

**FRIENDS OF THE WISSAHICKON
PROTECT OUR WATERSHED (POW) PROGRAM**

**LAND CONSERVATION & STEWARDSHIP PLAN
2006-'07**



Friends of the
Wissahickon

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EXECUTIVE SUMMARY

The Friends of the Wissahickon (FOW) created the following program to proactively address stormwater runoff in the lower Wissahickon watershed and to protect the area's significant remaining open space parcels:

PLANNING

Goal: Create a solid framework for the current and subsequent years of the Protect Our Watershed (POW) Program.

Objectives:

- Identify target properties and landowners within the lower Wissahickon watershed;
- Prioritize properties for outreach and protection;
- Select and develop joint projects with partner organizations; and
- Create handouts, press releases and visual materials for informational and outreach purposes.

Actions:

1. Develop lists of priority and highest priority properties for stormwater education and conservation easement outreach purposes.
2. Prepare GIS maps of priority and highest priority parcels.
3. Meet with local organizations with similar missions to develop joint watershed projects.
4. Create easy-to-read informational materials on stormwater management.
5. Create easy-to-read informational materials on conservation easements.
6. Develop a powerpoint presentation on stormwater problems and solutions.
7. Prepare a media outreach plan for watershed-related events.

LANDOWNER OUTREACH

Goals: Raise landowner awareness about the environmental degradation caused by excess stormwater runoff; raise landowner awareness about the benefits of donating a conservation easement; and generate support from the community for FOW's work.

Objectives:

- Sponsor speakers from partner organizations to give lectures, walks and workshops on watershed topics; and
- Meet with landowners at their homes to share information about stormwater and easements.

Actions:

1. Co-sponsor/publicize area classes relating to stormwater runoff and landscaping with native plants.
2. Create a FOW-POW winter/spring 2007 watershed lecture series.
3. Offer a watershed speakers bureau to community organizations.
4. Sponsor watershed walks for the general public.
5. Mail the new watershed brochure and calendar of events to targeted landowners.
6. Convene group meetings with landowners to share watershed and conservation easement information.
7. Send owners of highest priority properties the new FOW/CHHS easement brochure.
8. Seek additional opportunities to disseminate easement information.

IMPLEMENTATION

Goal: Mitigate negative stormwater runoff impacts on properties where erosion is occurring or where mitigation is most likely to make a difference; and lay the groundwork for permanent property protection

Objectives:

- Create landscape and habitat improvement plans for selected properties;

- Provide materials for landscape improvements to targeted landowners; and
- Recognize and reward positive landowner actions.

Actions:

1. Offer “Environmental Housecalls” to selected landowners.
2. Develop a pre-easement registry program.
3. Hold an annual event for existing easement donors.
4. Encourage donations of conservation easements on targeted properties.
5. Facilitate signature land protection projects.
6. Provide free native trees and shrubs to priority floodplain properties.
7. Offer information on conservation easements and stormwater management issues on the FOW website.
8. Feature a regular column on stormwater issues and land protection in the FOW newsletter.

SUSTAINABILITY

Goal: Position the POW program as a centerpiece of FOW’s activities by continuing and broadening outreach and implementation activities; and put the program on sound financial footing for future years.

Objectives:

- Evaluate effectiveness of POW program and adjust initiatives accordingly;
- Secure funding for years 2 through 4 of the program; and
- Continue successful initiatives begun in year 1 of POW and develop critical new programs and outreach activities.

Actions:

1. Evaluate year 1 of POW program.
2. Identify additional sources of funding for POW program.
3. Develop initiatives for year 2 through 4.

INTRODUCTION

THE TROUBLED WISSAHICKON

One of the main pleasures of living in or near Northwest Philadelphia is the beauty of the Wissahickon Valley. Walk along the Wissahickon Creek on one of the many scenic trails with which the area is blessed and the creek appears clear and clean. But walk by after even a short rainfall and you may see sediment-clogged water, fallen trees along eroded banks, and gullies spewing mud onto the gravel of Forbidden Drive. All is *not* well with the waters of the Wissahickon.

The Wissahickon River Conservation Plan several years ago reported “serious ‘health’ problems, which if not treated, will lead to more serious ecological breakdown and irreparable damage to the health of the entire watershed.”ⁱ Chief among these problems was environmental degradation caused by excess stormwater runoff.ⁱⁱ The plan noted that “[t]he continuous, unrelenting erosion and undercutting of stream banks is caused by excessive rate and volume of stormwater runoff. This problem is accelerated by the vast amounts of impervious roof, road and parking surfaces, the results of years of suburban sprawl development. . . .”ⁱⁱⁱ Over 30% of the Wissahickon watershed now is estimated to be covered by impervious surfaces.^{iv}

Because stormwater is discharged rapidly from impervious surfaces or downspouts into nearby streams, rainwater in highly developed areas does not have a chance to soak into the groundwater system. Consequently, during dry periods, baseflow in the Wissahickon Creek is made up almost completely of treated effluent discharged by the dozen upstream wastewater treatment plants. Nutrient concentrations in the water greatly exceed recommended guidelines during these times. During wet weather, increasing quantities and rates of stormwater runoff erode and destabilize the creekbanks, depositing mud and silt into the water. This harms the habitat and health of aquatic organisms in the creek. Trail systems are damaged by increasing number of flash floods, costing park departments millions of dollars they can’t afford.

FOW’S OPPORTUNITY TO HELP

The Wissahickon Creek flows for 21 miles through fourteen municipalities before it empties into the Schuylkill River. The Friends of the Wissahickon (FOW) operates in the three municipalities at the bottom of the watershed, inheriting stormwater problems washed down from upstream communities. FOW recognizes that it cannot solve the stormwater problem. **But it can help keep a bad problem from getting worse.**

Several of FOW’s existing programs -- such as identification and restoration of eroded trails and the recent rain garden installation adjacent to Valley Green Inn -- have mitigated stormwater impacts in the watershed, an important but essentially *reactive*

process. Thanks to a generous grant from the William Penn Foundation, FOW now can build on these efforts with a **Protect Our Watershed (POW) program** to address stormwater runoff in a *proactive* manner.

The framework for the POW program is detailed in this **Land Conservation & Stewardship Plan**. Parcels in the lower Wissahickon watershed have been prioritized for outreach and protection; landowners will be approached with information and technical assistance on how to improve their properties as riparian buffer, with a specific emphasis on erosion and stormwater runoff; and conservation easements will be encouraged on targeted properties to protect the area's remaining open space from the impervious surfaces and habitat destruction that comes with development. To leverage its actions, FOW will partner with other organizations chosen for their complementary missions, resources and/or geographic coverage.

POW's Land Conservation & Stewardship Plan has four components: Planning; Landowner Outreach; Implementation; and Sustainability. Following is an overview and action plan for each component. The budget is found in Attachment A. The Director of Watershed Protection is the lead staff for all actions unless noted below.

PLANNING

I. OVERVIEW

Many other documents and reports explain the Wissahickon's topography, geology, ecology and general erosion/stormwater problems.^v None of these reports, however, specifically identifies private properties that, if protected or improved in some manner, would make the most impact in alleviating stormwater problems in the lower watershed. This identification process was the first goal of the Land Conservation & Stewardship Plan.

PRIORITIZATION

Although every parcel in the watershed contributes in some way to its health, criteria were needed to prioritize the most important parcels for focused attention. The following prioritization criteria were developed after discussion with the FOW Watershed Committee:

- Adjacent to Fairmount Park or other public parkland
- Adjacent to the mainstem or a tributary of the Wissahickon
(within 75 feet for properties in Whitemarsh and Springfield Townships)^{vi}
- Contain slopes greater than 25%
(Philadelphia properties only)
- Located in the highest or second highest volume Wissahickon Creek drainage areas
(Philadelphia properties only)
- Adjacent to land protected by conservation easement held by FOW/ Chestnut Hill Historical Society (CHHS) or by Natural Lands Trust (NLT)
- Listed on the Natural Areas Inventory or Pennsylvania Natural Diversity Index (PNDI)
- Recommended for protection in a prior published study (e.g., Montgomery County Open Space Plan or Fairmount Park Adjoining Lands Study)

These criteria identified more than eleven thousand property owners, a number far greater than FOW could contact in a meaningful fashion. Consequently, a further "cut" was made to include in the priority property list *only parcels larger than ½ acre*. This selection resulted in 1,321 parcels (885 in Philadelphia and 436 in Montgomery County). **These approximately 1,300 priority parcels form the core of the watershed protection program.**

The priority parcels were further analyzed to create a smaller "highest priority" category. The factors considered in this ranking were:

- Contains at least 1 acre (Philadelphia) or at least 5 acres (Montgomery County) AND is adjacent to protected land or a stream or contains a Natural Areas Inventory/PNDI site; OR
- Recommended for protection in a prior published study.

These criteria identified 219 highest priority properties (123 in Philadelphia and 96 in Montgomery County).

As noted in more detail in the Landowner Outreach section below, POW's educational program (lectures, walks, e.g.) will be available and marketed to *all* landowners in the watershed, regardless of the size of their properties. Owners of priority properties also will be sent information about practical stormwater management techniques and will be eligible for subsidized courses on landscape improvements. Owners of the highest priority parcels will be the focus of POW's conservation easement outreach and landowner gatherings.

The Land Conservation & Stewardship Plan is not meant to be a static document: in subsequent years of the POW program, after the highest priority properties have been contacted by FOW staff with information about land protection, a next tier of targeted properties will be selected for intensive outreach.

GIS MAPPING

FOW has created GIS maps illustrating the priority and highest priority properties in the lower Wissahickon watershed. The maps are found in Attachment B, together with an Environmental Features map and an aerial photograph of the lower Wissahickon watershed. (Individual GIS maps showing the data layers used for prioritization are also available but are not attached to this Plan.) The priority maps were created with GIS data generously provided by the Philadelphia Water Department (PWD) and the Montgomery County Planning Department, together with easement information from CHHS. NLT was retained to compile and refine the maps.

Large, hard copy versions of the maps have been produced that show streets and indicate identification numbers for each priority parcel. The identification numbers correspond to a spreadsheet showing for each parcel: owner name, address, acreage, priority selection criteria, tax map parcel number, FOW relationship, and dates and types of mailings sent. This will allow FOW staff to easily identify targeted properties and to sort the landowner information to perform specialized outreach in the future, such as mailings on streambank plantings for property owners who live adjacent to a stream.

OTHER ACTIONS

In addition to identifying priority properties, the initial planning phase of the project encompassed the creation of joint projects with appropriate partner organizations. FOW's grant application to the William Penn Foundation listed preliminary partnerships and activities, but projects and partners have been refined as POW has gotten underway.

Visual and written materials explaining stormwater management and conservation easements are also being developed during the planning phase. These informational resources are necessary for the outreach and implementation phases of the program described below. A media plan is included as well, to "prime the pump" and generate general public interest in stormwater and land protection issues.

II. ACTION PLAN: PLANNING

Goal: Create a solid framework for the current and subsequent years of the Protect Our Watershed (POW) Program.

Objectives:

- Identify target properties and landowners within the lower Wissahickon watershed;
- Prioritize properties for outreach and protection;
- Select and create joint projects with partner organizations; and
- Create handouts, press releases and visual materials for informational and outreach purposes.

Timing: fall 2006

Actions:

1. Develop lists of priority and highest priority properties for stormwater education and conservation easement outreach purposes.

- *Identify stormwater runoff target areas*

--obtain information from the PWD regarding properties > 1/2 acre located in the highest and second highest volume drainage areas of the Philadelphia portion of the watershed

--obtain information regarding properties > 1/2 acre located within the Philadelphia portion of the watershed that are adjacent to Fairmount Park or other protected lands

- obtain information regarding properties >1/2 acre located within the Philadelphia portion of the watershed that have a slope > 25%
- obtain information regarding properties > 1/2 acre located within the Philadelphia portion of the watershed that are adjacent to a tributary of the Wissahickon
- obtain information from the Montgomery County Planning Commission regarding properties in Springfield and Whitemarsh Townships that are within 75 feet of the Wissahickon or a tributary
- obtain information from the Fairmount Park Commission regarding gullies on park property to assist in identifying adjacent private properties that contribute to erosion
- *Incorporate Fairmount Park Adjoining Land Study recommendations*
 - review the 1999 land acquisition/protection study prepared for the Fairmount Park Commission; incorporate GIS data on potential acquisition sites; identify role that POW can play for each of the Wissahickon Creek Park acquisition recommendations (containing 9 high priority; 4 medium priority; and 14 low priority properties recommended for protective action)
- *Incorporate CHHS's list of its conservation easement properties*
 - partner with CHHS to add non-façade easement properties to mapping information so that composite GIS map will show already-eased properties; review CHHS's list of "Conservation Easements to Pursue"
- *Identify owners of priority properties with whom FOW or CHHS board members have existing relationships*
 - seek FOW and CHHS staff and board input about priority properties where personal contacts may exist by calling a special board meeting on this topic; distribute lists of target properties organized by address and alphabetically by landowner name (*Executive Director or Development Director lead*)
 - add contact information obtained to landowner spreadsheets
- *Create informational spreadsheets for priority and highest priority properties*
 - list for each priority and highest priority property: owner name(s), address, FOW identification number, parcel acreage, priority selection criteria, relationship with FOW/CHHS, and type and date of mailing(s) sent.
 - hire NLT to finalize spreadsheets

2. Develop GIS maps of priority and highest priority parcels.

- *Use existing map resources to the extent possible*
 - partner with PWD, Fairmount Park Commission and the Montgomery County Planning Commission to obtain GIS data on properties fitting criteria listed above
 - work with NLT to finalize GIS maps
- *Identify a subset of highest priority properties*
 - the priority criteria identified 1,321 parcels (885 in Philadelphia and 436 in Montgomery County). These parcels should be further prioritized using the following selection criteria:
 - properties that are at least 1 acre in size in Philadelphia or at least 5 acres in size in Montgomery County AND are adjacent to protected land or a stream or contain a Natural Areas Inventory/PNDI site; OR
 - properties recommended for protection in a prior published study.
 - the resultant 219 highest priority properties (123 in Philadelphia and 96 in Montgomery County) will be targeted for conservation easement outreach

3. Meet with local organizations with similar missions to develop joint watershed projects.

- Meet with and solicit project proposals and budgets from possible partner organizations mentioned in the POW grant proposal to the Wm. Foundation (PWD, Fairmount Park, , NLT, Wissahickon Valley Watershed Association and Morris Arboretum).
- Identify and meet with possible additional partner organizations to solicit project proposals and budgets (Audubon Society, Schuylkill Center for Environmental Education (SCEE); Springfield and Whitemarsh Township Environmental Advisory Councils (EACs); and Temple University-Ambler's Center for Sustainable Development).

4. Create easy-to-read informational materials on stormwater management.

- *Survey existing brochures*
 - PWD's "A Homeowner's Guide to Stormwater Management"
 - DCNR's "Invasive Plants in Pennsylvania"
 - DCNR's "Landscaping with Native Plants"
 - Fairmount Park Commission's "Native Plants" (2 brochures, now out-of-print but available on the web)

- Wissahickon Valley Watershed Association's "Hold Your Stormwater"
- Lower Merion Conservancy's "S.O.S"
- Morris Arboretum's "25 Ways to Protect Your Stream and Streamside Property"
- FOW's "A List of Invasive Exotic Plants and Indigenous Plants in the Wissahickon Valley"

- *Create new POW brochure for January mailing*

--hire a graphic designer to design a brochure focusing on practical steps homeowners can take to help with watershed protection, including:

- signing up to have their properties evaluated by POW partners for design and habitat improvements
- implementing stormwater runoff mitigation techniques
- hosting neighbor gatherings for POW purposes
- attending POW lectures, workshops or walks
- reading about stormwater and conservation easements on the FOW website

--the brochure should include a brief overview of FOW and the POW program, and note that, "Your household has a significant impact on the Wissahickon watershed because"

--the brochure should include a map of the lower Wissahickon watershed, brief information on the benefits of conservation easements, and website links to FOW's website, to Fairmount Park's lists of native plants, to PWD's in-depth stormwater manual, and to the Audubon Society's web-based information on backyard habitat and local native plant nurseries

--the brochure should be a self-mailer with design elements similar to existing FOW membership and "Major Programs" brochures

--the brochure should be graphically consistent with the new conservation easement brochure (see #5 below)

- *Create a postcard or flier containing the calendar of winter/spring 2007 stormwater education program events*

5. Create easy-to-read informational materials on conservation easements.

- *Write and design a new conservation easement brochure*

--the brochure should both FOW and CHHS logos and be graphically consistent with the new watershed brochure

--the brochure should be sized so that a folded 8-1/2" x 11" letter can accompany the brochure in a mailing envelope (i.e., this brochure should not be a self-mailer)

- if possible, identify a local landowner who has placed his or her land under easement to highlight as an exemplary “case study”
- highlight new IRS conservation easement donation rules and benefits for 2007
- work with CHHS staff to prepare brochure

6. Develop a powerpoint presentation on stormwater problems and solutions.

- Hire a consultant to create a short, image-filled presentation that can be used by FOW and partner speakers (e.g., by Fairmount Park Commission staff at Rotary Club, by EAC volunteers at township meetings).

7. Prepare a media outreach plan for watershed-related events

- Prepare press releases to the Philadelphia Inquirer, Chestnut Hill Local, Montgomery County newspapers, FOW newsletter and other appropriate venues regarding POW educational opportunities and initiatives. *(FOW Editor lead)*
- Position FOW executive director as a local resource for press relating to stormwater issues, effect of storm events and, together with CHHS, conservation easements to protect open space. *(FOW Editor lead)*
- Create a calendar of information about watershed-related educational opportunities in the FOW website and newsletter, Chestnut Hill Local and community bulletin boards. *(FOW Editor lead)*

LANDOWNER OUTREACH

I. OVERVIEW

FOW will contact owners of all priority properties by mailing them the new watershed brochure in January 2007.

Certain landowners also will be contacted by telephone or personalized letter to enlist their help in hosting small gatherings of neighbors. Host landowners will be selected based on existing FOW board relationships and the locations of host properties. The focus of neighbor meetings will be “why your properties are so important to the health of the watershed,” and what landowners can do to alleviate runoff problems. FOW staff and partner organizations will cooperate in staffing these meetings. Additionally, backyard landscape “audits” and native landscape plans will be offered free to landowners selected because of the high resource value of their properties and their willingness to allow their properties to be featured as “showcases” in POW education materials.

At all neighbor gatherings, information about more permanent protection using conservation easements will be discussed. This offers a way of protecting the natural resources of the property in perpetuity while keeping the land in private ownership. However, the best type of land protection technique to use for each parcel will depend largely on the owner’s inclinations.

Outreach will include an educational lecture series in winter/spring 2007. Information provided will touch on direct actions landowners can take to mitigate stormwater runoff and improve habitat on their properties. One lecture will address the extensive floodplain mapping undertaken recently for the Pennypack Creek watershed. Public walks in the Wissahickon Valley also will be offered, focusing on riparian buffers and the effects of erosion. Educational programs will be marketed to all landowners within the watershed, regardless of the size or resource value of their properties. FOW will partner with the Whitemarsh and Springfield Township EACs to publicize the educational programs and will explore working with the EACs on mailings to landowners in those townships.

Providing interested landowners a range of conservation tools from which to choose will make a difference in the environmental health of the watershed. It also reinforces FOW’s image as an action-oriented, knowledgeable organization that is worthy of support.

II. ACTION PLAN: LANDOWNER OUTREACH

Goals: Raise landowner awareness about the environmental degradation caused by excess stormwater runoff; raise landowner awareness about the benefits of donating a conservation easement; generate support from the community for FOW's work

Objectives:

- Sponsor speakers from partner organizations to give lectures, walks and workshops on watershed topics; and
- Meet with landowners at their homes to share information about stormwater and easements.

Timing: winter/spring 2007

Actions:

1. Co-sponsor/publicize area classes relating to stormwater runoff and landscaping with native plants.

- *Assist with PWD workshops on using rain barrels to mitigate stormwater runoff*
 - publicize October 18 and 21, 2006, workshops at SCEE in the FOW fall newsletter
 - host a Rain Barrel Workshop at the Chestnut Hill Library on February 3, 2007, from 2-4 p.m. and provide free rain barrels to attendees
- *Promote Morris Arboretum's Landscape Design classes*
 - promote Arboretum courses that have a watershed focus (such as the "Managing Your Streamside Property" and "Rain Gardening" courses) in the calendar of events mailing to landowners
 - subsidize a portion of the cost of attending a watershed-related Arboretum course for attendees from targeted landowner list
 - purchase advertisement in winter Morris Arboretum class guide to promote FOW's winter/spring education series

2. Create a FOW-POW winter/spring 2007 watershed lecture series.

- *Arrange for lectures by watershed experts*
 - present 3 lectures on topics relating to the Wissahickon watershed (e.g., stormwater management techniques, backyard habitat creation, water quality

testing, floodplain mapping) at Chestnut Hill Library on February 7, March 7 and April 4, 2007, from 7:30–8:30 p.m.

-- select speakers from the Morris Arboretum, the Audobon Society and Temple University-Ambler's Center for Sustainable Development

--have POW brochures and FOW membership/ contribution information available at all meetings

--partner with SCEE and Springfield and Whitemarsh Township EACs to publicize the lecture series

3. Offer a watershed speakers bureau to community organizations.

- *Utilize Fairmount Park Comission Wissahickon Environmental Education Center staff as speakers*

--using the prepared POW powerpoint and new watershed and conservation easement POW brochures, arrange for Wissahickon Environmental Education Center staff to present two public outreach programs on stormwater management to community groups in the Wissahickon Valley, such as the Chestnut Hill Rotary Club and the Springfield or Whitemarsh Township EACs

4. Sponsor watershed walks for the general public.

- Hold 2 - 3 walks led by Fairmount Park's Wissahickon Environmental Education Center staff focusing on the Wissahickon's native trees and shrubs, stormwater erosion issues, and riparian buffers; promote all watershed-related offerings in the Wissahickon Environmental Education Center's quarterly program calendar.

5. Mail the new watershed brochure and calendar of events to targeted landowners.

- Send the new watershed brochure to owners of priority parcels in January.
- Mail the POW calendar of events to owners of priority parcels in January, either as a separate postcard or as a removable insert in the watershed brochure.
- Explore whether Springfield and/or Whitemarsh Township EACs are interested in personalizing the brochure mailings sent to their residents.

6. Convene group meetings with landowners to share information about stormwater and conservation easements.

- *With Morris Arboretum*

--Solicit up to three landowners to host neighbor gatherings where FOW staff (and possibly a board member) and Morris Arboretum staff discuss stormwater retention methods and land protection options; gatherings to be held in winter/spring 2007; tentative target areas are Andorra, Appelogon Road and/or Wissahickon Avenue. At the gatherings, Morris Arboretum staff could discuss landscape recommendations for the host property. (*Executive Director and Development Director assist*)

- *With Audubon Society*

--Solicit at least two landowners to host neighbor gatherings where FOW staff (and possibly a board member) and Audubon Society staff discuss stormwater retention methods and land protection options; gatherings to be held in spring 2007; target areas to be determined by results of the fall FOW board contact survey. At the gatherings, Audubon can discuss the results of its backyard habitat evaluation conducted for the host property. (*Executive Director and Development Director assist*)

- *With Natural Lands Trust*

--Solicit at least one landowner to host a neighbor gathering where FOW staff (and possibly a board member) and NLT staff discuss landscape improvements and land protection options; gatherings to be held in spring 2007; target area to be determined by results of the fall FOW board contact survey. At the gathering, NLT can discuss the results of landscape recommendations developed for the host property. (*Executive Director and Development Director assist*)

7. Send owners of highest priority properties the new FOW/CHHS easement brochure.

- Within six weeks of mailing the new watershed brochure to owners of priority parcels, send letter to owners of highest priority parcels, informing them of the special tax incentives available for easement donations in 2007, and include the new conservation easement brochure. Ideally, a FOW or CHHS board member who knows the landowner will co-sign the letter or make the introduction to the landowner.

8. Seek additional opportunities to disseminate information about conservation easements.

- Prepare a short article on the tax benefits of donating a conservation easement for inclusion in the newsletter sent to people moving into the Hill at Whitemarsh.
- Provide watershed and conservation easement brochures to local realtors and ask them to distribute copies to new homebuyers.

IMPLEMENTATION

I. OVERVIEW

The purpose of the outreach activities outlined above is to pique landowner interest in stormwater and land protection issues. The implementation component of the POW program translates *interest into action on the ground*. FOW will assist selected landowners in planning and making improvements to their properties to alleviate existing or future stormwater runoff problems. FOW also will help facilitate permanent land protection where possible.

II. ACTION PLAN: IMPLEMENTATION

Goal: Mitigate negative stormwater runoff impacts on properties where erosion is occurring or where mitigation is most likely to make a difference; and lay the groundwork for permanent property protection via a conservation easement.

Objectives:

- Create landscape and habitat improvement plans for selected properties;
- Provide materials for landscape improvements to targeted landowners; and
- Recognize and reward positive landowner actions.

Timing: Spring 2007

Actions:

1. Offer “Environmental Housecalls” to selected landowners.

- *Partner with Natural Land Trust to offer landscape plans and recommendations*

--NLT staff will develop 3 – 5 landscape recommendations and/or designs for targeted landowners of “showcase” properties on the priority list. The recommendations/design plans will be subsidized by POW. Landscape recommendations will be featured and discussed at POW landowner gatherings.

- *Partner with Audubon Society to offer Backyards for Nature audits*

--Audubon will provide free one-hour backyard evaluations to selected landowners whose properties are on the priority list. Evaluations will address potential improvements to native plant habitat, bird habitat, water

conservation and runoff, and turf grass coverage. Backyard audits will be featured and discussed at POW landowner gatherings.

2. Develop a pre-easement registry program.

- Create a registry program for landowners who have their backyard audited by Audubon, host a neighbor meeting, incorporate 2 or more stormwater Best Management Practices (e.g., installation of rain barrels or pledge to plant only native plant species), or meet some other threshold criteria. Landowners would receive a POW certificate designating them as “Watershed Keepers.” The goal is to start these landowners on the road to longer term land protection via a conservation easement. *(Development Director lead)*

3. Hold an annual event for existing easement donors.

- Create an annual gathering for landowners who have placed their land under easement with FOW/CHHS (or who live on properties that previous owners have conserved). A spring 2007 event, for instance, could be a breakfast featuring a speaker on the topic of native plant species. This type of outreach assists in building good relationships between the landowner and the monitoring organization and fosters good will for the easement program. *(Development Director lead, with CHHS staff)*

4. Encourage donations of conservation easements on targeted properties.

- *Assist property owners interested in exploring conservation easements*
 - If a landowner cultivated through the outreach process is interested in evaluating the financial benefits of a conservation easement, NLT will prepare a by-right development plan showing the full build-out potential of the property under current zoning. (This information is useful in showing conservation-minded landowners to extent to which future owners could subdivide and develop the property, and is also useful for “before/after” easement appraisal purposes.)
 - If the landowner decides to pursue an easement, NLT/CHHS/FOW will partner to draft the easement, prepare the baseline documentation and conservation plan map, and negotiate the stewardship endowment.

5. Facilitate signature land protection projects.

- Work with Chestnut Hill College, the new owners of the Sugarloaf Estate, to ensure that stormwater management planning is incorporated into future development of the property; begin dialogue regarding possibility of placing a conservation easement on the property in addition to the DCNR deed restriction.

- Work with the Wissahickon East community group, developer/owner DeSouza Brown, CHHS and the Fairmount Park Commission to explore and facilitate protection options for this 6-acre open space parcel along Cresheim Creek.
- Prepare support letters to accompany Montgomery County Planning Commission and NLT grant applications to DCNR for funding to protect Erdenheim Farm; explore having FOW represented on the Whitemarsh Foundation or other advisory group seeking to protect Erdenheim Farm. *(Executive Director or board lead)*

6. Partner with DCNR/Pennsylvania Horticultural Society's TreeVitalize program to provide native trees to floodplain properties on the POW priority list.

- Contact owners of Philadelphia priority properties adjacent to a tributary of the Wissahickon (the only properties eligible for the program at this time) to inform them of their eligibility to receive free native trees and shrubs from the TreeVitalize program. Wissahickon Environmental Education Center staff will distribute the trees and show landowners how to plant them. If a property owner prefers to pay a contractor to plant the tree, FOW can subsidize a portion of this cost.

7. Offer information on conservation easements and stormwater management issues and solutions on the FOW website.

- Hire a graphic designer to design a "Watershed Watch" page on FOW's website.
- Include text from the new watershed brochure on the "Watershed Watch" page; include summaries (and photos/slides if available) of each lecture offered in the educational series.
- Include text from the new conservation easement brochure on the "Watershed Watch" page. When conservation easements are acquired, highlight the grant of easement in the FOW newsletter and website, assuming the landowner consents.

8. Feature a regular column on stormwater issues and land protection in the FOW newsletter.

- Create a column (or page) on stormwater and land protection issues in the FOW newsletter under the heading "Watershed Watch." The first article in the fall 2006 newsletter will highlight the recent change in federal tax law that gives greater financial incentives for donation of conservation easements in 2006 and 2007. Future articles could showcase the rain garden at Valley

Green Inn; highlight aspects of FOW's trails restoration project that incorporate techniques to mitigate stormwater runoff; summarize the Land Conservation & Stewardship Plan; and highlight the watershed-related lectures held in winter/spring 2007. (*FOW Editor lead*)

PROGRAM SUSTAINABILITY

I. OVERVIEW

The first-year initiatives outlined in this Land Conservation & Stewardship Plan lay the foundation for a vital program to educate landowners and improve and protect natural resources on many of the most important private lands in the lower Wissahickon watershed. For POW to make a true impact, FOW must continue its outreach and implementation activities beyond the first year of the program. It must broaden its outreach activities and develop funding streams to carry it into the future. It must partner with organizations further upstream to help reduce stormwater impacts downstream. **FOW's goal should be to become the regional center of excellence for information about ways that private landowners can manage their properties to help alleviate the Wissahickon's stormwater problem.**

II. ACTION PLAN: PROGRAM SUSTAINABILITY

Goal: Position the POW program as a centerpiece of FOW's activities by continuing and broadening outreach and implementation activities; and put the program on sound financial footing.

Objectives:

- Evaluate the effectiveness of the POW program and adjust initiatives accordingly;
- Secure funding for years 2 through 4 of the program; and
- Continue successful initiatives begun in year 1 of POW and develop critical new programs and outreach activities.

Timing: Ongoing

Actions:

1. Evaluate year 1 of the POW program.

- Develop performance measurements including:
 - # of landowners contacted with stormwater runoff information
 - # of landowners contacted with conservation easement information
 - # of landowners attending educational lectures/workshops/walks
 - # of landowners attending neighbor meetings
 - # of landowners advised about landscape improvements for their properties

- # of landowners implementing landscape improvements
- # of properties/acres protected through landscape improvements
- # of properties/acres protected through conservation easements
- # of hits on “Watershed Watch” website page
- # of dollars raised to continue POW efforts

2. Identify additional sources of funding for the POW program.

- Identify potential sources of funding for facilitation and acquisition of conservation easements and continuation of stormwater outreach activities in subsequent years. *(Executive Director and Development Director lead, with assistance from Director of Watershed Program)*
- Seek William Penn Foundation support for 3 additional years in decreasing amounts. *(Executive Director and Development Director lead)*
- Have contribution materials and forms available at all POW educational events and landowner gatherings.

3. Develop initiatives for year 2 through 4.

- *Continue educational efforts*
 - prepare additional mailings on educational topics; for instance, highlighting landscape improvements implemented in year 1 of POW program
 - hire Morris Arboretum to create a Wissahickon Garden Design brochure showing four types of native local gardens (riparian buffer; meadow, small shade garden; woodland)
 - explore setting up a FOW hotline or having the FOW webpage contain information in case of Wissahickon Creek water quality emergencies *(Executive Director lead)*
 - explore creating a tree-cutting and replacement ordinance in the Wissahickon Valley *(FOW Conservation Committee lead)*
 - evaluate the effectiveness of the existing Philadelphia ordinance that imposes more stringent development regulations in the Wissahickon watershed *(FOW Conservation Committee lead)*
 - investigate partnerships with local nurseries to supply native plants to FOW members at reduced rates
 - develop a signage program for residential, commercial and institutional landowners that utilize stormwater Best Management Practices

- explore having a Philadelphia University Restoration Design charette focus on landscaping possibilities for the Wissahickon East 6-acre parcel
- explore the desirability of a storm drain stenciling program
- investigate setting up a youth fishing program for the Wissahickon Creek
- explore assisting the Wissahickon Valley Watershed Association with the design of a riparian buffer on one or more properties where it is pursuing an easement; and explore having FOW subsidize the design of a riparian buffer on a section of the Wissahickon Valley Watershed Association preserve
- ensure that the FOW Wildlife Committee creates Wissahickon fish/bird/mammal brochures that are graphically consistent with the POW brochures (*Development Director lead*)
- design folders to contain FOW membership brochures and letters, watershed and conservation easement brochures, FOW solicitation materials, etc. (*Development Director lead*)
- *Continue outreach efforts*
 - only properties greater than ½ acre in size were included on POW's priority list. In subsequent years it would be desirable to include properties *larger than ¼ acre* that are adjacent to 1st and 2nd order streams, the main stem of the Wissahickon, and protected parkland. The larger number of targeted properties would require a larger mailing and printing budget.
 - only the approximately 220 highest priority properties will have been contacted with information about conservation easements in the first year of the POW program. In subsequent years, additional properties on the priority list should be contacted regarding permanent land protection options.
 - continue partnering with local organizations to hold landowner gatherings to discuss stormwater and conservation easement issues
 - develop an approach for using large storm events as a way to galvanize community attention on Wissahickon stormwater issues

ⁱ Wissahickon Creek River Conservation Plan, (December 1, 1999), at I-12.

ⁱⁱ Other problems identified in the Plan were: damage to native forest due to disease, a warming climate, insect infestation, harmful invasive plant species and deer over-browse; point and non-point water

pollution; human over-use of Fairmount Park trails; inadequate stormwater and development regulations; and destruction of riparian buffers. Id. at I-12.

ⁱⁱⁱ Id.

^{iv} Draft Wissahickon Watershed Comprehensive Plan, Philadelphia Water Department (2006, unpublished).

^v In addition to the DCNR-funded River Conservation Plan, reports consulted for this Land Stewardship & Conservation Plan include:

Wissahickon Valley Master Plan, NLREEP (1999-2001)

The Wissahickon Riparian Restoration Trail Link Master Plan, (1998)

Managing Development & Promoting Preservation, CHHS & FOW (1996)

Nutrient & Siltation TMDL Development for Wissahickon Creek, PA, USEPA (October 2003)

Fairmount Park Adjoining Lands Study, NLREEP (December 1999)

Biological Assessment for the Wissahickon Watershed, Philadelphia Water Dept. (Spring 2001)

^{vi} Differences in criteria for parcels in Philadelphia and Montgomery County are due to the two county agencies having different types of GIS parcel information readily available.

ATTACHMENTS

A – POW LAND CONSERVATION & STEWARDSHIP PLAN BUDGET – YEAR 1

B – GIS MAPS

B-1: ENVIRONMENTAL FEATURES MAP

B-2: AERIAL PHOTOGRAPH OF LOWER WISSAHICKON WATERSHED

B-3: PRIORITY PARCELS

B-4: HIGHEST PRIORITY PARCELS

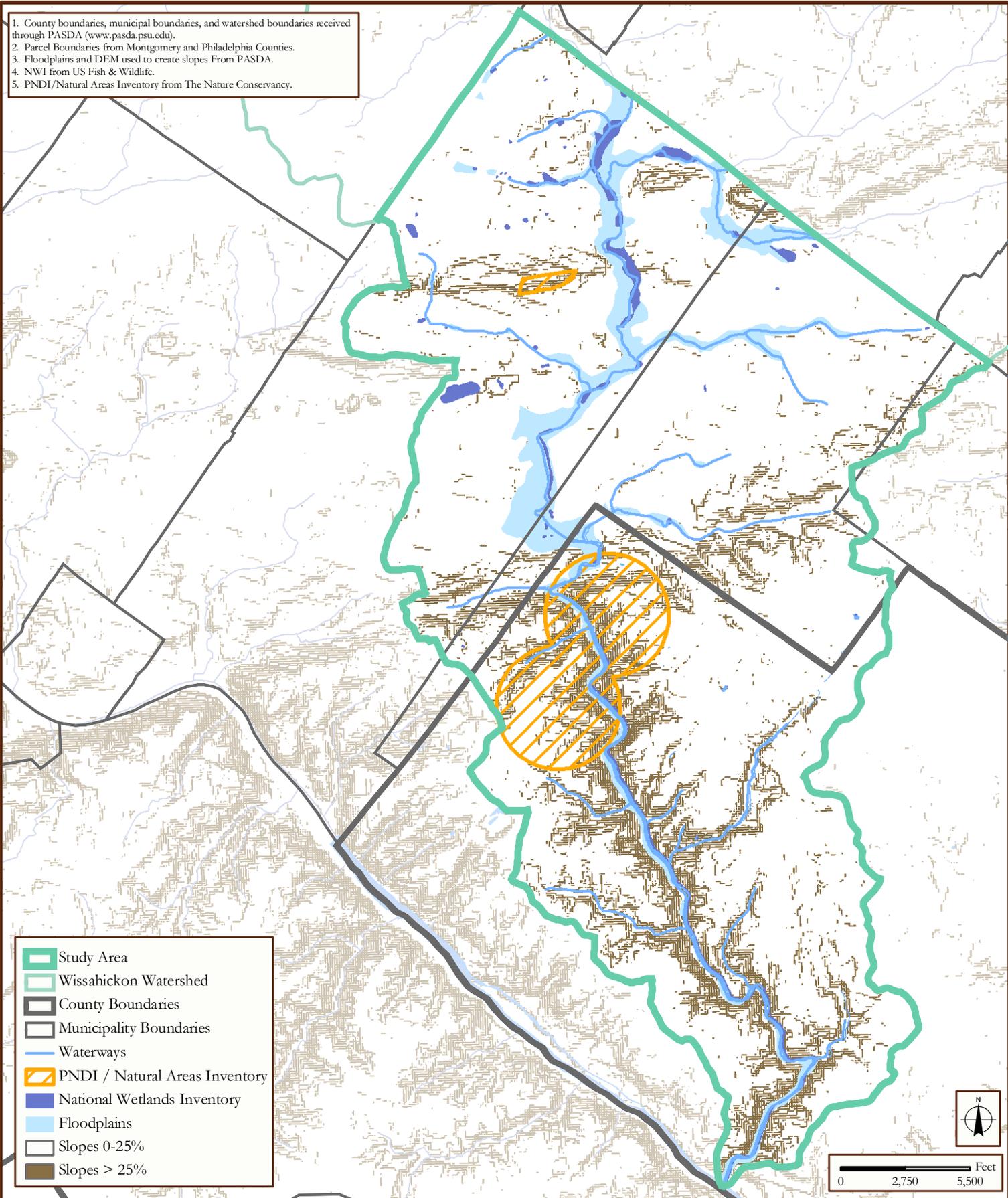
C – TASKS FOR STAFF OTHER THAN DIRECTOR OF THE WATERSHED PROGRAM

ATTACHMENT A

FOW Protection of the Watershed (POW) Program
Land Conservation & Stewardship Plan Budget for William Penn Foundation Funding
Year 1 -- 2006-'07

Activity	Estimated Cost
Planning	
NLT GIS mapping assistance	5,000.00
CHHS planning & writing assistance	2,000.00
Watershed brochure (design, writing & printing)	4,100.00
Cons. Easement brochure (design & printing)	4,100.00
Lecture postcards/fliers	1,000.00
Powerpoint	2,000.00
Subtotal	18,200.00
Landowner Outreach	
Mailing costs for brochures, letters, postcards	4,500.00
EAC stipends (Whitemarsh & Springfield)	1,500.00
PWD Rain Barrel workshop refreshments, fliers	750.00
Morris Arb. course guide advertisement	200.00
Morris Arb. landscape course subsidies	200.00
Lecture series:	
Audubon speaker stipend	300.00
Temple Univ. speaker stipend	300.00
Morris Arb. speaker stipend	300.00
Speakers bureau stipend:	
Fairmount Park WEEC staff	600.00
WEEC watershed walks	2,000.00
Landowner gatherings (5):	
Partner stipends (Morris Arb., NLT & Audubon)	1,000.00
Refreshments, host gifts	7,000.00
Easement donor breakfast--speaker & refreshments	2,000.00
CHHS staffing and prep for event	1,000.00
Subtotal	21,650.00
Implementation	
NLT landscape design recommendations (3 @\$1,000)	3,000.00
Audubon backyard audits (6 @ \$300)	1800
NLT by-right development plan (1)	750.00
TreeVitalize/PHS:	2400
Planting costs	2,000.00
Plant distribution (FPC)	400.00
Easement facilitation:	
Legal, baseline	7,000.00
CHHS staff	2,000.00
Webpage information	1,300.00
Subtotal	20,650.00
FOW Operating Support	10,000.00
Director of Watershed Program	36,500.00
Schuylkill Learning Community	5,000.00
Total	112,000.00

1. County boundaries, municipal boundaries, and watershed boundaries received through PASDA (www.pasda.psu.edu).
2. Parcel Boundaries from Montgomery and Philadelphia Counties.
3. Floodplains and DEM used to create slopes From PASDA.
4. NW1 from US Fish & Wildlife.
5. PNDI/Natural Areas Inventory from The Nature Conservancy.



- Study Area
- Wissahickon Watershed
- County Boundaries
- Municipality Boundaries
- Waterways
- PNDI / Natural Areas Inventory
- National Wetlands Inventory
- Floodplains
- Slopes 0-25%
- Slopes > 25%



Mapping Compiled 11/14/06 by DCR of:

Environmental Features

FRIENDS OF THE WISSAHICKON
PROTECT OUR WATERSHED (POW) PROGRAM

Philadelphia County and Springfield and Whitmarsh Townships, Montgomery County



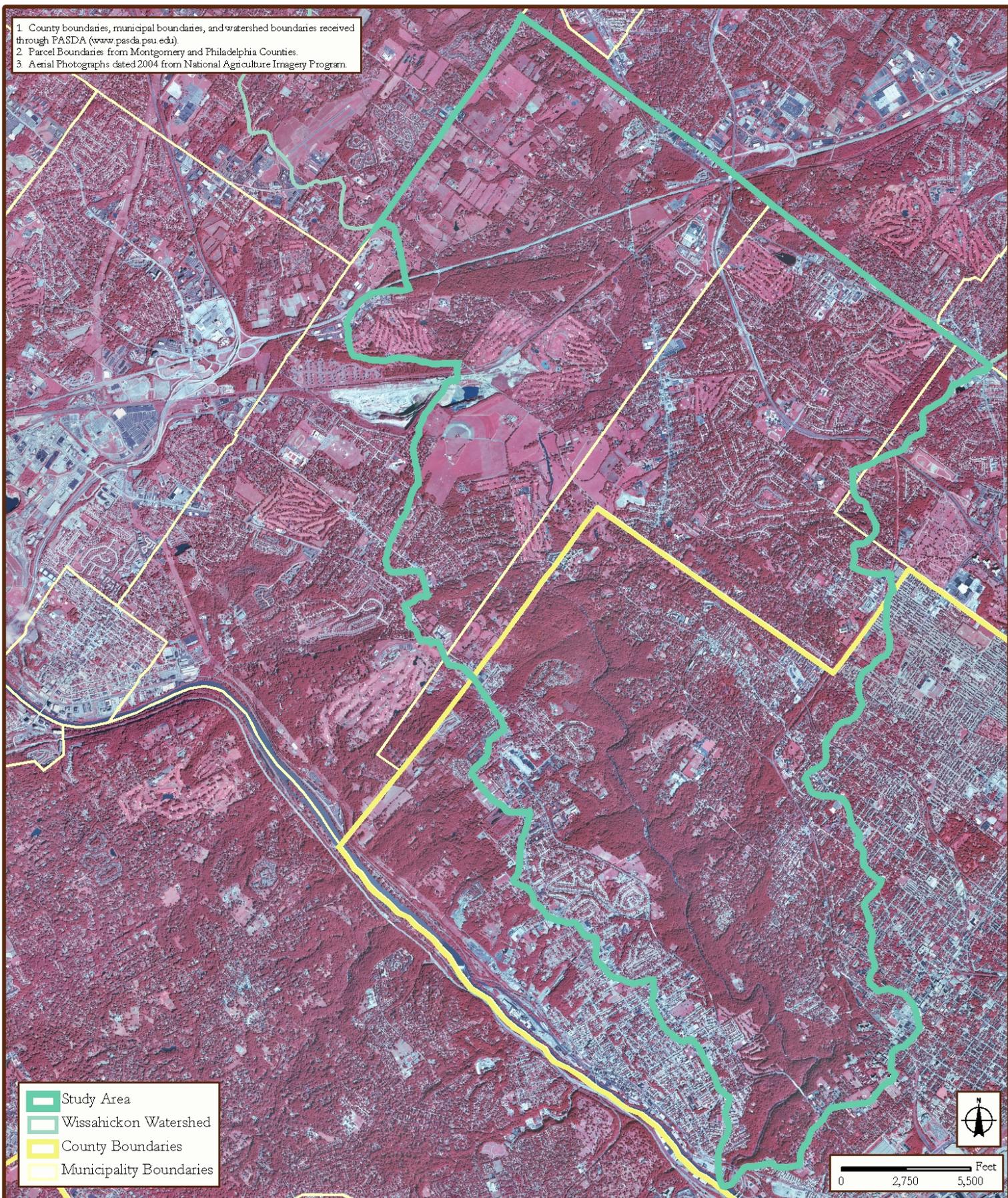
Friends of the
Wissahickon



Natural Lands Trust

1031 Palmers Mill Road, Media, PA 19063
610-353-5587 ~ www.natlands.org

1. County boundaries, municipal boundaries, and watershed boundaries received through PASDA (www.pasda.psu.edu).
2. Parcel Boundaries from Montgomery and Philadelphia Counties.
3. Aerial Photographs dated 2004 from National Agriculture Imagery Program.



-  Study Area
-  Wissahickon Watershed
-  County Boundaries
-  Municipality Boundaries



Mapping Compiled 11/14/06 by DCR of:



2004 Infrared Aerial Photograph
 FRIENDS OF THE WISSAHICKON
 PROTECT OUR WATERSHED (POW) PROGRAM

Philadelphia County and Springfield and Whitmarsh Townships, Montgomery County



1031 Palmers Mill Road, Media, PA 19063
 610-353-5587 ~ www.natlands.org

1. County boundaries, municipal boundaries, and watershed boundaries received through PASDA (www.pasda.psu.edu).
2. Parcel Boundaries from Montgomery and Philadelphia Counties.
3. Public and Protected Lands from Montgomery County, Philadelphia County, Pennsylvania Environmental Council, Chestnut Hill Historical Society/Friends of the Wissahickon, and Natural Lands Trust.
4. Priority Parcel selection determined by Friends of the Wissahickon.

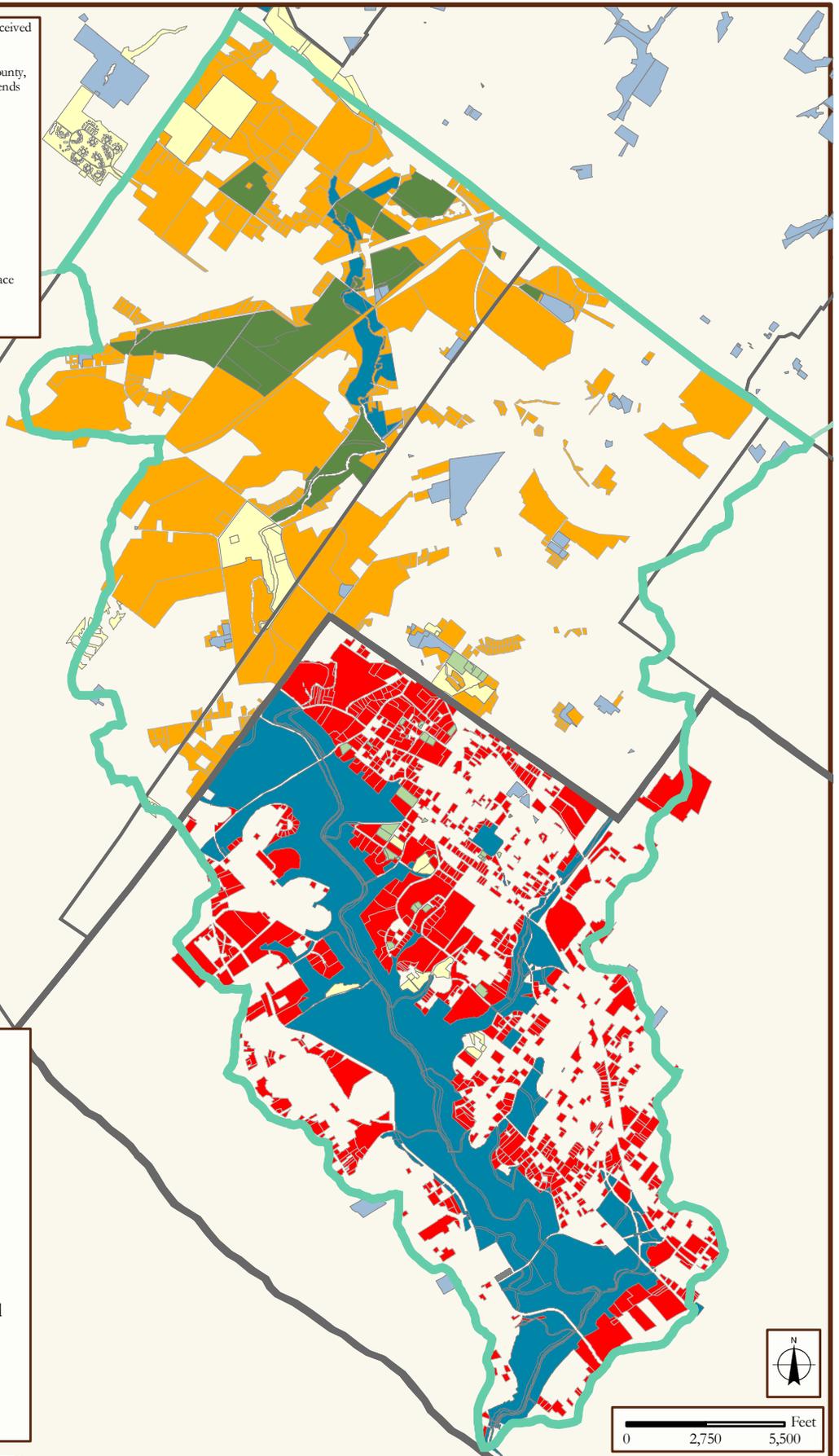
Properties with any one of the following criteria were selected.

Philadelphia County

- Priority Parcels from the Fairmount Park Adjoining Lands Study
- Parcels ≥ 0.5 acres Containing a PNDI Site
- Parcels ≥ 0.5 acres Containing or Adjacent to a Stream
- Parcels ≥ 0.5 acres Adjacent to Wissahickon Park
- Parcels ≥ 0.5 acres within the Highest Volume Drainage Areas
- Parcels ≥ 0.5 acres within the Second Highest Drainage Areas
- Parcels ≥ 0.5 acres Containing Slopes $> 25\%$

Montgomery County

- Parcels ≥ 0.5 acres within the 1996 Montgomery County Open Space Plan Greenways
- Parcels ≥ 0.5 acres within 75 feet of or Contain a Stream
- Parcels ≥ 0.5 acres Adjacent to Public or Protected Land



- Study Area
- Wissahickon Watershed
- County Boundaries
- Municipality Boundaries
- State Land
- County Land
- Municipal Land
- Chestnut Hill Historical Society / Friends of the Wissahickon Eased
- Other Conservation Org. Owned or Eased and Homeowners Association Land
- Agricultural Easement
- Philadelphia Priority Parcels
- Montgomery Priority Parcels



Priority Parcels

FRIENDS OF THE WISSAHICKON
PROTECT OUR WATERSHED (POW) PROGRAM

Philadelphia County and Springfield and Whitmarsh Townships, Montgomery County

Mapping Compiled 11/14/06 by DCR of:



1. County boundaries, municipal boundaries, and watershed boundaries received through PASDA (www.pasda.psu.edu).
 2. Parcel Boundaries from Montgomery and Philadelphia Counties.
 3. Public and Protected Lands from Montgomery County, Philadelphia County, Pennsylvania Environmental Council, Chestnut Hill Historical Society/Friends of the Wissahickon, and Natural Lands Trust.
 4. Highest Priority Parcel selection determined by Friends of the Wissahickon. Properties with any one of the following criteria were selected.
- Philadelphia County**
 Priority Parcels from the Fairmount Park Adjoining Lands Study
 Parcels \geq 1 acre Containing a PNDI Site
 Parcels \geq 1 acre Containing or Adjacent to a Stream
 Parcels \geq 1 acre Adjacent to Wissahickon Park
- Montgomery County**
 Parcels within the 1996 Montgomery County Open Space Plan Greenways
 Parcels \geq 5 acres within 75 feet of or Contain a Stream
 Parcels \geq 5 acres Adjacent to Public or Protected Land

Legend

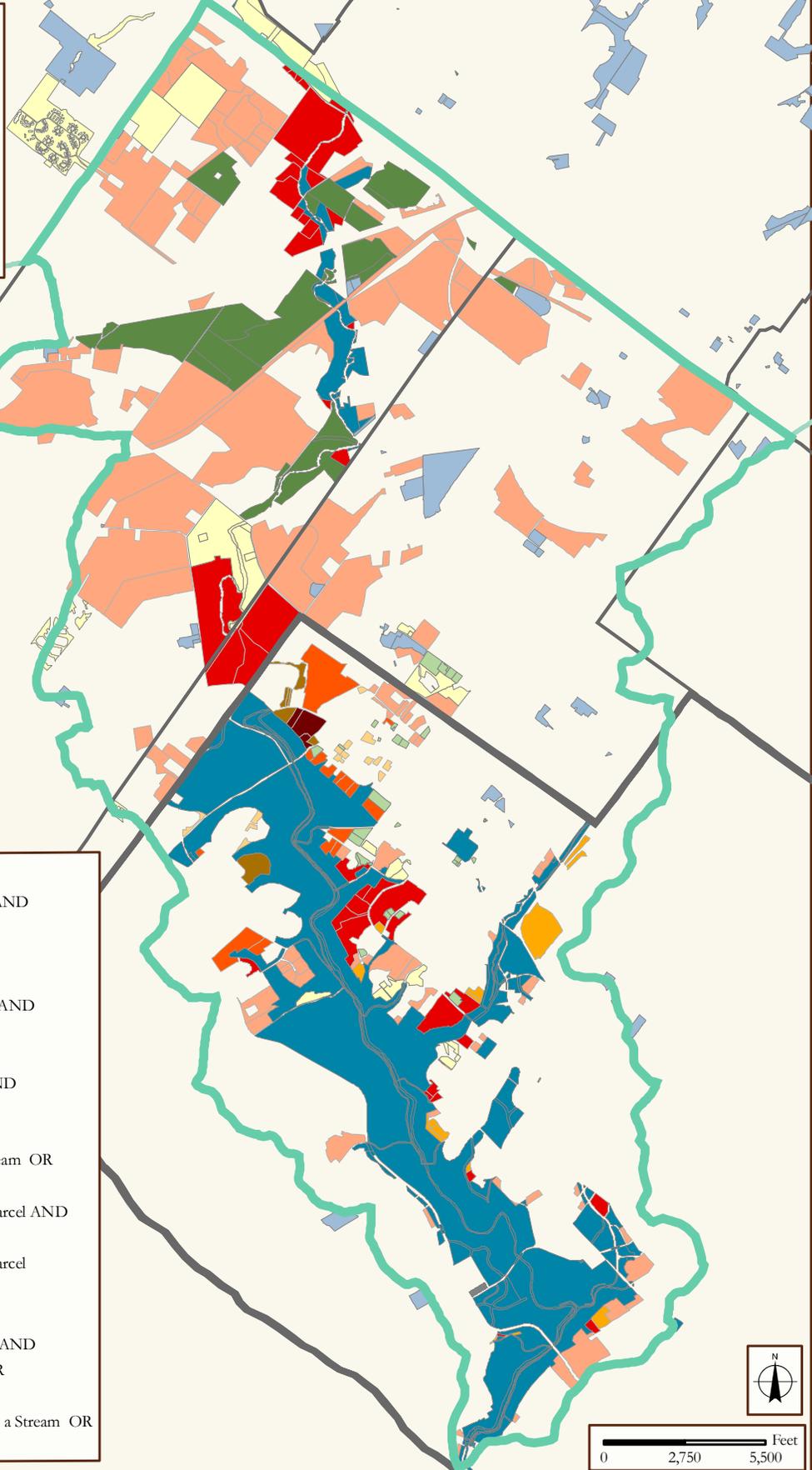
- Study Area
- Wissahickon Watershed
- County Boundaries
- Municipality Boundaries
- State Land
- County Land
- Municipal Land
- Chestnut Hill Historical Society / Friends of the Wissahickon Eased
- Other Conservation Org. Owned or Eased and Homeowners Association Land
- Agricultural Easement

Philadelphia Highest Priority Parcels

- Fairmount Park Adjoining Lands Study Priority Parcel AND \geq 1 acre Containing a PNDI Site AND \geq 1 acre Adjacent to or Contain a Stream OR \geq 1 acre Adjacent to Wissahickon Park
- Fairmount Park Adjoining Lands Study Priority Parcels AND \geq 1 acre Adjacent to or Contain a Stream OR \geq 1 acre Adjacent to Wissahickon Park
- Other Properties \geq 1 acre Containing a PNDI Site AND \geq 1 acre Adjacent to or Contain a Stream OR \geq 1 acre Adjacent to Wissahickon Park
- Other Properties \geq 1 acre Adjacent to or Contain a Stream OR \geq 1 acre Adjacent to Wissahickon Park
- Other Fairmount Park Adjoining Lands Study Priority Parcel AND \geq 1 acre Containing a PNDI Site
- Other Fairmount Park Adjoining Lands Study Priority Parcel
- Other Properties \geq 1.0 acre Containing a PNDI Site

Montgomery Highest Priority Parcels

- Montgomery County 1996 Open Space Plan Greenway AND \geq 5 acres within 75 feet of or Contain a Stream OR \geq 5 acres Adjacent to Public or Protected Land
- Parcels \geq 5 acres that are Within 75 Feet of or Contain a Stream OR \geq 5 acres Adjacent to Public or Protected Land



Highest Priority Parcels

FRIENDS OF THE WISSAHICKON
 PROTECT OUR WATERSHED (POW) PROGRAM

Philadelphia County and Springfield and Whitmarsh Townships, Montgomery County

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ATTACHMENT C

TASKS FOR STAFF OTHER THAN DIRECTOR OF WATERSHED PROGRAM

FOW EXECUTIVE DIRECTOR

- Prepare support letters to accompany Montgomery County Planning Commission and NLT grant applications to DCNR for funding to protect Erdenheim Farm; explore having FOW represented on the Whitemarsh Foundation or other advisory group seeking to protect Erdenheim Farm.
- Explore setting up a FOW hotline or having the FOW webpage contain information in case of Wissahickon Creek water quality emergencies.

FOW EXECUTIVE DIRECTOR/DEVELOPMENT DIRECTOR

- Seek FOW and CHHS staff and board input about priority properties where personal contacts may exist by calling a special board meeting on this topic; distribute lists of target properties organized by address and alphabetically by landowner name.
- Assist Director of Watershed Program in organizing and staffing several landowner gatherings to discuss stormwater issues and land conservation. Partner organizations will be Morris Arboretum, Audubon Society, and NLT.
- Identify potential sources of funding for facilitation and acquisition of conservation easements and continuation of stormwater outreach activities in subsequent years. (*Director of Watershed Program assist*)
- Seek William Penn Foundation support for 3 additional years in decreasing amounts.

FOW DEVELOPMENT DIRECTOR

- Create a registry program for landowners who have their backyard audited by Audubon, host a neighbor meeting, incorporate 2 or more stormwater Best Management Practices (e.g., installation of rain barrels or pledge to plant only native plant species), or meet some other threshold criteria. Landowners would receive a POW certificate designating them as “Watershed Keepers.” The goal is to start these landowners on the road to longer term land protection via a conservation easement.

- Create an annual gathering for landowners who have placed their land under easement with FOW/CHHS (or who live on properties that previous owners have conserved). A spring 2007 event, for instance, could be a breakfast featuring a speaker on the topic of native plant species. This type of outreach assists in building good relationships between the landowner and the monitoring organization and fosters good will for the easement program. *(With CHHS staff)*
- Design folders to contain FOW membership brochures and letters, watershed and conservation easement brochures, FOW solicitation materials, etc. *(Development Director lead)*

FOW EDITOR

- Prepare press releases to the Philadelphia Inquirer, Chestnut Hill Local, Montgomery County newspapers, FOW newsletter and other appropriate venues regarding POW educational opportunities and initiatives.
- Position FOW executive director as a local resource for press relating to stormwater issues, effect of storm events and, together with CHHS, conservation easements to protect open space.
- Create a calendar of information about watershed-related educational opportunities in the FOW website and newsletter, Chestnut Hill Local and community bulletin boards.
- Create a column (or page) on stormwater and land protection issues in the FOW newsletter under the heading “Watershed Watch.” Future articles could showcase the rain garden at Valley Green Inn; highlight aspects of FOW’s trails restoration project that incorporate techniques to mitigate stormwater runoff; summarize the Land Conservation & Stewardship Plan; and highlight the watershed-related lectures held in winter/spring 2007.

FOW CONSERVATION COMMITTEE

- Explore creating a tree-cutting and replacement ordinance in the Wissahickon Valley.
- Evaluate the effectiveness of the existing Philadelphia ordinance that imposes more stringent development regulations in the Wissahickon watershed.