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State and regional biomonitoring programs as the bridge to support local stormwater compliance and management

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Abstract

Regional biomonitoring programs serve as the girders for building bridges between water quality management programs, such as stormwater, TMDL, and environmental flows. In this talk, we will summarize the status of state and regional biomonitoring programs and how the tools and products associated with these programs can be used to support local stormwater management. The composition (or health) of biological communities, such as benthic invertebrates and algae, are increasingly being used by stormwater regulatory programs for establishing targets, evaluating potential impairment, and assessing compliance. Furthermore, watershed scale management is supplanting project or location specific approaches to stormwater regulatory compliance. Integrated regional biomonitoring programs are critical for providing the tools and data sets necessary to implement the latest generation of stormwater programs. Fortunately, California has robust state and region biomonitoring programs that can support local efforts through a range of activities. Regional data sets can be used to help establish relevant goals and targets and evaluate progress toward relative to larger trends. Using the standard protocols and data management systems associated with these programs allows programs to leverage their efforts against others in the state and region. We will provide examples from several programs across the state of how data and tools from regional programs are being used to support setting watershed goals, prioritize management actions, and to contextualize results to assess performance.

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