

Cisterns

Definition/Purpose

Cisterns are above or below ground storage tanks for rainwater harvesting systems used to collect and store rainwater. They are intended to reduce stormwater runoff, encourage runoff infiltration and conserve water.

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 entity.
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	<ul style="list-style-type: none"> • 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
CS2 Reference Materials	<ul style="list-style-type: none"> • NC-CSP-11 Signature Page • Map with BMP location • Cistern checklist • Cistern Operation & Maintenance Plan

Community Conservation Assistance Program

Items to Maintain in District File	<ul style="list-style-type: none">• Cistern operating level spreadsheet
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Standards

CCAP Design Manual, Chapter 7 -

<https://www.ncagr.gov/SWC/costshareprograms/CCAP/documents/Chapter7-CisternDesign.pdf>

Additional Resources

NC Stormwater Manual, Chapter 7 - <https://ncdenr.s3.amazonaws.com/s3fs-public/Energy%20Mineral%20and%20Land%20Resources/Stormwater/C-7%20%20Rainwater%20Harvesting%2020170811.pdf>

NCSU Guide for Homeowners - <https://content.ces.ncsu.edu/rainwater-harvesting-guidance-for-homeowners>