Breakout 3C: Can Payments For Ecosystem Services Improve Stormwater Management?

Panelists:

- Chad Praul, Environmental Incentives, LLC
- Cy Jones, World Resources Institute
- Kevin Shafer, Milwaukee Metropolitan Sewerage District
- Dr. Nancy Frank, School of Architecture and Urban Planning, UW-Milwaukee
- Moderated by Evan Branosky, World Resources Institute

Abstract:

Radical changes are necessary if the national stormwater program is to improve the quality of the nation's waters, according to a 2008 report by the National Research Council. The Clean Water Act requirement that Municipal Separate Storm Sewer System (MS4) permits "require controls to reduce the discharge of pollutants to the maximum extent practicable…" causes local governments to implement expensive practices that deliver uncertain water quality benefits. A shift from implementing practices to measuring performance might improve the current situation. In particular, a focus on performance could motivate MS4s to seek ecosystem services that 1) improve water quality at a lower cost compared to traditional compliance options, 2) value green infrastructure that provides ancillary benefits (e.g., wildlife habitat, recreation, aesthetic views) over gray infrastructure, and 3) deliver pollutant reductions that can be calculated easily, compared to the unclear accountability of common stormwater management practices. Distinguished panelists from consulting firms, NGOs, local governments, and academic institutions will discuss MS4 performance measurement and ecosystem services.

1. Brief description about what each panelist covered in their respective discussions

- Framing: moving from gray to green infrastructure

- Cy Jones: Chesapeake has aggressive standards and timetable for urban areas, will require retrofitting and large money. Cities don't have money or land; need green.

- Chad Praul: Lake Tahoe has 7 cities with major improvements in 1.5 years of program based on payments for fine particulate control; spatial analysis monitoring helped with effective targeting

- Kevin Shafer: managing combined sewer overflow with watershed planning, led to buffer purchases along Milwaukee River and other green infrastructure – bring it down to individual level

- Nancy Frank: green infrastructure challenges: authority to implement multi-jurisdictional plans leads to multi-stakeholder collaborative (sweet water); outreach to business community – convince them policy changes are ok and can benefit them; can be part of development, but may be risk averse

2. Overarching themes and key takeaways

   - Monitoring and accounting systems, including selection of appropriate model(s) and customized interface and local database to make understandable and accessible to public and decision-makers.
   - The huge cost of stormwater management

3. The most surprising finding or discussion

   - "Flow control" TMDL – focus on managing peak flows with green infrastructure.
   - No mechanism for regulatory "credit" for city of Milwaukee's $5-10 million investment in green infrastructure.
   - Lake Tahoe has 100% infiltration requirement and very little compliance because haven't invested and can't enforce

4. Finding or discussion that had the most audience consensus

   - Some form of stormwater market to fund green infrastructure and offsets or credits or both

5. What didn't get answered

   - Concern about pollutants that are infiltrated instead of discharged; none of the cities are actively dealing with accumulations

6. How this panel outlines (or contributes) to where we might go (as ecosystem services/markets professionals) from here

   - Need to make some choices, design programs that either work in perpetuity or have an accounting / monitoring mechanism that can make periodic (e.g. annual) payments / credits