



Louisville and Jefferson County Metropolitan Sewer District
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Louisville Kentucky 40203-1911
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August 9, 2012

██████████
Clifton Community Council
██████████ Sycamore Avenue
Louisville, KY 40206

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

Dear ██████████

Thank you for taking the time to prepare and submit written comments relative to the I-64 & Grinstead Drive storage basin project, and partnering opportunities within the City of Clifton. MSD appreciates the Clifton Community Council's willingness to take an active role in sewer overflow abatement and wishes to continue discussions on ways to focus your contributions to maximize the overall benefits to our community. Since your comments are essentially a Council statement reaffirming previous communications attached as Appendix A, B, and C, we will respond to each of the appendices in order. The comments in each appendix are summarized below, and your letter with the appendices in full is attached for reference.

Appendix A: Re-affirmation of CCC 2008 Board approved letter to MSD, December 5, 2008

- 1) Comment: IOAP should focus more on stormwater source reduction**
 - a) Aggressive modifications to the MSDS Plan Review Process to reduce the amount and type of impervious cover in proposed land use development**
 - b) Implement concerted program to eliminate residential, business and institutional downspout connections to the combined sewer system**

MSD response:

The 2009 approved IOAP had a significant budget commitment to increase stormwater source reduction through green infrastructure practices. Since that time MSD has completed or has under construction 9 green infrastructure projects in public right-of-way and 55 green infrastructure projects on property owned by both private and public partners. We have completed or committed over \$12 million dollars on green infrastructure to date, on projects



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that will retain and infiltrate over 218 million gallons of stormwater per year. As part of our commitment to prove the overflow reduction benefits of green infrastructure MSD has partnered with the EPA Office of Research and Development to study green practices in an urban setting. As you noted in your letter, we have also implemented both downspout disconnect and rain barrel pilot projects to assess the potential impacts that stormwater control on individual residences can have on overflow control.

As a result of lessons learned during the first three years of green infrastructure implementation, the IOAP 2012 Modification will continue to emphasize the use of green infrastructure to control combined sewer overflows. In addition to a county-wide voluntary incentives program, we have learned that some watersheds have the potential to benefit from a highly focused proactive approach based on MSD-implemented projects throughout a target watershed. Recent public meetings have clearly indicated that local residents are interested in reducing the size of the proposed I-64 and Grinstead basin through the use of green infrastructure practices. MSD will be requesting that USEPA and KDEP grant a change in the completion date for this project to allow a proactive and focused approach to green infrastructure to be implemented and evaluated prior to final "right-sizing" of this basin in 2015 or 2016.

To address your suggestion that MSD plan review be used to increase green infrastructure acceptance, please note that in 2011 MSD published a green best management practice manual as Chapter 18 of the MSD Design Manual. This BMP manual outlines design parameters for various types of green controls, describes specification language, design detail drawings, and guidance on calculating the monthly stormwater credits and initial cost recovery stipend for green elements. This document is meant to provide guidance for designers, contractors, and property owners for participation in the MSD Green Incentives Program that went into effect on August 1, 2011. In addition, the recently-approved Louisville Municipal Separate Storm Sewer System (MS4) permit, of which MSD is the primary permit holder, includes a requirement to make green infrastructure components an essential part of any new development or redevelopment approval. The requirement is committed to be in place by August 1, 2012.

MSD continues to support disconnecting downspouts and other impervious areas from the combined sewer system in areas where this can be accomplished without causing surface flooding or other drainage issues.

2) Proposed stream restoration Supplemental Environmental Project

The Amended Consent Decree includes a new SEP (Appendix H) consisting of a \$400,000 project for stream restoration. We strongly discourage use of such fund for litter and trash pick-up along effected creeks in favor of a meaningful effort to actually achieve restoration of the form and function of a segment of a creek. In particular, we support the use of such funds for a segment of Beargrass Creek in the vicinity of the proposed I-64 & Grinstead Drive off-line storage basin.

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MSD response:

MSD did not use the SEP for litter or trash pick-up. As you suggested, the SEPs completed with this funding focused on permanent restoration to the form and function of two different stream segments:

Cherokee Park SEP Project: Beargrass Creek within Cherokee Park is a highly urbanized stream system exhibiting a number of areas of significant bank erosion. The project included approximately 350 feet of stream relocation/enhancements upstream of park Bridge #7 and 150 feet of enhancements downstream from the bridge.

Pond Creek Trail SEP Project: This stream restoration project restored a section of Pond Creek running parallel to the Gene Snyder Expressway near Third Street in the southwestern portion of Jefferson County. The project included stream channel and riparian corridor restoration in the Pond Creek watershed. Stream restoration activities were completed on an existing 1,788-foot intermittent tributary to Pond Creek that was severely entrenched with vertical eroding banks throughout much of the project area. Completed stream restoration activities included in-channel modifications and bank regrading along the lower 670 linear feet of stream and the construction of a new channel with floodplain in the upper 1,220 feet of stream. Once the stream restoration was complete, the riparian corridors were planted with native tree, shrub and herbaceous species. Riparian restoration activities included the removal of bush honeysuckle from a 500-foot wide corridor along 1,200 feet of the banks of Pond Creek.

- 3) The structures and landscapes of the urban neighborhoods of near-cast Louisville and west Louisville have historic significance and contain archaeological resources. The Clifton Historic District is listed on the National Register of Historic Places in addition to its status as a local preservation district.**

MSD response:

MSD understands the historic and archaeological issues with the Clifton neighborhood. MSD's project management protocols are designed to ensure that we give this appropriate consideration during project development. We will continue to work with the Clifton Community Council to make certain these issues are properly addressed, in accordance with all applicable laws, codes and regulation.

- 4) Appendix B: Re-examination of the I-64 and Grinstead Overflow Control Basin alternative sites to review the WLLV radio tower site as a viable alternative to the Jim Porters property.**

MSD response:

MSD has done a preliminary evaluation of the process to relocate an operating radio transmission tower. Following FCC protocols to move an active commercial radio tower is a time consuming and expensive process requiring numerous approvals and agreements not

within MSD's complete control. Since a commercial radio station's FCC license requires essentially continuous operation, before an antenna can be decommissioned a new site must be procured; a new antenna system installed, commissioned, and "tuned"; then operations transferred. At that point the existing antenna can be taken down. If the schedule for the I-64 and Grinstead Basin is successfully modified to move the completion date back to 2020, this alternative review of the radio tower site could be performed in more detail, starting with a feasibility analysis and preliminary cost estimate to determine if this should be pursued further.

5) Appendix C: Aggressive Pursuit of Green/Gray/Natural Retention

- a) Clifton has approximately 1125 structures that could be outfitted with rain barrels. All of these structures should be incentivized to capture water from impervious roof areas.**
- b) Develop and implement a residential incentive program aimed toward the installation of rain gardens, and other option for recovering runoff from impervious surfaces at a residence.**

MSD response:

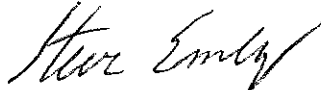
Currently two residential pilot projects are underway to determine the effectiveness of downspout disconnects and rain barrels in a residential setting. Until these projects are completed and data analyzed, MSD would not be interested in moving forward on another similar project. In addition, it is unlikely that the MSD Board would agree to extending the green incentive program to residential customers given the uncertainty of long-term sustainability and lack of a dependable enforcement approach for residential green infrastructure practices. MSD staff will continue to provide education and technical assistance in this area, including working with local nurseries so they can provide appropriate technical support and all the materials and plants appropriate for constructing a residential rain garden.

MSD welcomes the proactive involvement by the Clifton Community Council, and especially appreciates the continued follow-up on comments previously presented. It is MSD's intention to remain in contact with the Clifton Community Council and other neighborhood groups in the I-64 and Grinstead area as we move forward with a more focused approach to stormwater management through green infrastructure, and eventually to a "right-sizing", final site selection and facility configuration for whatever size basin is needed in this area.

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This letter will be posted on MSD's Project WIN web page at the link
<http://msdprojectwin.org/Public-Input.aspx>

Sincerely,



Steve Emly, PE
Interim Engineering Director

Attachment: Submitted Letter

Cc: Greg Heitzman, Interim MSD Executive Director
Brian Bingham, Regulatory Services Director



MSD IOAP Project Comments

ATTN: Project WIN Program Manager

700 West Liberty St.

Louisville, KY 40201

Reproduced below is a motion approved by the Board of Directors of the Clifton Community Council at its May 15th, 2012 meeting. As background, Clifton is a neighborhood of some 2200 residents in eastern Louisville, roughly bounded by Brownsboro Road to the north, I-64 to the south, Ewing Avenue to the east, and Mellwood Avenue to the west. As you are no doubt aware MSD has proposed to build near Clifton the I-64/Grinstead storage basin as a component in MSD's system-wide plan for compliance with the EPS Consent Decree.

As we in Clifton have attended various presentations and hearings in regard to the proposed basin, we have collected findings regarding the impact of the basin on Clifton and nearby neighborhoods. Based on the findings (detailed in the appendices B and C below) we bring this motion to MSD with suggestions of how we in Clifton want to partner with MSD to remediate our own impact on storm water entering the MSD combined system. While it is our conclusion that the system of storage basins are a necessary component of a very decent design by MSD, we acknowledge with these suggestions that we are a part of the problem to be resolved by edict of the Consent Decree, and make these suggestions, planning that with MSD's assistance

we can act to be a part of the solution. We are encouraged in this effort by MSD's initiation of the Payne Street Rain Barrel Pilot Project, an effort to keep storm water out of the combined sewer at the source, while monitoring the change in sewer flow as remediation progresses. Our own Sustainable Clifton Committee has worked closely with MSD on owner education and sign-up efforts, and in the installation of the barrels.

The motion below is in large part our request to continue, and enlarge the scope in partnering with MSD in a number of efforts to be a part of the solution. As you can see in Appendix A the present motion builds on the suggestions contained in a previous Clifton Board motion approved in 2008.

I welcome your comments and responses to this motion.

Sincerely,

[REDACTED]

Clifton Community Council

[REDACTED]

The 2012 Clifton Community Council reaffirms the substance of a 2008 Council Board-approved MSD/storage basin motion (attached here as Appendix A).

Additionally the Clifton Council urges MSD to reexamine the alternate site of the present WLLV radio tower as a site for construction of its proposed I-64/Grinstead storm water storage basin. The Council Board maintains that this site has distinct advantages in less disturbance or destruction of the existing natural environment over the only site under consideration presently behind Jim Porter's Restaurant. (A listing of these advantages here in Appendix B.)

Additionally the Clifton Council with this motion urges MSD to aggressively pursue options using green/gray/natural retention storage of storm runoff. (These suggestions here in Appendix C.)

Appendix A: Re-affirmation of CCC 2008 Board approved letter to MSD:

Dec. 5, 2008

Clifton Community Council 2337 Frankfort Ave. #333, Louisville, KY 40206

Sent via email to commentsIOAP@msdlouky.org

Mr. H.J. Schardein, Jr. Metropolitan Sewer District 700 W. Liberty Street Louisville, KY 40203

RE: Draft Integrated Overflow Abatement Plan ("IOAP") USDOJ Consent Decree #90-5-1-1-08254/1

Dear Mr. Schardein:

What follows are the comments of the Clifton Community Council ("CCC") on the draft IOAP and the Amended Consent Decree referenced above. The Amended Consent Decree was noticed for public comment in the Dec. 1, 2008 Federal Register.

The CCC supports implementation of the IOAP and the Consent Decree to reduce discharges from combined sewer overflows ("CSOs") in our and adjacent urban neighborhoods. These discharges have degraded the water quality of Beargrass Creek and posed risks for human contact for decades. Our comments focus on the following three areas:

Source reduction

Proposed stream restoration Supplemental Environmental Project; ("SEP," Exhibit H, Amended Consent Decree)

Capital project implementation in historic urban neighborhoods.

Source Reduction

We suggest that the draft IOAP focus more resources on source reduction. At least in our geographic area, there are several large (multi-million gallon capacity), concrete basins planned for off-line storage of wet weather flows as a way to mitigate discharges. Our concern is that without an equal, or at least substantial, focus on reducing storm-water contributions, these storage projects will not meet the long-term needs of the system. We recommend two specific areas of source reduction:

- 1) Aggressive modifications to the MSD Plan Review process to reduce the amount and type of impervious cover in proposed land use development and encourage alternative paving techniques and materials; and
- 2) Implementation of a concerted program to eliminate residential, business, and institutional downspout connections to the combined sewer system.

Regarding item 1), the CCC is an active stakeholder in land development projects within our neighborhood. We are also a Louisville Landmarks and Historic Preservation District. Compliance with our Landmarks Guidelines entails a legally mandated Metro Louisville review process for all changes to structures and landscapes within the district. We intentionally crafted guidelines that support the

minimization of impervious cover through design of the footprint of structures and the size and type of parking surfaces.

Nevertheless, one of our frustrations in the land development process is that developer proposals for conventional parking lots and driveways and materials of construction routinely receive plan approval through the MSD development drainage review process. **This plan review process has effectively trumped our efforts to minimize CSO problems in our neighborhood.** “Green” approaches can often save the developer money and better serve environmental needs. However, the plan review process within MSD and Metro Public Works has not kept pace with such approaches in our experience. We acknowledge that in some instances design or standard exceptions may need to be granted and can be done so without jeopardizing public safety. The CCC encourages prompt modifications to the current land development review process as a component of source reduction for the IOAP.

Regarding item 2), Clifton has had a long-standing interest in educating our homeowners, businesses, churches, and educational facilities on the benefits of minimizing each of our own contribution to the CSO problem. As an additional source reduction measure within the IOAP or as an additional SEP, we propose a Clifton (and Irish Hill) pilot program outlined in Attachment A to these comments. We have titled it the “GRaB”—Grassroots Rain Barrel--Project. As described in the attachment, this project would have a strong grassroots, volunteer focus, with some MSD support, and would yield data on the cumulative impacts of removal of individual contributions to the CSO problem.

Stream Restoration SEP

The Amended Consent Decree includes a new SEP (Exhibit H) consisting of a \$400,000 project for stream restoration. **We strongly discourage use of such funds for litter and trash pick-up along affected creeks in favor of a meaningful effort to actually achieve restoration of the form and function of a segment of a creek.** In particular, we support the use of such funds for a segment of Beargrass Creek in the vicinity of the proposed I-64 and Grinstead Dr. off-line storage basin. The University of Louisville has developed a comprehensive restoration and partial re-alignment plan for this stretch, the implementation of which would significantly exceed \$400,000. However, some portion of this plan could be implemented and/or the \$400,000 could possibly be used to leverage further funding for scientific and engineering work to restore the natural functions of this segment of the creek.

We are mindful that IOAP implementation will not eliminate fecal coliform contributions to the degradation of Beargrass Creek. We particularly noted the statement in the IOAP that “...fecal coliform is expected to continue primarily due to storm water runoff and sources other than sewer overflows” (Vol. 1, Ch. 5, p. 5) and that with full implementation of the capital projects “sewer overflows...could still be the cause of water quality standards exceedances 5 percent of the time (Id.). We encourage the stream restoration SEP to also evaluate the potential for residual contamination of soils and vegetation to serve as a continuing source of water quality problems and the benefits of stream remediation as well. We acknowledge that the SEP funding will not actually achieve remediation.

Capital Project Implementation

The proposed capital projects are an integral part of the engineering solution to control CSOs in response to the Consent Decree. The siting, construction, and operation and maintenance of these projects pose potential adverse impacts to affected neighborhoods. The structures and landscapes of the urban neighborhoods of near-east Louisville and west Louisville have historic significance and contain archaeological resources. The Clifton Historic District (400 acres) is listed on the National Register of Historic Places in addition to its status as a local preservation district. Portions of Irish Hill have been surveyed and determined to be National Register-eligible. Other neighborhoods, such as Clifton Heights, have not been surveyed but could contain eligible structures or areas.

In planning and implementation for projects in these areas, the CCC urges the following:

- Early consultation and coordination with the Metro Historic Preservation office (and Landmarks) staff and the State Historic Preservation Officer on the location and extent of eligible and listed properties and districts.
- Archaeological surveys by qualified professionals in areas requiring subsurface excavation.
- Prompt implementation of the Section 106 process under the National Historic Preservation Act (“NHPA”) for projects requiring federal approvals (e.g., U.S. Army Corps of Engineers nationwide or individual permit), including early contact with individuals and organizations interested in serving as Consulting Parties.
- Budgeting and funding of mitigation for projects determined to have an adverse effect on eligible or listed properties or districts through the Section 106 process.

Some capital projects may impact community resources that are not strictly “historic” or, even if historic, do not strictly experience “adverse effects” within the meaning of the NHPA. We also encourage some budgeting for mitigation for those projects as “Advanced Site Restoration” for context-sensitive landscaping, fencing, lighting, and signage.

In closing, we appreciate the opportunity to comment on this significant matter and look forward to hearing from you in response to our suggestions and concerns.

Sincerely,

John Baker, Co-Chair Mike O’Leary, Co-Chair

C:

Clifton Community Council Board Metro Councilwoman [REDACTED]

[REDACTED] Water Enforcement Branch, USEPA Region IV

[REDACTED] Division of Enforcement, KY DEP U.S. Dept. of Justice, [REDACTED]

[REDACTED]

[REDACTED] Metro Director of Code and Reg. Enforcement

[REDACTED] Metro Director of Public Works and Assets

[REDACTED] Chair, Metro Landmarks Commission

[REDACTED] and [REDACTED] Irish Hill Neighborhood Association

[REDACTED] and [REDACTED] Clifton Heights Neighborhood Assoc.

Attachment A: Grassroots Rain Barrel ("GRaB") Project

1. The Clifton Community Council and Irish Hill Neighborhood Association create a joint-neighborhood task force.
2. The task force works with the Jefferson County Property Valuation Administrator and his staff to secure the addresses and square foot measurements of all structures within the two neighborhoods.
3. The task force creates a data-base with every address for each of our two neighborhoods, or the PVA allows us to access their data-base.
4. Our task force would be made up of neighborhood volunteers and save MSD the cost of hiring a consultant to pull this information together.
5. For those who want to participate in the pilot project, MSD offers to pay for rain barrels and the cost of installation for all Clifton and Irish Hill properties with structures.
6. We encourage MSD to use the non-profit organization Youth Build Louisville to make the rain barrels and install them.
7. Rain gauges are placed throughout the two neighborhoods to measure rainfall. MSD (or task force) would have a list of properties in the pilot project with the square footage of each structure. After each rain MSD (or task force, with MSD technical assistance) would calculate how much rainwater run-off went into the rain barrels instead of the sewer system.
8. MSD and the task force would have a long-term, urban neighborhood- based test area measuring the success of rain barrels in preventing rainwater from draining into the area CSOs.
9. Clifton and Irish Hill would get rain barrels installed on their structures at no cost to the property owner and be active participants in sustainability practices.
10. According to the MSD website, there are thirteen MSD capital projects within the Clifton and Irish Hill neighborhoods. The projects do not have a time frame but the estimated capital cost for the projects add up to \$33,196,000.00. (Thirty-three million, one hundred, ninety-six thousand dollars.)
11. The Clifton and Irish Hill pilot project could show the cost-benefit of using rain barrels with actual rain gauge measurements within these urban neighborhoods.
12. Clifton is on the north side of Beargrass Creek with Irish Hill on the south side; both neighborhoods' watershed flow into the creek. This project could demonstrate how urban, grassroots neighborhood associations could make a measurable difference in revitalizing and protecting Beargrass Creek.

Appendix B: (Re-examination of retention basin site):

As the current proposed siting of the retention basin ("behind Jim Porter's") was selected by MSD with the information available prior to September, 2011, we

suggest and request that MSD re-examine other optional sites. In particular the "radio tower field" should be investigated with more detail for the following reasons:

- The Jim Porter site would have to be cleared of trees and a wetland habitat would have to be modified topographically before construction begins. The radio tower field is already cleared of trees. The current proposal would result in a major disruption to the existing woodland and wetland areas. The current proposal is owned by the Kentucky Department of Transportation and leased to Louisville Metro Parks, and a portion of the area (along Beargrass Creek) is presently in use through its bicycle/walking path as a recreational area. Proposed mitigation for the destruction of the wetlands has not been established but should therefore be established prior to selection of the site. Construction at the radio tower site would have much less effect on the continued use of the existing path and the riparian (bank) areas of Beargrass Creek.
- The radio tower field was "quickly ruled out" as an alternative in 2010 "due to the significant cost associated with acquiring private land and relocating the radio tower as well as the fact that the entire site lies within the existing 100-year floodplain." While the original site may have been completely above the 100-year flood plain, the current (much larger) proposed basin would be significantly (60-80%?) within the 100-year flood plain. If the radio tower field is ruled out for this reason, then the current proposed site should also be ruled out. The cost of the field is at this point speculative and should not be considered as a deterrent for use until a professional appraisal has been made. A low cost (because of public lands) is not in itself a positive in site selection when there are negative factors with that site.

- Construction could have access for the radio tower field off Lexington Rd. near the old 'Liebert' house (demolished). This would move heavy-equipment access away from an area on Lexington Rd. that is significantly populated by commercial entities that would be much burdened by the presence of such access for the two-year construction period. Although access for equipment ingress/egress may be "sufficient" this does not make it the best option: insufficient for access, or safety concerns, should not be the limits when choosing access for equipment.

Appendix C: Aggressive pursuit of green/gray/natural retention

Clifton findings:

-Clifton has approx. 1125 structures (This figure comes from Landmarks data for Clifton. Zoning info used by MSD reveals 709 residential parcels, and 185 commercial parcels.) that could be outfitted with rain barrels. All of these structures should be incentivized to capture water from impervious roof areas.

-Each residence in Clifton averages four downspouts per home (not including a garage which averages two/garage).

-The MSD Payne St. Pilot Project currently in process contains 100 residential subject properties. There are +100 downspouts connected to the MSD sewer system in the Payne St. Pilot Project Clifton.

Incentive ideas: (Appendix C to motion language below.)

1) Offer residents \$ TBD per downspout plus a rain barrel including installation, plus a 50-foot soaker hose. The offer would have the condition that participating property owners would have to agree to attach rain barrels to **all** downspouts at ground level of the structure. This offer would include a MSD disconnection of each downspout from the sewer system where applicable. After MSD has verified that the rain barrel installation is complete and functioning, the homeowner would be eligible for a TBD% discount on the sewer fee portion of their Louisville Water Co. monthly bill. This incentive program would be retroactively made available to

homeowners in both the Payne St. Pilot Project and other homeowners throughout Clifton who have previously chosen to disconnect and/or use rain barrels.

Homeowners in this group would be eligible for soaker hose per rain barrel. This program might be further incentivized toward immediate action by scheduling amount-decreasing steps of the incentive amounts.

2) We suggest a residential incentive program aimed toward the installation of rain gardens, and other options for recovering runoff from impervious surfaces at a residence. The incentive program would look and act like the business incentive program currently in use by MSD (see details of the business incentive program in #3 below.)

3) These are the parameters of the MSD business incentive program: A short-term construction cost recovery stipend of up to \$1.50 /square foot (of impervious area drained) when a property owner drains an impervious surface area into a rain garden, installs pervious pavement or a infiltration drain, or does water harvesting. A construction cost recovery stipend of \$2.25-\$3.75/square foot is offered when the option of a vegetative roof is chosen. Additionally long-term storm water drainage credits can be earned (up to a total of 50%) and applied towards the drainage portion of the owners Louisville Water Co. monthly bill.

There is no suggestion for change to this business incentive program, but a suggestion for a change in publicizing--MSD contacts each business for a MSD-representative-visit to the owner to outline the program and establish a sign-on date. This program might be further incentivized toward immediate action by scheduling amount-decreasing steps of the incentive amounts.

4) We suggest that MSD evaluate and designate the areas in Clifton where there exist sources of storm runoff from impervious parking areas, and armed with this information, use their own environmental and mechanical engineering staff in partnership with Metro Landmarks and a landscape designer to explore the acquisition and development of land for the creation of a natural retention basin in Clifton.