PROJECT CASE STUDY

Project: City of Kinston
Location: Kinston, NC - Lenoir County
Application: Wash City Garbage Truck Fleet and Conserve 10,000 Gallons Monthly
System(s): 5,600 CorGal® Cistern w/ RMH-10 Compact Pump Station
Design By: NCSU BAE Sr. Design Students

PROJECT DESCRIPTION

Public Services for Kinston uses 31,000 gallons per month to wash out the garbage truck fleet. In partnership with NC Cooperative Extension, a 5,600 gallons cistern was installed to collect rainwater from 4,500 SF of roof area. Based on 30 year rainfall averages, this rainwater system will conserve up to 10,000 gallons monthly, saving the city an estimated 30% on its water use.

The system was 100% installed by Kinston public services. The core project benefits included:

1. Peak stormwater flow control
2. Stormwater runoff volume reduction
3. Reduction in demand for groundwater resources
4. Promotion of water conservation

BRAE supplied the field erected 5,600 gallon CorGal® cistern and a RMH-10 pump station with constant pressure water supply used to pump the collected rainwater over 400 feet to the facility's wash station. BRAE commissioned the project at completion.

CorGal® is a registered trademark of Water Storage Tanks, Inc.

5,600 Gallon CorGal® Cistern

Washing Garbage Truck Fleet

Rainwater Supply 10GPM @60PSI

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