# THE PROTECTION AGENCY

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
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DEC 11 2015

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District Engineer
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605 Maple Street
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SUBJECT: Proposed Southeast Market Pipelines Project,

Jacksonville District Permit Appl. No. SAJ-2013-03030, SAJ-2013-03099

Savannah District Permit Appl. No. SAS-2013-00942

Mobile District Permit Appl. No. SAM-2014-00238, SAM-2014-00655

Dear Colonels Kirk, Griffin and Chytka:

This letter is in response to the above referenced public notices (PN) announcing Clean Water Act, Section 404 (CWA) permit applications seeking authorization to discharge dredged or fill material into waters of the United States to construct a new interstate natural gas pipeline and attendant infrastructure in multiple counties of Alabama, Georgia and Florida. The Southeast Markets Pipeline (SMP) Project will be comprised of three separate pipeline projects (i.e., Transco's Hillabee Expansion Project, Sabal Trail and the Florida Southeast Connection) totaling approximately 685 miles of new pipeline, as well as associated facilities.

The EPA has reviewed the public notices for the projects, the applicable sections of the Draft Environmental Impact Statement (DEIS) and has met with representatives of Sabal Trail Management LLC, the project Applicants ("Applicants"), who have provided additional information to the EPA. The EPA has reviewed the Applicants' November 9, 2015, letter to the Federal Energy Regulatory Commission (FERC) responding to comments the FERC received on the project. The EPA has also reviewed the Applicants' December 4, 2015, letter (copy attached) which provides additional information related to this project.

The EPA provided technical comments on the DEIS and indicated in the October 26, 2015, letter that the proposed pipelines will directly impact a total of 1,255.1 acres of jurisdictional wetlands in the DEIS. It was projected that the proposed pipelines will directly impact a total of 940.2 acres of jurisdictional wetlands covering three (3) ACE Districts (i.e. Mobile, Jacksonville and Savannah) (see section 5.1.4). It is the EPA's understanding that some of the wetlands impact acreage for Sabal Trail identified in the DEIS were not correct as a result of calculation issues, and according to the Applicants, the total area of wetlands impacted during construction of the SMP Project is approximately 882 acres. The EPA also understands that a large percentage of these wetlands will be allowed to revegetate, and the total acres permanently affected by the operation of the pipeline is approximately 235 acres. The EPA understands this update has been provided to both the FERC and the U.S. Army Corps of Engineers (ACE), and the EPA expects that the wetlands impacts will be addressed in more detail during the Section 404 permit process. The EPA looks forward to reviewing the final mitigation plan during that review.

The EPA's October 26, 2015, comments on the DEIS indicated that the DEIS did not fully identify avoidance and minimization measures for the preferred alternative's jurisdictional impacts as required by the CWA Section 404(b)(1) Guidelines. The EPA has looked more closely at this aspect of the project, reviewed the route and the steps taken by the Applicants during the development of the preferred alternative and, as discussed below, believe that the Applicants fully considered avoidance and minimization of impacts during the development of the preferred route.

This project began in 2009 when the Florida Public Service Commission identified that there was a need for additional natural gas in Florida and a pipeline to deliver that gas. This resulted in Florida Power and Light issuing a Request for Proposals to develop this pipeline that established the receipt and delivery points but did not identify a route. Over the next two years the Applicants worked on developing the route, and considered many alternatives. As noted in the DEIS in Section 4.3, the FERC evaluated both route alternatives (changes that are greater than 50 miles in length and can deviate from the proposed route by a significant distance) and variations (changes that are less than 50 miles in length and deviate from the proposed route to a lesser degree than a major route alternative). These alternatives were developed based on input from a number of sources including the public, the Applicants, agencies and the FERC's review of the area. During the development of the projects, the Applicants considered numerous route alternatives and hundreds of route variations, and included those alternatives in their applications. During the scoping process the FERC also received independent requests to review additional route alternatives and variations and the FERC identified additional alternatives during their review of the SMP Project.

In addition to the over 200 route variations that were considered by the applicant during the pre-filing process and noted by the FERC in the DEIS. Between November 2013 and September 2015, Sabal Trail evaluated and made numerous re-routings, many of which were specifically evaluated to address environmental, wetland and in some cases Environmental Justice concerns. As noted below and

discussed in the DEIS, during the development of the pipeline route, a decision was made to co-locate the project with other utility line projects when possible and a significant percentage of the project was co-located on existing rights of way for other linear utility projects. The EPA supports this approach as these areas are already impacted and in some cases maintained as a right of way. This approach also avoided more pristine wetland systems. In addition, as discussed below, the Applicants avoided the most sensitive karst features to avoid sinkhole development and other potential problems, protected species and habitat, utilized different construction techniques to minimize disruption to wetland areas, avoided conservation lands to the extent possible, and located facilities in non-wetland areas.

According to the Applicants, this review resulted in a number of different alternative route analyses that were conducted at different phases of the project development. As a result of this analysis, for the Sabal Trail portion of the project, 294 reroutes were evaluated. Of those, 167 were approved, 53 were rejected, and 71 were canceled. In addition, 428 workspace changes were also evaluated to avoid wetlands and other important areas such as Environmental Justice communities, conservation lands, state park lands and other important features.

To further avoid and minimize impacts, the Applicants have agreed to minimize the construction right of way impacts where the pipeline cannot avoid being located in wetlands, by narrowing the right of way to 75 feet, and will restore the impacted wetlands back to herbaceous wetlands only maintaining a 10 - 30 foot wide area over the pipeline.

In summary, as noted in the DEIS at Sections 2.2.1.1, 2.2.2.1, and 2.2.3.1, the Applicants have proposed minimization of wetland impacts by co-locating the pipeline with existing utility rights of way where possible along approximately 65.5 percent of the route. The Applicants also limited the width of the construction right of way to 75 feet in wetlands that crossed many systems at the narrowest part where the pipeline crosses; avoided high quality cypress dominated wetlands; and included setbacks from wetland systems where possible. Further, the Applicants plan to utilize construction techniques to limit permanent impacts such as horizontal drilling, single pass construction and construction mats. The Applicants plan to restore and monitor the impacted areas and provide mitigation for all temporal and permanent impacts.

According to the DEIS, the proposed project will also directly impact 177.8 acres of various conservation areas along the route, including the Green Swamp in Florida. The EPA had identified this as a concern in its October 26, 2015, technical comment letter. The EPA has looked more closely at this, and discussed this with the Applicants. It is the EPA's understanding that under Section 704.06(11) Florida Statutes, the owners of conservation easements can grant another party the authority to utilize "such lands or easements for the construction and operation of linear facilities." It is the EPA's understanding that for the conservation areas that will be crossed, the owners of some of the conservation easements have given permission to the Applicants to construct the pipeline across those easement lands. This permission includes restoration of the impacted areas as well as compensatory mitigation. For example, the Applicants provided the EPA with a copy of Florida Audubon's October 6, 2015, letter to the FERC, concerning two of the conservation areas that noted by re-routing the pipeline around the edge of the Halpata Tastanaki Preserve in Marion County Florida, they have avoided sensitive Florida Scrub Jay Habitat. In addition, through re-routing and mitigation, Sabal Trail has reduced the overall impacts to the Green Swamp Area of Critical Concern. The EPA appreciates these efforts and based on the DEIS, it appears that it is the FERC's and the Applicants' intent to let these conservation areas naturalize to pre-construction conditions and as a result this land use conversion should not be a significant long-term environmental issue. The EPA understands that there are continued discussions with the owners of other conservation easements and looks forward to any updates as those discussions reach conclusion of the NEPA process. Accordingly, the EPA believes that its environmental concerns have been sufficiently addressed, and as such has no remaining concerns on this issue.

The EPA noted in the October 26, 2015, letter based on the EPA's review of the DEIS, the proposed pipeline was expected by the EPA to have significant impacts to sensitive karst areas in the State of Georgia and Florida. The EPA based this position on the available information it had during the review of the DEIS. Since that time, the EPA has reviewed the additional information presented by the Applicants and appreciates the thorough analysis that was done on the karst areas. The Applicants used a team of geologists, geotechnical engineers and pipeline engineers with experience in the design of pipeline projects in karst terrain. The team also consulted with state geologists and other experts in all three states. The team concluded that the risk of damage to the pipeline from karst features and sinkholes was minimal and, based on their review, determined that additional karst risk assessment was not necessary. As part of the development of the route, it is the EPA's understanding that the Applicants avoided the most sensitive karst features to protect the resources, while also providing for the integrity of the pipeline.

The Applicants used LiDAR data for the entire pipeline route, as well as conventional topographic survey data. For all river crossings in karst areas, in addition to the LiDAR analysis and geotechnical and geophysical analysis, the Applicants are using horizontal directional drilling (HDD) to avoid karst and sinkhole features. Geotechnical and geophysical analyses were also done at all the proposed compressor stations and other surface developments. In summary, the EPA believes the Applicants have chosen a path that avoids many of the most sensitive areas and demonstrates that the karst areas in the path of the pipeline are unlikely to be significantly affected.

In the October 26, 2015, letter the EPA raised concerns that the pipeline would pose a potential threat to groundwater (and surface waters) resources. The EPA had received an emergency petition to designate the entire Floridan aquifer system as a sole source aquifer pursuant to §1424(e) the Federal Safe Drinking Water Act. This designation is used for areas that may have no alternative drinking water source physically and economically available to supply all who depend on the aquifer for drinking water. The EPA had requested that the FERC develop an alternative route to avoid impacts to the Floridan Aquifer and its sensitive and vulnerable karst terrain. As noted above, based on the EPA's review of the additional information associated with the analysis of the karst areas, the EPA believes it is unlikely that the pipeline would impact the Floridan Aquifer through karst or sinkhole features. As the Applicants correctly point out, the Floridan Aquifer underlies all of Florida and part of Georgia and avoiding routing the pipeline over the aquifer would be impossible. In addition, in the event there was a pipeline rupture, the gas would most likely vent to the atmosphere and would not contaminate the underlying groundwater or the Floridan aquifer.

In the October 26, 2015, letter the EPA had also identified concerns associated with impacts to the City of Albany, Georgia public water system well field. The pipeline will be located 200 – 300 feet from the water supply wells and is co-located with the Dixie Pipeline along the southern boundary of the well field. The pipe itself will be in a shallow trench, 6 – 8 feet below the surface, is constructed of high carbon steel with thicker walls used in densely populated areas and where HDD is used. All welds are x- rayed, and the pipe is internally coated with an epoxy coating which is inspected immediately after installation. The pipe is tested to 1.25 times operational levels, and has cathodic protection incorporated to protect the pipe from corrosion. Given these safeguards and advanced design considerations

proposed, it is highly unlikely that there will be any direct impacts to groundwater resulting from a pipeline rupture.

The EPA appreciates the information provided in the DEIS on surface water withdrawals to be used for hydrostatic testing of pipeline integrity, as well as median daily flows for relative comparison to rivers and springs. The EPA understands that approximately 146 million gallons of water will be needed for hydrostatic testing and horizontal direction drilling where needed. Water will be reused in 10 of the 35 test sections and all water will be returned to the same basin where it was withdrawn. According to the DEIS, water withdrawals will avoid low flow scenarios and all withdrawals will be subject to applicable state permits. The DEIS did not provide the level of detail necessary to fully assess the relationship between the withdrawal rates and the flow rates at those withdrawal points. In the DEIS, once these details are formulated, the EPA recommends the withdrawal rates (volume/time) for each withdrawal point should be compared to stream flow for those waterbodies.

In the October 26, 2015, comments, the EPA also noted that the FERC's compensatory mitigation plan for unavoidable impacts to jurisdictional waters of the U.S. had not been finalized, and the draft mitigation plan was not included in the DEIS. In our experience, it is not unusual for the mitigation plan to not be complete at this stage as all impacts have not been fully identified. However, during our discussions with the Applicants, we have learned more about the mitigation plan and look forward to reviewing the final plan when it is submitted to the ACE as part of our review of the Section 404 permit. Our understanding is that, consistent with the Mitigation Rule regulations, 33 CFR Part 332, the Applicants will be purchasing credits at a number of mitigation banks and we are currently reviewing the UMAM scores for onsite impacts and the areas that are to be restored after construction. At this time, the EPA understands that the Applicants have purchased \$12.3 million dollars of mitigation credits along the route in the basins where wetlands are expected to be impacted.

Thank you for the opportunity to comment on this request for Clean Water Act, Section 404 authorization for the Southeast Markets Pipeline Project. If you have any questions regarding our comments, please contact Mr. Tony Able at (404) 562-9273.

Sincerely,

James D. Giattina

Director

Water Protection Division

Cc: Mr. Lance LeFleur, Director, ADEM

Mr. Dan Everson, U.S. FWS Alabama

Ms. Stephen C. Wiedl, GEPD

Sandy Abbott, U.S. FWS Georgia

Mr. Tim Rach, FDEP

Ms. Victoria Foster, U.S. FWS Florida

Mr. Tim Sagul, Suwannee River WMD

Ms. Bonnie Irving, Southwest Florida WMD

Ms. Barbara Conmy, South Florida WMD

Mr. John Peconom, FERC

# **SABAL TRAIL MANAGEMENT, LLC** 2701 N. Rocky Point Drive, Suite 1050 Tampa, FL 33607



December 4, 2015

Christopher A. Militscher
Chief, NEPA Program Office
Resource Conservation and Restoration Division
U.S. Environmental Protection Agency
Region 4
61 Forsyth Street
Atlanta, Georgia 30303-8960

SUBJECT: Response to October 26, 2015, Comment Letter regarding FERC's Draft Environmental Impact Statement for the Proposed Southeast Market

**Pipelines Project** 

Dear Mr. Militscher:

On behalf of Sabal Trail Transmission, LLC ("Sabal Trail"), I appreciate the opportunity to respond to Region 4, U.S. Environmental Protection Agency's ("USEPA"), October 26, 2015, comments to the Federal Energy Regulatory Commission ("FERC") concerning the Southeast Market Pipelines Project. On September 4, 2015, FERC issued a draft environmental impact statement ("DEIS") under the National Environmental Policy Act ("NEPA") for the Hillabee Expansion, Sabal Trail, and Florida Southeast Connection Projects as proposed by Transcontinental Gas Pipe Line Company, LLC ("Transco"), Sabal Trail, and Florida Southeast Connection, LLC ("FSC"), respectively. These natural gas transmission pipeline projects are collectively referred to as the Southeast Market Pipelines Project ("SMP Project" or "Project").

Sabal Trail filed its Response to Comments on the DEIS with FERC on November 9, 2015, within 14 days following the end of the DEIS comment period. That response initially addressed some of the USEPA stated concerns along with other responses to certain comments filed in this proceeding. This letter, however, is intended to provide a summary of the information provided during a meeting held on November 17, 2015, between USEPA and representatives of Sabal Trail and FSC that addressed many of the remaining questions or comments that USEPA had raised in its DEIS comment letter. As stated at the meeting, Sabal Trail is committed to continue working with USEPA to provide the necessary information to clarify the detailed and thorough environmental analysis found in the DEIS. Sabal Trail further intends to work with the United States Army Corps of Engineers ("Corps") through the review process under the federal Clean Water Act.

## A. Project Background and Regulatory Timeline

Sabal Trail, FSC, and Transco are three proponents of the SMP Project, which is designed to meet the growing electricity needs of Florida and the southeastern United States' residents and businesses through a combination of two new natural gas pipelines, an interconnection hub, and

a mainline expansion. The scope of each of the three components of the SMP project is detailed in the DEIS.<sup>1</sup>

In 2009, the Florida Public Service Commission ("PSC") established the need for additional natural gas pipeline transportation capacity into Florida to meet the growing electric generation need within the state and required Florida Power & Light Company ("FPL") to issue a Request for Proposals ("RFP") for such services.<sup>2</sup> In December of 2012, FPL issued RFPs for new gas pipelines originating at Transco's Compressor Station 85 with delivery to the FPL Martin Power Plant in Indiantown, Florida.<sup>3</sup> Based on the RFP analysis, FPL selected the SMP projects to provide the required gas transportation with a commercial operation date of May 2017.<sup>4</sup> In 2013, FPL received a determination from the PSC that it was prudent for the company to enter into contracts with the pipeline projects that were selected through the RFP process.<sup>5</sup> Additionally, in July 2013 Sabal Trail executed an agreement with Duke Energy Florida, Inc., for gas transportation to its proposed electrical generating plant in Citrus County, Florida.

While the receipt and delivery points were set by the RFP and the contracts to provide service, the routing was subject to a rigorous alternatives analysis, which emphasized wetland avoidance, among numerous other factors. FERC substantially expanded the purpose of the SMP project beyond what Sabal Trail initially indicated, opening the environmental analysis to a broad consideration of routing and system alternatives. Specifically, the Project's purpose and need as originally set forth by Sabal Trail was to, among other things, (i) meet existing and growing natural gas fuel supply needs of electric generators and other natural gas users in Florida and the southeastern U.S., including Alabama and Georgia; (ii) add a third natural gas transmission line into Florida with access to multiple upstream supply sources at Transco's Station 85 and (iii) provide deliveries to a new Central Florida Hub that will interconnect with the two existing natural gas transmission pipelines in Florida.<sup>6</sup> FERC then broadened this purpose and need statement to "collectively help to meet the growing demand for natural gas by the electric generation, distribution and end use markets in Florida and the Southeast United States." FERC's purpose and need statement was not geographically narrow, did not predetermine the route, and allowed a full suite of alternatives to be examined and was appropriate under NEPA.

#### B. Route Overview, Alternatives, and Wetland Avoidance and Minimization

Sabal Trail evaluated and compared numerous alternative routes for the pipeline and associated aboveground facilities. Specifically, Sabal Trail considered many factors, such as wetlands and waterbodies, use of existing pipelines and utility corridors for co-location benefits, karst, protected species and habitat, alternative construction techniques (for example, horizontal directional drilling), existing and future development, conservation areas, and cultural resources.

<sup>&</sup>lt;sup>1</sup> Fed. Energy Regulatory Comm'n., Southeast Markets Pipelines Project, Draft Environmental Impact Statement, ¶¶ 1.1.1.1.-.3. [SMP DEIS].

<sup>&</sup>lt;sup>2</sup> *Id.*, ¶ 1.1.1.; *see also* Order No. PSC-09-0715-FOF-El, issued October 28, 2009, in Docket No. 090 172-EI, In re: Petition to determine need for Florida Energy Secure Pipeline by Florida Power & Light Company, page 5-6.
<sup>3</sup> SMP DEIS, ¶ 1.1.1.

<sup>4</sup> Id.

<sup>&</sup>lt;sup>5</sup> Id.

<sup>&</sup>lt;sup>6</sup> Resource Report 1, Section 1.2.

<sup>&</sup>lt;sup>7</sup> SMP DEIS, ¶ 1.1.1.

For instance, Sabal Trail engaged in months of preliminary engineering and route assessment prior to its selection by FPL. Over 200 miles of the initial route was adjusted as a result of agency and stakeholder engagement even before the FERC Pre-filing process commenced as described in the November 2013 draft Resource Reports 1 (Project Description) and 10 (Alternatives). Open houses were held in 2013 and 2014, to further solicit public input on the route and project overall.<sup>8</sup> And in this timeframe FERC began its outreach to federal and state agencies, including EPA.

In the DEIS, FERC recognized that over several hundred individual route variations were considered during the pre-filing process. Between November 2013 and September 2015, from initial drafts through supplemental filings, Sabal Trail evaluated and made numerous route adjustments, many of which were specifically to address environmental and wetland concerns. Ultimately, Sabal Trail evaluated 294 re-routes, of which 167 were adopted. Sabal Trail also made 428 workspace changes. Figure 4.3.1-1 in the DEIS provides a visual depiction of the numerous major route alternatives that were reviewed by FERC and clearly demonstrates a robust alternatives analysis.

For example, Sabal Trail moved the route crossing the Withlacoochee River in north Florida to avoid extensive karst features at the crossing and affect less state forest land. The rerouted location along the Suwannee River will include a horizontal directional drill ("HDD") under the Suwannee River State Park, avoiding recreational and environmentally sensitive areas.

Many of the rerouting efforts detailed in the alternatives analysis of the DEIS resulted in avoiding acres and miles of wetland impacts. Route changes resulted in over a 100 miles of less wetland impacts and over 87 acres of avoidance. These reroutes were made on a continuing basis as Sabal Trail sought to refine the most practicable and reasonable alternative path. For example, Sabal Trail worked with the Florida Department of Environmental Protection ("FDEP") and Audubon Florida to avoid to the maximum extent feasible portions of Polk and Lake Counties that had been previously designated in 1979 as the Green Swamp Areas of Critical State Concern. Sabal Trail evaluated 10 specific locations with Audubon Florida and FDEP, and developed a route attempting to mostly follow roads, property boundaries, and edges of mining areas to avoid wetlands or cross wetlands at the narrowest point. Specific attention was given to highly functional wetland systems and cypress dominated wetland areas. Sabal Trail also acquired a conservation easement for a critically located proposed mitigation bank in the area (Hilochee Wetland Mitigation Bank). These collaborative efforts enabled Audubon Florida to conclude that "Sabal Trail has now selected a pipeline route and mitigation measures that avoid important habitats and minimize impacts to sensitive wetlands areas in Florida."

Where wetlands and waters could not be avoided, Sabal Trail also identified measures to minimize impacts to wetlands and waters. Such efforts included co-locating the preferred route within and adjacent to existing rights-of-way, reducing construction footprints within wetland

<sup>&</sup>lt;sup>8</sup> *Id.*, ¶ 1.3.

<sup>&</sup>lt;sup>9</sup> *Id.*, ¶ 4.0.

<sup>10 § 380.0551,</sup> Fla. Stat.

<sup>11</sup> See, e.g., SMP EIS, ¶ 4.3.2.9. (discussing Green Swamp area variations).

<sup>&</sup>lt;sup>12</sup> October 6, 2015, letter from Charles Lee of Audubon Florida to Kimberly Bose, Secretary of FERC.

systems, and avoiding high quality cypress dominated wetlands. Sabal Trail also conducted detailed wetland delineations, detailed preconstruction documentation, and proposes to have real time monitoring by environmental inspectors during construction. Finally, Sabal Trail will be required to follow FERC plan and procedures that dictate additional practices to minimize impacts to wetlands, such as the use of construction mats, special construction techniques (like HDD), protecting topsoil and root systems, as well as implementing a post construction restoration and monitoring program.<sup>13</sup>

To demonstrate Sabal Trail's efforts to minimize permanent impact, the preferred route of approximately 515 miles of greenfield construction will result in only 2.6 acres of permanent fill in wetlands. Sabal Trail will mitigate for all permanent fill and permanent conversion of forested to herbaceous wetlands. Mitigation will also be provided for restoration of temporary effects to forested wetlands that are disturbed during construction, but not permanently converted. Sabal Trail will meet its compensatory mitigation obligations through the preferred use of mitigation banks along the route. Sabal Trail will spend over \$12 million in acquiring mitigation credits in coordination with the appropriate federal and state agencies.

#### C. Conservation Areas (Green Swamp)

Concerns were expressed about the Project's impact on "dedicated conservation areas," such as the Green Swamp and areas subject to conservation easements. Specifically the concern related to whether there would be permanent conversion of those areas within a pipeline easement. These concerns, however, were addressed by Sabal Trail to Audubon Florida's satisfaction, for instance. Moreover, such concerns are further alleviated by considering the nature and purpose of conservation easements in Florida as well as Green Swamp Land Protection Agreements, and the Green Swamp itself.

The Warner/Harrell Conservation Easement/Echo Plantation, the Chinquapin Farm Conservation Easement (both owned by the Suwannee River Water Management District ("SRWMD")) and the Southwest Florida Water Management District ("SWFWMD") Green Swamp Conservation Easements were all created pursuant to and subject to Section 704.06, Florida Statutes. Contrary to the notion that these conservation easements are "dedicated" or somehow protected forever from any disturbance, Section 704.06(11), Florida Statutes, provides statutory authority for an owner of a conservation easement to consent to "utilization of such lands or easement for the construction and operation of linear facilities." Both SRWMD and SWFWMD have indicated that they are willing to provide such consent upon the payment of fair market value and the provision of appropriate environmental mitigation.

As for the Green Swamp and Green Swamp Land Protection Agreements (which are now all owned by the Florida Board of Trustees of the Internal Improvement Trust Fund), neither were ever intended to prevent the use of the lands subject thereto for the installation of linear facilities like pipelines. Such linear facilities are excluded from the definition of "development" in the

<sup>&</sup>lt;sup>13</sup> See, e.g., SMP DEIS, p. ES-6; ¶ 2.3.

<sup>&</sup>lt;sup>14</sup> *Id.*, ¶ 3.4.2.2.

<sup>&</sup>lt;sup>15</sup> *Id*.

<sup>&</sup>lt;sup>16</sup> Id., p. 3-152, -54.

rules governing land uses within the Green Swamp, and thus are not subject to the special land use regulations applicable to the Green Swamp. <sup>17</sup> Similarly, section 2.2 of the form used for the Green Swamp Land Protection Agreements specifically states that such agreements do not prohibit the use of the subject lands for "work . . . by any . . . persons engaged in the distribution or transmission of gas . . . ." Consequently, neither the Green Swamp itself, nor any lands subject to a Green Swamp Land Protection Agreement are "dedicated conservation areas."

#### D. Pipeline Safety (Co-locating and the Albany Wellfield)

Tens of thousands of miles of parallel pipelines exist in the United States (and around the world). In fact, FERC's regulations mandate the consideration of the use of existing rights-of-way in locating proposed facilities. A review of the National Transportation Safety Board's ("NTSB") data reveals no occurrences of significant property damage to adjacent pipelines. A typical separation of 50-65 feet will be used between pipelines on this Project, a distance which exceeds the separation distances in many parts of the country. This separation provides adequate assurances of protection. In many instances, Sabal Trail will exceed those separation distances. Sabal Trail will also coordinate construction activities with the adjacent pipeline operators and will provide routine patrols, a one-call response system for any construction activity that may occur along the ROW, and use only qualified contractors specializing in pipeline construction.

Moreover, Sabal Trail has been in discussions with Southern Natural Gas Company since September 2013 to evaluate and minimize the number of pipeline crossings. From the originally proposed 73 crossings, the companies have worked together to successfully reduce the crossings to only 47. Additionally, Sabal Trail has agreed to bore, as opposed to open trench cut, 42 of the 47 crossings to accommodate Southern Natural Gas Company's requests and to enhance the safety of each crossing. Discussions are ongoing for the remaining 5 crossings. The use of safe construction techniques near existing facilities is of the utmost importance to all pipeline companies.

Specifically concerning the City of Albany, Georgia's groundwater well field, the proposed route is 200-300 feet from the production wells and is co-located adjacent to the existing Dixie Pipeline right-of-way along the southern border of the groundwater well field. As explained above, such co-location will not increase the risk of rupture of the Dixie Pipeline. The design of the pipeline provides substantial protection to surrounding infrastructure, which includes only the highest quality high strength carbon steel, increased wall thickness, fusion bond epoxy coating, and comprehensive testing of the pipeline during construction. Once in operation, the pipeline is routinely patrolled and is monitored 24 hours/365 days. It is also important to note that as a natural gas pipeline, in the highly unlikely event of a leak or failure, the gas will escape to the atmosphere and cannot pollute drinking water sources. Finally, there are already a number of land uses or activities occurring in the vicinity of the well field, including, for example, underground storage tanks, electrical substation, agricultural fields, sewer lines, and an airport.<sup>20</sup>

<sup>&</sup>lt;sup>17</sup> R. 28-27.005(46)(c)2., Fla. Admin. Code (Polk County); R. 28-28.005(44)(c)2., Fla. Admin. Code (Lake County). <sup>18</sup> See, e.g., Land Protection Agreement, § 2.2, O.R. Book 1620, Page 1679 (Lake County, FL.) (recorded June 24, 1998).

<sup>&</sup>lt;sup>19</sup> See generally SMP EIS, p. 3-275.

<sup>&</sup>lt;sup>20</sup> See generally id.,  $\P$  3.3.1.7.

#### E. Environmental Justice

In addition to the environmental justice analysis performed by Sabal Trail as contained in Resource Report 5, Socioeconomics (which was based on a May 5, 2014, consultation with USEPA, Region 4), FERC carefully examined the impacts of the SMP Project on minority and low-income populations and concluded "the SMP Project impacts would not be high and adverse; and its impacts would not have a disproportionate impact on environmental justice populations." Specifically, FERC established and followed the USEPA guidance, identified a clear study area, defined the low-income and minority populations within the study area, considered the nature of the impacts by properly utilizing the DEIS's environmental resource-specific content, and examined any disproportionate impacts for not only the SMP Project itself but for all of the land-based major route alternatives. Using this approach, FERC concluded that the SMP Project's impact would not be high and adverse or disproportionate on environmental justice populations nor would it result in significant adverse impacts on any population.

To assist FERC in its environmental justice analysis, it established and followed a three-step methodology The three steps are:

- 1. Determine the existence of minority and low-income populations.
- Determine if the impacts are high and adverse.
- Determine if the impacts fall disproportionately on environmental justice populations.<sup>22</sup>

The methodology FERC used is based on USEPA guidance.<sup>23</sup> Applying the methodology, FERC first identified areas of minority and low-income populations where the SMP Project, including aboveground facilities, would be located across or within one mile of the populations.<sup>24</sup> The affected area was defined as all census tracts that contain any proposed Project facilities and all census tracts within one mile of the planned pipeline route. The measurement or threshold for determining whether the population of an affected area has a percentage of minorities that is "meaningfully greater" than the general population, was determined by identifying all census tracts with a minority population that was more than 50 percent of the census tract population and all census tracts with a minority population that was 10 percent higher than the general population of the surrounding census tracts in the county. The measurement or threshold for determining a "meaningfully greater" low-income population relative to a general population was defined as the percentage of all persons living below the poverty level is more than the percentage for the state where the census tract is located, or the median household income for the census tract is lower than the median household income for the state where the census tract is located. FERC used state poverty levels in the analysis as a comparison group because poverty

<sup>23</sup> Id., ¶ 3.10.4.1; USEPA, Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses (Apr. 1998), available at http://www3.epa.gov/environmentaljustice/resources/policy/ej\_guidance\_nepa\_epa0498.pdf.

<sup>24</sup> Id., ¶ 3.10.4.2.

<sup>&</sup>lt;sup>21</sup> *Id.*, ¶¶ 3.10.4.1., 3.10.4.5.

<sup>&</sup>lt;sup>22</sup> *Id.*, ¶ 3.10.4.1.

levels at the county level in Alabama, Georgia, and Florida were generally much higher than state averages, and using the state averages provided more equitable basis for identification of environmental justice populations within census tracts. Based on U.S. Census Bureau - American Community Survey 2005-2012, 5-year census tract estimates, The SMP Project facilities including the proposed above ground facilities would be located across or within one mile of 119 different environmental justice populations (minority and/or low income).<sup>25</sup>

Next, FERC examined the impacts of constructing and operating the SMP Project to determine whether there will be any "high and adverse impacts to these populations." Using the criteria in Table 3.10.4-2 of the DEIS, FERC determined that "none" of the SMP Project impacts can be considered high and adverse. In reaching that conclusion, FERC properly relied on its consideration of the environmental resource-specific discussions in the DEIS and finding the SMP Project would not significantly impact the environment. Notably, the temporary nature of the Project's construction related impacts and the negligible and localized impacts of the operation of the small scale above ground facilities support FERC's determination that there will be no high and adverse impacts.

Lastly, FERC examined whether the impacts on the environmental justice populations would be disproportionate and concluded that the construction and operation of the SMP Project would not result in disproportionate impacts.<sup>30</sup> Notably, FERC considered the impact of all of the land-based major route alternatives identified in the DEIS on the identified environmental justice populations.<sup>31</sup> FERC concluded that the majority of the alternatives had relatively similar percentage of environmental justice populations that would be affected—which is not surprising given frequency of census tracts with environmental justice populations that exist throughout Alabama, southwest Georgia, and northern and central Florida—and that there was not a fundamental difference between the alternatives. In reaching its conclusion, FERC recognized that "[u]nlike discrete facilities whose impacts are generally concentrated in one location, a pipeline establishes or expands a narrow corridor over long distances that necessarily traverse a mosaic of ethnic and economic characteristics."<sup>32</sup> Ultimately, the critical conclusion that FERC made is that the SMP Project will "not significantly impact the environment," irrespective of the composition of the census tracts crossed, and that constructing and operating the SMP Project will not result in significant adverse impacts on any population.<sup>33</sup>

<sup>&</sup>lt;sup>25</sup> *Id.*, ¶ 3.10.4.2.

<sup>&</sup>lt;sup>26</sup> Id.

<sup>&</sup>lt;sup>27</sup> Id.

<sup>28</sup> Ld

<sup>&</sup>lt;sup>29</sup> *Id.*, ¶ 3.10.4.5.; *see*, *e.g.*, *id.*, ¶ 5.1.13. ("The majority of impacts associated with the SMP Project would be temporary or short-term..."); *id.*, ES-5. ("Constructing the SMP Project facilities would result in intermittent and short-term increases in air pollutant emissions; however, such emissions would be temporary and localized, and are not expected to cause or contribute to a violation of applicable air quality standards."); *id.*, ¶ 5.1.11. ("Based on the air dispersion modeling analysis presented in section 3.12.1 and the Applicants' strict compliance with the primary and secondary NAAQS, we conclude that operation of [the compressor stations] would not have a significant impact on regional air quality.").

<sup>&</sup>lt;sup>30</sup> *Id.*, ¶ 3.10.4.4.

<sup>&</sup>lt;sup>31</sup> *Id.*, ¶¶ 3.10.4.3, 3.10.4.3.

<sup>&</sup>lt;sup>32</sup> *Id.*, ¶ 3.10.4.4.

<sup>&</sup>lt;sup>33</sup> Id., ¶¶ 3.10.4.3., 3.10.4.4.

Sabal Trail reviewed the USEPA, Region IV environmental justice program to identify any populations or communities designated by the USEPA as environmental justice populations. No communities affected by the Project are located in the USEPA's Environmental Justice Showcase Communities.<sup>34</sup> It is important to also highlight that in considering the above referenced consultation and environmental justice methodology, Sabal Trail has made significant route adjustments to the SMP Project. This includes relocating the proposed site of the Albany Compressor Station to outside of any environmental justice population after examining a range of alternatives.<sup>35</sup> Further, Sabal Trail has employed communication means and methods to inform environmental justice populations about the SMP Project and encouraging meaningful public involvement in the FERC process, including developing a Public and Agency Participation Plan.<sup>36</sup>

# F. Groundwater Usage

The construction and testing of the pipeline will require the temporary, one-time use of groundwater. For the entire Sabal Trail segment of the project, only 146 million gallons will be used for hydrostatic testing and HDD crossings during construction. That is less than one half of the estimated total daily groundwater usage within the Suwannee River Water Management District.<sup>37</sup> Water will be reused as often as possible. Out of the proposed 35 test sections, 10 will use water from previous test sections. Once used, the water will be discharged in the same basin and both the withdrawal and discharge will be subject to government approval.<sup>38</sup>

## G. Karst and Floridan Aquifer

From the beginning, Sabal Trail understood that traversing karst terrain would pose unique construction challenges. At the inception of the project, Sabal Trail established a team of karst experts, including geologists, geotechnical engineers, and pipeline engineers, all of whom have extensive experience working with linear facilities in karst terrain. Combined the team has over 196 years of experience. Additionally the team consulted with state geologists in all three states.

The risk of damage to the pipeline from karst features is extremely low. Although sinkhole features are quite common in southern Georgia and northern Florida, for instance, Sabal Trail's team was unable to find documented instances of significant damage to infrastructure due to sinkhole collapse. The vast majority of sinkholes in the region are the subsidence type, which are relatively small, shallow, and easy to remediate.<sup>39</sup> In the highly unlikely event that a major sinkhole opens beneath the pipeline, the pipeline can safely span distances that greatly exceed 100 feet. Nevertheless, a robust karst mitigation plan was developed and submitted to FERC.<sup>40</sup> Moreover, FERC noted in the DEIS after consulting with safety representatives of PHMSA and

<sup>&</sup>lt;sup>34</sup> USEPA, Environmental Justice Showcase Communities, http://www3.epa.gov/environmentaljustice/grants/ej-showcase-r04.html (last visited Dec. 1, 2015).

<sup>&</sup>lt;sup>35</sup> *Id.*, ¶¶ 3.10.4.6., 4.4.2.1.

<sup>36</sup> See Appendix 1G in Resource Report 1, filed with the FERC in November 2014.

<sup>&</sup>lt;sup>37</sup> See Suwannee River Water Management District, Water Supply Assessment 210, p. 32.

<sup>&</sup>lt;sup>38</sup> SMP EIS, ¶ 3.3.1.7.

<sup>39</sup> See generally id., ¶ 3.1.2.3.

<sup>&</sup>lt;sup>40</sup> Id.

the Georgia and Florida Public Service Commissions, no one was aware of pipeline incidents related to sinkholes or karst terrain.<sup>41</sup>

Moreover, the bulk of the construction will involve shallow, open-cut trenching. Open-cut trenching over the unconfined portion of the Floridan aquifer will not adversely affect water quality or pose an unreasonable risk of triggering sinkholes. With a trench depth of less than 8 feet, the pipeline will be in the unconsolidated sediments, well above the limestone of the Floridan aquifer. While trenching may cause sinkholes, they are likely to be of the subsidence type, which are small, shallow, and easily remediated. Any turbidity caused by construction would be localized and temporary.<sup>42</sup>

The Sabal Trail karst team was unable to locate documented instances of major sinkhole formation or water quality issues from the construction or operation of infrastructure projects with much larger and more invasive footprints than this natural gas pipeline. Throughout this region hundreds of miles of existing pipelines, Interstate and other highways, and rail lines crisscross untold karst features. These linear structures, many of which require far more intensive construction (and which generate far more operational vibrations) than what is proposed for the SMP Project, safely operate every day. Entire towns and cities are located in this sensitive karst area. 43

Additionally, FERC adequately addressed environmental impacts associated with HDD crossings of rivers in karst terrain. Rivers are the base of the groundwater flow system. There is little or no groundwater flow beneath the river. Potential impacts would be confined to the vicinity of the HDD crossings. Sabal Trail has determined that the crossings are not areas of concentrated groundwater discharge. For example, the Suwannee River crossing only has four springs within a one-mile radius, the nearest spring is 1,100 feet downstream and is the smallest classification possible (fourth magnitude). LiDAR data also indicates only minor karst features along the HDD approach.<sup>44</sup>

Sabal Trail conducted a comprehensive geophysical and geotechnical investigation of the HDD crossings. Large voids are not anticipated. While small voids may be encountered, any impacts, such as loss of drilling fluids, would be highly localized. Consequently, the project will not likely result in a violation of an USEPA-approved state water quality standard. In the unlikely event of a pipeline rupture, groundwater contamination will not occur—the gas will simply vent to the atmosphere. Again, any turbidity impacts from HDD operations would be very localized and temporary. Many large infrastructure projects have been developed and operated for long periods of time in the region, yet the only documented regional degradation of Floridan aquifer water quality is increasing nitrate levels from agricultural operations. 45

Beyond the HDD crossings, Sabal Trail used LiDAR data for the entire route, as well as conventional topographic survey data. Geotechnical and geophysical analyses were done at the

<sup>&</sup>lt;sup>41</sup> SMP DEIS, ¶ 3.1.2.3, p. 3-12.

<sup>&</sup>lt;sup>42</sup> *Id*.

<sup>&</sup>lt;sup>43</sup> *Id*.

<sup>44</sup> Id.

<sup>&</sup>lt;sup>45</sup> Id.

proposed compressor stations and other surface developments, several route locations and road crossings, as well as the river crossing locations. 46

In addition to the pipeline itself, Sabal Trail believes that the compressor stations will not pose an unreasonable risk of triggering sinkholes. As part of the design level geotechnical work, detailed recommendations have been provided for site preparation and foundation design. These recommendations will minimize sinkhole risk and provide adequate support of buildings and equipment.<sup>47</sup>

Finally, all of these design and routing decisions have provided a preferred route that minimizes the potential impacts to the Floridan Aquifer. The Floridan Aquifer itself entirely encompasses Florida and thus cannot be avoided. As discussed already, the pipeline, or its associated infrastructure, will not significantly affect or be affected by karst terrain. The construction or operation will not significantly impact water quantity or quality of the Floridan Aquifer. <sup>48</sup> There has been substantial and sustained development in Florida over the aquifer.

In conclusion, on behalf of Sabal Trail, I appreciate the opportunity to provide the information contained in this letter. As always, Sabal Trail is available to answer any questions USEPA may have and we look forward to continuing to work positively and productively with USEPA and other agencies through the ongoing regulatory process.

Sincerely,

Sabal Trail Transmission, LLC By: Sabal Trail Management, LLC, Its Operator

Patrick J. Hester

Vice President and Deputy General Counsel

<sup>16</sup> Ld

<sup>47</sup> Id

<sup>&</sup>lt;sup>48</sup> *Id.*, ¶ 5.1.3.