SITE SPECIFIC ENVIRONMENTAL ASSESSMENT

900 Blk River Annex
Escambia County, Florida

Wetland Sciences, Inc. Project No. 2023-382

Prepared For:

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Date:

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List of Exhibits

1.0 Introduction

The following environmental "Site-Specific Survey" report is being provided in support of a pending Escambia County site building or land development application. Chapter 4, Article 5 of Escambia County's land development code requires a Site-Specific Survey to identify environmentally sensitive resources including area and description of all jurisdictional wetlands and endangered species habitat in support of development order applications. This report also includes the information normally required in Part III, Section 10.2.3.7, ERP Applicant's Handbook, Volume I, effective October 1, 2013.

2.0 Project Description

Wetland Sciences, Inc. (WSI), was requested by Charles E. Arnold, Jr. to complete a site-specific environmental assessment of a +/- 22.51-acre parcel of property located at the 900 Blk River Annex Road in Section 06, Township 1 North, Range 31 West, Escambia County, Florida (See Location Map - **Exhibit A**). The Escambia County Property Appraiser identifies the property by the following identification number: 06-1N-31-4300-000-000. The following is a summary of our findings.

3.0 Existing Site Conditions

3.1 Desktop Review

Prior to the field assessments, background data were gathered and reviewed to identify potential environmentally sensitive resources within the site. The data gathered and reviewed are described below.

3.1.1 Soils

Soils were delineated utilizing the United States Department of Agriculture, NRCS Soil Survey for Escambia County, Florida (**Exhibit B**). The soil survey identifies two (2) soil types within the subject property: Bigbee-Garcon-fluvaquents complex and Troup-Poarch complex. The following is a description of the identified soil complex.

Bigbee-Garcon-fluvaquents complex

The Bigbee-Garcon-Fluvaquents complex consists of the excessively drained Bigbee soil, the somewhat poorly drained Garcon soil, and the very poorly drained Fluvaquents. It is on the flood plains along the Perdido River, Eight-Mile Creek, and Eleven-Mile Creek in the central and northern parts of the county. The soils occur as areas so intricately intermingled that they could not be mapped separately at the scale selected for mapping. The Bigbee soil makes up about 35 percent of the map unit, the Garcon soil makes up about 30 percent, and the Fluvaquents make up about 20 percent. Slopes range from 0 to 2 percent. Individual areas generally are long and narrow. They range from 25 to about 800 acres in size.

Troup-Poarch complex

The Troup-Poarch Complex consists of the sandy, somewhat excessively drained Troup soil and the loamy, well drained Poarch soil. It is on strongly sloping hillslopes in the central and northern parts of the county. The soils occur as areas so intricately intermingled that they could not be mapped separately at the scale selected for mapping. The Troup soil makes up about 45 percent of the map unit, and the Poarch soil makes up about 35 percent. Slopes generally are short and complex. Individual areas are irregular in shape. They range from 10 to about 125 acres in size.

The Troup-Poarch Complex may be considered hydric with a hydric rating of 35% (Exhibit B). This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation. The NTCHS definition identifies general soil properties that are associated with wetness. To determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993). If soils are wet enough for a long enough period to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

3.1.2 USFWS Information for Planning and Consultation (IPaC)

Listed species data was obtained from U.S. Fish and Wildlife Service IPaC Report (See Species List Report from USFWS in Exhibit C). The U.S. Fish and Wildlife Service IPaC system report lists four (4) federally protected species and one (1) candidate species that should be considered in an effects analysis for the Subject Property (Table 1).

Category	Species Common Name	Scientific Name	Federal Status	State Status	Habitat Description	Habitat Present	Observed On-Site?
Birds	Eastern Black Rail	*Laterallus jamaicensis*	FT	TBD	Salt and brackish marshes with dense cover but can also be found in upland areas of these marshes	No	No
Reptiles	Alligator Snapping Turtle	*Macrochelys temminckii*	PT	NL	Floodplain swamp forest, lakes, canala, oxbows, swamps, ponds, bayous and river systems	No	No
	Eastern Indigo Snake	*Drymarchon corais couperi*	FT	FT	flatwoods, hammocks, dry glades, stream bottoms, cane fields, riparian thickets, and high ground with well-drained, sandy soils	Yes	No
Fish	Atlantic Sturgeon (Gulf Subspecies)	*Acipencer oxyrinchus*	T/CH	T	Western Gulf of Mexico - mud, clay and silty hard bottoms	No	No
Insects	Monarch Butterfly	*Danaus plexippus*	C	NL	Open flatwoods and grasslands that support milkweed	No	No

Table 1. Listed species that may occur within the project site. Code key; T=Threatened, PT=Proposed Threatened, CH=Critical Habitat Designated, CHP=Critical Habitat Proposed, C=Candidate, E=Endangered, MBTA=Migratory Bird Treaty Act, FMTPA=Florida Marine Turtle Protection Act, MMPA=Marine Mammal Protection Act.

3.1.3 Florida Cooperative Land Cover, Version 3.4

The Florida Cooperative Land Cover Map (CLC) is a partnership between the Florida Fish and Wildlife Conservation Commission (FWC) and Florida Natural Areas Inventory (FNAI) to develop ecologically based statewide land cover from existing sources and expert review of aerial photography. The CLC is primarily funded by the Florida's State Wildlife Grants program in support of The Florida State Wildlife Action Plan which identified improved habitat mapping as a priority data gap. A review of the CLC data available from FWC suggests the property is comprised of six (6) land use categories (**Exhibit D**). Please keep in mind these land use categories may not represent "real world" conditions. These land use categories are described below:

Coniferous Plantations (CLC 183332)

This community is dominated by a canopy of slash and loblolly pine (*Pinus elliottii* and *P. taeda*) that was planted as part of active silviculture operation. Understory species include ink berry (*Ilex glabra*), wax myrtle (*Morella cerifera*), saw palmetto (*Seneroa repens*), and bracken fern (*Pteridium aqulinium*).

Hydric Pine Flatwoods (CLC 22211)

Parcel is largely comprised of hydric Pine Flatwoods: Forest with a sparse to moderate canopy of Slash pine. The understory is grasses, wiregrass, forbs, and at times with sparse saw palmetto.

Improved Pasture (CLC 183313)

This category in most cases is composed of land which has been cleared, tilled, reseeded with specific grass types, and periodically improved with brush control and fertilizer application. Water ponds, troughs, feed bunkers and, in some cases, cow trails are evident. (FLUCCS)

Transportation (CLC 1840)

Transportation facilities are used for the movement of people and goods. Highways include areas used for interchanges, limited access rights-of-way and service facilities. The Transportation category encompasses rail-oriented facilities including stations, round-houses, repair and switching yards and related areas. Airport facilities include runways, intervening land, terminals, service buildings, navigational aids, fuel storage, parking lots and a limited buffer zone and fall within the Transportation category. Transportation areas also embrace ports, docks, shipyards, dry docks, locks and water course control structures designed for transportation purposes. The docks and ports include buildings, piers, parking lots and adjacent water utilized by ships in the loading and unloading of cargo or passengers. Locks, in addition to the actual structures, include the control buildings, power supply buildings, docks and surrounding supporting land use (i.e., parking lots and green areas).

Unimproved Woodland/Pasture (CLC 183314)

Includes cleared or forest land with major stands of trees and brush where native grasses have been allowed to develop. Normally, this land will not be managed with brush control and/or fertilizer application.

Upland Coniferous (CLC 1230)

Upland with sand/clay substrate; mesic-xeric; longleaf pine and/or loblolly pine and/or shortleaf pine.

3.1.4 Historical Resources

A review of the Master Site File– TRS Search performed by the Florida Division of Historical Resources revealed no previously recorded cultural resource sites within a one-mile radius of the subject parcel (Exhibit E). Although the above-cited conclusions are provided with some degree of confidence, only a detailed Phase I Archeological Site Assessment performed by a state licensed archeologist could authenticate our findings and provide a formal survey of cultural resource on the subject parcel.

3.1.5 FEMA Flood Hazards

The subject property is in Flood Zone X as determined from the Federal Emergency Management Agency Flood Insurance Rate Map of Escambia County, Florida, Map Number: 12033C0260G dated September 29, 2006 - Exhibit F. Preliminary maps January 27, 2017, map panel number 12033C0310J. No representation is made from such FIRM.

3.1.6 Wellhead Protection

Section 4-5.9 of Escambia County Land Development Code restricts the use handling, production and storage of certain deleterious substances and contaminants which may impair present and future public potable water supply wells and well fields shall be limited in proximity to wellheads. This resulted in the development of well head protection zones consisting of 7-year time of travel and 20-year time of travel zones. The site is not located within any Wellhead Protection Zone (Exhibit G).

3.1.7 National Wetlands Inventory

The US Fish and Wildlife Service (FWS) is the principal US Federal agency tasked with providing information to the public on the status and trends of our Nation's wetlands. The US FWS National Wetlands Inventory (NWI) is a publicly available resource that provides detailed information on the abundance, characteristics, and distribution of US wetlands. NWI data are used by natural resource managers, within the US FWS and throughout the Nation, *to promote the understanding, conservation, and restoration of wetlands.* A review of National Wetland Inventory Data suggests the property is comprised entirely of uplands. A forested wetland complex is depicted to the northeast of the subject property (Exhibit H).

3.1.8 USGS Quadrangle Map

A review of the USGS quadrangle map suggests that a stream feature associated with Jacks Branch exists in the northeastern margins of the subject property (Exhibit I).

3.1.9 Surface Water Classification

Surface waters identified as impaired under Section 303(d) of the Clean Water Act are considered as environmentally sensitive lands per Article 5, Section 4-5.2 of Escambia County Land Development Code. WSI reviewed the Florida Department of Environmental Protection's 2020-2022 Biennial Final assessment list of waterbodies and water segments that have been determined to not meet water quality standards and are additions to the State's Verified List of Impaired Waters and the Clean Water Act (CWA) section 303(d) list. The project is in the Jacks Branch watershed which is impaired. The cause of the impairment is currently being assessed.

3.2 Field Review

3.2.1 Wetlands

After review of background data, the field delineation was performed in accordance Rule 62-340 Florida Administrative Code pursuant to the requirements of the FDEP for delineation of state regulated wetlands and for use under the 404 Assumption Agreement for Assumed 404 Waters.

Wetlands are defined as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally, include but are not limited to swamps, marshes, bogs, and similar areas. Wetlands have the following three diagnostic environmental characteristics: hydrophytic (or wetland) vegetation, wetland hydrology, and hydric soils.

The FDEP method utilizes four tests to determine wetland jurisdictional limits; the "A" test, the "B" test, the "C" test and the "D" test. The "A" test is satisfied when, in the appropriate vegetative stratum (canopy, subcanopy, or herbaceous ground cover), the areal extent of OBL plants is greater than the areal extent of UPL plants and either: 1) the substrate is hydric soil or riverwash; 2) the substrate is nonsoil, rock outcrop-soil complex, or the substrate is located within an artificially created wetland; or 3) one or

more of the hydrologic indicators listed in Rule 62-340.500, F.A.C. are present and reasonable scientific judgement indicates that inundation or saturation is present sufficient to meet the definition of subsection 62-340.200(19), F.A.C.

The "B" test is satisfied if the areal extent of OBL or FACW plants, or combinations thereof, in the appropriate stratum is equal or greater than 80% of all plants in that stratum, excluding FAC plants and either: 1) the substrate is hydric soil or riverwash; 2) the substrate is nonsoil, rock outcropsoil complex, or the substrate is located within an artificially created wetland; or 3) one or more of the hydrologic indicators listed in Rule 62-340.500, F.A.C. are present and reasonable scientific judgement indicates that inundation or saturation is present sufficient to meet the definition of subsection 62-340.200(19), F.A.C.

The "C" test is satisfied if an area (other than pine flatwoods and improved pastures) with undrained hydric soils that meet, in situ, at least one of the criteria listed in the rule. Hydric soils are considered undrained unless reasonable scientific judgement indicates permanent artificial alterations to the on-site hydrology have removed the conditions that would support formation of hydric soils. For this test, soils classified according to the USDA's Keys to Soil Taxonomy (4th ed. 1990) as Umbraqualfs, Sulfaquents, Hydraquents, Humaquepts, Histosols (except Folists), Argiaquolls, or Umbraquults meet the criterion. Also, Saline sands (sand flats and tidal flats) are considered to meet the test. Soils within a hydric mapping unit designated by the USDA NRCS as frequently flooded or depressional, when the hydric nature of the soil has been field verified using the USDA NRCS approved hydric soil indicators for Florida, are also considered to meet the C test and define a jurisdictional wetland.

The "D" test is met if the area has one or more of the hydrologic indicators listed in Rule 62- 340.500, F.A.C. and has hydric soils as identified using the USDA NRCS approved hydric soil indicators for Florida, and reasonable scientific judgement indicates that inundation or saturation is present sufficient to meet the wetland definition of subsection 62-340.200 (19), F.A.C.

The FDEP utilizes the methodology defined in Rule 62-340 F.A.C. to delineate wetlands under the state regulatory program as well as under the 404 Assumption Program. These tests and parameters were used to identify the boundary between jurisdictional wetlands and non-wetland areas on the project site. In the state of Florida, the USACE Regional Supplement manual and methods are not used to define and delineate Section 404 jurisdictional wetlands where Assumption has been delegated.

Hydric Soils Assessment

Information regarding soils was recorded at each data point assessed. A soil sample of the upper 12 inches was examined. The color of the matrix and any redox features in the sample were determined for each apparent layer in the sample using a soil color chart (Munsell, 1994 Revised). Indicators of iron and manganese reduction, translocation, or accumulation, sulfate reduction, or organic matter accumulation were recorded, if present. Soil characteristics were reported on the data form and checked against the mapped soil type to determine if the mapped soil type appeared to be accurate for the plot. A hydric soil indicator was chosen for the plot if the observed characteristics matched the conditions of the listed indicators of the USDA NRCS for Florida.

During the desktop review of the property, it was determined soils identified within the property have a hydric rating of 35%. A specific area is not necessarily considered to have hydric soils because it is dominated by soils on a hydric soils list. Hydric soils must be identified by verifying the presence of one of

more of the hydric soil indicators. During our field inspection of the property, we verified the presence of hydric soils within three separate disturbed headwater features identified within the subject property.

Wetland Hydrology Assessment

At each plot, visual indications of wetland hydrology were recorded. Wetland hydrology indicators are listed in 62-340.500 as: algal mats, aquatic mosses or liverworts on trees or substrate, aquatic plants, aufwuchs (presence or remains of the assemblage of sessile, attached, or free-living, nonvascular plants and invertebrate animals which develop a community on inundated surfaces), drift lines and rafted debris, elevated lichen lines, evidence of aquatic fauna, hydrologic data, morphological plant adaptations, secondary flow channels, sediment deposition, vegetated tussocks or hummocks, and water marks.

Several wetland hydrologic indicators were noted within a wetland complex that occupies the southern margins of the subject property. Indicators observed include saturation, drainage patterns, aquatic fauna (crayfish chimney), and plant morphological adaptions.

Plant Community Structure

Both the upland and wetland communities were extremely disturbed from historic and current agricultural use of the property. The upland areas exist primarily as open pasture dominated by a sparse to moderate canopy of water oak (*Quercus nigra*), laurel oak (*Quercus laurifolia*), and live oak (*Quercus virginiana*). The ground cover was dominated by bahia grass (*Paspalum notatum*).

The wetland communities are former baygalls (aka bayhead drains) that have been mostly cleared. Some of these features maintain a few canopy trees consisting of sweetbay magnolia (*Magnolia virginiana*), black gum (*Nyssa sylvatica*), and tulip poplar (*Lirodendron tuliperifera*). These were mainly dominated by a variety of herbaceous plant species including meadow beauty (*Rhexia virginica*), beakrush (*Rhynchospora* spp), water pepper (*Persicaria hydropiper*), spadeleaf (*Centella asiatica*), alligator weed (*Alternanthera philoxeroides*).

Field Identification of Wetlands

Hydric soil indicators along with an assessment of the plant community structure was used to formulate the delineated wetland boundary line. The delineated wetland boundary line was established in the field by progressively locating points along 15-25 intervals along the wetland/upland boundary line or at directional changes along the boundary. These points are identified in the field with pink flagging tape labeled “Wetland Delineation” and assigned an alpha numeric designator. The upland/wetland boundary line was located using a Trimble Geo7X Global Navigation Satellite System (GNSS). The GNSS data is depicted on the attached wetland sketch (Exhibit J).

The feature will be subject to the regulatory jurisdiction of the Northwest Florida Water Management District (State ERP), Florida Department of Environmental Protection (State 404), and Escambia County pursuant to their Land Development Code and Comprehensive Plan. Be advised that Escambia County and District may regulate those lands within 25-ft. landward (upland) of the delineated wetland boundary line.

3.2.2 Listed Species

This portion of the assessment focused on the presence of any rare, threatened, or endangered species and/or their critical habitats within the subject property. Listed species include those with federal endangered or threatened status, federal candidate species, and state endangered, threatened, and species of special concern status. Listed species data was obtained from U.S. Fish and Wildlife Service IPaC Report (Exhibit C) and in consultation with Florida Fish and Wildlife Conservation Commission Florida's Endangered and Threatened Species (Florida Fish and Wildlife Conservation Commission, 2012), and Florida Department of Agriculture and Consumer Services (DOACS) via Fla. Admin. Code 5B-40. No critical habitats were identified within the subject property. The U.S. Fish and Wildlife Service IPaC system report lists four (4) federally protected species and one (1) candidate species that should be considered in an effects analysis or the Subject Property.

Review of Florida's Endangered and Threatened Species List revealed two additional species not listed on the IPaC report which may occur in the Action Area. In our opinion, there is potential occurrence of the Florida Pine Snake (*Pituophis melanoleucus mugitus*) and gopher tortoise (*Gopherus polyphemus*) within the subject property.

Of the species listed in the IPaC report and those identified in Florida's Endangered and Threatened Species List, potential species that could occur within the project area, based on current the condition of the ecological community include three (3) faunal species –Florida Pine Snake, Eastern Indigo Snake, and Gopher Tortoise. The remaining faunal and floral species were excluded during the pre-field review based on their water / wetland dependence, and/or different habitat types, which are not applicable to the subject property. The following is a summary of our findings.

Florida Pine Snake (*Pituophis melanoleucus mugitus)* is stated designated threatened and therefore was not identified in the IPaC report. The Florida pine snake is one of the largest eastern snakes in North America. This species can reach a length of up to 84 inches (213 centimeters). It has a brown back with dark blotches, white belly, ridged scales, small head, and pointed snout. The Florida pine snake inhabits areas that feature well-drained sandy soils with a moderate to open canopy. This species can be found from southwest South Carolina, west to Mobile Bay in Alabama, south to Florida.

Florida pine snakes are protected under 68A-25.002(10), F.A.C., which prohibits their commercial sale and limits the possession to 1 individual except for albino and amelanistic specimens. The Florida pine snake is also protected under 68A-27.007(a), F.A.C., which prohibits the take, possession, or sale of any Endangered or Threatened species, their parts, their eggs, and their nests. These protections are necessary and should be continued to prevent overcollection and unsustainable take of this species.

Florida pine snakes occupy a variety of upland habitats but seem to prefer dry habitats with a moderate to open canopy cover and well-drained sandy soils. The most common natural habitat of Florida pine snakes is sandhill, but they are found in other natural communities including scrub, xeric hammock, scrubby flatwoods, mesic pine flatwoods, and dry prairie with dry soils, old fields, and pastures.

There have been no documented occurrences of the Florida pine snake within the project area, and it was not observed during field reviews. As a result, the probability of occurrence of the Florida pine snake within the project area has been determined to be low. It is anticipated that the project may affect but is not likely to adversely affect the Florida pine snake.

Eastern Indigo Snake (*Drymarchon corais couperi*) is the only federally listed reptile potentially occurring within the project site. No eastern indigos were observed during the site reconnaissance. The indigo is difficult to census due to their cryptic nature and seasonal activity patterns. The USFWS listed the Eastern indigo snake as threatened in 1978 (FR Vol. 43 No 52:11082-11093).

The eastern indigo generally requires large tracts of land to survive. Indigos utilize a diverse range of habitats, from flatwoods, hammocks, stream bottoms, riparian zones, and high ground with deep, well-drained to excessively drained, sandy soils. Habitat preferences vary seasonally. Pine sandhill winter dens are used from December to April. Summer territories are selected from May to July. From August through November, indigo snakes are frequently located in shady creek bottoms. These seasonal changes in habitat encourage the maintenance of travel corridors that link these different habitat types. They are considered commensals of the gopher tortoise, wintering over in their burrows in the uplands, but foraging in more mesic to hydric habitats. The Eastern indigo snake is found throughout Florida but is rare in most areas. There is a low potential for the indigo snake to occupy habitat within the subject parcel due to the parcel's historical land use and disturbances. Given the lack of suitable habitat within the project area and the standard protection guidelines required during construction, it is anticipated that this project may affect, but is not likely to adversely affect the Eastern indigo snake.

Gopher tortoise *(Gopherus polyphemus)* are listed by the FWC as a threatened wildlife species and are protected by state law, Chapter 68A–27, FAC. Gopher tortoise is a large dark brown to grayish-black terrestrial tortoise. The shell is approximately 15-37 centimeters or 5.9-14.6 inches long. The gopher tortoise has elephantine hind feet, shovel-like forefeet, and a gular projection beneath the head of the yellowish, hinge-less plastron or under shell. For refuge, gopher tortoises dig burrows which average 5 to 10 feet in depth and may be 10 to 20 feet or more in length. Several other species may share gopher tortoise burrows, including the eastern indigo snake, the eastern diamondback rattlesnake, the black pine snake, and the gopher frog, as well as several small mammals.

Gophers favor dry sandy ridges with open stands of longleaf pine, turkey oak and other scrub oaks. Gophers feed on grasses and other low growing vegetation. Fire suppression is problematic to gopher habitat preventing sunlight from reaching the forest floor, and thus decreasing ground cover which the turtles depend on. It is commonly associated with a pine overstory and an open understory with a grass and forb (non-woody) groundcover and sunny areas for nesting. Gopher tortoises can also sometimes be found in more marginal habitats such as roadsides, ditch banks, utility and pipeline rights-of-way, pastures, and even marginal wetland habitat, especially if their preferred habitat has been lost.

No burrows were documented during our field review.

Avian

Bald eagle. As of August 8, 2007, the USFWS has removed (de-listed) the bald eagle from the federal endangered species list. However, protection would continue under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. The National Bald Eagle Management Guidelines would take the place of the 1987 Habitat Management Guidelines which operated with 750-foot and 1,500-foot buffers around active nests. The proposed guidelines require one 660-foot no activity buffer zone for projects of any size that are visible from the nest. The bald eagle most commonly uses habitats close to bays, rivers, lakes, or other bodies of water providing good food sources. Bald eagles generally nest in tall pine trees and return to the same nest year after year. Most bald eagles in northern and central Florida migrate north out of the state in May-July after the breeding season but some birds from northern populations

migrate to northern Florida in the winter. No active bald eagle nests are documented within or within 1,500 feet of the subject parcel.

Flora

Listed plant species include those species identified in 50 CFR 17.11 and 17.12, Endangered and Threatened Wildlife and Plants, F.A.C. 5B-40.0055, Regulated Plant Index, F.A.C. 68A-27, Rules Relating to Endangered or Threatened Species, and those identified as S1, S2, or S3 by the Florida Natural Areas Inventory. In contrast to the animal species listed under the Endangered Species Act, listed plants receive almost no regulatory protection, except if occurring on Federal lands or being impacted because of a federal project. The State regulation that that provided protection against the harvest or destruction of state-listed plants, focuses on regulating commercial use of those listed species. The rule specifically provides that private landowners can remove listed species present on their own property. Some protection is offered in limited circumstances under FAC, 9J-2.041, where large developments are planned (DRI's and Florida Quality Developments). In these cases, the regulated plant list is not utilized, plants must be listed as critically imperiled, imperiled, or rare in this rule. No state or federally listed plant species were noted within the subject properties.

3.2.3 Protected Trees

Escambia County Land Development Code affords protection to any defined protected tree 12" or greater in diameter at breast height (DBH) and any heritage tree 60" or greater in diameter at breast height (DBH) with the only exception being sand live oaks. Any tree species on the most recent Florida Exotic Pest Plant Council list of invasive species, any species of pine (*Pinus* sp.), cherry laurel (*Prunus laurocerasus and P. caroliniana*), or turkey oak (*Quercus laevis*) tree are not protected.

WSI physically identified each tree afforded protection pursuant to Escambia County Land Development Code in the field with green surveyor's tape. Each tree was given a specific alphanumeric designator, measured, speciated, and position located via high accuracy global positioning system (See Wetland and Tree Sketch in Exhibit J).

4.0 Conclusions

Article 5, Section 4-5.2 of Escambia County Land Development Code defines environmentally sensitive lands as:

1. Wetlands as defined by the State of Florida.
2. Shoreline protection zones as defined in this article.
3. Aquatic preserves and the Escambia River Wildlife Management Area as defined or authorized by Florida Statutes.
4. Outstanding Florida Waters as listed in the rules of Florida Administrative Code (Ch. 62-302.700).
5. Habitats of threatened and endangered species as defined by the U.S. Fish and Wildlife Service (FWS), the Florida Fish and Wildlife Conservation Commission (FWC), or other state or federal agencies.
6. Essential fish habitat, including seagrasses, defined as those waters and substrate necessary for fish to spawn, breed, feed, or grow to maturity [See Magnuson-Stevens Act, 16 U.S.C. 1802 (101].
7. Floodplain areas identified on the Federal Emergency Management Agency's Flood Insurance Rate Map as areas of special flood hazard subject to a one percent or greater annual chance of flooding.

8. Wellhead protection areas as defined in this article, including potable water wells, cones of influence, and potable water well fields.
9. Surface waters identified as impaired under Section 303(d) of the Clean Water Act

Wetland Sciences, Inc. identified several headwater wetland complexes within the subject property that will be subject to regulatory jurisdiction of the Northwest Florida Water Management District (State ERP), Florida Department of Environmental Protection (State 404), and Escambia County pursuant to their Land Development Code and Comprehensive Plan (Exhibit J). Be advised that Escambia County and District may regulate those lands within 25-ft. landward (upland) of the delineated wetland boundary line.

No surface water features (i.e. rivers, streams, creeks, lakes, ponds, bayous, etc.) were identified.

The subject property is not located within an Aquatic Preserve or Outstanding Florida Waters.

The subject property does not include any essential fish habitat identified or defined by the Magnuson-Stevens Act.

The subject property is in Flood Zone X as determined from the Federal Emergency Management Agency Flood Insurance Rate Map of Escambia County, Florida, Map Number: 12033C0260G dated September 29, 2006 - Exhibit F. Preliminary maps January 27, 2017, map panel number 12033C0310J. No representation is made from such FIRM.

No listed species or listed species habitat were identified within the subject property.

Several protected trees were identified within the subject property (Exhibit J). No heritage trees were identified.

No historical resources were identified within the property.

The site is not located within any wellhead protection zone (Exhibit G).

WSI reviewed the Florida Department of Environmental Protection's 2020-2022 Biennial Final assessment list of waterbodies and water segments that have been determined to not meet water quality standards and there are additions to the State's Verified List of Impaired Waters and the Clean Water Act (CWA) section 303(d) list. The project is located within an impaired watershed.

This concludes our findings. The information presented within this report represents the professional opinion of the scientist that performed the work and is intended to furnish the client with an approximation of the status of natural resources on the site under consideration.

This assessment does not provide authorization for any activity requiring a permit. However, Wetland Sciences, Inc. can provide professional assistance in obtaining permits as requested.

Questions regarding the contents or conclusions of this report can be directed to Keith Johnson or Craig Martin at either the address or telephone number listed on the title page.

5.0 List of Preparers

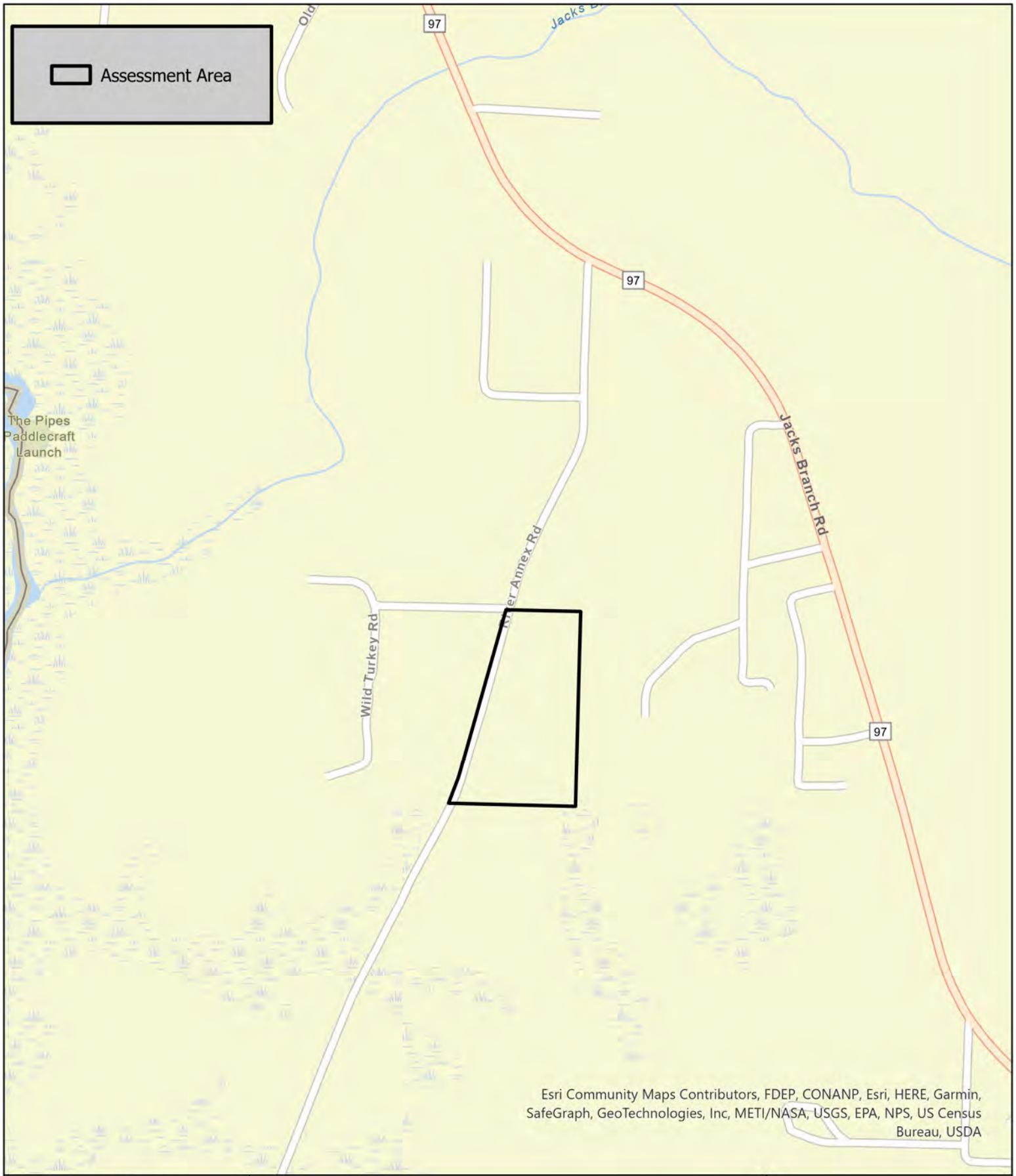
We declare that, to the best of our professional knowledge and belief, we have the specific qualifications based on education, training, and experience to complete an assessment of the subject property.

Keith Johnson
Environmental Scientist

Years of Experience: 27

Exhibit A

Location Map



WETLAND SCIENCES INCORPORATED

Site Location Map

900 Block River Annex
Cantonment, Escambia County, FL

0 0.07 0.14 0.27 0.41 0.54
Miles

Data Source:
ERSI
Imagery Source:
ESRI

N
W E
S

Coordinate System:
NAD 1983 FL
State Plane North

Exhibit B

Soils Map

WETLAND SCIENCES INCORPORATED

Soils Map

900 Block River Annex
Cantonment, Escambia County, FL

0 0.02 0.04 0.07 0.11 0.14
Miles

Data Source:
USDA NRCS
Imagery Source:
ESRI

N
W E
S

Coordinate System:
NAD 1983 FL
State Plane North

Exhibit C

USFWS IPaC Report

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Florida Ecological Services Field Office
1339 20th Street
Vero Beach, FL 32960-3559
Phone: (772) 562-3909 Fax: (772) 562-4288
Email Address: fw4flesregs@fws.gov
https://www.fws.gov/office/florida-ecological-services

In Reply Refer To:
Project Code: 2023-0094943
Project Name: 900 Block River Annex

June 19, 2023

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 ECOS-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 ECOS-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:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.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/birds/policies-and-regulations.php.

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/birds/bird-enthusiasts/threats-to-birds.php.

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/birds/policies-and-regulations/executive-orders/e0-13186.php.

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

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

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

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

This species list is provided by:

Florida Ecological Services Field Office
1339 20th Street
Vero Beach, FL 32960-3559
(772) 562-3909

PROJECT SUMMARY

Project Code: 2023-0094943
Project Name: 900 Block River Annex
Project Type: Clearing Land
Project Description: Four lot residential subdivision
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@30.6248991,-87.38272926177711,14z

Counties: Escambia County, Florida

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 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[1], 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.

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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
Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477	Threatened

REPTILES

NAME	STATUS
Alligator Snapping Turtle *Macrochelys temminckii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4658	Proposed Threatened
Eastern Indigo Snake *Drymarchon couperi* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/646	Threatened

FISHES

NAME	STATUS
Gulf Sturgeon *Acipenser oxyrinchus (=oxyrhynchus) desotoi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/651	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

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.

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

---

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)

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

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

NAME	BREEDING SEASON
American Kestrel *Falco sparverius paulus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9587	Breeds Apr 1 to Aug 31
Bald Eagle *Haliaeetus leucocephalus* 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.	Breeds Sep 1 to Jul 31

NAME	BREEDING SEASON
Brown-headed Nuthatch *Sitta pusilla* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Jul 15
Cerulean Warbler *Dendroica cerulea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 26 to Jul 20
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Kentucky Warbler *Oporornis formosus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Prairie Warbler *Dendroica discolor* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
Prothonotary Warbler *Protonotaria citrea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Swallow-tailed Kite *Elanoides forficatus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8938	Breeds Mar 10 to Jun 30
Wood Thrush *Hylocichla mustelina* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 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 and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

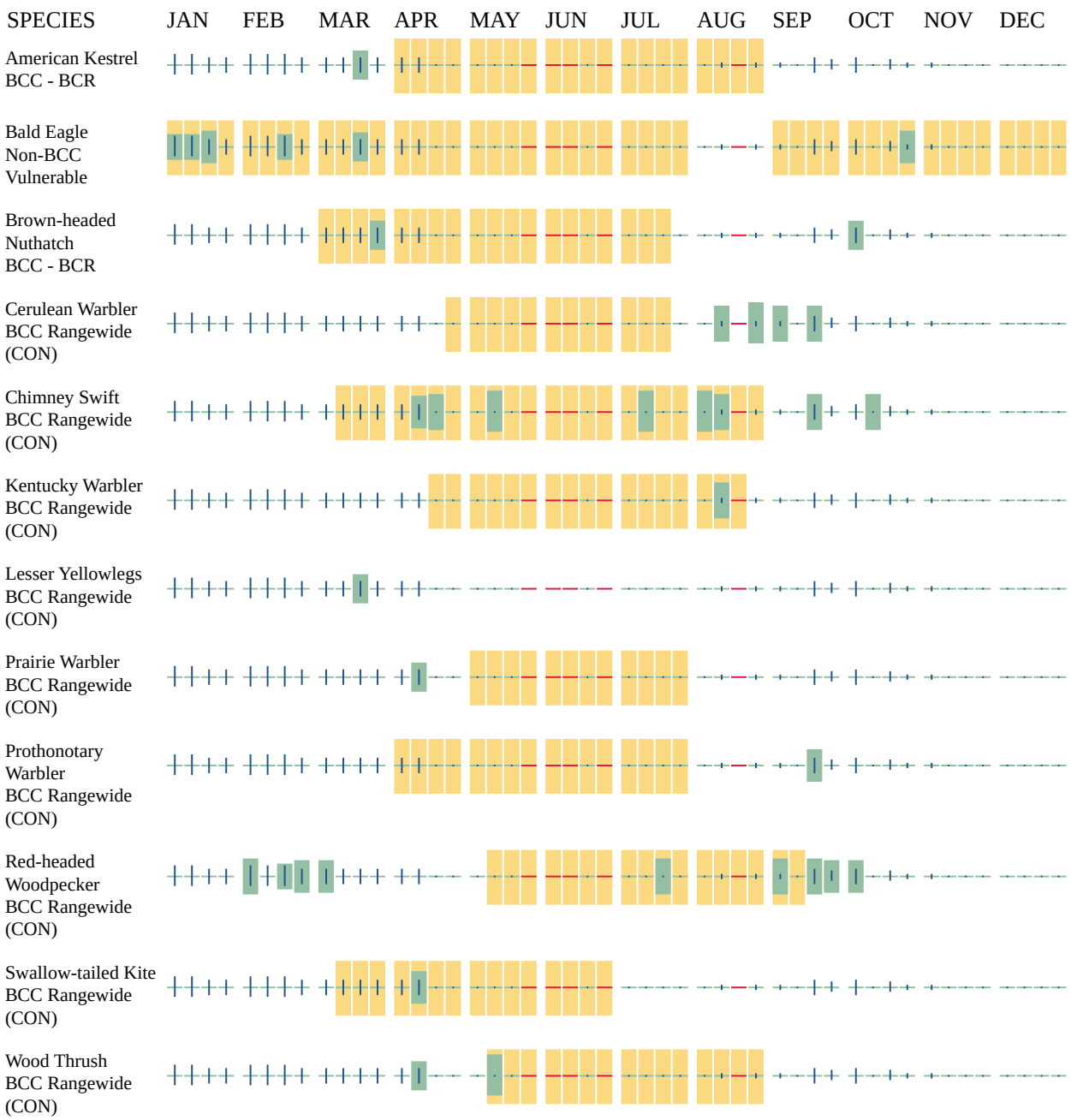
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

■ probability of presence ■ breeding season | survey effort – no data



Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

MIGRATORY BIRDS FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point

within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?
Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects
For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?
If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report
The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no

data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

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.

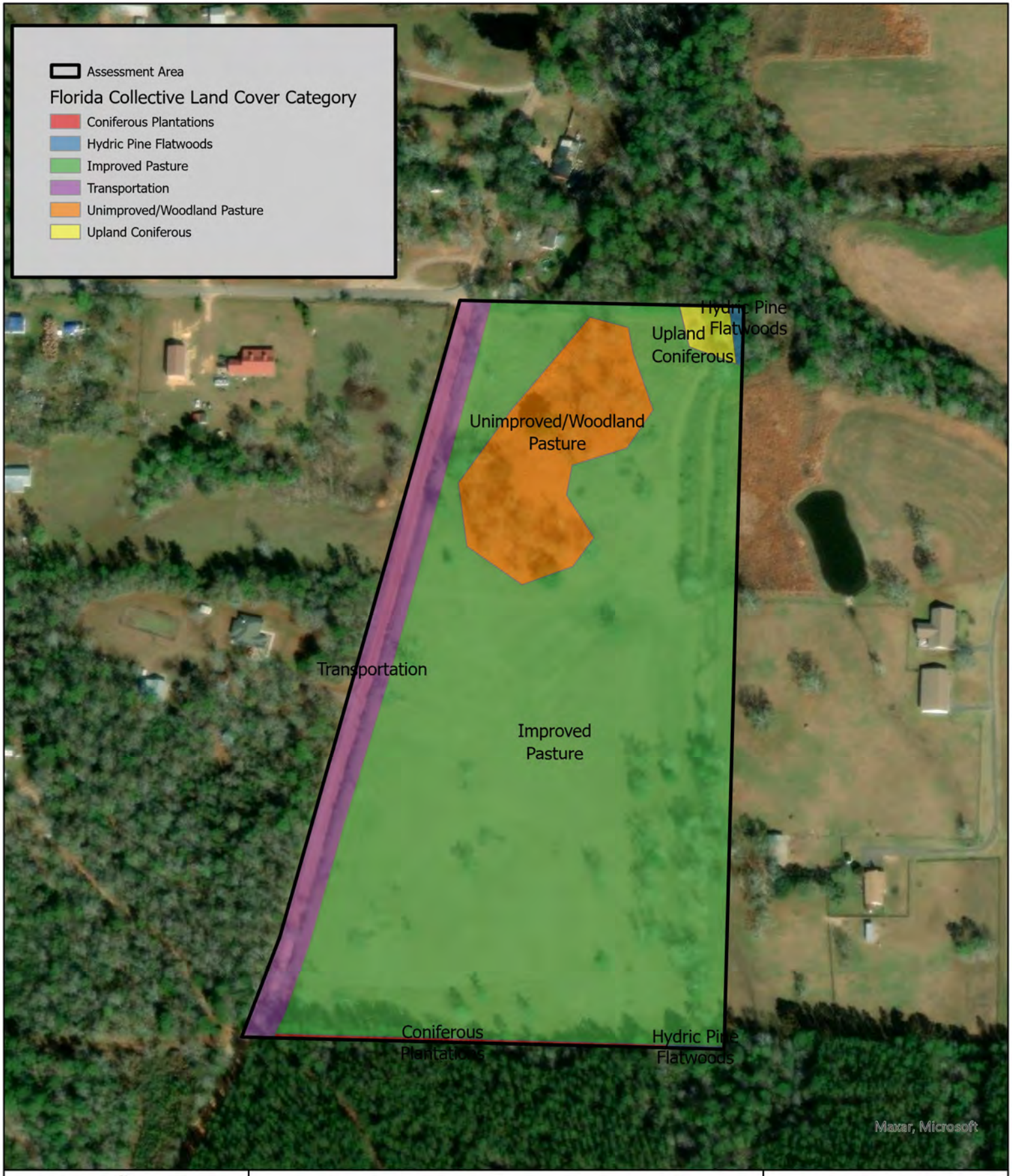
WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

IPAC USER CONTACT INFORMATION

Agency: Wetland Sciences, Inc.
Name: Keith Johnson
Address: 3308 Gulf Beach hwy
City: Pensacola
State: FL
Zip: 32507-7931
Email keith@wetlandsciences.com
Phone: 8502327783

Exhibit D

Florida Cooperative Land Cover Map



WETLAND SCIENCES INCORPORATED

Florida Collective Land Cover Map

900 Block River Annex
Cantonment, Escambia County, FL

0 0.02 0.04 0.07 0.11 0.14
Miles

Data Source:
FFWC
Imagery Source:
ESRI

Coordinate System:
NAD 1983 FL
State Plane North

N
W E
S

Exhibit E

Master Site File Review

Keith Johnson

From: Frederick, Cassandra A. <Cassandra.Frederick@dos.myflorida.com>
Sent: Monday, June 19, 2023 10:05 AM
To: Keith Johnson
Subject: RE: Site file request; 900 Blk River Annex Road, Cantonment, Fl
Attachments: Map.pdf

Good morning Keith,

There are no previously recorded resources within the boundary you provided for us. I have attached a map for your reference. Please let me know if you have any questions or need anything else. Have a great day!

Kind regards,

CASSIE FREDERICK
Historic Data Analyst | Florida Master Site File | Bureau of Historic Preservation | Division of Historical Resources | Florida Department of State | 500 South Bronough Street | Tallahassee, Florida 32399 | 850.245.6424 | 1.800.847.7278 | Fax: 850.245. 6439 | flheritage.com

---

From: Keith Johnson <keith@wetlandsciences.com>
Sent: Monday, June 19, 2023 8:51 AM
To: FMSFILE <FMSFILE@dos.myflorida.com>
Subject: Site file request; 900 Blk River Annex Road, Cantonment, Fl

Dear Site File Team,

Please accept this e-mail as a formal Master Site File review request for a +/- 22.51 acre parcel of property located at the 900 Block of River Annex Road in Section 06, Township 1 North, Range 31 West in Escambia County, Fl. I have attached site location map, quad map, and shapefile data identifying the subject property.

Please e-mail the results back to me.

Thanks,

Keith Johnson
Environmental Scientist
Wetland Sciences, Inc.
3308 Gulf Beach Hwy
Pensacola, FL 32507
Tel: 850-453-4700
Cell: 850-232-7783

Project Map

- FloridaStructures
- FloridaSites
- HistoricalBridges
- ResourceGroups
- NationalRegister
- HistoricalCemeteries
- Assessment_Area-polygon

0 0.04 0.07 0.15 Miles

N

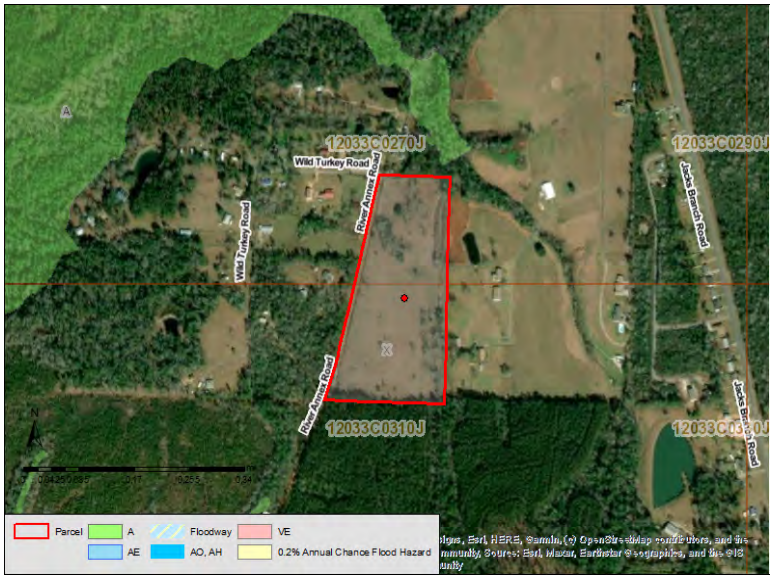
Created on 6/19/2023 by Florida Master Site File

Exhibit F

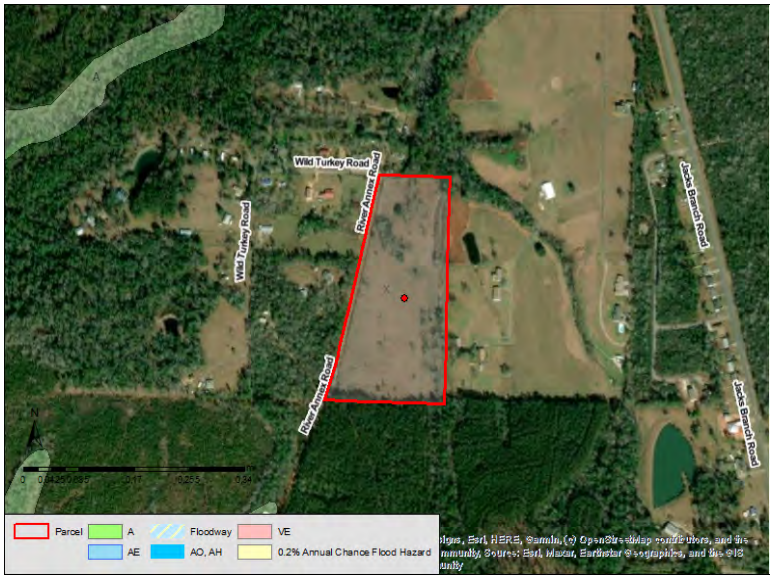
FEMA Flood Hazard Map

NWFWMD Report

Preliminary SFHA Flood Map (Prelim Issue Date: 1/27/2017)



Effective SFHA Flood Map (Effective Issue Date: 9/29/2006)



Geographical Information

Latitude/Longitude:	30.62474,-87.38261
Address:	900 River Annex Rd, Cantonment, FL, 32533, USA
Parcel ID:	**061N314300000000**
Firm Panel (Preliminary):	**12033C0310J**
Firm Panel (Effective):	12033C0260G

Flood Information

Flood Zone Information

Preliminary Flood Zone

Location of Interest:	X
Parcel:	**X:100%;**
Base Flood Information*:	**N/A**

Effective Flood Zone

Location of Interest:	X
Parcel:	**X:100%;**
Base Flood Information*:	**N/A**

*The computed elevation to which floodwater is anticipated to rise during the base flood (100 Year Flood). Base Flood Elevations (BFEs) are shown on Flood Insurance Rate Maps (FIRMs) and on the flood profiles. The BFE is the regulatory requirement for the elevation or floodproofing of structures. The relationship between the BFE and a structure's elevation determines the flood insurance premium. **Datum of measurement is NAVD1988.**

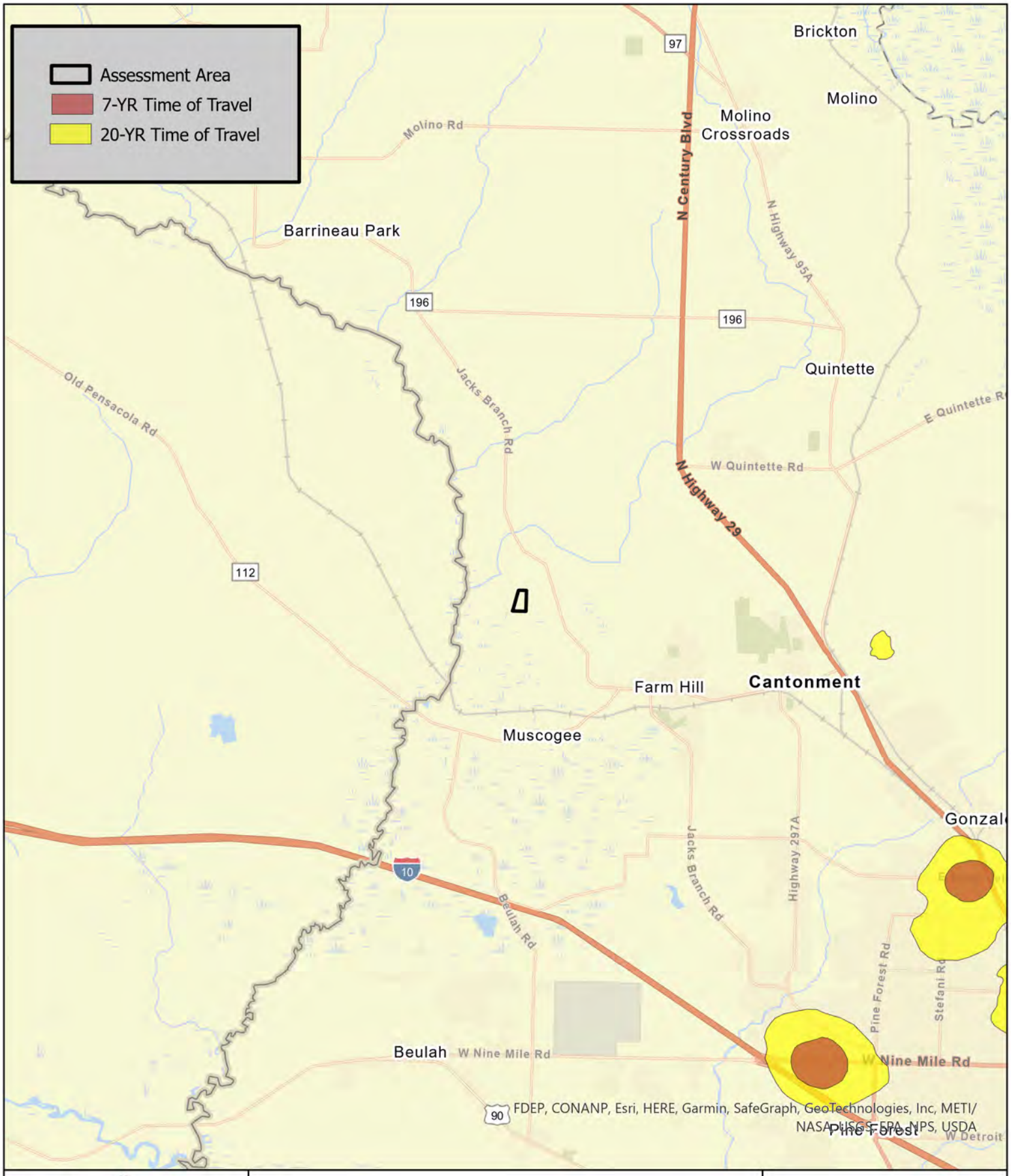
Zone VE: A coastal area inundated by 100-year flooding and subject to a velocity hazard (wave action) where BFEs have been determined. **Zone AE:** An area inundated by 100-year flooding, for which BFEs have been determined. **Zone AO/AH:** An area inundated by 100-year flooding: (AO) Sheet flow, ponding, or shallow flooding where Base Flood Depths are provided; (AH) Shallow flooding base floodplain where BFE's have been determined. **Zone A:** An area inundated by 100-year flooding, for which no BFEs have been determined. **Zone 0.2PCT (0.2 PCT ANNUAL CHANCE FLOOD HAZARD/X500):** An area inundated by 500-year flooding an area inundated by 100-year flooding with average depths of less than 1 foot or with drainage areas less than 1 square mile or an area protected by levees from 100-year flooding. **Zone X:** An area of minimal flood hazard.

Disclaimer:

Although derived directly from a variety of sources, including the Federal Emergency Management Agency's (FEMA's) Flood Insurance Rate Maps (FIRMs), the District's digital elevation model, the counties' digital parcel maps and data from other governmental sources, the data provided through this portal is for informational purposes only. The user is advised to be aware that for flood insurance or regulatory determinations, or for supporting an application for a Letter of Map Change (LOMC), only the official and latest FEMA FIRM and Flood Insurance Study (FIS) report should be consulted. Also, all elevation data submitted in support of a LOMC application must be certified by a licensed land surveyor, engineer, or architect. The NWFWMD, FEMA, its agents, and partners shall not be held responsible for the misuse or misinterpretation of the information presented in this portal.

Exhibit G

Wellhead Protection Zone Map



WETLAND SCIENCES INCORPORATED

Wellhead Protection Map

900 Block River Annex
Cantonment, Escambia County, FL

0 0.63 1.25 2.5 3.75 5
Miles

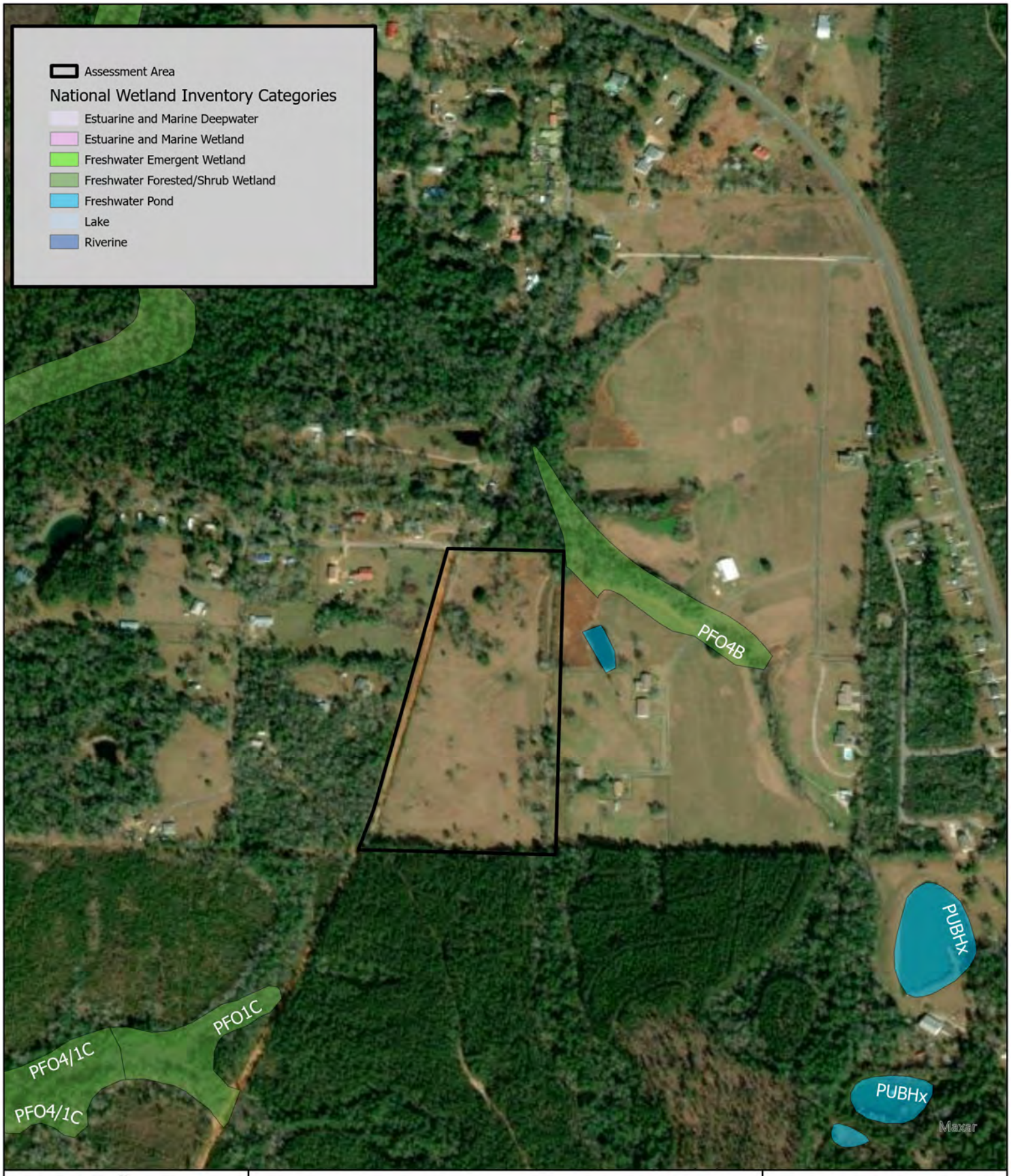
Data Source:
USFWS
Imagery Source:
ESRI

N
W E
S

Coordinate System:
NAD 1983 FL
State Plane North

Exhibit H

National Wetland Inventory Map



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All data within this map are supplied as is, without warranty. This product has not been prepared for legal, engineering, or survey purposes. Users of this information should review or consult the primary data sources to ascertain the usability of the information.

National Wetland Inventory Map

900 Block River Annex
Cantonment, Escambia County, FL

0 0.04 0.09 0.17 0.26 0.35
Miles

Data Source:
USFWS
Imagery Source:
ESRI

Coordinate System:
NAD 1983 FL
State Plane North

N
W E
S

Exhibit I

Quad Map

WETLAND SCIENCES INCORPORATED

Quad Map

900 Block River Annex
Cantonment, Escambia County, FL

0 0.04 0.09 0.17 0.26 0.35
Miles

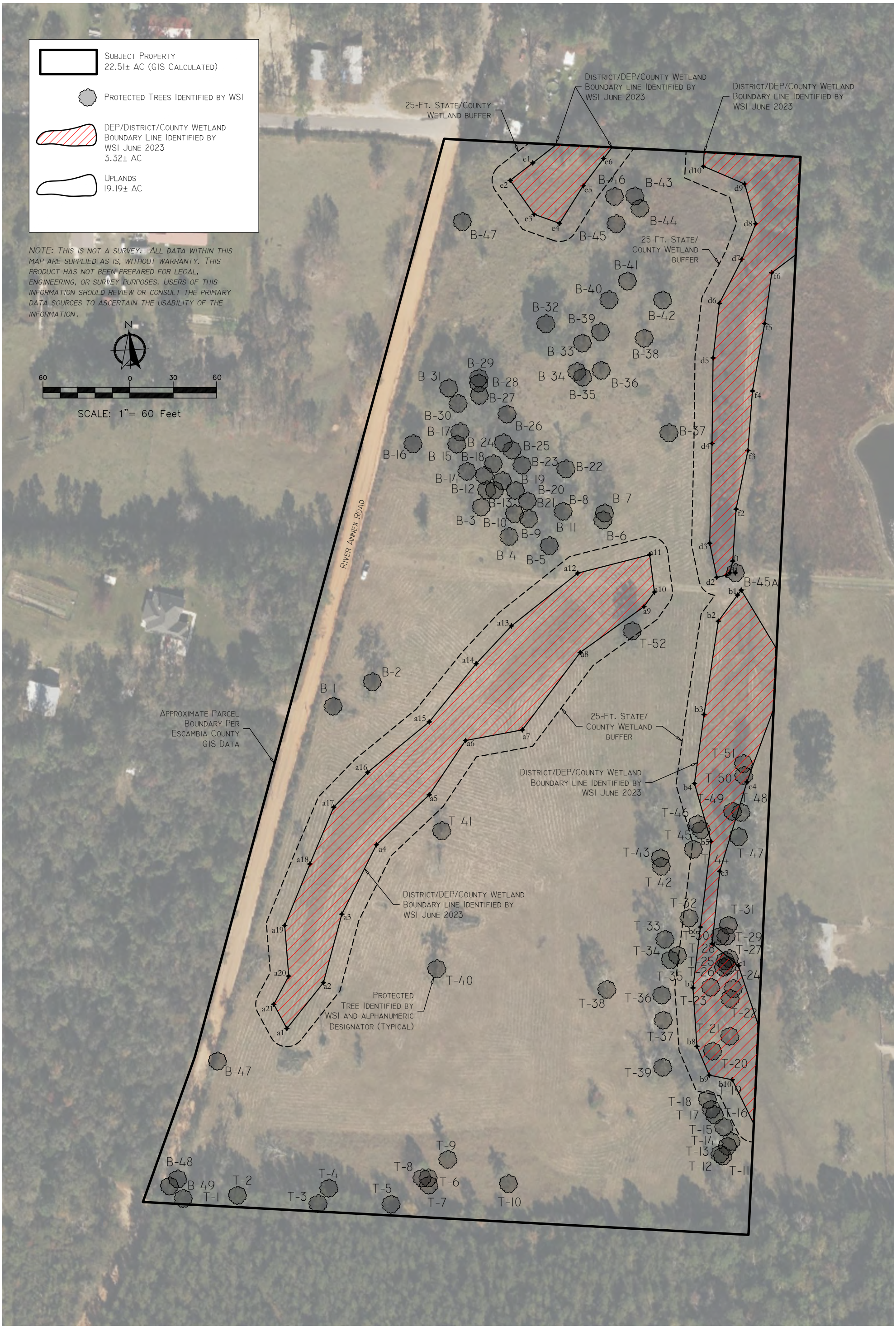
Data Source:
USGS
Imagery Source:
ESRI

N
W E
S

Coordinate System:
NAD 1983 FL
State Plane North

Exhibit J

Protected Tree and Wetland Sketch



SHEET:	1 OF 2
DATE:	06/16/23
DRAWN BY:	KDJ
PROJECT NO.:	2023-382

900 Blk River Annex Road
Escambia County, Fl

Tree & Wetland Sketch

NO.	DATE	APPR.	REVISION/ACTION TAKEN

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PENSACOLA, FLORIDA 32507
TEL: 850.453.4700
KEITH@WETLANDSCIENCES.COM

WETLAND SCIENCES INCORPORATED

ID	Name		DBH(in)	Notes
	Common Name	Scientific Name		
T-1	Water Oak	*Quercus nigra*	16.8	
T-2	Water Oak	*Quercus nigra*	14.3	
T-3	Water Oak	*Quercus nigra*	17.5	
T-5	Water Oak	*Quercus nigra*	19.0	
T-5	Water Oak	*Quercus nigra*	20.3	
T-6	Exotic	*Exotic*	15.3	
T-7	Sweetbay	*Magnolia virginiana*	12.3	
T-8	American Holly	*Ilex opaca*	6.0	
T-9	Water Oak	*Quercus nigra*	17.2	
T-10	Water Oak	*Quercus nigra*	17.5	Multilstem
T-11	American Holly	*Ilex opaca*	13.2	
T-12	Water Oak	*Quercus nigra*	19.5	
T-13	Water Oak	*Quercus nigra*	18.0	
T-14	Red Maple	*Acer ruprum*	14.0	
T-15	American Holly	*Ilex opaca*	6.8	
T-16	American Holly	*Ilex opaca*	9.2	
T-17	Water Oak	*Quercus nigra*	13.2	Unhealthy
T-18	Water Oak	*Quercus nigra*	24.5	
T-19	Water Oak	*Quercus nigra*	17.0	
T-20	Tuliptree	*Liriodendron tulipifera*	13.0	
T-21	Black Gum	*Nyssa sylvatica*	21.5	
T-22	Black Gum	*Nyssa sylvatica*	12.9	
T-23	Black Gum	*Nyssa sylvatica*	21.0	
T-24	Black Gum	*Nyssa sylvatica*	16.9	Multilstem
T-25	Black Gum	*Nyssa sylvatica*	18.2	
T-26	Tuliptree	*Liriodendron tulipifera*	17.5	
T-27	Black Gum	*Nyssa sylvatica*	17.0	
T-28	Black Gum	*Nyssa sylvatica*	16.2	
T-29	Tuliptree	*Liriodendron tulipifera*	14.5	
T-30	Tuliptree	*Liriodendron tulipifera*	17.5	
T-31	Black Gum	*Nyssa sylvatica*	19.5	
T-32	Tuliptree	*Liriodendron tulipifera*	19.6	Multilstem
T-33	Water Oak	*Quercus nigra*	28.1	Multilstem
T-34	Red Maple	*Acer ruprum*	18.1	Multilstem
T-35	Southern Magnolia	*Magnolia grandiflora*	16.0	
T-36	Water Oak	*Quercus nigra*	17.0	
T-37	Water Oak	*Quercus nigra*	22.2	Unhealthy
T-38	Water Oak	*Quercus nigra*	23.3	
T-39	Water Oak	*Quercus nigra*	20.2	
T-40	Water Oak	*Quercus nigra*	18.5	
T-41	Water Oak	*Quercus nigra*	12.2	
T-42	Water Oak	*Quercus nigra*	17.8	Multilstem
T-43	Water Oak	*Quercus nigra*	19.2	
T-44	Southern Magnolia	*Magnolia grandifolia*	14.0	
T-45	Black Gum	*Nyssa sylvatica*	12.7	
T-46	Tuliptree	*Liriodendron tulipifera*	13.0	
T-47	Sweetbay	*Magnolia virginiana*	18.3	Multilstem
T-48	Sweetbay	*Magnolia virginiana*	16.6	Multilstem
T-49	Sweetbay	*Magnolia virginiana*	12.2	
T-50	Tuliptree	*Liriodendron tulipifera*	12.2	
T-51	Live Oak	*Quercus virginiana*	17.7	
T-52	Water Oak	*Quercus nigra*	28.2	
B-1	Water Oak	*Quercus nigra*	17.7	
B-2	Water Oak	*Quercus nigra*	17.8	
B-3	Water Oak	*Quercus nigra*	20.6	Multilstem
B-4	Water Oak	*Quercus nigra*	22.6	Multilstem
B-5	Live Oak	*Quercus virginiana*	27.0	
B-6	Water Oak	*Quercus nigra*	23.8	
B-7	Water Oak	*Quercus nigra*	27.8	
B-8	Water Oak	*Quercus nigra*	29.7	Multilstem
B-9	Water Oak	*Quercus nigra*	25.3	Multilstem
B-10	Water Oak	*Quercus nigra*	17.0	Unhealthy
B-11	Water Oak	*Quercus nigra*	13.0	
B-12	Water Oak	*Quercus nigra*	12.1	
B-13	Water Oak	*Quercus nigra*	19.0	
B-14	Water Oak	*Quercus nigra*	23.7	
B-15	Water Oak	*Quercus nigra*	22.0	
B-16	Water Oak	*Quercus nigra*	20.5	
B-17	Water Oak	*Quercus nigra*	22.7	
B-18	Water Oak	*Quercus nigra*	19.5	
B-19	Water Oak	*Quercus nigra*	17.5	
B-20	Water Oak	*Quercus nigra*	17.5	
B-21	Water Oak	*Quercus nigra*	29.5	
B-22	Water Oak	*Quercus nigra*	23.4	
B-23	Water Oak	*Quercus nigra*	25.5	
B-24	Water Oak	*Quercus nigra*	15.0	
B-25	Water Oak	*Quercus nigra*	22.3	
B-26	Exotic	*Exotic*	12.2	
B-27	Live Oak	*Quercus virginiana*	35.0	
B-28	Water Oak	*Quercus nigra*	24.0	
B-29	Water Oak	*Quercus nigra*	19.0	
B-30	Water Oak	*Quercus nigra*	29.5	
B-31	Water Oak	*Quercus nigra*	27.5	
B-32	Live Oak	*Quercus virginiana*	30.3	
B-33	Water Oak	*Quercus nigra*	14.2	
B-34	Water Oak	*Quercus nigra*	15.3	
B-35	Water Oak	*Quercus nigra*	18.5	
B-36	Water Oak	*Quercus nigra*	14.0	Unhealthy
B-37	Water Oak	*Quercus nigra*	25.5	Multilstem
B-38	Water Oak	*Quercus nigra*	13.5	
B-39	Water Oak	*Quercus nigra*	26.8	
B-40	Water Oak	*Quercus nigra*	27.7	Multilstem
B-41	Water Oak	*Quercus nigra*	28.0	
B-42	Water Oak	*Quercus nigra*	23.5	
B-43	Water Oak	*Quercus nigra*	19.3	
B-44	Water Oak	*Quercus nigra*	16.4	
B-45	Water Oak	*Quercus nigra*	18.7	
B-45A	Black Gum	*Nyssa sylvatica*	36.3	
B-46	Water Oak	*Quercus nigra*	16.8	
B-47	Water Oak	*Quercus nigra*	26.0	
B-47	Water Oak	*Quercus nigra*	28.0	
B-48	Water Oak	*Quercus nigra*	14.0	
B-49	Water Oak	*Quercus nigra*	12.5	

SHEET:	DATE:	DRAWN BY:	PROJECT NO.:
2 OF 2	06/05/23	KDJ	2023-369

8500 North Davis Hwy
Escambia County, Fl

PROTECTED TREE TABLE

NO.	DATE	APPR.	REVISION/ACTION TAKEN

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