

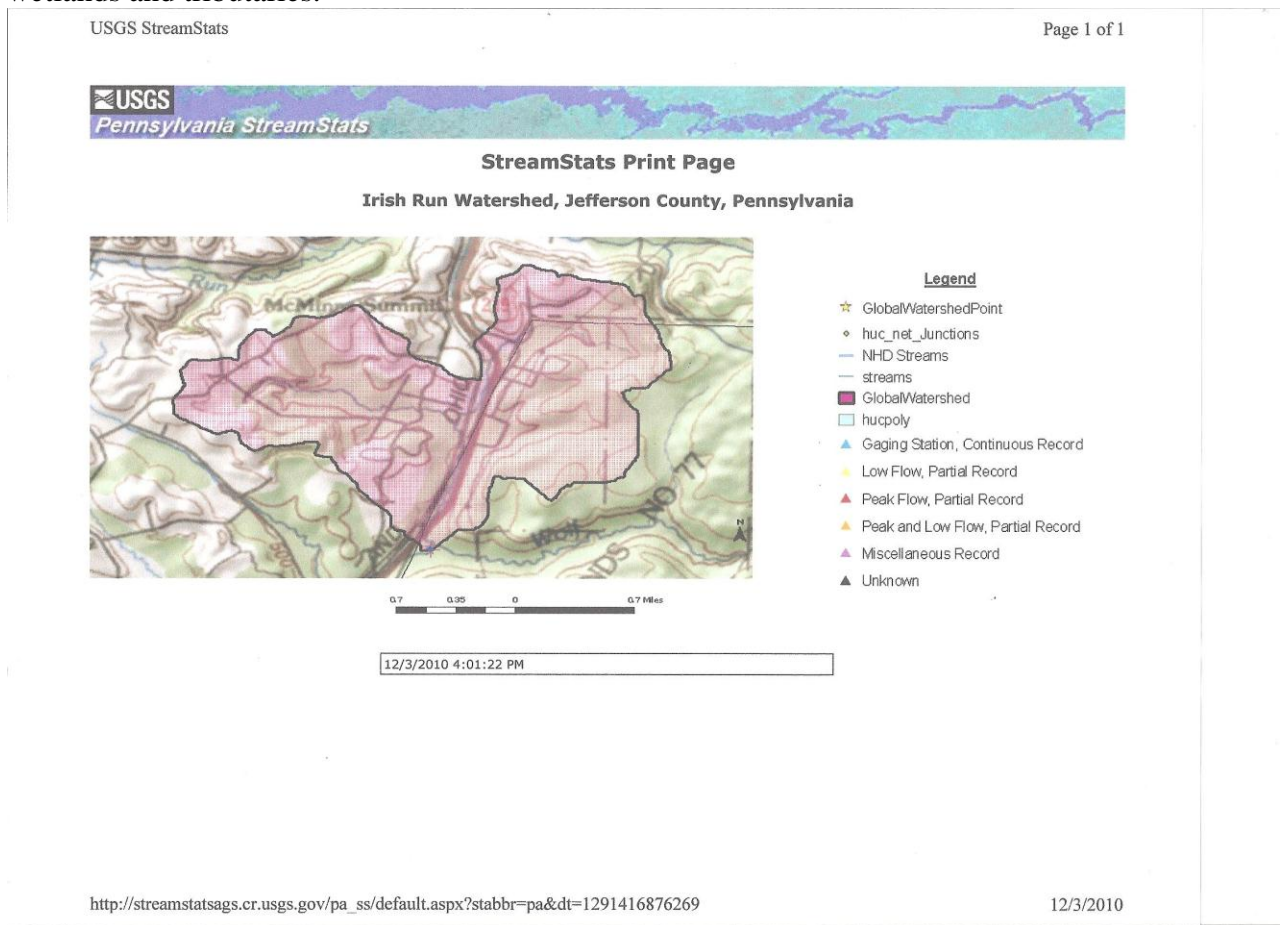
CONSERVATION PLAN

December 21, 2012

2011-12 CHP Evaluation Grant: Irish Run
Allegheny Mountain Chapter Trout Unlimited

Introduction & Background

Irish Run is a medium sized freestone stream located on the Jefferson and Clearfield County line in Washington and Sandy Townships. While much of the headwaters are heavily forested, the watershed also includes several active farms while the lower reaches are influenced by industrial, residential, and retail development, paralleled by a highway and an active railroad with several gravel township roads in or crossing the watershed's wetlands and tributaries.



The Irish Run watershed was heavily logged in the late part of the 19th and early part of the 20th centuries. Logging began in Clearfield & Jefferson Counties about 1820. Essentially all the white pine was gone by 1895. The resulting clear-cuts transitioned to hardwoods that were able to successfully compete with regenerating, but slower growing, pine seedlings.

Dairy & subsistence farms totaling approximately 900 acres were established in the watershed after 1890. While hay and grain crops are currently managed on those acreages that have not reverted to forest and brushlands, only one of the farms currently pastures cattle of any kind-a small herd of beef cattle. Other properties manage small numbers of horses and other small livestock.

In 2005 the Wolf Run Trail, a Pennsylvania Greenways linear park, was established on the section of Pennsylvania Railroad right of way from Falls Creek to McMinns Summit at the northern boundary of the watershed. Most of the main stem of Irish Run is closely paralleled by the Trail.

From 1950 to the present, residential, commercial, and industrial development took place in the watershed along with a relocation of a portion of State Route 219 as well as regular, reconstruction and upgrading of State Route 219 and the township roads in the watershed. In addition to road construction across the stream and through wetlands, the other primary effects of development would have been the elimination of natural ground cover with the construction of buildings, lawns, parking lots, and roadways and the resultant potential for the introduction to the waters of untreated sewage, fertilizers and chemicals.

Previous Studies

In 1997, a survey was commissioned by J.P.Mascaro/Eagle Environmental, a landfill developer, in order to demonstrate that any brook trout inhabiting the stream were stocked by opponents of the landfill. The survey, conducted by Dr. Jay Stauffer, PSU, determined, just to the contrary, that Irish Run, in fact, sustained a population of naturally reproducing wild trout.

In 2001 the Commonwealth Court of Pennsylvania affirmed a decision by DEP and the Fish & Boat Commission that Irish Run and two unnamed tributaries are wild trout streams and do in fact support naturally reproducing wild brook trout. (see Exhibit A).

Project Objectives

- Determine the environmental condition of the watershed.
- Determine the water quality and biological indicators in Irish Run.
- Identify conditions that may effect water quality.
- Develop a plan for conserving, enhancing and protecting Irish Run and its watershed.

Unique and Outstanding Values

The stream evaluation has identified 3 large cut-stone culverts under the roadbeds of the BR&P Railroad and the Rail-Trail which, in their ability to maintain, at depth, cold water even in the summer months, serve as the primary spawning sites on the stream while subsequently holding and protecting the wild trout fry.

Recommendations & Next Steps/Areas of Concern and Potential Conflict

In addition to the seasonal lab analysis, volunteers initiated a survey of the watershed to identify any existing or potential threats to the stream and its tributaries.

In the Fall of 2011, TU volunteers installed stream-bank erosion measures with donated logs and rock on multiple locations on the lower reaches of the main-stem on the east side of Route 219.

As anticipated and referenced in the original grant proposal, the following locations were evaluated, and, while it was concluded that the features presented no imminent or immediate threats to the quality and integrity of the stream, their existence would provide a certain level of potential threat through accident or negligence by human occupation of the watershed. These locations are identified/numbered on the map attached as Exhibit B.

In addition to the concentrated commercial and residential development in the center of the watershed (4), the following features were evaluated in order to identify any existing problems or threats:

1. Route 219

While no existing or imminent threats were identified relating to erosion, silt, chemical run-off, or other issues, the highway will be constantly monitored for problems.

2. BR&P Railroad

During construction of the BR&P and Pennsy railroads prior to 1900, the main stem of the stream was relocated & channelized between the two roadbeds for a distance of ~300 yards. For protection & restoration, the streambed could be relocated to the eastern side of the Pennsy (now Rails-Trails) and reconstructed as a natural streambed. The estimated cost of that project (~\$80,000) is currently prohibitive.

While the active railway does not currently appear to present ongoing stream degradation, imminent & potential threats would include, accidental chemical discharges, derailments, roadbed maintenance with toxic chemicals, roadbed erosion & sedimentation. The railroad will be constantly monitored for threats to the stream's water quality.

5. DEP Surface Mine Reclamation Site

During 2010, 2011 & 2012 the Office of Surface Mines and DEP performed a mine reclamation at the head of the Fathoms Tributary (the primary tributary to Irish Run). The project produced a significant volume of sedimentation in the upper tributary wetlands and, in the stream itself, many holes were filled with mud & gravel. The PFBC anticipates that the sediment will be flushed from the holes in the short-term resulting in no long-term issues.

6. Township Route/Harvey's Run Road

While chronic sedimentation has occurred for years due to improper grading of the dirt & gravel roadway, an agreement initiated by the Grantee has been effected between Washington Township and EQT (operators of a local gas drilling operation & heavy user of the roadway). The agreement will provide for a project that will re-grade and maintain the road in a manner that eliminates all sedimentation of the tributaries and the main stem of Irish Run. The project is expected to be completed by mid-summer 2013.

3. A section of pasture on a local farm was identified as a source of siltation flowing into the main stem of Irish Run. A section of fencing will be re-located in 2013 by volunteers in order to restrict cattle from the riparian area.

Summary and Conclusions

Discussions with the PFBC indicate that a request to the commission accompanied by seasonal water quality analysis would result in the performance of a stream evaluation by the Commission. It is anticipated that the PFBC survey will occur during Spring 2013.

In addition to the relocation of the section of pasture fencing (3), the following areas will continue to be monitored to identify risks or potential conflicts:

- existing and future commercial & residential land development and usage (4).
- Route 219 as a major highway with significant auto and truck traffic (1).
- the section of the BR&P Railroad adjacent the stream (2).
- monitor the deep holes to verify that high water has flushed them of the sand & gravel deposited during the surface mine reclamation (5).
- monitor the re-grading of Harveys Run Road and its subsequent maintenance (6).