Wissahickon Watershed Partnership Project List Projects align with Watershed Project Maps October 2011 Update

<u>Wissahickon from the Top Stewardship Projects: Wissahickon Valley Watershed</u> <u>Partnership (WVWA)</u> Contact Bob Adams, Wissahickon Valley Watershed Association, 215-646-8866 x14, unless otherwise noted

(LAD1 and LAD2) Wissahickon Park, Lansdale Borough: Infiltration basins and riparian corridor/wetlands installed along Wissahickon Creek in Borough of Lansdale. Contact Carl W. Saldutti, Director, Lansdale Park and Recreation, 215-361-8353.

<u>(UPGW2) Meadow and tree planting at crossing near Colorcom, Upper Gwynedd</u> <u>Township</u>. Project provides visual buffer for neighbors concerned about view of public trail. WVWA restored approximately 40 feet wide turf grass encroachments along trail/stream buffer.

<u>(UPGW4) Upper Gwynedd Township basin retrofit project:</u> Project goal is to hold and infiltrate more water. Funded via Merck settlement. Basin is completed and functioning well.

<u>(UPGW3) Wetland creation and restoration along creek in Upper Gwynedd:</u> Project includes little drainages into creek adjacent to developments that do not have stormwater management. Goal is to establish linear wetland along creek. The project was designed by AD Marble and funded via Merck settlement. Project is expected to begin construction in a few weeks and be done by end of November, except for herbaceous plantings.

<u>(UPGW3) Second wetland creation project planned for opposite side of creek in Upper</u> <u>Gwynedd:</u> Project goal is to develop additional stormwater management controls. Project requires funding.

<u>(UPGW3) Bridge removal in Upper Gwynedd:</u> Bridge present in area of wetland creation projects will be removed using Merck settlement funds. It is an old farm bridge that is now causing erosion.

(WHP1) Crossway's Preserve meadow restoration, Whitpain Township: Meadow restoration included removal of multiflora rose. Mechanically removed rose, sprayed, and seeded meadow with seed drill. Natural Lands Trust is providing assistance. Existing trees (cedars and others) left to create a savannah like habitat of approximately 7.2 acres. Project completed.

(AMB2) Ambler Borit Asbestos site, Ambler: Remediation activities have included a removal action that resulted in the clearing of many trees along the creek. Stream bank stabilized with geo-cells to secure asbestos. There is another dam near the Borit site that Penn Dot will remove (Kesley Madison dam). Remediation work continues. Recent flood dislodged cable concrete mats, which will be preset with concrete instead of soil.

Wissahickon Watershed Restoration and Stormwater Management Projects Page 1 of 5

(WHM2) Restored wetland at Bethlehem Pike and Lafayette Connector, Whitemarsh <u>Township</u>: Restored wetland on the Sandy Run tributary. The wetland was built to reduce the amount of stormwater runoff and sediment washing into Sandy Run and the Wissahickon Creek, and to reduce flooding at that site during extreme storm events. Clay-silt was removed, a natural vegetative buffer was planted, and several measures were taken to discourage Canada Geese from eating the wetland plants before they had a chance to become established. Project completed and successful.

(WHM1) Restored side-channel wetland in Fort Washington State Park, Whitemarsh Township Project completed (by PennDOT)

Stormwater Basin Retrofit Projects

(UD1) Aiden Lair Park basin retrofit, Upper Dublin. Retrofit work on two park basins that includes grading to increase storage volume and infiltration, installation of check dams to reduce flow velocities, installation of native plants, and modification of outlet structure. Funded via Exelon grant. Project mostly completed, with outlet plate still to be installed this fall. Contact Andy Fowler of Upper Dublin at 215-643-1600 x3335.

<u>(WHP3) Village Circle basin retrofit, Whitpain Township.</u> Project includes lengthened flow path, increasing infiltration, installing native plants, and modification of outlet structure. Project on hold until Township has resources to construct project. Contact Jim Blanch of Whitpain at 610-277-2400.

(WHP2) Lewis Lane basin retrofit, Whitpain Township. Basin retrofitted summer 2010 with infiltration pits, downstream channel and inlet modifications, and outlet modifications. In addition, the entire basin was naturalized. Funded via Growing Greener. Contact Jim Blanch of Whitpain at 610-277-2400.

(NW1) North Wales Center Street Basin. Project includes lengthened flow path, creating rain garden pockets, increasing infiltration, and installing native plants. This basin is owned by a single homeowner and services a small subdivision. An easement was developed to maintain the basin retrofit features and to establish Borough and homeowner operation/maintenance responsibilities. Constructed completed summer of 2011; infiltration pits required in rain garden cells to assure timely draining of basin. Funded via Exelon and by Merck settlement. Contact Nathaniel Dysard, Borough Manager at 215-699-4424.

(MG1) Montgomery Township basin naturalization projects. Township has funding from developers to maintain existing basins. The Township owns 6 of the basins, including one in the Wissahickon Watershed (MT1 which is the David Cutler development basin adjacent to headwaters at Montgomery Mall). They are reducing mowing at the township owned basins. They are looking at basin naturalization as a way to both reduce O/M costs and gain environmental benefits through increased detention and filtration. Contact Nick Fortune of Montgomery Township Environmental Advisory Committee at nfortune@comcast.net.

Wissahickon Watershed Restoration and Stormwater Management Projects Page 2 of 5

Additional Merck Settlement Funded Projects

(UPGW5) Upper Gwynedd Treatment Plant, Upper Gwynedd Township: The plant is upgrading its water treatment operations using funds from the Merck settlement.

<u>(AMB1) Rose Valley Creek Park project, Ambler:</u> This is a 3.5 acre stream restoration project in the lower area of Rose Valley Creek Park. Multiple volunteer days during 2009-2011 got 850 trees and shrubs planted (about 70 % of them protected with deer fencing), 1500 plugs planted under black walnut trees, and in a rain garden. A combination of hand weeding and spraying knocked out virtually all the Multiflora Rose and an estimated 85% of the Japanese Knotweed. Proposed stream bank re-grading project did not occur due to poor timing of the permitting process and the chosen volunteer planting dates. Project is complete except for on-going maintenance.

Challenges have included: 1) vandals damaging deer fencing; 2) plans for watering and protection from deer browsing that were inadequate; 3) unhappiness of neighbors with spraying, with weeds, and with the ugly jungle of fences and weeds, 4) re-alignment of deer fencing reduced ability to conduct maintenance mowing, resulting in pokeweed and burdock overwhelming desired plants, and 5) appalling damage to fences and loss of trees in the recent drastic flooding. Erosion from flooding has scoured Rose Valley Creek stream beds 6" to 24" deeper, and downed big trees that have rechanneled water flow. Contact Susan Curry of Ambler Environmental Advisory Committee at 215-591-1551.

(SPF1) Paper Mill Run project, Springfield Township: This project involved the stabilization of the Paper Mill Run stream embankment from the stone bridge (near Phil-Mont, part of the walking trail) to Paper Mill Road. It is adding a riparian buffer along the length of the stream within Cisco Park. The goal of the project is to reduce erosion (via stream bank stabilization) and improve water quality (via the riparian buffer). The project is nearing completion. Landscaping is to proceed this fall, with riparian seeding after the first frost and live stake plantings and other landscaping to be added. Contact Chuck Bailey of Springfield Township at <u>cbaily@springfield-township.org</u>.

<u>PHI5, PHI6, and PhI7) Fairmount Park erosion management projects, Philadelphia:</u> Friends of Wissahickon initially scoped out 12 erosion management projects in the park, focusing on the steeper gullies where runoff channels have created erosion problems. The Merck settlement is providing funding for 4 sites; Fairmount Park has already received Growing Greener funding for other sites.

The four sites are on the Mount Airy side of the creek. Many cubic yards (CY) of soil have already been lost over time from erosion, and these losses continue. Total estimated historical loss is 7,251 CY, with some gully sites reaching 945 CY's of loss. Many of these gullies are used as walking/biking trails, making erosion worse. As of 10/13/11, one site is completed (Kitchens Trail), two are under construction (Historic Rittenhousetown and Bluebell Meadow) and the last will begin construction in November (Kitchens Gully). Contact Maura McCarthy of Friends of Wissahickon at 215-247-0417 x101.

Wissahickon Watershed Restoration and Stormwater Management Projects Page 3 of 5

(ABT1) Sandy Run Stream restoration project in Roslyn Park, Abington: The Township proposed to will improve 930 linear feet of severely eroded stream bank in Roslyn Park; the project was to include two sections of creek. They planned to stabilize and restore the stream bank, using coconut (coir) fiber logs and mats designed to provide a base for vegetation to take root. They proposed to use native vegetation in the form of "live stakes" (willow branches). Mature native plants and black willow trees would also be planted as the logs and mats are installed. Eventually the coir fiber logs and mats would decay leaving the new plant growth in place. Project as proposed as not yet been approved by PA DEP, and alternatives have yet to be identified. Contact Cathy Gauthier of Abington Environmental Advisory Committee at <u>aajay@juno.com</u>.

Philadelphia Water Department (PWD) Stream and Wetland Projects in Fairmount Park (Contact Erik Haniman of PWD at 215-685-4877).

(PHI3) Cathedral Run stormwater treatment wetland, Philadelphia:

This project includes a diversion structure from the adjacent storm sewer system. It also will capture water from a natural spring on the site. The wetland will provide 95,000 cubic feet (CF) of storage. It also will capture sediment runoff from the adjacent horse stables. The project has included the removal of invasive plants. Construction started in the winter of 2011 and is scheduled for completion in spring of 2012.

(PHI1 and PHI4) Wises Mill Run wetland, Philadelphia: The site includes hydrology from both natural springs (spring house on site will stay) and from stormwater diversion. It is a four acre piece of land that will not require much grading to create 150,000 CF of storage. Design calls for a two tier wetland. A pool will require maintenance to clean out sediment. The current outfall is in very poor condition; it is a plunge pool with much erosion. Site will have a natural looking meadow appearance. There are also plans to complete some stream bank erosion management projects at specific locations along the Run. Large woody debris, root wads, and riparian buffer plantings will be installed, along with the re-grading of the floodplain. Construction started in the winter of 2011 and is scheduled for completion in spring of 2012.

(PHI2) Bells Mill Run stream restoration, Philadelphia: PWD is conducting this project on highly eroded sections of the creek, including erosion near the road where electric lines are slumping into the creek. They are to install in-stream structures such as large woody debris, and will grade back the banks. Construction started in the summer of 2011 and is scheduled for completion in the spring of 2012.

Chestnut Hill College project

<u>(PHI8)</u> Stream and floodplain restoration, Chestnut Hill College, Philadelphia: Chestnut Hill College has developed a design for restoring flood plains and stream banks along the main-stem of the Wissahickon Creek where it traverses the College property. The plan also addresses Morris Arboretum and private residential parcels directly across the stream. The design includes the restoration of flood plains and eroded stream banks at key areas long the creek. Contact Bob Meyers, Professor of Biology, Chestnut Hill College, at 215-248-7179.

Wissahickon Watershed Restoration and Stormwater Management Projects Page 4 of 5

Philadelphia Parks and Recreation Projects (not yet marked on project inventory <u>map</u>) Contact Tom Witmer, Philadelphia Parks and Recreation, at 215-683-0216.

<u>Wissahickon Valley Slope Restoration:</u> Repair and stabilize 7 badly-eroded gullies on slopes caused by uncontrolled stormwater. Project status: 4 of 7 sites completed. Remaining work in Oct 2011 - Mar 2012. Funding from PA DEP (Growing Greener Grant) and FOW.

<u>St. Georges Rd. Stormwater Management and Tributary Restoration Project:</u> Construct a series of stormwater infiltration BMPs on Allens Lane Art Center property; properly route stormflow to tributary; restore and stabilize tributary downslope of Georges Lane. Project status: Completed. Funding from PA DEP (Growing Greener Grant).

<u>Houston Meadow Reclamation:</u> Reclaim a high-quality historic meadow. The project entails removal of approximately 30 acres of encroaching vegetation, as well as herbiciding, drill-seeding 18 acres of meadows, planting 3,500 trees and shrubs and installing 4,000 feet of deer exclusion fence. The goal is to provide high-quality food, cover, breeding and nesting sites for migratory birds and other wildlife – particularly 30+ uncommon and sensitive bird species. Project status: Final seeding (wildflowers) in May 2012. All other work completed. Funding from USFS (ARRA Grant) and US F&WS.

<u>Andorra Meadow Reclamation:</u> Remove invasive vegetation around the existing fields to create one 33-acre meadow/shrub land habitat. Control invasives and seed with native meadow species. Project status: Clearing and site prep completed. Planting in November 2011 and drill-seeding in May 2012. Funding from USFS (ARRA Grant).

<u>Carpenters Woods Restoration:</u> Remove Norway maples and other invasive vegetation throughout the 43-acre site and plant native trees and shrubs. Project status: Clearing and site prep completed. Planting in October- November 2011. Funding from USFS (ARRA Grant).

Wissahickon Watershed Restoration and Stormwater Management Projects Page 5 of 5