

Stormwater Treatment

BIOHAVEN FLOATING TREATMENT WETLANDS are an innovative tool for treating stormwater in retention ponds. Wet ponds (also called NURP or retention basins) are widely used for stormwater. They typically rely on settling to remove TSS and nutrients. However, **stormwater treatment can be much more effective by adding floating treatment wetlands.**

These proprietary floating wetlands are thick, porous mats which support plants. The plants grow long roots down under the matrix and draw nutrients from the water. However, the key to the success of BioHaven islands is the surface area provided by the matrix and the long roots.

THE BIOHAVEN ADVANTAGE FOR STORMWATER PONDS

- Attractive retrofit
- Increased surface area for microbes to attach and break down pollutants
- Plant nutrient uptake
- Sediment trapping
- Plants to attract pollinators
- Algae reduction
- Aesthetic value
- Floatation adjusts to fluctuations in water levels, improving plant survival
- Less prone to being smothered by sediments (Tanner)

Plant uptake is estimated to only be 5% of the nutrient removal.

STORMWATER
REMOVAL
RATES

CONTAMINANT	REMOVAL RATE
TOTAL NITROGEN	67%
TOTAL PHOSPHORUS	68%
TSS	75%

FLOATING WETLANDS HAVE UNMATCHED SURFACE AREA

The matrix is dense and porous with holes which provide an excellent location for biofilms to attach and microbes to colonize. In fact, the BioHaven matrix provides approximately 125 square feet per cubic foot of surface area. This surface area is even larger with the long roots that grow beneath the island.



Native wetland plants flourish and attract pollinators



Treatment Wetland is positioned at the outlet of the stormwater pond to remove TSS and avoid clogging the pump. Water has been reused for 3 years to water ball fields in Minnesota.

GREEN INFRASTRUCTURE TECHNOLOGY

Floating Treatment Wetlands mimic natural floating islands – harnessing natural processes to reduce nutrients and provide wetland habitat.



MIDWEST
FLOATING
ISLAND

Cleaning water nature's way

Midwest Floating Island
w: MidwestFloatingIsland.com

p: (800) 328-2282 or (651) 379-2480
e: info@midwestfloatingisland.com