

**Comments on the Proposed Belleayre Resort at Catskill Park  
Submitted by Riverkeeper, Inc. &  
the Pace Environmental Litigation Clinic (on behalf of Riverkeeper, Inc.)**

**Organization Background**

Riverkeeper, Inc. is a non-profit environmental organization dedicated to protecting the Hudson River, its tributaries, and the New York City watershed. Riverkeeper was a negotiator of, and is a signatory to, the 1997 New York City Watershed Memorandum of Agreement. As a result, we have a demonstrated interest in any project with the potential to adversely impact water quality and quality of life in the New York City watershed.

**Project Description**

The project applicant proposes to develop approximately 600 acres to the east and west of the New York State owned and operated Belleayre Mountain Ski Center in the Towns of Shandaken in Ulster County and Middletown in Delaware County.<sup>1</sup> On the eastern portion, the applicant proposes to construct an 18-hole golf course, a 150-room hotel with a spa and other amenities, 77 buildings housing a total of 183 detached timeshare lodging units, a golf course maintenance building complex, a satellite golf course maintenance building, and a wastewater treatment plant facility.<sup>2</sup> On the western portion, the applicant proposes to construct an 18-hole golf course; a 250-room hotel with a conference center, spa, and other amenities; 21 buildings containing 168 detached lodging units, a Children’s Center, a clubhouse, a golf course maintenance building complex, a satellite golf course maintenance building, a wastewater treatment plant facility, and a 21-unit residential subdivision.<sup>3</sup>

**The 1997 New York City Watershed Memorandum of Agreement**

The proposed resort project is located in both the Catskill and Delaware watersheds, which are part of the New York City Drinking Water Supply Watershed (NYC Watershed). Together, the Catskill and Delaware watersheds supply up to 90% of the unfiltered drinking water supply for nearly nine million New Yorkers in New York

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<sup>1</sup> See Draft Environmental Impact Statement (DEIS) for Belleayre Resort at Catskill Park at i [hereinafter DEIS].

<sup>2</sup> See *id.* at i-ii.

<sup>3</sup> See *id.* at ii.

City, and parts of Westchester, Putnam, Orange, and Ulster counties. The NYC Watershed contains 19 reservoirs and 3 controlled lakes and covers approximately 2,000 square miles in the Hudson Valley and Catskill Mountains. The Catskill and Delaware watersheds, comprised of approximately 1,600 square miles, are located west of the Hudson River. The Croton watershed is located east of the Hudson River. Although the two systems are geographically distinct, they are interrelated, as water from the Catskill and Delaware watersheds flow into reservoirs east of the Hudson River before being distributed in New York City.

In 1997, the U.S. Environmental Protection Agency issued the City a Filtration Avoidance Determination (FAD), which allows the City to avoid filtering the Catskill/Delaware water supply. The 1997 New York City Watershed Memorandum of Agreement (MOA) – negotiated by New York City, New York State, the EPA, watershed municipalities, and five environmental groups – provides a framework for protection of the NYC Watershed and allowed EPA to issue the filtration waiver. In the absence of a filtration waiver, New York City would be required to construct a filtration plant, estimated at \$4–\$8 billion in capital construction costs and \$200-\$500 million in annual operating costs.

The MOA is designed to allow the City to meet the requirements of the filtration waiver and to provide for environmentally sensitive economic growth. It is divided into three components: land acquisition, watershed rules and regulations, and partnership programs. New York City's Land Acquisition Program is a vehicle for the City's purchase of property or conservation easements within the NYC Watershed. Under this program, the New York City Department of Environmental Protection (DEP) must solicit land purchases from willing sellers, rather than relying on any powers of eminent domain. The Watershed Rules and Regulations are intended to limit activities that threaten water quality. In general, activities affected by the regulations include septic system location, wastewater treatment plant operation, and construction activities. For example, a septic system absorption field cannot be located within 100 feet of a wetland or watercourse, or 300 feet of a reservoir. In addition, the MOA establishes several Partnership Programs between the City and watershed municipalities and organizations. Through these programs, the City spends millions of dollars on projects to address such issues as septic system upgrades, infrastructure repair and extension, and non-point source pollution.<sup>4</sup>

A central tenet of the MOA (and a proven principle) is that environmental protection and economic growth go hand-in-hand. It is nationally recognized that one of the most successful vehicles for carrying out this tenet is to revitalize existing town

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<sup>4</sup> The major partnership programs and New York City's funding obligations for them identified in the MOA are: Sewage Treatment Infrastructure - \$75 million (M); Catskill Fund for the Future - \$59.7 M; Stormwater Fund - \$31.7 M; Septic Rehab & Replacement – \$13.6 M; Sand/Salt Storage Facilities - \$10.25 M; Sewer Extensions - \$10 M; Good Neighbor Payments - \$9.765 M; Stormwater Retrofits - \$7.625 M; SPDES Upgrades - \$5 M; Catskill Watershed Corp. - \$3.5 M; Stream Corridor Protection - \$3 M; Tax Consulting Fund - \$3 M; Alternate Design Septics - \$3 M; Public Education - \$2 M; Forestry Management Program - \$0.5 M; Economic Development Study - \$0.5 M. *See* Catskill Center for Conservation & Development, Summary Guide to the Watershed Agreement (1997).

centers, benefit locally owned businesses, and preserve open space. Because the proposed project is not located in a town center, it is important that the project be subject to heightened scrutiny.

The New York City Watershed is a critical natural treasure. In terms of human benefits, one would be hard pressed to name a more critical natural area anywhere on the globe. In addition to important wildlife habitat, cultural and historical resources, and spectacular landscapes, the watershed provides prize-winning unfiltered drinking water to approximately 9 million people - over half the population of New York State. The catastrophic consequences of not protecting the watershed are economic and social as well as environmental. Thus, it is imperative that the New York State Department of Environmental Conservation (DEC) ensure this project will not have an adverse impact on the NYC Watershed. Anything less will not only threaten public health and lead to the construction of a multibillion dollar filtration plant, but also will jeopardize the hundreds of millions of dollars invested by New York City into the Catskills region via grants and low-interest business loans, good neighbor payments, farm and forestry programs, stream restoration programs, septic repair, and other programs.

### **The Draft Environmental Impact Statement (DEIS)**

We appreciate DEC's willingness to extend the public comment period. The vast number of citizens attending public hearings make it abundantly clear that this proposal is of great public interest. As a number of speakers noted, the initial comment period was insufficient for members of the public to navigate the vertiginous terrain of the massive DEIS. Our comments on the DEIS follow.

### **Stormwater Issues**

Detailed comments on erosion and sediment controls are attached as **Appendix 1** (report prepared by Carpenter Environmental Associates on behalf of Riverkeeper, Inc.) and are incorporated in full. Additional comments on erosion and sediment controls are attached as **Appendix 3** (report prepared by Cashin Associates on behalf of Riverkeeper, Inc.) and are incorporated in full. Following are further comments on stormwater issues:

#### ***Construction Phasing***

When construction activities remove vegetation and expose soils, forest canopies no longer intercept stormwater and root systems no longer hold soils in place. Construction site runoff can erode exposed soils and transport sediment to receiving waters. In fact, without sound erosion controls in place, construction sites can discharge

more than 1,000 tons of sediment per acre per year.<sup>5</sup> In contrast, forested lands contribute on average only 1 ton of sediment, or 0.1% of the amount from construction site runoff.<sup>6</sup>

The applicant's phased construction plan proposes to disturb up to 25 acres of soil at one time during Phase I<sup>7</sup> and up to 16.4 acres during Phase II.<sup>8</sup> Disturbances of this magnitude could attend severe water quality impacts and are not in compliance with permit limits. The New York State General Permit for Stormwater Discharges Associated with Industrial Activities from Construction Activities, Permit No. GP-02-01, limits areas of unprotected, exposed soil to no more than 5 acres at any given time without prior written approval from DEC.<sup>9</sup> The proper phasing of construction activities disturbing less than 5 acres at a time reduces sediment loadings to wetlands and watercourses; however, exposure of 16-25 acres of bare soil on a mountainside will compromise the effective management of stormwater runoff and may result in catastrophic sediment loading of receiving waters during rain events.

Furthermore, the lack of detail in the applicant's discussion and design drawings of stormwater control devices renders an informed review of the proposed practices impossible. A list of potential erosion control practices for steep slope areas on the project site does not propose specific practices at specific locations for public review.<sup>10</sup> The DEIS therefore fails to provide the public and interested parties with the level of information required for review under SEQRA.

Even when detailed stormwater pollution prevention plans (SWPPs) are drafted and proposed erosion controls are in place, large construction sites can discharge catastrophic sediment loads to receiving waters. In 2001-2002, the New York State Department of Transportation contracted the expansion of the Taconic State Parkway in the New Croton Reservoir Basin. During construction the proposed erosion and sediment controls failed, resulting in multiple sediment discharges to Hunter Brook, which then carried the sediment to the New Croton Reservoir. In another case, the construction of a 240-acre golf course in the Amawalk and Muscoot Reservoir Basins resulted in the discharge of sediment to the Angle Fly and Plum Brooks, which carried the sediment to the reservoirs. Local residents complained that their streams and ponds looked like "cappuccino." Given the fact that erosion and sediment controls on large construction sites—including golf courses—can and do fail, resulting in water quality impairment of unfiltered drinking water supplies, the disturbance of 25 acres of clay soils on the steep slopes of the applicant's project site could attend severe water quality impacts in the Ashokan and Pepacton Reservoirs, as well as the streams and wetlands in their watersheds. Turbidity events in Esopus Creek and the Ashokan Reservoir have resulted

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<sup>5</sup> See U.S. EPA, CONSTRUCTION SITE MANAGEMENT MEASURE - III. CONSTRUCTION ACTIVITIES, available at <http://www.epa.gov/OWOW/NPS/MMGI/Chapter4/ch4-3a.html> (last visited Apr. 6, 2004).

<sup>6</sup> See *id.*

<sup>7</sup> See DEIS at viii, 3-26; App. 11 at 5.

<sup>8</sup> See DEIS at 3-29.

<sup>9</sup> See General Permit for Construction Activity, GP-02-01, Part III.D.2.a.(4), available at [http://www.dec.state.ny.us/website/dow/gen\\_constr.pdf](http://www.dec.state.ny.us/website/dow/gen_constr.pdf) (last visited Apr. 21, 2004).

<sup>10</sup> See DEIS, CP-15.

in at least 8 turbidity alerts since 1996, some of which lasted months.<sup>11</sup> Because both Esopus Creek and the Ashokan Reservoir are listed by DEC as 303(d) impaired waters for silt and sediment, these receiving waters are particularly vulnerable to additional sediment loadings that may result from failed erosion controls on vast areas of exposed soil.<sup>12</sup> For all of the above reasons, DEC should not waive the permit requirement that soil disturbance be limited to 5 acres at any given time.

In addition, some stormwater detention basins are undersized to capture the required volume of runoff and sediment. For example, Basin 211 provides sufficient storage capacity to capture runoff from the 10-year storm (1.07 acre-feet), but provides no storage capacity for the accumulation of sediment (0.12 acre-feet).<sup>13</sup> Basins such as 211 must be increased in size to conform with the New York Guidelines for Urban Erosion and Sediment Control, which require basin sizing of at least 1,800 cubic feet per acre of disturbed area.<sup>14</sup>

### ***Stormwater Management Plan***

According to EPA, 40% of U.S. waterbodies do not meet water quality standards, and the leading source of water quality impairment is polluted stormwater runoff.<sup>15</sup> As runoff volumes and velocities increase due to increases in watershed imperviousness, water quality problems such as sedimentation, increased temperatures, habitat alteration, and impacted aquatic plant and animal populations become more pronounced.<sup>16</sup> Degradation of receiving waters and stream channels due to accelerated stormwater runoff also impacts the health, safety, and quality of life of people who use water resources for recreation and commerce.

The stated goal of the applicant's Stormwater Management Plan during the construction phase is to "enhance the quality of stormwater runoff to prevent water quality degradation and preserve water quality in receiving water bodies, including City water supply reservoirs."<sup>17</sup> The Stormwater Management Plan goal during the operational phase is "to match pre-development stormwater quality."<sup>18</sup>

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<sup>11</sup> See Comments of the New York City Watershed Inspector General of the Draft SPDES Permit for the Shandaken Tunnel Outlet into the Esopus Creek, Draft SPDES Permit No. NY-026 8151, DEC No. 3-5150-00420/00001 (Mar. 26, 2004).

<sup>12</sup> See New York State 2004 Section 303(d) List of Impaired Waters Requiring a TMDL, *available at* <http://www.dec.state.ny.us/website/dow/part1.pdf> (last visited Apr. 21, 2004).

<sup>13</sup> See DEIS, App. 9, at 2.

<sup>14</sup> See NYSDEC, NEW YORK GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL at 5A.47 (1997).

<sup>15</sup> U.S. EPA, STORM WATER PROGRAM BACKGROUND, *available at* <http://yosemite.epa.gov/R10/WATER.NSF/0/fd82644588a892f588256c41007d61b6?OpenDocument> (last visited Apr. 6, 2004).

<sup>16</sup> See U.S. EPA, URBANIZATION AND STREAMS: STUDIES OF HYDROLOGIC IMPACTS, *available at* <http://www.epa.gov/owow/nps/urbanize/report.html#01> (last visited Apr. 6, 2004).

<sup>17</sup> DEIS at 3-48.

<sup>18</sup> *Id.* at 3-49.

As the proposed project stands, the applicant clearly will not achieve the stated goals. According to the DEIS, stormwater runoff will increase phosphorus loading of the Ashokan Reservoir by 48 kg per year.<sup>19</sup> Stormwater runoff will increase phosphorus loading of the Pepacton Reservoir by 22 kg per year.<sup>20</sup> These additional phosphorus loadings will increase the Ashokan Reservoir's available load by 1% and the Pepacton Reservoir's available load by 0.4%.<sup>21</sup> This increase constitutes 0.247% of the overall available phosphorus load for the Ashokan Reservoir and 0.173% of the overall available phosphorus load for the Pepacton Reservoir.<sup>22</sup>

However, the applicant proposes to develop 0.2% of the Ashokan watershed and 0.09% of the Pepacton watershed.<sup>23</sup> Development in the Ashokan watershed will consume 0.2% of the available land, but will attach 0.247% of the available P loading, a difference of 0.047%. Development in the Pepacton watershed will consume 0.09% of the available land, but will attach 0.173% of the available P loading, a difference of 0.083%. These disparities demonstrate that the proposed percentages of phosphorus additions to New York City's unfiltered drinking water supply are disproportionate to the percentages of watershed lands the applicant proposes to develop. The applicant should not be permitted to attach a greater percentage of the reservoirs' available phosphorus loading than the percentage of watersheds the applicant proposes to develop.

Roofs, roads and parking lots on the site will account for 85 acres of impervious surfaces,<sup>24</sup> excluding turf. The applicant draws the erroneous conclusion that "[c]onversion of forest cover on a C Group hydrological soil to turf does not significantly increase runoff volume."<sup>25</sup> In fact, managed turf has an impervious factor of 9%<sup>26</sup> and will therefore contribute nearly one-tenth of its pollutant loadings to downgrade receiving waters, whereas runoff curve numbers illustrate that up to 4 inches of rainfall on woodlands will generate zero runoff.<sup>27</sup> The clearing of 674 acres of forest and conversion of 626 acres to turf<sup>28</sup> can result in significant post-development runoff from a project the proposed size of Crossroads. Did the applicant use large turf area as source area parameter in the WinSlamm program, and does this parameter account for imperviousness of turf?

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<sup>19</sup> See *id.* at 3-38.

<sup>20</sup> See *id.*

<sup>21</sup> See *id.* at 3-39.

<sup>22</sup> See *id.*

<sup>23</sup> *Id.* at 3-10.

<sup>24</sup> See *id.*

<sup>25</sup> *Id.*

<sup>26</sup> See CAPIELLA AND BROWN, IMPERVIOUS COVER AND LAND USE IN THE CHESAPEAKE BAY WATERSHED, CENTER FOR WATERSHED PROTECTION (2001).

<sup>27</sup> See NYSDEC, NEW YORK GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL at 10.4 (1997).

<sup>28</sup> See *id.*, Table 1 at 6.

### ***Stormwater Treatment – Chitosan Acetate***

The applicant proposes to treat captured stormwater in detention basins with an “environmentally-friendly” flocculent called chitosan acetate before pumping the treated stormwater into forested land.<sup>29</sup> The applicant also claims that “chitosan has very low aquatic organism toxicity” and biodegrades completely into carbon dioxide and water in 24 hours.<sup>30</sup>

Structurally, chitosan acetate is an organic amine: poly n-acetylglucosamine. In order for an organic amine to biodegrade into carbon dioxide and water, specific nitrogen-fixing bacteria are required for nitrogen uptake; otherwise, at least one of chitosan’s metabolites would contain nitrogen. This process of bacteriologic degradation is described in a flow chart that identifies the specific enzymes, chitosanase and glucosaminadase, in the reduction process.<sup>31</sup>

However, the applicant’s claims about chitosan and its degradation process are lacking sufficient detail. Nowhere in the DEIS does the applicant address the introduction and management of bacteria required to perform the necessary glucosamine uptake. How will the required bacteria be introduced and maintained, and how will seasonal variations in temperature affect the biodegradation process if there is one? Furthermore, what is the proposed origin of chitosanase and glucosaminadase for the degradation process? The degradation of chitosan into carbon dioxide and water is a complex biological process requiring additional additives and specific maintenance. The DEIS fails to address these issues in the discussion of flocculation for stormwater treatment.

In addition, the applicant’s Water Treatment Chemical Usage Notification Requirements for SPDES Permittees cites a study performed by an engineering company that determined the chitosan LC<sub>50</sub> for rainbow trout was 112 milligrams per liter (mg/l).<sup>32</sup> This information is contradicted by another study performed by the Freshwater Institute and the U.S. Geological Survey, National Fish Health Research Laboratory. The latter study determined that chitosan is acutely toxic to rainbow trout at a concentration of 1.0 mg/l and causes consistent pathological changes in their gill tissue,<sup>33</sup> “[i]n controlled experiments to determine the extent of toxicity, we found that trout died after several hours exposure to 0.75 ppm [= mg/l] and died in 24 h[ours] after exposure to 0.075 ppm.”<sup>34</sup>

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<sup>29</sup> DEIS at 3-27, STORMWATER POLLUTION PREVENTION PLAN App. 11 at 16.

<sup>30</sup> *Id.* at 3-32, App. 2 at 271.

<sup>31</sup> *See id.*

<sup>32</sup> *See* DEIS App. 2, at 269.

<sup>33</sup> *See* BULLOCK, G., BLAZER, V, TSUKUDA, AND S. SUMMERFELT, S., TOXICITY OF CHITOSAN ACETATE FOR CULTURED RAINBOW TROUT (*Oncorhynchus mykiss*), *Aquaculture* (2000), 276. Abstract available at <http://www.lsc.usgs.gov/fhb/workshops/24/50.htm> (last visited Mar. 8, 2004).

<sup>34</sup> *See id.* at 273.

The disparity between the lethal concentrations reported in the two studies may be due to different testing methods.<sup>35</sup> The AMEC study cited in the DEIS used a batch test whereas the Freshwater Institute study used a flow-through test. In the batch tests, specific amounts of chitosan were added to a closed test chamber and then assimilated by rainbow trout over measured time intervals. In the Freshwater Institute study, chitosan was delivered to a flow-through system that maintained the concentration at specific levels throughout the measured time intervals. The latter method more closely resembles chitosan delivery under natural conditions when stormwater runoff discharges pollutants to receiving waters. Although pollutant concentrations fluctuate under natural conditions depending on storm duration and intensity, stormwater nevertheless transports pollutants to receiving waters over time, which is inconsistent with the batch test model.

Initial stormwater basin concentrations at Crossroads will be as high as 2 mg/l with outfall spreader concentrations as high as 0.2 mg/l.<sup>36</sup> The applicant does not dismiss the possibility of chitosan reaching any of the five streams in the identified drainages,<sup>37</sup> all of which are classified to support trout populations. Instead, the applicant relies on a study by an engineering company that reported the low concentration of 0.2 mg/l will not be toxic to local trout populations, when in fact the National Fish Health Research Laboratory determined that 0.2 mg/l is almost three times the lethal concentration for trout after 24 hours exposure.

In addition to contradictory information regarding the toxicity of chitosan, its efficiency as a flocculent is also in question. In a batch test study (a similar method to that cited by the applicant regarding chitosan acetate) to evaluate the effectiveness of chitosan to remove sediment particles, “[c]hitosan was ineffective for the application tested and actually resulted in increased [ $>100\%$ ] turbidity.”<sup>38</sup> This information is in conflict with the applicant’s proposal to treat stormwater with chitosan as a means to protect surface waters from sediment loading.

### *The Proposed Use of Chitosan Acetate Should Be Subject to Pilot Testing*

DEC cannot issue a SPDES permit unless the permit provisions ensure compliance with applicable federal and state regulations, including those necessary to meet effluent limitations and water quality standards.<sup>39</sup> Subsection (b) of the applicable state regulations states that “[i]n any case in which an issued SPDES permit contains provisions applicable pursuant to subdivision (a) of this section, such permit shall state that on the basis of a submitted application, plans, or other available information, a determination has been made that compliance with the specified permit provisions will

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<sup>35</sup> Personal communication between Steve Summerfelt, Freshwater Institute, co-author of supra note 33 and William Wegner, Watershed Analyst, Riverkeeper, Inc. (Mar. 18, 2004).

<sup>36</sup> See DEIS App. 2, at 274.

<sup>37</sup> See *id.* at 275.

<sup>38</sup> TOBIASON, S., D. JENKINS, E. MOLASH, and S. RUSH, POLYMER USE AND TESTING FOR EROSION AND SEDIMENT CONTROL ON CONSTRUCTION SITES, *Erosion Control* Jan/Feb (2001), 9, 10, available at [http://www.forester.net/ec\\_0101\\_polymer.html](http://www.forester.net/ec_0101_polymer.html) (last visited Apr. 9, 2004).

<sup>39</sup> See 6 N.Y.C.R.R. §754.1(a).



reasonably assure compliance with applicable water quality standards.”<sup>40</sup> In the instant case, the applicant proposes a flocculent that is shrouded in conflicting data regarding fish mortality and sediment removal efficiency and could result in contravention of New York State water quality standards.

For example, the Draft SPDES permit for the Wildacres portion of the proposed project would authorize discharges of stormwater to Emory Brook, a Class B water.<sup>41</sup> Class B waters’ best usages are “primary and secondary contact recreation and fishing. These waters shall be suitable for fish propagation and survival.”<sup>42</sup> With the conflicting data regarding chitosan acetate’s toxicity to fish and performance as a flocculent, the applicant cannot yet provide reasonable assurances that the proposed flocculent will function as intended and without impairing the receiving water’s best usage.

Given the conflicting data surrounding the use of chitosan acetate, DEC should require pilot testing before allowing its use as a flocculent. This is particularly important here based on the magnitude of the proposed project, the steep slopes on site, and the environmental sensitivity of the site. Without more information to resolve conflicting data, DEC cannot go forward with the requisite determination under 6 N.Y.C.R.R. §754.1(b).

### ***Maintenance***

The DEIS claims that “[i]n order to optimize the effectiveness of the proposed [stormwater management] system, constant maintenance, water quality testing and upgrades to the system will be performed.”<sup>43</sup> Neither the DEIS nor its Appendices, however, discuss the specifics of the proposed “constant maintenance.”

Appendix 9A, Operational Phase Stormwater Quantity Management Plan, does not address maintenance of stormwater management practices. The Stormwater Pollution Prevention Plan (SWPPP) states that maintenance of the stormwater detention ponds “will be the responsibility of the project sponsor...[and] In the event the project sponsor transfers the project, the new owner will be required to sign a maintenance agreement to clearly transfer this obligation to the new entity.”<sup>44</sup> The SWPPP proposes sediment removal when forebays are 50% full, but offers no discussion of proposed removal methods.<sup>45</sup> Likewise, the discussion of the proposed flocculent refers to Figure 3-15R, Flocculent Delivery System, but neither the text nor the figure addresses maintenance procedures.<sup>46</sup> The proposed “constant maintenance” is inadequate for informed public

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<sup>40</sup> 6 N.Y.C.R.R. §754.1(b). *See also* In the Matter of the Application of Seven Springs, LLC (N.Y. Dep’t of Env’tl Conservation Aug. 23, 2002), *available at* <http://www.dec.state.ny.us/website/ohms/decis/sevenspringsr.htm> (last visited Apr. 18, 2004).

<sup>41</sup> *See* SPDES PERMIT NUMBER NY 027 0661 at 2.

<sup>42</sup> 6 N.Y.C.R.R. §701.7.

<sup>43</sup> DEIS App. 10A1, Operational Phase Stormwater Quality Management Plan, at 15.

<sup>44</sup> DEIS App. 11, Section 6.1.6, at 29.

<sup>45</sup> *See id.*

<sup>46</sup> *See* DEIS App. 11, at 16.

review; therefore, the applicant should be required to provide a detailed discussion of sediment removal and flocculent maintenance practices.

## **Wastewater**

Treated wastewater can be a significant source of nutrients entering receiving waters. The applicant proposes to introduce 33 kg of phosphorus per year to the Ashokan Reservoir and 42.7 kg of phosphorus per year to the Pepacton Reservoir through wastewater discharges.<sup>47</sup> The combined wastewater and stormwater Total Phosphorus loadings will result in the addition of 55 kg to the Ashokan Reservoir and 90.7 kg to the Pepacton Reservoir.

Clearly then, post-development phosphorus loadings do not match pre-development levels. In fact, the DEIS states that DEC will be required to adjust the Total Maximum Daily Load (TMDL) values for both reservoirs due to the additional phosphorus loadings resulting from the Crossroads project.<sup>48</sup> While these additions are still below the reservoirs' TMDLs for water quality impairment, the enormity of the proposed project and the applicant's own calculations indicate conclusively that pre- and post-development phosphorus levels in wastewater discharges and stormwater runoff will not match under the present wastewater and stormwater management plans. In addition, the TMDL data for the Ashokan and Pepacton Reservoirs is outdated since they were calculated in 1996.<sup>49</sup> For these reasons, the applicant should be required to match pre- and post-development phosphorus levels rather than relying on the increased loadings failing to "rise to the level of a significant impact."<sup>50</sup>

In addition, the DEIS fails to propose a wastewater management plan for the 8-year construction phase, fails to address siting factors and future expansion of the WWTP, fails to address long-term operation and maintenance costs of the WWTP, and proposes siting the subsurface absorption field for the Gatehouse at Big Indian Resort on slopes greater than 20 percent.<sup>51</sup> These issues must be corrected and/or addressed in the FEIS.

## **Wetlands Impacts**

Although wetlands comprise a relatively small percentage of the project site and potential impacts are estimated by the applicant to be small, *no* wetland or wetland buffer disturbance should be permitted. Wetlands comprise only 1.1% of the Catskill watershed

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<sup>47</sup> See DEIS at 3-38.

<sup>48</sup> See DEIS App. 10A, 1.

<sup>49</sup> See DEIS, App. 10.

<sup>50</sup> See DEIS at 3-39.

<sup>51</sup> See DEIS, App. 8, Conceptual Design Report for Wastewater Treatment and Disposal, Ex. A, Drawing 24.

and only 0.8% of the Delaware watershed.<sup>52</sup> Even small wetlands perform important functions, which include: 1) pollution and nutrient removal and transformation, which purifies our drinking water, and protects rivers, lakes, and coastal waters from pollutants, such as sediment, nutrients, chemical contaminants, and bacteria; 2) absorption of floodwaters, which protects coasts and homes from floods; 3) recharge of groundwater aquifers; and 4) providing habitat for plant and animal species, including threatened or endangered species, particularly for breeding and foraging.<sup>53</sup> With so few wetlands left, it is critical that we preserve *all* remaining wetlands within our unfiltered drinking water watershed areas.

### ***Wetlands, As Identified in the DEIS***

It must immediately be noted that the applicant has not given full parity to identification, description and review of all wetlands on the project site – it appears to give substance only to review of wetlands (and consequent impacts) that the U.S. Army Corps of Engineers (ACOE) has deemed jurisdictional. However, nowhere do the SEQRA regulations limit consideration of environmental impacts to those that rise above some regulatory threshold, whether they are federal, state, or local. It is up to the involved agencies, not the applicant, to determine what impacts are “significant” under SEQRA – such a determination cannot be made unless all wetland resources and potential impacts are fully detailed. It is merely for clarity, to mirror the separation in the DEIS, that impacts to jurisdictional and reportedly non-jurisdictional (“isolated”) wetlands are addressed separately below.

The DEIS identifies only approximately 17 acres of wetlands on both assemblages of the proposed project site that qualify as jurisdictional wetlands regulated by the ACOE – approximately 6 acres in the eastern portion and approximately 11 acres in the western portion.<sup>54</sup> The DEIS states that ACOE has refused to assert jurisdiction over additional “isolated” wetlands, seemingly to indicate that these wetlands need not be reviewed, yet it briefly identifies and quantifies impacts to isolated wetlands along with the jurisdictional wetlands – there are approximately seven additional acres of isolated wetlands on the project site, approximately two in the eastern portion, and approximately five in the western portion.<sup>55</sup> However, there is no discussion of the existing functions and values of any wetlands in the body of the DEIS. This information is only found in background materials supplied in Appendices 17, 17A, and 17B. Because these documents were prepared in connection with the ACOE permitting process, they do not provide the same level of detail regarding “isolated” wetlands that are not within ACOE’s

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<sup>52</sup> See JAMES M. TIERNEY, OFFICE OF THE NEW YORK STATE ATTORNEY GENERAL, THE REGULATION AND PROTECTION OF WETLANDS WITHIN THE NEW YORK CITY WATERSHED: A REPORT FOR POLICY-MAKERS AND CONCERNED CITIZENS (July 23, 1999). Note that the “wetlands” here are defined and identified according to the biological definition used in the U.S. Department of Interior’s National Wetlands Inventory.

<sup>53</sup> See C. SCHNEIDER & S. SPRECHER, WETLANDS MANAGEMENT HANDBOOK, U.S. Army Corps of Engineers, Engineer Research and Development Center 3 (2000).

<sup>54</sup> See DEIS at 3-89 to 3-90, and Tables 3-25, 3-26.

<sup>55</sup> See DEIS Tables 3-25 and 3-26.

jurisdiction, as they do and are for jurisdictional wetlands. As a result, the identification and quantification of “isolated” wetland impacts is less meaningful for purposes of SEQRA review. The DEIS identifies no wetlands within DEC’s jurisdiction, as no on-site wetlands appear on the DEC wetland maps and all are below the 12.4 acre size threshold for State regulation.<sup>56</sup>

Generally, “[w]etlands on the project site are usually associated with drainageways which channel runoff and groundwater that has emerged at the surface. These appear to flow intermittently, during times of snowmelt and high runoff from precipitation.”<sup>57</sup> Wetlands soils are predominantly poorly drained Onteora and Suny soils.<sup>58</sup> “In some of the wetlands, saturation lasts throughout most of the year, and the upper part of the soil has accumulated enough organic matter to be mucky.”<sup>59</sup>

Although ACOE failed to assert jurisdiction over certain isolated wetlands because it failed to observe *surface* connections to regulated waters of the United States, it is clear that from a hydrological perspective, many of these non-jurisdictional isolated wetlands are nonetheless connected by groundwater flows.

In walking the length of a typical mountainside stream on the project site, it is not unusual to find that a stream which has a flow of good volume dries up completely in its lower reaches. Such an occurrence appears to be due to the stream flowing into an area with a soil marked by a high percentage of boulders, cobbles, and channels. Usually, the stream will reappear at the surface downhill, within a few dozen yards of where it had disappeared. In some cases, there is a visible dry channel between the place where the stream disappears into the ground and the place where it re-emerges, suggesting that some surficial flow occurs there during part of the year.<sup>60</sup>

### ***Regulated Wetlands Impacts***

The DEIS identifies some impacts to wetlands on the project site. Specifically, there will be impacts to federally regulated wetlands from 0.0993 acres of fill and 2.58 acres of non-mechanized clearing of woody vegetation. Additional impacts to “isolated” wetlands from approximately 1.48 acres of fill and approximately 0.26 acres of vegetation removal are also proposed.<sup>61</sup> These impacts and others are discussed in more detail below.

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<sup>56</sup> See DEIS at 3-90.

<sup>57</sup> DEIS, App. 17 (FEDERAL WETLAND DELINEATION REPORT FOR BELLEAYRE RESORT AT THE CATSKILL PARK 2 (March 2000))[hereinafter WETLAND DELINEATION REPORT].

<sup>58</sup> See WETLAND DELINEATION REPORT, *supra* note 57 at 3.

<sup>59</sup> *Id.*

<sup>60</sup> *Id.* at 4.

<sup>61</sup> See DEIS, Table 3-26A, and App. 17A (PRE-CONSTRUCTION NOTIFICATION FOR THE BELLEAYRE RESORT AT CATSKILL PARK 17, 20 (Jan. 10, 2003))[hereinafter PRE-CONSTRUCTION NOTIFICATION].

### *Impacts Associated with Golf Course Construction and Maintenance*

In the western portion of the property, wetlands 16 and 23, totaling 4.18 acres, have been incorporated into the golf course layout.

Some of the holes of the Highmount golf club are proposed to play over wetlands 16 and 23, and the wetlands have been incorporated into the design of the golf course to serve as hazards to be avoided by golfers, much the same as a sand bunker is designed into a golf course as a hazard to be avoided.<sup>62</sup>

Due to this design, impacts are anticipated from removal of vegetation and from construction of elevated “boardwalk type” golf cart paths. These and other impacts have not been adequately addressed by the applicant in the DEIS. More detailed description and analysis of the combined impacts to these wetlands must be presented, especially because wetlands 16 and 23 “act as small tributaries of permanent streams that drain the Project Site,”<sup>63</sup> and thus have a clear potential to carry pollutants into, and degrade water quality in, the New York City drinking water supply.

- *Removal of Vegetation*

Within wetlands 16 and 23, “[u]p to 2.31 acres of selective hand removal of some trees may be necessary to allow golfers to avoid and shoot over these hazards.”<sup>64</sup> Reportedly, golf course design principles recommend “100 to 150 feet at the tees widening out to 180 to 300 feet for the fairways and 200 to 300 feet at the greens.”<sup>65</sup> By way of mitigation, the DEIS includes “Selective Wetland Tree Removal Protocols” that require hand removal of selected trees that may interfere with play over areas.<sup>66</sup> After the selected trees are cut and removed “[t]he wetland play over areas will develop into a combination of herbaceous and shrub plant communities...”<sup>67</sup> When the applicant alters the plant community structure of the onsite wetlands, the functions of those wetlands also may be altered. Before the applicant is permitted to convert forested wetlands to shrub wetlands, DEC should require an analysis of the proposed wetland function changes compared to their baseline function. Thus, the applicant must present more detailed information regarding the specific anticipated number, sizes and types of trees that are expected to be removed. If any existing wetland functions are lost or compromised by the alteration of plant communities, the applicant should be required to compensate for lost functions with effective mitigation measures.

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<sup>62</sup> DEIS at 3-92,

<sup>63</sup> PRE-CONSTRUCTION NOTIFICATION, *supra* note 61, at 6.

<sup>64</sup> DEIS at 3-92.

<sup>65</sup> *Id.*

<sup>66</sup> *See id.* at 3-95 to 3-96.

<sup>67</sup> *Id.*

- *Elevated Golf Cart Paths/Crossings*

Wetlands 16, 24, and possibly 23, will be impacted by golf cart paths. The DEIS states that in wetland 16, there will be 6 elevated crossings “totaling 220 linear feet...the longest crossing is 82 feet long and the shortest is 8 feet long. All but two crossings are 5 foot wide and the other two are 8 foot wide,” and in wetland 24 there will be “82 linear feet of golf cart path, which will require up to 0.28 acre of selective clearing of vegetation.”<sup>68</sup>

However, the discussion in the Jan. 10, 2003 Pre-Construction Notification (PCN) details additional impacts not contained in the DEIS. The PCN states that there will be 7 elevated pathways totaling 300 linear feet; “the longest crossing is 83 feet long and the shortest is 9 feet long.”<sup>69</sup> In addition, wetland 23 “will be crossed by a 32-foot-long cart path boardwalk, occupying 160 square feet.”<sup>70</sup> It is unclear whether the current pathway design proposal has been changed since the PCN was written, or whether this additional information was omitted from the DEIS. This issue must be clarified by the applicant.

Regarding construction of the pathways, the DEIS states that support structures for the elevated paths will be constructed in uplands “wherever possible,” and that there will be “a *de-minimus* amount of wetland activity related to the pouring of concrete supports in tightly sealed forms within wetlands.”<sup>71</sup> However, one must turn to the PCN in Appendix 17A for more specific details regarding construction of the elevated pathways. “There will be a total of 56 such concrete piers installed in these wetlands, which constitute a total area of approximately 31 square feet....Construction of each pier will involve drilling a hole up to 10 feet deep using a backhoe-mounted power auger, inserting a Sonotube<sup>TM</sup>, and filling it with concrete.”<sup>72</sup> Although PCN condition no. 5 requires heavy machinery within wetlands to be placed on equipment mats, no such discussion is included in the wetlands section of the DEIS. Impacts associated with use of heavy, power machinery within these wetlands must be identified and assessed in a proper wetlands impacts section in the EIS. As with vegetative removal, machinery should be kept out of wetlands entirely and the possibility of sinking pilings by hand should be considered.

In addition to the impacts noted in the DEIS, there are additional impacts associated with construction and operation of the golf courses that must be addressed in more detail by the applicant:

- *Maintenance Trucks and Golf Carts*

There is no discussion of potential impacts from the golf carts and maintenance trucks that will drive through wetlands 16, 23, and 24 on the elevated boardwalks. In

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<sup>68</sup> *Id.* at 3-93.

<sup>69</sup> PRE-CONSTRUCTION NOTIFICATION, *supra* note 61, at 18.

<sup>70</sup> *Id.*

<sup>71</sup> DEIS at 3-93.

<sup>72</sup> PRE-CONSTRUCTION NOTIFICATION, *supra* note 61, at 18.

fact, the DEIS does not even acknowledge that these boardwalks will be used by motorized vehicles. This information is briefly noted only in the PCN.<sup>73</sup> The potential for leakage of chemicals from the maintenance trucks and golf carts (e.g. petroleum-based, or battery acid, etc.) should be assessed in the EIS.

- *Golf Balls and Golfers*

There also will be impacts associated with designing wetlands as hazards, whereby a large number of golf balls will end up in the wetlands. Additional information should be provided to address the impacts from the golf balls themselves, from any activity conducted to remove the golf balls, and to assess and prevent the impacts from golfers entering the wetlands when shagging wayward balls.

- *Integrated Turf Management Plan*

The applicant acknowledges that “[i]f present in sufficient quantities, pesticide residues may have negative impacts on aquatic biota such as aquatic invertebrates and fish,”<sup>74</sup> but claims that:

[t]he results of the Risk Assessment were used to eliminate from consideration numerous potential pesticides due to a combination of their runoff potential and toxicity to aquatic invertebrates and fish as well as their leaching potential in relation to State drinking water standards... [these results] were used to design a fertilizer program that would result in healthy golf course turf, without resulting in significant phosphorus and nitrogen transport off-site.<sup>75</sup>

However, the proposed Integrated Turf Management (ITM) plan does not provide enough detail to ensure that chemical applications will not be used, particularly in sensitive wetlands and wetland buffers.

The applicant’s ITM plan favors chemical pesticide use, claiming that “[b]iological agents are complex, not totally effective, and not always predictable.”<sup>76</sup> For each potential insect pest species the plan lists a series of control options: e.g., for cutworm Option 1 is biological control, Option 2 is cultural control, and Option 3 is chemical control.<sup>77</sup> Biological control is the first option listed for each insect pest, but nowhere does the plan indicate that these options are prioritized in numerical order, meaning there is nothing to prevent applicators from choosing chemical control over other options in every case. In fact, the plan states that chemical pesticides “would be

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<sup>73</sup> See *id.*

<sup>74</sup> *Id.* at 15.

<sup>75</sup> *Id.* at 25.

<sup>76</sup> See DEIS, App. 14 (INTEGRATED TURF MANAGEMENT PLAN FOR THE BIG INDIAN COUNTRY CLUB AND HIGHMOUNT GOLF CLUB AT THE BELLEAYRE RESORT AT CATSKILL PARK 26 (Nov. 2002)).

<sup>77</sup> See *id.* at 45.

applied to the proposed golf courses' turf only when needed,” and “[t]he factors that would dictate when, where and how much pesticide would be applied are pest levels in relation to threshold levels and the environmental sensitivity of specific areas.”<sup>78</sup>

Biological controls present no risk of chemical contamination of water supplies and therefore should be prioritized as the first option to be considered for pest control wherever applicable. Additionally, one of the criteria that dictate when chemical pesticides are used should be the failure of biological controls to control the targeted species after they are attempted. The applicant should be required to provide a meaningful ITM plan that clearly establishes: 1) criteria for selection of appropriate controls, 2) quantifiable thresholds to assess when pest infestation and/or damage to vegetation warrants some form of treatment, and 3) identifies specific zones across the property where thresholds may be varied depending on the environmental sensitivity of the zone in question.

- *Wildlife Impacts*

Notably, the wetlands that are proposed as water hazards in the golf course design are among the largest and most functionally valuable wetlands on site. Wetland 16, being 3.6 acres, is the largest individual wetland on the Belleayre project site. Wetlands 23 and 24 are numbered separately in the DEIS, but hydrologically, they comprise one single wetland – the middle section of this wetland falls on private property not included in the proposed project assemblage, thus they appear as two separately numbered wetlands on Sheet 2 of 4 contained in the March 2000 Wetland Delineation Report. However, viewed in its entirety, wetland 23/24 appears to be similar in size to wetland 16, and is undoubtedly among the largest wetlands on the project site.

Disturbance of wetlands 16, 23 and 24 could have the most significant impacts not only on water quality because they “act as small tributaries of permanent streams that drain the Project Site,”<sup>79</sup> but also on their value as wildlife habitat. As the Office of the Attorney General noted in its recent Comments to EPA regarding the proposed redefinition of the term “waters of the United States,” many species, especially amphibians, may be affected by the loss of small wetlands because they depend on a high density of these wetlands.<sup>80</sup> Thus, the applicant must submit additional information

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<sup>78</sup> See *id.* at 24.

<sup>79</sup> PRE-CONSTRUCTION NOTIFICATION, *supra* note 61, at 6.

<sup>80</sup> See PETER LEHNER, STATE OF NEW YORK OFFICE OF THE ATTORNEY GENERAL, COMMENT LETTER (April 16, 2003)(submitted to EPA Docket ID No. 02-2002-0050), fn. 9. Quoting a U.S. Fish and Wildlife Service report, it continues to state:

Semlitsch and Bodie (1998) described the importance of small wetlands to amphibians. The abundance of small isolated wetlands supports a diverse assemblage of amphibian species, produces large numbers of juveniles (necessary to maintain populations), and serves as ‘stepping stones’ to aid in dispersal and recolonization of suitable habitats (Semlitsch 2000). Local populations of wetland-dependent organisms are vulnerable to extinction due to several factors including natural events (e.g., prolonged droughts and changing vegetation), disease, inbreeding, and habitat destruction. A study of wetlands in



assessing how the loss of wetland density will impact resident wildlife species, particularly amphibians, and how the surrounding golf course activity will affect ground species that must traverse the fairways in order to travel between the remaining wetlands on site.

### *Impacts from Fill Activity*

Bridges are proposed to provide stream crossings for access to the detached Wildacres Resort lodging units north of Gunnison Road, to cross Giggle Hollow, and to cross Birch Creek near Friendship Road. Portions of wetlands 24, 32, and 36 will be filled for bridge construction, and 0.28 acres of trees and tall shrubs will be cleared; portions of wetland 29 will be impacted to construct an access road. The total area to be filled in wetlands 24, 32, and 36 will be 0.0993 acres.<sup>81</sup> Technically, this amount of fill falls under the 0.10 acre limit above which Water Quality Certification is required,<sup>82</sup> and thus no Individual Permit has been required by ACOE. Notably, a mere 0.0007 acre miscalculation when assessing proposed wetlands impacts would avoid the necessity of the applicant seeking an Individual Permit.

In fact, it appears that all on-site wetlands and proposed impacts have *not* been adequately identified. For example, ACOE noted that “it appears as though additional waters of the United States would be filled within Woodchuck Hollow [in association with the improved access road] and would likely cause the overall proposed fill to exceed 0.10 acres.”<sup>83</sup> Table 3-25 in the DEIS indicates that Woodchuck Hollow Brook and/or its

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central Maine by Gibbs (1993) suggests that a high number of small wetlands that have lost populations due to chance extinction. The presence of a high number of small wetlands therefore increases the chance of survival of local populations over time.

Reducing the number of small wetlands in a given area increases overland migration distances and exposure of migrants (E.G., salamanders) to predators. This may place local populations at the risk of extinction. For example, Semlitsch and Bodie (1998) found that eliminating all natural wetlands less than 10 acres in size (in a South Carolina study area) would increase the nearest-wetland distance from 1,570 feet to 5,443 feet – a distance that would take most amphibian species several generations or more to travel. This type of loss would increase the probability of local population extinction for some amphibians.

Isolated wetlands with fluctuating water levels provide unique habitats for certain species, especially those that are vulnerable to fish predation. Much of the value of woodland vernal pools to amphibians is due to the absence of fish, which cannot survive periodic drawdowns. The presence of fish would eliminate or severely reduce the reproductive success of amphibians that breed in these pools.

<sup>81</sup> See DEIS at 3-93 to 3-94.

<sup>82</sup> See ACOE, PUBLIC NOTICE: REGIONAL CONDITIONS FOR NATIONWIDE PERMITS AND DESIGNATION OF CRITICAL RESOURCE WATERS (May 21, 2002), available at [http://www.nan.usace.army.mil/business/buslinks/regulat/pnotices/nwp\\_pn.pdf](http://www.nan.usace.army.mil/business/buslinks/regulat/pnotices/nwp_pn.pdf) (last visited Apr. 16, 2004).

<sup>83</sup> Letter from Brian A. Orzel, Project Manager, ACOE to Kevin J. Franke, The LA Group, P.C. (stamped Feb. 12, 2003).

adjacent wetland 27 has not been delineated, and Table 3-26A does not anticipate any impacts in this area. The applicant should make clear whether this is an omission of a proposed impact to jurisdictional waters of the United States, or whether there has been a design change made since this was noted by ACOE in February 2003 (an observation made *after* the January 10, 2003 PCN was completed).

Because proposed filling of only 0.0007 additional acres (approximately 30.5 sf.) would have required issuance of an Individual Permit from ACOE (an amount that may easily have been miscalculated, or that may accidentally be surpassed during construction), and because the proposed mitigation measures that have been accepted in the PCN are inadequate (discussed below), extra scrutiny should be given by DEC to all wetlands and stream impacts during the SEQRA process. In addition, DEC should urge ACOE to reconsider whether an Individual Permit should be issued, as it is within the District Engineer's discretion to modify, suspend, or revoke case specific authorizations under a Nationwide Permit.<sup>84</sup>

- *Isolated Wetland Impacts*

As noted above, SEQRA does not provide for a lesser analysis of isolated wetlands. *Any* impacts to isolated wetlands from the proposed project are likely "significant" under SEQRA, particularly as "approximately 22% of the wetlands in the NYC Watershed are 'isolated' because a surface connection to other water bodies is not apparent."<sup>85</sup> As noted by the Office of the State Attorney General, Environmental Protection Bureau, "[t]hese 'isolated' wetlands play a crucial role in protecting the water quality of the surface water sources that provide drinking water for NYC."<sup>86</sup>

As with jurisdictional wetlands, proper attention has not been given to the proposed impacts to so-called "isolated" wetlands. Planning for this project has been ongoing for several years, and the numerous changes made reducing the number of

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<sup>84</sup> See 33 C.F.R. §330.5(d). Stated factors for consideration include:

[1] changes in circumstances relating to the authorized activity since the NWP itself was issued or since the DE confirmed authorization under the NWP by written verification; [2] the continuing need for, or adequacy of, the specific conditions of the authorization; [3] any significant objections to the authorization not previously considered; progress inspections of individual activities occurring under an NWP; [4] cumulative adverse environmental effects resulting from activities occurring under the NWP; [5] the extent of the permittee's compliance with the terms and conditions of the NWPs; [6] revisions to applicable statutory or regulatory authorities; [6] and, the extent to which asserting discretionary authority would adversely affect plans, investments, and actions the permittee has made or taken in reliance on the permit; [7] and, other concerns for the environment, including the aquatic environment under the Section 404(b)(1) Guidelines, and other relevant factors of the public interest.

*Id.*

<sup>85</sup> PETER LEHNER, STATE OF NEW YORK OFFICE OF THE ATTORNEY GENERAL, COMMENT LETTER (submitted to EPA Docket ID No. 02-2002-0050) at 19 (Apr. 16, 2003).

<sup>86</sup> *Id.*

jurisdictional wetlands on the project site during this time warrant additional scrutiny. In addition to the problems caused by lack of information for proper SEQRA review, there may be additional defects in the ACOE permitting process. If any wetlands were incorrectly determined to be “isolated,” or ACOE improperly failed to assert jurisdiction over these wetlands, the contemplated impacts would again surpass the size threshold to require issuance of an Individual Permit from ACOE.

The March 2000 Delineation Report originally identified 21.42 acres of wetlands on the project site following ACOE methods prescribed in the 1987 Corps of Engineers Wetlands Delineation Manual.<sup>87</sup> But, the August 2000 site inspection report from ACOE field staff identified 29 acres of jurisdictional wetlands.<sup>88</sup> And by January 10, 2003 the jurisdictional wetlands identified in the PCN prepared for ACOE were whittled down to only 16.97 acres.<sup>89</sup> It should be noted that these revisions were not based on new scientific observation or understanding, or any change of conditions on the project site, but rather seem to be entirely in response to the January 2001 U.S. Supreme Court Decision in *Solid Waste Agency of Northern Cooke County v. U.S. Army Corps of Engineers*.<sup>90</sup> And, it is clear that these revisions were made after a request from the applicant’s consultants to do so,<sup>91</sup> which shows that the applicant sought to avoid governmental regulation rather than avoid wetland impacts.

The DEIS proposes impacts to isolated wetlands from approximately 1.48 acres of fill and approximately 0.26 acres of vegetation removal.<sup>92</sup> Activity in the Big Indian Plateau area will impact wetlands 26, 33, 34, and 35.<sup>93</sup> Wetland 34 will be “filled or excavated to construct a road and a stormwater detention basin...[and] there will be 0.01 acre of vegetation clearing in wetland 34 on the edge of a golf hole.”<sup>94</sup> The additional impacts to wetlands 26, 33, and 25 will result from 0.04 acres of fill from road construction or golf fairway construction.<sup>95</sup> “Impacts to isolated wetlands 17, 18, 19, 20, 21 and 22 include 1.08 acres of fill for construction of golf fairways, roadways, and a parking garage (see Table 5 and Drawings SG-1 and SG-3). An additional 0.25 acre of vegetation clearing will be required, mainly for golf fairways, including 35 linear feet of golf cart paths on boardwalks.”<sup>96</sup>

The U.S. Department of the Interior, Fish and Wildlife Service (F&WS) appears to share this concern, and as recently as July 2003, recommended that ACOE reconsider whether an Individual Permit was appropriate for the proposed project. Specifically, in a

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<sup>87</sup> See WETLAND DELINEATION REPORT, *supra* note 57, at 1.

<sup>88</sup> See Brian Orzel & Randy J. English, ACOE, Site Inspection Report (stamped Aug. 24, 2000).

<sup>89</sup> See PRE-CONSTRUCTION NOTIFICATION, *supra* note 61, at 6.

<sup>90</sup> 121 S. Ct. 675 (2001) (holding that the ACOE cannot regulate “isolated” wetlands based solely on the use of such waters by migratory birds). See also Letter from George Nieves, Chief, ACOE, to Richard P. Futyma, LA Group, P.C. (stamped Feb. 15, 2002).

<sup>91</sup> See Brian A. Orzel, ACOE, Memorandum For Record (stamped Feb. 15, 2002).

<sup>92</sup> See DEIS, Table 3-26A; PRE-CONSTRUCTION NOTIFICATION, *supra* note 61, at 17, 20.

<sup>93</sup> See DEIS at 3-94; PRE-CONSTRUCTION NOTIFICATION, *supra* note 61, at 20.

<sup>94</sup> PRE-CONSTRUCTION NOTIFICATION, *supra* note 61, at 21.

<sup>95</sup> See *id.*

<sup>96</sup> *Id.* at 20.

letter dated July 11, 2003, F&WS Field Supervisor David A. Stilwell suggested several items be given more attention by ACOE and the applicant. First, the letter notes that

[i]t is unclear if all of the streams including ephemeral and intermittent streams have been shown on the plans. We recently visited the project site and found channels with discernable bed and banks located downslope of mapped channels. For example, we observed channels south of Gunnison Road adjacent to proposed golf tee #5, which are not shown on the plans. *If the [sic] all of the water courses have not been documented, then not all of the impacts have been considered.*<sup>97</sup>

F&WS focused on *all* on-site impacts to both jurisdictional and non-regulated isolated wetlands, which total 4.34 acres, and concluded that, “[t]herefore, this project will result in more than minimal impacts to wetlands...the Corps should consider the cumulative impacts to waters of the United States, rather than considering just the discrete impacts to jurisdictional wetlands.”<sup>98</sup> F&WS recommended that due to the potential impacts on aquatic resources a “full public interest review is warranted for this project, including evaluation of the project as an Individual Permit. Currently, the Corps may not be considering all relevant information regarding impacts to waters of the United States, pending the completion of the SEQR process and input from local residents.”<sup>99</sup> Riverkeeper wholeheartedly agrees.

Given the nearly 2,000-acre project site that the applicant has to work with, it should be required to make every effort to avoid, minimize, and mitigate impacts to *all* wetlands. The applicant must present full information regarding the impacts to both jurisdictional and non-jurisdictional wetlands, and discuss the proposed impacts in terms of lost wetland function and value, not merely acreage. Again, Riverkeeper calls on DEC to urge ACOE to reconsider whether an Individual Permit should be issued for this project.

### ***Mitigation Measures***

Because impacts to isolated and, potentially, additional on-site wetlands have not been included in quantifying total wetlands disturbance for the purpose of the ACOE permitting process (and thus Nationwide Permits 14 and 25 are considered by ACOE adequate to cover proposed activities), the DEIS asserts that no in-kind mitigation measures are required by ACOE. Nonetheless, several “mitigation” measures are proposed. None of these measures actually mitigate the loss of wetlands – there are no proposals to enhance existing wetlands, such as with additional wetland plantings, or to create additional wetlands elsewhere. Merely avoiding further wetlands destruction is not mitigation, as claimed. The applicant must, therefore, avoid all wetland impacts; if it

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<sup>97</sup> Letter from David A. Stilwell, Field Supervisor, F&WS to Col. John B. O’Dowd, District Engineer, ACOE (dated July 11, 2003), at 2 (emphasis added).

<sup>98</sup> *Id.*

<sup>99</sup> *Id.* at 3.

cannot, it must submit additional information and a plan that provides true mitigative measures.

### *Wetland Buffers*

The applicant proposes that a “25-foot-wide protective buffer zone will be established on both sides of wetland 32, that contains the stream Giggle Hollow.”<sup>100</sup> Wetland buffers are extremely important to safeguard the health of a wetland itself, and establishing a 25-foot buffer is inadequate.

Vegetated wetland buffers provide additional transitional areas that intercept stormwater from upland habitat before it reaches wetlands or other aquatic habitat. A buffer may be described generally as a “linear band of permanent vegetation adjacent to an aquatic ecosystem intended to maintain or improve water quality by trapping and removing various nonpoint source pollutants.”<sup>101</sup> Other water quality benefits of buffer zones include reducing thermal impacts (shade), nutrient uptake, providing infiltration, reducing erosion, and restoring and maintaining the chemical, physical and biological integrity of water resources.<sup>102</sup> Buffers filter sediment, pesticides, heavy metals and other pollutants from stormwater, and reduce nutrient loadings to wetlands by uptake in vegetation and denitrification,<sup>103</sup> thereby protecting wetlands from excessive loadings and allowing them to perform similar functions without overloading of contaminants. Buffers also function to store water and reduce peak runoff velocities during storm events and provide unique recreation, academic and aesthetic opportunities.<sup>104</sup> In addition, buffers provide habitat for flora and fauna and corridors for wildlife to move between larger sections of habitat.<sup>105</sup>

A 25-foot wetland buffer is insufficient to provide desired buffering functions. A common wetland buffer width often is 100 feet, but more environmentally proactive planners have established wider buffers.<sup>106</sup> One hundred feet is considered the *minimum* buffer width recommended for water quality protection,<sup>107</sup> but additional buffer functions of wildlife habitat, recreation and aesthetics require larger buffers.<sup>108</sup> Depending on a waterbody’s position in the watershed, the composition and density of vegetation present,

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<sup>100</sup> DEIS at 3-94.

<sup>101</sup> FISCHER, R. AND J. FISCHENICH, DESIGN RECOMMENDATIONS FOR RIPARIAN CORRIDORS & VEGETATED BUFFER STRIPS, U.S. Army Engineer Research and Development Center 2 (2000).

<sup>102</sup> See U.S. ENVIRONMENTAL PROTECTION AGENCY, MODEL ORDINANCES TO PROTECT LOCAL RESOURCES, available at <http://www.epa.gov/owow/nps/ordinance/> (last visited May 13, 2003).

<sup>103</sup> See U.S. ARMY CORPS OF ENGINEERS, BUFFER STRIPS FOR RIPARIAN ZONE MANAGEMENT 2 (1991).

<sup>104</sup> See *id.*

<sup>105</sup> See FISCHER, R. AND J. FISCHENICH, DESIGN RECOMMENDATIONS FOR RIPARIAN CORRIDORS & VEGETATED BUFFER STRIPS, U.S. Army Engineer Research and Development Center 2 (2000).

<sup>106</sup> See U.S. ENVIRONMENTAL PROTECTION AGENCY, MODEL ORDINANCES TO PROTECT LOCAL RESOURCES, available at <http://www.epa.gov/owow/nps/ordinance/> (last visited May 13, 2003).

<sup>107</sup> See TOM SCHUELER, SITE PLANNING FOR URBAN STREAM PROTECTION, Metropolitan Washington Council of Governments 111 (1995).

<sup>108</sup> U.S. ENVIRONMENTAL PROTECTION AGENCY, DRAFT NATIONAL MANAGEMENT MEASURES TO CONTROL NONPOINT SOURCE POLLUTION FROM URBAN AREAS 4-11, 4-12 (2002).

adjacent land use and slope, some buffers require thousands of feet to provide ecological functions and benefits.<sup>109</sup> While recommendations and requirements vary among states and regions, *water quality benefits are significant when buffers exceed the minimum 100-foot width.* A survey of scientific literature by the Environmental Law Institute, specifically pertaining to thresholds applicable to land use decision-making, found that “land use planners should strive to establish 100-meter wide riparian buffers to enhance water quality and wildlife protection.”<sup>110</sup> In a Maine study, a vegetated buffer strip approximately 200 feet in width removed 80% of the suspended sediment in stormwater.<sup>111</sup> To intercept overland runoff and promote floodplain storage, increase runoff travel time and reduce flood peaks, ACOE engineers have recommended buffers up to 150 meters (492 feet) in width.<sup>112</sup> In addition, providing suitable wildlife habitat requires wider buffers. Several studies indicate that certain wildlife species, avian populations, and aquatic species can require more than a 100-foot buffer.<sup>113</sup>

Thus, to have any environmentally protective function, particularly those related to protecting water quality, the proposed buffer size should be increased to *at least* 100 feet. And, buffers must be established around *all* on-site wetlands, not just along the wetland bordering Giggie Hollow.

#### *Deed Restrictions and/or Conservation Easements*

The DEIS proposes that “[a]fter completion of the project, all remaining wetlands, both isolated and non-isolated, will be protected from further development,” and this will be done through deed restrictions and/or conservation easements.<sup>114</sup> While this is a good suggestion, and should be required if the proposed project ultimately goes forward, it nonetheless does not qualify as “mitigation.” General Condition 19 of the Nationwide General Permits, part (c) states that “Consistent with National policy, the District Engineer will establish a preference for restoration of wetlands as compensatory mitigation, with preservation used only in exceptional circumstances.”<sup>115</sup> As noted

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<sup>109</sup> See FISCHER, R. AND J. FISCHENICH, DESIGN RECOMMENDATIONS FOR RIPAIRAN CORRIDORS & VEGETATED BUFFER STRIPS, U.S. Army Engineer Research and Development Center 3 (2000).

<sup>110</sup> ENVIRONMENTAL LAW INSTITUTE, CONSERVATION THRESHOLDS FOR LAND USE PLANNERS 20 (2003), available at [http://www.elistore.org/reports\\_detail.asp?ID=10839](http://www.elistore.org/reports_detail.asp?ID=10839) (last visited June 13, 2003).

<sup>111</sup> See HORNER, R., AND B MAR, GUIDE FOR WATER QUALITY IMPACT ASSESSMENT OF HIGHWAY OPERATIONS AND MAINTENANCE, Washington Department of Transportation, *In*: FISCHER, R. AND J. FISCHENICH, DESIGN RECOMMENDATIONS FOR RIPAIRAN CORRIDORS & VEGETATED BUFFER STRIPS, U.S. Army Engineer Research and Development Center 5 (2000).

<sup>112</sup> See FISCHER, R. AND J. FISCHENICH, DESIGN RECOMMENDATIONS FOR RIPAIRAN CORRIDORS & VEGETATED BUFFER STRIPS, U.S. Army Engineer Research and Development Center 8 (2000).

<sup>113</sup> See VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION, WETLANDS FACT SHEET (1999), available at [www.vtwaterquality.org/wetlands/Fs18.PDF](http://www.vtwaterquality.org/wetlands/Fs18.PDF) (last visited May 12, 2003); U.S. ARMY CORPS OF ENGINEERS, TECHNICAL AND SCIENTIFIC CONSIDERATIONS FOR UPLAND AND RIPARIAN BUFFER STRIPS IN THE SECTION 404 PERMIT PROCESS 4 (2002); also see FISCHER, R. AND J. FISCHENICH, DESIGN RECOMMENDATIONS FOR RIPAIRAN CORRIDORS & VEGETATED BUFFER STRIPS, U.S. Army Engineer Research and Development Center 8 (2000).

<sup>114</sup> DEIS at 3-94.

<sup>115</sup> 67 Fed. Reg. 10, 2092 (2002).

above, preservation of existing wetlands from further destruction and degradation in no way enhances the functionality or increases the size (thus insuring no-net-loss) of existing wetlands. F&WS agrees.<sup>116</sup> This critique applies to the proposed preservation of the Adelstein Property as “forever wild,” as well.

If the proposed project *is* approved, it should be noted that project-specific Special Condition (A) related to Nationwide Permit 14 requires that the deed restriction or conservation easement be approved by ACOE, and then “executed and recorded within the Delaware and Ulster County Registrars of Deeds *within one year of the commencement of jurisdictional activities on site,*”<sup>117</sup> not after completion of the project as the DEIS proposes. The applicant must correct this inaccuracy in the DEIS.

Finally, the inadequacy of the “Selective Wetland Tree Removal Protocols” as a mitigation measure has been addressed above.

### ***Design Alternatives to Avoid Wetlands Impacts***

The wetlands section of the DEIS does not consider any alternative designs that could remove impacts from wetland areas, particularly from golf course impacts, which are the most extensive. “The Section 404(b)(1) guidelines set forth a rebuttable presumption that non-water-dependent projects do not need to be located near wetlands to fulfill their basic purpose, and that an upland alternative would be less impacting.”<sup>118</sup> Operation of golf courses is not a water-dependant project – the use of wetlands as water hazards is stylistic only. Avoidance of these wetlands, and consequent impacts, will not prevent construction of golf courses. Thus, the applicant should consider alternative golf course designs that avoid all wetlands impacts related to golf courses, particularly the use of wetlands as hazards; if they cannot be avoided entirely, options should be considered that reduce the number of crossing made by elevated pathways. For example, it is not necessary for such paths to cross wetland 16 six times, and several smaller “loops” could easily be eliminated without significantly effecting movement throughout the course.

Additional comments on wetlands impacts are attached as **Appendix 3** (Cashin Associates, P.C. report prepared on behalf of Riverkeeper, Inc.) and are incorporated in full.

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<sup>116</sup> “While we support efforts to preserve wetlands, preservation is not, in our opinion, an acceptable means to replace lost wetlands...Consequently, there will be a new loss of wetland functions and values as a result of the project and, therefore, the project will not comply with Executive Order 11990.” Letter from David A. Stilwell, Field Supervisor, F&WS to Col. John B. O’Dowd, District Engineer, ACOE (dated July 11, 2003), at 2.

<sup>117</sup> Letter from Richard L. Tomer, Chief, ACOE to Richard P. Futyma, The LA Group, P.C. (stamped July 18, 2003), at 2 (emphasis added).

<sup>118</sup> PRE-CONSTRUCTION NOTIFICATION, *supra* note 61, at 27-28.

## The Project Applicant Needs A Mined Land Reclamation Permit

DEC's Notice of Complete Application does not include any reference to a Mined Land Reclamation Permit.<sup>119</sup> However, the New York State Environmental Conservation Law (ECL) indicates that a Mined Land Reclamation Permit would be needed for the project. The project DEIS notes that the construction of the first year of the eastern portion will involve the removal of 6,800 cubic yards of soil and the blasting of 18,200 cubic yards of rock.<sup>120</sup> This activity is necessary to create irrigation ponds.

The ECL requires a Mined Land Reclamation Permit for "any person who mines or proposes to mine from each mine site more than one thousand tons or seven hundred fifty cubic yards, whichever is less, of minerals from the earth within twelve successive calendar months."<sup>121</sup> Mining, in the ECL, is defined as "the extraction of overburden and minerals from the earth...."<sup>122</sup> Further, the ECL defines "mineral" as "any naturally formed, usually inorganic, solid material located on or below the surface of the earth. For the purposes of this title, peat and topsoil shall be considered minerals."<sup>123</sup> The ECL definition of mining exempts excavation, removal, and disposition of minerals associated with construction projects, however, the exception is "exclusive of the creation of water bodies."<sup>124</sup> As noted above, the extraction on the proposed site is for creating detention ponds.

As a result, the project sponsor's planned activities rise to the level of need for a Mined Land Reclamation permit. As such, the applicant must file an application and DEC must comply with all relevant public notice and comment aspects.

## Secondary Growth

Comments on secondary growth issues are attached as **Appendix 2** (report prepared by Jannette M. Barth, Ph.D., J.M. Barth & Associates, Inc. on behalf of Riverkeeper, Inc.) and incorporated in full.

## Economic Impacts

Review of the DEIS reveals serious deficiencies in the economic impact analysis, both with regard to the purported economic benefits of the project and to the potential adverse economic impacts. Together, these failings erroneously skew the economic conclusions to support the proposed project. Detailed comments on the economic

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<sup>119</sup> See New York State Department of Environmental Conservation, Notice of Complete Application, Notice of Acceptance of Draft Environmental Impact Statement, and Notice of Legislative Public/SEQR Hearing and Issues Conference.

<sup>120</sup> See DEIS at 2-55.

<sup>121</sup> ECL §23-2711(1).

<sup>122</sup> ECL §23-2705(8).

<sup>123</sup> ECL §23-2705(7).

<sup>124</sup> ECL §23-2705(8).



impacts in the DEIS alternatives analysis are attached as **Appendix 2** (report prepared by Jannette M. Barth, Ph.D., J.M. Barth & Associates, Inc. on behalf of Riverkeeper, Inc.) and incorporated in full.

## Segmentation

In December 2003, DEC issued a Notice of Acceptance of Draft Environmental Impact Statement (DEIS) for Crossroad Ventures' massive Belleayre Resort at Catskill Park. The proposed project consists of approximately 1,960 acres of private land located to the east and west of the state-run Belleayre Mountain Ski Center. DEC also is currently planning a significant expansion of the Belleayre Mountain Ski Center. The planned expansion is in keeping with the final unit management plan for the Belleayre Mountain Ski Center adopted in May 1998. At present, the ski center provides over 170 acres of skiable terrain and an additional 7.5 miles of trails within the constitutional 25-mile limit can be built.<sup>125</sup> The environmental impact of the expansion of the ski center together with those of the proposed resort construction is not discussed in the Belleayre Resort DEIS. The interdependence of the two projects, their joint leadership under DEC, and their geographical proximity makes them for all logical purposes one action and the environmental impacts of the combined action should be analyzed jointly under SEQRA. The failure to analyze the combined impacts of the project constitutes impermissible segmentation under SEQRA.<sup>126</sup>

Segmentation is defined as the division of the environmental review of an action such that various activities or stages are addressed as though they are unrelated activities, needing individual determinations of significance.<sup>127</sup> In formulating a DEIS and determining whether an action may have a significant effect on the environment, "the agency must ... consider reasonably related effects 'including other simultaneous or subsequent actions which are: (1) included in any long-range plan of which the action under consideration is a part; (2) likely to be undertaken as a result thereof; or (3) dependent thereon.'"<sup>128</sup> DEC improperly segmented the analysis of the ski center expansion and the proposed Belleayre resort because they are part of the same long-range plan and are dependent on each other. The failure to analyze the impact of the ski center expansion in the Belleayre Resort DEIS constitutes impermissible segmentation and must be remedied with a supplemental EIS that describes the shared impacts of the projects.

*In the Matter of Village of Westbury v. Department of Transportation*,<sup>129</sup> the DOT had proposed the widening of a parkway and the reconstruction of an interchange in order to solve traffic problems in the same area.<sup>130</sup> DOT issued a negative declaration for the projects and the Village of Westbury claimed DOT had improperly segmented the

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<sup>125</sup> See DEIS at 1-7.

<sup>126</sup> See ECL § 8-0101.

<sup>127</sup> See 6 N.Y.C.R.R. §617.2; 617.3(g)(1).

<sup>128</sup> *In the Matter of Village of Westbury v. Department of Transp.*, 75 N.Y.2d 62, 68 (1989), *quoting* 6 N.Y.C.R.R. §617.7 (c)(2).

<sup>129</sup> *In the Matter of Village of Westbury v. Department of Transp.*, 75 N.Y.2d 62 (1989).

<sup>130</sup> *Id.* at 67.

projects and requested an EIS to describe the shared impacts.<sup>131</sup> The court held that the widening of the parkway was the type of subsequent action contemplated by the regulations and that the environmental effects of the two projects had to be considered together.<sup>132</sup> The court reasoned that the design of each was dependent on the other, and thus, the regulations required consideration of their combined effects, even though they were not part of a single formalized plan.<sup>133</sup> The court stated,

The two are complementary components of the remedy for the Northern State Parkway's traffic flow problems, sharing a common purpose, integrated and scheduled for consecutive construction. Thus, design of each is dependent on the other in that lane construction, which will be undertaken as a part of the interchange project, has no independent utility without the subsequent widening of the Northern State Parkway to the east. That being so, the regulations require the consideration of their combined effects even though they are not part of a single formalized plan.<sup>134</sup>

This case is very similar to the Belleayre Resort and Belleayre Mountain Ski Center situation because the facilities propose to be the remedy for the area's tourism deficiencies. The plans also share the common purpose of accommodating and attracting tourism. The interdependence of the two facilities is evident from the information provided in the Belleayre Resort DEIS. According to the Belleayre Resort DEIS, the ski center needs the Belleayre Resort in order to house its skiers. The DEIS states that

the Ski Center provides over 170 acres of skiable terrain. Existing trails total 17.5 miles, thus providing an additional 7.5 miles of trails within the constitutional 25-mile limit that could be built....Between 1998 and 2002 there has been an increase in skier visits of almost 100% from a low of approximately 74,000 to a high of 142,000. Management of the Ski Center aims over the next few seasons to attract 200,000 to 225,000 skier visits. The Lodging Bureau of the Ski Center estimates that there is a current shortfall of 500 hotel rooms to accommodate the present volumes and the shortfall will rise to 1,000 hotel rooms when current skier targets are achieved.<sup>135</sup>

The DEIS also states that the Belleayre Resort is being built in reliance on the ski center, "[a] strong public-private partnership is at the core of the project sponsor's Vision Statement: an opportunity to assist the State of New York in realizing its original dream of the Belleayre Mountain Ski Center as a major contributor to the economy of the region and the State."<sup>136</sup> The DEIS goes on to explain:

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<sup>131</sup> *Id.*

<sup>132</sup> *Id.* at 66.

<sup>133</sup> *Id.* at 71.

<sup>134</sup> *Id.* at 69.

<sup>135</sup> DEIS at 1-7.

<sup>136</sup> DEIS at iii.

The proposed Belleayre Resort, is in a highly favorable position to take advantage of the overnight accommodation and seasonal housing demand that the Belleayre Mountain Ski Center generates. This will only increase as NYSDEC's long range plans for the ski center area is carried out. On at least a winter's basis, Belleayre region visitors and skiers will have significant new real estate ownership opportunities and 400 new hotel type rooms from which to select, all of which are located in close proximity to the ski area facilities.<sup>137</sup>

These sections from the DEIS are illustrative of the interdependence between the two projects. The ski center expansion will create the need for housing and the Belleayre Resort has anticipated this need and will provide the housing in order to accommodate the ski mountain. It is reasonable to conclude that the long-range plan of the proposed resort is dependent on the ski center expansion because according to the DEIS, the Belleayre Resort has been "designed, to a large extent, as a residential facility that aims to capture much of the regions' existing demand for seasonal residences, particularly those generated by the adjacent Belleayre Mountain Ski Center."<sup>138</sup> The evidence in the DEIS of interdependence and a long range plan is substantive proof of impermissible segmentation.

Consideration of the additional factors of time and location also support the finding that these projects have been improperly segmented. The expansion of the ski center and the proposed resort are similar in time because construction for both is planned consecutively for the next five to eight years. *In the Matter of City of Buffalo v. New York State Department of Environmental Conservation*,<sup>139</sup> the court found that projects need not be constructed at the same time; they can be built in sequence and it is only important that their environmental effects are so interlinked that the projects must be considered at the same time.<sup>140</sup> The proposed resort is to be constructed on both sides of the ski mountain, therefore, any ski center expansion will have a direct effect on the proposed resort construction and shared impacts.

The interdependence of the projects and DEC's ultimate control of both prompts the preparation of a supplemental EIS that addresses their shared impacts. Although DEC issued a negative declaration finding that the ski center expansion would not cause a significant environmental impact, this decision was made without the proposed combined impacts from the Belleayre Resort and these projects together will result in undeniable environmental impacts.

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<sup>137</sup> *Id.* at 7-10.

<sup>138</sup> *Id.* at 7-2.

<sup>139</sup> *In the Matter of City of Buffalo v. New York State Department of Conservation*, 707 N.Y.S.2d 606, 611 (2000).

<sup>140</sup> *Id.* at 611.

In *Winston v. Jorling*,<sup>141</sup> the State of New York Freshwater Appeals Board found that although a negative declaration had been issued for demapping wetlands and a DEIS had been prepared for the development of the wetlands, the project had been improperly segmented and therefore DEC had the responsibility to review the existing EIS, and issue a supplemental EIS in compliance with SEQRA.<sup>142</sup> To hold otherwise, according to the board, “would be to say that any agency could relieve itself of its SEQRA obligations by racing to be the first to issue a negative declaration.”<sup>143</sup>

## Cumulative Impacts

In addition, the Belleayre Resort DEIS failed to consider the cumulative impacts of the combined traffic of the two projects. According to SEQRA, a DEIS may be flexible but has to contain “reasonably related short-term and long-term impacts, cumulative impacts and other associated environmental impacts.”<sup>144</sup> DEC has an independent obligation pursuant to ECL 3-0301(1)(b) to consider such cumulative impacts. The court in *In the Matter of Save the Pine Bush v. City of Albany*<sup>145</sup> explained that, “where there is really but one plan for the development of a single area of special environmental significance, the accurate ecological/social/economic balancing of costs and benefits mandated under SEQRA requires that the cumulative effects of all actions within the plan for that area be weighed.”<sup>146</sup> The ski mountain expansion is a plan that is going to be constructed at the same time and in same area as the Belleayre resort and therefore the combination of these projects must be addressed together.

The traffic analysis in the DEIS should have included the expected Belleayre Mountain Ski Center Expansion; the failure to do so understated the expected traffic loading for the Belleayre Resort. The traffic pattern analysis for the Belleayre Resort was divided into a winter period and a fall period to analyze the conditions during the peak ski season and proposed golf season respectively. Traffic data to represent the winter conditions was collected during Martin Luther King Junior holiday weekend, on Saturday, January 15, 2000 from 8:00 AM to 10:00 AM, 11:00AM to 1:00 PM, and from 3:30 PM to 5:30 PM at most of the study area intersections.<sup>147</sup> This period represented the worst-case holiday weekend traffic during the winter.<sup>148</sup> Traffic data for the fall was collected during the Columbus Day holiday weekend on Friday, October 13, 2000 from 5:00PM to 8:00 PM and on Sunday, October 15, 2000 from 4:00 PM to 7:00 PM.<sup>149</sup> Due to travel in the project corridor to and from the Fall Festival and Craft Fair at the Belleayre Mountain Ski Center on this weekend, the data represented the worst-case

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<sup>141</sup> *Winston v. Jorling*, 1991 N.Y. Env Lexis 94 (1991).

<sup>142</sup> *Id.* at 11.

<sup>143</sup> *Id.* at 10.

<sup>144</sup> 6 N.Y.C.R.R. §617.9 (b)(5)(a).

<sup>145</sup> *In the Matter of Save the Pine Bush v. City of Albany*, 70 N.Y.2d 193, 206 (1987).

<sup>146</sup> *Id.* at 206.

<sup>147</sup> See DEIS at 3-120.

<sup>148</sup> See *id.*

<sup>149</sup> See *id.*

weekend traffic conditions for the fall.<sup>150</sup> The problem with this data is that it does not take into account the planned expansion at the Belleayre Mountain Ski Center.

Belleayre Mountain Ski Center is limited to up to 25 miles of ski trails with trail widths up to 200 feet permitted by an amendment to Article XIV of the New York State Constitution. Existing trails total 17.5 miles, thus providing an additional 7.5 miles of trails within the constitutional 25-mile limit that could be built. The traffic data gathered does not take into account the effect that the remaining trail construction and subsequent operation and use will have on traffic patterns. The Belleayre Resort DEIS specifically states that “[t]he Belleayre Mountain Ski Center has a major impact on traffic volumes as evidenced by the fact that the highest peak hour volumes on NY Route 28 occur on winter weekends.”<sup>151</sup> It also indicates that “50 percent of the peak hour trips generated by the proposed resort during the winter will be shared trips with the Belleayre Mountain Ski Center.”<sup>152</sup>

Although the traffic volume analysis for the resort is based directly on the existing and projected traffic volumes generated by the ski mountain, the DEIS fails to address the projected construction of the remaining 7.5 miles of trails. Figure 1-7 “Belleayre Mountain Ski Attendance 1987-2002” illustrates visitation trends and annual skier visits fall within the range of 75,000 to 142,000 skiers per season.<sup>153</sup> However, the DEIS indicates, “[m]anagement of the Ski Center aims over the next few seasons to attract 200,000 to 225,000 skier visits.”<sup>154</sup> One can only assume this dramatic predicted increase in visitation is due to the cumulative impacts of the expected construction of 7.5 miles of trails and the proposed Belleayre Resort. This drastic increase for estimated visitors caused by the cumulative impact of the expanded trails and the proposed resort is not indicated in the traffic analysis and its absence is evidence of a failure to perform the necessary cumulative impact analysis required under SEQRA.

## Alternatives Analysis

SEQRA mandates that agencies shall “choose alternatives which, consistent with social, economic and other essential considerations, to the maximum extent practicable, minimize or avoid adverse environmental effects, including effects revealed in the environmental impact process.”<sup>155</sup> The statute also requires that an EIS include a “detailed statement” setting forth “alternatives to the proposed action,” to aid in making the “decision whether or not to undertake or approve ... [an] action.”<sup>156</sup> To do this, the EIS “shall describe the proposed action and reasonable alternatives to the action.”<sup>157</sup> It must include “a description and evaluation of the range of reasonable alternatives to the

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<sup>150</sup> *See id.*

<sup>151</sup> *Id.* at 3-131.

<sup>152</sup> *Id.*

<sup>153</sup> *See id.* at 1-7.

<sup>154</sup> *Id.*

<sup>155</sup> ECL § 8-0109(1).

<sup>156</sup> *Id.* § 8-0109(2).

<sup>157</sup> *Id.* § 8-0109(4).

action that are feasible, considering the objectives and capabilities of the project sponsor.”<sup>158</sup>

The DEIS is unacceptable for three overarching reasons:

- 1) the range of alternatives discussed is inadequate;
- 2) the level of detail of discussion of those alternatives actually considered is insufficient; and
- 3) the discussion does not include a no-build, no-action alternative.

Detailed comments on the variety of deficiencies in the DEIS alternatives analysis are attached as **Appendix 3** (Cashin Associates report prepared on behalf of Riverkeeper, Inc.) and incorporated in full. What follows below are additional comments on the alternatives section.

### *The Range of Alternatives Considered is Inadequate*

Under SEQRA, the lead agency’s ultimate findings must “certify that consistent with social, economic, and other essential considerations from among the reasonable alternatives available, the action is one that avoids or minimizes adverse environmental impacts to the maximum extent practicable.”<sup>159</sup> Accordingly, “[i]t is not necessary that every possible alternative be thoroughly explored. The only requirement is that information permitting a reasoned choice be considered.”<sup>160</sup> Also, “[t]he purpose of requiring inclusion of reasonable alternatives to a proposed project is to aid the public and governmental bodies in assessing the relative costs and benefits of the proposal. To be meaningful, such an assessment must be based on an awareness of all reasonable options other than the proposed action.”<sup>161</sup>

However, the alternatives considered in the DEIS are merely permutations of the same proposed project, quickly dismissed, and is not a detailed discussion of a “reasonable range” of alternatives necessary for informed decision-making with the goal of minimizing environmental impacts. The pages dedicated to the discussion of alternatives, which is at the heart of the SEQRA mandate to mitigate adverse environmental impacts through reasoned and informed decision-making, do not satisfy SEQRA’s requirements regarding alternatives. Indeed, the bulk of pages actually devoted to “alternatives” discuss alternative technologies for stormwater management, golf course maintenance and the like, as well as alternative sites for access and water supply. Relatively little space is spent on projects of alternative scale or magnitude and

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<sup>158</sup> 6 N.Y.C.R.R. §617.9(b)(5)(v).

<sup>159</sup> *Id.* §617.11(d)(5).

<sup>160</sup> *Natural Resources Defense Council v. City of New York*, 446 N.Y.S.2d 871, 873 (Sup.Ct.N.Y.Co. 1982).

<sup>161</sup> *Webster Assocs. v. Town of Webster*, 59 N.Y.2d 220, 228 (1983).

none, in fact, on variations of scale or magnitude other than adding or subtracting elements of the full-scale proposal.<sup>162</sup>

The scoping document specifies that among the categories of alternatives to be considered in the DEIS are “Alternative Layouts.” In particular, the scoping document states, “[d]esign alternatives considered shall include a discussion of a different mix of resort components and various layouts of the selected components including golf facilities.”<sup>163</sup> Unfortunately, beyond quick consideration and dismissal of the one golf course / one hotel option, the DEIS largely fails to consider smaller versions of the project, but instead focuses only on moving desired pieces around under the auspices of “Alternative Layouts.”

At the outset of the Alternative Layouts section, the applicant first attempts to discount the contention that the project site, particularly the Big Indian Plateau portion of the site, is unsuitable for golf course development.<sup>164</sup> In citing several examples of other courses around the country at high elevations, the DEIS focuses only on the ability of such elevations to support the turf quality necessary for successful golf courses, and blithely concludes on this basis that “from an alternatives standpoint, golf course development on Big Indian Plateau certainly is a viable alternative use of this portion of the project site.”<sup>165</sup> There is no discussion here of the natural resource impacts of constructing, and then maintaining, multiple 18-hole courses on mountainsides, which was clearly the point of concern expressed earlier in the SEQRA process.

The DEIS then recounts adjustments made to the resort configuration over time, including movement of a few holes of the planned golf courses, the supposed ‘greening’ of the Big Indian Resort to address visual impacts, and the consolidation of three buildings at Wildacres to one large building. There is also mention of the elimination of some 100-odd lodging units since the 1999 proposal.<sup>166</sup> This almost superfluous recollection of a handful of past alterations includes nothing about smaller alternative layouts, and in fact contributes almost nothing to a useful discussion of alternatives in general.

Even if the analysis of the one course/one hotel options were sufficient with regard to that specific alternative – and it clearly is not, as discussed below – there remains a glaring lack of consideration of smaller alternatives, rendering the range of alternatives considered inadequate. That the scoping document specifically required consideration of a one golf course/one hotel option does not absolve the applicant from considering a full range of alternatives, including those of a smaller scale or magnitude. For example, there is no analysis of smaller sized hotels or nine-hole golf courses, although there is even discussion as an alternative of an even *larger* plan – four eighteen

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<sup>162</sup> SEQRA lists “scale or magnitude” as a criteria for establishing an appropriate range of alternatives. 6 N.Y.C.R.R. §619.5((v)(c).

<sup>163</sup> Scoping Document §5.3.

<sup>164</sup> See DEIS at 5-3.

<sup>165</sup> *Id.* at 5-4.

<sup>166</sup> See *id.* at 5-5 to 5-6.

hole golf courses – than that proposed.<sup>167</sup> In the subsection on “Limitations Affecting Alternatives” (which was required by the scoping document),<sup>168</sup> the DEIS merely asserts that the two 18-hole courses can only be built on separate sides of the site due to slope constraints.<sup>169</sup> There is nothing at all said – in this section or elsewhere – about the natural resource limitations rendering the desired plan unsuitable for the site, with accompanying discussion of a project on a smaller scale to more appropriately fit the site. In other words, the applicant is committed to fitting the site to the proposed project, rather than the other way around.

*The Detail of Discussion of Alternatives is Insufficient*

SEQRA specifies that “[t]he description and evaluation of each alternative should be at a level of detail sufficient to permit a comparative assessment of the alternatives discussed.”<sup>170</sup> “The degree of detail with which each alternative must be discussed will, of course, vary with the circumstances and nature of each proposal.”<sup>171</sup> In this case, the proposed project is massive, with a litany of potentially severe impacts, as evidenced by a 7,000-page DEIS.

The scoping document specifically required that the alternative layouts to be considered include those “that consists [sic] of one golf course and one hotel complex. This discussion shall examine such an alternative in both the ‘east’ and ‘west’ areas of the project and separation of these two project elements by ‘east’ versus ‘west’ locations.”<sup>172</sup> The discussion contained in consideration of these options in the DEIS focuses on the economic viability of the options, and ignores potential benefits.

First, the option of locating one golf course and one hotel so that each was on a separate side of the site was summarily dismissed as “not practical” and “not provid[ing] a desirable product.”<sup>173</sup> The applicant contends such an option “is contrary to the major objective of the project,” to create a four-season destination resort, and would deny guests a “sense of place.”<sup>174</sup> Putting aside the dubiousness of this objective to begin with, merely stating here that housing and golf courses are often “combined” so that guests would be dismayed if they weren’t so, hardly suffices as a detailed discussion.

With regard to the option of placing one golf course and one hotel on either the eastern or western side of the site, the applicant touts its “extensive investment” in site design and construction planning which “already minimize or avoid environmental impacts,” thus supposedly obviating the need to pursue an option with far less physical

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<sup>167</sup> See *id.* at 5-13 to 5-14.

<sup>168</sup> See Scoping Document §5.3

<sup>169</sup> See DEIS at 5-13.

<sup>170</sup> 6 N.Y.C.R.R. §617.9(b)(5)(v).

<sup>171</sup> *Webster*, 59 N.Y.2d at 228.

<sup>172</sup> Scoping Document §5.3.

<sup>173</sup> DEIS at 5-6.

<sup>174</sup> *Id.*



impact.<sup>175</sup> Having stated this, the applicant devotes the remaining pages of discussion on this option relating market and financial analysis showing only a fully built-out resort as a viable option.

The market analysis suggests that a successful resort in the Catskills must appeal across the socioeconomic spectrum, requiring both a 3½-star and 5-star hotel.<sup>176</sup> This conclusion appears to ignore a “4-star” option that could appeal to a broader segment, or perhaps a hybrid hotel wherein both luxury and family accommodations are available. Surely not every resort in the country has two separate offerings for potential guests, yet they likely attempt to attract a variety of visitors.

The market analysis cited similarly indicates that two distinct golf courses are required to attract an appropriate assortment of golfers.<sup>177</sup> At the outset, this analysis seems to contradict itself, by first stating the NYC metropolitan area is underserved by golf courses (necessitating two unique courses here), and then immediately stating nearby competing resorts have two or more courses.<sup>178</sup> The analysis also follows circular reasoning and a self-fulfilling conclusion, stating essentially that without two golf courses the lodging in two hotels cannot be filled, and that two hotels filled with guests need two courses to accommodate all the players and to allow for “shot gun starts.”<sup>179</sup> And, as with the one hotel discussion, the argument that two golf courses are critical to attract visitors from across the socioeconomic spectrum ignores the possibility of one course that could appeal to all – as is presumably done at golf facilities across the country with just one course.<sup>180</sup>

Following this “analysis,” the DEIS then reiterates its conclusion that “based on the extensive investment in design details and mitigation measures...the need for further consideration of the *East or West Alternative* has not been established.”<sup>181</sup> In other words, the applicant contends that because it has spent so much on the design of its preferred plan, there is no need at all to review the natural resource benefits of an option half the size of the one envisioned.

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<sup>175</sup> *Id.*

<sup>176</sup> *See id.* at 5-7.

<sup>177</sup> *See id.* at 5-8 to 5-9.

<sup>178</sup> *See id.* at 5-8.

<sup>179</sup> *See id.* at 5-8 to 5-9.

<sup>180</sup> In fact, a cursory survey revealed several examples just in the Northeast. Villa Roma is a resort in Sullivan County, NY with one golf course and a hotel with a variety of accommodation ‘levels’. *See* <http://www.villaroma.com>. Snowshoe Mountain, WV, a ski area similarly sized to Belleayre, has one golf course. *See* <http://www.snowshoemtn.com>. Killington and Okemo are both long-successful Vermont resorts with multiple hotels but just one golf course each. *See* <http://www.killington.com> and <http://www.okemo.com>.

<sup>181</sup> DEIS at 5-13.

*The Discussion Does Not Include a No-Build, No-Action Alternative, or a Future No-Action Discussion*

SEQRA specifies, “[t]he range of alternatives must include the no action alternative.”<sup>182</sup> There are two theories of what constitutes no action; it either means no construction at all or construction only of what is authorized by zoning and prior approvals.<sup>183</sup> The DEIS does consider the latter type of no-action alternative.<sup>184</sup> However, “[f]or private actions, the law is unsettled, and a prudent project proponent may wish to describe both the no build and as-of-right alternatives.”<sup>185</sup> The no build no-action alternative should be analyzed to form a full range of alternatives. “It is readily apparent that the no action alternative is not a reasonable objective of a private project sponsor. Yet, the effects of the no action or no-build alternative are important for assessing the severity of environmental impacts as well as for evaluating social, economic, and other essential considerations.”<sup>186</sup>

In addition, the regulations state that “[t]he no action alternative discussion should evaluate the adverse or beneficial site changes that are likely to occur in the reasonably foreseeable future, in the absence of the proposed action.”<sup>187</sup> This means the “EIS preparer must consider the capability of a site to environmentally improve, recover, or allow for restoration and remediation in the absence of the proposed project.”<sup>188</sup> Indeed, the scoping document explicitly states, “[t]he no action alternative shall describe impacts of leaving the lands in their present state.”<sup>189</sup> Nevertheless, the applicant has failed to include an analysis of the resource benefits for a no build alternative in its discussion. The DEIS instead asserts the lands would either continue to be logged, or be sold for numerous smaller piecemeal developments, and would not be protected by the development restrictions of the proposed project.<sup>190</sup> None of these are a true no-build, no action alternative.

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<sup>182</sup> 6 N.Y.C.R.R. §617.9(b)(5)(v).

<sup>183</sup> See Gerrard, Ruzow and Weinberg, *Environmental Impact Review in New York*, Matthew Bender (1995) at 5-148.4 [hereinafter *Environmental Impact Review in New York*].

<sup>184</sup> The DEIS addresses the ‘as of right’ alternative in the ‘Alternative Uses’ subsection, concluding that zoning would permit a 445-lot subdivision, the maximum allowable as-of-right possibility. DEIS at 5-2.

<sup>185</sup> *Environmental Impact Review in New York*, supra note 183, at 5-148.5.

<sup>186</sup> *Id.* (quoting Environmental Impact Assessment Committee, Environmental Law Section, N.Y. St. Bar Ass’n, *Comments of Proposed Revisions to SEQRA Regulations*, 6 NYCRR Part 617, May 17, 1985, at 64-5).

<sup>187</sup> 6 N.Y.C.R.R. §617.9(b)(5)(v).

<sup>188</sup> *Environmental Impact Review in New York*, supra note 183, at 5-148.7.

<sup>189</sup> Scoping Document §5.9.

<sup>190</sup> See DEIS at 5-55.

## **LIST OF APPENDICES**

Appendix 1 – Comments prepared by Carpenter Environmental Associates, Inc. (CEA) on behalf of Riverkeeper, Inc. (April 20, 2004).

Appendix 2 – Comments prepared by Jannette M. Barth, Ph.D., J.M. Barth & Associates, Inc. on behalf of Riverkeeper, Inc. (April 19, 2004).

Appendix 3 – Comments prepared by Cashin Associates, P.C., on behalf of Riverkeeper, Inc. (April 21, 2004).