

PROPOSED RULEMAKING

ENVIRONMENTAL QUALITY BOARD

[25 PA. CODE CH. 93]

Triennial Review of Water Quality Standards

The Environmental Quality Board (Board) proposes to amend Chapter 93 (relating to water quality standards) to read as set forth in Annex A.

This proposed rulemaking was adopted by the Board at its meeting of April 18, 2017.

A. *Effective Date*

This proposed rulemaking will go into effect upon final-form publication in the *Pennsylvania Bulletin*, and subsequent approval by the United States Environmental Protection Agency (EPA) when water quality standards are used to implement the Federal Clean Water Act (33 U.S.C.A. §§ 1251—1388).

B. *Contact Persons*

For further information, contact Thomas Barron, Bureau of Clean Water, 11th Floor, Rachel Carson State Office Building, P.O. Box 8774, 400 Market Street, Harrisburg, PA 17105-8774, (717) 787-9637; or Michelle Moses, Assistant Counsel, Bureau of Regulatory Counsel, 9th Floor, Rachel Carson State Office Building, P.O. Box 8464, Harrisburg, PA 17105-8464, (717) 787-7060. Persons with a disability may use the AT&T Relay Service at (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This proposed rulemaking is available on the Department of Environmental Protection (Department) web site at www.dep.pa.gov (select “Public Participation,” then “Environmental Quality Board (EQB)”).

C. *Statutory and Regulatory Authority*

This proposed rulemaking is being made under the authority of sections 5(b)(1) and 402 of The Clean Streams Law (35 P.S. §§ 691.5(b)(1) and 691.402), which authorize the Board to develop and adopt rules and regulations to implement The Clean Streams Law (35 P.S. §§ 691.1—691.1001), and section 1920-A of The Administrative Code of 1929 (71 P.S. § 510-20), which grants to the Board the power and duty to formulate, adopt and promulgate rules and regulations for the proper performance of the work of the Department. In addition, section 303 of the Federal Clean Water Act (33 U.S.C.A. § 1313) sets forth requirements for water quality standards.

D. *Background and Purpose*

Water quality standards are in-stream water quality goals that are implemented by imposing specific regulatory requirements (such as treatment requirements, effluent limits and best management practices (BMPs)) on individual sources of pollution. Section 303(c)(1) of the Federal Clean Water Act requires that states periodically, but at least once every 3 years, review and revise as necessary their water quality standards. Water quality standards include designated uses, numeric and narrative criteria and antidegradation requirements for surface waters. The amendments in this proposed rulemaking are the result of ongoing reviews and evaluations of the water quality standards conducted by the Department. This proposed rulemaking fulfills the Federally-required triennial

review of water quality standards as mandated by the Federal Clean Water Act.

Pennsylvania water quality standards, which are generally codified in Chapter 93, are designed to implement the requirements of sections 5 and 402 of The Clean Streams Law and section 303 of the Federal Clean Water Act. The water quality standards include the existing and designated uses of the surface waters of the Commonwealth, along with the specific numeric and narrative criteria necessary to achieve and maintain those uses, and an antidegradation policy, which prohibits degradation of waters. The water quality standards also include a policy for the special protection of the existing quality of certain waters found to be of High Quality (HQ) or Exceptional Value (EV).

Water quality standards are an important element of the Commonwealth’s water quality management program. Some type of water quality standard has been in use for over 75 years in this Commonwealth. One of the early actions after the Sanitary Water Board (SWB) was created in 1923 was to classify streams by priority for water quality management actions. In 1947, the SWB classified all streams in this Commonwealth by the degree of treatment that had to be provided before discharge could occur. Article 301—Water Quality Control, which specifically contained water uses, general and specific water quality criteria, and designated water uses, was added to the SWB’s Rules and Regulations on June 28, 1967. The SWB was abolished on January 19, 1971, following the formation of the Department of Environmental Resources (DER) in 1968. Responsibilities for developing and maintaining the water quality criteria and standards and other related regulations were transferred to DER. New or revised specific water quality criteria and standards were developed by DER for all surface waters in this Commonwealth, and formally adopted into Chapter 93 on September 10, 1971.

DER completed its first major review and complete overhaul of the water quality criteria and standards in 1979. After a series of public hearings and extensive public participation, revisions to the water quality criteria and uses were incorporated into Chapter 93. EPA Region III formally approved the revisions to Pennsylvania’s water quality standards on January 26, 1981. Section 303(c)(1) of the Clean Water Act requires that states periodically, but at least once every 3 years, review and revise as necessary their water quality standards. Therefore, additional reviews and revisions were made to the Commonwealth’s water quality standards in 1985, 1989 and 1994. The then newly-formed Department, which was created in June 1995, after splitting DER into two agencies by approval of the Conservation and Natural Resources Act (71 P.S. §§ 1340.101—1340.1103), began to conduct its first comprehensive review of water quality standards regulations, policies and implementation procedures which became the basis for the next triennial review. Additional reviews and revisions were made to the Commonwealth’s water quality standards in 1998, 1999, 2000, 2002, 2004, 2009 and 2013 to address amendments for the Great Lakes Initiative, antidegradation policies, the Water Quality Standard Regulatory Basics Initiative Triennial and several other corrective amendments.

The EPA urged the Department in a letter dated January 21, 2013, to include the Federally-recommended ammonia and recreational water quality criteria (RWQC)

into the Commonwealth's water quality standards. Also, the EPA specifically recommended in its May 22, 2014, approval letter in reference to the 2013 Pennsylvania Triennial Review of Water Quality Standards "that PADEP will address the issues of total dissolved solids, most notably chlorides, ammonia, and recreational criteria" in its next triennial review.

On March 24, 2016, the Department's Water Resources Advisory Committee voted to concur with the Department's recommendation to move this proposed rulemaking forward for Board consideration. In addition, the Department provided to the Agricultural Advisory Board on February 25, 2016, a regulatory review that included the triennial review of water quality standards. Also, the Department provided to the Citizens Advisory Council on June 21, 2016, an overview of the triennial review.

E. Summary of Regulatory Requirements

The following is a detailed description of proposed amendments to Chapter 93.

§ 93.7. Specific water quality criteria—Table 3

The Board is proposing the following changes to the Table 3 criteria:

Ammonia criteria: The EPA released in April 2013 final recommendations for Aquatic Life Ambient Water Quality Criteria for Ammonia—Freshwater 2013 (EPA 822-R-13-001). These recommendations are intended as guidance to states, territories and authorized tribes in developing water quality standards to protect aquatic life from exposure to ammonia. The Department assessed the peer-reviewed technical documentation for the recommended ammonia criteria and found it was scientifically sound and appropriate for the surface waters of the Commonwealth. The document can be accessed at <https://www.epa.gov/wqc/aquatic-life-criteria-ammonia>.

These recommendations consider the most recent scientific research regarding the effects of ammonia on aquatic life and incorporate the latest toxicity information for freshwater species, including unionid mussels and gill-breathing (nonpulmonate) snails.

Freshwater unionid mussels are found in many states of the continental United States and many of these mussels are Federally-listed as endangered or threatened species. Freshwater mussels are broadly distributed across the United States, as are freshwater nonpulmonate snails. Both of these sensitive groups are now included in the ammonia criteria dataset. There are approximately 65 species of unionid mussels in this Commonwealth, including many that are rare or endangered. The seven most sensitive genera in the acute dataset are all in the family Unionidae and all of these genera, except for *Venustaconcha*, are found in this Commonwealth. The two most sensitive genera in the chronic dataset are also unionid mussels, and are both found in this Commonwealth. These criteria are appropriate for Pennsylvania because they provide sufficient protection for the most sensitive fauna in this Commonwealth.

The magnitude for both the acute (CMC) and chronic (CCC) criteria is determined by two separate equations and is given as a concentration in milligrams of total ammonia nitrogen per liter (mg TAN/L). Temperature and pH both influence the toxicity of ammonia. Temperature has little effect on the toxicity of total ammonia nitrogen (TAN) to fish, therefore the effect concentrations for fish are only normalized for pH. For invertebrates, temperature and pH affect the toxicity of TAN, so the TAN effects concentrations are normalized for pH and temperature.

At pH = 7, the acute criterion magnitude is driven by freshwater unionid mussels at water temperatures greater than 15.7°C (60.27°F). The TAN effects concentrations of salmonids and other fish drive the acute criterion magnitude at lower temperatures. The 2013 chronic criterion magnitude is determined primarily by the sensitivity of freshwater mollusks, particularly unionid mussels.

Therefore, the EPA developed the acute and chronic criteria equations with the underlying assumption that mussels are present, and this is appropriate for Pennsylvania, as sensitive mussels are ubiquitous throughout this Commonwealth. Additionally, the EPA developed an acute criteria equation that is appropriate when salmonids are present (along with the aforementioned mussels also being present). It is appropriate to use the acute criteria equation that considers the sensitive salmonids. The Department recommended that the Board consider salmonids being present when determining the Statewide CMC for TAN for several reasons: 1) salmonid fishes are common throughout this Commonwealth; 2) this equation uses the set of conditions that generates the most stringent criteria, so the proposed CMC will most certainly be sufficiently protective; and 3) all of the proposed acute criteria values generated by the proposed equation (regardless of the ambient pH and temperature conditions) are less restrictive than the values for the current acute criteria calculated using the same pH and temperature. Adopting this approach will not be detrimental to any current dischargers because the proposed acute standards will be less restrictive under all temperature and pH conditions. The 2013 chronic criterion magnitude is determined primarily by the sensitivity of freshwater mollusks, particularly unionid mussels, therefore the presence or absence of salmonids is inconsequential in the determination of the proposed chronic criteria.

As previously mentioned, adopting the acute criterion will not be detrimental to any current dischargers because the proposed acute standards will be less restrictive under all temperature and pH conditions. The chronic criterion becomes more stringent as pH and temperature increase just the same as the current chronic ammonia criterion does. Median summer temperature and pH were calculated using data from 235 fixed water quality network sampling sites collected from 2000 to 2015. The data is representative of all different types of streams found Statewide. The new chronic criterion is typically more stringent than the existing criterion in streams with low pH and temperature. These are typically smaller headwater streams where it is less likely for a discharge to exist. At pH < 7, the new criterion is more stringent being anywhere from 0.1 to 1.5 mg/l lower. It is most stringent in cold streams with pH near 6.0. At pH > 7.8 the proposed compared to the current criterion is less stringent by 0.2 mg/l or less. Between pH 7.5 and 7.8, the proposed criterion is typically more stringent but 95% of the time the difference is less than 0.17 mg/l and only 0.6 mg/l 50% of the time. Between pH of 7.0 to 7.5 mg/l half the time the proposed criterion is higher and half the time it is less stringent depending on the temperature. When the EPA-recommended criteria are more stringent, 95% of the time the difference is < 0.9 mg/l.

Overall, with respect to the proposed ammonia criteria, the Board expects either no impact or minimal impact on the great majority of point source discharges in this Commonwealth. In those cases, when additional treatment for ammonia may be needed, minimal cost impact is expected because ammonia is highly treatable. Treatment

usually involves only time allowed for biological degradation and exposure to atmospheric oxygen.

The Board proposes to replace the current Statewide aquatic life use criteria for ammonia with the new Federally-recommended criteria for ammonia. Statewide application of these Federally-recommended water quality criteria would provide an appropriate level of protection for aquatic life from the effects of ammonia.

Bacteria criteria: The Board is proposing amendments to the bacteria criteria that will include replacing the current fecal coliform-based criteria for water contact sports (WC) during the swimming season (May 1 to September 30) with the EPA's recommended 2012 RWQC in the Commonwealth's surface waters. The Department assessed the peer-reviewed technical documentation for the EPA's recommended recreational criteria for bacteria and found it was scientifically sound and appropriate for the surface waters of the Commonwealth. The document can be accessed at <https://www.epa.gov/sites/production/files/2015-10/documents/rwqc2012.pdf>.

The Commonwealth's current recreational use bacteria criteria have been based upon a maximum fecal coliform level of 200 colony forming units per 100 mL (cfu/100 mL) since the early 1970s. It is now widely accepted that *Escherichia coli* (*E. coli*) levels are a better indicator of fecal contamination than fecal coliforms. This change is designed to protect those engaging in WC (defined as the use of the water for swimming and related activities) from fecal contamination. There are two sets of recommendations based on two different risk paradigms (36 illnesses per 1,000 swimmers and 32 illnesses per 1,000 swimmers). The EPA maintains, in the 2012 RWQC, that both risk paradigms are adequately protective. The Board proposes the adoption of the *E. coli* freshwater levels associated with Recommendation 1, the 36 per 1,000 illness rate. The *E. coli* levels associated with this risk paradigm (geometric mean (GM) = 126 cfu/100 mL and statistical threshold value (STV) = 410 cfu/100ml) are most closely akin to the current Department of Health (DOH) standards in 28 Pa. Code § 18.28 (relating to bathing beach contamination) and the criteria that were promulgated for Lake Erie and Presque Isle under the 2004 Bacteria Rule (40 CFR 131.41 (relating to bacteriological criteria for those states not complying with Clean Water Act section 303(i)(1)(A))) published at 69 FR 67218 (November 16, 2004). The criteria values for the current DOH standards and the criteria values that were Federally-promulgated for Lake Erie beaches, including Presque Isle, are a geometric mean value of 126 and a single sample maximum value (SSM) of 235. This SSM feature is not part of the 2012 RWQC. The SSM has been replaced by the STV of 410, which is most similar to the SSM (409) for the 90th percentile from the EPA's 1986 recommended bacteria criterion. To achieve the most consistent approach, the Board is favoring the criteria based on the similar geometric mean and SSM values. The Department believes this will result in a more seamless transition.

The Department conducted field studies making side-by-side sample comparisons between the current fecal coliform and proposed *E. coli* criteria. The study included 181 sites in 7 different watersheds. Applying the proposed *E. coli* standard would impair 15% more sites for WC recreation than the fecal coliform standard. This indicates the proposed standard provides a higher level of protection from waterborne diseases for the citizens of this Commonwealth.

Other proposed amendments to Table 3 and § 93.9x (relating to Drainage List X) provide further clarification.

First, the Board would like to emphasize that the DOH bathing beach contamination in 28 Pa. Code § 18.28 applies to all regulated beaches Statewide. Therefore, the Board is proposing to delete references to the DOH regulation in § 93.9x since it is not limited to Lake Erie. The Board also proposes to delete language in § 93.9x which refers to 40 CFR 131.41, which pertains to Lake Erie and Presque Isle beaches. These references to 40 CFR 131.41 and 28 Pa. Code § 18.28, as Exceptions to Specific Criteria, are no longer necessary since the proposed *E. coli* WC criterion in Bac₁ will be applied Statewide and the DOH regulation applies Statewide.

Bac₁ is designed to be protective of activities involving WC. The Bac₁ criterion is systematically applied to all surface waters in the Commonwealth unless otherwise specified in other portions of Pennsylvania's water quality standards.

Historically, the Bac₂ criterion was originally implemented as a site-specific criterion to protect the potable water supply (PWS), when the WC use was removed at Lake Erie and has always only been implemented in these select waters. Therefore, Bac₂ is currently only applicable in the outer Erie Harbor and Presque Isle Bay; specifically, in the harbor area and central channel dredged and maintained by the United States Army Corps of Engineers. Therefore, the Board proposes to delete the Bac₂ criterion from Table 3 and add this criterion in a new table in § 93.9x, where it only applies to Lake Erie waters.

The Board proposes that the current nonswimming season fecal coliform-based numerical criterion in Bac₁, which is a geometric mean maximum value of 2,000 cfu/100 mL, be retained and should continue to be applied Statewide in all surface waters from October 1 through April 30. The EPA is currently conducting research in an attempt to develop criteria that will be protective of secondary contact recreation. When the EPA finalizes and recommends these new Federal secondary contact recreational criteria, the Department will conduct a thorough review and evaluate whether the recommendations are appropriate for the Commonwealth.

Chloride criteria: Chlorides occur naturally in streams and are ubiquitous. Elevated levels of chloride are toxic to aquatic life in freshwater environments. The existing chloride criterion was developed primarily for the protection of PWS and is only applied at the point of water supply intake under § 96.3(d) (relating to water quality protection requirements). The Board proposed updates to the chloride criteria in several earlier rulemakings, but withdrew those recommendations due to objections from commentators that suggested additional research was needed. The Board initiated a proposed rulemaking for the promulgation of the 1988 National aquatic life criteria for chloride at its March 16, 2010, meeting. The proposed aquatic life criteria (230 mg/l = chronic; 860 mg/l = acute) mirrored the National-recommended aquatic life criteria that were published in February 1988 by the EPA in Ambient Water Quality Criteria for Chloride. That proposed rulemaking was published at 40 Pa.B. 2264 (May 1, 2010) with a comment period that closed on June 15, 2010. Based on comments received during that public comment period, the Department re-evaluated the science used in the determination of the chloride criterion successfully implemented by the Iowa Department of Natural Resources, which was based on research conducted by the EPA, along with the Great Lakes Environmental Center in Columbus, OH, and the Illinois Natural History Survey in Champaign, IL. That research demonstrated a

correlation between chloride toxicity and hardness, and, to a lesser degree, sulfates levels in water. The final results of this toxicity testing were published in the report "Acute Toxicity of Chloride to Select Freshwater Invertebrates," EPA, October 28, 2008. The Board proposed a new equation-based criterion, which was published at 42 Pa.B. 4367 (July 7, 2012). This equation-based criterion was also later withdrawn because of requests for the Department to conduct further studies.

In response to these earlier rulemaking actions, the Department conducted additional studies to characterize the ionic composition of surface waters and contracted with the Stroud Water Research Center in Avondale to perform chloride toxicity testing on mayflies. The studies were designed to provide the additional information needed to support the development of a chloride criterion that is protective across the range of aquatic habitats and species in waters in this Commonwealth. The mayfly studies demonstrated the toxicity of chlorides is hardness dependent but the responses differed from those modeled in the previously mentioned study that used cladocera (water fleas) as the test organisms. There was not a sufficient number of mayfly toxicity tests done at varying hardness levels to determine a good mathematical relationship between hardness and chloride toxicity. The chloride criteria require adjustment to differing hardness levels so as not to be over or under protective at different hardness values. That adjustment remains a question as the cladocera responded differently from the mayflies and there were not enough tests to adequately define the mayfly response.

More recently, the EPA published for public comment on December 20, 2016, *Draft Field-Based Methods for Developing Aquatic Life Criteria for Specific Conductivity*. The Department is currently reviewing this new field-based method to determine how it applies to Pennsylvania. The document provides a scientific method to assess ecological effects of ions based on specific conductance. Elevated ionic concentration measured as specific conductivity has been shown to negatively impact aquatic life in a range of freshwater resources. Since specific conductance is a composite measure of all ions present in the water, it is believed it accounts for the toxic or protective interactions of the ions on overall toxicity. This field-based method is a shift away from traditional laboratory toxicity testing to develop criteria for individual ions such as chloride. Criteria for individual ions developed using laboratory toxicity tests requires adjustment at least for hardness as toxicity is at least partly dependent on hardness levels. Since conductivity is a surrogate measure for all the ions present in the water, this EPA study determines that conductivity better accounts for interactions between all ions and toxicity than simply defining a relationship between only hardness and toxicity. For the ions, it is also believed that organism community field-based responses are better indicators of toxic impacts than single species controlled laboratory tests.

This study was geared toward waters where sulfate was the dominant ion but the same field-based methods are suggested for other ions such as chloride. The EPA recommendation is that there are advantages to using this field-based conductivity method for ions because it better accounts for interactions between ions than does the hardness adjustment. As previously stated, the hardness to toxicity relationship was not defined well enough in the laboratory cladocera and mayfly toxicity tests. Once finalized, states and authorized tribes may use the methods to develop field-based specific conductivity criteria for flowing waters. This document does not impose

binding water quality criteria on any state. The 60-day public comment period has closed and the EPA will consider the comments, revise the document, as appropriate, and publish a final document.

Due to the complex nature of the chemical interactions that determine the toxicological responses of aquatic organisms to chloride, and the release for comment of the field-based specific conductivity draft that addresses these concerns through specific conductance rather than the individual ions, the Department is not recommending a specific chloride criterion with this proposed rulemaking. The Department continues to review all available science, including the *Draft Field-Based Methods for Developing Aquatic Life Criteria for Specific Conductivity* from the EPA and any new data acquired through the additional studies in efforts to develop appropriate criteria intended to be applied in all freshwaters of the Commonwealth for the protection of aquatic life.

§ 93.8a. Toxic substances

The Board proposes to delete the reference in subsection (b) to Chapter 16, Appendix A, Table 1A since this table is proposed to be deleted in a separate proposed statement of policy. See 47 Pa.B. 6703 (October 21, 2017). The Department will now maintain a publicly available online table of site-specific human health and aquatic life criteria that have been recently developed or adopted by the Department based on approved methodologies and the best scientific information currently available. It should be noted that a similar amendment is proposed in § 93.8c(a) (relating to human health and aquatic life criteria for toxic substances). Also, subsection (b) is proposed to be amended to note that the approved analytical procedures and detection limits for these substances will be listed in Chapter 16 (relating to water quality toxics management strategy—statement of policy), as appropriate. The tables can be accessed at <http://www.dep.pa.gov/Business/Water/CleanWater/WaterQuality/Pages/Site-Specific-Water-Quality-Criteria-In-PA.aspx>.

Additionally, the Board proposes to delete in subsection (j)(3) the reference to 40 CFR 131.32(a), which has been reserved. Deletion of this cross-reference was missed during the previous triennial review.

§ 93.8c. Human health and aquatic life criteria for toxic substances

The Board proposes to clarify in subsection (a) that, for those aquatic life criteria that are a function of local water quality conditions and are specified as a formula, such as several of the heavy metals, the hardness and pH values used to derive the appropriate water quality criteria shall be determined by instream measurements or best estimates, representative of the median concentrations or conditions of the receiving stream for the applicable time period and design conditions.

The Board proposes to delete the prohibition in subsection (b) and clarify that criteria in Table 5 may apply to the Great Lakes System for those substances not listed in Table 6.

The Board is proposing additions and amendments to the human health and aquatic life criteria in Table 5. Water quality criteria are to be based solely on the best available scientific data and scientific judgments on pollutant concentrations and their effects on human health or aquatic life. The criteria are tools used to calculate discharge limits in the National Pollutant Discharge Elimination System (NPDES) program and to support other pollution control efforts. The criteria in Table 5 are

proposed to be updated to reflect the latest scientific information and implementation of existing EPA policies in the Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health (EPA-822-B-00-004, October 2000). The proposed updates include new scientifically-based exposure factors for body weight (80 kg), drinking water consumption rate (2.4 liters per day) and fish consumption rate (22.0 kg per day).

The EPA announced at 80 FR 36986 (June 29, 2015) the final updates recommended for 94 pollutants. In addition to the updated exposure factors, the EPA has determined pollutant-specific bioaccumulation factors and has updated available toxicity values using the data from the EPA Integrated Risk Information System as the primary source. The Department reviewed the National recommendations and determined the criteria are scientifically sound and applicable for the protection of Pennsylvania waters. The document can be accessed at <https://www.epa.gov/sites/production/files/2015-10/documents/human-health-2015-update-factsheet.pdf>.

Following are compounds that have been recommended by the EPA since the completion of the Commonwealth's previous triennial review published at 43 Pa.B. 4080 (July 20, 2013). This list contains new criteria to protect human health from toxic substances that currently are not in Table 5.

Summary of Table 5 proposed criteria

Chapter 93 currently includes criteria for nonylphenol, which are based on guidance provided by the EPA. The EPA took no action to approve or disapprove this criterion as part of the previous triennial review. The EPA prepared a biological evaluation regarding Federally-listed threatened and endangered species and their critical habitat. The United States Fish and Wildlife Service could not concur that this criterion for nonylphenol would be protective of endangered mussels in this Commonwealth. Due to this disagreement, the EPA did not approve the Commonwealth's final Statewide criterion, which was based on the EPA's National recommendation. Without final approval, the Department may not use the nonylphenol standard, as a Statewide criterion, to implement the Federal Clean Water Act. This triennial review retains the existing Statewide water quality criterion for nonylphenol and the Department will, again, submit the criterion to the EPA for approval. Until the EPA approves the criterion, the Department will use site-specific water quality criteria as applicable.

After a thorough review of the 94 individual recommended criteria updates, the Board is proposing to adopt the updated criteria for 73 compounds and add 11 new human health compounds to Table 5. There are ten EPA-recommended criteria that are the same as the criteria currently in Table 5, and therefore no change is recommended for these criteria.

The Board proposes the following 11 new human health toxic pollutants be added to the water quality criteria for toxic substances in Table 5. The Board will also clarify which pollutants in Table 5 have human health criteria that are still based on the exposure inputs of 2 liters per day of drinking water and consumption of 22 grams of fish per day for the protection of a 70 Kg person, based on the unavailability of information needed to calculate criteria based on new exposure assumptions. The regulations will also indicate which of the criteria were developed by the Department (D) or the EPA (E) for those pollutants in Table 5 without a Priority Pollutant Number (PP NO).

Currently, there are acute (3,000 ug/L) and chronic (610 ug/L) aquatic life criteria for 1,1,1-trichloroethane in Table 5, but no human health criterion for trichloroethane. The EPA-recommended human health criterion is 10,000 ug/L. Ingestion of drinking water is a potentially significant source of exposure to 1,1,1-trichloroethane. Inputs used to derive the 2015 updated human health AWQC are protective of exposure to 1,1,1-trichloroethane from consuming drinking water and eating fish and shellfish (organisms) from inland and near shore waters.

1,2-dichloropropane is classified as Group B2, "probable human carcinogen," under the EPA's *Guidelines for Carcinogen Risk Assessment* (1986). The major source of 1,2-dichloropropane in drinking water is discharged from industrial chemical factories. It may be released into the atmosphere or in wastewater during its production or use as an intermediate in chemical manufacture. There were also significant releases during its former use as a soil fumigant, and it may leach from municipal landfills. There are currently acute (11,000 ug/L) and chronic (2,200 ug/L) aquatic life criteria in Table 5. The EPA-recommended cancer risk level (CRL) is 0.9.

1,2,4,5-tetrachlorobenzene was historically used as an insecticide, an intermediate in the production of herbicides and defoliants, and a component of dielectric fluids. Currently, 1,2,4,5-tetrachlorobenzene is not registered for use as a pesticide. The general population could be exposed to 1,2,4,5-tetrachlorobenzene through inhalation of ambient air and drinking water. The EPA is recommending a human health criterion of 0.03 ug/L.

2,4,5-trichlorophenol was once registered as an antimicrobial by the EPA, but is not currently a registered pesticide. Chlorophenols can be formed when water containing humic substances is treated with chlorine and has a pH ranging from 7 to 8. The general population could be exposed to chlorophenols through ingestion of water and food contaminated with the compounds as well as inhalation of contaminated air. 2,4,5-trichlorophenol has been detected in fish. The EPA-recommended human health criterion is 300 ug/L.

3-methyl-4-chlorophenol is used as a disinfectant and a preservative in the United States. It also is registered in the United States as an antimicrobial pesticide and is currently in the re-registration process by the EPA. Exposure of the general population to the chemical might occur through inhalation and dermal contact. The EPA is recommending a human health criterion of 500 ug/L.

Methoxychlor is an insecticide that is no longer produced or used in the United States. Prior to its cancellation as an approved pesticide, the chemical was detected in fish from the Great Lakes at levels ranging from 10 to 120 ug/kg wet weight. It was also detected in several species of migratory fish in Great Lakes tributaries at concentrations up to 1.4 ug/kg. In the EPA's National Lake Fish Tissue Study, the chemical was detected in 1–5% (that is, 9 of 468) of the predator fillets (at a maximum concentration of 370 parts per billion) and 5.8% (that is, 23 of 395) of the bottom-dweller whole body fish samples (at a maximum concentration of 107 parts per billion). Thus, based on available exposure information and its high potential to bioaccumulate, ingestion of fish and shellfish is a potentially significant source of exposure to methoxychlor. The EPA-recommended human health criterion is 0.02 ug/L.

Chlorophenoxy herbicide (2,4-D) is an herbicide used to control broad-leaved weeds in cereals, grain crops, road-

sides and farm buildings. 2,4-D is currently registered as a pesticide by the EPA. Human exposure to 2,4-D might occur through inhalation and ingestion of food and water. The primary exposure routes for the general public are through food residues and water ingestion. Based on its low potential for bioaccumulation, exposure to this chemical from ingestion of fish and shellfish is not considered likely. Because of the lack of data in fish and shellfish, the EPA has not established bioaccumulation factors according to trophic levels. 2,4-D is calculated with a total bioaccumulation factor of 13 L/kg. The EPA's recommended criterion is rounded from 1,371 ug/L to 1,300 ug/L. The Department disagrees with this rounding and the criterion will be rounded up to 1,400 ug/L.

Chlorophenoxy herbicide (2,4,5-TP) is an herbicide that is no longer used in the United States. This herbicide was formerly used to control woody plants, broadleaf herbaceous weeds and aquatic weeds. Cancellation of all registered uses in the United States was put into effect on January 2, 1985. Prior to the cancellation of 2,4,5-TP, research surveys detected the chemical in large fruit samples and dairy products. Recent monitoring information on 2,4,5-TP in imported foods could not be identified. Based on the available exposure information for 2,4,5-TP, and given that the chemical is no longer produced or used in the United States, the EPA does not anticipate that there will be significant sources and routes of exposure of 2,4,5-TP other than fish and shellfish from inland and nearshore waters and water ingestion. The EPA is recommending a human health criterion of 100 ug/L.

Dinitrophenols can be found today in contaminated air, as well as in waste water originating from some manufacturing sites. The inputs used to calculate the criterion for dinitrophenols are identical to the inputs used to calculate 2,4-dinitrophenol. The criterion for dinitrophenols will be protective for all forms of dinitrophenols (2,4-; 2,5-; and 2,6-dinitrophenol). The EPA-recommended criterion for dinitrophenols is 10 ug/L.

Hexachlorocyclohexane (HCH)-technical has several isomers, one of which goes by the common name lindane. Lindane is found in prescription topical treatments and has been used as an insecticide on fruit, vegetables and forest crops. Technical grade HCH is classified as Group B2, "probable human carcinogen." The EPA is recommending a CRL of 0.0066.

Pentachlorobenzene is generated as a by-product in a variety of industrial processes, such as solid waste incineration and combustion of coal. Air is likely the primary source by which the general population is exposed to pentachlorobenzene; however, water and food ingestion might also be significant. Based on the physical properties and available exposure information for pentachlorobenzene, air, fish and shellfish are potentially significant sources. The EPA is recommending a human health criterion of 0.1 ug/L.

§ 93.8d. *Development of site-specific water quality criteria*

The Board proposes to add to subsection (c) that the Department may require the use of the Biotic Ligand Model for the development of new or updated site-specific criteria for copper in freshwater systems.

The Board also proposes to clarify in subsection (f)(2) that the Department has developed a publicly available online resource to maintain a table of site-specific criteria that have been developed and are being used by the Department in permitting and other pollution control measures. This table will be routinely updated as new criteria are developed or other applications and imple-

mentation of existing site-specific criteria are added. Tables can be accessed at <http://www.dep.pa.gov/Business/Water/CleanWater/WaterQuality/Pages/Site-Specific-Water-Quality-Criteria-In-PA.aspx>.

§ 93.8e. *Special criteria for the Great Lakes System*

As previously stated, the Board proposes to clarify that, for any pollutant not listed in Table 6, criteria in Table 5 may be used to protect existing and designated uses in the Great Lakes System, or that criteria will be developed by the Department, as needed, in accordance with Chapter 93 and the methods in Chapter 16.

§§ 93.9a—93.9z—*Corrections to drainage lists*

The following amendments to the drainage lists are proposed by the Board to clarify stream names and segment boundaries and designations.

The Board is proposing to consolidate and reformat several drainage lists to address the continual changes and updates occurring to the National Hydrography Dataset (NHD) flowline.

The NHD flowline forms the basis of the Department's Designated and Existing Use Geographic Information System (GIS) layers. The NHD flowline is established using the United States Geological Survey (USGS) Geographic Names Information System (GNIS), which is the Federal and National standard for geographic nomenclature. The Department strives to maintain consistency with the GNIS database and the NHD flowline.

The Department routinely receives internal and external communications concerning streams that appear to be missing from Chapter 93. Often, these streams were considered unnamed at the time the drainage list was established and therefore were captured under unnamed tributaries entries. These streams currently have a designated use even though they do not appear as named entries in Chapter 93. In contrast, there are a number of named tributaries in Chapter 93 that are not currently recognized by the USGS and are not represented by the NHD flowline. These may be unofficial local names. Consolidation within drainage lists will greatly reduce these issues.

In many parts of the drainage lists, the current format consists of a main stem entry for a stream, followed by unnamed tributaries to that stream, and then individually named tributaries within the basin. Often, most of the tributaries, both named and unnamed, have the same designated use. In some cases, an entire basin is the same designated use except for a few streams. Large stream basins may take up several pages within a drainage list and can be difficult for individuals to navigate and understand. Reformatting large basins to consolidate portions of Chapter 93 that have the same designated use enables readers to view that entire basin within a page or two. In addition, a condensed drainage list reduces the likelihood that errors will occur in transcription of Chapter 93 during rulemaking procedures. The Department currently has several GIS mapping tools available, including eMapPA and WAVE, to assist staff, members of the public and the regulated community in locating streams in this Commonwealth, and they should be used in conjunction with the *Pennsylvania Code* and other available online mapping resources to determine official designated uses.

In addition, all river mile indexes (RMI) in §§ 93.9a—93.9z included in this triennial review will be converted to (x,y) coordinates—latitude and longitude. The conversion of RMI in all of the drainage lists is not included in

this proposed rulemaking. Going forward, whenever changes are proposed to Chapter 93, associated RMI will be converted to latitude and longitude. Eventually, all reference to RMI in §§ 93.9a—93.9z will be converted to latitude and longitude. The following additional proposed corrections do not change the current stream use designations, and only serve as clarifications and corrections.

§ 93.9b. *Drainage List B*

A clarification is proposed for this section. Currently, there are two entries for the Lackawaxen River. However, the entire main stem Lackawaxen River is designated HQ-Trout Stocked Fishes (TSF), Migratory Fishes (MF) from its origin at the confluence of West Branch Lackawaxen River and Van Auken Creek downstream to where it enters the Delaware River. It is proposed that the main stem be covered by a single entry.

§ 93.9c. *Drainage List C*

The Board proposes to clarify this section to eliminate the confusion associated with two named tributaries to the Delaware River that are currently included under two separate entries for unnamed tributaries. It is proposed to give Spackmans Creek and Mill Creek their own entries to identify them as tributaries to the Delaware River.

§ 93.9d. *Drainage List D*

The proposed correction will reformat the Tobyhanna Creek basin to eliminate any issues associated with named tributaries in the basin that are currently included under an unnamed tributaries entry.

The proposed correction will replace a bridge reference in the zone description for the Lehigh River. The correction will replace the PA 903 bridge with GIS coordinates. The Division of Water Quality Standards was notified that the PA 903 bridge is being relocated 1,000 feet upstream as part of a bridge replacement project.

The stream nomenclature for the Mauch Chunk Creek basin is proposed to be corrected to be consistent with the NHD flowline. Accordingly, White Bear Creek forms the headwaters of this basin. White Bear Creek enters into Mauch Chunk Lake. Mauch Chunk Creek begins at the outlet of Mauch Chunk Lake. In addition, Beaverdam Run is proposed to be corrected to Beaver Run.

The proposed correction to the Jordan Creek basin will eliminate any confusion associated with named tributaries to Jordan Creek that are currently included under entries for unnamed tributaries.

§ 93.9e. *Drainage List E*

Proposed corrections will eliminate the confusion associated with named tributaries in the Delaware River basin that are included under the current listing of unnamed tributaries. Rodges Run, Falls Creek, Swamp Creek, Smithtown Creek and Biles Creek are proposed to be added. The Department gained knowledge that these tributaries had been officially named subsequent to the inclusion of these streams under the listing of unnamed tributaries in this section.

§ 93.9f. *Drainage List F*

A proposed amendment will correct the hydrological order for Plum Creek and replace the RM reference with GIS coordinates. Plum Creek is a tributary to Tulpehocken Creek and should have 4 for hydrological order rather than 5. Unnamed Tributary to Plum Creek at RM 0.45 should have 5 for hydrological order rather than 6.

The Manatawny Creek basin is proposed to be reformatted to be consistent with the NHD flowline and historical rulemakings. The proposed corrections also clarify that the confluence of Pine Creek and Bieber Creek forms the Manatawny Creek basin.

Proposed corrections will eliminate the confusion associated with named tributaries in the Perkiomen Creek basin that are included under the current listing of unnamed tributaries. The Perkiomen Creek basin is being reformatted to incorporate Molasses Creek and Donny Brook.

§ 93.9g. *Drainage List G*

Proposed amendments will restore the correct designated use, as described in a final-form rulemaking published at 15 Pa.B. 544 (February 16, 1985), to the waters described as Goose Creek basin. According to the current NHD flowline, the zone (referred to in the 1985 final-form rulemaking as Goose Creek basin) that was redesignated in 1985 is currently described as the Chester Creek basin from the source to East Branch Chester Creek. The 1985 water quality standards triennial review adopted at 15 Pa.B. 544 redesignated Goose Creek from TSF to Warm Water Fishes (WWF). The preamble for that final-form rulemaking described Goose Creek as originating in West Goshen Township, Chester County, and flowing southeastward for approximately 5 miles to its confluence with East Branch Chester Creek. The Goose Creek drainage area includes portions of West Chester Borough and West Goshen, Westtown and Thornbury Townships, Chester County and a small portion of Thornbury Township, Delaware County. The West Goshen sewage treatment plant also discharges to Goose Creek. The corrections to drainage lists final-form rulemaking published at 27 Pa.B. 3050 (June 28, 1997), proposed at 26 Pa.B. 3637 (August 3, 1996), changed the reference from Goose Creek to Unnamed Tributary to East Branch Chester Creek at RM 0.4 (“Goose Creek”). This change was made erroneously. The preamble to the proposed rulemaking published at 26 Pa.B. 3637 stated that “Goose Creek is not found on topos or in Gazetteer of Streams, and is a local name for an UNT (# 00605, near State Rt 926).” This change was incorrect because it directly contradicted the description for Goose Creek in the preamble of the 1985 water quality standards triennial review published at 15 Pa.B. 544. Because of this change, the section that is WWF was actually switched to a different stream in the Chester Creek basin. The Blue Eye Run final-form rulemaking was published at 40 Pa.B. 1734 (April 3, 2010). The Department replaced the stream name listing for UNT 00605 to East Branch Chester Creek at RM 0.4 (Goose Creek) with Westtown Run. This amendment was made to be consistent with an electronic topographical GIS map layer that named this stream Westtown Run. Westtown Run is also named as such in the 1997 topo quad. Westtown Run is not labeled on the 2010 or 2013 topo quad. Westtown Run is not named as such on the NHD flowline. According to this section, Westtown Run (stream code 00605) is currently designated WWF, MF but it should be TSF, MF.

Clarifying language is proposed for two zone descriptions in the East Branch Brandywine Creek basin to indicate that the unnamed tributaries with mouths within East Brandywine and Uwchlan Townships are included in the HQ-TSF designation.

The Board proposes to correct the spelling of Stoney Creek. It currently appears as Stony Creek.

The Brandywine Creek basin is proposed to be reformatted to incorporate several named tributaries including Craigs Mill Run, Wilson Run and Beaver Creek.

§ 93.9j. *Drainage List J*

Additional language is proposed to be added to the zone description for Roaring Brook as a clarification to indicate that the downstream limit of the special protection portion of the basin does not include the Elmhurst Reservoir.

§ 93.9k. *Drainage List K*

Newport Creek was inadvertently omitted in the final-form rulemaking published at 9 Pa.B. 3051 (September 8, 1979), which reformatted a portion of this section. The Board is proposing to correct this omission by adding Newport Creek as a named tributary to the Susquehanna River.

§ 93.9l. *Drainage List L*

The Board proposes to reformat this entire drainage list to eliminate the confusion associated with named tributaries in the West Branch Susquehanna River basin that are included under current listings of unnamed tributaries, correct a number of misspelled streams and delete named tributaries that are, in fact, unnamed tributaries according to the GNIS database.

Proposed amendments to this section reflect the current NHD flowline for the headwaters of the Marsh Creek basin. The headwaters of the Marsh Creek basin originate from the confluence of Charleston Creek and Morris Branch, of which Kelsey Creek is a tributary. Chapter 93 currently lists Charleston Creek and Kelsey Creek as tributaries to Marsh Creek.

Corrections are proposed to the headwaters of Logan Branch within Bald Eagle Creek basin. Historically, UNT 23007 was considered to be a tributary to the Logan Branch (Stream Code 22997) and is currently listed this way. However, according to the NHD flowline, the headwaters of the Logan Branch is stream code 23007 and a portion of stream code 22997 from the source to confluence with 23007 is depicted as the unnamed tributary to Logan Branch. Due to the fact that the remaining portion of 22997 is still considered to be Logan Branch, UNT 23007 is being replaced with the following entry format: Tributary at X;Y. This format should eliminate any confusion associated with using the five-digit stream code.

§ 93.9m. *Drainage List M*

Designated uses for the lower portions of Bowersox Run and Erb Run are currently missing from this section. Presently, Chapter 93 only lists designated use information for each stream from its source to Federal Aid Secondary Highway (FAS) 690. Bowersox Run and Erb Run are not currently recognized by GNIS as the official names of these tributaries; therefore, the names are proposed to be amended as UNT 17823 (locally known as Bowersox Run) and UNT 17821 (locally known as Erb Run). These streams were included in Comprehensive Water Quality Management Program Area 6. DER published a proposed rulemaking to water quality criteria at 8 Pa.B. 511 (March 4, 1978). According to the summary of public comments received by DER dated December 5, 1978, numerous recommendations were received to designate specific waters used for public water supply as either EV or HQ waters. The headwaters of Bowersox Run and Erb Run were recommended for upgrade to EV. DER did not agree with the EV recommendation, but it did agree that the water supply segments of those waters deserved

an HQ designation. Bowersox Run and Erb Run, which did not appear as named tributaries in the proposed rulemaking published at 8 Pa.B. 511, were included as named tributaries to Middle Creek in the proposed rulemaking published at 8 Pa.B. 3665 (December 23, 1978). However, only the upper HQ portions of the basin were included. The lower portions of the basins from FAS 690 to the mouths were inadvertently omitted. This omission was carried over into the final-form rulemaking published at 9 Pa.B. 3051. At the time of the proposed rulemaking published at 8 Pa.B. 511, these streams were considered to be unnamed tributaries to Middle Creek and therefore carried a Cold Water Fishes (CWF) designated use. The appropriate designated use for the lower portions of these two streams is currently CWF, MF. The proposed amendments will add entries for both streams for the lower segments to their mouths. The zone descriptions for the upper portions are also being updated for clarification purposes by replacing FAS 690 with T3008 (Paxtonville Road).

§ 93.9n. *Drainage List N*

The West Branch Juniata River basin is proposed to be reformatted to eliminate the confusion associated with named tributaries to the Raystown Branch of the Juniata River that are included under current listings of unnamed tributaries.

§ 93.9o. *Drainage List O*

An omission that occurred in the final-form rulemaking published at 9 Pa.B. 3051 is proposed to be corrected. Trout Run originates in Perry County, flows through a small portion of western Cumberland County and eventually enters the Conodoguinet Creek in Franklin County. The proposed rulemaking published at 8 Pa.B. 511 listed the entire Trout Run basin as a conservation area. It also listed the Trout Run basin from the source to the water supply dam as a wilderness trout stream. The final-form rulemaking published at 9 Pa.B. 3051 designated the Trout Run basin from the source to the water supply dam as EV. The portion of Trout Run basin which lies downstream of the dam should have been designated as HQ, but it was inadvertently omitted from Chapter 93 and has continued to be missing.

During the previous triennial review, the Board deleted DO_4 from the water quality standards. This standard applied to HQ-CWF streams. Since the criteria for HQ streams is based on the maintenance of existing water quality, the dissolved oxygen (DO) criterion for HQ-CWF streams was in contradiction to the expectation that existing quality will be protected and maintained for all HQ streams. Chapter 93 no longer contains a DO_4 criterion. However, this section contains one exception to the criteria that references DO_4 , which is the Yellow Breeches Creek, main stem from LR 21012 to Mouth. The DO exception for the lower portion of the Yellow Breeches has appeared since at least 1968 to protect the world-renowned trout fishery that exists in this stream. The reference to DO_4 is proposed to be deleted and replaced with equivalent language (DO = 7.0 mg/L, June 1 to Sept. 30). Since the DO_1 standard was also updated during the previous triennial review to a value more protective than 7.0 mg/L during October 1 to May 31, the more protective standard of DO_1 should be in place during that time period. Therefore, DO = 7.0 mg/L will only apply during the time period stipulated to ensure the maximum level of protection.

Bow Creek and Boyds Run are proposed to be added as named tributaries. Bow Creek is a tributary to Swatara Creek. Boyds Run is a tributary to the Susquehanna River.

Corrections are proposed to the headwaters of Muddy Creek to be consistent with the NHD flowline. UNT 07784 is now the main stem of Muddy Creek and designated WWF. It was previously recognized by the Department as a tributary to Muddy Creek. The headwaters of Muddy Creek are now considered to be an unnamed tributary to Muddy Creek and designated TSF. No changes are proposed to the designated uses of these streams as a result of these corrections. The stream segment protected for WWF will continue to be protected at that level, and the stream segment protected for TSF will continue to be protected for TSF.

Several misplaced stream entries in the Pequea Creek basin are proposed to be relocated. These unnamed tributaries were referred to by RMI and were added incorrectly into the drainage list. RMI references are proposed to be deleted from the entries and replaced with UNT 07451 and UNT 07452 and moved to their proper locations within the drainage list.

A clarification is proposed to the zone description for the headwaters of Black Run to ensure that it is consistent with the NHD flowline and the actual fluvial geomorphology while accurately portraying what was in the Cooks Creek final-form rulemaking published at 21 Pa.B. 5511 (November 30, 1991). DER's 1989 special protection report indicated "segments of Black Run flowing through Nottingham Park (basin upstream of confluence with UNT 07007" should be redesignated EV. The mouth of UNT 07006 was originally described as being downstream of the mouth of 07007 through reference to river mile (RM). At the time of the Cooks Creek final-form rulemaking published at 21 Pa.B. 5511, the stream directory confirmed that 07006 was downstream from 07007. Since the Cooks Creek final-form rulemaking published at 21 Pa.B. 5511, road work in the area caused movement of the mouth of the stream and the NHD flowline now depicts 07006 as entering Black Run upstream of 07007 at RM 2.50. The proposed correction will replace RM 2.50 with UNT 07006.

Reynolds Run was designated as a conservation area in 1973 and thus received a designated use of HQ-CWF in the final-form rulemaking published at 9 Pa.B. 3051. Several streams in the area including Reynolds Run were subsequently re-evaluated in 1989. An October 1989 stream report produced by DER showed that the streams were largely affected by agriculture and were actually supporting warm-water biota. The report recommended that McCreary Run and Reynolds Run be redesignated as HQ-TSF. The streams were approved for redesignation in the Cooks Creek final-form rulemaking published at 21 Pa.B. 5511. At that time, Chapter 93 was amended to reflect the redesignation to HQ-TSF; however, a duplicate entry for Reynolds Run was also inadvertently introduced at that time. The duplicate entry was deleted, but the designation for Reynolds Run was changed back to HQ-CWF in the final-form rulemaking published at 27 Pa.B. 3050. Since there are no known data or reports to suggest that Reynolds Run was achieving a use of HQ-CWF at that time, it is being viewed as an error. The Board is proposing to restore the intended designation of HQ-TSF for Reynolds Run.

§ 93.9p. *Drainage List P*

The entire drainage list is proposed to be reformatted to eliminate the confusion associated with named tribu-

taries in the Allegheny River basin that are included under current listings of unnamed tributaries and to delete named tributaries that are, in fact, unnamed tributaries according to the GNIS database.

The proposed correction to Dingman Run will delete the zone description Main Stem and restore it to Basin. Dingman Run was a placeholder in the French Creek final-form rulemaking published at 28 Pa.B. 4510 (September 5, 1998) to amend the entry above it, which is Mill Creek. During the final-form rulemaking process, Dingman Run erroneously picked up Main Stem as the zone description.

Duplicate entries for Tunungwant Creek and McCrea Run are proposed to be deleted.

§ 93.9q. *Drainage List Q*

The entire drainage list is proposed to be reformatted to eliminate the confusion associated with named tributaries in the Allegheny River basin that are included under current listings of unnamed tributaries and to delete named tributaries that are, in fact, unnamed tributaries according to the GNIS database.

The stream listing is proposed to be amended to include the correct name for Minister Creek. The stream is currently and incorrectly referred to as Minister Run.

§ 93.9r. *Drainage List R*

The entire drainage list is proposed to be reformatted to eliminate the confusion associated with named tributaries in the Clarion River basin that are included under current listings of unnamed tributaries and to delete named tributaries that are, in fact, unnamed tributaries according to the GNIS database.

An erroneous entry for Mill Run is proposed to be deleted and the stream listing is proposed to be amended to include the correct name for Cathers Run. The stream is currently and incorrectly referred to as Cather Run.

According to the GNIS database, Lost Run is not registered as an official name for stream code 50397. Lost Run will be replaced with UNT 50397.

§ 93.9s. *Drainage List S*

The stream listing is proposed to be amended to include several named tributaries to Mahoning Creek including Jackson Run, Hamilton Run, Cave Run and Graffius Run. These four streams were previously unnamed tributaries. Wiskey Creek, which is a named tributary to the Allegheny River, is proposed to be added to the drainage list.

The proposed correction to the Cowanshannock Creek basin will delete "Unnamed" from the entry "Unnamed Tributaries to Cowanshannock Creek; Basins, Huskins Run to Mouth" to incorporate several named tributaries that currently do not appear in the drainage list (Spray Run, Mill Run and Long Run.)

§ 93.9t. *Drainage List T*

The stream listing is proposed to be amended to include several named tributaries that currently do not appear, including Hoffman Run, Kaufman Run and Hillside Run.

According to the GNIS database and the NHD flowline, Trout Run is not a direct tributary to the Little Conemaugh River. It is a tributary to Kane Run, which is a tributary to the Little Conemaugh. The proposed correction will delete Trout Run and add Kane Run.

§ 93.9v. *Drainage List V*

The stream listing is proposed to be amended to include several named tributaries that currently do not appear, including Miller Run, Rice Run, Parsons Run and Lost Run.

§ 93.9w. *Drainage List W*

The misspelling of Shenango River in the fourth entry for unnamed tributaries to the Shenango River is proposed to be corrected.

§ 93.9x. *Drainage List X*

The stream listing is proposed to be amended to include the Bac_2 Bacteria criterion, which, until this proposed rulemaking has been located in § 93.7, Table 3. There has been confusion that the Bac_2 criterion should be applied Statewide since this criterion was in Table 3 and the Critical Use is identified as PWS, which is listed as a Statewide water use in § 93.4, Table 2. The Department's investigation has shown that the current-day Bac_2 was developed and implemented as a site-specific criterion (originally identified as f_2 in the SWB criteria). Dating back to the adoption of Article 301—Water Quality Criteria by the SWB in 1967, this criterion had been applied as an exception to select waters where water contact sports (WCS—3.3) was deleted. Originally, this coliform-based criterion applied to specific zones of the Delaware Estuary or several tributaries, and to portions of Erie Harbor and Presque Isle Bay. As a result of rulemakings through 1979, the references to Bac_2 in the lower Delaware and these tributaries were replaced by specific criteria adopted by the Delaware River Basin Commission (DRBC). Therefore, since 1979 Bac_2 has exclusively only applied to the Lake Erie (Outer Erie Harbor and Presque Isle Bay) waters in the Harbor area and central channel dredged and maintained by United States Army Corps of Engineers. These proposed amendments should provide that clarification.

§ 93.9z. *Drainage List Z*

The stream listing is proposed to be amended to include Thompson Run, which is a named tributary to Wills Creek that is presently not listed.

Exceptions for fishable/swimmable waters

Part of the triennial review requires that states re-examine water body segments that do not meet the fishable or swimmable uses specified in section 101(a)(2) of the Federal Clean Water Act (33 U.S.C.A. § 1251(a)(2)). The Department evaluated the two Pennsylvania water bodies where the uses are not currently met: 1) the Harbor Basin and entrance channel to Outer Erie Harbor/Presque Isle Bay (§ 93.9x); and 2) several zones in the Delaware Estuary (§§ 93.9e and 93.9g (relating to Drainage List E; and Drainage List G)).

The swimmable use designation was deleted from the Harbor Basin and entrance channel demarcated by United States Coast Guard buoys and channel markers on Outer Erie Harbor/Presque Isle Bay because pleasure boating and commercial shipping traffic pose a serious safety hazard in this area. This decision was further supported by a Use Attainability Analysis (UAA) study conducted by DER in 1985. Because the same conditions and hazards exist today, no change is proposed to the designated use for Outer Erie Harbor/Presque Isle Bay.

In April 1989, DER cooperated with the DRBC, the EPA and other DRBC signatory states on a comprehensive UAA study in the lower Delaware River and Delaware Estuary. This study resulted in appropriate recom-

mendations regarding the swimmable use, which the DRBC included in its regulations for water use classifications and water quality criteria for portions of the tidal Delaware River in May 1991. The appropriate DRBC standards were referenced in §§ 93.9e and 93.9g in 1994. The WC use remains excluded from the designated uses for RMs 108.4 to 81.8 because of continuing significant impacts from combined sewer overflows, and hazards associated with commercial shipping and navigation.

In addition, limited uses for Zones 3 and 4, and upper Zone 5 of the Delaware Estuary basin were also incorporated into §§ 93.9e and 93.9g, which also date back to the original Article 301—Water Quality Criteria that were added to the SWB's rules and regulations in 1967. These are described in §§ 93.9e and 93.9g as WWF (Maintenance Only) and MF (Passage Only) for tidal portions of the basin, from RM 108.4 to the PA-DE State Border. The current designated uses within these Zones do not include propagation and thus refer to the DRBC's standards which were developed to protect fish maintenance and passage only.

Recent data and observations, however, suggest recovery is occurring in propagation for some species in portions of these Zones. Therefore, the DRBC initiated an evaluation of available data for resident and anadromous fishes collected since 2000 in an attempt to quantify spawning and early life stages, and the extent of successful reproduction for estuarine species.

Although this review continues, the DRBC found that for all nine fish species evaluated (Atlantic Sturgeon, American Shad, Striped Bass, White Perch, Bay Anchovy, Atlantic Silverside, Alewife, Blueback Herring, and Atlantic Menhaden) successful reproduction was clearly demonstrated in one or more of the compromised estuary zones. In addition, moderate to strong reproduction was demonstrated for multiple species in each zone indicating substantial recovery in the propagation use for Zones 3 and 4, and upper Zone 5. Weak and inconsistent spawning by Atlantic Sturgeon, and limited spatial recovery in spawning and rearing by American Shad and Striped Bass, suggested that full restoration of the propagation use is not supported by the currently available data for these species. It should be recognized that the demonstrated recovery in the propagation use for these Zones has occurred under the long-term implementation of the current criteria.

The Department continues to work in cooperation with the DRBC, the EPA and other DRBC signatory states to determine the appropriate criteria that should apply in the lower Delaware River and Delaware Estuary. The parties continue to work to prepare a resolution describing the Commission's next steps for improving the recovery taking place in the lower Delaware River and Delaware Estuary. The parties remain committed to enhancing the lower Delaware River and Delaware Estuary. Toward that end, the Department is requesting interested parties to submit any data on fish species recovery in the lower Delaware River and Delaware Estuary.

F. Consideration for Next Water Quality Standards Review

The Department is seeking comments on whether the definition of "outstanding National, State, regional or local resource water" in § 93.1 (relating to definitions) should be amended in the next water quality standards review to clarify how conservation easements can be

considered in an evaluation for a stream redesignation. The Department is also seeking comment on the following suggested definition of “conservation easements” to describe which types of easements may be considered in the stream evaluation. Based on the comments received during this review, the Department may recommend that the Board clarify the use of conservation easements in the water quality program in a future proposed rulemaking.

The existing regulations allow a stream that is protected for the HQ use to be redesignated to EV use if it is an outstanding National, State, regional or local resource water. High quality waters, along with related terms, is defined in § 93.1. Conservation easements protecting waters being evaluated for classification as EV waters are often submitted with petitions for stream redesignations, since many are designed to protect water quality in perpetuity. In many conservation easement documents, resource management plans are included that describe water quality protections. The Department is seeking comments on suggested language to guide decisions concerning which types of conservation easements are appropriate for use in this stream redesignation context. Suggested language that the Department may consider recommending to the Board in a future proposed rulemaking is as follows (language added to the existing definition is bold):

Outstanding National, State, regional or local resource water—A surface water for which a National or State government agency has adopted water quality protective measures in a resource management plan, or regional or local governments have adopted coordinated water quality protective measures along a watershed corridor. **The term includes a surface water protected by one or more conservation easements situated along a watershed corridor, in a manner that provides protection to significant reaches of the corridor.**

Conservation easements—Easements held in perpetuity, where a governmental unit with taxation powers, a national government agency, or a state government agency is the holder, long-term steward, or responsible beneficiary related to repair and perpetual maintenance of the easement. **Such easements must be recorded, provide for the maintenance and enhancement of water quality through water quality protective measures and cannot be revised, rescinded, or amended by any party.**

If commentators recommend alternative language, they are encouraged to provide justification.

G. *Benefits, Costs and Compliance*

Benefits

Overall, the Commonwealth, its citizens and natural resources will benefit from this proposed rulemaking because it provides the appropriate level of protection to preserve the integrity of existing and designated uses of surface waters in this Commonwealth. Protecting water quality provides: economic value to present and future generations in the form of a clean water supply for human consumption, wildlife, irrigation and industrial use; recreational opportunities such as fishing (also for consumption), WC and boating; and aquatic life protection. It is important to realize these benefits and to ensure opportunities and activities continue in a manner that is environmentally, socially and economically sound. Maintenance of water quality ensures its future availability for all uses.

Compliance costs

This proposed rulemaking may impose additional compliance costs on the regulated community. This proposed rulemaking is necessary to improve total pollution control. The expenditures necessary to meet new compliance requirements may exceed that which is required under existing regulations.

The proposed amendments will be implemented through the Department’s permit and approval actions. Persons with an existing discharge or proposing to add a new discharge point to a stream could be adversely affected if they need to provide a higher level of treatment or BMPs to meet any new standard established by this proposed rulemaking. For example, increased costs may take the form of higher engineering, construction or operating cost for point source discharges. Treatment costs and BMPs are site-specific and depend upon the size of the discharge in relation to the size of the stream and many other factors. It is therefore not possible to precisely predict the actual change in costs. Economic impacts would primarily involve the potential for higher treatment costs for new or expanded discharges to streams to meet any new water quality standards requirements. The initial costs resulting from the installation of technologically advanced wastewater treatment processes and BMPs may be offset by potential savings from and increased value of improved water quality through more cost-effective and efficient treatment over time.

Compliance assistance plan

This proposed rulemaking has been developed as part of an established program that has been implemented by the Department since the early 1980s. This proposed rulemaking is consistent with and based on existing Department regulations. The proposed amendments extend appropriate protections to all waterbodies of the Commonwealth and are consistent with antidegradation requirements established by the Federal Clean Water Act and The Clean Streams Law. All surface waters in this Commonwealth are afforded a minimum level of protection through compliance with the water quality standards, which prevent pollution and protect existing water uses.

The proposed amendments will be implemented through the Department’s permit and approval actions. For example, the NPDES permitting program bases effluent limitations on the uses of the stream, and the water quality criteria developed to maintain those uses. These effluent limits are established to assure water quality is protected and maintained.

Paperwork requirements

This proposed rulemaking should not have new direct paperwork impact on the Commonwealth, local governments, political subdivisions or the private sector. This proposed rulemaking is based on existing Department regulations and mirror the existing use protection that is already in place for these streams.

H. *Pollution Prevention*

The Federal Pollution Prevention Act of 1990 (42 U.S.C.A. §§ 13101—13109) established a National policy that promotes pollution prevention as the preferred means for achieving state environmental protection goals. The Department encourages pollution prevention, which is the reduction or elimination of pollution at its source, through the substitution of environmentally-friendly materials, more efficient use of raw materials and the

incorporation of energy efficiency strategies. Pollution prevention practices can provide greater environmental protection with greater efficiency because they can result in significant cost savings to facilities that permanently achieve or move beyond compliance.

Water quality standards are a major pollution prevention tool because they protect water quality and designated and existing uses. The proposed amendments will be implemented through the Department's permit and approval actions. For example, the NPDES bases effluent limitations on the designated use of the stream and the water quality criteria necessary to achieve designated and existing uses.

I. *Sunset Review*

The Board is not proposing to establish a sunset date for these regulations because they are needed for the Department to carry out its statutory authority. The Department will continue to closely monitor these regulations for their effectiveness and recommend updates to the Board as necessary.

J. *Regulatory Review*

Under section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on October 6, 2017, the Department submitted a copy of this proposed rulemaking and a copy of a Regulatory Analysis Form to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the House and Senate Environmental Resources and Energy Committees. A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, IRRC may convey comments, recommendations or objections to the proposed rulemaking within 30 days of the close of the public comment period. The comments, recommendations or objections must specify the regulatory review criteria in section 5.2 of the Regulatory Review Act (71 P.S. § 745.5b) which have not been met. The Regulatory Review Act specifies detailed procedures for review prior to final publication of the rulemaking by the Department, the General Assembly and the Governor.

K. *Public Comments*

Interested persons are invited to submit to the Board written comments, suggestions, support or objections regarding this proposed rulemaking. Comments, suggestions, support or objections must be received by the Board by December 29, 2017.

Comments may be submitted to the Board online, by e-mail, by mail or express mail as follows.

Comments may be submitted to the Board by accessing eComment at <http://www.ahs.dep.pa.gov/eComment>.

Comments may be submitted to the Board by e-mail at RegComments@pa.gov. A subject heading of the proposed rulemaking and a return name and address must be included in each transmission.

If an acknowledgment of comments submitted online or by e-mail is not received by the sender within 2 working

days, the comments should be retransmitted to the Board to ensure receipt. Comments submitted by facsimile will not be accepted.

Written comments should be mailed to the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 17105-8477. Express mail should be sent to the Environmental Quality Board, Rachel Carson State Office Building, 16th Floor, 400 Market Street, Harrisburg, PA 17101-2301.

L. *Public Hearings*

The Board will hold three public hearings for the purpose of accepting comments on this proposed rulemaking. The hearings will be held at 2 p.m. on the following dates:

December 8, 2017 Department of Environmental Protection
South Central Regional Office
Susquehanna Conference Room
909 Elmerton Avenue
Harrisburg, PA 17110

December 12, 2017 Department of Environmental Protection
Northeast Regional Office
2nd Floor Conference Room
2 East Main Street
Norristown, PA 19401

December 14, 2017 Department of Environmental Protection
Southwest Regional Office
Waterfront Conference Rooms A
and B
400 Waterfront Drive
Pittsburgh, PA 15222

Persons wishing to present testimony at a hearing are requested to contact the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 17105-8477, (717) 787-4526 at least 1 week in advance of the hearing to reserve a time to present testimony. Oral testimony is limited to 5 minutes for each witness. Witnesses are requested to submit three written copies of their oral testimony to the hearing chairperson at the hearing. Organizations are limited to designating one witness to present testimony on their behalf at each hearing.

Persons in need of accommodations as provided for in the Americans with Disabilities Act of 1990 should contact the Board at (717) 787-4526 or through the Pennsylvania AT&T Relay Service at (800) 654-5984 (TDD) or (800) 654-5988 (voice users) to discuss how the Board may accommodate their needs.

PATRICK McDONNELL,
Chairperson

(Editor's Note: See 47 Pa.B. 6703 (October 21, 2017) for a proposed statement of policy relating to this proposed rulemaking.)

Fiscal Note: 7-534. No fiscal impact; (8) recommends adoption.

Annex A

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE II. WATER RESOURCES

CHAPTER 93. WATER QUALITY STANDARDS

WATER QUALITY CRITERIA

§ 93.7. Specific water quality criteria.

(a) Table 3 displays specific water quality criteria and associated critical uses. The criteria associated with the Statewide water uses listed in § 93.4, Table 2 apply to all surface waters, unless a specific exception is indicated in §§ 93.9a—93.9z. These exceptions will be indicated on a stream-by-stream or segment-by-segment basis by the words “Add” or “Delete” followed by the appropriate symbols described elsewhere in this chapter. Other specific water quality criteria apply to surface waters as specified in §§ 93.9a—93.9z. All applicable criteria shall be applied in accordance with this chapter, Chapter 96 (relating to water quality standards implementation) and other applicable State and Federal laws and regulations.

TABLE 3

Parameter	Symbol	Criteria	Critical Use*
Alkalinity	Alk	Minimum 20 mg/l as CaCO ₃ , except where natural conditions are less. Where discharges are to waters with 20 mg/l or less alkalinity, the discharge should not further reduce the alkalinity of the receiving waters.	CWF, WWF, TSF, MF
Ammonia Nitrogen	Am	<p>[The maximum total ammonia nitrogen concentration (in mg/L) at all times shall be the numerical value given by: un-ionized ammonia nitrogen (NH₃-N) × (log⁻¹[pK_T-pH] + 1), where: un-ionized ammonia nitrogen</p> $= 0.12 \times f(T)/f(pH)$ $f(pH) = 1 + 10^{1.03(7.32-pH)}$ $f(T) = 1, T \geq 10^{\circ}C$ $f(T) = \frac{1 + 10^{(9.73-pH)}}{1 + 10^{(pK_T-pH)}}, T < 10^{\circ}C$ <p>and $pK_T = 0.090 + \left[\frac{2730}{(T+273.2)} \right]$, the dissociation constant for ammonia in water.</p> <p>The average total ammonia nitrogen concentration over any 30 consecutive days shall be less than or equal to the numerical value given by:</p> <p>un-ionized ammonia nitrogen (NH₃-N) × (log⁻¹[pK_T-pH] + 1), where:</p> <p>un-ionized ammonia nitrogen = 0.025 × f(T)/f(pH)</p> $f(pH) = 1, pH \geq 7.7$ $f(pH) = 10^{0.74(7.7-pH)}, pH < 7.7$ $f(T) = 1, T \geq 10^{\circ}C$ $f(T) = \frac{1 + 10^{(9.73-pH)}}{1 + 10^{(pK_T-pH)}}, T < 10^{\circ}C$ <p>The pH and temperature used to derive the appropriate ammonia criteria shall be determined by one of the following methods:</p> <ol style="list-style-type: none"> 1) Instream measurements, representative of median pH and temperature—July through September. 2) Estimates of median pH and temperature—July through September—based upon available data or values determined by the Department. For purposes of calculating effluent limitations based on this value the accepted design stream flow shall be the actual or estimated lowest 30-consecutive-day average flow that occurs once in 10 years.] 	

Parameter	Symbol	Criteria	Critical Use*
		<p>In freshwater, the concentration of total ammonia nitrogen (TAN) shall not exceed (more than once in three years on average), the concentration calculated (in milligrams of TAN per liter) by the following:</p> <p>1-hour average Criteria Maximum Concentration (CMC) acute criterion equation:</p> $CMC = \text{MIN} \left(\left(\frac{0.275}{1 + 10^{7.204 - \text{pH}}} + \frac{39.0}{1 + 10^{\text{pH} - 7.204}} \right), \left(0.7249 \times \left(\frac{0.0114}{1 + 10^{7.204 - \text{pH}}} + \frac{1.6181}{1 + 10^{\text{pH} - 7.204}} \right) \times (23.12 \times 10^{0.036 \times (20 - T)}) \right) \right)$ <p>30-day average Criteria Continuous Concentration (CCC) chronic criterion equation:</p> $CCC = 0.8876 \times \left(\frac{0.0278}{1 + 10^{7.688 - \text{pH}}} + \frac{1.1994}{1 + 10^{\text{pH} - 7.688}} \right) \times (2.126 \times 10^{0.028 \times (20 - \text{MAX}(T, 7))})$ <p>Chronic concentration is not to exceed 2.5 times the CCC as a 4-day average within 30 days (e.g. 2.5 × 1.9 mg TAN/L at pH 7 and 20°C or 4.8 mg TAN/L more than once in 3 years on average.</p> <p>The pH and temperature used to derive the appropriate ammonia criteria shall be determined by instream measurements or best estimates, representative of the median pH and temperature of the receiving stream for the applicable time period and design conditions.</p>	CWF, WWF, TSF, MF
Bacteria	Bac ₁	<p>[(Fecal coliforms/ 100 ml)] (<i>Escherichia coli</i>/100 ml)—During the swimming season (May 1 through September 30), the maximum [fecal coliform] <i>E. coli</i> level shall be a geometric mean of [200] 126 per 100 milliliters (ml) based on [a minimum of five] consecutive samples, each sample collected on different days during a 30-day period. No more than 10% of the total samples taken during a 30-day period may exceed [400] 410 per 100 ml.</p> <p>(Fecal coliforms/ 100 ml) For the remainder of the year, the maximum fecal coliform level shall be a geometric mean of 2,000 per 100 milliliters (ml) based on a minimum of five consecutive samples collected on different days during a 30-day period.</p>	WC
	[Bac ₂	<p>(Coliforms/100 ml)—Maximum of 5,000/100 ml as a monthly average value, no more than this number in more than 20 of the samples collected during a month, nor more than 20,000/100 ml in more than 5% of the samples.</p>	PWS]
Chloride	Ch	Maximum 250 mg/l.	PWS
* * * * *			

§ 93.8a. Toxic substances.

* * * * *

(b) Water quality criteria for toxic substances shall be established as described under Chapter 16 (relating to water quality toxics management strategy—statement of policy). The Department will develop water quality criteria for toxic substances not listed in Chapter 93, Table 5 in accordance with § 93.8d (relating to development of site-specific water quality criteria) and Chapter 16. **[Appendix A, Table 1A in Chapter 16 lists] The Department will maintain a publicly available online table of site-specific human health and aquatic life criteria that have been recently developed or adopted by the Depart-**

ment based on approved methodologies and the best scientific information currently available. **[The] For any analytical procedures or detection limits that are not EPA approved, the approved analytical procedures and detection limits for these substances will also be listed in Chapter 16. Chapter 16, along with changes made to it, is hereby specifically incorporated by reference.**

* * * * *

(j) The requirements for discharges to and antidegradation requirements for the Great Lakes System are as follows:

* * * * *

(3) Statewide antidegradation requirements in this chapter and Chapter 96 (relating to water quality standards implementation) [**and in the Federal regulation in 40 CFR 131.32(a) (relating to Pennsylvania)**] as applicable, apply to all surface waters of the Great Lakes System.

* * * * *

§ 93.8c. Human health and aquatic life criteria for toxic substances.

(a) Table 5 and [**Chapter 16, Appendix A, Table 1A (relating to site-specific water quality criteria for toxic substances)**] **the table of site-specific criteria maintained by the Department** list the aquatic life and human health criteria for toxic substances which the Department uses in development of effluent limitations in NPDES Permits and for other purposes. The human health criteria, which include probable modes of exposure (such as, but not limited to ingestion from drinking water and fish consumption, inhalation and dermal absorption), are further defined as to the specific effect (that is, cancer or threshold health effects). For those aquatic life criteria which are [**hardness related and**] **a function of local water quality conditions and** are specified as a formula, such as several of the heavy metals, the [**Department will use the specific hardness of the receiving stream after mixing with the waste discharge in calculating criteria on a case-by-case basis**] **hardness and pH values used to derive the**

appropriate water quality criteria shall be determined by instream measurements or best estimates, representative of the median concentrations or conditions of the receiving stream for the applicable time period and design conditions. The priority pollutants are a set of specific chemical pollutants regulated by the EPA. The priority pollutant numbers (PP NO) used by the EPA to identify priority pollutants are included in Table 5 for reference purposes. The toxics without a PP NO are nonpriority pollutants or State-derived criteria.

(b) Some of these criteria may be superseded for the Delaware Estuary, Ohio River Basin, Lake Erie Basin [,] and Genesee River Basin under interstate and international compact agreements with the Delaware River Basin Commission, Ohio River Valley Sanitation Commission and International Joint Commission, respectively. [**The criteria in Table 5 do not apply to the Great Lakes System.**] Water quality criteria for the Great Lakes System are contained in § 93.8e (relating to special criteria for the Great Lakes System) and Table 6 [**(relating to Great Lakes Aquatic Life and Human Health Criteria)**]. **Criteria in Table 5 may apply to the Great Lakes System for those substances not listed in Table 6.** Criteria may be developed for the Great Lakes System for substances other than those listed in [§ 93.8e] **Tables 5 and 6,** under the methodologies in § 16.61 (relating to special provisions for the Great Lakes [system] System).

**TABLE 5
WATER QUALITY CRITERIA FOR TOXIC SUBSTANCES**

PP NO	Chemical Name	CAS Number	Fish and Aquatic Life Criteria		Criteria Maximum Concentration (ug/L)	Human Health Criteria (ug/L)
			Criteria Continuous Concentrations (ug/L)	Criteria Maximum Concentration (ug/L)		
1M	ANTIMONY	07440360	220	1100	5.6 †	H
2M	ARSENIC	07440382	150 (As3+)	340 (As3+)	10	H
3M	BERYLLIUM	07440417	N/A	N/A	N/A	-
4M	CADMIUM	07440439	*[1.101672-(ln[H])×0.041838]]× Exp(0.7409×ln[H]-4.719) (ex: @H=100, CCC=0.25)	*[1.136672-(ln[H])×0.041838]]× Exp(1.0166×ln[H]-3.924) (ex: @H=100, CMC=2.0)	N/A	-
5M	CHROMIUM III	16065831	*0.860×Exp(0.819×ln[H]+0.6848) (ex: @H=100, CCC=74)	*0.316×Exp(0.819×ln[H]+3.7256) (ex: @H=100, CMC=570)	N/A	-
5M	CHROMIUM VI	18540299	[*10] *11	*16	N/A	-
6M	COPPER	07440508	*0.960×Exp(0.8545×ln[H]-1.702) (ex: @H=100, CCC=9.0)	*0.960×Exp(0.9422×ln[H]-1.700) (ex: @H=100, CMC=13)	N/A	-
7M	LEAD	07439921	*[1.46203-(ln[H])×0.145712]]× Exp(1.273×ln[H]-4.705) (ex: @H=100, CCC=2.5)	*[1.46203-(ln[H])×0.145712]]× Exp(1.273×ln[H]-1.460) (ex: @H=100, CMC=65)	N/A	-
8M	MERCURY	07439976	*0.77 (Hg2+)	*1.4 (Hg2+)	0.05	H
9M	NICKEL	07440020	*0.997×Exp(0.846×ln[H]+0.0584) (ex: @H=100, CCC=52)	*0.998×Exp(0.846×ln[H]+2.255) (ex: @H=100, CMC=470)	[610] 600 †	H
10M	SELENIUM	07782492	*4.6	N/A	N/A	-
11M	SILVER	07440224	N/A	*0.850×Exp(1.72×ln[H]-6.590) (ex: @H=100, CMC=3.2)	N/A	-
12M	THALLIUM	07440280	13	65	0.24 †	H
13M	ZINC	07440666	*0.986×Exp(0.8473×ln[H]+0.884) (ex: @H=100, CCC=120)	*0.978×Exp(0.8473×ln[H]+0.884) (ex: @H=100, CMC=120)	N/A	-
14M	CYANIDE, FREE	00057125	5.2	22	[140] 4.0	H
1A	2-CHLOROPHENOL	00095578	110	560	[81] 30	H
2A	2,4-DICHLORO[-]PHENOL	00120832	340	1700	[77] 10	H
3A	2,4-DIMETHYL[-]PHENOL	00105679	130	660	[380] 100	H
4A	4,6-DINITRO-o-CRESOL (2 METHYL-4,6-DINITROPHENOL)	00534521	16	80	[13] 2.0	H
5A	2,4-DINITRO[-]PHENOL	00051285	130	660	[69] 10	H
E	DINITROPHENOLS	25550587	N/A	N/A	10	H
6A	2-NITROPHENOL	00088755	1600	8000	N/A	-

PP NO	Chemical Name	CAS Number	Fish and Aquatic Life Criteria		Human Health Criteria (ug/L)
			Criteria Continuous Concentrations (ug/L)	Criteria Maximum Concentration (ug/L)	
7A	4-NITROPHENOL	00100027	470	2300	N/A
8A	P-CHLORO-m-CRESOL (3 METHYL-4-CHLOROPHENOL)	00059507	30	160	[N/A] 500
9A	PENTACHLORO[-]PHENOL	00087865	Exp(1.005×[pH]-5.134) @pH= 6.5 7.8 9.0	Exp(1.005×[pH]-4.869) @pH= 6.5 7.8 9.0	[0.27] 0.03
10A	PHENOL	00108952	N/A	N/A	[10400] 4000
E	2,4,5-TRICHLOROPHENOL	00095954	N/A	N/A	300
11A	2,4,6-TRICHLOROPHENOL	00088062	91	460	[1.4] 1.5
1V	ACROLEIN	00107028	3.0	3.0	[6.0] 3.0
2V	ACRYLONITRILE	00107131	130	650	[0.051] 0.06
3V	BENZENE	00071432	130	640	[1.2] 0.58
5V	BROMOFORM	00075252	370	1800	[4.3] 7.0
6V	CARBON TETRACHLORIDE	00056235	560	2800	[0.23] 0.4
7V	CHLORO[-]BENZENE	00108907	240	1200	[130] 100
8V	CHLORODIBRO[-]MO[-]METHANE	00124481	N/A	N/A	[0.40] 0.8
9V	CHLOROETHANE	00075003	N/A	N/A	N/A
10V	2-CHLOROETHYL VINYL ETHER	00110758	3500	18000	N/A
11V	CHLOROFORM	00067663	390	1900	[5.7] 6.5
12V	DICHLOROBROMOMETHANE	00075274	N/A	N/A	[0.55] .95
14V	1,1-DICHLORO[-]ETHANE	00075343	N/A	N/A	N/A
15V	1,2-DICHLORO[-]ETHANE	00107062	3100	15000	[0.38] 9.9
16V	1,1-DICHLORO[-]ETHYLENE	00075354	1500	7500	[33.0] 30
17V	1,2-DICHLORO[-]PROPANE	00078875	2200	11000	[N/A] 0.90
18V	1,3-DICHLORO[-]PROPYLENE	00542756	61	310	[0.34] 0.27
19V	ETHYLBENZENE	00100414	580	2900	[530] 68
20V	METHYL BROMIDE	00074839	110	550	[47] 100
21V	METHYL CHLORIDE	0074873	5500	28000	N/A
22V	METHYLENE CHLORIDE	00075092	2400	12000	[4.6] 20
23V	1,1,2,2-TETRA[-]CHLOROETHANE	00079345	210	1000	[0.17] 0.2

PP NO	Chemical Name	CAS Number	Fish and Aquatic Life Criteria		Human Health Criteria (ug/L)
			Criteria Continuous Concentrations (ug/L)	Criteria Maximum Concentration (ug/L)	
24V	TETRACHLORO[-]ETHYLENE	00127184	140	700	[0.69] 10 CRL
25V	TOLUENE	00108883	330	1700	[1300] 57 H
26V	[1,2-trans-DICHLORO-ETHYLENE] trans-1,2-DICHLOROETHYLENE	00156605	1400	6800	[140] 100 H
[-] D	1,2 cis-DICHLORO[-]ETHYLENE	00156592	N/A	N/A	[12] 11 H
27V	1,1,1-TRICHLORO[-]ETHANE	00071556	610	3000	[N/A] 10000 [-] H
28V	1,1,2-TRICHLORO[-]ETHANE	00079005	680	3400	[0.59] 0.55 CRL
29V	TRICHLORO[-]ETHYLENE	00079016	450	2300	[2.5] 0.6 CRL
31V	VINYL CHLORIDE	00075014	N/A	N/A	[0.025] 0.02 CRL
1B	ACENAPHTHENE	00083329	17	83	[670] 70 H
2B	ACENAPHTHYLENE	00208968	N/A	N/A	N/A -
3B	ANTHRACENE	00120127	N/A	N/A	[8300] 300 H
4B	BENZIDINE	00092875	59	300	[0.000086] 0.0001 CRL
5B	BENZO(a)-ANTHRACENE	00056553	0.1	0.5	[0.0038] 0.001 CRL
6B	BENZO(a)PYRENE	00050328	N/A	N/A	[0.0038] 0.0001 CRL
7B	3,4-BENZO-FLUORANTHENE (BENZO(b)FLUORANTHENE)	00205992	N/A	N/A	[0.0038] 0.001 CRL
8B	BENZO(ghi)-PERYLENE	00191242	N/A	N/A	N/A -
9B	BENZO(k)-FLUORANTHENE	00207089	N/A	N/A	[0.0038] 0.01 CRL
E	BIS(CHLOROMETHYL)ETHER	00542881	N/A	N/A	0.0002 CRL
10B	BIS(2-CHLORO[-] ETHOXY)METHANE	00111911	N/A	N/A	N/A -
11B	BIS(2-CHLORO[-]ETHYL)ETHER	00111444	6000	30000	0.030 CRL
12B	[BIS(2-CHLORO- ISOPROPYL)ETHER] BIS(2-CHLORO-1-METHYLETHYL) ETHER	00108601	N/A	N/A	[1400] 200 H
13B	BIS(2-ETHYL[-] HEXYL)PHTHALATE	00117817	910	4500	[1.2] 0.32 CRL
14B	4-BROMOPHENYL PHENYL ETHER	00101553	54	270	N/A -

PP NO	Chemical Name	CAS Number	Fish and Aquatic Life Criteria			Human Health Criteria (ug/L)
			Criteria Continuous Concentrations (ug/L)	Criteria Maximum Concentration (ug/L)		
15B	BUTYLBENZYL PHTHALATE	00085687	35	140	[150] 0.1	H
16B	2-CHLORO[-]NAPHTHALENE	00091587	N/A	N/A	[1000] 800	H
17B	4-CHLORO[-]PHENYL PHENYL ETHER	07005723	N/A	N/A	N/A	-
18B	CHRYSENE	00218019	N/A	N/A	[0.0038] 0.12	CRL
19B	DIBENZO(a,h)[-]ANTHRACENE	00053703	N/A	N/A	[0.0038] 0.0001	CRL
20B	1,2-DICHLORO[-]BENZENE	00095501	160	820	[420 for dichloro-benzene] 1000	H
21B	1,3-DICHLORO[-]BENZENE	00541731	69	350	[See 20B] 7.0	H
22B	1,4-DICHLORO[-]BENZENE	00106467	150	730	[See 20B] 300	H
23B	3,3-DICHLORO[-]BENZIDINE	00091941	N/A	N/A	[0.021] 0.05	CRL
24B	DIETHYL PHTHALATE	00084662	800	4000	[17000] 600	H
25B	DIMETHYL PHTHALATE	00131113	500	2500	[270000] 2000	H
26B	DL-N-BUTYL PHTHALATE	00084742	21	110	[2000] 20	H
27B	2,4-DINITRO[-]TOLUENE	00121142	320	1600	0.05 for dinitro-toluene	CRL
28B	2,6-DINITRO[-]TOLUENE	00606202	200	990	See 27B	CRL
29B	DI-N-OCTYL PHTHALATE	00117840	N/A	N/A	N/A	-
30B	1,2-DIPHENYL[-]HYDRAZINE	00122667	3	15	0.036	CRL
31B	FLUORANTHENE	00206440	40	200	[130] 20	H
32B	FLUORENE	00086737	N/A	N/A	[1100] 50	H
33B	HEXACHLORO[-]BENZENE	00118741	N/A	N/A	[0.00028] 0.00008	CRL
34B	HEXACHLORO[-]BUTADIENE	00087683	2	10	[0.44] 0.01	CRL
35B	HEXACHLORO[-]CYCLOPENTADIENE	00077474	1	5	[40] 4.0	H
36B	HEXACHLORO[-]ETHANE	00067721	12	60	[1.4] 0.1	CRL

PP NO	Chemical Name	CAS Number	Fish and Aquatic Life Criteria		Human Health Criteria (ug/L)
			Criteria Continuous Concentrations (ug/L)	Criteria Maximum Concentration (ug/L)	
37B	INDENO(1,2,3-cd)PYRENE	00193395	N/A	N/A	[0.0038] 0.001 CRL
38B	ISOPHORONE	00078591	2100	10000	[35] 34 H
39B	NAPHTHALENE	00091203	43	140	N/A -
40B	NITROBENZENE	00098953	810	4000	[17] 10 H
41B	N-NITROSO[-]DIMETHYLAMINE	00062759	3400	17000	[0.00069] 0.0007 † CRL
42B	N-NITROSODI-N-PROPYLAMINE	00621647	N/A	N/A	0.005 † CRL
43B	N-NITROSO[-]DIPHENYLAMINE	00086306	59	300	3.3 † CRL
E	PENTACHLOROBENZENE	00608935	N/A	N/A	0.1 H
44B	PHENANTHRENE	00085018	1	5	N/A -
45B	PYRENE	00129000	N/A	N/A	[830] 20 H
E	1,2,4,5-TETRACHLOROBENZENE	00095943	N/A	N/A	0.03 H
46B	1,2,4-TRICHLORO[-]BENZENE	00120821	26	130	[35] 0.07 H
1P	ALDRIN	00309002	0.1	3	[0.000049] 0.0000008 CRL
2P	alpha-[BHC] HEXACHLOROCYCLOHEXANE (HCH)	00319846	N/A	N/A	[0.0026] 0.0004 CRL
3P	beta-[BHC] HEXACHLOROCYCLOHEXANE (HCH)	00319857	N/A	N/A	[0.0091] 0.008 CRL
4P	gamma-[BHC] HEXACHLOROCYCLOHEXANE (HCH) (LINDANE)	00058899	N/A	0.95	[0.098] 4.2 H
5P	delta-BHC	00319868	N/A	N/A	N/A -
6P	CHLORDANE	00057749	0.0043	2.4	[0.00080] 0.0003 CRL
E	CHLOROPHENOXY HERBICIDE (2,4-D)	00094757	N/A	N/A	1000 H
E	CHLOROPHENOXY HERBICIDE (2,4,5-TP)	00093721	N/A	N/A	100 H
7P	4,4-DDT	00050293	0.001	1.1	[0.00022] 0.00003 CRL
8P	4,4-DDE	00072559	0.001	1.1	[0.00022] 0.00002 CRL

PP NO	Chemical Name	CAS Number	Fish and Aquatic Life Criteria		Human Health Criteria (ug/L)
			Criteria Continuous Concentrations (ug/L)	Criteria Maximum Concentration (ug/L)	
9P	4,4-DDD	00072548	0.001	1.1	[0.00031] 0.0001 CRL
10P	DIELDRIN	00060571	0.056	0.24	[0.000052] 0.000001 CRL
11P	alpha-ENDOSUL[-]FAN	00959988	0.056	0.22	[62 for endosulfan] 20 H
12P	beta-ENDOSULFAN	33213659	0.056	0.22	[See 11P] 20 H
13P	ENDOSULFAN SULFATE	01031078	N/A	N/A	[N/A] 20 [-] H
14P	ENDRIN	00072208	0.036	0.086	[0.059] 0.03 H
15P	ENDRIN ALDEHYDE	07421934	N/A	N/A	[0.29] 1.0 H
16P	HEPTACHLOR	00076448	0.0038	0.52	[0.000079] 0.000006 CRL
17P	HEPTACHLOR EPOXIDE	01024573	0.0038	0.5	[0.000039] 0.00003 CRL
E	HEXACHLOROCYCLOHEXANE (HCH)-TECHNICAL	00608731	N/A	N/A	0.007 CRL
E	METOXYCHLOR	00072435	N/A	N/A	0.02 H
18P	PCB		0.014	N/A	0.000064 for PCBs † CRL
25P	TOXAPHENE	08001352	0.0002	0.73	[0.00028] 0.0007 CRL
PP	2,3,7,8-TCDD	01746016	N/A	N/A	5.0 E-9 † CRL
D	ACETONE	00067641	86000	450000	[3500] 700 H
D	ACRYLAMIDE	00079061	N/A	N/A	0.07 CRL
D	ALUMINUM	07429905	N/A	750	N/A -
D	BARIUM	07440393	4100	21000	[2400] 1000 H
D	BENZENE METADISULFONIC ACID	00098486	1600000	2600000	N/A -
D	BENZENE MONOSULFONIC ACID	00098113	1200000	2000000	N/A -
D	BENZYL CHLORIDE	00100447	N/A	N/A	0.2 CRL
D	BORON	07440428	1600	8100	[3100] 600 H
D	2-BUTOXY ETHANOL	00111762	N/A	N/A	700 H
D	COBALT	07440484	19	95	N/A -
D	p-CRESOL	00106445	160	800	N/A -

PP NO	Chemical Name	CAS Number	Fish and Aquatic Life Criteria		Human Health Criteria (ug/L)
			Criteria Continuous Concentrations (ug/L)	Criteria Maximum Concentration (ug/L)	
D	CYCLOHEXYLAMINE	00108918	N/A	N/A	1000 H
E	DIAZINON	00333415	0.17	0.17	N/A -
D	FORMALDEHYDE	00050000	440	2200	[700] 1000 H
D	2-HEXANONE	00591786	4300	21000	N/A -
D	LITHIUM	07439932	N/A	N/A	N/A -
D	[METHYLETHYL] METHYL ETHYL KETONE	00078933	32000	230000	[21000] 300 H
D	[METHYLISO-BUTYL] METHYL ISOBUTYL KETONE	00108101	5000	26000	N/A -
D	METOLACHLOR	51218452	N/A	N/A	[69] 700 H
D	NONYLPHENOL	[00104405] 84852153	6.6	28	N/A -
D	P-PHENOL SULFONIC ACID	00098679	1400000	3500000	N/A -
D	[I] 1-PROPANOL	00071238	46000	230000	N/A -
D	2-PROPANOL	00067630	89000	440000	N/A -
D	RESORCINOL	01084603	7200	28000	[2700] 3000 H
D	STRONTIUM	07440246	N/A	N/A	4000 H
D	1,2,3-TRICHLORO[-]PROPANE	00096184	N/A	N/A	[210] 26 H
D	1,2,4-TRIMETHYLBENZENE	00095636	N/A	N/A	[72] 66 H
D	1,3,5-TRIMETHYLBENZENE	00108678	N/A	N/A	[72] 66 H
D	VANADIUM	07440622	100	510	N/A -
D	XYLENE	01330207	210	1100	[70000] 10000 H

Acronyms and Footnotes to Table 5

* Indicates dissolved metal criterion; others are total recoverable metals. Each listed dissolved criterion in Table 5 is equal to the corresponding total recoverable criterion before rounding (from the EPA National Ambient Water Quality Criteria Documents) multiplied by the conversion factor (from the Conversion Factors Table); a criterion that is expressed as a hardness (H)-based equation is shown in Table 5 as the conversion factor (listed) multiplied by the hardness criterion equation; an example criterion at hardness=100mg/L is included.

† Indicates criterion based on the exposure inputs of 2 liters per day of drinking water and consumption of 17.5 grams of fish per day, for protection of a 70 Kg person.

CAS—Chemical Abstract Service number

CRL—Cancer risk level at 1×10^{-6}

D—DEP developed criteria

E—EPA developed criteria

H—Threshold effect human health criterion; incorporates additional uncertainty factor for some Group C carcinogens.

ln [H]—Natural Logarithm of the Hardness of stream as mg/l CaCO₃

ug/L—Micrograms per liter

N/A—Criterion not developed

PP NO—Priority Pollutant Number

§ 93.8d. Development of site-specific water quality criteria.

* * * * *

(c) Scientific studies shall be performed in accordance with the procedures and guidance in the Water Quality Standards Handbook (EPA 1994), as amended and updated, including: “Guidance on the Determination and Use of Water-Effect Ratios for Metals” (February 1994); and the “Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health” (2000). **The Department may require the use of the Biotic Ligand Model (BLM) for the development of new or updated site-specific criteria for copper in freshwater systems.** Other guidance approved by the Department, which is based on other EPA-approved or scientifically defensible methodologies, may be used.

* * * * *

(f) If the Department determines that site-specific criteria are appropriate in accordance with subsection (a), the Department will do the following:

* * * * *

(2) Maintain a publicly available [lists] online table of site-specific criteria.

* * * * *

§ 93.8e. Special criteria for the Great Lakes System.

* * * * *

(b) *Water quality criteria for the Great Lakes System.* Human health and aquatic life criteria for the Great Lakes System are contained in Table 6 [(relating to Great Lakes aquatic life and human health criteria)]. For any pollutant not listed in the table, criteria in Table 5 may be used to protect existing and designated uses, or criteria will be developed by the Department, as needed, in accordance with this chapter and § 16.61 (relating to special provisions for the Great Lakes System).

* * * * *

DESIGNATED WATER USES AND WATER QUALITY CRITERIA

§ 93.9b. Drainage List B.

Delaware River Basin in Pennsylvania
Lackawaxen River

Stream	Zone	County	Water Uses Protected	Exceptions to Specific Criteria
		* * * * *		
3—Van Auken Creek	Basin	Wayne	HQ-TSF, MF	None
2—Lackawaxen River	[Mainstem, confluence of West Branch Lackawaxen River and Van Auken Creek to Dyberry Creek] Main Stem	[Wayne] Pike	HQ-TSF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions to Specific Criteria</i>
3—Tributaries to Lackawaxen River	Basins, confluence of West Branch Lackawaxen River and Van Auken Creek to Dyberry Creek	Wayne	HQ-CWF, MF	None
		* * * * *		
3—Dyberry Creek	Basin, Big Brook to Mouth	Wayne	HQ-CWF, MF	None
[2—Lackawaxen River	Main Stem, Dyberry Creek to Mouth	Wayne	HQ-TSF, MF	None]
3—Tributaries to Lackawaxen River	Basins, Dyberry Creek to Wallenpaupack Creek	Wayne	HQ-CWF, MF	None
		* * * * *		

§ 93.9c. Drainage List C.

Delaware River Basin in Pennsylvania
Delaware River

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions to Specific Criteria</i>
		* * * * *		
2—Hornbecks Creek	Basin	Pike	HQ-CWF, MF	None
2—Spackmans Creek	Basin	Pike	HQ-CWF, MF	None
2—Toms Creek	Basin	Pike	EV, MF	None
		* * * * *		
2—Allegheny Creek	Basin	Northampton	CWF, MF	None
2—Mill Creek	Basin	Northampton	CWF, MF	None
2—Oughoughton Creek	Basin	Northampton	CWF, MF	None
		* * * * *		

§ 93.9d. Drainage List D.

Delaware River Basin in Pennsylvania
Lehigh River

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions to Specific Criteria</i>
1—Delaware River				
2—Lehigh River	Basin, Source to Tobyhanna Creek	Luzerne-Monroe-Carbon	EV, MF	None
3—Tobyhanna Creek	[Main Stem] Basin, Source to Cross Keys Run	Monroe[-Carbon]	HQ-CWF, MF	None
[4—Unnamed Tributaries to Tobyhanna Creek	Basins	Monroe-Carbon	HQ-CWF, MF	None
4—Jim Smith Run	Basin	Monroe	HQ-CWF, MF	None
4—Pole Bridge Run	Basin	Monroe	HQ-CWF, MF	None
4—Singer Run	Basin	Monroe	HQ-CWF, MF	None
4—East Branch Dresser Run	Basin	Monroe	HQ-CWF, MF	None
4—Pollys Run	Basin	Monroe	HQ-CWF, MF	None
4—Hummler Run	Basin	Monroe	HQ-CWF, MF	None]
4—Cross Keys Run	Basin	Monroe	EV, MF	None
3—Tobyhanna Creek	Basin, Cross Keys Run to Frame Cabin Run	Monroe	HQ-CWF, MF	None
4—Frame Cabin Run	Basin	Monroe	EV, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions to Specific Criteria</i>
[4—Kistler Run	Basin	Monroe	HQ-CWF, MF	None
4—Wagner Run	Basin	Monroe	HQ-CWF, MF	None
4—Upper Tunkhannock Creek	Basin	Monroe	HQ-CWF, MF	None
4—Wolfs Spring Run	Basin	Monroe	HQ-CWF, MF	None
4—Deep Run	Basin	Monroe	HQ-CWF, MF	None
4—Davey Run	Basin	Monroe	HQ-CWF, MF	None
4—Red Run	Basin	Monroe	HQ-CWF, MF	None
4—Tunkhannock Creek	Basin	Monroe-Carbon	HQ-CWF, MF	None
4—Shingle Mill Run	Basin	Carbon	HQ-CWF, MF	None
4—Twomile Run	Basin	Monroe	HQ-CWF, MF	None
4—Stony Run	Basin	Monroe	HQ-CWF, MF	None]
3—Tobyhanna Creek	Basin, Frame Cabin Run to Mouth	Monroe-Carbon	HQ-CWF, MF	None
2—Lehigh River	Basin, Tobyhanna Creek to Buck Mountain Creek	Carbon	HQ-CWF, MF	None
3—Buck Mountain Creek	Main Stem	Carbon	HQ-CWF, MF	None
4—Unnamed Tributaries to Buck Mountain Creek	Basin	Carbon	HQ-CWF, MF	None
4—Indian Run	Basin	Carbon	HQ-CWF, MF	None
4—Shafer Run	Basin	Carbon	EV, MF	None
2—Lehigh River	Main Stem, Buck Mountain Creek to [PA 903 Bridge (at Jim Thorpe)] a point at 40° 52' 3.5" N; 75° 44' 9.3" W	Carbon	HQ-CWF, MF	None
3—Unnamed Tributaries to Lehigh River	Basins, Buck Mountain Creek to [PA 903 Bridge] the point at 40° 52' 3.5" N; 75° 44' 9.3" W	Carbon	HQ-CWF, MF	None
3—Drakes Creek	Basin	Carbon	HQ-CWF, MF	None
	* * * * *			
3—Robertson Run	Basin	Carbon	HQ-CWF, MF	None
2—Lehigh River	Main Stem, [PA 903 Bridge] the point at 40° 52' 3.5" N; 75° 44' 9.3" W to Allentown Dam	Lehigh	TSF, MF	None
3—Unnamed Tributaries to Lehigh River	Basins, [PA 903 Bridge] the point at 40° 52' 3.5" N; 75° 44' 9.3" W to Allentown Dam	Carbon-Lehigh	CWF, MF	None
3—Silkmill Run	Basin	Carbon	CWF, MF	None
3—Mauch Chunk Creek				
[3—Mauch Chunk] 5—White Bear Creek	Basin, Source to SR 902 Bridge	Carbon	EV, MF	None
[3—Mauch Chunk] 5—White Bear Creek	Basin, SR 902 Bridge to [Mouth] inlet of Mauch Chunk Lake	Carbon	CWF, MF	None
4—Mauch Chunk Lake	Basin	Carbon	CWF, MF	None
3—Mauch Chunk Creek	Basin, Mauch Chunk Lake Dam to Mouth	Carbon	CWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions to Specific Criteria</i>
3—[Beaverdam] Beaver Run	Basin	Carbon	CWF, MF	None
3—Long Run	Basin	Carbon	CWF, MF	None
		* * * * *		
4—Jordan Creek	Main Stem	Lehigh	TSF, MF	None
5—[Unnamed] Tributaries to Jordan Creek	Basins, Source to Mill Creek	Lehigh	HQ-CWF, MF	None
[5—Switzer Creek	Basin	Lehigh	HQ-CWF, MF	None
5—Lyon Creek	Basin	Lehigh	HQ-CWF, MF	None]
5—Mill Creek	Basin	Lehigh	CWF, MF	None
[5—Hassen Creek	Basin	Lehigh	HQ-CWF, MF	None]
5—Tributaries to Jordan Creek	Basins, Mill Creek to Mouth	Lehigh	HQ-CWF, MF	None
3—Little Lehigh Creek	Basin, Jordan Creek to Mouth	Lehigh	HQ-CWF, MF	None
		* * * * *		

§ 93.9e. Drainage List E.

Delaware River Basin in Pennsylvania
Delaware River

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions to Specific Criteria</i>
		* * * * *		
2—Frya Run	Basin	Northampton	HQ-CWF, MF	None
2—Cooks Creek	Basin	Bucks	EV, MF	None
2—Rodges Run	Basin	Bucks	TSF, MF	None
2—Gallows Run	Basin	Bucks	CWF, MF	None
2—Falls Creek	Basin	Bucks	TSF, MF	None
2—Swamp Creek	Basin	Bucks	TSF, MF	None
2—Tinicum Creek	Basin	Bucks	EV, MF	None
2—Smithtown Creek	Basin	Bucks	TSF, MF	None
2—Tohickon Creek	Basin, Source to Lake Nockamixon Dam	Bucks	TSF, MF	None
2—Tohickon Creek	Basin, Lake Nockamixon Dam to Deep Run	Bucks	CWF, MF	None
3—Deep Run	Basin	Bucks	WWF, MF	None
		* * * * *		
1—Delaware Estuary	Tidal Portions of Basin, Head of Tide to Burlington-Bristol Bridge	Bucks	WWF, MF	See DRBC regulations— Water Quality Zone 2
2—Unnamed Tributaries to Delaware Estuary	Non-Tidal Portion of Basins, Head of Tide to Burlington-Bristol Bridge	Bucks	WWF, MF	None
2—Biles Creek	Non-Tidal Portion of Basin	Bucks	WWF, MF	None
2—Martins Creek	Non-Tidal Portion of Basin	Bucks	WWF, MF	None
2—Levittown Lake	Basin	Bucks	TSF, MF	None
		* * * * *		

§ 93.9f. Drainage List F.

Delaware River Basin in Pennsylvania
Schuylkill River

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
		* * * * *		
3—Tulpehocken Creek	Main Stem, Blue Marsh Reservoir Dam to T 921	Berks	CWF, MF	None
4—Unnamed Tributaries to Tulpehocken Creek	Basins, Blue Marsh Reservoir Dam to T 921	Berks	WWF, MF	None
[5] 4—Plum Creek	Basin, Source to [Unnamed Tributary at RM 0.45] UNT 01867 at 40° 22' 30.2" N; 76° 0' 45.2" W	Berks	WWF, MF	None
[6— Unnamed Tributary to Plum Creek at RM 0.45]	Basin	Berks	WWF, MF	None
5— UNT 01867 to Plum Creek				
[5] 4—Plum Creek	Basin, UNT [at RM 0.45] 01867 to Mouth	Berks	CWF, MF	None
4—Cacoosing Creek	Basin, Source to Little Cacoosing Creek	Berks	CWF, MF	None
		* * * * *		
3—UNTs to Schuylkill River	Basins, in Spring City and Phoenixville	Chester	WWF, MF	None
3—Manatawny Creek	[Main Stem	Berks	CWF, MF	None
4— Unnamed Tributaries to Manatawny Creek	Basins	Berks	CWF, MF	None]
4—Pine Creek	Basin	Berks	EV, MF	None
4—Bieber Creek	Basin	Berks	EV, MF	None
3—Manatawny Creek	Basin, Confluence of Pine Creek and Bieber Creek to Oysterville Creek	Berks	CWF, MF	None
[4— Little Manatawny Creek	Basin	Berks	CWF, MF	None]
4—Oysterville Creek	Basin, Source to T 634 Bridge [(RM 2.6)] at 40° 23' 45.9" N; 75° 42' 30.0" W	Berks	EV, MF	None
4—Oysterville Creek	Basin, T 634 Bridge [(RM 2.6)] to Confluence of UNT 01680 at 40° 22' 44.6" N; 75° 43' 48.0" W	Berks	HQ-CWF, MF	None
5—UNT 01680 to Oysterville Creek	Basin	Berks	CWF, MF	None
4—Oysterville Creek	Basin, UNT 01680 to Mouth	Berks	HQ-CWF, MF	None
[4— Furnace Run	Basin	Berks	CWF, MF	None]
3— Manatawny Creek	Basin, Oysterville Creek to Trout Run	Berks	CWF, MF	None
4—Trout Run	Basin	Berks	EV, MF	None
3— Manatawny Creek	Basin, Trout Run to Ironstone Creek	Berks	CWF, MF	None
4—Ironstone Creek	Basin	Berks	TSF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Manatawny Creek	Basin, Ironstone Creek to Mouth	Berks	CWF, MF	None
3—Sprogels Run	Basin	Montgomery	WWF, MF	None
	* * * * *			
3—Perkiomen Creek	Basin, Source to SR 1010 Bridge at Hereford	Berks	HQ-CWF, MF	None
3—Perkiomen Creek	Main Stem, SR 1010 Bridge to Green Lane Reservoir Dam	Montgomery	TSF, MF	None
4—[UNTs] Tributaries to Perkiomen Creek	Basins, SR 1010 Bridge to [Green Lane Reservoir Dam] Hosensack Creek	Montgomery	TSF, MF	None
4—Hosensack Creek	Basin	Montgomery	CWF, MF	None
4—Tributaries to Perkiomen Creek	Basins, Hosensack Creek to West Branch Perkiomen Creek	Montgomery	TSF, MF	None
4—West Branch Perkiomen Creek	Basin, Source to SR 1022 Bridge [(RM 12.9)] at 40° 26' 49.6" N; 75° 37' 16.2" W	Berks	CWF, MF	None
4—West Branch Perkiomen Creek	Basin, SR 1022 Bridge to SR 2069 Bridge [(RM 8.0)] at 40° 23' 45.8" N; 75° 36' 31.5" W	Berks	EV, MF	None
4—West Branch Perkiomen Creek	Basin, SR 2069 Bridge to Mouth	Montgomery	CWF, MF	None
4—Tributaries to Perkiomen Creek	Basins, West Branch Perkiomen Creek to Unami Creek	Montgomery	TSF, MF	None
3—Perkiomen Creek	Main Stem, Green Lane Reservoir Dam to Mouth	Montgomery	WWF, MF	None
[4—Unnamed Tributaries to Perkiomen Creek	Basins, Green Lane Reservoir Dam to Mouth	Montgomery	TSF, MF	None
4—Macoby Creek	Basin	Montgomery	TSF, MF	None
4—Deep Creek	Basin	Montgomery	TSF, MF	None]
4—Unami Creek	Basin	Montgomery	HQ-TSF, MF	None
4—Tributaries to Perkiomen Creek	Basins, Unami Creek to Swamp Creek	Montgomery	TSF, MF	None
4—Swamp Creek	Basin, Source to Dam in Bechtelsville [(RM 15.5)] at 40° 22' 24.9" N; 75° 37' 51.5" W	Berks	HQ-CWF, MF	None
4—Swamp Creek	Basin, Dam in Bechtelsville to [Route] SR 100 Bridge	Berks	CWF, MF	None
4—Swamp Creek	Basin, [Route] SR 100 Bridge to Mouth	Montgomery	TSF, MF	None
[4—Mine Run	Basin	Montgomery	TSF, MF	None
4—East Branch Perkiomen Creek	Basin	Montgomery	TSF, MF	None
4—Lodal Creek	Basin	Montgomery	TSF, MF	None
4—Schoolhouse Run	Basin	Montgomery	TSF, MF	None
4—Doe Run	Basin	Montgomery	TSF, MF	None
4—Skippack Creek	Basin	Montgomery	TSF, MF	None
4—Mine Run	Basin	Montgomery	TSF, MF	None]

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—Tributaries to Perkiomen Creek	Basins, Swamp Creek to Mouth	Montgomery	TSF, MF	None
3—Valley Creek	Basin	Montgomery—Chester	EV, MF	None
		* * *		

§ 93.9g. Drainage List G.

Delaware River Basin in Pennsylvania
Delaware River

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
		* * *		
2—Ridley Creek	Non-Tidal Portions of Basin, LR 23013 Bridge to Mouth	Delaware	WWF, MF	None
2—Chester Creek	Basin (locally known as Goose Creek basin), Source to East Branch Chester Creek	Chester	[TSF] WWF, MF	None
3—East Branch Chester Creek	Basin [, Source to Westtown Run]	Chester	TSF, MF	None
[4—Westtown Run	Basin	Chester	WWF, MF	None
3—East Branch Chester Creek	Basin, Westtown Run to Mouth	Chester	TSF, MF	None]
2—Chester Creek	Basin, East Branch Chester Creek to Rocky Run	Delaware	TSF, MF	None
		* * *		
2—Chester Creek	Nontidal Portions of Basin, Dutton Mills Road Bridge to Mouth	Delaware	WWF, MF	None
2—[Stony] Stony Creek	Non-Tidal Portions of Basin	Delaware	WWF, MF	None
2—Marcus Hook Creek	Non-Tidal Portions of Basin	Delaware	WWF, MF	None
		* * *		
4—East Branch Brandywine Creek	Main Stem, Shamona Creek to Confluence with West Branch	Chester	WWF, MF	None
5—[Unnamed] Tributaries to East Branch Brandywine Creek	Basins, Shamona Creek to [Confluence with West Branch (except in East Brandywine and Uwchlan Townships)] UNT 00322 at 40° 1' 29.5" N; 75° 42' 22.6" W	Chester	[WWF, MF] HQ-TSF, MF	None
5—[Unnamed] Tributaries to East Branch Brandywine Creek	Basins, [in East Brandywine and Uwchlan Townships] UNT 00322 to Beaver Creek	Chester	[HQ-TSF, MF] WWF, MF	None
5—Beaver Creek	Basin	Chester	CWF, MF	None
5—Tributaries to East Branch Brandywine Creek	Basins, Beaver Creek to Confluence with West Branch	Chester	WWF, MF	None
5—Valley Creek	Basin, Source to Broad Run	Chester	CWF, MF	None
		* * *		
3—Brandywine Creek	[Main Stem] Basin, Confluence of East and West Branches to [PA-DE State Border] Pocopson Creek	[Delaware] Chester	WWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
[4—Unnamed Tributaries to Brandywine Creek	Basins (all sections in PA), Confluence of East and West Branches to PA-DE State Border	Chester-Delaware	WWF, MF	None
4—Plum Run	Basin	Chester	WWF, MF	None
4—Radley Run	Basin	Chester	WWF, MF	None]
4—Pocopson Creek	Basin	Chester	TSF, MF	None
[4—Bennetts Run	Basin	Chester	WWF, MF	None
4—Brinton Run	Basin	Chester	WWF, MF	None
4—Ring Run	Basin	Chester	WWF, MF	None
4—Harvey Run	Basin	Chester	WWF, MF	None]
3—Brandywine Creek	Basin (all sections in PA), Pocopson Creek to PA-DE State Border	Chester-Delaware	WWF, MF	None
3—Brandywine Creek (DE)				
4—[Unnamed] Tributaries to Brandywine Creek	Basins (all sections in PA), PA-DE State Border to Mouth	Delaware	WWF, MF	None

* * * * *

§ 93.9j. Drainage List J.

**Susquehanna River Basin in Pennsylvania
Lackawanna River**

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
		* * *		
3—Meadow Brook	Basin	Lackawanna	CWF, MF	None
3—Roaring Brook	Basin, Source to Inlet of Elmhurst Reservoir	Lackawanna	HQ-CWF, MF	None
3—Roaring Brook	Basin, Inlet of Elmhurst Reservoir to Mouth	Lackawanna	CWF, MF	None
3—Stafford Meadow Brook	Basin, Source to Farthest Downstream Crossing of Scranton-Moosic Corporate Boundary	Lackawanna	HQ-CWF, MF	None

* * * * *

§ 93.9k. Drainage List K.

**Susquehanna River Basin in Pennsylvania
Susquehanna River**

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
		* * *		
2—Warrior Creek	Basin	Luzerne	CWF, MF	None
2—Nanticoke Creek	Basin	Luzerne	CWF, MF	None
2—Newport Creek	Basin	Luzerne	CWF, MF	None
2—Harvey Creek	Basin, Source to Pikes Creek	Luzerne	HQ-CWF, MF	None
3—Pikes Creek	Basin	Luzerne	HQ-CWF, MF	None
2—Harvey Creek	Basin, Pikes Creek to Mouth	Luzerne	CWF, MF	None

* * * * *

§ 93.91. Drainage List L.

**Susquehanna River Basin in Pennsylvania
West Branch Susquehanna River**

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
1—Susquehanna River				
2—West Branch Susquehanna River	Main Stem	Northumberland	WWF, MF	None
3—[Unnamed] Tributaries to West Branch Susquehanna River	Basins, Source to [Moshannon Creek] Cush Cushion Creek	Cambria-Indiana-Clearfield	CWF, MF	None
[3—Leslie Run	Basin	Cambria	CWF, MF	None
3—Hoppel Run	Basin	Cambria	CWF, MF	None
3—Fox Run	Basin	Cambria	CWF, MF	None
3—Browns Run	Basin	Cambria	CWF, MF	None
3—Walnut Run	Basin	Cambria	CWF, MF	None
3—Porter Run	Basin	Cambria	CWF, MF	None
3—Moss Creek	Basin	Cambria	CWF, MF	None
3—Douglas Run	Basin	Cambria	CWF, MF	None
3—Emeigh Run	Basin	Cambria	CWF, MF	None
3—Peg Run	Basin	Cambria	CWF, MF	None]
3—Cush Cushion Creek	Basin	Indiana	HQ-CWF, MF	None
[3—Kilns Run	Basin	Clearfield	CWF, MF	None
3—Kings Run	Basin	Clearfield	CWF, MF	None
3—Shyrock Run	Basin	Clearfield	CWF, MF	None
3—Boiling Spring Run	Basin	Clearfield	CWF, MF	None
3—Sawmill Run	Basin	Clearfield	CWF, MF	None
3—Rock Run	Basin	Clearfield	CWF, MF	None
3—Cush Creek	Basin	Clearfield	CWF, MF	None
3—Martin Run	Basin	Clearfield	CWF, MF	None
3—North Run	Basin	Clearfield	CWF, MF	None
3—Deer Run	Basin	Clearfield	CWF, MF	None
3—Bear Run	Basin	Clearfield	CWF, MF	None
3—Whisky Run	Basin	Clearfield	CWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, Cush Cushion Creek to Chest Creek	Clearfield	CWF, MF	None
3—Chest Creek	Basin, Source to Patton Water Supply	Cambria	HQ-CWF, MF	None
3—Chest Creek	Basin, Patton Water Supply to Rogues Harbor Run	Clearfield	CWF, MF	None
4—Rogues Harbor Run	Basin	Clearfield	EV, MF	None
3—Chest Creek	Basin, Rogues Harbor Run to Pine Run	Clearfield	CWF, MF	None
4—Pine Run	Basin	Clearfield	EV, MF	None
3—Chest Creek	Basin, Pine Run to Mouth	Clearfield	CWF, MF	None
[3—Miller Run	Basin	Clearfield	CWF, MF	None
3—Laurel Run	Basin	Clearfield	CWF, MF	None
3—Haslett Run	Basin	Clearfield	CWF, MF	None
3—Curry Run	Basin	Clearfield	CWF, MF	None
3—McCracken Run	Basin	Clearfield	CWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Bell Run	Basin	Clearfield	CWF, MF	None
3—Hiles Run	Basin	Clearfield	CWF, MF	None
3—Passmore Run	Basin	Clearfield	CWF, MF	None
3—Porter Run	Basin	Clearfield	CWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, Chest Creek to Anderson Creek	Clearfield	CWF, MF	None
3—Anderson Creek	Basin, Source to DuBois Dam	Clearfield	HQ-CWF, MF	None
3—Anderson Creek	Basin, DuBois Dam to Bear Run	Clearfield	CWF, MF	None
4—Bear Run	Basin, Source to Pike Twp. Municipal Authority Dam	Clearfield	HQ-CWF, MF	None
4—Bear Run	Basin, Pike Twp. Municipal Authority Dam to Mouth	Clearfield	CWF, MF	None
3—Anderson Creek	Basin, Bear Run to Mouth	Clearfield	CWF, MF	None
[3—Hogback Run	Basin	Clearfield	CWF, MF	None
3—Hartshorn Run	Basin	Clearfield	CWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, Anderson Creek to Montgomery Creek	Clearfield	CWF, MF	None
3—Montgomery Creek	Basin, Source to Montgomery Dam	Clearfield	HQ-CWF, MF	None
3—Montgomery Creek	Basin, Montgomery Dam to Mouth	Clearfield	CWF, MF	None
3—Tributaries to West Branch Susquehanna River	Basins, Montgomery Creek to Moose Creek	Clearfield	CWF, MF	None
3—Moose Creek	Basin, Source to Dam	Clearfield	HQ-CWF, MF	None
3—Moose Creek	Basin, Dam to Mouth	Clearfield	CWF, MF	None
[3—Wolf Run	Basin	Clearfield	CWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, Moose Creek to Clearfield Creek	Clearfield	CWF, MF	None
3—Clearfield Creek	Main Stem	Clearfield	WWF, MF	None
4—[Unnamed] Tributaries to Clearfield Creek	Basins, Source to Sandy Run	Cambria [-Clearfield]	CWF, MF	None
[4—Bradley Run	Basin	Cambria	CWF, MF	None
4—Beaverdam Run	Basin	Cambria	CWF, MF	None
4—Swartz Run	Basin	Cambria	CWF, MF	None
4—Little Laurel Run	Basin	Cambria	CWF, MF	None
4—Indian Run	Basin	Cambria	CWF, MF	None
4—Laurel Run	Basin	Cambria	CWF, MF	None
4—Brubaker Run	Basin	Cambria	CWF, MF	None]
4—Sandy Run	Basin	Cambria	HQ-CWF, MF	None
[4—Powell Run	Basin	Cambria	CWF, MF	None
4—Fallentimber Run	Basin	Cambria	CWF, MF	None
4—Beaverdam Run	Basin	Cambria	CWF, MF	None
4—Turner Run	Basin	Clearfield	CWF, MF	None
4—Blain Run	Basin	Clearfield	CWF, MF	None
4—North Witmer Run	Basin	Clearfield	CWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—DeWitt Run	Basin	Clearfield	CWF, MF	None
4—Pine Run	Basin	Clearfield	CWF, MF	None
4—Dotts Hollow	Basin	Clearfield	CWF, MF	None
4—Cofinan Run	Basin	Clearfield	CWF, MF	None
4—Blue Run	Basin	Clearfield	CWF, MF	None
4—Buck Run (Porter Run)	Basin	Clearfield	CWF, MF	None
4—Maplepole Run	Basin	Clearfield	CWF, MF	None]
4—Tributaries to Clearfield Creek	Basins, Sandy Run to Muddy Run	Cambria	CWF, MF	None
4—Muddy Run	Basin, Source to Little Muddy Run	Clearfield	CWF, MF	None
5—Little Muddy Run	Basin, Source to Janesville Sportsman Dam	Clearfield	HQ-CWF, MF	None
5—Little Muddy Run	Basin, Janesville Sportsman Dam to Mouth	Clearfield	CWF, MF	None
4—Muddy Run	Basin, Little Muddy Run to Mouth	Clearfield	CWF, MF	None
[4—Japling Run	Basin	Clearfield	CWF, MF	None
4—Pine Run	Basin	Clearfield	CWF, MF	None
4—Lost Run	Basin	Clearfield	CWF, MF	None
4—Upper Morgan Run	Basin	Clearfield	CWF, MF	None
4—Potts Run	Basin	Clearfield	CWF, MF	None
4—Dunlap Run	Basin	Clearfield	CWF, MF	None
4—Lytle Run	Basin	Clearfield	CWF, MF	None
4—Cherry Run	Basin	Clearfield	CWF, MF	None
4—Raccoon Run	Basin	Clearfield	CWF, MF	None
4—Sanhourn Run	Basin	Clearfield	CWF, MF	None
4—Camp Hope Run	Basin	Clearfield	CWF, MF	None
4—Morgan Run	Basin	Clearfield	CWF, MF	None]
4—Tributaries to Clearfield Creek	Basins, Muddy Run to Little Clearfield Creek	Clearfield	CWF, MF	None
4—Little Clearfield Creek	Basin	Clearfield	HQ-CWF, MF	None
[4—Long Run	Basin	Clearfield	CWF, MF	None
4—Roaring Run	Basin	Clearfield	CWF, MF	None
3—Abes Run	Basin	Clearfield	CWF, MF	None]
4—Tributaries to Clearfield Creek	Basins, Little Clearfield Creek to Mouth	Clearfield	CWF, MF	None
3—Tributaries to West Branch Susquehanna River	Basins, Clearfield Creek to Lick Run	Clearfield	CWF, MF	None
3—Lick Run	Basin	Clearfield	HQ-CWF, MF	None
[3—Devils Run	Basin	Clearfield	CWF, MF	None
3—Bloody Run	Basin	Clearfield	CWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, Lick Run to Trout Run	Clearfield	CWF, MF	None
3—Trout Run	Basin	Clearfield	HQ-CWF, MF	None
[3—Millstone Run	Basin	Clearfield	CWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Surveyor Run	Basin	Clearfield	CWF, MF	None
3—Bear Run	Basin	Clearfield	CWF, MF	None
3—Bald Hill Run	Basin	Clearfield	CWF, MF	None
3—Moravian Run	Basin	Clearfield	CWF, MF	None
3—Deer Creek	Basin	Clearfield	CWF, MF	None
3—Big Run	Basin	Clearfield	CWF, MF	None
3—Willholm Run	Basin	Clearfield	CWF, MF	None
3—Sandy Creek	Basin	Clearfield	CWF, MF	None
3—Alder Run	Basin	Clearfield	CWF, MF	None
3—Rolling Stone Run	Basin	Clearfield	CWF, MF	None
3—Mowry Run	Basin	Clearfield	CWF, MF	None
3—Basin Run	Basin	Clearfield	CWF, MF	None
3—Rock Run	Basin	Clearfield	CWF, MF	None
3—Potter Run	Basin	Clearfield	CWF, MF	None
3—Rupley Run	Basin	Clearfield	CWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, Trout Run to Moshannon Creek	Clearfield	CWF, MF	None
3—Moshannon Creek	Basin, Source to Roup Run	Clearfield-Centre	HQ-CWF, MF	None
4—Roup Run	Basin	Centre	CWF, MF	None
3—Moshannon Creek	Main Stem, Roup Run to Mouth	Clearfield-Centre	TSF, MF	None
4—[UNTs] Tributaries to Moshannon Creek	Basins, Roup Run to [Mouth] Moutain Branch	Clearfield-Centre	CWF, MF	None
[4—Roup Run	Basin	Centre	CWF, MF	None
4—Whiteside Run	Basin	Clearfield	CWF, MF	None]
4—Mountain Branch	Basin, Source to Trim Root Run	Centre	HQ-CWF, MF	None
5—Trim Root Run	Basin	Centre	HQ-CWF, MF	None
4—Mountain Branch	Basin, Trim Root Run to Mouth	Centre	CWF, MF	None
[4—Bear Run	Basin	Centre	CWF, MF	None
4—Beaver Run	Basin	Clearfield	CWF, MF	None
4—Big Run	Basin	Clearfield	CWF, MF	None]
4—Tributaries to Moshannon Creek	Basins, Mountain Branch to Trout Run	Clearfield-Centre	CWF, MF	None
4—Trout Run	Basin, Source to Montola Dam	Centre	HQ-CWF, MF	None
4—Trout Run	Basin, Montola Dam to Mouth	Centre	CWF, MF	None
[4—Shimel Run	Basin	Clearfield	CWF, MF	None]
4—Tributaries to Moshannon Creek	Basins, Trout Run to Laurel Run	Clearfield-Centre	CWF, MF	None
4—Laurel Run	Basin, Source to Simeling Run	Clearfield	CWF, MF	None
5—Simeling Run	Basin	Clearfield	HQ-CWF, MF	None
4—Laurel Run	Basin, Simeling Run to Mouth	Clearfield	CWF, MF	None
4—Tributaries to Moshannon Creek	Basins, Laurel Run to Cold Stream	Clearfield-Centre	CWF, MF	None
4—Cold Stream	Basin, Source to US 322	Centre	HQ-CWF, MF	None
4—Cold Stream	Basin, US 322 to Mouth	Centre	CWF, MF	None
[4—Emigh Run	Basin	Clearfield	CWF, MF	None
4—Onemile Run	Basin	Centre	CWF, MF	None
4—Hawk Run	Basin	Clearfield	CWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—Wolf Run	Basin	Centre	CWF, MF	None
4—Sulphur Run	Basin	Clearfield	CWF, MF	None]
4—Tributaries to Moshannon Creek	Basins, Cold Stream to Black Bear Run	Clearfield-Centre	CWF, MF	None
4—Black Bear Run	Basin	Centre	EV, MF	None
4—Tributaries to Moshannon Creek	Basins, Black Bear Run to Sixmile Run	Clearfield-Centre	CWF, MF	None
4—Sixmile Run	Basin	Centre	HQ-CWF, MF	None
[4—Tark Hill Run	Basin	Centre	CWF, MF	None
4—Potter Run	Basin	Centre	CWF, MF	None
4—Laurel Run	Basin	Centre	CWF, MF	None
4—Browns Run	Basin	Clearfield	CWF, MF	None
4—Grassflat Run	Basin	Clearfield	CWF, MF	None
4—Weber Run	Basin	Clearfield	CWF, MF	None
4—Crawford Run	Basin	Clearfield	CWF, MF	None]
4—Tributaries to Moshannon Creek	Basins, Sixmile Run to Black Moshannon Creek	Clearfield-Centre	CWF, MF	None
4—Black Moshannon Creek	[Main Stem] Basin, Source to Benner Run	Centre	HQ-CWF, MF	None
[5—Unnamed Tributaries to Black Moshannon Creek	Basins	Centre	HQ-CWF, MF	None
5—Shirks Run	Basin	Centre	HQ-CWF, MF	None
5—Smays Run	Basin	Centre	HQ-CWF, MF	None
5—North Run	Basin	Centre	HQ-CWF, MF	None]
5—Benner Run	Basin, Source to Pine Haven Camp	Centre	EV, MF	None
5—Benner Run	Basin, Pine Haven Camp to Mouth	Centre	HQ-CWF, MF	None
[5—Hall Run	Basin	Centre	HQ-CWF, MF	None
5—Myers Run	Basin	Centre	HQ-CWF, MF	None]
4—Black Moshannon Creek	Basin, Benner Run to Rock Run	Centre	HQ-CWF, MF	None
5—Rock Run	Basin	Centre	EV, MF	None
[5—Pine Run	Basin	Centre	HQ-CWF, MF	None
5—Hicklen Run	Basin	Centre	HQ-CWF, MF	None
4—Sevenmile Run	Basin	Centre	CWF, MF	None]
4—Black Moshannon Creek	Basin, Rock Run to Mouth	Centre	HQ-CWF, MF	None
4—Tributaries to Moshannon Creek	Basins, Black Moshannon Creek to Ames Run	Clearfield-Centre	CWF, MF	None
4—Ames Run	Basin	Clearfield	HQ-CWF, MF	None
4—Tributaries to Moshannon Creek	Basins, Ames Run to Mouth	Clearfield-Centre	CWF, MF	None
3—[Unnamed] Tributaries to West Branch Susquehanna River	Basins, Moshannon Creek to [RM 121.36] Mosquito Creek	Clearfield-Centre [-Clinton]	HQ-CWF, MF	None
[3—Redlick Run	Basin	Centre	HQ-CWF, MF	None]

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Mosquito Creek	[Main Stem] Basin, Source to Twelvemile Run	Elk-Clearfield	HQ-CWF, MF	None
[4—Unnamed Tributaries to Mosquito Creek	Basins	Elk-Clearfield	HQ-CWF, MF	None
4—Pebble Run	Basin	Elk	HQ-CWF, MF	None
4—Beaver Run	Basin	Elk	HQ-CWF, MF	None
4—McNerny Run	Basin	Clearfield	HQ-CWF, MF	None
4—Meeker Run	Basin	Clearfield	HQ-CWF, MF	None
4—Panther Run	Basin	Clearfield	HQ-CWF, MF	None]
4—Twelvemile Run	Basin	Clearfield	EV, MF	None
[4—Gifford Run	Basin	Clearfield	HQ-CWF, MF	None
4—Susman Run	Basin	Clearfield	HQ-CWF, MF	None]
3—Mosquito Creek	Basin, Twelvemile Run to Cole Run	Clearfield	HQ-CWF, MF	None
4—Cole Run	Basin	Clearfield	EV, MF	None
[4—Grimes Run	Basin	Clearfield	HQ-CWF, MF	None
4—Dutch Hollow	Basin	Clearfield	HQ-CWF, MF	None
4—Curleys Run	Basin	Clearfield	HQ-CWF, MF	None
3—Laurel Run	Basin	Centre	HQ-CWF, MF	None
3—Saltlick Run	Basin	Clearfield	HQ-CWF, MF	None
3—Upper Three Runs	Basin	Clearfield	HQ-CWF, MF	None
3—Lower Three Runs	Basin	Clearfield	HQ-CWF, MF	None
3—Sterling Run	Basin	Centre	HQ-CWF, MF	None]
3—Mosquito Creek	Basin, Cole Run to Mouth	Clearfield	HQ-CWF, MF	None
3—Tributaries to West Branch Susquehanna River	Basins, Mosquito Creek to Loop Run	Clearfield-Centre-Clinton	HQ-CWF, MF	None
3—Loop Run	Basin	Clinton	CWF, MF	None
[3—Spruce Run	Basin	Centre	HQ-CWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, Loop Run to UNT 25562 at 41° 9' 40.2"N; 78° 0' 3.9"W	Centre-Clinton	HQ-CWF, MF	None
3—[Unnamed Tributary to West Branch Susquehanna River at RM 121.36] UNT 25562	Basin	Clinton	CWF, MF	None
3—[Unnamed] Tributaries to West Branch Susquehanna River	Basins, [RM 121.36 to Queens Run] UNT 25562 to Little Bougher Run	Centre-Clinton	HQ-CWF, MF	None
[3—Bougher Run	Basin	Centre	HQ-CWF, MF	None]
3—Little Bougher Run	Basin	Clinton	CWF, MF	None
[3—Leaning Pine Run	Basin	Clinton	HQ-CWF, MF	None
3—Moores Run	Basin	Centre	HQ-CWF, MF	None
3—Sugarcamp Run	Basin	Clinton	HQ-CWF, MF	None
3—Birch Island Run	Basin	Clinton	HQ-CWF, MF	None
3—Black Stump Run	Basin	Clinton	HQ-CWF, MF	None
3—Grove Run	Basin	Clinton	HQ-CWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Fields Run	Basin	Centre	HQ-CWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, Little Bougher Run to Yost Run	Centre-Clinton	HQ-CWF, MF	None
3—Yost Run	Basin	Centre	EV, MF	None
[3—Morris Run	Basin	Clinton	HQ-CWF, MF	None
3—Dry Run	Basin	Clinton	HQ-CWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, Yost Run to Burns Run	Centre-Clinton	HQ-CWF, MF	None
3—Burns Run	Basin	Centre	EV, MF	None
[3—Jews Run	Basin	Clinton	HQ-CWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, Burns Run to Sinnemahoning Creek	Centre-Clinton-Cameron	HQ-CWF, MF	None
3—Sinnemahoning Creek				
4—Bennett Branch Sinnemahoning Creek	[Main Stem, Source to Mill Run] Basin, Source to South Branch Bennett Branch	Cameron	CWF, MF	None
[5—Unnamed Tributaries to Bennett Branch Sinnemahoning Creek	Basins	Clearfield-Elk-Cameron	CWF, MF	None
5—McCracken Run	Basin	Clearfield	CWF, MF	None]
5—South Branch Bennett Branch	Basin	Clearfield	HQ-CWF, MF	None
[5—Heath Run	Basin	Clearfield	CWF, MF	None
5—Bark Camp Run	Basin	Clearfield	CWF, MF	None
5—Mountain Run	Basin	Clearfield	CWF, MF	None
5—Matley Hollow	Basin	Clearfield	CWF, MF	None]
4—Bennett Branch Sinnemahoning Creek	Basin, South Branch Bennett Branch to Wilson Run	Clearfield	CWF, MF	None
5—Wilson Run	Basin, Source to East Branch Wilson Run	Clearfield	CWF, MF	None
6—East Branch Wilson Run	Basin	Clearfield	HQ-CWF, MF	None
5—Wilson Run	Basin, East Branch Wilson Run to Mouth	Clearfield	CWF, MF	None
[5—Moose Run	Basin	Clearfield	CWF, MF	None
5—Horning Run	Basin	Clearfield	CWF, MF	None
5—Lamb Hollow	Basin	Clearfield	CWF, MF	None
5—Horning Hollow	Basin	Clearfield	CWF, MF	None
5—Mill Run	Basin	Clearfield	CWF, MF	None]
4—Bennett Branch Sinnemahoning Creek	Basin, Wilson Run to Mill Run	Clearfield	CWF, MF	None
5—Mill Run	Basin	Clearfield	CWF, MF	None
4—Bennett Branch Sinnemahoning Creek	Main Stem, Mill Run to Confluence with Driftwood Branch	Cameron	WWF, MF	None
[5—Tyler Run	Basin	Clearfield	CWF, MF	None]

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
5—Tributaries to Bennett Branch Sinnemahoning Creek	Basins, Mill Run to Cherry Run	Clearfield-Cameron-Elk	CWF, MF	None
5—Cherry Run	Basin, Source to Shawmut Dam	Elk	HQ-CWF, MF	None
5—Cherry Run	Basin, Shawmut Dam to Mouth	Elk	CWF, MF	None
5—Tributaries to Bennett Branch Sinnemahoning Creek	Basins, Cherry Run to Kersey Run	Elk	CWF, MF	None
5—Kersey Run	Basin, Source to Byrnes Run	Elk	CWF, MF	None
6—Byrnes Run	Basin	Elk	EV, MF	None
5—Kersey Run	Basin, Byrnes Run to Mouth	Elk	CWF, MF	None
5—Tributaries to Bennett Branch Sinnemahoning Creek	Basins, Kersey Run to Laurel Run	Elk	CWF, MF	None
5—Laurel Run	Basin	Elk	HQ-CWF, MF	None
[5—Bakemans Run	Basin	Elk	CWF, MF	None]
5—Tributaries to Bennett Branch Sinnemahoning Creek	Basins, Laurel Run to Medix Run	Elk	CWF, MF	None
5—Medix Run	Basin	Elk	HQ-CWF, MF	None
5—Tributaries to Bennett Branch Sinnemahoning Creek	Basins, Medix Run to Trout Run	Elk	CWF, MF	None
5—Trout Run	Basin, Source to Spring Run	Elk	CWF, MF	None
6—Spring Run	Basin, Source to UNT 24721 at 41° 20' 25.0"N; 78° 29' 52.9" W	Elk	CWF, MF	None
7—UNT 24721 to Spring Run	Basin	Elk	CWF, MF	None
6—Spring Run	Basin, UNT 24721 to Stony Brook	Elk	HQ-CWF, MF	None
7—Stony Brook	Basin	Elk	CWF, MF	None
6—Spring Run	Basin, Stony [Run] Brook to Mouth	Elk	CWF, MF	None
5—Trout Run	Basin, Spring Run to Mouth	Elk	CWF, MF	None
[5—Jimmy Run	Basin	Elk	CWF, MF	None
5—Johnson Run	Basin	Elk	CWF, MF	None
5—Wainwright Run	Basin	Elk	CWF, MF	None
5—Charlies Run	Basin	Elk	CWF, MF	None]
5—Tributaries to Bennett Branch Sinnemahoning Creek	Basins, Trout Run to Dents Run	Elk	CWF, MF	None
5—Dents Run	Basin	Elk	HQ-CWF, MF	None
5—Tributaries to Bennett Branch Sinnemahoning Creek	Basins, Dents Run to Hicks Run	Elk	CWF, MF	None
5—Hicks Run				
6—East Branch Hicks Run	Basin Source to Confluence with West Branch	Elk	HQ-CWF, MF	None
6—West Branch Hicks Run	Basin, Source to Confluence with East Branch	Elk	EV, MF	None
5—Hicks Run	Basin, Confluence of East and West Branches to Mouth	Cameron	HQ-CWF, MF	None
[5—Hicks Hollow	Basin	Cameron	CWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
5—Beaverdam Run	Basin	Cameron	CWF, MF	None
5—Stone Quarry Hollow	Basin	Cameron	CWF, MF	None]
5—Tributaries to Bennett Branch Sinnemahoning Creek	Basins, Hicks Run to Miller Run	Cameron	CWF, MF	None
5—Miller Run	Basin	Cameron	HQ-CWF, MF	None
[5—Water Plug Hollow	Basin	Cameron	CWF, MF	None]
5—Tributaries to Bennett Branch Sinnemahoning Creek	Basins, Miller Run to Mix Run	Cameron	CWF, MF	None
5—Mix Run	Basin, Source to English Draft Run	Elk	EV, MF	None
6—English Draft Run	Basin	Elk	HQ-CWF, MF	None
5—Mix Run	Basin, English Draft Run to Mouth	Cameron	HQ-CWF, MF	None
[5—Little Dent Run	Basin	Cameron	CWF, MF	None
5—Nanny Run	Basin	Cameron	CWF, MF	None
5—Boyer Run	Basin	Cameron	CWF, MF	None]
5—Tributaries to Bennett Branch Sinnemahoning Creek	Basins, Mix Run to Confluence with Driftwood Branch	Cameron	CWF, MF	None
4—Driftwood Branch Sinnemahoning Creek	Basin, Source to Elk Fork	Cameron	HQ-CWF, MF	None
5—Elk Fork	Basin, Source to Nichols Run	Cameron	EV, MF	None
6—Nichols Run	Basin	Cameron	HQ-CWF, MF	None
5—Elk Fork	Basin, Nichols Run to Mouth	Cameron	HQ-CWF, MF	None
4—Driftwood Branch Sinnemahoning Creek	Main Stem, Elk Fork to Confluence with Bennett Branch	Cameron	TSF, MF	None
5— [Unnamed] Tributaries to Driftwood Branch Sinnemahoning Creek	Basins, Elk Fork to [Confluence with Bennett Branch] Cooks Run	Cameron	HQ-CWF, MF	None
[5—Big Run	Basin	Cameron	HQ-CWF, MF	None
5—Bobby Run	Basin	Cameron	HQ-CWF, MF	None]
5—Cooks Run	Basin	Cameron	EV, MF	None
[5—Johns Run	Basin	Cameron	HQ-CWF, MF	None
5—Britton Run	Basin	Cameron	HQ-CWF, MF	None]
5—Tributaries to Driftwood Branch Sinnemahoning Creek	Basins, Cooks Run to Clear Creek	Cameron	HQ-CWF, MF	None
5—Clear Creek	Basin, Source to Mud Run	Cameron	EV, MF	None
6—Mud Run	Basin	Cameron	HQ-CWF, MF	None
5—Clear Creek	Basin, Mud Run to Mouth	Cameron	HQ-CWF, MF	None
[5—Ferguson Hollow	Basin	Cameron	HQ-CWF, MF	None
5—North Creek	Basin	Cameron	HQ-CWF, MF	None
5—Swesey Hollow	Basin	Cameron	HQ-CWF, MF	None
5—Dodge Hollow	Basin	Cameron	HQ-CWF, MF	None
5—Eddy Run	Basin	Cameron	HQ-CWF, MF	None
5—Wheaton Hollow	Basin	Cameron	HQ-CWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
5—West Creek	Basin	Cameron	HQ-CWF, MF	None]
5—Tributaries to Driftwood Branch Sinnemahoning Creek	Basins, Clear Creek to Sinnemahoning Portage Creek	Cameron	HQ-CWF, MF	None
5—Sinnemahoning Portage Creek	Basin, Source to Cowley Run	Cameron	EV, MF	None
6—Cowley Run	Basin	Cameron	EV, MF	None
5—Sinnemahoning Portage Creek	Basin, Cowley Run to Mouth	Cameron	CWF, MF	None
[5—Bauer Hollow	Basin	Cameron	HQ-CWF, MF	None
5—Canoe Run	Basin	Cameron	HQ-CWF, MF	None
5—Hunts Run	Basin	Cameron	HQ-CWF, MF	None
5—Stillhouse Run	Basin	Cameron	HQ-CWF, MF	None
5—Square Timber Run	Basin	Cameron	HQ-CWF, MF	None]
5—Tributaries to Driftwood Branch Sinnemahoning Creek	Basins, Sinnemahoning Portage Creek to Sterling Run	Cameron	HQ-CWF, MF	None
5—Sterling Run				
6—Finley Run	Basin, Source to [Unnamed Tributary at R.M. 1.7] UNT 25003 at 41° 25' 54.7" N; 78° 15' 34.2" W	Cameron	HQ-CWF, MF	None
7—UNT 25003	Basin	Cameron	HQ-CWF, MF	None
6—Finley Run	Basin, [Unnamed Tributary at R.M. 1.7] UNT 25003 to Confluence with Portable Run	Cameron	CWF, MF	None
6—Portable Run	Basin, Source to Confluence with Finley Run	Cameron	CWF, MF	None
5—Sterling Run	Basin, Confluence of Portable Run and Finley Run to Tannery Hollow Run	Cameron	CWF, MF	None
6—Tannery Hollow Run	Basin	Cameron	EV, MF	None
5—Sterling Run	Basin, Tannery Hollow Run to Mouth	Cameron	CWF, MF	None
[5—Mason Grove Run	Basin	Cameron	HQ-CWF, MF	None
5—Wash Mason Run	Basin	Cameron	HQ-CWF, MF	None
5—John Mason Run	Basin	Cameron	HQ-CWF, MF	None
5—Big Run	Basin	Cameron	HQ-CWF, MF	None
5—Dry Run	Basin	Cameron	HQ-CWF, MF	None
5—Tanglefoot Run	Basin	Cameron	HQ-CWF, MF	None
5—Nelson Run	Basin	Cameron	HQ-CWF, MF	None
5—Grindstone Hollow	Basin	Cameron	HQ-CWF, MF	None
5—Johnson Run	Basin	Cameron	HQ-CWF, MF	None]
5—Tributaries to Driftwood Branch Sinnemahoning Creek	Basins, Sterling Run to Confluence with Bennett Branch	Cameron	HQ-CWF, MF	None
3—Sinnemahoning Creek	Main Stem, Confluence of Bennett and Driftwood Branches to Mouth	Clinton	WWF, MF	None
4— [Unnamed] Tributaries to Sinnemahoning Creek	Basins, Confluence of Bennett and Driftwood Branches to [Mouth] First Fork	Cameron [-Clinton]	HQ-CWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
[4—Grove Run	Basin	Cameron	HQ-CWF, MF	None]
4—First Fork Sinnemahoning Creek	Basin, Source to Big Nelson Run	Cameron	HQ-CWF, MF	None
5—Big Nelson Run	Basin, Source to Right Branch Big Nelson Run	Potter	HQ-CWF, MF	None
6—Right Branch Big Nelson Run	Basin	Potter	EV, MF	None
5—Big Nelson Run	Basin, Right Branch Big Nelson Run to Mouth	Potter	HQ-CWF, MF	None
4—First Fork Sinnemahoning Creek	[Main Stem, Big Nelson Run to Stevenson Dam] Basin, Big Nelson Run to East Fork Sinnemahoning Creek	Cameron	HQ-CWF, MF	None
[5—Unnamed Tributaries to First Fork Sinnemahoning Creek	Basins, Big Nelson Run to Stevenson Dam	Potter-Cameron	HQ-CWF, MF	None
5—Fish Basket Hollow	Basin	Potter	HQ-CWF, MF	None
5—Little Nelson Run	Basin	Potter	HQ-CWF, MF	None]
5—East Fork Sinnemahoning Creek	Basin, Source to [Dolliver Trail] UNT 24255 at 40° 38' 35.5" N; 77° 51' 9.5" W (known as Dolliver Trail)	Potter	EV, MF	None
6—UNT 24255	Basin	Potter	EV, MF	None
5—East Fork Sinnemahoning Creek	[Main Stem, Dolliver Trail to Mouth] Basin, UNT 24255 to Stony Lick Run	Potter	HQ-CWF, MF	None
[6—Unnamed Tributaries to East Fork Sinnemahoning Creek	Basins, Dolliver Trail to Mouth	Potter	HQ-CWF, MF	None
6—Shinglebolt Hollow	Basin	Potter	HQ-CWF, MF	None
6—Horton Run	Basin	Potter	HQ-CWF, MF	None]
6—Stony Lick Run	Basin	Potter	EV, MF	None
[6—Wild Boy Run	Basin	Potter	HQ-CWF, MF	None
6—Jackson Lick Run	Basin	Potter	HQ-CWF, MF	None
6—Graveyard Hollow	Basin	Potter	HQ-CWF, MF	None
6—Stony Run	Basin	Potter	HQ-CWF, MF	None
6—Jamison Run	Basin	Potter	HQ-CWF, MF	None
6—Little Joe Run	Basin	Potter	HQ-CWF, MF	None
6—Camp Run	Basin	Potter	HQ-CWF, MF	None
6—Gravel Lick Run	Basin	Potter	HQ-CWF, MF	None
6—Mud Lick Run	Basin	Potter	HQ-CWF, MF	None
6—Williams Run	Basin	Potter	HQ-CWF, MF	None
6—Marvin Run	Basin	Potter	HQ-CWF, MF	None]
5—East Fork Sinnemahoning Creek	Basin, Stony Lick Run to Birch Run	Potter	HQ-CWF, MF	None
6—Birch Run	Basin	Potter	EV, MF	None
[6—Long Hollow	Basin	Potter	HQ-CWF, MF	None
6—Jordan Hollow	Basin	Potter	HQ-CWF, MF	None
6—Schoolhouse Run	Basin	Potter	HQ-CWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
6—Black Stump Hollow	Basin	Potter	HQ-CWF, MF	None
6—Upper Vag Hollow	Basin	Potter	HQ-CWF, MF	None
6—Hunter Hollow	Basin	Potter	HQ-CWF, MF	None
6—Avery Hollow	Basin	Potter	HQ-CWF, MF	None
6—Bentley Hollow	Basin	Potter	HQ-CWF, MF	None
5—Elk Lick Run	Basin	Potter	HQ-CWF, MF	None
5—Schoolhouse Run	Basin	Potter	HQ-CWF, MF	None
5—Dry Hollow	Basin	Potter	HQ-CWF, MF	None
5—Pine Island Run	Basin	Potter	HQ-CWF, MF	None]
5—East Fork Sinnemahoning Creek	Basin, Birch Run to Mouth	Potter	HQ-CWF, MF	None
4—First Fork Sinnemahoning Creek	Basin, East Fork Sinnemahoning Creek to Bailey Run	Potter	HQ-CWF, MF	None
5—Bailey Run	Basin, Source to Little Bailey Run	Potter	EV, MF	None
6—Little Bailey Run	Basin	Potter	HQ-CWF, MF	None
5—Bailey Run	Basin, Little Bailey Run to Mouth	Potter	HQ-CWF, MF	None
[5—Barrett Slide	Basin	Potter	HQ-CWF, MF	None
5—Mahon Run	Basin	Potter	HQ-CWF, MF	None
5—Berge Run	Basin	Potter	HQ-CWF, MF	None
5—Upper Logue Hollow	Basin	Cameron	HQ-CWF, MF	None
5—Logue Run	Basin	Cameron	HQ-CWF, MF	None
5—Owl Hollow	Basin	Cameron	HQ-CWF, MF	None
5—Norcross Run	Basin	Cameron	HQ-CWF, MF	None
5—Rattlesnake Run	Basin	Cameron	HQ-CWF, MF	None
5—Muley Run	Basin	Cameron	HQ-CWF, MF	None
5—Mill Run	Basin	Cameron	HQ-CWF, MF	None]
4—First Fork Sinnemahoning Creek	Basin, Bailey Run to Lushbaugh Run	Potter	HQ-CWF, MF	None
5—Lushbaugh Run	Basin	Cameron	EV, MF	None
[5—Brooks Run	Basin	Cameron	HQ-CWF, MF	None
5—Little Bailey Run	Basin	Cameron	HQ-CWF, MF	None
5—Short Bend Run	Basin	Cameron	HQ-CWF, MF	None]
4—First Fork Sinnemahoning Creek	Basin, Lushbaugh Run to Stevenson Dam	Potter	HQ-CWF, MF	None
4—First Fork Sinnemahoning Creek	Main Stem, Stevenson Dam to Mouth	Cameron	HQ-TSF, MF	None
5—[Unnamed] Tributaries to First Fork Sinnemahoning Creek	Basins, Stevenson Dam to Mouth	Cameron	HQ-CWF, MF	None
[5—Woodrock Run	Basin	Cameron	HQ-CWF, MF	None
5—Roaring Run	Basin	Cameron	HQ-CWF, MF	None
5—Bronson Run	Basin	Cameron	HQ-CWF, MF	None
5—Joes Run	Basin	Cameron	HQ-CWF, MF	None
5—Guys Hollow	Basin	Cameron	HQ-CWF, MF	None
5—Lick Island Run	Basin	Cameron	HQ-CWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
5—Pumpkin Hollow	Basin	Cameron	HQ-CWF, MF	None
5—Arksill Run	Basin	Cameron	HQ-CWF, MF	None
5—Pepperhill Run	Basin	Cameron	HQ-CWF, MF	None
5—Riddles Hollow	Basin	Cameron	HQ-CWF, MF	None
5—Whiteoak Run	Basin	Cameron	HQ-CWF, MF	None
5—Board Rock Hollow	Basin	Cameron	HQ-CWF, MF	None
5—Ellicott Run	Basin	Cameron	HQ-CWF, MF	None
4—Wykoff Run	Basin	Cameron	HQ-CWF, MF	None
4—Upper Jerry Run	Basin	Cameron	HQ-CWF, MF	None
4—Lower Jerry Run	Basin	Cameron	HQ-CWF, MF	None
4—Pfoutz Run	Basin	Clinton	HQ-CWF, MF	None
4—Montour Run	Basin	Clinton	HQ-CWF, MF	None
4—Round Island Run	Basin	Clinton	HQ-CWF, MF	None
4—Mill Run	Basin	Clinton	HQ-CWF, MF	None
4—Commissioners Run	Basin	Clinton	HQ-CWF, MF	None
4—Wistar Run	Basin	Clinton	HQ-CWF, MF	None
4—Moccasin Run (Moccasin Falls Run)	Basin	Clinton	HQ-CWF, MF	None
4—Upper Stimpson Run	Basin	Clinton	HQ-CWF, MF	None]
4—Tributaries to Sinnemahoning Creek	Basins, First Fork to Mouth	Cameron-Clinton	HQ-CWF, MF	None
3—Cooks Run	Basin, Source to Onion Run	Clinton	EV, MF	None
4—Onion Run	Basin	Clinton	EV, MF	None
3—Cooks Run	Basin, Onion Run to Crowley Hollow Run	Clinton	HQ-CWF, MF	None
4—Crowley Hollow Run	Basin	Clinton	CWF, MF	None
3—Cooks Run	Basin, Crowley Hollow Run to Mouth	Clinton	CWF, MF	None
[3—Milligan Run	Basin	Clinton	HQ-CWF, MF	None
3—Smith Run	Basin	Clinton	HQ-CWF, MF	None
3—North Smith Run	Basin	Clinton	HQ-CWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, Cooks Run to Fish Dam Run	Clinton	HQ-CWF, MF	None
3—Fish Dam Run	Basin	Clinton	EV, MF	None
3—Tributaries to West Branch Susquehanna River	Basins, Fish Dam Run to Kettle Creek	Clinton	HQ-CWF, MF	None
3—Kettle Creek	Basin, Source to Inlet of Kettle Creek Reservoir	Clinton	EV, MF	None
3—Kettle Creek	Basin, Inlet of Kettle Creek Reservoir to Alvin Bush Dam	Clinton	HQ-TSF, MF	None
3—Kettle Creek	Basin, Alvin Bush Dam to Twomile Run	Clinton	TSF, MF	None
4—Twomile Run	Basin, Source to Middle Branch Twomile Run	Clinton	HQ-CWF, MF	None
5—Middle Branch Twomile Run	Basin	Clinton	TSF, MF	None
4—Twomile Run	Basin, Middle Branch to Mouth	Clinton	TSF, MF	None
3—Kettle Creek	Basin, Twomile Run to Mouth	Clinton	TSF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
[3—Dry Run	Basin	Clinton	HQ-CWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, Kettle Creek to Barney Run	Clinton	HQ-CWF, MF	None
3—Barney Run	Basin	Clinton	EV, MF	None
[3—Shintown Run	Basin	Clinton	HQ-CWF, MF	None
3—Hall Run	Basin	Clinton	HQ-CWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, Barney Run to Drury Run	Clinton	HQ-CWF, MF	None
3—Drury Run	Basin, Source to Sandy Run	Clinton	EV, MF	None
4—Sandy Run	Basin	Clinton	HQ-CWF, MF	None
3—Drury Run	Basin, Sandy Run to Woodley Draft	Clinton	HQ-CWF, MF	None
4—Woodley Draft	Basin	Clinton	CWF, MF	None
3—Drury Run	Basin, Woodley Draft to Mouth	Clinton	CWF, MF	None
[3—Brewery Run	Basin	Clinton	HQ-CWF, MF	None
3—Peters Run	Basin	Clinton	HQ-CWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, Drury Run to Paddy Run	Clinton	HQ-CWF, MF	None
3—Paddy Run	Basin	Clinton	EV, MF	None
3—Tributaries to West Branch Susquehanna River	Basins, Paddy Run to UNT 23593 at 40° 18' 5.0" N; 77° 43' 36.8" W (known as Boggs Hollow)	Clinton	HQ-CWF, MF	None
3—[Boggs Hollow] UNT 23593	Basin	Clinton	EV, MF	None
3—Tributaries to West Branch Susquehanna River	Basins, UNT 23593 to Young Womans Creek	Clinton	HQ-CWF, MF	None
3—Young Womans Creek	Basin, Source to Left Branch Young Womans Creek	Clinton	EV, MF	None
3—Young Womans Creek	Basin, Left Branch Young Womans Creek to Mouth	Clinton	HQ-CWF, MF	None
[3—Caldwell Run	Basin	Clinton	HQ-CWF, MF	None
3—Dry Run	Basin	Clinton	HQ-CWF, MF	None
3—Hyner Run	Basin	Clinton	HQ-CWF, MF	None
3—Little McCloskey Run	Basin	Clinton	HQ-CWF, MF	None
3—Big McCloskey Run	Basin	Clinton	HQ-CWF, MF	None
3—Huff Run	Basin	Clinton	HQ-CWF, MF	None
3—Schoolhouse Hollow	Basin	Clinton	HQ-CWF, MF	None
3—Goodman Hollow	Basin	Clinton	HQ-CWF, MF	None
3—Johnson Run	Basin	Clinton	HQ-CWF, MF	None
3—Ritchie Run	Basin	Clinton	HQ-CWF, MF	None
3—Green Run	Basin	Clinton	HQ-CWF, MF	None
3—Rattlesnake Run	Basin	Clinton	HQ-CWF, MF	None
3—Grugan Hollow	Basin	Clinton	HQ-CWF, MF	None
3—Mill Run	Basin	Clinton	HQ-CWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Baker Run	Basin	Clinton	HQ-CWF, MF	None
3—McCloskey Run	Basin	Clinton	HQ-CWF, MF	None
3—Ferney Run	Basin	Clinton	HQ-CWF, MF	None
3—East Ferney Run	Basin	Clinton	HQ-CWF, MF	None
3—Holland Run	Basin	Clinton	HQ-CWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, Young Womans Creek to Tangascootack Creek	Clinton	HQ-CWF, MF	None
3—[Tangascootak] Tangascootack Creek	[Main Stem] Basin, Source to North Fork Tangascootack Creek	Clinton	CWF, MF	None
[4—Unnamed Tributaries to Tangascootack Creek	Basins	Clinton	CWF, MF	None]
4—North Fork [Tangascootak] Tangascootack Creek	Basin	Clinton	HQ-CWF, MF	None
[4—Bird Run	Basin	Clinton	CWF, MF	None]
3—Tangascootack Creek	Basin, North Fork Tangascootack Creek to Mouth	Clinton	CWF, MF	None
3—Tributaries to West Branch Susquehanna River	Basins, Tangascootack Creek to Lick Run	Clinton	HQ-CWF, MF	None
3—Lick Run	Basin, Source to Farthest Upstream Crossing of LR 18011 (SR 1001)	Clinton	EV, MF	None
3—Lick Run	Basin, Farthest Upstream Crossing of LR 18011 to Mouth	Clinton	HQ-CWF, MF	None
3—Tributaries to West Branch Susquehanna River	Basins, Lick Run to and including Queens Run	Clinton	HQ-CWF, MF	None
3—Queens Run	Basin	Clinton	HQ-CWF, MF	None
3—[Unnamed] Tributaries to West Branch Susquehanna River	[Queens Run to Pine Creek] Basins, Queens Run to Bald Eagle Creek	Clinton[-Lycoming]	CWF, MF	None
[3—Sugar Run	Basin	Clinton	CWF, MF	None
3—Reeds Run	Basin	Clinton	CWF, MF	None]
3—Bald Eagle Creek	Basin, Source to Laurel Run (at Port Matilda)	Centre	CWF, MF	None
	* * * * *			
3—Bald Eagle Creek	Main Stem, Laurel Run to Nittany Creek	Centre	TSF, MF	None
4—[Unnamed] Tributaries to Bald Eagle Creek	Basins, Laurel Run [to Nittany Creek] (at Port Matilda) to Laurel Run at 40° 51' 47.8" N; 77° 56' 7.3" W	Centre	CWF, MF	None
[4—Mudlick Run	Basin	Centre	CWF, MF	None]
4—Laurel Run	Basin	Centre	EV, MF	None
[4—Dicks Run	Basin	Centre	CWF, MF	None
4—Dewitt Run	Basin	Centre	CWF, MF	None]

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—Tributaries to Bald Eagle Creek	Basins, Laurel Run to Wallace Run	Centre	CWF, MF	None
4—Wallace Run	Basin, Source to [Unnamed Tributary at Gum Stump] UNT 23105 at 40° 58' 44.2" N; 77° 50' 59.3" W	Centre	EV, MF	None
5—[Unnamed Tributary at Gum Stump] UNT 23105	Basin	Centre	EV, MF	None
4—Wallace Run	Basin, [Unnamed Tributary at Gum Stump] UNT 23105 to Mouth	Centre	HQ-CWF, MF	None
[4—Moose Run	Basin	Centre	CWF, MF	None]
4—Tributaries to Bald Eagle Creek	Basins, Wallace Run to Spring Creek	Centre	CWF, MF	None
4—Spring Creek	Main Stem, Source to PA 550 Bridge	Centre	HQ-CWF, MF	None
	* * * * *			
5—UNTs to Spring Creek	Basins, PA 550 Bridge to Mouth	Centre	CWF, MF	None
5—Logan Branch	Basin, Source to [UNT 23007 at RM 7.16] Confluence with Tributary at 40° 49' 56.6"N; 77° 45' 18.8" W	Centre	[CWF, MF] HQ-CWF, MF	None
6—[UNT 23007 at RM 7.16 (locally McBrides Run)] Tributary at 40° 49' 56.6"N; 77° 45' 18.8" W	Basin	Centre	[HQ-CWF, MF] CWF, MF	None
5—Logan Branch	Basin, [UNT 23007] Confluence with Tributary at 40° 49' 56.6"N; 77° 45' 18.8" W to T 371 Bridge	Centre	CWF, MF	None
5—Logan Branch	Main Stem, T-371 Bridge to Mouth	Centre	HQ-CWF, MF	None
6—[Unnamed] Tributaries to Logan Branch	Basins, T-371 Bridge to Mouth	Centre	CWF, MF	None
5—Buffalo Run	Basin, Source to T 942 Bridge at [RM 0.66 (near Coleville)] 40° 54' 35.4" N; 77° 47' 37.3" W	Centre	HQ-CWF, MF	None
5—Buffalo Run	Basin, T 942 Bridge to Mouth	Centre	CWF, MF	None
[4—Antis Run	Basin	Centre	CWF, MF	None]
4—Tributaries to Bald Eagle Creek	Basins, Spring Creek to Nittany Creek	Centre	CWF, MF	None
4—Nittany Creek	Basin, Source to I-80	Centre	CWF, MF	None
4—Nittany Creek	Basin, I-80 to Mouth	Centre	HQ-CWF, MF	None
3—Bald Eagle Creek	Main Stem, Nittany Creek to Mouth	Centre	WWF, MF	None
4—[Unnamed] Tributaries to Bald Eagle Creek	Basins, Nittany Creek to [Mouth] Lick Run	Centre [-Clinton]	CWF, MF	None
[4—Bullit Run	Basin	Centre	CWF, MF	None
4—Greens Run	Basin	Centre	CWF, MF	None]

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—Lick Run	Basin	Centre	HQ-CWF, MF	None
[4—Hunters Run	Basin	Centre	CWF, MF	None
4—Marsh Creek	Basin	Centre	CWF, MF	None]
4—Tributaries to Bald Eagle Creek	Basins, Lick Run to Beech Creek	Centre	CWF, MF	None
4—Beech Creek				
5—South Fork Beech Creek	Basin, Source to Stinktown Run	Centre	CWF, MF	None
6—Stinktown Run	Basin	Centre	HQ-CWF, MF	None
5—South Fork Beech Creek	Basin, Stinktown Run to Mouth	Centre	CWF, MF	None
5—North Fork Beech Creek	Basin, Source to Confluence with South Fork	Centre	CWF, MF	None
4—Beech Creek	[Main Stem] Basin, Confluence of South and North [Branches to Mouth] Forks to Rock Run	[Clinton-]Centre	CWF, MF	None
[5—UNTs to Beech Creek	Basins, Confluence of South and North Branches to Mouth	Clinton-Centre	CWF, MF	None]
5—Rock Run	Basin	Centre	EV, MF	None
[5—Sandy Run	Basin	Centre	CWF, MF	None
5—Wolf Run	Basin	Centre	CWF, MF	None]
4—Beech Creek	Basin, Rock Run to Panther Run	Centre	CWF, MF	None
5—Panther Run	Basin	Centre	EV, MF	None
[5—Eddy Lick Run	Basin	Centre	CWF, MF	None
5—Logway Run	Basin	Centre	CWF, MF	None
5—Council Run	Basin	Centre	CWF, MF	None]
4—Beech Creek	Basin, Panther Run to Two Rock Run	Centre	CWF, MF	None
5—Two Rock Run	Basin	Centre	EV, MF	None
[5—Three Rock Run	Basin	Centre	CWF, MF	None]
4—Beech Creek	Basin, Two Rock Run to Hayes Run	Centre	CWF, MF	None
5—Hayes Run	Basin	Centre	EV, MF	None
4—Beech Creek	Basin, Hayes Run to Big Run	Centre	CWF, MF	None
5—Big Run				
6—Middle Branch Big Run	Basin, Source to [Thornapple Run] UNT 22666 at 41° 10' 47.7" N; 77° 45' 58.0" W	Clinton	EV, MF	None
7—[Thornapple Run] UNT 22666	Basin	Clinton	CWF, MF	None
6—Middle Branch Big Run	Basin, [Thornapple Run] UNT 22666 to Confluence with East Branch	Clinton	CWF, MF	None
6—East Branch Big Run	Basin, Source to [RM 4.5] a point at 41° 11' 15.5" N; 77° 43' 51.5" W	Clinton	EV, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
6—East Branch Big Run	Basin, [RM 4.5] from the point at 41° 11' 15.5" N; 77° 43' 51.5" W to Confluence with Middle Branch	Clinton	CWF, MF	None
5—Big Run	[Main Stem] Basin, Confluence of Middle and East Branches to [Mouth] West Branch Big Run	Clinton	CWF, MF	None
[6—Unnamed Tributaries to Big Run	Basins, Confluence of Middle and East Branches to Mouth	Clinton	CWF, MF	None]
6—West Branch Big Run	Basin	Clinton	EV, MF	None
5—Big Run	Basin, West Branch Big Run to Mouth	Clinton	CWF, MF	None
4—Beech Creek	Basin, Big Run to Monument Run	Clinton	CWF, MF	None
5—Monument Run	Basin	Clinton	HQ-CWF, MF	None
[5—Twin Run	Basin	Clinton	CWF, MF	None
5—Bitner Run	Basin	Clinton	CWF, MF	None
5—Sugar Run	Basin	Clinton	CWF, MF	None
4—Laurel Run	Basin	Clinton	CWF, MF	None
4—Beech Creek	Basin, Monument Run to Mouth	Clinton	CWF, MF	None]
4—Tributaries to Bald Eagle Creek	Basins, Beech Creek to Fishing Creek	Clinton	CWF, MF	None
4—Fishing Creek	Basin, Source to Cherry Run	Clinton	HQ-CWF, MF	None
5—Cherry Run	Basin	Clinton	EV, MF	None
4—Fishing Creek	[Main Stem, Cherry Run to Long Run] Basin, Cherry Run to Little Fishing Creek	Clinton	HQ-CWF, MF	None
[5—Unnamed Tributaries to Fishing Creek	Basins, Cherry Run to Long Run	Clinton	HQ-CWF, MF	None]
5—Little Fishing Creek	[Main Stem] Basin, Source to Roaring Run	Clinton	HQ-CWF, MF	None
[6—Unnamed Tributaries to Little Fishing Creek	Basins	Centre-Clinton	HQ-CWF, MF	None]
6—Roaring Run	Basin, Source to Camp Krislund	Centre	EV, MF	None
6—Roaring Run	Basin, Camp Krislund to Mouth	Centre	HQ-CWF, MF	None
[5—Cedar Run	Basin	Clinton	HQ-CWF, MF	None]
5—Little Fishing Creek	Basin, Roaring Run to Mouth	Clinton	HQ-CWF, MF	None
4—Fishing Creek	Basin, Little Fishing Creek to Long Run	Clinton	HQ-CWF, MF	None
5—Long Run	Basin	Clinton	HQ-CWF, MF	None
4—Fishing Creek	Basin, Long Run to Mouth	Clinton	CWF, MF	None
4—Tributaries to Bald Eagle Creek	Basins, Fishing Creek to Harveys Run	Clinton	CWF, MF	None

* * * * *

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Tributaries to West Branch Susquehanna River	Basins, Bald Eagle Creek to McElhattan Creek	Clinton	CWF, MF	None
3—McElhattan Creek	Basin, Source to Keller Reservoir Water Supply Intake	Clinton	HQ-CWF, MF	None
3—McElhattan Creek	Basin, Keller Water Supply Intake to Mouth	Clinton	CWF, MF	None
3—Tributaries to West Branch Susquehanna River	Basins, McElhattan Creek to Chatham Run	Clinton	CWF, MF	None
3—Chatham Run	Basin, Source to Chatham Water Co. Intake	Clinton	HQ-CWF, MF	None
3—Chatham Run	Basin, Chatham Water Co. Intake to Mouth	Clinton	CWF, MF	None
3—Tributaries to West Branch Susquehanna River	Basins, Chatham Run to Henry Run	Clinton	CWF, MF	None
3—Henry Run	Basin	Clinton	HQ-CWF, MF	None
3—Tributaries to West Branch Susquehanna River	Basins, Henry Run to Pine Creek	Clinton	CWF, MF	None
3—Pine Creek	Basin, Source to South Branch Pine Creek	Potter	HQ-CWF, MF	None
4—South Branch Pine Creek	Basin	Potter	HQ-CWF, MF	None
3—Pine Creek	Main Stem, South Branch Pine Creek to Marsh Creek	Tioga	EV, MF	None
4—[Unnamed] Tributaries to Pine Creek	Basins, South Branch Pine Creek to [Marsh Creek] Johnson Brook	Potter [-Tioga]	HQ-CWF, MF	None
4—Johnson Brook	Basin, Source to [Farthest Downstream Crossing of] State Game Lands No. 64 Border at 41° 45' 8.2" N; 77° 37' 59.2" W	Potter	EV, MF	None
4—Johnson Brook	Basin, [Farthest Downstream Crossing of] State Game Lands No. 64 Border at 41° 45' 8.2" N; 77° 37' 59.2" W to Mouth	Potter	HQ-CWF, MF	None
[4—Phoenix Run	Basin	Tioga	HQ-CWF, MF	None
4—Elk Run	Basin	Tioga	HQ-CWF, MF	None
4—Benaure Hollow	Basin	Tioga	HQ-CWF, MF	None]
4—Tributaries to Pine Creek	Basins, Johnson Brook to Long Run	Potter-Tioga	HQ-CWF, MF	None
4—Long Run	Basin	Tioga	CWF, MF	None
[4—Lick Run	Basin	Tioga	HQ-CWF, MF	None
4—Shin Hollow	Basin	Tioga	HQ-CWF, MF	None
4—Painter Run	Basin	Tioga	HQ-CWF, MF	None
4—Steele Run Hollow	Basin	Tioga	HQ-CWF, MF	None
4—Woodruff Hollow	Basin	Tioga	HQ-CWF, MF	None
4—Schanbacher Hollow	Basin	Tioga	HQ-CWF, MF	None
4—Bee Tree Hollow	Basin	Tioga	HQ-CWF, MF	None
4—Herrington Hollow	Basin	Tioga	HQ-CWF, MF	None]

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—Tributaries to Pine Creek	Basins, Long Run to Marsh Creek	Potter-Tioga	HQ-CWF, MF	None
4—Marsh Creek	[Main Stem, Source to Straight Run	Tioga	WWF, MF	None
5—Unnamed Tributaries to Marsh Creek	Basins, Source to Straight Run	Tioga	CWF, MF	None]
5—Charleston Creek	Basin, Source to Confluence with Morris Branch	Tioga	WWF, MF	None
5—Morris Branch	Basin, Source to Kelsey Creek	Tioga	CWF, MF	None
[5] 6—Kelsey Creek	Basin	Tioga	WWF, MF	None
[5—Horse Thief Run	Basin	Tioga	CWF, MF	None]
5—Morris Branch	Basin, Kelsey Creek to Confluence with Charleston Creek	Tioga	CWF, MF	None
4—Marsh Creek	Main Stem, Confluence of Charleston Creek and Morris Branch to Straight Run	Tioga	WWF, MF	None
5—Tributaries to Marsh Creek	Basins, Confluence of Charleston Creek and Morris Branch to Baldwin Run	Tioga	CWF, MF	None
5—Baldwin Run	Basin	Tioga	HQ-CWF, MF	None
[5—Hibard Hollow	Basin	Tioga	CWF, MF	None
5—Fuller Hollow	Basin	Tioga	CWF, MF	None
5—Wolf Run	Basin	Tioga	CWF, MF	None
5—Heise Run	Basin	Tioga	CWF, MF	None
5—Smith Run	Basin	Tioga	CWF, MF	None
5—Gee Hollow	Basin	Tioga	CWF, MF	None]
5—Tributaries to Marsh Creek	Basins, Baldwin Run to Canada Run	Tioga	CWF, MF	None
5—Canada Run	Basin	Tioga	HQ-CWF, MF	None
[5—Dantz Run	Basin	Tioga	CWF, MF	None]
5—Tributaries to Marsh Creek	Basins, Canada Run to Straight Run	Tioga	CWF, MF	None
5—Straight Run	Basin	Tioga	HQ-CWF, MF	None
4—Marsh Creek	[Main Stem, Straight Run to Mouth] Basin, Straight Run to Asaph Run	Tioga	CWF, MF	None
[5—Unnamed Tributaries to Marsh Creek	Basins, Straight Run to Mouth	Tioga	CWF, MF	None]
5—Asaph Run	Basin	Tioga	HQ-CWF, MF	None
[5—Gray Hollow	Basin	Tioga	CWF, MF	None
5—Kinney Hollow	Basin	Tioga	CWF, MF	None]
4—Marsh Creek	Basin, Asaph Run to Mouth	Tioga	CWF, MF	None
3—Pine Creek	Main Stem, Marsh Creek to Mouth	Lycoming-Clinton	HQ-TSF, MF	None
4—[Unnamed] Tributaries to Pine Creek	Basins, Marsh Creek to [Mouth] Pine Island Run	Tioga-Lycoming-Clinton	HQ-CWF, MF	None
[4—Strap Mill Hollow	Basin	Tioga	HQ-CWF, MF	None
4—Darling Run	Basin	Tioga	HQ-CWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—Owassee Slide Run	Basin	Tioga	HQ-CWF, MF	None
4—Pinafore Run	Basin	Tioga	HQ-CWF, MF	None
4—Bear Run	Basin	Tioga	HQ-CWF, MF	None
4—Little Fourmile Run	Basin	Tioga	HQ-CWF, MF	None
4—Fourmile Run	Basin	Tioga	HQ-CWF, MF	None
4—Stowell Run	Basin	Tioga	HQ-CWF, MF	None
4—Burdic Run	Basin	Tioga	HQ-CWF, MF	None
4—Horse Run	Basin	Tioga	HQ-CWF, MF	None
4—Tumbling Run	Basin	Tioga	HQ-CWF, MF	None
4—Little Slate Run	Basin	Tioga	HQ-CWF, MF	None
4—Ice Break Run	Basin	Tioga	HQ-CWF, MF	None
4—Campbells Run	Basin	Tioga	HQ-CWF, MF	None
4—Straight Creek	Basin	Tioga	HQ-CWF, MF	None
4—Good Spring Hollow	Basin	Tioga	HQ-CWF, MF	None
4—Rail Island Run	Basin	Tioga	HQ-CWF, MF	None]
4—Pine Island Run	Basin	Tioga	EV, MF	None
[4—Benjamin Hollow	Basin	Tioga	HQ-CWF, MF	None
4—Dillon Hollow	Basin	Tioga	HQ-CWF, MF	None
4—Clay Mine Run	Basin	Tioga	HQ-CWF, MF	None
4—Water Tank Run	Basin	Tioga	HQ-CWF, MF	None
4—Bohen Run	Basin	Tioga	HQ-CWF, MF	None
4—Stone Quarry Run	Basin	Tioga	HQ-CWF, MF	None
4—Jerry Run	Basin	Tioga	HQ-CWF, MF	None]
4—Tributaries to Pine Creek	Basins, Pine Island Run to Babb Creek	Tioga	HQ-CWF, MF	None
4—Babb Creek	Main Stem	Tioga	CWF, MF	None
		* * *		
4—Trout Run	Basin	Lycoming	HQ-CWF, MF	None
4—Tributaries to Pine Creek	Basins, Babb Creek to Cedar Run	Tioga-Lycoming	HQ-CWF, MF	None
4—Cedar Run	Basin	Lycoming	EV, MF	None
[4—Jacobs Run	Basin	Lycoming	HQ-CWF, MF	None
4—Gamble Run	Basin	Lycoming	HQ-CWF, MF	None
4—Elk Run	Basin	Lycoming	HQ-CWF, MF	None
4—Hilborn Run	Basin	Lycoming	HQ-CWF, MF	None]
4—Tributaries to Pine Creek	Basins, Cedar Run to Slate Run	Lycoming	HQ-CWF, MF	None
4—Slate Run	Basin	Lycoming	EV, MF	None
[4—Little Slate Run	Basin	Lycoming	HQ-CWF, MF	None
4—Naval Run	Basin	Lycoming	HQ-CWF, MF	None
4—Callahan Run	Basin	Lycoming	HQ-CWF, MF	None
4—Bonnell Run	Basin	Lycoming	HQ-CWF, MF	None
4—Wolf Run	Basin	Lycoming	HQ-CWF, MF	None
4—Ross Run	Basin	Lycoming	HQ-CWF, MF	None]
4—Tributaries to Pine Creek	Basins, Slate Run to Mill Run	Lycoming	HQ-CWF, MF	None
4—Mill Run	Basin, Source to Bull Run	Lycoming	EV, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
5—Bull Run	Basin	Lycoming	HQ-CWF, MF	None
4—Mill Run	Basin, Bull Run to Mouth	Lycoming	HQ-CWF, MF	None
[4—Trout Run	Basin	Lycoming	HQ-CWF, MF	None
4—Miller Run	Basin	Lycoming	HQ-CWF, MF	None
4—Truman Run	Basin	Lycoming	HQ-CWF, MF	None
4—Bluestone Run	Basin	Lycoming	HQ-CWF, MF	None
4—Solomon Run	Basin	Lycoming	HQ-CWF, MF	None
4—Shanty Run	Basin	Lycoming	HQ-CWF, MF	None
4—McClure Run	Basin	Lycoming	HQ-CWF, MF	None
4—Callahan Run	Basin	Lycoming	HQ-CWF, MF	None
4—Browns Run	Basin	Lycoming	HQ-CWF, MF	None
4—Dry Run	Basin	Lycoming	HQ-CWF, MF	None
4—Upper Pine Bottom Run	Basin	Lycoming	HQ-CWF, MF	None
4—Lower Pine Bottom Run	Basin	Lycoming	HQ-CWF, MF	None
4—Bull Run	Basin	Lycoming	HQ-CWF, MF	None]
4—Tributaries to Pine Creek	Basins, Mill Run to Little Pine Creek	Lycoming	HQ-CWF, MF	None
4—Little Pine Creek				
5—Texas Creek (Zimmerman Creek)	Basin, Source to Confluence with Blockhouse Creek	Lycoming	HQ-CWF, MF	None
5—Blockhouse Creek	Basin, Source to Flicks Run	Lycoming	CWF, MF	None
6—Flicks Run	Basin	Lycoming	HQ-CWF, MF	None
5—Blockhouse Creek	Basin, Flicks Run to Confluence with Texas Creek	Lycoming	CWF, MF	None
4—Little Pine Creek	Main Stem, Confluence of Texas and Blockhouse Creeks to Little Pine Creek Dam	Lycoming	CWF, MF	None
5—[Unnamed] Tributaries to Little Pine Creek	Basin, Confluence of Texas and Blockhouse Creeks to [Little Pine Creek Dam] English Run	Lycoming	HQ-CWF, MF	None
[5—Bear Run	Basin	Lycoming	HQ-CWF, MF	None
5—Bonnell Run	Basin	Lycoming	HQ-CWF, MF	None
5—Lick Run	Basin	Lycoming	HQ-CWF, MF	None]
5—English Run	Basin	Lycoming	CWF, MF	None
[5—Coal Run	Basin	Lycoming	HQ-CWF, MF	None
5—Rogers Run	Basin	Lycoming	HQ-CWF, MF	None]
5—Tributaries to Little Pine Creek	Basins, English Run to Otter Run	Lycoming	HQ-CWF, MF	None
5—Otter Run	Basin	Lycoming	CWF, MF	None
[5—Carsons Run	Basin	Lycoming	HQ-CWF, MF	None
5—McKees Run	Basin	Lycoming	HQ-CWF, MF	None
5—Panther Run	Basin	Lycoming	HQ-CWF, MF	None
5—Naval Run	Basin	Lycoming	HQ-CWF, MF	None
5—Love Run	Basin	Lycoming	HQ-CWF, MF	None]
5—Tributaries to Little Pine Creek	Basins, Otter Run to Little Pine Creek Dam	Lycoming	HQ-CWF, MF	None

PROPOSED RULEMAKING

6661

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—Little Pine Creek	Main Stem, Little Pine Creek Dam to Mouth	Lycoming	TSF, MF	None
5—[Unnamed] Tributaries to Little Pine Creek	Basins, Little Pine Creek Dam to Mouth	Lycoming	HQ-CWF, MF	None
[5—English Run	Basin	Lycoming	HQ-CWF, MF	None
5—Boone Run	Basin	Lycoming	HQ-CWF, MF	None
5—Dam Run	Basin	Lycoming	HQ-CWF, MF	None
4—Ramsey Run	Basin	Lycoming	HQ-CWF, MF	None
4—Bonnell Run	Basin	Lycoming	HQ-CWF, MF	None
4—Tombs Run	Basin	Lycoming	HQ-CWF, MF	None
4—Gamble Run	Basin	Lycoming	HQ-CWF, MF	None
4—Furnace Run	Basin	Lycoming	HQ-CWF, MF	None
4—Sulphur Run	Basin	Clinton	HQ-CWF, MF	None
4—Nichols Run	Basin	Lycoming	HQ-CWF, MF	None]
3—[Unnamed] Tributaries to North Bank of West Branch Susquehanna River	Basins, Pine Creek to Loyalsock Creek except Larrys Creek and Lycoming Creek	Lycoming	WWF, MF	None
3—Larrys Creek	Basin, Source to Second Fork Larrys Creek	Lycoming	HQ-CWF, MF	None
4—Second Fork Larrys Creek	Basin	Lycoming	HQ-CWF, MF	None
3—Larrys Creek	Basin, Second Fork to First Fork	Lycoming	WWF, MF	None
4—First Fork Larrys Creek	Basin	Lycoming	HQ-CWF, MF	None
3—Larrys Creek	Basin, First Fork to Mouth	Lycoming	WWF, MF	None
3—Lycoming Creek	Main Stem, Source to Long Run	Lycoming	CWF, MF	None
4—Tributaries to Lycoming Creek	Basins, Source to Red Run	Tioga-Lycoming	HQ-CWF, MF	None
4—Red Run	Basin	Lycoming	CWF, MF	None
4—Tributaries to Lycoming Creek	Basins, Red Run to Long Run	Lycoming	HQ-CWF, MF	None
4—Long Run	Basin	Lycoming	HQ-CWF, MF	None
3—Lycoming Creek	Basin, Long Run to Mouth	Lycoming	WWF, MF	None
3—[Unnamed] Tributaries to South Bank of West Branch Susquehanna River	Basins, Pine Creek to Loyalsock Creek except Aughanbaugh Run, Antes Creek and Big Run	Lycoming	CWF, MF	None
3—Aughanbaugh Run	Basin	Lycoming	HQ-CWF, MF	None
	* * * * *			
3—Antes Creek	Basin, Morgan Valley Run to Mouth	Lycoming	CWF, MF	None
[3—Stewards Run	Basin	Lycoming	WWF, MF	None
3—Larrys Creek	Basin, Source to Second Fork	Lycoming	HQ-CWF, MF	None
4—Second Fork Larrys Creek	Basin	Lycoming	HQ-CWF, MF	None
3—Larrys Creek	Basin, Second Fork to First Fork	Lycoming	WWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—First Fork Larrys Creek	Basin	Lycoming	HQ-CWF, MF	None
3—Larrys Creek	Basin, First Fork to Mouth	Lycoming	WWF, MF	None]
3—Big Run	Basin	Lycoming	HQ-CWF, MF	None
[3—Pine Run	Basin	Lycoming	WWF, MF	None
3—Quenshukeny Run	Basin	Lycoming	WWF, MF	None
3—Bender Run	Basin	Lycoming	CWF, MF	None
3—Daugherty Run	Basin	Lycoming	WWF, MF	None
3—Mosquito Creek	Basin	Lycoming	CWF, MF	None
3—Lycoming Creek	Main Stem, Source to Long Run	Tioga-Lycoming	CWF, MF	None
4—Unnamed Tributaries to Lycoming Creek	Basins, Source to Long Run	Lycoming	HQ-CWF, MF	None
4—Cascade Run	Basin	Lycoming	HQ-CWF, MF	None
4—Sugar Works Run	Basin	Tioga	HQ-CWF, MF	None
4—Mill Creek	Basin	Tioga	HQ-CWF, MF	None
4—Roaring Branch	Basin	Tioga	HQ-CWF, MF	None
4—Abbott Run	Basin	Lycoming	HQ-CWF, MF	None
4—Red Run	Basin	Lycoming	CWF, MF	None
4—Rock Run	Basin	Lycoming	HQ-CWF, MF	None
4—Frozen Run	Basin	Lycoming	HQ-CWF, MF	None
4—Heylman Run	Basin	Lycoming	HQ-CWF, MF	None
4—Pleasant Stream	Basin	Lycoming	HQ-CWF, MF	None
4—Slacks Run	Basin	Lycoming	HQ-CWF, MF	None
4—Shoemakers Run	Basin	Lycoming	HQ-CWF, MF	None
4—Grays Run	Basin	Lycoming	HQ-CWF, MF	None
4—Hagermans Run	Basin	Lycoming	HQ-CWF, MF	None
4—Glendenen Run	Basin	Lycoming	HQ-CWF, MF	None
4—Trout Run	Basin	Lycoming	HQ-CWF, MF	None
4—Wolf Run	Basin	Lycoming	HQ-CWF, MF	None
4—Daugherty Run	Basin	Lycoming	HQ-CWF, MF	None
4—Hoagland Run	Basin	Lycoming	HQ-CWF, MF	None
4—Long Run	Basin	Lycoming	HQ-CWF, MF	None
3—Lycoming Creek	Basin, Long Run to Mouth	Lycoming	WWF, MF	None
3—Grafius Run	Basin	Lycoming	WWF, MF	None
3—Hagermans Run	Basin	Lycoming	CWF, MF	None
3—Millers Run	Basin	Lycoming	WWF, MF	None]
3—Loyalsock Creek	Basin, Source to Pole Bridge Run	Lycoming	CWF, MF	None
4—Pole Bridge Run	Basin	Sullivan	HQ-CWF, MF	None
3—Loyalsock Creek	[Main Stem, Pole Bridge Creek to Sullivan-Lycoming Border] Basin, Pole Bridge Run to Shanerburg Run	Sullivan [-Lycoming]	CWF, MF	None
[4—Unnamed Tributaries to Loyalsock Creek	Basins, Pole Bridge Creek to Little Loyalsock Creek	Sullivan	CWF, MF	None]

PROPOSED RULEMAKING

6663

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—Shanerburg Run	Basin, Source to [End of Jeep Trail (about 1.5 Miles from Mouth)] a point at 41° 25' 57.5" N; 76° 32' 12.9" W	Sullivan	EV, MF	None
4—Shanerburg Run	Basin, [End of Jeep Trail to Mouth] the point at 41° 25' 57.5" N; 76° 32' 12.9" W to Mouth	Sullivan	HQ-CWF, MF	None
3—Loyalsock Creek	Basin, Shanerburg Run to Tamarack Run	Sullivan	CWF, MF	None
4—Tamarack Run	Basin	Sullivan	HQ-CWF, MF	None
3—Loyalsock Creek	Basin, Tamarack Run to Big Run	Sullivan	CWF, MF	None
4—Big Run	Basin	Sullivan	HQ-CWF, MF	None
[4—Double Run	Basin	Sullivan	CWF, MF	None
4—High Rock Run	Basin	Sullivan	CWF, MF	None
4—Little Loyalsock Creek	Basin	Sullivan	CWF, MF	None]
3—Loyalsock Creek	Basin, Big Run to Little Loyalsock Creek	Sullivan	CWF, MF	None
4—Little Loyalsock Creek	Basin	Sullivan	CWF, MF	None
3—Loyalsock Creek	Main Stem, Little Loyalsock Creek to Sullivan-Lycoming County Border at 41° 24' 7.8" N; 76° 44' 39.5" W	Sullivan	CWF, MF	None
4—[Unnamed] Tributaries to Loyalsock Creek	Basins, Little Loyalsock Creek to [Sullivan-Lycoming County Border] Ketchum Run	Sullivan	HQ-CWF, MF	None
[4—Scar Run	Basin	Sullivan	HQ-CWF, MF	None]
4—Ketchum Run	Basin	Sullivan	EV, MF	None
[4—Cape Run	Basin	Sullivan	HQ-CWF, MF	None
4—Barkshed Run	Basin	Sullivan	HQ-CWF, MF	None
4—Joes Run	Basin	Sullivan	HQ-CWF, MF	None
4—Elk Creek	Basin	Sullivan	HQ-CWF, MF	None
4—Slab Run	Basin	Sullivan	HQ-CWF, MF	None
4—Mill Creek	Basin	Sullivan	HQ-CWF, MF	None
4—Huckle Run	Basin	Sullivan	HQ-CWF, MF	None
4—Dry Run	Basin	Sullivan	HQ-CWF, MF	None]
4—Tributaries to Loyalsock Creek	Basins, Ketchum Run to Ogdonia Creek	Sullivan	HQ-CWF, MF	None
4—Ogdonia Creek	Basin, Source to Kettle Creek	Sullivan	HQ-CWF, MF	None
5—Kettle Creek	Basin	Sullivan	EV, MF	None
4—Ogdonia Creek	Basin, Kettle Creek to Mouth	Sullivan	HQ-CWF, MF	None
4—Tributaries to Loyalsock Creek	Basins, Ogdonia Creek to Sullivan-Lycoming County Border at 41° 24' 7.8" N; 76° 44' 39.5" W	Sullivan	HQ-CWF, MF	None
3—Loyalsock Creek	Main Stem, Sullivan-Lycoming County Border to [Mouth] PA 973 Bridge at 41° 19' 30.8" N; 76° 54' 42.6" W	Lycoming	TSF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—[Unnamed] Tributaries to Loyalsock Creek	[Basin] Basins, Sullivan-Lycoming County Border to [PA 973 Bridge] Plunketts Creek	Lycoming	HQ-CWF, MF	None
4—Plunketts Creek	[Main Stem] Basin, Source to Noon Branch	Lycoming	HQ-CWF, MF	None
[5—Unnamed Tributaries to Plunketts Creek	Basins	Sullivan-Lycoming	HQ-CWF, MF	None
5—Reibsan Run	Basin	Lycoming	HQ-CWF, MF	None
5—Mock Creek	Basin	Lycoming	HQ-CWF, MF	None]
5—Noon Branch	Basin, Source to Wolf Run	Lycoming	EV, MF	None
6—Wolf Run	Basin	Lycoming	HQ-CWF, MF	None
5—Noon Branch	Basin, Wolf Run to Mouth	Lycoming	HQ-CWF, MF	None
4—Plunketts Creek	Basin, Noon Branch to King Run	Lycoming	HQ-CWF, MF	None
5—King Run	Basin, Source to Engle Run	Lycoming	HQ-CWF, MF	None
6—Engle Run	Basin	Lycoming	EV, MF	None
5—King Run	Basin, Engle Run to Mouth	Lycoming	HQ-CWF, MF	None
[5—Dry Run	Basin	Lycoming	HQ-CWF, MF	None
4—Bear Creek	Basin	Lycoming	HQ-CWF, MF	None
4—Little Bear Creek	Basin	Lycoming	HQ-CWF, MF	None
4—Dry Run	Basin	Lycoming	HQ-CWF, MF	None
4—Butternut Grove Run	Basin	Lycoming	HQ-CWF, MF	None
4—Wallis Run	Basin	Lycoming	HQ-CWF, MF	None
4—Unnamed Tributaries to Loyalsock Creek	Basins, PA 973 Bridge to Mouth	Lycoming	TSE, MF	None
4—Mill Creek (West)	Basin	Lycoming	TSE, MF	None
4—Mill Creek (East)	Basin	Lycoming	TSE, MF	None]
4—Plunketts Creek	Basin, King Run to Mouth	Lycoming	HQ-CWF, MF	None
4—Tributaries to Loyalsock Creek	Basins, Plunketts Creek to PA 973 Bridge	Lycoming	HQ-CWF, MF	None
3—Loyalsock Creek	Basin, PA 973 Bridge to Mouth	Lycoming	TSE, MF	None
3—[Unnamed] Tributaries to West Branch Susquehanna River	Basins, Loyalsock Creek to [Mouth] Muncy Creek	Lycoming-Northumberland-Union	WWF, MF	None
[3—Tules Run	Basin	Lycoming	WWF, MF	None
3—Turkeys Run	Basin	Lycoming	WWF, MF	None
3—Carpenters Run	Basin	Lycoming	WWF, MF	None]
3—Muncy Creek	Basin, Source to second SR 2002 Bridge upstream of Sonestown at [RM 26.4] 41° 21' 24.5" N; 76° 31' 34.9" W	Sullivan	EV, MF	None
3—Muncy Creek	Main Stem, Second SR 2002 Bridge upstream of Sonestown [at RM 26.4] to US 220 Bridge at Muncy Valley at 41° 20' 36.3" N; 76° 35' 8.1" W	Sullivan	CWF, MF	None

PROPOSED RULEMAKING

6665

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—[UNTs] Tributaries to Muncy Creek	Basins, Second SR 2002 Bridge upstream of Sonestown [at RM 26.4] to US 220 Bridge at Muncy Valley	Sullivan	HQ-CWF, MF	None
[4—Slip Run	Basin	Sullivan	HQ-CWF, MF	None
4—Big Run	Basin	Sullivan	HQ-CWF, MF	None]
3—Muncy Creek	Main Stem, US 220 Bridge at Muncy Valley to Mouth	Lycoming	TSF, MF	None
4—[Unnamed] Tributaries to Muncy Creek	Basins, US 220 Bridge at Muncy Valley to Laurel Run	Sullivan-Lycoming	HQ-CWF, MF	None
[4—Trout Run	Basin	Lycoming	HQ-CWF, MF	None
4—Spring Run	Basin	Lycoming	HQ-CWF, MF	None
4—Rock Run	Basin	Lycoming	HQ-CWF, MF	None
4—Lick Run	Basin	Lycoming	HQ-CWF, MF	None
4—Big Run	Basin	Lycoming	HQ-CWF, MF	None
4—Roaring Run	Basin	Lycoming	HQ-CWF, MF	None]
4—Laurel Run	Basin	Lycoming	HQ-CWF, MF	None
4—[Unnamed] Tributaries to Muncy Creek	Basins, Laurel Run to Mouth	Lycoming	CWF, MF	None
[4—Pine Run	Basin	Lycoming	CWF, MF	None
4—Gregs Run	Basin	Lycoming	CWF, MF	None
4—Sugar Run	Basin	Lycoming	CWF, MF	None
4—Little Muncy Creek	Basin	Lycoming	CWF, MF	None
4—Wolf Run	Basin	Lycoming	CWF, MF	None
3—Glade Run	Basin	Lycoming	WWF, MF	None
3—Turkey Run	Basin	Lycoming	WWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, Muncy Creek to Black Hole Creek	Lycoming	WWF, MF	None
3—Black Hole Creek	Basin	Lycoming	TSF, MF	None
[3—Black Run	Basin	Lycoming	WWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, Black Hole Creek to White Deer Hole Creek	Lycoming-Northumberland-Union	WWF, MF	None
3—White Deer Hole Creek	Basin, Source to Spring Creek	Union	HQ-CWF, MF	None
4—Spring Creek	Basin	Union	TSF, MF	None
3—White Deer Hole Creek	Basin, Spring Creek to Mouth	Union	TSF, MF	None
[3—Delaware Run	Basin	Northumberland	WWF, MF	None
3—Dry Run	Basin	Northumberland	WWF, MF	None
3—Spring Run	Basin	Northumberland	WWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, White Deer Hole Creek to White Deer Creek	Northumberland-Union	WWF, MF	None
3—White Deer Creek	Basin	Union	HQ-CWF, MF	None
[3—Warrior Run	Basin	Northumberland	WWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Muddy Run	Basin	Northumberland	WWF, MF	None
3—Limestone Run	Basin	Northumberland	WWF, MF	None]
3—Tributaries to West Branch Susquehanna River	Basins, White Deer Creek to Buffalo Creek	Northumberland-Union	WWF, MF	None
3—Buffalo Creek	Basin, Source to LR 59042 (SR 3005) Bridge at 40° 55' 24.0" N; 77° 7' 41.9" W	Union	HQ-CWF, MF	None
3—Buffalo Creek	[Main Stem, LR 59042 to Rapid Run] Basin, LR 59042 Bridge to North Branch Buffalo Creek	Union	CWF, MF	None
[4—Unnamed Tributaries to Buffalo Creek	Basins, LR 59042 Bridge to Rapid Run	Union	CWF, MF	None]
4—North Branch Buffalo Creek	Basin, Source to Mifflinburg Water Supply Dam	Union	EV, MF	None
4—North Branch Buffalo Creek	Basin, Mifflinburg Water Supply Dam to Mouth	Union	HQ-CWF, MF	None
3—Buffalo Creek	Basin, North Branch Buffalo Creek to Rapid Run	Union	CWF, MF	None
4—Rapid Run	Basin	Union	HQ-CWF, MF	None
3—Buffalo Creek	Main Stem, Rapid Run to Mouth	Union	TSF, MF	None
4— [Unnamed] Tributaries to Buffalo Creek	Basins, Rapid Run to [Mouth] Stony Run	Union	CWF, MF	None
4—Stony Run	Basin	Union	HQ-CWF, MF	None
[4—Beaver Run	Basin	Union	CWF, MF	None]
4—Tributaries to Buffalo Creek	Basins, Stony Run to Spruce Run	Union	CWF, MF	None
4—Spruce Run	Basin, Source to eastern boundary of Bald Eagle State Forest at [RM 5.09] 41° 1' 43.8" N; 77° 0' 5.4" W	Union	EV, MF	None
4—Spruce Run	Basin, Eastern boundary of Bald Eagle State Forest [at RM 5.09] to Mouth	Union	HQ-CWF, MF	None
[4—Little Buffalo Creek	Basin	Union	CWF, MF	None
3—Limestone Run	Basin	Union	WWF, MF	None
3—Chillisquaque Creek	Basin	Northumberland	WWF, MF	None
3—Turtle Creek	Basin	Union	WWF, MF	None
3—Winfield Creek	Basin	Union	WWF, MF	None]
4—Tributaries to Buffalo Creek	Basins, Spruce Run to Mouth	Union	CWF, MF	None
3—Tributaries to West Branch Susquehanna River	Basins, Buffalo Creek to Mouth	Northumberland-Union	WWF, MF	None

§ 93.9m. Drainage List M.

Susquehanna River Basin in Pennsylvania
Susquehanna River

Stream	Zone	County					Water Uses Protected	Exceptions To Specific Criteria
		*	*	*	*	*		
4—Kern Run	Basin				Snyder		CWF, MF	None
4—[Bowersox Run] UNT 17823 at 40° 46' 30.7" N; 77° 4' 8.9" W (locally known as Bowersox Run)	Basin, Source to [FAS 690] T3008				Snyder		HQ-CWF, MF	None
4—UNT 17823	Basin, T3008 to Mouth				Snyder		CWF, MF	None
4—[Erb Run] UNT 17821 at 40° 46' 38.9" N; 77° 3' 29.1" W (locally known as Erb Run)	Basin, Source to [FAS 690] T3008				Snyder		HQ-CWF, MF	None
4—UNT 17821	Basin, T3008 to Mouth				Snyder		CWF, MF	None
4—Susquehecka Creek (Freeburg Run)	Basin				Snyder		CWF, MF	None
		*	*	*	*	*		
2—Gurdy Run	Basin				Dauphin		WWF, MF	None
2—Armstrong Creek	Basin, Source to [Unnamed Tributary at RM 9.86] UNT 16835 at 40° 30' 31.1" N; 76° 50' 43.2" W				Dauphin		CWF, MF	None
3—[Unnamed Tributary to Armstrong Creek at RM 9.86] UNT 16835	Basin, Source to SR 1003 Bridge at 40° 29' 45.1" N; 76° 47' 56.8" W				Dauphin		[HW-CWF] HQ-CWF, MF	None
3—[Unnamed Tributary to Armstrong Creek at RM 9.86] UNT 16835	Basin, SR 1003 Bridge to Mouth				Dauphin		CWF, MF	None
2—Armstrong Creek	Basin, [Unnamed Tributary at RM 9.86] UNT 16835 to LR 22028 (SR 4001) Bridge				Dauphin		CWF, MF	None
2—Armstrong Creek	Basin, LR 22028 Bridge to Mouth				Dauphin		TSF, MF	None
		*	*	*	*	*		

§ 93.9n. Drainage List N.

Susquehanna River Basin in Pennsylvania
Juniata River

Stream	Zone	County					Water Uses Protected	Exceptions To Specific Criteria
		*	*	*	*	*		
3—Raystown Branch Juniata River	Basin, Source to Breastwork Run				Somerset		CWF, MF	None
4—Breastwork Run	Basin				Somerset		HQ-CWF, MF	None
3—Raystown Branch Juniata River	Basin, Breastwork Run to Somerset-Bedford County Border at 39° 58' 49.3" N; 78° 45' 41.9" W				Somerset-Bedford		CWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Raystown Branch Juniata River	Main Stem, Somerset-Bedford County Border to Bedford-Huntingdon County Border at 40° 13' 49.5" N; 78° 14' 18.2" W	Bedford-Huntingdon	TSF, MF	None
4—[Unnamed] Tributaries to Raystown Branch	Basins, Somerset-Bedford County Border to [Bedford-Huntingdon County Border] Shobers Run	Bedford	WWF, MF	None
[4—Spicer Brook	Basin	Bedford	WWF, MF	None
4—Shawnee Branch	Basin	Bedford	WWF, MF	None
4—Buffalo Run	Basin	Bedford	WWF, MF	None
4—Cumberland Valley Run	Basin	Bedford	WWF, MF	None]
4—Shobers Run	Basin	Bedford	HQ-CWF, MF	None
4—Tributaries to Raystown Branch	Basins, Shobers Run to Dunning Creek	Bedford	WWF, MF	None
4—Dunning Creek	[Main Stem] Basin, Source to Stone Creek	Bedford	WWF, MF	None
[5—Unnamed Tributaries to Dunning Creek	Basins	Bedford	WWF, MF	None
5—Rocklick Creek	Basin	Bedford	WWF, MF	None
5—Bearfoot Run	Basin	Bedford	WWF, MF	None
5—Georges Creek	Basin	Bedford	WWF, MF	None]
5—Stone Creek	Basin, Source to Confluence with UNT 14908 at [RM 0.34] 40° 8' 55" N; 78° 33' 59.5" W	Bedford	WWF, MF	None
6—[Unnamed Tributary (UNT) 14908 to Stone Creek] UNT 14908	Basin	Bedford	CWF, MF	None
5—Stone Creek	Basin, UNT 14908 to Mouth	Bedford	CWF, MF	None
4—Dunning Creek	Basin, Stone Creek to Bobs Creek	Bedford	WWF, MF	None
5—Bobs Creek	Basin, Source to Pavia Run	Bedford	HQ-CWF, MF	None
6—Pavia Run	Basin	Bedford	HQ-CWF, MF	None
5—Bobs Creek	Basin, Pavia Run to Mouth	Bedford	CWF, MF	None
[5—Adams Run	Basin	Bedford	WWF, MF	None
5—Oppenheimer Run	Basin	Bedford	WWF, MF	None
5—Brush Run	Basin	Bedford	WWF, MF	None]
4—Dunning Creek	Basin, Bobs Creek to Imlertown Run	Bedford	WWF, MF	None
5—Imlertown Run	Basin	Bedford	TSF, MF	None
4—Dunning Creek	Basin, Imlertown Run to Pleasant Valley Run	Bedford	WWF, MF	None
5—Pleasant Valley Run	Basin	Bedford	CWF, MF	None
4—Dunning Creek	Basin, Pleasant Valley Run to Mouth	Bedford	WWF, MF	None
4—Tributaries to Raystown Branch	Basins, Dunning Creek to Cove Creek	Bedford	WWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—Cove Creek	Basin	Bedford	EV, MF	None
[4—Snakespring Valley Run	Basin	Bedford	WWF, MF	None]
4—Tributaries to Raystown Branch	Basins, Cove Creek to Clear Creek	Bedford	WWF, MF	None
4—Clear Creek	Basin	Bedford	TSF, MF	None
[4—Greys Run	Basin	Bedford	WWF, MF	None]
4—Tributaries to Raystown Branch	Basins, Clear Creek to Brush Creek	Bedford	WWF, MF	None
4—Brush Creek	Basin, Source to Fulton-Bedford County Border at 39° 57' 6.3" N; 78° 14' 20.3" W	Fulton-Bedford	HQ-CWF, MF	None
4—Brush Creek	Basin, Fulton-Bedford County Border to Mouth	Bedford	WWF, MF	None
[4—Tub Mill Run	Basin	Bedford	WWF, MF	None
4—French Run	Basin	Bedford	WWF, MF	None]
4—Tributaries to Raystown Branch	Basins, Brush Creek to Sherman Valley Branch	Bedford	WWF, MF	None
4—Sherman Valley Run	Basin	Bedford	CWF, MF	None
[4—Pipers Run	Basin	Bedford	WWF, MF	None
4—Sandy Run	Basin	Bedford	WWF, MF	None]
4—Tributaries to Raystown Branch	Basins, Sherman Valley Branch to Yellow Creek	Bedford	WWF, MF	None
4—Yellow Creek	Basin	Bedford	HQ-CWF, MF	None
[4—Sixmile Run	Basin	Bedford	WWF, MF	None]
4—Tributaries to Raystown Branch	Basins, Yellow Creek to Ravers Run	Bedford	WWF, MF	None
4—Ravers Run	Basin	Bedford	TSF, MF	None
[4—Shoup Run	Basin	Bedford	WWF, MF	None]
4—Tributaries to Raystown Branch	Basins, Ravers Run to Bedford-Huntingdon County Border at 40° 13' 49.5" N; 78° 14' 18.2" W	Bedford	WWF, MF	None
3—Raystown Branch Juniata River	[Main Stem] Basin, Bedford-Huntingdon County Border to [Mouth] Tatman Run	Huntingdon	WWF, MF	None
[4—Unnamed Tributaries to Raystown Branch	Basins, Bedford-Huntingdon County Border to Mouth	Huntingdon	WWF, MF	None
4—Shy Beaver Creek	Basin	Huntingdon	WWF, MF	None]
4—Tatman Run	Basin	Huntingdon	HQ-CWF, MF	None
[4—Coffee Run	Basin	Huntingdon	WWF, MF	None]
3—Raystown Branch Juniata River	Basin, Tatman Run to Great Trough Creek	Huntingdon	WWF, MF	None
4—Great Trough Creek	Basin	Huntingdon	TSF, MF	None
[4—James Creek	Basin	Huntingdon	WWF, MF	None
4—Hawns Run	Basin	Huntingdon	WWF, MF	None]

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Raystown Branch Juniata River	Basin, Great Trough Creek to Mouth	Huntingdon	WWF, MF	None
3—Unnamed Tributaries to Juniata River	Basins, Raystown Branch to Kishacoquillas Creek	Huntingdon-Mifflin	HQ-CWF, MF	None
	* * * * *			

§ 93.9o. Drainage List O.

Susquehanna River Basin in Pennsylvania
Susquehanna River

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
	* * * * *			
2—Conodoguinet Creek	Basin, Letterkenny Reservoir Dam to Trout Run	Franklin	CWF, MF	None
3—Trout Run	Basin, Source to Water Supply Dam	Franklin	EV, MF	None
3—Trout Run	Basin, Water Supply Dam to Mouth	Franklin	HQ-CWF, MF	None
2—Conodoguinet Creek	Basin, Trout Run to PA 997 at Roxbury	Franklin	CWF, MF	None
	* * * * *			
3—Old Town Run	Basin	Cumberland	HQ-CWF, MF	None
2—Yellow Breeches Creek	Main Stem, LR 21012 to Mouth	Cumberland-York-Dauphin	CWF, MF	[<i>Delete DO₁</i> [<i>Add DO₄</i>] <i>Add DO=Minimum 7.0 mg/L, June 1 to Sept. 30</i>
3—Unnamed Tributaries to Yellow Breeches Creek	Basins, LR 21012 to Mouth	Cumberland-York	CWF, MF	None
	* * * * *			
3—Indiantown Run	Basin, Inlet of Memorial Lake to Mouth	Lebanon	WWF, MF	None
3—Quittapahilla Creek	Basin	Lebanon	TSF, MF	None
3—Bow Creek	Basin	Dauphin	WWF, MF	None
3—Manada Creek	Basin, Source to I-81 at 40° 21' 48.6" N; 76° 42' 20.0" W	Dauphin	CWF, MF	None
3—Manada Creek	Basin, I-81 to Mouth	Dauphin	WWF, MF	None
	* * * * *			
2—Wilson Run	Basin	York	WWF, MF	None
2—Boyd's Run	Basin	York	WWF, MF	None
2—Conestoga River	Basin, Source to UNT 07792 at [RM 43.05] 40° 8' 57.4" N; 76° 5' 24.9" W	Lancaster	WWF, MF	None
3—UNT 07792 to Conestoga River at [RM 43.05] 40° 8' 57.4" N; 76° 5' 24.9" W	Basin	Lancaster	CWF, MF	None
2—Conestoga River	Main Stem, UNT 07792 at [RM 43.05] 40° 8' 57.4" N; 76° 5' 24.9" W downstream to Mouth	Lancaster	WWF, MF	None
3—UNTs to Conestoga River	Basins, UNT 07792 to Mouth	Berks-Lancaster	WWF, MF	None
[3—Muddy Creek	Main Stem, Source to Little Muddy Creek	Lancaster	TSF, MF	None

PROPOSED RULEMAKING

6671

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—Unnamed Tributaries to Muddy Creek	Basins, Source to Little Muddy Creek	Berks-Lancaster	WWF, MF	None]
3—Muddy Creek	Basin, Source to UNT at 40° 13' 9.9" N; 76° 1' 16.7" W	Lancaster	WWF, MF	None
4—UNT at 40° 13' 9.9" N; 76° 1' 16.7" W	Basin	Lancaster	TSF, MF	None
3—Muddy Creek	Main Stem, UNT at 40° 13' 9.9" N; 76° 1' 16.7" W to Little Muddy Creek	Lancaster	TSF, MF	None
4—Unnamed Tributaries to Muddy Creek	Basins, UNT at 40° 13' 9.9" N; 76° 1' 16.7" W to Little Muddy Creek	Lancaster	WWF, MF	None
4—Rock Run	Basin	Lancaster	HQ-TSF, MF	None
	* * * * *			
2—Pequea Creek	Main Stem, PA 897 to Mouth	Lancaster	WWF, MF	None
3—Unnamed Tributaries to Pequea Creek	Basins, PA 897 to Eshleman Run	Lancaster	CWF, MF	None
3—White Horse Run	Basin	Lancaster	WWF, MF	None
3—Umbles Run	Basin	Lancaster	HQ-CWF, MF	None
3—Houston Run	Basin	Lancaster	CWF, MF	None
3—Eshleman Run	Basin	Lancaster	CWF, MF	None
[3—Unnamed Tributaries to Pequea Creek	Basins, Eshleman Run to RM 3.35	Lancaster	WWF, MF	None
3—Unnamed Tributary to Pequea Creek at RM 3.35	Basin	Lancaster	HQ-CWF, MF	None
3—Unnamed Tributaries to Pequea Creek	Basins, RM 3.35 to RM 3.20	Lancaster	WWF, MF	None
3—Unnamed Tributary to Pequea Creek at RM 3.20	Basin	Lancaster	CWF, MF	None
3—Unnamed Tributaries to Pequea Creek	Basins, RM 3.20 to Mouth	Lancaster	WWF, MF	None]
3—Watson Run	Basin	Lancaster	WWF, MF	None
3—Walnut Run	Basin	Lancaster	WWF, MF	None
3—Little Beaver Creek	Basin	Lancaster	TSF, MF	None
3—Big Beaver Creek	Basin	Lancaster	TSF, MF	None
3—Huber Run	Basin	Lancaster	CWF, MF	None
3—Goods Run	Basin	Lancaster	TSF, MF	None
3—Silver Mine Run	Basin	Lancaster	TSF, MF	None
3—Climbers Run	Main Stem	Lancaster	CWF, MF	None
4—Unnamed Tributaries to Climbers Run	Basins	Lancaster	CWF, MF	None
4—Trout Run	Basin	Lancaster	HQ-CWF, MF	None
3—Unnamed Tributaries to Pequea Creek	Basins, Eshleman Run to UNT 07452	Lancaster	WWF, MF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—UNT 07452 to Pequea Creek at 39° 54' 20.6" N; 76° 19' 41.8" W	Basin	Lancaster	HQ-CWF, MF	None
3—Unnamed Tributaries to Pequea Creek	Basins, UNT 07452 to UNT 07451	Lancaster	WWF, MF	None
3—UNT 07451 to Pequea Creek at 39° 54' 12.4" N; 76° 19' 43.0" W	Basin	Lancaster	CWF, MF	None
3—Unnamed Tributaries to Pequea Creek	Basins, UNT 07451 to Mouth	Lancaster	WWF, MF	None
2—Otter Creek	Main Stem, Source to Upstream Boundary of State Game Lands No. 83 (T 616)	York	CWF, MF	None
	* * * * *			
2—Octoraro Creek	Main Stem, Confluence of East and West Branches to PA-MD State Border	Lancaster-Chester	WWF[;], MF	None
3—Unnamed Tributaries to Octoraro Creek	Basins, (all sections in PA) Confluence of East and West Branches to [RM 13.60] UNT 07001 at 39° 44' 1.7" N; 76° 5' 32.9" W	Lancaster-Chester	TSF[;], MF	None
3—Tweed Creek	Basin	Chester	TSF[;], MF	None
3—McCreary Run	Basin	Lancaster	HQ-TSF[;], MF	None
3—Blackburn Run	Basin	Chester	TSF[;], MF	None
3—Black Run	Basin, Source to [Unnamed Tributary at RM 2.50] UNT 07006 at 39° 44' 25.5" N; 76° 3' 15.9" W	Chester	EV[;], MF	None
4—[Unnamed Tributary to Black Run at RM 2.50] UNT 07006	Basin	Chester	TSF[;], MF	None
3—Black Run	Basin, [Unnamed Tributary at RM 2.50] UNT 07006 to Mouth	Chester	TSF[;], MF	None
3—Hog Run	Basin	Chester	TSF[;], MF	None
3—[Unnamed Tributary to Octoraro Creek at RM 13.60] UNT 07001 to Octoraro Creek at 39° 44' 1.7" N; 76° 5' 32.9" W	Basin	Chester	EV[;], MF	None
3—Unnamed Tributaries to Octoraro Creek	Basins, [RM 13.60] UNT 07001 to PA-MD State Border	Lancaster-Chester	TSF[;], MF	None
3—Reynolds Run	Basin	Lancaster	[HQ-CWF, MF] HQ-TSF, MF	None
2—Octoraro Creek (MD)				
	* * * * *			

§ 93.9p. Drainage List P.

Ohio River Basin in Pennsylvania
Allegheny River

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
1—Ohio River				
2—Allegheny River	[Main Stem, Source to PA-NY State Border] Basin, Source to Woodcock Creek	McKean	CWF	None
[3—Unnamed Tributaries to Allegheny River	Basins (all sections in PA), Source to PA-NY State Border	Potter-McKean	CWF	None]
3—Woodcock Creek	Basin	Potter	HQ-CWF	None
[3—Gross Hollow	Basin	Potter	CWF	None]
2—Allegheny River	Basin, Woodcock Creek to UNT 58543 at 41° 49' 58.8" N; 77° 53' 51.9" W (locally known as Wambold Hollow)	Potter	CWF	None
3—[Wambold Hollow] UNT 58543 (Wambold Hollow)	Basin	Potter	HQ-CWF	None
[3—Pigeon Hollow	Basin	Potter	CWF	None
3—Toombs Hollow	Basin	Potter	CWF	None
3—Kohler Hollow	Basin	Potter	CWF	None]
2—Allegheny River	Basin, UNT 58543 to Dwight Creek	Potter	CWF	None
3—Dwight Creek	Basin	Potter	HQ-CWF	None
[3—Peet Brook	Basin	Potter	CWF	None
3—Lent Hollow	Basin	Potter	CWF	None
3—Prosser Hollow	Basin	Potter	CWF	None
3—Baker Creek	Basin	Potter	CWF	None]
2—Allegheny River	Basin, Dwight Creek to Steer Run	Potter	CWF	None
3—Steer Run	Basin	Potter	HQ-CWF	None
[3—Reese Hollow	Basin	Potter	CWF	None]
2—Allegheny River	Basin, Steer Run to Mill Creek	Potter	CWF	None
3—Mill Creek	Basin, Source to North Hollow	Potter	HQ-CWF	None
3—Mill Creek	Basin, North Hollow to Mouth	Potter	CWF	None
2—Allegheny River	Basin, Mill Creek to Dingman Run	Potter	CWF	None
3—Dingman Run	[Main Stem] Basin	Potter	HQ-CWF	None
[3—Earl Hollow	Basin	Potter	CWF	None
3—Pump Station Hollow	Basin	Potter	CWF	None
3—Elm Flat	Basin	Potter	CWF	None
3—Gleason Hollow	Basin	Potter	CWF	None]
2—Allegheny River	Basin, Dingman Run to Reed Run	Potter	CWF	None
3—Reed Run	Basin	Potter	HQ-CWF	None
[3—Trout Brook	Basin	Potter	CWF	None]
2—Allegheny River	Basin, Reed Run to Laninger Creek	Potter	CWF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Laninger Creek	Basin	Potter	HQ-CWF	None
2—Allegheny River	Basin, Laninger Creek to Fishing Creek	Potter	CWF	None
3—Fishing Creek	[Main Stem] Basin, Source to East Branch Fishing Creek	Potter	CWF	None
[4—Unnamed Tributaries to Fishing Creek	Basins	Potter	CWF	None]
4—East Branch Fishing Creek	Basin	Potter	HQ-CWF	None
[3—Card Creek	Basin	Potter	CWF	None
3—Sartwell Creek	Basin	McKean	CWF	None]
3—Fishing Creek	Basin, East Branch Fishing Creek to Mouth	Potter	CWF	None
2—Allegheny River	Basin, Fishing Creek to Allegheny Portage Creek	Potter-McKean	CWF	None
3—Allegheny Portage Creek	Main Stem, Source to [Brown Hollow] UNT 58235 at 41° 42' 18.6" N; 78° 11' 43.6" W	Potter	TSF	None
4—[Unnamed] Tributaries To Allegheny Portage Creek	Basins, Source to UNT 58235 (locally known as Brown Hollow)	Potter[-McKean]	CWF	None
[4—Planing Mill Hollow	Basin	Potter	CWF	None]
4—[Brown Hollow] UNT 58235	Basin	Potter	HQ-CWF	None
3—Allegheny Portage Creek	Main Stem, [Brown Hollow] UNT 58235 to Scaffold Lick Run	McKean	HQ-CWF	None
[4—Indian Run	Basin	McKean	CWF	None
4—Heath Hollow	Basin	McKean	CWF	None]
4—Tributaries To Allegheny Portage Creek	Basins, UNT 58235 to Fair Run	Potter-McKean	CWF	None
4—Fair Run	Basin	McKean	HQ-CWF	None
[4—Rock Run	Basin	McKean	CWF	None
4—Scaffold Lick Run	Basin	McKean	CWF	None]
4—Tributaries To Allegheny Portage Creek	Basins, Fair Run to Scaffold Lick Run	McKean	CWF	None
4—Scaffold Lick Run	Basin	McKean	CWF	None
3—Allegheny Portage Creek	Main Stem, Scaffold Lick Run to Mouth	McKean	TSF	None
[4—Cady Hollow	Basin	McKean	CWF	None
4—Hamilton Run	Basin	McKean	CWF	None
4—Tramroad Hollow	Basin	McKean	CWF	None
4—Combs Creek	Basin	McKean	CWF	None
3—Lillibridge Creek	Basin	McKean	CWF	None]
4—Tributaries To Allegheny Portage Creek	Basins, Scaffold Lick Run to Mouth	McKean	CWF	None
2—Allegheny River	Basin, Allegheny Portage Creek to Skinner Creek	McKean	CWF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Skinner Creek	Basin	McKean	HQ-CWF	None
[3—Twomile Creek	Basin	McKean	CWF	None
3—Annin Creek	Basin	McKean	CWF	None
3—Rock Run	Basin	McKean	CWF	None
3—Open Brook	Basin	McKean	CWF	None
3—Newell Creek	Basin	McKean	CWF	None]
2—Allegheny River	Basin, Skinner Creek to Potato Creek	McKean	CWF	None
3—Potato Creek				
4—East Branch Potato Creek	[Basins] Basin, Source to Confluence with Havens Run	McKean	HQ-CWF	None
4—Havens Run	Basin, Source to Confluence with East Branch	McKean	CWF	None
3—Potato Creek	Main Stem, Confluence of East Branch and Havens Run to Cole Creek	McKean	TSF	None
4— [Unnamed] Tributaries to Potato Creek	Basins, Confluence of East Branch and Havens Run to [Cole Creek] West Branch Potato Creek	McKean	CWF	None
[4—Indian Run	Basin	McKean	CWF	None
4—Frog Camp Hollow	Basin	McKean	CWF	None
4—Kimball Hollow	Basin	McKean	CWF	None]
4—West Branch Potato Creek	Basin	McKean	HQ-CWF	None
[4—Sackett Hollow	Basin	McKean	CWF	None]
4—Tributaries to Potato Creek	Basins, West Branch Potato Creek to Brewer Run	McKean	CWF	None
4—Brewer Run	Basin	McKean	HQ-CWF	None
[4—Evans Hollow	Basin	McKean	CWF	None]
4—Tributaries to Potato Creek	Basins, Brewer Run to Red Mill Brook	McKean	CWF	None
4—Red Mill Brook	[Main Stem] Basin, Source to UNT 57891 at 41° 42' 42.7" N; 78° 28' 31.6" W (locally known as Wernwag Hollow)	McKean	CWF	None
[5—Unnamed Tributaries to Red Mill Brook	Basins	McKean	CWF	None]
5— [Wernwag Hollow] UNT 57891	Basin	McKean	HQ-CWF	None
[5—Browns Mill Hollow	Basin	McKean	CWF	None
5—Combs Hollow	Basin	McKean	CWF	None]
4—Red Mill Brook	Basin, UNT 57891 to Mouth	McKean	CWF	None
4—Tributaries to Potato Creek	Basins, Red Mill Brook to Colegrove Brook	McKean	CWF	None
4—Colegrove Brook	Basin	McKean	HQ-CWF	None
4—Tributaries to Potato Creek	Basins, Colegrove Brook to Robbins Brook	McKean	CWF	None
4—Robbins Brook	Basin	McKean	HQ-CWF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
[4—Walcott Brook	Basin	McKean	CWF	None]
4—Tributaries to Potato Creek	Basins, Robbins Brook to Boyer Brook	McKean	CWF	None
4—Boyer Brook	Basin	McKean	HQ-CWF	None
4—Tributaries to Potato Creek	Basins, Boyer Brook to Daly Brook	McKean	CWF	None
4—Daly Brook	Basin	McKean	HQ-CWF	None
4—Tributaries to Potato Creek	Basins, Daly Brook to Marvin Creek	McKean	CWF	None
4—Marvin Creek	[Main Stem] Basin, Source to UNT 57809 at 41° 41' 43.1" N; 78° 36' 1.0" W (locally known as Sherman Run)	McKean	CWF	None
[5—Unnamed Tributaries to Marvin Creek	Basins	McKean	CWF	None]
5— [Sherman Run] UNT 57809	Basin	McKean	HQ-CWF	None
4—Marvin Creek	Basin, UNT 57809 to UNT 57801 at 41° 42' 23.1" N; 78° 35' 4.7" W (locally known as Santeen Run)	McKean	CWF	None
5— [Santeen Run] UNT 57801	Basin	McKean	HQ-CWF	None
[5—Wildcat Hollow	Basin	McKean	CWF	None]
4—Marvin Creek	Basin, UNT 57801 to Warner Brook	McKean	CWF	None
5—Warner Brook	Basin	McKean	HQ-CWF	None
4—Marvin Creek	Basin, Warner Brook to Stanton Brook	McKean	CWF	None
5—Stanton Brook	Basin	McKean	HQ-CWF	None
[5—Bloomster Hollow	Basin	McKean	CWF	None]
4—Marvin Creek	Basin, Stanton Brook to Blacksmith Run	McKean	CWF	None
5—Blacksmith Run	Basin [from] , Source to Smethport Water Intake	McKean	HQ-CWF	None
5—Blacksmith Run	Basin [From] , Smethport Water Intake to Mouth	McKean	CWF	None
4—Marvin Creek	Basin, Blacksmith Run to Mouth	McKean	CWF	None
4—Tributaries to Potato Creek	Basins, Marvin Creek to Cole Creek	McKean	CWF	None
4—Cole Creek	[Basin, Source to South Branch Cole Creek	McKean	CWF	None]
5—South Branch Cole Creek	Basin, Source to Confluence with North Branch	McKean	EV	None
5—North Branch Cole Creek	Basin, Source to Confluence with South Branch	McKean	CWF	None
4—Cole Creek	Basin, [South Branch Cole Creek] Confluence of North and South Branches to Mouth	McKean	CWF	None
3—Potato Creek	Main Stem, Cole Creek to Mouth	McKean	WWF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—[Unnamed] Tributaries to Potato Creek	Basins, Cole Creek to Mouth	McKean	CWF	None
[4— Pierce Brook	Basin	McKean	CWF	None
3— Carpenter Creek	Basin	McKean	CWF	None
3— Canfield Creek	Basin	McKean	CWF	None
3— Barden Brook	Basin	McKean	CWF	None
3— Knapp Creek	Main Stem	McKean	CWF	None
4— Unnamed Tributaries to Knapp Creek	Basins	McKean	CWF	None
4— Tram Hollow Run	Basin	McKean	CWF	None
4— Kansas Branch	Basin	McKean	CWF	None
4— South Branch Knapp Creek	Basin	McKean	CWF	None
3— Indian Creek (NY)				
4— Unnamed Tributaries to Indian Creek	Basins (all sections in PA), Source to PA-NY State Border	McKean	CWF	None
3— Indian Creek	Main Stem, PA-NY State Border to Mouth	McKean	CWF	None
4— Unnamed Tributaries to Indian Creek	Basins (all sections in PA), PA-NY State Border to Mouth	McKean	CWF	None
4— North Branch Indian Creek	Basin (all sections in PA)	McKean	CWF	None
3— Mix Creek	Basin (all sections in PA)	McKean	CWF	None
3— McCrea Run	Basin	McKean	CWF	None
3— Tunungwant Creek	Main Stem, Confluence of East and West Branches to PA-NY State Border	McKean	WWF	None
3— McCrea Run	Basin	McKean	CWF	None]
2— Allegheny River	Basin (all sections in PA), Potato Creek to PA-NY State Border at 41° 59' 58.2" N; 78° 21' 0.6" W	McKean	CWF	None
2— Allegheny River (NY)				
3— Unnamed Tributaries to Allegheny River	Basins (all sections in PA), PA-NY State Border to Tunungwant Creek	McKean	CWF	None
3— Oswayo Creek	Basin, Source to [Brizzee Hollow] Hemlock Hollow Run	Potter	CWF	None
4—[Brizzee Hollow] Hemlock Hollow Run (locally known as Brizzee Hollow)	Basin	Potter	HQ-CWF	None
3— Oswayo Creek	Basin, [Brizzee Hollow] Hemlock Hollow Run to South Branch Oswayo Creek	Potter	HQ-CWF	None
4— South Branch Oswayo Creek	Basin	Potter	EV	None
3— Oswayo Creek	Basin, South Branch Oswayo Creek to Clara Creek	Potter	HQ-CWF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—Clara Creek	Basin, Source to Bradley Run	Potter	CWF	None
5—Bradley Run	Basin	Potter	HQ-CWF	None
4—Clara Creek	Basin, Bradley Run to Mouth	Potter	CWF	None
3—Oswayo Creek	[Main Stem, Clara Creek to Honeoye Creek] Basin, Clara Creek to Elevenmile Creek	Potter	CWF	None
[4—Unnamed Tributaries to Oswayo Creek	Basins, Clara Creek to Honeoye Creek	Potter	CWF	None
4—Clara Creek	Main Stem	Potter	CWF	None
5—Unnamed Tributaries to Clara Creek	Basins	Potter	CWF	None
5—Bradley Run	Basin	Potter	HQ-CWF	None]
4—Elevenmile Creek	Basin	Potter	HQ-CWF	None
[4—Canada Run	Basin	Potter	CWF	None
4—Wildcat Creek	Basin	Potter	CWF	None]
3—Oswayo Creek	Basin, Elevenmile Creek to Cow Run	Potter	CWF	None
4—Cow Run	Basin	Potter	HQ-CWF	None
3—Oswayo Creek	Basin, Cow Run to Honeoye Creek	Potter	CWF	None
4—Honeoye Creek (NY)				
5—[Unnamed] Tributaries to Honeoye Creek	Basins (all sections in PA), Source to PA-NY State Border at 41° 59' 58.2" N; 78° 1' 53.1" W	Potter	CWF	None
4—Honeoye Creek	[Main Stem, PA-NY State Border to Mouth] Basin (all sections in PA), PA-NY State Border at 42° 0' 1.1" N; 78° 6' 34.4" W to Butter Creek	Potter	CWF	None
[5—Unnamed Tributaries to Honeoye Creek	Basins (all sections in PA), PA-NY State Border to Mouth	Potter	CWF	None]
5—Butter Creek	Basin	Potter	HQ-CWF	None
[5—Plank Creek	Basin	Potter	CWF	None]
4—Honeoye Creek	Basin (all sections in PA), Butter Creek to Mouth	Potter	CWF	None
3—Oswayo Creek	Main Stem, Honeoye Creek to PA-NY State Border at 41° 59' 57.7" N; 78° 18' 9.2" W	McKean	WWF	None
4—[Unnamed] Tributaries to Oswayo Creek	Basins (all sections in PA), Honeoye Creek to [PA-NY State Border] Janders Run	Potter-McKean	CWF	None
4—Janders Run	Basin	McKean-Potter	HQ-CWF	None
[4—Horse Run	Basin (all sections in PA)	McKean	CWF	None]
4—Tributaries to Oswayo Creek	Basins (all sections in PA), Janders Run to Bell Run	Potter-McKean	CWF	None
4—Bell Run	[Main Stem] Basin, Source to Taylor Brook	McKean	CWF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
[5—Unnamed Tributaries to Bell Run	Basins	McKean	CWF	None
5—Shaytown Branch	Basin	Potter	CWF	None
5—Chapman Brook	Basin	McKean	CWF	None]
5—Taylor Brook	Basin	McKean	HQ-CWF	None
[4—Kings Run	Basin	McKean	CWF	None]
4—Bell Run	Basin, Taylor Brook to Mouth	McKean	CWF	None
4—Tributaries to Oswayo Creek	Basins (all sections in PA), Bell Run to Mouth	Potter-McKean	CWF	None
3—Oswayo Creek (NY)				
4—[Unnamed] Tributaries to Oswayo Creek	Basins (all sections in PA), PA-NY State Border at 41° 59' 57.7" N; 78° 18' 9.2" W to Mouth	McKean	CWF	None
3—Tunungwant Creek				
4—East Branch Tunungwant Creek	Basin, Source to Railroad Run	McKean	HQ-CWF	None
5—Railroad Run	Basin	McKean	EV	None
4—East Branch Tunungwant Creek	Basin, Railroad Run to T-331 Bridge at 41° 53' 10.3" N; 78° 39' 18.1" W	McKean	HQ-CWF	None
4—East Branch Tunungwant Creek	Main Stem, T-331 Bridge to SR 4002 Bridge at 41° 55' 46.1" N; 78° 38' 51.3" W	McKean	HQ-CWF	None
5—[Unnamed] Tributaries to East Branch Tunungwant Creek	Basins, T-331 Bridge to [SR 4002] Minard Run	McKean	CWF	None
[5—Sheppard Run	Basin	McKean	CWF	None]
5—Minard Run	Basin	McKean	EV	None
5—Tributaries to East Branch Tunungwant Creek	Basins, Minard Run to SR 4002	McKean	CWF	None
4—East Branch Tunungwant Creek	Basin, SR 4002 to Confluence with West Branch	McKean	CWF	None
4—West Branch Tunungwant Creek	Basin, Source to Marilla Brook	McKean	HQ-CWF	None
5—Marilla Brook	Basin, [Above] Source to Bradford Water Dam	McKean	HQ-CWF	None
5—Marilla Brook	[Main Stem, Bradford Water Dam to Mouth] Basin, Bradford Water Dam to Gilbert Brook	McKean	CWF	None
[6—Unnamed Tributaries to Marilla Brook	Basins, Bradford Water Dam to Mouth	McKean	CWF	None]
6—Gilbert Brook	Basin	McKean	HQ-CWF	None
5—Marilla Brook	Basin, Gilbert Brook to Mouth	McKean	CWF	None
4—West Branch Tunungwant Creek	Basin, Marilla Brook to Confluence with East Branch	McKean	CWF	None
3—Tunungwant Creek	Main Stem, Confluence of East and West Branches to PA-NY State Border at 41° 59' 59.1" N; 78° 37' 21.7" W	McKean	WWF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—[Unnamed] Tributaries to Tunungwant Creek	Basins (all sections in PA), Confluence of East and West Branches to [PA-NY State Border] Kendall Creek	McKean	CWF	None
4—Kendall Creek	Basin	McKean	WWF	None
[4— Bolivar Run	Basin (all sections in PA)	McKean	CWF	None
4— Foster Brook	Basin (all sections in PA)	McKean	CWF	None]
4— Tributaries to Tunungwant Creek	Basins (all sections in PA), Kendall Creek to PA-NY State Border	McKean	CWF	None
3—Tunungwant Creek (NY)				
4—[Unnamed] Tributaries to Tunungwant Creek	Basins (all sections in PA) PA-NY State Border to Mouth	McKean	CWF	None

§ 93.9q. Drainage List Q.

Ohio River Basin in Pennsylvania
Allegheny River

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
1—Ohio River				
2—Allegheny River (NY)				
3—Unnamed Tributaries to Allegheny River	Basins (all sections in PA), Tunungwant Creek to PA-NY State Border at 41° 59' 55.4" N; 78° 57' 14.6" W	McKean-Warren	CWF	None
3—Quaker Run (NY)				
4—[Unnamed] Tributaries to Quaker Run	Basins (all sections in PA)	McKean	HQ-CWF	None
[4— Willis Creek	Basin (all sections in PA)	McKean	HQ-CWF	None
4— Coon Run	Basin (all sections in PA)	McKean	HQ-CWF	None
4— Yeager Brook	Basin (all sections in PA)	McKean	HQ-CWF	None]
3—Wolf Run	Basin, (all sections in PA)	McKean	HQ-CWF	None
3—State Line Run	Basin (all sections in PA)	Warren	CWF	None
2—Allegheny River	Main Stem, PA-NY State Border at 41° 59' 55.4" N; 78° 57' 14.6" W to Clarion River	Clarion	WWF	None
3—[Unnamed] Tributaries to Allegheny River	Basins, PA-NY State Border to [French Creek] Willow Creek	[Venango] Warren	CWF	None
3—Willow Creek	Basin (all sections in PA)	Warren	HQ-CWF	None
[3— Carr Brook	Basin	Warren	CWF	None
3— Hooks Brook	Basin	Warren	CWF	None
3— Williams Brook	Basin	Warren	CWF	None
3— Tracy Run	Basin	Warren	CWF	None]
3— Tributaries to Allegheny River	Basins, Willow Creek to Cornplanter Run	Warren	CWF	None
3—Cornplanter Run	Basin	Warren	HQ-CWF	None
[3— Whisky Run	Basin	Warren	CWF	None
3— Johnnycake Run	Basin	Warren	CWF	None]

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Tributaries to Allegheny River	Basins, Cornplanter Run to Hodge Run	Warren	CWF	None
3—Hodge Run	Basin	Warren	HQ-CWF	None
3—Tributaries to Allegheny River	Basins, Hodge Run to Sugar Run	Warren	CWF	None
3—Sugar Run	Basin	Warren	HQ-CWF	None
[3—Billies Run	Basin	Warren	CWF	None]
3—Tributaries to Allegheny River	Basins, Sugar Run to Kinzua Creek	Warren	CWF	None
3—Kinzua Creek	Basin, Source to Wintergreen Run	McKean	CWF	None
4—Wintergreen Run	Basin	McKean	CWF	None
3—Kinzua Creek	Main Stem, Wintergreen Run to Mouth	Warren	CWF	None
4—[Unnamed] Tributaries to Kinzua Creek	Basins, Wintergreen Run to [Mouth] South Branch Kinzua Creek	McKean [-Warren]	HQ-CWF	None
[4—Windfall Run	Basin	McKean	HQ-CWF	None
4—Camp Run	Basin	McKean	HQ-CWF	None
4—Turnup Run	Basin	McKean	HQ-CWF	None
4—Thundershower Run	Basin	McKean	HQ-CWF	None
4—Libby Run	Basin	McKean	HQ-CWF	None
4—Whiting Run	Basin	McKean	HQ-CWF	None
4—Markham Run	Basin	McKean	HQ-CWF	None
4—Meade Run	Basin	McKean	HQ-CWF	None
4—Little Meade Run	Basin	McKean	HQ-CWF	None
4—Root Run	Basin	McKean	HQ-CWF	None]
4—South Branch Kinzua Creek	[Main Stem] Basin, Source to Hubert Run	McKean	HQ-CWF	None
[5—Unnamed Tributaries to South Branch Kinzua Creek	Basins	McKean	HQ-CWF	None
5—Glad Run	Basin	McKean	HQ-CWF	None
5—Watermill Run	Basin	McKean	HQ-CWF	None]
5—Hubert Run	Basin	McKean	CWF	None
4—South Branch Kinzua Creek	Basin, Hubert Run to Mouth	McKean	HQ-CWF	None
[4—Mud Lick Run	Basin	McKean	HQ-CWF	None]
4—Tributaries to Kinzua Creek	Basins, South Branch Kinzua Creek to Chappel Fork	McKean	HQ-CWF	None
4—Chappel Fork	Main Stem	McKean	CWF	None
5—[Unnamed] Tributaries to Chappel Fork	Basins, Source to Mouth	McKean	HQ-CWF	None
[5—Buck Lick Run	Basin	McKean	HQ-CWF	None
5—Crary Run	Basin	McKean	HQ-CWF	None
5—White Gravel Creek	Basin	McKean	HQ-CWF	None
5—Bump Run	Basin	McKean	HQ-CWF	None
5—North Fork	Basin	McKean	HQ-CWF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
5—Coon Run	Basin	McKean	HQ-CWF	None
5—Briggs Run	Basin	McKean	HQ-CWF	None
5—Hemlock Run	Basin	McKean	HQ-CWF	None
4—Morrison Run	Basin	McKean	HQ-CWF	None
4—Dutchman Run	Basin	McKean	HQ-CWF	None
4—Dewdrop Run	Basin	Warren	HQ-CWF	None
4—Campbell Run	Basin	Warren	HQ-CWF	None
4—Wolf Run	Basin	Warren	HQ-CWF	None]
4—Tributaries to Kinzua Creek	Basins, Chappel Fork to Mouth	McKean-Warren	HQ-CWF	None
3—Tributaries to Allegheny River	Basins, Kinzua Creek to Jackson Run	Warren	CWF	None
3—Jackson Run	Basin	Warren	HQ-CWF	None
3—Tributaries to Allegheny River	Basins, Jackson Run to Bent Run	Warren	CWF	None
3—Bent Run	Basin	Warren	HQ-CWF	None
3—Tributaries to Allegheny River	Basins, Bent Run to Hemlock Run	Warren	CWF	None
3—Hemlock Run	Basin	Warren	HQ-CWF	None
3—Tributaries to Allegheny River	Basins, Hemlock Run to Browns Run	Warren	CWF	None
3—Browns Run	Basin, Source to Dutchman Run * * * * *	Warren	EV	None
3—Browns Run	Basin, Morrison Run to Mouth	Warren	CWF	None
3—Tributaries to Allegheny River	Basins, Browns Run to Glade Run	Warren	CWF	None
3—Glade Run	Basin, Source to Concrete Channel	Warren	CWF	None
3—Glade Run	Basin, Concrete Channel at 41° 49' 48.1" N; 79° 7' 11.7" W to Mouth [, (a distance of approximately 1,500 ft)]	Warren	WWF	None
[3—Ott Run	Basin	Warren	CWF	None]
3—Tributaries to Allegheny River	Basins, Glade Run to Conewango Creek	Warren	CWF	None
3—Conewango Creek (NY)				
4—[Unnamed] Tributaries to Conewango Creek	Basins (all sections in PA), Source to PA-NY State Border at 41° 59' 58.6" N; 79° 8' 43.0" W	Warren	CWF	None
[4—Stillwater Creek	Basin (all sections in PA)	Warren	CWF	None
4—Kiantone Creek	Basin (all sections in PA)	Warren	CWF	None]
3—Conewango Creek	Main Stem, PA-NY State Border to Mouth	Warren	WWF	None
4—[Unnamed] Tributaries to Conewango Creek	Basins (all sections in PA), PA-NY State Border to [Mouth] North Branch Akeley Run	Warren	CWF	None
[4—Wiltsie Run	Basin	Warren	CWF	None
4—Storehouse Run	Basin (all sections in PA)	Warren	CWF	None
4—Johnny Run	Basin	Warren	CWF	None]

PROPOSED RULEMAKING

6683

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—North Branch Akeley Run	[Main Stem] Basin, Source to Vanarsdale Run	Warren	CWF	None
[5—Unnamed Tributaries to North Branch Akeley Run	Basins	Warren	CWF	None]
5—Vanarsdale Run	Basin	Warren	HQ-CWF	None
4—North Branch Akeley Run	Basin, Vanarsdale Run to Mouth	Warren	CWF	None
4—Tributaries to Conewango Creek	Basins, North Branch Akeley Run to Akeley Run	Warren	CWF	None
4—Akeley Run	[Main Stem] Basin, Source to Mill Run	Warren	CWF	None
[5—Unnamed Tributaries to Akeley Run	Basins	Warren	CWF	None
5—Reynolds Run	Basin	Warren	CWF	None]
5—Mill Run	Basin	Warren	HQ-CWF	None
[5—Widdlefield Run	Basin	Warren	CWF	None
5—Wolcott Run	Basin	Warren	CWF	None
4—Rhine Run	Basin	Warren	CWF	None
4—Dougherty Run	Basin	Warren	CWF	None
4—Hatch Run	Basin	Warren	CWF	None
4—Jackson Run	Basin	Warren	CWF	None
3—Sill Run	Basin	Warren	CWF	None]
4—Akeley Run	Basin, Mill Run to Mouth	Warren	CWF	None
4—Tributaries to Conewango Creek	Basins, Akeley Run to Mouth	Warren	CWF	None
3—Tributaries to Allegheny River	Basins, Conewango Creek to Morse Run	Warren	CWF	None
3—Morse Run	Basin	Warren	HQ-CWF	None
[3—Grunder Run	Basin	Warren	CWF	None
3—Scott Run	Basin	Warren	CWF	None]
3—Tributaries to Allegheny River	Basins, Morse Run to Brokenstraw Creek	Warren	CWF	None
3—Brokenstraw Creek (NY)				
4—[Unnamed] Tributaries to Brokenstraw Creek	Basins (all sections in PA), Source to PA-NY State Border at 41° 59' 55.7" N; 79° 37' 19.0" W	Erie-Warren	CWF	None
3—Brokenstraw Creek	[Main Stem, PA-NY State Border to Mouth] Basin, PA-NY State Border to Hare Creek	Warren	CWF	None
[4—Unnamed Tributaries to Brokenstraw Creek	Basins (all sections in PA), PA-NY State Border to Mouth	Erie-Warren	CWF	None
4—Coffee Creek	Basin (all sections in PA)	Warren	CWF	None
4—Whites Run	Basin	Warren	CWF	None]
4—Hare Creek	Basin, Source to Scotia Street Bridge [(Corry Borough)] at 41° 56' 30.1" N; 79° 38' 37.3" W	Warren	CWF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—Hare Creek	Main Stem, Scotia Street Bridge to Mouth	Warren	WWF	None
5—[Unnamed] Tributaries to Hare Creek	Basins, Scotia Street Bridge to Mouth	Warren-Erie	CWF	None
[4—Damon Run	Basin	Warren	CWF	None]
3—Brokenstraw Creek	Basin, Hare Creek to Spring Creek	Warren	CWF	None
4—Spring Creek	Basin	Warren	HQ-CWF	None
[4—Gar Run	Basin	Warren	CWF	None]
3—Brokenstraw Creek	Basin, Spring Creek to Blue Eye Run	Warren	CWF	None
4—Blue Eye Run	Basin, Source to SR 0027 Bridge at 41° 49' 7.9" N; 79° 25' 44.1" W	Warren	EV	None
4—Blue Eye Run	Basin, SR 0027 Bridge to mouth	Warren	CWF	None
[4—Little Brokenstraw Creek	Basin (all sections in PA)	Warren	CWF	None
4—Andrews Run	Basin	Warren	CWF	None
4—Mead Run	Basin	Warren	CWF	None
4—Mathews Run	Basin	Warren	CWF	None
4—Indian Camp Run	Basin	Warren	CWF	None
4—McKinney Run	Basin	Warren	CWF	None
4—Irvine Run	Basin	Warren	CWF	None
3—Lenhart Run	Basin	Warren	CWF	None
3—Sulphur Run	Basin	Warren	CWF	None
3—Dunn Run	Basin	Warren	CWF	None
3—Charley Run	Basin	Warren	CWF	None]
3—Brokenstraw Creek	Basin (all sections in PA), Blue Eye Run to Mouth	Warren	CWF	None
3—Tributaries to Allegheny River	Basins, Brokenstraw Creek to Hedgehog Run	Warren	CWF	None
3—Hedgehog Run	Basin	Warren	HQ-CWF	None
[3—Clark Run	Basin	Warren	CWF	None
3—Dry Run	Basin	Warren	CWF	None
3—Thompson Run	Basin	Warren	CWF	None]
3—Tributaries to Allegheny River	Basins, Hedgehog Run to Slater Run	Warren	CWF	None
3—Slater Run	Basin	Warren	HQ-CWF	None
[3—Little Run	Basin	Warren	CWF	None
3—Conklin Run	Basin	Warren	CWF	None
3—Station Run	Basin	Warren	CWF	None
3—Connelly Run	Basin	Warren	CWF	None
3—Alex Magee Run	Basin	Warren	CWF	None
3—Perry Magee Run	Basin	Warren	CWF	None
3—Waid Run	Basin	Warren	CWF	None
3—Snow Run	Basin	Warren	CWF	None
3—Bimber Run	Basin	Warren	CWF	None
3—Potter Run	Basin	Warren	CWF	None

PROPOSED RULEMAKING

6685

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—McGuire Run	Basin	Warren	CWF	None]
3—Tributaries to Allegheny River	Basins, Slater Run to Tidioute Creek	Warren	CWF	None
3—Tidioute Creek	Basin, Source to Ben George Reservoir Dam	Warren	HQ-CWF	None
3—Tidioute Creek	Basin, Ben George Reservoir Dam to Mouth	Warren	CWF	None
[3—Gordon Run	Basin	Warren	CWF	None
3—Myers Run	Basin	Warren	CWF	None
3—Grove Run	Basin	Warren	CWF	None
3—Dale Run	Basin	Warren	CWF	None
3—Dunn Run	Basin	Warren	CWF	None
3—Schwab Run	Basin	Forest	CWF	None
3—Jones Run	Basin	Forest	CWF	None]
3—Tributaries to Allegheny River	Basins, Tidioute Creek to East Hickory Creek	Warren-Forest	CWF	None
3—East Hickory Creek	Basin, Source to Forest Highway 119 at 41° 38' 30.9" N; 79° 20' 16.4" W	Warren	EV	None
3—East Hickory Creek	Basin, Forest Highway 119 to Mouth	Forest	HQ-CWF	None
[3—Siggens Run	Basin	Forest	CWF	None]
3—Tributaries to Allegheny River	Basins, East Hickory Creek to Little Hickory Run	Forest	CWF	None
3—Little Hickory Run	Basin	Forest	HQ-CWF	None
3—Tributaries to Allegheny River	Basins, Little Hickory Run to West Hickory Creek	Forest	CWF	None
3—West Hickory Creek	Basin, Source to Martin Run	Forest	HQ-CWF	None
4—Martin Run	Basin	Forest	CWF	None
3—West Hickory Creek	Basin, Martin Run to Mouth	Forest	CWF	None
[3—Dawson Run	Basin	Forest	CWF	None
3—Sibbald Run	Basin	Forest	CWF	None]
3—Tributaries to Allegheny River	Basins, West Hickory Creek to Tubbs Run	Forest	CWF	None
3—Tubbs Run	Basin	Forest	HQ-CWF	None
[3—Jamison Run	Basin	Forest	CWF	None
3—Hunter Run	Basin	Forest	CWF	None]
3—Tributaries to Allegheny River	Basins, Tubbs Run to Tionesta Creek	Forest	CWF	None
3—Tionesta Creek				
3—West Branch Tionesta Creek	[Main Stem, Source to Farnsworth Branch] Basin, Source to Wildcat Run	Warren	HQ-CWF	None
[4—Unnamed Tributaries to West Branch Tionesta Creek	Basins, Source to Farnsworth Branch	Warren	HQ-CWF	None
4—Tom Run	Basin	Warren	HQ-CWF	None
4—Jones Run	Basin	Warren	HQ-CWF	None
4—Shaw Run	Basin	Warren	HQ-CWF	None]
4—Wildcat Run	Basin	Warren	EV	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
[4—Adams Run	Basin	Warren	HQ-CWF	None
4—Elkhorn Run	Basin	Warren	HQ-CWF	None
4—Mead Run	Basin	Warren	HQ-CWF	None]
3—West Branch Tionesta Creek	Basin, Wildcat Run to Farnsworth Branch	Warren	HQ-CWF	None
4—Farnsworth Branch	Basin	Warren	HQ-CWF	None
4—West Branch Tionesta Creek	[Main Stem, Farnsworth Branch to Confluence with South Branch] Basin, Farnsworth Branch to Arnot Run	[Forest] Warren	CWF	None
[5—Unnamed Tributaries to West Branch Tionesta Creek	Basins, Farnsworth Branch to Confluence with South Branch	Warren	CWF	None
5—Pacard Run	Basin	Warren	CWF	None]
5—Arnot Run	Basin	Warren	EV	None
4—West Branch Tionesta Creek	Basin, Arnot Run to Sixmile Run	Warren	CWF	None
5—Sixmile Run	Basin	Warren	HQ-CWF	None
4—West Branch Tionesta Creek	Basin, Sixmile Run to Fourmile Run	Warren	CWF	None
5—Fourmile Run	Basin	Warren	HQ-CWF	None
[5—Dunham Run	Basin	Warren	CWF	None]
4—West Branch Tionesta Creek	Basin, Fourmile Run to Twomile Run	Warren	CWF	None
5—Twomile Run	Basin	Warren	HQ-CWF	None
[5—Dodge Run	Basin	Warren	CWF	None]
4—West Branch Tionesta Creek	Basin, Twomile Run to South Branch Tionesta Creek	Warren	CWF	None
4—South Branch Tionesta Creek	[Main Stem, Source to Confluence with West Branch] Basin, Source to Crane Run	Warren	HQ-CWF	None
[5—UNTs to South Branch Tionesta Creek	Basins	Elk-Forest-Warren	HQ-CWF	None
5—Martin Run	Basin	Elk	HQ-CWF	None
5—Wolf Run	Basin	Elk	HQ-CWF	None
5—Coon Run	Basin	Elk	HQ-CWF	None
5—Chaffee Run	Basin	Elk	HQ-CWF	None]
5—Crane Run	Basin	Elk	EV	None
[5—Iron Run	Basin	Forest	HQ-CWF	None
5—Fork Run	Basin	Forest	HQ-CWF	None
5—Bogus Run	Basin	Forest	HQ-CWF	None
5—Rock Run	Basin	Forest	HQ-CWF	None
5—Tuttle Run	Basin	Forest	HQ-CWF	None
5—Cherry Run	Basin	Warren	HQ-CWF	None
5—Martin Run	Basin	Warren	HQ-CWF	None
5—East Branch Tionesta Creek	Basin	Warren	HQ-CWF	None]
4—South Branch Tionesta Creek	Basin, Crane Run to Mouth	Warren	HQ-CWF	None

PROPOSED RULEMAKING

6687

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Tionesta Creek	[Main Stem, Confluence of West and South Branches to Mouth] Basin, Confluence of West and South Branches to Messenger Run	[Forest] Warren	CWF	None
[4—Unnamed Tributaries to Tionesta Creek	Basins, Confluence of West and South Branches to Mouth	Warren-Forest	CWF	None
4—Rock Run	Basin	Warren	CWF	None
4—Duck Eddy Run	Basin	Warren	CWF	None
4—Pell Run	Basin	Warren	CWF	None]
4—Messenger Run	Basin	Warren	EV	None
[4—Mead Run	Basin	Warren	CWF	None
4—Thad Shanty Run	Basin	Forest	CWF	None]
3—Tionesta Creek	Basin, Messenger Run to Bluejay Creek	Warren-Forest	CWF	None
4—Bluejay Creek	Basin	Forest	HQ-CWF	None
[4—Rocky Run	Basin	Forest	CWF	None
4—Bush Creek	Basin	Forest	CWF	None
4—Martin Run	Basin	Forest	CWF	None
4—Hastings Run	Basin	Forest	CWF	None
4—Reagan Run	Basin	Forest	CWF	None]
3—Tionesta Creek	Basin, Bluejay Creek to Upper Sheriff Run	Forest	CWF	None
4—Upper Sheriff Run	Basin	Forest	HQ-CWF	None
3—Tionesta Creek	Basin, Upper Sheriff Run to Lower Sheriff Run	Forest	CWF	None
4—Lower Sheriff Run	Basin	Forest	HQ-CWF	None
3—Tionesta Creek	Basin, Lower Sheriff Run to Fools Creek	Forest	CWF	None
4—Fools Creek	Basin	Forest	HQ-CWF	None
[4—Wildcat Run	Basin	Forest	CWF	None]
3—Tionesta Creek	Basin, Fools Creek to Minister Creek	Forest	CWF	None
4—Minister [Run] Creek	Basin	Forest	HQ-CWF	None
[4—Porcupine Run	Basin	Forest	CWF	None]
3—Tionesta Creek	Basin, Minister Creek to Blood Run	Forest	CWF	None
4—Blood Run	Basin	Forest	HQ-CWF	None
3—Tionesta Creek	Basin, Blood Run to Logan Run	Forest	CWF	None
4—Logan Run	Basin	Forest	CWF	None
[4—Phelps Run	Basin	Forest	CWF	None
4—Kingsley Run	Basin	Forest	CWF	None]
3—Tionesta Creek	Basin, Logan Run to Bobbs Creek	Forest	CWF	None
4—Bobbs Creek	Basin	Forest	HQ-CWF	None
[4—Little Minister Run	Basin	Forest	CWF	None]

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Tionesta Creek	Basin, Bobbs Creek to Fork Run	Forest	CWF	None
4—Fork Run	Basin	Forest	HQ-CWF	None
3—Tionesta Creek	Basin, Fork Run to Salmon Creek	Forest	CWF	None
4—Salmon Creek	[Main Stem] Basin, Source to Fourmile Run	Forest	HQ-CWF	None
[5—Unnamed Tributaries to Salmon Creek	Basins	Forest	HQ-CWF	None
5—Little Salmon Creek	Basin	Forest	HQ-CWF	None
5—Guiton Run	Basin	Forest	HQ-CWF	None]
5—Fourmile Run	Basin	Forest	EV	None
[5—Twomile Run	Basin	Forest	HQ-CWF	None
5—The Branch	Basin	Forest	HQ-CWF	None
4—Church Run	Basin	Forest	CWF	None
4—Carpenter Run	Basin	Forest	CWF	None
4—Lamentation Run	Basin	Forest	CWF	None]
4—Salmon Creek	Basin, Fourmile Run to Mouth	Forest	HQ-CWF	None
3—Tionesta Creek	Basin, Salmon Creek to Bear Creek	Forest	CWF	None
4—Bear Creek	Basin	Forest	HQ-CWF	None
3—Tionesta Creek	Basin, Bear Creek to Ross Run	Forest	CWF	None
4—Ross Run	Basin	Forest	HQ-CWF	None
[4—Jakes Run	Basin	Forest	CWF	None
4—Jug Handle Run	Basin	Forest	CWF	None]
3—Tionesta Creek	Basin, Ross Run to Little Coon Creek	Forest	CWF	None
4—Little Coon Creek	Basin	Forest	HQ-CWF	None
[4—Coon Creek	Basin	Forest	CWF	None
4—Piney Run	Basin	Forest	CWF	None
4—Sugar Run	Basin	Forest	CWF	None
4—Little Piney Run	Basin	Forest	CWF	None
4—Glasner Run	Basin	Forest	CWF	None
4—Johns Run	Basin	Forest	CWF	None
4—Peters Run	Basin	Forest	CWF	None
3—Little Tionesta Creek	Basin	Forest	CWF	None
3—Bates Run	Basin	Forest	CWF	None
3—Indian Camp Creek	Basin	Forest	CWF	None
3—Holeman Run	Basin	Venango	CWF	None
3—Stewart Run	Basin	Venango	CWF	None
3—Fox Run	Basin	Venango	CWF	None
3—Johnston Run	Basin	Venango	CWF	None]
3—Tionesta Creek	Basin, Little Coon Creek to Mouth	Forest	CWF	None
3—Tributaries to Allegheny River	Basins, Tionesta Creek to Hemlock Creek	Forest-Venango	CWF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Hemlock Creek	Basin	Venango	EV	None
[3—McCrea Run	Basin	Venango	CWF	None
3—Culver Run	Basin	Venango	CWF	None
3—Muskrat Run	Basin	Venango	CWF	None
3—Pithole Creek	Basin	Venango	CWF	None
3—Panther Run	Basin	Venango	CWF	None
3—Lamb Run	Basin	Venango	CWF	None
3—Horse Creek	Basin	Venango	CWF	None
3—Carney Run	Basin	Venango	CWF	None
3—Sage Run	Basin	Venango	CWF	None]
3—Tributaries to Allegheny River	Basins, Hemlock Creek to Oil Creek	Venango	CWF	None
3—Oil Creek	[Main Stem, Source to Cherrytree Run] Basin, Source to Thompson Creek	Venango	CWF	None
[4—Unnamed Tributaries to Oil Creek	Basins, Source to Cherrytree Run	Crawford-Venango	CWF	None
4—West Shreve Run	Basin	Crawford	CWF	None
4—East Shreve Run	Basin	Crawford	CWF	None
4—Mosey Run	Basin	Crawford	CWF	None
4—Bloomfield Run	Basin	Crawford	CWF	None
4—East Branch Oil Creek	Basin	Crawford	CWF	None
4—Marsh Run	Basin	Crawford	CWF	None]
4—Thompson Creek	Basin, Source to Shirley Run	Crawford	CWF	None
5—Shirley Run	Basin	Crawford	HQ-CWF	None
[4—Church Run	Basin	Crawford	CWF	None]
4—Thompson Creek	Basin, Shirley Run to Mouth	Crawford	CWF	None
3—Oil Creek	Basin, Thompson Creek to Pine Creek	Crawford	CWF	None
4—Pine Creek	Basin, Source to Caldwell Creek	Crawford	HQ-CWF	None
5—Caldwell Creek	Basin, Source to West Branch Caldwell Creek	Warren	HQ-CWF	None
6—West Branch Caldwell Creek	Basin	Warren	EV	None
5—Caldwell Creek	Basin, West Branch Caldwell Creek to Mouth	Crawford	EV	None
4—Pine Creek	Basin, Caldwell Creek to Mouth	Crawford	CWF	None
[4—Benninghof Run	Basin	Venango	CWF	None]
3—Oil Creek	Basin, Pine Creek to Cherrytree Run	Crawford	CWF	None
4—Cherrytree Run	Basin	Venango	CWF	None
3—Oil Creek	Main Stem, Cherrytree Run to Mouth	Venango	WWF	None
4—[Unnamed] Tributaries to Oil Creek	Basins, Cherrytree Run to [Mouth] Cherry Run	Venango	CWF	None
4—Cherry Run	Basin, Source to Rouseville Corporate Boundary at 41° 28' 37.5" N; 79° 40' 47.9" W	Venango	HQ-CWF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—Cherry Run	Basin, Rouseville Corporate Boundary to Mouth	Venango	CWF	None
[4—Cornplanter Run	Basin	Venango	CWF	None
3—Holiday Run	Basin	Venango	CWF	None
3—Charley Run	Basin	Venango	CWF	None
3—Brannon Run	Basin	Venango	CWF	None
3—Seneca Run	Basin	Venango	CWF	None
3—Twomile Run	Basin	Venango	CWF	None]
4—Tributaries to Oil Creek	Basins, Cherry Run to Mouth	Venango	CWF	None
3—Tributaries to Allegheny River	Basins, Oil Creek to French Creek	Venango	CWF	None
3—French Creek (NY)				
4—Unnamed Tributaries to French Creek	Basins (all sections in PA), Source to PA-NY State Border at 42° 1' 12.1" N; 79° 45' 42.7" W	Erie	WWF	None
4—Cutting Brook	Basin (all sections in PA)	Erie	WWF	None
4—Herrick Creek	Basin (all sections in PA)	Erie	WWF	None
3—French Creek	[Main Stem, PA-NY State Border to Mouth] Basin (all sections in PA), PA-NY State Border to Hubble Run	[Venango] Erie	WWF	None
[4—Unnamed Tributaries to French Creek	Basins (all sections in PA), PA-NY State Border to Mouth	Erie-Crawford-Venango	WWF	None]
4—Hubble Run	Basin (including the Wattsburg Fen), Source to the 1350 ft Contour Line [(Union City 7 1/2 Quadrangle)] at 41° 58' 10.2" N; 79° 45' 58.7" W	Erie	HQ-WWF	None
4—Hubble Run	Basin, 1350 ft. Contour Line to Mouth	Erie	WWF	None
3—French Creek	Basin, Hubble Run to West Branch French Creek	Erie	WWF	None
4—West Branch French Creek (NY)				
5—[Unnamed] Tributaries to West Branch French Creek	Basins (all sections in PA), Source to PA-NY State Border at 42° 7' 57.8" N; 79° 45' 43.1" W	Erie	WWF	None
4—West Branch French Creek	[Main Stem] Basin (all sections in PA), PA-NY State Border to Mouth	Erie	WWF	None
[5—Unnamed Tributaries to West Branch French Creek	Basins (all sections in PA), PA-NY State Border to Mouth	Erie	WWF	None
5—Darrow Brook	Basin (all sections in PA)	Erie	WWF	None
5—Townley Run	Basin	Erie	WWF	None
5—Alder Brook	Basin	Erie	WWF	None
5—Bailey Brook	Basin	Erie	WWF	None]
3—French Creek	Basin, West Branch French Creek to Lake Pleasant Outlet	Erie	WWF	None
4—Lake Pleasant Outlet	Basin	Erie	HQ-CWF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—French Creek	Basin, Lake Pleasant Outlet to Alder Run	Erie	WWF	None
4—Alder Run	Basin	Erie	CWF	None
3—French Creek	Basin, Alder Run to South Branch French Creek	Erie	WWF	None
4—South Branch French Creek	Basin, Source to Beaver Run	Erie	CWF	None
5—Beaver Run	Basin	Erie	EV	None
4—South Branch French Creek	Basin, Beaver Run to Mouth	Erie	CWF	None
[4—Wheeler Creek	Basin	Erie	WWF	None]
3—French Creek	Basin, South Branch French Creek to Le Boeuf Creek	Erie	WWF	None
4—Le Boeuf Creek	Basin, Source to Trout Run	Erie	TSF	None
5—Trout Run	Basin	Erie	HQ-CWF	None
4—LeBoeuf Creek	Basin, Trout Run to Mouth	Erie	TSF	None
3—French Creek	Basin, Le Boeuf Creek to Campbell Run	Erie-Crawford	WWF	None
4—Campbell Run	Basin	Crawford	TSF	None
3—French Creek	Basin, Campbell Run to Kelly Run	Crawford	WWF	None
4—Kelly Run	Basin	Crawford	HQ-CWF	None
3—French Creek	Basin, Kelly Run to Muddy Creek	Crawford	WWF	None
4—Muddy Creek	Basin, Source to East Branch Muddy Creek	Crawford	HQ-CWF	None
5—East Branch Muddy Creek	Basin	Crawford	HQ-CWF	None
4—Muddy Creek	Main Stem, East Branch Muddy Creek to Mackey Run	Crawford	HQ-TSF	None
5—[Unnamed] Tributaries to Muddy Creek	Basins, East Branch Muddy Creek to Mackey Run	Crawford	HQ-CWF	None
[5—Federal Run	Basin	Crawford	HQ-CWF	None]
5—Mackey Run	Basin	Crawford	HQ-CWF	None
4—Muddy Creek	Basin, Mackey Run to Mouth	Crawford	HQ-TSF	None
[4—Mohawk Run	Basin	Crawford	WWF	None]
3—French Creek	Basin, Muddy Creek to Conneauttee Creek	Crawford	WWF	None
4—Conneauttee Creek	Basins, Source to Outlet of Edinboro Lake	Erie	WWF	None
4—Conneauttee Creek	Main Stem, Outlet of Edinboro Lake to Erie-Crawford County Border at 41° 50' 58.9" N; 80° 5' 50.2" W	Erie-Crawford	TSF	None
5—[Unnamed] Tributaries to Conneauttee Creek	Basins, Outlet of Edinboro Lake to Erie-Crawford County Border	Erie	WWF	None
[5—Darrows Creek	Basin	Crawford	WWF	None]

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—Conneauttee Creek	[Main Stem, Erie-Crawford County Border to Mouth] Basin, Erie-Crawford County Border to Little Conneauttee Creek	Crawford	WWF	None
[5—Unnamed Tributaries to Conneauttee Creek	Basins, Erie-Crawford County Border to Mouth	Crawford	WWF	None
5—Torry Run	Basin	Crawford	WWF	None]
5—Little Conneauttee Creek	Basin	Crawford	CWF	None
4—Conneauttee Creek	Basin, Little Conneauttee Creek to Mouth	Crawford	WWF	None
[4—Boles Run	Basin	Crawford	WWF	None
4—Gravel Run	Basin	Crawford	WWF	None
4—Wolf Run	Basin	Crawford	WWF	None]
3—French Creek	Basin, Conneauttee Creek to Woodcock Creek	Crawford	WWF	None
4—Woodcock Creek	Basin, Source to Woodcock Creek Reservoir Dam	Crawford	HQ-CWF	None
4—Woodcock Creek	Basin, Woodcock Reservoir Dam to Mouth	Crawford	CWF	None
[4—Cussewago Creek	Basin	Crawford	WWF	None
4—Van Horne Creek	Basin	Crawford	WWF	None]
3—French Creek	Basin, Woodcock Creek to Conneaut Outlet	Crawford	WWF	None
4—Conneaut Outlet	Basin, Source to Conneaut Lake Dam	Crawford	HQ-WWF	None
4—Conneaut Outlet	Basin, Conneaut Lake Dam to Mouth	Crawford	WWF	None
3—French Creek	Basin, Conneaut Outlet to Little Sugar Creek	Crawford	WWF	None
4—Little Sugar Creek	Basin	Crawford	CWF	None
[4—Foulk Run	Basin	Mercer	WWF	None
4—Powdermill Run	Basin	Mercer	WWF	None
4—North Deer Creek	Basin	Mercer	WWF	None]
3—French Creek	Basin, Little Sugar Creek to McCune Run	Crawford-Mercer-Venango	WWF	None
4—McCune Run	Basin	Venango	CWF	None
3—French Creek	Basin, McCune Run to Mill Creek	Venango	WWF	None
4—Mill Creek	Basin	Venango	CWF	None
3—French Creek	Basin, Mill Creek to Sugar Creek	Venango	WWF	None
4—Sugar Creek	Basin, Source to East Branch Sugar Creek [(RM 17.0)] at 41° 36' 13.8" N; 79° 51' 7.7" W	Crawford	CWF	None
5—East Branch Sugar Creek	Basin, Source to SR 0428 Bridge at 41° 38' 28.9" N; 79° 49' 20.0" W	Crawford	CWF	None
5—East Branch Sugar Creek	Basin, SR 0428 Bridge to Mouth	Crawford	HQ-CWF	None

PROPOSED RULEMAKING

6693

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—Sugar Creek	Basin, East Branch Sugar Creek to Mouth	Venango	CWF	None
[4—Patchel Run	Basin	Venango	WWF	None]
3—French Creek	Basin, Sugar Creek to Mouth	Venango	WWF	None
3—[Unnamed] Tributaries to Allegheny River	Basins, French Creek to [RM 106.70] Lower Twomile Run	Venango	WWF	None
3—Lower Twomile Run	Basin	Venango	CWF	None
[3—Siefer Run	Basin	Venango	WWF	None
3—Ajax Run	Basin	Venango	WWF	None]
3—Tributaries to Allegheny River	Basins, Lower Twomile Run to East Sandy Creek	Venango	WWF	None
3—East Sandy Creek	Basin	Venango	CWF	None
3—Tributaries to Allegheny River	Basins, East Sandy Creek to Snyder Run	Venango	WWF	None
3—Snyder Run	Basin	Venango	CWF	None
3—Tributaries to Allegheny River	Basins, Snyder Run to Sandy Creek	Venango	WWF	None
3—Sandy Creek	Main Stem	Venango	WWF	None
	* * * * *			
4—Ditzenberger Run	Basin	Venango	WWF	None
[3—Clark Run	Basin	Venango	WWF	None]
3—Tributaries to Allegheny River	Basins, Sandy Creek to Pine Hill Run	Venango	WWF	None
3—Pine Hill Run	Basin	Venango	CWF	None
3—Tributaries to Allegheny River	Basins, Pine Hill Run to Dennison Run	Venango	WWF	None
3—Dennison Run	Basin	Venango	EV	None
3—Tributaries to Allegheny River	Basins, Dennison Run to Scrubgrass Creek	Venango	WWF	None
3—Scrubgrass Creek	Basin	Venango	CWF	None
3—Tributaries to Allegheny River	Basins, Scrubgrass Creek to UNT 51240 at 41° 15' 41.8" N, 79° 49' 53.7" W	Venango	WWF	None
3—[Unnamed Tributary to Allegheny River at RM 106.70] UNT 51240	Basin	Venango	CWF	None
[3—Unnamed Tributaries to Allegheny River	Basins, RM 106.70 to Clarion River	Venango-Clarion	WWF	None]
3—Tributaries to Allegheny River	Basins, UNT 51240 to Roberts Run	Venango	WWF	None
3—Roberts Run	Basin	Venango	CWF	None
[3—Falling Spring Run	Basin	Venango	WWF	None]
3—Tributaries to Allegheny River	Basins, Roberts Run to Whitherup Run	Venango	WWF	None
3—Whitherup Run	Basin	Venango	CWF	None
[3—Perry Run	Basin	Venango	WWF	None
3—Whann Run	Basin	Venango	WWF	None]

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Tributaries to Allegheny River	Basins, Whitherup Run to Little Scrubgrass Creek	Venango	WWF	None
3—Little Scrubgrass Creek	Basin	Venango	CWF	None
3—Tributaries to Allegheny River	Basins, Little Scrubgrass Creek to Shull Run	Venango	WWF	None
3—Shull Run	Basin	Venango	CWF	None
3—Tributaries to Allegheny River	Basins, Shull Run to Mill Creek	Venango	WWF	None
3—Mill Creek	Basin	Venango	CWF	None
3—Tributaries to Allegheny River	Basins, Mill Creek to Richey Run	Venango	WWF	None
3—Richey Run	Basin	Clarion-Venango	CWF	None
[3—Lowrey Run	Basin	Butler	WWF	None
3—Fowler Run	Basin	Armstrong	WWF	None]
3—Tributaries to Allegheny River	Basins, Richey Run to Clarion River	Venango-Clarion	WWF	None

§ 93.9r. Drainage List R.

Ohio River Basin in Pennsylvania
Clarion River

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
1—Ohio River				
2—Allegheny River				
3—Clarion River				
4—East Branch Clarion River	Basin, Source to Confluence with West Branch	Elk	HQ-CWF	None
4—West Branch Clarion River	[Main Stem, Source to Confluence with East Branch] Basin, Source to Wolf Run	Elk	CWF	None
[5—Unnamed Tributaries to West Branch Clarion River	Basins, Source to Confluence with East Branch	McKean-Elk	CWF	None
5—Windfall Run	Basin	McKean	CWF	None
5—Sicily Run	Basin	McKean	CWF	None
5—Buck Run	Basin	McKean	CWF	None
5—Rocky Run	Basin	Elk	CWF	None
5—Nearing Run	Basin	Elk	CWF	None
5—Wilson Run	Basin	Elk	CWF	None
5—Oil Creek	Basin	Elk	CWF	None]
5—Wolf Run	Basin	Elk	HQ-CWF	None
[5—Meffert Creek	Basin	Elk	CWF	None]
4—West Branch Clarion River	Basin, Wolf Run to Silver Creek	Elk	CWF	None
5—Silver Creek	Basin	Elk	HQ-CWF	None
4—West Branch Clarion River	Basin, Silver Creek to Confluence with East Branch	Elk	CWF	None

PROPOSED RULEMAKING

6695

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Clarion River	[Main Stem, Confluence of East and West Branches to Inlet of Piney Lake at RM 37.4] Basin, Confluence of East and West Branches to Riley Run	[Clarion] Elk	CWF	None
[4—Unnamed Tributaries to Clarion River	Basins, Confluence of East and West Branches to Inlet of Piney Lake at RM 37.4	Elk-Forest-Jefferson-Clarion	CWF	None
4—Johnson Run	Basin	Elk	CWF	None
4—Powers Run	Basin	Elk	CWF	None]
4—Riley Run	Basin	Elk	WWF	None
3—Clarion River	Basin, Riley Run to Little Mill Creek	Elk	CWF	None
4—Little Mill Creek	Basin	Elk	HQ-CWF	None
[4—Mason Creek	Basin	Elk	CWF	None
4—Elk Creek	Basin	Elk	CWF	None
4—Island Run	Basin	Elk	CWF	None]
3—Clarion River	Basin, Little Mill Creek to Big Mill Creek	Elk	CWF	None
4—Big Mill Creek	Basin	Elk	HQ-CWF	None
[4—Connerville Run	Basin	Elk	CWF	None
4—Dog Hollow Run	Basin	Elk	CWF	None
4—Gillis Run	Basin	Elk	CWF	None]
3—Clarion River	Basin, Big Mill Creek to Little Toby Creek	Elk	CWF	None
4—Little Toby Creek	[Main Stem] Basin, Source to Sawmill Run	Elk	CWF	None
[5—Unnamed Tributaries to Little Toby Creek	Basins	Elk-Jefferson	CWF	None
5—Limestone Run	Basin	Elk	CWF	None
5—Kyler Run	Basin	Elk	CWF	None
5—McCauley Run	Basin	Elk	CWF	None]
5—Sawmill Run	Main Stem	Elk	CWF	None
6—Unnamed Tributaries to Sawmill Run	Basins	Elk	CWF	None
6—[Lost Run] UNT 50397 at 41° 17' 39.8" N; 78° 38' 6.3" W (locally known as Lost Run)	Basin, Source to Fox Township Municipal Authority Dam	Elk	HQ-CWF	None
6—[Lost Run] UNT 50397	Basin, Fox Township Municipal Authority Dam to Mouth	Elk	CWF	None
[5—Brandy Camp Creek	Basin	Elk	CWF	None
5—Johnson Run	Basin	Elk	CWF	None
5—Bear Run	Basin	Elk	CWF	None
5—Oyster Run	Basin	Elk	CWF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
5—Mead Run	Basin	Elk	CWF	None]
4—Little Toby Creek	Basin, Sawmill Run to Boggy Run	Elk	CWF	None
5—Boggy Run	Basin	Elk	HQ-CWF	None
4—Little Toby Creek	Basin, Boggy Run to Whetstone Branch	Elk	CWF	None
5—Whetstone Branch	Basin, Source to Brockway Municipal Authority No. 1 Dam	Elk	HQ-CWF	None
5—Whetstone Branch	Basin, Brockway Municipal Authority No. 1 Dam to Mouth	Elk	CWF	None
[5—Walburn Run	Basin	Jefferson	CWF	None]
4—Little Toby Creek	Basin, Whetstone Branch to Rattlesnake Creek	Jefferson	CWF	None
5—Rattlesnake Creek	Basin, Source to Brockway Municipal Authority Dam	Jefferson	HQ-CWF	None
5—Rattlesnake Creek	Basin, Brockway Municipal Authority Dam to Mouth	Jefferson	CWF	None
[5—Baghdad Run	Basin	Jefferson	CWF	None
5—Jenkins Run	Basin	Jefferson	CWF	None
5—Little Vineyard Run	Basin	Jefferson	CWF	None]
4—Little Toby Creek	Basin, Rattlesnake Creek to Vineyard Run	Jefferson	CWF	None
5—Vineyard Run	Basin	Elk	HQ-CWF	None
[5—Coward Run	Basin	Elk	CWF	None
5—Laurel Run	Basin	Elk	CWF	None
5—Bearmouth Run	Basin	Elk	CWF	None]
4—Little Toby Creek	Basin, Vineyard Run to Mouth	Jefferson	CWF	None
3—Clarion River	Basin, Little Toby Creek to Bear Creek	Elk	CWF	None
4—Bear Creek	Basin	Elk	HQ-CWF	None
[4—Mahood Run	Basin	Elk	CWF	None
4—Beech Bottom Run	Basin	Elk	CWF	None
4—Lake City Run	Basin	Elk	CWF	None
4—Cole Run	Main Stem	Elk	CWF	None
5—Unnamed Tributaries to Cole Run	Basins	Elk	CWF	None]
3—Clarion River	Basin, Bear Creek to Crow Run	Elk	CWF	None
[5] 4—Crow Run	Basin, Source to Cole Run	Elk	HQ-CWF	None
[4—Irwin Run	Basin	Elk	CWF	None]
5—Cole Run	Basin	Elk	CWF	None
4—Crow Run	Basin, Cole Run to Mouth	Elk	HQ-CWF	None
3—Clarion River	Basin, Crow Run to Spring Creek	Elk	CWF	None
4—Spring Creek	Basin	Elk	HQ-CWF	None
3—Clarion River	Basin, Spring Creek to Maxwell Run	Elk	CWF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—Maxwell Run	Basin	Elk	HQ-CWF	None
[4—Elliott Run	Basin	Elk	CWF	None
4—Daugherty Run	Basin	Jefferson	CWF	None
4—Raught Run	Basin	Elk	CWF	None
4—Painter Run	Basin	Elk	CWF	None
4—Church Run	Basin	Elk	CWF	None]
3—Clarion River	Basin, Maxwell Run to Callen Run	Elk-Jefferson	CWF	None
4—Callen Run	Basin	Jefferson	HQ-CWF	None
[4—Cline Run	Basin	Elk	CWF	None]
3—Clarion River	Basin, Callen Run to Wyncoop Run	Elk-Jefferson	CWF	None
4—Wyncoop Run	Basin	Elk	HQ-CWF	None
[4—Leeper Run	Basin	Elk	CWF	None
4—Pine Run	Basin	Elk	CWF	None]
3—Clarion River	Basin, Wyncoop Run to Mill Stone Creek	Elk-Jefferson	CWF	None
4—Mill Stone Creek	Basin	Elk	HQ-CWF	None
[4—Shippen Run	Basin	Forest	CWF	None]
3—Clarion River	Basin, Mill Stone Creek to Clear Creek	Elk-Jefferson-Forest	CWF	None
4—Clear Creek	Basin	Jefferson	HQ-CWF	None
[4—Tadler Run	Basin	Jefferson	CWF	None]
3—Clarion River	Basin, Clear Creek to Cherry Run	Jefferson-Forest	CWF	None
4—Cherry Run	Basin	Forest	HQ-CWF	None
3—Clarion River	Basin, Cherry Run to Maple Creek	Jefferson-Forest	CWF	None
4—Maple Creek	Basin	Forest	HQ-CWF	None
3—Clarion River	Basin, Maple Creek to Coleman Run	Jefferson-Forest	CWF	None
4—Coleman Run	Basin	Forest	HQ-CWF	None
3—Clarion River	Basin, Coleman Run to Troutman Run	Jefferson-Forest	CWF	None
4—Troutman Run	Basin	Forest	HQ-CWF	None
[4—Henry Run	Basin	Forest	CWF	None]
3—Clarion River	Basin, Troutman Run to Toms Run	Jefferson-Forest	CWF	None
4—Toms Run	Basin, Source to Little Hefren Run	Clarion	EV	None
5—Little Hefren Run	Basin	Clarion	CWF	None
4—Toms Run	Basin, Little Hefren Run to Mouth	Forest	EV	None
3—Clarion River	Basin, Toms Run to Cathers Run	Jefferson-Clarion	CWF	None
4—[Cather] Cathers Run	Basin	Clarion	HQ-CWF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
3—Clarion River	Basin, Cathers Run to Maxwell Run	Clarion	CWF	None
4—Maxwell Run	Basin	Clarion	HQ-CWF	None
3—Clarion River	Basin, Maxwell Run to Blyson Run	Clarion	CWF	None
4—Blyson Run	Basin	Clarion	EV	None
3—Clarion River	Basin, Blyson Run to Inlet of Piney Lake at 41° 14' 11.6" N, 79° 19' 21.3" W	Clarion	CWF	None
3—Clarion River	Main Stem, Inlet of Piney Lake at [RM 37.4] at 41° 14' 11.6" N, 79° 19' 21.3" W to Mouth	Clarion	WWF	None
4—[Unnamed] Tributaries to Clarion River	Basins, Inlet of Piney Lake at [RM 37.4 to Mouth] at 41° 14' 11.6" N, 79° 19' 21.3" W to Mill Creek	Clarion	CWF	None
4—Mill Creek	[Main Stem, Source to Little Mill Creek] Basin, Source to McCanna Run	Clarion	HQ-CWF	None
[5—Unnamed Tributaries to Mill Creek	Basins, Source to Little Mill Creek	Clarion-Jefferson	HQ-CWF	None
4—Mill Creek				
5—Parks Run	Basin	Jefferson	HQ-CWF	None
5—Martin Run	Basin	Jefferson	HQ-CWF	None
5—Rankin Run	Basin	Jefferson	HQ-CWF	None
5—Updike Run	Basin	Jefferson	HQ-CWF	None]
5—McCanna Run (Pendleton Run)	Basin	Clarion	EV	None
4—Mill Creek	Basin, McCanna Run to Little Mill Creek	Clarion	HQ-CWF	None
5—Little Mill Creek	Basin	Clarion	CWF	None
4—Mill Creek	Main Stem, Little Mill Creek to Mouth	Clarion	CWF	None
5—Unnamed Tributaries to Mill Creek	Basins, Little Mill Creek to Mouth	Clarion	HQ-CWF	None
5—Douglass Run	Basin	Clarion	CWF	None
5—Woods Run	Basin	Clarion	HQ-CWF	None
5—Stroup Run	Basin	Clarion	HQ-CWF	None
5—Trap Run	Basin	Clarion	HQ-CWF	None
5—Whites Run	Basin	Clarion	CWF	None
[4—Reeds Run	Basin	Clarion	CWF	None
4—Toby Creek	Basin	Clarion	CWF	None
4—Trout Run	Basin	Clarion	CWF	None
4—Courtleys Run	Basin	Clarion	CWF	None
4—Piney Creek	Basin	Clarion	CWF	None
4—Deer Creek	Basin	Clarion	CWF	None]
4—Tributaries to Clarion River	Basins, Mill Creek to Canoe Creek	Clarion	CWF	None

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
4—Canoe Creek	Basin	Clarion	HQ-CWF	None
4—Tributaries to Clarion River	Basins, Canoe Creek to Beaver Creek	Clarion	CWF	None
4—Beaver Creek	Basin	Clarion	HQ-CWF	None
[4—Licking Creek	Basin	Clarion	CWF	None]
4—Tributaries to Clarion River	Basins, Beaver Creek to Turkey Creek	Clarion	CWF	None
4—Turkey Creek	Basin	Clarion	HQ-CWF	None
4—Tributaries to Clarion River	Basins, Turkey Creek to Mouth	Clarion	CWF	None

§ 93.9s. Drainage List S.

Ohio River Basin in Pennsylvania
Allegheny River

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
		* * * * *		
3—Mahoning Creek	Main Stem, Confluence of East Branch Mahoning Creek and Stump Creek to Mouth	Jefferson	WWF	None
4—Unnamed Tributaries to Mahoning Creek	Basins, Confluence to East Branch Mahoning Creek and Stump Creek to Mouth	Jefferson-Indiana-Armstrong	CWF	None
4—Big Run	Basin	Jefferson	CWF	None
4—Rock Run	Basin	Jefferson	CWF	None
4—Graffius Run	Basin	Jefferson	CWF	None
4—Jackson Run	Basin	Jefferson	CWF	None
4—Canoe Creek	Basin	Jefferson	CWF	None
		* * * * *		
4—Cathcart Run	Basin	Armstrong	CWF	None
4—Hamilton Run	Basin	Armstrong	CWF	None
4—Cave Run	Basin	Armstrong	CWF	None
4—Scrubgrass Creek	Basin	Armstrong	CWF	None
3—Wiskey Creek	Basin	Armstrong	WWF	None
3—Pine Creek	Basin	Armstrong	HQ-CWF	None
3—Hays Run	Basin	Armstrong	WWF	None
3—Limestone Run	Basin	Armstrong	WWF	None
3—Cowanshannock Creek	Basin, Source to Huskins Run	Armstrong	WWF	None
4—Huskins Run	Basin	Armstrong	WWF	None
3—Cowanshannock Creek	Main Stem, Huskins Run to Mouth	Armstrong	TSF	None
4—[Unnamed] Tributaries to Cowanshannock Creek	Basins, Huskins Run to Mouth	Armstrong	WWF	None
3—Garretts Run	Basin	Armstrong	WWF	None
		* * * * *		

§ 93.9t. Drainage List T.

Ohio River Basin in Pennsylvania
Kiskiminetas River

Stream	Zone	County			Water Uses Protected	Exceptions To Specific Criteria
		*	*	* * *		
6—Quemahoning Creek	Main Stem			Somerset	CWF	None
7—Unnamed Tributaries to Quemahoning Creek	Basins			Somerset	CWF	None
7—Hoffman Run	Basin			Somerset	CWF	None
7—North Branch Quemahoning Creek	Main Stem			Somerset	CWF	None
		*	*	* * *		
7—Spruce Run	Basin			Somerset	CWF	None
6—Kaufman Run	Basin			Somerset	CWF	None
6—Paint Creek	Main Stem, Source to Little Paint Creek			Cambria-Somerset	CWF	None
		*	*	* * *		
6—Spring Run	Basin			Cambria	CWF	None
[6—Trout Run	Basin			Cambria	CWF	None]
6—Kane Run	Basin			Cambria	CWF	None
6—North Branch Little Conemaugh River	Basin			Cambria	CWF	None
		*	*	* * *		
6—Unnamed Tributaries to McGee Run	Basins, Farthest Upstream Crossing of Derry Borough Border to Mouth			Westmoreland	CWF	None
6—Hillside Run	Basin			Westmoreland	CWF	None
6—Trout Run	Basin, Source to inlet of Blairsville Reservoir			Westmoreland	EV	None
		*	*	* * *		

§ 93.9v. Drainage List V.

Ohio River Basin in Pennsylvania
Monongahela River

Stream	Zone	County			Water Uses Protected	Exceptions To Specific Criteria
		*	*	* * *		
5—Tub Mill Run	Basin			Somerset	CWF	None
5—Piney Creek	[Main Stem] Basin (all Sections in PA)			Somerset	CWF	None
[6—Unnamed Tributaries to Piney Creek	Basins (all Sections in PA)			Somerset	CWF	None
6—Little Piney Creek	Basin			Somerset	CWF	None]
5—Miller Run	Basin			Somerset	CWF	None
5—Flaugherty Creek	Basin			Somerset	CWF	None
		*	*	* * *		
7—Unnamed Tributaries to East Branch Coxes Creek	Basins, PA 281 at 40° 0' 43.8" N; 79° 4' 27.5" W to Confluence with West Branch			Somerset	TSF	None
7—Parsons Run	Basin			Somerset	TSF	None
7—Kimberly Run	Basin			Somerset	CWF	None
		*	*	* * *		

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
6—Laurel Run	Basin	Somerset	WWF	None
6—Rice Run	Basin	Somerset	WWF	None
6—Wilson Creek	Basin	Somerset	WWF	None
		* * *		
6—Isers Run	Basin	Somerset	EV	None
5—Lost Run	Basin	Somerset	WWF	None
5—McClintock Run	Basin	Somerset	CWF	None
		* * *		

§ 93.9w. Drainage List W.

**Ohio River Basin in Pennsylvania
Ohio River**

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
		* * *		
3—Shenango River	Main Stem, Shenango Reservoir Dam to Point 1.0 River Mile Downstream	Mercer	TSF	None
4—Unnamed Tributaries to Shenango River	Basins, Shenango Reservoir Dam to Point 1.0 River Mile Downstream	Mercer	CWF	None
3—Shenango River	Main Stem (all sections in PA), 1.0 River Mile Downstream of Shenango Reservoir Dam to Confluence with Mahoning River	Lawrence	WWF	None
4—Unnamed Tributaries to [Shanango] Shenango River	Basins (all sections in PA), 1.0 River Mile Downstream of Shenango Reservoir Dam to Confluence with Mahoning River	Mercer-Lawrence	WWF	None
4—McCullough Run	Basin (all sections in PA)	Mercer	WWF	None
4—Thornton Run	Basin	Mercer	WWF	None
		* * *		

§ 93.9x. Drainage List X.

Lake Erie

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
1—Lake Erie	All sections of lake in PA except Outer Erie Harbor and Presque Isle Bay	Erie	CWF	Delete Fe[, DO ₁ and Bac ₁] and DO ₁ See GLWQA [Add E. coli per 40 CFR 131.41 (Except (f)) and See 28 Pa. Code § 18.28(b)(2) and (3)]

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
1—Lake Erie (Outer Erie Harbor and Presque Isle Bay)	Portion of lake bordered by Presque Isle on west, longitude 80° 01' 50" on east, and latitude 42° 10' 18" on north, except harbor area and central channel dredged and maintained by United States Army Corps of Engineers	Erie	WWF	Delete pH Add pH between 7 and 9 [Add E. coli per 40 CFR 131.41 (Except (f)) and See 28 Pa. Code § 18.28(b)(2) and (3)]

The following criterion is specific to Lake Erie (Outer Erie Harbor and Presque Isle Bay) waters in the Harbor area and central channel dredged and maintained by United States Army Corps of Engineers, based on special studies.

Parameter Symbol	Criteria		Critical Use*
Bacteria Bac₂	(Coliforms/100 ml)—Maximum of 5,000/100 ml as a monthly average value, no more than this number in more than 20% of the samples collected during a month, nor more than 20,000/100 ml in more than 5% of the samples.		PWS
1—Lake Erie (Outer Erie Harbor and Presque Isle Bay)	Harbor area and central channel dredged and maintained by United States Army Corps of Engineers	Erie	WWF, Delete WC
2—Unnamed Tributaries to Lake Erie	Basins (all sections in PA), PA-OH State Border to Presque Isle	Erie	CWF, MF
	* * * * *		Delete pH and Bac ₁ Add pH between 7 and 9, Bac ₂ None

§ 93.9z. Drainage List Z.

Potomac River Basin in Pennsylvania
Potomac River

<i>Stream</i>	<i>Zone</i>	<i>County</i>	<i>Water Uses Protected</i>	<i>Exceptions To Specific Criteria</i>
		* * * * *		
3—Little Wills Creek	Basin	Somerset	HQ-CWF, MF	None
3—Thompson Run	Basin	Somerset	HQ-CWF, MF	None
3—Gladdens Run	Basin	Somerset	HQ-CWF, MF	None
		* * * * *		

[Pa.B. Doc. No. 17-1766. Filed for public inspection October 20, 2017, 9:00 a.m.]

STATEMENTS OF POLICY

DEPARTMENT OF ENVIRONMENTAL PROTECTION

[25 PA. CODE CH. 16]

Water Quality Toxics Management Strategy

The Department of Environmental Protection (Department) is proposing to amend Chapter 16 (relating to water quality toxics management strategy—statement of policy) to read as set forth in Annex A.

A. Effective Date

The proposed amendments will be effective upon final publication in the *Pennsylvania Bulletin*.

B. Contact Persons

For further information, contact Thomas A. Barron, Chief, Standards Section, Water Quality Division, Bureau of Clean Water, 11th Floor, Rachel Carson State Office Building, P.O. Box 8774, Harrisburg, PA 17105-8774, (717) 787-9637; or Michelle Moses, Assistant Counsel, Bureau of Regulatory Counsel, 9th Floor, Rachel Carson State Office Building, P.O. Box 8464, Harrisburg, PA 17105-8464, (717) 787-7060. Persons with a disability may use the Pennsylvania AT&T Relay Service at (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This proposed statement of policy is available on the Department's web site at www.dep.pa.gov.

C. Summary of Amendments

Proposed amendments to § 16.1 (relating to general) clarify that a list of site-specific criteria is no longer maintained in Chapter 16.

Proposed amendments to § 16.21 (relating to acute and chronic protection) clarify endpoints, magnitude and duration.

Proposed amendments to § 16.22 (relating to criteria development) update the cross-reference to Chapter 92a (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance).

Proposed amendments to § 16.23 (relating to sources of information) add the ECOTOX computerized database as a source for aquatic life information. Reference to the Aquire database is proposed to be deleted because it is no longer available.

Proposed amendments to § 16.24 (relating to metals criteria) add the availability of the Biotic Ligand Model (BLM) to determine site-specific metals criteria.

Proposed amendments to § 16.32 (relating to threshold level toxic effects) add Benchmark Dose Modeling (BDM) as an alternative way of calculating adverse effect levels for human health criteria development. Also, references to the *National Recommended Water Quality Criteria* (EPA-822-H-04-001, 2004) and Exhibit 3-1 of the *Water Quality Standards Handbook, Second Edition*, EPA 823-0-94-005A, August 1994, as sources of developing water quality criteria are proposed to be deleted. The Department uses the United States Environmental Protection Agency's (EPA) *Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health* (Methodology) (EPA-822-B-00-004, October 2000) as its source for

method development. The Department is proposing to update the exposure factors for average body weight, drinking water intake and consumption of fish per day to reflect the latest scientific information, and to implement existing guidelines in EPA's Methodology for deriving human health criteria.

In §§ 16.33, 16.51 and 16.61 (relating to nonthreshold effects (cancer); human health and aquatic life criteria; and special provisions for the Great Lakes System), to maintain the consistency of the ambient water quality criteria throughout this Commonwealth, language pertaining to criteria from Appendix A, Table 1A and Chapter 93, Table 5 not applying to the Great Lakes System is proposed to be deleted. Current criteria available in Chapter 93, Table 5 are applicable to the final water quality guidance for the Great Lakes System (final guidance) published at 60 FR 15366 (March 23, 1995) in which the Department agreed to create criteria as protective as the criteria created using the Great Lakes Initiative (GLI) guidelines.

Additional clarification is proposed to be added to § 16.52 (relating to Whole Effluent Toxicity Testing (WETT)) regarding requirements and implementation of whole effluent toxicity testing (WETT) under Chapter 92a and Chapter 252 (relating to environmental laboratory accreditation). This will clarify that the Department may require WETT, under § 92a.21(d)(4) (relating to application for a permit), for any discharges covered by an NPDES permit or other activities, when it is determined that testing is necessary to assure protection of aquatic life. When WETT is required, the Department will also use design conditions and other applicable factors as a basis for evaluating test results. Additional clarification is added that WETT shall also be conducted in accordance with Chapter 252 and the NPDES permit.

Proposed amendments to § 16.102 (relating to approved EPA and DEP analytical methods and detection limits) delete language that pertains to Appendix A, Tables 1A, 2B and 3. Site-specific criteria in Appendix A, Table 1A will be populated and maintained on the Department's web site. References to the EPA-approved analytical methods and guidelines are proposed to be added to this section.

In Appendix A, Table 1A is proposed to be deleted. The heading of Table 2A is proposed to be amended and will contain methods developed and approved by the Department. In Tables 2A and 2B, the other analytical methods, are proposed to be deleted. Table 3 is proposed to be deleted as the information is redundant and found in 40 CFR Parts 122, 136, 141, 143, 430, 455 and 465. Section 16.102 is proposed to be updated to complement the changes made to the tables in Appendix A.

D. Public Comments

The Department invites public comments on this proposed statement of policy and will accept comments through December 29, 2017. Comments, including comments submitted by e-mail, must include the originator's name and address. A subject heading of the proposal and return name and address must also be included in each transmission. Commentators are urged to submit comments using the Department's online eComment system at www.ahs.dep.pa.gov/eComment. Written comments should be submitted by e-mail to ecomment@pa.gov or by mail to the Department of Environmental Protection, Policy Office, Rachel Carson State Office Building, P.O.

Box 2063, Harrisburg, PA 17105-2063. Comments submitted by facsimile will not be accepted.

E. Public Hearings

The Department will hold three public hearings on the proposed amendments to Chapter 16. The public hearings will take place on the same date and at the same location where the Environmental Quality Board will conduct public hearings on the proposed amendments to Chapter 93 (relating to water quality standards). The public hearings will begin at 1 p.m. as follows:

December 6, 2017	Department of Environmental Protection Northeast Regional Office 2nd Floor Conference Room 2 East Main Street Norristown, PA 19401
December 8, 2017	Department of Environmental Protection Southcentral Regional Office Susquehanna Conference Room 909 Elmerton Avenue Harrisburg, PA 17110
December 14, 2017	Department of Environmental Protection Southwest Regional Office Waterfront Conference Rooms A and B 400 Waterfront Drive Pittsburgh, PA 15222

Persons wishing to present testimony at the Chapter 16 hearings are requested to contact Thomas A. Barron at (717) 787-9637 or tbarron@pa.gov at least 1 week in advance of a hearing to reserve a time to present testimony. Oral testimony is limited to 5 minutes for each witness. Witnesses are requested to submit three written copies of their oral testimony to the hearing chairperson. Organizations are limited to designating one witness to present testimony on their behalf at each hearing.

Persons in need of accommodations as provided for in the Americans with Disabilities Act of 1990 should contact Thomas A. Barron at (717) 787-9637 or through the Pennsylvania AT&T Relay Service at (800) 654-5984 (TDD) to discuss how the Department may accommodate their needs.

PATRICK McDONNELL,
Secretary

(Editor's Note: See 47 Pa.B. 6609 (October 21, 2017) for a proposed rulemaking relating to this proposed statement of policy.)

Fiscal Note: 7-516. No fiscal impact; (8) recommends adoption.

Annex A

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart A. PRELIMINARY PROVISIONS

ARTICLE II. STATEMENTS OF POLICY

CHAPTER 16. WATER QUALITY TOXICS MANAGEMENT STRATEGY—STATEMENT OF POLICY

Subchapter A. GUIDELINES FOR DEVELOPMENT OF CRITERIA FOR TOXIC SUBSTANCES AND WATER QUALITY CRITERIA FOR TOXIC SUBSTANCES

INTRODUCTION

§ 16.1. General.

Water quality criteria are the numeric concentrations, levels or surface water conditions that need to be maintained or attained to protect existing and designated uses. They are designed to protect the water uses listed in Chapter 93 (relating to water quality standards). The most sensitive of these protected uses are generally water supply, recreation and fish consumption, and aquatic life related. Therefore, criteria designed to protect these uses will normally protect the other uses listed in Chapter 93. This chapter specifies guidelines and procedures for development of criteria for toxic substances [**and also lists those site-specific criteria which have been developed**].

GUIDELINES FOR DEVELOPMENT OF AQUATIC LIFE CRITERIA

§ 16.21. Acute and chronic protection.

To provide for protection of aquatic life, it is necessary to consider both chronic, that is, long-term (reproduction, growth, survival) and acute or short-term (survival) [**concepts**] **endpoints**. Aquatic life can generally survive excursions of elevated concentrations of a pollutant as long as the excursion is of relatively short duration and does not frequently recur. However, to provide protection over a lifetime, a lower concentration shall be maintained. Thus, each aquatic life criterion consists of two [**components**] **magnitudes**. The EPA defines these as a criterion maximum concentration (CMC) for acute protection and a criterion continuous concentration (CCC) for chronic protection. Each [**component is further**] **criterion is** defined in terms of magnitude (a scientifically derived number), duration (the period of time over which the number must be achieved), and the maximum desired frequency (the number of repetitions per unit time) of occurrence. Consistent with this approach, the Department whenever possible develops acute and chronic criteria and specifies the applicable magnitude and duration. The frequency of occurrence is accounted for through the specification of factors appropriate to the criteria in Chapter 96 (relating to water quality standards implementation). **Basis for the magnitude, duration and frequency is described in criteria development rationale or other appropriate supporting documentation.**

§ 16.22. Criteria development.

The Department will establish criteria for toxic substances to provide for protection of aquatic life in accordance with the following guidelines:

(1) For those toxics for which the EPA has developed criteria in accordance with the National guidelines as set forth in "Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses" (1985), as amended and updated, the Department will review and evaluate the criteria. If the Department determines that the criteria are adequate to protect indigenous aquatic communities in the State's waters, these criteria will serve as the basis for establishing total maximum daily loads (TMDLs) under Chapter 96 (relating to water quality standards implementation) or NPDES effluent limitations under

Chapter [92] 92a (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance). If the Department determines that the EPA National criteria are inappropriate, the Department will adjust these criteria in accordance with National guidelines to reflect the levels required for protection of aquatic life in this Commonwealth's waters.

(2) For those toxics identified or expected in a discharge for which the EPA has not developed criteria, the Department will develop criteria using EPA approved National guidelines.

§ 16.23. Sources of information.

The Department will use the following sources of information in establishing criteria for aquatic life protection:

(1) United States EPA 1986 Quality Criteria for Water (Goldbook).

(2) United States EPA Ambient Water Quality Criteria Development Documents and updates.

(3) Aquatic life toxicity data available in the published scientific literature.

(4) Aquatic life toxicity data available on EPA computerized databases (for example, [aquire] ECOTOX, Great Lakes Initiative (GLI) Clearinghouse).

§ 16.24. Metals criteria.

(a) [The] Metals criteria are established to control the toxic portion of a substance in the water column. Depending upon available data, aquatic life criteria for metals are expressed as either dissolved or total recoverable. As information develops, the chemical identifiers for the toxic portion may be added, changed or refined. The criteria form one of the bases for water quality-based effluent limitations, which are expressed as total recoverable metal. **When calculating equation-based metals criteria for determining effluent limitations, the criteria must be developed in accordance with § 93.8c (relating to human health and aquatic life criteria for toxic substances).**

(b) Chemical translators are used to convert dissolved criteria into effluent limitations which are required by Federal regulations to be expressed as total recoverable metal. The default chemical translator used by the Department is the reciprocal of the conversion factor (listed in the Conversion Factors Table located in § 93.8b (relating to metals criteria)) that was used to determine the dissolved criterion. **If a NPDES discharger performs a chemical translator study for a dissolved criterion, the study of this site-specific translator should be conducted in accordance with the EPA's "The Metals Translator: Guidance for Calculating a Total Recoverable Permit Limit from a Dissolved Criterion" (June 1996), as amended and updated.**

(c) NPDES dischargers may request alternate effluent limitations by using site-specific water quality characteristics in a request to modify an existing water quality criterion, in accordance with § 93.8d (relating to development of site-specific water quality criteria). [This is accomplished by performing a site-specific chemical translator study for a dissolved criterion. A water effect ratio (WER) study may also be conducted, based on either total recoverable or dissolved criteria, depending on the form of the criterion.] This may be accomplished through one or more of the following methods:

(1) Recalculating a water quality criterion in accordance with the EPA's "Interim Guidance on the Determination and Use of Water-Effect Ratios for Metals, Appendix B: The Recalculation Procedure" (February 1994), as amended and updated. The Recalculation Procedure accounts for corrections, updates and additions to the original criterion dataset to create an appropriate dataset to calculate the site-specific criterion. If the optional deletion process is used to evaluate the taxonomic composition, this process should follow the EPA's "Revised Deletion Process for the Site-Specific Recalculation Procedure for Aquatic Life Criteria" (April 2013).

(2) Developing a water quality criterion by performing a Water Effect Ratio (WER) study, which is a factor that expresses the difference between the measures of the toxicity of a substance in laboratory water and the toxicity in site water. The WER provides a mechanism to account for that portion of a metal which is toxic under certain physical, chemical or biological conditions. WERs are applicable only to certain metals, which are listed by the EPA in "Interim Guidance on the Determination and Use of Water-Effect Ratios for Metals" (February 1994), as amended and updated.

(3) Developing a water quality criterion by performing a Biotic Ligand Model (BLM) study for copper in freshwater systems. The BLM is a metal bioavailability model that uses receiving water body characteristics and monitoring data to develop site-specific water quality criteria. The BLM is used in evaluating the differences in the availability and toxicity of metals. These differences occur as a result of variation in local water chemistry. The BLM may be used to derive site-specific criteria for copper in freshwater systems. The BLM incorporates the best available science for determining site-specific water quality criteria for copper and is therefore preferred by the Department. Subject to Departmental approval of the testing and its results, the Department will evaluate the use of the BLM to establish alternate site-specific criteria. In the absence of available site data to run the BLM, estimates for missing water quality parameters may be developed using EPA's guidance "Draft Technical Support Document: Recommended Estimates for Missing Water Quality Parameters for Application in EPA's Biotic Ligand Model" (March 2016), as amended and updated.

(4) Developing a water quality criterion using other guidance approved by the Department, which is based on other EPA-approved or scientifically defensible methodologies.

(d) [A WER is a factor that expresses the difference between the measures of the toxicity of a substance in laboratory water and the toxicity in site water. The WER provides a mechanism to account for that portion of a metal which is toxic under certain physical, chemical or biological conditions. At this time, WERs are applicable only to certain metals, which are listed by the EPA in "Guidance on the Determination and Use of Water-Effect Ratios for Metals" (February 1994), as amended and updated. Subject to Departmental approval of the testing and its results, the Department will use the WER to establish an alternate

site-specific criterion.] The discharger may choose to conduct either the WER or BLM. Either the WER or BLM may be combined with a chemical translator study or the Recalculation Procedures. If the Recalculation Procedure is selected, the procedure requires the recalculation of the existing criterion before the WER is applied.

[(e) Chemical translator studies must be conducted in accordance with the EPA's interim final document, "The Metals Translator: A Guidance for calculating a total recoverable permit limit from a dissolved criterion" (June 1996), as amended and updated.

(f) Final reports on the studies shall be submitted to the Department within 60 days of completion. Upon approval of the study results, the Department will use the chemical translator or WER, or both, to determine revised effluent limitations.]

GUIDELINES FOR DEVELOPMENT OF HUMAN HEALTH-BASED CRITERIA

§ 16.32. Threshold level toxic effects.

* * * * *

(b) Control of threshold toxics is based upon animal testing or epidemiological studies that report no- or lowest-observed adverse effect levels of the substance (NOAEL or LOAEL). In evaluating a particular toxic, toxicologists weigh the merits of all the tests, and choose, in their best professional judgment, the safe level. By applying standard margins of safety to the NOAEL, extrapolations from the laboratory animals to humans (factor of 10), for sensitive subpopulations (10), and from short-term to chronic studies (10) can be taken into account. An additional factor of 10 is used if only a LOAEL is available. Modifying factors (1—10), which account for deficiencies in the toxicity studies, are also considered in determining an acceptable exposure level. The current term for this acceptable level is reference dose (RfD); it was previously called the acceptable daily intake (ADI). **Adverse effect levels may be calculated using Benchmark Dose Modeling (BMD). The purpose of the BMD is to derive a point of departure for calculating a risk value, such as a reference dose or a reference concentration. In the customary approach, the point of departure is the NOAEL or the LOAEL. The BMD values are calculated by dividing a point of departure by the uncertainty factors. This most sensitive effect is also called the critical effect, and it is used as the point of departure in establishing a toxicity benchmark. The RfD can be calculated using a LOAEL, a NOAEL or BMD. It is adjusted for protection of an average ([70] 80 Kg) person. It is then divided by expected exposure [condition] conditions to result in an applicable criterion. [Except as provided in § 16.61(b)(2) (relating to special provisions for the Great Lakes System), exposure] Exposure conditions by means of water include [2] 2.4 liters per day of drinking water and consumption of [17.5] 22.0 grams of fish per day. [Bioconcentration] The bioaccumulation of toxics in edible portions of fish is accounted for by use of [bioconcentration factors (BCF)] bioaccumulation factors (BAF). [BCF] The BAF is the ratio in liters per kilogram [of a substance's concentration in tis-**

sues of an aquatic organism to its concentration in the ambient water] that accounts for the chemical accumulation in aquatic organisms from all potential exposure routes, including water, food and sediment.

(c) The Department will establish criteria for threshold toxics in accordance with the following guidelines:

(1) If the EPA has developed criteria, the Department will evaluate and accept the criteria when it is determined that they are adequate to protect the designated water uses.

(2) If the EPA criteria have been evaluated, and have been determined to be inadequate to protect designated uses, or when no criteria have been developed for a substance identified or expected in a discharge, the Department will develop criteria following EPA's standard toxicological procedures outlined in the Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health (EPA-822-B-00-004, October 2000) [and the *National Recommended Water Quality Criteria* (EPA-822-H-04-001, 2004), as amended and updated or Exhibit 3-1 of the *Water Quality Standards Handbook, Second Edition, EPA 823-0-94-005A, August, 1994*], as amended and updated.

* * * * *

§ 16.33. Nonthreshold effects (cancer).

* * * * *

(e) The Department uses a 1×10^{-6} cancer risk level as specified in § 93.8a(d) (relating to [**water quality criteria for**] toxic substances). Attainment of this risk level is predicated on exposure that includes drinking [2] 2.4 liters of water and ingesting [17.5] 22.0 grams of fish per day over a 70-year lifetime [, except as provided in § 16.61(b)(2) (relating to special criteria for the Great Lakes Systems)]. Bioaccumulation of carcinogenic toxics in edible portions of fish are accounted for by use of bioaccumulation factors (BAFs).

* * * * *

WATER QUALITY CRITERIA FOR TOXIC SUBSTANCES

§ 16.51. Human health and aquatic life criteria.

(a) [**Appendix A, Table 1A and**] Chapter 93, Table 5 [**list**] lists the human health and aquatic life criteria for toxic substances which the Department uses in development of effluent limitations in NPDES Permits and for other purposes. [**Appendix A, Table 1A lists**] **The Department will maintain a table of site-specific human health and aquatic life criteria that have been developed or reviewed and approved by the Department. The approved analytical procedures and detection limits for these substances will be listed, as appropriate, in Table 2A.** The human health criteria, which include exposures from drinking water and fish consumption, are further defined as to the specific effect (that is, cancer or threshold health effects). For those aquatic life criteria which are [**hardness related and**] **a function of local water quality conditions and are** specified as a formula, such as several of the heavy metals, the [**Department will use the specific hardness of the receiving stream after mixing with the waste dis-**

charge in calculating criteria] hardness and pH values used to derive the appropriate water quality criteria will be determined by instream measurements or best estimates, representative of the median concentrations or conditions of the receiving stream for the applicable time period, and design conditions on a case-by-case basis. [The priority pollutant numbers (PP NO) used by the EPA to identify priority pollutants are included in Table 1A for reference purposes.] Some of these criteria may be superseded for the Delaware Estuary, Ohio River Basin, Lake Erie Basin, and Genesee River Basin under interstate and international compact agreements with the Delaware River Basin Commission, Ohio River Valley Sanitation Commission and International Joint Commission, respectively. The toxics substances in Chapter 93, Table 5 without a PP NO are [state-derived] **State-derived** criteria. [**The criteria in Appendix A, Table 1A and Chapter 93, Table 5 do not apply to the Great Lakes System.**] Water quality criteria for the Great Lakes System are [contained] in § 93.8e, Tables 6 and 7 [(relating to special criteria for the Great Lakes System)]. **Criteria in § 93.8c, Table 5 may apply to the Great Lakes System for those substances not listed in Table 6.** Criteria may be developed for the Great Lakes System for substances other than those listed in Table 5 or 6 under the methodologies in § 16.61 (relating to special provisions for the Great Lake System).

(b) If the Department determines that the natural quality of a surface water segment is of lower quality than the applicable criteria listed in Chapter 93, Table 5, the natural quality shall constitute the aquatic life criterion for that segment. [**All**] **Notice of all** draft natural quality determinations shall be published in the *Pennsylvania Bulletin* and be subject to a minimum [**30 day**] **45-day** comment period. The Department will maintain a publicly available list of surface waters and parameters where this subsection applies, and will, from time to time, submit appropriate amendments to these chapters. **Natural quality determinations are housed in stream investigation reports or water quality criteria rationale documents.**

§ 16.52. Whole Effluent Toxicity Testing (WETT).

The Department may [**impose WETT requirements on wastewater discharges**] require WETT, under § 92a.21(d)(4) (relating to application for a permit), for any discharges covered by an NPDES permit or other activities where it is determined that the testing is necessary to assure the protection of aquatic life. Where WETT is required, the Department will use the criteria of 0.3 TUA (Toxic Units Acute) and 1 TUC (Toxic Units Chronic), **design conditions and other applicable factors** as a basis for evaluating test results. WETT shall be conducted in accordance with 40 CFR Part 136 (relating to [**the establishment of**] **guidelines establishing** test procedures for the analysis of pollutants), **Chapter 252 (relating to environmental laboratory accreditation), the NPDES permit, Quality Assurance Quality Control [(QA/QC)]** guidance issued by the Department[,] or other protocols approved by the Department.

GREAT LAKES SYSTEM

§ 16.61. Special provisions for the Great Lakes System.

* * * * *

(b) *Water quality criteria for the Great Lakes System.*

* * * * *

(2) *Human health criteria.* Human health criteria for the Great Lakes System will be developed using the methods in §§ 16.32 and 16.33 (relating to threshold level toxic effects; and nonthreshold effects (cancer))[, **except that fish consumption is 15 grams per day**]. **If criteria for a substance is not available in § 93.8, Table 5 or 6, and there are insufficient data to develop human health threshold criteria for a toxic substance identified in a discharge into these waters, the Department will develop, or require the discharger to develop, subject to Department approval, protective human health values using the methodologies in 40 CFR Part 132, Appendix C, Section III, as it relates to Tier II values, in accordance with exposure inputs in §§ 16.32 and 16.33, and guidance issued by the Department.**

* * * * *

Subchapter B. ANALYTICAL METHODS AND DETECTION LIMITS FOR TOXIC SUBSTANCES

GENERAL PROVISIONS

§ 16.102. Approved EPA [**Analytical Methods and Detection Limits**] and DEP analytical methods and detection limits.

[(a) **Appendix A, Tables 2A and 2B contain the following data elements and is to be used as follows:**] **Appendix A, Table 2A contains approved Department analytical methods and detection limits. The following data elements are to be used as follows:**

(1) [**Parameter + (CAS) is the chemical name preceded by an alphanumeric code for the priority pollutants. Other inorganics (metals) listed on the application form have also been included.**] The Chemical Abstracts Service (CAS) number, a unique chemical identifier, is [**also listed**] to be used for completeness of identification. The CAS number should always be verified to ensure proper identification, particularly with chemicals with ambiguous or unfamiliar names, or both.

(2) **If the EPA has an approved test method for analysis of a specific pollutant, the NPDES permittee shall use the approved test method (or an approved alternate test method) for the specific pollutant under 40 CFR Part 136 (relating to guidelines establishing test procedures for the analysis of pollutants).** Methods [**number + (description) includes the approved EPA method by identifying number and an abbreviated description of each. The methods**] are detailed in one or more of the following sources:

(i) [**Methods for Chemical Analysis of Water and Wastes, EPA 600/4-79-020, Revised March 1984.**] **EPA-approved analytical methods and guidelines in 40 CFR Parts 122, 136, 141, 143, 430, 455 and 465.**

EPA-approved analytical methods must be sufficiently sensitive and capable of detecting and measuring the pollutants at, or below, the applicable water quality criteria or permit limits consistent with the EPA's regulations in 40 CFR Part 122 (relating to EPA administered permit programs: the National Pollutant Discharge Elimination System) and 40 CFR Part 136.

(ii) [40 CFR Part 136 (relating to guidelines establishing test procedures). The EPA provides a list of still other sources for these methods in 40 CFR Part 136. Methods that were not developed by the EPA, that is, have no EPA identifying method number, but are approved by the EPA for use in NPDES related analyses are marked with an asterisk (*) in Appendix A, Tables 2A and 2B.] If an EPA-approved analytical method is not available for a pollutant, an analytical method may be used that is capable of detecting and measuring the pollutant at or below the applicable water quality criterion or permit limit. The analytical method should be consistent with guidelines for developing analytical methods, as described in this chapter.

(iii) *Standard Methods for the Examination of Water and Wastewater*, 20th Edition, APHA-AWWA-WEF, 1998.

(iv) *Hach Handbook of Wastewater Analysis*, Hach Chemical Company, 1979.

(v) *Direct Current Plasma (DCP) Optical Emission Spectrometric Method for Trace Elemental Analysis of Water and Wastes, Method AES0029*. Applied Research Laboratories, Inc., 1986—Revised 1991, Fison Instruments, Inc.

(vi) *ASTM Annual Book of Standards, Section 11, Water*. American Society for Testing and Materials, 1999.

(3) MDL is the method detection limit for each chemical for each method. The MDL is defined as the minimum concentration that can be measured and reported with 99% confidence that the value is above zero—that is, something is really there. [**The MDL concentrations listed were obtained using reagent water. Similar results were achieved using representative wastewaters.**] The MDL achieved in a given analysis will vary depending on instrument sensitivity and matrix effects.

(i) When MDLs are not available, detection limits based on other criteria, [**such as instrument signal to noise ratios, are included in Appendix A**] approved by the Department, may be used. [**Table 3 Detection limits for metals are generally instrument detection limits.**]

(ii) For any pollutant with an effluent limitation below the method detection limit, the permittee is expected to generally achieve the detection limit of the most sensitive method that is below detection available.

(iii) If two approved analytical methods for the same parameter have detection limits that differ by less than 1 ug/l or a factor of 2 (whichever is greater), the permit may be written designating either method as acceptable. The permittee also has the option of using an alternate method approved by the Department and the EPA that the permittee selects as long as he achieves the level of detection of the cited method or the numerical water quality-based limit.

(iv) [**The primary source for detection limits in Appendix A, Tables 2A and 2B is EPA MDL studies. However, when**] When the EPA has not performed an MDL study or reported the detection limit, other sources—particularly, Standard Methods—are consulted. When there is no literature on detection limit, the Department's Bureau of Laboratories may [**be asked to determine the detection limit based on an MDL study**] develop a detection limit or review and approve a Department-accredited lab's development of a detection limit using an MDL study.

(4) Permittees will be required to meet the detection limits listed in Appendix A, [**Tables 2A and 2B**] **Table 2A. [If the detection limit is not listed, a permittee shall develop a detection limit using an MDL study.]**

(5) When permittees cannot meet a listed detection limit, they may be granted case-specific MDLs if they submit complete documentation demonstrating a matrix effect in their particular effluent. The permittees shall follow the procedure for determining MDLs published [**as**] in Appendix B of 40 CFR Part 136 [**(relating to guidelines establishing text procedures)**]. The Bureau of Laboratories will evaluate the data and advise the regional office of their decision.

[**(b) Appendix A, Table 3 gives a more detailed description of the EPA 600-series of analytical procedures for organic pollutants. Further detail is contained in 40 CFR Part 136.**]

APPENDIX A

(*Editor's Note: The Department is proposing to delete Appendix A, Table 1A, which appears on 25 Pa. Code page 16-16, serial page (367480).*)

TABLE 1A

[Reserved]

TABLE 2A
APPROVED [EPA] DEP ANALYTICAL METHODS AND DETECTION LIMITS [: INORGANICS]

	<i>Parameter (CAS)</i>	<i>Method Number (Description) [*]Source</i>	<i>Detection Limit (μl/l)</i>
[—	ALUMINUM	3111 D (AA, flame)	N/A
	(07429905)	3113 B (AA, furnace)	3
		200.7 (ICP/AES)	20
		200.8 (ICP/MS)	1
		200.9 (STGFAA)	7.8
		3500 Al B*¹ (Colorimetric)	6
		D4190-94*⁴ (DCP)	N/A
1M	ANTIMONY	3111 B (AA, flame)	70
	(07440360)	3113 B (AA, furnace)	3
		200.7 (ICP)	32
		200.8 (ICP/MS)	0.4
		200.9 (STGFAA)	0.8
2M	ARSENIC	3113 B (AA, furnace)	1
	(07440382)	3114 B. d (AA, hydride)	N/A
		3500 B (SDDC)	2
		200.7 (ICP/AES)	8
		200.8 (ICP/MS)	1.4
		200.9 (STGFAA)	0.5
—	BARIUM	3111 D (AA, flame)	N/A
	(14798084)	3113 B (AA, furnace)	2
		200.7 (ICP/AES)	1
		200.8 ICP/MS	1.4
		—*³ (DCP)	N/A
3M	BERYLLIUM	3111 D (AA, flame)	N/A
		3113 B (AA, furnace)	0.2
		200.7 (ICP/AES)	0.3
		200.8 (ICP/MS)	0.3
		200.9 (STGFAA)	.02
		3500-Be D*¹ (Colorimetric)	5
		D4190-94, 99*⁴ (DCP)	N/A
—	BORON	4500 B (Colorimetric)	0.2
	(07440428)	200.7 (ICP/AES)	3
		D4190-94, 99*⁴ (DCP)	N/A
4M	CADMIUM	3111 B OR C (AA, flame)	3
		3113 B (AA, furnace)	0.1
		200.7 (ICP/AES)	1
		200.8 (ICP/MS)	0.5
		200.9 (STGFAA)	.05
		3500-Cd D*¹ (Colorimetric)	0.5
		D3557-95, 02(C)*⁴ (Voltametry)	N/A
		D4190-94, 99*⁴ (DCP)	N/A
5M	CHROMIUM	3111 B (AA, flame)	20
	TOTAL	3113 B (AA, furnace)	2
	(07440473)	3111 C (AA, extraction)	N/A
		200.7 (ICP/AES)	4

STATEMENTS OF POLICY

	<i>Parameter (CAS)</i>	<i>Method Number (Description) [*]Source</i>	<i>Detection Limit (μ/l)</i>
		200.8 (ICP/MS)	0.9
		200.9 (STGFAA)	0.1
		D4190-94, 99* ⁴ (DCP)	N/A
		3500-Cr B* ¹ (Colorimetric)	N/A
5M	CHROMIUM	3111 C (AA extraction)	N/A
	VI	3120* ¹ (ICP)	7
	(07440473)	218.6 (Ion Chromatography)	N/A
—	COBALT	3111 B (AA, flame)	30
	(07440484)	3113 B (AA, furnace)	1
		200.7 (ICP/AES)	2
		200.8 (ICP/MS)	.09
		200.9 (STGFAA)	0.7
		D4190-94, 99* ⁴ (DCP)	N/A
6M	COPPER	3111 B (AA, flame)	10
	(07440508)	3113 B (AA, furnace)	1
		200.7 (ICP/AES)	3
		200.8 (ICP/MS)	0.5
		200.9 (STGFAA)	0.7
		3500-Cu B* ¹ (Colorimetric)	3
		3500-Cu C* ¹ (Colorimetric)	20
		D4190-94, 99* ⁴ (DCP)	N/A
—	IRON	3111 B or C (AA, flame)	20
	(07439921)	3113 B (AA, furnace)	1
		200.7 (ICP/AES)	30
		200.9 (STGFAA)	N/A
		3500-Fe B* ¹ (Colorimetric)	10
		D4190-94, 99* ⁴ (DCP)	N/A
7M	LEAD	3111 B or C (AA, flame)	50
	(07439921)	3113 B (AA, furnace)	1
		200.7 (ICP/AES)	10
		200.8 (ICP/MS)	0.6
		200.9 (STFGAA)	0.7
		3500-Pb B* ¹ (Colorimetric)	N/A
		D3559-96, 03(C)* ⁴ (Voltametry)	N/A
		D4190-94, 99* ⁴ (DCP)	N/A
—	MAGNESIUM	3111 B (AA, flame)	0.5
	(07439954)	200.7 (ICP/AES)	20
		3500-Mg D* ¹ (Gravimetric)	N/A
		—* ³ (DCP)	N/A
—	MANGANESE	3111 B (AA, flame)	10
	(07439965)	3113 B (AA, furnace)	0.2
		200.7 (ICP/AES)	1
		200.8 (ICP/MS)	0.1
		200.9 (STGFAA)	0.3
		3500-Mn B* ¹ (Colorimetric)	6
		8034-* ² (Colorimetric)	N/A
		D4190-94, 99* ⁴ (DCP36)	N/A

STATEMENTS OF POLICY

6711

	<i>Parameter (CAS)</i>	<i>Method Number (Description) [*]Source</i>	<i>Detection Limit (μ/l)</i>
8M	MERCURY	245.1 (Cold vapor, Man)	0.2
	(07439976)	245.2 (Cold vapor, Auto)	0.2
		245.7 (CVAFS)	N/A
		1631 E (Purge and Trap CVAFS)	0.0002
—	MOLYBDENUM	3111 D (AA, flame)	N/A
	(07439987)	3113 B (AA, furnace)	1
		200.7 (ICP/AES)	4
		200.8 (ICP/MS)	0.3
9M	NICKEL	3111 B or C (AA, flame)	20
	(07440020)	3113 B (AA, furnace)	1
		200.7 (ICP/AES)	5
		200.8 (ICP/MS)	0.5
		200.9 (STGFAA)	0.6
		3500-Ni D* ¹ (Colorimetric)	N/A
		D4190-94, 99* ⁴ (DCP)	N/A
10M	SELENIUM	3113 B (AA, furnace)	2
	(07782492)	200.7 (ICP/AES)	20
		200.8 (ICP/MS)	7.9
		200.9 (STGFAA)	0.6
		3114B* ¹ (AA, gaseous hydride)	2
11M	SILVER	3111 B or C (AA, flame)	10
	(07440224)	3113 B (AA, furnace)	0.2
		200.7 (ICP/AES)	2
		200.8 (ICP/MS)	0.1
		200.9 (STGFAA)	0.6
		—* ³ (DCP)	N/A
—	STRONTIUM	200.7 (ICP/AES)	0.01
	(07440246)	200.8 (ICP/MS)	2.0
		6010B (ICP/AES)	0.01
		6020 (ICP/MS)	1.0
12M	THALLIUM	3111 B (AA, flame)	N/A
	(07440280)	279.2 (AA, furnace)	1
		200.7 (ICP/AES)	1
		200.8 (ICP/MS)	0.3
		200.9 (STGFAA)	0.7
—	TIN	3111 B (AA, flame)	800
	(07440315)	3113 B (AA, furnace)	5
		200.7 (ICP/AES)	7
		200.9 (STGFAA)	1.7
—	TITANIUM	3111 D (AA, flame)	400
	(07440326)	283.2 (AA, furnace)	10
		—* ³ (DCP)	N/A
13M	ZINC	200.7 (ICP/AES)	2
	(07440666)	3500-Zn E* ¹ (Colorimetric)	1
		3500-Zn B* ¹ (Colorimetric)	20
		289.2 (AA furnace)	.05
		200.8 (ICP/MS)	1.8

STATEMENTS OF POLICY

<i>Parameter (CAS)</i>		<i>Method Number (Description) [*]Source</i>	<i>Detection Limit (μ/l)</i>
		D4190-94, 99*⁴ (DCP)	N/A
14M	CYANIDE, TOTAL (00057125)	4500-CN D*¹ (Titrimetric)	1000
		4500-CN E (Spectrophometric)	20
		335.4 (Color., Auto)	5]
** 14M	CYANIDE, FREE (00057125)	—(DEP Free CN method, Auto) Not EPA approved	1
		[4500-CN I*¹ Not EPA approved	N/A
		335.1 (Amenable to Chlor.)	N/A
	PHENOLS	420.1 (4AAP, Manual)	5
	TOTAL	420.4 (4AAP, Auto)	2]
—	BENZENE METADISULFONIC ACID (00098486)	OR 357A Test America, HPLC/UV or LC/MS/MS	50
—	BENZENE MONOSULFONIC ACID (00098113)	OR 357A Test America, HPLC/UV or LC/MS/MS	50
—	P-PHENOL SULFONIC ACID (00098679)	OR 357A Test America, HPLC/UV or LC/MS/MS	50

[* Not an EPA developed method, but approved by EPA

Source is:

¹—Standard Methods for the Examination of Water and Wastewater, 20th Edition. APHA-AWWA-WEF, 1998. The approved methods may also be found in Standard Methods for the Examination of Water and Wastewater, 18th or 19th Editions, but with different identifying numbers. For Selenium, the method number quoted is from the 19th Edition.

²—Hach Handbook of Wastewater Analysis. 1979.

³—Direct Current Plasma (DCP) Optical Emission Spectrometric Method for Trace Elemental Analysis of Water and Wastes, Method AES0029. Applied Research Laboratories, Inc., 1986—Revised 1991.

⁴—ASTM Annual Book of Standards, Section 11, Water. American Society for Testing and Materials, 1999.

**] * EPA currently measures “total cyanide” to satisfy cyanide limits and has not yet approved analytical methods for “free cyanide.” Free cyanide is a DEP required analysis, and either of the three listed methods are acceptable for its determination.

[NOTE: Metal samples are to be unfiltered and predigested for measurement of the total recoverable (not dissolved) fraction. Samples for dissolved measurement are to be field filtered.]

(Editor’s Note: The Department is proposing to delete Appendix A, Table 2B, which appears on 25 Pa. Code pages 16-22—16-34, serial pages (367486)—(367498).)

TABLE 2B
[Reserved]

(Editor’s Note: The Department is proposing to delete Appendix A, Table 3, which appears on 25 Pa. Code pages 16-35 and 16-36, serial pages (367499) and (367500).)

TABLE 3
[Reserved]

[Pa.B. Doc. No. 17-1767. Filed for public inspection October 20, 2017, 9:00 a.m.]

