

**Appendix A-2:
Newsletters**

Basin Quarterly Activity Reports (BQAR) by Basin

Upper Allegheny Basin

Basin Quarterly Activity Report

Upper Allegheny/Pine Creek Basin

Quarterly Key Points

The first year of ALCOSAN's Upper Allegheny/Pine Creek Planning Basin activities is complete. Similar planning efforts are being undertaken in six other basins with all plans being integrated into a basin facilities plan in 2011. Key achievements during the first year of the project include:

- Municipal background information has been collected to characterize the basin. Information such as demographics, population projections, collection system attributes, overflows and other data was summarized in an Existing Conditions Report in April 2009. The report was distributed for municipal review in May 2009.
- GIS surveying and limited, but essential, manhole inspections were completed in April 2009 to supplement data provided by 3RWW and the municipalities.
- The flow monitoring program within the municipal collection systems was completed in February 2009.
- One-on-one meetings were conducted with representatives of the municipalities to provide background information on the collection systems, discuss future growth, identify historical problems areas and to identify planned improvements.
- A hydraulic and hydrologic computer model of the essential portions of the regional collection system has been developed as of May 2009. Currently, it is being calibrated and integrated into a system-wide model. A comprehensive modeling report is planned to be issued in the Fall of 2009.
- An initial ranking of CSOs within the basin was developed in June 2009. This initial ranking is based on a combination of overflow volume, flow and frequency information from the previous modeling and reporting efforts.
- A process is in place for evaluating and short-listing CSO storage, treatment and conveyance technologies. Preliminary sites/locations for these technologies are currently being identified.
- A spreadsheet-based cost estimating tool has been developed to provide order of magnitude cost estimates for comparing alternatives.
- Four Basin Planning Committee Meetings have been conducted to coordinate ALCOSAN's wet weather planning efforts with the municipalities.
- Customer Municipal Advisory Committee and Regional Stakeholder Group membership roles have been filled and initial meetings held.
- Discussion was held with municipal officials at the June 18th Basin Planning Committee meeting about identifying early action projects where municipalities would partner with ALCOSAN to apply for PENNVEST or RUS (Farmers' Home Administration) funding. Multi-municipal projects that would have a large immediate benefit and foster partnership, such as stream removal projects, would be ideal candidates.

Basin Quarterly Activity Report

Upper
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On The Horizon...Your Participation

It is very important that all members of the affected public, including group stakeholders and affected ratepayers, become actively involved in the development of ALCOSAN's wet weather plan. By listening, learning, and participating in various meetings and public forums, everyone concerned can:

- Become actively involved in the development of ALCOSAN's wet weather plan;
- Understand the environmental drivers for undertaking the project and the economic impact to the region;
- Participate in the development of solutions to the wet weather problem;
- Gain an appreciation for the long-term benefits of the wet weather project.

ALCOSAN and the Upper Allegheny/Pine Creek Basin Team (UA Basin Team) intend to reach out to officials, stakeholders, and the general public whose voices may not otherwise be heard in a planning process.

Basin Quarterly Activity Report

Upper
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Public Information & Outreach

Public input will be an integral element of the planning process. The UA Basin Team will inform and educate the public using a wide variety of means, including Basin Planning Committee (BPC) meetings, public forums, distribution of printed materials, and electronic communication.

The UA BPC Meetings will provide opportunities for sustained, informed public. Each meeting will include a public participation update on the formal agenda. At critical points in the planning process, meeting participation will be expanded to include basin-specific environmental groups, governmental officials, and other key stakeholders. In early 2010, the first of a minimum of two (2) public forums will be held in the UA Basin. These meetings will be open to any and all interested members of the public. These public forum engagements will provide a framework to discuss and explain wet weather issues, the planning process, potential solutions and regional integration in a way that all attendees will understand. Those in attendance will be encouraged to ask questions and present opinions. The UA Basin Team will discuss outreach initiatives with the BPC attendees at the next quarterly meeting.

ALCOSAN recently convened the Customer Municipality Advisory Committee (CMAC) and the Regional Stakeholder Group (RSG). The CMAC will meet quarterly to provide guidance and solicit feedback for ALCOSAN's Long Term Wet Weather Control Plan. The fourteen members of the CMAC were appointed by the County Executive and ALCOSAN to represent the seven planning basins and to act as the steering committee for the Regional Stakeholder Group. The Regional Stakeholder Group is comprised of approximately thirty-five members representing academia, municipal government, regional government, environmental groups, land use entities, and special interest groups. This group will meet quarterly as a minimum, to assist with public participation, education, and outreach. As the Long Term Wet Weather Control Plan moves forward, the RSG will engage the UA Basin to share insights, concerns, etc.

ALCOSAN will provide quarterly website updates on the wet weather plan, with future web updates scheduled for July and November of 2009. The new ALCOSAN Municipal website is up and running. Please visit: <http://municipalities.Alcosan.org>.

Basin Quarterly Activity Report

Upper
Allegheny/Pine
Creek Basin

Basin Planning Committee Updates

The Upper Allegheny/Pine Creek Basin Planning Committee has met four times, with the most recent meeting held on June 18, 2009. These Committee meetings are attended by engineers from Malcolm Pirnie (Basin Consultant), representatives from ALCOSAN, 3RWW, regulatory representatives and managers/engineers from the municipalities in the Upper Allegheny/Pine Creek Basin.

Thus far, the meetings have been “workshop” oriented, with details of the ALCOSAN Wet Weather Plan discussed, along with the data and technical evaluations needed to identify viable solutions to the wet weather problems in the Basin.

The focus thus far has been gathering mapping, demographics, flow monitoring, and sewer system information from the municipalities. This has resulted in a cooperative effort between Malcolm Pirnie, ALCOSAN, Allegheny County, 3 Rivers Wet Weather, and each municipality in the Basin. As shown in the table below, meetings were held with each municipality (and their engineer) to gather valuable information about their respective sewer system and learn more about wet weather problems and concerns in the municipalities.

These meetings were followed up by telephone discussion and the submittal of technical flow and capacity information by the municipality to Malcolm Pirnie. The cooperation between everyone involved has been excellent and will certainly lead to the identification of the best possible solutions and technologies for the Basin.

The next Basin Planning Committee Meeting will be held in the fall of this year and will focus on discussing preliminary screening of overflow control alternatives in the Upper Allegheny/Pine Creek Basin and the criteria used for establishing locations for future capital improvements. This meeting will also be attended by local stakeholders.

Basin Municipal Meetings				
Municipality/Authority	Municipal Contact	Engineer	Phone Call Before Meeting	Date & Time of Meeting
Aspinwall	Ed Warchol	Bob Zischkau Jr.	9/09/08	9/10/08 – 1:30p.m. @ Sharpsburg
Blawnox	Sherry Kordos	Bill Mckeever	9/22/08	9/23/08 – 9:00 a.m.
Etna	Mary Ellen Ramage	Don Newman	9/09/08	9/10/08 – 3:30 p.m.
Fox Chapel	Gary Koehler	Bill Gordon	9/04/08	9/05/08 – 1:30 p.m.
Indiana	Daniel Anderson	Daniel Slagle	9/22/08	9/23/08 – 1:30 p.m.
O’Hara	Julie Jakubec	Chuck Steinert	9/09/08	9/10/08 – 11:00 a.m.
Penn Hills	Mohammed Rayan	Richard D. Ministerman	9/04/08	9/05/08 – 8:30 a.m.
Ross	Wayne Jones	Art Gazdik	9/22/08	9/23/08 – 11:00 a.m.
Shaler	Tim Rodgers	Kevin Creagh	9/09/08	9/10/08 – 8:30 a.m.
Sharpsburg	Ron Borczyk	Bob Zischkau, Jr.	9/09/08	9/10/08 – 1:30 p.m.
Verona	Bonnie Conway	Larry Seiler	9/04/08	9/05/08 – 11:00 a.m.

Basin Quarterly Activity Report

Upper
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Creek Basin

Future Actions

Over the next several months, detailed technical work will continue on the Wet Weather Plan for this basin. All of these efforts will be directed at identifying the appropriate solutions to the wet weather problems in the basin. This work includes:

- A Screening of Preliminary Alternatives and Sites Report will be submitted in late 2009 to identify feasible CSO treatment technologies within the UA basin and to identify areas where improvements to the existing system may be necessary.
- A Hydraulic and Hydrologic Model Calibration Report will be issued in the Fall of 2009 to summarize the calibration and verification of the UA basin model. Summaries of predicted overflow statistics based on a typical year of wet weather events will be presented.
- Bi-weekly attendance at the Feasibility Studies Workgroup meetings by representatives from the Upper Allegheny, Sawmill Run or Main Rivers basin planning teams will continue.
- The next BPC meeting will likely occur in the Fall of 2009.
- The next Public Participation Plan Workshop is scheduled for the Fall of 2009.
- ALCOSAN is to collect, by August 31, 2009, all Sanitary Sewer Overflow response plans developed by, or for, the customer Municipalities that apply to the Sanitary Sewer Outfalls listed in Appendix B of the Consent Order.

Contact Information

Any questions or requests for additional information may be directed to:

Mike Lichte, ALCOSAN Manager of Planning, 412-732-8004, Michael.Lichte@alcosan.org

Or

Tom Hartwig, Municipal and Public Outreach Leader, Upper Allegheny/Pine Creek Basin, 724-934-4110, THartwig@PIRNIE.com

Basin Quarterly Activity Report

Upper Allegheny/Pine Creek Basin

Quarterly Key Points

ALCOSAN's Upper Allegheny/Pine Creek (UA) Planning Basin activities have moved well into the second year. Similar planning efforts are being undertaken in six other basins with each basin completing a facilities plan in 2011. Basin facilities plans will ultimately be integrated into a regional Wet Weather Plan and submitted to the regulatory agencies in 2012. Key achievements during the last quarter of the project include:

- The Existing Conditions Report was revised to include updated municipal information. This report is available by request from ALCOSAN.
- Inspections of critical sewer manholes and overflow regulating structures were completed.
- Additional flowmeters were installed after recent municipal sewer rehabilitation in Penn Hills to determine if the infiltration had been reduced as a result of the repairs.
- A hydraulic model of the critical portions of the regional collection system was developed and calibrated using historical precipitation and sewer system flowmeter data.
- The model was used to generate probable volume, frequency and duration of overflows during a typical year and for a number of differently sized storm events. A draft modeling report was developed and submitted to ALCOSAN for review in October of 2009.
- The sewer overflow statistics were used to quantify overflows and develop potentially viable overflow control measures in the UA Basin.
- Overflow control measures that could reduce or potentially eliminate the impact of the overflows were identified, reviewed and screened.
- Meetings with municipal representatives were conducted in July 2009 to discuss preliminary potential overflow control sites.
- On August 11, 2009 a workshop was conducted with municipal representatives to receive feedback on the site screening process. As alternatives are further refined, the lowest cost alternatives will be evaluated and compared with the availability and size of sites.
- A spreadsheet-based cost estimating tool was made available to both the Basin Planners and municipalities. The tool is used to provide high-level preliminary cost estimates for comparing overflow control alternatives.
- Basin Planning Committee Meeting No. 5 was conducted on October 9, 2009 to coordinate ALCOSAN's wet weather planning efforts with the municipalities.
- Customer Municipal Advisory Committee and Regional Stakeholder Group meetings were held on June 23, 2009 and July 14, 2009 respectively.
- Internal workshops were held on July 30, 2009 and August 27, 2009 to develop protocols for conducting upcoming Public Participation meetings. These public meetings will be held in November 2009.
- The ALCOSAN Open House was held on September 19, 2009.

Basin Quarterly Activity Report

Upper Allegheny/Pine Creek Basin

Quarterly Key Points (cont.)

- Early Action Projects: Two projects were identified in the UA Basin, one at Ravine Street and one at Delafield Avenue.
 - The Ravine Street project would involve Shaler Township, O'Hara Township, and Sharpsburg Borough. An existing drainage channel conveys significant stormwater from O'Hara and Shaler Townships into a trunk sewer line in O'Hara Township just north of Sharpsburg Borough. The stormwater is then conveyed under Route 28 and discharges into the Sharpsburg combined sewer system at the intersection of State Route 28 and Ravine Street. The project may involve construction of a new sanitary sewer to convey sanitary flow from Shaler and O'Hara Townships into the combined system further downstream and a new 48" storm sewer and outfall structure to convey storm flow directly to the Allegheny River.
 - The Delafield Avenue project would seek to remove a stream and stormwater that enters into the Aspinwall combined sewer system. ALCOSAN is currently working with the US Army Corps of Engineers, Aspinwall, Fox Chapel and O'Hara Township to identify the feasibility of removing this inflow near UPMC St. Margaret.
- Regional Integration through Technical Standards: An important aspect of ALCOSAN's wet weather planning is the development of technical standards and protocols which will ensure a seamlessly integrated Wet Weather Plan that considers the local priorities identified in each of the seven basins. ALCOSAN's Program Management team is responsible for such coordination.
 - The flow monitoring program is one example which was carried out by four separate firms, and produced quality information that has been and will continue to be used by the Basin Planning teams and customer municipalities.
 - The effectiveness of this standardization should again be demonstrated when the models from each of the seven basins are integrated into a system-wide model. Basin Planning teams are extending the hydraulic models to include critical portions (identified by ALCOSAN's Consent Decree) of the municipal collections systems. These models, together with the data from the flow monitoring program will be used to assess a range of alternatives to control wet weather flow and improve water quality. Through documents, regular workshops and periodic status meetings, the standardization established for the models will once again maximize the value of the investment made by the ratepayers.
- Over the coming months, guidance will be provided to the Basin Planning teams and customer municipalities for the collaborative development of an integrated Wet Weather Plan that addresses local and regional challenges.

Basin Quarterly Activity Report

Upper
Allegheny/Pine
Creek Basin

On The Horizon...Your Participation

Please join us this fall, as the UA Basin Team launches a series of public forums to give members of the public with varying degrees of knowledge and interest an opportunity to learn about the wet weather issues and the ALCOSAN Wet Weather Program.

Three public forums, conducted as open houses, will be convened across the UA Basin. We invite you to attend the date and place that is convenient to you.

November 9th Penn Hills (convened in collaboration with the Turtle Creek/Thompson Run Basin)
Penn Hills Senior Center – 147 Jefferson Road, Penn Hills, PA 15235
(412)-244-3400

November 11th Sharpsburg
Sharpsburg Borough Building - 1611 Main Street, Pittsburgh, PA 15215
(412)-781-0546

November 18th O'Hara Township
Boyd Community Center – 1220 Powers Run Road, Pittsburgh, PA 15238
(412)-828-8566

The open houses will take place from 7:00 to 9:00 PM. At 7:15 PM, there will be an informational presentation about wet weather issues, ALCOSAN's Wet Weather Program, and the special conditions of the UA Basin. There will be informational kiosks open to the public providing information about the wet weather problems, the basin planning process, and possible solutions.

The public forums are free and open to all. Refreshments will be served and there will be educational opportunities available for school-age children. Whether you are new to the wet weather issue or you are already informed, please join us to learn about this important issue, important to your community and to the region.

Basin Quarterly Activity Report

Upper
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Public Information & Outreach

Public input continues to be a key element of the basin planning process. The UA Basin Team has been informing and educating the public by way of the Basin Planning Committee (BPC) meetings, through meetings of the Customer Municipality Advisory Committee (CMAC) and the Regional Stakeholder Group (RSG), and through distribution of quarterly reports.

The UA Basin Planning Committee most recently met on October 9th in Shaler Township. The status and results of the modeling, preliminary site screening and types of control alternatives were presented. Potential Early Action Projects and possible funding sources were discussed. Future BPC Meetings will include invitations to stakeholders within the UA Basin. The next BPC meeting will likely be conducted in January 2009.

As advocates for ALCOSAN's customer municipalities, the CMAC members have addressed several key topics which include: municipal feasibility studies, multi-municipal funding and collaboration, coordination of ALCOSAN's planning process and its impacts on its customer municipalities, effective methods to educate elected officials, and early action projects. The CMAC remains a forum to collaboratively examine municipal concerns, questions and experiences. The next CMAC meeting is scheduled for Wednesday, October 14, 2009.

The RSG members continue to examine and prioritize important topics that the public needs to know about regarding the wet weather pollution control program facing our region. Understanding that collaborative efforts will be the driving force in development of a comprehensive Wet Weather Plan, the RSG is actively engaged in defining effective avenues of communication and identifying critical topics and issues. The next RSG meeting is tentatively scheduled for Thursday, October 15, 2009.

Three open house public forums are scheduled in November to allow members of the public with varying degrees of knowledge and interest an opportunity to learn about the wet weather issues and the ALCOSAN Wet Weather Program. These are described in detail on page 2, *On The Horizon... Your Participation*.

CMAC representatives within the UA Basin include Mary Ellen Ramage, Manager of Etna and Tim Rodgers, Shaler Township Manager.

Basin Quarterly Activity Report

Upper Allegheny/Pine Creek Basin

Basin Planning Committee Updates

The Upper Allegheny/Pine Creek Basin Planning Committee has met five times, with the most recent meeting held on October 9, 2009. These Committee meetings are attended by engineers from Malcolm Pirnie (Basin Consultant), representatives from ALCOSAN, 3RWW, regulatory representatives and managers/engineers from the municipalities in the UA Basin. The meetings continue to be “workshop” oriented, with details of the ALCOSAN Wet Weather Plan discussed, along with the data and technical evaluations needed to identify viable solutions to the wet weather problems in the UA Basin.

The recent focus has been to discuss preliminary screening of overflow control alternatives in the UA Basin. This included an explanation of what types of control measures and technologies are best suited for each of the major overflows as well as the criteria and process used for establishing locations for future capital improvement projects. A cooperative effort between Malcolm Pirnie, ALCOSAN, Allegheny County, 3 Rivers Wet Weather, and the municipalities in the UA Basin has resulted in an effective quarter where a number of meetings were conducted to exchange as much information as possible. Meetings were held with each municipality where either a major overflow was located, or where a particular control alternative might be located. These meetings were followed up with a group workshop on August 11, 2009 which presented the findings from subsequent field investigations and desktop evaluations of each of the potential sites. The overall planning process cooperation has been very beneficial and will certainly lead to the identification of the best possible solutions and technologies for the UA Basin.

The next Basin Planning Committee Meeting will likely be held in January of 2010 and will provide an update on the detailed evaluation of the shortlist of sites and overflow control alternatives that have been identified so far. This will include an economic analysis of each alternative and a detailed look at the alternative selection criteria developed in cooperation with the municipalities. Local stakeholders within the UA Basin will be invited to this meeting.

Basin Municipal Meetings				
Municipality/Authority	Municipal Contact	Engineer	Other	Date & Time of Meeting
Aspinwall	Ed Warchol			7/9/09 – 10:00 a.m. @ Aspinwall
Etna	Mary Ellen Ramage	Don Newman		7/7/09 – 10:00 a.m. @ Etna
O’Hara	Julie Jakubec	Chuck Steinert		7/7/09 – 1:00 p.m. @ O’Hara
Pittsburgh	Dan Sentz			7/14/09 – 10:00 a.m. @ Pittsburgh
Shaler	Tim Rodgers	Kevin Creagh		7/8/09 – 3:00 p.m. @ Shaler
Sharpsburg	Ron Borczyk		John Stephen Director (ARTEZ)	7/13/09 – 1:30 p.m. @ Sharpsburg
Verona	Bonnie Conway			7/13/09 – 10:30 a.m. @ Verona

Basin Quarterly Activity Report

Upper
Allegheny/Pine
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Future Actions

Over the next several months, detailed technical work will continue on the Wet Weather Plan for this basin. All of these efforts will be directed at identifying potential solutions to the wet weather problems in the basin. Upcoming work activities include:

- A Screening of Preliminary Alternatives and Sites Report will be prepared in October 2009 to summarize feasible overflow treatment technologies and sites within the UA Basin and to identify areas where improvements to the existing collection system may be necessary.
- The Hydraulic and Hydrologic Model Calibration Report will be used in conjunction with the computer model to present overflow statistics based on a typical year of wet weather and various design storms for overflow control level sizing.
- The performance of potential control alternatives will be evaluated utilizing the computer model.
- The baseline financial capability model development will continue
- A detailed alternatives analysis and economic evaluation of control alternatives will be performed.
- Bi-weekly attendance at the Feasibility Studies Working Group meetings by representatives from the Upper Allegheny, Saw Mill Run or Main Rivers basin planning teams will continue.
- The next BPC meeting will likely occur in January 2010.
- The next Public Participation Plan Workshops are scheduled for the fall of 2009.
- The next CMAC meeting is scheduled for October 14, 2009.
- The next RSG meeting scheduled for October 16, 2009.

Contact Information

Any questions or requests for additional information may be directed to:

Mike Lichte, ALCOSAN Manager of Planning, 412-732-8004, Michael.Lichte@alcosan.org

Or

Tom Hartwig, Municipal and Public Outreach Leader, Upper Allegheny/Pine Creek Basin, 724-934-4110, THartwig@PIRNIE.com

Basin Quarterly Activity Report #3

Upper
Allegheny/Pine
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Quarterly Key Points

It has been two years since the Consent Decree was lodged which requires ALCOSAN to comply with the Clean Water Act during periods of wet weather. Since then, ALCOSAN's Upper Allegheny/Pine Creek (UA) Basin Planning Team has been collecting information on the UA Basin and using it to evaluate potential long-term solutions to the overflows in the UA Basin. The UA Basin potential solutions will be combined with the proposed solutions from ALCOSAN's six other planning basins into a regional Wet Weather Plan submitted to the regulatory agencies in 2012.

The UA Basin Planning Team focused on the following three tasks during the last quarter of 2009:

Preliminary Screening of Controls and Sites Report

This report provides an initial evaluation of the potential control technologies available to address the overflows that are occurring along the Allegheny River in the UA Basin. Developed in close collaboration with the communities in the UA basin, this report identified and screened potential sites that may be suitable for locating a wet weather control alternative (combination of technology + site + wet weather event). The report reviewed many technologies and sites and conducted preliminary screening of both, eliminating some sites and technologies for the UA Basin that either had a significant implementation issue (serious flaw) or that were comparatively much more difficult to implement than other comparable sites or technologies.

Hydraulic and Hydrologic Report

This report documents the critical sewers and anticipates hydraulic conditions in the sewers under different precipitation events. This report includes:

- A hydraulic model of the critical portions of the regional collection system that was developed and calibrated using historical precipitation and sewer system flowmeter data.
- Predictions of the probable volume, frequency and duration of overflows during a typical year and for a number of differently sized storm events.
- The overflow statistics that will be used to develop potentially viable overflow control alternatives in the UA Basin.

This report and model are currently under review by ALCOSAN.

Public Participation Meetings

As part of ALCOSAN's public outreach, three public meetings were held in the UA Basin. The public meetings were held November 9th at the Penn Hills Senior Center, November 11th at the Parkview Banquet Hall in O'Hara Township and November 18th at the Sharpsburg Borough Building. The purpose of the meetings was to educate the public on the current problems in the ALCOSAN service area, to understand what "wet weather issues" are related to the sanitary sewer system, and to show how ALCOSAN and the UA Basin Planning Team is working on solutions.

Basin Quarterly Activity Report #3

Upper
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Quarterly Key Points (cont.)

Major phases of ALCOSAN's wet weather planning program include: 1) review and analysis of existing data and information; 2) hydrologic and hydraulic (H&H) modeling; 3) alternatives development and analyses; and 4) development of basin facilities plan. The first phase is complete, the second phase is now nearing completion, and the alternatives development and evaluation work is about to begin.

A report on existing conditions and a report on preliminary sites and routes for wet weather control technologies have been prepared and they will be posted on the municipal secure web sites for examination by ALCOSAN's customer municipalities. The models will be "rolled out" through the Feasibility Study Working Group (FSWG) facilitated by Three Rivers Wet Weather.

Throughout most of 2010, ALCOSAN's basin planning teams will be developing and evaluating alternatives to mitigate wet weather overflows and resulting stream impacts. The goal is to develop basin-specific facilities plans first and then integrate these plans into one comprehensive overall Wet Weather Plan (WWP) for the region.

On The Horizon...Your Participation

ALCOSAN will have a booth and presentation at the upcoming Allegheny League of Municipalities conference at Seven Springs. In addition, please join ALCOSAN in promoting upcoming meetings. For a list of ALCOSAN activities, please visit the home page at www.alcosan.org.

Public Information & Outreach

ALCOSAN would like to give special thanks to RSG members Ron Borczyk (Sharpsburg Borough Manager) and Harry Dilmore (Avalon Borough & Kilbuk Township Manager) for co-hosting a basin public outreach meeting in November 2009. We greatly appreciate the continued support, participation and dedication of time and resources by the Regional Stakeholder Group (RSG) and the Customer Municipality Advisory Committee (CMAC) members relative to development of the long-term, regional Wet Weather Plan.

The first quarterly meeting for the CMAC (meeting #5) was scheduled for Tuesday, February 9, 2010, but was cancelled due to weather. The meeting has been rescheduled for Tuesday, March 2, 2010. Informative discussions with CMAC members have provided ALCOSAN with valuable insight when coordinating with its customer municipalities. Select 2010 goals for the CMAC include integrating feedback on site alternative screening and evaluation criteria into the alternative site review process as well as actively engaging elected officials and managers to participate in this critically important planning process.

Basin Quarterly Activity Report #3

Upper
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Public Information and Outreach (cont.)

RSG meeting #5 was scheduled for Thursday, February 11th, but cancelled due to weather. It has been rescheduled for Tuesday, March 16, 2010. With a full 2010 agenda, the RSG will begin exploring implementation factors that will affect the public and discussing relevant combined and sanitary sewer overflow (CSO / SSO) control technologies. Throughout the year, RSG members also will use their organization's network to help build public consensus for the development of a regional solution.

ALCOSAN annual Public Information Meetings

ALCOSAN annually conducts these meetings to present up-to-date information about the progress toward meeting the federal requirements to reduce and/or eliminate sewer overflows in this region. Five meetings were held throughout the service area in January and February.

Basin Planning Committee Updates

The Upper Allegheny/Pine Creek Basin Planning Committee (BPC) has met five times, with the most recent meeting held on October 9, 2009. After almost two years into this cooperative process, the BPC meetings have started to move from data collection and compilation to solutions. A brief summary of the past BPC meetings is shown below.

- BPC No. 1. This meeting was held on June 25, 2008 at the Ross Township Municipal Building. This was the kick off meeting that included introductions, the purpose of the BPC meetings, general schedules and timeframes, and concerns raised by the municipalities.
- BPC No. 2. This meeting was held on November 6, 2008 at the Shaler Municipal Building. This meeting included the introduction of the CMAC and RSG and focused on the flow monitoring, proposed modeling, the Existing Conditions Report, regional wet weather overflow control plans, and the municipal feasibility studies.
- BPC No. 3. This meeting was held on February 26, 2009 at the Indiana Township Municipal Building. Updates of the CMAC and RSG were provided at this meeting. Modeling and the Existing Conditions Report were discussed, but the primary focus of this meeting was financial data collection.
- BPC No. 4. This meeting was held on June 18, 2009 at the Penn Hills Municipal Building and provided an overview of basin planning activities, the CMAC, and the RSG. This meeting then discussed the proposed site selections and technology screenings that were to be conducted.
- BPC No. 5. This meeting was held on October 9, 2009 at the Shaler Municipal Building. This meeting provided the regular updates from the CMAC and RSG. The focus of this meeting was to discuss what types of control measures and technologies were best suited for each of the major overflows as well as the criteria and processes used to establish locations for future capital improvement projects.

Basin Quarterly Activity Report #3

Upper
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Creek Basin

Basin Planning Committee Updates (cont.)

The proposed discussion topics for the 6th BPC meeting include:

- H & H Modelling. The Basin Planning Team will discuss when the model will be available to the municipalities. They will also discuss the specifics of the UA Basin Report and the preliminary model results.
- Preliminary Flow Estimates
- The Screening of Controls & Sites Report
- The Feasibility Report and Present Worth Analysis Guidance including the control development strategy, modelling alternatives, the cost of the performance analysis, and alternatives development and evaluation.
- Municipal Outreach
- Public Outreach including a summary of the recent public meetings
- Financial Data Collection

The Basin Planning Team is hoping that the municipalities will present new initiatives within their boundaries and that the group can then discuss the progress they have made in the basin.

Future Actions

In the first quarter of 2010, the UA Basin Planning Team will finalize the H&H Model and Report, begin the Feasibility and Present Worth Analysis, and continue to prepare the Wet Weather Plan for this basin. All of these efforts will be directed at identifying potential solutions to the wet weather problems in the basin. Future actions include:

- The 6th Basin Planning Committee meeting will be held on March 3, 2010 at the Sharpsburg Municipal Building.
- The revised Preliminary Screening of Controls and Sites Report was submitted to ALCOSAN on February 17, 2010.
- The Draft Hydraulic and Hydrologic Report was submitted in October 2009. Comments have been received and another submittal of the report was completed in February 2010.
- The performance of potential control alternatives will be evaluated utilizing the computer model.
- The baseline financial capability model development will continue.
- A detailed alternatives analysis and economic evaluation of control alternatives will begin.
- The next CMAC meeting is scheduled for March 2, 2010.
- The next RSG meeting scheduled for March 16, 2010.



Upper Allegheny Planning Basin

Basin Quarterly Activity Report No. 4

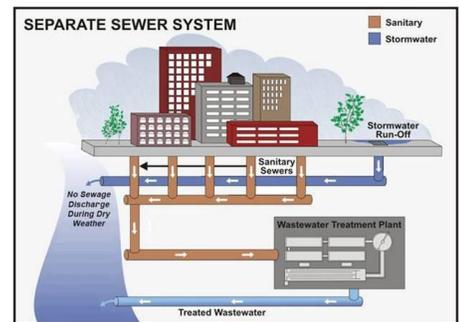
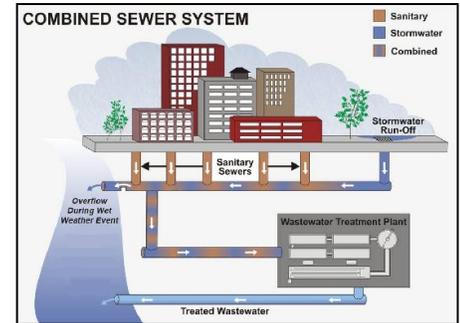
Development of Wet Weather Control Alternatives

When it rains or when snow melts, excess water enters and overloads the region’s sewage collection and conveyance systems. The Upper Allegheny (UA) Basin Planning Team has developed a hydraulic and hydrologic (H&H) computer model that simulates how precipitation affects the ALCOSAN conveyance system. The computer model predicts the frequency, rate and volume of discharge at the combined sewer overflows (CSOs) and sanitary sewer overflows (SSOs) in the UA Basin. Combined and Separate Sewer Systems are illustrated in the figures to the right. The model also identifies other problems such as natural streams that are flowing into the collection system. Details of the model were summarized in the “Upper Allegheny H&H Model Validation and Characterization Report” that was made available to all municipalities in the UA Basin.

The UA Team is now evaluating viable solutions to reduce or eliminate the overflows and achieve compliance. Technologies have been identified that have the potential to convey, store, treat or control the source of sewage overflows. Examples of technologies considered in further detail include; larger interceptor sewers, tunnels, storage, screening, high rate clarification, retention treatment basins, vortex separators, disinfection, biological treatment, source control, and green technologies.

The UA Team worked closely with the UA Basin municipal representatives to identify potential sites for these technologies that were within 2,500 feet of either a corresponding CSO (or SSO) outfall or regulator. In several cases, outfalls were grouped and the sites identified were logically located near the largest or most downstream overflow within the group. These sites were evaluated against numerous criteria such as access, construction complexity, availability, interference with critical infrastructure, and proximity public use areas.

During the upcoming months, the UA Team will be evaluating CSO and SSO control alternatives. Simultaneously, the UA Team will enhance the H&H model of the collection system, by working individually with the UA Basin municipalities to refine the Preliminary Flow Estimates (PFEs) or estimated flow that each municipality intends to deliver to their respective point of connection to the ALCOSAN system. In addition, potential areas for source control and green technologies will be identified and considered.



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Upper Allegheny Planning Basin

Basin Quarterly
Activity Report No. 4

In the Upper Allegheny Planning Basin Communities

Basin Planning Committee Meeting No. 6. The 6th Basin Planning Committee (BPC) meeting was held on March 3, 2010 in the Sharpsburg Municipal Building. The meeting included discussions on the recently completed H&H model of the critical sewers in the UA Basin, as well as preliminary flow estimates (PFEs) and why it is necessary for each municipality to provide this information. The BPC meeting also addressed the upcoming Feasibility Report efforts and the strategy to identify the most appropriate technologies to control sewage overflows. Municipal outreach efforts were discussed. The UA Team discussed the availability of the Alternatives Costing Tool which can be used by the municipalities to estimate planning level alternative costs. A weighting exercise was conducted to determine the relative importance of several evaluation criteria to the UA BPC attendees. The criteria were Economic Factors; Public Factors; Water Quality, Public Health and Environmental Impacts; Operational Impacts; and Implementation Impacts.

Municipal One-on-One Meetings. The UA Team has been meeting with individual municipal officials to update the data collected for 2008 for the "UA Existing Conditions H&H Model Development Report", to discuss proposed improvements to the municipal sewer systems that may affect the H&H computer model, and to determine a submission date for each municipality's preliminary flow estimates. The informal meetings have provided an opportunity for the UA Team and the municipalities to discuss the hydraulic model, to ask questions, and to have detailed discussions of the basin planning process.

In the Region... ALCOSAN Updates

Program Status.

Now that existing conditions have been defined and the H&H model has been developed and calibrated, the UA Basin planning effort has shifted to alternatives development and evaluation. Throughout most of 2010, ALCOSAN's basin planning teams will be developing and evaluating alternatives to control wet weather flows and pollution. The goal is to develop a basin specific plan. Coordination during this process will allow ALCOSAN to begin its regional alternatives evaluation process as the basin planning process is being completed. Regional alternatives evaluation will take the best components of each basin-wide plan and integrate them into a series of regional alternatives. Regional alternatives will then be evaluated and costs developed to select a system-wide Wet Weather Plan (WWP).

ALCOSAN Outreach.

Reaching Elected Officials and Municipal Managers: The Customer Municipality Advisory Committee (**CMAC**) has launched a correspondence campaign to encourage their peers to work closely with ALCOSAN. Like their fellow community and municipal leaders, CMAC members are held accountable for their decisions including the outcomes related to implementation of the Wet Weather Plan. Over 1,000 municipal managers and elected officials throughout the ALCOSAN service area will receive the letter. The CMAC met on May 11 for the sixth time. Members advocated the integration of green infrastructure into the WWP and gained an understanding of the current conditions of the Financial Capability Assessment – Phase 1: Affordability.



Upper Allegheny Planning Basin

Basin Quarterly
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In the Region... ALCOSAN Updates

Comparing WW Programs: The Regional Stakeholder Group (**RSG**) members wanted to know how other cities are planning and implementing their wet weather plans – so they can learn what is working and what is not. At RSG meeting #6 (May 13th) a presentation was given which compared the major components of four similar wet weather programs including impact on water quality, source reduction/green infrastructure, multi-municipal regional plans, and cost. RSG members heard information on the current conditions of the Financial Capability Assessment – Phase 1: Affordability which generated a dynamic dialogue on affordability and the income disparity throughout the region.

ALCOSAN's Technology Outreach: Green Buildings, Green Communities, Green Actions. The word 'Green' is used to denote various means for environmental improvements that control or reduce flows (rainfall, groundwater, etc.) into the collection system. On Wednesday, May 12th, ALCOSAN hosted a free workshop designed for elected officials, managers, community planners and engineers. The workshop presentation covered green infrastructure techniques and how other communities are utilizing these techniques for wet weather benefits. All attendees received complimentary reference materials.

On the Horizon - Future Actions

ALCOSAN's Technology Outreach. ALCOSAN will continue to host its NACWA (National Association of Clean Water Agencies) Flow series webinars. The next webinar titled "Green Infrastructure: What's Legal" will be on **September 8, 2010** from 2pm until 3pm. The seminars are **FREE** and are held in the ALCOSAN Customer Service and Training Building, 3101 Preble Avenue, Pittsburgh, PA 15233. Call (412) 732-8052 or (412) 732-8035 to register and for more information.

Upper Allegheny Basin Planning Committee Meeting #7. ALCOSAN's Basin Planning Committees will hold the seventh series of meetings throughout **June and July 2010**; The Upper Allegheny Basin Planning Committee meeting is scheduled for **June 23 at 9:30 AM at the Sharpsburg Municipal Building.**

CMAC Meeting #7. Scheduled for Tuesday, **August 3, 2010.**

RSG Meeting #7. Scheduled for Thursday, **August 12, 2010.**

Contact Information

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Or

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Or

Visit ALCOSAN's website at: www.alcosan.org



Upper Allegheny Planning Basin

Basin Quarterly Activity Report

Closing in on Potential Basin Solutions

The computer model that simulates sewage flow in the basin has been calibrated and is currently being used for detailed alternatives analysis. The Upper Allegheny (UA) Planning Team is using this model to simulate how various precipitation events impact the number and volume of combined and sanitary sewer overflows in the basin.

Previously, the UA Planning Team had developed a Site Screening and Technologies Report (SCSR) that identified preliminary sites and potential technologies that were available to convey, store, treat or control the source of the sewage overflows. Now, by combining the results of this prior report with the predictive results of the computer model, the UA planning team has been able to identify and begin evaluating the preliminary alternatives for controlling overflows. The ongoing evaluation process is designed to combine the best sites, with the most practical technologies, in a manner that reduces overflows in a cost-effective manner.

There are literally hundreds of potential alternatives that are being considered. Some alternatives are being eliminated and some are being refined for additional evaluation during the ongoing evaluation. In some areas, (i.e., Sharpsburg) it was deemed more cost-effective to group several overflows together to develop a single solution for the area. New sites were added and preliminarily screened in the City of Pittsburgh, O'Hara Township and Blawnox.

The site and alternative selection process will continue to be refined over the next several months. All of the UA sites and alternatives will be combined into a preferred alternative for the UA Basin. In turn, the alternatives for all seven planning basins will be integrated into a regional wet weather solution for ALCOSAN.



Attend an ALCOSAN Community Meeting in your community's basin...

Monday, Oct 25 - Clarence Fugh Memorial Hall – Etna

Thursday, Nov 4 (REGION-WIDE) - Senator John Heinz History Center

Wednesday, Nov 10 - Boyd Community Center – O'Hara Township

The meetings will focus on the community-based potential solutions for the Upper Allegheny Planning Basin as well as provide ALCOSAN's Annual Customer Information update. See page 3 for more information and details.

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Upper Allegheny Planning Basin

Basin Quarterly Activity Report

In the Upper Allegheny Communities

Basin Planning Committee Meeting #7 was held on July 23, 2010, at the Sharpsburg Municipal Building. The meeting provided an update of the UA basin planning process. The UA Planning Team presented information on the hydrologic and hydraulic (H&H) computer model and the calibration report as well as the results of the alternatives identification and evaluation process. Preliminary alternatives were presented along with some refined site locations. Population projections, planned sewer improvements in the municipalities and source reduction opportunities were also discussed.

The BPC meeting also included a discussion of the status and likely timing of the Preliminary Flow Estimates (PFEs) that were to be submitted to the UA Planning Team by October 2010. Since then, the UA Planning Team has been reviewing the PFEs received and has been meeting with each municipality to discuss the results and next steps. The UA Planning Team and the municipalities have been working closely and will continue to identify and remedy differences in the flow estimates.

The next BPC meeting is scheduled for October 7, 2010 at 1:00 pm at the Etna municipal building.

In the Region... ALCOSAN Updates

Program Status. ALCOSAN's Basin Planners have been busy of late reviewing the municipal PFEs they've been receiving from their tributary municipalities. If, for a given point of connection, they find the municipal flow estimate differs significantly from their own modeled flow estimate, they will closely coordinate with the municipality to identify the reason or reasons for the discrepancy and resolve the difference. In this manner, ALCOSAN hopes to ensure that their H&H model accurately reflects real-world conditions and incorporates the most up to date municipal information. The municipalities will also have the opportunity to use this process to update and finalize their own flow estimates with the knowledge that they will be accurately integrated into the BP's planning basin H&H model.

As the seven Basin Planners approach the final stages of their alternatives evaluation, they are simultaneously beginning to use their models to size and evaluate CSO and SSO control alternatives for their basins. ALCOSAN's Project Manager is also heavily involved in the process, combining all seven H&H models into a single Regional Balance Model (RBM). The RBM will be used during the Regional Optimization phase of the project, and will allow ALCOSAN to determine the overall best arrangement of control alternatives sizes and locations throughout ALCOSAN's entire service area.



Upper Allegheny Planning Basin

Basin Quarterly Activity Report

In the Region... ALCOSAN Updates (continued)

ALCOSAN Technology Outreach. ALCOSAN continues to promote the use of Green Technologies as a wet weather flow management strategy whenever and wherever feasible. In support of this effort, ALCOSAN recently hosted a series of Technology Outreach seminars that focused on Climate Change, Stormwater Runoff and Green Infrastructure. Future seminars will be planned; please visit ALCOSAN's website for more information.

ALCOSAN Community Outreach. At CMAC meeting #7, held August 3, the discussion focused on the issue of whether ALCOSAN could and should take over portions of municipal sewer collection systems, especially the municipal interceptors. This dynamic topic was a key concern, worthy of additional discussion with ALCOSAN, and required a follow-up meeting via conference call. During the call, CMAC members provided feedback on the critical items ALCOSAN should consider in its potential response to the 3RWW Regionalization RFP. Contact your CMAC representative to share your thoughts and insight on this issue. CMAC meeting #8 is scheduled for November 9.

RSG meeting #7 was held on August 12. RSG members discussed updated information regarding ALCOSAN's Affordability Analysis Process. The most notable issue was the question of which affordability factors were included in other cities' plans, and their potential impact on the development of ALCOSAN's regional WWP. RSG meeting #8 is scheduled for November 16.

On the Horizon...Upcoming Community Meetings

Sewer overflows impact everyone, and each of us can contribute to the resolution of this critical problem. By attending an upcoming meeting, you can learn about what is being considered in your community to address the public health, environmental and economic impacts of untreated sewer overflows into our region's rivers and streams.

Each community meeting will be held from 5:30 PM to 8:00 PM. A region-wide meeting will be held on Thursday, November 4 at the Senator John Heinz History Center from 10:00 AM to 4:00 PM. This meeting will provide a collective look at the community-based solutions for the entire ALCOSAN service area.

Plan to attend a meeting most convenient for you, bring a friend, and provide your input.

Contact Information

Any questions or requests for information may be directed to:

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724.934.4110, thartwig@pirnie.com

Visit ALCOSAN's website at: www.alcosan.org

ALCOSAN Community Meeting Schedule

Monday, Oct 18 - Heidelberg VFD
456 1st Street, Carnegie, PA 15106

Tuesday, Oct 19 - East Liberty Presbyterian Church
116 S. Highland Avenue, Pittsburgh, PA 15206

Wednesday, Oct 20 - Bellevue Christian Church
680 Lincoln Avenue, Bellevue, PA 15202

Thursday, Oct 21 - Carnegie Library of Homestead
510 E. 10th Avenue, Munhall, PA 15120

Monday, Oct 25 - Clarence Fugh Memorial Hall – Etna
437 Butler Street, Pittsburgh, PA 15223

Tuesday, Oct 26 - Wm. Anderson Library of Penn Hills
1037 Stotler Road, Pittsburgh, PA 15235

Wednesday, Oct 27 - St. Mark's Evangelical Lutheran Church
933 Brookline Boulevard, Pittsburgh, PA 15226

Thursday, Nov 4 (REGION-WIDE) - Senator John Heinz History Center
1212 Smallman Street, Pittsburgh, PA 15222

Tuesday, Nov 9 - Upper St. Clair Community & Rec. Center
1551 Mayview Road, Upper St. Clair, PA 15241

Wednesday, Nov 10 - Boyd Community Center
1220 Powers Run Road, Pittsburgh, PA 15238

Upper Allegheny Planning Basin

Basin Quarterly
Activity Report

From Feasibility Report to Basin Facilities Plan

The site and alternative selection process continued and led to the development of a draft *Feasibility Report and Present Worth Analysis Report* (FPW Report) that presented a “short list” of alternatives for the Upper Allegheny Planning Basin. The report summarized the UA planning team’s evaluations to determine the best sites, with the most applicable technologies that will be the most cost effective for controlling sewer overflows in the UA planning basin.

The preferred basin-level alternative for the UA Basin consists of a combination of technologies and sites that most cost-effectively control sewer overflows. The primary CSO control technologies consist of screening and disinfection facilities and storage tanks along with consolidation piping to convey flows to five preferred sites. The preferred SSO control technologies include source reduction, conveyance upgrades, and a storage tank. These alternatives are currently being refined to incorporate municipal preliminary flow estimates (PFEs), known municipal improvement/overflow plans, potential inter-basin solutions, and an integrated regional plan; all of which will form the basis for the Upper Allegheny Planning Basin Facilities Plan.

Basin-level alternatives must now be integrated into a set of regional alternatives in a process called Regional Optimization. ALCOSAN will utilize the most promising basin solution(s) and sites to assemble a set of regional control alternatives. The resulting set of regional alternatives must then be evaluated based on the suitability of sites and locations, the level of improvement they provide over the basin alternatives, and the relative increase in operational performance across the seven basins.

It is anticipated that the combining of basin flows and volumes will result in the need for fewer, but larger control facilities. Therefore, a regional overflow storage tunnel will likely become an important component of many of the regional alternatives. These tunnel-based regional alternatives must then be closely evaluated using both monetary (cost) and non-monetary (construction impact, etc) criteria in an effort to determine the most beneficial regional alternative.



Shown is a proposed alternative for the UA Basin. It consists of a Screening and Disinfection Facility located on a potential site in Etna near where Pine Creek meets the Allegheny River

In the Upper Allegheny Basin Communities

Basin Planning Committee Meeting #8 was held on October 7, 2010, at the Etna Borough Building. The meeting provided an update of the basin planning process. The UA Planning Team presented information on the

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Upper Allegheny Planning Basin

Basin Quarterly Activity Report

In the Upper Allegheny Basin Communities

PFEs that were submitted to the UA Planning Team. Refined site/basin alternative development was discussed, with emphasis on changes from the previous BPC meeting and highlighting the reasoning for the changes. The UA Planning Team then presented the preliminary site alternatives, including percent capture and present worth costs. The next BPC meeting is scheduled for February 22nd at 9:30 am at the Shaler municipal building.

The UA Planning Team continued meetings with each municipality to discuss the PFEs that were submitted by the municipalities and to compare the PFE results to the UA model results. The UA Planning Team and the municipalities are close to finalizing differences in the flow numbers.

The UA Planning Team supported ALCOSAN at the UA Basin community meetings held on October 25th (Etna) and , November 10th (O'Hara) and the regional meeting held on November 5th (Pittsburgh).

In the Region...ALCOSAN Updates

Advancing Green Solutions. Implementing successful pilot projects is important for promoting green solutions. Several communities are currently pursuing funding for green pilot projects. These concept projects include using commercial areas to capture runoff, store and discharge flow at a controlled rate, using vegetated swales in a residential community and rain gardens in an apartment complex. Another community's concept plan shows how a commercial area can use porous pavement and a bio-retention basin to capture and discharge flow and how porous pavement, rain gardens and vegetated swales can be utilized for a residential street. When implemented, these projects will help to develop the local standards needed for widespread implementation.

Affordability. United States Environmental Protection Agency (USEPA) guidelines suggest that if the ratio of total wastewater costs, when compared to an area's median household income, exceeds 2%, the costs are considered a "high burden" to the ratepayers. This ratio is called the Residential Indicator; under the Combined Sewer Overflow (CSO) Policy, a ratio of greater than 2% may open up some flexibility in the construction schedule that can be used to mitigate the burden on the ratepayer.

Last spring, ALCOSAN estimated additional wastewater infrastructure costs that, when added to current ALCOSAN and municipal sewer rates, could cause the Residential Indicator to exceed 2%. Though it was a simple snapshot that assumed all costs would be incurred simultaneously and inflation rates were negligible, it now provides a means to identify those infrastructure components whose costs may contribute the most toward the 2% threshold. It will also serve as a benchmark to gauge the impact that various levels wastewater spending may have.

Currently, ALCOSAN is expanding its financial capability model so that it can take into account potential construction scheduling, program phasing and a wide range of potential economic and financial conditions. Examples include: inflation of construction and operating costs; changes in residential incomes, populations and households; changes to interest rates and terms; and municipal and ALCOSAN equipment renewal and replacement costs. The resultant predictions of current and future annual operation and maintenance (O&M) costs, borrowing requirements, annual available regional "affordability" and typical household costs (i.e. the Residential Indicator) can be used to evaluate and prioritize the many wet weather control strategies being considered.

Upper Allegheny Planning Basin

Basin Quarterly Activity Report

In the Region...ALCOSAN Updates (continued)

Municipal Efforts. The Allegheny County Health Department (ACHD) issued a reminder letter to the ALCOSAN communities that the municipal feasibility studies are due in April.

ALCOSAN Outreach. The Feasibility Study Process and Regional Sewer System Management were key topics at the 8th CMAC meeting held on November 9th 2010. ALCOSAN presented their response to the 3RWW Regionalization request for proposal (RFP) to CMAC members. It included an outline of scope and potential regionalization options. Suggestions, such as using a steering committee to lead the study, were discussed and well received by ALCOSAN. In addition, CMAC members reviewed a memo from the 3RWW Feasibility Study Working Group (FSWG) addressing rates, planning schedule, basis of design, and planning issues. As follow-up, CMAC sent a representative to the December FSWG meeting.

Green Technologies and Stormwater Management continue to be points of emphasis for the RSG. At RSG Meeting #8, held on November 16th 2010, a PWSA representative, and CMAC member, discussed the City of Pittsburgh's plans to issue an RFP to evaluate the feasibility of developing a stormwater utility.

During October and November of 2010 community meetings were held within the ALCOSAN service area. There was one meeting in each of the seven basins, except for Chartiers Creek and Upper Allegheny that held two meetings. A regional meeting was held in downtown Pittsburgh. The total attendance at the ten meetings was approximately 170 people. Attendees included elected officials, municipal staff, stakeholder group members, and general citizens. The meetings served to meet the consent order requirements for an annual meeting as well as present information on potential solutions in each basin.

ALCOSAN also hosted a booth to inform the public about the S.O.A.K. program at the Pittsburgh Boat Show (Monroeville Convention Center) Thursday, January 27 through Sunday, January 30, 2011.

On the Horizon - Future Actions

This winter ALCOSAN will participate in several regional events to provide information to the public about the development of the WWP and the S.O.A.K. program. We encourage you tell your constituents and attend. Please spread the word!

- **Monroeville Home Show** (Monroeville Convention Center) – Thursday, February 24 through Sunday, February 27.
- **Pittsburgh Home & Garden Show** (Pittsburgh Convention Center) – Friday, March 4 through Sunday, March 13.

Contact Information

Any questions or requests for information may be directed to:

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Visit ALCOSAN's website at: www.alcosan.org

Upper Allegheny Planning Basin

Basin Quarterly Activity Report #7

Alternative Evaluation and the Basin Facility Plan

This Basin Quarterly Activity Report (BQAR) summarizes the activities of the Upper Allegheny Basin Planning team since winter 2011. During the last three months, the Upper Allegheny Basin Planning (UA BP) Team has been working on identifying cost-effective strategies by combining the preferred ALCOSAN Basin alternatives with the regional alternatives. In the UA Basin, the preferred Basin alternative includes five CSO treatment facilities located in the Pittsburgh, Etna and Sharpsburg areas along with several storage/conveyance improvements for SSO control located in the O'Hara, Blawnox and Verona areas. The UA BP is also evaluating regional tunnel alternatives which include various components of the Basin based site alternatives.

As the municipalities have been developing and submitting their planning information, the UA BP has been reconciling this information and will incorporate it into the basin models and alternatives.

The Basin Facility Plan will be comprised of the Basin Feasibility Report - which details such items as the future baseline conditions, the evaluation of site alternatives, and the evaluation of basin alternatives. The Basin Facility Plan will also contain a new section Number 5 detailing the recent and ongoing efforts for the integration of municipal alternatives and a new section 6 detailing the regional integration of the basin alternatives into a system-wide alternative. Using the Alternative Costing Tool (ACT), ALCOSAN's costs for each of the preferred alternatives are being calculated for use in these evaluations.

As part of the alternatives evaluation, the potential for inter-basin opportunities was explored. During this evaluation, it was determined that a proposed CSO treatment facility in the Main Rivers Basin (McCandless Avenue area) was in relative close proximity to a proposed CSO treatment facility in the Upper Allegheny Basin (57th Street area) and that these could potentially be consolidated. Depending upon whether a basin based or regional alternative is recommended, this option could become part of the final Facilities Plan.

The Upper Allegheny Basin Facility Plan will be submitted to ALCOSAN near the end of 2011 and will detail the integration of the municipal planning information with the evaluated ALCOSAN alternatives and summarize the preferred alternatives within the basin.



ALCOSAN is evaluating the installation of a tunnel as a regional based alternative. One of the tunnel scenarios being evaluated would extend a tunnel to the A-42 CSO located near Washington Boulevard in Pittsburgh. This CSO is the largest (by volume) in the ALCOSAN service area. Addressing this large overflow will be an important component of the Upper Allegheny Basin's Facility Plan.

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Upper Allegheny Planning Basin

Basin Quarterly
Activity Report #7

In the Upper Allegheny Communities

Several meetings have occurred in the Upper Allegheny Basin to coordinate the ALCOSAN and the municipalities' planning efforts. These meetings have covered such topics as municipal flow estimates, municipal and ALCOSAN proposed alternatives, costs, modeling methodology and schedule coordination.

The Upper Allegheny Basin Planning Committee Meeting # 9 was held February 22, 2011 and covered such topics as the Basin and Regional-based Alternatives analysis and the municipality planning information review. The Upper Allegheny Basin Planning Committee Meeting #10 was held May 24, 2011 and focused on the municipal alternatives and the integration of the municipal planning information into the ALCOSAN Basin Facility Plan..

In the Region... ALCOSAN Updates

CSO Flag Program. The CSO Flag Program, managed by the Allegheny County Health Department (ACHD), provides an advisory when a combined sewer overflow (CSO) alert has been issued. Alerts are issued when significant rainfall causes sewers carrying a combination of sewage and storm water to overflow into rivers and streams. There are CSO flag locations along the Allegheny, Ohio, and Monongahela Rivers. The 2011 CSO Flag Program's public notification period is May 15 through September 30. For more information, visit www.achd.net.

In addition, ALCOSAN complements the CSO Flag Program with its SOAK Program. The Sewer Overflow Advisory Key (SOAK) provides up-to-the-minute plant operation related to CSOs. It also spells out what activities are advisable during the red-yellow-green stages. Visit www.alcosan.org and click on the SOAK program on right hand side of the home page.

ALCOSAN Community Outreach. ALCOSAN hosted a booth at the 2011 Allegheny League of Municipalities (ALOM) Spring Conference. Over 200 attendees visited ALCOSAN's booth and received information about wet weather control technologies and ALCOSAN's regional wet weather control planning efforts. In addition, an informational booklet was made available that provided a comprehensive update on the overall ALCOSAN Wet Weather Program. Over one hundred people attended a presentation by ALCOSAN Executive Director Arletta Scott Williams entitled "16 Months Left to Speak Out – Don't Miss Your Opportunity". Extra booklets are available by calling (412) 734-8733.

Communicating and coordinating with elected officials and municipal managers was a key topic of discussion at the 9th CMAC meeting held on March 1, 2011. ALCOSAN also presented information on the progress of the Wet Weather Plan through December 2011. This update provided insight on the development of regional alternatives, as well as the status of ALCOSAN's requests for municipal planning information required by the Municipal Consent Orders. Finally, it was documented that the CMAC is supportive of ALCOSAN's proposed regionalization study to be undertaken by the Allegheny Conference on Community Development. At the 10th CMAC meeting, which was held May 10, 2011, the topics of discussion were the Etna Downspout Disconnect Program, the Regionalization Study and municipal coordination

Upper Allegheny Planning Basin

Basin Quarterly
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In the Region... ALCOSAN Updates (continued)

The 9th RSG meeting, held on March 17, 2011, included a presentation of Etna Borough's downspout disconnection program; a discussion on municipal wet weather controls; and the development of regional wet weather controls. At the 10th RSG meeting, held May 17, 2011, discussion included an update on stream removal and an update on critical Wet Weather Plan sites. Green technologies and storm water management continue to be points of emphasis for the RSG.

Meetings. Your constituents reach you at home, by phone, at council meetings, and in the supermarket. Will you be ready? Please make the effort to attend, participate in and promote any and all wet weather planning meetings. The clock is winding down until the Regional Wet Weather Plan is complete, and it is too comprehensive to digest AFTER it is completed. Take advantage of ALCOSAN's offer to meet with you or your council to discuss. If you have a particular group that will benefit from a presentation, contact ALCOSAN at (412) 734-8353.

On the Horizon - Future Actions

Save the date... ALCOSAN's annual Open House will be held on September 17, 2011. The Open House is fun, educational and includes activities for all ages.

Get ready... This fall, ALCOSAN will again host a series of informational community meetings to provide updates on basin planning activities. Meeting dates and locations will be published in the next Basin Quarterly Activity Report.

Upcoming Meetings

CMAC Meeting #11 – Tuesday, August 2, 2011
RSG Meeting #11 – Thursday, August 18, 2011

Contact Information

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Upper Allegheny/Pine Creek Planning Basin

Basin Quarterly Activity Report #8

Basin Facilities Plan Development

This Basin Quarterly Activity Report (BQAR) summarizes the activities of the Upper Allegheny/Pine Creek (UA) Basin Planning Team since Spring 2011. The UA Basin Planning Team completed the Draft Feasibility Study and Present Worth Analysis Report on the Basin planning activities and Basin alternative analysis and conclusions. The Team summarized the earlier prepared reports and identified the information within them that was used to develop the Feasibility Study and Present Worth Analysis Report. In the Report, the UA Basin Planning Team identified the most feasible alternatives for the various levels of control and developed a present worth cost analysis for those alternatives. The Report identified the municipal planning information provided and its impact on the basin alternative analysis. Finally, the Report outlined and analyzed areas of UA Basin integration with adjoining basins and regional planning efforts.

The UA Draft Feasibility Study and Present Worth Analysis Report will become the UA Basin Facility Plan. The Facility Plan will outline the facilities that could be constructed, or the actions that ALCOSAN could take, within the UA Basin to address the Consent Decree requirements.

The UA Basin Planning Team has evaluated various regional alternatives with specific focus on Alternative 3f, which is intended to control the 4-6 OFs/year for the combined sewer overflow (CSO) discharges and the 2-year design storm for the ALCOSAN's sanitary sewer overflows (SSO). The Alternative 3f evaluation utilized a conservative approach to sizing the municipal improvements which is currently being optimized by incorporating the reconciled information from the municipal submittals. The UA Basin's regional alternative consists of conveyance improvements to the existing shallow-cut interceptor along the northern shore of the Allegheny River and additional consolidation sewers on both sides of the Allegheny River in the combined sewer areas of the UA Basin. These consolidation sewers will convey wet weather flows to various proposed dropshafts and a proposed regional tunnel system along the southern side of the Allegheny River in the UA Basin and ultimately to the ALCOSAN Woods Run WWTP. The UA Basin's regional alternative also consists of a proposed storage facility and various system optimizations and conveyance improvements within the separate sanitary sewer areas of the basin.



ALCOSAN is currently evaluating the installation of a regional tunnel system. One of the benefits of a tunnel as compared to numerous treatment facilities is the minimal space requirement and associated impact of a dropshaft location, as seen above, in comparison to the tanks and facilities required for a satellite treatment facility.

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Upper Allegheny/Pine Creek Planning Basin

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Activity Report #8

In the Upper Allegheny/Pine Creek Communities

The Upper Allegheny/Pine Creek Basin Planning Committee (BPC) held its 10th meeting at the Shaler Township Municipal Building on Tuesday, May 24, 2011. Topics discussed included the Basin Facilities Plan, inter-basin coordination, municipal planning, Wet Weather Program updates, regionalization, upcoming activities, and project schedule.

The next BPC meeting will be held on Tuesday, October 11, 2011, at the Shaler Township Municipal Building. Agenda items will include the Basin Facilities Plan, municipal planning, Wet Weather Program updates, the ALCOSAN Regionalization Study, and next steps.

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.

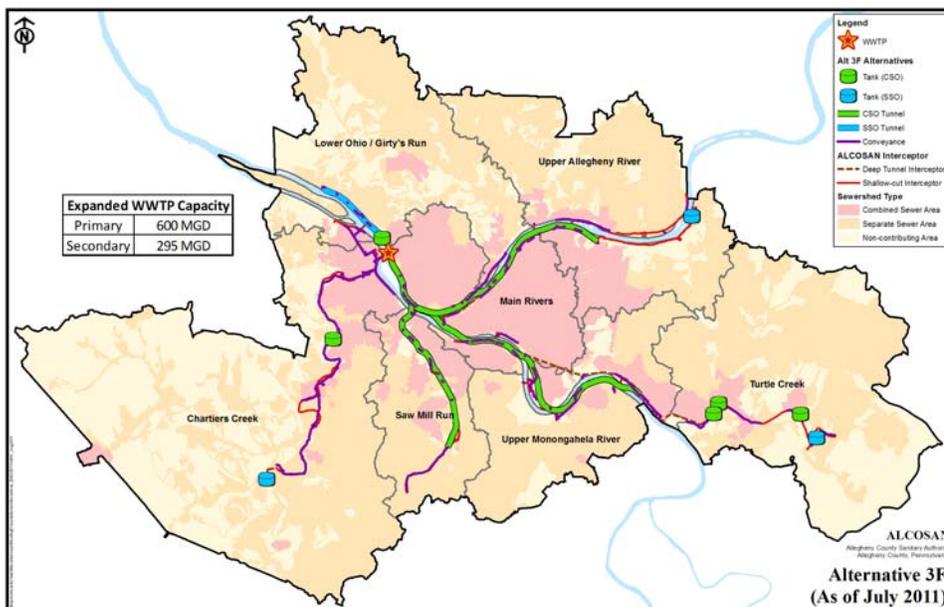
At a CSO control level of 4-6 overflows per year and an SSO control level corresponding to the 2-yr storm, one of the leading system-wide control alternatives appears to be a new regional storage / conveyance tunnel extending from the Woods Run WWTP up the Allegheny and Monongahela rivers to serve the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

Upper Allegheny/Pine Creek Planning Basin

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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

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 UA Basin specific Town Hall meetings are as follows:

- Wednesday, November 2 (5:30 – 7:30 PM), Penn Hills #7 Banquet Hall
- Monday, November 14 (10:00 - Noon), Undercliff Fire Hall

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

Contact Information

Any questions or requests for information may be directed to:

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Upper Allegheny/ Pine Creek Planning Basin

Finalizing the Upper Allegheny Facilities Plan

This Basin Quarterly Activity Report (BQAR) summarizes the activities of the Upper Allegheny/Pine Creek (UA) Basin Planning team since fall 2011. The UA Basin Planning team is in the process of finalizing the Final Basin Facilities Plan (BFP). The Final BFP is part of the larger Wet Weather Plan (WWP) required by the United States Environmental Protection Agency to address problems associated with combined sewer overflows (CSOs) and sanitary sewer overflows (SSOs) in the ALCOSAN service area.

The UA Basin Facilities Plan defines the facilities and conveyances specific to the UA Basin which are important components of ALCOSAN's preferred System-Wide Alternative, known as Alternative 3f-modified. Alternative 3f-modified eliminates ALCOSAN SSOs for a 2-year design storm and generally controls ALCOSAN CSOs to 4-6 overflows/year, with the exception being the elimination of those CSOs near sensitive areas. The UA Basin Facilities Plan describes the proposed facilities and conveyances and demonstrates the technical feasibility and cost-effectiveness of the proposed control measures. The Plan also ensures the use of practical and feasible sites and routes.

The UA Basin Facilities Plan represents the culmination of the Feasibility and Present Worth Analyses. The Feasibility Report and Present Worth Analysis identified, developed and evaluated Site Alternatives (site-specific control alternatives) and Basin Alternatives (Basin-wide control alternatives). The report focused on the identification of the preferred control alternative at the Planning Basin level, while discussing the general approach to identifying and evaluating control alternatives. Throughout this process, the UA Basin Planning team collaborated with UA Basin customer municipalities to ensure that the proposed ALCOSAN and municipal control technologies and sites were reviewed and discussed.

These collaboration efforts continued through 2011 and were crucial in sizing the various improvements being included as part of ALCOSAN's preferred System-Wide Alternative (Alternative 3f-modified). In the Upper Allegheny Basin, these improvements include: replacing the existing ALCOSAN interceptor in the Sharpsburg/Aspinwall area and in the Blawnox/O'Hara area with an upsized interceptor along the north side of the Allegheny River; constructing a consolidation sewer in the Stanton Heights/Morningside area of Pittsburgh; constructing dropshaft connections to a regional tunnel at various CSO locations in Etna, Sharpsburg and Pittsburgh; and constructing a 0.3 MG storage facility at the Verona Pump Station.

Basin Quarterly Activity Report #9



A below grade 0.3 MG storage facility being proposed at the existing Verona Pump Station will provide control during the 2-year design storm and allow for a possible recreational use of the land above.

**UA Basin Planning
Committee Meeting #12
May 8, 2012 1:30 PM**
Shaler Township
Municipal Building
300 Wetzel Road
Glenshaw, PA 15116

More inside...

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Upper Allegheny/ Pine Creek Planning Basin

Basin Quarterly
Activity Report #9

In the Upper Allegheny Communities

Basin Planning Committee (BPC) Meeting No. 11 was held on October 11, 2011 at the Shaler Township Municipal Building. Discussion topics included an update on the regional-based control strategies, status of municipal planning within the UA Basin, as well as updates on public outreach, the progress of the ALCOSAN Wet Weather Program and the 18-month Regionalization Study.

BPC Meeting No. 12 will be held from 1:30PM to 3:30 PM, on May 8, 2012, at the Shaler Township Municipal Building, 300 Wetzel Road, Glenshaw, PA 15116. The meeting will include a report on the Final UA Basin Facilities Plan and an update by the Program Manager on the draft WWP.

In the Region ... the Draft Wet Weather Plan

A strategic planning effort, mandated by a federal Consent Decree (CD), will achieve an important milestone when ALCOSAN officially releases its draft WWP for public review and comment on July 31, 2012. The WWP will provide a detailed strategy to eliminate existing SSO discharges and control CSO discharges in order to improve water quality in the region's rivers and streams for aquatic life, public water supply, and recreational use protection.

A comprehensive list of potential control alternatives was developed, subjected to computer simulation modeling, water quality and financial analyses, and then integrated to identify the most cost effective solution for the region. Facility improvements described in the Plan are intended to provide the needed sewer system capacity for continued population and economic growth throughout the ALCOSAN service area through 2046. The CD requires that, after review and approval by federal, state and county regulatory agencies, construction to implement the Plan would be completed by 2026.

A recommended Plan has been developed that would begin with the expansion of the ALCOSAN WWTP from its current capacity of 250 million gallons per day (mgd) to 600 mgd for primary treatment and 295 mgd for secondary treatment. The Plan also includes a new tunnel conveyance and storage system, parallel to the existing interceptor sewers, which would extend along the Allegheny, Ohio, and Monongahela Rivers and along Saw Mill Run. Additional relief sewers along Chartiers Creek and Turtle Creek would convey additional wastewater flow from municipal customers to the ALCOSAN plant. A series of storage facilities placed at strategic locations would capture peak wet weather flow to be later released for treatment. The plan would meet regulatory requirements and achieve the desired goals, but the estimated cost of \$3.6 billion is far more than the region can afford.

According to an analysis utilizing federal affordability criteria, the region's affordability guidelines establish an upper limit of \$2 billion through the 2026 construction period required by the CD. Three options that prioritize different improvements are being considered that would stay within affordability guidelines and allow for cost effective expansion of additional improvement phases in the future. One would give priority to eliminating SSOs. A second option would give priority to improving water quality. A third alternative would attempt to provide balanced priorities between CSO and SSO control, water quality improvement, and continued economic development.

Upper Allegheny/ Pine Creek Planning Basin

Basin Quarterly
Activity Report #9

In the Region... ALCOSAN Community Outreach

Customer Municipalities Advisory Committee (CMAC)

Throughout 2012, CMAC members will be engaged as partners in ALCOSAN's effort to educate municipal representatives and solicit comments on the draft Wet Weather Plan (WWP). During meeting #13, convened on March 20, 2012, CMAC members previewed the progress of the draft WWP, provided comments on the long-term recommended plan, and were presented with three options to prioritize improvements while staying in affordability guidelines.

Regional Stakeholder Group (RSG)

ALCOSAN will continue to reinforce its partnership with the Regional Stakeholder Group (RSG) by actively engaging the RSG for the citizen perspective and as ambassadors for the draft WWP. During meeting #13, held on March 28, 2012, RSG members shared their perspectives on each of the prioritized control plans that adhere to the affordability guidelines. Members expressed an interest in a flexible Plan that moves toward compliance but allows the ability to investigate green infrastructure.

New Outreach Initiative

ALCOSAN is taking the show on the road! This spring, ALCOSAN will launch a Grassroots Outreach initiative to increase awareness and inform the public about ALCOSAN and the Wet Weather Plan (WWP). ALCOSAN recognizes that there are multiple ways to inform and involve service area stakeholders. To supplement its ongoing public outreach efforts, ALCOSAN has prepared a brief presentation designed to explain the "why" and "what" of the draft WWP and how the public may review and comment on the draft. To schedule a presentation as an agenda item at your community based organization or at your municipal council meeting, contact the ALCOSAN Public Relations Department at (412) 734-8353.

On the Horizon - Future Actions

Get ready...

This fall, following the release of the draft Wet Weather Plan, ALCOSAN will host a series of public hearings to solicit public comment on the draft Plan. For hearing dates, times, and locations, please visit the ALCOSAN website at www.alcosan.org in July.

Save the date...

ALCOSAN's annual Open House will be held on Saturday, September 15, 2012. In addition to presentations about the draft WWP, this free annual event features tours of the treatment plant and laboratory, hands-on activities and exhibits, games, food, and fun for all ages.

Contact Information

Any questions or requests for information may be directed to:

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Visit ALCOSAN's website at: www.alcosan.org