

FINAL WATER QUALITY STUDY REPORT

LANGDALE PROJECT (FERC No. 2341)
AND
RIVERVIEW PROJECT (FERC No. 2350)



Prepared for:
Georgia Power Company

Prepared by:
Kleinschmidt Associates

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Kleinschmidt

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ACRONYMS AND ABBREVIATIONS

ADEM	Alabama Department of Environmental Management
AIR	additional information request
AL	State of Alabama
C.F.R.	Code of Federal Regulations
cfs	cubic feet per second
FERC	Federal Energy Regulatory Commission
FL	State of Florida
fps	feet per second
FPS	Final Study Plan
GA	State of Georgia
GDNR	Georgia Department of Natural Resources
Georgia Power	Georgia Power Company
GPS	Global Positioning System
HEC-RAS	Hydrologic Engineering Center River Analysis System
kW	kilowatt
PSP	Proposed Study Plan or Study Plan
RM	river mile
USACE	U.S. Army Corps of Engineers
USGS	United States Geological Survey

1.0 INTRODUCTION

Georgia Power Company (Georgia Power) is filing with the Federal Energy Regulatory Commission (FERC) this report in support of Georgia Power's applications for the license surrender and decommissioning of the Langdale Project (FERC No. 2341) and the Riverview Project (FERC No. 2350) (the Projects).

1.1 Langdale Project

The Langdale Project is located on the Chattahoochee River in Harris County, Georgia and adjacent to the City of Valley, Alabama (Figure 1-1). The Langdale Project is located at River Mile (RM) 191.9, approximately 9.5 river miles downstream of the U.S. Army Corps of Engineers (USACE) West Point Dam (RM 201.4), which began operation in 1976 and regulates the flow through the Middle Chattahoochee River region.

The Langdale Project was constructed between 1904 and 1908 and purchased by Georgia Power from West Point Manufacturing Company in 1930. The Project operated as a run of river hydroelectric plant. Over time, four horizontal generating units developed maintenance problems, and eventually were no longer operable. Generation records suggest that Georgia Power stopped operating the horizontal units in approximately 1954. The horizontal units were officially retired in 1960, leaving only the two 520 kilowatt (kW) vertical units operating at the Langdale Project; these two units remain in place in the powerhouse but have not operated since 2009.

1.2 Riverview Project

The Riverview Project is located approximately at river mile (RM) 191.0 (Crow Hop Diversion Dam) and RM 190.6 (Riverview Dam) on the Chattahoochee River, downstream of the City of Valley, Alabama, and in Harris County, Georgia (Figure 1-1). The Riverview Project is located approximately 10.5 RM downstream of the USACE West Point Project and 0.9 RM downstream of the Langdale Project.

The Project consists of two separate dams, Riverview Dam and Crow Hop Diversion Dam (Crow Hop Dam), and a powerhouse with generating equipment located on the western abutment of Riverview Dam. Crow Hop Dam is the upstream dam and is situated across the main river, diverting flow into a headrace channel between an island and the western bank. The headrace channel is approximately 1-mile-long. Riverview Dam and the powerhouse are located at the lower end of this headrace channel (Figure 1-2). The Project

was constructed in several phases. The smaller downstream dam was constructed in 1906 for West Point Manufacturing Company. Originally, the dam diverted water into the adjacent mill building to provide power for mill operation. The existing powerhouse was built in 1918 and houses two 240 kW generating units. Crow Hop Dam was constructed in 1920. Georgia Power purchased the Riverview Project from West Point Manufacturing Company in 1930 and began operating the two generating units. Over time, the units developed maintenance problems, and eventually were no longer operable. Georgia Power stopped operating the units in 2009.

Georgia Power filed License Surrender applications with FERC for the Projects on December 18, 2018, in accordance with the Commission's regulations at 18 C.F.R. § 6.1 and 6.2. The Projects' licenses expire on December 31, 2023.

On April 11, 2019, FERC issued an additional information request (AIR) regarding decommissioning studies proposed by Georgia Power. As part of its response, Georgia Power filed the Proposed Study Plan (PSP) on May 24, 2019 to provide additional information on the proposed studies to support its surrender applications for the Projects. Georgia Power filed the Final Study Plan (FSP) on July 24, 2019 and filed the Draft Study reports on September 21, 2020. On October 5, 2020, Georgia Power held a Public Meeting to present the study results to stakeholders. The meeting consisted of an afternoon and an evening session held virtually due to concerns with Coronavirus Disease 2019 (COVID-19). Georgia Power requested that stakeholders submit comments on all draft study reports no later than October 24, 2020. Georgia Power received seven comment letters on the draft study reports. Consultation documentation is provided in Appendix A.

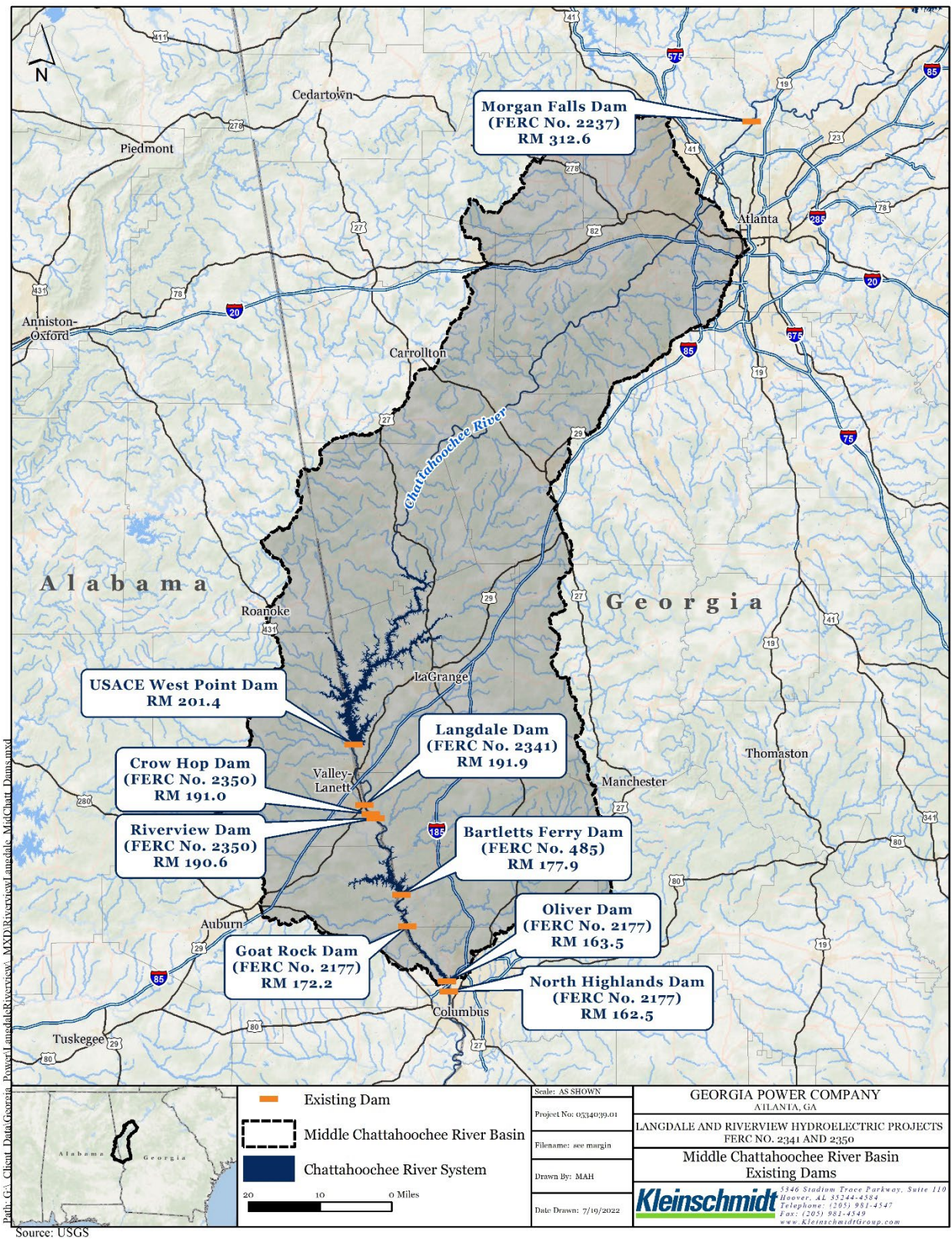


Figure 1-1 Middle Chattahoochee River Basin Existing Dams

Project Location

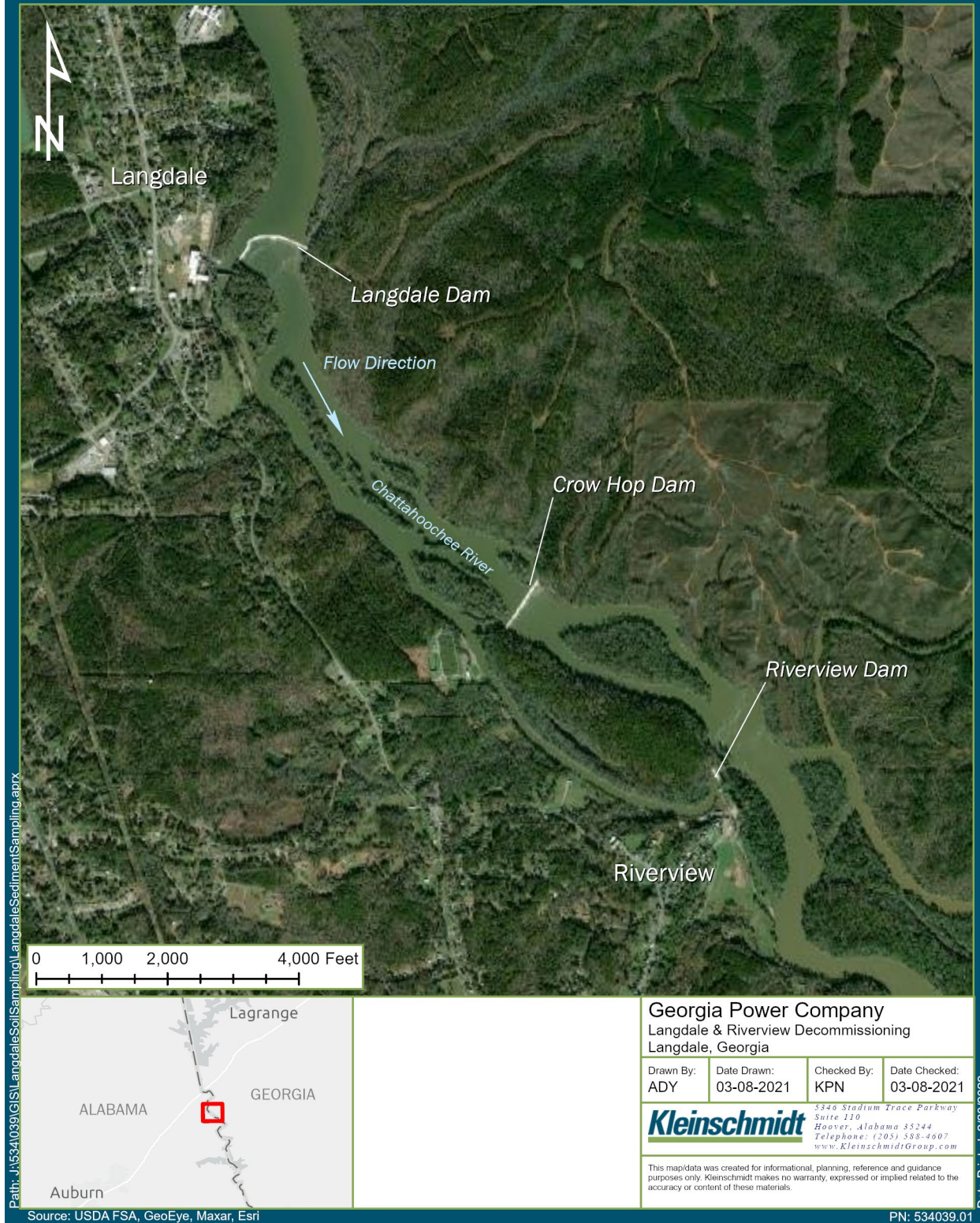


Figure 1-2 Langdale and Riverview Project Locations

2.0 METHODS

Georgia Power performed searches for available water quality data within the study area, which includes the Chattahoochee River within the FERC Project Boundary for the Langdale and Riverview Projects, as well as West Point Lake (upstream of the Projects) and Lake Harding (downstream of the Projects). Sources included United States Geological Survey (USGS), Georgia Environmental Protection Division (GEPD), Alabama Department of Environmental Management (ADEM), and Georgia Power Company (Georgia Power). GEPD and Georgia Power were sources of relevant contemporary (within the last 10 years) data, which were summarized and included in this report. No relevant contemporary data collected by USGS was found.

3.0 DESCRIPTION OF STUDY AREA

The Chattahoochee River is used extensively and has been actively managed since the late 1800s. Historic and current uses of the river include flood control, hydroelectric power, recreation, and wastewater assimilation. The river's water quality has been impacted by municipal and industrial discharges and agriculture. The Chattahoochee River Basin, including the river, its tributaries, headwater streams, and underlying groundwater, is utilized for numerous purposes. Its waters are withdrawn to supply water for cities and counties, industry, and agriculture.

The Projects lie within the Middle Chattahoochee River Basin (HUC 03130002). Langdale has a drainage area of 3,640 square miles (USGS 2018). The surface area of the water impounded by the Langdale Dam is approximately 152 acres (USACE 2016). Tributaries to the Langdale Project reservoir include Oselige Creek (AL) and Long Cane Creek (GA). Riverview has a drainage area of 3,661 square miles (USACE 2016). The surface area of the water impounded by the Crow Hop and Riverview Dams is 75 acres. Moores Creek is the only significant tributary that drains into the Riverview Project reservoir. The Riverview Project releases water into the Chattahoochee River, also considered the headwaters of the Lake Harding, a reservoir created by the Bartletts Ferry Hydroelectric Project (FERC No. 485), located approximately 12 RM downstream of the Riverview Dam.

The Projects historically operated as run-of-river. Discharges from West Point Dam comprise 98 percent of the inflows to the Projects, with the remaining 2 percent contributed by local runoff from the intervening watershed. West Point Dam has a minimum continuous flow requirement of 670 cubic feet per second (cfs), also referred to as the "base flow". West Point Dam is a peaking power plant and provides flood control for this region. Because most inflows into the Projects are comprised of releases from West Point, the operation of the upstream West Point Dam regulates the flow regime through the Projects 'area.

Georgia's use classification for the Chattahoochee River in the Project Area is "Drinking Water" (GEPD 2016). The state of Alabama use classifications for the Chattahoochee River in the Project Area are "Public Water Supply" (PWS) and "Fish and Wildlife" (F&W) (ADEM 2017). The specific criteria applicable to these use classifications are presented in Table 3-1. The most recent 305(b) reports for Georgia and Alabama indicate that the Chattahoochee River in the Project Area is fully supporting its designated uses (GEPD 2016a and ADEM 2016).

Table 3-1 Georgia and Alabama Water Quality Criteria for Applicable Classifications in the Study Area

Parameter	Drinking Water (GA)	Public Water Supply and Fish and Wildlife (AL)
Bacteria	May through October: < 200/100 milliliter (mL) November through April: < 1,000/100 ml	<i>E. coli</i> : Geometric mean < 548 colonies/100 mL; ≤ 2,507 colonies/100 ml in any sample
Dissolved Oxygen	≥ 5.0 mg/L daily average, and > 4 mg/L at all times	≥ 5.0 mg/L at all times
pH	6.0 – 8.5	6.0 – 8.5
Water Temperature	≤ 90° F	≤ 90° F

Source: GEPD 2015, ADEM 2017

4.0 RESULTS

The GEPD conducted forebay monitoring in West Point Lake since 1994 (Monitoring Location ID LK_12_4060). Vertical profiles of water temperature and dissolved oxygen collected at approximately 1-meter intervals indicate West Point Lake becomes stratified in spring and remains so through early fall (Figure 4-1, Figure 4-2). During this time, dissolved oxygen levels at depths greater than 10 meters are extremely low.

The GEPD also conducted monthly monitoring in the Chattahoochee River approximately 0.5 miles downstream of West Point Dam since January 2019 (Monitoring Location ID RV_12_4063). Data from that monitoring effort indicates low dissolved oxygen levels in the West Point tailrace in July and August (Table 4-1). This is due to the release of hypolimnetic water from the West Point Dam.

The GEPD conducted monthly monitoring in the Chattahoochee River at Highway 29, approximately 3 miles downstream of West Point Dam and 6.3 miles upstream of Langdale Dam, from 2010 to 2012 (Monitoring Location ID RV_12_4067). Mean monthly values for select parameters were calculated and are presented in Table 4-2. Similar to the data from the West Point tailrace, these data show dissolved oxygen levels are lowest during the summer months. The data also indicates relatively low levels of nutrients (nitrogen and phosphorus).

A Georgia Power study performed in 2009 and 2010 documented water quality in the Chattahoochee River approximately 1 mile downstream of the Riverview powerhouse. Monthly vertical profile samples at this location indicated dissolved oxygen levels exceed applicable criteria (Table 4-3). The 2009-2010 study also involved the collection of monthly discrete water chemistry samples. Analysis of these samples for 24 different parameters are summarized in Table 4-4.

The ADEM conducted monthly monitoring from March to October of 2014 and 2016 in Moores Creek, a tributary that joins the Chattahoochee River approximately 800 feet downstream of the Langdale powerhouse. The sampling site was located approximately 0.4 miles upstream of the confluence with the Chattahoochee River. Monthly samples at this location indicated dissolved oxygen levels exceed applicable criteria (Table 4-5). Monthly discrete water chemistry samples were analyzed for 14 different parameters, the results of which are summarized in Table 4-6.

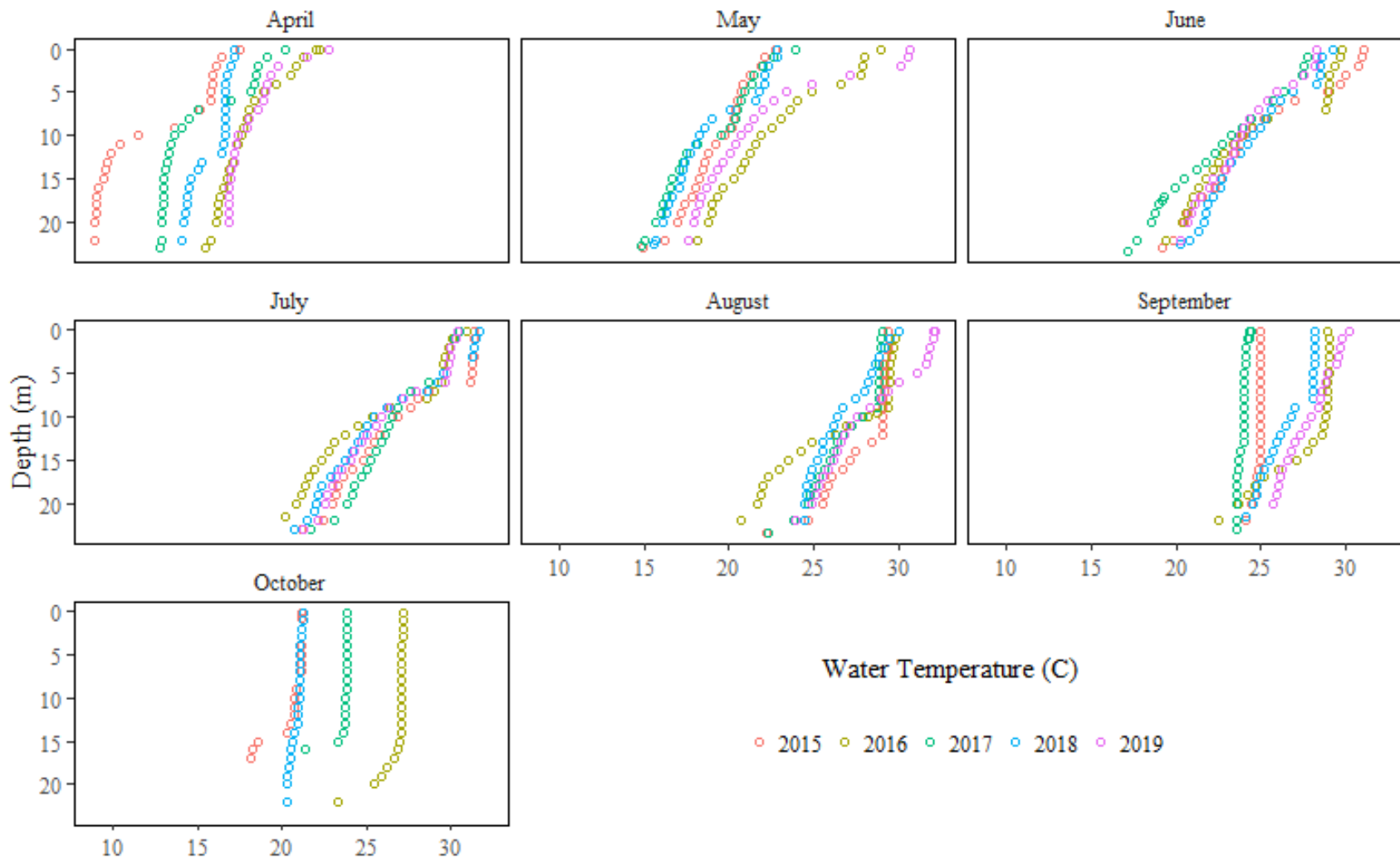


Figure 4-1 West Point Lake Forebay Water Temperature Profiles

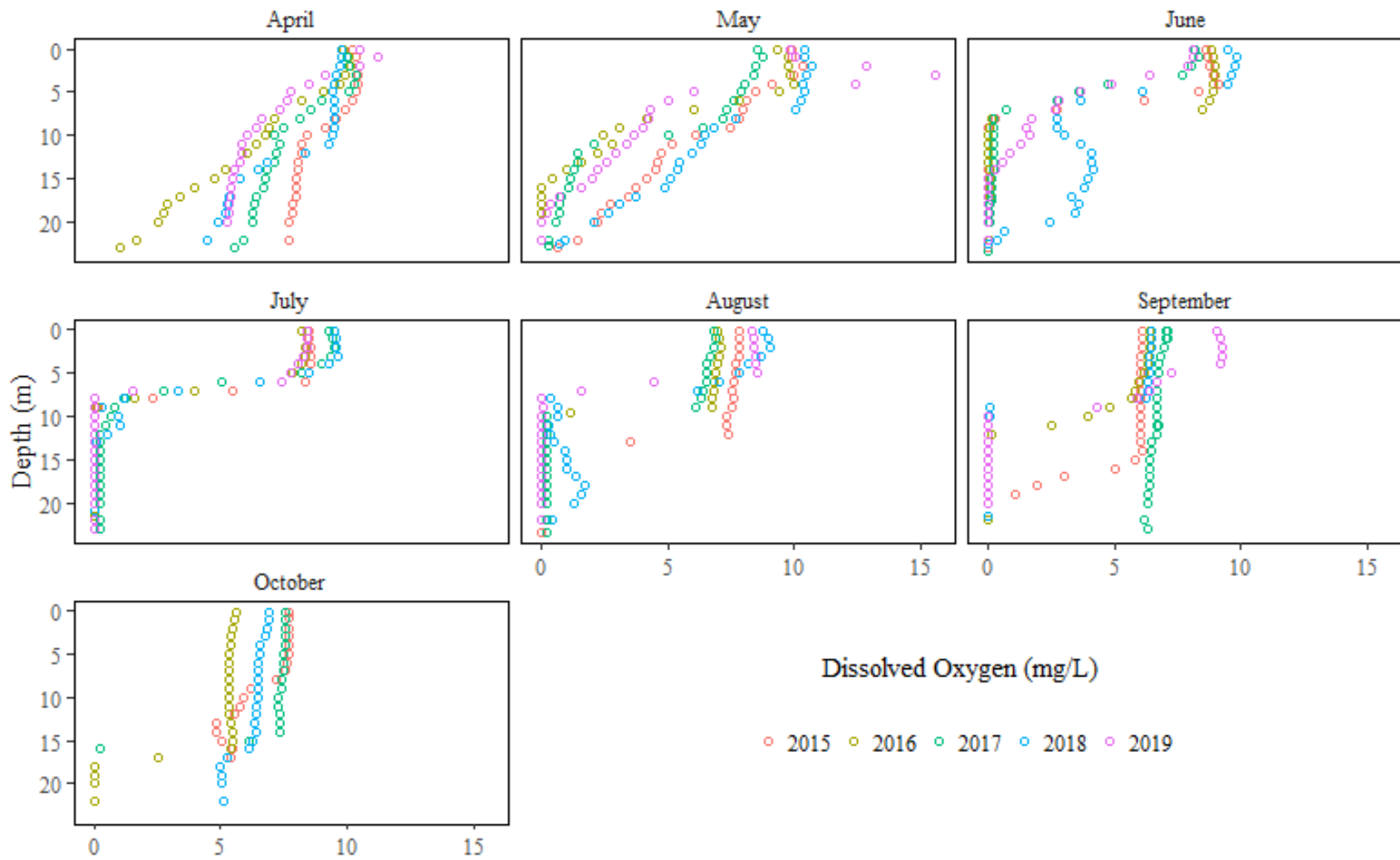


Figure 4-2 West Point Lake Forebay Dissolved Oxygen Profiles

Table 4-1 Summary of 2019 Water Quality Data from Chattahoochee River Below West Point Dam

Month	Water Temp (C)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	pH	Turbidity (NTU)	NO ²⁻ -NO ³ (mg/L)	NH ₃ (mg/L)	TKN (mg/L)	Total Phosphorus (mg/L)
Jan	9.76	70.4	10.00	7.20	12.0	0.63	0.06	0.31	0.04
Feb	9.58	65.3	10.33	6.90	8.5	0.71	0	0.27	0.03
Mar	12.88	67.1	9.92	7.00	12.0	0.64	0	0.29	0.03
Apr	14.67	64.4	-	7.00	3.9	0.63	0	0.29	0.03
May	19.02	56.6	7.50	7.30	9.8	0.49	0.04	0.38	0.03
Jun	25.36	78.4	5.37	6.80	3.3	0.57	0.05	0.31	0
Jul	26.92	87.8	4.52	6.83	2.9	0.54	0.08	0.34	0
Aug	29.08	102.0	3.74	6.21	2.7	0.45	0.23	0.56	0.02
Sep	24.90	-	5.15	6.59	7.0	-	-	-	-

Source: National Water Quality Monitoring Council 2022

Table 4-2 Summary of Water Quality Parameter Means from Chattahoochee River at Hwy 29 (2010 – 2012)

Month	Water Temp (C)	Conductivity (us/cm)	Dissolved Oxygen (mg/L)	pH	Turbidity (NTU)	NO ²⁻ -NO ³ (mg/L)	NH ₃ (mg/L)	TKN (mg/L)	Total Phosphorus (mg/L)
Jan	8.16	106.0	10.79	6.67	7.8	0.99	0.04	0.27	0.05
Feb	9.70	102.7	11.44	6.74	10.7	1.05	0.06	0.31	0.03
Mar	12.32	93.0	10.39	6.51	7.8	0.91	0.05	0.30	0.04
Apr	17.06	75.7	9.40	6.33	5.1	0.74	0.06	0.30	0.03
May	21.06	116.3	7.96	6.33	8.7	0.72	0.04	0.25	0.03
Jun	26.17	93.3	6.44	6.51	1.9	0.67	0.04	0.26	-
Jul	28.14	102.7	5.63	6.39	2.3	0.44	0.10	0.35	0.02
Aug	27.97	112.3	4.29	6.41	2.3	0.43	0.22	0.46	0.02
Sep	27.33	127.3	4.35	6.42	2.4	0.53	0.27	0.49	-
Oct	22.32	132.3	6.85	6.82	1.3	0.88	0.07	0.28	-
Nov	16.21	139.3	7.45	6.52	2.5	1.31	0.05	0.20	0.02
Dec	13.21	133.0	9.93	6.54	1.8	1.30	0.04	0.25	0.02

Source: National Water Quality Monitoring Council 2022

Table 4-3 Results of 2009-2010 Water Quality Monitoring below Riverview Powerhouse

Parameter	Minimum	Mean	Maximum
Dissolved Oxygen (mg/L)	7.54	9.57	11.90
Water Temperature (°C)	7.94	18.87	29.68
Specific Conductance (µs/cm)	57.70	92.10	128.70
pH (standard units)	6.61	7.26	7.70
Turbidity (NTU)	0.0	79.9	3000.0
Secchi Depth (ft)	2.00	4.51	8.50

Source: GPC 2011

Table 4-4 Results of 2009-2010 Water Samples Collected below Riverview Powerhouse

Analyte	Number of Samples	Number of Detections	Minimum	Mean	Maximum
Alkalinity (mg/L)	19	19	15	22	31
Ammonia (mg/L)	16	12	0	0.13	0.4
Arsenic (mg/L)	24	24	0	0	0.01
BOD (mg/L)	17	16	0	1	3
COD (mg/L)	17	15	0	5	15
Cadmium (mg/L)	24	24	0	0	0.001
Calcium (mg/L)	24	24	2.6	6.3	8.8
Chlorophyll a (µg/L)	24	24	0.4	1	2.4
Copper (mg/L)	24	24	0	0	0.01
Fecal Coliform (col./100 mL)	23	21	2	14	>336
Hardness (mg/L as CaCO ₃)	24	24	13	23	30
Iron (mg/L)	24	24	0.06	0.64	2.2
Lead (mg/L)	24	24	0	0	0.02
Magnesium (mg/L)	24	24	1.4	1.75	2.2
Manganese (mg/L)	24	24	0.034	0.12	0.42
Mercury (mg/L)	23	23	0	0.0001	0.0002
Nickel (mg/L)	24	24	0	0.001	0.005
Nitrate (mg/L)	24	24	0.262	0.665	1.12
Nitrite (mg/L)	24	24	0	0.014	0.13
Selenium (mg/L)	24	24	0	0	0.02
TSI Chlorophyll a	24	24	21.6	29.8	39.2
TSI Total Phosphorus	24	24	27.36	52.81	90.55
Total Phosphorus (mg/L)	24	24	0.01	0.05	0.4
Turbidity (NTU)	19	19	1	8	24

Source: GPC 2011

Table 4-5 Results of 2014 and 2016 Water Quality Monitoring in Moores Creek

Parameter	Minimum	Mean	Maximum
Dissolved Oxygen (mg/L)	5.16	7.91	10.52
Water Temperature (°C)	11.92	20.60	26.93
Specific Conductance (µs/cm)	3.30	93.14	129.50
pH (standard units)	6.33	6.99	7.39
Turbidity (NTU)	0.47	16.09	58.80

Source: National Water Quality Monitoring Council 2022

Table 4-6 Results of 2014 and 2016 Water Samples Collected in Moores Creek

Analyte	Number		Minimum	Mean	Maximum
	of Samples	Number of Detections			
Alkalinity (mg/L)	17	17	31.5	45.2	57.2
Ammonia (mg/L)	17	11	0.016	0.039	0.092
BOD (mg/L)	17	0	-	-	-
Chloride (mg/L)	17	17	2.76	3.98	8.56
Chlorophyll a (mg/m ³)	17	13	0.53	5.82	30.26
Dissolved Organic Carbon (mg/L)	9	9	1.89	3.15	5.67
<i>E. Coli</i> (MPN/100 mL)	17	17	92.8	427.7	2419.6
Nitrate-Nitrite (mg/L)	17	17	0.011	0.154	0.217
Orthophosphate (mg/L)	17	17	0.003	0.005	0.008
Phosphorus (mg/L)	17	17	0.018	0.011	0.026
Sulfate (mg/L)	8	8	1.19	2.34	4.90
Total Dissolved Solids (mg/L)	17	17	26	78	165
Total Kjeldahl Nitrogen (mg/L)	17	16	0.209	0.309	0.545
Total Suspended Solids (mg/L)	17	16	1	8	28

Source: National Water Quality Monitoring Council 2022

4.1 Effects of Decommissioning on Water Quality

Based on a review of available data, the water quality at the Projects generally meets or exceeds applicable water quality criteria. Nutrient levels at the Projects are generally low, as the upstream West Point Lake serves as an effective “trap” for nitrogen and phosphorus inputs from its drainage area. Releases from the USACE’s West Point Dam exhibit low dissolved oxygen levels during the summer months. The duration and magnitude of these low dissolved oxygen releases likely varies from year to year based on hydrologic and climatic conditions, which can affect lake stratification processes.

The effects of the dam removals on river hydraulics and hydrology were simulated using the U.S. Army Corps of Engineers’ Hydrologic Engineering Center’s River Analysis System (HEC-RAS) (Kleinschmidt 2022). Under existing conditions, dissolved oxygen levels recover as the releases from West Point Dam flow downstream, especially as they pass over the Projects’ dams, which provide physical aeration. If the Projects’ dams are removed, based on results of HEC-RAS modeling, water velocities in the shoal areas will increase during periods when West Point is generating. These higher velocities would provide an alternate means of physical aeration as the water passes through exposed shoals (Figure 4-3).

4.2 Effects of Decommissioning on Water Quality

The East Alabama Lower Valley Wastewater Treatment Plant (Valley WWTP) discharges treated effluent to the Chattahoochee River at the upstream end of the Riverview Headrace Channel. ADEM has indicated that the National Pollution Discharge Elimination System (NPDES) permit for the Valley WWTP is based on the 7Q10 flow of 136 cfs. Based on HEC-RAS modeling results, the decommissioning and removal of Crow Hop and Riverview Dams will result in a minimum flow of at least 193 cfs in the Headrace Channel (Kleinschmidt 2022) under the minimum flow discharge from the upstream West Point Dam. When West Point Dam’s large turbine units are added during peaking there is significantly more flow than 193 cfs present in the Headrace Channel. These flows ensure that decommissioning and removal do not impact the permitted effluent from Valley WWTP and meet applicable water quality criteria. Georgia Power discussed these issues with ADEM in its consultations which occurred on September 5, 2019, November 7, 2019 and via a follow-up phone conference on November 13, 2019. Additionally, this item was the subject of discussion with the East Alabama Water and Sewer Authority on July 22, 2019 and December 16, 2019. All consultation documentation is provided in Appendix A.

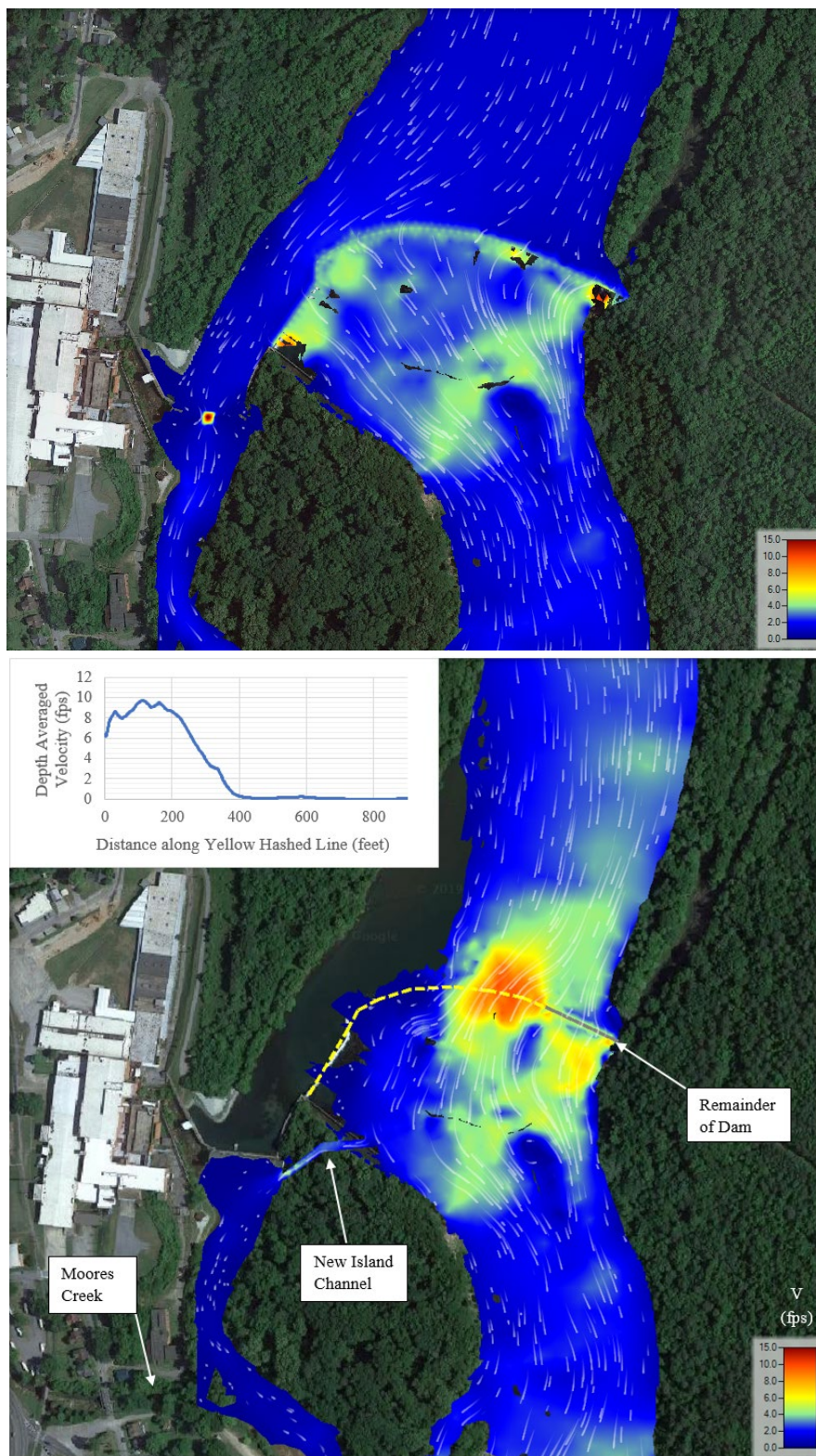


Figure 4-3 Example of Flow Velocity Difference with Dam in Place (Top) and Dam Removed (Bottom)

5.0 CONCLUSIONS

Based on the results of this study and the post-removal physical conditions predicted by the hydraulic model, the following conclusions are evident:

- Water quality at the Projects currently meets applicable standards and supports existing designated uses;
- Water quality at the Projects should continue to meet applicable standards and support existing designated uses after decommissioning and removal; and
- Decommissioning and removal of the Projects will not impact the Valley WWTP permitted effluent discharge.

6.0 LITERATURE CITED

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APPENDIX A

DOCUMENTATION OF CONSULTATION

Langdale and Riverview Projects - Public Comment Matrix

Comment by Lanny Bledsoe (Landowner) Accession No. 20201104-0020

I have a personal interest in this matter as I am the largest landowner directly affected by the destruction of the three dams at Langdale, Crow Hop, and River View. I own all of the islands in the river between Langdale and River View and they will be adversely affected if the dams are gone, as will all the shoreline.

- The destruction will be caused by the overwhelming flood of water turned loose each day when West Point dam generates. The water in the Langdale/River View area rises several feet quickly with great force and through the years we have seen the effect it has, even with the dams in place. It is my opinion that the dams now act as a protecting buffer and keep the water hitting the islands with full force. However, two islands have already been washed away and are gone.
- Some years back, the water force had washed to bank away in the bend above the River View dam and a portion of Riverdale Mill was in danger of falling into the river. I was manager of the mill at that time and a meeting was held with Corp of Engineers to review the situation. Alabama Sector Howard Heflin was in the meeting and after reviewing the evidence, Senator Heflin directed the Corp to line the bank with riprap to protect it. According to tests Georgia Power has done, they are concerned about this same area with the dams down and plan to protect it.
- Based on the latest Georgia Power studies just released, at minimum flow level, when West Point is not generating, only canoes and kayaks can travel on the river. These dams have been in place for a hundred years, the ponds behind the dams is a great place to boat, fish, and have recreation. The city of Valley should be greatly concerned about this, they're going to lose an asset.
- I've heard a lot of talk about concern for Shoal Bass as a reason to take the dams down. The state of Georgia showed little concern for any fish when they put striped bass in the river. Years ago, we could catch crappie and shad by the thousands at River View dam. Not they are gone, wiped out by the striped bass. Striped bass are not a problem above the dams now, but they will be with the dams gone.
- The River View powerhouse was built across an arm of the river. One side of the building was on the Alabama bank and the other side on Hodge Island. The tail race from the powerhouse flowed as it had before the powerhouse was built. Georgia Power's plans are to take the powerhouse down and block the flow of the river. Hodge Island, which I own, will not be an island but will be joined by land to the Alabama side. This will change the original flow of the river and they should not have the power to do this. They used the powerhouse for a hundred years and now want to block the river.
- I grew up in River View 84 years ago. The river has been a wonderful place for everyone to enjoy. It has been an asset here for all of my life. Now it will change. Georgia Power used these dams all these years for their business and the generation of electricity. They no longer have any use for the dam, and their plan would change what has been in place, for all of these years. This should not happen.

Georgia Power's Response

Georgia Power will evaluate potential erosion on the privately owned islands as part of removal process and post removal monitoring and would, if needed, propose to provide some protection potentially using rock from the dam removal. The Decommissioning Plan (Section 4) specifically addresses bank stabilization in the Riverview headrace channel.

The Applicant Prepared Environmental Assessment describes the change in river navigability of various vessels in Section 11. To address public access to the river, Georgia Power is proposing to extend three existing public boat ramps into the river to at least two feet of water depth at the new water surface elevation (measured at West Point minimum flow) following dam removal and river stabilization (see Section 11 of the APEA). Additionally, as discussed in the Recreation Section 11, there are nearby access points at Lake Harding and West Point that provide powered boat recreational access.

Regarding effects on Shoal Bass, Georgia Power implemented a Pre-Removal Shoal Bass Abundance and Tracking Study to provide baseline information on Shoal Bass. In addition, Georgia Power is proposing to implement a Post Removal Shoal Bass Abundance and Tracking Study to assess effects of the removal on Shoal Bass in the Project area. Section 8 of the APEA discusses effects of dam removal on Shoal Bass and other aquatic organisms.

Georgia Power performed studies to address effects of the decommissioning including: river hydraulics and hydrology (H&H) and potential impacts to aquatic organisms (including shoal bass). Study reports applicable to these comments include:

- Final H&H Report
- Final Water Quality Report
- Draft Sediment Quality Study Report
- Draft Sediment Transport Study Report
- Final Potential Effects on Dam Removal on Shoal Bass
- Pre-Dam Removal Shoal Bass Abundance and Tracking Study Report
- Freshwater Mussel Survey Report

Comment by GADNR - WRD Accession No. 20201104-5105

GA Power has completed a series of studies addressing potential changes to existing resources associated with the dam removals. These studies included modeling changes to river hydraulics and hydrology, sediment characterization, and potential impacts to aquatic wildlife, water quality, and cultural resources. Comprehensive modeling of flow distribution and velocity, shoal habitat, and potential impacts to aquatic resources such as the endemic Shoal Bass and native mussel community was also presented.

- Wildlife Resources Division finds the studies to be adequate, and we support Georgia Power's indication that sediment distribution will be further investigated during the decommissioning process in consultation with FERC and US Fish and Wildlife Service National Fish Passage Program.

Georgia Power's Response

Thank you for your comment and continued consultation.

Langdale and Riverview Projects - Public Comment Matrix

- We request that WRD be informed of related findings.
- Georgia Power maintains ongoing consultation with WRD regarding the decommission and removal of these hydropower projects, and we support the proposed actions and associated studies. The removal of these projects is expected to restore connectivity and riverine characteristics in this reach of the Chattahoochee River, which is expected to benefit fish, wildlife, and aquatic resources. The WRD will remain engaged in the decommissioning process.

Comment by Valley City Council District 5 (Kendall Andrews) Accession No. 20201105-5000

I have made previous comments opposing the removal of the Langdale, Riverview, and Crow Hop dams. These dams provide the City of Valley and its citizens with an invaluable natural resource. I have many concerns about their removal that I will list below:

- The H&H model presented by Georgia Power predicts that both boat ramps located in the City of Valley will be dewatered post removal. Even if the boat ramps are extended, the amount navigable water with a powerboat will be so little that they will be useless. The City of Valley has a large number of older citizens that use the river on a daily basis with powerboats. Many of these people will not be able to drag a canoe or paddle a kayak through the shoals that will be present. Also, many people with disabilities will face the same barriers. Their access to the river will be gone
- The restoration of suitable shoal bass habitat has been mentioned as a possible benefit to the removal of the dams. I disagree with this. The only example of dam removal where shoal bass were present in the surrounding waters was in Columbus, GA with the removal of the City Mills and Eagle Phenix dams. Removal of these dams had an extremely negative effect on the shoal bass in this area. There has been no research done on the shoal bass population located in the reservoir below Langdale Dam. It is common knowledge that this is where the best population of shoal bass exists in this area. I believe that there should be some data obtained from this area, if for nothing else, to create a baseline for comparison post removal of the dams.
- The virtual format of the public meeting made participation very difficult for much of the community. The list of attendees submitted shows that there were few participants that were not associated with an agency or group. This is one of the only chances for members of the community to have their questions answered and to voice their opinions.

The removal of these dams has the potential to devastate the local community. The public meeting should not be rushed to meet a deadline.

- I would like to respectfully request that the Federal Energy Regulatory Commission require Georgia Power to hold an in-person public meeting once the nation pandemic ends. This will give everyone the opportunity to participate before any decisions are finalized.

Georgia Power's Response

The Applicant Prepared Environmental Assessment describes the change in river navigability of various vessels in Section 11. To address public access to the river, Georgia Power is proposing to extend three existing public boat ramps into the river to at least two feet of water depth at the new water surface elevation (measured at West Point minimum flow) following dam removal and river stabilization (see Section 11 of the APEA). Additionally, as discussed in the Recreation Section 11, there are nearby access points at Lake Harding and West Point that provide powered boat recreational access.

Regarding effects on Shoal Bass, Georgia Power implemented a Pre-Removal Shoal Bass Abundance and Tracking Study to provide baseline information on Shoal Bass. In addition, Georgia Power is proposing to implement a Post Removal Shoal Bass Abundance and Tracking Study to assess effects of the removal on Shoal Bass in the Project area. Section 8 of the APEA discusses effects of dam removal on Shoal Bass and other aquatic organisms.

Comment by Chattahoochee Riverkeeper (Chris Manganiello) Accession No. 20201105-5077

... Our comments will focus on 3 topics: recreational access; construction process; and aquatic resources.

- Recreational Access:
- CRK supports safe, continued and enhanced access to the River in the middle of the Project area's middle (Cemetery Road) and the bottom (Lake Harding). This type of access will enable paddlers of varying skill to enter and exit the project area at multiple points. Some existing access points will require extensions and improvement when dam removal reduces pool elevations and river flows.
- CRK also supports a new public recreational access point to the river above the Projects. For example, a new proposed park above Langdale on river right would provide safe access above the exposed Langdale shoals.

Georgia Power's Response

The new Langdale Park is described in Section 11 of the Applicant Prepared Environmental Assessment and is also referenced in the Decommissioning Plan and 90 percent drawings for the Langdale Project (Appendix D). In addition, the Decommissioning Plan provides details on the construction process, schedule, and post removal monitoring.

Regarding effects on Shoal Bass, Georgia Power implemented a Pre-Removal Shoal Bass Abundance and Tracking Study to provide baseline information on Shoal Bass. In addition, Georgia Power is proposing to implement a Post Removal Shoal Bass Abundance and Tracking Study to assess effects of the removal on Shoal Bass in the Project area. Section 8 of the APEA discusses effects of dam removal on Shoal Bass and other aquatic organisms.

Langdale and Riverview Projects - Public Comment Matrix

For example, see slide 55 from the October 5, 2020 Public Meeting. CRK understands that the City of Valley, Alabama may assume local control and responsibility for recreational assets in the Project area. Foot access to the islands and the river is something that might be considered. CRK understands the managed nature of West Point Dam releases and river flows adds significant risk for people who choose to recreate in the Project area. If a single access point from Langdale to the large adjacent island was available, anglers might appreciate foot access from the west bank to the shoals.

•Construction Process:
 -CRK understands that Georgia Power is developing the details of the construction plan. CRK anticipates those details in the next round of public engagement and document release. CRK is very interested to learn about Georgia Power's plans for egress and river access to conduct physical construction and removal activities.
 -Additionally, we look forward to reviewing the dam removal schedule, that is, which dam will be removed first and by what methods, and what will Georgia Power intend to do with the dams' debris.
 -Finally, CRK would also like to know if Georgia Power has any additional plans for pre-construction and post-construction monitoring during the construction process, and specifically for sediment movement as well as quantity and quality.

•Aquatic Resources:
 -CRK is optimistic that removal of the dams in the Project area will enhance aquatic habitat and connectivity for species, including shoal bass. While CRK understands that Georgia Power cannot stock any aquatic species without coordinating with Georgia's Department of Natural Resources Wildlife Resources Division, it would be helpful to understand Georgia Power's plans for pre-construction and post-construction monitoring of aquatic species.
 -For example, is there a base-line for the shoal bass population, and if post-construction monitoring revealed poor conditions, what might Georgia Power do to improve conditions? It is our understanding that post-construction monitoring in Columbus after the removal of Eagle & Phenix and City Mills dams has been extremely limited.
 •In closing, CRK remains supportive and hopeful about the prospect of barrier removal in the Middle Chattahoochee River region. Given the unprecedented size, scale and scope of this proposed project, pre- and post-construction monitoring of multiple natural and aquatic resources would greatly aid in the general understanding of the impacts and consequences of barrier removal in large, regulated southeastern river systems.

Based on our review of the study report, we have the following comments:

- On Page 5 of the draft study report, GPC stated "searches for relevant contemporary USGS and ADEM data were not found." ADEM sampled Moores Creek, which is one of the main tributaries to the Riverview Project Reservoir, in 2014 and 2016. This data can be found using the Water Quality Data Portal.
- We request Georgia Power to continue informing the ADEM of water quality and sediment distribution findings during the decommissioning process.

Georgia Power performed studies to address effects of the decommissioning, as described in the following study reports:

- Final H&H Report
- Final Water Quality Report
- Draft Sediment Quality Study Report
- Draft Sediment Transport Study Report
- Final Potential Effects on Dam Removal on Shoal Bass
- Pre-Dam Removal Shoal Bass Abundance and Tracking Study Report
- Freshwater Mussel Survey Report
- Archaeological Testing of Two Sites On The Chattahoochee River, 9HS30 AND 9HS31, Harris County, Georgia
- Archaeological Survey of 20 Acre Island in the Chattahoochee River, Harris County, GA
- Archaeological Reconnaissance Survey of the Chattahoochee River, Harris County, GA
- Langdale Dam Marine Remote Sensing in the Chattahoochee River, Harris County, GA
- Assessment of Effects for Archaeological Sites 9HS30, 9HS525, 9HS526, 9HS527, 9HS528, 9HS529, 9HS530, 9HS531, 9HS532, and 9HS533.

These comments are addressed in the Final Water Quality Study Report.

Comment by American Rivers Accession No. 20201106-5010

Georgia Power's Response

American Rivers fully supports and encourages the removal of these projects for the reasons outline below:

- Public safety improvements: On 4/1/2019, one drowning and three injuries occurred at Crow Hop diversion dam as a result of a kayaking accident. Eliminating the low head dams will significantly improve public safety in this reach of river, especially for water recreation activities.

Georgia Power performed studies to address effects of the decommissioning including: river hydraulics and hydrology (H&H), sediment characterization (quality and quantity), potential impacts to aquatic organisms, water quality, and cultural resources. Georgia Power is filing an Applicant Prepared Environmental Assessment (which incorporates study results and analyzes effects on environmental, recreational, and cultural resources), Dam Decommissioning Plan, and the following study reports:

Langdale and Riverview Projects - Public Comment Matrix

<ul style="list-style-type: none"> •Sediment release: Based on data provided by GPC, impounded sediment volumes behind the low head dams are negligible compared to overall sediment volume in the system below West Point dam, which has become a sediment sink since its construction. Release of impounded sediments at the removed Riverview & Langdale Dams will renourish sediment-starved downstream habitat for the benefit of aquatic species. •River flow: By definition, low head dams do not store water, therefore removal of the dams will not cause significant changes in flow volume or timing, as the flow of the Chattahoochee River is controlled by US Army Corps of Engineers (USACE) operations at West Point Dam. USACE may elect to hold back flow in West Point Lake during dam removal construction to provide optimal conditions for instream activities. Presence of naturally occurring bedrock shoals will act as grade control for the river once dam removal construction is completed. •Flood risk: According to GPC studies, removing the dams will not increase flood risk, and in fact reduces flood risk at the 1% return, particularly upstream of the Langdale Dam. American Rivers concurs with this finding. •Boat access: due to water elevation changes associated with dam removal, some areas of the river may not be navigable during low flow conditions, even for low draft paddling boats such as canoes and kayaks. However, the public safety benefits of dam removal are critical given the recent fatality and injuries at the Crow Hop dam. It may be possible to negotiate short term flow augmentation from West Point Lake to support schedule water recreation events. It is important to point out that more than adequate access to flat water boating for canoes, kayaks, jon boats, and deeper draft motorized boats exists at West Point Lake and Lake Harding in proximity to the project area. •Aquatic habitat connectivity and species impacted: GA Wildlife Resources Division finds that dam removal will support aquatic habitat connectivity and access for shoal bass, a high-value, rare species identified as a priority species in the GA State Wildlife Action Plan. Chattahoochee Riverkeeper finds the potential reconnection of up to 11 miles of shoal bass habitat and encourages habitat enhancements be included in the project. American Rivers concurs with these positions and supports dam removal for aquatic habitat connectivity to benefit shoal bass. •Infrastructure: American Rivers finds that GPC plan for dam removal incorporates structural adjustments to accommodate continued treated effluent discharges to the Chattahoochee River. •Public engagement: Based on materials provide by GPC, American Rivers finds that public engagement was sufficient to provide critical information about the project to surrounding property owners, river interest groups, cognizant agencies, and stakeholders. •Water quality: American Rivers has documented the impacts of low head dams on water quality including decreased dissolved oxygen and increased thermal profile at numerous locations around the country. We concur with GPC's finding that dam removal will not negatively impact the water quality of the Chattahoochee River. 	<ul style="list-style-type: none"> • Final H&H Report • Final Water Quality Report •Draft Sediment Quality Study Report •Draft Sediment Transport Study Report •Final Potential Effects on Dam Removal on Shoal Bass •Pre-Dam Removal Shoal Bass Abundance and Tracking Study Report •Freshwater Mussel Survey Report •Archaeological Testing of Two Sites On The Chattahoochee River, 9HS30 AND 9HS31, Harris County, Georgia •Archaeological Survey of 20 Acre Island in the Chattahoochee River, Harris County, GA •Archaeological Reconnaissance Survey of the Chattahoochee River, Harris County, GA •Langdale Dam Marine Remote Sensing in the Chattahoochee River, Harris County, GA •Assessment of Effects for Archaeological Sites 9HS30, 9HS525, 9HS526, 9HS527, 9HS528, 9HS529, 9HS530, 9HS531, 9HS532, and 9HS533.
<p>Comment by American Rivers Accession No. 20201106-5011 - Duplicate of above comments</p>	<p>Georgia Power's Response - see above</p>
<p>Comment by Chattahoochee Riverkeeper (Chris Manganiello) Accession No. 20201106-5011 - Duplicate of above comments</p>	<p>Georgia Power's Response - see above</p>
<p>Comments by Federal Energy Regulatory Commission Accession No. 20201118-3015</p>	<p>Georgia Power's Response</p>
<p>H&H</p>	
<p>As noted in our August 15, 2019 letter, several stakeholders raised concerns regarding the composition of the sediment and the possible presence of contaminants within it. The H&H study fails to characterize the sediments found within the projects' reservoirs and instead speaks mostly to sediments elsewhere in the river</p>	<p>Georgia Power conducted a standalone Sediment Quality Study and is filing a Draft Sediment Quality Study Report concurrent with the Dam Decommissioning Plan and Applicant Prepared Environmental Assessment to address specific comments on sediment. The Final H&H Study Report incorporates by reference the Draft Sediment Quality Study Report.</p>

Langdale and Riverview Projects - Public Comment Matrix

<p>basin. Additionally, Appendix C only includes data for the borings within the proposed constructed channel through the island between Langdale Dam and Powerhouse.</p> <ul style="list-style-type: none"> •You must revise the H&H study report to characterize the sediments within the project reservoirs and include the associated data. 	
<p>The H&H study fails to explain why you did not perform a chemical analysis of the sediment and does not speak to the concerns related to possible contaminants in any meaningful way. You must explain the appropriateness of the comparisons in the H&H study to other sampling completed within the river basin due to the following conditions: 1) West Point Dam was more recently constructed and some of the sampling was performed in the riverine section just below the dam; and 2) the City Mills and Eagle Phenix Dams were located downstream of Lake Harding and had smaller impoundments with characteristics that made them less likely to trap sediment.</p> <ul style="list-style-type: none"> •You must revise the H&H study report to reassess the need for chemical analysis based on project specific circumstances. 	<p>Georgia Power conducted a standalone Sediment Quality Study and is filing a Draft Sediment Quality Study Report concurrent with the Dam Decommissioning Plan and Applicant Prepared Environmental Assessment. The Draft Sediment Quality Study Report provides a chemical analysis of the sediment and documentation of consultation. As applicable, the Final H&H Study Report incorporates by reference the Draft Sediment Quality Study Report.</p>
<p>The H&H study fails to explain how the number and locations of the sediment borings were determined, or explain their adequacy of lack thereof (e.g., see pages 31 and 52 – “borings did not provide enough information for interpolation”).</p> <ul style="list-style-type: none"> •You must revise the H&H study report to include an explanation of the appropriateness and adequacy of the locations and number of borings completed. 	<p>Georgia Power conducted a standalone Sediment Transport Study and is filing a Draft Sediment Transport Study Report with the Dam Decommissioning Plan and Applicant Prepared Environmental Assessment. The Final H&H Study Report incorporates by reference the Draft Sediment Transport Study Report.</p>
<p>The H&H study fails to address sediment quantity (estimated to be 516-acre-feet or approximately 832,500 cubic yards), post removal sediment transport, and associated impacts in any meaningful way.</p> <ul style="list-style-type: none"> •Either the Decommissioning Plan or the revised H&H study report must include a thorough analysis of the post removal sediment impacts, considering specific metrics such as erosion, scouring, incision, accretion, etc., stemming from the initial and prolonged changes in flow dynamics during and following dam removals. •You must also include specific analyses of these impacts to aquatic organisms, as described below. 	<p>Georgia Power has addressed the sediment quantity in the Draft Sediment Transport Study Report along with responses to each of the specific metrics described by FERC. Potential effects on aquatic organisms are described in the Applicant Prepared Environmental Assessment and in the Draft Sediment Transport Study Report.</p>
<ul style="list-style-type: none"> •Either the Decommissioning Plan or the revised H&H study report must include a discussion of post-removal streambank erosion. 	<p>The Decommissioning Plan discusses post removal streambank erosion.</p>
<p>The H&H study indicates two boat launches will be dewatered as well as the loss of motorboat access to most of the study reach but fails to discuss the impacts or possible mitigation measures.</p> <ul style="list-style-type: none"> •Either the Decommissioning Plan or the revised H&H study report must include a discussion of impacts and possible mitigation measures. 	<p>The Decommissioning Plan and the Applicant Prepared Environmental Assessment discuss Georgia Power's proposed protection, mitigation, and enhancement measures to address access to existing public boat ramps.</p>
<p>The H&H study contains the following error message in several locations (e.g., pages 25, 52, 53, and 74): “Error! Reference source not found.” Please correct these reference errors.</p>	<p>Error corrected in the Final H&H Study Report.</p>
<p>Shoal Bass & Water Quality</p>	
<p>In the shoal bass literature review, you included a histogram displaying predicted acres of existing and post-removal optimal habitat for shoal bass. You state that the data were generated from output from the Hydrologic Engineer Center – River Analyses System (HEC-RAS) modeling and analyzed with GIS, however, you did not provide supporting evidence (methods, data, maps, etc.) to substantiate those conclusions.</p> <ul style="list-style-type: none"> •Either the Decommissioning Plan or a revised shoal bass literature review must include such evidence to adequately support your conclusions. 	<p>Georgia Power conducted a standalone Pre-Dam Removal Shoal Bass Abundance and Tracking study that includes methods, data, maps, and conclusions.</p>

Langdale and Riverview Projects - Public Comment Matrix

<p>Similarly, you state in the water quality study report that conclusions were made based on modeling results; however, the methods you used were not described in the report, nor were any pertinent supporting materials to substantiate the statements that:</p> <ul style="list-style-type: none"> -The decommissioning and removal of Crop Hop and Riverview Dams will result in a minimum flow of at least 193 cubic feet per second in the Headrace Channel [thereby not impacting the Valley Wastewater Treatment Plan permitted effluent discharge]; -and If the projects' dams are removed, the resulting lower water levels and higher water velocities in the affected reach of the Chattahoochee River would provide an alternative means of physical aeration as the water passes through exposed shoals. <p>•Because there are gaps in your conclusions, you must address the items above in either the Decommissioning Plan or a revised water quality study report by providing such evidence to adequately support your results. Regarding minimum flows in the headrace channel, please also include documentation of correspondence with Valley Wastewater Treatment Plant for our review.</p>	<p>These comments are addressed in the Final Water Quality Study Report. Note that the consultation for the Valley Wastewater Treatment Plant was conducted with the East Alabama Water, Sewer, and Fire Protection District.</p>
<p>Aquatic Resources</p>	
<p>The H&H study does not address the specific methods that will be used in the removal of each individual dam, nor does it address the rate of drawdowns that each pond would experience as a result of each removal.</p> <ul style="list-style-type: none"> •The Decommissioning Plan must include the specific means by which the dams would be removed, including the anticipated rate of drawdown (to natural river channel) that would occur under each scenario. 	<p>Specific information on the removal of each dam and the Riverview Powerhouse is provided in the Decommissioning Plan, along with the construction sequence, schedule, and drawdown information.</p>
<p>As noted above, the H&H study does not provide an adequate analysis of sediment transport during and following dam removals. Further, there is no analysis of potential effects to mussel beds or other aquatic organisms in the shoal bass or mussel studies.</p> <ul style="list-style-type: none"> •The Decommissioning Plan must include an analysis of the potential impacts of sediment transport to aquatic organisms (i.e., sedimentation of mussel beds, habitat loss/creation, etc.), based on the revised H&H study report as directed above. 	<p>These issues are addressed in the Applicant Prepared Environmental Assessment.</p>
<p>Regarding aquatic organisms that may become stranded in dewatered areas during and following dam removals, there is no mention of a plan for surveys and/or rescue efforts in either the mussel or shoal bass studies.</p> <ul style="list-style-type: none"> •The Decommissioning Plan must include a plan to survey for stranded aquatic organisms during each dam removal, including methods for rescue/relocation if stranded organisms are found. This plan must be based on your previous bathymetry models, as well as your pending analysis of anticipated rates of reservoir drawdown as directed above. 	<p>The Draft Aquatic Organism Recovery Survey and Relocation Plan is discussed in the Decommissioning Plan and the Applicant Prepared Environmental Assessment. In addition, the draft Aquatic Organism Recovery Survey and Relocation Plan is provided as an appendix to the Decommissioning Plan.</p>
<p>Cultural Resources</p>	
<p>On September 21, 2020, you filed archaeological surveys completed for the Langdale and Riverview Projects with the Commission. However, you did not include consultation from the Georgia and Alabama State Historic Preservation Officers (Georgia and Alabama SHPOs) regarding the review of archaeological surveys in your filing.</p> <ul style="list-style-type: none"> •In our review of the archaeological surveys, we expect your Decommissioning Plan filing to include a draft Memorandum of Understanding (MOA) that memorializes the mitigation of any adverse effect to historic properties that would result from your proposals. •Additionally, you should include documentation of your consultation with the Georgia and Alabama SHPOs and how you addressed any of their comments in the MOA. 	<p>Consultation with the SHPOs has been ongoing during the study phase and this documentation is provided in the Consultation Summary as appendices to the concurrently filed Privileged cultural resource reports. After the study report review concluded, Georgia Power drafted an MOA that went out on July 1, 2022 to Alabama and Georgia SHPOs as well as Alabama-Coushatta Tribe of Texas, Alabama-Quassarte Tribal Town, Coushatta Tribe of Louisiana, and the Muscogee (Creek) Nation. Georgia Power did receive comments from the SHPOs and is currently addressing those comments in the MOA; a 2nd draft MOA will be sent back out to the same July 1st groups by middle to late August 2022. Georgia Power anticipates receiving any further comments and addressing them by about early October. Georgia Power will submit documentation of the MOA drafts and MOA consultation in a separate submittal to FERC in October 2022.</p>

Langdale and Riverview Projects - Public Comment Matrix

<p>Other Issues</p>	
<p>Several comments were filed in response to the October 5, 2020 virtual study result meetings. •You are expected to respond to those comments either as part of the study report revisions requested above or in the Decommissioning Plan to be filed with the Commission.</p>	<p>Comments are addressed in the Draft and Final Study Reports, Decommissioning Plan, and/or Applicant Prepared Environmental Assessment.</p>
<p>We remind you that our analysis of the surrender and decommissioning is based only on information filed on the record for these proceedings. •To help prevent the need for additional future studies and information requests, we again recommend that you document the detailed methods, consultation process, development, and implementation of these studies. Additionally, each study report should include each party's concurrence and/or comments, and explanations of how you addressed the comments.</p>	<p>The Study Reports include the associated documentation of consultation.</p>



Langdale and Riverview Hydroelectric Projects
FERC Projects #2341 and #2350

Communication Date:

8/15/2018

Communication Type (*telephone, email, in-person meeting, other*):

In-person

List and attach pertinent written correspondence:

(i.e. letter, fax, meeting notes/handouts, printed materials, etc.)

none

List persons attending from Southern Company/Georgia Power:

Courtenay O'Mara – Southern Company Hydro Services

Tony Dodd – Georgia Power Environmental and Natural Resources

Patrick O'Rouke - Georgia Power Environmental and Natural Resources

Melissa Crabbe - Southern Company Hydro Services

List organization name and persons attending from other organization:

Liz Booth – Georgia DNR EPD

Jeremy Smith - Georgia DNR EPD

Victoria Adams - Georgia DNR EPD

Subject:

Decommissioning of Langdale and Riverview FERC Projects and Potential Removal of Langdale Dam, Crowhop Dam, and Riverview Dam and Powerhouse

Comments/Discussions/Requests:

Courtenay O'Mara indicated that Georgia Power intends to surrender the FERC licenses for the Langdale and Riverview Projects and to remove the dams and the Riverview Project powerhouse. Courtenay reviewed the project vicinity, downstream and upstream dams, and a brief history of the dams. Courtenay explained that license surrenders are processed through FERC's Department of Hydro Administration and Compliance (DHAC) and that the schedule for a surrender is not necessarily as rigid as the relicense schedule. We (GPC) expect to file an application to surrender in December, conduct hydraulic modelling and analysis of the models, and then file the analysis with FERC. Courtenay shared that we are considering partnership with environmental resource agencies for the surrenders. Patrick O'Rouke mentioned that a goal will be to develop a partnership memorandum of understanding with one or more of the agencies.

EPD expressed an interest in staying informed about the surrenders.

Follow-up Requirements:

EPD review of meeting documentation and inclusion on the stakeholder mailing list.

Form Completed By:

Melissa Crabbe

From: [Adams, Victoria](#)
To: [O'Mara, Courtenay R.](#); [Dodd, Anthony Ray](#); [Crabbe, Melissa C.](#); [O'Rourke, Patrick Michael](#)
Subject: RE: Lloyd Shoals Project Scoping Meeting and Site Visit
Date: Friday, August 17, 2018 9:47:59 AM
Attachments: [image001.gif](#)
[image002.emz](#)
[image004.jpg](#)
[image008.jpg](#)
[image009.png](#)
[image010.jpg](#)
[image011.jpg](#)
[image012.jpg](#)

I'm waiting on an answer to the documentation of the discussion on Langdale/Riverview. In the meantime, I'd say yes to the "let us review it" question, pending final approval. If I had to make a guess, I would say they will say yes...but I do not have the authority to say yes by myself. ☺

From: O'Mara, Courtenay R. [mailto:CROMARA@SOUTHERNCO.COM]
Sent: Wednesday, August 15, 2018 4:04 PM
To: Adams, Victoria; Dodd, Anthony Ray; Crabbe, Melissa C.; O'Rourke, Patrick Michael
Subject: RE: Lloyd Shoals Project Scoping Meeting and Site Visit

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Yes, thanks for visiting with us as well; we covered a lot of ground.

The address for the Sept 13 meeting is
562 Old Bethel Rd, Jackson, GA 30233 (Pepper Sprout Barn)
I think FERC said they were planning to start at either 9 or 10 am. It will be in the Scoping document that they issue (August 24th ish)

The address for the dam/lake tour on Sept 14 is
180 Dam Road, Jackson, GA 30233
Tours through the powerhouse will occur between 9-12 and tours on the boat will be from 1-4 (each hour long). We were going to assign the times for that based on our RSVPs but certainly let us know if you have a time constraint/preference bc we will make it happen.

I also meant to ask you if y'all would be ok if we documented that we had a discussion on Langdale/Riverview. We would like to include in the December 2018 FERC filing that we consulted with y'all. In our summary we can mention that you asked about the water quality there. If it would make you feel more comfortable, we could write it up and let y'all review it first.

Thanks as always,

Courtenay R. O'Mara, P.E.
Hydro Licensing and Compliance Supervisor
Southern Company
241 Ralph McGill Blvd. – Bin 10193
Atlanta, Georgia 30308
Tel 404.506.7219

Mobile 404.797.9432

southerncompany.com [na01.safelinks.protection.outlook.com]



From: Adams, Victoria <Victoria.Adams@dnr.ga.gov>

Sent: Wednesday, August 15, 2018 2:50 PM

To: O'Mara, Courtenay R. <CROMARA@SOUTHERNCO.COM>; Dodd, Anthony Ray <ARDODD@southernco.com>; Crabbe, Melissa C. <MCCRABBE@SOUTHERNCO.COM>; O'Rourke, Patrick Michael <PMOROUKE@southernco.com>

Subject: FW: Lloyd Shoals Project Scoping Meeting and Site Visit

Thanks for coming today to talk about Lloyd Shoals (and other items). I'm looking forward to working together as things develop further across all of the subjects we covered.

Could one of y'all please send the address for the scoping meeting on the 13th and where to meet for tour on the 14th? I can't find the notice online (I looked at <https://www.ferc.gov/docs-filing/dec-not.asp> [[ferc.gov](mailto:na01.safelinks.protection.outlook.com)] [na01.safelinks.protection.outlook.com] and <https://www.georgiapower.com/company/energy-industry/generating-plants/lloyd-shoals-dam-project.html> [na01.safelinks.protection.outlook.com]).

Thanks again,
Victoria

From: Booth, Elizabeth

Sent: Thursday, August 9, 2018 5:05 PM

To: Lamarre, Paul; Adams, Victoria; Parsons, Tyler

Subject: FW: Lloyd Shoals Project Scoping Meeting and Site Visit

I will be out of the country when the tour of the facility and scoping meeting is taking place. Will one or more of you plan to attend. Thanks Liz

From: Jackson Relicense [<mailto:G2JACKSONREL@southernco.com>]

Sent: Thursday, August 09, 2018 3:49 PM

To: Booth, Elizabeth

Subject: Lloyd Shoals Project Scoping Meeting and Site Visit

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From: [O'Rourke, Patrick Michael](#)
To: dimoore@adem.alabama.gov; jhaslbauer@adem.alabama.gov
Cc: [Dodd, Anthony Ray](#)
Subject: Langdale/Riverview Water Modeling
Date: Thursday, April 18, 2019 1:27:53 PM

David and Jennifer:

We're hard at work on completing our water modeling scenarios for Langdale/Riverview removal/restoration. We'd like to get our agency partners together for a meeting once we have this ready to go to walk everyone through it and talk through any issues that may need to be addressed. [Please fill out this Doodle poll](#) to indicate your availability during the weeks of July 8 and July 15. I know it is summer and it's hard to find a day that doesn't hit someone's vacation, so I'm going to try to find a date that works where we can at least have representation from all of the resource agencies that have an interest in this project. Feel free to pass this invitation on to anyone else in ADEM who might be interested in attending.

Whichever day we choose, we'll meet from 10 AM-2 PM EDT at the Chattahoochee Hydro office on the Alabama side of Bartlett's Ferry Dam. Lunch will be provided.

Thank you, and we look forward to seeing everyone in July.

Patrick

Patrick O'Rourke
Fisheries Biologist
Georgia Power

pmorourke@southernco.com

241 Ralph McGill Blvd.
Atlanta, GA 30308
(404) 506-5025 (Office)
(470) 426-5322 (Cell)

From: [Adams, Victoria](#)
To: [Dodd, Anthony Ray](#)
Subject: RE: Langdale Riverview
Date: Thursday, April 18, 2019 1:48:12 PM
Attachments: [image001.gif](#)

EXTERNAL MAIL: Caution Opening Links or Files

Tony,

It has been a while! I hope you are well. Yes, Jeremy moved to consulting. Yes, EPD can definitely still share downstream data from WPL. Just let me know what you need and when. Also, we are about to release to the public a water quality database filled with this sort of data. I will be sure to let you know when it is live. 😊 Be sure to check out the instructional video...you might recognize the voice in it.

Cheers,
Victoria

From: Dodd, Anthony Ray [mailto:ARDODD@southernco.com]
Sent: Thursday, April 18, 2019 2:39 PM
To: Adams, Victoria
Subject: Langdale Riverview

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hey Victoria,

I hope all is well with you. Long time no speak.
I'm trying to follow up on a conversation we had with you, Liz and Jeremy a few months ago regarding GPC's intended plan to decommission the Langdale and Riverview dams.
The early project intent is still tracking forward. We'll know more after July about next potential steps forward.

In the meantime, I heard that Jeremy moved on to consulting. I mention that because at the time I think it was either Jeremy or Liz that indicated EPD might have and be able to share water quality data from the area just downstream of West Point Dam....Or do I not remember that correctly? For the benefit of early project planning details for Langdale Riverview, I'm hoping you can help me look into that possibility.

Please contact me if you wish to discuss.

Thank you!

Tony

Tony Dodd
Natural Resources Specialist
Georgia Power Company
241 Ralph McGill Blvd, NE
Atlanta, GA 30308

Desk: 404-506-5026
Cell: 404-434-9412
ardodd@southernco.com



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From: [Adams, Victoria](#)
To: [Dodd, Anthony Ray](#)
Subject: RE: Langdale Riverview
Date: Friday, April 19, 2019 8:51:04 AM
Attachments: [image001.gif](#)
[West Point Tailrace WQ.XLSX](#)

EXTERNAL MAIL: Caution Opening Links or Files

Tony,

Enclosed is water quality data from the dam forebay which were collected from 01/01/2014 until now. Surrounding samples sites yielded no data under these parameters. I am not sure if this is what you need or what sort of header you are wanting. Can you confirm & clarify?

Thanks,
Victoria

From: Dodd, Anthony Ray [mailto:ARDODD@southernco.com]
Sent: Thursday, April 18, 2019 3:05 PM
To: Adams, Victoria
Subject: RE: Langdale Riverview

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks Victoria. Glad to hear about the anticipated video release.
As for the West Point tailrace data, I think that EPD WQ data as available collected during the past 5 to 10 year period would suffice...send more if you wish ... especially data that is/has been "routinely" collected to represent trend. The objective is to have information that we in turn cite accordingly and present to FERC as part of the project description. Any format acceptable.

Thank for anything you can provide all those lines. If you find data to send, please include a simple header replying to our request so we can properly include and document project information in this public process.

Thanks very much and please call if any questions come up that I can help with.

Tony

From: Adams, Victoria <Victoria.Adams@dnr.ga.gov>
Sent: Thursday, April 18, 2019 2:45 PM
To: Dodd, Anthony Ray <ARDODD@southernco.com>
Subject: RE: Langdale Riverview

Tony,

It has been a while! I hope you are well. Yes, Jeremy moved to consulting. Yes, EPD can definitely still share downstream data from WPL. Just let me know what you need and when. Also, we are about to release to the public a water quality database filled with this sort of data. I will be sure to let you know when it is live. 😊 Be sure to check out the instructional video...you might recognize the voice in it.

Cheers,
Victoria

From: Dodd, Anthony Ray [<mailto:ARDODD@southernco.com>]
Sent: Thursday, April 18, 2019 2:39 PM
To: Adams, Victoria
Subject: Langdale Riverview

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hey Victoria,

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In the meantime, I heard that Jeremy moved on to consulting. I mention that because at the time I think it was either Jeremy or Liz that indicated EPD might have and be able to share water quality data from the area just downstream of West Point Dam....Or do I not remember that correctly? For the benefit of early project planning details for Langdale Riverview, I'm hoping you can help me look into that possibility.
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Thank you!

Tony

Tony Dodd
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Georgia Power Company
241 Ralph McGill Blvd, NE
Atlanta, GA 30308

Desk: 404-506-5026
Cell: 404-434-9412
ardodd@southernco.com



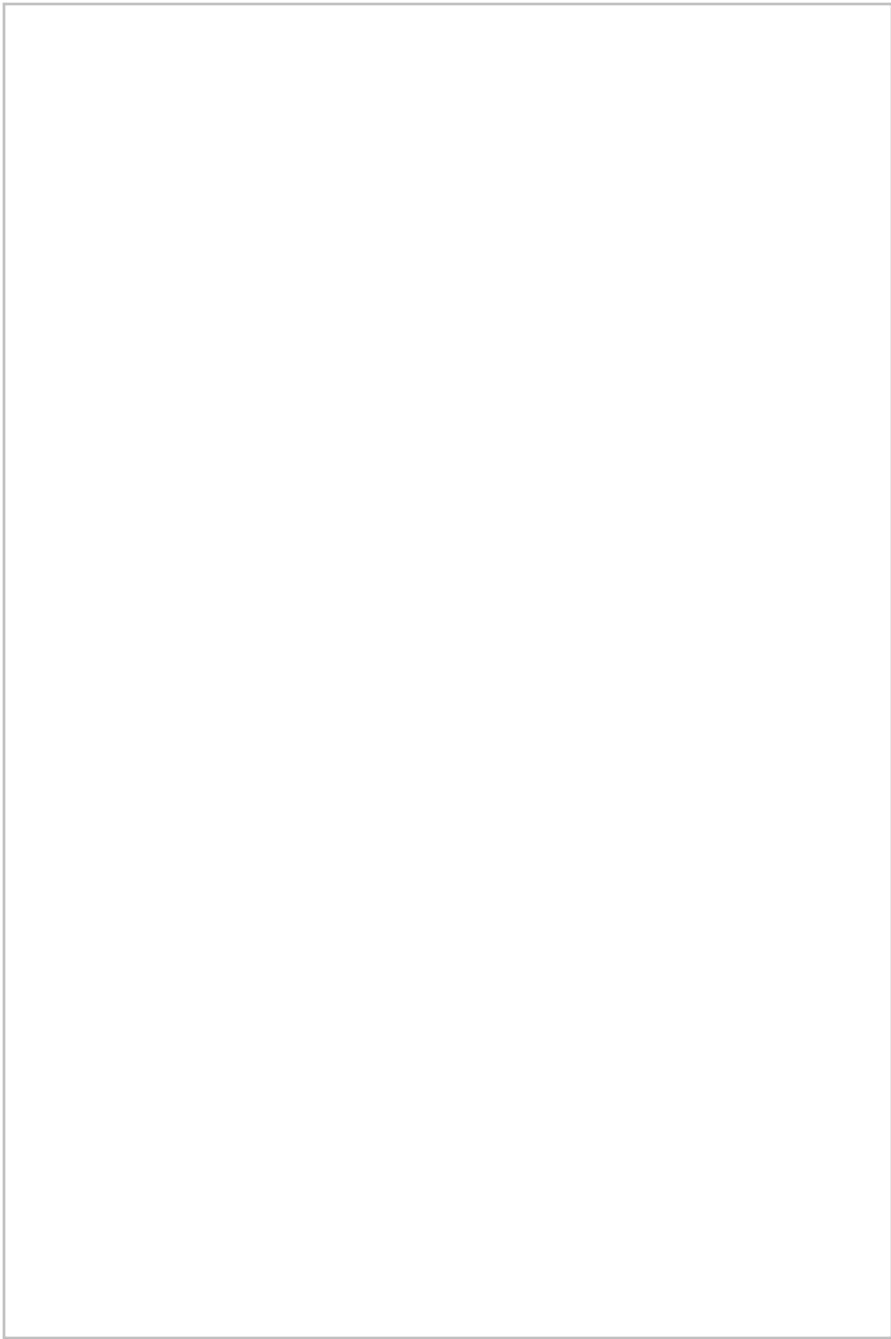
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From: [Adams, Victoria](#)
To: [Dodd, Anthony Ray](#)
Subject: RE: Langdale Riverview
Date: Tuesday, April 23, 2019 7:53:05 AM
Attachments: [image004.gif](#)
[image003.jpg](#)
[Between WPL and Langdale Dams.xlsx](#)

EXTERNAL MAIL: Caution Opening Links or Files

Tony,

Here is all of the data for surface water sites (as opposed to permitted facility effluent data or groundwater data) for our sites on the Chattahoochee (the yellow dots) between WP Dam and Langdale Dam (the green dot). Please let me know if you need additional data (e.g. discharging facilities, tributary WQ), or anything else to accompany this information.



Best,
Victoria

From: Dodd, Anthony Ray [mailto:ARDODD@southernco.com]
Sent: Monday, April 22, 2019 8:19 AM
To: Adams, Victoria
Subject: RE: Langdale Riverview

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hey Victoria,

Thanks very much for your prompt reply with data.

I do have one more question, please. Does EPD have any data collected between COE's West Point Dam and GPC's Langdale Dam that could be shared?

Tony

From: Adams, Victoria <Victoria.Adams@dnr.ga.gov>

Sent: Friday, April 19, 2019 9:46 AM

To: Dodd, Anthony Ray <ARDODD@southernco.com>

Subject: RE: Langdale Riverview

EXTERNAL MAIL: Caution Opening Links or Files

Tony,

Enclosed is water quality data from the dam forebay which were collected from 01/01/2014 until now. Surrounding samples sites yielded no data under these parameters. I am not sure if this is what you need or what sort of header you are wanting. Can you confirm & clarify?

Thanks,
Victoria

From: Dodd, Anthony Ray [<mailto:ARDODD@southernco.com>]

Sent: Thursday, April 18, 2019 3:05 PM

To: Adams, Victoria

Subject: RE: Langdale Riverview

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks Victoria. Glad to hear about the anticipated video release.

As for the West Point tailrace data, I think that EPD WQ data as available collected during the past 5 to 10 year period would suffice...send more if you wish ... especially data that is/has been "routinely" collected to represent trend. The objective is to have information that we in turn cite accordingly and present to FERC as part of the project description. Any format acceptable.

Thank for anything you can provide all those lines. If you find data to send, please include a simple header replying to our request so we can properly include and document project information in this public process.

Thanks very much and please call if any questions come up that I can help with.

Tony

From: Adams, Victoria <Victoria.Adams@dnr.ga.gov>
Sent: Thursday, April 18, 2019 2:45 PM
To: Dodd, Anthony Ray <ARDODD@southernco.com>
Subject: RE: Langdale Riverview

EXTERNAL MAIL: Caution Opening Links or Files

Tony,

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Cheers,
Victoria

From: Dodd, Anthony Ray [<mailto:ARDODD@southernco.com>]
Sent: Thursday, April 18, 2019 2:39 PM
To: Adams, Victoria
Subject: Langdale Riverview

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Hey Victoria,

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In the meantime, I heard that Jeremy moved on to consulting. I mention that because at the time I think it was either Jeremy or Liz that indicated EPD might have and be able to share water quality data from the area just downstream of West Point Dam....Or do I not remember that correctly? For the benefit of early project planning details for Langdale Riverview, I'm hoping you can help me look into that possibility.
Please contact me if you wish to discuss.

Thank you!

Tony

Tony Dodd
Natural Resources Specialist
Georgia Power Company
241 Ralph McGill Blvd, NE
Atlanta, GA 30308

Desk: 404-506-5026
Cell: 404-434-9412
ardodd@southernco.com



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From: [Wiedl, Stephen](#)
To: [Dodd, Anthony Ray](#)
Subject: RE: 401 Cert
Date: Wednesday, May 15, 2019 2:38:48 PM
Attachments: [image001.gif](#)

EXTERNAL MAIL: Caution Opening Links or Files

Mr. Dodd,

I tried to reach you just now but you were away from your phone(s). I'm only at the office today thru about 4:00, but I'll try to contact you tomorrow or Friday. Thanks.

Stephen C. Wiedl, PWS
Manager - Wetlands Unit
Georgia Environmental Protection Division
7 Martin Luther King, Jr. Drive, Suite 450
Atlanta, GA 30334

404-452-5060
Stephen.Wiedl@dnr.ga.gov

From: Dodd, Anthony Ray [<mailto:ARDODD@southernco.com>]
Sent: Wednesday, May 15, 2019 12:43 PM
To: Wiedl, Stephen
Subject: 401 Cert

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Steve,

I hope this message finds you doing well.

I spoke with Victoria Adams earlier today and she referred me to you for my 401 Certification question.

I work in Georgia Power's (GPC) Natural Resources group – and am seeking guidance from you for 401 Certification for planned activities at GPC's Langdale and Riverview Hydro Projects (Chattahoochee below West Point).

I would like to have a chance to discuss with you. Might you have time after 3:00 today or perhaps another day /time before this week is out?

Thank you,

Tony

Tony Dodd
Natural Resources Specialist
Georgia Power Company
241 Ralph McGill Blvd, NE
Atlanta, GA 30308

Desk: 404-506-5026
Cell: 404-434-9412
ardodd@southernco.com



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From: [Crabbe, Melissa C.](#)
To: Victoria.Adams@dnr.ga.gov
Cc: [Dodd, Anthony Ray](#)
Subject: RE: Riverview_Langdale Hydro Dams Decommissioning
Date: Thursday, May 30, 2019 9:05:32 AM
Attachments: [image002.png](#)
[image003.gif](#)

Hi, Victoria.

I can help! The FERC docket for the Langdale Project Surrender is P-2341-033 (P-docket-subdocket). The FERC docket for the Riverview Project Surrender is P-2350-025. We have proposed a 30-day comment period, which would end on June 23. Please feel free to reach back out if you have additional questions.

Thank you,
Melissa Crabbe, PE



From: Dodd, Anthony Ray
Sent: Thursday, May 30, 2019 9:04 AM
To: Crabbe, Melissa C. <MCCRABBE@SOUTHERNCO.COM>
Subject: Fwd: Riverview_Langdale Hydro Dams Decommissioning

Melissa

See the EPD msg below. Can you help?

Tony

Get [Outlook for iOS](#)

From: Adams, Victoria <victoria.adams@dnr.ga.gov>
Sent: Thursday, May 30, 2019 8:43 AM
To: Dodd, Anthony Ray
Subject: RE: Riverview_Langdale Hydro Dams Decommissioning

EXTERNAL MAIL: Caution Opening Links or Files

Tony,

I'm having trouble finding the right docket number...do you have it handy to send? I plan to draft a comment letter of support and send it up through Liz. Does the docket say when the comment period ends? Liz is in Israel at the moment.

Thanks,

Victoria

From: Dodd, Anthony Ray [<mailto:ARDODD@southernco.com>]
Sent: Tuesday, May 28, 2019 8:16 AM
To: Adams, Victoria
Cc: Booth, Elizabeth
Subject: Riverview_Langdale Hydro Dams Decommissioning

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Victoria,

Georgia Power Company filed its study plan last Friday with FERC for the intended decommissioning of Langdale and Riverview Hydro Dams. As a component of the stakeholder and public process, you are invited to comment on the dockets and express your needs in addition to what has been proposed in order to issue a 401 for dam removal in the future.

Tony Dodd
Natural Resources Specialist
Georgia Power Company
241 Ralph McGill Blvd, NE
Atlanta, GA 30308

Desk: 404-506-5026
Cell: 404-434-9412
ardodd@southernco.com



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The Nature Conservancy in
Georgia
100 Peachtree St
Suite 2250
Atlanta, GA 30303

Tel (404) 873-6946
Fax (404) 873-6984

Nature.org/Georgia

June 21, 2019

ORIGINAL

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Submitted via FERC eFiling System and via USPS

RE: The Nature Conservancy in Georgia's comments regarding Georgia Power's study plans under its application to surrender the Langdale (P-2341-033) and Riverview (P-2350-025) Projects

Dear Secretary Bose,

We appreciate the opportunity to review and comment as the Federal Energy Regulatory Commission (FERC) evaluates Georgia Power's application to surrender the Langdale and Riverview hydropower projects on the Chattahoochee River.

The Nature Conservancy (Conservancy) is a science-based conservation organization working in all 50 states and 70 countries to 'conserve the lands and waters on which all life depends.' We have worked in partnership with regulatory agencies and other non-profits for decades to restore aquatic habitat and hydrologic function in Georgia's rivers and streams. While the impact of hydropower projects can be mitigated somewhat through siting and operational best practices¹ it is essential that we properly assess the role of hydropower in providing low carbon, low cost, low impact power where better alternatives may exist².

The power generating units at the Langdale and Riverview Projects have not been operable since 2009; therefore, the benefits of the dam structures have not been realized for a decade, while their impacts on aquatic habitat and hydrologic function in the Chattahoochee River remained. The Conservancy joins with many other regulatory agencies³, nongovernmental organizations, academic researchers, and corporations in advocating for the removal of obsolete barriers as "an effective approach to restoring river and stream structure, functions, and dynamics."

1. **The Conservancy supports the surrender of the Langdale and Riverview hydropower licenses prior to the end of their license terms and the eventual removal of these barriers, along with the Crow Hop diversion dam.** The Conservancy would support retention of some elements of the in-stream structures for cultural and historic purposes if reasonable, feasible, and safe.

¹ Opperman et al. 2015. <https://www.nature.org/content/dam/tnc/nature/en/documents/power-of-rivers-report.pdf>

² Opperman et al. 2019. <https://www.nature.org/en-us/explore/newsroom/wwf-tnc-free-flowing-rivers/>

³ U.S. Army Corps of Engineers. 2018.

https://www.army.mil/article/211916/assistant_secretary_of_the_army_for_civil_works_announces_regulatory_guidance_letter_18_01

2. **The Conservancy supports the scope of the study plan, tasks and schedule. In addition the Conservancy has the following recommendations on three aspects of the study plan:**

a. Hydraulic & Hydrologic (H&H) Modeling

- i. The applicant should include a visual rendering of the river post de-commissioning and structural removal, using the H&H results to the extent possible. This will provide community members concerned with the loss of river access with a vision for the future of this section of the Chattahoochee River. Commonly heard misconceptions about removing low-head dams have included statements that it will "dry up the river," there will be a loss of flood protection, or unsightly mudflats will be present along the exposed shoreline for years.

a) Example: <https://www.americanrivers.org/2018/06/now-is-the-time-to-restore-the-mississippi-river-gorge/>

b. Water Quality (WQ) Study

- i. This portion of the study must address the quantity, quality and composition of the sediment contained in the reservoir area above each structure. As noted by the Chattahoochee Riverkeeper in their comment letter dated March 4, 2019:

"The Eagle and Phenix Mill Dam was the first major dam built across the Chattahoochee River in 1834 before significant land disturbing activity began in the upper Chattahoochee River basin. This could explain why there was little sediment discovered during the structure's removal in 2013. Langdale was the second structure constructed in the region in 1860, followed by North Highlands (1900), City Mills (1900) and Riverview (1902). Significant sediment flows in the region would have remained high until 1975 when West Point Dam was constructed. Given this timeline, the age of these structures, and the agricultural history of the region, it is plausible that there may be more legacy sediment than anticipated behind the structures Georgia Power proposes to remove."

Considering the long and intensely industrial history of the Columbus riverfront and decades of military training activities at Fort Benning, it also seems plausible that legacy contaminants in the sediment are present and may require remediation prior to removal of these structures. Refer to Section 404 of the Clean Water Act as it relates to the removal of obsolete dams⁴ and the Advisory Committee on Water Information Subcommittee on Sedimentation's Dam Removal Analysis Guidelines for Sediment⁵.

c. Shoal Bass Literature Review Study

- i. The Conservancy supports the study and methodology proposed. The Native Black Bass Initiative (NBBI) since 2010 has worked to conserve and restore regionally-endemic black bass populations through a collaborative partnership of local, state, and federal agencies; universities; nongovernmental organizations;

⁴ U.S. EPA Office of Water. 2016. <https://www.epa.gov/cwa-404/frequent-questions-removal-obsolete-dams>

⁵ U.S. Department of the Interior. 2017.

https://acwi.gov/sos/pubs/dam_removal_analysis_guidelines_for_sos_final_vote_2017_12_22_508.pdf

and corporations. The NBBI has gathered the most comprehensive information base on the genetics, life history, habitat requirements, distribution, and threats to native southeastern black bass including Shoal Bass⁶.

- ii. In addition, the conservancy recommends that a step be included to incorporate the results of the H&H model to inform the study report findings. In other words, the applicant should consult with members of the NBBI to provide an assessment of the suitability of in-stream habitats as modeled by the H&H Study to determine the potential impact on Shoal Bass population, distribution and availability as a target for game fishing in this section of the river.

The Nature Conservancy is grateful for this opportunity to provide input on Georgia Power's application to surrender the Langdale and Riverview hydropower projects on the Chattahoochee River, and we look forward to continued partnership opportunities with the Federal Energy Regulatory Commission to mitigate the impacts of hydropower operations in the Chattahoochee River and other river systems in Georgia.

Sincerely,



Sara J. Gottlieb

Director of Freshwater Science & Strategy, Georgia Chapter

⁶ Birdsong et al. 2015.

<https://www.researchgate.net/publication/275354943> Native Black Bass Initiative Implementing watershed-scale approaches to conservation of endemic black bass and other native fishes in the southern United States

Chris Manganiello, Atlanta, GA.
June 26, 2019

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Submitted via FERC eFiling System

RE: COMMENT regarding Georgia Power Company's Proposed Study Plan for
Langdale and Riverview Hydroelectric Project Numbers 2341-033 & 2350-025

Dear Secretary Bose,

Chattahoochee Riverkeeper appreciates the opportunity to file comments in response to the Georgia Power Company's request for comments on the Proposed Study Plan for Langdale and Riverview Hydroelectric Project Numbers 2341 & 2350, dated May 2019.

Established in 1994, Chattahoochee Riverkeeper (CRK) is an environmental advocacy and education organization with more than 8,600 members dedicated solely to making the Chattahoochee River a sustainable resource for the five million people who depend on it. Our mission is to advocate and secure the protection and stewardship of the Chattahoochee River, its lakes, tributaries, and watershed, in order to restore and preserve their ecological health for the people and wildlife that depend on the river system.

Hydraulic and Hydrologic Modeling Plan

CRK looks forward to reviewing the results of the Hydraulic and Hydrologic Modeling Plan.

Ensuring that there is enough flow in the river for municipal water supply and wastewater assimilation is critically important.

CRK understands that the projects are run of river dams, and that West Point Dam's discharges drive the overall volume of flow in this stretch of river.

However, CRK believes removing parts or all of the dams will alter the velocity, duration, and timing of water flow through the project areas.

The proposed barrier removals may result in a more-flashy and less regular stream flow that could be a problem for municipalities' raw water supply withdrawal points and the East Alabama Water, Sewer and Fire Protection District's wastewater discharge. There are other wastewater discharges including West Point (Ga.), Lanett (Al.), and inflow from Long Cane Creek (which supports multiple wastewater discharges in Georgia) that must also be considered when evaluating comprehensive assimilative capacity for this stretch of the Chattahoochee River.

In the Methodology section, please explain why some dams would be partially or entirely removed in some scenarios but not in others.

Shoal Bass Literature Review

CRK recognizes that barrier removal and the constructed whitewater course in Columbus, Georgia has not improved aquatic connectivity for shoal bass. However, because the Georgia Power Company's proposed removal will ultimately result in a natural streambed (as opposed to a manufactured streambed), CRK anticipates improved aquatic function. The proposed removal could create an 11-mile stretch of river shoal habitat. Georgia Power should make shoal bass habitat restoration a priority in the section of the Chattahoochee River.

Water Quality Plan

The USACE Clean Water Action Section 404 permitting and Section 401 Water Quality Certification processes are critical steps for addressing public and agency concerns about the nature, volume, and other characteristics of legacy sediment contained in the project areas. In August 2016, stakeholders and regulatory staff from the Savannah District, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the Georgia Environmental Protection Division discussed the new Nationwide Permit A for low head dam removal. Regulatory staff expressed specific concern about legacy sediment as one reason for not developing regional conditions for or immediately implementing Nationwide Permit A. Instead, the Savannah District ultimately did not adopt NWP-A, but rescinded NWP-A for five years.

The Eagle and Phenix Mill Dam was the first major dam built across the Chattahoochee River in 1834 before significant land disturbing activity began in the upper Chattahoochee River basin. This could explain why there was little sediment discovered during the structure's removal in 2013. Langdale was the second structure constructed in the region in 1860, followed

by North Highlands (1900), City Mills (1900) and Riverview (1902). Significant sediment flows in the region would have remained high until 1975 when West Point Dam was constructed. Given this timeline, the age of these structures, and the agricultural history of the region, it is plausible that there may be more legacy sediment than anticipated behind the structures Georgia Power proposes to remove.

Cultural Resources Plan

CRK continues to support the complete or partial removal of the three dams and the Riverview Powerhouse (P-2350-025), and the intent to repurpose the Langdale Powerhouse (P-2341-033). CRK would support retention of some elements of the dams or other properties for cultural and historic purposes if reasonable, feasible, and safe. Will underwater surveys (for example, divers) be used to evaluate the dam's physical condition?

If you have any questions, please do not hesitate to contact us.

Sincerely,

/JU/

Jason Ulseth

Riverkeeper

404.352.9828

julseth@chattahoochee.org



Langdale and Riverview Hydroelectric Projects
FERC Projects #2341 and #2350

Communication Date:

7/22/2019

Communication Type (*telephone, email, in-person meeting, other*):

In-person

List and attach pertinent written correspondence:

(i.e. letter, fax, meeting notes/handouts, printed materials, etc.)

Handout: Copy of PowerPoint presentation entitled Langdale and Riverview Projects – Preliminary Hydrologic & Hydraulic Modeling, July 2019

Handout: Depth Change Model Results in the Riverview headrace channel

Resource Document: EAWSFPD provided a copy of their NPDES Permit and permit rationale

List persons attending from Southern Company/Georgia Power:

Courtenay O'Mara & Melissa Crabbe - SCS

Dawson Ingram & Nancy DeShazo - GPC

Kelly Schaffer - Kleinschmidt

List organization name and persons attending from other organization:

Tony Segrest, East Alabama Water Sewer and Fire Protection Division (East Alabama)

Neil Marbury – Fire Chief, Water Rescue

Wheeler Crook & Matt Cobb, Goodwynn Mills and Cawood – Engineering Consultants to East Alabama

Subject:

Review preliminary hydrologic and hydraulic modeling results for complete dam removal.

Comments/Discussions/Requests:

Courtenay provided a PowerPoint presentation overview of the complete dam removal scenario (all three dams and Riverview powerhouse) under base flow, base flow + one unit generation at West Point and base flow + two unit generation at West Point. Areas highlighted during the presentation included areas that are currently wetted that the model predicts will be dry following dam removal and changes that the model predicts will occur at the EAWSFPD properties, including the wastewater treatment plant and two lift stations. Courtenay provided a summary of resource agency priorities from the 7/16/2019 consultation meeting. Resource agencies requested that Georgia Power consider ways to eliminate the concentrated water channel that hugs the east bank of the Chattahoochee River, including engineering the riverbed characteristics to spread the water westward. GPC will conduct additional water modeling to spread the water westward and hope to review the revised models with

EAWSFPD in late August / early September. In lesser detail we reviewed the intakes and discharges upstream of I-85. Detailed review of these utilities will not be conducted until additional modelling is conducted with higher coverage bathymetry data (which is currently being collected upstream of I-85).

East Alabama stated that their discharge limit is 4MGD (~ 6 cfs) and is based on a 7Q10 flow of 136 cfs. They provided a copy of this permit during the meeting. GPC will review the details of the permit.

Concerns:

- The EAWSFPD lift station below Langdale Powerhouse is a major collector for the Valley area. During the flood of December 2009, the lift station was taken offline to protect the electrical system at the station.
- Their discharge pipe is already not fully submerged at base flow from West Point.
- They expect a new large industrial loading to be added to their system so they are concerned about what the impact will be to the ADEM modelling.
- Water treatment plant discharge assimilation. Current permit will need to be renewed in 2022.

Neil Marbury is interested in the change in flow velocities at the boat ramps that he uses to access the river during rescue operations.

Action Items/Follow-up Items:

GPC: Determine if the 100-year flood level changes.

EA: Provide GPC a copy of the Corps agreement that dictates maintenance of the shoreline protection at the EAWSFPD wastewater treatment property.

GPC: Review the NPDES permit for the wastewater treatment plant.

EA: Provide lat/long, pipe elevation (specify datum) and diameter of the EAWSFPD and Lanett WWTP discharges.

EA: Provide lat/long of lift stations.

EA: Provide critical submergence elevation of the Chattahoochee Valley Water Supply District intake pump.

Additional details as available are a plus.

GPC: Provide model predicted base flow change post-dam removal in the Riverview headrace channel.

GPC: Provide a pdf or CAD file topo map of Campbell's island.

GPC: Schedule a follow-up meeting when new model results are available.

EA: Provide a contact for the Lanett WWTP for future consultation. The contact for West Point is Mike Criddle (who GPC recently added to the stakeholder list).

GPC: Will provide pre and post dam removal flow velocities at boat ramp/access points after final modelling is complete.

Form Completed By:

Melissa Crabbe

From: [Haslbauer, Jennifer](#)
To: [Dodd, Anthony Ray](#)
Cc: [Moore, David](#)
Subject: RE: Georgia Power Company Langdale_Riverview
Date: Thursday, August 22, 2019 3:46:15 PM
Attachments: [image001.gif](#)
[image002.png](#)

EXTERNAL MAIL: Caution Opening Links or Files

How does 10 am CST on the 5th sound? I can reserve the conference room for 2 hours just in case. Also, how many folks are planning to attend from Georgia so I can ensure we get a big enough conference room?

From: Dodd, Anthony Ray <ARDODD@southernco.com>
Sent: Thursday, August 22, 2019 2:39 PM
To: Haslbauer, Jennifer <jhaslbauer@adem.alabama.gov>
Cc: Moore, David <djmoore@adem.alabama.gov>
Subject: RE: Georgia Power Company Langdale_Riverview

Jennifer,

We can meet with you on the 5th ? Will mid- to late-late morning hrs (CST) work? ~1 to 1.5 hrs?

Tony

From: Haslbauer, Jennifer <jhaslbauer@adem.alabama.gov>
Sent: Thursday, August 22, 2019 2:57 PM
To: Dodd, Anthony Ray <ARDODD@southernco.com>
Cc: Moore, David <djmoore@adem.alabama.gov>
Subject: RE: Georgia Power Company Langdale_Riverview

EXTERNAL MAIL: Caution Opening Links or Files

Hi Tony,

The 4th or 5th should work for us. Let me know the best date and time and I'll get a conference room reserved.

Thanks,

Jennifer

From: Dodd, Anthony Ray <ARDODD@southernco.com>
Sent: Thursday, August 22, 2019 6:24 AM
To: Haslbauer, Jennifer <jhaslbauer@adem.alabama.gov>
Cc: Moore, David <djmoore@adem.alabama.gov>; Johnson, Chris L <CLJohnson@adem.alabama.gov>
Subject: RE: Georgia Power Company Langdale_Riverview

Happy Thursday, Jennifer,

Following up about schedule possibilities, would y'all be able to meet with us during mid-to late-morning hours on either 4, 5 or 6 September ?

Tony

Tony Dodd
Natural Resources Specialist
Georgia Power Company
241 Ralph McGill Blvd, NE
Atlanta, GA 30308

Desk: 404-506-5026
Cell: 404-434-9412
ardodd@southernco.com



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From: Haslbauer, Jennifer <jhaslbauer@adem.alabama.gov>
Sent: Wednesday, August 21, 2019 1:44 PM
To: Dodd, Anthony Ray <ARDODD@southernco.com>
Cc: Moore, David <djmoore@adem.alabama.gov>; Johnson, Chris L <CLJohnson@adem.alabama.gov>
Subject: RE: Georgia Power Company Langdale_Riverview

EXTERNAL MAIL: Caution Opening Links or Files

Tony,

We will need to reschedule for something after August 30th. Would September 3rd work?

From: Dodd, Anthony Ray <ARDODD@southernco.com>
Sent: Wednesday, August 21, 2019 11:30 AM
To: Haslbauer, Jennifer <jhaslbauer@adem.alabama.gov>
Cc: Moore, David <djmoore@adem.alabama.gov>; Johnson, Chris L <CLJohnson@adem.alabama.gov>
Subject: RE: Georgia Power Company Langdale_Riverview

Jennifer,

In follow-up, we'd like to try to meet with y'all during the mid-to late morning hrs on 28 Aug.

If that happens to not fit well with your schedules, please let me know and I'll round up an alternate date.

Thank you!

Tony

From: Haslbauer, Jennifer <jhaslbauer@adem.alabama.gov>
Sent: Tuesday, August 20, 2019 1:54 PM
To: Dodd, Anthony Ray <ARDODD@southernco.com>
Cc: Moore, David <djmoore@adem.alabama.gov>; Johnson, Chris L <CLJohnson@adem.alabama.gov>
Subject: RE: Georgia Power Company Langdale_Riverview

EXTERNAL MAIL: Caution Opening Links or Files

Hi Tony,

We can do a meeting at ADEM. We are mostly available the next 3 weeks so if there are there any particular days that are suitable for you, we can crosscheck with our calendars? Let me know and maybe we can narrow down a day that will work for everybody.

Thanks,

Jennifer Haslbauer, P.E.
Chief, Standards and Planning Section
Water Quality Branch – Water Division
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, Alabama 36130-1463
(334) 274-4250
adem.alabama.gov



Mission: Assure for all citizens of the state a safe, healthful, and productive environment

From: Dodd, Anthony Ray <ARDODD@southernco.com>
Sent: Tuesday, August 20, 2019 9:57 AM
To: Haslbauer, Jennifer <jhaslbauer@adem.alabama.gov>; Moore, David <djmoore@adem.alabama.gov>
Subject: Georgia Power Company Langdale_Riverview

Jennifer and David,

It's been quite a while since we last communicated about Georgia Power's intended project for decommissioning and removal of the Langdale and Riverview Dams for river restoration.

Currently, GPC and its consultants are steadily working on project planning details to fulfill the dam decommissioning plan required by FERC.

Over the past weeks, we've held conversations and meetings with involved agencies including GADNR Fisheries, GAEPD, USFWS and USACOE.

Key technical topics of recent include dam removal technique and project logistics, predictive hydraulic modeling for dam removal scenarios, sediment quality and aquatic habitat.

We feel like we're reaching a critical stage in detail development that will benefit from further direct communication and information exchange between GPC and ADEM about project status, FERC timeline, water quality and other timely details.

You would please consider meeting with us again at your office complex so we can provide this project update discussion?

If possible in your schedules, we'd like to try to meet within the next 3 weeks or so – maybe by 13 Sept?

We look forward to hearing from you. Please contact me if you have any questions.

Thank you!

Tony

Tony Dodd
Natural Resources Specialist
Georgia Power Company
241 Ralph McGill Blvd, NE
Atlanta, GA 30308

Desk: 404-506-5026
Cell: 404-434-9412
ardodd@southernco.com



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From: Moore, David <djmoore@adem.alabama.gov>
Sent: Monday, November 19, 2018 11:09 AM
To: Dodd, Anthony Ray <ARDODD@southernco.com>
Cc: Haslbauer, Jennifer <jhaslbauer@adem.alabama.gov>
Subject: RE:

This email has been sent from an external address. Please use caution when clicking on links or opening attachments.

Tony,

We enjoyed meeting you all as well. Thanks again for keeping us updated on those projects.

We look forward to working with you in the future.

David

From: Dodd, Anthony Ray <ARDODD@southernco.com>

Sent: Monday, November 19, 2018 9:44 AM

To: Moore, David <djmoore@adem.alabama.gov>

Subject:

David

Thanks again for arranging some time to meet with us last week. We enjoyed meeting y'all and having the opportunity to talk about the Langdale and Riverview projects.

Tony

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**Langdale and Riverview Hydroelectric Projects
FERC Projects #2341 and #2350**

Communication Date:

September 5, 2019

Communication Type (telephone, email, in-person meeting, other):

In-person meeting

List and attach pertinent written correspondence:

(i.e. letter, fax, meeting notes/handouts, printed materials, etc.)

- emails were exchanged between Tony Dodd and ADEM prior to the meeting for the purpose of scheduling

-handouts were given to ADEM, specifically a copy of maps depicting predicted base river flows in the Langdale, Riverview project area with dams removed. The map was recognized in conversation as draft/preliminary as another modeling revision was underway at that time.

List persons attending from Southern Company/Georgia Power:

Melissa Crabbe – Hydro Engineer and Compliance Specialist

Courtenay O’Mara – Hydro Licensing Manager

Laura Munn - Hydro Engineer and Compliance Specialist

Tony Dodd – Aquatic Biologist

List organization name and persons attending from other organization:

Jennifer Haslbauer – Chief, Standards and Planning, Water Quality Branch, Alabama Department of Environmental Management (ADEM)

David Moore – Environmental Engineer, ADEM

Subject: Project Update for Langdale and Riverview FERC License Surrender and Chattahoochee River Restoration

Comments/Discussions/Requests:

Met at ADEM Headquarters in Montgomery, AL.

Courtenay O’Mara introduced the team and described Georgia Power’s intent to update ADEM on project progress and to specifically request ADEM’s review and input on wastewater mixing details for

the East Alabama Water and Sewer Authority's NDPEs permitted outfall located in the project area - located just upstream of the Riverview powerhouse.

Courtenay described the point of current project progress within the FERC process. She described local stakeholders' interest in post dam removal river stage effects and the powerhouse facility at Langdale. The then most-recent results of GPC's hydraulic modeling (by Kleinschmidt Associates) were described. The discussion was aided by handouts of maps depicting projected river stage under base flow vs higher flows anticipated by Corps operations of Wests Point Dam upstream of Langdale and Riverview. Discussion included anticipated dam removal process via USFWS dam removal team and GPC's potential consideration of certain engineered features to achieve certain base flow river stage effects. Specifically, highlighted were GPC's awareness of wetted perimeter along the west bank features at the City of Valley as well as (water volume) at the East Alabama Water and Sewer and Fire Protection District (EAWSPFD) treatment plant discharge. Discussion further included GPC's then-on-going effort to collect additional stream-channel substrate and subsurface survey data to enhance model resolution with respect to sediment volume and flow effects. As related to projected base flow and compliance, SCS Hydro members raised questions and contributed to discussion about assimilation capacity within EAWSPFD's discharge permit allowance. At our team's request, ADEM agreed to have its NPDES group review the EAWSPFD permit limits and calculation, with respect to its 7Q2 mixing criteria, and reply to GPC with its analysis by mid-October 2019. GPC will continue dialogue with ADEM and noted the next update opportunity this Fall in the form of a second multi-agency, hydraulic modeling update meeting.

Follow-up Requirements: None at this time.

Form Completed By: Tony Dodd

From: [O'Mara, Courtenay R.](#)
To: [Haslbauer, Jennifer](#)
Cc: [Dodd, Anthony Ray](#); [Munn, Laura S.](#); [Crabbe, Melissa C.](#)
Subject: Riverview/Langdale for ADEM
Date: Tuesday, September 24, 2019 11:51:38 AM
Attachments: [Langdale-Riverview 2D Model Flow Distribution.xlsx](#)
[image001.png](#)
[Extracted Pages from 2018-12-18 FINAL Langdale Exhibit E..pdf](#)
[20170426_EAWSFPD ADEM Permit.pdf](#)
[20170124_EAWSFPD ADEM Permit Rationale.pdf](#)
[image002.gif](#)

Hey Jennifer-
Sorry for the delay.

Attached are several items we still we you.

1. Langdale-Riverview 2D Model Flow Distribution.xlsx
This contains the map and table of values of the HEC-RAS model flow split in the Riverview channel with the before and after dam removal numbers (in cfs, highlighted in yellow). These are the numbers we used as the basis of comparison with the permit 7Q10 numbers and what I reference in my response #1 below.
2. Extracted Pages from 2018-12-18 FINAL Langdale Exhibit E.pdf
This comes from the December 2018 surrender filing and has a map of the discharge locations. All of these are upstream of I-85. The document also includes a description of the intakes, which would be above the discharge points. As mentioned in Response #1 below we think because these are all upstream of I-85 they will remain unaffected. Please let us know if you have different locations!
3. We realized that in the last meeting we also promised you our copy of the permit and the permit rationale for East Alabama, both of which are attached.

Hope these items help. Please call me if you have any questions.

Thanks so much,

Courtenay R. O'Mara, P.E.
Hydro Licensing and Compliance Supervisor
Southern Company
241 Ralph McGill Blvd. – Bin 10193
Atlanta, Georgia 30308
Tel 404.506.7219
Mobile 404.797.9432
southerncompany.com



From: O'Mara, Courtenay R.
Sent: Thursday, September 19, 2019 9:24 PM
To: Haslbauer, Jennifer <jhaslbauer@adem.alabama.gov>
Subject: RE: Riverview/Langdale

Yes, I totally missed it! Thanks for reaching out.

1. We have a HEC-RAS model that uses the flows from West Point as the there different flow scenarios. The flows we have for the channel are based on the HEC-RAS modelling results before and after dam removal.
2. The model extends all the way to the tailrace of West Point so it includes the other intakes.
3. East Alabama Water and Sewer and other publicly available data helped us to identify the intakes and discharges of the entities you mention. We identified that the intake and the other discharges were all north of the I-85 bridge and East Alabama was the only one south of it. We have a map that we submitted in the Surrender application to FERC last December. I'll export that and send it to you in the morning. So we may need to cross check these locations if you have something different. We have not contacted them because we were waiting to see what the additional multi-beam bathymetry data upstream of Langdale was input into the model to determine final impact. (i.e. we did not want to alarm them if there was really no impact). Those modelling results will be presented in that Nov meeting I just set up. But internally we just looked at it yesterday and we think there is insignificant impact. We'll go over that in the meeting. I want to make sure I have the locations correct though bc maybe we are incorrect on those, in which case we would have to change direction on our individual outreach.

I'll email you again in the morning with our map.

Thanks,
Courtenay

From: Haslbauer, Jennifer <jhaslbauer@adem.alabama.gov>
Sent: Thursday, September 19, 2019 5:07 PM
To: O'Mara, Courtenay R. <CROMARA@SOUTHERNCO.COM>
Subject: FW: Riverview/Langdale

EXTERNAL MAIL: Caution Opening Links or Files

Hi Courtenay,

Wasn't sure if you had received my email below. I just wanted to make sure we can get you info as quickly as possible.

Thanks,

Jennifer Haslbauer, P.E.
Chief, Standards and Planning Section
Water Quality Branch – Water Division
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, Alabama 36130-1463
(334) 274-4250
adem.alabama.gov



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From: Haslbauer, Jennifer
Sent: Friday, September 13, 2019 3:06 PM
To: CROMARA@SOUTHERNCO.COM
Subject: Riverview/Langdale

Courtenay,

I had a few questions regarding the Riverview/Langdale dam removal:

- How are you determining the flows found in the presentation?
- Have you or do you plan to model further upstream than what is recognized in the presentation?
- Has Lanett, Lagrange, and West Point WWTPs been notified about the dam removals? I noticed they are all located within the boundaries that may experience upstream effects due to flow changes (Lanett is about a mile upstream of I-85 while the other Georgia facilities are between 85 and the dams).

Also, would providing our modeling results help assist you all with your modeling? I believe they are available on our website in eFile for permit #AL0024724.

Thanks,

Jennifer Haslbauer, P.E.
Chief, Standards and Planning Section
Water Quality Branch – Water Division
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, Alabama 36130-1463
(334) 274-4250

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Langdale and Riverview Hydroelectric Projects
FERC Projects #2341 and #2350

Communication Date:

9/30/2019

Communication Type (*telephone, email, in-person meeting, other*):

In-person

List and attach pertinent written correspondence:

(i.e. letter, fax, meeting notes/handouts, printed materials, etc.)

Handout: Copy of PowerPoint presentation entitled Langdale and Riverview Projects – Preliminary Hydrologic & Hydraulic Modeling, July 2019

List persons attending from Southern Company/Georgia Power:

Courtenay O'Mara, Laurie Munn, and Melissa Crabbe - SCS

List organization name and persons attending from other organization:

All from EPD:

Victoria Adams (Water Quality Standards)

Liz Booth (Program Manager, Watershed Planning and Monitoring)

Lewis Hays (Program Manager, Watershed Compliance)

Anna Truszczynski (Assistant Branch Chief, Watershed Protection Branch)

Joanna Smith (Surface Water Supply), Tom Woosley (Safe Dams)

Hallian Liang (Water Supply, Hydrological Unit)

Paul Lamare (Hydrological Modeler)

Feng Jiang (Hydrological Modeler)

Subject:

Review preliminary hydrologic and hydraulic modeling results for complete dam removal.

Comments/Discussions/Requests:

Courtenay provided a project overview of the proposal to surrender the Langdale and Riverview FERC licenses and the FERC process involved in surrounding a license and decommissioning the dams and Riverview Powerhouse. Courtenay talked through a handout of presentation slides that provided an overview of the complete dam removal scenario (all three dams and Riverview powerhouse) under base flow, base flow + one unit generation at West Point and base flow + two unit generation at West Point. Areas highlighted during the presentation included:

- areas of concern for the City of Valley: area that are currently wetted that the model predicts will be dry following dam removal at the at properties upstream and downstream of the Langdale powerhouse
- the model has incorporated excavating a channel in the island abutting Langdale powerhouse to bring water to the tailrace channel
- resource agency priorities from the 7/16/2019 consultation meeting, including engineering as needed to keep post-removal velocities that meet the needs for upstream fish passage (approx.. 3-5 fps)
- East Alabama Water Sewer and Fire Protection District wastewater discharge

Moving forward we are making model revisions based on feedback received and plan to convene an resource agency revised model review meeting on November 7.

Courtenay reviewed the design for the Riverview powerhouse area as we plan to remove the powerhouse to the operating floor elevation, but the foundation in place. A berm would be built in the location of the powerhouse to divert water from the Riverview headrace channel back into the main stem of the Chattahoochee River rather than allowing it to pass to the Riverview tailrace channel. Courtenay specifically asked Tom Woosley if the berm would fall under EPD's Safe Dams regulatory program. Because the berm would not impound water Tom states the berm would not be regulated by Safe Dams.

Liz Booth inquired about how sediment will be handled. Courtenay explained that we have proposed to quantify sediment and determine composition and this information will be reported in the Hydraulics and Hydrology Study, which will be filed in December 2019. After review of the FERC proceeding for the dam removal of downstream FERC projects City Mills and Eagle and Phenix Dams, we have not proposed to sample to determine sediment quality. As a result of consultation with resource agencies regarding a 2008 sediment quality analysis for removal of these nearby and downstream dams, owner, Uptown Columbus, did not receive any recommendations for treatment of impounded sediments.

Courtenay asked what regulatory sediment quality standards or criteria would apply to the removal of dams. Anna Truszczynski stated that they would have to look into it, but Bio F and Bio M might be the criteria that would apply. They would consider habitat impacts, end of pipe limits and turbidity.

Courtenay discussed two water withdrawal facilities and three wastewater discharge points between West Point Dam and Riverview Dam. At this stage of modeling it appears that only East Alabama Water Sewer and Fire Protection District's wastewater treatment facility needs to be further analyzed for impacts due to flow changes in the discharge channel. Courtenay let everyone know that we are currently in consultation with EAWSFPD and ADEM on whether or not the flow changes in the Riverview headrace channel adversely impact EAWSFPD's point source discharge permit. The remaining 4 facilities are located upstream of where Interstate 85 crosses the Chattahoochee River and the model predicts negligible change in at and upstream of I-85. Lewis Hayes stated that he could provide the invert elevations of the City of West Point's water intake, which is located just upstream of I-85 on the eastern side of the Chattahoochee.

Courtenay invited attendees to participate in our next meeting with resource agency stakeholders that will take place on November 7 and asked if any attendees who are not already on the surrender mailing list would like to be added. Liz Booth requested that we add Steve Wiedl to the stakeholder mailing list. Steve will review our application for a 401 water quality certification for the decommissioning of project dams and Riverview powerhouse.

Action Items/Follow-up Items:

Send Victoria Adams instructions for filing comments on FERC's efilings system.

Add Steve Wiedl to the stakeholder mailing list.

Form Completed By:

Melissa Crabbe

Chris Manganiello, Atlanta, GA.
May 1, 2020
Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Submitted via FERC eFiling System

RE: COMMENT regarding Georgia Power Company's February 28, 2020 License Surrender Filings re Langdale and Riverview Hydroelectric Project Numbers 2341-033 & 2350-025

Dear Secretary Bose,

Chattahoochee Riverkeeper appreciates the opportunity to file comments in response to the Georgia Power Company's (Georgia Power) request for comments on the Progress Report, Draft Potential Effects of Dam Removal on Shoal Bass Study Report, and Draft Water Quality Report, dated February 28, 2020. We are submitting these comments despite Georgia Power's cancellation due to COVID-19 social distancing measures of an April 1 public meeting to discuss this information. We contacted Georgia Power's project contact twice by email (April 27) and telephone (April 29) to determine if the May 1 deadline was a hard deadline, and did we not get a response.

Established in 1994, Chattahoochee Riverkeeper (CRK) is an environmental advocacy and education organization with more than 10,000 members dedicated solely to making the Chattahoochee River a sustainable resource for the five million people who depend on it. Our mission is to advocate and secure the protection and stewardship of the Chattahoochee River, its lakes, tributaries, and watershed, in order to restore and preserve their ecological health for the people and wildlife that depend on the river system.

Progress Report

CRK looks forward to reading a draft of the Hydraulics and Hydrology Study to learn more about why some dams would be partially or entirely removed in some scenarios but not in others.

CRK is pleased to learn that the Cultural Resources Study will be completed prior to and included with the Dam Decommissioning Plan filing. [page 6-2]

Draft Potential Effects of Dam Removal on Shoal Bass Study Report

CRK agrees that dam removal can produce enhanced habitat. Georgia Power's proposed removal will ultimately result in a natural streambed as opposed to a manufactured streambed as found downstream in some areas that were part of dam removal in the Columbus area. CRK anticipates improved aquatic function because the proposed removal will create an 11-mile stretch of natural river shoal habitat with connectivity to the Flat Shoals Creek tributary, which is known to support shoal bass populations.

As noted in the Draft Report, "If the impoundment covers historic spawning habitat, benefits can be two-fold in that spawning shoals are restored with appropriate flows while access is then provided to isolated, adjacent populations downstream of a dam....Even in case where population equilibrium does not increase, population stability over multiple generations is likely to increase." [Appendix A, no page number]

The Draft Report indicates removal may be good for adult shoal bass by providing optimal depth and velocity conditions. However, removal may not be so beneficial for young-of-year shoal bass because the main channel's depth may be optimal and the velocity may not be. Georgia Power asserts "Removal of the Projects' dams will result in a net increase in suitable habitat for Shoal Bass." [page 11] We agree that overall removal will enhance connectivity between the newly exposed shoals and tributaries.

CRK agrees it is critical that barrier removal projects do not impede passage of fish due to excessive velocities at newly-established points of connectivity. According to a single post-removal assessment of the Eagle and Phenix dam, barrier removal and the constructed whitewater course in Columbus, Georgia may not have improved aquatic connectivity for shoal bass in the main channel, see: Steven M. Sammons (Auburn University) for Uptown Columbus, Inc., Responses of Fish Assemblages to Dam Removal on the Chattahoochee River, Georgia (September 13, 2017). Anecdotal stories from anglers indicate shoal bass and other species are present in this section of the river and have benefited from the dams' removal. Clearly more study and evaluation are necessary to determine the long-term implications of barrier removal for shoal bass and other species.

CRK agrees that barrier removal projects should be pursued in a cost-effective approach that prioritizes species recovery both across the range and within priority sub-basins. However, this Draft Report does not indicate how Georgia Power will advance this approach or what specific tasks will take place to advance shoal bass habitat beyond removal of the Langdale and Riverview barriers. For example, is there a plan or schedule to re-stock shoal bass in the affected areas?

Draft Water Quality Report

CRK is pleased to learn that the Draft Water Quality Report indicates:

If the run-of-river dams are removed, the resulting lower water levels and higher water velocities in the affected reach of the Chattahoochee River would provide an alternative means of physical aeration as the water passes through the exposed shoals, [9] and

That decommissioning and removal of the Projects will not impact the East Alabama Lower Valley Wastewater Treatment Plant Valley WWTP permitted effluent discharge. [14]

CRK remains concerned that sedimentation surveys upstream of the Langdale and Riverview barriers have not been, and may not be, conducted. When the Eagle and Phenix Mill Dam and City Mills Dam were removed, it was assumed that little sediment would be released. However, there are concerns that sediment transport did occur from upstream to a downstream area on river right (the west bank in Alabama) below the former Eagle and Phenix Dam.

What is Georgia Power's justification for not conducting these sedimentation surveys and/or evaluations prior to removal of the Langdale and Riverview dams?

If you have any questions, please do not hesitate to contact us.

Sincerely,

/JU/

Jason Ulseth

Chattahoochee Riverkeeper