

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

Dominion Energy South Carolina, Inc.
Fish Passage Technical Working Committee

February 21, 2024

Final JAG 3/7/25

ATTENDEES:

Amy Bresnahan – DESC	Kevin Mack – NMFS
Caleb Gaston – DESC	Keith Whalen – USFS
Ray Ammarell – DESC	Eric Bauer* – USFWS
Paul Vidonic – Dominion	Melanie Olds* – USFWS
Taylor Allen* – Dominion	Aaron Gray – GADNR
Alison Jakupca – Kleinschmidt	Bryant Bowen – GADNR
Jason Moak ⁺ – Kleinschmidt	Clint Peacock – GADNR
Jenn Güt – Kleinschmidt	Elizabeth Miller – SCDNR
Will Pruitt – Kleinschmidt	Rusty Wenerick* – SCDHEC
Bjorn Lake* – NMFS	Paula Marcinek
Fritz Rohde* – NMFS	

* attended virtually

+ attended small portion of meeting

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 begin development of a fish passage prescription (Rx) for the Stevens Creek Hydroelectric Project (Project) and review planning studies for incorporation into the Fish Passage Adaptive Management Plan (AMP).

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

Adaptive Management Plan and Rules of Operation

The FPTWC reviewed the draft Adaptive Management Plan (AMP) and Rules of Operation (Rules) that were included in the Final License Application (FLA) for the Project. Alison stated the intent for DESC to file a final AMP and Rules with the Federal Energy Regulatory

Commission (FERC) by the end of May as FERC will need to approve it (they could also modify it) for inclusion into the Project license. The AMP was structured from Dominion's DFRTAC at Roanoke Rapids and Gaston. The committee reviewed the AMP. Under the Objectives section, Bryant, GADNR, asked if the aquatic species downstream language¹ was added at the previous meeting. Alison responded that, yes, there was a lot of discussion during the November 2023 meeting regarding the objectives. The group then reviewed the Target Species section. Taylor, Dominion, commented that at Roanoke Rapids, the DFRTAC has been more focused on improving habitat and not necessarily improving target species populations, and he wants to be clear that is the intention of the current AMP, which was generally agreed to by the committee. Elizabeth, SCDNR, noted that her state agency is interested in habitat improvement both upstream and downstream of the Project dam; the objective was revised accordingly. Paula noted that Section 5.0 of the AMP could be revised from "Target Species" to "Target Species and Habitat" but Alison then noted that we do not want to stray from naming the actual species for passage; this was based on a previous comment from the USFWS. The sentence was revised to: "Management of habitat for target species and species of interest is an important consideration of the FPTWC." Elizabeth inquired about the timeframe for review of draft reports and if that information was included in the AMP and/or Rules. Language was added to the Rules to note a minimum of a 30-day review period for draft reports.

Bryant asked NMFS if there was Essential Fish Habitat (EFH) identified in the Project Boundary and/or if EFH is expected to expand into the area. It was noted that there is no EFH in the vicinity but that there is critical habitat downstream for sturgeon.

Review of the AMP and Rules was completed. Kleinschmidt will distribute the AMP and Rules to the FPTWC with the meeting notes and ask the committee members to provide consensus (or comments if they cannot yet consent).

NSBLD/ADD Update

The FPTWC reviewed any updates to the ongoing regarding the New Savannah Bluff Lock and Dam (NSBLD) and Augusta Diversion Dam (ADD). Nothing of note has occurred for the NSBLD in recent months (the project is still tied up in litigation). Regarding ADD, NMFS noted that a virtual meeting had occurred among the agency, FERC, and the city of Augusta (City). During the meeting, FERC requested additional information from both NMFS and the City. NMFS has since provided the information; the City has not complied to date. NMFS is in the process of finalizing the Biological Opinion and the fish passage Rx for

¹ Language – Objective: Review alternative options regarding Stevens Creek Project operations or modifications to facilitate fish passage and habitat needs for target species at the dam and aquatic migratory species downstream.

the ADD – it is expected to be issued during the summer of 2024. It is anticipated that the City will file for a trial-type hearing after the Rx is issued.

Fish Passage Prescription

Timing

Alison reviewed the post-FLA process. Currently, the Project is within the FERC Scoping stage. Once FERC issues the Ready for Environmental Assessment Notice (REAN), the process will move very quickly. It is expected that the REAN could be issued by the end of 2024. It is DESC's intention to work through the Rx process now so that when the REAN is issued, everyone was on the same page regarding the Rx; USFWS agreed. If FERC stays on schedule, the Environmental Assessment is expected in November 2025.

Measures

The FPTWC reviewed potential measures to be included in the fish passage Rx. Based on requirements, fish passage performance standards will be included in the Rx. Alison noted that Alosine (shad) passage is on the record as being tied to passage at NSBLD. NMFS confirmed that once passage is in place in NSBLD that Alosine passage would be triggered at both ADD and the Project. A follow-up question was asked from Alison about what could happen at the Project if the City puts passage in at ADD and it is not proven effective. NMFS is currently unsure if they would require passage at ADD to be effective prior to implementation of passage at NSBLD. Ideally, NMFS would prefer a cooperative effort between DESC and the City for simultaneous passage construction. Fritz, NMFS, indicated that the Rx at the Project and ADD should not be linked. Theoretically, the Project Rx could require Truck and Transport (T&T) of fish above the Project without passage at ADD. Will, Kleinschmidt, inquired if the agencies would be interested in passage location at the Project based on where fish are going once leaving ADD. It was stated that the agencies are currently in a difficult situation as they are asked to make decisions without the information provided from a fishway feasibility study. However, Elizabeth noted that if passage is not effective downstream at ADD, that there are other options (T&T). Alison stated that the biggest concern for DESC is building passage at the Project prior to passage being proven effective at ADD and conducting siting studies; additionally, DESC does not want to be required to prove passage effectiveness at ADD.

Other components that DESC would prefer to have included in the Rx were discussed. A new information clause could be included in the Rx that basically states the Rx may be revised if new, relevant information becomes available. DESC would also prefer to have a longer timeline than the current 2-years to ensure ample time for sighting studies, design, etc.

Kevin, NMFS, asked if there was anything that DESC/the FPTWC could do now to determine some passage measures sooner rather than later. The committee discussed tagging studies to determine fish behavior. A similar study was conducted at Roanoke Rapids under the DFRTAC.

Caleb, DESC, asked if NMFS and USFWS were concerned with the 1-mile stretch of river between ADD and the Project. Kevin noted that that has been a question for NMFS, but their ultimate goal is for volitional passage; however, T&T is a viable option that is not being ruled out. Melanie commented that the USFWS would be amenable with T&T in a research capacity but not long-term; only interim while structures are being built. Volitional passage is the goal because of aquatic connectivity; T&T is selective. Alison asked NMFS and USFWS if DESC would be required to provide downstream passage for any T&T species as the fish entrainment study/blade stryke model indicated high downstream passage survivability for downstream eel and Alosines. NMFS again stated their preference for a cooperative effort between DESC and the City.

Alison asked if NMFS/USFWS could provide some specifics on the fish passage Rx timeline. The response was that American eel passage will be required upon license issuance. NMFS no longer includes numerical triggers for passage. Alosine passage is tied to passage at NSBLD.

Alison asked the committee if it would be acceptable for DESC to provide a strawman Rx and/or Rx examples to discuss. It was agreeable among the group that that would give the FPTWC a baseline to begin working from. Fritz suggested utilizing the Rx for the Santee Cooper Project (FERC No. 199) and the Yadkin-Pee Dee Project (FERC No. 2206). The strawman Rx² will be provided to the committee prior to the next quarterly meeting. Alison made the comment that if the FPTWC is making good progress on Rx discussions, that the group could request that FERC delay its REAN until the Rx is finalized with the committee.

Caleb inquired about passage at ADD. It is understood that Alosine passage will be required but it is currently unclear whether eel passage will be required. Fritz responded that there has not been a clear distinction made between the eel and Alosine passage for ADD. It is assumed that eels will use the existing structure and/or existing dam. The Santee Cooper Project Rx includes a timeline for eel studies. It is the consensus among the committee that eel siting studies can begin at the Project – particularly the location of eel congregation at the Project dam using nighttime visual surveys and traps. Caleb stated that DESC has been investigating the possibility of using drones to determine eel congregation. A thermal sensor would not work to identify eels as they would be the same temperature as the water they are in; however, it was suggested that a simple light may be sufficient as

² DESC will use a template provided by USFWS.

it would shine off eel eyes. Kevin indicated that the DFRTAC/Roanoke Rapids was a great success for eels.

Alison asked the committee if there was a performance test that they could think of that would be able to prove existing eel passage at the Project is sufficient. It was indicated that if a location of eel congregation was identified, traps could be set and then compared to the industry standard. Fritz warned that putting a performance standard on eels is very challenging. Bjorn, NMFS, stated that the USGS developed a memorandum³ that discusses standard methodology for eel observation surveys that NMFS intends to incorporate into a fish passage manual. Comparison to studies at Roanoke Rapids is likely equivalent to comparing apples to oranges as Stevens Creek Dam is easier to traverse than the Roanoke Rapids Dam.

Robust Redhorse

Alison asked USFWS if they could provide an update on Robust Redhorse, such as if there were any considerations for passing the species. Eric, USFWS, responded that he anticipates a draft Species Status Assessment and decision to come out this fiscal year. Robust Redhorse is a state endangered species in Georgia and will continue to be a concern. Assessments of habitat in the Stevens Creek arm have been conducted, indicating that the creek may provide potential spawning habitat for the species. The FPTWC should be considering this and what may or may not work for the Robust Redhorse. Paula stated that a potential study could be to relocate fish to the area and observe their movement/behavior; this would require tagging and hydroacoustic equipment. Caleb asked if Robust Redhorse is a target for passage at ADD – the group responded “No”. A further question was asked if Alosine passage would be acceptable for Robust Redhorse. It would depend on several factors; however, the Rx for ADD includes a vertical slot, which was modeled after the Columbia Dam slot, which has shown to pass Robust Redhorse. A vertical slot is something to be explored for the Stevens Creek Project.

Water Quality

Water quality at the Project was very briefly discussed. The 2023 report was provided to the committee prior to the FPTWC meeting; however, water quality is discussed with the broader Project Fish, Wildlife, and Water Quality Resource Conservation Group (RCG) during a separate meeting⁴ so it was agreed that the group would not go into much detail. In general, low dissolved oxygen (DO) in the Stevens Creek arm of the reservoir is a concern for the agencies, especially if fish are being placed into the habitat. From a fish

³ Haro, A. and S. Gephard. Memorandum: Protocol for Observational Surveys for Upstream Migrant Eels. From staff at United States Geological Survey to staff at United States Fish and Wildlife Service. March 2023.

⁴ Scheduled for March 19, 2024 from 1:00 PM to 2:30 PM ET.

passage perspective, the agencies are interested in knowing if low DO is a migration barrier for both adults moving upstream and larvae moving downstream. The low DO potentially occurs outside of the spawning windows for Alosines but the extent of those conditions is important. The agencies are also interested in what, if anything, can be done to resolve the water quality issues, which is why NMFS requested the pneumatic gate study. Kevin acknowledged that the response to the study request provided by DESC shows that selective spilling is not an option for improving DO in the Stevens Creek arm. Bryant asked if there was information missing from the report, if it would be more appropriate to approach at the RCG meeting. He stated that the report did not provide any comparisons. Alison reminded the group that there is a full year's worth of data at the Project (2021 Water Quality study) in addition to decades of data collected by the USGS. The group determined that the RCG could discuss water quality in general but that the FPTWC should discuss whether water quality is a migration barrier at the next quarterly FPTWC meeting. Both staff from SCDNR and GADNR stated that they are interested in water quality as it relates to all aquatic species.

Kevin suggested that DESC consider fishway feasibility at the Project. When NMFS typically writes a Rx, they have an idea of what is feasible. That information has not necessarily been provided for the Project. Kevin also encouraged DESC to lot a considerable amount of time to discuss eels at the next quarterly meeting.

At the conclusion of the meeting, Keith, USFS, inquired about the possibility of a fund similar to the Parr Project (FERC No. 1894) Habitat Enhancement Program (HEP). Amy, DESC, mentioned that the Project already has a fund but that it is not currently expanded to include on-the-ground efforts. It is DESC's intention to continue the fund through the new license term. It was discussed that FERC would likely not include an article in the license to provide funds to a program (an off-license agreement is a possibility).

The next quarterly meeting is scheduled for Wednesday, June 5, 2024, in Charleston, South Carolina from 10:00 AM to 3:30 PM ET.

ACTION ITEMS:

- Kleinschmidt to provide the revised Fish Passage Adaptive Management Plan and Rules of Operation to the FPTWC for consensus.
- DESC/Kleinschmidt to develop a strawman fish passage prescription for the Stevens Creek Project.
- DESC/Kleinschmidt to include water quality as a migration barrier and beginning eel sighting studies on the agenda for the next quarterly meeting.