## 3.1.4 Geology, Soils, and Topography Comments and Responses

<u>Comment 3.1-1 (Letter 2, Luiz C. Aragon, Commissioner, Sullivan County, Planning and</u> <u>Environmental Management, June 16, 2010)</u>: Some of the proposed lots are entirely covered by steep slopes, which will cause erosion and storm water concerns throughout the site. Steep slopes, like wetlands, should be preserved and removed from development areas.

**Response 3.1-1:** The Master Plan has been revised to include additional protection of steep slopes. The road layout has been adjusted in numerous places to avoid extensive disturbance of such slopes and lots are adjusted to avoid slopes at the front of the lot where the house would be located. Overall, steep slope disturbance has been reduced to approximately 12.4 acres (compared to 14.99 acres in the DEIS plan) by the fully built project.

**Comment 3.1-2 (Letter 3, John W. Petronella, Environmental Analyst, New York State Department of Environmental Conservation, July 1, 2010):** Based upon review of the preferred alternative Site Master Plan (SMP) Figure 2.5 and the DEIS, approximately 15 acres of steep slopes (greater than 25%) will be graded to allow for residential lots, road infrastructure, golf course and stormwater structures. On a site in excess of 2,000 acres, impacts to steep slopes (greater than 25%) can be avoided while still allowing for a substantial development. While it is indicated that impacts to steep slopes are directly related to the potential for soil erosion, additional potential impacts could result from their alteration that were not discussed. These include impacts to vernal pools and wetland hydraulics, impacts to species that utilize higher ground for perches during hunting (e.g.: Northern Goshawk, Sharp-shinned Hawk and Red-shouldered Hawk, Bald Eagle). The Department recommends avoiding construction on slopes in excess of 25% to a much greater degree than currently proposed.

**Response 3.1-2:** The Master Plan has been revised to include additional protection of steep slopes. As the steep slope areas naturally occur toward the base of slopes, rather than at the higher elevations of the site, these revisions will benefit the natural hydraulics of the nearby lowland/wetland areas. In particular, the revised plan preserves some 2.02 acres of steep slopes within an area of contiguous undisturbed green space on the western side of the property upgradient from wetlands U and T-C (both with vernal pool habitats), and approximately 10.26 acres of additional undisturbed land in steep slopes along the eastern side of large wetland ABD in the center of the property. As with the original DEIS plan, the new layout of roads and lots is designed to follow the contours of the land as much as possible thereby avoiding significant disturbance to the largest steep sloped areas.

Lost Lake Resort FEIS
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