



## **SABAL TRAIL PROJECT**

### ***RESOURCE REPORT 2*** *Water Use and Quality*

*FERC Docket No. CP15-\_\_\_\_-000*

**November 2014**

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<b>RESOURCE REPORT 2 – WATER USE AND QUALITY</b>	
<b>Filing Requirement</b>	<b>Location in Environmental Report</b>
<input checked="" type="checkbox"/> Identify and describe by milepost perennial waterbodies and municipal water supply or watershed areas, specially designated surface water protection areas and sensitive waterbodies, and wetlands that would be crossed. For each waterbody crossing, identify the approximate width, state water quality classifications, any known potential pollutants present in the water or sediments, and any potable water intake sources within 3 miles downstream. (§380.12(d)(1))	Sections 2.3.2 and 2.3.4 Table 2.3-3 and Table 2.4-1
<input checked="" type="checkbox"/> Compare proposed mitigation measures with the staff's current " <i>Wetland and Waterbody Construction and Mitigation Procedures</i> ," which are available from the Commission Internet home page or the Commission staff, describe what proposed alternative mitigation would provide equivalent or greater protection to the environment, and provide a description of site- specific construction techniques that would be used at each major waterbody crossing. (§380.12(d)(2))	Section 1.6.1.7 in Resource Report 1 and Tables 2.3-13, 2.3-14, 2.4-4, and 2.4-5 in Resource Report 2; Section 2.3.7.6 and Appendix 1A in Resource Report 1
<input checked="" type="checkbox"/> Describe typical staging area requirements at waterbody and wetland crossings. Also, identify and describe waterbodies and wetlands where staging areas are likely to be more extensive. (§380.12(d)(3))	Section 2.3.7.2 and Section 2.4.4 and Tables 2.3-13, 2.3-14, 2.4-4, and 2.4-5
<input checked="" type="checkbox"/> Include National Wetland Inventory (NWI) maps. If NWI maps are not available, provide the appropriate state wetland maps. Identify for each crossing, the milepost, the wetland classification specified by the U.S. Fish and Wildlife Service, and the length of the crossing. Include two copies of the NWI maps (or the substitutes, if NWI maps are not available) clearly showing the proposed route and mileposts directed to the environmental staff. Describe by milepost, wetland crossings as determined by field delineations using the current Federal methodology. (§380.12(d)(4))	Appendix 1A in Resource Report 1 and Section 2.4, Table 2.4-1, and Appendix 2B in Resource Report 2
<input checked="" type="checkbox"/> Identify aquifers within excavation depth in the project area, including the depth of the aquifer, current and projected use, water quality and average yield, and known or suspected contamination problems. (§380.12(d)(5))	Section 2.2.1, Section 2.2.3, and Table 2.2-1
<input checked="" type="checkbox"/> Describe specific locations, the quantity required, and the method and rate of withdrawal and discharge of hydrostatic test water. Describe suspended or dissolved material likely to be present in the water as a result of contact with the pipeline, particularly if an existing pipeline is being retested. Describe chemical or physical treatment of the pipeline or hydrostatic test water. Discuss waste products generated and disposal methods. (§380.12(d)(6))	Table 2.3-10 and Section 2.3.8.2
<input type="checkbox"/> If underground storage of natural gas is proposed: (i) Identify how water produced from the storage field will be disposed of, and (ii) For salt caverns, identify the source locations, the quantity required, and the method and rate of withdrawal of water for creating salt cavern(s), as well as the means of disposal of brine resulting from cavern leaching. (§380.12(d)(7))	N/A
<input checked="" type="checkbox"/> Discuss proposed mitigation measures to reduce the potential for adverse impacts to surface water, wetlands, or groundwater quality to the extent they are not described in response to paragraph (d)(2) of this section. Discuss the potential for blasting to affect water wells, springs, and wetlands, and measures to be taken to detect and remedy such effects. (§380.12(d)(8))	Sections 2.2.4, 2.3.7.5, 2.3.8, and 2.4.5

<b>RESOURCE REPORT 2 – WATER USE AND QUALITY</b>	
<b>Filing Requirement</b>	<b>Location in Environmental Report</b>
<input checked="" type="checkbox"/> Identify the location of known public and private groundwater supply wells or springs within 150 feet of proposed construction areas. Identify locations of EPA or state-designated sole-source aquifers and wellhead protection areas crossed by the proposed pipeline facilities. (§380.12(d)(9))	Section 2.2.2, Table 2.2-2, and Table 2.2-3

<b>FERC COMMENTS ON DRAFT RESOURCE REPORT 2</b>	<b>LOCATION IN RESOURCE REPORT 2 OR RESPONSE TO COMMENT</b>
<b><u>Resource Report 2 – Water Use and Quality</u></b>	
<b>SEPTEMBER 25, 2014 COMMENTS</b>	
1. Include the following information in section 2.2.1: a. a description of the “Other Rocks” aquifer depicted in figure 2.2-1 (update table 2.2-1 accordingly);	See Section 2.2.1.1, Pipeline Facilities (Other Rocks) and Table 2.2-1.
b. confirmation that first-magnitude springs or their equivalent (coming from thinly confined to unconfined portions of the Floridan Aquifer System) are present in both Florida and Georgia;	See Section 2.2.1.1, Pipeline Facilities (Floridan Aquifer System).
c. confirmation that the Floridan and Surficial Aquifer Systems are separated by confining units; and	c. See Section 2.2.1.1, Pipeline Facilities (Floridan Aquifer System).
d. the estimated thickness of the confining units overlying the Floridan Aquifer System, where present.	d. See Section 2.2.1.1, Pipeline Facilities (Floridan Aquifer System).
2. Include a table identifying state-designated springsheds crossed by the Project. This table should include the location of these springsheds by milepost (MP), the total feet crossed, and acres impacted. Also, include a description of how springsheds are defined; and describe any data used to define groundwater flow paths to springs and wells down gradient of HDD crossings.	See Table 2.2-4, Section 2.2.2.1, Pipeline Facilities (Wellhead, Aquifer, and Spring Protection Areas), and Resource Report 6 (Appendix 6B).
3. Ensure that table 2.2-3 includes springs and/or wells identified in filed comment letters and scoping meeting transcripts.	This information is provided in Table 2.2-3.
4. For the Environmental Sites discussed in section 2.2.3.1 (and section 8.4.6 of draft Resource Report 8), include a discussion of the criteria that Sabal Trail used to determine if an Environmental Site could impact the Project (see table 8.4-3).	See Section 2.2.3.1, Pipeline Facilities
5. Include a summary of consultations with the Florida Department of Environmental Protection regarding Sabal Trail’s plan to construct, and potentially dewater, in areas where ethylene dibromide contamination is known or could potentially occur.	See Section 2.2.3.1, Pipeline Facilities

FERC COMMENTS ON DRAFT RESOURCE REPORT 2	LOCATION IN RESOURCE REPORT 2 OR RESPONSE TO COMMENT
<p>6. Include the following information in section 2.2.4:</p> <p>a. a discussion of whether construction activities, including trenching, dewatering, or horizontal directional drill (HDD) installation, would contact contaminated groundwater associated with identified Environmental Sites or interfere with any current remediation activities underway to address groundwater contamination, if present;</p>	<p>See Section 2.2.4, Groundwater Impacts and Mitigation</p>
<p>b. a description of the natural gas (composition), other liquids (distillate) and other organic and/or inorganic compounds that would or may be present in the pipelines (e.g., polychlorinated biphenyls) and whether those compounds could contaminate groundwater in the event of a release;</p>	<p>The proposed pipelines will contain natural gas (methane). The Sabal Trail pipeline would receive natural gas streams at four different locations, as detailed in Resource Report 1. The gas compositions are 96 to 97 percent methane. Other minor components will include ethane, propane, iso-butane, N-butane, Iso-pentane, N-pentane, N-hexane, heptane, octane, nonane, nitrogen, and carbon dioxide. There will be no other liquids injected into the pipeline and there will be no PCBs present in the pipeline system.</p> <p>Natural gas is lighter than air which means in the highly unlikely event that natural gas escapes from the pipeline, the gas can only travel up through the soil into the atmosphere, where it dissipates. Additionally, no toxins are released that would affect water quality associated with the construction or operation of the Sabal Trail facilities. There are no other liquids in the pipeline that could leak into the groundwater in the unlikely event of a break in the pipeline.</p>
<p>c. a discussion of the potential for trenching to interrupt or collapse near surface conduit flow channels resulting in the disruption of preferential groundwater flow paths, the loss of spring flow, and disruption of localized groundwater supplies, if applicable, describe where along the Project this could occur and any measures that would be implemented to avoid or reduce this risk;</p>	<p>See Section 2.2.4, Groundwater Impacts and Mitigation</p>
<p>d. a description of the measures (e.g., training, signage, identification on construction alignment sheets) Sabal Trail would implement to alert construction personnel about areas of potential groundwater contamination, spring protection areas/zones, significant recharge zones, well fields, and other groundwater resources identified in table 2.2-3; and</p>	<p>See Section 2.2.4, Groundwater Impacts and Mitigation</p>

FERC COMMENTS ON DRAFT RESOURCE REPORT 2	LOCATION IN RESOURCE REPORT 2 OR RESPONSE TO COMMENT
<p>e. a description of the measures Sabal Trail would implement to minimize the development or enlargement of sinkholes in karst-sensitive areas, through:</p> <ul style="list-style-type: none"> <li>i. trench dewatering activities;</li> <li>ii. hydrostatic test water discharges activities (describe in section 2.3.8.2); and</li> <li>iii. grading that would divert drainage onto adjoining properties.</li> </ul>	<p>See Resource Report 6, Section 6.5.1.2, Karst Mitigation Measures.</p>
<p>7. Include a description of the groundwater monitoring (e.g., flow, water quality) that would be conducted by Sabal Trail and confirm that this monitoring would be conducted at all springs (e.g., Order 1, 2, 3) within 2,000 feet of the Project.</p>	<p>See Section 2.2.4, Groundwater Impacts and Mitigation and Appendix 2A, Best Drilling Practices Plan.</p>
<p>8. Confirm that the well testing procedures described in section 2.2.4 would also be implemented for all wells within 2,000 feet of HDD locations and associated groundwater point(s) of base flow discharge in karstic terrain, and provide the distance and direction of these wells from the HDD locations.</p>	<p>See Appendix 2A, Best Drilling Practices Plan.</p>
<p>9. Include in table 2.3-1 the beginning and end MP of each watershed crossing.</p>	<p>See Table 2.3-1 and Section 2.3.1.</p>
<p>10. Describe in section 2.3.1.3 how the watersheds crossed by the Project in Florida correlate to the boundaries and jurisdiction of the Florida Water Management Districts, if applicable.</p>	<p>See Table 2.3-1 and Section 2.3.1.3.</p>
<p>11. Include site-specific crossing plans for the major waterbodies that would be crossed by the open cut method and by access roads, as identified in table 2.3-3.</p>	<p>See Section 2.3.7.6.</p>
<p>12. Identify any state-designated in-stream construction timing restrictions that would apply to the streams crossed by the Project and include those restrictions in table 2.3-3.</p>	<p>See Table 2.3-3 and Section 2.3.4.1.</p>
<p>13. For the HDD activities described in section 2.3.7.4 and, as applicable in the HDD Contingency Plan provided in appendix 2A, include:</p> <ul style="list-style-type: none"> <li>a. the anticipated volume and source of water needed for each HDD crossing;</li> </ul>	<p>See Section 2.3.6, Pipeline Facilities and Table 2.3-11.</p>
<ul style="list-style-type: none"> <li>b. the anticipated disposal methods for drilling mud and cuttings;</li> </ul>	<p>See Section 2.3.7.4, Crossing Methods (Horizontal Directional Drill) and Section 5.0 of Appendix 2A.</p>



FERC COMMENTS ON DRAFT RESOURCE REPORT 2	LOCATION IN RESOURCE REPORT 2 OR RESPONSE TO COMMENT
c. drilling mud additives, other than bentonite, that would likely be added to the drilling mud in the event there is an annular pressure decrease or release of drilling mud, and verification that these additives would not have an adverse effect on water resources;	See Section 2.3.7.4.
d. the results of site-specific geotechnical investigations, including the: <ul style="list-style-type: none"> <li>i. general lithology along each drill path;</li> <li>ii. degree of subsurface karst found; and</li> <li>iii. potential for loss of drilling fluids through the karst network</li> </ul> (If the geotechnical investigations would not be completed prior to the final RRs, provide a schedule for when they would be completed and when the above information would be provided);	See Resource Report 6, Appendix 6C.
e. the specific “Best Drilling Practices” in appendix 2A for conducting direct circulation mud-rotary drilling within areas underlain by a mature karst environment, including how an inadvertent release or the complete loss of drilling fluid circulation into karst would be rectified in order to regain drilling fluid circulation, and/or reduce the impact to springs, wells or surface waterbodies;	See Resource Report 6, Appendix 6D – Karst Mitigation Plan.
f. who would notify the FERC about any inadvertent releases in wetlands, waterbodies, or karst features, and when FERC would be notified (e.g., provide in section 3.3 of appendix 2A); and	See Appendix 2A, Section 3.3.
g. in appendix 2A how Sabal Trail would monitor for and respond to an inadvertent release to a spring, well, and/or surface waterbody.	See Appendix 2A, Sections 4.3, 4.4, and 4.5.
14. Include in section 2.3.8 a summary of the Section 404 permitting processes in Alabama and Georgia (similar to the level of detail provided about the Section 404 permitting process in Florida) and summarize the Section 10 and Section 408 permitting programs and processes that would apply to the Project. Also, include descriptions of the construction and restoration measures that would be implemented for Section 10 and Section 408 waterbodies and identify these waterbodies in tables 2.3-3 and 2.3-6.	See Section 2.3.5 and Tables 2.3-3 and 2.3-6. Section 408 is not applicable.
15. Include in table 2.3-10 the approximate MP location where hydrostatic test water would be discharged, the maximum discharge rate, and the watershed associated with each withdrawal and discharge location. Also, depict the locations on construction alignment sheets prepared for the Project.	See Table 2.3-10 and Section 2.3.6.1.
16. Identify the sources and volumes of water that would be used for dust control activities.	Section 2.3.5.

<b>FERC COMMENTS ON DRAFT RESOURCE REPORT 2</b>	<b>LOCATION IN RESOURCE REPORT 2 OR RESPONSE TO COMMENT</b>
17. Include in section 2.4.5 a summary of the operational impact acreages for wetlands based on the 50-foot-wide operational easement. Further, summarize in section 2.4.5 the maintenance impact acreage for scrub-shrub and forested wetlands within the respective portions of the 10-foot-wide strip and 30-foot-wide strip that would be maintained in accordance with Sabal Trail’s Erosion and Sediment Control Plan (ESCP).	See Section 2.4.5.
18. Include in table 2.4-1 the following information: a. the Wetland Rapid Assessment Procedure (WRAP) score for each wetland crossed or affected in Alabama and Georgia, and the Uniform Mitigation Assessment Method (UMAM) score for each wetland crossed or affected in Florida; and	See Table 2.4-1.
b. state wetland classifications for each wetland, or if none, note that there are none.	See Table 2.4-1 and Section 2.4.
19. Describe in section 2.4.5.3 the wetland mitigation banks that would be used to mitigate for wetland impacts. Verify that identified banks are operated consistent with the respective state WRAP or UMAM programs and would be sufficient and available for the Project’s anticipated bank credit needs.	See Section 2.4.5.3.
20. In section 2.4.2.2, discuss the expected impacts on wetlands resulting from construction and operation of the Hunters Creek M&R Station.	See Section 2.4.2.2.
21. Include site-specific details on justifications listed in tables 2.4-4 and 2.4-5 for each requested modification to the FERC’s Plan and Procedures.	See revised Tables 2.4-4 and 2.4-5
22. Describe in section 2.4.5.1 permanent impacts on wetlands that would result from the construction of permanent access roads (PARs). Also, for each PAR that would result in the loss of wetlands, describe why an alternative route that would not impact wetlands was not chosen.	See Section 2.4.5.1.

## ACRONYMS AND ABBREVIATIONS

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ADEM	Alabama Department of Environmental Management
AIWS	Agricultural and Industrial Water Supply
Application	Certificate Application
ATWS	additional temporary workspace
BMPs	best management practices
Certificate	of Public Convenience and Necessity
CU	Cataloguing Unit
CWA	Clean Water Act
DEF	Duke Energy Florida, Inc.
Dth	dekatherms
E&SCP	Erosion and Sediment Control Plan
EDB	ethylene dibromide
EDR	Environmental Data Resources, Inc.
EFH	Essential Fish Habitat
ERC	Environmental Regulation Commission
ERP	Environmental Resource Permit
F&W	Fish and Wildlife
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FDOH	Florida Department of Health
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FGS	Florida Geological Survey
FGT	Florida Gas Transmission Company, LLC
FLUCCS	Florida Land Use Cover and Forms Classification System
FSC	Florida Southeast Connection, LLC
GAEPD	Georgia Environmental Protection Division
GDNR	Georgia Department of Natural Resources
GIS	geographic information systems
gpm	gallons per minute
HDD	horizontal directional drill
HUC	Hydrologic Unit Code
M&R	metering and regulating
mg/L	milligrams per liter
mgd	million gallons per day
MLV	mainline valves
MP	milepost
NHD	National Hydrography Dataset
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRI	National Rivers Inventory
NWI	National Wetlands Inventory
OAW	Outstanding Alabama Water
OFW	Outstanding Florida Water
OHWM	Ordinary High Water Mark
ONRW	Outstanding National Resource Water
ORV	outstandingly remarkable values

OWR	Office of Water Resources
PAR	permanent access road
PEM	Palustrine Emergent
PFO	Palustrine Forested
PSS	Palustrine Scrub-Shrub
PWS	Public Water Supply
RIBITS	USACE Regulatory In Lieu Fee and Bank Information Tracking System database.
ROW	right-of-way
S	Swimming and other Whole Body Water-Contact Sports
SDWA	Federal Safe Drinking Water Act of 1974
SFWMD	South Florida Water Management District
SH	Shellfish Harvesting
SOP	Standard Operating Procedure (USACE Savannah District compensatory mitigation)
SPCC Plan	Spill Prevention, Control and Countermeasure Plan
SPZ	spring protection zone
SSA	Sole Source Aquifers
SWAPP	Source Water Assessment Protection Program/Source Water Assessment Program
TMDL	Total Maximum Daily Load
Transco	Transcontinental Gas Pipe Line Company, LLC
UMAM	Uniform Mitigation Assessment Method
U.S.	United States
USACE	US Army Corps of Engineers
USEPA	US Environmental Protection Agency
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey
WHPA	Well Head Protection Area
WMD	Water Management Districts
WRAP	Wetland Rapid Assessment Procedure

## 2.0 RESOURCE REPORT 2 - WATER USE AND QUALITY

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### 2.1 Introduction

Sabal Trail Transmission, LLC (“Sabal Trail”), a joint venture between affiliates of Spectra Energy Partners, LP and NextEra Energy, Inc. (“NextEra”), is seeking a Certificate of Public Convenience and Necessity (“Certificate”) from the Federal Energy Regulatory Commission (“FERC”) pursuant to Section 7 (c) of the Natural Gas Act authorizing the construction and operation of the Sabal Trail Project (“Project”).

The Project is a new natural gas transmission pipeline comprised of a combination of lease capacity and new greenfield pipeline construction that will provide approximately 1,075,000 dekatherms per day (“Dth/d”) of new firm natural gas transportation capacity. Sabal Trail will acquire the capacity created by Transcontinental Gas Pipe Line Company, LLC’s (“Transco”) Hillabee Expansion Project (FERC Docket Nos. PF14-6-000 and CP15-16-000) pursuant to a capacity lease, which extends from Transco’s Compressor Station 85 in Choctaw County, Alabama to an interconnection with the new greenfield pipeline in Tallapoosa County, Alabama. Sabal Trail will construct, own and operate the greenfield pipeline, which will extend from Tallapoosa County, Alabama to a new interconnection hub (“the Central Florida Hub”) in Osceola County, Florida. At the Central Florida Hub, the Project will connect with the Florida Southeast Connection Pipeline Project, currently being proposed by Florida Southeast Connection, LLC (“FSC”) (FERC Docket No. PF14-2-000 and CP14-554-000). In addition, at or near the Central Florida Hub, the Project will interconnect with Gulfstream Natural Gas System, LLC (“Gulfstream”) and Florida Gas Transmission Company, LLC (“FGT”). The greenfield portion of the Project will have an initial capacity of 830,000 Dth/day with a proposed in-service date of May 1, 2017. Through a series of phased compressor station expansions to meet the future capacity needs of Sabal Trail’s customers, the Project capacity will increase to approximately 999,000 Dth/day by 2020 and 1,075,000 Dth/day by 2021.

#### *Pipeline Facilities*

The Project includes construction of approximately 474.4 miles of new 36-inch diameter natural gas transmission pipeline (the “Mainline Route”), approximately 13.1 miles of new 36-inch diameter natural gas pipeline (the “Hunters Creek Line”), and approximately 21.4 miles of new 24-inch diameter natural gas pipeline (the “Citrus County Line”). A summary of the Project pipeline facilities is provided in Table 1.1-1 of Resource Report 1 (*see* Tables section). A location map of the Project pipeline facilities is provided as Figure 1.1-1 of Resource Report 1 (*see* Figures section).

- Mainline Route – Originates in Tallapoosa County, Alabama near Transco milepost (“MP”) 944 and ends at an interconnection with the Florida Southeast Connection Pipeline Project at the Central Florida Hub in Osceola County, Florida;
- Hunters Creek Line – Connects at the proposed Reunion Compressor Station located at approximately MP 474.4 to FGT’s existing 24-inch diameter mainline natural gas pipeline in Orange County, Florida; and
- Citrus County Line – Located in Marion and Citrus Counties, Florida, extending from Sabal Trail’s facilities at approximately MP 389.8 to a new electric generation plant proposed by Duke Energy Florida, Inc. (“DEF”) to be located in Citrus County, Florida.

#### *Aboveground Facilities*

Five new compressor stations are proposed to be constructed along the Mainline Route. Three compressor stations (Alexander City, Hildreth, and Reunion) would have a 2017 in-service date, followed by two additional compressor stations (Dunnellon and Albany) with a 2020 in-service date. Expansion work (*i.e.*, additional compression) at two of these five new compressor stations (Hildreth and Albany) would then be

completed with an in-service date of 2021. Natural gas will be the proposed fuel source for the facilities within each compressor station. A summary of the Project aboveground facilities is provided in Table 1.1-2. Aboveground facility plot plans are provided in Appendix 1A, Volume II-B of Resource Report 1. United States (“U.S.”) Geological Survey (“USGS”) topographic location excerpts and aerial photography are provided as Figures 1.1-2 and 1.1-3 of Resource Report 1.

- Compressor Stations

- Alexander City Compressor Station (approximate MP 0.0) – In service 2017. Construction of a new compressor station near Alexander City in Tallapoosa County, Alabama. The compressor station will include two Solar Titan 130 and one Solar Titan 250 compressor units;
- Albany Compressor Station (approximate MP 159.3) – In service 2020. Construction of a new compressor station near Albany in Dougherty County, Georgia after the initial Project in-service date. The compressor station will include one Solar Titan 130 compressor unit. An additional Solar Titan 130 compressor unit will be constructed in a later phase of the Project with an in-service date of 2021;
- Hildreth Compressor Station (approximate MP 296.3) – In service 2017. Construction of a new compressor station near Lake City in Suwannee County, Florida, consisting of one Solar Titan 130 compressor unit. An additional Solar Titan 130 compressor unit will be constructed in a later phase of the Project with an in-service date of 2021;
- Dunnellon Compressor Station (approximate MP 389.8) – In service 2020. Construction of a new compressor station near Ocala in Marion County, Florida after the initial in-service date. The compressor station will include one Solar Titan 130 compressor unit; and
- Reunion Compressor Station (approximate MP 474.4) – In service 2017. Construction of a new compressor station near Intercession City in Osceola County, Florida, consisting of one Titan 130 compressor unit and one Solar Mars 100 compressor unit.

In addition, six meter and regulating (“M&R”) stations are proposed for the Project.

- M&R Stations

- Mainline Route M&R Stations
  - Transco Hillabee M&R Station in Tallapoosa County, Alabama (MP 0.0)
  - FGT Suwannee M&R Station in Suwannee County, Florida (MP 299.7)
  - FSC M&R Station in Osceola County, Florida (MP 474.4)
  - Gulfstream M&R Station in Osceola County, Florida (MP 474.4)
- Hunters Creek Line M&R Station
  - FGT Hunters Creek M&R Station in Orange County, Florida (MP 13.1)
- Citrus County Line M&R Station
  - DEF Citrus County M&R Station in Citrus County, Florida (MP 21.4)

A total of 39 mainline valves (“MLVs”), five ”pig” launcher, and five ”pig” receiver facilities are also proposed for the Project. Thirty-three MLVs would be located along the Mainline Route, four of which would be located within the site of proposed compressor stations. Three MLVs would be located along the

Hunters Creek Line, one of which would be located within the Reunion Compressor Station (MP 0.0 on the Hunters Creek Line) and one within the FGT Hunters Creek M&R Station (MP 13.1 on the Hunters Creek Line). Three MLVs would be located along the Citrus County Line, one of which would be located within the Dunnellon Compressor Station (MP 0.0 on the Citrus County Line) and one within the DEF Citrus County M&R Station (MP 21.4 on the Citrus County Line). All MLVs will have blow down capabilities, however four MLVs along the Mainline Route (MLVs 2, 18, 23, and 24) will be equipped with remote blow down facilities where the right-of-way (“ROW”) is located next to an electric transmission line corridor. The locations of proposed MLV sites are listed in Table 1.1-2 and shown on the aerial-based alignment sheets in Appendix 1A, Volume II-B of Resource Report 1.

### *Proposed Mainline Capacity Lease*

Transco Lease – Mainline capacity lease on Transco’s existing pipeline facilities extending from Transco’s Zone 4 Pool and Transco’s interconnections with Midcontinent Express Pipeline, LLC and Gulf South Pipeline Company, LP, all located at Transco Compressor Station 85 near Transco MP 784 in Choctaw County, Alabama to the point of interconnection with the proposed Sabal Trail facilities to be located near Transco MP 944 in Tallapoosa County, Alabama. The facilities associated with the Transco Lease will be addressed in a separate certificate application filed by Transco.

This Resource Report 2 describes the existing water resources and water quality in the Project area, evaluates the potential impacts of construction and operation of the proposed Project on those resources, and identifies proposed mitigation measures to avoid or minimize potential impacts to groundwater, surface waterbodies, and wetland resources. The information presented in this resource report was obtained from field surveys, review of available technical literature, and consultation with various federal, state, and local regulatory agencies. A checklist showing the status of the FERC filing requirements for Resource Report 2 is included after the table of contents.

Project drawings, maps, alignment sheets, and aeriels are provided in Resource Report 1, Appendix 1A.

## **2.2 Groundwater Resources**

While the Project is not expected to adversely impact groundwater quality and/or supply, the sections below include a description of the groundwater resources in the Project area. Measures proposed to be implemented as part of the Project to reduce and/or mitigate potential impacts on groundwater during construction and operation are included in Section 2.2.4, below.

### **2.2.1 Regional Aquifers Crossed by the Project**

#### **2.2.1.1 Pipeline Facilities**

The Mainline Route overlies four principal aquifer systems; Piedmont and Blue Ridge Aquifers, the Southeastern Coastal Plain aquifer system, the Floridan aquifer system, and the Surficial aquifer system. The Hunters Creek Line overlies the Floridan and Surficial aquifer systems and the Citrus County Line overlies the Floridan aquifer system. These aquifers are mostly composed of consolidated to unconsolidated sedimentary rocks, but also include hard, crystalline rocks in areas (*i.e.*, Piedmont and Blue Ridge Aquifers in Georgia). In places, these major aquifer systems lie atop others. For example, the Surficial aquifer system overlies the Floridan in places. In some areas, a clay confining unit that ranges in thickness separates these two aquifers. The Southeastern Coastal Plain Aquifer System underlies the Floridan Aquifer System in some places (mostly in western Georgia and westward into Alabama) and grades laterally into the Floridan in other places (mostly in southeastern Georgia and southwestern South Carolina). Although rocks of the Piedmont and Blue Ridge physiographic provinces extend under the Southeastern Coastal Plain Aquifer System, these rocks generally are not used as aquifers there because water can be more readily obtained from the shallower, unconsolidated Coastal Plain sediments (Miller,



1990). Table 2.2-1 identifies the aquifers underlying the Project area by milepost. Figure 2.2-1 depicts the regional aquifers crossed by the Project.

Annual precipitation in Alabama, Georgia, and Florida averaged 54.5, 48.1, and 51.5 inches, respectively, over the period from 2000 to 2014 (NOAA, 2014). Much of the precipitation in the Project area either flows directly into rivers or streams as overland runoff, or indirectly as baseflow discharging from aquifers where the water has been stored for a short time. Much of the precipitation that falls on the area is returned to the atmosphere by evapotranspiration (*i.e.*, evaporation from surface-water bodies such as lakes and marshes) and transpiration from plants. However, a substantial part of the precipitation is available for aquifer recharge throughout the area (Miller, 1990).

Total fresh groundwater use for the Project area counties in Alabama in 2005 was estimated at approximately six million gallons per day (“mgd”) (USGS, 2013) and total fresh groundwater use for the Project area counties in Georgia in 2005 was estimated at approximately 136 mgd (USGS, 2014a). Total fresh groundwater withdrawal for the Project area counties in Florida for 2010 was estimated at approximately 995 mgd (USGS, 2014b). The regional aquifer systems found along the Project area are described in further detail below.

### **Piedmont and Blue Ridge Aquifers**

The crystalline-rock aquifers that underlie the Piedmont and Blue Ridge physiographic provinces in east-central Alabama, northwestern Georgia, and western South Carolina are collectively called Piedmont and Blue Ridge aquifers. Within the Project area, Piedmont and Blue Ridge aquifers underlie the beginning of the pipeline in Alabama (Table 2.2-1). Well yields in the Piedmont and Blue Ridge Provinces vary depending on type of rock; thickness of the regolith (layer of loose rock covering the bedrock); the number, size and spacing of bedrock fractures and the degree to which the fractures are connected; and the topographic setting of the well (Miller, 1990). Approximate well yields are included in Table 2.2-1.

The quality of water from the Piedmont and Blue Ridge aquifers generally is suitable for drinking and other uses practically everywhere. Concentrations of dissolved constituents except for fluoride, iron, manganese, and, locally, sulfate seldom exceed State and Federal drinking-water standards. Wells yielding water containing large concentrations of these constituents possibly penetrate mineralized zones, although large iron concentrations may be due to the action of iron-fixing bacteria. Oxidation and filtration usually will alleviate problems of large iron and manganese concentrations, and render the water potable. Rarely, radioactive minerals occur in concentrations sufficient to create water-quality problems (Miller, 1990).

### **Southeastern Coastal Plain Aquifer System**

The Southeastern Coastal Plain Aquifer System consists of four regional aquifers that are composed predominately of clastic rocks ranging in age from Cretaceous to late Tertiary. The aquifer system underlies an area of approximately 90,000 square miles in the Coastal Plain of Alabama, Georgia, and South Carolina and extends for a short distance into northern Florida. Within the Project area, this aquifer system underlies the pipeline from southern Lee County in Alabama, through Georgia, and into the northern portion of Gilchrist County in Florida. Rocks of the Southeastern Coastal Plain Aquifer System were deposited in fluvial, deltaic and shallow-marine environments during a series of transgressions and regressions of the sea (Miller, 1990). Coarser grained, fluvial to deltaic sediments are located primarily near the updip (northern limit) extent of the aquifer system and consist primarily of coarse sand and gravel that form productive aquifers. Most of the aquifers in the system, however, consist chiefly of fine to coarse sand. Confining units within the system are mostly silt and clay, except for a thick sequence of chalk in Alabama and Mississippi. All these fine-grained materials form effective confining units that retard the vertical movement of groundwater, especially where they are thick. Overall transmissivity is much less toward the coastline (Miller, 1990). Approximate well yields are included in Table 2.2-1.



The sediments of the Southeastern Coastal Plain Aquifer System have been grouped into seven regional hydrogeologic units. Four regional aquifers separated by three regional confining units make up these seven hydrogeologic units. Each of the regional aquifers of the Southeastern Coastal Plain Aquifer System has been named for a major river that crosses the outcrop belt of the aquifer and, thus, exposes the aquifer. The proposed Project crosses three of these four regional aquifers; the Pearl River aquifer, the Chattahoochee River aquifer, and the Black Warrior River aquifer (Miller, 1990). These regional aquifers are described below.

The principal water-quality constituents that are used to characterize the groundwater in the Southeastern Coastal Plain Aquifer System are dissolved solids, dissolved iron, and dissolved chloride. Dissolved-solids concentrations are generally less than 50 milligrams per liter (“mg/L”) in outcrop recharge areas but increase as the water moves downgradient and dissolves some of the aquifer minerals. Concentrations greater than 500 mg/L generally occur only where there is mixing of freshwater and saltwater (Miller, 1990).

#### **Black Warrior River Aquifer**

The basal aquifer of the Southeastern Coastal Plain Aquifer System is the Black Warrior River aquifer. Although this regional aquifer crops out only in Alabama, Mississippi, and a small part of westernmost Georgia, it is extensive in the subsurface and is the most widespread of the regional aquifers in the system. The top of the aquifer ranges from a few hundred feet above sea level in its outcrop area to approximately 7,000 feet below sea level in southwestern Alabama. The aquifer is absent in a wide band adjacent to the inner Coastal Plain margin in South Carolina and eastern Georgia. There, the Chattahoochee River aquifer lies directly on the low-permeability rocks of the base of the aquifer system (Miller, 1990). The Black Warrior River aquifer consists mostly of Upper Cretaceous sand and clay that were deposited in fluvial, deltaic, and marine environments. Locally, sands of Early Cretaceous age are included in the aquifer in Alabama. The aquifer is displaced by faults in southwestern Alabama that have offset its top by as much as 500 feet. These faults do not affect the ground-water flow system because they occur where the aquifer contains stagnant saltwater. Approximately one-third of the aquifer contains water with dissolved-solids concentrations greater than 10,000 mg/L (Miller, 1990).

#### **Chattahoochee River Aquifer**

The Chattahoochee River aquifer lies above the Black Warrior River aquifer and the two are separated by the Black Warrior River confining unit. The Chattahoochee River aquifer is separated from the overlying Pearl River aquifer by the Chattahoochee River confining unit. The Chattahoochee River aquifer extends from southeastern North Carolina westward into central Alabama, where the lower part of the aquifer changes from sand to clay and chalk, and the clay confining unit over it pinches out. West of this area, equivalent permeable rocks are grouped with those of the Pearl River aquifer, and the fine-grained rocks in the lower parts of the aquifer are included in the Black Warrior River confining unit. The southern limit of the Chattahoochee River aquifer is where it grades into carbonate rocks of the lower part of the Floridan Aquifer System (Miller, 1990). The Chattahoochee River aquifer slopes gently seaward from its outcrop belt. Geologic formations included in the Chattahoochee River aquifer range in age from Late Cretaceous to Late Paleocene. The rocks are mostly sand beds with thin, lignitic clay lenses and locally include glauconitic sand and limestone. These rocks were deposited in marine environments in the Project area (Miller, 1990).

#### **Pearl River Aquifer**

The Pearl River aquifer is a thick sequence of sand with minor sandstone and gravel, and a few limestone beds. The sediments comprising the aquifer range in age from Paleocene to late Eocene and were deposited mostly in marine environments. The aquifer is equivalent to the Mississippi embayment aquifer system to the west and southwest and to part of the Floridan aquifer system in southern Georgia and adjacent areas.

The Pearl River aquifer and the Floridan aquifer system are hydraulically connected (Miller, 1990). The top of the Pearl River aquifer slopes gently toward the Atlantic Ocean and the Gulf of Mexico. The seaward limit of the aquifer in Florida and Georgia is the area where it grades completely into carbonate rocks of the Floridan aquifer system. In southwestern Alabama, its limit is the area where it grades completely from sandy strata into low-permeability clay. The aquifer contains freshwater everywhere except for a small area in southwestern Alabama and panhandle Florida (Miller, 1990).

### **Floridan Aquifer System**

The Floridan aquifer system is one of the most productive aquifers in the world. This aquifer system underlies an area of approximately 100,000 square miles in southern Alabama, southeastern Georgia, southern South Carolina, and all of Florida. Within the Project area, this aquifer underlies the Project from Terrell County, Georgia to the Project terminus in Florida. A thick sequence of carbonate rocks (limestone and dolomite) of Tertiary age comprises the Floridan aquifer system. The aquifer system is thick and widespread, and the rocks within it generally vary in permeability. In most places the system can be divided into the Upper and Lower Floridan aquifers, separated by a less-permeable confining unit. The geology and hydraulic properties of the Upper Floridan aquifer have been extensively studied, and is highly permeable in most places. Additionally, in most places the Upper Floridan aquifer yields sufficient water supplies for most purposes, and there is no need to drill into the deeper Lower Floridan aquifer. The confining unit separating the Upper and Lower Floridan aquifers is present at different elevations and consists of different rock types from place to place. Regardless of rock type, wherever the middle confining unit is present, it restricts the movement of groundwater between the Upper and Lower Floridan aquifers. The carbonate rocks of the Floridan aquifer system are readily dissolved where they are exposed at land surface (unconfined) or are overlain by only a thin layer of confining material, resulting in sinkholes and karst topography in some areas. The Project crosses unconfined and thinly confined areas of the aquifer in Terrell, Lee, Dougherty, and Mitchell counties, Georgia, and from the Georgia/Florida state line south to Sumter and Lake Counties, Florida. Water is able to enter, move through, and discharge from the Floridan aquifer system more readily and rapidly where it is unconfined or where the upper confining unit is thin. Florida has 33 first-magnitude springs (springs with a flow of 100 cubic feet per second or more). All of them issue from the Upper Floridan aquifer, and practically all of them are located in areas where the upper confining unit of the Floridan aquifer system either is less than 100 feet thick or is absent. Areas where the Floridan aquifer system is confined are crossed by the Project in Colquitt County, Georgia and a portion of Brooks County, Georgia. In this location, the upper confining unit is generally greater than 100 feet thick and unbreached, and separates the Floridan aquifer system from the Surficial aquifer system (Miller, 1990). Approximate well yields are included in Table 2.2-1.

The most common dissolved solids in water from the Upper Floridan aquifer are calcium, magnesium, sodium, bicarbonate, chloride, and sulfate. All of these ions are present either in the minerals of the aquifer or in unflushed saltwater within the aquifer. In general, water in the Lower Floridan aquifer is chemically similar to that of the Upper Floridan aquifer, except for dissolved-solids concentrations. There are more dissolved solids in the water in the Lower Floridan aquifer because this water has followed longer flowpaths and, accordingly, has had more time to dissolve aquifer minerals (Miller, 1990).

The Floridan aquifer system provides water for several large cities, including Savannah and Brunswick in Georgia; and Jacksonville, Tallahassee, Orlando, and St. Petersburg in Florida. In addition, the aquifer system provides water for hundreds of thousands of people in smaller communities and rural areas. In several places where the aquifer contains saltwater, such as along the southeastern coast of Florida, treated sewage and industrial wastes are injected into the Lower Floridan. Near Orlando, drainage wells are used to divert stormwater into the Lower Floridan aquifer. The Floridan is intensively pumped for industrial and irrigation supplies in much of the state.

### **Other Rocks (Intermediate Confining Unit)**

Areas defined as “Other Rocks/Confining Unit” in the national atlas data (USGS, 2003) are also described as “Intermediate Confining Unit” by the Florida Department of Environmental Protection (“FDEP”) (FDEP, 2007). A confining unit is a body of relatively impermeable or significantly less permeable material stratigraphically adjacent to one or more aquifer units. These areas are identified by milepost in Table 2.2-1. Approximate well yields are included in Table 2.2-1.

### **Surficial Aquifer System**

The Surficial aquifer system in the southeastern United States includes any otherwise undefined aquifers that are present at the land surface. The sand and gravel aquifer of Florida and southwestern Alabama, and the Biscayne aquifer of southern Florida (lateral equivalents of the Surficial aquifer system) are defined separately because of their importance as water sources for large municipalities. Within the Project area, the Surficial aquifer system underlies the Project in Colquitt and Brooks counties in Georgia and in Polk, Osceola, and Orange counties in Florida. The Surficial aquifer system consists mostly of beds of unconsolidated sand, shelly sand, and shell. Locally, in southwestern Florida, limestone beds form an important and highly permeable part of the system. In places, clay beds are sufficiently thick and continuous to divide the system into two or three aquifers; mostly, however, the system is undivided. Complex interbedding of fine- and coarse-textured rocks is typical of the system. The rocks that comprise the Surficial aquifer system range from late Miocene to Holocene in age. Approximate well yields are included in Table 2.2-1.

The transmissivity of the Surficial aquifer system is extremely variable (Miller, 1990). Hardness and dissolved-solids concentrations also vary widely and saltwater intrusion is a problem locally, where saline water from uncontrolled flowing artisan wells tap deeper aquifers (USGS, 1985). The Surficial aquifer system, although used by a large number of people, principally is used only for domestic, commercial, or small municipal supplies. Well yields range from less than 50 gpm in most of Georgia and South Carolina, to 450 gpm in St. Johns County, Florida, to 1,000 gpm in Indian River County, Florida (Miller, 1990).

#### **2.2.1.2 Aboveground and Pipeline Appurtenant Facilities**

Sabal Trail proposes to construct five compressor stations and six M&R stations along its proposed pipeline. Additional information on proposed compressor and M&R station facilities is provided in Resource Report 1. Aquifers and aquifer systems underlain by the proposed aboveground facilities are identified in Table 2.2-1, and are described in Section 2.2.1.1, above. Sabal Trail will construct additional aboveground facilities including MLV and “pig” launcher and receiver sites. The locations of proposed MLV sites are shown on the aerial based alignment sheets in Appendix 1A, Volume II-B. Sabal Trail will generally be installing these MLV’s along its proposed pipeline and within areas disturbed by pipeline construction and the permanent operational ROW, however, in certain cases remote blow off valves will need to be located outside of these areas where the construction ROW is located next to an electric transmission line corridor. The locations of pig launcher/receiver sites will be located within the limits of the proposed compressor and M&R station facilities. For this reason, the groundwater resources associated with the MLVs, pig launcher, and pig receiver facilities and the potential impacts of these facilities on groundwater resources will be the same as those associated with the corresponding pipeline facilities or station site.

#### **2.2.1.3 Pipe Yards and Contractor Ware Yards**

Land requirements for the proposed pipe/contractor ware yards are provided in Table 1.5-4 of Resource Report 1. These areas will be used for equipment, pipe, and material storage, as well as temporary field offices and pipe preparation/field assembly areas. The pipeline contractors will only utilize contractor ware yard locations approved for the Project.

## 2.2.2 Sensitive Groundwater Resources

Sensitive groundwater resources include U.S. Environmental Protection Agency (“USEPA”) designated Sole Source Aquifers (“SSAs”), state-designated aquifers that are afforded special protection in each state, public and private water supply wells, springs, and wellhead and aquifer protection areas. Each of these sensitive groundwater resources as they relate to the Project is discussed further below.

### 2.2.2.1 Pipeline Facilities

#### Sole Source Aquifers

SSA designations were defined by the USEPA, pursuant to Section 1424(e) of the Safe Drinking Water Act (“SDWA”), for an aquifer that provides a sole or principal source (greater than 50 percent) of drinking water for an area, where contamination of the aquifer could create a significant hazard to public health, and where there are no alternative water sources that could reasonably be expected to replace the water supplied by the aquifer (USEPA, 2012). According to the USEPA’s designated SSA maps for Region 4 (USEPA, 2014a), the streamflow and recharge source zone (“Recharge Zone”) for the Biscayne SSA is crossed by the proposed pipeline facilities in Osceola and Orange Counties Florida (*see* Table 2.2-2). Only the area designated as Recharge Zone for the Biscayne SSA is crossed by the Project, the area designated as the SSA is not crossed by the Project. The USEPA must review and approve federal financial assistance to a project that is located within an SSA and that has the potential to create a significant hazard to public health; however, the Project does not involve federal financial assistance and, therefore, does not require USEPA review. Additionally, the proposed pipelines will transport natural gas (methane) and would not pose a significant hazard to public health (*see* Section 2.2.4). Figure 2.2-2 depicts the proposed Project facilities in relation to the identified SSA and its Recharge Zone.

Recharge is the process by which aquifers are replenished with water from the surface. A number of factors influence the rate of recharge including the soil type, plant cover, slope, rainfall intensity, and the presence and depth of confining layers and aquifers. For Florida the groundwater recharge tends to occur during summer months when the precipitation is found to be the highest (UF, 2007). The streamflow source zone is the upstream area of streams which flow into the recharge area (USEPA, 2010). The designation of the Biscayne SSA Recharge Zone indicates that precipitation recharges the aquifer in the designated area (recharge) and that surface waters in the designated area may serve to recharge the aquifer because they flow in the direction of the aquifer (stream flow source). The designated Recharge Zone extends into Orange County, Florida to the north and into Monroe and Miami-Dade Counties, Florida to the south (USEPA, 2014a). The Biscayne aquifer is recharged principally by rainfall. National Oceanic and Atmospheric Administration (“NOAA”) records for the weather station at Kissimmee (Osceola County, Florida) show an average annual precipitation of 47.99 inches. Rainfall during May through September contributed approximately 62 percent of this total (U.S. Climate Data, 2014). Research by Schiner (1993) concluded that recharge from summer rains generally have been able to replenish the water discharged from the aquifer. Groundwater levels in surficial aquifers can change rapidly in response to drought or rainfall, as well as from withdrawals by pumping (SFWMD, 2014).

Cover type in the Recharge Zone crossed by the pipeline facilities includes cropland and pasture lands, freshwater marsh, cypress swamp, mixed wetland forest, mixed wetland hardwood forest, roads, electric transmission corridor, upland forest, streams and waterbodies, residential and commercial areas, and open/barren land. Forest/woodland and agricultural land are the predominant land use in the Recharge Zone. Streams crossed by the Project within the Recharge Zone are identified in Table 2.3-3 (Osceola and Orange Counties).

### **State-Designated Aquifers**

In addition to the USEPA designated SSA program, individual states may enact regulations protecting significant aquifer recharge areas used for public water supplies. The characteristics of state-designated aquifers underlying the proposed Project facilities are described below. Project crossing locations for medium and high yield aquifers are presented in Table 2.2-1, along with reported yield and depth.

#### **Alabama**

Sabal Trail has initiated consultation with the Alabama Department of Environmental Management (“ADEM”) and no Alabama state-designated or protected aquifers were identified in the Project area in Alabama (Arnold, 2014).

#### **Georgia**

Sabal Trail has initiated consultation with the Georgia Environmental Protection Division (“GAEPD”) and while no Georgia state-designated or protected aquifers were identified in the Project area in Georgia, the Mainline Route overlies significant recharge areas in certain parts of the state. (Trent, 2014).

In Georgia, significant groundwater recharge areas are protected under the Georgia Planning Act of 1989 and implementing regulations Georgia Department of Natural Resources (“GDNR”) Rule 391-3-16.02, Criteria For Protection of Groundwater Recharge Areas. Under this rule, variable levels of recharge area protection can be based upon the state’s hydrogeology. Recharge area protection within the significant recharge areas would be further refined, based upon the local susceptibility or vulnerability to human induced pollution (e.g., high, medium, or low). Significant recharge areas have been identified and mapped for approximately 22 to 23 percent of the state and pollution susceptibility mapping is ongoing. “Significant Recharge Areas” means those areas mapped by GDNR in Hydrologic Atlas 18 (1989 edition). Mapping of recharge areas is based on outcrop area, lithology, soil type and thickness, slope, density or lithologic contacts, geologic structure, the presence of karst, and potentiometric surfaces. Criteria address new development and uses such as septic, land disposal, and hazardous waste. Review of the Groundwater Recharge Area shapefile available from GAEPD identified the Mainline Route overlies mapped recharge areas from the Alabama/Georgia state border through Mitchell County Georgia, and at the Georgia/Florida state border in Lowndes County Georgia.

#### **Florida**

Florida classifies groundwater into five categories (Classes G-1, F-1, G-II, G-III, G-IV) under Chapter 62-520 of the Florida Administrative Code (“FAC”). Classifications are based first on whether the water is potable (drinkable) or non-potable, then on the total of dissolved solids the water contains, and finally on whether the water is located in a confined or unconfined aquifer as defined by Florida Administrative Code 62-520.410(1). Classifications include the following:

1. Class G-I water is potable groundwater in a single source aquifer (where *single source* means that the aquifer is the only reasonably available source of potable water to a significant segment of the population). Class G-I water has a total dissolved solids content of less than 3,000 mg/L and is specifically reclassified as Class G-I by the Environmental Regulation Commission (“ERC”).
2. Class F-I water designation is the same as G-I, but only includes the surficial aquifers (i.e., shallow aquifers that are close to the surface) in northeast Flagler County as described by FAC 62-520.460 (1).
3. Class G-II waters are still potable, but have a total dissolved solids content up to 10,000 mg/L.
4. Class G-III waters are non-potable, are located in unconfined aquifers, and either have a total dissolved solids content of 10,000 mg/L or greater or have been declared non-potable by ERC.



5. Class G-IV waters are non-potable, are located in confined aquifers only, and have a total dissolved solids content of 10,000 mg/L or greater. Class G-IV waters receive the least amount of protection.

Primary groundwater quality standards depend on the class of the groundwater, and they generally include the following:

1. *Minimum criteria.* This requires that all groundwater, except G-IV, must not be contaminated by carcinogenic or toxic substance discharges. However, G-IV waters are subject to the minimum criteria if there is a danger to the environment or public health, safety, or welfare.
2. *Maximum contaminant.* This standard represents the maximum amount of particular contaminants that will be tolerated in a particular class of water. For Classes F-I, G-I, and G-II, maximum contaminant levels (Primary Drinking Water Standards) are generally in accord with standards developed by the Florida Safe Drinking Water Act. Permits for the discharge of wastes will not be issued under Chapter 403, Florida Statutes, Section 403.088, when maximum contaminant levels in groundwater are exceeded by a discharge activity unless there is a granted exception (Olexa et. al., 2013).

Sabal Trail has contacted the FDEP and no G-I groundwater classifications have been identified in the Project area. While mapping of groundwater classifications is not available, it is likely that the Project area is located above Class G-II groundwater (James, 2014). Comments on the Project from the Florida Department of Economic Opportunity identified areas of high aquifer recharge crossed by the Project in Suwannee, Gilchrist, and Marion Counties (FERC, 2014).

### **Public and Private Water Supply Wells and Springs**

To identify public and private water supply wells and springs within 150 feet of the Project, Sabal Trail searched publicly available electronic databases from the FDEP, Suwannee River Water Management District, St. John's River Water Management District, and the Florida Geological Survey ("FGS"). Additionally, Sabal Trail consulted the FDEP, the applicable water management districts ("WMDs"), ADEM, and GAEPD regarding public and private drinking water supply wells and springs. No public drinking water sources were identified within 150 feet of the Project in Alabama and Georgia (Arnold, 2014 and Trent, 2014). Consultation regarding public wells in Florida identified one public supply community well (Toho Water Authority), (*see* Table 2.2-3) within 150 feet of the Project area in Florida (FDEP, 2008, Vincent, 2014). All known public and private supply wells and springs within 150 feet of the construction work areas for the Project are listed in Table 2.2-3. Table 2.2-3 includes wells and springs that have been identified in the field by landowners, ROW agents, or civil surveyors associated with the Project, and through review of available GIS shapefiles, agency correspondence, and public comment letters. Prior to construction, Sabal Trail will verify the existence of public and private water supply wells and springs within 150 feet of the construction work areas.

Geologists estimate that there are nearly 600 springs in the state of Florida, representing what may be the largest concentration of freshwater springs on Earth. Springs in the Project area in Florida are used for public recreation (*see* Resource Report 8) as well as drinking water supply. Springs are classified by rate of discharge. First magnitude springs produce the greatest amount of water (100 cubic feet per second or more) and Florida boasts 33 first magnitude springs (The Florida Springs Task Force, 2000). Several GIS shapefiles are available from FDEP and the Florida WMDs to assist in locating known springs including FDEP's 2011 Spring Locations shapefile. The purpose of FDEP's 2011 Spring Locations file was to combine available spring stations and information from many agencies to provide the best available spring vent location for each spring (FDEP, 2011).

Sabal Trail reviewed the FDEP (2011) Spring Locations file for springs within 0.5-mile of the Project. Ten springs were identified within the 0.5-mile radius, seven springs associated with the Withlacoochee River

(Adams, HAM610982, Morgan, MAD610981, MAD 610982, HAM610981, and Tanner), one spring associated with the Suwannee River (Anderson), one spring associated with the Santa Fe River (SUW917972), and one spring associated with Little Jones Creek (A. Wayne Lee Spring). All of these springs except Adams are located within 2,000 feet of the proposed workspace, and none are first magnitude springs. The two nearest springs were identified at the proposed Withlacoochee River crossing at the Madison/Hamilton County line; MAD610982 is located within 150 feet of workspace for water intake hose for the Withlacoochee River HDD. Additional information on springs and springsheds in the Project area, including figures, is provided in Resource Report 6 – Geological Resources, Appendix 6B - Characterization of Karst Sensitive Areas Relative to the Proposed Route of the Sabal Trail Natural Gas Pipeline in Florida. Note that the springs associated with the Withlacoochee River in Hamilton/Madison County will be avoided with incorporation of the Withlacoochee Route Alternative 3 into the proposed route (*see* Resource Report 10, Section 10.7).

### **Wellhead, Aquifer, and Spring Protection Areas**

Under a 1986 amendment to the federal SDWA, each state is required to develop and implement a wellhead protection program to identify the land and recharge areas contributing to public supply wells, and prevent the contamination of drinking water supplies. The SDWA was later updated in 1996 with an amendment requiring the development of a broader-based Source Water Assessment Protection Program (“SWAPP”), which includes the assessment of potential contamination to both groundwater and surface water through a watershed approach. States assess and delineate groundwater protection areas under a combination of these mandates.

Five state-designated protection areas for public supply wells are crossed by the Project in Florida and none have been identified as crossed in Alabama or Georgia. These locations are summarized in Table 2.2-3. Sabal Trail has initiated consultation with FDEP, the applicable WMDs, ADEM, and GAEPD regarding well, aquifer, and spring protection areas. The following sections describe the wellhead/aquifer protection programs for each state. Refer to Section 2.2.4 for a discussion of groundwater impacts and mitigation as it relates to wellhead and aquifer protection areas (“WHPA”) in the vicinity of the Project.

#### **Alabama**

ADEM Administrative Code Chapter 335-7-12.01 (“ADEM Admin. Code R. 335-7-12-.01”) implements the Alabama Wellhead Protection Program, as required by the SDWA and as authorized pursuant to the Alabama Underground Storage Tank and Wellhead Protection Act of 1988, to assist public water systems in protecting areas surrounding public water supply wells within their jurisdictions against contaminants that may have adverse effects on human health. Additionally, each community public water system in Alabama utilizing a groundwater source shall develop a Source Water Assessment Program (“SWAP”). Upon approval of the SWAP by ADEM a community water system may voluntarily proceed with developing a local Wellhead Protection Program (ADEM Admin Code R. 335-7-12-.02). All public water supply systems using a groundwater source for its drinking water must have a completed and approved SWAP (ADEM Admin. Code R. 335-7-15-.03). Consultation with ADEM did not identify any groundwater protection areas in the Project area in Alabama (Arnold, 2014).

#### **Georgia**

In Georgia, the source of water supply for all public water systems must have the approval of GAEPD in accordance with the Rules of the GDNR GAEPD Chapter 391-3-5.06 (“GDNR Rule 391-3-5.06”). Before approval of the source, whether from a well or a spring, a Source Water Assessment Plan for the proposed groundwater source must be developed (GDNR Rule 391-3-5-.06(d)(4)). Additionally, GAEPD developed a Wellhead Protection Plan including identification of a Control Zone for each well or spring, identification of each Management Zone for each well or spring, an inventory of potential pollution sources, and a management plan for potential pollution sources identified in the inventory. Within the Control Zone, the

owner must control all activities in the immediate vicinity of the well bore. Within the Management Zone certain potential pollution sources are prohibited and certain activities must be performed in accordance with specific rules. The size and shape of Management Zones are delineated based on several factors, including aquifer type, and may include an inner and outer zone. Depending on aquifer type, Management Zones can range from 100 feet to 500 feet from the well or spring (GDNR Rule 391-3-5-.40). Additionally, Georgia sets location standards for wells including setback distances from septic tanks, septic tank absorption fields, sewers, solid waste disposal sites, open abandoned wells and sink holes, and additional protection is required for wells located in flood plains (GDNR Rule 391-3-5-.07).

Consultation with GAEPD did not identify any groundwater protection areas in the Project area in Georgia (Trent, 2014). Research of Project area towns has identified that the City of Albany uses groundwater wells as the source for public drinking water supplies. The primary source of water supply for the Albany service area is 32 separate but interconnected groundwater wells (Albany Water, Gas, and Light Commission, 2014). The proposed Project traverses the southern boundary of the City of Albany well field near MP 159. Sabal Trail has surveyed wells on the property and has initiated discussion with the City regarding existing infrastructure and location of the proposed pipeline. Correspondence with the City of Albany identified a preference for Sabal Trail to be located 200-300 feet from production wells, and stated that a 100-foot fenced area is currently maintained around the wells (Daniels, 2014). The pipeline as proposed is located more than 300 feet from the identified production wells associated with the City of Albany well field. Initial discussions have indicated that wells identified closer than 100 feet to the pipeline are sampling wells, or are not in use. Correspondence with the City also identified existing underground power lines and a planned water line on the property. Sabal Trail will continue to coordinate with the City of Albany regarding this property and construction near existing and planned utilities through the easement process and during construction and operation of the Project. Sabal Trail has collocated the proposed pipeline with existing utility corridors in this location to minimize effects on the City of Albany well field. Copies of all agency correspondence are located in Appendix 1C of Resource Report 1.

### **Florida**

The FDEP Wellhead Protection program incorporates the Wellhead Protection rule, Chapter 62-521, FAC, and groundwater protection measures administered by the FDEP regulatory programs. The Wellhead Protection Rule establishes a 500-foot radius circular WHPA around all wells which serve community and non-transient non-community public water systems. The rule prohibits certain new installations from locating in WHPAs, and specifies additional performance standards for other new installations and activities. FDEP regulatory programs also implement specific performance, permitting, and monitoring criteria designed to protect groundwater on a statewide basis (FDEP, 2013a). According to the FDEP, any additional drinking water protection regulations are established and administered at the county level. Thus, some counties may have additional delineated WHPAs. Sabal Trail has initiated consultation with FDEP, the applicable WMDs, and applicable local agencies regarding public drinking water sources and protection areas. Additionally, Sabal Trail reviewed FDEP's SWAPP Areas data layer (FDEP, 2008) and identified five SWAPP areas crossed by the Project. Two of the SWAPP areas are located on the Mainline Route and are associated with City of Wildwood and three are located on the Hunters Creek Line in Osceola County and are associated with Toho Water Authority. All five are active community public water supply wells. SWAPP areas identified within 150 feet of the Project from this data source are included in Table 2.2-3.

Correspondence with the City of Wildwood identified the Mainline Route is close to an existing well site for the City of Wildwood, known as the West Well. Additionally, the City of Wildwood identified the Project is also near several water and sewer transmission lines. The correspondence received stated that Wildwood would object to any construction activity or line placement that would negatively affect its ability to operate any existing well site, or transmission line, that is part of its potable water delivery system. Mapping of the cities' water and wastewater infrastructure was also provided (Busche, 2014). Sabal Trail



will continue to coordinate with the City of Wildwood to avoid and minimize effects on the City's infrastructure and drinking water wells through the easement process and during construction and operation of the Project. Copies of all agency correspondence are located in Appendix 1C of Resource Report 1. Sabal Trail contacted the Toho Water Authority and no response has been received as of the date of this report. Sabal Trail will continue to follow-up with the Toho Water Authority regarding the identified SWAPP areas and wells, and will provide an update on correspondence in a supplemental filing anticipated to be submitted in December 2014.

Additionally, the Florida Springs Task Force was formed under the direction of the FDEP to recommend strategies for the protection and restoration of Florida's springs. In its 2000 Report, the Florida Springs Task Force stressed the need for identification of spring protection areas. Florida's springs are located in a 32-county region, stretching from Hillsborough County on the south to Walton County in the northwest. This region is called the Florida Springs Protection Area. The majority of the proposed Project route is located within the Florida Springs Protection Area, from the Florida state-line in Hamilton County to the border of Polk and Osceola Counties. This region is identified as the area where comprehensive plans and land development regulations should be adopted to protect springs and the Florida Department of Community Affairs has published an *Implementation Guidebook* designed to provide assistance to the cities and counties within the Florida Springs Protection Area (Florida Department of Community Affairs, 2008). Springshed delineation and travel time estimates are considered the first step in the process of developing regulatory spring protection zones in Florida (Florida Springs Task Force, 2000).

Sabal Trail identified the Project crosses a portion of the primary and secondary spring protection zone ("SPZ") established for Rainbow and Silver springs in Marion County. Article 5 of the Marion County Land Development Code established the Spring Protection Overlay Zone and sets forth prohibited land uses and permitted land uses with conditions within the SPZ. Utilities and transmission pipelines are not expressly identified in the code (Municode, 2014). The SPZ crossing is identified in Table 2.2-3.

Springsheds in north Florida are groundwater basins where all precipitation that falls on the surface infiltrates into the limestone of the Upper Floridan aquifer where it becomes entrained in the flow system to eventually discharge at a discrete spring or group of springs. Sabal Trail identified springsheds crossed by the Project using shapefiles provided by the FGS (Baker, 2014). The files provided are a compilation of data from several sources, using various methodologies to define springsheds, and FGS serves as a clearinghouse for the data. Additionally, springshed boundaries are variable depending on river stage, long-term climate events, and regional rainfall. Table 2.2-4 identifies the location of springsheds crossed by the Project by MP and includes the total feet crossed and acres impacted. Additional information on springsheds, including figures and data sources used to define groundwater flow paths to springs and wells downgradient of HDD crossings for Alabama, Georgia, and Florida is included in Resource Report 6, Appendix 6B.

#### **2.2.2.2 Aboveground and Pipeline Appurtenant Facilities**

The Recharge Zone identified in Section 2.2.2.1 above underlies the proposed Reunion Compressor Station, Gulfstream M&R station, FSC M&R station, MLV-HCL-2, and MLV 32 in Osceola County and the FGT Hunters Creek M&R station in Orange County, Florida. The Albany Compressor Station in Dougherty County and MLVs 7 – 12 are located within the Georgia Significant Recharge Areas identified in Section 2.2.2.1 above. The Hildreth Compressor Station is located in the Troy springshed identified in Table 2.2-4. In accordance with 18 C.F.R. Part 380.12(d)(9), Sabal Trail is currently in the process of identifying public water supply wells and springs and protection areas in the vicinity of the Project and known locations within 150 feet of the construction work areas for the Project are listed in Table 2.2-3. Any wells, springs, or protection areas within 150 feet of the pig launcher and receiver facilities have been included in the list

for the corresponding station property that the launcher/receiver is located within. Wells, springs, and protection areas within 150 feet of MLVs have been included within the list for the pipeline facilities.

### 2.2.2.3 Pipe Yards and Contractor Ware Yards

The Recharge Zone identified in Section 2.2.2.1 above underlies proposed Contractor Yard 6-3 in Osceola County, Florida. The Georgia Significant Recharge Areas identified in Section 2.2.2.1 above underlies Contractor Yard 2-1 in Lee County, Georgia and Contractor Yard 2-2 in Dougherty County, Georgia. Sabal Trail will implement its E&SCP and SPCC Plan during construction to minimize potential effects on the Recharge Zone and the Georgia Significant Recharge Areas. Additionally, all disturbed areas will be stabilized post-construction and the Contractor Yards will be allowed to revert to pre-construction conditions.

## 2.2.3 Sources of Potentially Contaminated Groundwater

### 2.2.3.1 Pipeline Facilities

A search completed by Environmental Data Resources, Inc. (“EDR”) identified various types of potential and actual sources of contamination to nearby groundwater resources along the proposed Project facilities in Alabama, Georgia, and Florida. Information from the EDR is a compilation of a variety of available federal, state, and local government databases. The EDR Report provides a detailed list of potentially contaminated sites within one mile of the Project. The review of these databases and files resulted in the identification of numerous sites with documented groundwater and/or soil impacts. Ninety-four environmental sites were identified within 0.25-mile of the Project including 1 site listed as inactive, 69 sites listed as No Release Reported, 17 sites listed as Closed, 4 sites listed as Unknown, and 3 sites listed as Open. A list of sites identified within 0.25-mile of the Project (EDR, 2014), related contamination issues, and comments regarding impacts on soil and/or groundwater contamination is provided in Resource Report 8. TRC, on behalf of Sabal Trail, evaluated environmental sites identified by EDR for the likelihood of encountering contaminated soil and/or groundwater during construction of the Project environmental impacts to the Project Corridor from nearby offsite properties by assessing a number of variables including: historic land use, distance, topography, hydrogeology, nature and extent of the releases, and regulatory status. Criteria used for assessing properties which represent an environmental site of interest that could potentially impact work performed within the Project area Corridor included the following:

- Historic Land Use – Property owners/occupants have used and/or stored oil and hazardous materials;
- Distance - Less than or equal to 0.25 mile;
- Topography - Higher elevation;
- Hydrogeology - Upgradient location relative to Project area;
- Nature and Extent of Release(s) - 1) Characteristics of contaminant: *type, ability to migrate, persistency*. 2) Characteristics of release: *source, amount, impacted media*; and
- Regulatory Status - Release site has not achieved regulatory closure.

Soil contamination is also discussed in Section 7.5.7 of Resource Report 7.

Sabal Trail will contact affected landowners regarding the presence of private septic systems along the proposed alignment. Septic systems located adjacent to the construction workspace will be identified on residential construction plans (Resource Report 8, Appendix 8A) to alert construction crews to the presence of the system and to avoid inadvertent damage to the system that could lead to groundwater contamination. Sabal Trail will implement its Project E&SCP; Resource Report 1, Appendix 1B) to minimize or avoid any

potential disturbances to contaminated materials encountered during construction and will dispose of or mitigate for any hazardous materials uncovered, in accordance with federal, state, and local requirements. Figure 2.2-3 depicts locations of Environmental Sites in relation to the Project facilities.

As part of the Groundwater Regulatory Program, the FDEP implements Florida's groundwater standards under Chapter 62-520 FAC and delineates areas of confirmed groundwater contamination under Chapter 62-524 FAC. Sabal Trail searched available GIS data from the FDEP to locate any delineated areas of groundwater contamination that would be crossed by the Project (FDEP, 1990). The Project crosses one area reported with groundwater contaminated with the soil fumigant ethylene dibromide ("EDB"), a carcinogen according to the National Institute for Occupational Safety and Health. This area is located at approximate MP 333.6 on the Mainline Route in Gilchrist County. From 1962 to mid-1983 the Florida Department of Agriculture and Consumer Services conducted widespread field application of EDB to control nematodes in citrus groves. EDB was also used by private citizens on golf courses and on crops such as peanuts and soybeans. Delineated areas are typically drawn within a 1000-foot setback from a site or well contaminated with EDB. Delineated areas are used in the application process for new wells. Where a proposed well is located in a delineated area, the applicable WMD will either require more rigorous well construction standards or connection to a public water system (FDEP, 2013b).

### **2.2.3.2 Aboveground and Pipeline Appurtenant Facilities**

As stated above, a search completed by EDR identified various types of potential and actual sources of contamination to nearby groundwater sources at the proposed Project facilities. The sites identified in the vicinity of the proposed compressor and M&R station sites are also included in Resource Report 8. Sources of potentially contaminated groundwater associated with the pig launcher and pig receiver facilities are the same as those identified for the aboveground facility sites in which they will be located. Sources of potentially contaminated groundwater associated with MLVs are the same as those identified for the pipeline facilities at the respective MPs where the MLVs will be located and are discussed in Section 2.2.3.1, above.

### **2.2.4 Groundwater Impacts and Mitigation**

The Project is not expected to adversely impact groundwater quality and/or supply. Sabal Trail proposes to implement construction practices designed to reduce and/or mitigate potential impacts on groundwater during construction as detailed in the Project E&SCP and Spill Prevention, Control and Countermeasure Plan ("SPCC Plan") (*see* Appendix 1B of Resource Report 1), the FERC Upland Erosion Control, Revegetation, and Maintenance Plan ("FERC Plan"), and FERC's Wetland and Waterbody Construction and Mitigation Procedures ("FERC Procedures") (FERC, 2013). Proposed modifications to the FERC Plan and the FERC Procedures are included in Sabal Trail's E&SCP and SPCC Plan and its contractors will adhere to these practices related to groundwater protection including:

- Installation/maintenance of temporary and/or permanent erosion control structures until soil stabilization is achieved;
- Monitoring of dewatering operations and discharging trench-water to appropriate receiving structures or filter bags as required;
- Use of secondary containment structures when working in/near sensitive resource areas;
- Enforcing restrictions on refueling locations and storage of hazardous substances;
- Revegetation of disturbed workspace locations following installation of the Project facilities;
- Installation of permanent trench plugs, where needed to maintain existing groundwater flow patterns;

- Limited and controlled use of herbicides on the ROW only in appropriate circumstances (where other options are impractical or not available) and consistent with applicable laws, rules, and regulations, as well as any enforceable limitations and controls arising from agency consultations; and
- Prohibiting use of herbicides in or within 100 feet of wetlands or waterbodies, except as allowed by the appropriate land management agency or state agency.

Effects on groundwater from construction of the new compressor and M&R stations will be minimized through installation of post-construction stormwater management measures designed to treat the difference in stormwater runoff volume from pre- to post-construction conditions for the design storm event in accordance with federal and state requirements. Stormwater related state permits anticipated to be required for the Project are listed in Resource Report 1, Table 1.12-1. Sabal Trail will minimize new impervious and graveled surfaces required for the facilities to the extent practicable and does not anticipate that construction or operation of the facilities will result in any meaningful change in groundwater recharge outside of station limits. Hazardous material storage at aboveground facilities will be designed with respect to applicable engineering, safety, and environmental standards. The facilities will include leak detection and spill containment structures commensurate with the quantity of materials stored and will be maintained in compliance with all applicable state and federal regulations and permits and in accordance with Sabal Trails SPCC Plan (*see* Appendix 1B of Resource Report 1).

Sabal Trail evaluated pipeline routing and associated aboveground facility site options, based on existing infrastructure, regional topography, potential adverse effects on the environment, public health and safety, population density, existing land use, and construction safety and feasibility considerations. A variety of major alternatives were evaluated along with small route modifications designed to avoid specific features. One major consideration in selecting a route is drinking water resources and wells. A detailed discussion of alternatives is located in Resource Report 10.

During the initial landowner contacts to acquire survey access permission, Sabal Trail's land representatives requested information on the locations of wells, springs, and septic systems from landowners. In many locations, this information was used to reconfigure work areas or modify the pipeline alignment to avoid impacts on these structures. Sabal Trail's land representatives will continue to request information on the location of wells, springs, and septic systems prior to the commencement of construction to complete an inventory of these structures within 150 feet of the Project.

Sabal Trail will offer landowners pre- and post-construction testing of water wells within 150 feet of the construction workspace and will test for yield and turbidity parameters. A Sabal Trail representative will contact landowners after construction testing events. For any significant differences in the well yield between pre- and post-construction sampling that cannot be attributed to naturally occurring conditions, such as seasonal groundwater level fluctuations, Sabal Trail will compensate the landowner for the installation of a new well or otherwise arrange for provision of suitable water supplies.

Where possible, Sabal Trail will seek to avoid affecting a septic system and its leach field. Where affecting a septic system, Sabal Trail will work with the landowner to relocate the system, and appropriately compensate the landowner for any additionally lost usable land and associated costs.

Areas exhibiting surface saturation associated with perennial and intermittent watercourses, wetlands, and stormwater runoff ephemeral ditches, were identified during civil and environmental surveys. The presence of springs was also included in landowner consultations, and Sabal Trail will continue to work with individual landowners to identify spring locations. Additionally surveys and landowner contacts to identify and re-confirm the location of springs and wells are ongoing and will continue prior to construction. If requested by the landowner, any seeps or springs located within 150 feet of construction workspaces will

be reviewed by an expert in the field to make a determination as to whether the normally planned construction activities are expected to have any effect. If any impacts are anticipated to occur, the expert will recommend construction alterations for consideration to avoid impacting these areas.

Effects on groundwater flow can occur during blasting from aboveground dislocation resulting from the force of the blast. No blasting is proposed in the Project area in Florida (blasting is not anticipated beyond MP 100.0), (*see* the Sabal Trail Project Blasting Plan in Resource Report 6, Appendix 6A).

The primary impact on groundwater recharge areas from the Project would include vegetation removal and soil disturbance associated with trenching operations, and water withdrawals associated with hydrostatic testing and HDD. Vegetation and soil disturbance will result in temporary effects on recharge areas and temporary disturbance of the waterbodies that also serve to collect surface water to recharge the aquifer. These effects will be minimized through adherence of the Project E&SCP (Appendix 1B of Resource Report 1), which includes implementation of erosion and sediment controls such as sediment barrier, dewatering filtration, and trench breakers. The Project E&SCP includes detailed descriptions of the erosion control best management practices (“BMPs”) proposed as well as typical details that will be followed during construction.

Post-construction monitoring will ensure proper re-vegetation and restoration of recharge areas; and the affected area will continue to function as recharge for the aquifer post-construction. Effects from water withdrawals will also be temporary. Where practicable, surface waters withdrawn for the Project will be discharged to a vegetated upland area through a filtration device, within the watershed it is withdrawn from and in accordance with state and federal regulations and the Project E&SCP.

Sabal Trail will follow detailed measures for oil and hazardous materials storage and spill protection outlined in the Project E&SCP and the FERC Plan and Procedures. These spill prevention practices include proper storage, handling and inspection of containers and tanks, minimizing refueling in recharge areas, following the appropriate emergency response procedures, and adherence to all spill prevention and control measures detailed in the Project E&SCP and SPCC Plan.

The City of Albany well field was identified as crossed by the Project in Georgia. To minimize effects on the City of Albany well field Sabal Trail has collocated the proposed pipeline with an existing utility corridor (*see* Resource Report 8, Table 8.2-3) in this location and has sited the proposed pipeline along the perimeter of the well field. Additionally, the pipeline is located no closer than 300 feet from identified production wells associated with the well field. Sabal Trail will continue to consult with City of Albany throughout construction and operation of the pipeline in the vicinity of the identified well field.

Two mapped Florida springs (second and third magnitude) were identified at the crossing of the Withlacoochee River at the Hamilton/Madison County line (FDEP, 2011). Note that the springs associated with the Withlacoochee River in Hamilton/Madison County will be avoided with incorporation of the Withlacoochee Route Alternative 3 into the proposed route. Information on this alternative is anticipated to be submitted in as supplemental filing to FERC in December 2014. Sabal Trail will implement additional monitoring for mapped Florida springs (FDEP, 2011) within 2,000 feet and downstream of the Project HDDs. The specific springs identified for monitoring are listed in Appendix 2A. No first magnitude springs were identified within 2,000 feet of the Project. Monitoring measures for the identified springs are included in Appendix 2A.

Several springsheds were identified as crossed by the Project (*see* Table 2.2-4). Sabal Trail has conducted extensive geotechnical surveys and research to identify and avoid sensitive features associated with springsheds. Incorporation of the Withlacoochee Route Alternative 3 will avoid effects on spring/cave systems identified at the Withlacoochee River crossing in Hamilton/Madison County, anticipated to be filed in December 2014. Additionally, the Project will cross the Santa Fe River at the location where two existing pipelines cross the Santa Fe River through HDD. Implementation of spring monitoring at HDD locations



included in Appendix 2A and karst mitigation measures included in the Karst Mitigation Plan provided in Appendix 6F of Resource Report 6 will further minimize effects on springsheds crossed by the Project.

Trenching for the installation of the pipeline is not anticipated to cause adverse effects in the above mentioned springsheds and karst sensitive areas. Trenching during pipeline construction will occur at a depth of approximately six to seven feet below land surface throughout the karst sensitive area. At that depth, construction activities will primarily occur in the sediments that overlie the limestone throughout most of the karst sensitive area. This overburden consists mostly of unconsolidated clay, sand, and gravel that is a result of weathering of the limestone. It is therefore unlikely that trenching will interrupt or collapse major groundwater flow conduits, which tend to occur at significantly greater depths within the limestone. Spring monitoring is therefore not proposed at mapped Florida springs that are not in the vicinity of an HDD or other waterbody crossing.

Areas that may require additional monitoring during trenching include areas where the overburden has been completely eroded away and limestone exists at land surface, such as the vicinity of rivers. This also occurs nears springs but the proposed pipeline route is no closer than approximately 1.6 miles to any first magnitude spring. Other sensitive areas include areas where the pipeline route is near large sinkholes or where fracture traces are crossed. The use of geotechnical borings and geophysical surveys in these areas to identify subsurface karst features that can be avoided or properly mitigated will reduce the risk of impacts to conduit flow channels that provide water for spring discharge. The results of site-specific geotechnical investigations are included in Resource Report 6, Appendix 6C. The potential exists for small domestic supply wells in the vicinity of the pipeline route to be affected during construction. These affects would likely be related to very slight increases in turbidity or sedimentation that would dissipate when construction was completed. Permanent damage to wells such as collapse of the well bore or decreases in yield would not be likely.

The Springs Protection Overlay Zone was identified as crossed in Marion County, Florida. To minimize effects on the SPZ, Sabal Trail has located the pipeline more than one mile from the nearest Florida mapped spring in the SPZ (FDEP, 2011), and has located the pipeline within previously disturbed areas to the maximum extent practicable (within open land and agricultural land). Additionally, Sabal Trail has sited the proposed alignment an additional 2,300 feet east of the SPZ from that proposed in the draft ER filed with FERC in June 2014 to further minimize impacts on the SPZ.

HDD installation will be designed to avoid any caves identified during the geophysical surveys described in Resource Report 6, Section 6.5.1.1.

Two SWAPP areas were identified as crossed by the Mainline Route in Sumter County, Florida and three SWAPP areas were identified as crossed by the Hunters Creek Line in Osceola County, Florida. Sabal Trail has initiated consultation with the City of Wildwood and the Toho Water Authority and will continue to work with these entities to minimize any potential effects on the identified resources. Implementation of Sabal Trails E&SCP and SPCC Plan will minimize effects on SWAPP areas.

Sabal Trail will include sensitive groundwater areas (*i.e.*, areas of potential groundwater contamination, spring protection areas/zones, significant recharge zones, well fields, and other groundwater resources identified in Table 2.2-3) in the environmental training prior to construction to make workers aware of the presence of these areas, how to identify them in the field, and any applicable construction restrictions. For identification in the field, these areas will be marked with flagging and/or signage during pre-construction surveys and the locations will also be incorporated into the construction line list to alert construction personnel and Environmental Inspectors of the location of the site(s) and applicable restrictions and/or mitigation measures. Additionally, implementation of the Project E&SCP, SPCC, and Waste Management Plan, environmental inspection during construction, and post-construction re-vegetation and monitoring

will minimize effects on the identified groundwater resource areas. Post-construction, Sabal Trail will avoid the use of herbicides within the identified resource areas.

Sabal Trail reviewed the Environmental Sites located within 0.25-mile of the Project provided by EDR (*see* Table 8.4-4 in Resource Report 8) for the potential to affect the Project. Effects on the Project could occur where contaminated groundwater associated with an identified site is contacted by Project activities including trenching, dewatering, or HDD installation. The majority of the sites are listed as No Release Reported or Closed; therefore, Sabal Trail does not anticipate contacting contaminated groundwater along the majority of the proposed routes. Review of the Environmental Sites and FDEP databases (FDEP, 1990) indicated that the potential to encounter contaminated groundwater may be higher in two locations; the Merck site at MP 164.6 and the EDB groundwater contamination area at MP 333.6.

Sabal Trail conducted a file review on the Merck site identified at MP 164.6 at the GAEPD offices in Atlanta, Georgia. Results of the file review indicated that groundwater contamination associated with the site is contained within the Merck property boundaries. Site plans, corrective action effectiveness reports, and a potentiometric site map were reviewed and identified that facility production wells created a cone of depression, holding contaminated groundwater within property boundaries. The proposed ROW parallels the Merck property to the north and parallels a portion of the property to the east. The ROW is not located within the property boundary; therefore, groundwater contamination is not anticipated to be encountered during construction.

As discussed above, an EDB groundwater contaminated area would be crossed at MP 333.6. The FDEP groundwater contamination area is a radius drawn around a well, known to be contaminated with EDB, and contaminated groundwater may or may not be present within the entire delineated area. Correspondence with FDEP did not identify any construction measures for pipelines that bisect EDB areas; however, general sampling and disposal recommendations were provided (Dodson, 2014; Dougherty, 2014). The groundwater contamination area mapping does not trigger any regulations or special construction procedures that would apply to the construction of the pipeline. Nevertheless, while working in the identified groundwater contamination area, Sabal Trail will test groundwater to determine if EDB is present. If EDB is present, then Sabal Trail will limit dewatering to the footprint of the groundwater contamination area and not discharge it to an area outside the footprint unless it is first tested to determine appropriate handling and disposal options. Additionally, no wetlands or waterbodies were identified in the EDB area crossed; therefore, trench dewatering within the EDB area is not anticipated. The EDB area limits will be flagged during pre-construction surveys and incorporated into the construction line list to alert construction personnel and Environmental Inspectors of the location of the site and potential dewatering restrictions.

Due diligence will be exercised for all identified sites with potential for groundwater impact from hazardous wastes or hazardous materials to ensure that plans are developed to protect the environment and human health. Any required contingency plans will be developed in coordination with all local, state, and federal agencies that have jurisdiction over these sites and in compliance with applicable laws and regulations. If previously unidentified contaminated groundwater is encountered during construction (*i.e.*, visibly impacted soil or water), Sabal Trail will manage all excavated materials and or water in accordance with applicable local, state, and federal regulations. Sabal Trail is obligated to inform the contractor of any health or safety concerns it may be aware of on-site, and the contractor is then required to inform/train their personnel appropriately. To that end, Sabal Trail has developed a Waste Management Plan, which includes measures to be followed in the event of an unexpected encounter of contaminated soil or groundwater. A copy of this plan is provided in Appendix 1B of Resource Report 1.

## 2.3 Surface Water Resources

Surface water resources were initially identified using USGS topographic maps and subsequently verified and surveyed during wetland field delineations conducted in 2013 and 2014. A summary of total waterbodies crossed by the Project by FERC classification is included in Table 2.3-4. Approximately 98 percent of the Mainline Route, 100 percent of the Citrus County Line, and 100 percent of the Hunters Creek Line have been field surveyed for surface waterbodies. Sabal Trail is in the process of obtaining access to the remaining Project area for field surveys. Environmental information for these no access parcels has been determined using available USGS mapping, aerial imagery and other GIS-based information and will be field verified when access is obtained. Surface water resources documented in the Project area include major rivers, streams and associated tributaries, lakes, and small ponds. The following sections describe the surface water resources in the Project area.

### 2.3.1 Watersheds

Project facilities are located within 16 different Cataloguing Unit (“CU”) watersheds (*i.e.*, 8-digit Hydrologic Unit Code (“HUC”) as defined by the USGS. A hydrologic unit can accept surface water directly from upstream drainage areas, and indirectly from associated surface areas such as remnant, non-contributing, and diversions to form a drainage area with single or multiple outlet points. Each hydrologic unit is identified by a unique HUC consisting of two to twelve digits based on the six levels of classification: 2-digit HUC first-level (region), 4-digit HUC second-level (subregion), 6-digit HUC third-level (accounting unit), 8-digit HUC fourth-level (CU), 10-digit HUC fifth-level (watershed), and 12-digit HUC sixth-level (subwatershed) (NRCS, 2007). Alabama, Georgia, and Florida water management agencies use the 8-digit CU for the purposes of watershed management, monitoring, and assessment activities (Alabama State Water Program, 2014; GAEPD, 2008; Mylavarapu et. al., 2013). Table 2.3-1 provides information on the watersheds crossed by the Project facilities, including the beginning and end MP of each watershed crossing. These watersheds encompass several waterbodies as summarized in Table 2.3-2 and discussed in Section 2.3.2.

#### Alabama

The Project traverses the Tallapoosa and the Chattahoochee-Chipola River Basins in Alabama. The Tallapoosa River originates in Paulding County Georgia, just 40 miles west of Atlanta, at an elevation of approximately 1,145 feet. It flows in a southwesterly direction for approximately 195 miles into Alabama and then turns to the west after meeting Uphapee Creek and continues westerly for 40 miles to join the Coosa River near Wetumpka. Its total length of 235 miles drains a watershed area of 4,680 square miles. Only 720 square miles lie in Georgia accounting for 15 percent of the total land area. The remaining 3,960 square miles lie in Alabama accounting for 85 percent of the land area. Principle tributaries in the Tallapoosa River Basin include the Little Tallapoosa River in Georgia and Sougahatchee Creek, South Sandy Creek, Uphapee, and Hillabee Creeks in Alabama (The Tallapoosa Watershed Project, 2008). Within the Tallapoosa River Basin, the Mainline Route crosses the Middle Tallapoosa CU from the beginning of the pipeline in Tallapoosa County, Alabama into Chambers County Alabama. Named streams crossed by the pipeline within this CU include Oaktasasi Creek, Hillabee Creek, Josie Leg Creek, Timbergut Creek, Tallapoosa River, Andrews Branch, and County Line Creek (*see* Table 2.3-3).

The Mainline Route enters the Chattahoochee-Chipola River Basin in Chambers county Alabama. The Chattahoochee River originates in northeast Georgia and flows southwest through Atlanta. Downstream of West Point Dam the Chattahoochee River forms the border of Alabama and Georgia and then continues south to the Florida Panhandle where it joins the Flint River in Lake Seminole and forms the Apalachicola River and flows southward to Apalachicola Bay. The Chipola River is a tributary to the Apalachicola River and originates in Houston County, Alabama, south of Dothan. The drainage area for this basin is 8,700 square miles in Alabama and it includes eleven major impoundments (Alabama Clean Water Partnership,



2014). Within the Chattahoochee-Chipola River Basin, the Mainline Route traverses the Middle Chattahoochee-Lake Harding and Middle Chattahoochee-Walter F CUs from Chambers County Alabama into Webster County, Georgia. Named streams crossed by the pipeline within the Middle Chattahoochee-Lake Harding CU include Boyds/Snapper Creek, Halawakee Creek, and Little Halawaka Creek. Named Streams crossed by the pipeline within the Middle Chattahoochee –Walter F CU in Alabama include Phelps Creek, Little Uchee Creek, Flake Creek, Horselot Branch, Uchee Creek, Cowpen Creek, Ihagee Creek, and the Chattahoochee River at the Alabama/Georgia state line (*see* Table 2.3-3).

### **Georgia**

The Mainline Route continues to traverse the Middle Chattahoochee – Walter F CU in Georgia as described in Section 2.3.1.1 above. Named streams crossed by the pipeline within the Middle Chattahoochee–Walter F CU in Georgia include Hannahatchee Creek, Colochee Creek, Frog Bottom Creek, and Hodchodkee Creek. The Mainline Route then enters the Flint River Basin in Webster County, Georgia and traverses this basin through Terrell, Lee, Dougherty, and Mitchell Counties, into Colquitt County. The Flint River originates near Atlanta, Georgia, at the base of Atlanta's Hartsfield International Airport and passes through Lake Blackshear (near Cordele, Georgia) and Lake Chehaw (near Albany, Georgia) before converging with the Chattahoochee River at the Jim Woodruff Lock and Dam where the rivers merge to create Lake Seminole. The single river that leaves Lake Seminole is known as the Apalachicola, which flows through Florida to the Gulf of Mexico. The Flint River is more than 200 miles long and drains some 8,460 square miles (Flint River, 2014). Within the Flint River Basin, the Mainline Route traverses the Ichawaynochaway, Kinchafoonee-Muckalee, and Lower Flint CUs. The Mainline Route does not cross any named streams in the Ichawaynochaway CU and crosses Reedy Creek in the Kinchafoonee-Muckalee CU. Named streams crossed by the Mainline Route in the Lower Flint CU include Cooleewahee Creek, the Flint River, Dry Creek, and Raccoon Creek.

The Mainline Route then enters the Ochlocknee River Basin in Colquitt County. The Ochlockonee River basin is located in Georgia and Florida and drains approximately 6,330 square miles. Approximately 1,460 square miles of the basin are in Georgia. The headwaters are located in Worth County, Georgia and the river flows in a southwesterly direction into Florida and eventually empties into the Gulf of Mexico (Georgia River Network, 2014a). Within the Ochlockonee River Basin, the Mainline Route traverses the Upper Ochlockonee CU. Named streams crossed by the pipeline within the Upper Ochlockonee CU include Bridge Creek, Little Creek, and the Ochlockonee River.

The Mainline Route traverses the Suwannee River Basin in Georgia from Colquitt County through Brooks and Lowndes counties to the Florida state line. The Suwannee River originates in southeast and south-central Georgia from Okefenokee Swamp, flows south 45 miles to White Springs, Florida and then forms a wide loop toward the west and empties into the Gulf of Mexico. The Suwannee River basin drains approximately 11,020 square miles including part or all of 20 Georgia counties, with approximately half of the basin's area in Georgia (Georgia River Network, 2014b). Within the Suwannee River Basin in Georgia the Mainline Route traverses the Withlacoochee and Little CUs. Named streams crossed by the pipeline in the Withlacoochee CU include Sloans Creek, Hog Creek, Little Creek, Okapilco Creek, Coon Creek, the Withlacoochee River, and Clyatt Mill Creek. The Little CU is crossed for a short distance in Brooks County, Georgia, and no named streams are crossed within this CU.

### **Florida**

The Mainline Route continues to traverse the Suwannee River Basin in Florida from the Georgia state line through Madison, Hamilton, Suwannee, Gilchrist, and Alachua counties and into Levy County. This area is managed by the Suwannee River WMD. The Suwannee River Basin is the largest watershed in the state, covering 7,702 square miles in north-central Florida within all or part of 14 counties. The watershed contains a rich assortment of rivers and streams, springs, cypress ponds, swamps, and estuaries (FDEP,

2014a). Within the Suwannee River Basin in Florida the mainline traverses the Withlacoochee, Lower Suwannee, Santa Fe, and Waccasassa CUs. Part of the Project in the Waccasassa CU in Levy County falls under the management of the Southwest Florida WMD. Named streams crossed by the pipeline in the Withlacoochee CU include Jumping Gully Creek and the Withlacoochee River. Named streams crossed by the pipeline in the Lower Suwannee CU include the Suwannee River and Little River, and the Santa Fe River is crossed within the Santa Fe CU. No named streams are crossed within the Waccasassa CU.

The Mainline Route traverses the Oklawaha River Basin for a short distance in Levy, Lake, Sumter, and Polk counties. This area is managed by the Southwest Florida WMD. The Oklawaha River watershed covers 2,769 square miles from the Green Swamp in Polk County and Lake Apopka sub-basins north through the Rodman Reservoir to the river's discharge into the St. Johns River near the town of Welaka. Along the way the river receives water from Silver Springs via Silver River and Orange Creek and chains of large connected lakes and wetlands are prominent surface features in this drainage. It is the largest tributary watershed of the St. Johns River (FDEP, 2014b). No named streams are crossed by the pipeline in this River Basin.

The Mainline Route traverses the Withlacoochee River Basin in Marion, Levy, Sumter, Lake, and Polk Counties and the Citrus County Line traverses this basin in Marion and Citrus counties. The Southwest Florida WMD manages this area. A portion of the Withlacoochee CU in Lake County is managed by the St. Johns River WMD. The Withlacoochee River located within the Suwannee River Basin in southwestern Georgia and northern Florida (identified above) is separate from the Withlacoochee River identified here in the Withlacoochee River Basin in eastern-central Florida. The two are not connected and are two distinct basins. The 157 mile long Withlacoochee River originates in the Green Swamp in northern Polk County. From there, it meanders northwest and then west, discharging into the Withlacoochee Bay Estuary in the Gulf of Mexico near Yankeetown. The basin encompasses 2,100 square miles located primarily in Marion, Polk, and Sumter counties, and in portions of Citrus, Hernando, Lake, Levy, and Pasco Counties. The watershed's natural communities form an extensive and diverse ecosystem, ranging from river floodplain forests, cypress domes, pine flatwoods, and sandhills in the Green Swamp; to extensive lake systems and marshes in the middle of the watershed; to salt marshes and the estuary at the river mouth. Within the Withlacoochee Basin, the pipeline crosses the Withlacoochee CU. No named streams are crossed by the Mainline Route in this River Basin. The Withlacoochee River is crossed within this River Basin on the Citrus County Line.

The Citrus County Line extends west from the Withlacoochee River Basin into the Springs Coast Basin. The Springs Coast Basin encompasses parts of Pasco, Hernando, Citrus, and Pinellas counties in west-central Florida. It is bounded on the west by the Gulf of Mexico and on the east by the Brooksville Ridge. The basin encompasses approximately 1,052 square miles (673,000 acres), not including an estuarine ecosystem that extends in a nearly unbroken swath along the entire shoreline (an additional 97,911 acres). The basin consists of six major rivers and four major spring complexes (FDEP, 2014c). Within the Springs Coast Basin, the Citrus County Line crosses the Crystal-Pithlachascotee CU. This area is managed by the Southwest Florida WMD. No named streams are crossed by the pipeline in this River Basin.

The remainder of the Mainline Route and the Hunters Creek Line traverse the Kissimmee River Basin within the Kissimmee CU in Polk, Osceola, and Orange counties. The Kissimmee River Basin encompasses 2,932 square miles associated with the Kissimmee River and 850 square miles associated with Fisheating Creek. The basin is located in Orange, Osceola, Polk, Okeechobee, Highlands, and Glades counties. This area is managed by the South Florida WMD. The Kissimmee River and Fisheating Creek watersheds are adjacent basins that both flow into Lake Okeechobee and are part of the greater Everglades ecosystem. The Kissimmee River Basin extends from Orlando southward to Lake Okeechobee. The largest source of surface water to Lake Okeechobee, this basin is approximately 105 miles long and has a maximum width of 35 miles. The Project is located in the northern portion of the basin, referred to as the Chain of

Lakes, which contains many lakes, some of which are interconnected by canals. The Chain of Lakes is bounded on the southern end by State Road 60 where the largest of the lakes, Lake Kissimmee, empties into the Kissimmee River. The southern portion of the basin includes the Lake Wales Ridge lakes, the Kissimmee River itself, and its tributary watersheds (including flow from the Istokpoga watershed) between Lake Kissimmee and Lake Okeechobee. The Kissimmee River was originally a 103 mile long shallow, meandering river that was reconfigured in the 1960s into a 56 mile long canal (renamed C-38) for flood control (FDEP, 2014d). Within the Kissimmee CU, the pipeline crosses Reedy Creek and Shingle Creek.

### **2.3.2 Waterbodies Crossed by the Project**

A waterbody, as defined by the FERC, is “any natural or artificial stream, river, or drainage with perceptible flow at the time of crossing, and other permanent waterbodies such as ponds and lakes.” The U.S. Army Corps of Engineers (“USACE”) has jurisdiction over “waters of the U.S., including wetlands”, pursuant to Section 404 of the federal Clean Water Act (“CWA”). Waterbodies include streams with perennial, intermittent, or ephemeral flow. Perennial streams flow year-round. Typically, intermittent streams will flow continuously during wet seasons, but may be dry for a portion of the year. Ephemeral streams flow only for a short period following major rainfall events. Intermittent and ephemeral streams may be dry at the time of construction, depending on the time of year and rainfall conditions.

The boundary of non-tidal surface waters potentially subject to USACE jurisdiction is defined by the Ordinary High Water Mark (“OHWM”), except where wetlands are present. The OHWM is the line on the shore established by the presence and/or fluctuations of water, and which is indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. Intermittent and ephemeral streams with an OHWM, and other surface waters that are dry at the time of crossing, may be jurisdictional as “waters of the U.S.” FERC defines waterbodies as being minor if they are less than or equal to 10 feet wide at the crossing location, intermediate if they are greater than 10 feet wide but less than or equal to 100 feet wide, and major if they are greater than 100 feet wide at the crossing location.

The term “waterbody” as it is used in this Resource Report is inclusive of all “waters of the U.S.,” other than wetlands, that are potentially jurisdictional to the USACE, and all waterbodies as defined by the FERC. Potential surface water resources within the Project area were initially identified using USGS 7.5-minute topographic maps and then field verified during waterbody and wetland delineation surveys. Field surveys for wetlands and waterbodies commenced in 2013 and are ongoing (*see* Resource Report 1, Section 1.13.1).

#### **2.3.2.1 Pipeline Facilities**

Waterbodies that will be crossed by the Sabal Trail pipeline facilities and located within the proposed workspace are listed in Table 2.3-3. The table contains a list of the waterbodies crossed by the Project pipeline facilities, including milepost, flow type, crossing width, fishery classification, state water quality classification, and the proposed crossing method for individual waterbodies in Alabama, Georgia, and Florida. Fisheries crossed by the Project are discussed in Section 3.2.2 of Resource Report 3. The information presented in the tables was collected through field surveys conducted in 2013 and 2014 for land parcels with landowner access and use of GIS National Hydrography Dataset (“NHD”) produced by the USGS and state GIS datalayers for areas where land access has not been permitted. NHD data is shown on the Project alignment sheets (Appendix 1A, Volume II-B). Additionally, water use quality designations and fishery classification information was collected through review of state water quality regulations and state fishery management agency websites.

NHD data sets (USGS, 2012) were used to identify waterbodies for no-access parcels, and are included in Table 2.3-3. In the absence of field survey data, Sabal Trail has identified these as a single line feature and provided a 3-foot crossing length. Where tree canopy cover allowed for suitable analysis, scaled aerial

photography was used to estimate crossing length for these NHD stream features. The proposed pipeline will cross a total of 223 minor waterbodies, 117 intermediate waterbodies, and 20 major waterbodies as classified by FERC (*see* Table 2.3-4). Major waterbody crossings as defined by FERC are detailed in Table 2.3-5, and discussed in Section 2.3.7.6, below.

### **2.3.2.2 Aboveground and Pipeline Appurtenant Facilities**

During construction of the aboveground and pipeline appurtenant facilities, Sabal Trail will adhere to its E&SCP and SPCC Plan (Appendix 1B of Resource Report 1) to ensure that effects on surface waters do not occur. Erosion controls, such as sediment barriers, will be installed after clearing and before grading activities to avoid the transport of disturbed sediments to identified waterbodies. Erosion controls will be monitored throughout construction, until successful implementation of final grading and restoration. As a result, no effects on surface water resources associated with construction or operation of the proposed aboveground facilities are anticipated. Surface waterbodies identified at the proposed aboveground facility sites are detailed below.

#### **Proposed Compressor Stations**

##### **Alexander City Compressor Station**

The Alexander City Compressor Station is located within the Tallapoosa River Basin, Middle Tallapoosa CU as described in Section 2.3.1.1 above. Field surveys in 2014 did not identify any surface waters within the Alexander City Compressor Station property.

##### **Albany Compressor Station**

The Albany Compressor Station is located within the Flint River Basin, Lower Flint CU as described in Section 2.3.1.2 above. Field surveys in 2014 did not identify any surface waters within the Albany Compressor Station property.

##### **Hildreth Compressor Station**

The Hildreth Compressor Station is located within the Suwannee River Basin, Lower Suwannee CU as described in Section 2.3.1.3 above. Field surveys in 2014 did not identify any surface waters within the Hildreth Compressor Station property.

##### **Dunnellon Compressor Station**

The Dunnellon Compressor Station is located within the Withlacoochee River Basin, Withlacoochee CU as described in Section 2.3.1.3 above. Field surveys in 2014 did not identify any surface waters within the Dunnellon Compressor Station property.

##### **Reunion Compressor Station**

The Reunion Compressor Station is located within the Kissimmee River Basin, Kissimmee CU as described in Section 2.3.1.3 above. The site was surveyed for surface waters in 2014 and one waterbody (WB13CAR038) was identified within the site, outside of the proposed fence line on the east side of the property (*see* Table 2.3-3).

#### **Proposed M&R Stations**

##### **Transco Hillabee M&R Station**

The Transco Hillabee M&R Station is located at the Alexander City Compressor Station site, within the Tallapoosa River Basin, Middle Tallapoosa CU as described in Section 2.3.1.1 above. Field surveys in 2014 did not identify any surface waters within the Transco Hillabee M&R Station site.

### **FGT Suwannee M&R Station**

The FGT Suwannee M&R Station is located within the Suwannee River Basin, Lower Suwannee CU as described in Section 2.3.1.3 above. Environmental field surveys conducted at the proposed FGT Suwannee M&R Station in 2014 did not identify any surface waters within the M&R Station Site.

### **FSC M&R Station**

The FSC M&R Station is located at the Reunion Compressor Station site, within the Kissimmee River Basin, Kissimmee CU as described in Section 2.3.1.3 above. Field surveys in 2014 did not identify any surface waters within the FSC M&R station site.

### **Gulfstream M&R Station**

The Gulfstream M&R Station is located at the Reunion Compressor Station site, within the Kissimmee River Basin, Kissimmee CU as described in Section 2.3.1.3 above. Field surveys in 2014 did not identify any surface waters within the Gulfstream M&R station site.

### **FGT Hunters Creek M&R Station**

The FGT Hunters Creek M&R Station is located within the Kissimmee River Basin, Kissimmee CU as described in Section 2.3.1.3 above. Field surveys in 2014 did not identify any surface waters within the proposed FGT Hunters Creek M&R station site.

### **DEF Citrus County M&R Station**

The DEF Citrus County M&R Station is located within the Springs Coast Basin, Crystal-Pithlachascotee CU as described in Section 2.3.1.3 above. One small pond identified at the site will be affected by fill for the permanent access road.

#### **2.3.2.3 Access Roads**

Sabal Trail will use existing roads in the Project area as temporary access roads and permanent access roads (“PARs”) to the extent feasible. Waterbodies crossed by the proposed access roads are identified in Table 2.3-3. Wetland and waterbody field surveys have not been completed for approximately 16,733 feet of access roads. Field surveys for the remaining access roads are currently underway and results of these surveys will be provided to FERC in a supplemental filing. Table 1.5-5 in Resource Report 1 provides a detailed listing of proposed access roads associated with the Project. Proposed access roads are shown on USGS Quadrangle mapping and Project alignment sheets located in Appendix 1A, Volume II-B.

#### **2.3.2.4 Pipe Yards and Contractor Ware Yards**

Proposed pipe and contractor ware yards were surveyed for wetlands and waterbodies in 2014. No surface waters were identified during field surveys of the contractor ware yards in 2014. The pipe yards and contractor ware yards proposed for use during Project construction are shown on USGS Quadrangle mapping located in Appendix 1A, Volume II-B.

#### **2.3.3 Water Quality Classification**

States are mandated to adopt and review water quality standards under Section 303(c) of the CWA. Water quality standards define the beneficial designated uses that are protected for each waterbody and the associated water quality criteria that must be met to protect those uses. Water quality classifications are based on the designated uses set under the water quality standards. A waterbody that does not achieve water quality criteria for one or more of its designated uses is considered impaired.



## Alabama

ADEM administers the state's water quality standards including both the designated uses of surface waters and the criteria intended to protect those uses. Designated uses are listed in ADEM Admin. Code R. 335-6-11 and the criteria are found in ADEM Admin. Code R. 335-6-10 (ADEM, 2014). Use classifications apply water quality criteria adopted for particular uses based on existing utilization, uses reasonably expected in the future, and those uses not now possible because of correctable pollution but which could be made if the effects of pollution were controlled or eliminated. Surface waters in Alabama are assigned one or more of seven water uses and codes – Outstanding Alabama Water (“OAW”); Public Water Supply (“PWS”); Swimming and other Whole Body Water-Contact Sports (“S”); Shellfish Harvesting (“SH”); Fish and Wildlife (“F&W”); Limited Warmwater Fishery; and Agricultural and Industrial Water Supply (“AIWS”) (ADEM Admin. Code R. 335-6-11-.01(1)(2)). Not all waters are included by name in the use classifications and in virtually every instance where a segment is not included by name, the ADEM has no information or stream data upon which to base a decision relative to the assignment of a particular classification. ADEM considers those segments which are not included by name in the use classifications to be acceptable for an F&W classification unless it can be demonstrated that such a generalization is inappropriate in specific instances (ADEM Admin. Code R. 335-6-11-.01(5)). The majority of Alabama waters crossed by the Project are classified as F&W. Additional classifications crossed by the Project include Uchee Creek (PWS/S/F&W) and Ihagee Creek (S/F&W). Refer to Table 2.3-3 for the water use classification of each waterbody crossed in Alabama by the Project facilities.

The best usage of waters classified as F&W include fishing, propagation of fish, aquatic life, and wildlife, and any other usage except for swimming and water-contact sports or as a source of water supply for drinking or food-processing purposes. F&W waters will be suitable for fish, aquatic life and wildlife propagation. Other uses of F&W waters are recognized including incidental water contact and recreation during June through September, except that water contact is strongly discouraged in the vicinity of discharges or other conditions beyond the control of ADEM or the Alabama Department of Public Health. F&W waters used for incidental water contact and swimming will meet accepted standards of water quality for outdoor swimming places and will be considered satisfactory for swimming and other whole body water-contact sports, under proper sanitary supervision by the controlling health authorities (ADEM Admin. Code R. 335-6-10-.09(5)).

The best usage of waters classified as PWS include source water for drinking or food-processing purposes. PWS waters, if subjected to treatment approved by ADEM equal to coagulation, sedimentation, filtration and disinfection, with additional treatment if necessary to remove naturally present impurities, and which meet the requirements of ADEM, will be considered safe for drinking or food-processing purposes. Other uses of PWS waters are recognized including incidental water contact and recreation during June through September, except that water contact is strongly discouraged in the vicinity of discharges or other conditions beyond the control of the ADEM or the Alabama Department of Public Health. PWS waters used for incidental water contact and swimming will meet accepted standards of water quality for outdoor swimming places and will be considered satisfactory for swimming and other whole body water-contact sports, under proper sanitary supervision by the controlling health authorities (ADEM Admin. Code R. 335-6-10-.09(2)).

The best usage of waters classified as S includes swimming and other whole body water contact sports. These waters, under proper sanitary supervision by the controlling health authorities, will meet accepted standards of water quality for outdoor swimming places and will be considered satisfactory for swimming and other whole body water-contact sports. The quality of waters will also be suitable for the propagation of fish, wildlife and aquatic life. The quality of salt waters and estuarine waters to which this classification is assigned will be suitable for the propagation and harvesting of shrimp and crabs (ADEM Admin. Code R. 335-6-10-.09(3)).

## **Georgia**

The GAEPD identifies water use classifications and water quality standards under GDNR Rule 391-3-6-.03. Water use classifications are scientifically determined to be the best utilization of the surface water from an environmental and economic standpoint. One of six water uses are assigned to surface waters by the state of Georgia – Drinking Water Supplies; Recreation; Fishing, Propagation of Fish, Shellfish, Game and other Aquatic Life; Wild River; Scenic River; and Coastal Fishing. Streams and stream reaches not specifically listed in GDNR Rule 391-3-6-.03 are classified as Fishing. None of the waterbodies crossed by the Project in Georgia with the exception of the Flint River are specifically listed in GDNR Rule 391-3-6-.03. The Flint River in the Project area (Georgia Highway 27 to Georgia Power Dam at Lake Worth Albany) is classified as Recreation. Refer to Table 2.3-3 for the water quality classification of waterbodies crossed in Georgia by the Project facilities.

Usage of waters classified as Fishing include: propagation of fish, shellfish, game and other aquatic life; secondary contact recreation in and on the water; or any other use requiring water of a lower quality (GDNR Rule 391-3-6-.3(6)(c)). Usage of waters classified as Recreation include: general recreational activities such as water skiing, boating, and swimming; or for any other use requiring water of a lower quality, such as recreational fishing. These criteria are not to be interpreted as encouraging water contact sports in proximity to sewage or industrial waste discharges regardless of treatment requirements (GDNR Rule 391-3-6-.03(6)(b)).

## **Florida**

The FDEP defines water use classifications based on the most beneficial present and future uses of a waterbody under FAC Chapter 62-302. Water quality classifications are arranged in order of the degree of protection required, with Class I waters having the most stringent water quality protection and Class V the least. All surface waters of Florida have been classified according to designated uses – Class I: Potable Water Supplies; Class II: Shellfish Propagation or Harvesting; Class III: Fish Consumption; Recreation; Propagation and Maintenance of a Healthy, Well-Balanced Population of Fish and Wildlife; Class III-Limited: Fish Consumption; Recreation; Propagation and Maintenance of a Limited Population of Fish and Wildlife; Class IV: Agricultural Water Supplies; and Class V: Navigation, Utility and Industrial Use. All surface waters in the State of Florida are designated as Class III, to support recreation and fish and wildlife, unless they are specifically listed in FAC 62-302.400(16) or they meet the criteria for Class IV. None of the Project area waters are specifically listed in FAC 62-302.400(16). All waterbodies crossed by the Project in Florida therefore have been assigned Class III, which is more protective than the Class IV designation. Refer to Table 2.3-3 for the water quality classification of waterbodies crossed in Florida by the Project facilities.

### **2.3.4 Sensitive Surface Waters**

Sensitive surface waters include all waterbodies that: 1) do not meet state water quality standards or have been designated for intensive water quality management, 2) waterbodies that support fisheries of special concern, 3) waterbodies that are crossed less than 3 miles upstream of a potable water intake, and 4) any waterbodies afforded national or state status for exceptional quality, and waterbodies listed on the National Rivers Inventory (“NRI”). Other factors that can provide a basis for sensitivity are: location of a waterbody within a protected watershed, steep banks and other characteristics that might contribute to high risk of erosion impacts, and important riparian areas. Table 2.3-6 identifies all sensitive waterbodies crossed by the Project pipeline facilities and indicates the basis for their sensitivity. Sensitive waterbodies are described in further detail in the sections below.

#### 2.3.4.1 Pipeline Facilities

##### **Impaired Surface Waters and Contaminated Sediments**

States are mandated to adopt and review water quality standards under Section 303(c) of the CWA. Water quality standards define the beneficial designated uses that are protected for each waterbody and the associated water quality criteria that must be met to protect those uses. Water quality classifications are based on the designated uses set under the water quality standards. A waterbody that does not achieve water quality criteria for one or more of its designated uses is considered impaired.

As part of state water quality assessments, Section 303(d) of the federal CWA mandates that states must also prepare a list of all waters that do not meet the water quality criteria for their designated uses, and develop for each a Total Maximum Daily Load (“TMDL”), which establishes the maximum allowable discharge into a waterbody to better control for pollutant levels. To determine whether any impaired waterbodies will be affected by the Project, Sabal Trail reviewed the 303(d) lists for Alabama, Georgia, and Florida for waterbodies that are included in USEPA Categories 4 and 5. Category 4 includes waterbodies where TMDLs have been completed or cannot be completed due to the nature of the contamination, and Category 5 includes waterbodies where TMDLs need to be developed by the state.

Review of the online NEPAAssist map (USEPA, 2014b) identified fourteen impaired waterbodies crossed by the Mainline Route and two impaired waterbodies crossed by the Hunters Creek Line. No impaired waterbodies were identified as crossed by the Citrus County Line. Table 2.3-7 identifies each impaired waterbody by milepost and includes the cause of impairment and state TMDL status for each. The proposed aboveground facilities will not affect any impaired waterbodies.

##### **Waters Containing Federally or State-listed Threatened or Endangered Species or Critical Habitat**

None of the waterbodies affected by the Project contain or have the potential to contain species managed by the National Marine Fisheries Service, nor do they support essential fish habitat (“EFH”) as defined under the Magnuson-Stevens Fishery Conservation and Management Act (Public Law 94-265 as amended through January 12, 2007) (Livergood, 2014 and Sramek, 2014). The Project does occur within U.S. Fish and Wildlife Service (“USFWS”) designated Critical Habitat for the Gulf Sturgeon (*Acipenser oxyrinchus desotoi*). The gulf sturgeon is federally listed as threatened and listed in Florida as a species of special concern. Surveys will be conducted between April 2014 and November 2014 to determine if gulf sturgeons are present in the Project area. See Section 3.2 of Resource Report 3 for additional information on fisheries.

##### **Waters that Support Fisheries of Special Concern**

Waterbodies contain fisheries of special concern if they have fisheries of important recreational value, support natural coldwater fisheries, are included in special state fishery management regulations, or provide habitat for federally or state-listed threatened or endangered species, or candidate threatened or endangered fish species. Waterbodies that contain EFH, or have significant economic value because of fish stocking programs, commercial fisheries, or tribal harvest, are also considered sensitive because of fisheries of special concern.

Sabal Trail consulted with the USFWS, National Marine Fisheries Service, Alabama Department of Conservation and Natural Resources, GDNR, Florida Natural Areas Inventory, and Florida Fish and Wildlife Conservation Commission to identify waterbodies that may contain federally or state-listed threatened, endangered, or candidate species and their habitat, EFH, coldwater fisheries, and other fisheries resources that could be considered fisheries of special concern. No coldwater fisheries exist in the Project area. Fisheries of special concern identified in the Project area are listed in Resource Report 3, (see Table 3.2-3), and are discussed in Section 3.2.3 of Resource Report 3. No state-designated in-stream construction timing restrictions that would apply to the streams crossed by the Project have been identified to date.



## **Waters Utilized as Surface Water Supplies**

### **Alabama**

Consultation with ADEM identified two streams crossed by the Project used for public water supplies, Halawakee and Uchee Creeks. Surface water intakes associated with the supplies are located more than three-miles downstream of the pipeline crossing. No other surface water sources for public supplies were identified in the vicinity of the Project in Alabama (Arnold, 2014). In Alabama, watersheds for all surface water intakes are delineated using the HUC, or other approved methods. Delineated watersheds shall extend upstream and laterally from intakes to the watershed topographic boundary, the next upstream dam (where applicable), and to the adjacent state boundary (ADEM Admin. Code R. 335-7-15-.12). Public surface water supply watersheds identified in the Project area are included in Table 2.3-8.

### **Georgia**

Sabal Trail has initiated consultation with the GAEPD and the Project area county planning offices to identify surface water intakes in the Project area and any water supply watershed areas crossed by the Project in Georgia. Consultation with the GAEPD did not identify any public surface water supplies in the vicinity of the Project (Trent, 2014). Additionally, review of the Georgia Department of Community Affairs's publicly available Water Supply Watershed GIS shapefile and did not identify any Georgia Water Supply Watersheds crossed by the Project (GDCA, 2002).

### **Florida**

Sabal Trail has initiated consultation with the FDEP, Florida Department of Health ("FDOH"), applicable Florida WMDs, and Project area county planning offices to identify surface water intakes in the Project area and any water supply watershed areas crossed by the Project in Florida. No surface water intakes or water supply watersheds have been identified near the Project facilities in Florida to date. Correspondence from the FDOH stated that there are no surface water supplies in the Project area counties in Florida (Vincent, 2014). Additionally, review of the public water supply surface water intake layer on FDEP's Map Direct web viewer and did not identify any surface water intakes within three miles of any proposed waterbody crossing (FDEP, 2014e).

## **National or State Recognized Exceptional Quality Waters**

Sabal Trail reviewed available state regulations and mapping, the NRI (NPS, 2011), and National Wild and Scenic River System maps (National Wild and Scenic River System, 2014) to identify National or State recognized exceptional quality waters crossed by the Project. The NRI is a listing of more than 3,400 free-flowing river segments in the United States that are believed to possess one or more "outstandingly remarkable" natural or cultural values ("ORVs") judged to be of more than local or regional significance. All federal agencies must seek to avoid or mitigate actions that would adversely affect one or more NRI segments (NPS, 2011). The National Wild and Scenic Rivers System was created by Congress in 1968 (Public Law 90-542; 16 U.S.C. 1271 et seq.) to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The 1968 Wild and Scenic Rivers Act encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection (National Wild and Scenic River System, 2014). National and State designated waters are discussed below and are summarized by milepost in Table 2.3-6.

### **Alabama**

Review of the NRI (NPS, 2011) identified listed river segments crossed by the Project in Alabama. Halawakee Creek at the Mainline Route crossing is listed with the following ORVs: Scenery, Recreation, Geology, Fish, Wildlife, History, and Cultural. This 23-mile river segment is described as a, "Free-flowing

accessible stream of significant historic value.” The Tallapoosa River at the Mainline Route crossing is listed with the following ORVs: Scenery, Recreation, Fish, Wildlife, History, and Cultural. This 24-mile river segment flows through Horseshoe Bend National Military Park (*see* Resource Report 8). Uchee Creek at the Mainline Route crossing is listed with the following ORVs: Scenic, Recreation, Fish, Wildlife, Historic, and Cultural. This 40-mile segment is described as an, “Archeologically significant corridor area” (NPS, 2011). No National Wild and Scenic Rivers are crossed by the Project in Alabama (National Wild and Scenic Rivers System, 2014).

In Alabama, the ADEM has an OAW use classification (ADEM Admin. Code R. 335-6-10-.09) and two special designations (ADEM Admin. Code R. 335-6-10-.10) consisting of Outstanding National Resource Water (“ONRW”) and Treasured Alabama Lake (“TAL”). High quality waters that constitute an outstanding Alabama resource, such as waters of state parks and wildlife refuges and waters of exceptional recreational or ecological significance, may be considered for classification as an OAW. High quality waters that constitute an outstanding National resource, such as waters of national and state parks and wildlife refuges and waters of exceptional recreational or ecological significance, may be considered for designation as an ONRW. High quality waters within impoundments and natural lakes that constitute an exceptional resource, such as waters of state parks and wildlife refuges and waters of exceptional whole body water-contact recreation, water supply or rare and extraordinary ecological significance, may be considered for designation as a TAL; provided that such waters are fully supporting their classified uses at the time of the TAL designation. No OAW, ONRW, or TAL waters are crossed by the proposed Project (ADEM, 2014).

### **Georgia**

Review of the NRI (NPS, 2011) identified listed river segments crossed by the Project in Georgia. The Flint River at the Mainline Route crossing is listed with the following ORVs: Scenery, Recreation, Geology, Fish, and Wildlife. This 52 mile river segment is described as having, “Bands of undisturbed vegetation lining the river corridor, excellent stands of bottomland hardwoods; relatively flat sloping coastal plains; many limestone rapids, outcrops, sinks, and springs; and supporting a variety of fish, birds, and mammals.” The Withlacoochee River at the Mainline Route crossing in Brooks County is listed with the following ORVs: Scenic, Recreation, Geology, Fish, and Wildlife. This 84-mile segment is described as having, “Crystal clear springs and white-water shoals in a primitive setting” (NPS, 2011). No National Wild and Scenic Rivers are crossed by the Project in Georgia (National Wild and Scenic Rivers System, 2014).

In Georgia, GAEPD has an ONRW designation (GDNR Rule 391-3-6-.03(2)(c)) to identify waters of National or State parks and wildlife refuges and waters of exceptional recreational or ecological significance. No ONRW waters are crossed by the Project in Georgia. Rivers in Georgia may also be designated by the State as Scenic under the Georgia Scenic Rivers Act of 1969. No Georgia Scenic Rivers are crossed by the Project (Georgia River Network, 2014c). As part of a larger effort to develop a comprehensive wildlife conservation strategy for the state, GDNR Wildlife Resources Divisions identified high priority waters for protecting aquatic biodiversity. High priority waters were selected to protect important populations of high priority species and also to protect or restore representative aquatic systems throughout the state. High priority waters were selected through an assessment of available information including but not limited to: streams containing the most important populations of high priority species; streams within The Nature Conservancy priority conservation areas; examination of Index of Biological Integrity scores for sites sampled by the GDNR Stream Survey Team; and extensive feedback from aquatic biologists, resource professionals, and other stakeholders. Additionally, to emphasize the importance of watershed-level conservation efforts, GDNR delineated all of the small watersheds (USGS HUC 12) that contained high priority stream reaches or contained tributaries that fed directly into high priority streams, to identify high priority watersheds (GDNR, 2014). The Mainline Route crosses seven high priority streams

in Georgia: Hannahatchee Creek, Hodchodkee Creek, Pataula Creek, Flint River, Cooleewahee Creek, Ochlockonee River, and Withlacoochee River.

Additionally, Georgia Code Section 12-2-8(c) defines “River Corridors” as 100 foot strips of land flanking streams with a mean annual flow of 400 cubic feet per second or greater, including any water bodies that occur along these streams. Sabal Trail reviewed the Designated River Corridors file available from GDNR and identified the Chattahoochee River and Flint River as Georgia Protected River Corridors crossed by the Project (*see* Table 2.3-6) (GDNR, 1996).

### **Florida**

Review of the NRI (NPS, 2011) identified listed river segments crossed by the Project in Florida. The Santa Fe River at the Mainline Route crossing is listed with the following ORVs: Scenery, Recreation, Geology, Fish, Wildlife, History, and Cultural. This 82 mile river segment is described as a, “Unique resource with diverse vegetation in a relatively natural state that provides habitat for abundant wildlife populations with many beautiful second magnitude springs below Oleno State Park”. The Withlacoochee River at the Mainline Route crossing in Hamilton County is listed with the following ORVs: Scenery, Recreation, Geology, Fish, and Wildlife. This 26 mile river segment is described as a, “Crystal clear spring fed stream in a primitive wilderness setting.” Note that the crossing of the Withlacoochee River in Hamilton/Madison County will be avoided with incorporation of the Withlacoochee Route Alternative 3 into the proposed route, which will be included in the supplemental information to be filed with the FERC in December 2014. The Withlacoochee River at the Citrus County Line crossing (Citrus/Marion County border) and Polk County crossings is listed with the following ORVs: Scenic, Recreation, Geology, Fish, and Wildlife. This 113 mile river segment is described as a, “Highly scenic, relatively clear stream with significant geologic exposures; meanders through dense cypress swamps, sandhills, and hardwood forests underlaced with cabbage palms; abundance of wildlife; designated State Canoe Trail; and penetrates the Withlacoochee State Forest” (NPS, 2011). No National Wild and Scenic Rivers are crossed by the Project in Florida (National Wild and Scenic Rivers System, 2014).

In Florida, a waterbody may also be designated as an Outstanding Florida Water (“OFW”) or an ONRW. ONRWs are waters designated by the ERC that are of such exceptional recreational or ecological significance that water quality should be maintained and protected under all circumstances, other than temporary lowering and the lowering allowed under Section 316 of the Federal CWA. No ONRWs are crossed by the Project in Florida (FAC 302.700(10)). OFWs are waters designated by the ERC as worthy of special protection because of their natural attributes. OFWs generally include the following surface waters (unless named as ONRW):

- Waters in National Parks, Preserves, Memorials, Wildlife Refuges and Wilderness Areas;
- Waters in the State Park System and Wilderness Areas;
- Waters within areas acquired through donation, trade, or purchased under the Environmentally Endangered Lands Bond Program, Conservation and Recreation Lands Program, Land Acquisition Trust Fund Program, and Save Our Coast Program;
- Rivers designated under the Florida Scenic and Wild Rivers Program, federal Wild and Scenic Rivers Act of 1968 as amended, and Myakka River Wild and Scenic Designation and Preservation Act;
- Waters within National Seashores, National Marine Sanctuaries, National Estuarine Research Reserves, and certain National Monuments;
- Waters in Aquatic Preserves;

- Waters within the Big Cypress National Preserve;
- Special Waters as listed in paragraph FAC 62-302.700(9)(i); and
- Certain Waters within the Boundaries of the National Forests (FAC 62-302.200 (26)).

Each water body demonstrated to be of exceptional recreational or ecological significance may also be designated as Special Waters (FAC 62-302.700). Several OFWs, including Special Waters are crossed by the Project. OFW/Special waters identified are located in the Withlacoochee River System, the Suwannee River, the Santa Fe River System, and the Lake Rousseau State Recreation Area. Crossings of these waters are identified in Table 2.3-6.

### **Flood Zones**

Sabal Trail reviewed available state and federal digital flood data to identify proposed crossings of areas subject to flooding and high volume flows. Flood zones are geographic areas that the Federal Emergency Management Agency (“FEMA”) has defined according to varying levels of flood risk and type of flooding. These zones are depicted on the published Flood Insurance Rate Map or Flood Hazard Boundary Map. Special Flood Hazard Areas represent the area subject to inundation by 1-percent-annual chance flood (FEMA, 2014). Figure 2.3-1 depicts mapped FEMA Flood Zones in the Project area and Table 2.3-9 identifies FEMA Flood Zones crossed by the Project.

#### **2.3.4.2 Aboveground and Pipeline Appurtenant Facilities**

Construction activities associated with the compressor stations, M&R stations, pig launchers, and pig receivers will not occur within the immediate vicinity of sensitive surface waters. Therefore, effects on sensitive surface waters are not expected to result from construction, modification, and operation of these facilities. Other than MLV 5, aboveground facilities are not located in any public watershed areas. MLV 5 is located within the Horselot Branch-Uchee Creek Public Watershed. Structures associated with the MLV will be minimal, and Sabal Trail will implement its E&SCP during construction and will stabilize all areas post-construction to avoid effects on the watershed.

Aboveground facilities located within FEMA flood zones will be designed and constructed in accordance with stormwater regulations and all applicable permits. FEMA flood zones cover a small portion of the Alexander City and Dunnellon compressor station sites. No aboveground facilities are proposed within the flood zone on the Alexander City compressor station property, and only the interior access road for the Dunnellon compressor station will be located within the flood zone. The entire DEF Citrus County M&R station is located within the flood zone. Sabal Trail will minimize effects on flood elevation to the extent practicable at the DEF Citrus County M&R Station and will obtain applicable permits for proposed elevation changes. MLVs 5 and 31, and a portion of MLV 29 are located within FEMA Flood Zones. Structures associated with the MLVs will be minimal, and no significant impacts on flood elevation are anticipated.

#### **2.3.4.3 Pipe and Contractor Ware Yards**

Sabal Trail has located pipe and contractor ware yards outside of sensitive surface waters, public watershed areas, and FEMA flood zones to the extent practicable. A portion (0.41 acres) of Contractor Yard #2-2 is located within the outer edge of a FEMA Flood Zone in a corner of the yard. No change in flood elevation is proposed at the yard and any use of the yard area will be temporary; therefore, there will be no effect on the flood zone from the Project.

#### **2.3.5 Construction Permits**

Sabal Trail will apply for applicable permits, approvals, and licenses related to the construction and installation of the pipeline across regulated waterbodies and wetlands and the withdrawal or discharge of

hydrostatic test water. Table 1.12-1 in Resource Report 1 provides a list of the permits and authorizations required for construction of the Project facilities.

### **2.3.5.1 Dredge and Fill Permits**

Federal authorization from the USACE under Section 10 of the Rivers and Harbors Act (33 U.S.C. 401 et seq.) will be required for the construction of the pipeline facilities in or under any “navigable waters” of the U.S. crossed by the Project. Federal authorization from the USACE under Section 14 of the Rivers and Harbors Act (33 U.S.C. 408 et seq.) may be required for construction of the pipeline facilities beneath the Chattahoochee River at the Alabama/Georgia state-line. Section 408 approval will not be required at any locations along the proposed routes. CWA Section 401 authorization will be required to meet state water quality requirements and CWA Section 404 authorization will be required for dredge and fill activities associated with construction in wetlands and designated Waters of the U.S. A single application for the Project will be submitted to the USACE lead district (Jacksonville), which will distribute the application to the other Project area districts (Mobile and Savannah). Sabal Trail proposes to use a dry crossing method, conventional bore, or HDD at Section 10 waterbody crossings. Additionally, construction and restoration at these waterbodies will be conducted in accordance with Sabal Trail’s E&SCP. Section 10 waterbodies, and the proposed construction method for each are identified in bold print in Tables 2.3-3 and 2.3-6. In the absence of a USACE dedicated list of Section 10 or Traditional Navigable Waters for the Project area, it was assumed that any perennial stream with an observed width of at least 25 feet and observed depth of at least 2 feet would be considered a Traditional Navigable Water.

In Alabama, the USACE has authority over dredge and fill projects granted by Section 10 and Section 404; therefore, Section 10/404 approval for the Project in Alabama will be reviewed by the USACE. For CWA Section 401, ADEM reviews USACE permit applications to determine whether or not a project will cause or contribute to a violation of Alabama water quality standards. Sabal Trail will provide ADEM a copy of its USACE permit application described above for their use in making a determination on Section 401 water quality certification for the Project in Alabama.

In Georgia, The GADNR has a memorandum of agreement with the USACE that coordinates simultaneous review and processing of both Section 404 and 401 application requests. The USACE is the primary contact and the application to the USACE is a simultaneous application to the state for Section 401 water quality certification. Similar to Alabama, Sabal Trail will provide GADNR a copy of its USACE permit application for their use in making a determination on Section 401 water quality certification for the Project in Georgia.

In Florida, Section 404 authorization is reviewed under the FDEPs Environmental Resource Permitting program through an operating agreement between the USACE, FDEP, and the WMDs (FDEP, 2013c). An Environmental Resource Permit (“ERP”) for the Project was submitted to the FDEP in July 2013 and is currently under review. CWA Section 401 Water Quality Certification in Florida will also be reviewed through the ERP process by FDEP.

### **2.3.5.2 Surface Water Withdrawal Permits**

In Alabama, surface water withdrawals of 100,000 gallons per day or more are required to be registered with the Alabama Office of Water Resources (“OWR”) and a Certificate of Use is required. To obtain a Certificate of Use from OWR, a Declaration of Beneficial Use application is submitted and reviewed. Water withdrawals or diversions for temporary use such as hydrostatic testing and trench dewatering for construction may be eligible for an exemption from this approval. Prior to beginning any temporary withdrawal for a temporary use, information regarding the temporary use must be submitted to OWR to ensure compliance with any OWR requirements (ADECA, 2014). In Georgia, surface water withdrawals of 100,000 gallons per day on a monthly average (or more) are required to obtain a surface water withdrawal permit from the EPD.



In Florida, the FDEP is involved in managing the quality and quantity of water through its relationship with the state's five WMDs and the adoption and implementation of The Florida Water Policy and The Florida Water Plan. Chapter 373, Florida Statutes, gives FDEP "general supervisory authority" over the WMDs and directs FDEP to delegate water resources programs to the WMDs where possible. Pursuant to these delegations, regulatory programs are delegated to the WMDs including programs to manage aquifer recharge, well construction, and surface water management. Additionally, Part 2 of Chapter 373 confers authority on WMDs to regulate consumptive water uses. Water Use Permits will be required from the WMDs (St. Johns River, Suwannee River, South Florida, and Southwest Florida) for surface water withdrawals for hydrostatic testing and horizontal directional drilling, and temporary trench dewatering permits for construction may also be required. The WMDs also require a permit modification for alteration of any previously approved Water Use, Well Construction, and/or WMD-issued ERP. The need to modify a previously approved permit could occur where the Project effects any conservation easement that is part of a permit's mitigation requirements. Permit modifications to FDEP conservation easement/mitigation areas will be addressed through the FDEP ERP application process, which is currently under review. Permit modifications to WMD conservation easement/mitigation areas will be addressed through the ROW process. Any permits for new wells, or modifications to existing well permits will be obtained by Sabal Trail as needed through the applicable WMD.

### 2.3.5.3 Hydrostatic Testwater Discharge Permit

Discharges of hydrostatic test water in Alabama require coverage under the ADEM National Pollutant Discharge Elimination System ("NPDES") General Permit for Discharges Associated with Hydrostatic Test Waters from New and Existing Petroleum and Natural Gas Pipelines (ALG670000) (ADEM, 2012). Discharges of trench dewatering activities, if managed with appropriate controls, require coverage under the ADEM NPDES General Permit for Construction Activities (ALR100000).

Coverage under Georgia's NPDES General Permit for Storm Water Discharges Associated with Industrial Activity (GAR050000) is required for construction related discharges in Georgia, including discharges of hydrostatic test water. Stormwater related state permits anticipated to be required for the Project are included in Resource Report 1, Table 1.12-1.

In Florida, discharges of hydrostatic test water require an FDEP NPDES permit (FDEP, 2012a). Trench dewatering for construction is delegated to the WMDs in Florida. Three of the Project-area WMDs (Suwannee River, St. John's River, and Southwest Florida) have provided exemptions for most dewatering activities within their regulatory rules. The remaining WMD, South Florida, does not provide an exemption for dewatering activities, but does allow for a No-Notice Short-Term Dewater Permit if certain conditions are met. Other WMD permits may be required for construction of the Project and best management practices stipulated within the ERP need to be followed for any exemptions or dewatering permits to remain valid. Additionally, coverage under the FDEP NPDES General Permit for Discharge from Large and Small Construction Activities is required for general construction activities in Florida (FDEP, 2012b). Sabal Trail had meetings with these agencies regarding the permitting requirements for the Project (*see* Appendix 1C of Resource Report 1) and will continue to coordinate with applicable regulatory agencies to obtain necessary permits prior to construction.

Public water sources (fire hydrants) will be utilized for dust control. Construction conservatively anticipates 1,500,000 gallons of water will be required per construction spread. Sabal Trail will obtain any necessary permits for use or spraying of hydrant water for dust control.



## 2.3.6 Hydrostatic Test Water

### 2.3.6.1 Pipeline Facilities

In compliance with U.S. Department of Transportation regulations at 49 C.F.R. Part 192, Sabal Trail will conduct hydrostatic testing on the pipeline facilities prior to placement in service. Potential sources of hydrostatic test water identified to date for the proposed Project are supplied in Table 2.3-10. Test sections were selected based on several factors, including pipe parameters, the elevation changes within the alignment, the target design pressure, and the class locations of the pipeline. To the extent practicable, Sabal Trail will transfer hydrostatic test water from one test segment to the next, to reduce the volume of test water required.

Preliminary evaluations have identified 11 water withdrawal sources to be used to complete the hydrostatic testing. Sabal Trail will obtain all required approvals for withdrawal and discharge of hydrostatic test water prior to initiating hydrostatic testing activities. Anticipated required approvals for withdrawals include: 1) Alabama OWR Certificate of Use, 2) GAEPD Surface Water Withdrawal Permit, and 3) Florida WMD Water Use Permit. Coverage under the following NPDES General Permits is anticipated for discharge of hydrostatic test water in Alabama and Georgia: 1) ADEM General Permit ALG670000 and 2) GAEPD General Permit GAR100002. In Florida, discharge of hydrostatic test water to waters of the United States requires approval of an Individual NPDES permit from FDEP. Potential sources of hydrostatic test water identified in Alabama include Oaktassasi Creek, Tallapoosa River, and the Uchee Creek. Potential sources identified in Georgia include the Chattahoochee River, one private pond, the Withlacoochee River, and two water wells. Potential sources identified in Florida include the Withlacoochee River (two withdrawal locations), and two private ponds. The withdrawal locations will occur at or near the construction corridor. Table 2.3-10 includes the approximate MP location where hydrostatic test water would be discharged, the maximum discharge rate, and the watershed associated with each withdrawal and discharge location. Withdrawal and discharge locations will be depicted on the construction alignment sheets to be included in the Initial Implementation Plan filed with FERC prior to construction. All discharge locations will be sited within a well vegetated upland area within the same watershed, where practicable. Sabal Trail is in the preliminary stage of coordinating with the Alabama OWR, ADEM, GAEPD, FDEP, and the applicable Florida WMDs and their input will weigh heavily on the final water withdrawal plan. When the water withdrawal plan is complete, Sabal Trail will apply for the appropriate water withdrawal permits (*see* Section 2.3.5, above).

HDD pre-test segment and drilling operations water sources and volumes have been evaluated and are included in Table 2.3-11. Potential sources identified in Alabama include Hillabee Creek, Tallapoosa River, Uchee Creek, and the Chattahoochee River. Potential sources identified in Georgia include Hannahatchee Creek, Flint River, City of Moultrie municipal water, and the Withlacoochee River. Potential sources identified in Florida include the Withlacoochee River (Hamilton County), City of Live Oak municipal water, Santa Fe River, private ponds and the Withlacoochee River (Citrus County). Note that withdrawals from the Withlacoochee River in Hamilton/Madison County will be avoided with incorporation of the Withlacoochee Route Alternative 3 into the proposed route, which will be included in the supplemental information to be filed with the FERC in December 2014.. Final determinations for sources during the drill, required volumes and drilling fluid make-up will be the responsibility of HDD contractors selected to perform the drilling operations. Sabal Trail's final water withdrawal plan will ensure that prescribed thresholds from the agencies are not surpassed during the water withdrawal process. Sabal Trail will apply for the appropriate water withdrawal permits based on estimated water volume and withdrawal timing needs for the test segments. Sabal Trail anticipates submitting applications in March, 2016.

### 2.3.6.2 Aboveground and Pipeline Appurtenant Facilities

Sabal Trail currently anticipates hydrostatic pressure testing of the compressor and M&R stations and the associated appurtenant above ground facilities, such as MLVs and pig launchers and receivers, to be conducted independently of the hydrostatic pressure test on the pipeline facilities. Additional water volumes required for hydrostatic pressure testing these facilities are included in Table 2.3-12. Municipal water has been identified as the potential source water for all compressor and meter stations, with the exception of the Reunion Compressor, for which a private pond has been identified as potential source water. Additionally the Hildreth Compressor Station is proposed to be testing using a private water well.

### 2.3.7 Waterbody Construction Methods

The Project pipeline facilities will cross a total of 360 waterbodies. The waterbody construction procedures described below and within the Project E&SCP are consistent with those prescribed in the FERC Procedures May 2013 version.

#### 2.3.7.1 General Procedures

Following surveying and staking, it is necessary to mobilize the required equipment at the waterbody crossing. To facilitate this process, temporary bridges may be constructed across the waterbody during clearing and grading activities for construction equipment (*see* the Project E&SCP located in Appendix 1B of Resource Report 1). Temporary bridges and associated supports are removed as part of the restoration process.

In general, construction equipment and vehicle refueling and lubricating takes place in upland areas located more than 100 feet from the edge of a waterbody (or wetland). In addition, fuels, lubricating oils, petroleum products, and other hazardous materials are not stored within 100 feet of an aquatic resource. However, instances may arise where equipment refueling and lubrication near or in a waterbody are necessary. For example, stationary equipment, such as a hydrostatic test water pump, may need to operate continuously on the bank of a waterbody. The Project E&SCP and SPCC Plan (*see* Appendix 1B of Resource Report 1) address the handling of fuel and other hazardous materials in or within 100 feet of a waterbody, which may be approved with conditions by the Lead EI. A list of deviations requested for refueling and equipment parking locations in or within 100 feet of wetlands for the Project is included in Table 2.3-13.

If trench dewatering is necessary in or near a waterbody, the removed trench water will be discharged into an energy dissipation/sediment filtration device, such as a geotextile filter bag or straw bale structure located away from the water's edge to prevent heavily silt-laden water from flowing directly into the waterbody in accordance with the Project E&SCP and all applicable permits. Monitoring will be conducted to ensure that all flow from the structure is infiltrating into the underlying soil. Refer to Section 1.6.1.6 of Resource Report 1 for additional waterbody construction-related information.

#### 2.3.7.2 Additional Temporary Workspace

In general, additional temporary workspace ("ATWS") is typically required on both sides of a waterbody crossing to store materials and trench spoil. These work areas will be located at least 50 feet away from the waterbody edge, topographic and other site specific conditions permitting. If conditions do not permit a 50-foot setback, Sabal Trail will request deviations from the FERC's Procedures. Table 2.3-14 identifies the locations where deviations from the FERC Procedures (2013) ATWS waterbody setback are required along the Project pipeline facilities.

#### 2.3.7.3 Clearing

Clearing involves the removal of all trees and brush from the construction workspace. Woody vegetation along the permanent easement is cleared to the edge of the waterbody; however, where available, a 50-foot wide herbaceous strip is left on the approach until immediately before construction to provide a natural

sediment filter that helps minimize the potential for erosion immediately adjacent to the waterbody and sedimentation from cleared upland areas. With the exception of stream buffers and forested wetlands, stumps are typically removed over the width of the permanent ROW. Initial grading of the herbaceous strip is limited to what is needed to install the equipment bridge and, where a large grade cut is needed, to the extent necessary to safely implement the construction activity. After clearing and prior to grading activities, temporary erosion control devices (sediment barriers) will be installed and maintained adjacent to the waterbody and within the construction work area, as needed to minimize the potential for sediment runoff.

#### 2.3.7.4 Crossing Methods

To minimize potential impacts, waterbodies, streams and rivers will be crossed as quickly and safely as possible. Additionally, efforts will be made to plan work during dry conditions for intermittent and ephemeral channels, where practicable. Sabal Trail understands FDEP and GAEPD turbidity limits in surface waters and will work to minimize turbidity through the use of BMPs outlined in the Project E&SCP (see Appendix 1B of Resource Report 1). Adherence to the construction procedures will ensure stream flow will be maintained throughout construction. Pending the results of ongoing geotechnical investigations, Sabal Trail proposes 18 HDDs for the Project, crossing a total of 23 waterbodies with this method. Ten of these waterbodies are located in Alabama, six in Georgia, and seven in Florida. Proposed waterbody crossing methods for each waterbody crossed by the proposed pipeline are provided in Table 2.3-3. HDD site-specific plans are included in Appendix 1A, Volume II-B of Resource Report 1.

#### Wet Crossing

Wet open cut crossings will be performed by using excavation equipment to trench across the waterbody. Equipment used to dig the trench will work from the waterbody banks, equipment crossings, or by straddling the trenchline where the width of the waterbody prohibits excavations solely from the banks. The depth of the trench will be sufficient to allow a minimum of five feet of cover over the pipeline below the streambed, provided rock is not encountered. Consistent with the FERC's Procedures, Sabal Trail plans to complete construction activities within 24 hours at minor wet open cut crossings and within 48 hours at intermediate wet open cut crossings. The Lead EI may adjust the final placement of the erosion and sediment control structures in the field to maximize effectiveness.

The following additional stipulations will apply to wet open cut crossings:

- The use of sediment controls across the width of the waterbody, such as BMP's/silt screening, water dams, and turbidity curtains with floatation booms (or a combination thereof) will be assessed and implemented on a site-specific basis and based on conditions at the time of crossing, in consultation with the FERC and applicable state regulatory agencies;
- Adherence to measures outlined for open wet cut crossings in the Project E&SCP (see Appendix 1B of Resource Report 1).
- Use of equipment operating in the waterbody will be limited to that needed to construct the crossing;
- Material excavated from the trench will kept to a minimum and will be stockpiled in the construction ROW at least 10 feet from the water's edge or in ATWS (located at least 50 feet from the water's edge);
- Material excavated from the trench generally will be used as backfill, unless federal or state permits specify otherwise;
- Any excess material will be removed from the body of water; and
- The waterbody bottom will be returned to its original contour.

### **Dry Crossing**

A dry crossing method will be used to install Project pipeline facilities at all waterbody crossing locations if there is flowing water at the time of construction. Dry crossing methods will involve installation of a flume pipe(s) and/or dam and pump prior to trenching to divert the stream flow over the construction area and allow trenching of the stream crossing in drier conditions isolated from the stream flow. A description of the Flumed crossing method and the Dam and Pump crossing method are included in the Project E&SCP (see Appendix 1B of Resource Report 1). Spoil removed during the trenching will be stored away from the water's edge and protected by sediment containment structures. Pipe strings will be prefabricated into one continuous section on one bank and either pulled across the stream bottom to the opposite bank, floated across the isolated portion of the stream, or carried into place and lowered into the trench. Where these methods are employed, ATWS areas will be required for assembly of the pipe strings and spoil storage areas. Fisheries resources along the route are discussed in Resource Report 3.

A dry open cut will be utilized for all waterbodies that are dry during the time of the crossing with no discernible or anticipated flow. This method will utilize conventional construction techniques with no temporary diversion structures (e.g., flume pipes, cofferdams) required during construction of the crossing. Consistent with the FERC Procedures, Sabal Trail plans to complete construction activities within 24 hours at minor open cut waterbody crossings and within 48 hours at intermediate open cut crossings. A minimum cover depth of five feet will be maintained over the pipeline for all designated waterbodies crossed with the dry open cut method.

### **Horizontal Directional Drill**

The HDD method is a trenchless installation process by which the pipeline is installed beneath obstacles or sensitive areas utilizing equipment and techniques derived from oil well drilling technology. In principle, HDD construction is the least disturbing method upon the existing environment relative to any other conventional open trench operations. The installation is a multi-stage process consisting of establishing a small diameter pilot hole along the crossing profile, followed by enlargement of the pilot hole to accommodate pull back of the proposed pipeline.

The HDD rig and associated equipment (e.g., control cab, drill string pipe storage, office and tool storage trailers, power generators, bentonite storage, bentonite slurry mixing equipment, slurry pump, cuttings separation equipment, and heavy construction equipment) will be set up on one side of the waterbody crossing. Due to the specialized equipment and area requirements associated with HDD technology, additional temporary workspace will be requested to stage and successfully operate the equipment. Drilling will progress beneath the waterbody towards the other shore. The pilot hole is drilled using a small diameter drill string and a drill bit consisting of an asymmetric jetting head. The hydraulic cutting action of the drill head is remotely operated to control its orientation and direction. The position of the drill string is electronically monitored during the drilling operation. Directional corrections are made as necessary to ensure that the drill string maintains the desired profile and alignment.

Bentonite drilling fluid is delivered to the cutting head through the drill string to provide the hydraulic cutting action, lubricate the drill bit, stabilize the hole, and to remove cutting spoil as the drilling fluid returns to the entry point of the pilot hole to an excavated containment pit. Typically, drilling fluid returns are processed to remove the cuttings and the bentonite is recycled for use as the drilling operation continues. In the event that there is an inadvertent release of drilling fluid, lost circulation materials may be used in an attempt to seal the formation and reestablish drilling fluid returns to the entry and/or exit pits. Many types of lost circulation materials are available for use during HDD operations which are inert and environmentally benign. These can include wood fibers, cotton seed husks, ground walnut shells and other natural materials. Special polymers that swell to several times their original size when introduced to water

can also be used. Which of these types of products are used is typically left to the discretion of the HDD Superintendent and the EI.

Water sources and volumes for HDD locations are discussed in Section 2.3.6, Hydrostatic Test Water, above. Drilling mud and cuttings will be recycled or disposed of at an approved upland location or disposal facility as described in Sabal Trail's Best Drilling Practices Plan for the Project (*see* Appendix 2A). No recovered drilling fluid will be disposed of in waterbodies or wetlands. Recovered materials will be collected in containers for temporary storage prior to removal from the site and all containment structures will be removed from the site.

Enlarging the pilot hole is an incremental process accomplished with one to several reaming passes, depending upon the carrier pipe diameter and the subsurface geology. The rotating reaming/cutting tool is attached to the drill string at the exit point, and drawn back toward the drilling rig situated at the entry point of the pilot hole. Drill pipe is added behind the reaming tool as it progresses toward the drill rig to ensure that a continuous drill string is maintained in the drilled hole. Bentonite drilling fluid is again utilized during the reaming process to remove cutting spoil from the hole.

Additional temporary workspace or false ROW will be required along the other side of the waterbody to prefabricate the pipeline into one continuous section in preparation for the pullback. Once assembled, the pipeline is placed on pipe rollers so that it may be conveyed into the drill hole during the pullback operation. The fabricated pipe will be hydrostatically tested prior to pullback. Once reaming is completed, the prefabricated pipeline is attached to the drill string at the exit point, and drawn back toward the drilling rig at the entry location. Upon completion of pipeline construction, the entire line will again be hydrostatically tested.

Sabal Trail has prepared site-specific crossing plans for each proposed HDD that will cross waterbodies (*see* Appendix 1A, Volume II-B of Resource Report 1). A contingency plan outlining procedures to be implemented in the case of drill failure or the inadvertent release of drilling fluid is also provided in Appendix 2A.

#### **2.3.7.5 Drilling and Blasting at Waterbodies**

Based on the surficial and bedrock geology along the Project route, Sabal Trail does not anticipate that waterbody crossings in Florida will require blasting during construction, but there is a potential for blasting to be required to approximate MP 100.0. Table 2.4-3 includes a desktop analysis of areas of shallow depth to bedrock at waterbody crossings along the proposed route. If encountered during construction, Sabal Trail anticipates that most streambeds with shallow bedrock will be rip-able sedimentary rock and will not require blasting. In instances where the rock is not rip-able, drilling and blasting will be used to install the pipeline. In such cases, judicious use of blasting will help the Contractor comply with restrictions on the duration of in-stream disturbance.

To identify the need for drilling or blasting, the trench crew will drill the stream banks to determine if rock will be encountered during construction. Should these test holes identify the need for blasting, the ditch crew will prepare the trench line. If in-water blasting is determined to be necessary, Sabal Trail will follow mitigation measures provided in the Sabal Trail Blasting Plan provided in Appendix 6A of Resource Report 6. The mainline tie-in crews will then excavate the trench, install the pipeline, and restore the area in accordance with the Project E&SCP.

#### **2.3.7.6 Major Waterbody Crossings**

The FERC Procedures (2013), classify major waterbodies as those waterbodies greater than 100 feet wide at the water's edge at the time of crossing (Section 1.B.1.c. of the Procedures). Table 2.3-5 identifies the 20 major waterbodies crossed by the Project. Four of the proposed major waterbody crossings are located in Alabama including Hillabee Creek, Tallapoosa River, Uchee Creek, and the Chattahoochee River. All



four major waterbodies in Alabama are proposed to be crossed utilizing the HDD crossing method. Seven of the proposed major waterbody crossings are located in Georgia including four unnamed ponds, the Flint River, the Withlacoochee River and the Ochlockonee River. The Flint River, Withlacoochee River, Ochlockonee River, and one pond are proposed to be crossed by HDD. Nine of the proposed major waterbody crossings are located in Florida including the Withlacoochee River (Hamilton / Madison County), Suwannee River, Santa Fe River, Withlacoochee River (Citrus / Marion County), Reedy Creek, and four unnamed ponds. The Withlacoochee Rivers (2), the Suwannee River, Santa Fe River, and two unnamed ponds are proposed to be crossed by HDD. Reedy Creek is proposed to be crossed by conventional bore. HDD site-specific crossing plans are located in Appendix 1A, Volume II-B.

Note that the Withlacoochee River in Hamilton/Madison County will be avoided with incorporation of the Withlacoochee Route Alternative 3 into the proposed route. Information on this alternative is anticipated to be submitted in as supplemental filing to FERC in December 2014.

No access roads are proposed to cross any major waterbodies. The five major waterbody crossings proposed as open-cut are man-made ponds. Sabal Trail proposes to dam and pump, and open-cut three of the crossings (WB5TRC014, WB6TRC011, and WB7CAR066). The remaining two are seasonal man-made ponds and Sabal Trail proposes to dam and pump the waterbodies if they are holding water at the time of construction, or use standard open-cut if they are not holding water at the time of construction (WB2TRC354 and WB8ECT219). A typical dam and pump drawing is included in Resource Report 1 (*see* Figure 45, Typical Environmental Details, Appendix 1A, Volume II-B).

#### **2.3.7.7 Restoration**

Completed stream crossings will be stabilized within 24 hours of backfilling in accordance with the FERC Procedures and the Project E&SCP, weather and soil conditions permitting.

Within the construction ROW, a 25 foot-wide riparian strip adjacent to waterbodies will be allowed to revegetate with native plant species. A 10 foot wide area centered on the pipeline may be maintained to facilitate periodic pipeline corrosion/leak surveys. Any trees within 15 feet of the pipeline that have roots that could compromise the integrity of the pipeline coating may be cut and removed from the permanent ROW during maintenance activities.

#### **2.3.8 Surface Water Effects and Mitigation**

Construction activities associated with the Project that have the potential to affect surface waters include clearing activities, dry crossings of waterbodies for pipeline installation, HDD, hydrostatic test discharges, potential spills or leaks of hazardous liquids from the refueling of construction vehicles or storage of fuel, oil, and other fluids, and temporary access road crossings. Periodic maintenance of the ROW also has the potential to impact bank and riparian areas adjacent to waterbodies.

Pipeline construction across rivers and streams or adjacent to surface waters can result in temporary and long-term adverse environmental impacts if not properly completed. However, proper construction techniques and timing can ensure that any such effects are both temporary and minor. The primary effect associated with in-stream trenching is a temporary increase in turbidity and the resulting sedimentation that may occur downstream. Surface runoff and erosion from the cleared ROW can also increase in-stream sedimentation during construction. Other potentially deleterious effects include accidental hazardous material spills resulting from refueling/maintaining construction equipment, fuel storage, or equipment failure in or near a waterbody, and could have immediate effects on aquatic resources and contaminate the waterbody downstream of the release point.

Long-term effects on water quality can result from alteration of stream banks and removal of riparian vegetation. If not stabilized and revegetated properly, soil erosion associated with surface runoff and stream bank sloughing can result in the deposition of large quantities of sediment into the waterbody. Increased

turbidity from soil erosion and increased water temperature from vegetation removal can reduce the suitability of habitat for fisheries. No coldwater fisheries were identified in the Project area. Potential effects on fisheries resources from the Project and proposed mitigation are discussed further in Section 3.2.7 of Resource Report 3.

Effects may also result from accidental releases of hazardous materials during refueling/maintaining of the construction equipment, equipment failure in or near a waterbody, or inappropriate storage of fuel in or near a waterbody. Minor long-term effects associated with pipeline operations and maintenance will largely be restricted to periodic clearing of vegetation within the permanent ROW at waterbody crossings. These maintenance activities will be consistent with the FERC Procedures, which have been fully integrated into the Project E&SCP (*see* Appendix 1B of Resource Report 1).

#### **2.3.8.1 Mitigation and Restoration Measures**

To minimize effects at waterbody crossings during construction, operation, and maintenance, Sabal Trail will construct the Project in accordance with the BMPs outlined in its Project E&SCP and with all federal and state regulations and permit requirements including stormwater permit requirements. Sabal Trail has sited the proposed ROW adjacent to existing maintained utility ROWs at waterbody crossings to the extent practicable to minimize impacts on riparian buffers along stream corridors.

To minimize the potential for sedimentation to waterbodies and within public watershed areas caused by erosion from the adjacent landscape, trench spoil that is excavated from streambeds and banks will be placed in the ATWS at least 10 feet from the top of the waterbody bank. Erosion control devices, such as silt fences and other BMP's, will be placed at the downslope edges of the spoil piles to prevent sediment from entering the waterbody. Once the pipeline is placed in the trench, the temporarily-stored spoil material will be placed back in the trench and the stream banks and streambed will be restored as close to their pre-construction contours as feasible. Stream banks and riparian areas will then be revegetated in accordance with the Project E&SCP (Appendix 1B of Resource Report 1) and any applicable agency requirements. During construction, the open trench may, on occasion, accumulate water from either groundwater intrusion or precipitation. In such cases, the trench will be dewatered periodically to allow for proper and safe construction (*see* Section 2.3.7.1 above). Additionally, major waterbody crossings and crossings of federal and state-designated waterbodies are proposed to be crossed utilizing HDD where practicable to avoid in-stream disturbance and to minimize tree clearing at stream banks along these sensitive waters.

Any hazardous materials, chemicals, lubricating oils, solvents, or fuels used during construction will be stored in upland areas at least 100 feet from wetlands and waterbodies as required by the Project SPCC. All such materials and spills (if any) will be handled in accordance with Sabal Trail's SPCC Plan. Except where absolutely necessary, or required to otherwise minimize overall effects to the environment, there will be no refueling or lubricating of vehicles or equipment within 100 feet of a waterbody. A list of deviations requested for refueling and equipment parking locations in or within 100 feet of wetlands for the Project is included in Table 2.3-13. Under no circumstances will refuse be discarded in waterbodies, trenches, or along the construction corridor. In accordance with the SPCC Plan, Sabal Trail will conduct routine inspections of tanks and storage areas to help reduce the potential for spills of hazardous materials. Specific measures are discussed in the SPCC Plan (Contingency Plan and Emergency Procedures) (*see* Appendix 1B of Resource Report 1). Sabal Trail will consult with federal and state agencies regarding the potential to encounter contaminated sediments along the Project. In the event that contaminated sediment areas are confirmed, Sabal Trail will work with federal and state agencies to develop appropriate mitigation.

#### **2.3.8.2 Hydrostatic Test Water**

The piping associated with all Project pipeline facilities will be hydrostatically tested for structural integrity prior to being placed in service. Testing will be completed by capping installed pipe facilities with test manifolds, filling these segments with water, and maintaining a test pressure in excess of normal operating

pressures for a specified period of time (typically 8 hours). Hydrostatic testing will be conducted on this Project in a manner that meets or exceeds the U.S. Department of Transportation “Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards” (49 CFR Part 192).

Sabal Trail will employ measures designed to reduce the likelihood of entrainment or impingement of juvenile and adult fishes during hydrostatic test water withdrawal operations. Sabal Trail will attempt to avoid low-flow conditions to limit any potential effect on downstream aquatic resources. Hydrostatic test water intake structures will be floated so they are not laying on the streambed and screened with wire to prevent larger fish from entering the intake structure. The screen around the intake will be fabricated to provide an adequate surface area of fine meshed screen designed to reduce the approach velocity to prevent impingement or entrainment of small fish and/or macroinvertebrates. Sabal Trail will obtain permits for water withdrawal intake and meters as required to be implemented during surface water withdrawals to maintain adequate stream flow rates and to ensure adequate volumes are available downstream for withdrawals by existing users.

Upon completion of the hydrostatic test, environmental effects from the discharge of hydrostatic test water will be minimized by using the measures described in the Project E&SCP. Sabal Trail will:

- Locate hydrostatic test manifolds outside of wetlands and riparian areas, to the extent practicable;
- Discharge into dewatering structures located in upland areas within the construction work area;
- Comply with all appropriate permit requirements;
- Not discharge into state-designated special waters, waterbodies that provide habitat for federally listed threatened or endangered species, or waterbodies designated as public water supplies, unless the relevant federal, state, and local permitting agencies grant written permission;
- Discharge test water to a well-vegetated and stabilized area, if practical, and maintain at least a 50 foot vegetated buffer from adjacent waterbody/wetland areas. If an adequate buffer is not available, sediment barriers or similar erosion control measures will be installed; and
- Regulate discharge rate, use energy dissipation device(s), and install sediment barriers, as necessary, to prevent sedimentation and streambed scour.
- Reuse hydrostatic test water to the extent practicable.
- Comply with state and federal discharge requirements once testing is complete.

Pumps used for hydrostatic testing located within 100 feet of any surface water will be operated and refueled in accordance with the Project E&SCP. Sabal Trail will also coordinate with the applicable state regulatory agencies regarding the source of hydrostatic test water and discharge locations. Sabal Trail does not anticipate using chemicals for testing or for drying the pipeline following hydrostatic testing. Additionally, the Project facilities to be hydrostatically tested consist of new internally coated pipeline materials and, therefore, hydrostatic test water is not anticipated to affect surface waters. Sampling of discharge water will be conducted in accordance with permit requirements and the Project E&SCP to document water quality at the time of discharge.

## **2.4 Wetlands**

Sabal Trail has designed the proposed Project to avoid and minimize effects on wetlands to the extent practicable. Sabal Trail proposes to implement its E&SCP and SPCC Plan to minimize effects on wetlands, and proposes mitigation where effects are unavoidable, as described in Section 2.4.5.1. A summary of permanent and temporary effects on wetlands is included in Table 2.4-2.

Sabal Trail identified, located, classified, and delineated wetland resources within the Project area through field surveys conducted in 2013 and 2014. Jurisdictional wetlands crossed by the Project were field delineated in accordance with the USACE's Wetlands Delineation Manual (Environmental Laboratory, 1987), Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0) (USACE, 2010 and 2012). For wetlands in Florida, state jurisdictional boundaries were also assessed using the methodology described in Chapter 62-340, FAC. Generally, the wetland jurisdiction lines are the same under the state and federal systems encountered along the Project, with the exception of Florida where the FDEP boundaries may be more conservative than the USACE. If any disparities were found, the more conservative (landward) wetland jurisdictional boundary was selected. Field surveys will continue through 2014 in those areas where additional survey permission is granted.

The USFWS wetland classification system described by Cowardin et. al. (1979) was used to classify the wetlands that will be affected by the Project. The wetlands in the Project area were delineated as Palustrine Forested ("PFO"), Palustrine Scrub-Shrub ("PSS"), Palustrine Emergent ("PEM"), Palustrine Open Water, or a combination of these four cover types. Palustrine systems include all none-tidal wetlands that are dominated by trees, shrubs, persistent emergent, and emergent mosses or lichens and all wetland that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 percent. The palustrine system was developed to group vegetated wetlands, commonly referred to as marshes, swamps, bogs, and prairies. This system includes ponds and may be situated shoreward of lakes, river channels, estuaries, and river floodplains or in isolated catchments or on slopes (Cowardin et. al., 1979). All of the resource areas identified along the Project route are classified as palustrine systems.

As of the date of this Resource Report, all jurisdictional wetlands crossed by the Project have been delineated, with the exception of those properties where landowners have denied or rescinded survey access permission or where changes to the Project alignment have taken place. For wetlands in locations of non-survey, Sabal Trail utilized publically available National Wetlands Inventory ("NWI") and Florida Department of Transportation's Florida Land Use, Cover and Forms Classification System ("FLUCCS") (FDOT, 1999) mapping to document the presence of approximate wetland boundaries and to develop approximate impact estimates. In Florida, the delineated wetland boundaries were field verified by representatives of the Northeast, Central, and Southwest Districts of the FDEP.

A brief description of the wetland cover types and associated vegetative communities crossed by the Project are detailed in Section 2.4.1, below. Wetlands in the Project area are listed in Table 2.4-1 by identification number (assigned by environmental field crews), MPs, and cover type(s). The table also provides calculated temporary and permanent wetland effects associated with the construction and operation of the Project, which are further discussed in Section 2.4.5. No state wetland classifications were identified that would apply to wetlands affected by the Project in Alabama or Georgia. FLUCCS codes for wetlands affected by the Project in Florida are included in Table 2.4-1. Table 2.4-2 provides a summary of wetland effects by wetland type for the Project. A Wetland Delineation Report for the Project is included in Appendix 2B.

### **2.4.1 Wetlands Crossed by Pipeline Facilities**

The Project crosses land regions resulting in a slight variation in wetland communities crossed from the Project's northern limit (MP 0.0) in Alabama to its southern terminus in Florida. The Project area in Alabama is located in the Eastern Mountains and Piedmont Region, Central and Eastern Mountains subregion and Southern Piedmont subregion. The Central and Eastern Mountains subregion is a topographically varied and floristically diverse, largely forested area. The Southern Piedmont subregion consists of hilly terrain dissected by many streams that flow slow and east to the Coastal Plain (USACE,

2012). The Project area in Georgia is located in the Atlantic and Gulf Coastal Plain Region, mainly within the Inner Coastal Plain subregion. Wetlands occupy a relatively high percentage of the Atlantic and Gulf Coastal Plain Region and may dominate the landscape in some areas. The Inner Coastal Plain subregion is an area of level to hilly topography, dissected by numerous streams. Much of the area consists of material eroded from the ancestral Appalachian Mountains and deposited in the ocean. Mixed evergreen/hardwood forests occur on rolling hills of the inner coastal plain on Pleistocene and older sediments. These landscapes are periodically interrupted by large river floodplains of recent origin containing bottomland hardwoods, swamps, and other riparian forests (USACE, 2010). The Project area in Florida is partially located in the Atlantic and Gulf Coastal Plain Region, Inner Coastal Plain subregion near the Georgia border. The majority of the Project in Florida is located within the Florida Peninsula subregion (USACE, 2012 and 2010). The Florida Peninsula has a hot and humid climate with more than half of the annual rainfall occurring from June to September. Fall and winter are drier. Topography is nearly level to gently rolling with many scattered lakes and wetlands. The Project area in Florida supports primarily flatwood community types. Wetland communities identified in the Project area in Alabama and Georgia are presented below as described in the USACE regional supplements for the Eastern Mountains and Piedmont Region and the Atlantic and Gulf Coastal Plain Region (USACE, 2012 and 2010). Wetland communities identified in the Project area in Florida are presented below as they correlate to the Florida Department of Transportation's Florida Land Use, Cover and Forms Classification System (FDOT, 1999) manual.

#### 2.4.1.1 Palustrine Forested Wetlands

Palustrine forested wetlands are characterized by woody vegetation that is 6 meters (approximately 20 feet) tall or taller and normally include an overstory of trees, an understory of young trees or shrubs, and an herbaceous layer (Cowardin et. al., 1979). Among the many types of forested wetlands in the U.S. are maples swamps, floodplain or bottomland hardwood swamps, forested bogs, cypress-gum (tupelo) swamps, bay swamps, wet flatwoods, and pine swamps and lowlands (Tiner, 1999).

#### Alabama

##### Wetland Hardwood Forests

Wetland hardwood forests in the Project area in Alabama have a closed canopy dominated by freshwater hardwood species. Within the Project area, red maple (*Acer rubrum*), sweetgum (*Liquidambar styraciflua*), and sweetbay magnolia (*Magnolia virginiana*) dominate this forest type. Other tree species identified during data collection include water oak (*Quercus nigra*), American hornbeam (*Carpinus caroliniana*), willow oak (*Quercus phellos*), tuliptree (*Liriodendron tulipifera*), green ash (*Fraxinus pennsylvanicus*), swamp tupelo (*Nyssa biflora*), overcup oak (*Quercus lyrata*), pin oak (*Quercus palustris*), and blackgum (*Nyssa sylvatica*). Where wetland hardwood forests in the Project area are adjacent to pine plantations, or have been altered by this activity, pine species such as loblolly pine (*Pinus taeda*) are present. Common shrubs include hazel alder (*Alnus serrulata*), black willow (*Salix nigra*), Chinese privet (*Ligustrum sinense*), black elderberry (*Sambucus nigra*), and possumhaw (*Viburnum nudum*). Other shrub species present include common buttonbush (*Cephalanthus occidentalis*), sweet pepperbush (*Clethra alnifolia*), silky dogwood (*Cornus amomum*), wax myrtle (*Morella cerifera*), dwarf palmetto (*Sabal minor*), and highbush blueberry (*Vaccinium corymbosum*). Typical herbaceous species present are netted chainfern (*Woodwardia areolata*), cinnamon fern (*Osmunda cinnamomea*), Virginia water horehound (*Lycopus virginicus*), common ladyfern (*Athyrium felix-femina*), giant cane (*Arundinaria gigantea*), smallspike false nettle (*Boehmeria cylindrica*), common rush (*Juncus effusus*), and royal fern (*Osmunda regalis*). Typical vines present are woodvamp (*Decumaria barbara*), roundleaf greenbriar (*Smilax laurifolia*), trumpet creeper (*Campsis radicans*), and poison ivy (*Toxicodendron radicans*).

The Project will cross several freshwater forested wetland hardwood community types, including Riverine or "Bottomland Hardwoods", slope wetlands, depression wetlands, and mineral flat wetlands. Bottomland



stream and lake swamp communities are among the most common hardwood wetland habitats in the Project area. These communities typically occur in floodplain or overflow areas of rivers, streams and lakes, but can be present elsewhere as well. Slope wetlands occur where the discharge and lateral movement of groundwater creates saturated soil conditions on sloping terrain. These wetlands are highly variable and range in size from small seeps at the bases of hill slopes to large wetlands in broad, relatively level valleys. Slope wetlands often occur along shallow drainageways above the headwaters of streams, and may extend for considerable distances through otherwise upland landscapes. Depression wetlands form where limestone rock is subjected to surface drainage or groundwater flow that results in dissolution, weakening, and eventual collapse (i.e., karst terrain). Once the “sinkhole” has filled with sediment from the surrounding area, the downward movement of water is restricted, thus promoting the formation of a wetland. Mineral soil flat wetlands occur where the land surface is nearly level and precipitation is retained near the surface by bedrock or a relatively impermeable soil layer (USACE, 2012).

## **Georgia**

### **Wetland Hardwood Forests**

Wetland Hardwood Forests in the Project area in Georgia consist of vegetation similar to those identified in Alabama, described above. Red maple, sweetgum, and sweetbay magnolia continue to dominate the canopy, intermixed with oaks, tuliptree, green ash, and blackgum. Bottomland hardwoods, slope wetlands, depression wetlands, and mineral flat wetlands are all present in the Project area in Georgia.

### **Mixed Forest Wetlands**

Mixed forest wetlands, in which neither hardwood nor conifer species achieve dominance of the crown canopy are the most common forested freshwater wetland community type occurring throughout the Project area in Georgia. Based on data collected during the field surveys, these forests typically included the same hardwood tree species identified in Wetland Hardwood Forests (Alabama), above, in addition to pond cypress (*Taxodium ascendens*), swamp titi (*Cyrilla racemiflora*), slash pine (*Pinus elliotii*), and longleaf pine (*Pinus palustris*). Understory species observed in mixed forest wetlands in Georgia are also similar to those identified in wetland hardwood forests in Alabama, above.

### **Wetland Coniferous Forests**

Wetland coniferous forests consist of a natural closed canopy dominated by coniferous species. Community types identified in Georgia included pine flatwoods and cypress swamp. Typical species in pine flatwoods in the Project area in Georgia include slash pine, redbay (*Persea borbonia*), sweetbay magnolia, cinnamon fern, Chinese privet, and roundleaf greenbriar. Cypress swamps in the Project area in Georgia are comprised of bald and pond cypress with associated species including common rush, giant cane, broadleaf arrowhead (*Sagittaria latifolia*), blackgum, red maple, marsh pennywort (*Hydrocotyle umbellata*), common buttonbush, and sugarcane plumegrass (*Saccharum giganteum*).

## **Florida**

### **Wetland Hardwood Forests**

Wetland hardwood forests are described in the above sections (Alabama and Georgia), and are the most common forested wetland community type in the Project area in Florida. Dominant species identified in the Project area in Florida included red maple, water oak, swamp tupelo, sweetbay magnolia, laurel oak (*Quercus laurifolia*), sweetgum, swamp titi, black titi (*Cliftonia monophylla*), loblolly bay (*Gordonia lasianthus*), black willow, and a variety of other species were commonly found in wetland hardwood forests. The Project will cross several freshwater wetland hardwood community types along the Mainline Route, including bottomland stream and lake swamps, mixed wetland hardwoods, bay swamps, gum swamps, and titi swamps. The bottomland stream and lake swamp community was identified along the

Citrus County Line and the mixed wetland hardwood and bay swamp were identified along the Hunters Creek Line. Bottomland stream and lake swamp is the predominant wetland hardwood forest community in the Project area in Florida followed by mixed wetland hardwood and bay swamp communities. Gum swamp and titi swamp communities are present in lesser amounts.

Bottomland stream and lake swamps are usually found on but not restricted to river, creek, and lake flood plain or overflow areas. This category has a wide variety of predominantly hardwood species of which some of the more common components include red maple, river birch (*Betula nigra*), water oak, sweetgum, willows, tupelos, water hickory (*Carya aquatica*), bays, water ash (*Fraxinus caroliniana*), and common buttonbush. The mixed wetland hardwood community is reserved for those wetland hardwood communities which are composed of a large variety of hardwood species tolerant of hydric conditions yet exhibit an ill-defined mixture of species. Bay swamps are composed of dominant trees such as loblolly bay, sweetbay magnolia, swamp bay (*Persea palustris*), with slash pine and loblolly pine as an associated component at times. Large gallberry (*Ilex coriacea*), fetterbush (*Lyonia lucida*), wax myrtle, and titi are included in the understory vegetation. Gum swamps are composed of swamp tupelo (blackgum) or water tupelo (*Nyssa aquatica*), or Ogeechee tupelo (*Nyssa ogeche*) which is pure or predominant. Associate species may include bald cypress (*Taxodium distichum*) and a great variety of wet site tolerant hardwood species widely variant in composition. Titi swamps are composed of often extremely dense stands of black titi and cyrilla which are either the pure or predominant species. Major associated species include bays, cypress, tupelos and a great variety of wetland hardwoods (FDOT, 1999).

#### **Mixed Forest Wetlands**

The mixed forest wetland communities are comprised of a tree canopy in which neither hardwoods nor conifers achieve a 66 percent dominance of the crown canopy composition (FDOT, 1999). Mixed forest wetlands were present along the Mainline Route and the Hunters Creek Line. Based on data collected during the field surveys in Florida, these forests typically include a mix of woody species such as: black willow, swamp bay, bald cypress, pond cypress, black titi, swamp tupelo, slash pine, water oak, and tuliptree. Understory species include large gallberry, odorless bayberry (*Myrica inodora*), swamp titi, wax myrtle, fetterbush, and common rush.

#### **Wetland Coniferous Forests**

Wetland coniferous forests are comprised of a closed canopy dominated by coniferous species. In Florida, these communities often occur in river floodplains, bogs, bayheads, and sloughs (FDOT, 1999). Typical dominant species observed during field surveys for these communities included: bald cypress, pond cypress, and pond pine (*Pinus serotina*). Wetland coniferous communities observed on the Mainline Route include cypress forests and hydric pine flatwoods. Communities identified along the Hunters Creek Line include cypress forest. The cypress forest community is composed of pond cypress or bald cypress which is either pure or predominant. In the case of pond cypress, common associates are swamp tupelo, slash pine, and black titi. In the case of bald cypress, common associates are water tupelo, swamp cottonwood (*Populus heterophylla*), red maple, American elm (*Ulmus Americana*), pumpkin ash (*Fraxinus profunda*), Carolina ash (*Fraxinus caroliniana*), overcup oak, and water hickory. Bald cypress may be associated with laurel oak, sweetgum and sweetbay magnolia on less moist sites. Cypress forest is the predominant wetland forest community identified along the Hunters Creek Line and also represents a significant presence along the Mainline Route. Hydric pine flatwoods are forest with a sparse to moderate canopy of slash pine. The understory is grasses, wiregrass, forbs, and at times with sparse saw palmetto (FDOT, 1999).

#### **2.4.1.2 Palustrine Scrub-Shrub Wetlands**

Scrub-shrub wetlands are dominated by woody vegetation less than 20 feet in height (Cowardin et. al., 1979). The species found in PSS wetlands include true shrubs, saplings, young trees, and trees or shrubs that are small or stunted because of environmental conditions. Scrub-shrub wetlands may include habitats

where the climax community consists of shrub species such as a buttonbush swamp, or where secondary-growth habitat composed of shrub or sapling species is present due to recent disturbance. In cases of disturbance or where individuals do not reach 20 feet due to other environmental conditions, sapling species composition for scrub-shrub wetlands may overlap with species described above in Section 2.4.1.1 for forested wetlands. These shrub dominated wetlands are commonly called bogs, pocosins, shrub-carrs, or simply shrub swamps (Tiner, 1999).

### **Alabama**

In the Project area in Alabama, densely vegetated wetlands found in depressions may be called “shrub thickets” and scrub-shrub wetlands on slopes may be called “fens”, “wet-weather seeps”, or “bogs”. Riverine shrub swamps are common in the Project area in Alabama, also present are shrub thickets located in maintained ROWs and slope wetlands on hillsides. Shrub swamps in the Project area in Alabama are dominated by hazel alder, black willow, sweetbay, black elderberry, common buttonbush, common rush, silky dogwood, and sweet pepperbush. Saplings are also present, particularly in maintained ROWs and areas of recent disturbance including sweetgum, red maple, willow oak, and green ash. Herbaceous plants present in shrub swamps in the Project area in Alabama include giant goldenrod (*Solidago gigantean*), woolgrass (*Scirpus cyperinus*), giant cane, netted chainfern, and cinnamon fern.

Characteristic shrubs that are common in riverine shrub swamps are similar to the shrub and herbaceous species listed in wetland hardwood forests, above. Prominent species characteristic of shrub thickets include white meadowsweet (*Spiraea alba*), alders (*Alnus* spp.), willows (*Salix* spp.), arrowwoods (*Viburnum* spp.), and highbush blueberry. Bluejoint (*Calamagrostis canadensis*) grass is often intermixed with alders forming a mosaic of wet meadow and shrub swamp. Shrubs characteristic of slope swamps include highbush blueberry, Virginia sweetspire, possumhaw, and pink azalea (*Rhododendron periclymenoides* = *R. nudiflorum*). Herbaceous plants include sedges (e.g., *Carex lurida* and *C. vulpinoidea*), Allegheny monkeyflower (*Mimulus ringens*), cardinalflower (*Lobelia cardinalis*), jewelweed (*Impatiens capensis*), skunk cabbage (*Symplocarpus foetidus*), and ferns, such as royal fern and sensitive fern (*Onoclea sensibilis*) (USACE, 2012).

### **Georgia**

Palustrine Scrub-Shrub wetlands identified in the Project area in Georgia consist of the same shrub swamp vegetation cover type identified in Alabama described above, with some regional variation. Riverine shrub swamps are common in the Project area in Georgia, also present are slope wetlands occurring in headwater areas (locally called bayheads or baygalls) and hillside seeps, depressional wetlands (locally known as Carolina bays, Delmarva bays, Grady ponds, and by many other names), Pocosins (freshwater shrub bogs found on inter-stream flats), and wet flats (USACE, 2010).

In the Project area in Georgia, shrub swamps are dominated by the species listed above for Alabama, and additional species including swamp titi, swamp doghobble (*Eubotrys racemosa*), Inkberry (*Ilex glabra*), redbay, dwarf palmetto, and poison sumac (*Toxicodendron vernix*). Eastern baccharis (*Eastern baccharis*), sawtooth blackberry (*Rubus argutus*), and field blackberry (*Rubus arvensis*) are also present. Sapling species in maintained ROW and areas of recent disturbance included the same species identified in Georgia in Section 2.4.1.1, above. Additional herbaceous species present include Cherokee sedge (*Carex cherokeensis*), Frank’s sedge (*Carex frankii*), fragrant flatsedge (*Cyperus odoratus*), strawcolored flatsedge (*Cyperus strigosus*), velvet panicum (*Dichanthelium scoparium*), blunt spikerush (*Eleocharis obtusa*), flattened pipewort (*Eriocaulon compressum*), Virginia sweetspire (*Itea virginica*), Elliot’s goldenrod (*Solidago elliotii*), and broadleaf cattail (*Typha latifolia*).

Characteristic shrubs that are common in riverine shrub swamps are similar to the shrub and herbaceous species listed in wetland hardwood forests, above. Headwater slope wetlands are often dominated by various species of bay trees (e.g., *Persea* spp., *Magnolia virginiana*) along with swamp tupelo, oaks, and

slash pine. Shrub bogs can be found in uplands of the inner coastal plain. Shrub bogs have typical bog vegetation containing pitcher plants, grasses, sedges, orchids, and yellow-eyed grass (*Xyris* spp.), surrounded or broken by areas of shrubs or small trees. Many of the shrubs common to pocosins are also found in shrub bogs, including buckwheat tree (*Cliftonia monophylla*), swamp titi, poison sumac, and pond cypress. Characteristic vegetation of seep wetlands in the region can be highly variable. Depressional wetlands in the region often support shrubs and trees of various bay species (e.g., sweetbay magnolia, red bay, loblolly bay), and species also found in pocosins. Pocosins are seasonally saturated or inundated, contain organic or organic-rich mineral soils, and support mainly broadleaf evergreen shrubs and small trees. Typical species include hollies (*Ilex* spp.), leucothoe (*Leucothoe* spp.), zenobia (*Zenobia pulverulenta*), swamp titi, and pond pine. Wet flats are present throughout the coastal plain region, and may be dominated by herbaceous plants, hardwoods, pines, or a mixture of pines and hardwoods. Often the wetlands occur in shallow depressions or microtopographic lows in very flat landscapes. Wet flats and surrounding communities are known by various names across the region, including flatwoods, pine savannas, Pine Barrens, and coastal prairies. The hydrology of wet flats can be highly seasonal and is derived mainly from direct precipitation, high water tables, and shallow overland flow (USACE, 2010).

### **Florida**

Palustrine Scrub-Shrub wetlands identified in the Project area in Florida consist of the same shrub swamp vegetation cover type identified in Georgia described above, with some regional variation. Specific to this state, the treeless hydric savannah community type (also described as “mixed scrub-shrub wetland”) is common in the Project area in Florida (FDOT, 1999).

In the Project area in Florida, shrub swamps are dominated by the species listed above for Georgia, and additional species including Florida anisetree (*Illicium floridum*), large gallberry (*Ilex coriacea*), gallberry, odorless bayberry, fetterbush, myrtle dahoon (*Ilex cassine*), common buttonbush, black elderberry, Walter’s viburnum (*Viburnum obovatum*), and sea myrtle (*Baccharis halimifolia*). Species characteristic of disturbed sites such as Chinese tallow (*Sapium sebiferum*) and Brazilian pepper (*Schinus terebinthifolius*) are also present as saplings in some wetlands. Treeless hydric savannah is typically dominated by wiregrass or cutthroat grass along with wetland plant associates. This community type is a treeless variant of the Hydric Pine Flatwoods community type which is characterized by a sparse to moderate canopy of slash pine with an understory of grasses, wiregrass, forbs, and at times with sparse saw palmetto.

#### **2.4.1.3 Palustrine Emergent Wetlands**

PEM wetlands are non-tidal wetlands characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. PEM wetlands usually are dominated by perennial plants (Cowardin et. al., 1979). These wetlands are commonly referred to by a host of terms, including marsh, wet meadow, fen, and vernal pool. Marshes represent emergent wetlands that are flooded for all or most of the year. Fens are seasonally flooded and saturated emergent wetlands. In the southern region of the U.S. these wetlands may be called sedge meadows where sedges predominate or wet meadows where grasses and other species abound. Virtually treeless grasslands called savannas are present in the Atlantic and Gulf Coastal Plain Region (Tiner, 1999).

### **Alabama**

PEM wetlands identified in the Project area in Alabama include freshwater marshes, wet meadows, and sedge meadows located on landforms including riverine floodplains, flats, slopes, and depressions. Characteristic species included in freshwater marshes include a variety of species and cattail marshes (*Typha* spp.) are common throughout the region. Typical wet meadow species include grasses such as bluejoint (*Calamagrostis canadensis*) and reed canary grass (*Phalaris arundinacea*), other graminoids such as sedges and rushes (*Juncus*), and various forbs such as Joe-Pye weeds (*Eupatoriadelphus*), thoroughworts



(*Eupatorium*), smartweeds (*Polygonum*), goldenrods (*Euthamia* and *Solidago*), and asters (*Aster*) (Tiner, 1999).

In the Project area in Alabama freshwater marshes are dominated by broadleaf cattail, southern cattail (*Typha domingensis*), giant cane, sensitive fern, cinnamon fern, giant goldenrod, netted chainfern, common rush, shallow sedge (*Carex lurida*), fragrant flatsedge (*Cyperus odoratus*), blunt spikerush, common boneset (*Eupatorium perfoliatum*), fowl mannagrass (*Glyceria striata*), switchgrass, and woolgrass. New growth of boxelder (*Acer negundo*), hazel alder, river birch, Japanese honeysuckle (*Lonicera japonica*), and other species noted above in Sections 2.4.1.1 and 2.4.1.2 are present in maintained ROW and areas of recent disturbance. Additional species present in freshwater marshes and dominant in wet meadows and sedge meadows include Cherokee sedge, giant sedge (*Carex gigantean*), seedbox (*Ludwigia alternifolia*), wingleaf primrose-willow (*Ludwigia decurrens*), hairy primrose-willow (*Ludwigia pilosa*), marshpepper knotweed (*Persicaria hydropiper*), swamp smartweed (*Polygonum hydropiperoides*), spotted lady's thumb (*Persicaria maculosa*), arrowleaf tearthumb (*Persicaria sagittata*), Handsome harry (*Rhexia virginica*), and slender yelloweyed grass (*Xyris torta*).

### **Georgia**

PEM wetlands identified in the Project area in Georgia consist of the same freshwater marsh and wet meadow cover type identified in Alabama described above, with some regional variation. Vegetation species present in Alabama are also present in Georgia. Additional species common to freshwater marshes and wet meadows in Georgia are peppervine (*Ampelopsis arborea*), bushy bluestem (*Andropogon glomeratus*), broomsedge bluestem (*Andropogon virginicus*), smallspike false nettle, southern waxy sedge (*Carex glaucescens*), false hop sedge (*Carex lupuliformis*), common buttonbush, slender woodoats (*Chasmanthium laxum*), velvet panicum, Virginia buttonweed (*Diodia virginiana*), dogfennel (*Eupatorium capillifolium*), rice cutgrass (*Leersia oryzoides*), Mexican primrose-willow (*Ludwigia octovalvis*), maidencane (*Panicum hemitomon*), Pennsylvania smartweed (*Persicaria pensylvanica*), shortbristle horned beaksedge (*Rhynchospora corniculata*), southern beaksedge (*Rhynchospora microcarpa*), broadleaf arrowhead, and lizard's tail (*Saururus cernuus*).

### **Florida**

PEM wetlands identified in the Project area in Florida consist of the same freshwater marsh and wet meadow cover types described above, with some regional variation. In Florida, PEM community types identified along the Mainline Route are called freshwater marshes, wet prairies, and emergent aquatic vegetation (FDOT, 1999). Wet prairie and freshwater marsh are present along the Citrus County Line and freshwater marsh is present along the Hunters Creek Line.

In the Project area in Florida vegetation cover of natural marshes varies considerably. Undisturbed natural marshes tend to have a plant cover consisting of a mixture of plants where no single species is dominant. Common species noted in the natural marshes include those noted above for Georgia and others including little carpetgrass (*Axonopus fissifolius*), narrowfruited horned beakrush (*Rhynchospora inudata*), spadeleaf (*Centella asiatica*), southern cutgrass (*Leersia hexandra*), maidencane, lemon bacopa (*Bacopa caroliniana*), dotted smartweed (*Polygonum punctatum*), bluejoint panicum (*Panicum tenerum*), and others. Natural marshes disturbed by human activity or cattle grazing tend to have few species and are dominated by weedy native and exotic species, including torpedo grass (*Panicum repens*), Cuban bulrush (*Oxycaryum cubense*), and limpo grass.

Wet prairies are similar to marshes, but are comprised primarily of grassy vegetation; usually they have less water or saturation and shorter herbaceous vegetation. Species such as maidencane and sawgrass typically predominate. The emergent aquatic vegetation community includes wetlands dominated by plant species that either float on or emerge partially or completely from standing water. Water lettuce *Pistia*



*stratiotes*), spatterdock (*Nuphar* spp.), water hyacinth (*Eichhornia* spp.), duck weed (*Lemna* spp.), and water lily (*Nymphaeaceae*), are typical dominant species in this community type. This category overlaps with some habitats that would be classified as open water under the Cowardin system (Cowardin et. al., 1979).

## **2.4.2 Wetlands Located within Aboveground and Pipeline Appurtenant Facilities**

### **2.4.2.1 Compressor Stations**

#### **Alexander City Compressor Station**

The Alexander City Compressor Station site was surveyed for wetlands and waterbodies in 2014. Wetland resources were identified along the proposed western fenceline for the facility and within two ATWS areas adjacent to the site. Some minor permanent impact to PEM wetlands along the fenceline may occur for installation and long-term maintenance of the fencing.

#### **Albany Compressor Station**

The Albany Compressor Station site was surveyed for wetlands and waterbodies in 2014. One PEM wetland was identified within the proposed compressor station site, inside the proposed station fencing on the eastern boundary of the property with Newton Road. Sabal Trail proposes to avoid this wetland during construction and operation of the Project. No clearing or construction will occur within the wetland. Sabal Trail will implement its E&SCP during the Project to minimize any transportation of sediments into the wetland from construction activities.

#### **Hildreth Compressor Station**

The Hildreth Compressor Station site was surveyed for wetlands and waterbodies in 2014. No wetland resource areas were identified within the proposed compressor station site. Sabal Trail has sited this facility outside of any identified wetlands; therefore, no wetland related effects associated with construction and operation of the proposed compressor station are anticipated.

#### **Dunnellon Compressor Station**

The Dunnellon Compressor Station was surveyed for wetlands and waterbodies in 2014. No wetland resource areas were identified within the proposed compressor station site. Sabal Trail has sited this facility outside of any identified wetlands; therefore, no wetland related effects associated with construction and operation of the proposed compressor station are anticipated.

#### **Reunion Compressor Station**

The Reunion Compressor Station was surveyed for wetlands and waterbodies in 2014. A wetland complex was identified within the proposed compressor station site, inside the proposed station fencing. Portions of the wetlands will be effected by installation of station fencing, fill for the permanent access road, construction of the pipeline interconnect, and use for temporary workspace. Other portions of these wetlands will be avoided during construction and operation as a no clearing buffer for the station.

### **2.4.2.2 M&R Stations**

#### **Transco Hillabee M&R Station**

The Transco Hillabee M&R Station site is located within the Alexander City Compressor Station fencing and wetland resources for this site are described above. No wetlands were identified within the proposed M&R station location.

### **FGT Suwannee M&R Station**

Environmental field surveys at the proposed FGT Suwannee M&R station site were conducted in 2014. The site of the M&R station is all upland and no wetlands will be affected.

### **FSC M&R Station**

The FSC M&R Station site is located within the fence line of the Reunion Compressor Station and wetland resources for this site are described in above. A portion of a PFO wetland will be effected by installation of station fencing.

### **Gulfstream M&R Station**

The Gulfstream M&R Station site is located within the fence line of the Reunion Compressor Station and wetland resources for this site are described in above. No wetlands were identified within the proposed M&R station location.

### **FGT Hunters Creek M&R Station**

The FGT Hunters Creek M&R Station site was surveyed for wetlands and waterbodies in 2014. A PEM/PSS wetland was identified surrounding the site. Effects on the wetland will occur from permanent fill for the access road and installation of station fencing.

### **DEF Citrus County M&R Station**

The DEF Citrus County M&R Station site was surveyed for wetlands and waterbodies in 2014. Two PSS wetlands were identified along the boundary of the site. Effects on the wetland will occur from fill for the permanent access road and from installation of the pipeline interconnect.

## **2.4.3 Wetlands Located within Pipe and Contractor Ware Yards**

Proposed pipe and contractor ware yards were surveyed for wetlands and waterbodies in 2014. No wetlands were identified during environmental field surveys of the contractor ware yards in 2014. Therefore, no adverse effects on wetlands are expected to occur from any activities associated with the temporary use of pipe and contractor ware yards. The pipe yards and contractor ware yards proposed for use during Project construction are shown on USGS Quadrangle mapping located in Appendix 1A, Volume II-B.

## **2.4.4 Wetland Construction Methods**

Sabal Trail will protect and minimize potential adverse impacts on wetlands using construction procedures specified within its Project E&SCP (Appendix 1B of Resource Report 1). In wetland areas, Sabal Trail will construct its pipeline facilities in accordance with the FERC Procedures, except for site-specific deviations that Sabal Trail has requested. Sabal Trail will determine the appropriate crossing method for each wetland depending on individual wetland soil conditions and degree of saturation at the time of construction. The method of construction and the required construction ROW width depend largely on soil stability and related conditions in the wetland. Sabal Trail anticipates that the open-cut trenching method will be used for most wetlands.

The construction procedures used to cross unsaturated wetlands are similar to those used on dry land. Stable temporary work surfaces may be required in wetlands where soils are saturated and unstable. Installing construction mats in the equipment travel lane is a typical method of site stabilization that Sabal Trail will employ, as necessary. Within the wetland, vegetation will be cut to ground level. Stump removal and grading will be limited to the area over the trench except where safety conditions dictate additional site preparation on the working side of the ROW. Where present in unsaturated wetlands, the top 12 inches of topsoil will be stripped from the wetland over the area disturbed by trenching and segregated from excavated subsoil. Temporary trench plugs will be installed in the trench at the edges of the wetland if the

possibility exists for sediment-laden water to flow from uplands down the trench and into the wetland. Silt fences and/or other BMP's will be installed at the edges of the construction work area if the possibility exists for spoil to flow into undisturbed areas of the wetland. Original topographic conditions and contours will be restored as close to pre-construction as possible after completion of construction. Refer to Section 1.6.1.7 of Resource Report 1 for more wetland construction-related information.

ATWS may be needed adjacent to specific wetlands to facilitate the pipeline crossing. The staging areas are in addition to the nominal construction ROW and may be used for the assembly and fabrication of the pipe section that will cross the wetland area. These work areas will be located at least 50 feet away from the wetland edge, except where adjacent upland consists of cultivated or rotated agricultural lands and other disturbed areas, topographic and other site specific conditions permitting. If construction limitations, such as topographic conditions (steep slopes) and road crossing requirements do not permit a 50 foot setback, these areas will be located at least 10 feet away from the wetland, to the extent practicable. In these cases, Sabal Trail is requesting a deviation from the FERC Procedures. Table 2.4-5 identifies the locations where a deviation from the FERC Procedures ATWS wetland setback is required and provides the justification for each such deviation.

## **2.4.5 Wetland Effects and Mitigation**

### **2.4.5.1 Construction Effects**

The construction of the Sabal Trail pipeline will result in a total of 565.25 acres of wetland effects, which includes 147.45 acres of temporary effect on PEM and PSS wetlands and 151.97 acres of permanent impact on PFO wetlands. Since temporarily disturbed wetlands for pipeline installation will be returned to pre-construction conditions, there will be no permanent loss of wetlands from construction of the pipelines. The only permanent wetland effects associated with the Project will be a conversion of 151.97 acres of forested wetlands to emergent or scrub-shrub wetlands as a result of vegetation maintenance of the permanent cleared right-of-way, and maintenance of cleared area surrounding above-ground facilities. Temporary effects on wetlands may include soil disturbance, temporary alteration of hydrology, and loss of vegetation. The permanent Project effects include conversion of PFO and PSS wetlands to PEM wetlands within the permanently maintained ROW. No permanent filling of wetlands is proposed along the pipeline. Table 2.4-1 identifies the wetland area that will be altered temporarily during of the Project facilities and identifies how much of this area consists of PFO and PSS wetlands that will be maintained during operation of the Project facilities as emergent or low scrub-shrub vegetation. Within the 50-foot permanent operation easement 2.14 acres of PSS wetland will be impacted during operation within the 10-foot wide corridor and 150.1 acres of PFO wetland will be impacted during operation within the 30-foot wide corridor that would be maintained in accordance with Sabal Trail's E&SCP. Upon completion of construction, topsoil, contour elevations, and hydrologic patterns will be restored, and affected areas will be reseeded or replanted to promote the re-establishment of native hydrophytic vegetation. Temporary workspace and ATWS areas will be restored to preconstruction grades and contours and reseeded. Temporary workspace and ATWS areas will not be maintained for operation of the proposed facilities and will be allowed to revert to their preconstruction land use and vegetation cover type.

Wetlands that are affected by temporary access roads will be covered with construction equipment mats during construction. The equipment mats will be removed and the wetland will be restored in accordance with the Project E&SCP, once construction is complete. Wetlands affected by PARs will be permanently filled with materials suitable to maintain a stable access road once construction is complete. The intent of PARs is to maintain all season access to the pipeline ROW and associated appurtenances (e.g., MLVs). Effects on the wetlands will be minimized by limiting clearing and grading to only that needed to construct a stable access road. This will be accomplished by steepening tie-in slopes to the extent practicable adjacent to wetlands while still maintaining a stable slope.

Permanent effects would result from the construction of permanent access roads on 11 wetlands (*see* Table 2.4-1). Approximately 1.2 acres of wetland will be effected by permanent fill for construction of permanent access roads. The majority of these permanent access roads have been sited along existing dirt track to minimize new land disturbance (PAR-AL-LE-005, PAR-AL-RU-005, PAR-AL-RU-012, PAR-AL-TA-001, PAR-GA-DO-001, PAR-GA-ST-020, PAR-GA-ST-022, PAR-GA-ST023). While Sabal Trail will limit grading as described above, some effects on wetlands will occur from grading and widening of the existing dirt track. Two of the access roads are proposed new access roads (PAR-CCL-FL-CDK and PAR-HCL-FL-OR-HFGT). Sabal Trail met with the FDEP on site at the proposed DEF Citrus County Meter Station to review wetlands. The proposed access road (PAR-CCL-FL-CDK) was sited to avoid a larger adjacent wetland. The Hunters Creek FGT Meter Station site is surrounded by wetland; therefore, placement of the access road (PAR-HCL-FL-OR-HFGT) could not avoid crossing the wetland to gain access to the site. Use of the road will be restricted to use by Sabal Trail for access to the meter station.

#### **2.4.5.2 Minimization of Effects**

Sabal Trail will protect and minimize potential adverse effects on wetlands by complying with the applicable permit conditions issued by appropriate regulatory agencies with respect to construction and operation of the Project facilities within wetlands, and through implementation of the wetland construction procedures described in the Project E&SCP for this Project (Appendix 1B of Resource Report 1). These wetland construction procedures are summarized below:

##### **Expediting Construction In and Around Wetlands**

Expediting construction in and around wetlands will reduce the amount of time wetland soils are exposed, minimizing the opportunity for soil loss and reducing the amount of time during which wetland functions and values are affected.

##### **Minimizing Vegetation Clearing within Wetlands**

Sabal Trail has reduced workspace in and around wetlands during construction in accordance with the Commission's requirements. With the exception of areas identified in Table 2.4-4, workspace within wetlands will be reduced to a width of 75 feet. Table 2.4-4 provides a list by milepost of any areas where greater than 75 feet of construction workspace will be needed in wetlands and provides site-specific justification for these proposed modifications from the FERC Procedures.

During operation of the Project, wetlands within the ROW will be maintained in accordance with the FERC Procedures. In forested wetlands, Sabal Trail will minimize tree clearing to the extent practicable while maintaining safe construction conditions.

##### **Use of Equipment Mats**

Equipment mats will be used to cross most wetlands. Decompaction would be performed if necessary.

##### **Segregation of Topsoil**

Effects on wetlands will be minimized by segregating up to the top 12 inches of soil from the area disturbed by trenching activities, except in saturated areas. The topsoil will be restored to its original location immediately after backfilling is complete to preserve the existing seedbank and promote the revegetation of the disturbed area.

##### **Use of Recommended Seed Mixes**

Seed mixes and mulch spread on the restored topsoil for temporary stabilization will be applied according to the mixes recommendation by the appropriate regulatory agency and landowner or land manager. The use of fertilizers will not be permitted.

### **Installation of Erosion Controls**

Erosion controls, including but not limited to silt fence and/or staked BMPs, also will be put in place to protect wetlands from sediment from disturbed areas in adjacent uplands during construction.

### **Stabilization and Restoration of Wetlands**

Restoring wetlands to their original configurations and contours, post-construction, will assist in maintaining preconstruction hydrology, minimizing impacts on wetlands. Prompt stabilization of disturbed upland areas adjacent to wetlands will minimize sediment transport into wetlands, protecting wetlands from filling with sediment and maintaining functions and values long-term. After construction, disturbed wetlands and adjacent uplands will be monitored to ensure long-term stabilization. Regular inspection and maintenance of erosion control measures will expedite successful restoration of the wetland.

### **Invasive Species Monitoring and Control**

Sabal Trail will conduct post-construction maintenance and monitoring of the ROW in affected wetlands to assess the success of restoration and revegetation. Monitoring efforts will include documenting occurrences of exotic invasive species in wetlands to compare to pre-construction conditions. Monitoring will continue for a minimum of three years after construction. If after three years of monitoring the densities of invasive species are documented below or consistent with off ROW densities, then Sabal Trail will cease monitoring activities upon approval from the appropriate regulatory agencies (*i.e.*, USACE, ADEM, GAEPD, FDEP). The use of herbicides or pesticides for targeted invasive species control may be implemented if necessary and only in accordance with approval from the applicable regulatory agency. Herbicides and pesticides will not be used within 100 feet of wetlands or waterbodies.

#### **2.4.5.3 Mitigation of Effects**

To minimize effects on wetlands, Sabal Trail will implement the construction procedures described in the Project E&SCP (Appendix 1B of Resource Report 1). In wetlands, vegetation maintenance over the full width of the permanent ROW is prohibited pursuant to the FERC Procedures. During operation of the Project, to facilitate periodic pipeline corrosion/leak surveys, ten feet of the permanent ROW, centered over the pipeline, will be maintained within wetlands at an early successional stage in accordance with Commission requirements. In forested wetlands, Sabal Trail will minimize tree clearing to the maximum extent practicable while maintaining safe construction conditions. Tree clearing within wetlands will be limited to selectively clearing trees within 15 feet of the pipeline with roots that could compromise the integrity of the pipeline coating. Trees and shrubs that become reestablished beyond 15 feet on either side of the pipeline will not be disturbed.

Within wetlands, the construction corridor will be reduced to a width of 75 feet or less. Access within the ROW across wetlands will only be permitted where the soils are non-saturated and able to support construction equipment at the time of crossing or with the use of equipment mats to avoid rutting of the wetland soil. Effects on wetlands will be minimized by segregating the top 12 inches of soil from the area disturbed by trenching activities, except in areas where standing water is present or soils are saturated. The topsoil will be restored to its original location immediately after backfilling is complete, to preserve the wetlands existing seedbank and promote revegetation of the affected area. Seed mixes spread on the restored topsoil for temporary stabilization will include annual rye grass at a rate of 40 pounds per acre (unless standing water is present) or appropriate mixes recommended by the local conservation districts. The use of fertilizers will not be permitted. Erosion controls including silt fence and/or staked BMPs will also be put in place to protect wetland from sediment disturbed in adjacent uplands during construction. Post-construction, the disturbed area will be monitored to ensure long-term stabilization of the site. The Project E&SCP (Appendix 1B of Resource Report 1) provides additional details on construction practices within wetlands.



Sabal Trail will protect and minimize potential adverse effects on wetlands by expediting construction in and around wetlands, by restoring wetlands to their original configurations and contours, by segregating topsoil during excavation where applicable, by permanently stabilizing upland areas near wetlands as soon as possible after backfilling, by inspecting the ROW periodically during and after construction and by repairing any erosion control or restoration features until permanent revegetation is successful. Sabal Trail will comply with the applicable permit conditions issued by federal, state, and local permitting agencies.

In compliance with federal and state regulatory permitting framework relative to wetland protection, Sabal Trail will develop a Project-specific wetland mitigation plan that will include the purchase of mitigation credits from established wetland banks prior to construction. The mitigation plan will provide measures to avoid, minimize, and compensate for temporary and permanent impacts. Sabal Trail will consult with the applicable federal and state regulatory agencies for guidance during development of the proposed mitigation measures and plans. As additional mitigation measures are developed and submitted as part of the federal and state permit applications, supplemental information will be provided to the Commission.

Sabal Trail is in the process of identifying wetland mitigation banks that will be used to mitigate for wetland impacts. As part of its Section 404/10 application to the USACE Sabal Trail will include a Mitigation Plan. The Mitigation Plan will include restoration monitoring of jurisdictional waters of the US that have been temporarily affected during construction and purchase of mitigation credits from an USACE approved mitigation bank or banks servicing the affected watersheds of forested jurisdictional waters that will be temporarily or permanently affected by the Project. Sabal Trail has reviewed information from the USACE Regulatory In lieu fee and Bank Information Tracking System (“RIBITS”) database to determine which banks servicing the Project’s watersheds have available credits. To date, the following mitigation banks have been identified for potential use in the Project Mitigation Plan:

- Alabama and Georgia: Canoe Creek, Martin Creek, MidCreeks, Enon-Sehoy, Bradley Farms Preserve, Upatoi Creek, Kolomoki, Cecil Bay, and Cherry Creek.
- Florida: San Pedro Bay, Bayfield, Hammock Lake, Heather Island, Green Swamp, Withlacoochee, Hilochee, Upper Coastal, Lake Louisa Green Swamp, Reedy Creek, Collany, Shingle Creek, Southport Ranch, Split Oak Forest, Hatchineha Ranch, Florida, Bullfrog Bay, Quickdraw, Crosby Island Marsh, and Gulf Coast.

Sabal Trail proposes to use mitigation banks that are operated consistent with the Wetland Rapid Assessment Procedure (“WRAP”), Standard Operating Procedure (“SOP”), and Uniform Mitigation Assessment Method (“UMAM”) to mitigate for wetland impacts in the USACE Mobile, Savannah, and Jacksonville Districts, respectively. Banks with sufficient credits to offset the Project’s impacts in each district will be included in the Section 404/10 application submitted to the USACE. After consultation and confirmation of credit calculations and credit supplier(s) with the USACE, Sabal Trail will enter into a credit agreement with the bank(s). When confirmed, Sabal Trail will provide the mitigation banks to be used for the Project to FERC. WRAP and UMAM scores for wetlands in each respective USACE district have been included in Table 2.4-1. SOP is a cumulative score, therefore the WRAP for each individual wetland has been provided for wetlands in the Savannah District.

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## **TABLES**

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TABLE 2.2-1

**Aquifers Crossed by the Sabal Trail Project**

State, Facility	Aquifer <u>a/</u>	Milepost <u>b/</u> Begin	Milepost <u>b/</u> End	Approximate Well Yields (gpm) (common range / may exceed) <u>c/</u>	Approximate Depth to Groundwater (feet) (common well depth range) <u>d/</u>	
<b>Alabama</b>						
<u>Mainline</u>	Piedmont and Blue Ridge	0.0	53.9	1-10 / 100	75-300	
	Southeastern Coastal Plain	53.9	86.4	300-1,000 / 1,400	200-1,500 <u>e/</u>	
<u>Compressor Stations</u>						
Alexander City	Piedmont and Blue Ridge		0.0	1-10 / 100	75-300	
<u>Meter Stations</u>						
Transco Hillabee	Piedmont and Blue Ridge		0.0	1-10 / 100	75-300	
<b>Georgia</b>						
<u>Mainline</u>	Southeastern Coastal Plain	86.4	133.1	50-1,200 / 3,300	20-800	
	Floridan	133.1	181.3			
	Other Rocks	181.3	183.5	1000-5,000 / 11,000	40-900 <u>f/</u>	
	Surficial	183.5	227.0	50-450 / 1,000	0-50	
	Other Rocks	227.0	246.7			
	Floridan	246.7	247.8	1000-5,000 / 11,000	40-900 <u>f/</u>	
<u>Compressor Stations</u>						
Albany	Floridan		159.3	1000-5,000 / 11,000	40-900 <u>f/</u>	
<b>Florida</b>						
<u>Mainline</u>	Floridan	247.8	324.9			
	Other Rocks	324.9	340.4			
	Floridan	340.0	341.1			
	Other Rocks	341.1	341.2			
	Floridan	341.2	353.9	500-1,000 / 20,000	100-1,800	
	Other Rocks	353.9	380.3			
	Floridan	380.3	441.8			
	Other Rocks	441.8	466.6			
	Surficial	466.6	474.4	50-450 / 1,000	0-50	
	Hunters Creek Line	Surficial	0.0	13.1	50-450 / 1,000	0-50
	<u>Citrus County Line</u>	Floridan	0.0	4.3		
Other Rocks		4.3	8.5	500-1,000 / 20,000	40-900 <u>f/</u>	
Floridan		8.5	21.4			
<u>Compressor Stations</u>						
Hildreth	Floridan		296.3	1000-5,000 / 11,000	40-900 <u>f/</u>	
Dunnellon	Floridan		389.8	1000-5,000 / 11,000	40-900 <u>f/</u>	
Reunion	Surficial		474.4	50-450 / 1,000	0-50	

TABLE 2.2-1

**Aquifers Crossed by the Sabal Trail Project**

State, Facility	Aquifer <u>a/</u>	Milepost <u>b/</u> Begin	Milepost <u>b/</u> End	Approximate Well Yields (gpm) (common range / may exceed) <u>c/</u>	Approximate Depth to Groundwater (feet) (common well depth range) <u>d/</u>
<u>Meter Stations</u>					
FGT Suwannee	Floridan	299.7		1000-5,000 / 11,000	40-900 <u>f/</u>
FSC	Surficial	474.4		50-450 / 1,000	0-50
Gulfstream (Hunters Creek Line)	Surficial	474.4		50-450 / 1,000	0-50
FGT Hunters Creek (Hunters Creek Line)	Surficial	13.1		50-450 / 1,000	0-50
DEF Citrus County (Citrus County Line)	Floridan	21.4		1000-5,000 / 11,000	40-900 <u>f/</u>

a/ Source: [USGS] U.S. Geological Survey. 2003. Principal Aquifers of the 48 Conterminous United States, Hawaii, Puerto Rico, and the U.S. Virgin Islands. Version 1.0. Accessed online on April 24, 2014 at: <<http://nationalatlas.gov/atlasftp.html>>.

b/ Approximate MP along the proposed pipeline rounded to the nearest tenth.

c/ Source: USGS 1984 and Miller 1990.

d/ Source: USGS 1984 and Miller 1990.

e/ Outcrops in Lee and Russell counties Alabama, and in Stewart, Webster, and Terrell counties Georgia.

f/ Confining unit thin or absent in portions of the Project area including Terrell, Dougherty, and Mitchel counties Georgia and from the Georgia / Florida state line south to Lake county.

TABLE 2.2-2

**USEPA Designated Sole Source Aquifers and Recharge Zones Underlying the Sabal Trail Project**

State, Facility	County	USEPA Sole Source Aquifer/Recharge Zone	Milepost Begin <u>a/</u>	Milepost End <u>a/</u>	Total Mileage	Acres Impacted <u>b/</u>
<b>Florida</b>						
<i>Pipeline Facilities</i>						
<u>Mainline</u>	Osceola	Streamflow and recharge source zone for the Biscayne Sole Source Aquifer	465.8	474.4	8.6	120.79
<u>Hunters Creek Line</u>	Osceola		0.0	13.0	13.0	176.69
	Orange		13.0	13.1	0.1	
<b>Total Mileage</b>					<b>21.7</b>	<b>297.48</b>
<i>Compressor Stations</i>						
<u>Reunion</u>	Osceola	Streamflow and recharge source zone for the Biscayne Sole Source Aquifer	474.4		N/A	18.42
<i>Meter Stations</i>						
<u>FSC</u>	Osceola		474.4		N/A	1.50
<u>Gulfstream</u> (Hunters Creek Line)	Osceola	Streamflow and recharge source zone for the Biscayne Sole Source Aquifer	474.4		N/A	1.35
<u>FGT Hunters Creek</u> (Hunters Creek Line)	Orange		13.1		N/A	4.21
<b>Totals</b>					<b>21.7</b>	<b>322.96</b>

Source: USEPA 2013. Available URL: <http://www.epa.gov/region4/water/groundwater/r4ssa.html>.  
a/ Approximate MP along the proposed pipeline rounded to the nearest tenth.  
b/ Acres impacted includes construction and operation impacts.



TABLE 2.2-3

**Public and Private Water Supply Wells and Springs and Locally Zoned Aquifer Protection Areas within 150 Feet of the Construction Work Area for the Sabal Trail Project**

State, Facility	Milepost @/	County	Supply Type (well, spring, WHPA)	Approximate Distance from Pipeline Centerline (feet)	Approximate Distance from Construction Work Area (feet)	Drinking Water (Yes/No)
<b>Alabama</b>						
<u>Mainline</u>	18.7	Tallapoosa	Well	82	17	Unknown
	20.4		Well	157	92	Unknown
	27.2	Chambers	Well	99	9	Unknown
	36.0			257	146	Unknown
	66.7	Russell	Well	43	Contained Within	Unknown
	78.5			10	Contained Within	Unknown
	<u>Compressor Stations</u>			None Identified		
<u>Meter Stations</u>			None Identified			
<u>Contractor Yards</u>			None Identified			
<b>Georgia</b>						
<u>Mainline</u>	123.6	Terrell	Well	2	Contained Within	Unknown
	123.6		Well	5	Contained Within	Unknown
	126.3		Well	125	75	Unknown
	126.7		Well	130	80	Unknown
	136.0		Well	94	44	Unknown
	159.8	Dougherty	Well	46	12	Unknown
	160.0		Well	2,587	144	Unknown
	162.3		Well	18	Contained Within	Unknown
	162.3		Well	14	Contained Within	Unknown
	162.3		Well	19	Contained Within	Unknown
	162.3		Well	14	Contained Within	Unknown
	169.5		Well	30	Contained Within	Unknown
	172.1	Mitchell	Well	116	51	Unknown
	173.0		Well	120	30	Unknown
	186.9	Colquitt	Well	69	2	Unknown
	191.1		Well	92	24	Unknown
	196.9		Well	79	Contained Within	Unknown
	219.9	Brooks	Well	36	13	Unknown
	219.9		Well	40	17	Unknown
	225.7		Well	88	23	Unknown
	228.8		Well	156	41	Unknown
	235.8	Lowndes	Well	145	95	Unknown
	237.1		Well	86	Contained Within	Unknown

TABLE 2.2-3

**Public and Private Water Supply Wells and Springs and Locally Zoned Aquifer Protection Areas within 150 Feet of the Construction Work Area for the Sabal Trail Project**

State, Facility	Milepost <u>a/</u>	County	Supply Type (well, spring, WHPA)	Approximate Distance from Pipeline Centerline (feet)	Approximate Distance from Construction Work Area (feet)	Drinking Water (Yes/No)
	241.9		Well	95	45	Unknown
	243.5	Lowndes	Well	33	Contained Within	Unknown
	243.8		Well	22	Contained Within	Unknown
	245.9		Well	105	70	Unknown
	246.6		Well	130	53	Unknown
	246.7		Well	58	8	Unknown
<u>Compressor Stations</u>			None Identified			
<u>Meter Stations</u>			None Identified			
<u>Contractor Yards</u>			None Identified			
<b>Florida</b>						
	256.9	Hamilton	Well	105	15	Unknown
	260.0		Well	167	102	Unknown
	262.7		Well	181	116	Unknown
	263.3		Well	67	2	Unknown
	264.1	Madison	Spring - Mad610982 (Madison) <u>b/</u>	243	50	No
	265.8		Well	97	47	Unknown
	270.2	Suwannee	Well	10	Contained Within	Unknown
	274.7		Well	126	61	Unknown
	275.9		Well	181	116	Unknown
	275.9		Well	81	Contained Within	Unknown
	275.9		Well	80	Contained Within	Unknown
	278.4		Well	80	Contained Within	Unknown
	278.6		Well	79	45	Unknown
	278.9		Well	222	83	Unknown
	279.0		Well	204	89	Unknown
	280.1		Well	188	123	Unknown
	280.3		Well	55	Contained Within	Unknown
	280.4		Well	172	62	Unknown
	282.1		Well	112	67	Unknown
	287.1		Well	109	44	Unknown
	287.2		Well	117	2	Unknown
	288.9		Well	19	Contained Within	Unknown
	289.1		Well	48	13	Unknown

TABLE 2.2-3

**Public and Private Water Supply Wells and Springs and Locally Zoned Aquifer Protection Areas within 150 Feet of the Construction Work Area for the Sabal Trail Project**

State, Facility	Milepost @/	County	Supply Type	Approximate Distance from Pipeline Centerline (feet)	Approximate Distance from Construction Work Area (feet)	Drinking Water (Yes/No)
			(well, spring, WHPA)			
	289.8		Well	204	89	Unknown
	291.8		Well	119	60	Unknown
	301.6	Suwannee	Well	128	94	Unknown
	304.2		Well	101	42	Unknown
	304.3		Well	90	55	Unknown
	305.0		Well	126	91	Unknown
	306.3		Well	169	134	Unknown
	310.0	Gilchrist	Well	125	90	Unknown
	315.0		Well	107	17	Unknown
	316.0		Well	224	128	Unknown
	316.3		Well	152	117	Unknown
	316.7		Well	167	102	Unknown
	327.2		Well	29	Contained Within	Unknown
	327.2		Well	7	Contained Within	Unknown
	330.0		Well	77	Contained Within	Unknown
	330.0		Well	125	40	Unknown
	330.0		Well	58	Contained Within	Unknown
	330.1		Well	110	25	Unknown
	341.2	Levy	Well	160	125	Unknown
	341.3		Well	235	120	Unknown
	341.4		Well	194	114	Unknown
	342.6		Well	123	73	Unknown
	342.6		Well	73	Contained Within	Unknown
	342.7		Well	118	50	Unknown
	351.0		Well	120	85	Unknown
	352.9		Well	75	40	Unknown
	353.1		Well	74	9	Unknown
	359.2		Well	121	86	Unknown
	365.8		Enter Rainbow Springs Primary Protection Zone	0	0	N/A
	369.6		Well	164	84	Unknown
	369.7		Well	88	8	Unknown

TABLE 2.2-3

**Public and Private Water Supply Wells and Springs and Locally Zoned Aquifer Protection Areas within 150 Feet of the Construction Work Area for the Sabal Trail Project**

State, Facility	Milepost @/	County	Supply Type (well, spring, WHPA)	Approximate Distance from Pipeline Centerline (feet)	Approximate Distance from Construction Work Area (feet)	Drinking Water (Yes/No)
	369.9	Marion	Well	128	48	Unknown
	370.2		Well	103	38	Unknown
	371.6		Well	178	113	Unknown
	371.6		Well	179	114	Unknown
	375.2	Marion	Well	62	27	Unknown
	377.0		Well	130	95	Unknown
	377.2		Exit Rainbow Springs Primary Protection Zone	0	0	N/A
	378.2		Well	30	Contained Within	Unknown
	382.6		Well	37	2	Unknown
	383.9		Well	185	150	Unknown
	404.9	Sumter	Well	30	Contained Within	Unknown
	408.5		Enter SWAPP - City of Wildwood	0	0	Yes
	408.6		Well	108	43	Unknown
	408.8		Exit SWAPP - City of Wildwood	0	0	Yes
	409.3		Well	684	12	Unknown
	409.3		Well	691	30	Unknown
	419.0		Well	49	Contained Within	Unknown
	419.9		Enter SWAPP - City of Wildwood	0	0	Yes
	420.5		Exit SWAPP - City of Wildwood	0	0	Yes
	420.9		Well	82	32	Unknown
	429.8		Well	47	13	Unknown
	437.6	Lake	Well	110	Contained Within	Unknown
	438.3		Well	144	79	Unknown
	438.4		Well	194	129	Unknown
	438.5		Well	36	1	Unknown
	438.5		Well	30	Contained Within	Unknown

TABLE 2.2-3

**Public and Private Water Supply Wells and Springs and Locally Zoned Aquifer Protection Areas within 150 Feet of the Construction Work Area for the Sabal Trail Project**

State, Facility	Milepost @/	County	Supply Type (well, spring, WHPA)	Approximate Distance from Pipeline Centerline (feet)	Approximate Distance from Construction Work Area (feet)	Drinking Water (Yes/No)
	438.5		Well	31	Contained Within	Unknown
	443.7		Well	119	22	Unknown
	443.7		Well	120	55	Unknown
	444.8		Well	182	45	Unknown
	444.8		Well	182	45	Unknown
	445.2		Well	160	110	Unknown
	445.8		Well	158	93	Unknown
	450.9		Well	227	147	Unknown
	464.6	Polk	Well	85	80	Unknown
	467.3	Osceola	Well	17	Contained Within	Unknown
	467.3		Well	19	Contained Within	Unknown
	467.5		Well	162	127	Unknown
<u>Hunters Creek Line</u>	1.5		Enter SWAPP - Toho Water Authority	0	0	Yes
	1.6		Community well Toho Water Authority	127	38	Yes
	1.7		Enter SWAPP - Toho Water Authority	0	0	Yes
	1.8		Exit SWAPP - Toho Water Authority	0	0	Yes
	2.0		Exit SWAPP - Toho Water Authority	0	0	Yes
	4.8		Well	31	Contained Within	Unknown
	7.4		Well	87	37	Unknown
	7.4		Well	77	27	Unknown
	7.4		Well	87	37	Unknown
	7.4		Well	77	27	Unknown
	11.1		Enter SWAPP - Toho Water Authority	0	0	Yes
	11.2		Well	180	145	Unknown



TABLE 2.2-3

**Public and Private Water Supply Wells and Springs and Locally Zoned Aquifer Protection Areas within 150 Feet of the Construction Work Area for the Sabal Trail Project**

State, Facility	Milepost <sup>a/</sup>	County	Supply Type (well, spring, WHPA)	Approximate Distance from Pipeline Centerline (feet)	Approximate Distance from Construction Work Area (feet)	Drinking Water (Yes/No)
	11.4		Exit SWAPP - Toho Water Authority	0	0	Yes
<u>Citrus County Line</u>	5.8	Citrus	Well	34	Contained Within	Unknown
	6.1		Well	49	Contained Within	Unknown
	6.1		Well	47	Contained Within	Unknown
	6.1		Well	55	Contained Within	Unknown
	6.2		Well	102	37	Unknown
	6.2		Well	98	33	Unknown
	6.2		Well	105	40	Unknown
	12.1		Well	50	25	Unknown
	12.5		Well	171	121	Unknown
	12.8		Well	589	84	Unknown
	15.5		Well	37	12	Unknown
	15.5	Citrus	Well	24	0	Unknown
	15.5		Well	30	5	Unknown
	15.5		Well	24	0	Unknown
	15.5		Well	30	5	Unknown
	17.4		Well	123	98	Unknown
	19.1		Well	109	84	Unknown
<u>Compressor Stations</u>				None Identified		
<u>Meter Stations</u>				None Identified		
<u>Contractor Yards</u>				None Identified		

Sources: Sabal Trail Transmission Verified Survey Data - field survey data for wells and springs and state GIS files for springs (FDEP 2011) and source water protection (FDEP 2008).

<sup>a/</sup> Approximate MP along the proposed pipeline rounded to the nearest tenth.

<sup>b/</sup> To be avoided with the incorporation of Withlacoochee Alternative Route 3 into the proposed route, anticipated to be filed in December 2014/January 2015.

TABLE 2.2-4

**Springsheds Crossed by the Sabal Trail Project by Milepost**

State, Facility	Springshed Name	Milepost Enter	Milepost Exit	Feet Crossed	Acres Impacted	
					Construction <u>a/</u>	Operation <u>b/</u>
<b>Georgia</b>						
<u>Mainline</u>	Wacissa	166.6	194.7	296,546	261.34	167.07
<b>Florida</b>						
<u>Mainline</u>	Madison Blue	247.7	259.2	109,845	95.80	68.30
	Troy	284.8	296.7	66,590	118.26	96.23
	Santa Fe	319.1	351.0	242,625	267.82	193.27
	Rainbow	351.4	384.7	199,132	291.95	199.56
	Gum	395.0	407.1	59,499	89.01	72.71
	Panasofkee	411.2	424.2	61,112	138.93	77.23
	Alexander	N/A	N/A	N/A	12.30	0.00
	Wekiwa	461.2	462.4	125,613.00	6.69	7.09
<u>Citrus County Line</u>	Kings Bay	17.1	1.4	96,431	142.40	92.31

Source: Baker, 2014

a/ Construction acres includes all areas impacted by construction including temporary workspace, ATWS, and the permanent ROW.

b/ Operation acres includes the 50-foot permanent ROW.

TABLE 2.3-1

Watersheds Crossed by the Sabal Trail Project

State, Facility	County	Subregion Name (HUC 4)	Cataloguing Unit Name / 8-digit code (HUC 8)	Milepost Enter	Milepost Exit	Florida Water Management District	Total Watershed Drainage Area (HUC 8) <sup>a/</sup>	
							Square Miles	Acres
<b>Alabama</b>								
<i>Pipeline</i>								
<u>Mainline</u>	Tallapoosa	Alabama	Middle Tallapoosa / 03150109	0.0	20.4	N/A	0.60	383.55
	Chambers	Alabama	Middle Tallapoosa / 03150109	20.4	29.8	N/A	0.24	156.38
	Chambers	Apalachicola	Middle Chattahoochee - Lake Harding / 03130002	29.8	40.1	N/A	0.26	165.71
	Lee	Apalachicola	Middle Chattahoochee - Lake Harding / 03130002	40.1	48.8	N/A	0.22	142.29
	Lee	Apalachicola	Middle Chattahoochee - Walter F / 03130003	48.8	60.8	N/A	0.29	188.53
	Russell	Apalachicola	Middle Chattahoochee - Walter F / 03130003	60.8	86.4	N/A	0.62	397.50
<i>Compressor Stations</i>								
<u>Alexander City</u>	Tallapoosa	Alabama	Middle Tallapoosa / 03150109		0.0	N/A	0.11	71.50
<i>Meter Stations</i>								
<u>Transco Hillabee</u>	Tallapoosa	Alabama	Middle Tallapoosa / 03150109		0.0	N/A	0.00	2.31
<b>Georgia</b>								
<i>Pipeline</i>								
<u>Mainline</u>	Stewart	Apalachicola	Middle Chattahoochee - Walter F / 03130003	86.4	110.3	N/A	0.62	393.70
	Webster	Apalachicola	Middle Chattahoochee - Walter F / 03130003	110.3	111	N/A	0.02	11.09
	Webster	Apalachicola	Ichawaynochaway / 03130009	111.0	115	N/A	0.09	58.66
	Webster	Apalachicola	Kinchafoonee - Muckalee / 03130007	115.0	120.5	N/A	0.14	87.05

TABLE 2.3-1

Watersheds Crossed by the Sabal Trail Project

State, Facility	County	Subregion Name (HUC 4)	Cataloguing Unit Name / 8-digit code (HUC 8)	Milepost Enter	Milepost Exit	Florida Water Management District	Total Watershed Drainage Area (HUC 8) <sup>a/</sup>	
							Square Miles	Acres
	Terrell	Apalachicola	Kinchafoonee - Muckalee / 03130007	120.5 122.3 132.4 135.7 141.9	121.4 130.2 135.5 141.3 143.5	N/A	0.44	278.99
	Terrell	Apalachicola	Ichawaynochaway / 03130009	121.3 130.2 135.3 135.5 143.5 146.6	122.3 132.4 135.4 135.7 145.8 146.7	N/A	0.15	96.56
	Lee	Apalachicola	Kinchafoonee - Muckalee / 03130007	141.3	141.9	N/A	0.02	10.83
	Lee	Apalachicola	Ichawaynochaway / 03130009	145.8	146.6	N/A	0.01	7.99
	Terrell	Apalachicola	Lower Flint / 03130008	146.7	146.7		0.00	0.00
	Dougherty	Apalachicola	Lower Flint / 03130008	146.7	169.8	N/A	0.53	338.27
	Mitchell	Apalachicola	Lower Flint / 03130008	169.8	182.6	N/A	0.30	189.94
	Colquitt	Apalachicola	Lower Flint / 03130008	182.6	183.4	N/A	0.02	12.70
	Colquitt	Ochlockonee	Upper Ochlockonee / 03120002	183.4	200.7	N/A	0.41	265.09
	Colquitt	Suwannee	Withlacoochee / 03110203	200.7	208.6	N/A	0.19	119.09
	Brooks	Suwannee	Withlacoochee / 03110203	208.6 224.6	222.6 231.4	N/A	0.48	307.39
	Brooks	Suwannee	Little / 03110204	222.6	224.6	N/A	0.05	28.92
	Lowndes	Suwannee	Withlacoochee / 03110203	231.9	247.8	N/A	0.37	238.01
<i>Compressor Stations</i>								
<u>Albany</u>	Dougherty	Apalachicola	Lower Flint / 03130008		159.3	N/A	0.07	42.64

TABLE 2.3-1  
Watersheds Crossed by the Sabal Trail Project

State, Facility	County	Subregion Name (HUC 4)	Cataloguing Unit Name / 8-digit code (HUC 8)	Milepost Enter	Milepost Exit	Florida Water Management District	Total Watershed Drainage Area (HUC 8) <sup>a/</sup>	
							Square Miles	Acres
<b>Florida</b>								
<i>Pipeline</i>								
<u>Mainline</u>	Hamilton	Suwannee	Withlacoochee / 03110203	247.8	264.1	Suwannee River	0.37	233.74
	Madison	Suwannee	Withlacoochee / 03110203	264.1	265.5	Suwannee River	0.03	22.28
	Madison	Suwannee	Lower Suwannee / 03110205	265.5	268.1	Suwannee River	0.06	38.56
	Suwannee	Suwannee	Lower Suwannee / 03110205	268.1	306.2	Suwannee River	0.87	559.25
	Suwannee	Suwannee	Santa Fe / 03110206	306.2	308.3	Suwannee River	0.05	34.10
	Gilchrist	Suwannee	Lower Suwannee / 03110205	308.3 318.5	311.1 332.9	Suwannee River	0.36	232.99
	Gilchrist	Suwannee	Santa Fe / 03110206	311.1	318.5	Suwannee River	0.17	109.39
	Gilchrist	Suwannee	Waccasassa / 03110101	332.9	337.5	Suwannee River	0.10	65.97
	Alachua	Suwannee	Waccasassa / 03110101	337.5	341.2	Suwannee River	0.08	49.17
	Levy	Suwannee	Waccasassa / 03110101	341.2	356.9	Suwannee River, Southwest Florida	0.34	215.89
	Levy	St. Johns	Oklawaha / 03080102	356.9	369.7	Southwest Florida	0.30	189.16
	Levy	Peace - Tampa Bay	Withlacoochee / 03100208	369.7	369.8	Southwest Florida	0.00	1.22

TABLE 2.3-1

Watersheds Crossed by the Sabal Trail Project

State, Facility	County	Subregion Name (HUC 4)	Cataloguing Unit Name / 8-digit code (HUC 8)	Milepost Enter	Milepost Exit	Florida Water Management District	Total Watershed Drainage Area (HUC 8) <sup>a/</sup>	
							Square Miles	Acres
	Marion	Peace - Tampa Bay	Withlacoochee / 03100208	369.8	399.5	Southwest Florida	0.64	409.33
	Sumter	Peace - Tampa Bay	Withlacoochee / 03100208	399.5 428.8 430.2	428.3 430.1 435.8	Southwest Florida	0.79	506.18
	Sumter	St. Johns	Oklawaha / 03080102	428.3	428.8	Southwest Florida	0.01	7.47
	Lake	Peace - Tampa Bay	Withlacoochee / 03100208	430.1 435.8 454.7	430.2 454.6 457.6	Southwest Florida, St. Johns River	0.45	289.10
	Lake	St. Johns	Oklawaha / 03080102	454.6	454.7	Southwest Florida	0.00	1.54
	Polk	Peace - Tampa Bay	Withlacoochee / 03100208	457.6	460.6	Southwest Florida	0.05	33.49
	Polk	St. Johns	Oklawaha / 03080102	460.6	464.8	Southwest Florida	0.08	53.16
	Polk	Southern Florida	Kissimmee / 03090101	464.8	465.8	Southwest Florida	0.02	13.75
	Osceola	Southern Florida	Kissimmee / 03090101	465.8	474.4	South Florida	0.19	121.64
<u>Citrus County Line</u>	Marion	Peace - Tampa Bay	Withlacoochee / 03100208	0.0	1.3	Southwest Florida	0.03	16.13
	Citrus	Peace - Tampa Bay	Withlacoochee / 03100208	1.3	12.1	Southwest Florida	0.21	131.23
	Citrus	Peace - Tampa Bay	Crystal-Pithlachascotee / 03100207	12.1	12.4	Southwest Florida	0.19	120.76
<u>Hunters Creek Line</u>	Osceola	Southern Florida	Kissimmee / 03090101	0.0	13.5	South Florida	0.27	173.77
	Orange	Southern Florida	Kissimmee / 03090101	13.1	13.1	South Florida	0.00	3.00



TABLE 2.3-1  
Watersheds Crossed by the Sabal Trail Project

State, Facility	County	Subregion Name (HUC 4)	Cataloguing Unit Name / 8-digit code (HUC 8)	Milepost Enter	Milepost Exit	Florida Water Management District	Total Watershed Drainage Area (HUC 8) <sup>a/</sup>	
							Square Miles	Acres
<i>Compressor Stations</i>								
<u>Hildreth</u>	Suwannee	Suwannee	Lower Suwannee / 03110205	296.3		Suwannee River	0.06	35.59
<u>Dunnellon</u>	Marion	Peace - Tampa Bay	Withlacoochee / 03100208	389.8		Southwest Florida	0.06	39.22
<u>Reunion</u>	Osceola	Southern Florida	Kissimmee / 03090101	474.4		South Florida	0.03	18.42
<i>Meter Stations</i>								
<u>FGT Suwannee</u>	Suwannee	Suwannee	Lower Suwannee / 03110205	299.7		Suwannee River	0.01	6.14
<u>FSC</u>	Osceola	Southern Florida	Kissimmee / 03090101	474.4		South Florida	0.00	1.50
<u>Gulfstream (Hunters Creek Line)</u>	Osceola	Southern Florida	Kissimmee / 03090101	474.4		South Florida	0.00	1.35
<u>FGT Hunters Creek (Hunters Creek Line)</u>	Orange	Southern Florida	Kissimmee / 03090101	13.1		South Florida	0.01	4.21
<u>DEF Citrus County (Citrus County Line)</u>	Citrus	Peace - Tampa Bay	Crystal-Pithlachascotee / 03100207	21.4		Southwest Florida	0.01	7.85

Source: Coordinated effort between the NRCS, USGS, and the USEPA. The Watershed Boundary Dataset ("WBD") was created from a variety of sources from each state and aggregated into a standard national layer for use in strategic planning and accountability. Watershed Boundary Dataset for Alabama, Georgia, and Florida. Accessed online April 24, 2014 at: "<http://datagateway.nrcs.usda.gov>".

<sup>a/</sup> Acres impacted includes construction and operation impacts.

TABLE 2.3-2

Summary of Waterbodies Crossed by the Sabal Trail Project - Pipeline Facilities by Flow Type

State	Perennial Waterbody Crossing	Intermittent Waterbody Crossing	Ephemeral Waterbody Crossings	Palustrine Open Water <sup>a/</sup>	Total <sup>b/</sup>
<b>Alabama</b>	106	54	35	1	<b>196</b>
<b>Georgia</b>	47	47	25	7	<b>126</b>
<b>Florida</b>	17	5	0	16	<b>38</b>
<b>PROJECT TOTAL:</b>	<b>170</b>	<b>106</b>	<b>60</b>	<b>24</b>	<b>360</b>

<sup>a/</sup> Palustrine Open Water is an open body of water (i.e., pond or lake).

<sup>b/</sup> Waterbodies in the workspace but not crossed by the pipeline are not counted in this table as crossings. Waterbodies impacted by access roads are not counted in this table as crossings.

TABLE 2.3-3

Waterbodies Crossed by the Sabal Trail Project

State, Facility	MP <u>a/</u>	County	Waterbody ID	Waterbody Name <u>b/</u>	Flow Type <u>c/</u>	Crossing Width (Feet) <u>d/</u>	Fishery Classification <u>e/</u>	State Water Quality Classification <u>f/</u>	State Required Timing Restrictions	Crossing Method <u>g/</u>	FERC Class <u>h/</u>
<b>Alabama</b>											
<i>Mainline</i>	<b>0.1</b>	<b>Tallapoosa</b>	<b>S1TRC018</b>	<b>Oaktasasi Creek</b>	<b>Perennial</b>	<b>67</b>	<b>WWF</b>	<b>F&amp;W</b>	<b>None</b>	<b>II / III</b>	<b>I</b>
	0.6	Tallapoosa	S1TRC355	UT Hillabee Creek	Perennial	4	WWF	F&W	None	I / II	MI
	0.7	Tallapoosa	S1TRC212	UT Hillabee Creek	Perennial	3	WWF	F&W	None	I / II	MI
	0.9	Tallapoosa	S1TRC214	UT Hillabee Creek	Perennial	5	WWF	F&W	None	I / II	MI
	<b>1.3</b>	<b>Tallapoosa</b>	<b>S1TRC216</b>	<b>Hillabee Creek</b>	<b>Perennial</b>	<b>217</b>	<b>WWF</b>	<b>F&amp;W</b>	<b>None</b>	<b>IV</b>	<b>MA</b>
	1.9	Tallapoosa	S4TRC068	UT Hillabee Creek	Ephemeral	2	WWF	F&W	None	I	MI
	2.0	Tallapoosa	S4TRC069	UT Hillabee Creek	Perennial	4	WWF	F&W	None	I / II	MI
	2.1	Tallapoosa	S4TRC070	UT Hillabee Creek	Ephemeral	4	WWF	F&W	None	I	MI
	2.1	Tallapoosa	S4TRC071	UT Hillabee Creek	Ephemeral	5	WWF	F&W	None	I	MI
	2.1	Tallapoosa	S4TRC072	UT Hillabee Creek	Ephemeral	5	WWF	F&W	None	I	MI
	2.2	Tallapoosa	S4TRC073	UT Hillabee Creek	Ephemeral	2	WWF	F&W	None	IV	MI
	2.4	Tallapoosa	S4TRC075	Josie Leg Creek	Perennial	54	WWF	F&W	None	IV	I
	2.6	Tallapoosa	S1TRC502	UT Josie Leg Creek	Ephemeral	0	WWF	F&W	None	N/A	N/A
	3.2	Tallapoosa	S4TRC084	UT Josie Creek	Intermittent	5	WWF	F&W	None	I	MI
	3.4	Tallapoosa	S1TRC365	UT Josie Creek	Ephemeral	10	WWF	F&W	None	I	MI
	3.5	Tallapoosa	S4TRC085	UT Josie Creek	Perennial	22	WWF	F&W	None	I / II	I
	3.6	Tallapoosa	S1TRC218	UT Josie Creek	Perennial	8	WWF	F&W	None	I / II	MI
	4.9	Tallapoosa	S1TRC022	UT Timber Gut Creek	Intermittent	12	WWF	F&W	None	I / II	I
	4.9	Tallapoosa	S1TRC023	UT Timber Gut Creek	Intermittent	0	WWF	F&W	None	N/A	N/A
	4.9	Tallapoosa	S1TRC023	UT Timber Gut Creek	Intermittent	0	WWF	F&W	None	N/A	N/A
	5.0	Tallapoosa	S1TRC025	UT Timber Gut Creek	Intermittent	0	WWF	F&W	None	N/A	N/A
	5.0	Tallapoosa	S1TRC022	UT Timber Gut Creek	Intermittent	6	WWF	F&W	None	I	MI
	5.0	Tallapoosa	S1TRC022	UT Timber Gut Creek	Intermittent	0	WWF	F&W	None	N/A	N/A
	5.0	Tallapoosa	S1TRC025	UT Timber Gut Creek	Intermittent	0	WWF	F&W	None	N/A	N/A
	5.0	Tallapoosa	S1TRC026	UT Timber Gut Creek	Intermittent	2	WWF	F&W	None	I	MI
	<b>5.1</b>	<b>Tallapoosa</b>	<b>S1TRC028</b>	<b>Timber Gut Creek</b>	<b>Perennial</b>	<b>70</b>	<b>WWF</b>	<b>F&amp;W</b>	<b>None</b>	<b>II / III</b>	<b>I</b>
	5.3	Tallapoosa	S1TRC030	UT Timber Gut Creek	Intermittent	4	WWF	F&W	None	I	MI
	5.5	Tallapoosa	S1TRC031	UT Timber Gut Creek	Perennial	6	WWF	F&W	None	I / II	MI
	5.5	Tallapoosa	S1TRC031	UT Timber Gut Creek	Perennial	11	WWF	F&W	None	I / II	I
	5.7	Tallapoosa	S1TRC033	UT Timber Gut Creek	Perennial	6	WWF	F&W	None	I / II	MI
	6.2	Tallapoosa	S1TRC036	UT Tallapoosa River	Perennial	10	WWF	F&W	None	I / II	MI
	6.3	Tallapoosa	S1TRC037	UT Tallapoosa River	Intermittent	6	WWF	F&W	None	I	MI
	6.4	Tallapoosa	S1TRC038	UT Tallapoosa River	Perennial	6	WWF	F&W	None	I / II	MI
	6.6	Tallapoosa	S1TRC041	UT Tallapoosa River	Intermittent	5	WWF	F&W	None	I	MI

TABLE 2.3-3  
Waterbodies Crossed by the Sabal Trail Project

State, Facility	MP <u>a/</u>	County	Waterbody ID	Waterbody Name <u>b/</u>	Flow Type <u>c/</u>	Crossing Width (Feet) <u>d/</u>	Fishery Classification <u>e/</u>	State Water Quality Classification <u>f/</u>	State Required Timing Restrictions	Crossing Method <u>g/</u>	FERC Class <u>h/</u>
	6.7	Tallapoosa	S1TRC042	UT Tallapoosa River	Intermittent	9	WWF	F&W	None	I	MI
	6.8	Tallapoosa	S1TRC043	UT Tallapoosa River	Perennial	5	WWF	F&W	None	I / II	MI
	<b>7.3</b>	<b>Tallapoosa</b>	<b>S1TRC046</b>	<b>Tallapoosa River</b>	<b>Perennial</b>	<b>548</b>	<b>WWF</b>	<b>F&amp;W</b>	<b>None</b>	<b>IV</b>	<b>MA</b>
	<b>7.4</b>	<b>Tallapoosa</b>	<b>S1TRC048</b>	<b>Tallapoosa River</b>	<b>Perennial</b>	<b>46</b>	<b>WWF</b>	<b>F&amp;W</b>	<b>None</b>	<b>IV</b>	<b>I</b>
	7.4	Tallapoosa	S1TRC050	UT Tallapoosa River	Perennial	17	WWF	F&W	None	IV	I
	7.4	Tallapoosa	S1TRC050	UT Tallapoosa River	Perennial	0	WWF	F&W	None	N/A	N/A
	7.5	Tallapoosa	S1TRC054	UT Tallapoosa River	Perennial	20	WWF	F&W	None	IV	I
	7.6	Tallapoosa	S1TRC054	UT Tallapoosa River	Perennial	13	WWF	F&W	None	IV	I
	7.6	Tallapoosa	S1TRC054	UT Tallapoosa River	Perennial	0	WWF	F&W	None	N/A	N/A
	8.9	Tallapoosa	S1TRC056	UT Tallapoosa River	Intermittent	4	WWF	F&W	None	I	MI
	9.0	Tallapoosa	S1TRC058	UT Tallapoosa River	Intermittent	5	WWF	F&W	None	I	MI
	9.1	Tallapoosa	S1TRC059	UT Tallapoosa River	Perennial	5	WWF	F&W	None	I / II	MI
	9.2	Tallapoosa	S1TRC061	UT Tallapoosa River	Intermittent	5	WWF	F&W	None	I	MI
	9.6	Tallapoosa	S1TRC062	UT Tallapoosa River	Perennial	5	WWF	F&W	None	I / II	MI
	9.6	Tallapoosa	S1TRC063	UT Tallapoosa River	Ephemeral	2	WWF	F&W	None	I	MI
	10.8	Tallapoosa	S1TRC067	UT Tallapoosa River	Ephemeral	4	WWF	F&W	None	I	MI
	10.8	Tallapoosa	S1TRC067	UT Tallapoosa River	Ephemeral	0	WWF	F&W	None	N/A	N/A
	11.0	Tallapoosa	S1TRC068	UT Tallapoosa River	Perennial	8	WWF	F&W	None	I / II	MI
	11.0	Tallapoosa	S1TRC070	UT Tallapoosa River	Perennial	22	WWF	F&W	None	I / II	I
	11.5	Tallapoosa	S1TRC074	UT Tallapoosa River	Perennial	8	WWF	F&W	None	I / II	MI
	11.8	Tallapoosa	S1TRC075	UT Tallapoosa River	Perennial	0	WWF	F&W	None	N/A	N/A
	12.2	Tallapoosa	S1TRC077	UT Tallapoosa River	Intermittent	8	WWF	F&W	None	I	MI
	12.5	Tallapoosa	S1TRC454	UT Miller Creek	Perennial	10	WWF	F&W	None	I / II	MI
	12.8	Tallapoosa	S1TRC455	UT Miller Creek	Intermittent	5	WWF	F&W	None	I	MI
	12.9	Tallapoosa	S1TRC456	Unnamed Creek	Perennial	27	WWF	F&W	None	I / II	I
	13.2	Tallapoosa	S2TRC241	UT Miller Creek	Intermittent	10	WWF	F&W	None	I / II	MI
	13.4	Tallapoosa	S1TRC322	Unnamed Creek	Perennial	0	WWF	F&W	None	N/A	N/A
	14.0	Tallapoosa	S1TRC321	Unnamed	Ephemeral	0	WWF	F&W	None	N/A	N/A
	14.1	Tallapoosa	S1TRC320	Unnamed	Intermittent	4	WWF	F&W	None	I	MI
	14.1	Tallapoosa	S1TRC318	UT Tallapoosa River	Perennial	3	WWF	F&W	None	I	MI
	14.3	Tallapoosa	S1TRC316	UT Tallapoosa River	Intermittent	4	WWF	F&W	None	I	MI
	14.5	Tallapoosa	S1TRC315	UT Tallapoosa River	Perennial	6	WWF	F&W	None	I / II	MI
	15.8	Tallapoosa	S1TRC080	UT Chattasofka Creek	Ephemeral	2	WWF	F&W	None	I	MI
	15.8	Tallapoosa	S1TRC079	UT Chattasofka Creek	Ephemeral	3	WWF	F&W	None	I	MI
	15.9	Tallapoosa	S1TRC083	UT Chattasofka Creek	Perennial	17	WWF	F&W	None	I / II	I

TABLE 2.3-3  
Waterbodies Crossed by the Sabal Trail Project

State, Facility	MP <u>a/</u>	County	Waterbody ID	Waterbody Name <u>b/</u>	Flow Type <u>c/</u>	Crossing Width (Feet) <u>d/</u>	Fishery Classification <u>e/</u>	State Water Quality Classification <u>f/</u>	State Required Timing Restrictions	Crossing Method <u>g/</u>	FERC Class <u>h/</u>
	16.5	Tallapoosa	S1TRC087	UT Chattasofka Creek	Perennial	38	WWF	F&W	None	II / III	I
	16.6	Tallapoosa	S1TRC088	UT Chattasofka Creek	Perennial	15	WWF	F&W	None	I / II	I
	17.4	Tallapoosa	S1TRC091	UT Chattasofka Creek	Intermittent	6	WWF	F&W	None	I	MI
	18.2	Tallapoosa	S1TRC099	UT Chattasofka Creek	Perennial	11	WWF	F&W	None	I / II	I
	18.3	Tallapoosa	S1TRC100	UT Chattasofka Creek	Perennial	6	WWF	F&W	None	I / II	MI
	20.1	Tallapoosa	S1TRC468	Unnamed	Perennial	30	WWF	F&W	None	I / II	I
	20.6	Chambers	S1TRC312	UT Andrews Branch	Intermittent	2	WWF	F&W	None	I	MI
	20.7	Chambers	S1TRC313	UT Andrews Branch	Intermittent	5	WWF	F&W	None	I	MI
	20.9	Chambers	S2TRC240	UT Andrews Branch	Intermittent	8	WWF	F&W	None	I / II	MI
	21.3	Chambers	S1TRC449	Unnamed Creek	Perennial	7	WWF	F&W	None	I / II	MI
	21.4	Chambers	S1TRC450	Unnamed Creek	Intermittent	5	WWF	F&W	None	I	MI
	21.5	Chambers	S1TRC450	Unnamed Creek	Intermittent	8	WWF	F&W	None	I	MI
	21.9	Chambers	S1TRC451	Unnamed Creek	Perennial	5	WWF	F&W	None	I / II	MI
	22.5	Chambers	S1TRC452	Unnamed Creek	Perennial	12	WWF	F&W	None	I / II	I
	22.8	Chambers	S1TRC453	Unnamed	Perennial	38	WWF	F&W	None	I / II	I
	22.8	Chambers	S1TRC426	Unnamed Creek	Perennial	7	WWF	F&W	None	I / II	MI
	23.6	Chambers	S1TRC108	UT Pretty Creek	Perennial	5	WWF	F&W	None	I / II	MI
	23.7	Chambers	S1TRC378	UT Pretty Creek	Ephemeral	4	WWF	F&W	None	I	MI
	24.2	Chambers	S1TRC112	UT Pretty Creek	Intermittent	3	WWF	F&W	None	I	MI
	24.2	Chambers	S1TRC113	UT Pretty Creek	Ephemeral	4	WWF	F&W	None	I	MI
	25.0	Chambers	S1TRC114	UT Pretty Creek	Perennial	7	WWF	F&W	None	I / II	MI
	25.2	Chambers	S1TRC115	UT Pretty Creek	Intermittent	4	WWF	F&W	None	I	MI
	25.8	Chambers	S1TRC307	UT Pretty Creek	Perennial	5	WWF	F&W	None	I / II	MI
	25.9	Chambers	S1TRC306	UT Pretty Creek	Intermittent	4	WWF	F&W	None	I	MI
	26.0	Chambers	S1TRC304	UT Pretty Creek	Perennial	3	WWF	F&W	None	I	MI
	26.6	Chambers	S1TRC119	UT Pretty Creek	Perennial	6	WWF	F&W	None	I / II	MI
	26.6	Chambers	S1TRC120	UT Pretty Creek	Ephemeral	4	WWF	F&W	None	I	MI
	26.9	Chambers	S1TRC121	UT Little Sandy Creek	Perennial	8	WWF	F&W	None	I / II	MI
	27.8	Chambers	WB1TRC123	Pond	Open Water	86	WWF	F&W	None	I	I
	28.5	Chambers	S1TRC126	UT Little Chattahospee Creek	Perennial	7	WWF	F&W	None	I / II	MI
	29.4	Chambers	S1TRC148	UT Little Chattahospee Creek	Perennial	4	WWF	F&W	None	I / II	MI
	29.4	Chambers	S1TRC149	Unnamed	Ephemeral	0	WWF	F&W	None	N/A	N/A
	30.4	Chambers	S2TRC235	UT Snapper Creek	Ephemeral	0	WWF	F&W	None	N/A	N/A
	30.5	Chambers	S2TRC235	UT Snapper Creek	Ephemeral	0	WWF	F&W	None	N/A	N/A
	30.5	Chambers	S1TRC469	Unnamed Creek	Perennial	6	WWF	F&W	None	I / II	MI

TABLE 2.3-3  
Waterbodies Crossed by the Sabal Trail Project

State, Facility	MP <u>a/</u>	County	Waterbody ID	Waterbody Name <u>b/</u>	Flow Type <u>c/</u>	Crossing Width (Feet) <u>d/</u>	Fishery Classification <u>e/</u>	State Water Quality Classification <u>f/</u>	State Required Timing Restrictions	Crossing Method <u>g/</u>	FERC Class <u>h/</u>
	30.5	Chambers	S1TRC470	Snapper Creek	Perennial	8	WWF	F&W	None	I / II	MI
	30.5	Chambers	S1TRC470	Snapper Creek	Perennial	0	WWF	F&W	None	N/A	N/A
	30.5	Chambers	S1TRC471	Unnamed	Intermittent	0	WWF	F&W	None	N/A	N/A
	30.6	Chambers	S1TRC473	Unnamed Creek	Perennial	4	WWF	F&W	None	I / II	MI
	30.6	Chambers	S1TRC473	Unnamed Creek	Perennial	14	WWF	F&W	None	I / II	I
	30.6	Chambers	S1TRC473	Unnamed Creek	Perennial	4	WWF	F&W	None	I / II	MI
	30.6	Chambers	S1TRC473	Unnamed Creek	Perennial	0	WWF	F&W	None	N/A	N/A
	31.5	Chambers	S1TRC135	UT Snapper Creek	Perennial	9	WWF	F&W	None	I / II	MI
	31.8	Chambers	S1TRC136	UT Snapper Creek	Ephemeral	3	WWF	F&W	None	I	MI
	32.2	Chambers	S4TRC003	UT Boyds Creek	Perennial	7	WWF	F&W	None	I / II	MI
	32.6	Chambers	S4TRC004	UT Snapper Creek	Perennial	7	WWF	F&W	None	I / II	MI
	33.3	Chambers	S4TRC007	Snapper Creek	Perennial	22	WWF	F&W	None	II / III	I
	33.8	Chambers	S1TRC145	UT Snapper Creek	Perennial	48	WWF	F&W	None	II / III	I
	34.9	Chambers	S1TRC512	UT Snapper Creek	Perennial	7	WWF	F&W	None	I / II	MI
	35.3	Chambers	S1TRC508	UT Snapper Creek	Intermittent	5	WWF	F&W	None	I	MI
	35.3	Chambers	S1TRC508	UT Snapper Creek	Intermittent	0	WWF	F&W	None	N/A	N/A
	35.3	Chambers	S1TRC507	UT Snapper Creek	Intermittent	5	WWF	F&W	None	I	MI
	35.6	Chambers	S1TRC504	UT Snapper Creek	Intermittent	4	WWF	F&W	None	I	MI
	36.4	Chambers	S1TRC510	Unnamed	Intermittent	3	WWF	F&W	None	I	MI
	37.5	Chambers	S1TRC153	UT Halawakee Creek	Perennial	8	WWF	F&W	None	I / II	MI
	38.2	Chambers	S4TRC015	UT Halawakee Creek	Perennial	8	WWF	F&W	None	I / II	MI
	38.2	Chambers	S4TRC015	UT Halawakee Creek	Perennial	15	WWF	F&W	None	I / II	I
	38.9	Chambers	S4TRC012	UT Halawakee Creek	Intermittent	12	WWF	F&W	None	I / II	I
	39.2	Chambers	S4TRC011	UT Halawakee Creek	Perennial	6	WWF	F&W	None	I / II	MI
	39.3	Chambers	S4TRC008	UT Halawakee Creek	Intermittent	6	WWF	F&W	None	I / II	MI
	40.2	Lee	S4TRC016	UT Halawakee Creek	Perennial	12	WWF	F&W	None	I / II	I
	40.3	Lee	S4TRC018	UT Halawakee Creek	Ephemeral	9	WWF	F&W	None	I / II	MI
	40.7	Lee	S1TRC156	UT Halawakee Creek	Perennial	8	WWF	F&W	None	I / II	MI
	40.7	Lee	S1TRC156	UT Halawakee Creek	Perennial	0	WWF	F&W	None	N/A	N/A
	41.7	Lee	S1TRC302	UT Halawakee Creek	Perennial	17	WWF	F&W	None	I / II	I
	41.9	Lee	S1TRC303	UT Halawakee Creek	Ephemeral	5	WWF	F&W	None	I	MI
	42.7	Lee	S4TRC019	UT Halawakee Creek	Perennial	15	WWF	F&W	None	I / II	I
	42.8	Lee	S1TRC160	UT Halawakee Creek	Ephemeral	5	WWF	F&W	None	I	MI
	42.9	Lee	S1TRC158	Halawakee Creek	Perennial	57	WWF	F&W	None	II / III	I
	43.0	Lee	S1TRC157	UT Halawakee Creek	Intermittent	4	WWF	F&W	None	I	MI



TABLE 2.3-3  
Waterbodies Crossed by the Sabal Trail Project

State, Facility	MP <u>a/</u>	County	Waterbody ID	Waterbody Name <u>b/</u>	Flow Type <u>c/</u>	Crossing Width (Feet) <u>d/</u>	Fishery Classification <u>e/</u>	State Water Quality Classification <u>f/</u>	State Required Timing Restrictions	Crossing Method <u>g/</u>	FERC Class <u>h/</u>
	43.1	Lee	S1TRC163	UT Halawakee Creek	Intermittent	3	WWF	F&W	None	I	MI
	43.6	Lee	S1TRC165	UT Halawakee Creek	Perennial	11	WWF	F&W	None	I / II	I
	44.1	Lee	S4TRC025	UT Little Halawaka Creek	Ephemeral	3	WWF	F&W	None	I	MI
	44.3	Lee	S4TRC024	Little Halawaka Creek	Perennial	20	WWF	F&W	None	II / III	I
	44.7	Lee	S4TRC023	UT Little Halawaka Creek	Perennial	2	WWF	F&W	None	I	MI
	45.7	Lee	S1TRC474	UT Halawakee Creek	Perennial	36	WWF	F&W	None	II / III	I
	45.8	Lee	S2TRC383	UT Halawakee Creek	Perennial	82	WWF	F&W	None	II / III	I
	45.9	Lee	S4TRC029	UT Halawakee Creek	Perennial	36	WWF	F&W	None	II / III	I
	46.0	Lee	S4TRC028	Unnamed	Intermittent	0	WWF	F&W	None	N/A	N/A
	46.4	Lee	S4TRC026	UT Halawakee Creek	Ephemeral	8	WWF	F&W	None	I	MI
	46.4	Lee	S4TRC027	UT Halawakee Creek	Ephemeral	4	WWF	F&W	None	I	MI
	46.5	Lee	S4TRC032	UT Halawakee Creek	Perennial	8	WWF	F&W	None	I / II	MI
	46.5	Lee	S1TRC169	UT Halawakee Creek	Intermittent	0	WWF	F&W	None	N/A	N/A
	46.5	Lee	S1TRC170	UT Halawakee Creek	Ephemeral	12	WWF	F&W	None	I	I
	47.2	Lee	S4TRC034	UT Halawakee Creek	Ephemeral	6	WWF	F&W	None	I	MI
	47.2	Lee	S4TRC035	UT Halawakee Creek	Perennial	13	WWF	F&W	None	I / II	I
	47.3	Lee	S4TRC036	UT Halawakee Creek	Ephemeral	12	WWF	F&W	None	I / II	I
	47.4	Lee	S4TRC037	UT Halawakee Creek	Ephemeral	10	WWF	F&W	None	I / II	MI
	47.7	Lee	S1TRC476	UT Halawakee Creek	Ephemeral	5	WWF	F&W	None	I	MI
	48.4	Lee	S4TRC038	UT Wacoochee Creek	Ephemeral	11	WWF	F&W	None	I / II	I
	49.0	Lee	S2TRC236	UT Phelps Creek	Intermittent	0	WWF	F&W	None	N/A	N/A
	49.0	Lee	S2TRC236	UT Phelps Creek	Intermittent	2	WWF	F&W	None	I	MI
	49.5	Lee	S1TRC422	UT Phelps Creek	Perennial	10	WWF	F&W	None	I / II	MI
	49.5	Lee	S1TRC422	UT Phelps Creek	Perennial	0	WWF	F&W	None	N/A	N/A
	50.6	Lee	S1TRC477	Phelps Creek	Intermittent	20	WWF	F&W	None	I / II	I
	51.3	Lee	S1TRC482	UT Phelps Creek	Perennial	31	WWF	F&W	None	II / III	I
	51.9	Lee	S4TRC020	UT Phelps Creek	Perennial	11	WWF	F&W	None	I / II	I
	52.3	Lee	S1TRC483	UT Phelps Creek	Perennial	9	WWF	F&W	None	I / II	MI
	52.6	Lee	S1TRC484	UT Phelps Creek	Intermittent	4	WWF	F&W	None	I	MI
	52.7	Lee	S1TRC478	UT Phelps Creek	Intermittent	3	WWF	F&W	None	I	MI
	52.8	Lee	S1TRC480	UT Phelps Creek	Intermittent	4	WWF	F&W	None	I	MI
	53.2	Lee	S1TRC481	UT Phelps Creek	Perennial	11	WWF	F&W	None	I / II	I
	53.6	Lee	S1TRC293	UT Phelps Creek	Perennial	7	WWF	F&W	None	I / II	MI
	53.6	Lee	S1TRC293	UT Phelps Creek	Perennial	0	WWF	F&W	None	N/A	N/A
	54.2	Lee	S1TRC485	Unnamed Creek	Perennial	7	WWF	F&W	None	I / II	MI

TABLE 2.3-3  
Waterbodies Crossed by the Sabal Trail Project

State, Facility	MP <u>a/</u>	County	Waterbody ID	Waterbody Name <u>b/</u>	Flow Type <u>c/</u>	Crossing Width (Feet) <u>d/</u>	Fishery Classification <u>e/</u>	State Water Quality Classification <u>f/</u>	State Required Timing Restrictions	Crossing Method <u>g/</u>	FERC Class <u>h/</u>
	<b>55.5</b>	<b>Lee</b>	<b>S1TRC176</b>	<b>Little Uchee Creek</b>	<b>Perennial</b>	<b>51</b>	<b>WWF</b>	<b>F&amp;W</b>	<b>None</b>	<b>II / III</b>	<b>I</b>
	55.7	Lee	S1TRC178	UT Little Uchee Creek	Ephemeral	4	WWF	F&W	None	I	MI
	55.7	Lee	S1TRC179	UT Little Uchee Creek	Ephemeral	0	WWF	F&W	None	N/A	N/A
	55.9	Lee	S4TRC041	Flake Creek	Perennial	21	WWF	F&W	None	I / II	I
	56.0	Lee	S4TRC040	UT Little Uchee Creek	Ephemeral	4	WWF	F&W	None	I	MI
	56.3	Lee	SNHD-05629	Unconfirmed	Perennial	3	WWF	F&W	None	I	MI
	56.3	Lee	SNHD-05635	Unconfirmed	Intermittent	4	WWF	F&W	None	I	MI
	56.3	Lee	SNHD-05635	Unconfirmed	Intermittent	0	WWF	F&W	None	N/A	N/A
	57.0	Lee	SNHD-05709	Unconfirmed	Intermittent	5	WWF	F&W	None	I	MI
	57.0	Lee	SNHD-05709	Unconfirmed	Intermittent	0	WWF	F&W	None	N/A	N/A
	57.9	Lee	S1TRC184	Unnamed Creek	Intermittent	5	WWF	F&W	None	I	MI
	57.9	Lee	S1TRC434	Unnamed	Intermittent	0	WWF	F&W	None	N/A	N/A
	58.6	Lee	S1TRC186	UT Maringo Creek	Perennial	7	WWF	F&W	None	I / II	MI
	59.3	Lee	S4TRC042	UT Maringo Creek	Perennial	8	WWF	F&W	None	I / II	MI
	59.7	Lee	S1TRC301	UT Maringo Creek	Perennial	5	WWF	F&W	None	I / II	MI
	59.9	Lee	S1TRC296	UT Maringo Creek	Perennial	6	WWF	F&W	None	I / II	MI
	61.0	Russell	S4TRC047	UT Maringo Creek	Perennial	5	WWF	F&W	None	I / II	MI
	61.1	Russell	S4TRC046	UT Maringo Creek	Intermittent	3	WWF	F&W	None	I	MI
	65.9	Russell	S1TRC196	UT Island Creek	Perennial	4	WWF	F&W	None	I / II	MI
	66.0	Russell	S1TRC200	Island Creek	Perennial	19	WWF	F&W	None	II / III	I
	66.8	Russell	S1TRC209	UT Island Creek	Intermittent	2	WWF	F&W	None	I	MI
	67.8	Russell	S4TRC066	UT Island Creek	Ephemeral	0	WWF	F&W	None	N/A	N/A
	67.9	Russell	S4TRC064	UT Island Creek	Perennial	17	WWF	F&W	None	I / II	I
	67.9	Russell	S4TRC064	UT Island Creek	Perennial	0	WWF	F&W	None	N/A	N/A
	67.9	Russell	S4TRC064	UT Island Creek	Perennial	0	WWF	F&W	None	N/A	N/A
	68.5	Russell	S1TRC175	UT Uchee Creek	Intermittent	4	WWF	F&W	None	I	MI
	69.4	Russell	S1TRC201	UT Uchee Creek	Intermittent	12	WWF	F&W	None	I / II	I
	69.7	Russell	S4TRC063	UT Uchee Creek	Intermittent	9	WWF	F&W	None	I / II	MI
	70.1	Russell	S4TRC061	Horse Lot Branch	Perennial	58	WWF	F&W	None	II / III	I
	70.3	Russell	S4TRC060	UT Uchee Creek	Intermittent	9	WWF	F&W	None	I / II	MI
	<b>70.8</b>	<b>Russell</b>	<b>S4TRC058</b>	<b>Uchee Creek</b>	<b>Perennial</b>	<b>225</b>	<b>WWF</b>	<b>PWS/S/F&amp;W</b>	<b>None</b>	<b>IV</b>	<b>MA</b>
	71.0	Russell	S1TRC219	UT Uchee Creek	Intermittent	4	WWF	F&W	None	I	MI
	71.2	Russell	S1TRC220	UT Uchee Creek	Ephemeral	8	WWF	F&W	None	I	MI
	71.4	Russell	S1TRC221	UT Uchee Creek	Perennial	10	WWF	F&W	None	I / II	MI
	73.3	Russell	S1TRC224	UT Cowpen Creek	Perennial	10	WWF	F&W	None	I / II	MI

TABLE 2.3-3  
Waterbodies Crossed by the Sabal Trail Project

State, Facility	MP <sup>a/</sup>	County	Waterbody ID	Waterbody Name <sup>b/</sup>	Flow Type <sup>c/</sup>	Crossing Width (Feet) <sup>d/</sup>	Fishery Classification <sup>e/</sup>	State Water Quality Classification <sup>f/</sup>	State Required Timing Restrictions	Crossing Method <sup>g/</sup>	FERC Class <sup>h/</sup>
	73.4	Russell	S1TRC226	UT Cowpen Creek	Perennial	86	WWF	F&W	None	II / III	I
	73.4	Russell	S1TRC229	UT Cowpen Creek	Intermittent	0	WWF	F&W	None	N/A	N/A
	74.0	Russell	S1TRC264	UT Cowpen Creek	Perennial	9	WWF	F&W	None	I / II	MI
	74.0	Russell	S1TRC263	UT Cowpen Creek	Perennial	4	WWF	F&W	None	I / II	MI
	74.7	Russell	S1TRC233	UT Cowpen Creek	Perennial	11	WWF	F&W	None	I / II	I
	75.9	Russell	S1TRC230	Ihagee Creek	Ephemeral	3	WWF	F&W	None	I	MI
	79.2	Russell	S1TRC270	Ihagee Creek	Perennial	13	WWF	S/F&W	None	I / II	I
	79.9	Russell	S1TRC267	UT Caneyhead Branch	Intermittent	23	WWF	F&W	None	I / II	I
	80.6	Russell	S1TRC272	UT Caneyhead Branch	Intermittent	3	WWF	F&W	None	I	MI
	81.0	Russell	S1TRC273	UT Caneyhead Branch	Ephemeral	12	WWF	F&W	None	I	I
	81.0	Russell	S1TRC273	UT Caneyhead Branch	Ephemeral	0	WWF	F&W	None	N/A	N/A
	81.3	Russell	S1TRC286	UT Snake Creek	Ephemeral	5	WWF	F&W	None	I	MI
	82.1	Russell	S1TRC287	UT Snake Creek	Ephemeral	5	WWF	F&W	None	I	MI
	82.4	Russell	S1TRC288	UT Snake Creek	Ephemeral	1	WWF	F&W	None	I	MI
	82.8	Russell	S1TRC289	UT Snake Creek	Intermittent	40	WWF	F&W	None	I / II	I
	83.2	Russell	S1TRC290	UT Snake Creek	Intermittent	6	WWF	F&W	None	I	MI
	83.4	Russell	S1TRC291	UT Snake Creek	Ephemeral	4	WWF	F&W	None	I	MI
	83.6	Russell	S1TRC284	UT Snake Creek	Perennial	6	WWF	F&W	None	I / II	MI
	<b>83.8</b>	<b>Russell</b>	<b>S1TRC282</b>	<b>Snake Creek</b>	<b>Perennial</b>	<b>0</b>	<b>WWF</b>	<b>F&amp;W</b>	<b>None</b>	<b>N/A</b>	<b>N/A</b>
	83.8	Russell	S1TRC281	UT Snake Creek	Intermittent	4	WWF	F&W	None	I	MI
	84.8	Russell	S1TRC274	UT Chattahoochee River	Intermittent	7	WWF	F&W	None	I	MI
	<b>86.4</b>	<b>Russell</b>	<b>S5TRC006</b>	<b>Chattahoochee River</b>	<b>Perennial</b>	<b>507</b>	<b>WWF</b>	<b>F&amp;W</b>	<b>None</b>	<b>IV</b>	<b>MA</b>
				<b>Alabama Pipeline Facilities Subtotal:</b>		<b>3,764</b>					
<i>Compressor Stations</i>											
<u>Alexander City</u>	0.0	Tallapoosa	S1TRC390	UT Oaktasasi Creek	Intermittent	0	WWF	F&W	None	N/A	N/A
		Tallapoosa	S1TRC389	UT Oaktasasi Creek	Intermittent	0	WWF	F&W	None	N/A	N/A
		Tallapoosa	S1TRC392	UT Oaktasasi Creek	Intermittent	0	WWF	F&W	None	N/A	N/A
		Tallapoosa	S1TRC392	UT Oaktasasi Creek	Intermittent	0	WWF	F&W	None	N/A	N/A
<i>Meter Stations</i>											
<u>Transco Hillabee</u>	0.0	Tallapoosa					None Identified				
				<b>Alabama Aboveground Facilities Subtotal:</b>		<b>0</b>					
<i>Access Roads</i>											
<u>PAR-AL-TA-003</u>	1.8	Tallapoosa	S1TRC329	UT Hillabee Creek	Perennial	8	WWF	F&W	None	Install Culvert	MI
<u>PAR-AL-TA-003</u>	2.0	Tallapoosa	S1TRC332	UT Hillabee Creek	Intermittent	3	WWF	F&W	None	Install Culvert	MI
<u>PAR-AL-TA-003</u>	2.1	Tallapoosa	S1TRC334	UT Hillabee Creek	Intermittent	0	WWF	F&W	None	Install Culvert	N/A

TABLE 2.3-3  
Waterbodies Crossed by the Sabal Trail Project

State, Facility	MP <sup>a/</sup>	County	Waterbody ID	Waterbody Name <sup>b/</sup>	Flow Type <sup>c/</sup>	Crossing Width (Feet) <sup>d/</sup>	Fishery Classification <sup>e/</sup>	State Water Quality Classification <sup>f/</sup>	State Required Timing Restrictions	Crossing Method <sup>g/</sup>	FERC Class <sup>h/</sup>
<u>PAR-AL-CH-001</u>	27.8	Chambers	WB1TRC123	Unnamed	Open Water	0	WWF	F&W	None	Install silt fence	N/A
<u>PAR-AL-LE-005</u>	58.7	Lee	S1TRC340	Unnamed	Perennial	8	WWF	F&W	None	Install Culvert	MI
<u>PAR-AL-LE-005</u>	58.7	Lee	S1TRC339	Unnamed	Perennial	6	WWF	F&W	None	Install Culvert	MI
<u>TAR-AL-RU-004</u>	68.3	Russell	S1TRC343	UT Horselot Branch Creek	Intermittent	0	WWF	F&W	None	N/A	N/A
<u>TAR-AL-RU-004</u>	68.3	Russell	S1TRC343	UT Horselot Branch Creek	Intermittent	0	WWF	F&W	None	N/A	N/A
<u>PAR-AL-RU-005</u>	69.6	Russell	S1TRC405	UT Horselot Branch	Intermittent	6	WWF	F&W	None	Install Culvert	MI
<u>PAR-AL-RU-005</u>	70.2	Russell	S1TRC403	UT Horselot Branch	Perennial	10	WWF	F&W	None	Install Culvert	MI
<u>PAR-AL-RU-008</u>	82.6	Russell	S1TRC416	Unnamed	Perennial	8	WWF	F&W	None	Install Culvert	MI
<u>PAR-AL-RU-008</u>	82.8	Russell	S1TRC413	Unnamed	Intermittent	5	WWF	F&W	None	Install Culvert	MI
<u>PAR-AL-RU-012</u>	84.5	Russell	S1TRC430	UT Chattahoochee	Perennial	8	WWF	F&W	None	Install Culvert	MI
<u>PAR-AL-RU-012</u>	85.2	Russell	S1TRC431	UT Chattahoochee	Perennial	20	WWF	F&W	None	Install Culvert	I
<u>TAR-AL-RU-011</u>	85.5	Russell	S1TRC346	UT Chattahoochee River	Perennial	5	WWF	F&W	None	Temporary Mats	MI
<b>Alabama Access Roads Subtotal:</b>						<b>87</b>					
<b>ALABAMA TOTAL:</b>						<b>3,851</b>					
<b>Georgia</b>											
<i>Mainline</i>											
	86.5	Stewart	S5TRC007	Unnamed	Intermittent	0	WWF	Fishing	None	N/A	N/A
	86.7	Stewart	S2TRC328	Unnamed	Ephemeral	1	WWF	Fishing	None	I	MI
	86.8	Stewart	S5TRC010	Unnamed	Intermittent	4	WWF	Fishing	None	I	MI
	87.1	Stewart	S2TRC147	UT Chattahoochee River	Perennial	12	WWF	Fishing	None	I / II	I
	88.9	Stewart	S2TRC004	UT Hannahatchee Creek	Intermittent	5	WWF	Fishing	None	I	MI
	91.0	Stewart	S1TRC014	UT Hannahatchee	Perennial	8	WWF	Fishing	None	I / II	MI
	91.1	Stewart	S1TRC008	UT Hannahatchee Creek	Perennial	8	WWF	Fishing	None	I / II	MI
	91.4	Stewart	S1TRC005	Hannahatchee Creek	Perennial	92	WWF	Fishing	None	IV	I
	91.4	Stewart	S1TRC005	Hannahatchee Creek	Perennial	0	WWF	Fishing	None	N/A	N/A
	92.1	Stewart	S2TRC005	UT Hannahatchee Creek	Ephemeral	4	WWF	Fishing	None	I	MI
	93.5	Stewart	S2TRC026	UT Hannahatchee Creek	Perennial	30	WWF	Fishing	None	II / III	I
	93.9	Stewart	S2TRC027	UT Hannahatchee Creek	Intermittent	25	WWF	Fishing	None	II / III	I
	94.0	Stewart	S2TRC029	UT Hannahatchee Creek	Intermittent	10	WWF	Fishing	None	I / II	MI
	94.5	Stewart	S2TRC030	UT Colochee Creek	Ephemeral	4	WWF	Fishing	None	I	MI
	95.2	Stewart	S2TRC138	UT Colochee Creek	Ephemeral	3	WWF	Fishing	None	I	MI
	95.2	Stewart	S2TRC138	UT Colochee Creek	Ephemeral	0	WWF	Fishing	None	N/A	N/A
	95.2	Stewart	S2TRC137	UT Colochee Creek	Intermittent	41	WWF	Fishing	None	I / II	I
	95.9	Stewart	S1TRC016	Colochee Creek	Perennial	94	WWF	Fishing	None	II / III	I
	96.1	Stewart	S2TRC175	UT Colochee Creek	Intermittent	12	WWF	Fishing	None	I / II	I
	96.1	Stewart	S2TRC368	UT Colochee Creek	Intermittent	14	WWF	Fishing	None	I / II	I

TABLE 2.3-3  
Waterbodies Crossed by the Sabal Trail Project

State, Facility	MP <u>a/</u>	County	Waterbody ID	Waterbody Name <u>b/</u>	Flow Type <u>c/</u>	Crossing Width (Feet) <u>d/</u>	Fishery Classification <u>e/</u>	State Water Quality Classification <u>f/</u>	State Required Timing Restrictions	Crossing Method <u>g/</u>	FERC Class <u>h/</u>
	96.3	Stewart	S2TRC013	UT Colochee Creek	Ephemeral	1	WWF	Fishing	None	I	MI
	96.5	Stewart	S2TRC012	UT Colochee Creek	Ephemeral	1	WWF	Fishing	None	I	MI
	96.8	Stewart	S2TRC011	UT Colochee Creek	Intermittent	9	WWF	Fishing	None	I / II	MI
	97.3	Stewart	S2TRC016	Colochee Creek	Ephemeral	4	WWF	Fishing	None	I	MI
	98.0	Stewart	S2TRC023	Frog Bottom Creek	Perennial	24	WWF	Fishing	None	II / III	I
	98.7	Stewart	S2TRC319	UT Hightower Branch	Intermittent	2	WWF	Fishing	None	I	MI
	98.8	Stewart	S2TRC323	UT Hightower Branch	Intermittent	1	WWF	Fishing	None	I	MI
	99.2	Stewart	S2TRC141	UT Hightower Branch	Intermittent	2	WWF	Fishing	None	I	MI
	102.3	Stewart	S2TRC339	Hodchodkee Creek	Perennial	24	WWF	Fishing	None	I / II	I
	103.1	Stewart	S1TRC503	Unnamed	Ephemeral	6	WWF	Fishing	None	I	MI
	105.0	Stewart	WB2TRC331	Unnamed	Open Water	0	WWF	Fishing	None	N/A	N/A
	105.1	Stewart	WB2TRC331	Unnamed	Open Water	0	WWF	Fishing	None	N/A	N/A
	105.1	Stewart	WB2TRC036	Unnamed	Open Water	0	WWF	Fishing	None	N/A	N/A
	105.7	Stewart	S2TRC043	UT Pataula Creek	Intermittent	6	WWF	Fishing	None	I	MI
	106.8	Stewart	S2TRC039	Pataula Creek	Perennial	17	WWF	Fishing	None	I / II	I
	106.8	Stewart	S2TRC041	UT Pataula	Perennial	0	WWF	Fishing	None	N/A	N/A
	106.8	Stewart	S2TRC040	Pataula Creek	Perennial	47	WWF	Fishing	None	II / III	I
	108.3	Stewart	S2TRC144	UT Clear Creek	Intermittent	4	WWF	Fishing	None	I	MI
	108.9	Stewart	S2TRC046	Unnamed	Intermittent	0	WWF	Fishing	None	N/A	N/A
	108.9	Stewart	S2TRC047	Unnamed Creek	Perennial	6	WWF	Fishing	None	I / II	MI
	114.1	Webster	WB5TRC014	Unnamed Pond	Open Water	150	WWF	Fishing	None	II	MA
	117.6	Webster	S2TRC064	Unnamed	Ephemeral	7	WWF	Fishing	None	I	MI
	123.5	Terrell	S2TRC078	UT Bear Creek	Ephemeral	2	WWF	Fishing	None	I	MI
	125.1	Terrell	S2TRC092	Reedy Creek	Intermittent	10	WWF	Fishing	None	I / II	MI
	126.5	Terrell	S2TRC081	Unnamed Creek	Intermittent	5	WWF	Fishing	None	I	MI
	126.5	Terrell	S2TRC082	Unnamed	Intermittent	3	WWF	Fishing	None	I	MI
	127.0	Terrell	S2TRC083	Unnamed Creek	Intermittent	4	WWF	Fishing	None	I	MI
	127.7	Terrell	S2TRC095	UT Mossy Creek	Ephemeral	1	WWF	Fishing	None	I	MI
	128.5	Terrell	S2TRC307	UT Mossy Branch	Intermittent	4	WWF	Fishing	None	I	MI
	128.5	Terrell	S2TRC308	Mossy Branch	Perennial	41	WWF	Fishing	None	II / III	I
	128.6	Terrell	S2TRC098	UT Mossy Branch	Perennial	7	WWF	Fishing	None	I / II	MI
	128.7	Terrell	S2TRC099	UT Mossy Creek	Intermittent	2	WWF	Fishing	None	I	MI
	130.7	Terrell	S2TRC103	UT Chickasawatchee Creek	Intermittent	6	WWF	Fishing	None	I / II	MI
	134.4	Terrell	S2TRC114	UT Middle Creek	Ephemeral	7	WWF	Fishing	None	I	MI
	136.8	Terrell	S2TRC115	UT Middle Creek	Ephemeral	4	WWF	Fishing	None	I	MI

TABLE 2.3-3  
Waterbodies Crossed by the Sabal Trail Project

State, Facility	MP <u>a/</u>	County	Waterbody ID	Waterbody Name <u>b/</u>	Flow Type <u>c/</u>	Crossing Width (Feet) <u>d/</u>	Fishery Classification <u>e/</u>	State Water Quality Classification <u>f/</u>	State Required Timing Restrictions	Crossing Method <u>g/</u>	FERC Class <u>h/</u>
	137.0	Terrell	S2TRC118	UT Middle Creek	Intermittent	29	WWF	Fishing	None	I / II	I
	137.3	Terrell	S2TRC119	UT Fowltown Creek	Ephemeral	4	WWF	Fishing	None	I	MI
	138.3	Terrell	S2TRC125	UT Fowltown Creek	Ephemeral	4	WWF	Fishing	None	I	MI
	139.8	Terrell	S2TRC132	UT Fowltown Creek	Intermittent	6	WWF	Fishing	None	I	MI
	142.9	Terrell	S2TRC151	Unnamed	Ephemeral	3	WWF	Fishing	None	I	MI
	149.9	Dougherty	SNHD-14990	Unconfirmed	Intermittent	4	WWF	Fishing	None	I	MI
	152.3	Dougherty	S1TRC493	Cooleewahee Creek	Perennial	40	WWF	Fishing	None	II / III	I
	154.9	Dougherty	S2TRC375	Unnamed	Intermittent	8	WWF	Fishing	None	I / II	MI
	<b>163.1</b>	<b>Dougherty</b>	<b>S3TRC151</b>	<b>Flint River</b>	<b>Perennial</b>	<b>330</b>	<b>WWF</b>	<b>Recreation</b>	<b>None</b>	<b>IV</b>	<b>MA</b>
	164.3	Dougherty	WB2TRC372	Unnamed	Open Water	59	WWF	Fishing	None	I	I
	168.4	Dougherty	S2TRC350	Unnamed	Perennial	36	WWF	Fishing	None	II / III	I
	168.5	Dougherty	WB2TRC352	Unnamed	Open Water	14	WWF	Fishing	None	I	I
	169.3	Dougherty	WB2TRC354	Unnamed	Open Water	649	WWF	Fishing	None	I / II	MA
	171.6	Mitchell	S2TRC363	Unnamed	Intermittent	7	WWF	Fishing	None	I	MI
	171.6	Mitchell	S2TRC363	Unnamed	Intermittent	0	WWF	Fishing	None	N/A	N/A
	175.7	Mitchell	S2TRC200	UT Raccoon Creek	Intermittent	5	WWF	Fishing	None	I	MI
	176.1	Mitchell	S2TRC201	UT Raccoon Creek	Ephemeral	2	WWF	Fishing	None	I	MI
	177.9	Mitchell	S2TRC218	UT Raccoon Creek	Ephemeral	7	WWF	Fishing	None	I	MI
	178.0	Mitchell	S2TRC213	Raccoon Creek	Perennial	7	WWF	Fishing	None	I / II	MI
	180.8	Mitchell	S3TRC128	UT Raccoon Creek	Intermittent	3	WWF	Fishing	None	I	MI
	181.4	Mitchell	S7TRC034	UT Raccoon Creek	Ephemeral	4	WWF	Fishing	None	I	MI
	181.9	Mitchell	S1TRC465	UT Raccoon Creek	Perennial	8	WWF	Fishing	None	I / II	MI
	182.4	Mitchell	S1TRC462	Unnamed	Intermittent	3	WWF	Fishing	None	I	MI
	182.7	Colquitt	S4TRC150	UT Raccoon Creek	Intermittent	6	WWF	Fishing	None	I	MI
	182.8	Colquitt	WB4TRC147	Unnamed	Open Water	0	WWF	Fishing	None	N/A	N/A
	184.8	Colquitt	WB4TRC143	Unnamed	Open Water	0	WWF	Fishing	None	N/A	N/A
	185.3	Colquitt	WB3TRC125	Unnamed	Open Water	0	WWF	Fishing	None	N/A	N/A
	188.1	Colquitt	WB2TRC195	Unnamed	Open Water	0	WWF	Fishing	None	N/A	N/A
	<b>188.6</b>	<b>Colquitt</b>	<b>S4TRC138</b>	<b>Bridge Creek</b>	<b>Perennial</b>	<b>71</b>	<b>WWF</b>	<b>Fishing</b>	<b>None</b>	<b>II / III</b>	<b>I</b>
	188.6	Colquitt	S4TRC139	UT Bridge Creek	Perennial	13	WWF	Fishing	None	I / II	I
	189.0	Colquitt	S3TRC120b	UT Bridge Creek	Perennial	0	WWF	Fishing	None	N/A	N/A
	189.0	Colquitt	S3TRC120a	UT Bridge Creek	Perennial	7	WWF	Fishing	None	I / II	MI
	190.4	Colquitt	S7TRC014	UT Little Creek	Ephemeral	8	WWF	Fishing	None	I	MI
	190.4	Colquitt	S7TRC014	UT Little Creek	Ephemeral	0	WWF	Fishing	None	N/A	N/A
	191.4	Colquitt	S3TRC111	UT Little Creek	Perennial	8	WWF	Fishing	None	I / II	MI



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Waterbodies Crossed by the Sabal Trail Project

State, Facility	MP <u>a/</u>	County	Waterbody ID	Waterbody Name <u>b/</u>	Flow Type <u>c/</u>	Crossing Width (Feet) <u>d/</u>	Fishery Classification <u>e/</u>	State Water Quality Classification <u>f/</u>	State Required Timing Restrictions	Crossing Method <u>g/</u>	FERC Class <u>h/</u>
	192.3	Colquitt	S4TRC104	UT Little Creek	Intermittent	8	WWF	Fishing	None	I / II	MI
	192.4	Colquitt	S4TRC107	Little Creek	Perennial	19	WWF	Fishing	None	I / II	I
	192.6	Colquitt	S4TRC110	UT Little Creek	Ephemeral	2	WWF	Fishing	None	I	MI
	193.3	Colquitt	SNHD-19331	Unconfirmed	Intermittent	3	WWF	Fishing	None	I	MI
	193.7	Colquitt	S4TRC116	UT Little Creek	Intermittent	2	WWF	Fishing	None	I	MI
	194.4	Colquitt	WB4TRC118	Unnamed	Open Water	0	WWF	Fishing	None	N/A	N/A
	194.9	Colquitt	S3TRC222	Unnamed	Intermittent	4	WWF	Fishing	None	I	MI
	195.0	Colquitt	S3TRC224	Unnamed	Intermittent	3	WWF	Fishing	None	I	MI
	195.4	Colquitt	S3TRC226	Unnamed	Perennial	10	WWF	Fishing	None	I / II	MI
	195.4	Colquitt	S3TRC226	Unnamed	Perennial	0	WWF	Fishing	None	N/A	N/A
	195.6	Colquitt	S3TRC229	Unnamed	Ephemeral	1	WWF	Fishing	None	I	MI
	196.1	Colquitt	S3TRC106	UT Ochlockonee River	Perennial	21	WWF	Fishing	None	I / II	I
	196.4	Colquitt	S3TRC261	Unnamed	Perennial	26	WWF	Fishing	None	I / II	I
	197.6	Colquitt	S3TRC197	UT Ochlockonee River	Perennial	9	WWF	Fishing	None	I / II	MI
	197.8	Colquitt	S3TRC114	UT Ochlockonee River	Intermittent	2	WWF	Fishing	None	I	MI
	199.2	Colquitt	S7TRC018	Ochlockonee River	Perennial	37	WWF	Fishing	None	IV	I
	199.3	Colquitt	S7TRC018	Ochlockonee River	Perennial	102	WWF	Fishing	None	IV	MA
	200.1	Colquitt	S2TRC223	UT Ochlockonee River	Intermittent	2	WWF	Fishing	None	I	MI
	203.4	Colquitt	SNHD-20341	Sloans Creek	Intermittent	3	WWF	Fishing	None	I	MI
	203.8	Colquitt	S4TRC085x	Unnamed	Intermittent	4	WWF	Fishing	None	I	MI
	204.5	Colquitt	S4TRC093	UT Hog Creek	Perennial	3	WWF	Fishing	None	I / II	MI
	204.5	Colquitt	S4TRC093	UT Hog Creek	Perennial	0	WWF	Fishing	None	N/A	N/A
	205.1	Colquitt	S7TRC006	UT Hog Creek	Perennial	3	WWF	Fishing	None	I / II	MI
	205.5	Colquitt	WB7TRC004	Unnamed	Open Water	0	WWF	Fishing	None	N/A	N/A
	206.7	Colquitt	S7TRC001	UT Hog Creek	Intermittent	10	WWF	Fishing	None	I / II	MI
	206.7	Colquitt	S7TRC001	UT Hog Creek	Intermittent	9	WWF	Fishing	None	I / II	MI
	206.7	Colquitt	S7TRC003	Hog Creek	Perennial	11	WWF	Fishing	None	I / II	I
	212.1	Brooks	S4TRC156	UT Hodges Creek	Ephemeral	2	WWF	Fishing	None	I	MI
	213.9	Brooks	S6TRC002	UT Little Creek	Intermittent	3	WWF	Fishing	None	I	MI
	214.6	Brooks	S6TRC005	UT Little Creek	Ephemeral	1	WWF	Fishing	None	I	MI
	216.9	Brooks	WB3TRC193	Unnamed	Open Water	0	WWF	Fishing	None	N/A	N/A
	218.8	Brooks	S3TRC045	Little Creek	Perennial	30	WWF	Fishing	None	II / III	I
	219.0	Brooks	S3TRC204	UT Little Creek	Intermittent	10	WWF	Fishing	None	I / II	MI
	219.2	Brooks	S3TRC043	UT Okapilco Creek	Ephemeral	4	WWF	Fishing	None	I	MI
	219.4	Brooks	S3TRC042	Okapilco Creek	Perennial	31	WWF	Fishing	None	I / II	I

TABLE 2.3-3  
Waterbodies Crossed by the Sabal Trail Project

State, Facility	MP <u>a/</u>	County	Waterbody ID	Waterbody Name <u>b/</u>	Flow Type <u>c/</u>	Crossing Width (Feet) <u>d/</u>	Fishery Classification <u>e/</u>	State Water Quality Classification <u>f/</u>	State Required Timing Restrictions	Crossing Method <u>g/</u>	FERC Class <u>h/</u>
	221.4	Brooks	S3TRC292	Unnamed	Perennial	18	WWF	Fishing	None	I / II	I
	221.4	Brooks	S3TRC292	Unnamed	Perennial	0	WWF	Fishing	None	N/A	N/A
	224.1	Brooks	WB3TRC062	Unnamed	Open Water	34	WWF	Fishing	None	I	I
	225.0	Brooks	WB6TRC011	Unnamed	Open Water	190	WWF	Fishing	None	II	MA
	225.2	Brooks	S6TRC012	UT Okapilco Creek	Intermittent	8	WWF	Fishing	None	I / II	MI
	227.1	Brooks	S6TRC020	Millrace Creek	Perennial	4	WWF	Fishing	None	I / II	MI
	229.7	Brooks	S3TRC278	Unnamed	Intermittent	3	WWF	Fishing	None	I	MI
	230.0	Brooks	S3TRC281	UT Withlacoochee River	Perennial	14	WWF	Fishing	None	I / II	I
	230.0	Brooks	S3TRC281	UT Withlacoochee River	Perennial	0	WWF	Fishing	None	N/A	N/A
	230.0	Brooks	S3TRC280	UT Withlacoochee River	Intermittent	5	WWF	Fishing	None	I	MI
	230.9	Brooks	S3TRC283	Unnamed	Perennial	2	WWF	Fishing	None	I / II	MI
	<b>231.3</b>	<b>Brooks</b>	<b>S3TRC304</b>	<b>Withlacoochee River</b>	<b>Perennial</b>	<b>114</b>	<b>WWF</b>	<b>Fishing</b>	<b>None</b>	<b>IV</b>	<b>MA</b>
	231.5	Lowndes	WB3TRC302	Unnamed	Open Water	138	WWF	Fishing	None	IV	MA
	232.7	Lowndes	S3TRC017	UT Tiger Creek	Perennial	10	WWF	Fishing	None	I / II	I
	233.6	Lowndes	S3TRC184	Unnamed	Intermittent	5	WWF	Fishing	None	I	MI
	237.3	Lowndes	S3TRC286	Unnamed	Intermittent	15	WWF	Fishing	None	I	I
	237.6	Lowndes	S3TRC290	Unnamed	Intermittent	0	WWF	Fishing	None	N/A	N/A
	239.1	Lowndes	S3TRC132	UT Withlacoochee River	Perennial	14	WWF	Fishing	None	I / II	I
	<b>240.2</b>	<b>Lowndes</b>	<b>S3TRC162</b>	<b>UT Lanes Mill Creek</b>	<b>Perennial</b>	<b>46</b>	<b>WWF</b>	<b>Fishing</b>	<b>None</b>	<b>II / III</b>	<b>I</b>
	<b>240.2</b>	<b>Lowndes</b>	<b>S3TRC162</b>	<b>UT Lanes Mill Creek</b>	<b>Perennial</b>	<b>19</b>	<b>WWF</b>	<b>Fishing</b>	<b>None</b>	<b>II / III</b>	<b>I</b>
	240.3	Lowndes	WB3TRC160	Unnamed	Open Water	0	WWF	Fishing	None	N/A	N/A
	241.2	Lowndes	S3TRC158	UT Lanes Mill Creek	Perennial	21	WWF	Fishing	None	I / II	I
	241.3	Lowndes	S3TRC157	UT Lanes Mill Creek	Perennial	5	WWF	Fishing	None	I / II	MI
	242.3	Lowndes	WB3TRC143	Unnamed	Open Water	0	WWF	Fishing	None	N/A	N/A
	242.9	Lowndes	SNHD-24292	Ciyatt Mill Creek	Perennial	3	WWF	Fishing	None	I / II	MI
	244.1	Lowndes	S3TRC029	UT Withlacoochee River	Perennial	5	WWF	Fishing	None	I / II	MI
	246.6	Lowndes	WB3TRC035	Unnamed	Open Water	0	WWF	Fishing	None	N/A	N/A
				<b>Georgia Pipeline Facilities Subtotal:</b>		<b>3,175</b>					
<i>Compressor Stations</i>											
<u>Albany</u>	159.3	Dougherty					None Identified				
				<b>Georgia Aboveground Facilities Subtotal:</b>		<b>0</b>					
<i>Access Roads</i>											
<u>PAR-GA-ST-018</u>	95.5	Stewart	S2TRC266	Unnamed	Intermittent	69	WWF	Fishing	None	Install Culver	I
<u>PAR-GA-ST-020</u>	95.9	Stewart	S2TRC289	Unnamed	Intermittent	5	WWF	Fishing	None	Install Culvert	MI
<u>PAR-GA-ST-020</u>	96.4	Stewart	S2TRC290	Unnamed	Intermittent	19	WWF	Fishing	None	Install Culvert	I

TABLE 2.3-3  
Waterbodies Crossed by the Sabal Trail Project

State, Facility	MP <u>a/</u>	County	Waterbody ID	Waterbody Name <u>b/</u>	Flow Type <u>c/</u>	Crossing Width (Feet) <u>d/</u>	Fishery Classification <u>e/</u>	State Water Quality Classification <u>f/</u>	State Required Timing Restrictions	Crossing Method <u>g/</u>	FERC Class <u>h/</u>
<u>PAR-GA-ST-023</u>	96.5	Stewart	S2TRC296	Unnamed	Ephemeral	3	WWF	Fishing	None	Install Culvert	MI
<u>PAR-GA-ST-023</u>	96.5	Stewart	S2TRC299	Unnamed	Intermittent	7	WWF	Fishing	None	Install Culvert	MI
<u>PAR-GA-ST-020</u>	96.6	Stewart	S2TRC291	Unnamed	Perennial	28	WWF	Fishing	None	Install Culvert	I
<u>PAR-GA-ST-022</u>	96.6	Stewart	S2TRC293	Unnamed	Perennial	20	WWF	Fishing	None	Install Culvert	I
<u>PAR-GA-ST-027</u>	98.0	Stewart	S2TRC249	Unnamed	Intermittent	20	WWF	Fishing	None	Install Culvert	I
<u>TAR-GA-ST-036</u>	104.2	Stewart	S2TRC250	Unnamed	Ephemeral	4	WWF	Fishing	None	Temporary Mats	MI
<u>PAR-GA-WB-003</u>	114.1	Webster	WB5TRC014	Unnamed	Open Water	0	WWF	Fishing	None	Install silt fence	N/A
<u>TAR-GA-TE-004</u>	130.7	Terrell	S2TRC103	Unnamed	Intermittent	6	WWF	Fishing	None	Temporary Mats	MI
<u>PAR-GA-TE-005</u>	137.0	Terrell	S2TRC118	Unnamed	Intermittent	0	WWF	Fishing	None	N/A	N/A
<u>TAR-GA-BR-010</u>	225.0	Brooks	WB3TRC266	Unnamed	Open Water	0	WWF	Fishing	None	Install silt fence	N/A
<u>TAR-GA-LO-003</u>	233.3	Lowndes	S3TRC188	Unnamed	Ephemeral	4	WWF	Fishing	None	Temporary Mats	MI
<u>TAR-GA-LO-003</u>	233.5	Lowndes	S3TRC187	Unnamed	Intermittent	18	WWF	Fishing	None	Temporary Mats	I
<u>TAR-GA-LO-003</u>	233.5	Lowndes	S3TRC186	Unnamed	Intermittent	9	WWF	Fishing	None	Temporary Mats	MI
<u>TAR-GA-LO-003-1</u>	233.6	Lowndes	S3TRC184	Unnamed	Intermittent	5	WWF	Fishing	None	Temporary Mats	MI
<u>TAR-GA-LO-003-1</u>	233.6	Lowndes	S3TRC183	Unnamed	Intermittent	3	WWF	Fishing	None	Temporary Mats	MI
<u>TAR-GA-LO-009</u>	239.2	Lowndes	S3TRC191	Unnamed	Intermittent	7	WWF	Fishing	None	Temporary Mats	MI
<b>Georgia Access Roads Subtotal:</b>						<b>226</b>					
<b>GEORGIA TOTAL:</b>						<b>3,400</b>					
<b>Florida</b>											
<i>Mainline</i>	248.2	Hamilton	S1ECT016	Jumping Gully Creek	Perennial	27	WWF	Class III	None	II / III	I
	249.9	Hamilton	S8ECT106	UT Withlacoochee River	Perennial	15	WWF	Class III	None	I / II	I
	262.7	Hamilton	WB8ECT170	Unnamed	Open Water	51	WWF	Class III	None	I	I
	263.2	Hamilton	WB8ECT171	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	<b>264.1</b>	<b>Hamilton</b>	<b>S2ECT128</b>	<b>Withalacoochee River</b>	<b>Perennial</b>	<b>198</b>	<b>WWF</b>	<b>Class III</b>	<b>None</b>	<b>IV</b>	<b>MA</b>
	<b>268.1</b>	<b>Madison</b>	<b>S8ECT247</b>	<b>Suwannee River</b>	<b>Perennial</b>	<b>278</b>	<b>WWF</b>	<b>Class III</b>	<b>None</b>	<b>IV</b>	<b>MA</b>
	275.5	Suwannee	WB3ECT001	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	293.8	Suwannee	S2ECT008	Little River	Intermittent	28	WWF	Class III	None	I / II	I
	297.5	Suwannee	WB2ECT012	Unnamed	Open Water	17	WWF	Class III	None	I	I
	<b>308.3</b>	<b>Suwannee</b>	<b>S2ECT106</b>	<b>Santa Fe River</b>	<b>Perennial</b>	<b>408</b>	<b>WWF</b>	<b>Class III</b>	<b>None</b>	<b>IV</b>	<b>MA</b>
	346.7	Levy	D4CAR044	Roadside Ditch	Intermittent	21	WWF	Class III	None	II / III	I
	346.8	Levy	D11CAR022	Roadside Ditch	Intermittent	17	WWF	Class III	None	II / III	I
	380.9	Marion	WB2ECT189	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	393.7	Marion	WB8ECT226	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	395.7	Marion	WB8ECT241	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	398.0	Marion	WB8ECT235	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A

TABLE 2.3-3  
Waterbodies Crossed by the Sabal Trail Project

State, Facility	MP <u>a/</u>	County	Waterbody ID	Waterbody Name <u>b/</u>	Flow Type <u>c/</u>	Crossing Width (Feet) <u>d/</u>	Fishery Classification <u>e/</u>	State Water Quality Classification <u>f/</u>	State Required Timing Restrictions	Crossing Method <u>g/</u>	FERC Class <u>h/</u>
	399.0	Marion	WB8ECT237	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	399.1	Marion	WB8ECT238	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	408.7	Sumter	WB8ECT219	Unnamed	Open Water	159	WWF	Class III	None	I / II	MA
	409.3	Sumter	WB9ECT185	Unnamed	Open Water	19	WWF	Class III	None	I	I
	409.4	Sumter	WB9ECT185	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	409.4	Sumter	WB9ECT185	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	424.6	Sumter	WB8ECT177	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	424.6	Sumter	WB8ECT177	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	425.6	Sumter	WB8ECT221	Unnamed	Open Water	71	WWF	Class III	None	I	I
	428.2	Sumter	WB8ECT180	Unnamed	Open Water	8	WWF	Class III	None	I	MI
	428.2	Sumter	WB8ECT181	Unnamed	Open Water	48	WWF	Class III	None	I	I
	428.2	Sumter	WB8ECT181	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	433.3	Sumter	WB6CAR207	Unnamed	Open Water	45	WWF	Class III	None	I	I
	433.4	Sumter	WB6CAR208	Unnamed	Open Water	46	WWF	Class III	None	I	I
	436.8	Lake	WB7CAR011	Unnamed	Open Water	65	WWF	Class III	None	I	I
	437.5	Lake	WB7CAR029	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	438.5	Lake	WB6CAR055	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	441.8	Lake	WB6CAR077	Unnamed	Open Water	82	WWF	Class III	None	I	I
	444.4	Lake	WB6CAR067	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	446.5	Lake	D6CAR141	Canal	Perennial	30	WWF	Class III	None	II / III	I
	449.6	Lake	WB7CAR066	Unnamed	Open Water	230	WWF	Class III	None	II	MA
	452.2	Lake	WB7CAR092	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	<b>458.9</b>	<b>Polk</b>	<b>S9ECT262</b>	<b>UT Withlacoochee River</b>	<b>Perennial</b>	<b>43</b>	<b>WWF</b>	<b>Class III</b>	<b>None</b>	<b>II / III</b>	<b>I</b>
	466.0	Osceola	WB13CAR115	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	466.1	Osceola	WB13CAR116	Unnamed	Open Water	66	WWF	Class III	None	I	I
	466.6	Osceola	WB6CAR095	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	468.7	Osceola	S6CAR106	Unnamed	Perennial	12	WWF	Class III	None	I / II	I
	469.2	Osceola	S6CAR107	UT Davenport Creek	Perennial	13	WWF	Class III	None	I / II	I
	469.7	Osceola	WB6CAR111	Unnamed	Open Water	613	WWF	Class III	None	IV	MA
	470.5	Osceola	WB4CAR149	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	471.3	Osceola	WB9ECT236	Unnamed	Open Water	52	WWF	Class III	None	IV	I
	471.3	Osceola	WB9ECT236	Unnamed	Open Water	301	WWF	Class III	None	IV	MA
	472.1	Osceola	S1ECT069	Davenport Creek	Perennial	20	WWF	Class III	None	II / III	I
	472.6	Osceola	S1ECT072	UT Reedy Creek	Intermittent	9	WWF	Class III	None	I / II	MI
	472.6	Osceola	S1ECT072	UT Reedy Creek	Intermittent	14	WWF	Class III	None	I / II	I

TABLE 2.3-3  
Waterbodies Crossed by the Sabal Trail Project

State, Facility	MP <sup>a/</sup>	County	Waterbody ID	Waterbody Name <sup>b/</sup>	Flow Type <sup>c/</sup>	Crossing Width (Feet) <sup>d/</sup>	Fishery Classification <sup>e/</sup>	State Water Quality Classification <sup>f/</sup>	State Required Timing Restrictions	Crossing Method <sup>g/</sup>	FERC Class <sup>h/</sup>
<i>Citrus County Line</i>	1.3	Marion	S13CAR093	Withlacoochee River	Perennial	139	WWF	Class III	None	IV	MA
	1.6	Citrus	WB13CAR097	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	20.1	Citrus	WB6CAR214	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
<i>Hunters Creek Line</i>	1.3	Osceola	xTRC001	Reedy Creek	Perennial	138	WWF	Class III	None	III	MA
	3.1	Osceola	WB13CAR025	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	6.4	Osceola	WB9ECT219	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	6.6	Osceola	D6CAR122	Canal	Perennial	15	WWF	Class III	None	II / III	I
	8.8	Osceola	S13CAR058	Unnamed Creek	Perennial	34	WWF	Class III	None	I / II	I
	9.2	Osceola	S13CAR061	Shingle Creek	Perennial	83	WWF	Class III	None	IV	I
	10.7	Osceola	D6CAR132	Canal	Perennial	39	WWF	Class III	None	II / III	I
	11.0	Osceola	D6CAR132	Canal	Perennial	45	WWF	Class III	None	II / III	I
	11.4	Osceola	WB7CAR135	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	12.2	Osceola	WB7CAR142	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
	12.2	Osceola	WB7CAR142	Unnamed	Open Water	0	WWF	Class III	None	N/A	N/A
<b>Florida Pipeline Facilities Subtotal:</b>						<b>3,499</b>					
<i>Compressor Stations</i>											
Hildreth	292.7	Suwannee					None Identified				
Dunnellon	384.2	Marion					None Identified				
Reunion	462.9	Osceola					None Identified				
<i>Meter Stations</i>											
FGT Suwannee	296.2	Suwannee					None Identified				
FSC	462.9	Osceola					None Identified				
Gulfstream	462.9	Osceola					None Identified				
FGT Hunters Creek (Hunters Creek Line)	13.3	Orange					None Identified				
Citrus County Plant M&R Station	21.4	Citrus	WB8ECT201	Unnamed	Open Water	0	WWF	CLASS III	None	N/A	N/A
<b>Florida Aboveground Facilities Subtotal</b>						<b>0</b>					
<i>Access Roads</i>											
TAR-FL-GI-005	321.2	Gilchrist	S8ECT134	Unnamed	Perennial	24	WWF	Class III	None	Temporary Mats	I
TAR-FL-GI-007	321.4	Gilchrist	S8ECT144	Unnamed	Perennial	23	WWF	Class III	None	Temporary Mats	I
TAR-FL-GI-007	322.8	Gilchrist	S4ECT014	Unnamed	Intermittent	0	WWF	Class III	None	Temporary Mats	N/A
TAR-FL-GI-007	322.8	Gilchrist	S4ECT014	Unnamed	Intermittent	5	WWF	Class III	None	Temporary Mats	MI
TAR-FL-GI-007	322.8	Gilchrist	S4ECT016	Unnamed	Intermittent	5	WWF	Class III	None	Temporary Mats	MI
TAR-FL-MA-010	391.1	Marion	WB8ECT145	Unnamed	Open Water	0	WWF	Class III	None	Install silt fence	N/A
TAR-FL-SUM-003-2	409.3	Sumter	WB9ECT185	Unnamed	Open Water	0	WWF	Class III	None	Install silt fence	N/A
TAR-FL-SUM-005	413.0	Sumter	WB8ECT265	Unnamed	Open Water	0	WWF	Class III	None	Install silt fence	N/A

TABLE 2.3-3  
Waterbodies Crossed by the Sabal Trail Project

State, Facility	MP <sup>a/</sup>	County	Waterbody ID	Waterbody Name <sup>b/</sup>	Flow Type <sup>c/</sup>	Crossing Width (Feet) <sup>d/</sup>	Fishery Classification <sup>e/</sup>	State Water Quality Classification <sup>f/</sup>	State Required Timing Restrictions	Crossing Method <sup>g/</sup>	FERC Class <sup>h/</sup>
<u>TAR-FL-SUM-005</u>	413.0	Sumter	WB8ECT265	Unnamed	Open Water	0	WWF	Class III	None	Install silt fence	N/A
<u>TAR-FL-SUM-005</u>	413.0	Sumter	WB8ECT265	Unnamed	Open Water	0	WWF	Class III	None	Install silt fence	N/A
<u>TAR-FL-SUM-005</u>	413.5	Sumter	S3ECT073	Unnamed	Perennial	0	WWF	Class III	None	Temporary Mats	N/A
<u>TAR-FL-OS-005</u>	472.5	Osceola	S6CAR199	Unnamed	Perennial	20	WWF	Class III	None	Temporary Mats	I
<u>TAR-FL-OS-005</u>	472.6	Osceola	S6CAR197	Unnamed	Perennial	25	WWF	Class III	None	Temporary Mats	I
<u>TAR-FL-OS-009</u>	473.6	Osceola	S4ECT066	Unnamed	Intermittent	5	WWF	Class III	None	Existing Culvert; install erosion control	MI
<b>Florida Access Roads Subtotal:</b>						<b>106</b>					
<b>FLORIDA TOTAL:</b>						<b>3,606</b>					
<b>PROJECT TOTAL:</b>						<b>10,858</b>					

<sup>a/</sup> MP at entry point of waterbody.

<sup>b/</sup> UT = Unnamed Tributary. Unnamed = unnamed / unmapped streams and waterbodies. Unconfirmed Waterbody = stream and waterbody features on non-survey parcels identified through desktop review. Features in **Bold Print** represent Section USACE Section 10 Traditional Navigable Waters.

<sup>c/</sup> P = Perennial; I = Intermittent; POW = Open Water; E = Ephemeral.

<sup>d/</sup> Waterbody crossing width based on field estimated distance from waters' edge to waters' edge. 0.0 = waterbody is not crossed but is in workspace. For USGS NHD waterbody data used to identify waterbodies on no-access parcels and shown as a single line feature on the Project alignment sheets, an assumed 3 foot width has been used for this analysis. Where tree canopy cover allowed for suitable analysis, scaled aerial photography was used to estimate crossing length for these NHD stream features.

<sup>e/</sup> WWF - Warm Water Fish.

<sup>f/</sup> Alabama Water Quality Classifications (Chapter 335-6-11 of the Alabama Administrative Code). Georgia Water Quality Classifications (Chapter 391-3-6-.03 of the Rules and Regulations for Water Quality Control). Florida Water Quality Classifications (Chapter 62-302 of the Florida Administrative Code). See Table 2.3-6 (Sensitive Waters Crossed by the Sabal Trail Project) for Special, Outstanding, and High Priority designated waters.

<sup>g/</sup> I = Wet Open Cut Method; II = Dry Crossing Method, including Flume or Dam and Pump, Cofferdam, or Dry Open Cut for waterbodies that are dry at the time of crossing; Method III = Conventional Bore; IV = HDD.

<sup>h/</sup> FERC Classification from the 2013 FERC Procedures. MI = Minor (<10 feet); I = Intermediate (>10 - <100 feet); MA = Major (>100 feet).

N/A, Not Applicable



TABLE 2.3-4  
Summary of Waterbody Crossings for the Sabal Trail Project - Pipeline Segments by FERC Classification <sup>a/</sup>

State	Minor ≤10 feet	Intermediate >10 - ≤100 feet	Major >100 feet	Total
<b>Alabama</b>	138	54	4	<b>196</b>
<b>Georgia</b>	83	36	7	<b>126</b>
<b>Florida</b>	2	27	9	<b>38</b>
<b>PROJECT TOTAL</b>	<b>223</b>	<b>117</b>	<b>20</b>	<b>360</b>

<sup>a/</sup> Waterbodies in the workspace but not crossed by the pipeline are not counted in this table as crossings. Waterbodies impacted by access roads are not counted in this table as crossings.

TABLE 2.3-5  
Summary of Major Waterbodies Crossed by the Sabal Trail Project <sup>a/</sup>

State, Facility	County	Waterbody ID	Waterbody Name	Milepost <sup>b/</sup>	Approximate Crossing Length (feet)	Crossing Method <sup>c/</sup>
<b>Alabama</b>						
<u>Mainline</u>	Tallapoosa	S1TRC216	Hillabee Creek	1.3	217	IV
	Tallapoosa	S1TRC046	Tallapoosa River	7.3	548	IV
	Russell	S4TRC058	Uchee Creek	70.8	225	IV
	Russell	S5TRC006	Chattahoochee River	86.4	507	IV
<b>Georgia</b>						
<u>Mainline</u>	Webster	WB5TRC014	Pond	114.1	150	II
	Dougherty	S3TRC151	Flint River	163.1	330	IV
	Dougherty	WB2TRC354	Unnamed	169.3	649	I / II
	Colquitt	S7TRC018	Ochlockonee River	199.3	102	IV
	Brooks	WB6TRC011	Unnamed	225.0	190	II
	Brooks	S3TRC304	Withlacoochee River	231.3	114	IV
	Lowndes	WB3TRC302	Unnamed	231.5	138	IV
<b>Florida</b>						
<u>Mainline</u>	Hamilton	S2ECT128	Withlacoochee River	264.1	198	IV
	Madison	S8ECT247	Suwannee River	268.1	278	IV
	Suwannee	S2ECT106	Santa Fe River	308.3	408	IV
	Sumter	WB8ECT219	Unnamed	408.7	159	I / II
	Lake	WB7CAR066	Unnamed	449.6	230	II
	Osceola	WB6CAR111	Unnamed	469.7	613	IV
	Osceola	WB9ECT236	Unnamed	471.3	301	IV

TABLE 2.3-5

**Summary of Major Waterbodies Crossed by the Sabal Trail Project <sup>a/</sup>**

<u>Citrus County Line</u>	Marion	S13CAR093	Withlacoochee River	1.3	139	IV
<u>Hunters Creek</u>						III
<u>Line</u>	Osceola	xTRC001	Reedy Creek	1.3	138	

<sup>a/</sup> The FERC Plan and Procedures (FERC 2013a, b) classify major waterbodies as those waterbodies greater than 100 feet wide at the water's edge at the time of crossing (Section I.B.1.c. of the Procedures). Crossings of waterbodies at an angle to the stream channel that result in a crossing distance greater than 100 feet are not considered major waterbody crossings if the perpendicular width of the stream channel at the water's edge is <100 feet.

<sup>b/</sup> MP at entry point of waterbody.

<sup>c/</sup> I = Wet Open Cut Method; II = Dry Crossing Method, including Flume or Dam and Pump, Cofferdam, or Dry Open Cut for waterbodies that are dry at the time of crossing; Method III = Conventional Bore; IV = HDD.

TABLE 2.3-6

**Sensitive Waters Crossed by the Sabal Trail Project**

State, Facility	Milepost	County	Waterbody Name <u>a/</u>	Basis for Sensitivity <u>b/</u>	Proposed Crossing Method <u>c/</u>
<b>Alabama</b>					
<u>Mainline</u>	7.3	Tallapoosa	Tallapoosa River	NRI	IV
	42.9	Lee	Halawakee Creek	NRI, Impaired	II / III
	70.8	Russell	Uchee Creek	NRI, Designated Critical Habitat (mussels)	IV
	79.2		Ihagee Creek	Impaired	I / II
<b>Georgia</b>					
<u>Mainline</u>	86.4	Russell / Stewart	Chattahoochee River	GA Protected River, Impaired	IV
	91.4	Stewart	Hannahatchee Creek	GA High Priority, Impaired	IV
	102.3		Hodchodkee Creek	GA High Priority, GA state-listed Broadstripe shiner (GA-R) potential	I / II
	106.8		Pataula Creek	GA High Priority, Impaired, GA state-listed Broadstripe shiner (GA-R)	II / III
	106.8		UT Patula Creek	GA state-listed Broadstripe shiner (GA-R)	N/A
	106.8		UT Patula Creek	GA state-listed Broadstripe shiner (GA-R)	II / III
	152.3	Dougherty	Cooleewahee Creek	GA High Priority	II / III
	163.1		Flint River	NRI, GA High Priority, GA Protected River, Designated Critical Habitat (mussels)	IV
	188.6	Colquitt	Bridge Creek	Impaired	II / III
	192.4		Little Creek	Impaired	I / II
	199.3		Ochlockonee River	GA High Priority, Impaired	IV
	219.4	Brooks	Okapilco Creek	Impaired	I / II
	231.3		Withlacoochee River	NRI, GA High Priority, Impaired	IV
<b>Florida</b>					

TABLE 2.3-6

**Sensitive Waters Crossed by the Sabal Trail Project**

<b>State, Facility</b>	<b>Milepost</b>	<b>County</b>	<b>Waterbody Name <u>a/</u></b>	<b>Basis for Sensitivity <u>b/</u></b>	<b>Proposed Crossing Method <u>c/</u></b>
<u>Mainline</u>	248.2	Hamilton	Jumping Gully Creek	Impaired	II / III
	<b>264.1</b>		<b>Withlacoochee River</b>	<b>NRI, Impaired, Designated Critical Habitat (Gulf Sturgeon)</b>	IV
	<b>268.1</b>	<b>Madison</b>	<b>Suwannee River</b>	<b>Impaired, OFW (SP), Designated Critical Habitat (Gulf Sturgeon)</b>	IV
	<b>308.3</b>	<b>Suwannee</b>	<b>Santa Fe River</b>	<b>NRI, OFW (SP)</b>	IV
	463.9	Polk	Big Creek Reach	Impaired	I / II
	<b>458.9</b>	<b>Polk</b>	<b>UT Withlacoochee River</b>	<b>NRI</b>	II / III
	<u>Hunters Creek Line</u>	1.3	Osceola	Reedy Creek	Impaired
<b>9.2</b>			<b>Shingle Creek</b>	<b>Impaired</b>	IV
<u>Citrus County Line</u>	<b>1.3</b>	<b>Citrus/Marion</b>	<b>Withlacoochee River</b>	<b>NRI, OFW (SP)</b>	IV

a/ Features in **Bold Print** represent Section USACE Section 10 Traditional Navigable Waters.  
b/ NRI = National Rivers Inventory (NPS 2011); Impaired (see Table 2.3-7); GA High Priority Streams (GA DNR 2014); GA Protected River (GDNR 1996); OFW = Outstanding Florida Water, SP = Special Water (FAC 62-302.700). Waterbodies with fisheries of special concern in the Project area containing *potential* habitat for T&E species is included in Resource Report 3.  
c/ I = Wet Open Cut Method; II = Dry Crossing Method, including Flume or Dam and Pump, Cofferdam, or Dry Open Cut for waterbodies that are dry at the time of crossing; Method III = Conventional Bore; IV = HDD.

TABLE 2.3-7

**Impaired Surface Waters Crossed by the Sabal Trail Project**

State, Facility	County	Waterbody Name	Milepost	Cause of Impairment	Detail		
<b>Alabama</b>							
<u>Mainline</u>	Lee	Halawakee Creek	42.9	Sedimentation/ Siltation	TMDL needed		
	Russell	Ihagee Creek	79.2	Sedimentation/ Siltation	TMDL needed		
<b>Georgia</b>							
<u>Mainline</u>	Russell / Stewart	Chattahoochee River	86.4	Fecal Coliform	TMDL needed		
	Stewart	Hannahatchee Creek	91.4	Fecal Coliform	TMDL needed		
		Patula Creek	106.8	Benthic Macroinvertebrates Assessments	TMDL needed		
	Colquitt	Bridge Creek	188.6	Fecal Coliform	TMDL needed		
		Little Creek	192.4	Fecal Coliform	TMDL needed		
	Brooks	Ochlockonee River	199.3	Mercury	TMDL needed		
		Okapilco Creek	219.4	Fecal Coliform	TMDL needed		
		Withlacoochee River	231.3	Mercury	TMDL needed		
<b>Florida</b>							
<u>Mainline</u>	Hamilton	Jumping Gully Creek	248.2	Dissolved Oxygen	TMDL needed		
				Nutrients	TMDL needed		
				Turbidity	TMDL needed		
	Madison	Suwannee River	268.1	Withlacoochee River	264.1	Fish Consumption Advisory (mercury)	TMDL needed
				Nutrients	TMDL needed		
				Dissolved Oxygen	TMDL needed		
				Fish Consumption Advisory (mercury)	TMDL needed		
	Polk	Big Creek Reach	463.9	Nutrients	TMDL needed		
				Dissolved Oxygen	TMDL needed		
				Coliforms	TMDL needed		
<u>Hunters Creek Line</u>	Osceola	Reedy Creek	1.3	Dissolved Oxygen	TMDL needed		
				Nutrients	TMDL needed		
				Turbidity	TMDL needed		
	Shingle Creek	9.2	Biochemical Oxygen Demand	9.2	TMDL needed		
					Coliforms	TMDL needed	
					Dissolved Oxygen	TMDL needed	
					Nutrients	TMDL needed	
				Turbidity	TMDL needed		

TABLE 2.3-7

**Impaired Surface Waters Crossed by the Sabal Trail Project**

State, Facility	County	Waterbody Name	Milepost	Cause of Impairment	Detail
<u>Citrus County Line</u>			None Identified		

Sources: Alabama All Impaired Waters 2012 GIS Layer accessed online May 1, 2014: <http://adem.alabama.gov/programs/water/303d.cnt>; USEPA Office of Water, 303(d) Listed Impaired Waters, Feb 07, 2014, National Extract; Georgia Environmental Protection Division, Georgia's 2012 Integrated 305(b)/303(d) Report, GIS data.



TABLE 2.3-8

Public Water Supply Watershed Areas Crossed by the Sabal Trail Project

State, Segment	County	Surface Water Supply <sup>a/</sup>	Milepost Begin	Milepost End	Crossing Length (miles)	Approximate Distance/ Direction from Pipeline(miles)
<b>Alabama</b>						
<u>Mainline</u>	Chambers	Upper Halawakee Creek Watershed	35.9	40.1	4.2	surface water intakes more than 3-miles downstream from crossing
	Lee		40.1	44.9	4.8	
	Russell	Horselot Branch-Uchee Creek Watershed	67.2	72.2	5.0	surface water intakes more than 3-miles downstream from crossing
<u>MLV 5</u>	Russell			67.8	N/A	
<b>Georgia</b>						
<u>Mainline</u>			None Identified			
<b>Florida</b>						
<u>Mainline</u>			None Identified			
<u>Hunters Creek Line</u>			None Identified			
<u>Citrus County Line</u>			None Identified			
<hr/>						
<sup>a/</sup> No public water supply watersheds identified in the vicinity of the proposed aboveground facilities other than MLV 5. HUC 12 watershed.						

TABLE 2.3-9

FEMA Flood Hazard Zones Crossed by the Sabal Trail Project Pipeline Segments

State, Facility	County	Milepost Begin <u>a</u> /	Milepost End <u>a</u> /	FEMA Flood Zone
<b>Alabama</b>				
<u>Mainline</u>	Tallapoosa	0.0	0.1	AE
	Tallapoosa	1.3	1.4	A
	Tallapoosa	2.4	2.5	A
	Tallapoosa	5.1	5.1	A
	Tallapoosa	7.3	7.4	A
	Tallapoosa	10.9	11.0	A
	Tallapoosa	16.5	16.7	A
	Tallapoosa	17.8	17.8	A
	Tallapoosa	18.2	18.3	A
	Tallapoosa	20.1	20.1	A
	Chambers	32.2	32.2	A
	Chambers	33.3	33.5	A
	Chambers	33.8	33.8	A
	Chambers	37.5	37.5	A
	Lee	41.6	41.7	A
	Lee	42.8	42.9	A
	Lee	43.6	43.6	A
	Lee	44.3	44.3	A
	Lee	45.7	45.7	A
	Lee	45.8	46.0	A
	Lee	47.2	47.2	A
	Lee	50.5	50.6	A
	Lee	55.4	55.5	A
	Lee	55.9	55.9	A
	Lee	56.2	56.3	A
	Russell	65.9	66.1	A
	Russell	66.2	66.2	A
	Russell	70.2	70.3	AE FLOODWAY
	Russell	70.7	70.9	AE FLOODWAY
	Russell	67.8	67.9	A
	Russell	67.9	68.0	A
	Russell	70.6	70.7	AE
	Russell	79.1	79.2	A
	Russell	79.8	80.1	A
Russell	83.4	83.4	A	
Russell	85.1	86.4	A	

TABLE 2.3-9

FEMA Flood Hazard Zones Crossed by the Sabal Trail Project Pipeline Segments

State, Facility	County	Milepost Begin <u>a/</u>	Milepost End <u>a/</u>	FEMA Flood Zone
	Russell	73.2	73.5	A
	Russell	74.0	74.1	A
	Russell	70.9	71.0	AE
	Russell	69.7	69.7	AE
	Russell	69.9	70.2	AE
	Russell	70.3	70.3	AE
<u>Compressor Stations</u>				
Alexander City	Tallapoosa		0.0	AE
<b>Georgia</b>				
<u>Mainline</u>				
	Stewart	86.4	86.6	A
	Stewart	86.8	86.8	A
	Stewart	87.1	87.1	A
	Stewart	88.4	88.4	A
	Stewart	88.5	88.5	A
	Stewart	90.2	90.3	A
	Stewart	91.0	91.0	A
	Stewart	91.1	91.5	A
	Stewart	93.1	93.1	A
	Stewart	93.5	93.6	A
	Stewart	93.9	94.0	A
	Stewart	94.5	94.5	A
	Stewart	95.2	95.3	A
	Stewart	95.9	96.1	A
	Stewart	96.8	96.8	A
	Stewart	98.0	98.1	A
	Stewart	102.2	102.2	A
	Stewart	106.8	106.9	A
	Webster	114.0	114.1	A
	Terrell	128.4	128.6	A
	Lee	141.7	141.7	A
	Dougherty	149.1	149.2	A
	Dougherty	151.7	152.2	AE
	Dougherty	152.2	152.3	AE FLOODWAY
	Dougherty	152.3	152.5	AE
	Dougherty	155.1	155.1	AE
	Dougherty	155.1	155.2	AE
	Dougherty	155.2	155.6	AE FLOODWAY

TABLE 2.3-9

FEMA Flood Hazard Zones Crossed by the Sabal Trail Project Pipeline Segments

State, Facility	County	Milepost Begin <u>a/</u>	Milepost End <u>a/</u>	FEMA Flood Zone
	Dougherty	155.6	155.6	AE
	Dougherty	156.0	156.0	AE
	Dougherty	162.1	162.2	AE
	Dougherty	162.3	162.5	AE
	Dougherty	162.6	162.8	AE
	Dougherty	162.8	163.3	AE FLOODWAY
	Dougherty	163.3	163.6	AE
	Dougherty	168.3	168.4	AE
	Dougherty	168.4	168.5	AE FLOODWAY
	Dougherty	169.5	169.8	A
	Mitchell	169.8	169.9	A
	Mitchell	172.5	172.8	A
	Mitchell	177.9	178.1	A
	Colquitt	187.7	187.7	A
	Colquitt	188.5	188.8	A
	Colquitt	192.2	192.4	A
	Colquitt	192.6	192.6	A
	Colquitt	196.3	196.4	A
	Colquitt	197.5	197.6	A
	Colquitt	199.0	199.4	A
	Colquitt	203.2	203.4	A
	Colquitt	205.9	206.9	A
	Colquitt	208.0	208.5	A
	Brooks	215.3	215.3	A
	Brooks	215.9	216.2	A
	Brooks	217.5	217.7	A
	Brooks	218.7	219.4	A
	Brooks	220.4	220.4	A
	Brooks	221.2	221.5	A
	Brooks	231.3	231.3	AE
	Brooks	231.3	231.3	AE FLOODWAY
	Lowndes	231.3	231.5	AE FLOODWAY
	Lowndes	231.5	231.5	AE
	Lowndes	231.5	231.8	AE FLOODWAY
	Lowndes	231.8	231.9	A
	Lowndes	232.6	232.7	A

TABLE 2.3-9

FEMA Flood Hazard Zones Crossed by the Sabal Trail Project Pipeline Segments

State, Facility	County	Milepost Begin <u>a/</u>	Milepost End <u>a/</u>	FEMA Flood Zone
<b>Florida</b>				
<u>Mainline</u>	Hamilton	247.9	248.3	AE
	Hamilton	248.8	248.9	AE
	Hamilton	249.1	249.5	AE
	Hamilton	249.5	249.7	AE FLOODWAY
	Hamilton	249.7	250.0	AE
	Hamilton	252.7	252.8	A
	Hamilton	255.0	255.2	A
	Hamilton	260.1	260.1	A
	Hamilton	261.4	261.4	AE
	Hamilton	261.7	262.4	AE
	Hamilton	262.4	264.1	AE FLOODWAY
	Madison	264.1	264.2	AE FLOODWAY
	Madison	264.2	264.2	AE
	Madison	265.1	266.4	AE
	Madison	266.4	268.1	AE FLOODWAY
	Suwannee	268.1	268.4	AE FLOODWAY
	Suwannee	268.4	268.5	AE
	Suwannee	268.7	268.7	AE
	Suwannee	282.1	282.2	A
	Suwannee	282.6	282.6	A
	Suwannee	286.7	287.1	A
	Suwannee	293.8	293.9	A
	Suwannee	308.1	308.2	AE
	Suwannee	308.2	308.3	AE FLOODWAY
	Gilchrist	308.3	308.5	AE FLOODWAY
	Gilchrist	308.5	308.7	AE
	Gilchrist	318.7	319.0	A
	Gilchrist	319.2	319.3	A
	Gilchrist	319.5	319.6	A
	Gilchrist	319.6	319.7	A
	Gilchrist	319.7	319.8	A
	Gilchrist	320.0	320.3	A
	Gilchrist	320.6	320.7	A
Gilchrist	320.7	320.8	A	
Gilchrist	320.9	321.0	A	

TABLE 2.3-9

FEMA Flood Hazard Zones Crossed by the Sabal Trail Project Pipeline Segments

State, Facility	County	Milepost Begin <u>a/</u>	Milepost End <u>a/</u>	FEMA Flood Zone
	Gilchrist	321.1	321.2	A
	Gilchrist	321.2	321.3	A
	Gilchrist	321.5	321.5	A
	Gilchrist	321.6	321.8	A
	Gilchrist	322.0	322.3	A
	Gilchrist	322.4	322.7	A
	Gilchrist	322.9	322.9	A
	Gilchrist	322.9	323.2	A
	Gilchrist	324.4	324.5	A
	Levy	341.4	341.6	A
	Levy	341.6	341.6	A
	Levy	341.8	341.8	A
	Levy	342.0	342.3	A
	Levy	342.4	342.4	A
	Levy	342.7	342.8	A
	Levy	342.9	343.2	A
	Levy	343.2	343.3	A
	Levy	343.3	343.5	A
	Levy	343.6	343.7	A
	Levy	343.7	343.7	A
	Levy	343.7	343.8	A
	Levy	343.8	343.8	A
	Levy	343.8	344.0	A
	Levy	344.5	344.6	A
	Levy	344.7	344.7	A
	Levy	344.8	345.0	A
	Levy	345.1	345.1	A
	Levy	345.2	345.4	A
	Levy	345.4	345.6	A
	Levy	345.6	345.6	A
	Levy	345.7	345.8	A
	Levy	345.9	346.0	A
	Levy	346.0	346.0	A
	Levy	346.0	346.1	A
	Levy	346.1	346.1	A
	Levy	346.3	346.3	A
	Levy	346.4	346.4	A



TABLE 2.3-9

FEMA Flood Hazard Zones Crossed by the Sabal Trail Project Pipeline Segments

State, Facility	County	Milepost Begin <u>a/</u>	Milepost End <u>a/</u>	FEMA Flood Zone
	Levy	346.8	346.8	A
	Levy	346.8	346.9	A
	Levy	346.9	346.9	A
	Levy	347.0	347.1	A
	Levy	347.1	347.2	A
	Levy	347.6	347.7	A
	Levy	347.8	347.9	A
	Levy	347.9	348.0	A
	Levy	348.1	348.1	A
	Levy	348.4	348.5	A
	Levy	348.5	348.5	A
	Levy	348.6	348.6	A
	Levy	348.6	348.6	A
	Levy	348.6	348.6	A
	Levy	348.7	348.7	A
	Levy	348.7	348.7	A
	Levy	348.7	348.8	A
	Levy	348.9	349.0	A
	Levy	349.0	349.0	A
	Levy	349.1	349.2	A
	Levy	349.2	349.4	A
	Levy	349.4	349.4	A
	Levy	349.4	349.4	A
	Levy	349.4	349.5	A
	Levy	349.5	349.5	A
	Levy	349.6	349.6	A
	Levy	349.6	349.9	A
	Levy	350.2	350.7	A
	Levy	350.8	351.3	A
	Levy	351.8	352.0	A
	Levy	352.0	352.0	A
	Levy	352.0	352.1	A
	Levy	352.3	352.4	A
	Levy	352.5	352.5	A
	Levy	354.1	354.3	A
	Marion	371.6	371.7	A
	Marion	372.1	372.2	A

TABLE 2.3-9

FEMA Flood Hazard Zones Crossed by the Sabal Trail Project Pipeline Segments

State, Facility	County	Milepost Begin <u>a/</u>	Milepost End <u>a/</u>	FEMA Flood Zone
	Marion	382.7	388.1	A
	Marion	388.1	388.1	AE
	Marion	388.4	388.6	AE
	Marion	388.6	390.1	A
	Marion	393.6	393.7	A
	Marion	394.1	394.7	A
	Marion	395.0	395.1	A
	Marion	395.3	395.8	A
	Marion	396.5	396.6	A
	Marion	396.8	397.1	A
	Marion	397.1	397.2	A
	Marion	398.0	398.0	A
	Marion	398.2	398.3	A
	Marion	398.9	398.9	A
	Sumter	399.5	399.8	A
	Sumter	399.9	400.2	A
	Sumter	407.9	408.1	A
	Sumter	408.2	408.5	A
	Sumter	408.7	408.8	A
	Sumter	409.0	409.4	A
	Sumter	409.5	409.5	A
	Sumter	409.6	409.7	A
	Sumter	409.9	410.0	A
	Sumter	410.2	410.5	A
	Sumter	410.9	411.0	A
	Sumter	411.2	412.5	A
	Sumter	412.5	413.0	A
	Sumter	413.0	413.4	A
	Sumter	413.9	414.1	A
	Sumter	414.2	414.3	A
	Sumter	414.3	414.4	A
	Sumter	414.8	414.8	A
	Sumter	414.9	415.0	A
	Sumter	415.4	415.4	A
	Sumter	415.5	415.6	A
	Sumter	415.8	415.9	A
	Sumter	416.0	416.1	A

TABLE 2.3-9

FEMA Flood Hazard Zones Crossed by the Sabal Trail Project Pipeline Segments

State, Facility	County	Milepost Begin <u>a/</u>	Milepost End <u>a/</u>	FEMA Flood Zone
	Sumter	416.3	416.4	A
	Sumter	416.4	416.4	A
	Sumter	417.3	417.7	AE
	Sumter	421.3	421.4	A
	Sumter	421.8	421.9	A
	Sumter	422.0	422.1	A
	Sumter	422.1	422.3	A
	Sumter	422.5	422.6	A
	Sumter	422.8	422.8	A
	Sumter	422.8	422.9	A
	Sumter	423.1	423.2	A
	Sumter	423.7	423.9	A
	Sumter	423.9	423.9	A
	Sumter	424.0	424.0	A
	Sumter	424.4	424.9	A
	Sumter	425.0	425.6	A
	Sumter	427.1	428.3	A
	Sumter	428.5	428.7	A
	Sumter	428.8	429.2	A
	Sumter	429.4	429.4	A
	Sumter	429.6	430.1	A
	Sumter	430.3	431.3	A
	Sumter	431.7	435.2	A
	Sumter	435.4	435.7	A
	Sumter	435.8	435.8	A
	Lake	430.1	430.2	A
	Lake	435.9	436.4	A
	Lake	436.4	436.6	A
	Lake	437.0	437.2	A
	Lake	437.4	437.6	A
	Lake	437.8	437.9	A
	Lake	438.3	438.4	A
	Lake	438.5	438.7	A
	Lake	438.8	439.0	A
	Lake	439.1	439.2	A
	Lake	439.3	439.3	A
	Lake	439.3	439.8	A

TABLE 2.3-9

FEMA Flood Hazard Zones Crossed by the Sabal Trail Project Pipeline Segments

State, Facility	County	Milepost Begin <u>a</u> /	Milepost End <u>a</u> /	FEMA Flood Zone
	Lake	439.9	441.1	A
	Lake	441.8	441.9	A
	Lake	442.1	442.3	A
	Lake	444.0	444.1	A
	Lake	444.9	445.4	A
	Lake	445.6	445.7	A
	Lake	445.8	445.9	A
	Lake	446.0	446.1	A
	Lake	446.2	446.2	A
	Lake	446.4	446.5	A
	Lake	446.9	449.7	A
	Lake	450.1	450.7	A
	Lake	451.0	451.1	A
	Lake	451.1	451.6	A
	Lake	452.7	453.6	A
	Lake	453.7	454.0	A
	Lake	454.1	454.3	A
	Lake	455.2	456.0	A
	Lake	456.2	456.2	A
	Lake	456.6	457.6	A
	Polk	457.6	457.8	A
	Polk	457.8	457.8	A
	Polk	457.9	458.6	A
	Polk	458.6	460.5	A
	Polk	460.8	460.8	A
	Polk	460.9	462.1	A
	Polk	462.4	463.5	A
	Polk	463.6	464.0	A
	Osceola	467.3	467.4	A
	Osceola	467.8	469.8	AE
	Osceola	470.4	470.5	A
	Osceola	472.1	472.1	AE
	Osceola	472.1	472.2	AE FLOODWAY
	Osceola	472.2	472.3	A
	Osceola	472.5	472.7	A
	Osceola	472.8	473.0	A
	Osceola	473.6	473.8	A

TABLE 2.3-9

FEMA Flood Hazard Zones Crossed by the Sabal Trail Project Pipeline Segments

State, Facility	County	Milepost Begin <u>a/</u>	Milepost End <u>a/</u>	FEMA Flood Zone
<u>Citrus County Line</u>	Osceola	473.8	473.9	A
	Osceola	473.9	474.2	A
	Marion	0.0	0.2	A
	Marion	1.0	1.1	AE
	Marion	1.1	1.3	AE FLOODWAY
	Citrus	1.3	2.0	AE
	Citrus	2.2	2.5	AE
	Citrus	2.5	2.7	AE
	Citrus	2.7	2.9	AE
	Citrus	3.5	3.6	AE
	Citrus	14.7	14.8	A
	Citrus	16.4	16.4	A
	Citrus	16.6	16.7	A
	Citrus	16.8	17.0	A
	Citrus	17.5	17.5	A
<u>Hunters Creek Line</u>	Citrus	20.3	21.4	AE
	Osceola	0.6	0.6	A
	Osceola	1.1	1.3	A
	Osceola	1.7	1.9	A
	Osceola	1.9	3.2	A
	Osceola	3.2	5.2	AE
	Osceola	5.2	5.8	AE FLOODWAY
	Osceola	5.8	6.0	AE
	Osceola	8.1	9.0	AE
	Osceola	9.0	9.3	AE FLOODWAY
Osceola	9.3	9.4	AE	
Osceola	9.4	9.4	AE	
<u>Compressor Stations</u>				
Dunnellon	Marion	389.8		A
<u>Meter Stations</u>				
DEF Citrus County (Citrus County Line)	Citrus	21.4		AE

Source: Citrus and Polk Counties: FEMA. 2000. Q3 data. All other counties: FEMA. 2013. DFIRM data.  
a/ Approximate MP along the proposed pipeline rounded to the nearest hundredth.

TABLE 2.3-10

Potential Hydrostatic Testing Water Sources for the Sabal Trail Project Pipeline Segments

State, Facility	Estimated Volume Uptake (gallons)	Potential Source(s)	Approximate Withdrawal Milepost	Withdrawal Watershed (HUC 8)	Approximate Discharge Milepost	Discharge Watershed (HUC 8)	Maximum Discharge Rate (gallons per minute)	Comment
<b>Alabama</b>								
<u>Mainline</u>	1,075,000	Oaktassasi Creek	0.1	Middle Tallapoosa (03150109)	4.1	Middle Tallapoosa (03150109)	9,000	Spread 1. Discharge 1,075,000 gal.
	6,100,000	Tallapoosa River	7.4	Middle Tallapoosa (03150109)	28.2	Middle Tallapoosa (03150109)	9,000	Spread 1. Discharge 252,000 gal. of quantity taken from Tallapoosa River
	N/A	N/A	N/A	N/A	47.7	Middle Chattahoochee -Lake Harding (03130002)	9,000	Spread 1. Discharge 5,148,000 gal. of quantity taken from Tallapoosa River
	N/A	N/A	N/A	N/A	50.2	Middle Chattahoochee -Walter F (03130003)	9,000	Spread 1. Discharge 700,000 gal. of quantity taken from Tallapoosa River
	6,875,000	Uchee Creek	71.0	Middle Chattahoochee -Walter F (03130003)	63.6	Middle Chattahoochee -Walter F (03130003)	9,000	Spread 1. Discharge 3,510,000 gal. of quantity taken from Uchee Creek
	N/A	N/A	N/A	N/A	75.4	Middle Chattahoochee -Walter F (03130003)	9,000	Spread 1. Discharge 415,000 gal. of quantity taken from Uchee Creek
	N/A	N/A	N/A	N/A	77.9	Middle Chattahoochee -Walter F (03130003)	9,000	Spread 1. Discharge 2,950,000 gal. of quantity taken from Uchee Creek



TABLE 2.3-10

Potential Hydrostatic Testing Water Sources for the Sabal Trail Project Pipeline Segments

State, Facility	Estimated Volume Uptake (gallons)	Potential Source(s)	Approximate Withdrawal Milepost	Withdrawal Watershed (HUC 8)	Approximate Discharge Milepost	Discharge Watershed (HUC 8)	Maximum Discharge Rate (gallons per minute)	Comment
<b>Georgia</b>								
<u>Mainline</u>	8,025,000	Chattahoochee River	86.6	Middle Chattahoochee -Walter F (03130003)	176.3	Lower Flint (03130008)	9,000	Spread 2. Discharge 8,025,000 gal.
	7,450,000	Private pond NE of ROW	204.4	Withlacoochee (03110203)	231.2	Withlacoochee (03110203)	9,000	Spread 3. Discharge 7,450,000 gal.
	7,350,000	Withlacoochee River (Georgia)	231.2	Withlacoochee (03110203)	259.0	Withlacoochee (03110203)	9,000	Spread 3. Discharge 7,350,000 gal.
	7,600,000	Water Well at CS5	296.3	Lower Suwannee (03110205)	324.2	Santa Fe (03110206)	9,000	Spread 4. Discharge 7,600,000 gal.
	7,650,000	Water Well at Spread Break 4/5	353.1	Waccasassa (03110101)	324.2	Santa Fe (03110206)	9,000	Spread 4. Discharge 7,650,000 gal.
<b>Florida</b>								
<u>Mainline</u>	9,710,000	Withlacoochee River via the CCL pipeline uptake at CCL crossing	CCL 1.05	Withlacoochee (03100208)	409.5	Withlacoochee (03100208)	9,000	Spread 5. Discharge 9,710,000 gal.
	7,200,000	Private pond	409.5	Withlacoochee (03100208)	436.8	Withlacoochee (03100208)	9,000	Spread 6. Discharge 150,000 gal.
	N/A	N/A	N/A	N/A	463.5	Oklawaha (03080102)	9,000	Spread 6. Discharge 4,175,000 gal.
	N/A	N/A	N/A	N/A	463.5	Oklawaha (03080102)	9,000	Spread 6. Discharge 2,875,000 gal.

TABLE 2.3-10

Potential Hydrostatic Testing Water Sources for the Sabal Trail Project Pipeline Segments

State, Facility	Estimated Volume Uptake (gallons)	Potential Source(s)	Approximate Withdrawal Milepost	Withdrawal Watershed (HUC 8)	Approximate Discharge Milepost	Discharge Watershed (HUC 8)	Maximum Discharge Rate (gallons per minute)	Comment
<u>Hunters Creek Line</u>	1,675,000	Private pond S of ROW	6.3	Kissimmee (03090101)	6.3	Kissimmee (03090101)	9,000	HCL. Discharge 1,675,000 gal.
<u>Citrus County Line</u>	2,510,000	Withlacoochee River	1.1	Withlacoochee (03100208)	1.1	Withlacoochee (03100208)	4,000	Spread 5 CCL Line. Discharge 2,510,000 gal.
<b>Project Total</b>	<b>73,220,000</b>							

N/A = Not Applicable

TABLE 2.3-11

Estimated Water Usage for the Sabal Trail Project HDD's

HDD	MP (Ending) of the HDD	Maximum Estimated Volume (gallons)		Water Source
		Hydrostatic Test Water	HDD Operations	
<b>Alabama</b>				
<u>Mainline</u>				
Hillabee Creek	1.7	140,000	1,050,000	Hillabee Creek MP 1.35
Cowpens Road, St Hwy 22	2.6	130,000	975,000	Hillabee Creek MP 1.35
Tallapoosa River	7.6	195,000	1,400,000	Tallapoosa River MP 7.38
Uchee Creek	71.0	90,000	750,000	Uchee Creek MP 70.88
Chattahoochee River	86.6	100,000	650,000	Chattahoochee River MP 86.39
<b>Georgia</b>				
<u>Mainline</u>				
Hannahatchee Creek	91.5	80,000	625,000	Hannahatchee Creek MP 91.23
Flint River	163.5	200,000	2,375,000	Flint River MP 163.18
Ochlockonee River	199.5	90,000	875,000	City of Moultrie, Georgia
St Hwy 38 & Withlacoochee River I	231.9	200,000	1,925,000	Withlacoochee River MP 231.6
<b>Florida</b>				
<u>Mainline</u>				
Withlacoochee River II	264.3	135,000	1,275,000	Withlacoochee River MP 264.09
Suwannee River	267.6	84,000	2,000,000	City of Live Oak, Florida
Santa Fe River	308.7	125,000	1,200,000	Santa Fe River 308.43
US Highway 27	464.9	100,000	750,000	Private Pond at FL-OS-002.005
Toll Road 429	470.1	110,000	850,000	Private Pond at FL-OS-002.005
Interstate 4	471.7	145,000	1,100,000	Private Pond at FL-OS-002.005
<u>Hunters Creek Line</u>				
Shingle Creek	9.6	165,000	1,300,000	Private Pond MP 6.3
Deerfield Development	12.8	100,000	775,000	Private Pond or local municipal water source
<u>Citrus County Line</u>				
Withlacoochee River III	1.1	75,000	475,000	Withlacoochee River MP 1.28

TABLE 2.3-12

Potential Sources of Hydrostatic Testwater for the Sabal Trail Project Aboveground Facilities

Facility	Estimated Volume (gallons) <sup>a/</sup>	Potential Source(s)	Approximate Withdrawal Milepost	Discharge Location <sup>b/</sup>
<b>Compressor Stations</b>				
<u>Alexander City</u>	111,300	City Water	N/A	0.0
<u>Albany</u>	16,200	City Water	N/A	159.3
<u>Hildreth</u>	78,300	Water Well	N/A	296.3
<u>Dunnellon</u>	140,600	City Water	N/A	389.8
<u>Reunion (Hunter's Creek Line)</u>	148,300	Private Pond	0.3	474.4
<b>Meter Stations</b>				
<u>Transco Hillabee</u>	46,400	City Water	N/A	0.0
<u>FGT Suwannee</u>	60,000	City Water	N/A	299.7
<u>FSC</u>	17,900	City Water	N/A	474.4
<u>Gulfstream (Hunters Creek Line)</u>	15,500	City Water	N/A	474.4
<u>FGT Hunters Creek (Hunter's Creek Line)</u>	38,600	City Water	N/A	13.1
<u>DEF Citrus County (Citrus County Line)</u>	8,400	City Water	N/A	21.4
	681,500	<b>Aboveground Facilities Total</b>		

<sup>a/</sup> Volumes for Meter Stations do not include skid piping. This piping is tested by the fabrication shop, and retesting at job site is not recommended.

<sup>b/</sup> Location of hydrostatic discharge to be determined based on consultation with the applicable state land use regulation permitting agencies.

TABLE 2.3-13

Refueling and equipment parking locations in or within 100 feet of wetlands for the Sabal Trail Project.

State, Facility	Milepost	Comments	Wetland ID(s)	Type
<b>Alabama</b>				
		None Identified		
<b>Georgia</b>				
<u>Mainline</u>	131.5	ATWS for move around	W2TRC106	PFO
	144.1	ATWS at road crossing	W2TRC152	PFO
	153.4	ATWS at road crossing	W2TRC160	PFO
	153.5	ATWS at road crossing	W5TRC017	PFO
	168.3	ATWS at road crossing	W2TRC351	PFO
	182.7	ATWS at road crossing	W7TRC031 W3TRC214	PFO PFO
	195.5	ATWS at road crossing	W3TRC231 W3TRC233	PEM PFO

TABLE 2.3-13

Refueling and equipment parking locations in or within 100 feet of wetlands for the Sabal Trail Project.

State, Facility	Milepost	Comments	Wetland ID(s)	Type
	206.7	ATWS at road crossing	W7TRC002	PFO
	211.8	ATWS at road crossing	W3TRC206	PFO
	223.9	ATWS for railroad crossing	W3TRC060	PFO
	232.0	HDD staging area	W3TRC275	PFO
<b>Florida</b>				
<u>Mainline</u>	308.2	HDD staging area	W2ECT105	PFO
	322.4	Access road staging area	W1ECT104	PFO
	346.3	ATWS for Highway bore	W9ECT037A W4CAR042	PFO PFO
	346.8	ATWS for Highway bore	W11CAR024	PFO
	348.2	ATWS for Highway bore	W9ECT042 W9ECT041 W11CAR040	PEM PFO PEM
	412.1	ATWS outside long wetland	W8ECT194	PFO
	412.2	ATWS outside long wetland	W8ECT195	PFO
	413.0	ATWS at Tollway bore and move around staging area	W8ECT195	PFO
	432.5	ATWS for Highway bore	W6CAR179	PEM
	435.1	ATWS for Highway bore and wetland staging area	W4CAR175	PFO
	437.3	ATWS for Highway bore and wetland staging area	W7CAR027	PEM
	440.0	ATWS for wetland	W6CAR149 W6CAR150 W6CAR151	PFO PEM PEM
	445.0	ATWS for wetland	W7CAR083	PFO
	445.7	ATWS for wetland	W7CAR086 W7CAR085	PFO PEM
	447.4	ATWS for wetland	W7CAR041 W7CAR040	PEM PFO
	447.5	ATWS for wetland	W7CAR041 W7CAR043 W7CAR044	PEM PFO PEM
	447.9	ATWS for wetland	W7CAR047 W7CAR046	PEM PFO
	449.1	TAR staging area for wetland	W7CAR057 W7CAR056 W7CAR060	PEM PFO PFO
	449.3	ATWS for wetland	W7CAR062 W7CAR061	PEM PFO
	451.1	TAR staging area for wetland	W7CAR068 W7CAR072	PFO PFO
	452.9	ATWS for wetland	W7CAR099 W7CAR098	PEM PFO
	453.4	ATWS for Highway bore and wetland staging area	W7CAR103 W7CAR107	PFO PFO

TABLE 2.3-13

Refueling and equipment parking locations in or within 100 feet of wetlands for the Sabal Trail Project.

State, Facility	Milepost	Comments	Wetland ID(s)	Type
	458.8	ATWS for wetland	W9ECT260	PFO
	459.6	ATWS for wetland	W9ECT260	PFO
	462.8	TWS outside wetland	W9CAR088 W9CAR087	PFO PFO
	468.6	ATWS for wetland	W6CAR105	PFO
	469.6	HDD staging area	W6CAR105	PFO
	471.1	ATWS for Highway bore and wetland staging area	W9ECT232	PFO
<u>Hunters Creek Line</u>	0.7	ATWS between railroad and above ground pipeline	W2ECT069	PFO
	0.8	ATWS for railroad crossing	W2ECT070	PFO
	4.2	ATWS for wetland	W13CAR027	PFO
	7.5	ATWS for Highway bore and wetland staging area	W13CAR046	PFO
	8.1	ATWS for road bore and wetland staging area	W13CAR046	PFO
	8.2	ATWS for road bore and wetland staging area	W13CAR048	PFO
	9.1	HDD staging area	W13CAR064	PFO
	11.4	ATWS for Highway bore and wetland staging area	W7CAR136	PFO
	11.5	ATWS for Highway bore and wetland staging area	W7CAR137	PFO
	12.3	ATWS for Highway bore and wetland staging area	W7CAR143	PFO
	12.5	HDD staging area	W7CAR143	PFO
	12.9	HDD staging area	W7CAR148 W6CAR217	PEM PSS
<u>Citrus County Line</u>	1.1	HDD staging area	W13CAR092	PFO
	1.6	HDD staging area	W13CAR095	PEM
	1.6	ATWS for wetland	W13CAR095	PEM



TABLE 2.3-14

ATWS within 50 feet of Waterbodies for the Sabal Trail Project Pipeline Facilities

State, Facility	Waterbody ID	Milepost	ATWS Milepost	ATWS Size (Acres)	Distance from Resource Area (Feet)	ATWS Justification <u>a/</u>
<b>Alabama</b>						
<u>Mainline</u>	S1TRC018, S1TRC392, S1TRC389, S1TRC390	0.09, 0, 0, 0	0.0	16.04	34, 0, 0, 0	Station ATWS
	S1TRC398, S1TRC399	0.04, 0.04	0.0	19.78	5, 14	Waterbody Crossing & Staging Area
	S1TRC216	1.36	1.3	0.19	0	Staging Area
	S1TRC216	1.36	1.4	0.29	0	Staging Area
	S4TRC067, S4TRC068, S4TRC069, S4TRC070	1.86, 1.91, 1.98, 2.11	2.0	1.87	15, 0, 0, 47	HDD Pullback
	S4TRC070, S4TRC071, S4TRC072	2.11, 2.13, 2.15	2.1	3.10	0, 0, 0	Ephemeral Stream, HDD Site & Staging Area
	S1TRC502	2.65	2.7	2.58	0	Ephemeral Stream, HDD Site & Staging Area
	S1TRC365	3.36	3.3	1.05	0	Ephemeral Stream, Slope
	S1TRC365	3.36	3.3	0.41	0	Ephemeral Stream, Slope
	S1TRC044	6.75	6.8	0.11	11	Waterbody Crossing
	S1TRC046	7.32	7.3	0.29	9	Staging Area
	S1TRC048, S1TRC050	7.4, 7.44	7.4	0.24	0, 0	Staging Area
	S1TRC050, S1TRC054	7.44, 7.63	7.6	0.78	0, 0	Access
	S1TRC055	7.78	7.9	2.53	48	Slope
	S1TRC067	10.74	10.6	0.22	0	Ephemeral Stream, Road Crossing
	S1TRC075	11.68	11.7	1.72	0	Slope
	S1TRC321	14.04	14.0	0.64	37	Ephemeral Stream, Slope
	S1TRC080	15.76	15.7	0.23	45	Ephemeral Stream, Waterbody Crossing
S1TRC079	15.77	15.8	0.08	48	Ephemeral Stream, Waterbody & Wetland Crossing & P.I.	
S1TRC113	24.17	24.2	0.11	29	Ephemeral Stream, Waterbody Crossing	

TABLE 2.3-14

ATWS within 50 feet of Waterbodies for the Sabal Trail Project Pipeline Facilities

State, Facility	Waterbody ID	Milepost	ATWS Milepost	ATWS Size (Acres)	Distance from Resource Area (Feet)	ATWS Justification <u>a/</u>
	S1TRC113	24.17	24.2	0.23	30	Ephemeral Stream, Waterbody Crossing
	S1TRC307	25.79	25.8	0.63	0	Waterbody Crossing & Crossover
	S1TRC307	25.79	25.8	0.54	34	Waterbody Crossing & Crossover
	S1TRC120	26.56	26.6	0.23	0	Ephemeral Stream, Waterbody Crossing
	WB1TRC123	27.76	27.8	0.34	43	Road & Waterbody Crossing
	WB1TRC123	27.76	27.8	0.10	42	Road & Waterbody Crossing
	S1TRC149	29.4	29.4	0.23	32	Ephemeral Stream, Waterbody Crossing
	S2TRC235	30.42	30.2	1.24	0	Ephemeral Stream, Slope
	S2TRC235	30.42	30.5	0.21	0	Ephemeral Stream, Waterbody Crossing & P.I.
	S1TRC136	31.75	31.7	0.46	0	Ephemeral Stream, Waterbody Crossing
	S1TRC136	31.75	31.8	0.13	0	Ephemeral Stream, Waterbody Crossing
	S1TRC507, S1TRC508	35.27, 35.23	35.3	0.26	3, 0	Railroad Crossing
	S1TRC507, S1TRC508	35.27, 35.23	35.3	0.07	45, 0	Railroad Crossing
	S4TRC012	38.93	38.9	0.14	0	Railroad Crossing
	S4TRC012	38.93	38.9	0.22	39	Railroad Crossing
	S4TRC012	38.93	39.0	0.14	37	Railroad Crossing
	S1TRC160	42.81	42.8	0.23	0	Ephemeral Stream, Waterbody Crossing
	S4TRC025	44.07	44.0	0.10	21	Ephemeral Stream, P.I.
	S4TRC025	44.07	44.0	0.26	19	Ephemeral Stream, P.I.
	S4TRC023	44.69	44.7	0.40	0	Crossover
	S4TRC023	44.69	44.7	0.52	0	Crossover
	S4TRC026	46.36	46.3	0.23	13	Ephemeral Stream, Road Crossing
	S4TRC027	46.37	46.4	0.25	18	Ephemeral Stream, Waterbody & Wetland Crossing

TABLE 2.3-14

ATWS within 50 feet of Waterbodies for the Sabal Trail Project Pipeline Facilities

State, Facility	Waterbody ID	Milepost	ATWS Milepost	ATWS Size (Acres)	Distance from Resource Area (Feet)	ATWS Justification <u>a/</u>
	S4TRC026, S4TRC027	46.36, 46.37	46.4	0.11	47, 43	Ephemeral Stream, Waterbody Crossing
	S4TRC034	47.22	47.2	0.23	43	Ephemeral Stream, Waterbody Crossing
	S4TRC034	47.22	47.2	0.12	17	Ephemeral Stream, Waterbody Crossing
	S4TRC038	48.42	48.4	0.11	37	Ephemeral Stream, Waterbody Crossing
	S4TRC038	48.42	48.5	0.23	38	Ephemeral Stream, Waterbody Crossing
	S1TRC484	52.61	52.6	0.15	0	Road Crossing
	S1TRC484	52.61	52.6	0.12	0	Road Crossing
	S1TRC293	53.56	53.6	0.07	0	Cathodic Protection Ground Bed
	S1TRC178	55.69	55.7	0.05	45	Ephemeral Stream, P.I.
	SNHD-05629	56.25	56.2	0.24	0	NHD Data, Road Crossing
	SNHD-05629, SNHD-05635	56.25, 56.27	56.2	0.11	0, 0	NHD Data, Road Crossing
	SNHD-05635	56.27	56.3	0.08	17	NHD Data, P.I.
	SNHD-05709	57.01	57.0	0.07	0	NHD Data, Road Crossing
	SNHD-05709	57.01	57.0	0.25	0	NHD Data, Road Crossing
	SNHD-05709	57.01	57.1	0.21	0	NHD Data, Road Crossing
	S1TRC184, S1TRC434	57.86, 57.89	57.9	0.11	46, 0	Road Crossing
	S1TRC210	66.74	66.7	0.18	4	Ephemeral Stream, Road & Waterbody Crossing
	S4TRC064, S4TRC065, S4TRC066	67.82, 67.82, 67.8	67.8	0.34	0, 26, 0	Road, Waterbody Crossing & Mainline Valve
	S4TRC064	67.82	67.9	0.14	26	Road & Waterbody Crossing
	S4TRC064	67.82	67.9	0.07	0	Road & Waterbody Crossing
	S1TRC219	70.95	70.9	0.17	0	HDD Site
	S1TRC219	70.95	70.9	1.01	0	HDD Site

TABLE 2.3-14

ATWS within 50 feet of Waterbodies for the Sabal Trail Project Pipeline Facilities

State, Facility	Waterbody ID	Milepost	ATWS Milepost	ATWS Size (Acres)	Distance from Resource Area (Feet)	ATWS Justification <u>a/</u>
	S1TRC220	71.22	71.2	0.63	0	Ephemeral Stream, Slope
	S1TRC270	79.18	79.2	0.07	41	Waterbody Crossing
	S1TRC286	81.3	81.3	0.23	20	Ephemeral Stream, Waterbody Crossing
	S1TRC287	82.1	82.1	0.26	42	Ephemeral Stream, Waterbody Crossing
	S1TRC288	82.38	82.3	0.23	37	Ephemeral Stream, Waterbody Crossing
	S1TRC291	83.41	83.4	0.33	0	Ephemeral Stream, Road Crossing
	S5TRC006	86.38	86.2	1.22	37	Access
	S5TRC006	86.38	86.3	0.20	0	Staging Area
<b>Georgia</b>						
<u>Mainline</u>	S5TRC006	86.38	86.4	0.22	0	Staging Area
	S5TRC007	86.45	86.5	1.03	0	Access
	S2TRC328	86.66	86.8	0.20	26	Ephemeral Stream, Slope
	S1TRC014, WB2TRC007	90.97, 90.84	90.9	0.76	0, 10	HDD Pullback
	WB1TRC007	91.18	91.2	1.42	3	HDD Site
	S1TRC005	91.36	91.3	0.45	16	Access
	S1TRC005	91.36	91.4	0.37	0	Access
	S2TRC005	92.09	92.1	0.23	0	Ephemeral Stream, Rock
	S2TRC005	92.09	92.1	0.49	0	Ephemeral Stream, Rock
	S2TRC029	93.96	94.0	0.58	0	Crossover
	S2TRC030	94.48	94.5	0.89	0	Ephemeral Stream, Rock
	S2TRC030	94.48	94.5	0.07	0	Ephemeral Stream, P.I.
	S2TRC030	94.48	94.6	0.15	40	Ephemeral Stream, Rock
	S2TRC138	95.18	95.0	1.02	0	Ephemeral Stream, Rock

TABLE 2.3-14

ATWS within 50 feet of Waterbodies for the Sabal Trail Project Pipeline Facilities

State, Facility	Waterbody ID	Milepost	ATWS Milepost	ATWS Size (Acres)	Distance from Resource Area (Feet)	ATWS Justification <u>a/</u>
	S2TRC138	95.18	95.1	0.29	10	Ephemeral Stream, Rock
	S2TRC138	95.18	95.2	0.20	0	Ephemeral Stream, Waterbody Crossing
	S2TRC012	96.55	96.5	0.32	22	Ephemeral Stream, Rock
	S2TRC012	96.55	96.5	0.68	0	Ephemeral Stream, Slope
	S2TRC023	97.98	98.0	0.03	42	Railroad & Waterbody Crossing
	S2TRC023	97.98	98.0	0.04	23	Waterbody & Wetland Crossing & Slope
	S2TRC023	97.98	98.0	0.22	23	Waterbody Crossing
	S2TRC141	99.23	99.3	0.14	35	Pipeline Crossing
	S2TRC064	117.59	117.6	0.10	14	Ephemeral Stream, Road Crossing
	S2TRC064	117.59	117.6	0.52	0	Ephemeral Stream, Road Crossing
	WB2TRC352	168.51	168.6	0.34	46	Waterbody Crossing
	WB2TRC354	169.32	169.4	0.11	42	Waterbody Crossing
	S2TRC201	176.05	176.0	0.20	0	Ephemeral Stream, Road Crossing
	S2TRC201	176.05	176.1	0.07	0	Ephemeral Stream, Road Crossing
	S4TRC150	182.66	182.6	0.11	35	Road & Wetland Crossing
	S4TRC150	182.66	182.7	0.12	0	Road & Wetland Crossing
	WB4TRC147	182.66, 182.82	182.8	0.19	5, 0	Road & Waterbody Crossing
	S3TRC226	195.25	195.5	0.22	0	Road Crossing
	S3TRC229, WB3TRC228	195.64, 195.64	195.7	0.08	14, 44	Ephemeral Stream, P.I.
	S3TRC261	196.36, 196.41	196.4	0.17	40, 44	Crossover
	WB3TRC180	201.88	201.9	0.15	10	Road Crossing
	SNHD-20341	203.39	203.4	0.24	0	NHS Data, Awaiting Delineated Waterbody Data, Wetland Crossing
	WB7TRC004	205.52	205.5	0.10	0	Road Crossing

TABLE 2.3-14

ATWS within 50 feet of Waterbodies for the Sabal Trail Project Pipeline Facilities

State, Facility	Waterbody ID	Milepost	ATWS Milepost	ATWS Size (Acres)	Distance from Resource Area (Feet)	ATWS Justification <u>a/</u>
	WB7TRC004	205.52	205.5	0.04	38	Waterbody Crossing
	S7TRC001	206.69	206.6	0.07	3	Road Crossing
	S7TRC001	206.69	206.6	0.24	10	Road Crossing
	S7TRC001, S7TRC003	206.69, 206.72	206.7	0.22	0, 0	Road & Wetland Crossing
	S3TRC283	230.91	230.9	0.21	0	HDD Pullback
	S3TRC304	231.34	231.3	0.36	0	Access
	S3TRC218	235	235.0	0.25	13	Ephemeral Stream, Road Crossing
	WB4TRC153	235.78	235.9	0.99	36	Road Crossing & P.I.
	S3TRC286	237.27	237.3	0.24	4	Road Crossing
	S3TRC286	237.27	237.4	0.61	20	Topsoil Separation
	S3TRC290	237.62	237.6	0.27	0	Road Crossing
<b>Florida</b>						
<u>Mainline</u>	WB8ECT170	262.75	262.9	1.10	0	Cultivated Cropland, Topsoil Separation
	S2ECT128	264.07	263.9	1.04	0	Access
	S2ECT128, S8ECT019	264.07, 264.07	264.0	0.23	20, 18	Access & Staging Area
	S2ECT128	264.07	264.2	0.49	0	Access
	S2ECT128, S8ECT019	264.07, 264.07	264.1	0.23	9, 21	Access & Staging Area
	S8ECT247	268.13	268.1	0.30	0	Access
	WB3ECT001	275.52	275.5	0.61	0	Access & Staging Area
	WB2ECT012	297.55	297.6	0.07	28	Cultivated Cropland, Topsoil Separation
	S2ECT106	308.31	308.2	0.33	0	Access
	D4CAR044	346.71	346.7	0.61	15	Highway Crossing
	D4CAR044	346.71	346.7	0.32	18	Highway Crossing

TABLE 2.3-14

ATWS within 50 feet of Waterbodies for the Sabal Trail Project Pipeline Facilities

State, Facility	Waterbody ID	Milepost	ATWS Milepost	ATWS Size (Acres)	Distance from Resource Area (Feet)	ATWS Justification <u>a/</u>
	D11CAR022	346.75	346.8	0.38	21	Highway Crossing
	WB6CAR208	433.35	433.3	1.15	48	Wetland Crossing
	WB7CAR011	436.84	436.8	0.11	10	Road Crossing
	WB7CAR011	436.84	436.8	0.25	10	Road Crossing
	WB9ECT271	440.97	441.0	0.50	11	Wetland Crossing
	WB7CAR158	452.23	452.2	0.07	22	P.I.
	S9ECT262	458.88	458.9	0.23	22	Waterbody Crossing
	S9ECT262	458.88	458.9	0.23	22	Waterbody Crossing
	WB6CAR095, WB8ECT278	466.55, 466.68	466.6	0.84	21, 5	Waterbody Crossing
	WB6CAR111	469.77	469.7	0.29	0	Waterbody Crossing
	WB4CAR149	470.45	470.4	0.28	0	HDD Pullback
	WB4CAR149	470.45	470.5	0.17	17	Waterbody Crossing
	WB9ECT235	471.12	471.1	1.21	2	HDD Site
	S1ECT069	472.15	472.1	0.14	7	Waterbody Crossing
<u>Citrus County Line</u>	S13CAR093	1.27	1.3	0.09	0	Staging Area
	WB13CAR097	1.62	1.6	0.44	0	Waterbody & Wetland Crossing
	WB8ECT201	21.41	21.4	1.24	0	Station ATWS
<u>Hunters Creek Line</u>	WB9ECT222	6.11	6.1	0.29	39	Topsoil Separation
	WB9ECT219	6.41	6.3	0.75	33	Road Crossing
	D6CAR122	6.62	6.6	0.15	25	Waterbody Crossing
	D6CAR122	6.62	6.6	0.01	17	Waterbody Crossing
	S13CAR058	8.64	8.6	2.18	5	Staging Area
	S13CAR058	8.64	8.8	0.50	0	HDD Pullback



TABLE 2.3-14

ATWS within 50 feet of Waterbodies for the Sabal Trail Project Pipeline Facilities

State, Facility	Waterbody ID	Milepost	ATWS Milepost	ATWS Size (Acres)	Distance from Resource Area (Feet)	ATWS Justification <u>a/</u>
	D6CAR132, WB3ECT052	10.78, 10.7	10.7	0.65	0, 1	Road, Waterbody & Wetland Crossing
	D6CAR132	10.78	11.0	0.62	0	Waterbody & Wetland Crossing & P.I.
	D6CAR132	10.78	11.0	1.55	5	Staging Area
	D6CAR132	10.78	11.1	0.04	0	Waterbody Crossing & P.I.
	WB7CAR135	11.43	11.4	0.30	13	Waterbody Crossing
	WB7CAR135	11.43	11.5	0.62	27	Road & Waterbody Crossing
	WB7CAR142, WB7CAR141	12.22, 12.16	12.2	0.18	0, 45	P.I.
	WB7CAR142	12.22	12.3	0.11	0	Road Crossing

a/ P.I. = Change in direction of the Right-of-way centerline.

TABLE 2.4-1  
Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <i>a/</i>	County	Wetland ID	Wetland Type <i>b/</i>	Crossing Length (Feet) <i>c/</i>	Wetland Impact <i>d/</i> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <i>e/</i>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
<b>Alabama</b>														
<i>Pipeline ROW</i>														
<u>Mainline</u>	0.6	Tallapoosa	W1TRC358	PFO	0	-	-	0.00	-	-	-	0.53	N/A	I or II
	0.7		W1TRC359	PFO	61	-	-	0.09	-	-	0.04	0.53	N/A	I or II
	5.0		W1TRC024	PFO	94	-	-	0.13	-	-	0.06	0.80	N/A	I or II
	5.5		W1TRC032	PFO	35	-	-	0.09	-	-	0.03	0.60	N/A	I or II
	8.9		W1TRC057	PFO	29	-	-	0.05	-	-	0.02	0.60	N/A	I or II
	11.0		W1TRC069	PFO	204	-	-	0.34	-	-	0.14	0.67	N/A	I or II
	13.4		W1TRC323	PFO	56	-	-	0.10	-	-	0.04	0.53	N/A	I or II
	14.1		W1TRC319	PFO	64	-	-	0.10	-	-	0.04	0.47	N/A	I or II
	14.5		W1TRC314	PFO	101	-	-	0.16	-	-	0.07	0.47	N/A	I or II
	17.8		W1TRC102	PSS	477	-	0.82	-	-	0.11	-	0.67	N/A	I or II
	18.3		W1TRC097	PFO	526	-	-	0.91	-	-	0.36	0.73	N/A	I or II
	19.6		W1TRC086	PSS	455	-	0.78	-	-	0.10	-	0.53	N/A	I or II
	20.0		W1TRC467	PFO	130	-	-	0.23	-	-	0.09	0.73	N/A	I or II
	20.1		W1TRC467	PFO	82	-	-	0.14	-	-	0.06	0.73	N/A	I or II
	23.9	Chambers	W1TRC110	PFO	131	-	-	0.18	-	-	0.09	0.67	N/A	I or II
	25.8		W1TRC311	PEM	0	0.02	-	-	-	-	-	0.40	N/A	I or II
	26.2		W1TRC509	PSS	0	-	0.03	-	-	-	-	0.47	N/A	I or II
	31.1		W1TRC130	PSS	152	-	0.19	-	-	0.03	-	0.47	N/A	I or II
	31.1	Chambers	W1TRC129	PFO	69	-	-	0.19	-	-	0.06	0.67	N/A	I or II
	31.2		W1TRC131	PFO	74	-	-	0.09	-	-	0.05	0.67	N/A	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	31.2		W1TRC132	PSS	0	-	0.04	-	-	-	-	0.47	N/A	I or II
	32.2		W4TRC002	PFO	318	-	-	0.39	-	-	0.21	0.53	N/A	I or II
	32.3		W4TRC001	PEM	19	0.26	-	-	-	-	-	0.60	N/A	I or II
	32.6		W4TRC005	PEM	0	0.02	-	-	-	-	-	0.60	N/A	I or II
	32.7		W4TRC006	PFO	0	-	-	0.03	-	-	-	0.53	N/A	I or II
	33.5		W1TRC147	PSS	0	-	0.33	-	-	-	-	0.53	N/A	I or II
	33.5		W1TRC146	PFO	684	-	-	0.84	-	-	0.45	0.87	N/A	I or II
	35.3		W1TRC505	PSS	0	-	0.28	-	-	0.00	-	0.47	N/A	I or II
	35.3		W1TRC506	PFO	355	-	-	0.83	-	-	0.20	0.60	N/A	I or II
	36.4		W1TRC511	PSS	46	-	0.09	-	-	0.01	-	0.40	N/A	I or II
	37.4		W1TRC151	PSS	0	-	0.07	-	-	0.00	-	0.67	N/A	I or II
	37.4		W1TRC152	PFO	95	-	-	0.15	-	-	0.06	0.67	N/A	I or II
	37.5		W1TRC154	PFO	299	-	-	0.52	-	-	0.21	0.73	N/A	I or II
	38.2		W4TRC014	PFO	74	-	-	0.17	-	-	0.05	0.73	N/A	I or II
	38.3		W4TRC013	PSS	379	-	0.60	-	-	0.09	-	0.47	N/A	I or II
	39.2		W4TRC009	PEM	488	0.81	-	-	-	-	-	0.47	N/A	I or II
	39.2		W4TRC010	PFO	202	-	-	0.34	-	-	0.14	0.40	N/A	I or II
	39.2		W4TRC009	PEM	62	0.14	-	-	-	-	-	0.47	N/A	I or II
	40.2	Lee	W4TRC017	PFO	0	-	-	0.10	-	-	0.00	0.47	N/A	I or II
	46.4		W4TRC030	PFO	65	-	-	0.10	-	-	0.04	0.73	N/A	I or II
	46.5	Lee	W4TRC031	PSS	0	-	0.00	-	-	-	-	0.60	N/A	I or II
	47.0		W4TRC033	PSS	0	-	0.00	-	-	-	-	0.53	N/A	I or II
	54.4		W1TRC486	PFO	0	-	-	0.01	-	-	-	0.73	N/A	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	54.4		W1TRC486	PFO	229	-	-	0.50	-	-	0.16	0.73	N/A	I or II
	54.5		W1TRC487	PFO	0	-	-	0.00	-	-	-	0.53	N/A	I or II
	54.7		W1TRC488	PFO	67	-	-	0.05	-	-	0.03	0.60	N/A	I or II
	59.3		W4TRC043	PFO	155	-	-	0.27	-	-	0.11	0.67	N/A	I or II
	59.7		W1TRC300	PFO	267	-	-	0.47	-	-	0.19	0.60	N/A	I or II
	59.9		W1TRC295	PFO	398	-	-	0.69	-	-	0.27	0.60	N/A	I or II
	61.0	Russell	W4TRC045	PFO	181	-	-	0.36	-	-	0.12	0.73	N/A	I or II
	61.5		W1TRC188	PFO	266	-	-	0.41	-	-	0.18	0.67	N/A	I or II
	62.0		W4TRC050	PEM	63	0.10	-	-	-	-	-	0.47	N/A	I or II
	64.5		W1TRC190	PSS	214	-	0.36	-	-	0.05	-	0.47	N/A	I or II
	64.6		W1TRC379	PFO	24	-	-	0.14	-	-	0.02	0.53	N/A	I or II
	65.2		W1TRC382	PFO	475	-	-	0.76	-	-	0.32	0.67	N/A	I or II
	67.9		W1TRC171	PFO	118	-	-	0.43	-	-	0.08	0.40	N/A	I or II
	68.0		W1TRC172	PSS	41	-	0.15	-	-	0.01	-	0.40	N/A	I or II
	68.4		W1TRC174	PSS	0	-	0.00	-	-	-	-	0.47	N/A	I or II
	69.5		W1TRC202	PFO	364	-	-	0.91	-	-	0.33	0.47	N/A	I or II
	69.5		W1TRC205	PEM	46	0.12	-	-	-	-	-	0.40	N/A	I or II
	69.5		W1TRC204	PSS	0	-	0.00	-	-	-	-	0.47	N/A	I or II
	69.6		W1TRC206	PEM	96	0.17	-	-	-	-	-	0.47	N/A	I or II
	69.9	Russell	W4TRC062	PFO	0	-	-	0.06	-	-	-	0.60	N/A	I or II
	70.6		W1TRC380	PFO	4	-	-	0.00	-	-	0.00	0.60	N/A	I or II
	70.8		W1TRC381	PFO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.60	N/A	IV
	73.3		W1TRC225	PSS	0	-	0.02	-	-	-	-	0.53	N/A	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	74.0		W1TRC261	PSS	0	-	0.09	-	-	-	-	0.60	N/A	I or II
	74.1		W1TRC262	PFO	623	-	-	0.93	-	-	0.43	0.73	N/A	I or II
	74.1		W1TRC261	PSS	0	-	0.06	-	-	-	-	0.60	N/A	I or II
	74.4		W1TRC258	PFO	64	-	-	0.11	-	-	0.04	0.47	N/A	I or II
	74.7		W1TRC232	PFO	277	-	-	0.48	-	-	0.19	0.73	N/A	I or II
	79.1		W1TRC269a	PFO	392	-	-	0.78	-	-	0.27	0.73	N/A	I or II
	79.2		W1TRC269a	PFO	117	-	-	0.28	-	-	0.08	0.73	N/A	I or II
	85.1		W1TRC353	PFO	0	-	-	0.04	-	-	-	0.47	N/A	I or II
	85.1		W1TRC276	PFO	0	-	-	0.04	-	-	0.00	0.60	N/A	I or II
	85.3		W1TRC276	PFO	944	-	-	1.62	-	-	0.65	0.60	N/A	I or II
	85.8		W1TRC375	PFO	77	-	-	0.17	-	-	0.05	0.47	N/A	I or II
			<b>Alabama Pipeline ROW Subtotal</b>		<b>11,323</b>	<b>1.63</b>	<b>3.90</b>	<b>15.76</b>	<b>0.00</b>	<b>0.41</b>	<b>6.03</b>			
<i>Compressor Stations</i>														
<u>Alexander City</u>	0.0	Tallapoosa	W1TRC393	PSS	N/A	-	1.38	-	-	-	-	0.60	N/A	Temporary Fill
			W1TRC396	PFO	N/A	-	-	0.62	-	-	-	0.53	N/A	Temporary Fill
			W1TRC411	PSS	N/A	-	0.00	-	-	-	-	0.53	N/A	Temporary Fill
			WTA11C003	PEM	N/A	0.06	-	-	0.06	-	-		N/A	Installation of fence line
		Tallapoosa	WTA11C003	PFO	N/A	-	-	0.27	-	-	-		N/A	Installation of fence line
<i>Meter Stations</i>														
<u>Transco Hillabee</u>	0.0	Tallapoosa				None Identified								
			<b>Alabama Aboveground Facilities Subtotal</b>		<b>N/A</b>	<b>0.06</b>	<b>1.38</b>	<b>0.88</b>	<b>0.06</b>	<b>0.00</b>	<b>0.00</b>			
<i>Access Roads</i>														

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <i>a/</i>	County	Wetland ID	Wetland Type <i>b/</i>	Crossing Length (Feet) <i>c/</i>	Wetland Impact <i>d/</i> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <i>e/</i>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
<u>PAR-AL-LE-005</u>	58.9	Lee	W1TRC338b	PFO	176	-	-	0.10	-	-	0.10	0.53	N/A	Permanent Fill
<u>PAR-AL-RU-005</u>	70.6	Russell	W1TRC404	PEM	77	0.03	-	-	0.03	-	-	0.40	N/A	Permanent Fill
<u>PAR-AL-RU-012</u>	86.2		W1TRC432	PSS	0	-	0.17	-	-	0.17	-	0.60	N/A	Permanent Fill
<u>PAR-AL-RU-012</u>	86.2		W1TRC433	PSS	0	-	0.21	-	-	0.21	-	0.40	N/A	Permanent Fill
<u>PAR-AL-TA-001</u>	0.2	Tallapoosa	W1TRC327	PSS	601	-	0.28	-	-	0.28	-	0.47	N/A	Permanent Fill
<u>TAR-AL-RU-011</u>	85.1	Russell	W1TRC349	PFO	166	-	-	0.07	-	-	-	0.60	N/A	Temporary Fill
<u>TAR-AL-RU-011</u>	85.1		W1TRC350	PFO	140	-	-	0.07	-	-	-	0.60	N/A	Temporary Fill
<u>TAR-AL-RU-011</u>	85.1		W1TRC353	PFO	12	-	-	0.00	-	-	-	0.47	N/A	Temporary Fill
<b>Alabama Access Roads Subtotal</b>					<b>1,171</b>	<b>0.03</b>	<b>0.65</b>	<b>0.24</b>	<b>0.03</b>	<b>0.65</b>	<b>0.10</b>			
<i>Contractor Yards</i>					None Identified									
<b>Alabama Contractor Yards Subtotal</b>					N/A	-	-	-	-	-	-			
<b>Alabama Total</b>					<b>12,495</b>	<b>1.73</b>	<b>5.94</b>	<b>16.88</b>	<b>0.09</b>	<b>1.06</b>	<b>6.12</b>			
<b>Georgia</b>														
<i>Pipeline ROW</i>														
<u>Mainline</u>	88.5	Stewart	W2TRC003	PFO	328	-	-	0.58	-	-	0.23	0.67	N/A	I or II
	90.2		W1TRC002	PSS	99	-	0.16	-	-	0.02	-	0.73	N/A	I or II
	90.2	Stewart	W1TRC001	PFO	488	-	-	0.84	-	-	0.33	0.80	N/A	I or II
	90.3		W1TRC001	PFO	15	-	-	0.03	-	-	0.01	0.80	N/A	I or II
	90.5		W1TRC004	PFO	89	-	-	0.15	-	-	0.06	0.53	N/A	I or II
	90.8		W1TRC015	PSS	66	-	0.11	-	-	0.02	-	0.40	N/A	I or II
	90.9		W2TRC008	PFO	0	-	-	0.06	-	-	-	0.33	N/A	I or II
	91.1		W1TRC011	PEM	0	0.01	-	-	-	-	-	0.27	N/A	I or II
	91.1		W1TRC010	PFO	167	-	-	0.38	-	-	0.11	0.47	N/A	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	91.1		W1TRC009	PEM	0	0.01	-	-	-	-	-	0.27	N/A	I or II
	94.0		W2TRC028	PEM	0	0.00	-	-	-	-	-	0.53	N/A	I or II
	95.7		W2TRC367	PFO	73	-	-	0.12	-	-	0.04	0.73	N/A	I or II
	96.2		W2TRC369	PFO	269	-	-	0.46	-	-	0.19	0.73	N/A	I or II
	97.6		W2TRC017	PSS	76	-	0.04	-	-	0.02	-	0.47	N/A	I or II
	97.6		W2TRC018	PFO	0	-	-	0.02	-	-	0.00	0.53	N/A	I or II
	97.8		W2TRC020	PSS	0	-	0.15	-	-	-	-	0.60	N/A	I or II
	97.8		W2TRC019	PFO	295	-	-	0.40	-	-	0.19	0.80	N/A	I or II
	98.1		W2TRC024	PSS	0	-	0.12	-	-	-	-	0.33	N/A	I or II
	98.1		W2TRC025	PFO	410	-	-	0.59	-	-	0.28	0.60	N/A	I or II
	98.6		W2TRC318	PFO	74	-	-	0.14	-	-	0.05	0.60	N/A	I or II
	98.7		W2TRC320	PFO	0	-	-	0.02	-	-	-	0.60	N/A	I or II
	98.8		W2TRC321	PEM	42	0.08	-	-	-	-	-	0.47	N/A	I or II
	98.8		W2TRC322	PFO	36	-	-	0.06	-	-	0.02	0.60	N/A	I or II
	98.9		W2TRC324	PFO	0	-	-	0.03	-	-	-	0.60	N/A	I or II
	98.9	Stewart	W2TRC325	PEM	86	0.15	-	-	-	-	-	0.47	N/A	I or II
	99.2		W2TRC140	PFO	407	-	-	0.59	-	-	0.26	0.60	N/A	I or II
	101.7		W2TRC334	PFO	50	-	-	0.12	-	-	0.03	0.47	N/A	I or II
	101.8		W2TRC333	PEM	0	0.01	-	-	-	-	-	0.47	N/A	I or II
	102.2		W2TRC336	PFO	108	-	-	0.16	-	-	0.06	0.73	N/A	I or II
	102.2		W2TRC336	PFO	71	-	-	0.12	-	-	0.05	0.73	N/A	I or II
	102.3		W2TRC336	PFO	6	-	-	0.04	-	-	0.01	0.73	N/A	I or II
	102.3		W2TRC337	PEM	0	0.01	-	-	-	-	-	0.60	N/A	I or II



TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	102.3		W2TRC337	PEM	15	0.02	-	-	-	-	-	0.60	N/A	I or II
	106.8		W2TRC037	PEM	0	0.01	-	-	-	-	-	0.60	N/A	I or II
	106.8		W2TRC038	PFO	0	-	-	0.01	-	-	-	0.60	N/A	I or II
	106.9		W5TRC001	PFO	364	-	-	0.76	-	-	0.24	0.80	N/A	I or II
	108.4		W2TRC145	PSS	181	-	0.32	-	-	0.04	-	0.53	N/A	I or II
	108.9		W2TRC045	PFO	152	-	-	0.23	-	-	0.10	0.73	N/A	I or II
	108.9		W2TRC044	PEM	0	0.10	-	-	-	-	-	0.73	N/A	I or II
	108.9		W2TRC045	PFO	206	-	-	0.31	-	-	0.14	0.73	N/A	I or II
	113.2	Webster	W2TRC255	PFO	0	-	-	0.02	-	-	-	0.60	N/A	I or II
	119.4		W2TRC068	PSS	0	-	0.00	-	-	-	-	0.67	N/A	I or II
	119.5		W2TRC067	PFO	144	-	-	0.25	-	-	0.10	0.67	N/A	I or II
	119.7		W2TRC071	PFO	200	-	-	0.34	-	-	0.14	0.60	N/A	I or II
	121.5	Terrell	W2TRC074	PSS	232	-	0.40	-	-	0.05	-	0.33	N/A	I or II
	121.8		W2TRC077	PEM	579	0.99	-	-	-	-	-	0.53	N/A	I or II
	124.0	Terrell	W2TRC079	PEM	35	0.06	-	-	-	-	-	0.47	N/A	I or II
	125.1		W2TRC088	PFO	417	-	-	0.72	-	-	0.29	0.60	N/A	I or II
	125.2		W2TRC084	PFO	180	-	-	0.31	-	-	0.12	0.73	N/A	I or II
	125.8		W2TRC091	PFO	186	-	-	0.31	-	-	0.13	0.73	N/A	I or II
	125.8		W2TRC089	PFO	165	-	-	0.25	-	-	0.11	0.60	N/A	I or II
	128.4		W2TRC306	PFO	531	-	-	0.86	-	-	0.37	0.73	N/A	I or II
	128.5		W2TRC093	PEM	0	0.07	-	-	-	-	-	0.73	N/A	I or II
	128.5		W2TRC312	PFO	122	-	-	0.22	-	-	0.09	0.67	N/A	I or II
	128.5		W2TRC312	PFO	346	-	-	0.48	-	-	0.24	0.67	N/A	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	128.6		W2TRC097	PEM	0	0.09	-	-	-	-	-	0.67	N/A	I or II
	128.7		W2TRC313	PEM	0	0.04	-	-	-	-	-	0.53	N/A	I or II
	128.7		W2TRC314	PFO	98	-	-	0.13	-	-	0.07	0.67	N/A	I or II
	129.2		W2TRC101	PFO	143	-	-	0.26	-	-	0.10	0.60	N/A	I or II
	131.3		W2TRC105	PFO	1,125	-	-	1.95	-	-	0.78	0.60	N/A	I or II
	131.5		W2TRC105	PFO	0	-	-	0.05	-	-	-	0.60	N/A	I or II
	131.6		W2TRC107	PSS	44	-	0.07	-	-	0.01	-	0.47	N/A	I or II
	132.0		W2TRC109	PFO	228	-	-	0.35	-	-	0.16	0.60	N/A	I or II
	133.9		W2TRC110	PFO	128	-	-	0.19	-	-	0.09	0.53	N/A	I or II
	134.5		W2TRC113	PFO	816	-	-	1.40	-	-	0.56	0.73	N/A	I or II
	134.6		W2TRC112	PEM	58	0.10	-	-	-	-	-	0.60	N/A	I or II
	137.0		W2TRC117	PFO	0	-	-	0.00	-	-	-	0.80	N/A	I or II
	137.6		W2TRC122	PFO	0	-	-	0.11	-	-	-	0.60	N/A	I or II
	138.9	Terrell	W2TRC127	PEM	0	0.06	-	-	-	-	-	0.60	N/A	I or II
	139.3		W2TRC129	PFO	259	-	-	0.39	-	-	0.18	0.53	N/A	I or II
	139.3		W2TRC128	PEM	49	0.13	-	-	-	-	-	0.53	N/A	I or II
	139.5		W2TRC131	PEM	105	0.16	-	-	-	-	-	0.47	N/A	I or II
	140.6		W2TRC327	PFO	792	-	-	1.35	-	-	0.54	0.67	N/A	I or II
	142.0		W2TRC135	PFO	182	-	-	0.31	-	-	0.13	0.67	N/A	I or II
	142.3		W2TRC134	PFO	205	-	-	0.38	-	-	0.14	0.67	N/A	I or II
	143.0		W2TRC150	PFO	281	-	-	0.45	-	-	0.19	0.67	N/A	I or II
	144.1		W2TRC152	PFO	134	-	-	0.25	-	-	0.09	0.67	N/A	I or II
	145.8		W2TRC136	PFO	48	-	-	0.11	-	-	0.04	0.47	N/A	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	145.8	Lee	W2TRC136	PFO	72	-	-	0.09	-	-	0.04	0.47	N/A	I or II
	147.3	Dougherty	W5TRC016	PFO	170	-	-	0.23	-	-	0.11	0.73	N/A	I or II
	147.4		WNWI-14747	PFO	0	-	-	0.09	-	-	-	-	N/A	I or II
	148.1		WNWI-14815	PFO	522	-	-	1.08	-	-	0.37	-	N/A	I or II
	148.3		WNWI-14828	PFO	267	-	-	0.60	-	-	0.18	-	N/A	I or II
	148.7		WNWI-14870	PFO	380	-	-	0.90	-	-	0.26	-	N/A	I or II
	149.1		WNWI-14925	PEM	390	0.90	-	-	-	-	-	-	N/A	I or II
	149.2		WNWI-14918	PEM	408	0.87	-	-	-	-	-	-	N/A	I or II
	149.3		WNWI-14925	PEM	1,025	2.41	-	-	-	-	-	-	N/A	I or II
	149.4		WNWI-14943	PFO	377	-	-	0.85	-	-	0.26	-	N/A	I or II
	149.6		WNWI-14960	PFO	329	-	-	0.85	-	-	0.23	-	N/A	I or II
	149.6		WNWI-14967	PFO	348	-	-	0.79	-	-	0.24	-	N/A	I or II
	149.7	Dougherty	WNWI-14960	PFO	125	-	-	0.42	-	-	0.09	-	N/A	I or II
	149.9		WNWI-14990	PFO	522	-	-	1.16	-	-	0.36	-	N/A	I or II
	149.9		WNWI-14993	PFO	0	-	-	0.01	-	-	-	-	N/A	I or II
	150.1		WNWI-15009	PFO	292	-	-	0.68	-	-	0.20	-	N/A	I or II
	150.1		WNWI-15013	PFO	164	-	-	0.66	-	-	0.11	-	N/A	I or II
	150.4		W1TRC489	PFO	892	-	-	1.53	-	-	0.62	0.67	N/A	I or II
	150.5		W1TRC489	PFO	460	-	-	0.80	-	-	0.32	0.67	N/A	I or II
	151.6		W1TRC490	PFO	192	-	-	0.48	-	-	0.13	0.67	N/A	I or II
	151.9		W1TRC490	PFO	179	-	-	0.25	-	-	0.12	0.67	N/A	I or II
	151.9		W1TRC490	PFO	118	-	-	0.21	-	-	0.08	0.67	N/A	I or II
	152.1		W1TRC492	PEM	0	0.05	-	-	-	-	-	0.33	N/A	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	152.5		W1TRC495	PFO	436	-	-	0.74	-	-	0.30	0.60	N/A	I or II
	152.7		W1TRC496	PFO	1,489	-	-	2.55	-	-	1.03	0.60	N/A	I or II
	153.1		W2TRC156	PFO	158	-	-	0.32	-	-	0.11	0.53	N/A	I or II
	153.1		W2TRC160	PFO	0	-	-	0.00	-	-	-	0.60	N/A	I or II
	153.1		W2TRC157	PEM	62	0.19	-	-	-	-	-	0.60	N/A	I or II
	153.1		W2TRC160	PFO	146	-	-	0.23	-	-	0.10	0.60	N/A	I or II
	153.3		W2TRC163	PFO	1,094	-	-	2.14	-	-	0.75	0.73	N/A	I or II
	153.5		W5TRC017	PFO	93	-	-	0.21	-	-	0.13	0.93	N/A	I or II
	153.5		W2TRC058	PFO	519	-	-	1.57	-	-	0.36	0.67	N/A	I or II
	153.8		W5TRC017	PFO	2,005	-	-	3.29	-	-	1.36	0.93	N/A	I or II
	154.9		W2TRC374	PFO	85	-	-	0.21	-	-	0.08	0.73	N/A	I or II
	155.4	Dougherty	W2TRC376	PFO	2,071	-	-	3.62	-	-	1.43	0.80	N/A	I or II
	162.7		W2TRC237	PFO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.87	N/A	IV
	162.9		W2TRC237	PFO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.87	N/A	IV
	163.1		W3TRC153	PFO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.53	N/A	IV
	163.4		W1TRC498	PFO	112	-	-	0.38	-	-	0.08	0.53	N/A	I or II
	165.5		W1TRC501	PFO	512	-	-	0.88	-	-	0.35	0.53	N/A	I or II
	167.4		W2TRC300	PEM	501	0.85	-	-	-	-	-	0.40	N/A	I or II
	168.1		W2TRC347	PFO	123	-	-	0.15	-	-	0.07	0.53	N/A	I or II
	168.4		W2TRC351	PFO	676	-	-	1.37	-	-	0.47	0.67	N/A	I or II
	168.5		W2TRC353	PFO	202	-	-	0.35	-	-	0.14	0.67	N/A	I or II
	169.7		W2TRC360	PFO	0	-	-	0.02	-	-	-	0.67	N/A	I or II
	169.8		W2TRC360	PFO	191	-	-	0.33	-	-	0.13	0.67	N/A	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	171.1	Mitchell	W2TRC362	PFO	0	-	-	0.19	-	-	0.01	0.60	N/A	I or II
	171.6		W2TRC364	PFO	0	-	-	0.05	-	-	-	0.67	N/A	I or II
	171.6		W2TRC364	PFO	0	-	-	0.05	-	-	-	0.67	N/A	I or II
	172.5		W2TRC386	PEM	0	0.18	-	-	-	-	-	0.33	N/A	I or II
	172.7		W2TRC187	PEM	257	0.44	-	-	-	-	-	0.40	N/A	I or II
	177.2		W2TRC209	PFO	319	-	-	0.55	-	-	0.22	0.47	N/A	I or II
	177.9		W2TRC217	PFO	122	-	-	0.20	-	-	0.08	0.67	N/A	I or II
	178.0		W2TRC216	PEM	0	0.00	-	-	-	-	-	0.53	N/A	I or II
	178.0		W2TRC214	PFO	395	-	-	0.57	-	-	0.27	0.67	N/A	I or II
	178.0		W2TRC215	PEM	0	0.08	-	-	-	-	-	0.60	N/A	I or II
	180.8	Mitchell	W3TRC129	PFO	187	-	-	0.31	-	-	0.13	0.53	N/A	I or II
	181.4		W7TRC035	PFO	240	-	-	0.42	-	-	0.17	0.47	N/A	I or II
	182.0		W1TRC464	PFO	177	-	-	0.30	-	-	0.12	0.40	N/A	I or II
	182.3		W1TRC463	PFO	0	-	-	0.01	-	-	-	0.53	N/A	I or II
	182.5		W7TRC031	PFO	93	-	-	0.16	-	-	0.06	0.47	N/A	I or II
	182.7	Colquitt	W7TRC031	PFO	97	-	-	0.35	-	-	0.07	0.47	N/A	I or II
	182.7		W3TRC214	PFO	0	-	-	0.00	-	-	-	0.60	N/A	I or II
	182.7		W3TRC214	PFO	120	-	-	0.40	-	-	0.08	0.60	N/A	I or II
	183.9		W3TRC299	PFO	274	-	-	0.47	-	-	0.19	0.40	N/A	I or II
	184.0		W4TRC142	PFO	766	-	-	1.29	-	-	0.53	0.47	N/A	I or II
	184.1		W4TRC141	PEM	0	0.01	-	-	-	-	-	0.60	N/A	I or II
	185.0		W3TRC127	PSS	46	-	0.11	-	-	0.01	-	0.33	N/A	I or II
	185.1		W3TRC126	PFO	336	-	-	0.55	-	-	0.23	0.53	N/A	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	186.6		W7TRC025	PFO	228	-	-	0.39	-	-	0.16	0.47	N/A	I or II
	187.3		W7TRC024	PEM	356	0.60	-	-	-	-	-	0.60	N/A	I or II
	187.7		W4TRC133	PFO	433	-	-	0.77	-	-	0.30	0.73	N/A	I or II
	188.1		W4TRC137	PFO	292	-	-	0.47	-	-	0.19	0.60	N/A	I or II
	188.5		W2TRC197	PFO	572	-	-	0.97	-	-	0.40	0.80	N/A	I or II
	188.7		W2TRC197	PFO	897	-	-	1.49	-	-	0.62	0.80	N/A	I or II
	189.0		W3TRC122	PFO	316	-	-	0.54	-	-	0.22	0.53	N/A	I or II
	189.8		W3TRC173	PFO	31	-	-	0.07	-	-	0.03	0.47	N/A	I or II
	190.4		W3TRC172	PFO	335	-	-	0.56	-	-	0.23	0.60	N/A	I or II
	190.6	Colquitt	W7TRC015	PFO	249	-	-	0.43	-	-	0.17	0.47	N/A	I or II
	192.3		W4TRC108	PFO	139	-	-	0.24	-	-	0.10	0.60	N/A	I or II
	192.4		W4TRC108	PFO	9	-	-	0.02	-	-	0.01	0.60	N/A	I or II
	192.5		W4TRC113	PEM	0	0.03	-	-	-	-	-	0.60	N/A	I or II
	192.6		W4TRC111	PSS	102	-	0.20	-	-	0.02	-	0.60	N/A	I or II
	192.6		W4TRC113	PEM	97	0.15	-	-	-	-	-	0.60	N/A	I or II
	193.3		WNWI-19332	PFO	146	-	-	0.33	-	-	0.10	0.00	N/A	I or II
	193.7		W4TRC115	PEM	0	0.00	-	-	-	-	-	0.47	N/A	I or II
	193.7		W4TRC114	PFO	99	-	-	0.15	-	-	0.07	0.40	N/A	I or II
	194.4		W4TRC117	PEM	174	0.26	-	-	-	-	-	0.80	N/A	I or II
	194.6		W4TRC123	PFO	119	-	-	0.19	-	-	0.08	0.53	N/A	I or II
	194.9		W3TRC221	PFO	119	-	-	0.19	-	-	0.08	0.60	N/A	I or II
	195.0		W3TRC223	PFO	118	-	-	0.19	-	-	0.08	0.60	N/A	I or II
	195.2		W3TRC223	PFO	1,098	-	-	2.05	-	-	0.76	0.60	N/A	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	195.3		W3TRC227	PSS	1	-	0.03	-	-	0.00	-	0.47	N/A	I or II
	195.3		W3TRC227	PSS	0	-	0.00	-	-	-	-	0.47	N/A	I or II
	195.4		W3TRC227	PSS	57	-	0.08	-	-	0.01	-	0.47	N/A	I or II
	195.5		W3TRC223	PFO	449	-	-	1.04	-	-	0.31	0.60	N/A	I or II
	195.5		W3TRC231	PEM	119	0.42	-	-	-	-	-	0.47	N/A	I or II
	196.1		W7TRC010	PFO	349	-	-	0.58	-	-	0.24	0.87	N/A	I or II
	196.3		W3TRC262	PEM	0	0.06	-	-	-	-	-	0.53	N/A	I or II
	196.4		W3TRC260	PFO	225	-	-	0.49	-	-	0.16	0.53	N/A	I or II
	196.4	Colquitt	W3TRC260	PFO	247	-	-	0.71	-	-	0.17	0.53	N/A	I or II
	196.5		W3TRC262	PEM	314	0.52	-	-	-	-	-	0.53	N/A	I or II
	196.5		W7TRC008	PFO	0	-	-	0.21	-	-	0.02	0.47	N/A	I or II
	196.8		W3TRC177	PFO	0	-	-	0.00	-	-	-	0.60	N/A	I or II
	196.8		W3TRC176	PFO	73	-	-	0.12	-	-	0.05	0.60	N/A	I or II
	196.9		W4TRC096	PEM	237	0.47	-	-	-	-	-	0.67	N/A	I or II
	197.6		W3TRC113	PFO	740	-	-	1.27	-	-	0.51	0.53	N/A	I or II
	197.8		W3TRC113	PFO	173	-	-	0.30	-	-	0.12	0.53	N/A	I or II
	198.3		W3TRC118	PSS	210	-	0.36	-	-	0.05	-	0.67	N/A	I or II
	199.2		W7TRC017	PFO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.67	N/A	IV
	200.1		W2TRC222	PFO	85	-	-	0.15	-	-	0.06	0.60	N/A	I or II
	200.2		W2TRC226	PFO	0	-	-	0.00	-	-	-	0.60	N/A	I or II
	200.3		W2TRC226	PFO	0	-	-	0.04	-	-	0.00	0.60	N/A	I or II
	200.3		W2TRC227	PEM	0	0.02	-	-	-	-	-	0.47	N/A	I or II
	200.3		W2TRC228	PFO	0	-	-	0.02	-	-	0.00	0.60	N/A	I or II



TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	200.3		W2TRC228	PFO	0	-	-	0.02	-	-	0.00	0.60	N/A	I or II
	200.4		W2TRC228	PFO	352	-	-	0.60	-	-	0.24	0.60	N/A	I or II
	200.5		W2TRC231	PFO	128	-	-	0.22	-	-	0.09	0.73	N/A	I or II
	200.5		W2TRC231	PFO	258	-	-	0.43	-	-	0.18	0.73	N/A	I or II
	200.6		W2TRC231	PFO	0	-	-	0.00	-	-	-	0.73	N/A	I or II
	201.6		W3TRC177	PFO	166	-	-	0.28	-	-	0.11	0.60	N/A	I or II
	202.3		W3TRC182	PEM	74	0.13	-	-	-	-	-	0.50	N/A	I or II
	203.2	Colquitt	W3TRC101	PSS	1,478	-	2.54	-	-	0.34	-	0.60	N/A	I or II
	203.4		WNWI-20342	PFO	329	-	-	1.01	-	-	0.23	0.00	N/A	I or II
	204.4		W4TRC092	PFO	0	-	-	0.00	-	-	-	0.73	N/A	I or II
	204.5		W4TRC092	PFO	112	-	-	0.19	-	-	0.08	0.73	N/A	I or II
	205.1		W7TRC007	PFO	993	-	-	1.71	-	-	0.68	0.47	N/A	I or II
	205.4		W7TRC005	PFO	198	-	-	0.56	-	-	0.14	0.47	N/A	I or II
	206.7		W7TRC002	PFO	632	-	-	1.24	-	-	0.43	0.67	N/A	I or II
	208.4		W3TRC095	PFO	1,573	-	-	2.70	-	-	1.08	0.60	N/A	I or II
	208.7	Brooks	W3TRC095	PFO	1,433	-	-	2.46	-	-	0.99	0.60	N/A	I or II
	208.8		W3TRC096	PEM	0	0.01	-	-	-	-	-	0.47	N/A	I or II
	210.1		W3TRC094	PSS	608	-	1.05	-	-	0.14	-	0.47	N/A	I or II
	210.8		W4TRC160	PFO	153	-	-	0.27	-	-	0.11	0.53	N/A	I or II
	211.8		W3TRC206	PFO	0	-	-	0.08	-	-	-	0.47	N/A	I or II
	211.9		W3TRC092	PEM	0	0.03	-	-	-	-	-	0.40	N/A	I or II
	211.9		W3TRC198	PFO	66	-	-	0.09	-	-	0.05	0.60	N/A	I or II
	216.1		W3TRC067	PEM	63	0.10	-	-	-	-	-	0.53	N/A	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	216.1		W3TRC067	PEM	0	0.01	-	-	-	-	-	0.53	N/A	I or II
	216.1		W6TRC009	PFO	525	-	-	0.91	-	-	0.36	0.87	N/A	I or II
	217.5		W3TRC039	PEM	507	0.87	-	-	-	-	-	0.40	N/A	I or II
	217.7		W3TRC038	PFO	1,444	-	-	2.48	-	-	0.99	0.40	N/A	I or II
	218.7		W3TRC205	PFO	0	-	-	0.09	-	-	0.00	0.47	N/A	I or II
	218.8		W3TRC041	PEM	441	0.47	-	-	-	-	-	0.33	N/A	I or II
	218.8	Brooks	W3TRC040	PFO	0	-	-	0.11	-	-	-	0.53	N/A	I or II
	218.8		W3TRC041	PEM	165	0.46	-	-	-	-	-	0.33	N/A	I or II
	218.8		W3TRC040	PFO	0	-	-	0.04	-	-	-	0.53	N/A	I or II
	219.0		W3TRC203	PFO	465	-	-	0.83	-	-	0.32	0.47	N/A	I or II
	219.1		W3TRC047	PFO	0	-	-	0.12	-	-	-	0.80	N/A	I or II
	219.2		W3TRC046	PEM	916	1.12	-	-	-	-	-	0.40	N/A	I or II
	219.2		W3TRC049	PFO	105	-	-	0.42	-	-	0.10	0.80	N/A	I or II
	219.4		W3TRC049	PEM	0	0.08	-	-	-	-	-	0.80	N/A	I or II
	219.4		W3TRC048	PFO	156	-	-	0.20	-	-	0.10	0.80	N/A	I or II
	220.5		W3TRC295	PFO	468	-	-	0.68	-	-	0.32	0.47	N/A	I or II
	221.1		W3TRC294	PEM	161	0.28	-	-	-	-	-	0.40	N/A	I or II
	223.5		W3TRC059	PFO	1,330	-	-	2.24	-	-	0.91	0.67	N/A	I or II
	224.0		W3TRC060	PFO	359	-	-	0.74	-	-	0.23	0.47	N/A	I or II
	224.1		W3TRC061	PFO	262	-	-	0.46	-	-	0.18	0.47	N/A	I or II
	224.5		W3TRC065	PEM	165	0.49	-	-	-	-	-	0.40	N/A	I or II
	224.5		W3TRC064	PFO	639	-	-	1.24	-	-	0.43	0.60	N/A	I or II
	225.1		W3TRC269	PFO	22	-	-	0.04	-	-	0.01	0.60	N/A	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	225.2		W3TRC268	PEM	0	0.01	-	-	-	-	-	0.58	N/A	I or II
	225.2		W6TRC013	PFO	0	-	-	0.02	-	-	-	0.67	N/A	I or II
	225.2		W6TRC013	PFO	56	-	-	0.11	-	-	0.04	0.67	N/A	I or II
	226.4		W3TRC070	PFO	2,259	-	-	3.90	-	-	1.56	0.60	N/A	I or II
	226.7		W6TRC017	PFO	179	-	-	0.22	-	-	0.12	0.40	N/A	I or II
	226.8	Brooks	W6TRC018	PFO	0	-	-	0.02	-	-	0.01	0.47	N/A	I or II
	226.9		W6TRC019	PFO	163	-	-	0.25	-	-	0.11	0.93	N/A	I or II
	227.1		W6TRC021	PEM	66	0.14	-	-	-	-	-	0.53	N/A	I or II
	227.2		W6TRC022	PFO	0	-	-	0.05	-	-	-	0.53	N/A	I or II
	228.4		W3TRC291	PFO	152	-	-	0.26	-	-	0.10	0.53	N/A	I or II
	229.1		W3TRC277	PFO	0	-	-	0.06	-	-	0.00	0.53	N/A	I or II
	229.1		W3TRC277	PFO	32	-	-	0.08	-	-	0.02	0.53	N/A	I or II
	230.0		W3TRC279	PFO	2,845	-	-	4.79	-	-	1.96	0.60	N/A	I or II
	230.6		W3TRC284	PFO	729	-	-	1.24	-	-	0.50	0.47	N/A	I or II
	230.9		W3TRC282	PFO	269	-	-	0.74	-	-	0.19	0.53	N/A	I or II
	231.3		W3TRC303	PFO	0	-	-	0.07	-	-	-	0.47	N/A	I or II
	231.4	Brooks/Lowndes	W3TRC303	PFO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.47	N/A	IV
	231.7	Lowndes	W3TRC301	PFO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.60	N/A	IV
	231.8		W3TRC300	PEM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.67	N/A	IV
	231.9		W3TRC275	PFO	24	-	-	0.03	-	-	0.02	0.67	N/A	I or II
	232.3		W3TRC273	PFO	167	-	-	0.30	-	-	0.12	0.67	N/A	I or II
	232.5		W3TRC007	PFO	76	-	-	0.22	-	-	0.05	0.60	N/A	I or II
	232.7		W3TRC015	PFO	839	-	-	1.43	-	-	0.58	0.60	N/A	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	232.7		W3TRC015	PFO	0	-	-	0.00	-	-	-	0.60	N/A	I or II
	232.8		W3TRC242	PFO	241	-	-	0.39	-	-	0.16	0.73	N/A	I or II
	233.0		W3TRC242	PFO	313	-	-	0.52	-	-	0.21	0.73	N/A	I or II
	233.1		W3TRC205	PFO	653	-	-	1.32	-	-	0.46	0.47	N/A	I or II
	233.4	Lowndes	W3TRC255	PSS	0	-	0.01	-	-	-	-	0.47	N/A	I or II
	233.5		W3TRC255	PSS	31	-	0.06	-	-	0.01	-	0.47	N/A	I or II
	233.5		W3TRC254	PFO	420	-	-	0.76	-	-	0.29	0.73	N/A	I or II
	233.6		W3TRC253	PSS	146	-	0.19	-	-	0.03	-	0.47	N/A	I or II
	233.7		W3TRC251	PSS	76	-	0.15	-	-	0.02	-	0.60	N/A	I or II
	233.8		W3TRC250	PFO	280	-	-	0.47	-	-	0.19	0.80	N/A	I or II
	233.8		W3TRC252	PSS	72	-	0.12	-	-	0.02	-	0.53	N/A	I or II
	235.5		W3TRC219	PSS	495	-	0.59	-	-	0.11	-	0.40	N/A	I or II
	237.6		W3TRC289	PFO	319	-	-	0.51	-	-	0.22	0.40	N/A	I or II
	238.6		W3TRC025	PSS	0	-	0.00	-	-	-	-	0.00	N/A	I or II
	240.2		W3TRC163	PEM	7	0.01	-	-	-	-	-	0.50	N/A	I or II
	240.2		W3TRC164	PFO	0	-	-	0.02	-	-	0.00	0.60	N/A	I or II
	240.2		W3TRC163	PEM	91	0.13	-	-	-	-	-	0.50	N/A	I or II
	241.3		W3TRC156	PFO	571	-	-	0.98	-	-	0.39	0.80	N/A	I or II
	242.9		WNWI-24291	PFO	255	-	-	0.65	-	-	0.18	-	N/A	I or II
	244.1		W3TRC030	PEM	0	0.01	-	-	-	-	-	0.47	N/A	I or II
	244.1		W3TRC031	PFO	178	-	-	0.29	-	-	0.12	0.60	N/A	I or II
	245.3		WNWI-24529	PEM	87	0.24	-	-	-	-	-	-	N/A	I or II
	245.4		WNWI-24545	PFO	232	-	-	0.53	-	-	0.16	-	N/A	I or II

TABLE 2.4-1  
Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost a/	County	Wetland ID	Wetland Type b/	Crossing Length (Feet) c/	Wetland Impact d/ (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method e/
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	247.0		W1ECT002	PFO	0	-	-	0.22	-	-	0.00	0.67	N/A	I or II
	247.5		W1ECT007	PFO	18	-	-	0.03	-	-	0.01	0.67	N/A	I or II
			<b>Georgia Pipeline ROW Subtotal</b>		<b>71,437</b>	<b>15.20</b>	<b>6.85</b>	<b>110.49</b>	<b>0.00</b>	<b>0.93</b>	<b>41.16</b>			I or II
<i>Compressor Stations</i>														
<u>Albany</u>	159.3	Dougherty	W2TRC261	PEM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.40	N/A	Avoided/ Buffer Area
			<b>Georgia Aboveground Facilities Subtotal</b>			<b>0.00</b>	<b>-</b>	<b>-</b>	<b>0.00</b>	<b>-</b>	<b>-</b>			
<i>Access Roads</i>														
<u>PAR-GA-DO-001</u>	153.2	Dougherty	W2TRC163	PFO	262	-	-	0.11	-	-	0.11	0.73	N/A	Permanent Fill
<u>PAR-GA-ST-020</u>	95.4	Stewart	W2TRC292	PFO	4	-	-	0.00	-	-	0.00	0.67	N/A	Permanent Fill
<u>PAR-GA-ST-022</u>	96.6		W2TRC292	PFO	75	-	-	0.05	-	-	0.05	0.67	N/A	Permanent Fill
<u>PAR-GA-ST-022</u>	96.6		W2TRC294	PFO	0	-	-	0.03	-	-	0.03	0.67	N/A	Permanent Fill
<u>PAR-GA-ST-023</u>	96.6		W2TRC297	PFO	53	-	-	0.03	-	-	0.03	0.73	N/A	Permanent Fill
<u>TAR-GA-BR-010</u>	225.1	Brooks	W3TRC269	PFO	66	-	-	0.04	-	-	-	0.60	N/A	Temporary Fill
<u>TAR-GA-COL-002</u>	197.7	Colquitt	W3TRC113	PFO	15	-	-	0.01	-	-	-	0.53	N/A	Temporary Fill
<u>TAR-GA-LO-004-2</u>	233.7	Lowndes	W3TRC250	PFO	33	-	-	0.02	-	-	-	0.80	N/A	Temporary Fill
<u>TAR-GA-LO-004-2</u>	233.7		W3TRC251	PSS	45	-	0.03	-	-	-	-	0.60	N/A	Temporary Fill
<u>TAR-GA-LO-004-2</u>	233.7		W3TRC252	PSS	150	-	0.08	-	-	-	-	0.53	N/A	Temporary Fill
<u>TAR-GA-LO-008</u>	245.5		WNWI-24545	PFO	275	-	-	0.16	-	-	-	-	N/A	Temporary Fill
			<b>Georgia Access Roads Subtotal</b>		<b>977</b>	<b>0.00</b>	<b>0.11</b>	<b>0.44</b>	<b>0.00</b>	<b>0.00</b>	<b>0.22</b>			
<i>Contractor Yards</i>														
			<b>Georgia Contractor Yards Subtotal</b>		<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>			
			<b>Georgia Total</b>		<b>72,413</b>	<b>15.20</b>	<b>6.96</b>	<b>110.93</b>	<b>0.00</b>	<b>0.93</b>	<b>41.38</b>			
<i>Florida</i>														

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
<i>Pipeline ROW</i>														
<u>Mainline</u>	248.0	Hamilton	W1ECT011	PFO	309	-	-	0.70	-	-	0.21	8, 6, 7	617	I or II
	248.0		W1ECT011	PFO	0	-	-	0.00	-	-	0.00	8, 6, 7	617	I or II
	248.0		W1ECT012	PSS	9	-	0.09	-	-	0.00	-	8, 6, 7	631	I or II
	248.0		W1ECT013	PFO	15	-	-	0.06	-	-	0.01	8, 6, 7	617	I or II
	248.2		W1ECT014	PFO	252	-	-	0.45	-	-	0.18	8, 8, 8	617	I or II
	248.2		W1ECT014	PFO	115	-	-	0.19	-	-	0.08	8, 8, 8	617	I or II
	248.3		W1ECT043	PFO	0	-	-	0.10	-	-	0.01	8, 8, 8	617	I or II
	248.3		W1ECT043	PFO	0	-	-	0.00	-	-	-	8, 8, 8	617	I or II
	248.5		W1ECT044	PFO	171	-	-	0.23	-	-	0.11	8, 8, 8	617	I or II
	248.9		W1ECT045	PFO	575	-	-	0.99	-	-	0.40	8, 8, 8	617	I or II
	254.3		W8ECT006	PEM	0	0.01	-	-	-	-	-	5, 4, 6	643	I or II
	260.1		W1ECT075	PFO	67	-	-	0.07	-	-	0.04	7, 7, 7	617	I or II
	260.1		W1ECT076	PEM	0	0.14	-	-	-	-	-	7, 7, 6	643	I or II
	267.6	Madison	W4ECT057	PFO	0	-	-	0.00	-	-	-	7, 7, 6	615	I or II
	274.9	Suwannee	W1ECT026	PEM	0	0.00	-	-	-	-	-	7, 6, 2	641	I or II
	276.0		W1ECT029	PFO	0	-	-	0.03	-	-	-	7, 6, 4	630	I or II
	279.9		W1ECT077	PEM	0	0.00	-	-	-	-	-	7, 6, 5	643	I or II
	282.2		W2ECT021	PEM	127	0.21	-	-	-	-	-	2, 2, 2	641	I or II
	282.6		W2ECT022	PEM	113	0.20	-	-	-	-	-	3, 3, 3	641	I or II
	283.8		W2ECT039	PEM	128	0.22	-	-	-	-	-	1, 1, 1	641	I or II
	285.5		W2ECT042	PFO	0	-	-	0.01	-	-	-	3, 1, 2	617/641	I or II
	286.9		W1ECT037	PEM	0	0.11	-	-	-	-	-	7, 6, 5	641	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	286.9	Suwannee	W1ECT038	PFO	446	-	-	0.66	-	-	0.31	7, 6, 7	617	I or II
	308.2		W2ECT105	PFO	56	-	-	0.29	-	-	0.04	8, 8, 8	617	I or II
	308.6	Gilchrist	W2ECT105	PFO	12	-	-	0.01	-	-	0.01	8, 8, 8	617	I or II
	318.8		W1ECT089	PFO	1,039	-	-	1.79	-	-	0.72	8, 8, 7	617	I or II
	319.1		W1ECT091	PFO	162	-	-	0.23	-	-	0.11	8, 8, 7	617	I or II
	319.3		W1ECT092	PFO	917	-	-	1.59	-	-	0.63	8, 8, 7	617	I or II
	319.6		W1ECT093	PFO	430	-	-	0.71	-	-	0.29	8, 8, 7	617	I or II
	319.7		W1ECT093	PFO	324	-	-	0.54	-	-	0.22	8, 8, 7	617	I or II
	319.8		W1ECT093	PFO	374	-	-	0.64	-	-	0.26	8, 8, 7	617	I or II
	320.1		W1ECT094	PFO	1,516	-	-	2.68	-	-	1.06	8, 8, 7	617	I or II
	320.5		W1ECT096	PFO	0	-	-	0.00	-	-	-	8, 8, 7	617	I or II
	320.6		W1ECT097	PFO	283	-	-	0.49	-	-	0.20	8, 8, 7	617	I or II
	320.9		W1ECT099	PFO	113	-	-	0.17	-	-	0.08	8, 8, 7	617	I or II
	321.0		W1ECT099	PFO	865	-	-	1.51	-	-	0.60	8, 8, 7	617	I or II
	321.2		W1ECT100	PFO	192	-	-	0.33	-	-	0.13	8, 8, 7	617	I or II
	321.2		W1ECT100	PFO	354	-	-	0.62	-	-	0.24	8, 8, 7	617	I or II
	321.4		W1ECT101	PFO	4	-	-	0.14	-	-	0.03	8, 8, 7	617	I or II
	321.5		W1ECT102	PFO	490	-	-	0.83	-	-	0.34	8, 8, 7	617	I or II
	321.7		W1ECT103	PFO	1,006	-	-	1.79	-	-	0.69	8, 8, 7	617	I or II
	321.9		W1ECT103	PFO	70	-	-	0.13	-	-	0.05	8, 8, 7	617	I or II
	322.1		W1ECT104	PFO	1,421	-	-	2.42	-	-	0.97	8, 8, 7	617	I or II
	322.3		W1ECT104	PFO	184	-	-	0.32	-	-	0.13	8, 8, 7	617	I or II
	322.5	Gilchrist	W1ECT104	PFO	1,649	-	-	3.43	-	-	1.14	8, 8, 7	617	I or II



TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	322.9		W1ECT107	PFO	196	-	-	0.35	-	-	0.14	8, 8, 7	617	I or II
	323.1		W1ECT107	PFO	1,550	-	-	2.67	-	-	1.07	8, 8, 7	617	I or II
	341.2	Levy	W9ECT079	PEM	5	0.03	-	-	-	-	-	4, 3, 4	641	I or II
	341.8		W9ECT083	PFO	0	-	-	0.00	-	-	-	8, 7, 4	620	I or II
	342.0		W9ECT084	PEM	336	0.57	-	-	-	-	-	8, 8, 8	641	I or II
	342.1		W9ECT085	PEM	0	0.03	-	-	-	-	-	8, 6, 6	641	I or II
	342.3		W9ECT087	PEM	296	0.50	-	-	-	-	-	6, 5, 4	641	I or II
	342.4		W6CAR030	PFO	59	-	-	0.11	-	-	0.04	6, 5, 6	621	I or II
	342.8		W9ECT091	PEM	590	1.19	-	-	-	-	-	7, 5, 6	641	I or II
	343.1		W6CAR034	PEM	40	0.07	-	-	-	-	-	6, 6, 7	641	I or II
	343.1		W6CAR035	PFO	182	-	-	0.31	-	-	0.13	6, 6, 7	626	I or II
	343.2		W8ECT065	PEM	0	0.30	-	-	-	-	-	6, 5, 5	641	I or II
	343.4		W8ECT067	PFO	1,407	-	-	2.28	-	-	0.97	6, 5, 6	621	I or II
	343.4		W4CAR030	PEM	0	0.14	-	-	-	-	-	7, 8, 8	641	I or II
	343.7		W4CAR034	PEM	976	1.60	-	-	-	-	-	7, 8, 8	641	I or II
	343.9		W8ECT068	PFO	303	-	-	0.50	-	-	0.21	5, 1, 2	625	I or II
	344.0		W4CAR037	PEM	1	0.05	-	-	-	-	-	7, 8, 8	641	I or II
	344.0		W4CAR037	PEM	0	0.03	-	-	-	-	-	7, 8, 8	641	I or II
	344.5		W8ECT110	PEM	177	0.30	-	-	-	-	-	6, 2, 4	641	I or II
	344.5		W8ECT111	PEM	249	0.43	-	-	-	-	-	6, 6, 4	641	I or II
	344.7		W8ECT063	PEM	208	0.30	-	-	-	-	-	6, 2, 4	641	I or II
	344.9	Levy	W1ECT080	PEM	1,023	1.76	-	-	-	-	-	8, 7, 7	643	I or II
	345.0		W1ECT080	PEM	0	0.12	-	-	-	-	-	8, 7, 7	643	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	345.1		W1ECT081	PEM	164	0.28	-	-	-	-	-	8, 7, 7	643	I or II
	345.2		W1ECT083	PEM	247	0.41	-	-	-	-	-	8, 7, 7	643	I or II
	345.3		W1ECT084	PFO	387	-	-	0.67	-	-	0.27	8, 8, 7	617	I or II
	345.6		W1ECT085	PFO	1,193	-	-	2.05	-	-	0.82	8, 8, 7	617	I or II
	345.8		W1ECT086	PFO	331	-	-	0.57	-	-	0.23	8, 8, 7	617	I or II
	345.9		W9ECT036	PFO	0	-	-	0.02	-	-	-	8, 8, 7	630	I or II
	345.9		W9ECT036A	PFO	315	-	-	0.50	-	-	0.22	8, 8, 7	620	I or II
	346.0		W9ECT036B	PFO	181	-	-	0.29	-	-	0.12	8, 8, 7	630	I or II
	346.0		W9ECT036A	PFO	117	-	-	0.22	-	-	0.08	8, 8, 7	620	I or II
	346.0		W9ECT036C	PFO	400	-	-	0.68	-	-	0.28	8, 8, 7	630	I or II
	346.2		W9ECT037A	PFO	0	-	-	0.00	-	-	-	6, 7, 6	620	I or II
	346.2		W9ECT037	PFO	276	-	-	0.47	-	-	0.19	6, 7, 6	630	I or II
	346.2		W9ECT037A	PFO	504	-	-	0.76	-	-	0.34	6, 7, 6	620	I or II
	346.3		W4CAR042	PFO	130	-	-	0.22	-	-	0.09	6, 8, 7	630	I or II
	346.4		W4CAR042	PFO	26	-	-	0.06	-	-	0.02	6, 8, 7	630	I or II
	346.4		W4CAR042	PFO	218	-	-	0.38	-	-	0.15	6, 8, 7	630	I or II
	346.5		W4CAR042	PFO	13	-	-	0.08	-	-	0.02	6, 8, 7	630	I or II
	346.8		W11CAR023	PEM	139	0.31	-	-	-	-	-	7, 7, 7	643	I or II
	346.8		W11CAR024	PFO	501	-	-	0.77	-	-	0.34	6, 6, 6	630	I or II
	346.9		W11CAR023	PEM	0	0.01	-	-	-	-	-	7, 7, 7	643	I or II
	347.0	Levy	W11CAR025	PEM	0	0.18	-	-	-	-	-	7, 7, 7	641	I or II
	347.1		W11CAR026	PFO	737	-	-	1.13	-	-	0.51	6, 6, 6	630	I or II
	347.2		W11CAR025	PEM	67	0.12	-	-	-	-	-	7, 7, 7	641	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	347.7		W11CAR031	PEM	0	0.16	-	-	-	-	-	7, 7, 7	641	I or II
	347.7		W11CAR032	PFO	375	-	-	0.49	-	-	0.26	7, 7, 7	630	I or II
	347.9		W11CAR033	PEM	360	0.63	-	-	-	-	-	7, 7, 7	641	I or II
	347.9		W11CAR034	PFO	155	-	-	0.26	-	-	0.10	7, 7, 7	630	I or II
	347.9		W11CAR036	PSS	265	-	0.49	-	-	0.06	-	7, 7, 7	631	I or II
	348.0		W11CAR037	PFO	473	-	-	0.77	-	-	0.33	7, 7, 7	630	I or II
	348.1		W11CAR039	PFO	0	-	-	0.01	-	-	-	7, 7, 7	630	I or II
	348.1		W11CAR039	PFO	0	-	-	0.01	-	-	-	7, 7, 7	630	I or II
	348.1		W11CAR038	PEM	0	0.04	-	-	-	-	-	7, 7, 7	641	I or II
	348.2		W11CAR040	PEM	37	0.17	-	-	-	-	-	4, 4, 4	641	I or II
	348.2		W9ECT041	PFO	0	-	-	0.01	-	-	-	5, 7, 6	621	I or II
	348.3		W9ECT043	PFO	0	-	-	0.04	-	-	0.01	6, 6, 6	620	I or II
	348.4		W4CAR003	PEM	312	0.51	-	-	-	-	-	6, 8, 8	641	I or II
	348.5		W9ECT044	PFO	252	-	-	0.46	-	-	0.17	4, 7, 4	621	I or II
	348.5		W4CAR003	PEM	40	0.07	-	-	-	-	-	6, 8, 8	641	I or II
	348.6		W9ECT045	PFO	205	-	-	0.35	-	-	0.14	6, 7, 4	620	I or II
	348.6		W4CAR005	PEM	0	0.00	-	-	-	-	-	6, 8, 0	641	I or II
	348.7		W9ECT046	PFO	352	-	-	0.60	-	-	0.24	6, 7, 6	621	I or II
	348.8		W4CAR007	PEM	0	0.05	-	-	-	-	-	5, 8, 8	641	I or II
	348.9	Levy	W9ECT047	PFO	1,102	-	-	1.83	-	-	0.75	6, 7, 6	620	I or II
	348.9		W4CAR009	PEM	0	0.04	-	-	-	-	-	5, 8, 8	641	I or II
	349.2		W4CAR015	PFO	0	-	-	0.22	-	-	0.00	6, 8, 8	621	I or II
	349.2		W4CAR016	PEM	0	0.00	-	-	-	-	-	6, 8, 8	641	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	349.3		W4CAR016	PEM	0	0.17	-	-	-	-	-	6, 8, 8	641	I or II
	349.3		W4CAR017	PFO	7	-	-	0.08	-	-	0.01	6, 8, 4	630	I or II
	349.3		W4CAR016	PEM	335	0.50	-	-	-	-	-	6, 8, 8	641	I or II
	349.4		W9ECT048	PFO	121	-	-	0.19	-	-	0.08	5, 7, 6	621	I or II
	349.5		W4CAR019	PFO	396	-	-	0.69	-	-	0.27	7, 8, 6	630	I or II
	349.7		W9ECT061	PFO	38	-	-	0.13	-	-	0.03	7, 4, 6	620	I or II
	349.8		W9ECT065	PFO	93	-	-	0.15	-	-	0.06	7, 7, 7	621	I or II
	350.2		W9ECT070	PFO	51	-	-	0.06	-	-	0.03	4, 4, 5	630	I or II
	350.5		W1CAR011	PEM	0	0.09	-	-	-	-	-	5, 3, 0	641	I or II
	350.7		W6CAR040	PEM	0	0.02	-	-	-	-	-	6, 3, 3	641	I or II
	351.0		W4CAR024	PFO	118	-	-	0.19	-	-	0.08	7, 6, 0	617	I or II
	351.2		W4CAR027	PEM	61	0.14	-	-	-	-	-	7, 6, 6	641	I or II
	351.9		W4CAR195	PEM	496	0.83	-	-	-	-	-	5, 8, 6	641	I or II
	352.1		W4CAR196	PEM	352	0.61	-	-	-	-	-	5, 7, 6	641	I or II
	382.8	Marion	W2ECT193	PEM	177	0.28	-	-	-	-	-	2, 2, 2	641	I or II
	383.0		W2ECT194	PEM	77	0.14	-	-	-	-	-	2, 2, 2	641	I or II
	383.2		W8ECT113	PEM	224	0.29	-	-	-	-	-	4, 4, 4	641	I or II
	383.2		W8ECT113	PEM	467	0.80	-	-	-	-	-	4, 4, 4	641	I or II
	383.4	Marion	W8ECT114	PEM	506	0.87	-	-	-	-	-	4, 4, 4	641	I or II
	384.2		W8ECT116	PEM	148	0.21	-	-	-	-	-	4, 3, 4	641	I or II
	384.8		W8ECT117	PEM	491	0.84	-	-	-	-	-	4, 4, 4	641	I or II
	385.0		W9ECT121	PEM	251	0.30	-	-	-	-	-	5, 4, 4	641	I or II
	385.2		W9ECT123	PEM	0	0.01	-	-	-	-	-	5, 4, 4	641	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	389.7		W13CAR078	PFO	262	-	-	0.45	-	-	0.18	8, 7, 7	630	I or II
	389.7		W13CAR079	PEM	0	0.00	-	-	-	-	-	4, 5, 5	641	I or II
	394.2		W8ECT228	PEM	236	0.39	-	-	-	-	-	2, 1, 1	641	I or II
	395.1		W8ECT229	PSS	265	-	0.47	-	-	0.06	-	3, 1, 1	631	I or II
	395.4		W6CAR231	PSS	307	-	0.47	-	-	0.07	-	8, 8, 8	617	I or II
	395.5		W8ECT240	PFO	885	-	-	1.62	-	-	0.62	8, 8, 8	631	I or II
	395.6		W6CAR231	PSS	142	-	0.21	-	-	0.03	-	8, 8, 8	617	I or II
	395.8		W8ECT242	PEM	367	0.62	-	-	-	-	-	3, 3, 3	641	I or II
	396.5		W8ECT231	PEM	289	0.40	-	-	-	-	-	3, 3, 3	641	I or II
	396.9		W8ECT232	PEM	371	0.66	-	-	-	-	-	3, 3, 3	641	I or II
	397.1		W8ECT234	PEM	132	0.48	-	-	-	-	-	3, 3, 3	641	I or II
	399.6		W9ECT145	PEM	0	0.00	-	-	-	-	-	8, 8, 7	641	I or II
	399.6	Sumter	W9ECT145	PEM	71	0.10	-	-	-	-	-	8, 8, 7	641	I or II
	399.6	Marion	W9ECT145	PEM	0	0.02	-	-	-	-	-	8, 8, 7	641	I or II
	399.7	Sumter	W9ECT145	PEM	856	1.09	-	-	-	-	-	8, 8, 7	641	I or II
	399.7	Marion	W9ECT145	PEM	0	0.39	-	-	-	-	-	8, 8, 7	641	I or II
	400.1	Sumter	W9ECT146	PEM	81	0.08	-	-	-	-	-	7, 7, 5	641	I or II
	400.1	Marion	W9ECT146	PEM	0	0.07	-	-	-	-	-	7, 7, 5	641	I or II
	400.1	Sumter	W9ECT146	PEM	53	0.24	-	-	-	-	-	7, 7, 5	641	I or II
	400.1	Marion	W9ECT146	PEM	0	0.00	-	-	-	-	-	7, 7, 5	641	I or II
	408.0	Sumter	W9ECT238	PEM	241	0.41	-	-	-	-	-	4, 3, 5	641	I or II
	408.1		W9ECT239	PEM	4	0.07	-	-	-	-	-	4, 3, 4	641	I or II
	408.3		W9ECT240	PFO	181	-	-	0.28	-	-	0.12	7, 5, 4	617	I or II

TABLE 2.4-1  
Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	408.4		W9ECT240	PFO	54	-	-	0.10	-	-	0.04	7, 5, 4	617	I or II
	409.0		W9ECT177	PEM	193	0.32	-	-	-	-	-	3, 3, 5	641	I or II
	409.2		W9ECT183	PEM	255	0.36	-	-	-	-	-	3, 3, 4	641	I or II
	411.0		W8ECT183	PEM	555	0.96	-	-	-	-	-	2, 1, 1	641	I or II
	411.1		W8ECT184	PEM	0	0.03	-	-	-	-	-	2, 1, 1	641	I or II
	411.2		W8ECT185	PEM	176	0.30	-	-	-	-	-	2, 1, 1	641	I or II
	411.5		W8ECT188	PEM	478	0.83	-	-	-	-	-	2, 2, 3	641	I or II
	411.7		W8ECT189	PEM	159	0.22	-	-	-	-	-	2, 1, 1	641	I or II
	411.7		W8ECT189	PEM	0	0.04	-	-	-	-	-	2, 1, 1	641	I or II
	411.8		W8ECT191	PEM	83	0.12	-	-	-	-	-	2, 1, 1	641	I or II
	411.9		W8ECT192	PEM	87	0.13	-	-	-	-	-	2, 1, 1	641	I or II
	411.9		W8ECT193	PFO	0	-	-	0.00	-	-	-	5, 5, 4	617	I or II
	412.0		W8ECT194	PFO	161	-	-	0.27	-	-	0.11	5, 5, 4	617	I or II
	412.1		W8ECT195	PFO	311	-	-	0.51	-	-	0.21	4, 5, 4	617	I or II
	412.6		W8ECT195	PFO	4,040	-	-	7.79	-	-	2.78	4, 5, 4	617	I or II
	413.0		W8ECT207	PFO	0	-	-	1.93	-	-	0.00	4, 5, 4	630	I or II
	413.1	Sumter	W8ECT207	PFO	320	-	-	0.67	-	-	0.22	4, 5, 4	630	I or II
	413.2		W8ECT207	PFO	1,417	-	-	2.58	-	-	0.98	4, 5, 4	630	I or II
	413.5		W8ECT208	PEM	0	0.09	-	-	-	-	-	3, 2, 3	641	I or II
	413.9		W8ECT210	PFO	27	-	-	0.05	-	-	0.02	3, 2, 3	630	I or II
	414.3		W9ECT248	PEM	236	0.40	-	-	-	-	-	7, 7, 5	643	I or II
	414.4		W9ECT249	PEM	146	0.25	-	-	-	-	-	7, 7, 5	643	I or II
	414.9		W2ECT246	PFO	0	-	-	0.01	-	-	-	5, 8, 7	617	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	415.0		W2ECT247	PFO	556	-	-	0.96	-	-	0.38	6, 8, 7	617	I or II
	415.6		W2ECT249	PFO	99	-	-	0.15	-	-	0.07	5, 5, 5	617	I or II
	415.9		W2ECT250	PEM	638	1.10	-	-	-	-	-	2, 6, 6	641	I or II
	416.0		W2ECT251	PEM	268	0.46	-	-	-	-	-	2, 6, 6	641	I or II
	416.4		W2ECT253	PEM	180	0.31	-	-	-	-	-	2, 6, 6	641	I or II
	416.9		W2ECT254	PFO	186	-	-	0.32	-	-	0.13	4, 3, 3	617	I or II
	417.6		W9ECT258	PEM	76	0.13	-	-	-	-	-	2, 3, 3	641	I or II
	423.9		W8ECT175	PEM	0	0.02	-	-	-	-	-	2, 1, 1	641	I or II
	424.6		W8ECT178	PEM	251	0.45	-	-	-	-	-	2, 1, 1	641	I or II
	424.9		W8ECT179	PEM	0	0.02	-	-	-	-	-	2, 1, 1	641	I or II
	425.2		W9ECT196	PEM	368	0.63	-	-	-	-	-	4, 3, 3	641	I or II
	425.4		W9ECT199	PEM	233	0.41	-	-	-	-	-	3, 3, 3	641	I or II
	425.5		W9ECT199	PEM	828	1.58	-	-	-	-	-	3, 3, 3	641	I or II
	427.2		W9ECT203	PEM	73	0.11	-	-	-	-	-	4, 3, 2	641	I or II
	427.2		W9ECT203	PEM	131	0.21	-	-	-	-	-	4, 3, 2	641	I or II
	427.8	Sumter	W8ECT223	PSS	870	-	2.04	-	-	0.20	-	2, 1, 1	631	I or II
	427.9		W6CAR229	PFO	0	-	-	0.01	-	-	-	5, 5, 5	617	I or II
	427.9		W6CAR229	PFO	228	-	-	0.38	-	-	0.16	5, 5, 5	617	I or II
	428.0		W8ECT223	PSS	630	-	1.09	-	-	0.14	-	2, 1, 1	631	I or II
	428.7		W9ECT211	PFO	156	-	-	0.28	-	-	0.11	6, 3, 3	617	I or II
	428.9		W9ECT212	PEM	285	0.49	-	-	-	-	-	3, 2, 3	641	I or II
	429.1		W9ECT214	PEM	481	0.80	-	-	-	-	-	5, 2, 3	641	I or II
	429.9		W9ECT215	PFO	118	-	-	0.21	-	-	0.08	4, 3, 4	617	I or II



TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	430.6		W9ECT206	PEM	19	0.05	-	-	-	-	-	3, 2, 3	641	I or II
	430.6		W9ECT206	PEM	0	0.02	-	-	-	-	-	3, 2, 3	641	I or II
	430.8		W9ECT208	PEM	312	0.53	-	-	-	-	-	3, 2, 3	641	I or II
	431.8		W7CAR155	PEM	1,319	2.27	-	-	-	-	-	7, 7, 7	640	I or II
	432.1		W7CAR155	PEM	872	1.50	-	-	-	-	-	7, 7, 7	640	I or II
	432.9		W6CAR179	PEM	3,434	6.05	-	-	-	-	-	5, 4, 5	643	I or II
	433.4		W6CAR181	PEM	0	0.00	-	-	-	-	-	5, 4, 5	643	I or II
	433.6		W6CAR181	PEM	1,436	2.47	-	-	-	-	-	5, 4, 5	643	I or II
	433.8		W6CAR183	PEM	181	0.28	-	-	-	-	-	4, 3, 4	641	I or II
	434.1		W4CAR165	PEM	635	1.10	-	-	-	-	-	6, 5, 5	641	I or II
	434.7		W4CAR174	PEM	0	0.02	-	-	-	-	-	6, 6, 7	641	I or II
	434.8		W4CAR173	PFO	317	-	-	0.52	-	-	0.22	7, 6, 6	617	I or II
	434.8		W4CAR174	PEM	715	1.24	-	-	-	-	-	6, 6, 7	641	I or II
	435.1		W4CAR175	PFO	1,162	-	-	2.19	-	-	0.81	6, 8, 8	617	I or II
	435.4	Sumter	W6CAR211	PFO	198	-	-	0.34	-	-	0.14	6, 8, 7	617	I or II
	435.5		W6CAR209	PFO	0	-	-	0.05	-	-	0.00	6, 8, 7	621	I or II
	435.6		W7CAR001	PEM	1,507	2.48	-	-	-	-	-	5, 7, 7	641	I or II
	435.6		W6CAR210	PFO	0	-	-	0.04	-	-	0.01	6, 8, 7	621	I or II
	435.6		W7CAR002	PFO	18	-	-	0.05	-	-	0.01	7, 8, 6	621	I or II
	435.7		W7CAR002	PFO	128	-	-	0.19	-	-	0.08	7, 8, 6	621	I or II
	435.8		W7CAR003	PFO	0	-	-	0.01	-	-	0.00	7, 4, 5	630	I or II
	435.8	Lake	W7CAR003	PFO	0	-	-	0.23	-	-	0.03	7, 4, 5	630	I or II
	436.0		W7CAR005	PEM	420	0.72	-	-	-	-	-	7, 7, 7	641	I or II

TABLE 2.4-1  
Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	436.1		W7CAR005	PEM	52	0.09	-	-	-	-	-	7, 7, 7	641	I or II
	436.1		W7CAR005	PEM	0	0.00	-	-	-	-	-	7, 7, 7	641	I or II
	436.1		W7CAR006	PFO	203	-	-	0.34	-	-	0.14	7, 7, 7	621	I or II
	436.3		W7CAR007	PEM	738	1.26	-	-	-	-	-	7, 7, 7	641	I or II
	436.5		W7CAR009	PEM	755	1.30	-	-	-	-	-	7, 7, 7	641	I or II
	436.9		W7CAR012	PEM	106	0.25	-	-	-	-	-	3, 3, 3	510D/211W	I or II
	436.9		W7CAR012	PEM	0	0.00	-	-	-	-	-	3, 3, 3	510D/211W	I or II
	437.1		W7CAR015	PEM	302	0.51	-	-	-	-	-	7, 6, 6	641	I or II
	437.1		W7CAR015	PEM	212	0.35	-	-	-	-	-	7, 6, 6	641	I or II
	437.4		W7CAR027	PEM	514	0.87	-	-	-	-	-	7, 7, 7	641	I or II
	437.4		W7CAR028	PFO	232	-	-	0.39	-	-	0.16	7, 7, 8	621	I or II
	437.5		W7CAR027	PEM	434	0.75	-	-	-	-	-	7, 7, 7	641	I or II
	437.6		W7CAR032	PFO	117	-	-	0.20	-	-	0.08	7, 4, 5	441 H	I or II
	437.7	Lake	W7CAR034	PEM	120	0.15	-	-	-	-	-	4, 4, 4	641	I or II
	437.8		W7CAR035	PFO	314	-	-	0.54	-	-	0.22	7, 7, 8	621	I or II
	437.9		W6CAR046	PFO	95	-	-	0.16	-	-	0.07	7, 4, 5	617	I or II
	437.9		W6CAR046	PFO	0	-	-	0.04	-	-	0.00	7, 4, 5	617	I or II
	438.6		W6CAR056	PFO	670	-	-	1.15	-	-	0.46	6, 6, 6	621	I or II
	438.7		W6CAR059	PEM	121	0.20	-	-	-	-	-	5, 5, 3	641	I or II
	438.8		W7CAR020	PFO	217	-	-	0.38	-	-	0.15	7, 7, 7	621	I or II
	438.9		W7CAR022	PEM	0	0.01	-	-	-	-	-	7, 7, 7	641	I or II
	439.0		W7CAR022	PEM	190	0.33	-	-	-	-	-	7, 7, 7	641	I or II
	439.2		W7CAR023	PEM	34	0.11	-	-	-	-	-	7, 7, 7	641	I or II

TABLE 2.4-1  
Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	439.2		W7CAR023	PEM	0	0.08	-	-	-	-	-	7, 7, 7	641	I or II
	439.3		W7CAR023	PEM	28	0.05	-	-	-	-	-	7, 7, 7	641	I or II
	439.4		W7CAR023	PEM	273	0.47	-	-	-	-	-	7, 7, 7	641	I or II
	439.5		W7CAR023	PEM	0	0.01	-	-	-	-	-	7, 7, 7	641	I or II
	439.5		W13CAR008	PEM	0	0.00	-	-	-	-	-	5, 8, 7	641	I or II
	439.6		W13CAR008	PEM	348	0.58	-	-	-	-	-	5, 8, 7	641	I or II
	439.6		W13CAR009	PEM	12	0.03	-	-	-	-	-	4, 4, 3	641	I or II
	439.7		W13CAR010	PEM	114	0.20	-	-	-	-	-	5, 8, 7	641	I or II
	439.7		W13CAR011	PEM	647	1.10	-	-	-	-	-	5, 8, 7	641	I or II
	439.8		W13CAR012	PFO	15	-	-	0.03	-	-	0.01	9, 9, 9	621	I or II
	439.9		W13CAR015	PFO	55	-	-	0.10	-	-	0.04	9, 9, 9	621	I or II
	439.9		W6CAR147	PFO	85	-	-	0.17	-	-	0.06	9, 9, 9	621	I or II
	440.0	Lake	W6CAR148	PEM	315	0.52	-	-	-	-	-	9, 8, 8	641	I or II
	440.0		W6CAR149	PFO	492	-	-	0.85	-	-	0.34	9, 9, 9	621	I or II
	440.1		W6CAR150	PEM	40	0.16	-	-	-	-	-	8, 7, 6	641	I or II
	440.5		W6CAR151	PEM	3,150	5.35	-	-	-	-	-	9, 8, 9	641	I or II
	440.5		W6CAR152	PFO	113	-	-	0.21	-	-	0.08	9, 9, 9	621	I or II
	440.7		W6CAR151	PEM	73	0.14	-	-	-	-	-	9, 8, 9	641	I or II
	440.8		W6CAR080	PFO	14	-	-	0.07	-	-	0.02	9, 9, 9	621	I or II
	440.8		W6CAR080	PFO	337	-	-	0.70	-	-	0.23	9, 9, 9	621	I or II
	440.8		W6CAR079	PEM	180	0.33	-	-	-	-	-	8, 8, 8	641	I or II
	440.9		W6CAR082	PFO	365	-	-	0.62	-	-	0.25	9, 9, 9	621	I or II
	440.9		W6CAR079	PEM	115	0.20	-	-	-	-	-	8, 8, 8	641	I or II

TABLE 2.4-1  
Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	441.0		W6CAR082	PFO	104	-	-	0.17	-	-	0.07	9, 9, 9	621	I or II
	441.0		W6CAR081	PEM	33	0.05	-	-	-	-	-	8, 8, 8	641	I or II
	441.1		W6CAR083	PEM	638	1.10	-	-	-	-	-	8, 8, 8	641	I or II
	441.7		W6CAR086	PEM	0	0.00	-	-	-	-	-	5, 4, 5	641	I or II
	441.8		W6CAR086	PEM	0	0.11	-	-	-	-	-	5, 4, 5	641	I or II
	441.8		W6CAR075	PEM	0	0.01	-	-	-	-	-	5, 5, 6	641	I or II
	441.8		W6CAR076	PEM	14	0.02	-	-	-	-	-	5, 6, 6	641	I or II
	441.8		W6CAR076	PEM	16	0.03	-	-	-	-	-	5, 6, 6	641	I or II
	442.2		W6CAR078	PEM	335	0.56	-	-	-	-	-	6, 6, 6	641	I or II
	442.3		W6CAR060	PEM	0	0.01	-	-	-	-	-	5, 5, 3	641	I or II
	444.0		W6CAR104	PEM	0	0.00	-	-	-	-	-	7, 6, 5	641	I or II
	444.0	Lake	W6CAR104	PEM	29	0.05	-	-	-	-	-	7, 6, 5	641	I or II
	444.0		W6CAR104	PEM	14	0.03	-	-	-	-	-	7, 6, 5	641	I or II
	444.1		W6CAR065	PFO	0	-	-	0.03	-	-	0.00	7, 6, 5	621	I or II
	444.8		W6CAR069	PFO	160	-	-	0.19	-	-	0.10	7, 8, 8	621	I or II
	445.1		W7CAR083	PFO	1,959	-	-	3.76	-	-	1.38	7, 8, 8	630	I or II
	445.3		W7CAR083	PFO	109	-	-	0.19	-	-	0.08	7, 8, 8	630	I or II
	445.3		W7CAR085	PEM	70	0.13	-	-	-	-	-	5, 7, 7	643	I or II
	445.6		W7CAR085	PEM	69	0.13	-	-	-	-	-	5, 7, 7	643	I or II
	445.7		W7CAR085	PEM	0	0.09	-	-	-	-	-	5, 7, 7	643	I or II
	445.7		W7CAR085	PEM	164	0.27	-	-	-	-	-	5, 7, 7	643	I or II
	446.0		W6CAR134	PEM	64	0.12	-	-	-	-	-	8, 6, 6	641	I or II
	446.0		W6CAR135	PEM	88	0.15	-	-	-	-	-	8, 7, 7	641	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	446.1		W6CAR136	PFO	218	-	-	0.35	-	-	0.15	8, 7, 8	621	I or II
	446.1		W6CAR137	PFO	257	-	-	0.46	-	-	0.18	8, 7, 8	617	I or II
	446.1		W6CAR218	PEM	63	0.11	-	-	-	-	-	8, 7, 7	641	I or II
	446.2		W6CAR218	PEM	0	0.04	-	-	-	-	-	8, 7, 7	641	I or II
	446.4		W6CAR139	PEM	177	0.31	-	-	-	-	-	8, 7, 7	641	I or II
	446.5		W6CAR139	PEM	377	0.61	-	-	-	-	-	8, 7, 7	641	I or II
	446.7		W6CAR144	PFO	210	-	-	0.34	-	-	0.14	7, 7, 7	621	I or II
	446.8		W6CAR145	PFO	156	-	-	0.22	-	-	0.11	7, 5, 5	621	I or II
	446.9		W7CAR037	PEM	53	0.06	-	-	-	-	-	7, 7, 7	643	I or II
	447.0		W7CAR038	PEM	0	0.01	-	-	-	-	-	7, 7, 7	643	I or II
	447.0	Lake	W7CAR039	PEM	0	0.02	-	-	-	-	-	7, 7, 7	643	I or II
	447.0		W7CAR039	PEM	52	0.09	-	-	-	-	-	7, 7, 7	643	I or II
	447.2		W7CAR040	PFO	2,290	-	-	3.94	-	-	1.58	8, 8, 8	630/621	I or II
	447.4		W7CAR041	PEM	18	0.03	-	-	-	-	-	7, 7, 7	643	I or II
	447.5		W7CAR041	PEM	22	0.04	-	-	-	-	-	7, 7, 7	643	I or II
	447.5		W7CAR041	PEM	456	0.75	-	-	-	-	-	7, 7, 7	643	I or II
	447.5		W7CAR042	PFO	0	-	-	0.04	-	-	-	7, 7, 7	621	I or II
	447.6		W7CAR043	PFO	0	-	-	0.09	-	-	0.02	7, 7, 7	621	I or II
	447.7		W7CAR044	PEM	429	0.75	-	-	-	-	-	7, 7, 7	643	I or II
	447.7		W7CAR043	PFO	0	-	-	0.01	-	-	-	7, 7, 7	621	I or II
	447.8		W7CAR045	PFO	0	-	-	0.01	-	-	-	7, 6, 6	621	I or II
	447.8		W7CAR047	PEM	0	0.00	-	-	-	-	-	7, 7, 7	643	I or II
	447.8		W7CAR047	PEM	0	0.03	-	-	-	-	-	7, 7, 7	643	I or II

TABLE 2.4-1  
Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	447.9		W7CAR048	PFO	0	-	-	0.01	-	-	-	7, 6, 6	630	I or II
	447.9		W7CAR047	PEM	94	0.24	-	-	-	-	-	7, 7, 7	643	I or II
	447.9		W7CAR046	PFO	120	-	-	0.21	-	-	0.08	8, 8, 8	630	I or II
	447.9		W7CAR047	PEM	129	0.22	-	-	-	-	-	7, 7, 7	643	I or II
	448.0		W7CAR047	PEM	47	0.09	-	-	-	-	-	7, 7, 7	643	I or II
	448.1		W7CAR046	PFO	488	-	-	0.83	-	-	0.34	8, 8, 8	630	I or II
	448.2		W7CAR046	PFO	0	-	-	0.05	-	-	-	8, 8, 8	630	I or II
	448.2		W7CAR052	PEM	909	1.49	-	-	-	-	-	7, 7, 7	641	I or II
	448.2		W6CAR230	PFO	60	-	-	0.11	-	-	0.04	7, 6, 6	621	I or II
	448.4	Lake	W7CAR050	PFO	1,244	-	-	2.16	-	-	0.86	7, 7, 7	630	I or II
	448.5		W7CAR053	PEM	0	0.00	-	-	-	-	-	7, 7, 7	643	I or II
	448.6		W7CAR053	PEM	80	0.14	-	-	-	-	-	7, 7, 7	643	I or II
	448.6		W7CAR053	PEM	68	0.10	-	-	-	-	-	7, 7, 7	643	I or II
	448.8		W7CAR050	PFO	1,302	-	-	2.28	-	-	0.90	7, 7, 7	630	I or II
	448.9		W7CAR055	PEM	522	1.07	-	-	-	-	-	4, 4, 4	643	I or II
	449.1		W7CAR056	PFO	1,101	-	-	1.90	-	-	0.76	7, 6, 6	630	I or II
	449.2		W7CAR057	PEM	88	0.16	-	-	-	-	-	4, 4, 4	643	I or II
	449.3		W7CAR060	PFO	527	-	-	0.91	-	-	0.36	7, 5, 6	630	I or II
	449.4		W7CAR062	PEM	219	0.38	-	-	-	-	-	4, 4, 4	643	I or II
	449.4		W7CAR062	PEM	63	0.11	-	-	-	-	-	4, 4, 4	643	I or II
	449.5		W7CAR061	PFO	426	-	-	0.74	-	-	0.29	7, 6, 7	630	I or II
	449.5		W7CAR063	PEM	49	0.09	-	-	-	-	-	4, 4, 4	643	I or II
	449.6		W7CAR064	PEM	14	0.03	-	-	-	-	-	4, 4, 4	643	I or II

TABLE 2.4-1  
Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	449.6		W7CAR065	PFO	90	-	-	0.15	-	-	0.06	7, 5, 7	630	I or II
	449.6		W7CAR065	PFO	370	-	-	0.64	-	-	0.25	7, 5, 7	630	I or II
	449.7		W7CAR067	PEM	134	0.19	-	-	-	-	-	7, 7, 7	643	I or II
	449.7		W6CAR216	PFO	0	-	-	0.01	-	-	-	6, 4, 4	621	I or II
	450.1		W7CAR120	PEM	112	0.14	-	-	-	-	-	5, 7, 7	643	I or II
	450.1		W7CAR121	PFO	0	-	-	0.00	-	-	-	6, 6, 4	630	I or II
	450.2		W7CAR120	PEM	0	0.01	-	-	-	-	-	5, 7, 7	643	I or II
	450.3		W7CAR120	PEM	29	0.05	-	-	-	-	-	5, 7, 7	643	I or II
	450.5	Lake	W7CAR121	PFO	2,686	-	-	4.62	-	-	1.85	6, 6, 4	630	I or II
	451.0		W7CAR069	PFO	0	-	-	0.08	-	-	0.01	7, 6, 8	630	I or II
	451.1		W7CAR068	PFO	944	-	-	1.69	-	-	0.64	7, 6, 8	441H/625	I or II
	451.2		W7CAR072	PFO	276	-	-	0.62	-	-	0.19	7, 6, 8	441H/625	I or II
	451.2		W7CAR073	PFO	357	-	-	0.62	-	-	0.25	7, 6, 8	630	I or II
	451.3		W7CAR076	PFO	111	-	-	0.19	-	-	0.08	7, 6, 8	441H/625	I or II
	451.3		W7CAR076	PFO	14	-	-	0.02	-	-	0.01	7, 6, 8	441H/625	I or II
	451.3		W7CAR076	PFO	0	-	-	0.00	-	-	-	7, 6, 8	441H/625	I or II
	452.2		W7CAR091	PEM	24	0.08	-	-	-	-	-	5, 7, 7	643	I or II
	452.3		W7CAR094	PEM	0	0.04	-	-	-	-	-	5, 7, 7	643	I or II
	452.4		W7CAR093	PFO	0	-	-	0.04	-	-	0.00	6, 6, 8	630	I or II
	452.4		W7CAR094	PEM	632	1.07	-	-	-	-	-	5, 7, 7	643	I or II
	452.8		W7CAR097	PFO	112	-	-	0.19	-	-	0.08	6, 5, 7	441H/625	I or II
	452.9		W7CAR098	PFO	964	-	-	1.72	-	-	0.66	6, 6, 7	630	I or II
	453.0		W7CAR099	PEM	628	1.16	-	-	-	-	-	5, 7, 7	643	I or II



TABLE 2.4-1  
Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	453.3		W7CAR103	PFO	2,092	-	-	4.03	-	-	1.44	6, 6, 8	630	I or II
	453.5		W7CAR107	PFO	219	-	-	0.67	-	-	0.15	6, 6, 8	630	I or II
	453.7		W7CAR109	PEM	46	0.10	-	-	-	-	-	5, 7, 7	643	I or II
	453.8		W7CAR110	PFO	1,369	-	-	2.34	-	-	0.94	7, 8, 8	630	I or II
	454.2		W3ECT038	PFO	1,779	-	-	3.05	-	-	1.23	6, 7, 8	630	I or II
	454.4		W3ECT039	PEM	366	0.57	-	-	-	-	-	4, 3, 3	641	I or II
	454.4		W3ECT039	PEM	361	0.66	-	-	-	-	-	4, 3, 3	641	I or II
	454.5	Lake	W3ECT042	PEM	81	0.14	-	-	-	-	-	5, 3, 3	641	I or II
	454.5		W7CAR225	PFO	0	-	-	0.00	-	-	-	6, 7, 8	630	I or II
	454.6		W3ECT040	PEM	434	0.71	-	-	-	-	-	5, 3, 3	641	I or II
	454.8		W3ECT043	PEM	676	1.00	-	-	-	-	-	5, 3, 2	641	I or II
	455.0		W6CAR071	PEM	114	0.21	-	-	-	-	-	6, 5, 4	643	I or II
	455.2		W6CAR072	PFO	29	-	-	0.05	-	-	0.02	8, 6, 6	626	I or II
	455.6		W6CAR073	PFO	3,861	-	-	6.65	-	-	2.66	8, 7, 8	621	I or II
	456.0		W6CAR074	PFO	455	-	-	0.72	-	-	0.31	8, 7, 7	611	I or II
	456.2		W6CAR087	PFO	0	-	-	0.01	-	-	-	8, 7, 6	626	I or II
	456.3		W6CAR088	PFO	0	-	-	0.10	-	-	-	7, 6, 6	611	I or II
	457.1		W9ECT260	PFO	5,017	-	-	8.68	-	-	3.46	9, 8, 9	620	I or II
	457.7	Polk	W9ECT260	PFO	932	-	-	1.76	-	-	0.64	9, 8, 9	620	I or II
	457.8		W9ECT260	PFO	180	-	-	0.29	-	-	0.12	9, 8, 9	620	I or II
	457.8		W9ECT260	PFO	83	-	-	0.16	-	-	0.06	9, 8, 9	620	I or II
	458.2		W9ECT260	PFO	3,147	-	-	5.86	-	-	2.17	9, 8, 9	620	I or II
	458.7		W9ECT260	PFO	2,294	-	-	4.31	-	-	1.58	9, 8, 9	620	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	459.7		W9ECT260	PFO	8,622	-	-	15.50	-	-	5.93	9, 8, 9	620	I or II
	460.6		W2ECT168	PEM	192	0.31	-	-	-	-	-	5, 5, 6	641	I or II
	461.2		W6CAR226	PFO	4,665	-	-	8.28	-	-	3.21	8, 8, 8	621	I or II
	461.8		W9CAR073	PFO	1,900	-	-	3.40	-	-	1.31	6, 8, 8	621	I or II
	462.1		W9CAR076	PSS	638	-	1.16	-	-	0.15	-	6, 6, 6	631	I or II
	462.3		W9CAR085	PEM	0	0.00	-	-	-	-	-	6, 8, 7	643	I or II
	462.4	Polk	W9CAR084	PEM	582	0.62	-	-	-	-	-	6, 4, 3	643	I or II
	462.4		W9CAR083	PSS	128	-	0.20	-	-	0.03	-	6, 7, 7	631	I or II
	462.5		W9CAR082	PFO	437	-	-	0.73	-	-	0.30	6, 8, 8	621	I or II
	462.5		W9CAR086	PEM	57	0.09	-	-	-	-	-	6, 8, 6	641	I or II
	462.6		W9CAR087	PFO	772	-	-	1.37	-	-	0.53	6, 8, 8	621	I or II
	462.7		W9CAR088	PFO	584	-	-	0.74	-	-	0.38	6, 7, 5	441H	I or II
	462.8		W9CAR088	PFO	154	-	-	0.24	-	-	0.11	6, 7, 5	441H	I or II
	462.9		W9CAR088	PFO	0	-	-	0.00	-	-	-	6, 7, 5	441H	I or II
	463.0		W9CAR088	PFO	5	-	-	0.01	-	-	0.00	6, 7, 5	441H	I or II
	463.1		W7CAR129	PFO	978	-	-	1.44	-	-	0.65	6, 7, 7	630	I or II
	463.4		W7CAR129	PFO	1,037	-	-	1.59	-	-	0.71	6, 7, 7	630	I or II
	463.5		W7CAR130	PEM	0	0.50	-	-	-	-	-	7, 7, 7	641	I or II
	463.6		W4CAR241	PFO	0	-	-	0.01	-	-	0.00	6, 7, 7	625	I or II
	463.6		W7CAR130	PEM	243	0.41	-	-	-	-	-	7, 7, 7	641	I or II
	463.8		W7CAR131	PFO	1,703	-	-	2.93	-	-	1.17	7, 7, 6	630	I or II
	466.6	Osceola	W6CAR096	PEM	292	0.49	-	-	-	-	-	7, 5, 6	643	I or II
	466.8		W6CAR097	PEM	0	0.05	-	-	-	-	-	7, 7, 7	643	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	467.4		W6CAR114	PFO	398	-	-	0.65	-	-	0.27	7, 7, 8	617	I or II
	467.8		W6CAR100	PFO	0	-	-	0.11	-	-	0.01	7, 8, 8	617	I or II
	467.9		W6CAR100	PFO	394	-	-	0.69	-	-	0.27	7, 8, 8	617	I or II
	468.9		W6CAR105	PFO	8,783	-	-	17.31	-	-	6.05	9, 9, 9	617	I or II
	470.8		W9ECT232	PFO	440	-	-	0.76	-	-	0.30	6, 5, 5	617	I or II
	471.0	Osceola	W9ECT232	PFO	1,047	-	-	2.10	-	-	0.72	6, 5, 5	617	I or II
	471.1		W9ECT232	PFO	329	-	-	1.55	-	-	0.23	6, 5, 5	617	I or II
	471.6		W4CAR113	PFO	68	-	-	0.08	-	-	0.05	6, 7, 7	631	I or II
	471.7		W1ECT067	PFO	257	-	-	0.44	-	-	0.18	7, 7, 7	617	I or II
	471.8		W1ECT067	PFO	667	-	-	1.10	-	-	0.46	7, 7, 7	617	I or II
	472.1		W1ECT068	PFO	450	-	-	1.13	-	-	0.31	8, 8, 8	617	I or II
	472.2		W1ECT068	PFO	743	-	-	1.64	-	-	0.51	8, 8, 8	617	I or II
	472.4		W1ECT070	PFO	63	-	-	0.11	-	-	0.04	7, 7, 7	617	I or II
	472.6		W1ECT071	PFO	1,262	-	-	2.18	-	-	0.87	7, 8, 8	617	I or II
	472.7		W1ECT073	PEM	37	0.07	-	-	-	-	-	8, 6, 5	643	I or II
	472.8		W6CAR164	PFO	0	-	-	0.01	-	-	-	7, 7, 7	617	I or II
	473.0		W6CAR161	PFO	1,257	-	-	2.15	-	-	0.86	7, 7, 7	617	I or II
	473.3		W10ECT002	PFO	147	-	-	0.32	-	-	0.10	7, 7, 7	617	I or II
	473.3		W1ECT073	PEM	73	0.17	-	-	-	-	-	8, 6, 5	643	I or II
	473.3		W6CAR163	PEM	73	0.21	-	-	-	-	-	6, 6, 6	641	I or II
	473.3		W6CAR162	PFO	172	-	-	0.64	-	-	0.12	7, 7, 7	617	I or II
	473.5		W2ECT184	PEM	81	0.13	-	-	-	-	-	2, 2, 2	641	I or II
	473.6		W2ECT185	PFO	625	-	-	1.01	-	-	0.43	7, 7, 7	611	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	473.7		W6CAR194	PEM	0	0.04	-	-	-	-	-	8, 6, 6	641	I or II
	473.7		W6CAR194	PEM	126	0.16	-	-	-	-	-	8, 6, 6	641	I or II
	473.8		W6CAR194	PEM	0	0.01	-	-	-	-	-	8, 6, 6	641	I or II
	474.0		W2ECT186	PFO	766	-	-	1.32	-	-	0.53	7, 7, 8	617	I or II
	474.1	Osceola	W10ECT007	PEM	289	0.37	-	-	-	-	-	5, 5, 3	641	I or II
	474.2		W10ECT009	PEM	0	0.04	-	-	-	-	-	3, 2, 3	641	I or II
	474.2		W10ECT009	PEM	0	0.33	-	-	-	-	-	3, 2, 3	641	I or II
	474.3		W13CAR032	PFO	452	-	-	1.01	-	-	0.31	6, 4, 5	630	I or II
<u>Line</u>	<u>Hunters Creek</u>	Orange	W6CAR234	PFO	0	-	-	0.25	-	-	-	7, 9, 9	621.00	I or II
	0.0		W6CAR233	PFO	0	-	-	0.12	-	-	0.01	7, 9, 9	621.00	I or II
	0.0	Osceola	W13CAR037	PEM	152	0.26	-	-	-	-	-	6, 6, 6	641	I or II
	0.1	Orange	W2ECT188	PEM	636	1.66	-	-	-	-	-	4, 6, 7		I or II
	0.1		W7CAR148	PEM	59	0.10	-	-	-	-	-	7, 7, 7	643	I or II
	0.2	Osceola	W2ECT067	PEM	0	0.02	-	-	-	-	-	2, 2, 2	641	I or II
	0.3		W2ECT068	PFO	396	-	-	0.68	-	-	0.27	6, 7, 7	617	I or II
	0.5		W2ECT068	PFO	769	-	-	1.48	-	-	0.51	6, 7, 7	617	I or II
	0.6		W2ECT069	PFO	27	-	-	0.06	-	-	0.02	6, 7, 7	617	I or II
	0.6		W2ECT069	PFO	49	-	-	0.13	-	-	0.03	6, 7, 7	617	I or II
	0.7		W2ECT069	PFO	433	-	-	1.73	-	-	0.30	6, 7, 7	617	I or II
	1.0		W2ECT070	PFO	2,884	-	-	5.56	-	-	1.99	8, 9, 9	617	I or II
	1.3		W2ECT070	PFO	184	-	-	0.33	-	-	0.13	8, 9, 9	617	I or II
	1.9		W2ECT074	PFO	1,023	-	-	1.87	-	-	0.72	6, 7, 7	617	I or II
	2.5		W13CAR017	PFO	3,843	-	-	6.74	-	-	2.65	7, 8, 8	617	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	2.8		W13CAR019	PEM	0	0.02	-	-	-	-	-	5, 4, 4	641	I or II
	2.9		W13CAR018	PEM	0	0.00	-	-	-	-	-	5, 6, 5	641	I or II
	3.1	Osceola	W13CAR024	PEM	41	0.08	-	-	-	-	-	5, 5, 4	641	I or II
	3.3		W13CAR030	PFO	196	-	-	0.33	-	-	0.13	7, 8, 8	617	I or II
	4.3		W13CAR027	PFO	6,647	-	-	11.43	-	-	4.56	7, 8, 8	617	I or II
	5.0		W13CAR028	PFO	1,595	-	-	3.03	-	-	1.10	6, 5, 5	617	I or II
	5.3		W6CAR155	PEM	145	0.63	-	-	-	-	-	6, 5, 5	643	I or II
	5.3		W6CAR222	PFO	472	-	-	0.82	-	-	0.32	7, 7, 5	621	I or II
	5.4		W9ECT228	PFO	182	-	-	0.40	-	-	0.13	7, 7, 7	621	I or II
	5.5		W6CAR223	PFO	563	-	-	1.03	-	-	0.39	7, 7, 5	621	I or II
	5.5		W9ECT228	PFO	96	-	-	0.13	-	-	0.06	7, 7, 7	621	I or II
	5.6		W6CAR221	PEM	261	0.49	-	-	-	-	-	7, 7, 7	641	I or II
	5.6		W6CAR223	PFO	282	-	-	0.54	-	-	0.20	7, 7, 5	621	I or II
	5.7		W9ECT228	PFO	1,162	-	-	1.99	-	-	0.80	7, 7, 7	621	I or II
	6.0		W9ECT227	PEM	31	0.08	-	-	-	-	-	3, 3, 3	641	I or II
	6.0		W9ECT225	PEM	86	0.10	-	-	-	-	-	3, 3, 3	641	I or II
	7.0		W6CAR124	PFO	168	-	-	2.91	-	-	0.35	6, 5, 5	617	I or II
	7.1		W6CAR125	PSS	222	-	0.84	-	-	0.05	-	5, 4, 4	630	I or II
	7.6		W13CAR046	PFO	1,414	-	-	2.92	-	-	0.97	5, 4, 4	630	I or II
	8.0		W13CAR046	PFO	1,910	-	-	3.67	-	-	1.31	5, 4, 4	630	I or II
	8.3		W13CAR048	PFO	1,739	-	-	3.65	-	-	1.20	7, 7, 7	630	I or II
	8.5		W13CAR051	PEM	55	0.75	-	-	-	-	-	5, 6, 5	641	I or II
	8.6		W13CAR052	PFO	0	-	-	0.71	-	-	0.01	7, 5, 6	621	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	8.6		W13CAR051	PEM	0	0.02	-	-	-	-	-	5, 6, 5	641	I or II
	8.7	Osceola	W6CAR190	PFO	0	-	-	0.08	-	-	-	7, 5, 5	621	I or II
	8.8		W13CAR057	PEM	246	0.65	-	-	-	-	-	6, 6, 5	641	I or II
	8.8		W13CAR059	PFO	0	-	-	0.01	-	-	-	6, 6, 5	630	I or II
	8.8		W13CAR059	PFO	10	-	-	0.11	-	-	0.00	6, 6, 5	630	I or II
	8.8		W13CAR059	PFO	0	-	-	0.00	-	-	-	6, 6, 5	630	I or II
	8.8		W13CAR057	PEM	347	1.05	-	-	-	-	-	6, 6, 5	641	I or II
	9.0		W13CAR064	PFO	N/A	N/A	N/A	N/A	N/A	N/A	NA	7, 9, 9	630	IV
	9.1		W13CAR064	PFO	N/A	N/A	N/A	N/A	N/A	N/A	NA	7, 9, 9	630	IV
	9.3		W13CAR064	PFO	N/A	N/A	N/A	N/A	N/A	N/A	NA	7, 9, 9	630	IV
	9.6		W13CAR064	PFO	0	-	-	0.12	-	-	-	7, 9, 9	630	I or II
	10.5		W6CAR127	PEM	34	0.08	-	-	-	-	-	6, 5, 6	641	I or II
	10.5		W6CAR127	PEM	0	0.00	-	-	-	-	-	6, 5, 6	641	I or II
	10.5		W3ECT049	PFO	257	-	-	0.38	-	-	0.18	3, 3, 6	617	I or II
	10.8		W6CAR224	PFO	1,227	-	-	2.03	-	-	0.84	5, 6, 7	621	I or II
	11.0		W6CAR131	PFO	316	-	-	0.40	-	-	0.20	5, 6, 7	621	I or II
	11.5		W7CAR136	PFO	253	-	-	1.03	-	-	0.17	5, 4, 6	630	I or II
	11.6		W7CAR137	PFO	793	-	-	1.97	-	-	0.55	6, 6, 7	630	I or II
	11.7		W7CAR137	PFO	0	-	-	0.00	-	-	-	6, 6, 7	630	I or II
	11.8		W7CAR139	PFO	0	-	-	0.00	-	-	-	6, 7, 7	630	I or II
	11.9		W7CAR139	PFO	313	-	-	0.45	-	-	0.20	6, 7, 7	630	I or II
	12.0		W7CAR140	PEM	182	0.30	-	-	-	-	-	4, 7, 4	641	I or II
	12.4		W7CAR143	PFO	683	-	-	2.35	-	-	0.47	5, 6, 6	630	I or II

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	12.5	Osceola	W7CAR143	PFO	87	-	-	0.25	-	-	0.06	5, 6, 6	630	I or II
	12.7		W7CAR148	PEM	N/A	N/A	N/A	N/A	N/A	N/A	NA	7, 7, 7	643	IV
	12.8		W6CAR219	PFO	42	-	-	0.05	-	-	0.03	7, 8, 8	621	I or II
	12.8		W6CAR219	PFO	0	-	-	0.00	-	-	-	7, 8, 8	621	I or II
	12.8		W7CAR148	PEM	84	0.32	-	-	-	-	-	7, 7, 7	643	I or II
	13.0		W7CAR148	PEM	0	0.07	-	-	-	-	-	7, 7, 7	643	I or II
	13.0		W7CAR148	PEM	0	0.18	-	-	-	-	-	7, 7, 7	643	I or II
	13.0		W7CAR148	PEM	0	0.00	-	-	-	-	-	7, 7, 7	643	I or II
	13.0	Orange	W7CAR148	PEM	0	0.00	-	-	-	-	-	7, 7, 7	643	I or II
	13.0		W9ECT246	PFO	0	-	-	0.00	-	-	-	6, 8, 8	621	I or II
	13.1	Osceola	W7CAR148	PEM	0	0.01	-	-	-	-	-	7, 7, 7	643	I or II
	13.1	Orange	W7CAR148	PEM	326	0.73	-	-	-	-	-	7, 7, 7	643	I or II
	13.1		W9ECT246	PFO	0	-	-	0.01	-	-	-	6, 8, 8	621	I or II
<u>Citrus County Line</u>	0.2	Marion	W13CAR084	PFO	0	-	-	0.06	-	-	-	8, 8, 8	630	I or II
	0.4		W13CAR085	PFO	10	-	-	0.18	-	-	0.03	8, 7, 7	630	I or II
	0.6		W13CAR087	PEM	232	0.53	-	-	-	-	-	4, 5, 5	641	I or II
	0.7		W13CAR088	PFO	223	-	-	0.29	-	-	0.15	8, 5, 5	630	I or II
	0.7		W13CAR089	PFO	0	-	-	0.43	-	-	0.01	8, 5, 7	630	I or II
	1.0		W13CAR090	PFO	13	-	-	0.05	-	-	0.02	6, 5, 5	630	I or II
	1.0		W6CAR206	PEM	0	0.00	-	-	-	-	-	6, 5, 5	643	I or II
	1.1		W13CAR092	PFO	281	-	-	0.93	-	-	0.21	9, 9, 9	630	I or II
	1.2		W13CAR092	PFO	0	-	-	0.08	-	-	-	9, 9, 9	630	I or II
	1.2	Marion	W13CAR092	PFO	0	-	-	0.15	-	-	-	9, 9, 9	630	I or II



TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
	1.6	Citrus	W13CAR095	PEM	650	2.38	-	-	-	-	-	5, 6, 5	641	I or II
	1.8		W13CAR098	PEM	1,699	2.94	-	-	-	-	-	6, 5, 6	641	I or II
	2.4		W13CAR102	PEM	1,294	2.13	-	-	-	-	-	6, 6, 5	641	I or II
	2.8		W13CAR104	PEM	588	1.02	-	-	-	-	-	6, 5, 5	641	I or II
	3.5		W13CAR108	PEM	274	0.47	-	-	-	-	-	6, 5, 5	641	I or II
	3.6		W13CAR108	PEM	0	0.00	-	-	-	-	-	6, 5, 5	641	I or II
	14.8		W3ECT026	PEM	26	0.05	-	-	-	-	-	5, 6, 5	641	I or II
	16.7		W3ECT016	PEM	105	0.10	-	-	-	-	-	6, 5, 4	641	I or II
	16.9		W3ECT018	PEM	735	1.25	-	-	-	-	-	5, 4, 5	641	I or II
	19.1		W6CAR215	PFO	0	-	-	0.04	-	-	-	3, 4, 3	617	I or II
	19.1		W3ECT027	PEM	0	-	-	-	-	-	-	1, 1, 1	641	III
	19.2		W3ECT029	PFO	194	-	-	0.32	-	-	0.13	4, 4, 6	630	I or II
	19.2		W3ECT029	PFO	193	-	-	0.49	-	-	0.13	4, 4, 6	630	I or II
	20.4		W2ECT120	PEM	75	0.18	-	-	-	-	-	2, 2, 2	641	I or II
	20.6		W2ECT121	PFO	108	-	-	0.19	-	-	0.07	6, 6, 6	630	I or II
	21.0		W2ECT122	PFO	147	-	-	0.17	-	-	0.08	6, 6, 6	630	I or II
	21.1		W2ECT123	PFO	159	-	-	0.31	-	-	0.11	6, 5, 5	630	I or II
	21.3		W3ECT078	PEM	0	0.03	-	-	-	-	-	3, 3, 2	641	I or II
	21.3		W3ECT079	PFO	0	-	-	0.05	-	-	-	4, 5, 6	630	I or II
<b>Florida Pipeline ROW Subtotal</b>					<b>209,764</b>	<b>105.95</b>	<b>7.06</b>	<b>280.26</b>	<b>0.00</b>	<b>0.80</b>	<b>102.88</b>			
<i>Compressor Stations</i>														
<u>Hildreth</u>	296.3	Suwannee	None Identified											

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <i>a/</i>	County	Wetland ID	Wetland Type <i>b/</i>	Crossing Length (Feet) <i>c/</i>	Wetland Impact <i>d/</i> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <i>e/</i>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
<u>Dunnellon</u>	389.8	Marion				None Identified								
<u>Reunion</u>	474.4	Osceola	W13CAR031	PSS	N/A	-	0.00	-	-	0.00	-	6, 5, 6	631	Installation of fence line
			W13CAR032	PFO	N/A	-	-	0.13	-	-	0.13	6, 4, 5	630	Installation of fence line
			W13CAR034	PFO	N/A	-	-	0.09	-	-	0.09	6, 5, 5	630	Installation of fence line
			W13CAR035	PFO	N/A	-	-	0.21	-	-	0.21	6, 5, 5	630	Access Road/Permanent Fill
			W13CAR036	PFO	N/A	-	-	0.74	-	-	0.74	6, 6, 7	630	Permanent Fill/Access road and installation of fence line
			W13CAR037	PEM	N/A	0.86	-	-	0.86	-	-	6, 6, 6	641	Permanent Fill/Access road, installation of fence line, pipeline interconnect
			W13CAR041	PSS	N/A	-	0.01	-	-	-	-	6, 5, 6	631	Temporary Fill
			W13CAR042	PEM	N/A	0.00	-	-	-	-	-	6, 6, 6	641	Temporary Fill
<i>Meter Stations</i>														
<u>FGT Suwannee</u>	299.7	Suwannee				None Identified								
<u>FSC</u>	474.4	Osceola	W13CAR032	PFO	N/A	-	-	0.01	-	-	0.01	6, 4, 5	630	Installation of fence line
<u>Gulfstream (Hunters Creek Line)</u>	474.4					None Identified								

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <i>a/</i>	County	Wetland ID	Wetland Type <i>b/</i>	Crossing Length (Feet) <i>c/</i>	Wetland Impact <i>d/</i> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <i>e/</i>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
<u>FGT Hunters Creek (Hunters Creek Line)</u>	13.1	Orange	W6CAR217	PSS	N/A	-	1.68	-	-	-	-	5, 6, 6	631	Access Road/Permanent Fill
			W7CAR148	PEM	N/A	0.20	-	-	0.19	-	-	7, 7, 7	643	Installation of fence line
<u>DEF Citrus County (Citrus County Line)</u>	21.4	Citrus	W8ECT203	PFO	N/A	-	-	0.73	-	-	0.27	6, 6, 7	617	Pipeline interconnect
			W8ECT275	PFO	N/A	-	-	0.14	-	-	0.11	6, 6, 7	631	Permanent Fill/Access Road
<b>Florida Aboveground Facilities Subtotal</b>					<b>N/A</b>	<b>1.06</b>	<b>1.69</b>	<b>2.05</b>	<b>1.05</b>	<b>0.00</b>	<b>1.56</b>			
<i>Access Roads</i>														
<u>PAR-CCL-FL-CI-CDK</u>	21.3	Citrus	W8ECT275	PFO	76	-	-	0.03	-	-	0.03	6, 6, 7	631	Permanent Fill
<u>PAR-HCL-FL-OR- HFGT</u>	0.1	Orange	W6CAR217	PSS	172	-	0.16	-	-	0.16	-	5, 6, 6	631	Permanent Fill
<u>TAR-CCL-FL-MA-001</u>	1.1	Marion	W13CAR092	PFO	58	-	-	0.08	-	-	-	9, 9, 9	630	Temporary Fill
<u>TAR-CCL-FL-MA-001</u>	1.1		W4CAR207	PFO	143	-	-	0.08	-	-	-	8, 8, 7	630	Temporary Fill
<u>TAR-FL-GI-003</u>	319.0	Gilchrist	W8ECT252	PFO	9	-	-	0.06	-	-	-	6, 3, 5	621	Temporary Fill
<u>TAR-FL-GI-004</u>	320.4		W8ECT120	PFO	228	-	-	0.13	-	-	-	6, 6, 6	617	Temporary Fill
<u>TAR-FL-GI-004</u>	320.4		W8ECT121	PFO	0	-	-	0.17	-	-	-	6, 6, 6	617	Temporary Fill
<u>TAR-FL-GI-004</u>	320.4		W8ECT122	PFO	0	-	-	0.03	-	-	-	6, 6, 6	617	Temporary Fill
<u>TAR-FL-GI-004</u>	320.4		W8ECT123	PFO	0	-	-	0.03	-	-	-	6, 6, 6	617	Temporary Fill
<u>TAR-FL-GI-004</u>	320.4	Gilchrist	W8ECT124	PFO	297	-	-	0.17	-	-	-	6, 6, 6	617	Temporary Fill
<u>TAR-FL-GI-005</u>	321.3		W8ECT128	PFO	36	-	-	0.05	-	-	-	6, 6, 6	617	Temporary Fill
<u>TAR-FL-GI-005</u>	321.3		W8ECT129	PFO	0	-	-	0.01	-	-	-	6, 6, 6	617	Temporary Fill
<u>TAR-FL-GI-005</u>	321.3		W8ECT130	PFO	1,526	-	-	0.88	-	-	-	6, 6, 6	617	Temporary Fill
<u>TAR-FL-GI-005</u>	321.3		W8ECT131	PFO	713	-	-	0.41	-	-	-	6, 6, 6	617	Temporary Fill

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
<u>TAR-FL-GI-005</u>	321.3		W8ECT132	PFO	0	-	-	0.02	-	-	-	6, 6, 6	617	Temporary Fill
<u>TAR-FL-GI-005</u>	321.3		W8ECT133	PFO	194	-	-	0.20	-	-	-	6, 6, 6	617	Temporary Fill
<u>TAR-FL-GI-005</u>	321.3		W8ECT135	PFO	303	-	-	0.17	-	-	-	6, 6, 6	617	Temporary Fill
<u>TAR-FL-GI-006</u>	322.4		W1ECT104	PFO	75	-	-	0.04	-	-	-	8, 8, 7	617	Temporary Fill
<u>TAR-FL-GI-006</u>	322.4		W8ECT138	PFO	202	-	-	0.12	-	-	-	6, 6, 6	617	Temporary Fill
<u>TAR-FL-GI-006</u>	322.4		W8ECT139	PFO	285	-	-	0.17	-	-	-	6, 6, 6	617	Temporary Fill
<u>TAR-FL-GI-006</u>	322.4		W8ECT141	PFO	906	-	-	0.52	-	-	-	6, 6, 6	617	Temporary Fill
<u>TAR-FL-GI-006</u>	322.4		W8ECT142	PFO	0	-	-	0.01	-	-	-	6, 6, 6	617	Temporary Fill
<u>TAR-FL-GI-007</u>	322.8		W4ECT009	PFO	0	-	-	0.00	-	-	-	6, 5, 4	617	Temporary Fill
<u>TAR-FL-GI-007</u>	322.8		W4ECT010	PFO	0	-	-	0.01	-	-	-	6, 5, 4	617	Temporary Fill
<u>TAR-FL-GI-007</u>	322.8		W4ECT013	PFO	44	-	-	0.04	-	-	-	7, 6, 5	617	Temporary Fill
<u>TAR-FL-GI-007</u>	322.8		W4ECT015	PFO	36	-	-	0.03	-	-	-	7, 6, 5	617	Temporary Fill
<u>TAR-FL-GI-007</u>	322.8		W4ECT018	PFO	33	-	-	0.02	-	-	-	7, 6, 5	617	Temporary Fill
<u>TAR-FL-GI-007</u>	322.8		W4ECT019	PFO	88	-	-	0.05	-	-	-	5, 5, 3	617	Temporary Fill
<u>TAR-FL-GI-007</u>	322.8		W8ECT133	PFO	173	-	-	0.09	-	-	-	6, 6, 6	617	Temporary Fill
<u>TAR-FL-GI-007</u>	322.8		W8ECT143	PFO	679	-	-	0.63	-	-	-	6, 6, 6	617	Temporary Fill
<u>TAR-FL-LA-003</u>	445.7	Lake	W7CAR086	PFO	151	-	-	0.09	-	-	-	7, 6, 6	621	Temporary Fill
<u>TAR-FL-LA-006</u>	450.8	Lake	W3ECT060	PSS	0	-	0.00	-	-	-	-	5, 5, 4	631	Temporary Fill
<u>TAR-FL-LA-006</u>	450.8		W8ECT147	PFO	47	-	-	0.04	-	-	-	3, 3, 4	621	Temporary Fill
<u>TAR-FL-LA-006</u>	450.8		W8ECT270	PEM	301	0.31	-	-	-	-	-	6, 7, 7	617	Temporary Fill
<u>TAR-FL-LA-007</u>	451.1		W7CAR068	PFO	0	-	-	0.06	-	-	-	7, 6, 8	441H/625	Temporary Fill
<u>TAR-FL-LA-007</u>	451.1		W7CAR072	PFO	18	-	-	0.06	-	-	-	7, 6, 8	441H/625	Temporary Fill
<u>TAR-FL-LA-008-1</u>	454.6		W7CAR224	PFO	0	-	-	0.00	-	-	-	5, 5, 7	630	Temporary Fill

TABLE 2.4-1  
Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
<u>TAR-FL-LA-009-1</u>	455.0		W7CAR227	PFO	0	-	-	0.00	-	-	-	7, 7, 7	630	Temporary Fill
<u>TAR-FL-LA-009-1</u>	455.0		W7CAR228	PFO	0	-	-	0.01	-	-	-	7, 7, 7	630	Temporary Fill
<u>TAR-FL-LA-009-1</u>	455.0		W7CAR233	PFO	0	-	-	0.02	-	-	-	7, 7, 7	630	Temporary Fill
<u>TAR-FL-LA-009-1</u>	455.0		W7CAR234	PFO	0	-	-	0.01	-	-	-	7, 7, 7	630	Temporary Fill
<u>TAR-FL-LA-009-1</u>	455.0		W9ECT169	PFO	161	-	-	0.51	-	-	-	9, 8, 9	617	Temporary Fill
<u>TAR-FL-LA-009-1</u>	455.0		W9ECT172	PFO	38	-	-	0.13	-	-	-	9, 8, 9	617	Temporary Fill
<u>TAR-FL-LA-009-1</u>	455.0		W9ECT173	PEM	0	0.00	-	-	-	-	-	8, 7, 7	643	Temporary Fill
<u>TAR-FL-LA-009-1</u>	455.0		W9ECT174	PEM	0	0.01	-	-	-	-	-	6, 5, 5	643	Temporary Fill
<u>TAR-FL-LE-001</u>	345.7	Levy	W1ECT084	PFO	145	-	-	0.21	-	-	-	8, 8, 7	617	Temporary Fill
<u>TAR-FL-LE-001</u>	345.7		W1ECT085	PFO	281	-	-	0.16	-	-	-	8, 8, 7	617	Temporary Fill
<u>TAR-FL-LE-001</u>	345.7		W1ECT086	PFO	248	-	-	0.16	-	-	-	8, 8, 7	617	Temporary Fill
<u>TAR-FL-LE-001</u>	345.7		W2ECT144	PFO	68	-	-	0.04	-	-	-	3, 4, 4	617	Temporary Fill
<u>TAR-FL-LE-001</u>	345.7		W2ECT145	PFO	0	-	-	0.00	-	-	-	5, 6, 7	617	Temporary Fill
<u>TAR-FL-MAD-001</u>	267.2	Madison	W4ECT054	PFO	48	-	-	0.05	-	-	-	7, 7, 6	615	Temporary Fill
<u>TAR-FL-MAD-001</u>	267.2		W4ECT055	PFO	227	-	-	0.13	-	-	-	7, 7, 6	615	Temporary Fill
<u>TAR-FL-MAD-002</u>	267.2		W4ECT056	PFO	0	-	-	0.01	-	-	-	7, 6, 6	615	Temporary Fill
<u>TAR-FL-MAD-003-1</u>	267.6	Madison	W4ECT057	PFO	178	-	-	0.09	-	-	-	7, 7, 6	615	Temporary Fill
<u>TAR-FL-MAD-003-1</u>	267.6		W4ECT058	PFO	340	-	-	0.18	-	-	-	7, 7, 6	615	Temporary Fill
<u>TAR-FL-OS-005</u>	472.4	Osceola	W6CAR195	PEM	269	0.25	-	-	-	-	-	8, 6, 6	641	Temporary Fill
<u>TAR-FL-OS-005</u>	472.4		W6CAR198	PEM	410	0.29	-	-	-	-	-	8, 6, 6	641	Temporary Fill
<u>TAR-FL-OS-006</u>	473.3		W1ECT071	PFO	0	-	-	0.03	-	-	-	7, 8, 8	617	Temporary Fill
<u>TAR-FL-OS-006</u>	473.3		W1ECT073	PEM	0	0.06	-	-	-	-	-	8, 6, 5	643	Temporary Fill
<u>TAR-FL-OS-007</u>	473.3		W1ECT073	PEM	0	0.00	-	-	-	-	-	8, 6, 5	643	Temporary Fill

TABLE 2.4-1  
Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
<u>TAR-FL-OS-007</u>	473.3		W6CAR193	PEM	0	0.01	-	-	-	-	-	8, 6, 6	641	Temporary Fill
<u>TAR-FL-OS-009</u>	0.1		W4ECT065	PFO	0	-	-	0.03	-	-	-	6, 5, 4	630	Temporary Fill
<u>TAR-FL-PO-001</u>	461.9	Polk	W9CAR073	PFO	96	-	-	0.06	-	-	-	6, 8, 8	621	Temporary Fill
<u>TAR-FL-PO-002</u>	463.6		W4CAR241	PFO	0	-	-	0.00	-	-	-	6, 7, 7	625	Temporary Fill
<u>TAR-FL-PO-002</u>	463.6		W7CAR130	PEM	368	0.19	-	-	-	-	-	7, 7, 7	641	Temporary Fill
<u>TAR-FL-PO-003</u>	464.0		W9ECT175	PEM	145	0.08	-	-	-	-	-	4, 4, 3	641	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6	Sumter	W2ECT202	PEM	0	0.01	-	-	-	-	-	2, 2, 2	641	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6		W2ECT203	PFO	0	-	-	0.00	-	-	-	4, 5, 6	617	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6		W2ECT204	PEM	0	0.00	-	-	-	-	-	2, 2, 2	641	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6		W2ECT205	PEM	0	0.03	-	-	-	-	-	2, 2, 2	641	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6		W2ECT206	PEM	0	0.00	-	-	-	-	-	4, 5, 6	641	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6		W2ECT207	PEM	0	0.00	-	-	-	-	-	2, 2, 2	641	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6		W2ECT208	PEM	0	0.00	-	-	-	-	-	2, 2, 2	641	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6		W3ECT064	PEM	9	0.03	-	-	-	-	-	4, 4, 3	641	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6		W3ECT066	PEM	0	0.01	-	-	-	-	-	4, 4, 3	641	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6	Sumter	W3ECT067	PFO	11	-	-	0.18	-	-	-	5, 6, 7	617	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6		W3ECT068	PFO	0	-	-	0.01	-	-	-	5, 6, 7	617	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6		W3ECT069	PFO	0	-	-	0.00	-	-	-	4, 4, 4	613	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6		W3ECT070	PFO	0	-	-	0.02	-	-	-	4, 5, 6	613	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6		W3ECT071	PEM	6	0.02	-	-	-	-	-	4, 3, 3	641	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6		W3ECT072	PFO	28	-	-	0.16	-	-	-	6, 7, 7	617	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6		W3ECT075	PEM	0	0.02	-	-	-	-	-	5, 5, 4	641	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6		W3ECT076	PEM	0	0.03	-	-	-	-	-	5, 5, 4	641	Temporary Fill

TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost a/	County	Wetland ID	Wetland Type b/	Crossing Length (Feet) c/	Wetland Impact d/ (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method e/
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
<u>TAR-FL-SUM-005</u>	413.6		W3ECT077	PEM	153	0.08	-	-	-	-	-	4, 4, 3	641	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6		W8ECT266	PFO	514	-	-	0.30	-	-	-	7, 7, 7	617	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6		W8ECT267	PEM	69	0.04	-	-	-	-	-	7, 1, 3	641	Temporary Fill
<u>TAR-FL-SUM-005</u>	413.6		W8ECT268	PEM	252	0.14	-	-	-	-	-	7, 3, 6	641	Temporary Fill
<u>TAR-FL-SUM-006</u>	413.7		W2ECT198	PFO	155	-	-	0.10	-	-	-	4, 5, 6	617	Temporary Fill
<u>TAR-FL-SUM-006</u>	413.7		W2ECT200	PFO	235	-	-	0.17	-	-	-	4, 5, 6	617	Temporary Fill
<u>TAR-FL-SUM-008</u>	414.0		W2ECT197	PFO	0	-	-	0.00	-	-	-	4, 4, 6	610	Temporary Fill
<u>TAR-FL-SUM-009</u>	434.2		W13CAR112b	PEM	0	0.02	-	-	-	-	-	5, 0, 4	641	Temporary Fill
<u>TAR-HCL-FL-OS-001</u>	0.1	Osceola	W13CAR037	PEM	0	0.00	-	-	-	-	-	6, 6, 6	641	Temporary Fill
<u>TAR-HCL-FL-OS-002</u>	0.1		W13CAR043	PFO	0	-	-	0.00	-	-	-	6, 4, 5	630	Temporary Fill
<u>TAR-HCL-FL-OS-002</u>	0.1		W2ECT067	PEM	0	0.02	-	-	-	-	-	2, 2, 2	641	Temporary Fill
<u>TAR-HCL-FL-OS-006</u>	1.6		W2ECT073	PFO	0	-	-	0.12	-	-	-	5, 6, 7	617	Temporary Fill
<u>TAR-HCL-FL-OS-006</u>	1.6		W2ECT074	PFO	0	-	-	0.02	-	-	-	6, 7, 7	617	Temporary Fill
<u>TAR-HCL-FL-OS-008</u>	4.8		W13CAR028	PFO	12	-	-	0.05	-	-	-	6, 5, 5	617	Temporary Fill
<u>TAR-HCL-FL-OS-008</u>	4.8	Osceola	W3ECT047	PFO	11	-	-	0.08	-	-	-	5, 7, 6	621	Temporary Fill
<u>TAR-HCL-FL-OS-012-1</u>	9.1		W13CAR057	PEM	0	0.01	-	-	-	-	-	6, 6, 5	641	Temporary Fill
<u>TAR-HCL-FL-OS-012-1</u>	9.1		W8ECT224	PFO	292	-	-	0.17	-	-	-	2, 3, 3	621	Temporary Fill
<u>TAR-HCL-FL-OS-012-3</u>	8.7		W13CAR057	PEM	56	0.03	-	-	-	-	-	6, 6, 5	641	Temporary Fill
<b>Florida Access Roads Subtotal</b>					<b>11,618</b>	<b>1.70</b>	<b>0.16</b>	<b>7.70</b>	<b>0.00</b>	<b>0.16</b>	<b>0.03</b>			
Contractor Yards					None Identified									
<b>Florida Contractor Yards Subtotal</b>					<b>0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>			
<b>FLORIDA TOTAL</b>					<b>221,382</b>	<b>108.72</b>	<b>8.92</b>	<b>290.00</b>	<b>1.05</b>	<b>0.96</b>	<b>104.47</b>			
<b>PROJECT TOTAL</b>					<b>306,290</b>	<b>125.64</b>	<b>21.81</b>	<b>417.81</b>	<b>1.14</b>	<b>2.94</b>	<b>151.97</b>			



TABLE 2.4-1

Wetlands Affected by the Sabal Trail Project

State, Facility	Milepost <u>a/</u>	County	Wetland ID	Wetland Type <u>b/</u>	Crossing Length (Feet) <u>c/</u>	Wetland Impact <u>d/</u> (Acres)						WRAP or UMAM Score	State Wetland Classification	Proposed Crossing Method <u>e/</u>
						Construction			Operation					
						PEM	PSS	PFO	PEM	PSS	PFO			
<p>N/A: Not Applicable</p> <p><u>a/</u> Approximate MP along the proposed pipeline rounded to the nearest tenth. MP for access roads is the point at which the access road intersects with the pipeline route.</p> <p><u>b/</u> Wetland classification according to Cowardin et. al., 1979: PEM = Palustrine Emergent Wetland; PSS = Palustrine Scrub-Shrub Wetland; PFO = Palustrine Forested Wetland.</p> <p><u>c/</u> 0 = wetland is not crossed by the pipeline but is in workspace. For access roads, crossing length is the distance of wetland crossed by the centerline of the access road.</p> <p><u>d/</u> Wetlands associated with MLVs included in the corresponding pipeline facility. Construction Acreage = all workspace during construction activities (TWS &amp; ATWS plus permanent ROW); Operation Acreage = 10-foot wide corridor permanently maintained in herbaceous vegetated cover through PSS wetlands, and 30-foot wide corridor permanently maintained through PFO wetlands where trees taller than 15 feet will be selectively cut and removed. The permanently maintained corridors represent a change in cover type from PFO to PSS and PEM or PSS to PEM; there is no pipeline operation impact on PEM wetlands, since there is no change in the pre- and post-construction vegetation cover type. Construction impacts were calculated using a proposed construction footprint surface area and existing land use based on field surveys or desktop analysis, including NWI data, in those areas where permission has not been granted to conduct field surveys. Surface area of operational maintenance corridor as described above were used to calculate acres of operation impact to each pre-construction wetland vegetation cover type for each wetland included in the table. The ROW width at all wetland crossings is 75 feet, except for those wetlands described in Table 2.4-4.</p> <p><u>e/</u> Crossing Methods for wetlands: I = Standard Crossing; II = Conventional Crossing; III = Conventional Bore; IV = Horizontal Directional Drill.</p>														

TABLE 2.4-2

Summary of Wetland Types Affected by Construction and Operation of the Sabal Trail Project (acres)

State, Facility	PEM		PSS		PFO		Project Totals	
	Construction <sup>a/</sup>	Operation <sup>b/</sup>	Construction	Operation	Construction	Operation	Construction	Operation
<b>Alabama</b>								
<i>Pipeline</i>	1.63	0.00	3.90	0.41	15.76	6.03	<b>21.29</b>	<b>6.43</b>
<i>Aboveground Facilities</i>	0.06	0.06	1.38	0.00	0.88	0.00	<b>2.33</b>	<b>0.06</b>
<i>Access Roads</i>	0.03	0.03	0.65	0.65	0.24	0.10	<b>0.92</b>	<b>0.78</b>
<i>Contractor Yards</i>	-	-	-	-	-	-	-	-
<b>Alabama Subtotal</b>	<b>1.73</b>	<b>0.09</b>	<b>5.94</b>	<b>1.06</b>	<b>16.88</b>	<b>6.12</b>	<b>24.54</b>	<b>7.27</b>
<b>Georgia</b>								
<i>Pipeline</i>	15.20	0.00	6.85	0.93	110.49	41.16	<b>132.53</b>	<b>42.09</b>
<i>Aboveground Facilities</i>	0.00	0.00	-	-	-	-	<b>0.00</b>	<b>0.00</b>
<i>Access Roads</i>	0.00	0.00	0.11	0.00	0.44	-	<b>0.55</b>	<b>0.00</b>
<i>Contractor Yards</i>	-	-	-	-	-	-	-	-
<b>Georgia Subtotal</b>	<b>15.20</b>	<b>0.00</b>	<b>6.96</b>	<b>0.93</b>	<b>110.93</b>	<b>41.38</b>	<b>133.08</b>	<b>42.31</b>
<b>Florida</b>								
<i>Pipeline</i>	105.95	0.00	7.06	0.80	280.26	102.88	<b>393.27</b>	<b>103.68</b>
<i>Aboveground Facilities</i>	1.06	1.05	1.69	0.00	2.05	1.56	<b>4.80</b>	<b>2.61</b>
<i>Access Roads</i>	1.70	0.00	0.00	0.16	7.70	0.03	<b>9.40</b>	<b>0.19</b>
<i>Contractor Yards</i>	-	-	-	-	-	-	-	-
<b>Florida Subtotal</b>	<b>108.72</b>	<b>1.05</b>	<b>8.92</b>	<b>0.96</b>	<b>290.00</b>	<b>104.47</b>	<b>407.64</b>	<b>106.48</b>
<b>PROJECT TOTAL</b>	<b>125.64</b>	<b>1.14</b>	<b>21.81</b>	<b>2.94</b>	<b>417.81</b>	<b>151.97</b>	<b>565.25</b>	<b>156.06</b>

<sup>a/</sup> Construction Acreage = all workspace during construction activities (TWS & ATWS plus permanent ROW).

<sup>b/</sup> Operation Acreage = For conventional crossing methods: 30-foot width permanently maintained through forested wetlands, 10-foot width permanently maintained through scrub-shrub wetlands; there are no operation impacts to PEM wetlands associated with pipeline Right-of-Way as there is no change in the pre- and post-construction vegetation cover type.

TABLE 2.4-3

**Wetlands and Waterbodies Located in Areas of Shallow Depth to Bedrock Crossed by the Sabal Trail Project Pipeline Segments**

Facility	Wetland / Waterbody ID	Milepost Begin <u>a/</u>	Milepost End <u>a/</u>	Wetland Class / Flow Type <u>b/</u>
<u>Mainline</u>	S1TRC355	0.6	0.6	Perennial
	S1TRC214	0.9	0.9	Perennial
	S1TRC216	1.4	1.4	Perennial
	S4TRC068	1.9	1.9	Perennial
	S4TRC069	2.0	2.0	Perennial
	S4TRC070	2.1	2.1	Ephemeral
	S4TRC071	2.1	2.1	Ephemeral
	S4TRC072	2.1	2.1	Ephemeral
	S4TRC073	2.2	2.2	Ephemeral
	S4TRC084	3.2	3.2	Perennial
	S1TRC365	3.4	3.4	Ephemeral
	S1TRC218	3.6	3.6	Perennial
	S1TRC037	6.3	6.3	Intermittent
	S1TRC038	6.4	6.4	Perennial
	S1TRC041	6.6	6.6	Intermittent
	S1TRC042	6.7	6.7	Intermittent
	S1TRC043	6.7	6.7	Perennial
	S1TRC046	7.3	7.3	Perennial
	S1TRC061	9.2	9.2	Intermittent
	S1TRC062	9.6	9.6	Perennial
	S1TRC063	9.6	9.6	Ephemeral
	S1TRC067	10.8	10.8	Ephemeral
	S1TRC316	14.3	14.3	Intermittent
	W1TRC314	14.4	14.4	PFO
	S1TRC315	14.4	14.4	Perennial
	W1TRC314	14.4	14.4	PFO
	W1TRC314	14.4	14.5	PFO
	W1TRC086	19.6	19.6	PSS
	W1TRC467	20.0	20.0	PFO
	S1TRC450	21.5	21.5	Intermittent
	S1TRC451	21.8	21.8	Intermittent
	S1TRC112	24.2	24.2	Ephemeral
	S1TRC113	24.2	24.2	Ephemeral
	S4TRC019	42.7	42.7	Perennial
S4TRC024	44.3	44.3	Perennial	
S1TRC474	45.7	45.7	Perennial	

TABLE 2.4-3

**Wetlands and Waterbodies Located in Areas of Shallow Depth to Bedrock Crossed by the Sabal Trail Project Pipeline Segments**

Facility	Wetland / Waterbody ID	Milepost Begin <u>a/</u>	Milepost End <u>a/</u>	Wetland Class / Flow Type <u>b/</u>
	S2TRC383	45.8	45.8	Perennial
	S4TRC029	45.9	45.9	Perennial
	S4TRC034	47.2	47.2	Ephemeral
	S4TRC020	51.8	51.8	Perennial
	S1TRC483	52.3	52.3	Perennial
	S1TRC481	53.2	53.2	Perennial
	S4TRC041	55.9	55.9	Perennial
	SNHD-05629	56.2	56.2	Perennial
	SNHD-05635	56.3	56.3	Perennial
	W2TRC197	188.5	188.5	PFO
	W3TRC198	211.9	211.9	PFO
	W3TRC059	223.6	223.7	PFO
	W3TRC064	224.6	224.6	PFO
	W3TRC277	229.1	229.1	PFO
	W3TRC279	229.7	229.7	PFO
	W1ECT011	247.9	248.0	PEM
	W1ECT012	248.0	248.0	PFO
	W1ECT013	248.0	248.0	PSS
	W1ECT014	248.1	248.2	PFO
	W1ECT045	248.8	248.9	PFO
	W2ECT022	282.6	282.6	PFO
	W2ECT022	282.6	282.6	PFO
	W2ECT039	283.8	283.8	PFO
	W2ECT039	283.8	283.8	PFO
	W1ECT038	286.8	286.8	PFO
	W1ECT038	286.8	286.8	PFO
	W1ECT038	286.8	286.9	PFO
	W1ECT038	286.8	286.9	PFO
	W9ECT036A	346.0	346.0	PFO
	W9ECT036C	346.0	346.0	PFO
	W4CAR042	346.4	346.4	PFO
	W4CAR042	346.4	346.4	PFO
	W11CAR023	346.8	346.8	PFO
	W11CAR024	346.8	346.8	PFO
	W11CAR023	346.8	346.8	PFO
	W11CAR024	346.8	346.9	PFO

TABLE 2.4-3

**Wetlands and Waterbodies Located in Areas of Shallow Depth to Bedrock Crossed by the Sabal Trail Project Pipeline Segments**

Facility	Wetland / Waterbody ID	Milepost Begin <u>a/</u>	Milepost End <u>a/</u>	Wetland Class / Flow Type <u>b/</u>
	W11CAR026	347.0	347.2	PFO
	W11CAR025	347.2	347.2	PFO
	W11CAR032	347.6	347.7	PFO
	W11CAR033	347.8	347.8	PFO
	W11CAR036	347.9	348.0	PFO
	W11CAR037	348.0	348.0	PFO
	W4CAR003	348.4	348.4	PFO
	W9ECT044	348.4	348.5	PFO
	W9ECT046	348.7	348.8	PFO
	W9ECT047	348.9	349.0	PFO
	W4CAR016	349.3	349.4	PFO
	W9ECT048	349.4	349.4	PFO
	W4CAR019	349.5	349.5	PFO
	W4CAR024	351.0	351.0	PFO
	W4CAR027	351.2	351.2	PEM
	W2ECT193	382.8	382.8	PFO
	W2ECT194	383.0	383.0	PFO
	W8ECT113	383.1	383.1	PEM
	W8ECT113	383.2	383.3	PEM
	W8ECT114	383.3	383.3	PEM
	W8ECT114	383.3	383.4	PEM
	W8ECT114	383.4	383.4	PEM
	W8ECT117	384.7	384.8	PEM
	W9ECT238	408.0	408.0	PFO
	W9ECT239	408.1	408.1	PFO
	W9ECT240	408.3	408.3	PFO
	W9ECT177	409.0	409.1	PEM
	W8ECT195	412.2	412.3	PFO
	W8ECT195	412.5	412.5	PFO
	W8ECT210	413.8	413.9	PFO
	W9ECT249	414.4	414.4	PEM
	W2ECT247	414.9	415.0	PEM
	W9ECT258	417.6	417.6	PEM
	D9ECT259	417.6	417.7	PFO
	WB8ECT221	425.6	425.6	PFO
	W9ECT203	427.1	427.2	PEM

TABLE 2.4-3

**Wetlands and Waterbodies Located in Areas of Shallow Depth to Bedrock Crossed by the Sabal Trail Project Pipeline Segments**

Facility	Wetland / Waterbody ID	Milepost Begin <u>a/</u>	Milepost End <u>a/</u>	Wetland Class / Flow Type <u>b/</u>
	W9ECT203	427.2	427.2	PEM
	W8ECT223	427.7	427.9	PEM
	W6CAR229	427.9	428.0	PFO
	W8ECT223	428.0	428.1	PSS
	W8ECT223	428.1	428.1	PSS
	WB8ECT180	428.2	428.2	PFO
	W9ECT211	428.6	428.6	PFO
	W9ECT215	429.9	430.0	PFO
	W6CAR179	432.6	432.6	PEM
	W4CAR165	434.0	434.1	PEM
	W4CAR165	434.1	434.2	PEM
	W4CAR173	434.7	434.7	PFO
	W7CAR007	436.3	436.4	PEM
	W7CAR015	437.0	437.0	PEM
	W7CAR027	437.3	437.3	PEM
	W7CAR027	437.5	437.5	PEM
	W7CAR032	437.6	437.6	PFO
	W6CAR046	437.9	437.9	PFO
	W13CAR008	439.6	439.6	PEM
	W13CAR009	439.6	439.6	PEM
	W13CAR011	439.7	439.8	PEM
	W6CAR151	440.1	440.3	PEM
	W6CAR151	440.4	440.5	PEM
	W6CAR151	440.5	440.7	PEM
	W6CAR151	440.7	440.7	PEM
	W6CAR080	440.7	440.8	PFO
	W6CAR080	440.8	440.8	PFO
	W6CAR079	440.8	440.8	PEM
	W6CAR082	440.8	440.9	PFO
	W6CAR079	440.9	440.9	PEM
	W6CAR083	441.1	441.1	PEM
	W6CAR078	442.1	442.1	PEM
	W9ECT260	458.9	459.0	PFO
	W9ECT260	459.2	459.3	PFO
	W9ECT260	459.3	459.5	PFO
	W9ECT260	459.5	459.6	PFO

TABLE 2.4-3

**Wetlands and Waterbodies Located in Areas of Shallow Depth to Bedrock Crossed by the Sabal Trail Project Pipeline Segments**

Facility	Wetland / Waterbody ID	Milepost Begin <u>a/</u>	Milepost End <u>a/</u>	Wetland Class / Flow Type <u>b/</u>
	W9ECT260	459.8	460.4	PFO
	W6CAR226	461.3	461.4	PFO
	W7CAR129	463.1	463.2	PFO
	W7CAR129	463.2	463.4	PFO
	W7CAR130	463.6	463.6	PEM
	W7CAR131	463.6	464.0	PFO
	D7CAR132	464.0	464.0	PFO
<u>Citrus County Line</u>	W13CAR087	0.6	0.6	PFO
	W13CAR090	1.0	1.0	PFO
	W13CAR092	1.0	1.1	PFO
	W13CAR092	1.1	1.1	PFO
	W13CAR098	1.6	2.0	PFO
	W13CAR098	2.0	2.0	PFO
	D13CAR101	2.1	2.1	PFO
	W2ECT120	20.4	20.4	PEM
	W2ECT121	20.6	20.6	PFO
	W2ECT122	21.0	21.0	PFO
	W2ECT123	21.1	21.2	PFO
	W8ECT203	21.3	21.3	PFO
	W8ECT203	21.3	21.4	PFO
<u>Hunters Creek Line</u>		None Identified		

Source: Wetlands: Field delineated wetland boundaries and NHD GIS data where survey is not complete. Shallow depth to bedrock: NRCS 2013.  
a/ Enter/exit MPs represent where the wetland enters and exits the shallow depth to bedrock area.  
b/ Wetland classification according to Cowardin et al. 1979; PEM = Palustrine Emergent Wetland; PSS = Palustrine Scrub-Shrub Wetland; PFO = Palustrine Forested Wetland.

TABLE 2.4-4

Construction Workspace >75 feet Within Wetlands for the Sabal Trail Project Pipeline Segments a/

State, Facility	County	Wetland ID	Milepost Begin <u>b/</u>	Milepost End <u>b/</u>	Crossing Length (feet)	Crossing Width (feet)	Wetland Class Impacted	Justification <u>c/</u>
<b>Alabama</b> <u>Mainline</u>	Chambers	W1TRC506	35.3	35.3	147.2	121.2	PFO	ATWS & TWS for Railroad Crossing
	Chambers	W4TRC013	38.3	38.3	95.0	85.0	PSS	TWS for PI
	Lee	W1TRC486	54.4	54.4	155.0	100.0	PFO	TWS for Road Crossing
	Russell	W1TRC171	67.9	68.0	118.2	145.4	PFO	ATWS & TWS for Road & Wetland Crossing
	Russell	W1TRC172	68.0	68.0	40.9	149.9	PSS	ATWS & TWS for Road & Wetland Crossing
	Russell	W1TRC269a	79.1	79.2	186.0	100.0	PFO	ATWS for Waterbody Crossing
	Russell	W1TRC269a	79.2	79.2	105.0	100.0	PFO	TWS for Waterbody Crossing
	Russell	W1TRC375	85.8	85.8	33.0	83.0	PFO	TWS for Wetland Crossing
<b>Georgia</b> <u>Mainline</u>	Stewart	W1TRC010	91.1	91.1	52.0	93.1	PFO	TWS for Wetland Crossing
	Stewart	W2TRC318	98.6	98.6	52.0	85.0	PFO	TWS for Wetland Crossing & Slope
	Stewart	W2TRC334	101.7	101.8	30.8	93.9	PFO	TWS for Wetland Crossing & Slope
	Stewart	W5TRC001	106.9	106.9	202.0	115.8	PFO	ATWS for Waterbody & Wetland Crossing
	Dougherty	WNWI-14815	148.1	148.2	83.0	92.5	PFO	NWI Data
	Dougherty	WNWI-14828	148.2	148.3	256.0	100.0	PFO	NWI Data
	Dougherty	WNWI-14870	148.6	148.7	364.0	100.0	PFO	NWI Data
	Dougherty	WNWI-14925	149.1	149.1	360.0	100.0	PEM	NWI Data
	Dougherty	WNWI-14918	149.1	149.2	338.0	100.0	PEM	NWI Data
	Dougherty	WNWI-14925	149.2	149.4	1010.0	100.0	PEM	NWI Data
	Dougherty	WNWI-14943	149.4	149.5	354.0	100.0	PFO	NWI Data
	Dougherty	WNWI-14960	149.6	149.6	311.0	100.0	PFO	NWI Data
	Dougherty	WNWI-14967	149.6	149.7	329.0	100.0	PFO	NWI Data



TABLE 2.4-4

**Construction Workspace >75 feet Within Wetlands for the Sabal Trail Project Pipeline Segments a/**

<b>State, Facility</b>	<b>County</b>	<b>Wetland ID</b>	<b>Milepost Begin <u>b/</u></b>	<b>Milepost End <u>b/</u></b>	<b>Crossing Length (feet)</b>	<b>Crossing Width (feet)</b>	<b>Wetland Class Impacted</b>	<b>Justification <u>c/</u></b>
	Dougherty	WNWI-14990	149.8	149.9	451.0	100.0	PFO	NWI Data
	Dougherty	WNWI-15009	150.0	150.1	282.0	100.0	PFO	NWI Data
	Dougherty	WNWI-15013	150.1	150.1	40.1	125.0	PFO	NWI Data
	Dougherty	WNWI-15013	150.1	150.1	117.0	175.0	PFO	NWI Data
	Dougherty	W2TRC156	153.1	153.1	35.7	90.1	PFO	ATWS & TWS for P.I.
	Dougherty	W2TRC160	153.1	153.1	15.0	78.5	PFO	TWS for Wetland Crossing
	Dougherty	W2TRC163	153.4	153.4	25.5	100.0	PFO	TWS for Railroad & Wetland Crossing & P.I.
	Dougherty	W5TRC017	153.4	153.5	63.0	112.3	PFO	ATWS for Railroad Crossing and P.I.
	Dougherty	W2TRC058	153.5	153.5	265.9	150.0	PFO	ATWS for Railroad Crossing and P.I.
	Dougherty	W2TRC376	155.4	155.4	185.0	90.0	PFO	ATWS for P.I.
	Dougherty	W2TRC261	159.3	159.4	N/A	285.9	PEM	Albany Compressor Station (CS-3)
	Dougherty	W1TRC498	163.4	163.4	91.9	150.0	PFO	ATWS for HDD Pullback
	Dougherty	W2TRC351	168.3	168.3	31.2	125.0	PFO	ATWS for Road Crossing
	Colquitt	W7TRC031	182.6	182.7	56.1	91.5	PFO	ATWS & TWS for Road & Wetland Crossing
	Colquitt	W7TRC031	182.7	182.7	26.2	160.7	PFO	ATWS & TWS for Road & Wetland Crossing
	Colquitt	W3TRC214	182.7	182.7	120.0	125.0	PFO	ATWS & TWS for Road & Wetland Crossing
	Colquitt	WNWI-19332	193.3	193.3	131.0	100.0	PFO	NWI Data
	Colquitt	W3TRC223	195.0	195.1	96.0	90.0	PFO	ATWS for P.I.
	Colquitt	W3TRC223	195.2	195.2	67.0	90.0	PFO	ATWS for P.I.
	Colquitt	W3TRC223	195.2	195.2	108.0	90.0	PFO	ATWS for P.I.
	Colquitt	W3TRC223	195.5	195.5	21.3	125.0	PFO	ATWS for Road Crossing
	Colquitt	W3TRC223	195.5	195.5	152.7	150.0	PFO	ATWS for Road Crossing
	Colquitt	W3TRC231	195.5	195.5	118.8	109.7	PEM	ATWS for Road Crossing

TABLE 2.4-4

Construction Workspace >75 feet Within Wetlands for the Sabal Trail Project Pipeline Segments a/

State, Facility	County	Wetland ID	Milepost Begin <u>b/</u>	Milepost End <u>b/</u>	Crossing Length (feet)	Crossing Width (feet)	Wetland Class Impacted	Justification <u>c/</u>
	Colquitt	W3TRC260	196.3	196.4	220.0	93.5	PFO	TWS for Wetland Crossing
	Colquitt	W3TRC260	196.4	196.4	38.9	85.4	PFO	ATWS & TWS for Crossover
	Colquitt	W3TRC262	196.4	196.4	72.0	100.0	PEM	ATWS & TWS for Crossover
	Colquitt	W3TRC176	196.8	196.8	48.2	89.5	PFO	TWS for Wetland Crossing
	Colquitt	W3TRC113	197.7	197.7	80.0	83.1	PFO	TWS for Access Road
	Colquitt	WNWI-20342	203.4	203.4	33.7	100.0	PFO	NWI Data
	Colquitt	W7TRC005	205.4	205.5	77.1	105.6	PFO	ATWS for Road Crossing
	Colquitt	W7TRC002	206.7	206.7	174.0	124.4	PFO	ATWS for Road & Wetland Crossing
	Brooks	W3TRC060	223.9	223.9	108.9	101.6	PFO	ATWS for Railroad Crossing
	Brooks	W3TRC064	224.6	224.6	192.6	110.1	PFO	ATWS for Road & Wetland Crossing
	Brooks	W3TRC284	230.5	230.6	14.2	78.6	PFO	TWS for Wetland Crossing
	Brooks	W3TRC282	230.9	230.9	248.3	125.0	PFO	ATWS & TWS for HDD Pullback
	Lowndes	W3TRC007	232.5	232.5	11.3	86.2	PFO	TWS for Wetland Crossing
	Lowndes	W3TRC205	233.1	233.1	191.0	150.0	PFO	ATWS & TWS for Road Crossing
	Lowndes	WNWI-24291	242.9	242.9	20.3	125.0	PFO	NWI Data
	Lowndes	WNWI-24291	242.9	242.9	132.8	100.0	PFO	NWI Data
	Lowndes	WNWI-24291	242.9	242.9	30.9	115.0	PFO	NWI Data
	Lowndes	WNWI-24291	242.9	242.9	20.3	140.0	PFO	NWI Data
	Lowndes	WNWI-24529	245.3	245.3	63.0	86.2	PEM	NWI Data
	Lowndes	WNWI-24545	245.4	245.5	225.3	100.0	PFO	NWI Data
<b>Florida</b>								
<u>Mainline</u>	Hamilton	W1ECT011	247.9	248.0	279.0	100.0	PFO	TWS for Wetland Crossing
	Gilchrist	W1ECT104	322.4	322.4	50.1	150.0	PFO	ATWS for Road Crossing
	Gilchrist	W1ECT104	322.4	322.4	75.4	205.9	PFO	ATWS for Road Crossing & TWS for Access Road

TABLE 2.4-4

**Construction Workspace >75 feet Within Wetlands for the Sabal Trail Project Pipeline Segments a/**

State, Facility	County	Wetland ID	Milepost Begin <u>b/</u>	Milepost End <u>b/</u>	Crossing Length (feet)	Crossing Width (feet)	Wetland Class Impacted	Justification <u>c/</u>
	Gilchrist	W1ECT104	322.4	322.4	124.6	165.0	PFO	ATWS for Road Crossing
	Levy	W9ECT091	342.7	342.8	288.0	105.0	PEM	ATWS for P.I.
	Levy	W8ECT065	343.0	343.0	337.9	54.6	PEM	Workspace to be necked down
	Levy	W4CAR042	346.3	346.3	41.8	85.1	PFO	TWS for Road Crossing
	Levy	W1CAR011	350.5	350.5	119.8	44.5	PEM	Workspace to be necked down
	Marion	W8ECT113	383.2	383.2	5.2	76.1	PEM	TWS for Wetland Crossing
	Sumter	W8ECT188	411.5	411.5	30.0	78.7	PEM	TWS for PI
	Sumter	W8ECT195	412.9	412.9	119.0	150.0	PFO	ATWS for Highway Crossing & P.I.
	Sumter	W8ECT195	412.9	413.0	327.4	175.0	PFO	ATWS for Highway Crossing & P.I.
	Sumter	W8ECT207	413.0	413.1	82.7	175.0	PFO	TWS for Highway Crossing
	Sumter	W8ECT207	413.0	413.1	135.7	81.3	PFO	ATWS & TWS for Highway Crossing
	Sumter	W8ECT207	413.2	413.2	286.0	100.0	PFO	ATWS for P.I.
	Sumter	W9ECT199	425.5	425.5	213.0	105.0	PEM	ATWS for P.I.
	Sumter	W8ECT223	427.7	427.8	336.7	85.0	PSS	TWS for Wetland Crossing
	Sumter	W8ECT223	427.8	427.8	189.3	110.7	PSS	ATWS for P.I.
	Sumter	W8ECT223	427.8	427.9	101.0	150.0	PSS	ATWS for Waterbody Crossing
	Sumter	W8ECT223	427.9	427.9	110.0	150.0	PSS	ATWS for Waterbody Crossing
	Sumter	W6CAR179	433.2	433.2	247.0	93.6	PEM	ATWS for P.I.
	Sumter	W4CAR175	435.2	435.2	N/A	81.1	PFO	ATWS for Road Crossing
	Lake	W7CAR012	436.9	436.9	66.0	100.0	PEM	TWS for Road Crossing
	Lake	W7CAR027	437.3	437.3	92.6	89.6	PEM	ATWS & TWS for Wetland Crossing
	Lake	W6CAR150	440.1	440.1	37.9	193.0	PEM	ATWS & TWS for Wetland Crossing
	Lake	W6CAR080	440.8	440.8	227.0	105.0	PFO	ATWS for P.I.
	Lake	W7CAR083	445.0	445.1	40.0	84.3	PFO	TWS for Wetland Crossing

TABLE 2.4-4

Construction Workspace >75 feet Within Wetlands for the Sabal Trail Project Pipeline Segments a/

State, Facility	County	Wetland ID	Milepost Begin <u>b/</u>	Milepost End <u>b/</u>	Crossing Length (feet)	Crossing Width (feet)	Wetland Class Impacted	Justification <u>c/</u>
	Lake	W7CAR083	445.2	445.3	288.0	96.2	PFO	ATWS for P.I.
	Lake	W7CAR055	448.9	448.9	249.0	105.0	PEM	ATWS for P.I.
	Lake	W7CAR068	451.1	451.2	97.0	140.0	PFO	ATWS for Road Crossing
	Lake	W7CAR072	451.2	451.2	94.8	140.0	PFO	ATWS for Road Crossing
	Lake	W7CAR098	452.9	453.0	119.0	100.0	PFO	ATWS for Road Crossing
	Lake	W7CAR099	453.0	453.0	119.3	100.0	PEM	ATWS for Road Crossing
	Lake	W7CAR103	453.3	453.3	173.0	100.0	PFO	ATWS for P.I.
	Lake	W7CAR103	453.4	453.5	102.4	125.0	PFO	ATWS for Road Crossing
	Lake	W7CAR103	453.5	453.5	167.2	146.1	PFO	ATWS & TWS for Road Crossing
	Lake	W7CAR107	453.5	453.5	124.0	172.8	PFO	ATWS & TWS for Road Crossing
	Lake	W3ECT039	454.4	454.5	202.0	100.0	PEM	ATWS for P.I.
	Lake	W9ECT260	457.6	457.6	288.0	100.1	PFO	ATWS for P.I.
	Polk	W9ECT260	457.8	457.8	22.0	88.7	PFO	TWS for Wetland Crossing
	Polk	W9ECT260	457.9	458.0	238.8	104.3	PFO	ATWS for P.I.
	Polk	W9ECT260	458.0	458.1	221.6	100.0	PFO	ATWS for P.I.
	Polk	W9ECT260	458.1	458.2	231.0	106.1	PFO	ATWS for P.I.
	Polk	W9ECT260	458.4	458.5	101.8	100.0	PFO	ATWS for P.I.
	Polk	W9ECT260	458.8	458.8	62.6	100.0	PFO	ATWS for Waterbody Crossing
	Polk	W9ECT260	458.8	458.8	21.6	87.8	PFO	ATWS for Waterbody Crossing
	Polk	W9ECT260	458.8	458.9	200.8	125.0	PFO	ATWS for Waterbody Crossing
	Polk	W9ECT260	458.9	458.9	205.0	125.0	PFO	ATWS for Waterbody Crossing
	Polk	W9ECT260	459.2	459.2	249.0	121.0	PFO	ATWS for P.I.
	Polk	W9ECT260	459.3	459.3	71.5	100.0	PFO	ATWS for P.I.
	Polk	W9ECT260	459.7	459.7	201.0	124.9	PFO	ATWS for Road Crossing

TABLE 2.4-4

**Construction Workspace >75 feet Within Wetlands for the Sabal Trail Project Pipeline Segments a/**

<b>State, Facility</b>	<b>County</b>	<b>Wetland ID</b>	<b>Milepost Begin <u>b/</u></b>	<b>Milepost End <u>b/</u></b>	<b>Crossing Length (feet)</b>	<b>Crossing Width (feet)</b>	<b>Wetland Class Impacted</b>	<b>Justification <u>c/</u></b>
	Polk	W6CAR226	461.0	461.1	332.0	100.0	PFO	ATWS for P.I.
	Polk	W9CAR073	461.9	462.0	359.0	100.0	PFO	ATWS for P.I.
	Polk	W9CAR076	462.0	462.1	205.0	100.0	PSS	ATWS for P.I.
	Polk	W7CAR130	463.5	463.5	N/A	93.4	PEM	ATWS for P.I. & Staging Area
	Osceola	W6CAR105	468.2	468.3	216.0	105.0	PFO	ATWS for P.I.
	Osceola	W6CAR105	468.4	468.4	215.0	105.0	PFO	ATWS for P.I.
	Osceola	W6CAR105	468.4	468.5	218.0	100.0	PFO	ATWS for P.I.
	Osceola	W6CAR105	468.7	468.7	126.0	125.0	PFO	ATWS for Waterbody Crossing
	Osceola	W6CAR105	468.7	468.8	126.0	125.0	PFO	ATWS for Waterbody Crossing
	Osceola	W6CAR105	469.3	469.4	283.0	100.0	PFO	ATWS for P.I.
	Osceola	W6CAR105	469.4	469.4	214.0	105.0	PFO	ATWS for P.I.
	Osceola	W6CAR105	469.4	469.5	215.0	105.0	PFO	ATWS for P.I.
	Osceola	W6CAR105	469.6	469.7	593.0	179.2	PFO	ATWS for HDD Site
	Osceola	W9ECT232	470.9	471.0	331.3	100.0	PFO	ATWS for P.I.
	Osceola	W9ECT232	471.1	471.1	229.6	225.0	PFO	ATWS for HDD Site
	Osceola	W1ECT068	472.1	472.1	213.0	155.0	PFO	ATWS for Waterbody Crossing
	Osceola	W1ECT068	472.2	472.2	226.0	155.0	PFO	ATWS for Waterbody Crossing
	Osceola	W10ECT002	473.3	473.3	113.0	100.0	PFO	TWS for Wetland Crossing
	Osceola	W1ECT073	473.3	473.3	51.0	100.0	PEM	TWS for Wetland Crossing
	Osceola	W6CAR163	473.3	473.3	33.1	100.0	PEM	TWS for Wetland Crossing
	Osceola	W6CAR163	473.3	473.3	23.6	125.0	PEM	ATWS & TWS for Pipeline Crossing & P.I.
	Osceola	W6CAR162	473.3	473.4	165.9	141.9	PFO	ATWS & TWS for Pipeline Crossing & P.I.
	Osceola	W10ECT009	474.2	474.2	N/A	167.2	PEM	ATWS for Staging Area
	Osceola	W13CAR032	474.2	474.3	446.0	100.0	PFO	TWS for Wetland Crossing

TABLE 2.4-4

**Construction Workspace >75 feet Within Wetlands for the Sabal Trail Project Pipeline Segments a/**

State, Facility	County	Wetland ID	Milepost Begin <u>b/</u>	Milepost End <u>b/</u>	Crossing Length (feet)	Crossing Width (feet)	Wetland Class Impacted	Justification <u>c/</u>
<u>Citrus County Line</u>	Marion	W13CAR087	0.6	0.6	191.0	115.0	PEM	ATWS & TWS for HDD Pullback
	Marion	W13CAR089	0.7	0.7	N/A	88.3	PFO	ATWS & TWS for HDD Pullback
	Marion	W13CAR092	1.1	1.1	19.7	123.7	PFO	ATWS for HDD Site
	Marion	W13CAR092	1.1	1.1	107.4	90.6	PFO	ATWS for HDD Site
	Marion	W13CAR092	1.1	1.1	43.3	100.0	PFO	ATWS for Access
	Citrus	W13CAR095	1.5	1.6	380.4	311.2	PEM	ATWS for HDD Site & Staging Area
	Citrus	W13CAR095	1.6	1.6	69.6	88.9	PEM	ATWS for Waterbody & Wetland Crossing
	Citrus	W3ECT029	19.2	19.2	149.7	115.0	PFO	ATWS & TWS for Road Crossing
	Citrus	W8ECT203	21.3	21.4	224.1	195.9	PFO	ATWS & TWS for Station
	Citrus	W8ECT275	21.4	21.4	N/A	112.4	PFO	TWS for Station
<u>Hunters Creek Line</u>	Osceola	W2ECT068	0.5	0.5	179.8	141.2	PFO	ATWS for Road Crossing
	Osceola	W2ECT069	0.6	0.6	18.0	100.0	PFO	TWS for Road Crossing
	Osceola	W2ECT069	0.6	0.6	40.5	100.0	PFO	TWS for Wetland Crossing
	Osceola	W2ECT069	0.6	0.7	202.1	217.9	PFO	ATWS for Pipeline & Railroad Crossing
	Osceola	W2ECT069	0.7	0.7	176.9	189.2	PFO	ATWS for Pipeline & Railroad Crossing
	Osceola	W2ECT070	0.8	0.8	222.0	140.0	PFO	ATWS for Power line Crossing
	Osceola	W2ECT070	0.8	0.9	150.0	100.0	PFO	ATWS for Power line Crossing
	Osceola	W2ECT070	1.2	1.3	202.0	125.0	PFO	ATWS for Waterbody Crossing
	Osceola	W13CAR017	2.1	2.2	229.0	110.0	PFO	ATWS for Road & Wetland Crossing
	Osceola	W13CAR027	4.2	4.2	177.0	100.0	PFO	ATWS for P.I.
	Osceola	W13CAR028	5.1	5.2	237.4	125.0	PFO	ATWS for P.I.
	Osceola	W13CAR028	5.2	5.2	40.6	155.0	PFO	ATWS for Waterbody & Wetland Crossing
	Osceola	W6CAR155	5.3	5.3	143.6	155.0	PEM	ATWS for Waterbody & Wetland Crossing

TABLE 2.4-4

**Construction Workspace >75 feet Within Wetlands for the Sabal Trail Project Pipeline Segments a/**

State, Facility	County	Wetland ID	Milepost Begin <u>b/</u>	Milepost End <u>b/</u>	Crossing Length (feet)	Crossing Width (feet)	Wetland Class Impacted	Justification <u>c/</u>
	Osceola	W6CAR222	5.3	5.3	20.7	155.0	PFO	ATWS for Waterbody & Wetland Crossing
	Osceola	W6CAR222	5.3	5.3	75.2	105.0	PFO	ATWS for Waterbody & Wetland Crossing
	Osceola	W6CAR221	5.5	5.6	245.6	100.0	PEM	ATWS for P.I.
	Osceola	W6CAR223	5.6	5.6	70.4	100.0	PFO	ATWS for P.I.
	Osceola	W6CAR125	7.0	7.1	201.1	149.3	PSS	ATWS for P.I.
	Osceola	W6CAR124	7.0	7.1	82.2	91.3	PFO	ATWS for P.I.
	Osceola	W13CAR046	7.5	7.6	308.0	150.0	PFO	ATWS for Road Crossing
	Osceola	W13CAR046	7.9	7.9	149.0	100.0	PFO	ATWS for P.I.
	Osceola	W13CAR046	8.0	8.0	276.9	100.0	PFO	ATWS for P.I.
	Osceola	W13CAR046	8.1	8.1	176.0	122.2	PFO	ATWS for Road Crossing
	Osceola	W13CAR048	8.2	8.2	211.0	149.2	PFO	ATWS for Road Crossing
	Osceola	W13CAR048	8.3	8.4	184.0	100.0	PFO	ATWS for P.I.
	Osceola	W13CAR048	8.4	8.5	200.0	100.0	PFO	ATWS for HDD Pullback & P.I.
	Osceola	W13CAR051	8.5	8.5	N/A	105.0	PEM	ATWS for HDD Pullback
	Osceola	W13CAR052	8.6	8.6	N/A	167.8	PFO	ATWS for HDD Pullback
	Osceola	W13CAR057	8.7	8.8	225.2	125.0	PEM	ATWS for HDD Pullback & TWS for Access
	Osceola	W13CAR057	8.8	8.8	73.7	125.0	PEM	ATWS for HDD Pullback
	Osceola	W13CAR057	8.8	8.8	100.0	150.0	PEM	ATWS for HDD Pullback & Waterbody Crossing
	Osceola	W13CAR057	8.8	8.9	171.3	125.0	PEM	ATWS for HDD pullback
	Osceola	W13CAR064	9.6	9.6	N/A	115.3	PFO	ATWS for HDD Site
	Osceola	W7CAR136	11.5	11.5	37.1	154.9	PFO	ATWS for Road & Waterbody Crossing
	Osceola	W7CAR137	11.5	11.5	79.2	168.1	PFO	ATWS for Road & Waterbody Crossing

TABLE 2.4-4

**Construction Workspace >75 feet Within Wetlands for the Sabal Trail Project Pipeline Segments <sup>a/</sup>**

State, Facility	County	Wetland ID	Milepost Begin <sup>b/</sup>	Milepost End <sup>b/</sup>	Crossing Length (feet)	Crossing Width (feet)	Wetland Class Impacted	Justification <sup>c/</sup>
	Osceola	W7CAR137	11.5	11.6	122.5	175.0	PFO	ATWS for Road & Waterbody Crossing
	Osceola	W7CAR143	12.3	12.4	266.0	125.1	PFO	ATWS for Road Crossing & P.I.
	Osceola	W7CAR143	12.4	12.5	289.3	225.0	PFO	ATWS for HDD Site
	Osceola	W7CAR143	12.5	12.5	11.7	82.5	PFO	ATWS for HDD Site
	Osceola	W7CAR148	12.8	12.8	26.4	225.0	PEM	ATWS for HDD Site
	Osceola	W7CAR148	13.1	13.1	13.1	90.7	PEM	ATWS for P.I.
	Orange	W7CAR148	13.1	13.1	182.0	105.0	PEM	ATWS for P.I.
	Orange	W6CAR217	13.1	13.1	N/A	206.7	PSS	ATWS for Station
	Orange	W7CAR148	0.0	0.1	25.0	249.3	PEM	ATWS for Station
	Orange	W7CAR148	0.0	0.0	59.1	75.6	PEM	TWS for Wetland Crossing
	Orange	W2ECT188	0.0	0.0	14.8	150.0	PEM	ATWS for Road Crossing & P.I.
	Orange	W2ECT188	0.0	0.1	51.0	150.0	PEM	ATWS for Road Crossing & P.I.
	Orange	W2ECT188	0.1	0.1	38.0	109.2	PEM	ATWS for Station
	Orange	W6CAR233	0.1	0.1	N/A	96.4	PFO	ATWS for Station
	Orange	W2ECT188	0.1	0.1	38.1	125.0	PEM	ATWS for Station

<sup>a/</sup> Workspace = operation and construction

<sup>b/</sup> Approximate MP along the proposed pipeline rounded to the nearest tenth.

<sup>c/</sup> P.I. = Change in direction of the Right-of-way centerline.



TABLE 2.4-5

ATWS within 50 feet of Wetlands for the Sabal Trail Project Pipeline Facilities a/, b/

State, Facility	County	ATWS ID	MP Begin <u>c/</u>	MP End <u>c/</u>	Nominal Dimensions <u>d/</u> (feet)		Area Affected (square feet)	Area Affected (acres)	Existing Land Use <u>e/</u>	Feature ID	Distance from Resource Area (feet)	Justification <u>f/</u>
					Width	Length						
<b>Alabama</b>												
<u>Mainline</u>	Tallapoosa	2088	0.0	0.1	0	0	698,621.98	16.04	FW, OL	W1TRC393, WTA11C003, W1TRC396	0, 0, 0	Station ATWS
	Tallapoosa	4676	0.0	0.1	0	0	861,480.84	19.78	FW, OL	W1TRC410, W1TRC411	25, 0	Waterbody Crossing & Staging Area
	Tallapoosa	5157	0.0	0.0	0	0	94,557.27	2.17	FW, OL	WTA11C003, WTA11C003	0, 0	Station ATWS
	Tallapoosa	1778	8.8	8.9	25	455	11,500.79	0.26	OL	W1TRC057	46	Slope
	Chambers	4170	26.2	26.2	0	0	22,617.36	0.52	OL	W1TRC509	0	Cathodic Protection Ground Bed
	Chambers	4414	33.4	33.4	15	360	5,591.43	0.13	FW, OL	W1TRC147	48	Waterbody & Wetland Crossing
	Chambers	4167	35.2	35.3	50	200	11,236.60	0.26	FW	W1TRC506	0	Railroad Crossing
	Chambers	1622	35.3	35.3	15	200	2,888.52	0.07	OL	W1TRC506, W1TRC505	23, 0	Railroad Crossing
	Lee	4260	54.3	54.4	50	200	10,775.21	0.25	FW	W1TRC486	28	Road Crossing
	Russell	1927	64.6	64.7	0	0	18,048.05	0.41	FW, OL	W1TRC379	0	Crossover
	Russell	4829	64.6	64.7	0	0	18,029.79	0.41	FW, OL	W1TRC379	16	Crossover
	Russell	4827	67.9	68.0	50	170	9,175.26	0.21	FW, OL	W1TRC172, W1TRC171	0, 0	Road & Wetland Crossing
	Russell	1442	74.1	74.1	0	0	2,838.25	0.07	OL	W1TRC262	11	Cathodic Protection Ground Bed
	Russell	1857	74.1	74.2	50	200	10,064.39	0.23	OL	W1TRC262	40	Wetland Crossing
	Russell	1941	79.1	79.2	25	125	3,124.99	0.07	FW	W1TRC269a	0	Waterbody Crossing
<b>Georgia</b>												
Stewart	4041	90.8	91.0	50	570	33,017.21	0.76	FW, OL	W2TRC008	0	HDD Pullback	
Stewart	3676	95.4	95.8	10	2065	20,773.72	0.48	FW, OL	W2TRC367	23	Rock	

TABLE 2.4-5

ATWS within 50 feet of Wetlands for the Sabal Trail Project Pipeline Facilities a/, b/

State, Facility	County	ATWS ID	MP Begin <u>c/</u>	MP End <u>c/</u>	Nominal Dimensions <u>d/</u> (feet)		Area Affected (square feet)	Area Affected (acres)	Existing Land Use <u>e/</u>	Feature ID	Distance from Resource Area (feet)	Justification <u>f/</u>
					Width	Length						
	Stewart	1328	97.3	97.7	10	2320	23,205.30	0.53	FW, OL	W2TRC017, W2TRC018	21, 45	Rock
	Stewart	3982	97.8	97.9	10	241	2,499.07	0.06	FW, OL	W2TRC019	38	Rock
	Stewart	3983	97.9	97.9	50	130	5,446.83	0.13	FW	W2TRC019, W2TRC021	1, 0	Railroad & Wetland Crossing
	Stewart	3611	97.9	98.0	0	0	18,699.68	0.43	FW	W2TRC022	0	Railroad & Waterbody Crossing
	Stewart	1240	106.7	106.8	0	0	14,036.36	0.32	FW, OL	W2TRC037, W2TRC038	0, 0	Crossover
	Stewart	3800	106.9	106.9	50	200	10,000.02	0.23	FW	W5TRC001	0	Waterbody & Wetland Crossing
	Stewart	3970	106.9	107.1	30	1120	33,468.65	0.77	FW	W5TRC002, W5TRC004	31, 43	Slope
	Webster	3778	119.6	119.6	15	300	4,503.20	0.10	OL	W2TRC070	42	Road & Wetland Crossing
	Terrell	3863	131.4	131.5	0	0	42,794.04	0.98	FW	W2TRC105	0	Staging Area
	Terrell	3763	131.4	131.5	15	200	3,088.44	0.07	FW	W2TRC104, W2TRC105	6, 3	Road Crossing
	Terrell	3923	131.5	131.6	0	0	129,847.24	2.98	AG, OL	W2TRC107	36	Road Crossing & Staging Area
	Terrell	1308	143.1	143.3	25	705	17,611.82	0.40	AG, FW	W2TRC245	41	Road, Waterbody & Wetland Crossing
	Terrell	3979	144.1	144.1	75	100	6,084.34	0.14	FW	W2TRC152	22	Road Crossing
	Dougherty	1255	148.7	148.8	15	205	2,965.91	0.07	FW	WNWI-14870	30	NWI Data, P.I.
	Dougherty	3959	149.7	149.7	15	200	3,021.69	0.07	FW	WNWI-14967, WNWI-14960	26, 0	NWI Data, Road Crossing
	Dougherty	3960	149.7	149.7	50	200	9,977.70	0.23	FW	WNWI-14967, WNWI-14960	42, 0	NWI Data, Road Crossing
	Dougherty	1412	150.1	150.1	25	200	4,816.45	0.11	FW	WNWI-15009, WNWI-15013	17, 0	NWI Data, Road Crossing
	Dougherty	4103	150.1	150.1	50	200	10,587.77	0.24	FW	WNWI-15009, WNWI-15013	22, 0	NWI Data, Road Crossing

TABLE 2.4-5

ATWS within 50 feet of Wetlands for the Sabal Trail Project Pipeline Facilities a/, b/

State, Facility	County	ATWS ID	MP Begin <u>c/</u>	MP End <u>c/</u>	Nominal Dimensions <u>d/</u> (feet)		Area Affected (square feet)	Area Affected (acres)	Existing Land Use <u>e/</u>	Feature ID	Distance from Resource Area (feet)	Justification <u>f/</u>
					Width	Length						
	Dougherty	1416	153.1	153.1	25	175	4,042.84	0.09	FW, OL	W2TRC156, W2TRC157, W2TRC160	0, 0, 0	Wetland Crossing & P.I.
	Dougherty	1417	153.4	153.4	0	0	14,980.23	0.34	FW, OL	W2TRC163	0	Railroad & Wetland Crossing
	Dougherty	1418	153.4	153.4	25	150	3,692.24	0.08	FW, OL	W2TRC163	0	Railroad & Wetland Crossing
	Dougherty	1163	153.4	153.5	75	400	33,033.89	0.76	FW	W2TRC058, W5TRC017	0, 0	Railroad & Wetland Crossing
	Dougherty	3651	155.4	155.4	15	200	3,052.44	0.07	FW	W2TRC376	0	P.I.
	Dougherty	3633	163.3	164.2	50	4785	239,293.43	5.49	FW	W1TRC498	0	HDD Pullback
	Dougherty	3632	164.3	164.3	0	0	49,160.26	1.13	FW, OL	W2TRC373	0	Railroad & Road Crossing & P.I.
	Dougherty	3644	168.3	168.3	50	200	9,909.95	0.23	FW	W2TRC351	0	Road Crossing
	Mitchell	1128	171.0	171.2	15	625	9,218.98	0.21	FW	W2TRC362	0	P.I.
	Mitchell	1127	171.1	171.1	15	200	3,922.12	0.09	FW	W2TRC362	37	P.I.
	Colquitt	3503	182.6	182.7	25	200	4,947.38	0.11	FW	W7TRC031, W3TRC214	0, 48	Road & Wetland Crossing
	Colquitt	985	182.6	182.7	50	200	10,677.86	0.25	FW	W7TRC031	0	Road & Wetland Crossing
	Colquitt	3507	182.7	182.7	25	220	5,232.15	0.12	FW	W3TRC211, W3TRC214	45, 0	Road & Wetland Crossing
	Colquitt	3508	182.7	182.8	25	350	8,230.40	0.19	FW, OL	W3TRC211	6	Road & Waterbody Crossing
	Colquitt	3072	195.0	195.1	15	305	4,532.42	0.10	FW	W3TRC223	0	P.I.
	Colquitt	3071	195.2	195.2	15	270	4,011.11	0.09	FW	W3TRC223	0	P.I.
	Colquitt	3083	195.5	195.5	50	200	9,672.92	0.22	FW, OL	W3TRC223, W3TRC227	0, 20	Road Crossing
	Colquitt	3085	195.5	195.5	25	200	5,090.56	0.12	FW, RE	W3TRC223	0	Road Crossing
	Colquitt	3082	195.5	195.6	50	200	10,352.27	0.24	FW, OL	W3TRC231	0	Road Crossing
	Colquitt	685	195.5	195.6	25	200	4,911.95	0.11	FW, OL	W3TRC231	0	Road Crossing

TABLE 2.4-5

ATWS within 50 feet of Wetlands for the Sabal Trail Project Pipeline Facilities a/, b/

State, Facility	County	ATWS ID	MP Begin <u>c/</u>	MP End <u>c/</u>	Nominal Dimensions <u>d/</u> (feet)		Area Affected (square feet)	Area Affected (acres)	Existing Land Use <u>e/</u>	Feature ID	Distance from Resource Area (feet)	Justification <u>f/</u>
					Width	Length						
	Colquitt	3247	196.4	196.4	25	293	7,587.31	0.17	FW	W3TRC260, W3TRC262	0, 5	Crossover
	Colquitt	3257	197.5	197.6	0	0	62,146.78	1.43	FW	W3TRC113	0	Wetland Crossing
	Colquitt	3258	197.7	197.8	0	0	19,444.52	0.45	FW	W3TRC113	0	Wetland Crossing
	Colquitt	779	203.4	203.4	50	200	10,238.62	0.24	FW	WNWI-20342	0	NWI Data, Wetland Crossing
	Colquitt	790	204.9	205.0	0	0	11,140.79	0.26	AG	W7TRC007	47	Cultivated Cropland, Pipeline Crossing & P.I.
	Colquitt	3181	205.4	205.5	50	200	12,034.13	0.28	FW	W7TRC005	0	Road Crossing
	Colquitt	3178	206.7	206.7	50	200	9,442.57	0.22	FW	W7TRC002	0	Road & Wetland Crossing
	Brooks	3156	211.8	211.8	50	90	5,914.17	0.14	AG, FW	W3TRC206	0	Road Crossing
	Brooks	3142	223.9	223.9	15	200	3,093.32	0.07	FW	W3TRC060	22	Railroad Crossing
	Brooks	693	223.9	223.9	50	200	8,932.11	0.21	FW	W3TRC060	0	Railroad Crossing
	Brooks	717	224.6	224.6	50	200	9,936.22	0.23	FW	W3TRC064	0	Road & Wetland Crossing
	Brooks	3129	224.6	224.7	0	0	89,324.35	2.05	AG, FW, OL	W3TRC064	39	Staging Area
	Brooks	3099	225.1	225.1	50	195	9,780.35	0.22	FW	W3TRC268, W3TRC269	14, 10	Waterbody Crossing
	Brooks	3077	230.5	230.6	50	200	9,999.99	0.23	FW	W3TRC284	10	Road Crossing
	Brooks	2041	230.9	230.9	25	400	8,992.25	0.21	FW	W3TRC282	0	HDD Pullback
	Brooks	3073	231.2	231.3	25	635	15,828.58	0.36	FW, OL, OW	W3TRC303	0	Access
	Lowndes	5135	231.9	232.0	0	0	47,545.31	1.09	FW	W3TRC275	26	HDD Site
	Lowndes	3086	232.4	232.5	25	400	9,623.76	0.22	FW	W3TRC007	15	Pipeline Crossing & P.I.
	Lowndes	967	232.7	232.8	75	135	12,221.73	0.28	FW	W3TRC015, W3TRC242	0, 0	Wetland Crossing
	Lowndes	964	233.0	233.1	50	200	10,297.88	0.24	FW, OL	W3TRC205	15	Road Crossing
	Lowndes	965	233.1	233.1	50	200	9,819.02	0.23	FW, OL	W3TRC205	0	Road Crossing

TABLE 2.4-5

ATWS within 50 feet of Wetlands for the Sabal Trail Project Pipeline Facilities a/, b/

State, Facility	County	ATWS ID	MP Begin <u>c/</u>	MP End <u>c/</u>	Nominal Dimensions <u>d/</u> (feet)		Area Affected (square feet)	Area Affected (acres)	Existing Land Use <u>e/</u>	Feature ID	Distance from Resource Area (feet)	Justification <u>f/</u>
					Width	Length						
Florida <u>Mainline</u>	Lowndes	966	233.1	233.2	15	270	4,130.62	0.09	FW	W3TRC205	41	P.I.
	Lowndes	3418	242.9	242.9	15	125	1,875.00	0.04	FW	WNWI-24291	0	NWI Data, Waterbody Crossing
	Lowndes	3419	242.9	242.9	25	125	3,124.99	0.07	FW	WNWI-24291	0	NWI Data, Road Crossing
	Lowndes	3420	242.9	242.9	15	125	1,875.02	0.04	FW	WNWI-24291	0	NWI Data, Waterbody Crossing
	Lowndes	3421	242.9	242.9	25	125	3,125.02	0.07	FW	WNWI-24291	0	NWI Data, Road Crossing
	Madison	3048	267.8	267.9	15	295	4,457.57	0.10	FW	W8ECT246	16	P.I.
	Suwannee	666	288.0	288.2	0	0	31,817.18	0.73	FW, OL	W2ECT001	42	Road Crossing & Crossover
	Suwannee	655	308.1	308.2	0	0	46,634.48	1.07	FW, OL	W2ECT105	10	HDD Site
	Suwannee	643	308.1	308.2	15	300	4,503.04	0.10	OL	W2ECT105	22	HDD Site
	Suwannee	2588	308.2	308.3	0	0	14,576.00	0.33	FW, OW	W2ECT105	0	Access
	Gilchrist	450	320.6	320.6	100	160	15,546.32	0.36	FW	W1ECT096, W1ECT097	0, 0	Wetland Crossing
	Gilchrist	453	322.3	322.4	75	300	22,496.82	0.52	FW	W1ECT104	0	Road Crossing
	Gilchrist	454	322.4	322.4	15	200	3,000.04	0.07	FW	W1ECT104	0	Road Crossing
	Gilchrist	2741	322.7	322.8	0	0	16,181.91	0.37	FW, ID	W1ECT105	39	Crossover
	Gilchrist	2740	323.4	323.5	25	395	10,594.12	0.24	FW, ID	W1ECT108	22	Crossover
	Levy	374	342.7	342.8	15	265	3,916.39	0.09	OL	W9ECT091	0	P.I.
	Levy	3	342.7	342.8	15	290	4,431.99	0.10	OL	W9ECT091	0	P.I.
	Levy	2636	346.3	346.3	50	188	9,380.93	0.22	FW, ID	W9ECT037A	33	Road Crossing
	Levy	2724	346.3	346.3	50	200	9,991.53	0.23	FW	W4CAR042	20	Road Crossing
Levy	2638	346.8	346.8	100	115	16,631.92	0.38	FW	W11CAR023, W11CAR024	34, 20	Road, Waterbody & Wetland Crossing	

TABLE 2.4-5

ATWS within 50 feet of Wetlands for the Sabal Trail Project Pipeline Facilities a/, b/

State, Facility	County	ATWS ID	MP Begin <u>c/</u>	MP End <u>c/</u>	Nominal Dimensions <u>d/</u> (feet)		Area Affected (square feet)	Area Affected (acres)	Existing Land Use <u>e/</u>	Feature ID	Distance from Resource Area (feet)	Justification <u>f/</u>
					Width	Length						
	Levy	2642	348.1	348.2	50	300	13,956.89	0.32	FW, ID, OL	W11CAR040	0	Road Crossing
	Levy	2643	348.1	348.2	25	200	5,242.22	0.12	ID, OL	W11CAR040	0	Road Crossing
	Levy	23	348.2	348.2	0	0	19,448.20	0.45	FW	W9ECT041	0	Road Crossing
	Levy	416	349.4	349.4	50	260	13,239.84	0.30	FW	W4CAR017, W9ECT048, W4CAR016	2, 25, 1, 0	Road Crossing
	Marion	2456	383.1	383.2	50	275	13,472.05	0.31	OL	W8ECT113	29	Wetland Crossing & P.I.
	Marion	83	384.9	385.0	50	200	10,000.04	0.23	OL	W9ECT121	45	Road Crossing
	Marion	62	398.8	398.8	50	200	10,004.46	0.23	FW	W8ECT236	9	Road Crossing
	Sumter	2133	411.5	411.7	0	0	172,343.84	3.96	OL	W8ECT189	24	Staging Area
	Sumter	214	411.8	411.8	25	125	3,094.82	0.07	OL	W8ECT191	31	Waterbody Crossing
	Sumter	215	411.9	411.9	25	125	3,125.01	0.07	OL	W8ECT192	32	Waterbody Crossing
	Sumter	222	412.1	412.2	0	0	56,298.64	1.29	FW	W8ECT195	0	Wetland Crossing
	Sumter	219	412.9	413.0	75	300	18,856.94	0.43	FW	W8ECT195	0	Highway Crossing & P.I.
	Sumter	220	412.9	413.0	25	255	6,757.88	0.16	FW	W8ECT195	0	Highway Crossing & P.I.
	Sumter	221	413.0	413.1	0	0	77,515.48	1.78	FW	W8ECT207, W8ECT207	0, 0	Highway Crossing & P.I.
	Sumter	2066	414.8	414.9	25	200	4,997.09	0.11	FW, OL	W2ECT246	0	Road Crossing
	Sumter	2183	425.5	425.5	15	200	2,951.29	0.07	OL	W9ECT199	0	P.I.
	Sumter	2182	425.5	425.5	15	200	3,028.95	0.07	OL	W9ECT199	0	P.I.
	Sumter	2191	427.8	427.8	15	150	2,154.64	0.05	OL	W8ECT223	0	P.I.
	Sumter	2192	427.8	427.8	15	200	3,081.93	0.07	OL	W8ECT223	0	P.I.
	Sumter	2203	427.8	427.9	50	100	5,014.45	0.12	OL	W8ECT223	0	Waterbody Crossing
	Sumter	2204	427.8	427.9	25	100	2,499.99	0.06	OL	W8ECT223	0	Waterbody Crossing

TABLE 2.4-5

ATWS within 50 feet of Wetlands for the Sabal Trail Project Pipeline Facilities a/, b/

State, Facility	County	ATWS ID	MP Begin <u>c/</u>	MP End <u>c/</u>	Nominal Dimensions <u>d/</u> (feet)		Area Affected (square feet)	Area Affected (acres)	Existing Land Use <u>e/</u>	Feature ID	Distance from Resource Area (feet)	Justification <u>f/</u>
					Width	Length						
	Sumter	262	427.9	427.9	50	100	5,000.02	0.11	FW, OL	W8ECT223, W6CAR229	0, 0	Waterbody Crossing
	Sumter	263	427.9	427.9	25	100	2,500.01	0.06	OL	W8ECT223, W6CAR229	0, 13	Waterbody Crossing
	Sumter	2395	432.5	432.6	0	0	27,942.16	0.64	OL	W6CAR179	0	TWS Road
	Sumter	2220	432.5	432.6	25	135	3,276.73	0.08	OL	W6CAR179	0	Road Crossing
	Sumter	2222	433.2	433.2	15	200	3,469.74	0.08	OL	W6CAR179	0	P.I.
	Sumter	2221	433.2	433.2	15	200	3,743.28	0.09	OL	W6CAR179	0	P.I.
	Sumter	2245	434.0	434.0	45	160	5,542.89	0.13	OL	W4CAR165	41	Wetland Crossing
	Sumter	4988	435.2	435.2	0	0	12,180.76	0.28	FW, OL	W4CAR175	0	Road Crossing
	Lake	2214	435.7	435.9	25	610	15,881.09	0.36	FW, ID, OL	W7CAR003	0	Crossover
	Lake	297	436.0	436.1	40	265	9,072.18	0.21	OL	W7CAR005	0	P.I.
	Lake	2229	436.9	436.9	25	200	5,328.65	0.12	FW, OL	W7CAR012	0	Road Crossing
	Lake	2228	436.9	436.9	50	200	8,678.81	0.20	OL	W7CAR012	0	Road Crossing
	Lake	2234	437.3	437.3	100	200	20,507.26	0.47	FW, OL	W7CAR027	0	Wetland Crossing
	Lake	2235	437.3	437.3	25	105	2,552.02	0.06	FW	W7CAR027	0	Road Crossing
	Lake	2250	439.5	439.5	50	135	6,833.87	0.16	FW, OL	W7CAR023, W13CAR008	0, 0	Wetland Crossing
	Lake	2287	440.1	440.1	50	200	9,999.99	0.23	FW, OL	W6CAR150, W6CAR149, W6CAR151	0, 0, 8	Wetland Crossing
	Lake	2286	440.1	440.1	100	200	19,999.97	0.46	FW, OL	W6CAR150, W6CAR149, W6CAR151	0, 15, 30	Wetland Crossing
	Lake	2252	440.3	440.3	50	90	5,220.08	0.12	FW	W6CAR151	0	Wetland Crossing

TABLE 2.4-5

ATWS within 50 feet of Wetlands for the Sabal Trail Project Pipeline Facilities a/, b/

State, Facility	County	ATWS ID	MP Begin <u>c/</u>	MP End <u>c/</u>	Nominal Dimensions <u>d/</u> (feet)		Area Affected (square feet)	Area Affected (acres)	Existing Land Use <u>e/</u>	Feature ID	Distance from Resource Area (feet)	Justification <u>f/</u>
					Width	Length						
	Lake	307	440.8	440.8	15	200	2,908.73	0.07	FW	W6CAR080, W6CAR079	0, 22	P.I.
	Lake	306	440.8	440.8	15	245	3,735.14	0.09	FW	W6CAR080, W6CAR079, W6CAR151	0, 2, 13	P.I.
	Lake	2288	441.0	441.0	0	0	25,756.91	0.59	OL	W6CAR081, W6CAR083, W6CAR082	0, 0, 0, 0, 27	Wetland Crossing
	Lake	2289	441.0	441.0	0	0	21,730.38	0.50	OL	W6CAR083, W6CAR081, W6CAR082	0, 0, 29	Wetland Crossing
	Lake	2386	445.0	445.1	0	0	16,260.43	0.37	RE	W7CAR083	5	Wetland Crossing
	Lake	201	445.2	445.3	15	265	3,903.04	0.09	FW	W7CAR083	0	P.I.
	Lake	200	445.2	445.3	15	145	1,918.66	0.04	FW	W7CAR083	0	P.I.
	Lake	2384	445.7	445.7	50	125	4,544.57	0.10	OL	W7CAR086, W7CAR085	43, 0	Road Crossing
	Lake	5003	445.8	445.8	75	300	24,231.83	0.56	ID, OL	W7CAR085, W7CAR083	41, 41	Road Crossing
	Lake	2376	446.9	446.9	50	100	5,000.01	0.11	OL	W7CAR037	35	Wetland Crossing
	Lake	2375	447.4	447.5	100	190	22,709.16	0.52	FW	W7CAR040, W7CAR041	6, 0	Wetland Crossing
	Lake	2373	447.6	447.6	50	200	9,999.99	0.23	OL	W7CAR044	33	Wetland Crossing
	Lake	2371	447.9	448.0	0	0	39,683.05	0.91	OL	W7CAR046, W7CAR047	44, 0	Wetland Crossing
	Lake	2372	448.0	448.0	0	0	23,630.86	0.54	AG, OL	W7CAR046, W7CAR047	24, 0	Wetland Crossing
	Lake	2370	448.6	448.6	0	0	17,260.53	0.40	OL	W7CAR053, W7CAR050	0, 0	Wetland Crossing
	Lake	199	448.9	448.9	15	265	3,948.83	0.09	OL	W7CAR050, W7CAR055	14, 0	P.I.



TABLE 2.4-5

ATWS within 50 feet of Wetlands for the Sabal Trail Project Pipeline Facilities a/, b/

State, Facility	County	ATWS ID	MP Begin <u>c/</u>	MP End <u>c/</u>	Nominal Dimensions <u>d/</u> (feet)		Area Affected (square feet)	Area Affected (acres)	Existing Land Use <u>e/</u>	Feature ID	Distance from Resource Area (feet)	Justification <u>f/</u>
					Width	Length						
	Lake	198	448.9	448.9	15	295	4,478.61	0.10	FW, OL	W7CAR050, W7CAR055	0, 0	P.I.
	Lake	197	449.2	449.2	0	0	11,013.95	0.25	OL	W7CAR057, W7CAR060, W7CAR056	0, 45, 25	Road & Wetland Crossing
	Lake	35	449.4	449.4	0	0	8,158.23	0.19	OL	W7CAR061, W7CAR062	41, 0	Wetland Crossing
	Lake	34	449.5	449.6	0	0	13,822.60	0.32	AG, OL	W7CAR065, W7CAR064, W7CAR063, W7CAR061	19, 0, 0, 28, 39	Wetland Crossing
	Lake	2357	449.8	449.8	0	0	48,755.92	1.12	OL	W7CAR117, W6CAR216	0, 33	Staging Area
	Lake	2354	450.2	450.2	0	0	12,887.23	0.30	OL	W7CAR120, W7CAR121	0, 40	Wetland Crossing
	Lake	2365	451.1	451.2	15	200	2,999.99	0.07	FW, ID	W7CAR072, W7CAR068	0, 0	Road Crossing
	Lake	2364	451.1	451.2	50	200	10,000.01	0.23	FW, ID	W7CAR072, W7CAR068	0, 0	Road Crossing
	Lake	2407	451.4	451.4	0	0	4,295.24	0.10	FW	W7CAR076	14	Road & Wetland Crossing
	Lake	53	451.4	451.5	100	400	39,319.64	0.90	OL	W7CAR076	41	Road Crossing
	Lake	2404	451.5	451.5	25	230	6,278.71	0.14	OL	W6CAR188	44	Road, Waterbody & Wetland Crossing
	Lake	190	452.9	453.0	25	125	3,125.02	0.07	FW, OL	W7CAR098, W7CAR099	0, 0	Road Crossing
	Lake	2360	453.0	453.0	25	125	3,125.00	0.07	OL	W7CAR099	0	Road Crossing
	Lake	2353	453.3	453.3	25	190	4,847.07	0.11	FW	W7CAR103	0	P.I.
	Lake	2348	453.4	453.5	50	200	8,715.39	0.20	FW	W7CAR103	0	Road Crossing
	Lake	2349	453.5	453.5	25	175	4,696.17	0.11	FW, ID	W7CAR103	0	Road Crossing
	Lake	191	453.5	453.5	0	0	24,560.16	0.56	FW, ID	W7CAR103	0	Road Crossing

TABLE 2.4-5

ATWS within 50 feet of Wetlands for the Sabal Trail Project Pipeline Facilities a/, b/

State, Facility	County	ATWS ID	MP Begin <u>c/</u>	MP End <u>c/</u>	Nominal Dimensions <u>d/</u> (feet)		Area Affected (square feet)	Area Affected (acres)	Existing Land Use <u>e/</u>	Feature ID	Distance from Resource Area (feet)	Justification <u>f/</u>
					Width	Length						
	Lake	2347	453.5	453.5	50	200	12,495.94	0.29	FW	W7CAR107	0	Road Crossing
	Lake	364	454.4	454.5	25	210	5,407.77	0.12	OL	W3ECT039	0	P.I.
	Lake	325	455.0	455.0	75	395	33,029.15	0.76	FW, ID, OL	W7CAR115, W7CAR227	3, 29	Wetland Crossing & P.I.
	Lake	2320	457.6	457.6	15	200	6,408.07	0.15	FW	W9ECT260	0	P.I.
	Polk	203	457.6	457.6	15	150	2,270.80	0.05	FW	W9ECT260	0	P.I.
	Polk	348	457.8	457.8	345	410	126,766.38	2.91	FW, OL	W9ECT260	22	Staging Area
	Polk	349	457.8	457.9	75	200	14,999.98	0.34	FW, OL	W9ECT260	9	Wetland Crossing
	Polk	2324	457.9	458.0	25	200	5,223.78	0.12	FW	W9ECT260	0	P.I.
	Polk	2331	458.0	458.1	25	200	5,091.62	0.12	FW	W9ECT260	0	P.I.
	Polk	2330	458.1	458.2	25	200	5,117.42	0.12	FW	W9ECT260	0	P.I.
	Polk	2329	458.4	458.5	25	200	5,161.48	0.12	FW	W9ECT260, W9ECT260	0, 0	P.I.
	Polk	2325	458.8	458.8	25	130	3,629.39	0.08	FW	W9ECT260	0	P.I.
	Polk	2326	458.8	458.9	50	200	10,000.08	0.23	FW	W9ECT260	0	Waterbody Crossing
	Polk	344	458.9	458.9	50	200	9,873.58	0.23	FW	W9ECT260	0	Waterbody Crossing
	Polk	2332	459.2	459.2	25	200	5,107.09	0.12	FW	W9ECT260	0	P.I.
	Polk	345	459.3	459.3	25	200	4,723.24	0.11	FW	W9ECT260	0	P.I.
	Polk	355	459.7	459.7	50	200	10,000.03	0.23	FW	W9ECT260	0	Road Crossing
	Polk	2334	461.0	461.1	25	390	10,248.51	0.24	FW	W6CAR226	0	P.I.
	Polk	346	461.9	461.9	25	200	4,759.82	0.11	FW	W9CAR073	0	P.I.
	Polk	347	462.0	462.1	25	200	4,803.77	0.11	FW, OL	W9CAR073, W9CAR076	0, 0	P.I.
	Polk	343	462.3	462.4	100	125	13,152.85	0.30	FW	W9CAR084	29	Wetland Crossing
	Polk	2335	463.4	463.6	0	0	132,953.43	3.05	FW, ID, OL	W7CAR130, W7CAR129,	45, 44, 0, 0	P.I. & Staging Area

TABLE 2.4-5

ATWS within 50 feet of Wetlands for the Sabal Trail Project Pipeline Facilities a/, b/

State, Facility	County	ATWS ID	MP Begin <u>c/</u>	MP End <u>c/</u>	Nominal Dimensions <u>d/</u> (feet)		Area Affected (square feet)	Area Affected (acres)	Existing Land Use <u>e/</u>	Feature ID	Distance from Resource Area (feet)	Justification <u>f/</u>
					Width	Length						
										W7CAR130, W4CAR241		
	Osceola	2115	466.6	466.7	0	0	36,633.06	0.84	FW, ID	W6CAR096	24	Waterbody Crossing
	Osceola	2398	467.3	467.3	100	100	8,588.72	0.20	RE	W6CAR114	31	Road Crossing
	Osceola	49	467.8	467.8	75	85	5,561.25	0.13	RE	W6CAR100	0	Road Crossing
	Osceola	2397	468.0	468.1	0	0	51,305.35	1.18	FW	W6CAR100, W6CAR105	28, 0	Wetland Crossing
	Osceola	2396	468.2	468.3	15	200	2,955.87	0.07	FW	W6CAR105	0	P.I.
	Osceola	48	468.2	468.3	15	200	3,044.11	0.07	FW	W6CAR105	0	P.I.
	Osceola	334	468.4	468.4	15	200	2,954.75	0.07	FW	W6CAR105	0	P.I.
	Osceola	335	468.4	468.4	15	200	3,045.26	0.07	FW	W6CAR105	0	P.I.
	Osceola	2316	468.4	468.5	25	200	4,868.19	0.11	FW	W6CAR105	0	P.I.
	Osceola	336	468.7	468.7	50	125	6,250.00	0.14	FW	W6CAR105	0	Waterbody Crossing
	Osceola	337	468.7	468.8	50	125	6,249.99	0.14	FW	W6CAR105	0	Waterbody Crossing
	Osceola	338	469.3	469.4	25	200	4,375.45	0.10	FW	W6CAR105	0	P.I.
	Osceola	2317	469.4	469.4	15	200	2,957.22	0.07	FW	W6CAR105	0	P.I.
	Osceola	339	469.4	469.4	15	200	3,042.79	0.07	FW	W6CAR105	0	P.I.
	Osceola	2319	469.4	469.5	15	200	2,961.25	0.07	FW	W6CAR105	0	P.I.
	Osceola	2318	469.4	469.5	15	200	3,038.77	0.07	FW	W6CAR105	0	P.I.
	Osceola	2342	469.6	469.7	0	0	35,360.27	0.81	FW	W6CAR105	0	HDD Site
	Osceola	2343	469.6	469.7	0	0	26,955.69	0.62	FW, ID	W6CAR110, W6CAR105	37, 0	HDD Site
	Osceola	2027	470.7	470.8	100	345	35,783.53	0.82	FW, ID	W9ECT232	13	Road Crossing
	Osceola	2031	470.9	471.0	25	200	5,628.74	0.13	FW	W9ECT232	0	P.I.
	Osceola	2032	470.9	471.0	75	1320	99,010.32	2.27	FW	W9ECT232	0	HDD Pullback

TABLE 2.4-5

ATWS within 50 feet of Wetlands for the Sabal Trail Project Pipeline Facilities a/, b/

State, Facility	County	ATWS ID	MP Begin <u>c/</u>	MP End <u>c/</u>	Nominal Dimensions <u>d/</u> (feet)		Area Affected (square feet)	Area Affected (acres)	Existing Land Use <u>e/</u>	Feature ID	Distance from Resource Area (feet)	Justification <u>f/</u>
					Width	Length						
	Osceola	2028	471.1	471.1	175	300	52,499.92	1.21	FW	W9ECT232, W9ECT232	0, 0	HDD Site
	Osceola	2029	471.6	471.7	0	0	46,040.38	1.06	FW	W4CAR113, W1ECT067	40, 13	HDD Site
	Osceola	2030	471.6	471.7	0	0	8,420.94	0.19	FW	W4CAR113	0	HDD Site
	Osceola	353	471.8	471.8	0	0	46,199.87	1.06	FW	W1ECT067	18	Wetland Crossing
	Osceola	2304	472.1	472.1	30	200	5,999.91	0.14	FW	W1ECT068	0	Waterbody Crossing
	Osceola	2303	472.1	472.1	50	200	9,999.98	0.23	FW	W1ECT068	0	Waterbody Crossing
	Osceola	327	472.2	472.2	30	200	5,999.93	0.14	FW	W1ECT068	0	Waterbody Crossing
	Osceola	2302	472.2	472.2	50	200	9,999.95	0.23	FW	W1ECT068	0	Waterbody Crossing
	Osceola	2306	472.7	472.8	0	0	19,658.93	0.45	OL	W1ECT073	0	Wetland Crossing
	Osceola	2315	473.3	473.3	25	155	3,732.51	0.09	FW, OL	W6CAR163, W6CAR162	0, 0	P.I.
	Osceola	2314	473.3	473.4	50	200	9,422.94	0.22	FW, OL	W6CAR163, W6CAR162	48, 0	Pipeline Crossing & P.I.
	Osceola	2310	474.1	474.3	0	0	449,865.99	10.33	OL	W10ECT009, W10ECT007, W10ECT009	0, 0, 0	Pipeline & Road Crossing & Staging Area
	Osceola	2312	474.1	474.2	25	400	10,000.01	0.23	OL	W10ECT007	28	Pipeline Crossing
<u>Citrus County Line</u>	Marion	4894	0.5	1.0	25	2665	64,148.32	1.47	FW, OL	W13CAR087, W13CAR088, W13CAR089	0, 29, 0	HDD Pullback
	Marion	4920	1.0	1.1	200	400	79,999.99	1.84	FW	W13CAR092	0	HDD Site
	Marion	1979	1.0	1.1	25	400	9,999.90	0.23	FW, OL	W13CAR092, W13CAR092	0, 49	HDD Site
	Marion	1989	1.2	1.3	50	75	3,824.51	0.09	FW, OW	W13CAR092, W13CAR092	24, 0	Staging Area
	Citrus	1978	1.5	1.6	0	0	23,867.59	0.55	FW, OL	W13CAR095	0	HDD Site

TABLE 2.4-5

ATWS within 50 feet of Wetlands for the Sabal Trail Project Pipeline Facilities a/, b/

State, Facility	County	ATWS ID	MP Begin <u>c/</u>	MP End <u>c/</u>	Nominal Dimensions <u>d/</u> (feet)		Area Affected (square feet)	Area Affected (acres)	Existing Land Use <u>e/</u>	Feature ID	Distance from Resource Area (feet)	Justification <u>f/</u>
					Width	Length						
	Citrus	4921	1.5	1.6	0	0	106,298.01	2.44	FW, OL	W13CAR095	0	HDD Site & Staging Area
	Citrus	5056	1.6	1.6	100	190	19,304.34	0.44	OL	W13CAR095	0	Waterbody & Wetland Crossing
	Citrus	4873	16.6	16.7	15	255	3,898.82	0.09	OL	W3ECT016	43	P.I.
	Citrus	4870	16.8	16.8	150	100	14,399.11	0.33	OL	W3ECT018	2	Road & Wetland Crossing
	Citrus	4867	19.1	19.1	100	100	11,696.97	0.27	FW	W3ECT027, W3ECT029, W6CAR215	3, 0, 0	Highway & Wetland Crossing
	Citrus	4866	19.2	19.2	100	125	12,504.56	0.29	FW	W3ECT029	0	Wetland Crossing
	Citrus	1987	19.2	19.2	15	215	5,261.64	0.12	FW	W3ECT029	0	Road Crossing
	Citrus	5098	21.3	21.4	0	0	53,826.32	1.24	FW, ID, OW	W8ECT275	41	Station ATWS
	Citrus	4923	21.3	21.3	100	450	45,000.09	1.03	FW, ID, OL	W3ECT078, W3ECT079	0, 0	Staging Area
	Citrus	4922	21.3	21.4	25	200	4,851.96	0.11	FW, OL	W8ECT203	0	Station ATWS
<u>Hunters Creek Line</u>	Osceola	205	0.0	474.2	25	1065	26,719.56	0.61	OL	W13CAR037, W13CAR042, W13CAR041	0, 0, 0	Station ATWS
	Orange	4924	0.0	13.1	0	0	89,236.84	2.05	FW, ID, OL	W7CAR148, W6CAR217	0, 0	Staging Area
	Osceola	4978	0.5	0.5	50	210	9,803.63	0.23	FW, ID	W2ECT068	0	Road Crossing
	Osceola	4977	0.5	0.5	0	0	3,359.81	0.08	FW, ID	W2ECT068	0	Road Crossing
	Osceola	4974	0.6	0.6	130	248	27,730.32	0.64	ID	W2ECT069	6	Staging Area
	Osceola	1999	0.6	0.7	0	0	36,249.28	0.83	FW	W2ECT069, W2ECT070	0, 34	Pipeline & Railroad Crossing
	Osceola	2003	0.6	0.7	50	200	10,065.42	0.23	FW, ID	W2ECT069	0	Pipeline & Railroad Crossing
	Osceola	4932	0.8	0.8	50	200	10,256.56	0.24	FW	W2ECT070	0	Power line Crossing
	Osceola	4946	0.8	0.8	15	120	1,814.52	0.04	FW	W2ECT070	0	Power line Crossing

TABLE 2.4-5

ATWS within 50 feet of Wetlands for the Sabal Trail Project Pipeline Facilities a/, b/

State, Facility	County	ATWS ID	MP Begin <u>c/</u>	MP End <u>c/</u>	Nominal Dimensions <u>d/</u> (feet)		Area Affected (square feet)	Area Affected (acres)	Existing Land Use <u>e/</u>	Feature ID	Distance from Resource Area (feet)	Justification <u>f/</u>
					Width	Length						
	Osceola	4947	0.8	0.8	25	150	3,894.67	0.09	FW	W2ECT070	0	Power line Crossing
	Osceola	4942	1.2	1.2	50	200	10,021.03	0.23	FW	W2ECT070	0	Waterbody Crossing
	Osceola	1996	2.0	2.1	25	200	5,180.21	0.12	FW	W2ECT074	15	Road & Wetland Crossing
	Osceola	1997	2.1	2.1	25	200	5,520.02	0.13	FW, ID	W13CAR017	0	Road & Wetland Crossing
	Osceola	4937	2.1	2.1	10	200	2,025.87	0.05	FW	W13CAR017	0	Road & Wetland Crossing
	Osceola	4956	4.2	4.2	25	200	4,867.61	0.11	FW	W13CAR027	0	P.I.
	Osceola	4955	5.1	5.2	25	165	4,317.94	0.10	FW	W13CAR028	0	P.I.
	Osceola	4954	5.2	5.3	50	675	33,809.02	0.78	FW, OL	W13CAR028, W6CAR155, W6CAR222	0, 0, 0	Waterbody & Wetland Crossing
	Osceola	4953	5.2	5.3	30	660	19,743.48	0.45	FW, OL	W13CAR028, W6CAR155, W6CAR222	0, 0, 0	Waterbody & Wetland Crossing
	Osceola	2005	5.5	5.6	25	200	5,623.97	0.13	FW, OL	W9ECT228, W6CAR221, W6CAR223	9, 0, 0	P.I.
	Osceola	4964	6.6	6.7	50	130	6,562.92	0.15	FW, OL	W6CAR124	1	Waterbody Crossing
	Osceola	4966	7.0	7.1	50	330	16,455.14	0.38	OL	W6CAR125, W6CAR124	0, 33	P.I.
	Osceola	4965	7.0	7.1	25	340	8,521.30	0.20	FW, OL	W6CAR125, W6CAR124	0, 0	P.I.
	Osceola	1994	7.5	7.5	25	300	7,491.31	0.17	FW	W13CAR046	0	Road Crossing
	Osceola	1993	7.5	7.5	50	300	14,682.59	0.34	FW	W13CAR046	0	Road Crossing
	Osceola	4940	7.7	7.8	0	0	149,490.00	3.43	FW, OL	W13CAR046	19	Staging Area
	Osceola	4949	7.9	7.9	25	200	5,404.78	0.12	FW	W13CAR046	0	P.I.
	Osceola	4948	8.0	8.0	25	200	4,369.29	0.10	FW	W13CAR046	0	P.I.

TABLE 2.4-5

ATWS within 50 feet of Wetlands for the Sabal Trail Project Pipeline Facilities a/, b/

State, Facility	County	ATWS ID	MP Begin <u>c/</u>	MP End <u>c/</u>	Nominal Dimensions <u>d/</u> (feet)		Area Affected (square feet)	Area Affected (acres)	Existing Land Use <u>e/</u>	Feature ID	Distance from Resource Area (feet)	Justification <u>f/</u>
					Width	Length						
	Osceola	2011	8.1	8.1	75	175	13,449.11	0.31	FW, ID, OL	W13CAR046	0	Road Crossing
	Osceola	2010	8.1	8.1	0	0	1,132.49	0.03	FW, OL, RE	W13CAR046	0	Road Crossing
	Osceola	2012	8.1	8.2	50	200	9,637.13	0.22	FW	W13CAR048	0	Road Crossing
	Osceola	4967	8.2	8.2	25	200	4,999.98	0.11	FW, RE	W13CAR048	0	Road Crossing
	Osceola	1992	8.3	8.4	25	200	5,101.07	0.12	FW	W13CAR048	0	P.I.
	Osceola	4968	8.4	8.6	0	0	31,433.01	0.72	FW, OL	W13CAR048, W13CAR051, W13CAR052	0, 0, 0	HDD Pullback & P.I.
	Osceola	4969	8.5	8.6	0	0	32,644.37	0.75	FW, OL	W13CAR048, W13CAR051, W13CAR051, W13CAR052	0, 0, 0, 0	HDD Pullback
	Osceola	2019	8.6	8.7	0	0	94,965.85	2.18	FW, OL	W6CAR190, W13CAR051, W13CAR052	0, 0, 0	Staging Area
	Osceola	4973	8.7	8.7	25	120	2,949.27	0.07	OL	W13CAR057	21	Road Crossing
	Osceola	4972	8.7	8.7	50	100	5,018.62	0.12	OL	W13CAR057, W13CAR059	0, 21	Road Crossing
	Osceola	2016	8.7	8.9	25	875	21,828.02	0.50	FW, OL, OW	W13CAR057, W13CAR059, W13CAR057, W13CAR059	0, 0, 0, 0	HDD Pullback
	Osceola	4971	8.8	8.8	25	100	2,500.44	0.06	OL	W13CAR057	0, 45	Waterbody Crossing
	Osceola	4970	8.8	8.8	25	100	2,500.41	0.06	OL	W13CAR057	0, 24	Waterbody Crossing
	Osceola	5116	10.4	10.5	0	0	69,581.59	1.60	FW, ID, OL	W6CAR127, W6CAR127	4, 5	Road & Wetland Crossing
	Osceola	4958	10.6	10.7	0	0	28,183.13	0.65	ID, OW	W6CAR224	9	Road, Waterbody & Wetland Crossing

TABLE 2.4-5

ATWS within 50 feet of Wetlands for the Sabal Trail Project Pipeline Facilities a/, b/

State, Facility	County	ATWS ID	MP Begin <u>c/</u>	MP End <u>c/</u>	Nominal Dimensions <u>d/</u> (feet)		Area Affected (square feet)	Area Affected (acres)	Existing Land Use <u>e/</u>	Feature ID	Distance from Resource Area (feet)	Justification <u>f/</u>
					Width	Length						
	Osceola	4959	11.0	11.0	90	285	27,190.88	0.62	ID, OL	W6CAR131	25	Waterbody & Wetland Crossing & P.I.
	Osceola	2006	11.0	11.1	0	0	67,554.08	1.55	OL	W6CAR131	40	Staging Area
	Osceola	4961	11.4	11.5	75	300	26,847.58	0.62	FW	W7CAR136	0	Road & Waterbody Crossing
	Osceola	4945	11.5	11.6	100	300	26,707.27	0.61	FW	W7CAR137	0	Road & Waterbody Crossing
	Osceola	2000	11.6	11.7	0	0	102,769.28	2.36	FW	W7CAR137	0	Staging Area
	Osceola	2033	12.3	12.4	0	0	11,002.92	0.25	FW, ID	W7CAR143	0	Road Crossing
	Osceola	2034	12.4	12.4	25	120	2,931.88	0.07	FW	W7CAR143	0	P.I.
	Osceola	5008	12.4	12.5	60	300	17,999.95	0.41	FW	W7CAR143, W7CAR143	0, 0	HDD Site
	Osceola	5009	12.4	12.5	115	300	34,500.02	0.79	FW	W7CAR143, W7CAR143	0, 16	HDD Site
	Osceola	5012	12.8	12.9	115	300	34,499.90	0.79	FW, OL	W7CAR148, W6CAR219	0, 0	HDD Site
	Osceola	5011	12.8	12.9	60	300	18,000.02	0.41	FW, OL	W7CAR148	0	HDD Site
	Osceola	5010	13.0	13.1	0	0	30,408.63	0.70	FW, OL	W9ECT246, W7CAR148, W7CAR148	0, 0, 0	HDD Pullback
	Orange	5013	13.1	13.1	15	205	3,037.52	0.07	FW, OL	W9ECT246, W7CAR148	0, 0	P.I.
	Orange	5014	13.1	13.1	15	215	3,217.31	0.07	FW, OL	W7CAR148, W6CAR217	0, 34	P.I.
<u>Hunters Creek Line</u>	Orange	4925	0.0	0.0	0	0	586.76	0.01	FW, ID, OL	W7CAR148, W6CAR217	0, 0	Staging Area
	Orange	2017	0.0	0.0	75	175	19,820.12	0.46	OL	W2ECT188	0	Road, Waterbody & Wetland Crossing
	Orange	2018	0.1	0.1	0	0	16,875.01	0.39	FW, OL	W2ECT188, W6CAR233, W6CAR234	0, 0, 0	Station ATWS



TABLE 2.4-5

ATWS within 50 feet of Wetlands for the Sabal Trail Project Pipeline Facilities a/, b/

State, Facility	County	ATWS ID	MP Begin <u>c/</u>	MP End <u>c/</u>	Nominal Dimensions <u>d/</u> (feet)		Area Affected (square feet)	Area Affected (acres)	Existing Land Use <u>e/</u>	Feature ID	Distance from Resource Area (feet)	Justification <u>f/</u>
					Width	Length						

a/ Sabal Trail has requested a variance from the Commission's Procedures for these areas in Resource Report 1. A list of all ATWS areas including those within 50 feet of wetlands and waterbodies is included in Resource Report 8 Table 8.3-6.

b/ Areas of temporary workspace that are greater than 75' within a wetland but do not include ATWS are not included in this table. They can be found in Table 2.4-4.

c/ Approximate MP along the proposed pipeline rounded to the nearest tenth.

d/ Several ATWS areas are irregularly shaped - dimensions of such areas are approximate.

e/ OL = Open Land (non-agricultural), AG = Agricultural, FW = Forested/Woodland, ID = Industrial/Commercial, RE = Residential, OW = Open Water.

f/ P.I. = Change in direction of the Right-of-way centerline.

## **FIGURES**

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**APPENDIX 2A**

**Best Drilling Practices Plan for the Sabal Trail Project**

# **Best Drilling Practices Plan for the Sabal Trail Project**



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**November 2014**

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## **1.0 INTRODUCTION**

Sabal Trail Transmission, LLC (“Sabal Trail”), a joint venture between affiliates of Spectra Energy Partners, LP and NextEra Energy, Inc., is seeking a Certificate of Public Convenience and Necessity from the Federal Energy Regulatory Commission (“FERC”) pursuant to Section 7 (c) of the Natural Gas Act authorizing the construction and operation of the Sabal Trail Project (“Project”).

The Project is a new natural gas transmission pipeline comprised of a combination of lease capacity and new greenfield pipeline construction that will provide approximately 1,075,000 dekatherms per day (“Dth/d”) of new firm natural gas transportation capacity. Sabal Trail will acquire the capacity created by Transcontinental Gas Pipe Line Company, LLC’s (“Transco”) Hillabee Expansion Project (FERC Docket Nos. PF14-6-000 and CP15-16-000) pursuant to a capacity lease, which extends from Transco’s Compressor Station 85 in Choctaw County, Alabama to an interconnection with the new greenfield pipeline in Tallapoosa County, Alabama. Sabal Trail will construct, own and operate the greenfield pipeline, which will extend from Tallapoosa County, Alabama to a new interconnection hub (“the Central Florida Hub”) in Osceola County, Florida. At the Central Florida Hub, the Project will connect with the Florida Southeast Connection Pipeline Project, currently being proposed by Florida Southeast Connection, LLC (“FSC”) (FERC Docket No. PF14-2-000 and CP14-554-000). In addition, at or near the Central Florida Hub, the Project will interconnect with Gulfstream Natural Gas System, LLC (“Gulfstream”) and Florida Gas Transmission Company, LLC (“FGT”). The greenfield portion of the Project will have an initial capacity of 830,000 Dth/day with a proposed in-service date of May 1, 2017. Through a series of phased compressor station expansions to meet the future capacity needs of Sabal Trail’s customers, the Project capacity will increase to approximately 999,000 Dth/day by 2020 and 1,075,000 Dth/day by 2021.

The construction of the Project will involve the use of the horizontal directional drilling (“HDD”) installation technique for the purpose of avoiding environmentally sensitive resources or obstructions that occur along the Project pipeline route. This Best Drilling Practices Plan (“Plan”) has been developed to minimize or quickly resolve possible inadvertent effects by identifying appropriate corrective actions for various potential scenarios that may be encountered during HDD operations. The purpose of this document is to provide a description of proposed HDD work activities, the HDD working procedures, monitoring of inadvertent returns of drilling fluid (including training and reporting), response to HDD operations, and proposed cleanup techniques in the event that inadvertent returns occur during HDD activities on the Project. The following sections of this Plan provide the processes and procedures to be implemented in the case of inadvertent returns or releases of drilling fluid during HDD activities.

## **2.0 BEST AVAILABLE DRILLING PRACTICES**

### **2.1 Description of the Work**

The HDD method requires establishing staging areas at both ends of the proposed crossing, typically known as the entry and exit points or workspaces. The process commences with the drilling of a pilot hole along a predetermined path beneath the obstruction, wetland or waterbody. Once the pilot hole has been completed, the drilled hole is enlarged with one or more passes of a reamer until the diameter of the hole is adequate to complete the pull-back (installation) of the pipeline. Once the reaming pass(es) are completed, prefabricated pipe segments are then pulled through the hole to complete the installation. Additional welding to join the prefabricated segments may be required during the pullback process. While the HDD method is a commonly used, proven technology, there is the potential for unintended effects that could occur as a result of the drilling. The proposed drilling program is expected to be initiated in 2016 during the Project construction period and will be completed in 2017.

## 2.2 Drilling Fluids

The HDD process uses drilling fluids to facilitate many of the HDD operations. Drilling fluid is a slurry composed of water and bentonite clay (typically 95 percent water) intended to maintain hole stability, lubricate the drilling head and reduce soil friction. Bentonite clay (sodium montmorillonite) is a naturally occurring clay, usually mined in Wyoming, which is extremely hydrophilic and can absorb up to ten times its weight in water.

Depending on subsurface conditions encountered, certain additives may also be introduced in the drilling fluid mixture. These additives include lost circulation materials (“LCMs”) and special polymers. Lost circulation materials may be used during inadvertent return events and/or in certain cases when drilling fluid circulation seems to be diminishing. Lost circulation materials may be used to attempt to seal conduits or to aid in reestablishment of drilling fluid returns to the entry and/or exit pits. Many types of LCMs are available for use during HDD operations that are inert and environmentally benign. These can include wood fibers, cotton seed husks, ground walnut shells and other natural materials. Special polymers that swell to several times their original size when introduced to water can also be used. These polymers are industrial grade equivalents of food grade polymers that are used to swell and absorb fluids in the food industry. The type of products used is typically left to the discretion of the HDD Superintendent and the Environmental Inspector. Both of these types of products are readily available should the need arise.

Bentonite is non-toxic to the aquatic environment and is a non-hazardous substance. The composition of the drilling fluids and its engineering properties are specified and tested to ensure their suitability for the given subsurface conditions encountered along the alignment and at each individual HDD location.

The slurry is designed to:

- Stabilize the hole against collapse;
- Lubricate, cool, and clean the cutters;
- Transport cuttings by suspension and flow to entry and exit points; and
- Reduce soil friction and required pull loads during pilot hole, reaming, and carrier pipe installation.

Although intended to facilitate the HDD process, there is the potential for inadvertent migration or loss of drilling fluids from the bored hole. However, drilling fluids that are released will likely contain a lower concentration of bentonite when they surface because the mixture may be filtered and somewhat diluted as it passes through existing sediments of various types.

Inadvertent releases may occur as a result of rock fractures, low density soils, and unconsolidated geology, which were not foreseen during the design phase. Inadvertent returns are readily detected at the surface as seepage (pooling of drilling mud at the surface) or a loss of circulation of the drilling fluid. When the operator observes a loss of drilling fluid returning, it is an indicator that seepage may be occurring outside of the hole. Loss of drilling fluid returns is only an indicator as some loss of drilling fluid is expected, such as where loose sediments are encountered and more drilling fluid is required to be added to fill the voids.

## 2.3 HDD Working Procedures

Prior to the start of drilling operations, site-specific HDD Procedures will be reviewed with the HDD contractor. At a minimum, the HDD Procedures will address the following:

Return Circulation – Once it is indicated to the driller that drilling fluid circulation is dissipating or that a release has occurred, the driller has the following options (or any combination of these options):

- Decrease pump pressure;
- Decrease penetration rate;
- Retract the drill string a distance to restore circulation (“swab” the hole);
- Introduce additional drilling fluid flow along the hole using “weeper” subs; and
- Introduce lost circulation additives to the drilled hole.

Inadvertent Returns at In-accessible Locations - If inadvertent returns are observed on the ground surface along portions of the alignment that are inaccessible; the following procedures will be followed:

- Contractor will ensure all reasonable measures within the limitations of current technology have been taken to re-establish circulation; and
- Continue drilling utilizing a minimal amount of drilling fluid as required to penetrate the formation or to maintain a successful carrier pipe pull back.

Inadvertent Returns at Accessible Locations – If inadvertent returns are observed on the ground surface along portions of the alignment that are accessible, containment and recovery operations will be completed in accordance with the procedures discussed in Section 4.0.

### **3.0 MONITORING OF INADVERTENT RETURNS**

#### **3.1 Personnel and Responsibilities**

The actions in this Plan are to be implemented by the following personnel:

Chief Inspector – Sabal Trail will designate a Chief Inspectors (“CI”) for the Project. The CI will have overall authority for construction activities that occur on their designated portion of the Project.

Environmental Inspector – At least one Environmental Inspector (“EI”) will be designated by Sabal Trail to monitor the HDD activities. The EI will have peer status with all other craft inspectors and will report directly to the CI who has overall authority. The EI, along with all other inspectors and inspection personnel, will have the authority to stop activities that violate the environmental conditions of the FERC certificate (if applicable), other federal and state permits, or landowner requirements, and to order corrective action.

HDD Superintendent – The HDD Superintendent is the senior on-site representative of the HDD contractor. The HDD Superintendent has overall responsibility for implementing this Plan on behalf of the HDD contractor. The HDD Superintendent will be familiar with the aspects of the drilling activity, the contents of the Plan and the conditions of approval under which the activity is permitted to take place. The HDD Superintendent will make available a copy of this Plan to the appropriate construction personnel. The HDD Superintendent will ensure that workers are properly trained and familiar with the necessary procedures for response to an inadvertent release.

HDD Operator – The HDD Operator is the HDD contractor’s driller operating the drilling rig and mud pumps. The HDD Operator is responsible for monitoring circulation back to the entry and exit locations. In the event of loss of circulation, the HDD Operator must communicate the event to the HDD Superintendent and HDD contractor field crews. The HDD Operator is responsible for stoppage or changes to the drilling program in the event of observed inadvertent returns.

HDD Contractor Personnel – During HDD installation, field crews will be responsible for monitoring the HDD alignment along with Sabal Trail’s field representatives’. Field crews, in coordination with the EI, are responsible for timely notifications and responses to observed releases in accordance with this Plan. The EI ultimately must approve the action plan for mitigating the release.



### 3.2 Training

Prior to drilling, the HDD Superintendent, CI, and the EI will verify that the HDD Operator and field crew receive the following site-specific training but not limited to:

- Project specific safety training;
- Review provisions of this Plan and site-specific permit requirements;
- Review location of sensitive environmental resources at the site;
- Review drilling procedures for release prevention;
- Review the site-specific monitoring requirements;
- Review the location and operation of release control equipment and materials; and
- Review protocols for reporting observed inadvertent returns.

### 3.3 Monitoring & Reporting

Appropriate Monitoring & Reporting actions will be:

- If the HDD Operator observes a loss of circulation, the Operator will notify the HDD Superintendent and field crews of the event and approximate position of the cutting head;
- Where practical, a member of the field crew will visually inspect the ground surface near the position of the cutting head. Surface waters, wells, and mapped springs within 2,000 feet of the HDD site will also be visually inspected.
- If an inadvertent release is observed:
  - Field crew will notify (via hand-held radio or cell phone) the HDD Operator;
  - The HDD Operator will temporarily cease pumping of the drilling fluid and notify the HDD Superintendent and CI;
  - The CI will notify and coordinate a response with the EI;
  - The EI will notify FERC and the appropriate permitting authorities as necessary of the event and proposed response and provide required documentation within 24 hours; and
- The CI will prepare a report that summarizes the incident.
- After the HDD installation is complete, perform final clean-up (*see* Section 5.0 below).

### 3.4 Mapped Springs

The monitoring program proposed for mapped springs involves the establishment of a baseline turbidity level in springs that are 2,000 feet downgradient from the HDD activities proposed for the Project. Prior to the start of HDD activity, a baseline turbidity level will be established at the springs to be monitored by collecting samples at six hour intervals over a 24 hour period. This monitoring program will allow Sabal Trail to determine if drilling mud and/or sediments from construction activities have entered the spring system. Turbidity monitoring will be conducted in accordance with the schedule below, or as required in any permits issued by the United States Army Corps of Engineers (“USACE”), GAEPD, FDEP, and/or other state regulatory agencies.

Field sampling for turbidity will follow the Standard FDEP sampling protocols (FDEP, 2014). Water samples will be analyzed for turbidity using a portable turbidity meter. Turbidity readings, water levels, rainfall rates, seasonal and environmental changes, and water appearance will be recorded during every

sampling event. Water samples will be collected from large springs using a Van Dorn sample bottle deployed from the bank or boat/canoe. All necessary safety precautions will be taken. The turbidity meter will be calibrated daily in accordance with FDEP (FDEP, 2014) calibration standards. Rainfall rates will be recorded from the nearest weather station with available data.

With the proposed incorporation of the reroute that will replace the crossing of the Withlacoochee River (as addressed in the November filing with the FERC), the monitoring program will address only one mapped spring that has been identified as occurring within 2,000 feet and downstream of Project HDDs. Monitoring of this spring is subject to granting of access permission and safety of the access point at the time of monitoring. Sabal Trail will work with the landowners where applicable to gain access to springs for monitoring.

Spring Monitoring Locations								
Spring ID	Location	Nearest Distance from Pipeline (feet)	Nearest Milepost	Magnitude	HDD Crossing Milepost	HDD Crossing Name	Distance from HDD Crossing	Access
Suw923972 (Suwannee)	Lat 30 24 15.92, Long 83 09 27.76	1,040	TBD	4	TBD	Suwannee River	1,040 feet downstream of crossing	Owner: Trustees of the Internal Improvement Trust Fund, Suwannee River State Park

Source: FDEP. 2011. Spring Locations in Florida – 2011. Florida Geographic Data Library.

If an inadvertent release is reported, this spring will be sampled twice per day (morning and afternoon) until the turbidity returns to background levels or until the turbidity levels are below the 29 NTUs above background in accordance with the Florida Department of Environmental Protection (“FDEP”) Surface Water Criteria for Class III, Predominantly Fresh Waters (Florida Administrative Code 62-302.530).

### 3.5 Wells

Turbidity sampling, using the portable turbidity meter noted above and following the same testing and calibration protocols, will be conducted at drinking water wells within 150 feet of the HDD activity prior to initiating the HDD activity, where access is permitted and in coordination with the landowner. This sampling will establish baseline turbidity levels for these wells. A table of drinking water wells within 150 feet of the Sabal Trail HDD activities is provided below. This table will be updated as additional drinking water wells are identified during preconstruction surveys. If an inadvertent release from the HDD activity is confirmed, water samples will be taken from these drinking water wells and tested for turbidity on a daily basis until the turbidity levels return to the baseline levels.

If there are drinking water wells within 2,000 feet of the HDD activity, turbidity sampling will also be conducted prior to the HDD activity to establish a baseline turbidity level, where access is permitted and in coordination with the landowner. In the event of an inadvertent release during the HDD activity and a change in water quality is identified from the sampling of the drinking water wells within 150 feet of the HDD activity, additional turbidity sampling will be extended to these drinking water wells (2,000 feet of the HDD activity and for which a baseline turbidity level had been established). Sampling of these wells will continue daily until the turbidity levels return to baseline levels.

Well Monitoring Locations				
Milepost	Distance from Centerline (feet)	Distance from Construction Work Area (feet)	HDD Crossing Name	Drinking Water (Y/N)
464.57	85	80	US Highway 27	Unknown

#### 4.0 RESPONSE TO INADVERTENT RETURNS

Typically, inadvertent releases are most often detected in the area near the entry or exit points of the drill alignment where the HDD path is at shallow depths, above bedrock, and in permeable/porous soils. In these occurrences the release will be assessed by the HDD Superintendent, EI, and CI to determine an estimated volume of the release. They will also assess the potential of the release to reach adjacent waterbodies, wetlands, or other types of infrastructure (e.g., wells). The HDD Superintendent will assess the drilling parameters (depth, type of formation, fluid flow rate, and drilling fluid characteristics) and incorporate appropriate changes.

The HDD Superintendent, EI, and CI will coordinate installation of appropriate containment structures and implement additional response measures. Site topography in conjunction with access for personnel and equipment to the release site are major factors in determining the methods used for containment and disposal. Typically, containment is achieved by excavating a small sump pit (approximately 5 cubic yards) at the site of the release and/or surrounding the release with hay bales, silt fence and/or sand bags. Once contained, the drilling fluid is either collected by vacuum trucks or pumped to a location where vacuum trucks can be accessed. The fluids are then transported either back to the HDD Drilling Rig or to a disposal site.

The EI in coordination with the HDD Superintendent and CI will determine when drilling operations can resume.

The site-specific response will follow the guidelines provided in the following sections.

##### 4.1 Upland Locations

- Evaluate the amount of release to determine if containment structures are warranted and if they will effectively contain the release.
- Promptly implement appropriate containment measures as needed to contain and recover the slurry.
- If the release is within 50-feet of a wetland or waterbody, silt fence and/or hay bales will be installed between the release site and the wetland or waterbody.
- If the release cannot be contained, then the operator must suspend drilling operations until appropriate containment is in place.
- Remove the fluids using either a vacuum truck or by pumping to a location where a vacuum truck is accessible.
- After the HDD installation is complete, perform final clean-up (*see* Section 5.0 herein).

##### 4.2 Wetland Locations

- Evaluate the amount of release to determine if containment structures are warranted and if they will effectively contain the release.
- Promptly implement appropriate containment measures to contain and recover the slurry;

- Efforts to contain and recover slurry in wetlands may result in further disturbance by equipment and personnel, and possibly offset the benefit gained in removing the slurry.
- If the amount of the slurry is too small to allow the practical collection from the affected area, the fluid will be diluted with fresh water or allowed to dry and dissipate naturally.
- If the release cannot be controlled or contained, immediately suspend drilling operations until appropriate containment is in place.
- Remove the fluids using either a vacuum truck or by pumping to a location where a vacuum truck is accessible.

#### 4.3 Major Waterbody Locations

Sabal Trail's proposed HDDs are being designed to minimize the potential for inadvertent releases. Sabal Trail's Contractor(s) may also employ the techniques described below to reduce the probability of inadvertent returns.

Surface Casing – If deemed necessary, surface casing may be installed in certain instances. Surface casing provides a conduit to allow drilling fluids to return from the drill path back to the surface. Additionally, surface casing helps isolate the drill path from regions of unstable overburden material.

Intersect Method – Sabal Trail's Contractor(s) may drill some of the pilot holes from both sides of the crossing and perform and intersect near a predetermined point, usually near the middle of the crossing. The intersect method is widely used in long, large diameter HDDs. The intersect method reduces the length that must be drilled from each end and thereby decreases the distance that drilling fluids need to be pumped in order to return to surface at the entry/exit points. Utilization of this method is particularly advantageous in longer crossings because the reduced distance that drilling fluid must be pumped subsequently decreases the fluid and pressure required for the drilling fluid to travel back to the entry/exit points.

In the event of an inadvertent release in a flowing waterbody, the following approach will generally be followed after the inadvertent release has been isolated and the flow has stopped. Due to the unpredictable nature of the locations and environment in which inadvertent releases may appear, this description cannot encompass all possible approaches to clean-up under all conditions.

Agency staff and other experts will be consulted to the extent practicable in the development of remedial clean up techniques, as required. The following are standard response techniques that may be applied:

- If the bentonite material flows overland prior to entering the waterbody, installation of silt fencing or sandbag dams at the point of entry will be used to reduce or stop the flow; if the vent is directly into the waterbody, other means to isolate the vent site from the flowing waterbody will be used.
- Using a vacuum truck or pump(s), with a sufficient hose, personnel will remove the bentonite, working from downstream to upstream, to allow maximum visibility. Hand tools may be used to scarify the sediments and ensure removal to the maximum extent practicable.
- If necessary, water may be diverted using temporary barriers to isolate the impact area. Only a portion of the stream will be diverted to minimize dewatering impacts. Water will be able to pass through the site in its natural condition.
- If it is impracticable to remove the drill fluid from the surface water, a clear written explanation will be submitted to the applicable regulatory agencies.
- Any disturbed soils will be stabilized immediately.

- Exposed soils will have temporary erosion control measures established as soon as practical with permanent erosion controls established as soon as possible as described in the Project E&SCP.
- Disturbance of vegetation will be kept to a minimum and all disturbed vegetation will be restored.

In the event of an inadvertent release of drilling mud under pressure into dry ephemeral streams, a response plan similar to the above described will be implemented.

#### **4.4 Mapped Springs**

Specific emergency procedures will be addressed through the appropriate regulatory agency permitting process. It is important to understand that any significant rise or fall in water levels in the spring directly attributed to nearby river discharge or rainfall can dramatically alter water quality conditions. In the event of a suspected or confirmed inadvertent release, the site-specific response will follow measures outlined for surface waters in Section 4.3, to the extent practical.

Agency staff and other experts will be consulted to the extent practicable in the development of remedial clean up techniques, as required. The following are standard response techniques that may be applied:

- If there is a potential for bentonite material to flow overland and reach a spring, installation of silt fencing or sandbag dams will be used to reduce or stop the flow.
- If practical, bentonite entering the spring overland will be removed using a vacuum truck or pump. Hand tools may be used to scarify the sediments and ensure removal to the maximum extent practicable.
- Any disturbed soils will be stabilized immediately.
- Exposed soils will have temporary erosion control measures established as soon as practical with permanent erosion controls established as soon as possible as described in the Project E&SCP.
- Disturbance of vegetation will be kept to a minimum and all disturbed vegetation will be restored.

#### **4.5 Wells**

In the event an inadvertent release results in a change in the quality of the water within the drinking water wells sampled as described above in Section 3.5, Sabal Trail will provide an alternate source of water to the landowner until the well water quality returns to pre-construction conditions. If the well water quality does not return to pre-construction conditions after a suitable length of time, Sabal Trail will compensate the landowner for the installation of a new well or otherwise arrange for provision of a suitable water supply.

### **5.0 CLEAN-UP**

After completion of the HDD installation, site-specific clean-up measures will be developed by the CI and the HDD Superintendent for approval by the EI. Potential for secondary impact from the clean-up process will be evaluated, as well as the benefits of clean-up activities.

The following measures may be used:

- Drilling mud will be cleaned up by hand using hand shovels, buckets and soft bristled brooms minimizing damage to existing vegetation.
- Fresh water washes may be employed if deemed beneficial and feasible.
- Containment structures will be pumped out and the ground surface scraped to bare topsoil minimizing loss of topsoil or damage to adjacent vegetation.

- The recovered drilling fluid will be recycled or disposed of at an approved upland location or disposal facility. Recovered drilling fluid will not be disposed of in streams or storm drains.
- All containment structures will be removed.
- Recovered materials will be collected in containers for temporary storage prior to removal from the site.

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**APPENDIX 2B**

**Wetland Delineation Reports**

**[Provided on DVD]**