



July 11, 2019

Jessica Shirley, Director
Policy Office
Department of Environmental Protection
Rachel Carson State Office Building
Harrisburg, PA 17105-2063

Re: Comments of the Delaware Riverkeeper Network for Draft DEP Stream Redesignation Evaluation Report for Tohickon Creek 49 Pa.B. 1855 (April 13, 2019)

Dear Ms. Shirley:

The Delaware Riverkeeper Network, and the Delaware Riverkeeper (collectively "DRN") are pleased to submit these comments on Pennsylvania Dept. of Environmental Protection's (DEP) draft 2019 Water Quality Report on the Tohickon Creek in Bucks County. Delaware Riverkeeper Network is a co-petitioner and original and continued supporter of Tinicum Conservancy's long-standing stream redesignation petition. Delaware Riverkeeper Network is dedicated to the Delaware River Watershed, and the protection and restoration of all its communities and represents our 19,666 members who live within and outside of the Watershed. DRN is sending a CD of additional completed reports highlighted in this comment to Mr. Mark Brickner with supporting data to supplement the Tohickon petition.

The DEP report unfortunately falls short in its analysis of protection of the Tohickon Creek as a special protection waterway, and in the egregious and unsupported recommendation to downgrade the Tohickon Creek (from the Lake Nockamixon Dam to the mouth) from CWF, MF to a redesignation of TSF, MF.

With this comment DRN presents what we believe are deficiencies in the Department's review and the

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perilous course that the Department has undertaken via this improper recommendation. DRN believes that the Tohickon Creek and its community is deserving of Exceptional Value status now; the Tohickon is certainly not deserving of a downgrade. DRN requests that all past reports, supplements and correspondence put on the record since the inception of the Tohickon Creek original petitioner submission in 1995 be incorporated into the current and ongoing record. To have to advocate for an upgrade designation for over 25 years flies in the face of what the Clean Water Act, the Pennsylvania Clean Streams laws, and the Pennsylvania Environmental Rights Amendment are fundamentally about --- to preserve every Pennsylvanian's right to clean streams and a healthy environment.

A. History of Petition to Upgrade Tohickon Creek

On September 19, 1995, the Environmental Quality Board (EQB) accepted the petition of Marion and Neil Kyde and the Tincum Conservancy to upgrade the 11.2-mile main stem Tohickon Creek, from the Lake Nockamixon Dam to its mouth at the Delaware River as an Exceptional Value (EV) stream. For almost twenty five years, the Delaware River community has been working and waiting to see the realization of Tincum Conservancy's stream upgrade petition. Various supplements and reports have been provided during this timeframe by Tincum Conservancy, Delaware Riverkeeper Network, Heritage Conservancy, and others from the conservation community. The Tohickon is the largest watershed in Bucks County. The Tohickon flows through iconic places like Ralph Stover State Park and the Appalachian Highlands. The Tohickon Creek is recognized as an integral tributary of the Lower Delaware Wild and Scenic River system since it was proposed in the mid 90's and subsequently designated in 2000. Over 3,000 acres of lands have been protected, through both public and private investment, by communities that take pride in preserving this well-loved and significant Bucks County stream with exceptional recreational significance. Tohickon Creek has been recognized by the United States Congress as possessing "outstandingly remarkable" natural, cultural, historic, scenic and recreational resource values which should qualify the Tohickon as an "Exceptional Value Water."

A portion of the National Historic Landmark Delaware Canal, passing through Point Pleasant, falls within the boundaries of the Tohickon Creek Historic District containing several bridges, a canal aqueduct, and two locks. The Byram Road Metal Pratt pony truss bridge, manufactured circa 1877 by Murray-Dougal & Company, retains original stone abutments and wing walls, and was recently impeccably restored with a one-lane wooden deck. The Delaware Canal crosses the Tohickon Creek on an aqueduct, rebuilt circa 2002, as part of the interpretation of the National Landmark Delaware Canal offering important historic, landscape, and engineering associations. The fully functional aqueduct carried canal boats over the Tohickon Creek in three spans utilizing a wooden Burr Truss design replicated in this reconstruction that reused the original abutments and piers, with a wooden towpath deck, metal waterway, and wooden covered sides (see attachments regarding historic characteristics). With this and many other historically significant attributes, the Delaware Riverkeeper Network submitted a petition originally in 2016 and resubmitted again in 2019 requesting the proposed Tohickon Creek Historic District be nominated to the National Register of Historic Places. The petition is included to this comment and reports by Kutztown University Professor Rob Reynolds detail the historical significance and unique landscape of the region of the Tohickon.

Despite these and many more community investment and conservation efforts provided in supplements over the decades, on April 13, 2019, the Department of Environmental Protection issued a report on the Bucks County's community's upgrade petition, but instead of giving this stream better protections, PADEP is proposing to weaken protections for the Tohickon by downgrading its main stem from Lake Nockamixon dam to its confluence with the Delaware River with a DEP proposed designation to Trout Stock Fishery, Migratory Fishery (TSF, MF). Tohickon's current designation is Cold Water Fishery, Migratory Fishery (CWF, MF).

Despite these community investment and conservation efforts over the decades, on April 13, 2019, the Department of Environmental Protection issued a report on the Bucks County's community's upgrade petition, but instead of giving this stream better protections, PADEP is proposing to weaken protections for the Tohickon by downgrading its main stem from Lake Nockamixon dam to its confluence with the Delaware

River with a DEP proposed designation to Trout Stock Fishery, Migratory Fishery (TSF, MF). Tohickon's current designation is Cold Water Fishery, Migratory Fishery (CWF, MF).

B. The Department Fails to Give the Public Notice that it is conducting a Water Assessment to Downgrade the Tohickon

A Petition was before the Department to upgrade the Tohickon. The Department's website notified that it was doing a stream assessment for EV/HQ purposes.

http://files.dep.state.pa.us/Water/Drinking%20Water%20and%20Facility%20Regulation/WaterQualityPortalFiles/Stream_Packages/StreamEvalTbl.pdf. Such assessment based on a submitted Petition should

have resulted in a binary outcome indicating whether the stream did or did not qualify as EV. The Department has not given the public or local agencies any prior notice or opportunity to submit data relative to a downgrade of the Tohickon. If the Department believes that a downgrade is appropriate then it cannot just unilaterally convert the stream assessment process to one for a downgrade but it must first publish notice of its intentions and any potential redesignation, in advance. It must offer the public an opportunity to submit relevant data and information on the stream with respect to the type of assessment that DEP is performing. Because the Department's notice was inadequate for the action that it is recommending, redesignation is inappropriate. Furthermore, DEP's most recent integrated waters report published and out for public comment earlier this year, did not list the Tohickon Creek as being impaired in meeting its CWF standards.

C. The Department Fails to Conduct a Use Attainability Analysis

While the Department is not obligated to justify a determination to maintain a designated use while it employs strategies to allow the stream to recover and attain the existing use, it is surely obligated to justify a downgrade decision. See gen. Kelso v. Rybachek, 912 P.2d 536, 540 (Alaska, 1996) (Department should maintain designated uses in cases where unequivocal decisions regarding attainability of uses could not be

made due to lack of data). In particular, DEP must conduct a scientific use attainability analysis (“UAA”) to demonstrate that the designated use of the stream is not attainable.

The procedures for a downgrade are governed by Section 93.4(b) which provides as follows:

Less restrictive uses. Less restrictive uses than those currently designated for particular waters listed in §§ 93.9a--93.9z may be adopted when it is demonstrated that the designated use is more restrictive than the existing use, the use cannot be attained by implementing effluent limits required under sections 301(b) and 306 of the Federal Clean Water Act (33 U.S.C.A. §§ 1311(b) and 1316) or implementing cost-effective and reasonable BMPs for nonpoint source control, and one or more of the following conditions exist:

- (1) Naturally occurring pollutant concentrations (natural quality) prevent the attainment of the use.
- (2) Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met.
- (3) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place.
- (4) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate the modification in a way that would result in the attainment of the use.**
- (5) Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life uses.
- (6) Controls more stringent than those required by sections 301(b) and 306 of the Federal Clean Water Act would result in substantial and widespread economic and 25 Pa. Code. § 93.4. Statewide water uses. (emphasis added)

Per the regulations, the Department can rely on the presence of a Dam to preclude attainment of a stream's designated use only if it is not feasible to restore the water body to its original condition or to operate the Dam in such a manner that would result in attainment of use. As the EPA has cogently explained, "it is the prospective analysis of future attainability of designated uses that provides the demonstration necessary to support a use change." "Use Attainability Analyses and other Tools for Managing Designated Uses", EPA, March 2006. The Department, in the case of the Tohickon Creek, has neither properly investigated nor otherwise demonstrated that increasing the discharge from the Lake Nockamixon Dam would not otherwise restore or establish the Tohickon Creek's use as a CWF. While the Department summarily dismisses the opportunity to increase cold water releases from Lake Nockamixon because of speculation that increased releases would impair the tailwaters from low dissolved oxygen conditions, experience throughout the Commonwealth with reservoir releases clearly establishes that thriving cold water fisheries can be established and maintained in such tailwater reaches (e.g., Beltzville Reservoir, FE Walter Reservoir, Lake Wallenpaupack, and the multiple reservoirs supporting cold water fisheries on the upper Delaware River). Problems with hypoxia and low dissolved oxygen are not routine, and the Department fails in its due diligence to thoroughly evaluate the water quality and ecological potential of increased cold water releases from Lake Nockamixon.

Furthermore, and contrary to the Department's hypothesis, where flow was maintained above the 11 cfs conservation release (post repair of the release valve that occurred 2012-2014 according to DEP) there was no contravention of the dissolved oxygen standards. Accordingly, efforts to study and/or increase discharge to the stream are required before such a drastic step as a downgrade to strip current designated use.

D. The Department Actions/Inactions are Unlawful and a Cause of the Inability of the Tohickon to Meet its Designated Use

The Department has comprehensive authority and responsibility for the regulations of Dams, including the Lake Nockamixon Dam, under the Dam Safety and Encroachment Act (DSEA). 32 P.S. §

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693.1 et seq. See also 25 Pa. Code § 105.2. Accordingly, it is ultimately the Department who has the obligation to investigate and alter a dam that has a derogatory effect on a stream. See 32 P.S. § 693.14 (“If the department determines that any dam... adversely affects ...the environment or has not been properly ...operated or maintained in compliance with this act, it may order the owner of the facility to repair, alter, maintain or remove the facility or take such other action necessary to carry out the purposes of this act...”). Section 105.113 dealing with releases from a dam mandates as follows:

(d) Every dam must at all times be operated in a manner to allow the required flow of water into the stream below the dam as established under this section, and as otherwise necessary to support fish and other aquatic life and to assure compliance with the water quality standards in Chapter 93 (relating to water quality standards) and to provide for other instream uses for the affected stream.

25 Pa Code. § 105.113(d) (emphasis added)

Suggesting that operation of the Dam precludes the Tohickon from achieving its designated use, is tantamount to an admission that the Department has failed to manage and regulate the Dam, in accordance with its mandatory legal obligations. When the Department fails in their administrative oversight obligations, they may be subject to a mandamus action to correct those deficits. See Odette’s, Inc. v. Com., Dept. of Conservation and Natural Resources, Bureau of State Parks, 699 A.2d 775 (Pa. Commw. 1997)(Action in equity seeking injunction, mandamus, and declaratory judgment against (DCNR) and (DEP) for violation of the Dam Safety and Enforcement Act). Concomitantly, such conduct may also violate the Clean Streams Law.

The broad purpose of the Clean Streams Law is to prevent further water pollution to the waters of the Commonwealth and to reclaim and restore even presently polluted streams. 35 P.S. §691.4. Section 611 of the Clean Streams Law makes it unlawful to cause pollution of waters of the Commonwealth. 35 P.S. § 691.611. The definition of “pollution” under the Clean Streams Law is very broad:

“Pollution” shall be construed to mean contamination of any waters of the Commonwealth such as will create or is likely to create a nuisance or to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, municipal, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life, *including but not limited to such contamination by alteration of the physical, chemical or biological properties of such waters, or change in temperature, taste, color or odor....*

35 P.S. 691.1

In this regard, the Pennsylvania Environmental Hearing Board (“EHB”) has opined that any physical alteration of a water resource, including diminishment of water quantity, could constitute “pollution” under Section 611. See Oley Township v. DEP, 1996 EHB 1098, 1996 WL 635277 (well permit that did not consider impact to hydrologically connected adjacent wetland was improper). The EHB’s position was based upon a United States Supreme Court precedent related to the operations of a hydroelectric dam wherein the Supreme Court defined pollution, under the Clean Water Act, as follows:

This broad conception of pollution—one which expressly evinces Congress' concern with the physical and biological integrity of water—refutes petitioners' assertion that the Act draws a sharp distinction between the regulation of water “quantity” and water “quality.” Moreover, § 304 of the Act expressly recognizes that water “pollution” may result from “changes in the movement, flow, or circulation of any navigable waters ..., including changes caused by the construction of dams.” 33 U.S.C. § 1314(f). This concern with the flowage effects of dams and other diversions is also embodied in the EPA regulations, which expressly require existing dams to be operated to attain designated uses.

PUD No. 1 of Jefferson County v. Washington Dept. of Ecology, 114 S.Ct. 1900, 1913, 511 U.S. 700, 700 (1994). In sum, the Lake Nockamixon Dam cannot be operated in a manner that alters the flow, temperature and water quantity, causing degradation to the Tohickon Creek and its aquatic life, and the Department must ensure operation of the Dam protects those uses designated in Chapter 93.

Under the Clean Streams Law, the Department of Environmental Protection is mandatorily obligated to investigate claims of water pollution and to protect the “waters of the Commonwealth” including, the

Tohickon Creek from “pollution” from the Lake Nockamixon Dam, which has adversely impacted its designated uses. 35 P.S. §§ 691.5(b)(6).

The Department has failed to investigate the restorative and beneficial impact of an increase in cool water discharges from the Lake Nockamixon Dam (and the deleterious effects of not providing same) and any downgrade is therefore unsupportable and contravenes the Department’s responsibilities and duties, pursuant to the Clean Streams Law.

Finally, and significantly, operations of the Lake Nockamixon Dam in such a manner as to cause degradation to the Tohickon Creek, is also a concomitant violation of the Environmental Rights Amendments of the Pennsylvania Constitution. Article 1, Section 27 of the Pennsylvania Constitution promises:

The People have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and aesthetic values of the environment. Pennsylvania’s public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

Under Article I, Section 27 of the Pennsylvania Constitution, DEP has particular constitutional obligations as the lead environmental agency of the Commonwealth. See Pennsylvania Environmental Defense Foundation v. Commonwealth, 161 A.3d 911, 938 (Pa. 2017). DEP’s duties under Article 1, Section 27 are also recognized as mandatory duties within the DSEA. See 32 P.S. § 693.2. (The Purpose of the Act is to “protect the natural resources, environmental rights and values secured by the Pennsylvania Constitution and conserve the water quality, natural regime and carrying capacity”). DEP has violated its duty by failing to protect the Tohickon Creek, allowing for mismanagement and improper operations of the dam, and for water pollution via the failure to require sufficient release of water to maintain the designated uses of the stream.

E. Lake Nockamixon Releases Inconsistent with Department Requirements & Cold Water Protection Practices

The conservation release for the Lake Nockamixon Dam has been set at 11 cfs during “normal” operating conditions, and at 7 cfs during “drought” conditions (Delaware River Basin Water Code, with amendments through December 4, 2013). With a drainage area at the Dam of 75 square miles, the 11 cfs conservation release is equivalent to 0.147 cubic feet per second per square mile (cfsm or csm) of the watershed drainage area.

Under Chapter 105 of the Department’s regulations (25 Pa. Code § 105.113), dams constructed prior to August 28, 1978, will have a conservation release that is not numerically prescribed by a formula but instead balances multiple considerations:

For dams and reservoirs constructed prior to August 28, 1978, the Department will determine a reasonable schedule for release rates, considering all of the following:

- (1) The purposes stated in subsection (a) and the particular needs of instream and downstream water uses on the affected stream.
- (2) The capacity of existing release works at the dam and feasibility of potential modification of the release works.
- (3) The yield of the reservoir, and its capability to meet release requirements and satisfy the purposes and uses of the reservoir.

For reservoirs constructed after August 28, 1978, Chapter 105 prescribes conservation releases up to 0.25 cfsm (25 Pa. Code § 105.113(b)). Using these formulas for post-1978 dams, the conservation release for the Lake Nockamixon Dam could range from 15 cfs to 20 cfs, depending on specifics in the storage and operation of the reservoir. Thus, the conservation release under Chapter 105 could be nearly 100% higher for the Tohickon Creek if the Dam were operated in a manner consistent with other reservoirs in the Commonwealth.

Furthermore, the adequate protection of cold water fisheries may require releases exceeding 0.25 cfsm, as the Commonwealth, DRN, and multiple partner agencies have articulated for the coldwater fishery

of the Upper Delaware River system. In the Upper Delaware, cold water releases in summer range from 0.40 to over 1.00 cfsm from the New York City reservoirs during normal operating conditions (see Flexible Flow Management Program, available at <https://webapps.usgs.gov/odrm/ffmp/index.html>). Only during drought conditions do releases for the cold water fisheries fall to as low as 0.16 cfsm, and only at one of the three Delaware Basin reservoirs (Pepacton Reservoir) while at the two additional reservoirs, releases are maintained at 0.20 cfsm (Cannonsville Reservoir) and 0.43 cfs (Neversink reservoir).

The release of only 11 cfs from the Lake Nockamixon Dam therefore amounts to a feeble and inadequate effort on the part of the Commonwealth to fully protect the designated use established in Chapter 93 for the Tohickon Creek. Releases ranging from 20 cfs to 35 cfs would be more consistent with both the Commonwealth's own specific requirements for modern reservoirs and the operating conditions under carefully scrutinized plans to fully protect cold water fisheries. Clearly, much work remains for the Tohickon Creek to explore the proper and adequate reservoir releases that would maintain and support a cold water fishery and DRN is enthusiastic to help in this endeavor with the various agencies and conservation community. Moreover, the large size of Lake Nockamixon (approaching 40,000 acre feet of storage) and the lack of large demands for water supply from this large storage provide ample opportunity to explore higher and more protective releases from Lake Nockamixon that could fully support the Cold Water Fishery designated use for the Tohickon Creek. In the meantime, it's critical that the EV designation sought over the last 25 years by the community is not further stalled and delayed yet again - while these negotiations are worked out. This is especially important since the justification of building the Nockamixon dam in the first place was to assist in the Tohickon continuing to meet CWF status long term.

F. DEP's Report is Contrary to Conservation Ethics at the Local, Regional and National Levels

The DEP's report does not consider all of the data and the spatial and seasonal variation of the data. As argued by the petitioners for over two decades, it's critical that softer qualifiers beyond macroinvertebrates and water quality parameters like temperature are employed for the Tohickon Creek which runs through various public and privately held state parks and eased lands.

DRN and other petitioners believe and have laid out how the Tohickon Creek meets these Exceptional Value qualifiers that are outlined in Chapter 93:

- The water is located in a designated State park natural area or State forest natural area, National natural landmark, Federal or State wild river, Federal wilderness area or National recreational area
- The water is an outstanding National, State, regional or local resource water
- The water is a surface water of exceptional recreational significance
- The water is a surface water of exceptional ecological significance

Support of these other qualifiers outlined in Chapter 93 were provided to DEP by petitioners over the years in the community effort to seek EV but have been largely ignored (see Lower Tohickon Creek Watershed Exceptional Value Background Documentation report compiled by Heritage Conservancy on behalf of the Tincum Conservancy submitted in April, 2009).

Supplements to the petition submitted by the Tincum Conservancy and Delaware Riverkeeper Network over the past two decades, as well as the recent letters submitted by the National Park Service, the Lower Delaware Wild & Scenic River Program, the Point Pleasant Community Association, and various elected officials among many other entities clearly demonstrate and indicate the strong support for the Tohickon that is long deserving of EV protections – the Tohickon certainly cannot be candidate for weaker protections as the DEP is proposing.

G. Available Data Used in the DEP Draft Report

Regarding water quality thresholds set by DEP, the strict adherence to temperature standards 99% of the time are an exceptionally difficult threshold to meet, especially in light of newer technologies like automatic sensors that are now being used for stream sampling data collection. These automatic sensors were used for Tohickon analysis and can now collect data around the clock - 24 hours - and often are set to collect data hourly - providing a large sum of datasets. At the time the standards were established, these types of automatic logging sensors were not readily used. Has the criteria of 99% been set too high of a bar to disqualify deserving streams of higher standards - a goal of the Clean Water Act? Past petitions indicate

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that there are few petitioners that took the road of water quality thresholds because the 99% rule is so onerous to achieve. Tincum Conservancy, to its credit and support of Tohickon protections, was willing to invest and go down the water quality route based on conversations with DEP staff but to no avail. Furthermore, an analysis of French Creek and Pine Creeks - both EV streams - were analyzed for temperatures by the late Dr. Bob Stanfield and compared to Tohickon temperatures. Dr. Stanfield's findings indicated that French and Pine Creek did not meet temperature standards for HQ-CWF 99% of the time. In fact, they both failed. For example, results clearly show that in the demonstrably biologically excellent stream, Upper Pine Creek, the water temperatures in the time period data were collected, exceeded the CWF-HQ temperature maximum criteria on 30-45% of the days. Though the Upper Pine creek site is close to its headwaters, sheltered by dense foliage and has very sparse development along its banks, it failed to meet the Pennsylvania temperature regulations for a High Quality Cold Water Fisheries (See: Comparison of Three Creek Stream Temperatures and Pennsylvania High Quality(HQ) and Exceptional Value (EV) Streams Temperature Criteria by Dr. Bob Stanfield).

Analysis of benthics for the Tohickon as part of this petition were only conducted in January 1997, May 2000, and April 2010. It's important to note that these sampling efforts by DEP, were conducted before the valve was fixed at Lake Nockamixon. It is important to note that if cold water releases were increased at Lake Nockamixon, over time a colder benthic community may establish itself on the main stem.

Efforts have been underway to remove relic dams on the main stem Tohickon, another example of local community and collaborative support to improve water quality conditions. The Ralph Stover dam removal and habitat restoration project was implemented along the Tohickon Creek near Point Pleasant in 2007. Partners in this dam removal included DCNR, American Rivers, and the Fish and Boat Commission. The restoration project restored 7,973 feet of riparian habitat (1.51 miles); 3,960 feet instream habitat and opened up 1.6 stream miles to benefit migratory cold water species. Conversations are also underway by the local community regarding removal of the Stover Myers Mill dam which would be another effort to pursue before allowing or spending limited resources for DEP's proposed UAA.

DEP characterizes the Tohickon as a eutrophic system due to pH swings. However, the swings may not be water quality violations, but swings reflective of a natural system. Dr. Bob Stanfield also reviewed pH conditions for the Tinicum Conservancy to submit on the petition record. The Tohickon has low nutrients compared to other southeast PA streams. If there are problems in the chemistry meeting the standards, it could be natural conditions (Dr. Erik Sildorff, communication). DEP also acknowledges in the draft report (p.11) that reduced riparian buffer conditions could elevate stream temperatures. Over the past decade and even more recent years, multiple stream riparian buffer projects have been implemented in the Tohickon Creek watershed by the community (including by the original petitioners) and there certainly exists other areas where continued enhancements to buffers could be employed and implemented especially in light of all the preserved lands along the Tohickon corridor. As Tinicum Conservancy, Delaware Riverkeeper Network, and the Pennsylvania Lands Trust umbrella group commented during the public process where DEP was encouraging input on how preserved private lands are viewed in way of petitions, preserved lands and private easements bring with them real water quality protections and measures that are formal and enforced (see public comments from Dec 2017) – therefore private eased lands may very well be even more protected than publicly owned lands and adding forested buffers on these lands is often very welcomed if buffers do not currently exist.

It's also important to note that DEP acknowledges that in 1997, stations along the Tohickon were sampled and collected prior to the DEP's revised Antidegradation Regulations and therefore were not used to evaluate the biological use qualifying criteria. With the original petition submitted in 1995, DRN also raises why this petition was not grandfathered in and evaluated under the prior standards, especially in light of the intense community support for this petition at the local, county, regional and national levels. Valley Creek, which runs through Valley Forge National Historic Park in the southeast, has petitions that date back to a similar timeframe to the Tohickon for example, and that stream received EV designation under the prior rules. In Valley Creek, there has been both tremendous growth as well as the ability of the local

conservation groups to advocate and press for smarter growth when developer proposals occur (EQB Notice dated 1992). With the climate change threats we face, increased flooding costs and need for better riparian protections, and freshwater impairments that already exist in the state, its absolutely critical unnecessary hurdles do not hinder the goals of Pennsylvania's Environmental Rights Amendment and other protective state and federal laws.

DEP cites 165 active water management permits issued in the Tohickon basin that include 90 non-municipal and 7 municipal sewage treatment surface water or land application permits, 25 industrial stormwater discharges, 10 industrial waste water discharges and 33 pesticide application permits. DEP asserts that pursuit of the installation of non-point source BMPs could potentially help cool stream temperatures but then also states that such BMPs for the Tohickon would likely not improve water quality for the Tohickon. There appears to be no analysis or thorough modeling of these discharges by DEP that could adequately warrant a UAA. Furthermore, a cursory review of the PA Bulletin by DRN between 1996 and 2019 indicates that some permitted discharges in the Tohickon are operating under special protection waters conditions and HQ-CWF rules. The first year this occurs is in 2007 and the last year is 2014 and some of these special provisions are for two sewage treatment permits including the Quakertown STP which discharges in the TSF section of the Upper Tohickon above Lake Nockamixon. Downgrading Tohickon's use would lead to dire consequences for the Tohickon as new and existing dischargers proposed to operate or continue to operate in the Tohickon would have to adhere to less strict standards especially in regards to temperatures. At a time when climate change is impacting stream temperatures and will continue to heat up our Pennsylvania streams into the future, such backwards steps of downgrades are unacceptable.

H. Violation of its Own Regulations

Most problematically, the DEP's draft report fails to identify its own illegal actions, inactions, and violations of its mandatory duties with respect to the Tohickon Creek's alleged failure to meet its designated use as a CWF. As a matter of law, during the pendency of the Petition, it was and remained the Department's obligation to maintain and protect the *existing uses* of the Tohickon Creek. See 25 Pa. Code §

93.4a. The Department argues that the Tohickon Creek's existing use is less restrictive than its designated use. In actuality, the existing use was degraded through and because of the Department's own violation of its duties. In particular, it has been admitted by the Department that "Nockamixon Dam may not have been meeting its conservation release due to inoperable release valves" and that "this may have resulted in significant reduced flows and a subsequent reduced ability for the Tohickon Creek to naturally assimilate elevated air temperatures." Moreover, this conservation release (even when properly occurring) may not be sufficient in quantity to protect the Tohickon Creek and additional water release may be necessary. As Princeton Hydro, DRN's expert, has opined, "Lake Nockamixon has an important role in controlling temperatures in Tohickon Creek." Accordingly, when there is an increased release of waters, from the Nockamixon Dam, it is an important management tool, for temperatures in the Tohickon and all of the ecosystem dynamics flowing from it, including aquatic organisms that rely on cooler temperatures. See Princeton Hydro, Temperature Evaluation for Tohickon Creek, January 2016. The Department admitted as much in its draft stream report when it stated, "additional increases in cool water discharges from the bottom discharge release of Nockamixon Dam could possibly reduce surface water temperatures." Instead of remedying the damage done to Tohickon Creek under DEP's own watch, incredibly the Department claims that the Dam is a reason that precludes the attainment of the Tohickon's designated use. See DEP Draft Report, Tohickon Creek, 2019 at p. 11. Instead of increasing the release of cold water to Tohickon Creek, the Department takes the obdurate and unsupported position that it is impossible to restore Tohickon Creek and therefore is seeking a downgrade.

I. Conclusion

For all of the foregoing reasons, it would be an inappropriate and unlawful choice for the Department to engage in a downgrade to the Tohickon Creek. The Department is therefore encouraged to revise its draft report and engage in all necessary administrative actions to ensure that Tohickon Creek remains CWF and is finally given its long deserving status of Exceptional Value based on the long list of softer qualifiers that have been invested in over the last 25 years. DRN remains willing to assist the Department in reevaluating

its draft report and doing the further analyses necessary to demonstrate that a downgrade is unwarranted and would welcome the opportunity to meet with DCNR and DEP to pursue avenues to increase the cool water discharges from Lake Nockamixon and other positive steps for the Tohickon Creek. In the meantime, we believe, as indicated by over 800 comments on the docket so far, that efforts are sorely needed now to finally provide EV designation to the deserving Tohickon Creek and its watershed community that has worked so hard to advocate for its protection for over 25 years.

We look forward to organizing an upcoming meeting to discuss these measures with the agency. Thank you for your time and consideration.

Sincerely,

A handwritten signature in blue ink that reads "Maya K. van Rossum". The signature is written in a cursive style with a long horizontal line extending to the right.

Maya K. van Rossum
the Delaware Riverkeeper

Cc: Mark Brickner, DEP, Division of Water Quality, mbrickner@pa.gov
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