pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Water Quality Standards
Class A Stream Redesignations

25 Pa. Code Chapter 93
49 Pa.B. 1367 (March 23, 2019)
Environmental Quality Board Regulation #7-548
(Independent Regulatory Review Commission #3226)

COMMENT AND RESPONSE DOCUMENT

Introduction

Water Quality Standards - Class A Stream Redesignations

The Environmental Quality Board (Board) approved the proposed rulemaking for the Class A Wild Trout Stream Redesignation Package at its December 18, 2018 meeting. On March 4, 2019, the Department of Environmental Protection (Department) submitted a copy of the proposed rulemaking 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 in accordance with Section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)). The proposed rulemaking 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 a public hearing on April 26, 2019 at the Department's Southcentral Regional Office in Harrisburg, Pennsylvania. Comments were received from 777 commenters including testimony from two witnesses at the public hearing. Support of the rulemaking was indicated by 774 of the commenters. One commenter indicated opposition to the rulemaking. IRRC also submitted comments requesting the Board consider the recommendations submitted by the Pennsylvania Fish and Boat Commission (PFBC). IRRC further requested that if changes are made to address the PFBC's concerns, then the Board should update the total stream miles affected and quantify any potential economic or fiscal impact that may result.

Comments supporting the proposed stream redesignations

1. **Comment:** The Department received 774 comments indicating support for the redesignation of the streams and stream segments in this rulemaking package to High Quality-Cold Water Fishes (HQ-CWF). (1-742, 744-763, 765-776)

    - ***Previous support:*** We support this current rulemaking and we have provided supportive comments for previous Class A rulemakings. (762)

    - ***Future support:*** We urge the Department to redesignate additional Class A streams to HQ. (715-735, 737, 740-742, 746-751, 755-763)

    - ***Please accept the attached letters of support.*** Commenter submitted 83 letters that indicate strong support for the Board's proposal to redesignate these Class A wild trout streams to HQ-CWF. The letters include the numerous benefits including that protection of the water quality in these streams will help ensure that our best wild trout populations will continue to thrive, and that the rulemaking supports an outdoor recreation economy worth $29 billion to the state. The letters boast that 1.3 million anglers enjoy 16,000 miles of wild trout water. The letters note the protection to the downstream users including farmers and industry and drinking water supply. The letters urge the Department to quickly move additional Class A packages. (745)

    - ***Commend the Department.*** We commend the Pennsylvania Department of Environmental Protection in its continuing effort to upgrade streams into its Special Protection Waters Program. (744)

- ***Protect the public trust and health of our communities.*** These upgrades are an essential component to protecting the public trust and the health of our communities in the Commonwealth. (762)

- ***Redesignation is appropriate:***
  - These redesignations represent the results of many scientific measurements of trout populations. The science is sound, and the law is clear – these streams deserve the protections that the High Quality (HQ) designation affords. (756)
  - These streams have been classified by the PFBC as Class A waters which is one of the eligibility requirements for redesignation to HQ. (738, 739, 754)

- ***Recreational Opportunities***:
  - These upgrades will help sustain angling in Pennsylvania. The PFBC touts that Pennsylvania is home to some of the best trout fishing in the world. This rulemaking will help to ensure that it is maintained. (756)
  - Protecting water quality in these streams bolsters recreation besides angling as well. Clean streams are more attractive destinations for boating, swimming, hiking, or simply enjoying a lazy summer afternoon in nature. Pennsylvania's natural beauty not only beckons visitors to our parks and game lands, but immensely benefits the millions of Pennsylvanians who spend time outdoors. (756)

- ***Supports Article 1 Section 27 of Pennsylvania Constitution:***
  - These stream redesignations ensure the protection of Pennsylvanians' constitutionally protected right to clean water. (739, 754)
  - The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and aesthetic values of the environment. (738)

- ***Protection of streams:***
  - These upgrades will protect these streams from degradation and pollution. (2-714, 736, 752, 754, 756)
  - Needed for all Pennsylvania's living beings. (756)
  - This rulemaking will promote healthier surface waters. (739)
  - These upgrades will help to ensure healthier habitat for wildlife (including trout). (2, 739, 756)

- ***Protection of downstream uses:*** HQ designations will protect downstream users, including farmers and industry. (715-735, 737, 740-742, 746-751, 755, 757-761)

- ***Provides community benefit:***
  - Overall health of our community is dependent upon clean water. (2-714, 736, 752)
  - Recreation and outdoor enjoyment will increase in the associated communities. (762)

- ***Numerous benefits:*** There are many benefits to upgrading these waters. (715-735, 737, 740-742, 746-751, 757-761)

- ***Aesthetics:*** These upgrades will help to ensure beautiful scenery. (2)

- ***Enjoyment:***
  - Enjoyment of our land is dependent upon clean water. (2-714, 736, 752)
  - These proposed redesignations will help to ensure that these streams can be enjoyed now and in the future. (2-714, 736, 739, 752, 753)

- ***Aquatic Resources are essential:***
  - Pennsylvania's water resources are essential to the Commonwealth's health and economic well-being and they should be given the strongest level of protection possible. (2-714, 736, 752, 754)
  - Protecting these streams at high quality will help ensure that our best wild trout populations continue to thrive. (715-735, 737, 740-742, 746-751,755, 757-761)

- ***Acknowledgement of collaborative support and work effort:*** The Pennsylvania Fish and Boat Commission has been working diligently to survey streams for trout biomass across the Commonwealth. Communities across the state, Trout Unlimited chapters, the Pennsylvania Campaign for Clean Water Exceptional Value Work Group, Delaware Riverkeeper Network and many others have been in support of this important redesignation work that has spanned decades to work towards Pennsylvania's freshwater streams receiving the special protection status our finite freshwater resources deserve. We are eager to see the additional Fish and Boat Commission packages submitted receive the proper designated uses these streams deserve as indicated by Fish and Boat Commission biomass surveys and some of these comments may be helpful for those pending packages. We are grateful to the work underway. (763)

Response: The Department appreciates the commenters' support and their acknowledgement of the collaborative work effort that culminated in this final rulemaking. These streams and stream segments have been designated as Class A wild trout streams by the PFBC following public notice and comment and, therefore, are eligible for consideration for redesignation as HQ in accordance with 25 Pa. Code § 93.4b. The designation of these waters to HQ will ensure that the appropriate level of protection will be provided to maintain existing water quality and that the uses of these waters will be protected. Article 1, Section 27 of the Pennsylvania Constitution protects Pennsylvanians' rights to pure water and the stream redesignations in this rulemaking satisfy that obligation.

The Department additionally appreciates the commenters' support, which highlights the importance of protecting the streams, the biota associated with the streams, and the recreational opportunities and enjoyment that will be maintained and enhanced by protecting the streams and their biota.

The Department also appreciates the commenters' support in describing how the aquatic resources of Pennsylvania are essential for the Commonwealth's health and economic well-being and therefore deserving strong protection. The Department also appreciates the commenters' support for preserving our waters for future generations.

The Department would like to clarify that stream redesignations do not represent "upgrades" or "downgrades." The Department's goal in redesignating streams is to apply the appropriate designated use and thereby provide the appropriate level of protection for all of the surface waters of the Commonwealth.

Comments that focus on economic benefits of this rulemaking

2. **Comment:** These Class A protections proposed here, will go a long way to supporting and sustaining natural capital and services that are essential for a sustainable economy and livable thriving healthy communities in the Commonwealth. There are many studies that show how property values, community health, and local businesses all thrive when clean streams, healthy riparian buffers and healthy watersheds flow through them. The proposed regulations site many of these studies. To add to that information, especially in light of two of the streams in this bundle flowing into the Lehigh River in Carbon County, a 2014 Lehigh Valley Planning Commission report entitled, *Lehigh Valley Return on Environment*, has key findings that show the wide-ranging benefits to the community when clean water and natural areas are preserved like that of High Quality and Exceptional Value waterbodies (accessible here: https://www.lvpc.org/pdf/2014/ReturnOnEnvironment_Dec_18_2014.pdf). For example, the Lehigh report finds:

   - The highest natural system services on a per acre basis is found in wetlands, riparian corridors and forests. Maintaining and restoring connected habitats and (stream and riparian) corridors will provide the full potential value of natural system services.

   - 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).

   - Physically active people typically enjoy a variety of health benefits, including lower incidence of cardiovascular diseases, diabetes, depression, certain cancers and obesity. A growing body of evidence shows that contact with nature reduces stress, depression and blood pressure; increases concentration, creativity and learning; and connects people to their community. This helps reduce medical care costs and enhances productivity.

   - Natural areas provide over $22.4 million annually in pollination and $2.5 million in biological control services to agriculture, backyards and the natural landscape.

   Another report that provides data on the values of a healthy river is the Delaware Riverkeeper Network's (DRN's) 2010 *River Values, The Value of Clean and Healthy Delaware River* that provides statistics on reduced stormwater flooding costs related to tree cover and protection of forests and riparian buffers and other statistics for the Delaware River watershed to help illustrate the importance of protecting freshwater streams and the natural habitats and riparian buffers that are part of those watersheds http://www.delawareriverkeeper.org/sites/default/files/River_Values_Report_0.pdf.

University of Delaware's 2016 analysis entitled, Economic Analysis of the Economic Value of Nature and Ecosystems in the Delaware River Basin (http://www.wrc.udel.edu/research/economic-value-of-nature-andecosystems-in-the-delaware-river-basin/) is another recent report to help flush out and value the community benefits a clean watershed provides.

Finally, since clean healthy trout streams benefit from healthy riparian buffers, this recent report by ECONorthwest commissioned by DRN and released in 2018 entitled, *The Economic Value of Riparian Buffers in the Delaware River Basin*, provides important data that show how very valuable natural habitats and high quality stream corridors are to communities that again go far beyond just protecting fish http://www.delawareriverkeeper.org/sites/default/files/Riparian%20Benefits%20ECONW%200818.pdf. Other ecosystem service and community health reports exist for the state to further point to and have sound science that shows all the benefits that come when we designate and protect streams as High Quality or Exceptional Value and work hard to protect these standards. We believe these types of analyses and ecosystem services calculations must be fully integrated in the regulatory process to ensure the public trust is adequately protected and alternatives analyses calculated and considered provide the full and complete picture. (763)

Response: The Department appreciates that the commenter has provided these resources which demonstrate that protecting special protection waters is beneficial economically and is furthermore essential for livable, thriving, healthy communities in the Commonwealth. The Department will use this information where appropriate to discuss the economic benefits and costs associated with protecting water quality. The Department fully agrees with the commenter that analyses of these economic benefits and costs of protecting our waters must be fully integrated in the regulatory process. These studies will assist the Department in its discussion of the full and complete picture of the costs and benefits associated with protection of surface waters.

3. **Comment:** Economic strength is dependent upon clean water. (2-714, 736, 752)

   Response: The Department appreciates the commenters' support of the proposed redesignations.

4. **Comment:** These redesignations will provide economic benefits. (739)

   Response: The Department appreciates the commenter's support of the proposed redesignations.

5. **Comment:** This rule supports Pennsylvania's outdoor recreation industry which is valued at $29 billion. Pennsylvania boasts 16,000 miles of wild trout waters and more than 1.3 million anglers. (715-735, 737, 740-742, 746-751, 755, 757-761)

   Response: The Department appreciates the commenters' support of the proposed redesignations.

6. **Comment:** Tourism and outdoor recreation are significant components of Pennsylvania's economy. (739)

   Response: The Department appreciates the commenter's support of the proposed redesignations.

7. **Comment:** Clean streams, healthy forests, riparian buffers, and diverse open space habitats correlate with increased property values. (762)

   Response: The Department appreciates the commenter's support of the proposed redesignations.

Comments on benefits to public water supplies and public water suppliers; including cost savings

8. **Comment:** Public water suppliers which maintain the current quality of their source water will realize decreased initial treatment costs as the source water will initially be higher quality. The DEP identified eleven public drinking water supply facilities that are within 30 miles downstream of the candidate stream sections in this rulemaking that serve over 175,000 citizens. This rulemaking is an economic benefit because the drinking water may be less costly to consumers if the source water treatment costs are lower because less treatment is needed due to the higher quality of the source water in the stream. (763)

   Response: The Department did state that these redesignations will protect high-quality source water for affected drinking water facilities and therefore public water supply customers may realize cost savings as the initial source water treatment costs may be less. The Department appreciates that the commenter also recognizes this as a potential cost savings to the drinking water customers.

9. **Comment:** These upgrades will help to ensure cleaner drinking water. (2, 715-735, 737, 740-742, 746-751, 755-762)

   Response: The Department appreciates the commenters' support of the proposed redesignations. The Department agrees that the regulations contained within this rulemaking should protect the existing water quality at its current state.

   The Department would like to clarify that stream redesignations do not represent "upgrades" or "downgrades." The Department's goal in redesignating streams is to apply the appropriate designated use and thereby provide the appropriate level of protection for all of the surface waters of the Commonwealth.

10. **Comment:** These upgrades will help to ease the burden on public and private drinking water purification systems. (756)

    Response: The Department appreciates the commenter's support of the proposed redesignations. The Department agrees that protecting the existing water quality should provide a benefit for drinking water purification systems.

The Department would like to clarify that stream redesignations do not represent "upgrades" and "downgrades." The Department's goal is to apply the appropriate designated use and thereby provide the appropriate level of protection for all of the surface waters of the Commonwealth.

Comments on streams in the Lehigh and Schuylkill River watersheds, including Sixpenny Creek

11. Comment: We are especially pleased to see streams of the Lehigh and Schuylkill watersheds as well as the Sixpenny Creek in Berks County gaining stronger protection with this proposed rulemaking. (763)

Response: The Department appreciates the commenter's support of the proposed redesignations.

Comments on Drainage List T; Quemahoning Creek

12. Comment: In Drainage List T at 25 PA Code §93.9t please clarify the applicable zone for the proposed modification of the addition of the identified stream with hydrologic order "6-Quemahoning Creek". To maintain consistency with other listings of stream segments in drainage list T please identify the zone as either "Basin, Beaverdam Creek to Roaring Run" or "Mainstem, Beaverdam Creek to Roaring Run," as appropriate. (744)

Response: The Department thanks the commenter for pointing out this error. This entry in Drainage List T has been corrected. The zone description in Annex A for this portion of the basin of Quemahoning Creek between Beaverdam Creek and Roaring Run now reads, "Basin, Beaverdam Creek to Roaring Run".

Inquiries pertaining to the status of other stream evaluations

13. Comment: In New Jersey, similar stream sources of drinking water are protected as C1 waterways which is similar to Exceptional Value designation in Pennsylvania and many watershed groups and community petitioners including the Delaware Riverkeeper Network have requested upgrades for similar water supplies like the Perkiomen Creek that flows into Green Lane Reservoir in Pennsylvania but these redesignations to help protect drinking water supplies were not successful. (763)

Response: In addition to regulations that address water uses, the Department has established protocols that it follows when making recommendations for stream redesignations. 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.

The Department's stream redesignation evaluation report for Perkiomen Creek is available on the Department's website at

www.dep.pa.gov/Business/Water/CleanWater/WaterQuality/StreamRedesignations/Pages/default.aspx.

Inquiries pertaining to why some of the recommendations for redesignation are for the main stem only, rather than the entire basin

14. Comment: For Class A streams not currently designated as High Quality or Exceptional Value, the current 25 Pa. Code Chapter 93 Water Quality Standards listing does not adequately protect the existing flora and fauna present in these ***basins***. Due to their significant wild trout resources, which meet Class A criteria, these stream sections and their tributaries should be designated as High Quality-Cold Water Fishes and Migratory Fishes (HQ-CWF, MF) as a ***Basin*** designation by the Department of Environmental Protection upon listing by the PFBC as a Class A wild trout stream under 25 Pa. Code Chapter 93 based on the qualifier found in 93.4b(2)(ii).

The reasons for applying a ***Basin*** rather than a ***Main Stem*** designation appear to be primarily administrative and subjective, with no specific guidelines or criteria included. As such, it is unclear what, if any, criteria DEP uses to assign only ***Main Stem*** instead of the entire ***Basin*** as the zone of redesignation and why some waters are designated as ***Main Stem*** while others are designated as ***Basin***. Of the 41 stream redesignations included in this package, 34 are proposed for ***Basin*** and the other 7 are only proposed as ***Main Stem***. A review of the current package suggests substantive inconsistencies. (753)

Response: PFBC Class A delineations are generally basin delineations where fisheries data from a stream reach demonstrates Class A biomass and the upstream mainstem and all upstream tributaries are included in the Class A classification in order to protect and manage the downstream resource from a fisheries perspective.

The Department's protected uses serve a purpose that is, in part, different than solely fisheries management. The Department's regulations define protected uses including aquatic life uses (Cold Water Fishes (CWF), Warm Water Fishes (WWF), Trout Stocking (TSF), Migratory Fishes (MF)) and special protection uses (High Quality Waters (HQ) and Exceptional Value Waters (EV)), as well as qualifications for special protection. Protected uses are to be supported through development and implementation of specific water quality criteria that protect those uses, which are used to develop specific effluent limitations and permit regulated activities to surface waters.

The Department evaluates protected uses for specific waters by comparing protected use definitions and qualifications to available information and data from a waterbody. For example, the definition of CWF in 25 Pa. Code § 93.3, Table 1 – "*Maintenance or propagation, or both, of fish species including the family Salmonidae and additional flora and fauna which are indigenous to a cold water habitat*" – would be satisfied with data that characterizes a reproducing trout population and additional flora and fauna from a waterbody.

In addition to determining the protected use, the Department must also characterize the representativeness or appropriate spatial extent for which it applies. If fisheries data is collected from a single reach, the Department must determine how far upstream or downstream that fisheries data represent, and from an implementation perspective (i.e., permitting), how far upstream or downstream would any permitted activity likely have an effect on, or be affected by, those stream segments being evaluated?

Generally, there is an inverse correlation associated with the distance between the points at which data is collected along the candidate stream reach being evaluated, and the likelihood that the collected data accurately represents the candidate stream reach. This is typically due to the increased opportunity for characteristics of the stream to be affected by other influences like land use, riparian buffer, point source effects, implementation of water quality improvement projects, water quality protective measures, flow modifications, etc. If it is determined that there are factors that could affect the representativeness of data and information to a stream reach, additional data may be necessary to adequately support a use evaluation for a particular stream reach.

The Department must also consider the practicalities of implementation of the protected use and supporting water quality criteria. Pennsylvania contains a high concentration of surface waters and typically these surface water systems are dendritic or have many branching waters, both large and small, within a basin that may or may not always be documented. Permitted activities to these and any surface water is required to be protective of downstream protected uses. Many of these smaller tributaries have a direct and immediate connection to larger downstream surface waters and permitted activities can be completely influenced by the downstream protected use due to a combination of proximity, flow, and assimilative capacity. In these situations, these smaller tributaries will be included in the protected use delineation for the downstream, larger surface water.

In addition, the comment was made that any water that the PFBC lists as a Class A water qualifies for the Department's designation of MF. MF is defined in 25 Pa Code § 93.3, Table 1 as "*Passage, maintenance and propagation of anadromous and catadromous fishes and other fishes which move to or from flowing waters to complete their life cycle in other waters.*" According to the water quality standards regulations, the MF use is an independent use from the HQ use and the Department must evaluate it as such. The MF use will be added to those surface waters which meet the definition of MF in 25 Pa. Code § 93.3, Table 1. A surface water can be classified Class A and be designated HQ-CWF and not necessarily be designated as MF.

15. Comment: The following Class A wild trout waters included in the package currently have only the Main Stem listed as the Zone for recommended Designated Use upgrade and should have this Zone changed to Basin:

- UNT 03913 to Lehigh River - Zone should be Basin to account for tributaries to UNT 03913 not listed in Drainage list D. Also, Basin is consistent with the current designated use listing Zone for other Unnamed Tributaries in this reach of the Lehigh River. In addition, Main Stem only does not adequately protect this resource.

- Fireline Creek - Zone should be Basin, Source to mouth to account for tributaries to Fireline Creek not listed in Drainage list D. Also, Basin is consistent with current designated use listing Zone for this water. In addition, Main Stem only does not adequately protect this resource.

- Glen Brook - Zone should be Basin, Source to Foundryville Road to account for tributaries to this reach of Glen Brook not listed in Drainage List K. In addition, Main Stem only does not adequately protect this resource.

- Gap Run - Zone should be Basin to account for tributaries to Gap Run not listed in Drainage List L. Also, the PFBC has documented populations of wild Brook Trout in tributaries to Gap Run. In addition, Main Stem only does not adequately protect this resource.

- Council Run - Zone should be Basin to account for tributaries to Council Run not listed in Drainage List L. Also, Basin is consistent with the current designated use listing Zone for this water. The PFBC has documented populations of wild Brook Trout in tributaries to Council Run. In addition, Main Stem only does not adequately protect this resource.

- Spencer Creek - Zone should be Basin to account for tributaries to Spencer Creek not listed in Drainage list Q. Also, Basin is consistent with nearby Beaver Run, which is designated as a Class A wild trout water. In addition, Main Stem only does not adequately protect the resource.

- Benson Run - Zone should be Basin to account for tributaries to Benson not listed in Drainage list Q. Also, Basin is consistent with nearby Trout Run, which is designated as a Class A wild trout water. In addition, Main Stem only does not adequately protect this resource. (753, 777 - IRRC)

Response: The Department initially addressed these comments by reaching out to this commenter on the Class A proposed rulemaking, to discuss these specific comments. Main stem HQ recommendations for UNT 03913 to Lehigh River, Fireline Creek, Glen Brook, Gap Run, Council Run, Spencer Creek, and Benson Run were then updated to basin delineations due to the submission and discussion of additional data and information that support the inclusion of these additional stream segments. For five of these seven stream segments, the Department is recommending changes from the proposed rulemaking to be consistent with the commenter's suggestions.

There were two situations where the updated zone is different from what the commenter had requested. First, the original Department recommendation was only for the main stem of Fireline Creek. The commenter had requested that all the tributaries in the Fireline Creek basin be included with the zone recommended for inclusion with this rulemaking. The Department updated the zone so that it now includes all the tributaries to Fireline Creek except UNT 03907. Second, the original Department recommendation was that the main stem of the Glen Brook basin from UNT 28087 downstream to the Foundryville Road should be redesignated to HQ-CWF, MF. The commenter had requested the Glen Brook basin

above Foundryville Road should be redesignated to HQ-CWF, MF. The Department updated zone description for the candidate stream segment so that it now includes the entire Glen Brook basin. This updated recommendation adds the main stem above UNT 28087, the main stem below Foundryville Road, and all the tributaries to Glen Brook.

16. **Comment:** The following (two) streams have Basin as the listed Zone for recommended Designated Use upgrade but only for a reach of the stream. Rationale is given below for including the entire stream and its Basin.

- Beaver Run - This should be Basin for the entire stream. The original report submitted to DEP only covered the reach from Source to UNT 27182 (PFBC management Section 01) but since that time, PFBC has designated the entire Stream as Class A wild trout water after evaluating Section 02. This report has been submitted to DEP and this stream section has been listed under DEP Stream Assessment Notifications for March 8, 2018. The entire stream is now designated as a Class A wild trout water and the entire stream and basin should be listed to account for all tributaries to Beaver Run not listed in Drainage list L.

- Laurel Run - This should be Basin for the entire stream. PA Code, Chapter 93, Drainage List L already lists the Laurel Run Basin as HQ-CWF, MF from Source to a point at 40°49'3.5"N; 78°5'52.0"W. To have two segments of Laurel Run upstream and downstream of the x,y coordinates listed will be confusing during navigation of the drainage lists by users and may result in errors. In addition, Drainage List L designates the upper portion of Laurel Run as HQ-CWF, MF; but eMapPA and available GIS layers from DEP continue to list this portion as CWF, MF. Designating the entire basin and correcting GIS layers will prevent further inaccuracies and confusion. (753, 777 - IRRC)

Response: The Department initially addressed these two comments by reaching out to this commenter on the Class A proposed rulemaking, to discuss these specific comments. In both cases, the Department's original recommendation is not being changed.

The portion of the Beaver Run basin that is included as a candidate for redesignation to HQ-CWF, MF along with this final rulemaking package is the basin from the source to and including UNT 27182. The commenter has submitted a separate report which demonstrates that the remainder of the basin meets the trout biomass criteria and is also a Class A water according to PFBC guidelines and therefore the commenter concludes that it should be included with this rulemaking. The Department is actively evaluating the additional Beaver Run report and associated recommendations. This evaluation will be included in a subsequent rulemaking in order to provide the appropriate public participation opportunities.

With respect to the Laurel Run basin, the basin is currently designated HQ-CWF, MF from the from the source to 40°49'3.5"N; 78°5'52.0"W. The recommendation for this rulemaking is to redesignate the remaining portion of the basin from 40°49'3.5"N; 78°5'52.0"W to mouth HQ-CWF, MF. When this final rulemaking is codified there will be a single entry for Laurel Run and the zone description will be "Basin" and the Laurel Run basin will be designated HQ-CWF, MF.

17. IRRC Comment: This proposed rulemaking will update designated uses for streams that qualify as High Quality (HQ)-Cold Water Fishes (CWF) waters, based on species-specific biomass for Class A Wild Trout set by the Pennsylvania Fish and Boat Commission (PFBC). EQB states that Department of Environmental Protection (DEP) staff conducted an independent review of the trout biomass data in PFBC fishery management reports for relevant streams to ensure that the HQ conditions were met. The proposal affects 42 stream segments totaling 204 stream miles.

A document prepared by DEP's Division of Water Quality Standards that was submitted with this proposal states that while DEP generally followed PFBC requested stream reach delineations, "adjustments were made in some instances based on land use, confluence of tributaries or considerations based on electronic mapping limitations."

PFBC submitted comments suggesting that the zone for recommended designated use for seven streams be amended from Main Stem to Basin. They also suggest that the Basin designation be applied to entire reaches of two streams instead of just the streams themselves. It is our understanding that adopting the recommendations of the PFBC would increase the number of stream miles affected by the proposal.

We ask EQB to review the comments of the PFBC to determine if the suggestions are supported by acceptable data and to provide an explanation of why it will either adopt or not adopt the suggested amendments. If changes are made, we ask EQB to update the number of stream miles that will be affected and also to quantify any potential economic or fiscal impact that may result. (777)

Response: The Department conducted a review of the PFBC comments, which provided two suggestions: 1) the Department expand recommended redesignations for seven streams to include tributaries to those streams; and 2) the Department expand recommended redesignations for two streams to include the entire respective basins. For the following reasons, the Department adopted the PFBC's first suggestion to expand the recommended redesignations for seven streams, but declined to recommend PFBC's second suggestion to include the entire stream basin for the two additional streams.

The Department met with PFBC to discuss their comments as part of its review. The PFBC had concerns with seven streams in the proposed rulemaking which only had the main stem or a portion of the main stem as the candidate portion for redesignation. For these candidate waters, the Department did not initially include the tributaries to the main stem and the PFBC believed the tributaries should have been included. The Department updated its recommendation and added more tributaries to be redesignated to HQ along with all seven of the main stem portions that were initially listed as only having the main stem or a portion of the main stem as the candidate waters.

The PFBC was also concerned with two streams in the proposed rulemaking which only had a portion of their basin included as the candidate segment for redesignation. The PFBC believed that the entire basin of both these streams should have been candidates for HQ. The

Department is not changing its recommendation for the other two streams for which the candidate waters included a portion of the basin, but not the entire basin.

A detailed description of the concerns that PFBC had with these nine stream segments as well as the Department's final recommendations and an explanation regarding why the Department is or is not adopting these suggestions are included in the previous two comments (i.e., Comment 15 and Comment 16) and the Department's responses to these comments.

The Department has changed its recommendation from the proposed rulemaking so that 222 stream miles are now being affected by this rulemaking. IRRC requested that if the Department changes its recommendation based upon the comments from PFBC, then it should provide information regarding the potential economic or fiscal impact associated with the additional miles of streams being redesignated along with this rulemaking. The Department has determined that there are 19 facilities that currently hold active National Pollutant Discharge Elimination System (NPDES) permits in the surface waters that were included in the initial candidate waters described in the proposed rulemaking. This count does not include NPDES permits for discharges of stormwater associated with construction activities, since these permitted activities are relatively temporary.

Based on the PFBC comment, the Department is adding 13 stream miles in the final rulemaking to the recommended redesignations; the Department has determined that there are no additional facilities that hold NPDES permits in these newly added surface waters. All 19 of these discharges were in existence at the time of the relevant stream survey and have been considered in the evaluation of the existing water quality of the relevant streams 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, based on 25 Pa. Code § 92a.54(a)(8) (relating to general permits), and therefore require individual permits. The individual permits are necessary to track any additional or increased discharges to a special protection water. Overall, there will be no additional economic or fiscal impact that will result from these additional waters being redesignated to HQ-CWF. These newly added waters will be afforded the same protection as the waters that were initially recommended for HQ-CWF in the proposed rulemaking and the economic and fiscal impact will be the same for the 13 miles of newly added surface waters and the initially recommended 209 miles of stream in the proposed rulemaking, so there is no change in the Department's response to this inquiry. Likewise, the economic benefits of these stream redesignations will be the same for the 222 miles of surface water that are being added with this final rulemaking as for the 209 miles of surface water in the proposed rulemaking. A detailed description of the economic and fiscal impacts along with a discussion of the economic benefits can be found in the Regulatory Analysis Form (RAF).

18. Comment: We are unclear why some of the listings, like that of the Lehigh River and the Fireline Creek in Carbon County and located in the Delaware River Watershed, are not listed for their entire basins. There are a few other streams that also have this same segmentation noted. The table in the regulations notes they are main stem only. We are not sure if this an oversight especially noting that trout often move through a watershed depending on stream temperature ranges. For example, as temperatures rise in summer months, larger trout may move from larger areas of water downstream into cooler headwater tributaries and deep pools to stay cool. As we have provided in past comments, providing less segmentation or breaking up into various different use segments and providing more watershed wide/basin protections is appropriate and more protective of the system as a whole. (763)

Response: The Department believes that one of the two streams to which the commenter is referring is actually Unnamed Tributary (UNT) 03913 to the Lehigh River (locally known as "Nis Hollow"), rather than the entire Lehigh River. The other stream specified in the comment is Fireline Creek. The Department's initial recommendation for seven streams has been changed based on discussions with PFBC following the publication of the proposed rulemaking. The recommendation for UNT 03913 is now that the entire basin should be redesignated to HQ-CWF, MF rather than just the main stem. The recommendation for Fireline Creek has expanded the candidate zone for redesignation to include the main stem above UNT 03907 and all the tributaries in the entire basin except UNT 03907. UNT 03907 will remain CWF, while still being protective of the recommendation of HQ for Fireline Creek downstream of UNT 03907. In addition, the land use is heterogenous through this segment and includes multiple ponds, lawns, and encroachments that could affect the results of an existing use evaluation and there is not currently data available that demonstrates a protected use of HQ for this portion of the basin.

Comments on the Class A qualifier for HQ designation

19. Comment: We did not cross reference the original FBC listings with this proposed listing of 42 streams, but we would like to learn if there are any streams in this Class A bundle that were originally put forth by the FBC that were not included in this final package. We understand that DEP conducts its own analyses of these streams beyond trout biomass. We believe the regulations in Chapter 93 indicate that a stream can be listed for HQ just based on trout biomass alone and the stream does not need to have the macroinvertebrate scores in this instance. (ii) *Class A wild trout qualifier.* The surface water has been designated a Class A wild trout stream by the Fish and Boat Commission following public notice and comment. If insects do not score highly enough, that should not matter and we believe those streams should all be included as High Quality. Along these same lines, we would like to explore if the Dept. evaluates any of the softer qualifiers in Chapter 93 available during their review of these candidate streams to see if any streams qualify for additional Exceptional Value designation. Considering the amount of time it takes to see a stream through this process we believe it would be an essential piece to ensuring streams have the highest protection afforded to them. (763)

Response: There are currently stream segments classified by PFBC as Class A Wild Trout

Waters that are not included in this rulemaking due to the need for further data and review. See the Department's response to Comment 14 for further explanation. The Department will continue to evaluate additional Class A surface waters and does anticipate an additional Class A proposed stream redesignation rulemaking in the future.

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 of redesignation to HQ; however, the Department must independently evaluate the data first. The Board may rely upon the expertise of other agencies, but it must reserve for itself the final decision.

The Department will consider all special protection qualifiers in § 93.4b if the information, like a Class A Wild Trout Classification, is available. As information becomes available, the Department will review the information and make existing use determinations, as appropriate, as part of a final permit or approval action in accordance with 25 Pa. Code § 93.4c(a)(1)(iv).

Conversion from River Miles to Latitude and Longitude

20. Comment: Regarding corrections to drainage lists, we understand that there is a potential conversion from River Miles (RM) to latitude and longitude. This addition will be a good one. We would recommend keeping both the RM and adding the lat and long and as indicated above, perhaps linking the geospatial coordinates to interactive maps. This could be another way to improve communication and public access as well as permitting accuracies as the Dept. continues to make efforts to increase public accessibility. (763)

Response: The Department is recommending that all references to river mile indexes (RMI) in this rulemaking are to be converted to a set of latitude and longitude coordinates, with the eventual goal of converting all River Mile Indexes (RMI) in the drainage lists in §§ 93.9a—93.9z to latitude and longitude coordinates. Department staff recognizes the RMI system to be antiquated. When determining the RMI, it is possible to derive differing RMI depending on the technique used. In contrast, it is easy to consistently determine the latitude and longitude along any point of a stream or river while an individual is in the field with a cellular phone, a hand-held Global Positioning System (GPS) unit, or using a Geographic Information System (GIS) software application (the geographic coordinate system is North American Datum 1983 or NAD 1983). It is very difficult to determine the RMI while in the field. Referring to the latitude and longitude will make it much easier for the regulated community to apply the zone descriptions in § 93.9a—93.9z to their particular project and to determine whether their project discharges within the referenced stream zone.

Comments on EV wetlands

21. Comment: These HQ listings will also designate important wetlands associated with these trout streams as exceptional value, therefore giving these wetland habitats increased protection. Wetlands function to clean and filter our water supplies and provide flood protection. (762)

Response: Exceptional value wetlands include certain wetlands that are located in or along the floodplain of the reach of a wild trout stream, as identified by the PFBC. See 25 Pa. Code §§ 105.17 (relating to exceptional value wetlands) and 105.1 (definition of wild trout stream).

22. **Comment:** In accordance with Chapter 105.17, there are multiple ways for a wetland to qualify as Exceptional Value wetlands, one of which is related to trout waters. § 105.17(iii) Wetlands that are located in or along the floodplain of the reach of a wild trout stream or waters listed as exceptional value under Chapter 93 (relating to water quality standards) and the floodplain of streams tributary thereto, or wetlands within the corridor of a watercourse or body of water that has been designated as a National wild or scenic river in accordance with the Wild and Scenic Rivers Act of 1968 (16 U.S.C.A. §§ 1271—1287) or designated as wild or scenic under the Pennsylvania Scenic Rivers Act (32 P.S. §§ 820.21—820.29). Wetlands are critical habitats that provide essential natural capital and ecosystem services. (763)

    Response: The Department agrees with the commenter's statement regarding qualification for EV wetlands and also the critical functions that wetlands provide.

23. **Comment:** We recommend more effort be made at minimum, to list and better map these EV wetlands hydrologically connected to trout waters to assist with better protection of these EV wetlands in the permitting programs perhaps similar to the existing use table that currently exists for streams. With the technological advancements of mapping capabilities, interactive maps showing potentially impacted wetlands or streams would be a method for the public to better access and review such information during project permit application reviews. (763)

    Response: The Department appreciates this comment. The Department does not consider remote sensing technologies to be adequate means to delineate wetlands for permitting purposes. Wetlands must be delineated in accordance with the Department's policy found at 25 Pa. Code § 105.451 (relating to identification and delineation of wetlands—statement of policy) through on-site methodologies. Likewise, determinations that wetlands are Exceptional Value Waters also require an accurate on-site delineation.

24. **Comment:** DRN has repeatedly requested over the past few years from the Department with limited success, for example, GIS map layers for aquatic impacts for larger linear gas pipeline projects that impact hundreds of wetlands and streams. These maps and GIS data layers would help with thorough public review. For example, in April, the PADEP issued its most recent integrated list using an online mapping tool which is allowing the public to better access stream segments and information - this type of interactive mapping could also be implemented for permitting review especially for large linear projects like pipelines. There is a stakeholder effort underway as part of a settlement agreement by Clean Air Council and DRN, to review Chapter 105 guidance documents for alternatives analyses of waterbody impacts if developers and others aim propose to impact these aquatic resources. As more evidence and studies show the value of these natural systems, it is critical that the regulations adequately protect these resources that are part of the public trust. Wetlands classified as

"Exceptional Value" fall with the antidegradation provisions of Pennsylvania's water quality standards. See 25 Pa. Code § 96.3(b); 25 Pa. Code § 93.4a; 25 Pa. Code §§ 105.18a(a)-(1). (763)

Response: A permit or authorization is required to obstruct or encroach upon wetlands, including Exceptional Value wetlands. As per the requirements of 25 Pa. Code Chapter 105, an applicant must provide an impacts analysis, which includes the Department's current listing of Designated and Existing Uses of streams, and an analysis of whether any wetlands proposed to be impacted are EV in accordance with § 105.17. In accordance with § 105.14(b)(11), the Department is also required to review all Chapter 105 permit applications for consistency with state antidegradation requirements. Once a permit application is submitted to the Department, it is part of the public record and materials, including maps, plans, and specifications, may be made available to the public by scheduling a file review at the local regional office or through a formal Right to Know request.

Comments on the stream redesignation process once again moving forward

25. Comment: I am a retired DEP aquatic biologist who worked in the Southcentral Regional Office. In 2014, I learned that the stream redesignation process had not been moving forward since 2011. This concerned me because during my career I collected data to support recommendations for stream redesignations and I always took this work seriously. I took action with the help of Trout Unlimited to re-establish the advancement of stream redesignations. Actions taken included correspondence and meetings with DEP. It appears that the stream redesignation process is once again moving forward. Objective decisions should be made on real science (i.e. the surveys conducted by the biologists working for the PFBC and the DEP which document the status of the trout populations and the macroinvertebrate communities, respectively), not political science. In light of the fact that the stream redesignation process was hijacked for several years and a back-log of streams now exists I urge the EQB to vote yes on this recent package of stream upgrades. The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic, and aesthetic values of the environment. (738)

Response: The Department continuously monitors approximately 85,000 miles of streams across the Commonwealth. It takes time to collect and process water quality data along with other relevant data associated with a stream redesignation evaluation. Additionally, the Department incorporates a robust public review into every step of the evaluation. The Department acknowledges that it may appear as though there is no activity during certain times, but data is constantly being collected and analyzed for the purposes of evaluating protected uses and making redesignation recommendations in redesignation reports and subsequent stream redesignation rulemaking packages. The Department is grateful that the commenter is interested in the stream redesignation process and is motivated to take action in order to maintain its advancement.

Comments on undue burden associated with this rulemaking

26. Comment: The commenter expressed concern of undue burden associated with an unpermitted activity that does not warrant consideration. (743)

Response: The Department acknowledges this comment.

27. Comment: The proposed stream redesignations by PADEP concern us because it may impose undue burden on critical infrastructure projects that also provide benefits to the citizens of the Commonwealth.

For instance, PADEP proposes to designate the entire Mosquito Creek basin (Stream Code 20929) as a high-quality water. This action will designate over 21 miles of stream as high quality and thousands of acres that drain into Mosquito Creek will require the same burdensome treatment. Additionally, the Mosquito Creek area is currently managed by the Williamsport Municipal Water Authority currently as a nature preserve. The Williamsport Municipal Water Authority, like FirstEnergy, has a duty to deliver reliable, utility service to its customers and may need to construct critical infrastructure from time to time.

By designating the stream as high quality, general permits for construction will no longer be acceptable. Also, expensive, cumbersome, and complicated socio-economic justifications will be required when water quality cannot meet these strict and burdensome standards. Such protections can inadvertently have adverse effects in providing safe and reliable utilities to millions of Pennsylvanians.

PADEP provides a well-documented and quantitative review of the benefits of the proposed regulation; however, PADEP does very little to quantify the costs. While existing permits may not be affected, any expanded or new permits will fall under this purview. As such, construction of critical infrastructure will need individual permits versus efficient, streamlined general permits. Such individual permits will add technical third parties to complete and delay projects by months, all of which, adversely affect the costs of a project. To this end, FirstEnergy requests that the Department develop a general permit for high quality waters in an effort to help keep the time burden and cost of individual permits to a minimum, so that infrastructure improvements can be installed as efficiently as practicable.

FirstEnergy believes that such high-quality stream designations are important in protecting the most valuable waters in the Commonwealth; however, the proposed list should be reviewed to determine whether entire streams and drainage basins are appropriate to characterize as high quality. FirstEnergy also believes that where critical infrastructure already exists to serve the citizens of the Commonwealth for purposes of the public good, such as drinking water or electricity, that PADEP should consider the ramifications of such designations when contemplating changes in stream designations. (764)

Response: The stream redesignation process begins when the Department becomes aware of information and data that is pertinent to an evaluation of protected uses for specific waters. In accordance with 25 Pa. Code § 93.4a, the Department must maintain and protect all

existing instream uses and the level of water quality necessary to protect the existing uses and must maintain and protect the water quality of HQ and EV waters, with certain exceptions for HQ waters. The determination of the appropriate water use is solely dependent upon whether the surface water is meeting the definitions and qualifications as defined in the regulations found in Chapter 93. The Department uses monitoring and assessment protocols, that are publicly available, to determine that a stream is achieving a specific water use.

The commenter states that the Department explains the benefits of the rulemaking but does very little to discuss the cost to the regulated community. The Department can generally explain the benefits of protecting HQ or EV surface waters because the surface waters are currently supporting those uses, and the uses are providing tangible benefits. Implementation of Pennsylvania's antidegradation regulation (§ 93.4c(b)) specifically applies to new, additional, or increased discharges to HQ or EV waters. The Department can reasonably state that any future costs of this rulemaking will be in the form of permitting and wastewater treatment or best management practices for any new, additional, or increased discharge. However, the Department does not have the ability to foresee future plans of current dischargers, nor can the Department predict if new discharges will originate in the affected waters. Furthermore, the Department cannot predict the composition of a future discharge that currently does not exist nor the cost of treatment and engineering services at some future date. The impact on individual permit effluent limitations, as well as the engineering and treatment costs associated with achieving more stringent limits, are very site-specific and impossible to predict. The Department does elaborate further on the known costs in Question 15 of the Regulatory Analysis Form.

The commenter correctly states that once a stream is demonstrated to achieve the qualifications for special protection, the Department will require coverage for all NPDES permitted discharge activity under an individual permit. In accordance with § 92a.54(e), coverage under a general permit is not permissible if a discharge will occur to a HQ or EV water. The commenter requests that the Department should develop a mechanism by which a general permit could be used in HQ waters to ease the burden on the permit applicant. The promulgation and implementation of the regulations contained in Chapter 92a are not being considered under 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 special protection stream. This type of site-specific evaluation would not be assured or afforded through a general permit. Additionally, permittees with discharges to special protection waters 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.

The commenter states that permittees will be required to complete social or economic justifications (SEJs). 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. SEJs are

never a requirement. An SEJ request may be submitted to the Department with the appropriate permit application for projects resulting in discharges to HQ waters. The Department will approve or deny the request in accordance with § 93.4c(b)(1)(iii) and other applicable guidance and policy. The SEJ process may provide some relief to certain effluent limitations depending on the specific circumstances.