3.5.7 Community Water Services Comments and Responses

Comment 3.5.7-1: (Letter 2, Steven Neuhaus, Orange County Executive, June 10, 2015):
Water: There is a plan in place to connect the existing Kiryas Joel water distribution system to the Catskill Aqueduct. In the meantime, the Village continues to develop groundwater sources in order to meet demands with in the system. Plans, however, have not been submitted and finalized for either the connection to the aqueduct, or to continue to develop groundwater sources until such time as that connection is made. This does not necessarily mean that the Village will be unable to meet system demands (regardless of annexation), but the proper planning is necessary to show how the Village will meet those demands as growth and system usage continues to increase. There is an assumption that adequate supply exists from both groundwater and aqueduct sources, but little mention is given to how this will be implemented or on what schedule to keep pace with demands.

Response 3.5.7-1: *The Village of Kiryas Joel has long planned to connect to the Catskill Aqueduct to provide a safe and reliable source of drinking water for a growing community. The Village has actively pursued this plan since 2000 and has made large investments into the planning, extensive environmental and hydrogeological studies, litigation, and capital improvements to realize the plan. In fact, engineering plans for the pipeline have long been completed and approved by all appropriate government agencies, including NYSDOH, OCDOH and NYSDEC, among others. Construction has been underway for over 2 years. Likewise, final engineering plans for the connection to the NYC Aqueduct have been submitted to the New York City Department of Environmental Protection (NYCDEP) and final technical adjustments are now being discussed and finalized by the Village and City engineering staff. Since a redundant source of water is required by the NYCDEP for connection to the Aqueduct, the Village has worked to approve multiple new groundwater supply sources, including the Mountainville Well No. 1 site. The Mountainville Well No. 1 is part of the overall consolidated Water Supply Permit application for the Village, now under review by the NYSDEC (WAS No. 11,609). As indicated in the DGEIS, the Mountainville Well No. 1 is anticipated to come on-line in 2015 and the Aqueduct connection completed in 2017.*

According to the Village engineering consultant, CDM Smith, approximately two-thirds of the Phase 1 pipeline connection to the Mountainville wellfield/ pump station site has been completed and it is expected to be completed by year's end. Phase II of the pipeline connection, from the Mountainville wellfield/ pump station to the New Windsor connection site is expected to be completed in 2017.

William Richardson, of the NYCDEP Bureau of Water Supply, has confirmed the Village's right to take a water supply from the City's water system (see Appendix G10).

Regarding the Village's groundwater sources to provide redundancy for the Aqueduct water, the Affidavit indicates:

> *"*Pursuant to the Water Supply Agreement currently under negotiation, Kiryas Joel would be required to certify that it has sufficient capabilities to provide its residents with an adequate supply during a prolonged shutdown of Kiryas Joel's source of City water. Based on my understanding of Kiryas Joel's current inventory of available wells and storage capabilities, DEP believes Kiryas Joel can meet this requirement".

In any event, the Village's longstanding efforts to plan and acquire a safe and reliable water supply for its residents is independent of the proposed annexation, but rather is related to the natural growth of the Village population that has long been anticipated and planned for in the community.

Comment 3.5.7-2: (Letter 2, Steven Neuhaus, Orange County Executive, June 10, 2015): The DGEIS indicates that centralized water available to the Village will include use of the Mountainville test well field which remains under permitting review. Use of this well field would constitute an interbasin water transfer, importing water from the nearby Woodbury Creek watershed. A 2011 Mountainville Well pumping test report by the applicant's consultant (LBG) describes a 425 gpm pumping test at this site, and includes calculations suggesting up that 1,212 gallons per minute might be supported by this location. On August 12, 2010, Chazen recorded a flow of 2.14 cfs (960 gpm) in the Woodbury Creek (August 2010 field report by Chazen for OCWA). On the basis of reference watersheds with available performance statistics, yet lower flow conditions in the Woodbury Creek would be expected approximately 10% of the time (e.g. less than 960 gpm approximately one month per year). Page 2-10 of the DGEIS does not confirm the volume of water needed from the Mountainville test well site, nor discuss stream or biological impacts of accordingly gallon-for-gallon flow reductions in Woodbury Creek at either the demand rate under the 'annexation' scenario or the likely lower demand rate under the 'no annexation' scenario when a share of the proposed growth would be supported by individual wells.

Response 3.5.7-2: *The draft consolidated Water Supply Permit application under review by the NYSDEC lists the capacity of the Mountainville Well No. 1 as 425 gpm. This is the maximum flow rate that the NYSDEC could approve for this well.*

As indicated in the DGEIS discussion of the Mountainville Well No. 1 (pages 3.5-6 and 3.5-7), the aquifer that supplies the Mountainville well has little direct connection to Woodbury Creek. The flow rates in Woodbury Creek are largely independent of the Woodbury Creek sand and gravel aquifer. The aquifer receives recharge from its entire watershed.

The Village's consultant, Leggette, Brashears & Graham, Inc. completed a 72-hour pumping test on the Mountainville Well No. 1 in June 2011. That test was conducted in strict adherance to the NYSDEC pumping test standards ("Recommended Pump Test Procedures for Water Supply Application," TOGS 3.2.1, Appendix 10.) The pumping test included the monitoring of water levels in three piezometers (shallow wells) to assess the potential impact of Well No.1 on surface water resources. The piezometers included an onsite stream, an on-site wetland and Woodbury Creek. The pumping test demonstrated a stabilized safe yield of 425 gpm, and no measurable water level drawdown in the piezometers during the test, including no drawdown in Woodbury Creek.

The issue of whether the Village conducted an adequate review of impacts to water-dependent natural resources (including Woodbury Creek) was addressed in the litigation challenging the Mountainville SEQRA review and was dismissed by Orange County Supreme Court, Environmental Claims Part, in favor of the Village. In that Decision,Order and Judgment, the Court expressly held that "the record demonstrates that Kiryas Joel identified and took a "hard look' at relevant areas of environmental concern with respect to the Mountainville Well, and made a "reasoned elaboration" of the

basis for its determination." (Town of Woodbury et al. v. Village of Kiryas Joel, Sup Ct, Orange County, Lefkowitz, J., April 7, 2014, Index No.2877, at 15) (See Appendix G11.)

Comment 3.5.7-3: (Letter 3, James C Purcell, Village of Monroe Mayor, June 10, 2015): The potable water impacts are largely avoided because the DGEIS assumes that it will be permitted for connection to the New York City aqueduct. As the DGEIS makes clear, without the New York City aqueduct- or more well capacity than currently identified to satisfy DEC requirements for a municipal water service based solely on wells -- the Village of Kiryas Joel is unable to service the annexed area with its municipal water, as the DGEIS notes that Kiryas Joel must now truck in water to its own residents on the occasion of peak demands. Because the identification of the wells alone are insufficient to satisfy Kiryas Joel's anticipated growth and the new demands of the annexed area, and no permits have yet to be secured from New York City authorizing the use of the aqueduct water, there must be additional studies in a SGEIS or in the FGEIS to address how the Village of Kiryas Joel will address the water demands of the 20,000 anticipated inhabitants of the annexation area if there is no tie-in to the New York City aqueduct. Of course, one way to mitigate this impact would be to delay the annexation until after the New York City permits are issued. If this mitigation measure is not selected, then the studies are critical to assess the water demand (and related infrastructure improvement) impacts.

Response 3.5.7-3: *See response to Comment 3.5.7-1. The Village of Kiryas Joel has has actively pursued the plan to connect to the Catskill Aqueduct for over ten years, including extensive planning, studies and construction activities. As a municipality in Orange County, the Village is entitled to take water from the Aqueduct, pursuant to the New York City Administrative Code (Section 24-360(a)). Contrary to comments received, the NYCDEP has non-discretionary authority to approve the engineering plans for the actual connection, but has no authority to deny a water supply from the Aqueduct. This issue was previously raised in the litigation challenging the Mountainville SEQRA review and was dismissed by Orange County Supreme Court, Environmental Claims Part, in favor of the Village. (Town of Woodbury et al. v. Village of Kiryas Joel, Sup Ct, Orange County, Lefkowitz, J., April 7, 2014, Index No.2877, at 17-18)(See Appendix G11).*

Given that the NYCDEP requires that all water taken from the aqueduct has back-up capacity from groundwater sources, the Village has added new groundwater supply from additional wells. Since 2000, the Village has added 6 permitted wells with the average permitted yield of 928,200 gpd (not including Mountainville Well No. 1). The Village has secured the rights to approximately 2,419,200 gpd of additional water supply capacity (including the Mountainville Well No. 1) as discussed in pages 3.5-6 through 3.5-10 of the DGEIS. The Village will proceed with the permitting and infrastructure improvements to bring these new water sources on-line as the Village demands increase.

The proposed annexation is not dependant upon having sufficient water supply in place to service future residents, either in the Village or in the annexation lands. Rather, any new residential development in either the Village or in the annexation lands will need sufficient water supply to support that development. The approval of any individual residential project cannot proceed without an identified water supply for those new residents. The planning, studies and construction of new sources of water supply is an ongoing and long term process for the Village, just as it is for all communities. Through its long term planning and investment, the Village is committed to providing adequate water to current residents and to provide for the foreseen growth in the community.

Comment 3.5.7-4: (Letter 5, Susan H. Shapiro, Esq., Preserve Hudson Valley, LLC., June 10, 2015): The DGEIS provides misleading and inaccurate information regarding Water Supply for the Annexation Territory. The DGEIS is based on KJ's unapproved hope that KJ will be given approval to tap into the NYC Catskill Aqueduct. At this time no agreements or approvals exist for this connection, nor has KJ demonstarted an ability to provide the necessary back up water supply needed to tap into the NYC water supply.

To date KJ does not have permission from the New York City Department of Environmental Protection ("DEP") to access the Catskill Aqueduct in New Windsor, or for the permits from the NYSDEC to utilize the wellfield in Mountainville.

The claims in the DGEIS that KJ will have either water supply is wishful thinking and therefore is inaccurate and misleading. KJ's application to the New York State Department of Environmental Conservaiton ("DEC") to utilize the Mountainville wellfield water supply remains suspended while the DEC awaits the village's response to comments made at the 2014 hearing regarding the project. The entire annexation plan relies on this unnapproved water supply.

Response 3.5.7-4: *See Responses 3.5.7-1 and 3.5.7-3 above.*

Comment 3.5.7-5: (Letter 18, Stephen Welle, Mayor, Village of Harriman, June 10, 2015): The DGEIS states that the population of Kiryas Joel will continue to grow regardless of this annexation being approved or not. In all other communities in Orange County, new development is approved based on available resources and infrastructure. The Village of Kiryas Joel has made it very apparent in this DGEIS that they plan on continuing to allow new construction without any regard for the availability of water and sewer resources.

Response 3.5.7-5: *The DGEIS demonstrates that the Village has in place the infrastructure and the water resources to currently serve its existing residents. As it is for all communities in Orange County, the planning, funding and construction of infrastructure for the Village is a long term and ongoing process. The Village initiated the planning for the connection to the Catskill Aqueduct more than a decade ago and a significant portion of the pipeline infrastructure has been completed. The DGEIS discusses capacity issues regarding the Orange County Sewer District #1, and its plans for expansion to meet the demands of continued growth in the District.*

Approval of any new residential project in the annexation lands will require an adequate supply of water and adequate waste water treatment capacity to support the project. This is a requirement NYSDOH and Orange County Department of Health regulations.

Comment 3.5.7-6: (Letter 22, Village of Cornwall & Town of Cornwall, June 19, 2015): As the provider of water for both Cornwall on Hudson and Cornwall, we are concerned with any proposals that might impact our ability to provide water to our residents. Because Kiryas Joel's insufficient analysis of the water supply expansion, we engaged the services of Maser Consulting to conduct our own evaluation of Kiryas Joel's proposed water supply expansion. A key question is whether Kiryas Joel's proposal to take 612,000 gallons per day from its well within Cornwall will impact the current and future needs of the Village and the Town's residents. Maser conducted an extensive review of Kiryas Joel's proposal, and found that the aquifer test conducted by Kiryas Joel's consultants is inadequate for determination of impacts to water-dependent natural resources.

Response 3.5.7-6: *The 72 hour pumping test completed for the proposed Mountainville Well No. 1 was conducted with strict adherance to the NYSDEC pumping test standards ("Recommended Pump Test Procedures for Water Supply Application," TOGS 3.2.1, Appendix 10). The standard testing protocol was approved by NYSDEC and designed to determine potential impacts to surface water features, neighboring wells, groundwater availability, and groundwater quality.*

The Mountainville Well pump test indicated it would have no effect on the Town of Cornwall's water supplies. Water supply is a State resource. State law provides for municipalities to acquire and expand water supplies, subject to oversight and regulation by NYSDEC. The State water supply is not regulated by individual local governments. (See ECL § 15-0103 [1]). The Village has the same right to use or acquire a water supply based on need as does any other local community in New York State, subject to regulations and permit conditions. No community has a reserved right in the waters of the State or exclusive use of water that may flow under its municipal boundaries. No community has the right to prevent others from taking a water supply even if being removed from within that community.

The issue of whether the Village conducted an adequate review of impacts to water-dependent natural resources was addressed in the litigation challenging the Mountainville SEQRA review and was dismissed by Orange County Supreme Court, Environmental Claims Part, in favor of the Village. In that Decision,Order and Judgment, the Court expressly held that "the record demonstrates that Kiryas Joel identified and took a "hard look" at relevant areas of environmental concern with respect to the Mountainville Well, and made a "reasoned elaboration" of the basis for its determination." (Town of Woodbury et al. v. Village of Kiryas Joel, Sup Ct, Orange County, Lefkowitz, J., April 7, 2014, Index No.2877, at 15) (See Appendix G11.)

Comment 3.5.7-7: (Letter 23, Andrew Fetherston, P.E., & Thomas Dwyer, P.G. June 18, 2015): The DGEIS for this proposed 507-Acre Annexation proceeds without any consideration of the impacts noted in letter written on behalf of the Village of Cornwall on Hudson and the Town of Cornwall, originally dated April 16, 2014 and submitted to the NYSDEC as part of the public hearing for the DEC Application No.: 3-3399-00065/00001 Water Withdrawal, Village of Kiryas Joel Proposed Mountainville Well No. 1. The apparent intent in the GDEIS is to utilize the Mountainville well as a potentially permanent water supply, rather than a secondary water supply, which contradicts KJ's prior statements and analysis. I refer to KJ's DEC application and their neg dec where there were repeated statements that the Mountainville well was part of the connection to the Aqueduct. Now, the most KJ is saying is that one year after the Mountainville well will be placed into service, KJ must identify a potential secondary source. Obviously KJ's intent is to use the Mountainville well as likely permanent water supply. Given the apparent change in use of the Mountainville well as a primary water supply, we request that KJ must rescind its prior neg dec according to the criteria set forth in 6 NYCRR 617. 7(/). Should KJ not rescind its prior neg dec, KJ must address the environmental impacts associated with the primary use of the Mountainville well as part of the GEIS process, including responses to all outstanding comments made to the DEC as part of the water supply legislative hearing.

Response 3.5.7-7: *The Village's primary plan has been and remains to connect to the Catskill Aqueduct as its primary source of water supply. The viability of the Mountainville well site was first identified by the Village in 2011, well into the Aqueduct connection project. The Mountainville well will be constructed on the same property where the midway pump station for the pipeline will be located. The convenience of this location*

will enable the Village to provide an interim supply of water without the need for an additional parallel pipeline to transport this resource to the Village. The Mountainville well water has always been identified as a source to serve the Village's potable water supply needs during times of Aqueduct shutdown and as an interim source while construction of the remainder of the pipeline is completed. Contrary to the comment, there has been no change in the Village plans. The NYSDEC draft consolidated permit requires a redundant well at the Mountainville site or elsewhere within a specified time period (based on anticipated completion of the primary well). This redundant well will support the Village's ability to meet the anticipated maximum daily demand with the greatest producing well out of service (Well 1) during the interim period while construction of the remainder of the pipeline is completed.

Comment 3.5.7-8: (Letter 23, Andrew Fetherston, P.E., & Thomas Dwyer, P.G. June 18, 2015): Page 3.5-3 states: "The addition of the Mountainville well field would enable the Village to meet this maximum daily demand and serve as an interim supply while the remainder of the pipeline connection to the Aqueduct is constructed." What guarantees do the Village of Cornwall on Hudson and the Town of Cornwall have that KJ will complete the pipeline to the NYC aqueduct? If a permit is granted to KJ to complete the pipeline to the NYC aqueduct, what is the NYSDEC perceived expiration date for this permit to ensure timely construction to get the Aqueduct connection into service and maintain the Mountainville Wells as a backup supply?

Response 3.5.7-8: *See Responses 3.5.7-1, 3.5.7-3, 3.5.7-6 and 3.5.7-7. The Village of Kiryas Joel has invested considerable time and resources into the connection to the Catskill Aqueduct and is fully committed to complete that process. A substantial portion of the pipeline connection has already been constructed, and the Village is presently securing necessary work permits for the remaining sections. The aqueduct will provide a long-term reliable source of water supply for the Village, as opposed to any single well or combination of wells. Permit conditions from the NYSDEC are not known. In any event, the outcome of future permits has no bearing on the annexation action.*

Comment 3.5.7-9: (Letter 23, Andrew Fetherston, P.E., & Thomas Dwyer, P.G. June 18, 2015): Page 3.5-3 states: "The draft consolidated permit would allow the Village to withdraw up to 2.54 mgd once the draft permit is finalized and Mountainville Well is placed into service." What controls or limits if any would be placed on the KJ Mountainville Well to maintain a sustainable withdrawal of water as to not adversely cause the impacts noted in this letter? What is the status of the Orange County review and permit for the continuation of the installation of the water mains for the NYC aqueduct and the Mountainville Wells? What is the plan for KJ should the NYCDEP deny the request to connect to the NYC aqueduct, if as noted on page 3.5-4 "Excessive groundwater withdrawals may affect neighbors to the Village who depend on the same groundwater resources"?

Response 3.5.7-9: *The maximum withdrawl from the Mountainville Well will be determined, regulated and enforced by the NYSDEC.*

The renewal of the existing Orange County Department of Public Works work permit remains pending and there is no reason to believe it will not be issued. Work on the pipeline continues along the NYS right of way pursuant to a NYSDOT permit. .

As a municipality in Orange County, the Village is entitled to take water from the Aqueduct, pursuant to the New York City Administrative Code. The Village fully

anticipates the authorization by the NYCDEP to connect to the Catskill Aqueduct upon the completion of adjustments to the final engineering plans. (See Response 3.5.7-3.)

Comment 3.5.7-10: (Letter 23, Andrew Fetherston, P.E., & Thomas Dwyer, P.G. June 18, 2015): On page 3.5-4 the DGEIS states: "In September 2000, the Village of Kiryas Joel filed an official request with the New York City Department of Environmental Protection (NYCDEP) for conceptual approval to connect to the aqueduct." Further the GDEIS on the same page states "The City of New York must still provide final engineering approval for the proposed Village connection to the Catskill Aqueduct." What is the status of this NYCDEP permit and plan review, give these plans were submitted 15 years ago?

Response 3.5.7-10: *See Response 3.5.7-1 and 3.5.7-3. The Village initiated formal consultation with the NYCDEP for the aqueduct connection in 2000. The Village has been working cooperatively with NYCDEP on this project for over a decade. NYCDEP has repeatedly acknowledged the Village's entitlement to take water from the Aqueduct and to construct the necessary appurtenant facilities to accomplish this. Over that time, the Village has conducted extensive planning and engineering for the connection, and has installed a significant portion of the piping infrastructure needed for the connection.*

The Village will connect to the Catskill Aqueduct near Riley Road in the Vails Gate section of the Town of New Windsor. The Village intends to share an existing Aqueduct tap with the Town of New Windsor pursuant to an inter-municipal agreement executed in January 2011. Final adjustments to the engineering plans for the shared connection are currently being coordinated between the Village and City engineering staff and the water supply agreement with the City likely will be executed later in 2015.

Comment 3.5.7-11: (Letter 23, Andrew Fetherston, P.E., & Thomas Dwyer, P.G. June 18, 2015): On page 3.5-4 the GDEIS states: "The allowable water taking from the aqueduct will be determined by the NYCDEP at a future time when approvals and infrastructure are in place to connect to the aqueduct. For example, the Village would be entitled to approximately 2.56 mgd from the aqueduct, based on the 2010 Census for the Village (20, 17 5 population) and the 2010 NYC per capita water usage estimates (127 gpd). The Village would be required to maintain 100 percent back-up for the volume of its taking with existing and new groundwater wells. The Village intends to rely on its existing groundwater wells and new wells to be established in the future to meet this backup requirement." Conversely, what is the 100% backup for KJ's highest yielding well (Mountainville) should there be an impact to adjoining properties or a failure at the well, assuming the NYCDEP Aqueduct is not online, permitted or available?

Response 3.5.7-11: *The comment appears solely directed to the pending NYSDEC water supply permit for the Mountainville well and is outside the scope of this DGEIS.*

The NYSDOH requires a municipal water system to demonstrate the ability to provide maximum daily demand with the best well in the system out of service. The NYSDEC draft consolidated permit requires a redundant well at the Mountainville site or elsewhere within a specified time period (based on anticipated completion of the primary well). This redundant well will support the Village's ability to meet the anticipated maximum daily demand with the greatest producing well out of service (Well 1). See Response 3.5.7-7.

Comment 3.5.7-12: (Letter 23, Andrew Fetherston, P.E., & Thomas Dwyer, P.G. June 18, 2015): How is it that a connection to the NYC Aqueduct, requiring a 100% backup (the Mountainville well), has a findings statement prepared as noted on page 3. 5-5 since the 100%

backup Mountainville Well has not received any permits and the impacts elaborated in the public hearing process from April 2014 remain unanswered?

Response 3.5.7-12: *The comment appears solely directed to the pending NYSDEC water supply permit for the Mountainville well and is outside the scope of this DGEIS.*

In 2004, the Village commenced the SEQRA review for the Aqueduct Connection Project, including a Draft Environmental Impact Statement ("EIS"), Final EIS and Findings Statement. The Village completed an Amended Final EIS and Amended Findings in 2009.

As noted at that time and is the case today, based on the Village's current well inventory and storage capabilities, the Village will be able to endure the shutdown of the Aqueduct at the time of the connection. In addition to its wells, the Village maintains five storage tanks with a total capacity of 3.72 million gallons, which serve to support the Village's ability to meet maximum daily demands which occur on only a limited number of days out of the year. In the future, it is likely that the Village will be required to identify additional measures to support its ability to endure future shutdowns.

The Mountainville Well is intended to provide additional support for the Village's water demands now and in the future. In the absence of Mountainville, the Village may be required to identify additional measures to accommodate this maximum day demand if it would be anticipated to occur during the shutdown. This could be done by any number of means, including through use and management of the Village's existing wells and storage facilities. In the past, the Village has even relied on the use of trucked in water on limited occasions to support its maximum demand, which is an acceptable albeit costly practice.

Comment 3.5.7-13: (Letter 23, Andrew Fetherston, P.E., & Thomas Dwyer, P.G. June 18, 2015): Page 3.5-5 states "The Village commenced the SEQRA coordinated review process for the Catskill Aqueduct Connection project in July, 2002. Amended Findings for the Catskill Aqueduct Connection project were adopted by the lead agency on March 31, 2009 ... " Page 3-5.6, the GDEIS notes: "In addition to serving as a necessary backup to the City water, the Mountainville well will serve as an interim primary supply for the Village while the remainder of the pipeline is constructed." The permit conditions need to be elaborated in order to quantify the impacts. How long will the Mountainville well serve as an interim primary supply for the Village? What limitations will be enacted to ensure KJ connects to the NYC Aqueduct or seeks another viable source of water should the NYC Aqueduct be unavailable or not permitted?

Response 3.5.7-13: *The comment appears solely directed to the pending NYSDEC water supply permit for the Mountainville well and is outside the scope of this DGEIS. That permit and any conditions imposed by NYSDEC remains pending.*

Comment 3.5.7-14: (Letter 23, Andrew Fetherston, P.E., & Thomas Dwyer, P.G. June 18, 2015): Page 3-5.7, the GDEIS notes: "A NYSDEC required 72 hour pumping test demonstrated that the Mountainville Well was self-sustaining and its use would not impact local nearby wells or other surface water bodies. This statement is an opinion and should be removed from the GDEIS, especially given the complete lack of response to the letter written on behalf of the Village of Cornwall on Hudson and the Town of Cornwall, originally dated April16, 2014 and submitted to the NYSDEC as part of the public hearing for the DEC Application No.: 3-3399-00065/00001 Water Withdrawal, Village of Kiryas Joel Proposed Mountainville Well No. 1.

Response 3.5.7-14: *The comment appears solely directed to the pending NYSDEC water supply permit for the Mountainville well and is outside the scope of this DGEIS.*

The referenced statement in the DGEIS was based on the actual reported data and analysis of the 72- hour pump test conducted in June 2011 in strict adherance to the NYSDEC pumping test standards ("Recommended Pump Test Procedures for Water Supply Application," TOGS 3.2.1, Appendix 10). Review of the Mountainville well permit application remains pending before NYSDEC.

Comment 3.5.7-15: (Letter 23, Andrew Fetherston, P.E., & Thomas Dwyer, P.G. June 18, 2015): Correct the typo stating "425 gallons per day" on page 3-5. 7.

Response 3.5.7-15: *Comment noted. The correct amount should be 425 gallons per minute.*

Comment 3.5.7-16: (Letter 23, Andrew Fetherston, P.E., & Thomas Dwyer, P.G. June 18, 2015): Page 3-5.14, "The draft consolidated water supply permit, WSA No. 11609, which includes Mountainville Well 1, will authorize a water withdrawal of 2.54 mgd". This statement is an opinion and not based on a permitted withdrawal, and as such should be removed from the DGEIS.

Response 3.5.7-16: *The statement is based upon current permitting status and indicates that the permit is "draft" and that if approved, "will" allow withdrawl of 2.54 mgd.*

Comment 3.5.7-17: (Letter 23, Andrew Fetherston, P.E., & Thomas Dwyer, P.G. June 18, 2015): Without Annexation will the connection to the NYC Aqueduct be pursued? Will the Mountainville Wells be pursued? With a lesser population growth of 12,307 persons as compared to the with annexation population growth estimates, will the NYC and Mountainville connections be required? If so, to what extent?

Response 3.5.7-17: *Both the Aqueduct connection project and the Mountainville well project were commenced well before the current annexation was filed with the Town and Village. The Aqueduct connection and the Mountainville well are not directly connected or reliant upon the annexation, but rather are intended, independent of the annexation, to provide a safe and reliable water supply for the residents of Kiryas Joel.*

Comment 3.5.7-18: (Letter 23, Andrew Fetherston, P.E., & Thomas Dwyer, P.G. June 18, 2015): On page 3-5.17, the statement "Once the Village is connected to the Catskill Aqueduct, it is intended to serve as the primary water source for the Village and groundwater wells will be in place as temporary back-up water supply during those periods when the Aqueduct water is unavailable due to maintenance. Therefore, after the aqueduct connection, the Village's wells will only be used on a temporary basis for testing or during those periods when the Aqueduct is unavailable." Assumes a permit will be issued. If a permit is not issued for KJ, is the annexation feasible, given the existing wells and the impacts noted in this document? Without the Aqueduct we assume well permits will precede Annexation?

Response 3.5.7-18: *See Response 3.5.7-1 and 3.5.7-3. The proposed annexation is not dependant upon having secured agreements or permits for water supply for all future residents. The Village has invested in the long term planning and studies to provide water for anticipated growth over time in the community. As in any other community, all*

new residential projects in the Village will need to demonstrate that the Village can provide adequate water for the project. Based on the Village's entitlement to Aqueduct water, there is no reason to believe that the connection will not be authorized by NYCDEP once final adjustments to the engineering plans are agreed upon between the Village and NYCDEP engineering staff.

Comment 3.5.7-19: (Letter 23, Andrew Fetherston, P.E., & Thomas Dwyer, P.G. June 18, 2015): Page 3-5.19 states "Connection to the Catskill Aqueduct will also mitigate potential water supply source impacts." This is not true as wells are needed during Aqueduct shutdowns. The Mountainville wells have not been permitted. There are many potential impacts noted herein and as provided to the NYSDEC during the public hearing and as the written comment attests. The document has not addressed the sustainability of aquifer recharge supplying their existing wells. This issue still needs to be addressed for the Mountainville site as previously discussed.

Response 3.5.7-19: *The comment appears solely directed to the pending NYSDEC water supply permit for the Mountainville well and is outside the scope of this DGEIS. The Village and its consultants have provided data and analysis to the NYSDEC regarding the impacts of the Mountainville Well. The analysis indicates that the proposed pumping rate of 425 gpm is sustainable, based upon the pump test analysis and aquifer recharge conditions. That application is currently under review by the NYSDEC. As noted in the DGEIS, after connection to the Aqueduct, the Village's wells will only be used on a temporary basis for testing or during those limited periods when the Aqueduct is unavailable. It is reasonable to conclude that this limited use will relieve and reduce stress on the aquifer.*

Comment 3.5.7-20: (Letter 24, Open Space Institute, et.al., June 19, 2015): As part of the Village's application to the NYSDEC, and in the Village's negative declaration under the State Environmental Quality Review Act (SEQRA) for the expansion of its water supply (the Water Supply Expansion Neg Dec), the Village stated, repeatedly, that the use of Mountainville Well would be as a secondary water supply source, which was a necessary prerequisite to the Village making a connection to the New York City Catskill Aqueduct (the NYC Aqueduct). The Village's Water Supply Expansion Neg Dec specifically stated that the Mountainville Well "will assure an adequate backup supply as required for the Village's Catskill Aqueduct connection." Now, in its Draft Generic Environmental Impact (DGEIS) the Village has changed its water supply project, stating that the Mountainville Well would be used as a primary source of water supply for some unspecified period of time, and possibly as a permanent water supply. See DGEIS at 3.5-1, 6. The Village's only apparent obligation would be to merely identify a redundant source of water one year after placing the Mountainville Well into service as a primary water source. The Village makes no commitment to use a redundant water supply within any timeframe, or to reserve the use of the Mountainville Well as a backup supply as it previously claimed. This is a substantial change to the Village's proposed water supply expansion. The Village's indefinite use of the Mountainville Well as a primary water source heightens our concerns over the environmental threats to the Moodna Creek and Ramapo River watersheds and their surrounding ecology.

Response 3.5.7-20: *See Response 3.5.7-7.*

Comment 3.5.7-21: (Letter 24, Open Space Institute, et.al., June 19, 2015): Unfortunately the Village unilaterally suspended the NYSDEC's review of its water supply application. As a result, the Village has yet to address any of the significant and substantive comments raised during the NYSDEC's legislative hearing, including our prior comments. Nonetheless,

construction of the pipeline to the Mountainville Well continues, without either NYSDEC or NYC approval to actually fill it with water. Furthermore, the Village is installing a pipe that is 24 inches in diameter; the Village's prior SEQRA review only evaluated the impacts associated with the use of an 18 inch diameter pipe. A 24 inch pipe has double the carrying capacity of an 18 inch pipe. This is one more example of the outstanding issues that the Village did not review under SEQRA, or inadequately reviewed.

> ***Response 3.5.7-21:*** *The NYSDEC's review of the Water Supply Permit application is not suspended and remains ongoing. With respect to prior approvals, see Response 3.5.7-1 and 3.5.7-3. Regarding the size of the pipeline, the Village's SEQRA review for the Aqueduct Connection fully assessed the project as designed with the 24-inch pipe. The issue identified by the comment has been previously raised in the litigation challenging the Mountainville SEQRA review and was dismissed by Orange County Supreme Court, Environmental Claims Part, in favor of the Village. (Town of Woodbury et al. v. Village of Kiryas Joel, Sup Ct, Orange County, Lefkowitz, J., April 7, 2014, Index No.2877, at 3-6) (See Appendix G11).*

Comment 3.5.7-22: (Letter 24, Open Space Institute, et.al., June 19, 2015): The landscape in Orange County affected by the proposed water supply expansion has been the epicenter of conservation efforts for more than a century. Starting in 1909, the State of New York and the Palisades Interstate Park Commission protected over 71,000 acres of land in the western Hudson Highlands, including Harriman State Park (New York State's second largest state park), Bear Mountain State Park, Sterling Forest State Park and Storm King State Park. Collectively we have protected an additional 9,000 acres in this area at an aggregate cost of over $72 million. The proposed water supply project may have a significant impact on the public's use and enjoyment of these scenic, historic and ecologically sensitive lands. As noted by Chazen, the Village's existing water supply analysis "fails to describe and evaluate inevitable environmental impacts of a 425 gpm inter-basin transfer removing water from the Woodbury Creek tributary watershed and its downstream Moodna Creek watershed." Based on actual field data and analyses, Chazen found that, [the] continuous removal of 425 gpm will deplete the Woodbury Creek of more than half its flow during at least one month per year on average, and is likely to fully dry the creek bed during drought periods. These depletion impacts raise concerns also for downstream Moodna Creek flows since our data demonstrate that the Woodbury Creek supports half the flow of the Moodna Creek during dry periods.

> **Response 3.5.7-22:** *Village residents value Orange County's parks and open spaces, along with other County residents. See Response 3.5.7-2; 3.5.7-7; 3.5.7-14; and 3.5.7-19.*

Comment 3.5.7-23: (Letter 32, Robert A. Fromaget, Monroe, New York): The impact of this assessment on population growth suggests that from 2010 to 2040 there will be a population of 147,063 people in the Village of Kiryas Joel and they will need 10.6 million gallons per day (gpd) of water. This is based on the Kiryas Joel FEIS document for their water pipeline where they state their average consumption is 72 gallons per day per resident.

> ***Response 3.5.7-23:*** *The DGEIS analyzed population growth for the Village of Kiryas Joel community to the year 2025, which is consistent with most long-term planning studies. The DGEIS included an analysis of potential Village water demand, with and without annexation. As discussed herein, the DGEIS used the estimate of 66 gallons per day per resident, which is based upon actual water use.*

Comment 3.5.7-24: (Letter 40, Russ Kassoff, Monroe, June 22, 2015): It is ridiculous to build a 13 mile pipeline to tap the NYC Water Supply. NYC has not issued permits for this - and the water in NYC has become more expensive than ever to its residents. The NYC Water Board has not approved the tapping of their Water Supply for KJ. Even KJ residents will incur high water rates from NYC should this ever be approved.

Response 3.5.7-24: *See Response 3.5.7-1 and 3.5.7-3.*

Comment 3.5.7-25: (Letter 40, Russ Kassoff, Monroe, June 22, 2015): Consequences of massive building and development - Who will be responsible for the aquifer and the quality of water to the surrounding neighbors as far as the aquifer will provide if, as is a normal occurrence construction causes the pollution of such aquifer? Will the polluted aquifer causing compromised water, perhaps even brown drinking water allow those who have been harmed to sue construction companies and developers? A sole source aquifer for this region has always been met by the DEC with rulings that all development in such areas would be denied and the permitting would be rejected as well as building proposals because if the aquifer is our single source then the entire community would be harmed.

Response 3.5.7-25: *Sole source aquifers are an EPA designation. The wells that serve the Kiryas Joel community do not draw groundwater from a designated sole source aquifer. A sole source aquifer has not been designated in the vicinity of the Village or the Brenner well field. Likewise, the annexation territory does not overlie a designated sole source aquifer.*

Comment 3.5.7-26: (Letter 40, Russ Kassoff, Monroe, June 22, 2015): All property owners may petition the town to create or develop a water district, a sewer district and the town can grant you the OK to create one providing that you pay for it. Has a petition ever been filed to the town for such services? I myself enjoy my well water - I drink it, I wash with it, I shower with it and I love it. Massive construction projects will certainly damage the aquifer and who knows what effect that will be.

Response 3.5.7-26: *Residents in the Town may petition for a water district provided a centralized source is reasonably available. Two recent subdivision projects in the Town, Vintage Vista and Forest Edge, appear to have done so in order to acquire a water supply from Kiryas Joel.*

Comment 3.5.7-27: (Letter 41, Richard Massimi, Greater Cornell Chamber of Commerce, June 22, 2015): We believe the aquifer test conducted by KJ consultants is inadequate for determination of impacts to water dependent natural resources, our local farms, our tourism, our rivers and streams, the Moodna Creek Watershed and, most importantly, our own plans for our current needs for our water supply to our residents.

Response 3.5.7-27: *See Response 3.5.7-2 and 3.5.7-6.*

Comment 3.5.7-28: (Letter 42, Lorraine McNeill, June 21, 2015): There are numerous issues not addressed regarding water supply, which is inadequate currently and will be even more so if this annexation goes through. There are issues not addressed regarding inter-basin transfers that will help the Ramapo basin with increased flow but to the detriment of the already stressed Moodna basin.

The Village does not have a water supply adequate for the growth anticipated in its current territory; it definitely will not have an adequate water supply for the additional growth in expanded area should this annexation go through and be developed as indicated. And the Village of Kiryas Joel seems to be relying on water sources that are not yet approved, like the Mountainville wells, whose application was withdrawn back in January. Additionally, the Village plans on one well permit for a series of wells not connected or contiguous in anyway and these should be separate permits. Also, there is no back up water supply for redundancy as required. The water consumption rates are underestimated and this annexation and increased density will have a detrimental effect on the water supply in NYC should the Catskill Aqueduct connection be approved by the NYC DEP. It will have a detrimental effect on an approved Woodbury water source (a well nearby and not revealed by Village leaders to the NYC DEP) if the Mountainville wells are approved.

Response 3.5.7-28: *See Response 3.5.7-3. DGEIS section 3.5 contains a detailed discussion of the Village's existing and available potential future water supply sources.*

As reported in the DGEIS, the per capita water consumption rates for Village residents are reasonably based upon actual water usage rates and are not underestimated. As noted in Response 3.5.7-1, NYCDEP is fully aware and working cooperatively with the Village on the Aqueduct connection and has not raised any issue with respect to detrimental effects upon the New York City system.

Likewise, issues related to potential impacts to Woodbury's wells have been fully addressed by the Village in its water supply permit application and SEQRA negative declaration. This issue was also previously raised in the litigation challenging the Mountainville SEQRA review and was dismissed by Orange County Supreme Court, Environmental Claims Part, in favor of the Village. (Town of Woodbury et al. v. Village of Kiryas Joel, Sup Ct, Orange County, Lefkowitz, J., April 7, 2014, Index No.2877, at 15) (See Appendix G11).

Finally, with regard to the comment on the consolidated water supply permit, the DGEIS makes clear that the Village currently has separate valid NYSDEC-issued permits for each of its water supply wells. Consolidation is being done at the request of NYSDEC.

Comment 3.5.7-29: (Letter 47, Margie Turrin, June 22, 2015): The proposed development plan does not take into account the current impact on water for Rockland County. The proposed source of water is not clearly delineated and much is left to be determined later. Planning cannot be done on blind trust. Prior to approving any kind of annexation clear plans need to be in place that note the source of all drinking water and the plan for wastewater.

Rockland draws a third of their water resources from well fields in the Ramapo River. Currently the water being pulled for drinking water is primarily groundwater from the wells, however there are times that, in addition to the well water, this water is pulling surface water. This means an extra layer of purification is required which is an extra cost to United Water and ultimately the customers as the end users.

Response 3.5.7-29: *The DGEIS focuses on the implications of annexation. Since population growth will occur with or without annexation, the discussion of water supply is provided as background, rather than a likely potential adverse impact. The DGEIS at Section 3.5.1 reasonably describes the existing and potential water supply sources*

available to the Village. These include viable potential sources for which the Village possesses an ownership interest.

The DGEIS discusses the fact that the Village bedrock aquifer and the Ramapo River Valley aquifer are both located in the Ramapo River basin. This is a large drainage basin that straddles New York and New Jersey. One existing well in the Brenner well field (Well 28) is located in sand and gravel deposits near the Ramapo River. This well has been a permitted well for the Village for nearly 10 years. When approving the permit for this well, NYSDEC expressly determined in its approval that this new water supply would have no adverse impact on the Ramapo River. (This information is reflected in the 2009 AFEIS for the Aqueduct Connection project). In addition, water-level monitoring in the Ramapo River was conducted from 2007 through 2009 (23 months) per special Condition No. 8 for Water Supply Permit #10,612 after Well 28 was placed into service. Daily water level measurements were collected from locations in the Ramapo River upstream and downstream of Well 28. This monitoring program showed no direct impact from Well 28 pumping on the Ramapo River. The results of this monitoring program were submitted to the NYSDEC as part of the permit special condition.

Any expansion of this well field or new wells within the Ramapo River watershed will likewise require NYSDEC approval. After the Village is connected to the Catskill Aqueduct, the existing groundwater wells in the Village water supply system will be used as back-up supply sources, reducing the pressure on groundwater wells in the vicinity of the Ramapo River.

The annexation's relationships to wastewater treatment and to the Ramapo River Basin are further discussed in DGEIS Section 3.6-1.

Comment 3.5.7-30: (Letter 49, Michael & Mary DeFranco, June 19, 2015): We have attended numerous hearings regarding this annexation proposal and are concerned about the impact it would have on our Village and the citizens of Orange County.

We are very concerned regarding the annexation and the use of the wells in Mountainville to support this annexation. As of today, there has been no indication that the NYCDEP has granted or is even considering granting access to the Catskill aqueduct as the primary water source for this annexation as was originally proposed. At the meeting that was held in KJ, the apparent intent is now to use the Mountainville wells as the primary source. Doesn't this negate the entire request? What would the secondary source be? How would it be monitored? How would the aquifer replenish? How will this affect the populations of Cornwall and Cornwall on Hudson who also obtain their water from the same aquifer? How can an annexation proceed or even be considered if the basic question of water has not been resolved!?

Response 3.5.7-30: *See response to Comment 3.5.7-1; 3.5.7-3; 3.5.7-7 and 3.5.7-11.*

Comment 3.5.7-31: (Letter 50, John Ebert, Chairman, Monroe Conservation Commission, June 20, 2015): The DGEIS utilizes a rate of 66 gallons per day for water usage. Is this the actual rate utilized and approved by NYSDOH for permitting purposes? Current water use rates are known but not specified in the DGEIS. Reference to average gallons per day of water use should be from a known data source. If not, what is the rate, and what is the total usage using that rate, based on full build out, and not the arbitrary 2025 build out.

Response 3.5.7-31: *The estimated water usage rate for residents of the Village of Kiryas Joel, at 66 gallons per day, is based upon Village residents' actual water usage rates. The basis for the water usage is discussed in page 3.5-13 of the DGEIS.*

The projected date of 2025 is not arbitrary but a 10-year time frame that is commonly used in planning studies. The County's own projections for population growth in Orange County go out ten years, as do most municipal comprehensive plans. For example, the County's AFEIS for the Harriman Wastewater Treatment Plant (WWTP), completed in 2010 was based on a population growth and build out analysis through 2025. The 2010 update to the Orange County Comprehensive Plan also contained population projections and housing forcasts out only to 2020. While the 2011 Woodbury Comprehensive Plan DGEIS did not contain any specific forcasts, the plan itself is a vision of the Village in 2020. Additionally the Orange County Final Water Master Plan, published in October 2010 only included five- and ten-year planning horizons.

Comment 3.5.7-32: (Letter 50, John Ebert, Chairman, Monroe Conservation Commission, June 20, 2015): In stating that the Village of Kiryas Joel can service outside Petitioners via an out of district agreement, there does not appear to be a compelling reason to annex the lands on the basis of providing water supply.

Response 3.5.7-32: *The DGEIS discusses the differences between the "annexation scenario" and the "no-annexation" scenario, as it relates to outside Petitioners residing in the Town of Monroe and water service. See pages 3.5-14 through 3.5-16. Non-Village residents choosing to connect to the Village system will have to pay for extending water lines and securing the permits and approvals that come with infrastructure improvements. Therefore, it is more likely that larger residential development projects may choose to connect to the Village water system versus smaller individual homeowners. These projects will be subject to individual project review involving the Village, the Town of Monroe, OCDOH, NYSDOH, and NYSDEC. The cost, time and uncertainty of these reviews, would make connection to the Village water system more burdensome for Town residents outside of the Village, including the Annexation Petitioners, than for residents of the Village. Moreover, the Annexation Petition was premised on the desire for many other municipal and community services that are more readily available in the Village than the Town, in addition to public water.*

Comment 3.5.7-33: (Letter 50, John Ebert, Chairman, Monroe Conservation Commission, June 20, 2015): The WA does not examine the significant impact to water supply that full build out of the annexation lands will create. The amount of water demanded by full build out of the annexation lands based on the Village's current zoning and realistic development trends needs to be evaluated. In addition, the Village's current water supply system which it controls needs to be compared to the volume of water required to meet the NYCDEP requirements for a full backup supply. Has the Village's water supply been in compliance with water quality standards for the last five years? Data sets from the prior five years of KJ well quantity and quality test should be provided in the DGEIS.

Response 3.5.7-33: *See Response 3.5.7-3. The Village's water supply is regulated by NYSDEC and NYSDOH and is in compliance with all of its existing permits.*

Comment 3.5.7-34: (Letter 50, John Ebert, Chairman, Monroe Conservation Commission, June 20, 2015): The DGEIS completely fails to disclose water quality results of the drinking water supply from the well fields serving the VKJ. Are any wells presently shut down?

Response 3.5.7-34: *See response to Comment 3.5.7-34. Inclusion of the referenced data is beyond the scope of the DGEIS.*

Comment 3.5.7-35: (Letter 50, John Ebert, Chairman, Monroe Conservation Commission, June 20, 2015): From a sustainability aspect, a comparison is needed between:

- the estimated groundwater recharge to water supply aquifers that are tapped in the study area; and
- the overall projected groundwater usage.

This assessment needs to include induced infiltration from surface water bodies, and the effect on the flow and water levels in these surface water bodies.

Response 3.5.7-35: *A groundwater recharge analysis is beyond the scope of the DGEIS.*

Groundwater wells serving the Village system have been approved by NYSDEC since the establishment of the Village in 1976. As noted in the DGEIS, currently the Village water system includes 17 wells in two well fields. All wells added to the system are required by the NYSDEC to be evaluated with a standard 72-hour pumping test. The pumping test determines the sustainable yield of the well, and whether the use of the well will have impacts on nearby wells or surface water resources.

Comment 3.5.7-36: (Letter 50, John Ebert, Chairman, Monroe Conservation Commission, June 20, 2015): Well 28 in the Brenner well field, described as a high capacity well, produces water from the Ramapo River valley sand and gravel aquifer. The DGEIS should include estimates of the amount of induced surface water infiltration from the Ramapo River and its tributaries due to the operation of Well 28 and other wells in the Brenner well field, as well as estimates of the potential reduction in surface water flow in these streams resulting from the operation of the this well field, given that: (1) the effluent from the VKJ WWTP discharges to a tributary of the Ramapo River upstream of the well field and thus this effluent may contribute recharge to the aquifer tapped by the well field; and (2) the Harriman WWTP discharges to the river downstream of the Brenner well field, and a decrease in river flow will increase the impact from the Harriman WWTP effluent on the river water quality.

Response 3.5.7-36: *See Response 3.5.7-29. Well 28 has been permitted by the NYSDEC since 2005 for an allowable flow rate of 337.5 gallons per minute (based on an 18 hour per day pumping cycle). When approving the permit for this well, NYSDEC expressly determined in its approval that this new water supply would have no adverse impact on the Harriman WWTP and the Ramapo River. (This information is reflected in the 2009 AFEIS for the Aqueduct Connection project). Any expansion of this well field or new wells within the Ramapo River watershed will likewise require NYSDEC approval. Further analysis of a permitted well is beyond the scope of the DGEIS.*

Comment 3.5.7-37: (Letter 50, John Ebert, Chairman, Monroe Conservation Commission, June 20, 2015): In the first paragraph under the header "Mountainville Well Field", it is stated that "A requirement for connection to the Catskill Aqueduct and the New York City water supply will be to have a backup supply source in the event that repairs are needed on the Aqueduct." Will there also be other reasons for the required backup that will be included in the agreement between New York City (NYC) and VKJ, such as the potential for a reduction or complete cessation of water supply from the Catskill Aqueduct as NYC's water needs continue to expand?

Response 3.5.7-37: *The Village is not aware of any potential future reductions in the New York City water supply system. Such speculative comments are beyond the scope of the DGEIS.*

Comment 3.5.7-38: (Letter 50, John Ebert, Chairman, Monroe Conservation Commission, June 20, 2015): In the third paragraph under the header "Mountainville Well Field", it is stated that "The aquifer consists of interbeds of well-sorted sand and gravel, silt and clay. The best water-yielding and water-bearing material in the aquifer is the coarse sand and gravel deposits". Review of the "Town of Monroe, Orange County Groundwater Study Map" indicates that unconsolidated deposits in the area of the Mountainville well field consist of "Stratified clay and silt with no or thin layers of sand and gravel at land surface and below the water table". This description is not inconsistent with the description provided above, but it provides further detail and indicates that the sand and gravel beds constitute only a small percentage of the deposits intersected by the well intakes, with the remainder being low permeability, low yielding clay and silt. Were the estimated well yields for this well field based on 72-hour pumping tests? Given that the beds of gravel and sand are likely thin and possibly discontinuous in this type of setting, the minimum required 72-hour pumping test would likely overestimate the long term safe yield of wells.

Response 3.5.7-38: *The comment appears to misidentify the map which was not from the Town of Monroe, but was from mapping completed by Leggette Brashears & Graham (LBG) (the Village's own consultant). LBG completed the mapping of the sand and gravel aquifer referred to above (Orange County, New York, Ground-Water Resource Study, May 1995). The aquifer mapped along the entire Woodbury Creek corridor consists of interbeds of well-sorted sand and gravel, salt and clay. Mapping was conducted along the Woodbury Creek Corridor utilizing prior mapping conducted by Frimpter (Frimpter, 1972) and the Soil Survey of Orange County (Olsson 1981). No drilling information of aquifer material at depth was available so the mapping was limited to surficial geology to interpret the aquifer at depth. Drilling and pumping test support the conclusion that a prolific outwash sand and gravel deposit underlies the Mountainville well field and region.*

The estimated yield for the Mountainville Well No. 1 were based upon a 72-hour pump test which provides the most reliable demonstration that the yield is sustainable. The pumping test was strictly done according to the NYSDEC pumping test standards ("Recommended Pump Test Procedures for Water Supply Application," TOGS 3.2.1, Appendix 10). The descriptions of the aquifer and water bearing sediments were provided from the well drilling and installation information. These well logs are more accurate for a given location than groundwater study maps, which typically provide general subsurface descriptions for a larger area. The Mountainville well is located in the Town of Cornwall, not the Town of Monroe.

Comment 3.5.7-39: (Letter 50, John Ebert, Chairman, Monroe Conservation Commission, June 20, 2015): The last paragraph on this page begins with "The groundwater sources and wells may include: …" This is a clear statement that required water sources are not yet defined or resolved. Availability of water resources, and the associated management of wastewater produced by use of water from these sources, are some of the most significant, critical-path issues that need to be resolved before the feasibility of Annexation and major population growth in the annexed area can be fully assessed. Since these issues have been ongoing topics of

study for some time, and are still far from being resolved, the availability of the required water sources cannot be considered a forgone conclusion at this point in either the decision-making or the assessments being conducted as they relate to the proposed Annexation and related topics.

> ***Response 3.5.7-39:*** *See Responses 3.5.7-3 and 3.5.7-28. The proposed annexation of land is not dependent upon having secured approved water resources to provide water for future residents. The DGEIS demonstrates that the Village has in place reasonable plans and resources necessary to provide for those anticipated future demands. Any new residential project in the Village or in the annexed land will need to demonstrate that there is sufficient water supply to support that project, as required by NYSDEC, NYSDOH, the Village of Kiryas Joel (for Village projects) and the Town of Monroe (for Town projects).*

Comment 3.5.7-40: (Letter 50, John Ebert, Chairman, Monroe Conservation Commission, June 20, 2015): In the last sentence of the fourth paragraph of this page, the sentence reads "Therefore, without the annexation, residents in Town of Monroe land are ultimately dependent upon available private wells". Note that this is also the case in much of the rest of the Town of Monroe, not just in the area being considered for annexation. Also, the water supply would not necessarily be reliant on available private wells; new wells could also be installed.

> ***Response 3.5.7-40:*** *Comment noted. The commenter is correct that most residents in the Town of Monroe are dependent upon private wells. New wells would likely need to be installed to service new development in the annexation lands, if connection to the Village water system was not feasible or otherwise implemented.*

Comment 3.5.7-41: (Letter 50, John Ebert, Chairman, Monroe Conservation Commission, June 20, 2015): The second paragraph on this page indicates that the per capita water usage in VKJ (66 gallons per day [GPD]) is 12 percent greater than the average in Orange County (58.9 GPD). Given this greater than average per capita water usage, and that during the public comment hearing for the DGEIS on June 10, 2015 it was pointed out that the population growth estimates provided in the DGEIS for the VKJ community are likely greatly underestimated, the actual projected water needs require re-evaluation before the DGEIS can be completed.

> ***Response 3.5.7-41:*** *The source for the 58.5 gpd per capita water use estimate for Orange County residents has not been provided. The Orange County, New York Final Water Master Plan (October, 2010) utilizes a per capita water demand of 118 gallons per day (gpd) for municipal water districts and 62 gpd for individual wells. By comparison, the USGS reports the current national per capita average at approximately 98 gpd and per capita water use in New York City is reported at approximately 127 gpd. The DGEIS utilized a figure of 66 gpd which is reasonably based upon Village residents' actual water usage rates. The basis for the water usage is discussed in page 3.5-13 of the DGEIS.*

Comment 3.5.7-42: (Letter 50, John Ebert, Chairman, Monroe Conservation Commission, June 20, 2015): In the last paragraph under "Village and Annexation Territory", it is stated that "The capacity of these water sources to serve new development in the land proposed for annexation will be reviewed on a case-by-case basis by agencies authorizing respective approvals and permits (OCDOH, NYSDEC, and NYSDOH)". Note that under the scenario without annexation (i.e., the existing scenario) they would also be reviewed by boards within the Town of Monroe (e.g., Planning Board). The feasibility and approval of constructing dwellings on these properties will be partly based on availability of sufficient well yield/water supply. Under

existing laws and zoning, lack of sufficient water supply, among other considerations, may lead to a determination that the property cannot be developed for a dwelling as proposed.

Response 3.5.7-42: *Comment noted. Likewise, any future development approvals in the Village would also require approval by the boards within the Village. The availability of groundwater on any given parcel is variable and uncertain. Under the with annexation scenario, landowners in the annexation territory would be afforded greater certainty of a reliable municipal water supply.*

Comment 3.5.7-43: (Letter 54, David E. Church, AICP, Commissioner, Orange County Department of Planning, June 22, 2015): There is a plan under development to connect the existing Kiryas Joel water distribution system to the Catskill Aqueduct. In the meantime, the Village continues to develop groundwater sources in order to meet demands within the system. Plans, however, have not been submitted and finalized for either the connection to the aqueduct, or to continue to develop groundwater sources until such time as that connection is made. This does not necessarily mean that the Village will be unable to meet system demands (regardless of annexation), but proper planning is necessary to show how the Village will meet those demands as growth and system usage continues to increase. There is an assumption that adequate supply exists from both groundwater and aqueduct sources, but little mention is given to how this will be implemented or how it will be scheduled to keep pace with demands. Annexation is anticipated to accelerate the rate of development and demand for utilities. There is no correlation of when new dwelling units will be brought on line and how this will correlate with the associated demand and available capacity of systems. This analysis should be provided.

Response 3.5.7-43: *See Response 3.5.7-1.*

Comment 3.5.7-44: (Letter 54, David E. Church, AICP, Commissioner, Orange County Department of Planning, June 22, 2015): The DGEIS seems to suggest that because population growth is constant under either scenario (annexation or no annexation) the water and wastewater service requirements are also equivalent. However, without annexation, a portion of anticipated growth would occur in surrounding Towns typically serviced with conventional on site wells and septic systems. Therefore the 'no annexation' scenario precludes the need for a share of the centralized water and wastewater infrastructure currently planned. The DGEIS must examine the benefits and/or liabilities associated with relieving expansion pressure on centralized W/WW services by the use of distributed W/WW services under the 'no annexation' scenario.

Response 3.5.7-44: *The "no annexation" scenario in the Town of Monroe annexation territory is discussed in the DGEIS pages 3.5-14 through 3.5-16. Under the no annexation scenario, as indicated by the comment, the need for a share of centralized water or wastewater would not exist if such service was not specifically sought. Therefore, without such demand, there would be no pressure on such systems to be relieved and no need for a separate analysis in the DGEIS as suggested by the comment. Nevertheless, as described in the DGEIS, it is reasonably concluded based on recent history that there will still be demand for centralized services in the annexation territory even without annexation and, therefore, the DGEIS considers that demand.*

Comment 3.5.7-45: (Letter 54, David E. Church, AICP, Commissioner, Orange County Department of Planning, June 22, 2015): The DGEIS indicates that centralized water available to the Village will include use of the Mountainville test well field which remains under

permitting review. Use of this well field has not yet been approved and would constitute an inter-basin water transfer, importing water to Kiryas Joel from the nearby Woodbury Creek watershed. This uncertainty and the impacts of the inter-basin transfer must be addressed.

> ***Response 3.5.7-45:*** *New York State regulations 6 NYCRR Part 601 "Water Withdrawal Permitting, Reporting and Registration," subpart 601.18, requires that a diversion of water or wastewater over 1,000,000 gpd (gallons per day) across New York State Major Drainage Basin watershed boundaries must be reported to and approved by NYSDEC. The interbasin transfer of water from the Mountainville Well 1 located in the Lower Hudson Basin of 425 gpm (gallons per minute) or 612,000 gpd to the Ramapo River watershed does not exceed the threshold volume of 1,000,000 gpd. Accordingly, the fact that the transfer is significantly below the regulatory threshold indicates that it will not result in a significant impact and is thus permissible.*

Comment 3.5.7-46: (Letter 54, David E. Church, AICP, Commissioner, Orange County Department of Planning, June 22, 2015): A 2011 Mountainville Well pumping test report by the applicant's consultant (LBG) describes a 425 gpm pumping test at this site, and includes calculations suggesting that 1,212 gallons per minute might be supported by this location. On August 12, 2010, the Chazen Companies recorded a flow of just 2.14 cfs (960 gpm) in the Woodbury Creek (August 2010 field report by Chazen for OCWA) during a period when reference watersheds with available performance statistics indicated lower flows would be expected approximately 10% of the time. Thus Woodbury Creek flows of approximately 960 gpm or less currently occur over more than one full month per year. Interbasin transfers remove water that ultimately leave watersheds by streams, so a continuous 425 gpm pumping rate would remove half or more of the flow of the Woodbury Creek for more than one month per year, and fully dry the streambed for more than one month per year if a pumping rate of 1,212 gpm is used.

Page 2-10 of the DGEIS does not confirm the volume of water needed from the Mountainville test well site. The analysis also does not discuss stream or biological impacts of such gallon-for-gallon flow reductions in Woodbury Creek under either the demand rate under the 'annexation' scenario or the likely lower demand rate under the 'no annexation' scenario when a share of the proposed growth might be supported by individual wells.

The Woodbury Creek is a Class C(TS) stream indicating it has the capacity to support trout species and serve as spawning habitat; the Creek also hosts other native aquatic species, and is abutted by substantial riparian wetlands. Benthic macro-invertebrate sampling overseen by OCWA has occurred on the Woodbury Creek four times, in the years of 2005, 2006, 2010 and 2012, documenting slow declines in ecological habitat condition, with the latest known (2013) report identifying Slightly Impaired water quality. Depleted stream flow would presumably pose additional stress on this creek, requiring analysis.

The August 12, 2010 Chazen gauging data also indicate that the Woodbury Creek provides fully half of the flow of the Moodna Creek below their point of confluence. An interbasin removal of 425 gpm from the Mountainville well field would therefore reduce the lowest month flows of the Moodna creek by 27% or more, with greater flow depletion if up to 1,121 is removed from the Moodna Creek. The existing conditions and impacts of such flow depletion on the Moodna Creek below its confluence with Woodbury Creek require evaluation.

> ***Response 3.5.7-46:*** *See Response 3.5.7-2 and 3.5.7-6. As indicated in the DGEIS discussion of the Mountainville Well No. 1 (pages 3.5-6 and 3.5-7), the NYSDEC*

required 72-hour pumping test demonstrated that the Mountainville well was self-sustaining and its use would not impact local nearby wells or surface water bodies. This issue was also previously raised in the litigation challenging the Mountainville SEQRA review and was dismissed by Orange County Supreme Court, Environmental Claims Part, in favor of the Village. (Town of Woodbury et al. v. Village of Kiryas Joel, Sup Ct, Orange County, Lefkowitz, J., April 7, 2014, Index No.2877, at 15).

Comment 3.5.7-47: (Letter 54, David E. Church, AICP, Commissioner, Orange County Department of Planning, June 22, 2015): Inter-basin Water Transfer: The DGEIS readily states that withdrawal of 612,000 gallons per day (GPD) from the Mountainville well will occur for at least one if not two years because of KJ population growth and annexation. This will occur until approval and a connection to the NYC Aqueduct is made. NYSDOH requires that redundancy exist with the most productive well out of service. With the projected growth of Kiryas Joel, as reported by Tim Miller, in all likelihood the Mountainville and/or the Star Mountain Well Fields will be in service even if the Village is eventually connected to the NYC Aqueduct. This constitutes a planned exportation of water from the Woodbury Creek and Moodna water basins to the Ramapo water basin. The water withdrawal and transfer will impact the ability of municipalities in the Woodbury Creek and Moodna basins from developing residentially and commercially; thereby impacting their community viability. This impact needs to be analyzed in the DGEIS.

Response 3.5.7-47: *See Response 3.5.7-45 regarding the inter-basin transfer of water.*

Regarding impacts to local municipalities, see Response 3.5.7-6 and 3.5.7-46. The safe yield of the Mountainville Well is 612,000 gpd (425 gpm), based upon the pumping test. This is the yield identified in the draft permit now under review. Under the draft permit, the total average combined water taking permitted by the NYSDEC would be limited to 1.93 mgd (1,928,800 gpd). The draft permit excludes the Mountainville Well No. 1 in the total combined permitted yield capacity for the Village based on the NYSDOH redundancy requirement (best well out of service). With the Mountainville Well volume removed from the Village inventory, the Village is unable to demonstrate adequate source capacity to meet its maximum peak daily demand. Acknowledging the ongoing effort by the Village to connect to the NYC Aqueduct to meet its water supply needs, NYSDEC has provided a condition in the draft permit that would allow the Village to temporarily take up to 2.54 mgd utilizing the Mountainville Well, provided the Village can establish another redundant well at Mountainville or elsewhere within a reasonable time period. This can be accomplished at the Mountainville site; however, it must be noted that doing so will not increase the net taking permitted from this well field.

The Village is not seeking sustained, long-term withdrawal of 2.54 million gpd, but rather authorization to provide for such capacity when maximum peak demand situations require it. The Village can meet its average demand with its existing wells. There has been no identified community impact from use of the Village's existing wells. In any event, the Village intends to reduce the impact of its water demand on the aquifer by constructing the pipeline and aqueduct connection. This will result in a positive impact on the groundwater resource and the community. The pumping test demonstrated that the proposed well can sustainably yield 425 gpm without endangering other supplies.

Comment 3.5.7-48: (Letter 55, Sheila Conroy, June 22, 2015): Page 2-10 discusses that the Village currently has sufficient water supply to meet current demands, except during those times of peak demand. It further describes other possible water sources which include the

Mountainville Well, the Star Mountain well field and the purchased Woodbury Heights Water Company. The document does not quantify how frequently these "peak times" occur or how much water is trucked in. According to the EIS for the aqueduct application, these "peak times" were often associated with religious observances that consisted of at least 75 days/year. Is this number still accurate? Since the new approved water supplies (excluding the unapproved Mountainville and Star wells) that have been added can barely keep up with the Village's growth, what is the current existing water deficit during these peak times? How much water needs to be trucked in daily during these peak times – gallons per day and for how many days in a row? The original Environmental Study for the Aqueduct Connection was begun in 2003 and modified a few years later, so those figures likely need updating. Do these peak times occur in the summer or fall when water tables may be lower due to seasonal adjustments? How frequently do these peak demand times occur?

Response 3.5.7-48: *The noted issues are independent of the annexation action and therefore are beyond the scope of the DGEIS.*

The total present combined yield capacity of all Village wells is approximately 2.28 million gallons per day ("mgd"),not including the Mountainville Well. The current total permitted water taking limit under existing NYSDEC water supply permits is a combined 1.93 mgd. The reason for the difference in these figures relates to the NYSDEC imposed 1.0 mgd cap on the volume that can be regularly used from the higher yielding wells in the Village (present yield capacity = 1.389 mgd). Higher amounts are available for use on those limited occasions when necessary to meet the Village's maximum peak water demand. In addition to its wells, the Village maintains five storage tanks with a total capacity of 3.72 million gallons, which serve to support the Village's ability to meet maximum day demands which occur on only a limited number of days per year. In the past, as noted in the DGEIS, the Village has even relied on the use of trucked in water on limited occasions to support maximum demand, which is an acceptable albiet costly practice. In all of 2014, the Village's maximum daily demand exceeded 2 mgd on only five occasions.

Comment 3.5.7-49: (Letter 55, Sheila Conroy, June 22, 2015): What is the status of the Mountainville and Star well sites named above? Are they close to being brought on-line? Have they received DEC permits? Given the "inevitable growth rate" proclaimed by the Village and the requirement by the NYC Department of Environmental Protection that all water now and in the future that is drawn from the pipeline must have an independent back up supply so that the Aqueduct does not become the primary supplier, the Village will need to continuously be looking for ever more well fields. This again goes to the central issue of being able to sustain itself given that resources are not infinite.

Response 3.5.7-49: *The draft Water Supply Permit that includes the Mountainville Well is pending before the NYSDEC. A permit for the Star Mountain well field is not being pursued by the Village at this time. See Responses 3.5.7-3 and 3.5.7-5.*

Since 2000, the Village has added 6 permitted wells with the average permitted yield of 928,200 gpd (not including Mountainville Well No. 1). The Village has secured the rights to approximately 2,419,200 gpd of additional potential water supply capacity (including the Mountainville Well No. 1) as discussed in pages 3.5-6 through 3.5-10 of the DGEIS. The Village will proceed with the permitting and infrastructure improvements to bring these new water sources on-line as the Village demands increase.

Comment 3.5.7-50: (Letter 55, Sheila Conroy, June 22, 2015): Page 2-11: Based on the foregoing inventory of water supply resources, it is evident that the Village will have an adequate public supply sufficient to accommodate the annexation parcels. If these are not working and approved wells, then they cannot be counted to supply the annexation parcels. And since the Aqueduct connection is not completed or approved, this water supply also cannot count.

Response 3.5.7-50: *See Responses 3.5.7-3 and 3.5.7-4 and 3.5.7-7. The Village has plans and the rights to water resources sufficient to accommodate the annexation parcels. Those resources will be permitted, approved and brought on-line, as needed to support future development.*

Comment 3.5.7-51: (Letter 55, Sheila Conroy, June 22, 2015): Mountainville Well should not be counted. On the pages shown above, as well as elsewhere in this document, yields are cited for the Mountainville well. These should not be included since that well has not been approved by the DEC. In its application for well approval, the Village failed to mention the approved Woodbury Well that is in the same area. The well testing done by the Village of Kiryas Joel did not include monitoring the existing Woodbury Well for drawdown impacts. Not only has the Mountainville Well not been approved, due to deficiencies in its applications, there is also no indication of what the safe yield would be from this well or what pumping limitations would be imposed. There is no way at this point that water from this well should be factored into the annexation discussion. It is premature and guesswork.

Response 3.5.7-51: *See Responses 3.5.7-3; 3.5.7-4;3.5.7-7; and 3.5.7-28.*

Comment 3.5.7-52: (Letter 55, Sheila Conroy, June 22, 2015): Given that there is a hydraulic relationship between Well 28 and the Ramapo River, is there any danger that this well could be negatively impacted if there are incidents of improperly treated discharges from the Harriman Plant into the River.

Response 3.5.7-52*: See Response 3.5.7-29 and 3.5.7-36. Well 28 is a well permitted by the NYSDEC and its allowable pumping rate and connection to the Ramapo River were considered during the well permitting review process.*

Comment 3.5.7-53: (Letter 55, Sheila Conroy, June 22, 2015): It would help to know numerically how many days in 2014 did the Village experience the peak demands over the 1.9 mgd that it can safely pump? Elsewhere in the document as well as in the SEQRA document for the NYC Aqueduct Connection, there were references to about 75 days during the year when special religious observances significantly increased the water needs of the village (from 66 gpd/person to 88 gpd/person) this section is vague in quantifying what is means by "a few occasions". Also, I asked for the number of trucks that were used daily to bring in water as well as how much they held or how many gallons of water had to be trucked in per day and over what time period.

Response 3.5.7-53: *See Response 3.5.7-48.*

Comment 3.5.7-54: (Letter 55, Sheila Conroy, June 22, 2015): In order to consolidate all of the numerous well permits into one permit, the Village must"… establish an alternative water supply source to meet its maximum day demand and to meet is redundancy requirement." Further, the NYSDOH, requires that "…all sources of water meet the peak maximum day demand with the greatest capacity well out of service (Mountainville Well #1)." How can the

Mountainville Well even be considered in this calculation since it does not exist – it is not approved, has not shown that its pumping does not affect the near-by approved Woodbury Well, does not have yield figures and does not have for pumping limitations? How can a non-approved, non-existent well be part of this or any other calculation?

> ***Response 3.5.7-54:*** *See Response 3.5.7-51, above regarding the pumping test and potential impacts to the Trout Brook Woodbury well field. See Response 3.5.7-47 regarding back-up water capacity for the Mountainville Well. The consolidated Water Supply Permit that includes Mountainville Well No. 1 is currently under review by the NYSDEC.*

Comment 3.5.7-55: (Letter 55, Sheila Conroy, June 22, 2015): How can the Village meet the NYC Aqueduct requirement of having a back-up supply to meet the amount of water it plans to withdraw from the pipeline? This section discusses that according to the 2010 census, showing a Village population of 20,175 residents, the Village is allowed to withdraw 2.56 mgd from the aqueduct. However, the village only has the ability to provide 1.93 mgd with its existing wells. It uses the non-existent and unapproved Mountainville Well to make up the 600,000 galls/day deficiency. This well does not exist and it has not been proven that is can pump that quantity of water per day.

And this section further claims that it will use this imaginary well as a temporary primary water supply until the aqueduct connection is completed. There is no basis to make this claim since there is not even a time table for it and when this well will be approved. In its earlier SEQRA documents the Village did not mention or analyze that this well would be used for a primary water supply before connection to the aqueduct.

> ***Response 3.5.7-55:*** *See Response 3.5.7-6 and 3.5.7-7. The consolidated Water Supply Permit that includes the Mountainville Well is currently pending before NYSDEC.*

Comment 3.5.7-56: (Letter 59, Robert Kecskes, June 22, 2015): If the Kiryas Joel connection to the New York City aqueduct is not implemented, and the OCSD#1 discharge remains at its present location, the Ramapo River will be comprised of even larger concentrations of wastewater than described above due to the large contribution that the Village and annexed properties will result in (as well as the other towns that convey their wastewater to the OCSD#1 plant). Since the Kiryas Joel withdrawals in the Ramapo River watershed would increase over time, it would play a large role in this phenomenon.

New York City has yet to entirely approve the aqueduct connection to Kiryas Joel. In the event that this approval was denied, Kiryas Joel and the annexed properties would have to rely on its existing wells in the Ramapo River watershed as well as new well fields. The potential increase in the wastewater concentrations were not evaluated in this case. The EIS should evaluate a "fall-back" strategy if the aqueduct option is not approved.

> ***Response 3.5.7-56:*** *Wastewater issues are fully assessed in sections 3.5.4 through 3.5.6 of the DGEIS. It is beyond the scope of the DGEIS to examine unlikely or speculative scenarios that are not connected to the proposed action.*
>
> *See Response 3.5.7-1 and 3.5.7-3 regarding the Village's entitlement to take water from the NYC Aqueduct*

Comment 3.5.7-57: (Letter 59, Robert Kecskes, June 22, 2015): The Mountainville well field has yet to be approved by the NYSDEC. If this well field in not permitted, and Kiryas Joel's other preliminary alternatives were not approved, the back-up supply required of New York City's approval for use of the aqueduct would be in jeopardy. The EIS should be revised to reflect this potential obstacle.

> ***Response 3.5.7-57:*** *The comment is overly speculative and beyond the scope of the DGEIS. See Responses 3.5.7-3; 3.5.7-7; and 3.5.7-12.*

Comment 3.5.7-58: (Letter 59, Robert Kecskes, June 22, 2015): Uncertainty in the Conclusion that Study Area Populations will be the same with and without Annexation. Throughout the EIS, it is claimed that the year-2025 population will be the same regardless of whether the 507-acre Town of Monroe properties are annexed by Kiryas Joel. This conclusion is highly inaccurate for several reasons.

The annexation will facilitate accelerated development in the annexed lands because individual properties will be expeditiously able to connect into the Village's public supply that would have been carefully planned for the 507-acre properties. Without annexation, however, individually subdivided properties and the entity to provide public water would be subject to approval by the Town of Monroe and the Orange County Department of Public Health. As discussed in the EIS, extending water service to the properties outside the Village is a discretionary action by the Village and serving the Village's current inhabitants is a required priority. Without annexation, residents in the adjacent Town of Monroe properties are ultimately dependent upon available private wells.

Without annexation, the process of either being served by Kiryas Joel or being dependent on private wells will undoubtedly delay development, and hence the 2025 population projections estimated in the EIS. In addition, if the residents have to rely on private wells, there is no guarantee that all of the wells would be approvable. Well interference would likely represent a major obstacle to reaching the same population as the annexed lands.

Furthermore, the likelihood of the 507-acre properties being served by the New York City aqueduct is reduced if the properties are not annexed by Kiryas Joel. As pointed out in the EIS, the future use of aqueduct water would be prohibited in the 507-acre properties if they were not annexed, unless special permission is granted by New York City. And if they were permitted, interconnections on these properties may be subject to higher fees paid to New York City. If the 507-acre property was not annexed by the Kiryas Joel, connecting to the Village water system from the aqueduct would involve greater cost and uncertainty than under the annexation scenario where community water service is provided to all landowners.

> ***Response 3.5.7-58:*** *The commenter is correct that annexation will make it easier for new residential development to connect to the Village water system, as compared to Outside users, who will need to obtain approval from the Town of Monroe and OCDOH. It is reasonable that given the infrastructure, planning and permitting costs, much new residential development in the annexation parcels will be done by developers for multi-family projects. These larger projects may not need to rely on individual wells and septics and may choose to connect to the Village system on an Outside User basis. Nevertheless, under such circumstances, annexation may result in a less time-consuming and costly approval process, as compared to the no-annexation scenario, where development would require additional regulatory review and longer timeframes.*

Comment 3.5.7-59: (Letter 59, Robert Kecskes, June 22, 2015): The EIS indicates that Kiryas Joel will abandon its well fields when it is connected to the New York City aqueduct. It specifies that these well fields will only be used when the aqueduct is unavailable. The cost of New York City aqueduct water will be substantially higher than the continued use of its well fields. In addition, its current well fields in the Ramapo River watershed is causing significant streamflow depletion in the Ramapo River and increasing the concentration of wastewater in the river during periods of low streamflow.

Based on the above, it is recommended that the EIS include a provision that specifies that Kiryas Joel will request that NYSDEC modify its existing Village permits as well as any other permits for new well fields to include a condition that the wells are only to be used when the aqueduct in unavailable.

> ***Response 3.5.7-59:*** *The Village will be required to maintain its water supply capacity from wells after its connection to the New York City water system. The commenter provides no basis or reference for claims that the cost of water from the New York City supply system will be higher than from Village wells or the claim that the Brenner well field is depleting flow in the Ramapo River. Neither of these conditions are anticipated to occur.*

Comment 3.5.7-60: (Letter 59, Robert Kecskes, June 22, 2015): The EIS proposes specific water supply alternatives to serve as backup supplies when the aqueduct is not available in the future, but these supplies are not yet permitted by the NYSDEC. There is no guarantee that these backup supplies will be permitted. The EIS should not be approved until these supplies have NYSDEC permits. Backup supplies should be permitted to meet demand for at least the next 20 years to ensure that ample supplies can be made available beyond the ten-year planning horizon.

> ***Response 3.5.7-60:*** *See Responses 3.5.7-3 and 3.5.7-7. It is impractical to expect that any community in New York State would acquire NYSDEC water supply permits to accommodate potential future population over the next 20 years. As noted at DGEIS page 3.5-7, this was the very reason that the Village determined, in consultation with NYSDEC, to withdraw its water supply permit application for the Star Mountain well field, reserving its right to re-apply should the need be presented in the future.*

Comment 3.5.7-61: (Letter 61, Dennis E. A. Lynch, Feerick, Lynch, MacCarthney, PLLC, June 22, 2015): The narrative discusses the submission of Annual Water Withdrawal Reports to NYSDEC for the existing Water Supply Permit. These reports should be included in the Appendix and made available for review to substantiate the conclusions. We note discrepancies in the reported 2014 average day demand. Page 3.5-2 of the report states the average water withdrawal in 2014 was 1.61 MGD. Page 3.5-13 states that average daily water usage in 2014 was 1.49 MGD.

> ***Response 3.5.7-61:*** *The data in the annual reports speaks for itself; the DGEIS did not draw any conclusions from such data. A summary of monthly water usage equal to 1.61 mgd (water withdrawal) is provided for 2014 in Appendix G-2. In 2014 the actual water sold by the Village (average daily usage) was 1.49 mgd.*

Comment 3.5.7-62: (Letter 61, Dennis E. A. Lynch, Feerick, Lynch, MacCarthney, PLLC, June 22, 2015): The report utilizes the average day demand to develop a per capita flow rate of

66 gallons per person, per day demand. This value is significantly lower than the recommended 75 gallons per day, per person which NYSDEC publishes.

> ***Response 3.5.7-62:*** *The per capita daily water demand for Village residents was reasonably based upon actual usage and is, therefore, more accurate than a generalized water usage factor of 75 gallons per day, per person. The lower figure is likely due in part to less frequent use of water for activities such as lawn watering, car washing, and the complete lack of private swimming pools in Kiryas Joel.*

Comment 3.5.7-63: (Letter 61, Dennis E. A. Lynch, Feerick, Lynch, MacCarthney, PLLC, June 22, 2015): The statements regarding the potential availability of adequate water service are somewhat speculative, and provide intent, but do not indicate, for example, whether the various permitting agencies have committed to providing access, capacity, or service if permit requirements are met. The DGEIS fails to consider or evaluate alternative water service options in the absence of the required approvals of the State and any other permitting agency.

> ***Response 3.5.7-63:*** *See Response 3.5.7-1. NYSDEC approvals are required for all new public water supplies and NYCDEP engineering approval is required for the connection to the Catskill Aqueduct. If State permit requirements and New York Administrative Code requirements are met, the NYSDEC and the NYCDEP have no authority to deny water service. The DGEIS, at pages 3.5-4 through 3.5-10 presents a reasonable and rational plan for a series of alternative water supply sources available to the Village. The Village has ownership interests in each of these sources and thus they are not speculative.*

Comment 3.5.7-64: (Letter 67, Richard J. Pearson, PE, & Robert B. Peake, AICP, June 18, 2015): When will the NYSDEC draft consolidated water supply permit (WSA No. 11,069) be approved as final? What is the impact of this timing?

> ***Response 3.5.7-64:*** *The draft consolidated permit is currently pending before NYSDEC. The timing of this permit approval has no bearing on the annexation action.*

Comment 3.5.7-65: (Letter 67, Richard J. Pearson, PE, & Robert B. Peake, AICP, June 18, 2015): The Mountainville well field, according to the WSA No. 11,609 in Appendix G.1, states that the Mountainville Well No. 1 is the largest well in the Village system, thus in order to meet redundancy requirements its contribution cannot be counted towards total well system capacity of 1,928,800 gpd, per Special Condition 1B of the permit. (This Condition notes that the Village is authorized to take up to 2.54 million gallons per day (mgd) only until March 31, 2015, and this period of time is past.) The DGEIS statement that the addition of the Mountainville well field would enable the Village to meet its maximum daily demand and serve as an interim supply while the remainder of the pipeline connection to the Aqueduct is constructed is therefore not accurate because it cannot be counted towards permitted total system capacity. As such, what is the impact of this on the Village's water supply until the Aqueduct connection is completed?

> ***Response 3.5.7-65:*** *See Response 3.5.7-47. The noted special permit condition 1B in the draft permit is reasonably expected to be adjusted to reflect the current timing of the final permit approval.*

Comment 3.5.7-66: (Letter 67, Richard J. Pearson, PE, & Robert B. Peake, AICP, June 18, 2015): Explain the rights the Village has to the Mountainville well field, and any contested

ownership of groundwater resources claimed by any nearby municipalities. How will that impact the use of the well field by Kiryas Joel and the annexed territory in the future?

Response 3.5.7-66: *See Response 3.5.7-6. The Village owns the land and well infrastructure at the Mountainville Well site. Groundwater resources are not owned by any local municipality, but withdrawal of groundwater for public water supply is subject to NYSDEC review and approval. The Village has fully complied with its obligations to seek NYSDEC approval and permitting for the Mountainville well, and has completed all required SEQRA review.*

Comment 3.5.7-67: (Letter 67, Richard J. Pearson, PE, & Robert B. Peake, AICP, June 18, 2015): Specific details should be provided regarding the status of the permitting required for the Village's proposed connection to the Catskill Aqueduct. Filing dates, current review status, and expected date of final permit approvals should be provided.

Response 3.5.7-67: *See Response 3.5.7-1 and 3.5.7-10.*

Comment 3.5.7-68: (Letter 67, Richard J. Pearson, PE, & Robert B. Peake, AICP, June 18, 2015): In addition, specific details should be provided regarding the status of the construction schedule of Phase 1 and Phase 2 of the Village's proposed connection to the Catskill Aqueduct. The DGEIS states that according to the project engineer (whose firm is not identified) the construction of Phase 1 is nearing completion and is scheduled to be completed in 2015, with Phase 2 to be completed in 2017. This response does not provide sufficient detail. A monthly schedule of work to be completed on the Aqueduct construction including current construction status needs to be provided.

Response 3.5.7-68: *The Village's engineer for the Aqueduct connection is CDM Smith based in Latham, New York. The specific level of detail otherwise identified by this comment is beyond the scope of the DGEIS.*

Comment 3.5.7-69: (Letter 67, Richard J. Pearson, PE, & Robert B. Peake, AICP, June 18, 2015): The statement that the Mountainville well will serve as an interim primary supply for the Village while the remainder of the Aqueduct pipeline is constructed is not accurate. What is the impact of this on the Village's water supply until the Aqueduct connection is completed?

Response 3.5.7-69: *See Responses 3.5.7-1, 3.5.7-7 and 3.5.7-48. The Mountainville Well will provide supplementary water supply on an interim basis to help meet maximum peak demand until the connection to the Catskill aqueduct is completed.*

Comment 3.5.7-70: (Letter 67, Richard J. Pearson, PE, & Robert B. Peake, AICP, June 18, 2015): The current status of the Woodbury Heights Estate Water Company's March 2014 application to the NYSDEC for a water supply permit should be provided. When is the approval expected? What impact does this timing have on the Village?

Response 3.5.7-70: *The NYSDEC review of the Woodbury Heights Estate Water Company's March 2014 application remains pending before NYSDEC. The timing of this permit approval has no bearing on the annexation action.*

Comment 3.5.7-71: (Letter 67, Richard J. Pearson, PE, & Robert B. Peake, AICP, June 18, 2015): Further details should be provided on the volume of water allowed to be taken from the Catskill Aqueduct both with and without the proposed annexation based on the date that the

connection is anticipated to be completed. Describe this permitting process and the timing involved.

> ***Response 3.5.7-71:*** *See Response 3.5.7-67 and 3.5.7-68. Section 24-360(a) of the NYC Administrative Code provides that "[i]t shall be lawful for any of the municipal corporations or water districts in the counties of Ulster, Greene, Delaware, Schoharie, Sullivan, Orange, Westchester and Putnam, and for the village of Deposit in the counties of Delaware and Broome, to take and receive from any of the reservoirs, aqueducts, conduits, streams or pipes of the city a supply of water for the uses and purposes of such municipal corporations or water districts or village and to that end such municipal corporations or water districts are, and each of them is, and such village also is, authorized and empowered to lay the necessary mains, pipes, valves, hydrants, supply pipes and other necessary appurtenances for the use of such water, without the consent of any board, officer, bureau, or department of the state or any subdivision thereof." Section 24-360(e) further provides that "[t]he daily quantity of water which may be taken and received by any municipal corporation or water district under the provisions of this section shall not exceed the quantity calculated by multiplying the number of its inhabitants as shown by the last preceding census of the United States or the last state or official municipal census by the daily per capita consumption in the city of New York."*

Comment 3.5.7-72: (Letter 67, Richard J. Pearson, PE, & Robert B. Peake, AICP, June 18, 2015): It should be clarified if the 100 percent back-up for the volume of water taken from the Aqueduct as specified by the New York City administrative code is required to be calculated with the largest supply well out of service. If so, how does this impact the Village's water supply calculations?

> ***Response 3.5.7-72:*** *NYSDEC water supply permits based upon groundwater require that the maximum daily demand be provided with the best well out of service. For the Aqueduct connection, NYCDEP requires that the Village demonstrate the capacity to sustain a shutdown of the connection. This requirement does not specify this be demonstrated with the largest supply well out of service, but does require that all sources used to sustain the shutdown have necessary approvals from all regulatory agencies.*

Comment 3.5.7-73: (Letter 67, Richard J. Pearson, PE, & Robert B. Peake, AICP, June 18, 2015): Table 3.5-1 should be modified with additional columns that show the type of permitting required and permitting status for each of the various well fields, the timeframe permitting is anticipated to take (if applicable), as well as the anticipated permitted water to be taken from each well field.

> ***Response 3.5.7-73:*** *All of the wells or well-fields listed in the Table require a NYSDEC water supply permit . The Table indicates the estimated well yields based upon pump testing. The remainder of information suggested by the comment is speculative and beyond the scope of the DGEIS.*

Comment 3.5.7-74: (Letter 67, Richard J. Pearson, PE, & Robert B. Peake, AICP, June 18, 2015): This figure should be modified to include a legend, to depict the extent of the Catskill Aqueduct connection pipeline currently installed, the pipeline yet to be installed, and monthly dates of the anticipated installation next to those sections of the pipeline remaining to be

installed. The figure should also depict the proposed annexation area. Explain the meaning of "Pipeline Route A" depicted on the figure.

> ***Response 3.5.7-74:*** *Figure 3.5-1 is provided to show the route of the proposed Aqueduct connection pipeline project. The Aqueduct connection and pipeline was subject to a separate SEQRA review that has been completed. Approximately two-thirds of the portion of the project from the Village to the Mountainville Well/ pump station parcel has been completed. A detailed schedule for pipeline construction has no bearing on the proposed annexation and is beyond the scope of the DGEIS. The Annexation area is shown in Figure 2-3 Annexation Map. Pipeline Route A indicates the preferred alternative selected from three alternatives studied in the Aqueduct connection project SEQRA review.*

Comment 3.5.7-75: (Letter 67, Richard J. Pearson, PE, & Robert B. Peake, AICP, June 18, 2015): The statement that "It has been reported that the Villages of South Blooming Grove and Woodbury are successors to the rights and obligations of the Towns of Blooming Grove and Woodbury, with respect to the intermunicipal agreements". What is the source of the reporting?

> ***Response 3.5.7-75:*** *This statement is from the February 19, 2010 agreement between Orange County and OCSD#1 regarding wastewater treatment (see page 1 of Agreement, Appendix G7 of DGEIS). This statement has no bearing on the annexation.*

Comment 3.5.7-76: (Letter 65, Brian D. Nugent, Feerick, Lynch, MacCarthney, PLLC, June 22, 2015): Based on the existing permitted water supply, the Village of Kiryas Joel is not capable of meeting its maximum day demand.

The narrative discusses various other planned sources of additional water supply including the Mountainville well field, the NYC Aqueduct connection and the Star Mountain well field. At this point in time, none of these additional sources have the required regulatory approvals.

> ***Response 3.5.7-76:*** *In 2014, the Village's maximum daily demand exceeded 2.0 mgd on only 5 occasions. In such situations, the Village supports its demand through use and management of the Village's existing wells and storage facilities. In the past, the Village has even relied on the use of trucked in water on limited occasions to support its maximum demand, which is an acceptable albeit costly practice. The anticipated Mountainville well and Aqueduct connection will ensure that the Village can more reasonably and reliably meet its future water demand requirements at all times.*

Comment 3.5.7-77: (Letter 68, Gale Pisha, Sierra Club Lower Hudson Group, June 22, 2015): The letters of support from Rockland County legislators for the inter-basin transfer of water from NY City Aqueduct to the Ramapo basin are not applicable to the current DGEIS. Therefore, it is clear that in 2005, the legislators did not have the understanding of Rockland's water situation they do now, and these earlier letters of support are not appropriate to support the current annexation proposal.

> ***Response 3.5.7-77:*** *Comment noted. The letters are not intended to support the annexation proposal, but rather support the notion that an inter-basin transfer can have a net positive benefit to the water-poor watershed.*

Comment 3.5.7-78: (Letter 69, Daniel Richmond, Zarin & Steinmetz, June 22, 2015): The Community Water and Sewer Section of the DGEIS is inherently flawed by virtue of its use of an

arbitrary 2025 outside date for analysis and its failure to address reasonable worst case build-out scenarios and density projections. These include the Village's representations to EFC, and those set forth in the Village's Comprehensive Plan, as well as the potentially more than 10,000 dwelling units alluded to in the DGEIS itself. This information is particularly relevant to this section of the GEIS. The SGEIS must re-present both the water and sewer analysis showing what the Village's water and sewer demands would be if the Proposed Annexation occurs using 2045 as an outside date for analysis, and using the projections presented to EFC, the analysis set forth in the Village's Comprehensive Plan, as well as the potentially more than 10,000 dwelling units (and 60,000 users in the territories at issue) alluded to in the DGEIS itself.

This section should show what water and sewer demand would be based on projected growth rates extrapolated from housing data available from Census Bureau. Similarly, the section should show what water and sewer demand would be expected to be in 2025 and 2045 based on the growth rates projected by Orange County.

> ***Response 3.5.7-78:*** *See Responses 3.1-84, 3.1-87, 3.2.10-40 and 3.2.10-4 regarding the adequacy of the DGEIS analysis study period.*

Comment 3.5.7-79: (Letter 69, Daniel Richmond, Zarin & Steinmetz, June 22, 2015): The DGEIS outside date of 2025 for analysis is particularly inapt with respect to potential water usage. Even using the DGEIS's figures, the DGEIS fails to address how the Village would provide adequate water for Village residents past 2025. Indeed, the DGEIS actually indicates that the Village would outstrip available water capacity *before* 2025. The DGEIS fails to discuss what coordinated actions are necessary to prevent development in the territories at issue from surpassing the capacity of the environment to supply water.

> ***Response 3.5.7-79:*** *See Responses 3.1-84, 3.1-87, 3.2.10-40 and 3.2.10-4 regarding the adequacy of the DGEIS analysis study period.*
>
> *The Village average water demand is estimated to be approximately 2.79 mgd by the year 2025. Connection to the Catskill Aqueduct is scheduled to be completed in 2017, and the DGEIS indicates potential well yields of 4.33 to 4.36 mgd, based upon existing supplies secured by the Village (not all of this volume is yet permitted, but pump testing indicates that the yields are sustainable).*
>
> *See DGEIS Table 3.5-1 for existing and potential well yields.*

Comment 3.5.7-80: (Letter 69, Daniel Richmond, Zarin & Steinmetz, June 22, 2015): The DGEIS recognizes that, regardless of its use of the Aqueduct, "[t]he Village would be required to maintain 100 percent back-up for the volume of its taking with existing and new groundwater wells." (DGEIS at 3.5-4.) The DGEIS claims that "the Village currently has permitted capacity of 1.93 mgd and expects to expand that capacity with the addition of the Mountainville well field to 2.54 mgd." (DGEIS at 3.5-6.) The Village, however, has not obtained permission to access and withdraw groundwater from the Mountainville well field. As such, even assuming the Village's apparent claim that it will have access to wells with a capacity of 2.54 mgd, it would appear that 2.54 mgd is the limitation on the Village's access to water. The SGEIS needs to address when this capacity limitation will be reached. The SGEIS needs to assess what level of development the 2.54 mgd limitation could reasonably support. The SGEIS needs to explain how the Village can rationally anticipate that it can satisfy a water demand of 2.79 mgd.

Response 3.5.7-80: *See Response 3.5.7-60 and 3.5.7-79. The 2.54 mgd referenced in the comment is the volume of water currently under consideration in the Village's consolidated Water Supply Permit application. As Village water demand grows, additional water resources, such as those identified in the DGEIS will be permitted and added to the Village water system as back-up to the Catskill Aqueduct supply.*

Comment 3.5.7-81: (Letter 69, Daniel Richmond, Zarin & Steinmetz, June 22, 2015): Bearing in mind the 2.54 mgd water limitation stated in the DGEIS, the SGEIS should identify critical thresholds for development in the Village, the Annexation territories, and the surrounding areas to ensure that all action necessary to prevent such thresholds from being reached are taken.

The DGEIS also fails to consider rational mitigation measures for the Proposed Annexation's potential significant adverse impacts on water.

Response 3.5.7-81*: Please refer to Response 4-1 regarding thresholds for future reviews. Establishing development thresholds as part of the annexation action is premature.*

Comment 3.5.7-82: (Letter 69, Daniel Richmond, Zarin & Steinmetz, June 22, 2015): The DGEIS also fails to consider water usage by the poultry plant in the Village. The SGEIS should address whether production at this facility will increase to match projected population growth. The SGEIS should discuss how much additional water the poultry plant will require by 2025, and by 2045.

Response 3.5.7-82: *The poultry plant is an independent business and it is not owned or managed by the Village. The private plant provides kosher chicken and turkey to a broad region beyond the Village and therefore it would be unreasonable to correlate the growth of the Village to the production of the plant. It should be noted that the poultry plant has recently reduced its daily water consumption and waste water generation by 40 percent (see Comment* 3.5.8-15*). However, the future water demand of the plant is not relevant to the proposed annexation.*

Comment 3.5.7-83: (Letter 69, Daniel Richmond, Zarin & Steinmetz, June 22, 2015): The DGEIS concedes that "extending water service to land outside the Village is a discretionary action of the Village," such that the Village could "extend water service to land outside the Village on a case by case basis." (DGEIS at 3.5-11.) The SGEIS should explain if, without the Annexation, growth could be accommodated using the Village's water services.

Response 3.5.7-83: *See Responses 3.5.7-32. 3.5.7-42 and 3.5.7-44. The DGEIS provides a further discussion and analysis of future water demand and use in the annexation territory without annexation (see DGEIS pages 3.5-14 through 3.5-16).*

Comment 3.5.7-84: (Letter 69, Daniel Richmond, Zarin & Steinmetz, June 22, 2015): The DGEIS states, however, that "the use of Aqueduct water is strictly limited to the territorial boundaries of the Village." (DGEIS at 3.5-19.) The SGEIS needs to explain if the Village believes this means that, with Annexation, it would be able to use Aqueduct water for the territories at issue. If the Village does believe if can use Aqueduct water for the territories at issue, the SGEIS should explain how this correlates with the SEQRA Findings adopted by the Village in connection with the development of the water supply pipeline, which states that "[t]he project does not involve the expansion of the Village's distribution system into previously

undeveloped or subserviced areas but will allow the existing Village to be served with a new source of water supply."

Also, if the Village believes it can use Aqueduct water for the territories at issue, the SGEIS should discuss whether the Village has made this belief clear to the New York City Department of Environmental Protection ("DEP"). Any relevant correspondence to this point should be produced in the SGEIS.

Response 3.5.7-84: *The SEQRA review and findings for the Aqueduct connection project fully anticipated the provision of water for a growing village population into the distant future. The statement attributed to by this comment referred to the then current need for the project. In fact, the population projection (and water demand) in the 2003 Aqueduct connection DEIS are similar to those forecast today in the DGEIS. At the time of the completion of SEQRA for the Aqueduct project, there was no annexation petition, though growth of the village to accommodate its natural growth was considered. The pipeline is currently under construction. If any annexation has been completed by the time the connection is completed and such water from the Aqueduct is required to accommodate any future development in this area, this will be addressed with the NYCDEP as part of the Village's water supply agreement.*

Comment 3.5.7-85: (Letter 69, Daniel Richmond, Zarin & Steinmetz, June 22, 2015): The DGEIS acknowledges that the engineering plans for this connection are still subject to the review and approval of DEP. (DGEIS at 3.5-19.) Even if the Village believes it can use Aqueduct water for the territories at issue, it should consider whether it is rational to rely on an unapproved mitigation measures.

Response 3.5.7-85: *See Response 3.5.7-1 and 3.5.7-3.*

Comment 3.5.7-86: (Letter 69, Daniel Richmond, Zarin & Steinmetz, June 22, 2015): If the Village accepts that it cannot lawfully use Aqueduct water for the territories at issue, the SGEIS should explain why the purported Aqueduct connection has any relevance to the Proposed Annexation. The SGEIS should also explain how the prohibition against using Aqueduct water outside the Village will be enforced.

Response 3.5.7-86: *The DGEIS does not adopt the comment's premise. See responses 3.5.7-1 and 3.5.7-3. Use of Aqueduct water will be monitored and regulated by NYCDEP subject to the water supply agreement.*

Comment 3.5.7-87: (Letter 69, Daniel Richmond, Zarin & Steinmetz, June 22, 2015): The SGEIS should propose concrete mitigation measures to address significant adverse impacts posed by the Proposed Annexation, and to prevent the area from reaching an ecological point of no return. Consider clear and enforceable thresholds for future project specific reviews and monitoring programs. This discussion should include the merit of phased development tied to any such thresholds or monitoring programs.

Response 3.5.7-87: *Please refer to Response 4-1 regarding thresholds for future reviews. As indicated in the DGEIS, it is expected that the annexation area, if approved, will develop in general accordance with the density of the existing Village. As noted in the DGEIS, future development in the annexation territories will be subject to SEQRA as well as all other applicable federal, State and local laws.*

Comment 3.5.7-88: (Letter 74, Michael Sweeton, Council Chairman, Moodna Creek Watershed Intermunicipal Council, June 17, 2015): We are particularly concerned about water withdrawals from water sources located inside the Moodna Creek watershed and where some of this water is or may be discharged outside the Moodna Creek watershed. There are a number of existing water withdrawals from locations in the Moodna basin that involve such diversions to other adjacent basins through wastewater systems, including water that flows to the county's wastewater treatment plant in Harriman.

Notably, we are not aware of any significant diversions from adjacent watersheds into the Moodna basin. We believe, therefore, that the Moodna Creek is currently impacted by a net export of water that's being withdrawn inside the basin, used for water supply purposes, and conveyed via wastewater discharges to streams outside the basin. Our Council submitted detailed comments on some of these issues as they relate to the Woodbury Creek, an important tributary of the Moodna Creek, and to the lower portion of the Moodna Creek itself, during the comment process for the Village of Kiryas Joel water supply permit application for the proposed Mountainville Well and Pump Station (DEC Application ID: 3-3399-00065/00001) in 2013. These concerns were re-affirmed in our comments at the public hearing on this application on April 29, 2014, and comments by some other parties included similar concerns. Those comments remain highly relevant

> ***Response 3.5.7-88****: Please see Response 3.5.7-2 regarding the Mountainville Well and its potential impacts upon Woodbury Creek. Impacts from other unidentified withdrawals from the Moodna basin are beyond the scope of this DGEIS.*
>
> *Please see Response 3.5.7-45 regarding the transfer of water from one drainage basin to another.*

Comment 3.5.7-89: (Letter 74, Michael Sweeton, Council Chairman, Moodna Creek Watershed Intermunicipal Council, June 17, 2015): There appears to have been a highly significant change in the Village of Kiryas Joel's proposed use of the Mountainville well referenced above since the water supply permit application for it was subject to public review and comment in 2013 and 2014. That previous application indicated this well would be used only as a backup supply after a pipeline connection and tap to the NY City water system was completed, with continuous daily use proposed only for an initial interim period for c. 1 year. The current DGEIS that is the subject of this comment letter seems to indicate a different plan in which the Village of Kiryas Joel could wait considerably longer before the NY City water connection comes on-line. This new plan was not considered in the previous SEQRA process for the Mountainville well, and the DGEIS for the proposed annexation must consider the environmental and economic impacts of this new scenario on the Woodbury Creek and the lower Moodna Creek that receives flow from the Woodbury Creek.

> ***Response 3.5.7-89:*** *See Responses 3.5.7-7.*

Comment 3.5.7-90: (Letter 74, Michael Sweeton, Council Chairman, Moodna Creek Watershed Intermunicipal Council, June 17, 2015): Over time, the cumulative and growing impact of the existing withdrawals and diversions outside of the Moodna basin has slowly diminished the amount of water available for use in the basin. This affects what is available for others as fresh water and it can decrease the assimilative capacities of the streams, creeks, and rivers to accept storm water and wastewater without significant impacts on *fish,* shellfish, crustaceans, and aquatic and associated terrestrial habitats. Water availability within the Moodna basin is vital to the health, safety, and welfare of all of the residents, businesses, and

visitors in our communities. Research referenced in our attached, previous comments on the 2013 water supply permit application indicate that existing flows may be near a limit for sustainable use during low or even normal flow conditions in parts of the basin.

In summary, the Moodna Creek Watershed Intermunicipal Council is requesting that the DGEIS include more detailed information on current in-stream flow conditions and projected low-flow conditions under various scenarios, including a no-action scenario in which low-flow conditions may change due to other factors outside the proposed annexation (such as climate change, drought, or more water diversions from the Moodna basin by other new projects and actions). The Council requests a more thorough consideration of the impacts and risks noted above, and consideration of alternatives and mitigation strategies as required by SEQR.

> ***Response 3.5.7-90:*** *Please see Response 3.5.7-2. Further discussion about in stream flow conditions of the Moodna Creek is beyond the scope of this DGEIS.*