

## **STORMWATER BMPs – REALITY VS. THEORY**

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### **ABSTRACT**

The installation of stormwater Best Management Practices or BMPs were supposed to aid in the protection of surface water quality and stream biota. But are these so called state of the art practices really providing the benefits to the state waterways they were expected to provide. In the conduct of several Stressor Identification studies on several New Jersey waterways, to try to determine the causes of impaired benthic macroinvertebrate populations, existing BMP installations were examined in detail – both old and new. These BMP structures were determined to have more detrimental effects on overall stream integrity than perhaps envisioned by their designers. This presentation will explore the repetitive design flaws of these state of the art BMPs and how they are detrimentally impacting stream water quality, stream hydrology, and stream biota.

### **KEYWORDS**

Stressor Identification, Stormwater BMP flaws, impaired benthic macroinvertebrate and fish populations