PUBLIC NOTICE FOR
CATEGORICALLY EXCLUDED ACTION
AFFECTING WETLAND

White Pine – Dumplin Valley Fiber Transmission Line Construction

The Tennessee Valley Authority (TVA) is seeking your comments on proposed wetland impacts and TVA's determination of no practicable alternative. Comments must be received no later than May 13, 2021. Public input for further wetland avoidance or minimization strategies shall be considered in TVA's ultimate project design and implementation. Any comments, including names and addresses, will become part of the administrative record and will be available for public inspection as requested.

Submit comments regarding wetland impacts resulting from this project to:

Fallon Parker Hutcheon; fcparkerhutcheon@tva.gov; 400 West Summit Hill WT 11, Knoxville, TN

TVA proposes to install OPGW fiber on the existing White Pine to Dumplin Valley transmission line. A new access road is necessary to access structure 120; this proposed route contains wetland, and is therefore subject to Executive Order 11990 (EO11990). EO11990 requires federal agencies to minimize wetland destruction, loss, or degradation, and preserve the natural and beneficial wetland values while carrying out agency responsibilities. TVA aims to balance these logistical obstacles in a manner that reduces environmental impacts to the extent practicable. Because not all wetland could be avoided, this access road would need to be located in wetland in order to accommodate the necessary construction, and all forested wetland within the proposed route would be removed for access. Woody vegetation would be deterred from regrowth within the access road for the lifetime of the utility line.

Wetland determinations were performed according to the USACE standards, which require documentation of hydrophytic (wet-site) vegetation, hydric soil, and wetland hydrology

(Environmental Laboratory 1987; Lichvar et al. 2016; USACE 2012; USACE 2018). Wetlands were evaluated for functional capacity using the Tennessee Rapid Assessment Method (TRAM) to classify wetland quality in three categories: low, moderate, or exceptional resource (TDEC 2015). Low quality wetlands are degraded aquatic resources usually due to disturbance regime and/or lack of hydrologic influence. Moderate quality wetlands provide functions at a greater value due to a lesser degree of degradation and/or due to their habitat, landscape position, or hydrologic input. Moderate quality wetlands are considered healthy water resources of value. Exceptional resource value wetlands offer high functions and values within a watershed or are of regional/statewide concern. No exceptional wetlands were identified on this project.

A total of 0.05 acres of wetland was delineated within the fiber install project footprint (Table 1). This total wetland area incorporates 1 wetland feature, a total 0.05 acres of natural forested wetland habitat. This wetland contains woody vegetation that would be cleared to accommodate right-of-way construction and overhead line clearance. These woody wetland habitats would be permanently converted to emergent, meadow-like wetlands within the right-of-way and maintained as-such long term. Woody wetland vegetation, in general, has deeper root systems and contains greater biomass (quantity of living matter) per area than do emergent wetlands which do not grow as tall. As a result, forested and scrub-shrub wetlands tend to provide higher levels of wetland functions, such as sediment retention, carbon storage, and pollutant retention and transformation (detoxification), all of which

support better water quality. Consequently, the clearing and conversion of woody wetlands to wet meadow habitat results in reduction of wetland function that would otherwise support healthier and improved downstream water quality (Wilder and Roberts 2002; Ainslie et al. 1999; Scott et al. 1990). Although the converted emergent wetlands would provide the same suite of functions as their wooded counterparts, it would be at a reduced level due to the removal of tree and sapling vegetation.

Table 1. Wetlands in the White Pine – Dumplin Valley Fiber project footprint.

Wetland ID	Type[1]	TRAM Category (score)	Wetland Impacts	Wetland Acreage in Review Area
W001	PFO1E	Low (36)	Cleared for Access	0.05
			TOTAL	0.05

[1]Classification codes as defined in Cowardin et al. (1979): P=Palustrine; FO1=Forested, Broad-Leaved Deciduous vegetation; E= Seasonally flooded/saturated.

Activities in wetlands are regulated by state and federal agencies to ensure no net loss of wetland resources. Under Clean Water Act (CWA) §404, activities resulting in the discharge of dredge or fill into waters of the U. S. must be authorized by the U.S. Army Corps of Engineers (USACE) through a Nationwide, Regional, or Individual Permit. CWA §401 requires state water quality certification for projects requiring USACE approval. In Tennessee, the Department of Environment and Conservation (TDEC) is responsible for issuance of water quality certifications pursuant to Section 401. Section 404(b) of the CWA directs regulatory agencies to consider secondary impacts, such as loss of wetland functions from forested wetland clearing and habitat loss due to conversion. The proposed project would require wetland fill associated with access construction, with wetland functional loss resulting as a secondary impact due to wooded wetland clearing needed for access. Therefore, forested wetland loss is subject to the authority of the regulatory agencies to ensure no net loss of wetland functions and values, per the directive of the CWA and the federal no net loss of wetland policy (EPA 1990). The CWA authorizes regulatory oversight for these impacts. The USACE and states exert this oversight through an established permit program that ensures maintenance of the physical, biological, and chemical integrity of the national and state waters, including wetlands. In Tennessee, wetlands are considered waters of the state, and wetland habitat alteration can be considered impactful and subject to TDEC regulatory oversight. Any regulated activity in wetlands would require TDEC permitting, which includes consideration of Tennessee's anti-degradation to water courses identified as impaired on Tennessee's 303(d) list of impaired waters (TDEC 2020). The proposed 0.05 acre of forested wetland conversion would result in wetland functional loss to an unnamed stream into a retention pond. The permitting process involves a demonstration of wetland avoidance, minimization of disturbance, and compensation for loss of wetland functions and values within the larger watershed basin. TVA would obtain the necessary Section 404/401 CWA permits and TDEC aquatic resource alteration permit, and all required mitigation to ensure the proposed wetland impacts are compensated to the extent deemed appropriate such that no further degradation to water resources occurs within the affected basin. Necessary compensatory mitigation would be covered by a TDEC general ARAP and a USACE NWP#12 to ensure no more than minimal impacts to the aquatic environment result and the objectives of Tennessee's water pollution statutes and federal CWA mandates are upheld.

TVA would minimize wetland disturbance during tree removal in the new right-of-way corridor via clearing trees with a fellerbuncher, use of low ground pressure equipment, mats, dry season work,

and/or adherence to all other wetland best management practices for clearing, construction, and long term maintenance activities (TVA 2017) for any and all other work necessary within the identified wetland boundaries. Similar best management practices would be in place for long term vegetation management within the right-of-way. Therefore, as a result of proposed protective measures and fulfilling Nashville USACE and TDEC compliance requirements, this transmission line project is anticipated to have no significant adverse impacts to wetland functions and values provided within the larger watershed basin.

In consideration of wetland degradation resulting from the propose activities, all practicable design measures to minimize wetland disturbance have been incorporated. This includes:

- Minimizing environmental impacts to the extent practicable by siting new line parallel to existing easement;
- Avoiding structure placement in wetlands wherever engineering/electric design allows;
- Avoiding vehicular traffic across wetlands wherever an alternative exists;
- Use of a fellerbuncher for clearing wetland trees;
- Adherence to wetland Best Management Practices:
    - Schedule work activities during dry season work when practicable
    - Use of wood mats, pipe mats, panels or pallets, metal grating, cut-and-cross lay road, pole road, etc. as temporary equipment access
    - Use of low ground pressure equipment or other vehicles with rubberized tracks and wide tires whenever practicable to reduce soil compaction
    - No tire rutting greater than 12”
    - Cutting of woody vegetation within 12” of ground surface, no grubbing
    - Contours within wetland and wetland buffer are restored to preconstruction elevations if altered
    - All exposed soils in wetland seeded with an approved and vegetation mix.
    - Only aquatic approved herbicides shall be used in wetland areas for vegetation maintenance.
- Comply with federal/state wetland regulatory requirements to ensure wetland impacts result in no net loss of wetland resources.

TVA concluded the proposed project comports with EO11990 because:

1. The project was designed to avoid wetland impacts to the extent practicable.
2. There is no practicable alternative to avoiding the proposed wetland impacts.
3. The project would conform to all applicable federal and state wetland regulations ensuring no more than minimal impacts to the aquatic environment.
4. With best management practices and compliance mechanisms in place, proposed wetland impacts would be insignificant.

Literature Cited

Ainslie, W.B., R.D. Smith, B.A. Pruitt, T.H. Roberts, E.J. Sparks, L. West, G.L. Godshalk, and M.V. Miller. 1999. A regional guidebook for assessing the functions of low gradient, riverine wetlands in

western Kentucky. U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS, USA. Technical Report WRP-DE-17.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetland and Deepwater Habitats of the United States. Washington, D.C.: U.S. Fish and Wildlife Publication FWS/OBS-79/31.

Environmental Laboratory. 1987. Corps of Engineers Wetland Delineation Manual. Vicksburg, MS: U.S. Army Corps of Engineers Waterways Exp. Station. Technical Report Y-87-1.

Mack, J. 2001. Ohio Rapid Assessment Method for Wetlands, Version 5.0, User's Manual and Scoring Forms. Columbus: Ohio Environmental Protection Agency, Division of Surface Water, 401/Wetland Ecology Unit, EPA Technical Report WET/2001-1.

Miller, R.E. and B.E. Gunsalus. 1999. Technical Publication REG-001, Wetland Rapid Assessment Procedure (WRAP). Natural Resource Management Division, Regulation Department, South Florida Water Management District.

Lichvar, R.W., M. Butterwick, N.C. Melvin, and W.N. Kirchner. 2014. The National Wetland Plant List: 2014 update of wetland ratings. Phytoneuron 2014-41: 1–42. Published 2 April 2014. ISSN 2153 733X (n.d.)

Tennessee Valley Authority. 2017. A Guide for Environmental Protection and Best Management Practices for Tennessee Valley Authority Construction and Maintenance Activities, Revision 3. Edited by G. Behel, S. Benefield, R. Brannon, C. Buttram, G. Dalton, C. Ellis, C. Henley, T. Korth, T. Giles, A. Masters, J. Melton, R. Smith, J.Turk, T. White, R. Wilson. Chattanooga, TN.

Scott, Michael L., Barbara A. Kleiss, William H. Patrick, Charles A. Segelquist, et al. The Effect of Developmental Activities on Water Quality Functions of Bottomland Hardwood Ecosystems: The Report of the Water Quality Workgroup. As reported in: Gosslink, J.G. et al. (1990) Ecological processes and cumulative impacts : illustrated by bottomland hardwood wetland ecosystems / edited. Lewis Publishers, Chelsea, MI.

U.S. Army Corps of Engineers. 2012. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region Version 2.0*, ed. J. F. Berkowitz, J. S. Wakeley, R. W.Lichvar, C. V. Noble. ERDC/EL TR-12-9. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Army Corps of Engineers. 2018. National Wetland Plant List, version 3.4. Engineer Research and development Center. Cold Regions Research and Engineering Laboratory, Hanover, NH.

Wilder, T.C. and Roberts, T. H. 2002. "A Regional Guidebook for Applying the Hydrogeomorphic Approach to Assessing Wetland Functions of Low-Gradient Riverine Wetlands in Western Tennessee," ERDC/EL TR-02-6, U.S. Army Engineer Research and Development Center, Vicksburg, MS.

White Pine - Dumplin Valley Fiber
Wetland Delineation 2021