2007 Fall Conservation Tour

Innovations in Conservation of Natural and Cultural Resources— at the Rural/Suburban Interface

Visit the work of the Wetland Studies and Solutions, Inc.

This is a Joint-Tour of the Society of American Foresters and Soil & Water Conservation Society

Where: Gainesville, VA (Start & End at USDA South Building—board transportation from C Street, SW, between Wing 2 and 3 at 8:00 a.m.)

When: Thursday, October 18, 2007 (8:00 am to 3:30 p.m.)

Contact: Eric Noland at 202-401-5971 or Bill Boyer at 202-720-0307

RSVP Required—Reservations Deadline=Thursday, October 11, 2007
Reservation Form—Submit by October 11

2007 FALL TOUR
Innovations in Conservation of Natural and Cultural Resources— at the Rural/Suburban Interface

$15 SWCS & SAF members / $20 non-members
FREE to new members of SWCS or SAF
(Includes Box Lunch)

Name(s): ____________________________________________
__________________________________________________

Number of Members (SAF): ____________ (SWCS): ____________

Non-Members: ____________ Total Payment: ____________

Phone: ____________ E-Mail: ________________________________

Box Lunch Selection: Sandwich Classics served with potato chips & pickle.

Make Selections:
- Sierra Turkey, ________________________________
- Asiago Roast Beef, ______________________________
- Smoked Turkey, ________________________________
- Tuna Salad, ________________________________
- Ham & Swiss ________________________________

Complete this form and send with your check (by 10/11/07)
To Bill Boyer, NRCS Room 6158-S
Make checks payable to “SWCS-NCC”
Agenda

Innovations in Conservation of Natural and Cultural Resources–at the Rural/Suburban Interface

8:00 a.m. Leave USDA South Building
9:00 a.m. Arrive at WSSI
9:15 Introductions and WSSI Presentation
10:00 Tour WSSI Building and Landscape Development
11:45 Lunch
12:45 pm Leave WSSI – Tour Site 1
1:00 North Fork Wetlands Bank and Stream Restoration Project
1:45 Leave Site 1 – Tour Site 2
2:15 Sunrise Valley Nature Park
3:00 End Tour – Return to USDA South Building
3:45 Arrive at USDA South Building

Tour Description

This 2007 Fall Conservation Tour is a collaboration of the Soil and Water Conservation Society and the Society of American Foresters, National Capital Chapters. The Wetland Studies and Solutions, Inc (WSSI) will host this year’s tour and will be the networking hot spot for a shared learning experience.

WSSI is the leading natural and cultural resources consultant in Northern Virginia. Their wetland scientists, engineers, regulatory specialists, and archeologists assist developers with the permitting process and create innovative solutions to water quality issues affecting the Chesapeake Bay region. Over the past 15 years, WSSI has consulted on more than 2,000 sites
(comprising 140,000 acres) in Virginia (Fairfax, Loudoun, and Prince William counties), which include some of the largest and most complex projects in the region.

In addition, WSSI new office facility, located at 5300 Wellington Branch Drive in Gainesville, Virginia, has been awarded “Gold” status under the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED) certification system for Commercial Interiors (LEED-CI). The site is also a demonstration of Low Impact Development (LID). Company President, Michael S. Rolband, P.E., P.W.S., P.W.D., could not be happier about the news and is happier to show the WSSI facility and projects to visitors. The WSSI project team created an indoor work environment that is healthy, attractive, and filled with energy and cost-saving features.

**The building** uses an estimated 30% less energy and 50% less potable water than a conventional building of the same size. Some of the many innovations at the WSSI building include recycled carpeting; walls and surfaces made from recycled plastic bottles; rapidly renewable corn fiber based fabrics and wheat board counters and cabinetry; waterless urinals and low-flow toilets and faucets; high-efficiency heating and air conditioning with ventilation rates based on air quality; and parabolic light fixtures with compact fluorescent bulbs.

**Outside of the building,** WSSI created an integrated LID site plan, which includes a large rain garden, an underground cistern, a gravel-bed detention system, a bio-swale, three types of pervious pavement, and a green roof. The plan deals with storm water in an environmentally sensitive manner, capturing it for the irrigation of native landscaping and mimicking the runoff character of a natural forest.

**WSSI also provides the following services**: Wetland Reconnaissance, Delineation, and Survey, Wetland and Waterway Permitting, Wetland Mitigation Design, Monitoring, and Management, Resource Protection Area Delineation and Exceptions, Stream Evaluation and Restoration Design, Endangered and Threatened Species Habitat Evaluations and Surveys, Tree Stand Evaluations, Vegetation Surveys, Geographic Information Services, Archeological Evaluations and Surveys and Low Impact Development Techniques.

WSSI Site Tours;
1. North Fork Wetlands Bank and Stream Restoration Project.

Created in 1999 and 2000 from a former cattle pasture, the North Fork Wetlands Bank is an ecologically diverse system providing 7 acres of open water, 76 acres of wetlands, and 42 acres of upland buffers to be preserved in perpetuity. Wetlands mitigation banks are areas of constructed, restored, or preserved wetlands consisting of quantified value units (credits) that can be purchased by developers in advance of anticipated wetlands losses due to construction activities. This wetlands bank provides a valuable alternative to wetlands mitigation requirements for projects permitted by the U.S. Army Corps of Engineers and Virginia Department of Environmental Quality in Northern Virginia.

The North Fork Wetlands Bank, constructed in 1999 and 2000, features a diverse mixture of forested, shrub-scrub and emergent wetlands with several sub-communities selected by elevation, source of hydrology, and species composition. Named for the stream that feeds the pond and lowest wetland areas, the North Fork Wetlands Bank also includes higher wetland tiers that derive their hydrology from precipitation and surface runoff, as well as vernal pools supported solely by precipitation. Water in these wetlands is held near the surface by a nearly impermeable layer of clay. After completion of grading, the mitigation
area was disked and then planted with a variety of native plants to “jump start” the establishment of a natural wetlands system. The planting plan was designed to take advantage of the different hydrologic regimes present in different cells. Species tolerant of periodic drying were selected for the higher tiers, which are wettest during winter and spring and drier in summer and fall. Plant species tolerant of perennial inundation or soil saturation were selected for the lowest wetland areas around the large pond, where flow from North Fork provides water most of the year. This wetlands bank incorporates previously existing farm ponds and upland habitats, and takes advantage of adjacent forest (both upland and wetland) to provide habitat for a diverse array of wildlife species.

2. Sunrise Valley Nature Park (SVNP),

This is a case study of SVNP, a compensatory mitigation project in Reston, Virginia, designed and permitted in 1993 and constructed in July 1994 was created to satisfy requirements of a Clean Water Act Section 404 Permit issued by the U.S. Army Corps of Engineers in 1993 for development activities that are expected to end between 2010 and 2015. SVNP successfully compensated for wetland and stream impacts while providing the community with education and passive recreation opportunity.

Participants; Developer: Reston Land Corporation, a subsidiary of Mobil
Consultant: Wetland Studies and Solutions, Inc.
Proposed Steward: Reston Association, the homeowners’ association for this 60,000 member community

SVNP design includes; Upland forest, • Forested wetland, • Scrub-shrub wetland, • Emergent marsh, • Open water/ floating aquatic vegetation, Upland embankment dam and a Butterfly garden