CMP = Julian, Ian, Melissa

Monitoring impact of human presence in forest

<u>TSP:</u> a. Install trail counters at base of each trail. Pull numbers periodically. Devise and commit to nonarbitrary decision-tree to guide what will happen when certain numbers of users are on trails.

b. Seasonal visual inspection of trails for erosion and needs for maintenance will be conducted by the ACFC on an ongoing basis.

c. Quantitative and qualitative data collected will be reviewed regularly and guide the committee in prioritizing trail maintenance and upgrades.

d. Seasonal visual inspection for invasive species will be conducted by ACFC and removal / mitigation will be planned accordingly.

e. Trail maintenance will occur seasonally and as needed and will be coordinated with the other local trail maintenance groups to best communicate with volunteers and take advantage of shared resources. The ACFC member who is the Richmond Trails Committee member will liaise between ACFC and said groups.

CMP: Monitoring efforts should be designed and implemented periodically. Monitoring should include such elements as counting visits, doing periodic surveys of plants (including invasives) and animals, and inspecting for erosion. The plan should establish baselines and then monitor changes over time. Management actions should be adjusted according to the results of the monitoring plan per the adaptive management model in fig 1 pp 9-10 of the revised MP.

We suggest getting guidance from Judy Rosovsky and/or Jon Kart on monitoring methods to guide an expert hired to create the plan for the ACFC.

To the extent possible, methods should build on the baseline established by the Arrowwood studies that have already defined some sensitive areas both in terms of plants and places. Recommendations from the Field Naturalist Report from 2019 on monitoring areas, game cameras, citizen science and forest monitoring coordination (p22-24 and appendix V) should be taken into consideration.

In the monitoring efforts, we should seek a balance between cost and efficiency. Perhaps engaging in an annual or twice annual survey.

References:

A simple method for extrapolating from sample monitoring to estimate longer term traffic volume. <u>https://bikepeddocumentation.org/</u>

Examples nearby: Monitoring Traffic on Hinesburg Town Forest (2017) https://drive.google.com/file/d/1uUC0Vwym_BjyvSnyVy58z4Qp40p6ElBT/view

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

 <u>Trail-based recreation impacts on wildlife and benefits of outdoor recreation and nature – CMP</u> The Easement (Page 6, III Permitted Uses of the protected Property, Paragraph A) specifies that: mechanized recreation such as mountain biking and by animals capable of transporting humans (including, but not limited to, horses) may be permitted in the discretion of Grantors if such uses are regulated in the Management Plans and are consistent with the Purposes of this Grant and are consistent with Section(s) V, VI and VII, identifying constraints within the Riparian Buffer Zone, [rare and uncommon natural communities] Ecological Protection Zone and Vernal Pool Ecological Protection Zone.

So the following regulations about non-pedestrian recreation are proposed:

1. No access for horses and similar animals; TSP: Horses are not allowed on any ACFC trails. They are a major vector of invasive species spread.

2. Mechanized recreation only on trails identified for such use on the Trails Map;

3. No mechanized recreation during (specified) winter months or when trails are announced as 'closed' via public notices;

4. Other?

• <u>Allowable activities TSP</u>

a. Biking is to be allowed only on established trail networks and not on pedestrian-only trails

- b. Pedestrians are allowed on all trails
- c. Dana's Climb is to be pedestrian only

d. Rocky View and Cascade are pedestrian only (Stream View, which is one access point for those two trails, will have both pedestrian and non-pedestrian traffic).

e. Electric bikes are not allowed on the trail network. The ACFC acknowledges that allowing eMTBs may broaden access for individuals with physical limitations, as is consistent with our commitment to equity and inclusion. However, concerns regarding eMTBs (eg faster speeds, safety, user conflict) and the non-motorized specifications within the Conservation Easement lead the ACFC to not permit eMTBs. Any ACF visitors with mobility disabilities who seek to use motorized personal assistive mobility devices (as permitted in the Conservation Easement, Section G) should reach out to the ACF Chair to notify the committee. (Note: respect ADA access)

CMP: Recommendation on non-mechanized and mechanized recreation

Consistent with easement section III.A (Page 5 "Restricted Uses of the Protected Property") We believe the committee should seek a blend of recreational opportunities in the forest. In the case of nonmechanized use trails, there should be trails that provide easy to moderate walking for 45 to 60 minutes. We believe this would be adequate for school trips, families with young children or older relatives. Trails of any sort should take into account sensitive habitat and ecological concerns.

- <u>Alignment with conservation easement CMP</u>
 See annotated Conservation Easement the file <u>EasementHighLight.doc</u>
- Dogs (related to wildlife)

<u>TSP</u>: Dogs are permitted below the power lines, and not above them.

Dogs are to be kept on leash at all times. This is more stringent than the town dog ordinance, this rule is intended to protect wildlife and vegetation to the greatest degree possible, as well as other forest users. The ACFC acknowledges this may limit hunting with dogs, but that is a trade-off we are comfortable taking.

All pet waste needs to be carried out.

<u>CMP</u> Following the model of the Audubon Society (Huntington), in order to protect the forest wildlife, we suggest establishing rules that require dogs to be leashed below the power lines and prohibit dogs above the power lines.

Include references when reasonable and helpful – <u>CMP</u> Some References:

Beyer K., Kaltenbach A., Szabo A., Bogar S., Nieto F.J., Malecji K. Exposure to neighborhood green space and mental health: Evidence from the survey of the health of Wisconsin. International Journal of Environmental Research and Public Health. 2014; 11: 453-3472.

Netta Weinstein and others, Seeing Community for the Trees: The Links among Contact with Natural Environments, Community Cohesion, and Crime, BioScience, Volume 65, Issue 12, 01 December 2015, Pages 1141–1153, https://doi.org/10.1093/biosci/biv151.

https://www.backcountryhunters.org/trail_based_recreation_and_its_impacts_on_wildlife

California Fish and Wildlife Journal, Special Issue, effects of non-consumptive recreation on Wildlife in California, 2020

"Trails for People and Wildlife — Guidebook to the science and techniques for locating trails to reduce their impacts on healthy wildlife populations. New Hampshire Dept. of Fish & Game, 2019. <u>https://wildlife.state.nh.us/trails/documents/trails-for-people-wildlife.pdf</u>

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

Benefits of Outdoor Sports for Society. A Systematic Literature Review and Reflections on Evidence. Int J Environ Res Public Health. 2019 Mar; 16(6): 937.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6466442/

Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants Paperback – Robin Wall Kimmerer. Milkweed Editions, 2015.

See References in MP2: Wiseman (1995, 2001), Haviland and Power (1994), Thomas et al. 1995, Doherty et al. 1996, Haviland and Power 1994, Wiseman 1995b, 2001, Pkwamhadin, Chenevert 2021, Cotnoir n.d. as well as numerous online resources. Appendix 3 in Wiseman (2001)

• <u>Clarity (signage?) at property boundaries with trails / establish liaison with adjacent owners – CMP</u>

There are three existing possibilities for trail connectivity: VYCC, Sip of Sunshine and Valley View. Each has their own site-specific issues that need to be addressed (agreements with land owners, zoning regulations, and other easements).

There are other adjacent lands whose owners have made clear to the committee their wish to avoid ACF traffic on their land.

For each case, there should be clear signage about what is and is not permitted and, where necessary, signage established between ACF and land belonging to others.

Practices and policies that should be known to both parties, specifically: Motorized travel; Parking; Hunting; Day-time/night-time access; Seasonal access limitations; Dogs: Trail closing policies Also: Implications of secondary connectivity (trails on parcels beyond the adjacent land).

Who does their trail management (by RTC, RMT, others?)

- <u>Invasive species management TSP (maybe CMP)</u> (See monitoring above)
- <u>Events/permitting CMP</u>

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

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

Approval of events will be determined by the ACFC according to criteria including but not limited to: Appropriateness of use per the objectives of the MP and the easement, density of the event, parking, ecological impact on the trails (for eg, deer wintering, spring vernal pools, etc.).

• <u>Education re: land and original people recognition – CMP</u> (maybe TSP re: trail signage, interpretation, <u>etc.</u>)

Reserve a portion of the kiosk to share history of Abenaki use of the land.

Look for opportunities to host educational programs provided by people who can speak knowledgeably about Abenaki uses and care of the land (for example, hosting authors such as Frederick Mathew Wiseman for a book club, perhaps in conjunction with the Conservation Commission, UVM, VYCC, others?).

Continue to seek advice from authorities including Indigenous peoples' Chiefs, organizations such as Richmond Racial Justice, and individuals with links to or knowledge of indigenous culture.

Review names of trails and places and rename to reflect Abenaki heritage, as already included in MP2

 <u>Allowance of future trails / designating no-trail zones (related to wildlife) / Expanding trails currently</u> proposed beyond proposed route in the future – TSP, <u>CMP</u> and Request for more trails than currently proposed – <u>CMP</u>

Recommendations governing new trails:

New proposals for trails should be brought before the committee. The committee will evaluate the appropriateness of the trail based on an ecological review that is consistent with the easement and guided by the criteria established in most current best practices (should they include further guidance than is provided by the easement).

Evaluation of suitability of new trail proposals should take into account the results of monitoring of impacts of existing and prior trails.

Here we should identify criteria for approving new trails: Avoid impacting ecologically sensitive areas (via buffers and Zones of Influence); avoid duplication of trail routes and high density of trails; avoid trail routes liable to erosion; other criteria? Also, specify the criteria and regulations for allowing mechanized use and the (per Easement Page 6 (Page 6 Section IIIA "Permitted Uses of the protected Property".

<u>Alignment with town plan/zoning regulations – CMP</u>
 CMP has been in contact with town zoning officials. We received the following email from Keith Oborne:

RE DRB and zoning board approvals:

"When there is a plan to expand, ACF should contact Richmond Planning and Zoning to ensure the regulations are followed and there is actually a need for DRB approval."

RE "development" per the town plan:

Town plan: "Restrict development on steep slopes between 20% and 35%, cliffs, and ridgelines over 900ft in elevation, and prohibit all structural development (including renewable energy generation facilities and distribution/transmission infrastructure) on slopes greater than 35%, in order to maintain habitat connectors and mitigate erosion."

Would this apply to trails and accompanying structures such as bridges in the Andrews Community Forest? This would apply to trails in general and would include any structures such as bridges. Concerning trails, any new trails developed on slopes greater than 20% will require engineered plans for "adequate" erosion controls per the RZR, SECTION 6.11. Any development in the ACF requires DRB approval as an aside. Trails that currently exist can be maintained in-situ but if there are any changes, that would be considered an update to the approved site plan and would require DRB approval. Although not specific to your question, ACF would have no authority over transmission lines or renewable energy facilities on easements.

The second question is in reference to hierarchy of guiding documents. Andrews Community Forest has management plan which is superseded and guided by the Conservation Easement. Would the Richmond Town Plan be the top guiding document, or is the Richmond Town Plan superseded by the Conservation Easement on the Andrews Community Forest? Any and all Town Plans are "guidance/vision" documents and have no legal bearing on zoning or other legal documents. Their purpose is to guide, not regulate. Conservation Plans are legal documents and do have a bearing on zoning and specifically regulate. Following the TP guidance is required, to the best of one's ability, and if you are developing the management plan with both the TP and the conservation easement in mind, you should be golden. There really is no hierarchy here, especially if the "Plan" considers both the TP and easement language; said plan would be the ultimate guiding document, the one stop shopping scenario. After all, that's the point!

<u>Night use – CMP, TSP</u>

See above (permitted uses) and Easement

Except where otherwise noted in the plan (seasonal trail closures in certain areas to protect foraging, reproduction etc of at-risk species, or exceptions for hunting, for example), the ACF is open year-round to the public from dawn to dusk. Other exceptions with prior approval of the ACFC

• <u>Parking – CMP</u>, TSP

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

Bike parking should be installed.

TSP: Parking is limited to the allotted spaces at the Rt. 2 trailhead. Additional parking needs may be met by other Richmond Town designated parking areas, and users will self-transport to the ACF.

• <u>Structural revision to plan to make easier to read – CMP</u>

Soon, we will need to include the unified recommendations from the subcommittees into the MP. It would be helpful to have someone hired to include our suggestions and common recommendations. When they do, we could ask them to review the entire MP for clarity and organization and to make recommendations for structural changes.

• <u>Determining trail closure times</u>

<u>TSP</u>: a. Following state guidance for deer wintering closures, the trails will be closed above the power lines from December 15 - April 1 for reasons of protecting habitat and desirable game species. The ACFC recognizes that people may still recreate across ACF in a dispersed manner (eg x-c skiing) but trails will not officially be open.

b. All trails above powerlines will be closed to non-hunting recreation during deer regular season for reasons of safety and minimizing interference with hunting by non-hunter presence. Dates will vary from year to year but will follow VT Fish & Wildlife specifications

CMP: Future decisions on seasonal trail closures should consider the following criteria:

1. Quality of the activity relative to the season.

2. Minimize incompatibilities among activities for maximizing safety (for example, minimizing nonhunting uses during hunting season, establishing directionality of trails for bikers where necessary, for example).

3. Minimize impacts on animal habitat (Deer wintering may call for special closures in winter and spring, for example)

We propose closure of the upper trails to bikes from hunting season through April 1st (to minimize disturbance of deer wintering habitat). Walking is allowed at all times with STRONG cautions to wear highly visible clothing during hunting season.

- <u>Role of ACF within larger landscape of recreation and habitat CMP</u>
- Language adjustments in management plan <u>CMP</u>
 See suggestions in <u>https://infoacf.files.wordpress.com/2023/03/mp2_plus.pdf</u>
- <u>Structural revision to plan to make easier to read CMP</u>

TSP = Caitlin, Chase

- Phased trail development TSP
- Pedestrian only trail(s) (related to wildlife) TSP
- Seasonal trail closures (related to wildlife) TSP
- <u>Trail use policy enforcement TSP</u>

a. Clear signage and map at kiosk, including permitted uses and guidance for users to access trail closure status (eg, QR code to trail conditions websites).

b. Ropes across trail entrances when trails are closed for the season (but not on, for example, daily basis).

c. Use current systems to indicate status (and describe allowable uses) working with existing trail groups (Richmond Trails Committee, RMT). ACFC member who is the Richmond Trails Committee member will be a designated point person on ACFC to ensure statuses are updated.

- Trail maintenance TSP
- Ebikes or other motorized travel TSP
- Trail route: potential modifications, document reason for routing (related to wildlife, discuss buffers)
 TSP including the trail map etc.
- <u>Designate specific activities allowed on each trail TSP</u>

Trail routes and reroutes

a. Existing roads and trails – Close? Treat as trails? Etc. - TSP

i. Urbanik Way should be re-routed to start higher in the parking lot past the large ash tree. The current route requires persistently wet ground, scramble up rock, and passing very closely to Rt 2.

b. Proposed trail reroutes

i. The East Climb and Hemlock Valley trail will be rerouted to avoid wet areas and rare/sensitive plants, per Arrowood fine-scale review late summer 2022.

c. Proposed trail removals

i. Remove Ridgetop from the proposal, as it tracks to closely to the ravine that serves as a key wildlife corridor.

ii. Remove the Roadside Trail from the proposed network, as it is redundant to the road and passes through persistently wet areas thereby making trail construction "tricky" per Arrowwood and Sinuosity report, requiring bridges, ramps, puncheon, etc.

iii. Remove the proposed central path between Cascade Trail and Rocky View; instead, connect the two where they are closest to one another towards the southern end.

d. Existing logging roads and skid trails

i. Except where they coincide with the proposed trail network, existing logging roads and skid trails will not be maintained as trails by the ACFC and will not be shown on ACF trail maps (although during future forest management activities, they may be maintained by the forester and logger).

e. Trail-free zones

i. Other than proposed trails, current connection to VYCC trails, and where present-day VAST trail connects, designate all other areas of the forest as trail-free