

MSD's Integrated Overflow Abatement Plan
Compilation of Wet Weather Team Feedback on the Emergent Vision (as of June 13, 2008)

In May 2008 a survey was distributed to Wet Weather Team stakeholders to collect initial feedback about the emergent vision for MSD's Integrated Overflow Abatement Plan (IOAP). The survey was based on a presentation from the April 3, 2008 WWT meeting entitled "Emergent Vision for MSD's Consent Decree Response." As of June 13, 2008, nearly all WWT stakeholders had submitted responses to the survey. This document is a compilation of those responses.

1. Expected Water Quality Benefits of MSD's Integrated Overflow Abatement Plan

Description: The draft vision states that MSD's IOAP will result in significant water quality improvements. The expected water quality benefits include: (a) significant reductions in the peak levels of bacteria in Beargrass Creek and (b) a reduction in the duration of wet weather impairment of local waterways (i.e., the number of days that bacteria levels exceed water quality standards during periods of wet weather). The water quality improvements will be greater in Beargrass Creek than in the Ohio River.

Responses

Very Comfortable: 6

Comfortable: 10

Uncomfortable: 1

Very uncomfortable: 0

Unsure: 0

Comments

Comment #1: When one understands that MSD's sewer overflows are not the only source of bacteria in streams, these benefits are then recognized as much greater than they may at first seem.

Comment #2: For sure, the water quality will improve, but according to one of our presentations, CSO and SSO are only 15 % of the problem in the Ohio, and there was not any data displayed about the amount of contribution of CSOs to Beargrass Creek.

Comment #3: The second sentence "significantly" qualifies the first. I'd feel better if the second sentence was the lead sentence, the first omitted, the third included, and a sentence added, perhaps from a following section, that states that water quality improvements under ambient conditions are expected from the coordination of the IOAP with water quality initiatives such as MS4 that are outside the scope of the IOAP.

2. MSD's IOAP as a Catalyst of Community Water Quality Efforts

Description: The draft vision states that sewer overflow control is essential to meeting water quality standards, but overflow control alone is not enough to meet water quality standards. In light of this challenge, MSD will use the IOAP as a catalyst of broader water quality improvement efforts in the community, and the IOAP will serve as a cornerstone of MSD's participation in those water quality improvement efforts. In particular, the IOAP will be complementary to other wet weather and water quality programs managed by MSD and/or by other community partners. These complementary efforts include the Mayor's Green City Initiative, the Partnership for a Green City, Metro Louisville's Municipal

Separate Storm Sewer System (MS4) discharge permit, and other initiatives of Jefferson County Public Schools, private developers, and other entities.

Responses

Very Comfortable: 4

Comfortable: 11

Uncomfortable: 1

Very uncomfortable: 0

Unsure: 1

Comments

Comment #1: This is important. The public and powers that be need to see that other actions can and should be taken beyond this effort's scope to address WQ issues that will remain even with full IOAP implementation.

Comment #2: I am dubious about the concentration or effectiveness of the other programs named. I do think private developers will do a better job in the future with this emphasis on water quality

Comment #3: What, if any, is the commitment/acknowledgement from these other initiatives that their roles in improving water quality should be actively linked with the ConCENT Plan for the greatest combined benefit?

Comment #4: Referencing slide 8, it seems that we are exceeding the the accepted definitions of x-yr storms in the past x years. Are the definitions of x-yr storms changing in the near future?

Comment #5: I think that if you are going to hang the hat on community's work, MSD should - make sure that the named agencies know that they are being so named, that MSD keeps track of those agencies activities and contributions towards water quality. To me the slide implies that MSD realizes how important source control, or reduction of non point pollution is, but with PROJECT WIN, they are going to put their funds into rebuilding the sewer system. If MSD is going to fund some of the work like Cincinnati is with an MOU that describes in detail the relationship, then it should be highlighted even more.

Comment #6: I would like to see the '8664' proposal listed as a possibility or at least a nod to not building 2 bridges. Is that possible? If you won't give me this wording, at least add SOMEWHERE "but are not limited to" or "these are some."

Comment #7: This is close but stronger words than "catalyst" and "complementary" should be used. The IOAP could be used to leverage other resources. Comprehensive watershed planning could coordinate the IOAP with various initiatives in the community that also have the potential to improve WQ. Because MSD is not solely responsible for these other initiatives, coordination and community goal-setting will be essential.

3. "Affordability" of IOAP in the Context of Community Water Quality Efforts

Description: Since overflow control alone is not sufficient to meet water quality standards (as noted in item #2 above), the draft vision states that the "affordability" of the IOAP must be viewed in the context of other, future water quality initiatives and other service needs of the community. That is, the

community's ability to pay for the IOAP must also consider the community's ability to pay for other community water quality improvement efforts and other MSD services.

Responses

Very Comfortable: 3

Comfortable: 10

Uncomfortable: 3

Very uncomfortable: 2

Unsure: 0

Note: One stakeholder marked both "uncomfortable" and "very uncomfortable."

Comments

Comment #1: The consent decree requires that the IOAP go forward. Certain WQ initiatives are important, but are not mandated by the consent decree. Therefore, though the big picture affordability cannot be ignored when pushing the IOAP forward, it necessarily must take a back seat.

Comment #2: I am uncomfortable for I fear that nearly all of MSD's capital dollars will be diverted to the IOAP with very little investment in growing the sanitary sewer system to accommodate the requirements for economic development in the next 20 years in Louisville. My understanding is a progressive community determined to grow responsibly must make certain no more than 50% of their capital dollars are devoted to the Consent Decree requirements while growth of the tax base for the community via sewer expansion should also receive approximately 50% of the capital dollars.

Comment #3: I am unclear as to where or how these pieces come together?

Comment #4: I missed this presentation at the last meeting. Define 'follow on' and 'other community water quality water quality inprovement efforts and other MSD services'.

Comment #5: I personally think that this is a cop out. We can afford to build a 1/2 billion dollar arena, a 4 billion dollar bridge project. The bottom line is that we can pay more for protection of our streams and overall water quality. We still are way under the EPA affordability index. So I guess the big question is, who determines affordability?

Comment #6: Our discussions of affordability were not in the context of water quality. Our discussions were about how rates would compare to other cities and the EPA affordability calculation. If there were other significant initiatives actually planned and resources (counted in 100s of millions of dollars over 20 years, like the IOAP) committed to improving water quality in coordination with the IOAP, I'd be comfortable with this, but there aren't and it's wrong to imply that there are.

4. Federal Enforceability

Description: The draft vision notes that the IOAP—as MSD's wet weather consent decree response—will be a federally enforceable action plan for sewer overflow abatement. By design, the IOAP will limit the scope of MSD's federally enforceable consent decree response to commitments that directly relate to MSD programs and activities to address combined sewer overflow (CSO) and sanitary sewer overflow (SSO) issues. Other community water quality programs, which may be partly or completely out of MSD's control, provide synergistic benefits with the IOAP, but they do not fall under the same level of federal enforcement. These programs may, however, have different mechanisms for ensuring

accountability (e.g., the State of Kentucky oversees the MS4 stormwater permit that MSD and several other agencies hold).

Responses

Very Comfortable: 6

Comfortable: 9

Uncomfortable: 3

Very uncomfortable: 0

Unsure: 0

Note: One stakeholder marked both “comfortable” and “uncomfortable.”

Comments

Comment #1: Although I am comfortable with MSD's response, I still feel that the community as a whole, including the City of Louisville and its citizens and patrons, have to be held accountable and responsible for their inputs to the water quality degradation. As MSD's actions and past decisions are part of the problem, so are the cumulative actions and decisions that have been made by many others in the watershed. It may not be federally enforceable, but a "good faith effort" needs to be put forth by the City, as well as its citizens, to compliment the contribution being led by MSD. I think there may be an implied sense by others that the federally enforceable action of MSD will correct the existing water quality problem in Beargrass Creek.

Comment #2: Comfortable as long as MSD adds a statement of intent to be actively involved as a leader, facilitator or clearinghouse for group participation in problem solution.

Comment #3: I still believe that if MSD adopts source control as a main way of prevention, they should be, we should be held to it. A good example could be, if an organization determines that they would like to take a reduction in their drainage fees, to implement some source control deals, they should be held accountable. If it totally separate, why put it this slide in there. It states that by design, the IOAP will limit the scope. Whose design, MSD? The Wet Weather Team? Or EPA's. I also thought that was the scope of the consent decree. So why don't we just say that. The consent decree states that only SSO and CSO work can be done.

Comment #4: I regard these as weasel words for the EPA, not the community, and balanced with the weakness of the previous paragraphs, they pretty much cancel out everything that's been said. This is a caveat that MSD needs, and I accept it, but it's certainly not "visionary." Bury it somewhere, or change this to say that the IOAP outlines only those programs that respond directly to the Consent Decree; although MSD anticipates coordination of the IOAP with other WQ initiatives by the community, MSD cannot commit them in the IOAP.

5. CSO Regulatory Strategy

Description: The draft vision notes that CSOs are permitted discharges in wet weather, as long as they are managed to avoid degradation of water quality in the receiving streams. (SSOs are unauthorized discharges and must be eliminated, see item #6 below.) EPA's CSO Control Policy¹ sets specific abatement targets for CSOs. To be permitted, wet-weather CSOs must be controlled so that either water

¹ EPA's Combined Sewer Overflow Control Policy is available at <http://cfpub1.epa.gov/npdes/cso/cpolicy.cfm>.

quality standards are achieved or the permit-holder can show that the CSO discharges do not cause or contribute to exceedances of water quality standards. The draft vision states that based on EPA's CSO Control Policy, MSD's strategy for controlling wet weather CSO discharges may require a temporary variance or suspension of water quality standards during wet weather. As stated in the EPA CSO Control Policy, variances are reviewable generally every three years.

Responses

Very Comfortable: 4

Comfortable: 10

Uncomfortable: 3

Very uncomfortable: 0

Unsure: 0

Comments

Comment #1: I think there has to be a limit here. A temporary variance during wet weather forever is too long. A temporary variance while a remedial plan is being implemented is o.k. Again, any future contributions of stormwater to existing problem CSO's should be disallowed. Efforts should be towards removing potential problems CSO's from the system, on a planned schedule, or as opportunities allow, the removal or reduction .of stormwater from the CSO as opportunities come up.

Comment #2: If we adopt a 2-year storm as a minimum level of protection, have we taken into consideration potential increases in storm frequency and severity due to climate change?

Comment #3: In essence, we are going to improve the situation, CSO will kick on less frequently than now, but during rain events, or sewer malfunctions, CSO's will still be a factor in our streams. It is just too expensive to get rid of all of them 100% of the time.

6. Design Storm for SSOs

Description: The draft vision proposes that the values evaluation framework will be used to determine the appropriate level of control of SSOs in MSD's Integrated Overflow Abatement Plan, while the minimum level of protection would be a two-year storm (i.e., a storm that occurs once every two years on average). This means that solutions to address an individual SSO would be designed to protect against larger storms (e.g., a five-year storm instead of a two-year storm) if that would yield a higher benefit-cost ratio in the analysis of project alternatives. As a point of reference, Atlanta, Cincinnati, and Knoxville all use a two-year design storm as the minimum protection level for SSOs.

Responses

Very Comfortable: 5

Comfortable: 10

Uncomfortable: 2

Very uncomfortable: 0

Unsure: 0

Comments

Comment #1: Obviously, careful explanation of this component will be required.

Comment #2: If a 2-year storm is acceptable in the other major cities cited above, i.e. Atlanta, Cincinnati, etc., then control for a two-year storm should be the design requirement, not a five-year storm which likely will not be affordable if frequently done.

Comment #3: Is this really a consideration for a rainfall frequency and not a storm event that has the probability of occurring once every two years?

Comment #4: It is my understanding that the definition of an 'x-yr' storm is not a 'storm that occurs every x-years on average'. Please define for the group.

Comment #5: In # 5, it states that SSO's must be eliminated. I realize that you have said that eliminate does not mean eliminate. I think we should use words that mean what they mean. Eliminate means none. How often over the past 5 years, have we had a 2 year storm. With climate change, supposedly they are going to become more frequent. I think we should give folks the facts.

7. Role of Source Control and Green Infrastructure in the IOAP

Description: The draft vision includes the guiding principle that MSD's IOAP will be developed based on front-end consideration of source control and green infrastructure. This means that more traditional "gray" infrastructure in the IOAP will be sized after considering both (1) the anticipated flow-reduction benefits of programmatic and site-specific green infrastructure solutions and (2) the anticipated effectiveness of other source control approaches, including reduction of private sources of infiltration and inflow (I&I). [Note: The CSO understandings document covers aspects of this point that relate to CSO control and also further describes the evaluation process for green and gray solutions. The SSO understandings document described the analysis the technical team is conducting on private-side I&I reduction approaches.]

Responses

Very Comfortable: 7

Comfortable: 9

Uncomfortable: 0

Very uncomfortable: 0

Unsure: 1

Comments

Comment #1: I believe that the WWT has been virtually unanimous in its support for this approach.

Comment #2: Some of the non-gray "solutions" are to be determined and we must be sure improvements are made which will work and meet the objectives. While "green is good" it has not been widely accepted yet and the results are totally unknown locally at this time.

Comment #3: Would like to be kept abreast of results of studies regarding the efficacy of I&I reductions.

Comment #4: I am not sure why it is ok to work on private-side I and I for SSO's, but not for CSO's?

8. Adaptive Management and Performance Monitoring

Description: The draft vision states that MSD's IOAP will use an adaptive management implementation approach based on monitoring and evaluation efforts. MSD's post-construction compliance monitoring and evaluation plan for the IOAP will include: (a) water quality monitoring, (b) sewer flow monitoring, (c) overflow events analysis, (d) gray and green infrastructure project performance monitoring, and (e) measurement of the effectiveness of source control and behavior-change efforts. MSD will adapt its CSO management and SSO elimination approaches based on the monitoring and evaluation results; this may include recalibrating models, "right-sizing" gray infrastructure solutions, and adjusting the types and characteristics of projects planned for later phases of implementation.

Responses

Very Comfortable: 6

Comfortable: 10

Uncomfortable: 1

Very uncomfortable: 0

Unsure: 0

Comments

Comment #1: We are all paying for performance. The public deserves proof of this program's performance.

Comment #2: Right sizing of gray solutions should include a reevaluation of green solutions.

Comment #3: I would not use the word elimination - it is still management

9. Public Education

Description: The draft vision states that education is critical to the success of the IOAP. The IOAP education plan will be designed to accomplish three objectives: (1) generate a sense of personal ownership and responsibility required for the sustainability of critical voluntary programs in the IOAP, (2) promote public acceptance and support for the financial investments required to achieve consent decree and Clean Water Act compliance, and (3) encourage support for other agency programs or legislation that supports overflow abatement efforts. Education is particularly important to promote and sustain participation in green infrastructure programs (e.g., rain gardens and rain barrels) and in efforts to control private sources of infiltration and inflow (I&I) into the sewer system.

Responses

Very Comfortable: 8

Comfortable: 8

Uncomfortable: 1

Very uncomfortable: 0

Unsure: 0

Comments

Comment #1: The steps outlined are very desirable and describe what we need to accomplish. I am uncertain about the community's acceptance of personal steps to be taken in the course of changing

behavior, etc. As a case in point, in many new neighborhoods, recycling is done by a very small percentage of the residents, maybe less than 5%.

Comment #2: This needs to be a particularly strong part of the IOAP but also one that engages other parts of the community rather than MSD. i.e. Much of what might be allowed through the community's Planning and Zoning processes may not be contradictory to the existing community's long range plan but may not work in concert to the objectives needed to implement the IOAP.

10. Funding Plan Principles Regarding Rates and Fees

Description: The draft vision includes the principle that rates and fees for the IOAP must pay MSD's operating costs and debt service, and must adequately maintain MSD's current bond rating. The draft vision further includes the principle that MSD's rates and fees must allow for continued economic development in the community. In particular, a strong local economy will be important to sustain the affordability of the IOAP. These principles for the funding plan will affect the amount of money MSD may borrow at any one time and the level of increases in rates and fees needed to fund capital and operating expenses for IOAP implementation.

Responses

Very Comfortable: 6

Comfortable: 11

Uncomfortable: 1

Very uncomfortable: 0

Unsure: 0

Note: One stakeholder marked both "comfortable" and "uncomfortable."

Comments

Comment #1: Obviously, the tougher economic times we have again entered will make this a much tougher sell than it would have been only a year ago.

Comment #2: It is refreshing to see future economic development considerations are included here in along with the requirement for funds to meet the Consent Decree capital requirements.

Comment #3: You say MSD's current bond rating, I think it should be the community's bond rating. Our community is borrowing so much money, and the MSD stuff is figured in the middle of it. I also think that MSD rates and fees are low. I have not seen any evidence that increasing the fees more would negatively impact economic development of our community. Most people are never willing to pay more taxes. I happen to believe that having clean water in our community will strengthen our economy. I also have issues with borrowing money.

11. IOAP Solutions Consider Future Development

Description: The draft vision proposes that solutions in the IOAP will consider future development based on the community's long-term land-use plan, Cornerstone 2020.² IOAP solutions will be designed to accommodate the anticipated impacts of population growth and land-use development in that the solutions will consider the effects of growth on connections to existing infrastructure that is upstream from existing overflow points. The IOAP is not, however, intended to provide capacity for all future growth predicted by Cornerstone 2020. Cases where the growth outlined in Cornerstone 2020 would logically be provided by new infrastructure, and not hydraulically dependent on or connected to the IOAP solution, are not considered part of the projects in the IOAP. In summary, the solutions in the IOAP will be designed and sized to account for the impacts of anticipated growth on existing infrastructure, but the IOAP itself is not intended to build the capacity needed for growth.

Responses

Very Comfortable: 6

Comfortable: 8

Uncomfortable: 1

Very uncomfortable: 1

Unsure: 1

Comments

Comment #1: The IOAP of course must be planned to meet the requirements of the Consent Decree but MSD must have a parallel effort underway to fund the requirements to support economic development efforts for the entire county. Of course private development will be paying its portion for progress with capacity charge payments, building of all new sewers other than truck line expansions, etc.

Comment #2: I would like more discussion/explanation of this point. Who pays for new capacity? Is it guaranteed to be at least as compliant as the IOAP?

12. Wet Weather Flow Reduction from Future Development

Description: The draft vision notes that continued development in the community will require MSD to implement measures to reduce wet-weather flows. As currently conceived, MSD proposes a three-to-one offset of wet-weather flows from new development. This means that flows entering MSD's sanitary sewer systems will be reduced at a ratio of three gallons for every new gallon added. MSD would track flow reduction "credits" to ensure that the flow reductions occur in the appropriate geographic locations to offset the new flows. (This three-to-one offset approach is based on the City of Knoxville's Capacity Assurance Program.) The MSD Board is currently considering the fee structure for the offset plan.

Responses

Very Comfortable: 4

Comfortable: 11

Uncomfortable: 1

Very uncomfortable: 0

Unsure: 2

² For more information about the Cornerstone 2020 plan, see <http://www.louisvilleky.gov/PlanningDesign/Cornerstone+2020.htm>.

Note: One stakeholder marked both “comfortable” and “uncomfortable.”

Comments

Comment #1: Needs to be clearly explained to the development community (and their critics).

Comment #2: I continue to struggle with understanding exactly how this will work...

Comment #3: I think in addition to the 1 to 3 offset, there needs to be a clarifying statement that no development will be approved that exceeds the wet weather capacity of the local sewers or the waste water plant that it goes to. One could define the wet weather capacity as to be able to handle a three year storm event. .

Comment #4: I'd like to know that connections won't aggravate existing SSOs. This is likely addressed by the SSO enforcement piece, but it would be a good reassurance here.

13. Other Comments and Questions

Comment #1: How will this information be used and communicated to a broader audience?

Comment #2: It is critical for MSD to plan for the progress of sanitary sewers in Louisville to support the growth of our economic base while working to meet all of the requirements of the Consent Decree over the next 15-20 years. Otherwise Louisville will become a “has been city” like Dayton instead of a “shining city on the hill” like Nashville or Raleigh.

Comment #3: I know you put in there that we reached consensus several times throughout the document, I did agree to many things, but it does not mean that I am comfortable with everything. I am comfortable enough that my voice has been heard, but I have not been won over on all items. I will not lobby to defeat the plan, and I will actively support it. But, I am not comfortable with everything in it, as you can tell from my comments.

On slide 1 - you put alleged violations - Is MSD saying that they did not violate the Clean Water act? I thought this was resolved. - I am not sure what it says, if we are spending 800 million on an alleged violation. I thought it was true that we have CSO's and they empty into Beargrass Creek.

On slide 1, I would say, reduce discharges, instead of eliminate unauthorized.

On slide 4 - I am not sure why Harrods creek does not go all the way to the county line - the red outline stops 1/2 there - that is on the picture- metro streams have some impairments. (I am not sure if any stream is totally clean. - at least the health department says all streams have impairments, so maybe the sub title is wrong it should read All Louisville Metro streams are impaired.

On Slide 12 - there should be some way to say no swimming in Jefferson County creeks. Can we put a big X through the picture?

ON slide 15, you have a book or a poster called Project Win Presents kid Win - This is the first time, I have seen that the education part was going to include writing a book. I have not seen that in any of the descriptions nor minutes of the education. I think the education program has to be much better defined.

If such a book is going to be developed, then feature it, I also think the green "martin" or turtle, is not the best logo.

On slide 17 - I think the picture of Steve Wilson's and Laura Lee Browns big building looks like a NASA launch site. If that is what we call economic vitality, I am in the wrong place. This is a very expensive project that I believe draws too much money towards it, we basically are giving our wealthiest people a tax break. The bottom line is we need a better picture to represent economic vitality. I would not use a house in Polo fields, or a picture of the new arena, or this one. Maybe something to do with renovation of a brown field? This is a hard one, how to graphically represent economic vitality.

on Page 18 - while the photo of the young child by himself by the creek is beautiful, it would be better to have a picture of a mom and kid, or dad, or family by a creek. Just as you don't want to have photos of people without life jackets, you don't want to have kids by themselves by a creek.