



Louisville and Jefferson County Metropolitan Sewer District  
700 West Liberty Street  
Louisville Kentucky 40203-1911  
502-540-6000  
www.msdlouky.org

April 10, 2012

██████████  
██████████ Angora Court  
Louisville, Kentucky 40206

Subject: Integrated Overflow Abatement Plan (IOAP)  
Public Input Meeting January 24, 2012  
Response to comments

Dear ██████████

Thank you for taking the time to attend the meeting and submit your comments relative to I-64 & Grinstead Drive storage basin project. Your comments are summarized below along with MSD's response. Your comment form and comments sent via e-mail are attached for reference.

Comment 1 – Has the “radio tower” area been investigated for use as the site of the basin? Apparently not a cell tower; may not be a working radio tower. Area is already cleared of trees.

Response to Comment 1 – The “radio tower” area was investigated as part of the Planning Report completed in December of 2010 – utilizing the previous basin size of 2.74 million gallons. This site was quickly ruled out as an alternative due to the significant cost associated with acquiring the private land and relocating the radio tower as well as the fact that the entire site lies within the existing 100-year floodplain.

Additionally, your e-mail, dated January 20, 2012, included several questions related to the project as well as suggestions for the presentation. Most of the suggestions were incorporated into the presentation and the questions will be answered individually below.

Comment 2 – I still do not have a good understanding of why the original scope of this project was so far off. Were there not sufficient flow monitors? Were they defective? What has changed so that the public can trust the new estimates?

Response to Comment 2 – One of the basic principles of the Integrated Overflow Abatement Plan (IOAP) implementation approach is the use of adaptive management- refining our past decisions through continuous improvement of the physical and hydraulic information available to the analytical tools. The intent of adaptive management is to “right-size”



*Beneficial Use of Louisville's Biosolids*  
www.louisvillegreen.com

projects as additional information is developed through expanded flow monitoring etc. Adjusting the project sizes to successfully achieve overflow reduction and regulatory objectives is MSD's charge. Continuous measurement and increased understanding of the sewer system under various wet weather conditions will enable MSD to do so.

Project identification and sizing for the IOAP preparation was based on a sewer system model developed and calibrated over the time period of 2006 – 2007. The mathematical representation of the physical sewer system was based on sewer maps and construction drawings that date back as far as the early 1900's. While MSD surveyors field-verified some of the information from the old maps and drawings, the size and complexity of the system precluded resurveying every pipe and manhole during the planning process.

After building the mathematical model of the combined sewer system, the hydraulic calculations were calibrated using flow measurements taken from 29 locations in the combined system over the course of 3- 4 months in the spring of 2007. This time period included several significant rain events. The purpose of the initial hydraulic modeling was to provide estimates of flows at various locations in the sewer system to allow identification, evaluation, and prioritization of projects to reduce sewer overflows.

In 2009, MSD began an aggressive program of enhanced flow monitoring to continue improving the quality of the sewer flow predictions. This second round of calibration employed 57 flow monitors measuring flows for 6 months in the spring of 2010. The expanded flow monitoring system included sites specifically selected to improve our information relative to sizing our most significant proposed projects.

The most recent calibration showed good agreement on overall hydrology as that performed in 2007 (total volumes of sewer overflow from the entire combined system within 10% of the original calibration), but incorporating enhanced flow measurements and corrections in the physical representation of older parts of the sewer system resulted in a redistribution of the flow in individual pipes. It is this redistribution that caused the I-64 and Grinstead Storage Basin to grow, and other basins to shrink.

MSD believes this first round of recalibration has identified the major issues with sewer system modeling and calibration flow monitoring. While we continue improving our flow monitoring system and extent, the data we are now gathering shows us that flow routing and sewer flows now appear to be more accurate. However, future flow monitoring, overflow statistical analyses, system data gathering and advancements in modeling technologies will continue to improve our understanding of the sewer system behavior. We will also continue tracking the benefits of source control programs like green infrastructure storm water management and inflow and infiltration reduction which can affect projects. MSD has confidence in the on-going flow monitoring program, and is moving forward with the current

Letter to [REDACTED]  
March 30, 2012  
Page 3 of 3

flow estimates and project sizes with the understanding that future flow monitoring will result in additional incremental changes in sizes of some projects.

Comment 3 – What has been found out about the radio tower? In use? Visually, it does not appear to have cell tower additions.

Response to Comment 3 – MSD's consultant for this project found documentation showing the radio tower transmits a signal for WLLV 1240 AM – Louisville's Urban Gospel Radio. This station is still transmitting.

Comment 4 – What impact would construction have on the use of the bicycle/walking path? Brief closure during pipeline installation? A day? A week? Longer? No impact?

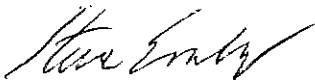
Response to Comment 4 – At this time it would be premature to say exactly what impact construction would have on the bike path, but MSD is well aware of the value the community places on this amenity. Generally speaking, impacts could include temporary closures and/or detours during construction. Our highest priority will be to protect public safety. Many factors are still in play that would influence the duration and extent of impact, including site selection and the final basin size. MSD has committed to working with Metro Parks to handle these impacts with as little disruption as possible.

Comment 5 – Will the access to the construction site be adequate (for large equipment) at the proposed place (the current driveway access for the radio tower)? To my eye the one lane and required turning radius (entering/exiting) seem to be a problem.

Response to Comment 5 – Initial consensus is that this access will be sufficient for equipment ingress/egress. If it is determined that the entrance is insufficient, or a safety concern, other means of entry will be explored.

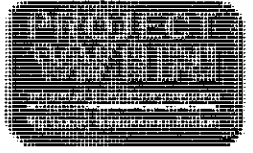
This letter will be posted on MSD's Project WIN web page at the link [www.msdlouky.org/projectwin](http://www.msdlouky.org/projectwin).

Sincerely,



Steve Emly, PE  
Interim Director of Engineering

Attachment: Comment Form, E-mail



### IOAP Public Outreach Meeting

1/24/2012  
(date)

#### To Be Completed by the Customer

Customer Name (Last, First) \_\_\_\_\_

Address ANGORA CT Zip Code 40206

<sup>home</sup> Cell Phone \_\_\_\_\_ ~~Work Phone~~ \_\_\_\_\_

#### LOCATION OF REQUEST

Address Ev-64/Genistral CSD Zip Code \_\_\_\_\_

Owner [ ] Tenant [ ] Other [ ]

#### REQUEST TYPE

- MSD Construction
- IOAP Project/Program
- Drainage
- General MSD concern
- Sanitary Sewer
- \_\_\_\_\_
- Development
- \_\_\_\_\_

#### REQUEST DESCRIPTION

Has the 'radio tower' area been investigated for use as the site of the basis? Apparently not a cell tower; may not be a working radio tower. Area is already cleared of trees.

#### To Be Completed by an MSD Representative

MSD Responder: \_\_\_\_\_ Division: \_\_\_\_\_

Response Provided to Customer: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Angela Akridge - Re: I-64 & Grinstead Meeting Minutes 1/10/12

---

**From:** [REDACTED]  
**To:** <millerc@msdlouky.org>  
**Date:** 1/20/12 12:40 PM  
**Subject:** Re: I-64 & Grinstead Meeting Minutes 1/10/12  
**CC:** <BINGHAM@msdlouky.org>, [REDACTED], [REDACTED],  
 [REDACTED], [REDACTED],  
 <CROCE@msdlouky.org>, <EMLY@msdlouky.org>, <GRAY@msdlouky.org>,  
 <swanson@msdlouky.org>, <SYDNOR@msdlouky.org>, [REDACTED]

---

Thank you for the opportunity to preview the public presentation (for Tuesday, January 24). I do have some comments and questions (and I understand that not everything I ask or suggest can be incorporated into the presentation because of the short time between now and then):

At the start of the presentation on the 24th, I think it would be best to summarize what you will be covering. This should preclude interruptions asking if you will be covering subject X, or Y, or Z. I would think this would include the background of the consent decree with EPA, the original scope of this specific project (I-64/Grinstead), the updated flow numbers, the current scope of this project, and the original and current options (including other basins and green options). Take 30 seconds to summarize, then go into the details of your presentation.

Question: I still do not have a good understanding of why the original scope of this project was so far off. Were there not sufficient flow monitors? Were they defective? What has changed so that the public can trust the new estimates?

Suggestion for the presentation: for the optional nearby basins, have maps available that show suggested sites with landmarks noted. I do not have a good feel for exactly where the River Metals site would be, or other possible basins. How large? What other sites (not necessarily as an alternative, but stand alone) are in the general area?

Question: what has been found out about the radio tower? In use? Visually, it does not appear to have cell tower additions.

Question: what impact would construction have on the use of the bicycle/walking path? Brief closure during pipeline installation? A day? A week? Longer? No impact?

Question: Will the access to the construction site be adequate (for large equipment) at the proposed place (the current driveway access for the radio tower)? To my eye the one lane and required turning radius (entering/exiting) seem to be a problem.

Although my questions are mostly focused on contingencies and mitigation of the proposed basin, I remain hopeful that this basin will not be needed. As Mr. Hixson suggested, there should be some rough analysis provided showing how green practices can effect the project.

Please make sure that you do not omit information to the public, or mislead the public. I hesitate to use the following examples because I really do not think you (MSD) have fallen into these traps, but here are two recent local examples of non-helpful public situations. One: the arena (KFC YUM! Center)

was placed in its site partially because its greater size allowed a needed new hotel; shortly after the final site was selected the hotel was no longer needed. Never mind what they said before. Two: the Bridges Project could not be modified from its two bridges/rebuild the Junction because that would re-open the agreement and lead to long delays. Until it was needed to modify the scope to reduce costs. Then it was OK to re-open the agreement.

I understand the problems involved with green requirements (legal requirements for rain barrels, or disconnecting downspouts, etc.), and that MSD does not want to be in the position to tell people what to do. But. By increasing the sewer changes MSD is telling people what to do.

Thank you for all of your hard work.

[REDACTED]  
[REDACTED] Angora Ct.  
[REDACTED]

---

**From:** "Christian Miller" <millerc@msdlouky.org>

**To:** [REDACTED], [REDACTED], [REDACTED], [REDACTED],  
[REDACTED],  
[REDACTED], [REDACTED], [REDACTED], [REDACTED],

AKRIDGE@msdlouky  
.org, CROCE@msdlouky.org, EMLY@msdlouky.org, GRAY@msdlouky.org, LANHAMM  
@msdlouky.org, swanson@msdlouky.org, SYDNOR@msdlouky.org

**Cc:** BINGHAM@msdlouky.org

**Sent:** Tuesday, January 17, 2012 3:09:55 PM

**Subject:** I-64 & Grinstead Meeting Minutes 1/10/12

Attached you will find meeting minutes for our January 10, 2012 meeting along with the sign-in sheet. Thank you all for attending, we appreciate your input and support as we move forward with this project.

**Christian W. Miller II, EIT**  
Project Administrator  
Engineering - Design  
Metropolitan Sewer District  
(502) 540-6626  
[millerc@msdlouky.org](mailto:millerc@msdlouky.org)