

WATER RESOURCES PROJECTS TENNESSEE

Roller compacted concrete (RCC) has been used to construct large dams (dams over 50 feet high) in the United States since the first one was constructed in the early 1980's. Progess in design and construction over the ensuing decades have solidified RCC as an economical and resilient method to build large dams. See below for examples of successful large dam projects that have been completed in the state. Learn more by visiting <u>PCA's Dams Page</u>.

A red dot indicates RCC Dam project 50' and higher



| Name | City | Date | Max Height (ft.) | Length (ft.) | RCC Volume (cy) | Cement (lb/cy) | Flyash (lb/cy) | Upstream Facing | Total Project Cost (\$ Millions) (2) | RCC Unit Cost (\$/cy) (2,3) | Owner | Designer | Contractor | River |
|---|--------------|---------|------------------------|-----------------|-----------------------|-------------------|-------------------|---|---|---|--|--|---|---------------------------|
| Nickajack Auxiliary Spillway | Pittsburg | 1991 | 55 | 1,316 | 103,000 | 143 | 200 | Earth or Rock Fill Placed Concurrently with RCC | _ | _ | Tennessee Valley Authority | Vann A. Newell & Harry A. Mason | TVA Construction Forces, GUMBK, Sequatchie Concrete Services Inc. | Tennessee |
| Center Hill Auxiliary Backup Dam | Smithville | 2019 | 136 | 960 | 145,000 | 157 | 157 | Formed RCC (see comments) | 43.0 | _ | US Army Corps of Engineers, Nashville District | USACE, Nashville District | Thalle Construction | Wolf Creek (Tributary) |
| Comments: | Rockfill pla | iced ag | ainst ups | stream fao | ce. | | | | | | | | | |



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| Notes: | |
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| 1. | The information contained herein was compiled by the Portland Cement Association and published for informational purposes only. The user of this information is responsible for confirming the accuracy or completeness of the information. |
| 2. | Cost information shown is nominal. |
| 3. | RCC unit costs do not include mobilization costs. |