

Seattle Public Utilities (SPU) hosted a public meeting on September 25, 2012 at Viewlands Elementary (10525 3<sup>rd</sup> Ave NW) from 6:30 to 8:30 pm. Prior to the start of the meeting, attendees could review project information and maps of the project area.

Angie Thomson (facilitator) welcomed attendees to the meeting and reviewed the meeting agenda and format. She noted that the purpose of the meeting was to give Broadview residents an opportunity to learn about the sewer and drainage work SPU completed recently in the area, discuss potential next steps for improving sewer service and reducing stormwater flooding risks related to public health and safety and get input from the public.

Angie introduced Nancy Ahern, SPU Deputy Director for the Utility Systems Management, who welcomed everyone to the meeting and emphasized the importance of the work in Broadview. She noted that the comments received at the meeting will help shape the future approaches to addressing sewer and surface water problems in Broadview. Nancy introduced Celia Kennedy, SPU Project Manager, who reviewed the goals of the project and gave an overview of the sewer and stormwater issues in the basin.

Celia introduced Jeff Lykken from the consulting team supporting the project, who gave an overview of the location of surcharged sewer pipes during the December 2010 storm. Celia continued the presentation with a review of the pilot projects in Broadview, as well as early actions completed. She introduced Andy Behnke, the consultant team lead, who presented potential tools being considered to improve sewer and stormwater service in Broadview.

Next, Celia discussed how residents can help prevent stormwater flooding in homes and properties during the upcoming rainy season by:

- Keeping stormwater system (e.g., ditches and stormwater grates) clear of debris and leaves
- Report sewer backups or stormwater flooding to SPU by calling (206) 386-1800

Cynthia Carlstad, consulting team member concluded the presentation by providing an overview of the Broadview stormwater drainage system. Before breaking up into small group sessions, Angie asked if residents had questions about the project. Comments and questions covered a range of topics, and are provided below. Staff answers are noted in italics.

**What exactly is the work SPU is doing regarding sealing manholes?** *SPU did a pilot project to seal leaky pipes in a portion of 12<sup>th</sup> Ave basin and sealed 50 maintenance hole structures as well. The sealing project helped prevent infiltration (groundwater seeping in) through these pipes and the maintenance hole structures, including during flooding events.*

**What natural drainage systems were created around Greenwood and 125<sup>th</sup>?** *Seattle Department of Transportation worked in that area and SPU will look into exactly what drainage system was used.*

**How do you know if the sewer pipes are sized appropriately to deal with potential growth and development?** *SPU has reviewed the current system and found that it can handle residential and small commercial sewage flows. However, during large storms inflow and infiltration into the pipes can overwhelm the system in some areas.*

**You mentioned pending early action drainage projects in specific areas, who should we contact to find out more about these projects?** *Residents should contact Holly McCracken at (206) 386-4195 to find out more information on specific area projects.*

**What is the impact of the additional sewer flow from the Greenwood apartment buildings on sewer pipe capacity?** *Before any development occurs, permitting agencies conduct a review to ensure pipe capacity is adequate. SPU has not seen overflows occurring in the summer, indicating that there is sufficient capacity for base sewer flows.*

**Comment from resident:** It was not King County who put in the sewer system; it was the Greenwood Sewer District.

**My basement floods frequently.** *The sewer pipes in the basin convey sewage in the summer, but during large winter storms in places in Broadview there is nowhere for the extra water to go. Note: Some ways basements can flood is from groundwater leaking in through cracks or also from the sewer backing up into basements.*

**When is SPU going to make improvements to stormwater drains on 9<sup>th</sup> and 120<sup>th</sup>?** *SPU is in the process of identifying a stormwater management solution for that area. You can provide some suggestions about that area during the breakout sessions.*

**What are the results of the summer infiltration testing?** *That work was completed as part of a different project, the Venema Natural Drainage Project, so results are not available at this meeting tonight. Note: Nancy Ahern provided a quick summary of where that project is at this time.*

**Is SPU going to encourage residents to disconnect their downspouts from their sewer drain?** *SPU is looking at that as one possible solution.*

**Is the data that is being collected going to be made available to the community?** *Yes, all the data is public information and can be made available.*

**Are there water storage tanks (for sewage) in Broadview now?** *There are currently no water storage tanks in Broadview.*

After the question and answer session concluded, the group broke up into small groups to discuss potential solutions to address sewer and drainage issues in the 12<sup>th</sup> Avenue and Dayton Avenue basins. Summaries of those discussions are provided below. Participants also had the opportunity to visit booths on the following topics: 1) Early Action Drainage Improvements, 2) Backflow Valve Pilot Project (reducing risk of sewer backups into homes), 3) Restore Our Waters and 4) New GIS tool showing drainage and sewer system in Broadview.

### **12<sup>th</sup> Ave Basin breakout group**

Project team participants: Angie Thomson, Andy Behnke, Jim Johnson, Landon Bosisio

Andy reviewed the unique features of the 12<sup>th</sup> Avenue Basin, including the bluffs along Puget Sound and the presence of Mohlendorph Creek draining into Carkeek Park. He also commented on the soggy areas along 12<sup>th</sup> Avenue. He reviewed potential tools that could be implemented to reach project goals in this basin, and noted that shallow infiltration into the soil could be challenging in much of this basin because of the high water table.

The group discussed concerns they have about the flow in the basin:

- Bluff stability, especially the slide area
- Size of pipes at Carkeek Park
- Imprint pond in the park
- Standing water
- Critical areas (13<sup>th</sup> Ave NW creek)

Andy asked the group how willing they would be to disconnect their sump pumps from the sewer system, as one part of the solution. Most people responded that they do not have sump pumps. When asked if they'd disconnect their roof downspouts, people answered that they would, providing there was a way to move the water off of their property in another way.

Andy provided additional information regarding some of the tools the team is considering for reducing sewage backups. Pipe storage can include installing one or two pipes (often 6 feet in diameter) to store sewage when the system is over capacity. Pipes can be installed through pipe bursting or open cut construction.

Angie outlined some of the tools for reducing stormwater flooding, such as cisterns, cascading swales, and roadside bioretention and infiltration. The group made some suggestions for diverting stormwater flow off 12<sup>th</sup> Avenue.

### **Dayton Avenue Basin (includes 1<sup>st</sup> to 105<sup>th</sup>) breakout group**

Project team participants: Cynthia Carlstad, Jeff Lykken, Celia Kennedy, Alice Lancaster, Courtney Boyle

Jeff gave an overview of the work that SPU has completed in the Dayton Avenue Basin, including modeling and monitoring the sewer system and stormwater flows, CCTV (video) inspections and smoke testing. Jeff also discussed issues related to the stormwater and sewer system capacity at NW 115<sup>th</sup> Ave and Dayton Ave.

Participants in the discussion had questions and comments, including whether the pipe replacement on NW 105<sup>th</sup> Ave was intended to fix problems related to stormwater. Jeff responded that there were improvements on NW 105<sup>th</sup> Ave, but other improvements would still be needed to address upstream issues. A group member asked about flooding in basements on NW 104<sup>th</sup> Ave and the effectiveness of bioswales.

Jeff asked the group to share any information about the neighborhood that would help SPU during the development of alternatives. As the group provided information, Cynthia marked those areas on a map of the Dayton Avenue Basin. Individuals brought up the following topics:

- Stormwater runoff that could flood basements and cause heavy water flow down streets. Jeff noted that stormwater could be directed to a detention area or facility
- Problems related to ditches, including impaired access to a home and the presence of garbage in ditches
- Not being able to see where a recently enlarged culvert was being placed

Jeff provided information about the tools the team is considering for reducing sewer backups and overflows in the Dayton Ave Basin. Some group members suggested that doing pipe repairs would help reduce infiltration, but another noted that fixing residential laterals is very expensive. One participant asked whether a funding program existed to help residents pay for these residential side sewer repairs. A member of the group commented that it didn't make sense to them to store or send stormwater downstream rather than reduce the infiltration in the system.

Jeff asked the group how willing they would be to disconnect their sump pumps from the sewer system. One person supported the effort.

The community meeting concluded with information about upcoming community involvement events, including a meeting in the first quarter of 2013 to provide residents with the latest information on alternatives for sewer system improvements.