



**U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration**

**Natural Gas Distribution Infrastructure Safety and Modernization Grant
Program**

**Lake Apopka Natural Gas District, FL
Tier 2 Site Specific Environmental Assessment
NGDISM-FY22-EA-2023-20**

PHMSA Approval:

**PHMSA Office of Planning and Analytics
Environmental Policy and Justice Division**

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Overview:

The purpose of this Tier 2 Site Specific Environmental Assessment (Tier 2) is to (1) document the proposed action (the Project) and the need for the action (2) identify existing conditions; (3) assess the social, economic, and environmental effects using appropriate tools and agency coordination to comply with local, state, and federal environmental laws, regulations, and ordinances; to (4) document applicable mitigation commitments that will avoid, minimize, or mitigate potential effects; and (5) seek comments from the public. This Tier 2 analysis informs the Pipeline and Hazardous Materials Safety Administration's (PHMSA) assessment as to whether the Project is consistent with the impacts described in the Tier 1 Nationwide Environmental Assessment for the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program.¹

As part of this Tier 2, PHMSA is soliciting public comments through a public comment period. This Tier 2 is available on PHMSA's website where comments can be submitted to the contact noted below. PHMSA will accept public comments for 30 days on this Tier 2. PHMSA will consider comments received and incorporate them in the decision-making process. Consultation with appropriate agencies on related processes, regulations, and permits is ongoing. Please submit all comments to: PHMSABILGrantNEPAComments@dot.gov and reference NGDISM-FY22-EA-2023-20 in your response.

At the conclusion of the EA process, PHMSA will either issue a "Finding of No Significant Impact," further supplement this EA with additional analysis, mitigation measure, or prepare an Environmental Impact Statement.

I. Project Description/Proposed Action

Project Title	Lake Apopka Natural Gas District
Project Location	Orange County, Florida

Project Description/Proposed Action:

The Lake Apopka Natural Gas District (LANGD) Infrastructure Improvement Project would replace approximately 13.13 miles of vintage steel and vintage plastic polyethylene (PE) pipe in multiple areas of the system with modern PE pipe. The replacement of the 2-inch, 4-inch, and 6-inch steel mains and a section of 2-inch PE pipe and the associated service lines would take place in the following four segments (See Appendix A for project maps):

- Segment 1: Ocoee Apopka and Fullers Cross
- Segment 2: Gaymar Drive
- Segment 3: Abigail Drive, Rodger Williams & Semoran Crossing, Thompson Road and East 1st Street, Thore Avenue, Votaw Road and Rolfe Drive
- Segment 4: Sadler Drive and Sloewood Court

The project area contains 13.13 miles of main line and 156 steel service line replacements. The pipeline was originally installed in the 1950s.

¹ <https://www.federalregister.gov/documents/2022/11/09/2022-24378/pipeline-safety-notice-of-availability-of-the-tier-1-nationwide-environmental-assessment-for-the>

The utility easement measures 30 feet from the centerline of the roadway, in general there is 10 feet of usable utility easement on each side of the road. The existing utility easement contains buried electricity, water, sewer, communications, and the existing pipeline. The replacement pipeline would be installed on the "house" side of the easement, further away from the road than the existing pipelines. The existing pipeline is buried at a depth between 3 and 5 feet below grade.

The new pipe would be installed using horizontal directional drilling (HDD) with excavation at entry and exit points. Trenching may be required in certain locations depending on site conditions identified during construction. The Tier 1 EA described that the majority of site-specific projects would utilize the insertion method of pipe replacement. As described in this document, LANGD would utilize an open trench method for portions of the project, which generally involves greater soil disturbance and use of heavy equipment and related impacts than the insertion method. No new easements would be required for any segment of this project. All pipelines being replaced are either on existing utility easements or rights-of-way (ROW).

The proposed project would also include purchasing equipment that would be used to minimize the release of methane by capturing gas during purging operations. Leak survey equipment would also be purchased to modernize the leak survey process.

No Action:

The No Action alternative, as required under NEPA, serves as a baseline, and is used to compare impacts resulting from the Proposed Action. Under the No Action alternative, PHMSA would not fund this pipeline replacement project. Additionally, PHMSA would not be able to reduce the inventory of methane leaks and reduce safety risks by replacing pipe prone to leakage. Under this alternative, LANGD would continue to use leak prone pipeline material, and conduct repairs or replacements in the future using non-federal sources of funding, and potentially on an emergency basis, when a pipeline fails. Impacts and benefits associated with replacing the leak prone pipeline within LANGD, with updated material would not be seen in the near term. The safety risks and methane leaks would persist. The replacement pipeline activities would either not be taken or they would be undertaken at a later, uncertain date. Even if pipe replacement were to happen at some point in the future, environmental mitigation measures during such a replacement would be unknown. Furthermore, existing economic losses, and increased risk associated with prolonged gas leaks would continue.

Need for the Project:

The objective of the proposed project is the replacement of leak prone pipelines in the LANGD service area. The proposed project would eliminate leaks, and leak-related accidents and injuries as well as prevent property damage and gas outages in disadvantaged areas of the LANGD service area.

Description of the Environmental Setting of the Project Area:

The proposed project takes place within an urban environment with a mix of residential housing and commercial businesses. The pipeline infrastructure and location of the new pipe is located adjacent to roadways within existing transportation or utility ROW that consists of mowed grassy areas.

II. Resource Review

Air Quality and Greenhouse Gases (GHG)	
Question	Information and Justification
Is the project located in an area designated by the EPA as non-attainment or maintenance status for one or more of the National Ambient Air Quality Standards (NAAQS)?	No, based on review of the EPA Greenbook. ²
Will the construction activities produce emissions that exceed de minimis thresholds (tons per year) described in the initial Tier 2 EA worksheet?	N/A
Will mitigation measures be used to capture blowdown ³ ?	Yes, all methane would be captured using cross compression technology.
Does the system have the capability to reduce pressure on the segments to be replaced? If yes, what is the lowest psi your system can reach prior to venting?	No
Will project proponent commit to reducing pressure on the line to this psi prior to venting? Please calculate venting emissions based on this commitment and also provide comparison figure of venting emissions volume without pressure reduction/drawdown using calculation methods identified in the initial Tier 2 EA worksheet.	N/A, all methane would be captured using cross compression technology during construction.
Estimate the current leak rate per mile based on the type of pipeline material. Based on mileage of replacement and new pipeline material, estimate the total reduction of methane.	The existing leak rate is 27,866 kg/year Replacement would result in a leak rate of 378 kg/year or a reduction of 27,488 kg/yr. ⁴
<p>Conclusion:</p> <p>The project area is located in an area designated by the EPA as in attainment for all National Ambient Air Quality Standards (NAAQS).</p> <p>No Action:</p> <p>Under the No Action alternative, existing and planned pipeline activities, including construction and maintenance activities, would continue unchanged. The project proponent would continue to use leak prone pipe material. Under the No Action alternative, PHMSA estimates that 27,866 kg of methane would be released each year from the existing pipelines within the project area. The total methane emissions within the project area were extrapolated over 20 years to represent the continuation of methane release under the No Action alternative. This amounts to 557,316 kg of methane over a 20-year time frame. See Appendix B for the methane leak rate calculations.</p> <p>Proposed Action:</p>	

² <https://www.epa.gov/green-book/green-book-national-area-and-county-level-multi-pollutant-information>

³ Blowdown refers to the venting of natural gas in current facilities, in order to begin rehabilitation, repair, or replacement activities.

⁴ Leak rates are based on Pre-1990 Installation emission factors found in *Table 1 Average methane emission factors for natural gas pipelines (adopted from EPA GHG Inventory, Annex 3.6, Table 3.62)* in the November 9, 2022, PHMSA: Natural Gas Distribution Infrastructure Safety and Modernization Grant Program Programmatic Environmental Assessment, Tier 1 Nationwide Environmental Analysis.

The Proposed Action alternative would result in minor air quality impacts associated with construction activities. Pipeline blowdowns are typically necessary to ensure that construction and maintenance work can be conducted safely on depressurized natural gas facilities and pipelines. All methane would be captured using cross compression technology. Therefore, no methane would be emitted during construction. As described in the Tier 1 EA, methane leaks from natural gas distribution pipelines increase with age and are considerably higher for bare steel pipelines, as compared with plastic. Replacing leak prone pipe with newer, more durable materials would reduce leaks and methane emissions. Based on the current leak rate of the existing pipe within the project area, this project would reduce overall emissions by 27,488 kg of methane per year. This amounts to a reduction of 549,753 kg of methane over a 20-year time frame. See Appendix B for the methane reduction calculations. Therefore, it is PHMSA's assessment that the proposed project would provide a net positive benefit to air quality from the overall reduction of greenhouse gas emissions and that no indirect or cumulative impacts would result from the Proposed Action.

Mitigation Measures:

LANGD shall implement the following mitigation measures:

- Efficient use of on-road and non-road vehicles, by minimizing speeds and vehicles
- Minimizing excavation to the greatest extent practical
- Use of cleaner, newer, non-road equipment as practicable
- Minimizing all vehicle idling and at minimum, conforming with local idling regulations
- Ensuring that all vehicles and equipment are in proper operating condition
- On-road and non-road engines must meet EPA exhaust emission standards (40 CFR Parts 85, 86, and 89)
- Covering open-bodied trucks while transporting materials
- Watering, or use of other approved dust suppressants, at construction sites and on unpaved roadways, as necessary
- Minimizing the area of soil disturbance to those necessary for construction
- Minimizing construction site traffic by the use of offsite parking and shuttle buses, as necessary
- Cross-compression technology will be used to capture methane during construction

Water Resources	
Question	Information and Justification
Are there water resources within the project area, such as wetlands, streams, rivers, or floodplains? If so, would the project temporarily or permanently impact wetlands or waterways?	Yes, wetlands are located within the project area according to United States Fish and Wildlife (USFWS) National Wetland Inventory (NWI).
Under the Clean Water Act, is a Section 401 State certification potentially required? If yes, describe anticipated permit and how project proponent will ensure permit compliance.	No
Under the Clean Water Act, is a USACE Section 404 Permit required for the discharge of dredge and fill material? If yes, describe anticipated permit and how project proponent will ensure permit compliance.	No
Under the Clean Water Act, is an EPA or State Section 402 permit required for the discharge of pollutants into the waters of the United States? Is a Stormwater	Construction activities may exceed soil disturbance thresholds and a 402 permit may be required prior to construction.

Pollution Prevention Plan (SWPPP) required?	
Will work activities take place within a FEMA designated floodplain? If so, describe any permanent or temporary impacts and the required coordination efforts with state or local floodplain regulatory agencies.	Yes, based on review of FEMA National Flood Hazard Layer FIRMette map.
Will the proposed project activities potentially occur within a coastal zone ⁵ or affect any coastal use or natural resource of the coastal zone, requiring a Consistency Determination and Certification?	Yes, the project is located within a coastal zone.
<p>Conclusion:</p> <p>PHMSA reviewed NWI maps, as well as the FEMA National Flood Hazard Layer FIRMette map. Wetlands were identified adjacent to the project area. FEMA's FIRMette map indicated portions of the project area is located adjacent to a FEMA Zone AE, which is a special flood hazard areas (SFHA) and corresponds to the one percent annual chance of flooding. Additionally, PHMSA reviewed the NRCS soils survey which identified some soils within the project area as hydric. These hydric soils are located near NWI wetlands which supports the conclusion wetlands are located within the project area. Additionally, the project is located within Florida's Coastal Zone. See Appendix C for water resource related documentation.</p> <p>No Action:</p> <p>Under the No Action alternative, the existing pipeline would remain in the current location and normal maintenance activities would continue without any impact anticipated to water resources. Minor impacts to waterways and wetlands could occur due to maintenance and repair.</p> <p>Proposed Action:</p> <p>Where the pipeline crosses wetland habitat, directional boring would be used to avoid impacts. Entry and exit pits would be excavated within previously disturbed soils more than 100 feet from identified wetland habitat. No impacts to the wetlands would occur as the existing pipeline infrastructure is outside of the waterway.</p> <p>Based on the construction methods which would utilize boring or directional drilling, all work would take place outside of the designated FEMA Zone AE floodplain, avoiding potential impacts.</p> <p>The entire State of Florida is considered a Coastal Zone and is subject to a Coastal Zone Management Act. Based on the Florida Coastal Management Program Guide (2021) there are no Coastal and Aquatic Managed Areas, or Areas of Critical State Concern on or adjacent to the project site. The Project activities consist entirely of in-kind replacement of existing infrastructure and do not constitute new development.</p> <p>The Florida State Clearinghouse coordinates the state's reviews to determine that projects receiving federal grant funds are consistent with the Florida Coastal Management Program. PHMSA coordinated with the Florida State Clearinghouse to determine if an individual project review would be required for this pipeline replacement project and it was determined that while the project is covered by EO 12372, the Florida State Clearinghouse</p>	

⁵ The term "coastal zone" means the coastal waters (including the lands therein and thereunder) and the adjacent shorelands (including the waters therein and thereunder), strongly influenced by each other and in proximity to the shorelines of the several coastal states, and includes islands, transitional and intertidal areas, salt marshes, wetlands, and beaches.)

does not select the project for review and the project could proceed.

Based on information provided by the project proponent and a review of available information, PHMSA's assessment is that there would be no temporary or permanent impacts to wetland resources. The new pipeline placement and abandonment of the existing pipeline is not anticipated to cause any reasonably foreseeable indirect effects or cumulative effects to water resources as none are in the footprint of the proposed work. Therefore, it is PHMSA's assessment that there would be no adverse impacts to water resources.

Mitigation Measures:

LANGD shall implement the following mitigation measures:

- Avoid staging and laydown areas within identified NWI wetlands or FEMA Zone AE floodplains. The site will be restored to pre-construction contours.
- If construction activities exceed soil disturbance thresholds and a 402 permit is required, LANGD will develop and implement a stormwater pollution prevention plan.

Groundwater and Hazardous Materials/Waste	
Question	Information and Justification
Does the project have potential to encounter and impact groundwater? If yes, describe potential impacts from construction activities.	Yes, groundwater runoff is possible during construction activities.
Will the project require boring or directional drilling that may require pits containing mud and inadvertent return fluids? If yes, describe measures that will be taken during construction activities to prevent impacts to groundwater resources.	Yes, sediment control measures would be used to mitigate groundwater/mud runoff. No work would occur within EPA superfund sites or areas containing known waste. An incident response plan would be developed to control and minimize impacts to sensitive resources.
Will the project potentially involve a site(s) contaminated by hazardous waste? Is there any indication that the pipeline was ever used to convey coal gas? If yes, PHMSA will work with the project proponent for required studies.	No, the project would not involve sites contaminated by hazardous waste. The pipeline has never conveyed coal gas.
Does the project have the potential to encounter or disturb lead pipes or asbestos?	No, there is no potential to disturb lead pipes or asbestos.
Conclusion: PHMSA reviewed EPA's EnviroAtlas ⁶ to identify any brownfield properties, hazardous waste sites, and superfund sites. No properties were identified. A high groundwater table exists within portions of the project area. No Action: Under the No Action alternative, pipes would remain in their current location and ongoing and routine maintenance activities would occur. Pipes would be replaced under failed circumstances. While there are no adverse impacts to groundwater anticipated by the No Action alternative, increased methane emissions are	

likely to occur if the leak prone pipes remain (EPA, PRO Fact Sheet No. 402⁷) and the risk of failure is higher among these types of pipes. Therefore, under the no action alternative, PHMSA anticipates an increased risk for the release of methane, both as leaks and during a pipeline failure, which could then result in ground disturbances from construction activities, potentially impacting groundwater.

Proposed Action:

A majority of the new pipeline would be installed within the existing ROW at a depth of approximately 3 to 5 feet. All of the existing gas line would be abandoned, in accordance with PHMSA requirements, and would be purged of natural gas and sealed on each end. The new gas lines would be installed by directional drilling with excavation for entry and exit pits. All excavated trench materials would be stored on site and used to back fill, unless otherwise deemed unsuitable. In these cases, unsuitable soils would be hauled offsite and the trench would be backfilled with clean soils. All disturbed areas would be re-seeded or paved (as appropriate) and restored to preexisting conditions. Should groundwater be intercepted by construction activities, dewatering may be required during construction. In these cases, groundwater would be kept to just below the work area so that the proposed work to be completed would not be compromised.

Where directional drilling would occur near wetland habitat, LANGD would implement appropriate dewatering and erosion control measures. PHMSA's assessment is that there would be no adverse impacts to groundwater associated with the project. Additionally, there are no hazardous waste or brownfield, or superfund sites within the immediate project area that could be potentially impacted by the Proposed Action alternative. PHMSA has not identified any indirect or cumulative effects to groundwater or hazardous materials.

Mitigation Measures:

LANGD shall implement the following mitigation measures:

- An incident response plan would be developed to control and minimize impacts to sensitive resources.
- If construction activities exceed soil disturbance thresholds and a 402 permit is required, LANGD will develop and implement a stormwater pollution prevention plan.

Soils	
Will all bare soils be stabilized using methods using methods identified in the initial Tier 2 EA worksheet? Will additional measures be required?	Yes, erosion and sediment control measures would be utilized during the project. All impacted areas would be restored to pre-construction contours. Soil disturbance associated with excavation would be stabilized using seeding and erosion control material.
Will the project require unique impacts related to soils?	No, the project would not require unique impacts to soils.
Conclusion:	
PHMSA reviewed the USDA, NRCS's web soil survey which indicates that the project area is comprised of a	

⁷ Insert Gas Main Flexible Liners at <https://www.epa.gov/sites/default/files/2016-06/documents/insertgasmainflexibleliners.pdf#:~:text=Methane%20emissions%20reductions%20come%20from%20lower%20leakage%20rates,pipe%20and%20external%20corrosion%20in%20unprotected%20steel%20piping.>

variety of soil types.⁸ Undisturbed soil is anticipated to be encountered throughout the project area.

No Action:

Under the No Action alternative, the existing pipes would remain in their current location and soils would remain in their current state and condition. Normal maintenance activities would occur, and pipes would be replaced under failed circumstances. Some soil disturbance would occur during emergency repairs and the affected areas would be restored upon completion. Under either scenario, no adverse impacts to soils would be anticipated under the No Action alternative.

Proposed Action:

The new gas lines would be installed at a depth of three to five feet below grade by directional drilling. Little soil disturbance would occur. All disturbed areas would be re-seeded or paved (as appropriate) and restored to pre-existing conditions. Therefore, PHMSA's assessment is that there would be no adverse impact to soils resulting from the Proposed Action alternative. Additionally, there are no indirect or cumulative impacts anticipated as LANGD would restore all areas to pre-construction conditions.

Mitigation Measures:

LANGD shall utilize best management practices, as appropriate, to control sediment and erosion during construction which may include silt fencing, check dams, and promptly covering all bare areas. All impacted areas shall be restored to pre-construction conditions.

Biological Resources	
Question	Information and Justification
Based on review of IPaC and NOAA Fisheries database, are there any federally threatened or endangered species and/or critical habitat potentially occurring within the geographic range of the project area? ⁹ If no, no further analysis is required.	Yes, based on review of the USFWS's Information for Planning and Consultation (IPaC). ¹⁰ Additionally, Florida state resources were inventoried to identify potential state listed species.
Will the project impact any areas in or adjacent to habitat for Federally, listed threatened or endangered species or their critical habitat? If no, provide justification and avoidance measures. If yes, PHMSA will work with the project proponent to conduct necessary consultation with resource agencies.	No, the project would not disturb threatened and endangered species/habitats.
Conclusion:	
The project would take place in a predominately urban area within previously disturbed areas along roadsides. The only areas that contain vegetation and pervious surfaces are in residential backyards or mowed vegetated buffer areas along the streets. PHMSA requested an official species list through the USFWS's IPaC website. See	

⁸ <https://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>

⁹ <https://ipac.ecosphere.fws.gov/> and <https://www.fisheries.noaa.gov/species-directory/threatened-endangered>

¹⁰ <https://ipac.ecosphere.fws.gov/>

Appendix D, Biological Resources, for the list of federally threatened, endangered, proposed endangered and candidate species. No critical habitat is within the project area.

Additionally, the Florida Natural Areas Inventory was reviewed to assist in identifying potential species protected by the State and under the jurisdiction of the Florida Fish and Wildlife Conservation Commission (FWC).¹¹

No Action:

Under the No Action alternative, existing conditions would remain, and normal maintenance activities would occur. The project area is in an urbanized environment and therefore has very limited biological resources present. Additionally, the project area does not contain suitable habitat and therefore, no impacts to biological resources would occur under the No Action alternative.

Proposed Action:

Because these areas are within mowed ROW that has been previously impacted (pipeline laid in the ground in close proximity to the location where new pipes would be bored) the immediate project area has very limited biological resources present. Additionally, the project area does not contain suitable or critical habitat for federally listed species. Therefore, in accordance with Section 7 of the Endangered Species Act¹² PHMSA's assessment is that the project would have no effect on federally listed species. Under Section 7(a)(4) of the Endangered Species Act (ESA), Federal agencies must confer with the USFWS if their action would jeopardize the continued existence of a proposed species. As a candidate species, the monarch butterfly receives no statutory protection under the ESA. PHMSA's assessment is that the project would have no adverse impacts to state listed species or other biological resources and that there are no indirect or cumulative impacts anticipated as no impacts to habitat or species would occur.

Mitigation Measures:

There are no biological resource impacts, therefore no mitigative measures are necessary.

Cultural Resources	
Question	Information and Justification
Does the project include any ground disturbing activities, modifications to buildings or structures, or construction or installation of any new aboveground components?	Yes, the Project includes ground disturbing activities. No modifications to buildings or structures would be made.
Is the project located within a previously identified local, state, or National Register historic district or adjacent to any locally or nationally recognized historic properties? This information can be gathered from the local government and/or State Historic Preservation Office. ¹³	No, there are no identified local, state, or national historic districts in the project area. There are no previously identified local, state, or national register historic district, not is the project area adjacent to any properties.

¹¹ <https://www.fnai.org/BiodiversityMatrix/index.html>

¹² 50 CFR § 402.02

¹³ Many SHPOs have an [online system](https://www.nps.gov/subjects/nationalregister/state-historic-preservation-offices.htm) at <https://www.nps.gov/subjects/nationalregister/state-historic-preservation-offices.htm> that can tell you previously identified historic properties in your project area. The [National Register list](https://www.nps.gov/subjects/nationalregister/database-research.htm) at <https://www.nps.gov/subjects/nationalregister/database-research.htm> can also be accessed online.

Does the project or any part of the project take place on tribal lands or land where a tribal cultural interest may exist? ¹⁴	No, the project does not take place on tribal lands or where a tribal cultural interest may exist.
Are there any nearby properties or resources that either appear to be or are documented to have been constructed more than 45 years ago? ¹⁵ Does there appear to be a group of properties of similar age, design, or method of construction? Any designed landscapes such as a park or cemetery? Please provide photographs to show the context of the project area and adjacent properties.	Yes, there are homes greater than 45 years of age. All nearby properties appear to have been constructed more than 45 years ago. In general, most properties appear to have been constructed more than 45 years ago. Homes are built in a similar age, design, or method of construction. All homes in the project area appear to be of similar age, design, and method of construction. Properties are of similar age but not similar design.
Has the entire area and depth of construction for the project been previously disturbed by the original installation or other activities? If so, provide any documentation of prior ground disturbances.	Yes, the ground was disturbed during original pipe installation. Distribution piping has been previously installed at the project location. All construction would take place in the existing rights of way. The entire project area has had pipe previously installed.
Will project implementation require removal or disturbance of any stone or brick sidewalk, roadway, or landscape materials or other old or unique features? Please provide photos of the project area that include the roadway and sidewalk materials in the project and staging areas.	No. Project implementation would not require removal or disturbance of any stone or brick sidewalk, roadway, or landscape materials or old or unique features.
<p>Conclusion:</p> <p>PHMSA must consider the impact of projects for which they provide funding on historic and archeological properties¹⁶ in accordance with Section 106 of the National Historic Preservation Act (Section 106). Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the Undertaking may directly or indirectly affect historic resources. Based on the proposed scope of work, PHMSA has delineated the APE for this project to encompass the existing ROW, which includes the limits of disturbance and any staging or access areas. See Appendix E, Cultural Resources, for the APE.</p> <p>No Action:</p> <p>Under the No Action alternative, existing conditions would remain, and normal maintenance activities would occur. These activities could result in ground disturbance that might affect archaeological resources.</p> <p>Proposed Action:</p> <p>U.S. DOT staff identified properties based on available information on previously identified historic properties in the APE, including the National Register of Historic Places (NRHP) database and data received from the Florida Division of Historical Resources. U.S. DOT staff also conducted research to determine if there are any previously unidentified properties within the APE that are 45 years of age or older and may be eligible for the NRHP. No</p>	

¹⁴ The SHPO may have information on areas of tribal interest, or a good source is the [HUD TDAT website at https://egis.hud.gov/TDAT/](https://egis.hud.gov/TDAT/).

¹⁵ Local tax and property records or historic maps may indicate dates of construction.

¹⁶ Historic property means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (National Register) maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.

NRHP-listed above-ground historic properties are within the APE. There are no known archaeological sites in the APE and based on the evaluation, there is low probability for intact significant archeological resources in the APE, and no additional archeological survey is recommended. See Appendix E, Cultural Resources for additional information about the APE and the properties identified.

PHMSA has determined that there are no historic properties as defined in 36 CFR 800.16(l) within the APE. Therefore, in accordance with 36 CFR Part 800.4(d)(1), PHMSA has determined the Undertaking would result in No Historic Properties Affected.

A letter was sent on January 10, 2024, to the Florida State Historic Preservation Officer (SHPO), federally recognized tribes with a potential interest in the project area, and all consulting parties outlining the Section 106 process, including a description of the undertaking, delineation and justification of the APE, identification of historic properties and an evaluation and proposed finding of no historic properties affected. PHMSA requested comments on the Section 106 process, identification of historic properties, and proposed finding within 30 days of receipt of the letter. See Appendix E, Cultural Resources, for additional information.

Mitigation Measures:

If, during project implementation, a previously undiscovered archeological or cultural resource that is or could reasonably be a historic property is encountered or a previously known historic property will be affected in an unanticipated manner, all project activities in the vicinity of the discovery will cease and the LANGD will immediately notify PHMSA. This may include discovery of cultural features (e.g., foundations, water wells, trash pits, etc.) and/or artifacts (e.g., pottery, stone tools and flakes, animal bones, etc.) or damage to a historic property that was not anticipated. PHMSA will notify the State Historic Preservation Office and participating federally recognized tribes and conduct consultation as appropriate in accordance with 36 CFR § 800.13. Construction in the area of the discovery must not resume until PHMSA provides further direction.

In the event that unmarked human remains are encountered during permitted activities, all work shall halt and LANGD shall immediately contact PHMSA as well as the proper authorities in accordance with applicable state statutes to determine if the discovery is subject to a criminal investigation, of Native American origin, or associated with a potential archaeological resource. At all times human remains must be treated with the utmost dignity and respect. Human remains and associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be photographed, collected, or removed until PHMSA has conducted the appropriate consultation and developed a plan of action. Project activities shall not resume until PHMSA provides further direction.

All work, material, equipment, and staging to remain within the road's existing right-of-way or utility easement or other staging areas as identified in the environmental documentation. If the scope of work changes in any way that may alter the effects to historic properties as described herein, the grant recipient must notify PHMSA, and consultation may be reopened under Section 106.

Section 4(f)

Question	Information and Justification
Are there Section 4(f) properties within or immediately adjacent to the project area? If yes, provide a list of properties or as an attachment.	No

Will any construction activities occur within the property boundaries of a Section 4(f) property? If so, please detail these activities and indicate if these are temporary or permanent uses of the Section 4(f) property. Further coordination with PHMSA is required for all projects that might impact a Section 4(f) property.	No
<p>Conclusion:</p> <p>Section 4(f) of the US Department of Transportation (USDOT) Act of 1966 as amended (Section 4(f)) (49 U.S.C. § 303(c)); is a federal law that applies to transportation projects that require funding or other approvals by the USDOT. Section 4(f) prohibits the Secretary of Transportation from approving any program or project which requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or any land from an historic site of national, state, or local significance unless:</p> <ul style="list-style-type: none"> • There is no feasible and prudent alternative to the use of the land; • The program or project includes all possible planning to minimize harm to such park, recreational area, wildlife and waterfowl refuge, or historic site, resulting from such use. <p>PHMSA conducted a review of properties that are located within the Project Area to identify properties that qualify as Section 4(f). No Section 4(f) properties are located within or immediately adjacent to the project area.</p> <p>No Action:</p> <p>Under the No Action alternative, there would be no change to existing pipeline infrastructure pursuant to federal funding or approval authorized by the Program. Therefore, there would be no use of Section 4(f) property under the No Action alternative.</p> <p>Proposed Action:</p> <p>Under the Proposed Action alternative, construction activities would not occur within or adjacent to 4(f) properties. Therefore, there would be no use of Section 4(f) resources.</p> <p>Mitigation Measures:</p> <p>There are no 4(f) resources identified in the project area and therefore, no mitigation measures are necessary.</p>	

Land Use and Transportation	
Question	Information and Justification
Will the full extent of the project boundaries remain within the existing right-of-way or easements? If no, please describe any right-of-way acquisitions or additional easements needed.	Yes. The entire project would occur within existing rights-of-way and easements.
Will the project result in detours, transportation restrictions, or other impacts to normal traffic flow or to existing transportation facilities during construction? Will there be any permanent change to existing transportation facilities? If so, what are the changes, and how would changes affect the public?	No, the project would not result in detours, transportation restrictions, or other impacts to normal traffic flow or to existing transportation facilities during construction.

Will the project interrupt or impede emergency response services from fire, police, ambulance or any other emergency or safety response providers? If so, describe any coordination that will occur with emergency response providers?	No, the project would not interrupt or impede emergency response services.
<p>Conclusion:</p> <p>The project is located in Orange County Florida, an area comprised of predominately residential areas.</p> <p>No Action:</p> <p>Under the No Action alternative, leak prone pipes would remain in their current location. No changes to land use would occur. Normal maintenance activities would occur, and pipes would be replaced under failed circumstances.</p> <p>Proposed Action:</p> <p>The pipeline would be installed within the existing infrastructure ROW and easements with all work occurring under paved roadways or along street edges within previously disturbed soils associated with roadways. Any trenching or excavation pits would be backfilled with sand, clean soils, and gravel and paved or seeded daily. Therefore, PHMSA's assessment is that there would be no permanent change to land use. The project is replacing/upgrading the existing pipe and would not include new pipeline to serve any additional areas. Additionally, there are no indirect impacts anticipated as land use remains the same.</p> <p>During construction, there may be short-term impacts to adjacent residences, businesses and normal traffic patterns. Potential impacts include an increase in noise, dust, and transportation accessibility, as a result of construction and construction staging. Local and state regulations guide the transport of machinery, equipment, and automobiles around the construction areas. No lane closures would be required. The project would not result in detours. Regular flow of traffic would be maintained. LANGD would notify emergency services of the scheduled work. Therefore, because the work consists of the replacement of existing pipeline, would not convert any new areas into a different use and impacts would only occur during construction, PHMSA's assessment is that impacts related to land use are considered minor and temporary and there would be no cumulative impacts on land use or transportation.</p> <p>Mitigation Measures:</p> <p>A traffic control plan will be developed. LANGD will coordinate with emergency services and other agencies.</p> <p>LANGD will notify residents and businesses of parking impacts. Impacted areas will be restored to pre-construction conditions.</p>	

Noise and Vibration	
Question	Information and Justification
Will the project construction occur for longer than a month at a single project location?	No, construction would not occur for longer than a month at any location.
Will the project location be in proximity (less than 50-ft.) to noise sensitive receivers (residences, schools, houses of worship, etc.)? If so, what measures will be	Yes, service replacement would occur within 50 feet of the building it serves.

taken to reduce noise and vibration impacts to sensitive receptors?	
Will the project require high-noise and vibration inducing construction methods? If so, please specify.	No
Will the project comply with state and local ordinances? If so, identify applicable ordinances and limitations on noise/vibration times or sound levels.	Yes, the Orange County Noise Pollution Control Ordinance (Chapter 15 Article V.) Construction activities would occur during normal business hours.
Will construction activities require large bulldozers, hoe ram, or other vibratory equipment within 20 feet of a structure?	No, vibratory equipment would not be utilized within 20 feet of a structure.

Conclusion:

The ambient noise within the project area consists of a combination of environmental noise from road traffic, construction, industry, the built environment, population density and other sources. Several sensitive noise receptors are within the project area including businesses and residential properties.

No Action:

Under the No Action, the project would not move forward and the pipelines identified for replacement would not be replaced at this time. It is likely that these pipelines would be repaired or replaced due to a leak under emergency conditions and only in the immediately affected areas. If replacement or repairs occur under emergency conditions, noise from construction equipment would add to that of the current ambient noise and would be of a shorter duration.

Proposed Action:

The pipeline replacement project would result in temporary construction noise impacts; however, no vibration impact should occur. Excavators, dump trucks, skid steers, and other similar construction equipment would be used to excavate a trench, lay pipe, compact soils and restore the area to pre-existing conditions and contours. The use of construction equipment would result in temporary noise impacts. Construction for the project is not anticipated to last any longer than one month at any single project location. Construction activities would occur in close proximity (less than 50-ft.) to noise sensitive receivers (residences, schools, houses of worship, etc.) in order to install service lines. While there would be a temporary increase in noise due to construction equipment, PHMSA's assessment is that these impacts would be minor and temporary. Adhering to state and local noise ordinances would ensure the project does not cause cumulatively more than minor adverse noise or vibration impacts.

Mitigation Measures:

LANGD will adhere to state and local noise regulations including the Orange County Noise Pollution Control Ordinance (Chapter 15 Article V.)

Activities will be limited to occurring only during normal weekday business hours when noise restrictions are not in place.

Proper maintenance of equipment mufflers will be performed.

Environmental Justice	
Question	Information and Justification

Using the EPA EJScreen or census data ¹⁷ , is the project located in an area of minority and/or low-income individuals as defined by USDOT Order 5610.2(c)? If so, provide demographic data for minority and/or low-income individuals within ½ mile from the project area as a percentage of the total population.	Yes, based on review of socioeconomic data using the EPAs EJScreen, the population residing within the general project area contains 39% low income and 68% minority populations.
Will the project displace existing residents or workers from their homes and communities? If so, what is the expected duration?	No
Will the project require service disruptions to homes and communities? If so, what is the expected communication and outreach plan to the residents and the duration of the outages?	Yes, outages are only expected on the day a natural gas service is tied over to a new natural gas main. The disruption to each resident would last between 30 minutes to an hour. LANGD would reach out to residents for outage schedule and duration.
Are there populations with Limited English Proficiency located in the project area? If so, what measures will be taken to provide communications in other languages?	Yes, the population within the project area contains limited English-speaking populations within project area. LANGD would provide communications available in multiple languages.
<p>Conclusion:</p> <p>Executive Order (E.O.) 14096—"Revitalizing Our Nation's Commitment to Environmental Justice for All" was enacted on April 21, 2023. E.O. 14096 on environmental justice does not rescind E.O. 12898 – "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," which has been in effect since February 11, 1994 and is currently implemented through DOT Order 5610.2C. This implementation would continue until further guidance is provided regarding the implementation of the new E.O. 14096 on environmental justice.</p> <p>PHMSA reviewed socioeconomic data using the EPAs EJScreen and found the population residing within the project area contains 39% low income and 68% minority populations. The percentage of these populations is above the county average. See Appendix F, Environmental Justice.</p> <p>No Action:</p> <p>Under the No Action alternative, existing and planned pipeline activities, including construction and maintenance activities, would continue unchanged. The project proponent would continue to use leak prone pipe material that could lead to safety incidents and service disruptions. Additionally, if a pipeline segment is not repaired or replaced prior to failure, it is likely to be associated with even more emissions under the No Action alternative. Thus, emissions benefits to the community associated with repairing or replacing existing pipelines with updated material would not be achieved and the incident risks and leaks would remain. There may be some degree of air pollution associated with construction activity for maintenance and repairs of existing pipelines under the No Action alternative, either through planned repair or replacement efforts or unplanned, emergency repairs or replacements.</p>	

¹⁷ <https://www.census.gov/quickfacts/fact/table/US/PST045222>

Proposed Action:

The Proposed Action alternative would result in an overall reduction in GHG emissions. Construction activities would result in minor temporary air quality impacts. Noise impacts associated with construction are anticipated to be minor. Traffic impacts would be temporary and only minor disruptions would occur. However, removal of leak prone pipe would reduce leaks and the potential for incidents, resulting in an increase in pipeline safety across the system while also improving operation and reliability. Therefore, consistent with Executive Order 12898 and DOT Order 5610.2(c), PHMSA's assessment is that the project would not result in disproportionately high and adverse effects on minority or low-income populations, or other underserved and disadvantaged communities. PHMSA's assessment is that the project would have an overall beneficial effect on environmental justice populations and would not result in indirect or cumulative impacts.

Mitigation Measures:

LANGD will provide advanced notification of service disruptions and the construction schedule will be communicated to the community. Services will be maintained at temporary facilities if appropriate.

LANGD will make announcements of communications available in multiple languages.

Safety	
Question	Information and Justification
Has a risk profile been developed to describe the condition of the current infrastructure and potential safety concerns?	Yes, a risk profile has been developed and can be found in LANGD's Distribution Integrity Management Program (DIMP).
Has a public awareness program been developed and implemented that follows the guidance provided by the American Petroleum Institute (API) Recommended Practice (RP) 1162?	Yes, a public awareness program has been developed and would be executed by LANGD.
Does the project area include pipes prone to leakage?	Yes.
Will construction safety methods and procedures to protect human health and prevent/minimize hazardous materials releases during construction, including personal protection, workplace monitoring and site-specific health and safety plans, be utilized? If yes, document measures and reference appropriate safety plans.	Yes, the project would incorporate public awareness programs and adhere to LANGD safety standards.
Has an assessment of the project been performed to analyze the risk and benefits of implementation?	Yes, an assessment of the project has been performed to analyze the risk and benefits of implementation.
Conclusion:	
<p>The proposed project would replace leak prone pipe. Pipelines that are known to leak based on the material include cast iron, bare steel, wrought iron, and early vintage PVC plastics with known issues (PIPES Act of 2020). PHMSA establishes safety regulations for all pipelines (49 CFR Parts 190-199). In 2011, following major natural gas pipeline incidents, DOT and PHMSA issued a Call to Action to accelerate the repair, rehabilitation, and replacement of the highest-risk pipeline infrastructure. Among other factors, pipeline age and material are significant risk indicators. Pipelines constructed of cast and wrought iron, as well as bare steel, are among the</p>	

pipelines that pose the highest risk. PHMSA continues to encourage legacy pipeline repair or replacement to increase the safety of these segments of the gas distribution systems. Pipeline incidents can result in death, injury, property damage, and environmental damage.

No Action:

Under the No Action alternative, existing leak prone pipes would remain in their current condition. Normal maintenance activities would occur, and pipes would be replaced under failed circumstances. Safety risks resulting from existing leak prone pipes remaining in place would persist until the existing pipes are replaced.

Proposed Action:

The proposed project is necessary to replace leak prone pipes. This replacement is in alignment with LANGD's DIMP plan, increasing the overall safety of the community.

The project would reduce the risk profile of existing pipeline systems prone to methane leakage and would also benefit disadvantaged rural and urban communities with the safe provision of natural gas. The project responds to the need to address the potentially unsafe condition of the natural gas distribution system of pipelines. The repair, rehabilitation, or replacement of pipelines would be constructed in accordance with industry best practices and would comply with all local, state, and federal regulations, including those for safety.

The abandonment of the existing pipeline would be conducted in accordance with PHMSA requirements found in 49 CFR 192.727 and 195.402(c)(10). These requirements include disconnecting pipelines from all sources and supplies of gas, purging all combustibles and sealing the facilities left in place. These requirements for purging and sealing abandoned pipelines would ensure that the abandoned pipelines are properly purged and cleaned and pose no risk to safety in their abandoned state. Therefore, PHMSA's assessment is that this replacement project would improve the overall safety LANGD's infrastructure.

Safety

Mitigation Measures:

LANGD shall use standard construction safety methods and procedures; and conduct regular safety audits of crews performing work in the field and subsequent follow-up reporting and/or training, as required.

LANGD shall ensure their DIMP procedures are updated as necessary, the work is constructed in accordance with industry best practices and the project will comply with all local, state, and federal regulations, including those for safety and any required inspections.

III. Public Involvement

On November 9, 2022, PHMSA published a Federal Register notice (87 FR 67748) with a 30-day comment period soliciting comments on the "Tier 1 Nationwide Environmental Assessment for the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program." During the 30-day comment period, PHMSA received one comment letter from the APGA on various aspects of the program and air quality related analysis in the EA on December 9, 2022. This APGA letter is available for public review at the Docket No: PHMSA-2022-0123.¹⁸ PHMSA reviewed the comment letter and determined the comments were not substantial and did not warrant further analysis. One comment provided by the APGA indicated that the majority of construction methods used for pipe

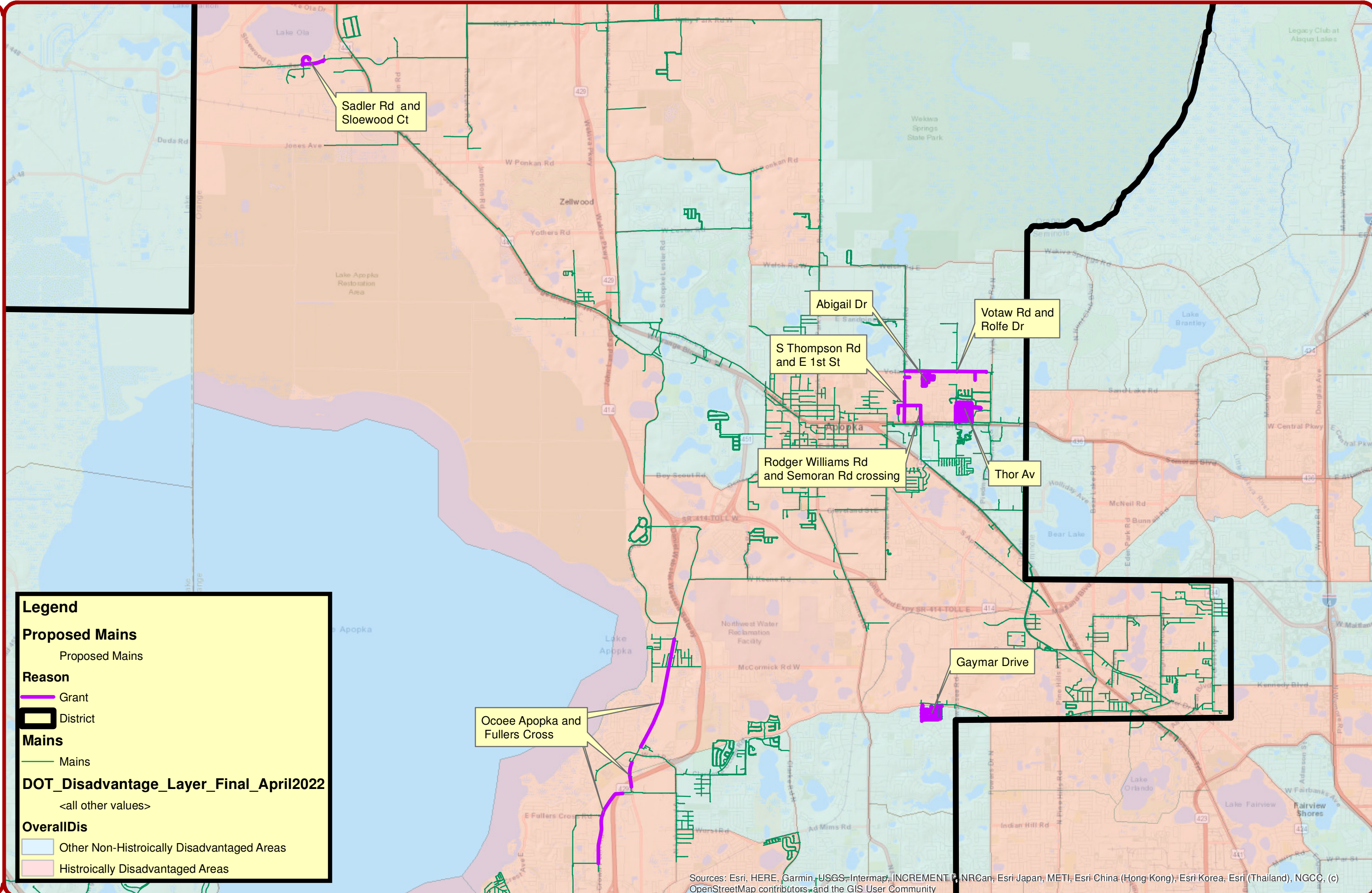
¹⁸ <https://www.regulations.gov/document/PHMSA-2022-0123-0002/comment>

replacements would be replacement by open trenching and that some may want to abandon the existing pipe rather than removing it for replacement. Any departures from methods described in the Tier 1 will require additional documentation from the project proponent, as reflected in this Tier 2.

As part of this Tier 2, PHMSA is soliciting public comments through a public comment period. This Tier 2 EA is available on PHMSA's website where comments can be submitted to the contact noted below. PHMSA will accept public comments for 30 days on this Tier 2 EA. PHMSA will consider comments received and incorporate them in the decision-making process. Consultation with appropriate agencies on related processes, regulations, and permits is ongoing. Please submit all comments to: PHMSABILgrantNEPAcomments@dot.gov and reference NGDISM-FY22-EA-2023-20 in your response.

Appendix A

Project Map



Appendix B

Air Quality

Table 1. Average methane emission factors for natural gas pipelines (adapted from EPA GHG Inventory, Annex 3.6, Table 3.6-2)

Pipeline Material	Pre-1990 Installation (kg/mile)	1990-2020 Installation (kg/mile)	Average Rate (kg/mile/year)
Cast Iron	4,597.40	1,157.30	2,877.35
Unprotected steel	2,122.30	861.3	1,491.80
Protected steel	59.1	96.7	77.90
Plastic	190.9	28.8	109.85

Table 2: No Action Leak Rate

Pipeline Material Type	Average Rate (kg/mile/year)	Miles	Current Methane Leak Rate (kg/year)
Cast Iron	4,597.40	0	0
Unprotected steel	2,122.30	13.13	27866
Protected steel	59.1	0	0
Plastic	190.9	0	0
Total Annual Methane Leak Rate			27866
20-year Methane Emissions			557316

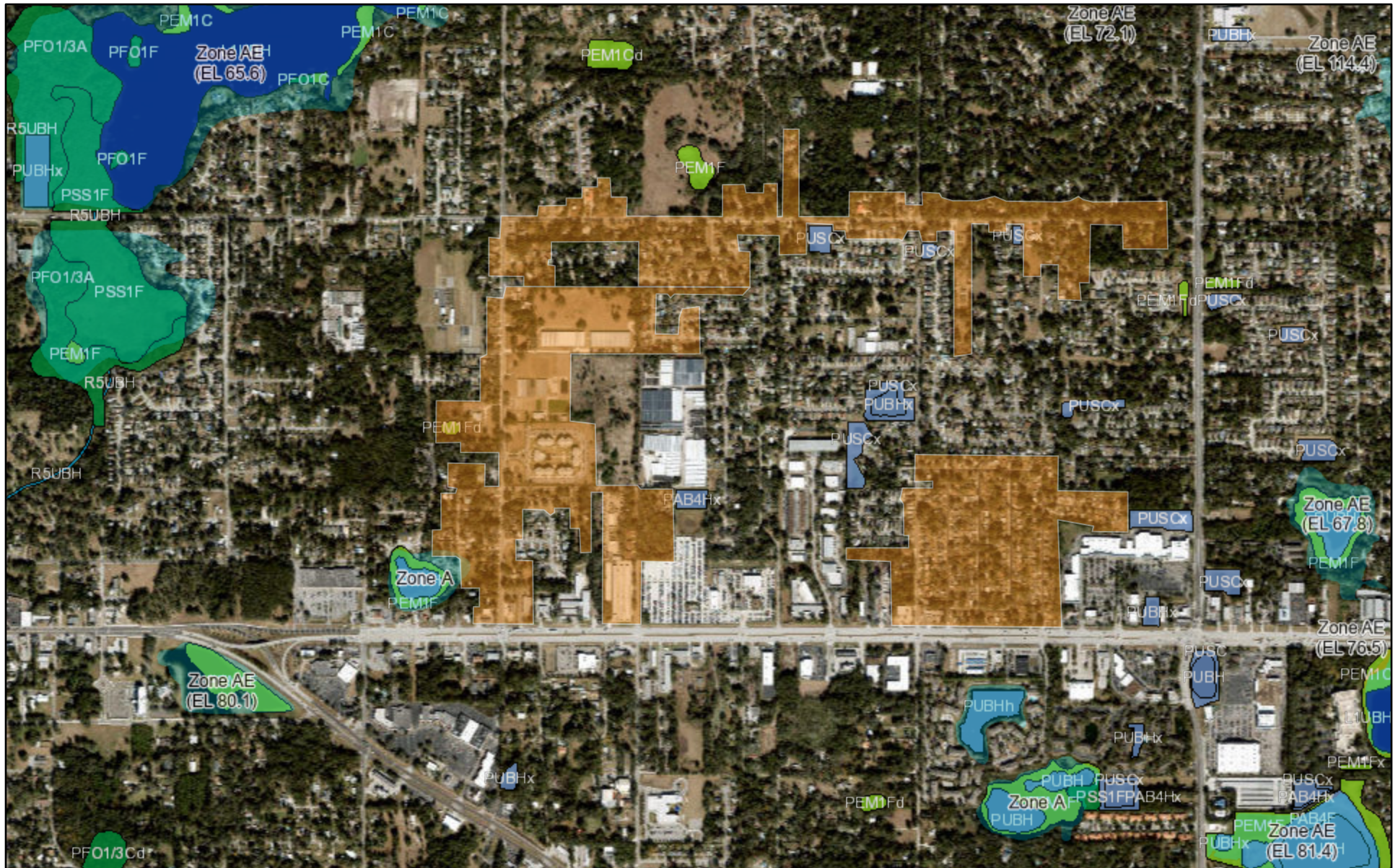
Table 3: Proposed Action Leak Rate

Pipeline Material Type	Average Rate (kg/mile/year)	Miles	New Methane Leak Rate (kg/year)
Plastic	28.8	13.13	378
Annual Methane Reduction			27488
20-year Methane Reduction			549753




















Appendix C

Water Resources

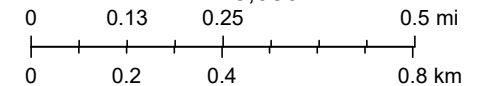
Water Resources



December 11, 2023

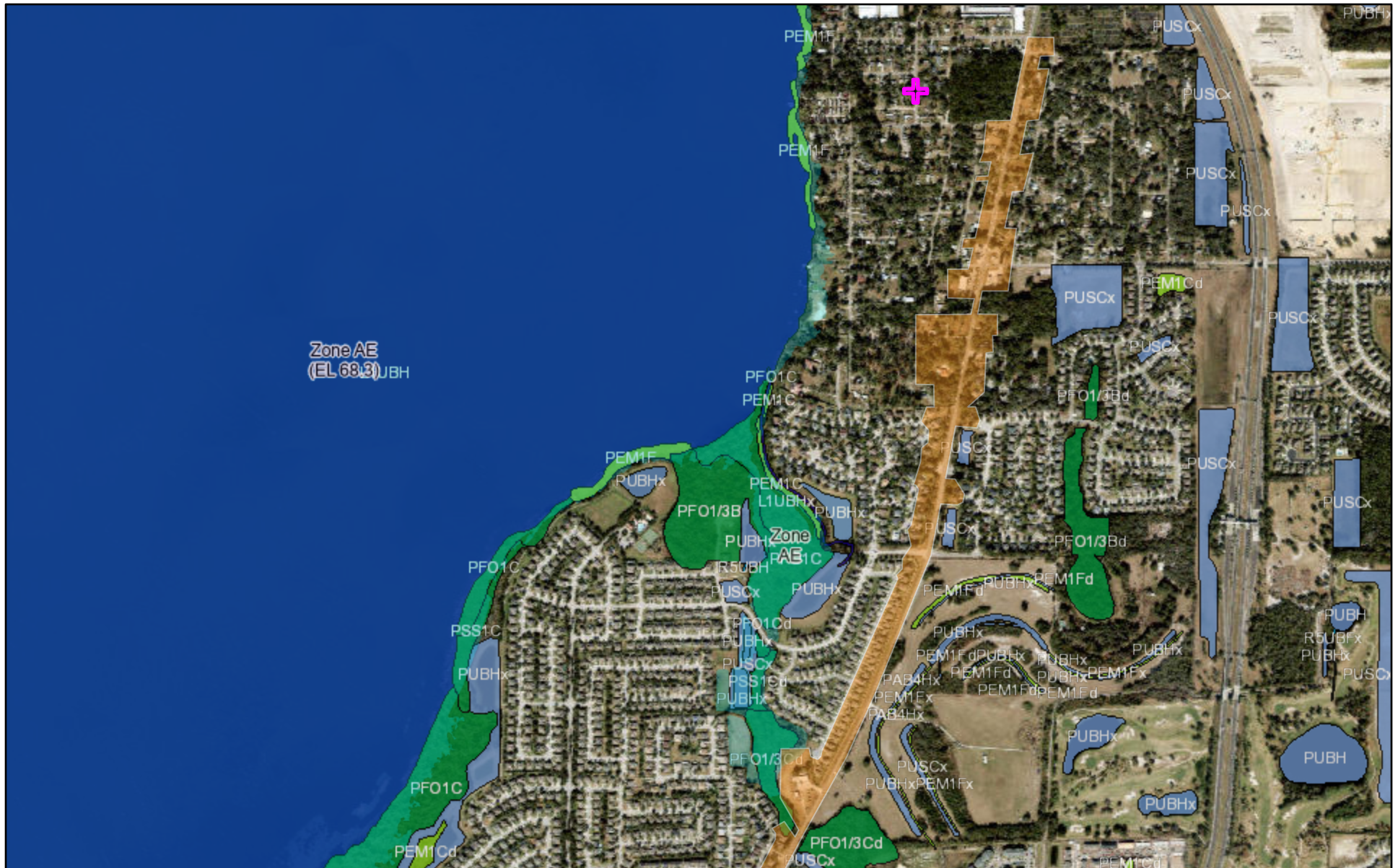
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|--|---|---|---|
|  project area |  Area of Undetermined Flood Hazard |  Wetlands |  Freshwater Pond |
|  Flood Hazard Zones |  0.2% Annual Chance Flood Hazard |  Estuarine and Marine Deepwater |  Lake |
|  1% Annual Chance Flood Hazard |  Future Conditions 1% Annual Chance Flood Hazard |  Estuarine and Marine Wetland |  Other |
|  Regulatory Floodway |  Area with Reduced Risk Due to Levee |  Freshwater Emergent Wetland |  Riverine |
|  Special Floodway |  Area with Risk Due to Levee |  Freshwater Forested/Shrub Wetland | |

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












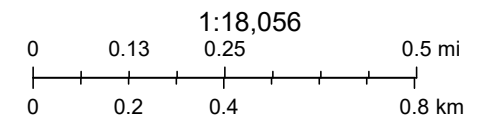
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wetlands_team@fws.gov, State of Florida, Maxar

Water Resources



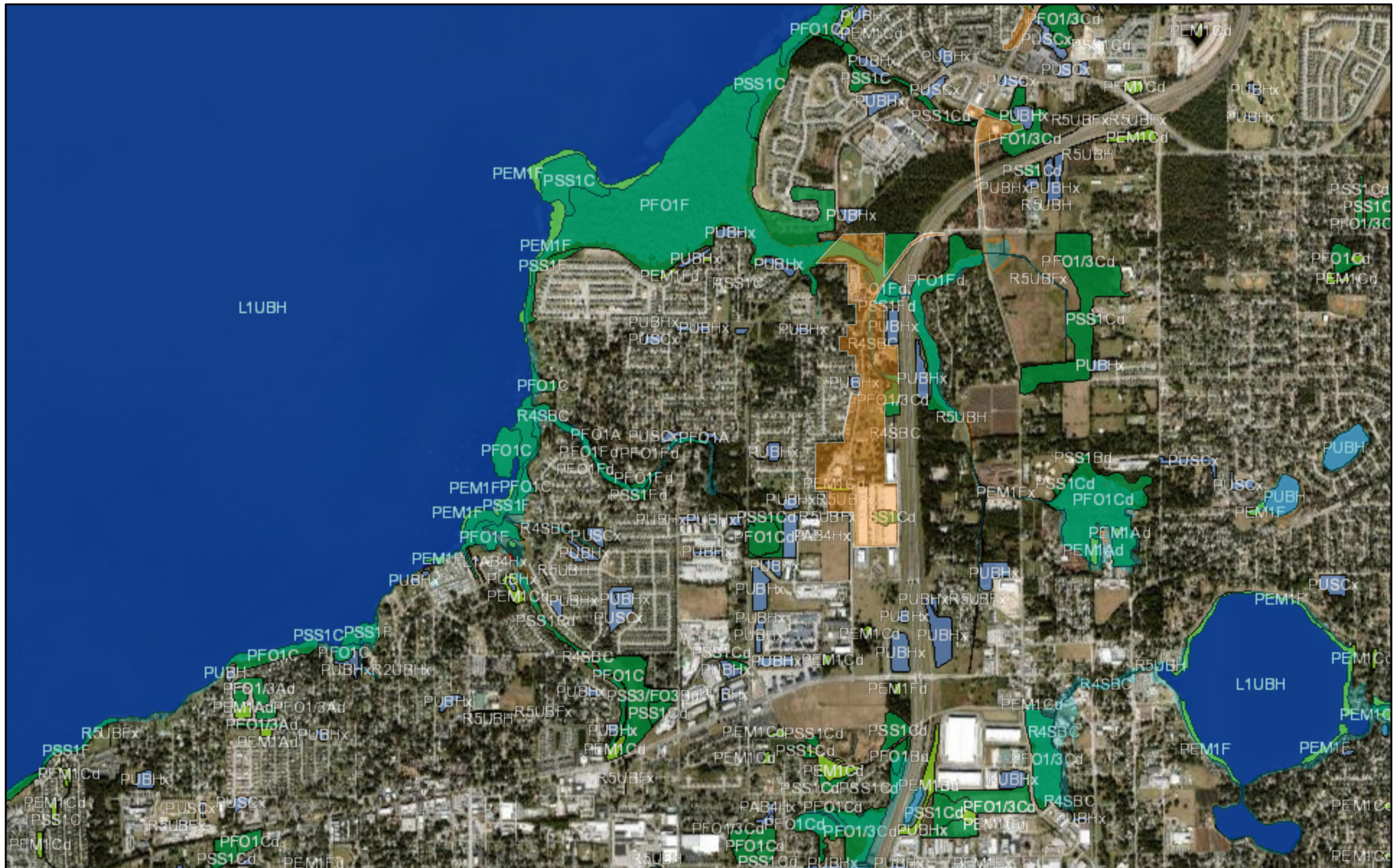
December 11, 2023

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|---|---|--|---|
|  project area |  Special Floodway |  Area with Risk Due to Levee |  Freshwater Forested/Shrub Wetland |
|  Search Result (point) |  Area of Undetermined Flood Hazard |  Wetlands |  Freshwater Pond |
|  Flood Hazard Zones |  0.2% Annual Chance Flood Hazard |  Estuarine and Marine Deepwater |  Lake |
|  1% Annual Chance Flood Hazard |  Future Conditions 1% Annual Chance Flood Hazard |  Estuarine and Marine Wetland |  Other |
|  Regulatory Floodway |  Area with Reduced Risk Due to Levee |  Freshwater Emergent Wetland |  Riverine |












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wetlands_team@fws.gov, State of Florida, Maxar





Water Resources

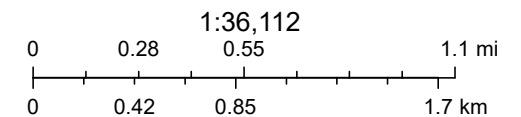


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- | | | | |
|--|-------------------------------|---|---|
|  | project area |  | Area of Undetermined Flood Hazard |
|  | 1% Annual Chance Flood Hazard |  | 0.2% Annual Chance Flood Hazard |
|  | Regulatory Floodway |  | Future Conditions 1% Annual Chance Flood Hazard |
|  | Special Floodway |  | Area with Reduced Risk Due to Levee |
| | |  | Area with Risk Due to Levee |

- Wetlands
- Estuarine and Marine Deepwater
 - Estuarine and Marine Wetland
 - Freshwater Emergent Wetland
 - Freshwater Forested/Shrub Wetland

-  Freshwater Pond
 Lake
 Other
 Riverine



U.S. Fish and Wildlife Service, National Standards and Support Team,
wetlands_team@fws.gov, State of Florida, Maxar

Water Resources



December 11, 2023

project area

Flood Hazard Zones

1% Annual Chance Flood Hazard

Regulatory Floodway

Special Floodway

Area of Undetermined Flood Hazard

0.2% Annual Chance Flood Hazard

Future Conditions 1% Annual Chance Flood Hazard

Area with Reduced Risk Due to Levee

Area with Risk Due to Levee

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

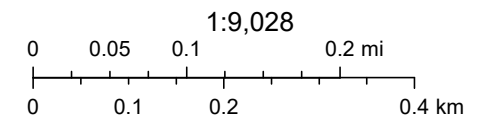
Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Other

Riverine



U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov, State of Florida, Maxar

Water Resources



December 11, 2023

project area

Flood Hazard Zones

1% Annual Chance Flood Hazard

Regulatory Floodway

Special Floodway

Area of Undetermined Flood Hazard

0.2% Annual Chance Flood Hazard

Future Conditions 1% Annual Chance Flood Hazard

Area with Reduced Risk Due to Levee

Area with Risk Due to Levee

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

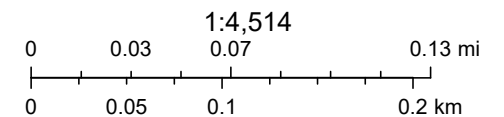
Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Other

Riverine



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wetlands_team@fws.gov, State of Florida, Maxar

Appendix D

Biological Resources



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Florida Ecological Services Field Office

1339 20th Street

Vero Beach, FL 32960-3559

Phone: (772) 562-3909 Fax: (772) 562-4288

Email Address: fw4flesregs@fws.gov

<https://www.fws.gov/office/florida-ecological-services>



In Reply Refer To:

December 10, 2023

Project Code: 2024-0024896

Project Name: LANGD Pipeline Replacement

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat.

Please include your Project Code, listed at the top of this letter, in all subsequent correspondence regarding this project. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of

this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Florida Ecological Services Field Office

1339 20th Street

Vero Beach, FL 32960-3559

(772) 562-3909

PROJECT SUMMARY

Project Code: 2024-0024896
Project Name: LANGD Pipeline Replacement
Project Type: Pipeline - Onshore - Maintenance / Modification - Below Ground
Project Description: PHMSA is assessing impacts associated with the Lake Apopka Natural Gas District (LANGD) Infrastructure Improvement Project which would replace approximately 13.13 miles of existing vintage steel and vintage plastic polyethylene (PE) pipe in multiple areas of the system with modern PE pipe. All work would take place within the existing transportation and utility right-of-way. The new pipe would be installed using horizontal directional drilling (HDD) with excavation at entry and exit points.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@28.67235225,-81.4724359735656,14z>



Counties: Orange and Seminole counties, Florida

ENDANGERED SPECIES ACT SPECIES

There is a total of 17 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.
-

BIRDS

NAME	STATUS
Crested Caracara (audubon"s) [fl Dps] <i>Polyborus plancus audubonii</i> Population: FL DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8250	Threatened
Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477	Threatened
Everglade Snail Kite <i>Rostrhamus sociabilis plumbeus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7713	Endangered
Florida Scrub-jay <i>Aphelocoma coerulescens</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6174	Threatened
Whooping Crane <i>Grus americana</i> Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/758	Experimental Population, Non-Essential
Wood Stork <i>Mycteria americana</i> Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8477 General project design guidelines: https://ipac.ecosphere.fws.gov/project/XPHXALSCZVEQLK2SRPXTWIKQIA/documents/generated/6954.pdf	Threatened

REPTILES

NAME	STATUS
Eastern Indigo Snake <i>Drymarchon couperi</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/646	Threatened
Sand Skink <i>Neoseps reynoldsi</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4094	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

FLOWERING PLANTS

NAME	STATUS
Beautiful Pawpaw <i>Deeringothamnus pulchellus</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4069	Endangered
Britton's Beargrass <i>Nolina brittoniana</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4460	Endangered
Florida Bonamia <i>Bonamia grandiflora</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2230	Threatened
Papery Whitlow-wort <i>Paronychia chartacea</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1465	Threatened
Pigeon Wings <i>Clitoria fragrans</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/991	Threatened
Pygmy Fringe-tree <i>Chionanthus pygmaeus</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1084	Endangered
Sandlace <i>Polygonella myriophylla</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5745	Endangered
Scrub Lupine <i>Lupinus aridorum</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/736	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

-
1. The [Bald and Golden Eagle Protection Act](#) of 1940.
 2. The [Migratory Birds Treaty Act](#) of 1918.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Kestrel <i>Falco sparverius paulus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9587	Breeds Apr 1 to Aug 31
Bachman's Sparrow <i>Aimophila aestivalis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6177	Breeds May 1 to Sep 30
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31
Black Skimmer <i>Rynchops niger</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234	Breeds May 20 to Sep 15
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Great Blue Heron <i>Ardea herodias occidentalis</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/10590	Breeds Jan 1 to Dec 31
Henslow's Sparrow <i>Ammodramus henslowii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3941	Breeds elsewhere

NAME	BREEDING SEASON
King Rail <i>Rallus elegans</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8936	Breeds May 1 to Sep 5
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Magnificent Frigatebird <i>Fregata magnificens</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9588	Breeds Oct 1 to Apr 30
Painted Bunting <i>Passerina ciris</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9511	Breeds Apr 25 to Aug 15
Pectoral Sandpiper <i>Calidris melanotos</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9561	Breeds elsewhere
Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9513	Breeds May 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Swallow-tailed Kite <i>Elanoides forficatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8938	Breeds Mar 10 to Jun 30
Willet <i>Tringa semipalmata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10669	Breeds Apr 20 to Aug 5



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

Due to your project's size, the list below may be incomplete, or the acreages reported may be inaccurate. For a full list, please contact the local U.S. Fish and Wildlife office or visit <https://www.fws.gov/wetlands/data/mapper.HTML>

LAKE

- L1UBH
- L2AB4H
- L2AB4F
- L1UBHx
- L1UBKx
- L2ABH
- L1AB4H

FRESHWATER FORESTED/SHRUB WETLAND

- PFO1/3A
 - PFO4Cd
 - PSS1/3C
 - PFO1Ad
 - PFO1/3Bd
 - PFO2F
 - PSS1Fd
 - PFO1A
 - PFO1Fd
 - PFO1/3B
 - PSS1Bd
 - PSS1A
 - PFO4C
 - PFO1Cd
 - PFO1C
 - PSS3/FO3B
-

- PSS1F
- PSS1Cd
- PFO1/3Ad
- PFO2Cd
- PFO1/3Cd
- PFO1/3C
- PSS1B
- PSS1C
- PFO1F

FRESHWATER EMERGENT WETLAND

- PEM1Cd
- PEM1Bd
- PEM1F
- PEM1Fx
- PEM1Fd
- PEM1B
- PEM1C
- PEM1Ad
- PEM1/SS1F
- PEM1A

FRESHWATER POND

- PAB4F
 - PUBHh
 - PAB4H
 - PAB4Fd
 - PUBHx
 - PUBH
 - PAB4Hx
-

IPAC USER CONTACT INFORMATION

Agency: Pipeline and Hazardous Materials Safety Administration

Name: Travis Mast

Address: 55 Broadway

City: Cambridge

State: MA

Zip: 01452

Email: travis.mast@dot.gov

Phone: 6174943782

Appendix E

Cultural Resources



U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

January 10, 2024

Alissa Slade Lotane
Director
Florida Division of Historical Resources
R.A. Gray Building
500 South Bronough Street
Tallahassee, Florida 32399-0250

Section 106 Consultation: PHMSA Pipeline Replacement Project in Lake Apopka, Florida

Grant Recipient: Lake Apopka Natural Gas District

Project Location: Lake Apopka, Orange County, Florida

Dear Alissa Slade Lotane:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) provides funds authorized under the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program. PHMSA proposes to provide funds to the Lake Apopka Natural Gas District (LANGD) for the replacement of pipeline (Undertaking). PHMSA is initiating consultation for the above referenced Undertaking in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated implementing regulations, 36 CFR Part 800 (Section 106).

Project Description/Background

The Undertaking involves the replacement of 13.13 miles of pre-code, 1950s coated steel and leak-prone plastic Aldyl-A polyethylene (PE) pipe in multiple areas of the LANGD with modern PE pipe. All work will occur within the existing right-of-way (ROW) or utility easements. The existing pipes include 2-inch, 4-inch, and 6-inch steel mains and 2-inch Aldyl-A PE pipe. The replacement pipelines will be installed approximately 4 to 5 feet from the existing pipelines on the side furthest from the road. Construction methods will include horizontal directional drilling (HDD) and cut and cover (trenching). The expected width of ground disturbance to set the HDD is 4 feet by 4 feet, and the maximum depth of ground disturbance will be 5 feet below grade.

In addition, 156 steel service lines will be replaced within existing utility easements. The replacement service lines will extend from the location of the replacement pipeline to the side of the building where the existing riser and service meter are located. Ground disturbance for the service line work will involve a 1-foot by 1-foot hole at the service meter for directional boring and with a depth of 2 feet. A 4-foot by 4-foot hole will be dug where the bore enters the ground to reach the service and tie in the service to the main line.

The staging area for the Undertaking will be located at LANGD's yard at 1320 Winter Garden Vineland Road in the City of Winter Garden, which is entirely paved. Project location maps are enclosed in **Attachment A**. Photographs showing the overall character of the project areas are included in **Attachment B**.

Area of Potential Effects (APE)

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the Undertaking may directly or indirectly affect historic resources. Due to the scale and nature of the Undertaking, which is limited to the replacement of pipelines within existing ROW, PHMSA has delineated the APE for this Undertaking to encompass the existing ROW, adjacent parcels where the service line replacements will be located, and the staging area at 1320 Winter Garden Vineland Road in the City of Winter Garden. The APE includes the limits of disturbance and any staging and access areas. The APE extends to the depth of proposed ground disturbance of up to 5 feet below grade. The Undertaking does not have the potential to cause visual or audible effects after the completion of construction. The APE is shown on the maps in **Attachment A**.

Identification and Evaluation

To identify historic properties in the APE, U.S. Department of Transportation (U.S. DOT) staff who meet the Secretary of the Interior's (SOI) Professional Qualification Standards reviewed available information on previously identified historic properties in the APE, including the National Register of Historic Places (NRHP) database and data received from the Florida Division of Historical Resources, the USDA Soil Survey database, topographic maps and historic aerial photographs. U.S. DOT staff also conducted research to determine if there are any previously unidentified properties within the APE that are 45 years of age or older and may be eligible for the NRHP.

Historic Architecture

There are no NRHP-listed above-ground resources within the APE. Additionally, a search of the data received from the Florida Division of Historical Resources found no known NRHP-eligible above-ground resources within the APE. Due to the scale and nature of the Undertaking, which is limited to the replacement of pipelines and service lines within existing ROW and utility easements, the identification effort for above-ground resources focused on identifying properties that could experience diminished integrity as a result of the Undertaking. While the service line replacements will take place leading up to buildings, the project will be limited to below-ground construction, and no alterations to the buildings are anticipated. Furthermore, the work will not have any lasting visual effects. A review of the APE found no potentially significant above-ground resources that have the potential to be affected by the Undertaking.

Archaeology

There are no known archaeological sites within the APE. 17 known archaeological sites are located within one mile of the APE; none of the 17 sites are listed or have been determined eligible for listing in the NRHP. Five sites are unevaluated or require additional information to determine if they are eligible for the NRHP. A list of the known sites within one mile of the APE and their eligibility status are included in Table 1 below.

Table 1. Archaeological Sites within one mile of the APE.

Site Number	NRHP Eligibility Status
OR00491	Unevaluated
OR00509	Unevaluated
OR00519	Unevaluated
OR03520	Unevaluated
OR09165	Unevaluated

Site Number	NRHP Eligibility Status
OR04337	Not Eligible
OR04338	Not Eligible
OR04339	Not Eligible
OR04340	Not Eligible
OR04342	Not Eligible
OR06051	Not Eligible
OR06052	Not Eligible
OR09178	Not Eligible
OR09574	Not Eligible
OR09582	Not Eligible
OR06059	Not Eligible
OR06060	Not Eligible

Soils within the APE range from very poorly drained to excessively drained, with excessively drained soils comprising the most frequent soil type. Poor soil drainage typically coincides with the presence of lakes, swamps, and wetlands. There are several lakes adjacent to the APE, including Lake Apopka, Lake McCoy, and Lake Ola. Various other lakes, ponds, and wetlands intersect and surround the APE. The soil types within the APE are included in Table 2. These variables indicate a higher cultural resource potential. However, no prehistoric archaeological sites have been recorded here previously. Furthermore, topographic maps and historic aerial photographs from the 1950s indicate that the area within the APE has been heavily developed since then. Aerial photographs from the 1950s show that the area had been parceled out and heavily developed within the APE from the 1950s to the present.

Table 2. Soil types within the APE

Soil Type	Percent of APE
Tavares fine sand-Urban land complex, 0 to 5 percent slopes	21.40%
Candler-Urban land complex, 0 to 5 percent slopes	21.30%
Tavares-Millhopper fine sands, 0 to 5 percent slopes	9.90%
Zolfo fine sand, 0 to 2 percent slopes	7.30%
Tavares fine sand, 0 to 5 percent slopes	6.60%
Smyrna-Smyrna, wet, fine sand, 0 to 2 percent slopes	6.50%
Basinger fine sand, frequently ponded, 0 to 1 percent slopes	5.50%
Candler fine sand, 0 to 5 percent slopes	5.30%
Immokalee fine sand	3.60%

Soil Type	Percent of APE
Candler-Urban land complex, 5 to 12 percent slopes	3.40%
Felda fine sand, 0 to 2 percent slopes, frequently flooded	2.20%
Candler-Apopka fine sands, 5 to 12 percent slopes	1.50%
Ona fine sand, 0 to 2 percent slopes	1.00%
Other	4.3%

The APE is limited to the existing ROW, some of which has been previously disturbed up to the proposed ground disturbance depth of 5 feet due to prior pipeline installation. Furthermore, existing utility easements contain buried electric, water, sewer, and communications utilities, and the staging area for this Undertaking will be confined to a paved surface. Work for the replacement of service lines will occur using the HDD method, which decreases the amount of ground disturbance. Due to the lack of significant archaeological sites in the vicinity of the APE and the previous ground disturbance that has occurred through the years, there is low probability for intact significant archaeological resources to be present in the APE, and no archaeological survey is recommended at this time.

Determination of Effect

Based on the aforementioned identification and evaluation, PHMSA finds that there are no historic properties as defined in 36 CFR 800.16(l) within the APE. Therefore, in accordance with 36 CFR Part 800.4(d)(1), PHMSA has determined the Undertaking will result in No Historic Properties Affected.

Consulting Party Outreach

PHMSA will also invite the following federally recognized tribes to participate in consultation by separate letter:

- Coushatta Tribe of Louisiana
- Miccosukee Tribe of Indians
- Muscogee (Creek) Nation

PHMSA sought to identify additional consulting parties that may be interested in the Undertaking and its effects on historic properties; however, the APE is in an area where no historical societies or additional consulting parties with a potential interest in the Undertaking were identified. However, PHMSA requests that the Florida Division of Historical Resources inform the agency if they are aware of any additional parties that should be consulted. If any consulting party expresses concerns about the Undertaking's potential effects to historic properties, PHMSA will consult with the party to resolve those concerns prior to project implementation.

Request for Section 106 Concurrence

Based on the information presented above, PHMSA has determined that the Undertaking will result in No Historic Properties Affected. PHMSA is submitting this Undertaking to your office for your review and comment. PHMSA requests your concurrence with this determination of effect within 30 calendar days of the date of this letter. Should you need additional information please contact Amy Hootman, Section 106 specialist, at PHMSASection106@dot.gov or 857-998-9981.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Fuller". The signature is fluid and cursive, with the first name "Matt" and last name "Fuller" clearly distinguishable.

Matt Fuller
Senior Environmental Protection Specialist

MF/ah

cc: Shelby Hanchera, Environmental Protection Specialist, USDOT Volpe Center
Damond Smith, PHMSA Grant Specialist
Samuel Davis Jr., Lake Apopka Natural Gas District
Patrick Nguyen, Lake Apopka Natural Gas District
Maribel Brinkle, President, The Apopka Historical Society and Museum
Pamela Schwartz, Executive Director, Historical Society of Central Florida

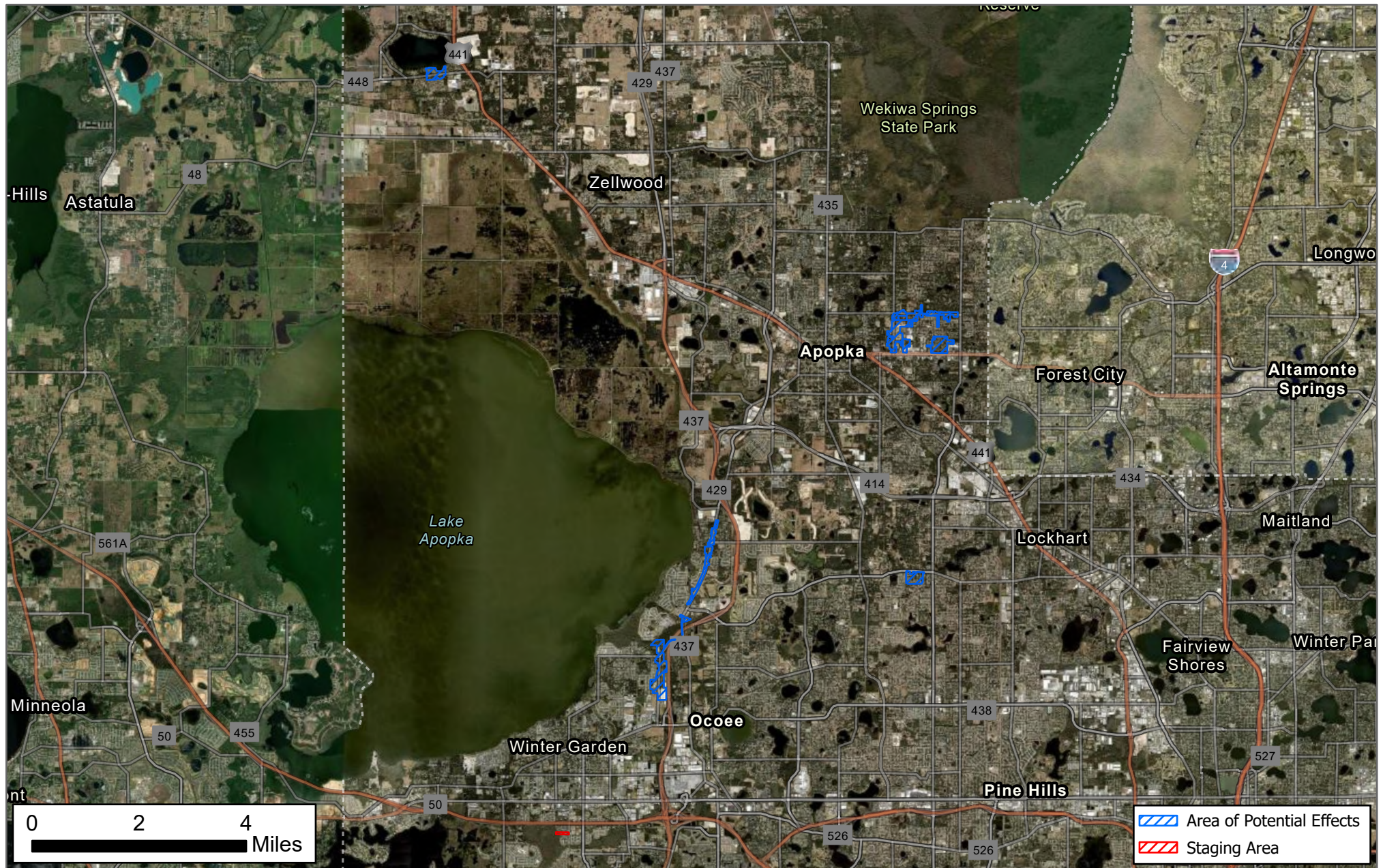
Enclosures:

Attachment A: Project Location and APE Maps
Attachment B: Project Area Photographs

ATTACHMENT A

Project Location and APE Maps

Area of Potential Effects Map

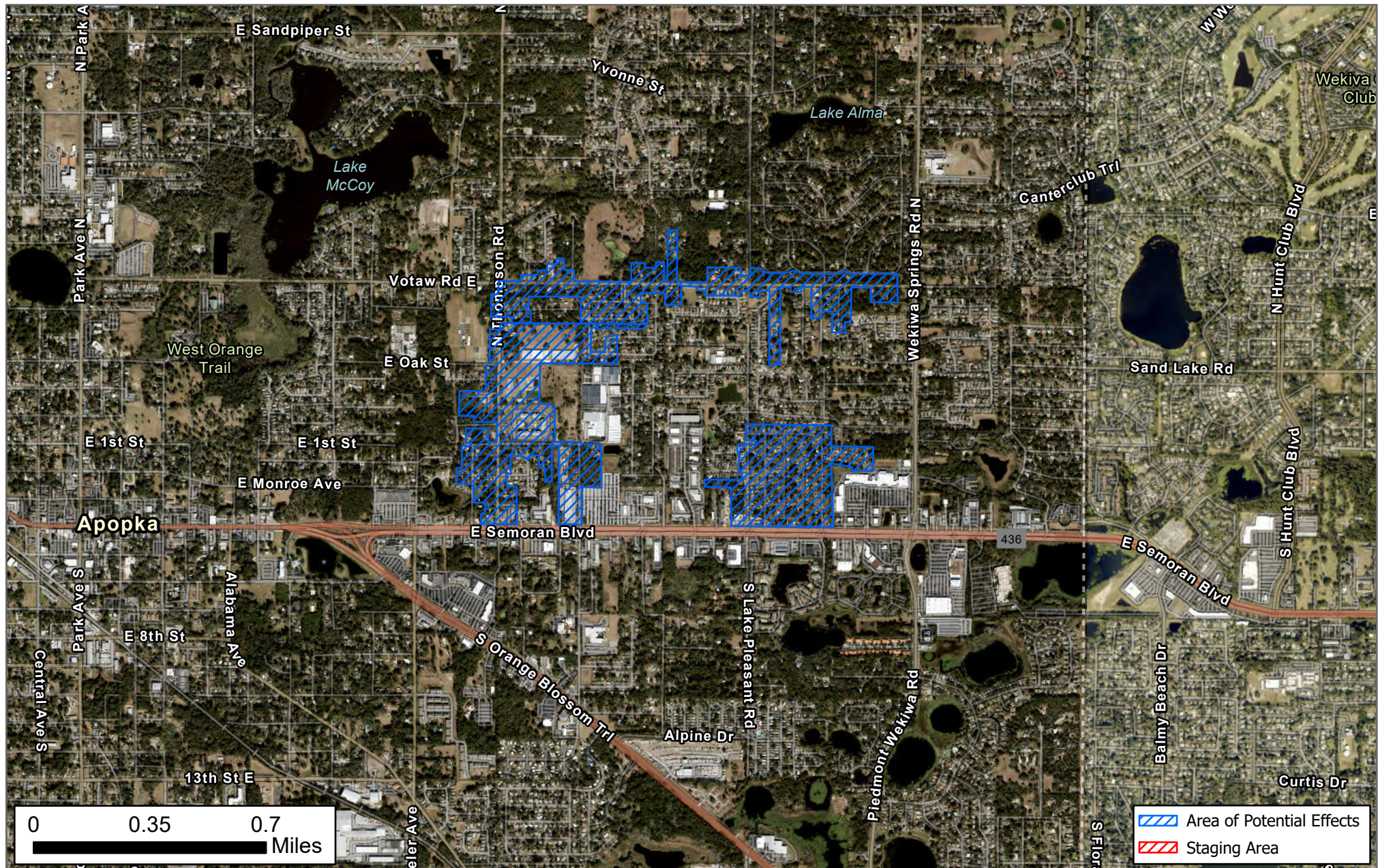


Name: Lake Apopka, Florida Gas Line Replacement
Scale: 160,000
Total Acreage: 527
Orange and Lake Counties, FL



Service Layer Credits: State of Florida, Earthstar Geographics, County of Orange, FL, FDEP, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA

Area of Potential Effects Map

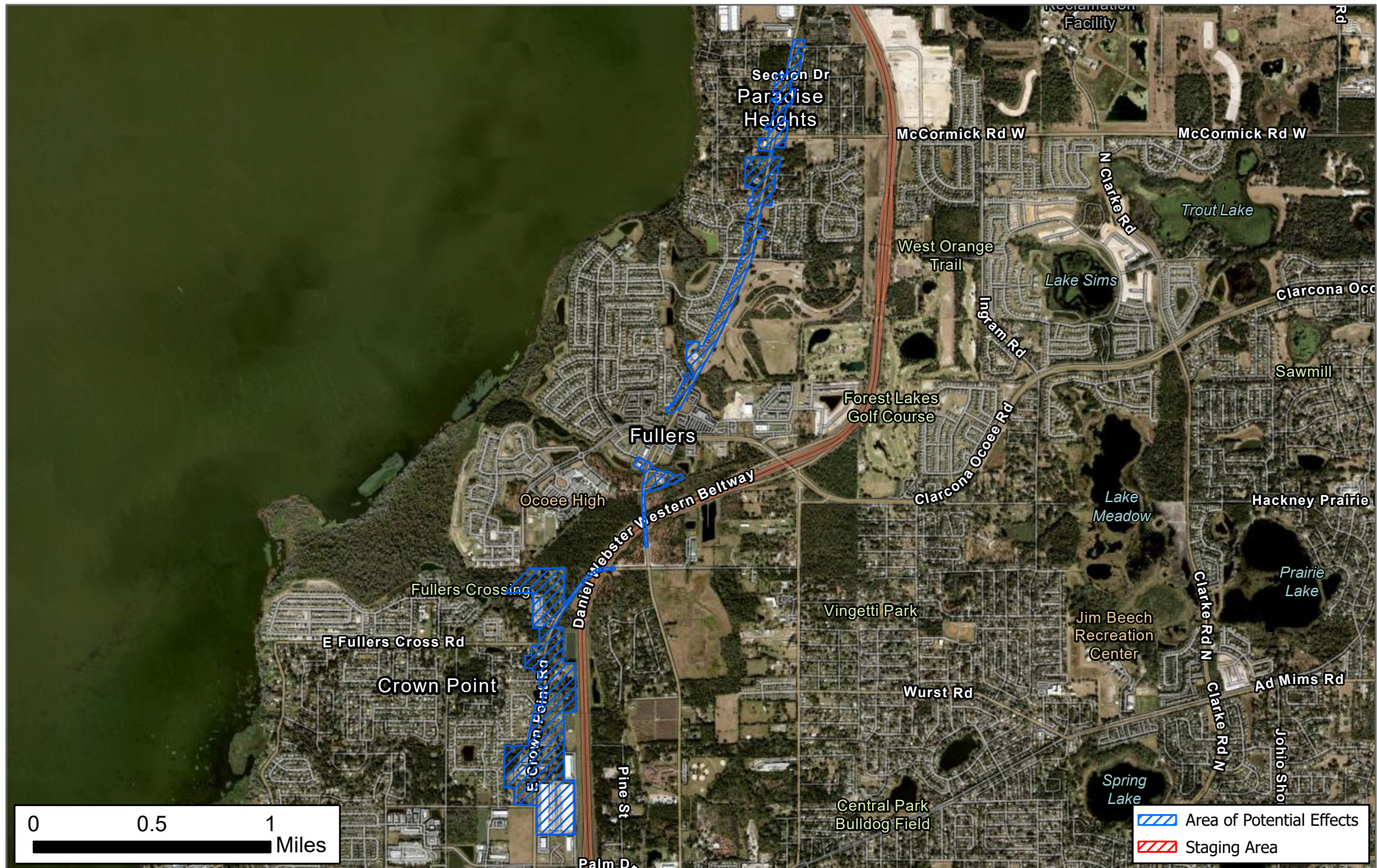


Name: Lake Apoka, Florida Gas Line Replacement
Scale: 25,000
Total Acreage: 242
Orange and Lake Counties, FL



Service Layer Credits: County of Orange, FL, FDEP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, State of Florida, Maxar

Area of Potential Effects Map



Name: Lake Apopka, Florida Gas Line Replacement
Scale: 35,000
Total Acreage: 527
Orange and Lake Counties, FL



Service Layer Credits: County of Orange, FL, FDEP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, State of Florida, Maxar

Area of Potential Effects Map

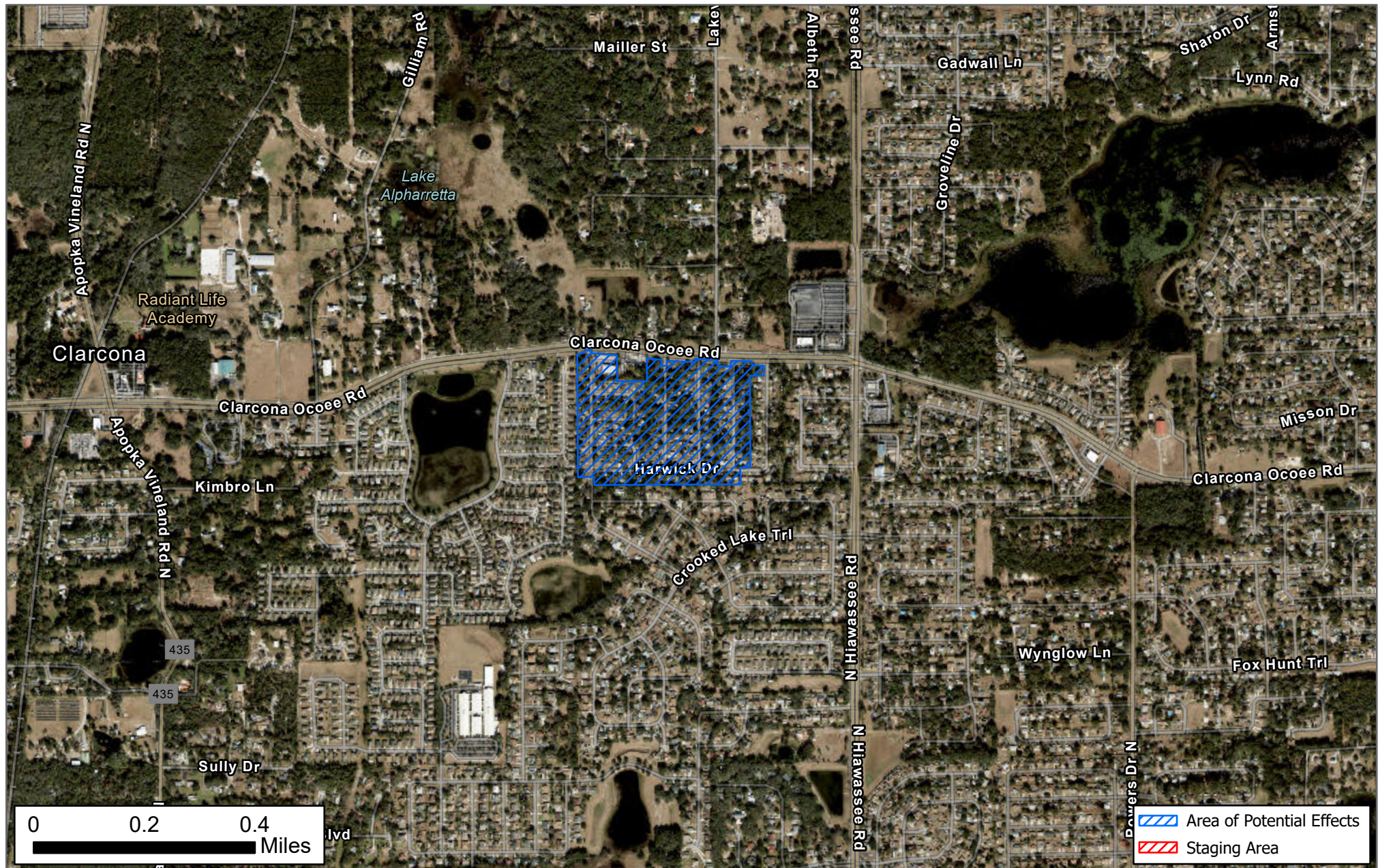


Name: Lake Apopka, Florida Gas Line Replacement
Scale: 35,000
Total Acreage: 43
Orange and Lake Counties, FL



Service Layer Credits: County of Orange, FL, FDEP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, State of Florida, Maxar

Area of Potential Effects Map



Name: Lake Apopka, Florida Gas Line Replacement
Scale: 15,000
Total Acreage: 43
Orange and Lake Counties, FL



Service Layer Credits: State of Florida, Maxar, Esri Community Maps Contributors, County of Orange, FL, FDEP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

Area of Potential Effects Map



Name: Lake Apopka, Florida Gas Line Replacement
Scale: 90,000
Total Acreage: 6.5
Orange and Lake Counties, FL



Service Layer Credits: State of Florida, Maxar, Esri Community Maps Contributors, County of Orange, FL, FDEP, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

ATTACHMENT B

Photographs

Project Right-of-Way



Project Right-of-Way



Staging Area



Services to be replaced



ATTACHMENT C

Consulting Party Response Form

Section 106 Consulting Party Response Form

Pipeline and Hazardous Materials Safety Administration (PHMSA)

Natural Gas Distribution Infrastructure Safety and Modernization Grant Program

Project Name/Location:

Date:

Organization:

Name:

Affiliation:

Address:

Phone Number:

E-mail:

Please check one of the following:

- ☐ **Yes**, I, or my organization, would like to participate in consultation on the project's potential effects to historic properties. I, or my organization, has a legal or economic relation to the project or affected properties or have a concern with the project's effects on historic properties.
- ☐ **No**, I, or my organization, do(es) not wish to participate as a consulting party for the project.

Do you know of any other potential consulting parties that should be contacted? If so, please list the name, email, or other contact information below.

Comments:

Please return by:

Please return to: Katheryn Giraldo
USDOT Volpe Center
220 Binney Street, Cambridge, MA
E-mail: PHMSASection106@dot.gov

Appendix F

Environmental Justice



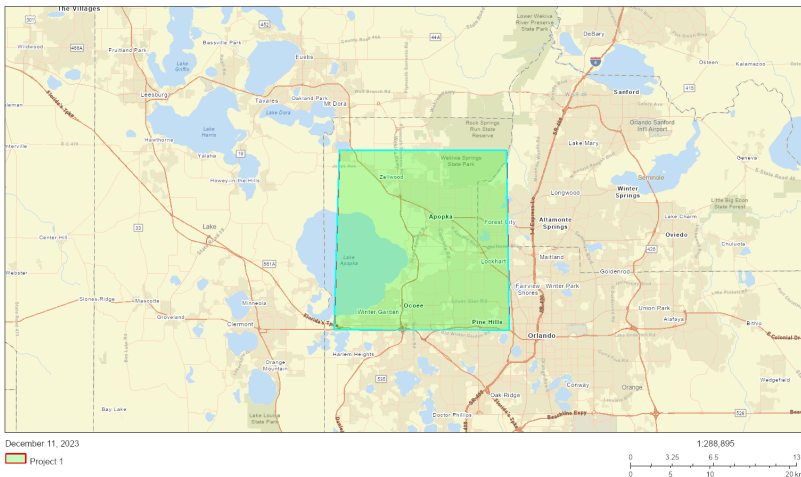
EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

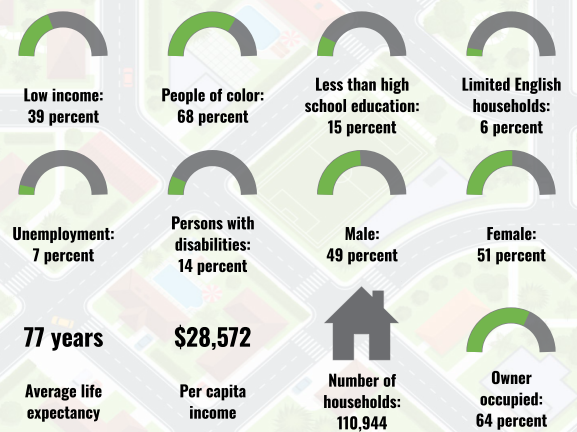
Apopka, FL

the User Specified Area
Population: 348,096
Area in square miles: 187.91

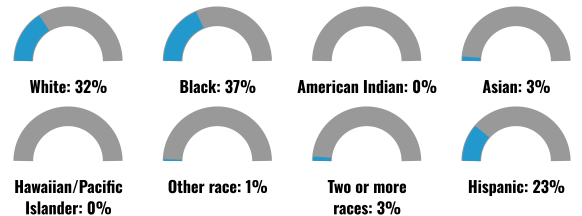
A3 Landscape



COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE



LIMITED ENGLISH SPEAKING BREAKDOWN



Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	69%
Spanish	19%
French, Haitian, or Cajun	8%
Other Indo-European	1%
Vietnamese	1%
Total Non-English	31%

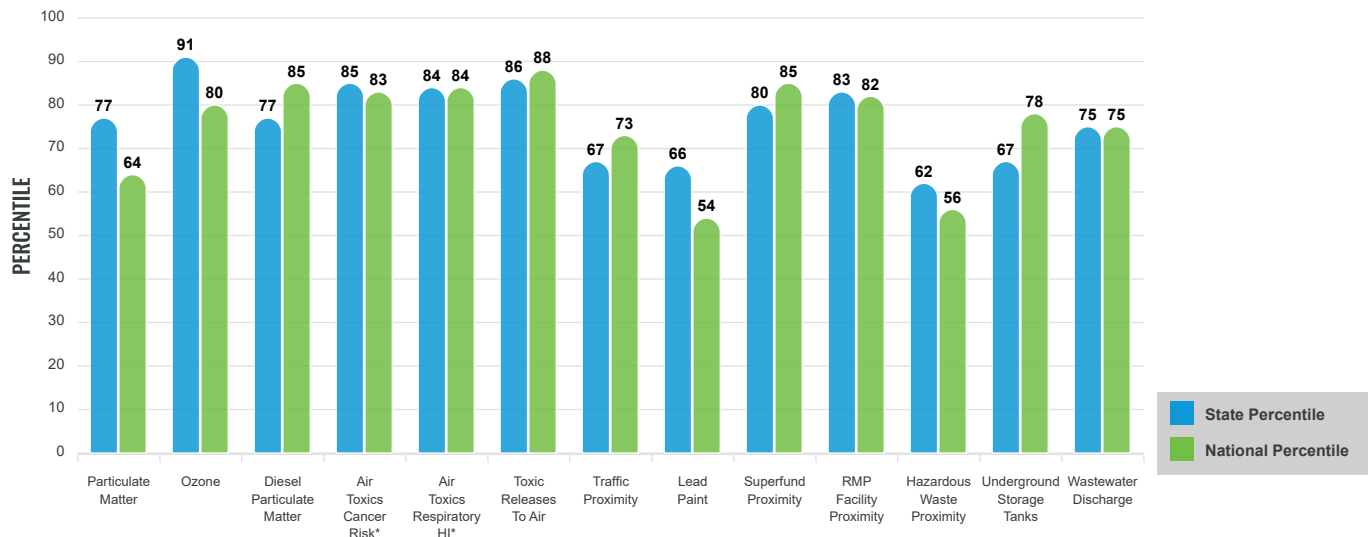
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the [EJScreen website](#).

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

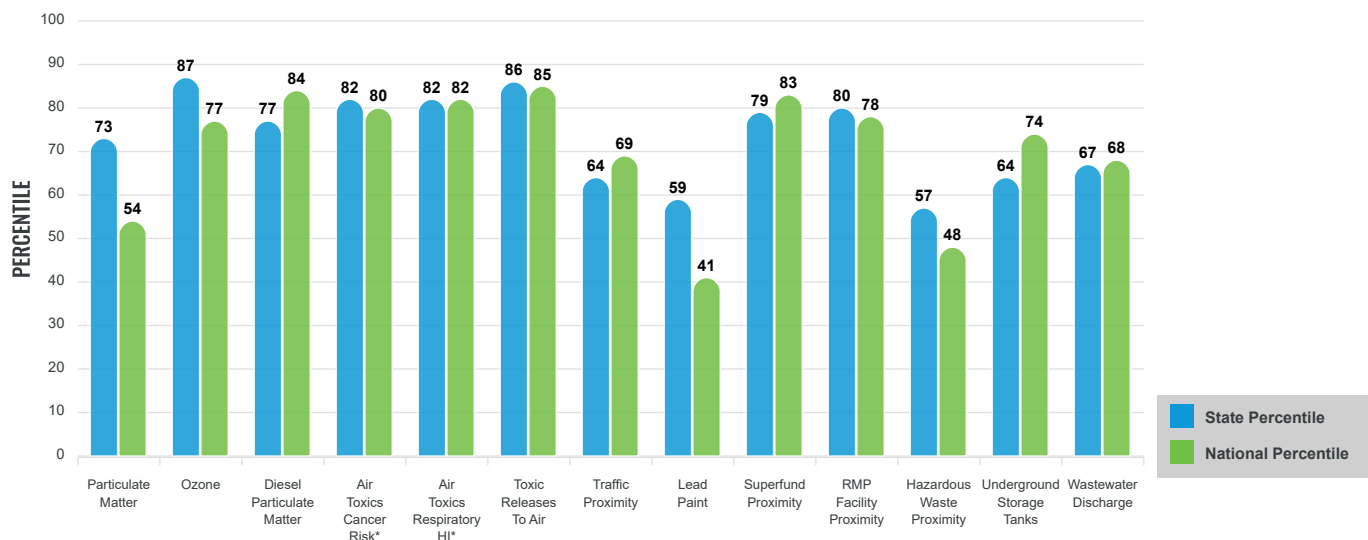
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for the User Specified Area

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter ($\mu\text{g}/\text{m}^3$)	7.59	7.52	60	8.08	34
Ozone (ppb)	62.4	59.4	81	61.6	59
Diesel Particulate Matter ($\mu\text{g}/\text{m}^3$)	0.354	0.293	69	0.261	77
Air Toxics Cancer Risk* (lifetime risk per million)	30	25	1	25	5
Air Toxics Respiratory HI*	0.36	0.32	11	0.31	31
Toxic Releases to Air	2,700	1,900	86	4,600	77
Traffic Proximity (daily traffic count/distance to road)	110	160	57	210	59
Lead Paint (% Pre-1960 Housing)	0.088	0.14	63	0.3	33
Superfund Proximity (site count/km distance)	0.14	0.13	74	0.13	76
RMP Facility Proximity (facility count/km distance)	0.51	0.31	84	0.43	77
Hazardous Waste Proximity (facility count/km distance)	0.18	0.52	49	1.9	33
Underground Storage Tanks (count/km ²)	4.4	7	58	3.9	75
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.31	0.52	88	22	87
SOCIOECONOMIC INDICATORS					
Demographic Index	53%	39%	72	35%	77
Supplemental Demographic Index	17%	15%	67	14%	70
People of Color	68%	45%	72	39%	77
Low Income	39%	33%	64	31%	67
Unemployment Rate	7%	5%	73	6%	71
Limited English Speaking Households	6%	7%	69	5%	78
Less Than High School Education	15%	11%	72	12%	71
Under Age 5	7%	5%	72	6%	67
Over Age 64	13%	23%	32	17%	38
Low Life Expectancy	19%	19%	50	20%	49

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

Sites reporting to EPA within defined area:

Superfund	1
Hazardous Waste, Treatment, Storage, and Disposal Facilities	1
Water Dischargers	
..	1364
Air Pollution	95
Brownfields	21
Toxic Release Inventory	38

Other community features within defined area:

Schools	62
Hospitals	6
Places of Worship	153

Other environmental data:

Air Non-attainment	No
Impaired Waters	Yes

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

Report for the User Specified Area

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	19%	19%	50	20%	49
Heart Disease	6.1	7.2	36	6.1	50
Asthma	9.6	8.7	80	10	43
Cancer	5.4	6.9	29	6.1	31
Persons with Disabilities	13.1%	13.9%	49	13.4%	53

CLIMATE INDICATORS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	4%	26%	20	12%	36
Wildfire Risk	19%	32%	61	14%	83

CRITICAL SERVICE GAPS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	12%	13%	56	14%	54
Lack of Health Insurance	16%	13%	70	9%	85
Housing Burden	Yes	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Footnotes

Report for the User Specified Area



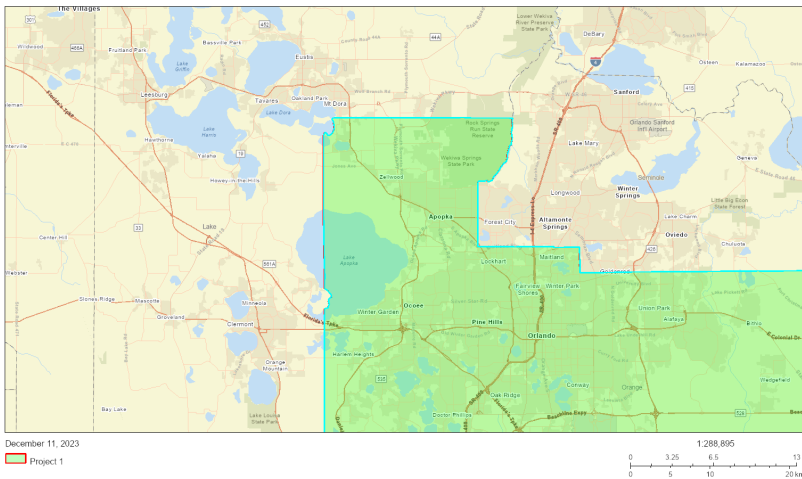
EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

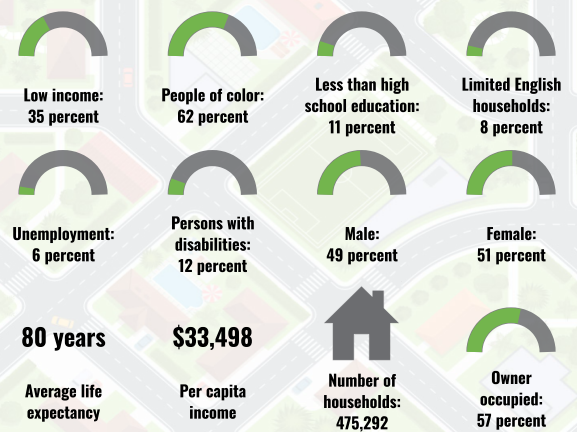
Orange County, FL

County: Orange
Population: 1,409,949
Area in square miles: 1003.43

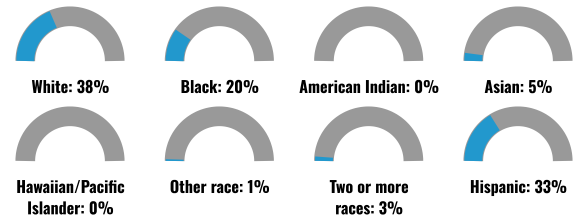
A3 Landscape



COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE



LIMITED ENGLISH SPEAKING BREAKDOWN



LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	63%
Spanish	26%
French, Haitian, or Cajun	4%
Other Indo-European	3%
Chinese (including Mandarin, Cantonese)	1%
Vietnamese	1%
Other Asian and Pacific Island	1%
Arabic	1%
Total Non-English	37%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

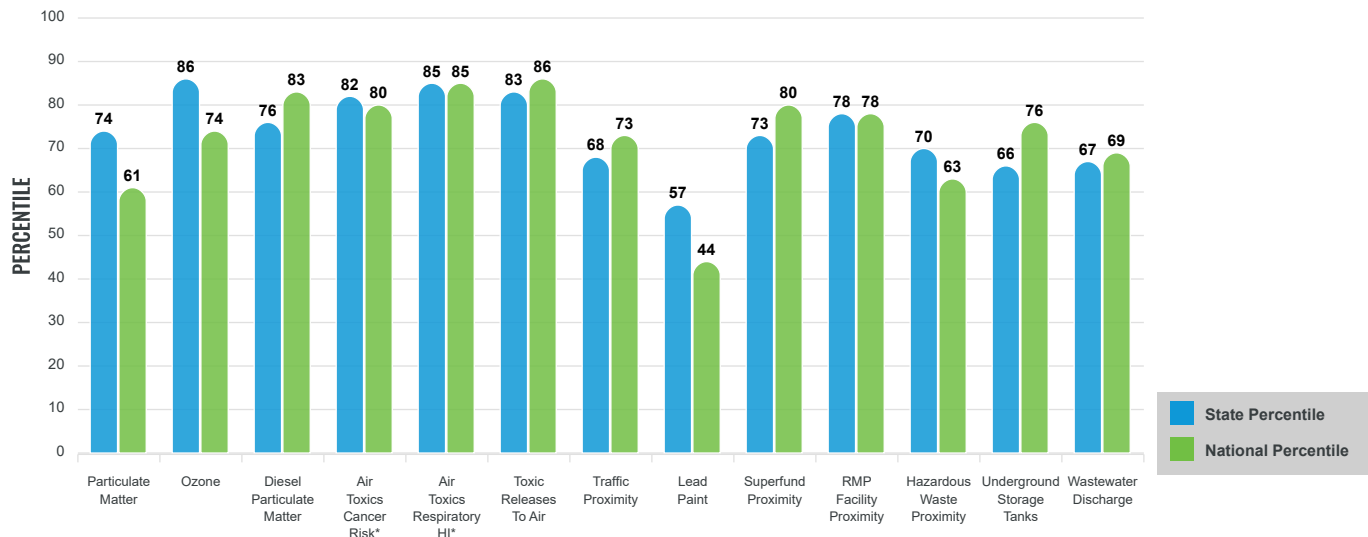
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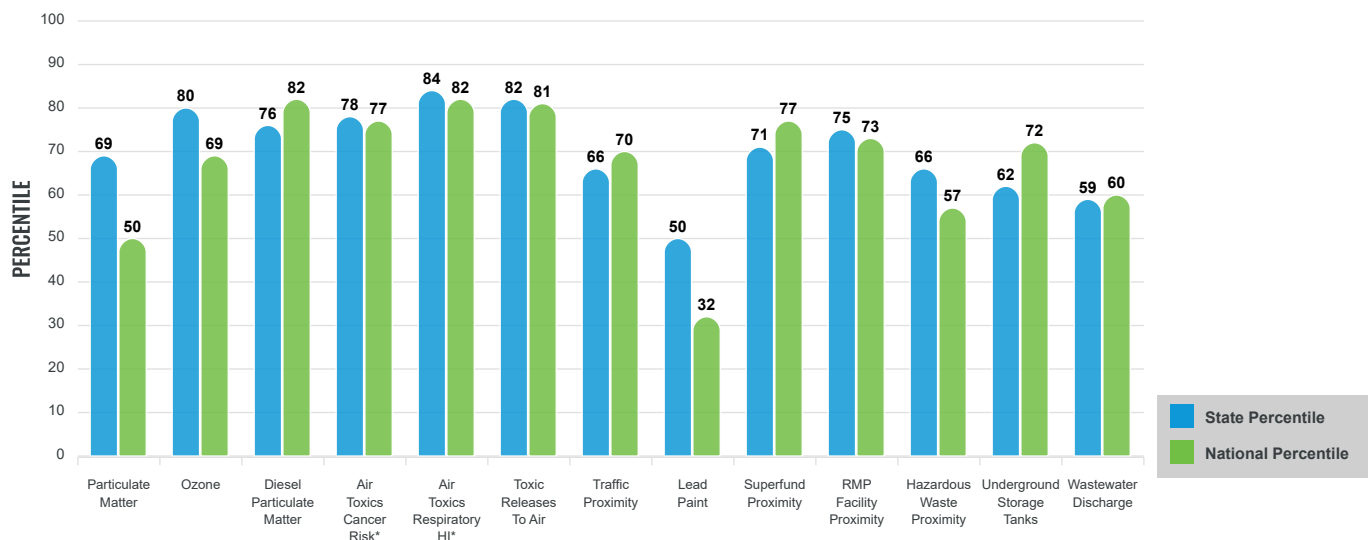
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for County: Orange

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter ($\mu\text{g}/\text{m}^3$)	7.62	7.52	63	8.08	35
Ozone (ppb)	61.7	59.4	75	61.6	55
Diesel Particulate Matter ($\mu\text{g}/\text{m}^3$)	0.395	0.293	76	0.261	82
Air Toxics Cancer Risk* (lifetime risk per million)	30	25	1	25	5
Air Toxics Respiratory HI*	0.39	0.32	11	0.31	31
Toxic Releases to Air	2,800	1,900	87	4,600	78
Traffic Proximity (daily traffic count/distance to road)	170	160	70	210	70
Lead Paint (% Pre-1960 Housing)	0.096	0.14	64	0.3	34
Superfund Proximity (site count/km distance)	0.13	0.13	73	0.13	75
RMP Facility Proximity (facility count/km distance)	0.46	0.31	82	0.43	75
Hazardous Waste Proximity (facility count/km distance)	0.51	0.52	75	1.9	50
Underground Storage Tanks (count/km ²)	6.1	7	65	3.9	81
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.5	0.52	90	22	89
SOCIOECONOMIC INDICATORS					
Demographic Index	48%	39%	67	35%	72
Supplemental Demographic Index	15%	15%	58	14%	63
People of Color	62%	45%	68	39%	73
Low Income	35%	33%	58	31%	62
Unemployment Rate	6%	5%	64	6%	62
Limited English Speaking Households	8%	7%	74	5%	82
Less Than High School Education	11%	11%	59	12%	59
Under Age 5	6%	5%	66	6%	60
Over Age 64	12%	23%	29	17%	35
Low Life Expectancy	17%	19%	29	20%	28

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

Sites reporting to EPA within defined area:

Superfund	3
Hazardous Waste, Treatment, Storage, and Disposal Facilities	26
Water Dischargers	7476
Air Pollution	394
Brownfields	32
Toxic Release Inventory	136

Other community features within defined area:

Schools	287
Hospitals	22
Places of Worship	620

Other environmental data:

Air Non-attainment	No
Impaired Waters	Yes

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

Report for County: Orange

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	17%	19%	29	20%	28
Heart Disease	5.1	7.2	20	6.1	31
Asthma	8.8	8.7	58	10	20
Cancer	4.9	6.9	19	6.1	22
Persons with Disabilities	11.3%	13.9%	37	13.4%	41

CLIMATE INDICATORS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	5%	26%	24	12%	42
Wildfire Risk	29%	32%	63	14%	84

CRITICAL SERVICE GAPS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	9%	13%	46	14%	44
Lack of Health Insurance	13%	13%	59	9%	79
Housing Burden	Yes	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Footnotes

Report for County: Orange