

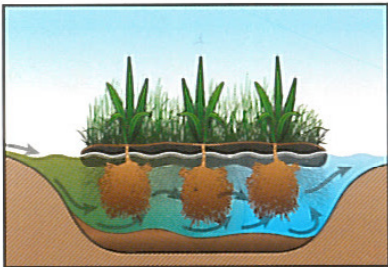
FLOATING TREATMENT WETLANDS

HOW THEY WORK

FLOATING ISLANDS MIMIC NATURE

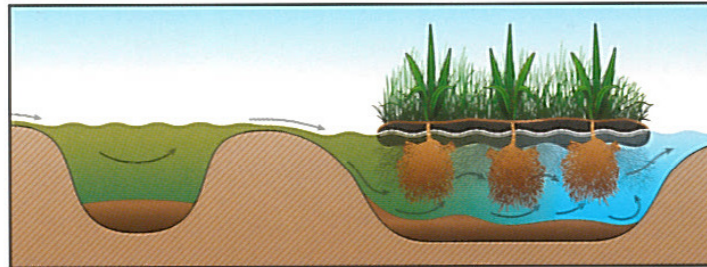
Constructed of durable, stable, non-toxic post-consumer plastics and vegetated with native plants, BioHaven® FTWs float on top of the water, providing a beautiful habitat for local birds and animals. But underneath the surface, a remarkable and dynamic process takes place.

Host pond with FTW Island



The two key factors to mimicking the Wetland Effect are circulation and surface area, both of which are eco-orchestrated with BioHaven FTWs.

Host pond with FTW Island connected to an optional Sedimentation Basin



OPTIONAL SEDIMENTATION BASIN
(course sediment removal)

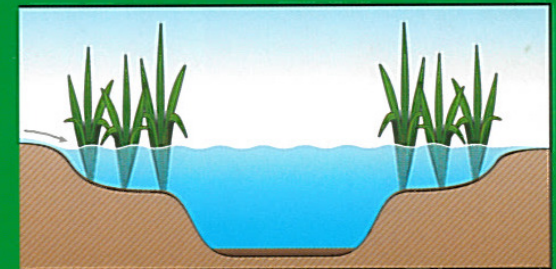
FLOATING TREATMENT WETLAND
(removal of fine particulates, metals, denitrification)

Microbes, which are responsible for breaking down waste and nutrients, produce a sticky biofilm which grows on BioHaven® FTW's matrix superstructure and the roots hanging beneath the island. Biofilm and whatever sticks to it, such as the suspended solids present in water, forms periphyton. This is the base of the fresh water food chain. As periphyton is consumed in what we describe as "the floating supermarket effect," ecosystem abundance results. Another smaller fraction of nutrients is taken up by plant roots, while still another fraction settles in the benthic zone below the BioHaven® FTWs.

These pathways represent a concentrated wetland effect—nature's way to clean water.

THE RESULT

As a BioHaven® wetland removes nitrogen, phosphate and other biological contaminants, a number of things begin to happen. Oxygen returns, the growth of nuisance plants and algal mats slows, and water temperature and clarity improve. Competition, synchronicity and symbiotic life-relationships reoccur instead of the monoculture effect usually associated with phytoplankton/algae. A healthy biosystem, fueled by sunlight and the natural nitrogen cycle, is the result. Even marine dead zones will ultimately be improved as BioHaven® floating islands do their work upstream.



SURFACE AREA AND CIRCULATION ARE
KEY TO THE WETLAND EFFECT