



January 27, 2015

Mr. John Quigley
Chairperson, Environmental Quality Board
Acting Secretary, Department of Environmental Protection
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Dear Secretary Quigley,

The Delaware Riverkeeper Network (DRN) is writing to share our support of the stream redesignation petition submitted June 2014 for Beaver Creek and its tributaries located in Concord and Chadds Ford Townships, Delaware County. We would also like to provide additional information that we believe should be considered as part of the Pennsylvania Department of Environmental Protection's (PA DEP.) review and study for the Beaver Creek.

The petition was submitted on behalf of the Beaver Creek Conservancy and Christopher Donnelly by James Schmid, Ph.D., President of Schmid & Company, Inc., Consulting Ecologists. The petition, which requests redesignation to Exceptional Value (EV), included a natural resource report (dated November 2013) prepared by Schmid & Company that contained the results of macroinvertebrate sampling conducted in May 2013. The PADEP accepted the petition for further study on August 19, 2014.

The Beaver Creek has many attributes that make it deserving of special protection and that make the current Chapter 93 designation of WWF inaccurate and we are delighted to see efforts to upgrade this stream to Exceptional Value (EV) status to secure for this healthy tributary its proper designation. We appreciate the attention the PADEP is providing in these efforts. In support of those efforts, we would like to highlight characteristics of Beaver Creek pertinent to criteria for qualification as an EV stream.

Outstanding National or State Resource Waters

To qualify for outstanding National or State resource waters, a government agency must adopt water quality protection measures for such waters. The Beaver Creek watershed straddles the 12-Mile Circle that forms the boundary between Pennsylvania and Delaware. A significant portion of the watershed lies in Pennsylvania, but flowing west and south toward its confluence with the Brandywine, land use in the

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stream's headwaters has implications for the health of those waters downstream in Pennsylvania as well as Delaware.

Beaver Creek flows into Brandywine Creek, a tributary to the Christina River which is a tributary of the Delaware River. The Brandywine serves as a major drinking water supply for central Chester and northern New Castle Counties. The Brandywine Creek has six surface water intakes and numerous public water supply wells and substantial groundwater resources exist within the vast majority of the Brandywine Creek watershed to serve as a significant source of water supplies¹. It also serves as the only source of drinking water for the city of Wilmington, DE, which has a population of over 71,000 people (2013 census). By protecting this relatively rural Brandywine tributary, whose healthy forested buffer remains largely intact (compared to some of the Brandywine's other more developed tributaries), and giving it EV designation, PADEP would be helping to protect part of the drainage of a critical water supply.

In addition, the Beaver Creek feeds into and flows through the newly designated (December 2014) First State National Historic Park, now under National Park Service (NPS) management and preservation (<http://www.nps.gov/frst/index.htm>), which encompasses 1,100 acres (see Figure 1). The Woodlawn tract of land within Beaver Valley was first designated as the First State National Monument (Delaware's first national park unit in 2013). The First State National Historic Park recognizes Delaware's colonial heritage and that state's role in the signing of the U.S. Constitution, but also recognizes the cultural and important values and history of the Beaver Valley. Though located largely in Delaware, the First State National Historic Park extends into Pennsylvania and takes in the Beaver Creek Watershed. Locally, the Delaware County Natural Heritage Inventory documented Beaver Valley as being a potential trove of archeological resources and the inventory recommends the preservation of Beaver Valley.

According to the NPS, "The [Woodlawn property] provides a taste of what Delaware was like when first contact took place between Indians and Europeans. It is a small part of a large manor established by William Penn and reflects early Quaker settlement patterns. The Woodlawn Tract has been preserved by the Woodlawn Trust founded by philanthropist William Bancroft in 1901." This Woodlawn Tract is also a favorite location for outdoor recreation with a series of hiking and mountain biking trails throughout it, adding to the recreational significance of the Beaver Valley watershed. With the management now under the NPS, last year community meetings (including a November 5th meeting at the Brandywine Conservancy in Chadds Ford, PA) began to discuss other uses and ways this national historic park and its natural resources can be enhanced and protected— fishing and access to Beaver Creek are a component of discussions to date. There are several existing hiking trails that cross over the Beaver Creek.

Schmid & Company found associated wetlands in the Beaver Valley that have the presence of Threatened or Endangered (T&E) species of plants or animals. State law requires that such wetlands be classed as Exceptional Value (25 Pa. Code 105.17). The presence of T&E species tie in wetlands, also deserving of EV status, that are connected to the petitioned surface water, argue in support of the highest level of protection for the Beaver Creek watershed.

The 2011 natural heritage program for Delaware County indicates core forested habitat still remains in the Beaver Valley Watershed, including sections that are considered interior forest.

There is also an existing 1963/64 30-inch Colonial petroleum pipeline that runs parallel across the Basin where plants of concern and T&E species are located in wetlands. Pipeline ROWs need to be kept clear of structures and any future or planned developments should have to adhere to a safe distance from the ROW to provide fire protection and to keep people out of harms way. This pipeline characteristic lends itself to areas of that Basin that will not be developable in any other way than this industrial ROW.

Woodlawn Tract - First State National Monument

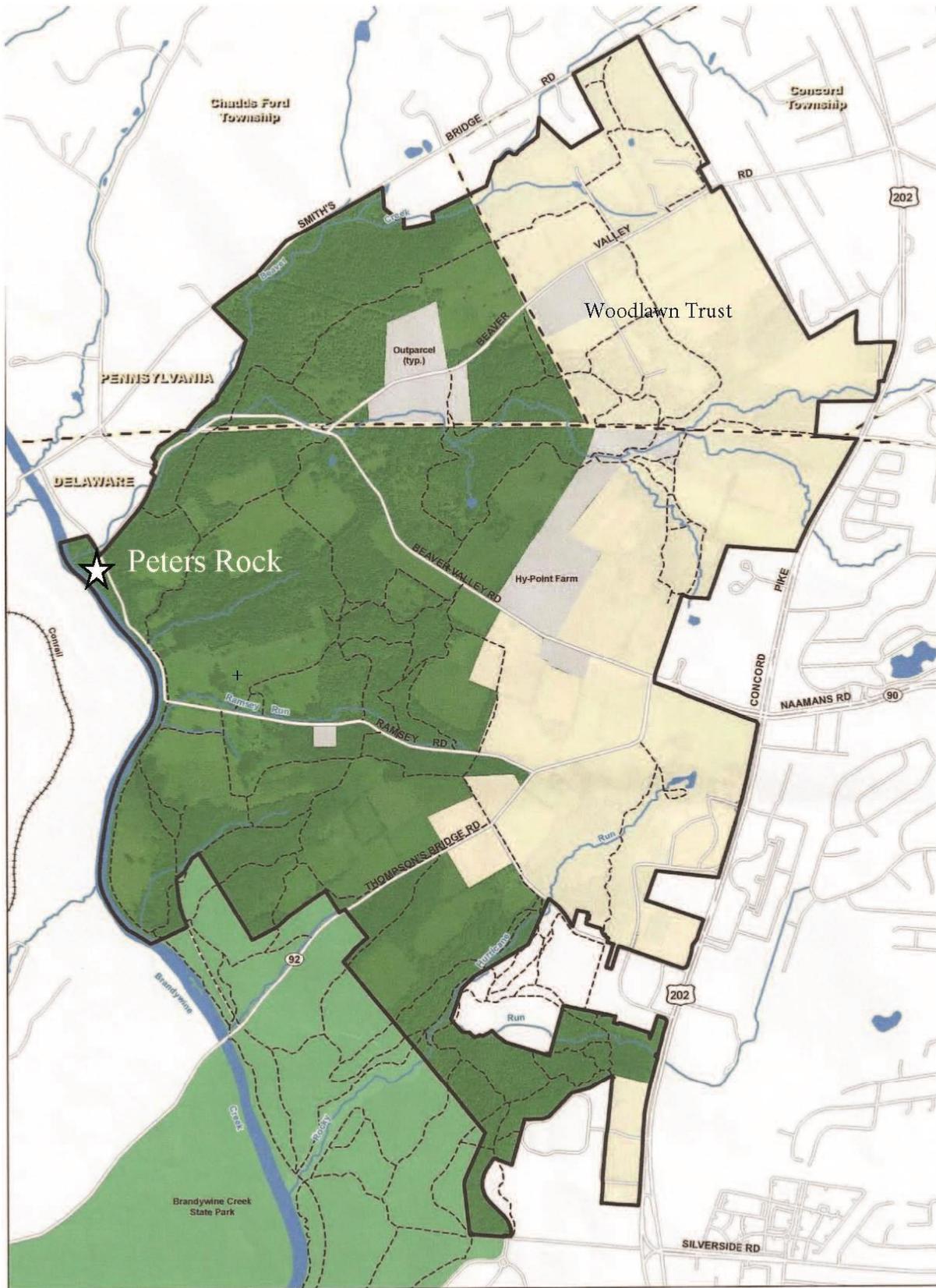


Fig 1. Map of newly designated First State National Historic Park under NPS administration, Beaver Creek Basin
Page 3 of 5

Stronger State Protections Downstream & Presence and Stocking of Trout

According to the more recent data collection and reports submitted by the petitioner, PADEP has less protective designations for the portions of the Beaver Creek that are located within Pennsylvania while Delaware Department of Natural Resources and Environmental Control (DNREC) provides stronger protections in the lower part of the Basin located in Delaware. By strengthening designations in Pennsylvania, the two agencies would be more inline and downstream uses would be better protected.

In addition, an EV designation in the Pennsylvania portion of the basin will further protect, and possibly enhance, a potential trout fishery which would represent an invaluable natural resource in this populated region of the watershed. According to the report, PAFBC currently does not stock any Pennsylvania portions of the stream with trout nor do they currently list any of the Watershed as a wild trout stream. As mentioned above with the new national designation along stretches of the stream, there likely will be increased fishing opportunity to park users. The Beaver Creek is currently designated WWF in Chapter 93. But trout were observed at at least one station (right bank UNT in Chaddsford) of the watershed during the May 7, 2013 macroinvertebrate sampling (Take note that the unnamed tributary where trout were observed is not part of the new preserved historic park). But DNREC also stocks trout in the lower sections of the watershed at four distinct locations (Schmid report, November 2013, Figure 7) and Beaver Valley is situated close to the southern limit of low-elevation trout-supporting streams in the piedmont. From maps it appears that the forested section of the Beaver creek downstream of where trout were observed at the benthic station and upstream of where DNREC stocks could likely also have trout present. Trout, particularly larger browns, can move from a few hundred yards to many miles during their lifetime to find suitable water levels, water temperatures and food supply. DRN also suggests inter-agency coordination with the PA Fish and Boat Commission (PFBC) to survey the Beaver Creek for the presence of trout if PFBC has not already begun surveys for 2015.

Healthy macroinvertebrate community

Benthic results were collected on May 7, 2013 by Eco-Analysts, Inc. Those results yielded a high number of EPT species in the majority of the five benthic samples. There was some variation between the benthic scores with variation by stream location, but DRN supports, being that the Beaver Creek is a small sub-watershed, and that the lower portions of the Basin located in the State of Delaware already have trout stream designation, that the entire subwatershed located in Pennsylvania be provided the highest designated use and special protection in its entirety, rather than bisecting up the basin into smaller and fragmented designated uses. All of the recorded habitat scores conducted in May 2013 as part of the Water Quality Network Habitat Assessment were “excellent”, ranging from 183 to 202, another component that warrants stronger protections. Aerials of the watershed show relatively healthy riparian buffers. Field habitat assessments for all five benthic stations surveyed had excellent bank vegetation protection scores (19, 19, 19, 18, and 15 out of 20) and excellent riparian vegetative zone width scores (19, 19, 19, 19 and 18 out of 20). For sections of the Beaver Creek that may be impaired (using DEP’s 2009 Index of Biotic Integrity), we urge PADEP to update those segments as non-attaining and prepare a Total Maximum Daily Load in order to improve conditions to restore the entire watershed to the high water quality that has now been shown to be possible .

Finally, Delaware Riverkeeper Network understands there has been much community support to preserve the Beaver Valley. Residents around the region have a great love for this region and a dedication to preserving stream health and the rural character surrounding this historic place. We understand there could be local ordinances that are protective being pursued for this region’s townships that lend to this local protection effort.

Since pending developments located in Concord and Chadds Ford Township may be eminent, it is critical that PADEP provide Existing Use protection to this Watershed as soon as possible to protect its existing

uses and to exercise particular vigilance now to prevent degradation of the Beaver Creek. With an Existing Use designation, should any permit applications be submitted to PADEP that would affect this drainage, stronger protections will be triggered.

We appreciate PADEP's consideration of our comments and your efforts to ensure that the Beaver Creek antidegradation assessment fully considers all of this Watershed's unique attributes and good water quality. If you have any questions or need additional information please do not hesitate to contact DRN's Monitoring Director Faith Zerbe at 215-369-1188 ext. 110 or faith@delawareriverkeeper.org.

Sincerely,



Maya K. van Rossum
the Delaware Riverkeeper
Delaware Riverkeeper Network

cc. Mike Kauffman, Pennsylvania Fish and Boat Commission
Josh Lookenbill, PA DEP
Laura Edinger, Regulatory Coordinator, PA DEP
Diana McCarthy, Beaver Valley Conservancy
Congressman Pat Meehan, PA
Senators Bob Casey & Pat Toomey, PA
Senators Thomas Carper and Chris Koons, DE
Congressman John Carney, DE

ⁱ DNREC, Retrieved from Delaware Watersheds: <http://delawarewatersheds.org/piedmont/brandywine-creek/>. 1/12/14.