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U.S. Army Corps of Engineers
Attn: CECW-CO-R
U.S. Fish & Wildlife Service
441 G Street NW,
Washington, DC 20314-1000

electronic submission

RE: Department of the Army, Corps of Engineers Proposal to Reissue and Modify Nationwide Permits; Docket Number: COE-2020-0002

To Whom It May Concern,

The South Carolina Department of Natural Resources (SCDNR) is the state agency charged by state law with the management, protection and enhancement of wildlife, fisheries and marine resources in South Carolina. The South Carolina Department of Natural Resources (SCDNR) mission is to serve as the principal advocate for and steward of South Carolina's natural resources. Due to the agency's responsibility to be a steward for the resource, the SCDNR has found it pertinent for the agency to be involved in public commenting opportunities on regulatory actions. Therefore, the SCDNR provides the following comments in response to the proposal to reissue and modify the nationwide permits ahead of the typical renewal cycle for the purpose of the U.S. Army Corps of Engineers' (USACE) response to Executive Order 13783 to reduce regulatory burden and streamline processes for the development or use of domestically produced energy resources, with particular attention to oil, natural gas, coal and nuclear resources.

Proposed Removal of the 300 Linear Foot Limit for Losses of Stream Bed

The 2020 Nationwide Permits (NWP) propose to remove the 300 linear feet limit for losses of stream bed and rely on the 0.5-acre limit and Pre-Construction Notification (PCN) requirements for several NWPs. Because streams are linear features, the SCDNR finds that a length measurement is more appropriate for assessment than an area measurement. The idea that acreage of stream bed is a good surrogate in lieu of a functional/condition assessment methodologies is false. Impacts that fill or excavate a portion of the stream bed still have impacts on the portions of the stream adjacent to the impact area. Counting impacts that occur only within the actual area of excavation or fill, instead of the linear feet of a stream, is assuming that the activity that occurred has not altered the flow of the stream. Activities that occur that impact only a portion of the stream bed can become the origin of degradation depending upon how those partial stream bed impacts change the flow dynamics of the stream. Additionally, tributaries are defined by flow as a part of the 2020 Navigable Waters Protection Rule, in addition to the stream's position related to a federal navigable water. The change of NWPs assessing impacts solely on the effects on the stream bed seems to eliminate the importance of all aspects of fluvial processes. Thus, the SCDNR disagrees

with the change in definition of the 'Loss of waters of the United States' and the proposed change from a linear foot metric to acres. The SCDNR finds that the current practice under the 2017 NWPs of limiting to 300 linear feet for losses more appropriate.

The SCDNR has concerns regarding the allowance of 0.5 acres of stream impact as proposed, despite the use of PCNs, due to the mitigation that may or may not be required at the discretion of the District Engineer. General Condition 23(d) states that compensatory mitigation at a minimum of one-for-one ratio will be required for all losses of stream bed that exceed 1/10-acre and require preconstruction notification. However, it gives the District Engineer discretion to determine that "the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement." This discretion could allow for up to 0.5 acres of stream bed loss which is equal to up to 3,457 feet of a first order stream with an average width of 6.3 feet (Downing et. al 2012) and up to 2,532 feet of a second order stream with an average width of 8.6 feet.

Example 1
(average stream width of 6.3 feet) x (3,457 linear feet) = 21,779 square feet / 43,560 square feet (1 acre) = 0.5 acres

Example 2
(average stream width of 8.6 feet) x (2,532 linear feet) = 21,775 square feet / 43,560 square feet (1 acre) = 0.5 acres

The threshold for stream mitigation is proposed at 0.1 acre. This would allow for impacts of up to 691 linear feet for a first order stream and up to 506 linear feet for a second order stream to occur without mitigation requirements. Again, General Condition 23(e) allows for the District Engineer to have the discretion to determine on a case-by-case basis that compensatory mitigation is required.

Example 3
(average stream width of 6.3 feet) x (691 linear feet) = 4,353 square feet / 43,560 square feet (1 acre) = 0.1 acre

Example 4
(average stream width of 8.6 feet) x (506 linear feet) = 4,351 square feet / 43,560 square feet (1 acre) = 0.1 acre

From the agency's experience in reviewing Section 404 Clean Water Act permits, the majority of streams that are impacted are first and second order streams here in South Carolina. The SCDNR has concerns that the proposed change from linear feet to acreage for quantifying stream impacts would eliminate these smaller order streams from being mitigated. Thus, the SCDNR reiterates the need for retaining the 300 linear feet limit to ensure continued protection of streams under the Section 404 Clean Water Act program.

The SCDNR would be supportive of the hybrid approach proposed to retain linear limits for losses of stream bed and the use of the 0.5 acre limit for combined losses of stream bed and non-tidal wetlands authorized by NWPs 21, 29, 39, 40, 42, 43, 44, 50, 51 and 52. Although the classification of the stream order may prove difficult in other locations across the country, South Carolina is fortunate to have LiDAR derived stream data from 2007-2013[1]. This data was utilized for the U.S.

[1] Kolb, K.R., Heal, E.N., and Clark, J.M., 2018, Lidar-derived Data Layers for South Carolina StreamStats, 2007-2013: U.S. Geological Survey data release, https://doi.org/10.5066/P9Q8RSF5.

Geological Survey's (USGS) StreamStats application. Recently, in 2019, the USGS updated stream lines[2] for StreamStats based on hydrography lines created from elevation rasters that ranged from 4 to 10 ft resolution, to produce a product of approximately 1:6,000-scale. This data could be useful in support of the hybrid approach for South Carolina

Federal Agency Actions PCN Requirement

Principal I.C.1 of the Legislative Outline for Rebuilding Infrastructure in America recommended a statutory change to authorize Federal agencies to select and use NWPs without additional review from the USACE, regardless of PCN requirements. The USACE is considering this exemption under the theory that Federal agencies may employ staff who are environmental experts and who already review these projects before submitting PCNs to the USACE to determine whether they meet the criteria for applicable NWP. This statement could also be made in regard to numerous State agencies. The SCDNR finds that it is important that the authority remain with the USACE for consistency in implementation and protection of aquatic resources to ensure that all Federal agencies are implementing the NWPs as they are intended.

Status of Existing Permits

Due to the change in scheduling for the 2020 proposed NWPs, the possibility exists that the timeframe for authorization of the 2017 NWPs and 2020 NWPs could overlap. The SCDNR finds that activities that previously were verified under the 2017 NWPs should be allowed to continue and other projects should be able to utilize the 2017 NWPs if, and only if, the 2020 NWPs are not more restrictive than the 2017 NWP thresholds, general or regional conditions. If the USACE decides to discontinue the 2017 NWPs authorization upon enactment of the 2020 NWPs, the SCDNR requests that the USACE notify all permittees who submitted PCNs or verification letters for the use of the 2017 NWPs.

NWP 12 Oil and Natural Gas Pipeline Activities

The USACE is soliciting information regarding Best Management Practices (BMP) that should be included in the proposed NWP 12 solely for oil and natural gas. The Association of State and Wetland Managers compiled a list of BMP manuals that support oil and gas pipeline development and maintenance activities in Appendix G of the document titled "Considering Best Practices for Managing Pipeline Permitting[3]." Several of the federally available documents listed in Appendix G, such as the Federal Energy Regulatory Commission's (FERC) "Wetland & Waterbody Construction and Mitigation Procedures[4]" and the FERC's "Guidance for Horizontal Directional Drill Monitoring, Inadvertent Return Response and Contingency Plans[5]", are excellent resources for best management practices related to impacts to wetlands and streams.

The SCDNR would specifically recommend the following BMPs for consideration:

- All excavations should be backfilled with the excavated material after installation of the appropriate structures. Sidecast spoil material from trench excavation should be placed on the side of the trench opposite streams and wetlands. Spoil material from trench excavation should be placed on the side of the trench to be reused as back fill with the A-horizon

[2] Kolb, K.R, Clark, J.M., Gross, T.A, Gurley, L.N., Huffman, B.J, and Musser, J.W., 2019, Stream Lines Used to Produce the South Carolina StreamStats 2018 Release: U.S. Geological Survey data release, https://doi.org/10.5066/P9VDWVJO.
[3] https://www.aswm.org/pdf_lib/pipeline/considering_best_practices_managing_pipeline_permitting.pdf
[4] https://www.ferc.gov/sites/default/files/2020-04/wetland-waterbody-construction-mitigation-procedures.pdf
[5] https://www.ferc.gov/sites/default/files/2020-04/guidance-natural-gas.pdf

placed back in its original position. Excess spoil material must be removed to an approved upland disposal site.

- Stream banks at crossings must be restored after construction has been completed. Disturbed stream banks can be restored by planting woody vegetation and by using bioengineering techniques for stream bank stabilization.
- Right-of-ways through and adjacent to streams should be maintained in low growing, woody vegetation to minimize stream bank erosion and sedimentation. Maintenance of this right-of-way should be conducted with mowing rather than with chemicals to reduce the potential for contamination and negative impacts on aquatic resources. If chemicals are used, a 50-foot buffer on either side of the stream crossing should be established where no herbicide treatments would be allowed. This will serve to retain the riparian vegetation while reducing the amount of chemical runoff into the aquatic environment.
- Right-of-ways through and adjacent to forested wetlands should be maintained in low growing, native vegetation. Maintenance of this right-of-way should be conducted via hand clearing rather than with chemicals to reduce the potential for contamination and negative impacts on aquatic resources. If chemicals are used, a 50-foot buffer on either side of the wetland crossing should be established where no herbicide treatments would be allowed. This will serve to retain the riparian vegetation while reducing the amount of chemical runoff into the aquatic environment.
- Any open trench must be temporarily fenced to reduce the likelihood of wildlife becoming trapped and must include a ramped section which would allow wildlife to escape. A full visual inspection of every open trench section must be made daily to identify any trapped wildlife in need of rescue.

For pipelines installed utilizing horizontally directionally drilled methods, the SCDNR recommends the following BMPs for consideration:

- The use of HDD should be encouraged on all streams when possible; however, due to terrain and other limitations that it is not always possible. In such instances, the use of the flume method should be the required method for use of the NWP 12 over the damp and pump or open cut stream crossing methods. The flume method essentially provides a stream flow by-pass during construction, minimizing impacts to aquatic resources.
- Inadvertent releases occasionally occur during HDD, and thus, to protect nearby aquatic resources and water quality, the following preventative measures outlined in the Horizontal Directional Drilling Contingency and Inadvertent Release Plan should be implemented as a part of the NWP 12. These include:
    - Erecting straw bales or sedimentation fences between the drill site and nearby sensitive resources to prevent drilling mud releases from reaching the resource.
    - Conducting regular, on-site briefings for personnel to identify and locate sensitive resources at the site.
    - Maintaining necessary response equipment either on-site or at a readily accessible location and in good working order.
    - In addition, the HDD Contractor should employ a Full Time, Qualified On-Site Mud Engineer to continuously monitor the drilling fluid circulation and returns as a preventative measure.

Many of the recommendations highlighted above are also in line with the Arkansas USACE District's "Sediment and Erosion Control Guidelines for Pipeline Projects[6]"

NWP 27 Aquatic Habitat Restoration, Enhancement and Establishment
Additionally, for NWP 27, the SCDNR recommends that a PCN be required for all dam removal projects and the submittal of sediment contaminant results. This allows the District Engineer the opportunity to ensure sediment contaminants will not be released downstream to negatively impact the environment.

Regarding incidental or frequent discharges from reservoirs for the purpose of sediment releases downstream for habitat enhancements or for impoundment maintenance, the SCDNR has concerns that the current NWP 27 does not include a threshold of impact for PCN review or a frequency of discharge allowed under the NWP. While sediment release can be beneficial to downstream habitats that are sediment starved, there are also concerns with the timing of those releases. This is particularly concerning for freshwater mussel populations, which are highly imperiled across the Southeast, and for impacts to other aquatic organisms associated with changes in dissolved oxygen that would occur, especially during the summer months when stream flows and dissolve oxygen levels are typically at their lowest. The summer months would also be the time that many aquatic species spawn; eggs and juvenile aquatic species are more likely to be impacted by environmental changes during this time as well. Thus, the SCDNR requests that clarity be provides on the frequency of discharge under this NWP and that assurances are in place to prevent deleterious effects. The SCDNR recommends a PCN requirement for all reservoir sediment releases that are proposed to occur.

Proposed New Nationwide Permit – C. Electric Utility Line and Telecommunication Activities and D. Utility Line Activities for Water and Other Substances
Some of the aforementioned comments in relation to NWP 12 for Oil and Gas Pipelines would also apply and could be incorporated into the language for underground utilities under NWP C and NWP D. The SCDNR would be supportive of the inclusion of the requirement of the use of low-ground pressure equipment such as the use of machines with wide tires, duals, tire tracks, bogies, tracks light weight and/or central tire inflation for the new proposed NWPs as outlined in the Electric Power Research Institutes' "BMP Manual for Access Road Crossings of Wetlands and Waterbodies[7]".

Water Reclamation and Reuse Facilities
While many activities associated with water reclamation and reuse facilities can be covered under NWPs 29, 39, 40 and 42, the SCDNR agrees with the option to propose a new NWP that is defined for the purposes of permitting these facility impacts to dredge or fill material into jurisdictional waters. The SCDNR finds that this promotes the greatest clarity and limits confusion.

[6] https://www.swl.usace.army.mil/Portals/50/docs/regulatory/Sedimenatation-Erosion%20Control.pdf
[7] https://www.epri.com/research/products/1005188

Discussion of Proposed Modifications to NWP General Conditions (GC)

GC 23 Mitigation

As previously mentioned, the SCDNR does not agree with the change in threshold from linear feet of impact to acres for requiring compensatory mitigation for losses of stream beds that require PCN.

Thank you for the opportunity to review the propose 2020 NWPs and provide comments.

Sincerely,

Lorianne Riggin

Lorianne Riggin
SCDNR Office of Environmental Programs Director

cc: USACE, Charleston District
EPA
SCDHEC, Bureau of Water & Ocean and Coastal Resource Management Office

References

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