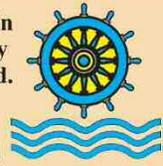




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Recent Mining and Grading Activity on the 850 Route 28 Property Leading to Degradation of Hydrologic & Biologic Resources Inclusive of Pickerel Pond

NYSDEC's Cease-and-Desist directive to Thomas Auringer dated November 5, 2021 is fully warranted. Issuance of this directive followed site inspection on October 29, 2021. 16.3-acre Pickerel Pond, a shining gem within New York State owned Bluestone Wild Forest, has been hydrologically beheaded from Praymaher Brook. Its waters and surrounding trails are used for fishing, bird and turtle watching, hiking, and bicycling. Auringer has constructed a massive dam against the downstream outlet of Pickerel Pond that will adversely impact its water depths, biologic integrity and pristine ecosystem if not removed soon - preferably prior to spring breeding periods of reptiles and amphibians.

Downstream of Pickerel Pond, 850 Route 28 site mining and grading activities have resulted in entrainment of fine particulates in a series of man-made ponds that comprise the headwaters of Praymaher Brook. These particulates have polluted Praymaher Brook, have reduced water clarity to that of chocolate milk, and threaten species health and diversity due to siltation of the channel invert (bottom). In addition, NYSDEC personnel report a hydrocarbon slick on one of the ponds. As documented by NYSDEC and within this letter, Auringer has conducted a massive mining operation on the 850 Route 28 site, complete with loose rock removal, crushing, and grading. His unpermitted actions of blocking surface water flow in a 103-acre headwater region of Praymaher Brook, constructing a dam that will adversely impact Pickerel Pond and waters of New York State, and placing large quantities of fill in a stream speak volumes regarding potential adverse environmental impacts should future site work be approved. Site activities pose a direct threat to biologic, hydrologic, and historic cultural resources.

This letter bolsters NYSDEC's site findings, provides additional photographic documentation of site conditions, and provides a number of professional recommendations. Furthermore, it provides hydrologic discussion beyond that provided to the Town of Kingston Planning Board in the HydroQuest letter dated July 1, 2021 (*RE: 850 Route 28 - Pubic Hearing Documents and Mining Impact Comments*). This letter and related material may be readily viewed by pressing the horse and wagon tab (top right) on the first HydroQuest web page found at: <http://hydroquest.com>.

The 850 Route 28 Auringer property was last mined for bluestone in the 1970s. On August 10, 2021 Tom Auringer proposed (via email) processing approximately 3,500 cubic yards of loose shot rock currently on the property in aid of expanding an existing contractor's yard. The proposal letter did not address the major discrepancy or compatibility between Auringer's proposed large-scale cement and steel fabrication facility currently under SEQRA review and the newly proposed equipment storage land use, nor did it withdraw the proposed fabrication facility application. On October 4, 2021 the New York State Department of Environmental Conservation (NYSDEC) issued a response letter acknowledging that processed material would remain on site and would be used for leveling to accommodate safe storage area working conditions. NYSDEC recognized the large discrepancy in stated land use under SEQRA review versus expansion of a contractor's yard, clearly deferring to local Town approval relative to site activities. Importantly, the NYSDEC letter did not grant permission for stream disturbance, water quality degradation, or dam construction abutting the outlet of Pickerel Pond. NYSDEC stated:

*“A facility with onsite crushing, **local approval**, and no mineral or overburden entering or leaving the site does not require a permit pursuant to the Mined Land Reclamation Law. If the conditions stated in your inquiry change, **we would need to reevaluate the need for this permit.** (emphasis added) ... The Department is aware that there is a current proposal associated with this site that has recently received a SEQR Positive Declaration requiring the preparation of a Draft Environmental Impact Statement (DEIS). Pursuant to SEQR regulations, no agency involved in an action may undertake, fund or approve the action until it has complied with the provisions of SEQR. In addition, a project sponsor may not commence any physical alteration related to an action until the provisions of SEQR have been complied with.”*

Drone photography of the site area, conducted from a land base outside the 850 Route 28 property, documented what appeared to be a large-scale mining operation within, throughout, and possibly extending beyond the 1970s 6.9-acre mine footprint depicted on the attached GIS map. Comparative imagery analysis can be used to ascertain whether or not recent site rock processing has extended beyond and above the floor area of the 1970s quarry area, especially in the bedrock promontory area situated 350 feet northwest of the 0.4-acre mound depicted on the GIS map. Figure 1 below depicts extensive site mining activity on September 30, 2021. Substantial additional mining and grading-related activity occurred after this date, apparently ending by early November 2021.

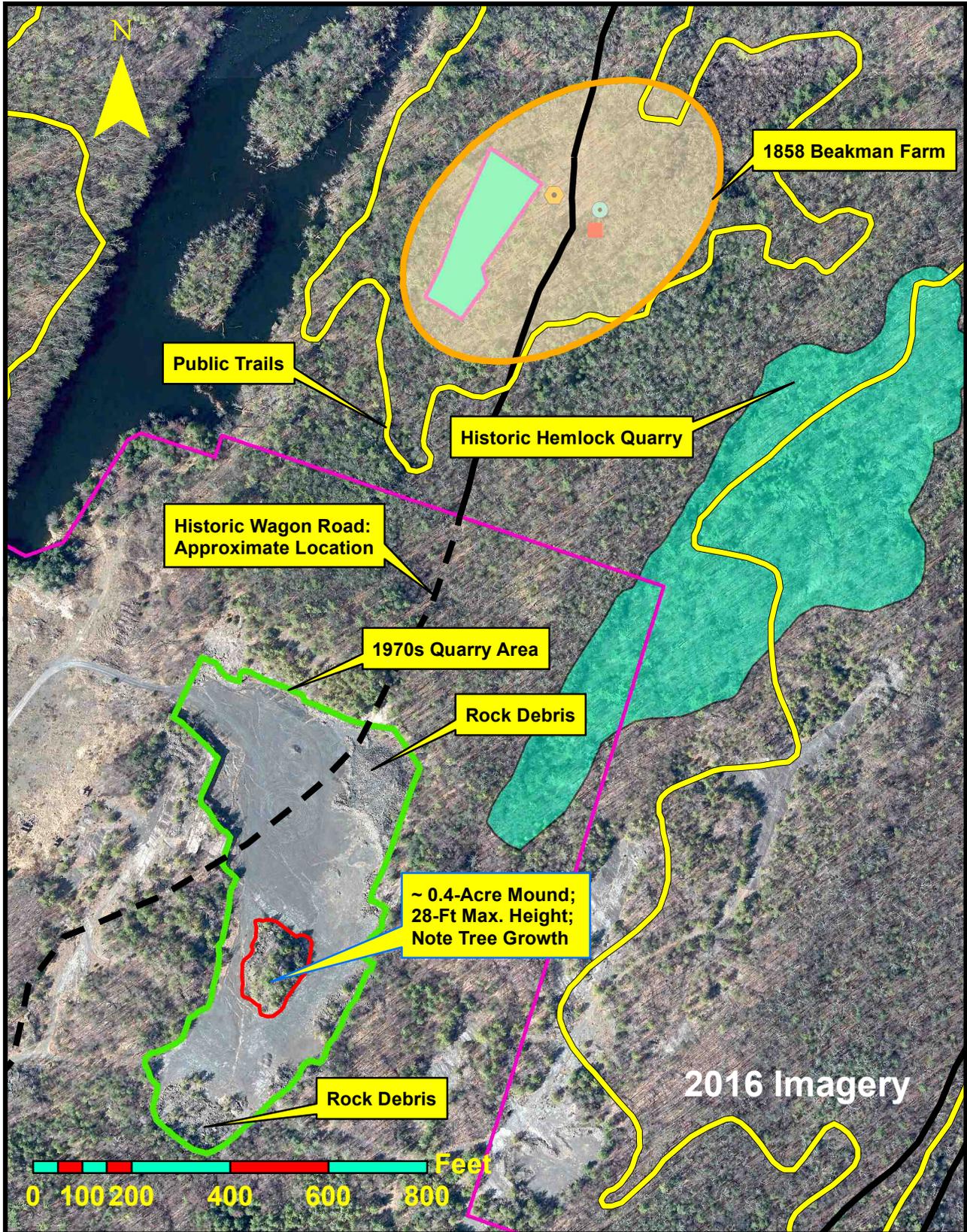




Figure 1. Expansive mining operation on the 850 Route 28 property on September 30, 2021. Recent mining activity extended approximately another 500 feet southwest of the quarry working area depicted above.

NYSDEC's October 4, 2021 letter indicates that rock processing to accommodate an expanded contractor's yard requires local approval by the Town of Kingston Planning Board (SEQRA lead agency). **This yard would have an areal extent some three times its 2020 size.** Such approval would be premature because the lead agency has not satisfied the provisions of SEQRA, inclusive of historic/archaeologic investigation and preservation. The:

“Office of Parks, Recreation and Historic Preservation (OPRHP) has determined that the Hemlock Historic Bluestone Quarry District (aka Historic Hemlock Quarry District) is eligible for the New York State and National Registers of Historic Places (11106.000034).” As stated in NYSDEC mine-related material, “... each application must be reviewed for possible impacts to historic or archaeological sites protected by the State Historic Preservation Act (SHPA).”

As seen on the attached GIS map with a photograph base, the historic Waughkonk Wagon Road extends to the quarry top to both the north and southwest. Potential damage to this resource, as well as the nearby historic Hemlock Quarry, stemming from additional site activity should be professionally assessed prior to granting approvals, permits, or variances of any kind.

The October 4, 2021 NYSDEC letter potentially provided for the processing of approximately 3,500 cubic yards of loose shot rock, assuming that required Town approvals had been satisfied. The approximately 0.4-acre mound some 28 feet high that is depicted on the attached GIS map and Figure 2 below has now been removed. Based on LiDAR-derived elevational data, its volume was on the order of 14,000 yds³, some four times the anticipated rock processing material.

Reference to the photograph below, the GIS map, and Figure 1 above shows that this mound volume pales when compared with the enormous mounds of newly processed and unprocessed material present throughout much of the 1970s quarry site. Clearly, processing activities far exceeded 3,500 yds³ of material thus triggering the need for NYSDEC and the Town of Kingston to reevaluate any existing or required permits and Town approval. On November 5, 2021 NYSDEC followed through and issued the Cease-and-Desist directive mentioned above.



Figure 2. Spring 2021 imagery depicting tree-covered quarry mound (yellow circle) prior to excavation. For size comparison, note that its size is much smaller than the partial quarry area depicted above on Figure 1. Note also, the former free-flowing stream outflow pathway of Pickerel Pond toward the upper left of the image. Figure 7 contrasts the Pickerel Pond outlet before and after recent dam construction.

The expansive volume of crushed material now on the quarry floor could potentially be used for quarry leveling and/or future removal and sale of graded, processed, mineral material. Processed bluestone has substantial market value.

Dam Construction at the Outlet of Pickerel Pond & Degradation of Praymaher Brook

NYSDEC's November 5, 2021 Cease-and-Desist directive letter to Thomas Auringer provides numerous excellent photographs and text supporting their site findings. HydroQuest's review of recent drone imagery also documents that unpermitted site activities (violations of Article 17 of the New York State Environmental Conservation Law) may significantly compromise species health within the Pickerel Pond ecosystem, as well as those along the outflow stream (Praymaher Brook) until its confluence with Englishmans Creek if not corrected in the near future. The continuous flow path of Praymaher Brook is illustrated on Figure 3 (next page) which is excerpted from the July 1, 2021 HydroQuest letter to the Town of Kingston Planning Board. Auringer's site activities have resulted in water quality degradation of Praymaher Brook from its headwaters at the Pickerel Pond Dam, through a number of man-made ponds (aka former sediment settling basins), and downstream into Praymaher Brook.

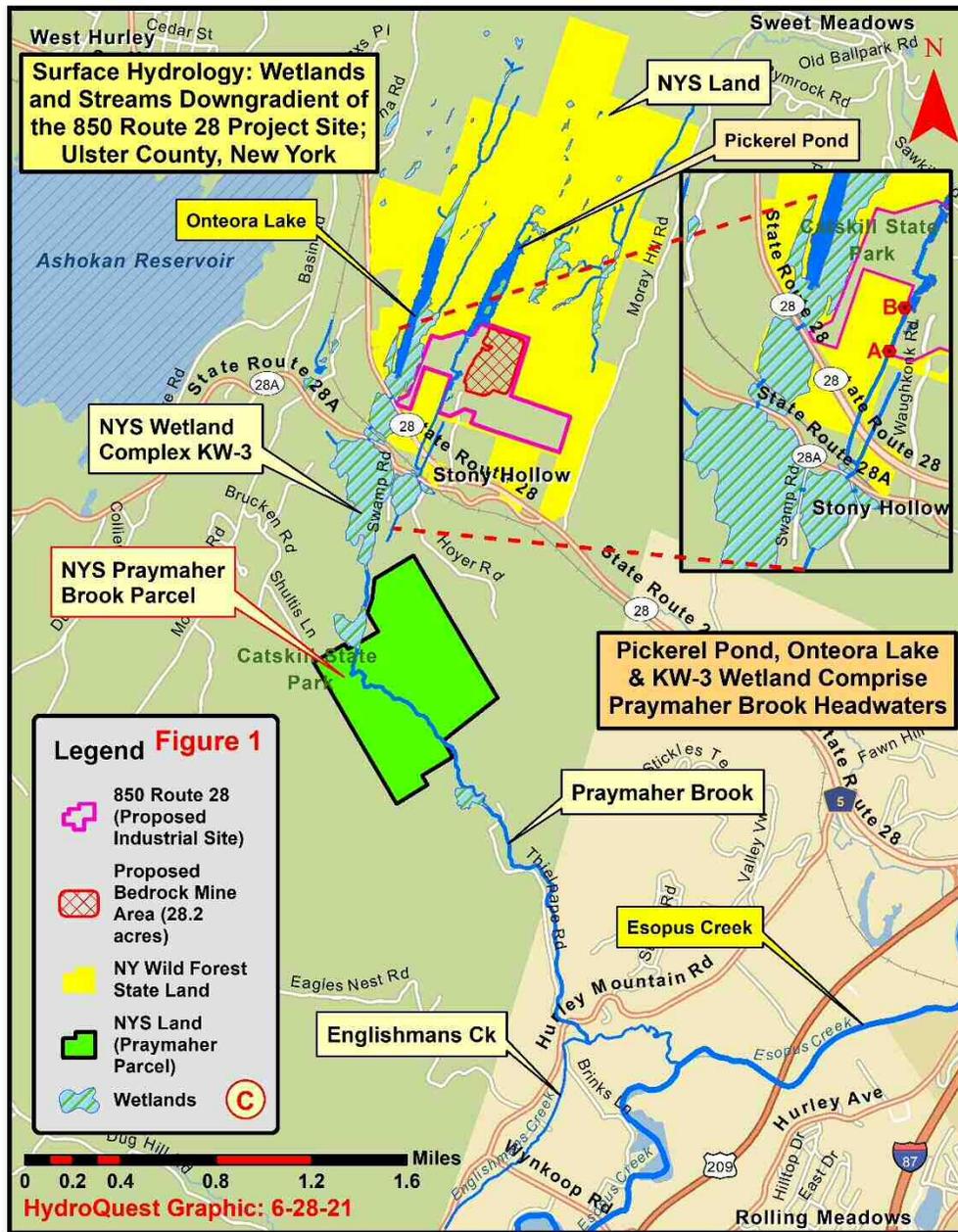


Figure 3. The flow path of Praymaher Brook extends southward from State-owned Ontario Lake and Pickerel Pond, through the State-owned Praymaher Brook Parcel, and downstream to its junction with Englishmans Creek.

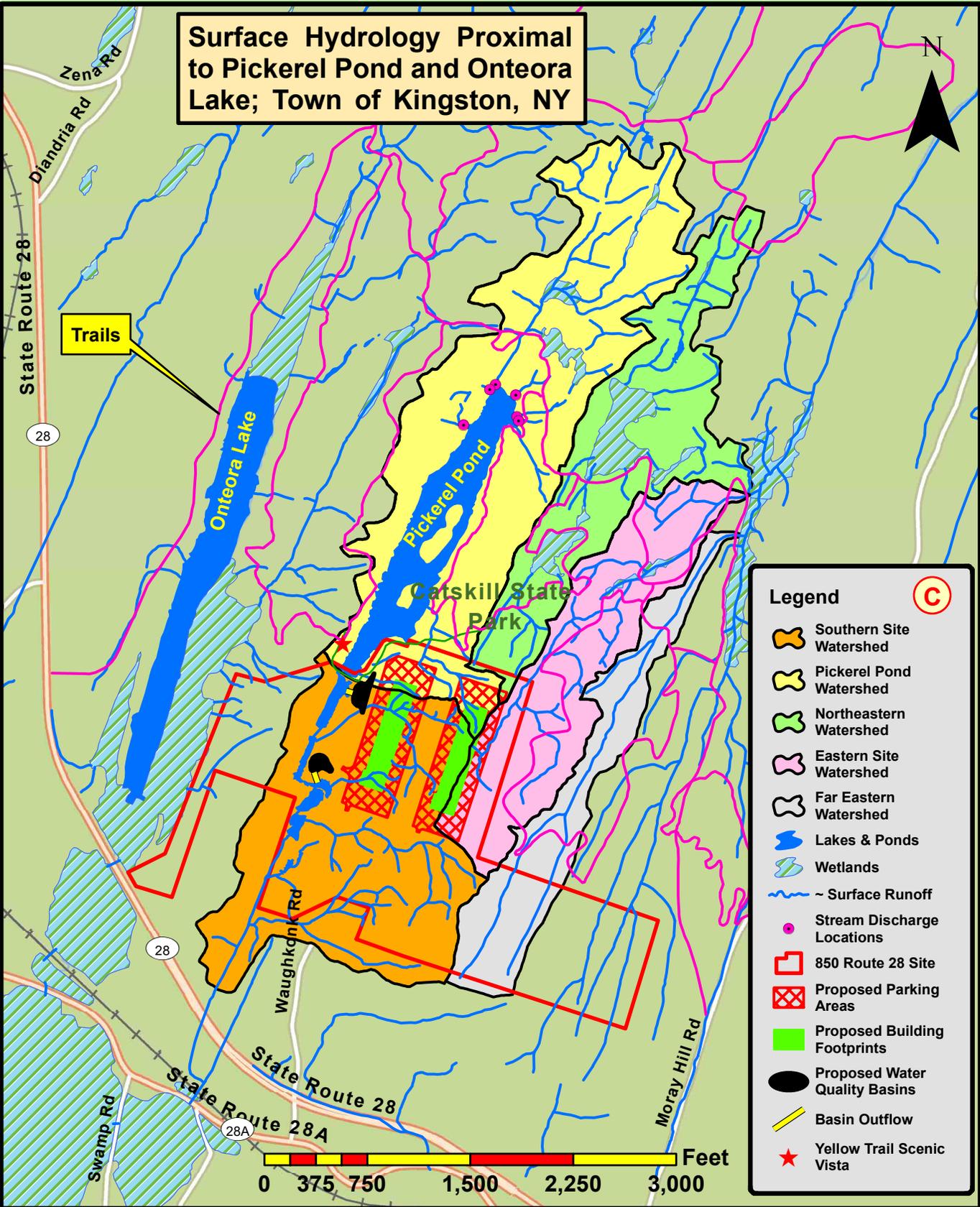
Fine quartz particulates stemming from quarry mining operations become entrained in surface water runoff and from direct grading into site ponds. Their small particle size and slow settling rates result in their staying in suspension for long periods of time (e.g., weeks or longer). The red ellipses on Figure 4 show highly turbid water in Pond B (bottom turbid pond) and downgradient (upper red ellipse) along the Praymaher Brook stream course. NYSDEC's Cease-and-Desist directive letter provides excellent photographs of turbid, sediment-laden, water in downstream ponds resulting from site mining and grading activities. Review of these photographs is instructive from



Figure 4. Sediment laden Pond B exhibits the uncontrolled release of fine particulates into Praymaher Brook.

the standpoint that they document the impractical nature of Auringer's two small proposed settling basins that are part of his active SEQRA bedrock mining and fabrication facility application. Proposed bedrock mining on the 850 Route 28 property to accommodate two huge fabrication buildings (Figure 5) has the potential of degrading Praymaher Brook and wetland water quality for years. Medenbach & Eggers (2-26-20; NYS Environmental Quality Review Act Environmental Assessment Form Addendum) state that these former settling ponds have been classified as federally-regulated wetlands. This is discussed in detail on pages 9 to 11 of the July 1, 2021 HydroQuest letter to the Town of Kingston Planning Board (*RE: 850 Route 28 – Public Hearing Documents and Mining Impact Comments*). Similarly, sediment accumulation or blanketing (i.e., siltation) on the invert (bottom) of Praymaher Brook may degrade aquatic and fishery habitat.

Surface Hydrology Proximal to Pickerel Pond and Onteora Lake; Town of Kingston, NY



Recent unpermitted 850 Route 28 site activities included construction of a wide dam (the “850 Dam”), approximately four feet in height, across the outlet of Pickerel Pond (Figures 6, 7 and 8). HydroQuest does not know if a culvert was installed beneath the dam material. If present, it would not facilitate the free passage of wildlife (e.g., beavers, muskrats).

For decades, Pickerel Pond has supported a healthy ecosystem brimming with birds, turtles, salamanders, fish and other wildlife. For example, a visit on November 21, 2021 included a conversation with a man fishing near the southwest end of Pickerel Pond. He caught and released three pickerels and one yellow perch over a short period of time. Auringer’s construction of a dam at the pond outlet may irreparably alter and harm the existing ecosystem. The yellow 103-acre Pickerel Pond Watershed tributary to this dam (Figure 5) is now beheaded from its downstream reaches of Praymaher Brook. The 850 Dam should be removed immediately before a significant rise in pond level occurs. On November 21, 2021 HydroQuest established a datum from which to monitor increases in pond level until the dam is removed and natural stream throughflow has been restored.

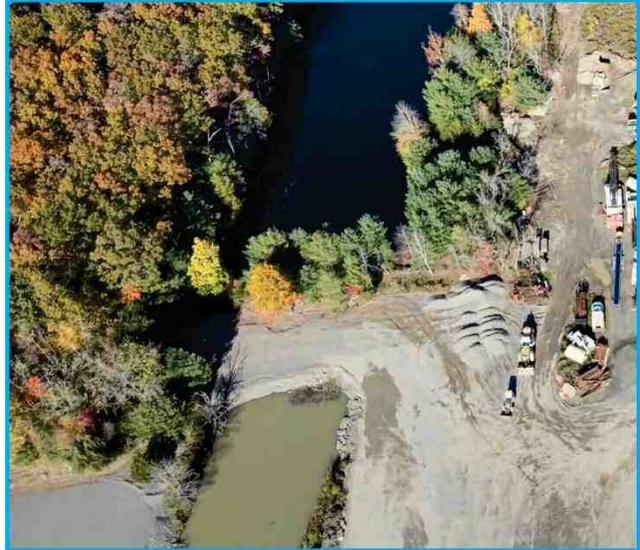


Figure 6. The 850 Dam now abuts Pickerel Pond and blocks its outflow.



Figure 7. Unpermitted dam construction and blockage of Pickerel Pond outflow within the headwaters of Praymaher Brook. The yellow polygon approximates a 0.3-acre fill zone. Drone imagery documents fill placement sometime between 9-30-21 and 11-05-21.



Figure 8. The left side photographs document the open conveyance of surface water through and out of Pickerel Pond along this headwater reach of Praymaher Brook in March 2020. The November 2021 photographs show the constructed 850 Dam that disrupts natural pond outflow and brook flow.

Review of recent drone imagery and newly released spring 2021 orthoimagery reveal significant mining-related infractions that extend well beyond the scope of what NYSDEC anticipated that Auringer would do as part of his processing of approximately 3,500 cubic yards of loose shot rock currently on the property in aid of expanding an existing contractor's yard. **The greatest environmental impacts associated with these actions relate to ecosystem and water quality integrity of Pickerel Pond and Praymaher Brook.** Examples of these site activities include:

- Construction of the wide 850 Dam situated at the southwestern end of 16.3-acre Pickerel Pond where headwater drainage of Praymaher Brook formerly flowed freely and a nearly constant pond elevation was maintained. The dam dimensions are estimated as four feet high with a width on the order of 70 feet (Figures 6, 7, and 8);
- Placement of a large quantity of fill near the southeastern corner of Pickerel Pond (Figure 7) that has the potential of degrading Pickerel Pond water quality during runoff events;
- Partial filling of the man-made pond (Pond B), situated immediately southwest of Pickerel Pond, primarily within its northeastern end (approximately 0.3-acres; Figure 7);
- Placement of fill alongside and into the western side of man-made Pond B immediately southwest of Pickerel Pond for a distance of approximately 400 feet (Figure 7);
- Placement of fill alongside and into the southeastern corner of man-made Pond B (Figure 7);
- Significant water quality degradation from entrainment of fine particulates and oil into a series of man-made ponds downgradient of Pickerel Pond, with discharge into Praymaher Brook (11-05-21 NYSDEC Cease-and-Desist letter, Figures 4, 6, and 7);
- Removal of a 0.4-acre, 28-foot high, rock mound formerly within the 1970s quarry area with a volume on the order of 14,000 yds³, some four times the anticipated rock processing material volume (GIS map and Figure 2); and
- Potential quarry expansion into the bedrock promontory situated some 350 feet northwest of the 0.4-acre rock mound formerly present in the 1970s quarry footprint (Figure 1).

New York State Natural Resource Protection and Site Restoration Considerations

At this time, construction activities at the 850 Route 28 site have jeopardized important New York State owned natural resources, ecosystems, and water quality. The most important environmental considerations relative to recent site activities are to:

- Protect and maintain the water quality and ecosystems of Pickerel Pond and Praymaher Brook; and
- Preserve the integrity of historic resources within the 850 Route 28 property.

Recommendations

Completely remove the 850 Dam placed at the outlet of Pickerel Pond and restore the natural flow route of this headwater reach of Praymaher Brook. This restoration work should be guided and supervised continuously by both a NYSDEC hydrologist and a NYSDEC biologist. This work should be completed prior to spring high runoff conditions and species breeding periods;

Remove the recent fill placed near the southeastern corner of Pickerel Pond or install a berm between the fill and Pickerel Pond to eliminate all risk of sediment transport/runoff into Pickerel Pond;

Based on observation that recent mining and grading activities on the 850 Route 28 site have degraded the water quality in numerous ponds and almost certainly Praymaher Brook, no additional mining, rock processing, or grading activity should be permitted on the site property;

Conduct no additional tree clearing or usage of heavy equipment on site areas that might compromise the integrity of historic cultural resources (e.g., Waughkonk Wagon Road, Hemlock Quarry);

Determine whether Auringer has withdrawn his fabrication facility plans and related SEQRA application and now replaced them with a new land use proposal. The intended land use of the property must be clarified and the appropriate permit requirements established prior to any further work taking place at the site; and

Do not accept or approve applications for any SPDES (e.g., GP-0-20-001) or other permits, or variances, until such time as OPRHP and NYSDEC acknowledge that the SEQRA process has been satisfactorily completed. Do not lift the Cease-and-Desist directive until the true future land use is clarified and, if still applicable, until the provisions of SEQRA have been complied with.

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