

MEETING NOTES
Stevens Creek Hydroelectric Project (FERC No. 2535)

Dominion Energy South Carolina, Inc.
Water Quality Technical Working Committee

July 1, 2024

Final JAG 3/7/25

ATTENDEES¹:

Amy Bresnahan – DESC	Kevin Mack – NMFS
Caleb Gaston – DESC	Eric Bauer – USFWS
Ray Ammarell – DESC	Aaron Gray – GADNR
Fritz Hoogakker – Dominion Energy	Bryant Bowen – GADNR
Paul Vidonic – Dominion Energy	Clint Peacock – GADNR
Taylor Allen – Dominion Energy	David Hedeem – GAEPD
Alison Jakupca – Kleinschmidt	Dewey Richardson – GAEPD
Jason Moak – Kleinschmidt	Rusty Wenerick – SCDES
Jenn Güt – Kleinschmidt	Alex Pellet – SCDNR
Will Pruitt – Kleinschmidt	Elizabeth Miller – SCDNR
Andy Herndon – NMFS	Jason Bettinger – SCDNR
Bjorn Lake – NMFS	Paula Marcinek
Fritz Rohde – NMFS	

Not in Attendance: USACE, USFS

These notes are a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.

The purpose of the meeting was to review revisions to the Stevens Creek 2023 Water Quality Study Report (Water Quality Report) and continue development of the Stevens Creek Hydroelectric Project (Project) Water Quality Adaptive Management Plan (Water Quality AMP).

¹ Acronyms: DESC = Dominion Energy South Carolina; GADNR = Georgia Department of Natural Resources; GAEPD = Georgia Environmental Protection Division; NMFS = National Marine Fisheries Service; SCDES = South Carolina Department of Environmental Services; SCDNR = South Carolina Department of Natural Resources; USACE = United States Army Corps of Engineers; USFS = United States Forest Service; USFWS = United States Fish and Wildlife Service

Following a welcome and introduction, Alison, Kleinschmidt, stated the purpose of the meeting and reviewed the agenda. No additions to the agenda were noted by any member of the Water Quality Technical Working Committee (WQTWC, group, or committee).

Revised Water Quality Report

Alison discussed the distribution of the revised Water Quality Report on May 15, 2024, by Kleinschmidt. The deadline for submitting additional comments on the Water Quality Report was extended to July 5, 2024, to allow the WQTWC to ask questions during the present meeting prior to submitting comments.

Jason M., Kleinschmidt, reviewed the significant changes made to the Water Quality Report. In summary, the following was added: information about the water quality data collected by USGS² and USACE; time stamps for the longitudinal and off-channel surveys; figures with data points from longitudinal surveys; results of the time of dissolved oxygen (DO) minima and maxima analysis for 2021 and 2023; comparison of off-channel DO to in-channel DO collected during longitudinal surveys; and figures that include Stevens Creek inflows. Kevin, NMFS, thanked Kleinschmidt and DESC for their efforts on revising the Water Quality Report, and noted that the additions improved the report significantly and provided more clarity about water quality within Stevens Creek.

Fritz R., NMFS, referenced Figure 3-3 (Time of Dissolved Oxygen Minimum Occurrence at RM³ 4.5 in May to October 2021 and 2023) and inquired if there were any ideas as to why the DO minimum occurred around 10:00 AM. Jason responded that the answer likely depends on a number of factors; however, one of the causes they were looking at were the transient off-channel areas on Stevens Creek. Thurmond Dam operates late in the afternoon through the evening, and the Project reservoir does not typically drain until early morning. It was noted that during one of the off-channel surveys, low DO water was logged coming from one of the off-channel areas around 8:00 AM; two hours later at 10:00 AM the water passed through RM 4.5.

Kevin commented that Figure 3-3 included a correction compared to a previous report regarding what Kleinschmidt/DESC was presuming to happen in Stevens Creek. Jason replied that analysis was hampered somewhat in 2021 due to the lost data when low DO is typically seen in the system, and the 2023 data allowed the water quality dynamics to be teased out a bit more.

Water Quality AMP

² United States Geological Survey

³ River Mile

Alison reviewed the draft Water Quality AMP that was filed with the Project Final License Application. Alison stated that water quality was worked through during the previous relicensing as it primarily related to low DO water coming from Thurmond Dam. Since the previous license was issued, USACE has installed oxygen infusers in Thurmond Lake, which has improved the water quality entering the Project. Water quality discussions have since shifted during the current relicensing to focus on the Stevens Creek arm.

Alison noted that a lot of the boiler plate information in the Water Quality AMP was pulled from the Parr Hydroelectric Project West Channel Adaptive Management Plan. She commented that DESC is open to accepting comments on the Water Quality AMP should members of the WQTWC have any. Alison discussed the Review Committee members, which consists of state and federal resource agencies charged with managing aquatic resources within the Savannah River Basin, including: GADNR, GAEPD, NMFS, SCDHEC⁴, USACE, USFS, and USFWS.

The overall goal of the Water Quality AMP is to evaluate water quality in the Project reservoir and provide guidance on potential measures for water quality improvement during the new license term. The members' desired outcomes of this AMP are to improve water quality year-round (specifically to meet state standards for DO and to improve DO levels in the Stevens Creek arm of the reservoir during summer/fall periods).

Alison commented on the 25 plus years of water quality data collected by the Licensee and USGS through the current license term as required by license articles 404 and 405. Additional water quality data was collected from January 2021 to February 2022 and again from May through October 2023 within the Project reservoir. Kleinschmidt and DESC will revise the Water Quality AMP to include this most recent baseline data. The WQTWC will work together to develop Section 5.0 Implementation of the Water Quality AMP and to identify measures necessary to evaluate water quality during the new license term through this AMP.

Alison noted that DESC is proposing to fund measuring additional water quality parameters at existing USGS gages. DESC is consulting with USGS regarding adding instruments to measure water temperature and DO levels at USGS gage 02195520 (Savannah River Near Evans, GA) and USGS gage 021963601 (Stevens Creek at Woodlawn Rd nr Murphy Village, South Carolina). Alison suggested that one of the first implementations the committee could enact is to analyze the available water quality data from those continuous gages. Amy, DESC, stated that the data that USGS collects under the current license includes specific conductance and pH in addition to water temperature

⁴ Effective July 1, 2024, SCDHEC became two separate agencies. Consultation regarding the Stevens Creek Hydroelectric Project will be conducted through the South Carolina Department of Environmental Services (SCDES) moving forward.

and DO and inquired of the group if they believed there was a need to measure specific conductance and pH continuously at the USGS gages as well. Alison added that the USGS annual reports provide a great baseline of some of the main water quality parameters in the Project reservoir. However, it was noted that there is a limited baseline regarding the Project's re-regulation function due to the dam work (replacing flashboards; rock anchors) that has been ongoing over the past several years, and perhaps the WQTWC can look further into how the Project's re-regulation function impacts conditions both upstream and downstream of the Project dam. Kevin responded that NMFS recognizes that re-regulation was not the original intent of the Project, and NMFS is trying to consider things from a basin-wide perspective. FERC⁵ added the re-regulation function to the Project, which NMFS believes is a good thing that benefits downstream species and infrastructure. The water quality data collected in 2021 and 2023 prove that the re-regulation function is being realized and the Project is releasing water that meets state standards. Kevin believes collecting continuous DO and water temperature data at the existing gages makes sense, particularly where flow data is collected.

Alison spoke of the water quality data monitoring that has been historically conducted under the Project's current license. There is discussion in the current license that if USACE puts in oxygenation and improvements are seen in the system, DESC could request to have the USGS monthly profile and annual report modified. DESC understands that still being able to monitor water quality at the Project is important and believes that proposing the continuous monitors will provide the necessary information. The USGS annual report process is now a relic of the previous relicensing, and DESC is looking for efficiencies in providing necessary water quality data during the new license term if amenable to resource agencies. Kevin responded that the current USGS data collection has been useful in documenting the change in water quality once the oxygenators were put in place in Thurmond Lake. The group is still looking to Thurmond Lake as the source of water quality issues, but it is now more complex that low DO water. He added that set stations with continuous monitoring is going to be a better long term data set than monthly snapshots which is currently done, and NMFS believes that that is a reasonable switch to make. Kevin noted that he was curious about GAEPD's and SCDES's thoughts on the discontinuation of USGS sampling and adding the continuous monitors; no replies from the agencies were received.

Alison noted that DESC is planning to petition FERC to discontinue the USGS monitoring beginning in 2025. The license article allows DESC to request to modify the article on the annual reporting requirements, but if the committee could potentially make that modification sooner rather than later, that would allow the continuous monitors to be installed sooner and collecting data, which is beneficial from a resource agency perspective. Alison added that it would be important to FERC that DESC has support from

⁵ Federal Energy Regulatory Commission

the resource agencies on the discontinuation and requested that GAEPD and SCDES, specifically, consider the options. Amy thanked Kevin/NMFS for their support, and she noted that she will be distributing an email to the resource agencies to request their concurrence or comments.⁶

Alison reviewed the schedule with the group. As previously noted, comments on the Water Quality Report were requested by July 5, 2024. DESC will re-distribute the Water Quality AMP for a minimum 30-day review period, and then schedule another WQTWC meeting. However, Alison requested that should group members have initial thoughts on the Water Quality AMP, comments on the structure, or any implementation goals, to please provide comments by July 31, 2024. As previously noted, DESC will distribute an email to resource agencies for support on the discontinuation of the USGS monitoring and will request replies to be sent within 30 days. DESC will file the letter with FERC once that consultation is received.

The meeting was adjourned.

ACTION ITEMS:

- DESC to distribute an email to WQTWC Members requesting concurrence or comments on the discontinuation of USGS data collection and addition of continuous monitoring equipment to existing USGS gages.
- WQTWC Members to provide any initial comments on the Water Quality AMP, its structure, and/or implementation measures by July 31, 2024.
- DESC/Kleinschmidt will re-distribute a revised Water Quality AMP to the WQTWC for a minimum 30-day review period.
- DESC/Kleinschmidt will schedule a WQTWC meeting after the review period.

⁶ The referenced email was distributed by Amy Bresnahan, DESC, on July 3, 2024, with a request for concurrence or comments from the Water Quality Technical Working Committee Members by August 9, 2024.