

# HYDROCHAIN™ STORMWATER MANAGEMENT SYSTEM



# THE FUTURE OF WATER IS THE WORK OF TODAY

When it comes to water, we all have a common challenge: keeping groundwater and waterways clean, and providing clean water to our communities.

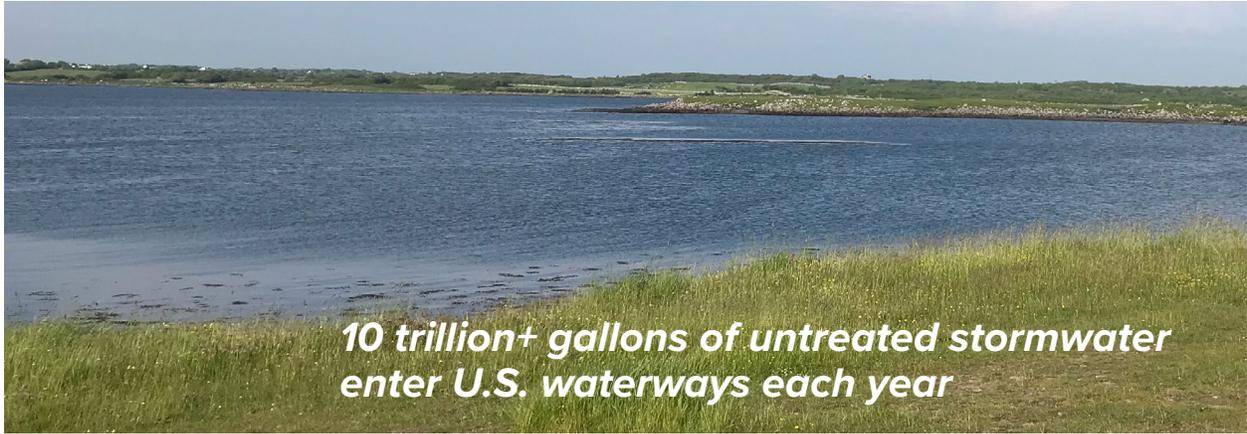
**The HydroChain System solves both challenges, with all the structures and water-quality components needed for a comprehensive treatment train.**

Through strategic partnerships, Shawcor Water expands its product line of corrosion-resistant tanks with other stormwater products to provide a comprehensive water-quality system. We will help you build a **HydroChain System** best suited for your project. We start with the the best choice of composite structure for the site – tank, chamber or vault – and add treatment components for the volume and flow-rate control a site requires.

**MANAGE**  
Water Volumes

**PREVENT**  
Water Pollution

**RESTORE**  
Water Quality



**10 trillion+ gallons of untreated stormwater enter U.S. waterways each year**

## STORMWATER RUNOFF IS THE MAIN CAUSE OF CONTAMINATION TO SURFACE WATER AND GROUNDWATER.

Changing weather patterns and rapidly growing urban populations add pressure to aging infrastructure. Thirty percent of pollutants in U.S. waters comes from untreated stormwater runoff. Treatment is a key best management practice for stormwater so water can be safely discharged into waterways or reused. In the United States alone:

**70%**

Growth of urban population by 2050

**75,000**

Approximate number of sanitary-sewer overflows annually

**750+**

Cities in need of new stormwater infrastructure

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## CONCRETE IS THE PAST. COMPOSITES ARE THE FUTURE.

Engineers in every industry recognize the material benefits of composites. In construction, infrastructure, energy, aerospace and transportation – composites are fast replacing traditional materials.

When it comes to stormwater management systems, the advantages of composites are a clear contrast to the deficiencies of concrete.

	COMPOSITES	CONCRETE
<b>Corrosion-resistant</b> Inherently resistant to corrosion	Yes	No
<b>Watertight</b> Not vulnerable to cracking or leaking	Yes	No
<b>Lightweight</b> for easy and quick installation	Yes	No

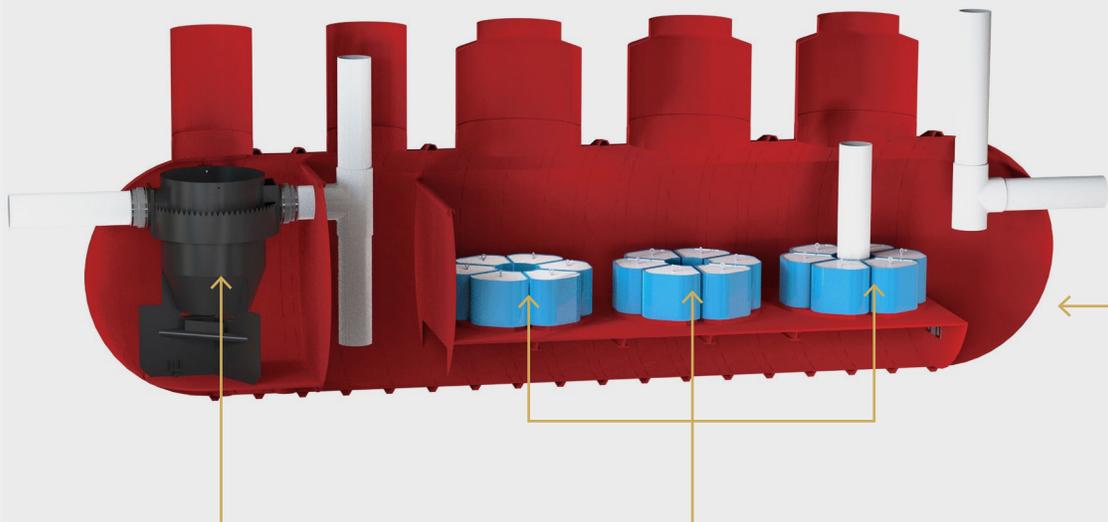
# STORMWATER MANAGEMENT IS COMPLEX

## PLANNING DOESN'T HAVE TO BE

With fiberglass tanks, chambers and vaults, and the products of our water-quality treatment partners, we help you build a complete stormwater management system designed for optimum performance.

To simplify the process even more, our **HydroChain Complete** includes stormwater treatment components – a **HydroChain Prime Separator** and **HydroChain Filter Cartridges** – all within a watertight fiberglass **HydroChain Tank**. When a project calls for more than one HydroChain Complete, any number can be installed at the same site. The Complete manages and treats stormwater, and restores it to a clean, usable state.

All treatment components are in the process of being certified by the New Jersey Department of Environmental Protection (NJDEP) and being designated for use by the Washington State Department of Ecology (WADOE).



The **Prime Separator** removes trash and debris, and petroleum hydrocarbons, suspended solids and heavy metals.

**Filter Cartridges** remove liquid-bound and sediment-bound nutrients and metals, hydrocarbons, heavy metals and solids

The watertight, corrosion-resistant **HydroChain Tank** is available in diameters of 8' to 15.5'

## CHOOSE YOUR WATER-QUALITY OPTIONS

### Pretreatment

Pretreatment makes every stage of treatment more efficient by removing solids, sand, trash, oil and grit from stormwater before it flows into other water-quality components, or into treatment tanks, chambers and/or vaults.

#### HYDROCHAIN PRIME SEPARATOR

This hydrodynamic separator captures trash, debris and floatables, and can be installed in concrete or fiberglass manholes.



#### HYDROCHAIN OIL INTERCEPTOR

The principles of Stoke's Law and a horizontal flow pattern result in high-efficiency performance for large volumes, with oil rising to the top, and grit and sediment sinking to the bottom of the tank.



### Filtration

Stormwater is cleaned by sedimentation, adsorption and filtration to remove suspended solids, petroleum hydrocarbons, heavy metals and nutrients.

#### HYDROCHAIN VORTEX FILTER

This hydrodynamic system combines sedimentation with an upflow filter process, and can be installed in concrete or fiberglass manholes.



#### HYDROCHAIN FILTER CARTRIDGES

These activated carbon and zeolite filter replacement cartridges can be configured in any quantity for large volumes of stormwater.



## CHOOSE YOUR STORAGE AND INFILTRATION OPTIONS

Composite tanks, chambers or vaults can form the foundation of the system. They are used for detention, retention and/or infiltration.



#### HYDROCHAIN XL TANK

Large-diameter, field-jointed fiberglass tank sections can be installed in any length or number of parallel rows.



#### HYDROCHAIN CHAMBER

Structurally strong, eco-friendly composite chambers are installed surrounded by stone to maximize per-foot infiltration.

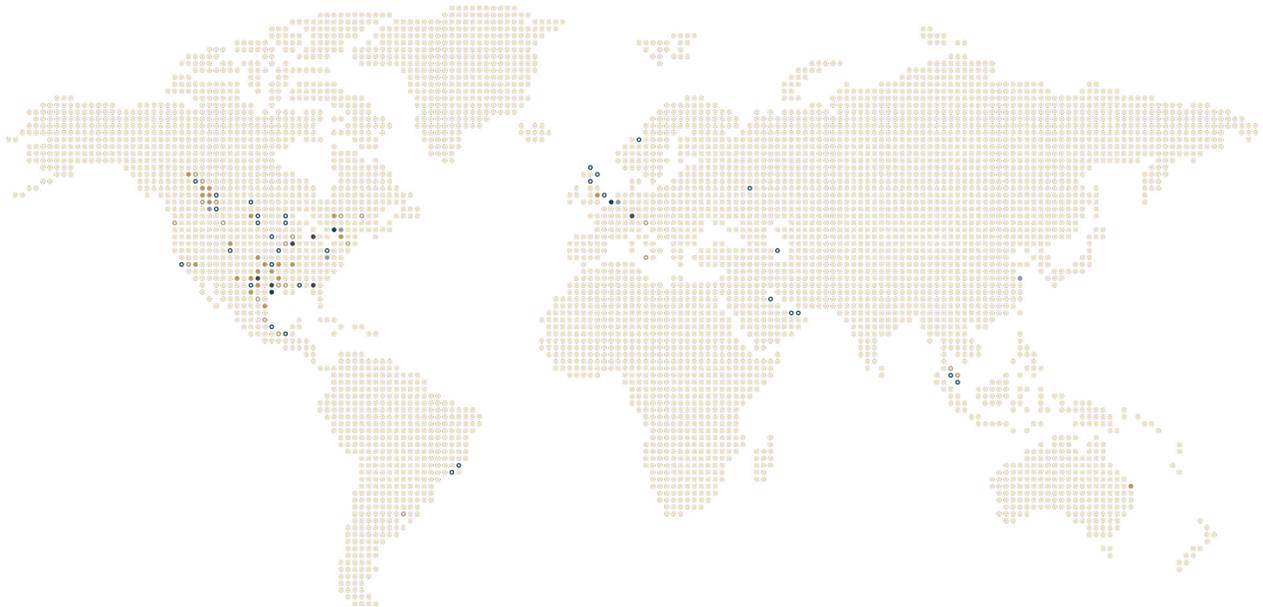


#### HYDROCHAIN TRITON VAULT

Composite double-barrel, cross-sectional vaults maximize space and minimize stone required for large-volume infiltration.

# CARING FOR WATER AROUND THE WORLD

No matter where in the world you need to manage and treat stormwater, we have the expertise and technology to meet your requirements.



**50 years**

Underground installation  
of composite products

**20 years**

Proven treatment  
technology

**6 continents**

With underground tank  
and pipe installations

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## THE SHAWCOR DIFFERENCE

Shawcor Ltd. is a leading global company specializing in products, services and solutions for the water, energy, infrastructure and transportation markets. We continually pursue sustainable solutions that protect the environment, conserve resources and extend asset life. Our goal is to exceed customers' expectations with unparalleled expertise, delivery, performance and value. We do this every step of the way — from project planning through the life of each project.





***“The fiberglass tank is an extremely strong, durable product that doesn’t deteriorate over time. As more developers install and use fiberglass tanks, more will be sold, because more of us will see the advantages.”***

– U.S. DEVELOPER

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## **START YOUR PROJECT NOW**

Our engineers provide design support so that you have all the products and technology you need — whether it’s a total treatment system or individual treatment components. All parts of the system are easy to install and maintain — no matter how large or small the project is.

To start a conversation about your next project, contact us at [watersales@shawcor.com](mailto:watersales@shawcor.com).



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