Cisterns

Definition/Purpose

Cisterns are above or below ground storage tanks for rainwater harvesting systems used to collect and store rainwater. These reduce stormwater runoff and utilize the captured rainwater.

Policies:

1. Cisterns must be placed in accordance with manufacturer's instructions.

2. Cisterns shall be sized to provide 0.5 - 1.0 gallon of cistern volume for each square foot of contributing rooftop depending on the site and the water use demand.

3. Cost share assistance will only be provided for cisterns 250 gallons or larger.

4. Cistern cost share eligibility to receive CCAP funding is based on the existence of a water quality concern. The CCAP checklist must be completed.

5. Agricultural non-point source pollution sources are not eligible, with the exception of runoff from a greenhouse on an educational facility (ex: school).

6. Any system collecting 3,000 gallons or more requires a PE design, regardless of the number of cisterns and whether or not they are connected.

7. If installing multiple cisterns, cisterns should be connected. If the cisterns are not connected, a written justification is required. This justification will determine whether one or more accessory packages can be approved.

CISTERN	
Lifespan	5 years single-family home, 10 years all other properties
BMP Units	GALLONS
Required Effects	Number of gallons harvested/reutilized Rainwater Harvesting Model
JAA	Commission issues JAA for cisterns <3,000 gallons. A Professional Engineer must design cisterns >3,000 gallons
Standards	CCAP Design Manual, Chapter 7: Cistern Design

Community Conservation Assistance Program

Additional Resources	NC Stormwater Manual, Chapter 7, Rainwater Harvesting NCSU Guide for Homeowners

CS2 Reference Materials	• NC-CSP-11 Signature Page
	 • Map with BMP location
	     • Cistern checklist
	     • Cistern Operation & Maintenance Plan
	     • Receipts for Actual Costs
	     • Receipts Summary form

Items to Maintain in District File	• Cistern operating level spreadsheet