

2 PUBLIC PARTICIPATION

“I love the idea! Please give us a greener Philadelphia. It would make us healthier and happier all around.”

- Response on the Philadelphia Water Department’s “Green Neighborhoods through Green Streets Survey.” The question asked, “*Are you in favor of greening?*”

2.1 INTRODUCTION

2.1.1 Overwhelming Public Support

The participants in the Philadelphia Water Department’s (PWD’s) *Green City, Clean Waters* public participation program overwhelmingly favor the sentiment expressed in the above quote – green stormwater infrastructure (such as street tree trenches, sidewalk planters and vegetated bump-outs) is more desirable over gray stormwater infrastructure (such as, sewer separation, tunnels, and dams) as the preferred approach to controlling Combined Sewer Overflows (CSOs) in Philadelphia. In fact, over ninety-two percent of the more than 730 survey respondents reacted positively to the green stormwater infrastructure approach. This desire for green stormwater infrastructure is echoed throughout all components of PWD’s *Green City, Clean Waters* public participation program and confirms the wishes expressed over the past *ten years* by PWD’s long-standing watershed partners during the watershed management planning process. The benefits associated with a more environmentally-sensitive approach to improving the health of the region and the City’s waterways are almost universally understood. The citizens, partners and stakeholders that we have met and worked with believe that the benefits derived from a green approach contribute towards the creation of healthier watersheds, communities, and parks which transform into desirable places for individuals to live, work, and play.

Watershed partners value safe access to a clean stream where they can fish and relax. Likewise, City residents that participated in the *Green City, Clean Waters* programs, value a tree-lined street as it provides shade, cools the air and beautifies the block, making it more enjoyable to live on such a street. Ultimately, PWD’s watershed stakeholders desire an approach to protecting and preserving the region and the City’s waterways that can promote multiple community benefits, creating truly sustainable watersheds and cleaner waterways for the City of Philadelphia and its upstream neighbors.

2.1.2 The Demand

In recent months, the PWD has seen the desire for green stormwater infrastructure rapidly evolve into a *demand* by residents of CSO-impacted areas. Through PWD’s Model Neighborhoods initiative, PWD has received approximately 750 signatures to date (from March – July 2009), from residents petitioning for Green Streets. These residents want PWD to install green stormwater infrastructure on their block, in order to serve as a model green neighborhood in the City. The demand for Green Streets is so high that has begun to exceed PWD’s capacity to implement them. This initiative is a true testament to the overwhelmingly positive response the City is receiving from its citizens, regarding green stormwater infrastructure.

2.1.3 Partnerships, Plans and Participation

In addition to City residents, PWD understands that relationships with watershed stakeholders – upstream, as well as downstream - are critical to facilitating successful watershed management plans

and the implementation of these plans. The City also recognizes that it is vital for its citizens to understand the benefits and costs associated with controlling Combined Sewer Overflows (CSOs) and the importance of active citizen participation in the decision-making process associated with the CSO Long Term Control Plan Update (LTCPU). As a result, PWD offers an extensive partnership program and public participation program, as detailed below.

2.1.4 Watershed Goals

Through the watershed management planning process, a critical component of active watershed partnership involvement with the City’s upstream neighbors is *goal-setting*. During this phase of the watershed management planning process, watershed partners work closely with PWD on ranking their wishes for the watershed. In doing so, a final list of goals that reflects the multitude of stakeholder interests in the watershed is established.

Over the past ten years, the watershed-based goal-setting process initiated through IWMP development has taught PWD that our watershed stakeholders generally consider all watershed management goals of almost equal importance; there is no goal with a clear higher priority over others (Figure 2-1). The *Green City, Clean Waters* program aligns with this equal prioritization by addressing all aspects of watershed management instead of focusing solely on selected in-stream water quality parameters.

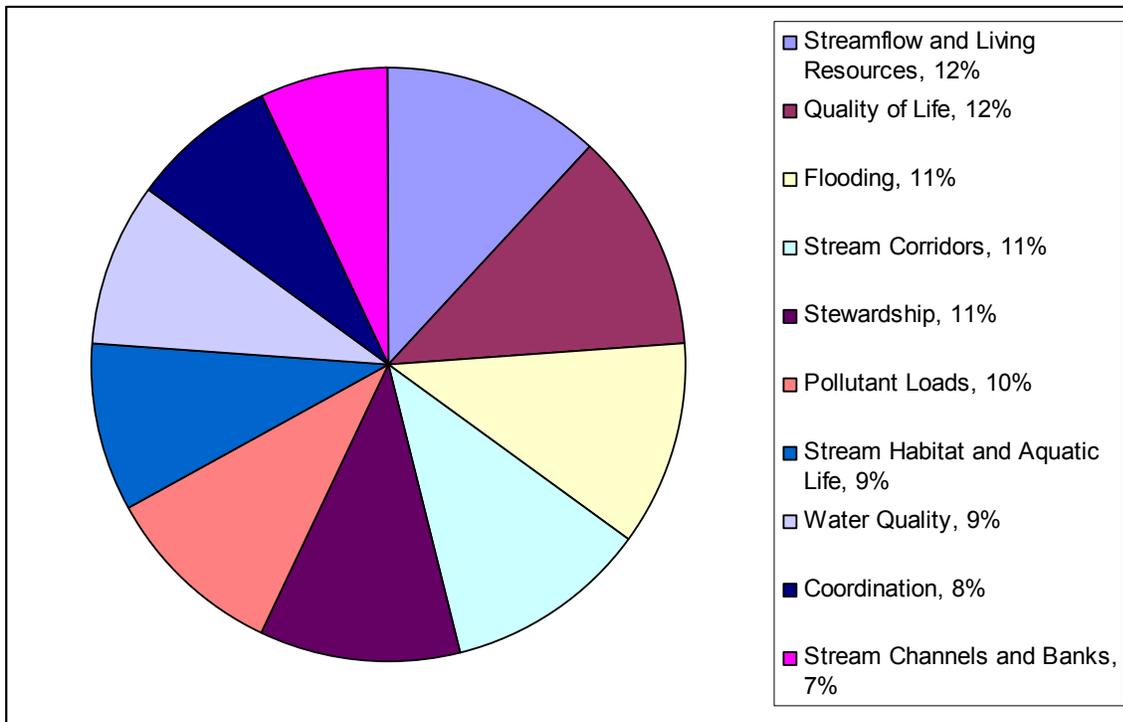


Figure 2-1: Distribution of weight percentages amongst watershed goals as prescribed by watershed partners Source: Data based on the goal-setting process for the development of the Cobbs Creek Integrated Watershed Management Plan, 2003

Eroded parks and streambanks, a lack of aquatic habitat, culverted and concreted stream sections, trash and odors in the parks and streams, a lack of safe recreation, concerns about security and a need for environmentally sound development – all of these are conditions the watershed partners want addressed under the prioritized goals. The wishes of the watershed partners are clear – they

unanimously desire communities where opportunities exist for fishing, hiking and birding in a safe park, along a clean creek, surrounded by native wildflowers and other components of a healthy stream buffer, which can protect rich and diverse aquatic life in their streams. These are the goals the watershed partners believe will lead the watersheds to attain water quality and water quantity improvements, a healthier natural environment and a better quality of life for the people who live, work and play in the watersheds.

2.1.5 Education and Outreach

In recognizing that active citizen engagement in Philadelphia is critical to the success of the CSO LTCPU, PWD has also offered a variety of education and outreach programs over the past twenty years that target the residents of the City and foster public awareness and facilitate public involvement. Most recently, innovative CSO-related outreach programs are offered *in addition* to public meetings and have garnered much attention. Through the Model Neighborhoods program, fourteen communities are currently selecting the first four blocks in their respective neighborhoods that they want to green with green stormwater infrastructure in an effort to serve as the City's model green neighborhoods. The City has also hosted the first-of-its-kind *Green City, Clean Waters* Art Exhibit, featuring artwork by local artist, Bill Kelly, in addition to informational posters on the LTCPU and its green stormwater infrastructure alternatives. The Green Neighborhoods through Green Streets survey is circulating throughout the City and on on-line blogs, gauging attitudes and opinions on Green Streets, while educating survey-takers on the green stormwater infrastructure elements highlighted in the survey. Friends abound on PWD's *Green City, Clean Waters* Facebook wall, where approximately 200 members can find public meeting announcements, view images of Green Streets and provide feedback.

2.1.6 Diversified Partnership and Public Participation are Keys to Success

PWD believes that its commitment to its diverse watershed partners, including the residents of the City, is critical to the success of the LTCPU. Detailed components of the recent CSO LTCPU programs are listed below.

2.1.6.1 LTCPU Public Participation Program

A targeted LTCPU Public Participation Program was developed to foster public awareness on CSOs and to facilitate public involvement in the decision-making process associated with the LTCPU.

2.1.6.2 LTCPU Public Participation Program Team (Team)

A LTCPU Public Participation Program Team (Team), comprised of PWD staff and consultants, was assembled to develop and produce communication strategies, materials, and events, aimed at educating the affected public on Combined Sewer Overflows (CSOs) and the LTCPU, using a variety of methods to reach different segments of the population. Furthermore, the Team is tasked with documenting all activities resulting from the public participation process.

2.1.6.3 *Green City, Clean Waters*

At the outset of the development of the LTCPU Public Participation Program, the Public Participation Program Team set out to label the LTCPU in a manner that better connected the plan to its target audience: the affected public. As a result, the LTCPU is also referred to as the *Green City, Clean Waters* program. The Team referred to it as such when referencing the LTCPU in a public context and in all communication materials in order to better capture the attention of its target audience.

The Public Participation section of the report summarizes the public participation activities conducted to reach the affected public on CSOs and the LTCPU. It also includes the activities carried out to gain input from the affected public, while also listing the materials and comments received throughout the public participation process on the development of the LTCPU.

2.2 PUBLIC INVOLVEMENT DURING THE DEVELOPMENT OF THE DRAFT LTCPU

"This LTCP is the greatest investment -- more than \$1 Billion -- that we will see in our lifetimes to redress the "sins of the past" against our neighborhoods, rivers and streams. This investment will launch the transformation of our City into the "Green ... Towne" that our founder envisioned!"

-Patrick Starr, Senior Vice President, Pennsylvania
Environmental Council

2.2.1 Advisory Committee

The Public Participation Program Team assembled a diverse group of stakeholders to comprise the *Green City, Clean Waters* Advisory Committee. The committee consists of key City, state and community representatives (including civic organizations in neighborhoods affected by sewage backups during intense rainstorms), as well as leaders of local, regional and national environmentally-minded organizations. Targeted efforts were made to invite civic leaders of the impacted neighborhoods (and who represent ratepayers), industrial users, and organizations that represent people that live near and use the impacted areas. A majority of the representatives that actively participate on the advisory committee belong to organizations whose missions concentrate on civic and environmental issues.

The *Green City, Clean Waters* Advisory Committee is responsible for providing oversight and guidance to the PWD throughout the development of the LTCPU, along with providing input specifically on the development of the communication strategies, on public information and on outreach materials. All advisory committee invitees were sent an advisory committee introductory packet, including an appeal letter, a meeting agenda, two informational backgrounders and directions to the first meeting. View Supplemental Volume 1 for Advisory Committee Invite Packet.

The *Green City, Clean Waters* Advisory Committee were convened during key stages of the LTCPU. After the initial kick-off meeting, held in the fall of 2007, the committee met twice per year. Members of the advisory committee also met with PWD staff outside of regularly scheduled advisory committee meetings to further discuss communication strategies and outreach materials, and to get feedback on specific interests. Advisory committee members were also invited to attend public meetings.

2.2.1.1 Advisory Committee Membership

The representative organizations that serve on the *Green City, Clean Waters* Advisory Committee are listed in Table 2-1.

Table 2-1 Advisory Committee Organizations

Type of Group	Organization
Business	<ul style="list-style-type: none"> • Building Industry Association
Citizen Groups	<ul style="list-style-type: none"> • Northern Liberties Neighborhood Association • Passyunk Square Neighbors Association • Washington West Civic Association
Interest Groups	<ul style="list-style-type: none"> • Community Legal Services, Inc. • Delaware River City Corporation • Impact Services Corporation • PennFuture (Next Great City) • Pennsylvania Environmental Council • Tookany/Tacony-Frankford Watershed Partnership • Schuylkill River Development Corporation • Sierra Club
Regulatory Agencies	<ul style="list-style-type: none"> • Pennsylvania Department of Environmental Protection (PADEP)
Local Government Agencies	<ul style="list-style-type: none"> • Fairmount Park Commission • Mayor's Office of Sustainability • Philadelphia Water Department

2.2.1.2 Advisory Committee Meetings

The *Green City, Clean Waters* Advisory Committee meetings are listed in Table 2-2. The agendas, presentations, sign-up sheets and comments from each meeting may be viewed in Supplemental Volume 1.

Table 2-2 Advisory Committee Meetings

Green City, Clean Waters Advisory Committee			
Meeting:	1	2	3
Date:	November 13, 2007	February 20, 2008	October 8, 2008
Time:	10:00am - 12:00pm	10:00am - 12:00pm	10:00am - 12:00pm
Place:	Fairmount Water Works Interpretative Center, Philadelphia	Fairmount Water Works Interpretative Center, Philadelphia	Fairmount Water Works Interpretative Center, Philadelphia
Number of Attendees:	9	8	16
Topics Covered:	Purpose and role of the advisory committee	Purpose and role of the advisory committee	Water quality characterization
	Overview on CSOs	Feedback on the public meeting presentation	Problem analysis
	Assessment of Philadelphia's combined sewer system	Presentation on Philly RiverCast	Goals developed for each targeted watershed
	Regulatory context of the LTCPU	Presentation on plans for Philly CSOCast	Presentation on Philly CSOCast
	Watershed management approach to CSO control		Preview of <i>Green City, Clean Waters</i> Exhibit (Refer to Section 2.2.3 for exhibit description)

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

Green City, Clean Waters Advisory Committee			
Meeting:	1	2	3
	CSO-related outreach materials/projects developed to date		
	Next steps for CSO-related public outreach		
	Timeline for future meetings and meeting topics		
General Feedback:	When presenting to the public, use less technical jargon and more images; relay problems and solutions; and demonstrate to the public why they should care.	Demonstrate what individuals (public) can do to make a difference; take extra time to explain combined sewers, separate sewers and stormwater runoff and the impacts on streams.	Create incentives for commercial and residential properties to go green; ensure communication with properties that will be affected by rate allocation; provide more details on CSO Cast; tell us more about sizing gray infrastructure and tidal influences.

Table 2-2 Advisory Committee Meetings cont'd

Green City, Clean Waters Advisory Committee		
Meeting:	4	5
Date:	April 9, 2009	August 5, 2009
Time:	10:00am - 12:00pm	10:00am - 12:00pm
Place:	Fairmount Water Works Interpretative Center, Philadelphia	Fairmount Water Works Interpretative Center, Philadelphia
Number of Attendees:	8	12
Topics Covered:	Public meeting presentation on CSO – control options & alternatives	How do we promote the final public meetings? Any final feedback to incorporate in the draft and CSO LTCPU?
General Feedback:	Use less technical jargon when presenting to the public. The presentation is too balanced regarding the green and gray infrastructures.	Promote through press and all partners. This plan is a model for all cities!

2.2.1.3 Targeted Advisory Committee Meetings

The Public Participation Program Team met with advisory committee members outside of the regularly scheduled advisory committee meetings to further discuss communication strategies and outreach materials. The Team also met with other stakeholders that were targeted for specific feedback, such as the Commercial Customer Forum Committee. These sub-committee meetings enabled the City to get specific feedback from residents or customers with specific interests in PWD’s operations and services. The meetings are listed in Table 2-3.

Table 2-3 Targeted Advisory Committee Meetings

Targeted Advisory Committee Meetings		
Meeting:	1	2
Date:	December 12, 2007	March 5, 2008
Time:	10:00am - 11:30am	10:00am - 11:30am
Place:	Philadelphia Water Department, Philadelphia	Philadelphia Water Department, Philadelphia
Attendees:	Business Industry Association (BIA)	Pennsylvania Environmental Council
	PWD	Passyunk Square Civic Association
Topics Covered:	Public outreach strategy for first public meeting and review of materials produced to date in preparation for the first public meeting	Public outreach strategy for first public meeting and review of materials produced to date in preparation for the first public meeting
	Feedback on communications strategy	Feedback on communications strategy

2.2.2 Public Meetings

The *Green City, Clean Waters* public meetings were held during key points in the development of the LTCPU in order to keep the public apprised of the plan as it progressed and, in turn, for the City to get feedback from the public on the development of the LTCPU. Effort was made to engage a full range of stakeholders; including rate payers, industrial users, and communities that live near and use the affected areas. A detailed record of the public meetings, including the number of people attending, all comments made by attendees and responses to all comments, is included in Supplemental Volume 1.

2.2.2.1 Notification

Notifications and advertisements for the public meetings are disseminated via the following media:

- Newspapers: Notices of public meetings were published at least one week prior to each public meeting. Public meetings were advertised in the following newspapers as shown in Figure 2-2 (View Supplemental Supplemental Volume 1 for more notices and ads).
 - Chestnut Hill Local
 - Germantown Courier
 - Mt. Airy Independent
 - Mt. Airy Times Express
 - North Star
 - Philadelphia Daily News
 - Philadelphia Inquirer
 - South Philadelphia Review
 - The Philadelphia Tribune
 - Westside Weekly
- Internet Websites: Notices of public meetings were also placed on the following websites:
 - PWD’s LTCPU Program website: <http://www.phillyriverinfo.org/csoltcpu>
 - Philadelphia Tribune – <http://www.phillytribune.com>

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

- Germantown Courier – <http://www.Germantowncourier.com>
 - Mt. Airy Times - <http://www.mtairytimesexpress.com/>
 - Philadelphia Inquirer/Daily News – <http://www.philly.com> (Green Section)
 - Penn Praxis - <http://www.design.upenn.edu/pennpraxis/>
 - This Week in Philly – <http://www.thisweekinphilly.com>
 - Northeast Philly – <http://www.nephillyonline.com>
 - Northern Liberties Neighbors Association – <http://www.nlna.org>
 - Philly 1 – <http://www.philly1.com>
 - Green Philly Blog – <http://www.greenphillyblog.com>
 - Yahoo – <http://www.upcoming.yahoo.com>
 - Twitter – <http://www.twitter.com>
- Radio:
 - KYW 1060AM
 - The Public Eye News WPEB 88.1FM

PHILADELPHIA INQUIRER www.philly.com B A13

Philadelphia
PWD
Water Department

GREEN CITIES, CLEAN WATERS PROGRAM:

**COMBINED SEWER OVERFLOW
LONG-TERM CONTROL PLAN
PUBLIC MEETINGS**

Please join the Philadelphia Water Department (PWD) for a series of public meetings on our Combined Sewer Overflow Long-Term Control Plan Update entitled "Green Cities, Clean Waters".

Learn about the City's combined sewer system, and PWD's proposed strategies for significantly reducing combined sewer overflows to our rivers and streams. Give us your feedback on these strategies that are designed to combine 'gray' solutions, such as underground infrastructure and 'green' solutions such as tree infiltration trenches.

1ST MEETING
WHEN: Wednesday, April 2 from 5:45 – 7:45 p.m.
WHERE: Port Richmond Library
(2987 Almond Street, Philadelphia, 19134)

2ND MEETING
WHEN: Thursday, April 10 from 6:00 – 8:00 p.m.
WHERE: Fels Community Center
(2407 S. Broad Street, Philadelphia, 19148)

3RD MEETING
WHEN: Thursday, April 24 from 6:00 – 8:00 p.m.
WHERE: School of the Future
(4021 Parkside Avenue, Philadelphia, 19104)

Figure 2-2 Public Notice

- Watershed Partnership Listservs and Advisory Committee Listservs: Notice of all public meetings was distributed through the following listservs via e-mail announcements.
 - Tookany/Tacony Frankford Watershed Partnership
 - Darby-Cobbs Watershed Partnership
 - Delaware Direct Watershed Partnership
 - Pennypack Watershed Partnership
 - Schuylkill Action Network
- Flyer: A flyer was created for the second, third and fourth series of public meetings. The flyers were placed in popular neighborhood locations (See Supplemental Volume 1 for flyers).

2.2.2.2 Public Meetings, Series #1

The *Green City, Clean Waters* public meetings are held in different locations throughout the City of Philadelphia in order to maximize the likelihood of attendance for residents from across the City (Figure 2-3 and 2-4). The public meetings are listed in Table 2-4. A detailed record of the public meetings, including the number of people attending, all comments made by attendees and responses to all comments, agendas, presentations, and sign in sheets may be viewed in Supplemental Volume 1.

The first series of public meetings included a unique informational display, referred to as the *Green City, Clean Waters* Information Fair (Figure 2-2). The fair was set up at each venue. (For details on the Information Fair, view section 2.2.5).



Figure 2-3 *Green City, Clean Waters* Information Fair



Figure 2-4 Public Meeting

The first series of public meetings covered the following topics:

- History of Philadelphia's waterways and current status of the waterways
- Combined sewer systems
- The CSO Long Term Control Plan and the National CSO Control Policy
- Introduction to CSOs per watershed
- Nine Minimum Controls
- Capital projects
- Philadelphia's Integrated Watershed Management Approach

- Watershed partnerships
- How You Can Make a Difference
- Profiles of CSO peer cities and their approach to CSO control
- Gray (traditional infrastructure) approach
- Green stormwater infrastructure approach

Table 2-4 Public Meetings, Series #1

Green City, Clean Waters Public Meetings, Series #1			
Meeting:	1	2	3
Date:	April 2, 2008	April 10, 2008	April 24, 2008
Time:	6:00 p.m. – 8:00 p.m.	6:00 p.m. – 8:00 p.m.	6:00 p.m. – 8:00 p.m.
Place:	Port Richmond Library, Philadelphia	FELS Community Center, Philadelphia	School of the Future, Philadelphia
Number of Attendees:	10	6	19
General Feedback:	Generally, the participants posed questions, regarding PWD’s proposed tank in the area; on whether gray water systems are illegal; and provided comments on green stormwater infrastructure being a better approach and on the locations of storage tanks or diversion systems.	The participants made remarks, regarding the importance of showing specific examples of green stormwater infrastructure projects and using local project examples, so that the public can better relate to the projects.	The participants asked questions, regarding building code changes, the impacts of greening on the residential water bills, and the importance of working with neighborhood groups to maintain green stormwater infrastructure projects, in addition to the importance of educating children in school about green projects.

2.2.2.3 Public Meetings, Series #2

The second series of public meetings was also held in locations throughout the City of Philadelphia in order to maximize the likelihood of attendance for residents from across the City. The meetings are listed in Table 2-5. A detailed record of the public meetings, including the number of people attending, all comments made by attendees and responses to all comments, agendas, presentations, and sign in sheets may be viewed in Supplemental Volume 1.

The second series of public meetings kicked off at the Fairmount Water Works Interpretive Center. At this site, the *Green City, Clean Waters* Exhibit was on display. Meeting participants were encouraged to tour the exhibit and the other displays in the Interpretive Center. This exhibit was also advertised at the other meeting sites. (For more details on the exhibit, view section 2.2.5)

The second series of public meetings covered the below topics:

- PWD’s mission & responsibilities
- *Green City, Clean Waters* vision
- Review of combined sewer systems and the National CSO Control Policy
- Overview of Gray (traditional infrastructure) and Green approach and examples of each approach
- Mayor’s Priorities

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

- Integrated Watershed Management Approach & Partnerships
- Existing watershed problems and conditions
- The way in which the Long Term Control Plan Update addresses the watershed problems

Table 2-5 Public Meetings, Series #2

Green City, Clean Waters Public Meetings Series #2			
Meeting:	1	2	3
Date:	October 23, 2008	December 4, 2008	December 10, 2008
Time:	6:30pm - 8:30pm	5:30pm - 7:30pm	6:00pm - 8:00pm
Place:	Fairmount Water Works Interpretative Center, Philadelphia	Cobbs Creek Community Environmental Education center, Philadelphia	Center in the Park, Philadelphia
Number of Attendees:	13	14	20
General Feedback:	The participants asked questions, regarding incentives for residential/commercial properties; communication with the larger parcels that will be affected by the rate reallocation; modeling gray infrastructure; and tidal influences on the drinking water intake on the Delaware River.	The participants asked questions, regarding the function of a tank; the longevity of gray infrastructure; models and maintenance of porous asphalt; stormwater regulations; and about CSO LTCPU plans in other cities.	The participants asked questions, regarding how project sites are selected; the reasons behind residents paying for stormwater impacts, and about how other CSO cities manage with their gray projects.

2.2.2.4 Public Meetings, Series #3

The third series of public meetings was also held in locations throughout the City in order to maximize the likelihood of attendance for residents from across the City. The meetings are listed in Table 2-6. A detailed record of the public meetings, including the number of people attending, all comments made by attendees and responses to all comments, agendas, presentations, and sign in sheets may be viewed in Supplemental Volume 1.

The third series of public meetings involved a component of a survey, titled, “Combined Sewer Overflow (CSO) -Control Approach Survey” (See Supplemental Volume 1). The responses on the survey were overwhelmingly positive – favoring green stormwater infrastructure over gray infrastructure. Table 2-7, 2-8 and 2-9 provide the feedback from the survey.

The third series of public meetings covered the below topics:

- Options for CSO-Control
- Alternatives for CSO-Control
- Approaches to CSO-Control
- Survey on CSO-Control Approach

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

Table 2-6 Public Meetings, Series #3

Green City, Clean Waters Public Meetings Series #3			
Meeting:	1	2	3
Date:	June 2 2009	June 4 2009	June 10 2009
Time:	6:00pm - 8:00pm	6:00pm - 8:00pm	6:00pm - 8:00pm
Place:	Fels South Philadelphia Community Center, Philadelphia	Waterview Recreation Center, Philadelphia	Northern Liberties Community Center, Philadelphia
Number of Attendees:	7	9	14
General Feedback:	See Table 2-7	See Table 2-8	See Table 2-9

Table 2-7 CSO Control Survey Results, Public Meeting, Series #3, FELS Center

FELS Center			
Do you like this strategy?	What do you like about the strategy?	What concerns do you have about this strategy?	Any additional information?
Yes	Makes sense!	Some Concerns about maintaining curb openings, planters, water collection units, but I'm sure they will be maintained.	
Absolutely, all-green is utopian (after all the most cost-effective), green is probably the most practical and a huge improvement over the current situation	I love the idea of replacing with more porous material. Love the Model Neighborhood approach	Cooperation from the government, narrow-minded individuals, companies, corporations. What is being done to convince, train and persuade?	How can I help? How can PWD and LoMo work together? Who pays for what?
Yes	Works well with future plans of developing the City neighbors, parts, commercial industries and business.	The cost	
I strongly prefer the all green approach, while I understand the seeming necessity of the plan mentioned above.	I like the cost-effectiveness of this plan vs. an all-gray approach, which does not offer any of the socioeconomic benefits.	Can't think of any at this time.	Perhaps offering greening solutions and tips on billing statements for residents who cannot attend community meetings but are interested in green approach.
Yes! I have been studying green infrastructure economics & the PWD's strategy is probably the most progressive program for stormwater management. I want to see it implemented across the City.	The fact that PWD has used triple bottom line accounting to prove the value of Green Infrastructure. Also, that PWD is holding presentations like this for public education, input and feedback.	How are we going to pay for it as a City? How can we implement this strategy over as a short amount of time as possible?	More information on the model neighborhood program and getting our blocks involved in green infrastructure renovations on our homes and streets.

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

Table 2-8 CSO Control Survey Results, Public Meeting, Series #3, Waterview Recreation Center

Waterview			
Do you like this strategy?	What do you like about the strategy?	What concerns do you have about this strategy?	Any additional information?
Yes	It captures the water at or near the source which prevents or helps to prevent problems as water travels through sewer system to reduce stress on the system.	Convincing the gov't that this investment will be beneficent in the short and long tem	
	Lowering crime, prettier neighborhood	Tailor it more to homeowners; Use more pictures	
Yes	All	Not a thing	Get the word out more
I endorse the green approach for the clear social & environmental benefits. The cost savings and improved quality of life in a greener Philly	The increased air quality, health benefits, recreation opportunities in the green solutions.	How to build public support for letting PWD green their blocks. It will be a significant communication and public involvement challenge	Have some case studies available about the commercial and industries. Handouts no more needed in the presentation. Is there a film or short documentary about a model neighborhood here on Philly?
Yes, with more incentives \$ for the individual property owners	It has a more sustainable methodology to a long term problem.	[My concern is] that the solutions are not geared or focused on the individuals own home/property.	Producing a model neighborhood in Philadelphia that can be visited.
Love it	I like the whole idea of the greening of Philadelphia. There are so many benefits to the <i>Green City, Clean Waters</i> initiative.	[My concern is] obtaining support from local residents, businesses, organizations and government agencies. But keep up the good work - the more you educate people about this program, the more positive feedback.	Great presentation! Very interesting and informative. Thanks.
Yes	most of green improvements	more knowledge in areas (urban)	Put into schools and organizations
Yes	Reality	Traditional business men might block the City plans if they're gonna lose profit	Stick to the plan

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

Do you like this strategy?	What do you like about the strategy?	What concerns do you have about this strategy?	Any additional information?
yes	This presentation was very informative. I didn't really understand the issues before. Green is the best approach.	My concern is that more people need to be informed so then a greater support and participation.	
yes, it's great	Greening space is always good. Ancillary benefits of green infrastructure are also great. It's the environmental approach.	No grey water plan, which would lower sewer stress. Residences should have rate incentive to manage the first inch.	More info on impact. For example, how many square feet of green roof per mile do you need to reduce x% of stormwater events. Also, how much work do you have to do on private land?
Absolutely	Increased green - trees, plants, etc. improved environment - healthier waterways	Maintenance - Who will maintain the garden? Is it PWD or neighbors?	Could the presentation be available online (maybe shorter) so people who are busy can watch it when they have free time.
Absolutely! No more gray - Green, Green, Green	All the benefits, triple bottom line return to green away from more infrastructure and enormous pipes.	Maintenance	Timeline
Yes, I think it is great.		Long term maintenance, who is responsible? May be difficult to get some communities on board with maintaining these features.	It would be helpful to see examples on how effective the "green approach" has been in the past. For example, how do you measure the amount of runoff captured? Flow meters? Water quality sampling?
I love it very much. The added benefits of greening (health, performance, ecological, monetary) make it the obvious choice.	See before	Changing public perception	The current state of water resources - running out, polluted and undervalued

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

Table 2-9 CSO Control Survey Results, Public Meeting, Series #3, Northern Liberties Community Center

Northern Liberties Community Center			
Do you like this strategy?	What do you like about the strategy?	What concerns do you have about this strategy?	Any additional information?
Yes	Everything sounds like a no-brainer.	Will these spaces become breeding areas for the mosquitoes?	
Yes	Aesthetics and cost	Convincing row house Philadelphians that it will work	How to hook-up a rain barrel; how will the City handle the additional leaves, horticultural involvement, etc.
Yes	The multitude of benefits of greening. Reduced stormwater runoff, increased aesthetics, air quality improvement reduction of waste diverted to the Delaware river	none	
It is a wonderful and natural process	I didn't hear much because I was late, however, I read about it (not much). I understand that the strategy presented is more complex and thorough than some	I cant say since I didn't hear the entire presentation	No
Questionable need more info	good presentation	need more info	need more info
yes	Balance, presentation of alternatives, figures. But needs to be 20 min shorter	Overestimates Philadelphians willingness to embrace change. For example, god luck putting cut outs and trees in St. Monica's	where people park too deep for blocks
yes	beauty of landscape in City; protects rivers and streams		
yes	Reality	Traditional business men might block the City for they lose profit	stick to the plan
yes	This presentation was very informative. I didn't really understand the issues before. Green is the best approach.	My concern is that more people need to be informed so then a greater support and participation.	

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

Do you like this strategy?	What do you like about the strategy?	What concerns do you have about this strategy?	Any additional information?
yes, it's great	Greening space is always good. Ancillary benefits of green infrastructure are also great. It's the environmental approach.	No grey water plan, which would lower sewer stress. Residences should have rate incentive to manage the first inch.	More info on impact. For example, how many square feet of green roof per mile do you need to reduce x% of stormwater events. Also, how much work do you have to do on private land?
Absolutely	Increased green - trees, plants, etc. improved environment - healthier waterways	Maintenance - Who will maintain the garden? Is it PWD or neighbors?	Could the presentation be available online (maybe shorter) so people who are busy can watch it when they have free time.
Absolutely! No more gray - Green, Green, Green	All the benefits, triple bottom line return to green away from more infrastructure and enormous pipes.	maintenance	Timeline
Yes, I think it is great.		Long term maintenance, who is responsible? May be difficult to get some communities on board with maintaining these features.	It would be helpful to see examples on how effective the "green approach" has been in the past. For example, how do you measure the amount of runoff captured? Flow meters? Water quality sampling?
I love it very much. The added benefits of greening (health, performance, ecological, monetary) make it the obvious choice.	see above	changing public perception	The current state of water resources - running out, polluted and undervalued

2.2.2.5 Public Meetings, Series #4

The fourth series of public meetings were held primarily outdoors – at green stormwater infrastructure demonstration sites, located throughout the City, in order to maximize the likelihood of attendance for residents from across the City. In order to drum up attention for the public meetings, the *Green City, Clean Waters* Exhibit is traveling throughout the City, serving to educate and to promote the final round of public meetings and the LTCPU Summary Report. Along with the exhibit, Green Stormwater Infrastructure fact sheets are available along with comments sheets for participants to leave comments. Table 2-10 lists the venue sites hosting the exhibit. The meetings are listed in Table 2-11. A detailed record of the public meetings, including the number of people attending the meetings, all comments made by attendees and responses to all comments, agendas, presentations, and sign in sheets may be viewed in Supplemental Volume 1.

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

Comments on the exhibit may also be viewed in Supplemental Volume 1. The focus of the fourth series of public meetings is the LTCPU Summary Report. The report will be shared with the participants. PWD will walk them through the report. Also, PWD will highlight the local model green stormwater infrastructure demonstration project on-site. PWD plans to solicit final comments from participants.

The fourth series of public meetings will cover the below topics:

- LTCPU Summary Report
- Feedback on the Summary Report
- Model green stormwater infrastructure demonstration project

Table 2-10 Green City, Clean Waters Exhibit

Green City, Clean Waters Exhibit			
Exhibit	Date	Time	Location
1	July 21- August 21, 2009	Tuesday – Saturday 10:00pm - 5:00pm Sunday 1:00pm – 5:pm	Fairmount Water Works Interpretive Center, Philadelphia
2	July 20 -24, 2009	Monday – Friday 10:00am - 1:00pm	Northern Liberties Community Center, Philadelphia
3	July 27-31, 2009	Monday and Wednesday 12:00pm - 8:00pm Tuesday, Thursday and Friday 10:00am – 5:00pm	Walnut Street West Library, Philadelphia
4	August 3-7, 2009	Monday – Friday 7:00am - 9:00pm	Waterview Recreation Center, Philadelphia
5	August 10-14, 2009	Monday – Friday: 9:00am - 9:00pm	Columbus Square Recreation Center, Philadelphia
6	August 17-21, 2009	Monday – Thursday: 9:00am - 9:00pm Friday: 9:00am – 6:00pm	Parkway Central Library, Philadelphia

Table 2-11 Green City, Clean Water Public Meetings, Series #4

Green City, Clean Waters Public Meetings, Series #4				
Meeting:	1	2	3	4
Date:	August 18 2009	August 19 2009	August 20 2009	August 25 2009
Time:	6:00pm - 8:00pm	6:00pm - 8:00pm	6:00pm - 8:00pm	6:00pm - 8:00pm
Place:	Waterview Recreation Center, Philadelphia	Northern Liberties Community Center, Philadelphia	Columbus Square Recreation Center, Philadelphia	Mercy Hospital, Philadelphia
Number of Attendees:	15	34	20	25
General Feedback:	Very Positive. View section 2.5.1 for testimonials from public meetings.	Very Positive. View section 2.5.1 for testimonials from public meetings.	Very Positive. View section 2.5.1 for testimonials from public meetings.	Very Positive. View section 2.5.1 for testimonials from public meetings.

2.2.2.6 Targeted Public Meetings

Components of the *Green City, Clean Waters* presentations and materials prepared for the LTCPU public meetings were also presented at the following meetings:

Table 2-12 Targeted Public Meetings

Targeted Public Meetings			
Event	Date	Place	Address
Citizen's Advisory Committee (CAC) Meeting	February 15, 2008	Philadelphia Water Department	1101 Market St. Philadelphia
South Philadelphia Storm Flood Relief Civic Meeting	April 24, 2008	Maria Goretti High School	1736 S 10th St. Philadelphia
Penn Praxis "10 Action Steps" event	May 26, 2008	Seaport Museum	Penn's Landing, Philadelphia
Rally Around Green Streets with State Senator Fumo	June 12, 2008	Columbus Square & Liberty Lands Park	N 3rd St Philadelphia
<i>Green City, Clean Waters</i> Exhibit Opening and Artist Reception for Bill Kelly	October 16, 2008	Fairmount Water Works Interpretative Center,	640 Waterworks Drive Philadelphia
Columbus Square Storm Flood Relief Civic Meeting	October 27, 2008	Columbus Square Recreation Center,	12th & Wharton Sts. Philadelphia
Washington West Storm Flood Relief Civic Meeting	October 29, 2008	Jefferson Hospital,	111 South 11th Street Philadelphia

2.2.3 Watershed Partnerships

Stakeholder buy-in is critical to informing the PWD approach to implementing CSO-control alternatives. A diversity of stakeholder perspectives is considered in the development of each stage in the planning process of the LTCPU in order to ensure that the plan is representative of stakeholder interests. Through this approach, a green stormwater infrastructure program would be built based on the public demand for it. Recognizing this, the PWD has helped to develop stakeholder watershed partnerships for each watershed that drains to the City of Philadelphia through its integrated watershed planning approach. The purpose of each watershed partnership is to share resources and expertise among partners and to coordinate information with other municipalities within the same watershed. The ultimate goal of the watershed planning approach is to cultivate partnerships committed to implementing the watershed management plans once completed.

2.2.3.1 Tookany/Tacony-Frankford Watershed Partnership

In 2000, the PWD launched the Tookany/Tacony-Frankford Watershed Partnership (TTF) with its partners, as an effort to connect diverse stakeholders as neighbors and stewards of the watershed. The partnership was integral in developing the Tookany/Tacony-Frankford Integrated Watershed Management Plan (TTF IWMP).

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

In 2005, the TTF Partnership formally incorporated as an independent non-profit, composed of environmental organizations, community groups, government entities, and other watershed stakeholders. Now the Partnership has embarked on implementing the TTF IWMP and advancing a wide range of initiatives for the good of the watershed.

The mission of the TTF Watershed Partnership is:

“To increase public understanding of the importance of a clean and healthy watershed; to instill a sense of appreciation and stewardship among residents for the natural environment; and to improve and enhance our parks, streams, and surrounding communities in the Tookany/Tacony-Frankford Watershed.”

A range of public education and outreach activities and events have resulted from the watershed planning approach in the Tookany/Tacony-Frankford Watershed. Please refer to Table 2-13 for a description of the events and activities that took place through the watershed planning approach, which occurred prior to the updating of the Long Term Control Plan in 2008.

The below activities and events cover components of the LTCPU and/or the topic of “watershed management” in the Tookany/Tacony-Frankford Watershed, from the inception of the update of the LTCP in early 2008 alone:

Table 2-13 Tookany/Tacony-Frankford Watershed Partnership Outreach Events

Tookany/Tacony-Frankford (TTF) Watershed Partnership Outreach Events				
Event Title:	Location	Date:	Description	Number Served
Watershed Lessons	Taylor Elementary School	January 22, 2008	One 45 minute watershed lesson co-taught with Awbury Arboretum's Director of Outreach and Public Programs. Watershed lesson included the "Curly the Catfish" activity (importance of clean water and good stewardship).	54 third graders during school time
Watershed Lessons	Emlen Elementary School (Upshal & Chew)	March 12, 2008	One 45 minute watershed lesson co-taught with Awbury Arboretum's Director of Outreach and Public Programs. Watershed lesson included the "Curly the Catfish" activity (importance of clean water and good stewardship).	15 7th graders, 15 3rd graders, 15 2nd graders after school
"Stormwater Management for Business" Lecture	Elkins Park Rotary Club	March 12, 2008	30 minute presentation on ways businesses can help manage stormwater and reduce non-point source pollution. Main presentation given by PWD's Watersheds Program coordinator.	11 Rotary Club Members (adults)
"Stormwater Management for Business" Lecture	Cheltenham/Rockledge Rotary Club	March 20, 2008	31 minute presentation on ways businesses can help manage stormwater and reduce non-point source pollution. Main presentation given by PWD's Watersheds Program coordinator.	26 Rotary Club Members (adults)

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

Tookany/Tacony-Frankford (TTF) Watershed Partnership Outreach Events				
Event Title:	Location	Date:	Description	Number Served
Wingohocking Creek Watershed Historic Stream Mystery Tour	TTF Watershed	April 5, 2008	The Wingohocking Creek, the largest creek in the City to be encapsulated in a sewer, ran from the top of East Mt Airy, through Germantown, to Juniata Park. In the four hours of the tour, we'll cover some natural history and a lot of human history, concentrating on the important role of man-made drainage structures in the development of the City.	33 participants
		October 11, 2008		26 participants
		December 18, 2008		12 participants
Rain Barrel Workshop	Glenside-Weldon Elementary School	April 16, 2008	Rain Barrel Workshop	61 families
Stream Cleanup	Wall Park	April 19, 2008	Volunteer stream clean up day.	12 adults, 3 children
			28 bags of trash collected	
			12 evaluation forms completed	
Rain Barrel Workshop	Cedarbrook Middle School	April 26, 2008	Rain Barrel Workshop	79 families
TOXTOUR w/ Christopher Swain	Cedarbrook Middle School	April 27, 2008	Hosted Christopher Swain	15 adults
			Arranged volunteers and assisted with e-waste collection (950 lbs)	
			Unattended TTF Watershed display table	
TOXTOUR school visit	Cedarbrook Middle School	April 28, 2008	Christopher spoke to 7 classes about clean water issues and e-waste	4adults, 150 children (7th graders)
Mt. Airy Day	Cliveden Historic Site (6401 Germantown Ave)	May 3, 2008	Shared a display table with Awbury Arboretum	30 children, 15 adults
			Talked to adults about the TTF Watershed information	
			Did the Nature's Filter activity with children	
Jenkintown Fair		May 10, 2008	Hosted TTF display table	23 adults, 1 child
			Talked to adults about the TTF Watershed information	
Park Clean Up and Invasive Removal	Tacony Creek Park (Snake Road by I and Ramona)	May 14, 2008	Frankford high School City Year students collected trash and removed invasive in Tacony Creek Park, led by Jackie Olson, FPC	4 Frankford High School Students, 3 City Year Leaders (college age)
TTF Watershed Bus Tour	Multiple sites in the TTF Watershed	June 27, 2008	5-hour bus Tour of 7 demonstration sites across the TTF Watershed	25 adults, 11 speakers

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

Event Title:	Location	Date:	Description	Number Served
Model Neighborhood Presentation	Chew & Belfield Organization - 1124 Chew Avenue	August 18, 2008	2 hour meeting with neighborhood block captains, Renovo Developers, Mt Airy USA and Awbury Arboretum. The sole agenda item was the Model Neighborhood Project. Sarah described the program and then a long discussion followed in which feedback and suggestions about neighborhood improvement were given.	11 adults
Belfield Block Party	6424 Belfield	August 23, 2008	Hosted a TTF display table with Model Neighborhood information highlighted. 2.5 hours	15 adults, 2 teens
Volunteer Work Day in Tacony Creek Park	Tacony Creek Park in Rising Sun and Olney	August 26, 2008	In collaboration with Fairmount Parks Commission, removed invasive species and trash from Tacony Creek Park for 3 hours with Red Cross volunteers	4 adults, 4 teens
Watershed Lessons, Academy for Middle Years	Awbury Arboretum	August 27, 2008	Taught a Watershed lesson while touring the Arboretum property. Focused on the onsite stormwater management demonstration projects.	6 adults, 50 7th-graders
Rain Barrel Workshop	Waterview Recreation Center	September 11, 2008	Hosted Rain Barrel Workshop taught by PWD staff	48 families
			Porous pavement demonstration by PHS staff	
			Model neighborhood presentation by TTF	
Model Neighborhood Presentation	Chew & Belfield Organization - Corner of Chew and Belfield	September 16, 2008	Presented the Model Neighborhood Project to residents of Chew and Belfield neighborhood as part of their monthly block meeting. Surveys about neighborhood improvement were distributed.	24 adults, 1 teen
Coast Day	Penn's Landing	September 20, 2008	Hosted a TTF display table with Awbury Arboretum. Did the "What's Your Watershed Address?" with hundreds of children and adults using large-scale street/watershed maps. 4 hours	approx. 200 adults and children
Model Neighborhood Presentation	Chew & Belfield Organization - E. Herman St. near Chewfield Avenue	September 22, 2008	Presented the Model Neighborhood Project to residents of E. Herman Street as part of their monthly block meeting. Project ideas were shared verbally and surveys about neighborhood improvement were completed	18 adults

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

Event Title:	Location	Date:	Description	Number Served
Senior Environment Fair	Center in the Park, Senior Environment Corps	September 26, 2008	Hosted a TTF display table with Model Neighborhood information highlighted. Surveys about neighborhood improvement were distributed. 5 hours.	50 adults
Stream Clean Up	Wall Park	September 28, 2008	Volunteer neighborhood clean up day. 16 evaluation forms completed and 20 bags of trash collected.	9 adults, 12 children
			20 bags of trash collected 16 evaluation forms	
Neighborhood Clean Up	1124 Chew Avenue (Chew and Walnut Lane)	October 11, 2008	Volunteer neighborhood clean up day.	19 adults, 5 children
			11 tons of trash 15 evaluation forms completed	
Neighborhood Clean Up	Whitaker and F St	November 8, 2008	Volunteer clean up day run by PA clean ways in collaboration with PWD, Streets Department, Penn DOT, FPC, and TTF.	38 volunteers
			231, 860 lbs (115.93 tons)	
TOXTOUR school visit	High School of the Future	December 3-7, 2008	Christopher Swain, swimmer conservationist presented his work at numerous schools throughout Cheltenham and Philadelphia. He spoke about clean water issues, his past work swimming rivers to raise awareness, his upcoming swim (1000+ miles down the Atlantic Coast from Boston to Washington DC), and the problems associated with common e-waste disposal techniques.	60 HS students
	Arcadia University			15 college students, 1 adult
	Cheltenham high School			58 HS Students
	Elkins Park Elementary			25 6th graders
	Cedarbrook Middle School			210 7th and 8th graders
	Glenside Elementary			350 K-4th graders
TOXTOUR, Ethical Electronics Recycling Event	Cedarbrook Middle School	December 6, 2008	Hosted a drive to collect used electronics for ethical recycling at a fee of \$1/lb.	150 families
			10,524.7lbs of e-waste collected	
			\$1000 proceeds to TTF	
			150 contacts added to mailing list	

2.2.3.2 Darby Cobbs Watershed Partnership

In 1999, the Darby Cobbs Watershed Partnership (DCWP) was initiated in an effort to connect residents, businesses, and government as neighbors and stewards within the vast drainage area. Over the course of the last nine years, this partnership has provided a driving force for stakeholder planning and implementation of the Darby Cobbs Integrated Watershed Management Plan (DC IWMP).

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

The Darby Cobbs Watershed Partnership (DCWP) mission is:

"To improve the environmental health and safe enjoyment of the Darby Cobbs Watershed by sharing resources through cooperation of the residents and other stakeholders in the Watershed. The goals of the initiative are to protect, enhance, and restore the beneficial uses of the Darby-Cobbs waterways and riparian areas."

A range of public education and outreach activities and events have resulted from the watershed planning approach in the Darby Cobbs Watershed. Please refer to Table 2-14 for a description of the events and activities that took place through the watershed planning approach, which occurred prior to the updating of the Long Term Control Plan in 2008.

The below activities and events cover components of the LTCPU and/or the topic of “watershed management” in the Darby Cobbs Watershed, from the inception of the update of the LTCP in early 2008 alone:

Table 2-14 Darby Cobbs Watershed Partnership Outreach Events

Darby Cobbs Watershed Partnership Outreach Events				
Event Title:	Location	Date:	Description	Number Served
Second Ward porous Basketball Court hoops Challenge	Second Ward playground in Upper Darby Township, PA	September 9, 2007	In celebration of the porous pavement basketball court, an Enviroscape demonstration was set up, along with an awards ceremony to honor the Darby Cobbs Watershed Partnership.	25 participants
25th Annual Darby Creek Valley Association Stream Clean Up	77 square miles of the Darby Watershed	April 25, 2008	Help continue the "Ribbon of GREEN" from Tinicum to Tredyffrin	
Indian Creek East Branch Walking and Bus tour	Friend's Central School (1101 City Ave., Wynnewood	May 17, 2008	This event involved a bus/walk tour of stormwater Best Management Practices (BMP) projects and stream restoration projects, along with presentations by project leaders on the visited sites. Lunch was included.	20 participants
Free Rain Barrel Workshop	Christ Lutheran Church (7240 Walnut St, Upper Darby)	May 29, 2008	This Rain Barrel Workshop provided a brief overview of the rainwater cycle, the importance of stormwater management at the property level, and how to install and use a rain barrel. The first 50 households that pre-registered for the workshop received a free rain barrel. This event was offered to residents of the Darby-Cobbs Watershed.	45 participants
Delaware County Riverfront Ramble	Along the Delaware Riverfront	September 20, 2007	This day included community service events, education, other activities, dining and fireworks in honor of the river 30+ contacts made from this event	

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

Darby Cobbs Watershed Partnership Outreach Events				
Event Title:	Location	Date:	Description	Number Served
Clean Up in Morris Park	Papa Playground (Lansdowne Ave and 68th St.)	September 20, 2007	A community clean up took place in the park	40+ volunteers
Thinking Like a Watershed	Ridley Creek State Park	November 4, 2008	The purpose of this workshop was to educate participants about watersheds and how to enhance the beneficial features of an urban system. This free one day workshop was intended for teachers of grades four through eight. Participants enjoyed the hands-on activities offered through this workshop, which included trudging through the stream and receiving in-class instructions while participating in activities.	9 School teachers

2.2.3.3 Delaware Direct Watershed Partnership

The Delaware Direct Watershed Partnership was formed in the fall of 2007 to support the River Conservation planning process for the Delaware Direct River Conservation Plan. A myriad of stakeholders are involved– non-profits, state and local government, in addition to community representatives. Each of the stakeholders represents a current planning initiative, such as the GreenPlan Philadelphia, the Central Delaware Master Plan, and the DRBC Water Resources Plan, among others. Through the Partnership, the representatives come together in a coordinated manner to communicate the best possible method to achieve protection of the natural resources and their sustainability in the urbanized Delaware Direct Watershed.

The below meetings and events involved components of the LTCPU and/or the topic of “watershed management” in the Delaware Direct Watershed:

Table 2-15 Delaware Direct Watershed Partnership Outreach Events

Delaware Direct Watershed Partnership Outreach Events				
Event Title:	Location	Date:	Description	Result
Pulaski Pier River Conservation Plan Workshop #1	Pennsylvania Horticultural Office (PHS) Office, Philadelphia	April 30, 2008	Research and problem-solving session on Pulaski Pier as a park, wetland and riparian restoration park expansion	35 attendees representing 26 organizations
21st Century Parking Solutions River Conservation Plan Workshop #2	Philadelphia Seaport Museum, Philadelphia	July 4, 2008	Research and problem-solving session on 21st century parking solutions	32 attendees representing 17 organizations and businesses

Delaware Direct Watershed Partnership Outreach Events				
Event Title:	Location	Date:	Description	Result
Green and Complete Streets River Conservation Plan Workshop #3	Penn Treaty Park, Philadelphia	July 31, 2008	research and problem solving session on green and complete streets	39 attendees representing 27 organizations and businesses
Healthy Neighborhoods River Conservation Plan Public Meeting #1	Center for Architecture, Philadelphia	12/4/2008	Rather than a traditional lecture format, the meeting plan provided for a series of activities and one-to-one discussions. The open house format allowed for drop in visitations over a several hour time frame.	Estimated 60 attendees from surrounding watershed and neighborhoods

2.2.3.4 Schuylkill Action Network (SAN)

The Schuylkill Action Network (SAN) was initiated in 2003 as a joint collaborative network supported by the US EPA, PADEP and City of Philadelphia along with numerous partners from throughout the Watershed.

The purpose of the Schuylkill Action Network is: *"To improve the water resources of the Schuylkill River Watershed by working in partnership with state agencies, local watershed organizations, water suppliers, local governments, and the federal government to transcend regulatory and jurisdictional boundaries in the implementation of protection measures."*

Although the City of Philadelphia has long been a leading supporter of the Schuylkill Action Network and an active partner in the events and activities taking place throughout this large drainage basin, the events and activities relevant to the portion of the watershed that lies within the City of Philadelphia are in their inception. The Environmental Committee of the Schuylkill River Development Corporation (SRDC) will be charged with reviewing the Integrated Watershed Management Plan associated with the in-City portion of the Schuylkill Watershed. Through the development of the goals and the implementation of the plan, the public participation events and activities will emerge.

2.2.4 Existing Educational Programs

The PWD offers a variety of educational programs that target the residents of the City and upstream watershed partners.

2.2.4.1 Model Neighborhoods

In recent months, the PWD has seen the desire for green stormwater infrastructure rapidly evolve into a *demand* by residents of CSO-impacted areas. Through PWD's Model Neighborhoods initiative, PWD has received approximately 750 signatures to date (from March – July 2009), from residents petitioning for Green Streets. These residents want PWD to experiment with green stormwater infrastructure on their block, in order to serve as a model green neighborhood in the City. Currently, the demand for Green Streets is so high that it has exceeded PWD's capacity to implement them. This initiative is a true testament to the overwhelmingly positive response the City is receiving from its citizens, regarding green stormwater infrastructure. View Figure 2-5 for an example of a Green Streets/Model Neighborhoods Petition and view Supplemental Volume 1 for copies of the petitions received to date.

The Model Neighborhoods initiative is a new program (as of January, 2009). It is the result of the PWD partnership with Citizens for Pennsylvania's Future and the Next Great City coalition, Fairmount Park, Pennsylvania Horticultural Society and a diverse number of civic representatives, among other City department staff and environmentally-minded partners. The goal of the initiative is to transform the neighborhoods of Philadelphia into model green communities that manage stormwater in innovative ways. These neighborhoods will showcase green stormwater infrastructure elements, such as street tree trenches, sidewalk planters, and vegetated bump outs/curb extensions. The program is currently targeting four blocks in approximately fourteen willing neighborhoods in the City of Philadelphia, helping these communities become models for green stormwater infrastructure projects. The ultimate goal is to design projects that will manage stormwater runoff on one greened acre of each participating neighborhood. Design and construction of the green stormwater infrastructure elements will take place in the first year of the program for the first three targeted neighborhoods - Northern Liberties, Passyunk Square and Awbury/Cliveden.



Green Streets/Model Neighborhood Petition

I, Andrew Kerber, as the representative for the 2500 block of Grays Ferry Avenue, submit this petition as evidence that nearly 100 percent of the residents on my block want to find out more about becoming one of the City's Green Streets (which can include trees with planters, curb bumpouts, above ground planters, and other street features that better manage rainwater runoff and improve the beauty of our block).

#	Name	Address
1	Andrew Kerber	2534 Grays Ferry Ave
2	[Signature]	2527 Grays Ferry Ave
3	[Signature]	2527 GRAYS FERRY AVE
4	[Signature]	2521 Grays Ferry Ave
5	[Signature]	2519 Grays Ferry Ave
6	[Signature]	2519 Grays Ferry Ave
7	[Signature]	2519 Grays Ferry Ave
8	[Signature]	2527 Grays Ferry Ave
9	AMES CAMPBELL	2531 GRAYS FERRY AVE
10	Nadeleine Gates	2515 Grays Ferry Ave
11	[Signature]	2536 Grays Ferry Ave
12	[Signature]	2523 Grays Ferry Ave
13	[Signature]	2526 Grays Ferry Ave
14	[Signature]	2527 GRAYS FERRY AVE
15	[Signature]	3532 Carpenter St
16	[Signature]	2526 Grays Ferry Ave
17	[Signature]	2523 Grays Ferry Ave
18	[Signature]	2546 Grays Ferry Ave
19	Rosevelt Logan	2519 Grays Ferry Ave
20		
21		
22		
23		
24		
25		
26		

Figure 2-5 Green Streets/Model Neighborhoods Petition

The Model Neighborhoods program requires a great deal of public outreach in order to generate public awareness and enthusiasm for green stormwater infrastructure components. The civic partners representing each neighborhood are pivotal to the success of each community, as they initiate the grass-roots civic engagement process that leads a neighborhood to become considered for this program. Table 2-16 lists the current Model Neighborhoods and partners.

Table 2-16 Model Neighborhoods and Civic Partners

Location	Civic Partner
Passyunk Square	Passyunk Square Civic Association
Awbury/Cliveden	Tookany/Tacony-Frankford (TTF) Watershed Partnership
Northern Liberties	Northern Liberties Neighbors Association
Pennsport	Pennsport Civic Association
New Kensington/ Fishtown	New Kensington CDC
Point Breeze	South Philadelphia Homes, Inc./ Newbold/Redevelopment Authority (RDA)
North Philadelphia	Asociación Puertorriqueños en Marcha (APM)
Manayunk	Manayunk Development Corp/ Roxborough CDC
East Falls	East Falls Development Corporation
Lower Moyamensing	Lower Moyamensing Civic Association
Cobbs	Cobbs Creek CDC
Haddington	Haddington CDC
Gray's Ferry	South of South Neighborhood Association (SOSNA)
Allegheny West	Allegheny West Civic

A number of Model Neighborhoods educational materials and programs have been developed with additional outreach tools currently in production. Fairmount Park has led a series of free walks in the Model Neighborhoods, titled “Tree Walk on Your Blocks” in Northern Liberties, Passyunk Square and Awbury/Cliveden. They have also offered a free summer environmental education program for children in Model Neighborhoods titled, H2O & You, Trees are Terrific and Steppin into Nature. By September, 2009, these summer programs are projected to reach approximately 1,175 children, along with 91 adults, in the first three targeted Model Neighborhoods - Northern Liberties, Passyunk Square and Awbury/Cliveden. Fairmount Park has also produced a number of informational fact sheets and handouts, regarding tree care and maintenance. View Table 2-13 for examples of the Model Neighborhoods education materials and Supplemental Volume 1 for all materials.

PWD has developed a Model Neighborhoods overview brochure, informational handouts on trees and laterals, along with other outreach materials (See Table 2-17). Photo simulations of green stormwater infrastructure elements have been created for each of the first three neighborhoods - Northern Liberties, Passyunk Square and Awbury/Cliveden. The photo simulations depict a street before and after the implementation of green stormwater infrastructure projects, providing strong visuals to help residents better visualize a Green Street in their neighborhood. PWD is also currently working on creating a Model Neighborhoods Kit. The kit will serve as an orientation packet for Model Neighborhoods civic partners, including an array of materials to best prepare civic leaders reaching out to residents for Model Neighborhoods support. View Figure 2-6 for an example Green Street photo simulation and Supplemental Volume 1 for other simulations.



Before



After

Figure 2-6 Example of Model Neighborhoods Photo Simulation Set (3rd and Brown Streets, Northern Liberties)

Table 2-17 Examples of Model Neighborhoods Educational Materials

Model Neighborhoods Educational Materials			
Three Typical Stormwater Management Project		Sidewalk Trees and House Sewer Laterals	
Model Neighborhoods Brochure		Street Trees in Philadelphia Background Information	
Model Neighborhoods Tree Walk on your Block		Summer Outreach Programs for Camps	
Philadelphia Street Trees		Before and After Photo Simulation	

2.2.4.1.1 PENNVEST

The City of Philadelphia was approved for a \$30 million loan administered by PENNVEST (Pennsylvania Infrastructure Reinvestment Authority) in April, 2009. These funds are dedicated to the implementation of innovative, green stormwater infrastructure projects throughout Philadelphia. PENNVEST funds will cover the cost of the first year of Model Neighborhoods projects, along with installation of green stormwater infrastructure in conjunction with PWD’s planned water and sewer replacement work, along with interagency cooperation with Streets Department to identify opportunities for green streets implementation within the CSS drainage area.

2.2.4.2 Green Neighborhoods through Green Streets Survey

“How beautiful everything is! 100% behind this effort in all ways!”

- Response on the Philadelphia Water Department’s “Green Neighborhoods through Green Streets Survey.” The question asked, “*Are you in favor of greening?*”

PWD developed a qualitative survey titled, Green Neighborhoods through Green Streets. The purpose of the survey is to understand how the targeted audience (City residents) feels about green stormwater infrastructure elements, such as Green Streets (*e.g.*, likes and dislikes), and to get the survey-taker to start thinking about green stormwater infrastructure in Philadelphia neighborhoods through images, therefore making the survey an educational tool, as well as serving as qualitative research. View Figure 2-7 for sample question from Green Neighborhoods through Green Streets Survey.

Over ninety-two percent of the 734 survey responses to date are in favor of a green stormwater infrastructure-based approach. A longer on-line survey was posted on City and partner websites, in addition to a PWD - hosted Facebook page, partner sites and other websites. Representatives from every zip code in the City (except for one) participated in the survey. View Tables 2-18 and 2-19 for sample survey results (March – August, 2009) and view Supplemental Volume 1 for all survey results and the Green Neighborhoods through Green Streets (complete) Survey.

1. After viewing each set of images below, are you in favor of greening in your neighborhood?

Yes
 No

a) What do you like about the images?
b) What don't you like about the images?



Figure 2-7 Green Neighborhoods through Green Streets Survey Sample Question (Images from Wallace Roberts & Todd, LLC)

Table 2-18 Green Neighborhoods through Green Street Survey - Popular Responses

Green Neighborhoods through Green Streets Survey – Popular Responses			
	On-line	Hardcopy	Overall
Likes	Most respondents stated that they were in favor of greening. Popular quotes: “trees and plants add beauty to the block” and “it makes the neighborhood more safe and more inviting”	Respondents generally are in favor of greening. Popular quotes: “we want more trees” and “greening makes the block more attractive”	92% responded positively towards greening 15% specifically mentioned that greening will “beautify” the neighborhood 14% specifically stated that they “want more trees” + “liked/loved trees”
Dislikes	Most popular comments: “who will maintain this?” and “limited space available for greening on some sidewalks”	Most popular concerns: “trash and foliage come with greening” and “damage to sidewalks, home foundations or pipes due to tree roots”	23% of the respondents are worried about maintenance-related issues 60% have concerns about greening
Total Responses	438	296	734 (Total)

Table 2-19 Green Neighborhoods through Green Streets Feedback

Survey Quotes
Amazing; I think it's a no-brainer!
Bring it on... beautifying the neighborhoods, making better use of public space -- brings communities together, etc.
Greening makes the world a better, happier place.
All of it. More trees & green!
How beautiful everything is! 100% behind this effort in all ways!
I LOVE IT - what a great plan!
I love the idea! Please give us a greener Philadelphia. It would make us healthier and happier all around.
I strongly support it. In addition to what it does for storm water, it's prettier, shadier, and people are less likely to throw trash on it.
Yes, yes, a thousand times yes! We need more street trees. The corner bump-outs with trees would be WONDERFUL for overall look-and-feel in the neighborhoods (and the traffic calming benefits would be nice as well. I'm not sure where the second set of photos is, exactly, but it would be a nice improvement.
Love that there would be shade along the sidewalk, especially during the summer months when I am walking with my kids. The trees and green areas make the places seem more welcoming. And the fact that it would help with stormwater runoff is a real plus!
I LOVE THE GREEN NEIGHBORHOODS... GOOD ENERGY...A VIBRANCY... A POSITIVE FEEL!
"AFTER" images - the street views look fresher & softer; more friendly & vibrant. They indicate a community where the residents are glad to be living.
Things are prettier, more sustainable, shows community pride, [and] make the City beautiful.
Everything!!! Increase worth of home, cleaner air, calmer environment, shade in the summer.
What's not to like? It's a no-brainer.
I love plants, trees and greenery. I feel more at peace near nature.
I'm a big greening advocate do I'm totally on-board with all of these project proposals.
This work needs to be done in all neighborhoods.

2.2.4.3 Facebook

The PWD has a Facebook page and Facebook wall dedicated to the *Green City, Clean Waters* program (Figure 2-8). Facebook (a free-access social networking website) enables PWD to reach out to an audience that may otherwise not choose to become familiarized with its programs. Friends abound on PWD’s *Green City, Clean Waters* Facebook wall, where approximately 200 members can find public meeting announcements, view images of Green Streets and where visitors can leave comments on the City’s green stormwater infrastructure approach. The Facebook page also hosts the Green Neighborhoods through Green Streets survey. . To access PWD’s Facebook page, visit <http://www.facebook.com/green.cities.clean.waters>. View Supplemental Volume 1 to view images of the Facebook page and wall.

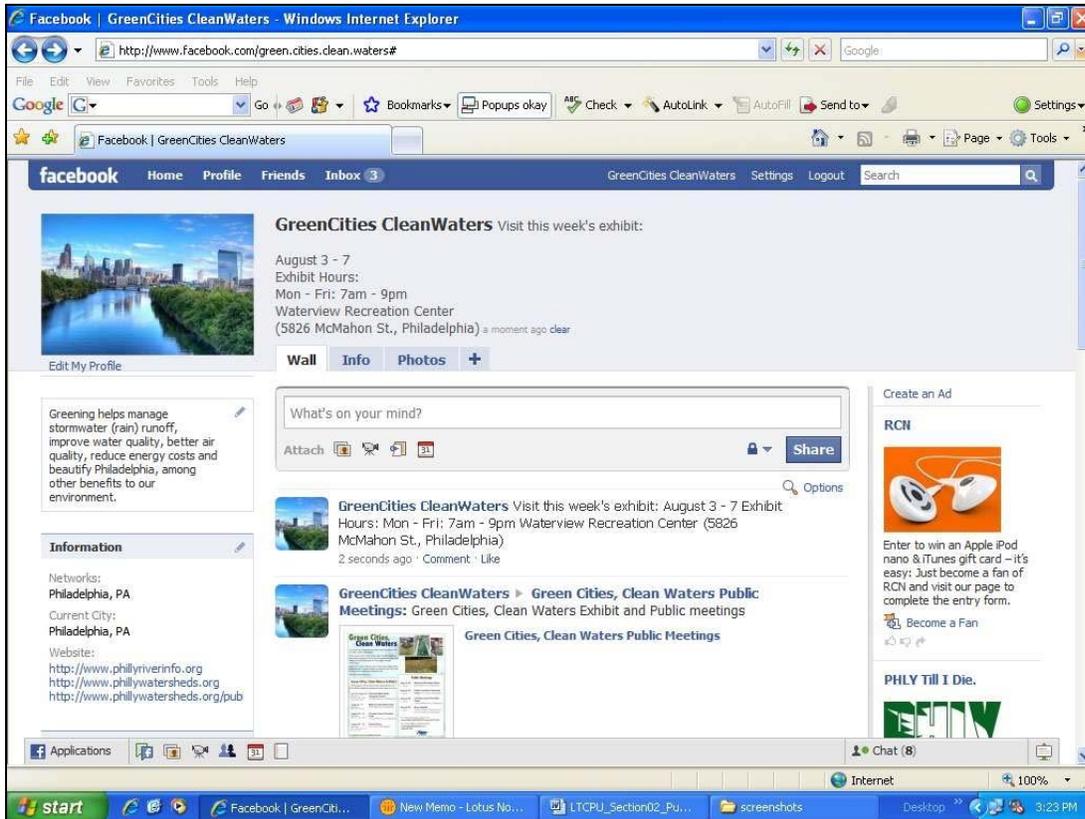


Figure 2-8 Facebook Screenshot

2.2.4.4 Watershed Partnership Story

A Watershed Partnership Story is in the process of being developed to tell the story of the watershed partnership approach through a short presentation, geared to different audiences, such as a municipal audience or environmentally-minded audience. This presentation will provide PWD with an opportunity to relay its watershed management and partnership messages in a short, yet visual manner, while also serving to connect with potentially new partners as well.

2.2.4.5 Green Stormwater Infrastructure Tours

The PWD regularly offers tours to highlight local examples of green stormwater infrastructure. Table 2-20 lists the tours held in 2008 and 2009.

Table 2-20 Green Stormwater Infrastructure Tours

Date	Event	Number of Attendees	Description
April 6, 2008	Historic Mill Creek Watershed Tour	35	As part of a larger tour organized for a University of Pennsylvania landscape architecture class that focused on the Mill Creek Watershed, students toured the Mill Creek Farm, Mill Creek Playground, Sulzberger Outdoor Classroom, Blackwell Homes, and Penn-Alexander School.
May 3, 2008	Clean Water, Green City Tour	20	Presented with White Dog Café, a tour to highlight projects that link environmental vision with economic health, and quality of life with the sustainability of our City. Sites included Waterworks Interpretive Center, Awbury Arboretum, Saylor Grove, and Penn-Alexander School.
Sept. 10, 2008	Philadelphia Green Infrastructure Tour	10	Organized for a group from New York City Parks, Conservation District, and Dept. of Environmental Protection, sites included Wissahickon Charter School, Waterview Recreation Center, Cliveden Park, Saylor Grove, and Allens Lane Arts Center.
Oct. 3, 2008	GreenPlan Philadelphia Tour	45	Organized as part of the American Society for Landscape Architects national conference, the tour highlighted several greening and vacant land management sites that integrated stormwater management, including Liberty Lands, N. 3 rd Street Corridor, and North Central Philadelphia vacant land stormwater management sites.
May 5, 2009	Historic Mill Creek Watershed Tour	35	As part of a larger tour organized for a University of Pennsylvania landscape architecture class that focused on the Mill Creek Watershed, students toured the Mill Creek Farm, Mill Creek Playground, Blackwell Homes, Penn-Alexander School, and Clark Park.
June 10, 2009	US EPA National Stormwater Coordinators Meeting Tour	40	As part of a national US EPA meeting, the tour illustrated PWD's green infrastructure program and highlighted innovative projects and partnerships. Sites included Liberty Lands, Thin Flats, Greensgrow Farm, model neighborhoods (Northern Liberties, New Kensington, and APM), Saylor Grove, and Wise's Mill.

2.2.4.6 Water Quality Council

The Water Quality Council is made up of a diverse group of individuals concerned about water quality and watershed issues. The council is comprised of private citizens, representatives from watershed non-profit groups, Friends groups, and city and state representatives. The Water Quality Council has been meeting since 1995. Currently, the council members meet approximately four times per year. The council members meet to learn about current innovative PWD projects from PWD staff and about other environmentally-related issues from local watershed leaders. Most importantly, however, the meetings provide an opportunity for the PWD staff and other watershed leaders to hear from the council members (who represent the public) about their concerns. These meetings also enable the members to explore opportunities to collaborate with the Department on projects in their respective watersheds. In turn, PWD gets valuable feedback from the council members on PWD's emerging projects and initiatives and gets to hear directly from the council members on what the needs of the local representatives are in the City.

2.2.4.7 Storm Flood Relief

Since 2005, the PWD has been planning for storm relief in neighborhoods where basement backups are occurring. This Storm Flood Relief Program involves revamping the City’s sewer system to reduce future waste water basement backups. Property owners in South Philadelphia, Northern Liberties, Washington Square West and Kensington have complained of basement backups, mainly between 2005 through 2006 – a period of intense rain fall. This program was developed in response to these complaints. Although the PWD has been meeting with the public since 2005 on Storm Flood Relief, Table 2-21 lists the Storm Flood Relief public meetings that were held as of January, 2008 – when the Storm Flood Relief Program public meetings overlapped with the targeted CSO LTCPU Public Participation Program.

Table 2-21 Storm Flood Relief Meetings

Meeting	Date	Place
So. Philly Storm Flood Relief (SFR)	April 24, 2008	Maria Goretti HS
Columbus Square	October 27, 2008	Columbus Square Rec Center
Washington West SFR	October 29, 2008	Jefferson Hospital
Passyunk Civic SFR	April 7, 2009	Passyunk Civic Meeting Site
Washington Ave. SFR	May 6, 2009	Washington Ave. Meeting Site
Washington Ave. SFR	May 28, 2009	Italian Market

2.2.5 Public Information

In recognizing that active citizen engagement in Philadelphia is critical to the success of the LTCPU, the PWD targets the residents of the City and upstream the watershed partners in a variety of public forums to foster public awareness and facilitate public involvement.

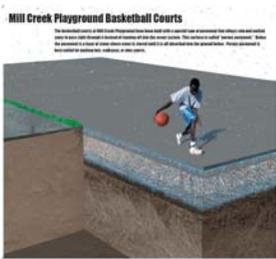
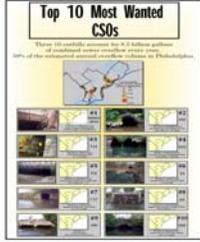
2.2.5.1 Green City, Clean Waters Information Fair

A *Green City, Clean Waters* Information Fair was displayed during select public meetings. The Fair included a table-top display with posters on CSO LTCPU-related projects, fact sheets on projects designed and/or implemented by PWD to address CSO discharges, other educational materials and a demonstration rain barrel. Table 2-22 lists samples of the materials from the *Green City, Clean Waters* Information Fair. View Supplemental Volume 1 for all Information Fair materials.

Table 2-22 Green City, Clean Waters Information Fair Materials

Green City, Clean Waters Information Fair Materials			
Backgrounder (enhanced fact sheet): The CSO Long Term Control Plan - History and Background		Illustration: Green Roof Cross-Section	
Fact Sheet: Tacony Creek Storage		Illustration: Venice Island's Green Roof Pumping Station	

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

Green City, Clean Waters Information Fair Materials			
Fact Sheet: Waterways Restoration Team		Mill Creek Recreation Center's Porous Basketball Court –	
Fact Sheet: Real Time Control Center		Poster: Rain Barrels	
Fact Sheet: Main Relief		Fact Sheet: Marshall Road Creek Restoration	
Fact Sheet: Penn Alexander's Stormwater Management BMPs		Guide: Saylor Grove Stormwater Wetland Tour Guide	
Brochure: Floatables Skimming Vessels		Poster: Top 10 CSO's of Philadelphia	
Guide: Homeowner's Guide to Stormwater Management Manual		Poster: Philadelphia's Changing Streams	

2.2.5.2 Green City, Clean Waters Exhibit

The LTCPU Public Participation Team developed a one-of-a-kind informational exhibit and art exhibit. The two shows made up the *Green City, Clean Waters* Exhibit, which were displayed at the Fairmount Water Works Interpretive Center (in Philadelphia) for approximately one month (October 10, 2008 – November 7, 2008). The purpose of the combined exhibit was to unite art with educational information on CSO controls in order to raise awareness on the LTCPU. The goal of this approach was to target a new audience and to capture the attention of the general public through art, providing a gateway to the informational displays.

While the *Green City, Clean Waters* Exhibit was displayed at the Fairmount Water Works Interpretive Center, over a month-long period, roughly 992 visitors had a direct experience with the artwork and the messages portrayed through the informational displays. The exhibit also received media coverage on the local television CBS News affiliate and in local newspapers, such as the Philadelphia Inquirer and the City Paper, in addition to other media (See Supplemental Volume 1 for media coverage documentation and month-long sign up sheet.)

The artistic component of the exhibit was comprised of artwork (photography and jars) from artist and educator, Bill Kelly. Mr. Kelly specializes in depicting nature in an urban context. He was commissioned to interpret the *Green City, Clean Waters* program through an artistic eye. Bill Kelly used recycled mason jars, filled with water, plants and photography to interpret the CSO LTCPU. The unique exhibit also included photographs of the jars. His work was funded through a Coastal Non-Point Pollution Program grant through the Pennsylvania Department of Environmental Protection's Coastal Zone Management Program and the National Oceanic and Atmospheric Administration (NOAA). (See Figure 2-9, Figure 2-10 and Supplemental Volume 1. for examples of Bill Kelly's artwork).

The informational component of the exhibit was made up of a variety of posters that relayed CSO-related and watershed-related information, in addition to displaying a rain barrel. The informational posters are also currently circulating throughout the City, drumming up excitement for the final round of public meetings in August, 2009 (View Table 2-10 for the traveling exhibit locations). The informational posters are listed in Table 2-23. (See Supplemental Volume 1 for examples of the informational posters).

An artist reception was held on October 16, 2008, at the Fairmount Water Works Interpretive Center, to celebrate the opening of the *Green City, Clean Waters* Exhibit. The reception also gave the Public Participation Program Team an opportunity to discuss the material behind the informational posters (the CSO LTCPU) with the attendees. Approximately 77 individuals attended the artist reception. (See Supplemental Volume 1 for reception invitation flyer and reception sign-up sheet.)



Figure 2-9 Sample of Bill Kelly Art



Figure 2-10 Sample of Bill Kelly Art

Table 2-23 *Green City, Clean Waters* Exhibit Informational Posters

Green City, Clean Waters Exhibit Information Posters	
<p><i>Green City, Clean Waters</i> ~ PWD's Combined Sewer Overflow Long Term Control Plan (an introduction to the CSO LTCPU)</p>	
<p>History of Drainage in Philadelphia (historical timeline)</p>	
<p>What the City and its Partners are Doing (examples of local demonstration projects that manage stormwater through "green" approach)</p>	
<p>What You Can Do (examples of projects property owners can take on to manage stormwater in environmentally-friendly manners)</p>	

2.2.5.3 Fairmount Water Works Interpretive Center

The Fairmount Water Works Interpretive Center (FWWIC) is PWD’s renowned education center, located on the banks of the Schuylkill River in Philadelphia. The Center tells the story of the Schuylkill River and its human connections throughout history. Innovative exhibits and interactive educational programs meld the history, technology and science, providing education on the many issues facing the regions’ urban watersheds.

The mission of the Center is to: *“educate citizens to understand their community and environment, especially the urban watershed, know how to guide the community and environment in the future, and understand the connections between daily life and the natural environment.”*

Since opening its doors in October, 2003, the FWWIC has seen over 150,000 visitors tour the center, participate in its programs, sign up for educational events and online updates.

During a typical week, the FWWIC hosts 450 visitors, three school groups (elementary or middle school classes), two independent organizations (charter school, community centers), and two special events (evening with a visiting environmental author or lecturer, weekend film preview, e.g., Liquid Assets).

In 2008, approximately 37,177 individuals visited the FWWIC. The breakdown of visitors is listed in Table 2-24.

Table 2-24 2008 Fairmount Water Works Interpretive Center Visitors

2008 Fairmount Water Works Interpretive Center Visitors	
School Groups	113 classes, totaling 6,843 students
Teacher Trainings	3 multi-day workshops with 33 teachers
Summer Camps	24 multi-day summer camps with 851 environmental campers
Special Exhibits	6 multi-month exhibits, including the <i>Green City, Clean Waters</i> CSO Long Term Control Plan Update Exhibit
New Programs	9 events, including the World Water Day Celebration
Visiting Authors, Lecturers, Environmental Leaders	4 new education programs, including "Seeing is Believing: A Drop in the Bucket," a career- based laboratory program for high school students
Community Programs	70 community programs, reaching 4,739 individuals
General Visitors	18,985
2008 Total Visitors	37,177

2.2.5.4 Stormwater Best Management Practices (BMP) Recognition Program

In 2005, PWD and partners developed the Stormwater Best Management Practices (BMP) Recognition Program to recognize developers, engineers, architects, and others that are designing and implementing innovative and environmentally-friendly stormwater Best Management Practices (BMPs) in southeastern Pennsylvania. Projects, such as rain gardens, green roofs, infiltration swales, and treatment wetlands - stormwater management systems based on nature’s best designs are recognized to provide inspiration for future similar projects in the region. The number of submissions has grown steadily every year. Approximately eighty submissions have been received to date. The awardees are listed in Table 2-25 –Stormwater BMP Recognition Program Awards.

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

A certificate is distributed to each awardee to recognize their good work. Each certificate recipient is also provided with an opportunity to present their awarded project at an event, such as the Urban Watersheds Revitalization Conference. The recognized projects are also promoted in the PWD Water Wheel (newsletter), distributed to over a half million residents and businesses in Philadelphia and on the website (<http://www.stormwaterbmp.org>).

Table 2-25 Stormwater BMP Recognition Program Awards

Stormwater BMP Recognition Program Awards	
Awardee	Project
AD Marble & Company	Evaluation of Potential Improvements within the Cobbs Creek Corridor: Marshall Road to Cobbs Creek Golf Club
Andropogon Associates & Friends of Wissahickon	Valley Green ~ Environmental Restoration Program
Andropogon Associates, Ltd.	Thomas Jefferson University Plaza
Awbury Arboretum Association	Awbury Arboretum Watershed Restoration Project
Cahill Associates	Porous Asphalt Parking Lot for the Morris Arboretum, University of Pennsylvania
	John Heinz National Wildlife Refuge at Tinicum
	Innovative Stormwater Management and Education at the K-8 Penn-Alexander School
	Demonstration of Innovative Stormwater Management Using Porous Pavement and Rain
Cheltenham Township	Gardens in an Urbanized Setting (Wayne Art Center)
Community Design Collaborative	Leaf Leachate Stormwater Management Waverly Road Leaf Composting Facility
	Haven in the Goodlands
CSA Group, Inc.	Overbrook Environmental Education Center
Fairmount Park Commission	School of the Future
Friends Center Corporation	Monastery Stables Runoff Control Project
F.X. Browne, Inc.	Friends Center Urban Water Management
	Stony Creek Farms Age-Qualified Residential Development
Gladnick Wright Salameda	F.X. Browne Constructed Stormwater Wetland
Gilmore & Associates	Swarthmore College Science Center
Green Valleys Association	Chatham Financial Corporate Headquarters
Hunt Engineering Company	Porous Parking & Bioretention
Interface Studio LLC	Smith Memorial Playground
	Sheridan Street Housing
Johnson & Johnson	Third Street Condominiums
	Pharmaceutical Research and Development Spring House Road Property
Kling	Ortho McNeil Springhouse
	Centocor Horsham
Lower Merion Environmental Advisory Council	Riverbend Environmental Education Center
Lower Merion Township	Aqua America Headquarters
Lower Providence Township	Image
Onion Flats	Rag Flats
Pennoni Associates, Inc.	3925 Walnut Street Mixed Use Facility

Stormwater BMP Recognition Program Awards	
Awardee	Project
Pennsylvania Horticultural Society	Tree Vitalize
	Models for Stormwater Management on Vacant Land
Roofscapes, Inc. (Lifetime Achievement Award)	Philadelphia Fencing Academy
The Enterprise Center Community Development Corporation	The Plaza at Enterprise Heights
The Schuylkill Center for Environmental Education	Green Roof Installation
Upper Darby Township and Cahill Associates	Second Ward Park
Upper Perkiomen High School (UPHS)	UPHS Stormwater BMPs
Upper Providence Township	Black Rock
UC Green	Lower Mill Creek Stormwater Management Demonstration Garden
Ursinus College Environmental Studies Program	Design of an Extended-detention Wet-pond Retrofit for Ursinus College
Villanova University Stormwater Partnership	Villanova University Bioinfiltration BMPs
Wallace, Roberts & Todd, LLC	Mill Creek Hope VI Project
Warrington Environmental Advisory Committee	Igoe, Porter, Wellings Memorial Field
Wissahickon Charter School	Harmony Garden
Wissahickon Valley Watershed Association	Sandy Run

2.2.5.5 Urban Watersheds Revitalization Conference

“The conference was one of the best I’ve been to in 25 years. Such a wide cross-section of people but all of us focused on the same city-improving agenda. Thanks for your efforts in making it happen.”

- Comment from 2008 “Greening Our Streets” Conference participant

Since 2005, the PWD, along with its partners, has hosted an annual conference, titled the Urban Watersheds Revitalization Conference. The event gives PWD an opportunity to explore current watershed-related themes that are relevant to the City of Philadelphia and the suburban communities that drain to the City. The conference is held at different locations every year and it targets the urban and suburban (or mostly developed) communities in southeastern Pennsylvania. The audience is diverse – comprised of local planners, engineers, municipal representatives, community activists, among others. The event is offered at a nominal fee or it is free of charge.

Details on the conferences held in the past two years are listed in Table 2-26. Flyers may be viewed in Supplemental Volume 1.

Table 2-26 2007 & 2008 Urban Watersheds Revitalization Conference

Urban Watersheds Revitalization Conference		
Conference Theme:	Greening Our Streets	Stormwater Management Regulations & Requirements
Date:	October 31, 2008	May 3, 2007
Time:	8:30am - 3:30pm	8:30am - 3:30pm
Location:	The Great Hall, Community College of Philadelphia, Spring Garden Street, Philadelphia	Kanbar Center, Philadelphia University, School House Lane, Philadelphia
Number of participants:	175	131
Result:	Many participants remarked on it being a very successful conference (see above quote).	Feedback from the participants was positive.
Promotional Material:	View Supplemental Volume 1	View Supplemental Volume 1

2.2.6 Floatables Control Outreach ~ Skimming Vessel and Pontoon Vessel

The reduction in floatables on the Schuylkill and Delaware Rivers in Philadelphia improves both water quality and aesthetics. The use of a skimmer vessel and pontoon vessel allows for mobile control programs capable of managing debris at various locations, increasing the effectiveness of this control measure. In addition, the boats are visible controls, therefore increasing public awareness and education of the impacts of floatables.

The vessels are used for clean up and serve as public relations tools at local events on the river, such as the Schuylkill Regatta, an annual sailing event. For more details on the performance of the vessels, please refer to Section 1 and Section 10 of this report.

The skimming vessel participated in several public events during 2007 and 2008. In addition to cleaning the tidal portions of the Delaware and Schuylkill Rivers, the PWD plans to continue to use the skimming vessel as a tool for public awareness and outreach.

In 2007 and 2008, the vessel participated in the following events, by conducting clean-ups while these outdoor activities occurred:

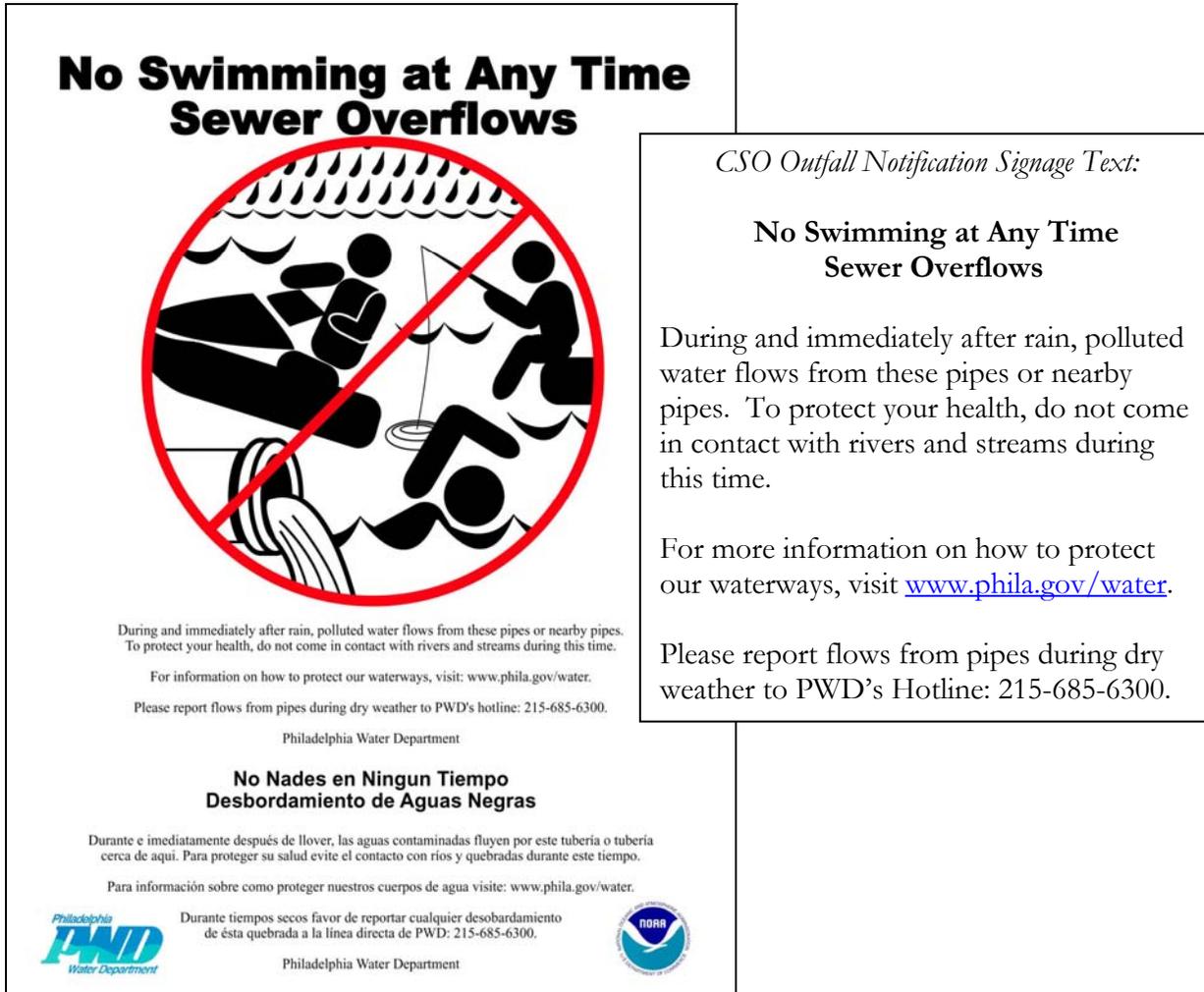
- Demonstrations for students on the Schuylkill River (2007)
- Coast Day (2007)
- 4th of July (2007)
- Dedication Ceremony of the new fireboat, Independence (2007)
- Penn’s Landing Safe Boating Day (2008)
- Fairmount Water Works Shad Tour (2008)
- Maritime Charter School (Frankford Arsenal Dock Demonstrations) (2008)
- Bartram Gardens Dock (Demonstration for Teachers) (2008)

The pontoon vessel also participated in public events in 2008, including the Philly Spring Clean-Up and the Earth Day Clean-Up at Lloyd Hall. Public awareness is one of the many benefits resulting from the work conducted by the vessels.

2.2.7 Signage, Websites & Informational Materials

2.2.7.1 CSO Outfall Notification Signage

The PWD produced CSO outfall notification signs to educate the public of the potential hazards associated with primary contact with creeks and rivers during and shortly after wet weather events. The signs (Figure 2-11) were placed at outfalls that are accessible by the public. In addition to warning the public, the text in the signs state that the PWD be notified if overflows occur during dry weather (an emergency call –in number is provided on the sign). The text is in English and Spanish.



CSO Outfall Notification Signage Text:

No Swimming at Any Time Sewer Overflows

During and immediately after rain, polluted water flows from these pipes or nearby pipes. To protect your health, do not come in contact with rivers and streams during this time.

For more information on how to protect our waterways, visit www.phila.gov/water.

Please report flows from pipes during dry weather to PWD's Hotline: 215-685-6300.

Figure 2-11 CSO Outfall Notification Signage

The CSO Outfall Notification Signage was a pilot project aimed at determining if outfall signs were a feasible way to accomplish public notification of combined sewer overflows. The PWD, in conjunction with the Fairmount Park Commission, installed thirteen signs at CSO outfalls in the City. Locations for placement of the signs were selected based on factors such as high visibility, known recreational areas, and volume of the combined sewer overflow. Installation of the CSO signs was conducted in the summer of 2007 and a survey of the sites was completed in October, 2007. During this survey, each of the sites where the CSO signs were installed was visited and photos were taken to document the status of the signs that were installed. The survey of the sites determined that several of the signs were removed or vandalized. Of the thirteen signs that were

installed, five of them were vandalized or removed during the short amount of time between installation and the survey. Although signs are seen as a simple, low-cost, visual way to raise awareness of Combined Sewer Overflows, this pilot project has highlighted the difficulties in using signs as a public notification system in Philadelphia due to the poor sustainability (See Figure 2-12 and Figure 2-13).



Figure 2-12 Vandalized CSO Notification Sign



Figure 2-13 Missing CSO Notification Sign

2.2.7.2 CSO Identification Signage

The PWD also produced CSO identification signs, which were installed at each of the City's CSO outfalls, with the exception of eight sites that were difficult to reach. The identification signs include an outfall ID number (See Figure 2-14). The identification signs are useful when the public is reporting a problem at an outfall, as they are able to accurately identify the outfall due to this signage. The identification sign helps alleviate communication problems between the public and the PWD responders. Unlike the CSO Notification Signage, the CSO identification signs have not been vandalized



Figure 2-14 CSO Identification Signage

2.2.7.3 Websites

The PWD created multiple websites as educational tools dedicated to watershed management. A CSO LTCPU website was also created and devoted exclusively to CSO issues. View Section 2.24 for the *Green City, Clean Waters* Facebook page and wall.

2.2.7.3.1 PhillyRiverInfo

<http://www.phillyriverinfo.org>

As presented in Section 1, this website offers detailed information on Philadelphia's watersheds and partnerships. The website offers resources to the public including educational material and announcements of upcoming watershed-related events and projects (See Figure 2-15). The PhillyRiverInfo site also allows residents of 10 counties in Southeastern Pennsylvania to find their watershed from one of the seven that drains to Philadelphia by typing in their street address.

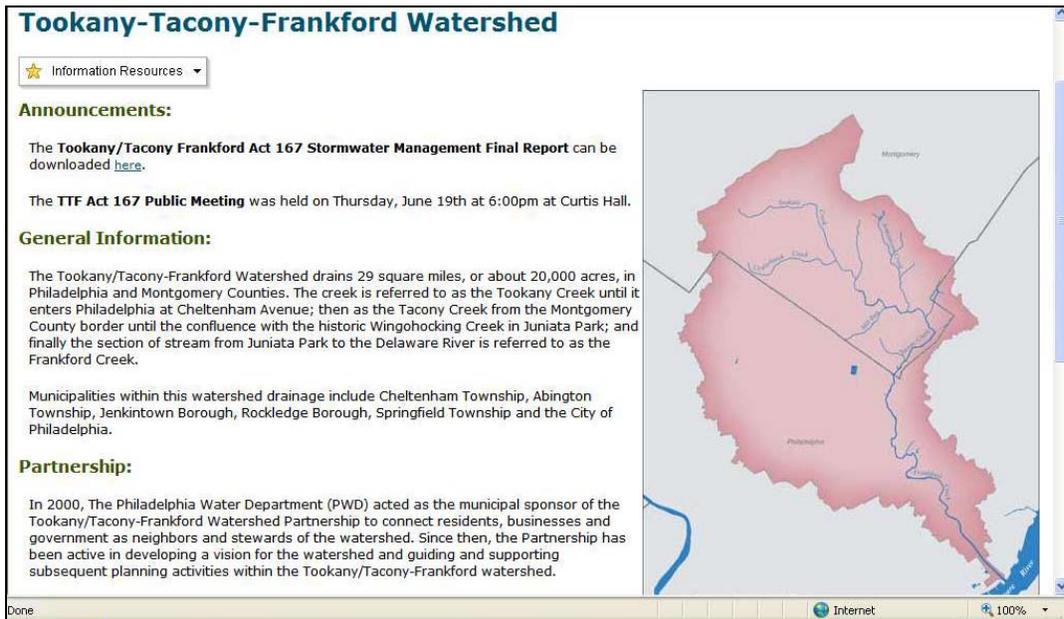


Figure 2-15 Example of public information on PhillyRiverInfo

2.2.7.3.2 Green City, Clean Waters (CSO Long Term Control Plan Update)

<http://www.phillyriverinfo.org/csoltcpu>

An offshoot of PhillyRiverInfo, this website focuses exclusively on the *Green City, Clean Waters* Program (CSO Long Term Control Plan Update) (See Figure 2-16). One can find details on the nature of CSOs, the LTCPU, the history of CSOs, and public events, among other CSO-related information.

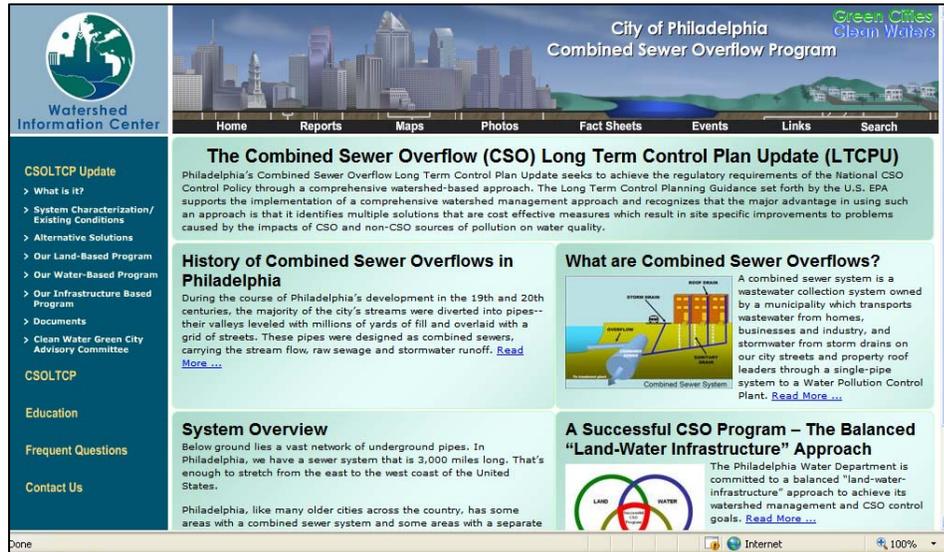


Figure 2-16 *Green City, Clean Waters* (LTCPU) Website

2.2.7.3.3 RiverCast

<http://www.phillyrivercast.org>

As described in Section 1, The Philly RiverCast is a forecast of water quality that predicts potential levels of pathogens in the Schuylkill River between Flat Rock Dam and Fairmount Dam (*i.e.*, between Manayunk and Boathouse Row). One would visit this site to find out the daily RiverCast prediction and to learn more about water quality (See Figure 2-17).

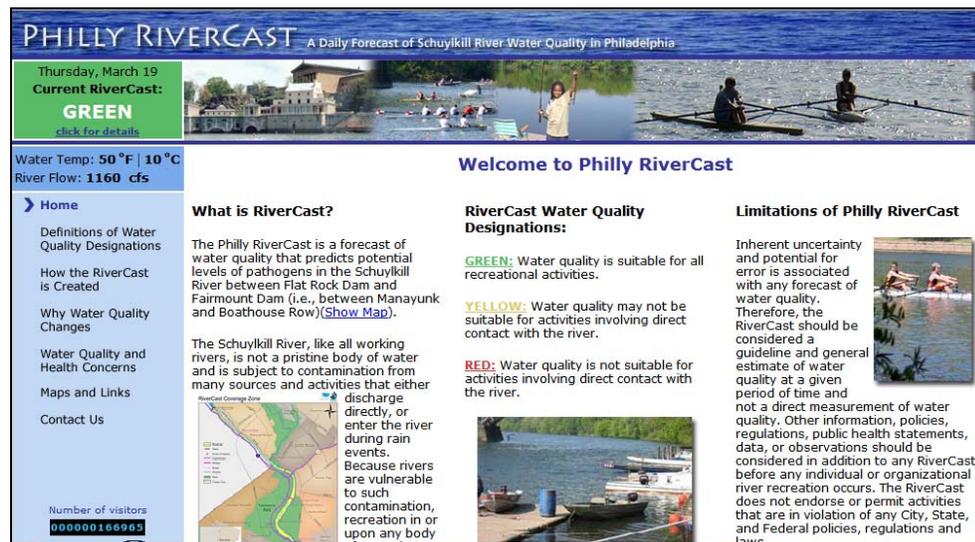


Figure 2-17 PWD’s RiverCast Website

2.2.7.3.4 Public Outreach & Education

<http://www.phillywatersheds.org/public>

This website is dedicated to promoting PWD’s educational programs and opportunities (See Figure 2-18). Options available include watershed partnership projects, educational materials, public meeting and event announcements, among others.

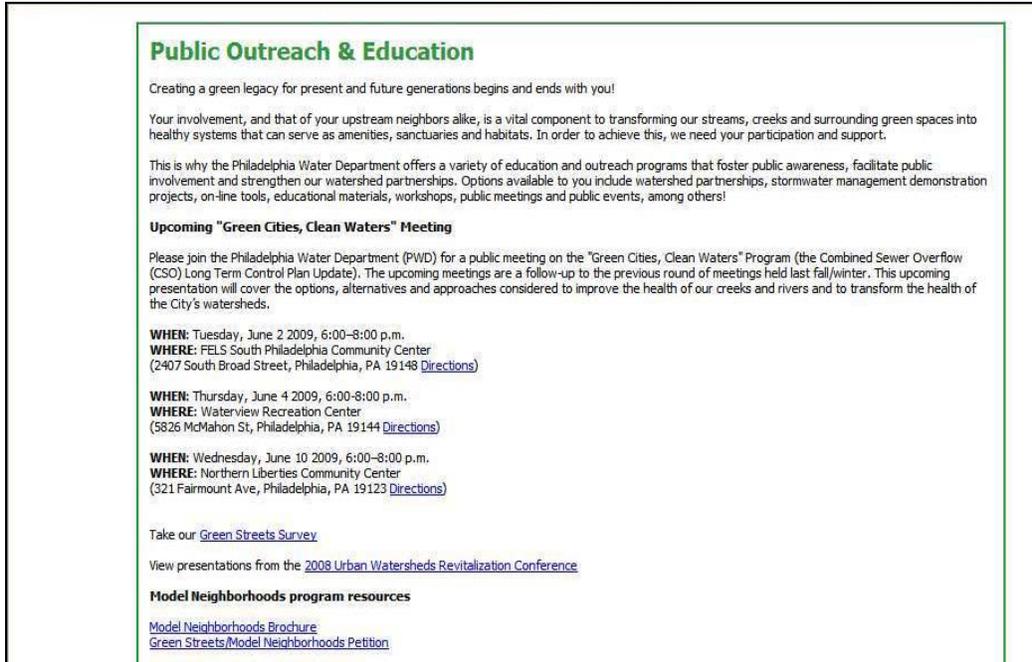


Figure 2-18 Public Outreach and Education Website

2.2.7.3.5 CSOcast

<http://www.phillywatersheds.org/cso>

The CSOcast is PWD’s latest effort in demonstrating the overflow status of the City’s 164 Combined Sewer Outfalls. CSOcast informs the public whether CSOs are occurring or are suspected to have occurred within the last 24 hours (See Figure 2-19). It is updated twice daily with information from PWD’s extensive sewer monitoring network.

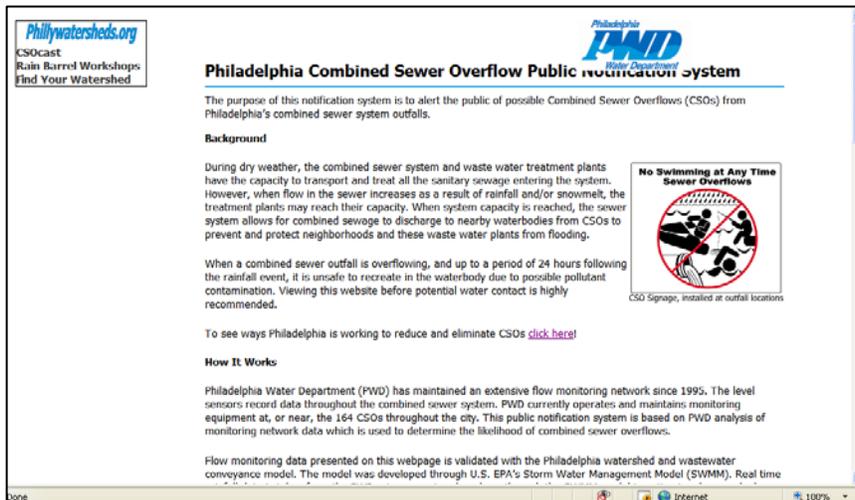


Figure 2-19 PWD’s CSOcast Website

2.2.7.3.6 Rain Barrel Program

<http://www.phillywatersheds.org/rainbarrel>

The PWD is providing rain barrels to residents of Philadelphia’s watersheds free of charge, in order to promote the reduction of stormwater flows to our sewer system and creeks (See Figure 2-20). To receive a rain barrel, one must attend a rain barrel workshop to be educated on the installation and use of the rain barrel. Rain barrel workshops are held in locations around the City throughout the year. Through this website, one can view when a workshop is being held in watersheds throughout the region.

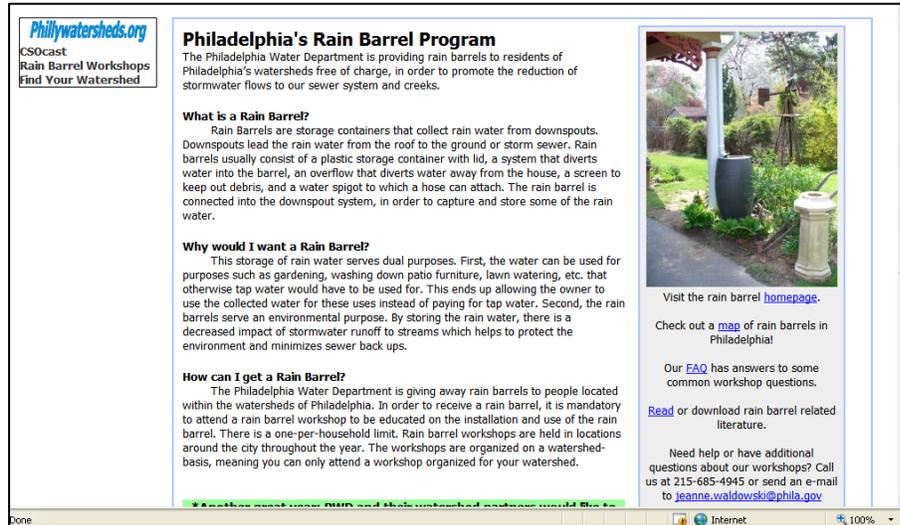


Figure 2-20 PWD’s Rain Barrel Program Website

2.2.7.3.7 Handout Materials

CSO LTCPU Backgrounders

The eight page Backgrounders are handouts designed for a general audience (the CSO affected public) and serve to provide an overview of the LTCPU. These documents provide information on the history, background and approach taken by the City to control CSOs. The Backgrounders are distributed to our watershed partners, the LTCPU Advisory Committee and to the public at all public meetings and public events. The documents are also available through the LTCPU website. View Supplemental Volume 1 for copies of the Backgrounders. The Backgrounders cover the themes in Table 2-27.

Table 2-27 CSO LTCPU Backgrounders

Backgrounder I	The CSO Long Term Control Plan – History & Background
Backgrounder II	The CSO Long Term Control Plan Update – Clean Water Benefits & The Balanced Approach
Backgrounder III	Current Status of Our Waterways

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

Bill stuffers/waterwheels (Newsletters)

The bill stuffers and Water Wheels are newsletters inserted into the water bill of the estimated one-half million customers of the PWD. The bill stuffers and Water Wheels listed in Table 2-28 have been developed under the CSO LTCPU Public Participation Program and have also been distributed throughout the City at advisory committee meetings, public meetings, and at other public events. View Supplemental Volume 1 for copies of the newsletters.

Table 2-28 Bill Stuffers & Waterwheels

Newsletter Title	Newsletter Description
Bill Stuffer I: The Combined Sewer Overflow Program: A Long Term Control Plan for Our Rivers in addition to Clean Water, Green City: Long Term Control Plan Update.	This publication covers an introduction to the CSO LTCPU and the goals of the PWD in controlling CSOs.
Water Wheel I: CSO Public Notification Means You're in the Know	This publication aims to notify the public of the CSO public notification system and covers the commonly asked questions about CSO-affected waters.
Water Wheel II (in Water Quality Report): <i>Green City, Clean Waters Program</i>	This publication covers the history of CSOs and includes a CSO Notification Card cut-out.
Water Wheel III: Clean Waters, Green Cities – Neighborhood-Friendly Solutions	This publication covers the PWD's Green Streets Program.
Water Wheel IV: Green Cities, Clean Waters – Tookany/Tacony-Frankford Creek	This publication covers the Integrated Watershed Management Plan for the Tookany/Tacony-Frankford Watershed.

2.3 PUBLIC INVOLVEMENT DURING RELEASE OF DRAFT CSO LTCPU

“I have attended many meetings of the PWD concerning the CSO long term Plan. As a resident and business owner in Philadelphia I am proud that PWD came up with a solution to our stormwater needs that has such a broad positive effect. As a citizen of the planet, I am inspired by PWD's vision. Their thinking is cutting edge and in my experience they have the will, strategy and expertise to implement this plan effectively. I fully support this project.”

-Dr. Terrie Lewine, Northern Liberties – Statement made at
Green City, Clean Waters Public Meeting, Series #4)

2.3.1 Distribution of Information

PWD plans to provide copies of the Draft LTCPU Summary Report to the public in the last round of public meetings. PWD will also distribute the Summary Report to key locations, such as libraries, in each targeted watershed, in addition to partner organization centers, such as the Awbury Arboretum. Table 2-29 lists the targeted locations. The Draft LTCPU Summary Report will also be available on-line - on PWD's CSO LTCPU website (<http://www.phillyriverinfo.org/csoltcpu>).

Table 2-29 Targeted Locations for Draft LTCPU Summary Report Distribution

Targeted Locations for Draft CSO LTCPU Distribution	
Frankford Library	4634 Frankford Ave, Philadelphia
Ogontz Avenue Revitalization Corporation	1536 Haines St, Philadelphia
Wissahickon Environmental Center Tree House	300 Northwestern Ave. Philadelphia
Center in the Park	5818 Germantown Ave. Philadelphia
FELS Community Center	2407 S. Broad Street Philadelphia
Port Richmond Library	2987 Almond Street Philadelphia
Fairmont Waterworks Interpretive Center	Waterworks Drive and Kelly Drive Philadelphia
Aubury Arboretum	One Awbury Road Philadelphia
Free Library of Philadelphia	1314 Locust St. Philadelphia
South Philadelphia Library	1700 S Broad St. #2 Philadelphia
Cobbs Creek Community Environmental Education Center	700 Cobbs Creek Parkway, Philadelphia

2.3.2 Media Publicity

PWD plans to notify the public of the availability of the Draft LTCPU Summary Report through a public notice process, conducted via newspaper announcements, internet websites, television and radio public service announcements, partnership e-mail listservs, and through the CSO LTCPU Advisory Committee. View Section 2.2.2. (Public Meetings) for the list of media outlets targeted for outreach for the release of the Draft LTCPU Summary Report. View Supplemental Volume 1 for all notices.

2.4 OPPORTUNITIES FOR PUBLIC COMMENT ON DRAFT CSO LTCPU SUMMARY REPORT



Figure 2-21 Northern Liberties Community Center August 2009 Public Meeting

Opportunities for public comment on the draft LTCPU Summary Report will be made possible through:

- Mail letters to Joanne Dahme, Public Affairs Division, 5th Floor, 1101 Market Street, Philadelphia, PA 19107
- E-mail: Questions@phillywatersheds.org
- Fax: 215-685-6043
- *Green City, Clean Waters* Facebook Wall: <http://www.facebook.com/green.cities.clean.waters>
- *Green City, Clean Waters* Public Meetings
- Comments sheets left at libraries and other centers of distribution that will host the Draft LTCPU Summary Report

2.5 PUBLIC COMMENTS ON DRAFT CSO LTCPU

2.5.1 Comments on Draft CSO LTCPU Summary Report

The Draft LTCPU Summary Report was distributed during the final round of public meetings (Series 4). A list of the comments that have been received by members of the public thus far follows.

- *“This plan is great! It is positive for our neighborhood and for our people. Greening can improve the way people behave and act.”* (John Donlen, Fishtown Resident)
- *“You’re not trying to solve it all with one answer. The different projects are not going to be buried or hidden underground. The projects are going to be visible and they are going to provide amenities to us and lots of solutions. There’s a big difference between raising our kids in a place surrounded by pavement versus green. This plan is wonderful!”* (John Donlen, Fishtown Resident)
- *“After hearing about this plan, I am much more appreciative of the work that the City is doing. We need to get this out there!”* (Don McGuire, Ph.D., Mt. Airy Resident)
- *“This plan will protect our streams, rivers and the underground structures. It has to be a good thing!”* (Harold Carter, Germantown Resident)
- *“It’s great, but throw us a bone! Create more incentives for residents to do greening.”* (Janet Boys, Mt. Airy Resident)
- *“I support this plan because I believe it is vital to our health and welfare. I appreciate how well founded the proposed project is based on good research. I would like the plan to be implemented completely and soon.”* (Margaret Judd, Northern Liberties Resident)
- *“I fully support the PWD, its CSO LTCPU and commend PWD for its creative approach.”* (Eugene Swggnot, Northern Liberties Resident)
- *“This program is a must for the good of the entire city of Philadelphia. There is much talk regarding “greening.” But this project is instrumental to the very core values our President speaks of. As one citizen, I*

Philadelphia Combined Sewer Overflow Long Term Control Plan Update

cast my vote of confidence to the Philadelphia Water Department.” (James Harrison, Northern Liberties Resident)

- *“I see this project is long-term and pretty ambitious, and I assume you will be needing a large workforce to accomplish these goals. If I wanted to work for this project, what should I do? I completely support your efforts and would like to offer my help, even voluntarily, to accomplish this.”* (Ernesto Canal, Northern Liberties Resident)
- *“This is a very exciting plan of action. In addition to all of its environmental benefits, it brings a certain urban-natural vitality to the city and its management of water runoff!”* (Harry Kyriakodis, Esq., Northern Liberties Resident)
- *“I would like to support the PWD project [plan]. It is a very interesting idea that could create a better environment in the city... I feel that one of my dreams regarding the city is coming true! Thank you!”* (Cinzia Sevigani, Ph.D., South Philadelphia)
- *“I am excited about this plan! It makes so much sense to recycle rain water in this way and reduce the heat pocket in the City. The benefits to the City are so varied and all the areas of influence (like parking, roofs, streets, schools, open space and industry, etc.) individually can be used to spur each other on to make a really major impact! Go Philly Go! Thanks to PWD for moving forward on this! I’m a “PIMBY” – Please in my back yard!”* (Mary Stumpf, South Philadelphia Resident)
- *“What’s not to like? We’re transforming concrete and black top into a green oasis!”* (Diane Mayer, Pennsport Resident)
- *“This plan is so exciting, the timing is right and our City needs a kick in the pants to move forward with clean water initiatives!”* (Jessica Mammarella, South Philadelphia Resident)
- *“Thank you for the thoughtful & exciting presentation tonight at Columbus Square Park. PWD’s plan to green Philadelphia is the most exciting & encouraging initiative my husband & I have seen in our 30 plus years in Philadelphia... Because of these initiatives our neighborhood has blossomed with young families interested in calling this neighborhood their home.”* (Norma Gottlieb & Mark Brown, Columbus Square)
- *“This is the way to go! Green Streets, Parks, Green Pathways!”* (Jim Campbell, SOSNA)
- *“The Green City, Clean Waters Plan is long overdue and will be a plus for our City and neighborhoods. I’m looking forward to seeing the further greening of my community!”* (Patricia Funaro, Columbus Square)
- *Green City, Clean Waters Plan... with public policy that connects us, our homes and streets to our natural shared resources... Public Health Policy at its best!* (Susan Patrone, Columbus Square)

2.5.2 Approach to Addressing Comments on Draft CSO LTCPU Summary Report

PWD will respond to questions and comments presented at public meetings. PWD is also prepared to answer questions received via mail, e-mail, fax, the Facebook Wall, and comments left on comments sheets at libraries and other centers of distribution in the City.

2.6 FUTURE PUBLIC PARTICIPATION

PWD is committed to working with the public on the planning, design and construction of CSO control projects.

PWD plans to hold an additional public meeting (Series 4) on August 25 2009, to distribute the CSO LTCPU Summary Report. All comments received at this meeting will be submitted to the PADEP and US EPA.

All public participation projects have and will continue to be designed to educate the affected public about the CSO LTCPU and CSO control projects, to get feedback from the affected public on the CSO LTCPU and CSO control projects and their results, and to partner with neighborhood residents before, during and after the implementation of CSO controls, in addition to reporting progress on the results of the public participation projects to them.

The watershed partnerships will continue to expand, as well as Model Neighborhoods, among other public participation programs. PWD will continue to evolve its public participation program in order to get a step closer to the best methods, preferred tools, key tactics and target audiences to focus its CSO LTCPU-related and CSO control-focused program messages. New initiatives will also continue to unfold. Currently, a Faith-Based Initiative is underway, where PWD and the Mayor's Office of Faith-Based Initiatives are partnering in a more focused manner with diverse faith-based organizations throughout the City on green stormwater infrastructure. See Supplemental Volume 1 for outreach materials in development.

The PWD's commitment to its watershed partners and the citizens of the City will enable the programs that support the LTCPU to continue to grow and expand.