The Feasibility of Numeric Effluent Limits in NPDES Permits

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Issue

- How can the State Water Board use the findings of the panel of experts to improve the NPDES stormwater program?
- CPR's comments focus only on the implications of the panel report for MS4 permits.
- The question of the feasibility of including numeric standards in MS4 permits has been with us since 1990, when the first area-wide MS4 permits were adopted in California.

Observations on the Recommendations of the Expert Panel

- The State Board is to be commended for convening the expert panel to address the technical feasibility of establishing numeric effluent limitations, or some other quantifiable limit, for inclusion in stormwater permits.
- CPR agrees with the panel that improvement in the design of municipal BMPs is necessary to ensure better performance; that is the underlying purpose of the iterative BMP process.
- CPR also agrees that BMPs need to be designed to facilitate maintenance.

Key Conclusions of the Expert Panel

- It is not feasible at this time to set enforceable numeric effluent criteria for municipal BMPs and in particular urban discharges.
- For catchments not treated by a structural or treatment control BMP, setting a numeric effluent limit is basically not possible.
- The panel acknowledged that several times a year runoff volume will exceed the design volume or rate capacity of BMPs and that stormwater agencies should not be held accountable for pollutant removal for storms beyond the size for which a BMP is designed.

Key Conclusions of the Expert Panel (Continued)

- An "upset" value or Action Level that is clearly above the normal observed variability could be developed as an interim approach to identify "bad actor" catchments to receive additional attention.
- It is possible to select and design BMPs much more rigorously with respect to the physical, chemical, and or biological processes that take place within them.
- The panel suggested an Enforceable BMP Design and Permit process through which compliance with design criteria and a maintenance plan and schedule would constitute achievement of the design effluent criteria.

Recommendations

- The State Board should adopt policies to:
 - Reaffirm the infeasibility of using numeric limits in MS4 stormwater permits and reaffirm that California will require MS4s to comply with water quality standards through the implementation of an iterative BMP process;
 - Define maximum extent practicable (MEP) for California based on the 1993 Elizabeth Jennings memo that has been cited in several MS4 permits;
 - Establish design storms for the various physical regions of the state;
 and
 - Require TMDLs to include load allocations and reductions for atmospheric deposition.
- The State Board should adopt an immediate moratorium on Regional Boards' adopting MS4 permit terms that impose numeric limits on MS4s.
- The State should provide funding for BMP pilot and demonstration programs and establish a BMP testing and certification program.