



Water collection tanks.

www.highlandtank.com

TWO PRONG APPROACH TO STORM WATER BEST MANAGEMENT PRACTICES

Who would have thought years ago that the storm water infrastructure could be a municipality’s biggest asset besides its potable water system? That’s right, storm water is going green.

Over the last decade, rethinking how we manage water has been essential in contributing to sustainable storm water management policies, regulations and solutions. In these developed areas, impervious surfaces, pavement, and roofs prevent soil absorption which interferes with the natural hydrologic process of filtration and collection to our aquifers. Instead storm water runs unimpeded into storm drains, sewer systems and drainage areas causing flooding, erosion, sanitary sewer overflows (SSOs), combined sewer overflows (CSOs), etc.

How does this affect you? As regulations continue to shape development, the adoption of Green Technology BMPs are essential in minimizing the impact on local storm water infrastructure and reducing pollution and the threat of flooding. Highland Tank’s two-prong BMP approach combines the pretreatment and storage of storm water with pump, treatment, and reuse for non-potable water applications. This new approach has introduced dynamic storm water management tools that mimic the natural hydrology of a site without the dependence on structural practices.

Highland Tank understands the principles of flow reduction, treatment, storage and reuse as they relate to modern storm water management plans. Our design concept creates a decentralized water system that reduces the dependence on municipal services, reduces a building’s carbon footprint, and minimizes impact on our water supply.

Best Management Practices 1st Prong

Building a decentralized water supply starts with a solid foundation. Highland Tank’s Stormwater Detention Tanks/Stormwater Retention Tanks provide on-site storage to avoid hydraulic overload of the storm/sewer infrastructure. These storm water tanks play a critical role in maintaining the hydrology of the sewer system while reducing the potential for flooding, or worse, SSOs. Whether used to store and slowly release storm water to the sewer system (detention) or dispose of the storm event on-site and reuse (retention) these tanks provide a sustainable solution to storm water management (1st Prong). Highland Tanks High-DRO® Stormwater Detention/Retention Tanks are constructed of high-strength carbon or stainless steel and protected with your choice of high-solids polyurethane, epoxy, or other tough internal linings and external coatings.

Best Management Practices 2nd Prong

The 2nd prong in the decentralized system is to pump, treat and recycle the water for toilet flushing, cooling tower make-up, irrigation and/or anywhere that non-potable water can be used in lieu of municipal water. Highland Tank introduced the High-DRO®-Pure Rainwater Harvesting system in 2002 as a packaged skid mounted, turn-key product. In turn, engineering, technology, and site-specific limitations inspired the need for a compact all-in-one water recycling unit without sacrificing performance. The High-DRO®-Pure Modular Rain Water System meets and exceeds those needs.

The High-DRO®-Pure Modular Rainwater System (MRS) is a pre-packaged water treatment system that fits into any storm water management BMP. The MRS's unique design incorporate all the components of a water recycle system into a single space-saving package. All MRS units are skid mounted with welded SS pipe, and are wired and factory tested prior to shipping. The MRS is also engineered to meet the strict water quality standards associated with bringing non-potable water into a building for reuse.

High-DRO® MRS Features:

- Multi-Media, Carbon, and pH filters with auto flush
- UV Disinfection
- Water Quality monitoring to include ORP, TSS and pH
- Water meter with totalizer
- Integral day tank with level control
- Control center with remote monitoring capabilities utilizing High-LINK® (web based)
- On board booster(s) pump(s)

Highland Tank has taken the lead in performance and efficiency in developing water recycling systems. Flow rates from 5-300gpm can be achieved with scalable equipment to match the water reuse application. Day tank sizes range from 100-1000 gallons, and depending on headroom, can go higher in volumes.



Rainwater Harvesting packaged skid-mounted system .

MRS applications include toilet flushing, cooling tower make-up, irrigation, and industrial closed loop systems. The PLC based control center provides real time condition monitoring and management of pH, TDS, chlorine, temperature, water levels, and more to validate water quality and ensure compliance. Powerful software records data obtained from real time, on-site measurements compiling meaningful patterns so we can make informed decisions based on data and not opinion. High-LINK® utilizes analytics to establish benchmarks to predict and improve both efficiency and performance of the High-DRO® Pure Modular Rainwater Harvesting system.

Water is our most precise resource and must be maintained for future generations. With the "GREEN" movement, the use of rainwater harvesting as an integral storm water BMP, has become more wide-spread to reduce the environmental impact of development and population growth. Architects, engineers, and builders have long recognized Highland Tank's protected steel water tanks for their strength, durability, and functionality.

With the addition of our advanced High-DRO®-Pure systems, we are continuing our commitment to protect the environment and conserve our precious natural resources to benefit our world today and tomorrow.

**Call 814-893-5701 today
or visit us at
www.highlandtank.com for more
information on water storage for
emergency use.**

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