Data Submitted (UTC 11): 4/8/2024 4:00:00 AM First name: Richard Last name: Enser Organization: The Conservation Cooperative Title: Comments: RE: Green Mountain National Forest, Telephone Gap Integrated Resource Project, Preliminary Environmental Assessment.

Herein are comments regarding the above-referenced project. Comments are primarily directed to Resource Sections 3.2 (Forest Habitat), 3.3 (Forest Health), 3.5 (Threatened, Endangered and Sensitive Wildlife), and 3.6 (Sensitive Plants); also attached are comments concerning biodiversity, which is not identified by the Forest Service as a resource worthy of consideration.

Comments and supporting details are grouped under several primary issue statements that identify information gaps that can only be addressed through an Environmental Impact Statement process.

Issue 1. The Forest Service has not demonstrated a [ldquo]need[rdquo] for creating early successional habitat that justifies a trade-off for the higher ecosystem service value of retaining intact forests.

The Telephone Gap Preliminary Environmental Assessment (TGPEA) states that, [ldquo]it is important to balance the role forests have in countering carbon emissions through their carbon-sequestering and storage capacity with the need to address declining forest health and lack of habitat diversity within the project area.[rdquo] Preliminary Environmental Assessment (p. 11).

As you are aware, the philosophy expressed in this paragraph has been described by Littlefield and D[rsquo]Amato (2022) as the [Idquo]wildlife-carbon trade-off[rdquo], which they describe as applicable in cases [Idquo][hellip]when strategies to maximize carbon on the ground do not tidily align with disturbance-oriented strategies to promote important habitat for imperiled wildlife species.[rdquo] The authors argue that creating early successional habitats by logging is an acceptable practice because species utilizing this habitat are declining. But are these species imperiled?

The term [Idquo]Imperiled[rdquo] has been used for several decades to describe species of greatest conservation concern, specifically those nearing extirpation. The Natural Heritage Network and NatureServe, the nation[rsquo]s primary biodiversity database, has ranked all North American plants and animals as a quick assessment of a species conservation needs. Ranking consists of assigning a G (Global) rank, and a State (S) rank as follows:

G1/S1	Critically imperiled, <6 populations
G2/S2	Imperiled, <20 populations
G3/S3	Vulnerable
G4/S4	Secure
G5/S5	Demonstrably Secure

In the Telephone Gap proposal and environmental assessment, the animals suggested as those that are likely to benefit from the creation of early successional habitat include [Idquo]ruffed grouse, woodcock, wild turkey, deer, black bear, moose, bobcat, and snowshoe hare, as well as many passerines such as the eastern bluebird, chestnut-sided warbler, common yellowthroat, song sparrow, and American goldfinch.[rdquo] Many will

recognize some of these species as common in Vermont, and in fact all are identified as S5 species, or demonstrably secure in the state

The TGPES also states: [Idquo]This age class provides early successional habitat and is of critical importance to a variety of species of wildlife, including migratory birds and pollinators. Fifty-four Vermont Species of Greatest Conservation Need and four categories of insects (bumble bees, butterflies, moths, Carabid beetles) require or depend heavily upon young forest or old field/shrub habitat to maintain healthy populations.[rdquo]

It is difficult to ascribe any relevance to this paragraph without more information. What species of pollinators or migratory birds? It would be helpful to know what the 54 Species of Greatest Conservation Need are that require [ldquo]young forest or old field/scrub habitat[rdquo], which describes many places throughout Vermont. But even without the list of 54, identification of all Early successional SGCN species likely to be found in the Telephone Gap area finds that all are ranked S5.

Littlefield and D[rsquo]Amato (2022) try to make their case for early successional habitat creation by citing just one species, the golden-winged warbler, which has according to the authorss, [ldquo][hellip]experienced one of the steepest declines of any North American songbird.[rdquo] Despite the hyperbole, this bird is ranked a G4 (secure), with most of its population found in the northern Midwest. It is an S2 in Vermont simply because the eastern edge of this bird[rsquo]s breeding population is in the Champlain Valley of Vermont. There is no expectation that the golden-winged warbler will be found in the GMNF.

Littlefield and D[rsquo]Amato (2022) also mention, [ldquo][hellip]this holds true for game species as well, like American woodcock and ruffed grouse, which often motivate management for early successional conditions.[rdquo] To be succinct, the motivations of wildlife managers to sustain harvestable populations of game animals is not an acceptable option when weighing the wildlife/carbon trade-off.

A central question in an EIS process is, describe the need for this project that justifies the action above other services provided by forest ecosystems? In the case of the Telephone Gap project, the issue of need has not been justified.

Issue 2. There have been no biological/ecological assessments of the species and ecosystems that would be negatively impacted by the project.

In all TGIRP narratives, only species benefitting from the project are mentioned. But creating a new habitat, especially an early successional one, cannot be done without destroying another, more mature habitat. Sending a 40-year old forest back to year 0 takes a violent disturbance, and a lot of species go with it. An EIS would require the Forest Service to provide a biological and ecological assessment of the impacts to forest biodiversity from all harvest treatments. What species (e.g., birds, plants, pollinators, etc.) would be lost?

Although the Forest Service has mostly fulfilled its requirements under State and Federal Endangered Species regulations, simply focusing on rare species is a woefully incomplete assessment of the biodiversity in a forest. It is obvious the Forest Service is uncomfortable about the issue of biodiversity. Biodiversity complicates things, as well it should. But when you only worry about the small points on the land that harbor the few regulated species, you are free to pursue management actions that can damage entire ecosystems and the myriad unregulated species they harbor.

In the Telephone Gap proposal, in the section describing the benefits of early successional habitat, is this phrase: [Idquo]Early successional characteristics change gradually over time up to 20 years, at which time their wildlife habitat benefits diminish.[rdquo]

That statement is true when the only wildlife considered are the ones that are harvested with guns, arrows, or

binoculars. Yes, in about 20 years that wildlife begins to diminish as the openings in the forest return to forest. But the numbers of everything else, especially the insects, begins to climb. It is a standard ecological principle, that as forests mature and develop greater structural complexity, biodiversity follows.

[Idquo]Old-growth forests in North America provide habitat for unique assemblages of species that often are rare in younger forests. Insects and related arthropods reach their highest diversity in old-growth forests because of their stable moderate temperature and relative humidity and the rich variety of resources represented by high plant species richness and structural complexity.[rdquo] (Schowalter (2017)

Another important index of biodiversity is the herbaceous plant layer, described by Gilliam (2007) as follows:

[Idquo]The herbaceous layer is significant to the structure and function of forest ecosystems in ways that belie its diminutive stature. It represents less than 1% of the biomass of the forest, yet can contain 90% or more of the plant species of the forest and contribute up to 20% of the foliar litter to the forest floor - litter that is generally of higher nutrient content than that of trees. As the site of intense competitive interactions, the herb layer can direct the development of forests after canopy-removing disturbances and can become intricately linked with species of the forest canopy. Herb-layer species with phenologies that dictate growth and development in the early spring (e.g., spring ephemerals) can mitigate the potential loss of nutrients, such as N, that are essential to all plants, including trees.[rdquo]

Forest biodiversity is critical to healthy functioning forests. Biodiversity does most of the work in running the ecosystem services attributed to, the [Idquo]forest[rdquo]. An Environmental Impact Statement would provide the opportunity to recognize the importance of biodiversity and how logging projects of all kinds can impact biodiversity[rsquo]s role in providing a wide range of forest ecosystem services.

Issue 3. Proposals to alter natural ecosystems, for example controlled burning to create habitat for oaks, have not been critically reviewed by conservation biologists.

As stated in the TGPEA: [Idquo]Prescribed fire treatment areas totaling 963 acres would be burned every three years over a 15-year period. Actual burning cycles would be dependent on site-specific conditions such as acom production and competition with other vegetation.[rdquo] P. 17, PEA

The Forest Service continues to address forests in terms of habitat, and not as ecosystems. Instead, it[rsquo]s all about habitat, a meaningless term until defined. Habitat for what? Habitat for a black-throated blue warbler is somewhat easy to define, [ldquo]forest habitat[rdquo] or [ldquo]early successional habitat[rdquo] not so easy. Likewise, there can be many varying opinions as to what is meant by [ldquo]improving forest habitat[rdquo].

The Forest Service[rsquo]s disinterest in ecosystems is reflected in proposals to alter naturally functioning forest ecosystems to [lsquo]improve their resiliency to climate change, increase resistance to insect invasion and other natural disturbances, provide more habitat diversity and, at the same time increase their capacity to supply wood products. All of it can be done if we tweek the system a little bit one way or another, hopefully without tipping it off balance

The most outrageous tweeking in the Telephone Gap proposal is the proposed periodic burning of more than 900 acres to accelerate the change from northern hardwood forest to an oak forest. Essentially, a redesigning of the natural ecosystem by introducing a new disturbance regime to the Green Mountains, and proposed without any recognition of the biodiversity impacts caused by this degree of ecosystem change. Normally, ecosystem-altering projects of this magnitude would be vetted by teams of restoration ecologists with a variety of public agencies and private consultants. Again, an Environmental Impact Statement process would be the appropriate avenue to address this proposal. No single agency can assume the ethical responsibility of conducting a management action that poses considerable ecological harm.

There are additional issues that could be raised at this time regarding the incomplete analysis of Threatened and Endangered Species and National Forest Sensitive Species, but these issues would be addressed under guidelines of conducting an Environmental Impact Statement. Which is the central point of my comments, that the environmental impacts of the proposed project have not been addressed, and can only be addressed in an Environmental Impact Statement.