



# CEI Hy-Jump™



## Hydraulic Jump Treatment System

**What:** A custom designed stormwater treatment system that removes suspended sediment from high volume, large diameter stormdrain systems and outfalls.

**Why:** Less costly, easier to maintain and contains more sediment storage; more effective, retrofit-friendly. An alternative to proprietary “treatment in a box” systems.

**Useful for:** Water supply, estuary or lakes and ponds protection from filling in with sediments. Can help meet TMDLs and NPDES permit requirements.

This is a stormwater treatment technique that is far more effective than any other technique or device in eliminating suspended sediment from high volume flows. It also requires only a small footprint and makes maintenance and cleanout easy and fast. The CEI Hy-Jump™ works both during pipe-full conditions, as well as during lesser first-flush storms, and the maintenance basin retains the sediment that once would have gone directly into the water body. The CEI Hy-Jump™ is different than other techniques such as swirl separators in that it relies on a hydraulic jump created by changing supercritical to subcritical flow conditions in the structure design. Suspended solids rapidly drop out into an offline, easily-maintained basin.

### Advantages:

- Reduced frequency of maintenance
- Better performance and removal of sediment
- Typically lower cost than other proprietary units

### Effectiveness:

Ongoing testing of the CEI Hy-Jump™ has shown results of roughly 45% effectiveness, compared to 15-25% for other pretreatment structures.



### To Learn More, Contact:

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Innovation Overview

