

Research Workgroup
Wednesday, March 11, 2009
10:30 AM to 11:30 AM

Individuals Present:

Linda Broach (TCEQ); Tom Ivy (Texas Stream Team); Steven Johnston (GBEP); Richard Chapin (City of Houston); Tony Bennett (AECOM); Ruben Martinez (Montgomery County); Min Xiao (AECOM); Michael Bloom (PBS&J); Linda Pechacek (public); Bruce Heiberg (BPA)

H-GAC Staff Present:

Rachel Powers; Erin Anderson

Reporter to BIG:

Michael Bloom

Discussion:

Research Priorities

Linda P. asked to add another topic: consider modeling to predict results of various activities recommended in the I-Plan. This would probably be a wise use of taxpayer money. If the model does not predict adequate results, we would need to step back and examine whether the exercise would be meaningful.

Michael thinks it is a good idea, although the topic might be less related to the research and more related to the monitoring workgroup. Richard asked about structural vs. nonstructural controls. Tony suggested that regrowth is not included in models, although Linda suggested that QUALHIMO might be able to accommodate it and is being reviewed by EPA. Linda B. suggested that models would be hindered by the lack of data and the plethora of assumptions. Tom Ivy suggested that EPA would not accept "reasonable assurances" unless the implementation activities are modeled.

Erin asked that the group discuss priorities. At the same time, she passed a sheet of the research topics so that attendees could indicate on a page their five priorities.

Bruce asked about new products that target bacteria. Richard Chapin provided the example of the "Smart Sponge" (AB Tech) which could filter bacteria out of water by destroying their cell walls. It might be an appropriate use in locations of cosmetic washing (e.g., in front of the Wortham Theater under all the grackles and starlings, or on all stormwater inlets).

One anonymous participant provided his/her favorites:

- BMP effectiveness in a general sense
- Water quality standards and health risk
- UAA
- Persistence and regrowth
- Indicator organisms

Linda P. suggested models could be used to work backwards to figure out whether a 90% reduction of bacteria could be identified.

There was a discussion of health risk in general vs. what indicator organism to monitor and how. Richard suggested that identifying the indicator bacteria: pathogen ratio would be a valuable study. A corollary is asking what *is* the best indicator bacteria. There are many, many questions to be asked—and answered—on these topics.

Linda B. asked about the contribution of collection systems—and how we figure that out. \$1.4 billion was spent in the 90s in the City of Houston to address collection systems. There are also significant efforts to identify and address illicit discharges. Does research exist that correlate inputs to outputs at WWTF to identify I&I.

Linda suggested a literature review might be a priority for research.

Next meeting:

Wednesday, May 13, 2009, 10:00 AM to 11:30 AM, H-GAC offices, Conference Room B
Be prepared to finalize the prioritization of research activities.

Conversation continued...