

## **Petition To Redesignate The Stony Run Watershed From Cold Water Fishes To Exceptional Value**

The Stony Run watershed is a picturesque area of Springfield Township, Fayette County. The large amount of forested area and the relatively low levels of historic agricultural, commercial, and industrial development have combined to allow the uses and quality of the watershed to become truly exceptional. Because the law requires the protection and maintenance of existing uses and quality, the Mountain Watershed Association is petitioning the Pennsylvania Department of Environmental Protection to recognize the existing Exceptional Value Cold Water Fishes use of the watershed, and the quality necessary for that use.

### Section II.B. of the Petition Form

Why is the petitioner requesting this action from the Board? (Describe problems under current regulations and the changes being recommended to address the problems. State factual and legal contentions and include supporting documentation that establishes a clear justification for the requested action.)

#### *Problems under the current regulations*

The primary problem with the current designation of Stony Run as Cold Water Fishes is that it does not reflect its current existing use and quality, which is Exceptional Value Cold Water Fishes. Without the legally necessary level of protection for Stony Run, future development will pose a threat to the stream's health. The principal future development threats to the health of Stony Run come from oil and gas development, logging, and coal mining.

As to oil and gas development, there are already two well pads located within the watershed. A search on eMAP revealed the Detwiler 574 Well (Site ID 40955) and the McKinney 2 OG Well (Site ID 560953). Clearly, there is a demonstrated interest in development of oil or gas in this watershed, so the threat of more of it is real.

As to coal mining, the watershed overlies various coal seams. A search of eMAP and of historic mining records revealed the existence of two now-reclaimed coal mines in or adjacent to the watershed: the Karadus Mine (Site ID 632951) and the Fabian Mine (Site ID 602741). If reclamation of those mines proves to have been ineffective, then there is a risk of future abandoned mine drainage that could pollute Stony Run. Also, to the extent that there are commercial quantities of mineable coal or noncoal minerals that underlie the watershed or adjacent areas, then future mining could pose risks to stream health.

Oil and gas development, coal and noncoal mining, pose numerous risks to stream health that include: surface spills; erosion and sedimentation from activities on and near the well pad or mine; deposition into the stream of air emissions, including dust; and contamination of aquifers that are hydrologically connected to the stream.

As to logging, it can be done as a necessary part of oil and gas development or coal mining or it can be done to harvest timber for its own sake. Much of the Stony Run watershed remains forested. That characteristic of the watershed is a principal reason why Stony Run is attaining a Special Protection Water use and why the quality is so excellent. First, the tree canopy overlying the stream segments helps to minimize deposition of air emissions and keeps the streams cool. Second, the presence of the trees minimizes the adverse impacts of erosion and sedimentation. Tree removal would take away those ecological services and would decrease the watershed's ability to maintain its use and quality.

In light of those threats to the watershed, the current designation of Stony Run as Cold Water Fishes is problematic because it does not ensure adequate protection of existing use and quality, which is required by law.

*Factual and legal contentions that establish a clear justification for the requested action*

Water quality standards include designated uses, criteria, and an antidegradation policy. A designated use is a use, specified in the Pennsylvania Code, for a water body or segment, whether or not that use is actually being attained. 25 Pa. Code § 93.1. Water quality criteria are defined as "numeric concentrations, levels or surface water conditions that need to be maintained or attained to protect existing and designated uses." *Id.* An existing use is the use actually being attained in the water body on or after November 28, 1975, no matter what the Code says. 25 Pa. Code § 93.1. The antidegradation policy augments water quality criteria and designated uses by ensuring that Pennsylvania's High Quality and Exceptional Value waters will not deteriorate to the level of water quality standards.

For both designated and existing uses, certain kinds of water uses are to be protected. 25 Pa. Code § 93.3. In Pennsylvania and as it relates to this Petition, protected uses include an aquatic life use of "Cold Water Fishes" and a special protection use of "Exceptional Value Waters." 25 Pa. Code § 93.3 Table 1.

As a floor, existing uses and the level of water quality necessary to protect those uses must always be maintained. 25 Pa. Code § 93.4a(b). Where special protection uses like Exceptional Value Waters are achieved in a waterway, maintenance and protection of that high level of water quality must exist. 25 Pa. Code § 93.4a(c) & (d).

When there is a discrepancy between the current existing use and quality being attained, and the designated use in the Code, citizens can petition the Department for a redesignation of the stream at issue. 25 Pa. Code §§ 93.4a - d. A petition seeking to redesignate a stream as a High Quality Water or Exceptional Value Water must be based on certain kinds of qualifiers. 25 Pa. Code § 93.4b. This Petition seeks to have the Department redesignate the Stony Run watershed based on the biological assessment qualifier. 25 Pa. Code § 93.4b(a)(2)(i). As such, attached is the relevant Biological Assessment that contains facts and conclusions that support redesignation of the watershed.

*Changes being recommended to address the problems*

Based on the information in this Petition, including the Biological Assessment, Stony Run is currently attaining a use that is higher and more restrictive than its designated use of Cold Water Fishes. Based on that and because the law requires the maintenance and protection of existing uses and the quality necessary to protect them, the Department should: (1) immediately add Stony Run to the existing use list as an Exceptional Value watershed; (2) ensure as soon as possible that any Department authorizations related to activity in the watershed account for that existing use; and (3) promulgate an amendment to the Code to ensure that the designated use in Section 93.9 reflects the existing use, which is Exceptional Value Cold Water Fishes.

These changes will address the problems described above because for an Exceptional Value watershed, the Department must review and issue permits or approvals that ensure the maintenance and protection of the Exceptional Value use and quality. To engage in activity that may impact an Exceptional Value watershed, applicants seeking a permit or approval must evaluate nondischarge alternatives. 25 Pa. Code § 93.4c(b). Where there are no environmentally sound and cost-effective nondischarge alternatives, an applicant must demonstrate that they will employ the Antidegradation Best Available Control Technologies (ABACT) and that the use of ABACT will not lower the existing water quality of the Exceptional Value stream. *Id.* Without the acknowledgement that the Stony Run watershed merits Exceptional Value status, the Department cannot adequately ensure the protection and maintenance of the current use and quality.

Section II.C. of the Petition Form

Describe the types of persons, businesses, and organizations likely to be impacted by this proposal.

The redesignation of the Stony Run watershed will positively impact various persons, businesses, and organizations.

First, those who fish in the watershed will benefit because the protection of existing uses and maintenance of existing water quality will ensure that the aquatic species will thrive and continue to propagate. In addition to persons who fish, businesses such as bait and tackle shops and fishing supply stores, and organizations who consist of members who fish and that offer guidance on fishing, will also benefit as the demand for goods and services will grow when the watershed can continue to attract visitors.

Second, persons and organizations doing research on sensitive fish and macroinvertebrate populations will benefit because the protection of existing uses and maintenance of existing water quality will ensure that those populations are protected to facilitate the research of scientists and the education of schoolchildren.

Third, the community in and near the watershed as a whole will benefit because the protection of existing uses and maintenance of existing quality will make that community a nicer place to live and recreate. For example, according to the Indian Creek Watershed Plan and Environmental Assessment from October 2000, for every \$1 spent on AMD restoration, there is a \$2.40 return to the local economy in terms of recreational value that includes fishing. Therefore, recognizing the existing Exceptional Value use and quality, and then maintaining them, will be beneficial to the area.

While certain industrial, commercial, or agricultural developers may be concerned about the redesignation, they needn't be. Development is still possible in an Exceptional Value watershed. Recognizing the existing use and quality of the Stony Run watershed simply means that developers will have to ensure that their projects satisfy the antidegradation regulations, which means that they will either have to creatively implement strategies to remove the need for a discharge, or that their discharges will have to avoid degrading the stream quality. Requiring these best management practices ensures that development can coincide with environmental protection. There are numerous weekly examples published in the Pennsylvania Bulletin of permits being issued for development in Exceptional Value watersheds.

#### Section II.E. of the Petition Form

For stream redesignation petitions, the following information must be included for the petition to be considered complete. Attach supporting material as necessary.

As described below, supporting material is attached.

1. A clear delineation of the watershed or stream segment to be redesignated, both in narrative form and on a map.

Maps are provided in the Biological Assessment that delineates the Stony Run watershed that is to be redesignated (specifically, Maps 1 & 2).

2. The current designated use(s) of the watershed or segment.

The current designated use for the watershed is Cold Water Fishes.

3. The requested designated use(s) of the watershed or segment.

The requested designated use for the watershed is Exceptional Value. If the Department determines that any or all of the segments merit a designated use of High Quality, then that is acceptable, though the Petition demonstrates that the watershed merits a designation of Exceptional Value.

4. Available technical data or instream conditions for the following: water chemistry, the aquatic community (benthic macroinvertebrates and/or fishes), or instream habitat. If such data are not included, provide a description of the data sources investigated.

Attached to this petition is a complete biological assessment of the Stony Run watershed.

Dr. Ben Stout of Wheeling Jesuit University and Schmid & Co., Inc. in Media, Pennsylvania, prepared the biological assessment, which was completed on June 26, 2013. The Biological Assessment was based on sampling at Stony Run performed in February 2013, and the oft-used Exceptional Value reference stream located in Ryerson Station State Park.

The Biological Assessment concludes that Stony Run, currently designated as Cold Water Fishes, has an existing use of Exceptional Value. The Biological Assessment recommends the redesignation from Cold Water Fishes to Exceptional Value, which is the request of this Petition To Redesignate.

5. A description of the existing and proposed point and nonpoint source discharges and their impact on water quality and/or the aquatic community. The names, locations, and permit numbers of point sources discharges and a description of the types and locations of nonpoint source discharges should be listed.

There are no known point source discharges to Stony Run. The Petition authors searched the following to investigate the existence of any point source discharges: eMAP; the Pennsylvania Bulletin; the website of the Department of Environmental Protection; eFACTS; and Google.

Nonpoint sources include logging, agriculture, and road salt from Routes 653 and 711.

6. Information regarding any of the qualifiers for designation as high quality waters (HQ) or exceptional value waters (EV) in §93.4b (relating to qualifying as High Quality or Exceptional Value waters) used as a basis for the requested designation.

Please see attached Biological Assessment, described above in response to Item 4. The Biological Assessment fulfills the requirements of the biological qualifiers in 25 Pa. Code § 93.4b(a)(2) & (b)(1)(v).

7. A general description of land use and development patterns in the watershed. Examples include the amount or percentage of public lands (including ownership) and the amount or percentage of various land use types (such as residential, commercial, industrial, agricultural and the like).

Much of the information in this section comes from the planning and zoning section of the Fayette County website:

[www.co.fayette.pa.us/planningzoning/Pages/Springfield.aspx](http://www.co.fayette.pa.us/planningzoning/Pages/Springfield.aspx) (last visited July 31, 2013)

Springfield Township is located in the northeastern portion of Fayette County next to Somerset County. It is mostly rural. There are more concentrated residential areas in the villages of Normalville, Mill Run, and Pleasant Hill. The Laurel Ridge passes through the eastern half of the Township.

The Fayette County website provides the following land use breakdown:

*Existing Built Area:*

A small area of existing built area is located in the north-central portion of the Township.

.5% of Township land area

*Future Growth Areas:*

Growth will occur on available lands throughout the Township and specifically within the Rural Villages.

*Rural Villages:*

Normalville

Mill Run

Pleasant Hill

2.5% of Township land area

*Recreation/Cultural Resource Conservation:*

Laurel Ridge State Park

State Game Lands

8% of Township land area

*Commercial Conservation:*

2% of Township land area

*Agricultural Conservation:*

Located throughout the Township.

9% of Township land area

*Resource Preservation:*  
58% of Township land area

*Land Reclamation:*  
Twenty-five sites throughout the Township  
6% of Township land area

*Rural Conservation:*  
14% of Township land area

And the following watershed data is from the Environmental Protection Agency's MyWATERS database:

*NHDPlus 1.0 Watershed Characterization Report*

At the watershed outlet:

- Stream Name: Stony Run
- Stream Order: 1
- Stream Level: 6
- Mean annual flow volume (UROM): 3.8 cfs
- Mean annual flow volume (Vogel): 3 cfs
- Mean annual flow velocity (UROM): 1 fps
- Mean annual flow velocity (Vogel): 1 fps

For the catchment (local area draining directly to the selected stream segment):

- Drainage area measurement: 1 km<sup>2</sup>
- Area weighted temperature: 9.1 C
- Area weighted precipitation: 1142.6 mm
- Land Cover:
  - o Open Water: 0%
  - o Low Intensity Residential: 0%
  - o Commercial: 0%
  - o Deciduous Forest: 71%
  - o Deciduous Forest: 0%
  - o Mixed Forest: 3%
  - o Urban/Recreational Grasses: 0%
  - o Other: 26%

For the watershed (drainage area extending from the outlet upstream to the headwaters):

- Drainage area measurement: 4.9 km<sup>2</sup>
- Area weighted temperature: 9.12 C

- Area weighted precipitation: 1143.6 mm
- Land Cover:
  - o Open Water: 0%
  - o Low Intensity Residential: 0%
  - o Commercial: 0%
  - o Deciduous Forest: 77%
  - o Evergreen Forest: 0%
  - o Mixed Forest: 3%
  - o Urban/Recreational Grasses: 0%
  - o Other: 21%

8. The names of all municipalities through which the watershed or segment flows, including an official contact name and address.

The Stony Run watershed is located entirely within Springfield Township, Fayette County, Pennsylvania. The contact name and address are:

Springfield Township Board of Supervisors  
 Box 13  
 Mill Run, PA 15464  
 724.455.3015

9. Locational information relevant to items 4-8 (except for contact names and addresses) displayed as a map or maps, if possible.

Please see attached Biological Assessment, described above in response to Item 4.

Additionally, attached are a DEP map of undermined areas in the Township, a PennDOT map of the Township, and a quadrangle map of the Township.