

The Dover Town Clerk

June 29, 2009

126 East Duncan Hill Road

Dover Plains, NY 12522

To Supervisor Ryan Courtien

The Dover Town Board

The Dover Town Planning Board,

In the limited time allowed reviewing the four thousand plus pages of the Dover Knolls Draft Environmental Impact Statement several cultural and historical and current points are worth noting and their relevance to the proposed regional new urbanism development in regards to watershed planning, open space, agriculture and forestlands preservation.

The applicant has mentioned the possibility of watershed protection in the Appendices Chapter II C Water Treatment Report:

**“ 2. Watershed protection requirements**

The proposed project will include stormwater measures to capture and filter stormwater runoff from the development that will drain into the reservoir. The measures have been identified in the Stormwater Management Plan prepared for this project. Watershed rules and regulations will be established so as to notify the property owners who purchase land within the watershed of the importance of maintaining the land around the watershed. The New York State Public Health Law allows local water supply providers to initiate a process leading to enactment of watershed rules and regulations by the Commissioner of the State Health Department. These rules were first developed in the late 19th century to protect tributary streams and reservoirs used to supply drinking water. They were later applied to public well fields and adjacent aquifer areas. Most of the nearly 200 public supply systems that have adopted watershed rules did so prior to 1940.

Watershed Rules specify minimum linear setbacks for different uses. For example, many regulations prohibit the location of salt storage sites within 500 feet of public supply wells, reservoirs or tributary streams to reservoirs. Since 1972, setback standards

have been promoted for activities involving synthetic organic chemicals; however, for this class of contaminants, a minimum distance may not be effective because of their persistence and ability to effect large areas over extended periods of time. Water supply protection regulations should be customized to the particular hydrogeologic conditions existing at the public supply well field or reservoir; and that the concept of minimum

21

acceptable distance does not address the differences between types of potential contaminants such as pathogens and synthetic organic chemicals, nor the inherent characteristics of groundwater transport found in different geologic and hydrologic

situations. Watershed rules and regulations are unique in being the only controls specifically designed to protect public water supplies. These regulations are prepared jointly by the water purveyor and the NYSDOH local public health engineer. Enforcement responsibility rests with the water purveyor, the district and the NYSDOH health officer.”

A report from WJ Kiernan dated October 15, 1914 recognized the value of the forested slopes on the eastern portion of the site :

**"Harlem Prison Site"**

**State Commission of Prisons, Twentieth Annual Report, New York, 1914**

“Inspected October 15, 1914. W. J. Kiernan, Superintendent and Caretaker.

This site consists of four farms lying one mile south of Wingdale village in the eastern section of Dutchess County on the Harlem of the New York Central railroad.

These farms contain about 618 acres, about 200 of which are plow lands and the remainder pasture ranges and woods, the latter covering what was intended to be the watershed of the site. There are eight dwelling houses and each farm has a barn and other out buildings. One of the houses on the hill in the eastern section of the site was built of brick, the clay for which was taken from the site; this clay is said to be of good quality. The brick of this house, built (I was informed) more than 75 years ago, are still in good condition” reprinted from [www.harlemvalley.org](http://www.harlemvalley.org)

Since its inception first as the Wingdale Prison in 1912 and from 1924 -1994 as the Harlem Valley State Hospital the forested slopes to the east have been utilized as a watershed protection area. The proposed construction of roads and detached single family houses on the forested slopes would pose an adverse impact to the historical use as a watershed protection area. This historical record should be considered as a conservation strategy that has worked reasonably well for the water supply; periods of drought notwithstanding.

The DEIS mentions degradation of wetlands due to former extensive use of the site, that the construction of 4 acres of new wetlands will mitigate the degradation. The Clean Water Act requires that all surface waters of the United States be classified for their use. In New York State the Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH) are responsible for carrying this out. The DEIS does mention these use classes ,two water bodies are class “A” for drinking water the Swamp River up to tributary six and the former HVPC reservoir . The Swamp River is also a trout spawning stream (TS), the rest of the streams and tributaries on site are use class”C” for fishing. Each surface water use class “A” through “D” has water quality standards requirements that are used to assess water quality. Class “A’ drinking water standards are more stringent than Class “C’ fishing. These standards are found in “NYSDEC Water Quality Regulations” Surface Water and Ground Water Classifications and Standards New York State Codes, Rules and Regulations Title 6, Chapter X Parts 700-706. In the report previously submitted to the Dover Town Clerk “Housatonic Waterbody Inventory and Priority Water Bodies List” prepared by a NYSDEC Steam Bio Monitoring Unit for the NYSDOH (released in July 2008 ) This reach of Swamp River is listed as a Priority Water Body because its use class is considered threatened .An Excerpt from the report:

**“ Swamp River, Upper, and tribs (1601-0016) Need Verific**

**Waterbody Location Information** Revised: 07/14/2008

**Water Index No:** Conn 15- 4 **Drain Basin:** Housatonic River

**Hydro Unit Code:** 0110005/480 **Str Class:** A (

**Waterbody Type:** River **Reg/County:** 3/Dutchess Co. (14)

**Waterbody Size:** 31.1 Miles **Quad Map:** ()

**Seg Description:** stream and tribs, above Wingdale

**Water Quality Problem/Issue Information** (CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

**Use(s) Impacted Severity Problem Documentation**

Water Supply Threatened Suspected

**Type of Pollutant(s)**

Known: - - -

Suspected: OTHER POLLUTANTS (unspecified)

Possible: Nutrients, Pathogens

**Source(s) of Pollutant(s)**

Known: - - -

Suspected: OTHER SOURCE (unspecified)

Possible: Agriculture, Landfill/Land Disp., Municipal

**Resolution/Management Information**

**Issue Resolvability:** 3 (Strategy Being Implemented)

**Verification Status:** 5 (Management Strategy has been Developed)

**Lead Agency/Office:** ext/WQCC **Resolution Potential:** High

**TMDL/303d Status:** n/a

**Further Details**

Overview

Water supply use of this portion of Swamp River is thought to be threatened by unspecified pollutants from point wastewater, agricultural activities and various other nonpoint sources.

NYSDOH Source Waters Assessment

The NYSDOH Source Waters Assessment Program (SWAP) compiles, organizes, and evaluates information regarding possible and actual threats to the quality of public water supply (PWS) sources. The information contained in SWAP assessment reports assists in the oversight and protection of public water systems. It is important to note that SWAP reports estimate the potential for untreated drinking water sources to be impacted by contamination. These reports do not address the safety or quality of treated finished potable tap water. This water supply reservoir provides water to private/commercial/institutional facilities. This assessment found an elevated susceptibility to contamination for this source of drinking water. The amount of pasture in the assessment area results in a high potential for protozoa contamination. There is also a high density of sanitary wastewater discharges which results in elevated susceptibility for all contaminate categories. In addition, it appears that the total amount of wastewater discharged to surface water in this assessment area is high enough to further raise the potential for contamination. Non-sanitary wastewater discharges may also contribute to contamination. There is also noteworthy contamination susceptibility associated with other discrete contaminant sources, including hazardous waste sites, landfills and other toxic releases. Finally, it should be noted that relatively high flow velocities make river drinking water supplies highly sensitive to existing and new sources of microbial contamination. (NYSDOH, Source Water Assessment Program, 2005)

Segment Description

This segment includes the portion of the stream and all tribs above unnamed trib (-6) in Wingdale. The waters of this portion of the stream are Class A(T) from unnamed trib (-6) to unnamed trib (-8) and Class C(T) for the remainder of the reach. Tribs to this reach/segment, including Lower Hiller Brook (-11), are Class C,C(T),C(TS). Lower Swamp River is listed separately.”

The DEIS does not mention these impacts or how non point pollution sources can be minimized to reduce impairments and improve water quality standards. A watershed protection plan might begin to address these non point sources. Parking areas and roadways are frequently cited as non point sources along stream and wetland corridors. Appropriate vegetative buffers should be maintained along all stream and wetland corridors as a preventive measure in reducing non point sources of pollution. A watershed plan may be useful in mitigation of the other listed threats to the water supply. Partnership and cooperation of all parties in the affected watershed should be a goal of the Watershed Protection Plan.

The Water Purveyor has not been identified in the DEIS above, a public water system as complex as the one described will require expert maintenance and upgrade , will Dutchess County Water & Wastewater Authority be the purveyor and at what costs ? Will a homeowners association be assigned the task? Conservation of water and watershed protection is mentioned as effective means in maintaining water quality and quantity. Attached are some recommendations for watershed protection being used throughout Dutchess County today:

## **What steps can I take to protect my watershed?**

### **Maintain or replant native vegetation as a buffer along the stream.**

This will stabilize stream banks to prevent erosion, reduce the impact of stormwater, and help provide habitats in and around the stream.

### **Reduce or eliminate pesticides and fertilizers for lawn maintenance.**

Stormwater runoff carries residues of pesticides and fertilizers to the stream, adding nutrients and Other chemicals that can degrade water quality. Being mindful of the timing of application and reducing the amount of pesticides and fertilizers used can limit their impact on streams.

### **Use rain barrels or create rain gardens.**

These structures collect rainwater from rooftops and driveways to use for watering plants or gardens. Allowing the water to slowly infiltrate into the ground this way reduces the risk of flooding and erosion. (See <http://www.umuc.edu/gogreen/resources/rainbarrels.shtml> for more details.)

### **Minimize the use of road salt during the winter.**

Using smaller amounts of de-icing road salt on driveways, walks, and parking lots will reduce the impact of the salt on the stream's ecosystem.

### **Maintain your septic system and have it pumped out regularly.**

Proper maintenance of septic tanks and sewer systems can help prevent bacterial contamination of the stream. Most septic tanks need to be pumped out every 2-5 years, depending on tank and family size. (See <http://www.aceseptictankservice.com/howoften.nxg> for more information.)

### **Properly dispose of your household hazardous waste.**

Household hazardous waste includes old cans of cleansers, paint, bug spray, used motor oil, and other toxic substances. Correctly disposing of them avoids potential risks to the environment, wildlife, and human health. (Contact the Dutchess County Resource Recovery Agency or see <http://www.dccra.org/hhwaste.html> for more specific information about disposal.)

### **Take notice of potential problems and alert your local municipal authorities.**

If you notice storm drains that are clogged with trash, silt fences near streams that are not installed properly, polluted streams, or streams that regularly flood, let your local municipal authorities know so changes can be made to improve watershed health.

### **Pick up litter.**

Participate in a stream cleanup or organize your own!  
Courtesy of Vassar College

The Dutchess Area Science Advisory Network (ESAN) has prepared a document addressing watershed management in Dutchess County; the ESAN was ratified by Dutchess County Legislature in September 2008, a local consortium of scientists, engineers and watershed managers engaged in informing the public and municipal officials on best management practices for flood control, stormwater runoff and watershed management . Available at the Dutchess County Environmental Council Website : [www.dutchessemc.org/ESANRecomendations.pdf](http://www.dutchessemc.org/ESANRecomendations.pdf)

Additional historical land use patterns of the site and of adjacent property owners should also be considered as a "hard look" in the D.E.I.S. Worthy of note are the agricultural lands that are slated for development on the western portion of the site. Converting productive farmland to detached residential housing would eliminate the possibility of locally produced food for a smart growth community. Dutchess County Soil and Water District has information on farmland conservation that might serve the project well in fitting into the rural character of Dover. More information is at : <http://www.dutchessswcd.org>

Preservation of critical natural habitat areas are land uses currently being employed by adjacent landowners of the Duell Hollow Critical Environmental Area ,the National Park Service along the Appalachian National Scenic Trail and supported by recommendations in The 2009 New York State Open Space Conservation Plan signed by New York State Governor David Paterson on June 8,2009 [http://www.dec.ny.gov/docs/lands\\_forests\\_pdf/osp09complete.pdf](http://www.dec.ny.gov/docs/lands_forests_pdf/osp09complete.pdf) the 2009 plan also recognizes the Great Swamp Watershed and its uplands as Priority Conservation Areas:

" GREAT SWAMP {25} ~ - The largest and highest quality red maple hardwood swamp in southern New York is located in the Towns of Pawling and Dover, Dutchess County and the Towns of Patterson and Southeast, Putnam County. Much of the Great Swamp is within the Croton River Basin and flows directly into the East Branch Reservoir, a New York City reservoir. It contains critical habitat for bird and aquatic species—nine of which are rare, protects and purifies the water supply for millions of New York residents, is an aquifer recharge area, reduces flooding, and provides outstanding educational and recreational opportunities. This vital and fragile natural resource needs to be safeguarded from further development and associated runoff. In order to protect the unique habitat of the Great Swamp, the diverse range of wildlife it supports, its scenic value, and its critical function of water purification, not only the in-holdings but also the surrounding uplands need to be conserved. Nearly all of the Great Swamp's 63,000-acre watershed has been identified by the USDA Forest Service as one of several Highlands Conservation Focal Areas, where three conditions coincide: a large contiguous tract or major cluster of land; a high priority composite conservation value; and an absence of permanent protection."

The 2009 Open Space Conservation Plan also recognizes the uplands of the Great Swamp watershed as part of the Taconic Ridge in the Harlem Valley a priority conservation project:

"TACONIC RIDGE / HARLEM VALLEY {40} ~ - An area comprising the Taconic Mountain Ridge and its viewsheds, where it straddles the New York, Connecticut, Massachusetts, and Vermont borders i

Putnam, Dutchess, Columbia and Rensselaer Counties, and the Harlem Valley and its viewsheds. At its southern end it is anchored by the Cranberry Mountain State Wildlife Management Area and extends through eastern Dutchess County along the Connecticut border, west to include the Harlem Valley and lands to the west including West Mountain, and north to the Taconic State Park. From here it extends northerly through Columbia and Rensselaer Counties, westerly to include the Route 22 Corridor and its viewsheds, and northward along the borders of Massachusetts and Vermont. The viewshed includes the Taconic Ridge, Harlem Valley, Route 22 corridor, farmlands of central Dutchess, and Stissing Mountain.

Protection of this area continues to be a high priority due to the region's high biodiversity, scenic

views, substantial recreational value, thousands of acres of intact/unfragmented forestland, steeply sloping hillsides, unique geologic segments, historic architecture, working farm landscapes, and multiple connection opportunities to land currently protected by the State, Federal Government, Counties, Towns and private land conservation organizations.

Numerous trail systems including the Appalachian Trail, Taconic Crest Trail and South Taconic Trail extending beyond the New York border, and the Harlem Valley Rail Trail continue to be important projects for this area and will increase recreational opportunities for the public and provide permanent public use and access of the Taconic Ridge area. In addition, acquisition of properties in the Taconic Ridge/Harlem Valley and Route 22 corridor will protect important open space, scenic viewsheds, working farm landscapes, watersheds and water quality, and preserve critical wildlife habitat for several threatened and endangered species. Specific projects include the Shaker Swamp, an almost 500-acre wetland complex supporting a high biodiversity and serving as an important aquifer recharge area; surrounding active farmland, formerly owned by the Shakers and regarded as historically significant; Schein Parcel, a connector between Cranberry Mountain Wildlife Conservation Area and Ciaiola County Park; Nuclear Lake-West Mountain connectors, Depot Hill and Taconic State Park additions; various intact camp properties; Wassaic Multiple Use Area buffers including Taconic DDS/Wassaic State School; Appalachian Trail, Taconic Crest Trail, South Taconic Trail and Harlem Valley Rail Trail connectors and viewshed protection; Little Whaley Lake; Crane Pond and Depression Pond area; Route 22 corridor viewshed protection; prime farmland soils and designated wetlands along the Webatuck Creek and Ten Mile River; unique geologic segments of the Taconic Ridge such as East Mountain, Rattlesnake Mountain, Stissing Mountain/Thompson Pond, West Mountain, Seven Wells and Nellie Hill and Stone Church buffers; and exceptional plant and wildlife habitat areas ranked on the State Natural Heritage Inventory such as rattlesnake and bog turtle habitat, limestone wet meadows, graminoid fens and sedge meadows.

Since this area's inclusion in the initial State Open Space Conservation Plan, over 14,500 acres have been protected in Putnam, Dutchess, Columbia and Rensselaer counties. Nonetheless, since key portions of the area demonstrating high biodiversity, scenic views, recreational value, working forests and farmland, and potential connections to other protected lands remain unprotected, the Taconic Ridge/Harlem Valley and associated viewsheds continue to be high priorities for protection. In addition, extensions of the Taconic Crest Trail and the Harlem Valley Rail Trail, as well as protection of the Route 22 corridor, which includes scenic vistas, productive farmland, and habitat supporting endangered and threatened species continue to be important considerations within the overall area."

The Oblong Land Conservancy has been a leader in conservation easements throughout Dover and Pawling for many years. The Oblong's most recent acquisition is the Slocum /Mostachetti Preserve, a 100 acre marble knoll that is to the north of the proposed project area known as Dykeman parcel. Based on recent research at the Slocum Mostachetti site there may be a hydraulic connectivity to the Dykeman parcel. Access to the Dykeman parcel has not been granted for scientific study to date, hopefully the DEIS will be able to address such queries by adjacent landowners in the future. Conducting scientific research is of benefit for Dover, the Harlem Valley Region and New York State.

In summary the DEIS for the Dover Knolls project , to take the requisite "hard look" , should take into account the long history of conservation that has been practiced in Wingdale , Dover , Pawling and Dutchess County for well over 90 years. The rural character of our area is able to survive through the cooperation of adjacent landowners, local municipal home rule, and an informed public, all with support from our regional and state experts. Utilizing land use decisions based on sustainable development practice and science will make sure Dover maintains its rightful title as a place of scenic and natural beauty with a resilient local economy. Thanks for allowing the comment period for the DEIS and I wish you success in your efforts.

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