National Park Service U.S. Department of the Interior Everglades National Park Florida



Tamiami Trail Modifications: Next Steps /

Final Environmental Impact Statement

Record of Decision

Recommended:

Kunlen,

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Approved:

For2 David Vela

Southeast Regional Director

National Park Service

Date:

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UNITED STATES DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

RECORD OF DECISION

TAMIAMI TRAIL MODIFICATIONS: NEXT STEPS /

ENVIRONMENTAL IMPACT STATEMENT

Everglades National Park

Florida

The Department of the Interior (DOI), National Park Service (NPS), has prepared this "Record of Decision" (ROD) on the Tamiami Trail Modifications: Next Steps / *Environmental Impact Statement* for Everglades National Park. This ROD includes a description of the background of the project, a statement of the decision made, a synopsis of other alternatives considered, the basis for the decision, findings on impairment of park resources and values, a description of the environmentally preferable alternative, a listing of measures to minimize environmental harm, and an overview of public and agency involvement in the decision-making process.

BACKGROUND OF THE PROJECT

In 1928, the Tamiami Trail roadway and the Tamiami canal were constructed across the entire width of the Everglades (*Figure 1*). While photos from the 1930s show water occasionally spilling over the top of the road, by 1940, aerial photos indicate that in just 12 years, the construction of Tamiami Trail had resulted in the formation of two separate and distinct landscape types, a wetter, more preserved ridge and slough habitat north of the trail, in what is now Water Conservation Area 3A, and a much drier, degraded sawgrass-dominated habitat south of the trail, in what is now Everglades National Park. Tamiami Trail forms the northern boundary of the park and acts as a dam, preventing water from flowing freely from north to south along its historical and natural path. This alteration has effectively deprived the park of vital water, resulting in the deterioration of the park's unique ecosystems, and also hindering restoration of the Everglades.



Figure 1 – Location of the Tamiami Trail in south Florida. The road was constructed in 1928 to connect the city of Miami on the east coast to Tampa on the west coast. The segment of the road that is the subject of this study (Project Area) is also depicted.

Acknowledging the need to restore more historical flow conditions in Northeast Shark River Slough, as well as overcoming legal challenges to raising the Tamiami Trail, Congress, in the 2009 Omnibus Appropriations Act, directed the U.S. Army Corps of Engineers to immediately build the 2008 Limited Reevaluation Report plan. Implementation of the 2008 Limited Reevaluation Report plan will raise the road to allow L-29 Canal stages to occasionally rise to 8.5 feet; however, constraints associated with highway safety will require that the stage in the L-29 Canal be operated on a sustained basis at no higher than 7.8 feet (*Figure 2*). This translates into only a 0.3-foot increase over the existing operational maximum canal stage (7.5 feet) and will not produce the water flow needed to restore the characteristic ridge and slough topography in Northeast Shark River Slough.



Figure 2 – Revised configuration of Tamiami Trail following the implementation of the 2008 Limited Reevaluation Report (LRR) project. Modifications include the addition of a 1-mile bridge (not depicted) and the addition of asphalt to raise the road surface elevation. Modifications will allow water levels to increase to a maximum of 8.5 feet NGVD but will be operated to maintain a 7.8 feet NGVD level as a precaution to prevent damage to the unbridged portion of the highway.

The 2009 Act also directed the National Park Service to complete a study that identifies additional modifications to the Tamiami Trail (e.g., bridging and road-raising) required to fully restore the ecological conditions in Northeast Shark River Slough and the Water Conservation Areas and establish the foundation for future restoration efforts in the Everglades. This initiative is referred to as the Tamiami Trail Modifications: Next Steps Project. This project is not authorized under existing law. If authorized, the Tamiami Trail Modifications: Next Steps Project would modify the road to allow a Design High Water (DHW) stage of 9.7 feet in the L-29 canal, providing the capability to convey the historical volumes of water that once passed into Everglades National Park. Importantly, meeting the structural roadbed requirements for the 9.7-foot DHW stage within this project would preclude the need for expensive future modifications to the Tamiami Trail when related projects that store and distribute the water required for full restoration are implemented.

To meet the Act's mandate, the National Park Service, as lead agency pursuant to the requirements of the National Environmental Policy Act, formed a Project Delivery Team (PDT). The Florida Department of Transportation and the Miccosukee Tribe of Indians of Florida participated as non-official members of the PDT. The National Park Service invited the Miccosukee Tribe of Indians of Florida to participate as a member of the PDT. Although representatives of the Tribe attended most meetings, these representatives indicated that the Tribe was not a formal member of the PDT.

The PDT consisted of the following representatives from federal, state, and local agencies:

- The National Park Service—Lead Agency
- The U.S. Army Corps of Engineers—PDT Member
- The Florida Department of Transportation—Non-official PDT Member
- The Miccosukee Tribe of Indians of Florida—Non-official PDT Member
- The U.S. Fish and Wildlife Service—PDT Member
- The Florida Department of Environmental Protection—PDT Member
- The South Florida Water Management District—PDT Member
- The Miami-Dade Department of Environmental Resources Management—PDT Member

The purpose of this team was to develop project objectives, screen and evaluate the benefits and costs of alternatives, and assist in the alternative evaluations leading to the National Park Service's selection of a preferred alternative.

Purpose and Objectives

The purpose of the Tamiami Trail Modifications: Next Steps Project is to comply with the Act that directs the Secretary of the Interior, acting thorough the National Park Service

"to immediately evaluate the feasibility of additional bridge length, beyond that to be constructed pursuant to the Modified Water Deliveries to Everglades National Park Project (16 U.S.C. § 410r-S), including a continuous bridge, or additional bridges or some combination thereof, for the Tamiami Trail (U.S. Highway 41) to restore more natural water flow to Everglades National Park

and Florida Bay and for the purpose of restoring habitat within the Park and the ecological connectivity between the Park and the Water Conservation Areas." (emphasis added)

Based on the specific language in the Act, the project delivery team developed the following objectives:

- Improve flows to and ecological conditions in Everglades National Park by bridging the Tamiami Trail to provide for unconstrained flows to Northeast Shark River Slough and Florida Bay;
- Restore the natural pathways for species movements (ecological connectivity) by removing obstructions to sheetflow between Water Conservation Area 3B and Northeast Shark River Slough;
- Improve historic flow patterns between Water Conservation Area 3B and Northeast Shark River Slough by reconnecting remnant sloughs, allowing natural re-contouring of the ridge and slough landscape;
- Improve ecological habitats in Everglades National Park, including ridge and slough, the Rocky Glades, and coastal estuaries; and
- Ensure compatibility with pre-Comprehensive Everglades Restoration Plan (CERP) and CERP projects.

In undertaking the required evaluation, Department of the Interior and National Park Service staff determined that it was necessary to take the following actions:

- Complete an Environmental Impact Statement for National Environmental Policy Act compliance;
- Include all real estate costs for acquisition of remaining properties in Northeast Shark River Slough authorized by the 1989 Everglades National Park Protection and Expansion Act;
- Continue to provide access to commercial airboat operators and Native American Indian camps located on the Tamiami Trail;
- Rely heavily on earlier studies that analyzed bridging alternatives for the Trail, particularly the alternatives and analyses conducted by the U.S. Army Corps of Engineers in the 2005 Revised General Reevaluation Report;
- Use existing technical information;
- Design the canal stage in the project to allow for unconstrained flow (later verified to be the same as the canal stage value used in the 2005 Revised General Reevaluation Report and equal to 9.7 feet NGVD); and
- Provide a 0.5-mile buffer between all bridge approaches and Native American Indian camps located within the project area as requested by these camps and the Miccosukee Tribe of Indians of Florida.

Per guidance provided from the Department of the Interior, several issues, while associated with the proposed project, are not addressed by the Environmental Impact Statement and will be addressed in future documents (i.e., Everglades National Park General Management Plan; Combined Operational Plan, as a component of the

Modified Water Deliveries to Everglades National Park project; and associated Comprehensive Everglades Restoration Plan projects). These issues include:

- Modification of water flows (water operations plan) associated with raising operating water levels in the L-29 Canal and the subsequent impact or benefit of increased water flows south of Tamiami Trail into Everglades National Park;
- Seepage control and flood mitigation along the eastern boundary of Northeast Shark River Slough in Everglades National Park;
- Potential designation of the East Everglades Expansion Area (a 107,600 acre addition to the northeast area of the park in 1989) as wilderness;
- Addition of supplementary public access points along Tamiami Trail; and
- Continued operation of commercial ventures (i.e., commercial airboating) and two radio towers located within the boundaries of Everglades National Park.

DECISION (SELECTED ACTION)

Description of the Selected Alternative

The National Park Service determined that Alternative 6e (*Figure 3*) with 5.5 miles of bridging most closely meets the objectives of the project, while preserving important historic, cultural, and natural resources within Everglades National Park. While Alternative 6e was determined to have the highest environmental benefit without impairment of park resources, this alternative also has the highest cost; therefore, the alternatives were also evaluated using the cost-to-importance analysis prescribed by the "Choosing By Advantages" evaluation which compares the importance scores to total costs for each alternative (*Figure 4*).



Figure 3 – Alternative 6e had the highest importance score, consists of a 5.5 miles of bridging, and would also maintain access to the commercial airboat facilities and the Native American Indian camps.



Figure 4 – Total cost plotted against the importance value (benefit) for all alternatives.

Based on these results that included evaluation of potential impacts to historic, cultural and natural resources within the park, the National Park Service made a preliminary selection of Alternative 6e as the preferred alternative, but also requested that the U.S. Army Corps of Engineers evaluate these data using the standard cost-effectiveness analysis performed for U.S. Army Corps of Engineers projects. The results of the U.S. Army Corps of Engineers analysis are depicted in *Table 1* and resulted in all alternatives being characterized as cost effective, but Alternative 6e was determined to be a better value (most efficient) when compared to the other alternatives.

Alternative	Total Cost (M\$)	Importance Score	Lift over No-Action	Cost per lift (M\$)	Cost Effective
No-Action	\$0	70	N/A	N/A	N/A
Alternative 4 – 1.0 mile	\$135.5	121	51	\$2.66	Yes
Alternative 5 – 1.5 miles	\$152.9	168	98	\$1.56	Yes
Alternative 1 – 2.2 miles	\$178.7	207	137	\$1.30	Yes
Alternative 2a – 3.3 miles	\$199.2	281	211	\$0.94	Yes
Alternative 6e – 5.5 miles	\$310.0	402	332	\$0.93	Most Efficient ¹

Table 1 - Results of Cost-Effectiveness Analysis performed by U.S. Army Corps of Engineers.

¹ These results indicated that Alternative 6e had the best value for the environmental benefits provided in relation to costs. Alternative 6e was the only alternative exhibiting the most efficient cost performance when compared to the other alternatives examined in the study.

Direct Benefits of the Selected Alternative

Alternative 6e, in combination with the 1.0 mile bridge being constructed under the 2008 Limited Reevaluation Report plan, would restore a total of 6.5 miles of potential ecological connectivity between Everglades National Park and marshes to the north, reconnecting 10 sloughs that have been severed since 1928, and restoring marsh flow patterns across much of Northeast Shark River Slough. The increased connectivity results from the construction of the new bridges coupled with the removal of the existing Tamiami Trail roadbed corresponding to the bridge locations. The greater expanse of bridging allows for improved distribution and timing of water flows at velocities of 0.08 feet per second (fps), similar to historical conditions (0.05 fps). The removal of 5.5 miles of roadway would also reduce wildlife mortality and potentially reconnect historic ridge and slough landscape, improving breeding and foraging conditions for some wildlife species. In addition, Alternative 6e would provide the conveyance capacity to meet the original Modified Water Deliveries Project target water flow of 4,000 cfs and also accommodate future projects, including those of the Comprehensive Everglades Restoration Plan and recent State of Florida restoration initiatives. Importantly, the increased bridging and road raising of Alternative 6e would allow stages in the L-29 Canal to be raised to allow for essentially unconstrained flows between Water Conservation Area 3 and Northeast Shark River Slough, based on a Design High Water elevation of 9.7 feet in the L-29 Canal. Hydrological analysis conducted for the 2005 Revised General Reevaluation Report indicated that substantial bridging, as in Alternative 6e, was needed to provide increased water conveyance to Northeast Shark River Slough without adversely impacting ecologically and culturally important tree islands in Water Conservation Area 3B.

If this project is authorized, funded, and implemented in conjunction with other planned restoration projects, increased water volumes and improved flow distributions will reestablish seasonal water depths and flooding durations that are critical to the survival of many fish and wildlife species, including the federally endangered Wood Stork, Everglade Snail Kite, and Cape Sable Seaside Sparrow, and state listed Roseate Spoonbill. In concert with the Combined Operation Plan, Alternative 6e will also enable the reconnection of Water Conservation Area 3 to Everglades National Park, reducing the severity and duration of dry-down events in one compartment of this region (Water Conservation Area 3B) and the prolonged deep-water conditions associated with the loss of tree islands in the southern portion of Water Conservation Area 3A. Achievement of the many ecological benefits through the implementation of Alternative 6e will not adversely affect Native American Indian

camps located on the Tamiami Trail, as it provides for a one-half mile set-aside on either side of existing Native American Indian camps. The proposed location of the bridge spans also maintains access to existing airboat tour operations.

The total estimated cost for implementation of Alternative 6e is \$310 million. The itemized cost breakdown is as follows:

TOTAL:	\$310 million		
Demolition/telemetry site relocation:	\$16 million		
Compensable Business Costs:	\$9 million		
Land Acquisition:	\$25 million		
Construction:	\$260 million		

Summary of Regional and Cumulative Impacts and Benefits

The completion of the Tamiami Trail Modifications: Next Steps project will provide the infrastructure to move larger volume flows to Northeast Shark River Slough associated with new water quality and water storage initiatives south of Lake Okeechobee. Past actions attempted to manage the movement of water from the water conservation areas to Everglades National Park without major modifications to the Tamiami Trail, generating few measurable benefits. Current actions are also limited and will provide only minimal ecological improvements, as the L-29 canal water stages will have to be controlled well below levels where substantial flow volumes and associated ecological benefits are attainable. New scientific information and new water quality treatment and storage initiatives underscore the realization that restoration of the central and southern Everglades depends on raising the Tamiami Trail to allow for the natural, unconstrained flow patterns (volumes, distributions, velocities, and timing of flows) critical to restoring the Everglades wetlands into the flow-sculpted, ridge-slough-tree island mosaic that once supported the abundant and diverse fish and wildlife populations found in the pre-drainage Everglades ecosystem.

MITIGATION MEASURES / MONITORING

The following mitigation measures and best management practices will be applied to the selected plan to avoid or minimize potential impacts from implementation of the selected alternative.

Natural Resources

General Construction Mitigation Measures

- Environmental training will be conducted to help educate construction personnel with the intent of reducing impacts on water quality/soils, wetland resources, and wildlife.
- All construction areas will be protected to confine potentially adverse activities to the minimum area required for construction. All protection measures will be clearly stated in the construction specifications,

and workers will be instructed to avoid conducting activities beyond the construction zone. The use of previously undisturbed areas will be minimized to the extent possible by selectively choosing staging areas and clearly defining and marking construction zones and perimeters.

Geology, Topography and Soils

• The use of tarps or similar cover materials or equivalent Best Management Practices will be used on stockpiled fill and other erosion prone areas during construction to minimize erosion as a result of storm events.

Water Resources

- Pre- and post-construction erosion control Best Management Practices will be implemented, including the installation and inspection of silt fences, straw bale barriers, sediment traps, or other equivalent measures, and revegetation of areas (where feasible) to control erosion, preserve water quality, protect wildlife and habitat, and prevent soil contamination. Erosion and sediment control Best Management Practices will be inspected and maintained on a regular basis and after each measurable rainfall to ensure they are functioning properly.
- Spill prevention, control, and countermeasure procedures, as well as storm water pollution prevention measures will be implemented to protect water quality/soils from erosion and contamination. Areas used for refueling will be limited to areas where these activities currently occur. Equipment containing fuels will be regularly inspected for leaks.
- A water quality monitoring plan will be implemented to ensure compliance with State permitting requirements.
- Impacts to wetland resources will be avoided and minimized to the maximum extent feasible through the implementation of construction Best Management Practices. All unavoidable impacts will be mitigated.

Wetlands

- Wetlands will be avoided and protection measures will be applied during construction. Wetlands will be delineated by qualified NPS staff or certified wetland specialists and clearly marked before construction work. Construction activities will be performed in a cautious manner to prevent damage caused by equipment, erosion, siltation, etc.
- In addition to the above wetland mitigation measures, NPS staff will conduct additional future wetland impact and mitigation analysis, as per NPS policy and Section 404 of the Clean Water Act (as administered by the Army Corps of Engineers). NPS policy requires the development of a "Wetlands Statement of Findings," which identifies and analyzes all wetland functions and values affected by NPS actions in a park unit. The "Wetlands Statement of Findings" (Appendix D of the FEIS) quantified all wetland impacts resulting from implementation of the selected plan. Although Section 404 of the Clean Water Act pertains only to wetland filling and dredging, the NPS statement of findings policy addresses the impacts on several other wetland values, such as wildlife habitat, soils, vegetation communities, surface hydrology, aesthetics, and cultural values. The detailed functional analysis of wetland impacts and the development of wetland avoidance and mitigation measures are part of the "Wetlands Statement of Findings."

• Since there is uncertainty as to the level of wetland improvements that will be achieved with the operation of the project, mitigation will be conducted at the Hole-in-the-Donut site in Everglades National Park if anticipated project benefits do not adequately offset the project's impacts to wetland value and functions. If needed, wetland impacts will be mitigated; therefore, there will be no impairment of wetland values and functions as a result of implementation of any of the action alternatives.

Wildlife and Vegetation / Habitat

- Steps will be taken to minimize the introduction of non-native species and will include washing equipment before entering the project area; minimizing disturbances; and initiating revegetation of disturbed areas immediately after construction (where feasible). The National Park Service will follow all of the guidelines outlined in the South Florida and Caribbean Parks Exotic Plant Management Plan.
- NPS will perform Systematic Reconnaissance Flight surveys to monitor nesting wading birds in the Tamiami colonies throughout the nesting season.
- Per National Park Service *Management Policies 2006*, artificial lighting will not be used in locations where its presence would disrupt wildlife dependent on the dark; minimal-impact lighting techniques will be used (e.g., consideration of yellow versus white lights, use of timers); artificial lighting will be shielded and directed, where necessary, with regard for natural night sky conditions. The use of lighting is not anticipated in view of the fact that all construction activities are expected to take place during daylight hours. However, construction crews may carry emergency/safety lighting and will be instructed to abide by the National Park Service *Management Policies 2006*.

Special Status Species

- During the environmental training, construction contractors will receive training on federal- and statelisted species and how to recognize and avoid impacts to these species.
- Pre-construction surveys will be conducted to identify any federal- and state-listed species occurring in the project area. Should individuals or active breeding sites be identified, additional measures will be taken to avoid impacts (e.g., providing additional information to contractors about the species) and the Florida Fish and Wildlife Conservation Commission and the U.S. Fish and Wildlife Service will be notified of the presence of these species in the project area.
- Mitigation for loss of primary panther habitat will be carried out as required by the U.S. Fish and Wildlife Service.
- Everglade snail kite monitoring will be conducted throughout the nesting season in Northeast Shark River Slough, Everglades National Park.
- Wood stork and state-listed wading bird (little blue heron, snowy egret, tricolored heron, and white ibis) monitoring will be conducted throughout the nesting season as part of the Everglades National Park Systematic Reconnaissance Flight wading bird surveys.
- Construction will include implementation of standard protection measures for protected species to the maximum extent practical. Additional specific mitigation measures may be identified during Section 7 consultation with the U.S. Fish and Wildlife Service. Specific planned measures include:

- The Guidelines for Manatee Conservation during the Comprehensive Everglades Restoration Plan Implementation (CERP Interagency Manatee Task Force, 2006) will be followed during all phases of construction.
- Nest protection buffers will be provided for the Everglade snail kite as described in the Draft Snail Kite Management Guidelines (USFWS, 2006) during all phases of project construction.
- The Standard Protection Measures for the Eastern Indigo Snake (USFWS, 2004) will be followed during all phases of project construction.
- Based on the results of the Systematic Reconnaissance Flight survey data, the need for wood stork management zone restrictions and state-listed wading bird nest protection buffers will be evaluated by National Park Service staff throughout the nesting season. Should any re-delineation of the wood stork management zones be necessary, Everglades National Park will coordinate such information with the U.S. Fish and Wildlife Service and the Florida Fish and Wildlife Conservation Commission.
- The following protective measures for wood storks will be implemented:
 - Primary Zone (the wood stork colony and a 1,000 ft buffer): From onset of nesting activity through the onset of the rainy season (or when the young have fledged), highway construction (e.g., highly disruptive activities, such as pile driving and blasting) should not be permitted in the reach of the highway affected by that alternative. The National Park Service Systematic Reconnaissance Flight surveys will be used to determine the nesting status of wood storks.
 - Secondary Zone (a 1,500 ft buffer surrounding the primary zone): No unauthorized human activity (on foot, airboat, or off-road vehicle) should occur at any time of the year within the reach of highway affected by that alternative on the south side of the highway and particularly during the nesting season.
 - Length of Restrictions: These restrictions shall remain in effect during the construction phase of the Tamiami Trail project.
 - Qualified Observer: Subject to the approval of the U.S. Fish and Wildlife Service, Florida Fish and Wildlife Conservation Commission, and National Park Service, a qualified observer(s) shall be stationed onsite during the construction phase of the Tamiami Trail project. The observer shall monitor wood stork activity and shall notify U.S. Fish and Wildlife Service, Florida Fish and Wildlife Conservation Commission, and the National Park Service if wood stork behavior is modified such that roosting, breeding, nesting, foraging, and/or fledging of young is disrupted or otherwise interfered with.
 - Modification of Restrictions: If new information becomes available concerning the wood stork colonies, the National Park Service, U.S. Fish and Wildlife Service, and Florida Fish and Wildlife Conservation Commission shall immediately contact each other to determine what modifications, if any, are warranted.
- A 100 meter nest protective buffer zone will be implemented for state-listed wading birds (little blue heron, snowy egret, tricolored heron, and white ibis) during the construction phase of the project. The National Park Service will coordinate with the Florida Fish and Wildlife

Conservation Commission and the U.S. Fish and Wildlife Service to determine the types of construction related activities that will be restricted should this mitigation measure need to be implemented.

- Should active nests of limpkins or Florida sandhill cranes be encountered in the project area, National Park Service will coordinate with the Florida Fish and Wildlife Conservation Commission to develop protective nest buffers for any encountered nests.
- Specific Terms and Conditions Required by the U.S. Fish and Wildlife Service—the The U.S. Fish and Wildlife Service Biological Opinion issued for this project recommends the following conservation recommendations:
 - The National Park Service should continue to implement the U.S. Fish and Wildlife Service Standard Local Operating Procedures-Endangered Species guidance whenever covered species could be encountered within or near a construction area.
 - The National Park Service should consult with the U.S. Fish and Wildlife Service and Florida Fish and Wildlife Conservation Commission if any federal- or state listed-species nests within the project area while construction is taking place, even if the nests occur in areas not previously considered in the Biological Opinion.
 - Should it become apparent that adult or juvenile wood storks, or other wading bird species, are having difficulty traversing the elevated bridges, thus raising the risk of vehicle strikes the National Park Service should consult with the U.S. Fish and Wildlife Service and Florida Fish and Wildlife Conservation Commission on ways to prevent this from occurring.
 - The National Park Service should place caution signs on Tamiami Trail, a reasonable distance from both ends of the project corridor, to alert motorists to the possibility of encountering panthers in the roadway.
 - Should panthers be sighted in and around the project area after construction is complete, the National Park Service should consider fencing the road embankments at the ends of appropriate bridge segments. This will serve to funnel panthers under the bridge rather than up onto the roadway. The National Park Service should contact the U.S. Fish and Wildlife Service for specifics regarding the latest fencing specifications.

Wilderness/Unique Ecosystems

- Measures listed above under "Water Resources" and "Wildlife" will serve to protect wilderness values and quality as well.
- Construction procedures will follow the minimum tool analysis for construction and would include provisions to minimize impacts to natural resources that contribute to wilderness values.

Cultural Resources

• To avoid damage to previously unknown archaeological resources, archaeological surveys and testing activities in previously un-surveyed and/or undisturbed areas will be conducted prior to ground-disturbing activities. If any resources are encountered, mitigation of project impacts (in consultation with appropriate agencies) or adjustment of the project design will take place to avoid or limit the adverse effects on

prehistoric and historic archaeological resources. Stop-work provisions will be included in the construction documents should archaeological or paleontological resources be uncovered. It should be noted there is a low probability that the project area contains undiscovered archeological resources.

- Monitoring will be done if any excavation exceeds the depth of existing ground disturbance. In the event that cultural resources are encountered during any necessary excavation work, project work will be halted and the discovery process would be initiated.
- If previously unknown archaeological resources are discovered, work will be stopped in the area of any discovery and the National Park Service will consult with affiliated tribes, pursuant to Native American Graves Protection and Repatriation Act (NAGPRA) and the *Draft Park NAGRPA Plan of Action for Inadvertent Discoveries, Everglades National Park and Associated Tribes* (May 2008).

Visitor Use and Experience

- Construction information and general information about the project will be posted at the park, distributed to visitors, and made available on the park's web site. Signage and notices will be used to inform visitors about the purpose of the project and to protect visitor and staff safety during construction activities.
- Artificial lighting, including minimum illumination levels, light-emitting diodes, limited color spectrum (e.g., yellow) lights, and timers and sensors will be used, where applicable, to ensure safety.
- The use of artificial lighting will be restricted to areas where security, basic human safety, and specific cultural resource requirements must be met.

Noise/Soundscapes

• Construction activities will involve multiple pieces of heavy equipment. Best management practices for noise, such as using mufflers on heavy equipment and noise-muffling construction material, will be implemented, resulting in short-term minor impacts to soundscapes. Assuming that heavy equipment operates at 80 to 90 decibels (dB) measured at a distance of 50 feet, and that sound levels decrease approximately 6 dB with the doubling of distance (Harmon 2006), it is estimated that natural attenuation will decrease the noise from these activities to no greater than 50 to 60 dB at a distance of approximately 1,500 feet from the work area; noise will continue to dissipate with increased distance from the construction activities.

Transportation

• In order to reduce traffic impacts from construction, a Maintenance of Traffic (MOT) plan will be implemented and construction would be scheduled during off-peak traffic hours.

Air Quality

• Everglades National Park has a Class I clean air status. If dust is generated during construction, Best Management Practices for dust suppression will be initiated. Emissions from construction vehicles would be kept to a minimum by restricting idling time.

OTHER ALTERNATIVES CONSIDERED

Several other alternatives were considered during the planning process (*Figure 5*). The paragraphs below describe the concept and key features of these alternatives. More detailed information on these alternatives can be found in the Environmental Impact Statement.

No Action Alternative: LRR 1-mile Bridge and Remaining Roadway Elevated



Alternative 1: 2.15-miles of Bridges and Remaining Roadway Elevated



Alternative 2A: 3.33-miles of Bridges and Remaining Roadway Elevated



Alternative 4: 1.01-miles of Bridges and Remaining Roadway Elevated



Alternative 5: 1.52-miles of Bridges and Remaining Roadway Elevated



Alternative 6E: 5.50-miles of Bridges and Remaining Roadway Elevated

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Controls Cares	Prog City Gator Pert	Coopertruer Solver 1.77 phile	1-mile 56-mile
2008 LRR Bridge	Proposed	d Bridges	Road Elevated

Figure 5 – Final suite of alternatives evaluated in this study. The No Action Alternative consists of the road corridor modifications associated with the approved 2008 Limited Reevaluation Report and includes 1 mile of bridging. Alternatives evaluated in this study add to the Limited Reevaluation Report plan and have additional total span lengths ranging from 1.01 miles to 5.5 miles.

No-Action Alternative

The No-Action Alternative is authorized by the 2008 LRR/EA and consists of construction of a 1-mile eastern bridge with the remaining road raised to allow an increase in the allowable stage in the L-29 Canal from 7.5 ft-NGVD to 8.5 ft-NGVD. All of the following action alternatives assume the 1-mile bridge (2008 LRR) has been constructed.

Alternative 1 – 2.2 Miles of Bridges

This alternative includes 4 bridges and a ConSpan for a total of 2.2 miles of bridges: (1) a 0.56 mile bridge located between the Osceola Camp and the Lincoln Financial Media Radio Tower, (2) a 0.45 mile bridge located between the Lincoln Financial Radio Tower and Everglades Safari Park, (3) a 0.51 mile bridge located between Everglades Safari Park and the Airboat Association, (4) a 0.38 mile bridge located between the Airboat Association and the Tiger Tail Camp, and a 0.26 ConSpan located just west of Coopertown, at control structure S-355B. The bridges and ConSpan would create a conveyance opening through Tamiami Trail by removing the sections of the existing highway and embankment. Bridges would be constructed approximately 50 feet south of the existing roadway right-of-way to maintain motor vehicle traffic during bridge construction. The remaining highway embankment (approximately 4.99 miles) would be reconstructed to raise the crown elevation to 13.13 feet.

Alternative 2a – 3.3 Miles of Bridges

This alternative includes 6 bridges and ConSpan for a total of 3.3 miles of bridges: (1) a 0.56 mile bridge located between the Osceola Camp and the Lincoln Financial Media Radio Tower, (2) a 0.45 mile bridge located between the Lincoln Financial Media Radio Tower and Everglades Safari Park, (3) a 0.51 mile bridge located between Everglades Safari Park and the Airboat Association, (4) a 0.38 mile bridge located between the Airboat Association and the Tiger Tail Camp, (5) a 0.26 mile ConSpan located between the Coopertown facility and the Salem Communications Radio Tower, (6) a 0.53 bridge located between the Salem Communications Radio Tower and the bridge located between the Salem Communications Radio Tower, (6) a 0.53 bridge located between the existing 1-mile bridge and the S-334 structure.

Alternative 2a would involve creating conveyance openings through Tamiami Trail by removing 3.3 miles of the existing highway and embankment. Bridges would be constructed approximately 50 feet south of the existing roadway right-of-way to maintain motor vehicle traffic during bridge construction. The remaining highway embankment would be reconstructed to raise the crown elevation to 13.13 feet.

Alternative 4 – 1.0 Mile of Bridges

This alternative includes 2 bridges for a total of 1.0 mile: (1) a 0.56 mile bridge located between the Osceola Camp and the Lincoln Financial Media Radio Tower, and (2) a 0.45 mile bridge located between the Lincoln Financial Media Radio Tower and Everglades Safari Park. The bridges would create a conveyance opening through Tamiami Trail by removing the sections of the existing highway and embankment. Bridges would be constructed approximately 50 feet south of the existing roadway right-of-way to maintain motor vehicle traffic

during bridge construction. The remaining highway embankment (approximately 7.80 miles) would be reconstructed to raise the crown elevation to 13.13 feet.

Alternative 5 – 1.5 Miles of Bridges

This alternative consists of 3 bridges for a total of 1.5 miles: (1) a 0.56-mile bridge located between the Osceola Camp and the Lincoln Financial Media Radio Tower; (2) a 0.45-mile located between Lincoln Financial Media Radio Tower and Everglades Safari Park, and (3) a 0.51-mile bridge located between the Everglades Safari Park and Frog City. The bridges would create a conveyance opening through Tamiami Trail by removing the sections of the existing highway and embankment. Bridges would be constructed approximately 50 feet south of the existing roadway right-of-way to maintain motor vehicle traffic during bridge construction. The remaining highway embankment (approximately 6.57 miles) would be reconstructed to raise the crown elevation to 13.13 feet.

BASIS FOR DECISION

The selection of the recommended alternative was based on a comprehensive evaluation of the potential effects (benefits and impairment) of the action alternatives on the preservation, protection and enhancement of the historic, cultural, and natural resources of Everglades National Park. To assist in identifying the recommended alternative, the NPS used the "Choosing By Advantages" process that compares the relative benefits of alternatives based both on the objectives of the project (e.g., ecological restoration) and National Park Service mission (e.g., preservation and protection of both natural and cultural resources).

While the Tamiami Trail Modifications: Next Steps alternatives ranged in bridging lengths from 1.01 to 5.5 miles, all of the action alternatives would raise the Tamiami Trail to allow for a 9.7 feet design high water elevation in the L-29 Canal—the water level that the inter-agency team agreed would provide for the natural, unregulated flows between marshes to the north and marshes in the park essential to full restoration of both Everglades National Park and the Greater Everglades ecosystem. Increasing the allowable high water level in the L-29 Canal provides hydraulic head needed to push water from the L-29 Canal into Shark River Slough and to allow water to flow through the existing culverts and future bridges. Without this increase in water level (i.e., stage), a sufficient hydraulic gradient would not exist to push the water to the south. The greater the L-29 Canal stage increase, the greater the water availability to Northeast Shark River Slough and the greater the water depths and corresponding restoration benefit to the downstream ridge and slough community in Everglades National Park. The current canal water control stage of 7.5 feet was established to prevent damage to the sub-base of the road. Therefore, it is a fundamental assumption that the entire section of road will have to be raised or replaced with bridging to accommodate the increase in canal stage.

In the Choosing By Advantages evaluation, numerical values were assigned to factors (performance measures) based on their importance in achieving the objectives of the project. The factor, restoring sheet flow conditions, was given the greatest importance value by the project delivery team for two reasons. First, this factor used distribution of flows across the 10.7-mile project area and topography to identify those areas where bridging would most enhance volumes of water flows and ecological benefits over the largest area in Northeast Shark River Slough. Second, modeling from the 2005 Revised General Reevaluation Report clearly indicated that bridges located in the western portion of the 10.7-mile project corridor provided greater volumes of flows to Everglades National Park, with fewer seepage concerns, than bridges located more to the east. The next highest scoring factors were, in order, increasing ecological connectivity, reconnecting sloughs, and restoring marsh flow (velocity) conditions. Alternative 6e scored demonstrably higher in the total importance scores (402) than did the other alternatives (refer to *Figure 4*).

FINDINGS ON IMPAIRMENT OF EVERGLADES NATIONAL PARK RESOURCES AND VALUES

A determination of impairment for the selected action is found in Chapter 3 and 4 of the Final Environmental Impact Statement and summarized in Appendix B of this document.

All practical measures to minimize environmental harm from the selected alternative have been adopted and are described in the previous "Mitigation Measures / Monitoring" section.

The National Park Service determined that any adverse impacts anticipated as a result of implementation of the selected or recommended plan on a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation, (2) key to the natural or cultural integrity of the Preserve(including the Addition) or to opportunities for enjoyment of the Preserve, or (3) identified as significant in the Preserve's general management plan or other relevant NPS planning documents will not rise to levels that would constitute impairment.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

In accordance with Director's Order Number 12 (Conservation Planning, Environmental Impact Analysis, and Decision-making) (NPS, 2001), the National Park Service is required to identify the "environmentally preferred alternative" in all environmental documents, including an Environmental Impact Statement. According to Council on Environmental Quality guidelines, the environmentally preferred alternative is the alternative that would promote the national environmental policy, as expressed in Section 101 of the National Environmental Policy Act, to:

- 1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- 2. Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- 3. Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
- 4. Preserve important historic, cultural, and natural aspects of our national heritage; and maintain, wherever possible, an environment which supports diversity and variety of individual choices;
- 5. Achieve a balance between population and resource use which would permit high standards of living and a wide sharing of life's amenities; and
- 6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

A description of how each alternative would or would not achieve the requirements of sections 101 and 102(1) of the National Environmental Policy Act criteria is provided below and illustrated through a rating system in *Table* **2**.

<u>Criterion 1</u> — Everglades National Park is a unit of the national park system, and as the trustee of this resource, the NPS would continue to fulfill its obligation to protect this area for future generations. The No-Action Alternative would only provide a limited environmental benefit while environmental degradation to wetlands and wildlife habitat would continue because of the historically altered hydrology and limited ecological connectivity. Each of the action alternatives would create the conditions that would allow the enhancement of the freshwater marshes within Northeast Shark River Slough and Everglades National Park and increased potential ecological connectivity; however, the anticipated incremental improvement to the environment of each alternative increases with increasing bridge lengths. Therefore, Alternative 6e (maximum bridging option) would do a better job at providing a long-term solution for the area and thus would provide the greatest level of protection for park resources over time.

<u>Criterion 2</u> — The No-Action Alternative would provide safe and culturally pleasing surroundings; however, because potential environmental benefits are limited to the one existing bridge, potential enhancement to environmental productivity and aesthetics are limited and environmental degradation would continue. All action alternatives would provide for the same level of public health and safety and culturally pleasing surroundings. Action alternatives 1, 4, and 5 would provide for incrementally greater environmental productivity and aesthetics based on their respective bridge openings. Alternatives 2a and 6e would provide maximum potential benefits to environmental productivity and aesthetics based on bridge length and potential amount of flows that can be restored to Northeast Shark River Slough and Everglades National Park.

<u>Criterion 3</u> — The No-Action Alternative would provide only limited environmental benefits, while environmental degradation to wetlands and wildlife habitat would continue because of altered hydrology and limited ecological connectivity. The action alternatives would provide for conditions that would lead to enhanced wetland values and functions and increased ecological connectivity with incremental benefits incurred based on bridge length. All action alternatives would result in permanent impacts to wetlands, soils, and habitats of special status species. Alternatives 2a and 6e would provide for the widest range of beneficial uses based on the potential for ecological enhancement provided by their bridge openings; however, Alternatives 2a and 6e also would incur the highest level of impacts to wetlands and state and federally listed wading bird species. However, the adverse impacts from construction of the Tamiami Trail Modifications: Next Steps Project is anticipated to be outweighed by the overall beneficial effects of implementation of the Tamiami Trail Modifications: Next Steps Project anticipated to be outweighed association with other Everglades restoration projects such as the Comprehensive Everglades Restoration Plan and the Modified Water Deliveries.

<u>Criterion 4</u> — The No-Action Alternative allows for maximum preservation of historic and cultural resources and access to opportunities that support diversity and individual choice. All action alternatives are associated with minor to moderate levels of impacts to cultural and historic resources with the exception of Action Alternative 6e, which would have a major cultural resource impact on the Coopertown property. The action alternatives also include the same level of recreational access and opportunities that lead to supporting diversity and individual choice.

<u>Criterion 5</u>—The No-Action Alternative would offer only limited availability of resource use and enjoyment of amenities as degradation of the resource would continue into the future. The action alternatives would allow for enhanced access and enjoyment of resource amenities with incremental enhancements based on bridge lengths. Alternative 6e offers the maximum ability for access and enjoyment of resource amenities since the bridge length provides maximum increased access for recreation (i.e., boating) and maximizes restoration potential of downstream wetlands.

<u>Criterion 6</u> — The No-Action Alternative provides for some enhancement of renewable resources, while resulting in the lowest use of depletable resources (fuel) of all alternatives. Each of the action alternatives would result in enhancing the quality of renewable resources through National Park Service management in the project

area. According to the carbon footprint analysis (an analysis of greenhouse gas emissions resulting from the use and combustion of fuel, a non-renewable resource, used for the project) conducted for the project, Alternatives 1, 4, and 5 would result in the lowest level of use of depletable resources. Alternatives 2a and 6e consume the highest amount of fuel and would result in the lowest amount of recycling of depletable resources.

Based on this numerical analysis, the environmentally preferred alternative for the Tamiami Trail Modifications: Next Steps project is Alternative 6e. According to the ratings included in *Table 2*, this alternative would surpass the other alternatives in realizing the full range of national environmental policy goals in Section 101 of the National Environmental Policy Act. In particular, Alternative 6e best responds to criteria 1, 2, and 5 by providing the greatest level of safety, environmental protection/enhancement, and access to and enjoyment of the resource while minimizing environmental and cultural resource impacts to the greatest extent possible.

Criterion	No- Action	1	2a	4	5	6e
1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.	2	3	4	3	3	5
2. Ensure safe, healthful, productive, and aesthetically and culturally pleasing surroundings for all Americans.	2	3	5	3	3	5
3. Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.	2	3	4	3	3	4
4. Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and a variety of individual choices.	5	4	4	4	4	3
5. Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.	2	3	4	3	3	5
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.	3	4	3	4	4	3
Total Points*	16	20	24	20	20	25

* Five points were given to the alternative if it fully meets the criteria; four points if it meets nearly all of the elements of the criteria; three points if it meets more than one element of the criteria; two points if it meets only one element of the criteria; and one point if the alternative does not meet the criteria.

PUBLIC AND AGENCY INVOLVEMENT

Everglades National Park places a high priority on meeting the intent of public and interested agency involvement, both internal and external, in the National Environmental Policy Act process. In addition to giving the public an opportunity to comment on proposed actions, regulatory agency comments, interested party comments, and comments from National Park Service staff familiar with the proposed project were highly encouraged. As part of the National Park Service National Environmental Policy Act process, issues associated with the action were identified during scoping meetings with National Park Service staff, coordination with other affected agencies, public meetings, and public comment periods.

During the development of the Environmental Impact Statement, the Park actively involved the public in all facets of the process. The Park's goals for public participation include: understanding and acceptance of the Environmental Impact Statement by the public; substantive and valuable input to help guide Park decisions; and minimization of conflicts through dissemination of information and initiating discussion.

The Park places a high value on maintaining a meaningful dialogue with interested parties, agencies, and organizations. The Park elicited public participation in the discussion of alternatives for the Environmental Impact Statement. Public and agency involvement efforts included open house meetings, press releases, website postings, and dissemination of information and gathering of comments through the internet.

Public Scoping

A project scoping newsletter was distributed by National Park Service to individuals, organizations, agencies, and American Indian Tribes by U.S. mail and electronic mail in May 2009. This notice announced the Park's proposal and described preliminary alternative and resource considerations, and identified opportunities for public participation in the Environmental Impact Statement process. The notice invited interested parties to submit their initial views or concerns regarding the project to the Park. The scoping period was scheduled from May 21 through June 12, 2009.

A public scoping meeting was held on June 2, 2009, at the South Dade Regional Library in Miami, Florida, to initiate public involvement early in the planning stage and to obtain community feedback regarding the initial concepts for the development of the Tamiami Trail Modifications: Next Steps Environmental Impact Statement. A total of 47 public participants and 13 project personnel attended.

Scoping Comments

Correspondence from respondents regarding the Tamiami Trail Modifications: Next Steps project were in general strongly supportive of the proposed action. Based on all of the scoping comments received, 96.7% percent of respondents were strongly in favor of the project and 0.4% of respondents were generally in favor of the project but had concerns or questions about certain aspects of the project. Approximately 0.8% of respondents expressed a strong opposition to the project and 0.8% of respondents were generally in opposition to the project but expressed concerns or questions that, if resolved, could garner their support for the project. The remaining 1.3% of respondents raised questions about the project but did not express an opinion supporting or opposing the project.

Draft EIS Process and Public Involvement

Pursuant to 42 U.S.C. 4332(2)(C) of the National Environmental Policy Act of 1969 and National Park Service policy in Director's Order Number 2 (Park Planning) and Director's Order Number 12 (Conservation Planning, Environmental Impact Analysis, and Decision-making), the National Park Service published a Notice of Availability about the Draft Environmental Impact Statement for the Tamiami Trail (U.S. Highway 41) Modifications: Next Steps Project for Everglades National Park, Florida, in the Federal Register (Volume 75, Number 100, pages 29359-29361) on Tuesday, May 25, 2010. The notice invited interested parties to submit their views or concerns regarding the project to the park. The 60-day comment period was scheduled from May 25 through July 27, 2010. The Notice of Availability in the Federal Register also announced that a public meeting would be held during the 60-day comment period.

Public Meeting

A public meeting was held on June 24, 2010, at the South Dade Regional Library in Miami, Florida, to initiate public involvement and to obtain community feedback regarding the Tamiami Trail Modifications: Next Steps Draft Environmental Impact Statement. The public meeting date/time and place was published on the National Park Service's website and a public meeting announcement was printed in the Miami Herald and El Nuevo Herald on June 16, 2010. A total of 100 public participants and 10 project personnel attended.

Agency Meeting

An interagency roundtable discussion meeting for this project was held on August 18, 2010, at the National Park Service South Florida Natural Resources Center in Homestead, Florida. Local, state, and federal agencies and Tribes involved in this project were invited to this roundtable meeting to discuss any issues, concerns, or comments about the Draft Environmental Impact Statement. Along with National Park Service staff and consultants, Florida Department of Environmental Protection, South Florida Water Management District, U.S. Army Corps of Engineers, and the Miccosukee Tribe of Indians of Florida participated in the meeting (note that some participants joined in the discussion via conference call).

Public/Agency Comment Process

Numerous methods were available for the community to provide comment about the Tamiami Trail Modifications: Next Steps project. Those attending the public meeting were given comment forms, which could be filled out at the meeting or mailed back to the park. Public meeting participants were also informed of additional opportunities to comment on the project, including directing comments by mail, e-mail, or through the National Park Service's Planning, Environmental and Public Comment website. Public meeting participants were also given the opportunity to provide a formal comment on the project during the public comment session of the public meeting, during which a court reporter was available to record all statements.

During the comment period, 14,735 pieces of correspondence were received with 40,643 comments². Correspondence was received by one of the following methods: e-mail, hard copy letter, National Park Service comment form, or entered into the Planning, Environmental and Public Comment website. Letters received by e-

² Please note that 5,680 pieces of correspondence were form letters sent by members of the Sierra Club and 8,455 pieces of correspondence were form letters sent by members of the National Parks Conservation Association. Fifteen other form letters were also received from other organizations.

mail, hard copy, or the National Park Service comment form, were entered into the Planning, Environmental and Public Comment system for analysis. Each of these letters or submissions is referred to as correspondence.

AGENCY AND AMERICAN INDIAN CONSULTATION AND COORDINATION

National Historic Preservation Act Section 106 Consultation

Federal agencies that have direct or indirect jurisdiction over historic properties are required by Section 106 of the National Historic Preservation Act of 1966, as amended (16 *United States Code* 270, et seq.) to take into account the effect of any undertaking on properties eligible for listing in the National Register of Historic Places. To meet the requirements of 36 *Code of Federal Regulations* 800, the National Park Service mailed a letter to the Florida state historic preservation officer on November 11, 2009, inviting their formal participation in the planning process.

In the Draft Environmental Impact Statement, the National Park Service determined that the preferred alternative will have adverse effects on two cultural resources, the Coopertown airboat facility and the Tamiami Trail roadbed, and mailed a copy of this determination to the state historic preservation officer with a request for written concurrence with that determination.

In a Memorandum of Agreement (MOA) between the National Park Service and the state historic office dated April 21, 2010, it was determined that the adverse impacts to the two cultural resources were unavoidable and the mitigation proposed by the NPS would be appropriate. Subsequent to the MOA, in a letter dated July 15, 2010, from the Florida Department of State, Division of Historical Resources to Everglades National Park, the state historic preservation office agreed with the Draft EIS determination that adverse impacts to the two cultural resources would be appropriately mitigated by actions proposed by the NPS.

Copies of all project correspondence with local, state, and federal agencies and Tribes are located in *Appendix J* of the Environmental Impact Statement.

American Indian Tribes

The National Park Service recognizes that indigenous peoples have traditional and contemporary interests and ongoing rights in lands now under NPS management, as well as concerns and contributions to make for the future via the scoping process for general management plans and other projects. Related to tribal sovereignty, the need for government-to-government Native American consultations stems from the historic power of Congress to make treaties with American Indian tribes as sovereign nations.

Consultations with American Indians and other Native Americans, such as Alaska Natives and Native Hawaiians, are required by various federal laws, executive orders, regulations, and policies. For example, such consultations are needed to comply with Section 106 of the National Historic Preservation Act of 1966, as amended. Implementing regulations of the Council on Environmental Quality for the National Environmental Policy Act of 1969, as amended, also call for Native American consultations.

Miccosukee Tribe of Indians of Florida

In accordance with Section 106 of the National Historic Preservation Act, the National Park Service consulted with the Miccosukee Tribe of Indians of Florida throughout the planning process, and will continue to consult

with Tribe through project implementation. Miccosukee Tribe representatives also participated in all project delivery team meetings used to develop alternatives and select the recommended alternative.

The Miccosukee Tribe of Florida provided a letter to the NPS dated June, 26, 2009, during the Public Scoping portion of the project. A meeting was held on December 11, 2009, between representatives of the National Park Service, U.S. Army Corps of Engineers, and Miccosukee Tribe concerning the proposed Tamiami Trail Modifications project.

In a letter dated March 22, 2010, the Miccosukee Tribe provided comments on the project. In addition, the Miccosukee Tribe provided a letter dated July 26, 2010, in response to the Draft Environmental Impact Statement. The detailed responses by the NPS to each of the Miccosukee Tribe concerns are contained in Appendix K of the Environmental Impact Statement.

Seminole Tribe of Florida

The Seminole Tribe of Florida provided a response to the Draft Environmental Impact Statement letter on July 22, 2010.

State of Florida

Florida Department of Environmental Protection

The Florida Department of Environmental Protection provided comments on the Draft Environmental Impact Statement through the Florida State Clearinghouse via a letter dated July 19, 2010.

Florida Department of Transportation

Because of the unique position of the Florida Department of Transportation as owner of this transportation facility (Tamiami Trail), the National Park Service conducted an extensive and comprehensive consultation process with this agency.

The National Park Service met with Florida Department of Transportation on April 21, 2009 at the Florida Department of Transportation's District VI office in Miami to introduce the proposed Tamiami Trail Modifications: Next Steps project. Personnel from the U.S. Army Corps of Engineers also participated in the meeting. The National Park Service summarized the results of the April 21, 2009, meeting with the Florida Department of Transportation in a letter dated May 19, 2009. Additionally, this letter invited Federal Highway Administration to be a cooperating agency in order to better meet the transportation requirements of the project.

In response to the National Park Service May 19, 2009 letter, Florida Department of Transportation provided a letter dated June 10, 2009. Also, in a letter dated July 27, 2009, Florida Department of Transportation clarified that while they could not be a cooperating agency in this project, they would work closely with the National Park Service to ensure their concerns are addressed.

The Florida Department of Transportation provided a response to the Draft Environmental Impact Statement in a letter dated July 27, 2010. The Florida Department of Transportation also provided detailed engineering comments about the preferred alternative in the July 2010 letter. These comments and the National Park Service responses are contained in Appendix K of the Environmental Impact Statement.

Florida Fish and Wildlife Conservation Commission

The Florida Fish and Wildlife Conservation Commission responded to the Draft Environmental Impact Statement through the Florida State Clearinghouse in a letter dated July 20, 2010.

South Florida Water Management District

The South Florida Water Management District provided comments on the Draft Environmental Impact Statement in a letter dated July 26, 2010.

Local Government Agency

Miami-Dade County Department of Environmental Resources Management

During the initial scoping portion of the project, Miami-Dade County Department of Environmental Resources Management provided a letter dated June 12, 2009. Staff members of Miami-Dade County Department of Environmental Resources Management reviewed the Draft Environmental Impact Statement and provided technical comments on the project via the National Park Service's Planning, Environmental and Public Comment website on July 27, 2010.

National Environmental Policy Act (NEPA) and Clean Air Act Compliance

U.S. Environmental Protection Agency

The U.S. Environmental Protection Agency provided comments on the Draft Environmental Impact Statement via a letter dated July 19, 2010.

Endangered Species Act Section 7 Consultation

U.S. Fish and Wildlife Service

The National Park Service initiated formal consultation with the U.S. Fish and Wildlife Service via electronic mail dated February 25, 2010. The National Park Service requested an amendment to the Tamiami Trail portion of the Modified Water Deliveries to Everglades National Park project Biological Opinion, which was originally issued on January 12, 2006 (and later amended on June 25, 2008).

After reviewing the Draft Tamiami Trail Modifications: Next Steps Environmental Impact Statement, the U.S. Fish and Wildlife Service submitted a Memorandum to the National Park Service on July 26, 2010, providing the U.S. Fish and Wildlife Service recommended findings for threatened and endangered species. Within the Memorandum, the U.S. Fish and Wildlife Service requested that the NPS provide a wood stork foraging assessment and a panther habitat unit assessment to assist in the Endangered Species Act Section 7 Consultation. On August 25, 2010 the National Park Service submitted the requested information to the U.S. Fish and Wildlife Service.

The U.S. Fish and Wildlife Service issued the Biological Opinion for the Tamiami Trail Modifications: Next Steps project on October 18, 2010. The findings of the Biological Opinion have been incorporated into the Final Environmental Impact Statement.

CONCLUSION

The 2009 Omnibus Appropriations Act direction and recent science on restoration requirements, including science conducted by the State of Florida, provided the framework for the National Park Service's analysis of the question of how much additional bridging is needed and the benefits and impacts associated with the six alternatives that are the subject of the Environmental Impact Statement. Eight separate factors were assessed by a

project delivery team that included representatives of the National Park Service, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, the South Florida Water Management District, the Florida Department of Environmental Protection, the Florida Department of Transportation, and the Miami-Dade County Department of Environmental Resource Management. These factors included marsh connectivity and flow velocity, reconnection of the ridge and slough landscape, and vehicular wildlife mortality, as well as preservation of cultural resources and wetland loss. Analysis of the alternatives found a strong positive correlation between the amount of bridge span and the benefits provided and culminated in the selection of Alternative 6e as the preferred alternative as set forth in the Environmental Impact Statement. Although Alternative 6e would result in more impacts to cultural resources and wetlands, these impacts could be adequately mitigated and are justified based on the substantial environmental benefits of Alternative 6e. As described in the "Mitigation" section, all practical means to avoid or minimize environmental harm have been adopted. Moreover, as evidenced in the findings of the Environmental Impact Statement, the unavoidable adverse impacts will be adequately and appropriately mitigated. After a review of these effects, the alternative selected for implementation will not impair resources or values in Everglades National Park and will not violate the National Park Service Organic Act.