## 3.2 Surface Water Resources

Comment 3.2-1 (Planning Board Meeting, November 10, 2011, Frank Stratton): The first comment particularly related to the Fallsburg Fishing and Boating Club is that early on in the process we received a commitment from the developer that they would remain outside the dam inundation zone. Essentially if there was a dam break, which we hope never will be, but within that zone there are certain levels of responsibilities that the Fallsburg Fishing and Boating Club have in terms of notification and just general responsibility. And right now, that scope is relatively small but as we move to a project of this size, this scope, this many people, in an area where there is a potential for danger, it increases the cost to the Fallsburg Fishing and Boating Club, although the DEIS says there will be no cost change at all, we respectfully disagree and find that to be a statement that doesn't make sense. But we're pleased to see that the cluster authority proposal, I believe, keeps the structures out of the inundation zones other than, I believe, the water treatment plant. Is that right?

**Response 3.2-1:** The water treatment plant is in excess of 800 feet outside the inundation zone.

Comment 3.2-2 (Planning Board Meeting, November 10, 2011, James Creighton): Good. I know the ultimate proposal that the standard subdivision that if the town were not to go with the cluster, maintains a number of structures within that inundation zone and would create a significant hardship to the Fallsburg Fishing and Boating Club just on a notification scale but also in terms of if there ever was an emergency. They would probably be in a position where they would need a far greater notification project, something along the lines of but not as large as Indian Point would have, but we would need some kind of robo-call or siren system or something, if the standard subdivision were to be implemented. We do support the cluster authority proposal; it does make sense in terms of maintaining some of the view shed and allowing for a sensible development of the property.

**Response 3.2-2:** The cluster does allow for the placement of all residences and activity areas outside the inundation zone thereby providing greater safety for future residents.

Comment 3.2-3 (Planning Board Meeting, November 10, 2011, James Creighton): The inundation zone, emergency action plan is talked about a lot in the DEIS and essentially the applicant has taken the position they do no mitigation with respect with that ... (Mr. Creighton trails off in his comment and the end of it is not distinguishable.) Our club certainly finds it unacceptable that we would bear the cost of notifying and building a new infrastructure for notification based on the placement of units downstream of us. I think the most important point is you need to look at safety. Safety is the most important thing. I appreciate that the applicant has taken measures to keep the units outside of the inundation zone. But I would expect the DEC would be requiring us to notify the applicant and all of the unit owners if there were an event at the lake.

**Response 3.2-3:** All open space in the inundation zone will owned and managed by two condominium associations. Therefore there will be only two organizations to notify in the event of a dam emergency. The specific mechanics of notification, e.g. siren, phone, etc., will be determined by the FF&BC and the condominium associations.

<u>Comment 3.2-4 (Planning Board Meeting, November 10, 2011, James Creighton):</u> Well, the DEC requires us to notify any landowner who is affected by an emergency. There are three

levels of emergencies that can be identified. I think from a safety standpoint, if we were to identify an emergency situation, we would want to be sure that the landowners down below who are within that inundation zone be notified so that any children playing on fields, or anybody out in their backyards would know to get their kids out of the yards because there might be a situation coming. I think that's the intent of the emergency action. Obviously, if it were needed, it's for people to evacuate homes. But certainly if there is an event the DEC may not require it now but I certainly think that it is within their intent to make sure that everything downstream is safe. To the extent that they have deeded lots to individuals or unit owners who would be able to have swing sets or whatever within that inundation zone, it's just concerning to us. And it looks like it's a few dozen lots that would still be within the inundation zone unless that's fully deeded conservation easements to the town, no use whatsoever by the developer. We'd feel more comfortable with something like that. I don't think that's the expectation of the applicant.

**Response 3.2-4:** There are no individual lots. This development will be a condominium association. All homes are on the inside of loop roads with play areas in the interior of the loops. There are no "backyards" in the inundation zone. However since it is possible that there may be some informal use of the open space in the inundation zone, such as hiking or fishing, it would be a good idea to have a warning siren to alert any individuals using this area.

<u>Comment 3.2-5 (Planning Board Meeting, November 10, 2011, Arthur Rosenshein):</u> What about the mention of, I'm not sure of the reference to ... because it is condo, but the placing of anything, swings anything in that zone.

**Response 3.2-5:** There will be no placement of recreation equipment in the inundation zone. The majority of the inundation zone exhibits steep slopes of 25% - 30% and the balance is situated at least 200' distant from the closest homes.

<u>Comment 3.2-6 (Planning Board Meeting, November 10, 2011, Ron Hiatt):</u> There wouldn't be a problem to put together a conservation easement then. There's nothing to be lost.

Response 3.2-6: A conservation easement will be established for the inundation zone.

<u>Comment 3.2-7 (Planning Board Meeting, November 10, 2011, Mendel Lerner:</u> That's why they kept out of the inundation zone. Also, there really isn't any access.

**Response 3.2-7:** The inundation zone is generally bordered by steep banks down to the river plain. Access to this area is therefore not conducive to development.

<u>Comment 3.2-8 (Planning Board Meeting, November 10, 2011, Arthur Rosenshein):</u> In some way, adding that to your condominium rules.

Response 3.2-8: See response 3.2-6.

Comment 3.2-9 (Planning Board Meeting, November 10, 2011, James Creighton): If there were a conservation easement, or something that a condo would own that as one landowner or two landowners depending on how the condo association... (Interference and part of comment was not audible).... If we only need to notify two individuals, that would not create a significant problem for us in terms of EAP notification requirements. Clearly, the DEC could change the rules along the way and move the stream banks up and we create a whole different place. But

right now as it stands, if that property is owned only by condo one, condo two or condo four and we have individuals to contact if there were an emergency that would satisfy that. But that would require that that property be owned only by the condo association.

**Response 3.2-9:** The property in the inundation zone will be owned by two condominium associations. One association will own the land on the east side of the stream, and one association will own land on the west side of the stream.

Comment 3.2-10 (Planning Board Meeting, November 10, 2011, Mendel Lerner): Basically, whoever owns it, if notification is required, it's the responsibility of the fishing club... Whoever owns it that is who you notify. If there are a hundred people, there are a hundred; if it's one person then it's one.

**Response 3.2-10:** The NYSDEC and the EAP protocol, as amended from time to time in accordance with NYSDEC regulations in effect at the time, will establish notification requirements for the FF&BC.

Comment 3.2-11 (Planning Board Meeting, November 10, 2011, James Creighton): Our concern is that we not have to notify one hundred people. We are required. This is something the state requires of us. So as we move in and the applicant is looking to mitigate any impacts on the landowners around, if the impact is notify a hundred people, that's a huge impact for us and changes the whole nature of our notification scheme. If we only have to notify two people because that property is owned by two individual associations and there are no individual owners that are impacted, we're more comfortable with that. I think that if there are no structures that are owned by any individuals and the property is only owned by the condo association itself and not individual owners or multiples, I believe we only have to notify it looks like only two people unless they change the rules of the game. That has happened.

Response 3.2-11: See Response 3.2-9 and Response 3.2-10.

<u>Comment 3.2-12 (Planning Board Meeting, November 10, 2011, Ron Hiatt):</u> Can you check with the DEC to confirm that all he has to notify is the association?

Response 3.2-12: See Response 3.2-9 and Response 3.2-10.

Comment 3.2-13 (Planning Board Meeting, November 10, 2011, James Carr): I'm not opposed to the development. I think the development provides jobs, it provides infrastructure. I'm opposed to, what I see, and this is my personal opinion, as irresponsible development. It is an extremely dense development. All one has to do is go on You Tube and look at the inundation that occurred over on Heiden Road back in August. Look at the amount of water that came through there. Have you planned on what's going to happen to those culverts under Ranch Road? There are wetlands right off of Ranch Road. How have you, have you thought about the impact on those? I don't see any reasonable reason to put such a dense development literally right inside the small river valley like that whether it is a small stream or not. I think it is somewhat disingenuous to say to whoever is upstream, "It's not my problem." I think this community should be working in concert with your upstream neighbors as well as your downstream neighbors. We all share a responsibility in that. Again, I respect the application, I see there is a happy medium that can be reached. I just think this is a little too dense for that wooded.... There are plenty of other locations that do not have such an intense environmental impact. This is my opinion. I wanted be express my disapproval of the project at least in its state

as it is proposed now. I think it can be pared back and made a little more sensible with less, with far less impact to the residents, the town and the environment as well.

**Response 3.2-13:** NYSDEC Regulations require that the amount of stormwater runoff from the project upon completion (post-development), cannot exceed the runoff amount from the current site (pre-development), which is accomplished by retention/detention basins and other methods. Therefore, there will be no net increase in stormwater generated by the site in the post development condition. Therefore there will be no impact on existing flooding conditions or concerns downstream from the project site.

**Comment 3.2-14 (Letter to Planning Board, December 16, 2011, Fallsburg Fishing and Boating Club, James Creighton):** There is particular concern that the proposed development will have significant, unmitigated and irreversible impacts upon the Sheldrake Stream and the unnamed stream feeding from the Heiden Road wetlands. Irreversible damage to water quality to the Sheldrake Stream – a Class B(t) waterbody (a part of the Middle Delaware River Watershed) will result in degradation of the waterbody's primary and secondary contact recreation and fishing uses. Changes to the delicate nature of that waterbody could disturb the protected trout waters and could impact a major source of Sullivan County's recreation and tourism industries, as well as impact the delicate ecological balance of those waters. The applicant should be encouraged to supplement the DEIS to describe the measures to be taken to ensure that the water quality to all watercourses on the property (not just the Sheldrake Stream) will remain undisturbed and protected, along with the slopes leading to those waterbodies.

Response 3.2-14: Erosion and sediment control plans have been prepared for the project to insure water quality in the Sheldrake Stream and the unnamed stream mentioned above will be protected both during construction and in the post construction condition. During construction erosion control fencing will be maintained around any and all open, disturbed areas to control sediment. As areas are built and the disturbed land is revegetated and returned to a natural state, plant material will filter overland flow of water. In addition stormwater from impervious surfaces will be captured in the stormwater treatment system consisting of swales, pipes and detention basins. The basins will be designed with water quality control features further enhancing water quality of water entering Sheldrake Stream. Also see Response 3.2-13.

Comment 3.2-15 (Letter to Planning Board, December 16, 2011, Fallsburg Fishing and Boating Club, James Creighton): A system of pea gravel and grass alongside the roadway along a sensitive stream is an insufficient and inappropriate method of ensuring that stormwater is properly discharged to sensitive streams. It appears from the applicant's various maps included in the DEIS that stormwater in the area alongside each of the streams in Clusters 1 and 2 will in fact not be capable of conveying water by a gravity system to the stormwater basins described in the DEIS.

**Response 3.2-15:** No streams exist in or immediately adjacent to Cluster 1. The unnamed intermittent stream from Heiden Road Wetland passes ±50' from the cluster 2 road, with the area between that road and stream to remain undisturbed and vegetated with silt fence barrier in place during construction. All methods of capturing, treating and releasing stormwater is in accordance with NYSDEC guidelines and regulations.

Comment 3.2-16 (Letter to Planning Board, December 16, 2011, Fallsburg Fishing and Boating Club, James Creighton): As shown in the SWPPP plan map entitled Post Development Drainage Areas dated May 20, 2011 (Sheet D.A.-2) submitted on CD in DEIS Volume 2, the drainage basin serving Cluster 4 does not appear to be designed to collect water from the road and 24 residential units along the stream. These roadways and units (particularly those near units 52 and 53) also appear to be less than 25 feet from a USACOE regulated wetland, and will likely have significant impacts on that wetland as well.

**Response 3.2-16:** Cluster 4 has a  $\pm$  22 acre developed area with stormwater runoff conveyed to storm basin #4, A  $\pm$  1 ½ acre of the development at the low, south corner, which includes 8 units in 4 duplex homes and a section of roadway, is too low in elevation to be conveyed to the stormwater basin. However storm basin design computations insure that the "post – development" discharges (example: 157 cfs for 100-yr. storm) are still less than the "pre –development" discharges (168 cfs for 100-yr. storm) from the cluster 4 project, as required by DEC regulations. In addition, the E&SC plans indicate extensive silt fence barrier protection and stone outlet aprons from drain pipes in that area to protect the receiving stream.

In the vicinity of homes 52/57 a short section of proposed road passes 20' from a small ACOE/fed wetland. No buffer requirements exist for ACOE wetlands and a 15'-20' setback for this type of construction is common and considered acceptable.

Comment 3.2-17 (Letter to Planning Board, December 16, 2011, Fallsburg Fishing and Boating Club, James Creighton): The DEIS appears to mislead the reader when it states that "following construction, stormwater from the project site would be routed through stormwater management ponds and retention facilities and then ultimately enter the Sheldrake Stream." (DEIS at page 3.2-4) The FF&BC respectfully requests that the Planning Board direct the applicant to prepare a Supplement to the DEIS to address the apparent mistakes or omissions in the DEIS with regard to the critical issue of stormwater handling around the stream areas so that the Planning Board can properly assess the real environmental impacts of the proposed project and so that effective mitigation techniques can be developed to ensure proper protection of the affected streams and environment.

**Response 3.2-17:** It is not clear what "mistakes or omissions" regarding "stormwater handling around stream areas" the writer is referring to. All methods of capturing, treating and releasing stormwater as indicated in the SWPPP are in accordance with NYSDEC guidelines and regulations.

Comment 3.2-18 (Letter to Planning Board, December 16, 2011, Fallsburg Fishing and Boating Club, James Creighton): We also note that the applicant suggested in the SWPPP that "Porous Pavement may be included for this site." (DEIS Appendix B at page 6) We welcome this "green infrastructure" technique and encourage the Planning Board to require that the applicant use porous pavement (such as open-jointed blocks with open, permeable spaces between the units) throughout the project. While the pavers give an architectural appearance, they can bear heavy traffic and mitigate to some extent the conveyance of stormwater offsite. In light of the fact that the applicant states throughout the DEIS that the development will be for summer seasonal use only, the issue of plowing and other winter concerns related to such techniques would be inapplicable.

Response 3.2-18: Table # 1," Green Infrastructure Techniques" included in the SWPPP under Chapter III; "Stormwater Management, indicates porous pavement "may be" included in the project. Current design computations for treating water quality volume and detaining stormwater runoff are based on all roadways and parking areas having a paved, impervious surface. Using porous pavement or pavers was not incorporated in the design computations and, if used, would only enhance stormwater management. Porous pavement 'may" be considered in certain locations if subsoil characteristics allow the necessary rate of infiltration.

Comment 3.2-19 (Letter to Planning Board, December 16, 2011, Fallsburg Fishing and Boating Club, James Creighton): Finally, the area surrounding the unnamed stream is particularly significant and deserves protection. We highly encourage the Planning Board to schedule a site walk of the entire site, but particularly to include the area alongside each of the streams in Clusters 1 and 2 prior to considering any approvals for this project.

**Response 3.2-19:** The Planning Board may walk the site, but must schedule any site visits ahead of time with the applicant.

Comment 3.2-20 (Letter to Planning Board, December 16, 2011, Fallsburg Fishing and Boating Club, James Creighton): We also urge the Planning Board not to consider any stream disturbance, including the perilous trenching of a sewer main under the Sheldrake Stream. Impacts to the Pleasure Lake Dam Inundation Zone

Response 3.2-20: The proposed installation of a 3" diameter sewerline and 8" diameter ductile iron waterline across Sheldrake Stream between clusters 3 and 4, both encased in concrete and at least 4 feet below the streambed, is a common and accepted practice routinely permitted by the NYSDEC and subject to numerous construction conditions, designed to protect the stream and its ecology. Stream disturbance to install water and wastewater pipes will be much less impactful to the environment than developing entirely separate wastewater and water supply systems for cluster 4 on the opposite side of the stream.

Comment 3.2-21 (Letter to Planning Board, December 16, 2011, Fallsburg Fishing and Boating Club, James Creighton): Although the FF&BC requested that the applicant analyze and submit data to the Planning Board in its DEIS under SEQRA's Surface Water Resources section, it appears that the applicant did not provide substantial dam break analysis data to supplement various statistical 2-, 10-, 25- and 100-year 24 hour storm events in order to ensure that human lives and property are not placed at risk in the inundation zone. Rather, the applicant provided assurances to the Town and the FF&BC that it does not plan to build any structures (including residential units) in the inundation zone. While we find the lack of that data concerning, particularly in light of recent significant storm events, the applicant's assurances should, at a minimum, be formalized.

Response 3.2-21: As addressed in the DEIS, "Flood Inundation Zone Impacts", pg. 3.2-5, stormwater runoff to Sheldrake Stream from the developed areas of the project site (i.e. – clusters 1,2,3 and 4) for the 1-year through 100-year storm events will be conveyed first through 4 separate stormwater basins designed to detain runoff to predevelopment conditions, or less, therefore not adding runoff flows on top of Pleasure Lake dambreak flows in the inundation zone as incorporated in the FF & BC E.A.P. and analysis. (Refer to Responses 3.2-2, 3.2-5, 3.2-6 and 3.2-7) It is otherwise unclear

what additional "dam break analysis data to supplement various storm events" the writer is seeking.

Comment 3.2-22 (Letter to Planning Board, December 16, 2011, Fallsburg Fishing and Boating Club, James Creighton): A conservation easement or other binding restriction must be required to be publicly filed with the land records division of the county clerk as a condition of any approvals so that the area within the inundation zone of the Sheldrake Stream downstream of Pleasure Lake remains safe and secure.

Response 3.2-22: See Response 3.2-6.

Comment 3.2-23 (Letter to Planning Board, December 16, 2011, Fallsburg Fishing and Boating Club, James Creighton): The applicant has also indicated that the ownership of the lands within the inundation zone will be held only by one or two entities (the homeowners' associations that maintain stewardship of common property areas rather than individual property owners). Any approval should also ensure that the property within the inundation zone is not individually deeded to property owners but is held by the association(s) or entities that are established to maintain stewardship of common property areas.

Response 3.2-23: See response 3.2-4.

Comment 3.2-24 (Letter to Planning Board, December 16, 2011, Fallsburg Fishing and Boating Club, James Creighton): During the November 10, 2011 public hearing, the applicant's consultant (Mr. Lopez) as well as the Planning Board attorney (Mr. Hiatt) suggested the ease of "signing off" on a conservation easement; we wholeheartedly agree that a conservation easement must be incorporated into any approvals for this project in order addressed. The mere ownership of the inundation zone stream buffers by the condo associations would not provide a lasting safe and secure method of protection. It would also accomplish the equally important goal of protecting the delicate ecology of the stream areas from encroachment and plans for further development or use by subsequent owners.

Response 3.2-24: See Response 3.2-6

<u>Comment 3.2-25 (Letter to Planning Board, December 10, 2011, Robert Pinckney):</u> This area is also prone to flooding.

**Response 3.2-25:** All areas subject to flooding as identified by the dam inundation zone, and including the FEMA, 100-year flood zone have been illustrated on the site plans. No development of homes, roads and utilities is proposed within those areas.



