From: Jennifer.Welte@dnr.ga.gov,
To: themtnsvoice@aol.com,
Cc: Kevin.Chambers@dnr.ga.gov, David.Griffin@dnr.ga.gov, GORArequest.Water@dnr.ga.gov,
Subject: RE: OPEN RECORDS REQUEST #0039: Lake Petit Dam Documents (Submitted: Nov 22, 2021)
Date: Tue, Dec 7, 2021 2:03 pm
Attachments:

Mr. Hopkins,

As will be further described below, the documents requested in your latest email have not yet been provided to EPD by the dam owner. As you are aware, EPD received the EAP over the Thanksgiving holiday and is still in the process of reviewing it. In addition, EPD has been in contact with the dam owner and is aware that some of these items are forthcoming. The Safe Dams Program engages in a thorough review of all submissions and requests additional or follow up information and/or revisions to materials submitted based on that review and the engineering judgment of the program staff. If and when EPD requests this information and it is received, it will be available to the public.

Responding specifically to the items referenced below:

- EPD has not yet received the O&M that is referenced in the EAP. During our review of the EAP, EPD has already flagged this as an item to request from the dam owner.
- EPD has not yet received their calculations for the new storage volume, however the owner and their engineer have indicated that this information is forthcoming. If EPD does not receive this information soon, it will request the same from the dam owner.
- EPD does not typically receive the underlying data or reports for inundation modeling for the EAP from dam owners. If, upon review of the EAP, EPD determines that it needs this information to complete its review of the EAP, it will request the same from the dam owner.
- EPD has not yet received a new seismic analysis. The seismic analysis that was submitted several years ago (which EPD understands you have received) was not rejected by EPD, although it also was not accepted. EPD has been in contact with the dam owner and consultant and understands that a new or revised seismic analysis will be included as part of a new permit application for the dam. If EPD does not receive this information with the new permit application, it will request the same from the dam owner.
  - As you're aware, this dam is already permitted. The new permit application would address upgrades to the dam that the owner has been working with their engineer to design.
- The Rapid Drawdown through offsite pumps/low level drain issue, among other things, will be addressed in the new permit application to be submitted by the dam owner. If EPD does not receive this information with the new permit application, it will request the same from the dam owner.

We hope this information is helpful.

From: themtnsvoice@aol.com <themtnsvoice@aol.com>
Sent: Thursday, December 2, 2021 9:37 AM
To: Welte, Jennifer <Jennifer.Welte@dnr.ga.gov>
Cc: Chambers, Kevin <Kevin.Chambers@dnr.ga.gov>; Griffin, David
<David.Griffin@dnr.ga.gov>; Water, GORArequest
<GORArequest.Water@dnr.ga.gov>
Subject: Re: OPEN RECORDS REQUEST #0039: Lake Petit Dam Documents
(Submitted: Nov 22, 2021)

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Again, Thank you for finding the files I had requested. I was able to access and review them. Unfortunately, it appears that ALL of the documents sought in my GORA Request still appear not to be there.

## For example....

(1) Page 9 has the following quote, "Descriptions and locations of all other pertinent Dam features are discussed and presented in the **O&M Plan** (Geosyntec, 2021)."

The above O&M Plan has not been submitted as part of any GORA Response, but would appear to be legally required to have been submitted to GSD, due to it's inclusion by reference in the EAP. On Page 39 the O&M Plan is further discussed in Section "8.4 / Prevention and Preparedness Actions". Perhaps most clearly as to why the O&M Plan is mandatory to the EAP is found in the following Section:

1.2 Dam Data Sheet

In this section of the EAP, high-level categorical data with regards to the Dam is provided in the table below (Table 1). For location and descriptions of pertinent dam, features **refer to** the Lake Petit Dam Operations & Maintenance (O&M) Plan (Geosyntec, 2021).

I have never been provided with a copy of the O&M Plan. Is Georgia Safe Dams saying that they have not been supplied with this crucial reference data that is directly referenced in the EAP? Or by overisght have I just not been provided it?

(2) A Crucial piece of data appears to be missing, which are the calculations/reports that show the establishment of the Lake's "New" volume of approximately 5,000 Acre feet. We find the following quote on Page 8:

"The GA Safe Dams Program (GSDP) database lists the total storage for the reservoir at approximately 7,500 acre-feet (ac-ft), however, the calculated maximum storage is approximately **5,000 ac-ft** based on calculations based on original design drawings. Table 1 presents additional dam data."

I can only believe that GSD is not simply "*taking their word*" for this fact, and has been provided with the actual calculations and analysis used to reach this conclusion. In support of the reasonablenss of this approach I point to two facts:

(a) The "original design drawings" in 1972 have already been used to calculate the acre-feet..... back in 1972! And as referenced they (assumably the original engineers "CRW") calculated it as **7500 acre-feet**.

(b) The original Inundation Modeling was "based upon a DAMBRK model performed in 1998 by Jordan, Jones and Goulding" . which were again referenced in the 2017 Draft EAP. Jordan Jones and Goulding is a highly qualified engineering firm that actually did the onsite analysis. In that they concluded the following:

Petit Lake is a 115 foot high earthen embankment in the upper reaches of the Blackwell Creek drainage basin in northeastern Pickens County. It impounds approximately **<u>6,000 acre-feet</u>** of water"

So we have three (3) different engineering analysis conveniently dropping the volume of water over the years from 7500 to 6000 and now to 5000 acre-feet. When the Draft EAP was submitted in 2017, the 7500 >> 6000 acre-feet discrepancy was caught, which resulted in GSD demanding that the Inundation Maps be recalculated and verified. I have attached just one of many letters that document the demands. This was almost Four (4) years ago.... and it is unfathomable to me that after all that time, that the Engineer (Geosyntec) has not supplied their calculations, nor that GSD has required them, due to the wild fluctuations in reported lake volume.

I would like copies of that analysis, and indeed all of the underlying data/reports that have been submitted as part of this Inundation Modeling Report creation process. And I would also like any internal or outside review papers that may have been done by GSD, since the suppositions and conclusions are all over the map. (3) I do not see any Seismic Analysis Reports. In 1998 the Dam was found to be Seismically unsound. File Attached. NO ACCEPTED Counterstudy analysis by Geosyntec was ever officially accepted. I have repeatedly asked for such evidence that their decades old analysis was accepted, and GSD has never been able to provide any evidence that their findings were concluded to be valid. The Big Canoe POA is submitting plans to do Millions of Dollars of work to rework the Spillway, and come up with some hoaky alternative Pump-Based-Drawdown plan, in lieu of an actual operational Lower Level Outlet. At the same time, new and persistant seepage areas are popping up all across the downstream face of the dam, and the left abutment at time runs like a heavy flowing creek. Quarterly reports also show the phreatic lines at all time highs (rising). All of this indicates the need for new Seismic Analysis due to changed equational factors. It seems to be an insane approach to allow Big Canoe Property Owners to fund a multi-year, multi-million dollar renovation of this dam, without first seeing if the actual structure itself is stable and to code. Because if it is NOT, and it needs to be reworked, and that would basically end up wasting much of what is being proposed as unecessary.

(4) I do not see any references to exactly what sort of expectations can be had from pulling in offsite pumps to be utilized for Rapid Drawdown. Number of units? Volume requirements of water removal ver time, etc?? Perhaps this in the elusive O&M Plan??? Pages 9, 32, and 33 of the EAP detail the importance of the LLO as a FIRST (1st) line of defense in the event of a variety of Level 2 & 3 potential failure scenarios. It is conveniently referenced as "if available". And yet, loads of documentation and evidence is present of GSD declarations that the LLO is currently unsafe to be operated, and SHOULD NOT be operated. In the recent Lake Disharoon Cluster-F#ck the Big Canoe POA pulled in Five (5) of the largest available punps, but got overwhelmed with just keeping up with the rainall watershed entering hte lake basin. In the event of Lake Petit (larger by a factor of 25-30X) it is unfathomable that similar pumps could actually remove enough water in enough time to meet requirements. If this is the entire source of Rapid Drawdown Plan - I assume that some details of the requirements for equipment, pump volume requirements etc are available in some sort of written form. I would like to see that information as well. Or is it the GSD position that this is all fly-by-the-seat-of-our pants honr system stuff involving total reliance on the "historically great planning and operational skills" of the Big Canoe POA? And yes, that is sarcasm.

Please search your files for this information, and include it in your response. If it is not available, then I will be drafting an "On The Record" media inquiry for why this has not been done, seeking more details responses. I am also getting closer to issuing formal Complaints, which may include a Petition provided to Every Affected Parcel Owner in the downstream affected areas listed in the EAP, along with regional residents that would be impacted by a failure of the Petit Dam.

This entire process is very disturbing in that the inference is growing that the Big Canoe POA, with a 20+ year track record of compliance failures is being allowed to dictate and steer the process of bringing the Dam into compliance.

Peace, - david hopkins / publisher