

**Version for March 24<sup>th</sup> with new edits**

1 **BE: Note: This version, reflects ACFC review through Section 2.9. Including Julian’s comments of Feb.**  
2 **10<sup>th</sup>**

3 **Note by Ian: Comments in the margin have been inserted into the text within [] and colored red or green.**  
4 **Inserted or edited text is in red**

5

6

**Andrews Community Forest**

7

**Draft Comprehensive Management Plan 2025**

8

9

*Including history, background, and important information about the forest  
that will both guide and inform management decisions*

10

11

12

Richmond, Vermont

13

**2025?**

14



15

16

17

18

19

**Revision to be presented to the Richmond Selectboard and  
Vermont Land Trust**

20

21

22

## Table of Contents

1		
2		
3	1. Introduction, Process History, Land Acknowledgement, and Governance Guidelines.....	4
4	1.1 Introduction to this document.....	4
5	1.2 Acquisition and Conservation of the Andrews Community Forest.....	4
6	1.4 The Indigenous Land Acknowledgment.....	5
7	1.5 Governance of the Andrews Community Forest .....	5
8	1.6.1 Purpose of the Committee .....	6
9	2. History, Background and Existing Conditions .....	7
10	2.1 General Property Description and Background.....	7
11	2.2 Geology, Topography, and Climate.....	8
12	2.2.1 Topography and Aspect.....	8
13	2.2.2 Biophysical Region.....	8
14	2.2.3 Bedrock Geology .....	8
15	2.2.4 Surficial Geology.....	9
16	2.3 Climate.....	9
17	2.4. Cultural History .....	9
18	2.4.1 Indigenous History.....	9
19	2.4.2. Plants and Animals of Special Cultural Importance for Western Abenaki .....	11
20	2.4.3. Abenaki language and the ACF.....	11
21	2.4.4 History After European Settlement .....	12
22	2.4.5 Remaining Historical Sites and Features.....	13
23	2.5 Ecological Resources.....	13
24	2.6 Water Resources .....	13
25	2.7. Forestry .....	14
26	2.9. Recreation.....	16
27	2.10. Agriculture.....	16
28	2.11. Legal Agreements on the Property .....	17
29	2.11.1 Agricultural Lease .....	17
30	2.11.2 Powerline Rights-of-Way: VELCO.....	17
31	2.11.3 Powerline Rights-of-Way: Green Mountain Power .....	17
32	2.11.4 (new).....	18
33	3. Management Plan Development and General Principles .....	18
34	3.1 Management Plan Development.....	18

## Version for March 24<sup>th</sup> with new edits

1	3.2 General Rules.....	19
2	3.3 Restricted and Prohibited Uses, as specified in the Conservation Easement .....	20
3	3.4 Posting of Town Forest Rules.....	21
4	3.5 Parking.....	21
5	3.6. History of the Management Plan Public Input Process .....	22
6	3.7. Expert Guidance Provided to the ACF Committee .....	23
7	3.8. Comprehensive Management Plan: Process for Updates: Amendments and Revisions .....	24
8	4. Timber Management and Forestry Activities .....	25
9	4.1 Forestry Management Objectives and Actions.....	26
10	5. Cultural History Management Objectives and Actions .....	27
11	5.1 Potential partners regarding ACFC cultural history .....	28
12	6. Wildlife and Natural Resources Stewardship .....	29
13	6.1 Ecological Resources and Stewardship .....	29
14	6.2 Landscape-Level Elements.....	29
15	6.2.1 Landscape-Level Objectives.....	30
16	6.2.2 Landscape-Level Action Items .....	30
17	6.3 Community-Level Elements.....	31
18	6.3.1 Community-level objectives.....	32
19	6.3.2 Community-level action items.....	32
20	6.4 Species-Level Elements.....	33
21	6.4.1 Species-Level Objectives.....	33
22	6.4.2 Species-Level Action Items .....	34
23	7. Recreation Management .....	35
24	7.1 Recreation as addressed in the Conservation Easement .....	35
25	7.2 Trail-based Recreation.....	35
26	7.2.1 Process for Considering Future Trails .....	38
27	7.2.2 Trail Connectivity to Surrounding Properties.....	40
28	7.2.3 Process for Constructing Approved Trails .....	41
29	7.2.4 Trail Design Map.....	41
30	7.2.5 Trail Monitoring, Maintenance, etc.....	44
31	7.3 Snowmobiling.....	46
32	7.4 Hunting .....	46
33	7.5 Potential Recreation Partnerships .....	46
34	7.6 Recreation Management Objectives and Actions.....	46

**Version for March 24<sup>th</sup> with new edits**

1 8. Agriculture Management .....48  
2 8.1 Potential Agriculture Partnerships .....48  
3 8.2 Agriculture Management Objectives and Actions .....48  
4 9. Education .....49  
5 9.1 Educational Objectives and Actions .....49  
6 9.2 Potential Education Partnerships .....50  
7 10. Legal Agreements on the Property .....50  
8 10.1 Conservation Easement .....51  
9 10.2 Agricultural Lease .....51  
10 10.2 Powerline Rights-of-Way: VELCO .....51  
11 10.3 Powerline Rights-of-Way: Green Mountain Power .....52  
12 10.4 Legal Agreements Management Objectives .....52  
13 10.5 Legal Agreements Management Actions .....52  
14 11. Appendices .....53  
15 12. References .....54

16

17 **1. Introduction, Process History, Land Acknowledgement, and**  
18 **Governance Guidelines**

19 **1.1 Introduction to this document**

20 This document serves as the Comprehensive Management Plan for the Andrews Community Forest  
21 (ACF), revised and updated in 2025, to replace the document accepted by the Selectboard in November  
22 2018. Major changes include an Indigenous land use acknowledgment, a more comprehensive and  
23 updated description of the ACF’s ecological importance replacing the original recreational trail design  
24 concept with a new trail design based on ecological assessments, along with textual reorganization,  
25 updates, clarifications and corrections.

26 **1.2 Acquisition and Conservation of the Andrews Community Forest**

27 In 2018, the Town of Richmond, with the assistance of Vermont Land Trust and the Town’s Conservation  
28 Reserve Fund, purchased a 428-acre, largely wooded parcel from the Andrews family to create a new  
29 community forest. Simultaneous with the sale, a [Conservation Easement](#) (Appendix A) was conveyed to  
30 both the Vermont Land Trust and the Vermont Housing and Conservation Board to protect the property’s  
31 natural resources and ensure public access in perpetuity.

32

33 *[BE: Suggest moving the two paragraphs below to Section 10 with other “Legal Agreements”]*

34

## 1 **1.4 The Indigenous Land Acknowledgment**

2 [IS: While it appears that historical references can be specific to Abenaki people (recognized by the State  
3 of VT, though not Federally), current and future references could refer generically to ‘Indigenous People’.  
4 See [https://www.vermontpublic.org/local-news/2025-02-21/statehouse-visit-abenaki-first-nations-press-  
5 vermont-lawmakers-denounce-state-recognized-tribes](https://www.vermontpublic.org/local-news/2025-02-21/statehouse-visit-abenaki-first-nations-press-vermont-lawmakers-denounce-state-recognized-tribes) [BE: Suggest saving time by asking Josh for  
6 immediate review of this and related sections by the Town Attorney, as we’re dealing with Town  
7 property. The Selectboard is likely to ask for this anyway, so we can avoid delay by getting this blessed  
8 beforehand.]

9 Andrews Community Forest is located within Ndakinna (in-DAH-kee-NAH), the homeland of the  
10 Western Abenaki people, who have a unique connection to this land and have been its traditional stewards  
11 for millennia. For many generations before the European colonists arrived, the Abenaki people harvested  
12 animals, nuts, plants, berries, fiber, and timber in these forests, without degrading their ecological health.  
13 The Indigenous people who preceded the colonists created an extensive system of trails throughout the  
14 Green Mountains that attest to the extended relationships between the Abenaki people and other tribes,  
15 who also used these forests, and who took refuge here as the settlers drove them from their homes.  
16 The Town of Richmond acknowledges that we have access to this land because it was taken without  
17 consent and that our ability to make decisions about its management rests on this historic injustice. The  
18 Andrews Community Forest Committee therefore acknowledges the Abenaki people’s rights to use this  
19 land in perpetuity and welcomes the Abenaki people as partners in our forest management. We aim to  
20 honor and respect the Abenaki people through responsible forest management and sustainable land use.  
21 We will strive to incorporate Traditional Ecological Knowledge into our management practices to foster a  
22 healthy forest community and to restore a healthy balance between human needs and the needs of the  
23 nonhuman species in the forest (**Appendix B Indigenous recognition**). We say their name, and we name  
24 trails using the Western Abenaki language, to remind us that the Abenaki people are the Original People  
25 of the Dawnland, Ndakinna, out of respect for their culture and special relationship to the land, and to  
26 acknowledge their historic and ongoing contributions to our community.

## 27 **1.5 Governance of the Andrews Community Forest**

28 The Town of Richmond Selectboard is ultimately responsible for the management and stewardship of the  
29 Town-owned Andrews Community Forest. The Selectboard has delegated to the Andrews Community  
30 Forest Committee (ACFC), charging it with meeting the priorities and goals outlined in the Town Forest  
31 Management Plan, or as directed by the Selectboard or Town Manager and subject to the Conservation  
32 Easement and [ACFC Bylaws](#).

33  
34 The ACFC is a nine-person committee. The Richmond Conservation Commission and the Richmond  
35 Trails Committee each appoint a current member of their respective committee to sit on the ACFC.  
36 Additionally, the Conservation Commission and Trails Committee shall each recommend one person who  
37 is not a member of their respective committee for appointment to the ACFC. In order to incorporate  
38 Indigenous perspectives and traditional ecological knowledge into ACF management, the ACFC will seek  
39 to fill at least one of its seats with an Abenaki tribal citizen (see **Appendix B: Indigenous recognition**).  
40 **ACFC will engage with the local Abenaki community to identify potential ACFC members.** [SP  
41 **comment: When does this happen? Every time a seat opens? Have we been doing this?]**

## Version for March 24<sup>th</sup> with new edits

### 1 1.6.1 Purpose of the Committee

2

3 The purpose of the Andrews Community Forest Committee is to:

- 4 • Serve as representatives of the Town in decisions related to the management of the Andrews  
5 Community Forest, with ultimate approval of the Selectboard.
- 6 • Oversee management of the Community Forest responsibly and in accordance with the  
7 Comprehensive Management Plan, the Conservation Easement, and the Forestry Management  
8 Plan.
- 9 • Act as a liaison with the Vermont Land Trust when input or approval is needed.
- 10 • Lead the management planning process whenever updates are needed to the Comprehensive  
11 Management Plan.
- 12 • Provide regular opportunities for public engagement with the Community Forest and in the  
13 planning/management of this community-owned property.
- 14 • Educate the public about the Community Forest.
- 15 • Stay up to date on measures to maintain the ecological integrity and functionality of forests such  
16 as the ACF and provide the public with meaningful, sustainable recreational and educational  
17 opportunities.

18

19 Furthermore, the ACFC agrees to strive towards the following guiding tenets by demonstrating an  
20 ongoing commitment to:

- 21 • Providing meaningful, sustainable public access and outdoor recreation opportunities while  
22 simultaneously providing meaningful ecological protections and enhancements including the  
23 Forestry plan's design to boost biodiversity.
- 24 • Learning more about the property and its natural history.
- 25 • Work together across differences as representatives of the Town and all of its residents.

26

27 **VISION:** The Andrews Community Forest will serve Richmond as a thriving ecosystem where  
28 conservation, education, and recreation harmoniously coexist. Through sustainable management  
29 practices, we aim to preserve the forest's ecological integrity and contributions to its forest block, while  
30 providing opportunities for local community engagement, environmental education, innovative forestry  
31 practices, and outdoor recreation. Together, we strive to create a model of responsible land management  
32 where generations connect with and enjoy nature, share in the Forest's stewardship, and foster a deep  
33 appreciation for the rich biodiversity and cultural heritage of our region.

34

35 **MISSION** (representing a concise form of the 'Purposes' spelled out in the Easement):

36 The ACFC's mission is to manage the Andrews Community Forest to uphold the Purposes and other  
37 directives of the Conservation Easement as well as those found in applicable local, state and  
38 federal policies and mandates. We will:

## Version for March 24<sup>th</sup> with new edits

- 1 1. Protect its productive forestland, wildlife habitats, biological diversity, natural communities, riparian  
2 buffers, wetlands, soil and water quality, and native flora and fauna, along with the ecological processes<sup>1</sup>  
3 that sustain them.
- 4 2. Keep the ACF available for public use and enjoyment, including non-motorized, non-commercial  
5 recreational, educational, and other appropriate community uses.
- 6 3. Conserve the ACF's open space values and scenic resources for current and future generations
- 7 4. Guide the Forest's management through open, public discussions and decision-making.
- 8

## 9 **2. History, Background and Existing Conditions**

10 Documentation about the ACF and its surrounding lands is available via State resources updated with new  
11 information provided by the Vermont Agency of Natural Resources (ANR) through its 2024 [Vermont](#)  
12 [Conservation Design](#) initiative and updated [BioFinder](#) web site (together with continuing updates by  
13 VGIS ([Link – Vermont Center for Geographic Information ?](#))). Specific ACF and local sources include  
14 Arrowwood's [Science to Action](#), the UVM [Field Naturalist Report](#) (Glynn, G., Hagen, E., & Naughton,  
15 M. (2019, January). Landscape Analysis and Wildlife in the Andrews Community Forest, Richmond,  
16 Vermont. University of Vermont). These provide appreciation of key landscape features and the wildlife  
17 and ecology. These resources also inform decisions regarding Forest uses in general and as stipulated by  
18 the Forest [Easement](#) (the [Richmond Town Plan](#) and other governing Documents (Richmond Zoning and  
19 State and Federal laws and regulations).

### 20 **2.1 General Property Description and Background**

21 The Andrews Community Forest is a 428-acre, largely forested parcel just outside Richmond Village in  
22 Chittenden County. It is part of the State-designated, 72,000-acre Mt. Mansfield Forest Block, and abuts  
23 6,000 acres of forestland within that block. The State's [Vermont Conservation Design](#) project, which  
24 prioritizes Vermont's lands and waters for their contributions to landscape-level ecological integrity,  
25 gives the ACF its highest priority rankings for interior forest integrity and wildlife connectivity. The ACF  
26 is one of eight large parcels that inspired the Chittenden County Uplands Conservation Project<sup>2</sup>, a  
27 landscape-scale conservation effort focused on safeguarding important forest blocks and habitat  
28 connectors between and alongside Camel's Hump State Park and Mount Mansfield State Forest.

29  
30 The property is a diverse forestland with two small meadows, three headwater streams, at least two vernal  
31 pools and several small wetland areas. Among the natural communities<sup>3</sup> identified in the ACF are several  
32 areas of Dry Oak Forest, Dry Red Oak-White Pine Forest, and Dry Oak-Hickory-Hophornbeam Forest,  
33 which are uncommon natural communities in Vermont. The ACF's oak and beech hard-mast stands serve  
34 as important food sources in the landscape for bears, deer, turkeys and other wide-ranging animals, along  
35 with fishers, porcupines and many birds and small mammals. Vermont Conservation Design ranks the  
36 quality of the ACF's natural communities, generally clustered above the powerlines, "Highest Priority"  
37 and "High Priority" for their ecological integrity and functionality.

---

<sup>1</sup> Typical ecological processes for a Vermont forest include succession, carbon sequestration, natural disturbances, and the interaction of biotic (organisms) and abiotic (climate and soil) factors, all contributing to a dynamic and resilient ecosystem.

<sup>2</sup> More information on CCUP is available [here](#) on page 35.

<sup>3</sup> **Defined** as "an interacting assemblage of organisms, their physical environment, and the natural processes that affect them."

## Version for March 24<sup>th</sup> with new edits

1  
2 Certain features of the ACF have special importance to particular species. For example, its low elevation,  
3 southerly facing hemlock stands are vital wintering areas for deer. **Unfragmented interior areas serve as**  
4 **foraging and nesting grounds for wood thrush and ovenbirds.** Recent timber harvesting and blowdowns  
5 have created patches of the Vermont's increasingly scarce, early successional habitat, required by ruffed  
6 grouse, American woodcock, golden winged warblers and other species. The ACF's vernal pools provide  
7 essential breeding areas for salamanders and frogs.

8  
9 *[BE: Good points below, but this early in the document it feels like we're delaying getting to the meat by*  
10 *including text that would be better placed later in the document. That would enable us to include other*  
11 *challenges ACF faces, like invasive plants, insects and diseases, and the effects of our changing climate.*  
12 *Suggest deleting..] [BE: Much of the 2.2 section is consolidated into a general "Ecological Resources"*  
13 *section later in this draft (but would come earlier in the final version once earlier material is moved,*  
14 *edited or deleted.)*

## 15 **2.2 Geology, Topography, and Climate**

### 16 **2.2.1 Topography and Aspect**

17 The Andrews Community Forest is mostly south-facing, with elevations ranging from 400' to 1240'  
18 above mean sea level. Much of the terrain is steep but there are some flatter areas north of the parking lot  
19 and along the forest's southeastern boundary.

### 20 **2.2.2 Biophysical Region**

21 The Andrews Community Forest is located within the **Northern** Green Mountains Biophysical Region,  
22 **bridging into** the Champlain Hills Region LR-1. This region is part of the Appalachian Mountain chain  
23 that extends from Alabama north to Québec. It includes Vermont's highest mountain (Mount Mansfield at  
24 4,393 feet) and includes its coldest climate, and the greatest annual precipitation (72 inches). The bedrock  
25 is primarily acidic, composed of non-calcareous schists, phyllites, gneisses, and granofels. Northern  
26 hardwood forests blanket the region on the mountain slopes up to about 2,500 feet, above which yellow  
27 birch and red spruce are dominant. Spruce-fir forests occupy the higher slopes and summits, with alpine  
28 meadows above 3,500 feet. The extensive, unfragmented forests of this region provide habitat for many  
29 species of wildlife that thrive in remote, interior forest conditions as well as high-elevation forests. The  
30 heavy precipitation and deep snows in the mountains feed some of the state's largest rivers.

31

### 32 **2.2.3 Bedrock Geology**

33 The Andrews Community Forest contains both Underhill and Pinnacle bedrock Formations. The western  
34 part of the forest, from its northernmost point over is Underhill, and the eastern area is Pinnacle. Both  
35 formations are metamorphic sedimentary rocks, formed by sediments collecting at the bottom of an  
36 ancient sea, stacking on top of each other, then metamorphosing and compacting into rock during the  
37 Taconic Orogeny, the event that created the Green Mountains. As metamorphic rocks, they are typically  
38 dense and non-porous and have cracks and visible fractures.

## Version for March 24<sup>th</sup> with new edits

1

2 The Pinnacle Formation is made of schistose greywacke rock, metamorphosed from bits of rock, mud,  
3 and debris that had already broken down somewhat from their original state. It is gray to buff in color and  
4 the stripes of varying layers in the rock are generally visible. The minerals present are quartz, sericite,  
5 biotite, and chlorite. The formation dates back at least to the Cambrian Period, 500 to 630 million years  
6 ago.

7

8 The Underhill Formation is a silvery-green color and a combination of phyllite and schist rocks. The  
9 minerals present are chlorite, muscovite, and quartz. Compared to the Pinnacle Formation, the Underhill  
10 Formation bedrock also dates back to at least the Cambrian Period but has coarser grains.

11

### 12 **2.2.4 Surficial Geology**

13 Surficial geology refers to loose materials deposited above the bedrock layer by wind, water, or glaciers.  
14 Like much of the Green Mountain Region, the Andrews Community Forest is covered in rocks deposited  
15 when the glaciers receded at the end of the last ice age (roughly 14,000 years ago). Fine silt, pebbles,  
16 stones, and boulders of all sizes deposited by glaciers are known as glacial till. The glacial till covers the  
17 underlying bedrock surface to form the surface shape of the visible landscape. In addition to glacial till,  
18 soil particles deposited by the post-glacial Lake Vermont, which filled much of the Champlain and  
19 western Winooski River Valley following the retreat of the Laurentide Ice Sheet up to an elevation of  
20 about 600 feet above sea level, cover much of the southern portions of the Andrews Community Forest.

21

22 In the Andrews Community Forest, where the bedrock is not exposed, till covers the land and is the  
23 source of stones in the forest's rocky soils. The glacial till is thicker in the valleys and thinner in the  
24 uplands. Many of the exposed uplands in the forest have experienced significant post-glacial erosion,  
25 leaving only rubble and scattered boulders on top of the bedrock. **Topography and soil types and depths**  
26 **may place limitations on recreational usage and development in some parts of the ACF.**

### 27 **2.3 Climate**

28 The Andrews Community Forest is part of the Northern Green Mountains and **Champlain Hills LR-1**  
29 biophysical regions, which have a cooler climate and more precipitation than other parts of Vermont. The  
30 ACF is also significantly influenced by the Champlain Valley biophysical region, which is warmer and  
31 features a longer growing season than most other parts of the state. Coupled with its southerly aspect, this  
32 produces a forest dominated by tree species adapted to warm, dry sites with poorer soils on upper  
33 elevations, and those adapted to slightly richer forest soils on lower elevations (due to the influence of  
34 Lacustrine deposits).

### 35 **2.4. Cultural History**

#### 36 **2.4.1 Indigenous History**

37 *[BE Suggest shortening this section here to match the lengths of neighboring material. Deleted content*  
38 *could move to the Appendix. Also suggest having a Town Attorney review this ASAP, in advance of our*

## Version for March 24<sup>th</sup> with new edits

1 *completion of other parts of the draft. The Selectboard will likely be looking for that review and doing it*  
2 *now will save time.]*

3 Richmond is located within Ndakinna (in-DAH-kee-NAH), the homeland of the Western Abenaki people,  
4 also known as the Original People, who have a unique connection to this land and have been its  
5 traditional caretakers since at least the last Ice Age. For hundreds of generations before the European  
6 colonists arrived and applied their own borders and labels, the Western Abenaki people lived and worked  
7 on this land, stewarding resources in an ecologically sustainable way. Given that ACF lies along  
8 important east-west and north-south transportation and trade routes, other tribes are likely to have visited  
9 the forest as well.

10 Abenaki oral tradition and written accounts, historical resources, and archaeological studies of prehistoric  
11 sites in Richmond inform our understanding of how the ACF landscape has been stewarded and its  
12 continued importance to Indigenous people of our town and region. General resources include books such  
13 as those by Wiseman (1995, 2001), an Abenaki elder and scholar, and Haviland and Power (1994), as  
14 well as numerous online resources. Appendix 3 in Wiseman (2001) lists many written, video, and  
15 museum resources regarding Abenaki cultural history.

16 Specifically for the Richmond area, archaeological studies in the 1990s near the bridges in Jonesville over  
17 the Huntington and Winooski rivers have yielded valuable physical evidence of occupation and forest use  
18 by Indigenous peoples before colonization (Thomas et al. 1995; Doherty et al. 1996). These sites were  
19 radiocarbon dated to approximately 1040 AD (near Winooski bridge) and 1500 AD (near Huntington  
20 bridge), and thus considered to represent the Middle to Late Woodland period. The sites show that  
21 animals “including black bear, deer, beaver, porcupine, muskrat, fisher, mink, skunk, cottontail, red  
22 squirrel, and chipmunks were taken for both meat and pelts. Various nuts, including butternut, hickory  
23 nuts, beech nuts, and acorns from red oak” were also collected and processed for consumption and storage  
24 (Thomas et al. 1995). Diverse tree species were used for firewood at the Huntington River site, including  
25 beech, maple, birch, red pine, eastern hemlock, elm, eastern hophornbeam, eastern cottonwood, red pine,  
26 and possibly alder. No evidence of maize was found at these sites, even as maize, beans, and other plants  
27 were being cultivated at that time along the Winooski River closer to Lake Champlain. Thomas (2008)  
28 surmises that these Jonesville sites were seasonal encampments occupied between September and late  
29 December/early January to collect and process forest resources. Such findings suggest that the forests  
30 where ACF is now located were largely stewarded and used for hunting and gathering, rather than  
31 agriculture. This pattern concurs with broader geographical accounts of Abenaki practices, such as  
32 Wiseman (2001:27), who stated that the Abenaki “... had smaller seasonal camps along most rivers eight  
33 thousand winters ago” and described gathering and hunting activities in the uplands.

34 The Jonesville archeological digs also uncovered the dramatic environmental changes that occurred as a  
35 result of forest clearing by European settlers (Thomas et al. 1995). The alluvial terrace on the Huntington  
36 River, which the Abenaki families occupied over 500 years ago, had developed slowly over thousands of  
37 years with minimal flooding evident in the analysis of sediments. In contrast, during the 19<sup>th</sup> and early  
38 20<sup>th</sup> centuries, catastrophic flash flooding became more common as upland and riparian forests were  
39 cleared for farming. Thomas (2007:9) noted that “between roughly 1810 and 1880, four to seven feet of  
40 sand, gravel, and even small cobbles were deposited on the terrace surface.” These extraordinary floods  
41 covered or destroyed most evidence of precontact use and settlements. More recently, as abandoned  
42 farmland grew back to forest, flooding has declined. “Since the early decades of the twentieth century,

## Version for March 24<sup>th</sup> with new edits

1 less than eight inches of alluvium have been deposited on the terrace surface next to the Huntington  
2 bridge, and most of this was probably due to the great flood of 1927” (Thomas 2007:10).

### 3 **2.4.2. Plants and Animals of Special Cultural Importance for Western** 4 **Abenaki**

5 A number of forest species were and continue to be of special cultural importance to the Abenaki people,  
6 and as such deserve special management consideration. Among tree species, these include black ash  
7 (*Fraxinus nigra*, also called brown ash and *maalakws* in Abenaki) used for basketry, and white birch  
8 (*Betula papyrifera*, also called canoe birch, its bark called *wigwa* in Abenaki) for canoes, homes, and  
9 containers. Unfortunately, black ash populations are currently highly threatened by the emerald ash borer,  
10 which is already present in Richmond. Butternut (*Juglans cinerea*, in Abenaki *agon* or *agon*) were  
11 among the trees highly valued for food, medicines, materials, and dyes (Haviland and Power 1994;  
12 Wiseman 1995b, 2001). This culturally important species is also threatened. The butternut canker fungus,  
13 first found in Vermont in 1983, now infects nearly all butternut trees causing dieback and often death.  
14 Maple sugaring (*Pkwamhadin* – “gathering of maple sap” (Chenevert 2021)) was an important seasonal  
15 activity among the Western Abenaki, one which was taught to colonists (Cotnoir n.d.).

16 Thomas (et al. 1995:61-64) lists the uses by the Abenaki of some thirty species of trees and shrubs  
17 abundant in the mixed deciduous forests of Vermont, many of which are found in ACF. Wiseman (1995a,  
18 1995b, 2001) describes a wide range of forest plant species that were and are collected for construction  
19 materials, food, medicines, and dyes by Abenaki people. In Appendix 2, Wiseman (2001) lists many  
20 forest plants used in Abenaki herbal medicines by the maladies that they treat. A complete list of  
21 culturally important species found now or in the past at ACF would be valuable to develop for use by the  
22 ACFC in management decisions and educational materials. Ideally, such a list would be compiled, and  
23 important species prioritized, in partnership with the Abenaki people.

24 Before colonization, the Abenaki likely hunted and trapped a wide range of animal species for food and  
25 pelts in the forested landscape where ACF is now located. Thomas et al. (1995:65-75) describes the  
26 traditional uses of the 11 species of animals found at the Huntington River site. Wiseman (2001)  
27 describes the relationship and importance of many species to the Abenaki, as well as how they were  
28 traditionally hunted and used. The acts of hunting and fishing, as well as the resulting food, skins and  
29 other usable body parts (e.g., bones and sinew), remain culturally important for many Indigenous peoples.  
30 As mentioned for forest flora above, it would be valuable to develop a prioritized list of ACF’s animal  
31 species of cultural importance in consultation with Abenaki partners, including uses, stewardship, and  
32 both Abenaki and scientific names.

### 33 **2.4.3. Abenaki language and the ACF**

34 The Western Abenaki language, which is in the Algonquian family of languages, is considered critically  
35 endangered by UNESCO (2010). It is a descriptive language based on root words specifying physical  
36 qualities. For example, the region’s largest river is named Winoskisibo – built from *Winos* means onion,  
37 *ki* means land, and *sibo* means river. Thus the Winooski River is named for the ramps and other wild  
38 onions which were known to grow in abundance along its shores. Maintaining the Abenaki language and  
39 culture is deeply connected to the Abenaki homeland and its stewardship. For example, Cotnoir (n.d.), a

## Version for March 24<sup>th</sup> with new edits

1 citizen of the Nulhegan Band of the Coosuk Abenaki Nation, wrote that “...sugaring still functions as a  
2 time for our community members to gather and connect with the woods and one another. Through  
3 sugaring, we continue to cultivate a working relationship with the land, while practicing our language –  
4 Western Abenaki.”

5 Conservation efforts, such as the ACF, can inadvertently contribute to the erasure of Indigenous presence  
6 when introducing and perpetuating nonnative place names and management practices. Conversely, the  
7 ACF can support the revival of the Western Abenaki language and culture by supporting the use of  
8 Abenaki language for places, practices, flora, and fauna in the naming of trails, educational materials, and  
9 signage. **Appendix B** includes suggestions developed by the Richmond Racial Equity committee in  
10 collaboration with Abenaki tribal citizens and culture keepers. If ACFC decides to go beyond that list,  
11 Abenaki culture keepers should be consulted.

### 12 **2.4.4 History After European Settlement**

13 European settlers arrived in the Richmond area in the 1770’s. “Gray Rocks Farm,” as it was formerly  
14 known, was placed on the National Register of Historic Places in 1996 “because of its dual architectural  
15 and agricultural significance” (Longstreth 2007). The farm exemplifies the growth and development of  
16 dairy farming in 19<sup>th</sup> and 20<sup>th</sup> century Vermont. The land that is now the Community Forest was largely  
17 the farm’s pasture and woodlot, and most of the farmland and remains of the historic farm’s agricultural  
18 buildings are on land now owned by Maple Wind Farm and protected by an agricultural conservation  
19 easement The farm house and immediate yard are privately owned.  
20

21 The existing forest parcel, along with 212 additional acres, was first farmed by James Butler, beginning  
22 around 1800. He constructed a farmhouse, blacksmith shop, and an English barn before selling the  
23 property to Asa Rhodes in 1813. The property remained in the Rhodes family for over a hundred years,  
24 passing from father to son.  
25

26 The 1850 agricultural census indicates that the Rhodes farm was primarily a dairy farm, with 45 cows  
27 producing 1,800 lbs. of butter and 15,000 lbs. of cheese annually. As was common in Richmond at the  
28 time, the farm also had other livestock – horses, chickens, sheep, and swine. The Rhodes also harvested  
29 125 tons of hay and 200 lbs. of maple syrup annually and grew many different crops: corn, oats, rye,  
30 potatoes, peas, and beans.  
31

32 Over the years, ownership passed first to Asa’s son, Cornelius, and then to his son Edward, around the  
33 turn of the century. The farm continued to grow and ultimately thrived as the market for butter and cheese  
34 expanded. Given the farm’s success, in 1917, Edward reconstructed the English barn into a large U-  
35 shaped barn that more than doubled the space available for the cows. The new barn also added space for  
36 horses, a granary, and a milk house and he added a silo for storing cereals elsewhere on the property.  
37

38 In 1923, Edward Rhodes sold the farm to Clarence Andrews. Andrews continued dairying operations on  
39 the property until 1978. The Andrews also operated a successful inn, the Gray Rocks Inn, from 1928 to  
40 1941. Ina Andrews, Clarence’s wife, ran the inn, cooking three meals a day for guests from  
41 Massachusetts, New York, and Connecticut. During this period, the Richmond area was full of small inns  
42 for travelers looking to experience the idyllic countryside. The tourism business was vital to the  
43 Richmond economy and an important period in the town’s history.

## Version for March 24<sup>th</sup> with new edits

1

2 After Ken’s death, Everett and his wife, Mary Jo, ran the dairy farm on their own, and also sold firewood  
3 and hay from the property. They built a rustic cabin on the northern portion as a deer camp which they  
4 used into the 1990s. Only two 1950s automobiles remain.

5

6 Everett and Mary Jo raised four daughters on the land – Abigail, Amy, Jennifer and Kate. After  
7 shutting down farming operations, the family generously facilitated the transfer and  
8 conservation of the property. What had largely been the farm’s timberland, pastures and places  
9 of childhood exploration and adventures became Richmond’s first community forest.

10

11 In 2018, Angus Cummings, a UVM student, interviewed several of the Andrews sisters and other  
12 townspeople familiar with the recent history of the parcel for his thesis. It includes historical photos of the  
13 site contributed by the Andrews family.

### 14 **2.4.5 Remaining Historical Sites and Features**

15 Today, all that is left of the many farmstead buildings on the community forest parcel are two former  
16 farmstead sites with stone foundations. One foundation is on the northwestern side of the property, near  
17 the VAST trail. The other remaining foundations are near the end of the eastern farm road. One remaining  
18 foundation, set slightly apart, was either a springhouse or a small barn. The adjacent parcel to the east,  
19 was also part of Gray Rocks Farm and the Andrews Farmstead. The 1813 farmhouse and barn remain  
20 there, just outside of the town-owned forest property. In 2013 Maple Wind Farm bought 189 acres from  
21 the Andrews family largely below Route 2, which is conserved by an agricultural use easement On  
22 January 13th, 2014 the barn located across the street from the ACF entrance, burned down from an  
23 electrical fire. Maple Wind Farm rebuilt the barn in the same location in 2014.

24

### 25 **2.5 Ecological Resources**

26 [IS Comment: Note: sections 2.5 and 2.6 Water Resources are recommended by Brad and Sam to be  
27 replaced by text in the new section in “MP2 Eco with Appendix 1-22.pdf” ) (see also Section 6]

28

### 29 **2.6 Water Resources**

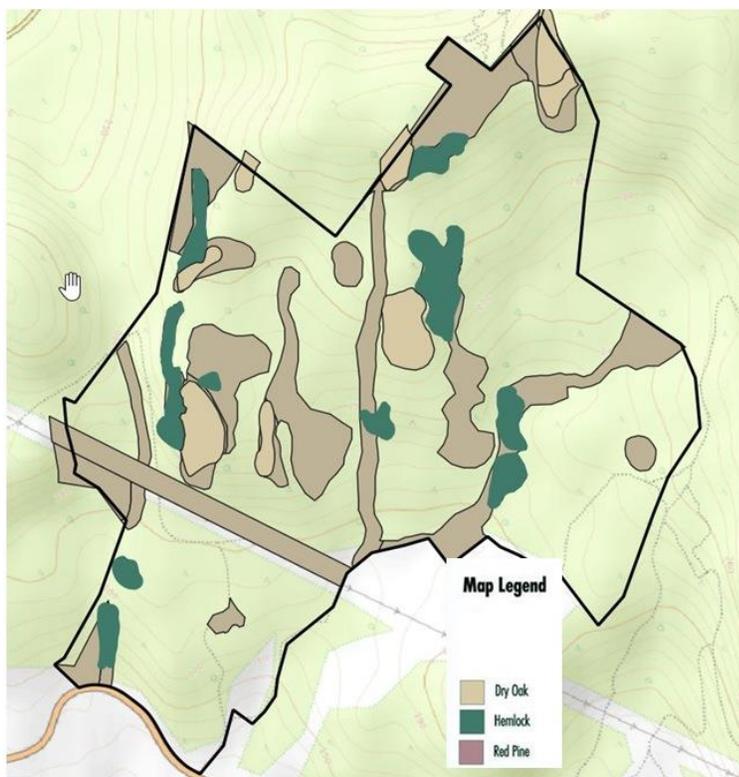
30 [IS Comment: Note: sections 2.5 and 2.6 Water Resources are recommended by Brad and Sam to be  
31 replaced by text in the new section in “MP2 Eco with Appendix 1-22.pdf” ) (see also Section 6]

32

33

1 **2.7. Forestry**

2



Map showing principal tree species locations, using data provided at the [Arrowwood site](#).

Historical records indicate that former owners actively managed the forest. In 2011 - 2014, timber management occurred on a western portion of the property. Western areas were previously logged in 2001-2003 and eastern areas were logged in 1994-1997. The most recent timber harvest was completed in the spring of 2021 under the direction of then Chittenden County Forester, Ethan Tapper. In 2024 the Town began working with Chittenden County Forester Brandon Benedict.

There are a number of reasons to continue to employ active forest management on the Andrews Community Forest. Active forest management can be an important part of land restoration, conservation, maintaining the ecological integrity of native ecosystems, retaining the working landscape of Vermont, and supporting the local forest products economy in Vermont. Outside of

27

28 infestations of non-native invasive plants, forests do not require human intervention to self-perpetuate and  
29 function ecologically. Active forest management, though, can accelerate the process by which forests  
30 acquire characteristics we may find desirable, such as:

- 31 - Healthy wildlife habitat
- 32 - Old forest characteristics
- 33 - Resilience to disturbances (climate change, invasive pests, etc)
- 34 - Carbon storage and/or sequestration
- 35 - A steady supply of forest products

36 Active management in the form of timber harvesting can meet the goals of creating the forest products we  
37 use while promoting the other attributes as well. The forest products industry, in addition to being  
38 economically important in Vermont, can support the maintenance of healthy, intact ecosystems by  
39 providing the means for enhancing wildlife habitat, elevating the health and resilience of forested  
40 ecosystems, and generating periodic income to fund important stewardship activities. It is also a source of  
41 local, renewable resources in the form of forest products.

42

43 Forests, such as ACF, can sustain plant and wildlife species of special cultural importance to Abenaki  
44 peoples. Forest management for timber on municipal lands can serve as a demonstration of responsible  
45 and sustainable forest management, educating people on how to harvest forest resources in a sustainable

## Version for March 24<sup>th</sup> with new edits

1 way. If forest management incorporates traditional practices by engaging Abenaki foresters and culture  
2 keepers, it offers the opportunity to demonstrate historical and contemporary Indigenous forest  
3 stewardship practices.

4  
5 Uneven aged silvicultural systems (single and group tree selection) will generally mimic the scale,  
6 intensity, and frequency of disturbance that the forests of Vermont historically received prior to European  
7 settlement. With these systems either single, scattered trees or groups of trees (up to about 2 acres) are  
8 removed in a single treatment. These mimic historical disturbances such as windthrow, ice damage, or  
9 large downburst events. In forest management choices of which trees to retain and which to harvest are  
10 guided by a combination of ecological principles (which tree is “healthier,” which trees are in use, or may  
11 be used, by wildlife), and human desires (the management objectives). Economic considerations (which  
12 tree is a more valuable species or may produce a more valuable product in the future) may contradict the  
13 'non-commercial' stipulation in the Easement. Trees in forests, without any intervention by humans, will  
14 naturally die due to old age, disease, or disturbance. Active forest management seeks to guide which trees  
15 continue to occupy the forest and which will succumb to mortality; thus accelerating the accumulation of  
16 desirable forest characteristics (for example increased carbon storage or wildlife habitat).

17  
18 The ability of a forest to respond to and maintain its health during disturbance is known as resiliency.  
19 Simple forests lack a diversity of tree species or structure, because of this they have fewer pathways to  
20 recovery if a disturbance occurs. Complex forests, those with greater species diversity or increased  
21 structural complexity, have more pathways to recovery following disturbance, and are therefore more  
22 resilient. Forests today encounter regular natural disturbance events, together with human-related events.  
23 In the face of an unstable climate, invasive exotic plants, animals and pathogens, and many other  
24 unpredictable problems, it is prudent to manage forests for resiliency in the course of any long-term forest  
25 management planning. Our goal is to encourage diversity, both in terms of species composition and  
26 function, the age spectrum of significant species and consistent with other activities within the  
27 management plan. Uneven aged silvicultural systems will accomplish the goal of encouraging complexity  
28 the forest, and therefore the forest’s resiliency.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29

## 2.9. Recreation

*Note: Brad is proposing a reworked, shortened version as a consolidated alternative to the two Recreation sections 2.9 and 7 in the document “[Recreation and Appendix 2-26-25.docx](#)”. It’s aimed at resolving many of the issues flagged in Section 7.)*

[MW Comment: 2.9 line 4 When the Forest was owned by.... Is a strange way to lead the opening paragraph of the recreation section. Please rework for concise wording with more factual information. Line 12. Parking and trails have “opened up” the forest. Please be more concise and specific.]

When the Forest was owned by the Andrews family, it was not posted and allowed hunting, walking, snowshoeing, and skiing. It was also managed for timber, leaving logging roads scattered throughout the property. Some of these roads are unsuitable for increased recreational use due to their steep grades, poor drainage, and potential for erosion. Others could be lightly maintained for continuing use as footpaths, supplementing multi- and single-use trails in appropriate areas. Other roads (the VELCO road, the Maple Wind Farm road on the eastern boundary, and parts of the former VAST trail) act as important recreational and management corridors throughout the property and remain in use.

Now, new trails and a parking area have opened up the forest to many more people and activities.

The VYCC campus, which adjoins the property to the east, has a network of trails. There is currently a former VAST trail connecting the two properties and trail networks.

Adjoining the ACF to the north is a 173-acre property currently owned by David Sunshine and Carol Jordan, which contains a multi-use trail network connecting to trails on adjoining properties and beyond, including into Jericho. Trail maps of the area are available online at various sites such as RichmondMountainTrails.com and TrailForks.com, the RTC proposed favored App. The Sunshine-Jordan property is conserved through VT Forests, Parks and Recreation. Motorized travel is not permitted there and there is no parking at the trailhead, though trails connect northwards to Jericho ([details])

## 2.10. Agriculture

Maple Wind Farm, the adjoining landowner to the south and east, is a diversified pasture-based livestock, poultry, and organic vegetable farm. This farm had an informal agreement with the Andrews family to use two fenced-in meadow areas for livestock grazing. Many years ago Maple Wind Farm had placed high tensile electric fencing around their grazing area in the community forest’s lower meadow and upper meadow. A human gate through the fence allows for public access to the meadow when the pasture is not in use for grazing. When the pasture is in use, the “cutover trail” is closed.

The “lower meadow” and the “upper meadow” under the power lines, used to have about 30 adult bovines and 30 calves for 10-16 days per year. The fenced-in meadow lands have not been used for grazing or any agricultural purpose since perhaps 2010. The ACF Committee did have conversations with Maple Wind Farm perhaps in 2018 about entering into a license agreement at nominal charge for agricultural use of the two fenced meadows. Those conversations ended without final terms established. The Committee would like Maple Wind to continue these conversations and consider finalizing the agricultural license agreement.

## Version for March 24<sup>th</sup> with new edits

1 Maple Wind Farm has a 25' right-of-way for agricultural purposes over the old farm road on the eastern  
2 side of the Andrews Community Forest extending from the then Dyer-Chadwick property on Route 2 to  
3 Maple Wind Farm's upper meadow. The Town has a 25' right of way over the northern edge of Maple  
4 Wind Farm's upper meadow over what was previously the VAST trail.

5

6 *[BE:I suggest deleting the following section (2.11) as it is covered later in the document, and with a note*  
7 *that we should also briefly describe the Conservation Easement and its Purposes.]*

### 8 **2.11. Legal Agreements on the Property**

9 There are four recorded easement agreements as follows:

10 the east / west 150' wide VELCO (Vermont Transco, LLC) utility easement, the adjoining to the north  
11 and parallel 100' to 125' wide east / west Green Mountain Power, Co. utility easement, the Maple Wind  
12 Farm, 25' farm road right of way on the eastern side of the Andrews Community Forest, and the Vermont  
13 Land Trust conservation easement.

14 A fifth easement, which has been fully agreed to and will likely be recorded in early 2025, is the VELCO,  
15 surveyed, 25', utility road right of way easement, leading from US Rte. 2 heading north up the existing  
16 utility road to the two utility right of way easements. Approval by Vermont Land Trust and the  
17 Selectboard is required for any changes in easement agreements.

#### 18 **2.11.1 Agricultural Lease**

19 Maple Wind Farm is an adjoining landowner of several hundred acres of the original Andrew farm.  
20 Maple Wind Farm has historically used eight to twelve acres of what is now the Community Forest for  
21 grazing cattle. The fenced in lower meadow and fenced upper meadows have not had cattle on them  
22 since perhaps 2015. The ACF Committee is interested in continuing to have Maple Wind Farm use these  
23 meadows and will explore the possibility of a long-term license agreement. These meadows should be  
24 brush hogged so trees and brush don't over take them.

25 .

#### 26 **2.11.2 Powerline Rights-of-Way: VELCO**

27 A VELCO powerline runs east/west through the community forest subject to a 150' wide utility  
28 easement. VELCO, the committee, the Town Manager, the Selectboard and the Vermont Land Trust  
29 have been working collaboratively to provide VELCO with its desired '25 wide perpetual utility road  
30 Right of Way easement, over the existing utility road. In 2018, VELCO improved a road from the forest  
31 entrance on Route 2 to the powerline; they used the upper landing area to stage their work. Following this  
32 work, they re-seeded the landing and the road above the landing and installed waterbars on the road below  
33 the landing. At certain periods, VELCO may need to close some of the forest to perform larger projects  
34 on the powerline. The ACF Committee should coordinate with VELCO to prepare for such events and  
35 fully inform the public of the closure.

#### 36 **2.11.3 Powerline Rights-of-Way: Green Mountain Power**

37 Green Mountain Power has a 75' to 100' utility right-of-way adjacent north of the VELCO utility line in  
38 the same east / west powerline corridor.

## Version for March 24<sup>th</sup> with new edits

1 Within each of these two utility corridors, VELCO and Green Mountain Power manages vegetation  
2 growth. The Committee will work to better understand the vegetation management goals and practices,  
3 the landowner's (Town's) rights, to advise the Selectboard to make an informed decision about vegetation  
4 management within the Powerline corridor, and to communicate this decision broadly to Community  
5 Forest visitors.

### 6 **2.11.4 (new)**

7 A fifth easement, which has been fully agreed to and will likely be recorded in early 2025, is the VELCO,  
8 surveyed, 25', utility road right of way, leading from US Rte. 2 heading north up the existing utility road  
9 to the two utility right of way easements. Approval by Vermont Land Trust and the Selectboard is  
10 required for any changes in easement agreements. IS: Can we add this to the end of the preceding Section  
11 2.11.3?]

## 12 **3. Management Plan Development and General Principles**

### 13 **3.1 Management Plan Development**

14 *[This section is only of very limited interest to people and not relevant to management. At most could be*  
15 *dealt with in the Appendix or even a separate, historical document for Town archives.. It also omits the*  
16 *expert panel discussion on how trails and wildlife can co-exist, the consultation with Fish & Wildlife's*  
17 *Andrea Shortsleeve, and the survey and consultation with botanists Liz Thompson (who first spotted the*  
18 *broad-beech ferns in a flagged route). Whether we list these people should depend on whether we follow*  
19 *their recommendations.* Upon purchasing the property, the Selectboard established an Interim Community  
20 Forest Steering Committee to develop a Comprehensive Management Plan and governance structure for  
21 the Community Forest, subject to final approval by the Selectboard. This Committee prepared an Interim  
22 Management Plan to provide short-term guidelines for the management of the property and allow  
23 "breathing room" for the development of the Comprehensive Management Plan. The [2018 Management](#)  
24 [Plan](#) was signed by the Town and approved by the Vermont Land Trust in March 2018.

25  
26 Meanwhile, the Town, through a grant from the Vermont Urban and Community Forestry Program,  
27 worked to develop the full Management Plan with the consulting groups SE Group and Arrowwood  
28 Environmental. Beginning in 2018, these groups assisted in management planning by leading the public  
29 input process, conducting environmental analyses, and drafting the plan. The first Management Plan was  
30 adopted by the Selectboard in November 2018 in compliance with conditions attached to a grant from the  
31 US Forest Service.

32  
33 **Credits:** *[IS: Suggest all listing of names and other sources of help and input for this MP2 be moved to a*  
34 *section at the end of the MP called 'Credits']*

#### 35 **Interim Community Forest Steering Committee:**

36 Berne Broudy, Cecilia Danks, Brad Elliott, Willie Lee, Hannah Phillips (Chair), Wright Preston, Guy  
37 Roberts, and Elizabeth Wright.

38 Assistance provided by Ethan Tapper (Chittenden County Forester), Bob Heiser, Cara Montgomery,  
39 Rebecca Roman (Vermont Land Trust), Drew Pollak-Bruce, Liz Grades, Ellie Wachtel, Taylor Luneau  
40 (SE Group), Dori Barton and Aaron Worthley (Arrowwood Environmental).

## Version for March 24<sup>th</sup> with new edits

1 The first iteration of this document was accepted by the Selectboard in November 2018 including Bard  
2 Hill, David Sanders, Steve Ackerman, Roger Brown, Christy Witters, and Josh Arneson.

### 3 **Land Acknowledgement:**

4 Scott Silverstein, Alexis Latham (Richmond Racial Equity), Jesse Bruchac and Kerry Wood, (tribal  
5 citizens), Annette Urbschat (culture keeper), Don Stevens (Chief of the Nulhegan Band of the Coosak  
6 Abenaki Nation).

### 7 **ACFC Committee:**

8 Jesse Crary, Cecilia Danks, Jim Monahan, Caitlin Littlefield, Nick Neverisky, Amy Powers, Daniel  
9 Schmidt, Melissa Wolaver, Chase Rosenberg, Ellen Kraft McCune, Tyler Merritt, Ian Stokes, Julian  
10 Portilla, Wright Preston, Brad Elliott, James Cochran, Sam Pratt.

### 11 **Consultation with experts:**

12 May 2021: Ecologists and trail designer (Aaron Worthley, Dori Barton of Arrowwood; Mariah Keagy of  
13 Sinuosity)

14 July 2021: Arrowwood and Sinuosity consultants (Aaron Worthley, Dori Barton, Mariah Keagy, Brooke  
15 Scatchard)

16 June 2022: Arrowwood and Sinuosity (Dori Barton and Mariah Keagy)

17 July 2022: Discussion with Arrowwood (Aaron Worthley) about the fine-scale review.

18 August 2022: Consultation with Melissa Levy (Community Roots, LLC) about facilitation of a  
19 community engagement public meeting.

20 August 2022: [Advice from Nick Fortin](#) (Deer & Moose Project Leader, Department of Fish & Wildlife,  
21 Vermont Agency of Natural Resources) email to ACFC about deer wintering areas and recreational use.

22 January 2022: Rebecca Roman (Vermont Land Trust) about acknowledgment wording and use rights as  
23 related to the Conservation Easement)

24 January 2022: Chief Richard Menard of Missisquoi Abenaki Nation about perspectives on the Land  
25 Acknowledgment and related components

26 July 2022: Rebecca Rouiller (Radiate Art Space, which sponsored the murals of Abenaki culture and  
27 language on the Town Center building) agreed to allow use of mural images in ACF signage. The murals,  
28 which were dedicated in a traditional ceremony led by Abenaki culture bearer Charles Delaney Megeso.

29 March 2023: Richmond Conservation Commission panel discussion on balancing conservation and trail-  
30 based recreation. [Video by MMCTV](#)

31 June 2023: Talk “Enjoying Our Trails with Wildlife in Mind”: Sue Morse of “Keeping Track” Video by  
32 MMCTV <https://archive.org/details/sue-morse-enjoying-trails-wildlife-06072023>

33 November 2024: Tyler Machia (Richmond Zoning Administrator) presented information to ACFC  
34 meeting [about Zoning Regulations and trail construction](#).

35

## 36 **3.2 General Rules**

37 *[BE: Rules would best be published where they’ll be easier to change. The MP is too long-lived for any*  
38 *list to avoid becoming obsolete, especially with us relatively new to the job and learning which rules*  
39 *work, which don’t and which we need to add. We can have a requirement somewhere to keep rules posted*  
40 *on the ACFC web page and on the kiosk and other entrances to the ACF.*

41

- 42 ● Except where otherwise noted in the plan (seasonal trail closures in certain areas to  
43 protect foraging, reproduction and winter shelter etc. of at-risk species, hunting), the ACF  
44 is open year-round to the public from dawn to dusk. Other exceptions with prior  
45 approval of the ACFC. Any human presence is known to disrupt activity of nocturnal

## Version for March 24<sup>th</sup> with new edits

wildlife. (e.g. See <https://www.nationalgeographic.com/science/article/news-humans-making-mammals-nocturnal-behavior-ecology>)

- Please keep in mind that different types of recreation place varying levels and types of pressure on forests. These pressures can have impacts on forest hydrology, soils, invasive species propagation, wildlife movement, tree regeneration and health.
- As the Original People who stewarded these lands [IS: suggest deleting the specific reference to 'the Western Abenaki People and other Indigenous Peoples'] are extended a special invitation to visit the ACF and pursue traditional and contemporary practices as outlined in **Appendix B, Indigenous Acknowledgement, Part 2.**

- **Allowed Uses:**

- Dispersed and trail-based pedestrian access is allowed on the property for uses such as hiking, walking, wildlife observation, or cross-country skiing, unless otherwise noted.
- Mountain biking is only allowed on trails designated for that use and at designated times.
- Snowmobiling may only be used on designated trails subject to agreements with VAST.
- Hunting is allowed on the Andrews Community Forest and is subject to the State of Vermont hunting seasons, rules, and regulations.
  - Temporary tree stands and ground blinds are allowed: from the third Sunday in August through the third Saturday in December, May 1 through May 31, and during any Youth Hunting Day. Tree stands and ground blinds must be erected such that no damage is done to a living tree (except that branches <1” diameter on the main stem may be trimmed). Stands and blinds must have the owner's name and contact information in an easily identifiable location. Stands and blinds that do not conform to these regulations may be confiscated.
- The Abenaki People may use ACF for gatherings and ceremonies, including the erection of small, temporary structures relevant to ceremonies. Prior notification of the ACFC is requested for large gatherings.
- The Abenaki People have the right to collect fungi, plants, and plant parts in a sustainable manner, which is described in **Appendix B, Indigenous acknowledgement.**
- Additional uses not listed here may be considered by the ACF Committee if they comply with town and state law and the Purposes and other provisions of the Conservation Easement.

### 3.3 Restricted and Prohibited Uses, as specified in the Conservation Easement

- **Restricted Uses:**

- Motorized vehicles are not allowed on the property, except for use by those with physical disabilities (as defined in ADA?), snowmobiles on any approved VAST trail, vehicles required for property management, or in case of emergency. Use for winter maintenance such as 'grooming' of trails [JP: Should include something like, per the trails plan. Trail plan should include which trails should be groomed. I'm assuming not all trails will be groomed. ] shall be limited twice per year to minimize disturbances during the winter when wildlife is at risk.
- Road Use: Motorized vehicles will be permitted subject to the easements with VELCO and the right-of-way agreement with Maple Wind Farm.
- Commercial wildcrafting, the collection of mushrooms, berries, herbs, and other forest materials for sale, is restricted to Abenaki People who follow the sustainable practices

## Version for March 24<sup>th</sup> with new edits

described in Appendix B. ? Other non-commercial wildcrafting - (mushrooms, chaga, ramps, birch bark, etc.)?

### ● Prohibited Uses:

- Campfires
- Overnight parking
- Horseback riding
- Camping
- New trail development without prior approval of the ACFC.
- Timber harvest outside of the approved Forest Management Plan.
- Trapping. Trapping poses a safety hazard to visitors and their pets and is considered incompatible with recreational and educational off-trail hiking by residents, school groups, researchers and hunters. Exceptions may be granted by the ACFC in conjunction with the Vermont Land Trust to address animals of concern/natural resource management concerns. Signage will notify visitors of the trap location and purpose.

## 3.4 Posting of Town Forest Rules

Posted rules shall be posted at the kiosk and trails providing access from neighboring lands (Note to ACFC: need to update the posted rules and install):

1. The Forest is open from dawn until dusk for walking, running, skiing, and other non-mechanized recreation. Hunting is permitted thirty minutes before sunrise [JP: Doesn't hunting happen as early as 3am during the season?] and thirty minutes after sunset in accordance with VT State regulations §4745. [Insertion by SP]
2. ATVs, motorcycles and other types of motorized transport are not permitted. Be aware that the neighboring farm operation may use farm vehicles to access its pastures.
3. Bikes only on authorized trails (see the map) and yield to others. [SP Comment: I think we should add signage per trail stating allowed uses as well.]
4. During hunting seasons (generally October through May) - please use safety colors.
5. Please park only in the assigned lot and not on the adjacent private property or across Rt. 2. Respect the privacy of the neighboring homes and businesses.
6. Keep pets on a leash; dogs are not permitted above the power lines. [SP Comment: I generally agree this is the responsible thing to do, but I would offer that we make a slight adjustment— changing it from power line to VAST trail. It only slightly changed the allowed trails for dogs, and also allows for better connectivity to surrounding properties for dog owners without having a major impact on wildlife.] Avoid disturbing wildlife or livestock. Remove all pet waste.
7. Be careful of the pasture fencing - it may be electrified.
8. Camping and fires are not allowed.
9. Do not cut, remove or damage any trees or other vegetation. [SP Comment: This seems to broad as it would not allow for foraging things like ramps, nettle, etc]
10. Watch out for ticks!

## 3.5 Parking

Parking is available off of Route 2 across from Maple Wind Farm, at 1129 East Main Street, Richmond and is permitted to accommodate one parked school bus and five parked cars. The Town of Richmond is

## Version for March 24<sup>th</sup> with new edits

1 responsible for maintenance and plowing. The upper landing area can be used for parking during special  
2 events, subject to acceptance of an application to the ACFC.

3 No new car parking shall be designated without ACFC approval. Maintaining low parking capacity is a  
4 passive way of controlling density of use.

5 Bike parking shall be installed in the parking area.

6

7 *[BE: Below (3.6 and 3.7) -- More history and feel-good text that can go elsewhere. It has a promotional,  
8 even self-aggrandizing ring to it. It makes it seem like the ACFC puts image-polishing ahead of  
9 presenting a solid MP. Suggest moving to appendix. Few will need to see it anyway. [IS comment: Many  
10 Management Plans include material about public input to add credibility.]*

### 11 **3.6. History of the Management Plan Public Input Process**

12 Public input opportunities into the initial management planning process in 2017 and 2018 [IS: and in  
13 2022 and 2023] were advertised by email, social media, Front Porch Forum, via signage in Town, and in  
14 the local print newspaper, the TimesInk! This process was critical to ensure the Management Plan reflects  
15 the interests of Richmond residents, and to give the Committee an opportunity to consider and reach  
16 consensus on important management issues such as hunting, trail development, and more.

17

18 Results from the public input process are available on the [ACFC website](#) [IS: where? In the MP?] and  
19 participation is summarized below:

- 20 ● In response to an online survey about whether the Town of Richmond should purchase the  
21 Andrews Forestland as a community forest, wildlife habitat protection was the most (?confirm)  
22 listed interest of respondents related to the opportunity.
- 23 ● *Visioning Workshop* – A public workshop was held on January 18, 2018 with about 80  
24 community members in attendance, providing input on management balance, appropriate  
25 activities and facilities
- 26 ● *Visioning Survey* – A survey, open from January to March 2018, asked similar questions to those  
27 posed at the workshop. The survey received 317 responses from residents of Richmond and  
28 surrounding towns.
- 29 ● *Stakeholder Interviews* – Small group interviews were held on June 14 and June 18, 2018 to  
30 discuss the future of the property with stakeholder groups: hunters/trappers, neighbors, education,  
31 trail-based recreation, natural resources, and others were invited to join.
- 32 ● *Draft Strategies Workshop* – A public workshop was held on July 12, 2018 to present the  
33 progress of the plan and hear feedback from the community on draft strategies for the future  
34 development and management of the property.
- 35 ● *Community Forest Committee* – The Community Forest Committee met twice a month through  
36 this process. The committee also met as smaller working groups to inventory and plan for each  
37 resource in the property.
- 38 ● *Public Input on Draft Management Plans* -- 44 people attended a presentation of the 1st draft of  
39 the Management Plan on 9/20/18; an additional 14 people submitted comments in writing. The  
40 comment period was open for two weeks. A second draft plan was released on 10/21/18, followed  
41 by a two-week comment period and including another public meeting.

42

43 Formal Public input into the 2022 Management Plan revision, including public engagement regarding the  
44 development of the approved trail design and the inclusion of an Indigenous land use acknowledgment,

## Version for March 24<sup>th</sup> with new edits

1 occurred in 2020-2022. In addition to the monthly ACFC carried out the following specific public  
2 engagements:

- 3 ● September 2020: After consultation the ACFC developed an RFP for ecological review and trail  
4 design services requiring the ecologist and trail designer to collaboratively establish a proposed  
5 trail design
- 6 ● May 2021: Public walk held at ACF with Arrowwood and Sinuosity (professional ecologist/trail  
7 build team) to walk part of the proposed trail and discuss routing
- 8 ● June 2021: Public presentation by Arrowwood and Sinuosity of proposed design, including  
9 representatives from VLT and SB. Some members of the public raised concerns over proposed  
10 encroachments on sensitive wildlife habitat and natural communities.
- 11 ● March 2022: Online public comments form launched seeking feedback on ACFC's preliminary  
12 trail Plan. 128 public comments received on proposed trail design. ACFC thematically coded  
13 comments into 25 emergent themes/concerns. Some of the submitted suggested changes and  
14 submitted via other forums (e.g., Front Porch Forum, the Times Ink) were specific and  
15 accompanied by clear rationale.
  - 16 - [Comments submitted via form](#)
  - 17 - [The comments here in 'readable' form](#) and organized by category.
  - 18 - [Public comments related to proposed trail route and committee responses](#)
- 19 ● March 2023: Professionally facilitated public meeting to solicit feedback related to proposed  
20 Management Plan revision
  - 21 o [Questions presented for experts at the March 29th 2023 'Public](#)  
[Engagement' meeting](#)
  - 22 - [Video recording](#) of Public Engagement meeting.
  - 23 Transcript (per YouTube) [here](#) with speakers identified, and edited for clarity; and partial timeline
  - 24 [here](#) o [Facilitator report](#) – Comments after “Public Engagement” meeting,
  - 25 - [Summary of Facilitator Report](#)

26  
27 [BE: The next section is redundant with much of 3.1] [IS: Suggest moving this and the material in section  
28 3.1 to a section at the end called 'Credits']

### 29 3.7. Expert Guidance Provided to the ACF Committee

30 **Alignment with town plan/zoning regulations:** Keith Osborne (Town Planner) advised that when there is  
31 a plan for new trails, etc. ACFC should contact Richmond Planning and Zoning and DRB to ensure the  
32 regulations are followed.

33 **Development addressed in the town plan:** The Town plan states: “Restrict development on steep slopes  
34 between 20% and 35%, cliffs... and prohibit all structural development ... on slopes greater than 35% , in  
35 order to maintain habitat connectors and mitigate erosion”

36 **Zoning:** The ACF is zoned as a recreational facility, based on a June 10 2020 DRB decision about the  
37 parking at the East Main frontage. The Zoning Administrator ~~Tyler Machia~~ has advised that any  
38 development in the ACF requires DRB approval: Concerning trails, any new trails developed on slopes  
39 greater than 20% will require engineered plans for “adequate” erosion controls per the RZR, SECTION  
40 6.11. Trails that currently exist can be maintained in-situ but any changes that would be considered an  
41 update to the approved site plan would require DRB approval. See [Tyler Machia memo](#) for Nov 25th  
42 2024 [IS Comment: Also his updated memo of Dec 13<sup>th</sup> 2024] meeting and ACFC Minutes October 23rd,  
43 2023: and the Town's [Zoning Regulations](#) especially Section 2.5.1 Areas with Special Guidelines for  
44 Land Development.

## Version for March 24<sup>th</sup> with new edits

### 1 **Other Expert advice:**

2 [IS: Suggest creating a section elsewhere called ‘Credits’]:

3 [MW: Names of specific positions such as Town Manager Josh Arneson, do not belong in the  
4 management plan because they do not make sense once a new person fills that position. Any reference to  
5 position should be without the current occupant throughout the management plan. So for example, Trails  
6 Committee Liaison, should not list the person’s name. Also, the current and past members of the Andrews  
7 Community Forest Committee do not need to be listed in the management plan. Let’s be concise. You  
8 can find that information not he website.]

9 Trail designers Aaron Worthley, Dori Barton of Arrowwood and Mariah Keagy of Sinuosity about the  
10 proposed trail routes and removing the Ridgetop Trail based on public feedback, and about the fine-scale  
11 ecological review.

12 Consultation with Community Roots, LLC (Melissa Levy) about facilitation of a public meeting on  
13 revisions to the Comprehensive Management Plan.

14 Nick Fortin (Deer & Moose Project Leader, Department of Fish & Wildlife, Vermont ANR) about how to  
15 manage deer wintering areas in the context of recreational use. ([Correspondence with Nick Fortin](#))

16 Rebecca Roman (VLT) regarding development of trail design, revising the management plan, and general  
17 compliance with the Conservation Easement.

18 Josh Arneson, (Richmond Town Manager) Judy Rosovsky, (Conservation Commission) Willie Lee and  
19 Chase Rosenberg (Trails Committee)

20 [SP Comment: Other experts listed show how they contributed their advice— can we provide context for  
21 these resources as well?]

22  
23 **For the development of the Land Acknowledgment**, the accompanying use rights, and the signage and  
24 naming suggestions:

25 Scott Silverstein and Alexis Latham (Richmond Racial Equity) and Jesse Bruchac and Kerry Wood, (tribal  
26 citizens), Chief Don Stevens ( Nulhegan Band of the Coosak Abenaki Nation), Chief Richard Menard  
27 (Missisquoi Abenaki Nation), Abenaki culture bearer Charles Delaney Megeso and culture keeper  
28 Annette Urbschat concerning Abenaki access to the forest for hunting, gathering and perhaps holding  
29 gatherings, as well as the potential trail naming and interpretive signage (See Appendix B).

30 Rebecca Roman (VLT) reviewed the Land Acknowledgment wording and use rights as related to the  
31 Conservation Easement and Rebecca Rouiller of Radiate Art Space, which sponsored the murals of  
32 Abenaki culture and language on the Town Center building, agreed to allow use of mural images in ACF  
33 signage.

34  
35 *[BE: We have yet to present management objectives or action items, and we’re describing how they’ll be  
36 changed? It sort of knocks the legs out from under them. This material belongs in the MP but would be  
37 most logical to include at the end.]*

### 38 **3.8. Comprehensive Management Plan: Process for Updates: Amendments** 39 **and Revisions**

40 This Comprehensive Management Plan is intended to be a living and evolving document. As the Andrews  
41 Community Forest is new to public ownership, there is a need to better understand current and changing  
42 conditions on the ground and respond to new conditions that may arise. Adaptive management is an  
43 iterative cycle of evaluating and learning, adjusting, planning, and acting. The ACFC is required to make  
44 management decisions based on resource management requirements, objectives and current best

## Version for March 24<sup>th</sup> with new edits

1 management practices. *[BE: The preceding sentence should read, "...resource management requirements*  
2 *and objectives, ..."* In addition, the ACFC is required to gather information on relevant management  
3 practices that can guide future management decisions and management plan revisions.

4  
5 *[This is very open-ended. Who will decide whether a change is minor or major Also, what is meant by*  
6 *"in the public eye"?)* This plan must be reviewed and updated, at a minimum, every ten years, as required  
7 by the Conservation Easement. However, more frequent revisions may be necessary as the community's  
8 uses of the property and knowledge about it evolve. Updates to the Comprehensive Management Plan can  
9 be of two kinds, revisions or amendments, which vary in degree of public outreach and data collection.

10  
11 *[BE: Suggestion below]* Any amendments to the plan, as suggested by **Figure 3: Adaptive Management**  
12 **Model**, may include **minor adjustments** made in the public eye that improve the effectiveness of  
13 management actions or minor changes to wording.

14 Any **major changes** to the plan objectives or proposed actions require a plan revision, which entails a  
15 planning and outreach process that includes scoping of concerns, collection of any needed data, and a  
16 public engagement process that invites stakeholders and other residents to provide input on proposed  
17 revisions. Such a process may entail a combination of surveys, ecological assessments, field trips, and  
18 public meetings dedicated to the plan revision.

19  
20 Proposed changes to the Comprehensive Management Plan, either amendments or revisions, must be  
21 reviewed and approved by the Vermont Land Trust to ensure compliance with the Conservation Easement  
22 and submitted for approval by the Richmond Selectboard.

### 23 24 **Figure 3. Adaptive Management Model**



## 26 27 28 **4. Timber Management and Forestry Activities**

29 In November of 2019 the ACFC, Vermont Land Trust, and the Selectboard adopted a [Forest Management](#)  
30 [Plan](#) written by the County Forester Ethan Tapper specific to forestry activities. The document details  
31 how the forest will be managed for its timber and other natural resources. It uses a 'zone' approach that  
32 divides the forest into three different management styles for perpetuity and emphasizes a diverse and  
33 resilient forest as well as addresses invasive species management. This Comprehensive Management Plan

## Version for March 24<sup>th</sup> with new edits

1 provides more detail about the Forest Management Plan that was crafted by Ethan Tapper and adopted by  
2 the Selectboard on November 18, 2019. Additional timber stand improvement (TSI) activities were  
3 completed in the winter of 2022 and included crop tree release as well as selective cutting.

4  
5 Many forest management roads (also called “logging roads,” or “skid trails”) from previous logging  
6 operations still exist in the forest. Some may still serve as a component of a multi-use recreational trail  
7 network, provided that drainage and erosion challenges can be mitigated. The use of these trails for  
8 recreation should not compromise or preclude their utility as forest management roads into the future.

9  
10 This Forest Management Plan provides an initial schedule for maintenance and on-going forest  
11 management activities by stand and zone. All forestry activities should be in agreement with this  
12 document. (Located on the town website; click [here](#) for direct access).

### 13 4.1 Forestry Management Objectives and Actions

14 [IS notes: Brandon wrote in an email on /2025: I made some small changes to section 2.7 “Forestry”. I  
15 did not find any changes to make in section 4.1- objectives. That section felt fine, but more importantly, it  
16 is really not my place to define the objectives of the town forest. “”]

17 **Overall Objectives:** Follow the [Forest Management Plan](#) adopted in 2019 to manage forestry activities  
18 that improve forest health, wildlife habitat protection and wildlife diversity.

- 19  
20
- Utilize multi-aged silvicultural treatments over the majority of the property.
  - Avoid creating new permanent openings or wide (> 20 feet wide), roads and trails. Consider  
22 creating 5-10 acres of young forest/early-successional habitat.
  - Utilize management guidelines that enhance the value of the forest for a variety of deep forest  
24 species such as bear, fisher, and a variety of songbirds is recommended.
  - In Ledge, Talus, and Ridges area, a forested canopy should be maintained over these rock habitats  
26 that occur in a forested matrix. The selective removal of trees near these habitats is compatible  
27 with continued use by wildlife. Maintain a 100’ buffer from treatments to broken ledge and talus  
28 that provide concealment cover for wildlife.
  - Mast Stands: Use forest management activities that promote the establishment, maintenance, and  
30 persistence of these species within the Forest.
- 31

32 **Objective 2.** Protect natural communities as well as the ecological processes that sustain them. Retain  
33 soil integrity, water quality, natural species composition, natural disturbance regimes and natural  
34 hydrology.

- 35
- Update natural community mapping as more on-the-ground data becomes available.
  - All forestry activities shall incorporate steps to retain soil integrity, water quality, natural species  
37 composition, natural disturbance regimes, and natural hydrology; Identify and control exotic  
38 species with the Forest Management Plan.
  - Deer Wintering Areas: The Hemlock and Hemlock-Northern Hardwood forest communities on  
40 the parcel could be managed specifically to enhance the conifer overstory and hemlock  
41 regeneration.
- 42

## Version for March 24<sup>th</sup> with new edits

1 **Objective 3.** Recognize that forest management in the form of the periodic harvesting of timber is an  
2 important part of land conservation, maintaining the working landscape, and supporting the forest  
3 products economy in Vermont.

- 4 • Employ forest management for timber on municipal lands as a demonstration of responsible, and  
5 sustainable forest management, educating residents of Richmond and beyond in how to harvest  
6 forest resources in a sustainable way. See Forest Management Plan for harvest dates.
- 7 • Hold educational events around forest management activities to inform the public about the  
8 rationale and best practices of sustainable forest management.

9  
10 **Objective 4.** Manage the ACF to sustain plant and wildlife species of special cultural importance to  
11 Abenaki peoples. (When forest management incorporates traditional practices by engaging Abenaki  
12 foresters and culture keepers, it offers the opportunity to educate the community about historical and  
13 contemporary Indigenous forest stewardship practices.)

- 14 • Maintain contact with Abenaki tribal foresters to contribute to future forest management planning  
15 and activities. In collaboration with Abenaki partners, identify culturally important species (e.g.,  
16 black ash) and the stewardship practices needed to sustain them, to inform future forest  
17 management activities.

## 19 5. Cultural History Management Objectives and Actions

20 *[BE: We might be able to save a lot of time if we asked Josh if it would make sense to show the whole*  
21 *Indigenous agreement to the Town Attorney now and get their recommendations....unless that's already*  
22 *happened. But because we're carving out exceptions to the way Town property is managed, the attorney*  
23 *may have some suggestions on the best way to do so, if it's possible.]*

24 In our commitment to Abenaki indigenous, first nation people we have pledged to foster a healthy forest  
25 community by incorporating Traditional Ecological Knowledge into our management practices.

26 **Objective:** Provide information for forest visitors about the Indigenous and colonial cultural history of  
27 the forest and its context within Richmond.

28 Expand and enhance cultural information about the forest.

29 Add interpretive signage about the cultural history of this forest land at historic sites and about  
30 other educational materials that explain and celebrate Abenaki language, forest uses and stewardship  
31 practices.

32 Work with the Abenaki tribes, the Andrews family, and others with cultural knowledge of the  
33 forest to host programs and tours about the history and contemporary resources of the ACF.

34 Work with Radiate Art to share high quality images of their murals for use by the ACF  
35 interpretive materials and signage.

36  
37 **Objective:** Protect remaining cultural features and values.

38 Route trails distant from **cultural resources** [SP Comment: What cultural resources exist? Are we  
39 referring to ecological resources? Either way, perhaps we could be more specific.]; provide spur trails if  
40 appropriate.

41  
42 **Objective:** Maintain viable populations of plants and wildlife of cultural importance.

## Version for March 24<sup>th</sup> with new edits

1 Coordinate with Chittenden County forester and Abenaki tribal forester(s) to manage black ash  
2 trees [SP Comment: Is this actionable? Aside from tree injections, can we do anything to preserve these  
3 trees?] given its cultural importance and the threat of the emerald ash borer. Identify and protect any  
4 threatened butternut trees [SP Comment: Are there any butternut trees in ACF?] and any other culturally  
5 important species in the ACF.

6 Consult with an Abenaki Forester or tribal affiliate upon any management plan revisions and  
7 major management activities that may affect cultural resources. (See Appendix B, Part 3).

8  
9 **Objective:** Include Indigenous perspectives, knowledge, and language in ACF educational materials,  
10 management and naming practices.

11 Maintain a working relationship with the Western Abenaki People and welcome them to this  
12 land.

13 Improve our community's understanding of the cultural importance of ACF to Indigenous people.

14 Partner with Abenaki tribal representatives and others to develop and prioritize lists of culturally  
15 important forest plant, animal and fungal species to help the ACFC manage them sustainably and to  
16 provide educational materials. Such lists should include Abenaki names, scientific names, traditional and  
17 current uses, traditional ecological knowledge and stewardship practices, potential threats, and other  
18 information, stories or sources that would help in their sustainable management.

19 Choose AFC trail names from the list of Abenaki words for animals of the forest and landscape  
20 features found in Appendix B, Part 4. These words were proposed and vetted by Abenaki tribal citizens  
21 and culture keepers.). Take advantage of educational materials and programming for the UN International  
22 Decade of Indigenous Languages 2022 – 2032. See:

23 <https://www.un.org/development/desa/indigenouspeoples/indigenous-languages.html>

24 Also, for exploring the potential for ACF to be an educational site for the Abenaki Trails Project, see:

25 <https://abenakitribe.org/abenaki-trails-project>

### 26 5.1 Potential partners regarding ACFC cultural history

- 27 ● Abenaki Nation of Missisquoi, <https://www.abenakination.com/>
- 28 ● The Nulhegan Band of the Coosuk Abenaki Nation, <https://abenakitribe.org/>
- 29 ● Kerry Wood and Annette Urbschat for consultation regarding the Western Abenaki language
- 30 ● Abenaki Arts and Education Center, <https://abenaki-edu.org/>
- 31 ● Radiate Art, <https://www.radiateartspace.org/>, ~~Contact: Rebecca Rouille~~
- 32 ● Richmond Racial Equity, ~~Contacts: Scott Silverstein and Alexis Latham~~
- 33 ● Chittenden County Forester

1

## 2 **6. Wildlife and Natural Resources Stewardship**

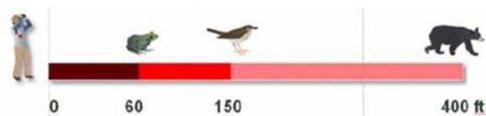
### 3 **6.1 Ecological Resources and Stewardship**

4

5 The ACF Conservation Easement and Richmond Town Plan call for maintaining the Forest’s ability to  
6 support biodiversity amid climate and land-use changes. To guide this effort, this Plan uses the Vermont  
7 Conservation Design (VCD)<sup>4</sup> framework to look at the ACF’s ecological resources from three  
8 perspectives: landscape, community, and species.

9

10 Drawing from this comprehensive approach and numerous research studies, the Plan aims to minimize  
11 human impacts on sensitive habitats by recognizing the area around trails known as their “zone of  
12 influence” or ZOI, where wildlife can detect and respond to traffic, often adversely degrading the  
13 habitat’s viability...



Wildlife can detect and show alarm at human presence on trails over large distances known as the zone of influence, or ZOI.

20

[BE: Suggest adding the illustration’s source to caption or footnote: *Trails for People and Wildlife*, NH Department of Fish & Wildlife. Page 5.]

For some species in some terrain, ZOIs can extend beyond 1000 feet. As a general recommendation for New England forests, wildlife biologists advise keeping trail traffic 330-

21 400 feet from sensitive areas<sup>5</sup>. This guidance, supported by professional ecological assessments, informs  
22 this Plan’s strategies to ensure long-term human access to and enjoyment of the full ACF without  
23 degrading its ecological integrity or its forestry, recreational, agricultural, and educational values.

24

### 25 **6.2 Landscape-Level Elements**

26

27 Much of the ACF, especially above the former VAST trail, is ranked  
28 “Highest Priority” or “Priority” by Vermont’s natural resource agencies as  
29 contiguous interior forest supporting high-quality wildlife habitat and robust  
30 natural communities.

31

32 ACF’s intact interior forest, ranked “Highest Priority” for its conservation  
33 values (see illustration) supports wide-ranging species like black bears,  
34 bobcats, moose, fishers and wild turkeys. Its ridges and ravines provide vital  
35 migration corridors, foster genetic diversity and are ranked “Priority” for

36 promoting forest connectivity on a landscape scale. As the climate shifts, the  
37 forest’s connectivity will facilitate northward species migration,



UVM researchers in the ACF spotted this bear watching them work.

<sup>4</sup> <https://vtfishandwildlife.com/conservation/vermont-conservation-design>

<sup>5</sup> [Naughton, 2021](#), [Oehler, 2017](#) and others. See References in Appendix.

## Version for March 24<sup>th</sup> with new edits

1 underscoring its role in sustaining regional biodiversity. Recognizing this, the ACF Conservation  
2 Easement highlights the need to conserve the ACF’s landscape connectivity to sustain regional wildlife  
3 populations and mitigate habitat loss, fragmentation, and climate change effects.  
4

### 5 **6.2.1 Landscape-Level Objectives**

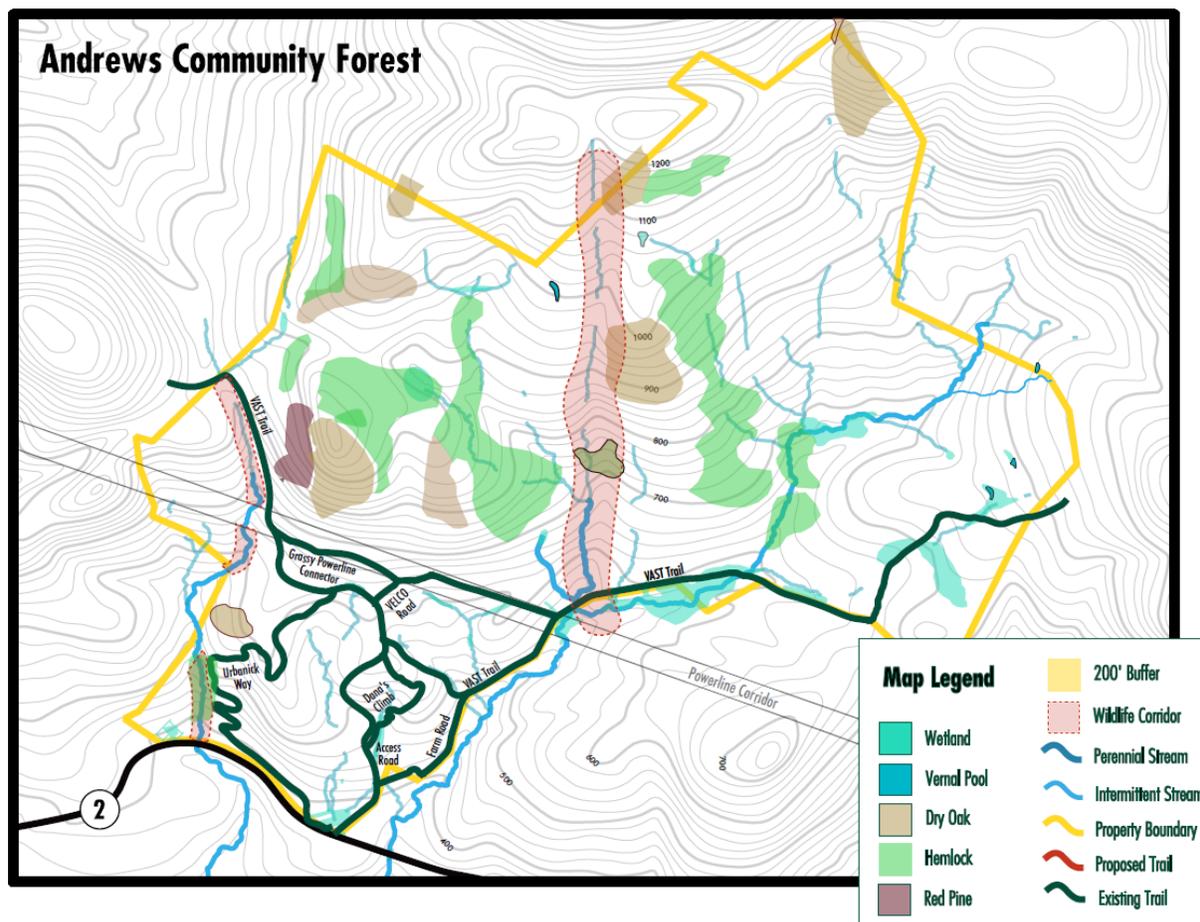
- 6 • Maintain the ACF’s ecological integrity, biodiversity and functionality, including its status as  
7 “High Priority” and “Priority” interior forest and connectivity components of Vermont  
8 Conservation Design.
- 9 • Preserve interior forest health and connectivity to support black bears, bobcats, moose, fishers,  
10 ovenbirds, hermit thrushes and other deep-forest species.
- 11 • Protect neighboring properties’ landscape-scale ecological integrity and pursue opportunities to  
12 conserve and connect wildlife habitats.
- 13 • Protect soils, natural vegetation, water quality and natural climate change resilience through  
14 measures shown to control erosion and prevent washouts from soil disturbances on slopes  
15 exceeding 20 percent. Avoid disturbing any soil or duff layers on slopes over 35 percent. Monitor  
16 existing trails on those slopes for damage and erosion, and take restorative measures that could  
17 include closures.

### 19 **6.2.2 Landscape-Level Action Items**

- 20 • Maintain recreational access north of the former VAST trail at current types and levels while  
21 creating new and diverse options south of the VAST trail (see Recreation).
- 22 • Work with the County Forester to implement the ACF Forestry Management Plan and enhance  
23 the ACF’s interior forest and wildlife connectivity values.
- 24 • Replace invasive species with native vegetation.
- 25 • Develop a plan to reduce wildlife mortality along Route 2 crossings.
- 26 • Use public signage and events to educate visitors about ACF’s ecological role.

27  
28 **For more information, see [Landscape-Level Elements](#) in the Appendix’s [Background to Ecological](#)  
29 [Resources and Stewardship](#) section**

1 6.3 Community-Level Elements



2  
3 The ACF encompasses ten upland and wetland natural communities vital for wildlife diversity. Each is  
4 “an interacting assemblage of plants and animals, their physical environment, and the natural processes  
5 that affect them<sup>6</sup>.” Undisturbed, natural communities provide needed food, shelter and breeding grounds  
6 for myriad species.

7  
8 ACF’s natural communities, particularly those north of the former VAST trail, hold “High Priority” and  
9 “Priority” rankings in Vermont Conservation Design. Tracks, scratch marks, sightings, camera captures  
10 and other evidence show ACF’s upland communities supporting whitetail deer, black bears, bobcats and  
11 forest birds such as hermit thrushes. Wetland areas, while comprising less than 1% of ACF, support  
12 important populations of amphibians, reptiles, and mammals. Riparian zones filter stormwater runoff to  
13 protect water quality while also providing critical wildlife corridors.

<sup>6</sup> *Conserving Vermont’s Natural Heritage*. 2<sup>nd</sup> Edition. Vermont Fish and Wildlife Department and Agency of Natural Resources. Waterbury, Vermont. 2013.

1 **6.3.1 Community-level objectives**

2



- Maintain the relative isolation and integrity of rare upland natural communities (e.g., Dry Oak Forest) to support the conservation needs of bears, bobcats, wild turkeys, hermit thrushes and other deep-forest, far-ranging species.
- Protect wetland and aquatic habitats, including vernal pools, for diverse species such as salamanders and wood frogs.
- Facilitate connectivity between upland and wetland habitats.
- Minimize disturbances to natural communities south of the VAST trail.

13 **6.3.2 Community-level action items**

- 14 • Develop a Wildlife Stewardship Plan to protect the functionality of the ACF's community-level  
15 elements.
- 16 • Promote food, cover and structural diversity for terrestrial and aquatic species in upland and  
17 wetland natural communities.
  
- 18 • Maintain hiking, hunting, skiing, snowshoeing, birding, wildlife observation and other types of low-  
19 impact recreation north of the former VAST trail on existing forest roads. Identify routes best suited  
20 for these types of recreation and maintain them accordingly. Expand recreational opportunities  
21 between the parking lot and the former VAST trail to include new and improved trails for mountain  
22 bikers, casual walkers, runners, elderly residents and school groups.
- 23 • Work with County Forester, UVM resources and professionals to ensure adequate amounts of shade  
24 and coarse, woody debris in streams and wetlands.
- 25 • Assess and develop plans addressing these major challenges to the ACF's natural communities:  
26 ○ Invasive species  
27 ○ Tree and plant diseases  
28 ○ Climate change  
29 ○ Human impacts
- 30 • Use signs and outreach tools to inform and involve the public in conserving the ACF's natural  
31 communities and the ecological processes and benefits they support.
- 32 • Monitor the health of the ACF's natural communities and habitats.  
33 ○ Involve ACFC and public volunteers in a program combining field visits, camera and audio traps,  
34 and consultations with experts.  
35 ○ Utilize black bear and bobcat [and \_\_\_\_songbirds/raptors?] as indicators of the overall  
36 biodiversity and health of the ACF.
- 37 • Maintain or enhance conditions for wildlife in and among the ACF's natural communities:

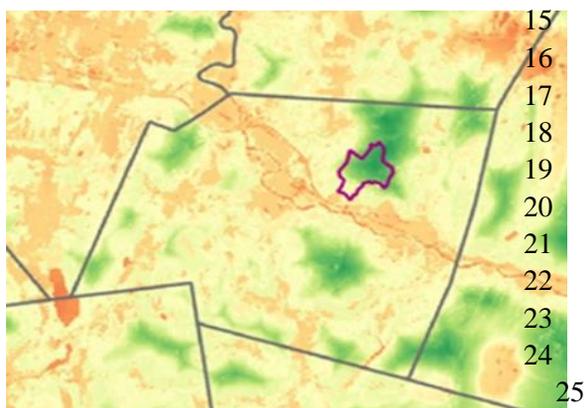
## Version for March 24<sup>th</sup> with new edits

- Improve deer population management so the ACF's herd can contribute to its health and species diversity. Encourage hunting subject to VT regulations. Employ exclosures to both track and demonstrate impacts of deer browsing the forest understory.
- Protect mast-producing areas from disturbances during fruiting and wildlife foraging seasons.
- Monitor forest health and quantitative/qualitative changes to its habitats (see Appendix     ).
- Post to *Times Ink!*, *Front Porch Forum*, the ACFC webpage and social media information about the ACF's natural and cultural history, and efforts to protect and enhance its natural communities and other habitat features.

For more information, see [Community-Level Elements](#) in the [Appendix's Background to Ecological Resources and Stewardship section](#)

### 6.4 Species-Level Elements

ACF offers specialized, critical habitats for certain species. Hemlock groves provide winter shelter for deer, enabling them to conserve energy during the leanest months. Oak, beech, blueberry and other sources of mast support over 100 species, including black bears and turkeys. Ledges and rocky areas serve as vital habitats for bobcats, ruffed grouse and other animals. Early successional habitats foster biodiversity by supporting young tree growth and associated fauna.



Much of Richmond's prime bobcat habitat (green) exists in the northern part of the ACF. *Source: 2020. [Investigating Bobcat-Recreation Conflicts in Vermont. Middlebury College.](#)*

#### 6.4.1 Species-Level Objectives

- Conserve rare, threatened, and endangered species by integrating updated information into management plans.
- Maintain the functionality of mature softwood cover for wildlife wintering and ensure nearby food sources.
- Promote the health and viability of mast-producing trees and shrubs.
- Enhance early successional habitats to diversify species and age structures.

1 **6.4.2 Species-Level Action Items**

2



3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
Hemlock stands not only shield deer and other wildlife from winter snows and winds, but they also provide nesting spaces for interior forest birds such as the hermit thrush.

- Engage ecologists to survey proposed trail routes and infrastructure areas for rare species within 50 feet of their sides and adapt conservation plans accordingly.
- Maintain at least a 70 percent canopy within hemlock stands. Close trails within 100 meters to all but hunters from November through March.
- Manage deer populations with regulated hunting. Install exclosures to demonstrate browsing impacts and nurture seedlings.
- Maintain the oak and other mast requirements of black bears, wild turkeys, white-tailed deer and other species. Avoid disturbing soft- and

17 hard-mast stands areas during fruiting and foraging seasons.

- Provide education and updates about ACF's efforts to preserve its species and habitats.

19

20 For more information, see **Landscape-Level Elements** in the **Appendix's [Background to Ecological](#)**  
21 **[Resources and Stewardship section](#)**  
22

1

## 2 **7. Recreation Management**

3 [BE: As you'll see below, there are many issues with this section, ranging from its flow to repetitiveness  
4 to occasional defensive, exaggerated or misleading language. And then there's the length, and inclusion  
5 of unnecessary text. I'm proposing a reworked, shortened alternative to the two Recreation sections 2.9  
6 and 7 in the document "[Recreation and Appendix 2-26-25.docx](#)")  
7  
8

### 9 **7.1 Recreation as addressed in the Conservation Easement**

10 [BE: Do we need this? Haven't we already described the need to abide by the Easement, and added it to  
11 the Appendix?] []

12 The Conservation Easement notes that the ACF is "one of Vermont's largest blocks of unfragmented  
13 interior forest." The continued loss of Vermont forest lands makes the ACF even more ecologically  
14 valuable. The "Purposes" of the governing Conservation Easement allow conserving the ACF's natural  
15 resources while continuing to provide public access to the Forest in appropriate ways." [BE: The first  
16 "Purpose" of the Easement does more than "allow" conservation – it mandates it. Suggest "require,"  
17 "compel," "mandate," etc.]  
18

19 The Conservation Easement (Page 6, III Permitted Uses of the protected Property, Paragraph A) allows  
20 for non-motorized, non-mechanized recreational use of the forest (i.e., walking, snowshoeing, skiing, and  
21 hunting). Additionally, Section IIIA of the Easement allows for "snowmobiling, and for non motorized  
22 mechanized recreation such as mountain biking, and by animals capable of transporting humans as  
23 regulated in the Management Plan and are consistent with the Conservation Easement Section(s) V, VI  
24 and VII. that identify constraints within the Riparian Buffer Zone, [rare and uncommon natural  
25 communities], the Ecological Protection Zone and Vernal Pool Ecological Protection Zone. The  
26 Management Plan must provide the rules for these three uses and guide the management of recreational  
27 infrastructure and native flora and fauna...and the ecological processes that sustain these natural resource  
28 values...."]

29 [BE: This should note the condition the Easement puts on all "allowed" activities plus any others not  
30 listed. The Town is required to abide by the "Purposes of the Grant." The first mandates us to "conserve  
31 productive forestland, wildlife habitat, biological diversity, natural communities, riparian buffers,  
32 wetlands, soil productivity, water quality and native flora and fauna...and the ecological processes that  
33 sustain these natural resource values...."]

### 34 **7.2 Trail-based Recreation**

35

36 [BE: Is this needed? It could be boiled down into the sentence suggested below ... but then what do we  
37 say? The last two sentences do no more than set up a false dichotomy. I suggest simply finding a better  
38 place for the "Extensive research..." sentence below. It could be in a preamble to this section, as it  
39 applies to non-trail based recreation as well.  
40

41 **Trail-based recreation impacts on wildlife and benefits of outdoor recreation and nature**

## Version for March 24<sup>th</sup> with new edits

1 Extensive research details how human activities in a forest can have negative effects on wildlife and  
2 positive effects on human wellbeing.

3 *[BE: No one is proposing either of those extremes. The statement is a red herring and potentially*  
4 *inflammatory. In addition, the preceding paragraph only states the obvious. Alongside conservation, the*  
5 *Easement requires us to “provide” “appropriate” recreational uses. The paragraph’s last two sentences*  
6 *should be cut.]*

### 8 **Town residents’ preferences**

9 A 2018 survey (see 2018 Management Plan, [Appendix G](#), page 279) asked town residents to indicate their  
10 preferences for activities they would like to see allowed in the ACF. The ten most favored, in order of  
11 preference, were hiking, running, hunting, snowshoeing, skiing, bird- and wildlife-watching, picnicking,  
12 biking and dog-walking. Some Town residents identified connectivity with abutting trail systems to be an  
13 important attribute of trail design, while others were concerned that increased traffic would impact  
14 sensitive wildlife habitats. Expanding trails into the Forest’s most sensitive areas and linking them into  
15 larger, unregulated networks would tax the Town’s ability to protect the ACF’s ecological resources and  
16 to manage safety for people using more remote trails. [CR Comment: subjective.....try “could possibly  
17 tax”]

18  
19 *[BE: Suggest adding the following text here as another subsection:]*

### 20 **Trail Design Principles**

21 Trail development and management in the ACF are guided by the principles listed on page 4 of the [The](#)  
22 [Vermont Town Forest Trail Design Guide](#):

23 Avoid sensitive ecological areas and critical habitats.

24 Develop trails in areas already influenced by human activity.

25 Provide buffers to protect sensitive ecological and hydrologic systems.

26 Use natural infiltration and best practices for stormwater management.

27 Ensure ongoing stewardship of trails and surrounding natural systems.

28 Design, build, and maintain trails sustainably.

29 Decommission and restore unsustainable trail corridors.

### 31 **Naming of Trails:**

32 *[IS comment: The suggested names in Appendix B use animal names, which do not necessarily*  
33 *correspond to the prevalence or habitat of the named species. Conversely, the English Language proposed*  
34 *names are indicative of landscape etc. features.]* ACF will support the revival of the Western Abenaki  
35 language and culture by using Abenaki language for places, practices, flora, and fauna in the naming of  
36 trails, educational materials, and signage. Trails will be named to help bring Indigenous presence and  
37 language back to this landscape (rather than contribute to their erasure). Appendix B: Indigenous  
38 Recognition, Part 4, identifies suggested names that were proposed and vetted by Abenaki tribal citizens,  
39 culture keepers and language experts.

40  
41 **General Regulations** *[BE: Usage regulations are likely to be updated more often than the MP. Putting*  
42 *them in the MP could shorten its shelf life. This and the next five sub-sections would best be published*  
43 *elsewhere – the ACFC web page, the kiosk, with printed maps, annotations to TrailsFork listing, etc.]*

44 To address the often competing interests of human and Forest health, the following regulations about  
45 recreation are proposed:

46 1. No access for horses and similar animals; Horses are a major vector of invasive species spread.

## Version for March 24<sup>th</sup> with new edits

- 1 2. Pedestrians are allowed on all trails; Mechanized recreation only on trails identified for such use on the  
2 Trails Map; [SP Comment: Consider adding to trail signage as well.]  
3 3. No mechanized recreation during hunting seasons, during (specified) winter months or when trails are  
4 announced as ‘closed’ via public notices;  
5 4. Electric bikes (eBikes) are not generally allowed on the trail network, based on concerns regarding  
6 their faster speeds, safety, possible user conflict and the non-motorized provision in the Conservation  
7 Easement. Recognizing that eBikes may broaden access for individuals with physical limitations and  
8 consistent with a commitment to equity and inclusion and the ADA, any ACF visitors with mobility  
9 disabilities who wish to use motorized personal assistive mobility devices (as permitted in the  
10 Conservation Easement, Section G) should contact the ACF Committee.

11

### 12 **Dogs**

13 [IS suggests Figures: Dogs on Trail Rules

14 <https://infoacf.wordpress.com/wp-content/uploads/2023/06/dogs-on-trail-rules-covallis-2019.jpg>

15 <https://infoacf.wordpress.com/wp-content/uploads/2024/09/whynodogs.jpg> ]

16 Dogs are permitted below the power lines, and not above them. [SP Comment: I generally agree this is the  
17 responsible thing to do, but I would offer that we make a slight adjustment— changing it from power line  
18 to VAST trail. It only slightly changed the allowed trails for dogs, and also allows for better connectivity  
19 to surrounding properties for dog owners without having a major impact on wildlife.] Dogs are to be kept  
20 on leash at all times, following the model of the Audubon Society (Huntington), in order to protect the  
21 forest wildlife. This is more stringent than the town dog ordinance, and is intended to protect wildlife and  
22 vegetation as well as other forest users. Hence no hunting with dogs. Voice control may not always be  
23 effective, and may disturb wildlife anyway because of the (loud) vocalization required.

24 All pet waste must be carried out.

25

### 26 **Signage at property boundaries with trails and liaison with adjacent owners**

27 There are three existing possibilities for trail connectivity: VYCC, Sip of Sunshine and Valley View.  
28 At each access point from adjacent properties clear signage will indicate what is and is not permitted,  
29 using text as posted at the kiosk.

30

### 31 **Events/permitting**

32 People and organizations wishing to hold events in the ACF should apply to the ACF at least two ACF  
33 meetings in advance of the event date. (See Easement, Events p7, section J)

34 Fees may be determined in proportion to and in accordance with cost of the events.

35 Approval of events will be determined by the ACFC according to criteria including but not limited to:

36 Appropriateness of use per the objectives of the MP and the Easement, expected numbers of participants,  
37 location and extent of the event, parking requirements, the likely ecological impact on the trails (if  
38 applicable) and on flora and fauna (for e.g., deer wintering, spring vernal pools, etc.).

39

### 40 **Determining trail closure times**

41 Decisions on seasonal trail closures address the following criteria: Quality of the activity relative to the  
42 season; Minimize incompatibilities among activities for maximizing safety (for example, minimizing  
43 non-hunting uses during hunting season, establishing directionality of trails for bikers where necessary);  
44 Minimize impacts on animal habitat. Following state guidance for deer wintering closures, the trails will  
45 be closed above the power lines from December 15 - April 1 to protect habitat and desirable game  
46 species. People may still recreate across ACF in a dispersed manner (eg x-c skiing) but trails will not

## Version for March 24<sup>th</sup> with new edits

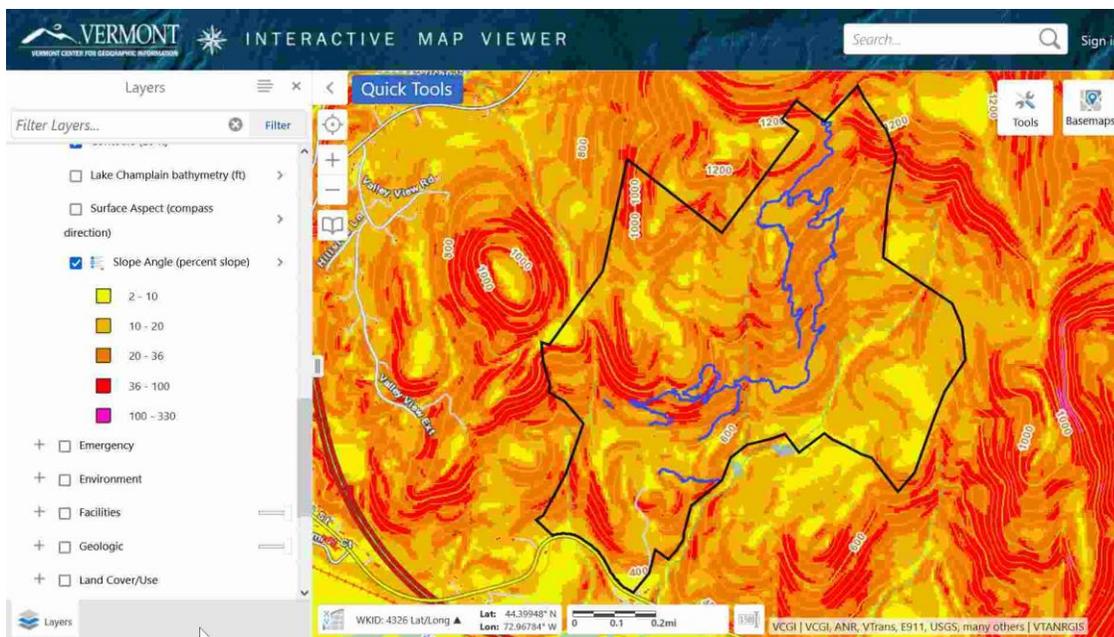
1 officially be open. Trails will be closed to bikes from hunting season through April 1st to reduce the  
2 number of visitors, and the extent of their presence disturbing deer in wintering habitat. [IS: Question:  
3 why only bikes? Would skiers be similarly disturbing?] Walking is allowed at all times with STRONG  
4 cautions to wear highly visible clothing during hunting seasons.  
5 [BE: Comments seem appropriate to include somehow. But firm ‘rules’ seem elusive. Usage regulations are likely  
6 to be updated more often than the MP. Putting them in the MP could shorten its shelf life. This and the next five sub-  
7 sections would best be published elsewhere – the ACFC web page, the kiosk, with printed maps, annotations to  
8 TrailsFork listing, etc.]

### 10 Enforcement of Trail use Policy

11 Clear signage and a map will be maintained at the kiosk and other formal access points to identify  
12 permitted uses and guidance for users and trail closure status. Public should be notified of trail closures at  
13 the Town Website and through notices at Richmond’s Front Porch Forum. Ropes will be placed across  
14 trail entrances when trails are closed seasonally or temporarily for trail maintenance such as clearing  
15 downed trees.

### 16 7.2.1 Process for Considering Future Trails

17 Proposals for new trails shall not be approved for construction until a new Trail Design Map is adopted  
18 through a full revision of the Management Plan, which is subject to public review and approval by the  
19 Selectboard, and the Easement holders. [BE: The word “through” in the previous sentence is ambiguous  
20 as to whether the MP drives the trail design or the (problematic )opposite. We now know the  
21 Selectboard’s preferences on this, too. Suggested rewording: “Proposals for new trails must comply with  
22 the latest approved update to the Management Plan. Otherwise, the Management Plan must first be fully  
23 revised, publicly reviewed and approved by the Selectboard and Easement holders.”]  
24 In considering the appropriateness of proposing any new future trails, the Committee will (1) seek  
25 appropriate professional guidance to assist it in evaluating trail sustainability and the impact of trails on  
26 the ACF’s wildlife and forested ecosystems; [BE: ACFC members, the SB and public will need to know  
27 more. Suggest leading this list with (1) Document the need for and benefits of new trails] (2) comply  
28 with Richmond’s Zoning Regulations and Town Plan [BE: Suggest: (3) Obtain estimates for building it  
29 and its infrastructure.] (3); engage with the community via an open public process addressing the Town  
30 Plan and Management Plan’s objectives to offer recreational opportunities while protecting the ACF’s  
31 natural resources. Zoning permits for new trail construction may require a professionally prepared site  
32 plan and an engineering design plan. [BE: I believe Tyler referred to an “Erosion and Sedimentation  
33 control plan.”]  
34



1

**Figure 5:** Slopes of terrain in the ACF, with proposed trails overlaid. Richmond’s Zoning Regulations identify special provisions for development on slopes greater than 20%, and greater than 35%. Map source: Vermont [Interactive Map Viewer](#).

2 *[BE: A map showing only slopes from 20-35% and above 35% would be more helpful. It would probably*  
3 *also be better if placed in the Trail Stewardship Plan, along with other maps showing ACF’s landscape-,*  
4 *community- and species-level attributes.] [IS: Not easy to make changes to this map – but it uses slope*  
5 *thresholds that happen to be the ones in Richmond’s Zoning.]*

6 Any new trail will avoid impacting ecologically sensitive areas (via buffers and Zones of Influence);  
7 avoid duplication of trail routes and high density of trails; avoid trail routes liable to erosion.

8 Evaluation of suitability of new trail proposals should take into account the results of monitoring of  
9 impacts of existing and prior trails. A new trail proposal should identify whether it is intended for  
10 mechanized (bike) use, and explain why, taking into account the criteria and regulations for allowing  
11 mechanized use in the Easement Page 6 (Page 6 Section IIIA “Permitted Uses of the protected Property”).

12

13 *[BE: The following section, though important to ACFC’s drafting of the MP and trail designs as well as*  
14 *to discussions of other Town boards, needn’t belong in the MP.]*

15

### 16 **Some Factors to Consider in Evaluating new Trail Proposals:**

#### 17 **In favor:**

- 18 1. The Easement cites 'connectivity' as desirable; (when compliant with the “Purposes” of the Easement)
- 19 2. Many people have expressed a desire to see a connection to the Sunshine trail network and beyond,
- 20 (though many have opposed it with valid reasons, see below);
- 21 3. The trails were designed with Arrowwood’s ecological expertise and were considered consistent with
- 22 ecological design principles. (Arrowwood/Sinuosity [Trails Proposal](#))
- 23 4. Trails, if designated as ‘multi-use’ would accommodate people using mechanized transport, thus
- 24 increasing the variety of possible recreational activities and participants.
- 25 5. Increasingly, people are recognizing the value of many forms of outdoor recreation to health and
- 26 wellbeing. Additional trails in more remote sections of the Forest would add to those opportunities.

## Version for March 24<sup>th</sup> with new edits

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
  
28  
  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40

### **Not favoring the proposed trails:**

*[BE: Another point: Arrowwood has expressed its professional misgivings about the SOS connection, explaining that the firm was required to map a such a route despite its ecological impacts.]*

*[MW Comment: The pro’s and cons list of increasing recreation do not belong in the management plan. Those are topics for a meeting, not management plan material.]*

1. The Wildlife Stewardship Plan provides a thoroughly researched and updated documentation of the ecological reasons why human presence, especially as facilitated by trails, should be minimized, especially above the power lines;

2. The terrain on which those trails are proposed is mostly steep, and some areas apparently exceed the 30% slope above which the Town Zoning regulations preclude trail development. Slope of the terrain in many other areas exceeds 20%, thus requiring a lot of financial expense and a long permitting process with no guarantee of approval.

3. Some of the proposed trails appear to be inconsistent with ecological principles documented in the Management Plan (proximity to streams, wetlands, etc., infringement on ecologically sensitive areas) where recent research has identified greater negative impacts of human presence.

4. Some Townspeople wish to reserve areas of the Forest where solitude can be enjoyed, and wildlife can be observed, or hunted. More trails would facilitate larger volumes of human traffic.

5. Unknown factors include anticipated volume and cumulative effects of trail traffic, and the possible future changes in access to the trails on adjacent properties.

6. An extensive trail network accommodating ‘mechanized travel’ would require infrastructure to accommodate steep and rugged terrain, stream crossing requiring bridges, boardwalks etc. This would require additional expenditure of efforts and resources by the Town to construct, monitor and maintain trails in a location where access and parking may limited their value relative to other already existing nearby trails.

*[BE: Suggest: No one has yet identified a compelling need for building the SOS connection that justifies its costs, ecological trade-offs and management challenges.]*

### **7.2.2 Trail Connectivity to Surrounding Properties**

The conserved lands around the ACF provide opportunities for a larger, connected trail network. *[BE: Connections to neighboring lands are “opportunities” only if they meet the Easement’s Purposes and comply with the Management Plan. They also must be based on need, with gains that will exceed the costs (ecological and economic alike). Connections already exist to neighboring lands, including others not noted here.]* The former VAST trail already connects the VYCC and trail networks. Consistent with the Easement’s recreational objectives, the ACF Trail Design addresses connections to existing, mapped, public trails on properties adjoining the ACF. Any trail connections with adjacent properties will be subject to mutual agreement, including signage to be installed at boundaries to indicate land ownership and allowed uses, and the time span during which the agreement will remain in effect even if ownership of the property changes.

*[BE: As with streams, trails should perpendicularly cross the boundary to minimize traffic impacts along that boundary.]*

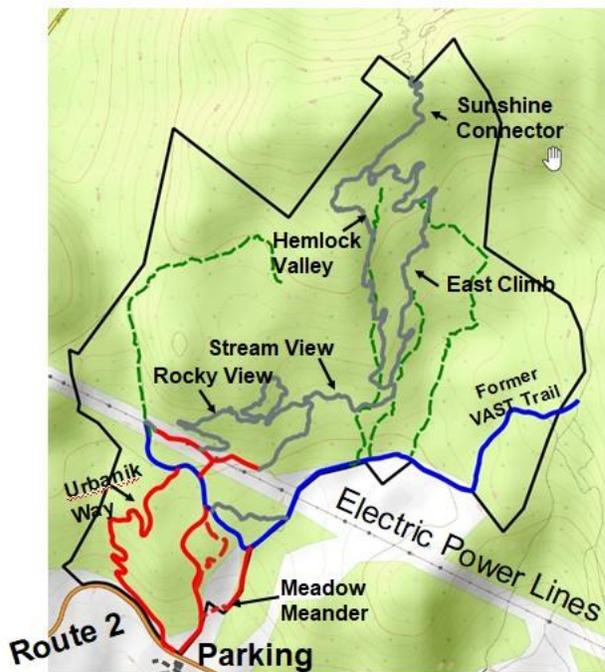
### 1 7.2.3 Process for Constructing Approved Trails

- 2 ● A hired professional trail designer will flag a route that, to the best of their ability, follows the  
3 route appearing in the approved Trail Design Map.
- 4 ● A professional ecologist, will walk the flagged route and a 50 foot buffer on either side to  
5 determine whether there are any fine-scale features (rare, threatened, or endangered species) that  
6 would be adversely impacted by the proposed trail development. If there are, the trail designer  
7 will consult with the ecologist to identify a suitable re-route.
- 8 ● The Committee may make minor adjustments to the Trail Design Map to ensure a 200' buffer  
9 between the trail and known sensitive areas, as identified and mapped in existing ecological  
10 assessments. *[BE: Words like “may” and “minor” in the preceding sentence provide little  
11 guidance for ACFC decision-making. Further, they subordinate the entire Forest’s ecological  
12 needs to trail aspirations throughout, in conflict with the Easement and best practices. Also, the  
13 200’ buffer is a carry-over from MP1, and short of the latest, research-based recommendations  
14 for maintaining ecological integrity and long-term, sustainable human access.]* Following  
15 Easement holder and Selectboard approval, the Committee will proceed to work with the  
16 Richmond Trails Committee, volunteer groups or individuals and/or a hired trail-builder to install  
17 trails which meet standards and designs agreed upon by the Committee and approved by the  
18 Selectboard and DRB.
- 19 ● The ACFC will seek grant funding as necessary to support the design, construction, and  
20 maintenance of trails approved and included on the Trail Design Map.  
21

### 22 7.2.4 Trail Design Map

23 *[BE Comments: Trail designs need to follow criteria contained in an approved Management Plan, thus  
24 this section is premature. Also, when the MP is approved and a trail design published, the ACF shouldn’t  
25 be shown as a blank slate. The design can’t be evaluated without a map or maps showing proposed trail  
26 routes and their appropriate zones of influence in conjunction with the ACF’s natural communities,  
27 connectivity routes, steep slopes and other sensitive features.]*

28 The 2018 Trail Concept Map was intended as a “roadmap to trail construction” in which the proposed  
29 trails “reflect the approximate desired location of future trails, pending the results of the coarse- and fine-  
30 scale ecological assessment”. The present Trail Design Map  
31 is an extensive development from the Concept Map, based on the [design](#) proposed in a contract with  
32 Arrowwood Environmental and Sinuosity and [subsequently modified](#) in response to public input and  
33 Zoning considerations, and recognizing to limited extent published and peer-reviewed expert findings and  
34 recommendations about trail impacts. *[BE: The latest proposed design was produced ahead of the  
35 required revision of MP2 and thus without benefit of whatever trail placement guidelines the new  
36 document will contain. Some changes made to the design reflect expert knowledge and best practices. But  
37 significant concerns remain with some of the proposed routes.]*



(Trail names from Arrowwood Proposal)  
**Red:** Existing (Urbanik Way, Access Road, Dana's, etc.)  
**Red-Dashed:** Pedestrian Only Trail  
**Gray:** Currently proposed ('Rocky View, Hemlock, East Climb, Lower traverse)  
**Green (dashed):** existing Forest Roads

The present Trail Design Map proposes an enduring, sustainable trail network that should not be expanded, to protect the natural resources within the ACF and also to honor the desires of the Andrews family and community intent documented in the Management Plan. It is intended to achieve a trail network that is consistent with minimizing ecological impacts of trail-based recreation. [SP Comment: This map may not be accurate—we still have to determine the trail design for ACF, both in terms of zoning/development feasibility, engineering site plans, and effects on wildlife.] [and “sustainable” shouldn’t be used without reasonable substantiation, especially given the likelihood of long-term impacts from higher volumes of trail traffic on nearby natural communities, steep slopes and other sensitive areas, and the safety and enjoyment of people using those trails.]

**General Principles and Objectives for the**

27 **trails design**

28 The plan creates a lower density of trails above the powerlines and higher density below the powerlines to  
 29 place equal emphasis on conservation of the interior forest areas of the property, while still facilitating  
 30 public access. [BE: There are much more balanced ways to conserve the ACF’s interior forest “while still  
 31 facilitating public access” than introducing new volumes and types of traffic into it. The ZOIs of traffic on  
 32 proposed trails would fragment and degrade some 80 acres of interior forest per mile. Fortunately, the  
 33 ACF’s sensitive and most secluded areas are in the north. We can then construct new hiking and  
 34 mountain biking trails and infrastructure in the area south of and including the former VAST trail, closer  
 35 to the parking lot, Rt. 2 and the village, where they will be less ecologically disruptive, more cost-  
 36 effective, and more inviting to “people of all ages and abilities.”] It provides shorter loops at a lower  
 37 grade from the parking area to ensure the property is accessible and inviting to people of all ages and  
 38 abilities, non-mechanized (pedestrian) trails are designated to accommodate school trips, families with  
 39 young children or older people, providing easy to moderate walking for 45 to 60 minutes.

41 Trails avoid sensitive areas [SP Comment: Based on the current proposed trail design map, they do not  
 42 avoid sensitive areas/EPZs.] [BE: Because of its ZOIs, trail traffic would still degrade the ecological  
 43 functions and integrity of dry oak forests, riparian areas, wildlife wintering areas, mast stands, seeps and  
 44 other sensitive areas.] (EPZs, etc) and give an appropriate buffer to sensitive areas, as determined by  
 45 professional ecologists and with reference to the Conservation Easement. [BE: The Easement’s EPZ’s are  
 46 not necessarily aimed at protecting habitat. The 50’ riparian area EPZ’s for example, seem geared

## Version for March 24<sup>th</sup> with new edits

1 *toward protecting water quality and not wildlife habitat and connectivity. Dry oak EPZs – of critical and*  
2 *increasing value for feeding many species – are not buffered at all.] To reduce impacts by avoiding*  
3 sensitive areas, 'buffer' widths; are specified as "300-foot" to reflect current ecological science.  
4 [JP: 1. the arrowwood proposals do avoid EPZs. The zone of influence may incur but the trails  
5 themselves do not. [Except for the large primary and secondary buffers around the two identified vernal  
6 pools, the EPZ buffers range from zero feet protecting the dry oak areas to 50 feet along streams. Those  
7 widths are far below what is needed to shield wildlife using those features from nearby human  
8 disturbances. VLT's aim seems to be protecting oaks from being trampled or cut, and the streams from  
9 being filled with sediment, not for the reasons wildlife need these areas.] 2. 300 foot ZOI is a good  
10 measure but should be conditional language, "wherever possible" or "trails should be routed to ensure  
11 minimum impact on habitat by taking a 300ft ZOI wherever possible." [The Easement doesn't say,  
12 "Conserve productive forestland, wildlife habitat, etc." "wherever possible." Nor does it say "Provide for  
13 non-motorized, non-commercial recreation..." "wherever possible." Elevating one Easement purpose  
14 over another upsets the balance the Easement wants us to provide. (Plus, vague subjective stipulations  
15 like "should" and "wherever possible" weaken policy documents, leaving them open to contentious,  
16 political and, over time, inconsistent interpretations.)]  
17 [JP: Meredith's document is not a policy handbook that lays out strict guidelines. [Correct, and if we  
18 followed it out the window in an area as small and packed with sensitive features as the ACF the case  
19 could be made for banning all trails. That's why we need clear, consistent, well-balanced guidelines. And  
20 not just to maintain the ACF's ecological health but also to avoid ambiguity and Committee struggles in  
21 making sound decisions on new trail proposals.]  
22 Let's not forget that the document also says that motorized traffic is less impactful than non-motorized  
23 traffic (because it moves through more quickly). By that logic we should allow only e-bikes and motor  
24 bikes. Yet I don't think any of us would prefer that. So we need to make rational decisions about the area  
25 that reflect considered compromises. β] [Meredith and other researchers qualify that observation by  
26 noting that, as with e-bikes and motor bikes, "mountain biking often covers more ground than foot travel  
27 and thus may accumulate a greater effect." ] [IS: motorized bikes: moot as the Easement precludes them]  
28  
29

### 30 Existing roads and trails

31 1. Except where they coincide with the proposed trail network, existing logging roads and skid trails will  
32 not be maintained as trails and will not be shown on ACF trail maps (although during future forest  
33 management activities, they may be maintained by the forester and logger). [BE: *The Zoning*  
34 *Administrator recommends against this closing existing trails due to the permitting requirement new trail*  
35 *construction elsewhere would force onto the ACFC. This measure would also strip away the value hikers,*  
36 *hunters, skiers, birders and others find in the ACF's network of forest roads, And it would require the*  
37 *Town to assume the yet-to-be-presented costs and risks of building trails in steep, remote areas]*  
38 2. **Dana's Climb to be renamed as Camel's Hump View** [SP Comment: This isn't consistent with the  
39 choice to use Abenaki names for the trails.] and is to be pedestrian only.  
40 3. Urbanik Way should be re-routed to start higher in the parking lot to bypass persistently wet ground,  
41 scramble up rock, and a section passing very close to Rt 2.  
42

### 43 Modifications to Arrowwood Proposal:

44 [BE: *As welcome as specific modifications will eventually be, first we need a completed MP2 to base*  
45 *them on. Otherwise, and as the next three comments show, the concerns behind them are being arbitrarily*  
46 *applied, outside of any consistent management guidelines.]*

## Version for March 24<sup>th</sup> with new edits

- The proposed East Climb and Hemlock Valley trails will be rerouted to avoid wet areas and rare/sensitive plants, per [Arrowwood fine-scale review](#) late summer 2022.
- The proposed Ridgetop trail was removed from the proposal, as it tracks closely to the ravine that serves as a key wildlife corridor. *[BE: For the same reason, Stream View needs to be re-routed away from its parallel route along that same corridor.]*
- The proposed central path between Cascade Trail and Rocky View *[SP Comment: Hemlock Valley and Rocky View are problematic due to being in hemlock natural communities, and too close to ledges.]* was removed from the plan; instead, the two should be connected where they are closest to one another towards the southern end. Rocky View and Cascade are pedestrian only (Stream View *[BE: Stream View still appears to run parallel and too close to the central corridor and its riparian area. (Again, maps of trail proposals need to show not just the routes but also their ZOIs and the ACF's sensitive areas.)*], which is one access point for those two trails, will have both pedestrian and non-pedestrian traffic). **Note – potential slope problem in that area.**
- The Roadside Trail was removed from the proposed network as it is redundant, paralleling the road, and would pass through persistently wet areas making trail construction “tricky” per Arrowwood and Sinuosity [report](#), requiring bridges, ramps, puncheon, etc.

### **Pedestrian-only Trails:**

1. All Existing Forest Roads and the (renamed) Dana’ will be designated as pedestrian-only.

### **Trail-free zones**

Other than proposed trails, current connection to VYCC trails, and where present-day VAST trail connects, all other areas of the forest are designated as trail-free. **Refer to Wildlife Stewardship Plan?** *[BE: This presumes that the miles of proposed trails throughout the ACF comply with the Easement, Town Plan, Zoning, best practices, etc., which isn’t the case. Plus the existing network of forest roads and trails would need to be closed to hikers, hunters, etc. to make the ACF “trail-free.” A better solution would be to designate the more sensitive north as “new trail-free” and develop new hiking and biking trails in the more accessible south.]*

## **7.2.5 Trail Monitoring, Maintenance, etc.**

*[BE: This would benefit from an opening statement describing the purpose, such as: “The Adaptive Management concept described on page \_\_, as well as the Town’s overall stewardship of the forest and its recreational facilities, depend on regular, consistent tracking of trail usage, trail and infrastructure conditions, impacts on ecological processes, and the need, progress and costs of maintenance projects. Benchmarks and trigger points should be established to guide usage of the data as its gathered. The Trail Stewardship Plan details steps needed to achieve this.”]*

Trail users will be encouraged to notify the ACFC of any observed problems requiring attention (downed trees, erosion, invasive plants, etc.) via the email address listed at the Town website. The ACFC member who is the Richmond Trails Committee representative will be a designated as responsible for monitoring trail conditions, coordinating maintenance and repairs, and publicizing trails’ status.

**Monitoring of trail traffic** *[SP Comment: Should we consider adding a visitor sign in log?] [JP:*

## Version for March 24<sup>th</sup> with new edits

1 Absolutely, doing so is consistent with all of our goals (conservation, recreation, education, etc)]  
2 [BE: We definitely need to provide for some kind of monitoring. But it can't be seen as a replacement for  
3 avoiding sensitive areas in the first place. Otherwise, we could find ourselves endlessly closing trails and  
4 opening new ones, which would not only be costly but ineffective in an area as small as the ACF.) and  
5 status should include counting or estimating the number of visits, making periodic surveys of plants  
6 (including invasives) and animal populations, and inspecting for trail erosion. The plan should establish  
7 baselines and then monitor changes over time. [BE: Baselines, yes, but how to establish them? We might  
8 just set some parameters for a Trail Stewardship Plan here and wrestle with the baseline question there  
9 (and possibly in the Wildlife Stewardship Plan as well). Results of monitoring shall be reported annually  
10 at a meeting of the ACFC. Management actions shall be adjusted according to the results of the  
11 monitoring plan per the adaptive management model in **Figure 3.**  
12 Monitoring should start with sensitive areas identified by the [Arrowwood report](#) recommendations, and  
13 the 2019 [Field Naturalist Report](#) and employ game cameras, [BE: audio traps,] observations by  
14 volunteers, and forest monitoring coordination.

15

### **Invasive species management**

17 Seasonal visual inspection for invasive species will be conducted by ACFC and removal / mitigation will  
18 be planned accordingly. Guidance shall be sought from the Conservation Commission, local experts such  
19 as Jon Kart (Vermont Agency of Natural Resources, Fish & Wildlife Department) and others on  
20 monitoring methods and control measures for identified invasive species. [BE: *We should ask the  
21 County Forester to take a lead role in this, especially given the critical importance given to this topic in  
22 the Forestry Management Plan. (Assuming the updated Forestry MP picks that up from the original  
23 one.)*]

24

### **Monitoring impact of human presence in forest**

26 [BE: *The title seems overly broad, as the methods suggested seem to focus only on soil impacts. Again,  
27 data will be meaningless unless there are benchmarks and standards relating to trail carrying capacity  
28 for ecological protections, user safety, user enjoyment, etc., all of which should be covered in trail  
29 proposals. We will never perfect this but should at least come up with a justifiable approach. The  
30 difficulties in doing this correctly AND practically are another reason for simply avoiding the  
31 construction of new trails in the north as mitigation for increasing trails and traffic in the less sensitive  
32 south.*]

33 Quantitative and qualitative data collected will be reviewed regularly and guide the Committee in  
34 prioritizing trail maintenance and upgrades. Trail user counters will be installed at base of each trail, and  
35 counts retrieved periodically. A non-arbitrary decision-tree will be established to guide actions when  
36 certain numbers of users are on trails. Methodology:

37 1. National Bicycle and Pedestrian Documentation Project (2016): A simple method for extrapolating

38 from sample monitoring to estimate longer term traffic volume. <https://bikepeddocumentation.org>

39 2. SE Group (2017) Monitoring Traffic on Hinesburg Town Forest (2017)

40 [https://drive.google.com/file/d/1uUC0Vwym\\_BjyvSnyVy58z4Qp40p6EIBT/view](https://drive.google.com/file/d/1uUC0Vwym_BjyvSnyVy58z4Qp40p6EIBT/view)

41 3. Monitoring traffic on Johnnie Brook Trail <https://infoacf.files.wordpress.com/2023/04/jbt-kh.pdf>

42 Seasonal visual inspection of trails for erosion and maintenance requirements will be conducted by the

43 ACFC. Trail maintenance will be planned seasonally and as needed and will be coordinated with the

44 Trails Committee to supervise work and to recruit volunteers. The ACFC member who is the Richmond

45 Trails Committee (RTC) member will liaise between ACFC and the RTC and other groups.

## Version for March 24<sup>th</sup> with new edits

### 1 **7.3 Snowmobiling**

2 Previously the ACF contained a snowmobile trail that was part of the VAST trail network. Snowmobiling  
3 will be permitted in the ACF if and when VAST seeks to establish such trails and subject to a use contract  
4 ensuring compatibility with the Management Plan’s goals and objectives.

### 5 **7.4 Hunting**

6 Many people want to hunt in the ACF. Hunting is allowed on the property in accordance with all State  
7 and federal laws and allowable uses. As of 2021, citizens of recognized Abenaki tribes may obtain free  
8 hunting licenses from the state of Vermont. The ACFC will emphasize education about hunting season  
9 safety for both hunters and non-hunters. Trapping will not be permitted on the Town Forest because of the  
10 safety hazard it presents to visitors and their pets who may be traveling both on and off trail.

### 11 **7.5 Potential Recreation Partnerships**

12 *[BE: Add Richmond Conservation Commission, County Forester, Vermont Fish & Wildlife Department,*  
13 *UVM Community Forest Program]*

- 14 ● Richmond Trails Committee
- 15 ● Western Abenaki Tribes and Richmond Racial Equity
- 16 ● Maple Wind Farm
- 17 ● VYCC
- 18 ● Richmond Land Trust
- 19 ● Richmond Mountain Trails/Vermont Mountain Bike Association (VMBA)
- 20 ● Scouts
- 21 ● Community Senior Center

### 22 **7.6 Recreation Management Objectives and Actions**

23 *[BE: Would this be better ahead of the preceding text, or much of it anyway?]*

24 **Objective 1:** Develop and promote a community forest that accommodates a wide variety of recreation  
25 opportunities (hunting, hiking, skiing, mountain biking etc.) subject to the provisions of the Conservation  
26 Easement and this Management Plan as it may be revised from time to time.

#### 27 **Actions:**

- 28 ● Maintain existing trails and design build new trails in conformity with the **ACF Trail Design Map**  
29 and provisions in this Management Plan *[BE: Another appearance of the cart in front of the*  
30 *horse. Though this may not be the intent, it implies a **pre-existing** “Trail Design Map,” which*  
31 *blocks us from basing such a map on expert-derived, agreed-upon criteria clearly spelled out in*  
32 *the Management Plan. To do otherwise counters Selectboard wishes, opens the way to arbitrarily*  
33 *applied rules, and inconsistent, ineffective management of the property over time.]*
- 34 ● Choose trail names that bring Indigenous presence and language back to this landscape and create  
35 signage accordingly. Consult Appendix B, Part 4 for suggested names that were proposed and  
36 vetted by Abenaki tribal citizens, culture keepers and language experts.
- 37 ● Maintain a trailhead kiosk at the parking lot with information about wildlife and natural  
38 resources, hunting seasons, hunting safety, trail etiquette, agricultural uses of the property,  
39 allowed user groups, property ownership, cultural and ecological information, etc.
- 40 ● Include the short version of the Land Acknowledgment at all signed entrances, on kiosks and on  
41 maps stating: “The Andrews Community Forest is located within Ndakinna, the unceded

## Version for March 24<sup>th</sup> with new edits

1           homeland of the Western Abenaki People, who have a unique connection to this land and have  
2           been its traditional stewards.” (See Appendix B, Part 1.)

- 3           • Install a bike rack at the East Main Street entrance to the Community Forest
- 4           • Work with neighboring landowners to address any changes in landownership and allowed uses.

5

6   **Objective:** Manage the recreation infrastructure in a way that best honors the needs of the forest and its  
7   users.

### 8   **Actions:**

- 9           • Work with the Trails Committee to organize, advertise, and facilitate routine maintenance, acute  
10          maintenance, and trail work days and recruit volunteers.
- 11          • Establish the ACFC email address as the means for trail users to communicate any need for trail  
12          maintenance (downed trees, erosion, etc.) or user conflicts.
- 13          • Maintain a process to monitor and communicate trail conditions to the public.
- 14          • Monitor impacts of recreational use on natural resources and adapt management strategies  
15          accordingly: *[BE: Suggest beginning this point with “Establish benchmarks and management action*  
16          *points, and monitor impacts....”]*
- 17          • Explore possibilities for creating a walking/biking connection from the ACF to Richmond Village.
- 18          • Evaluate applications for hosting trail-based events and races on forest trails if ecological monitoring  
19          indicates an ability to do so without negative impacts to forest ecosystems and trail infrastructure.  
20          *[BE: We needn’t limit this to “trail-based events and races” as many forms of recreation take place*  
21          *off trails. Suggest just saying “organized activities in the ACF.” (Of course, we should also be sure to*  
22          *build trails “without negative impacts to forest ecosystems.”)]*
- 23          • Employ current best practices on balancing the needs of both habitat and recreational users.

1

## 2 **8. Agriculture Management**

### 3 **8.1 Potential Agriculture Partnerships**

- 4 ● Maple Wind Farm
- 5 ● Richmond Farmers Market
- 6 ● Richmond Community Kitchen
- 7 ● The Farm at VYCC
- 8 ● NOFA Vermont
- 9 ● Vermont Farm Bureau (Remove)

### 10 **8.2 Agriculture Management Objectives and Actions**

11 **Objective:** Recognize the importance of agriculture in Richmond and Vermont’s heritage and continue to  
12 allow agricultural uses that are compatible with other management goals.

13 **Action:**

- 14 ● Promote opportunities for agriculture education and demonstration on the parcel, perhaps in  
15 conjunction with Maple Wind Farm or other agricultural entity with a vested interest in the  
16 property.

17

18 **Objective:** Develop agreements with Maple Wind Farm or other farm entity to allow coexistence of  
19 agriculture and public access.

20 ● **Actions:**

21 Work with neighboring Maple Wind Farm or other farm entity who desires to use the two fenced-  
22 in agricultural meadow pastures and maintain or create the necessary license agreement for their  
23 use.

24 ● Work with Maple Wind Farm to have the farm consider converting the southern part Old Farm  
25 Road to a human use only trail and in exchange for granting Maple Wind Farm a perpetual  
26 easement agricultural use of the 25’ utility road right of way from Route 2.

27 ● Maintain the two meadows as open land whether grazed or not; Brush hog each of the meadows  
28 at least every three years.

29

30 Maple Wind Farm, the current farm leasee may use the “lower meadow” and a meadow along the  
31 powerline right-of-way for grazing cattle. Maple Wind Farm has a right-of-way for agricultural purposes  
32 over the main farm road on the Andrews Community Forest extending from the Dyer-Chadwick property  
33 to Maple Wind Farm’s upper meadow. The Town has a right of way over the northern edge of Maple  
34 Wind Farm’s upper meadow. The Town will work with Maple Wind Farm to ensure compatible shared  
35 use of these two roads and rights of way, and to accommodate a high tensile electric fence around their  
36 grazing area in the community forest’s lower meadow. A gate through the fence will allow for public  
37 access to the meadow when the pasture is not in use for grazing. When the pasture is in use, the “cutover  
38 trail” will be closed.

39

40 There may be opportunities in the forest for a community garden/orchard, and agricultural education and  
41 demonstration projects. Under the Conservation Easement, agriculture is permitted where the forest has

## Version for March 24<sup>th</sup> with new edits

1 already been cleared. The ACF Committee will remain open to proposals for alternative uses of the  
2 agricultural lands, but appreciates maintaining a long-term, mutually-beneficial agricultural partnership.

3

### 4 **9. Education**

5 The ACF offers abundant educational opportunities and should exploit the natural features and cultural  
6 history of the Andrews Community Forest to provide enriching educational experiences for community  
7 members from elementary school students, college students, and curious adults.

8

9 Possible educational opportunities include:

- 10 • Climate and Biodiversity monitoring programs
- 11 • Trail building and maintenance (in partnership with VYCC)
- 12 • Host community events with an educational component.
- 13 • Tree/bird identification programs
- 14 • Sustainable forestry and forest products education
- 15 • Sustainable agriculture education
- 16 • School field trips on ecology and cultural history
- 17 • Outdoor skills training about responsible trail use (respecting wildlife, other trail users, natural  
18 resources, etc.)
- 19 • Kids summer camps and after school programs
- 20 • Seasonal guided hikes highlighting forest ecology
- 21 • Navigation and orienteering workshops

22

#### 23 **9.1 Educational Objectives and Actions**

24

25 **Objective 1:** Provide educational materials, demonstrations and tours about natural communities,  
26 biodiversity, cultural history, the working forest, and good stewardship practices using the forest as a  
27 model and example of the value of healthy forests to the community.

- 28 • Place interpretive signage throughout the forest about natural communities, stewardship, and  
29 cultural history.
- 30 • Identify locations for birding and viewing wildlife.

31

32 **Objective 2:** Include local students and community members in data gathering/analysis.

- 33 • Monitoring of trail use
- 34 • Monitoring of invasive species

35

36 **Objective 3:** Partner with the schools and organizations listed above to hold programming in the forest.  
37 Use timber management activities as an opportunity to educate the community about proper forest  
38 management.

- 39 • Action 1
- 40 • Action 2

41

42 **Objective 4:** Education about land and original people recognition

## Version for March 24<sup>th</sup> with new edits

- 1 • Reserve a portion of the kiosk to share history of Abenaki use of the land.
- 2 • Recruit people who can speak knowledgeably about Abenaki uses and care of the land (for
- 3 example, hosting authors for a book club, perhaps in conjunction with the Richmond Free
- 4 Library, Conservation Commission, UVM, VYCC, others?).
- 5 • Continue to seek advice from authorities including Indigenous peoples' Chiefs, organizations
- 6 such as Richmond Racial Justice, and individuals with links to or knowledge of indigenous
- 7 culture. About naming trails and places and rename to reflect Abenaki heritage, as already
- 8 included in MP2
- 9

### 10 9.2 Potential Education Partnerships

- 11 ● Richmond Elementary School
- 12 ● Camels Hump Middle School
- 13 ● Mount Mansfield Union High School
- 14 ● University of Vermont Field Naturalist Program
- 15 ● University of Vermont Rubenstein School and Environmental Studies Program
- 16 ● Essex Technical School
- 17 ● Vermont Youth Conservation Corps
- 18 ● Abenaki Nation of Missisquoi, The Nulhegan Band of the Coosuk Abenaki Nation, Richmond
- 19 Racial Equity
- 20 ● Green Mountain Audubon Center, Birds of Vermont Museum
- 21 ● Boy and Girl Scout Troops
- 22 ● Maple Wind Farm
- 23 ● Nature Conservancy
- 24 ● Vermont Land Trust, Richmond Land Trust
- 25 ● Richmond Recreation Committee
- 26 ● Radiate Art
- 27 ● Vermont Forests, Parks, and Recreation
- 28 ● Summer Camps: Mount Mansfield Modified Union School District (MMMUSD) and
- 29 MMMUSD, Part 2 After School and Summer Camps, Our Community Cares Summer camp
- 30 ● Green Mountain Orienteering Club
- 31

### 32 10. Legal Agreements on the Property

33 [BE: This seems to be misplaced here and perhaps better included as a comment to the section below.]

34

35 There are many [several?] agreements, rights-of-way, and easements that are key to the management of

36 the forest. [BE suggests adding: Besides those listed below, the Richmond Town Plan establishes broad

37 guidelines for management of the ACF. ]. The Town's Zoning Regulations come into play as well,

38 particularly in constructing new trails and infrastructure on ACF slopes above 20% in pitch.

39

40 [BE: Suggest adding the following text here, based on language taken from Section 1.2]

1 **10.1 Conservation Easement**

2 To conserve the ACF's natural resources and ensure public access to it in perpetuity, a [Conservation](#)  
3 [Easement](#) (Appendix A) was conveyed to both the Vermont Land Trust and the Vermont Housing and  
4 Conservation Board when the forest was acquired from the Andrews family.

5  
6 The Vermont Land Trust acts as the primary **conservation** steward. As such, VLT must conduct annual  
7 monitoring to ensure activities on the property are consistent with the terms of the Easement. VLT's  
8 stewardship representative serves as the ACF Committee's primary contact at VLT for reviews and  
9 approvals of proposed actions which are not contemplated in the Management Plan.

10  
11 The Easement (Appendix A) requires a Management Plan and any future changes to the Management  
12 Plan must be reviewed and approved by Richmond's Selectboard and by VLT. Section 1.B. of the  
13 Conservation Easement dictates what information the Management Plan must include. Public input is  
14 required for any updates to the Plan.

15  
16 **10.2 Agricultural Lease**

17 Maple Wind Farm is the adjoining landowner, and that land includes the remaining acres of the original  
18 Andrew farm. Maple Wind Farm has historically used eight acres of what is now the community forest  
19 for grazing cattle. Both parties are interested in continuing this arrangement and can explore the  
20 possibility of a long-term agriculture license agreement. Vermont Land Trust, as conservation easement  
21 holder would need to approve any such use license agreement.

22 Should Maple Wind Farm return to using one or both open meadows, the Committee wishes to retain a  
23 crossover trail across the lower portion of the pasture linking the VELCO access road with the old farm  
24 road to the east. This trail would be open anytime cows are not grazing in the pasture; when cows are  
25 grazing, the Committee proposes closing this trail and installing appropriate signage to redirect visitors to  
26 other routes on the property.

27 It is noted that the southern side of the lower agricultural meadow is on land that is apart of the former  
28 Andrews' homestead. The committee should work with this residential neighbor to continue accessing  
29 this lower meadow trail.

30 **10.2 Powerline Rights-of-Way: VELCO**

31 A VELCO powerline, and its 150' east / west utility easement right of way runs through the middle of the  
32 community forest. VELCO needs frequent vehicular road access to the utility right-of-way for  
33 maintenance and repairs to the powerline. In 2018, VELCO upgraded improved the utility access road  
34 from the forest entrance on Route 2 to the powerline right of way ; VELCO used the upper landing area to  
35 stage the utility road their work. Following this 2018 work, VELCO re-seeded the landing and the road  
36 above the landing and installed waterbars on the road below the landing.

37  
38 **The Town (with the Committee) has worked for three years with VELCO on a 25' wide the utility road**  
39 **easement right of way agreement, requested by VELCO. This utility road right of way is located in the**  
40 **existing utility road heading north from Rte. 2 to the VELCO and GMP utility lines on the property. The**  
41 **Town will receive \$11,549.45 from VELCO for granting this utility road right of way easement.**  
42 **Additionally, VELCO's insurance provider has listed the Town of Richmond as additionally insured, and**

## Version for March 24<sup>th</sup> with new edits

1 VELCO installed two rows of split rail fencing and signs to help keep the public away from the now  
2 unused utility road bridge abutments under the power lines. This new utility road easement will likely be  
3 recorded in early 2025.

4 Approval by Vermont Land Trust and the Selectboard is required for any changes in easement  
5 agreements.  
6

### 7 **10.3 Powerline Rights-of-Way: Green Mountain Power**

8 Green Mountain Power has a 100'-125' utility right-of-way adjacent and north of the VELCO line in the  
9 same powerline corridor.  
10

11 Within each of the two utility corridors, VELCO and Green Mountain Power (GMP) manage vegetation  
12 growth. The Committee will work to better understand the vegetation management goals and practices,  
13 the landowner's (Town's) rights, to advise the Selectboard to make an informed decision about vegetation  
14 management within the Powerline corridor, and to communicate this decision broadly to Community  
15 Forest visitors.

16 At certain periods, VELCO and or Green Mountain Power may need to close some or certain parts the  
17 community forest to perform utility line maintenance and upgrade projects. VELCO and GMP should  
18 coordinate with the Town and the committee to prepare for such events and fully inform the public of the  
19 closure.  
20

### 21 **10.4 Legal Agreements Management Objectives**

- 22 ● Develop agreements that allow partners to work within the forest while limiting the impact (both  
23 ecological and human impact) of such work.

### 24 **10.5 Legal Agreements Management Actions**

- 25 ● Work with VELCO and GMP to understand and select vegetation management strategies in the  
26 powerline right-of-ways which are safe, effective, and environmentally responsible.  
27 ● Communicate with the public about grazing plans or powerline management activities that may  
28 influence the public's experience on the property.  
29 ● Manage public use during powerline work or grazing periods to mitigate public safety hazards.  
30 ● **Maintain** positive working relationships with Maple Wind Farm, VELCO, and Green Mountain  
31 Power to ensure that their use of the property is compatible with public visitation.

1  
2

## 3 **11. Appendices**

4 [Appendix A: Conservation Easement](#)

5 Appendix B. [Indigenous Land and People Acknowledgment and Land Use](#)

6 Appendix C: Draft [Wildlife Stewardship Plan](#)

7

### 8 **List of Maps**

9 A. Trail Concept Map 2018 - zones

10 B. Trail Concept Map 2018 - possible trails

11 C. Trail Design Map

12 D. Arrowwood and Sinuosity proposed map 2021

13 E. Slopes: <https://maps.vermont.gov/vcgi/html5viewer/?viewer=vtmapviewer>

14 F. Maps from Shapefiles:

15

### 16 **Appendices from 2018 Management Plan ([links](#))**

#### 17 **1. Forestry Maps, etc.**

18 [ACF Soil Map \(2019\)](#)

19 [Forest Stands \(2019\)](#)

20 [Forest Stands -Topo \(2019\)](#)

21 [Management Intensity Zones \(2019\)](#)

22 [Forestry Activities Map \(2019\)](#)

23 [ACF Invasives Map 090119](#)

24 [Example Forester Agreement 072419\)](#)

25

#### 26 **2. Ecological Assessments**

27 [Andrews Farm Ecological Assessment](#) – Allaire Diamond

28 [Four Town Ecological Assessment](#) - Arrowwood Environmental

29 [Audubon Society](#): Forest Bird Habitat Assessment and Management Recommendations (Hagenbuch,  
30 2017)

31

#### 32 **3. [Maps & Appendices](#) from 2018 Management Plan**

##### 33 A. Maps

34 a. Trail Concept Map - zones

35 b. Trail Concept Map - possible trails

36 c. Conservation Easement Map

37 d. Interim Management Plan Map (applicable through 12/31/18)

38 B. Chart: Evolution of Allowed/Prohibited Uses Through Planning Phases

39 G. Results and Comments from Public Meetings (page 279)

40

#### 41 **4. [Visioning Process](#) (2017) from 2018 Management Plan**

42 (Starts at Page 279 of 345):

43 Visioning Process Results (pp 279 - )

44 See charts of priorities: Page 294: Management Focus; Page 342 – 347: Recreational Activities 1-6

1 **12. References**

2 *[BE: At some point this list need some review and clean-up.]*

3 Arrowwood Environmental Natural Resource Guidance Toolkit. 2018. Vermont Town Forest Recreation  
4 Planning.

5 Avitt, Andrew (2021) The wellness benefits of the great outdoors USDA Forest Service, Office of  
6 Communication <https://www.fs.usda.gov/features/wellness-benefits-great-outdoors>

7

8 Audubon Vermont and the Vermont Department of Forests, Parks, and Recreation. 2011. Silviculture  
9 with Birds in Mind: Options for Integrating Timber and Songbird Habitat Management in Northern  
10 Hardwood Stands in Vermont.

11 Baas J., et al. [An assessment of non-consumptive recreation effects on wildlife: current and future](#)  
12 [research, management implications, and next steps.](#), California Fish and Wildlife, Recreation Special  
13 Issue; 62-73; 2020.

14 Barre Community Forest Management Plan Committee. (2013, 2 27). Barre Community Forest  
15 Community Forest Plan. *Community Forest Plan for the Barre Community Forest*. Vermont: Barre Town  
16 Selectboard.

17 Bennington County Conservation District. (2016, January). Final Management Plan, The Greenberg  
18 Headwaters Park. Bennington, VT: Town of Bennington.

19 Cotnoir, Alexander W. (n.d.) An Abenaki History of Maple <https://abenakitribe.org/maple-syrup> .

20

21 Chenevert, Brian. 2021. Maple sugaring among the Abenaki and Wabanaki Peoples.

22 <https://abenakitribe.org/maple-syrup>

23

24 Cummings, Angus B. 2019. Farm to Forest: The Andrews Community Forest. University of Vermont  
25 senior thesis archived at:

26 <https://scholarworks.uvm.edu/cgi/viewcontent.cgi?article=1064&context=envstheses>

27

28 Degraaf, R.M. et al. 1992. *New England Wildlife: Management of Forested Habitats*. General Technical  
29 Report NE-144. Amherst, MA. U.S.D.A., Forest Service.

30

31 Dertien et al. (2021) Recreation effects on wildlife: a review of potential quantitative thresholds. *Nature*  
32 *Conservation* 44: 51-68.

33

34 Diamond, A. 2017. Rapid Ecological Assessment of the Richmond Town Forest. Vermont Land Trust.  
35 Richmond, VT.

36 [https://www.richmondvt.gov/fileadmin/files/Andrews\\_Community\\_Forest/General/2024/05/14ACF\\_Management\\_Plan\\_Appendicescompress.pdf](https://www.richmondvt.gov/fileadmin/files/Andrews_Community_Forest/General/2024/05/14ACF_Management_Plan_Appendicescompress.pdf) (page 50 of 345)

37

38 Doherty, Prudence, Robert Florentin and Peter A. Thomas. 1996/Revised 1997. Phase I and II  
39 Archeological Studies Richmond BRZ 1445(18) Richmond, Vermont. Submitted to Vermont Agency of  
40 Transportation. 72 pages.

## Version for March 24<sup>th</sup> with new edits

- 1  
2 Eigenschenk, Barbara, et al. (2019) Benefits of Outdoor Sports for Society. A Systematic Literature  
3 Review and Reflections on Evidence. Int J Environ Res Public Health. 2019 Mar; 16(6): 937.  
4 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6466442/>  
5
- 6 Hagenbuch, S. (2017, November). Forest Bird Habitat Assessment and Management Recommendations.  
7 Huntington, Vermont: Audubon Vermont.
- 8 Haviland, William A. and Marjory W. Power. 1994. The Original Vermonters: Native Inhabitants Past  
9 and Present. University of Vermont. Hanover and London: University Press of New England.  
10
- 11 Hawes, Ellen and Markelle Smith. 2005. Riparian Buffer Zones: Functions and Recommended Widths.  
12 Yale School of Forestry and Environmental Studies.  
13
- 14 Hennings, L. (2017). Hiking, mountain hiking and equestrian use in natural areas: A recreation  
15 ecology literature review.  
16 [https://www.researchgate.net/publication/320084633\\_Hiking\\_mountain\\_biking\\_and\\_equestrian\\_use\\_in\\_natural\\_areas\\_A\\_recreation\\_ecology\\_literature\\_review](https://www.researchgate.net/publication/320084633_Hiking_mountain_biking_and_equestrian_use_in_natural_areas_A_recreation_ecology_literature_review)  
17  
18
- 19 Kimmerer, Robin Wall (2015). Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the  
20 Teachings of Plants Paperback –Milkweed Editions, 2015.  
21
- 22 Larson, CL, et al. (2016). Effects of Recreation on Animals Revealed as Widespread through  
23 Global Systematic Review. PLoS ONE 11(12):  
24 <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0167259>  
25
- 26 Longstreth, Julie. 2007. Everett and Mary Jo Andrews’ Farm. in Riggs, H.W. et al. Richmond, Vermont:  
27 A History of More Than 200 Years. Richmond, VT: Richmond Historical Society, pp. 389-393.  
28
- 29 Naughton, M: Wildlife & Recreation: Understanding and Managing Effects of Trail use on Wildlife.  
30 <https://streaming.uvm.edu/watch/41780/wildlife-trail-recreation-understanding-managing-and-monitoring-recreation-effects/>  
31  
32
- 33 Naughton, M. (2021): [“Understanding And Managing The Effects Of Trail Use On Wildlife”](#) by  
34 Meredith Naughton – University Of Vermont Field Naturalist Program – For Vermont Fish & Wildlife  
35 Vermont Forests, Parks, And Recreation.  
36
- 37 Oehler, J. (2019) Trails for People and Wildlife — Guidebook to the science and techniques for locating  
38 trails to reduce their impacts on healthy wildlife populations. New Hampshire Dept. of Fish & Game,  
39 <https://wildlife.state.nh.us/trails/documents/trails-for-people-wildlife.pdf>  
40 Or <https://www.wildlife.nh.gov/sites/g/files/ehbemt746/files/inline-documents/sonh/trails-for-people-wildlife.pdf>  
41  
42
- 43 Parker B. (2022) Trail\_based\_recreation\_and\_its\_impacts\_on\_wildlife.  
44 [https://www.backcountryhunters.org/trail\\_based\\_recreation\\_and\\_its\\_impacts\\_on\\_wildlife](https://www.backcountryhunters.org/trail_based_recreation_and_its_impacts_on_wildlife)  
45

## Version for March 24<sup>th</sup> with new edits

- 1 RJ Turner Company. 2008. Eaton Forest Management Plan. Bristol, Vermont: Town of Warren  
2 Conservation Commission.
- 3 Taylor, AR, Knight, RL. (2003). Wildlife Responses to Recreation and Associated Visitor Perceptions.  
4 [https://doi.org/10.1890/1051-0761\(2003\)13\[951:WRTRAA\]2.0.CO;2](https://doi.org/10.1890/1051-0761(2003)13[951:WRTRAA]2.0.CO;2)
- 5 Thomas, Peter A., Robert Stone, Nanny Carder, and Robert Florentin. 1995. Archaeological Site  
6 Identification Evaluation and Mitigation pf VT-CH-619 for Richmond TH 2407, Richmond, Chittenden  
7 County, Vermont. 147 pages.  
8
- 9 Thomas, Peter A., 2007. Richmond's ancient past, in Riggs, Harriet (ed). 2007. Richmond, Vermont: A  
10 History of More than 200 Years. Richmond Historical Society. Submitted to Vermont Agency of  
11 Transportation.  
12
- 13 Thompson EH and Sorenson ER. 2000. Wetland, Woodland, Wildlife: A Guide to the Natural  
14 Communities of Vermont. The Nature Conservancy and the Vermont Department of Fish and Wildlife:  
15 Montpelier, VT.
- 16 Thompson EH, Sorenson ER, Zaino EJ (2019): A guide to the Natural Communities of Vermont:  
17 Wetland, Woodland Wildland. Chelsea Green Publishing.  
18
- 19 UNESCO. 2010. Atlas of the world's languages in danger.  
20 <https://unesdoc.unesco.org/ark:/48223/pf0000187026>  
21
- 22 Vermont Agency of Natural Resources 2005. Riparian Buffers and Corridors: Technical Papers.  
23
- 24 Vermont Department of Fish & Wildlife. 2015. *A Landowners Guide: Wildlife Habitat Management for*  
25 *Lands in Vermont.*  
26
- 27 Vermont Department of Fish and Wildlife and the Agency of Natural Resources. 2004. *Conserving*  
28 *Vermont's Natural Heritage. A Guide to Community-Based Planning for the Conservation of Vermont's*  
29 *Fish, Wildlife, and Biological Diversity.*  
30
- 31 Weinstein, N. et al. (2015), Seeing Community for the Trees: The Links among Contact with Natural  
32 Environments, Community Cohesion, and Crime. 2015. BioScience, Volume 65, Issue 12, 01 December  
33 2015, Pages 1141–1153, <https://doi.org/10.1093/biosci/biv151> .  
34
- 35 Wiseman, Frederick M. 1995a. Gift of the Forest: The Abenaki, Bark, and Root. Abenaki Educational  
36 Series, Handbook No. 1. Vermont: Ethan Allen Homestead Trust.  
37
- 38 Wiseman, Frederick M. 1995b. The Abenaki People and the Bounty of the Land. Abenaki Educational  
39 Series, Handbook No. 2. Vermont: Ethan Allen Homestead Trust.  
40
- 41 Wiseman, Frederick Matthew. 2001. The Voice of the Dawn: An Autohistory of the Abenaki Nation.  
42 Hanover and London: University Press of New England.  
43
- 44 **Additional references – cited in text?**

## **Version for March 24<sup>th</sup> with new edits**

1 Pkwamhadin, Chenevert 2021,