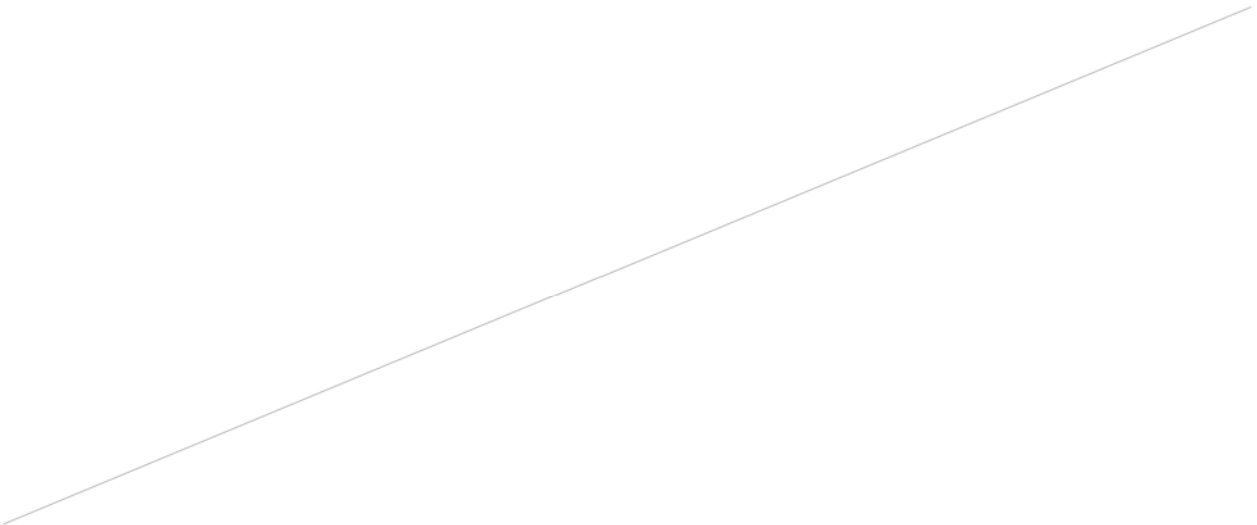


*APPENDIX A*  
*AIR QUALITY AND CLIMATE ANALYSIS*



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## Construction Emission Inventory

This construction emission inventory (CEI) assessment was prepared for informational purposes to disclose the potential construction-related emissions generated by the Proposed Project.

The U.S. Environmental Protection Agency (USEPA) sets National Ambient Air Quality Standards (NAAQS) to protect public health and the environment. The USEPA has identified the following seven criteria air pollutants for which NAAQS are applicable: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and sulfur dioxide (SO<sub>2</sub>). The USEPA describes these pollutants as "criteria" air pollutants because the agency regulates them by developing human health-based and/or environmentally-based criteria (science-based guidelines) for setting permissible levels (EPA, 2023).

According to the USEPA, lead (2008 standard), for a portion of Hillsborough County, is classified as "maintenance" (i.e., about 10 miles east of the Airport) (EPA, 2022). Also, sulfur dioxide 1-hour (2010 standard) for a portion of Hillsborough County is classified as "maintenance" (i.e., Gibsonton and Riverview areas, over 10 miles southeast of the Airport) (EPA, 2022).

The EA's Direct and Indirect Study areas are located entirely within Hillsborough County. All construction activity would occur in the Direct Study Area. The Direct Study Area is an "attainment" area for all National Ambient Air Quality Standards (NAAQS) (EPA Greenbook, 2022).<sup>1</sup>

### Construction Emissions Inventory Approach

Construction requirements for the Proposed Project include a variety of construction emissions sources: off-road, on-road, and fugitive dust. The emissions from these sources are most commonly associated with the following types of activities: earthwork, grading and leveling, and construction equipment storage and movement. Construction of the Proposed Project is anticipated to begin in 2025 and end in 2026. Construction emissions are estimated based on these factors: construction schedule; the number of construction vehicles and/or equipment; the types of construction vehicles and/or equipment; types of fuel used to power the equipment and vehicles; vehicle and equipment hourly activity/vehicle miles traveled; construction materials used and their quantities; and the duration of construction.

#### Non-road Emission Sources

Non-road sources associated with the Proposed Project's construction include exhaust from heavy construction equipment (e.g., graders, excavators, rollers, dump trucks) and fugitive dust emissions). The CEI assessment was based on the factors described in the above paragraph.

#### On-road Emission Sources

On-road emission sources associated with the Proposed Project's construction include material delivery vehicles (e.g., dump trucks, 18-wheelers carrying asphalt) and passenger vehicles transporting construction personnel to and from the job site.

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<sup>1</sup> NAAQS are six criteria pollutants: carbon monoxide, lead, ozone, sulfur dioxide, nitrogen dioxide, and ozone.

### Fugitive Emissions

Paving or dust emission sources associated with the Proposed Project's construction include asphalt storage, material movement on both paved and unpaved roads, soil handling, and un-stabilized land and wind erosion. Paving or dust emissions were based on the number of months for construction.

### MOVES3

The CEI used the EPA's MOrtor Vehicle Emissions Simulator 3 (MOVES3.1) to analyze the Proposed Project's potential construction emissions.

### Inputs

The Proposed Project's cost estimates and typical construction practices were used to develop the CEI inputs displayed in **Table 1, Table 2, Table 3, and Table 4**. Construction equipment type and hours for the Proposed Project are based on engineering judgment and past experience with airport construction projects. These equipment types and hours were used in MOVES3.1 to develop Non-Road and On-Road engine emission and load factors to determine if the Proposed Project would exceed the *de minimis* levels established in the FAA's Aviation Emissions and Air Quality Handbook (FAA, 2023).

**Table 1 2025 Non-Road Construction Emissions Inventory Inputs**

<b>Equipment Type</b>	<b>Fuel Type</b>	<b>Operating Hours</b>
90 Ton Crane	Diesel	2,104.5
Backhoe	Diesel	2,104.5
Concrete Pump	Diesel	78.9
Concrete Ready Mix Trucks	Diesel	394.5
Concrete Truck	Diesel	157.8
Fork Truck	Diesel	22,354.3
Generator	Diesel	1,972.3
High Lift	Diesel	6,049.1
Man Lift	Diesel	19,723.2
Man Lift (Fascia Construction)	Diesel	157.8
Material Deliveries	Diesel	394.5
Survey Crew Trucks	Diesel	65.1
Tool Truck	Diesel	4,879.5
Tractor Trailer- Material Delivery	Diesel	5,429.8
Tractor Trailer- Steel Deliveries	Diesel	262.3
Tractor Trailers Temp Fac.	Diesel	25.6
Trowel Machine	Diesel	78.9

Source: RS&H 2023

**Table 2 2026 Non-Road Construction Emissions Inventory Inputs**

	<b>Equipment Type</b>	<b>Fuel Type</b>	<b>Operating Hours</b>
	90 Ton Crane	Diesel	3,908.3
	Backhoe	Diesel	3,908.3
	Concrete Pump	Diesel	146.5
	Concrete Ready Mix Trucks	Diesel	732.6
	Concrete Truck	Diesel	293.0
	Fork Truck	Diesel	41,515.1
	Generator	Diesel	3,662.9
	High Lift	Diesel	11,234.1
	Man Lift	Diesel	36,628.8
	Man Lift (Fascia Construction)	Diesel	293.0
	Material Deliveries	Diesel	732.6
	Survey Crew Trucks	Diesel	120.9
	Tool Truck	Diesel	9,062.0
	Tractor Trailer- Material Delivery	Diesel	10,083.9
	Tractor Trailer- Steel Deliveries	Diesel	487.2
	Tractor Trailers Temp Fac.	Diesel	47.6
	Trowel Machine	Diesel	146.5

Source: RS&H 2023

Vehicle Miles Traveled (VMT) are based on the distance traveled by employees and material deliveries for the Proposed Project. MOVES3.1 uses a 30-mile round trip per passenger car and a 40-mile trip per material delivery.

**Table 3 2025 On-Road Construction Emissions Inventory Inputs**

<b>Equipment</b>	<b>Fuel Type</b>	<b>VMT*</b>
Single Unit Short-haul Truck	Diesel	3,469
Single Unit Short-haul Truck	Diesel	1,850
Combination Short-haul Truck	Diesel	79.5
Passenger Car	Gasoline	851,400

Note – VMT = vehicle miles traveled

Source: MOVES3.1, RS&H 2023

**Table 4: 2026 On-Road Construction Emissions Inventory Inputs**

<b>Equipment</b>	<b>Fuel Type</b>	<b>VMT*</b>
Single Unit Short-haul Truck	Diesel	10,407
Single Unit Short-haul Truck	Diesel	5,550
Combination Short-haul Truck	Diesel	238.5
Passenger Car	Gasoline	2,554,200

Note – VMT = vehicle miles traveled

Source: MOVES3.1, RS&H 2023

## Construction Emissions Inventory Results

For informational purposes, **Table 5** shows the criteria pollutants in tons per year during the Proposed Project's construction.

**Table 5: Proposed Project Totals MOVES3 Results (Tons Per Year or TPY)**

2025-2026	NAAQS						GHGs		
	CO	VOC	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O
<b>NONROAD</b>	4.24	0.60	16.69	0.67	0.65	0.03	12,431.19	0.00	0.00
<b>ONROAD</b>	13.71	0.10	0.36	0.01	0.01	0.01	1,025.47	0.03	0.00
<b>FUGITIVE</b>	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00
<b>TOTAL (TPY)</b>	17.95	0.70	17.05	0.68	0.67	0.04	13,456.66	0.03	0.00
<b>HILLSBOROUGH COUNTY TOTAL</b>	149,296	46,505	24,761	26,365	6,911	8,244	N/A	N/A	N/A
<b>% OF COUNTY</b>	0.012%	0.001%	0.068%	0.025%	0.009%	0.0005%	N/A	N/A	N/A

Note – N/A = not applicable

Source: MOVES3.1, RS&H 2023.

## Operational Aviation Emissions

When compared to the No Action Alternative, the Proposed Project would result in an increase in aircraft operations in 2027 and 2032. As the 2032 study year has the larger increase in aircraft operations (i.e., 2,000), the aircraft emissions due to the 2032 Proposed Project were compared to the Hillsborough County total emissions. The Direct Study Area is “attainment” for all NAAQS. Therefore, air quality *de minimis* thresholds do not apply.

For informational purposes, operational aviation emissions were calculated for the opening year 2027 and five years after the opening year in 2032 for the Proposed Project. Operational aviation emissions were calculated using the FAA’s Aviation Environmental Design Tool (AEDT) up to the 10,000-foot mixing height. See **Table 6** for emissions that would be generated from the Proposed Project.

**Table 6 Operational Aviation Emissions in Tons Per Year (Up to 10,000-foot Mixing Height)**

Year	CO	VOC	NO <sub>x</sub>	SO <sub>x</sub>	PM 2.5	PM 10
<b>2027</b>	2.05	0.25	3.35	0.25	0.04	0.04
<b>2032</b>	8.87	1.08	14.52	1.11	0.16	0.16

Note: Calculated up to the 10,000-foot mixing height for social cost calculations.

Source: AEDT, 2023, RS&H, 2023.

## Climate

In January 2023, the Council on Environmental Quality (CEQ) issued interim guidance, *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change*,<sup>2</sup> to assist agencies in analyzing greenhouse gas emissions (GHG) and climate change effects of a proposed project under NEPA. The CEQ identified Social Cost-Greenhouse Gases (SC-GHG) as the metric for assessing potential climate impacts and represents the monetary estimate of the effect associated with each additional metric ton of carbon dioxide released into the air (Interagency Working Group, 2021). The three GHGs<sup>3</sup> that are analyzed are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O), which represent more than 97% of U.S. GHG emissions.

To calculate SC-GHG, the carbon dioxide equivalent CO<sub>2</sub>e<sup>4</sup> must be calculated first. CO<sub>2</sub>e is calculated using the Global Warming Potential (GWP) metric to compare the impact a gas has on the global climate concerning CO<sub>2</sub>. GWP values are based on the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) (IPCC, 2023). For example, CH<sub>4</sub> has 28 times the GWP of CO<sub>2</sub> and absorbs 28 times more energy in the atmosphere when compared to CO<sub>2</sub> (IPCC, 2023). **Table 7** shows the CO<sub>2</sub>e values for the construction years of 2025 and 2026 using the CEI results from **Table 5**. Operational aviation emissions from the Proposed Project are represented in 2027<sup>5</sup> and 2032<sup>6</sup> (see **Table 6**). The associated CO<sub>2</sub>e emissions from the operation of the Proposed Project are included in **Table 7**.

The Interagency Working Group (IWG) developed average discount rates to assess climate impacts over time. The higher the discount rate, the lower the social climate cost (SCC) for future generations. The IWG average discount rates are 5 percent, 3 percent, 2.5 percent, and the 95<sup>th</sup> percentile estimate at the 3 percent discount rate, which represents the potential for low-probability catastrophic climate impacts. The IWG determined the social cost of CO<sub>2</sub> (SC-CO<sub>2</sub>) through 2050 and assigned a monetary value<sup>7</sup> for each additional metric ton of CO<sub>2</sub> produced. SC-CO<sub>2</sub> is equivalent to SC-GHGs and represents the social costs of the total greenhouse gases converted to the CO<sub>2</sub>e equivalent. The SC-CO<sub>2</sub> helps weigh the benefits of climate mitigation against its costs.

**Table 8** shows the monetary value of each additional metric ton of CO<sub>2</sub> for 2025, 2026, 2027, and 2032. The SC-CO<sub>2</sub> models projects the future cost of each additional ton of CO<sub>2</sub> in the future (Institute for Policy Integrity, 2017).

**Table 9** shows the Social Cost of Carbon Dioxide (SC-CO<sub>2</sub>) for the Proposed Project. The construction emissions inventory's CO<sub>2</sub>e (see **Table 7**) was multiplied by the average discount rates (see **Table 8**) to determine the monetary impact for 2025 and 2026. The Proposed Project's CO<sub>2</sub>e operational aviation emissions data was multiplied by the average discount rate (see **Table 8**) to determine the monetary impact for 2027 and 2032.

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<sup>2</sup> 88 FR 1196, National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change, <https://www.federalregister.gov/documents/2023/01/09/2023-00158/national-environmental-policy-act-guidance-on-consideration-of-greenhouse-gas-emissions-and-climate>; Accessed November, 2023

<sup>3</sup> These three GHGs are identified in the CEQ's National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change.

<sup>4</sup> CO<sub>2</sub>e: Number of metric tons of CO<sub>2</sub> emissions with the same global warming potential as one metric ton of another greenhouse gas.

<sup>5</sup> 2027 represents the opening year of the Proposed Project.

<sup>6</sup> 2032 represents five years after the opening year of the Proposed Project.

<sup>7</sup> These monetary values are based on the results from three economic models used by the IWG: William Nordhaus' DICE model (Yale University), Richard Tol's FUND model (Sussex University), and Chris Hope's PAGE model (Cambridge University).

**Table 7 Proposed Project CO<sub>2</sub>e**

Year	Pollutant	Emissions Quantity (Tons)	AR6 GWP	CO <sub>2</sub> e
<b>Construction Emissions</b>				
2025	CO <sub>2</sub>	4611.58	1	4,611.58
	CH <sub>4</sub>	0.01	28	0.2381
	N <sub>2</sub> O	0.00104	265	0.2767
			<b>Total</b>	<b>4,612.0985</b>
<b>Operational Emissions</b>				
2026	CO <sub>2</sub>	8845.08	1	8,845.077
	CH <sub>4</sub>	0.02255	28	0.631449
	N <sub>2</sub> O	0.00	265	0.776564
			<b>Total</b>	<b>8,846.484627</b>
2027	CO <sub>2</sub>	2.05	1	2.05
	CH <sub>4</sub>	0	28	0.00
	N <sub>2</sub> O	3.35	265	887.75
			<b>Total</b>	<b>889.80</b>
2032	CO <sub>2</sub>	8.87	1	8.87
	CH <sub>4</sub>	0	28	0.00
	N <sub>2</sub> O	14.52	265	3,847.80
			<b>Total</b>	<b>3,856.67</b>

Sources: MOVES 3.1; Interagency Working Group, 2021<sup>8</sup>, IPCC Sixth Assessment 2023<sup>9</sup>

The calculated social costs are estimates only and subject to change depending on various factors (i.e. flooding, energy supply)<sup>10</sup>. These calculations are for information purposes only. This range in costs represents the potential social costs associated with adding GHGs to the atmosphere in a given year. It includes the value of all climate change impacts, including (but not limited to) changes in net agricultural productivity, human health effects, property damage from increased flood risk natural disasters, disruption of energy systems, risk of conflict, environmental migration, and the value of ecosystem services. It is important to note that this climate analysis does not include positive impacts from the Proposed Project (e.g., economic development, meeting projected passenger and airline (domestic and international) demand, proactively preventing near-future congestion, improving passenger experience, and technological advancements).

<sup>8</sup> [https://www.whitehouse.gov/wpcontent/uploads/2021/02/TechnicalSupportDocument\\_SocialCostofCarbonMethaneNitrousOxide.pdf](https://www.whitehouse.gov/wpcontent/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf); Accessed November 2023

<sup>9</sup> [https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC\\_AR6\\_SYR\\_LongerReport.pdf](https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_LongerReport.pdf); Accessed November 2023

<sup>10</sup> [https://costofcarbon.org/files/Omitted\\_Damages\\_Whats\\_Missing\\_From\\_the\\_Social\\_Cost\\_of\\_Carbon.pdf](https://costofcarbon.org/files/Omitted_Damages_Whats_Missing_From_the_Social_Cost_of_Carbon.pdf); Accessed November 2023



**Table 8 Annual SC-CO<sub>2</sub> Per Metric Ton of CO<sub>2</sub> (in 2020 dollars)**

Emissions year	Average Estimate at 5% Discount Rate	Average Estimate at 3% Discount Rate	Average Estimate at 2.5% Discount Rate	95 <sup>th</sup> Percentile Estimate at 3.0% Discount Rate
<b>Construction Emissions</b>				
2025	\$17	\$56	\$83	\$169
2026	\$17	\$57	\$84	\$173
<b>Operational Emissions</b>				
2027	\$18	\$59	\$86	\$176
2032	\$21	\$64	\$92	\$194

Note: Discount Rates from IWG 2021 represent the monetary value of each additional metric ton of CO<sub>2</sub> produced for 2025, 2026, 2027, and 2032. 2027 represents the opening year of the Proposed Project, and 2032 represents five years after the opening year of the Proposed Project. These monetary values are based on the results from three economic models used by the IWG: William Nordhaus' DICE model (Yale University), Richard Tol's FUND model (Sussex University), and Chris Hope's PAGE model (Cambridge University). The models projects the future cost of each additional metric ton of CO<sub>2</sub> in the future.

Sources: Interagency Working Group, 2021, IPCC Sixth Assessment 2023, RS&H, 2023.

**Table 9 Social Cost - Carbon Dioxide for the Proposed Project**

Year	Proposed Project CO <sub>2</sub> e	Average Estimate at 5% Discount Rate	Average Estimate at 3% Discount Rate	Average Estimate at 2.5% Discount Rate	95 <sup>th</sup> Percentile Estimate at 3.0% Discount Rate
<b>Construction Emissions</b>					
2025	4,612.09	\$78,405.53	\$258,277.04	\$382,803.47	\$779,443.21
2026	8,844.57	\$150,390.16	\$504,249.36	\$743,104.32	\$1,530,441.04
<b>Operational Emissions</b>					
2027	889.8	\$16,016.40	\$52,498.20	\$76,522.80	\$156,604.80
2032	3,856.67	\$80,990.07	\$246,826.88	\$354,813.64	\$748,193.98

Note: Per the 2023 IPCC Sixth Assessment Report, CO<sub>2</sub>e equivalent for SC-GHG were calculated using the Interagency Working Group<sup>11</sup> average discount rates: 5 percent, 3 percent, 2.5 percent, and the 95<sup>th</sup> percentile estimate applying the 3 percent discount rate. CO<sub>2</sub>e Values are multiplied by the discount rate to calculate SC-CO<sub>2</sub>.

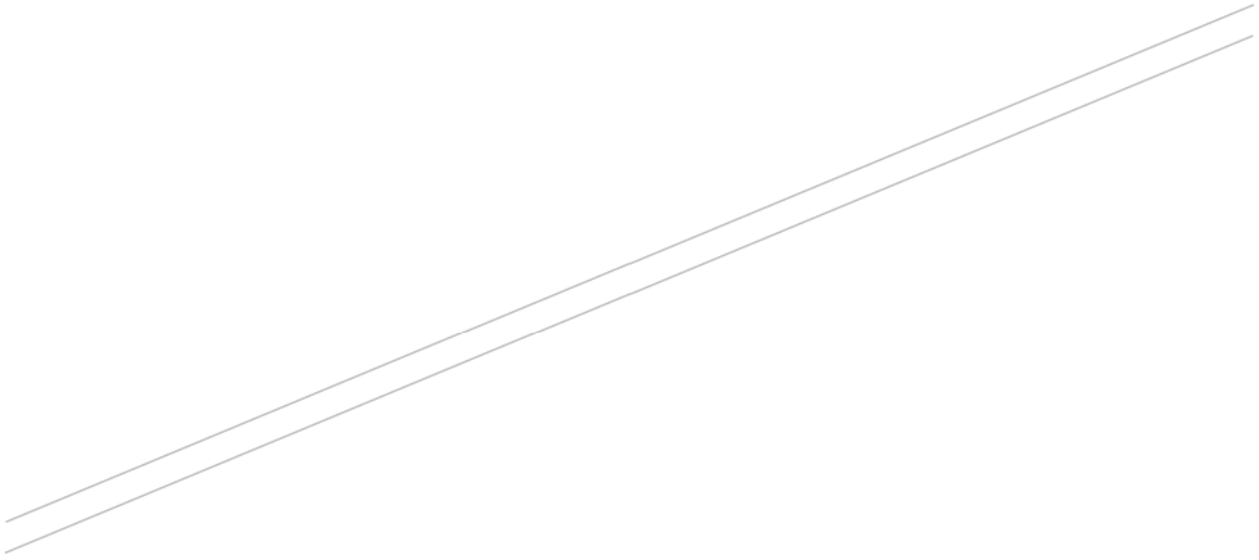
Per the 2023 IPCC<sup>12</sup> Sixth Assessment Report, the CO<sub>2</sub> equivalent for N<sub>2</sub>O is calculated by multiplying the N<sub>2</sub>O emissions by the GWP of 265. The CO<sub>2</sub> equivalent for CH<sub>4</sub> is calculated by multiplying the CH<sub>4</sub> emissions by the GWP of 28. For example, the 2025 Average Estimate at 5% Discount Rate was calculated using the 2025 CO<sub>2</sub>e value of 6,737.994 multiplied by 2025's \$17 determined value for the 5% Discount Rate.

Sources: Interagency Working Group, 2021, IPCC Sixth Assessment 2023, RS&H, 2023.

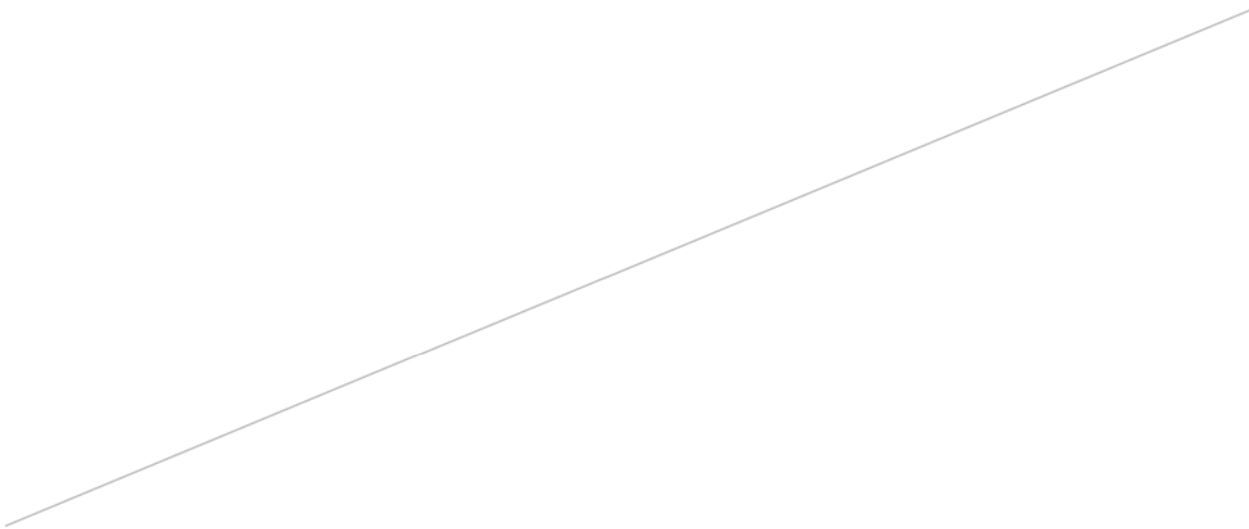
<sup>11</sup>[https://www.whitehouse.gov/wpcontent/uploads/2021/02/TechnicalSupportDocument\\_SocialCostofCarbonMethaneNitrousOxide.pdf](https://www.whitehouse.gov/wpcontent/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf); Accessed November, 2023

<sup>12</sup>[https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC\\_AR6\\_SYR\\_LongerReport.pdf](https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_LongerReport.pdf); Accessed November, 2023

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*APPENDIX B*  
*AIRCRAFT NOISE ANALYSIS*



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## AIRCRAFT NOISE

A noise screening analysis has been prepared to evaluate the potential changes in noise associated with the Proposed Project. The noise analysis was prepared to comply with the National Environmental Policy Act (NEPA) of 1969; Federal Aviation Administration (FAA) Order 1050.1F, Environmental Impacts: Policies and Procedures; and FAA Order 5050.4B, NEPA Implementing Instructions for Airport Actions.

### Methodology

The potential for changes in noise exposure due to the Proposed Project was assessed by comparing the 2032 Proposed Project to the 2032 No Action Alternative.<sup>1</sup> For projects in which the planned changes involve only aircraft operations and fleet mix (and not flight tracks, flight profiles, or runway modifications), the procedure for assessing noise exposure for an airport NEPA assessment is two-tiered:

Step 1: Conduct a noise screening analysis using the FAA's Area Equivalent Method (AEM) model. If the potential for significant noise impact results, proceed to Step 2.

Step 2: Conduct detailed noise contour modeling and develop Day-Night Average Sound Level (DNL) contours using the FAA's Aviation Environmental Design Tool (AEDT).

For step 1, the regulations stipulate that a 17% or greater increase in the 65 DNL contour area could result in a 1.5 DNL increase. If AEM computes an increase of less than 17%, then there are no significant noise impacts, and no further noise analysis is required. The AEM does not produce noise contours, only an estimate (in square miles) of the area potentially affected. The most recent available version of AEM, Version 2c SP2, was used for this analysis.

### Aircraft Operations and Fleet Mix

The aircraft operations<sup>2</sup> for 2032 were obtained from the FAA's Terminal Area Forecast (TAF), issued February 2023. These data, by aircraft category, are provided in **Table 1**. As shown, the 2032 forecast annual operations total 271,488, which is an average of 744 operations per day.

**Table 1: 2032 Annual Aircraft Operations**

Air Carrier	Air Taxi & Commuter	General Aviation	Military	Sum
216,615	24,935	29,241	697	271,488

Source: FAA TAF, February 2023

<sup>1</sup> The 2032 study year has the greatest difference in aircraft operations, therefore, the 2027 aircraft operations are not included in the AEM study.

<sup>2</sup> An aircraft operation is defined as one arrival or one departure.

The 2032 aircraft fleet mix was based on a recent noise study prepared by the Hillsborough County Aviation Authority (HCAA). In December 2021, the HCAA finalized a 14 CFR Part 150 (Part 150) Noise Exposure Map Update (NEM) for Tampa International Airport (TPA). Included in this study were forecast projections of operations by specific aircraft types for the future year 2026. This data was compared to the aircraft operations and fleet that occurred at TPA in 2022 to identify if any notable changes to the aircraft types have occurred since the development of the Part 150 NEM.

The HCAA maintains an aircraft operations monitoring system that records aircraft flights at TPA. The system records the aircraft type, the origin/destination, and the time of the departure/arrival. Calendar year 2022 information for TPA was obtained and reviewed.

The aircraft types that comprised the top ten in air carrier operations in 2022 are the same as the top ten aircraft types in 2026 included in the FAR Part 150 NEM. The day/night split for these ten in 2022 were 89% occurred during the day (7:00 a.m. – 9:59 p.m.) and 11% occurred at night (10:00 p.m. - 6:59 a.m.) and the 2026 Part 150 NEM forecast has these ten at 90% day and 10% at night. The review of the 2022 data showed that while there were some changes in the aircraft fleet mix and time of day compared to the Part 150 NEM data, these changes are minor and would not result in notably different noise exposure results. Therefore, the year 2026 fleet mix of aircraft (and the time of day) included in the Part 150 NEM have been applied to the operations for the year 2032.

## Proposed Project Aircraft Operations

This section provides the total passenger airline operations considered under the No Action Alternative and Proposed Project. The Airport's passenger airline operations were developed using the methodology summarized below.

- » Annual passenger operations and design day flight schedules for 2028 (Gate Test), Planning Activity Level (PAL) 1 (2032), PAL 2 (2037), and PAL 3 (2042) were established as part of the TPA Master Plan Update based on the projections of aviation activity that FAA approved on April 29, 2022.
- » Annual passenger airline operations by day for 2027 and 2032 were determined by extrapolating growth trends from forecast and design day flight schedule development to determine daily operations for the particular years. This resulted in the "extrapolated daily operations."
- » Previous analyses were reviewed to identify the number of operations associated with each design flight schedule and the maximum operational capability associated with the existing gates. This resulted in the "maximum daily operations."
- » The difference between extrapolated daily operations and the maximum daily operations was summed and identified as the operations associated with the additional gates (i.e., Airside D's 16 gates). This resulted in "additional operations."
- » The total additional operations were subtracted from the forecasted passenger airline operations established in the FAA-approved forecast to determine the annual passenger airline operations without Airside D development.

**Table 2** includes the 2027 and 2032 Proposed Project and No Action Alternative passenger airline operations.

**Table 2: Proposed Project and No Action Alternative Passenger Airline Operations**

	2027	2032
Proposed Project Operations	198,625	220,500
No Action Alternative Operations	198,163	218,500
Difference	462	2,000

Source: Ricondo & Associates, Inc. 2023

The 2032 No Action Alternative and Proposed Project total annual aircraft operations and fleet mix are shown in **Table 3**.

**Table 3: 2032 Annual Aircraft Operations and Fleet**

Category	Aircraft	2032 No Action Alternative	2032 Proposed Project	Difference
Air Carrier / Cargo	Boeing 737-800 Series	43,389	43,786	397
	Boeing 737-8 (MAX8)	36,752	37,088	336
	Airbus A320-200 Series	34,378	34,693	315
	Boeing 737-700 Series	31,859	32,151	292
	Airbus A321-200 Series	28,216	28,474	258
	Airbus A320-NEO	21,575	21,772	197
	Airbus A319-100 Series	12,564	12,679	115
	Boeing 767-300 ER	5,927	5,981	54
	Boeing 757-200 Series	3,083	3,083	-
	Airbus A300F4-600 Series	2,336	2,336	-
	Boeing 757-200 Series	2,283	2,311	28
	Boeing MD-11	1,475	1,475	-
	Boeing 757-300 Series	475	479	4
	Airbus A350-900 series	274	277	3
	Embraer ERJ190	9	10	1
Air Taxi / Commuter	DeHavilland DHC-8-300	4,881	4,881	-
	DeHavilland DHC-6-300	4,580	4,580	-
	Embraer ERJ175	4,237	4,237	-
	Bombardier Challenger 600	2,163	2,163	-
	Bombardier CRJ-900-ER	437	437	-
	Bombardier Challenger 601	411	411	-
	Embraer ERJ170	245	245	-
General Aviation	Bombardier Learjet 35	4,718	4,718	-
	Cessna 550 Citation II	3,112	3,112	-
	Cessna 500 Citation I	2,713	2,713	-
	Raytheon Beech Baron 58	1,839	1,839	-
	Cessna 750 Citation X	1,694	1,694	-
	Cessna 560 Citation Excel	1,594	1,594	-
	1985 1-ENG COMP	1,554	1,554	-

Category	Aircraft	2032	2032	Difference
		No Action Alternative	Proposed Project	
	Cessna 680 Citation	1,476	1,476	-
	Cessna 208 Caravan	1,427	1,427	-
	Cessna 180	1,222	1,222	-
	Gulfstream V	1,152	1,152	-
	Gulfstream IV	898	898	-
	Cessna Citation 510	847	847	-
	Dassault Falcon 900-EX	738	738	-
	Bell 427	717	717	-
	Cessna 560 Citation Encore	590	590	-
	Cessna 560 Citation V	478	478	-
	Bell 407	311	311	-
	Cessna 172 Skyhawk	305	305	-
	Cessna 150 Series	254	254	-
	Bombardier Global Express	212	212	-
	Cessna 650 Citation III	197	197	-
	Bell 206 Jet Ranger	154	154	-
	Cessna 441 Conquest II	127	127	-
	Cessna 182	124	124	-
	Bombardier Global 5000	121	121	-
	Cessna 525 Citation Jet	121	121	-
	Gulfstream G650	109	109	-
	Robinson R44 Raven	106	106	-
	Israel IAI-1121	82	82	-
	Eclipse 500	73	73	-
	Sikorsky S-76	48	48	-
	Cessna 206	33	33	-
	Aerospatiale SA-350D	21	21	-
	Piper PA-42 Cheyenne	18	18	-
	Bell Iroquois	18	18	-
	Robinson R22 Mariner	12	12	-
	Hawker HS748-2A	9	9	-
	Piper PA-30	9	9	-
	Dassault Falcon 20-C	3	3	-
	Raytheon Beech 1900-C	3	3	-
	Bell 429	3	3	-
Military	Lockheed C-130 Hercules	697	697	-
		<b>271,488</b>	<b>273,488</b>	<b>2,000</b>

Source: 2021 TPA FAR Part 150 NEM Update, December 2021; FAA TAF, February 2023; RS&H 2023



Each aircraft type has been assigned the corresponding AEM aircraft type. As required for use in the AEM, aircraft operations have been converted to daily landing-takeoff cycles (LTOs). One LTO equals two operations. Aircraft operations modeled in the AEM are assigned as occurring during daytime (7:00 a.m. to 9:59 p.m.) or nighttime (10:00 p.m. to 6:59 a.m.). The calculation includes an additional weight of 10 decibels for those operations occurring at night. The 2032 No Action Alternative and Proposed Project modeled daily LTOs by time of day are shown in **Table 4**.

**Table 4: 2032 Daily LTOs**

Category	Aircraft	AEM ID	2032 No Action Alternative		2032 Proposed Project	
			Day	Night	Day	Night
Air Carrier / Cargo	Boeing 737-800 Series	737800	52.48	6.95	52.97	7.02
	Boeing 737-8 (MAX8)	737800	43.33	7.02	43.73	7.08
	Airbus A320-200 Series	A320-232	43.20	3.89	43.60	3.92
	Boeing 737-700 Series	737700	39.65	3.99	40.01	4.03
	Airbus A321-200 Series	A321-232	34.01	4.65	34.32	4.69
	Airbus A320-NEO	A320-211	25.13	4.43	25.36	4.47
	Airbus A319-100 Series	A319-131	15.64	1.58	15.78	1.59
	Boeing 767-300 ER	767300	6.23	1.89	6.29	1.91
	Boeing 757-200 Series	757PW	2.15	2.07	2.15	2.07
	Airbus A300F4-600 Series	A300-	2.07	1.13	2.07	1.13
	Boeing 757-200 Series	757RR	2.53	0.60	2.56	0.61
	Boeing MD-11	MD11PW	1.34	0.68	1.34	0.68
	Boeing 757-300 Series	757300	0.54	0.11	0.54	0.11
	Airbus A350-900 series	A340-211	0.37	0.00	0.37	0.00
	Embraer ERJ190	EMB190	0.01	0.00	0.01	0.00
Air Taxi / Commuter	DeHavilland DHC-8-300	DHC830	6.69	0.00	6.69	0.00
	DeHavilland DHC-6-300	DHC6	5.95	0.32	5.95	0.32
	Embraer ERJ175	EMB175	5.55	0.25	5.55	0.25
	Bombardier Challenger 600	CL600	2.81	0.16	2.81	0.16
	Bombardier CRJ-900-ER	CRJ9-ER	0.60	0.00	0.60	0.00
	Bombardier Challenger 601	CL601	0.54	0.03	0.54	0.03
	Embraer ERJ170	EMB170	0.34	0.00	0.34	0.00
	Bombardier Learjet 35	LEAR35	5.79	0.68	5.79	0.68
General Aviation	Cessna 550 Citation II	CNA55B	4.04	0.22	4.04	0.22
	Cessna 500 Citation I	CNA500	3.44	0.27	3.44	0.27
	Raytheon Beech Baron 58	BEC58P	1.91	0.61	1.91	0.61
	Cessna 750 Citation X	CNA750	2.22	0.10	2.22	0.10
	Cessna 560 Citation Excel	CNA560X	2.12	0.07	2.12	0.07
	1985 1-ENG COMP	COMSEP	2.08	0.05	2.08	0.05
	Cessna 680 Citation	CNA680	1.94	0.08	1.94	0.08
	Cessna 208 Caravan	CNA208	1.85	0.11	1.85	0.11

Category	Aircraft	AEM ID	2032 No Action Alternative		2032 Proposed Project	
			Day	Night	Day	Night
Military	Cessna 180	GASEPV	1.62	0.06	1.62	0.06
	Gulfstream V	GV	1.42	0.16	1.42	0.16
	Gulfstream IV	GIV	1.16	0.07	1.16	0.07
	Cessna Citation 510	CNA510	0.96	0.20	0.96	0.20
	Dassault Falcon 900-EX	CNA750	0.98	0.03	0.98	0.03
	Bell 427	DHC6	0.73	0.25	0.73	0.25
	Cessna 560 Citation Encore	CNA560E	0.76	0.05	0.76	0.05
	Cessna 560 Citation V	CNA560E	0.51	0.14	0.51	0.14
	Bell 407	DHC6	0.28	0.15	0.28	0.15
	Cessna 172 Skyhawk	CNA172	0.29	0.13	0.29	0.13
	Cessna 150 Series	GASEPF	0.33	0.02	0.33	0.02
	Bombardier Global Express	GV	0.27	0.02	0.27	0.02
	Cessna 650 Citation III	CIT3	0.25	0.02	0.25	0.02
	Bell 206 Jet Ranger	DHC6	0.19	0.02	0.19	0.02
	Cessna 441 Conquest II	CNA441	0.17	0.01	0.17	0.01
	Cessna 182	CNA182	0.15	0.02	0.15	0.02
	Bombardier Global 5000	GV	0.15	0.01	0.15	0.01
	Cessna 525 Citation Jet	CNA525C	0.16	0.00	0.16	0.00
	Gulfstream G650	GV	0.14	0.01	0.14	0.01
	Robinson R44 Raven	DHC6	0.13	0.01	0.13	0.01
	Israel IAI-1121	IA1125	0.10	0.01	0.10	0.01
	Eclipse 500	ECLIPSE50	0.10	0.00	0.10	0.00
	Sikorsky S-76	DHC6	0.07	0.00	0.07	0.00
	Cessna 206	CNA206	0.05	0.00	0.05	0.00
	Aerospatiale SA-350D	DHC6	0.015	0.036	0.015	0.036
	Piper PA-42 Cheyenne	PA42	0.02	0.00	0.02	0.00
	Bell Iroquois	DHC6	0.02	0.00	0.02	0.00
	Robinson R22 Mariner	DHC6	0.02	0.00	0.02	0.00
	Hawker HS748-2A	HS748A	0.01	0.00	0.01	0.00
	Piper PA-30	PA30	0.01	0.00	0.01	0.00
	Dassault Falcon 20-C	CNA750	0.01	0.00	0.01	0.00
	Raytheon Beech 1900-C	1900D	0.01	0.00	0.01	0.00
	Bell 429	DHC6	0.01	0.00	0.01	0.00
Lockheed C-130 Hercules	C130E	0.89	0.00	0.89	0.00	
			<b>328.535</b>	<b>43.366</b>	<b>330.955</b>	<b>43.686</b>

Source: 2021 TPA FAR Part 150 NEM Update, December 2021; FAA TAF, February 2023; RS&H 2023

## AEM Results

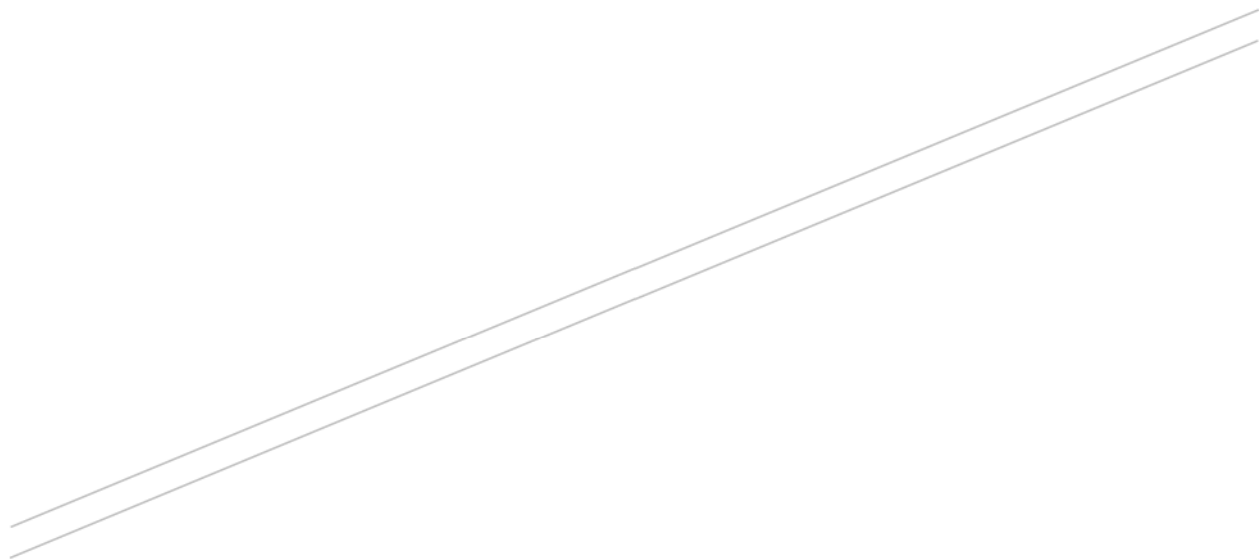
The AEM results indicate that the Proposed Project, when compared to the No Action Alternative, would increase the 65 DNL contour area by 0.6% in 2032. The 0.6% increase is well below the FAA's noise criterion of 17% for additional noise analysis. Therefore, the Proposed Project does not result in a significant noise impact and no further analysis is necessary. The AEM input and results are shown in **Figure 1**.

**Figure 1: AEM Results**

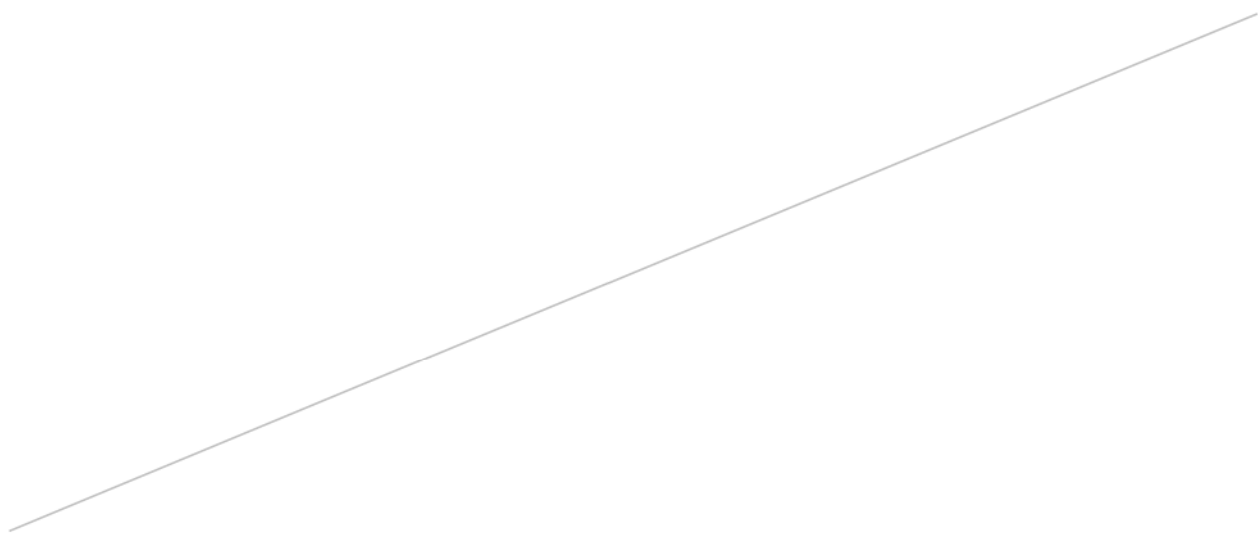
Federal Aviation Administration Office of Environment and Energy <a href="http://www.faa.gov/about/office_org/headquarters_offices/apl/research/models/aem_model/">http://www.faa.gov/about/office_org/headquarters_offices/apl/research/models/aem_model/</a>				
Area Equivalent Method (AEM) Version 2c SP2				
Airport Name/Code:		TPA 2032		
DNL (dBA)	Baseline Area (Sq. Mi.)	Alternative Area (Sq. Mi.)	Percent Change in Area	
65	3.62	3.65	0.6%	
Aircraft Type	BASE Case		ALTERNATIVE Case	
	Daytime LTO Cycles	Nighttime LTO Cycles	Daytime LTO Cycles	Nighttime LTO Cycles
<a href="#">737700</a>	39.654	3.989	40.017	4.026
<a href="#">737800</a>	96.810	13.972	96.687	14.100
<a href="#">757300</a>	0.539	0.111	0.544	0.112
<a href="#">767300</a>	6.227	1.892	6.284	1.909
<a href="#">1900D</a>	0.004	0.000	0.004	0.000
<a href="#">757PW</a>	2.154	2.070	2.154	2.070
<a href="#">757RR</a>	2.529	0.598	2.560	0.606
<a href="#">A300-622R</a>	2.066	1.134	2.066	1.134
<a href="#">A319-131</a>	15.635	1.576	15.778	1.590
<a href="#">A320-211</a>	25.126	4.429	25.355	4.469
<a href="#">A320-232</a>	43.204	3.890	43.599	3.925
<a href="#">A321-232</a>	34.006	4.645	34.318	4.688
<a href="#">A340-211</a>	0.375	0.000	0.378	0.000
<a href="#">BEC58P</a>	1.906	0.613	1.906	0.613
<a href="#">C130E</a>	0.955	0.000	0.955	0.000
<a href="#">C17</a>	0.249	0.021	0.249	0.021
<a href="#">CL600</a>	2.806	0.156	2.806	0.156
<a href="#">CL601</a>	0.536	0.027	0.536	0.027
<a href="#">CNA172</a>	0.286	0.133	0.286	0.133
<a href="#">CNA182</a>	0.153	0.017	0.153	0.017
<a href="#">CNA206</a>	0.046	0.000	0.046	0.000
<a href="#">CNA208</a>	1.848	0.108	1.848	0.108
<a href="#">CNA441</a>	0.156	0.008	0.166	0.008
<a href="#">CNA500</a>	3.443	0.273	3.443	0.273
<a href="#">CNA510</a>	0.957	0.203	0.957	0.203
<a href="#">CNA525C</a>	0.162	0.004	0.162	0.004
<a href="#">CNA555B</a>	4.043	0.220	4.043	0.220
<a href="#">CNA550E</a>	1.272	0.191	1.272	0.191
<a href="#">CNA560XL</a>	2.117	0.066	2.117	0.066
<a href="#">CNA680</a>	1.943	0.079	1.943	0.079
<a href="#">CNA750</a>	3.198	0.137	3.198	0.137
<a href="#">COMSEP</a>	2.076	0.054	2.076	0.054
<a href="#">CRJ9-ER</a>	0.599	0.000	0.599	0.000
<a href="#">DHC6</a>	7.415	0.765	7.415	0.765
<a href="#">DHC830</a>	6.689	0.000	6.689	0.000
<a href="#">ECLIPSE500</a>	0.095	0.004	0.095	0.004
<a href="#">EMB170</a>	0.335	0.000	0.335	0.000
<a href="#">EMB175</a>	5.550	0.255	5.550	0.255
<a href="#">EMB190</a>	0.012	0.000	0.012	0.000
<a href="#">GASEFP</a>	0.327	0.021	0.327	0.021
<a href="#">GASEFPV</a>	1.616	0.058	1.616	0.058
<a href="#">GIV</a>	1.160	0.070	1.160	0.070
<a href="#">GV</a>	1.980	0.203	1.980	0.203
<a href="#">HS748A</a>	0.008	0.004	0.008	0.004
<a href="#">JA1125</a>	0.104	0.008	0.104	0.008
<a href="#">LEAR35</a>	5.787	0.675	5.787	0.675
<a href="#">MD11PW</a>	1.338	0.683	1.338	0.683
<a href="#">PA30</a>	0.012	0.000	0.012	0.000
<a href="#">PA42</a>	0.021	0.004	0.021	0.004
<b>Total LTOs</b>	<b>329.535</b>	<b>43.366</b>	<b>330.955</b>	<b>43.686</b>

Source: RS&H, 2023

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*APPENDIX C*  
*AGENCY AND PUBLIC ENGAGEMENT*



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## Alberts, David

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**Sent:**  
**To:**  
**Subject:**

Good morning David,

SWD water facilities permitting recommendations. This project may need the following list of permits by programs.

**Industrial Wastewater:** The project may require a Generic Permit for Discharge of Ground Water from Dewatering Operations. "Dewatering operations" means temporarily lowering the water table by draining or pumping of ground water from activities such as excavations, building foundations, vaults, trenches and aquifer performance tests for exploratory purposes. If required, the project will be reviewed under 62-621.300(2), F.A.C. Please note that dewatering operations covered under the Generic Permit for Stormwater Discharges from Construction Activities (CGP), will not be required to obtain separate coverage under the dewatering generic permit.

**Domestic Wastewater:** Rule 62-604, F.A.C. requires that any project that needs to extend wastewater collection and transmission system to obtain a collection/transmission system construction permit unless it is a construction of a single gravity or non-gravity individual service connection from a single building to a gravity collection system. This project probably will require a construction permit for the collection system from HCEPC. Also, check with EPC for other local construction permits.

Drinking water permit for water distribution systems from DOH Hillsborough county.

ERP permit from FDEP.

Thank you

Jorge

*Jorge Perez*, CESCO  
Environmental Consultant  
Permitting & Waste Cleanup Program  
Florida Dept. of Environmental Protection, Southwest District  
13051 North Telecom Parkway  
Temple Terrace, FL 33637-0926  
(813) 470-5734  
FAX (813) 470-5995  
[jorge.perez@floridadep.gov](mailto:jorge.perez@floridadep.gov)

**Permitting Consistency Initiative:** The Florida Department of Environmental Protection is committed to providing efficient, consistent and quality service to the citizens of Florida. In keeping with these objectives, we continue to identify ongoing improvements to our permitting process by standardizing and simplifying our documents.

---

**From:** Alberts, David <David.Alberts@rsandh.com>

**Sent:** Monday, November 27, 2023 8:21 AM

To: Perez, Jorge <Jorge.Perez@FloridaDEP.gov>  
Subject: FW: HCAA TPA 8500 23 - AS-D EA - FDEP coordination  
Importance: High

**EXTERNAL MESSAGE**

This email originated outside of DEP. Please use caution when opening attachments, clicking links, or responding to this email.

Good Morning Mr. Perez,

Does the DEP southwest district have any initial comments on the Tampa Airport Airside D Environmental Assessment packet sent to your office?

Thank you,

Dave A

**David E. Alberts**

Aviation Senior Environmental Manager  
10748 Deerwood Park Blvd South, Jacksonville, FL 32256  
O 904-256-2469 | M 904-307-7049  
David.Alberts@rsandh.com  
rsandh.com | Facebook | Twitter | LinkedIn | Blog

[Stay up-to-date with our latest news and insights.](#)



---

**From:** Stahl, Chris <[Chris.Stahl@FloridaDEP.gov](mailto:Chris.Stahl@FloridaDEP.gov)>  
**Sent:** Tuesday, November 7, 2023 8:35 AM  
**To:** Alberts, David <[David.Alberts@rsandh.com](mailto:David.Alberts@rsandh.com)>  
**Subject:** RE: HCAA TPA 8500 23 - AS-D EA - FDEP coordination

Since this was a request for early coordination it was forwarded on the DEP Southwest district office since they could speak much more effectively to possible issues from our program areas in that region. The staffer I sent it to was Jorge Perez 813-470-5734 [Jorge.Perez@FloridaDEP.gov](mailto:Jorge.Perez@FloridaDEP.gov)

---

**From:** Alberts, David <[David.Alberts@rsandh.com](mailto:David.Alberts@rsandh.com)>  
**Sent:** Monday, November 6, 2023 10:09 AM  
**To:** Service Desk <[ServiceDesk@dep.state.fl.us](mailto:ServiceDesk@dep.state.fl.us)>  
**Cc:** Stahl, Chris <[Chris.Stahl@FloridaDEP.gov](mailto:Chris.Stahl@FloridaDEP.gov)>  
**Subject:** RE: HCAA TPA 8500 23 - AS-D EA - FDEP coordination

**EXTERNAL MESSAGE**

This email originated outside of DEP. Please use caution when opening attachments, clicking links, or responding to this email.

FDEP,

I reviewed the FDEP Clearinghouse system and cannot find the FDEP's comments on the early agency coordination for the Tampa Airport Airside D EA (attached). Can you please help?



Thanks

Dave A

**David E. Alberts**

Aviation Senior Environmental Manager  
10748 Deerwood Park Blvd South, Jacksonville, FL 32256  
O 904-256-2469 | M 904-307-7049  
David.Alberts@rsandh.com  
rsandh.com | Facebook | Twitter | LinkedIn | Blog

[Stay up-to-date with our latest news and insights.](#)



---

**From:** Alberts, David  
**Sent:** Friday, August 11, 2023 8:58 AM  
**To:** Stahl, Chris <[Chris.Stahl@FloridaDEP.gov](mailto:Chris.Stahl@FloridaDEP.gov)>  
**Subject:** FW: HCAA TPA 8500 23 - AS-D EA - FDEP coordination

Mr. Stahl,

About a year ago, I submitted an email seeking FDEP comments. I looked in my files and do not see a reply. I did not see a letter on the Clearinghouse website either.

At this time we are assembling the Draft EA for this project and would like to include FDEP's letter.

Could you please re-send the FDEP's comments letter to me?

Thanks,

Dave A

---

**From:** Alberts, David  
**Sent:** Monday, September 26, 2022 12:14 PM  
**To:** Stahl, Chris <[Chris.Stahl@FloridaDEP.gov](mailto:Chris.Stahl@FloridaDEP.gov)>  
**Cc:** Hamblin, Monica <[Monica.Hamblin@rsandh.com](mailto:Monica.Hamblin@rsandh.com)>; Fesanco, Michael <[Michael.Fesanco@rsandh.com](mailto:Michael.Fesanco@rsandh.com)>; Robert L. Furr <[rfurr@TampaAirport.com](mailto:rfurr@TampaAirport.com)>; Daniel Porter <[dporter@TampaAirport.com](mailto:dporter@TampaAirport.com)>  
**Subject:** HCAA TPA 8500 23 - AS-D EA - FDEP coordination

Mr. Stahl,

On behalf of the Hillsborough County Aviation Authority, I am pleased to provide the Early Agency Coordination Letter for the new Airside D Environmental Assessment at Tampa International Airport. FDEP's input on the attached is greatly appreciated.

If you have any questions, please let me know.

Dave A



September 26, 2022

Mr. Chris Stahl  
Florida Department of Environmental Protection  
Environmental Review Clearinghouse  
3900 Commonwealth Blvd., MS 47  
Tallahassee, FL 32399  
Sent via email: [State.Clearinghouse@FloridaDEP.gov](mailto:State.Clearinghouse@FloridaDEP.gov)

**RE: Tampa International Airport – New Airside-D Environmental Assessment – Early Agency Coordination**

Dear Mr. Stahl,

The Hillsborough County Aviation Authority (Authority) proposes the construction of the new Airside D (AS-D) development at Tampa International Airport (Airport or TPA) in Hillsborough County, Tampa, Florida (see **Figure 1**, attached). The Proposed Project includes airside and landside improvements at the Airport (see **Figure 2**, attached). The Proposed Project is the construction and operation of a sixteen-gate airside (AS-D), automated people mover, improvements to Taxi Lane Z, and associated apron area. The new AS-D would consist of three levels including holdrooms, aircraft gates, concessions, restrooms, and a connecting automated people mover station to the main terminal.

The Authority will request the Federal Aviation Administration's (FAA) unconditional approval of the improvements on its Airport Layout Plan. This request is a Federal action, and through the requirement for the Authority to meet FAA grant assurances. RS&H, Inc. will prepare an Environmental Assessment (EA) for the Proposed Project.

In accordance with the National Environmental Policy Act (NEPA) and FAA Orders 1050.1F, *Environmental Impacts: Policies and Procedures* and 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions of Airport Actions*, the EA will analyze the potential environmental effects of the Proposed Project. A project study area has been developed for the EA (see **Figure 3**, attached). Preliminary environmental analysis indicates that the Proposed Project would not result in significant impacts.

On behalf of the Authority, we are sending you this early notification letter to:

1. Advise your agency of the preparation of the EA;
2. Request any relevant information that your agency may have regarding the project site or environs;  
and
3. Solicit early comments regarding potential environmental, social, and economic issues for consideration during the preparation of the EA.

You may send any information and comments to me via email at [David.Alberts@rsandh.com](mailto:David.Alberts@rsandh.com) or to the address provided at the top of this letter. We would appreciate your prompt response within 30 days.

On behalf of the Authority, we would like to thank you for your interest in this project and look forward to working with you as we prepare the EA. If you have any questions or need additional information regarding the Proposed Project or EA, please do not hesitate to contact me at (904) 256-2469 or the email above.

Sincerely,

A handwritten signature in blue ink that reads "D. Alberts". The signature is written in a cursive style with a large initial "D" and a stylized "A".

David Alberts  
Project Manager  
RS&H, Inc.

#### Attachments

cc: Rob Furr, Sr. Manager - Sr. Airport Architect, Hillsborough County Aviation Authority  
Layne E Bolen, FAA  
Project File

Figure 1: Airport Location



Sources: ESRI 2022; RS&H 2022.

Not to scale. Graphics use only.

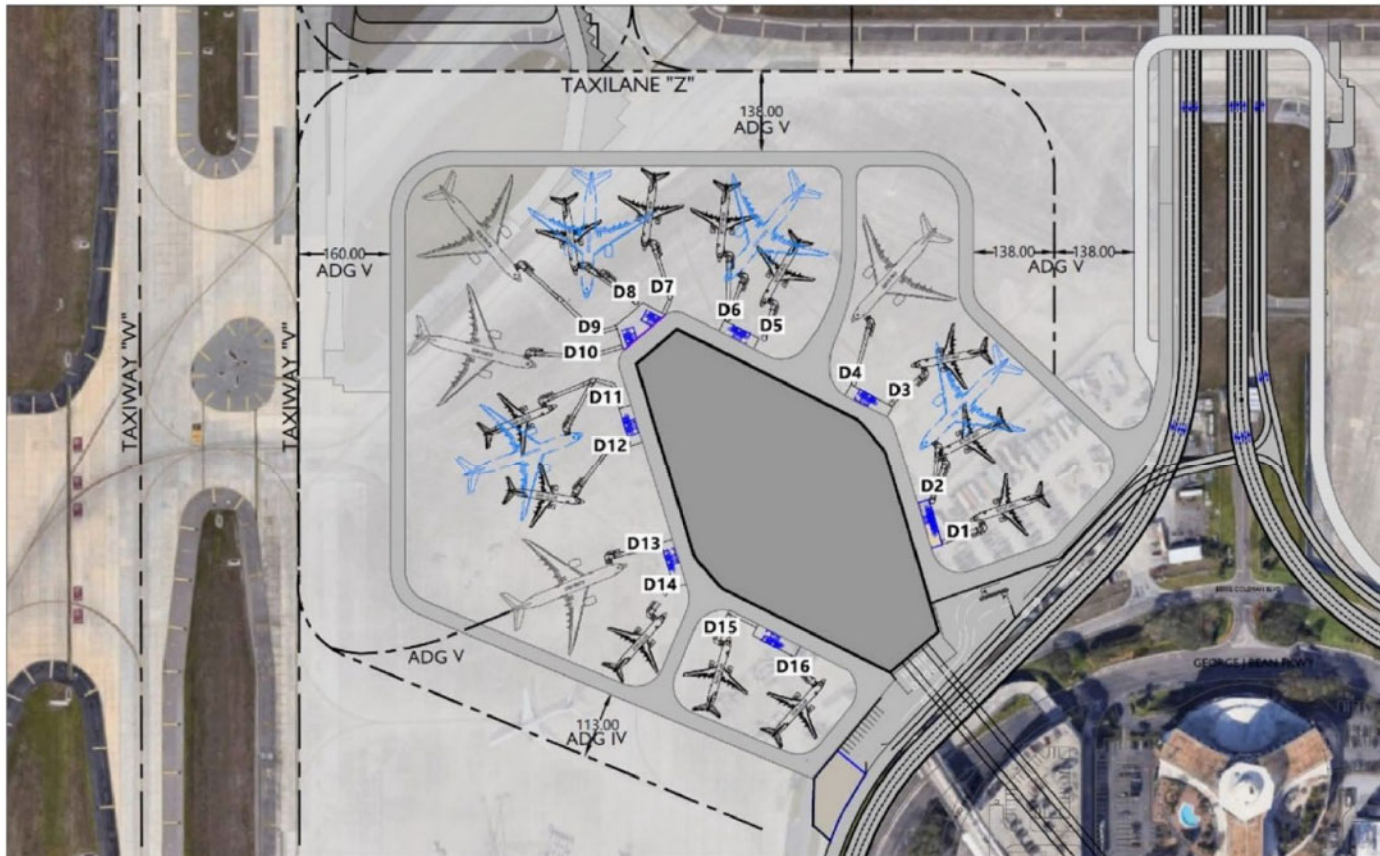
**Legend**

 Airport Location



Airport Location

Figure 2: Proposed Project



Sources: ESRI 2022; RS&H 2022.

Not to scale. Graphics use only.



Proposed Project

Figure 3: Project Study Area



Sources: ESRI 2022; RS&H 2022.

Not to scale. Graphics use only.

### Legend

 Project Study Area



Project Study Area

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*APPENDIX D*  
*BIOLOGICAL RESOURCES*



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## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Florida Ecological Services Field Office  
1339 20th Street  
Vero Beach, FL 32960-3559  
Phone: (772) 562-3909 Fax: (772) 562-4288  
Email Address: [fw4flesregs@fws.gov](mailto:fw4flesregs@fws.gov)

In Reply Refer To:  
Project Code: 2024-0031659  
Project Name: TPA Airside D

January 02, 2024

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

To Whom It May Concern:

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

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

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

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

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

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

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

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

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

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

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

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

Attachment(s):

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

## **OFFICIAL SPECIES LIST**

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

This species list is provided by:

**Florida Ecological Services Field Office**

1339 20th Street

Vero Beach, FL 32960-3559

(772) 562-3909

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## PROJECT SUMMARY

Project Code: 2024-0031659

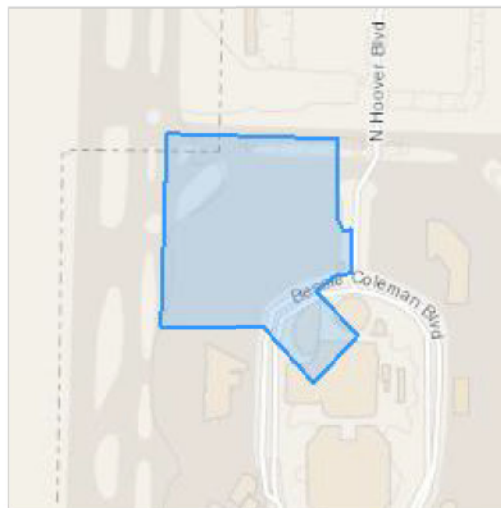
Project Name: TPA Airside D

Project Type: Airport - New Construction

Project Description: The HCAA proposes to construct and operate a new 563,000-square-foot Airside D (AS-D) to meet its projected demand of operations and passengers (Proposed Project). This includes a three-level airside and 16 contact gates with passenger boarding bridges.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@27.9830665,-82.53713104034594,14z>



Counties: Hillsborough County, Florida

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## ENDANGERED SPECIES ACT SPECIES

There is a total of 14 threatened, endangered, or candidate species on this species list.

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

**BIRDS**

NAME	STATUS
Crested Caracara (audubon""s) [fl Dps] <i>Caracara plancus audubonii</i> Population: FL DPS No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8250">https://ecos.fws.gov/ecp/species/8250</a>	Threatened
Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10477">https://ecos.fws.gov/ecp/species/10477</a>	Threatened
Everglade Snail Kite <i>Rostrhamus sociabilis plumbeus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/7713">https://ecos.fws.gov/ecp/species/7713</a>	Endangered
Rufa Red Knot <i>Calidris canutus rufa</i> There is <b>proposed</b> critical habitat for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a>	Threatened
Whooping Crane <i>Grus americana</i> Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/758">https://ecos.fws.gov/ecp/species/758</a>	Experimental Population, Non- Essential
Wood Stork <i>Mycteria americana</i> Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8477">https://ecos.fws.gov/ecp/species/8477</a> General project design guidelines: <a href="https://ipac.ecosphere.fws.gov/project/6JHCLSE46VAVVENEP4SWEGQFR4/documents/generated/6954.pdf">https://ipac.ecosphere.fws.gov/project/6JHCLSE46VAVVENEP4SWEGQFR4/documents/generated/6954.pdf</a>	Threatened



## REPTILES

NAME	STATUS
American Crocodile <i>Crocodylus acutus</i> Population: U.S.A. (FL) There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6604">https://ecos.fws.gov/ecp/species/6604</a>	Threatened
Eastern Indigo Snake <i>Drymarchon couperi</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/646">https://ecos.fws.gov/ecp/species/646</a>	Threatened
Hawksbill Sea Turtle <i>Eretmochelys imbricata</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3656">https://ecos.fws.gov/ecp/species/3656</a>	Endangered
Leatherback Sea Turtle <i>Dermochelys coriacea</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1493">https://ecos.fws.gov/ecp/species/1493</a>	Endangered
Loggerhead Sea Turtle <i>Caretta caretta</i> Population: Northwest Atlantic Ocean DPS There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1110">https://ecos.fws.gov/ecp/species/1110</a>	Threatened

## INSECTS

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

## FLOWERING PLANTS

NAME	STATUS
Florida Golden Aster <i>Chrysopsis floridana</i> Population: No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5352">https://ecos.fws.gov/ecp/species/5352</a>	Endangered
Pygmy Fringe-tree <i>Chionanthus pygmaeus</i> Population: No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1084">https://ecos.fws.gov/ecp/species/1084</a>	Endangered

## CRITICAL HABITATS

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

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

# USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

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

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

## BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act<sup>1</sup> and the Migratory Bird Treaty Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats<sup>3</sup>, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

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

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

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

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

## PROBABILITY OF PRESENCE SUMMARY

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

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**Probability of Presence** (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

**Breeding Season** (■)

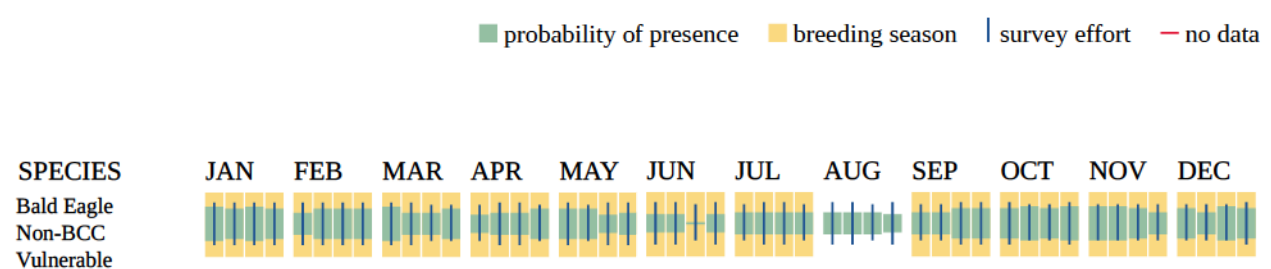
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

**Survey Effort** (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

**No Data** (—)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

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

## MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats<sup>3</sup> should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

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

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

NAME	BREEDING SEASON
American Kestrel <i>Falco sparverius paulus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/9587">https://ecos.fws.gov/ecp/species/9587</a>	Breeds Apr 1 to Aug 31
American Oystercatcher <i>Haematopus palliatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/8935">https://ecos.fws.gov/ecp/species/8935</a>	Breeds Apr 15 to Aug 31
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a>	Breeds Sep 1 to Jul 31
Black Skimmer <i>Rynchops niger</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/5234">https://ecos.fws.gov/ecp/species/5234</a>	Breeds May 20 to Sep 15
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9406">https://ecos.fws.gov/ecp/species/9406</a>	Breeds Mar 15 to Aug 25
Great Blue Heron <i>Ardea herodias occidentalis</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/10590">https://ecos.fws.gov/ecp/species/10590</a>	Breeds Jan 1 to Dec 31
Gull-billed Tern <i>Gelochelidon nilotica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9501">https://ecos.fws.gov/ecp/species/9501</a>	Breeds May 1 to Jul 31

NAME	BREEDING SEASON
<p>King Rail <i>Rallus elegans</i>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/8936">https://ecos.fws.gov/ecp/species/8936</a></p>	Breeds May 1 to Sep 5
<p>Lesser Yellowlegs <i>Tringa flavipes</i>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9679">https://ecos.fws.gov/ecp/species/9679</a></p>	Breeds elsewhere
<p>Magnificent Frigatebird <i>Fregata magnificens</i>            This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  <a href="https://ecos.fws.gov/ecp/species/9588">https://ecos.fws.gov/ecp/species/9588</a></p>	Breeds Oct 1 to Apr 30
<p>Painted Bunting <i>Passerina ciris</i>            This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  <a href="https://ecos.fws.gov/ecp/species/9511">https://ecos.fws.gov/ecp/species/9511</a></p>	Breeds Apr 25 to Aug 15
<p>Prairie Warbler <i>Dendroica discolor</i>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9513">https://ecos.fws.gov/ecp/species/9513</a></p>	Breeds May 1 to Jul 31
<p>Reddish Egret <i>Egretta rufescens</i>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/7617">https://ecos.fws.gov/ecp/species/7617</a></p>	Breeds Mar 1 to Sep 15
<p>Ruddy Turnstone <i>Arenaria interpres morinella</i>            This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  <a href="https://ecos.fws.gov/ecp/species/10633">https://ecos.fws.gov/ecp/species/10633</a></p>	Breeds elsewhere
<p>Short-billed Dowitcher <i>Limnodromus griseus</i>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9480">https://ecos.fws.gov/ecp/species/9480</a></p>	Breeds elsewhere
<p>Swallow-tailed Kite <i>Elanoides forficatus</i>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/8938">https://ecos.fws.gov/ecp/species/8938</a></p>	Breeds Mar 10 to Jun 30
<p>Willet <i>Tringa semipalmata</i>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/10669">https://ecos.fws.gov/ecp/species/10669</a></p>	Breeds Apr 20 to Aug 5





Additional information can be found using the following links:

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

## WETLANDS

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

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

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

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

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## **IPAC USER CONTACT INFORMATION**

Agency: Private Entity  
Name: Michael Fesanco  
Address: 10748 Deerwood Park Blvd South  
City: Jacksonville  
State: FL  
Zip: 32256  
Email: michael.fesanco@rsandh.com  
Phone: 3217952840

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# Endangered Species Act Review

- 1 Request an official species list
- 2 Evaluate Determination Keys Complete
- 3 Analyze project (optional)
- 4 Download documentation

## DETERMINATION KEY

### Wood Stork Determination Key

Release date: May 1, 2023

You completed the latest version of this key, published May 1, 2023, and reached a determination of **not applicable** for species or critical habitats covered by the key.

This key is for determining effects to the threatened wood stork resulting from U.S. Army Corps of Engineers' (Corps) permit applications. The purpose of this Key is to assist IPaC users in making appropriate effects determinations for threatened wood stork resulting from U.S. Army Corps of Engineers' (Corps) permit applications pursuant to section 7 of the [Endangered Species Act of 1973](#), as amended (Act) (87 Stat. 884; 16 U.S.C. 1531 et seq.) The Key is intended to streamline consultation with the U.S. Fish and Wildlife Service (Service) when the proposed action can be walked through the Key and the appropriate conclusion is the proposed action will have no effect or may affect but not likely to adversely affect the wood stork. For projects where the Service believes that further evaluation of the proposed project is necessary, the Key recommends contacting the local field office and requesting consultation. The Service intends to develop decision keys in the future to provide technical assistance for section 7 consultation for other listed species. Therefore, the Service highly recommends continuing to check this site for improvements and additional streamlining opportunities for other listed species.

The U.S. Fish and Wildlife Service is the lead Federal agency charged with the protection and conservation of Federal Trust Resources, such as threatened and endangered species and migratory birds, in accordance with section 7 of the [Endangered Species Act of 1973](#), as amended (Act) (87 Stat. 884; 16 U.S.C. 1531 et seq.), the [Marine Mammal Protection Act](#), the [Bald and Golden Eagle Protection Act](#), (16 U.S.C. 668-668d) (Eagle Act), and the [Migratory Bird Treaty Act](#) (40 Stat. 755; 16 U.S.C. 701 et seq.).

This key is based on the following documents:  
[The Corp's Determination Guidance for Endangered & Threatened Species \(EDGES\)](#)  
[Central and North Peninsular Florida 2008 wood stork consultation key](#)  
[South Florida 2010 wood stork consultation key](#)

### Species covered by this key

This key covers the following species, and critical habitat for these species, expected to occur in this project area:

Wood Stork *Mycteria americana*

### Critical habitats covered by this key

This key covers the critical habitats for the following species expected to occur in this project area:

None

For more information about this determination key, including a list of all potential questions, refer to the [detailed overview](#).

### Qualification interview

1. Does the proposed action require a permit (nationwide, general, or individual permits) from the U.S. Army Corps of Engineers?

No

Your project is outside the scope of this determination key. Please contact the local Ecological Service Field Office if you need additional information regarding the wood stork.

# Florida Natural Areas Inventory - Hillsborough County

## Plants & Lichens

Group	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status	Tracked?
Plants and Lichens	<i>Acrostichum aureum</i> 🌿	golden leather fern	G5	S3		T	Y
Plants and Lichens	<i>Adiantum tenerum</i> 🌿	brittle maidenhair fern	G5	S3		E	Y
Plants and Lichens	<i>Agrimonia incisa</i> 🌿	incised groove-bur	G3	S2		T	Y
Plants and Lichens	<i>Andropogon arctatus</i> 🌿	pinewoods bluestem	G3	S3		T	Y
Plants and Lichens	<i>Asplenium auritum</i> 🌿	auricled spleenwort	G5	S2		E	Y
Plants and Lichens	<i>Astragalus obcordatus</i> 🌿	Florida milkvetch	G3G4	S2S3		N	Y
Plants and Lichens	<i>Bonamia grandiflora</i> 🌿	Florida bonamia	G3	S3	T	E	Y
Plants and Lichens	<i>Calopogon multiflorus</i> 🌿	many-flowered grass-pink	G2G3	S2S3		T	Y
Plants and Lichens	<i>Carex chapmanii</i> 🌿	Chapman's sedge	G3	S3		T	Y
Plants and Lichens	<i>Centrosema arenicola</i> 🌿	sand butterfly pea	G2Q	S2		E	Y
Plants and Lichens	<i>Cheiroglossa palmata</i> 🌿	hand fern	G4	S3		E	Y
Plants and Lichens	<i>Chionanthus pygmaeus</i> 🌿	pygmy fringe tree	G2G3	S2S3	E	E	Y
Plants and Lichens	<i>Chrysopsis floridana</i> 🌿	Florida goldenaster	G3	S3	E, PDL	E	Y

Plants and Lichens	<i>Glandularia tampensis</i> 🌿	Tampa vervain	G2	S2		E	Y
Plants and Lichens	<i>Gymnopogon chapmanianus</i> 🌿	Chapman's skeletongrass	G3	S3		N	Y
Plants and Lichens	<i>Helianthus debilis</i> ssp. <i>vestitus</i> 🌿	hairy beach sunflower	G5T2	S2		N	Y
Plants and Lichens	<i>Hypoxis sessilis</i> 🌿	glossyseed yellow stargrass	G3	S2S3		N	Y
Plants and Lichens	<i>Lechea cernua</i> 🌿	nodding pinweed	G3	S3		T	Y
Plants and Lichens	<i>Lechea divaricata</i> 🌿	pine pinweed	G2	S2		E	Y
Plants and Lichens	<i>Lythrum flagellare</i> 🌿	lowland loosestrife	G3	S3	UR	E	Y
Plants and Lichens	<i>Matelea floridana</i> 🌿	Florida spiny-pod	G2	S2		E	Y
Plants and Lichens	<i>Meniscium serratum</i> 🌿	toothed maiden fern	G5	S1		E	Y
Plants and Lichens	<i>Nolina brittoniana</i> 🌿	Britton's beargrass	G3	S3	E	E	Y
Plants and Lichens	<i>Pecluma dispersa</i> 🌿	widespread polypody	G5	S2		E	Y
Plants and Lichens	<i>Pecluma plumula</i> 🌿	plume polypody	G5	S2		E	Y
Plants and Lichens	<i>Pecluma ptilodon</i> var. <i>bourgeauana</i> 🌿	comb polypody	G5? TNR	S2		E	Y
Plants and Lichens	<i>Protocodon robiniae</i> 🌿	Brooksville bellflower	G1	S1	E	E	Y

Plants and Lichens	<i>Rhynchospora megaplumosa</i> 	large-plumed beaksedge	G2	S2		E	Y
Plants and Lichens	<i>Schizachyrium niveum</i> 	scrub bluestem	G1G2	S1S2		E	Y
Plants and Lichens	<i>Schwalbea americana</i> 	chaffseed	G2	S1	E	E	Y
Plants and Lichens	<i>Stachys agraria</i> 	shade betony	G5	S1		N	Y
Plants and Lichens	<i>Tephrosia corallicola</i> 	rockland hoary-pea	G1	S1		E	Y
Plants and Lichens	<i>Tephrosia curtissii</i> 	Curtiss's hoary-pea	G1	S1		E	Y
Plants and Lichens	<i>Triphora amazonica</i> 	broad-leaved nodding-caps	GU	S1		E	Y
Plants and Lichens	<i>Vachellia tortuosa</i> 	poponax	G4G5	S1		E	Y
Plants and Lichens	<i>Zephyranthes simpsonii</i> 	redmargin zephyrlily	G2G3	S2S3		T	Y

## Invertebrates

Group	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status	Tracked?
Clams and Mussels	<i>Utterbackia peninsularis</i> ☼	Peninsular Floater	G2G3	S2S3		N	Y
Clams and Mussels	<i>Villosa amygdala</i> ☼	Florida Rainbow	G3	S3		N	Y
Mayflies	<i>Attenella attenuata</i> ☼	Hirsute Mayfly	G5	S1S2		N	Y
Mayflies	<i>Stenacron floridense</i> ☼	A Mayfly	G3G4	S3S4		N	Y
Dragonflies and Damselflies	<i>Dromogomphus armatus</i> ☼	Southeastern Spinyleg	G4	S3		N	Y
Dragonflies and Damselflies	<i>Gomphurus modestus</i> ☼	Gulf Coast Clubtail	G3G4	S1		N	Y
Dragonflies and Damselflies	<i>Leptobasis lucifer</i> ☼	Lucifer Swampdamselfly	G4G5	S2		N	Y
Dragonflies and Damselflies	<i>Lestes tenuatus</i> ☼	Blue-striped Spreadwing	G5	S3		N	Y
Grasshoppers and Allies	<i>Typhloceuthophilus floridanus</i> ☼	Blind Pocket Gopher Cave Cricket	G2	S2		N	Y
Beetles	<i>Aphodius aegrotus</i> ☼	Small Pocket Gopher Aphodius Beetle	G3G4	S3?		N	Y
Beetles	<i>Aphodius laevigatus</i> ☼	Large Pocket Gopher Aphodius Beetle	G3G4	S3?		N	Y
Beetles	<i>Bolbocerosoma hamatum</i> ☼	Bicolored Burrowing Scarab Beetle	G3G4	S3		N	Y
Beetles	<i>Chelyoxenus xerobatis</i> ☼	Gopher Tortoise Hister Beetle	G2G3	S2		N	Y

Beetles	<i>Haroldiataenius saramari</i> ☼	Sand Pine Scrub Ataenius Beetle	G3G4	S3S4		N	Y
Beetles	<i>Hypotrachia spissipes</i> ☼	Florida Hypotrachia Scarab Beetle	G3G4	S3S4		N	Y
Beetles	<i>Ischyryus dunedinensis</i> ☼	Three Spotted Pleasing Fungus Beetle	G2G3	S2S3		N	Y
Beetles	<i>Micronaspis floridana</i> ☼	Florida Intertidal Firefly	G3?	S3		N	Y
Beetles	<i>Onthophagus polyphemi polyphemi</i> ☼	Punctate Gopher Tortoise Onthophagus Beetle	G2G3T2T3	S2		N	Y
Beetles	<i>Peltotrupes profundus</i> ☼	Florida Deepdigger Scarab Beetle	G3	S3		N	Y
Beetles	<i>Phyllophaga elongata</i> ☼	Elongate June Beetle	G3	S3		N	Y
Beetles	<i>Selonodon mandibularis</i> ☼	Large-Jawed Cebionid Beetle	G2G4	S2S4		N	Y
Caddisflies	<i>Hydroptila bernerii</i> ☼	Berner's Microcaddisfly	G4G5	S3		N	Y
Caddisflies	<i>Hydroptila wakulla</i> ☼	Wakulla Springs Varicolored Microcaddisfly	G2	S2		N	Y
Caddisflies	<i>Ochrotrichia provosti</i> ☼	Provost's Somber Caddisfly	GH	SH		N	Y
Caddisflies	<i>Orthotrichia curta</i> ☼	Short Orthotrichian Microcaddisfly	G4	S2S3		N	Y
Caddisflies	<i>Orthotrichia dentata</i> ☼	Dentate Orthotrichian Microcaddisfly	G2G3	S2		N	Y

Caddisflies	<i>Oxyethira florida</i> <sup>ⓔ</sup>	Florida Cream and Brown Microcaddisfly	G2	S2		N	Y
Caddisflies	<i>Triaenodes furcellus</i> <sup>ⓔ</sup>	Little-fork Triaenode Caddisfly	G3	S3		N	Y
Butterflies and Moths	<i>Aphrissa statira</i> <sup>ⓔ</sup>	Statira	G5	S2S3		N	Y
Butterflies and Moths	<i>Euphyes dukesi calhouni</i> <sup>ⓔ</sup>	Calhoun's Skipper	G3G4T2T3	S2S3	UR	N	Y
Butterflies and Moths	<i>Idia gopheri</i> <sup>ⓔ</sup>	Gopher Tortoise Noctuid Moth	G2G3	S2S3		N	Y
Ants, Bees, and Wasps	<i>Bombus fraternus</i> <sup>ⓔ</sup>	Southern Plains Bumble Bee	G3G4	S3		N	Y
Ants, Bees, and Wasps	<i>Colletes titusensis</i> <sup>ⓔ</sup>	A Cellophane Bee	G2G3	S2S3		N	Y
Ants, Bees, and Wasps	<i>Stelis ater</i> <sup>ⓔ</sup>	Southwest Florida Stelis Bee	G2	S2		N	Y



## Vertebrates

Group	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status	Tracked?
Fishes	<i>Microphis brachyurus</i> <sup>Ⓢ</sup>	Opossum Pipefish	G4G5	S2	SC	N	Y
Amphibians	<i>Lithobates capito</i> <sup>Ⓢ</sup>	Gopher Frog	G2G3	S3	UR	N	Y
Reptiles	<i>Alligator mississippiensis</i> <sup>Ⓢ</sup>	American Alligator	G5	S4	SAT	FT(S/A)	Y
Reptiles	<i>Caretta caretta</i> <sup>Ⓢ</sup>	Loggerhead Sea Turtle	G3	S3	T	FT	Y
Reptiles	<i>Chelonia mydas</i> <sup>Ⓢ</sup>	Green Sea Turtle	G3	S2S3	T	FT	Y
Reptiles	<i>Crotalus adamanteus</i> <sup>Ⓢ</sup>	Eastern Diamondback Rattlesnake	G3	S3	UR	N	Y
Reptiles	<i>Dermochelys coriacea</i> <sup>Ⓢ</sup>	Leatherback Sea Turtle	G2	S2	E	FE	Y
Reptiles	<i>Drymarchon couperi</i> <sup>Ⓢ</sup>	Eastern Indigo Snake	G3	S2?	T	FT	Y
Reptiles	<i>Gopherus polyphemus</i> <sup>Ⓢ</sup>	Gopher Tortoise	G3	S3		ST	Y
Reptiles	<i>Heterodon simus</i> <sup>Ⓢ</sup>	Southern Hognose Snake	G2	S2S3		N	Y
Reptiles	<i>Lampropeltis extenuata</i> <sup>Ⓢ</sup>	Short-tailed Snake	G3	S3	PT	ST	Y
Reptiles	<i>Lampropeltis floridana</i> <sup>Ⓢ</sup>	Florida Kingsnake	G2	S2		N	Y
Reptiles	<i>Pituophis melanoleucus</i> <sup>Ⓢ</sup>	Pine Snake	G4	S3	UR	ST	Y
Reptiles	<i>Plestiodon egregius pop. 1</i> <sup>Ⓢ</sup>	Mole Skink, Egmont Key population	G5T1Q	S1		N	Y

Reptiles	<i>Pseudemys concinna suwanniensis</i> Ⓢ	Suwannee Cooter	G5T3	S3		N	Y
Birds	<i>Antigone canadensis pratensis</i> Ⓢ	Florida Sandhill Crane	G5T2	S2		ST	Y
Birds	<i>Aphelocoma coerulescens</i> Ⓢ	Florida Scrub-Jay	G1G2	S1S2	T	FT	Y
Birds	<i>Aramus guarauna</i> Ⓢ	Limpkin	G5	S3		N	Y
Birds	<i>Athene cunicularia floridana</i> Ⓢ	Florida Burrowing Owl	G4T3	S3		ST	Y
Birds	<i>Buteo brachyurus</i> Ⓢ	Short-tailed Hawk	G4G5	S1		N	Y
Birds	<i>Charadrius nivosus</i> Ⓢ	Snowy Plover	G3	S1		ST	Y
Birds	<i>Egretta caerulea</i> Ⓢ	Little Blue Heron	G5	S4		ST	Y
Birds	<i>Egretta rufescens</i> Ⓢ	Reddish Egret	G4	S2		ST	Y
Birds	<i>Egretta thula</i> Ⓢ	Snowy Egret	G5	S3		N	Y
Birds	<i>Egretta tricolor</i> Ⓢ	Tricolored Heron	G5	S4		ST	Y
Birds	<i>Eudocimus albus</i> Ⓢ	White Ibis	G5	S4		N	Y
Birds	<i>Haematopus palliatus</i> Ⓢ	American Oystercatcher	G5	S2		ST	Y
Birds	<i>Haliaeetus leucocephalus</i> Ⓢ	Bald Eagle	G5	S3		N	Y
Birds	<i>Hydroprogne caspia</i> Ⓢ	Caspian Tern	G5	S2		N	Y
Birds	<i>Mycteria americana</i> Ⓢ	Wood Stork	G4	S2	DL	FT	Y

Birds	<i>Nyctanassa violacea</i> <sup>ⓔ</sup>	Yellow-crowned Night-heron	G5	S3		N	Y
Birds	<i>Nycticorax nycticorax</i> <sup>ⓔ</sup>	Black-crowned Night-heron	G5	S3		N	Y
Birds	<i>Pandion haliaetus</i> <sup>ⓔ</sup>	Osprey	G5	S3S4		N	Y
Birds	<i>Platalea ajaja</i> <sup>ⓔ</sup>	Roseate Spoonbill	G5	S2		ST	Y
Birds	<i>Plegadis falcinellus</i> <sup>ⓔ</sup>	Glossy Ibis	G5	S3		N	Y
Birds	<i>Rallus longirostris scottii</i> <sup>ⓔ</sup>	Florida Clapper Rail	G5T3?	S3?		N	Y
Birds	<i>Rynchops niger</i> <sup>ⓔ</sup>	Black Skimmer	G5	S3		ST	Y
Birds	<i>Sternula antillarum</i> <sup>ⓔ</sup>	Least Tern	G4	S3		ST	Y
Birds	<i>Thalasseus maximus</i> <sup>ⓔ</sup>	Royal Tern	G5	S3		N	Y
Birds	<i>Thalasseus sandvicensis</i> <sup>ⓔ</sup>	Sandwich Tern	G5	S2		N	Y
Mammals	<i>Eptesicus fuscus</i> <sup>ⓔ</sup>	Big Brown Bat	G5	S3		N	Y
Mammals	<i>Mustela frenata peninsulae</i> <sup>ⓔ</sup>	Florida Long-tailed Weasel	G5T3?	S3?		N	Y
Mammals	<i>Podomys floridanus</i> <sup>ⓔ</sup>	Florida Mouse	G3	S3		N	Y
Mammals	<i>Sciurus niger niger</i> <sup>ⓔ</sup>	Southeastern Fox Squirrel	G5T5	S3		N	Y
Mammals	<i>Trichechus manatus latirostris</i> <sup>ⓔ</sup>	Florida Manatee	G2G3T2	S2S3	T	N	Y

Mammals	<i>Ursus americanus floridanus</i> ®	Florida Black Bear	G5T4	S4		N	Y
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## Natural Communities

Group	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status	Tracked?
Natural Communities	<i>Beach dune</i>		G3	S2		N	Y
Natural Communities	<i>Coastal grassland</i>		G3	S2		N	Y
Natural Communities	<i>Estuarine composite substrate</i>		G3	S3		N	Y
Natural Communities	<i>Estuarine consolidated substrate</i>		G3	S3		N	Y
Natural Communities	<i>Estuarine unconsolidated substrate</i>		G5	S5		N	Y
Natural Communities	<i>Hydric hammock</i>		G4	S4		N	Y
Natural Communities	<i>Mangrove swamp</i>		G5	S4		N	Y
Natural Communities	<i>Marine mollusk reef</i>		G3	S3		N	Y
Natural Communities	<i>Marine seagrass bed</i>		G3	S2		N	Y
Natural Communities	<i>Maritime hammock</i>		G3	S2		N	Y
Natural Communities	<i>Mesic flatwoods</i>		G4	S4		N	Y
Natural Communities	<i>Salt marsh</i>		G5	S4		N	Y
Natural Communities	<i>Sandhill</i>		G3	S2		N	Y
Natural Communities	<i>Scrub</i>		G2	S2		N	Y

## ESI Marine Mammal Habitat Areas

FWC GIS Librarian  
Florida Fish and Wildlife Conservation Commission

### Summary

To visually represent the most recent Environmental Sensitivity Index data available for each area within the state of Florida.

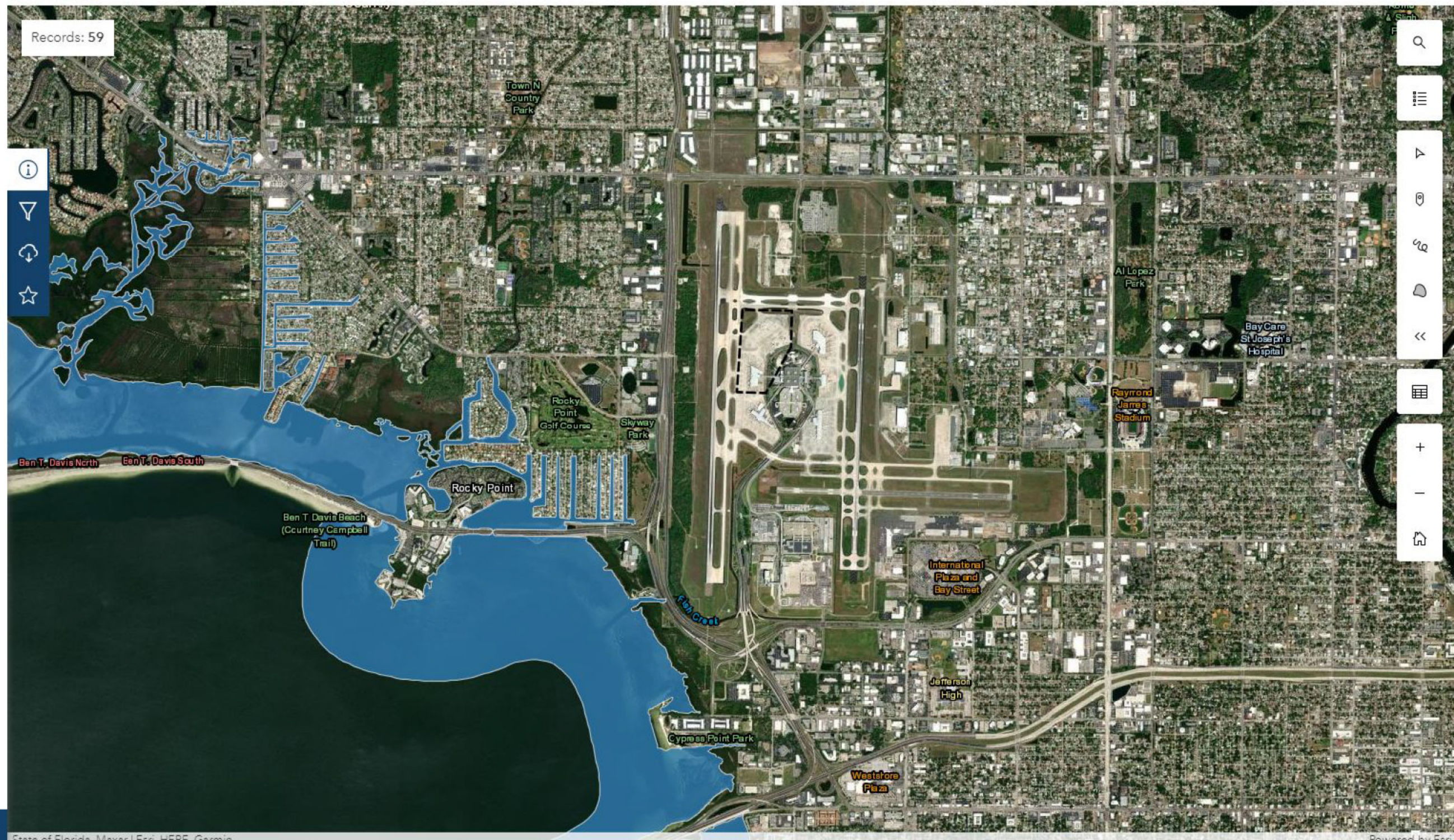
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This data set contains sensitive biological resource data for manatees, whales, and dolphins in South Florida (2013), Panhandle Florida (2012), and the rest of Florida (2003). The data were originally delivered as coverages with a region polygon format which allowed overlaps, representing describe marine mammal distributions. These overlapping polygons are retained in the final geodatabase feature classes. Species specific abundance, seasonality, status, life history, and source ID information have been joined to the attribute table. Source details are stored in a separate related SOURCES data table designed to be used in conjunction with this spatial data layer. This data set comprises a portion of the ESI data for Florida. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources. Environmental Sensitivity Index (ESI) is more properly known as "Sensitivity of Coastal Habitats and Wildlife to Spilled Oil" Atlases. The term "ESI" is often used in reference to the whole dataset, but the term "ESI" is really a reference to the classification system of shoreline types known as Environmental Sensitivity Index, that classifies a shoreline on a scale from 1 to 10 based upon overall sensitivity to spilled oil. FWRI contracted out updates to Florida's ESI data for the Panhandle and South Florida in the years 2010 through early 2013. These datasets were delivered as coverages in region-polygon format that allow for overlapping polygons in the same manner as FWRI's older ESI GIS data (in Gulf-Wide Information System (GWIS) format/specification). Hundreds of new species were added and the regional products were completed and delivered as promised. However, FWRI wanted and needed a statewide product for use within the Marine Resources Geographic Information System (MRGIS) and the Florida Marine Spill Analysis System (FMSAS). This data set is a compilation of the most recent ESI mapping for each area of Florida.

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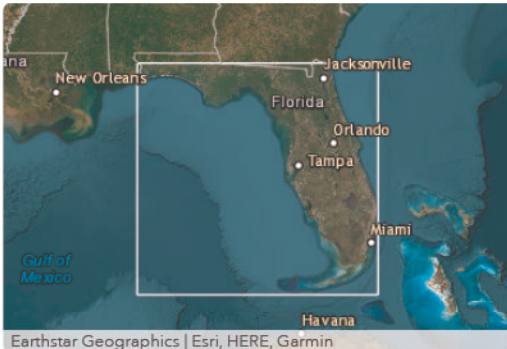
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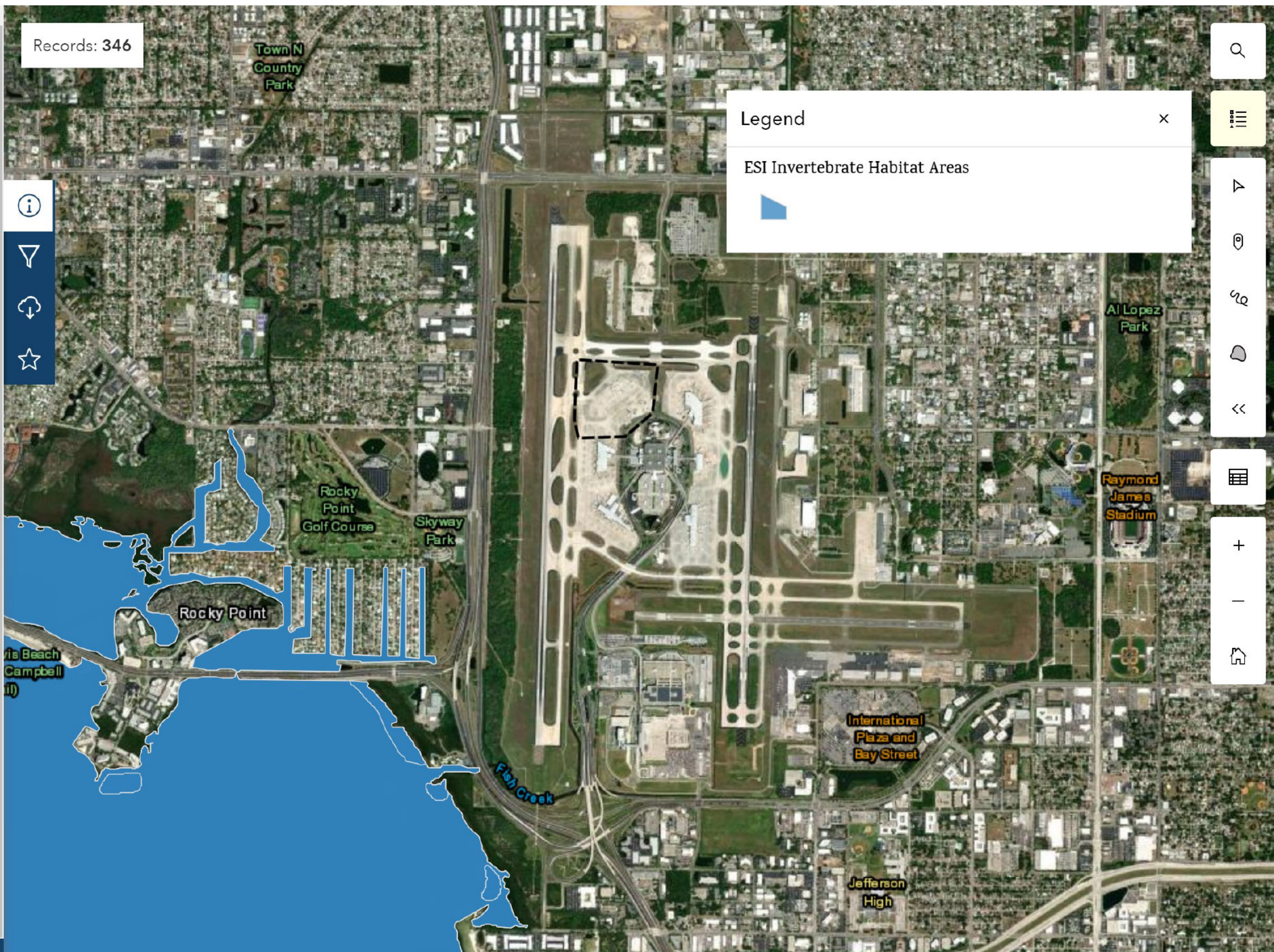
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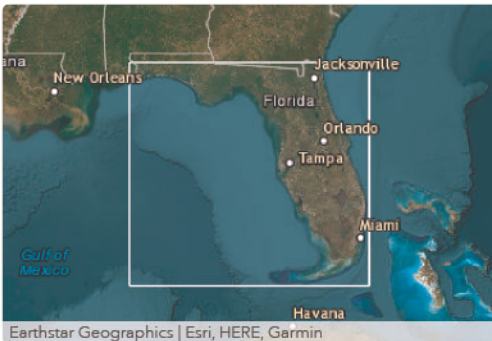


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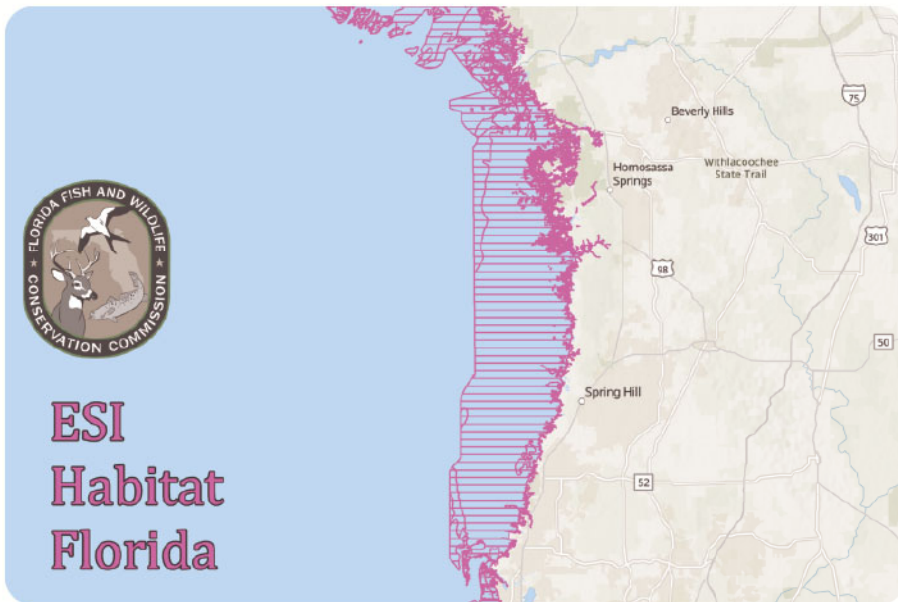
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## ESI Habitat Regions in Florida



FWC GIS Librarian  
Florida Fish and  
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Commission

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### Summary

To visually represent the most recent Environmental Sensitivity Index data available for each area within the state of Florida.

This data set contains sensitive biological resource data for threatened/endangered/rare terrestrial plants and communities in South Florida (2013), Panhandle Florida (2012), and the Saint Johns River (2003). The data were originally delivered as coverages with a region polygon format which allowed overlaps, representing plants and communities geodata. These overlapping polygons are retained in the final geodatabase feature classes. Benthic habitats information are included in the HABITATS layer for the areas outside of the Panhandle and South Florida areas that were updated in 2010-2013. Please see the BENTHIC feature class within the larger Statewide Composite ESI geodata for benthic habitats in South Florida and the Panhandle. Species specific abundance, seasonality, status, life history, and source ID information have been joined to the attribute table. Source details are stored in a separate related SOURCES data table designed to be used in conjunction with this spatial data layer. This data set comprises a portion of the ESI data for Florida. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources. Environmental Sensitivity Index (ESI) is more properly known as "Sensitivity of

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However, FWRI wanted and needed a statewide product for use within the Marine Resources Geographic Information System (MRGIS) and the Florida Marine Spill Analysis System (FMSAS). This data set is a compilation of the most recent FSI mapping for each area of Florida  
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abc	EL_SPE_SEA		∨
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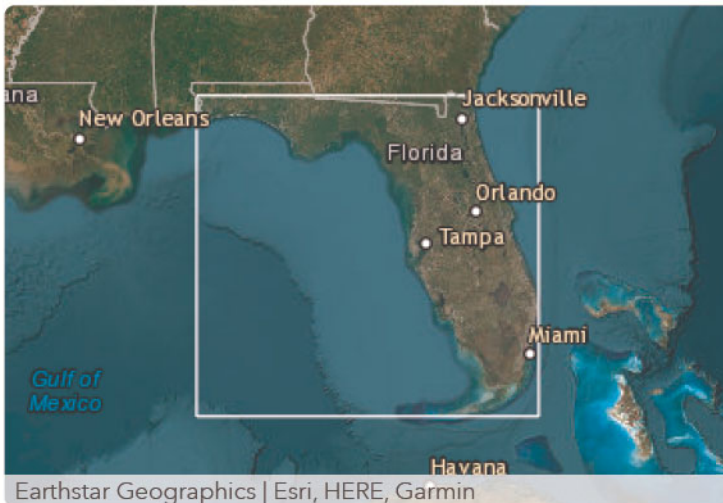
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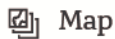
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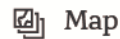
#### ESI Land Mammal Habitat Areas

GISLibrarian

To visually represent the most recent Environmental Sensitivity Index data...

**Type:** Map Service

**Date Updated:** December 15, 2023



Map

#### ESI Reptile Habitat Areas

GISLibrarian

To visually represent the most recent Environmental Sensitivity Index data...

**Type:** Map Service

**Date Updated:** December 15, 2023



Map

#### ESI Bird Habitat Areas 2003

GISLibrarian

The G-WIS data are updated and re-formatted Environmental Sensitivity Index...



Map

#### ESI Invertebrate Habitat Areas

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### ESI Reptile Habitat Areas

FWC GIS Librarian  
Florida Fish and Wildlife Conservation Commission

#### Summary

To visually represent the most recent Environmental Sensitivity Index data available for each area within the state of Florida.

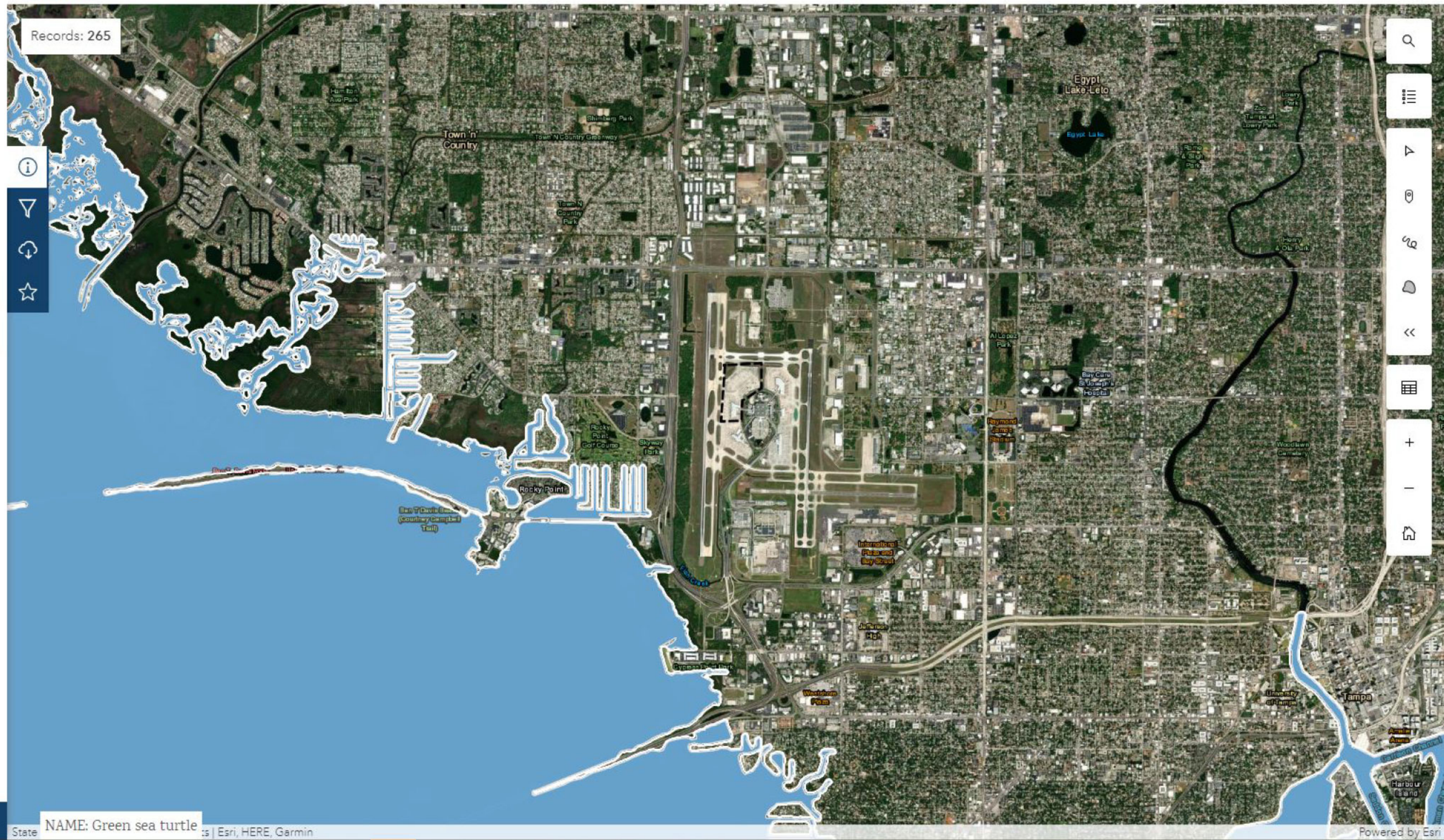
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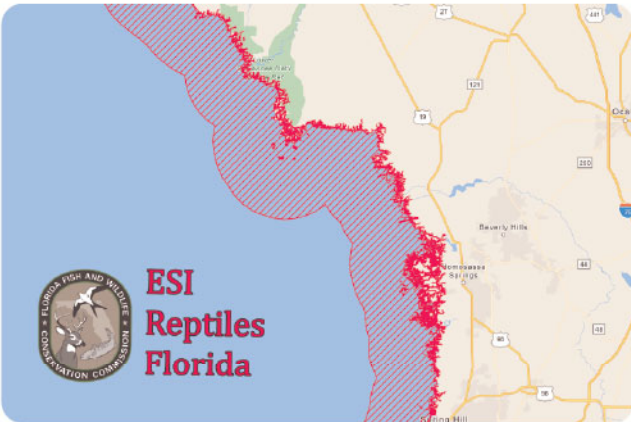
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## ESI Reptile Habitat Areas



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### Summary

To visually represent the most recent Environmental Sensitivity Index data available for each area within the state of Florida.

This data set contains sensitive biological resource data for sea turtles, crocodiles, mangrove terrapins, and other rare species in South Florida (2013), Panhandle Florida (2012), and the rest of Florida (2003). The data were originally delivered as coverages with a region polygon format which allowed overlaps, representing reptile distribution and nesting areas. These overlapping polygons are retained in the final geodatabase feature classes. Species specific abundance, seasonality, status, life history, and source ID information have been joined to the attribute table. Source details are stored in a separate related SOURCES data table designed to be used in conjunction with this spatial data layer. This data set comprises a portion of the ESI data for Florida. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources. See also REPTILES\_PT for additional information on reptiles. Environmental Sensitivity Index (ESI) is more properly known as "Sensitivity of Coastal Habitats and Wildlife to Spilled Oil" Atlases. The term "ESI" is often used in reference to the whole dataset, but the term "ESI" is really a reference to the classification system of shoreline types known as Environmental Sensitivity Index, that classifies a shoreline on a scale from 1 to 10 based upon overall sensitivity to spilled oil. FWRI contracted out updates to Florida's ESI data for the Panhandle and South Florida in the years 2010 through early 2013. These datasets were delivered as coverages in region-polygon format that allow for overlapping polygons in the same manner as FWRI's older ESI GIS data (in Gulf-Wide Information System (GWIS) format/specification). Hundreds of new species were added and the regional products were completed and delivered as promised. However, FWRI wanted and needed a statewide product for use within the Marine Resources Geographic Information System (MRGIS) and the Florida Marine Spill Analysis System (FMSAS). This data set is a compilation of the most recent ESI mapping for each area of Florida.

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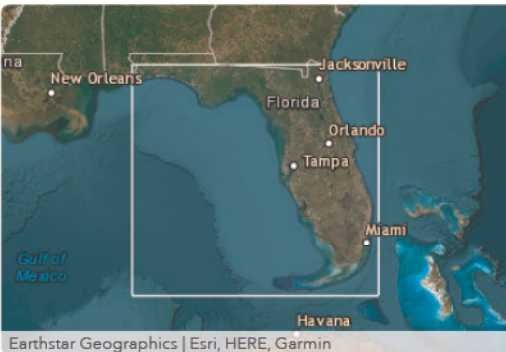


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GISLibrarian

To visually represent the most recent Environmental Sensitivity Index data...

Type: Map Service

Date Updated: December 15, 2023



Map

### ESI Land Mammal Habitat Areas

GISLibrarian

To visually represent the most recent Environmental Sensitivity Index data...

Type: Map Service

Date Updated: December 15, 2023



Map

### ESI Invertebrate Habitat Areas

GISLibrarian

To visually represent the most recent Environmental Sensitivity Index data...

Type: Map Service

Date Updated: December 15, 2023



Map

### ESI Bird Habitat Areas 2003

GISLibrarian

The G-WIS data are updated and re-formatted Environmental Sensitivity...

Type: Map Service

Date Updated: December 15, 2023



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### ESI Land Mammal Habitat Areas

FWC GIS Librarian  
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#### Summary

To visually represent the most recent Environmental Sensitivity Index data available for each area within the state of Florida.

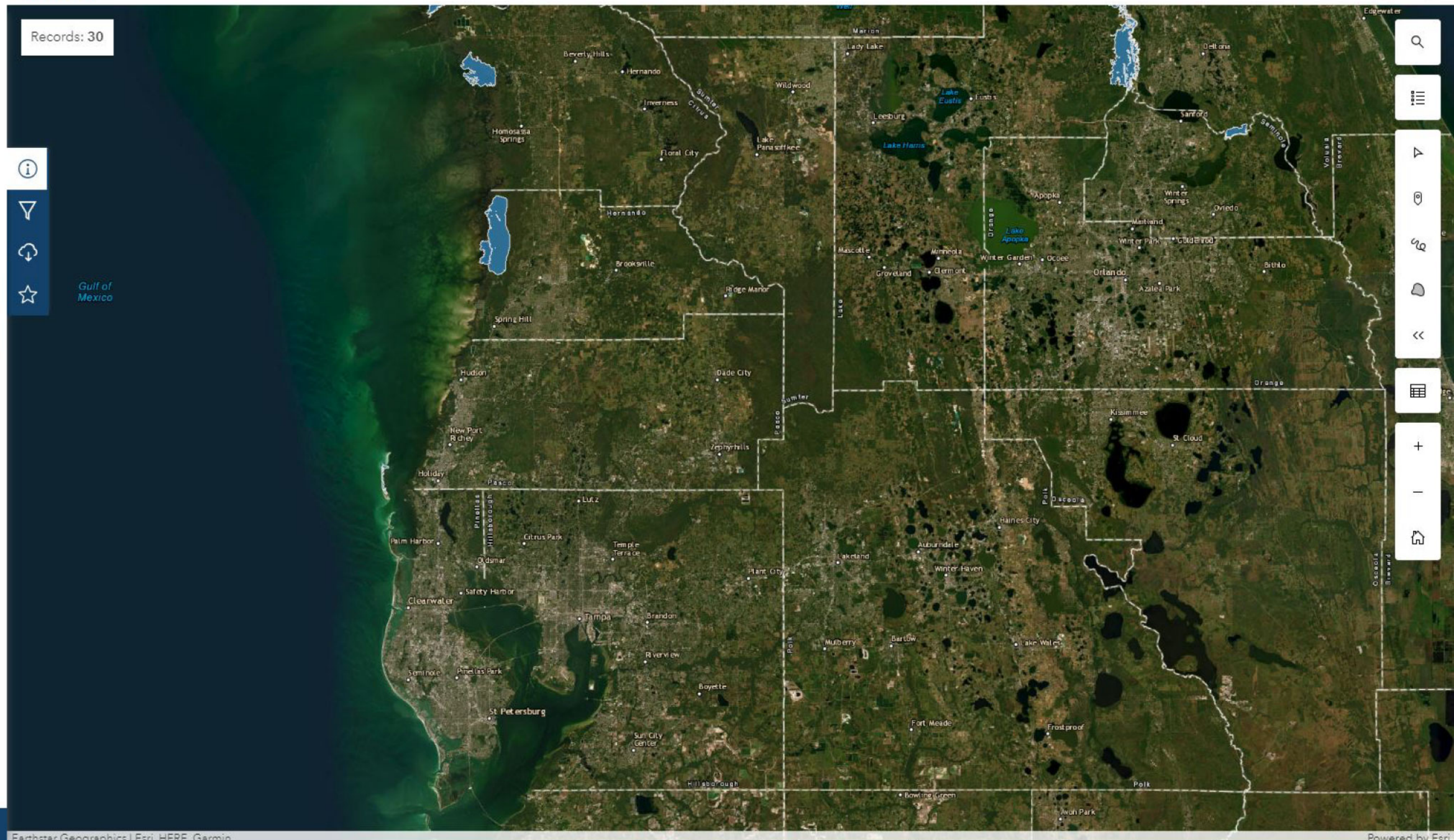
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## ESI Land Mammal Habitat Areas



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### Summary

To visually represent the most recent Environmental Sensitivity Index data available for each area within the state of Florida.

This data set contains sensitive biological resource data for State and Federally threatened and endangered terrestrial mammals in South Florida (2013), Panhandle Florida (2012), and the rest of Florida (2003). The data were originally delivered as coverages with a region polygon format which allowed overlaps, representing State and Federally threatened and endangered terrestrial mammal distribution. These overlapping polygons are retained in the final geodatabase feature classes. Species specific abundance, seasonality, status, life history, and source ID information have been joined to the attribute table. Source details are stored in a separate related SOURCES data table designed to be used in conjunction with this spatial data layer. This data set comprises a portion of the ESI data for Florida. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources. Environmental Sensitivity Index (ESI) is more properly known as "Sensitivity of Coastal Habitats and Wildlife to Spilled Oil" Atlases. The term "ESI" is often used in reference to the whole dataset, but the term "ESI" is really a reference to the classification system of shoreline types known as Environmental Sensitivity Index, that classifies a shoreline on a scale from 1 to 10 based upon overall sensitivity to spilled oil. FWRI contracted out updates to Florida's ESI data for the Panhandle and South Florida in the years 2010 through early 2013. These datasets were delivered as coverages in region-polygon format that allow for overlapping polygons in the same manner as FWRI's older ESI GIS data (in Gulf-Wide Information System (GWIS) format/specification). Hundreds of new species were added and the regional products were completed and delivered as promised. However, FWRI wanted and needed a statewide product for use within the Marine Resources Geographic Information System (MRGIS) and the Florida Marine Spill Analysis System (FMSAS). This data set is a compilation of the most recent ESI mapping for each area of Florida.

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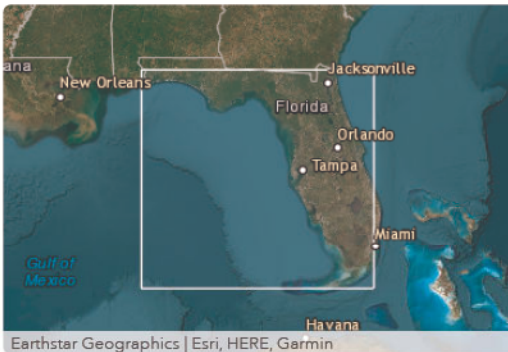


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abc	ELEMENT		▼
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<b>Map</b> <b>ESI Bird Habitat Areas 2000</b> GISLibrarian The G-WIS data are updated and re-formatted Environmental Sensitivity... <b>Type:</b> Map Service <b>Date Updated:</b> December 15, 2023		

## Tags

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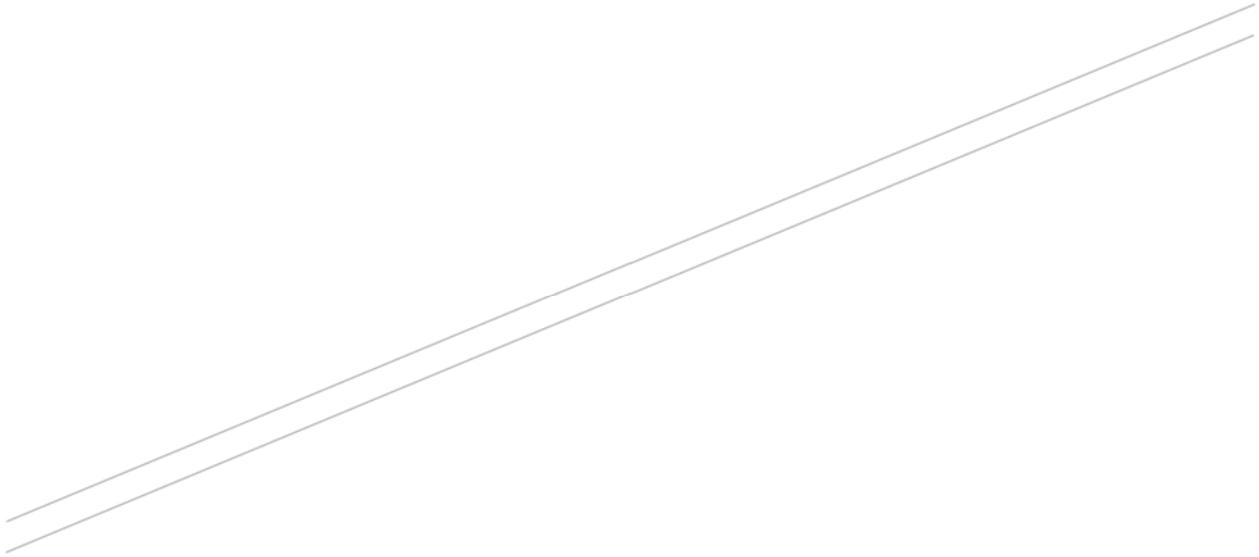
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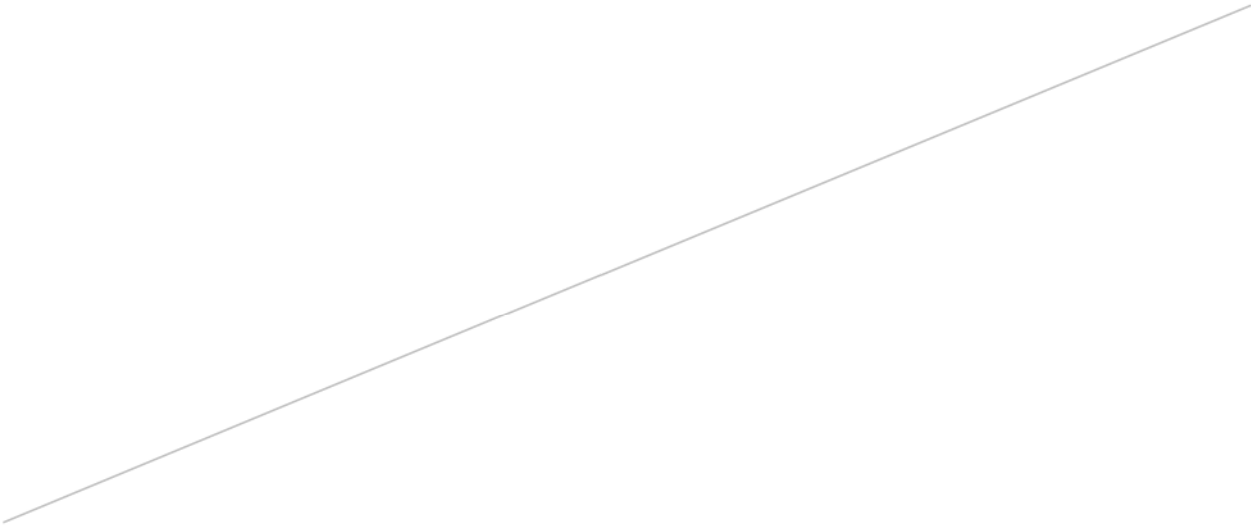


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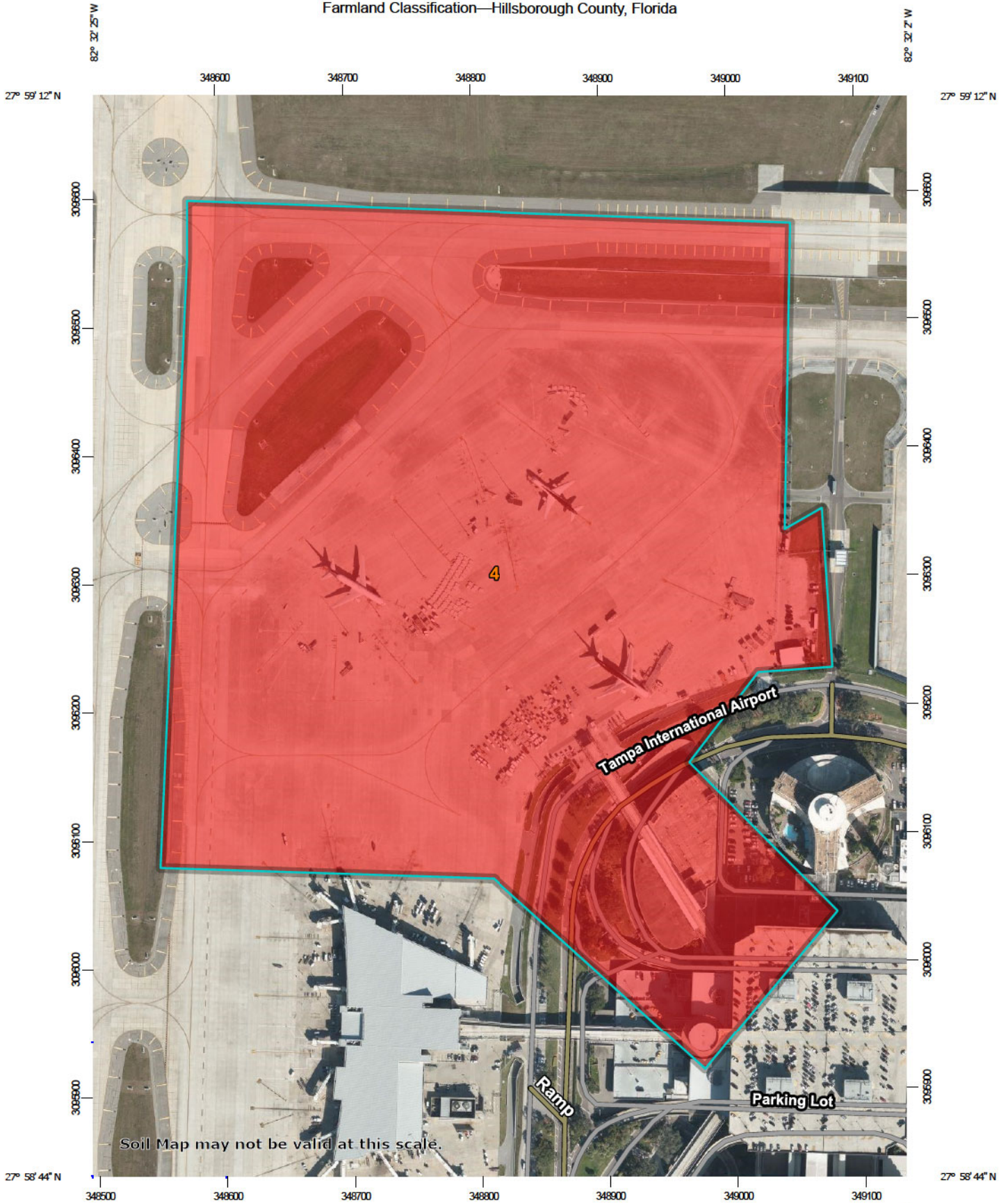


*APPENDIX E*  
*FARMLANDS*

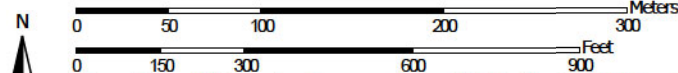


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Farmland Classification—Hillsborough County, Florida

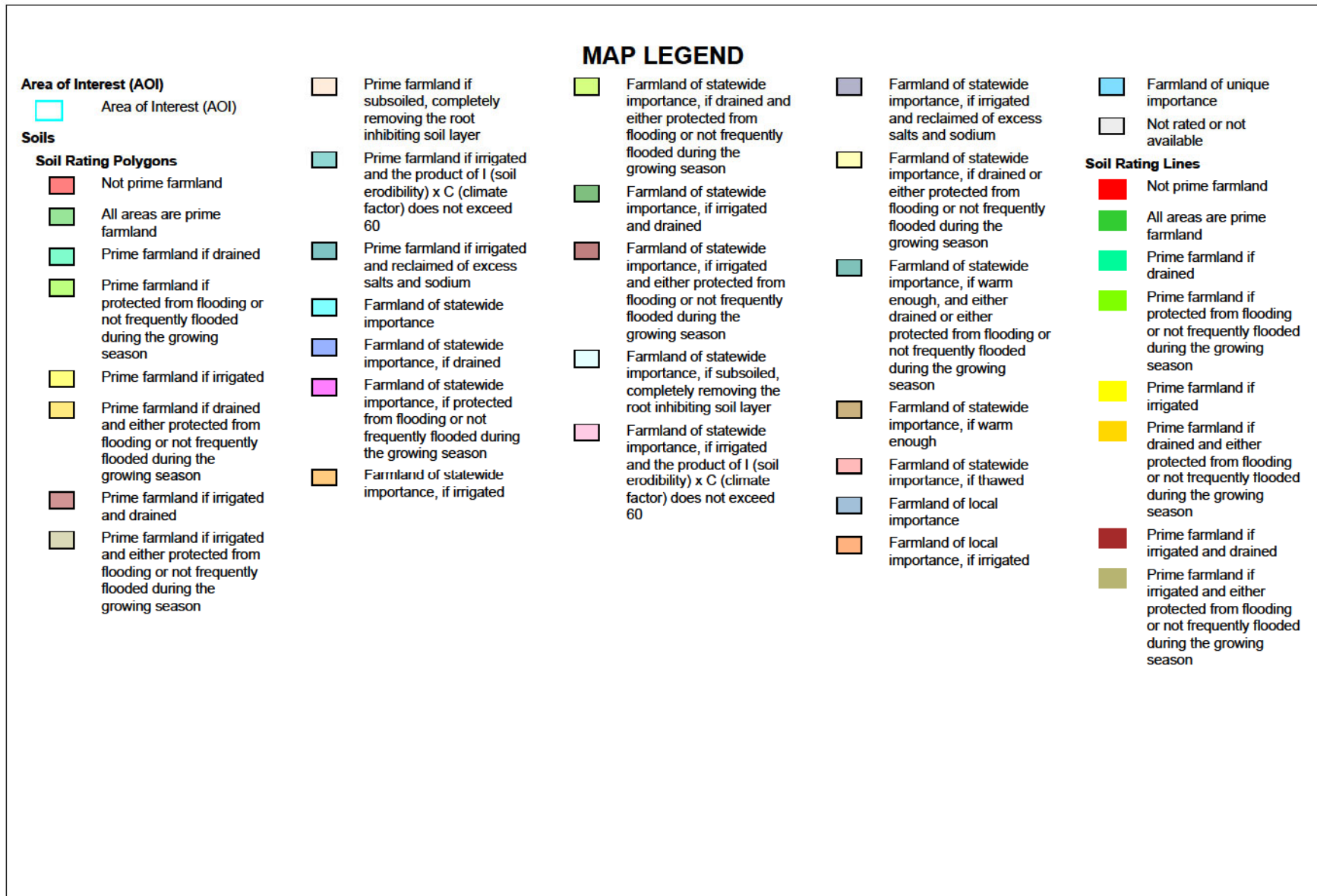


Map Scale: 1:4,110 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84





Farmland Classification—Hillsborough County, Florida

	Prime farmland if subsoiled, completely removing the root inhibiting soil layer		Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium		Farmland of unique importance		Prime farmland if subsoiled, completely removing the root inhibiting soil layer
	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60		Farmland of statewide importance, if irrigated and drained		Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season	<b>Soil Rating Points</b>			Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
	Prime farmland if irrigated and reclaimed of excess salts and sodium		Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season		Not prime farmland		Prime farmland if irrigated and reclaimed of excess salts and sodium
	Farmland of statewide importance		Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer		Farmland of statewide importance, if warm enough		Prime farmland if drained		Farmland of statewide importance
	Farmland of statewide importance, if drained		Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60		Farmland of statewide importance, if irrigated		Prime farmland if protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if drained
	Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season				Farmland of local importance		Prime farmland if irrigated		Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
	Farmland of statewide importance, if irrigated				Farmland of local importance, if irrigated		Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if irrigated
							Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season		

Farmland Classification—Hillsborough County, Florida

<p> Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season</p>	<p> Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium</p>	<p> Farmland of unique importance</p> <p> Not rated or not available</p>	<p>The soil surveys that comprise your AOI were mapped at 1:20,000.</p>
<p> Farmland of statewide importance, if irrigated and drained</p>	<p> Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season</p>	<p><b>Water Features</b></p> <p> Streams and Canals</p>	<p>Warning: Soil Map may not be valid at this scale.</p> <p>Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.</p>
<p> Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season</p>	<p> Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season</p>	<p><b>Transportation</b></p> <p> Rails</p> <p> Interstate Highways</p> <p> US Routes</p> <p> Major Roads</p> <p> Local Roads</p>	
<p> Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer</p>	<p> Farmland of statewide importance, if warm enough</p>	<p><b>Background</b></p> <p> Aerial Photography</p>	<p>Please rely on the bar scale on each map sheet for map measurements.</p>
<p> Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60</p>	<p> Farmland of statewide importance, if thawed</p>		<p>Source of Map: Natural Resources Conservation Service                  Web Soil Survey URL:                  Coordinate System: Web Mercator (EPSG:3857)</p>
	<p> Farmland of local importance</p>		<p>Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.</p>
	<p> Farmland of local importance, if irrigated</p>		<p>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</p>
			<p>Soil Survey Area: Hillsborough County, Florida                  Survey Area Data: Version 23, Aug 28, 2023</p>
			<p>Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.</p>
			<p>Date(s) aerial images were photographed: Dec 6, 2018—Jan 30, 2022</p>
			<p>The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.</p>

## Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
4	Arents, nearly level	Not prime farmland	66.2	100.0%
<b>Totals for Area of Interest</b>			<b>66.2</b>	<b>100.0%</b>

### Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

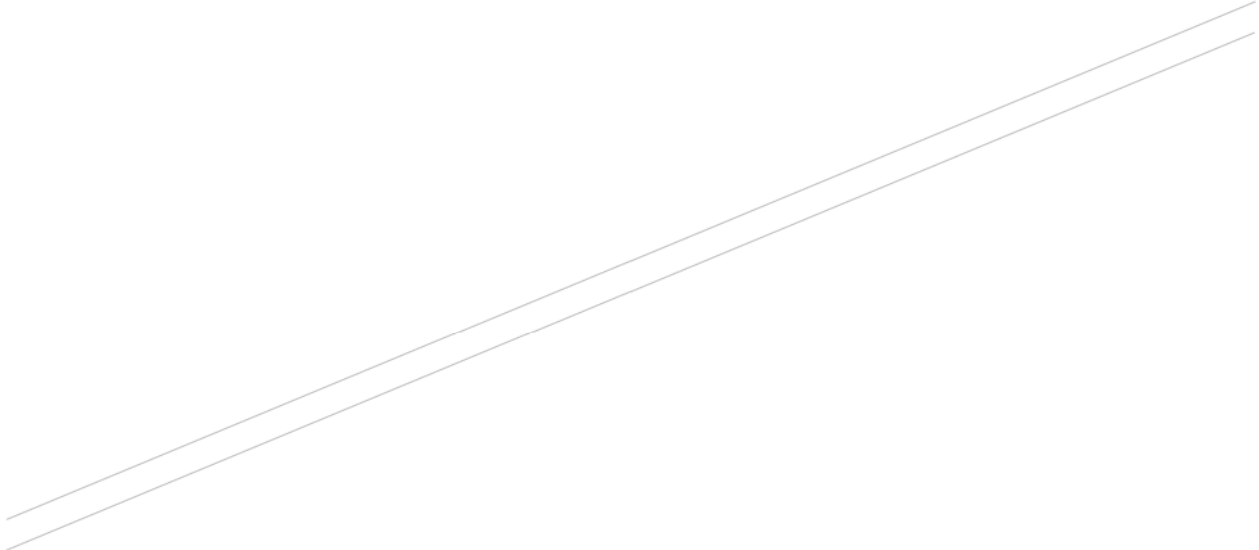
### Rating Options

*Aggregation Method:* No Aggregation Necessary

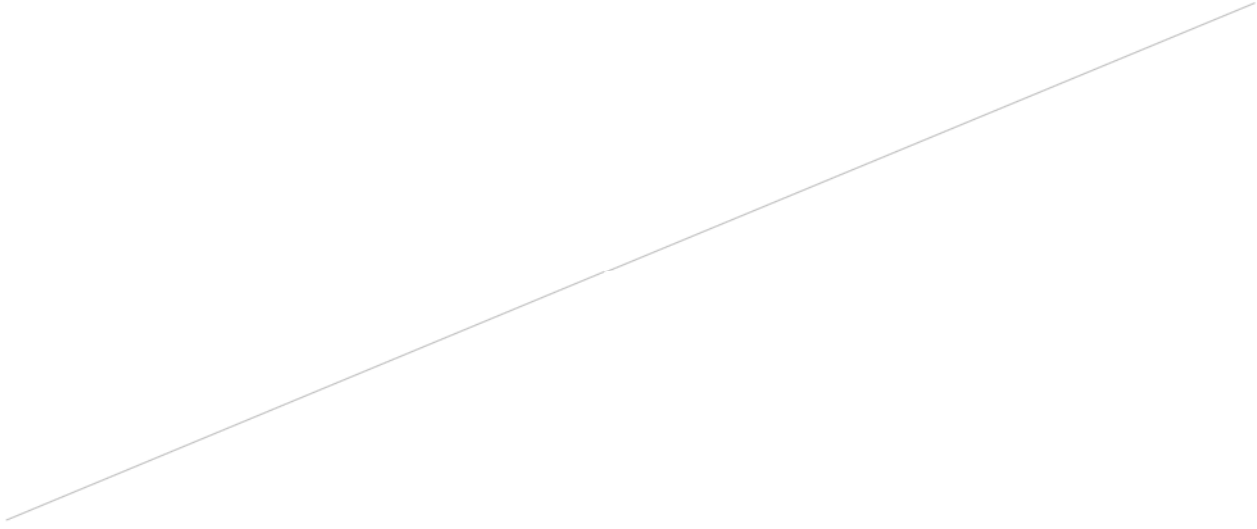
*Tie-break Rule:* Lower

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*APPENDIX F*  
***CULTURAL RESOURCE***  
***ASSESSMENT STUDY***



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Governor

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Ms. Heather Chasez  
Federal Aviation Administration  
Orlando Airports District Office  
8427 South Park Circle, Suite 524  
Orlando, Florida 32819

February 20, 2024

Re: DHR Project No.: 2024-806  
*Federal Aviation Administration  
Construction and Operation of New Airside D at Tampa International Airport  
Tampa, Hillsborough County*

Dear Ms. Chasez:

This office reviewed the referenced project for possible impact to historic properties listed, or eligible for listing, in the *National Register of Historic Places*. The review was conducted in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended and *36 CFR Part 800: Protection of Historic Properties*.

We note that the Tampa International Airport Resource Group (Florida Master Site File Number: HI14544) has previously been determined to meet the criteria for listing in the *National Register*.

Based on the information provided, this office concurs with your finding that the proposed undertaking will have no adverse effect on historic properties.

If you have any questions concerning our comments, please contact Scott Edwards, Historic Preservationist, by electronic mail [scott.edwards@dos.myflorida.com](mailto:scott.edwards@dos.myflorida.com), or at 850.245.6333 or 800.847.7278.

Sincerely,

Alissa Slade Lotane  
Director, Division of Historical Resources  
and State Historic Preservation Officer

**Division of Historical Resources**  
**R.A. Gray Building • 500 South Bronough Street • Tallahassee, Florida 32399**  
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January 11, 2024

## Cultural Resource Assessment Study for the Proposed New Airside D at Tampa International Airport Hillsborough County, Florida

Tampa/Hillsborough County, Florida  
HCAA Project No.: 8500 23  
HCAA Work Order No.: 22-30A  
RS&H No.: 2041880062





**Cultural Resource  
Assessment Study for the  
Proposed New Airside D at  
Tampa International Airport**

January 11, 2024

City of Tampa/Hillsborough County, Florida

HCAA Project No.: 8500 23

HCAA Work Order No.: 22-30A

Prepared by RS&H, Inc. at the  
direction of Hillsborough County Aviation  
Authority

Assessment of Effects under 36 CFR 800.5:  
Mollie Olinyk, MS, Architectural Historian,  
The Mannik & Smith Group, Inc.

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## Executive Summary

This Cultural Resource Assessment Study (CRAS) presents the results of a cultural resources analysis completed for the Hillsborough County Aviation Authority (HCAA or Authority). This analysis was performed to supplement an Environmental Assessment (EA) being prepared by RS&H, Inc. for the proposed construction and operation of a new Airside D at Tampa International Airport (TPA or Airport) Airside D. The Federal Aviation Administration (FAA) Orlando Airports District Office (ADO) requested a CRAS to facilitate Section 106 coordination with the Florida Division of Historic Resources (FL DHR) pertaining to the Proposed Undertaking.

The HCAA proposes replacing the original Airside D with a new 563,000-square-foot Airside D (Proposed Undertaking). The HCAA is proposing improvements at the Airport that would meet projected passenger and airline (domestic and international) demand and proactively prevent near-future congestion.

The Area of Potential Effects (APE) is approximately 480 acres and consists of four existing airsideways, portions of Runway 1L/19R and Runway 1R/19L, concrete apron area, vehicular roads (e.g., George Bean Parkway), taxiways, taxilanes,, stormwater drainage system, and mowed/maintained airfield turf.

The Airport was designed by Leigh Fisher Associates in consultation with the Authority. The design also included trams that transported passengers to the terminals, which had never been used in an airport, and an automated baggage system (Calise 2021; French and Hylton 2018). Construction was overseen by architect Ivan Smith of the Jacksonville-based architectural firm Reynolds, Smith & Hills (RS&H). The Airport was built in the Brutalist architectural style, with exposed concrete the primary structural material of its four distinct facades, and glass curtain walls that allowed for views of the runways. The Tampa International Airport was finished in April 1971 and cost over \$80 million (Calise 2021; French and Hylton 2018; FMSF 2018).

Florida Master Site File (FMSF) data was reviewed to identify previously recorded cultural resources within the APE and one mile of the Proposed Undertaking. Only one resource group is recorded within the APE (Tampa International Airport (Site ID HI14544)). The Tampa International Airport (Site ID HI14544) is eligible for listing on the NRHP (SHPO, 2022).

The Proposed Undertaking occurs entirely on land previously disturbed and developed for aviation activities. The Proposed Undertaking's construction and operation would not directly or indirectly affect cultural resources (e.g., noise, air, visual). Based on an evaluation of the details of the Proposed Undertaking in conjunction with the research and analysis summarized in this CRAS, the FAA concluded that the Proposed Undertaking **will have no adverse effect** on historic properties (i.e., properties that are eligible for or listed on the NRHP).

This Cultural Resource Assessment Study (CRAS) presents the results of a cultural resources analysis completed by RS&H, Inc. for the Hillsborough County Aviation Authority (HCAA or Authority). This analysis was performed to supplement an Environmental Assessment (EA) being prepared by RS&H, Inc. for the proposed construction and operation of a new Airside D at Tampa International Airport (TPA or Airport) Airside D. The Federal Aviation Administration (FAA) Orlando Airports District Office (ADO) requested a CRAS to facilitate Section 106 coordination with the Florida Division of Historic Resources (FL DHR) pertaining to the proposed undertaking. This CRAS includes:

- » a description of the Proposed Undertaking
- » a description of the Proposed Undertaking's Purpose and Need
- » a description of the Area of Potential Effects (APE)
- » background research on the APE, including environmental characteristics,
- » a review of the Florida Master Site File (FMSF) database to identify previous cultural resource surveys and previously documented archaeological and historical resources,
- » descriptions of potential direct and indirect impacts,
- » a cultural context study (see **Attachment A**),
- » a review of historic aerial imagery and topographic maps (see **Attachments B and C**),
- » a architectural photo log (see **Attachment D**), and
- » the determination of effects.

The CRAS was prepared by David Alberts of RS&H. It has been reviewed by Mollie Olinyk, M.S., of The Mannik & Smith Group, Inc., who meets the Secretary of the Interior's professional qualifications (36 CFR 61) as an architectural historian. Ms. Olinyk is responsible for the assessment of effects under 36 CFR 800.5 (see **Attachment E**).

## 1 Background

The Authority has undertaken an Environmental Assessment (EA) for the construction and operation of a new passenger handling area, Airside D (i.e., Proposed Undertaking) at the Airport. The EA is being prepared pursuant to the National Environmental Policy Act of 1969 (NEPA) and in accordance with FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*.

The original Airside D had a Y-shaped footprint, and its two concourses could accommodate 10 Boeing 727-200 aircraft. Airside D ceased operation in 2005 because it exceeded its useful life, and airlines relocated to the then-new Airside C. The previous Airside D was the last of the original airsideways and was demolished in 2007 (see **Figure 1**).

**Figure 1: Airside D – 2005 and 2022 Aerial Photographs\***



Sources: ESRI, 2022; RS&H, 2022



\*See **Attachment B** for additional historic aerials of this area.

Since then, improvements have been made to convert the former Airside D site into hardstands for airline and cargo aircraft parking. In 2022, UPS and Amazon cargo operations used the Hardstand D.<sup>1</sup>

## 1.1 Proposed Undertaking

The HCAA proposes replacing the original Airside D with a new Airside D. The HCAA proposes constructing and operating a 563,000-square-foot Airside D to meet its projected demand for operations and passengers (Proposed Undertaking). This includes a three-level airside and 16 contact gates with passenger boarding bridges. Additional project components that support the Proposed Undertaking include reconstruction of the apron, new hydrant fuel system, construction and operation of a 450-foot-long-dual-guideway automated people mover system (APM) to transport passengers to/from the new airside and main terminal, and an Airport-personnel vehicle parking area with an access gate connected to the existing Airport Access Road. The airside APM station would be outside the sterile airside zone. The APM stations have the capability to support up to a pair of two-car trains. Each car can carry 76 passengers. The APM maintenance facility would be located beneath the airside APM station. **Figure 2** shows the Proposed Undertaking and connected actions. **Figure 3** illustrates the Proposed Undertaking.

## 1.2 Project's Purpose and Need

The increasing demand for domestic and international flights necessitates the development of additional gates and associated airside passenger facilities to accommodate future growth effectively. The HCAA is proposing improvements at the Airport that would meet projected passenger and airline (domestic and international) demand and proactively prevent near-future congestion (i.e., Proposed Undertaking).

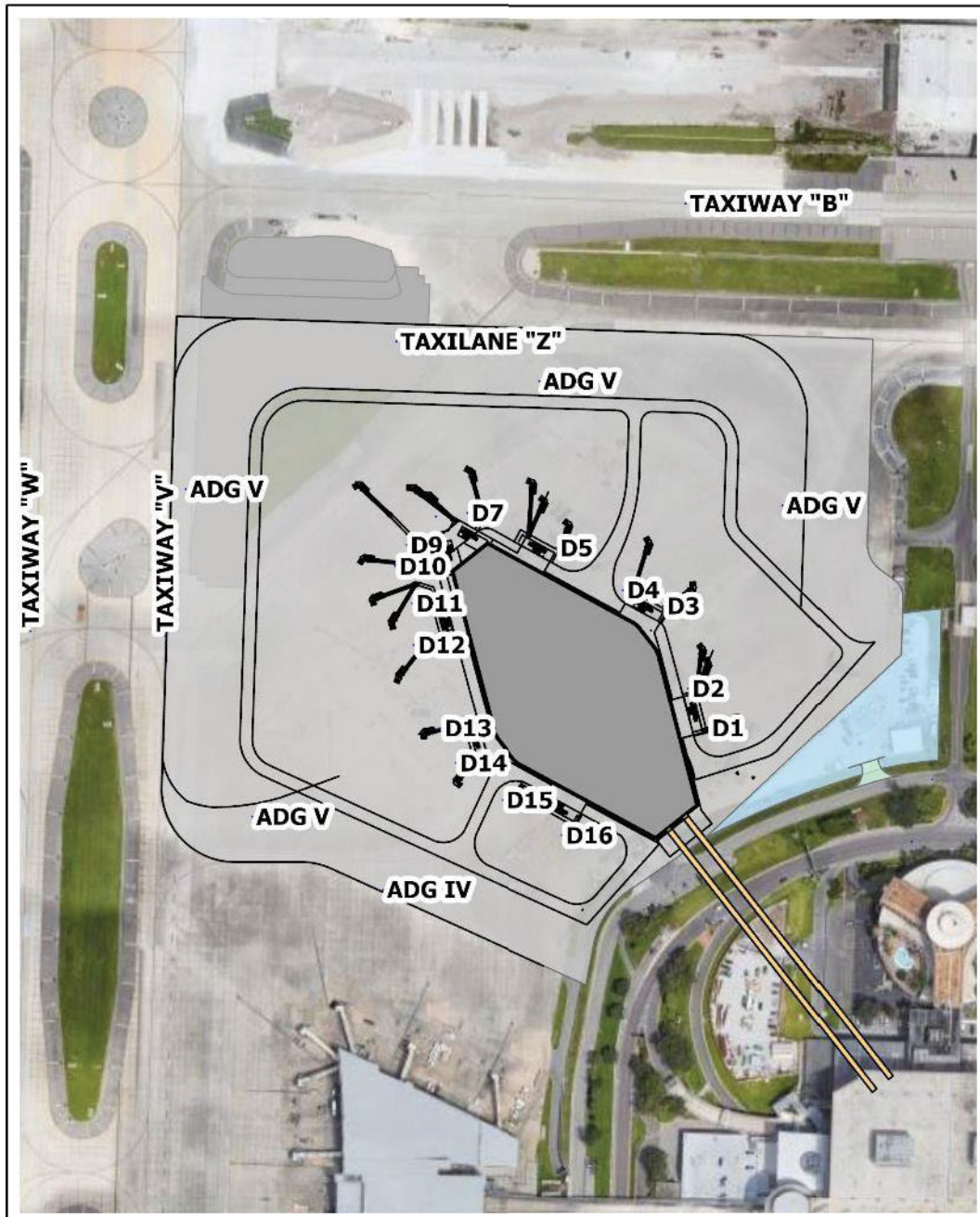
## 1.3 Area of Potential Effects and Existing Conditions

The Area of Potential Effects (APE) to historic resources for the Proposed Undertaking consists of the Main Terminal, including existing Airsides A, B, C, E and F and the former Hardstand D area (see **Figure 4**). The APE is approximately 480 acres and also includes portions of Runway 1L/19R and Runway 1R/19L, concrete apron area, vehicular roads (e.g., George Bean Parkway), taxiways, taxilanes,, stormwater drainage system, and mowed/maintained airfield turf.

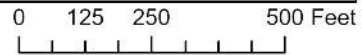
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<sup>1</sup> A hardstand is an aircraft parking position that does not have equipment that connects it to a building.

Figure 2: Proposed Undertaking



Sources: HCAA 2022; ESRI 2022; RS&H 2022.



Legend

- Airside D
- Parking
- Apron
- Access Gate
- Automated People Mover



**Figure 3: Illustration of the Proposed Undertaking (Airside D)**




Source: HCAA, 2023.

**Figure 4: Area of Potential Effects**



Sources: Google Earth, 2024; RS&H, 2024

**Legend**

 Area of Potential Effects (APE)



The APE is within the Gulf Coastal Lowlands physiographic region (White 1970). This region comprises level to gently sloping and poorly drained terrain along the coastal margin. The topography of the area is characterized by broad marine terraces formed during episodes of interglacial sea level change during the Pleistocene and have been subsequently altered by wind erosion, surface hydrological processes, and subsidence of the underlying limestone bedrock (White 1970; Estabrook et al. 1990). The APE is within the Old Tampa Bay watershed and Lower Sweetwater Creek watershed.

One soil type is within the APE (U.S. Department of Agriculture Natural Resources Conservation Service [USDA NRCS] 2023). The USDA-mapped soil type is classified as Arents, nearly level. The Arents series is a fine sand series formed in altered marine deposits and typically found on rises on marine terraces. The soils of this series have been disturbed by human activities (USDA NCSS 2023a).

## 2 History of Tampa International Airport

In the 1920s, John H. Drew and Hugh C. MacFarlane built an airfield in Tampa. Named Drew Field, approximately 100,000 people attended the opening day celebration on February 22, 1928. Drew leased the 160-acre airfield to Tampa, eventually purchasing the property for \$11,654 (McMorrow-Hernandez 2021). Following its purchase by the city in 1934, several considerable improvements were completed at the field, including new runways, hangars, and lighting. These changes were financed primarily with federal funding through the Civil Works Administration and the Works Progress Administration (Drew Park Community Redevelopment Area and Hillsborough County Historical Advisory Council 2016).

The government leased the field as a sub-post to MacDill Army Airfield. Heavy bombers arrived at Drew Army Airfield in May 1940. The army converted Drew Field into a military base with over 3,000 new structures, which included barracks, an administration building, and hospital facilities. With the completion of MacDill, Drew became a separate base and headquarters for the Third Fighter Command. Throughout World War II, more than 100,000 combat aircrews trained at Drew Field (Drew Park Community Redevelopment Area and Hillsborough County Historical Advisory Council 2016; Florida Department of State 2023; McMorrow-Hernandez 2021). The base at the height of the war included 15 square miles (sq mi) and could accommodate 25,000 personnel. Training at Drew Field included large signal air warning and engineering aviation training for heavy bombers. Following the U.S. entry into the war, the airfield became the location of a German prisoner-of-war camp in August 1944. Housed initially at Camp Blanding, the German prisoners arrived at Drew Field to be laborers in quartermaster workshops, kitchens, canteens, and warehouses. This camp held 395 Germans from August 1944 to March 1946 (Florida Department of State, 2023).

At the war's end, the U.S. Army returned the airfield to the City of Tampa. The former base operations facilities building became the main passenger terminal as the field returned to use as



a municipal airport. By 1950, international flights utilized Drew Field, which prompted a name change to Tampa International Airport. The Authority formed shortly after that and began preparations to construct a new passenger terminal, which opened on August 17, 1952. Despite several expansions completed in the 1950s, the Airport quickly proved to be too small. In the 1960s, the Authority conducted a study to design a new terminal that would accommodate larger planes and an increase in passengers. Construction began in 1968, and business continued at the smaller terminal until completion (French and Hylton 2018; McMorrow-Hernandez 2021).

The new Airport was designed by Leigh Fisher Associates in consultation with the Authority. It was divided into landside and airside sections. Construction was overseen by architect Ivan Smith of the Jacksonville-based architectural firm Reynolds, Smith & Hills (RS&H). The new Tampa International Airport was finished in April 1971 and cost over \$80 million (Calise 2021; French and Hylton 2018; FMSF 2018).

Following the opening of the new terminal, portions of the older terminal were leased to Hillsborough Community College for teaching classrooms until 1974 (Sumberg 1972; Tampa Times 20 October 1975:11A). By 1975, plans for the demolition of the old building were announced following the departure of the last tenant, the National Weather Service (Seale 1975). Demolition began in October 1975 (Tampa Times 20 October 1975:11A). Most of the old Drew Field is now a part of the neighborhood called Drew Park (City of Tampa Department of Urban Development 2004).

See **Attachment B** for historic aerial photographs of the Airport. **Attachment C** includes historic USGS topographic maps.

### 3 Florida Master Site File Review

Florida Master Site File (FMSF) data was reviewed to identify previously recorded cultural resources within the APE and one mile of the Proposed Undertaking.

As shown in Figure 5, one resource group is recorded within the APE (Tampa International Airport (Site ID HI14544)). The Tampa International Airport (Site ID HI14544) is eligible for listing on the NRHP (SHPO, 2022). Tampa International Airport (HI14544) was recorded in 2018 by members of the University of Florida (UF) Historic Preservation Program during an architectural study that resulted in the publication of Florida's Mid-Century Modern Architecture (1945-1975), which highlighted the Airport's Brutalist architectural design<sup>2</sup> as one of 50 "Flagship Structures"

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<sup>2</sup> Brutalist architecture is a style of building design developed in the 1950s in the United Kingdom following World War II. With an emphasis on construction and raw materials, the aesthetic evolved as reconstruction efforts were underway in the post-war era. The style is characterized by raw, exposed concrete and bold geometric forms.

representing the character and scope of mid-century modern architecture in the state (French and Hylton 2018:11, 78).

Tampa International Airport introduced several technological innovations that are in use today. In the 1960s, the Authority studied designs for the best modern solution to overcrowding. The Authority decided to build a concept that split the Airport into landside (parking, ticketing, concessions) and airside (passenger holding areas, apron, taxiways, runways) that represented a hub and spoke system.

The landside's Brutalist-style main terminal (i.e., exposed concrete with bold geometric design) had four distinct facades, each three stories tall with glass curtain walls framed in concrete to provide airfield views. The main terminal interior used "graphic colors and wide swaths of carpeting in contrast to the honey-brown concrete and extensive bands of tinted glass." The Authority also contracted Florida sculptor Roy Butler to create dozens of metal sea birds appearing to fly in the open spaces.

Passengers would be transported from the main terminal to each airside via an automated people mover system (APM). The APM was the first significant airport application of this type of transit technology. Each air-conditioned shuttle was initially designed to transport up to 100 people. The Airport was also the first to use an automated baggage system. According to the UF Historic Preservation Program review of the main terminal, many extensive renovations have occurred. Still, the overall structure retains its architectural integrity (French and Hylton 2018:11, 78).

In 2018, Tampa International Airport (8HI14544) was determined eligible for inclusion in the NRHP due to its architectural style, integrity, and significant technological and design innovations (FMSF 2018). The significance is based on the National Register Criterion C, which represents "the distinct characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent significant and distinguishable entity whose components may lack individual distinction."

Five historic structures are recorded within one mile of the Proposed Undertaking (see **Table 1**). These include one private residence (8HI09995) and four commercial buildings (8HI14469, 8HI14615, 8HI14627, and 8HI14628). Four of the five historical structures within one mile of the Proposed Undertaking have been determined ineligible for inclusion in the NRHP, and one was not evaluated. The one structure not evaluated was a commercial building (8HI14615) built in 1970 that is part of a complex of contemporary buildings located at 5519 W. Hillsborough Avenue. None of these five historical structures are located within the APE.

Cultural Resource Assessment Study for the Proposed New Airside D at Tampa International Airport

Table 1: Previously Recorded Historic Resources within One Mile of the Proposed Undertaking

8HI14628	Building 4, 5519 W. Hillsborough Ave.	Building - Commercial	1970	Historic Structure	Ineligible (2019)
8HI14615	Building 1, 5519 W. Hillsborough Ave.	Building - Commercial	1970	Historic Structure	Not evaluated
8HI14469	6005 Jarvis Street	Building – Commercial	1961	Historic Structure	Ineligible (2019)
8HI06719	Skyway Bike Trail	Campsite - Native American-Aceramic	n/a	Archaeological Site	Ineligible (2003)

Source: FMSF and SEARCH, Inc. 2023.

Two archaeological sites are recorded within one mile of the Project Undertaking (see **Figure 5** and **Table 1**). These include one pre-contact campsite site (8HI06719) and one site that is a pre-contact isolated lithic find (8HI03295). Neither of these archaeological sites are located within the APE.

## 4 Potential Direct and Indirect Effects

Since 1971, Tampa International Airport has continually been modified to provide aviation services to residents, visitors, and the economy of the Tampa Bay region. The original Airside D was operational from 1971 to 2005 and was demolished in 2007. As described in the following sections, no other listed or eligible for listing cultural resources would be directly or indirectly affected by the Proposed Undertaking other than the Tampa International Airport (Site ID HI14544).

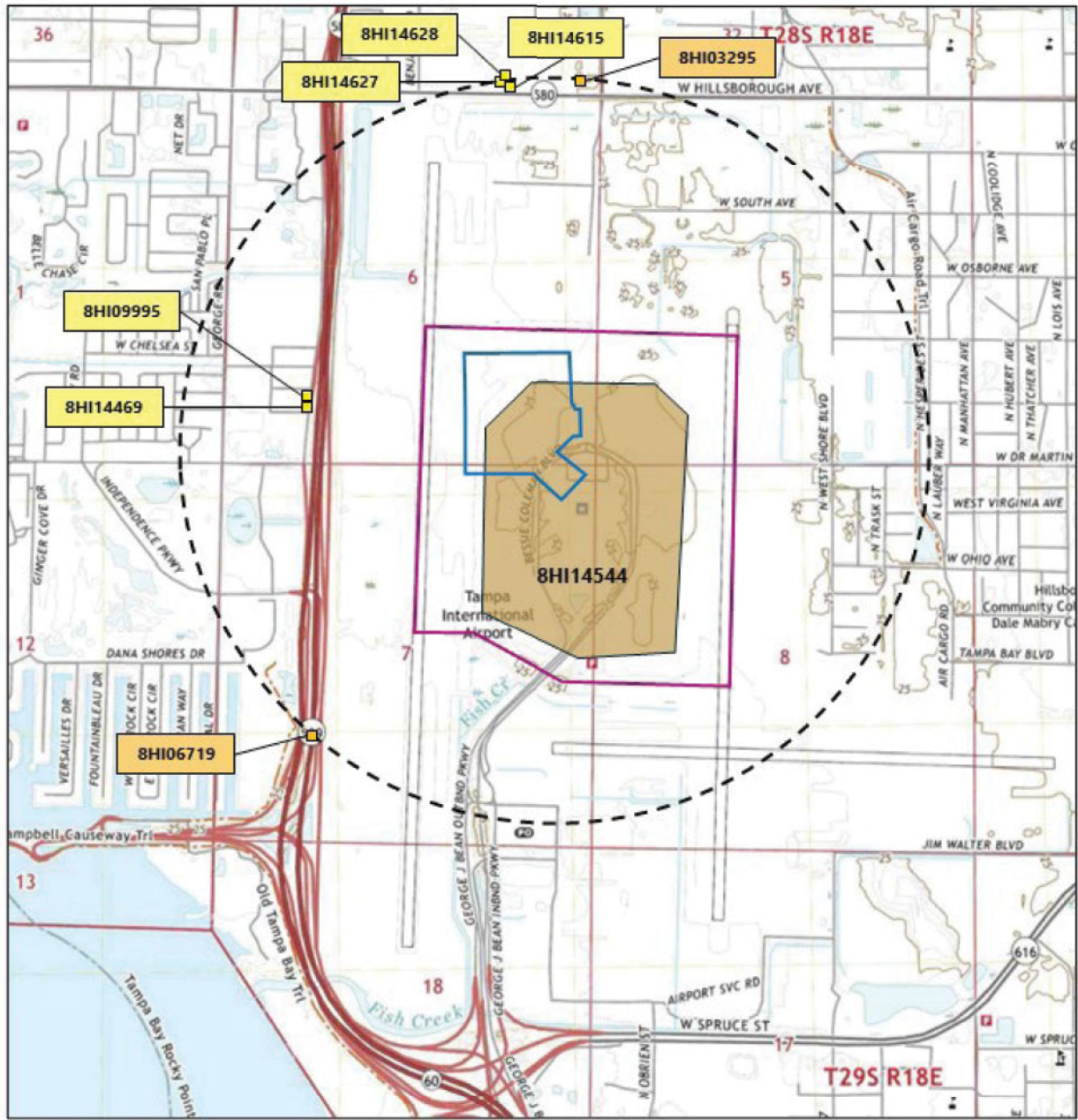
### 4.1 Cultural Resources

HCAA's Proposed Undertaking is to construct aviation-related infrastructure at the Airport and replace an airside and 450-foot-long-dual-guideway APM connection that were previously operational (1971-2005) and later demolished (2007). The Proposed Undertaking complements the architectural style and integrity of Site HI14544 and reestablishes significant technological and design innovations. The Proposed Undertaking would be consistent with the Airport setting. It would not affect National Register eligibility under Criterion C for "the distinct characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent significant and distinguishable entity whose components may lack individual distinction." Therefore, constructing the Proposed Undertaking and its APM connection to the main terminal would not affect the architectural style, integrity, and significant technological and design innovations of the Airport's Site HI14544 eligibility for listing on the NRHP as defined in 36 Code of Federal Regulations (CFR) 800.5.

The APE was extensively disturbed when Tampa International Airport was originally constructed. There are no archaeological resources located within the APE. The Proposed Undertaking includes ground-disturbing activities occurring entirely on land previously disturbed and developed for aviation activities (original Airside D, apron, taxiways) and would not affect archaeological resources.

The Proposed Undertaking's ground-disturbing activities occur entirely on land previously disturbed and developed for aviation activities. The Proposed Undertaking would not affect tribal land or land of interest to tribes.

**Figure 5: Previously Recorded Cultural Resources within One Mile of the Proposed Undertaking**



Source: USGS, 2021, FMSF, 2023, RS&H, 2023.

**Legend**

- Project Area
- 1-mile boundary
- Area of Potential Effects (APE)
- Historic Structure
- Archaeological Site
- Resource Group



## 4.2 Noise and Noise-Compatible Land Use

An AEM noise analysis was conducted for the proposed undertaking. The Proposed Undertaking's potential change in the DNL 65 dBA contour is 0.6% in 2032 (or approximately 19 acres of a total 2,336-acre contour). According to FAA Order 1050.1F Desk Reference, "If the AEM calculations indicate that the action would result in less than a 17 percent (approximately a DNL 1 dB) increase in the DNL 65 dB contour area, there would be no significant impact over noise sensitive areas, and no further noise analysis would be required" (Federal Aviation Administration, 2020). The Proposed Undertaking would increase operations and aircraft taxiing noise adjacent to the main terminal (Site ID HI14544). However, it would not significantly increase noise levels at Site ID HI14544 or introduce significant audible elements that would be out of character. Accordingly, it would not have an adverse effect on them as defined in 36 CFR 800.5. It would not affect the architectural style, integrity, and significant technological and design innovations of the Airport's (Site ID HI14544) eligibility for listing on the NRHP.

## 4.3 Air Quality

The United States Environmental Protection Agency (USEPA) sets National Ambient Air Quality Standards (NAAQS) to protect public health and environmental welfare. The USEPA has identified the following six criteria air pollutants for which NAAQS are applicable: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and sulfur dioxide (SO<sub>2</sub>). The USEPA has three classifications for areas regarding their ability or inability to meet the NAAQS. "Nonattainment" areas are geographic areas that violate one or more NAAQS. "Attainment" areas are geographic areas where concentrations of the criteria pollutants are below (i.e., within) the NAAQS. Lastly, "maintenance" areas are geographic areas with prior nonattainment status that have since transitioned to attainment. The APE is an "attainment" area for all National Ambient Air Quality Standards (NAAQS) (EPA Greenbook, 2022). The construction and operation of the Proposed Undertaking would not significantly affect air quality or violate local, state, tribal, or federal air quality standards under the Clean Air Act Amendments of 1990 nor indirectly affect minority and/or low-income populations. The Proposed Undertaking would not significantly increase construction or operational air emission levels at Site ID HI14544 or introduce significant atmospheric elements that would be out of character. Accordingly, it would not diminish the integrity of the property's historic features defined in 36 CFR 800.5. Therefore, the Proposed Undertaking would not affect the architectural style, integrity, and significant technological and design innovations of the Airport's (Site ID HI14544) eligibility for listing on the NRHP.

## 4.4 Visual

Potential aesthetic effects of an action are generally assessed by comparing the visual characteristics of the proposed development to existing development in the areas and to the

environmental setting. The visual effects resulting from constructing and operating the Proposed Undertaking would result from physical changes to the visual character of the APE, including existing development, landforms, vegetation, and water surfaces.

Construction of the Proposed Undertaking would occur during the day. There is the potential for night-time work that would require additional lighting; however, this lighting would be directional and last only for the duration of night-time construction work. The temporary use of directional lighting for construction purposes would not result in light emission impacts on the surrounding area, including cultural resources. The Proposed Undertaking's conceptual illustration is shown in **Figure 3**. The Proposed Undertaking would occur entirely on-Airport property, would be consistent with the existing Airport environment, and would not result in viewshed changes or additional light emissions of cultural resources. The Proposed Undertaking would not introduce visual elements that would be out of character. Accordingly, it would not diminish the integrity of the property's historic features defined in 36 CFR 800.5.

Operation of the Proposed Undertaking would be visually different, with increased operations and aircraft taxiing adjacent to the main terminal. It would not affect the architectural style, integrity, and significant technological and design innovations of the Airport's (Site ID HI14544) eligibility for listing on the NRHP. Operation of the Proposed Undertaking would include permanent outside lighting to move aircraft, vehicles, and people safely. Public views of the new Airside D would be obscured by the existing multi-lane Veterans Expressway, Hillsborough Avenue, commercial businesses, and other on-Airport structures.

## 5 Section 106 Determination of Effects

The Proposed Undertaking occurs entirely on land previously disturbed and developed for aviation activities. The Proposed Undertaking's construction and operation would not directly or indirectly affect any cultural resources (e.g., noise, air, visual) other than the Tampa International Airport (8HI14544). However, the likely effects on Tampa International Airport would not alter any aspect of this resource from which it derives its significance under Criterion C for NRHP eligibility. Therefore, the likely effects to the Tampa International Airport will not constitute *adverse effects* as defined in 36 CFR 800.5. Because the Proposed Undertaking does include ground disturbance activities, the Authority will implement special conditions regarding unexpected discoveries during construction.

Based on an evaluation of the details of the Proposed Undertaking in conjunction with the research and analysis summarized in this CRAS, the FAA concluded that the Proposed Undertaking **will have no adverse effect** on historic properties (i.e., properties that are eligible for or listed on the NRHP).

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## Attachment A: Cultural Context and Historic Background

This attachment characterizes the pre-contact culture and post-contact history of the APE and the region. The source of this information is from the *Technical Memorandum Cultural Resources Desktop Analysis of the Tampa International Airport (TPA) Wildlife Remediation/ Employee Parking Expansion, Hillsborough County, Florida* completed by SEARCH, Inc. in December 2023.

### Pre-Contact Culture History

#### *Paleoindian*

The first well-documented inhabitants of Florida entered the area approximately 12,000 years ago during the Paleoindian period (12,000–9000 BP), during which the sea level was much lower than it is today. The Florida peninsula was wider and drier, particularly in the central interior. There is, however, growing evidence that there may be occupations that pre-date 12,000 BP in Florida, such as at the Sloth Hole and Page-Ladson sites in Jefferson County, where radiocarbon dates predating 12,000 BP have been obtained from levels containing lithic waste flakes, but no diagnostic tool forms (Dunbar 2002, 2006; Hemmings 1999, 2004). Both sites are inundated river sites, and although the contexts are considered intact, the downward movement of artifacts from the overlying artifact-bearing levels is possible.

Many animal species that are now extinct roamed the state (mammoths, camels, sloths, giant land tortoises, etc.), and these were hunted by Florida's earliest inhabitants. Most known Paleoindian sites are in north and west-central Florida, where karst springs and chert were readily available. In Hillsborough County, Paleoindian sites are located along the coast and various drainages.

Paleoindian sites are also underneath Tampa Bay (Goodyear and Warren 1972). These site locations were once on dry land when sea levels were lower but have become submerged as sea levels have risen during the past 10,000 years. One of the most well-known Paleoindian sites in the Tampa Bay area is in Hillsborough County. Harney Flats is a large habitation site excavated in the early 1980s (Daniel and Wisenbaker 1987).

#### *Archaic*

During the subsequent Archaic period (9000–2500 BP), human populations grew and expanded their territories as the climate became wetter and water sources became more prevalent. After the demise of Pleistocene fauna, human subsistence strategies became more diverse. They came to include new plant, animal, and aquatic species. People began to live in larger groups, use different stone tools, and inhabit more of what is now Florida.

The Early Archaic (9000–8000 BP) represented a continuity of the Paleoindian occupation of Florida. It occurred during rising sea levels, a gradual warming trend, and the spread of oak hardwood forests and hammocks. Numerous small Early Archaic special activity and campsites have been located throughout west-central Florida (Milanich 1994). The Middle Archaic (8000–4000 BP) was a wetter period with mixed pine and oak intrusion into the hardwood forest.

As conditions became wetter, extensive river systems and wetlands developed, and people began to exploit the resources associated with these aquatic habitats (Austin et al. 2004). This trend continued into the Late Archaic period (4000–2500 BP) (Austin et al. 2004). However, evidence also suggests that the environment became slightly drier during these periods and that aquatic habitats were fewer and not as deep (Russo 1986). This is probably the result of climatic fluctuations over time. Precontact populations in the Hillsborough County area may have been smaller and aggregated around springs and sinkholes once again.

The earliest pottery was tempered with plant fibers and first appeared at about 4000 BP (Sassaman 1993). The people who made fiber-tempered pottery practiced an essentially Archaic lifestyle of hunting, gathering, and incipient horticulture. Fiber-tempered pottery was made with naturally occurring clays, and plant fibers were then added to the clay as a tempering agent to strengthen it. After being made, pots were left to dry and then fired. Most Late Archaic sites containing fiber-tempered pottery are on the coast, with smaller campsites in the interior.

### *Post-Archaic*

The following Manasota period is divided into two subperiods. Early Manasota (2500–1300 BP) is recognized archaeologically by the dominance of sand-tempered pottery in assemblages, while the Weeden Island-related phase of Manasota (1300–1100 BP) is identified by the presence of St. Johns Check Stamped pottery in village contexts and the inclusion of ornately decorated pottery in mortuary contexts (burial mounds) (Milanich 1994). During the Manasota period, wetter conditions prevailed, and estuarine habitats became more numerous. This enabled larger populations to live in villages along the coast and the interior along significant rivers and streams. This trend continued into the following Safety Harbor period (1100–250 BP).

The Safety Harbor culture developed from the preceding Weeden Island-related Manasota culture in the central Gulf coast region of Florida around AD 900 (Mitchem 1989). Safety Harbor sites in this region include nucleated villages, usually containing a large platform mound with an associated plaza, one or more burial mounds, and surrounding village middens. In addition, numerous smaller midden sites are present in outlying areas. These probably represent small “hamlets” or household clusters within a specific polity. Each polity was ruled by a cacique (chief or leader) who lived in the town center. Caciques and their family members were buried in lineage mounds after their remains had been ritually cleaned and stored in a charnel house. There is no evidence that Safety Harbor groups practiced agriculture. Instead, the subsistence base was fishing, gathering, and hunting. Each town center probably represented a simple

chiefdom. Although alliances were forged between local polities, they otherwise appear to have acted independently of one another (Milanich 1998:103–104).

## Post-Contact History

### *European Exploration and Settlement, 1513–1821*

Spanish explorers were the first Europeans in the Tampa Bay area. Juan Ponce de León led two sea voyages to the peninsula of Florida, one in 1513 and one in 1521, but he never reached as far north as present-day Tampa Bay (Gannon 1996). The later expedition of Pánfilo de Narváez landed in Pinellas County in 1528 and trekked inland, then northward. While this was a significant European foray into the region, the Narváez expedition failed because of geographical confusion and conflict with Native Americans (Milanich and Hudson 1993).

A decade later, another explorer, Hernando de Soto, attempted an expedition to Florida on behalf of Spain. The expedition landed in Tampa Bay near the mouth of the Little Manatee River. It established a temporary camp before setting out into the interior. The expedition fought its way through what is now central and northern Florida before exploring other areas of the southeastern United States (Gannon 1996). Archaeological sites associated with the DeSoto expedition have been located in Hillsborough County; however, DeSoto left no permanent settlement in the region (Milanich and Hudson 1993). Little settlement occurred in the Tampa Bay area during the two centuries that followed the initial Spanish explorations. Spanish fishermen from Cuba occasionally established seasonal camps along the islands affronting the mainland. Here, fishermen collected their catch and smoked the fish before returning to Cuba (Worth 2012).

Native American groups from present-day Alabama and Georgia made their way into Florida. By the end of the seventeenth century, they had established settlements in the state. The Spanish referred to them collectively as cimarrón, meaning “wild” or “runaway,” which later became “Seminole” (Covington 1993:13). In 1763, after the Seven Years War, the British traded Havana to Spain in exchange for Florida. Spain regained the Florida territory in 1783 when it was returned following the American Revolution. The Seminoles developed trade with British and Spanish frontiersmen and attempted to forge alliances against the emerging U.S. (Covington 1993). During Florida’s British period, George Gauld completed a coastal survey of Florida, making the most accurate maps of Florida and Tampa Bay. When Spain regained Florida, its exploratory efforts remained comparatively minimal. Throughout the remainder of their rule over Florida, they did little to strengthen their knowledge of or presence in Tampa Bay (Weddle 1995).

### *United States Territory and State through Civil War, 1821–1865*

The Seminole accepted among their ranks formerly enslaved Africans and African Americans, who possessed valuable agricultural knowledge and could speak Native American languages and English. This acceptance fueled tensions between Americans in the southern U.S. (who opposed the relationship between formerly enslaved Africans and African Americans and Seminoles) and the Spanish in East Florida (who accepted it) (Gannon 1996). In 1817, the U.S. War Department tasked General Andrew Jackson with bringing the Seminole under control, resulting in the First Seminole War. Jackson led a punitive mission against the Seminole in Spanish Florida in 1818, highlighting Spain's weak control over the region and leading to the transfer of the territory to the U.S. several years later. The Adams-Onís Treaty, signed in 1819 and ratified in 1821, transferred Florida to the U.S. (Carter 1956:8–11; Tebeau 1981).

Once Florida became a U.S. territory in 1821, white homesteaders began moving into the northern and coastal areas of the territory. Hillsborough County's historical roots extend back to January 18, 1824, when U.S. Colonel George M. Brooke established Cantonment Brooke on the east bank of the mouth of the Hillsborough River, largely as a means of monitoring relations with the Seminole (Carter 1956; McCall 1974[1868]). In 1825, a military road connected the numerous forts being built, including Fort Brooke and Fort King (Marion County) (Knetsch 2003; Tomalin 2012). Typical of U.S. Army forts in frontier areas, Fort Brooke attracted civilian settlement. The territorial legislature created Hillsborough County on January 25, 1834. The county originally consisted of many of the present-day counties in the Tampa Bay area. Next to Fort Brooke, the village of Tampa began to grow, and it became the county seat in 1845 (Brown 1999; Covington 1957; Grismer 1950). At its creation, Hillsborough County encompassed present-day Pinellas, Polk, Manatee, Sarasota, Charlotte, De Soto, Hardee, Highlands Counties, most of Glades County, and part of Lee County. However, Hillsborough remained sparsely settled (Hillsborough County, Florida 2021).

Hillsborough County's fortunes were tied to the military personnel of Fort Brooke during the Second and Third Seminole Wars (Brown 1999). The 1840 census illustrates the extent of the military presence in this area: of the 452 people in the county in that year, fewer than 100 were civilians, the remainder being military personnel (Dietrich 1978). Enslaved African Americans also lived near Fort Brooke. Other non-military civilians included ranchers, farmers, storekeepers, and fishermen. Most of the population lived in Tampa, and men outnumbered women. Within the next 10 years, the gender imbalance began to even out as the military importance declined at the end of the Second Seminole War; additionally, the Armed Occupation Act facilitated the movement of families into the region (Covington 1957; Grismer 1950).

In the 1850s, the emerging port shipped cattle to Cuba for sizable profits, and civic leaders began discussing building a railroad to Tampa. At the onset of the Civil War, Florida seceded

from the Union. Though isolated from the epicenter of the conflict, Tampa was the backdrop for clashes between the Union Navy, which prowled the Gulf coast, and Confederate sympathizers, who attempted to sneak goods into Tampa Bay (Brown 2000). The west coast of Florida produced salt during the conflict. Salt was necessary to preserve foods for shipment to troops in the field. When the war ended in 1865, the region entered a period of economic stagnation (Brown 2000).

### *Post-Civil War and Late Nineteenth Century, 1866–1899*

Following the Civil War, new settlers began moving into the region. In 1870, William B. Hooker moved to the area; his settlement came to be known as Hooker's Point (Martin 1948:2). Apart from Tampa, Hillsborough County remained rural and sparsely settled until the 1880s, with the arrival of the railroad. Henry Plant brought his South Florida Railroad through the region in 1883. In 1886, the Orange Belt Railway connected Tampa and Sanford (Seminole County) with St. Petersburg (Pinellas County) and crossed through Hillsborough County (Turner 2008).

Agriculture and cattle emerged as the primary industries in Hillsborough County, but this changed during the last two decades of the nineteenth century. Following the railroad's arrival, Don Vicente Martinez Ybor moved his Key West cigar factory operations to the outskirts of Tampa in 1886 (Grismer 1950). At the dawn of the twentieth century, Tampa produced more than 111 million cigars annually, with a market value of about ten million dollars. The entire Bay area benefitted from the prosperity, as a service industry flourished; with this economic surge came rapid growth (Covington 1957). Shipping increased after Plant's and Ybor's investments, requiring Tampa Bay's dredging and Port Tampa's development. Hillsborough, a frontier area in 1880, blossomed into a diverse economic region by 1900 when the population surpassed 35,000 (Dietrich 1978). In 1892, the county built a red brick courthouse with a silver dome. Although it was demolished in 1952, the image of the building is preserved on the county seal (Hillsborough County, Florida, 2021).

### *Twentieth Century to Present, 1900–Present*

Hillsborough County's large industries changed significantly at the start of the twentieth century. Tropical fish farming, technology, and the service sector came to displace or limit the importance of the county's nineteenth-century industries. In 1909, Earl and Rosella Adams settled south of Gibsonton and named their community Adamsville. Originally from Pennsylvania, the Adams family bought a 40-acre plot and brought 10 children. The family expected a tropical paradise but encountered instead wild terrain. Over the next several decades, Earl and Rosella Adams cleared the land, and Rosella Adams worked as a midwife in the surrounding area (Catala 2011). As more people arrived in Adamsville, the cove nearby became known as The Kitchen. Residents depended on the fish, crabs, clams, and oysters for

much of their daily nutrition. The area was a reliable source of food and income, as many sold their catches at nearby markets (Green 1997).

During World War I, Tampa became a major shipbuilding city; at its peak, 3,400 people were employed at the Oscar Daniels Company to build eight 3,500-ton cargo ships (Mormino and Pizzo 1983:150). A total of 3,619 Hillsborough County residents served in World War I. Several men were honored for their war actions (Florida Department of Military Affairs 1992). Samuel M. Block of Tampa received the French Croix de Guerre with the Gilt Star for his bravery. As a private, Block succeeded in carrying messages during intense machine gun fire and artillery bombardment. His file indicated that he exhibited “extraordinary bravery” on several other occasions (Florida State Archives and Library 1920).

Following the First World War, Florida experienced economic growth and population expansion, known as the Florida Land Boom. This drew the attention of developers and businessmen who saw an opportunity to make large fortunes through land speculation. When the automobile increased mobility for families, many people moved to areas that had not been over-industrialized, such as Tampa. The development of state roads and public highways throughout Florida in the 1920s facilitated this movement. The Florida Road Department created many of the new hard-surfaced roads. Tampa became more accessible with the completion of the Michigan Avenue Bridge and the 22nd Street Causeway, both privately funded (NRHP 1996). Between 1920 and 1930, Tampa’s population increased from 51,608 to 101,161, making it the third-most populous city in the state.

In 1926, an economic depression began in Hillsborough County and Tampa ahead of the Great Depression that affected the rest of the nation starting in 1929. Many banks and other industries closed their doors, some never to reopen. Responding to the crises, the local government procured federal funding to employ the jobless through the CCC and WPA. The newly employed worked on numerous projects, including the opening of Adamo Drive, the widening of Nebraska Avenue, the filling in of Spanishtown Creek, the restructuring of Bayshore Boulevard, and the construction of the Fort Homer Hesterly Armory. One of the many public projects in Tampa was the improvement of Drew Field, the city’s first airfield built during the 1920s. Workers constructed runways and hangars, creating one of the best airports in the state by 1938 (Mormino and Pizzo 1983:168–169).

World War II was a boon to the economy. With the creation of new bases and the subsequent influx of military personnel and their paychecks into local economies, cities such as Tampa were able to recover from the Great Depression. MacDill Field was activated on April 16, 1941 (Mormino and Pizzo 1983:172; MacDill Air Force Base 2020). The federal government spent millions of dollars and employed thousands to construct the base. The government also established Drew Field (present-day Tampa International Airport) as a radar training base and Henderson Field (located at the present-day University of South Florida) as a physical fitness



base. Tampa's shipbuilding industry employed nearly 16,000 people in round-the-clock shifts (Mormino and Pizzo 1983:174). MacDill continued operating after the war, but many shipbuilding industries ceased (Massey 2019).

During the 1950s, a new industry was rapidly expanding in Hillsborough County. In 1958, between 20 and 30 fish hatcheries operated in the county. These operations varied greatly, with some covering many acres and others consisting of only a few ponds. In the Adamsville area, H. Woolf produced 8 million fish annually (Richardson 1958). By 1961, Adamsville and Ruskin quickly became renowned as the world's largest tropical fish producers. The Woolf Fish Farm and K & P Tropical Fish Farm, owned by Warren Kushmer and E. J. Proctor, were located in Adamsville on U.S. 41 and among the largest producers. Woolf's operation owned its own aircraft, which delivered its shipments. Millions of tropical fish lived in the numerous hatcheries in the Ruskin-Adamsville-Gibson area. They shipped to all 50 states and Canada (Beauchamp 1961).

The east Hillsborough Bay area remained minimally developed throughout the mid-twentieth century (U.S. Board of Engineers for Rivers and Harbors 1958). By the 1980s, phosphate shipping led to the development of the East Hillsborough Bay area. Companies associated with the phosphate industry or shipping owned large tracts of land in the area. However, most land remained undeveloped (U.S. Army Corps of Engineers 1987). In 1983, 107 people lived in Adamsville, which remained quite rural. That year, the Hillsborough County Commission included the community in its long-range plan. It projected that industrial development in the area would increase in the coming years. Adamsville was part of the Big Bend Industrial Park between U.S. 41 and Tampa Bay. At the time, the Tampa Electric Company, Agrico Chemical Company, and Mitsui and Company all operated in Adamsville. Though several homeowners protested the area being designated as an industrial park, the Planning Commission refused to change the classification (Steele 1983).

Hillsborough County grew steadily throughout the twentieth century, and by 1990, the county had a population of 834,054 (Forestall 1996). Recently, Tampa has become a significant city for established businesses and new entrepreneurs. Forbes Magazine named Tampa the second-best city for entrepreneurs. Tampa Bay ranked third for the most cost-friendly U.S. business location. The proximity to global transit links, high population density for the workforce, and access to many resources make Tampa a destination for business (Visit Tampa Bay 2021). East Tampa has become one of the prime locations for industries seeking space in Tampa. Tampa had 336,150 residents in 2010 and 399,700 residents in 2019 (U.S. Bureau of the Census 2021).

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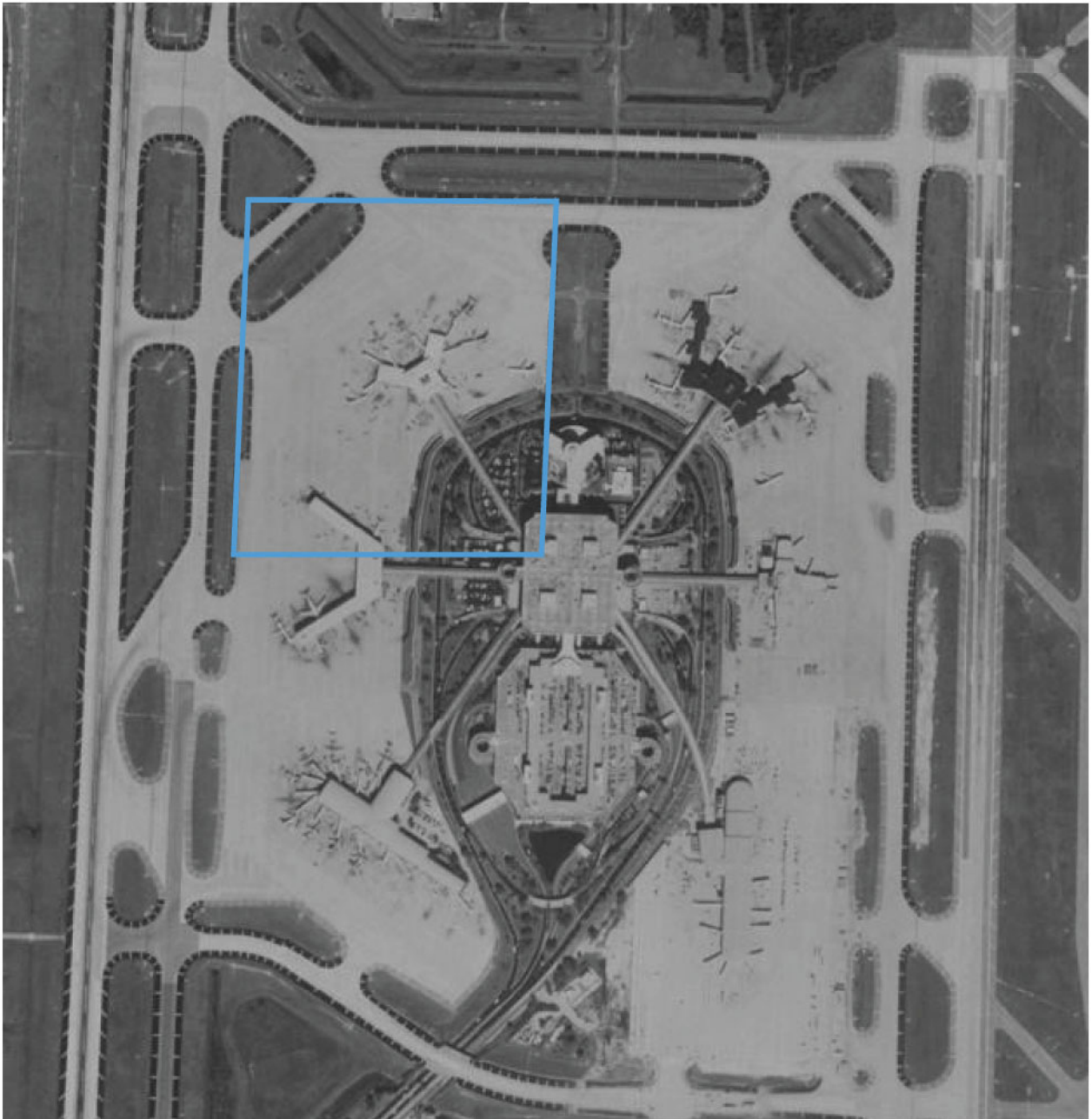
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## Attachment B: Historic Aerials

Circa 1995 (blue polygon is approximate project area)



Cultural Resource Assessment Study for the Proposed New Airside D at Tampa International Airport

Circa 2002 (blue polygon is approximate project area)



Source: Google Earth, 2023.



Cultural Resource Assessment Study for the Proposed New Airside D at Tampa International Airport

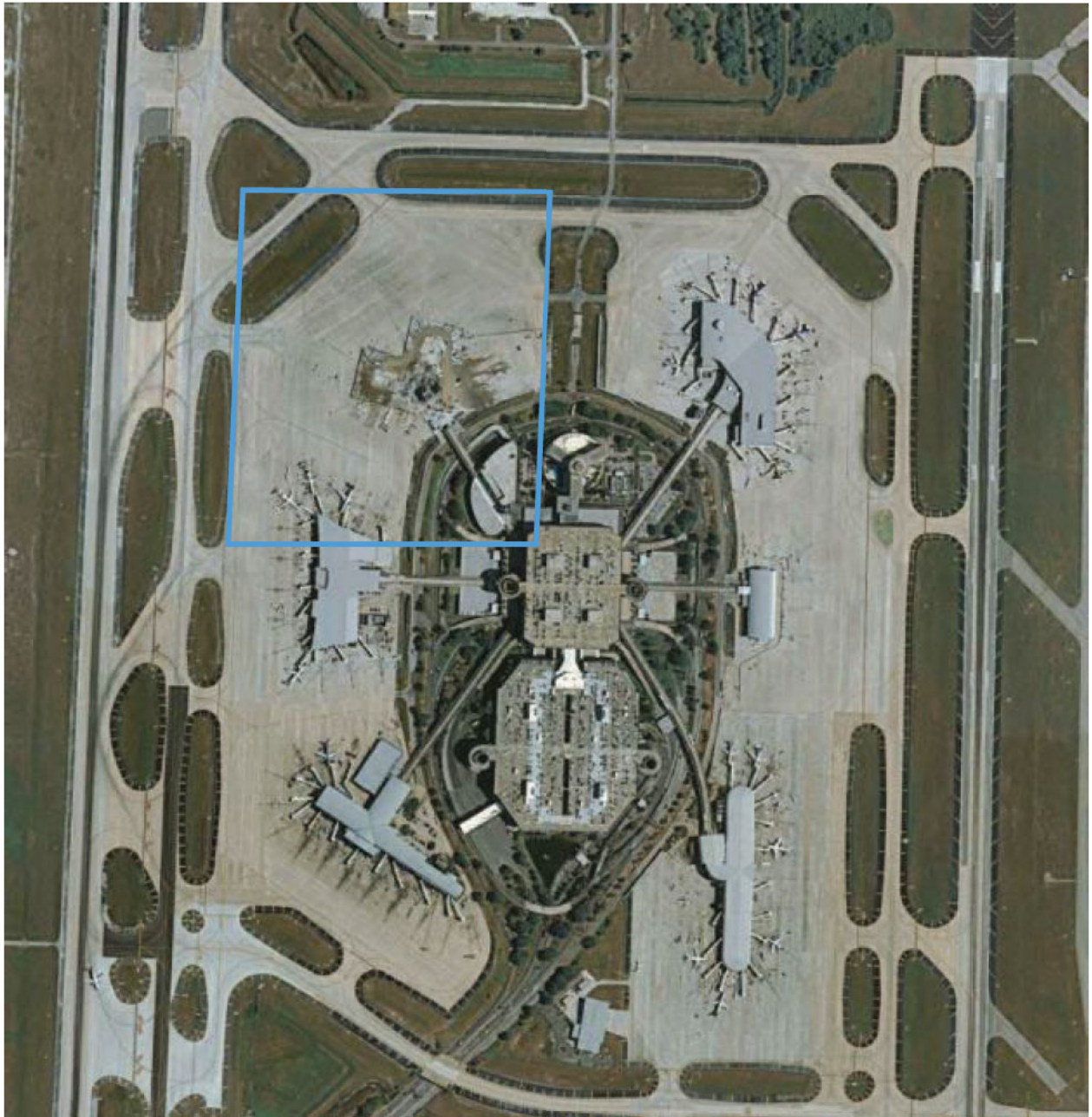
Circa 2005 (blue polygon is approximate project area)



Source: Google Earth, 2023.

Cultural Resource Assessment Study for the Proposed New Airside D at Tampa International Airport

Circa 2007 (blue polygon is approximate project area)



Source: Google Earth, 2023.

Cultural Resource Assessment Study for the Proposed New Airside D at Tampa International Airport

Circa 2015 (blue polygon is approximate project area)



Source: Google Earth, 2023.

Cultural Resource Assessment Study for the Proposed New Airside D at Tampa International Airport

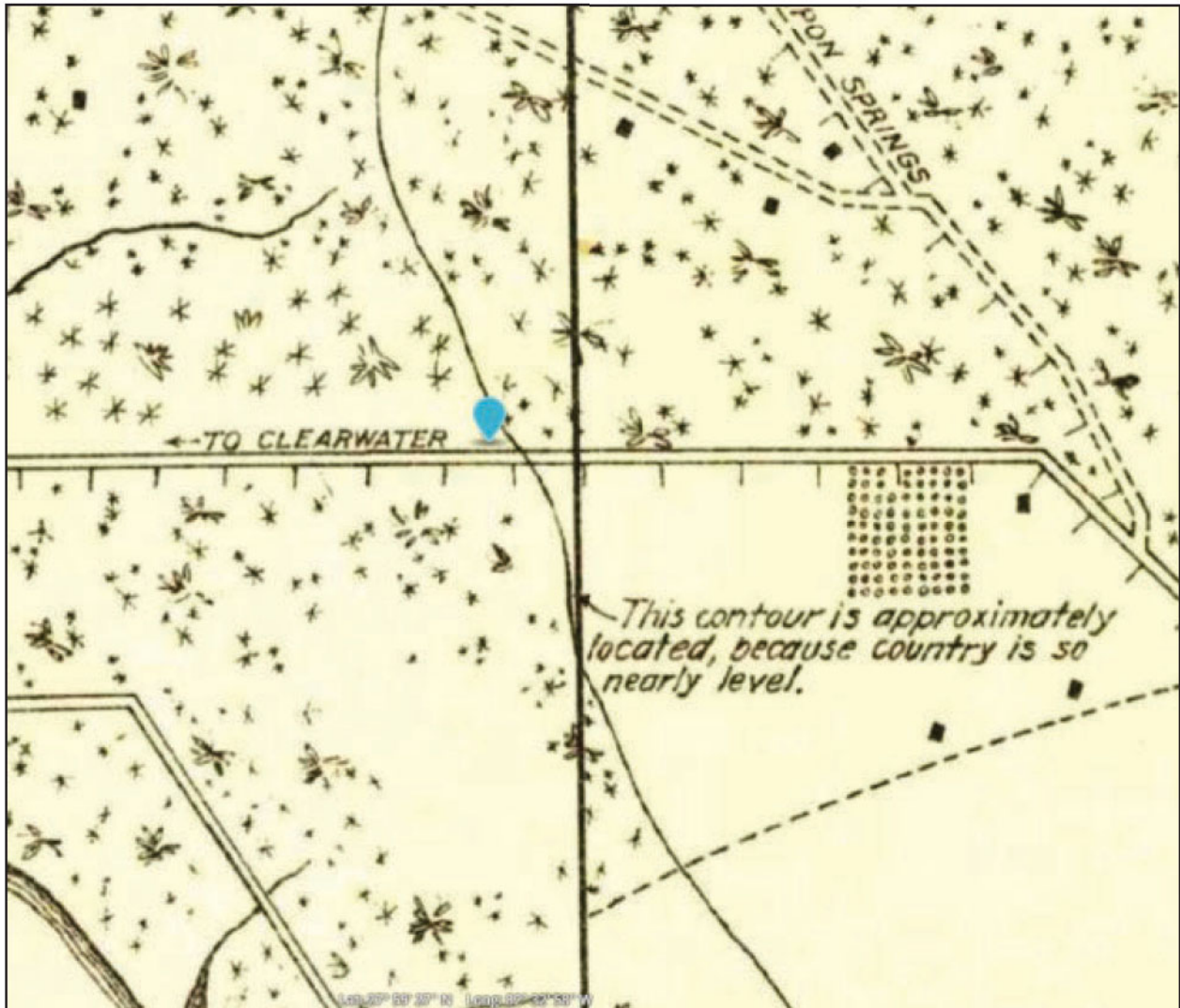
Circa 2023 (blue polygon is approximate project area)



Source: Google Earth, 2023.

## Attachment C: USGS Topographic Maps

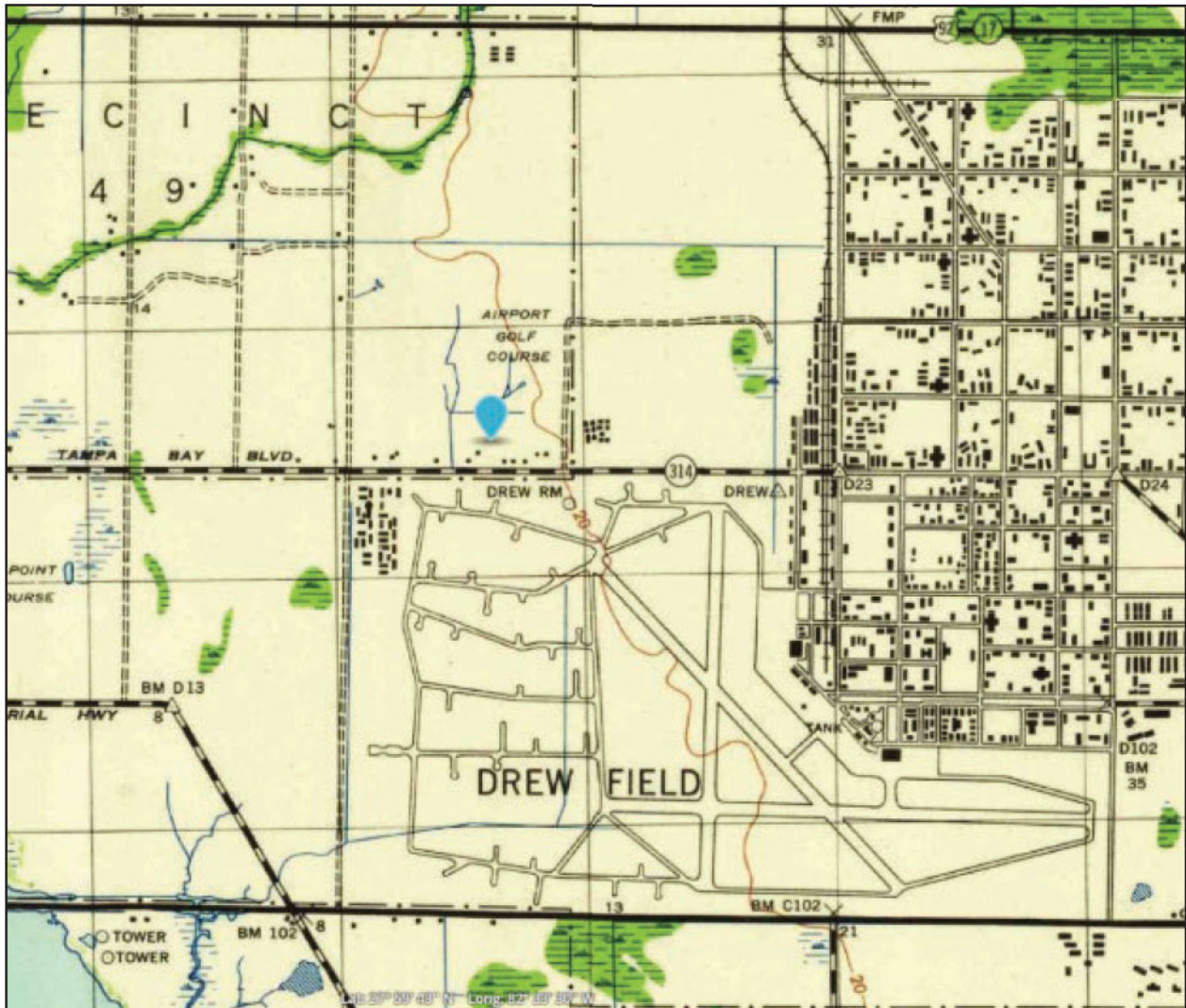
USGS 7.5' St. Petersburg Quad 1921 (blue indicator is approximate project area)



Source: USGS, 2023.

Cultural Resource Assessment Study for the Proposed New Airside D at Tampa International Airport

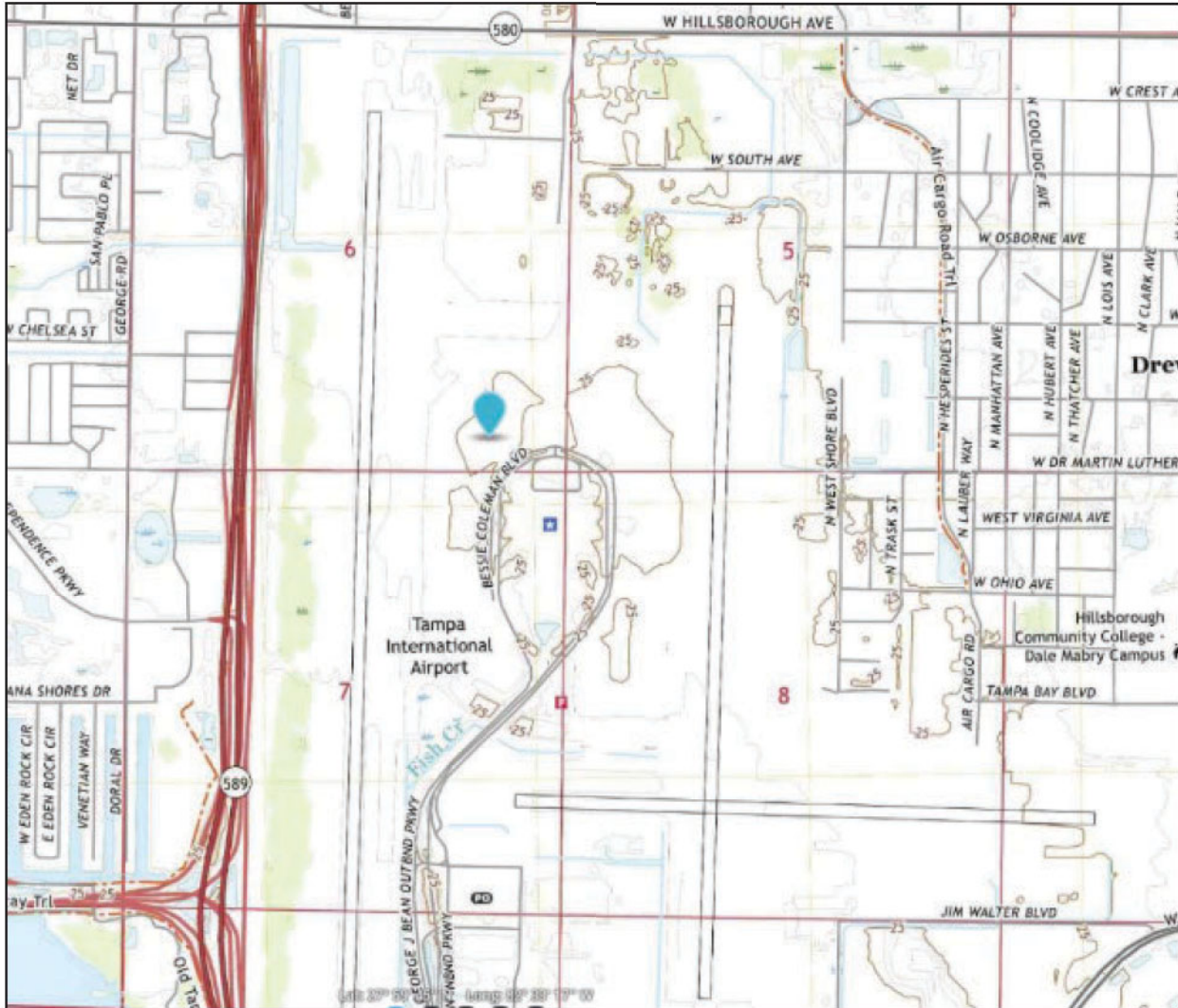
USGS 7.5' Gandy Bridge Quad 1943 (blue indicator is approximate project area)



Source: USGS, 2023.

Cultural Resource Assessment Study for the Proposed New Airside D at Tampa International Airport

USGS 7.5' Gandy Bridge Quad 2021 (blue indicator is approximate project area)



Source: USGS, 2023.

## Attachment D: Photo Log

This attachment illustrates the existing conditions within the APE from ground level viewing the Site ID HI14544 (Main Terminal) in the vicinity of the project area along George Bean Parkway. The photos were downloaded from Google Street View. Photo numbers and direction are included on the photo log map.



Cultural Resource Assessment Study for the Proposed New Airside D at Tampa International Airport

Photo Log Map



Sources: Google Earth, 2024; RS&H, 2024

**Legend**



Area of Potential Effects (APE)



Google Street View Photo and Direction



Cultural Resource Assessment Study for the Proposed New Airside D at Tampa International Airport



Photo 1: George Bean Parkway, looking south



Photo 2: George Bean Parkway, looking south



Photo 3: George Bean Parkway, looking east

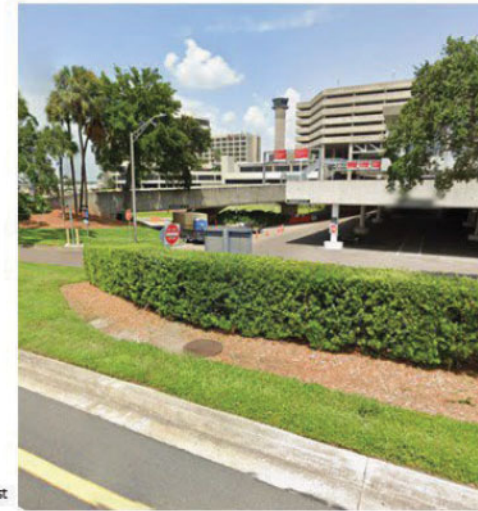


Photo 4: George Bean Parkway, looking northeast

Cultural Resource Assessment Study for the Proposed New Airside D at Tampa International Airport



Photo 5: George Bean Parkway, looking west



Photo 6: George Bean Parkway, looking northwest



Photo 7: George Bean Parkway, looking north-northwest

## Attachment E: Architectural Historian Resume



## Mollie Olinyk, MS

Architectural Historian

### Professional Background

Mollie is federally certified (36 CFR 61) as an architectural historian with over 15 years of experience. She serves as an Architectural Historian for Section 106 review/consultation and all phases of history/architecture investigations. Mollie spent 8 years as a historian coordinating and reviewing Section 106 HUD-funded demolition and rehabilitation projects in the City of Detroit for the Michigan State Historic Preservation Office (MISHPO). She has conducted state and federal tax credit reviews and facilitated grant management. Mollie has expertise in National Register of Historic Places (NRHP) evaluations and nominations, as well as experience in architectural survey, property research, historic context development, and property documentation. Her experience also extends to the negotiation and preparation of Memoranda of Agreement and Programmatic Agreement documents.

### Role

Ms. Olinyk meets the Secretary of the Interior's professional qualifications (36 CFR 61) as an architectural historian. Mollie is responsible for the assessment of effects under 36 CFR 800.5.

### Specializations

#### History/Architecture Investigations

Survey, identification and documentation of resources, research and analysis, and assessment of effects on historic and cultural resources

#### Section 106 Review/Consultation

Assist federal agencies in considering the effects of federally-funded project activities on historic properties, including identifying historic properties, determining how project activities will impact historic properties, exploring measures to reduce or avoid harm, and develop agreements with the SHPO/THPO to resolve any adverse effects

#### Agreement Documents

Assist in the development of Memoranda of Understanding (MOU), Memoranda of Agreement (MOA) and Programmatic Agreements (PAs) to support plans resulting from Section 106 Consultation, set expectations, and to help minimize future disputes

#### Grant Applications and Management

Assist in the process of grant application or grant management if and when the opportunity arises, including research and writing of grant proposals or applications

### Experience

#### Coolidge Bus Terminal, Detroit, Michigan (Client: Detroit Department of Transportation)

Project Architectural Historian for HABS Level II-style documentation of the Coolidge Bus Terminal, a mid-20<sup>th</sup>-century site that played a pivotal role in public transportation in Detroit during the transition from public rail-based transit to the dominance of personal automobiles.



### Specializations

History/Architecture Investigations

Section 106 Review/Consultation

Agreement Documents

Grant Applications and Management

### Education

M.S. Historic Preservation Planning, Eastern Michigan University, 2007

BA, Art & Art History, Kalamazoo College, 2003

### Certifications / Affiliations

Federally Certified (36 CFR 61) Architectural Historian, Historian

LEED Accredited Professional, 2009

### Years of Experience

With MSG 2023 - Present  
MI SHPO 2010 - 2018  
Mead & Hunt, Inc. 2007-2009



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

Orlando Airports District Office  
8427 South Park Circle, Suite 524  
Orlando, FL 32819  
Phone: (407) 487-7220  
Fax: (407) 487-7135

January 17, 2024

Alissa S. Lotane  
Director and State Historic Preservation Officer  
Florida Division of Historical Resources  
Florida Department of State  
R.A. Gray Building  
500 South Bronough Street  
Tallahassee, Florida 32399-0250

RE: Section 106 Consultation  
Construction and Operation of New Airside D  
Tampa International Airport  
Hillsborough County, Florida

*[Sent vial e-mail to: [scott.edwards@dos.myflorida.com](mailto:scott.edwards@dos.myflorida.com)]*

Dear Ms. Lotane,

The Hillsborough County Aviation Authority (Authority) proposes the construction of the new Airside D (AS-D) development at Tampa International Airport (Airport or TPA) in Hillsborough County, Tampa, Florida. The Airport is located in Hillsborough County, about 5 miles northwest of downtown Tampa. The Airport has three runways, with the longest runway, Runway 01L/19R, measuring 11,002 feet. TPA supports the local community by providing commercial airline service to the Tampa region. TPA supports the general aviation community with fixed-based operators (FBO), operation of maintenance repair and overhaul (MRO) facilities and the operation of several cargo operators.

The Proposed Project is the construction and operation of a sixteen-gate airside (AS-D) and connected actions. The Authority will request the Federal Aviation Administration's (FAA) unconditional approval of the improvements on its Airport Layout Plan. The Federal action associated with the Proposed Project is an "undertaking" subject to the National Historic Preservation Act (Section 106) and its implementing regulations at 36 CFR Part 800. This letter is intended to initiate Section 106 consultation.

#### Proposed Undertaking

The Proposed Undertaking includes airside and landside improvements at the Airport. The Proposed Undertaking is the construction and operation of a sixteen-gate airside (AS-D), automated people mover, improvements to Taxilane Z, and associated apron area. The new AS-D

would consist of three levels including holdrooms, aircraft gates, concessions, restrooms, and a connecting automated people mover station to the main terminal.

Area of Potential Effects (APE)

The Area of Potential Effects (APE) to historic resources for the Proposed Undertaking consists of the Main Terminal, including existing Airsides A, B, C, E and F and the former Hardstand D area. The APE is approximately 480 acres and also includes portions of Runway 1L/19R and Runway 1R/19L, concrete apron area, vehicular roads (e.g., George Bean Parkway), taxiways, taxilanes, stormwater drainage system, and mowed/maintained airfield turf.

Historic and Archaeological Resources in the APE

There are no known resources listed on the National Register of Historic Places (NRHP) within APE. The nearest National Register-listed resource is the George Guida Sr. House located about 3.5 miles southeast of the APE (National Park Service, 2022). According to the Florida Master Site File, the Tampa International Airport is listed as eligible for NRHP listing (Site ID HI14544) (SHPO, 2022) and is within the APE.


There are no known archaeological resources within the APE, and the area of the Proposed Undertaking consists of a concrete pad and a previously modified and maintained grass area that serves as part of the airports permitted stormwater system. As such, no archaeological investigation was performed.

Determination of Effect

Based on a review of the Proposed Undertaking and the research and analysis in the CRAS, the FAA has determined the undertaking would have no adverse effect historic resources. Because the Proposed Undertaking includes ground disturbance activities, the FAA will require the Authority to implement special conditions regarding unexpected discoveries during construction. The FAA requests the FL SHPO's concurrence regarding the determination of effect.

FAA requests your review of the enclosed Cultural Resources Assessment Survey and response within 30 days of receipt of this letter indicating if you concur with our determination. Please direct correspondence and questions to me at 407-487-7236 or via email at Heather.Chasez@faa.gov.

Sincerely,



Heather Chasez  
Environmental Protection Specialist  
Federal Aviation Administration

Cc: Rob Furr, Sr. Manager - Sr. Airport Architect, Hillsborough County Aviation Authority  
David Alberts, RS&H, Inc.



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

Orlando Airports District Office  
8427 South Park Circle, Suite 524  
Orlando, FL 32819  
Phone: (407) 487-7220  
Fax: (407) 487-7135

January 30, 2024

[Sent via e-mail: [section106@mcn-nsn.gov](mailto:section106@mcn-nsn.gov)]

Ms. Corrain Loe-Zepeda  
Tribal Historic Preservation Officer  
Historic and Cultural Preservation Department  
Muscogee (Creek) Nation Cultural Preservation  
PO Box 580  
Okmulgee, Oklahoma 74447

RE: Project Notice and Invitation for Consultation  
Construction of Airside D  
Tampa International Airport, Tampa Florida  
Hillsborough County, Florida

Dear Ms. Loe-Zepeda,

The Hillsborough County Aviation Authority (HCAA) has requested federal funds and approval from the Federal Aviation Administration (FAA) to construct and operate new Airside D at Tampa International Airport, in Tampa Florida (**Attachment 1**). The federal actions associated with the proposed project are an undertaking subject to the *National Historic Preservation Act* (Section 106) and its implementing regulations at 36 CFR Part 800. This letter is to inform the Muscogee (Creek) Nation of the proposed project and invite your Tribe to consult on the project.

### **Proposed Undertaking**

The HCAA proposes to construct a new Airside D at the same location as the previous Airside D, which was demolished in 2007. The HCAA proposes constructing and operating the 563,000-square-foot Airside D to meet its projected demand for operations and passengers (Proposed Undertaking, **Attachment 2**). This includes a three-level airside and 16 contact gates with passenger boarding bridges. Additional project components that support the Proposed Undertaking include reconstruction of the apron, new hydrant fuel system, construction and operation of a 450-foot-long-dual-guideway automated people mover system (APM) to transport passengers to/from the new airside and main terminal, and an Airport personnel vehicle parking area with an access gate connected to the existing Airport Access Road. An APM maintenance facility would be located beneath the airside APM station.

### **Area of Potential Effect (APE)**

The Area of Potential Effects (APE) to historic resources for the Proposed Undertaking consists of the Main Terminal, including existing Airsides A, B, C, E and F and the former Hardstand D area. The APE is approximately 480 acres and also includes portions of Runway 1L/19R and Runway



1R/19L, concrete apron area, vehicular roads (e.g., George Bean Parkway), taxiways, taxi lanes, stormwater drainage system, and mowed/maintained airfield turf (Attachment 3).

The project was evaluated for noise impacts on and off airport. The Proposed Undertaking would increase aircraft operations, but the noise analysis showed that the minor increase in noise would not result in an appreciable change in the noise environment, meaning that the amount of time that the area surrounding the airpath would experience additional noise would be negligible. Additionally, there are no known noise sensitive cultural resources within the area. Therefore, noise impacts to cultural resources are not anticipated.

#### **Historic and Archaeological Resources**

National Register of Historic Places (NRHP) Search – There were no NRHP listed historical, archeological, or architectural resources found to be within the APE or within one mile of the Proposed Undertaking.

Florida Master Site File Search – There were no archaeological sites recorded as being located within the APE, however, two (2) are located approximately 1 mile from the Proposed Undertaking. One site was identified as a Campsite – Native American-Aceramic and was evaluated as ineligible by the State Historic Preservation Officer (SHPO). The other site is described as an Isolated Find – Native American-Aceramic and has not been evaluated for eligibility. Neither of these sites will be impacted by the Proposed Undertaking.

Five historic structures were identified within one mile of the Proposed Undertaking. Four of the structures were evaluated by the SHPO as ineligible. One structure was recorded but not evaluated for eligibility. The Proposed Undertaking will not impact any of these structures.

One previously recorded eligible architectural resource group, Tampa International Airport (Site 8HI14544) is located within the proposed APE. The Proposed Undertaking will connect directly into this resource group.

No other historical resources were identified within the APE or one mile of the Proposed Undertaking.

Cultural Resource Assessment Analysis – A Cultural Resources Assessment Study was prepared for the proposed development project. The study included the identification and description of known resources located within or proximate to the APE. A copy of the report is enclosed with this letter (Attachment 4).

The Proposed Undertaking was assessed for its effects on Site 8HI14544, Tampa International Airport. The assessment indicated that the Proposed Undertaking will be consistent with an airport setting, complements the architectural style and integrity of Site HI14544 and reestablishes significant technological and design innovations; Therefore, it would not affect its National Register eligibility under Criteria C “the distinct characteristics of a type, period, or method of construction or that represent the work of a master, or that posses high artistic vales, or that represent significant and distinguishable entity whose components may lack individual distinction”.

The background research and assessment resulted in no archaeological or historic resources being identified within the APE, but one architectural resource group was identified. It has been determined

that the proposed undertaking will have no adverse effect on cultural resources. The CRAS was submitted to the SHPO on January 17, 2024.

### Consultation

Based on site conditions, a review of the proposed development project, and the research conducted, the FAA's preliminary determination is the Proposed Undertaking would not adversely affect historic properties or cultural resources. However, we are interested in knowing if the Muscogee (Creek) Nation has any concerns or interests related to the proposed project and would like to enter into Section 106 consultation. We welcome your knowledge and opinion on the APE and the effects of the proposed project. FAA appreciates your review of the enclosed project information and response within 30 days of receipt of this letter. Please direct correspondence and questions to me at (407) 487-7236 or [heather.chasez@faa.gov](mailto:heather.chasez@faa.gov).

Sincerely,

HEATHER Digitally signed by  
HEATHER CHASEZ  
Date: 2024.01.30  
12:15:16 -0500  
CHASEZ

Heather Chasez  
Environmental Protection Specialist

Attachments Proposed Project Location Map  
Proposed Undertaking  
Area of Potential Effect  
Cultural Resource Assessment Survey

Figure 1-1: Airport Location



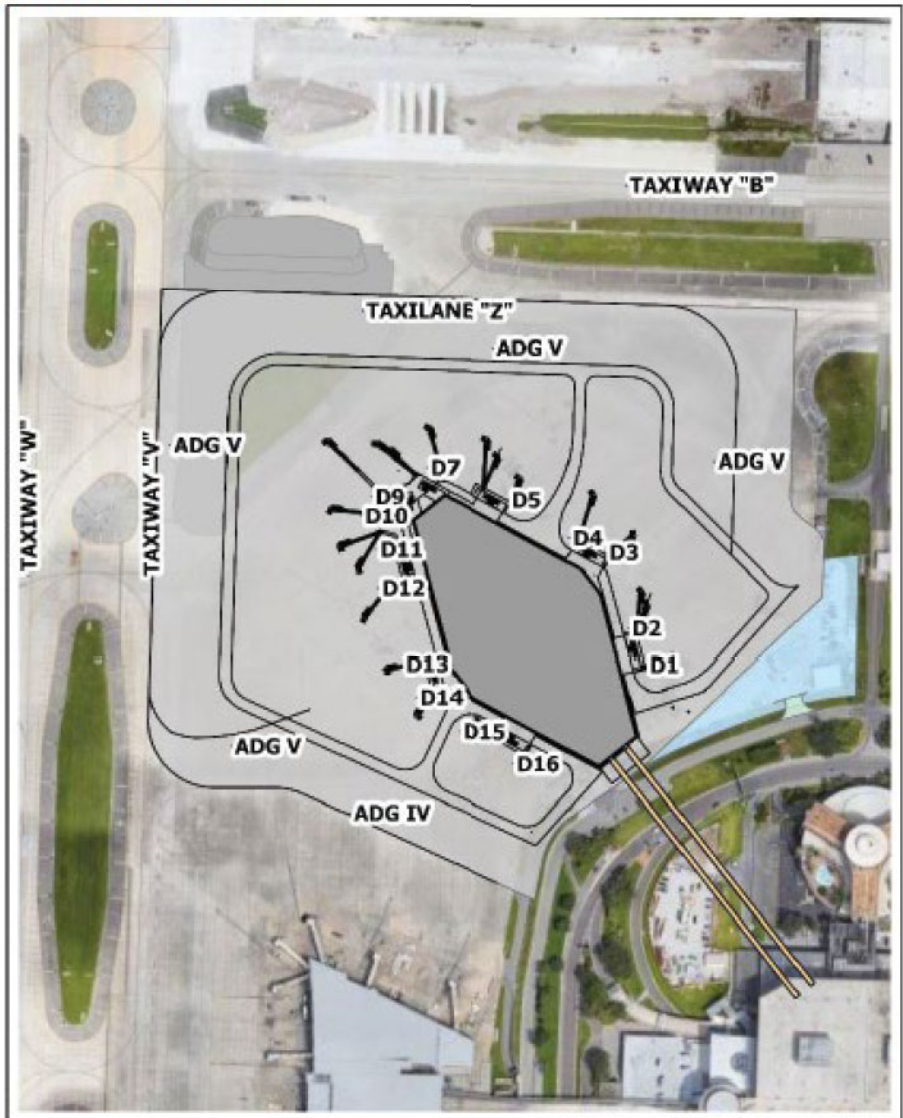
Sources: ESRI, 2022; RS&H, 2022

**Legend**

 Airport Location



Figure 2: Proposed Undertaking



Sources: HCAA 2022; ESRI 2022; RS&H 2022.

**Legend**

- Airside D
- Apron
- Automated People Hover
- Parking
- Access Gate




Figure 4: Area of Potential Effects



Sources: Google Earth, 2024; RS&H, 2024

**Legend**

 Area of Potential Effects (APE)





U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

Orlando Airports District Office  
8427 South Park Circle, Suite 524  
Orlando, FL 32819  
Phone: (407) 487-7220  
Fax: (407) 487-7135

January 30, 2024

[Sent via e-mail: [kevind@miccosukeetribe.com](mailto:kevind@miccosukeetribe.com)]

Mr. Kevin Donaldson  
Environmental Specialist  
Miccosukee Tribe of Indians of Florida  
Tamiami Station  
P.O. Box 440021  
Miami, Florida 33144

RE: Project Notice and Invitation for Consultation  
Construction of Airside D  
Tampa International Airport, Tampa Florida  
Hillsborough County, Florida

Dear Mr. Donaldson,

The Hillsborough County Aviation Authority (HCAA) has requested federal funds and approval from the Federal Aviation Administration (FAA) to construct and operate new Airside D at Tampa International Airport, in Tampa Florida (**Attachment 1**). The federal actions associated with the proposed project are an undertaking subject to the *National Historic Preservation Act* (Section 106) and its implementing regulations at 36 CFR Part 800. This letter is to inform the Miccosukee Tribe of Indians of Florida of the proposed project and invite your Tribe to consult on the project.

#### **Proposed Undertaking**

The HCAA proposes to construct a new Airside D at the same location as the previous Airside D, which was demolished in 2007. The HCAA proposes constructing and operating the 563,000-square-foot Airside D to meet its projected demand for operations and passengers (Proposed Undertaking, **Attachment 2**). This includes a three-level airside and 16 contact gates with passenger boarding bridges. Additional project components that support the Proposed Undertaking include reconstruction of the apron, new hydrant fuel system, construction and operation of a 450-foot-long-dual-guideway automated people mover system (APM) to transport passengers to/from the new airside and main terminal, and an Airport personnel vehicle parking area with an access gate connected to the existing Airport Access Road. An APM maintenance facility would be located beneath the airside APM station.

#### **Area of Potential Effect (APE)**

The Area of Potential Effects (APE) to historic resources for the Proposed Undertaking consists of the Main Terminal, including existing Airsides A, B, C, E and F and the former Hardstand D area. The APE is approximately 480 acres and also includes portions of Runway 1L/19R and Runway

1R/19L, concrete apron area, vehicular roads (e.g., George Bean Parkway), taxiways, taxi lanes, stormwater drainage system, and mowed/maintained airfield turf (**Attachment 3**).

The project was evaluated for noise impacts on and off airport. The Proposed Undertaking would increase aircraft operations, but the noise analysis showed that the minor increase in noise would not result in an appreciable change in the noise environment, meaning that the amount of time that the area surrounding the airpath would experience additional noise would be negligible. Additionally, there are no known noise sensitive cultural resources within the area. Therefore, noise impacts to cultural resources are not anticipated.

### **Historic and Archaeological Resources**

National Register of Historic Places (NRHP) Search – There were no NRHP listed historical, archeological, or architectural resources found to be within the APE or within one mile of the Proposed Undertaking.

Florida Master Site File Search – There were no archaeological sites recorded as being located within the APE, however, two (2) are located approximately 1 mile from the Proposed Undertaking. One site was identified as a Campsite – Native American-Aceramic and was evaluated as ineligible by the State Historic Preservation Officer (SHPO). The other site is described as an Isolated Find – Native American-Aceramic and has not been evaluated for eligibility. Neither of these sites will be impacted by the Proposed Undertaking.

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One previously recorded eligible architectural resource group, Tampa International Airport (Site 8HI14544) is located within the proposed APE. The Proposed Undertaking will connect directly into this resource group.

No other historical resources were identified within the APE or one mile of the Proposed Undertaking.

Cultural Resource Assessment Analysis – A Cultural Resources Assessment Study was prepared for the proposed development project. The study included the identification and description of known resources located within or proximate to the APE. A copy of the report is enclosed with this letter (**Attachment 4**).

The Proposed Undertaking was assessed for its effects on Site 8HI14544, Tampa International Airport. The assessment indicated that the Proposed Undertaking will be consistent with an airport setting, complements the architectural style and integrity of Site HI14544 and reestablishes significant technological and design innovations; Therefore, it would not affect its National Register eligibility under Criteria C “the distinct characteristics of a type, period, or method of construction or that represent the work of a master, or that posses high artistic vales, or that represent significant and distinguishable entity whose components may lack individual distinction”.

The background research and assessment resulted in no archaeological or historic resources being identified within the APE, but one architectural resource group was identified. It has been determined





Figure 1-1: Airport Location



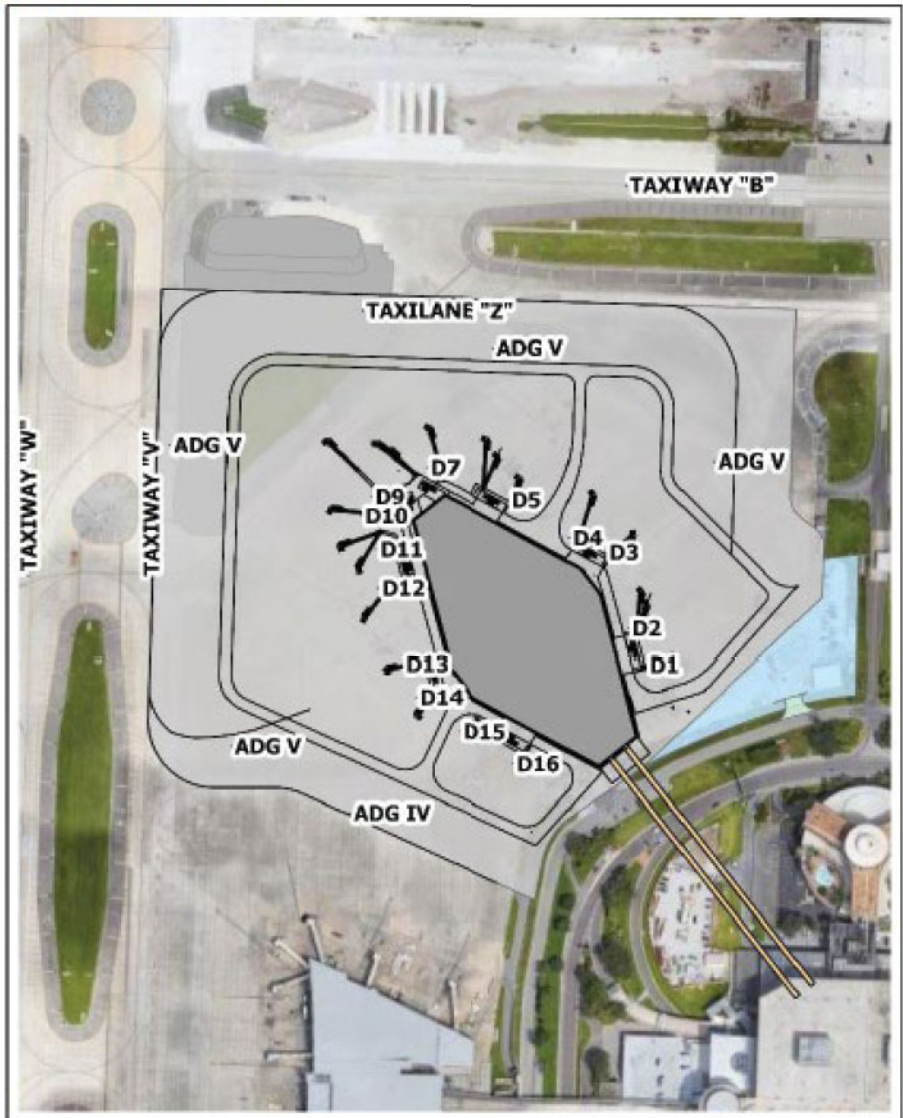
Sources: ESRI, 2022; RS&H, 2022

**Legend**

 Airport Location



Figure 2: Proposed Undertaking



Sources: HCAA 2022; ESRI 2022; RS&H 2022.

**Legend**

-  Airside D
-  Apron
-  Parking
-  Access Gate
-  Automated People Hover




Figure 4: Area of Potential Effects



Sources: Google Earth, 2024; RS&H, 2024

**Legend**

 Area of Potential Effects (APE)



**From:** [Chasez, Heather \(FAA\)](#)  
**To:** [Alberts, David](#)  
**Subject:** FW: Project Notice and Invitation for Consultation - Tampa International Airport Airside D  
**Date:** Wednesday, March 6, 2024 10:44:42 AM

---

Hello Dave,

Please see the below and incorporate it into the next revision of the EA.

Thanks,

*Heather Chasez*

Environmental Protection Specialist  
Federal Aviation Administration-FAA  
Orlando Airports District Office-ADO  
8427 SouthPark Circle, Suite 524  
Orlando, FL 32819  
Main: 407-487-7220  
Direct: 407-487-7236

---

**From:** Section106 <Section106@mcn-nsn.gov>  
**Sent:** Wednesday, March 6, 2024 9:46 AM  
**To:** Chasez, Heather (FAA) <Heather.Chasez@faa.gov>  
**Subject:** Re: Project Notice and Invitation for Consultation - Tampa International Airport Airside D

**CAUTION:** This email originated from outside of the Federal Aviation Administration (FAA). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Good morning Ms. Chasez,

Thank you for sending the correspondence regarding the proposed construction of Airside D located in the same location as the previous Airside D at Tampa International Airport in Hillsborough County, Florida. Hillsborough County is located within the Muscogee (Creek) Nation's historic area of interest and is of importance to us. After review, due to the negative findings of the associated cultural resources survey, the Muscogee Nation concurs with the determination of **No Adverse Effects** to any known historic properties. However, due to the historic presence of Muscogee people in the project area, inadvertent discoveries of cultural resources, human remains and related NAGPRA items may occur, even in areas of existing or prior development. Should this occur, the Muscogee (Creek) Nation requests that all work cease and our office as well as other appropriate agencies be notified immediately. Please feel free to contact me if there are any questions or concerns.

Thank you,

**Robin Soweka, Jr.**

Cultural Resource Specialist, Historic and Cultural Preservation Department

The Muscogee Nation

P.O. Box 580 | Okmulgee, OK 74447

T 918.732.7726 | F 918.758.0649

[rosoweka@MuscogeeNation.com](mailto:rosoweka@MuscogeeNation.com)

MuscogeeNation.com



---

**From:** Chasez, Heather (FAA) <[Heather.Chasez@faa.gov](mailto:Heather.Chasez@faa.gov)>

**Sent:** Tuesday, January 30, 2024 12:53 PM

**To:** Section106 <[Section106@mcn-nsn.gov](mailto:Section106@mcn-nsn.gov)>

**Cc:** Alberts, David <[David.Alberts@rsandh.com](mailto:David.Alberts@rsandh.com)>; Matthew Deloatche <[mdeloatche@TampaAirport.com](mailto:mdeloatche@TampaAirport.com)>

**Subject:** Project Notice and Invitation for Consultation - Tampa International Airport Airside D

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello,

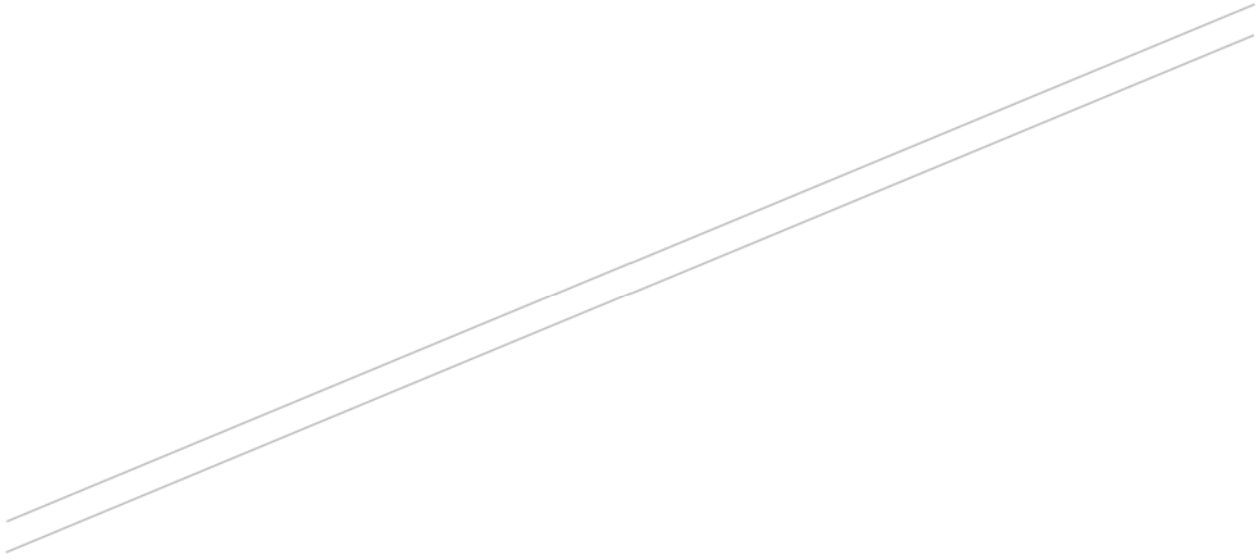
The FAA is reviewing a request from Hillsborough County Aviation Authority (HCAA) to construct Airside D at Tampa International Airport (TPA). As part of the project assessment, a Cultural Resources Assessment Study was produced. The FAA would like to invite your Tribe to consult on the proposed project. Please find attached the consultation request and CRAS. The FAA appreciates your review of the attached project information and response within 30 days of receipt of this request. Please reach out to me if there is need for additional information. Thank you for your time reviewing this project.

Cheers,

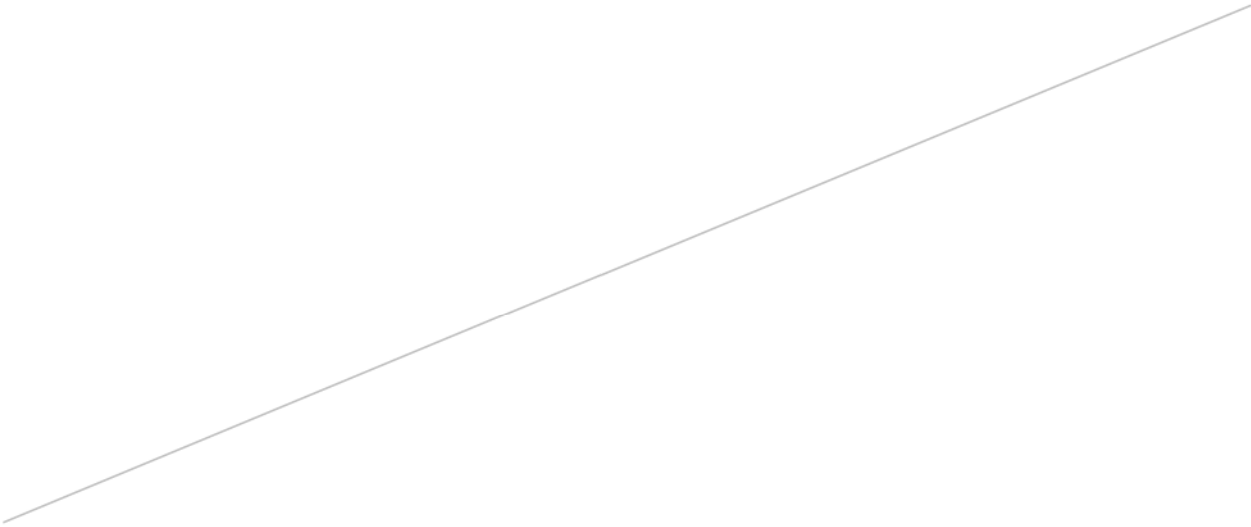
*Heather Chasez*

Environmental Protection Specialist  
Federal Aviation Administration-FAA  
Orlando Airports District Office-ADO  
8427 SouthPark Circle, Suite 524  
Orlando, FL 32819  
Main: 407-487-7220  
Direct: 407-487-7236

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*APPENDIX G*  
*DRAFT EA PUBLIC INVOLVEMENT*



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0000333701-01

**Tampa Bay Times  
Published Daily**

STATE OF FLORIDA  
COUNTY OF Hillsborough

} SS

Before the undersigned authority personally appeared **Deirdre Bonett** who on oath says that he/she is **Legal Advertising Representative** of the **Tampa Bay Times** a daily newspaper printed in St. Petersburg, in Pinellas County, Florida; that the attached copy of advertisement, being a Legal Notice in the matter **RE: NEW AIRSIDE PASSENGER TERMINAL D** was published in said newspaper by print in the issues of: **3/ 6/24** or by publication on the newspaper's website, if authorized, on

Affiant further says the said **Tampa Bay Times** is a newspaper published in **Hillsborough** County, Florida and that the said newspaper has heretofore been continuously published in said **Hillsborough** County, Florida each day and has been entered as a second class mail matter at the post office in said **Hillsborough** County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement, and affiant further says that he/she neither paid not promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

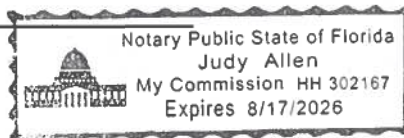
Signature Affiant

Sworn to and subscribed before me this **.03/06/2024**

Signature of Notary Public

Personally known                      X                      or produced identification

Type of identification produced                     



**US Department of Transportation  
Federal Aviation Administration**

**NOTICE OF AVAILABILITY OF DRAFT ENVIRONMENTAL ASSESSMENT  
FOR  
NEW AIRSIDE PASSENGER TERMINAL D  
AT  
TAMPA INTERNATIONAL AIRPORT, TAMPA, FLORIDA**

The Hillsborough County Aviation Authority (Authority), in coordination with the Federal Aviation Administration (FAA), announces the availability of the Draft Environmental Assessment (EA) for the construction and operation of the proposed Airside D passenger terminal building at the Tampa International Airport (TPA), in Hillsborough County, Florida. Pursuant to Title 49, United States Code, § 47106(c)(1)(A) and Section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, the Draft EA is being circulated for review and comment from the public and federal, state, and local agencies.

Comments from the federal, state, and local agencies, and the public, will be considered as part of the Final EA. The Final EA will be submitted to the FAA for the agency's environmental determination.

**Proposed Development Project:** The Authority proposes to construct a new 563,000 square-foot, three-level passenger terminal building with 16 aircraft boarding gates. The terminal building will be constructed in the same location as the previous Airside D passenger terminal building, which was removed in 2007. The proposed passenger terminal development project also includes reconstruction of the former Terminal aircraft parking apron; installation of a new hydrant fuel system; construction of a 450-foot-long, dual-guideway Automated People Mover (APM) to connect the new passenger terminal building to the airport's Main Terminal; and a vehicle parking area for airport personnel. The purpose of the proposed new Airside D passenger terminal is to meet the transportation needs of passengers using TPA. The project is needed to meet increasing number of passengers using the airport, the need for additional aircraft boarding gates, and the need for additional space for federal inspection services. The proposed project would help the Authority meet projected passenger and airline (domestic and international) demands and avoid congestion.

**Summary of Impacts:** A Draft EA has been prepared to disclose the potential economic, social, and environmental impacts of the Proposed Project. The project was found to have no impacts to Biological Resources, Coastal Resources, Children's Environmental Health and Safety Risks, Environmental Justice, Farmlands, Land Use, and Water Resources. The Proposed Project was found to have impacts to Air Quality/Climate, Department of Transportation Act, Section 4(f) resources, Hazardous Materials, Solid Waste, and Pollution Prevention, Natural Resources and Energy Supply, Noise and Noise-Compatible Land Use, Socioeconomics, Visual Effects, and Water Resources (floodplains). Although impacts were identified, the research and analysis provided in the EA resulted in no impacts being significant. The Proposed Project is expected to generate additional aircraft activity at TPA that would have an effect on the noise environment in the vicinity of the airport; However, the impact is expected to be minimal.

**Draft EA Availability:** The Draft EA is available for public review on the Airport's website <https://www.tampaairport.com/> and at the following locations:

Hillsborough County Aviation Authority 5411 Skycenter Dr., 4th Floor Tampa, FL 33607	Town N' Country Regional Library 7606 Paula Dr. #120 Tampa, FL 33615
---	--

**How to Comment:** Comments on the Draft EA should focus on the Proposed Project's economic, social, and environmental effects. Electronic comments may be sent to [David.Alberts@rsandh.com](mailto:David.Alberts@rsandh.com) or [mdeloatche@TampaAirport.com](mailto:mdeloatche@TampaAirport.com). Written comments can be mailed to either of the recipients below:

Mr. David Alberts RSSH 10748 Deerwood Park Boulevard South Jacksonville, FL 32256	Hillsborough County Aviation Authority Attn: Mr. Matt DeLoatche P.O. Box 22287 Tampa, FL 33622
--	--

The public comment period on the Draft EA will begin Wednesday **March 6, 2024** and will close on Friday **April 5, 2024**. Electronic and hand-delivered comments must be received no later than 5:00 pm Eastern Standard Time on Friday **April 5, 2024**. Mailed comments must be postmarked no later than Friday **April 5, 2024**.

Be advised that all comments received, including personal identifying information, may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

**Opportunity for Public Hearing:** The FAA will afford the public an opportunity to request a Public Hearing. The purpose of the hearing, if one is held, would be to solicit additional comments regarding the Proposed Project. Any person interested will have 15 days from the date of publication of this Notice of Availability to request a Public Hearing. In deciding whether a hearing is appropriate, the FAA shall consider whether there is substantial environmental controversy; substantial interest in holding a hearing; or a request for a hearing by an agency with jurisdiction (supported by reasons why the hearing would be helpful). If a hearing is scheduled, the date and location will be announced in a separate notice. Request for a hearing should be received no later than **Thursday March 21, 2024, 5:00 pm Eastern Standard Time**.

0000333701-2

# Tampa Bay Times

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US Department of Transportation Federal Aviation Administration NOTICE OF AVAILABILITY OF DRAFT ENVIRONMENTAL ASSESSMENT FOR NEW AIRSIDE PASSENGER TERMINAL D AT TAMPA INTERNATIONAL AIRPORT, TAMPA, FLORIDA The Hillsborough County Aviation Authority (Authority), in coordination with the Federal Aviation Administration (FAA), announces the availability of the Draft Environmental Assessment (EA) for the construction and operation of the proposed Airside D passenger terminal building at the Tampa International Airport (TPA), in Hillsborough County, Florida. Pursuant to Title 49, United States Code, [47106\(c\)\(1\)\(A\)](#) and Section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, the Draft EA is being circulated for review and comment from the public and federal, state, and local agencies. Comments from the federal, state, and local agencies, and the public, will be considered as part of the Final EA. The Final EA will be submitted to the FAA for the agency's environmental determination. Proposed Development Project: The Authority proposes to construct a new 563,000 square-foot, three-level passenger terminal building with 16 aircraft boarding gates. The terminal building will be constructed in the same location as the previous Airside D passenger terminal building, which was removed in 2007. The proposed passenger terminal development project also includes reconstruction of the former Terminal aircraft parking apron; installation of a new hydrant fuel system; construction of a 450-foot-long, dual-guideway Automated People Mover (APM) to connect the new passenger terminal building to the airport's Main Terminal; and constructing a vehicle parking area for airport personnel. The purpose of the proposed new Airside D passenger terminal is to meet the transportation needs of passengers using TPA. The project is needed to meet increasing number of passengers using the airport, the need for additional aircraft boarding gates, and the need for additional space for federal inspection services. The proposed project would help the Authority meet projected passenger and airline (domestic and international) demands and avoid congestion. Summary of Impacts: A Draft EA has been prepared to disclose the potential economic, social, and environmental impacts of the Proposed Project. The project was found to have no impacts to Biological Resources, Coastal Resources, Children's Environmental Health and Safety Risks, Environmental Justice, Farmlands, Land Use, and Water Resources. The Proposed Project was found to have impacts to Air Quality/Climate, Department of Transportation Act, Section 4(f) resources, Hazardous Materials, Solid Waste, and Pollution Prevention, Natural Resources and Energy Supply, Noise and Noise-Compatible Land Use, Socioeconomics, Visual Effects, and Water Resources (floodplains). Although impacts were identified, the research and analysis provided in the EA resulted in no impacts being significant. The Proposed Project is expected to generate additional aircraft activity at TPA that would have an effect on the noise environment in the vicinity of the airport; However, the impact is expected to be minimal. Draft EA Availability: The Draft EA is available for public review on the Airport's website <https://www.tampaairport.com/> and at the following locations: Hillsborough County Town N' Country Regional Library Aviation Authority 7606 Paula Dr. #120 5411 Skycenter Dr., 4th Floor Tampa, FL 33615 Tampa, FL

33607 How to Comment: Comments on the Draft EA should focus on the Proposed Project's economic, social, and environmental effects. Electronic comments may be sent to David.Alberts@rsandh.com or mdeloatche@TampaAirport.com. Written comments can be mailed to either of the recipients below: Mr. David Alberts Hillsborough County RS&H Aviation Authority 10748 Deerwood Park Boulevard South Attn: Mr. Matt DeLoatche Jacksonville, FL 32256 P.O. Box 22287 Tampa, FL 33622 The public comment period on the Draft EA will begin Wednesday March 6, 2024 and will close on Friday April 5, 2024. Electronic and hand-delivered comments must be received no later than 5:00 pm Eastern Standard Time on Friday April 5, 2024. Mailed comments must be postmarked no later than Friday April 5, 2024. Be advised that all comments received, including personal identifying information, may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so. Opportunity for Public Hearing: The FAA will afford the public an opportunity to request a Public Hearing. The purpose of the hearing, if one is held, would be to solicit additional comments regarding the Proposed Project. Any person interested will have 15 days from the date of publication of this Notice of Availability to request a Public Hearing. In deciding whether a hearing is appropriate, the FAA shall consider whether there is substantial environmental controversy; substantial interest in holding a hearing; or a request for a hearing by an agency with jurisdiction (supported by reasons why the hearing would be helpful). If a hearing is scheduled, the date and location will be announced in a separate notice. Request for a hearing should be received no later than Thursday March 21, 2024, 5:00 pm Eastern Standard Time. March 6, 2024 0000333701-2

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<a href="#">Legal Notice of Finance Committee 2024 Multiple Meetings.pdf</a>	3/5/2024
<a href="#">TPA AS-D Draft EA NOA.pdf</a>	3/1/2024
<a href="#">TPA AS-D EA Appendix A Air Quality Climate - 508.pdf</a>	3/1/2024
<a href="#">240223 TPA AS-D Draft EA main rpt - 508.pdf</a>	3/1/2024
<a href="#">240223 TPA AS-D Draft EA - 508.pdf</a>	3/1/2024
<a href="#">TPA AS-D EA Appendix F Cultural Resource Assessment Study - 508.pdf</a>	3/1/2024
<a href="#">TPA AS-D EA Appendix E Farmlands - 508.pdf</a>	3/1/2024
<a href="#">TPA AS-D EA Appendix D Biological Resources - 508.pdf</a>	3/1/2024
<a href="#">TPA AS-D EA Appendix C Agency Public Engagement - 508.pdf</a>	3/1/2024
<a href="#">TPA AS-D EA Appendix B Aircraft Noise - 508.pdf</a>	3/1/2024
<a href="#">Notice of Intent to Award Sole Source - Dabico Airport Solutions.pdf</a>	
<a href="#">2nd Revision Notice of Public Meetings - FBO for VDF.pdf</a>	2/27/2024
<a href="#">7250 24 Maintenance Contingency Fence Repair Notice of Public Meeting.pdf</a>	2/20/2024
<a href="#">Legal Notice of Finance Committee 02-28-24.pdf</a>	2/20/2024
<a href="#">Notice of Cancellation and Intent to Reissue - Lumacurve Airfield Sign Legend Panels.pdf</a>	2/12/2024
<a href="#">Notice of Intent to Award- ITB Lumacurve Airfield Sign Legend Panels.pdf</a>	2/12/2024
<a href="#">Notice of Public Meetings - PARCS Technical Evaluation.pdf</a>	1/29/2024
<a href="#">Notice of Public Meetings - Group Vision Insurance Benefits.pdf</a>	1/17/2024
<a href="#">Notice of Public Meetings - Group Dental Insurance Benefits.pdf</a>	1/17/2024
<a href="#">Revised Notice of Public Meetings - FBO for VDF.pdf</a>	1/17/2024

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**From:** [Madsen, Elizabeth](#)  
**To:** [Alberts, David](#)  
**Subject:** RE: Town N Country Library - Document for Reference Section?  
**Date:** Friday, March 1, 2024 12:54:37 PM

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Hi David,

Jut wanted to you know that the document will be delivered to the Town N Country branch today by 4pm.

Thanks!

Beth

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**From:** Alberts, David <David.Alberts@rsandh.com>  
**Sent:** Wednesday, February 28, 2024 4:14 PM  
**To:** Madsen, Elizabeth <MadsenE@hcfl.gov>  
**Subject:** RE: Town N Country Library - Document for Reference Section?

**External email: Use caution when clicking on links, opening attachments or replying to this email.**

Good afternoon Beth,

Today, we sent the Draft EA package via FedEx. It should be to the address provided by tomorrow morning. If you could please let me know it was received and when it is at the Town N Country branch would be very helpful.

Thank you,

Dave A

### David E. Alberts

Aviation Senior Environmental Manager  
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904-307-7049

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