MEETING MINUTES
WRIA 9 Retrofit Project Management Team

December 8, 2011
EPA Region 10 headquarters

Attendees

- Ed O'Brien, Ecology
- Krista Mendelman, EPA
- Tamie Kellogg, Kellogg Consulting
- Curt Crawford, King County
- Curtis DeGasperi, King County
- Dan Smith, King County
- Dave Funke, King County
- David Batts, King County
- Doug Navetski, King County
- Giles Pettifor, King County
- Jeff Burkey, King County
- Jim Simmonds, King County
- Larry Jones, King County
- Olivia Mary Wright, UW
- Rich Horner, UW
- Chris Knutson, King County
- Elissa Ostergaard, King County

- Krista Mendelman introduced herself as the new project officer for EPA, temporarily replacing Michelle Wilcox in that role.
- Jim introduced a new Science Section staff member that will be working on this team, Chris Knutson. Chris authored the project’s draft of Historic Data Memo.
- Jim reviews project updates
  - Presented to Renton drainage staff who were very supportive of the project and interested in the project results
  - Working on project update meetings with the Muckleshoot Tribe and other local WRIA 9 cities
- Dr. Horner’s update
  - He presented a draft powerpoint of his data analysis report
    - His statistical analysis of the hydrology indicators shows good relationships and statistical connections
    - The statistical analysis of the connection of the dissolved metals to the total metals and total metals to TSS was weaker
      - The dissolved copper data was acceptable
      - The dissolved zinc data was not as strong
  - Ed O’Brien of ECY had questions about the fate of the dissolved metals as they pass through stormwater BMPs. The statistical analysis is based upon observed concentrations of the metals in stormwater. As the affect of the BMPs on the metals varies amongst different...
BMPs. Ed was wondering how we should model or manage these variations in the fate of the metals in the BMPs

- Deadline for comments on Rich’s study is January 3, 2011. Folks were not to provide comments on the percent confidence level to be recommended for the targets, or on the specific target within the range of outcomes to be recommended.

- **Olivia Wright’s Alternative Analyses update**
  - Two different approaches
    - Observed streamflow analysis used to calculate the surface flow volume that needs to be captured by BMPs
      - Presented an equation which calculates baseflow
      - The variability in the equation is the stream flow coefficient constant which she determined how to calculate through a thorough literature search.
        - By analyzing the receding limb of the hydrograph, you fit a straight line to the data of the receding limb, you analyze the slope at different points, which is used as the coefficient constant
        - BMP rain barrel to bio-retention trains will be the BMP to be used for volume analysis
      - Though she hasn’t gotten to this point yet, Olivia may be able to extend the analysis to assess the volume and duration requirements to meet the flow metric targets, or a suite of flow metric targets. Jim suggested that this would be very beneficial to the project.
    - Land use analysis
      - By using observed precipitation and the hydrologic responses of the land use in the basin
      - The Newaukum basin under analysis is 54% impervious and also 15% of land cover are transportation (roads)
      - Comment on the need to define meaning of the words “impervious” vs. “pervious”, etc.
      - Questions of where to count where the BIBI scores are taken? At headwaters? At random spots? Mouth?
      - What % of the storms do we actually model as capturing in one modeled storm
    - Olivia to make a poster for workshop with Larry Jones’s help
    - Olivia to present methods at workshop in Powerpoint presentation

- **Curtis’ SUSTAIN update**
  - SUSTAIN is operating well for our basin scale pilot test
  - Need to decide what suite of BMPs are we going to model?
  - Also need to decide how we are going to be incorporating gray infrastructure into the model
  - Curtis is looking into automating some of the model running by creating a script (like a .dll or .exe) which will help to make running the model easier to run more than 1 basin
- We need to get feedback from the stakeholders at the workshop on the makeup of the BMP suites, the treatment trains
- A potential benefit to the mapping efforts required for the NPDES muni stormwater permit would be feedback from the modelers about which MS4 attributes are needed to effectively model the function of the MS4 of a basin
- Question of how much lead time and prep of materials we need to have to tee-up the BMP treatment train discussion at the workshop?
- Curtis will present the following items at the January workshop
  - We have successfully implemented SUSTAIN in one small catchment, and here are the results
  - Here are the BMPs used, in their order, i.e., the treatment trains, and we want your input on them
  - He will deliver a paper on the BMPs and the treatment trains to the team in the next 2 weeks so we can edit and send to workshop participants by Jan 12.

- Ecology SUSTAIN project update
  - Mindy absent today so Ed had limited information available
    - They will not be using the Snohomish medium density residential basin as the monitoring data showed the water was dirty enough and modeling it wouldn’t be of any benefit
    - They are approaching Federal Way about using a commercial land use basin and its corresponding data instead
    - Ed didn’t know the status of the cost table updating from Herrera, though he had heard they were disappointed with the amount of local cost information received.

- EPA Projects update
  - The Gorst Creek project in Bremerton is on hold due to staffing issues
  - The SPU pipers creek project has not yet made a decision of whether or not to go forward with using SUSTAIN to do the modeling

- HSPF update
  - No major work updates this PMT, minor work being done at present, but on course

- New Data Project update
  - Good data has been collected and the draft report will be out soon for review
  - Seeing the turbidity numbers in the smaller creeks increasing up to 500 NTUs
  - In the bigger creeks only seeing increases during the bigger storms, in fact turbidity numbers begin to fall while still on the rising limb of the hydrograph
  - Comments will be needed by 1/3/11
  - Draft will be emailed around next week

- Historic Data Report update
  - Distributed to PMT yesterday
  - Data showed no major surprises
- One comment so far, show summary graph for all three hydrologic metrics used (not just high pulse count).
- Draft report was emailed out yesterday.
- Comments will be needed by 1/3/11

**Workshop**
- Confirmed for January 26, 2011
- Tamie walked us through the draft agenda
- We need to gather feedback on
  - Targets discussion
  - BMP suite design
- We will have presenters get together for practice runs
- Everybody to show up by 8:00
- Material to be sent out by Jan 12

**Next Steps**
- Next PMT meeting in mid-March, possibly March 15
- Working on contracting and invoicing
- Submit comments on reports by Jan 3, 2012