



# Turtle Creek Planning Basin

## Basin Quarterly Activity Report #8

### Basin Facilities Plan Development

This Basin Quarterly Activity Report (BQAR) summarizes the activities of the Turtle Creek (TC) Basin Planning team since Spring 2011. The TC Basin Planning team prepared an August update to the Draft Feasibility Study and Present Worth Analysis Report. For the August update, the team incorporated municipal planning information into the analysis of additional basin alternatives for integration with other basins and overall system-wide alternatives. The team's effort has concentrated on basin alternatives that would be part of System-Wide alternative 3f (described in more detail in the "In the Region – ALCOSAN Updates" portion of this BQAR), which controls SSOs for the 2-year storm and CSOs to meet water quality standards. TC basin alternatives for Alternative 3f maintain the preferred basin-based approach of distributed control, with consolidation sewers conveying wet weather flows to four buried storage tanks at four sites along Turtle Creek. The team will continue to refine the preferred basin alternative as municipal plans are developed further and the system-wide alternatives converge to the ultimate Wet Weather Plan.

Details of the preferred basin-based approach of distributed control, with consolidation sewers conveying wet weather flows to four buried storage tanks at four sites along Turtle Creek are as follows:

- Overflows would be conveyed to a storage site on Site B using consolidation sewers CF01 and CF02. CF01 would convey overflows from T-01 through T-04, CF02 would convey flow from T-08 and T-07.
- Overflows from T-25 through T-10 along Turtle Creek would be conveyed to a storage tank at Site 5 using consolidation sewer CF03, which would run mostly parallel to the Turtle Creek Interceptor. The storage tank at Site 5 would also receive conveyed wet weather flows from a municipal Thompson Run consolidation sewer from TR-06 to T-09.
- Site A would store wet weather flows received from consolidation sewer CF04, conveying overflows from CSO T-26 and SSOs T-26B and T-26A.
- Consolidation sewers CF05 (T-33 through T-27) and CF06 (T-29A-10 and T-29A-00) would convey wet weather flow to a storage tank on Site 36.

The TC Draft Feasibility Study and Present Worth Analysis Report will become the TC Basin Facility Plan. The Facility Plan will describe in detail the facilities that could be constructed, or the actions that ALCOSAN could take, within the TC Basin as part of the regional Wet Weather Plan to address the Consent Decree requirements.



**Site B is located along the east bank of Turtle Creek and straddles the border of East Pittsburgh and North Versailles.**

**Site B is one of the wet weather control sites in the preferred basin alternatives for the TC Basin. A buried storage tank here would control overflows from outfalls T-08 through T-01 in the downstream reaches of Turtle Creek.**

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### In the Turtle Creek Communities

The Turtle Creek (TC) Basin Planning Committee (BPC) meeting No. 10 was held on May 24, 2011, at the Gateway Hall in Monroeville. Topics discussed included the ALCOSAN Feasibility Report and Basin Facilities Plan, Municipal Feasibility Studies, update on outreach initiatives, the ALCOSAN Regionalization Study, and next steps for the TC Basin team.

**BPC No. 11 is scheduled for October 3, 2011, at 1:30 PM, at Gateway Hall, Monroeville Volunteer Fire Company #4.**

The agenda will include a report on the TC Basin Facilities Plan, including Plan progress, integration of Municipal Alternatives, and schedule update. There will also be an update on Municipal Planning Information and a discussion of the status of Municipal Feasibility Studies. A report on public outreach efforts will be given with an emphasis on the upcoming public Town Hall meetings. Finally, there will be a report on the ALCOSAN Regionalization Study.

### In the Region... ALCOSAN Updates

*Development of System-Wide Alternatives* ALCOSAN has integrated the preferred basin alternatives from each of the seven Planning Basins with needed accompanying regional conveyance, storage and treatment facilities. Each of the resulting System-Wide Alternatives represents a complete plan to control all ALCOSAN and municipal CSOs and SSOs to a selected level of control.

Upon evaluating the overall impacts of the System-Wide Alternatives, ALCOSAN recommended modifications to various components of the basin alternatives to enhance their benefits to water quality and/or to reduce regional implementation costs. Many technical, economic and regulatory factors were also considered, including:

- Municipal flow projections and planned overflow control improvements
- Maximizing the value of existing conveyance and treatment plant infrastructure
- The cost vs. benefit of treatment plant expansion
- Opportunities to consolidate planning basin facilities
- Comingling of sanitary and combined flow
- Water quality benefits, including increased control in or near "sensitive" areas
- Balancing financial capability limitations with regulatory compliance requirements

To identify the most cost-effective mix of basin-based and regional facilities, a number of hybrid alternatives were identified and evaluated. Six different tunnel configurations with various combinations of remote CSO and SSO facilities along the rivers were analyzed. Control variables included SSO control for three different storm intensities and two increased treatment plant capacities at the Woods Run facility.

At a CSO control level of 4-6 overflows per year and an SSO control level corresponding to the 2-yr storm, one of the leading system-wide control alternatives appears to be a new regional storage / conveyance tunnel extending from the Woods Run WWTP up the Allegheny and Monongahela rivers to serve the MR, LOGR (Allegheny portion), UA, UM, CC and SMR planning basins. The LOGR (Ohio portion) and Turtle Creek basins would retain their preferred basin-based overflow control alternative components.

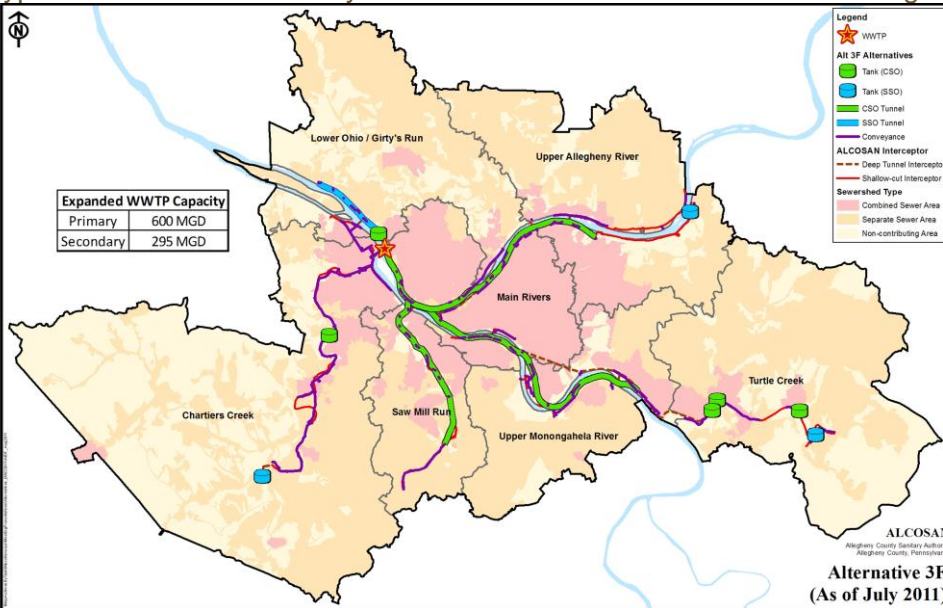


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## In the Region... ALCOSAN Updates (continued)

Variations of this alternative were also analyzed at SSO control levels corresponding to the 10-yr storm and the Typical Year rainfall. This system-wide alternative is illustrated in the figure below.



The seven BPs will each base their Facility Plan on the portions of the recommended system-wide alternative contained in their respective planning basin.

## On the Horizon - Future Actions

**Get ready...** This fall, ALCOSAN will host a series of informational Town Hall meetings to provide updates on basin planning activities. Dates for TC Basin specific Town Hall meetings are as follows:

- Wednesday, November 2 (10:00 AM – Noon), Turtle Creek Borough Council Chambers and Community Room
- Monday, November 14 (5:30 – 7:30 PM), Gateway Hall, Monroeville

**Region-wide Town Hall meetings** will also be held at the following locations:

- Wednesday, November 9 (5:30 PM - 7:30 PM), IBEW #5 Circuit Centre
- Tuesday, November 15 (10:00 AM - 4:00 PM), Heinz History Center

**For more information, and for a list of all of the upcoming Town Hall meetings, please go to [www.alcosan.org](http://www.alcosan.org)**

### Contact Information

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