

Round 4 SAM Study Topic Proposal List

Top Ranked Projects from SWG Survey

MAINTENANCE/MANUAL:

1. What is the minimum maintenance frequency for bioretention required to achieve full benefits of the facilities?
2. What is the range of options to address spills on permeable pavement, and what are the most effective and lower cost methods?
3. Informed by a white paper, do a controlled field study to evaluate maintenance thresholds required in the SWMMWW; include a survey of permittees on thresholds being used.
4. Develop or modify a model to predict catch basin accumulation for predicting maintenance frequencies.
5. Research related to adaptations for the Stormwater Management Manual; e.g., maintenance needs for new GULD/TAPE BMP's, vetting feasibility of new BMP design screening methods (i.e. infiltration testing methods).

6PPD and 6PPD-quinone management and *reducing URMS*

6. Study existing BMPs (gray or green) to verify capture or treatment of 6PPD/q; e.g. solids and dissolved constituents removal.
7. Identify new BMPs that effectively reduce 6PPD/q; e.g. in HPBSM.
8. 7. Fill gaps on physicochemical properties for environmental fate and transport of 6PPD/q
9. Study street sweeping and/or line cleaning to get more information about 6PPD/q removal.

BMP EFFECTIVENESS

10. Create a matrix comparing the effectiveness, costs, constructability, and maintainability of BMPs.
11. Quantify the habitat and other benefits and reduced O&M provided by mature vegetation in stormwater ponds. Are we still getting the pollutant removal? What are the tradeoffs?
12. A study that identifies appropriate BMPs for managing polluted pressure washing runoff and how to use them effectively in the variable situations that you find at different sites to better establish regional compliance consistency for both regulators and contractors.

PERMIT

13. Fill gaps on benefits of retrofitting, restoration of riparian buffer, property acquisition, removal of impervious surfaces, floodplain reconnection or other actions used to address stormwater runoff not otherwise required in S.5.C (from Structural Stormwater Controls, Science Review and Synthesis Project)
14. Improve future Permit annual report questions for quantifying data for regional learning by analyzing Annual Report data, including analysis of narrative questions.

15. Investigate other NPDES permit thresholds to see if they are appropriate for 6PPD/q; also review reporting data from other permits for information pertinent to treating 6PPD/q.
16. Regional stormwater discharge monitoring study (Appendix 9, WWA Permit) to characterize emerging pollutants in stormwater, e.g. 6-PPD/q, PFAS/PFOS, micro- and nano- plastic contamination in stormwater.

SOURCE CONTROL

17. What are the most effective approaches to source control for bacteria? In what situations do E&O, IDDE, and O&M activities most effectively address bacteria problems.
18. What do we know about the impacts of homeless camps on aquatic resources? Research water quality impacts with the goal of developing relationships with social services.
19. Research and compile examples of innovative stormwater management – e.g. –public private partnerships, watershed planning, use of technology tools, Strategic Asset Management. (White paper)