
Sustainable Water Management Techniques

4/24/2013

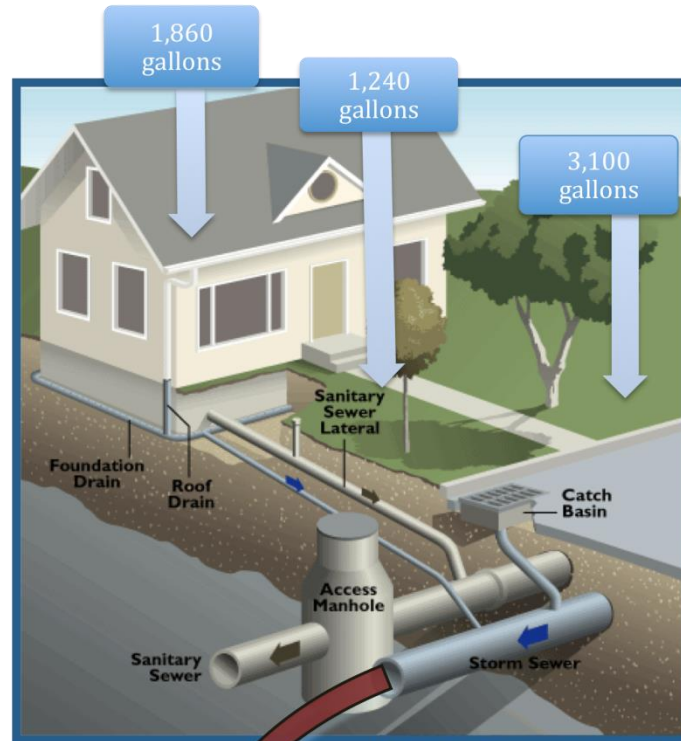
Ed Beaulieu

Aqualand





Traditional Watershed



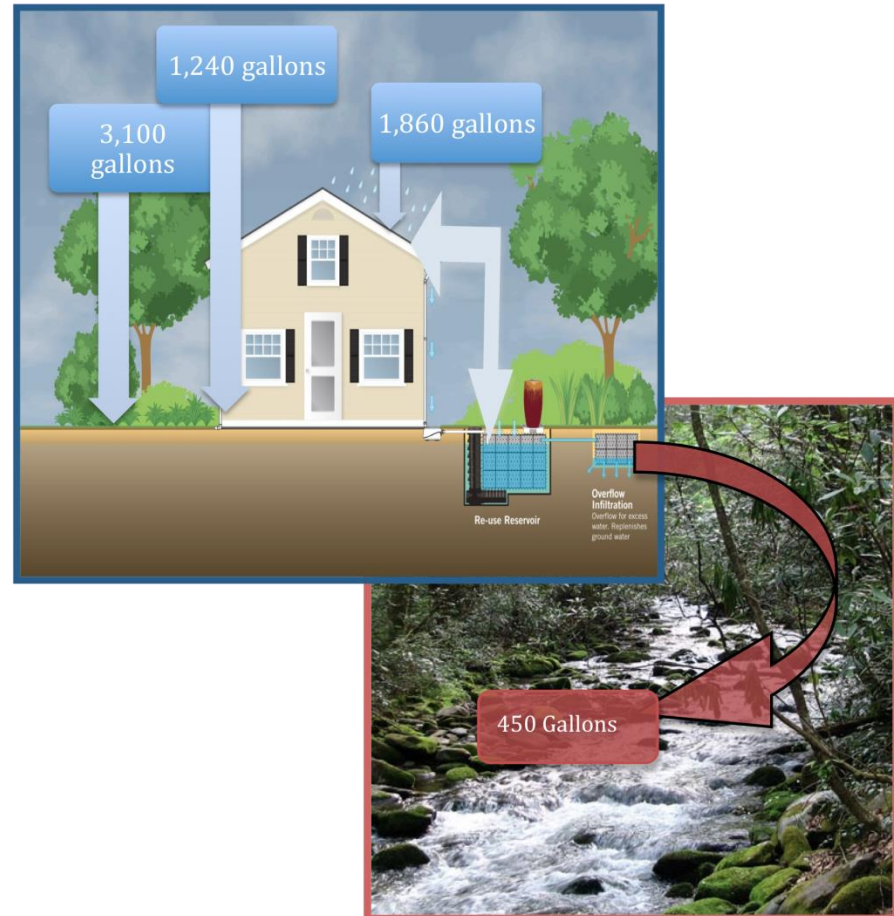
1" Rain Event

- 3,000 sqft roof
- 5,000 sqft lawn
- 2,000 sqft paved surface



Decentralized Solution

- 1" Rain Event
- 3,000 sqft roof directed into RainXchange
- 5,000 sqft native plantings & lawn
- 2,000 sqft permeable paver walkway





Excavation



Sand base and Geotextile



Pump vault & Completed Aquablox



Drainage connections & Prefilter



Geogrid and CA 7 Base Rock

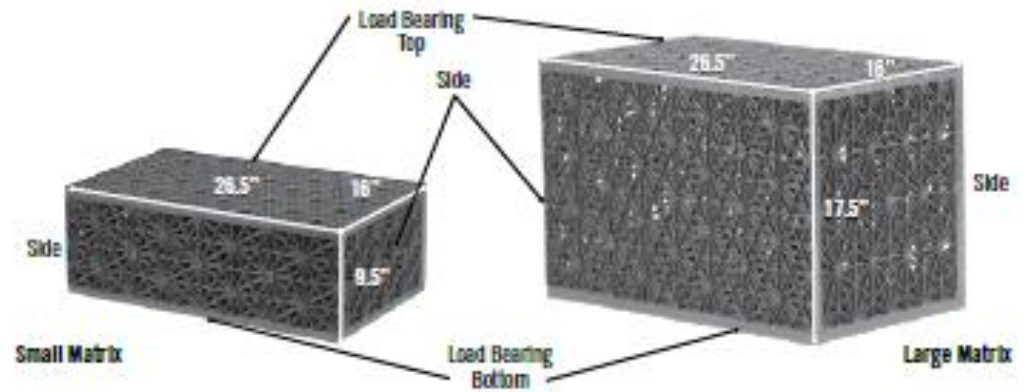


Unconfined Crush Testing

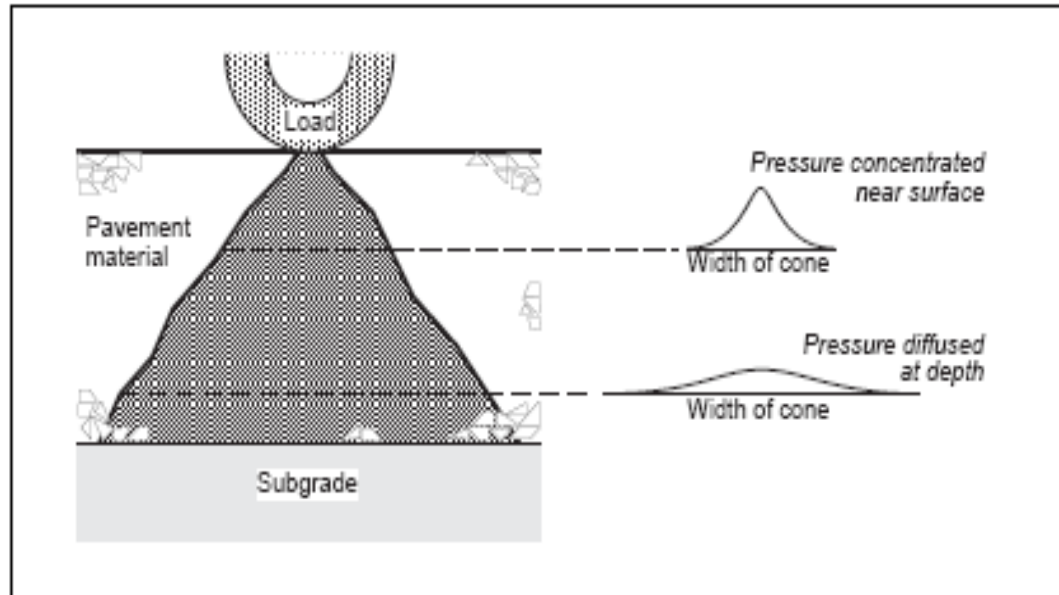


Imperial
34 psi

Metric
24 t/m²



Base Thickness Disperses Load



- **Protects subgrade**
- **Compensates for wet or uncompacted subgrade**



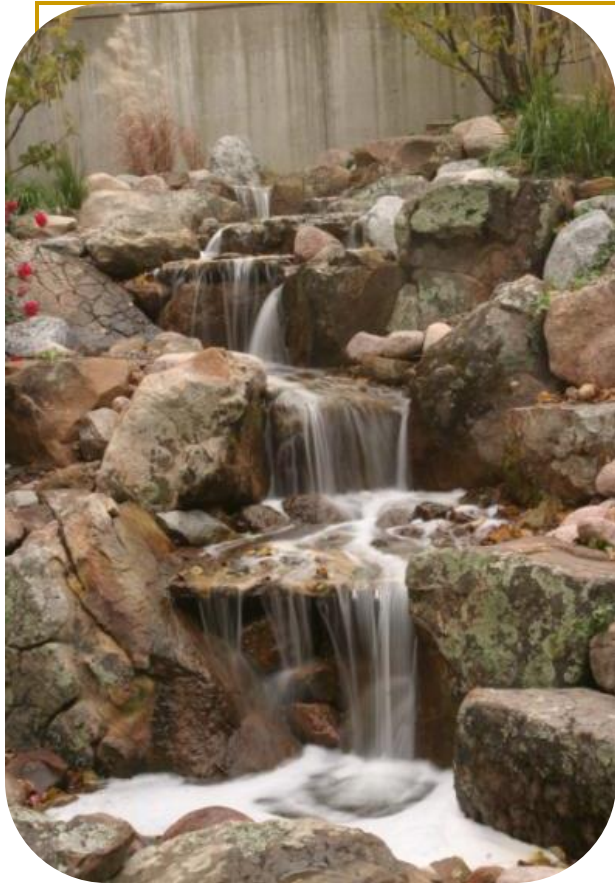
Pump access and Cleanout



Completed System













Happy Homeowner



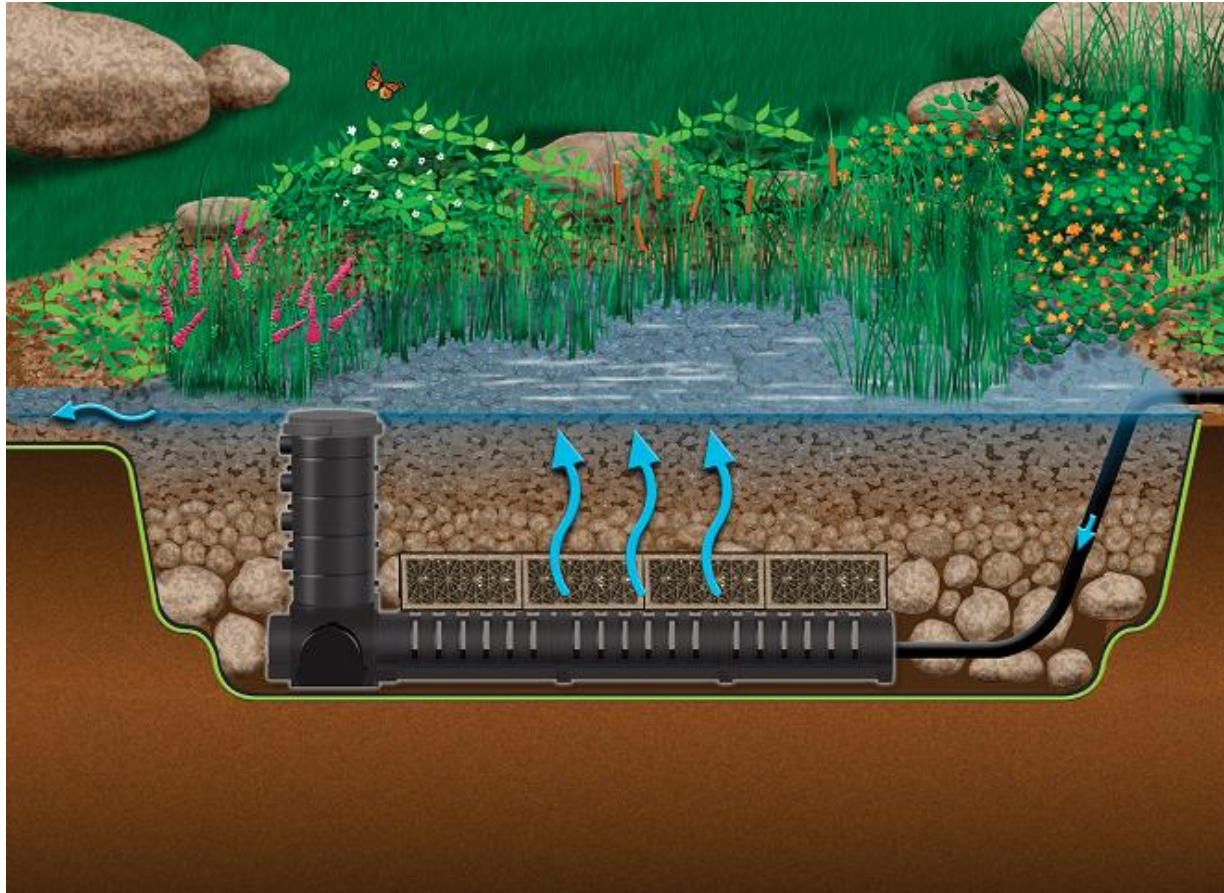
Equipment Washing Station FVPD



Exceeds Living Building Challenge LEED Platinum & Sustainable Sites



Constructed Wetlands







Every Drop – Every House

Giving a community
a way to impact
complicated
problems
one house at a
time



The Lakes of Bliss Woods

- 7 x 500 = 3,500
- 2 x 750 = 1,500
- Johnson = 1,500
- Mandele = 2,500
- Beaulieu = 2,000
- Schlicht = 3,500
- 30 Barrels = 2,250
- 5 Rain Gardens = 1,500

**Total Impact for
1" Rain
18,250 Gallons**

