

MSANK Wet Weather Management Program

May 2014 Newsletter

Long Term Control Plan: Development of Alternatives Solutions



MSANK & the Communities need your involvement.

MSANK and the communities of Arnold, Lower Burrell, New Kensington, and Plum are in the final stages of an “Alternatives Analysis” for the federally mandated Long Term Control Plan (LTCP) that will be submitted to the U.S. Environmental Protection Agency (EPA). The LTCP, due in the fall of 2014, will provide alternatives solutions that address combined sewer overflows and sanitary system flooding that occurs during large rainfall events. The Alternatives Analysis of the LTCP is used in conjunction with a hydrologic and hydraulic model in order to determine the most cost effective and operationally efficient solutions to solving sewer system overflows caused by storm events.

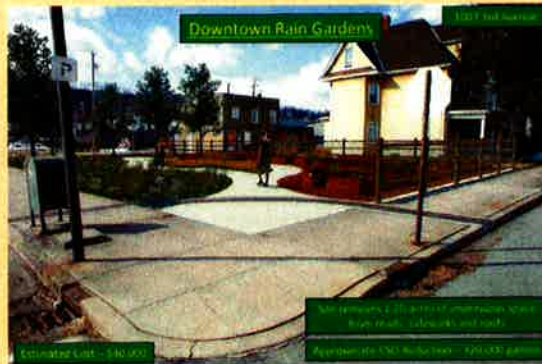
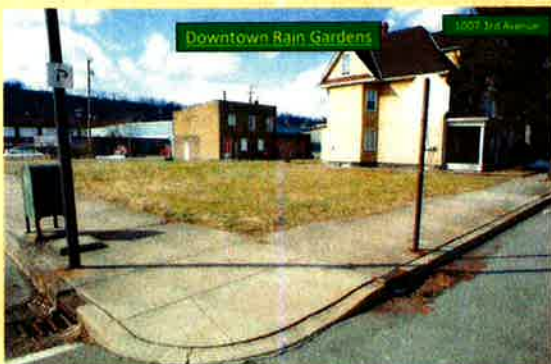
Some alternatives solutions identified for the service area include: maximizing treatment capacity at the sewage treatment plant, rehabilitation of structurally deficient and leaking sewer pipes, stormwater management through green infrastructure and rain gardens, sewer system storage tanks, and increased flow capacity in sewer pipes.

MSANK and the communities have been working aggressively during the past months at identifying which combinations of these alternatives solutions are the most cost effective and compliant to EPA Clean Water Act regulations for the residents and rate payers within the service area.



Stormwater Management through Green Infrastructure and Rain Gardens

In the very near future, a proposed draft LTCP will be released to the public for comment from the service area residents. In this draft, the recommended alternatives solutions will be proposed along with a detailed financial assessment of how the solutions will impact the residents and rate payers. MSANK



and the communities will be requesting that all the concerned citizens get involved in the final stages of this important regional issue.

Stay tuned at
www.msank.org!

Potential Green Infrastructure in New Kensington

What is Green Infrastructure?

Green infrastructure uses vegetation, soils, and natural processes to manage storm water and create a healthier urban environment. Green infrastructure also refers to storm water management systems that mimic nature by soaking up and storing water before it drains to collection systems that can become overloaded.

Examples of these systems include rain gardens, planter boxes, bioswales, permeable pavement, and green roofs.



Rain Gardens: Rain gardens (also known as bio-retention or bio-infiltration cells) are shallow vegetated basins that collect and absorb runoff from

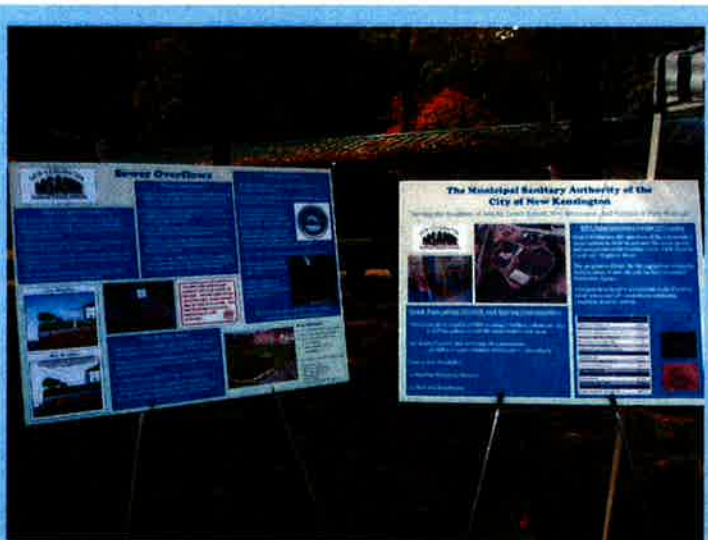
rooftops, sidewalks, and streets. Rain gardens mimic natural hydrology by infiltrating and evapo-transpiring runoff. Rain gardens are versatile features that can be installed in almost any unpaved space.

Planter Boxes: Planter boxes are urban rain gardens with vertical vaults and open or closed bottoms that collect and absorb runoff from sidewalks, parking lots, and streets. Planter boxes are ideal for space-limited sites in dense urban areas and as a streetscaping element.

Bioswales: Bioswales are vegetated, mulched, or landscaped channels that provide treatment and retention as they move storm water from one place to another. Vegetated swales slow, infiltrate, and filter storm water flows. As linear features, vegetated swales are particularly suitable along streets and parking lots.

Permeable Pavements: Permeable pavements are paved surfaces that infiltrate, treat, and/or store rainwater where it falls. Permeable pavements may be constructed from pervious concrete, porous asphalt, permeable interlocking pavers, and several other materials. These pavements are particularly cost effective where land values are high and where flooding or icing is a problem.

Green roofs: Green roofs are covered with growing media and vegetation that enable rainfall infiltration and evapotranspiration of stored water. Green roofs are particularly cost effective in dense urban areas where land values are high and on large industrial or office buildings where storm water management costs may be high.



Posters displayed at the "Social in the Park" in New Kensington.

Public Participation

In order to provide the opportunity for public participation during development of the Long Term Control Plan, MSANK representatives provided an exhibit at the New Kensington/Arnold "Social in the Park" at Memorial Park in New Kensington on September 15, 2013. Posters about the MSANK sewer system were displayed and information was handed out to the public. An interactive display demonstrating overland rainfall and runoff responses was available for children. A similar exhibit will be provided at the "Social in the Park" to be held at Roosevelt Park in Arnold on May 18, 2014.