

**Public Comments on
Draft Ten-Year Management Plans
For Paran and Mile-Around Woods**

Thank you for this comprehensive draft management plan. This is a vast and much-needed undertaking, and I greatly appreciate it. I would like to know more about the herbicide aspect, considering our property butts up against the woods, and our students and families spend a great deal of time in McCullough Woods, Lake Paran, and the Robert Frost Trail. We were grateful for the warning that was sent out in the spring of this year regarding the spraying of the fields. It allowed our teachers to plan for the safety of the students. The students of Southshire Community School have been stewards of the woods and Lake for the past 34 years cleaning up the litter as well as removing the garlic mustard. We have been scientists, naturalists, artists, and budding ornithologists. Similar to the Village School we are a neighboring independent school, we ask to be included in the plans for the learning opportunities referred to in your letter. Please let me know how Southshire can become more supportive or how I could personally be more involved with the Fund.

Great. Looking forward to the new projects.

One of the ugliest sights in the Fund's lands is the border rows of boxelders [references in particular the south edge of unit 10e]. We would love to see them removed. Involving neighboring landowners in invasive plant removal would be mutually beneficial. We look forward to seeing later versions of the plan and to cooperating with the removal of invasives in the future. On our land, the biggest impediment to invasive removal has been the difficulty of disposing of the vegetation. If we can coordinate disposal with the Fund's efforts, we could get rid of many more honeysuckle and barberry bushes. Sharing expenses would be reasonable.

I have read the plans for the Mile Around and fields as well as the Lake Paran area. What a comprehensive and informative report! I fully support this effort. As one of the folks who along with Susan Lambert who have organized and pulled Garlic Mustard in the Mile Around for over 10 years I have seen invasive plants began to take over. I have surveyed the woods for the West Virginia White Butterfly as well as the small wetland restoration area for other butterflies. Thankfully the West Virginia White seems to be doing well in both the Mile Around and Short Aldrich woods. The small wetland is also showing signs of harboring butterflies such as Least Skipper, Great Spangled Fritillary, Monarch, Viceroy to name a few. These findings are entered into eButterfly. Please keep me on your notification list. I am willing to help.

It was great to get your email to supporters about your new approach to managing the woods and trails. I read through both proposals and did a bit of research into the firm. It seems very well put together. Since you asked for feedback, I do have some thoughts I would love to share.

I'm glad you are tackling invasive species, and seeking to improve the balance of the forested landscape. I am in full support of the main goals of the proposal (increasing biodiversity, strengthening stands of native plants, general trail and property maintenance). I was, then, quite surprised to see that herbicides would be the primary method for controlling invasives.

In the proposal, herbicides are discussed as an unfortunate necessity, but the only other options discussed are hand pulling, mowing and mulching. What about controlled fire, mycological interventions, tarping, planting more desired species, selective tree-felling, soil health management, or other techniques? For Garlic Mustard, for example, the newest research from Cornell suggests that the best approach is actually to leave it alone, as it self-limits and dies out. Each plant has its own techniques, of course, but a blanket of chemicals is not always the best way.

Did you discuss those any of those options with them? Have you talked with soil scientists or permaculture specialists?

In the proposals, the herbicide application is vague. Would it be spray, pellet, injection, ____? What chemicals would they use? For example, I am dealing with a major infestation of Ailanthus on my property in Troy and the best approach seems to be: application of a tiny dose of herbicide into the trunk, then felling 6 months later. This entirely limits the poison to the tree and root structure. A foliar spray approach to the same issue creates a scorched-earth environment where the soil and many of the microorganisms in it are killed by the herbicide, which ultimately finds its way into the water table (not to mention changing the microorganisms in the soil).

The proposal does mention applying for "NRCS brush management practice (chemical) #314". That practice discusses the benefits of foliar sprays as one option, saying it is "cost-effective". I hope that they aren't weighing momentary cost over the long-term health of this ecosystem. The fact that they also propose to mow and mulch in a handful of areas is great, but the majority of the management plan is chemical-based.

Long View is proposing to use herbicides in 186.95 acres of the Mile-Around woods.

What is Long View's approach to long term soil and water health? They mention following "Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont", which to my quick scan, seems like it might be a bit slim. It defines hazardous materials as petroleum products and coolant, and focuses mostly on logging roads and drainage ditches. That sort of practice is great, but it does not seem comprehensive in this situation.

Since my family's property is downstream of the woods, and we eat from the garden adjacent to the wetland the creek creates, I have a vested interest in

limiting the use of herbicides anywhere upstream. People talk about herbicides in many ways, but they are one thing and one thing only: poison. Many are neurotoxins, and almost all are carcinogens. I strongly urge against their use. At the very least, I expect that if they are used, the soils, waters, animals, and people downstream are considered beforehand. I would also hope that Glyphosates are off the table. This, of course, applies even more to the Paran Creek work, as that water is enjoyed by the entire community.

Again, I would love to hear if you have been in contact with a sustainability or permaculture consultant throughout this process, whether you have talked with any other land management companies, etc. as the goals of promoting native species and protecting pollinators seems to run in opposition to the use of chemical pesticides/herbicides.

Thank you for taking the time to read through all of this, and for your work maintaining the woods and trails, as always. I would love to hear your thoughts on these issues, and discuss further if you are open to that. hear your thoughts on these issues, and discuss further if you are open to that.

Here are my comments [on behalf of Paran Recreations, Inc] for the Lake Paran Property portion of the Conservation Management Plan:

1. Use Lake Paran's property as primary or one of many outdoor classroom spaces for Village School. We are currently compiling a data base of natural history with the help of our Bennington College Field Work Student. We hope to use this research to shape more specific place-based curriculum for our outdoor education programs.
2. Instill a Youth Conservation Corps, either through the VYCC, or form a Bennington specific conservation corps to remove invasive species during summer. Program will be compensated and will incorporate relevant professional development.
3. Work with MAU "Outdoor Club" for volunteer invasive management days
4. Lake Paran & McCullough Library will host a 4-season community "Bioblitz" assessing the flora and fauna of Lake Paran property as a citizen science effort.
5. Pertaining to the aquatic invasive species (AIS) in Lake Paran, which in part stems from the health of the forest and Paran watershed as a whole, I have several suggestions:
 1. Hire permanent, part-time "Watershed Steward" to collect water quality samples at sites along the Paran Creek and conduct public outreach/education of watershed stewardship
 2. Dredging the sediment build up at the mouth of Lake Paran.

3. Conducting a heavy metal survey of the sediment in Lake Paran with the ultimate goal of understanding the historical toxic pollution that runs from various industries along Paran Creek.
4. Installing internet connection on the Frost Bridge stream gauge to monitor stream activity automatically and for public information. Perhaps through USGS?
5. Purchasing a mechanical harvester for milfoil/water-chestnut management.
6. Using our 8 week summer camp series, (with goal of hosting year round programming) to teach about forest conservation.

Also incorporating forest conservation into consistent adult workshops, ie. teaching either chainsaw 101, invasive management, ect.
7. Whipstock Hill Preservation Society has proposed installing a vernal pool in Lake Paran which will be one of several sites around Bennington/Hoosick region. It is in partnership with VDEC.
8. Planting pollinator hillside beneath Lake Paran playground and on hill leading down Lake Paran driveway, both for aesthetic, pollinator services, and erosion control.
9. Planting riparian buffers everywhere especially near water quality testing sites with high nutrient loads. (i.e. Overlea Road or anywhere along railroad)
10. Build an experiential trail on wooded slope beneath Lake Paran parking lot (*inspiration: The Play Grove | Montshire Museum of Science)

I am the new Watershed Steward for Lake Paran. My position involves studying Lake Paran's water quality using scientific tools of measure. I have prior experience in the field of hydrology and ecology and am a major advocate for the management plans being proposed. I want to know how the plan will address the aquatic invasive species in Lake Paran. I gather that the introduction of buffers may be a part of the plan? I suggest the implementation of eco-restorative processes along the watershed. Eco-engineering is a method that has worked in aiding many freshwater bodies across Vermont. There are practices using native aquatic plant species to deal with high nutrient content that we can implement in the lake. A small, closed-loop aquaponic system functioning off the shoreline may aid the restoration process of the native ecosystem. Said plants can be harvested and relocated to cover more of the lake's surface area. This would give invasive species less room to grow, helping native species outcompete.

Well, this is a hard nut to crack. Having (finally) read through the proposal, I confess I am concerned about the amount of chemical control I think is being proposed. I am sure you are too. I am currently reading *Beyond The War on Invasives*, written from a permaculture perspective, which is certainly provocative, and challenging some of my

notions about invasives and landscapes. Broadly, she proposes that before trying to eradicate an invasive one should ask what larger changes in use (elimination of other species, development, pollution etc.) made the invasion possible, and further proposes that sometimes invasives are serving, or, with a different management style, could serve, important ecological services. She describes some persuasive case studies, but truthfully, I can't imagine what service invasive honeysuckle serves that makes it OK to strangle trees. Nonetheless, the book's perspective is at least making me ask the question. I certainly know that you don't take this step lightly, and would continue to support the Fund's efforts if I had any (financial) resources, but...I wish we could have some kind of direct contact about this issue. Maybe small group conversations. Maybe that already happened and I missed it.

Notes with donations:

Thrilled to support your efforts.

Sending another 100 because of your commitment to removing invasives...
Thanks for taking on a truly challenging task.

Looking forward to the ecologists' plan, and maybe opportunities to accompany on surveys, etc.