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26 May 2023

Subject: Updating Sheets of Emergency Action Plan - Lake Petit Dam

Pickens County, Georgia

Dear Sir or Madam,

You are receiving this letter as you are listed as one of the Control Copy holders of the <u>Lake Petit Dam Emergency Action Plan (EAP)</u>. Revision 4, dated December 2022. The dam owner downstream of Big Canoe and one of the contacts in the Dam Failure Notification Flow Chart has changed. Also, the final concurrence signature has been received. To reflect these changes in the record copies of the EAP, you should replace the sheets listed below in the binder (hard) copy of your EAP with the sheets attached herein to keep your copy of the EAP up-to-date, as noted below:

- Pages 3, 18, and 25 should replace the exact same sheets in the Section 1 Introduction (Page 3) and Section 4 Step 2 Notifications and Communications (Pages 18 and 25) sections of your binder.
- Sheets for the following sections of Appendix B should be replaced in whole:
  - o Appendix B-1 Concurrences
  - o Appendix B-2 Record of Holders of Control Copies
  - o Appendix B-4 EAP Periodic Test

All sheets removed should be destroyed. On behalf of the Big Canoe POA, thank you for your efforts in updating the EAP, being involved in the recent tabletop exercise, and being prepared for an emergency event.

Regards,

Wesley MacDonald, P.E. (GA, AL, KY, TN, and WA)

Wesley MowDand

Senior Engineer

Geosyntec Consultants, Inc.

423-385-2312

JUN 0 9 2023

EPD Watershed Protection Branch

Attachments: updated replacement pages for the Lake Petit Dam EAP, Revision 4 (2022)



Chapter 391-3-8 of the GA State Code Rules for Dam Safety. The Dam is owned, operated, and maintained by the Big Canoe POA. The original design drawings for the Dam were prepared by Baldwin & Cranston Associates (Baldwin & Cranston Associates, 1971).

The Dam is located within the Big Canoe development on Petit Creek approximately 5.8 miles upstream of Marble Hill, in Pickens County, north-central Georgia. The reservoir formed by the Dam has a surface area of 107 acres at a normal pool elevation of 1635.5 and extends up Petit Creek approximately 0.7 miles. The revised maximum water storage for the reservoir approved by the Georgia Safe Dams Program (GSDP) is 5,635 acre-feet (ac-ft). Table 1 presents additional dam data. The topography around the Dam consists of very steep, wooded, mountainous foothills.

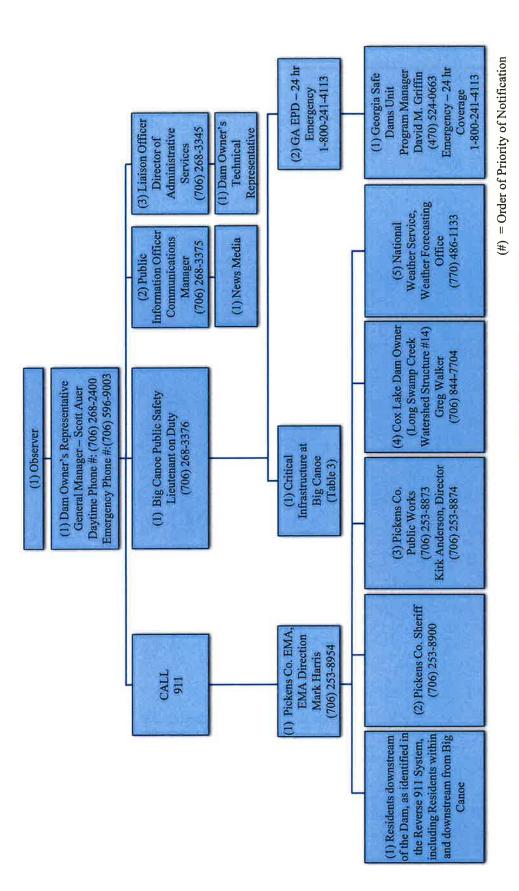
The dam has a 15-foot-wide concrete cascading channel spillway on the east side of the earth dam's abutment. The spillway discharge is controlled by a concrete crest underneath a bridge located on the roadway (i.e., Wilderness Parkway) running along the crest of the Dam. The Dam has a 36-inch low-level discharge conduit which is the only permanent means of lowering the reservoir level beneath the spillway crest, short of structural excavations or the use of temporary pumps or siphons. The low-level discharge conduit is operated via a lift system used to operate the heavy-duty sluice gate, which is located under the hatch cover of the low-level discharge conduit gate operator vault.

Lake Sconti, owned by Big Canoe, is located approximately 1.0 mile downstream of Lake Petit. Lake Disharoon, owned by Big Canoe, is located approximately 0.1 mile upstream of Lake Sconti. Lake Petit does not directly recharge the reservoir at Lake Disharoon, however, in the event of an inundation, Lake Disharoon is in the inundation area of Lake Petit. Cox Lake Dam, also referred to as Long Swamp Creek Watershed Structure #14, is located approximately 3.5 miles downstream from Lake Petit Dam, south of Cove Road, and is not owned or operated by Big Canoe.

### 1.4 Site and Pertinent Structure Access

Big Canoe has two permanent roadway access points, both of which have a guard shack with gate access: (1) the main entrance off Steve Tate Highway is Wilderness Parkway, which crosses Petit Creek approximately 2.3 miles downstream of Lake Petit Dam, and (2) the secondary (northern) entrance off Steve Tate Highway (also Wilderness Parkway) which crosses over the top of Lake Petit Dam (only staffed during the day). Access to the toe is via Wolfscratch Drive, a connector road that both starts and ends at different portions of Wilderness Parkway. A third access route to Big Canoe is through an unmanned, locked gate at the Big Canoe Golf Maintenance Area. These three (3) connections are the only exit points from Big Canoe to Steve Tate Highway. The use of these evacuation routes will be controlled by the Big Canoe Department of Public Safety to prevent the endangerment of evacuees in case of an imminent failure. To assist with access to the Dam, directions from Downtown Atlanta, Georgia to the Dam were sourced from Google Maps (Google, 2021) and are presented in Appendix A – Directions from Atlanta GA, to the Dam.

For emergency conditions that require the operation of the low-level discharge conduit, the gate operator vault for the low-level discharge conduit is located on the upstream face, near the center of the Dam at Station (STA) 4+70. This is just north of the present-day flagpole. A 30-inch (in.) x 30-in. heavy-duty sluice gate (inlet) was designed (Baldwin & Cranston, 1971) to be mounted on the low-level inlet structure that connects the low-level discharge conduit to the reservoir. The



Emergencies Figure 8: Dam Failure Notification Flowchart for Conditions B (Level 2) &



The Public Safety Director at Big Canoe is responsible for notifying Pickens County EMA, Critical Infrastructure at Big Canoe, Dawson County 911 Services, and the GA EPD 24-Hour Emergency Contact in the event of an emergency. If time allows, they should seek advice and assistance.

The Public Information Officer, Communications Manager is responsible for notifying the News Media (including radio and television media). The Liaison Officer, Director of Administrative Services is responsible for notifying Dam Owner's Technical Representative.

The Pickens County EMA is responsible for notification of the residents below the Dam as identified in the Reverse 911 System, including: (i) Big Canoe residents and residents downstream from Big Canoe; (ii) Pickens County Sheriff's Department; (iii) Pickens County Public Works; (iv) the Cox Lake Dam Owner; and the (v) National Weather Service Weather Forecasting Office.

The GA EPD 24 Hour Emergency Contact is responsible for notification of the GSDP.

#### 4.3.1 Emergency Condition B (Level 2) Warning Message

All warning messages for an Emergency Condition B (Level 2) should be brief and to the point. The following message may be used to help describe the emergency situation to the emergency management personnel:

"This is (Big Canoe Public Safety Director or Lieutenant on Duty). We have an emergency condition at Lake Petit Dam, located about 5.7 miles upstream of Marble Hill in Pickens County, Georgia. We have activated the Emergency Action Plan for this dam and are currently under Emergency Condition B (Level 2). We are implementing predetermined actions to respond to a rapidly developing situation that could result in dam failure. Please prepare to evacuate the areas downstream of the Dam based on the inundation mapping. Reference the evacuation map in your copy of the Emergency Action Plan. We will advise you when the situation is resolved or if the situation gets worse.

I can be contacted at the following number (Big Canoe Public Safety Director's or Lieutenant's on Duty phone number to be contacted). If you cannot reach me, please call the following alternative telephone number (Big Canoe Public Safety Director's or Lieutenant's on Duty alternative phone number to be contacted at)."

## 4.3.2 Emergency Condition C (Level 3) Warning Message

All warning messages for an Emergency Condition C (Level 3) should be brief and to the point. The EMA should be contacted immediately and the area evacuated. The following actions should be taken:

• Call 911. Be sure to say, "This is an emergency." They will call other authorities and begin the evacuation. The following message may be used to help describe the emergency situation to the Pickens County Sheriff's Department, or Pickens County EMA:

"This is an emergency. This is (Big Canoe Public Safety Director or Lieutenant on Duty). Lake Petit Dam, located about 5.7 miles upstream of Marble Hill in Pickens County, Georgia is failing. The downstream area must be evacuated immediately based on the inundation mapping. Repeat, Lake Petit Dam, is failing; evacuate the downstream

# APPENDIX B-1 – CONCURRENCES

By my signature, I acknowledge that I, or my representative, have reviewed this plan and concur with the tasks and responsibilities assigned herein for me and my organization.

Dam Owner's Representative, Big Canoe POA
1. Full Clever Big (and POA 1/17/2023  Signature Scott Aver POA General Manager  Printed name and title: Scott Aver POA General Manager
Printed name and title: Scott Auer POA General Manager
Big Canoes POA's Public Safety
2. P By Cause Public Safay 1/17/2023  Organization Date Date Date Date Date Date Date Date
Printed name and title: Tychael Joseph
Big Canoe POA's Lake Petit Dam Technical Representative
Geosyntec Consultants 08 December 2022
3. Geosyntec Consultants 08 December 2022  Signature Organization Date
Printed name and title: Wesley MacDonald, PE, Senior Engineer
Georgia Safe Dams Program Representative  4. Georgia Safe Dams Program December 9, 2022  Signature Organization Date  Printed name and title: David M. Criffin, Manager, Georgia Safe Dams Program
Pickens County Sheriff's Department
5. Signature Organization Date  Printed name and title: UT. MUSCENE 331
Pickens County Emergency Management Agency
Printed name and title: MARK HARDS DIRECTOR  PICKENS COUNTY EMA  Organization  Date

Pickens County Public Works		
	USLIC LUREK)	1/17/23 Date
Printed name and title: KR A Australia	Organization  PRINTUR V3. 600	
Cox Lake Dam Owner, 8. 4 Malo T. Kup	LSUSW Organization	#/11/23
Signature Printed name and title:	( ) gomzanon	

# APPENDIX B-2 – RECORD OF HOLDERS OF CONTROL COPIES

Copy Number	Organization	Person Receiving Copy
1	Big Canoe Property Owners Association, Inc. 10586 Big Canoe Jasper, Georgia 30143	Scott Auer
2	Big Canoe POA's Public Safety Director 41 Wolfscratch Circle Marble Hill, Georgia 30148	Ricky Jordan
3	Engineer – Geosyntec Consultants, Inc. 835 Georgia Avenue, Suite 500 Chattanooga, Tennessee 37402	Wesley MacDonald, P.E.(TN, AL, GA, and WA)
4	Georgia Safe Dams Program 2 Martin Luther King Jr. Drive SE, Suite 1362 Atlanta, Georgia 30334	David M. Griffin, P.E.
5	Pickens County Sheriff's Department 2985 Camp Rd Jasper, Georgia 30143	Donnie Craig
6	Pickens County EMA 1266 East Church Street Jasper, Georgia 30143	Mark Harris
7	Pickens County Public Works 3043 Camp Road Jasper, Georgia 30143	Kirk Anderson
8	Cox Lake Dam Owner Georgia Soil and Water Conservation Commission 4310 Lexington Road Athens, Georgia 30605	Greg Walker

## **APPENDIX B-4 – EAP PERIODIC TEST**

A periodic test of the EAP procedures is recommended every 5 years. Documentation for the test is provided in this appendix.

Date	Conducted By	Observations
7/10/2019	Big Canoe POA	Earthquake Scenario
2/13/2023	Big Canoe POA, J. Robby Westbrook, Ph.D., and Wes MacDonald, P.E.	Full Tabletop Exercise with Sunny Day Failure (Piping) Scenario