



US Army Corps
of Engineers.

USACE Dam Safety Facts for Carters Dam

Project location and description: Carters Dam was designed and built by the U.S. Army Corps of Engineers (USACE) and completed in 1975. USACE operates Carters Dam for hydropower, flood damage reduction, and recreation.

The main components of the project are an earthen embankment, hydropower generation facilities, a reregulation dam, and a gated spillway section for releases during major flood events. The spillway is located beyond the left abutment (looking downstream) and is 262 feet wide with a crest elevation of 1070 feet NGVD. The spillway can release up to 1.5 million gallons per second or approximately the equivalent of over four and a half feet of water on a football field (not including the end zones) every second. The earthen dam is 2,053 feet long and 350 feet high, and the top of the dam is 40 feet wide. The elevation of the top of the earthen embankment is 1112 feet NGVD. The foundation is mostly rock.



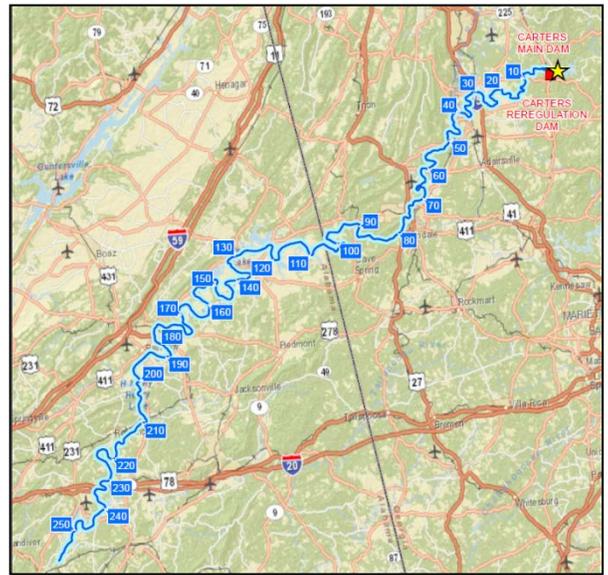
During the fall and winter months, when excessive rainfall is likely, the lake is kept at a relatively low level (referred to as winter pool). Should heavy rains occur, surface water runoff is stored in the lake until the swollen streams and rivers below the dam recede and can handle the release of stored water without damage to lives, property, or the environment. Sometimes water must be released to protect the dam's integrity even though streams and rivers may have already reached or exceeded their capacity.

Benefits associated with Carters Dam: This dam has provided over \$277 million in flood damage reduction since placed into service. The annual hydropower benefit is about \$51 million. Annual recreational benefits to the area are about \$5 million.

Risks associated with dams in general: Dams reduce but do not eliminate the risk of economic and environmental damages and loss of life from flood events. When a flood exceeds the reservoir's storage capacity, large amounts of water may have to be released that could cause damaging flooding downstream. A fully-functioning dam could be overtopped when a rare, large flood occurs, or a dam could breach because of a deficiency, both of which pose risk of property damage and life loss. This means there will always be flood risk that has to be managed. To manage these risks, USACE has a routine program that inspects and monitors its dams regularly. USACE implements short- and long-term actions, on a prioritized basis, when unacceptable risks are found at any of its dams.

Risk associated with Carters Dam: Based upon the most recent risk assessment in 2014, USACE considers this dam to be a low risk dam among its more than 700 dams. USACE manages this risk by conducting routine monitoring and evaluation.

What residents should know: Dams do not eliminate all flood risk, so it is important that residents downstream from the dam are aware of the potential consequences should the dam breach, not perform as intended, or experience major spillway or outlet works flows. The risk to the towns of Resaca, Calhoun, Rome, and Murray, Gordon, and Floyd counties and the related consequences further downstream warrant increased efforts on the part of USACE, local emergency management officials, and residents to heighten awareness of the potential flood risk associated with the dam.



The primary areas impacted should the dam breach with a full reservoir during a rare flood event or experience major spillway or outlet works flows are shown on the map. The potential for loss of life is highest within 30 miles of the dam, and is substantial beyond 60 miles downstream of the dam, should the dam breach with a full reservoir during a rare flood event, not perform as intended, or experience major spillway or outlet works flows. Advanced warning of problems and events plays a major role in protecting life and property.

Public awareness: Dams are designed to pass large amounts of water on a regular basis and this means there will always be flood risk that has to be managed (see the table below).

Recommendations for Residents	Carters Dam Facts
<ul style="list-style-type: none"> • Living with flood risk-reduction infrastructure comes with risk – know your risk. • Living with flood risk-reduction infrastructure is a shared responsibility – know your role. • Know your risk, know your role, and take action to reduce your risk. • Listen to and follow instructions from local emergency management officials. • Strongly consider purchasing flood insurance. • Contact your elected local, county, and state officials to make sound flood risk management decisions in your area. 	<p>Estimated population affected for dam breach with reservoir at top of active storage / maximum high pool:</p> <ul style="list-style-type: none"> • Population at risk: ~ 16,900 • Structures as risk: ~ 5,000 • Land and property at risk: \$ 638.2 million <p>Estimated consequences with rare flood event and no breach:</p> <ul style="list-style-type: none"> • Population at risk: 10,000 • Structures as risk: No data available • Land and Property at risk: \$ 14.7 million <p>Damages prevented: \$277 million (1975-2012) National Inventory of Dams (NID) No.: GA00821</p>

Residents should listen to and follow instructions from local authorities. For more information, please contact the USACE Mobile District office using the information on this fact sheet. Also:

See 'Local EMA Info' on Georgia Emergency Management Agency website: <http://www.gema.ga.gov/>

See list of county coordinators for Alabama Emergency Management Agency: <http://ema.alabama.gov/county.cfm>

For additional information about dam safety and living with dams, please visit <http://www.usace.army.mil/Missions/CivilWorks/DamSafetyProgram.aspx> and <https://damsafety.org/resourcecenter/asdso-resources>