

3.2 Surface Water Resources

Comment 3.2-1 (Deputy Mayor Yagel, Public Hearing Transcript, June 4, 2009): ...the dam that takes the water to the head waters of the Mahwah River was damaged during that same time frame and it was never remediated. Five-million gallons of water, class A drinking water is not forever gone until the remediation is done on that dam.

Response 3.2-1: Neither the Applicant nor his Consultants are aware of any damage that occurred at the existing dam.

Comment 3.2-2 (Mr. Rhodes, 26 Sky Meadow Road, Public Hearing Transcript, June 4, 2009): Mr. Miller's report, he says he expects zero loss of ground water recharge that occurs under existing conditions today.

Response 3.2-2: The proposed stormwater management plan does indeed include recharge basins so that following development there will be zero loss in groundwater recharge.

Comment 3.2-3 (Mr. Rhodes, 26 Sky Meadow Road, Public Hearing Transcript, June 4, 2009): I live on Sky Meadow Road we have, every once in awhile, enormous storms that completely flood the road and isolate us.

Response 3.2-3: As documented in the SWPPP developed for the Proposed Action and as required by State Law, the rate of stormwater runoff in the developed condition will not exceed that of the current condition. As such, the rate of future runoff from the hillside will be similar to or less than that which occurs under current conditions.

This will be achieved as follows. Post development stormwater runoff will be collected in catch basins and underground piping and directed to the proposed stormwater ponds. Drainage swales will be installed on the downhill side of the western most homes to direct stormwater to the ponds. This design will reduce the current amount of sheet flow off the site and direct it to specific outfall locations (i.e. pond outfalls).

The stormwater ponds are sized to result in the State required "no net increase" in stormwater runoff discharge rates between the existing and build conditions for the 1-100 year storm events. This is achieved by storing water in the ponds and releasing it over an extended time period. Outlets for the stormwater pond will be directed to existing drainage swales. The rip rap at the pipe outlets will be sized to dissipate flows to a non-erosive velocity thereby eliminating the potential for scour or bed and bank erosion. Emergency spillways for the ponds will also direct the runoff in the larger storms toward existing drainage swales. Prior to submitting the construction plans to the Planning Board and NYSDEC, stormwater runoff will be further analyzed to determine the feasibility of directing a portion of the volume to the eastern side of the property. The fact that a ridge runs north to south through the property may make this difficult.

Comment 3.2-4 (Mr. Rhodes, 26 Sky Meadow Road, Public Hearing Transcript, June 4, 2009): sewer infrastructure on the north end of Ramapo. This isn't going to help in the south end, in Airmont, where we've had these enormous overflows.

Response 3.2-4: Historical overflows in Airmont no longer occur because of improvements constructed by the Rockland County Sewer District #1 (RCSD #1). Improvements constructed by RCSD #1 consisted of a 458 foot 30" gravity sewer installed parallel to the beginning of the existing 27" Ramapo Interceptor located in the railroad ROW and diverting the Tallman force main into the new parallel sewer; leaving only the Twin Lakes force main to discharge into the manhole on South Monsey Road. The new parallel gravity sewer connects to the existing interceptor via a new doghouse manhole. In addition, the District added an 18" inverted siphon through existing chambers further downstream on the Ramapo Interceptor, for which spare penetrations were originally provided, to the existing 12" & 20" siphons. These upgrades improved hydraulics and increased capacity.

Comment 3.2-5 (Mr. Rhodes, 26 Sky Meadow Road, Public Hearing Transcript, June 4, 2009): We are nearing the limits of water. There's no ground water left to exploit in this county, so now there're going to the Hudson River.

Response 3.2-5: Comment noted. Water supply is not the constraining factor, water usage is limited by the number of access points available to tap into the groundwater. United Water is constantly exploring new outlets to tap into the plentiful supply of groundwater in the area.

Comment 3.2-6 (Mr. Rhodes, 26 Sky Meadow Road, Public Hearing Transcript, June 4, 2009): ..we have a sewer system which is grossly inadequate.

Response 3.2-6: Section 3.6.6 of the DEIS identifies the existing conditions, potential impacts, and mitigation measures associated with the downstream receiving sewer system. No sewer inadequacies will exist within the downstream receiving sewer system following the Patrick Farm development.

Comment 3.2-7 (Mr. Goldman, Public Hearing Transcript, June 4, 2009): I have my house -- My development is a well. What's gonna happen to my well water? All that property that's gonna be concreted over and black topped over, the runoff from the proposed.. Possibly 2,000 cars. More bus traffic. What's gonna happen to the water that I have to drink? What's gonna happen to the water that everybody in my neighborhood and up and down 202 that has a well has to drink, Mr. Supervisor?

Response 3.2-7: The proposed stormwater management plan includes recharge basins so that following development there will be zero loss in groundwater recharge and no impact on local wells in the neighborhood.

Comment 3.2-8 (Mr. O'Reilly, Public Hearing Transcript, June 8, 2009): It's also a question of the water supply. We don't have enough water to support developments like these.

Response 3.2-8: United Water - NY is the water purveyor for the property and they have provided a willingness to serve letter for Patrick Farm.

Comment 3.2-9 (Letter #3, Lee Ross, July 1, 2009): The waste water from runoff and loss of soil permeability will endanger the adjacent critical wetlands and headwaters of the Mahwah River.

Response 3.2-9: Following development, the quality of stormwater runoff shall be treated in accordance with the requirements of the New York State Department of Environmental Conservation (NYSDEC) Stormwater General Permit. A Stormwater Pollution Prevention Plan is provided in Appendix D in Volume II of the DEIS and includes analyses which demonstrate that the stormwater management plans is in compliance with NYSDEC requirements for water quality mitigation. Soil permeability will not be an issue for the Patrick Farm development because the proposed stormwater management design includes recharge basins so that following development there will be zero loss in groundwater recharge.

Comment 3.2-10 (Letter #10, Adam Peterson, Environmental Analyst, New York State Department of Environmental Conservation, Division of Environmental Permits, Region 3, June 16, 2009): Protection of Waters (Article 15) -- The subject parcel contains portions of two NYS Protected streams; both are Class B tributaries to the Mahwah River (Water Index No's NJ 11-12 and NJ 11-14). Any disturbance within the bed or banks of these protected streams requires a Protection of Waters permit from this Department.

Response 3.2-10: The Applicant acknowledges that NYSDEC permits will be required for the crossing of regulated watercourses. All necessary permits from appropriate agencies will be secured before construction of the project commences.

Comment 3.2-11 (Letter #10, Adam Peterson, Environmental Analyst, New York State Department of Environmental Conservation, Division of Environmental Permits, Region 3, June 16, 2009): Dam Safety (Article 15) — According to the documentation provided, the site includes an earthen dam which is 10 feet high and impounds greater than 3 million gallons of water. Any proposed repair to this impoundment requires a dam safety permit from this Department.

Response 3.2-11: Comment noted. The appropriate permits will be secured from NYS DEC prior to final site plan approval.

Comment 3.2-12 (Letter #10, Adam Peterson, Environmental Analyst, New York State Department of Environmental Conservation, Division of Environmental Permits, Region 3, June 16, 2009): Water Supply (Article 15) --The recently accepted Draft Environmental Impact Statement (DEIS) for this project indicates that United Water New York will provide water service to this project and has sufficient excess capacity to do so. As the subject parcel is located within an existing water district, a water supply permit from this Department is not required for this project.

Response 3.2-12: Comment noted.

Comment 3.2-13 (Letter #10, Adam Peterson, Environmental Analyst, New York State Department of Environmental Conservation, Division of Environmental Permits, Region 3, June 16, 2009): SPDES Wastewater — The recently accepted DEIS for this project indicates that sanitary wastewater will be discharged to the Rockland County Sewer District #1 (RCSD #1) municipal system. The DEIS also indicates that RCSD #1 has sufficient capacity to accept and treat this flow. Therefore, a sanitary SPDES permit is not required for this project.

Note: The sewer extension (physical connection to existing infrastructure) requires site plan review and approval from this. Department.

Response 3.2-13: Comment noted. The appropriate permits will be secured from NYS DEC prior to final site plan approval.

Comment 3.2-14 (Letter #10, Adam Peterson, Environmental Analyst, New York State Department of Environmental Conservation, Division of Environmental Permits, Region 3, June 16, 2009): Compliance with the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities (GP-0-08-001) — Compliance with this SPDES General Permit is required for construction projects that disturb one or more acres of land. When other DEC permits are required, the Stormwater Pollution Prevention Plan (SWPPP) required by the SPDES General Permit must be submitted along with the permit application for concurrent review. Authorization for coverage under the SPDES general permit is not granted until approval of the SWPPP and issuance of the other necessary DEC permits.

Response 3.2-14: Comment noted.

Comment 3.2-15 (Letter #11, Adam Peterson, Environmental Analyst, New York State Department of Environmental Conservation, Division of Environmental Permits, Region 3, July 3, 2009): The New York State Department of Environmental Conservation (DEC or Department) has reviewed the Draft Environmental Impact Statement (DEIS) for the Patrick Farm Subdivision development project proposed by Scenic Development, LLC. The Department is an involved agency in the SEQR review of this project. Several permits and approvals will likely be required from DEC for the project including:

1. Protection of Waters for construction activities affecting the bed and banks of state regulated streams on the property;
2. Freshwater Wetlands for construction affecting state regulated wetlands and associated 100 foot adjacent areas;
3. Dam safety for proposed repairs to the on site earthen dam; and State Pollutant Discharge Elimination System (SPDES) for proposed stormwater discharges.

Response 3.2-15: The Applicant acknowledges that several NYSDEC permits will be required for construction of the proposed action. The Applicant Engineer anticipated that Protection of Waters and Dam Safety Permits will be required. The Applicant does not anticipate that a Wetland Disturbance Permit will be required because no disturbance is anticipated within the wetlands or within the 100 foot adjacent area. Finally the Applicant anticipates that Patrick Farm will qualify for coverage under the New York State Stormwater General Permit.

Comment 3.2-16 (Letter #11, Adam Peterson, Environmental Analyst, New York State Department of Environmental Conservation, Division of Environmental Permits, Region 3, July 3, 2009): The-subject parcel includes portions of two NYS regulated streams; both Class B tributaries to the Mahwah River. This proposal includes two crossings of these protected streams which will require permits from DEC. All stream crossings must include a bottom consisting of natural substrate and must completely span the bed of the stream to prevent constriction of flow. Permits will be also be required for the construction of stormwater discharge points within the bed and banks of these protected streams. In addition, DEC recommends maintaining a 50 foot wide vegetated corridor on each side of protected streams in order to maintain stable embankments and water quality. These recommendations should be incorporated into the final site plan, which will be reviewed by this Department upon submission of a formal application. In addition, a condition of any permit issued will be the addition of a "deed notice" on affected lots regarding the presence of NYS regulated streams. The objective of the deed notice is to ensure owner awareness and compliance with Article 15. The deed notice language is as follows:

"This property contains a New York State regulated stream. For as long as any portion of the property described in this deed is subject to regulation under Article 15 (Protection of Waters) of the Environmental Conservation Law (ECL) of the State of New York, there shall be no regulated activity as defined by Article 15 of the ECL on this property within the bed or banks of this stream at any time without having first secured the necessary permission and permit required pursuant to the above noted Article 15 from the NYS Department of Environmental Conservation (DEC). This restriction shall bind the Grantees, their successors and assigns and shall be expressly set forth in all subsequent deeds to this property."

It appears that the deed notice is appropriate for lots 58,66-68, and 79.

Response 3.2-16: *The Applicant anticipates that a Protection of Water Permit will be required for the stormwater outfalls. Site Plans do not provide a continuous 50 foot corridor which is a NYSDEC recommendation. The Applicants Consultants attended a Pre-Application Conference with the DEC to discuss the 50 foot recommended corridor. The NYSDEC provided suggestions where it would be preferable to expand the corridor to provide additional separation that would be closer to the 50 foot recommendation. The Applicants Consultants will provide as much corridor as possible and will continue to coordinate with the NYSDEC to improve the plans so that they provide the best stream protection practicable and so that in the future when an application is filed with the NYSDEC that the plans may be viewed as approvable by the NYSDEC.*

The required "deed notice" language will be incorporated into the deeds of Lots 58, 66-68, and 79.

Comment 3.2-17 (Letter #11, Adam Peterson, Environmental Analyst, New York State Department of Environmental Conservation, Division of Environmental Permits, Region 3, July 3, 2009): Section 3.2 page 5 states "An acceptable. SMP will capture and treat 90 percent..." This should be revised to state "An acceptable water quality SMP will capture and treat 90 percent..."

Response 3.2-17: *Comment noted.*

Comment 3.2-18 (Letter #11, Adam Peterson, Environmental Analyst, New York State Department of Environmental Conservation, Division of Environmental Permits, Region 3, July 3, 2009): Section 3.2 page 6 states "All of these wet extended detention ponds were designed in accordance with NYSDEC sizing criteria to treat a portion of the water quality volume (WQv) by detaining..." In fact, DEC sizing criteria require that detention ponds be sized to treat the entire water quality volume.

Response 3.2-18: Comment noted.

Comment 3.2-19 (Letter #11, Adam Peterson, Environmental Analyst, New York State Department of Environmental Conservation, Division of Environmental Permits, Region 3, July 3, 2009): Upon submission of a formal application to DEC, the Stormwater Pollution Prevention Plan (SWPPP) will be reviewed to ensure compliance with the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities (GP-0-08-001).

Response 3.2-19: Comment noted.

Comment 3.2-20 (Letter #15, Salvatore Corallo, Commissioner, County of Rockland Department of Planning, July 24, 2009): Best Management Practices for soil erosion control are outlined on Page 3.1-12. It is unclear how soon some disturbed areas will be stabilized. If work will not commence in an area for more than 15 days but less than 30 days, will those soils be temporarily seeded or mulched? This section seems to imply that these areas could be unstable for two to four weeks. Significant erosion could occur within such a timeframe. In areas where work will not commence for more than 30 days, will temporary stabilization measures be installed immediately? On Page 3.12-6, a seven-day time frame is discussed. The timing of temporary stabilization measures must be clarified.

Response 3.2-20: Temporary stabilization will commence within 7 days if an area will remain without permanent stabilization for a period of more than 30 days.

Comment 3.2-21 (Letter #16, Salvatore Corallo, Commissioner, County of Rockland Department of Planning, July 24, 2009): The proposed amendments will result in a more extensive subdivision of this property than is permitted under the existing R-40 zoning. As required by the Rockland County Stream Control Act, future subdivision plans must be reviewed and signed by the Chairman of the Rockland County Drainage Agency before the County Clerk can accept the plan to be filed.

Response 3.2-21: Comment noted.

Comment 3.2-22 (Letter #16, Salvatore Corallo, Commissioner, County of Rockland Department of Planning, July 24, 2009): The proposed amendments must be reviewed by the Rockland County Drainage Agency due to the site's proximity to the Mahwah River and its location within the 100-year floodplain.

Response 3.2-22: Comment noted.

Comment 3.2-23 (Letter #18, Shajan Thottakara, P.E., Rockland County Drainage Agency, July 30, 2009): Please have the Name and License Number of the Professional Engineer and/or Registered Architect printed on all drawings submitted as part of the application for permit. The drawings included in the Stormwater Pollution Prevention Plan (SWPPP) are not signed and stamped or sealed by a Professional Engineer and/or Registered Architect licensed in the State of New York as required.

....Please note that all drawings and calculations must be signed and stamped or sealed by a Professional Engineer or a Registered Architect licensed in the State of New York.

***Response 3.2-23:** Comment noted. Site plans submitted for review and approval will be stamped or sealed by a Professional Engineer or a Registered Architect licensed in the State of New York as required.*

Comment 3.2-24 (Letter #18, Shajan Thottakara, P.E., Rockland County Drainage Agency, July 30, 2009): The "Plan Components" section of the Stormwater Pollution Prevention Plan (SWPPP) report indicates that the maximum disturbance for construction at any one time is 5 acres, however, no phasing plan has been provided. Please provide the construction-phasing plan as referenced in the SWPPP demonstrating that no more than 5 acres will be disturbed at any given time with phase specific erosion and sediment control measures in accordance with the New York State Standards and Specifications for Erosion and Sediment Control.

***Response 3.2-24:** No phasing plan is required. No more than 5 acres will be disturbed at one time however, the disturbed area will be continuously changing and it is not possible to provide a phasing plan that would reflect the continuously changing nature of the limit of disturbance.*

Comment 3.2-25 (Letter #18, Shajan Thottakara, P.E., Rockland County Drainage Agency, July 30, 2009): Please provide a copy of the acknowledgment letter from the New York State Department of Environmental Conservation indicating that the applicant has filed the Notice of Intent for Stormwater Compliance.

***Response 3.2-25:** A Notice of Intent (NOI) will be filed with the NYSDEC when the plans have been developed to the stage where Subdivision and Site Plan Applications are prepared and filed. A copy of the NOI acknowledgment letter from the DEC will be provided to the Rockland County Drainage Agency (RCDA) in the future along with more detailed plans that will enable the RCDA to perform a detailed review of the project.*

Comment 3.2-26 (Letter #18, Shajan Thottakara, P.E., Rockland County Drainage Agency, July 30, 2009): In accordance with Chapter 846, Rockland County Stream Control Act, please provide the RCDA with an environmental impact statement for the proposed project that provides sufficient information and details of the upstream and downstream impact of the proposed project with respect to the impact on aquatic life and habitat, fauna, biota, vegetation and wetlands. The environmental impact statement should also identify and describe any mitigating measures that will address the potential environmental impacts of the proposed project.

***Response 3.2-26:** The "environmental impact statement" referenced by the RCDA is actually a biological assessment of plants and animals. This information will be excerpted from the DEIS and provided to the RCDA in the future along with more detailed plans that will enable the RCDA to perform a detailed review of the project.*

Comment 3.2-27 (Letter #18, Shajan Thottakara, P.E., Rockland County Drainage Agency, July 30, 2009): Please provide certification from the Floodplain Administrator for the Town of Ramapo that the proposed construction is in compliance with Chapter 196, "Floodplains Local Law No. 8-1987", Town of Ramapo Town Code, as adopted by the Town of Ramapo.

Response 3.2-27: A letter will be requested from the Town of Ramapo Floodplain Administrator and provided to the RCDA along with more detailed plans that will enable the RCDA to perform a detailed review of the project at the time of site plan submission.

Comment 3.2-28 (Letter #18, Shajan Thottakara, P.E., Rockland County Drainage Agency, July 30, 2009): The information provided indicates that the project design and methodology is in general compliance with the New York State Stormwater Management Design Manual, with exceptions noted above. The calculations indicate that water quality and quantity measures are proposed for the Phase II stormwater compliance. The calculations also indicate that the intent is to ensure there are no net increases in stormwater runoff from the site. However, the RCDA is unable to perform a comprehensive review at this time as the details of supporting information have not been provided. As discussed in a meeting with the RCDA and the applicant on June 18, 2009, the additional information is to be supplied by the applicant to the RCDA when available.

Response 3.2-28: Comment noted. The additional information requested will be submitted to the RCDA when available.

Comment 3.2-29 (Letter #19, John F. Lange, Senior Associate for Planning, Frederick P. Clark Associates, Inc.): The drainage system has been designed in accordance with standard engineering practices. What is missing is a less structural design which would seek to provide a series of water amenities which reflect the sensitive nature of this site. These amenities could be fed with non-structural systems such as rain gardens and underground storage tanks to provide waters for other uses. The basins as proposed do not provide an amenity to enhance the site. They have been designed as a standard add-on which provides a facility for detention instead of designing the detention into the site in a series of visually appealing amenities. It is not that the design is not correct, but that detention could be used as a design feature to supplement the visual environment instead of simply providing an engineered basin for detention. This site offers the capacity for more sensitive treatment of stormwaters which would contribute to the more sensitive design of the overall proposal. Although noted later, there is an opportunity to recoup the energy of the streams to offset the energy consumption of the development. There is an opportunity to enhance the sustainability of the development.

Response 3.2-29: Stormwater management basins have been designed as an amenity to enhance the beauty of the Patrick Farm development. Figure 2-6 in the DEIS shows what a representative pond will look like. Stormwater management ponds will feature fountains as shown in Figure 2-6 and other aeration devices and will be well landscaped to provide pocket parks to be enjoyed by residents. In addition, the existing farm pond will be enhanced by a proposed promenade that will wrap around the pond and provide a location for exercise and socializing and enjoyment of the beauty of the 5 acre pond. Figure 3.9-22 is a rendering of the pond and shows how the promenade will enhance the pond and transform it into an amenity.