

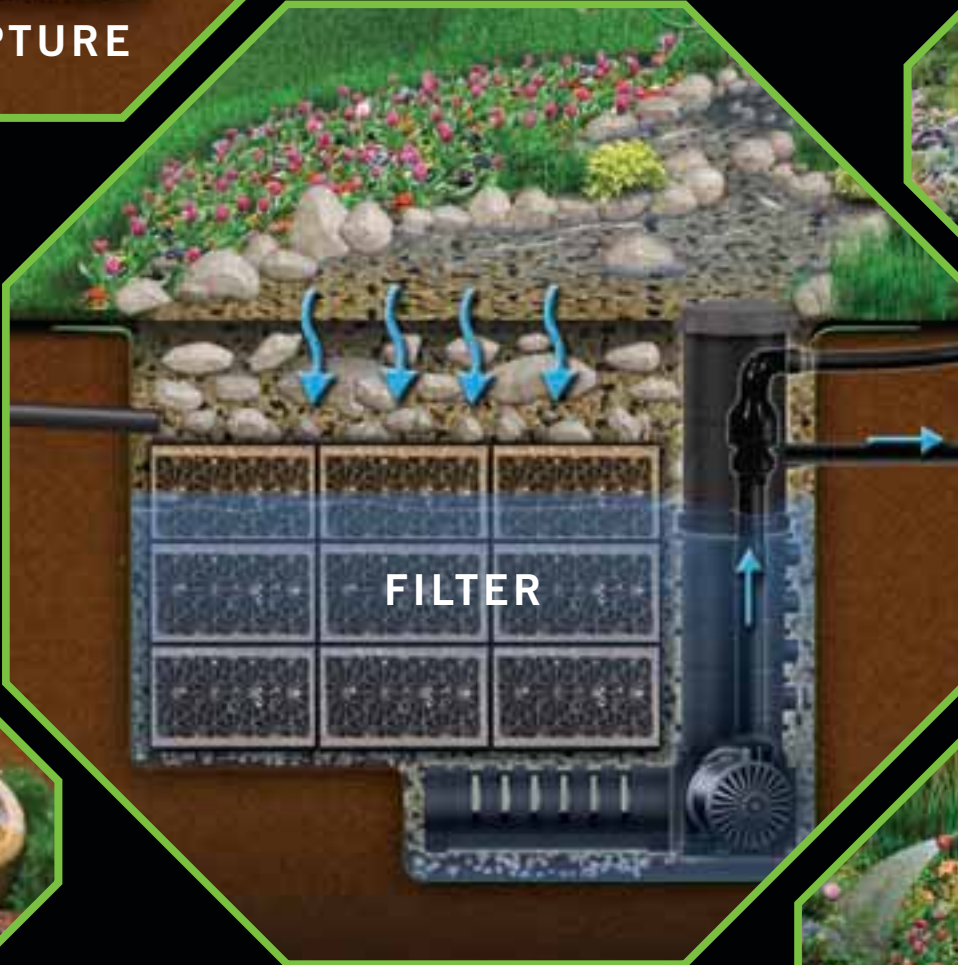


# RainXchange™

Rainwater Harvest Systems



**CAPTURE**



**FILTER**



**REUSE**


**RAINWATER HARVEST SYSTEMS  
SOLUTIONS GUIDE**



ACCORDING TO A GALLUP POLL MARCH 2008, WHEN AMERICANS ARE ASKED TO RATE THEIR LEVEL OF WORRY ABOUT EACH OF 12 ENVIRONMENTAL CONCERNS, THE TOP 4 RELATE TO THE QUALITY OF WATER.



## WHY RAINWATER HARVEST?

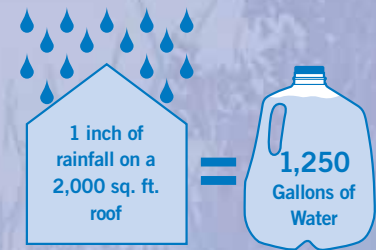
 The earth is known as the Blue Planet for a reason, it's no surprise that water is a dominant part of our everyday lives. The world's current challenge is to improve the planet's water quality and then maintain clean and healthy water that supports all life forms in our diverse environment.

### CAPTURING AND REUSING RAINWATER MAKES DOLLARS AND "SENSE"

- Reduce water bills including city storm sewer charges
- Alleviate demand on municipal systems
- Avoid strict watering schedules

### BETTER FOR YOUR LANDSCAPE THAN MUNICIPALLY TREATED WATER

- Rainwater is extremely rich in nutrients
- Using rainwater to irrigate will reduce fertilizer use
- No chemicals have been added to rainwater



### DID YOU KNOW?

- 1 inch of rainfall on a 2,000 sq. ft. residential roof generates 1,250 gallons of water that can be reused.
- That same roof in a region receiving 30 inches of annual rainfall generates 41,000 gallons of reusable water.
- The average US household with a 10,000 square foot lot uses up to 3,000 gallons of water **weekly** for landscape irrigation.
- Running a sprinkler for 2 hours can use up to 500 gallons of water.
- The RainXchange™ allows you to collect thousands of gallons of water anywhere, even in the Desert!

### HOW CAN YOU REUSE RAINWATER USING AQUASCAPE'S RAINXCHANGE™?



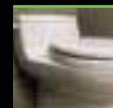
Landscape irrigation for your lawn and flowerbeds

Washing your car, patio or deck



Topping off water features, swimming pools, & hot tubs

Protect property from wildfires



Toilet and laundry water supply

Rainwater harvesting with Aquascape's

# RainXchange™

Rainwater Harvest Systems

shown with  
Pondless® Waterfall

## 10 IRRIGATION SYSTEM

- Natural water is loaded with micronutrients and compounds that will make your plants flourish.
- A healthy garden consumes more greenhouse gases and properly irrigated soils allow for greater water infiltration and better overall soil profiles.

## 9 AQUATIC PLANTS

- Providing food and shelter for a great number of birds, insects and amphibians and the cornerstone for maintaining our biodiversity.

## 2 CONNECTING PIPE

- Carries the water via gravity to the main storage chamber. (sold separately)

## 1 DOWNSPOUT FILTER

- Captures and removes pollutants flushed into the system during a rain event.
- Coarse filter screen removes leaves, twigs, and seeds.
- Smaller suspended particles are captured in a fine mesh which can easily be removed for cleaning.

## 3 MODULAR STORAGE BASIN

- Modular design can be configured to fit a wide variety of applications and settings.
- The storage basin consists of modular plastic tanks that are assembled on-site.
- EPDM rubber membrane creates a water-tight basin.

Please note: The numbers represented in this drawing show the stages of rain water harvest.

### 8 BIOLOGICAL FILTER

- Beneficial bacteria and enzymes reduce organic wastes and pollutants to less toxic substances that can be absorbed by plants, thereby creating a perfect cycle of nutrient re-use.

### 7 OVERFLOW INFILTRATION

- Excess rainwater is sent to a storage area that facilitates the infiltration of water into deeper soils and aquifers.

### 6 FLEXIBLE PVC

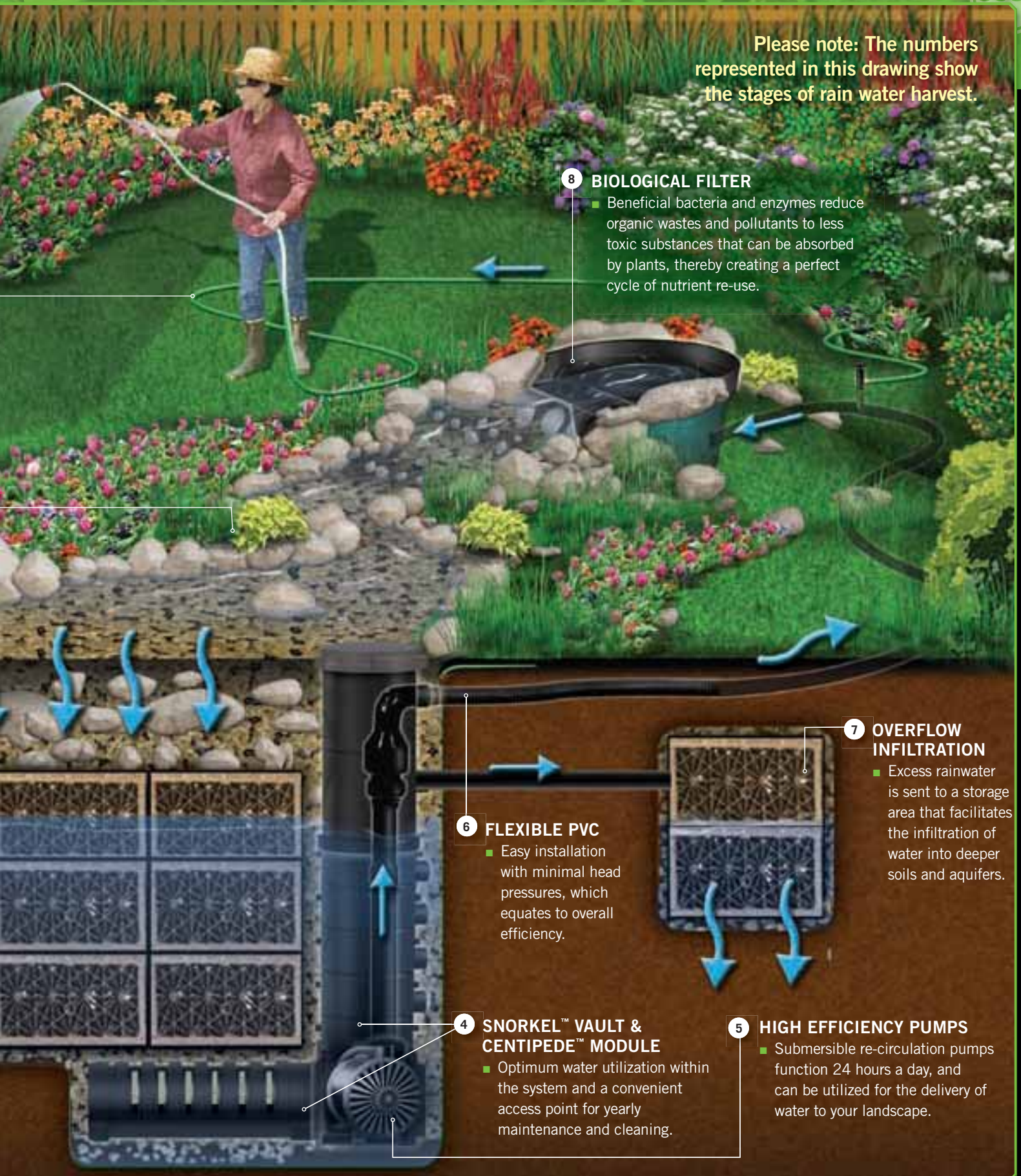
- Easy installation with minimal head pressures, which equates to overall efficiency.

### 4 SNORKEL™ VAULT & CENTIPEDE™ MODULE

- Optimum water utilization within the system and a convenient access point for yearly maintenance and cleaning.

### 5 HIGH EFFICIENCY PUMPS

- Submersible re-circulation pumps function 24 hours a day, and can be utilized for the delivery of water to your landscape.

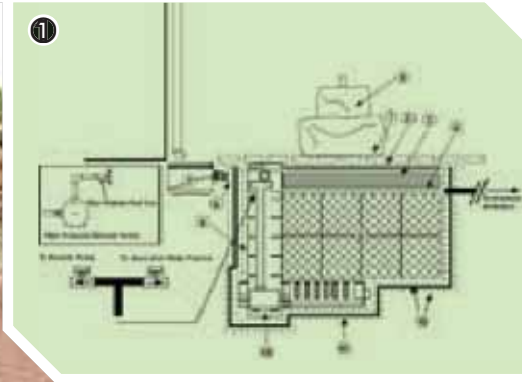


# SUSTAINABLE DESIGN SOLUTIONS

Architects, Builders, Developers, Land Planners, the RainXchange™ System is an ideal solution for your next green building project. Most residential and commercial developments require some degree of an effective storm water management strategy. This creates an amazing opportunity to not only store excess water, but to cherish its presence by understanding it and turning it into an asset of the design, as opposed to an afterthought. The water feature then becomes a destination point for a family or an outdoor classroom for children.



**Project Design Goal:**  
Capture and reuse the rainwater that falls on a 2,500 sq.ft. patio for irrigation.



**Project Design Solution:** A 3,000 gallon RainXchange™ System was used in combination with a permeable paver patio. A fountain stone was incorporated into the design for filtration while adding a decorative element to the landscape design. A ½ horse power booster pump provides water from the storage chamber to the sites irrigation system.



## LEED® POINTS

LEED® (Leadership in Energy and Environmental Design) Points – Using the RainXchange™ System with the AquaBlox® Matrix® in a project design can earn as many as 12 LEED credits for your project. Contact us for more information on using the AquaBlox® Matrix® in your next LEED® project.

- Sustainable Sites - up to 4 Credits
- Water Efficiency – up to 4 Credits
- Materials and Resources – up to 3 Credits
- Innovation & Design Process – up to 1 Credit

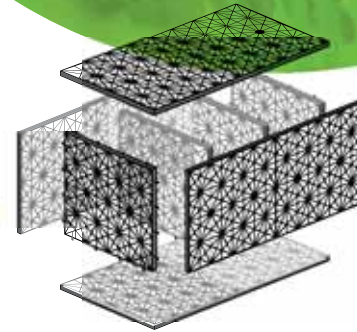
Let our technical agents assist you in meeting your project goals.

# AQUABLOX® WATER MATRIX® TANK MODULE

Manufactured using recycled materials, the AquaBlox® Water Matrix® Tank Module is a lightweight structural component developed through years of research and development.

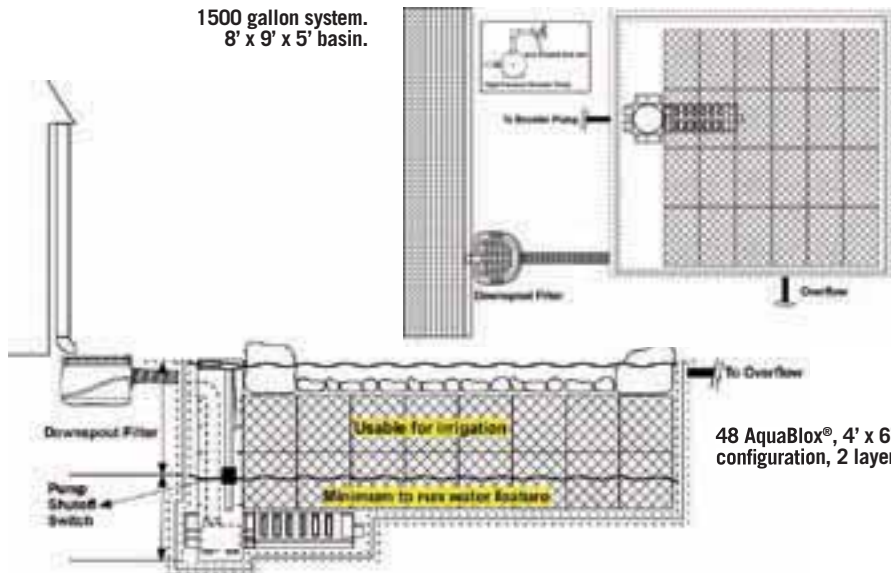
## PRODUCT FEATURES

- **High Capacity** – 95% void space maximizes water storage.
- **Modular** – Easily create any shape and size reservoir to meet the project's requirements.
- **Use Valuable Space** – The tanks are installed underground preserving the look of your home & garden.
- **Strong Structural Design** – Designed for car loadings up to 38 psi
- **Easy to Transport** – The tanks are efficiently shipped as unassembled panels thereby reducing shipping cost.
- **Lightweight and Quick to Install** – No need for cranes or heavy lifting equipment! Assembled and installed by hand.



Product #	Matrix Size	Matrix Dimensions	# of Parts / Dimensions	Volume	Weight	Load Bearing Weight
29492	Large	26.5" L x 16" W x 17.5" H	4x (26.5" x 16"), 4x (14.5" x 16")	32 Gallon	15.4 lbs.	38 psi (Installed)

1500 gallon system.  
8' x 9' x 5' basin.



### Ultimate Load / Unconfined Crush Testing:

	Imperial	Metric
Crush Load	34 psi	24 t/m <sup>2</sup>
Displacement	0.433"	11 mm
Temperature	46.4-57.2°F	8-14°C

### Side Load:

	Imperial	Metric
Crush Load	3.58 psi	2.5 t/m <sup>2</sup>
Displacement	0.394"	10 mm
Temperature	62.6°F (± 37.4)	17°C (± 3)

Surface Area	95% void
Material	85% recycled Polypropylene + 15% propriety selected materials
Biological & Chemical Resistance	Unaffected by molds, algae, soil-bourne chemicals, and bacteria
Service Temperature	-21.2°F to 131°F (-6°C to 55°C)



# RainXchange™ SYSTEMS

With our easy-to-use, prepackaged RainXchange™ System Kits, you have the flexibility to choose the water storage size and decorative style that suits you! Simply follow the step-by-step selection chart to determine the products required to complete your RainXchange™ System.

## STEP 1 CHOOSE THE RAINXCHANGE™ SYSTEM WATER STORAGE KIT.

### RainXchange™ Water Storage Kits

Each RainXchange™ Water Storage System Includes: AquaBlox® Water Matrix® Tanks, 45 mil EPDM rubber liner membrane, and two panels of non-woven geotextile underlayment (one to surround the AquaBlox® Water Matrix® & one to surround the exterior of the EPDM rubber liner)



#### 500 Gallon Water Storage Kit Catalog #30097

- Basin Size: 6'x9'x4'
- 16 AquaBlox® Water Matrix®
- 15'x 20' Liner and Underlayment

#### 1000 Gallon Water Storage Kit Catalog #30099

- Basin Size: 6'x9'x5'
- 32 AquaBlox® Water Matrix®
- 20'x 25' Liner and Underlayment
- Snorkel™ Vault Extension

#### 1500 Gallon Water Storage Kit Catalog #30102

- Basin Size: 8'x9'x5'
- 48 AquaBlox® Water Matrix®
- 25'x 25' Liner and Underlayment
- Snorkel™ Vault Extension

#### 2000 Gallon Water Storage Kit Catalog #30105

- Basin Size: 9'x11'x5'
- 64 AquaBlox® Water Matrix®
- 25'x 30' Liner and Underlayment
- Snorkel™ Vault Extension

#### 2500 Gallon Water Storage Kit Catalog #30108

- Basin Size: 11'x12'x5'
- 80 AquaBlox® Water Matrix®
- 25'x 30' Liner and Underlayment
- Snorkel™ Vault Extension

#### 3000 Gallon Water Storage Kit Catalog #30112

- Basin Size: 9'x11'x6'
- 96 AquaBlox® Water Matrix®
- 25'x 30' Liner and Underlayment
- Snorkel™ Vault Extension



## STEP 2 CHOOSE YOUR WATER FEATURE.

### Decorative Fountains

Select from a number of decorative bubbling urns and stone fountains that sit on top of the RainXchange™ Water Storage System. The water spills over the top of the decorative piece and flows back down into the RainXchange™ Water Storage System where it is re-circulated.



#### Decorative Fountain Pump and Vault Components Catalog #30173

- Snorkel™ Vault and Centipede™ Module
- One Downspout Filter (additional units may be purchased separately)
- AquaSurge™ 2000 High Efficiency Pump
- Decorative Fountain Plumbing Kit (includes assortment of fittings and 3/4" x 25' Kink-Free Pipe)

### Pondless® Waterfall

This water feature is made up of a waterfall or stream that flows and then disappears gracefully into the gravel.

**Please note:** Determine the desired length of stream and waterfall, then choose the appropriate stream liner found on the next page.



#### Pondless® Waterfall Pump and Vault Components Catalog #30098

- Snorkel™ Vault and Centipede™ Module
- One Downspout Filter (additional units may be purchased separately)
- AquaSurge™ 4000 High Efficiency Pump
- Pondless® Plumbing Kit



# RainXchange™

Rainwater Harvest Systems

by Aquascape Inc.  
The leading innovator in water features.

Aquascape's ecosystem approach to water gardening is based on recreating a naturally functioning ecosystem. Water circulation, filtration, fish, plants, rocks and gravel all used to ensure a balanced system and long term sustainability.

Aquascape is committed to further expand its environmental position by developing innovative new products with a focus on the environment and the long term sustainability of the world's most precious resource, water.

The RainXchange™ System offers companies, as well as consumers the opportunity to do their part to address some of the challenges associated with drought and the increasing problem of excessive rainwater run-off.

To learn more about Aquascape as a company and our initiatives please log onto our website at [www.aquascapeinc.com](http://www.aquascapeinc.com).

For more information on the RainXchange™ System,

**VISIT** [www.rainxchange.com](http://www.rainxchange.com)

**Do you qualify for government assistance?** More and more government municipalities and agencies are requiring residential on-site storm water management; some even offer rebates and tax incentives. Let us help you determine if the RainXchange™ System is a solution to these regulations and programs.



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Item #30169  
IDD 08086645-080181