

January 10, 2022

The Marshfield Conservation Commission requests funding from the Town of Marshfield to hire an ecological consultant to conduct a Natural Resources Inventory of the Town of Marshfield. This inventory has been a long-standing priority of the Conservation Commission and will fulfill an important goal as described in the 2018 Town Plan.¹ The purpose of this inventory is to enhance the knowledge and understanding of the most ecologically significant areas of the Marshfield landscape to support town planning, conservation of the Town's significant ecological resources, and to enhance the ability of Marshfield residents to enjoy and steward their Town's natural resources. A Marshfield town inventory will complement inventories already completed in our neighboring towns of Cabot, Calais, and Plainfield.

The study will identify the significant and sensitive natural terrestrial, wetland, and aquatic communities² of the Town. Classification of terrestrial communities will follow *Wetland, Woodland, Wildland: A Guide to the Natural Communities of Vermont* (Thompson et al. 2019) as well as established protocols of the Vermont Natural Heritage Inventory, a program of the Vermont Fish and Wildlife Department. Classification of aquatic communities will follow *Classification of the Aquatic Communities of Vermont* (CACV 1998).

A natural resources inventory will assess the presence within the Town boundaries of ecological communities of state and local significance, connections between significant communities, riparian areas important for water quality and flood hazard abatement, and occurrence of and habitat for Species of Greatest Conservation Need. The methods used to conduct the Town inventory will have six components: desktop landscape analysis, local resident interviews, landowner identification and contact, field inventory, public forums, and final documentation in an illustrated report and a public presentation.

The Conservation Commission proposes to hire an ecological consultant who will provide the necessary overall coordination of the inventory, complete the landscape analysis to identify priority sites, conduct field work to survey priority sites, and draft the report. Landscape analysis, critical to focusing field work, will include compilation and analysis of relevant GIS data layers including aerial photographic imagery assembled from the Vermont Center for Geographic Information and the Vermont Natural Resources Atlas. Surface waters, wetlands, soils, digital elevation models, bedrock geology, and surficial geology will constitute the principal types of physical features data used in the landscape analysis. Digital databases describing occurrence of rare plants and animals, natural communities, Ecological Habitat Blocks, Wildlife Linkage Habitat, wildlife road crossing, vernal pools, and critical wildlife habitat (i.e., bear mast, deer wintering grounds, etc.) will also be reviewed.

The Conservation Commission is providing \$5,000 in funds from their Conservation Fund obtained through its annual tree and shrub sales. Members of the Conservation Commission also will contribute in-kind support through reviewing recommendations for priority sites, conducting interviews and holding public forums to tap into the Town's substantial ecological expertise and promote awareness in Town residents. Commission members will also survey priority sites in collaboration with the consultant, and review and comment on the draft report. Commission members will determine ownership and obtain permission prior to accessing any privately owned parcel.

We appreciate your consideration of this request and would welcome any of your questions and suggestions.

Members of the Town of Marshfield, VT Conservation Commission

¹ Town of Marshfield Town Plan, 2018, page 38: "The Conservation Commission is encouraged to complete wetland mapping and a town-wide natural resource inventory."

² A natural community is a particular set of interacting species (plants and animals), the physical environment where they are typically found, and the natural processes that affect them.