

TOWNSHIP OF KINGWOOD

Environmental Commission Meeting:
Fourth Tuesday of Each Month – 7:30pm
Municipal Building:
Corner of Rt. 519 & Oak Grove Rd.
Fax: (908) 996-7753



Address Reply To:
Cynthia Keller, EC Secretary
P.O. Box 199
Baptistown, NJ 08803-0199
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Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street Northeast, Room 1A
Washington, DC 20426

Re: Docket CP15-558-000 – Proposed PennEast Pipeline Project
Draft EIS fails to address Surface Water Impacts

September 12, 2016

Dear Ms. Bose,

The Kingwood Township Environmental Commission is submitting these comments in opposition to the proposed PennEast Pipeline Docket CP15-558-000. Kingwood Township Environmental Commission is an intervenor in this matter and Kingwood Township is an impacted landowner on the proposed route. Both the construction and the long term functioning and maintenance of this pipeline would put our surface water at risk and violate the Clean Water Act. It has been demonstrated that there is no need for this pipeline carrying an additional 1.1 million dekatherms per day year-round, which would displace existing sources. In fact, no residents of Kingwood are served by natural gas at all. Instead, we are in effect a net exporter of sustainable solar energy.¹ We can and do obtain our energy needs from other sources, but we cannot replace our precious surface water.

The draft Environmental Impact Statement (DEIS) released by FERC on July 22, 2016 does not accurately describe the surface water resources or evaluate the potential impacts, therefore it does not fulfill FERC's NEPA obligation.

In the following comments, we have attempted to point out discrepancies, errors, unanswered questions and data gaps. However, the sheer volume of inadequacies and unfairly short comment period precludes us from being as comprehensive as we would like. For this reason, we request a second public comment period on a second draft EIS before FERC attempts to finalize the EIS.

DEIS section 4.3.2 Surface Water Resources: *“The Project would cross a total of 7,231 feet within waterbodies, with about 74 percent of that distance occurring in Pennsylvania. Overall, about 73 percent of the waterbodies that would be crossed by the Project are classified as minor, with 22 percent classified as intermediate and 4 percent classified as major.”*

Comment: We disagree with the DEIS' classifications of waterbodies. New Jersey uses the Surface Water Quality Standards (SWQS) to form the basis for compliance with Sections 303(d) and 305(b) of the Clean Water Act. This includes the designation of certain streams as Category 1 antidegradation streams, which require 300' stream buffers around every named and unnamed tributary of C1 streams,

among other measures. Non-C1 streams are required to have 50' buffers. The proposed pipeline's route crosses C1 streams 9 times within Kingwood Township, including 4 crossings of the Lockatong Creek. The proposed pipeline would eliminate these riparian buffers, resulting in increased stormwater runoff, soil erosion and water temperature. In contrast, FERC's classification is based solely on waterbody width, regardless of the value and sensitivity of the waterbody and failing in any objective measures of prevention of water quality impacts. Is the FERC stream classification acceptable with the EPA or NJDEP agency classification system?

DEIS section 4.3.2.2 Sensitive Waterbodies, National or State Wild and Scenic Rivers, page 4-38, "...the Delaware River would be crossed by HDD and therefore no in-channel disturbance would occur, nor are impacts anticipated on the lower NWSRS reach for the Delaware River."

Comment: No scientific studies or factual evidence is presented to support this conclusion. Scientific research has proven, and it is commonly known, that forests and ecologically intact riparian buffers protect water quality. The PennEast project would destroy of hundreds of acres of forests and dozens of riparian buffers which would result in downstream measurable water quality degradation. **Therefore, no reasonable scientist could conclude that the pipeline could not impact the Delaware River.**

DEIS section 4.3.2.2 Sensitive Waterbodies, State-Designated High-Quality and Exceptional Value Waters, New Jersey, page 4-41: "The dominant crossing method for these waters are [sic] proposed to use dry crossing methods with timing restrictions to correlate to critical periods for migratory fish passage or recreational uses."

Comment: Consideration of "migratory fish passage" for our C1 streams displays a lack of understanding of the reasons these streams are designated C1. The DEIS fails to present strategies that avoid impacts to the reasons each individual stream has been designated C1, which differs from stream to stream. The DEIS does *recommend*, but doesn't require, that PennEast should submit plans that would minimize impacts on C1 streams. **The DEIS should not have been submitted for public review without this critical piece of information for the public to review.**

DEIS section 4.3.2.2 Sensitive Waterbodies, Impaired Surface Waters and Waterbodies with Contaminated Sediments, page 4-46: "Based on the Section 303(d) lists, six waterbodies in New Jersey that would be crossed by the Project have water quality-related impairment issues related to pathogens and nutrients, and three waterbodies have water quality-related impairment issues related to pH, acidity, turbidity, and/or temperature (table 4.3.2-5). All of the listed waters identified in New Jersey are proposed for dry crossings using coffer dams, pump and flume, or flow diversion methods which would minimize in-water work and disturbance of sediments."

Comment: The DEIS again misses a major issue. It is not just the construction activities that can impact our streams (although these concerns have not been adequately addressed), but the permanent destruction of the surrounding forests and riparian buffers. Scientific research has proven, and it is commonly known, that forests and ecologically intact riparian buffers protect water quality. The PennEast project would destroy approximately 82 acres of forest in Kingwood alone (using 400' width overlain on 2012 Land Use data), more than half which are mature forests (e.g. 100 year old forests) and remove riparian buffers that would otherwise protect 13 streams. These permanent changes would result in downstream measurable water quality degradation. **Therefore, no reasonable scientist could conclude that the pipeline could not contribute to stream impairment.**

DEIS section 4.3.2.2 Sensitive Waterbodies, Waterbodies with Total Maximum Daily Load Plans, page 4-47: "...given the small footprint of disturbance and short-term duration of construction at individual crossings, it is not considered a long-term contribution to the watershed basin issue....Operation of the

pipeline would not result in a long-term contribution of suspended solids to these waterbodies. Use of HDD would not result in resuspension sediments or soil erosion from excavation activities.”

Comment: As mentioned previously, since construction and operation of the pipeline would require permanent destruction of forests and riparian buffers, the pipeline *should* be “considered a long-term, contribution to the watershed basin issue.” In addition, impacts from HDD and other blasting and excavation activities do have the potential to introduce sediments and other pollutants into fractures, which connect the ground and surface water, in the process commonly known as the water cycle. This potential pathway of pollution is not even a consideration in the DEIS.

DEIS section 4.3.2.2 Sensitive Waterbodies, Waterbodies of Ecological or Recreational Importance, page 4-47.

Comment: Again, discussion only touches on the potential impacts (inadequately, since PennEast has not even submitted complete plans to FERC yet, as acknowledged by FERC on the previous page 4-46) to waterbodies of ecological or recreational importance and does not address the issue of permanent impacts due to permanent impacts to forests, wetlands, soils, and riparian buffers.

DEIS section 4.3.2.2 Sensitive Waterbodies, Waterbodies with Steep and Actively Eroding Banks and Riparian Areas, page 4-47.

Comment: Again, discussion only touches on the potential impacts (inadequately, since PennEast has not even submitted complete plans to FERC yet, as acknowledged by FERC on the following page 4-48) to waterbodies with steep and actively eroding banks and riparian areas and does not address the issue of permanent impacts due to permanent impacts to forests, wetlands, soils, and riparian buffers, which are especially sensitive in steep slopes.

DEIS section 4.3.2.2 Sensitive Waterbodies, Waterbodies with Riparian Areas, page 4-48.

Comment: Again, discussion only touches on the potential impacts (inadequately, since PennEast has not even submitted complete plans to FERC yet, as acknowledged by FERC on the following page 4-48) to waterbodies with riparian areas and does not address the issue of permanent impacts due damage or loss of the ecological functions of riparian buffers, which are especially critical to protection of downstream water quality.

DEIS section 4.3.2.2 Sensitive Waterbodies, Flood Hazard Zones, page 4-48: “No aboveground facilities would be located within a FEMA Special Flood Hazard Area.”

Comment: While the DEIS says no aboveground facilities would be located within a FEMA Special Flood Hazard Area, construction activities would take place in them, and the pipeline itself would cross them. In this case, discussion only touches on the potential impacts in flood hazard zones *after* construction and does not address the issue the flashiness of our streams and contingency plans, since heavy storms have become more frequent.² With construction activities spanning 6 to 9 months at each location, contingencies that account for the flashiness of our streams must be in place in order to prevent or minimize impacts on water resources (and infrastructure). It also gives no consideration of the potential future scour of the fill material overlying the buried pipe in flood zones and riparian zones.

DEIS section 4.3.2.3 Major Waterbodies Crossed by the Project, Lockatong Creek, page 4-50:
“...however, no in water work would be conducted and disturbance of sediments or impairment of water quality during construction would not be expected.”

As mentioned previously, impacts from HDD and other blasting and excavation activities do have the potential to introduce sediments and other pollutants into fractures, which connect the ground and surface water, in the process commonly known as the water cycle. This potential pathway of pollution is not even a consideration in the DEIS.

DEIS, page 4-52 Hydrostatic Test Water: *“In total, PennEast anticipates using approximately 18 million gallons of water for hydrostatic testing.” And Because PennEast has not identified the final hydrostatic test water sources and discharge locations, we recommend that:*

- ***Prior to construction, PennEast should file with the Secretary its final hydrostatic test plan that identifies the final hydrostatic test water sources and discharge locations, and provides documentation that all necessary permits and approvals have been obtained for withdrawal from each source. PennEast’s plan should provide the approximate water volume that would be withdrawn and discharged as both a Project-total amount, and a daily amount, for each pipeline segment. Also, PennEast’s plan should detail the decision process for determining when an alternative water source would be used during exceptional dry periods when low flow conditions may be encountered.”***

Comment: Because Kingwood is underlain with Lockatong argillite and Brunswick shale, ground water is limited by fractures, which can be scarce in this dense bedrock. Dr. Robert Hordon, a Rutgers University hydrogeologist, was commissioned by the Kingwood Township Committee to study the ground water resources of Kingwood in 1995. Results of this study showed that Kingwood’s well depths range from 100 to 800 feet; that newer wells are being drilled deeper; that median yield is 5 gpm; and drawdown is high (i.e. when water is used, the well level rapidly decreases). Results of Dr. Hordon’s study confirmed an earlier study (1966) by Haig F. Kasabach, NJ State Geologist, that the Lockatong aquifer is one of the poorest yielding aquifers in NJ. How can FERC approve the proposed PennEast pipeline when PennEast has not provided any data that shows that they will have enough water for the hydrostatic testing or the hydrostatic testing will not adversely impact the drinking water supply of the area residents?

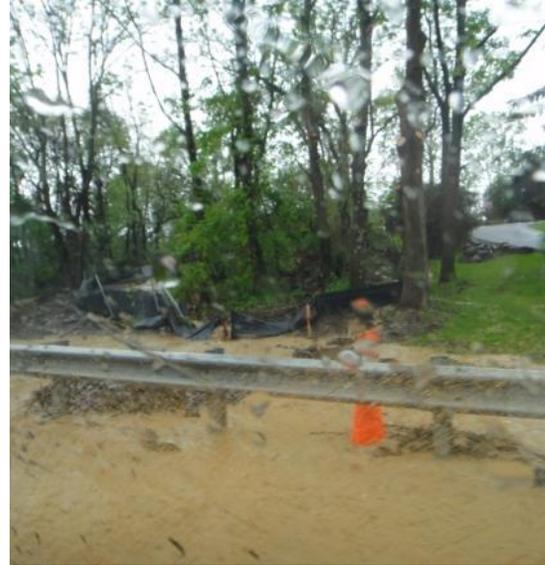
Furthermore, in a 2014 analysis of water availability, the NJ Geological and Water Survey (NJGWS) showed that the western half of Kingwood is already over allocated at Low Flow Margins* (LFM) $\leq 10\%$ and the eastern half is already over allocated at LFM $\leq 18\%$, while a LFM $\leq 5\%$ is actually recommended to protect the health of sensitive streams (such as C1 streams).³ Therefore, for the sustainability of our ground water resource, Kingwood has work to do to reduce its current water demands. The use of large quantities of water for construction activities and hydrostatic testing (with no discernible benefit to township landowners or residents) quite simply cannot be accommodated in our water budget.

DEIS section 4.3.2.5 General Impacts and Mitigation for Surface Water Resources, page 4-55

Comment: This section fails to take into account the concerns listed above, plus the extreme flashiness of our creeks. Flashiness of streams makes certain methods inappropriate. It’s nearly inevitable to experience a high flow event (or more than one) during any 6 to 9 period, which would blow out the sediment controls, pipes or dams silt fences, straw bales (see the example photo from Flemington 5/11/2013 where a short but intense rainfall caused erosion control measures to fail on Route 12 near Hinkley Road), which is in the same geology as Kingwood.

* The amount of water available is based on the Low Flow Margin (LFM) approach. This assumes that the amount of water that the combined surface water-unconfined aquifer system can lose to depletive and consumptive water use, without experiencing unacceptable ecological impacts is a percentage of the difference between the annual 7-day stream low flow that has a 10% chance of occurring each year (7Q10) and the September median stream flow at the HUC11 outlet. This approach is fully explained by Domber and others (2013). The low flow margin approach is an outgrowth of work by Hoffman and Rancan (2009) on the hydroecological integrity assessment process.

If allowed to build this pipeline, PennEast will remove riparian vegetation, drive vehicles through the streams, dam the streams, blast the bedrock and destabilize the stream banks. Kingwood's streams are naturally flashy (i.e. runoff quickly swells the streams to flood levels, after which the streams quickly return to low flow conditions) due to our local geology, soils and in some areas steep slopes. For example, Locketong Creek's flow varies from 0.56 cfs to the extreme of 7,190 cfs. Are FERC's BMPs designed to handle that kind of variability? Planning the in-stream work to be done between June 1 and November 30 does not take into account the flashiness of streams, as we have observed that high rainfall events are most likely to occur during the summer and fall months due to tropical storms and we have witnessed BMP blowouts that allow sedimentation and erosion to occur during storms.⁴ We believe that the probability of failure is so high, that it cannot be claimed that these methods avoid or minimize impacts.



In summary, within Kingwood, there are:

- 13 streams crossings in Kingwood (9 C1 and 4 C2); plus many unmapped intermittent stream crossings
- The Federally funded *Locketong and Wickecheoke Creek Watersheds Restoration and Protection Plan* study and implementation projects revealed significant cause/effect relationships between existing land use(s) and the existing hydrology and water quality of these streams.³
- The 2005 EPA approved TMDL for the Locketong (C1) requires a phosphorus load reduction of 86.9%.⁴
- The 2003 EPA approved TMDLs for Nishisakawick (C1) and Copper Creeks require a reduction of fecal coliform load (with margin of safety) of 77% and 98%, respectively.⁵
- Kingwood's streams are extremely flashy; pipeline construction and permanently compacted soils would increase flashiness, increase flooding, erosion and sedimentation.
- Possible future scouring of the materials surrounding the pipeline at every stream crossing. Both the processes of blasting a trench and directionally drilling below the streambed would likely fracture the surrounding bedrock. Through freeze/thaw cycles and the inevitable storms and floods, accentuated by the aforementioned flashiness of Kingwood's streams, the pipeline could gradually or suddenly be exposed and damaged by rocks and debris carried by the streams (particularly during high flow events) and result in safety and pollution issues.

DEIS section 4.4.1 Existing Wetland Resources pages 4-65 to 4-73:

Comment: A large portion of Kingwood Township is classified as wetland (Kingwood ERI, 2009)⁵.

- ~ 21 wetlands in Kingwood would be impacted; most are exceptional value; 10 crossings are > 1/10 mile length; plus many potential vernal pools
- ~ 64 acres of wetlands in Kingwood (using 400' width overlain on 2012 Land Use data⁶)
- ~ 66% of the length within Kingwood crosses wetlands and wetland buffers
- "Wetlands remediation" that doesn't remediate the exact location where impacts are occurring will result in loss of wetland function (water quality, water storage and filtration, habitat etc.) and result in violations of the CWA.

- Many Kingwood property owners have received LOIs from NJDEP that state that the wetlands and transition areas (buffers) cannot support development of any kind based upon current NJDEP regulations. Many have been severely fined for wetlands violations. Why should PennEast be permitted to violate the CWA when landowners cannot?

No reasonable person would conclude that the both the construction and operation of the pipeline could not cause significant temporary and long-term impacts on surface water.

The information contained within the DEIS does not support the conclusion that the impacts of the proposed PennEast pipeline project on surface water would be negligible.

The information contained within the DEIS does not support the conclusion that all impacts could be mitigated to less-than-significant levels.

Only the no-action alternative yields a scenario where our surface water resource is not at risk from pipeline impacts.

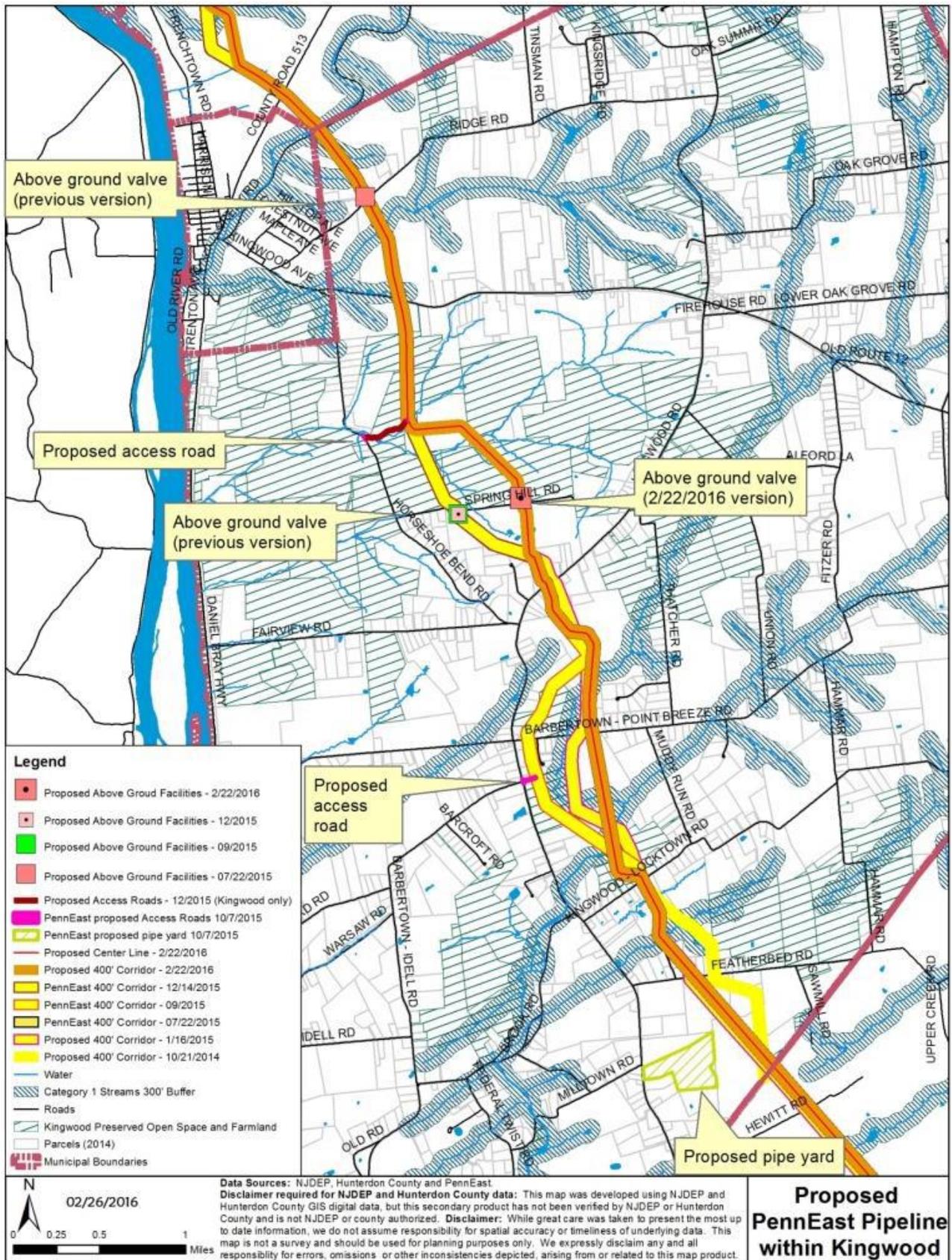
Thank you for your full consideration of Kingwood Township's comments.

Sincerely,

The Kingwood Township Environmental Commission

CC: Kingwood Township Committee
Congressman Leonard Lance
Senator Robert Menendez
Senator Cory Booker
Assemblyman John DiMaio
Assemblyman Erik Peterson
Senator Michael J. Doherty
Hunterdon County Freeholders

Appendix A: Map of Proposed PennEast Pipeline Route in Kingwood, created by the Kingwood Township Environmental Commission



Appendix b: Photo of Pipeline Clearcut and “wet crossing”

Stop the Tennessee Pipeline. http://www.notennesseepipeline.org/p/about_16.html, accessed 9/11/2016.

Photo caption: Tennessee Pipeline NEUP, 100-yard wide clearcut and "wet crossing" of the Lackawaxen River, Summer 2011.



References

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- ¹ Kingwood Township Environmental Commission. 09/25/2015. *Comment of Kingwood Township Environmental Commission on Resource Reports 1, 4, 5, and 10 under PF15-1*. Submittal 20150925-5008 to FERC DOCKET PF15-1. <http://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=13995592>
- ² EPA. August 2016. *What Climate Change Means for New Jersey*. EPA 430-F-16-032
- ³ NJ Geological and Water Supply (NJGWS). *DGS14-1 Computer Workbook Investigating Water Availability in New Jersey on a Watershed Management Area Basis*. July 2014. <http://www.nj.gov/dep/njgws/geodata/dgs14-1.htm>
- ⁴ NJ State Climatologist, website accessed 8/24/2015, http://climate.rutgers.edu/stateclim_v1/dailynormalsextrêmes.html
- ⁵ Kingwood Township Environmental Commission. 09/25/2015. *Comment of Kingwood Township Environmental Commission on Resource Reports 1, 4, 5, and 10 under PF15-1*. Submittal 20150925-5008 to FERC DOCKET PF15-1. <http://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=13995592>