

Berkshire Regional Planning Commission Clearinghouse Review Report

SUBJECT: Greylock Glen Outdoor Recreation and Environmental Education Center
EOEEA#: 14566
LOCATION: Adams
EST. COST: \$40-60 million
REVIEW TYPE: Environmental Notification Form
APPLICANT: Town of Adams and Dept. of Conservation and Recreation
COMMENTS DUE: April 27, 2010

PROJECT DESCRIPTION

The Greylock Glen Outdoor Recreation and Environmental Education Center is being developed by project partners, the Town of Adams, as the state's provisionally designated developer, and the Dept. of Conservation and Recreation (referred to jointly as the proponents). In general terms, the Town is overseeing the development of the core development area, while DCR is overseeing the development of the trails system, although there is some flexibility for overlap. The site is approximately 1,063 acres, of which approximately 47-49 acres will be developed, including a 100,000 square foot (sf) 170-room lodge and conference center with a fitness center and pool, a 2,500 seat amphitheater, an 11,000 sf environmental education center, a 6,000 sf maintenance building, and a campground with 140 sites and swimming pool. The bulk of the development is clustered at the junction of Gould and Thiel roads, with the camping located a short distance to the west. The project also includes improvements and additions to the existing trail system that extends throughout the entire parcel, with some trails leading to the adjacent Mt. Greylock State Reservation. The project alters 47-49 acres of land, 8 acres of which will be impervious surface area, alters 1,028 sf of bordering vegetated wetlands and 8 acres of riverfront.

The property is owned by the state, and the project will be part of a 99-year lease to the Town of Adams. The state is providing \$3 million to match the non-state investment on a 1:1 basis, and it is anticipated that this funding will be used to develop the trail system. The state is also contributing to infrastructure improvements along Gould and Thiel roads. Approximately 1,000 acres of the site will be permanently protected through a conservation easement, the holder of which is yet to be determined. The Town of Adams will work with a private developer on the site, but the developer has not yet been determined. The ENF describes the master plan for the site, calculating the estimated footprint of the project, the proposed location and size of buildings and activities, water usage, and traffic demand.

The project is proceeding through the MEPA process because it exceeds land disturbance, wetland and transportation thresholds, and requires review by the Natural Heritage and Endangered Species Program (NHESP). The project requires an Order of Conditions from the Conservation Commission (a Dept. of Environmental Protection permit if appealed), a sewer permit from DEP, review by NHESP and a federal stormwater management permit. Because the project involves financial assistance from the state and is, in part being undertaken by DCR, MEPA jurisdiction is broad.

Land Alteration

The project will alter 47-49 acres of land. The core development area will be clustered on land that is already largely cleared. The buildings that house the conference/lodging center, amphitheater and environmental education/Nordic ski center are clustered along lower Gould and Thiel roads, and the campgrounds are clustered at upper Gould Road. Existing water and sewer lines are in place and

require only extensions to serve individual facilities. The land alterations for these activities are listed as being approximately 29 acres, with the approximately remaining 20 acres involving trail improvements.

The clustering of main activities within two discrete sites will reduce the footprint of the project and habitat fragmentation, and will facilitate pedestrian movement between activities. This is consistent with many of the sustainable development styles that BRPC has promoted. However, to increase the likelihood of pedestrian movement, an ADA-compliant path should be established. There are trails connecting the main buildings and winding their way down from the campgrounds, but to encourage visitors of all ages and abilities to walk to the other facilities, there also needs to be a clear and direct walking route, such as path along the road system. This is especially important for campers who wish to attend shows at the amphitheater or patronize the restaurant at the conference center at night.

A Sustainable Design Guidelines document (VHB, Inc, and Maryann Thompson Architects, 2009), has been prepared, the purpose of which is to serve as an “easily accessible guide to lead prospective developers and the public through natural features of the land and a palette of design responses which, when applied as a system, will yield a minimal development footprint on the land.” Overall, the document helps the reviewer to understand the overall nature of the project. It highlights a number of progressive and sustainable design elements, utilizing the landscape of the site and recommending energy efficient designs and technologies. Buildings are proposed to be designed to employ energy conservation measures using passive solar orientation, green roofs and renewable energy technologies. Building materials are to be sustainably harvested. Stormwater is being managed throughout with low impact techniques such as dry wells, pervious pavement, infiltration trenches, vegetated swales, and rain gardens. It will be important to ensure these guidelines are fully integrated into the actual project as it moves forward to implementation.

The project is proceeding through MEPA at a very early stage in the development. The engineering design is at a very early stage and the town has not selected its private development partner. There are different indications as to the amount of land alteration that will occur: the ENF states that total land disturbance is 47.6 acres (pg. 2) and 49.3 acres (pg. 7), while the consultant stated at the site visit and at the BRPC Clearinghouse Review Committee meeting that land disturbance will be 48.5 acres. The project is extremely close to crossing the 50-acre EIR threshold. Any slight change in design to accommodate the developer’s requirements or to meet engineering needs could easily push the development past the EIR threshold.

Wetlands

According to the ENF, there are several ponds on the site, many of them constructed as part of the former golf course design. There are several intermittent and perennial streams flowing from the Mt. Greylock hills to the west of the site. The large wetland complex in the center of the site is located adjacently west of the core development area. According to the narrative, this complex includes 5 of the 7 certified vernal pools, but their locations are not shown on any of the ENF’s maps.

The project will impact ~1,000 sf of bordering vegetated wetlands, and a replication site of approximately 2,000 sf is proposed. As noted by the large acreage of riverfront impacts, there are numerous areas where trails will cross streams and wetlands. Table 4A of the ENF lists the more than 80 numbered wetland crossings that will be improved as part of the project. Most of these crossings are at existing trails and, if constructed carefully and as proposed, will decrease the overall environmental degradation at those sites. These crossings are expected to be filed as limited projects.

As shown on the trail map, there are several proposed trails in or near wetland areas. The ENF does not fully explain the reasons for the density and locations of trails that cut through or jut into wetlands. Although these trails allow visitors to see and appreciate wetland ecosystems up close, too many trails have the potential to harm the very ecosystems that are on display. Deposition of eroded sediment, dispersal of invasive plant seeds, and trash are some of the negative impacts that could potentially harm the ecosystems. The ENF does not state what BMPs would be put in place to reduce the chances that these negative impacts will occur.

Rare Species

The project site currently supports a broad diversity of plant communities and habitats, including rare plants and animals. The site has been extensively studied to document the plant species on the site, finding more rare species than was previously known to exist there. The ENF includes a copy of the *Rare Plant and Natural Community Survey in Greylock Glen (Adams, Mass.)* (Biodrawiversity LLC, 2010), which provides the results of the survey and recommendations to protect the rare plants found on site. According to the survey, a total of 439 plant species were identified in 2008, including 21 state-listed rare or watch-list species. The rich mesic forest areas and calcareous fens supported more intact native plant assemblages, in which a higher number of rare species was found. The mature forests of the northernmost section of the site yielded a large population of one of the rarest plants in the state and, as stated in the survey, it was “one of the most exciting observations we made,” as it had not previously been documented in the Mt. Greylock area. The previously disturbed areas on the site, the old fields, early successional forests and altered wetlands supported a rich diversity of native and introduced plant species.

Supplemental information received from DCR and NHESP indicates that the proponents have worked in good faith to identify rare species on the site. The survey report discusses the field work conducted and provides the findings of this work fairly well, including a complete list of the plant species found on the site and a map showing general locations. The report also states that the consultants “observed more introduced species along existing trails than in the surrounding areas, suggesting that hikers are transporting seeds along the trails. Many of these trails start in or near the open meadows of the core development area. Increasing the number of visitors and building new trails into uninvaded areas will likely worsen the problem.” The report does not map the most problematic invasive species sites or trails most affected. It would have been more complete if it had done so.

The report clearly lists recommendations to avoid directly impacting rare plant species from human trampling and indirectly impacting them from introduction of invasive species. The recommendations include:

- “Do not build new trails within state-listed or watch-listed plant habitats.
- If trail maintenance (for existing trails) is planned in rich mesic forests or where rare species occur, carefully consider the design and placement of water bars, walkways, or bridges. Do not disturb the soil or rocks where rare species are growing.
- Reduce the number of Class I and II trails within the property whenever feasible, or confine them to the grassland and early successional forest habitats in the property’s lower elevations.
- Avoid creating large trails that go directly from the core development area (where invasive species are most abundant) into rare species habitat where invasive species have not yet gained a foothold.
- During the trail building process, use best management practices to prevent dispersal of seeds of invasive species. This is especially important if soil or rock is being transported or if equipment may be contaminated.”
- Develop an invasive species management plan as part of the proposed development.
- Actively remove invasive species and encourage native species.

- Educate visitors and local volunteers about invasive species and encourage them to become involved in controlling their spread.”

The survey is a valuable tool. Results and recommendations should be fully incorporated into the future management of the site and the trail system. The ENF states that the number of proposed trails has been reduced to avoid rare species areas, but it does not state which trails have been withdrawn or their locations.

The site contains a rich diversity of plant assemblages. The relatively dense trail system has the potential to negatively impact that diversity, especially those trail segments that travel through or along the edge of the rare species habitats that were mapped as part of the rare plant survey. Trails through wetland areas, especially those wetlands serving as vernal pools, or those trails directly connecting the core development site to rare species habitat also contain the potential to negatively impact the rich diversity. The location of these trails does not conform to the recommendations made in the survey report attached to the ENF. Subsequent to the filing of the ENF, Biodiversity provided additional information stating that Biodiversity and the trail designer, Dodson Associates have been working together with the Natural Heritage and Endangered Species Program to locate the trails (see attached letter from Steve Johnson of Biodiversity (April 26, 2010)). It was stated that there will be no new trail construction within mapped habitat for state-listed or Watch List Plants. It was further stated that the polygons shown on the map contained in the Survey were “inflated” and that trails will pass around or between these populations. At a BRPC Clearinghouse Review Committee meeting the proponents additionally indicated that trails will be constructed according to new standards agreed to by DCR and NHESP. The Biodiversity letter also restates the need to control invasive species transport from the development area and to take great care in the design and maintenance of trails in or near rare species habitat.

BRPC staff met with staff from DCR, which is the agency taking the lead on developing the trail system on the site. Apparently the trail system was developed with specific users in mind, with some trails developed to meet ADA standards, while others were developed for Nordic skiers or mountain bikers. According to DCR, Nordic skiing is an activity that is greatly desired on the site because it will draw visitors to the site in the off-season, and a trail system of at least 15 km (9.3 miles) is needed to attract skiers. A feasibility study to document the minimum length of trail needed to make the Nordic skiing an economically viable component of the project has not been conducted.

The rare species sections of the ENF states that DCR worked closely with NHESP to identify and ensure protection of rare species, but does not describe how this was done. The proponents have provided supplemental information to BRPC upon request. A rare vertebrate is known to exist on the site, and work has been conducted, in coordination with NHESP, to determine the area utilized by the animals. The identity and exact location of the rare species is being withheld to protect the population.

The site hosts 7 certified vernal pools and several potential vernal pools, while other altered wetlands are serving as vernal pools, supporting common and rare wildlife species. According to supplemental information provided by the proponents’ consultant, the vernal pools tend to be located in or near the large wetland complex to the east of the core development area. The only development to occur near these areas are new trails or trail improvements.

TRANSPORTATION

The ENF submittal includes a Traffic Impact and Access Study prepared by VHB in February 2010. The Study divides project traffic generation into two sub-groups:

1. Core project uses: including the Conference Center, Campgrounds, and Nature Center. Average Daily Traffic (ADT) generated by these uses is estimated at 1820 trips (weekday) and 1990 trips (Saturday).
2. Special Event Traffic associated with the Amphitheater. Based on a proposed 2500 seat venue, additional trip generation associated with an event at the Amphitheater is 1850 trips (weekday) and 2,000 trips (Saturday).

The Study's approach to assessing impacts from Special Event Traffic (the Amphitheater) is incomplete.

In doing their analysis, VHB secured MEPA staff approval to utilize a 'trip averaging' methodology to reduce the number of trips shown in the trip generation summary (Table 5 on page 21) for the purpose of determining if the project would exceed a MEPA EIR threshold. The methodology states that if Special Events only occur on 44 out of a possible 110 weekday 'performance days', the added traffic will only be 40% as severe as trip generation results dictate. In other words, the estimated weekday trip generation from Special Events is reduced by 60% (in similar fashion, estimated weekend trips are reduced by 25%).

The trip averaging methodology is not an accurate representation of Special Event traffic impacts. Congestion that would occur on 40% of all weekdays, and on the majority of Saturdays for a defined performance season, is not an irregular event that can be discounted.

Special Event traffic is also not addressed in the Traffic Operations Analysis (intersection level of service) section of the Study. Only trip generation from the core project uses are incorporated in intersection LOS calculations. The Study states that Special Event traffic would be addressed through a Transportation Management Plan (TMP), to be implemented at a later date by the Town of Adams and its development partner(s), primarily to coincide with the construction of the Performing Arts Amphitheater. In concept, the TMP would be scalable based on the size and nature of the Special Event. Generic actions that might be incorporated in the TMP include shuttle service to the Amphitheater from peripheral parking locations, a Special Events Coordinator for police and emergency staff (presumably for intersection and parking area traffic control), a Central Communications Center, and Wayfinding Signage that would direct traffic to appropriate locations. The Study states that "since venues have not yet been determined, a specific TMP has not been developed at this time."

There are several problems with this conceptual approach for analyzing Special Event traffic. The overriding issue is no attempt has been made to assess the severity of traffic impacts associated with a Special Event. While a TMP may be a logical mechanism for mitigation of Special Event traffic, in practice it would not eliminate event associated congestion. A best case result from implementation of TMP actions would be to maximize the available capacity of an overstressed roadway network.

Other Special Event traffic issues include:

- The proposed TMP actions address local circulation and parking issues, but would have very limited benefit for regional network congestion (i.e. impacts to Route 8 through traffic)
- While the Town of Adams has made a good faith commitment to implementing a TMP, it is not clear how this requirement could be enforced at a future date.
- Many of the proposed actions (electronic signage, traffic control officers, parking shuttles) would be costly to implement. There is no information on projected cost for such actions, and who would be responsible for funding them.

In addition to the items relating to Special Event traffic, BRPC has these comments on the ENF Traffic Study:

Page 28: Signalized Intersection Capacity Analysis

Table 11 reports that Commercial Street@Center Street will operate at LOS F for both build and no-build weekday conditions in the year 2019. The report states “the project is expected to have negligible impacts to operations at this location (No-Build versus Build).”

Contrary to that statement, Table 11 reports an increase in the intersection volume to capacity ratio (v/c) from 1.05 to 1.13. V/C is a measure of intersection capacity utilization. Even if an intersection is operating at conditions exceeding its design capacity, the v/c change noted for Build conditions is not negligible, and would result in increases in the extent and duration of localized congestion.

Page 30: Unsignalized Intersection Capacity Analysis

Table 12 reports LOS, vehicle delay, and queue lengths for stop sign controlled approaches at unsignalized intersections. This table shows some increases in side-street delay (the amount of time a vehicle has to wait to enter the main traffic stream) at intersections with Route 8. The most significant increases, as indicated by queue length, occur at the intersections of Route 8/Hoosac St. and Route 8/Maple St. The report text states the Town is ‘investigating improvement strategies’ at both these locations.

It would be helpful to have more information of the type of improvement strategies being considered by the Town to address side street delay. If the Town is considering signalization at these locations, a negative consequence of this type of improvement would be increased delay and reduced travel speeds for through movement on Route 8.

Page 35: Transportation Demand Management

The report discusses TDM measures as a means to reduce automobile traffic and encourage use of alternate modes. TDM measures are only effective when implemented in a controlled environment (e.g. the campus of a major employer or university), or when associated with a program of strict auto disincentives (e.g. parking controls, such as pricing and supply restrictions). It should be clearly stated that the proposed TDM measures would have very limited benefit for regional (through) traffic flows.

RECOMMENDATIONS

The BRPC does not feel that an EIR for this project is warranted at this time. There are, however, outstanding issues regarding the project as proposed that should be addressed as the project moves forward from the “Master Plan” stage to implementation.

In addition, we respectfully request that the Secretary require the filing of an EIR should future project changes exceed the land disturbance threshold of 50 acres or if future analysis of Special Event traffic indicates significant and non-mitigated impacts to regional traffic flow.

The state legislature has mandated that some level of economic development occur at Greylock Glen, and BRPC believes that development with an environmental educational focus is a good opportunity to highlight the biodiversity of the site. The ENF, as submitted to MEPA and the public, adequately describes the impacts and proposed mitigation measures of the project regarding general land and wetland impacts and mitigation, but it lacks adequate information regarding the full impacts and mitigation measures regarding rare species, especially in regards to the trail system.

This project is close to crossing the 50-acre EIR threshold. The land alteration and traffic impacts should continue to be closely monitored as the project progresses through final design and engineering. If, at any time land alteration exceeds 50 acres or traffic impacts increase significantly, the Secretary should require that the proponents file an EIR to clearly document the changes and the reasons for increased acreage.

Inasmuch as the ENF submittal is at a "Master Plan" level, the exact footprint of the project is not completely known at this time because the developer and design/engineering team for the project have not been chosen. In general, BRPC is concerned with the increasing number of projects that proclaim to be of a design level that allows proponents to claim with certainty that the footprint of the project is well documented, only to come before MEPA and the Secretary of EOEEA with new footprint calculations that show the project exceeding the 50-acre threshold. Then, as has been happening, the proponent asks the Secretary to deem the changes insignificant. In BRPC's opinion, this strategy constitutes project segmentation. It has been successful all too often, depriving the public and the state agencies the right to properly review and analyze the cumulative impacts of the newly expanded project. It is especially important that such strategies are not successful in projects that are on public lands and substantially subsidized with public funds, such as this one is.

- Areas that support rare species habitat or intact native plant assemblages should experience little human traffic. Although many of the trails that are located in rare species habitat already exist, they currently experience low to moderate traffic. If the project is as successful as projected, the trail system will experience an increase in traffic. With that increase is the greater risk of compromise of those areas through such items as trampling, sedimentation and invasive plant seed dispersal. The proponents are urged to continue to work with the NHESP, DCR and local biologists to reduce or re-locate the number of trails through rare species, mesic forest and wetland habitats, and to retire those existing trails that have the greatest potential to impact rare plant and animal species through trampling or invasive species introduction. A few select environmental educational programs could lead students to rare species sites if the programs were carefully conducted, such as requiring cleaning of shoes and clothes to reduce the chance for invasive species seed dispersal.
- In the ENF, the proponents have not sufficiently demonstrated that the density of the trail system is necessary to make this project economically viable. BRPC urges the proponents to reduce the density of the trail system, especially through rare species or mesic forest habitats, or near vernal pools. If the DCR can demonstrate that trails must travel through or near rare species habitat to make Nordic skiing an economically viable component of the project, then the proponents should work to design a trail system that is both protective of rare species while meeting industry standards. Perhaps the trail system can be designed so that skiers travel a loop system twice to meet the preferred mileage, or perhaps trails segments through sensitive habitats are closed off during three seasons, opening them up for use only during times of protective snow cover.
- The proponents should attempt to avoid trails leading directly from the core development areas or areas of known invasive species to rare species or mesic forest habitats, as recommended in the rare plant survey document and the attached letter. This could include removing the trails west and northwest of the core development area.
- The plant list in the Sustainable Design Guidelines should be amended. The list of plants to be used on the site should only include native plants. The list should be carefully reviewed for potentially-invasive plants, removing plants such as periwinkle (*vinca minor*) and rose rugosa (*rosa rugosa*), both of which are known to escape into natural areas in the Berkshires.

- The proponents should develop and implement a long-term invasive species management plan as part of the proposed development, as recommended in the Rare Plant and Natural Community Survey. This plan should clearly dictate which party(ies) are responsible for monitoring, conducting, implementing, and financing the long-term management plan.
- The site has been demonstrated to harbor intact plant assemblages, and management efforts to reduce infestations of invasive plants or pests should be a priority. A component of that management effort should be aimed at campers and should include items such as prohibitions to bring their own camp firewood, so to reduce the chances of Emerald Ash Borer and other pest infestations. Campers should be informed of the prohibition and the reason for it when they call or make their camping reservations online, so that they are aware of the prohibition ahead of time. Camp firewood provided at the sites should be sustainably harvested, preferably from local sources.
- To increase the likelihood of pedestrian movement, an ADA-compliant route should be established, such as path along the road system. This is especially important for campers who wish to attend shows at the amphitheater or patronize the restaurant at the conference center at night.
- Based on discussions between the project proponents and BRPC staff, there is agreement that further analysis will be needed to address traffic impacts from the proposed amphitheater. The Town of Adams has requested that this analysis be deferred until the amphitheater project has advanced to the project permitting stage. At that time, the traffic study should be supplemented to incorporate a 'special event scenario' for more detailed traffic operations analysis. Elements of this analysis should include estimates of trip/parking generation for the event, and the resultant impacts to intersections. Proposed TMP actions for the event should be described, including their cost of implementation. Using this average scenario as an example, an estimated annualized cost for implementation of the TMP should be provided. In addition, the proposed TMP mitigations primarily address issues of local circulation. The future TMP analysis should include discussion of travel speeds and travel times on the Route 8 corridor through Adams, and estimated changes to travel times under various future scenarios. Further mitigation measures should be proposed at that time, if warranted. BRPC is willing to work with the town at that time.
- The traffic study indicates access to the site will rely on a variety of local roads, including Friend St., West Road, Maple St., Fisk Road, and Harmony St, Prospect St and Gould Rd. These roads serve predominantly residential land uses and currently carry relatively low traffic volumes. While the local road system will be adequate from a capacity standpoint to serve forecast trips to the project, the relative increase in average daily traffic on these roads will be large. This may negatively affect neighborhoods. Town officials should proactively work with affected areas to address their potential concerns early on in the process.
- The proponents should continue to solicit public input on the project as it evolves, keeping interested citizens and the advisory committee apprised of project milestones or changes. This is especially important as the proponents establish policies and fee schedules regarding public access to the facilities and the trail system.

The BRPC Clearinghouse Review Committee approved these comments on April 26, 2010, as authorized to do so by the BRPC Executive Committee at their meeting of April 8, 2010.