

CLOSURE PLAN FOR ASH POND E

PLANT BRANCH
PUTNAM COUNTY, GEORGIA

FOR



Georgia
Power

April 2025

REV. 0



Geosyntec 
consultants

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LIST OF ACRONYMS

ACD	Air Curtain Destructor
BMP	Best Management Practice
CFR	Code of Federal Regulations
CCR	Coal Combustion Residuals
CCRMU	Coal Combustion Residuals Management Unit
CQA	Construction Quality Assurance
EAP	Emergency Action Plan
E&SC	Erosion and Sediment Control
FT	Feet
GA EPD	Georgia Environmental Protection Division
Georgia Power	Georgia Power Company
GSWCC	Georgia Soil and Water Conservation Commission
H:V	Horizontal : Vertical
HDPE	High Density Polyethylene
MSL	Mean Sea Level
NPDES	National Pollutant Discharge Elimination System
SDP	Safe Dams Program
USEPA	United States Environmental Protection Agency
WWTS	Wastewater Treatment System

1. GENERAL

Georgia Power Company's (Georgia Power's) Plant Branch (Site) formerly operated as a coal-fired power plant that commenced power generation in 1965. The plant, located in Putnam County, Georgia, has been decommissioned. Over the course of power generation at the Site, five Coal Combustion Residuals (CCR) Surface Impoundments (Ash Ponds), identified as Ash Ponds A, B, C, D, and E, were utilized (Figures 1.1 and 1.2).

Plant Branch ceased producing electricity prior to April 2015. Ash Pond E meets the definition of "National Pollutant Discharge Elimination System (NPDES) – CCR Surface Impoundment" subject to State CCR Rule 391-3-4-.10(9)(c)7. Since Ash Pond E did not receive CCR on or after October 19, 2015, and is located at an electric utility that has ceased producing electricity prior to October 19, 2015, it was not subject to requirements of the 2015 federal CCR Rule. However, Ash Pond E is a "legacy CCR surface impoundment" as defined in 40 CFR § 257.53 and is subject to the federal regulations under the "Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments" (i.e., Legacy Rule). Although Georgia has not yet incorporated the Legacy Rule, this Closure Plan addresses applicable Legacy Rule requirements for completeness.

Ash Pond E will be closed by removal. This closure strategy will eliminate the need for future maintenance and long-term post-closure care. Georgia Power will accomplish this by removing CCR to a new, on-site CCR landfill or selling it for beneficial use. Permit Drawings depicting existing conditions, CCR removal, and final conditions illustrate the closure activities.

2. NOTIFICATION

No later than 15 days prior to beginning removal of CCR from within Ash Pond E, Georgia Power will provide a written Notification of Intent (NOI) to Close the CCR Unit by removal to GA EPD. The NOI will be placed in the CCR unit's Operating Record after submittal to EPD. Closure activities will commence according to the closure schedule presented in Section 11 of this Closure Plan. Depending on the actual CCR excavation rate achieved during closure activities, complete CCR removal and final restoration of the ash pond, in accordance with this Closure Plan, will be accomplished within approximately ten (10) to fifteen (15) years following the beginning of closure activities.

3. BOUNDARY SURVEY AND LEGAL DESCRIPTION

A sealed boundary survey of the Site property and the legal description of the CCR permit boundary are included on Sheets 3 and 4 of the Permit Drawings (Exhibit 8).

4. WRITTEN CLOSURE PLAN

4.1 OVERVIEW

The purpose of this section of the Closure Plan is to describe the steps and procedures required to close the Plant Branch ash pond in a manner consistent with recognized and generally accepted engineering practices. No wetlands and streams have been identified within the waste boundary of Ash Pond E.

Ash Pond E will be closed in accordance with this Closure Plan. This written closure plan may be amended by Georgia Power at any time with EPD's approval. Moreover, as required by 391-3-4-.10(7)(b) [40 CFR §257.102(b)(3)(ii)(B)], this closure plan must be amended before or after closure activities have commenced, if unanticipated events necessitate a revision of the written closure plan. The time frames for amendment to the written closure plan will be in accordance with those specified in 391-3-4-.10(7)(b) [40 CFR §257.102(b)(3)(iii)].

The major steps to close Ash Pond E include: clearing and grubbing, dewatering, construction-phase stormwater and contact water management, excavating and transporting the CCR to a permitted disposal location (i.e., the new on-site CCR landfill), or sending it to the onsite beneficial use facility for preparation to sell to an ash marketer for beneficial use, treating CCR contact water via the on-site wastewater treatment system (WWTS) to meet discharge requirements, partially or completely removing the Category I Dam and the finger dams, and backfilling areas as needed within the former Ash Pond E footprint with earthen fill to blend in with surrounding grades.

The beneficial use of ash will support the ash pond closure. CCR will be harvested and transported to a new onsite beneficial use facility, where the CCR material will be screened, dried, and beneficiated to create a more marketable ash product that will meet the quality standards of off-site market.

After removing the CCR and six inches of soil below the CCR, the finger dams and the Category I Dam in Ash Pond E will be breached (i.e., removed or lowered). Soil from the finger dams and the Category I Dam that were not in contact with the CCR may be used as fill within the former pond for grading. Once restoration grades are reached, vegetation will be established. The grading plans are intended to promote positive drainage of stormwater away

from the closure area, generally restoring the land topography to conditions similar to those before the ash pond was constructed. Existing appurtenant structures, such as emergency and auxiliary overflow structures, culverts, underdrain piping, wells, and piezometers that are located within the ash pond and the Category I Dam, will be removed.

4.2 PHASING PLAN

4.2.1 Phasing Overview

CCR removal for Ash Pond E will generally occur in a phased manner. A conceptual phasing approach with three phases has been developed. The sequence of the conceptual phases and phase activities is summarized below. Phasing activities may be adjusted based on approval of the Design Engineer, with the requirement that regulatory criteria related to stormwater and contact water management are met. The phasing approach is presented on Sheets 10 through 12, Phasing Plans I through III, of the Permit Drawings (Exhibit 8).

4.2.2 Phase I

Phase I consists of preparation activities required to take place prior to initiation of CCR removal within Ash Pond E (including the finger areas). These activities include: (i) a stormwater diversion to the north of Ash Pond E and the east of Finger 1 was constructed to reduce run-on into Ash Pond E; (ii) a stormwater diversion to the west of Ash Pond E and Finger 2 was constructed to reduce run-on into Ash Pond E; and (ii) contact water will be gravity drained or pumped in order to generally maintain a target water surface elevation of 423 feet mean sea level (feet msl) or below.

4.2.3 Phase II

Phase II consists of the dewatering and removal of CCR from Fingers 1, 2, and 3, and construction of finger dams which will further reduce stormwater run-on into Ash Pond E and facilitate CCR removal within the main Ash Pond E footprint.

Phase II will be executed in stages, with the option to install temporary berms or channels around the fingers to divert run-on around the

working areas of the fingers to either downstream of the working areas within the fingers or directly into Ash Pond E. Temporary berms will also be constructed as needed within the working areas of the fingers to isolate dewatering and removal operations.

Finger dams will be constructed at the appropriate stage within Phase II with an adequate offset from the excavated CCR in Ash Pond E. Finger 1, Finger 2, and Finger 3 dams will be 45, 40, and 35 feet in height, respectively, and will be classified as Category II Dams and subclassified as large dams (at Fingers 1 and 2), or a medium dam (at Finger 3) under the GA EPD Safe Dams Program (SDP). The finger dams will include overflow weirs (i.e., emergency spillways and auxiliary spillways) to concentrate potential flow that discharges from the fingers into Ash Pond E. To comply with the regulatory criteria, as well as prevent backflow of contact water from Ash Pond E into the fingers, the water surface elevation of Ash Pond E will be generally maintained at a target water surface elevation of 417 feet msl or below via gravity draining or pumping.

Upon construction of the finger dams and removal of the upgradient CCR and six inches of underlying foundation soil, the Fingers 1, 2, and 3 detention/storage areas will transition to stormwater management features. Concrete riser outlet structures and outlet pipes will be installed within the fingers. Stormwater diversions will be constructed between Fingers 1 and 2 and Fingers 2 and 3 to convey stormwater flow from one finger to another via the outlet pipes. Stormwater will discharge through the stormwater diversions to Beaver Dam Creek, and ultimately to Lake Sinclair.

4.2.4 Phase III

Phase III consists of the dewatering and removal of CCR from the remainder of Ash Pond E. This phase will be executed in stages, with temporary berms, channels, and sediment/stormwater basins installed within Ash Pond E, as needed, to isolate CCR dewatering and removal areas, divert contact water runoff to downgradient locations within Ash Pond E, and manage runoff in areas where CCR removal is completed. CCR removal will generally progress from higher to lower elevation areas, to limit the volume of water required to be managed during

removal activities. Phase III will be finished upon complete removal of CCR material and 6-inches of foundation soil from Ash Pond E. Following the end of Phase III, but prior to the beginning of restoration grading, described in Section 4.11 of this plan, stormwater runoff collected within Ash Pond E will be managed and discharged in accordance with the applicable NPDES Industrial General Stormwater permit (GAR050000), and/or the facility's NPDES industrial wastewater discharge individual permit (GA0026051).

4.3 FUGITIVE DUST CONTROL PLAN

The purpose of this fugitive dust control plan is to demonstrate compliance with the fugitive dust requirements in GA EPD Rule 391-3-4.10 and § 257.100(f)(3)(i) per § 257.80(b) of the Legacy Rule. USEPA defines CCR fugitive dust as "solid airborne particulate matter that contains or is derived from CCR, emitted from any source other than through a stack, or chimney." [40 CFR § 257.53; incorporated by reference in GA EPD Rule 391-3-4.10(2)(a)].

This fugitive dust plan identifies and describes the CCR fugitive dust control measures that will be used to minimize CCR from becoming airborne at the facility, including CCR fugitive dust originating from CCR units, roads, and other CCR management and material handling activities. The fugitive dust control measures that will be used are presented below:

- Fugitive dust originating from the closure of Ash Pond E will be controlled using water suppression, compaction, synthetic or vegetative covers, or dust suppression agents.
- CCR that is transported via truck to the existing onsite landfill will be conditioned to appropriate moisture content to reduce the potential for fugitive dust.
- Water suppression will be used, as needed, to control fugitive dust on facility roads used to transport CCR and other CCR management areas.
- Speed limits will be used to reduce the potential for fugitive dust.
- Trucks used to transport CCR will be filled to or under capacity to reduce the potential for material spillage.

The fugitive dust control measures identified and described in this Closure Plan were selected based upon an evaluation of site-specific conditions at Ash Pond E, including the physical properties of CCR, the specific closure construction activities, weather conditions, and operating conditions.

Georgia Power personnel and/or their contractors will assess the effectiveness of the control measures by performing visual observations of Ash Pond E and surrounding areas. Appropriate corrective actions for fugitive dust will be implemented as necessary. Logs will be used to record the use of water-spray equipment. Should a complaint be received from a citizen regarding a CCR fugitive dust event at the facility, the complaint will be documented in a log and investigated. Appropriate steps will be taken, including any corrective action, if needed.

An initial annual fugitive dust control report will be prepared by Georgia Power no later than January 8, 2026, followed by annual reports thereafter.

Amendments to the fugitive dust control plan may be made at any time as required due a change in conditions that would affect the in-place plan. All revisions to the fugitive dust control plan will be documented and placed in the operating record. Upon completion of CCR removal, the fugitive dust control plan will no longer be applicable and associated activities including reporting will cease.

4.4 ORGANIC MATERIALS MANAGEMENT

Ash Pond E contains a variety of vegetation from trees and underbrush to non-woody plants. Woody vegetation will be cut above the ground surface and removed prior to removing CCR. Vegetation and wood waste will be managed in the following manner:

1. Trees and logs may be harvested, windrowed, or stockpiled for mulching prior to off-site disposal, chipped for use on-site as a best management practice (BMP) measure, burned through approved methods and times, or disposed of at an appropriately permitted offsite landfill.

2. Large bushes may be windrowed, or stockpiled for mulching prior to disposal, burned through approved methods, or disposed of at an appropriately permitted offsite landfill.
3. Stumps and tree roots not in contact with CCR may be windrowed, or stockpiled for mulching prior to disposal, chipped for use on-site as a BMP measure, burned through approved methods, or disposed of at an appropriately permitted offsite landfill.
4. Grass and brush may be windrowed, or stockpiled for mulching prior to disposal, or disposed of at an appropriately permitted offsite landfill.

Remaining wood waste from grubbing work within the CCR footprint will be managed and kept separate from surface-cut wood waste. Wood waste that contains CCR will be managed within the ash pond limits in the following manner:

1. Stumps and tree roots may be mechanically screened to remove CCR, windrowed or stockpiled for mulching prior to disposal, burned through approved methods, or disposed of at an appropriately permitted landfill.
2. Grass and bush may be mechanically screened to remove CCR, and windrowed or stockpiled for mulching prior to disposal at an appropriately permitted landfill.

The following procedures will be followed for on-site burning:

Air curtain destructors (ACDs) will be used for all burning in accordance with Solid Waste Thermal Treatment Operations Rule 391-3-4-.08(2). The ACD(s) will be mobile units, therefore construction certification as required by 391-3-4-.08(2)(b) will not be required; however, if a permanent ACD structure is utilized, then a construction certification will be prepared and submitted to EPD. The following conditions will be met for utilization of any ADC:

1. Location: The ACD must be at least 500 feet from any occupied dwelling. The distance may be increased or decreased on a site-specific basis at the discretion of the Division.

2. If needed, areas for storing waste prior to treatment will be clearly defined and maximum capacity specified.
3. Types of Wastes: Only wood wastes consisting of trees, logs, brush, stumps relatively free of soil, and natural wood products free of wood preserving chemicals, paints, and other contaminants may be burned. Fallen leaves, sawdust, other densely packed wood wastes, and paper (any type) may not be burned.
4. Air Quality: The facility shall be designed in such a manner as to meet applicable air quality standards of the Division. No smoke emissions exceeding 20 percent opacity may be produced during operation except for a specified ignition period.
5. Disposal of Ash and Residue: Ash and residue shall be removed from the facility, handled as a recovered material or disposed in a permitted facility.
6. Fire Protection: Facility design shall provide for fire control equipment and a soil stockpile placed near the storage and ACD area. Additional fire fighting equipment shall be made available for emergencies.
7. Supervision: Operation and management of air curtain destructors shall be under the direct supervision and control of an operator who is present at all times of operation and is qualified in air curtain distracter management by training, education or experience.
8. Residue: Temperature and combustion time shall be sufficient to produce a satisfactory residue, and such residue shall be promptly deposited in a landfill operated and maintained as provided herein or handled in such other manner as may be allowed by these Rules. Ashes may not be allowed to build up on the combustion pit to higher than one-third the pit depth to the point where combustion is impeded, whichever comes first.
9. Access: Facility access shall be restricted to prohibit unauthorized storage or disposal of wastes and to prevent injury during ACD operation.
10. Inspection and Maintenance: The ACD and all operating appurtenances must be routinely inspected and adequately maintained to ensure proper working order. Storage areas must be inspected and maintained to exclude unauthorized wastes and minimize any fire hazard.

11. No ACD may burn any household waste or yard trimmings.

4.5 POND DEWATERING PROCESS

Dewatering will include removing water using a variety of methods, including but not limited to passive, gravity-based methods (e.g. rim ditches) and/or active dewatering methods (e.g., pumps and well points) as needed to allow for CCR excavation and transportation. CCR contact water will be treated by an on-site WWTS. Water will be managed and discharged in accordance with the Site's approved NPDES Industrial Wastewater Discharge Individual Permit GA0026051 and the current approved version of the Ash Pond Dewatering Plan. The Ash Pond Dewatering Plan was initially approved by GA EPD Watershed Protection Branch in June 2017, and describes treatment processes, monitoring and best management practices necessary to comply with the NPDES Industrial Wastewater Discharge Individual Permit requirements.

4.6 STORMWATER AND CONTACT WATER MANAGEMENT

4.6.1 Water Management Overview

During CCR removal, run-on stormwater, and run-off contact water (e.g., stormwater that has come into contact with CCR) will be controlled with best management practices such as channels, diversion berms, and pumps and managed in accordance with the NPDES General Industrial Storm Water permit and Industrial Wastewater Discharge Individual permits GA0026051. During CCR removal activities, stormwater run-on into the ash pond will be minimized to the extent practicable through the use of finger dams, temporary berms and diversion ditches. The Phasing Plan, presented in Section 4.2 of this plan and in Sheets 10 through 12 of the Permit Drawings, describes stormwater diversions and finger detention areas to be constructed to manage stormwater run-on and runoff during CCR removal and site restoration activities. Water management during CCR removal at Ash Pond E will be conducted such that regulatory criteria related to stormwater and contact water management (i.e., design storms and appropriate freeboard) contained in the State CCR Rule and the Georgia Rules for Dam Safety are satisfied.

4.6.2 Stormwater Management Features

As described in the Phasing Plan in Section 4.2 of this plan and depicted in Sheets 10 through 12 of the Permit Drawings, stormwater during CCR removal at Ash Pond E is managed through the use of temporary and permanent diversions (i.e., channels) constructed around Ash Pond E and between Fingers 1, 2, and 3, and through the creation of detention areas within the fingers, upon the removal of CCR from these areas, and transition to stormwater ponds.

The diversions connect Finger 3 to Finger 2, Finger 2 to Finger 1, and Finger 1 to a North diversion stormwater pond, which discharges to Beaver Dam Creek and ultimately to Lake Sinclair. The diversions are designed as trapezoidal in shape with 3 horizontal to 1 vertical (3H:1V) side slopes, and grass or riprap lining to minimize erosion and scour.

The finger detention areas provide stormwater storage and minimize runoff to Ash Pond E during CCR removal activities. The finger detention areas are created by the construction of the finger dams after the removal of CCR and 6-inches of foundation soils. Stormwater within the finger detention areas is discharged through (i) concrete riser structures with outlet pipes to the downstream diversions; (ii) pumps installed in the finger detention areas; (iii) auxiliary spillways located in the finger detention area crests to the downstream diversions; and (iv) emergency spillways located in the finger dams into Ash Pond E.

4.7 NPDES INDUSTRIAL WASTEWATER DISCHARGE INDIVIDUAL PERMIT

Plant Branch currently discharges stormwater and/or wastewater under NPDES Industrial Wastewater Discharge Individual Permit GA0026051 revised in March 2023 with an effective date of May 1, 2023. This permit governs discharges into Lake Sinclair from various outfalls located on the Plant Branch property. Georgia Power submitted an Ash Pond Dewatering Plan to GA EPD Watershed Protection Branch, the latest version of which was approved in October 2021 [Georgia Power, 2021]. The permit establishes effluent limitations and monitoring requirements, which Georgia Power will follow for discharges from the WWTS.

4.8 WASTEWATER MANAGEMENT

During ash pond closure, CCR contact water and legacy wastewater from the ash pond will be treated by an on-site WWTS. The wastewater will be treated to meet the NPDES permit effluent discharge requirements contained in Permit GA0026051. Treatment methods may include physical-chemical processes such as flocculation, clarification, and filtration. The WWTS is located immediately to the east of Ash Pond B. The WWTS may be decommissioned upon verification of CCR removal when wastewater treatment will no longer be needed.

4.9 CCR EXCAVATION AND REMOVAL CRITERIA

CCR will be excavated in consideration of many site-specific factors including access into and out of the ash pond, haul routes, dewatering methods, detailed CCR excavation and final restoration phasing plans, the excavation working face size, and excavation and hauling methods. In addition,

The general sequence of planned excavation and restoration activities is summarized as follows: CCR excavation will be conducted in phases in such a manner as to only expose a limited area of CCR that can reasonably be worked by the contractor. Phasing CCR removal incrementally is intended to limit the active excavation area such that contact water generation is minimized to the extent practicable. Contact and non-contact water will be directed to ditches and berms to prevent mixing and route contact water to the on-site treatment system. As excavation proceeds, new diversion ditches/berms will be installed to re-direct runoff from new excavation areas to the WWTS; interim slopes will be graded to drain to the temporary ditches and then to the contact water management features. This process will proceed until the base of each CCR unit is reached, visible CCR material has been removed, and the area has been certified by the CQA Engineer and approved by GA EPD for the removal. Once ash removal is approved by GA EPD, the former CCR unit will be graded, backfilled, and stabilized. Typical BMPs and other erosion control measures to be employed during the excavation and removal of CCR within the units are shown on Sheets 13 through 15 of the Permit Drawings.

“CCR removal” refers to the process of verifying and documenting that the CCR has been removed from the ash pond. The ash pond is known to contain a

mixture of fly ash and bottom ash collectively referred to as CCR. Decontamination of the CCR unit will be conducted in a three-step process:

1. Visible CCR will be removed from the unit and sent to an appropriately permitted CCR solid waste facility.
2. A minimum of 6 inches of soil beneath the visible CCR footprint will be excavated and placed in an appropriately permitted CCR solid waste landfill. Visual observations and Munsell Soil Color Chart will be used to confirm that visible CCR has been excavated from the former CCR footprint.
3. Groundwater monitoring of the former CCR unit will be conducted for a minimum period of 5 years after CCR removal, or continue until groundwater monitoring concentrations do not exceed the groundwater protection standard established pursuant to 40 CFR §257.95(h) for Appendix IV constituents.

After removal of CCR and the additional minimum of 6 inches of soil, the intermediate surface will be inspected by Georgia Power prior to stabilization or placement of any backfill. The documentation of this procedure is presented in Section 4 of the companion Construction Quality Assurance (CQA) Plan. Groundwater monitoring will be implemented as described in Section 4.12 of this Closure Plan.

4.10 GEOTECHNICAL INSTRUMENTATION

Geotechnical instrumentation may be utilized to obtain subsurface information to monitor ground conditions during CCR removal. Instrumentation may include settlement plates, slope inclinometers, vibrating wire piezometers, standpipes, and other instruments.

4.11 SITE RESTORATION AND BORROW AREA MANAGEMENT

The post-CCR-removal final restoration grading plan for Ash Pond E will utilize soils that were not in contact with the CCR and will originate from the breach and partial removal of the Category I Dam, Finger 1 dam, and Finger 2 dam, and full removal of the Finger 3 dam to achieve final grades within the ash pond footprint. The breach dimensions for the Category I Dam and finger dams are such that the breach widths are greater than the maximum heights of the dams

and the breach cut slopes are not steeper than 4H:1V. The diversions north of Ash Pond E and east of Finger 1 and the North diversion stormwater pond will remain in place during Site restoration, to convey run-on away from the former Ash Pond E footprint. Stormwater will discharge to Beaver Dam Creek, and ultimately to Lake Sinclair.

Engineering analyses indicate that the soil from the breach and partial removal of the Category I Dam, Finger 1 dam, and Finger 2 dam, and partial removal of the Finger 3 dam should be sufficient to achieve the final restoration grades. However, if additional borrow soil is needed, onsite and/or offsite borrow areas may be developed. Best management practices will be followed for grading, drainage, and erosion control in the borrow area(s).

4.12 GROUNDWATER MONITORING

Pursuant to the Rules of Solid Waste Management, Chapter 391-3-4-.10(6), Georgia Power prepared a Groundwater Monitoring Plan (included in Exhibit 6) and installed a groundwater monitoring system within the uppermost aquifer beneath the Site. This groundwater monitoring system is located around the perimeter of Ash Pond E.

Following CCR removal from Ash Pond E, Georgia Power will monitor groundwater semi-annually pursuant to the requirements defined in the Groundwater Monitoring Plan included in the permit. Georgia Power will monitor groundwater for a period of five (5) years after the CCR has been removed from Ash Pond E to confirm that groundwater constituent concentrations are not detected at statistically significant levels above the groundwater protection standards established in State CCR 391-3-4-.10(6)(b) which references the constituents listed in the Federal CCR Rule Subpart D, Appendix III and IV.

A demonstration certified by a Qualified Groundwater Scientist will be submitted to GA EPD for approval documenting that groundwater constituent concentrations are not detected at statistically significant levels above the groundwater protection standards established in Rule 391-3-4-.10(6)(b) for constituents listed in Appendix IV. Evaluation criteria may include but are not limited to, additional sampling, analysis, calculations, and/or modeling to demonstrate compliance as determined by the Qualified Groundwater Scientist and approved by GA EPD. In accordance with the Georgia Water Well Standards

Act (O.C.G.A. § 12-5-120), at least once every five years, Georgia Power will have the monitoring well(s) inspected by a professional engineer or professional geologist, who will direct appropriate remedial corrective work to be performed if the well does not conform to standards. Well inspection records and records of remedial corrective work are subject to review by GA EPD.

4.13 DEMOLITION OF ASH POND INFRASTRUCTURE

Various plant and ash pond infrastructure will be demolished as part of ash pond closure. The coal-fired plant was demolished separately from the ash pond closure project and the demolition was completed in 2019.

The disposition of various plant and ash pond infrastructure in and around Ash Pond E varies. Some infrastructure will need to remain functional during ash pond closure. Some infrastructure will be demolished during ash pond closure and disposed of in an appropriately permitted landfill. Other infrastructure may be repurposed in other appropriate applications to support ash pond closure.

The disposition of ash pond infrastructure is summarized in the following table.

Table 4.1. Proposed Disposition of Existing Ash Pond Infrastructure

Existing Ash Pond Infrastructure	Maintain Functionality During CCR Removal	Demolish or Abandon During CCR Removal	Potential Repurpose for Ash Pond Closure	Demolish or Abandon During Dam Removal
36" HDPE Pipe (Ash Pond E to Ash Pond D Overflow Pipe)			X	X
Pozzalime Feeder		X		
24" HDPE Pipe (Former Sluice Line)			X	X
Ash Pond E Piezometers (in pond)		X		
Ash Pond E Piezometers (in dam)	X			X
Ash Pond E Blanket Drain and Transverse Drain Pipe	X			X
Ash Pond E Lateral/Finger/Sand Toe Drains	X			X
Ash Pond E Collector Sumps from Drains	X			X
Ash Pond E HDPE Sump Pump-back Line	X			X
Ash Pond E Relief Wells and Sumps	X			X
Drainage Ditches at Toe of Dam (with structures and piping)	X			X
Ash Pond E Primary Outlet Structure	X	X		
Ash Pond E Emergency Spillway (earthen structure)	X	X		
30" Discharge Pipe (abandoned)		X		

4.14 COORDINATION WITH GA EPD SAFE DAMS PROGRAM (SDP)

Georgia Power will coordinate with the GA EPD SDP in regard to the construction of finger dams and the removal of the Category I Dam.

4.14.1 Finger Dams

In the second phase (Phase II) of closure activities, new dams are proposed to manage and control run-on to Ash Pond E, creating impoundments in Fingers 1, 2, and 3. Due to proposed height of the new structures, the finger dams will be classified as Category II Dams. "Proposed or Existing Information for Inventory and Classification" forms will be submitted to the GA EPD SDP for each of the finger dams.

If the GA EPD SDP agrees with the Category II classification, no further action (i.e., submittals) will be required for these structures.

4.14.2 Category I Dam

In the third phase (Phase III) of closure activities, the main body of Ash Pond E impoundment will be dewatered and CCR plus 6-inches of foundation soils will be removed from, up to the Category I Dam. No impacts to the Category I Dam are planned until dewatering and CCR removal are complete.

As described in Section 4.11 of this plan, Site restoration activities include the breach and partial removal of the Category I Dam. Approximately one year prior to the planned date of the breach, Georgia Power will submit a breach application, including a plan view and cross sections of the breach to the GA EPD SDP. Once approved by the GA EPD SDP, breach construction will be completed. The GA EPD SDP will make a site visit to confirm completion, and if satisfied, will concur with removing the permit for the Category I Dam at Ash Pond E.

4.15 PERMIT DRAWINGS

Permit Drawings, titled “Plant Branch CCR Surface Impoundment Closures, Ash Pond E Closure-by-Removal, Putnam County, Georgia, Permit Drawings”, have been prepared depicting existing, interim, and final conditions associated with closure construction. The Existing Site Conditions drawing (Sheet 5) shows the current topography and site features. The CCR Removal Plan drawing (Sheet 6) portrays interim conditions showing the expected CCR removal grades accounting for over-excavating six inches of soil, prior to the partial removal of the Category I Dam. The Restoration Grading Plan drawing (Sheet 7) portrays the post-dam breach grades, restoration grades, and final stormwater management measures. The drawings also identify select infrastructure remaining or demolished at the interim and final conditions.

5. CERTIFICATION OF CLOSURE

At the completion of CCR removal a professional engineer registered in Georgia will prepare, and Georgia Power will submit a certification report documenting the removal to GA EPD. The certification reports will be submitted to GA EPD within 60 days of completion of closure by removal activities. Pursuant to State CCR Rule 391-3-4-

.10(7)(e), and after at least five years from the removal of all CCR, if groundwater concentrations at the Site have been demonstrated not to exceed the applicable Federal and State groundwater protection standards, Georgia Power will submit a closure report to the GA EPD Director.

6. ESTIMATE OF CCR VOLUME TO BE REMOVED

The volume of CCR in the ash pond was estimated as 10,564,000 cubic yards using AutoCAD software.

7. BENEFICIAL USE OPERATION

CCR is proposed to be reclaimed from Ash Pond E or other Georgia Power CCR units for beneficial use as defined in 40 CFR § 257.53. The quantity of CCR that may be reclaimed is unknown, largely because the demand for the product fluctuates based on market conditions. Any reclaimed CCR will be processed in the beneficial use facility, which will mechanically screen, dry, and thermally beneficiate the CCR to create a more marketable ash product that would meet the quality standards of the off-site market. Pre-processed CCR will be staged within a structure to prevent contact with stormwater and movement by wind. Post-processed CCR will be stored in silos for ease of railcar or truck loading operations; CCR that doesn't meet the quality standard will be placed in the on-site CCR Landfill. The CCR removal plan for beneficial use presented below describes the measures that will be implemented during CCR reclamation for beneficial use.

- Onsite CCR reclamation will occur concurrently (and in a manner that does not interfere) with closure construction.
- Contact water generated at onsite beneficial use operations will be removed and managed as contact water in the same manner as described herein for the closure activities.
- Dust control measures at onsite beneficial use operations will be implemented in the same manner as described herein for the closure activities.
- The volume of CCR reclaimed from Ash Pond E and sent to the BU facility will be tracked and documented by Georgia Power on an ongoing basis. The volume of CCR rejected and returned to the landfill

from the BU facility will be tracked, in addition to the volume that is sent to the offsite market will be tracked as well.

8. VEGETATION PLAN

The final restoration areas for the ash pond and the potential onsite borrow area will be stabilized, seeded and fertilized to meet the requirements for Vegetative Measures in the latest edition of the Manual for Erosion and Sediment Control in Georgia. These areas will be stabilized as appropriate for the final conditions. Areas will be stabilized within two weeks after reaching final grades. Areas where permanent vegetation is slow to establish will receive temporary seeding.

9. EROSION AND SEDIMENT CONTROL (E&SC)

Erosion and sediment control measures will be designed, permitted, installed, and maintained in accordance with the latest edition of the Manual for Erosion and Sediment Control in Georgia, the Permit Drawings, and the detailed design drawings to be prepared in accordance with the State CCR Rule.

10. COST OF CLOSURE

In compliance with applicable securities laws and regulations, Georgia Power will provide the unredacted cost estimate for closure to GA EPD under separate cover. The closure cost estimate includes all items necessary for a third-party to complete the project in accordance with the Closure Plan as set forth herein. The cost estimate will be adjusted annually for inflation. Georgia Power will provide a demonstration of financial assurance upon approval of the closure and post-closure care cost estimates by GA EPD.

11. CLOSURE SCHEDULE

The following is a conceptual-level schedule communicating the anticipated milestones of major closure activities. The schedule will be refined as closure activities begin. This schedule could extend depending on opportunities to beneficially re-use CCR and/or disposal of CCR at Plant Branch and is as follows:

Table 10.1. Anticipated Closure Schedule for Ash Pond E

Activity	Duration/Schedule
Mobilization and Site Preparation (including clearing and grubbing)	Year 1
Ash Pond Closure Construction Activities (including dewatering, CCR removal, related earthwork, and site restoration)	Year 1 to Year 15 (estimated 10 to 15 years)
Submit Certification Reports Documenting the Removal to GA EPD	Year 1 to Year 15 (estimated 10 to 15 years)
Groundwater Monitoring During Ash Pond Closure	Year 1 to Year 15 (estimated 10 to 15 years)
Post CCR-Removal Groundwater Monitoring	5 years following completing closure construction
Submit a Closure Report to the GA EPD Director	Upon demonstrating groundwater monitoring concentrations at the Site do not exceed the applicable Federal and State groundwater protection standards

12. SUPPLEMENTAL PROVISIONS

a. General Information Regarding the Changes to the Federal CCR Rule:

USEPA issued additional CCR regulations for inactive surface impoundments at inactive electric utilities, referred to as "legacy CCR surface impoundments."

AP-E meets the definition of a legacy surface impoundment, and these changes to the Federal CCR Rule, which went into effect on November 8, 2024, are currently applicable to AP-E. Although certain associated requirements are not yet required under Georgia regulations to be addressed in this Closure Plan, Georgia Power is including the following Legacy Rule-related information in this Closure Plan for completeness.

The above closure schedule anticipates complying with the Legacy Rule's closure timeline due to the availability of up to five two-year extensions to the otherwise applicable requirement to complete closure within 5 years of the submittal of the NOI.

b. Requirement for Permanent ID Marker

No later than January 8, 2025, a permanent identification marker which is a single post with placard, as set forth by § 257.73(a)(1) will be placed on or immediately adjacent to Pond E.

c. Site Security

Access to the former Plant Branch Site, and specifically to Pond E, is controlled by 24-hour security and site perimeter controls, including perimeter fence and gates. Access to Plant Branch is controlled at all times and gates will be locked. Therefore, the possibility for unauthorized entry of persons or livestock onto Pond E has been minimized.

d. Weekly, Monthly, and Annual Inspections

The following inspections are performed in accordance with State CCR Rule 391-3-4-.10(5)(b):

7-Day Inspections: Georgia Power inspects the CCR unit and discharge of all hydraulic structure outlets at intervals not exceeding seven (7) days. The 7-day inspections are made by a qualified person and include observation and documentation of any appearance of actual or potential structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the facility.

30-Day Inspections: Georgia Power monitors all CCR unit instrumentation at intervals not exceeding 30 days. These instrumentation monitoring examinations are made by a qualified person.

Annual Inspections: A qualified professional engineer (P.E.) registered in Georgia inspects the CCR unit on an annual basis to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. The inspection includes at a minimum, the following activities:

- i. A review of available information regarding the status and condition of the CCR unit, including but not limited to, files available in the operating record (e.g., CCR unit design and construction information required by §§ 257.73(c)(1) and 257.74(c)(1), previous periodic structural stability assessments required under §§ 257.73(d) and 257.74(d), the results of inspections by a qualified person, and results of previous annual inspections;
- ii. A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures; and

iii. A visual inspection of any hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit for structural integrity and continued safe and reliable operation.

The results of this annual inspection are presented in a report that is placed in the facility's operating record as well as on the Georgia Power CCR Compliance website. The annual inspection report will address the following: (i) any changes in geometry of the impounding structure since the previous annual inspection; (ii) the location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection; (iii) the approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection; (iv) the storage capacity of the impounding structure at the time of inspection; (v) the approximate volume of impounded water and CCR at the time of the inspection; (vi) any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation or safety of the CCR unit and appurtenant structure; and (vii) any other changes which may have affected the stability or operation of the impounding structure since the previous annual inspection. If a potential deficiency or release is identified during an inspection, Georgia Power will remedy the deficiency as soon as feasible. If needed, Georgia Power will activate the Emergency Action Plan and follow the appropriate procedures outlined in that plan. Georgia Power will prepare documentation detailing the corrective measures taken and will place it in the facility's operating record.

e. Structural Integrity Requirements & Periodic Assessments

The following requirements of §§ 257.73 and 257.100 will be implemented for Ash Pond E in accordance with the schedule provided in the rule as detailed below:

- Initial hazard potential classification assessments by May 8, 2026 and periodic hazard potential classification assessments thereafter;
- Preparation of an Emergency Action Plan (EAP) by May 8, 2026;
- Compilation of a history of construction by February 9, 2026; and
- Completion of the structural stability and safety factor assessments by May 8, 2026.

f. Inflow Design Flood Control System & Periodic Assessments

An initial inflow design flood control system plan for Pond E is presented in "Stormwater and Contact Water Management Plan for Ash Pond E", dated November

9, 2018, per 257.82(a)(1) and (a)(2) but will be updated no later than May 8, 2026 in accordance with 257.82(c).

g. Recordkeeping, Notification, and Publicly Accessible Internet Site:

Georgia Power will comply with the recordkeeping requirements of 40 CFR § 257.105(k), closure notification requirements specified in 40 CFR § 257.106(k), and closure internet requirements in 40 CFR § 257.107(k).

Specifically, the following notifications, document retention, and timely postings to the internet include:

- (i) Notifications will be sent to the State Director within 30 days of placing information required by 257.105 in the operating record in accordance with 40 CFR 257.106(d) and (k);
- (ii) The operating record information under 40 CFR 257.105 required by 40 CFR 257.107(d) and (k) to be posted to the CCR website within 30 days of placing the information in the operating record; and
- (iii) The information required to be posted to the CCR website, including the information required by 40 CFR 257.107(d) and (k) will be made available to the public for at least five years following the date on which the information was first posted to the CCR website as required by 40 CFR 257.107(c).

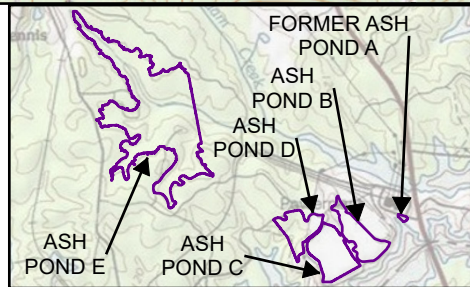
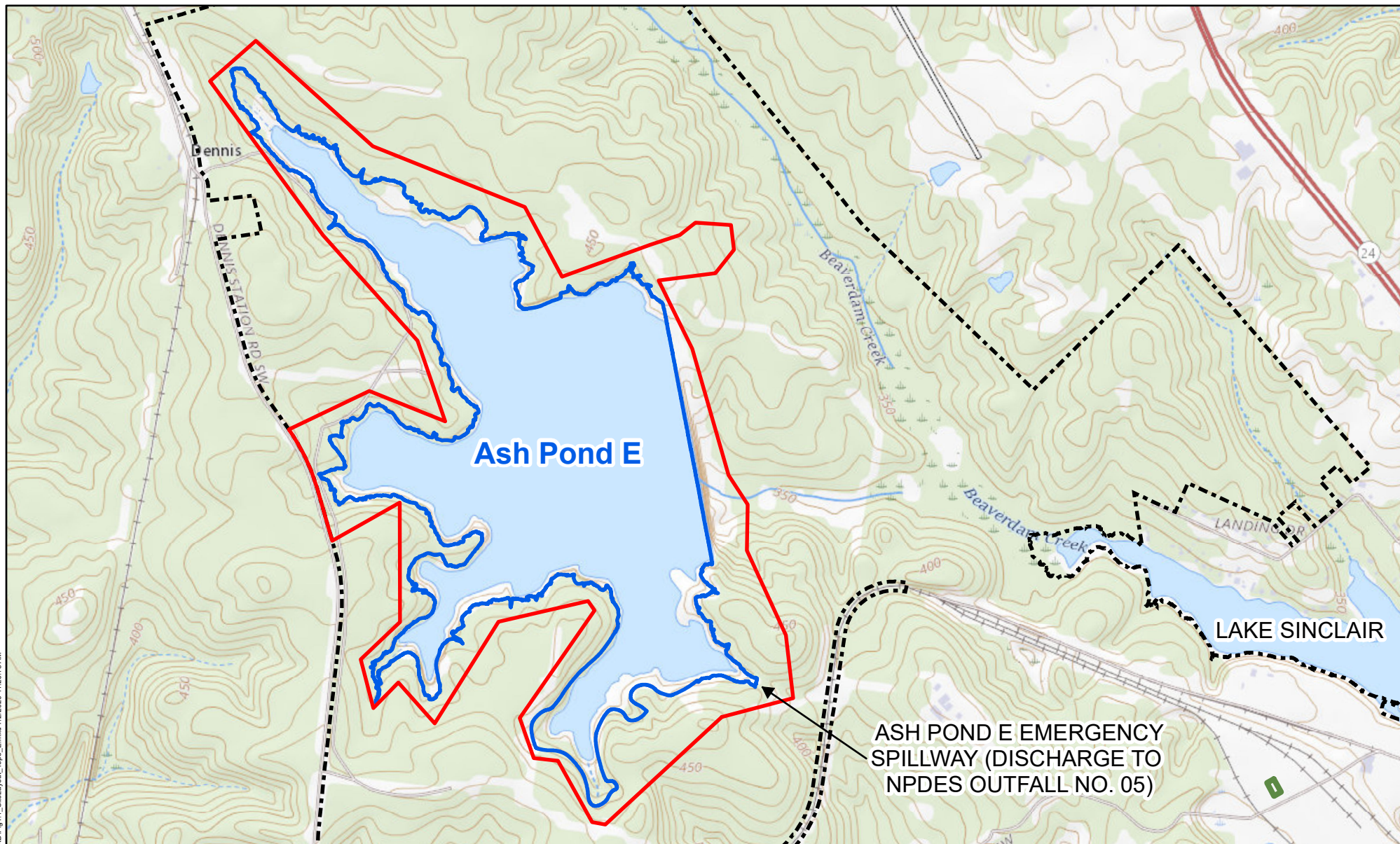
13. REFERENCES

United States Environmental Protection Agency (USEPA). (2024). 40 CFR Parts 9 and 257 "Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments".

Georgia Power (2021). "Georgia Power Plant Branch, NPDES Permit No. GA0026051, Ash Pond Dewatering Plan".

GSWCC (2016). "Manual for Erosion and Sediment Control in Georgia".

FIGURES



KEY MAP

1,500 750 0 1,500 Feet

Legend

- Property Boundary
- Proposed CCR Permit Boundary
- Ash Pond E Boundary

Notes:
1. Service Layer Credits:
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Site Layout - Topographic Map

Georgia Power Company
1100 Milledgeville Road
Putnam County, GA 31061

Geosyntec
consultants

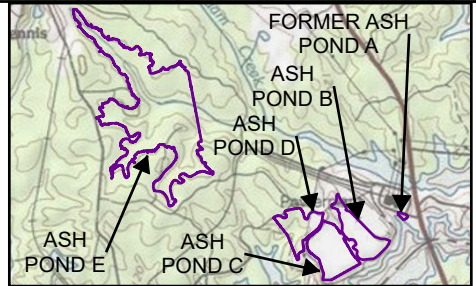
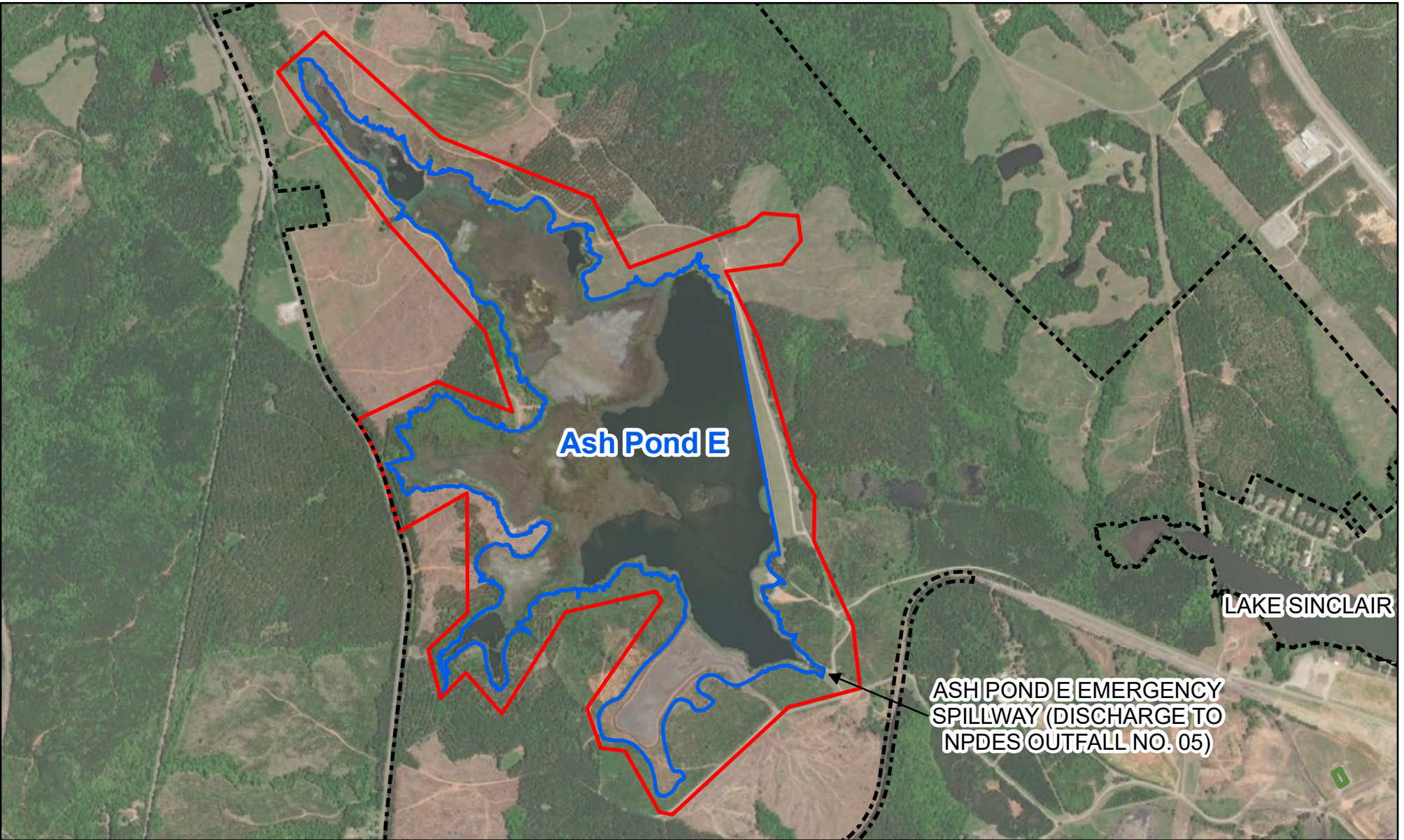
Kennesaw, GA

May 2024

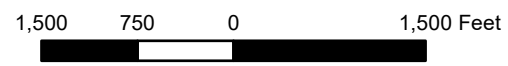
Figure

1.1

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KEY MAP



Legend

- Property Boundary
- Proposed CCR Permit Boundary
- Pond Boundary

Notes:
1. Service Layer Credits:
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Site Layout - Aerial Map

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1100 Milledgeville Road
Putnam County, GA 31061

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Kennesaw, GA

May 2024

Figure

1.2