Resource Report 3
Fish, Wildlife, and Vegetation

FERC Docket No. CP22-___-000

Equitrans, L.P.
Ohio Valley Connector Expansion Project
Greene County, Pennsylvania
Wetzel County, West Virginia
and Monroe County, Ohio

January 2022

EQUITRANS℠

Public Information

RESOURCE REPORT 3 - FISH, WILDLIFE, AND VEGETATION	
SUMMARY OF FERC FILING INFORMATION	
Information	**Found In**
Minimum Filing Requirements	
1. Classify the fishery type of each surface waterbody that would be crossed, including fisheries of special concern - Title 18 Code of Federal Regulations (CFR) part (§) 380.12(e)(1).	Section 3.1
2. Describe terrestrial and wetland wildlife and habitats that would be affected by the project - 18 CFR § 380.12(e)(2).	Section 3.2 Section 3.3
3. Describe the major vegetative cover types that would be crossed and provide the acreage of each vegetative cover type that would be affected by construction - 18 CFR § 380.12(e)(3).	Section 3.3 Table 3.3-1
4. Describe the effects of construction and operation procedures on the fishery resources and proposed mitigation measures - 18 CFR § 380.12(e)(4).	Section 3.1.4
5. Evaluate the potential for short-term, long-term, and permanent impact on the wildlife resources and state-listed endangered or threatened species caused by construction and operation of the project and proposed mitigation measures - 18 CFR § 380.12(e)(4).	Section 3.4 Appendix 3-A
6. Identify all federally listed or proposed endangered or threatened species that potentially occur in the vicinity of the project and discuss the results of the consultations with other agencies. Include survey reports as specified in 18 CFR § 380.12(e)(5).	Section 3.4 Appendix 3-A
7. Identify all federally listed essential fish habitat that potentially occurs in the vicinity of the project and the results of abbreviated consultations with the National Oceanic and Atmospheric Administration's National Marine Fisheries Service and resulting essential fish habitat assessment - 18 CFR § 380.12(e)(6).	Section 3.1.3
8. Describe significant biological resources that would be affected. Describe impact and mitigation proposed to avoid or minimize that impact - 18 CFR § 380.12(e)(4,7).	Section 3.4
Additional Information Often Missing and Resulting in Data Requests	
9. Provide copies of correspondence from federal and state fish and wildlife agencies along with responses to their recommendation to avoid or minimize impacts on fisheries, wildlife, and vegetation.	Appendix 3-A

RESOURCE REPORT 3 - FISH, WILDLIFE, AND VEGETATION	
SUMMARY OF FERC FILING INFORMATION	
Information	**Found In**
10. Provide a list of significant wildlife habitats crossed by the project. Specify locations by milepost and include length and width of crossing at each significant wildlife habitat.	Section 3.2.2
11. Provide a description of project-specific measures that would be implemented during construction and operation of the project to void or minimize impacts on migratory birds. Include comments from the U.S. Fish and Wildlife Service on the proposed measures.	Sections 3.2.3 Section 3.2.4 Appendix 3-A
12. For aquatic and marine species, be sure to include effects of sedimentation, changes to substrate, effects of blasting. This information may be needed on a location-specific (milepost) basis and may require geophysical and other surveys. Results of such surveys and analyses should be included in the application.	Section 3.1.4

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Acronyms and Abbreviations

BGEPA	Bald and Golden Eagle Protection Act
BCC	Birds of Conservation Concern
BCR	Bird Conservation Region
CFR	Code of Federal Regulations
CWF	Cold Water Fishes
ECOS	Environmental Conservation Online System
EFH	essential fish habitat
Equitrans	Equitrans, L.P.
ESA	Endangered Species Act
ESCP	Erosion and Sediment Control Plan
EV	Exceptional Value
FERC	Federal Energy Regulatory Commission
HQ	High Quality
IBA	Important Bird Area
IPaC	Information for Planning and Consultation
LOD	limit of disturbance
MBTA	Migratory Bird Treaty Act
MF	migratory fishes
MOU	Memorandum of Understanding
NABCI	North American Bird Conservation Initiative
NMFS	National Marine Fisheries Service
ODA	Ohio Department of Agriculture
ODNR	Ohio Department of Natural Resources
OEPA	Ohio Environmental Protection Agency
OH	Ohio
OHFO	Ohio Field Office
PA	Pennsylvania
PA Code	Pennsylvania Code
PADA	Pennsylvania Department of Agriculture
PADEP	Pennsylvania Department of Environmental Protection
PADCNR	Pennsylvania Department of Conservation and Natural Resources
PAFO	Pennsylvania Field Office
PFBC	Pennsylvania Fish and Boat Commission
PGC	Pennsylvania Game Commission
Plan	FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan*
PNDI	Pennsylvania Natural Diversity Inventory
PNHP	Pennsylvania Natural Heritage Program

Acronyms and Abbreviations (Continued)

Procedures	FERC's *Wetland and Waterbody Construction and Mitigation Procedures*
Project	Ohio Valley Connector Expansion
ROW	right-of-way
SGL	State Game Lands
TSF	Trout Stocking Fisheries
USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
USFWS	United States Fish and Wildlife Service
WMA	Wildlife Management Area
WV	West Virginia
WVCSR	West Virginia Code of State Rules
WVDEP	West Virginia Department of Environmental Protection
WVDNR	West Virginia Division of Natural Resources
WVFO	West Virginia Field Office
WWF	Warm Water Fishes

3.0 Fish, Wildlife, and Vegetation

A detailed description and overview map of Equitrans, L.P.'s (Equitrans') Ohio Valley Connector Expansion (Project) are provided in Resource Report 1, General Project Description.

Resource Report 3 describes the existing fisheries, upland and wetland vegetation communities, biodiversity and wildlife, and protected species and their habitats associated with the Project. This report addresses the Project's potential effect on these resources during construction and operation. The report will address measures proposed to avoid, minimize, or mitigate effects during construction and operation in relation to the natural environment.

3.1 Fishery Resources

This section describes fisheries resources present in waterbodies crossed by proposed Project components. Fisheries are surface water areas that provide habitat for fish as well as other aquatic organisms. Fisheries information is based on review of existing, publicly available information including United States Geological Survey (USGS) topographic maps, aerial photographs, spatial data layers, results from wetland and waterbody field surveys, and consultation with Federal and State agencies. The term "fishery" refers to activities associated with harvesting fish, or it can be used to identify a group of species that share the same habitat. Fisheries in Ohio (OH), Pennsylvania (PA), and West Virginia (WV) are characterized according to water temperatures and types of fishing uses (commercial or recreational, stocked or native fishes). Significant fisheries resources are defined by the Federal Energy Regulatory Commission (FERC) as waterbodies that either: 1) provide important habitat for foraging, rearing, or spawning of fish species; 2) represent important commercial or recreational fishing areas; or 3) support large populations of commercially or recreationally valuable fish species or species listed for protection at the federal, state, or local level.

Waterbodies identified in the Project area include perennial, intermittent, and ephemeral streams. Resource Report 2, Table 2.2-1 provides a description of all waterbodies crossed by the Project.

3.1.1 Fishery Classification

Fishery classifications for streams crossed by the Project in Monroe County, OH, Greene County, PA, and Wetzel County, WV are included below. Table 3.1-1 provides a description of the representative fish species likely to occur within the Project area. The Project will cross perennial, intermittent, and ephemeral waterbodies. Classification of fisheries habitat includes consideration of chemical and physical characteristics such as water temperature, salinity, and whether the waterbody is part of a marine, estuarine, or freshwater system. Habitat classification depends on the presence of certain fish species in the aquatic community that use the habitat for reproduction, which is largely driven by temperature. The Fishery classification for each waterbody crossed by the Project will be discussed here, and can be found in Resource Report 2, Table 2.2-1.

Table 3.1-1

Representative Game and Commercial Fish Species Likely to Occur in Project Area Waterbodies

Cold Water (stocked)[1]	Warm Water[2]	
Rainbow trout	American eel	Grass pickerel
Brown trout	Redhorse spp.	Northern pike
Golden rainbow trout	Sucker spp.	Tiger musky
Brook trout	Sunfish spp.	Muskellunge
	Rockbass	Yellow perch
	Crappie (black and white sp.)	Walleye

Table 3.1-1 (continued)

Cold Water (stocked)[1]	Warm Water[2]	
	Largemouth bass	Sauger
	Smallmouth bass	Bullhead spp.
	Spotted bass	Channel catfish
	Shad spp.	Flathead catfish
	Common carp	

Notes:

1 Stocked trout-streams were identified using the OH Department of Natural Resources (ODNR) 2021 Trout Stocking Dates and Locations (ODNR, 2021a), WV Division of Natural Resources (WVDNR) Trout stocking schedule (WVDNR, 2021a), and the PA Fish and Boat Commission (PFBC) Trout stocking schedule (PFBC, 2021a and 2021b).

2 The common game and commercial fish were identified using ODNR Search for Species: Fish (ODNR, 2021b), PFBC Popular Sport fishes of PA (PFBC, 2021c), and WV Department of Environmental Protection (WVDEP) WV Fish (WVDEP, 2021).

OH

The OH Environmental Protection Agency (OEPA) uses three categories of potential use designations to define waterways: aquatic life habitat, water supply, and recreation (OEPA, 2021). Under aquatic life habitat, there are seven specific classes that describe fisheries:

- Coldwater habitat: Native cold water or cool water species; put-and-take trout stocking.
- Seasonal salmonid habitat: Supports lake-run steelhead trout fisheries.
- Exceptional warmwater habitat: Unique and diverse assemblages of fish and invertebrates.
- Warmwater habitat: Typical assemblages of fish and invertebrates, like least impacted reference conditions.
- Limited warmwater habitat: Temporary designations based on 1978 water quality survey and not subjected to use attainability analysis.
- Modified warmwater habitat: Tolerant assemblages of fish and macro-invertebrates, but otherwise like warmwater habitat; irretrievable condition precludes complete recovery to reference condition.
- Limited resource waters: Fish and macroinvertebrates severely limited by physical habitat or other irretrievable condition.

Surface water in OH that is not classified as “limited” is considered a “high quality water”. High quality streams are protected by antidegradation rules (OEPA, 2018).

PA

PA Code Title 25 categorizes waterbody systems under the following protected uses: Aquatic Life, Water Supply, Recreation and Fish Consumption, Special Protection, and Other (PA Code, 2021a). Under Aquatic Life, there are four sub-designations: warm water fishes (WWF), cold water fishes (CWF), migratory fishes (MF), and Trout Stocking Fisheries (TSF).

- CWF: Includes the maintenance and/or propagation of fish species (including the Salmonidae family) and additional flora and fauna that are indigenous to a cold-water habitat.

- MF: Includes the passage, maintenance, and propagation of anadromous and catadromous fishes and other fishes that ascend into flowing waters to complete their life cycle.
- TSF: Maintenance of stocked trout from February 15 to July 31, and maintenance and propagation of fish species and additional flora and fauna that are indigenous to a warmwater habitat.

The habitats associated with these designations vary and can overlap in temperature range and physical characteristics. In general, WWF-designated waters are too warm to support natural reproduction of trout while CWF-designated resources support reproducing populations of trout. Waters stocked with trout are designated as TSF and may support some natural trout reproduction. By nature, MF traverse multiple waterbodies throughout their life cycle, so many PA waterbodies have a MF designation in addition to a WWF, CWF or TSF designation. In PA, all surface waterways are considered WWF unless otherwise specified.

Under PA Code Title 58, Chapter 57, the PFBC classifies waterbodies that support trout populations (either stocked or native) or provide trout habitat as follows: Wild Trout Waters (including upstream tributaries), Class A Wild Trout Streams, and Wilderness Trout Streams (PA Code, 2021b).

In addition, waterways or watersheds can be designated as Exceptional Value (EV) or High Quality (HQ) to recognize outstanding resources (PA Code, 2021a). Streams must be exceedingly free of toxic substances and must support high quality biological communities to reach these classifications. PA Department of Environmental Protection (PADEP) regulation Document 391-0300-002 defines antidegradation for state waters. PA applies antidegradation laws directly to all state waters and highlights HQ and EV waters as such (PA Code, 2021c). All waters in the state are maintained at their existing level of quality classification.

WV

In WV, water quality standards are codified under WV Code of State Rules (WVCSR) title 47 series 2: Requirements Governing Water Quality Standards (WVCSR, 2021). The code establishes the following use categories for state waterways:

- Category A - Water supply, public.
- Category B - Propagation and maintenance of fish and other aquatic life.
- Category C - Water contact recreation.
- Category D - Agriculture and wildlife uses.
- Category E - Water supply, industrial.

All waters of the state are assigned to Category B unless otherwise specified. Within this category, WV subclassifies fisheries as either WWF (B1) or trout waters (B2). Fisheries which are annually stocked but do not support year-round populations of trout are excluded from trout waters in WV (WVCSR, 2021).

WV utilizes a tier system to dictate levels of protection for waterways. Tier 1 mandates all existing uses and water quality shall be maintained and protected, regardless of designated uses. Tier 2 applies to “HQ waters”, which must be maintained as such. In WV, high quality waters are those equal to or better than the minimum quality levels set forth by national water quality goal uses. Tier 3 applies to waters which constitute outstanding national resources. This designation applies to wilderness areas, state and national parks and forests, and national scenic rivers among other qualifications. As with Tiers 1 and 2, Tier 3 waters must be maintained, protected, and improved where necessary to sustain their tier designation.

3.1.2 Existing Fishery Resources

The findings presented in this assessment are based on USGS quadrangle maps, aerial photographs, and on-site wetland and waterbody field surveys (Appendix 2-C, Resource Report 2). Additionally, Equitrans consulted with federal and state agencies to identify fishery resources in the Project area. Agencies contacted included the PA field office (PAFO), WV field office (WVFO), and OH field office (OHFO) of the United States Fish and Wildlife Service (USFWS), PA Department of Conservation and Natural Resources (PADCNR), PFBC, PA Game Commission (PGC), WVDNR, and ODNR. As further discussed herein, agency correspondence is ongoing with the PAFO and WVFP of the USFWS and ODNR. Agency Correspondence is provided in Appendix 3-A.

The Project will cross perennial, intermittent, and ephemeral streams in PA and WV. As discussed in Resource Report 2, no waterbodies were identified within the Project study area in OH. Waterbodies crossed by the Project are provided in Table 2.2-1 of Resource Report 2.

OH

No waterbodies are crossed by the Project in OH; therefore, Equitrans does not anticipate impacts to fishery resources in OH.

PA

Waterbodies crossed by Project facilities in PA are designated as WWF. None of the streams crossed by the Project in PA have existing use classifications, and none are designated as trout waters (PFBC, 2021a). Additionally, no streams crossed by the Project in PA are considered EV or HQ (PADEP, 2021).

WV

Waterbodies crossed by the Project in WV are classified as WWF, and two of them are stocked with trout annually: the North Fork and South Fork of Fishing Creek (WVDNR, 2021a). Neither stream supports trout populations year-round, which means they are not classified as trout waters. As discussed in Resource Report 2, streams in the Project area in WV are considered Tier 1 waters.

3.1.3 Fisheries of Special Concern

Fisheries of special concern are defined as waterbodies given special designation by environmental regulatory agencies as important commercial or recreational fisheries or otherwise protected fishery areas.

In the Magnuson-Stevens Act, Congress defined essential fish habitat (EFH as consisting of “waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity”. Specific habitats include all estuarine water and substrate (mud, sand, shell and rock); all associated biological communities, such as sub-tidal vegetation (seagrasses and algae); and the adjacent inter-tidal vegetation (marshes and mangroves). EFH represents areas of high economic importance due to the dependence of recreational and commercial fisheries directly and indirectly associated with these areas. Based on the online EFH mapper tool, EFH areas are not within the Project area (National Oceanic and Atmospheric Administration, 2021).

The WVDEP and PADEP enforce antidegradation rules (WVDEP, 2016; and PADEP, 2003). Antidegradation rules promote the maintenance and protection of existing water quality standards for those waters as defined in WV as HQ streams (Tier 2 or Tier 3 streams). The antidegradation laws promote the maintenance and protection of existing water standards listed as HQ waters are composed of general HQ waters, superior HQ waters, outstanding state waters, and/or outstanding national resource waters. Additionally, the PADEP establishes levels of protection for deserving waterbodies classified as HQ or EV based on designated

uses or existing uses (PADEP, 2021). Streams crossed by the Project in WV are designated as having Tier 1 protection as described in Chapter 303(d) Impaired Waters through WVDEP received additional protection (WVDEP, 2016). Criteria for HQ designation in WV is: (1) streams with native or stocked populations of trout; and (2) warm water streams five or more miles in length with desirable fish populations that are utilized by the public. North Fork Fishing Creek and South Fork Fishing Creek are HQ streams. As discussed in Resource Report 2, North Fork Fishing Creek is crossed by the Project; however, South Fork Fishing Creek is crossed by an existing bridge and would not be impacted. The Project will not cross EV, Tier 2, or Tier 3 waterbodies (OEPA, 2020; PADEP, 2021; and WVDEP, 2016). As discussed in Section 3.1.2, the Project will not cross designated trout waters. No waterbodies are proposed to be crossed in OH.

Considering fisheries, further protections exist for rare, threatened, and endangered species.

OH

Consultation with ODNR, dated November 19, 2021, provided state-listed threatened and endangered species within the range of the Project; however, since the Project in OH does not propose impacts to streams, floodplains or wetlands, and does not propose tree clearing or subsurface impacts to bat hibernaculum; the Project is not likely to impact these species. Equitrans provided a follow-up letter to ODNR on January 12, 2022, requesting concurrence that the Project was not likely to impact state-listed species. Additional information will be provided to FERC upon receipt. Consultation with the OHFO of the USFWS, dated November 23, 2021, did not indicate potential impacts to rare, threatened, or endangered fishery species.

PA

Consultation with the PGC, dated October 25, 2021, indicated species or resources of concern are within the vicinity of the Project. However, based on the information provided by Equitrans concerning the nature of the Project and limits of disturbance, the PGC determined no impact is likely and no further coordination with the PGC would be necessary for the Project. Consultation with the PFBC dated October 22, 2021, communicated that with exception to transient species, no rare, candidate, threatened, or endangered species under their jurisdiction are known to exist in the Project area. Coordination with the PAFO of the USFWS is ongoing, and updates will be provided to FERC upon receipt.

WV

Consultation with WVDNR, dated November 5, 2021, stated no records, surveys, or habitat surveys were found for RTE species at Project sites. WVDNR indicated crossings of North Fork Fishing Creek may require fish spawning waivers prior to instream work. Equitrans will acquire fish spawning waivers prior to instream work should they be required. Coordination with the WVFO of the USFWS is ongoing, updates will be provided to FERC upon receipt.

Agency Correspondence is provided in Appendix 3-A.

3.1.4 Construction and Operation Impacts and Mitigation to Fishery Resources

The Project will employ specific construction techniques (see Section 1.3 in Resource Report 1) to minimize the effects of construction on habitats in and along as well as downstream of the pipeline stream crossings. Waterbody crossing methodology is identified and discussed in Resource Report 2. These crossings include conventional open-cut trenching, dry ditch crossing methods including dam and pump and flume techniques.

Crossing streams via the dry ditch method will temporarily affect water flow and quality. In general, construction activities will disturb streambeds and banks as well as increase erosion and sediment potential. Increased sedimentation and the disruption of water flow may increase

turbidity levels within the stream. Temporary alteration of stream banks and removal of riparian vegetation may affect bank stability resulting in deposition of eroded soils downstream. To minimize these impacts, trench spoil from minor and intermediate waterbody crossings will be placed in the construction right-of-way (ROW) sufficiently far from the water's edge or in additional extra work areas. These materials will be protected by erosion control devices that prevent, or significantly reduce, sediment runoff from entering waterbodies. No major waterbody crossings are proposed.

In addition to impacts from waterbody crossing, waterways may be affected by clearing, grading, and trenching activities in adjacent uplands. Surface drainage patterns and hydrology could be temporarily altered and could increase the potential for trenches to act as a drainage channel. Disturbance of adjacent wetlands could impair the capacity to control erosion and flooding. Prior to and during construction, Equitrans will implement the mitigation measures contained in FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan* (Plan) and *Wetland and Waterbody Construction and Mitigation Procedures* (Procedures), and Project Erosion and Sediment Control Plan (ESCP), such as silt fences and other structures used to direct sediment-laden flow to well-vegetated areas.

Inadvertent release of equipment-related fluids may have an impact on water quality. To prevent fuel spills, construction activities will be conducted in accordance with Equitrans' Spill Prevention, Control, and Countermeasure Plan) and Unanticipated Discovery of Contamination Plan (Resource Report 2, Appendix 2-B).

Impacts to waterbodies described in this section will be minimized by using the construction techniques described in Resource Report 2. Operation of the facilities is not anticipated to impact aquatic organisms and their habitats. Equitrans will continue to consult with appropriate federal and state agencies to avoid or limit impacts on fisheries, as appropriate.

3.2 Wildlife

Major natural habitat types within the Project area are described in this section. The terrestrial resources affected by the Project include areas identified along the proposed pipeline corridor, access roads, additional temporary workspaces, and aboveground facilities.

3.2.1 Existing Wildlife Resources

The Project crosses a variety of habitats commonly found in rural, agricultural, and forested areas of southeastern OH, southwestern PA, and northwestern WV. The primary land use in the Project area is mixed deciduous forest. Other landforms crossed or abutting the Project include open fields, agricultural fields, and riparian areas. As discussed in Resource Report 2, emergent and scrub-shrub wetlands were identified during field survey within the Project area. As discussed in Resource Report 8, Section 8.3, there are no known existing or proposed National Wildlife Refuges, nature preserves, natural areas, or state wildlife management areas within the Project area.

Mammalian species likely to inhabit the Project area include the white-tailed deer (*Odocoileus virginianus),* Virginia opossum (*Didelphis virginiana*), eastern gray squirrel (*Sciurus carolinensis*), eastern chipmunk (*Tamias striatus*), raccoon (*Procyon lotor*), coyote (*Canis latrans*), red fox (*Vulpes vulpes*), eastern cottontail (*Sylvilagus floridanus*), striped skunk (*Mephitis mephitis*), and North American beaver (*Castor canadensis*), as well as several species of mice, shrews, and voles (NatureServe, 2021).

Reptiles and amphibians present in the Project area may include the copperhead (*Agkistrodon contortrix*), ring-necked snake (*Diadophis punctatus*), red-bellied snake (*Storeria occipitomaculata),* eastern fence lizard (*Sceloporus undulatus*), eastern box turtle (*Terrapene carolina*), common snapping turtle *(Chelydra serpentine*), American toad (*Anaxyrus americanus*), green frog (*Lithobates catesbeianus*), gray tree frogs (*Dryophytes sp.*), wood frog

(*Lithobates sylvaticus*), and salamanders of the genera *Ambystoma, Desmognathus,* and *Plethodon* (NatureServe, 2021).

Bird species likely to inhabit the Project area include the American woodcock (*Scolopax minor*), northern cardinal (*Cardinalis cardinalis*), cedar waxwing (*Bombycilla cedrorum*), Cooper's hawk (*Accipiter cooperii*), Pileated woodpecker (*Dryocopus pileatus*), ruffed grouse (*Bonasa umbellus*), wild turkey (*Meleagris gallopavo*), eastern meadowlark (*Sturnella magna*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), and great blue heron (*Ardea herodias*) (NatureServe, 2021).

Common game species may occur within the Project area include black bear (*Ursus americanus*), white-tailed deer, wild turkey, ruffed grouse, bobwhite quail (*Colinus virginianus*), eastern cottontail, snowshoe hare (Lepus americanus), ring-necked pheasant (*Phasianus colchicus),* raccoon, bobcat (Lynx rufus), Virginia opossum, woodchuck (*Marmota monax*), weasel (*Mustela frenata*), and various squirrel species (ODNR, 2021b; PGC, 2021a; and WVDNR, 2021e).

OH

As previously discussed in Section 3.1.3, the Project in OH does not propose impacts to streams, floodplains or wetlands, and does not propose tree clearing or subsurface impacts to bat hibernaculum; therefore, the Project is not likely to impact state-listed species provided by ODNR. Equitrans provided a follow-up letter to ODNR on January 12, 2022, requesting concurrence that the Project was not likely to impact state-listed species. Additional information will be provided to FERC upon receipt. Consultation with the OHFO of the USFWS, dated November 23, 2021, indicated that due to the project type, size, location, and the proposed implementation of seasonal tree cutting (clearing of trees greater than or equal to three inches diameter at breast height between October 1 and March 31) to avoid impacts to the endangered Indiana bat (*Myotis sodalis*) and threatened northern long-eared bat (*Myotis septentrionalis*), that they do not anticipate adverse effects to other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. USFWS-OH indicated no tree clearing should occur on the Project area until consultation under Section 7 of the ESA, between the USFWS and FERC, is completed. USFWS-OH recommend FERC submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for their review and concurrence. The Project scope in OH does not propose tree clearing.

PA

Consultation with the PGC, dated October 25, 2021, indicated species or resources of concern are within the vicinity of the Project. However, based on the information provided by Equitrans concerning the nature of the Project and limits of disturbance, the PGC determined no impact is likely and no further coordination with the PGC would be necessary for the Project. Consultation with the PFBC dated October 22, 2021, communicated with exception to transient species, no rare, candidate, threatened, or endangered species under their jurisdiction are known to exist in the Project area. No impact is anticipated, and no further coordination with PFBC will be necessary for the Project. Coordination with the PAFO of the USFWS is ongoing, updates will be provided to FERC upon receipt.

WV

Consultation with WVDNR, dated November 5, 2021, stated no records, surveys, or habitat surveys were found for RTE species at Project sites. WVDNR recommended coordination with USFWS for habitat buffers of the Indiana Bat. Coordination with the WVFO of the USFWS is ongoing, updates will be provided to FERC upon receipt.

Agency Correspondence is provided in Appendix 3-A.

3.2.2 Significant or Sensitive Wildlife Habitat

Significant or sensitive wildlife habitats include wildlife management areas, refuges, and other known resources are of critical importance to wildlife. As discussed in Resource Report 8, Section 8.3, there are no known existing or proposed National Wildlife Refuges, nature preserves, natural areas, or state wildlife management areas within the 0.25-mile of the Project.

OH

The Plasma Compressor Station is approximately 1.5 miles from Sunfish Creek State Forest (ODNR, 2021c). As discussed in Resource Report 1, the Plasma Compressor Station is existing and the Project proposes expansion to accommodate additional compression therefore, due to the existing nature of the facility and minor expansion area, distance from the state forest and the presence of existing forest buffer, Equitrans does not anticipate impacts to the state forest.

PA

One significant wildlife habitat is near the Project in PA: State Game Lands (SGL) 179 (PGC, 2021b). SGL 179 is broken into two parcels of land situated on either side of PA Route 18 in Greene County. The southeastern portion of SGL 179 is 1.6 miles east of the Cygrymus Compressor Station, 1.4 miles east of Shough Creek Valve Yard, and one -mile east of contractor yard CY-PA18-South. The northwestern section of SGL 179 lies 1.6 miles to the west of contractor yard CY-PA18-North. This SGL is owned and operated by the PGC as a public hunting property. Due to the distance from the Project, Equitrans does not anticipate impacts to SGL 179.

WV

A single contractor yard (CY-WV20) is within one mile of the Lewis Wetzel Wildlife Management Area (WMA) and the adjacent Lantz Farm and Nature Preserve (WVDNR, 2021b). The WMA is owned and managed by WVDNR Wildlife Resources Section as a public hunting and fishing area. Because this Project component is temporary and lies in a previously disturbed area, no impacts are anticipated.

3.2.3 Migratory and Non-Migratory Birds

The vegetation communities in the Project area are utilized by a variety of migratory and non-migratory bird species. The Migratory Bird Treaty Act (MBTA), passed in 1918, implements the US commitment to four bilateral treaties, or conventions, for the protection of a shared migratory bird resource, protecting more than 800 species of birds. The list of migratory bird species protected by the MBTA appears in Title 50, Section 10.13, of the Code of Federal Regulations (CFR) (50 CFR § 10.13). The MBTA provides it is unlawful to pursue, hunt, take, capture, kill, possess, sell, purchase, barter, import, export, or transport migratory bird, or part, nest, or egg of such bird, unless authorized under a permit issued by the Secretary of the Interior for certain types of activities. Take is defined in regulations as: “pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect” (50 CFR § 10.13) (USFWS, 2021a). Executive Order 13186 (January 2001) directs federal agencies to consider the effects of agency actions on migratory birds, with emphasis on bird species of concern.

The Birds of Conservation Concern (BCC) list was developed because of a 1988 amendment to the Fish and Wildlife Conservation Act. The Fish and Wildlife Conservation Act mandates the USFWS “identify species, subspecies, and populations of all migratory non-game birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973.” *Birds of Conservation Concern 2021* (USFWS,

2021b) is the most recent effort to carry out this mandate. The goal of the BCC list is to prevent or remove the need for additional ESA bird listings by implementing proactive management and conservation action. The USFWS Division of Migratory Bird Management provides this list to highlight migratory bird species that may be affected by pending human activity. Table 3.2-1 summarizes the priority migratory bird species that may occur within the Project area.

On March 30, 2011, the USFWS and FERC entered a voluntary Memorandum of Understanding (MOU) that focuses on avoiding or minimizing adverse effects on migratory birds and strengthening migratory bird conservation through enhanced collaboration between the two federal agencies. The MOU does not authorize the take of migratory birds or waive legal requirements under MBTA, Bald and Golden Eagle Protection Act (BGEPA), the federal ESA of 1973, or other statutes. This includes "incidental take," which is the unintentional killing of birds. Therefore, developers may be held responsible for migratory birds harmed during construction efforts.

Bird Conservation Regions (BCRs) are regions that encompass landscapes with similar bird communities, habitats, and resource management issues [North American Bird Conservation Initiative (NABCI), 2021]. BCRs were established to facilitate a regional approach to bird conservation and to identify overlapping or conflicting conservation priorities. There are 67 BCRs used by the NABCI to implement landscape-scale bird conservation. The Project is within the Appalachian Mountains BCR (BCR 28), which is described in further detail below.

BCR 28 consists of rugged terrain dominated by deciduous forest types at lower elevations and by various combinations of pine, hemlock, spruce, and fir at higher elevations. While flatter portions are in agricultural use, most of the region is forested. Priority forest birds include cerulean warblers (*Setophaga cerulea*), black-throated blue warblers (*Setophaga caerulescens*), golden-winged warblers (*Vermivora chrysoptera*), and Henslow's sparrows (*Ammodramus henslowii*). BCR 28 contains the headwaters of several major eastern US river systems used by various waterfowl during migration (NABCI, 2021).

Table 3.2-1

Birds of Conservation Concern Potentially Occurring in the Vicinity of the Project

Common Name	Scientific Name	Presence[1]	Breeds in Region[2]
Yellow-billed cuckoo	*Coccyzus americanus*	B, M	Yes
Black-billed cuckoo	*Coccyzus erythropthalmus*	B, M	Yes
Common Nighthawk	*Chordeiles minor*	B, M	Yes
Eastern whip-poor-will	*Antrostomus vociferus*	B, M	Yes
Chimney swift	*Chaetura pelagica*	B, M	Yes
American golden-plover	*Pluvialis dominica*	M	No
Upland sandpiper	*Bartramia longicauda*	M	No
Dunlin	*Calidris alpina*	M	No
Pectoral sandpiper	*Calidris melanotos*	M	No
Semipalmated sandpiper	*Calidris pusilla*	M	No
Short-billed dowitcher	*Limnodromus griseus*	M	No
Lesser yellowlegs	*Tringa flavipes*	M	No
Black tern	*Chlidonias niger*	M	No
Common tern	*Sterna hirundo*	M	No
Long-eared owl	*Asio otus*	NB	No

Table 3.2-1 (continued)

Common Name	Scientific Name	Presence[1]	Breeds in Region[2]
Short-eared owl	*Asio flammeus*	NB	No
Northern saw-whet owl	*Aegolius acadicus*	NB	Yes
Belted kingfisher	*Megaceryle alcyon*	YR	No
Red-headed woodpecker	*Melanerpes erythrocephalus*	YR	Yes
American kestrel	*Falco sparverius*	YR	No
Black-capped chickadee	*Poecile atricapillus*	YR	Yes
Veery	*Catharus fuscescens*	M	No
Wood thrush	*Hylocichla mustelina*	B, M	Yes
Grasshopper sparrow	*Ammodramus savannarum*	B, M	No
Field sparrow	*Spizella pusilla*	YR	No
Henslow's sparrow	*Centronyx henslowii*	B, M	Yes
Bobolink	*Dolichonyx oryzivorus*	B, M	Yes
Eastern meadowlark	*Sturnella magna*	B, M	No
Rusty blackbird	*Euphagus carolinus*	M, NB	No
Golden-winged warbler	*Vermivora chrysoptera*	B, M	Yes
Blue-winged warbler	*Vermivora cyanoptera*	B, M	No
Prothonotary warbler	*Protonotaria citrea*	B, M	Yes
Connecticut warbler	*Oporornis agilis*	M	No
Kentucky warbler	*Geothlypis formosa*	B, M	Yes
Kirtland's warbler	*Setophaga kirtlandii*	M	No
Cerulean warbler	*Setophaga cerulea*	B, M	Yes
Prairie warbler	*Setophaga discolor*	B, M	Yes
Canada warbler	*Cardellina canadensis*	M	Yes
Rose-breasted grosbeak	*Pheucticus ludovicianus*	M	No

Notes:

1 As indicated by mapping provided by the Cornell Lab of Ornithology (Cornell, 2019). B = breeding season (spring and summer); M = potential presence during migration; NB = nonbreeding season (fall and winter); YR = year-round.

2 As indicated by 2021 USFWS BCC list for BCR 28 (USFWS, 2021b).

Bald and golden eagles are afforded additional protection under the BGEPA, which prohibits the take, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of bald or golden eagle, alive or dead, including part, nest, or egg, unless allowed by permit (16 United States Code ["U.S.C."] 668(a); 50 CFR Part 22). "Take" under the BGEPA is defined as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." "Disturb" means "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle; (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior; or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

Based on review of the PA Bald Eagle Nesting Locations online mapping tool no eagle nests have been observed within the PA section of the Project (USFWS, 2021c). Public data is not

readily available regarding the exact location of bald or golden eagle nests in OH or WV (ODNR, 2021f; WVDNR, 2021c). No bald or golden eagle nests had been identified during Project field review. If eagles are encountered during Project activities, the Project will adhere to the general migratory bird avoidance measures and USFWS avoidance measures specific to eagles outlined in Section 3.4.1.3. If eagle nests are discovered during Project activities, Equitrans will coordinate with the USFWS regarding measures to be implemented to maintain compliance with the BGEPA.

Equitrans will implement voluntary minimization and mitigation measures to minimize impacts to migratory birds during construction and operation of the Project. Where practicable, the Project will utilize existing access roads and contractor yards or locate access roads and contractor yards within previously cleared or disturbed areas. The Project has been co-located with existing ROW, where feasible. In accordance with FERC's Plan and Procedures, Equitrans will not conduct vegetation maintenance over the full width of the permanent ROW in wetlands or at waterbodies. A riparian strip at least 25 feet wide, measured from a waterbody's mean high watermark, will be allowed to revegetate with native plant species and will not be maintained. However, to facilitate periodic pipeline corrosion/leak surveys in wetlands or at waterbodies, a corridor centered on the pipeline up to 10 feet wide will be maintained in an herbaceous state. In addition, to prevent damage to the pipeline, trees within 15 feet of the pipeline which are greater than 15 feet in height will be selectively cut and removed for the entire length of the permanent ROW. No herbicides or pesticides will be used within 100 feet of a wetland or waterbody except as allowed by the applicable land management or state agency. The frequency of the vegetation maintenance for the entire length of the ROW will not exceed once every three years except for a 10-foot-wide corridor directly over the centerline, which would be maintained annually as needed for corrosion testing and other maintenance activities. Routine vegetation mowing, and clearing will not take place between April 15 to August 1 of any year.

The Project will adhere to the Project-specific ESCP, which determine restoration and revegetation techniques and are coordinated with OEPA, PADEP, and WVDEP.

In the United States, the National Audubon Society administers an Important Bird Area (IBA) program to identify and conserve a network of sites that provide critical habitat for birds. IBAs are selected according to standardized criteria, through a collaborative effort with non-governmental conservation organizations, government agencies, local conservation groups, academics, birders, and others. In PA, IBAs are designated by the PA Ornithological Technical Committee and are recognized as the most critical regions in the Commonwealth for conserving bird diversity and abundance. The Project components in PA lie within the Greene County Forest Block, which is recognized as a state IBA [site ID: 5022 (Audubon, 2021)]. All Project components in WV except for contractor yard CY-WV20 lie within a portion of the Southern Allegheny Plateau Forest Block Complex (IBA Site ID: 5072), which is an IBA of global priority. The Lewis Wetzel WMA mentioned in Section 3.2.2 is an IBA of global priority (Site ID: 3447). The Project does not cross nor abuts IBAs in OH.

Equitrans is coordinating with the respective field offices of the USFWS regarding MBTA and BGEPA and will provide updates to FERC as needed pending further consultations with the USFWS. Agency Correspondence is provided in Appendix 3-A.

3.2.4 Construction and Operation Impacts and Mitigation to Wildlife Resources

Pipeline and aboveground facility construction are expected to have minor, short-term impacts on wildlife habitat, causing localized effects on resident fauna. The Project will impact a variety of habitats including upland forests, open land, wetlands, agricultural land and commercial and developed lands. Table 3.3-1 shows the vegetation communities impacted by the Project.

Clearing and grading of the proposed ROW will result in the temporary loss of vegetative cover and may result in the loss of less mobile fauna, such as small rodents, reptiles, and invertebrates unable to escape the construction area. It is anticipated most wildlife can relocate to suitable adjacent habitat during construction. After construction, wildlife is expected to return and colonize the post-construction habitats. Species diversity is expected to remain at or near pre-construction conditions following restoration of the pipeline ROW.

The impacts likely to occur from the construction and operation of the Project are not expected to be significant given the mobile nature of the wildlife in the area, the availability of similar habitat adjacent to the Project area, and the compatible nature of the restored ROW with species occurring in the area. Project construction may have short-term effects to wildlife species. No long-term wildlife impacts are anticipated, as plentiful and suitable wildlife habitats are present adjacent to the proposed Project area.

3.3 Vegetation

This section describes the vegetation resources encountered within and adjacent to the construction and operation areas of the Project area. Included are descriptions of representative plant communities found in the Project area, descriptions of unique or protected vegetation, and methods Equitrans will employ to minimize impacts to resources.

3.3.1 Project Ecoregions

Ecoregions represent areas of general similarity in ecosystems and the type, quality, and quantity of environmental resources. They are a useful means of characterizing and describing landscapes at a large scale. Ecoregions are identified by analyzing the patterns and composition of biotic and abiotic factors that correlate to ecosystem quality, such as geology, physiography, vegetation, climate, soils, land use, wildlife, and hydrology. The Project study area for vegetation resources falls within the Western Allegheny Plateau Level III Ecoregion [United States Environmental Protection Agency (USEPA), 2021].

The Western Allegheny Plateau ecoregion is characterized by rounded hills, ridges, and broad valleys. A network of tributaries to the Ohio River run through the unglaciated plateau. The forest area is mixed oak and mixed temperate forests. Dairy, livestock, and general agriculture, as well as residential developments, are concentrated in the valleys. Coal mining is active in the region (USEPA, 2021).

3.3.2 Existing Vegetation Resources

Primary land uses within the proposed Project limit of disturbance (LOD) include forest, open land, agricultural land, developments, open water, and existing maintained utility ROW. The Project topography contains rolling hill slopes, ridgetops, steep hillsides, upland and wetland areas, and wide stream valleys.

Forest communities observed throughout the Project area included species such as red maple (*Acer rubrum*), red oak (*Quercus rubra*), white oak (*Quercus alba*), black cherry (*Prunus serotina*), black walnut (*Juglans nigra*), American beech (*Fagus grandifolia*), tulip poplar (*Liriodendron tulipfera*), slippery elm (*Ulmus rubra*), sugar maple (*Acer saccharum*), American hornbeam (*Carpinus caroliniana*), white pine (*Pinus strobus*), red pine (*Pinus resinosa*), and eastern hemlock (*Tsuga canadensis*).

Shrub species throughout the Project area include Allegheny blackberry (*Rubus allegheniensis*), American honeysuckle (*Lonicera canadensis*), black raspberry (*Rubus occidentalis*), spice bush (*Lindera benzoin*), winterberry (*Ilex verticillata*), silky dogwood *(Cornus amomum*), greenbrier (*Smilax spp.*), and black willow (*Salix nigra*).

Open land throughout the Project area included herbaceous species such as goldenrod (*Solidago spp.*), red clover (*Trifolium pratense*), white clover (*Trifolium repens*), wingstem

(*Verbesina alterniflora*), deertongue (*Dichanthelium clandestinum*), agrimony species (*Agrimonia* spp.), soft rush (*Juncus effuses*), woolgrass (*Scirpus cypernius*), cattail species (*Typha* spp.), sedge species (*Carex* spp.), and sensitive fern (*Onoclea sensibilis*).

Common noxious weeds and invasive plants in OH, PA, and WV within the Project area include autumn olive (*Elaegnus umbellata*), multiflora rose (*Rosa multiflora*), johnsongrass (*Sorghum halepense*), garlic mustard (*Alliaria petiolate*), Canadian thistle (*Cirsium arvense*), bull thistle (*Cirsium vulgare*), Asiatic tearthumb (*Polygonum perfoliatum*), kudzu (*Pueraria lobata*), giant hogweed (*Heracleum mentegazzianum*), tree of heaven (*Ailanthus altissima*), Japanese honeysuckle (*Lonicera japonica*), and purple loosestrife (*Lythrum salicaria*) [United States Department of Agriculture, Natural Resources Conservation Service, 2021; OH Department of Agriculture (ODA), 2021; ODNR, 2021d; PADCNR, 2021; and WVDNR, 2021d].

The plant communities observed during field investigations for wetland and streams were recorded on the United States Army Corps of Engineers (USACE) Wetland Determination Data Form and included in the Wetland and Stream Investigation Report (Appendix 2-C, Resource Report 2). The identified dominant species at the data points were correlated with land use classifications as detailed in Resource Report 8 to report the dominant species in the observed habitat communities described below.

OH

As discussed in Section 3.1.3, the Project in OH does not propose impacts to streams, floodplains or wetlands, and does not propose tree clearing or subsurface impacts to bat hibernaculum; therefore, the Project is not likely to impact state-listed species provided by ODNR. Consultation with the OHFO of the USFWS, dated November 23, 2021, indicated that due to the project type, size, location, and the proposed implementation of seasonal tree cutting (clearing of trees greater than or equal to three inches diameter at breast height between October 1 and March 31) to avoid impacts to the endangered Indiana bat (*Myotis sodalis*) and threatened northern long-eared bat (*Myotis septentrionalis*), they do not anticipate adverse effects to other federally endangered, threatened, or proposed species, or proposed or designated critical habitat.

PA

Consultation with the PADCNR dated October 26, 2021, stated potential impacts are anticipated on Elliott's beardgrass *(Andropogon gyrans)* which is a state-proposed rare species. PADCNR stated potential impacts are anticipated for Elliott's beardgrass *(Andropogon gyrans)* and requested a survey for Elliott's beardgrass *(Andropogon gyrans)*. A survey was conducted on November 23, 2021, and the survey results were provided to the PADCNR on January 13, 2022. PADCNR provided a response on January 20, 2022, indicating no impact anticipated per survey with avoidance and minimization measures. Coordination with the PAFO of the USFWS is ongoing, updates will be provided to FERC upon receipt.

WV

Consultation with WVDNR, dated November 5, 2021, stated no records, surveys, or habitat surveys were found for RTE species at Project sites. Coordination with the WVFO of the USFWS is ongoing, updates will be provided to FERC upon receipt.

Agency Correspondence is provided in Appendix 3-A.

3.3.3 Construction and Operation Impacts and Mitigation to Vegetation Resources

As detailed in Resource Report 8, Table 8.1-2, the primary impact on vegetation will occur from loss of forest cover along the Project ROW. Equitrans sited its Project with the primary goal of collocating with existing utility corridors wherever possible to safely construct the pipeline. As

detailed in Resource Report 8, the Project is collocated with existing utility corridors to the extent practicable. Resource Report 8, Table 8.1-3, details the components of the Project collocated in existing ROW corridors to minimize impacts on forested land as well as wildlife and fisheries habitats.

Access roads proposed for the Project may be expanded up to 40 feet wide to accommodate construction vehicles. Equitrans is evaluating line of sight for safe use of access roads proposed for the Project. Where an access road meets a public road, Equitrans will identify if additional vegetation clearing is required to create sufficient line of sight. Equitrans will provide additional vegetation clearing requirements to FERC should they be necessary beyond the proposed LOD.

The Project will result in temporary vegetation impacts within the LOD. After construction, Equitrans will grade the construction ROW to restore pre-construction contours to the extent practicable and backfill the soil in the proper condition for revegetation efforts. To re-establish pre-construction vegetation, Equitrans will adhere to the FERC Plan and Procedures and according to applicable state requirements. This will include preparing a seedbed in disturbed areas and seeding of permanent vegetation within the recommended seeding dates. A summary of vegetation habitats impacted for construction and operation of the Project is presented in Table 3.3-1.

3.3.3.1 Invasive and Noxious Weed Species Management

Noxious weeds are opportunistic plants that readily flourish in disturbed areas, preventing native plant species from establishing successful communities. Invasive species are considered non-native to the ecosystem and whose introduction causes or is likely to cause economic or environmental harm or harm to human health. Invasive plants include not only noxious weeds but other plants not native to an area. Equitrans developed a Noxious Weed/Invasive Plant Species Control and Mitigation Plan for controlling invasive and noxious species in areas disturbed by the Project, which can be found in Appendix 3-B.

The ODA, PA Department of Agriculture (PADA), and WVDNR maintain lists of invasive plant species for their respective states (ODA, 2021; PADA, 2021; and WVDNR, 2021b).

Prior to construction, Equitrans' EI will review for noxious and invasive species, mark the areas of concern of non-native, noxious or invasive plants within the ROW based on pre-construction conditions to alert construction contractors to areas where control measures need to be implemented to reduce the spread of the species.

To control the spread of noxious weed species within the Project area, control measures will be implemented in accordance with existing regulations and landowner agreements. Equitrans will adhere to erosion control measures in FERC's Plan and Procedures to minimize sediment flow into newly disturbed soils, and therefore reduce the potential for invasive plant seed distribution. In addition, Equitrans will implement the Noxious Weed/Invasive Plan Species Control and Mitigation Plan included in Appendix 3-B.

During active construction and until the Project ROW is successfully revegetated, the Environmental Inspector(s) will review the Project ROW for new growth of noxious weed species as outlined in FERC's Plan and Procedures. If new areas of growth are observed, Equitrans will coordinate with landowners and applicable agencies to address concerns.

Table 3.3-1

Vegetation Communities Affected by Construction and Operation of the Project[1]

	Forest		Open Land				Agricultural Land		Developed[4]		Wetlands				Open Water[5]		Total	
			Scrub-Shrub		Herbaceous						Emergent		Scrub-Shrub					
Facility/County, State	Const.[2]	Op.[3]	Const.[2]	Op.[3]	Const.[2]	Op.[3]	Const.[2]	Op.[3]	Const.[2]	Op.[3]	Const.[2]	Op.[3]	Const.[2]	Op.[3]	Const.[2]	Op.[3]	Const.[2]	Op.[3]
Pipeline Facilities																		
H-327 and H-328 Pipelines, Greene County, PA[6]																		
Pipeline	3.96	1.97	0.21	0.08	1.21	0.74	0.00	0.00	0.01	0.01	0.02	<0.01	0.01	0.01	0.02	0.01	**5.43**	**2.81**
ATWS	0.00	0.00	0.04	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.10**	**0.00**
Deep Anode Groundbed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Access Road[7]	0.01	0.01	0.03	0.03	0.32	0.32	0.00	0.00	0.29	0.29	0.00	0.00	0.00	0.00	<0.01	<0.01	**0.65**	**0.65**
Staging/Parking Areas	0.00	0.00	<0.01	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.05**	**0.00**
Contractor Yards[8]	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**8.55**	**0.00**
H-327 and H-328 Pipelines, Subtotals	***4.13***	***1.99***	***0.28***	***0.11***	***1.61***	***1.05***	***0.00***	***0.00***	***8.71***	***0.30***	***0.02***	***<0.01***	***0.01***	***0.01***	***0.02***	***0.01***	***14.78***	***3.47***
H-326 Pipeline, Wetzel County, WV[9]																		
Pipeline	29.39	12.54	0.57	0.35	10.90	7.41	0.42	0.28	0.95	0.67	0.03	0.02	0.00	0.00	0.09	0.05	**42.35**	**21.33**
ATWS	3.42	0.00	0.20	0.00	1.07	0.00	0.94	0.00	0.09	0.00	0.02	0.00	0.00	0.00	<0.01	0.00	**5.73**	**0.00**
Deep Anode Groundbed	*None*																	
Access Road[7]	3.76	0.00	0.16	0.00	4.33	0.04	0.05	0.00	0.81	0.21	0.00	0.00	0.00	0.00	0.02	-	**9.13**	**0.25**
Staging/Parking Areas	0.56	0.00	0.01	0.00	0.63	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**1.87**	**0.00**
Contractor Yards[8]	0.01	0.00	0.16	0.00	4.23	0.00	0.00	0.00	3.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**7.54**	**0.00**
H-326 Pipeline Subtotals	***37.14***	***12.54***	***1.09***	***0.35***	***21.17***	***7.46***	***1.41***	***0.28***	***5.65***	***0.88***	***0.05***	***0.02***	***0.00***	***0.00***	***0.11***	***0.05***	***66.61***	***21.58***
H-329 Pipeline, Wetzel County, WV																		
Pipeline	<0.01	0.00	0.05	0.04	0.10	0.05	0.00	0.00	<0.01	<0.01	0.00	0.00	0.00	0.00	0.00	0.00	**0.15**	**0.09**
ATWS	*None*																	
Deep Anode Groundbed	*None*																	
Access Road[7]	0.00	0.00	0.00	0.00	0.14	0.14	0.00	0.00	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	**0.26**	**0.26**
Staging/Parking Areas	*None*																	
Contractor Yards[8]	*None*																	
H-329 Pipeline Subtotals	***<0.01***	***0.00***	***0.05***	***0.04***	***0.24***	***0.20***	***0.00***	***0.00***	***0.12***	***0.12***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.41***	***0.35***
H-330 Pipeline, Wetzel County, WV[9]																		
Pipeline	2.96	1.48	0.06	0.02	4.72	2.36	0.00	0.00	0.28	0.22	0.05	0.04	0.00	0.00	0.01	<0.01	**8.08**	**4.11**
ATWS	0.10	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.46**	**0.00**
Deep Anode Groundbed	*None*																	
Access Road[7]	0.57	0.00	0.00	0.00	0.03	0.03	0.00	0.00	0.33	0.33	0.06	0.06	0.00	0.00	0.00	0.00	**0.99**	**0.42**
Staging/Parking Areas	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.32**	**0.00**
Contractor Yards[8]	*None*																	
H-330 Pipeline Subtotals	***3.70***	***1.48***	***0.06***	***0.02***	***5.02***	***2.39***	***0.00***	***0.00***	***0.94***	***0.55***	***0.11***	***0.09***	***0.00***	***0.00***	***0.02***	***0.00***	***9.84***	***4.53***
H-330 Spur, Wetzel County, WV																		
Pipeline	0.00	0.00	0.00	0.00	0.22	0.12	0.00	0.00	0.08	0.08	0.10	0.02	0.00	0.00	0.00	0.00	0.40	0.21
ATWS	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.05	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.16	0.00
Deep Anode Groundbed	*None*																	
Access Road[7]	*None*																	
Staging/Parking Areas	*None*																	
Contractor Yards[8]	*None*																	
H-330 Spur Subtotals	***0.01***	***0.00***	***0.01***	***0.00***	***0.23***	***0.12***	***0.00***	***0.00***	***0.13***	***0.08***	***0.18***	***0.02***	***0.00***	***0.00***	***0.00***	***0.00***	***0.56***	***0.21***

Table 3.3-1 (continued)

	Open Land										Wetlands							
	Forest		Scrub-Shrub		Herbaceous		Agricultural Land		Developed[4]		Emergent		Scrub-Shrub		Open Water[5]		Total	
Facility/County, State	**Const.[2]**	**Op.[3]**	**Const.[2]**	**Op.[3]**	**Const.[2]**	**Op.[3]**	**Const.[2]**	**Op.[3]**	**Const.[2]**	**Op.[3]**	**Const.[2]**	**Op.[3]**	**Const.[2]**	**Op.[3]**	**Const.[2]**	**Op.[3]**	**Const.[2]**	**Op.[3]**
Pipeline Facilities																		
Logansport Spur, Wetzel County, WV																		
Pipeline	0.00	0.00	0.03	0.00	0.38	0.00	0.00	0.00	3.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**3.75**	**0.0**
ATWS	*None*																	
Deep Anode Groundbed	*None*																	
Access Road[7]	*None*																	
Staging/Parking Areas	*None*																	
Contractor Yards[8]	*None*																	
Logansport Spur Subtotals	***0.00***	***0.00***	***0.03***	***0.00***	***0.38***	***0.00***	***0.00***	***0.00***	***3.34***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***3.75***	***0.00***
Pipeline Facilities Subtotals	**44.98**	**16.01**	**1.53**	**0.52**	**28.65**	**11.21**	**1.41**	**0.28**	**18.89**	**1.92**	**0.35**	**0.13**	**0.01**	**0.01**	**0.14**	**0.07**	**95.96**	**30.14**
Aboveground Facilities																		
PA Aboveground Facilities																		
Shough Creek Valve Yard, Green County, PA[10]	0.00	0.00	<0.01	<0.01	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.06**	**0.06**
Cygrymus Compressor Station, Green County, PA[11]	3.09	0.06	0.59	<0.01	3.75	0.15	0.00	0.00	2.08	0.58	0.01	0.00	0.00	0.00	0.00	0.00	**9.51**	**0.80**
PA Subtotals	***3.09***	***0.06***	***0.59***	***<0.01***	***3.80***	***0.21***	***0.00***	***0.00***	***2.08***	***0.58***	***0.01***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***9.57***	***0.85***
WV Aboveground Facilities																		
Corona Compressor Station, Wetzel County, WV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**2.58**	**0.00**
Pickenpaw Interconnect, Wetzel County, WV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.08**	**0.00**
OVC Interconnect, Wetzel County, WV[12]	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.45	0.18	0.00	0.00	0.00	0.00	0.00	0.00	**0.49**	**0.22**
Mobley Run Tap Site, Wetzel County, WV	0.00	0.00	0.00	0.00	<0.01	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.25**	**0.00**
Liberty Valve Yard, Wetzel County, WV[10]	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	**0.02**	**0.02**
WV Subtotals	***0.00***	***0.00***	***0.01***	***0.01***	***0.05***	***0.05***	***0.00***	***0.00***	***3.34***	***0.18***	***0.01***	***0.01***	***0.00***	***0.00***	***0.00***	***0.00***	***3.41***	***0.24***
OH Aboveground Facilities																		
Plasma Compressor Station, Monroe County, OH[14]	0.00	0.00	0.02	0.01	2.69	1.13	0.00	0.00	4.93	<0.01	0.00	0.00	0.00	0.00	0.00	0.00	**7.64**	**1.14**
OH Subtotals	***0.00***	***0.00***	***0.02***	***0.01***	***2.69***	***1.13***	***0.00***	***0.00***	***4.93***	*<0.01*	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***0.00***	***7.64***	***1.14***
Aboveground Facilities Subtotals	***3.09***	***0.06***	***0.62***	***0.02***	***6.55***	***1.39***	***0.00***	***0.00***	***10.34***	***0.76***	***0.02***	***0.01***	***0.00***	***0.00***	***0.00***	***0.00***	***20.62***	***2.23***
Project Totals	**48.07**	**16.07**	**2.15**	**0.54**	**35.20**	**12.60**	**1.41**	**0.28**	**29.23**	**2.68**	**0.37**	**0.14**	**0.01**	**0.01**	**0.14**	**0.07**	**116.58**	**32.38**

Notes:

1 The numbers in this table have been rounded for presentation purposes. As a result, the totals may not reflect the sum of the addends in all cases or in related tables.

2 Land affected during construction is comprised of the permanent easement, temporary workspace, ATWS, staging areas, contractor yards, access roads and aboveground facility temporary and permanent workspace.

3 Land affected during operation includes the permanent easement, new/expanded aboveground facility area and permanent access roads.

4 Developed land is inclusive of Commercial/Industrial and Residential land use types.

5 Open water includes delineated waterbodies.

6 The H-327 and H-328 Pipelines are parallel pipelines within shared pipeline construction ROW.

7 Access roads have been designed to be expanded up to 40 feet wide.

8 Access roads associated with the contractor yards in PA and WV are included within the reported acreage for contractor yards. No contractor yards are proposed in OH.

9 Portions of the H-326 and H-330 Pipelines share construction ROW for 0.20-mile. Shared construction and operational impacts for the H-326 and H-330 Pipelines are accounted for under the H-330 Pipeline.

10 A portion of the facility is accounted for within the permanent pipeline ROW. The reported operational acreage represents the area of the facility beyond the permanent pipeline ROW.

11 Operational acreage for Cygrymus Compressor Station represents the area required for expansion at the existing station.

Table 3.3-1 (continued)

[12] Operational acreage for the OVC Interconnect represents the area required for expansion at the existing facility.

[13] Logansport Spur consists of modification within existing facility to install approximately 160 feet of 12-inch-diameter pipeline. Reported acreage represents the existing aboveground facility area.

[14] Construction Acreage reported for Plasma Compressor Station consists of the existing permanent access road, existing facility area, facility expansion area and temporary workspace. Operational acreage for Plasma Compressor Station represents the area required for expansion at the existing station.

3.4 Endangered, Threatened, and Special Concern Species

Section 7 of the Environmental Species Act requires Federal agencies to verify actions authorized, funded, or carried out do not jeopardize the continued existence of federally listed threatened or endangered species, or result in the destruction or adverse modification of designated critical habitat for federally-listed species. The law is jointly administered by the USFWS, which is responsible for terrestrial and freshwater species, and the National Marine Fisheries Service (NMFS), which is responsible for marine and anadromous species. As the lead Federal agency for authorizing the Project, FERC is required to coordinate with the USFWS and NMFS on activities that may affect a listed species to determine whether federally listed endangered or threatened species or designated critical habitat are found in the Projects, and to evaluate the potential effects of the proposed actions on those species and/or critical habitat. Most states enforce special requirements, guidelines, or recommendations for species that are state-listed. Equitrans has coordinated with the appropriate federal and state agencies, as detailed in Section 3.4.1.1.

3.4.1 Existing Resources

3.4.1.1 Agency Consultations

Equitrans initiated consultations regarding the Project with ODNR, PADCNR, PGC, PFBC, WVDNR, and the PAFO, WVFO, and OHFO of the USFWS on October 21, 2021. Agency consultation is provided in Appendix 3-A. A description of federal and state agency consultations is included below, along with planning tools referenced during the initial phases of the Project planning and design.

OHFO of the USFWS and ODNR

Consultation with the ODNR and the OHFO of the USFWS was initiated on October 21, 2021. Through this initial consultation, Equitrans introduced the overall Project, specific components applicable within OH, and provided the overall Project and state-specific location mapping. As discussed in Section 3.1.3, the Project in OH does not propose impacts to streams, floodplains or wetlands, and does not propose tree clearing or subsurface impacts to bat hibernaculum; therefore, the Project is not likely to impact state-listed species provided by ODNR. Equitrans provided a follow-up letter to ODNR on January 12, 2022, requesting concurrence that the Project was not likely to impact state-listed species. Additional information will be provided to FERC upon receipt. Consultation with the OHFO of the USFWS, dated November 23, 2021, indicated that due to the project type, size, location, and the proposed implementation of seasonal tree cutting (clearing of trees greater than or equal to three inches diameter at breast height between October 1 and March 31) to avoid impacts to the endangered Indiana bat (*Myotis sodalis*) and threatened northern long-eared bat (*Myotis septentrionalis*), they do not anticipate adverse effects to other federally endangered, threatened, or proposed species, or proposed or designated critical habitat. USFWS-OH indicated no tree clearing should occur on the Project area until consultation under Section 7 of the ESA, between the USFWS and FERC, is completed. USFWS-OH recommends FERC submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for their review and concurrence. The Project scope in OH does not propose tree clearing.

PAFO of the USFWS

Consultation with the PAFO of the USFWS was initiated on October 21, 2021, via email letter submittal and the PA Natural Diversity Inventory (PNDI) consultation tool. Equitrans introduced the overall Project and introduced the Project components applicable to PA as well as provided Project location mapping and anticipated tree clearing estimates. On January 3, 2022, the PAFO requested that Equitrans commit to limiting tree clearing to November 15-March 31. The office cited concerns over the potential of undiscovered bat hibernacula disturbed between October 1-November 15. On January 6, 2022, Equitrans agreed to limit cutting of trees in PA

between the dates of November 15-March 31. Coordination with the PAFO of the USFWS is ongoing, updates will be provided to FERC upon receipt.

PNDI Tool

The PA Natural Heritage Program (PNHP) is part of NatureServe, a network of natural heritage programs that gather and provide information on the location and status of important ecological resources. PNHP, through its partnership with PADCNR, PFBC, PGC, and in cooperation with USFWS, inventories ecological and geologic resources and makes them available through the PNDI environmental review tool (PNHP, 2019). The PNDI environmental review tool allows its user to quickly screen projects for potential impacts to threatened and endangered species and critical habitats. A PNDI Receipt with conservation measures, avoidance measures, or next steps for consultation with partnering agencies is provided to the user.

The PNDI receipt (PNDI-743054) for the Project indicated further coordination would be required with each of the partnering agencies (USFWS, PADCNR, PFBC, and PGC) because the Project spans a linear distance greater than 10 miles and is therefore categorized as a "Large Project." Additional Project information was provided to the four jurisdictional agencies on October 21, 2021. As of October 25, 2021, the PFBC and PGC have indicated no impacts to vulnerable species or habitat are anticipated. Consultation with the PADCNR, dated October 26, 2021, stated the potential for proposed rare plant species, [Elliott's beardgrass (*Andropogon gyrans*)], may be within the Project area in PA. The PADCNR requested a botanical survey be conducted by a qualified botanist. A survey was conducted on November 23, 2021, and the survey results were provided to the PADCNR on January 13, 2022. PADCNR provided a response on January 20, 2022, indicating no impact anticipated per survey with avoidance and minimization measures. The certified PNDI receipt (PNDI-743054) is provided as part of the correspondence with the PAFO of the USFWS, Appendix 3-A.

WVFO of the USFWS and WVDNR

Consultation with the WVDNR and the WVFO of the USFWS was initiated on October 21, 2021. Through this initial consultation, Equitrans introduced the overall Project, specific components within WV, and provided overall Project and state-specific location mapping and anticipated tree clearing estimates. WVDNR has no records, surveys, or habitat surveys of RTE species at Project Sites. WVDNR recommended coordination with USFWS for habitat buffers of the Indiana Bat. WVDNR indicated spawning waivers may be required prior to instream work at North Fork Fishing Creek; these will be acquired as necessary. Coordination with WVDNR has concluded. Coordination with the WVFO of the USFWS is ongoing, updates will be provided to FERC upon receipt.

Agency Correspondence is provided in Appendix 3-A.

3.4.1.2 Planning Tools

Information for Planning and Consultation Tool

The USFWS Environmental Conservation Online System (ECOS) is a gateway website that provides access to data systems in the USFWS and other government data sources. ECOS serves a variety of reports related to federally listed threatened and endangered species. ECOS uses the Information for Planning and Consultation (IPaC) project planning tool to streamline the USFWS environmental review process (USFWS, 2021d). The IPaC tool allows the user to obtain a list of species known to occur or are likely to occur within and around the limits of the Project's disturbance (USFWS, 2021e).

Two individual IPaC species lists were generated for this Project to coordinate with the USFWS WVFO and OHFO (Consultation Codes - OH: 03E15000-2021-SLI-2416; WV: 05E2WV00-2021-SLI-1006). The OH list indicated three threatened, endangered, or

candidate species have the potential to be affected by Project activities. The Indiana bat (*Myotis sodalis*), northern long-eared bat (*Myotis septentrionalis*), and monarch butterfly (*Danaus plexippus*). No critical habitats were found in the OH Project area. The WV review found the same two bat species and the monarch butterfly but included two endangered clam species: clubshell (*Pleurobema clava*) and snuffbox mussel (*Epilblasma triquetra*). As in OH and PA, no critical habitat lies in the WV Project area. The IPaC generated species list can be found accompanied with the WVFO and OHFO of the USFWS consultation letters provided in Appendix 3-A.

Consultation with the USFWS PAFO utilized the PNDI consultation tool for coordination regarding species under their jurisdiction. The USFWS PAFO consultation and the certified PNDI receipt (PNDI-743054) is provided in Appendix 3-A.

Table 3.4-1

Federal- and State-Listed Species Potentially Occurring within the Project Area[1]

Common Name[2]	Scientific Name	County, State	Federal Status	OH Status	PA Status	WV Status	Anticipated Habitat Impacts[3]
Indiana bat	*Myotis sodalis*	Monroe County, OH; Greene County, PA; Wetzel County, WV	Endangered	Endangered	Endangered	Endangered	To be determined
Northern long-eared bat	*Myotis septentrionalis*	Monroe County, OH; Greene County, PA; Wetzel County, WV	Threatened	Threatened	Endangered	Threatened	To be determined
Clubshell	*Plerobema clava*	Wetzel County, WV	Endangered	Endangered	Endangered	Endangered	To be determined
Snuffbox mussel	*Epioblasma triquetra*	Wetzel County, WV	Endangered	Endangered	Endangered	Endangered	To be determined
Monarch butterfly	*Danaus plexippus*	Monroe County, OH; Greene County, PA; Wetzel County, WV	Candidate	Not listed	Not listed	Not listed	To be determined
Elliott's beardgrass	*Andropogon gyrans*	Greene County, PA	Not listed	Not listed	Proposed Rare	Not listed	To be determined

Notes:

1 Coordination with the PAFO and WVFO of the USFWS, and ODNR, is ongoing with regards to Federal and State Listed species.

2 Includes species identified through official species list identified in the IPaC, PNDI review and consultations to date.

3 Habitat impacts will be interpreted upon receipt of consultations from federal and state agencies. Information will be updated as needed.

3.4.1.1 Federal and State-Listed Species Impacts and Mitigation

Species identified during IPaC review, PNDI review and consultations to date are outlined in Table 3.4-1. Coordination with the PAFO, and WVFO of the USFWS, and ODNR is ongoing with regards to Federal and State Listed species. Equitrans will provide updates to FERC as needed pending further consultations with agencies.

Birds

Bald eagle (Haliaeetus leucocephalus)

The bald eagle was down-listed from endangered to threatened in 1995 and was removed from the federal endangered species list in 2007 (USFWS, 2021h). The bald eagle is not listed as threatened nor endangered in OH, PA, or WV (ODNR, 2021e; PGC, 2021c; and WVDNR, 2021c). However, the bald eagle is protected under the BGEPA. No eagle nests were identified in the Project area. For information on the BGEPA, refer to Section 3.3.3.

Mammals

Indiana bat (*Myotis sodalis*)

The Indiana bat, a federally endangered species, has been historically documented throughout much of the eastern United States. Known populations have been observed in Alabama, Arkansas, Georgia, Illinois, Indiana, Iowa, Kentucky, Michigan, Mississippi, Missouri, New Jersey, New York, North Carolina, OH, Oklahoma, PA, Tennessee, Vermont, Virginia, and WV. Population declines have resulted from destruction of hibernacula from disturbance and vandalism by humans, improper protective cave gates and structures, natural hazards, and white nose syndrome (USFWS, 2021f). Forest habitat is essential to the survival of the Indiana bat. Indiana bats utilize forested areas as roosting and foraging habitat in the spring, summer, and fall. Tree removal may eliminate Indiana bat maternity and foraging habitat and may remove corridors between caves and foraging habitat, thereby leaving the bats vulnerable to predation. Removal of riparian forest may result in degradation of water quality and elimination of prey species (USFWS, 2011).

Based on knowledge of the Project area, no Project components in OH or PA are within Indiana bat buffers. Additionally, no tree clearing is proposed in OH, so no impacts are anticipated. In WV, Project facilities and components are within a bat buffer, based on knowledge of the area, except for contractor yard CY-WV19. Equitrans is awaiting confirmation from the PAFO and WVFO of the USFWS regarding the Indiana bat and updates will be provided upon receipt.

Northern long-eared bat (*Myotis septentrionalis*)

The northern long-eared bat, a federally threatened species, has been historically documented throughout most of the northern United States east of the Rocky Mountains. Known populations have been observed in 37 states, including OH, PA, and WV (USFWS, 2021g). White-nose syndrome, a fungal disease known to affect bats, is the predominant threat to this bat. However, like the Indiana bat, population declines can be attributed to destruction of hibernacula via deforestation due to expanding human development. As is the case with the Indiana bat, forest habitat is essential to the survival of the northern long-eared bat.

This species was identified by the USFWS IPaC tool as a potential species of concern in the Project vicinity. For the northern long-eared bat, Section 4(d) of the ESA tailors protections to areas affected by white-nose syndrome during the bat's most sensitive life stages (USFWS, 2020). The rule is designed to protect the bat while minimizing regulatory requirements for landowners, land managers, government agencies and others within the species' range.

Northern long-eared bats have time-of-year restrictions for construction where they are present, which vary depending on the proximity of the species to work areas.

No tree clearing is proposed for OH, and no impacts are anticipated for this section of the Project. As detailed in correspondence with the PAFO and WVFO of the USFWS, Equitrans anticipates approximately 48 acres of tree clearing for the Project of which approximately seven acres would be required in PA and approximately 41 acres would be in WV. Agency Correspondence is provided in Appendix 3-A. Equitrans is awaiting responses from the PAFO and WVFO's of the USFWS and updates will be provided to FERC upon receipt.

Insects

The USFWS is considering the monarch butterfly as a candidate to be listed throughout its range, and the species appeared on the IPaC species lists reviewed for OH, PA, and WV. A status assessment completed at the end of 2020 concluded population declines necessitate listing under the ESA, but the monarch will remain in "candidate" status until a final listing proposal is completed (USFWS, 2021i). Threats facing the butterfly are thought to include pesticide use and climate change coupled with widespread habitat loss and fragmentation. Potential impacts to this species will be mitigated through the revegetation efforts outlined in this report. Equitrans is awaiting responses from the PAFO and WVFO of the USFWS and updates will be provided to FERC upon receipt. The response from the OHFO of the USFWS, dated November 23, 2021, did not identify the monarch butterfly as a listed species.

Mussels

The USFWS IPaC tool identified sensitive mussel species potentially occurring near the Project in the state of WV. No species were indicated by IPaC in OH or PA. Future correspondence from WVFO the USFWS regarding these species will be provided to FERC upon receipt. WVDNR correspondence dated November 5, 2021, did not identified sensitive mussel species potentially as crossing the Project streams.

Miscellaneous State Species

Equitrans provided a follow-up letter to ODNR on January 12, 2022, requesting concurrence that the Project was not likely to impact state-listed species. Additional information will be provided to FERC upon receipt. PADCNR provided a response on January 20, 2022, with regard Elliott's beardgrass, indicating no impact anticipated per survey with avoidance and minimization measures. The PFBC and PGC have indicated no impacts to state-listed species or habitat are anticipated, and no further coordination is required.

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APPENDIX 3-A
Agency Correspondence

APPENDIX 3-B

Noxious Weed and Invasive Plant Species Control and Mitigation Plan

Noxious Weeds/Invasive Plant Species Control and Mitigation Plan

FERC Docket No. CP22-___-000

Equitrans, L.P.
Ohio Valley Connector Expansion Project
Greene County, Pennsylvania,
Wetzel County, West Virginia,
and Monroe County, Ohio

January 2022

EQUITRANS℠

Public Information

Table of Contents

Acronyms and Abbreviations

EI	Environmental Inspector
Equitrans	Equitrans, L.P.
ESCP	Erosion and Sediment Control Plan
FERC	Federal Energy Regulatory Commission
LOD	limit of disturbance
OH	Ohio
PA	Pennsylvania
Plan	Federal Energy Regulatory Commission's *Upland Erosion Control, Revegetation, and Maintenance Plan*
Procedures	Federal Energy Regulatory Commission's *Wetland and Waterbody Construction and Mitigation Procedures*
Project	Ohio Valley Connector Expansion
ROW	right-of-way
TAR	Temporary Access Road
USDA	United States Department of Agriculture
WV	West Virginia

Noxious Weeds/Invasive Plant Species Control and Mitigation Plan

This Noxious Weeds/Invasive Plant Species Control and Mitigation Plan describes the general control measures to be implemented by Equitrans, L.P. (Equitrans) and its contractors during construction and post-construction activities of the proposed Ohio Valley Connector Expansion (Project) in Monroe County, Ohio (OH); Greene County, Pennsylvania (PA); and Wetzel County, West Virginia (WV).

Where deemed appropriate and feasible, measures identified within this plan will be applied to work areas during construction and post-construction activities to avoid and/or minimize the spread of existing noxious weeds and invasive plant species within the Project's permanent easement.

1.0 Noxious Weeds and Invasive Plant Species

Per Executive Order 13112, "invasive species" means a non-native species whose introduction to an ecosystem does or is likely to cause economic or environmental harm or harm to human health. Invasive plants include noxious weeds and other plants not native to an area. This Noxious Weeds and Invasive Plant Species Control and Mitigation Plan will describe methods to prevent and control the introduction and spread of invasive plant species during construction and restoration.

Species included on the United States Department of Agriculture's (USDA's) Introduced, Invasive and Noxious Plants lists and PLANTS database, as well as OH, PA, and WV state lists were reviewed for species that have the potential to occur in the Project area. A list of potential noxious and invasive species for the Project area is provided in the attached Table 1 [OH 2018a, 2018b; PA Department of Conservation and Natural Resources, 2021a and 2021b; USDA, 2021a and 2021b; and WV Division of Natural Resources, 2021]. Equitrans has prepared this mitigation plan to limit the spread and establishment of non-native plant species during construction, operation, and maintenance of the Project.

Based on observations made during environmental field surveys completed as of September 2021, noxious and invasive species weed populations were noted in the locations outlined in Table 2. Prior to construction, Equitrans' Environmental Inspector (EI) will review for noxious and invasive species, mark the areas of concern of non-native, noxious or invasive plants within the limit of disturbance (LOD) based on pre-construction conditions to alert construction contractors to areas where control measures need to be implemented to reduce the spread of the species.

2.0 Control and Mitigation Plan

During construction, exposed topsoil may provide for the recruitment of invasive species, and the potential exists for equipment to introduce seeds to non-infested areas. To counteract this, Equitrans will implement the following measures to prevent the spread of non-native plants during construction activities:

- Equitrans will adhere to erosion control and restoration measures in the Federal Energy Regulatory Commission's (FERC's) *Upland Erosion Control, Revegetation, and Maintenance Plan* (Plan) and *Wetland and Waterbody Construction and Mitigation Procedures* (Procedures) (FERC, 2013a and 2013b) as well as state and local guidance to minimize unintended seed placement in newly disturbed soils.
- Prior to mobilization in the Project area, contractors will thoroughly clean construction equipment to limit the chance of seed transportation. Equipment includes earth-moving vehicles, mechanized felling equipment, spreaders, track hoes, timber mats, straps, and other heavy equipment capable of carrying mud and debris. Upon arrival of equipment onsite, inspections will be completed by the contractor and EI to verify equipment is free of foreign soil and debris. During construction, equipment used in areas of invasive plant infestation will be cleaned prior to leaving the area. The EI will confirm that tracks, tires, and blades of equipment are cleaned by hand or compressed air before leaving areas known to contain invasive species.

- Introduction of invasive species from organic materials brought onsite will be avoided by using weed-free mulch, straw, hay, wood fiber hydromulch, erosion control fabric, or functional equivalents.
- The duration of bare soil will be minimized during construction, thereby minimizing the opportunity for invasive species to become established. Disturbed areas will be reseeded promptly after final grading or per landowner agreement, weather and soil conditions permitting, and in compliance with state and local permits to prevent invasive species becoming established in bare soil. Seeding is not required in active agricultural lands unless requested by the landowner.
- Seed mixes will be habitat appropriate (i.e., when reseeding along a waterway, utilize a riparian seed mix), and will include native species wherever possible. Seed mixes will be weed-free and developed in accordance with the FERC Plan, applicable agency guidelines, Project-specific Erosion and Sediment Control Plans (ESCPs), and landowner requests.
- In areas along the pipeline where topsoil segregation is required and infestations of noxious or invasive plant species are observed, topsoil will be segregated adjacent to the areas from which they were removed and stored separately from other, less contaminated topsoil and subsoil. The EI will identify and mark these areas prior to grading activities, and the Contractor will install sediment barriers (e.g., silt fences) around the stockpiles to prevent movement into adjacent areas. During reclamation, the materials will be returned to the areas from which they were obtained.
- During active construction and until the Project right-of-way (ROW) is successfully revegetated, the EI(s) will monitor the ROW for infestations or outbreaks of noxious weed or invasive plant species, as outlined in FERC's Plan (FERC, 2013a). If colonies of noxious weed or invasive plant species are found in numbers substantially greater than those existing nearby in off-ROW locations, the Project will conduct selective spot eradications of those species as described in Section 3.0.

3.0 Post-Construction Monitoring

Following construction, invasive plant infestations will be monitored as part of restoration monitoring activities in accordance with FERC's Plan and Procedures. Equitrans will continue revegetation efforts and monitoring until successful revegetation is achieved. In accordance with FERC's Plan, revegetation shall be considered successful when, upon visual survey, the density and cover of non-nuisance vegetation are congruent to adjacent, undisturbed lands. Following successful revegetation, Equitrans will monitor and treat invasive plant species as part of its normal operations and maintenance activities in accordance with applicable state and federal regulations.

If, based on results of post-construction monitoring, invasive plant species become established in the ROW or aboveground facility sites in numbers which significantly differ from nearby off-ROW areas and remedial actions are necessary, Equitrans will work with landowners to determine appropriate remedial measures. Remedial measures may include treatment using approved herbicides, mechanical methods such as mowing, and/or alternative methods, as appropriate for the plant species and in accordance with applicable laws and regulations. The method selected will be the best available for the time, place, and species as determined through consultation with the appropriate state and/or federal agencies and with the landowner.

Post-construction herbicide applications such as spot herbicide application or backpack spraying will be conducted prior to seed maturation where possible. Herbicide application will be based on species and area-specific conditions and will be coordinated with state and/or federal agencies as necessary. Herbicide application will be conducted by a licensed contractor in accordance with applicable laws and regulations.

Mechanical methods include the use of equipment to mow or disk invasive plant species populations. Mechanical treatments will be conducted prior to seed maturation where possible. If needed, Equitrans

will work with landowners to determine follow-up seeding plans for both herbicide and mechanical methods of species control in accordance with FERC's Plan and the Project-specific ESCPs.

4.0 References

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TABLES

Table 1

Noxious Weed and Invasive Plant Species

Scientific Name	Common Name
Invasive Species Known to Occur in OH	
Ailanthus altissima	tree of heaven
Celastrus orbiculatus	oriental bittersweet
Dipsacus fullonum	common teasel
Elaeagnus umbellata	autumn olive
Heracleum mantegazzianum	giant hogweed
Lespedeza cuneata	Chinese bushclover
Lonicera japonica	Japanese honeysuckle
Lonicera mackii	amur honeysuckle
Microstegium vimineum	Japanese stiltgrass
Rhamnus cathartica	European buckthorn
Rosa multiflora	multiflora rose
OH State Prohibited Noxious Weeds	
Cirsium arvense	Canada thistle
Conium maculatum	poison hemlock
Lythrum salicaria	purple loosestrife
Polygonum perfoliatum	mile-a-minute
Polygonum cuspidatum	Japanese knotweed
Salsola kali	Russian thistle
Sorghum halepense	johnsongrass
Invasive Species Known to Occur in PA	
Celastrus orbiculatus	oriental bittersweet
Datura stramonium	jimsonweed
Elaeagnus umbellata	autumn olive
Euonymus alatus	burning bush
Galega officinalis	goatsrue
Heracleum mantegazzianum	giant hogweed
Hydrilla verticillata	hydrilla
Kummerowia sp.	common lespedeza
Lespedeza cuneata	Chinese bushclover
Lonicera japonica	Japanese honeysuckle
Phalaris arundinacea	reed canary grass
Coronilla varia	crownvetch
PA State Noxious Weed List	
Ailanthus altissima	tree of heaven
Berberis thunbergii	Japanese barberry
Cirsium arvense	Canadian thistle

Table 1 (Continued)

Scientific Name	Common Name
PA State Noxious Weed List (continued))	
Cirsium vulgare	bull thistle, spear thistle
Cuscuta spp.	dodder
Fallopia japonica	Japanese knotweed
Heracleum mantegazzianum	giant hogweed
Lythrum salicaria	purple loosestrife
Microstegium vimineum	Japanese stiltgrass
Orobanche spp.	broomrape
Polygonum perfoliatum	mile-a-minute
Pueraria lobata	kudzu
Rosa multiflora	multiflora rose
Sorghum bicolor	shattercane
Sorghum halepense	Johnsongrass
Invasive Species Known to Occur in WV	
Ailanthus altissima	tree of heaven
Arthraxon hispidus	small carpetgrass
Berberis thunbergii	Japanese barberry
Cirsium arvense	Canada thistle
Coronilla varia	crownvetch
Fallopia japonica	Japanese knotweed
Lespedeza cuneata	Chinese bushclover
Lonicera japonica	Japanese honeysuckle
Lythrum salicaria	purple loosestrife
Microstegium vimineum	Japanese stiltgrass
Phalaris arundinacea	reed canary grass
Polygonum perfoliatum	mile-a-minute
WV State-Listed Noxious Weeds	
Cannabis sativa	marijuana
Carduus acanthoides	plumeless thistle
Carduus crispus	curled thistle
Carduus nutans	musk thistle
Elaeagnus umbellata	autumn olive
Papaver somniferum	opium poppy
Pueraria lobata	kudzu
Rosa multiflora	multiflora rose
Sorghum halepense (L.) Pers.	Johnsongrass

Table 2
Noxious Weed and Invasive Plant Species Locations[1]

Facility	Approximate Milepost	Species	Prevalence[2]
Monroe County, OH			
Plasma Compressor Station	N/A	*Cirsium arvense*	L
Plasma Compressor Station	N/A	*Lespedeza cuneata*	L
Plasma Compressor Station	N/A	*Microstegium vimineum*	L
Plasma Compressor Station	N/A	*Rosa multiflora*	L
Greene County, PA			
CY-PA18-North	N/A	*Cirsium arvense*	L
CY-PA18-North	N/A	*Euonymus alatus*	L
CY-PA18-North	N/A	*Lonicera japonica*	L
CY-PA18-North	N/A	*Microstegium vimineum*	L
CY-PA18-North	N/A	*Phalaris arundinacea*	L
CY-PA18-North	N/A	*Polygonum perfoliatum*	L
CY-PA18-North	N/A	*Rosa multiflora*	L
CY-PA18-North	N/A	*Coronilla varia*	L
Shough Creek Valve Yard	N/A	*Elaeagnus umbellata*	H
Shough Creek Valve Yard	N/A	*Kummerowia*	H
Shough Creek Valve Yard	N/A	*Lespedeza cuneata*	H
H327/H328 Main Line	0.3	*Berberis thunbergii*	T
H327/H328 Main Line	0.3	*Elaeagnus umbellata*	L
H327/H328 Main Line	0.1	*Rosa multiflora*	L
H327/H328 Main Line	0.1	*Elaeagnus umbellata*	L
H327/H328 Main Line	0.1	*Microstegium vimineum*	H
Cygrymus Compressor Station	N/A	*Cirsium arvense*	M
Cygrymus Compressor Station	N/A	*Cirsium vulgare*	L
Cygrymus Compressor Station	N/A	*Elaeagnus umbellata*	L
Cygrymus Compressor Station	N/A	*Lespedeza cuneata*	M
Cygrymus Compressor Station	N/A	*Microstegium vimineum*	L
Cygrymus Compressor Station	N/A	*Rosa multiflora*	L
Wetzel County, WV			
Corona Compressor Station	N/A	*Microstegium vimineum*	H
H326 Pipeline	0.1	*Rosa multiflora*	L
H326 Pipeline	0.1	*Microstegium vimineum*	H
H326 Pipeline	0.2	*Fallopia japonica*	H
H326 Pipeline	0.5	*Microstegium vimineum*	M
Pickenpaw Interconnect	0.0	*Microstegium vimineum*	H
H326 Pipeline	0.7	*Microstegium vimineum*	H
H326 Pipeline	0.9	*Microstegium vimineum*	H

Table 2 (Continued)

Facility	Approximate Milepost	Species	Prevalence[2]
Wetzel County, WV (continued)			
H326 Pipeline	1.2	*icrostegium vimineum*	H
H326 Pipeline	1.2	*Rosa multiflora*	M
H326 Pipeline	1.5	*Rosa multiflora*	H
H326 Pipeline	1.5	*Microstegium vimineum*	H
H326 Pipeline	1.5	*Ailanthus altissima*	H
H326 Pipeline	1.7	*Microstegium vimineum*	M
H326 Pipeline	2.1	*Microstegium vimineum*	M
H326 Pipeline	2.5	*Rosa multiflora*	M
H326 Pipeline	2.5	*Ailanthus altissima*	M
H326 Pipeline	2.5	*Microstegium vimineum*	M
Temporary Access Road (TAR)-326-07	N/A	*Rosa multiflora*	H
TAR-326-07	N/A	*Elaeagnus umbellata*	H
TAR-326-07	N/A	*Microstegium vimineum*	H
TAR-326-07	N/A	*Ailanthus altissima*	M
H326 Pipeline	2.8	*Microstegium vimineum*	H
H326 Pipeline	3.1	*Rosa multiflora*	M
H326 Pipeline	3.1	*Berberis thunbergii*	M
H326 Pipeline	3.1	*Microstegium vimineum*	M
TAR-326-08	N/A	*Microstegium vimineum*	H
TAR-326-08	N/A	*Elaeagnus umbellata*	M
H326 Pipeline	3.2	*Rosa multiflora*	H
H326 Pipeline	3.2	*Microstegium vimineum*	H
H326 Pipeline	3.4	*Microstegium vimineum*	M
H326, H330 Pipelines	3.7, 0.6	*Microstegium vimineum*	M
OVC Interconnect	N/A	*Cirsium arvense*	M
OVC Interconnect	N/A	*Rosa multiflora*	M
OVC Interconnect	N/A	*Elaeagnus umbellata*	M
Liberty Valve Yard	N/A	*Cirsium arvense*	L
Liberty Valve Yard	N/A	*Microstegium vimineum*	L
Liberty Valve Yard	N/A	*Arthraxon hispidus*	L
Logansport Spur Facility Area	N/A	*Elaeagnus umbellata*	L
Logansport Spur Facility Area	N/A	*Lespedeza cuneata*	L
Logansport Spur Facility Area	N/A	*Lonicera japonica*	L
Logansport Spur Facility Area	N/A	*Phalaris arundinacea*	L
Logansport Spur Facility Area	N/A	*Rosa multiflora*	L
H326 Contractor Yard CY-WV19	N/A	*Cirsium arvense*	M

Table 2 (Continued)

Facility	Approximate Milepost	Species	Prevalence[2]
Wetzel County, WV (continued)			
H326 Contractor Yard CY-WV20	N/A	*Arthraxon hispidus*	L
H326 Contractor Yard CY-WV20	N/A	*Fallopia japonica*	H
H326 Contractor Yard CY-WV20	N/A	*Lespedeza cuneata*	L

Notes:

[1] Based on observations made during environmental field surveys completed as of September 2021, noxious and invasive species weed populations were noted in the locations outlined in Table 2. Prior to construction, Equitrans' EI will review for noxious and invasive species, mark the areas of concern of non-native, noxious or invasive plants within the LOD based on pre-construction conditions to alert construction contractors to areas where control measures need to be implemented to reduce the spread of the species.

[2] M = medium; H = high; and L = low.