

Project WIN

EPA/KDEP Review of IOAP



Agenda

- Describe EPA/KDEP discussions re: IOAP
- Significant questions or requests for additional information
 - Volume 1 Issues
 - Continuing Public Involvement
 - Post-Construction Compliance Monitoring
 - Volume 2 Issues
 - Presumption vs. Demonstration
 - Ecological Reach Characterization
 - WQ modeling calibration
 - Starting point for technology selections
 - Green Infrastructure
 - Volume 3 Issues
 - Hydraulic modeling assumptions
 - Boundary conditions and starting point for technology selections
 - Validate assumptions on B/C trending
- Path Forward



Regulatory Review Included Open Communications

- Bi-weekly conference calls
- Presentation of IOAP at 1-day meeting in Louisville prior to detailed regulatory review
- Discussion of questions and clarifications at 1-day meeting in Atlanta
- E-mails and ad hoc phone calls
- Resubmittal will address questions and provide additional information to facilitate final regulatory review



EPA/KDEP Overview Feedback

Very Complementary

- Green Infrastructure approach “one of the best, if not THE best ever submitted”
- Stakeholder involvement process a model for others to follow
- Values-based risk management determination of project benefits “the right way to do it”
- Site specific levels of protection recommended as a model for other communities
- EPA Region 4 referring other communities to MSD for guidance in overflow abatement planning
- Region 4 reviewer noted - “I am placing a great deal of faith and credibility in the results of your public involvement program”
- Our investments of time and resources are paying off



Volume 1 Questions

- How will MSD continue public outreach as IOAP implementation evolves?
 - Discussion topic for later tonight
- Provide more detail on Post Construction Compliance Monitoring Program
 - Draft guidance document provided
 - Need link to current data collection practices described in Vol. 2
 - How are we using data
 - Want specificity on sample locations, parameters analyzed, and duration of monitoring each location

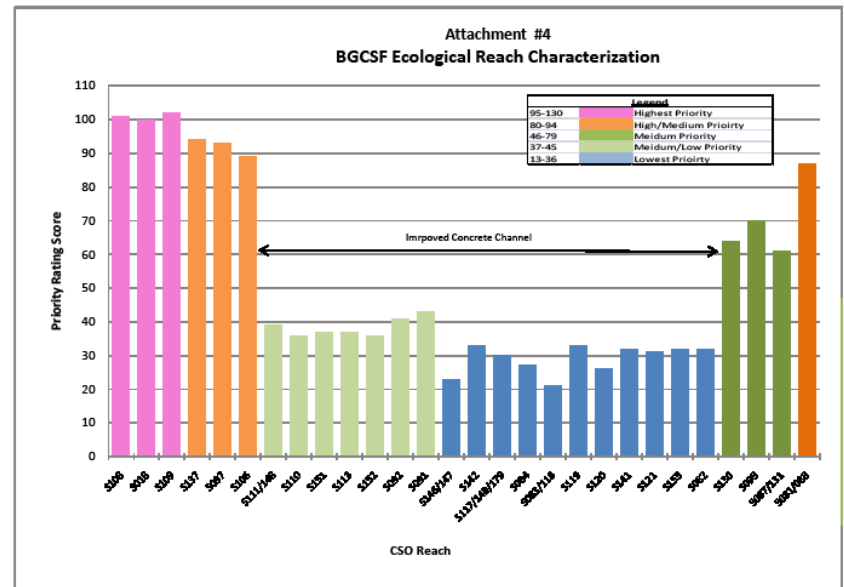


Volume 2 CSO Long-Term Control Plan

Questions, Requests For Information

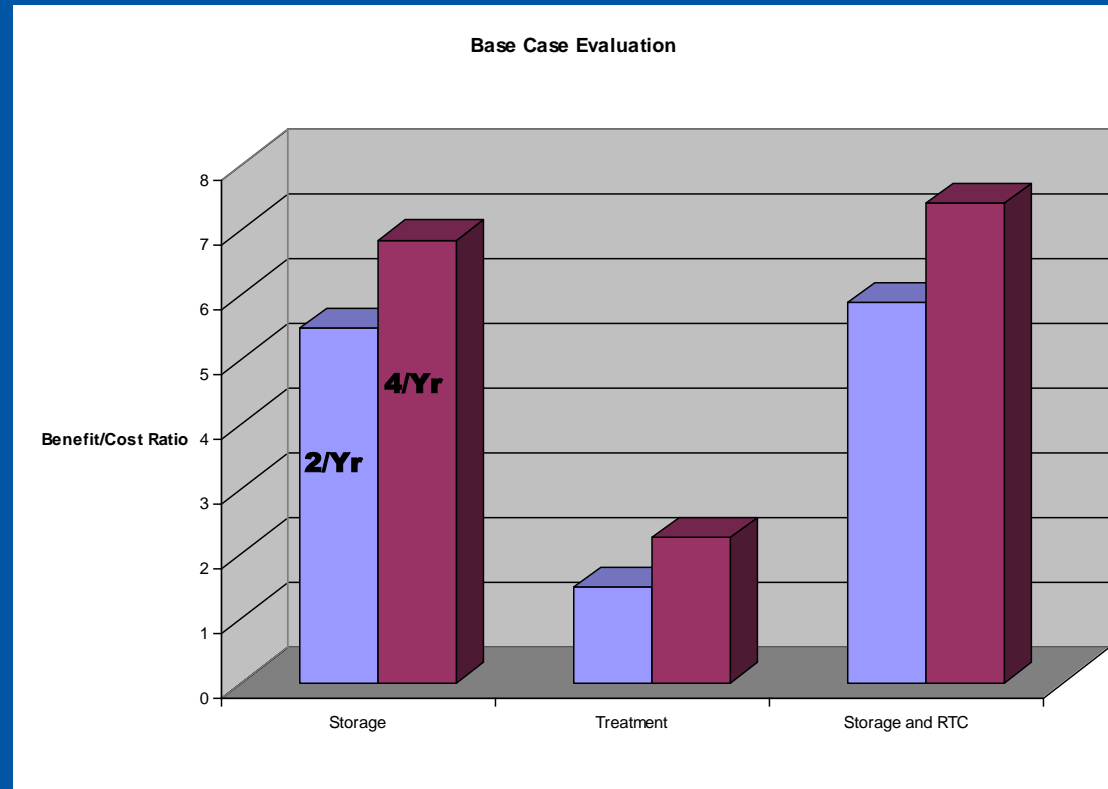
- EPA suggests demonstration approach most appropriate
 - We did the WQ model, and the data supports this approach
 - Capture statistics helpful, but not the basis for regulatory acceptance
- Ecological Reach Characterization
 - Presentation of data did not clearly show why reach scores were averaged, not totaled
 - Low-flow calibration not as accurate as storm conditions

Final CSO Long-Term Control Plan



Technology Selection Based on 4 Overflows per Year Questioned

- If the base case was 2 OF/Yr would the technology selection have been different?
- EPA selected 3 sites to test assumption that starting point does not matter



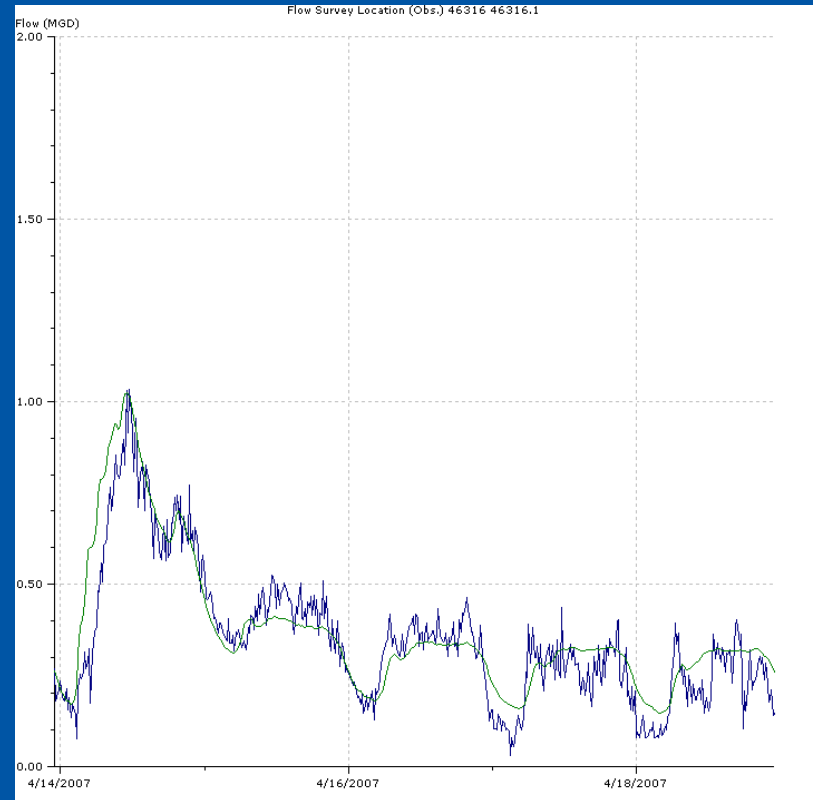
Green Infrastructure Requests for Specific Programs and Schedule Commitments

- Review of local ordinances and design standards suggested to remove barriers to green infrastructure implementation
 - Requirements for public infrastructure construction
 - Also suggest private-side green infrastructure can be required by ordinance, not just encouraged by practice
 - Low-flow appliance requirements or incentives suggested
- Assign specific schedule dates to implementing each of the green infrastructure programs
 - Incentive structure
 - Cost-sharing
 - Inspection and follow-up
- Clarify difference between stormwater retention and CSO volume reductions



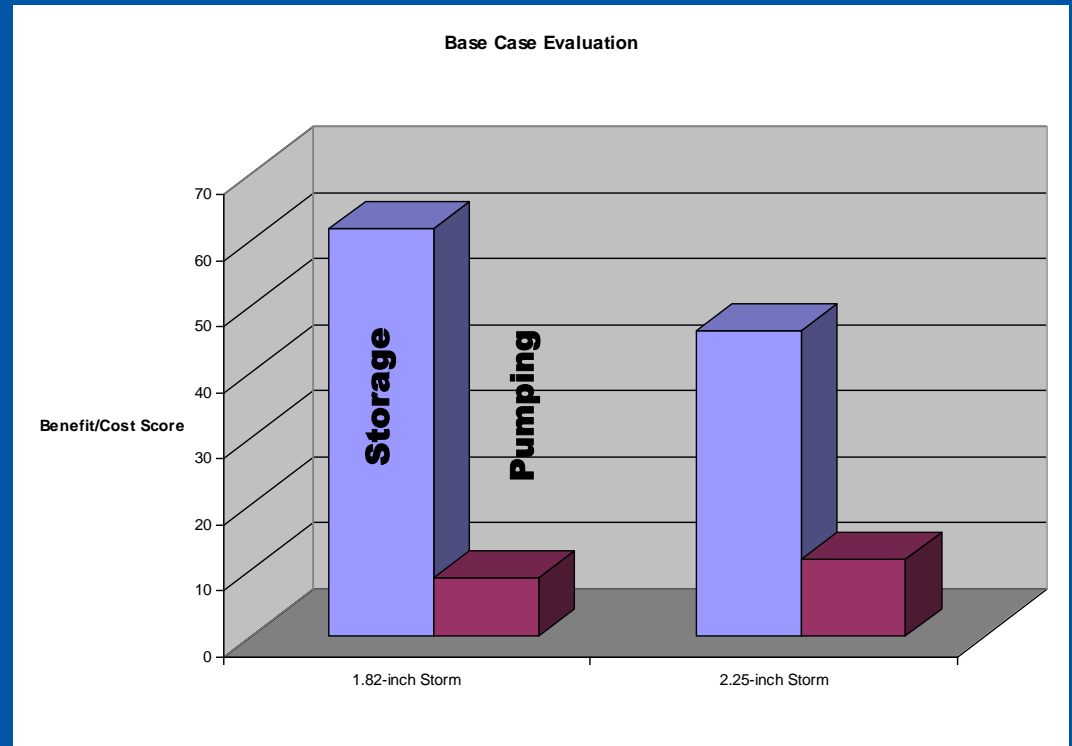
Volume 3 – Sanitary Sewer Discharge Plan Comments and Requests for Information

- Clarify/validate hydraulic modeling assumptions
 - Cloudburst storm
 - Lower boundary for level of protection the 50% probability storm
 - Use of 50%, 20%, and 10% probability storms for analysis
 - Calibration conditions



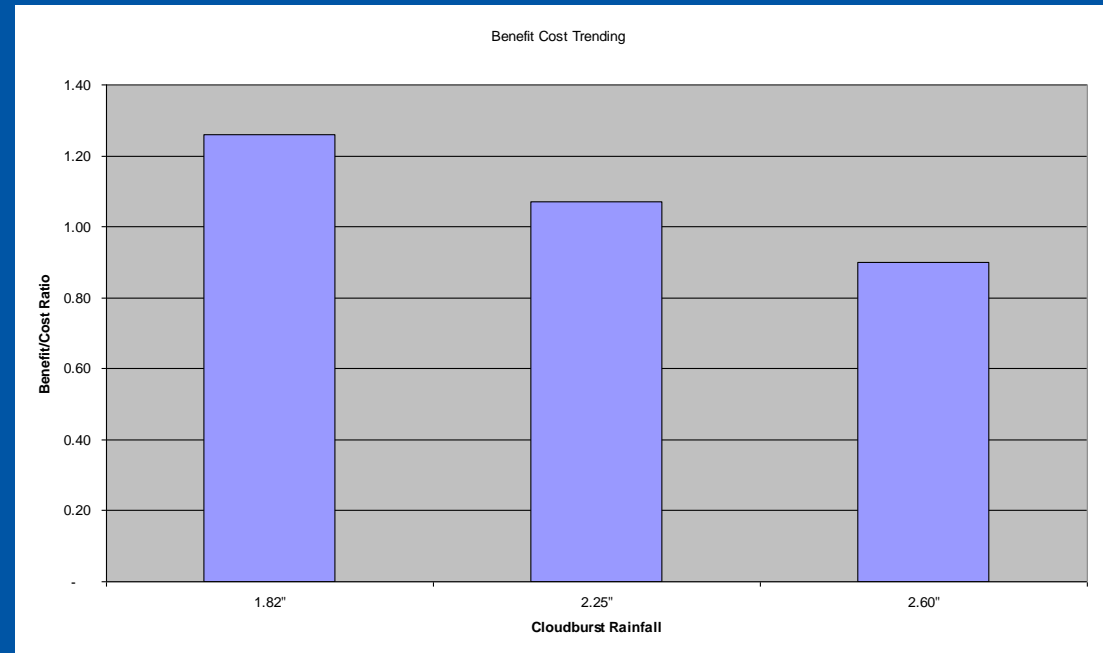
Technology Selection Based on 50% Probability Storm Questioned

- If the base case was 20% probability storm would the technology selection have been different?
- EPA selected 3 sites to test assumption that starting point does not matter



Assumption Questioned Regarding B/C Trends

- Analyze B/C of selected technology at 50% and 20% storms. If 50% storm better than 20% storm, assumption is 10% storm will be lower also
- EPA selected 3 sites to test assumption that B/C trend is consistent going to larger storms



Path Forward

- Submit revised CSO LTCP by May 29, 2009
- Submit revised SSDP by June 12, 2009
- Submit Volume 1 by June 19, 2009
- EPA/KDEP to review revised submittals and prepare formal comments or approval based on revisions
- Big party planned when approval is received.

