



FEATURES OF ECOLOGICAL SIGNIFICANCE

Ashley Community Forest, Strafford

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Report Date: July 5, 2018

Technology Used: ESRI Collector on Galaxy Note 8

Data: 'NatComm' geodatabase: \\PORO\Landinfo\GIS\Base\Resource\ConsBioInfo

The Ashley Community Forest property in Strafford is mostly forested, with a small area of wetland and open meadows near its eastern side along Nutting Road.. The property's 268 acres include a ridge running north-south, with the western slope dropping steeply down to a south-flowing tributary of Fay Brook. An arm of the ridge extends east and is partially open with expansive views of the surrounding area. Nutting Rd.'s terminus soon reaches a cellar hole of an historic farmhouse, as well as stone walls and rows of large old trees that once lined farm roads. Elevations range from a high point of about 1600' on a hilltop in the center of the property, down to a low point of about 1180' where the stream flows off the southern boundary. The land is underlain by three bedrock types: the calcium-rich, easily weathering metamorphosed limestone of the Waits River Formation lies under most of the property, but is interrupted by a narrow north-south band of metamorphosed volcanic rock – amphibolite and greenstone – also of the Waits River Formation, and the eastern edge of the property has an area of quartzite bedrock of the Gile Mountain Formation. A ledgy band along the ridge likely indicates a bedrock transition. The forest is largely hardwood forest, with mixed hemlock-hardwood forest on the shadier, steeper slopes surrounding the stream. Sugar maple, black cherry, eastern hophornbeam, American basswood, white ash, and American beech are all common on the higher slopes.

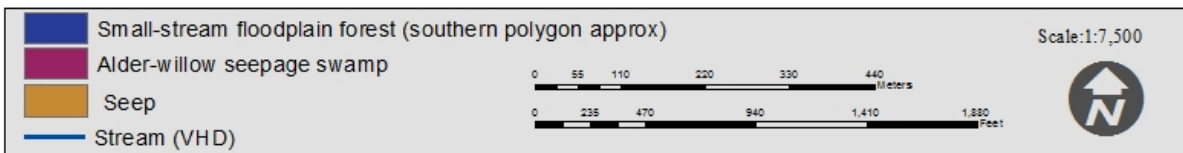
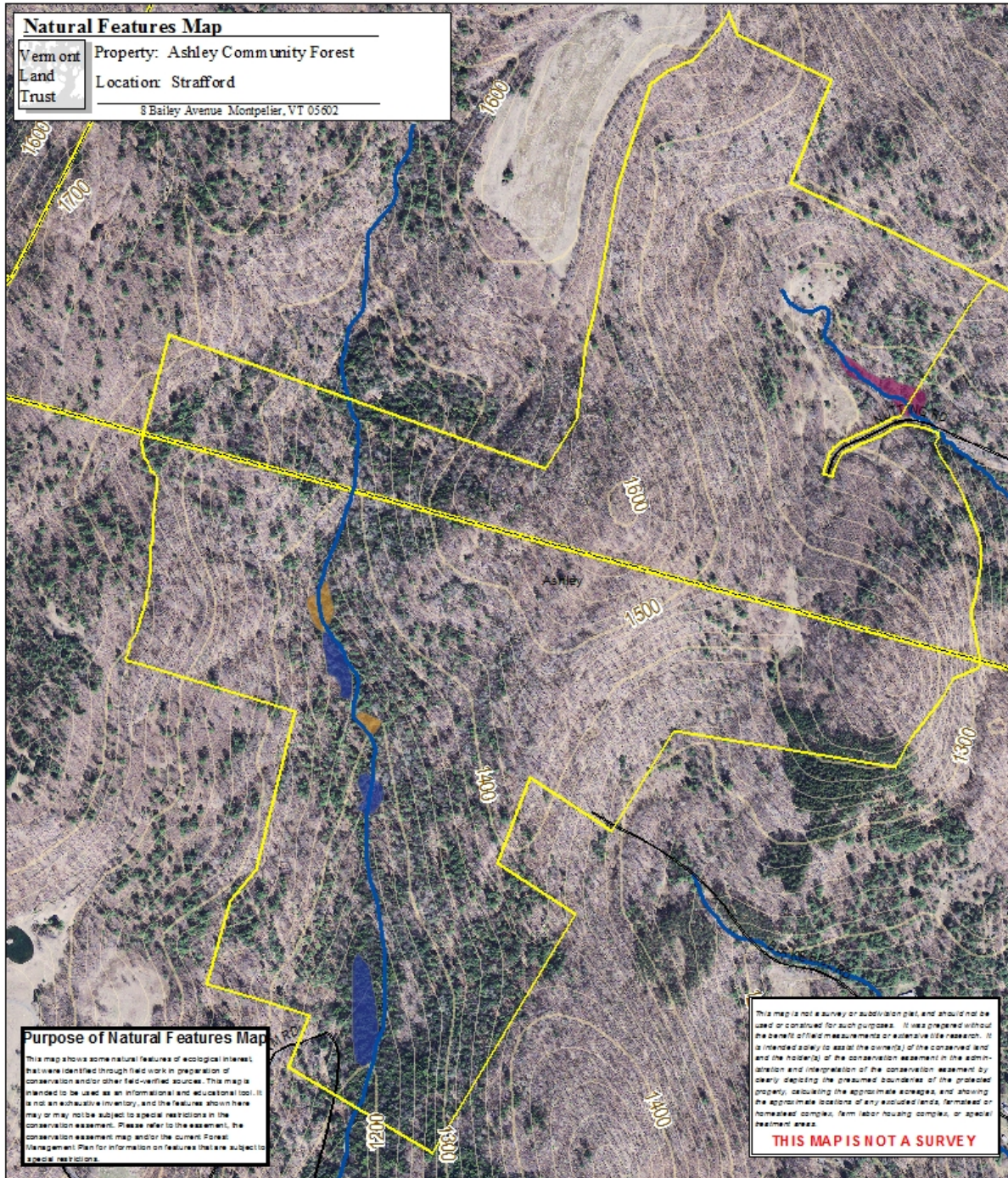
A headwater tributary of Fay Brook, which is itself a tributary of the White River, begins north of the property and flows south through its western side. The stream has well-developed channel features including small floodplain terraces, gravel bars, and pools. Scattered black ash and yellow birch trees grow in these small floodplain forests over stands of ostrich fern, sensitive fern, and jewelweed. Seeps and seepage runs occur along the stream banks, and these small, sensitive wetlands are characterized by organic soils and plants including toothwort, maidenhair fern, sensitive fern, miterwort, foamflower, jewelweed, and Jack-in-the-pulpit. Fallen trees lie across the stream in some places. The property does not have any significant areas of wetland apart from these seeps and floodplains that line the lower stream. I did not assess the southern end of the riparian area on the property.

Moose tracks were noted here and the property also provides habitat for forest-dwelling songbirds; our party heard Black-throated Green Warblers and Chestnut-sided Warblers on our mid-June visit. The ledges and riparian areas provide additional habitat diversity.

Vermont Land Trust's Flood Sensitivity Screen, a GIS model, considers the Fay Brook tributary to be moderately sensitive to erosion during flood events because of its relatively high stream power.

We noted some areas of relatively recent erosion and downcutting along the stream. Features like the small-stream floodplain areas can hold flood waters and mitigate the effects of extreme flooding downstream. The Vermont Conservation Design (2015), a landscape-level conservation prioritization from Vermont Land Trust and the Vermont Agency of Natural Resources, places the forested portion of the property in a 6,948-acre unfragmented forest block that is considered both a 'Priority Interior Forest Block' and a 'Priority Connectivity Block', providing critical ecological function on a statewide level. These designations complement the field observations described above.

NATURAL FEATURES MAP



Significant ecological features Language for attributes section of easement, subject to change during drafting	Easement considerations under VLT policy
Streams, including headwater tributaries of Fay Brook that, with wooded buffers and natural flow, provide an array of ecological benefits including maintaining water quality and providing corridors for species movement	Riparian buffer policy will apply
Wetlands, including seeps and other small areas of open, shrub, and stream-associated wetlands,	Wetland protection policy will apply to wetlands over 1/2 acre
Additional wetland, upland, and riparian habitat for wildlife	

Project Design Notes re. Water Quality (for VHCB projects)

There are some additional small streams emerging from seeps on the slopes above the main stream. Some of these are quite short. These are not shown on the VHD layer or the map above but those that extend further up the slope should be considered with the same riparian buffer protections as the main stream.

HazMat Considerations (for VHCB projects)

N/A from state layer; an historic farm dump is near the cellar hole and some trash and an abandoned camper are at the edge of one of the open meadows.

Features to be shared with Vermont Natural Heritage Program

N/A