Watershed News
Lower Passaic and Saddle Rivers
Watershed Management Area 4

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A Brief History of Paterson and Its River
By Dr. Mark Newell

Picture a river with boaters lazily enjoying a quiet trip on a summer day, or perhaps swimmers splashing in the shallows near shore. This was once part of life in Paterson. For over two hundred years the destiny of Paterson has always depended upon the Passaic River and has been centered upon the magnificent Great Falls which together were the sole reason for Paterson’s very existence. Both river and city have mirrored each other. Optimism, celebrating industrial success, luxuriating in nature’s beauty, and developing a community sense of the river as the center of life marked Paterson until World War I.

Since then, however, the river has come to be seen merely as something to be used and increasingly something to be ignored. Coupled with a changing economy, the decline of manufacturing in Paterson, and the rise of suburbs as desirable places to live, the twentieth century story of Paterson and its river meant alienation of people and city from the river. It was not always so, nor does it need to remain so.

In 1791, the state of New Jersey issued a charter to the Society for Establishing Useful Manufactures (SUM) which was dreamed up by Alexander Hamilton. Soon investors chose the Great Falls area to be-

Lower Passaic River to Receive Attention
By Dr. Richard Pardi

Introduction
In late 2003, the Public Advisory Committee (PAC) and Technical Advisory Committee (TAC) submitted a “Scope of Work” proposal to NJDEP for what has become known as the “$25K Priority Stream Segment Project” (the amount to be provided by the NJDEP to each Watershed Management Area-or WMA- for stream segment projects). The proposal identified the Lower Passaic River between Two Bridges and Dundee Dam as a “Priority Stream Segment. The proposal was subsequently approved by NJDEP.

Project Description
This stream segment differs significantly from those chosen by most other WMA’s (those were primarily small (cont. on page 2)
come America’s “national manufactory” and established a thirty-six square mile district around the falls as a would-be industrial showplace, though the SUM could raise only enough money to purchase 60 acres. Named after the New Jersey governor, Paterson struggled as financial troubles plagued the SUM in the 1790s. Soon after cutting its first raceway to divert Passaic River water to run mills, the whole enterprise collapsed.

Limping into the 1800s as a land and water power company, the SUM was rescued by the efforts of Roswell Colt who bought up the outstanding stock at bargain prices and proceeded to develop the water power of the river.

A third raceway opened in 1827, by which time many foreign visitors to America were making visits to the falls along bumpy plank roads from Newark to see what those crazy Americans were up to in the wilderness. On September 30, 1827, one of those crazy Americans, Sam Patch, even jumped over the falls and then off the newly opened bridge over the chasm. Paterson was on the map and by 1851 was incorporated as a city.

By mid-century, Paterson was emerging as one of America’s premier industrial manufacturing districts. People like John Ryle, who had established the silk industry, were among its leading citizens. In 1854, Paterson got its own water company as investors led by Ryle began to pump water from the river after working out a deal with the SUM which jealously claimed title to every drop that spilled over the falls. In 1865, iron rolling mills, locomotive production and other industries had made Paterson such a boom town that the SUM raised its dam to provide even more water power. As cities grew, the water supply became a critical issue and in the mid-1880s a group of investors formed a water syndicate with grand plans to use the Passaic River to supply New York City via a tunnel under the Hudson River.

Among the group was Paterson’s own Garret Hobart who managed to secure the water rights of the SUM from the Colt family. Along with an agreement with the owners of the Morris Canal, this meant that the syndicate literally owned the river. Public outcry as well as financial reali-

ties doomed the NYC plan, but the water barons of the Passaic—known after 1894 as the New Jersey General Security Co.—wound up constructing the water supply systems of Newark and Jersey City, as well as supplying water to Paterson, Clifton, Passaic, Montclair, and a host of other towns.

The need for water in Newark and Jersey City had been occasioned by pollution of the lower Passaic from which both cities drew water. By the 1870s, Newark was literally drinking its own sewage mingled with salt water, and typhoid rates soared. The industrial growth of Paterson and other cities had changed the Passaic drastically. Further, the SUM itself was now more interested in selling water to slake the thirst of a burgeoning New Jersey population, so it built a steam plant and electric generation plant at the falls and began converting mills to electricity. Rather than driving mills with its power, the river was being consumed as a commodity. Industry continued to grow and Paterson around World War I reached its peak of population. From just over 16,000 people in 1855, Paterson in 1905 had 111,529.

Between the world wars, Paterson continued to grow industrially, particularly with the Wright Aeronautical Co. building many of America’s airplane engines. At the same time, the city (along with Passaic and Clifton) wrested control of its water supply from the Security Co. and established the Passaic Valley Water Commission.

By 1945, the SUM dissolved and its various remaining parts were eventually sold off. Along with the dissolution of the SUM, however, came the decline of Paterson’s industrial core. With the emergence of synthetic fibers, demand for silk fell, and gradually other industries like Wright left the area. Paterson was left with many empty factories and with a dirty river attractive to no one. Paterson and its river have historically risen and fallen together in every aspect of their existence.

Today, many efforts are underway to restore the Passaic River and the Great Falls to a position of prominence. Watershed Management Area 4 (WMA 4) is cooperating with the city, and with groups like the Friends of the Great Falls and the Passaic Valley Sewerage Commissioners in order to clean up the river and to help people once again make it an enjoyable part of their lives. The Great Falls is the centerpiece of WMA 4, and if it can once again become a center of the community, it will be testimony to a great city and great river with a rich history to be celebrated by all.
Passaic River to Receive Attention (cont.)

streams). This difference is not surprising given that our watershed is almost entirely urbanized. The Passaic River enters the watershed already exhausted. The question for us is, “What can we do to ease the river’s final journey to the sea?”

Our emphasis will be on the impact of this watershed management area on the defined segment. Along with river-bank sub-watersheds (primarily Paterson), six tributaries drain into the Lower Passaic between Two Bridges and Dundee Dam – Deepavaal, Preakness, Molly Ann, Goffle and Diamond Brooks and the Peckman River.

There can be little doubt that water quality in the Passaic River deteriorates significantly over the length of the defined segment. This is especially true for two parameters of concern – fecal coliform and phosphorus – but holds true for almost all other surface water quality standards. Clearly the tributaries of WMA 4 impact negatively on the defined segment.

Proposed Work

Our intention is to quantify and rank the relative contribution of each of the potential tributary sources to the defined segment. The work will initially consider the immediate discharge of each tributary into the Passaic, but may also look upstream within each tributary watershed as time and funding permits. The tasks we will undertake include a “Characterization and Assessment” of existing analyses, and modeling of “Best Management Practices” (BMPs) to reduce impairments. The most significant component of the project will be the development of an implementation plan for action within the watershed.

Based on this project the WMA will be in a position to submit proposals for Clean Water Act Section 319(h) funding, for which these stream segments will be identified as a priority. In addition, the WMA 4 PAC can proceed to identify a second “priority stream segment” to receive funding for next year.

Stakeholder Involvement

We call upon all WMA #4 stakeholders to contribute to this project in any way possible. Especially needed - as soon as possible - is any information about public studies of tributary water quality or land issues (e.g., the nature of the study, its availability) that would aid in the “Characterization and Assessment” component which must be submitted to the DEP by June 2004. This author will maintain a table of data sources with references which will be provided to anyone who has something to contribute (for more information, contact Dr. Richard Pardi at pardir@wpunj.edu).

Watershed Workshop Makes A Splash in Montclair

By Gray Russell

Last month in Montclair, a public workshop entitled, “We All Live Downstream,” discussed the increasingly critical topic of clean water and the impact of stormwater management on Watershed Management Area 4. It focused on where our drinking water comes from, where our stormwater goes, and what steps we can all take now to protect our water in the future. It was co-hosted by the Montclair Environmental Program, NJ Community Water-Watch and the League of Women Voters of the Montclair Area.

The workshop was successful in part because of the great public participation by over 85 residents and visitors from neighboring towns. Those attending became well-informed through the speaker presentations, stormwater video, informational handouts, and WMA 4 posters.

A proposal was made to form a “Friend of the Brooks” group for Montclair. Stream clean-ups and public service projects were also announced. Montclair is the first community in the state to host such a public education event since the NJDEP Stormwater Permits were due in March. (For more information, contact Gray Russell, Environmental Outreach Coordinator for the Township of Montclair at: grussell@montclairnjusa.org)

...how does your garden grow?

Are you gardening the non-toxic and drought-resistant way? Try these resources:

- *Gardening with Mother Nature*, published by the Environmental Education Fund of the Environmental Lobby (free, call 609-396-3774).
- [www.rce.rutgers.edu/](http://www.rce.rutgers.edu/) (Go to publications section on gardening, and you will find everything you need to help you garden the natural way)
Duck, Duck, Goose...

Have you signed up to count geese as part of the Total Maximum Daily Load (TMDL) report? It’s easy. Just check with Pat Rector (Pat.Rector@dep.state.nj.us) to see which of the area’s water bodies or parks are needed for data and closest to you. Once a month, for one year, you count the geese and list the date, time of day, weather conditions, whether there is a “no feeding waterfowl” sign, etc. We need data and your help will make all the difference. You can start at any time.

The Non-Point Source Pollution Booklet for Passaic Basin

Thanks to the generosity of the Passaic Valley Sewerage Commissioners, the League of Women Voters of New Jersey’s excellent publication on non-point source pollution will be reprinted for our watershed. Check with your local librarian or email Ellie Gruber at mandegruber@hotmail.com.

Printed on recycled paper

Regular Meeting Schedule

Public Advisory Committee
Date: Second Thursday of each month
Location: Various, within WMA 4
Time: 6:30-8:30pm
For More Information: Veronica Craw 973-817-5958

Technical Advisory Committee
Date: Last Thursday of each month
Location: Oldham Pond Environmental Center, N. Haledon
Time: 6:30pm
For More Information: Russ Furnari 973-430-8848

Education and Outreach Committee
Date: Third Wednesday of each month
Location: Clifton Public Library, Allwood Branch, Clifton
Time: 6:30-8:30pm
For More Information: Veronica Craw 973-817-5958

Open Space Committee
Date: Second Thursday of each month
Location: Various, within WMA 4
Time: 5:00-6:30pm, immediately prior to PAC
For More Information: Paul Russo 973-748-9000

Watershed Management
Area 4

c/o New Jersey Department of Environmental Protection
Watershed Management
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