

**Final Meeting Summary
Wet Weather Team Meeting #17
Thursday, April 3, 2008
MSD Main Office, Louisville**

The Wet Weather Team (WWT), chartered by the Louisville and Jefferson County Metropolitan Sewer District (MSD), met on April 3, 2008, at MSD's main office in Louisville. The objectives of the meeting were to:

- Review and discuss potential additions to the ground rules for the Wet Weather Team;
- Review and discuss potential changes to user fees and incentives in the funding plan for MSD's Integrated Overflow Abatement Plan;
- Review and discuss a draft vision for MSD's Integrated Overflow Abatement Plan;
- Review and discuss a draft description of the WWT's understanding of anticipated combined sewer overflow (CSO) control strategies in MSD's Integrated Overflow Abatement Plan; and
- Review and discuss summary results and examples from the benefit/cost analysis of project alternatives.

Potential Additions to Wet Weather Team Ground Rules

Rob Greenwood of Ross & Associates reviewed the ground rules that have been used since the beginning of the WWT stakeholder process, as well as a series of potential additions to the ground rules that concern procedures for sharing draft documents with sensitive, pre-decisional information. The proposed additions to the ground rules were as follows.

- Certain types of draft materials that contain pre-decisional information that is highly sensitive (e.g., potential sites for constructed facilities) will be labeled "draft: working documents not for release."
- Documents labeled "not for release" will not be shared during Wet Weather Team stakeholder meetings. Information from "not for release" documents may, however, be generalized or presented at a higher level of detail at WWT meetings if necessary to support WWT deliberations.
- If Wet Weather Team participants would like to review "not for release" documents individually outside of WWT meetings, MSD will make the documents available for WWT members to review at MSD's office in MSD's presence. WWT members will be asked to sign a confidentiality agreement before reviewing "not for release" documents at MSD.

WWT participants approved these additional ground rules, and they will be incorporated into an updated version of the ground rules.

Next, Rob Greenwood mentioned a suggestion that one WWT member had proposed for the group's consideration—the idea of potentially having an executive session of the WWT (i.e., a meeting without outside observers) to support the WWT's deliberations. This could be an opportunity for the WWT to discuss the specifics of project alternatives, including documents WWT members review at MSD's office.

WWT members discussed the executive session idea, and noted that if the WWT were to have an executive session, it would be important to be transparent about the timing, scope, and reasons for a special meeting. In addition, MSD and the WWT would need to be prepared to answer questions about the session. MSD agreed to look at whether MSD policies would allow a WWT executive session and will coordinate with the facilitation team to communicate that information to the WWT.

Wet Weather Project Updates and Announcements

The following Wet Weather Project updates and announcements were noted at the meeting.

- Beargrass Creek Study Comments: Rob Greenwood of Ross & Associates said that the technical team had received comments from WWT members on the Beargrass Creek ecological reach characterization study that was presented at the January WWT meeting. The technical team will send a written response to the WWT members and will copy the rest of the group on the e-mail message.
- WWT Schedule: Rob Greenwood and MSD Executive Director Bud Schardein stated that MSD would soon be requesting WWT stakeholder group members to participate in additional WWT meetings in summer and fall, to continue to provide input on MSD's consent decree response.
- Project WIN Meetings: Angela Akridge of MSD announced that there would be a half-page ad in the Sunday newspaper announcing the next series of Project WIN public meetings in May. MSD has changed some of the arrangements for these meetings based on the suggestions from WWT members, including announcing the meetings a month in advance, holding some meetings downtown in the middle of the day, and reducing costs by providing basic refreshments rather than full meals.
- WWT Idea Lists: Jennifer Tice of Ross & Associates said that the facilitation team would be working with the technical team to review the idea lists (solution idea list, education and outreach idea list, and data requests and monitoring suggestions list) to understand how and to what extent the WWT's suggestions have been considered and incorporated into the technical team's analytic work thus far.

Funding Plan Discussion—User Fees and Incentives

MSD Finance Director Marion Gee gave a presentation on MSD's current sources of revenues, user fees, and the incentives and discounts that MSD currently offers or could consider adopting in the future. Revenue sources include wastewater service, volume, and quality charges (73 percent of FY 2007 revenues); stormwater service and volume charges (23 percent of FY 2007 revenues); and other operating income (4 percent of FY 2007 revenues) from sources such as capacity charges and connection fees.

MSD's current incentives and discounts include an optional rate structure for high volume users, a credit for detention/retention basins, reduced quality charges for "cleaner" wastewater, and a senior citizens discount of 30 percent on wastewater billing and the Project WIN surcharge. Mr. Gee mentioned examples of incentives and discounts that other communities—including Portland, OR; Tulsa, OK; and Gwinnett County, GA—offer to encourage rain gardens, eco roofs, rain barrels, and other ways of reducing impervious surface area and stormwater runoff. He also noted that revenues lost from incentives granted to one customer class must be recovered from the remaining customer classes.

WWT members asked a few clarifying questions and offered some suggestions for incentives, as follows.

- A few WWT stakeholders identified additional activities that could be incentivized, including:
 1. Installing/using green roofs and permeable pavement;
 2. Increasing tree canopy, changing plantings, and other activities to reduce runoff from people's yards;
 3. Reducing use of lawn chemicals; and
 4. Controlling the spread of invasive species.
- Several participants commented on the idea of extending MSD's senior citizens discount program. A key interest expressed was helping people who face a financial hardship. Comments included:

1. Consider people's ability to pay, not simply their age. Provide assistance and/or discounts to low-income populations.
 2. Evaluate whether the square footage of people's homes could be used as an indicator of the need for financial assistance.
 3. Examine the verification process and criteria that LG&E uses for its Winterhelp program.
- Some WWT stakeholders suggested working with the Green City Partnership on potential incentives.
 - A few WWT members recommended charging higher rates for people with the ability to pay in order to provide resources to offer incentives to people who "do the right thing" and discounts to people who need financial assistance.

Emergent Vision of MSD's Consent Decree Response

Angela Akridge of MSD gave a presentation on the emergent vision of MSD's response to the wet weather consent decree—the Integrated Overflow Abatement Plan (IOAP). General principles of the consent decree response include the following.

- The approach is shaped by the community values identified by the Wet Weather Team stakeholder group and by direct engagement with the public.
- Community partnerships—including support for green infrastructure and control of private property infiltration and inflow (I&I)—are essential to the success of the program.
- MSD is considering a wide range of control alternatives, and these are being evaluated using a values-based benefit-cost analysis.
- Monitoring and adaptive management will allow MSD to evaluate the program's performance and design future projects that are "right sized" and build on initial successes.
- Program costs must be affordable to the community and allow for continued economic growth.

Ms. Akridge noted that MSD intends for the IOAP to serve as a centerpiece of water quality improvement efforts in the community. Sewer overflow control is essential to improving water quality, but overflow control alone is not enough to meet water quality standards. Therefore, the "affordability" of the IOAP must be viewed in the context of other future water quality initiatives and other service needs. Other specific elements of the draft vision included the following.

- Control Strategies: Control strategies in the IOAP will include source control, storage, transport, and treatment. The values-based benefit/cost analysis and site-specific considerations determine the application of specific approaches.
- Sizing of Gray Solutions: Gray infrastructure will be sized after considering anticipated benefits from green infrastructure, private property I&I reduction, and other source control approaches.
- SSO Protection Level: The values-based benefit/cost analysis will determine the protection level for sanitary sewer overflows (SSOs), with a two-year design storm (i.e., a storm that occurs once every two years on average) proposed as the minimum level of protection for SSOs.
- CSO Regulatory Strategy: Based on EPA's CSO Policy, MSD's strategy for controlling wet weather CSOs may require a temporary waiver or suspension of standards during wet weather.
- Offsets for New Development: A three-to-one offset ratio is proposed to address the increase in wet weather flows associated with new development (that is, flows entering MSD's sewer systems will need to be reduced at a ratio of three gallons for every new gallon added).
- Education: Education to foster a sense of personal responsibility and ownership is critical to the success of the program.

- Funding: Rates and fees for the program must pay MSD’s operating costs and debt service, and adequately maintain MSD’s bond rating.

WWT members asked several clarifying questions in response to the presentation, and also offered a number of comments, as follows.

- In response to a question about offsets, Brian Bingham of MSD noted that the flow reductions would be from the system at large, not necessarily from the specific location of the new development. In part, this will allow MSD the flexibility to address the worst problems first. In prioritizing sewer rehabilitation efforts, MSD examines where public exposure is greatest and where it can achieve the greatest reductions in overflow volume and frequency.
- A few WWT stakeholders suggested that it could be useful to consider incentives for developing in areas where there is less impact on the sewer system (i.e., encouraging lower impact development); there also could be a role for impact fees in addressing this issue. The Louisville Metro government has examined impact fees for new developers and builders in some areas of the community.
- Several WWT participants commented on the relationship of MSD’s federally enforceable IOAP and other community green initiatives.
 - Some WWT members indicated an interest in having other entities share the responsibility for water quality improvement efforts along with MSD. MSD, Metro Louisville’s Planning and Design Department, Jefferson County Public Schools, developers, and other entities all can contribute and encourage change (in the words of one participant, “good water quality is not a spectator sport”).
 - Furthermore, WWT participants indicated an interest in enabling broader community water quality improvement efforts, including green initiatives.
 - MSD noted that anything included in MSD’s consent decree response is very difficult to change, even minor modifications, and suggested that the municipal stormwater permit can play a role in assuring further community water quality improvements. (MSD is one of several permittees on the stormwater permit, which the State of Kentucky oversees.)

WWT members also commented on MSD’s intent to use the vision presentation for the next set of Project WIN public meetings, as follows.

- A few WWT members suggested that MSD add visuals to the presentation and incorporate roles for individuals to be involved (e.g., show how individual efforts help the bigger picture of water quality improvement). In addition, these messages should be brought to builders and other contractors.
- Some WWT stakeholders said that MSD could consider developing direct ads to consumers (e.g., developing short public service announcements on rain barrels, pervious pavement, etc.).

Draft CSO Understandings Document

Rob Greenwood of Ross & Associates reviewed the draft document, “Wet Weather Team Stakeholder Group Draft Understanding of Combined Sewer Overflow Control Strategies in MSD’s Integrated Overflow Abatement Plan,” and asked each WWT participant whether he or she agreed with the document or thought changes were needed. WWT stakeholder group members approved the CSO understandings document without changes.

Benefit/Cost Analytic Process and Sample Results

The technical team gave two presentations that outlined and provided examples of the analytic process the technical team is using to evaluate project alternatives for controlling CSOs and eliminating SSOs.

CSO Long Term Control Plan Benefit-Cost Analysis

Tim Kraus of O'Brien & Gere described the technical team's overall analytic approach to identifying and evaluating project alternatives for MSD's Long Term Control Plan for CSOs (one component of the IOAP). For each CSO location, the technical team's analytic approach includes the following steps.

1. Evaluate alternatives to apply each type of technology (storage, treatment, transport, sewer separation, and green solutions) and select the best alternative for each type of technology.
2. Look at single projects as well as grouped projects (projects that affect multiple CSOs).
3. Identify and evaluate integrated gray-green alternatives.
4. Compare across the technologies and select the alternative with the highest benefit-cost ratio.
5. For the selected project alternative, evaluate whether different levels of overflow control achieve higher benefit-cost ratios (as compared to the base case of four overflows per year).

As part of this presentation, Mr. Kraus also reviewed conceptual project designs and results of the benefit-cost analysis for a couple of technology options for specific CSOs.

SSO Control Project Benefit-Cost Analysis

Gary Swanson of CH2M HILL gave a presentation on SSO control issues, how the technical team is evaluating SSO control alternatives, and sample results from the benefit-cost analysis. The technical team has calibrated and validated modeling results to accurately characterize MSD's sanitary sewer system, and the team has divided the system into segments or "branches" for the purpose of the analysis (these are analogous to CSO "clusters"). SSO control options incorporate anticipated I&I reduction from the Program as a whole. The technical team is also evaluating how future growth will affect SSO solutions; however, Mr. Swanson noted that MSD's Capacity Assurance Program, not the IOAP, addresses the issue of new sewers to transport future flows. Finally, Mr. Swanson said that benefit-cost results inform both the selection of project alternatives and the optimum level of protection for particular SSOs.

Rob Greenwood of Ross & Associates noted that there will be four key anchors of the group's understanding of MSD's consent decree response, including:

- The vision for the Program;
- The values evaluation framework, which the WWT approved earlier in the WWT process;
- The application of the evaluation framework; and
- The overall suite of projects and other program elements.

WWT members asked several clarifying questions in response to these presentations and also provided the following comments.

- WWT stakeholders asked why the analysis of green alternatives was the third step in the process. Mr. Kraus said that the analytic steps weren't necessarily sequential, and reminded the group that the technical team is analyzing green solutions in parallel to gray solutions. (The third step above refers specifically to the integration of gray and green alternatives, not the evaluation of green alternatives.)
- A few WWT members suggested that it could be useful to develop a flow diagram or decision tree showing the process for identifying and selecting projects.

- In response to a question, Gary Swanson of CH2M HILL said that the SSO control alternatives evaluation process uses a target for source control that is factored into other technologies (e.g., the size of gray solutions assumes a certain level of flow reduction from source control).

Observer Comments

An MSD employee noted that MSD is interested in learning about the activities that other organizations are doing to improve water quality in the community.

Wrap Up and Next Steps

- The facilitation team will incorporate the proposed additional procedures related to sharing draft documents with sensitive, pre-decisional information into a revised version of the ground rules.
- MSD will investigate the possibility of the WWT meeting in an executive session (without observers) and the conditions under which this could occur, if at all. The facilitation team will get back to the WWT with any new information about MSD's policy on this issue.
- WWT members are encouraged to send comments and feedback on the emergent vision for MSD's Integrated Overflow Plan to the facilitation team at Ross & Associates.
- The facilitation team will check in with WWT stakeholders who missed the meeting about the draft CSO understandings document.
- MSD will conduct the third series of Project WIN public meetings about MSD's Integrated Overflow Abatement Plan. Meetings are scheduled for May 5, 6, 13, 14, 27, 28, and 29, 2008. (Meeting locations and times are posted on MSD's Project WIN website, www.msdlouky.org/projectwin.)
- Potential topics for the WWT's next meeting on May 15, 2008 include:
 - Refinements to the vision for MSD's Integrated Overflow Abatement Plan;
 - Draft monitoring and evaluation plan;
 - Draft education and outreach plan; and
 - Update on additional results of the benefit/cost analysis of project alternatives.

Meeting Participants

Wet Weather Team Stakeholders

Steve Barger, Labor

Susan Barto, Mayor of Lyndon

Stuart Benson, Louisville Metro Council, District 20

Charles Cash, Louisville Metro Planning & Design Services Department

Allan Dittmer, University of Louisville

Faye Ellerkamp, City of Windy Hills

Arnita Gadson, West Jefferson County Community Task Force and Kentucky Environmental Quality Commission

Mike Heitz, Louisville Metro Parks Department

Tom Herman, Zeon Chemicals

Rick Johnstone, Deputy Mayor, Louisville Metro Mayor's Office

Bob Marrett, CMB Development Company

Kurt Mason, Jefferson County Soil and Water Conservation District

Judy Nielsen, Louisville Metro Health Department

Lisa Santos, Irish Hill Neighborhood Association
David Tollerud, University of Louisville, School of Public Health and Information Sciences
Tina Ward-Pugh, Louisville Metro Council, District 9
David Wicks, Jefferson County Public Schools

MSD Personnel

Angela Akridge, MSD Regulatory Policy Manager
Brian Bingham, MSD Regulatory Management Services Director
Derek Guthrie, MSD Director of Engineering/Operations and Chief Engineer
Bud Schardein, MSD Executive Director

Facilitation and Technical Support

Gary Swanson, CH2M HILL
Rob Greenwood, Ross & Associates Environmental Consulting
Jennifer Tice, Ross & Associates Environmental Consulting

Meeting Observers

Arnold Celentano, MSD Board	Clay Kelly, Strand Associates
Jim Bruggers, Louisville Courier-Journal	Tim Kraus, O'Brien & Gere
Vicki Coombs, MSD	Paul Maron, Strand Associates
Kristin Crumpton, Tetra Tech	Chad McCormick, Strand Associates
Henry Cubero, The Cubero Group	Julia Muller, MSD
Marion Gee, MSD	Bill Sanders, Heritage
Justin Gray, MSD	Phillip Scott, O'Brien & Gere
Sue Green, MSD	Wes Sydnor, O'Brien & Gere

Meeting Materials

- Agenda for the 4/3/08 WWT Meeting
- Summary of the 2/26/08 WWT Meeting
- WWT Ground Rules with Potential Additions Highlighted
- Solution Ideas List (Updated March 2008)
- Education and Outreach Ideas List (Updated March 2008)
- Data Requests and Monitoring Suggestions List (Updated March 2008)
- Consensus Items List (Updated February 2008)
- User Fees and Incentives Presentation (Note: This presentation was also distributed at the 2/26/08 WWT meeting.)
- Emergent Vision for MSD's Consent Decree Response Presentation
- Draft WWT Stakeholder Group Understanding of Combined Sewer Overflow Control Strategies in MSD's Integrated Overflow Abatement Plan
- Combined Sewer Overflow LTCP Approach Summary and Benefit/Cost Sample Presentation
- Benefit/Cost Evaluation Results for CSO Project Alternatives "L_SO_MF_097_M" Handout
- SSO Control Summary and Benefit/Cost Results Example Presentation
- Draft SSS Initial Solutions Development Summary Sheets for Two SSOs in Beargrass Creek Middle Fork, Branch #6 Handout
- Compliance Monitoring Presentation (Note: This presentation was distributed but not discussed at the meeting.)