

Environmental Patterns Inquiry Area
Discovery Process Findings
10.2.13

1. Campus planning

- a. What facilities or designs will we need for multiple uses (multiple seasons, multiple programs)?
- b. Can we move our buildings toward greater efficiency?
- c. How can we best situate ourselves for solid conservation-based stewardship?

Findings:

- We see distinct areas of ENF defined by the location and usage. The first two—the quad hilltop and the activity area from the tennis courts to the riding ring and pastures—are primary and must be kept year round as a school campus.
- A secondary area is comprised of Nature Hill and the New Lodge, also important to camp, if less prominent, and more threatened by future development. The main threat here is the access to the Huber property via the Weedigo Trail. This 14-acre piece extends from the top of Nature Hill to just above the Sun Lodge.
- If it were to go out of the Huber family control or if it were to be developed the most likely access would be a road by the New Lodge, up Nature Hill. (Mo Hill will most likely stay as it is currently).
- A good deal of campus planning has already taken place, including plans for a LEED-certified core campus redesign.
- It is difficult to predict campus needs without foreseeing changes in programming.
- We should remember that long-term campus planning must account for the eventual move of the Winston-Salem office to Pisgah Forest.
- We could agree to a set of principles for any new construction, redesign, renovation, or expansion that we consider. One example would be to commit to LEED certification for all new buildings, but we could choose other principles in addition or instead.
- We should pursue a comprehensive conservation plan for the entire campus/property.
- For things like renewable or sustainable energy (e.g., solar panels), non-profits are handicapped since they don't benefit from tax exemptions, but there are work-arounds.

2. Regional planning and forecasting

- a. How could Little River development affect our campus and programming?

- b. How could public land management affect our programming (e.g., National and State Forests)?
- c. How can ENF position itself as a local and regional advocate for our interests?

Findings:

National Forests – Management Planning

- The U.S. Forest Service is revising the Nantahala and Pisgah National Forests Land and Resource Management Plan (the Plan). SEE Fact Sheet on National Forest Plan Revision. This process began in 2012 and will continue until 2015. The Forest Service is currently accepting comments during this “Assessment Phase.” It appears there will be many other opportunities for public comment.
- In the last major amendment, the USFS appeared to be moving towards an ecosystem management approach for forest management, again a good trend of ENF. However, they still seem to be struggling with their age-old mandate to balance multiple uses of the national forests, including timber harvesting and other consumptive uses. SEE the Management Plan.
- RECOMMENDATION: ENF should participate in the on-going management plan revision process. The Wilderness Society’s National Forest Action Center might be a good place for information on their evaluation of the existing Management Plan and the revision process.

Dupont Forest

- Dupont Forest is managed by the NC Forest Service. There is a citizens support organization called Friends of Dupont State Forest <http://www.dupontforest.com/>. This group could present an opportunity for ENF to get more involved in stewardship of the forest.
- The forest management plan is fairly recent, dated June 2011 (SEE DSRF Land Resource Management Plan). ENF is listed in the plan as an environmental educator in the vicinity. The plan appears to be sensitive to the needs of protecting the Forest’s ecology while continuing to manage it for resource-based, passive recreational uses. While there is some reference to the economic benefits of logging, it’s difficult to determine how much logging the plan permits.
- It appears the ENF would need a commercial use permit to use the Forest for our purposes. There is a permit preparation fee and permit monitoring fee. I assume we’re aware of this policy.

Local Land Use Planning

- ENF's campus is likely threatened by incompatible land uses around the campus in the Little River Valley. The recent unsuccessful proposal to site a bio-fuels plant is a good example. The owner of this site will likely continue to aggressively market it for other uses. Transylvania County has no zoning and very little land use regulation. Land use regulation is not a short-term solution to threats to the campus.
- The recent economic slow-down likely spared ENF any major development threats. However, as the national, state, and regional economy improve, new growth and development pressure will come to Transylvania County.
- In the long-term, local experts predict that zoning and more land use regulations may be on the horizon. Politics in Transylvania County appear to be slowing shifting, which may provide political support for land development regulation in the future.
- ENF may be well-served by banding together with other local interests or individuals that have similar concerns about land use threats to their property/business. Although many of the other camps in the area enjoy natural buffers by benefit of adjacent public (National Forest) or privately protected land, there may be some advantage to working cooperatively with other camps to seek appropriate regulations. One of the current County Commissioners is the owner of Keystone Camp.
- There is also a nascent movement in the county that successfully helped fight the proposed biofuel plant is attempting to become more politically involved in the community.
- RECOMMENDATION: If it has not already been done, ENF should consider working with ACA and other local camps to conduct a study of the economic benefits of camps in Transylvania County.

3. Environmental education

- a. What are other semester programs doing in this regard?
- b. Other camps?
- c. What are important pedagogical trends in the field?

Findings:

- Some schools and camps (e.g. Chewonki) have students doing hands-on sustainability work, like installing solar panels.

- However, the ACA doesn't even categorize camps that offer an environmental education focus (though they note things like "nature exposure").
- Some schools link curriculum, and programming in general, to an environmental education mission in concrete ways, and we should too. (This could even go so far as including a Hanté on energy and sustainability, for example.)
- We have always helped kids develop a love for being outside, a respect for their environment, etc. We can express that benefit more clearly and deliberately highlight it in marketing.
- We should also note that education and facilities go hand in hand. Our mission and our practice should work synergistically at the level of the physical plant.

4. Climate change

- a. How might climate trends impact our campus?
- b. How can we adjust programming to accommodate volatile weather (or a possible new normal of extreme heat and precipitation)?
- c. Is our campus prepared for volatile weather?
- d. How might we need to react to big changes in transportation norms?

Findings:

- Over the course of the 20th century, the Southeast U.S. was one of the few places on the globe *not* to experience a warming trend. However, the 2000s have brought higher temperatures, with 2001-2010 the warmest decade on record. And it is worth noting that our corner of the region saw the greatest temperature increase.
- NOAA now predicts continued warming over the next 80 years, and an increase in precipitation volatility. We might not have more rain in general, but we'll have it more irregularly. Five of the top ten annual values for extreme precipitation index occurred in the century leading up to 1990. The rest took place in the 21 years after that date.
- With higher temperatures and more volatile precipitation (i.e., more droughts and more floods), some public lands may be closed periodically because of water issues. (NC sections of the Appalachian Trail were closed last year for this reason). And we will see more forest fires.
- The Appalachians in general have been described by The Nature Conservancy as biodiversity "strongholds," which should be able to retain higher levels of diversity even in the face of these climate changes. The downside to this likely involves greater development pressure and an unpredictable government regulatory/management regime.
- We should consider long-term planning that accounts for flooding and precipitation spikes—better road grading, larger

culverts, drainage plans for the entire campus but especially the lower fields and garden, dam maintenance, etc.