# Four Mile Run Restoration Project e-Newsletter

**Volume 2, Issue 3** **July/August 2009**

## *Fish Survey Reveals Fourteen Species in Tidal Four Mile Run*

Welcome to the Four Mile Run Restoration Project electronic newsletter. This edition highlights the results from a recent survey of fish community composition in the tidal portion of Four Mile Run, ongoing fence construction at the Arlington County Water Pollution Control Plant, and the completion of the final Design Guidelines for Four Mile Run.

### *Survey Reveals Hundreds of Fish*

The following section contains thoughts from Neal Sigmon, Co-Chair of the Four Mile Run Restoration Project Joint Task Force, regarding the June 17, 2009, fish survey for tidal Four Mile Run. The survey produced several hundred fish, with at least 14 species represented.

*White Perch*

*Largemouth Bass*

*The morning is gray, the winds from the east, and a light drizzle adds to the atmosphere on an unusually cool mid-June day. Fishery biologists and ecologists from the Virginia Department of Game and Inland Fisheries (VADGIF), Northern Virginia Regional Commission (NVRC), and City of Alexandria gather alongside Four Mile Run to document existing conditions along the stream. Today's goal is to conduct a fish community survey. A fish survey reveals what species are in a stream, their abundance relative to other species in the stream and how the stream in focus compares with other streams. Due to easterly winds, sampling efforts will focus on the area near the Mt. Vernon Avenue/Arlington Ridge Road bridge.*

*To survey, the biologists first don their waders, unload their raft, and fill several buckets with stream water. Then they retrieve their long handled fish nets and wade into the water. The raft carries a water-filled chest that contains an opening through which the fish, when captured, can be dropped. A small gasoline engine on the raft generates electricity which is conducted into the water through wands carried by each of the biologists. The electricity stuns the fish for a short period and causes them to rise to the surface, at which point the biologists quickly net the fish and transfer them to the water-filled chest. The team performs this exercise for about 300 feet along the north bank of Four Mile Run. With the first run complete, two men carry the container full of fish to the shore and the actual count begins.*

*Two biologists handle the fish, noting each individual's species and length. After each fish is measured and recorded, it is released back into the water -- a most efficient operation.*

*In total, the biologists collect 14 distinct species along the two sampling reaches that span the upstream and downstream areas of the Mount Vernon Bridge. Among the species are white perch, largemouth bass, two species of native catfish, bluegill, American eel, killifish, and several species of sunfish. The sunfish are all stunningly beautiful, full of shimmering color. The pumpkinseed sunfish has a bright orange dot on its "ear" and is about five to six inches long. The catfish, well they are catfish, but both species in the count are natives. The American eels are slippery and slithery, their length a guess since it is not possible to still them long enough to achieve a precise measurement.*

*How wonderful it is to have all these fish existing in this urban stream. Their presence is a worthy incentive to protect Four Mile Run, improve water quality and restore fish habitat. With a healthier stream, Four Mile Run is likely to have even more abundance and additional species. Virginia DGIF plans to return in late-summer to survey again in the lower tidal area, near the Water Pollution Control Plant and the Route 1 Bridge. Additionally, Arlington County is coordinating with ecologists from the Fairfax County Department of Public Works and Environmental Services to survey the fish community in the alluvial sections of the Four Mile Run Watershed this summer. This important information will serve as a baseline upon which to compare future surveys and a parameter in the determination of the tidal corridor restoration's success.*

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*New fencing at the Arlington Water Pollution Control Plant is just one of several ongoing upgrades to the facility. Portions of the fence along S. 31st St. have already been installed.*

## *Water Pollution Control Plant Upgrades Underway*

Officials at the Arlington County Water Pollution Control Plant recently began to install new fencing around the plant's perimeter as part of a series of ongoing upgrades. Over the next 15 months, over 8,000 feet of fencing will be placed around the plant. Additional improvements commenced at the plant in June, including: modernization of aging infrastructure, expansion to increase capacity to 40 million gallons per day, generation of fewer odors, discharge of cleaner water to Four Mile Run, the Potomac River and the Chesapeake Bay, and compliance with regulations to ensure a safe and healthy environment.

## *Design Guidelines Update*

After more than a year of collaboration, Arlington and Alexandria staff have nearly finalized the Four Mile Run Design Guidelines. These Guidelines will provide a consistent vision to staff, developers, and the U.S. Army Corps of Engineers that facilitates consistency in all undertakings throughout the restoration project area.

Staff from each jurisdiction plan to take the Guidelines before their respective planning commissions for final approval in September. If you wish to view the Guidelines, they are available in electronic format on NVRC's website at www.novaregion.org/design.

## *Additional Information*

For additional information on the Four Mile Run Restoration Project, please visit NVRC's website at http://www.novaregion.org/fourmilerun. To subscribe or unsubscribe from this newsletter, email NVRC Environmental Planner, Marshall Popkin, at mpopkin@novaregion.org.

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