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Patrick McDonough  
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August 27, 2010

Rebecca Crist  
Environmental Analyst  
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21 South Platt Corners  
New Paltz, NY 12561

Dear Rebecca,

Enclosed you will find comments regarding the DEIS for the HRVR project made by the Rosendale Environmental Commission and the Rosendale Planning Board. Please let us know if you need any clarification or further information.

Sincerely,

Patrick McDonough, Supervisor  
Town of Rosendale

**Comments on the Draft HRVR DEIS Submitted to the NYS DEC**  
**from Rosendale Planning Board**

H. LAND USE AND ZONING:

1 ENVIRONMENTAL SETTING

c) Conformance of Proposed Action with Town of Rosendale Comprehensive Plan, Affordable Housing, Project is required to have 10% Affordable Housing, and as such should be included in this section, and where appropriate in other sections;

i) Preservation of Resources, Discussion of project on/around 4th Binnewater Lake.

iii) Improving Efficiency of Services, How will Rail Trail continuity be addressed, and there be a fee/charge for public access ?;

f) Necessity of Proposed Zoning, pg 316, last para "For example, a minimum property size of 750 acres....." How many other parcels in Rosendale over 750 acres now ?;

2. Impacts

e) Proposal for ownership, maintenance and management responsibilities.....Needs to include ownership/management of Storm water; Some text refers to Lagoons, and graphics seem to have altered shore line but no details on mitigations.

I. TRANSPORTATION & TRAFFIC.

Table III.I.5 Time of Peak Hour Traffic and Table III.I.6 Table of Peak Hour Traffic Volume, both are missing data for Ulster County counts, which include intersections # 6 and #9, those closest and possibly most impacted.;

3 Mitigation

b) On-site Mitigation Measures, mentions Hotel and employee parking being separated- Where ?;

c) Off-site Mitigation Measures, Resort guests....Shuttle service....to/from Park and Ride and Poughkeepsie... Resort operated, UCAT or private operator ?; No Helipad is appreciated.

**Comments on the Draft HRVR DEIS Submitted to the NYS DEC**  
**Prepared by the Rosendale Environmental Commission**  
**August 2, 2010**

This document was prepared by the Rosendale Environmental Commission on behalf of the Town of Rosendale as part of the SEQR Review of the proposed William Lake Development by Hudson River Valley Resorts (HRVR). The purpose of this document is to provide input into the SEQR process regarding the question of whether the Draft Environmental Impact Statement (DEIS) submitted by the applicant meets the requirements of the Final Scoping Document, dated April 1, 2009.

The Environmental Commission's review was limited to the following sections of the DEIS and related appendices: III. A (Soils and Topography), III.B (Surface Water Resources), III.D (Water Supply), III.E (Wastewater/Sewage Disposal), III.F (Solid Waste Disposal), III.G (Terrestrial and Aquatic Ecology), III.H (Land Use and Zoning), III.J (Aesthetic Resources), III.O (Greenhouse Gas Emissions), and Section V (Alternatives). Regarding Section C (Groundwater Resources) and the accompanying Appendix L (Hydro Geology Investigation Report), the Environmental Commission is deferring comment until after the outside karst expert completes the review of these portions of the DEIS.

The methodology used by the Commission in this review was to compare the DEIS summary sections (and when relevant, appendices) with the corresponding sections of the Final Scoping Document to assess whether the requirements of the Scoping Document were adequately addressed in each section. For some sections, such as water supply, the Environmental Commission's limited technical expertise meant that the Commission could not conduct a rigorous review of the technical adequacy of studies and data provided in support of statements made in the DEIS summaries. In general, the review sought to identify omissions of information, incomplete information, inconsistencies, or potentially inaccurate information to the extent practicable given the Commission's available resources.

This document includes comments that are both organizational and substantive in nature. The DEIS provides a great deal of useful information for reviewing the environmental impacts of the proposed project, but in a number of instances this information could be better organized to facilitate review. On a substantive level, the comments identify gaps in information that the Commission believes should be addressed to meet the requirements of the Final Scoping Document. The Commission's comments also flag statements and conclusions in different sections of the DEIS that could potentially be affected by the outside hydrogeological review.

While this document does not include a detailed review of Section I (Executive Summary) and Section II (Description of Proposed Action), some of the Commission's comments on summary sections apply to information contained in Sections I and II, particularly with regard to 1) the listing of environmental impacts, and 2) how the project is characterized in terms of its overall impact on the site. The DEIS routinely characterizes the project's area of disturbance as a percentage of the entire parcel, and the remaining area as land the project will preserve. It would be more accurate to characterize the area of disturbance as a percentage of buildable land, excluding the pre-existing conservation easement, water bodies, and other site features that could not be built on under any scenario.

## Comments on the HRVR DEIS by Section

### **III. A. SOILS AND TOPOGRAPHY:**

**Regarding the requirement of the Final Scope, Sect. A.1(a) to provide “a complete analysis of the on-site conditions”:** The DEIS states on p. 107 that no karst features exist on the site, but the document does not appear to include an explanation of how this conclusion was reached. For example, there is no mention in the DEIS (including in the hydrogeology report) that a karst inventory of the site was conducted. Field work for the 2006 Rosendale Biodiversity Assessment found two pirated streams (a typical karst feature) on the site, suggesting that this conclusion may not be accurate. The determination of whether the above Scope requirement has been met should await the report of the outside karst expert reviewing the hydrogeological work.

**In response to the requirement of the Final Scope, Sect. A.1(b) to identify and locate all abandoned caves, mines, etc,** the DEIS states on p. 107 that “approximately 100 mine openings and/or surface crevasses were identified that correspond to the three cement company operations that existed on the Site.” What was the methodology used to determine the location of mines and to distinguish instances of subsidence due to mines from natural processes that produce karst features? This information should be included in the DEIS. If older maps of mines were used to determine their location, copies of these maps should be included in an appendix to facilitate evaluation of the information provided in the DEIS.

**Regarding final Scope, Sect. A.1(b)** requiring that the DEIS discuss how safety concerns of features from the historical mining will be addressed and/or mitigated, including impacts to hydrogeology and wildlife:

- 1) The DEIS states that some mines will be filled and collapsed. More information is needed to assess the environmental impacts, including the proposed extent of filling (how many mines?) and the proposed locations for filling and collapsing mines. (The Cut and Fill memo in Appendix M mentions one mine, Mine 11, as a candidate for filling.) Has the habitat potential of the mines for bats been considered?
- 2) The hydrological discussion of the impacts to abandoned mines (DEIS, p. 133) may need to be revised if further testing is determined by the karst expert to be needed.

**Final Scope Sect. A.1(c) requires the DEIS** to identify rock outcroppings and other unique features on a map that also shows proposed roads and structures. The DEIS references Appendix C. Drawing 1. C-1 (“*Existing Conditions*”), but we did not see this information here. It is possible that rock outcroppings are mapped but are not clearly distinguishable on the map. This map does not have a legend, and all the colors are in the black-gray range, making features hard to identify. It is recommended that the map be revised using a different color for the different features that are being mapped (e.g., red for mines, blue of rock outcroppings, etc.)

**The DEIS has not met the requirement of the Final Scope sect. A.1(d)** to describe the nature of rock material likely to be encountered in rock removal. It is also unclear from the text in DEIS Section 3A whether a complete site-specific seismic assessment has been undertaken in accordance with this section of the Final Scope. In general, the DEIS is vague on the likelihood and extent of blasting, making it difficult to assess the possible environmental impacts.

**Regarding Final Scope Section A.2 and A.3(d)**, we ask that the DEC carefully review these sections of the DEIS to determine whether on-site soil investigations are sufficient, to date, to determine the likely environmental impacts with regard to soils, structural stability, and groundwater per the requirements of the Final Scope. Much of the proposed development is sited on the soil type, STD, according to the UC Soil Survey. As the DEIS states, “the variable depth to bedrock, slope, rock outcrops, and slight wetness of the Stockbridge soil are severe limitations for most urban uses of this unit” (p.112). In addition, the town’s Karst Aquifer Map indicates that in many areas where development is proposed, this soil type is underlain by limestone bedrock with a moderate to very high potential for karst development. To date, the applicant has undertaken “deep tests” at 11 locations. In 9 of these tests, the bedrock was shallow and of these 9, the permeability ranged from rapid to very rapid in 5 tests, suggesting that groundwater could be very susceptible to contamination in these areas. Given the constrained nature of the soil and bedrock types underlying the proposed development, it is important that there be sufficient information in the DEIS from on-site soil investigations to evaluate the environmental impacts of the project.

**The following supporting documentation for the Soils and Topography Section appears to be missing from the DEIS:**

- 1) An appendix containing the report on the “deep test” results;
- 2) A map of where the deep tests were done. The DEIS references Appendix C.2., but there is no C.2. on the disc provided.
- 3) The “Memo: Site Soils,” dated 3/3/10 (Appendix M.3) is missing half of the pages as well as the map, referenced in the memo, overlaying the site plan on the UC Soil Survey-based soil map.
- 4) The summary text states that the CF soils area does not need testing because of soil tests conducted in 2008. These test results should be summarized here and included in the appendix.

**The DEIS has not met the requirement of the Final Scope, Sect. A.2(c), to discuss structural stability.** If this information is discussed elsewhere in the DEIS, it should be referenced in Section A. Soils and Topography.

**Regarding Figure 7, “Environmentally Sensitive Lands within One Mile Radius – Slopes and Soils Prone to Subsidence,”** the DEIS does not contain information on how the soils prone to subsidence were mapped. This information is needed to determine whether all appropriate soils were mapped. In addition, according to the U.S. Geological Survey (NYS HAS MIT PLAN, 2008; <http://water.usgs.gov/ogw/pubs/fs00165/>), mapping areas prone to subsidence requires not only looking at soils but also at the underlying bedrock type (e.g., limestone bedrock). Instances of subsidence have already occurred on the site and should be mapped; areas prone to subsidence due to unstable subsurface conditions (e.g., presence of abandoned mines) should also be mapped.

**Requirements for Final Scope Section A(3)c** regarding test pits and perc tests for stormwater infiltration areas have not been addressed in this section. Have they been discussed elsewhere in the DEIS? If so, the discussion should be referenced in this section.

**Final Scope Section A(3)d requires discussion of any impact to soils and slope stability.** The DEIS states on p. 133: “Development on steep slopes is limited to the proposed construction of two buildings (yoga and meditation studio and teahouse) on flat portions of the prominent ridge East of Fifth Binnewater Lake.”

Are all other areas of disturbance on slopes (including roads) less than 15%? If not, the DEIS should specify the extent and location of areas of disturbance on steep slopes, as well as the slope percentages.

### **III.B. SURFACE WATER RESOURCES:**

**Regarding Section B(1) and B(2):** See comments on wetlands-related issues at the end of this document (p. 15-18).

**Regarding Section B(2)4:** See also Comment (1) on Section E (Wastewater and Sewage), below.

**Regarding Final Scope Section B(1),** the Town of Rosendale’s map of “Ecologically Significant Habitats in the Binnewater Lakes Region” show intermittent streams on the property that do not appear on surface water maps in the DEIS.

**Regarding Section B(3)B (Stormwater Management):** Please note that the Environmental Commission did not have time to review the SWPPP attached as an appendix to the DEIS; the comments below on stormwater management are limited to section B(3)B of the DEIS.

**Regarding Section B(3)B of the Final Scope,** the DEIS summary does not include the reference to “other applicable requirements imposed by the Town of Rosendale” as a regulated MS4 community.

Relatedly, on page 145, the DEIS states: “Construction activities for the Project will exceed 5 acres; however, construction will proceed in subphases less than 5 acres and will thus require a SPDES general permit for construction activities.” This is incorrect: According to the Town of Rosendale stormwater requirements, a full SWPPP is required for this project.

**Regarding requirements under B(3)B.a of Final Scope,** the DEIS summary does not reference the 24 hour storm event or amount of rainfall in inches.

**Regarding requirements under B(3)B.b of the Final Scope:** Pre- and post-development stormwater quality including pollutant analysis (TP, TN, TSS, BOD and thermal) has not been discussed or summarized in the DEIS.

**Regarding requirements under B(3)B.c of the Final Scope:**

- 1) A drawing has not been provided in this section of the conceptual locations of all stormwater management design measures.
- 2) The DEIS summary information regarding access to, ownership of and responsibility for long-term maintenance of any stormwater management facilities has not been discussed. The details regarding ownership and long-term maintenance are very important to ensuring effective on-site detention and treatment of run-off over the long term.

**Regarding requirements under B(3)B.d,** the DEIS summary does not address erosion and sediment control methods that shall be implemented during and post-construction as per current NYSDEC Design Standards and local regulations.

### **III.C. GROUNDWATER RESOURCES:**

The Environmental Commission defers comment on this section until after the outside karst expert completes review of this section and the Hydro Geology Investigation Report (Appendix L).

### **III.D. WATER SUPPLY:**

#### Comments:

- 1) The applicant has reduced its estimate of water consumption from 160,000 to 76,000 gpd (a 52% reduction) without a reduction in the size of the project. On the face of it, the size of the reduction seems larger than is feasible through water conservation measures, alone. The Environmental Commission requests that the DEC carefully review the data and assumptions upon which this conclusion is based to determine whether this estimate is realistic.
- 2) The DEIS notes that records of Williams Lake Resort for 2004-2005 show that monthly average daily demand ranged between 10,939 gallons per day in February and 44,961 gallons per day in August. Is it reasonable to project that the proposed project will use only 69% more water (76,126 gpd) than the former resort on peak water usage days, given that the population density of the proposed project (residents, guests, employees) is many times greater and will also additionally include a large spa facility?
- 3) Will additional water be used to treat wastewater? The Water Supply Engineer's Report (contained in Appendix M) does not appear to show any potable water usage for this purpose. (The Rosendale Sewage Treatment Plant uses 2,000 gpd.)
- 4) There does not appear to be an allocation of water for grounds maintenance. There are references to the use of grey water for this purpose but none of the diagrams and design points appear to reflect this.
- 5) The assessment of the impacts of using 5<sup>th</sup> Binnewater Lake as the water source depend upon the hydrogeological review and may need to be revised in the event that further studies are conducted.

### **III.E. WASTEWATER/SEWAGE DISPOSAL:**

#### Comments:

- 1) This section and related appendices do not appear to address the issues raised at the April 23, 2010, meeting between the DEC, the applicant, and the Town regarding the applicant's preferred option for wastewater/sewage disposal. The follow-up letter to that meeting from Rebecca Crist to Tim Allred, dated April 28, 2010, specifies the information that the DEIS must include if the applicant continues to pursue the option of discharging effluent into a regulated wetland. If this remains the preferred option, the DEIS should be revised to incorporate the required information. If the applicant is pursuing a different option, then the DEIS should be updated accordingly to ensure that Final Scope requirements are being met for revised plan.
- 2) Regarding wetlands impacts of the proposal, please see Environmental Commission comments on wetlands-related issues at the end of this document (pp. 15-18).
- 3) **Regarding E.7 of the Final Scope** requiring discussion of such mitigation measures as water conservation to reduce sewage flows, it would be helpful to assessing water conservations claims if the an appendix included the data on which the conclusions of Crawford & Associates research (cited on p. 193) are based.

### **III.F. SOLID WASTE DISPOSAL**

**Regarding F.1 of the Final Scope**, the DEIS does not, as required, specify in this section which

buildings are to be demolished and what environmental condition they are in. If this is discussed elsewhere in the DEIS, the appropriate section(s) should be referenced here.

### **III.G. TERRESTRIAL AND AQUATIC ECOLOGY**

**For Environmental Commission comments on aquatic ecology**, please see comments on wetlands-related issues at the end of this document (pp. 15-18).

**Regarding Final Scope Section G.1(a)**, the DEIS does not appear to include all correspondence from NYSDEC and USFWS as an appendix, as required.

**Regarding Final Scope Section G.1(b)**, the DEIS provides an overall natural communities map but does not include a map of “specimen vegetation” in areas of disturbance as required.

### **III.H. LAND USE AND ZONING:**

General comment: It would greatly facilitate review of this section and other sections of the DEIS if the applicant could provide overlays--in shape files if possible--of maps and drawings included in the DEIS of the proposed development, the alternatives, and natural resources and site features (including mine openings).

**Regarding H.b of the Final Scope**, the DEIS is required to discuss the proposed action’s consistency with the Comprehensive Plan. The comments on the DEIS, below, are organized around the bulleted items contained in the Final Scope and appear in bold:

- **Proposed extension of residential and related infrastructure into currently vegetated areas rather than maintenance of existing clustering, ecological corridor preservation, and retention/restoration of water body and wetlands buffers, as envisioned by the Plan.**
- **Proposed development in areas described as constrained under the Plan such as steep slopes, limestone, soils prone to subsidence, wetlands and their buffers, mined-out areas of land and floodplains.**

#### Comment 1:

There is no discussion in this DEIS section of proposed development in the following constrained areas listed above: areas with limestone bedrock, areas with soils prone to subsidence, and mined out areas.

#### Comment 2:

The following statements in the DEIS do not properly characterize the proposed development in terms of the extent to which the project extends into currently undeveloped areas:

P. 304: “The majority of the Site to be redeveloped has previously been heavily impacted by mining activities and an existing resort hotel.”

P. 306: “Approximately fifty-nine percent (59%) of new building is focused in core of historic disturbance.”

P. 309: “The Project plan clusters over 59% of residences (and the vast majority of resort buildings) in previously impacted areas and in previously vegetated areas between Fourth and Fifth Binnewater



lakes.”

The Town of Rosendale has previously concluded that the former mining areas have reverted to a natural state, and the DEIS should reflect this determination. The Town’s 2006 Biodiversity Assessment of the Binnewater Lakes Region, which is an appendix to the Comprehensive Plan, maps the former mined areas as habitats and not as “developed areas.” Moreover, as stated in a letter from DEC Region 3 Director Willy Janeway to Rosendale Planning Board Clerk Heidi Haynes on January 4, 2008, in reference to the applicant’s EAF: “While the Department would not necessarily characterize the site as “pristine”, the prior industrial uses of the site described in the sponsor’s SEQR lead agency coordination materials are historic in nature and portions of the site not currently containing functional infrastructure have reverted to a natural state. Therefore, the important natural communities and resources noted above currently exist on the site despite its past industrial uses, and the development of the site must be carried out in a manner that fully considers and protects these resources....”

When describing the extent to which the proposed development extends into currently vegetated areas, the DEIS should only consider the footprint of the former resort as areas that are being “redeveloped.” This revision should be made elsewhere in the DEIS, including in the Executive Summary and Description of Proposed Action (Sections I and II), the Alternatives Section (Section V), and other references in the DEIS to the lands impacted by the proposed development.

Comment 3:

Relatedly, on p. 307 of this section and elsewhere in the DEIS, the proposed action is referred to as a “redevelopment” of the Williams Lake Resort, which is not an accurate characterization of the proposal. The footprint of the development far exceeds the footprint of the original resort and the residential development component is altogether new to the site. Additionally, the applicant has requested a zoning change to accommodate this new type of development, which further underscores the inaccuracy of the term, redevelopment.

Comment 4:

On p. 304, the DEIS states: “The total area of disturbance from the proposed development will be limited to 68.8 acres of the approximately 779 acre site. The remaining 710 acres, roughly 91% of the Site, will be preserved.” Here and elsewhere in the DEIS, the area of disturbance should be calculated as a percentage of developable land and not the entire parcel. A significant portion of the parcel, including the pre-existing conservation easement, water bodies, etc., are not developable and therefore do not constitute land that the proposed project is preserving.

Comment 5:

P. 304 of the DEIS states: “No development will occur within floodplains, wetlands or their buffers.” This statement is inconsistent with information provided elsewhere in the DEIS (including on p. 309). The DEIS summary should clearly define the sizes of the buffers to which it refers, and list all proposed disturbances to these areas.

Comment 6:

P. 305 of the DEIS states: “The management plan will support protection of wildlife habitat, protection of surface and groundwater resources, access to recreation areas, ecological research and education, and sustainable management of forested lands as necessary.” The DEIS should include a draft of this management plan, or else specific details about this plan, because the content of this plan is essential to evaluating the environmental impacts of the project—particularly given the proposed scale of the project and the projected intensity of land use. What are the components of the management plan? Who will do the managing and how? The discussion of covenants in Appendix F.1 provides a list of some excellent examples of restrictive covenants that are being considered. Does this constitute for the full list? How

will the proposed POA enforce these restrictions? What is the role of the resort management?

Comment 7:

P. 306 of the DEIS states: “Prior to precise siting of buildings and homes, a detailed site survey will be conducted to avoid problems with unstable soils or geology.” As was discussed in comments on Section A (Soils and Topography), we are concerned that a more detailed site survey of unstable soils and geology may be needed as part of the SEQR process, given the constraints of the site and the significant size of the proposed development.

Comment 8:

P. 310 of the DEIS states: “The Project will work to preserve ecological corridors.” The DEIS summary could usefully include more information about how this will be done. What types of specific measures are envisioned? Have these corridors been mapped? How does the conceptual plan affect ecological corridors between 4<sup>th</sup> and 5<sup>th</sup> Lakes, where a significant portion of the development is concentrated?

Comment 9:

P. 210 of the DEIS states: “The only proposed development on steep slopes is the proposed yoga and meditation studio and the teahouse, which are sited on small clearings of prior disturbance from the cement manufacturing era. Both of these structures are relatively small and would be accessed by foot via existing trails.” Will all land disturbance, including roads, be limited to areas where slopes are less than 15%? If not, the DEIS summary should specify the extent and location of areas of disturbance on steep slopes, as well as the slope percentages.

Comment 10:

P. 210 of the DEIS states: “The geology of the Site is dominated by limestone. Limited development is planned on limestone outcrops or ridges. A maximum of six homes could be considered to be sited on limestone outcrops or ridges.” Are these houses on outcrops identified on the conceptual plan?

- **Proposed development density related to ability of underlying natural and physical features of the property to support that density.**

Comment 1:

P. 310 of the DEIS states: “The Applicant considers that the Site can support the proposed density, particularly with sustainable infrastructure and technologies.” Again, we are concerned about whether this determination can be made in the absence of a more detailed site survey of unstable soils and geology.

Comment 2:

There is no discussion in this section of how habitats will be protected once the project is operational.

- **Character of the proposed action compared to the existing character of the Town of Rosendale, which is rural and small in scale.**

Comments 1:

On page p. 312, the DEIS states: “Though the town is not generally considered affluent, a number of Rosendale’s homes are second homes for relatively affluent New Yorkers.” This statement needs to be accompanied by supporting data. How many second home are there in Rosendale and what percentage of all residences do they represent? What is the median value of second homes compared to primary residences? The reference to “New Yorkers” should be omitted unless it is based on factual data.

Comment 2:

To provide a more complete picture of how the character of the proposed action compares to the existing character of the town, this section should also contain information on the following:

--the projected value of the proposed homes in the development compared to the current median value of homes in Rosendale.

--the projected median income of resort residents and guests compared to the median income of Rosendale residents.

--a discussion of the increase in traffic volume, which affects the character of the town.

--in the discussion of scale in the DEIS, 1) a comparison of the average size of proposed homes in the development with the average size of existing residences in Rosendale; 2) a comparison of the former resort and the planned resort development in terms of the number of daily users (guests, employees, and residents); 3) a comparison of the footprints of the existing resort and the proposed resort development.

--a realistic discussion of how this type of development is likely to shape future residential and commercial development in the town.

**Regarding H.1.c of the Final Scope**, the DEIS is required to discuss impacts of non-conformance with the Comprehensive Plan:

Comment:

The DEIS states on p. 318: “The Project is broadly consistent with the objectives of the Comprehensive Plan and there are no significant impacts of non-conformance with the plan.” A determination of the project’s consistency with the Comprehensive Plan cannot be made because of the gaps in information noted above. The outside hydrogeological review may also provide information relevant to making this determination.

**Regarding H.1.d of the Final Scope:**

Comments:

Regarding the discussion in the DEIS on p.319, (“*Land Uses – Conservation Land*”), concerning protected open space:

- 1) This section needs to be updated to be made consistent with information in Section II: Description of the Proposed Action regarding the proposed increase in protected open space. On p. 53, the DEIS states that 249 additional acres in the Development Area is proposed for open space.
- 2) Will the additional open space be designated protected open space?
- 3) If it is to be designated protected open space, the Final Scope requires that the DEIS specify the criteria by which this land has been selected. (If no criteria were used, that should also be stated in the DEIS.)

**III.J. AESTHETIC RESOURCES:**

Comment 1:

**Regarding J.1 of the Final Scope**, has a viewshed map been included—as required by the Scope--that uses NYSDEC Program Policy, Assessing and Mitigating Visual Impacts, DEP-00-2 as a guideline? We were unable to find it. If this requirement has been met, it should be referenced in the summary text.

Comment 2:

**Regarding J.1.a of the Final Scope**, the DEIS should mention potential visual impacts from the Shawangunk Ridge and Joppenburgh Mountain, including impacts from light pollution.

Comment 3:

On p. 366, the DEIS states, “The proposed development will....maintain the existing rural character of the Site.” It does not appear that the full visual impacts have been considered: This section should discuss the visual impact of the proposed subdivision on Binnewater Road, which will greatly increase the number of houses and housing density in that area.

Comment 4:

On p. 367, the DEIS states, “to the extent possible, the proposed development has been sited within the existing 21 acres of disturbed area.” The differences in footprint between the former resort and the proposed project should be specifically stated in this section to give a more precise picture of the differences.

Comment 5:

On p. 368, the DEIS states, “he proposed wastewater treatment facility will be sited in and screened by a forested landscape.” For clarification, what is meant by “sited in”?

### **III.O. GREENHOUSE GAS EMISSIONS:**

*Comments for this section were prepared by Rosendale Environmental Commission members Sarah Charlop-Power and Jessica Barry. Sarah is Coordinator for Mid-Hudson Energy Smart Communities, a program of NYSERDA; Jessica, a LEED Accredited Professional since 2006, formerly held the position now held by Sarah and is currently Director of Business Development for Prism Solar Technologies.*

Questions regarding modeling

How GHG emissions were measured for this study is not clear. An explanation of how the baseline is calculated is given by referencing USGBC. Does USGBC (and by this, it is assumed to be LEED) suggest GHG should be calculated by using the models that were employed by this study? It would be helpful for evaluating this section if the DEIS included the basic inputs that were used for each category of emissions (buildings, solid waste, and transportation).

GHG Stationary

- 1) The GHG study does not contain anything on overall size of buildings, or what the baseline building size is, or possible reduction in building size (which is a mitigation measure listed in the DEC’s “Guide for Assessing Energy Use and GHG Emissions in Environmental Impact

Statements”). Reducing building size and increasing space efficiency is the number one way to reduce GHG emissions.

- 2) The study states that the main Resort building will be LEED certified, but there is no mention of how the 160 houses will achieve 40% energy savings over code. Will they use LEED? Will they use Energy Star? **A qualified third party needs to be identified and involved from the beginning planning stages through construction to verify that such efficiencies are achieved.**
- 3) The study assumes all buildings in the proposed project will be managed for maximum efficiency by the Property Owner’s Association and resort staff. It should be noted that building management is very hard to enforce and has led to a change in the LEED standard, requiring that buildings be tested after they are in use before certification is granted.
- 4) The study says PV, solar thermal, and geothermal will be employed. It should be noted that using geothermal alone does not necessarily result in energy savings – this technology is effective when used in combination with building envelope efficiencies and PV (and usually most effective at reducing buildings that have high cooling loads).
  - a. What on-site fuel will be used if using solar thermal (e.g., oil, propane)? If using geothermal, why not just use geothermal for hot water rather than solar thermal? The DEIS states that 50% of hot water electricity demand will be replaced with solar thermal but it is not clear whether this refers to the resort or to the residential buildings as well.
  - b. Have the economics been considered for employing the three energy alternatives (geothermal, solar thermal, and PV)? A reference to a geothermal and solar thermal study is made, but cost calculations were not included. The geothermal study says geothermal will be used for the houses, but is this really the case?
  - c. Design efficiency should be number one both in terms of making the project cost-effective and in reducing energy use. Following efficiency in design should be thoughtful applications of technologies like PV and geothermal where it makes sense. More details about these alternative energy projects should be included in the DEIS.

#### Transportation:

- 1) It is not clear that the spaces between homes, buildings, and facilities will be realistically conducive to walking over driving, given the overall acreage of the resort development.
- 2) A Shuttle to Rosendale Park and Ride is proposed. This could reduce car use, and could also potentially provide a direct connection to Main Street. Details about how often this shuttle will run would be helpful to assessing energy impacts.
- 3) The document states that the “proposed connection to the Wallkill Valley Rail Trail will facilitate bicycle and pedestrian transportation to and from the Village of Rosendale and beyond.” While this connection will promote recreation, it will not likely reduce car use as it does not connect to main commercial areas (e.g., shops in Rosendale).
- 4) The transportation analysis (executive summary pg 17) estimates 179 mid-week am trips and 262 pm mid-week trips after full build out. The analysis assumes that the percentage of homes used as second homes stays at 80%. If the number of full time residents increases, these numbers could drastically increase. What is the basis for assuming that these residences will in reality be used as second homes?

#### Solid Waste

The claim in the study of negative GHG emissions from solid waste generation does not make sense and should be explained.

Mitigation Scenario: In the GHG report on page 440, the baseline for the mitigation scenario assumes that commercial recycling will increase from 23% to 75%; and residential recycling will increase from 32% to 60%. It is very difficult to mandate in-home behavior changes. This section should discuss how this level of recycling will be achieved and maintained over time. If it is discussed elsewhere in the DEIS, the discussion should be referenced in this section.

## **V. ALTERNATIVES:**

### General comments:

1. The DEIS uses a selective list of Comprehensive Plan goals to evaluate the alternatives' consistency with that Plan, using, for instance, only 4 of the 11 bulleted goals for "preserving resources" listed on p. 15 of the Plan. A more complete evaluation of the alternatives relative to the goals of the Comprehensive Plan would include the full list of goals on that page as well as the list of goals on p. 16 under "Enhancing Value"—another organizing principle of the Comprehensive Plan.

2) We understood Alternative D in the Final Scope as an alternative that was to be distinct from the proposed development. For instance, a scaled-back version of the proposed project could be considered that reduces the footprint of the project and the extent of disturbance of previously vegetated areas, reduces GHG emissions, reduces impervious surfaces, avoids impacts to wetlands and areas of unstable soils and geology, etc., relative to the proposed development. The discussion would include a fiscal and economic analyses that would assess the costs and benefits relative to the proposed development.

### Comments on Summary Analysis of Development Alternatives (chart, p. 25 and p. 453):

1) This chart is missing the following information as required by the Scope:

- impacts on vegetation by type
- traffic trips generated
- fiscal impacts for the alternatives have not been quantified.

2) Rather than, or in addition to, comparing the number of "full-time residents" for each alternative, the chart should include a list of "daily users" or "residents and guests" to give a more complete and accurate picture of the intensity of use of the site under the proposed development.

3) It would be more meaningful if "Comprehensive Plan Compliance" were a relative measure of the alternatives' compliance with specific goals and not an absolute "compliance/no compliance," given the number of Comprehensive Plan goals and the potential for two alternatives to differ greatly in the extent to which they promote a given goal. The DEIS could usefully include a separate chart listing the relevant Comprehensive Plan goals (i.e., the lists on pp. 15-16 of the Comprehensive Plan) and a clearly defined scale for measuring compliance with each goal.

4) Water demand:

--Given proposed buildings with potentially significant water usage (spa, hotel/restaurant), it is not at all obvious that a conventional subdivision would use more water. The DEIS should include information about how this analysis was done and what assumptions were used.

--The chart states that the "resort rehabilitation alternative" would use the same amount of water as the "no action plan." Why would this be the case? The "no action plan", as conceived in the DEIS, should have virtually no water usage.

--It does not seem likely that the water demand for a resort rehabilitation would be as high as 50,000 gpd—only around 52% less demand than the proposed development, which is far larger in scale and includes a residential development. Again, how was this calculation made and what were the assumptions used? This information should be included in the DEIS.

5) Wastewater: How was the calculation made for the “no action” alternative? Where is the wastewater coming from in this scenario?

6) Stormwater: What is the basis for assuming that the stormwater total will be the same for the “resort rehabilitation” alternative as for the “no action plan”? If the resort rehabilitation alternative were pursued, it would be subject to the Town’s stormwater requirements as an MS4 community just as the proposed development is. There would necessarily be improvements made to the site in stormwater management relative to the former resort.

7) How was the determination made that the impacts of a conventional subdivision on wetlands would be “significant” compared to the proposed development? This information should be included in the DEIS.

Comments on DEIS Discussion of Resort Rehabilitation Alternative:

1) P. 457 of the DEIS states: “Though the Resort Rehabilitation Alternative conforms better than the No Action Alternative with the Town of Rosendale Comprehensive Plan, this alternative does not meet the needs of the Applicant. More critically, this alternative is not economically feasible.”

Comment: The Resort Rehabilitation alternative needs to be compared against the proposed development and not against the “no action” alternative, alone. Which option—the proposed development or the resort rehabilitation alternative--would better conform with the Comprehensive Plan? What are the specific cost differences between the two alternatives? What is the applicant’s criteria and threshold for economic feasibility? This information should be contained in this section of the DEIS.

2) P. 457 of the DEIS states: “Costs of this alternative would be similar to the proposed (conservation) development plan with far fewer benefits, particularly from a fiscal perspective.....While fiscal impacts were not quantified in detail for this alternative, it is clear that the net impact would be significantly more negative than the Project.”

Comment: It is not at all clear that this is the case. The DEIS should explain in detail how this conclusion is reached and should specify the assumptions made about each alternative, (including both an economic and fiscal analysis). Since this rehabilitation alternative would be on a much smaller scale than the proposed development, it seems likely that costs would be significantly lower.

3) On the same page, the DEIS states: “In conclusion, the Resort Rehabilitation alternative is not considered economically feasible.”

Comment: No data has been provided that can be used to evaluate the validity of this conclusion.

4) “Environmentally, this alternative has the positive benefit of creating few new adverse environmental impacts as much less land would be impacted to retro-fit the Resort than to build a new Resort with residential units.”

Comment: Does this alternative provide any environmental improvements to the existing site (e.g.,

stormwater management, water use)? These should be discussed, as well, for a more complete comparison of the alternatives.

5) On p. 458, the DEIS states: “As discussed elsewhere, these costs are unlikely to occur as the Project will market residences as second homes with few actual impacts on the Town. Thus, fiscal costs are roughly similar between the Resort Rehabilitation alternative and the Project.”

Comment: 1) Again, a more complete fiscal analysis needs to be provided to support this claim. 2) How can it be assured that the homes in the proposed development will in fact be second residences? Will there be a deed restriction against purchasing homes as a primary residence? 3) Whether they are primary or secondary residences, there will still be greatly increased traffic/road impacts from the increased volume associated with the residences as well as with a much larger resort. This section of the DEIS needs to specify the costs and the assumptions made for each alternative.

6) On the same page, the DEIS states: “The Resort Rehabilitation Alternative does not meet the objectives of the Applicant as the large investment required toward a sustainable, responsible development would have to be recovered by revenues from the Resort alone. This scenario is considered technically feasible, but creates significant investment risk.”

Comment: Without seeing the analysis upon which this conclusion is based, the conclusion cannot be evaluated.

7) On the same page, the DEIS states: Compared to the proposed development, fiscal benefits from this alternative pale are approximately 25 times less than the Project. As such, this alternative fails to “get the greatest fiscal return”.

Comment: How can this conclusion be reached if the fiscal impacts were not quantified in detail?

Comments on DEIS Discussion of Conventional Subdivision Alternative:

1) Since the applicant has not done a fiscal analysis, there is no basis upon which to evaluate the conclusions drawn in this section.

2) On p. 461, the DEIS state: “Historic resources (remnant kiln walls and artifacts from cement manufacturing) would be lost.”

Comment: This is not necessarily the case since the Cement District is a listed historical site.

Comments on Subdivision build-out (Appendix V.1: Conceptual Subdivision Plan):

- 1) Does the build-out take into account 100-foot regulated buffers?
- 2) Does it take into account restrictions for listed species?
- 3) Does the build-out site buildings on steep slopes?

The DEIS should indicate the parameters of this build-out so that its reasonableness can be assessed.

**WETLAND-RELATED ISSUES (DEIS SECTIONS I, III.B and III.G and Appendix O)**



*The comments in this section were prepared by Laurie Machung, DEP Wetland Scientist, on behalf of the Rosendale Environmental Commission*

### Summary of impacts and proposed mitigation

Direct impacts to wetlands appear include 260 square feet (0.006 acre) to HRVR 1 (DEC FWW RD-2) for construction of the WWTP outfall, complete fill of HRVR 13 (400 square feet, 0.009 acre) for road and stormwater basin construction, 0.018 acre and 0.07 acre to emergent marsh habitat along the shorelines of 4<sup>th</sup> and 5<sup>th</sup> lakes, respectively, for the construction of stormwater lagoons. This totals .103 acres of direct wetland disturbance.

Impacts to the regulated adjacent area of NYS FWW RD-2 include 0.5 acres of temporary disturbance for construction of the WWTP outflow, access roads, and collection/distribution system, with 0.27 acre of permanent impacts for the access road. Additional, unregulated buffer impacts include multiple impacts within 100 feet of HRVR-12 for the construction of Road 4, a stormwater management basin, residences and associated driveways and encroachment within 750 feet (critical terrestrial habitat) of vernal pools HRVR 2, 9, 10, and 16.

The WWTP outfall would also result in the discharge of 53 gpm of effluent to RD-2.

Proposed mitigation includes the planning of *Acer rubrum* in a 1000 square foot area along 5<sup>th</sup> lake, and construction of 1.25 acres of emergent marsh associated with a stormwater lagoon adjacent to 5<sup>th</sup> lake.

### Comments

The above-listed wetland impacts and proposed mitigation are not concisely summarized anywhere in the document, and the acreages are inconsistent throughout (see list below). These inconsistencies should be addressed to facilitate an accurate and thorough review.

Though these impacts are of minimal areal extent, there is potential to negatively impact amphibian populations due to the proposed disturbances within the critical terrestrial habitat of vernal pools (HRVR 2, 9, 10), a complete fill of woodland pool (HRVR 13), and construction directly adjacent to pond HRVR 12. Though a vernal pool assessment was completed that generally determined all impacted pools to be population sinks, the DEIS should address the limitations of gathering vernal and woodland pool survey data in a single season due to annual differences in rainfall amounts, soil temperature, and amphibian dispersal. HRVR 13 received a score of 13 out of 14 possible on the vernal pool evaluation, yet was determined to be a population sink as no evidence of metamorphosis was gathered in the survey period. Pool usage by amphibians can vary widely from year to year, and the DEIS should address this issue. Similarly, the remaining pools received scores of 10 or 11 based largely on hydroperiod, which also varies seasonally and annually.

In addition, the DEIS should disclose in Chapter G, Section 2.5, the areal extent and percent disturbance of the VPE and CTH for HRVR 2 as it does for the other pools in this section.

The DEIS indicates that the Northern Cricket Frog has been historically detected in the south pond of HRVR 12, yet significant development is proposed within 100 feet of this wetland that could impact water quality and create barriers to amphibian migration. Alternatives, such as those listed on page 277, that would significantly reduce buffer disturbance around HRVR 12 should be employed.

The plans should be reviewed to confirm that there are not impacts to the VPE's of additional pools such as HRVRs 11, 14, and 15 located south of the conservation easement, within or adjacent to the proposed development area.

The DEIS inadequately addresses impacts to RD2 associated with the WWTP outfall. According to the DEIS, the proposed WWTP discharge represents roughly a 25% increase in flow to RD2 during low flow conditions. Page 292 of the DEIS indicates that this would not adversely impact RD2 based on findings from a rainfall event in July 2009 that resulted in a 140% increase in flow but did not adversely affect water quality or wetland community structure. The effects of an episodic event are not comparable to a continuous increase in flow particularly in regards to wetland community structure. Furthermore, the DEIS should cite water quality sampling and flow measurement methodology used to support the conclusions provided. Water quality sampling frequency relative to discharge should be provided along with specific water quality parameters analyzed.

The executive summary cites that Nationwide Permit (NWP) 12 is required for the construction of the intake structure for the wastewater treatment plant but does not address permitting requirements associated with the construction of the outfall in HRVR 1. This also requires a federal permit. The US Army Corps should be contacted to determine whether NWP 7 (Outfall structures and associated intake structures) or 12 (Utility Line Activities) applies to this activity. Preconstruction notification may also be required as per NWP 29 (Residential Developments) for the impacts to the shoreline of 4<sup>th</sup> and 5<sup>th</sup> lakes, and for the fill of HRVR 13, depending on its jurisdictional status.

The Wetland Delineation Report lacks complete documentation and is technically incorrect in the realm of wetland classification. This is unlikely to impact the findings of the delineations regarding the extent of wetlands onsite, or the scope of impacts, but shortcomings are as follows:

- The wetland determination field sheets are incomplete. The plant indicator status is often lacking, the percent of hydrophytes is typically not calculated, and field soil descriptions are lacking for nearly all sites. The one field soil description that was provided (HRVR 1) is technically inaccurate as it is a mineral description for a soil that, according to the form, confirms the mapped histosol. All of this is inconsistent with the narrative on page 4 of the delineation report that claims that 'soils were characterized by depth; horizon; Munsell moist color, presence, color, frequency, and contrast of mottles or streaks, and by texture. Data were recorded on standard data sheets that are included in Appendix A of this report.' A histic epipedon was indicated for several of the soil types with no evidence provided that the depth of the organic surface layers met technical criteria. In some (not all) instances, inundation may have precluded soil description, and this should have been consistently indicated on the forms.
- Some of the field data forms appear to have been incorrectly copied, such as HRVR 3 and HRVR 23 up, where the front of the form is for an upland condition, and the back describes a wetland; and HRVR 23 Wet where the front of the form indicates dry conditions, and the back indicates inundation.
- A single delineation form does not suffice for deepwater lakes and their fringing wetland habitat. As per Cowardin et al., the Lacustrine system includes limnetic lakes (which are deepwater habitats) and littoral zones, which are wetlands. Any wetlands fringing

deepwater lakes should have been mapped separately as lacustrine littoral or palustrine wetland habitats.

- Section 4.1 of the delineation report shows a poor understanding of the Cowardin Classification system. The wetlands are described as lacustrine, palustrine, mine adits, and vernal pools, when they all technically fall under the palustrine or lacustrine system. The delineation report describes Palustrine wetlands as occurring in basins or adjacent to tributaries. This is a somewhat limited description of this system, which basically includes non-tidal, freshwater wetlands with the exception of certain types occurring within stream channels and lacustrine littoral zones. Palustrine systems are by no means limited to basins and tributaries. The isolated wetlands found on-site such as vernal and woodland pools also fall within the palustrine system. The flooded mine adits would fall under the lacustrine or palustrine system, depending on water depth.

### Inconsistencies in the DEIS

The area of permanent impacts to the adjacent area of RD-2 for the construction of the access road is listed as 0.27 acres in the executive summary, but 0.1 acres on page 293.

Section 2.1 of Chapter G (Impacts) does not include the loss of 0.006 acres of forested wetland due to construction of WWTP outfall in RD-2, and does not include the 0.018 acre impact to emergent marsh along the shoreline of 4<sup>th</sup> lake.

Chapter G, Section 2.5 (Wetland and NYS DEC Regulated Adjacent Area Disturbance) does not include the 0.07 acre impact to emergent marsh in HRVR 5.

Table II.1, page 45, lists 55 acres of wetlands pre and post construction. How so if mitigating at over 2:1 as indicated in Executive Summary and other sections?

Chapter G.3 (Mitigation) only includes losses of eutrophic ponds and marsh cover types, it does not include the forested wetland impacts at RD-2 nor the proposed *Acer rubrum* plantings.

Table III.G.17 does not include loss of emergent marsh (0.018 acre) along 4<sup>th</sup> Binnewater Lake, and refers to HRVR 13 as a 0.13 acre loss, while this wetland is cited as 400 square feet throughout the document.

Chapter B (Surface Water Resources), Section 1 refers to 28 woodland and vernal pools, while there are 21 pools in the project area. The remaining 7 are other palustrine wetland types.