

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

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

May 14, 2026

Draft JAG 5/22/26

MEETING ATTENDEES¹:

Will Barnes – Dominion Energy	Kevin Mack – NMFS
Amy Bresnahan – Dominion Energy	Paula Marcinek
Kyle Brown – SCDNR	Bill Post – SCDNR
Caleb Gaston – Dominion Energy	Andrew Rollins – Dominion Energy
Aaron Gray – GAWRD	Matthew Rowe – GAWRD
Jennifer Güt – Kleinschmidt	Ellen Waldrop – SCDNR
Fritz Hoogakker – Dominion Energy	Keith Whalen – USFS
Alison Jakupca – Kleinschmidt	Brooke Winsmann – Dominion Energy
Stephanie Krug – NMFS	

Not in Attendance: USFWS

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.

MEETING PURPOSE: The purpose of the meeting was to review the 2026 American Eel methodology implementation and preliminary results, discuss the Stevens Creek Habitat Suitability Report (HSI Report), and plan for regulatory requirements/prescriptions (Rx) for the Stevens Creek Hydroelectric Project (Stevens Creek Project or Project).

Caleb Gaston, Dominion Energy (DE), and Alison Jakupca, Kleinschmidt, began the meeting with a welcome and safety moment for Fish Passage Technical Working Committee (FPTWC) members (also referred to herein as group or committee). Introductions for meeting participants were made, and Alison discussed the meeting purpose.

¹ Abbreviations/Acronyms: GAWRD = Georgia Department of Natural Resources, Wildlife Resources Division; Kleinschmidt = Kleinschmidt Associates; NMFS = National Oceanic and Atmospheric Administration, National Marine Fisheries Service; SCDNR = South Carolina Department of Natural Resources; USFWS = United States Fish and Wildlife Service; USFS = United States Forest Service

FERC² Schedule

Alison noted that although FERC is currently behind schedule, they could issue the REA³ Notice for the Project at any time, starting the 60-day clock for the draft fishway Rx and preliminary conditions from regulatory agencies.

Kevin Mack, NMFS, stated that his agency has been anticipating the REA Notice and is relatively ready to act accordingly with filing of the draft Rx.

Alison suggested she could attempt to reach out to FERC for an update if the group felt inclined.

Regional Fish Passage Updates

As discussed in previous FPTWC meetings, new language in the WRDA⁴ 2024 has instructed USACE⁵ to “fully repair” the NSBLD⁶ “lock and dam structure” prior to allowing construction of a fishway in a bypass channel on the SC⁷-side of the dam. USACE has contracted with a third party to conduct a full assessment of the lock and dam structure, which has been supposedly completed, but USACE is not permitted to share the assessment information due to CEII⁸ material.

Aaron Gray, GAWRD, explained that the NSBLD Park closed in early March 2026 for a dam inspection/work; however, the park re-opened a few weeks later. USACE indicated that the scheduled repair work is on hold; no other explanation or timetable was provided.

Fish Passage Technology Updates

Brooke Winsmann, DE, provided a review of a Fishheart demonstration that she attended at the Tunnel Generating Station⁹ in Preston, CT¹⁰ on an approximately 30-foot, 2-megawatt dam. In summary, Fishheart consists of floating pontoons that can be removed seasonally. There are four sources of attraction flow and two entry pipes for the fish. The system uses AI¹¹ fish detection and reporting, which can target invasive species. Fishheart is run remotely and requires approximately two weeks for installation. While Brooke was not sure of the

² FERC = Federal Energy Regulatory Commission

³ REA = Ready for Environmental Analysis

⁴ WRDA = Water Resources Development Act

⁵ USACE = United States Army Corps of Engineers

⁶ NSBLD = New Savannah Bluff Lock and Dam

⁷ SC = South Carolina

⁸ CEII = Critical Energy Infrastructure Information

⁹ FERC non-jurisdictional project

¹⁰ CT = Connecticut

¹¹ AI = Artificial Intelligence

total, she knows the Fishheart structure cost the Tunnel Generation Station licensee under 10 million dollars. Some additional pros of Fishheart are that it can be installed conceivably on a dam of any height and fish survival is great.

Bill Post, SCDNR, indicated that he attended the Fishheart demonstration at the Santee-Cooper Project¹² and was impressed with the technology. The committee discussed that the structure can pass big fish (i.e., sturgeon) as well as eel. Keith Whalen, USFS, asked if Fishheart structures have been employed within areas with a high fish population density, which was unknown. The FPTWC also discussed ability of the AI sorting cameras to function in highly turbid water (any AI sorting occurs after fish is inside collection tubing). Matthew Rowe, GAWRD, believes that the image should be clear enough close-up at less than 20 NTUs¹³.

It is currently unknown whether Fishheart can be owner-operated or only contracted through Fishheart for operations.

American Eel Studies

Caleb presented some results from the Spring 2026 Eel Sampling Study. Water temperatures in the tailrace as of May 12 had reached 16.1 degrees Celsius.

As of the date of the FPTWC meeting, 5 electrofishing events had occurred, which resulted in 322 eels being captured downstream of the Project dam and 8 eels captured upstream. The eels downstream ranged between 117 and 745 mm¹⁴ and those 8 captured upstream ranged between 185 and 676 mm. Caleb discussed that the field team has collected a lot more eel electrofishing in 2026 than in 2025. One particular hotspot has been the sampling location added since 2025: "debris island" located below the 4-foot flashboards on the Project dam. Fritz Hoogakker, DE, stated that he is of the opinion that "debris island" is a hotspot because of habitat preference, not necessary that eels are gathering for passage.

The eel ramp has collected less numbers so far in 2026 compared to the same time period in 2025, with only 6 eels averaging 146 mm (122-180 mm) recorded so far in 2026. There were two recaptured eels: one was collected below the 5-foot flashboards on the Project dam in May 2025 and then at the same place 10 months later; the other eel was collected below the 5-foot flashboards at the beginning of March 2026 and recaptured in the eel ramp a few weeks later.

Caleb noted that the low flow this year in the Project area may be influencing collections at the eel ramp; the Project tailrace elevation has been lower on average compared to 2025.

¹² Santee Cooper Hydroelectric Project, FERC No. 199

¹³ NTU = Nephelometric Turbidity Unit

¹⁴ mm = millimeter

Flows are reduced this spring compared to 2025 as well – USACE is in Drought Level 2 operations with a daily average flow of only 3,800 cfs¹⁵. Kevin noted that eel passage is down in the entire southeast, likely a result of the drought conditions.

Reservoir eels have been captured in the Thurmond Dam¹⁶ tailrace or Kiokee Creek (on the GA side of the reservoir). Their left pectoral fin is being clipped for recapture purposes. Aaron noted that he would send DE GAWRD's data of eels above the Project dam.

Caleb asked the committee for their thoughts on sampling past June to capture a potential fall pulse of eel movement, and if extended, what is of more interest – the eel ramp, electrofishing, or both. Kevin noted that the Blewett Project¹⁷ takes a break during the summer from their eel passage operations, and Kevin would be amenable to a summer closure at the Project. NMFS would ultimately be in favor of running the eel ramp over electrofishing. Keith wondered if it would be worthwhile to just sample in the reservoir during the fall to look for recaptures. DE believes that the likelihood of collecting recaptures is slim given the success rate at the Roanoke Rapids Project¹⁸. Paula Marcinek stated that she is in favor of running the eel ramp past June and electrofishing in the reservoir. She suggested that the group could pick a calendar date to start back up sampling with a caveat that if temperatures drop before that date, that DE would start back up sampling more immediately. Fritz added that it would be important to also consider flows, as pulses appear to be triggers for eel passage. Caleb will develop a proposal for potential fall eel sampling for the FPTWC's review.

American Shad Studies

Fritz provided an overview of the HSI Report, which was presented more thoroughly at the January 2025 FPTWC meeting.

Key Takeaways: 1) factoring in substrate, existing shad habitat is almost exclusively in the uppermost reaches of the study area; 2) the upper reaches contain habitat of marginal to moderate quality, but little to no excellent habitat anywhere; 3) substrate is a defining factor in assessing suitability; 4) below the USGS¹⁹ Modoc gage²⁰, the system is entirely sand/silt and largely under reservoir influence; 5) there are unstable/reversing flows in the lower reaches of the study area due to backwater effect; 6) the system has changed considerably

¹⁵ cfs = cubic feet per second

¹⁶ USACE's J. Strom Thurmond Dam

¹⁷ Blewett Falls Hydroelectric Development, part of the Yadkin-Pee Dee Hydroelectric Project, FERC No. 2206

¹⁸ Roanoke Rapids and Gaston Hydroelectric Project, FERC No. 2009

¹⁹ USGS = United States Geological Survey

²⁰ Stevens Creek Near Modoc, SC (Gage No. 02196000)

since the 2005 Plan²¹ was made; and 7) 2025 spawning season simulation and Robust Redhorse analysis is upcoming.

Paula asked where the Modoc gage was located, which is approximately 8 RMs²² upstream of the top of the Stevens Creek Project boundary line and 20 RMs from the Project dam. Fritz noted that the Modoc weir may prohibit fish passage that may be worth looking further into.

Fritz added that there is not a lot of consistency between results provided in the HSI Report and the 2005 Plan. While there were some variations in methodologies, Fritz believes the differences are largely due to time and the creek experiencing a significant hurricane.

Kevin thanked DE for their study efforts. He stated that NMFS understands that the results provided in the HSI Report are not consistent with the 2005 Plan. Kevin continued that most of NMFS's strategy for the Savannah River Basin up to this point, including providing fish passage up Stevens Creek for shad, has been based on the 2005 Plan, but the HSI Report changes some matters.

Kevin requested that the HSI Report be revised to include modeling without substrate as a factor, which can be attached as an appendix.

The committee discussed filing the HSI Report and other FPTWC documents with FERC. Alison noted that it would be beneficial to file the information soon as it is beneficial information for FERC's timeline of the REA Notice and EA development. Kevin asked about making the information public; he believes it is potentially valuable knowledge for other basins.

Other revisions to the HSI Report discussed included adding pictures from Stevens Creek, such as those presented in the January 2026 FPTWC meeting.

Paula suggested that the HSI Report could include some information on any changes in impervious surfaces in the basin. Keith commented that the USFS owns much of the land adjacent to Stevens Creek so there should not have been significant changes in impervious surfaces; the USFS land-management is likely partly why the 2005 Plan identified Stevens Creek as great suitable habitat for shad.

In addition to not potentially being ideal habitat for shad, the committee discussed that there are still other issues as it relates to fish passage at the Project including low DO²³ levels

²¹ U.S. Fish and Wildlife Service and National Marine Fisheries Service. 2005. Diadromous fish restoration plan for the Middle Savannah River: strategy and implementation schedule. Charleston, South Carolina. August 2005.

²² RM = river mile

²³ DO = dissolved oxygen

and reverse flows at the mouth of Stevens Creek due to slugs of water from Thurmond Dam. Fritz believes that the reverse flow is likely to cause some issues for shad signals to pass up Stevens Creek, which should be considered.

Fritz will complete modeling for Robust Redhorse suitable habitat in Stevens Creek soon, but he expects similar results to shad. Discussions would need to be had with USFWS accordingly about impacts of passage at the Project to that species.

Keith questioned if Price's Mill Dam was removed if shad would move up to the area for spawning. Fritz theorized that suitable habitat above the mill dam would probably remain moderate, like below the dam. The removal of the dam may have bigger implications for passing invasive species; however, Keith explained that he discussed the potential removal of Price's Mill Dam with a SCDNR staff member²⁴ who stated he was not concerned with Bartram's Bass potential introduction to that area of Stevens Creek.

The group discussed the water quality issues near the mouth of Stevens Creek being a potential hinderance to fish passage. However, the committee recognized that this discussion is more appropriate for the Water Quality Technical Working Committee (WQTC). DE and Kleinschmidt will review action items from the last WQTC meeting and contact that group as appropriate about scheduling another meeting to discuss water quality at the Project. Alison recalled some modeling to be conducted and taking a stepwise approach. Kevin noted that it is on NMFS's radar to have discussions with USACE regarding providing environmental flows at Thurmond Dam.

Keith stated that now that there is a better understanding of habitat in Stevens Creek, there is doubt that fish passage is warranted at the Project. Kevin agreed that NMFS has the same thoughts.

Kleinschmidt will send an email to the FPTWC requesting a 30-day review of the HSI Report.

Draft Preliminary Fishway Prescription(s)

Kevin stated that NMFS is preparing for submission of the Project draft fishway Rx for internal review to be triggered by the FERC REA Notice; however, he understands that data is being collected in real time that potentially impacts those decisions. Kevin noted that the Augusta Project²⁵ has a Rx to provide passage, which would only provide fish access to one mile of habitat. Jenn Güt, Kleinschmidt, asked NMFS about any mechanisms to open back up the Augusta Project Rx, which Kevin replied that he also has questions about and is currently not sure.

²⁴ Mark Scott, Ph.D., Wildlife Biologist III, Statewide Fisheries Research Leader, Clemson Lab

²⁵ Augusta Canal Hydropower Project, FERC No. 11810

Kevin continued that NMFS has discussed within previous FPTWC meetings about the potential for trap and haul operations. DE and Kleinschmidt discussed reservations of this type of passage due to working with the Augusta Project licensee and the fact that it would not meet USFWS goals for volitional passage.

Bill again reminded the group that NSBLD is located approximately at RM 188, and shad currently spawn below that structure. Additionally, for some time now, the shoal habitat was believed to be the location where shad and other anadromous fishes desired for spawning so putting them above this point in less desirable water with potentially unsuitable habitat may not be the best option at this time. Bill also brought up the idea of shad numbers being a trigger for fish passage and if that was still out of favor with NMFS. Bill noted that it is important to not have a repeat of what happened at the Catawba-Wateree Project²⁶ and build passage for relatively no use. He continued that a biological trigger as opposed to a time trigger (once downstream passage is implemented) is something that should be seriously contemplated. Kevin replied that while a biological trigger is not something NMFS was currently considering in the draft Rx, he is open to discussing it further with his management. Matthew Rowe, GAWRD, added that if biological triggers are adopted for shad, the Rx should also apply biological triggers for other species (i.e., Robust Redhorse).

Next Steps

The FPTWC discussed next steps, including compiling a package regarding the Fish Passage AMP²⁷ for filing with FERC as FLA supplemental information.

If the REA Notice is issued prior to the next scheduled FPTWC meeting, committee members should have a conference call.

The next meeting was scheduled for August 19, 2026, in the Columbia, SC area to be in-person with a virtual option for those not able to travel. Exact location TBD.²⁸

The meeting was adjourned.

ACTION ITEMS:

- GAWRD to provide DE with eel data above the Project dam
- DE to develop proposal for eel sampling past June 2026
- DE/Kleinschmidt to send notification for 30-day review of the HSI Report²⁹

²⁶ Catawba-Wateree Hydroelectric Project, FERC No. 2232

²⁷ AMP = Adaptive Management Plan

²⁸ TBD = to be determined

²⁹ Sent via email by Jennifer Güt, Kleinschmidt, on March 15, 2026

- DE to revise HSI Report
- DE/Kleinschmidt to coordinate WQTWC meeting
- DE/Kleinschmidt to compile Fish Passage AMP material for filing with FERC