FrOGS Initial Concerns Regarding the Proposed Starkdale Project

FrOGS has significant concerns about the viability of the Starkdale Project, which includes a 100-room hotel, shops, duplexes, and single family homes, and opposes the outline of this project as it was publicly shared (prior to November 2024). These documents can be found at https://tinyurl.com/y5wzmjyw.
Our concerns are summarized as follows:

- **Threat to Water Quality.** The Great Swamp is designated a Class I wetland by New York State's Department of Environmental Conservation, has been a priority conservation project in the New York State Open Space Plan since 1992, and is both a Priority Wetland and an "Important Scarce and Vulnerable" Wetland under USFWS plans and acts. We believe that the Starkdale project holds a number of potential threats to the water quality of The Great Swamp with its alkaline pH, mineral-rich, nutrient-poor waters for the following reasons:
    - **Storm water.** During construction, surface runoff will flow into Burton Brook, The Great Swamp, through the Swamp River to the Ten Mile River, the Housatonic River, and Long Island Sound. There is significant risk of damage to these wetlands from silt and legacy farmland chemicals potentially released from the excavated surface soil.
    - **Wastewater.** A proposal of this size will produce a great deal of wastewater.
        - The sewage system will have to be extensive and be capable of preventing all nitrogenous waste, phosphates, and chemical agents (detergents) used in the proposed commercial buildings from entering The Great Swamp and the neighboring water supplies.
        - Sewage volumes may bring the Pawling sewage treatment facility to capacity.
        - Preventing release of untreated effluent directly into the Great Swamp during natural disasters, such as flooding, must be rigorously addressed, especially if the treatment facility is brought to near full capacity by the completed project.
        - Many pharmaceuticals excreted in urine and feces are not removed by wastewater treament plants and are a significant class of contaminants in freshwater ecosystems. Many of these drugs have negative impacts on the health of aquatic organisms and the environment. The project with its many hundreds of new residents and visitors will pose a significant added burden of pharmaceuticals to The Great Swamp wetlands with unknown consequences.
    - **Groundwater supplies.** A project of this size will demand a significant supply of water from local aquifers. The groundwater demands and aquifer capacity need to be carefully examined to ensure that use of water by the proposal does not affect the water table in the wetlands or the towns of Dover and Pawling, especially during a prolonged drought.

- **Negative consequences of turfgrass.** The expansive acreage of turfgrass may bring significant ecological damage from surface runoff of applied lawn chemicals and the loss of biodiversity that occurs when a turfgrass monoculture is installed.
    - Turfgrass reduces the diversity of plant life that supports a wide range of wildlife and contributes to a more resilient ecosystem.
    - Lawn fertilizers will runoff into the Great Swamp and potentially trigger harmful algal blooms.
    - The pesticides, herbicides, and fungicides, which are integral components of lawn treatments, can kill beneficial microorganisms, worms and insects that contribute to a healthy ecosystem.
    - Lawn chemicals pose a toxicologic threat to species outside the soil, such as pollinators, birds, bats, fish, amphibians and other wildlife as well as humans.

- **Threats to wildlife**. The disruption and destruction of habitats due to noise, heavy traffic, and air pollution during and after construction is a significant concern.
    - Potential blasting and the use of heavy equipment have the possibility of altering the movement of migratory birds and other wildlife species that use the area as a corridor to enter The Great Swamp. Thousands of migratory birds depend on the flora and fauna within The Great Swamp to refuel for their long journeys.
    - Light pollution created by the proposed buildings and street lighting may negatively affect the bird migrations. The applicant states that lighting installations will focus on Dark Sky compliance, but this falls short of a promise to comply with the most rigid dark sky practices specifying full cutoff above the horizontal plane for all fixtures, color temperatures that do not exceed 3000K lumens, and output that does not exceed 5500 lumens per residence.
    - Animals that reside within our adjacent Gordon Douglas Reserve have a great possibility of being affected during the construction process and the daily operations of the proposed buildings. The wildlife habitats includes but are not limited to rattlesnake habitat (a threatened species in New York State), black bear dens, bobcat dens, and New England cottontail rabbit habitat.

- **Threats from agriculture**:
    - A vineyard is proposed and viticulture typically involves heavy use of pesticides, herbicides, and fungicides. All these have the potential to runoff into The Great Swamp wetlands and cause harm to the many organisms that call this home. Organic alternatives are based on the insecticide spinosad which is banned in five states and has been shown to be more damaging to beneficial insects such as honey bees and butterflies than the chemicals it is intended to replace. A vineyard has great potential to destabilize the fragile ecosytems of The Great Swamp and we oppose any proposal that includes one.
    - There was no statement as to the intended farming practices. We oppose any plan that includes conventional farming practices that include chronic application of fertilizers and other chemicals.