The UPPER SHENANGO RIVER WATER TRAIL

DETAILED PROJECT DESCRIPTION

The upper Shenango River runs from its origin at Pymatuning State Park's Shenango Reservoir dam, downstream and south to the Corps of Engineer's Lake Shenango Reservoir. This is an "as the river flows" reach of some 26 miles.

Historically, the river was both a commercial and recreational resource. Parts of it were components of the Erie Canal. Much structure from locks and towpaths still exist along the river. It transported trade goods, powered gristmills, and supplied clean water to various communities. Residents swam in it, dived from its bridges, and picnicked along it. More contemporaneously, it hosted canoe races, casual canoe and kayak trips, all sorts of fishers, and duck hunters.

The Borough of Greenville uses it as it's principal source of domestic water. Other pubic water suppliers who draw upon the Shenango are the Reynolds Water Company, Sharpsville Borough Water Company, and others farther down the river.

At present, and in the recent past, none of these attributes are reasonably available to the public due to the severe number and extent of the blockages now obstructing the river.

It is the mission of the Shenango River Watchers, Inc. ("SRW") to re-open the channel, and then improve access to the river. We will then raise public awareness of the river's attributes by bringing it into the Pennsylvania Water Trail system.

The following comments and quotations reflect upon the inherent value of preserving the Shenango River watershed for broadly drawn environmental reasons. A Water Trail exists within, and contributes to, protecting and enhancing these virtues, whether threatened by environmental degradation or simply unknown to the general public. While the Shenango River is not one of PA's large, dramatic, well known rivers, it has an environmental significance far beyond its public notoriety.

Environmental Benefits

"Within the Ohio River basin, the Shenango River is of particular importance. There are 11 fish species within the Shenango River watershed that are considered threatened, endangered, or candidates for threatened or endangered status in Pennsylvania. The Ohio River basin has the most diverse population of freshwater mussels in the world, including 42 per cent of the species that can be found in North American. There are at least 25 species of mussels recorded within the Shenango River watershed, 15 of which are of special concern."

"The damming of the Shenango River has severely impacted the flow of water in the Shenango River. Period of low water do not create enough energy to transport sediment

downstream, and silt is deposited on the river bottom, smothering many mussel species." The impact of the many blockages in the river form, in effect, many small dams, exacerbating the silting and resultant smothering of many mussel species.

Selected Excerpts from "Shenango River Watershed Conservation Plan"

P.4-5, Fish and Mussels

"The Ohio River basin is considered the most aquatically diverse river basin in Pennsylvania and among the most diverse in the world. Within the Ohio River basin, the Shenango River is of particular importance...there are 11 fish species within the Shenango River watershed that are considered threatened, endangered, or candidates for threatened or endangered status in Pennsylvania."

P.4-12

"The Shenango River upstream of Shenango River Lake (from Greenville to Big Bend) is likely the <u>largest wildlife resource</u> in this sub watershed, containing a forested riparian zone and <u>good stream habitat</u>...the river supports a number of threatened or endangered mussel and fish species. The section from New Hamburg to Big Bend is still predominately forested and supports migratory birds such as Cerulean Warbler.

(Selected) Chapter 4: Management Recommendations P. 4-37

Wildlife and Biodiversity:

- a. Develop areas for wildlife viewing and education to <u>raise awareness</u> about the high level biodiversity in the watershed
- b. <u>Educate citizens</u> about biological diversity and the vital importance of habitats in protecting species.
- c. <u>Improve aquatic life habitat</u> for fish, mussels, and other organisms by implementing best management practices and other <u>restoration activities</u>.

Important Habitat Areas

- a. Continue to make <u>the Shenango River</u> upstream and downstream of Kidd's Mill Bridge <u>a priority for restoration</u> and protection through BMP programs, reduction of road runoff, and <u>establishment of better flow regimes</u>.
- b. Identify and protect additional environmentally sensitive areas and areas of high biodiversity.

Other

a. Provide educational programs for municipal officials about land-use planning that incorporates <u>conservation goals to make communities more attractive</u> and protects biodiversity.

Chapter Six, Issues and Concerns p. 6-4 Recreation

"Watershed residents expressed an interest in capitalizing on the recreation opportunities that exist. Marketing of current recreational facilities is limited. <u>Hunting, fishing, boating</u>, hiking, and horseback riding have been identified as popular recreation activities and can be enhanced

through additional planning and protection. The watershed has a variety of recreational facilities. Working to <u>connect these facilities</u> to one anther and enhancing the amenities of these facilities would be beneficial."

"Extending and linking existing trails, along with the <u>development of new trails</u>, is something that <u>residents would like to see</u>. Watershed stakeholders also identified the <u>desire for more access</u> to trials, better maintenance, and the <u>creation of water trails</u>. Parking facilities and access points for boating were also suggested."

Chapter 7: Issues and Recommended Approaches (Selected Recommendations)

- a. Establish a greenway plan for economic revitalization of downtown areas.
- b. Revitalize downtown areas such as...Greenville.
- c. Utilize available <u>nature-based tourism</u> opportunities to <u>increase revenue</u>.
- d. Establish more collaboration amongst environmental groups, including the development and support for more groups.
- e. Increase municipal awareness and cooperation for preserving, protecting and restoring the natural resources of the watershed.
- f. Provide public education and awareness programs about the <u>economic benefits</u> and importance of <u>watershed protection</u>.
- g. Establish greenway corridors and trails along waterways.
- h. Educate all watershed stakeholders about the importance of riparian corridors.
- i. Establish driving, walking, and/or biking/boating tours highlighting historical sites and structures to increase awareness of local historical sites, structures, and history.
- j. Identify local, state, federal, and private funding to promote ecotourism.

And...

- k. Promote tourism utilizing available natural and recreational resources.
- l. Utilize <u>river resources</u> for <u>recreational opportunities</u>.
- m. Develop additional public access sites to the Shenango River...including adequate parking and amenities.
- n. Increase local, state, federal and private funding for establishing and maintaining multi-use parks, <u>providing access to waterways</u>, ...and maintaining area fisheries.
- o. Protect and improve area waterways to maintain fisheries.
- p. Work with landowners to <u>provide access to waterways</u> for anglers and <u>small non-powered</u> <u>watercraft.</u>

And...

- q. Establish water trails on...the Shenango River.
- r. Maintain trail paths, whether land or water, keeping them free of debris for the safety of those utilizing the resources available.

"Pennsylvania was the first state to develop an Important Bird Area program in the United States. The Shenango River watershed hosts, entirely or in part, four of the 81 current IBAs... The Shenango River watershed is arguable the most important watershed in PA for wading birds during breeding season and yearly migrations. Forest interior birds...depend on large, intact forest tracts and a forest matrix that has a large percentage

of forest. These birds still have a significant presence throughout the watershed, especially along the forested riparian zones of the Shenango River."

"The Important Mammal Area Project recognizes natural areas with diverse populations of mammals and mammals of special concern. The Pymatuning IMA, located within the Shenango river watershed, was the second IMA designated in the state of Pennsylvania."

General Benefits/Future Plans

The broad and enthusiastic support we generate from the affected communities is a statement of the obvious benefits from our Water Trail project. The Boroughs of Greenville and Jamestown are excited about the economic benefits of a Water Trail, especially the synergy with the bike trails now being developed in our area. Jamestown's primary economic engine is Pymatuning State Park, Pennsylvania's largest park. This is a water-oriented park, with hundreds of campsites, several boat launches, marinas, and picnic areas. These are reinforced by more of the same on the Ohio side of the lake.

The first few hundred yards of the river are within the park, as it flows out of the dam forming Lake Pymatuning. Many businesses are open only during the tourist seasons, while other year round businesses such as the pharmacy, food store, and hardware store have their best months while the vacationers abound.

Adding the river's recreational availability to the mix will add significantly to the boost given the town from tourism. Kayaks and canoes, in greater numbers, will be sold from the 3 boat dealers in the area. Others will rent kayaks and canoes, offer shuttles, and give lessons to paddle crafters. With the notoriety gained from being part of the Water Trail system, regional paddle sport clubs will float the river, bring their business to the town.

We, at Shenango River Watchers, are constantly called asking for advise on floating the river. We have no choice but to be honest with them, and offer that but for short sections (say Greenville to Kidd's Mill Covered Bridge park), it is essentially unsafe and unfloatable. A canoe club blog, from Youngstown, OH, has posted advice to avoid the Shenango. All this will change for the better with the opening of the channel and all that follows.

Shortly after flowing under Hwy. 322/58 in downtown Jamestown is two abandoned railway bridges crossing the river. The first has been purchased by Mercer County Trails for one of their bike trails, running from Greenville to Jamestown. It is visible from the highway in town. The second, about 1/3 of a mile from town (known locally as the Black Bridge), is hidden; but again, is part of the proposed regional bike trail system.

Adjacent to this track bed is a large "swamp," perhaps 10 acres of open water, plus surrounding marsh, and riparian forest between it and the river. A stream flowing through Jamestown, into the swamp, and then flowing again as a creek, flows into the river. It is our intent to acquire this swamp to protect the water quality of its outflow (in 1945, the currently landowner tells us, a spill of chemical from a now defunct factory

killed all the aquatic life in the swamp). In 2008-9, the Shenango Rive Watchers organized two cleanups of an dump in the swamp. We removed several hundred tires, tons of broken concrete, and tons more of debris with volunteers from our group, heavy equipment from surrounding boroughs and townships, and a local excavation contractor.

We hope to develop this swamp into a recreational resource for local schools, as a pleasant place to visit during waterfowl migration, to observe the beaver at work in the creek, and so forth. We envision a boardwalk more or less around the swamp, with viewing sites, explanatory graphics, and hand's-on exhibits.

The river then flows under the Black Bridge, down to Greenville's Riverside Park. Along the way, you see virtually no development even while being paralleled by two highways on either side of it (as a distance ranging from several hundred yards to a half mile). It is completely wooded with large mature deciduous trees for the entire reach. At points, the proposed bike trail will be within sight of the river. In Riverside Park, we have already built, with DEP matching funds, a canoe launch/takeout. With picnic area pavilions and flush toilets already at the put-in in Pymatuning, and the same in Riverside Park, this is ready-made for a pleasant family float of perhaps 2 hours duration.

Principal Problem Being Addressed by this Application

All that stands in the way of such a bucolic float are a minimum of 49 identified blockages in the 8 miles reach between the Pymatuning State Park dam and Greenville's Riverside Park. These are the blockages that obstruct the channel completely. There are another 10 that overhang the channel and may have fallen into the river since the survey was completed in 2008 and/or in the river.

The pictures included with this application are of the very first blockage on the map (coded OB 1,2,and 3), about 500 yards below the dam in the park. It extends from the first tree for some 100 yards. Subsequent blockages may be more extensive, and many are somewhat less so. Nevertheless, they, one after another, totally impede paddling the river. These obstructions are in fact dangerous to inexperienced paddlers especially during high flow regimes.

The blockages significantly reduce stream velocity, thus increasing siltation. They also cause periodic flooding in Jamestown as debris backs up on the blockages and briefly dams the river.

The Greenville Water Authority strongly supports us (they have contributed \$10,000 to our funding) as they see the benefit of increasing the velocity of the current. Moreover, they want people on the river, observing and reporting dumping, point pollution, and the like. The Borough similarly gave us \$10,000 for the perceived economic benefit and the recreational benefits to their community.

While this is our main effort in starting the Water Trail project, please note we have already built the afore mentioned canoe launch in Greenville (DEP matching grant) and are beautifying/stabilizing a stream bank with DEP matching funds (this was another

dump site we cleaned up with volunteers in Greenville). One part is essentially an extension of the other, wherever you choose to start.

Scope of Work

The scope of work is quite simple in concept, quite difficult in execution. Meadville Land Services, Inc. ("MLS"), a Meadville based company specializing in wetland restoration, has surveyed the river from the dam to Riverside Park. Early in August, two of their professionals launched a canoe at the dam. After encountering the first obstructions (the ones pictured), they returned their canoe to the launch, and proceed to walk the entire length of the reach to Greenville (their informal observations of the river, with reference to the Wallace and Pancher map, was that "there seemed to be a lot more downed trees.").

From this survey, MLS proposed a contract to us that entailed putting a crew of 5 men "on the river" for 5 weeks (see their attached proposal). They would, using only man portable tools like chain saws, chainsaw winches, pulleys and the like, cut enough of each blockage to functionally open the channel for paddle craft. Many of the trees are as much as 36" in diameter. These exceedingly large trees would have enough removed to allow comfortable and safe passage of paddle craft. Smaller trees will be cut out completely and removed from the river. The wood MLS cuts will be moved up to and onto the bank. All DEP mandates will be observed, such as keeping the stump and root ball intact in the bank. No heavy equipment will impact the riverbank, and certainly no heavy equipment will go in the river. Any mitigation to the work required by PNDI mandates will be scrupulously observed.

The "phasing" of our Water Trail project is as follows.

Phase One: opening the channel from the river's inception at Pymatuning State Park to Greenville's Riverside Park. About 8 miles of work at a cost of \$66,000 plus volunteer labor. Work to be done in the spring, 2011.

Phase Two: similarly opening the channel from Riverside Park to the river's joining with the Lake Shenango Reservoir. Work to commence upon completion of Phase One, and subject to availability of funding.

(Concurrent with the substantial completion of Phase Two, applying for admission to Fish and Boat Commission's Water Trail system.)

Phase Three: building several new canoe launches along the reach, creating several picnic areas. We will also design and install signage and graphics identifying the Water Trail, launch/take-out points, areas of interest, etc.

Phase Four: Acquiring the "Jamestown Swamp," an important wetland feeding the Shenango River and supporting a large riparian forest on its boundaries. This will be "developed" as an educational resource for area schools and environmental study by

various groups. The swamp is within an easy walk from Jamestown, and is bordered by the soon-coming bike trail being developed by Mercer County Trails Association

SRW volunteers, a heavy dose of Jamestown and Greenville Lions Club volunteers, and other volunteers from the community, will deal with LWD moved to the bank. Each landowner affected will be contacted and sign the permission form demanded by DEP. Additionally, however, we will deal with the LWD according to the landowner's requirements, within reason. I.e., if the wood may remain on or near the bank, so be it. If their river frontage is more formal, we will haul it away, using as required, feasible, and allowed, tracked excavators, dump trucks and front-end loaders, quads, or Amish horse teams.

While any marginal costs associated with this can be born by SRW contingency funds, it is assumed that volunteers will bear the largest burden of the removal and disposition. The success we've had removing two large dumps from the watershed suggests we'll be able to accomplish this mission similarly.

We have developed a database of owners from the counties tax roles. There are no fewer than 133 separate individuals or institutions that must be contacted to complete Phases One and Two. About 75 fall in the Phase One work. We are asking for some support from DEP's Growing Greener Fund to increase our part-time secretaries hours to manage this effort. She will not only monitor the signing of the Land Owner's Permission form, but also determine what is required to deal with LWD on each parcel, that we've accomplished each component with our volunteers, etc.

In subsequent years, SRW will obligate itself to maintaining the channel, removing any new blockages with our own volunteers or volunteers from outside the organization. We already maintain "our" canoe launches in Greenville and Sharpsville and have annual river clean-ups. This will simply become part of that ongoing effort.