



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4  
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Atlanta, GA 30303

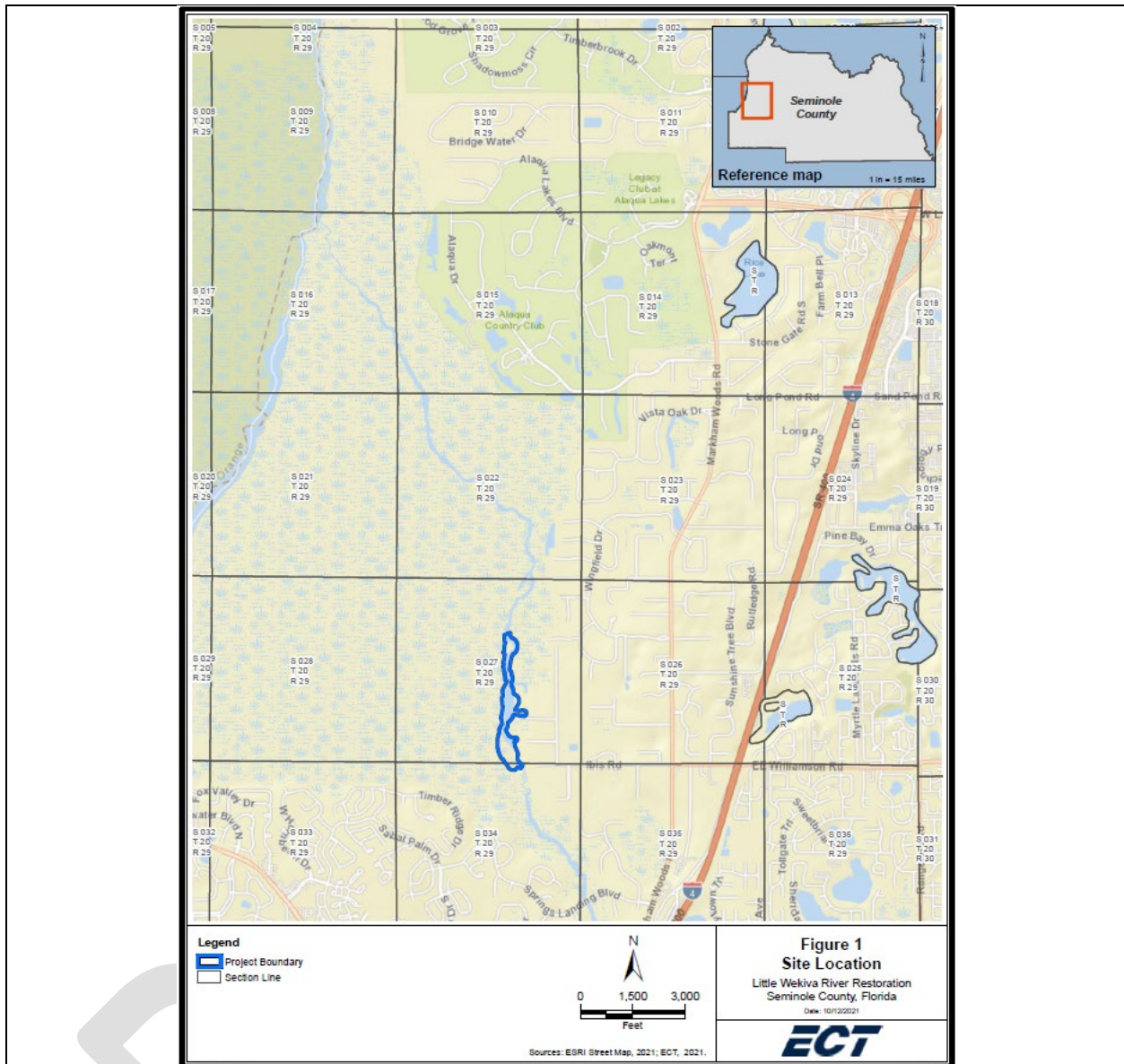
Environmental Assessment  
of  
Seminole County Government for Little Wekiva River Restoration Project

The U.S. Environmental Protection Agency (EPA) prepared the following Environmental Assessment (EA) for the Seminole County Government for Little Wekiva River Restoration Project (the Proposed Action). The EPA prepared this EA in compliance with the Council on Environmental Quality (CEQ) National Environmental Policy Act (NEPA) implementing regulations (40 Code of Federal Regulations [CFR] Parts 1500-1508) and the EPA's procedures for implementing the CEQ NEPA regulations (40 CFR Part 6). This EA discloses the direct, indirect, and cumulative environmental impacts that may result from the Proposed Action and the alternatives considered. The EA is organized into the following nine sections that document the EPA's findings:

- 1) **General Information.** This section includes the name of the Proposed Action, grant identification number, and point of contact information for the grant applicant and responsible EPA official.
- 2) **Proposed Action Description.** This section describes the Proposed Action, implementation timeline, and current environmental conditions within the project area.
- 3) **Environmental Impact of the Proposed Action.** This section describes the Proposed Action's potential direct and indirect impacts to resources within the project area.
- 4) **Cumulative Impacts.** This section describes the Proposed Action's potential to contribute to adverse cumulative impacts in combination with other past, present, and reasonably foreseeable actions.
- 5) **Alternatives Considered.** This section describes the alternatives to the Proposed Action, the potential environmental impacts of each, and why each alternative was not identified by the EPA as the Proposed Action.
- 6) **Review of Applicable Environmental Laws or Executive Orders.** This section identifies the environmental laws and executive orders applicable to the Proposed Action.
- 7) **Required Mitigation.** This section presents the mitigation measures that are essential to render the impacts of the Proposed Action not significant and/or to avoid non-compliance with applicable environmental laws or executive orders.
- 8) **Individuals and Agencies Consulted.** This section presents a list of the individuals and agencies consulted during the development of the EA.
- 9) **List of References.** This section provides a list of any reference documents cited in the EA.
- 10) **List of Attachments.** This section provides a list of supporting documents attached to the EA.

| I. General Information   |                                    |                                   |
|--|------------------------------------|-----------------------------------|
| <b>Proposed Action Name</b>  | <b>Program / Funding Authority</b> | <b>Grant ID Number (if known)</b> |
| Seminole County Government Little Wekiva River Restoration Project     | EPA Community Grants               |                                   |
| <b>Grant Applicant Organization</b>                                    |                                    |                                   |
| Seminole County  |                                    |                                   |
| <b>Grant Applicant Contact Information</b>                             |                                    |                                   |
| <i>Name/Title</i>  | <i>Email</i>                       | <i>Phone Number</i>               |
| Shannon Wetzel   | SWetzel@seminolecountyfl.gov       | (407) 665-2455                    |
| <b>EPA Responsible Official</b>  |                                    |                                   |
| <i>Name/Title</i>  | <i>Email</i>                       | <i>Phone Number</i>               |
| Johnnie Purify   | Purify.Johnnie@epa.gov             | (404) 562-9298                    |
| <b>Prepared By</b>   |                                    |                                   |
| <i>Name/Title</i>  | <i>Email</i>                       | <i>Phone Number</i>               |
| ERG Contractor Support Team  | --                                 | --                                |
| <b>Direct Comments to (if different from EPA Responsible Official)</b> |                                    |                                   |
| <i>Name/Title</i>  | <i>Email</i>                       | <i>Phone Number</i>               |
|  |                                    |                                   |

| II. Proposed Action Description   |
|---|
| <p><b>Proposed Action Location and Site Description</b></p> <p><i>Provide the address or general location of the Proposed Action (include state, county, and locality) and a brief description of the site characteristics. Examples of site characteristics include land use and zoning, population served by the existing water system, current infrastructure, and formally classified lands within the Proposed Action area.</i></p> <p>The Project would be located in the portion of the Little Wekiva River adjacent to Delk Road in the City of Longwood in Seminole County, Florida as shown in Figure 1; refer to Figure 1-1 in the attached Environmental Narrative for the Little Wekiva River Restoration Project (<i>Attachment A</i>). The Little Wekiva River is a tributary to the Wekiva River, an Outstanding Florida Waterway and Wild and Scenic River, and part of the Wekiva River Aquatic Preserve. The Wekiva River was designated as a Wild and Scenic River because it was found to be free flowing and possessing five of the “outstanding remarkable” values: scenic, recreation, wildlife and habitat, water quality and quantity, and historic and cultural resources (Wekiva Wild and Scenic River System, 2023). As such, water quality and habitat within this waterway is important for wildlife and recreation.</p> <p>The Project area is zoned as Planned Development and A-1 Agricultural and has existing land use designations as Managed Environmental Lands, Public – Other, Residential – Single Family, Residential – Vacant, and Agriculture (Seminole County, 2023). The Project area has future land use designations as either Preservation/Managed Lands or as Suburban Estates (Seminole County, 2022a). Lands adjacent to the western Project boundary are under a conservation easement. The previously developed parcels along the eastern Project boundary are historically built-out single-family residential parcels. The few remaining undeveloped parcels within this single-family residential area are dominated by wetlands and have limited to no development capacity. Future County land use indicates this area would remain as Suburban Estates, which designates not more than one dwelling unit per acre.</p> |



**Figure 1. Site Location (Figure 1-1 in the Environmental Narrative, Attachment A)**

Check all land uses that occur within or adjacent to the Proposed Action area:

- |   |   |   |   |
|---|---|---|---|
| <input checked="" type="checkbox"/> Agriculture | <input type="checkbox"/> Military                   | <input type="checkbox"/> Private                | <input type="checkbox"/> Other (specify): _____ |
| <input type="checkbox"/> Commercial             | <input type="checkbox"/> Mixed Use                  | <input checked="" type="checkbox"/> Residential |   |
| <input type="checkbox"/> Forest                 | <input type="checkbox"/> Open Space                 | <input checked="" type="checkbox"/> Water       |   |
| <input type="checkbox"/> Industrial             | <input checked="" type="checkbox"/> Park/Recreation |   |   |

#### Brief Description of Proposed Action

The Project includes habitat restoration along a 3,500-foot-long section of the Little Wekiva River to address excessive sedimentation and proliferation of invasive vegetation. Project activities include removal of invasive, nuisance, and exotic vegetation within the river channel and adjacent areas through chemical methods, followed by mechanical removal; dredging and removal of accumulated sediments within the river channel and adjacent areas to restore the river's historic natural cross section and meanders; and replanting native vegetation within the river channel and adjacent areas to enhance biodiversity and stabilize the banks for sediment and erosion control. Refer to the Environmental Narrative (*Attachment A*) for additional information.

**Purpose of and Need for Proposed Action**

The purpose of the Project is to restore natural conditions and improve water quality in the Little Wekiva River Basin.

The need for the Project is driven by water quantity and quality problems within the Little Wekiva River, including erosion and the accumulation of sediments and invasive vegetation in the river channel, flooding and public safety concerns, and impediments to navigable conditions and limitations on recreational uses (e.g., kayaking, canoeing, and using small motor craft). Restoring this portion of the Little Wekiva River would enhance habitat quality, reduce flood risks, and improve recreational opportunities. Without the Project, current conditions in portions of the Little Wekiva River would continue to worsen, deteriorate, and impede use of previous activities.

In addition to local requests to restore the Little Wekiva River to more historic, natural conditions, the 2021 Florida State Senate Bill 976 (Protection of Ecological Systems) required that the Florida Department of Environmental Protection (FDEP) and the St. Johns River Water Management District (SJRWMD) conduct a study and issue a report to identify the sources of sedimentation and to detail water quality improvements that could be achieved in the Little Wekiva River. This Project works toward the amelioration of these issues in this portion of the river and is supported locally by the residents, as well as the municipalities, state and federal agencies, and environmental groups. Refer to the Environmental Narrative (*Attachment A*) for additional information on the Project purpose and need.

**Anticipated Construction Start Date and Duration of Proposed Action**

Construction for the Project is expected to begin in 2024 and is expected to last for approximately one year. Based upon standard construction operating procedures, the proposed Project time frame is approximately 180 to 200 days.

**Affected Environment in the Proposed Action Area**

*Provide a brief description of the current environmental conditions within the Proposed Action area. Topics discussed may include, but are not limited to, the following: topography, geology, and soils; water resources (surface waters, groundwater, wetlands, floodplains); natural resources (vegetation, wildlife, habitats); cultural resources (historic properties, archeological/Tribal resources); air quality; environmental justice/socioeconomics; transportation; energy and utilities; solid/hazardous wastes.*

The Little Wekiva River is a tributary to the Wekiva River, located between a small low-density residential area (less than 2 dwelling units per acre) along the eastern boundary, and freshwater marshes and wetland hardwood along the western boundary. The Little Wekiva River is classified as a navigable water but has become unusable for recreation due to large amounts of sediment entering the waterway and invasive vegetation. The Project is located within the 100-year floodplain of the Little Wekiva River. The Project area is comprised of a mix of freshwater emergent wetland, freshwater forested/shrub wetland, and riverine systems. The river channel meanders through wetlands, with freshwater emergent wetlands found within the channel itself, and with forested/shrub wetlands found in the higher portions of the channel, which transitions into the floodplain. Refer to the Environmental Narrative (*Attachment A*) for additional information. Currently, the Project area has several sections of vertical incision as seen by steep bank slopes as well as leaning trees from lateral channel migration (SJRWMD, 2021). The Project area is also located within the coastal zone as the entire state of Florida is a coastal management zone (National Oceanic and Atmospheric Administration, 2012).

The Little Wekiva River is part of the Wekiva River, Rock Springs Run, and Little Wekiva Canal Basin Management Action Plan (BMAP), which aims to reduce nitrogen and phosphorus loads, as well as the Wekiva Spring and Rock Springs BMAP, which aims to reduce nitrogen loads. The Florida Department of Environmental Protection has assigned the Waterbody ID #2987 to the Little Wekiva River, which

has a state-adopted and EPA-approved Total Maximum Daily Load for fecal coliform and is included in an alternative pollutant reduction plan for *Escherichia coli*.

Soils within the Project area are almost entirely Nittaw, Okeelanta, and Basinger Soils, all of which are very poorly draining and contribute to frequent flooding (U.S. Department of Agriculture [USDA] National Cooperative Soil Survey, 2014, 2018, 2020). A small portion of the eastern boundary of the Project area contains St. Johns and Eugallie fine sands. These soils are consistent with those found in riverine and floodplain areas. Refer to Figure 1-2 in the Environmental Narrative (*Attachment A*).

The vegetation in the Project area is dominated by invasive, nuisance vegetation including water hyacinth (*Eichhornia crassipes*) within the channel, wild taro (*Colocasia esculenta*) near the top of the bank, water lettuce (*Pistia stratiotes*) covering the open water surface, and Peruvian primrose willow (*Ludwigia peruviana*) in the shallow portions of the channel. These invasive species clog the channel and hinder kayaking, canoeing, and small motor craft. Decreases in water depth and flow coupled with increases in nutrient concentrations have also resulted in the establishment of nuisance non-invasive species (e.g., barnyard grass [*Echinochloa crus-galli*] and cattail [*Typha* sp.]) growing in locations in the channel that impede navigable conditions. The excess accumulated sediments and vegetation are causing the river to expand into the floodplain and potentially increase residential flooding. Refer to the Environmental Narrative for additional information (*Attachment A*).

The U.S. Fish and Wildlife Service (USFWS) Official Species List, dated November 28, 2023, (*Attachment B*) indicates that seven federally listed or experimental population species under USFWS jurisdiction have the potential to occur in the vicinity of the Project area: crested caracara (audubon's) [FL DPS] (*Polyborus plancus audubonii*), eastern black rail (*Laterallus jamaicensis* ssp. *jamaicensis*), Everglade snail kite (*Rostrhamus sociabilis plumbeus*), whooping crane (*Grus americana*), wood stork (*Mycteria americana*), eastern indigo snake (*Drymarchon couperi*), and pygmy fringe-tree (*Chionanthus pygmaeus*). In addition, the Florida manatee (*Trichechus manatus latirostris*), which is a federally listed threatened species, has been documented in the Project area. The Project site is a relatively small freshwater body with at least one low-head dam downstream of the site; thus, no other marine mammals are expected to occur in the Project site.

The area surrounding the Project site includes the following population characteristics:

- People of color: 18 percent (25<sup>th</sup> percentile in state); state average 45 percent
- Low income: 9 percent (11<sup>th</sup> percentile in state); state average 33 percent

The area surrounding the Project site also includes potentially sensitive communities. For example:

- Wastewater discharge (toxicity-weighted concentration/m distance): 0.091 (82<sup>nd</sup> percentile in state); state average 0.52
- Population over age 64: 37 percent (83<sup>rd</sup> percentile in state); state average 23 percent
- Cancer: 9.1 (82<sup>nd</sup> percentile in state); state average 6.9

Refer to the EJ Screen Report (*Attachment C*) for additional information on population characteristics around the Project site.

### III. Environmental Impact of the Proposed Action

In the tables below, use the following impact categories to document the Proposed Action's impact on the environmental resource:

- **No Impact** (e.g., resource not present)
- **Beneficial Impact Only** (no adverse impact)
- **Adverse Impact, Mitigation Not Required** (e.g., minor and/or temporary impact)
- **Adverse Impact, Mitigation Required** (e.g., to avoid potentially significant impact)

Under each heading, provide a brief description of the direct and indirect impacts on the environmental resource and cite any supporting analyses. Direct impacts are defined as effects caused by the Proposed Action that occur at the same time and place. Indirect impacts are defined as reasonably predictable effects caused by the Proposed Action that occur later in time or distance from the Proposed Action area. Indirect impacts may include effects such as growth or changes in patterns of land use, human or ecological populations, natural systems, and ecosystem dynamics.

#### III.A. Natural and Cultural Resources

| Impact Category                         | Environmental Resource  |
|---|---|
| Adverse Impact, Mitigation Not Required | <b>Groundwater Resources.</b> Effects on groundwater resources located within the Proposed Action area or adjacent properties. Examples include changes in depth or character of the water table, rate of groundwater recharge, and groundwater quality.  |
|   | <u>Summary of Impacts:</u> Due to the use of construction equipment that could leak fuel and petroleum products and the use of herbicides in the Little Wekiva River, which could percolate through the water table, the Project could result in adverse impacts to groundwater. However, strict best management practices (BMPs) and permit conditions would be implemented during construction to prevent leaks to groundwater, limit the application of herbicide, and reduce the potential for impacts to groundwater. For example, BMPs would be implemented during construction to prevent impacts to groundwater, such as spill and leak prevention measures, absorbent booms, and specialized equipment for site access, construction, and herbicide application. In addition, herbicide application would be measured and targeted to the appropriate invasive species to reduce water quality impacts. Refer to the Environmental Narrative (Attachment A), USACE NWP (Attachment D), SJRWMD ERP (Attachment E) for additional information on these BMPs. |
|   | The Project would not include any control structures or pumping that would alter the groundwater table.   |

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| Adverse Impact, Mitigation Not Required | <p><b>Surface Water Resources.</b> <i>Effects on surface waters located within the Proposed Action area or adjacent properties. Examples include changes in water quality (e.g., due to erosion, new/modified discharges, increased runoff, or contaminant leaks), hydrology, physical characteristics (e.g., depth), and riparian buffers.</i></p> <p><u>Summary of Impacts:</u> Construction activities would result in temporary negative impacts on surface water quality and the coastal zone due to use of herbicides for vegetation management, increased turbidity associated with soil removal, and use of equipment that could leak fuel and petroleum products in surface water bodies and wetlands. A total of 0.34 acres of wetlands would be temporarily disturbed due to construction ingress and egress as depicted in the U.S. Army Corps of Engineers (USACE) Nationwide General Permit (NWP) #SAJ-2021-04075, issued on February 14, 2023 (<i>Attachment D</i>). Seminole County would implement BMPs and adhere to conditions in the USACE NWP (<i>Attachment D</i>), as well as the SJRWMD Environmental Resource Permit (ERP) and Written Authorization to Use State Owned Sovereign Submerged Lands (SSL) (#178839-1), issued on November 21, 2022 (<i>Attachment E</i>). With implementation of BMPs, the Project would be consistent with the Florida Coastal Management Program, and the federal consistency review was conducted through the issuance of the SJRWMD Environmental Resource Permit.</p> <p>BMPs, including silt fencing, floating turbidity barriers, sediment traps, temporary settling basins, temporary soil stockpile areas, wash racks, flocculation logs, and aquadams would be used to prevent erosion and minimize turbidity. Ingress/egress areas would be reduced to minimize disturbances to wetlands, temporary mats would be used to allow for equipment access, and the ingress/egress areas would be restored to previous conditions after construction is complete. Stream flow would be maintained at all times during construction activities to prevent impacting downstream segments of the river. Seminole County would comply with the permit conditions in the USACE Nationwide General Permit #SAJ-2021-04075, issued on February 14, 2023, as well as the SJRWMD Environmental Resource Permit, issued on November 21, 2022, to minimize effects on surface water and wetlands. Refer to the Environmental Narrative (<i>Attachment A</i>), USACE NWP (<i>Attachment D</i>), SJRWMD (<i>Attachment E</i>) for additional information on these BMPs.</p> <p>No permanent loss of wetland habitat or surface waters would result from the Project. After construction, the Project would have long-term, beneficial impacts on surface water quality. Following the completion of the Project, water quality would improve due to the diverse native plant species providing erosion control and water filtration. Recontouring the channel would have long-term improvements on surface water flow. While the Project is located within the 100-year floodplain, the Project does not include any new development and would not result in a net reduction of flood storage. The Project would result in long-term benefits by increasing flood storage capacity in the Little Wekiva River.</p> |
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| Beneficial Impact Only                  | <p><b>Unique Natural Features.</b> <i>Effects on natural features (e.g., caves, cliffs, vistas, canyons, waterfalls, dunes, tree stands, etc.) within the Proposed Action area or adjacent properties. Examples include alteration, destruction, or restriction of access to the natural feature.</i></p> <p><u>Summary of Impacts:</u> Construction activities could result in minor, temporary negative impacts on the Little Wekiva River, a tributary to a Wild and Scenic River, due to potential impacts to water quality and wildlife if no BMPs were implemented as discussed in the Surface Water Resources and Vegetation and Wildlife sections. However, the Project would have long-term, beneficial impacts on the scenic, recreational, wildlife and habitat, and water quality values of the Little Wekiva River and would further the Wekiva River System outstanding remarkable values goals (Wekiva Wild and Scenic River System, 2023).</p>   |
| Adverse Impact, Mitigation Not Required | <p><b>Vegetation and Wildlife.</b> <i>Effects on plant communities, wildlife, and habitats within the Proposed Action area or adjacent properties.</i></p> <p><u>Summary of Impacts:</u> Construction activities would result in impacts on vegetation and wildlife. Invasive plant species would be removed from the Project site and replaced with native species using chemical and mechanical methods. During the construction process, non-target vegetation may be uprooted and moved or partially damaged. Wildlife in the Project area may be disturbed during the construction process due to sound and unusual activity in the area. The adverse impact on vegetation and wildlife would be temporary and limited to the construction period. BMPs would be implemented during construction to reduce impacts to vegetation and wildlife. Several Project BMPs and permit conditions are intended to protect Florida manatees during construction activities. With implementation of BMPs and permit conditions, the Project would not be expected to adversely affect marine mammals.</p> <p>Specific herbicide types would be chosen and measured to target the appropriate invasive species and reduce impacts to other non-target vegetation. In areas where native, desirable vegetation have been planted, maintenance and monitoring of these areas would be required to ensure successful recruitment of native communities. The SJRWMD Environmental Resource Permit includes conditions intended to protect manatees from direct Project effects, including following the 2011 Standard Manatee Conditions for in-Water Work and requiring an observer onsite dedicated to watching for manatees during all in-water operations. Refer to the Environmental Narrative (<i>Attachment A</i>), SJRWMD ERP (<i>Attachment E</i>), and the Florida Fish and Wildlife Conservation Commission Comments (<i>Attachment F</i>) for additional information on these BMPs.</p> <p>The Project would have long-term, beneficial impacts on vegetation and wildlife. Removing invasive species, planting native species, and restoring the stream channel's historic flow would improve conditions for native vegetation, wildlife, and habitat. Furthermore, native species would flourish and establish mixed vegetation that creates a more diverse ecosystem and prevent future monostands.</p> <p>On January 26, 2022, USACE completed an environmental review of the Project and determined that the Project would have no effect on species listed or proposed for listing under the Endangered Species Act (ESA) as discussed in the Department of the Army Memorandum Documenting General Permit Verification (<i>Attachment G</i>). On June 26, 2023, Seminole County submitted an email to USFWS inquiring about whether additional consultation is needed for the EPA to fulfill their ESA Section 7 compliance responsibilities or whether the USACE documentation is sufficient. USFWS responded on</p> |



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|           | <p>June 27, 2023, stating that USFWS does not consult on projects with a “no effect” determination, USFWS has reviewed the submitted materials and they are sufficient, and USFWS has no concerns at this time (<i>Attachment H</i>). Since the time of USACE’s review, one additional species (i.e., whooping crane) was identified on the Official Species List generated on November 28, 2023 (<i>Attachment B</i>); however, the EPA determined that the Project would have no effect on the whooping crane, and no additional consultation with USFWS is required.</p>  |
| No Impact | <p><b>Cultural Resources.</b> <i>Effects on historic, cultural, and archeological resources within the Proposed Action area or adjacent properties.</i></p> <p><u>Summary of Impacts:</u> The Project would not be expected to impact cultural resources.</p> <p>On December 17, 2021, as part of the SJRWMD Environmental Resource Permit application process, the Florida Department of Historical Resources), which serves as the State Historic Preservation Office (SHPO), was notified of the Project as shown in the SJRWMD Notice of Receipt to the Division of Historical Resources (<i>Attachment I</i>). SJRWMD provided a copy of the permit application to the SHPO to solicit comments on the Project. The SJRWMD ERP with SSL Authorization Technical Staff Report dated November 21, 2022 states that “no adverse impacts to cultural resources are anticipated” (<i>Attachment E</i>). On June 2, 2023, the SHPO sent a SHPO Review Letter (<i>Attachment J</i>) to Seminole County that they reviewed the Project for possible effects on historic properties listed, or eligible for listing, on the National Register of Historic Places in accordance with state statutes and regulations as well as Section 106 of the National Historic Preservation Act. As described in the SHPO Review Letter (<i>Attachment J</i>), the SHPO stated that a cultural resources assessment survey would not be recommended; however, unexpected finds may occur during ground disturbing activities, and they request special conditions related to inadvertent discoveries.</p> <p>On September 14, 2023 and September 15, 2023, the EPA submitted a letter to the Seminole Tribe of Florida, Miccosukee Tribe of Indians of Florida, Muscogee (Creek) Nation, Poarch Band of Creek Indians, and Coushatta Tribe of Louisiana to notify them of the Proposed Action and seek their concurrence with the finding of “No Historic Properties Affected” within 30 days (<i>Attachments K, L, M, N, and O</i>). Because no responses were received from the Tribes, the EPA assumes their concurrence with this finding.</p> <p>The Project would follow conditions and BMPs set forth in the USACE NWP (<i>Attachment D</i>), the SJRWMD ERP (<i>Attachment E</i>), and the SHPO Review Letter (<i>Attachment I</i>). In accordance with the USACE Nationwide General Permit #SAJ-2021-04075, the SJRWMD Environmental Resource Permit, and the letter from the SHPO, if archaeological or cultural materials or human remains are discovered during construction, all work within a 100-meter radius shall be stopped, the USACE, SHPO, and medical examiner would be contacted the same business day (as applicable), and the activity shall not resume without written authorization from the SHPO and USACE. The proper authorities shall be notified in accordance with Section 872.05, Florida Statutes. The USACE, SHPO, and the Tribal Historic Preservation Office would work together to assess the significance of the discovery and devise appropriate actions. In the case of unanticipated discoveries, additional cultural resources assessments may be required. Refer to the USACE NWP (<i>Attachment D</i>), SJRWMD ERP (<i>Attachment E</i>), and SHPO Review Letter (<i>Attachment I</i>) for additional information on these BMPs.</p> |

| III.B. Land Use Planning and Development |   |
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| Impact Code                              | Environmental Resource  |
| Beneficial Impact Only                   | <p><b>Land Use Change and Consistency.</b> <i>Effects on existing pattern and type of land use, including direct and indirect changes within the Proposed Action area or adjacent properties as well as promotion of future development and population growth (e.g., due to new or expanded infrastructure). Consistency with local or regional comprehensive plans, community policies, and land use goals.</i></p>  |
|  | <p><u>Summary of Impacts:</u> The Project would further the area's Preservation/Managed Lands land use classification by restoring the river (Seminole County, 2022b).</p>  |
| Adverse Impact, Mitigation Not Required  | <p><b>Open/Recreational Space and Cultural Facilities.</b> <i>Effects on the quality of and access to open space, recreational space, and cultural facilities (e.g., theaters, museums, and libraries) within the community.</i></p>  |
|  | <p><u>Summary of Impacts:</u> The Project would have temporary minor impacts on recreational space and the availability, quality, access, and proximity to open space within the community as the Project area would be temporarily inaccessible to the public during construction.</p> <p>The Project would have long-term, beneficial impacts to recreational areas and open space. The Project would improve the quality of recreational areas and open space by restoring a portion of the Little Wekiva River. In addition, the Project would increase the amount of recreational space in the area by improving navigability in the Little Wekiva River.</p>  |
| Adverse Impact, Mitigation Not Required  | <p><b>Topography, Geology, and Soils.</b> <i>Effects on site topography, underlying geology (e.g., bedrock), and soils, as well as the potential for these characteristics to affect the Proposed Action (e.g., unsuitable soil conditions). Examples include changes in grading and fill; site stability, runoff patterns, and erosion potential; bedrock modifications; existing or potential soil contamination; and conversion of soils suitable for agricultural activities.</i></p>   |
|  | <p><u>Summary of Impacts:</u> Construction activities and the use of equipment for the Project could destabilize soils and cause erosion along streambanks. However, erosion during construction would be minimized due to implementation of BMPs and permit conditions, including soil stabilization and equipment stabilization measures. BMPs and permit conditions described above for Surface Water Resources would reduce soil- and erosion-related impacts during construction. In addition, when native soils are encountered during soil excavation, dredging in that location would be terminated and native soils would not be removed from the stream area. Soil stabilization measures would also be applied during grading activities and after final grade is reached. Refer to the Environmental Narrative (<i>Attachment A</i>), USACE NWP (<i>Attachment D</i>), SJRWMD ERP (<i>Attachment E</i>) for additional information on these BMPs.</p> <p>The Project would result in long-term beneficial impacts on topography and soils in the Little Wekiva River through the removal of approximately 26,500 cubic yards of accumulated sediment from the stream channel and floodplain. The grade and contour of the channel would be altered to improve stream flow and water storage capacity. Excavation would only occur within the existing channel. In addition, the Project would promote the long-term stabilization of the streambanks by planting native vegetation within the channel and adjacent areas, which would help hold soils in place.</p> |

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| Adverse Impact, Mitigation Not Required             | <b>Public Safety and Nuisances.</b> <i>Potential to cause or contribute to hazards and nuisances (e.g., noise, vibration, hazardous materials) within the Proposed Action area or adjacent properties, as well as the potential for these hazards and nuisances to affect the Proposed Action.</i>   |
|   | <p><u>Summary of Impacts:</u> The Project would result in temporary minor nuisances and noise during construction activities due to the use of heavy equipment, vehicle traffic, and dredging. However, impacts to sensitive noise receptors, if present, would be temporary and localized. Acoustic screening (e.g., trees and bushes) would help decrease noise attenuation to residences. In addition, noise-generating construction activities would need to comply with the Noise Control Ordinance of Seminole County, Florida (Ord. No. 2020-15, § 2, 5-12-2020). During the construction process, the Occupational Safety and Health Administration safety standards and Florida Trench Safety Act would be followed to ensure worker safety.</p> <p>The Project would have long-term, beneficial impacts on safety. Flooding associated with the Project area has been a long-standing public safety concern and the Project would reduce flooding risk by removing excess sediment from the floodplain. The Project would also have beneficial impacts on public health and safety by improving water quality.</p> |
| Beneficial Impact Only                              | <b>Environmental Design.</b> <i>Effects on the visual coherence, scale, and character of the surrounding natural or manmade environment within the Proposed Action area or adjacent properties.</i>  |
|   | <u>Summary of Impacts:</u> The Project would have long-term beneficial impacts on environmental design. The Project would result in minor improvements to the visual coherence and character of the surrounding environment by removing excessive sedimentation, removing invasive plant species, and planting native plant species to improve and restore the historic conditions of the Little Wekiva River and natural habitat.   |
| <b>III.C. Community Services and Infrastructure</b> |  |
| <b>Impact Code</b>                                  | <b>Environmental Resource</b>  |
| No Impact   | <b>Essential Community Services.</b> <i>Effects on the quality of and access to community services including schools, health care, social services, and emergency services (police, fire, and emergency medical). Examples include changes in demand for services (e.g., student population growth) and changes in accessibility due to road closures and modifications.</i>   |
|   | <u>Summary of Impacts:</u> The Project and associated construction traffic would not affect accessibility of any community services.   |
| No Impact   | <b>Solid and Hazardous Waste Management.</b> <i>Effects on the capacity of and access to solid waste disposal facilities in the community, as well as generation, handling, and disposal of hazardous waste.</i>   |
|   | <u>Summary of Impacts:</u> The Project would have no impact on solid and hazardous waste management. Construction activities include the removal of approximately 26,500 cubic yards of sediment from the stream channel and floodplain. The Public Works Stockpile Area at the Seminole County Yankee Lake Water Treatment Plant would be the permanent soil disposal location as described in the SJRWMD ERP ( <i>Attachment E</i> ). Suitable soil would be taken from this stockpile location and reused for other County projects (e.g., correcting washouts, repairing sidewalks and trails). The disposal of dredged material would not affect the capacity of disposal facilities.   |
| No Impact   | <b>Wastewater Infrastructure.</b> <i>Effects on the capacity and effectiveness of the sewer or septic system that serves the Proposed Action area.</i>   |
|   | <u>Summary of Impacts:</u> The Project would have no impact on wastewater. The Project would not affect the capacity and design of the sewer and/or septic systems in the area.  |

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| No Impact  | <b>Storm Water Infrastructure.</b> <i>Effects on the capacity and effectiveness of storm water collection, conveyance, and treatment systems within the Proposed Action area.</i>   |
|  | <u>Summary of Impacts:</u> The Project would have no impact on the capacity and design of the storm water collection and treatment systems within the Project area.   |
| No Impact  | <b>Water Supply.</b> <i>Effects on the capacity and effectiveness of drinking water systems within the Proposed Action area.</i>  |
|  | <u>Summary of Impacts:</u> The Project would have no impact on water supply. There are no public drinking water sources or supplies within the Project area. Proposed restoration activities do not include any pumping activities that could potentially impact nearby residential wells.  |
| Adverse Impact, Mitigation Not Required                | <b>Energy Use and Infrastructure.</b> <i>Effects on energy use and the capacity and effectiveness of energy infrastructure (e.g., electrical grid, natural gas distribution). Examples include long-term changes in electricity demand and changes in fossil fuel use due to modified commuting patterns.</i>   |
|  | <u>Summary of Impacts:</u> The Project would have negligible impacts on energy consumption. Mobile small-scale generators may be temporarily used during construction activities to power electrical equipment and/or lighting, and construction equipment, and vehicles would use fossil fuels to operate. The Project would have no long-term impact on energy consumption.   |
| Adverse Impact, Mitigation Not Required                | <b>Transportation.</b> <i>Effects on the adequacy of and access to public transportation services within the community.</i>   |
|  | <u>Summary of Impacts:</u> The Project would have a minor impact on transportation. The Project would increase or disrupt traffic due to increases in construction worker and heavy vehicle traffic. However, increases in traffic would be temporary and negligible compared to existing vehicle counts.   |
| <b>III.D. Socioeconomics and Environmental Justice</b> |   |
| <b>Impact Code</b>                                     | <b>Environmental Resource</b>   |
| Adverse Impact, Mitigation Not Required                | <b>Sensitive Populations.</b> <i>Potential to result in human health and environmental effects that disproportionately and adversely affect sensitive populations including communities with environmental justice concerns (e.g., people of color, low-income populations, Indian Tribes, and communities with existing social, economic, health, or environmental burdens), children, disabled and the elderly.</i>   |
|  | <u>Summary of Impacts:</u> The Project would have minor impacts on sensitive populations. The elderly population would constitute a large portion of those exposed to construction-related impacts, such as air emissions, traffic, and noise. However, this population would also experience the long-term benefits associated with the Project, such as reduced flood risks and improved surface water quality, habitat quality, and aesthetics. Overall, the Project would not result in human health or environmental effects that disproportionately and adversely affect sensitive populations. |
| No Impact  | <b>Demographic/Character Changes.</b> <i>Effects on the racial, ethnic, and income demographic characteristics of the community.</i>  |
|  | <u>Summary of Impacts:</u> The Project would have no impact on demographic characteristics. The Project would not result in changes in resources for any specific community.  |
| No Impact  | <b>Displacement.</b> <i>Effects on the relocation of individuals, families, existing jobs, community facilities, or business establishments.</i>  |
|  | <u>Summary of Impacts:</u> The Project would have no impact on displacement. The Project would not result in the displacement of individuals, families, existing jobs, community facilities, or business establishments.  |

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| Beneficial Impact Only                  | <b>Economic Opportunities and Growth.</b> <i>Effects on employment opportunities and economic growth within the community.</i>   |
|   | <u>Summary of Impacts:</u> The Project would have minor, temporary, beneficial impacts on employment and income patterns. The Project may result in temporary increases in employment due to the hiring of construction workers and specialists, as well as potential increases in economic activity during construction due to purchasing of project materials and worker meals, among other purchases.   |
| <b>III.E. Air Quality and Climate</b>   |  |
| <b>Impact Code</b>                      | <b>Environmental Resource</b>  |
| Adverse Impact, Mitigation Not Required | <b>Air Quality and Odor.</b> <i>Effects on community air quality. Examples include temporary construction-related emissions, installation of new emission sources, changes in transportation patterns, and introduction of sources of odor.</i>  |
|   | <u>Summary of Impacts:</u> The Project would result in temporary impacts on air quality. The Project is not located in a nonattainment or maintenance area for any relevant pollutants; therefore, the Project is not subject to a conformity determination. The Project would result in the temporary increase of fugitive dust and equipment exhaust emissions during construction activities; however, emissions associated with Project construction are expected to be minimal and well below the <i>de minimis</i> levels. The Project would not install any new emissions units. With implementation of BMPs during construction activities, such as dust suppression techniques and anti-idling technology, the Project would not have significant air quality impacts for nearby sensitive receptors. |
| Adverse Impact, Mitigation Not Required | <b>Climate.</b> <i>Effects on greenhouse gas emissions and climate resiliency, as well as potential effects of climate change on the Proposed Action.</i>  |
|   | <u>Summary of Impacts:</u> The Project would have minor impacts on climate. Construction activities would include the use of equipment and vehicles powered by fossil fuels and electricity and would therefore result in Scope 1 and Scope 2 emissions. Climate change is expected to increase flood volume and frequency in the area, which would have negative impacts on the Project area. However, the Project would help improve the area's climate resiliency by increasing flood storage capacity and reducing potential residential flood risks.  |
| <b>III.F. Other Resource Areas</b>      |  |
| <b>Impact Code</b>                      | <b>Environmental Resource</b>  |
| N/A                                     | <b>Other Resource Areas.</b> <i>Effects on resource areas not reflected in the above categories.</i>   |
|   | <u>Summary of Impacts:</u> N/A   |

#### IV. Cumulative Impacts

*Cumulative impacts on an environmental resource area result from the impacts of the Proposed Action when considered in combination with the impacts caused by other past, present, and reasonably foreseeable actions affecting the same resource area.*

*Provide a brief description of the Proposed Action's potential to contribute to adverse cumulative impacts on the human environment. Use the environmental resource areas listed in Section III to identify the resource area of concern. If there is no potential for adverse cumulative impacts, provide a brief justification below (e.g., absence of other past, present, or reasonably foreseeable actions).*

| Environmental Resource Area | Cumulative Impact   |
|-----------------------------|---|
| N/A                         | There are no previous, present, or reasonably foreseeable actions near the Project site. Due to the limited developable lands and future land use designation for the area, the Project would not result in cumulative impacts. |

#### V. Alternatives Considered

*Briefly describe alternatives to the Proposed Action considered including other sites, design modifications, or no action. Summarize the beneficial and adverse impacts on the human environment (considering direct, indirect, and cumulative impacts) for each and the reason the alternative was not identified by the EPA as the Proposed Action.*

##### Alternative 1: No Action

The No Action Alternative would not restore the Little Wekiva River and would not remove sediments, remove invasive vegetation, or plant native vegetation in the Little Wekiva River. The No Action Alternative would result in the continued growth of invasive vegetation and accumulation of sediment from upstream reaches of the river, thereby altering the flow of the river, rendering it unnavigable, and increasing flooding potential to the public. The No Action Alternative would result in continued negative impacts to the human environment. Therefore, the EPA did not identify the No Action Alternative as the Proposed Action.

##### Alternative 2: Placement of Excavated Materials on Vegetated Islands

Seminole County considered an alternative design of placing excavated material on existing in-channel islands, which are dominated by invasive vegetation, and creating point bars within the river with the excavated material. The alternative design was determined to be infeasible because filling in floodplain wetlands and/or surface waters is not permitted by the SJRWMD as described in the SJRWMD ERP (*Attachment E*).

#### VI. Review of Applicable Environmental Laws and Executive Orders

*In the list below, place an "X" next to each environmental law or executive order identified as applicable to the Proposed Action.*

| ID | Environmental Law/Executive Order  | "X" |
|----|--|-----|
| 1  | Environmental Justice [Executive Orders Nos. 12898 and 14096]  | X   |
| 2  | Endangered Species Act [16 U.S.C. §§ 1531–1599]  | X   |
| 3  | Bald And Golden Eagle Protection Act [16 U.S.C. §§ 668-668C]   |     |
| 4  | Fish and Wildlife Coordination Act [16 U.S.C. § 661 et seq.]   | X   |
| 5  | Marine Mammal Protection Act [16 U.S.C. §§ 1361-1407]  | X   |
| 6  | National Historic Preservation Act (NHPA) as amended [54 U.S.C. § 300101 et seq.] and Archeological and Historic Preservation Act, as amended [54 U.S.C. §§ 312501-312508] | X   |
| 7  | Archaeological Resources Protection Act [16 U.S.C. §§ 470AA-MM]  |     |
| 8  | Native American Graves Protection and Repatriation Act [25 U.S.C. § 3001 et seq.]  |     |
| 9  | Clean Water Act [Section 404] and Protection of Wetlands [Executive Order No. 11990 (1977), as amended by Executive Order No. 12608 (1997)]                                | X   |
| 10 | Rivers and Harbors Act [Section 10]  | X   |



|    |   |   |
|----|---|---|
| 11 | Flood Plain Management [Executive Order No. 11988 (1977), as amended by Executive Order No. 12148 (1979)]                               | X |
| 12 | Safe Drinking Water Act [42 U.S.C. §§ 300F-300J-26]   |   |
| 13 | Farmland Protection Policy Act [7 U.S.C. §§ 4201-4209]  |   |
| 14 | Coastal Zone Management Act [16 U.S.C. §§ 1451-1466]  | X |
| 15 | Coastal Barriers Resources Act [16 U.S.C. §§ 3501-3510]   |   |
| 16 | Wild and Scenic Rivers Act [16 U.S.C. §§ 1271-1287]   |   |
| 17 | Essential Fish Habitat Consultation Process Under the Magnuson-Stevens Fishery Conservation and Management Act [16 U.S.C. §§ 1801-1891] |   |
| 18 | Migratory Bird Treaty Act [16 U.S.C. §§ 703-712]  |   |
| 19 | Clean Air Act Conformity [42 U.S.C. § 7506(C)]  |   |
| 20 | Wilderness Act [16 U.S.C. § 1131 et seq.]   |   |

## VII. Required Mitigation Measures

*Describe any mitigation measures that are essential to render the impacts of the Proposed Action not significant and/or to avoid non-compliance with applicable environmental laws or executive orders. Use the environmental resource areas listed in Section III to identify the resource area of concern. If no mitigation measures are required, type "N/A".*

| Environmental Resource Area | Mitigation |
|-----------------------------|------------|
| N/A                         | N/A        |

## VIII. Agencies and Persons Consulted

*List the individuals, Tribes, Federal, State, and local agencies consulted during the development of this EA. Provide the name, title, and agency of the individuals consulted.*

|  |
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| Jason Daniel, Miccosukee Tribe of Indians of Florida (September 14, 2023) (Attachment J) |
| Turner Hunt, Muscogee (Creek) Nation (September 14, 2023) (Attachment K)                 |
| Tina Marie Osceola, Seminole Tribe of Florida (September 14, 2023) (Attachment L)        |
| Kristian Poncho, Coushatta Tribe of Louisiana (September 15, 2023) (Attachment M)        |
| Larry Haikey, Poarch Band of Creek Indians (September 15, 2023) (Attachment N)           |

## IX. List of References

*Provide full citations for any reference documents cited in this EA.*

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| National Oceanic and Atmospheric Administration. 2012. State Coastal Zone Boundaries. Retrieved from <a href="https://coast.noaa.gov/data/czm/media/StateCZBoundaries.pdf">https://coast.noaa.gov/data/czm/media/StateCZBoundaries.pdf</a> . Accessed on April 7, 2023.   |
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| Seminole County. 2023. Information Kiosk. Retrieved from <a href="https://seminolegis.maps.arcgis.com/apps/webappviewer/index.html?id=668252d321334112be7534024b972bc6">https://seminolegis.maps.arcgis.com/apps/webappviewer/index.html?id=668252d321334112be7534024b972bc6</a> . Accessed on May 4, 2023.   |
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| USDA National Cooperative Soil Survey. 2018. Nittaw Series. Retrieved from <a href="https://soilseries.sc.egov.usda.gov/OSD_Docs/N/NITTAW.html#:~:text=The">https://soilseries.sc.egov.usda.gov/OSD_Docs/N/NITTAW.html#:~:text=The</a> . Accessed on May 5, 2023.                   |
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## **X. List of Attachments**

*List the supporting documents attached to this EA.*

*Attachment A:* Environmental Narrative for the Little Wekiva River Restoration Project

*Attachment B:* USFWS Official Species List

*Attachment C:* EIScreen Community Report

*Attachment D:* USACE Nationwide General Permit (#SAJ-2021-04075)

*Attachment E:* SJRWMD Environmental Resource Permit (ERP) and written authorization to Use State Owned Sovereign Submerged Lands (SSL) (#178839-1)

*Attachment F:* Florida Fish and Wildlife Conservation Commission Comments

*Attachment G:* Department of the Army Memorandum Documenting General Permit Verification

*Attachment H:* USFWS and Seminole County Email Correspondence Regarding ESA Section 7 Consultation

*Attachment I:* SJRWMD Notice of Receipt to the Division of Historical Resources

*Attachment J:* SHPO Review Letter

*Attachment K:* Letter to Miccosukee Tribe of Indians of Florida

*Attachment L:* Letter to Muscogee (Creek) Nation

*Attachment M:* Letter to Seminole Tribe of Florida

*Attachment N:* Letter to Coushatta Tribe of Louisiana

*Attachment O:* Letter to Poarch Band of Creek Indians