



COMBINED SEWER OVERFLOW

Long Term Control Planning

2010 IAWA Annual Meeting

September 30, 2010



SMSD BACKGROUND

- District formed in 1924
- Spring Creek WWTP (50 MGD) operational in 1929
- Sugar Creek WWTP (25 MGD) added in 1973
- Serves approximately 145,000 of Sangamon County's 194,122 residents
- 180 miles of Combined Sewers in the Springfield Area



Completed and On-going Activities

- Site Visits and Documented Field Observations
- Rainfall Data
- Sewer Flow Monitoring
- Sewer Water Sampling
- Receiving Water Sampling
- Collection System Modeling
- Stream Modeling
- Developing / Studying Options



Rain Gauges



Eight electronic rain gauges installed around town.



Flow Monitoring - How



- Flow meters were installed by CMT in 25 Locations in the Spring Creek
- 12 sites are being monitored in the Sugar Creek Area.



Dry Weather Sampling

- Dry weather samples were manually taken during an extended period of dry weather at manholes near each CSO location.
- Weekly dry weather stream samples were taken manually at six locations between the beginning of May through the end of October, 2009.



Wet Weather Sampling



SMSD purchased 13 portable refrigerator samplers. The samplers were programmed to take samples on programmed intervals and to send a notification to field personnel once triggered.



Modeling

- The flow meter data was utilized to develop and calibrate models of the collection system and of Spring Creek.
- The model is being used to further develop design criteria, and to assess the effects and benefits of proposed improvements.
- Similar efforts are underway for Sugar Creek.



Town Branch





Sensitive Area Issue

WHAT IS A SENSITIVE AREA?

- Outstanding National Resource Waters
- National Marine Sanctuaries
- Shellfish beds
- Waters with primary contact recreation, such as bathing beaches
- Water with threatened or endangered species or their habitat
- Public drinking water intakes.



IEPA Draft Permit Designation

IEPA stated that the Town Branch was a Sensitive Area due to its proximity to a park and residential areas. IEPA referred to text in the state standard for fecal coliform limits.





Sensitive Area Consideration

- SMSD Study / Field Observations found evidence of periodic human presence near the ditch, but no evidence to support primary contact recreation or the Sensitive Area Designation.
- IEPA would not offer any further comment due to Quincy IPCB case.
- IPCB ruled against IEPA on the Quincy case. SMSD is currently pursuing further discussions with IEPA on the matter of the Town Branch.



THANK YOU

QUESTIONS?