

**Appendix A-7:  
Annual Customer Information Meetings**

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## **Executive Summaries**

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**October/November 2010**

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# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #1: CHARTIERS CREEK BASIN

Monday, October 18, 2010 / 5:30PM

Heidelberg Volunteer Fire Department, 456 1<sup>st</sup> Street, Carnegie, PA 15106

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*The following summarizes the information from the community meeting #1, held on the above referenced date.*

**WELCOME: Arletta Scott Williams**, ALCOSAN, Executive Director

Arletta welcomed and thanked everyone for attending the meeting. She expressed that the purpose of the annual customer information update portion of the meeting was to provide the public with an annual informational update on ALCOSAN's progress relative to the EPA Consent Decree.

**ANNUAL INFORMATION UPDATE PRESENTATION: Arletta Scott Williams**, ALCOSAN, Executive Director

The presentation is summarized as follows:

- Explanation of the consent decree and the problem
- Organization chart outlining roles of ALCOSAN, engineers, stakeholder committees and regulators
- Brief description of the scope, schedule and status of work
- Focus in 2010: Alternatives Development, Affordability Analysis, Public Participation and Municipal Coordination
- Alternatives Development – potential solutions have been identified
- Affordability Analysis – EPA criteria for affordability explained
- Public Participation – interests of stakeholder groups and public outreach efforts
- Municipal Coordination – information exchange between municipalities and ALCOSAN
- 2011-2012 Next Steps and Key Activities: finalize basin solutions, work on regional solutions, complete affordability analysis; develop wet weather plan

**CHARTIERS CREEK BASIN PRESENTATION: Dan Lockard**, ALCOSAN, Project Manager

The presentation is briefly summarized as follows:

- Definition of the problem
- Approach, information and tools developed to address the problem
- Key elements of potential solutions – technology, flows and sites
- Technology categories – remove it, hold it, move it and treat it
- Site selection criteria explained
- Maps and images of potential sites and technologies
- Question and answer

The goal of the presentation was to inform attendees how the sanitary sewer overflows (SSOs) and combined sewer overflows (CSOs) are being addressed and review examples of potential solutions that are being developed.

The presentation covered the following topics:

- the problem
- tools used to plan solutions,
- key elements of all solutions
- specific information on potential solutions



# Wet Weather Planning Process

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The number and frequency of SSO and CSO overflows are creating a problem. There are an estimated 65 overflows in Chartiers Creek basin from ALCOSAN conveyance system and 50 overflows from the municipal sewers that occur in wet weather events. Communities upstream of Heidelberg have separate sanitary systems while the communities downstream are combined sanitary and storm system systems. All these systems generate overflows that carry bacteria and litter which pollute Chartiers Creek.

The planning process to develop solutions is being headed by a national engineering firm, Tetra Tech. Key tools used are computer simulations of piping networks and a standard approach to estimating costs of solutions. Computer simulations analyze how the piping system works. This tool was developed using flow monitoring data as well as an accurate representation of the pipe network. The ALCOSAN Costing Tool (ACT) offers a consistent basis for all cost estimates. Both of these tools are shared with the municipalities so that all improvements (ALCOSAN and municipal) are developed with the same approach.

All solutions being developed have three components: Technology, Flow and a Location or Site. Technologies can be grouped into the following categories as regards how flow is handled: **Remove It** from the current system at the source, **Hold It** by temporarily by storing flows during rain events until pipe capacity is ready to accept it again, **Move It** along in new pipes and conveyance systems and **Treat It** at the existing wastewater treatment plant at Woods Run by expanding the plant.

The amount of flow being captured at overflow locations drives the size and type of technology. The basis of determining how much flow is to be captured needs to be acceptable to the regulators. Typically, a two year storm is the usual basis for sizing improvements to handle SSOs. For CSOs the amount of overflows should, typically, not exceed 4-6 overflow events per year once improvements are in place. Where the flows are occurring influences the location or sites of the proposed improvements. Removing relatively small quantities of flows from the system can be done by using green technologies. Two feasible technologies for the Chartiers Creek basin are storage tanks and retention basins. Storage tanks hold the flow temporarily while retention basins treat the flow and discharge it into the waterways.

Since the volume of flow is significant the potential solution for Chartiers Creeks is to consolidate flows from the 65 overflows at 5 locations or sites within the basin. Solutions were presented at the five sites which are Bridgeville, Collier, Heidelberg, Crafton and McKees Rocks. The focus of interest was on the Heidelberg site. The potential solution for Chartiers Creek, proposes retention treatment basins at McKees Rocks and Crafton and storage tanks at Heidelberg, Collier (Universal Stainless) and Bridgeville along with piping to get the flows to these sites as shown in the displays brought to the meeting.

Cost is a big concern since the solution needs to be affordable to rate payers. Many sites were considered and this potential solution utilizes five sites instead of a more expensive approach of putting new facilities at a larger number of sites. The sites selected need to be suitable for the technology and be able to accommodate future expansion as regulations change. Both the costs to construct as well as to operate and maintain facilities are considered in the planning process. Locating new facilities closer to existing interceptors along Chartiers Creek reduces the cost of conveying flow in large diameter sewers.



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#### QUESTIONS AND ANSWERS:

Questions, comments and replies made during the meeting are captured below.

- Question:** How many of the site plans shown were close to residential areas? He indicated he had received many comments from the community. He inferred that the site in Heidelberg is contaminated and would cost more to dig up and treat the soil. What do you plan to do with contaminated soil?
- Question:** Would it be a fatal flaw to remove Heidelberg from a \$6 billion dollar project? How many sites is ALCOSAN looking at within 25 feet of a residential community? None of other sites are adjacent to residential areas.

**Reply:** It is a valid concern. We started with 146 sites and just started looking at a site selection process one year ago.
- Comment:** Consider the “Superior Mills” site and a parking lot located across the creek. The “Superior Mills” site is a former scrap yard.
- Question:** Have assessments been done? Have boring been done?

**Reply:** This is the planning phase so no assessments or borings have been completed.
- Question:** What would be the impact of removing Heidelberg from the planning process? What would it take for ALCOSAN to remove Heidelberg from the funnel of sites that are currently being evaluated?
- Question:** Why didn't ALCOSAN come to the community earlier?

**Reply:** ALCOSAN just began selecting sites a year ago.
- Question:** Why did ALCOSAN select the smallest municipalities? Why Heidelberg?

**Reply:** Sewage does not recognize municipal boundaries. ALCOSAN tries to select the best technical alternatives.
- Question:** How is this not going to smell? How can you prevent it from smelling when it overflows during floods? Wind direction changes and it will cause a smell.
- Question:** How can you guarantee that there will be no smell? Of sewage or chlorox?
- Question:** We have flows over the top of stop signs in that area. How can you guarantee that a tank will not flood and dump massive amounts of sewage into the flooded area?
- Question:** How can you prevent the tank from overflowing?
- Comment:** Actual overflows are causing problems in the creek. It overflows every rainfall and we need to get the overflows down or eliminated. Residual is on the bank for weeks, animals covered in



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- our backyards (for people who abut the creek). It does not have to happen at this location and the problem needs to be solved. Try to sell property on the creek bank.
13. **Question:** Heidelberg has very little sewage load in the system, why do we have the largest volume overflows? Why do our overflow locations have the most discharge?
14. **Question:** Regarding the projects shown in Michigan, could we have someone talk to us from these communities to tell us what they have been through? We want to find out what happened before, during and after the project was put in.  
**Reply:** Yes we can do this.
15. **Question:** Have stormwater leaders been removed from upstream communities?  
**Reply:** Yes. The Allegheny County Health Department (ACHD) is enforcing the drain disconnects.
16. **Question:** How many people have gotten sick or died from CSOs? The resident commenting bought their house to be close to a park and do not want to be next to a plant. How many jobs would be created? Will property values plummet?  
**Reply:** We do not know yet how many jobs would be created but this is huge project and it will create jobs.
17. **Question:** Sulfur pours into the creek. Why not treat the abandoned mine drainage while you treat the sewage overflows? Even if you get all of the sewage out of the water, it will still be contaminated with mine water.  
**Reply:** Our issue is sewage overflows, other impacts have to be addressed separately. Studies have been conducted to determine if sewage could be stored in the mines, but there is no way to control the flow in or out of the mines and in spring, the mines are usually full of water.
18. **Question:** What will be done with floatables?  
**Reply:** At the plant floatables are collected up front and are either incinerated or landfilled.
19. **Question:** If ALCOSAN can only process 250 MGD right now, how can you process all the new flow?  
**Reply:** We are looking at increasing the capacity to 600 MGD at the plant to be able to handle some of the increased flow.
20. **Comment:** Even if the tank is installed, it will not make Heidelberg compliant with the consent order and there may be a need for the borough to put its own tank.  
**Reply:** If a tank were installed in Heidelberg, it would be highly unlikely that the borough would be required to build an additional tank.
21. **Question:** Consider other sites such as Trader Jack site, across the creek, Superior Mills site. When will you get back to us?  
**Reply:** We will get back to you in at least 45 days.



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22. **Question:** Has any consideration been given to building another treatment plant in the west part of town instead of all of the tanks, etc?  
**Reply:** The existing plant can treat the regular sewage flows but this is a wet weather problem. A new treatment plant would be starved under normal conditions. Comment: Was consideration given to areas where growth is occurring? Often poorer communities get selected for these types of things. It is better to find a more remote area somewhere else.
23. **Comment:** This is the only undeveloped site in Heidelberg. The only site that provides revenue.
24. **Question:** There is a long distance between Universal and Heidelberg. How much impact is this going to have on us during construction? How much infrastructure will this tank require? How big of a pipe would it take to get the sewage to the tank and where will it be located? Would 1<sup>st</sup> Street be blocked off? If so, it would ruin our commercial trucking business and cut off the fire department.
25. **Comment:** Regarding streetscape going along Route 50, don't tear up our streetscape.  
**Reply:** ALCOSAN would consider trenchless technologies and different alternate routes and that by the time the piping is installed the streetscape would no longer be new.
26. **Question:** What is tunnel storage?  
**Reply:** Tunnel storage is a method to convey and store flows
27. **Question:** The area is underlain by mines. Has storing flows in mines ever been considered?  
**Reply:** The use of the mines is too hard to control. There are too many unknowns. He stated that this is a wet weather problem and during wet weather the mines are usually full and this is something that has been looked at in the past.
28. **Question:** Will debris have to be taken regularly out of the tank?  
**Reply:** It will mostly be flushed down the pipes. However if pumping out is needed it would be required to screen the debris first. There could possibly be a full dumpster after some wet weather events. We can look into other tank facilities to see how they handle debris.
29. **Comment:** For a \$6 billion project even if it cost 2x as much (\$around 40M) to site the tank somewhere else, it would still be only 1/2 percent of the total cost
30. **Question:** Nothing about this will be good for Heidelberg. What is the benefit to our community?  
**Reply:** There would be improvements to the park, preferential hiring and host fees. For any community that is willing to work with ALCOSAN, we will try to make it a win-win situation, for example basketball courts, etc. Potential items include host fees, improvements, something built above grade – all for negotiation.
31. **Question:** How big is the tank going to be?  
**Reply:** The tank will approximately be 250 feet long, 150 feet wide and about 20 feet deep.



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32. **Question:** How big would the building be?  
**Reply:** The exact dimensions of the building are not known at this time but we will get that information to the community. On the figure the building is generously sized and does not indicate its specific size.
33. **Comment:** The reason we have a problem is due to rain water from bad infrastructure. For half the cost of the tank, we could get new infrastructure. ALCOSAN should give the communities money to re-do their sewers.
34. **Question:** Would the pump station be heard from the tank?  
**Reply:** No
35. **Comment:** ALCOSAN could purchase the entire town which is assessed at under \$42 million.
36. **Question:** Are any of these tanks in communities in Western Pennsylvania? Can you smell the facilities?
37. **Question:** If this is voted down can you take the property by eminent domain?  
**Reply:** I believe it can be done but I would not recommend that to my board (ALCOSAN Board of Directors).
38. **Question:** Who represents our interests? If this contaminated site can be cleaned up it would be beneficial on one level. It could be a win-win for the government of Heidelberg. Who suggested this site? How was this site selected?  
**Reply:** First 146 sites were identified. The municipalities were asked to look at sites (potential) that were vacant. There were quarterly meetings in which I and other municipalities participated with the consultants and ALCOSAN to discuss sites. No one has said anything at borough council meetings where this concept was introduced. The borough has not been asked to approve a site. Now that we have community input it will be taken into account.
39. **Question:** Would this facility be a way to get a park system finished? These are benefits we (the community) need to consider.
40. **Question:** What happens elsewhere before, during and after on these types of projects? Are there any follow-up assessments from other communities that have had similar construction?  
**Reply:** We will try to find this type of information
41. **Comment:** We have accomplished a lot in this area. Our park will be completed and we do not need this to be completed by this project.
42. **Comment:** In Birmingham, Michigan there is a good example of a community where a storage facility is adjacent to million dollar homes. **Question:** How long has it been there? Can we get information on before, during and after on this project?



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**Reply:** We can try.

**Comment:** Please make this information available to Joe Kauer for distribution to the community.

42. **Question:** Are these homes on 25 foot lots?

**Reply:** No.

43. **Question:** Would you want this in your backyard?

**Reply:** I would.



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #2: MAIN RIVERS BASIN

Tuesday, October 19, 2010 / 5:30PM

East Liberty Presbyterian Church, 116 South Highland Avenue, Pittsburgh, PA 15206

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*The following summarizes the information from the community meeting #2, held on the above referenced date.*

**WELCOME: Arletta Scott Williams, ALCOSAN, Executive Director**

Arletta welcomed and thanked everyone for attending the meeting. She expressed that the purpose of the annual customer information update portion of the meeting was to provide the public with an annual informational update on ALCOSAN's progress relative to the EPA Consent Decree.

**ANNUAL INFORMATION UPDATE PRESENTATION: Arletta Scott Williams, ALCOSAN, Executive Director**

The presentation is summarized as follows:

- Explanation of the consent decree and the problem
- Organization chart outlining roles of ALCOSAN, engineers, stakeholder committees and regulators
- Brief description of the scope, schedule and status of work
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- Alternatives Development – potential solutions have been identified
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- 2011-2012 Next Steps and Key Activities: finalize basin solutions, work on regional solutions, complete affordability analysis; develop wet weather plan

**MAIN RIVERS BASIN PRESENTATION: Mike Lichte, ALCOSAN, Project Manager**

The presentation is briefly summarized as follows:

- Definition of the problem
- Approach, information and tools developed to address the problem
- Key elements of potential solutions – technology, flows and sites
- Technology categories – remove it, hold it, move it and treat it
- Site selection criteria explained
- Maps and images of potential sites and technologies
- Question and answer

The goal of the presentation was to inform attendees how the sanitary sewer overflows (SSOs) and combined sewer overflows (CSOs) are being addressed and review examples of potential solutions that are being developed.

The presentation covered the following topics:

- the problem
- tools used to plan solutions,
- key elements of all solutions
- specific information on potential solutions



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #2: MAIN RIVERS BASIN

Tuesday, October 19, 2010 / 5:30PM

East Liberty Presbyterian Church, 116 South Highland Avenue, Pittsburgh, PA 15206

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The number and frequency of SSO and CSO overflows are creating a problem. There are an estimated 300 overflows points in the ALCOSAN conveyance system and 140 overflows points from the municipal sewer systems that occur in wet weather events. In addition there are overflows occurring at numerous manholes. The engineers are trying to estimate the total amount of flow leaving the systems during wet weather events. In the Main Rivers basin the wet weather flows are designed to flow through an overflow structure located on river that serves the A-22 sewer shed. The overflows at this location can get up to 800 MGD. The amount of overflows from the ALCOSAN conveyance system at this location is considered to be the 2<sup>nd</sup> largest in the system.

The planning process to develop solutions is being headed by Chester Engineers. One of the key tools used is computer simulations of piping networks to estimate the volume and flow rate of the overflows. Computer simulations analyze how the piping system works. This tool was developed to utilize flow monitoring data as well as future flow estimates from the City for this basin. The ALCOSAN Costing Tool (ACT) is used to develop cost estimates for proposed improvements.

Rainfall and snowmelt cause overflows. For SSOs, a design storm is mathematically developed to represent flows that typically occur once in two years. This is the basis for sizing the necessary improvements to prevent SSOs. For CSOs, improvements are sized based on the average storm along with how many overflows per year will be allowed. We need to size improvements to handle approximately 800 MGD of CSOs.

All solutions being developed have three components: Technology, Flow and a Location or Site. Technologies can be grouped into the following categories as regards how flow is handled: **Remove It** from the current system at the source, **Hold It** temporarily by storing flows during rain events until pipe capacity is ready to accept it again, **Move It** along in new pipes and conveyance systems and **Treat It** at the existing wastewater treatment plant at Woods Run by expanding the plant.

The planning process is starting to look at sites and compare options. This includes looking at what other cities have done—which in many cases includes underground solutions. This is not a basin with a lot of available good sites. To be feasible improvements have to fit on the sites and sites have to be assessed to ensure they are not contaminated. Sites suggested by community groups and developers are considered.

Cost is a big concern since the solution needs to be affordable to rate payers. Initially there are hundreds of potential solutions, but viable ones locate the facilities close to where the overflows are occurring. The tunnel alternative is a potential solution for this basin as shown in displays at this meeting. In addition to the tunnel being underground, surface facilities and a tunnel shaft that comes up to surface is needed. At Station Square, the tank alternative needs more land than the tunnel alternative. There is a need to consolidate flows and build improvements to handle these flows at fewer sites. This will lower the overall cost to solve the problem. Future work involves combining the solutions identified for each basin to create a regional solution.

#### **QUESTIONS AND ANSWERS:**

Questions, comments and replies made during the meeting are captured below.

1. **Question:** Can the public attend regional stakeholder group meetings?  
**Reply:** Yes, if you are interested.



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2. **Question:** How does the 2 percent work?  
**Reply:** It is an EPA target for what they think ratepayers can afford.
  
3. **Question:** Will the rates be raised?  
**Reply:** Yes.



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #3: LOWER OHIO/GIRTY'S RUN BASIN

Wednesday, October 20, 2010 / 5:30PM

Bellevue Christian Church, 680 Lincoln Avenue, Bellevue, PA 15202

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*The following summarizes the information from the community meeting #3, held on the above referenced date.*

**WELCOME: Arletta Scott Williams**, ALCOSAN, Executive Director

Arletta welcomed and thanked everyone for attending the meeting. She expressed that the purpose of the annual customer information update portion of the meeting was to provide the public with an annual informational update on ALCOSAN's progress relative to the EPA Consent Decree.

**ANNUAL INFORMATION UPDATE PRESENTATION: Arletta Scott Williams**, ALCOSAN, Executive Director

The presentation is summarized as follows:

- Explanation of the consent decree and the problem
- Organization chart outlining roles of ALCOSAN, engineers, stakeholder committees and regulators
- Brief description of the scope, schedule and status of work
- Focus in 2010: Alternatives Development, Affordability Analysis, Public Participation and Municipal Coordination
- Alternatives Development – potential solutions have been identified
- Affordability Analysis – EPA criteria for affordability explained
- Public Participation – interests of stakeholder groups and public outreach efforts
- Municipal Coordination – information exchange between municipalities and ALCOSAN
- 2011-2012 Next Steps and Key Activities: finalize basin solutions, work on regional solutions, complete affordability analysis; develop wet weather plan

**LOWER OHIO/GIRTY'S RUN BASIN PRESENTATION: Dan Lockard**, ALCOSAN, Project Manager

The presentation is briefly summarized as follows:

- Definition of the problem
- Approach, information and tools developed to address the problem
- Key elements of potential solutions – technology, flows and sites
- Technology categories – remove it, hold it, move it and treat it
- Site selection criteria explained
- Maps and images of potential sites and technologies
- Question and answer

The goal of the presentation was to inform attendees how the sanitary sewer overflows (SSOs) and combined sewer overflows (CSOs) are being addressed and review examples of potential solutions that are being developed.

The presentation covered the following topics:

- the problem
- tools used to plan solutions,
- key elements of all solutions
- specific information on potential solutions



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #3: LOWER OHIO/GIRTY'S RUN BASIN

Wednesday, October 20, 2010 / 5:30PM

Bellevue Christian Church, 680 Lincoln Avenue, Bellevue, PA 15202

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The number and frequency of SSO and CSO overflows are creating a problem. There are an estimated 15 CSOs and 13 SSOs in the Lower Ohio/Girty's Run basin from ALCOSAN conveyance system that occur in wet weather events. The CSOs and SSOs entering our waterways limit how they can be used and impact public health.

The planning process to develop solutions is being headed by a national engineering firm, Wade Trim. Accurate information on flow monitoring, sampling and working with municipalities to get flow estimates led to creation of an important tool - computer simulations to understand how the ALCOSAN conveyance system behaves. Computer simulations indicate how much water makes into the system in wet weather events and predicts where the overflows will occur. We use it to develop alternatives. All seven firms planning improvements in their own basins need to be coordinated so we do not end up with a plan that we cannot afford.

Technologies can be grouped into the following categories in regards to how flow is handled: **Remove It** from the current system at the source, **Hold It** by temporarily by storing flows during rain events until pipe capacity is ready to accept it again, **Move It** along in new pipes and conveyance systems and **Treat It** at facilities and still feed it back into the plant for full treatment. ALCOSAN is also looking at expanding the primary treatment capacity of the plant to a little more than twice its existing capacity.

The amount of flow being captured drives the size and type of technology. The regulators like the high end technologies but it needs to be worth it in terms of water quality. Therefore we model water quality impacts. We have an ALCOSAN Cost Tool (ACT) so we can include all elements and get all cost estimates by all engineers completed on a consistent basis. Our national firms know what solutions are viable and cost effective from past experience.

Storage solutions are based on volume while treatment solutions are based on peak flows. Direction on precipitation has been provided so solutions are designed on the same basis. The basis of determining how much flow is to be captured needs to be acceptable to the regulators. Communities are very interested in sites for locating improvements. We try to find vacant land that is flat, large enough for the improvements and located where overflows are occurring today to keep the costs down. We started with 146 sites and have eliminated about two-thirds of the sites.

Regarding solutions, the flow from Lower Ohio needs to be conveyed to the Woods Run plant in a tunnel. Lower Ohio South needs to consider a consolidation sewer to capture all the flows and put it through a retention basin. Girty's Run should take its flow into a retention basin but there are other possibilities. Stowe has a site slated for economic development and we might seek a small portion of it to consolidate flow and treat it in a small retention basin. Odor control will be part of the solution along with community enhancements. There are also cross basin potential solutions where, for instance, we bring flow from Stowe into the Chartiers Creek basin to a facility at McKees Rocks. Lower Northern Allegheny might be able to connect to a Main Rivers basin solution. We will work with the communities but need to understand what the municipalities do as that will impact our solutions.

#### **QUESTIONS AND ANSWERS:**

Questions, comments and replies made during the meeting are captured below.

1. **Comment:** In Troy's Run the sewage is in old pipes too small and they cause odors.



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**Reply:** Part of the problem is that pipes are old and weak in some communities.

2. **Comment:** Flood control is not being addressed in this program.

**Reply:** Flood control is not our focus, but the overflow problem we are addressing does contribute to extra flows in river during the times when the river does flood. The improvements made by ALCOSAN will significantly reduce our contribution to flooding.

3. **Question:** What is industry doing?

**Reply:** We have asked them (our industrial customers) to hold their flows back and not put their flows into the system during times when we are having overflows. They have responded well to that request. They now store on-site or recycle their flows and therefore avoid contributing to the overflow problem.

4. **Question:** Do you monitor what industries are doing?

**Reply:** We have an industrial group within ALCOSAN that interfaces with our industrial customers.

5. **Comment:** Industry needs more stringent requirements. They are producing a lot of runoff.

**Reply:** We try to encourage green technologies to reduce flows when talking with municipalities, and encourage municipalities to share this information with their industrial customers.

6. **Comment:** Most of our smells come from across the river. Put facilities further north and not in same area. Down by the river we all get dumped on too much already.

**Reply:** ALCOSAN has been successful at mitigating odor and now does a good job of keeping its odors out of the communities adjacent to and around the plant.

7. **Question:** Are you willing to meet with neighborhood around Troy Hill?

**Reply:** Yes, that can happen.

8. **Comment (City Council President):** I am hoping these tanks (storage tanks) are not put in City of Pittsburgh. ALCOSAN needs to look at suburban areas. We have had enough of the region's facilities put in the City without gaining anything. The suburban communities utilize our lines and do not pay host fees. Consider areas outside the City. We cannot operate without host fees anymore. It is about time non-city people pay host fees for lines and facilities they use.

**Note:** The City Council President has requested that the notes reflect that there was no objection to her comments at the meeting.



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #4: UPPER MONONGAHELA BASIN

Thursday, October 21, 2010 / 5:30PM

Carnegie Library, 510 East 10<sup>th</sup> Avenue, Munhall, PA 15120

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*The following summarizes the information from the community meeting #4, held on the above referenced date.*

**WELCOME: Arletta Scott Williams**, ALCOSAN, Executive Director

Arletta welcomed and thanked everyone for attending the meeting. She expressed that the purpose of the annual customer information update portion of the meeting was to provide the public with an annual informational update on ALCOSAN's progress relative to the EPA Consent Decree.

**ANNUAL INFORMATION UPDATE PRESENTATION: Arletta Scott Williams**, ALCOSAN, Executive Director

The presentation is summarized as follows:

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**UPPER MONONGAHELA BASIN PRESENTATION: Tim Prevost**, ALCOSAN, Project Manager

The presentation is briefly summarized as follows:

- Definition of the problem
- Approach, information and tools developed to address the problem
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- Maps and images of potential sites and technologies
- Question and answer

The goal of the presentation was to inform attendees how the sanitary sewer overflows (SSOs) and combined sewer overflows (CSOs) are being addressed and review examples of potential solutions that are being developed.

The presentation covered the following topics:

- the problem
- tools used to plan solutions,
- key elements of all solutions
- specific information on potential solutions



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #4: UPPER MONONGAHELA BASIN

Thursday, October 21, 2010 / 5:30PM

Carnegie Library, 510 East 10<sup>th</sup> Avenue, Munhall, PA 15120

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The number and frequency of SSO and CSO overflows are creating a problem. There are an estimated 300 overflows points in the ALCOSAN conveyance system and 140 overflows points from the municipal sewer systems that occur in wet weather events. UM basin has only CSOs.

During the planning process we have done regional mapping, flow monitoring and developed computer models. Computer model simulations of piping networks help us to understand how large we have to size our facilities. Our plan needs to work until the year 2046, and therefore we need flow estimates from municipalities to predict future wet weather flows and have large enough pipes to avoid overflows. Cost is an important consideration and we have a costing tool for estimating costs of the alternatives we develop.

All solutions being developed have three components: Size, Technology, and a Location or Site. We have to figure out the amount and rate of flow, as this drives the size of what we have to build. The use of treatment, storage and source control technologies help to slow the water down and reduce peaks. We want to offer amenities if the communities can help us find the sites that we need. Facilities can be made to blend into to existing development in an area.

Technologies can be grouped into the following categories in regards to how flow is handled: **Remove It** from the current system at the source, **Hold It** by temporarily by storing flows during rain events until pipe capacity is ready to accept it again, **Move It** along in new pipes and conveyance systems and **Treat It** at facilities and still feed it back into the plant for full treatment. Processes like Acti-flo, vortex separation, screening and disinfection, tunnel for storage and tanks are all options.

A good site must be able to fit a range of improvements and have room for expansion. Being near to existing points of discharge and located such that pumping can be avoided is beneficial. In the UM basin we started with all vacant land then we reduced the number to 20 to 30 sites located closer to the ALCOSAN system. These are in areas like Streets Run, Mon Valley and Jacks Run. We looked at consolidating sewers to get flows into these sites. Our engineers, Hazen and Sawyer, also visited the sites, surveyed and figured out local land use rules and regulations. We also spoke with municipalities about improvements they are seriously considering. At this point we assume all flows are coming to ALCOSAN as flows can be huge during wet weather.

Our displays show potential solutions that consolidate flows for treatment at a few locations. This is more cost effective compared to building many of these facilities. We are also considering tunnels. We have two types of solutions – basin solutions which are specific to a basin and regional solutions like a tunnel. Most likely the final solution will be a combination of both.

Our aim is to finalize a basis for sizing improvements based on deciding on the number of overflows to be allowed per year into the waterways. To determine that we will look at how fast the cost of improvements rises as the number of overflows to be allowed per year decreases. There will be point (a number of overflows per year) where the cost to reduce them further will increase substantially and we do not intend to incur those higher costs. It is expected that the regional solution will capture a large amount of flow, which is going to be expensive to address. The costs to address this problem also will include the cost for the municipalities to implement their system improvements. We are trying to create a cost effective plan.



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #4: UPPER MONONGAHELA BASIN

Thursday, October 21, 2010 / 5:30PM

Carnegie Library, 510 East 10<sup>th</sup> Avenue, Munhall, PA 15120

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#### QUESTIONS AND ANSWERS:

Questions, comments and replies made during the meeting are captured below.

- Question:** What is difference between the level of treatment at the ALCOSAN plant and what we are proposing on this project in terms of impact on water quality? Will the regulators accept it?  
**Reply:** We are looking at suspended solids and bacteria as the water quality parameters that will be improved by what we proposing. The regulators have approved this approach elsewhere. Other programs have met their goals using a mix of alternatives.
- Question:** Does the 2 percent affordability criteria include the costs of municipal improvements as well?  
**Reply:** Yes it does.
- Question:** What is a size range for the tunnel?  
**Reply:** It could range in size from 14 to 30 feet.
- Question:** How will affordability be determined for the municipalities?  
**Reply:** Each municipality will develop the cost of its improvements. All municipal costs will be combined with ALCOSAN's costs to determine affordability for our service area.
- Question:** Will the ALCOSAN bill be the same across all communities?  
**Reply:** There will not be a different rate per community. There may be incentives for communities to reduce the flow coming to ALCOSAN. We have a uniform rate right now which is \$4.04/1000 gallons
- Question:** How does a stormwater utility work?  
**Reply:** For instance if Home Depot had a large parking lot they would pay for flow from the parking lot that goes into pipes underground. ALCOSAN cannot implement a stormwater utility. That is up to municipalities if they want to.
- Question:** A wet weather surcharge might be reasonable. Would ALCOSAN then charge us for all the wet weather flow coming to the plant?  
**Reply:** We are looking at rate models with another group so charging for wet weather flow coming from each municipality to the plant is not off the table.
- Question:** Once the future tunnel has been paid for with increased rates will our rates be reduced?  
**Reply:** By law we cannot continue to charge to build facilities once the cost of construction is paid off.

#### **Basin Station Questions/Comments**

The following public comments were made to the UM basin planner directly at the basin presentation station:

1. A resident was happy to hear than Munhall OCF was no longer being considered.
2. A resident was interested in low impact developments (LIDs)/BMPs for her home so she could help reduce flows. She asked if there was a source she could go to help her get ideas for her property. *This information is available via the "How Can You Help" brochure.*



## Wet Weather Planning Process

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3. A resident felt that the sewers were not cleaned frequently enough.
4. A resident noted that the recent lining project was a good idea.
5. A member of Munhall Council likes the idea of regional conveyance versus having separate facilities.
6. A resident asked how homeowners can reduce flows to the combined sewers. ***This information is available via the "How Can You Help" brochure.***
7. After explaining to a Munhall resident the nature of the wet weather problem and the consent decree, she acknowledged that she understands why rates will increase.
8. A resident had no idea that overflows existed, or the magnitude.
9. A resident did not realize that ALCOSAN handles flow from 83 municipalities.
10. A resident was surprised to see the number of overflows in Munhall.
11. A Swissvale resident would like more information about the municipality's requirements.



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #5: UPPER ALLEGHENY BASIN

Monday, October 25, 2010 / 5:30PM

Clarence Fugh Memorial VFD, 27 Crescent Avenue, Pittsburgh, PA 15223

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*The following summarizes the information from the community meeting #5, held on the above referenced date.*

**WELCOME: Arletta Scott Williams**, ALCOSAN, Executive Director

Arletta welcomed and thanked everyone for attending the meeting. She expressed that the purpose of the annual customer information update portion of the meeting was to provide the public with an annual informational update on ALCOSAN's progress relative to the EPA Consent Decree.

**ANNUAL INFORMATION UPDATE PRESENTATION: Arletta Scott Williams**, ALCOSAN, Executive Director

The presentation is summarized as follows:

- Explanation of the consent decree and the problem
- Organization chart outlining roles of ALCOSAN, engineers, stakeholder committees and regulators
- Brief description of the scope, schedule and status of work
- Focus in 2010: Alternatives Development, Affordability Analysis, Public Participation and Municipal Coordination
- Alternatives Development – potential solutions have been identified
- Affordability Analysis – EPA criteria for affordability explained
- Public Participation – interests of stakeholder groups and public outreach efforts
- Municipal Coordination – information exchange between municipalities and ALCOSAN
- 2011-2012 Next Steps and Key Activities: finalize basin solutions, work on regional solutions, complete affordability analysis; develop wet weather plan

**UPPER ALLEGHENY BASIN PRESENTATION: Mike Lichte**, ALCOSAN, Project Manager

The presentation is briefly summarized as follows:

- Definition of the problem
- Approach, information and tools developed to address the problem
- Key elements of potential solutions – technology, flows and sites
- Technology categories – remove it, hold it, move it and treat it
- Site selection criteria explained
- Maps and images of potential sites and technologies
- Question and answer

The goal of the presentation was to inform attendees how the sanitary sewer overflows (SSOs) and combined sewer overflows (CSOs) are being addressed and review examples of potential solutions that are being developed.

The presentation covered the following topics:

- the problem
- tools used to plan solutions,
- key elements of all solutions
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# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #5: UPPER ALLEGHENY BASIN

Monday, October 25, 2010 / 5:30PM

Clarence Fugh Memorial VFD, 27 Crescent Avenue, Pittsburgh, PA 15223

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The number and frequency of SSO and CSO overflows are creating a problem. There are an estimated 300 overflows points in the ALCOSAN conveyance system and 140 overflows points from the municipal sewer systems that occur in wet weather events. Pine Creek experiences a CSO every time it rains.

During the planning process we have looked at mapping, conducted flow monitoring and water quality modeling. We analyze existing flow rates and look at future flows in order to size alternatives. Cost is an important consideration and we have a costing tool for estimating costs of the alternatives we develop.

Technologies can be grouped into the following categories in regards to how flow is handled: **Remove It** from the current system at the source, **Hold It** temporarily by storing flows during rain events until pipe capacity is ready to accept it again, **Move It** along in new pipes and conveyance systems and **Treat It** at facilities and still feed it back into the plant for full treatment. The plan will be a combination of these technologies.

The amount of flow being captured at overflow locations drives the size and type of technology. The basis of determining how much flow is to be captured needs to be acceptable to the regulators. Typically, a two year storm is the usual basis for sizing improvements to handle SSOs. For CSOs the amount of overflows should, typically, not exceed 4-6 overflow events per year once improvements are in place. Where the flows are occurring influences the location or sites of the proposed improvements. Removing relatively small quantities of flows from the system can be done by using green technologies.

Although a number of technologies could be feasible, the best solution is a technology that is suitable for gravity flow. Railroad easements and rights of way present a unique challenge in this area. Approximately 146 sites have been identified – adjacent to existing facilities—and within 3,000 feet of overflow. Potential sites could be Etna Business Park and Washington Boulevard.

#### **QUESTIONS AND ANSWERS:**

Questions, comments and replies made during the meeting are captured below.

1. **Question:** The borough is starting a four year construction project on the route 28 corridor and we don't want it to be disrupted. Is ALCOSAN coordinating with PennDOT?  
**Reply:** Absolutely; we want to minimize the level of utility disruption.



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #6: TURTLE CREEK/THOMPSON RUN BASIN

Tuesday, October 26, 2010 / 5:30PM

William E. Anderson Library of Penn Hills, 1037 Stotler Road, Penn Hills, PA 15235

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*The following summarizes the information from the community meeting #6, held on the above referenced date.*

**WELCOME: Arletta Scott Williams, ALCOSAN, Executive Director**

Arletta welcomed and thanked everyone for attending the meeting. She expressed that the purpose of the annual customer information update portion of the meeting was to provide the public with an annual informational update on ALCOSAN's progress relative to the EPA Consent Decree.

**ANNUAL INFORMATION UPDATE PRESENTATION: Arletta Scott Williams, ALCOSAN, Executive Director**

The presentation is summarized as follows:

- Explanation of the consent decree and the problem
- Organization chart outlining roles of ALCOSAN, engineers, stakeholder committees and regulators
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- Alternatives Development – potential solutions have been identified
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- Public Participation – interests of stakeholder groups and public outreach efforts
- Municipal Coordination – information exchange between municipalities and ALCOSAN
- 2011-2012 Next Steps and Key Activities: finalize basin solutions, work on regional solutions, complete affordability analysis; develop wet weather plan

**TURTLE CREEK/THOMPSON RUN BASIN PRESENTATION: Tim Prevost ALCOSAN, Project Manager**

The presentation is briefly summarized as follows:

- Definition of the problem
- Approach, information and tools developed to address the problem
- Key elements of potential solutions – technology, flows and sites
- Technology categories – remove it, hold it, move it and treat it
- Site selection criteria explained
- Maps and images of potential sites and technologies
- Question and answer

The goal of the presentation was to inform attendees how the sanitary sewer overflows (SSOs) and combined sewer overflows (CSOs) are being addressed and review examples of potential solutions that are being developed.

The presentation covered the following topics:

- the problem
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# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

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Tuesday, October 26, 2010 / 5:30PM

William E. Anderson Library of Penn Hills, 1037 Stotler Road, Penn Hills, PA 15235

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The number and frequency of SSO and CSO overflows are creating a problem. There are an estimated 300 overflows points in the ALCOSAN conveyance system and 140 overflows points from the municipal sewer systems that occur in wet weather events. CSOs occur in about 15% of TT Basin. The problems from this are bacteria and unsightly materials in our waterways and basement backups.

During the planning process we have looked at mapping, conducted flow monitoring (one of the largest efforts in the country) and water quality modeling. We analyze existing flow rates and look at future flows in order to size alternatives. Cost is an important consideration and we have a costing tool for estimating costs of the alternatives we develop.

All solutions being developed have three components: Size, Technology, and a Location or Site. Storage tanks will be used in this basin. Those above ground will include pump stations which can be integrated into the community and made to look like a house. Underground tanks can be covered by, for instance, tennis courts or park facilities. Storage is based on flow volume. The control level (how much flow we are going to have to capture) will impact the size of the storage tanks. After the wet weather event the flow in tanks will be bled back into system and sent to the treatment plant.

Technologies can be grouped into the following categories in regards to how flow is handled: **Remove It** from the current system at the source, **Hold It** by temporarily by storing flows during rain events until pipe capacity is ready to accept it again, **Move It** along in new pipes and conveyance systems and **Treat It** at facilities and still feed it back into the plant for full treatment. The plan will be a combination of these technologies.

A good site must be able to fit a range of improvements and have room for expansion. Being near to existing points of discharge and located such that pumping can be avoided is beneficial. The planning process looked at all vacant sites and our engineers visited many potential sites. Examples include the Old Walmart site, Westinghouse, IDC, Union RR and Temple Parking Lot. At the confluence of Thompson Run and Turtle Creek is a brownfield site that is far from residences.

The sizing of potential solutions for CSOs is based on wet weather events in a typical year. For SSOs sizing is based on a design storm. We have developed sizing of potential solutions based on different levels of overflows as we try to figure out what the regulators will accept and what we can afford. Preferred solutions have been identified, in the TT basin, based on assuming all municipal flows come to ALCOSAN. We coordinate with the municipalities so the engineers can coordinate the solutions being developed. We have provided our computer modeling tool to the municipalities.

We are starting to look at regional solutions by combining work in 7 basins. The existing wastewater plant will need to be expanded but there is not a lot of room for expansion. Therefore some of these potential solutions we have identified will be needed. Economic feasibility of a regional solution is very important.

Our aim is to finalize a basis for sizing improvements based on the cost considering the number of overflows to be allowed per year into the waterways. As an example 20 overflows might cost \$100M, while 7-12 overflows could be \$200M and 3-4 overflows could cost \$400M. We look at these options and will present our case to



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regulators. An option with very high costs is unreasonable. We have to create a plan that we can afford and that regulators will accept.

#### **QUESTIONS AND ANSWERS:**

Questions, comments and replies made during the meeting are captured below.

- Question:** What direct responsibilities do the municipalities have to the federal government  
**Reply:** The obligation of your municipality is to the state and county but not to federal government. Penn Hills does not have a consent order with the federal government. It has a consent decree with the state and county. The result of that is that Penn Hills got way ahead of the other municipalities. We have been coordinating with Penn Hills for the last two years as we share models and they share data on what they are planning. We need people to hear about this and we are doing our best. We need you to share this with your friends.
- Comment:** Most people here (in Penn Hills) do not know ALCCOSAN and they are not aware of these issues as they should be.
- Question:** How should we as ALCOSAN get our message out?  
**Response:** Utilize WQED. Get on TV as 80% of the people watch TV.
- Comment:** Last spring there was a presentation to explain past payments and their responsibilities. 35 people came to represent 35,000 people. It was a great presentation and it included information about ALCOSAN.
- Question:** When you sell your home do you have to interface with ALCOSAN, if not who?  
**Response:** Your service is provided by the municipality so that is who a seller has to interface with, not ALCOSAN.
- Question:** Will ALCOSAN be willing to send representatives to small groups?  
**Response:** Yes, we go wherever we are asked to go.
- Question:** Are presentations formal or informal?  
**Response:** It varies
- Comment:** We will provide you opportunities for personal contact with local people.
- Question:** Would ALCOSAN own the sites or just use them?  
**Reply:** We would build and own the tanks on the site. For instance, if we constructed a tank under the ball field we would not own the ball field. However, for most part ALCOSAN would own the land and the facilities on which we construct.
- Question:** Why would combined areas not focus on green solutions? This should be done so Penn Hills is not saddled with these costs.



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

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**Reply:** The engineering firm ALCOSAN has contracted for this area says that the Turtle Thompson basin is good place for green solutions. People are doing it. They are disconnecting the downspouts and installing rain gardens. We are encouraging the municipalities to use green technologies and that is all we can do.

11. **Question:** Is the City of Pittsburgh and Braddock implementing green solutions?

**Reply:** The City is looking at green solutions.

12. **Question:** If ALCOSAN helps out would it reduce the cost?

**Reply:** Green solutions are not the entire solution to this problem. Sewer separation is another solution but it shifts problem to storm water which will eventually have to be addressed.

13. **Question:** Is the Turtle Thompson firm on site now? Who hired them? Are they on standby? Were they hired by bid or RFP? Why not use local firms? What are they doing that municipalities cannot do?

**Reply:** The national firms are teamed up with local firms to enhance project expertise. ALCOSAN selected seven firms, one for each basin. The local firms do not have the resources to do this as their focus is working with the municipalities.

14. **Question:** Are there opportunities for jobs?

**Reply:** Initially the project will create construction jobs. Once the improvements are built there will be jobs to operate and maintain the systems and can we train people. However, training (to people we have not hired) is not currently an ALCOSAN policy. We are member of Pittsburgh Pipeline which is an opportunity for training non college bound high school people to develop skills. Community support is needed.

15. **Comment:** Bring the PA. Dept of Labor into this. How about getting our universities into it and getting local input to look after our interests? Why not have engaged students engaged in water quality monitoring and use the federal agency for water quality sampling at a very good price.

**Reply:** We utilize the current process to try to ensure value for the dollars we spend.

16. **Question:** Do you use eminent domain?

**Reply:** We have the ability; it would only be used in extreme cases.

17. **Question:** Is the Temple site under consideration?

**Reply:** There is flooding in the area.

18. **Question:** What about a new pipeline to collect all sewage?

**Reply:** This would not solve our issues.

19. **Question:** What is public participation?

**Reply:** A process where public is engaged for comment/feedback.

20. **Question:** Is Penn Hills one of the higher paying municipalities?



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**Reply:** Not exactly sure, there are communities that are above and below 2 percent, but we have to look at the average.

21. **Question:** Where is open house?

**Reply:** ALCOSAN

22. **Question:** Are our public officials being met with on a regular basis?

**Reply:** Varies; it is important but we will constantly strive for more coordination



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #7: SAW MILL RUN BASIN

Wednesday, October 27, 2010 / 5:30PM

St. Mark's Evangelical Lutheran Church, 933 Brookline Blvd., Pittsburgh, PA 15226

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*The following summarizes the information from the community meeting #7, held on the above referenced date.*

**WELCOME: Dave Borneman**, ALCOSAN, Director of Engineering and Construction

Arletta welcomed and thanked everyone for attending the meeting. She expressed that the purpose of the annual customer information update portion of the meeting was to provide the public with an annual informational update on ALCOSAN's progress relative to the EPA Consent Decree.

**ANNUAL INFORMATION UPDATE PRESENTATION: Dave Borneman**, ALCOSAN, Director of Engineering and Construction

The presentation is summarized as follows:

- Explanation of the consent decree and the problem
- Organization chart outlining roles of ALCOSAN, engineers, stakeholder committees and regulators
- Brief description of the scope, schedule and status of work
- Focus in 2010: Alternatives Development, Affordability Analysis, Public Participation and Municipal Coordination
- Alternatives Development – potential solutions have been identified
- Affordability Analysis – EPA criteria for affordability explained
- Public Participation – interests of stakeholder groups and public outreach efforts
- Municipal Coordination – information exchange between municipalities and ALCOSAN
- 2011-2012 Next Steps and Key Activities: finalize basin solutions, work on regional solutions, complete affordability analysis; develop wet weather plan

**SAW MILL RUN BASIN PRESENTATION: Mike Litche**, ALCOSAN, Project Manager

The presentation is briefly summarized as follows:

- Definition of the problem
- Approach, information and tools developed to address the problem
- Key elements of potential solutions – technology, flows and sites
- Technology categories – remove it, hold it, move it and treat it
- Site selection criteria explained
- Maps and images of potential sites and technologies
- Question and answer

The goal of the presentation was to inform attendees how the sanitary sewer overflows (SSOs) and combined sewer overflows (CSOs) are being addressed and review examples of potential solutions that are being developed.

The presentation covered the following topics:

- the problem
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# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #7: SAW MILL RUN BASIN

Wednesday, October 27, 2010 / 5:30PM

St. Mark's Evangelical Lutheran Church, 933 Brookline Blvd., Pittsburgh, PA 15226

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The number and frequency of SSO and CSO overflows are creating a problem. We have a significant overflow problem in SMR basin – 300 MG per year. There are an estimated 300 overflow points in the ALCOSAN conveyance system and 140 overflow points from the municipal sewer systems that occur in wet weather events. There are 46 overflows in the Small Mill Run basin half of which belong to municipalities. An example is a McNelly Road map that shows water first goes to a municipal structure before it reaches ALCOSAN.

The planning process relies on key tools such as computer models, mapping and GIS. We also get preliminary flow estimates from municipalities so we can understand what municipalities are planning to combine them with our flows. We do water quality assessments to understand the impact of our proposed solutions on the rivers. The ALCOSAN costing tool (ACT) is used to develop cost estimates for proposed improvements. Rainfall and snowmelt cause overflows. We use design storms in our models and see how the system is performing with those levels of flow. We also correlate our results with visual inspections as we have crews that monitor these overflows.

Technologies can be grouped into the following categories in regards to how flow is handled: **Remove It** from the current system at the source, **Hold It** by temporarily by storing flows during rain events until pipe capacity is ready to accept it again, **Move It** along in new pipes and conveyance systems and **Treat It** at facilities and still feed it back into the plant for full treatment. **Treat It** occurs at the existing wastewater treatment plant at Woods Run.

The planning process starts with determining size or flow volumes for an improvement before looking at sites to make sure they are large enough. We also look at the level of service which for CSOs is how much water is going to be discharged in the river. This is called a knee of the curve analysis.

Our solutions will be a combination of technologies such as: retention basins that treat the flow before discharging it to the waterway or screening and disinfection, which is similar except that floatables are removed first. Storage tanks just hold flows until pipe capacity is available as do subterranean tunnels that many cities use. We are trying to look at green technologies like rain gardens and trees in attempts to keep the water out of our systems. Sites must fit the necessary infrastructure and are best if suitable for gravity flow as well as being close to where the existing flows are. We always have issues with potential conflicts with existing utilities, railroads and roads. In SMR we grouped overflows together so that the captured flows would go to nearest suitable site. We are beginning to cost out solutions for SMR basin by honing in on preferred sites and routes of sewers. We are doing cost comparisons by comparing the cost of improvements at different levels of service. We end up looking at many alternatives and after that we will start looking at regional solutions to find the optimal solution.

#### **QUESTIONS AND ANSWERS:**

Questions, comments and replies made during the meeting are captured below.

1. **Comment:** You keep emphasizing cost. A tremendous amount of energy comes from water. We should start there. We have debris to remove from the water but once that is done we should capture energy from the force of water.



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

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**Reply:** We have looked at the potential for that at plant. Going forward we aim to look at opportunities to capture energy and be energy efficient at the plant.

2. **Comment:** We need to capture this energy to pay for these improvements. There was an individual who proposed that a cup of water could generate enough energy for all of this and we should listen to people with those proposals. The taxpayers should not have to pay for this.

**Reply:** There are plans to make an effort to look into the use of water in this way.

3. **Question:** Are you building a screening and disinfection facility by West End?

**Reply:** We are costing that out. A screening and disinfection facility is coming out expensive. We are having trouble getting them to fit on a site especially at levels of controls that the regulators want. We consider how technologies fit at different sites.

4. **Question:** Can you treat water coming down Saw Mill Run creek?

**Reply:** Our goal is keep the overflows out of the river but not to treat the entire creek.

5. **Question:** How would you treat flow coming to Dormont?

**Reply:** In the Saw Mill Run basin we will need to build more pipes to get flow to that facility. The ACOE (Corp of Engineers) is building facilities at bottom of Saw Mill Run. Source reduction helps to reduce flows that go the streams, at least to reduce our contribution to wet weather flows in the creek.

6. **Question:** What will you do about the water that comes down the creek and overflows its banks?

**Reply:** That is a PENNDOT problem and they are building a larger culvert to prevent flooding. When we eliminate or considerably reduce wet weather overflows there will be a little less storm water coming down to that point.

7. **Question:** What will be the role of local companies and how can jobs come from this?

**Reply:** The scale of improvements will provide jobs for local and national companies. Other programs have created jobs in their communities.

8. **Question:** In trying to understand the problem did the rainfall last evening rainfall create an overflow? Did snow the last April generate an overflow?

**Reply:** Most likely the rainfall last evening generated an overflow because it rained for quite a while. The snow last April when it melted definitely created an overflow.

9. **Question:** How much of the sewer system in Brookline and the adjacent City of Pittsburgh system is separated versus combined?

**Reply:** Some parts of Brookline have separate sewers. The City of Pittsburgh has about 100 miles of combined sewers in both Brookline and its adjacent City area that are part of same system.



## Wet Weather Planning Process

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10. **Question:** Since we have to pay for this why don't we start increasing rates now to offset a huge future rate increase that is coming?

**Reply:** ALCOSAN has financing to meet current needs. We do not yet know what we can afford and how much we need to spend. Our past practice to do an incremental approach to rate increases since, at this time, we have financing to meet our needs today. To start artificially raising rates has been considered but ALCOSAN has not decided to do that yet. We do not think we need to start that now.

11. **Comment:** The last question makes a good point. We need a special account that we could start putting money into now with smaller rate increases. Those funds would be dedicated to this project and could get invested until the project is implemented.

**Reply:** ALCOSAN will take it under consideration. ALCOSAN only has 12 miles of sewers and the municipalities will have future costs as well. We would like to see them raise the funds of their improvements as well.

12. **Comment:** The idea of dedicated funds for this project is perfect. We must hold people accountable the political game has to stop.

**Reply:** We are coming up on second step in the process and there will have to be dedicated effort going forward on all levels of government.

#### Basin Station Questions/Comments

The following public comments/questions were made to the SMR basin planner directly at the presentation station:

1. **Question:** Can the force of the water—energy—reduce the cost of the program?

**Reply:** We will pass this information on to our stakeholder groups for consideration.

2. **Question:** You should build a storage tank at the bottom of the west end of the bridge?

**Reply:** That is something we are considering cost for. A screening and disinfection facility comes out cheaper and takes less space.

3. **Question:** Will you treat SMR Creek?

**Reply:** No our goal is to deal with sewer overflows and avoid it going into the creek. We want to get it out from SMR Creek.

4. **Question:** How will water from Dormont Street/McNeily Road be treated?

**Reply:** Our system follows route 88.

5. **Question:** Are local companies being used/job creation?

**Reply:** Scale will bring local and national firms. Provide local jobs.

6. **Question:** Would last evening's rain create overflow?

**Reply:** Absolutely.



## Wet Weather Planning Process

### ALCOSAN Community Meetings & Annual Customer Information Update

#### Meeting Summary

Meeting #7: SAW MILL RUN BASIN

Wednesday, October 27, 2010 / 5:30PM

St. Mark's Evangelical Lutheran Church, 933 Brookline Blvd., Pittsburgh, PA 15226

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7. **Question:** You mentioned flag system. How many times has it been implemented this year?  
**Reply:** ALCOSAN will post statistics soon.
8. **Question:** Is most of the city CSO?  
**Reply:** Most of South Hills is SSO but not this area. City is mostly CSO. 10 percent is SSO. Age plays a large role.
9. **Question:** This has to be done/will be done. Any thought given to the bill increase proceeding implementation?  
**Reply:** Sensitive to what customer pays. Once we get a better understanding of the project's schedule and costs then we can make decisions about rate increases.
10. **Question:** Can a special account be created and money reinvested to pay for this program?  
**Reply:** We can consider this.



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #8: REGION-WIDE MEETING

Thursday, November 4, 2010 / 10:00 AM – 4:00 PM

Senator John Heinz History Center, 1212 Smallman Street, Pittsburgh, PA 15222

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*The following summarizes the information from the community meeting #8, held on the above referenced date.*

**WELCOME: Arletta Scott Williams, ALCOSAN, Executive Director**

Arletta welcomed and thanked everyone for attending the meeting. She expressed that the purpose of the annual customer information update portion of the meeting was to provide the public with an annual informational update on ALCOSAN's progress relative to the EPA Consent Decree.

**ANNUAL INFORMATION UPDATE PRESENTATION: Arletta Scott Williams, ALCOSAN, Executive Director**

The presentation is summarized as follows:

- Explanation of the consent decree and the problem
- Organization chart outlining roles of ALCOSAN, engineers, stakeholder committees and regulators
- Brief description of the scope, schedule and status of work
- Focus in 2010: Alternatives Development, Affordability Analysis, Public Participation and Municipal Coordination
- Alternatives Development – potential solutions have been identified
- Affordability Analysis – EPA criteria for affordability explained
- Public Participation – interests of stakeholder groups and public outreach efforts
- Municipal Coordination – information exchange between municipalities and ALCOSAN
- 2011-2012 Next Steps and Key Activities: finalize basin solutions, work on regional solutions, complete affordability analysis; develop wet weather plan

**QUESTIONS AND ANSWERS:**

Questions, comments and replies made during the meeting are captured below.

1. **Question:** Will the “2 percent of Median Household Income (MHI) affordability criteria” applied by planning basin or across the entire service area?
2. **Reply:** It will apply across the entire service area.
3. **Comment:** The 2011 budget for one of the communities in the service area is based on a median household income of \$13,500. They are at 3.7% of MHI which exceeds the 2% EPA criteria.
4. **Question:** Does the dilute sewage that is being discharged include human waste? How does it affect the rivers?  
**Reply:** Yes, human waste is included. We can have a separate discussion about river impacts.
5. **Question:** Can ALCOSAN invest in green solutions upstream of its system for removal of excess flow if it can result in down-sized facilities?  
**Reply:** We have the ability to pay for that but our financial advisors tell us that we should not pay for facilities that we do not own. ALCOSAN has been cautioned against that but we are still talking about it. It is a delicate issue.



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #8: REGION-WIDE MEETING

Thursday, November 4, 2010 / 10:00 AM – 4:00 PM

Senator John Heinz History Center, 1212 Smallman Street, Pittsburgh, PA 15222

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6. **Question:** What about investing in public education or promoting a stormwater utility?  
**Reply:** Yes, we are committed to a wide variety of educational resources with particular emphasis on the schools; grade-school children, for example, very effectively carry the message home to their families.
7. **Question:** Why are the community meetings not better advertised? For instance, I did not get it in my water bill. I heard about yesterday on NPR. What are we doing to better promote these meetings?  
**Reply:** This meeting was advertised extensively in news papers, KQV, and NPR. In spite of our advertising efforts, people cannot be forced to attend. Typically people are not going to come out until it is a pocket book issue. For example the Penn Hills community knows about paying high rates to address sewer problems and still they did not show up. In contrast, a Heidelberg meeting was very well attended because they hated a site.
8. **Question:** What do you think we (ALCOSAN) should do?  
**Reply:** Offer free rain barrels to attendees and include a notice of meeting in water bills.
9. **Comment:** With respect to water bill inserts, we only directly bill very few communities and have to go through entities that direct bill. We need to look into coordinating with billing agencies in the future.
10. **Question:** Did the planning phase produce any big surprises?  
**Reply:** No surprises have occurred so far.
11. **Question:** What types of jobs should we expect for our community?  
**Reply:** Hold onto to that question. I will address it.

#### Basin Station Questions/Comments

Meeting attendees were also able to discuss basin specific plans with basin planners at their respective presentation stations. The following captures those comments/questions:

1. (UM Basin) - Bill Meadows (RIDC) – sees this as not just ALCOSAN's issue but would like to see this addressed together with PWSA and developers.
2. (TT Basin) - Mike Welsh – asked about schedule, and commented that would be nice to start some projects sooner.
3. (UA Basin) - Mr. Okur of Fox Chapel – general questions on magnitude of problem, how 3 Rivers Wet Weather relates to ALCOSAN and if PWSA and ALCOSAN are one and the same.
4. (UA Basin) - Jerry Edwards of Franklin Park Borough – interested in flow from municipalities and treatment plan/storage sites.



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #8: REGION-WIDE MEETING

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5. (UA Basin) - Bob Zischau of Glenn Engineering representing Sharpsburg and Aspinwall – general discussion of potential locations.
6. (UA Basin) - Mike Welsh of Carpenter’s Union – general discussion of treatment and timing – jobs and training.
7. (UA Basin) - Sandra of Pittsburgh and formerly Cecil – interested in timing of solution implementation – focus on Etna.
8. (UA Basin) - general questions on number of treatment and storage facilities per basin and extent of problem.
9. (Basin not indicated) - more source control needed; appear to be moving to a conveyance solution without enough consideration of green alternatives and solving implementation constraints so green alternatives can become part of a preferred basin alternative. Water quality concerns for new use s of waterfront (eg. new boat or jet ski launch) that may not be reflected in current CSO management concepts.



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #9: CHARTIERS CREEK BASIN

Tuesday, November 9, 2010 / 5:30PM

Upper St. Clair Community and Rec. Center, 1551 Mayview Road, Upper St. Clair, PA 15241

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*The following summarizes the information from the community meeting #9, held on the above referenced date.*

**WELCOME: Dave Borneman, ALCOSAN, Director of Engineering and Construction**

Arletta welcomed and thanked everyone for attending the meeting. She expressed that the purpose of the annual customer information update portion of the meeting was to provide the public with an annual informational update on ALCOSAN's progress relative to the EPA Consent Decree.

**ANNUAL INFORMATION UPDATE PRESENTATION: Dave Borneman, ALCOSAN, Director of Engineering and Construction**

The presentation is summarized as follows:

- Explanation of the consent decree and the problem
- Organization chart outlining roles of ALCOSAN, engineers, stakeholder committees and regulators
- Brief description of the scope, schedule and status of work
- Focus in 2010: Alternatives Development, Affordability Analysis, Public Participation and Municipal Coordination
- Alternatives Development – potential solutions have been identified
- Affordability Analysis – EPA criteria for affordability explained
- Public Participation – interests of stakeholder groups and public outreach efforts
- Municipal Coordination – information exchange between municipalities and ALCOSAN
- 2011-2012 Next Steps and Key Activities: finalize basin solutions, work on regional solutions, complete affordability analysis; develop wet weather plan

**CHARTIERS CREEK BASIN PRESENTATION: Dan Lockard, ALCOSAN Project Manager**

The presentation is briefly summarized as follows:

- Definition of the problem
- Approach, information and tools developed to address the problem
- Key elements of potential solutions – technology, flows and sites
- Technology categories – remove it, hold it, move it and treat it
- Site selection criteria explained
- Maps and images of potential sites and technologies
- Question and answer

The goal of the presentation was to inform attendees how the sanitary sewer overflows (SSOs) and combined sewer overflows (CSOs) are being addressed and review examples of potential solutions that are being developed.

The presentation covered the following topics:

- the problem
- tools used to plan solutions,
- key elements of all solutions
- specific information on potential solutions



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #9: CHARTIERS CREEK BASIN

Tuesday, November 9, 2010 / 5:30PM

Upper St. Clair Community and Rec. Center, 1551 Mayview Road, Upper St. Clair, PA 15241

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The number and frequency of SSO and CSO overflows are creating a problem. There are an estimated 65 overflows in Chartiers Creek basin from ALCOSAN conveyance system and 50 overflows from the municipal sewers that occur in wet weather events. Communities upstream of Heidelberg have separate sanitary systems while the communities downstream are combined sanitary and storm system systems. All these systems generate overflows that carry bacteria and litter which pollute Chartiers Creek.

The planning process to develop solutions is being headed by a national engineering firm, Tetra Tech. Key tools used are computer simulations of piping networks and a standard approach to estimating costs of solutions. Computer simulations analyze how the piping system works. This tool was developed using flow monitoring data as well as an accurate representation of the pipe network. The ALCOSAN Costing Tool (ACT) offers a consistent basis for all cost estimates. Both of these tools are shared with the municipalities so that all improvements (ALCOSAN and municipal) are developed with the same approach.

All solutions being developed have three components: Technology, Flow and a Location or Site. Technologies can be grouped into the following categories as regards how flow is handled: **Remove It** from the current system at the source, **Hold It** temporarily by storing flows during rain events until pipe capacity is ready to accept it again, **Move It** along in new pipes and conveyance systems and **Treat It** at the existing wastewater treatment plant at Woods Run by expanding the plant.

The amount of flow being captured at overflow locations drives the size and type of technology. The basis of determining how much flow is to be captured needs to be acceptable to the regulators. Typically, a two year storm is the usual basis for sizing improvements to handle SSOs. For CSOs the amount of overflows should, typically, not exceed 4-6 overflow events per year once improvements are in place. Where the flows are occurring influences the location or sites of the proposed improvements. Removing relatively small quantities of flows from the system can be done by using green technologies. Two feasible technologies for the Chartiers Creek basin are storage tanks and retention basins. Storage tanks hold the flow temporarily while retention basins treat the flow and discharge it into the waterways.

Since the volume of flow is significant the potential solution for Chartiers Creeks is to consolidate flows from the 65 overflows at 5 locations or sites within the basin. Solutions were presented at the five sites which are Bridgeville, Collier, Heidelberg, Crafton and McKees Rocks. The focus of interest was on the Heidelberg site. The potential solution for Chartiers Creek, proposes retention treatment basins at McKees Rocks and Crafton and storage tanks at Heidelberg, Collier (Universal Stainless) and Bridgeville along with piping to get the flows to these sites as shown in the displays brought to the meeting.

Cost is a big concern since the solution needs to be affordable to rate payers. Many sites were considered and this potential solution utilizes five sites instead of a more expensive approach of putting new facilities at a larger number of sites. The sites selected need to be suitable for the technology and be able to accommodate future expansion as regulations change. Both the costs to construct as well as to operate and maintain facilities are considered in the planning process. Locating new facilities closer to existing interceptors along Chartiers Creek reduces the cost of conveying flow in large diameter sewers.



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #9: CHARTIERS CREEK BASIN

Tuesday, November 9, 2010 / 5:30PM

Upper St. Clair Community and Rec. Center, 1551 Mayview Road, Upper St. Clair, PA 15241

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#### QUESTIONS AND ANSWERS:

Questions, comments and replies made during the meeting are captured below.

- Question:** What percentage of the solution can be fixed by each solution (i.e., rain gardens sound good, but they don't seem that they can really make a difference)?

**Reply:** Other cities are trying to develop ideas that will capture the first inch of stormwater. Generally you will not attain acceptable levels with only green solutions. We have pockets of areas in the Chartiers Creek Basin that would be good locations for stormwater removal. The problem is that the municipalities control the stormwater. Our area has a lot of groundwater to consider as well.
- Question:** Is the cost burden shared equally throughout the basins or is it per use?

**Reply:** Currently the costs are based on water consumption.
- Question:** What is the incremental difference between base flow and wet weather flow?

**Reply:** ALCOSAN representative discussed the treatment plant's existing capacity.
- Question:** For what are you going to provide treatment?

**Reply:** ALCOSAN will have to treat whatever they collect to some extent. The facilities that are proposed in the Chartiers Basin would only be active for two to three days after a storm which is about 50 to 60 times a year. The USEPA has instructed ALCOSAN to pick a "typical year's rainfall" and that is what we are designing our structures for.
- Question:** Is a lot of this water seepage from groundwater or rainwater getting into the system?

**Reply:** It is a mix. Older systems have storm, foundation drains and leaky joints all allowing water into the system.
- Question:** How much of a health problem is it because there is a huge amount of water in the rivers?

**Reply:** Primary and secondary contact can be dangerous. The previous argument was that "dilution was the solution", but you have to consider that we are also getting pollution from mines and other upstream sources.
- Question:** Are there any guesses in what we will do based on what has been done in other parts of the county?

**Reply:** There are many different solutions, but they will cost in the billions of dollars.
- Question:** How clean is clean?

**Reply:** Our industry is always changing as the regulations become stricter.



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #10: UPPER ALLEGHENY BASIN

Wednesday, November 10, 2010 / 5:30PM

Boyd Community Center, 1220 Powers Run Road, Pittsburgh, PA 15238

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*The following summarizes the information from the community meeting #10, held on the above referenced date.*

**WELCOME: Art Tamilia, Esq.,** ALCOSAN, Director of Environmental Compliance & Deputy Executive Director

Arletta welcomed and thanked everyone for attending the meeting. She expressed that the purpose of the annual customer information update portion of the meeting was to provide the public with an annual informational update on ALCOSAN's progress relative to the EPA Consent Decree.

**ANNUAL INFORMATION UPDATE PRESENTATION: Art Tamilia, Esq.,** ALCOSAN, Director of Environmental Compliance & Deputy Executive Director

The presentation is summarized as follows:

- Explanation of the consent decree and the problem
- Organization chart outlining roles of ALCOSAN, engineers, stakeholder committees and regulators
- Brief description of the scope, schedule and status of work
- Focus in 2010: Alternatives Development, Affordability Analysis, Public Participation and Municipal Coordination
- Alternatives Development – potential solutions have been identified
- Affordability Analysis – EPA criteria for affordability explained
- Public Participation – interests of stakeholder groups and public outreach efforts
- Municipal Coordination – information exchange between municipalities and ALCOSAN
- 2011-2012 Next Steps and Key Activities: finalize basin solutions, work on regional solutions, complete affordability analysis; develop wet weather plan

**UPPER ALLEGHENY BASIN PRESENTATION: Mike Lichte,** ALCOSAN, Project Manager

The presentation is briefly summarized as follows:

- Definition of the problem
- Approach, information and tools developed to address the problem
- Key elements of potential solutions – technology, flows and sites
- Technology categories – remove it, hold it, move it and treat it
- Site selection criteria explained
- Maps and images of potential sites and technologies
- Question and answer

The goal of the presentation was to inform attendees how the sanitary sewer overflows (SSOs) and combined sewer overflows (CSOs) are being addressed and review examples of potential solutions that are being developed.

The presentation covered the following topics:

- the problem
- tools used to plan solutions,
- key elements of all solutions
- specific information on potential solutions



# Wet Weather Planning Process

## ALCOSAN Community Meetings & Annual Customer Information Update

### Meeting Summary

Meeting #10: UPPER ALLEGHENY BASIN

Wednesday, November 10, 2010 / 5:30PM

Boyd Community Center, 1220 Powers Run Road, Pittsburgh, PA 15238

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The number and frequency of SSO and CSO overflows are creating a problem. There are an estimated 300 overflows points in the ALCOSAN conveyance system and 140 overflows points from the municipal sewer systems that occur in wet weather events.

During the planning process we have looked at mapping, conducted flow monitoring and water quality modeling. We analyze existing flow rates and look at future flows in order to size alternatives. Cost is an important consideration and we have a costing tool for estimating costs of the alternatives we develop.

Technologies can be grouped into the following categories in regards to how flow is handled: **Remove It** from the current system at the source, **Hold It** temporarily by storing flows during rain events until pipe capacity is ready to accept it again, **Move It** along in new pipes and conveyance systems and **Treat It** at facilities and still feed it back into the plant for full treatment. The plan will be a combination of these technologies.

The amount of flow being captured at overflow locations drives the size and type of technology. The basis of determining how much flow is to be captured needs to be acceptable to the regulators. Typically, a two year storm is the usual basis for sizing improvements to handle SSOs. For CSOs the amount of overflows should, typically, not exceed 4-6 overflow events per year once improvements are in place. Where the flows are occurring influences the location or sites of the proposed improvements. Removing relatively small quantities of flows from the system can be done by using green technologies.

Although a number of technologies could be feasible, the best solution is a technology that is suitable for gravity flow.

#### **QUESTIONS AND ANSWERS:**

Questions, comments and replies made during the meeting are captured below.

- Question:** Is the government providing incentives for this program?  
**Reply:** ALCOSAN is pursuing some grant funding actively; however grant money has been very tight historically. We will continue to pursue those opportunity.
- Question:** When did ALCOSAN conduct the water quality sampling and what are the standards?  
**Reply:** By and large levels of heavy metals and industrial chemicals are low. We discovered that these pollutants could be controlled at the source. Over the next few years, the federal government is evaluating if additional pollutants should be evaluated.

**October/November 2011**

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# ALCOSAN BASIN FACILITIES PLANNING

## PUBLIC OFFICIALS BRIEFING

Thursday, October 20, 2011 / 8:00 AM – 9:30 AM

Best Western Parkway Center Inn

875 Greentree Road, Pittsburgh, PA 15220

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The public officials briefing was held on October 20, 2011 at the Best Western Parkway Center Inn in Pittsburgh, from 8 a.m. to 9:30 a.m. Breakfast was available to attendees from 7 a.m. to 8 a.m.

### Introduction

Rep. Harry Readshaw, Chairman, ALCOSAN Board of Directors, thanked everyone for coming and commented, “Everyone is aware of the Consent Decree obligations; but we also understand that it is difficult to explain the anticipated costs of the Wet Weather Plan to our constituents which is the purpose of this meeting. We want you to have the knowledge so that you can pass that information on to your constituents when they call your offices. As we know, our constituents don’t want technical answers. They’re concerned about costs going up. How clean is the water going to get is the main question that is going to be asked. You may agree or disagree, but we’re on the journey and we have to complete it.” Rep. Readshaw turned the meeting over to Arletta Scott Williams, ALCOSAN’s Executive Director.

Arletta asked those present to introduce themselves. She noted that water quality in this region is far from what it should be and water quality is the message. At the end of the day, water quality is the issue. She said, “we can’t get there without the technical issues or spending the billions of dollars. At the end of this meeting, we’re not done. Anything we can do to support you, we will. We’ll come to your offices and meet with you at your convenience.” Arletta then introduced Dave Borneman, ALCOSAN’s Director of Engineering and Construction, and Jan Oliver, ALCOSAN’s Director of Regional Conveyance, as the presenters.

### Presentation

Dave began the presentation and reviewed the key topics to be covered during the presentation including:

1. The Problem
2. Wastewater Roles and Responsibilities
3. Wet Weather Planning Process and Schedule
4. Alternatives Analysis Update
5. Water Quality Assessment

Dave transitioned the presentation over to Jan on the topic of water quality. Prior to the start of Jan’s presentation, Janeen Zappa indicated she had questions.

- Janeen commented that she had been attending a lot of meetings where questions regarding this project were asked. There are questions about the opportunity for local jobs, particularly with the tunnel work, but there is an understanding that these crews may not be local. How does the WWP analysis take into consideration the opportunity for local jobs?
- Dave responded that there will be a lot of other work other than tunnels such as pipe laying.
- Janeen responded that this is what the local officials need to understand. She also asked who would be responsible for bidding the work.
  - Dave responded that ALCOSAN would be responsible for this task.

Jan initiated her segment of the presentation on water quality. Highlights of Jan’s comments included:

- Sampling taken during rainfall conditions
- Competing needs and cost curve
- Sanitary Sewer Overflows (SSOs) are illegal, Combined Sewer Overflows (CSOs) are legal
- Treatment capacity for additional CSOs in wet weather periods
- Chartiers Creek schedule for SSO elimination by 2019 is the result of a third party law suit



# ALCOSAN BASIN FACILITIES PLANNING

## PUBLIC OFFICIALS BRIEFING

Thursday, October 20, 2011 / 8:00 AM – 9:30 AM

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At the conclusion of the presentation, the floor was opened for questions from the audience. The questions and responses are summarized as follows:

### Questions/Comments

- Brenda Smith, of Nine Mile Run Watershed Association, asked if she could get a list of entities represented on the Regional Stakeholder Group.
  
- A member of the audience asked if ALCOSAN received calls about Marcellus Shale run off.
  - Arletta responded that ALCOSAN does get calls about treating that discharge but they've died down since two years ago. ALCOSAN also did a cursory review as to what would be required to treat that waste. It would cost \$1 billion in modifications to the plant to treat the wastewater.
  
- A member of the audience asked if the Girty's Run tunnel is different than what has been proposed for Girty's Run?
  - Dave responded that ALCOSAN is anticipating a large pipe to supplement Girty's Run, not the 18-foot pipe that's more dominant toward the plant. It will not be the deep tunnel either. It will be open cut or something along those lines. Tanks up in Girty's Run will remain.
  
- A member of the audience asked about the affordability guidance and if there was a projection for how long it would take if the program came in under or over the affordability limit identified?
  - Dave responded that it could take 50-60 years if the cost was over the affordability limit.

### Conclusion

Representative Readshaw presented closing remarks at 9:25.



Regional Wet Weather Plan

# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Lower Ohio/Girty's Run Basin**  
**Monday, October 24, 2011/ 10:00 AM – 12:00 PM**  
**Holiday Inn Pittsburgh – North Hills**  
**4859 McKnight Road, Pittsburgh, PA 15237**

The following summarizes the questions received and responses given at the town hall meeting held on the above referenced date and time. The meeting was held at Holiday Inn in Pittsburgh's North Hills, which is located in the Lower Ohio/Girty's Run Basin area. There were a total of eighteen (18) people in attendance and five (5) comment forms were collected. Arletta Scott Williams opened the meeting, and Jan Oliver presented the Annual Customer Information Update to the attendees in the form of a PowerPoint presentation. Specific project information pertinent to the Lower Ohio/Girty's Run planning basins was made available in the form of graphic display boards. The following question and answer session took place at the conclusion of the presentation.

## Questions and Responses

**Question:** Your flyer said you would discuss cost and the slide isn't helpful. What does ALCOSAN think costs will be?

**Response:** Jan referred back to the slide with the cost curves and affordability limits, and offered a more detailed explanation

**Question:** What's the average cost per person? Are you implying that richer neighborhoods will pay more than poorer neighborhoods?

**Response:** All rates are uniform across service area. We have a study going on right now to review ways to charge and ways to add incentives for communities to take more flow out of system. Right now ALCOSAN rates are uniform and municipal rates vary greatly.

**Question:** That chart with blue and green, is that two different plans or four different plans?

**Response:** The chart represents two plans, basin-based and tunnel-based. For each plan, the dark line represents capital cost and the light line represents cost projected out.

**Question:** Are your controls above ground or tunnels below?

**Response:** Most facilities are constructed underground.

**Question:** How do you know the integrity of the tunnels? What if there's leaking sewage? Does it cost more money.

**Response:** ALCOSAN has 90 miles of system and 30% is deep tunnel. We have the ability to use sonar pto track and monitor the integrity. This figure does include repair and replacement of the system, Plus or minus 25-30% (- 10 plus 35) on accuracy of cost estimates.

**Question:** What's the cost of "doing nothing?" Why follow the consent decree? Why not pay fines and walk away?

**Response:** If we do that, we would take an enormous penalty. We signed the consent decree. It makes more sense to improve water quality. Penalties could be as much as \$2500 a day for each overflow; \$1500 for other issues. We want to improve water quality.

**Question:** How many overflows do you have per day annually?

**Response:** There are 318 overflows location (plus 140 Municipal overflows), with 50 overflows per year.



Regional Wet Weather Plan

# ALCOSAN BASIN FACILITIES PLANNING

Town Hall Meeting / Lower Ohio/Girty's Run Basin  
Monday, October 24, 2011/ 10:00 AM – 12:00 PM  
Holiday Inn Pittsburgh – North Hills  
4859 McKnight Road, Pittsburgh, PA 15237

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**Question:** If we get 10-20 inches of snow, can we dump the snow into the river?

**Response:** You aren't permitted to do that.

**Question:** Why not? If the snow melts, it goes down the storm sewer.

**Response:** You can't pick up the snow and accelerate the process.

**Comment:** New York opened their sewers and pushed in snow, but they used filters and they had so much snow, and no place to put it. This may be a local regulation.

**Question:** How do municipalities and ALCOSAN interrelate as far as handling sewage? I live in Ross Township.

**Response:** The 83 municipalities have lines to collect sewage and convey it to ALCOSAN's interceptor. Before ALCOSAN was built – overflows occurred all the time. All were constructed to convey dry weather flow. Some municipalities have some level of treatment. (See booklet -What Can Residents Do?)

**Question:** So municipalities don't treat, they just transport?

**Response:** McCandless treats theirs, but most transport their flow to ALCOSAN for treatment. I've gone back to this slide to reiterate the various responsibilities. We aren't suggesting that individuals can change the outcome of this issue; but every little bit helps.

**Question:** Have municipalities looked at separating the system and what are the downsides?

**Response:** The down sides include high costs, huge disturbance, and the fact that stormwater pollution in highly urbanized areas wouldn't be captured. Some are still looking at this in a few areas around Pittsburgh. The tunnel based plan shows area to be separated in the Main Rivers Basin.

**Question:** If you control runoff water so it doesn't go with sewage, this would reduce the flow for processing. You're proposing tunnels to store all runoff until it can be conveyed and treated?

**Response:** Yes. The tunnel is the most cost effective solution to meet the Consent Decree. The tunnel is similar to what the Port Authority is doing by river using special technology manufactured outside the country. The design firms are from this country.

**Question:** Philadelphia has a plan to take care of wet weather using ponds to hold water until it evaporates to reduce water going into system. Could you compare your system to Philadelphia?

**Response:** They are completely different systems. Institutionally, the Philadelphia water department is a city department and they are working together to develop their plan. It is extremely affordable but it hasn't been approved yet. They're at 85% capture and have to meet water quality standards, which will be hard to do at 85% capture. They may be putting off water quality until later and doing green infrastructure. We don't believe green infrastructure will solve the magnitude of our problem.

**Question:** Could you do ponds and tunnels? Did you study what Philadelphia has done? If the pond system and regular capture of water would be more ecologically acceptable than tunnels, it may be better to look at. These tunnels are going to require specialists and out of the country equipment.

**Response:** The equipment is manufactured out of the country, but the labor will be from within the country. Therefore, this project will create jobs. We will bring in technical jobs to build and maintain



Regional Wet Weather Plan

# ALCOSAN BASIN FACILITIES PLANNING

Town Hall Meeting / Lower Ohio/Girty's Run Basin

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Holiday Inn Pittsburgh – North Hills

4859 McKnight Road, Pittsburgh, PA 15237

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versus people brought in to build a tunnel. Regarding the ecological part, ponds versus tunnels, if there is an opportunity for water to evaporate and not go into system, then there would be less for ALCOSAN to treat.

**Question:** Any reason ALCOSAN has to charge \$2 billion? Why not give the money to municipalities to do green infrastructure?

**Response:** Municipalities have submitted their plans, but none included plans to solve problems with green infrastructure. They are finding they can't meet water quality standards with green infrastructure alone. Regarding funneling resources to communities to deal with the problem upstream, we're going to finance this project through bonds. Since they will be are bonds, they need to finance something for which we are directly accountable. We can issue bonds at a much more affordable rate.

**Question:** What water quality isn't it meeting?

**Response:** It isn't meeting the standard for bacteria. We did receive a grant from the Department of Environmental Protection to do green infrastructure and we did get some green infrastructure design done. We have two areas pursuing this, Westview and Bells Run.

**Question:** In April 2009, ALCOSAN did an assessment of costs to customers. The capital cost was \$3.2 billion and municipality construction was \$2.9 billion. Are those estimates different?

**Response:** Yes, they are different. The 2009 cost figures were a best guess, given the worst case scenario without today's information.

**Question:** What costs estimates exist?

**Response:** We began with 146 sites, and now we're down to less than 50. We have a better understanding of what's needed.

**Question:** Let's take numbers given to Allegheny County.

**Response:** That was our best guess of what we knew at that time. The numbers I gave you were best case scenario – not worst case.

**Question:** At what point will you publicly release the cost of what you're proposing to do?

**Response:** Our goal is to get the best program for the best cost. The program selected will go to the public for comment in July 2012. In January 2013, it will go to the agencies.

**Question:** When will you submit to the agency and will it include the costs?

**Response:** It will be submitted to the agencies in January of 2013 to agencies and it will include costs.

**Question:** What construction cost contingency is in your chart?

**Response:** There is 33% contingency. With \$2.9 billion for municipalities, they're finding it cheaper to convey to ALCOSAN which is causing ALCOSAN's number to go up.

**Comment:** I have a concern with ALCOSAN handling a billion dollar project. ALCOSAN is proposing a project equal to two Hoover Dams.



Regional Wet Weather Plan

# ALCOSAN BASIN FACILITIES PLANNING

Town Hall Meeting / Lower Ohio/Girty's Run Basin  
Monday, October 24, 2011/ 10:00 AM – 12:00 PM  
Holiday Inn Pittsburgh – North Hills  
4859 McKnight Road, Pittsburgh, PA 15237

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**Comment:** North Hills has separate sewer systems with 15% combined sewer system. We're paying for this on a metered system. We're subsidizing other areas.

**Comment:** I'm suggesting a three party review of ALCOSAN costs. There are serious issues with the costs. This is a serious business concerning amounts of money to be spent. Be honest with us as you were with Allegheny County. I apologize for being so direct but we had this conversation before. But you gave information to Allegheny County and you should at least give them to us.

**Response:** I thought I was being direct. A regulator will determine the costs. We will propose the least cost solution for the best program. This is ongoing. ALCOSAN and our Board of Directors do not desire to pillage the rate payer. In fact we are all ratepayers. We don't want to be compared to Jefferson County in Alabama.

**Question:** Regarding penalties, you said there were 318 sites that overflowed about 50 times per year. About \$2500/overflow/per day which not counting the municipalities is a huge bill/fine per year. If there were one million customers – that would only cost \$40/per person per year. Wouldn't that be cheaper? You said this was incorporated into the Consent Decree. I'm just looking at it from a cost basis.

**Response:** Yes, but there could also be lawsuits and other penalties.

**Question:** We could operate on a violation basis for 100 years.

**Response:** We're committed to compliance, and it will be incredibly expensive.

**Question:** Regarding Philadelphia, if we can't capture everything with green infrastructure, we can't do any of it?

**Response:** Green infrastructure isn't particularly acceptable for our system. It needs to be developed in municipalities where flow is generated. However, the municipalities haven't submitted anything regarding green infrastructure yet. You have to be able to show the return and you need to get credit for it in your planning process. But please don't think we're anti-green. We encourage the use of green infrastructure, where it works, but it will be in combination with other technologies.



# ALCOSAN BASIN FACILITIES PLANNING

Town Hall Meeting / Saw Mill Run/Upper Monongahela Basin

Monday, October 24, 2011/ 5:30 PM – 7:30 PM

Brentwood Library

3501 Brownsville Rd., Pittsburgh, PA 15227

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The following summarizes the questions received and responses given at the town hall meeting held on the above referenced date and time. The meeting was held at the Brentwood Library in Pittsburgh, which is located in the Saw Mill Run Basin and Upper Monongahela Basin area. There were a total of fourteen (14) people in attendance and three (3) comment forms were collected. Arletta Scott Williams opened the meeting, and Dave Borneman presented the Annual Customer Information Update to the attendees in the form of a PowerPoint presentation. Specific project information pertinent to the Saw Mill Run and Upper Monongahela planning basins was made available in the form of graphic display boards. The following question and answer session took place at the conclusion of the presentation.

## Questions and Responses

**Question:** The four to six overflows per year, are they per location or system-wide?

**Response:** Per outfall.

**Question:** Why are their two lines in the cost curve?

**Response:** Darker, heavier line is capital cost; Other is present worth cost – lighter (operation and maintenance)

**Question:** What is the medium income for this area?

**Response:** Service area-wide, it's around \$43,000 - \$44,000. It can range higher or lower.

**Question:** How much does it cost to treat wastewater (per gallon/per million gallons?)

**Response:** That's what we're charging you for – we're not a for-profit entity.

**Question:** That's not my question. What does your process cost for treatment?

**Response:** There are more fixed costs than fluctuating, but it's something we need to look into. We're only charging for 90 million gallons/day. I will follow up and I'll try to get this for you as soon as possible.

**Question:** You used an analogy of a highway – it's scary. You finish them and they're already too small. One advantage of green is it reduces the amount of water you have to deal with.

**Response:** Tunnels also help deal with volume too. We understand that and green has been reviewed and it can assist in the sustainability of the tunnels. But the regulatory agencies are looking for numbers. It will be part of the discussion.

**Question:** I saw a software tool for estimating the contribution of green infrastructure at the sewer conference. This is one example of what's available. Are you still certain we can't come up with numbers of capture?

**Response:** The regulators say you can wait, but you'll need a backup plan.

**Question:** How about having a demonstration first then a backup plan if you need it?

**Response:** Regulatory agencies have to have a different position on this as well and we're caught in the middle. We like green - we just can't use it as a solution at this time in this situation.

**Question:** What other communities are committed to green?

**Response:** Cleveland, St. Louis, Philadelphia, and New York announced something today, but they have grey technology.

**Question:** Is this something we can do?

**Response:** We're having conversations about green and it's ongoing.



# ALCOSAN BASIN FACILITIES PLANNING

Town Hall Meeting / Saw Mill Run/Upper Monongahela Basin

Monday, October 24, 2011/ 5:30 PM – 7:30 PM

Brentwood Library

3501 Brownsville Rd., Pittsburgh, PA 15227

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**Question:** Is there anything the community can do to help this along?

**Response:** We could come up with a letter-writing or calling campaign.

**Question:** Do you consider local job creation in your approaches?

**Response:** We do consider local jobs and we're still looking at it. There will be so many opportunities for employment and job creation.

**Question:** Will the Wet Weather Plan go into detail about local employment and jobs coming in from outside?

**Response:** There will be plenty of work and a mix of technology to create lots of jobs for all trades.

**Question:** That's not my question – is this a part of the plan in detail?

**Response:** No – there's no check box about local job creation. This is typically not in the plan.

**Comment:** We would like to see what we're getting for the money. It's our money.

**Question:** Can you ballpark between basin-based and tunnel-based in terms of how the number of jobs might compare?

**Response:** No, we haven't done that.

**Question:** I understand some municipalities have their own consent orders and planning schedule. How do those plans interact with the overall ALCOSAN plan? What are their orders for? How do they relate to ALCOSAN's Consent Decree?

**Response:** Municipal orders were agreed to in 2004. They have to submit a feasibility study six months after ALCOSAN submits their Wet Weather Plan. Additionally, ALCOSAN will be preparing a 537 Plan Update which will include municipal information from the feasibility update. We've been talking with municipalities for three years. We've been trying to bring the municipalities on board. ALCOSAN has to design to handle what the municipalities say they're sending to ALCOSAN. If the municipalities are not sending flow to ALCOSAN, they have to say what they're doing with the flow.

**Question:** Earlier today it was suggested that there be an incentive for municipalities reducing flow. This is a good idea, but a great expense to municipalities. I'm trying to figure out how the money can get spread around.

**Response:** This wasn't a suggestion, but an option, and there are other options out there. We are working to decide what the best options are.

**Question:** Besides service reduction, are there are other ideas about making communities a nicer place to be – is there a way to make this a part of the equation?

**Response:** There are a lot of cities that have been successful at doing this with going green, tree plantings, etc.



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Chartiers Creek Basin**  
**Tuesday, October 25, 2011/ 10:00 AM – 12:00 PM**  
**Peter's Place**  
**1199 Washington Pike, Bridgeville, PA 15017**

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The following summarizes the questions received and responses given at the town hall meeting held on the above referenced date and time. The meeting was held at Peter's Place Restaurant in Bridgeville, which is located in the Chartiers Creek Basin area. There were a total of eleven (11) people in attendance and six (6) comment forms were collected. Arletta Scott Williams opened the meeting, and Dave Borneman presented the Annual Customer Information Update to the attendees in the form of a PowerPoint presentation. Specific project information pertinent to the Chartiers Creek planning basin was made available in the form of graphic display boards. The following question and answer session took place at the conclusion of the presentation.

## Questions and Responses

**Question:** I attended a meeting with Clean Water and they promote incentives on permeable pavement. This is a good plan, but in Mt. Lebanon, there are a lot of trees. We're not allowed to plant weeping willows, but they soak up a lot of water. In areas that aren't populated, why isn't that an option? Does the EPA encourage this?

**Response:** EPA is encouraging green but there is a concern about how well it will work. Cities are incorporating more planting as a part of their program, but it's not the whole program. How well it will work is hard to gauge, and EPA is concerned about this. It's the trend, but it's mostly a mix of gray and green. We've tried to educate customer municipalities on this over the past few years.

**Comment:** You have the monitors in place so you know where water is coming in. Also I like gardens alive and not putting nontoxic pesticides in your yard. There should be an incentive for people to use these products. There are ways we can help in small ways.

**Comment:** I'm not impressed with the price we'll be paying. All the big companies are letting sewage out and do nothing about it. The common little people are paying for it. In the 1960s we had green grass on curbs. The homeowners have to do the work to keep it up, that's city stuff. Trees drop leaves and create safety hazards for driving and walking during rain. There are power outages due to tree branches on lines. Everybody wants everything from the common folks and when you're retired, you don't have a lot of money.

**Response:** We're working to see that this doesn't happen. And everyone has a role in this.

**Question:** What have they done in Sharpsburg? Industries are always letting out discharge.

**Response:** Every industry has a discharge permit and is being monitored.

**Question:** Is any portion of Penn Hills in the ALCOSAN service area?

**Response:** Yes, it is.

**Question:** Isn't Penn Hills treating its own sewage?

**Response:** No. ALCOSAN treats.

**Question:** Commercial parking lots are most of the problem. Are they paying their fair share?

**Response:** It depends on where they're located, but this is one of our challenges going forward. We have to capture and treat those flows or treat them at the source. To reiterate, the municipalities have a responsibility for what is collected within the municipalities and what is collected and conveyed to ALCOSAN. However, a large part includes the responsibility of the residential community in the municipalities. Your line brings sewage and water out of your home. If your line is cracked it could be bringing in groundwater. There's information that suggests 60-70% of the inflow is coming from residential property.



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Chartiers Creek Basin**  
**Tuesday, October 25, 2011/ 10:00 AM – 12:00 PM**  
**Peter's Place**  
**1199 Washington Pike, Bridgeville, PA 15017**

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**Question:** How would you know if your pipes are broken?

**Response:** They can run a camera down your line that can tell the type of pipe material and the condition.

**Question:** If you had a broken terra cotta line, wouldn't the water back up?

**Response:** Eventually you'll get some indication on your property.

**Question:** Are there diagrams of utility lines?

**Response:** The utility company usually knows and they look at the box in relation to street. The sewer company has videos of the lines.

**Question:** Do hospitals pay ALCOSAN?

**Response:** Yes, and we have a department that specifically goes out to inspect those customers. They pay specifically for the waste they generate. You don't supplement the cost of commercial business.



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Lower Ohio/Girty's Run Basin**

**Tuesday, November 1, 2011/ 5:30 PM – 7:30 PM**

**Heidelberg Volunteer Fire Department**

**456 1<sup>st</sup> Street, Carnegie, PA 15106**

The following summarizes the questions received and responses given at the town hall meeting held on the above referenced date and time. The meeting was held at Heidelberg Volunteer Fire Department in Carnegie, which is located in the Lower Ohio/Girty's Run Basin area. There were a total of twenty one (21) people in attendance and three (3) comment forms were collected. Arletta Scott Williams opened the meeting, and Jan Oliver presented the Annual Customer Information Update to the attendees in the form of a PowerPoint presentation. Specific project information pertinent to the Lower Ohio/Girty's Run planning basins was made available in the form of graphic display boards. The following question and answer session took place at the conclusion of the presentation.

## Questions and Responses

**Question:** Do current plans require storage facility within the borough?

**Response:** No.

**Question:** When you present your plan next year, will there be a public comment period or will just municipalities have an opportunity to comment?

**Response:** There will be a public comment period.

**Question:** If you don't get approval – do you have a Plan B?

**Response:** Yes, there will be a backup plan. We may need to step back to reconsider prioritization.

**Question:** When you say there are things you are not going to do, is there a chance you may have to go back and reconsider?

**Response:** Yes.

**Question:** It looks like you are trying to gather all flow and direct to ALCOSAN. It appears decentralization may be more cost effective. Are you trying to free up capacity?

**Response:** There is an existing system that can convey flow to the plant. Right now the plan is the most cost-effective of the entire system.

**Question:** This area is so heavily mined. Can you use the mined area for pipes?

**Response:** That was a suggestion early on. We looked at mines for overflow but their unstable conditions were discouraging. Mines are undefined and we're not sure of the extent you can control overflow from there. They have breakouts all of the time and would be part of the problem. As for us using them for tunnels, we would be concerned about the gas pockets.

**Question:** Another concern is regardless of storage, Heidelberg will be in the path of convergence from Chartiers Creek. Some paths and tunnels will go under Washington Street in the borough or around Heidelberg. When will this information be available to the borough in terms of convergence around/through Heidelberg?

**Response:** For planning purposes, we're taking the most direct route. We think it's reasonable to construct through Heidelberg and we've priced tunnel-less technologies. Once we get to the design phase, we'll take another look. 70% of the time the tunnel will be along Chartiers Creek based on our mapping. We tried to do this where we could.

**Question:** At least two cities (Philadelphia and Washington) have both looked at another way of redirecting stormwater. Philadelphia used a green infrastructure; Washington used tunnel, basins, and green infrastructure. It looks like you're headed for tunnels. Please comment on this. Washington has a tunnel in one basin, and will use green in others.



# ALCOSAN BASIN FACILITIES PLANNING

Town Hall Meeting / Lower Ohio/Girty's Run Basin

Tuesday, November 1, 2011/ 5:30 PM – 7:30 PM

Heidelberg Volunteer Fire Department

456 1<sup>st</sup> Street, Carnegie, PA 15106

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**Response:** Washington is looking at green for an infrastructure enhancement, but hasn't been approved yet. They are using tunnels. In Philadelphia, the level of control for their plan is lower.

**Question:** Have you looked at giving money to municipalities to have them separate their sewer lines at the outset and be done?

**Response:** This was the most costly level of control, and once the sewers are separated, stormwater doesn't get treated. It did have to be evaluated, however. EPA required investigating.

**Comment:** I would like to see how this evaluation turned out.

**Response:** Give your name and address and we'll be glad to get that to you.

**Question:** If there's a 2% median increase, what happens to our rates if we reach that point?

**Response:** There is a study in place now. It depends on how we borrow the money.

**Question:** Will rates go up five times?

**Response:** We don't know at this point, but they'll go up. If you'll leave your name, we can get that to you. It may be \$900/year. We do have a study on the financing and we're looking at five-year blocks for financing. But, the rates will go up.

**Question:** What's the likelihood of your plan being accepted?

**Response:** We want to submit an acceptable plan and there may be some negotiation that may need to occur.

**Question:** That's a big gap – you're twice the affordability limit. You said there were stormwater quality regulations coming?

**Response:** Yes. You have to map and know where your storm sewers are, but this will evolve into stormwater quality. Green can make improvements in this area.

**Question:** Based on your flow measurements you know where problems are. What if a community can solve their problems, can they opt out of this?

**Response:** You're still going to have wet weather issues. Separate communities have overflows too and there's no guarantee there wouldn't be overflows. Older systems are still going to leak. One of the challenges is that upstream communities put out too much flow resulting in the need for more capacity. One community could reduce their flow, but ALCOSAN's approach will remain the same due to the overall system needs.

**Question:** In terms of money, have you compared green infrastructure to pipes?

**Response:** Green does occur in the municipal systems, but there's little opportunity to implement in the ALCOSAN system.

**Question:** I don't understand how you went from five facilities to one without changes to design storm. Is this really going to work?

**Response:** The biggest change is trying to control all flows within the area versus what we're letting out of the system downstream. In this current plan, the tunnel allows for more flow to the system.

**Question:** One of the other meetings, someone likened this to highways not being big enough when they're finally done. Is this going to be big enough if it starts raining more than it normally does? This seems to be happening now.



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Lower Ohio/Girty's Run Basin**

**Tuesday, November 1, 2011/ 5:30 PM – 7:30 PM**

**Heidelberg Volunteer Fire Department**

**456 1<sup>st</sup> Street, Carnegie, PA 15106**

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**Response:** I hope it doesn't come to this, but rather than building more tunnels perhaps we could consider doing more green. Also adaptive management will give the opportunity for more monitoring before we design if we were too conservative. We can address these issues as we go.

**Question:** Is it more cost effective to have satellite facilities such as Turtle Creek?

**Response:** The existing system has great capacity. We are trying to maximize it.



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Turtle Creek Basin**

**Wednesday, November 2, 2011/ 10:00 AM – 12:00 PM**

**Turtle Creek Borough Community Room**

**125 Monroeville Ave., Turtle Creek, PA 15235**

The following summarizes the questions received and responses given at the town hall meeting held on the above referenced date and time. The meeting was held at Turtle Creek Borough Community Room in Turtle Creek, which is located in the Turtle Creek Basin area. There were a total of sixteen (16) people in attendance and two (2) comment forms were collected. Arletta Scott Williams opened the meeting, and Jan Oliver presented the Annual Customer Information Update to the attendees in the form of a PowerPoint presentation. Specific project information pertinent to the Turtle Creek planning basin was made available in the form of graphic display boards. The following question and answer session took place at the conclusion of the presentation.

## Questions and Responses

**Question:** Is ALCOSAN responsible for coordinating among municipalities? What does regulatory coordination mean?

**Response:** ALCOSAN is responsible for coordinating with municipalities, but that means coordination among regulatory agencies. We've been meeting with regulatory agencies for three to four months. We are sharing our approach, our analysis, and where we should spend money. We don't regulate the municipalities. Three Rivers did coordinate with DEP and the Health Department when municipalities got their orders.

**Question:** Where is the pressure coming from, the federal government or the state?

**Response:** State, Federal, and County agencies.

**Comment:** In 2006 North Versailles directed people to take downspouts out of sanitary, and I refused. Being a manager of plumbing and pipefitters, I recognized a significant problem. My neighbor did and now I need to waterproof my basement because no one's property can handle the water. Now we have water running over into roads, yards and flooding basements because the municipalities and ALCOSAN want downspouts to be disconnected. Allegheny Plumbing Code 1102 states you can't have a downspout running out into the yard. The Clean Water Act (CWA) states you can't put more water out than is already there. ALCOSAN was charged and is putting the remedy on the residents. You've created a chaotic situation with neighbors fighting neighbors, a \$5 billion problem, threatening neighbors and communities. Four people have died and didn't have to. I testified at an ALCOSAN Meeting about this issue two years ago with a court reporter and it fell on deaf ears. There's something wrong, you're causing problems including mold problems. I filed a federal lawsuit on October 3. I want to alert people to an extreme health hazard. If it isn't a flood, your houses will be closed up because there are hundreds of thousands of homes with mold growing in them. Go back and ask your legal departments. If anyone wants to talk about it, I'm here. This is a public health safety problem. The court's assessments are wrong now due to the mold and water damage. Each home needs \$5,000 to \$10,000 worth of repairs.

**Response:** ALCOSAN is a public entity, not a private entity. I'm familiar with the lawsuit and that's why I identified you by name. That's all I'm going to say about the lawsuit.

**Question to Audience Member:** Does that health issue concern all communities or just your community?

**Audience Member Response:** 60 or 70 communities (audience member response)

**Response:** ALCOSAN will not require anyone to disconnect anything at your home, but this is not ALCOSAN's responsibility. It is the municipalities' responsibility. ALCOSAN was not sued and that's why I signed the consent decree. We want the best return and best environmental benefit at the least cost possible.

**Question to Audience Member:** I'm working with a committee at ALCOSAN and it's my understanding that it's the municipalities' responsibility until it reaches ALCOSAN's system. Some communities are trying to reduce the flow to ALCOSAN by doing downspout disconnects responsibly. If you do it wrong it can harm others, but this is being looked at in a way to reduce flow into the system. There are municipalities working responsibly to disconnect downspouts.



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Turtle Creek Basin**

**Wednesday, November 2, 2011/ 10:00 AM – 12:00 PM**

**Turtle Creek Borough Community Room**

**125 Monroeville Ave., Turtle Creek, PA 15235**

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**Audience Member Response:** Still, hundreds of thousands of downspouts are in violation of code 1102, the Clean Water Act and Clean Streams Act. ALCOSAN has the responsibility to bring this to light.



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Upper Allegheny Basin**  
**Wednesday, November 2, 2011/ 5:30 PM – 7:30 PM**  
**Penn Hills #7 Banquet Hall**  
**125 Universal Road, Penn Hills, PA 15235**

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The following summarizes the questions received and responses given at the town hall meeting held on the above referenced date and time. The meeting was held at the Penn Hills #7 Banquet Hall in Penn Hills which is located in the Upper Allegheny Basin area. There were a total of fourteen (14) people in attendance and seven (7) comment forms were collected. Arletta Scott Williams opened the meeting, and Dave Borneman presented the Annual Customer Information Update to the attendees in the form of a PowerPoint presentation. Specific project information pertinent to the Upper Allegheny planning basin was made available in the form of graphic display boards. The following question and answer session took place at the conclusion of the presentation.

## Questions and Responses

**Question:** Rodi Road has been repaved. What was done to alleviate flooding?

**Response:** Sewers are not ALCOSAN's responsibility. That question should be directed toward your municipality

**Question:** Too much stormwater going where it shouldn't. Ideally, where should it go? Why was it objectionable going into the river?

**Response:** Currently it's going where it was designed to go, but the laws have changed. When stormwater mixed with sewage went into the rivers, the thought was that it would move quickly and be diluted. Now ALCOSAN has to build a system to handle it. In 1987 there were new regulations for the Clean Water Act.

**Question:** What I don't understand is how developers have a grand plan. Do they check with ALCOSAN or the county planners about the impact? If you live in a community not politically connected, will our problems be delayed while others at the table get served first?

**Response:** ALCOSAN will comment on new potential sewage plans and the County will comment on the developers' stormwater planning. As far as ALCOSAN service areas are concerned – all customers are treated equally. Also, you asked about special consideration for your municipality. We took the time to divide the service area into planning basins to give every community fair and equal attention.

**Question:** Do your specialty engineers in this process connect and communicate? How do you learn best practices to avoid recreating the wheel?

**Response:** We've teamed up with experts that have national expertise, national agencies to assist with understanding technologies, and local expertise on the lay of the land. We have civil and environmental engineers and we also have new tools, models, monitors and meters for simulations of the system. The treatment plant uses electrical and mechanical engineers within the organization.

**Question:** What are your best practices?

**Response:** Each planning basin has a national expert. In addition, local firms participate in agencies/associations such as the National Association of Clean Water Agencies (NACWA).

**Question:** Is the structure of ALCOSAN an administrative hierarchy, do you make policy or is there a connection with County executives? What's the relationship?

**Response:** The County Executive Office appoints members of the ALCOSAN Board – seven members which are confirmed by the County Council. (Three are put forth by the County Executive, three by the County Council and one more by both.) ALCOSAN is governed by the ALCOSAN Board. Harry Readshaw is the Board Chair.

**Question:** Cost of the project is spread over what period of time?

**Response:** Until we know how fast we need the money, we don't know how much we will need. It has to be built by 2026, but we've not figured out financing yet.



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Upper Allegheny Basin**

**Wednesday, November 2, 2011/ 5:30 PM – 7:30 PM**

**Penn Hills #7 Banquet Hall**

**125 Universal Road, Penn Hills, PA 15235**

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**Question:** Any contact with property casualty companies in anticipation of claims by homeowners?

**Response:** Not to my knowledge.

**Question:** In your book, you mention what residents can do. People aren't interested in reducing pollutants. I'm an environmentalist and I talk to people about this. Our township covers us with salt in the winter.

**Response:** The fact that you're talking to people is a plus. It has been borne out over years that recycling worked best when it went through the school system. You do have to get to the right audience.

**Question:** With property values going down and people moving into apartments, how will that affect this project?

**Response:** We're concerned and we look at population projections. Water usage is also changing with the use of more efficient washers, etc.

**Question:** Cost-wise, what is your biggest project to date?

**Response:** New odor control facilities and plant expansion which cost over \$100 million in construction. There was also an interceptor pipe built for \$30 million a couple of years ago. The largest was probably the initial construction of ALCOSAN. The nature of this project will also employ a lot of people too.

**Comment:** Future meetings should be televised on cable TV.



# ALCOSAN BASIN FACILITIES PLANNING

Town Hall Meeting / Saw Mill Run / Upper Monongahela Basins

Thursday, November 3, 2011/ 10:00 AM – 12:00 PM

Courtyard by Marriott

401 W. Waterfront Dr., West Homestead, PA 15120

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The following summarizes the questions received and responses given at the town hall meeting held on the above referenced date and time. The meeting was held at the Courtyard by Marriott in West Homestead, which is located in the Saw Mill Run Basin and Upper Monongahela Basin areas. There were a total of nine (9) people in attendance and five (5) comment forms were collected. Jan Oliver opened the meeting and presented the Annual Customer Information Update to the attendees in the form of a PowerPoint presentation. Specific project information pertinent to the Saw Mill Run and Upper Monongahela planning basins was made available in the form of graphic display boards. The following question and answer session took place at the conclusion of the presentation.

## Questions and Responses

**Question:** What did you do to the streams?

**Response:** Parallel pipes were installed, separating streams from sewer systems.

**Question:** Who are the regulatory agencies responsible for reviewing the plan?

**Response:** Federal Environmental Protection Agency (EPA), Pennsylvania Department of Environmental Protection, and the Allegheny County Health Department will review the plan.

**Question:** Who is responsible for the Financial Analysis?

**Response:** CompDresser & McKee – our financial analyst

**Question:** Do you have tunnels already?

**Response:** Yes, we have some for conveyance.

**Question:** The plan focuses on tunnels, but how much have you invested in green technology? For comprehensive plan green isn't being considered?

**Response:** We've pursued two EPA grants and we have worked with municipalities to implement green infrastructure. We have two projects, one in Westview and Bells Run (discharges to Chartiers Creek) and there's work in Aspinwall along the Allegheny River.

**Question:** ALCOSAN doesn't have the ability to improve green infrastructure?

**Response:** Correct.

**Question:** What criteria were used to decide to go with tunnel approach?

**Response:** There are about 20 criteria including water quality benefits, disruption to community during construction, constructability, etc. The Customer Municipal Advisory Committee (CMAC) and Regional Stakeholders Group (RSG) also evaluated public acceptance.

**Question:** Will the tunnel-based solution solve the problem?

**Response:** It will bring us into compliance and solve sewage discharge problem into receiving waters.

**Question:** Will it address flooding? We had four deaths due to flooding on Washington Boulevard.

**Response:** No – this is not a flood control program. The system is not sized for storm of that magnitude.

**Question:** So it's Alternative 3F?

**Response:** This is what is being looked at – but there are other alternatives being considered. The ability to afford the solutions is another factor being considered. The cost curve is used to analyze this.



# ALCOSAN BASIN FACILITIES PLANNING

Town Hall Meeting / Saw Mill Run / Upper Monongahela Basins

Thursday, November 3, 2011/ 10:00 AM – 12:00 PM

Courtyard by Marriott

401 W. Waterfront Dr., West Homestead, PA 15120

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**Question:** What are we doing at the moment?

**Response:** We do have overflows. Some are small and others discharge in significant storms.

**Question:** Can you wait an hour to flush when it's raining outside?

**Response:** I do. This can help. The concept is used with industrial customers. Industries may hold discharge in a storm.

**Question:** Have you done a job analysis to see how many jobs would be created?

**Response:** No, not yet.

**Question:** Your affordability analysis is fluid? It was done in 2006, done in 2011. That's going to change.

**Response:** That is a concern, but it is probably worse than the analysis shows. We will implement what we can and then reevaluate.

**Question:** Regarding affordability of plan implementation in 2026, is ALCOSAN fined for not meeting longer term goals? As a residential customer, we're being threatened with fines for the disconnect. At a higher level, you say you're not being fined, but as a resident that's not my experience. An engineer from Munhall recommended we disconnect and direct the pipe out toward the street.

**Response:** The direction from the Munhall engineer was to disconnect what the home contributes. Regulations for stormwater are on the horizon.

**Question:** Could you talk more about the stormwater impacts?

**Response:** Stormwater impacts may bring more rain barrels, wetlands, and rain gardens. As opportunities are slim in developed areas and topography also has its limitations, there aren't many opportunities to redirect stormwater.



# ALCOSAN BASIN FACILITIES PLANNING

Town Hall Meeting / Lower Ohio/Girty's Run Basin

Thursday, November 3, 2011/ 5:30 PM – 7:30 PM

Troy Hill Grace Lutheran Church

1701 Hatteras St. Pittsburgh, PA 15235

The following summarizes the questions received and responses given at the town hall meeting held on the above referenced date and time. The meeting was held at the Troy Hill Grace Lutheran Church in Pittsburgh which is located in the Lower Ohio/Girty's Run Basin area. There were a total of fifteen (15) people in attendance and zero (0) comment forms were collected. Arletta Scott Williams opened the meeting, and Dave Borneman presented the Annual Customer Information Update to the attendees in the form of a PowerPoint presentation. Specific project information pertinent to the Lower Ohio/Girty's Run planning basin was made available in the form of graphic display boards. The following question and answer session took place at the conclusion of the presentation.

## Questions and Responses

**Question:** What is the outcome for Washington's Landing?

**Response:** We're looking at an underground pipe, a tunnel down the north side toward the plant. With a second pipe, the existing would be repaired. The existing and new tunnels would both be used.

**Question:** With the tunnel approach, shouldn't you start at plant and work out rather than starting at reaches? It seems it can't work until all is done. What was shown before was to be done in stages.

**Response:** There are some advantages, but there are discussions about what approach will be best. Some say build an interim facility, but you worry about whether that investment makes sense in the long term.

**Question:** Couldn't it be phased better with a basin-based approach?

**Response:** Could be a direct-build interim facility. Between expansion of the ALCOSAN Wastewater Treatment Plant and the existing pipe, could treat more flow. Also the tunnel could be used for storage.

**Question:** How are you doing financially and handling your bond rate?

**Response:** This is one of the things going forward that we have to schedule. We're in the planning stage – and this will be something to study. It will be a series of borrowings – not just one large borrowing.

**Question:** Where do you stand with your bond rating right now?

**Response:** We financed back in August at a good rate. The concern is that, as you borrow more money, the rates may increase.

**Question:** Specifically, what is your rating?

**Response:** We have the highest rating with Fitch and Standard & Poor's.

**Question:** On the cost-curve slide, there was a margin of error. What is that?

**Response:** + 50% / -30%

**Question:** For that amount of money have you come up with the economic benefit to the region and how does this compare to other plans?

**Response:** We're not required to do an economic study for the plan, but we do anticipate that there will be a lot of jobs for the region. Expect full engagement.

**Comment:** As a ratepayer, I would like to know real costs and how this will impact us.

**Question:** You went away from pretreatment to tunnels. What was this based on?

**Response:** This was based on a lot of criteria including costs, public acceptance, operations, and maintenance.



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Lower Ohio/Girty's Run Basin**

**Thursday, November 3, 2011/ 5:30 PM – 7:30 PM**

**Troy Hill Grace Lutheran Church**

**1701 Hatteras St. Pittsburgh, PA 15235**

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**Comment:** Councilwoman Darlene Harris thanked ALCOSAN for taking into consideration Troy Hills concerns.

**Question:** If the total time frame is 2026, where, when and who is looking at the other side of this, the physical construction?

**Response:** We're still in the planning stage and next we'll begin the design stage, which is a few years out. Redeveloped areas do have separated sewers. 83 municipalities are working in parallel to develop their own plans.

**Question:** This pipe that will be vented, will there be an odor and what chemicals will be used?

**Response:** There will be an odor, but we would use an activated carbon to address it. It will only vent when the pipe is filling up. The existing interceptor has venting.

**Question:** There's an area that smells every time you go past it.

**Response:** It shouldn't be that way. We'll address it; there must be a problem.

**Question:** 20 years doesn't seem realistic – should be 50 years.

**Response:** We always felt it wasn't realistic but the regulatory agencies said 15 years is typically all that is needed. As we move forward, the timeframe will need to be adjusted.

**Question:** If all goes well, when will construction start?

**Response:** We hope it will be five to ten years until construction.

**Question:** How do storage tunnels work?

**Response:** It's active when it rains and it will pump flow to the plant when the capacity is acceptable again. One to two days to drain is a rule of thumb.

**Comment:** Come back to share an update!



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Region-wide**  
**Wednesday, November 9, 2011/ 5:30 PM – 7:30 PM**  
**I.B.E.W. #5 Circuit Centre & Ballroom**  
**5 Hot Metal St., Pittsburgh, PA 15203**

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The following summarizes the questions received and responses given at the region-wide town hall meeting held on the above referenced date and time. The meeting was held at the I.B.E.W. #5 Circuit Centre and Ballroom in Pittsburgh. There were a total of one hundred and thirty eight (138) people in attendance and twenty one (21) comment forms were collected. Arletta Scott Williams opened the meeting, and Dave Borneman presented the Annual Customer Information Update to the attendees in the form of a PowerPoint presentation. Specific project information pertinent to the seven individual planning basins was made available in the form of graphic display boards. The following question and answer session took place at the conclusion of the presentation.

## Questions and Responses

**Question:** What is entailed in the regulatory review phase?

**Response:** The regulatory review phase is one year. It involves review of what is written and response to questions. With further discussion, they could request additional information.

**Question:** This is a system-wide investment. Do all communities have a prorated share or differential rates per community?

**Response:** There are no differential rates. There is a flat rate, based on water consumption, at \$4.00 per 100 gallons of water consumed.

**Question:** You said rates are uniform across the region and based on consumption. Will that change based on impervious ground on your property?

**Response:** Right now, we are undergoing a study to determine options. We have national and local consultants working with us on this. We're looking at what could be done, but we're a year away from determining what that will look like.

**Question:** A lot of what we see is high bacteria due to leaks from sanitary sewer and combined sewer lines broken down. How will that be addressed?

**Response:** We're working with the municipalities to improve their systems and the issue you raised is one of them. It's not just groundwater getting in but sewage getting out. We're trying to get cost estimates as to what needs to be done. The health department and the Department of Environmental Protection (DEP) are asking these questions of the municipalities and their responses will be shared with us.

**Comment:** Keep an open mind to a lot more of your day-lighting projects. ("fundamental" rather than "supplemental")

**Response:** We did try to remove as many streams as possible. We've been aggressive in taking streams out of the sewer system. We've identified a stream removal along Route 28, and we're doing what you're suggesting. We do need municipal participation.

**Question:** We're concerned about rate increases. Have there been investigations into other funding resources from other agencies?

**Response:** Three Rivers Wet Weather has received money from PennDOT, US Army Corps of Engineers, and the Environmental Protection Agency (EPA).

**Question:** What type of enforcement is in place to keep low-quality water from coming into our state?

**Response:** We're identifying the extent of our responsibility. DEP is responsible for this in other areas. We do some upstream and downstream sampling to determine our impact.



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Region-wide**

**Wednesday, November 9, 2011/ 5:30 PM – 7:30 PM**

**I.B.E.W. #5 Circuit Centre & Ballroom**

**5 Hot Metal St., Pittsburgh, PA 15203**

**Question:** Are there local sourcing requirements for contracts or are you looking at the cheapest cost?

**Response:** ALCOSAN is governed by Pennsylvania's Employment Act regarding bids or contracts and regarding publicizing bids. We follow all of the acceptable processes that we've been doing for years. We'll look at this more going forward.

**Question:** I gather my own stormwater, sometimes by hand. The municipalities (your clients) are looking to you to provide a solution. The green infrastructure by its nature needs to be distributed. You're in a position to set the trend by doing education and getting municipalities to do this. The municipalities may not have the resources to research the best things to be done. Also these municipalities present an opportunity to experiment with innovation.

**Response:** I don't have the ability to force municipalities to do anything. We have directly supported this. You asked why we can't spread the several billions we're spending onto the municipalities and let them reduce flow coming to us. We don't have the ability to do this. We can't spend money on things we won't own or won't have responsibility for. After our plan has been accepted by the agencies, then we can potentially consider some of the things you've put forth.

**Question:** It seems that ALCOSAN is going to implement the tunnels in the plan to be submitted to EPA. Is that right?

**Response:** There are combinations of options with tunnels that we're looking at. There will be tunnels and other controls.

**Question:** Is it correct that there's not enough money to create more green in the city? This affects me because sewage comes into my basement. Green might make a better environment and more breathable again. What's the problem in this area?

**Response:** We're looking at sewage being treated and handled properly. Green is a relatively new trend nationally and funding is somewhat limited in our region. Also if you have sewage in your basement you need to call the health department. I can give you that number to call.

**Question:** Where do we get the billions to put pipes in?

**Response:** Through our customers.

**Comment:** So we pay? Everyone's water bill will go up.

**Question:** You looked at various basin based alternatives and alternative 3F. There are a lot of alternatives out there. Was some consideration given to what this means to the local economy and local workers? If not, can you give consideration to this moving forward?

**Response:** We will be looking at how we can work with our local resources when we can.

**Question:** Can you put information in a bill? The "What can residents do" is helpful.

**Response:** We have agencies we work with to put information in their bills or we can do a direct mailing.

**Question:** From a municipal aspect, is there any pressure legislatively to make sure municipalities control the problem, and do you control municipality regulations?

**Response:** We don't have any control over the municipalities and there's a lot of legislation that speaks to municipality control.

**Question:** So it's not being enforced?

**Response:** It is being enforced.



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Region-wide**

**Wednesday, November 9, 2011/ 5:30 PM – 7:30 PM**

**I.B.E.W. #5 Circuit Centre & Ballroom**

**5 Hot Metal St., Pittsburgh, PA 15203**

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**Question:** Do you have the ability to give municipalities incentives? Change the billing?

**Response:** No, we don't have the ability.

**Question:** I support a system that reduces sewer overflow. Why aren't we doing more green infrastructure? It's not new. Philadelphia is doing a lot of green with trees and green spaces, and grey is being used the least as possible. This plan is very expensive. Green could save money and create more long-term or permanent jobs.

**Response:** Green initiatives at this point are outside our ability to implement, fund, or direct. We'll continue these conversations.

**Question:** What percentage of what ALCOSAN deals with has to do with human excrement?

**Response:** I can't tell you that.

**Comment:** Can you consider a social justice, economic, and indigenous approach? How about changing human behavior? Go beyond engineering, to the human element. Can you look at this from another angle – hu-manure. See the hu-manure handbook by Joe Jenkins. The book is available on the internet.

**Question:** Redirect us so that we know where to turn to and provide us information to get us where we need to be so that we can help.

**Response:** First go to [www.alcosan.org](http://www.alcosan.org). Also attend your local municipal government meetings.

**Question:** Why wouldn't ALCOSAN consider investing in educating communities? There are so many people who don't know what ALCOSAN is and what ALCOSAN does. There are a lot of people that would be interested in community outreach for years to come.

**Response:** We do engage in public outreach. Our most significant event is an open house held the third Saturday in September. We've had as many as 2500 people, we have scholastic outreach for school-age children and you'll see even more. I have a complete team of public relations staff for this purpose alone. We are proud of what we do and you'll see us more.

**Question:** When you said you couldn't give municipalities money because you can't issue bonds, what is paying that bond off? Our water bills?

**Response:** Essentially, but it's the sewer portion of the water bill. What we can't do is create a physical structure with that bond money that we don't have a responsibility for.

**Question:** I don't see much "remove it" in the plan. That part of the solution needs to be addressed more than it appears.

**Response:** The opportunities to "remove it" exist before it gets to our system. The homeowners and municipalities have more control over removing it before it gets to our system. We call it source reduction, and it's been difficult to show with any success. We can't show it if it's not being proposed to us by municipalities.

**Question:** A lot of time, resources, and energy focused on a foregone conclusion at the detriment of other things. Green is nothing new and stormwater management goes back thousands of years. We need to respect this rather than put it on the back burner. Why don't you start with things that are more valuable? People in the communities and the things we can do are the more valuable things. You can be the leader to start this and we can go from there.

**Response:** New requirements are changing urban development, but it's in areas smaller than the ALCOSAN service area. I appreciate your comments.



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Region-wide**

**Wednesday, November 9, 2011/ 5:30 PM – 7:30 PM**

**I.B.E.W. #5 Circuit Centre & Ballroom**

**5 Hot Metal St., Pittsburgh, PA 15203**

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**Question:** We wouldn't know the outcome of green until they're done and if we start encouraging and investing more in green now, we could save money and create a lot of jobs in the process.

**Response:** We're doing some demo projects and its catching hold, but the timeline is not going to permit a lot of this type of approach.

**Question:** Are all municipalities' consent decree orders the same? Sewer overflows or bacteria?

**Response:** There's a gap in the timelines for ALCOSAN and the municipalities.

**Question:** This is my first meeting – presentation was interesting. I'm a kayaker and this is a problem that needs to be addressed. It seems that the problem has to do with clean water getting mixed in with sewage. The audience is saying there needs to be a greener approach, but you're saying you can't, due to bonds, etc. We need to get a solution that doesn't just talk about costs, but talks about jobs and green jobs, and how we're dealing with the environment and employment as long term sustainability. You said you've done sampling, but there are no results on what happened. Where is the bacterial contamination in our rivers?

**Response:** The water quality data is used to establish a base line and will be a part of the information presented in the draft Wet Weather Plan.

**Comment:** I think this is "engineers seeking an engineered solution."

**Question:** Who regulates ALCOSAN?

**Response:** We're regulated by EPA, DEP and the Health Department. We're an independent municipal authority with governance by a seven-member board.

**Question/Comment:** Comment on Nine Mile Run, could it be duplicated in other communities?

**Question/Comment:** What are community projects to minimize stormwater/ source control?

**Response:** One example is the Target development in East Liberty.



# ALCOSAN BASIN FACILITIES PLANNING

Town Hall Meeting / Upper Allegheny Basin

Monday, November 14, 2011/ 10:00 AM – 12:00 PM

Undercliff Fire Hall

700 Mount Royal Blvd., Pittsburgh, PA 15223

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The following summarizes the questions received and responses given at the town hall meeting held on the above referenced date and time. The meeting was held at the Undercliff Fire Hall in Pittsburgh, which is located in the Upper Allegheny Basin area. There were a total of eleven (11) people in attendance and three (3) comment forms were collected. Dave Borneman opened the meeting and presented the Annual Customer Information Update to the attendees in the form of a PowerPoint presentation. Specific project information pertinent to the Upper Allegheny planning basin was made available in the form of graphic display boards. The following question and answer session took place at the conclusion of the presentation.

## Questions and Responses

**Question:** How long will the tunnels last and when would you have to replace or upgrade them?

**Response:** We would expect the tunnels to last at least 50 years or longer. The size of the tunnel capacity is critical for meeting future needs.

**Question:** If you use storage tanks instead of tunnels, how long would they last?

**Response:** We would estimate them lasting for 35 years.

**Question:** What is the ALCOSAN rate increase for 2012?

**Response:** 7% - see [www.ALCOSAN.org](http://www.ALCOSAN.org).

**Question:** Is this rate increase the same for all regardless of income level?

**Response:** Yes, it is based on water usage.

**Question:** If my stormwater runoff is less than my neighbors, why do I have to pay the same rate?

**Response:** Rates today reflect sewage treatment and not stormwater. Conserving water usage is the best way to control your bills. ALCOSAN is currently doing a rate structure study. We are looking into an equitable way of charging for the Wet Weather Plan.

**Question:** Why can't ALCOSAN work with municipalities to implement green infrastructure and reduce the need for an expanded system?

**Response:** The implementation of green infrastructure is unpredictable and ALCOSAN cannot fund projects over which it has no control.

**Question:** If municipalities remove stormwater, will rate payers be exempt from rate increase?

**Response:** Water conservation in the home affects your rate.

**Question:** Will there be benefit for municipalities to separate stormwater?

**Response:** Going forward, we will have to analyze options and the ALCOSAN rate structure. We asked basin planners to study potential reduction of flow locally. The cost is staggering to rebuild the entire system.

**Question:** The are areas in the City of Pittsburgh - North Shore, Convention Center, Strip District, South Side Works – where they are separating the flows. Will that impact rates?

**Response:** We are looking at the rate system and the institutional framework.

**Question:** What are the benefits to communities of catching stormwater? Could it reduce the need for construction? If construction cost increases affordability shouldn't we share money with municipalities?

**Response:** ALCOSAN cannot build what it doesn't own.



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Upper Allegheny Basin**

**Monday, November 14, 2011/ 10:00 AM – 12:00 PM**

**Undercliff Fire Hall**

**700 Mount Royal Blvd., Pittsburgh, PA 15223**

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**Question:** Who establishes building codes in regards to stormwater?

**Response:** There are state laws, county rules, and plumbing codes. These are implemented by the respective municipality.

**Question:** How will this cost affect distressed municipalities?

**Response:** This is being discussed in the Regionalization Study that is currently underway.

**Question:** Are you taking population growth and shifts into consideration?

**Response:** Yes. We are looking at where the population will be 20 years from now.

**Comment:** ALCOSAN is submitting this plan for the common good.



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Turtle Creek Basin**

**Monday, November 14, 2011/ 5:30 PM – 7:30 PM**

**Gateway Hall**

**4370 Northern Pike, Monroeville, PA 15146**

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The following summarizes the questions received and responses given at the town hall meeting held on the above referenced date and time. The meeting was held at the Gateway Hall (Monroeville Volunteer Fire Department #4) in Monroeville which is located in the Turtle Creek Basin area. There were a total of nine (9) people in attendance and two (2) comment forms were collected. Arletta Scott Williams opened the meeting, and Jan Oliver presented the Annual Customer Information Update to the attendees in the form of a PowerPoint presentation. Specific project information pertinent to the Turtle Creek planning basin was made available in the form of graphic display boards. The following question and answer session took place at the conclusion of the presentation.

## Questions and Responses

**Question:** If \$2 billion is affordable, what are regulators saying now about cost since it's well above what's affordable? What are the chances?

**Response:** We're trying to negotiate. We're going back and forth right now with information sharing. It is a good economic climate for negotiations. The extension of schedule may be a consideration.

**Question:** You don't anticipate having control of infiltration. If you can't control it, can you do away with combined systems?

**Response:** Our system is tight, but it's 60 years old. There is not a lot of infiltration in ALCOSAN's system. Some of the municipalities are going to tighten up their systems. The combined sewer overflow policy said we had to look at separating combined sewer overflows, but it is cost prohibitive.

**Question:** Is ALCOSAN just building for what is coming into the pipe?

**Response:** Yes. Our roles and responsibilities are limited but we're looking at the system holistically to determine what is best.

**Question:** Could a community pull out and build their own facility?

**Response:** Yes, but that wouldn't be the most cost-effective option.

**Question:** I asked this last week – could a community pull out? What if they were educated so that they didn't send their waste to you? The way the presentation is, it is as if engineering is the way. With the educational outreach, we could reduce the \$2 billion. Are you doing anything to change behavior? Sustainable Pittsburgh would be interested if this isn't your view. Also, how does Marcellus Shale play into this? Thanks for looking into Hu-manure.

**Response:** We're not engaged in a massive education effort to change behavior or culture. The shift that would be required would take decades. You have to manage your own personal waste, but this can't be done in time for us to be in compliance with the consent decree. Marcellus Shale isn't an issue as ALCOSAN doesn't accept this discharge right now – and we're adamantly opposed to accepting it. It would not be cost effective. We would need to invest \$1 billion today to make sure we could effectively treat it.

**Question:** Since this is spread out to 2026, how do you accommodate political and technology changes?

**Response:** We spoke about developing an adaptable approach that can be changed as we go along. The regulatory agencies will also be looking at this as we go along.

**Question:** All plans now deal with discharge, but there are no plans to look at green infrastructure, point source capture.



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Turtle Creek Basin**

**Monday, November 14, 2011/ 5:30 PM – 7:30 PM**

**Gateway Hall**

**4370 Northern Pike, Monroeville, PA 15146**

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**Response:** We do have three projects and municipalities are participating: one in Westview Borough, one in the City of Pittsburgh, and one in Aspinwall (green infrastructure analysis in downtown). There are a few demonstrations to get municipalities involved.

**Question:** Why aren't they integrated into the overall plan?

**Response:** They are.

**Question:** Only three projects?

**Response:** The municipalities submitted their plans on what they wanted to do, and Etna is doing some green controls on their own. But there were only three plans submitted.

**Comment:** I don't think the communities understand that this could reduce the burden that's going to be put on them. There are ancillary savings as a result of green infrastructure.

**Response:** Green infrastructure is beneficial environmentally, but it hasn't been effective in controlling overflows in the streams.

**Question:** Is there a cost benefit analysis?

**Response:** We're looking at affordability clearly. We take into consideration what is being paid, but we're also looking at schedule and phasing. We're trying to do what is reasonable, protect the environment, and be compliant. Our process is based on consumption. Right now, that's how our rates are structured, but we're looking at this.

**Question:** Besides holding town hall meetings, how are you trying to engage the community?

**Response:** We have held an Open House; we have a scholastic outreach program; we'll go to all kinds of meetings. We try to be out there. We have municipal newsletters, news media, and the web site.

**Question:** These should be a much wider plan – dealt with at a higher level?

**Response:** We are working within a fragmented institutional framework.

**Question:** ALCOSAN does not anticipate separation?

**Response:** Correct.

**Question:** Is removal integral to cost analysis?

**Response:** Unfortunately, it is not ALCOSAN's purview.

**Question:** \$6B—"How far back" does it go?

**Response:** That figure includes municipal costs.

**Question:** Are you looking at rate structure regarding stormwater?

**Response:** ALCOSAN is examining other rate structures.

**Question:** Isn't it backwards to build conveyance structures first?

**Response:** Over the 2026 time frame, there is opportunity for municipalities to undertake green infrastructure.

**Question:** Why not "control" green in municipalities?

**Response:** Municipalities have been reluctant and haven't been willing to have "skin in the game."



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Turtle Creek Basin**

**Monday, November 14, 2011/ 5:30 PM – 7:30 PM**

**Gateway Hall**

**4370 Northern Pike, Monroeville, PA 15146**

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**Question:** How will stormwater regulations impact? Why not be proactive?

**Response:** It is still a process. Municipalities have competing needs.

**Question:** Have to comply without having authority/control?

**Response:** Municipalities also have orders.



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Region-wide**  
**Tuesday, November 15, 2011/ 10:00 AM – 4:00 PM**  
**Senator John Heinz History Center**  
**1212 Smallman Street, Pittsburgh, PA 15222**

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The following summarizes the questions received and responses given at the region-wide town hall meeting held on the above referenced date and time. The meeting was held at the Senator John Heinz History Center in Pittsburgh. There were a total of forty four (44) people in attendance and fourteen (14) comment forms were collected. Arletta Scott Williams opened the meeting, and Jan Oliver presented the Annual Customer Information Update to the attendees in the form of a PowerPoint presentation. Specific project information pertinent to the seven individual planning basins was made available in the form of graphic display boards. The following question and answer session took place at the conclusion of the presentation.

## Questions and Responses

### 10:30 AM Presentation

**Question:** Did you look at a combination of tunnel and basin plans?

**Response:** Yes. All of the alternatives include both tunnels and basin plans to some extent.

**Question:** Do you submit all of the alternatives to the regulatory agencies?

**Response:** We will submit one plan (alternative).

**Question:** Has ALCOSAN looked at other economic impacts, so as not to continue to exacerbate inequity?

**Response:** The bill is based on water consumption and there is an ongoing study to address rate structure.

**Question:** How will cost be distributed given some are addressing problem, some are not?

**Response:** Approximately \$500 million in municipal costs. By and large all municipalities are under orders and are performing a parallel effort, due in 2013.

**Question:** Is this cost in addition to maintenance? Do the controls lower maintenance costs?

**Response:** All operations and maintenance (O&M) costs are included. We are gathering municipal O&M costs.

**Question:** You say total costs to be driven by municipal level. Will engagement with municipalities make the best long term decisions?

**Response:** We began engaging municipalities few years ago. If they choose to reduce flow, they need to show how. We have not seen sustained programs to remove stormwater or flow

**Question:** Is ALCOSAN attempting to assist municipalities?

**Response:** We actively tried to educate municipalities through workshops with 3RWW, identifying Federal funds for green infrastructure projects, and Regional Stakeholder Group presentations.

**Question:** Does more work need to be done to assist municipalities with source control?

**Response:** The deadline complicates the issue. We have also identified a regionalization study.

**Comment:** Goal should address equity and sustainability as well as encouraging “good behaviors”

**Comment:** Barney Oursler explained the Clean Rivers Campaign, providing the following objectives:

- Build citizen support to address gap in controls and affordability
- Look at other economic factors/benefits
- Promote green infrastructure



# ALCOSAN BASIN FACILITIES PLANNING

**Town Hall Meeting / Region-wide**  
**Tuesday, November 15, 2011/ 10:00 AM – 4:00 PM**  
**Senator John Heinz History Center**  
**1212 Smallman Street, Pittsburgh, PA 15222**

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## 1:30 PM Presentation

**Question:** Where does water go in the basin-based solution?

**Response:** Satellite treatment and conveyance to wastewater treatment plant.

**Question:** What is the capacity of facilities?

**Response:** Sized for various levels of flow; typically 10-50 million gallons per day

**Question:** What is the life of the tunnel system before expansion?

**Response:** Implementation by 2026 with a twenty year horizon beyond that.

**Question:** What did you use for population growth projections?

**Response:** We used the Southwestern Pennsylvania Commission's growth projections to 2035. We would revisit these in the future.

**Question:** Are there pharmaceuticals or radiation in waste water?

**Response:** Pollutants would be reduced. ALCOSAN is becoming aware of growing concerns though it is not the focus of the Wet Weather Plan.

**Question:** How is the plan feasible, affordable?

**Response:** Sewer separation has been evaluated and it is even more costly. We have sponsored several green infrastructure projects:

- PWSA – Bells Run
- Westview
- Aspinwall

**Question:** Is cost shared by municipalities?

**Response:** Municipalities also have responsibilities, including conveyance, facilities, and green infrastructure.

**Question:** What is the single biggest flow volume?

**Response:** Ground water – only ½ of flow is traced to water consumption

**Question:** What is the process for public comment in July?

**Response:** There will be a minimum three month process from August to October 2012. Public comments will be incorporated into the final Wet Weather Plan for submission.

**Question:** Is the long-term maintenance cost of facilities included in the financial analysis?

**Response:** It includes operation and maintenance costs.