

Access Points to the Woonasquatucket River:

Problem Areas and Potential Development in the Woonasquatucket River Watershed

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I. Woonasquatucket River Watershed Council Description

The Woonasquatucket River watershed is an extremely diverse area. Some sections are located in densely populated urban-industrial areas whereas other regions are rural and sparsely populated. Consequently, the communities living within the watershed have widely varying needs, interests, and concerns. Additionally, the Watershed suffers from numerous environmental problems ranging from a Superfund site, combined sewer overflows (CSOs) contamination, and land-use management and conservation issues. Thus, applying the watershed approach to such an area can be a daunting task.

During our conversations with the Woonasquatucket River Watershed Council (WRWC), they stated that the primary problem facing the WRWC was a lack of constituency. Community members from urban areas are the least involved with the Council activities. Jane Sherman, the Chair of the WRWC, and Jenny Pereira, the Director of WRWC, said that many people who live in the poorer areas of Providence, such as Olneyville, are simply not aware that Woonasquatucket River exists. This is mainly due to the fact that many old mills that border the river obscure the river from public sight. However, where parking lots or roads do provide access to the river, these sections of the river are usually heavily polluted. Some of those who are aware of the river's existence take its poor health as the norm for the way the river should be and do not consider pollution and debris a problem.

Upstream communities are involved in the council but only to a limited extent. There are council representatives from Johnston, North Providence, Smithfield, and North Smithfield, but the WRWC is currently more concerned with urban issues. This may be because the WRWC arose from the Greenway Project, which traditionally

focused on the urban reaches of the watershed and did not extend northwards. Thus, one of the WRWC's primary goals is to develop a broad-based constituency. Among other things, they also expressed a desire to extend the Greenway Project up river and to start addressing some of the illegal dumping issues along the urban sections of the river.

II. Project Description

After discussing these issues with various members of the WRWC, we decided to map access points along the river and then to construct a user-friendly website. In keeping with the goals of the watershed approach, we wanted to create a project that would look at the watershed as a whole. In other words, we wanted our project to incorporate all communities within the watershed: Providence, Johnston, North Providence, Smithfield, and North Smithfield.

We defined an access point as any area that bordered the river and was accessible by car. An access point could be positive, such as a bike path, park, or boat launch; negative, a place used for illegal dumping; or potentially-positive, an area that could be developed for community recreational use. To map the access points, we drove through the watershed, taking Global Positioning System (GPS) points using the GPS unit of each access point. Photographs of each area were taken using a digital camera. The GPS points were then converted into a file that was used to make a Geographic Information System (GIS) map, using the ArcView program. These maps, in addition to the photos and description of each point, were used on the website:

<http://envstudies.brown.edu/classes/es192/2002/index.htm>

III. How We Envision the Website Being Used

The website is meant to be a tool for the Council and the Woonasquatucket Watershed community. We believe that it can be used to initiate conversations about the Woonasquatucket River and the watershed in general. For instance, the northern reaches of the watershed are relatively undeveloped. However, with increasing development pressure, the community may want to start identifying areas they wish to protect and preserve. Because the website has visual images of specific points along the river, it could help the community identify either points along the river they wish to protect from future degradation, or areas near the river that are of particular value to the community and should be preserved as a green-space. Additionally, we believe the website could be used in urban areas to promote conversation about the current condition of the river. Given that mill buildings obscure the river, community members are not often exposed to the river. Furthermore, areas that are open to the public are heavily littered with tires, shopping carts, and trash. As a result, it may be difficult for community members to envision their river as a potential resource. The website could be used at local centers to initiate discussions about access points, illegal dumping, and water quality. Community members may have ideas as to how to prevent illegal dumping, or ideas about areas they might like to develop for recreational use. We hope that these conversations could be a starting point in a longer process of building a broad-based constituency. Finally, this website might be a useful tool for school projects that address issues pertaining to watershed management, water quality, illegal dumping, or river pollution.

IV. Future Applications

We have built the website using all of the access points we documented, however, we know that local residents from the neighborhoods that border the river will be aware of many more access points. Therefore, we created a site that could be continually updated and would stimulate interaction between the WRWC and civic or community groups from each town in the watershed. For example, the Council could collaborate with groups, such as the Audubon Society of Rhode Island, the Northern Rhode Island Conservation District, or church and school groups to identify other access points along the river. With this information, the Council can expand the GIS database and then incorporate that information into the website.

The website can be improved and expanded upon by the WRWC in other ways as well. Updating the individual pages with additional descriptions of each access point as well as specific recommendations about how the access point could be developed would be useful and could be another way to involve constituents. For example, for the points on the webpage that address illegal dumping as a problem there could be recommendations on how to prevent future dumping. The descriptions of potentially positive sites on the webpage could include additional information, such as property ownership and recommendations for the best use of the land (i.e. park, walking path, protected area etc.) Because the community has a much better understanding of the area and of the access points within the area, we think these recommendations should be developed by the community members themselves through conversations with the Watershed Council.

By involving the local communities in the expansion of the website, the WRWC will be building a constituency that can in turn be mobilized to initiate a volunteer water

quality monitoring program. Community members might be encouraged to work on the website, because the website is a source of positive feedback. In other words, if a civic group makes recommendations about how to develop certain urban access points and then sees their suggestions on the website, they may be persuaded that their input can be of use and might be willing to collaborate on bigger projects with the WRWC.

V. Recommendations

While driving through the watershed, we noticed that several simple measures could be taken to prevent littering. For example, there are very few “No Dumping” signs along the river. The WRWC could increase the number of signs along the river and ensure that they are both bright and visible. These signs could have additional information as well, such as DEM’s twenty-four hour number to report illegal dumping ((401) 222-2797). Given the diversity of the watershed, these signs should be in multiple languages.

Additionally, simple aesthetically pleasing natural or artificial barriers could be erected to prevent illegal dumping. These could be chainlink fences, wood fences, hedges, or openable road blocks. One area that would benefit from a natural vegetative buffer is the loading dock behind the Stop and Shop near the Providence – North Providence line. At this access point, it is possible to bring a truck 20 feet away from the river and there are only sparse trees along the banks. However, if there were thick shrubs running along the back of the loading dock area, the potential for illegal dumping would be greatly reduced. Likewise, near San Souci drive in Olneyville there is an open parking lot in front of the Cathedral Art building. The parking lot is adjacent to the river, but no

barrier exists between the parking lot and the river. A low wooden fence could be installed to impede direct access to the river and local school groups could be involved to paint murals on the fence to increase its attractiveness. Across the street, the Greenway Project has created a similar fence along the Shop Right parking lot edge.

Finally, we believe that schools will form an integral part in helping promote and sustain the watershed approach for addressing environmental issues. Therefore, school field trips should include visits to key sites along the watershed in both urban and rural areas. Taking students from the urban areas to see the northern reaches of the river where the banks are not as littered will help them begin to realize that it is not normal for a river to be in the condition it is in the urban areas. This, in turn, will promote interest in the river and extend the WRWC's constituency.

VI. Developing Potentially Positive Access Points

We have identified three access points that can be developed in different ways to minimize the likelihood of illegal dumping and promote active use by local communities. These sites include, a path on the Northeastern bank of the Woonasquatucket Reservoir, Esmond Park in southern Smithfield, and the dirt access road that runs south to Buttonhole Golf Course in southern Johnston.

Woonasquatucket Reservoir hiking path:

On the east side of the Woonasquatucket Reservoir, there is an area that has potential to be developed into a walking path. Currently, a dirt road runs parallel to Myers Street up to a commercial establishment. Along this road, there are large piles of trash including refrigerators, tires and other debris. From this road, there is a well-worn

path that leads up to and runs along the Reservoir. This area is designated as Open Space Preservation according to the open space RIGIS layer that can be applied on ortho images of the region.

After contacting the Smithfield town council to discuss the development of the area, the first step in developing this area would be to remove all trash from the dirt road. The WRWC could organize a clean-up and involve local community groups that they had collaborated with to develop the website. Then signs could be put up along the road to instruct visitors of proper park behavior and how to minimize impact while enjoying the area. In turn, the road leading to the trail could be clearly marked as an area for pedestrians only and a physical barrier, such as an openable roadblock should be placed across the entrance. Next, the trail must be improved by placing large rocks or logs along its border to demarcate it and impede hikers from straying from the path. Signs can be erected at the head of the trail with a map of the watershed indicating where the trail is located. Along the trail, information about the history of the watershed and other interesting information can be posted on signs.

Esmond Park:

The Watershed Council expressed interest in developing a water quality-monitoring program. The initial step in developing a water quality-monitoring program is identifying potential sites from which to monitor the river. These points must be public and easily accessible. They could include a park, a bridge, or a pond. Eugenia Marks, Director of the Audubon Society, suggested that Esmond Park might be a good place to start such a program. Esmond Park is located directly above Benny's factory. According to Eugenia Marks, community residents have expressed concern that pollution from the

factory is contaminating the river. Therefore, Esmond Park would be a good point to gather base-line data. Additionally, because Esmond Park is a public space, it is easily accessible and well known by community members.

Dirt Access Road to Buttonhole Golf Course:

In Southern Johnston there is a dirt access road that runs south from Traver Street along the old railroad line; it dead ends into the Buttonhole Golf Course. Currently this area is being used from illegal dumping. It is secluded and there is direct access from the road to the river as most of the vegetation along the banks has been cut. This area is currently a negative access point, however it could easily become a positive access point that is used by local communities. The road is owned by the Naragansette Electric Company and, with their permission, could be developed into a biking/walking path. There is open access to the road from Traver Street, therefore the entrance to the dirt access road should be blocked to cars; a removable barrier might be appropriate. Next, new trees could be planted along the river banks to create a vegetative buffer. In addition, signs can be posted at the entrance of the walk/bikeway to advise users to respect the rules of the area. Trash cans could also be placed along the pathway to minimize the potential for littering. Admittedly, these trash cans will have to be emptied. Perhaps either the town or volunteers from the community would want to “adopt” this area and the trash cans and be responsible for keeping it clean. This dirt access road can easily be connected to the Greenway Project’s bike path and will most likely be used by residents, as it borders the widely visited golf course.

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