FINAL RULEMAKING

ENVIRONMENTAL QUALITY BOARD [25 PA. CODE CH. 93]

Water Quality Standards; Class A Stream Redesignations

The Environmental Quality Board (Board) by this order amends 25 Pa. Code Chapter 93 relating to Water Quality Standards. The amendments will modify the drainage lists at §§ 93.9d, 93.9f, 93.9j, 93.9k, 93.9l, 93.9m, 93.9p, 93.9q, 93.9r, and 93.9t to read as set forth in Annex A. The purpose of this rulemaking is to update the designated uses so that the surface waters of the Commonwealth are afforded the appropriate level of protection. This final rulemaking fulfills the Commonwealth's obligations under State and Federal law to review and revise, as necessary, water quality standards that are protective of surface waters.

This final-form rulemaking was adopted by the Board at its meeting of _____.

A. Effective Date

This final-form rulemaking will be effective upon publication in the *Pennsylvania Bulletin*. Once approved by the United States Environmental Protection Agency (EPA), water quality standards are used to implement the Federal Clean Water Act (CWA) (33 U.S.C.A. §§ 1251—1388).

B. Contact Persons

For further information, contact Gary Walters, 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 Pennsylvania AT&T Relay Service at (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This final-form rulemaking is available on the Department of Environmental Protection's (Department) website at www.dep.pa.gov (select "Public Participation," then "Environmental Quality Board (EQB)" and then the meeting date described above when the final-form rulemaking was adopted by the Board).

C. Statutory and Regulatory Authority

This final-form 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, sections

101(a)(2) and 303(c)(2)(A) of the CWA (33 U.S.C.A. §§ 1251(a)(2) and 1313(c)(2)(A)) set forth requirements for water quality standards.

D. Background and Purpose

The purpose of developing water quality standards is to protect the Commonwealth's surface waters. The Commonwealth's surface waters, through the water quality standards program, are protected for a variety of uses including: aquatic life; water supply uses as drinking water supplies for humans, livestock, and wildlife, irrigation for crops, turf, and other horticultural activities, and industrial water supplies; fish consumption; recreation; and special protection. The purpose of this final rulemaking is to update the designated uses so that the surface waters of the Commonwealth are afforded the appropriate level of protection.

Section 5 of The Clean Streams Law, 35 P.S. § 691.5, instructs the Department to consider water quality management and pollution control in the watershed as a whole, and the present and possible future uses of waters when adopting rules and regulations. In addition to these requirements, the Commonwealth has responsibilities under the CWA that require water quality standards to be reviewed and approved by EPA for consistency with the mandates under that Act. Section 101(a)(2) of the CWA, 33 U.S.C.A. §1251(a)(2), establishes the national goal that wherever attainable, water quality should provide for the protection and propagation of fish, shellfish, and wildlife and for recreation in and on the water. Section 303(c)(2)(A), 33 U.S.C.A. § 1313(c)(2)(A), requires water quality standards to include designated uses of waters, taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes. Section 303(d)(4)(B), 33 U.S.C.A. § 1313(d)(4)(B), establishes an antidegradation policy for waters where the quality of the water equals or exceeds levels necessary to protect the designated uses for surface waters. The designated uses included in this final rulemaking are consistent with these State and Federal statutory mandates.

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 CWA, 33 U.S.C.A.§ 1313(c)(1), requires states to periodically review and revise, as necessary, their water quality standards. Water quality standards include designated uses, numeric and narrative criteria to protect those uses, and antidegradation requirements for surface waters. These amendments are the result of new information presented for stream evaluations of the designated uses.

The Department may identify candidate streams for redesignation of uses during routine waterbody investigations. Requests for consideration may be initiated by other agencies, or members of the public may submit a rulemaking petition to the Board. These amendments are the result of stream evaluations conducted by the Department in response to a submittal of data from the Pennsylvania Fish and Boat Commission (Commission) under § 93.4c (relating to implementation of antidegradation requirements).

In this final rulemaking, redesignations rely on § 93.4b(a)(2)(ii) (relating to qualifying as High Quality or Exceptional Value Waters) to qualify streams for High Quality Waters (HQ) designations based upon their classifications as Class A wild trout streams. A surface water that has been classified a Class A wild trout stream by the Commission, based on species-specific biomass standards in 58 Pa. Code § 57.8a (relating to Class A wild trout streams), and following public notice and comment, qualifies for HQ designation. The Commission published notice and requested comments on the Class A classification of these streams. The Commissioners of the Commission approved these waters after public notice and comment. Department staff conducted an independent review of the trout biomass data in the Commission's fisheries management reports for the streams requested for redesignation. This review was conducted to ensure that the HQ criteria were met, but also to determine if additional information was available to make more comprehensive redesignation recommendations, as appropriate.

Prior to rulemaking, the Department has an obligation to provide existing use protection when data indicates that a surface water attains or has attained an existing use. Section 93.1 (relating to definitions) defines "existing uses" as "those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards." Section 93.4c requires the Department to make a final determination of existing uses protection for the surface water as part of a final permit or approval action. During a review of a permit application and a draft permit, interested persons may provide the Department with additional information regarding existing uses protection for the surface water. The Department also presents available information in draft stream evaluation reports and makes the reports available for public comment.

Where the existing uses are different than the designated uses for a surface water, the water body will immediately receive the highest protection identified by either the attained uses or the designated uses. For example, if the designated use of a stream is listed as Cold Water Fishes (CWF) but the Department's evaluation of available existing use information indicates that the water attains the use of HQ-CWF, the stream would be protected for this HQ-CWF existing use through a permit or final action, prior to a rulemaking. A stream redesignation proposal will then be initiated through the rulemaking process to match the existing uses with the designated uses in the drainage lists found in §§ 93.9a-93.9z.

By protecting the water uses, and the quality of the water necessary to maintain the uses, benefits may be gained in a variety of ways by all citizens of this Commonwealth. For example, clean water used for drinking water supplies benefits the consumers by lowering drinking water treatment costs and reducing medical costs associated with drinking water-related illnesses. Clean surface waters also benefit the Commonwealth by providing for increased tourism and recreational use of the waters. Clean water provides for increased wildlife habitat and more productive fisheries. This final-form rulemaking benefits not only local residents but those from outside the areas affected by this rulemaking who come to enjoy the benefits and aesthetics of outdoor recreation.

A copy of the stream evaluation report for these waterbodies is available on the Department's website or from the contact persons listed in Section B of this Preamble. Copies of the Commission fisheries management reports for these streams and the Commission's sampling

protocols for wadeable streams are available on the Department's website or from Gary Walters, whose address and telephone number are listed in Section B of this Preamble. The data and information collected on these waterbodies support the Board's final regulations as set forth in Annex A.

This final rule will revise 25 Pa. Code Chapter 93 (relating to water quality standards). This regulation may affect persons who discharge wastewater into the surface waters identified in Annex A or otherwise conduct activities which may impact such waters.

The regulation was adopted by the Board as a proposed rulemaking at its December 18, 2018 meeting, and was published in the *Pennsylvania Bulletin* on March 23, 2019 (49 Pa.B. 1367) with a 45-day public comment period that closed on May 7, 2019. The Board held one public hearing on April 26, 2019 at the Department's Southcentral Regional Office in Harrisburg, Pennsylvania for the purpose of accepting comments on the proposed rulemaking. The Board received comments from 777 commenters including testimony from two witnesses at the public hearing and comments received from the Independent Regulatory Review Commission (IRRC). The comments received on the proposed regulation are summarized in Section E.

The Board has considered all public comments received on the proposed rulemaking in preparing this final regulation.

E. Summary of Responses to Comments and Changes to the Proposed Rulemaking

Summary of Responses to Comments

The Board received 777 comments on the proposed regulation. Two of the commenters submitted their comments in the form of oral testimony at the public hearing. Following is a summary of the comments that were submitted and a summary of responses to the comments. Further details regarding the comments received and the complete responses can be found in the Comment and Response Document that is part of this rulemaking.

Supportive Comments: There were 774 commenters who were supportive of the proposed rulemaking. The comments that indicated support of the rulemaking included many reasons. Some commenters stated their support of previous Class A rulemakings and encouraged the promulgation of regulations which would redesignate additional Class A streams to HQ-CWF. One commenter submitted 83 letters of support. Reasons for support of the rulemaking included the following stream protection benefits: the essential importance of the Commonwealth's aquatic resources; protection of headwaters and downstream uses; protection of the public trust and health of our communities; community benefits; recreational opportunities that provide enjoyment to water users; consistency with Article 1 Section 27 of the Pennsylvania Constitution (relating to declaration of rights; natural resources and the public estate); and the assurance of the continuation of beautiful scenery. One commenter commended the effort and another commenter acknowledged the collaborative work effort to complete this rulemaking. There were many comments that discussed the economic benefits and the benefits to the public water supplies. One comment provided information that demonstrates protecting special protection waters is economically advantageous. One comment was appreciative that streams in

the Lehigh and Schuylkill River watersheds, including Sixpenny Creek, were included in this rulemaking. The Department responded to this tremendous groundswell of support by thanking the commenters and expressing the Department's gratitude for the supportive comments. The Department is grateful for the comment that included the economic resources that it can refer to when describing the economic benefits of redesignating streams to a more protective use.

Comments on Drainage List T: One comment pointed out that the proposed rulemaking needed clarification in the zone description for Quemahoning Creek between Beaverdam Creek and Roaring Run in Drainage List T. This entry in Drainage List T has been corrected. In § 93.9t of Annex A, the zone description for this portion of the basin of Quemahoning Creek between Beaverdam Creek and Roaring Run now reads, "Basin, Beaverdam Creek to Roaring Run".

Comments on stream evaluations not included in this rulemaking: One inquiry was received pertaining to the status of other stream evaluations, particularly the Perkiomen Creek. On March 18, 2014, the Board accepted the Department's recommendation to maintain the current stream designations of the Upper Perkiomen Watershed. The Board's decision is published at 44 Pa.B. 2142.

Comments on whether some of the streams should have an expanded zone for redesignation: There were comments pertaining to how the Department arrived at its listing recommendations and questioning whether the Department was too narrow when recommending the zones for redesignation to HQ-CWF in the proposed rulemaking. Commenters requested re-evaluation of these certain recommendations and modification if appropriate. In response to these comments, the Department re-evaluated nine of its recommendations included in the proposed rulemaking. Additionally, the Department met with the Commission to address these specific concerns. The Comment and Response Document prepared for this rulemaking includes a discussion of the differences between the Commission's Class A wild trout delineations and the additional factors the Department considers when recommending HQ designations. The Department changed its recommendation to expand the HQ-CWF stream zones for seven streams based on the submission and discussion of additional data and information that supports the expansion of the zones to be redesignated. As a result, 13 more HQ-CWF stream miles, in total, are added to the final regulations (see Summary Table below).

In response to comments that requested a quantification of the potential economic or fiscal impact of any added HQ-CWF stream miles between the proposed and final rulemaking, the Department determined that there are no facilities that hold National Pollution Discharge Elimination System (NPDES) permits in these newly added surface waters. There are 19 NPDES permitted facilities located on the streams of the reevaluated waters. No additional facilities are located on the expanded zones of these seven streams. The presence of these discharges does not preclude the attainment of the special protection status; therefore, the discharges may continue as long as the discharge characteristics remain the same. However, all discharges to special protection streams require individual permits. Besides any changes to the type of permit issued, there will be no immediate, additional economic or fiscal impact for the existing facilities as a result of the additional 13 miles of streams being redesignated to HQ-

CWF. The economic benefits of these stream redesignations will be the same for all 222 miles of surface water that are being redesignated to HQ-CWF with this final rulemaking.

Summary Table: Stream Zones Expanded in Response to Commission Comments Changed Between Proposed and Final Rulemaking: Class A Stream Redesignations Package

		Zone Recommended	Zone Recommended		
Stream Name	Initial Designated Use	by DEP at Proposed Rulemaking for HQ-CWF	by DEP at Final Rulemaking for HQ-CWF or HQ-CWF, MF	Description of Change	
Drainage List D (§ 93.9d)					
UNT 03913 to Lehigh River "Nis Hollow"	CWF, MF	Main Stem	Basin	Recommendation now includes the tributaries	
Fireline Creek	CWF, MF	Main Stem, UNT 03907 to Mouth	Basin, except UNT 03907.	Recommendation now includes the main stem above UNT 03907 and all of the tributaries in the entire basin except UNT 03907	
Drainage List K (§ 93.9k)					
Glen Brook	CWF, MF	Main Stem, UNT 28087 to Foundryville Road	Basin	Recommendation now includes the main stem above UNT 28087 and below Foundryville Road; and also adding all tributaries to Glen Brook	
Drainage List L (§ 93.91)					
Gap Run	CWF, MF	Main Stem, Source to the sink hole at 40°51'59.0"N; 77°44'4.0"W	Basin, Source to the sink hole at 40°51'59.0"N; 77°44'4.0"W	Recommendation now includes the tributaries	
Council Run	CWF, MF	Main Stem	Basin	Recommendation now includes the tributaries	
Drainage List Q (§ 93.9q)					
Spencer Creek	CWF	Main Stem	Basin	Recommendation now includes the tributaries	
Benson Run	TSF	Main Stem	Basin	Recommendation now includes the tributaries	

Comments relating to the Department's application of the Class A Qualifier: A commenter suggested that the regulations allow redesignation of a stream to HQ based on trout biomass, alone, and no other factors. The regulations at § 93.4b.(2)(ii) describe that if a stream has been classified as Class A by the Commission following public notice and comment, then it qualifies for consideration in a redesignation to HQ, but first the data must be independently evaluated by the Department. The Board may rely upon the expertise of other agencies, but it must reserve for itself the final decision. The commenter went on to ask the Department whether or not it considers all of the qualifiers in Chapter 93 when reviewing a designated use. The Department will consider all special protection qualifiers in § 93.4b if the information, like a Class A Wild Trout Classification, is available. The Department will review the information and recommend the appropriate determinations. The Department may also evaluate special protection qualifications for stream reaches in the vicinity of a candidate stream that is under review.

Comments relating to conversion from river miles to latitude and longitude: One commenter was concerned with the decision to replace river miles with latitude and longitude in the Drainage Lists. The use of river miles is antiquated and often difficult to determine. Latitude and longitude can easily be gathered by anyone with a GPS enabled cellular phone or other device.

Comments relating to EV wetlands: Several comments were received which focused on designation of Exceptional Value Waters (EV) wetlands, as Chapter 105 (relating to dam safety and waterway management) provides guidelines for determining whether wetlands associated with wild trout streams should be classified as EV wetlands. The scope of this rulemaking is streams, not wetlands. One comment recommended that the Department should list and map EV wetlands to assist the public during project permit application reviews. Additionally, the commenter recommended the use of remote sensing technologies for wetland delineations. Wetlands should be delineated in accordance with the Department's statement of policy found at 25 Pa. Code § 105.451 (relating to identification and delineation of wetlands – statement of policy), which recommends on-site methodologies. Another commenter was concerned that the Department's regulations need to adequately protect these resources. Although wetlands are not the focus of this stream redesignation rulemaking, they are protected by Chapters 93 and 105.

Comments on the pace of the stream redesignation process: Oral testimony was received describing how the stream redesignation process had slowed down or stopped for four years but is now moving forward again. The work involved with stream redesignations had been ongoing during the four-year span identified by the commenter. The Department continuously monitors streams and collects samples, which take time to process in a lab, and gathers other relevant data associated with stream redesignation evaluations. Additionally, the Department incorporates a robust public review into every step of the evaluations.

Comments relating to Undue Burdens on critical infrastructure projects: The commenter states that this rulemaking may cause undue burden on critical infrastructure projects that also provide benefits to the citizens of the Commonwealth. The example given by the commenter stated that if a stream used by a public water supplier is redesignated to HQ, then there is now an added burden associated with permitting. The commenter believes that when critical infrastructure which benefits the public (i.e. electric or drinking water) is present, then the

Department should factor in the ramifications associated with a change to the basin designation when making its recommendations for a change to the designated use. Section 4 of The Clean Streams Law (relating to declaration of policy) states "the prevention and elimination of water pollution is recognized as being directly related to the economic future of the Commonwealth." The purpose of this rulemaking is to protect, through redesignations, surface waters having quality that exceeds levels necessary to support water uses identified in § 93.3 (relating to protected water uses). Chapter 93 provides a permittee with the opportunity to request relief for numeric permit limits by demonstrating a localized social or economic need for lowering water quality. The response explains the stream redesignation process and the use of the definitions and qualifications found in Chapter 93 to determine the appropriate level of protection for surface waters. Once the Department has determined that a stream is achieving a specific water use, the appropriate level of protection is afforded, and other factors are not considered unless they are specifically included with the definitions and qualifications found in the regulations. The commenter also remarked that the Department did an adequate job of discussing the benefits of the redesignation in the proposed rulemaking, however it fell short on its quantification of the cost. The response points out that the surface waters included in this rulemaking for redesignation are currently meeting their existing uses; and therefore, the benefits of maintaining the water quality at a level commensurate with ensuring the continuation of those uses are already present, and as such those benefits can be easily measured. Conversely, any costs associated with this rulemaking will not occur until a facility that currently discharges to a surface water changes the quantity or quality of the existing discharge, or when a new facility applies for a permit. Any immediate future costs associated with this rulemaking will be in the form of permit requirements for permitting and wastewater treatment for any new, additional, or increased discharge. The response explains the difficulties of predicting the costs in this context.

Additionally, the commenter correctly states that once a stream is demonstrated to achieve the qualifications for special protection, the Department will require individual permit coverage for all NPDES permitted discharge activities. Coverage under a NPDES general permit is not permissible for discharges occurring in special protection waters. The commenter put forth a request that the Department should allow general permits to be used for discharges to HO waters. The regulations at 25 Pa. Code § 92a.54 (relating to general permits) discuss the eligibility requirements for general permits. The response explains that the regulations found in Chapter 92a (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance) are not a part of this rulemaking. Individual permits are required in special protection waters because the existing quality of the waters must be protected and typically differs from stream to stream. Site-specific characteristics of the stream water quality are used to determine effluent limitations for discharges to a stream. This type of site-specific evaluation would not be assured or afforded through a general permit. Additionally, permittees must evaluate nondischarge alternatives and nondegrading technologies for a discharge and these evaluations do not result in standard conditions that apply to an industry sector. Lastly, the commenter states that permittees will be required to complete socioeconomic justifications (SEJs) for discharges. The regulations do not require an applicant to perform a SEJ for discharges; however, an applicant may choose to complete the analysis if the following cannot be achieved: (1) implementation of cost-effective and environmentally sound nondischarge alternatives; and (2) implementation of nondegrading technologies. The response explains that SEJs are never a requirement and gives some description of the SEJ process.

Changes to the Proposed Rulemaking

As discussed above, the zones of seven streams included in this rulemaking were expanded in response to comments received, resulting in the redesignation of 13 additional stream miles as HQ-CWF waters. Another comment led to a change that clarifies the zone description for the basin of Quemahoning Creek between Beaverdam Creek and Roaring Run in Drainage List T.

The regulations finalized for the Triennial Review of Water Quality Standards became effective on July 11, 2020 (50 Pa.B. 3426). Those Chapter 93 amendments included a consolidation of the drainage lists. The proposed regulations of this rulemaking, which also contained changes to the drainage lists, were developed while the Triennial Review rulemaking was under review. Because the consolidation was not finalized at the time of the development of proposed regulations for this rulemaking, the proposed regulations at 49 Pa.B. 1677 (March 23, 2019) were developed in conformance with the Pennsylvania Code in effect at that time. Due to the overlapped timing of these two rulemakings, both rulemakings affected some of the same sections: §§ 93.9d, 93.9j, 93.9k, 93.9l, 93.9p, 93.9q and 93.9r. Changes made in this final regulation are based on the drainage lists that became effective on July 11, 2020 (50 Pa.B. 3426).

Finally, there are three instances where the Board is clarifying the coordinates for either the latitude or longitude as they are written in the Drainage List. The first instance occurs in the Pohopoco Creek basin found in Drainage List D. The longitude found in the zone description for the entry which designates the portion of the basin between Wild Creek and UNT 64089 as CWF, MF has been corrected. The second occurrence is found two entries later in the entry for the upper portion of UNT 04088 basin. The longitude for the zone description of UNT 04088 to Pohopoco Creek has been corrected. The third instance is found in the entry for the headwaters of Tenmile Run in Drainage List K. The latitude in the zone description has been corrected.

F. Benefits, Costs and Compliance

Benefits

Overall, the Commonwealth, its citizens and natural resources will benefit from this 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. Water uses in the Commonwealth include: water supplies for human consumption, wildlife, irrigation, and industrial use; recreational opportunities such as fishing (also for consumption); water contact sports and boating; and aquatic life and special protection. Protection and maintenance of water quality ensures its future availability for all uses.

<u>Increased property values are an economic and social benefit of clean water protected by this regulation.</u>

A reduction in toxics found in the Commonwealth's waterways may lead to increased property values for properties located near rivers or lakes. A study, *The Effect of Water Quality*

on Rural Nonfarm Residential Property Values, (Epp and Al-Ani, American Journal of Agricultural Economics, Vol 61, No. 3 (Aug. 1979), pp. 529-534 (www.jstor.org/stable/1239441), used real estate prices to determine the value of improvements in water quality in small rivers and streams in the Commonwealth. Water quality, whether measured in pH or by the owner's perception, has a significant effect on the price of adjacent property. The analysis showed a positive correlation between water quality and housing values. The study concluded that buyers are aware of the environmental setting of a home and that differences in the quality of nearby waters affect the price paid for a residential property.

A 2010 report from the Delaware Riverkeeper Network (www.delawareriverkeeper.org/sites/default/files/River_Values_Report_0.pdf) discusses a case study from the Maine Agricultural and Forest Experiment Station which compared waterfront property values based on whether the water that the homes faced was considered clean. Properties located near higher-quality waters had higher market value than if the waterbody was lower in water quality. It was shown in some cases that a decline in water quality can completely abate the market value premium associated with a home being a waterfront property.

A 2006 study from the Great Lakes region estimated that property values were significantly depressed in two regions associated with toxic contaminants (PAHs, PCBs, and heavy metals). The study showed that a portion of the Buffalo River region (approximately 6 miles long) had depressed property values of between \$83 million and \$118 million for single-family homes, and between \$57 million and \$80 million for multi-family homes as a result of toxic sediments. The same study estimated that a portion of the Sheboygan River (approximately 14 miles long) had depressed property values of between \$80 million and \$120 million as the result of toxics. "Economic Benefits of Sediment Remediation in the Buffalo River AOC and Sheboygan Rice AOC: Final Project Report," (https://www.nemw.org/wp-content/uploads/2015/06/EconBenReport06.pdf). While this study related to the economic effect of contaminated sediment in waters in the Great Lakes region, outside of the Commonwealth, the idea that toxic pollution depresses property values applies in the Commonwealth. A reduction in toxic pollution in the Commonwealth's waters has a substantial economic benefit to property values in close proximity to waterways.

Maintenance of abundant and healthy fish and wildlife populations and support for outdoor recreation are social and economic benefits of clean water protected by this final regulation.

Businesses in the recreation industry will be positively affected by these regulations. The maintenance and protection of the water quality will ensure the long-term availability of Class A wild trout fisheries. Because the focus of this rulemaking relates directly to the protection of fisheries, sportspersons in the Commonwealth will benefit by the preservation of the existing Class A fisheries. Protection of existing Class A wild trout streams protects self-sustaining angling opportunities and minimizes the need for the cost-intensive alternative of raising and stocking fish. The purpose of these stream redesignations is to preserve these resources for current and future sportspersons and other members of the public, which will continue to provide social and economic benefits in the local areas. As recreation demands increase in the future, the protection and maintenance of unique resources such as Class A wild trout waters will add economic value to the local areas and, importantly, will provide a valuable social function for

outdoor recreation. Specific revenue-related benefits associated with outdoor trout fishing in the Commonwealth are outlined below.

The Center for Rural Pennsylvania prepared a report titled "Economic Values and Impacts of Sport Fishing, Hunting and Trapping Activities in Pennsylvania," (www.rural.palegislature.us/documents/reports/hunting.pdf) that examined such economic values and impacts between the years 1995 to 1997. The report provides a snapshot of how much money these sporting activities bring to the state and how they affect employment in rural areas. The report found that the total annual value of \$3.7 billion for sport fishing was almost three times the \$1.26 billion spent in travel costs to use fishing resources during the same 12-month period. The total net annual benefit to anglers was \$2.49 billion.

According to the "Angler Use, Harvest and Economic Assessment on Wild Trout Streams in Pennsylvania," (R. Greene, et al. 2005) (www.fishandboat.com/Fish/Fisheries/TroutPlan/Documents/WildTroutStreamAnglerUseCatchEconomicContribution.pdf), the Commission collected information to assess the economic impact of wild trout angling in the Commonwealth during the 2004 regular trout season, April 17 through September 3, 2004. The Commission found that angling on wild trout streams contributed over \$7.16 million to the Commonwealth's economy during the regular trout season in 2004.

According to the "2011 National Survey of Fishing, Hunting and Wildlife-Associated Recreation" (www.census.gov/prod/2012pubs/fhw11-nat.pdf) prepared by the U.S. Fish and Wildlife Service, there were approximately 1,101,000 anglers in Pennsylvania and 3,598,000 persons that participated in wildlife watching in the year 2011 within the Commonwealth. In addition, all fishing-related expenditures in the Commonwealth totaled \$485 million in 2011. Such expenditures include food and lodging, transportation, and other expenses (e.g., equipment rental, bait, cooking fuel). In 2011, wildlife watchers spent \$1.3 billion on activities in the Commonwealth. Expenditures include trip-related costs and equipment.

According to the Outdoor Recreation Industry Association, outdoor recreation in the Commonwealth generates 251,000 direct in-state jobs, \$8.6 billion in wages and salaries, and \$1.9 billion in state and local tax revenue. These figures include both tourism and outdoor recreation product manufacturing. The association reports that 56% of Commonwealth residents participate in outdoor recreation each year. (See Outdoor Industry Association (2017), "The Outdoor Economy: Take it Outside for American Jobs and a Strong Economy" (https://outdoorindustry.org/resource/pennsylvania-outdoor-recreation-economy-report/).)

Southwick Associates prepared a report for the Theodore Roosevelt Conservation Partnership that analyzed the economic contribution of outdoor recreation in the Commonwealth. This 2018 report, "The Power of Outdoor Recreation Spending in Pennsylvania: How hunting, fishing, and outdoor activities help support a healthy state economy" (http://www.trcp.org/wp-content/uploads/2018/12/TRCP-and-Southwick-PA-Economic-Analysis-12-6-18.pdf), states that during 2016 there were more than 390,000 jobs supported by outdoor recreation activities in the Commonwealth, and for comparison, this is more than the number of jobs in the Commonwealth that supported the production of durable goods. Outdoor recreation had an economic

contribution in the Commonwealth of almost \$17 billion in salaries and wages paid to employees and over \$300 million in federal, state, and local tax revenue.

Maintenance of the current green infrastructure along streams and the associated reduction in tax expenditures are social and economic benefits of clean water protected by this regulation.

The findings of a 2014 Lehigh Valley Planning Commission report entitled Lehigh Valley Return on Environment demonstrates the benefits when clean water and natural areas are preserved (note that there are streams included in this regulation that flow in the Lehigh Valley). The report (www.lvpc.org/pdf/2014/ReturnOnEnvironment_Dec_18_2014.pdf) states, "the current green infrastructure along streams in the Lehigh Valley reduces tax dollars by avoiding more than \$110.3 million annually in expenditures for water supply (\$45.0 million), disturbance (flood) mitigation (\$50.6 million) and water quality (\$14.7 million)." The report describes investing in green infrastructure (i.e. watershed conservation, forest buffers, and wetlands construction) to improve water quality, which can be much more cost effective than more traditional gray infrastructure approaches (i.e. pipes and treatment plants).

Savings in water filtration for downstream communities that rely on surface waters for water supplies and availability of unpolluted water for domestic, agricultural, and industrial uses are benefits of clean water protected by this final regulation.

The Department identified 11 public water supply facilities with raw water intakes that are located no further downstream than 30 stream miles of those stream sections for redesignation in this final rulemaking package. These 11 public water suppliers, which serve over 175,000 citizens, will benefit from this rulemaking because their raw source water will be afforded a higher level of protection. This is an economic benefit because the source water treatment costs for the drinking water may be less costly to customers if less treatment is needed due to the high quality of the water in the stream. By maintaining cleaner water, public water suppliers will incur the benefits of lower water treatment costs. In addition, cleaner intake water will reduce consumer costs for purchasing clean drinking water.

Compliance costs

This rulemaking is necessary to protect and maintain the existing water quality and effectively control discharges of pollutants into the affected streams. These amendments to Chapter 93 will not impose any new compliance costs on persons engaged in regulated activities under existing permits or approvals from the Department. Additional compliance costs may arise when permits or approvals are necessary for new or expanded regulated activities. The Department will implement the stream redesignations through permit and approval actions.

Persons adding or expanding a discharge to a stream may need to provide a higher level of treatment or additional BMPs to meet the designated and existing uses of the affected streams, which could result in higher engineering, construction, or operating costs. 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. The Department cannot accurately estimate such costs because of the variability associated with each discharge.

Any person proposing a new, additional, or increased point source discharge to an HQ stream would need to satisfy the antidegradation requirements found at 25 Pa. Code § 93.4c(b)(1) (relating to protection of high quality and exceptional value waters). An applicant for any new, additional, or increased point source discharge to special protection waters must evaluate nondischarge alternatives and the applicant must use an alternative that is environmentally sound and cost-effective when compared with the cost of the proposed discharge. If a nondischarge alternative is not environmentally sound and cost-effective, an applicant for a new, additional, or increased discharge must use the best available combination of cost-effective treatment, land disposal, pollution prevention, and wastewater reuse technologies.

The permit applicant must demonstrate in the permit application that their new or expanded activities will not lower the existing water quality of special protection streams. If an applicant cannot meet these nondegrading discharge requirements, a person who proposes a new, additional, or increased discharge to HQ waters is given an opportunity to demonstrate a SEJ for allowing lower water quality. The SEJ demonstration must show that the discharge is necessary to accommodate important economic or social development in the area in which the waters are located, and that other water uses will be supported. Discharge activities to special protection streams do not qualify for NPDES general permits, based on 25 Pa. Code § 92a.54(a)(8) (relating to general permits), and therefore, require individual permits.

There are approximately 10,300 facilities across the Commonwealth that hold permits issued pursuant to Chapter 92a (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance). This statewide number of facilities includes NPDES permits for concentrated animal feeding operations, industrial wastewater, municipal separate storm sewer systems (MS4s), sewage, and industrial stormwater. Out of this statewide total of approximately 10,300 permits, only 19 facilities currently hold active NPDES permits within the boundaries of the watersheds of the stream segments being redesignated in this rulemaking.

The 19 NPDES discharges to waters affected by this rulemaking include industrial wastewater, sewage, MS4s, and industrial stormwater. Discharges in existence at the time of each relevant stream survey have been considered in the evaluation of the existing water quality of each relevant stream and the recommendation for redesignation to special protection. Since the presence of such discharge activities did not preclude the attainment of special protection status, the discharges may continue as long as the discharge characteristics – both quality and quantity – remain the same. Thus, redesignation to special protection does not impose any additional special treatment requirements on the existing discharges from these 19 NPDES permitted entities. However, discharge activities to special protection streams do not qualify for NPDES general permits and any general permit holders will need to apply for individual permits. The individual permits are necessary for antidegradation implementation to track any additional or increased discharges to a special protection water. Thirteen of the 19 permits will be converted from general permits to individual permits when they are reissued; two of the 19 permits are currently individual permits and will not be affected. The remaining four existing permitted discharges will not be affected unless there is a change to the quality or quantity of the permitted discharge.

There are thousands of general and individual NPDES permits for stormwater discharges associated with construction activities issued under 25 Pa. Code Chapter 102 (relating to erosion and sediment control) that were not included in the preceding analysis of NPDES permits. These permits for stormwater discharges associated with construction activities were not included in the preceding permit counts because of the relatively temporary nature of these permits and permitted discharges. However, if a construction stormwater discharge permit was issued as a general permit, and if the permitted activity is not completed by the expiration date of the permit and the permittee seeks to renew, then the permit must be renewed as an individual permit. For stormwater discharges associated with construction activities, the administrative filing fee for an individual permit is \$1,500 and the administrative filing fee for a general permit is \$500, and both the individual permit and the general permit have an additional cost of \$100/acre of disturbed land, as set forth in 25 Pa. Code § 102.6(b)(1). Additionally, when earth disturbance activities occur within the basins of the stream segments being redesignated in this rulemaking, additional BMPs may be necessary to protect water quality under Chapter 102. For stormwater discharges associated with construction activities, a person with general permit coverage (e.g., PAG-02 coverage) may continue to operate using the BMPs approved; however, if the earth disturbance activities are not completed upon renewal of coverage, then the person would need to seek an individual permit and may need to implement additional BMPs on the remainder of the area that will be disturbed.

A person proposing a new earth disturbance activity requiring a permit under Chapter 102 (relating to erosion and sediment control) must comply with the antidegradation provisions, as applicable. In general, a person conducting earth disturbance activities that require a permit for which any receiving water is classified as HQ must evaluate nondischarge alternatives and antidegradation best available combination of technologies (ABACT) BMPs for both the construction and post construction phases of the activity The E&S BMPs and their ABACT rating, if applicable, are identified in the Department's *Erosion and Sedimentation Pollution Control Program Manual* (www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=4680), and the Department's Alternative E&S and PCSM BMPs list (http://files.dep.state.pa.us/Water/BPNPSM/StormwaterManagement/ConstructionStormwater/R eviewed_Alternative_BMPs.pdf). Also, the Department may approve alternative BMPs that maintain and protect the existing water quality and water uses.

Where on-lot sewage systems are planned, compliance with the sewage facilities planning and permitting regulations in 25 Pa. Code Chapters 71, 72, and 73 (relating to the administration of sewage facilities planning program; administration of sewage facilities permitting program; and standards for onlot sewage treatment facilities) will continue to satisfy 25 Pa. Code § 93.4c (relating to implementation of antidegradation requirements) in the streams redesignated to HQ in this rulemaking. Permit applicants for sewage facilities proposed to discharge to HQ waters who demonstrate SEJ at the sewage facilities planning stage need not re-demonstrate SEJ at the discharge permitting stage. The SEJ demonstration process is available to sewage and non-sewage discharge applicants.

Local governments will most likely have additional costs associated with MS4 permitting requirements as a result of this rulemaking. MS4 permittees that discharge to HQ streams, and that operate pursuant to a general permit (i.e., PAG-13), will be required to obtain an individual

permit when the permit is up for renewal. Any new, first-time MS4 permit applicants will be required to obtain individual permits for discharges. There is a difference in cost between the initial issuance of individual permits and general permits due to the increased staff time needed to review applications and provide implementation oversight associated with individual permits. An individual permit allows for the tailoring of a MS4's stormwater management program and its implementation of the minimum control measures. For MS4s, the annual fee is the same for a general permit and an individual permit.

More complete estimates of cost are discussed in the Regulatory Analysis Form, required under the Regulatory Review Act, that accompanies this rulemaking.

Compliance assistance plan

This rulemaking will not impose any new compliance requirements on persons engaged in regulated activities under existing permits or approvals from the Department. When applying for permits or approvals for new, additional, or increased discharges, the Department will provide compliance assistance.

Paperwork requirements

This rulemaking will not impose any new paperwork requirements on persons engaged in regulated activities under existing permits or approvals from the Department. When applying for permits or approvals for new, additional, or increased discharges, additional information may need to be submitted to the Department as part of the permit application or approval request. As discussed above, the permit applicant will complete an antidegradation analysis. The applicant will describe how the proposed activity will be conducted to maintain existing water quality. If water quality cannot be maintained, the applicant will describe a SEJ for the proposed activity. NPDES general permits are not available for discharges to these streams. Thus, an individual permit, and its associated paperwork, would be required.

G. 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. This regulation has incorporated the following pollution prevention incentives.

The water quality standards and antidegradation program are major pollution prevention tools because the objective is to prevent degradation by maintaining and protecting existing water quality and existing uses. Although the antidegradation program does not prohibit new or expanding wastewater discharges, nondischarge alternatives must be evaluated and are required

to be used when environmentally sound and cost-effective. Nondischarge alternatives, when implemented, remove impacts to surface water and may reduce the overall level of pollution to the environment by remediation of the effluent through the soil. In addition, if no environmentally sound and cost-effective alternatives are available, discharges must be nondegrading except as provided in § 93.4c(b)(1)(iii) (relating to social or economic justification in High Quality Waters).

H. Sunset Review

These regulations will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulations effectively fulfill the goals for which they were intended.

I. Regulatory Review

Under Section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on March 4, 2019, the Department submitted a copy of the notice of proposed rulemaking, published at 49 Pa.B. 1367, to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the Senate and House Environmental Resources and Energy Committees for review and comment.

Under Section 5(c) of the Regulatory Review Act, IRRC and the Committees were provided with copies of the comments received during the public comment period, as well as other documents when requested. In preparing the final-form rulemaking, the Department has considered all comments from IRRC, the House and Senate Committees and the public.

Under Section 5.1(j.2) of the Regulatory Review Ac	ct, on, the final-form
rulemaking was deemed approved by the House and Se	nate Committees. Under section 5.1(e) of
the Regulatory Review Act, IRRC met on	, and approved the final-form
rulemaking.	

J. Findings of the Board

The Board finds that:

- (1) Public notice of proposed rulemaking was given under sections 201 and 202 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§ 1201 and 1202) and regulations promulgated thereunder at 1 Pa. Code §§ 7.1 and 7.2.
- (2) A public comment period was provided as required by law. In addition, Board hearings were held. All comments were considered.
- (3) This final-form rulemaking does not enlarge the purpose of the proposal published at 49 Pa.B. 1367 (March 23, 2019).
- (4) These regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this order.

K. Order of the Board

The Board, acting under the authorizing statutes, orders that:

- (a) The regulations of the Department, 25 Pa. Code Chapter 93, are amended to read as set forth in Annex A.
- (b) The Chairperson of the Board shall submit this final-form regulation to the Office of General Counsel and the Office of Attorney General for approval and review as to legality and form, as required by law.
- (c) The Chairperson shall submit this final-form regulation to the Independent Regulatory Review Commission and the Senate and House Environmental Resources and Energy Committees as required by the Regulatory Review Act.
- (d) The Chairperson of the Board shall certify this final-form regulation and deposit them with the Legislative Reference Bureau, as required by law.
- (e) This final-form regulation shall take effect immediately upon publication in the *Pennsylvania Bulletin*.

PATRICK McDONNELL, Chairperson