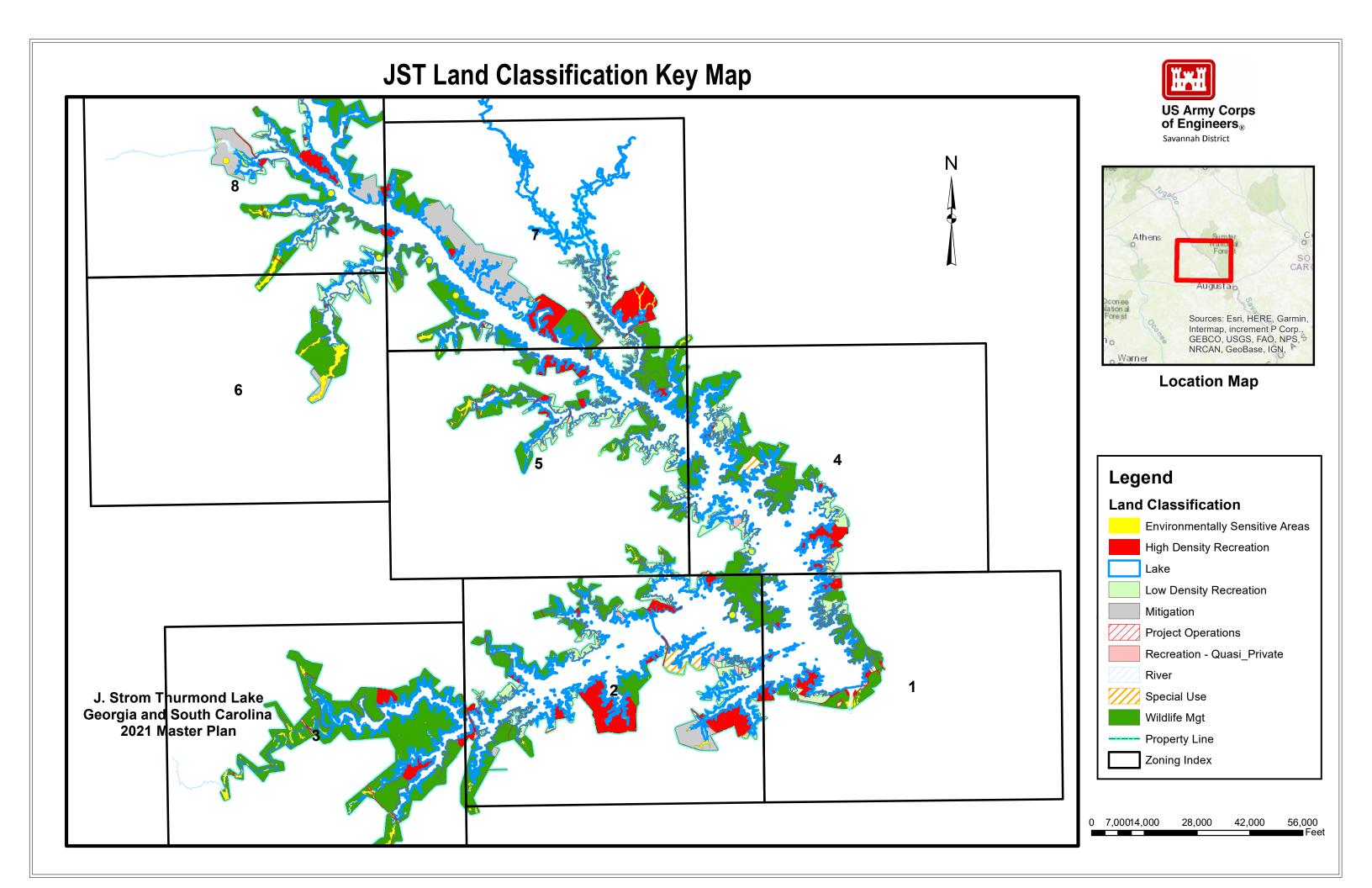
Appendix A

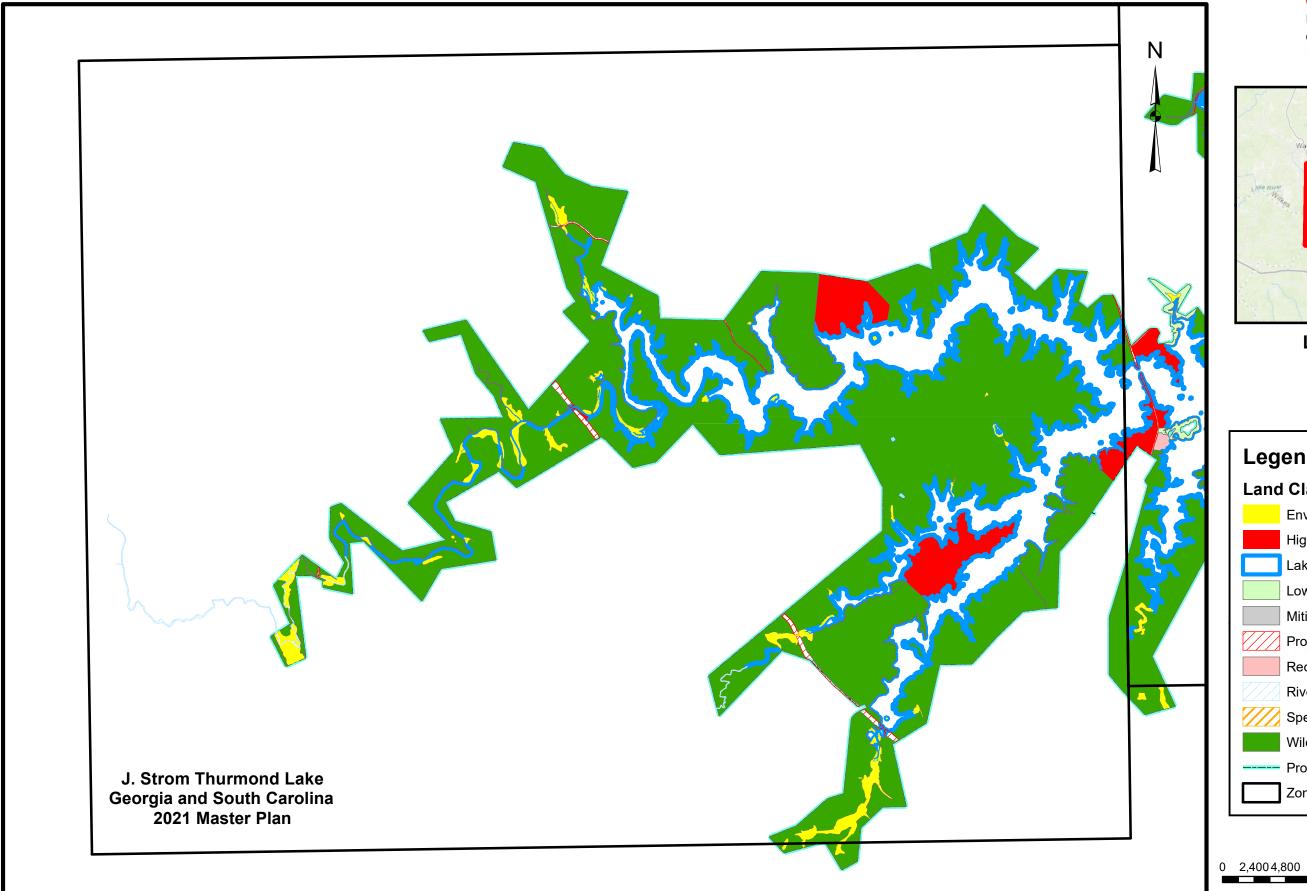
Land Classification Maps



JST Land Classification Maps- Plate 1 of 8 US Army Corps of Engineers_® Savannah District Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, **Location Map** Legend **Land Classification** Environmentally Sensitive Areas High Density Recreation Low Density Recreation Mitigation Project Operations Recreation - Quasi_Private River Special Use Wildlife Mgt ---- Property Line J. Strom Thurmond Lake Zoning Index **Georgia and South Carolina** 2021 Master Plan 0 2,3754,750 14,250 19,000 9,500

JST Land Classification Maps- Plate 2 of 8 US Army Corps of Engineers_® Savannah District Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, GN, **Location Map** Legend **Land Classification** Environmentally Sensitive Areas High Density Recreation Low Density Recreation Mitigation Project Operations Recreation - Quasi_Private River Special Use Wildlife Mgt J. Strom Thurmond Lake --- Property Line **Georgia and South Carolina** Zoning Index 2021 Master Plan 0 2,3754,750 9,500 14,250 19,000

JST Land Classification Maps- Plate 3 of 8





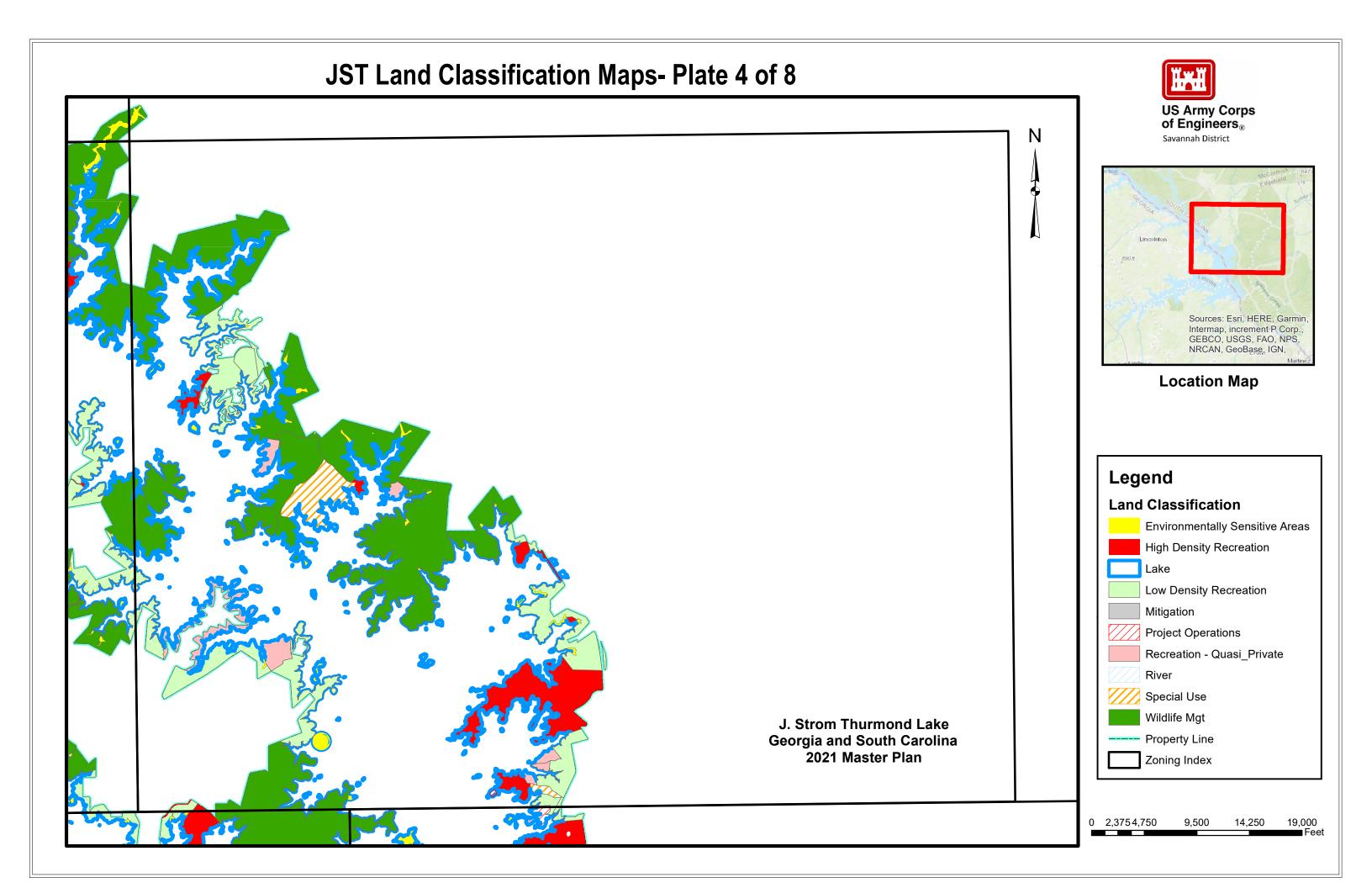


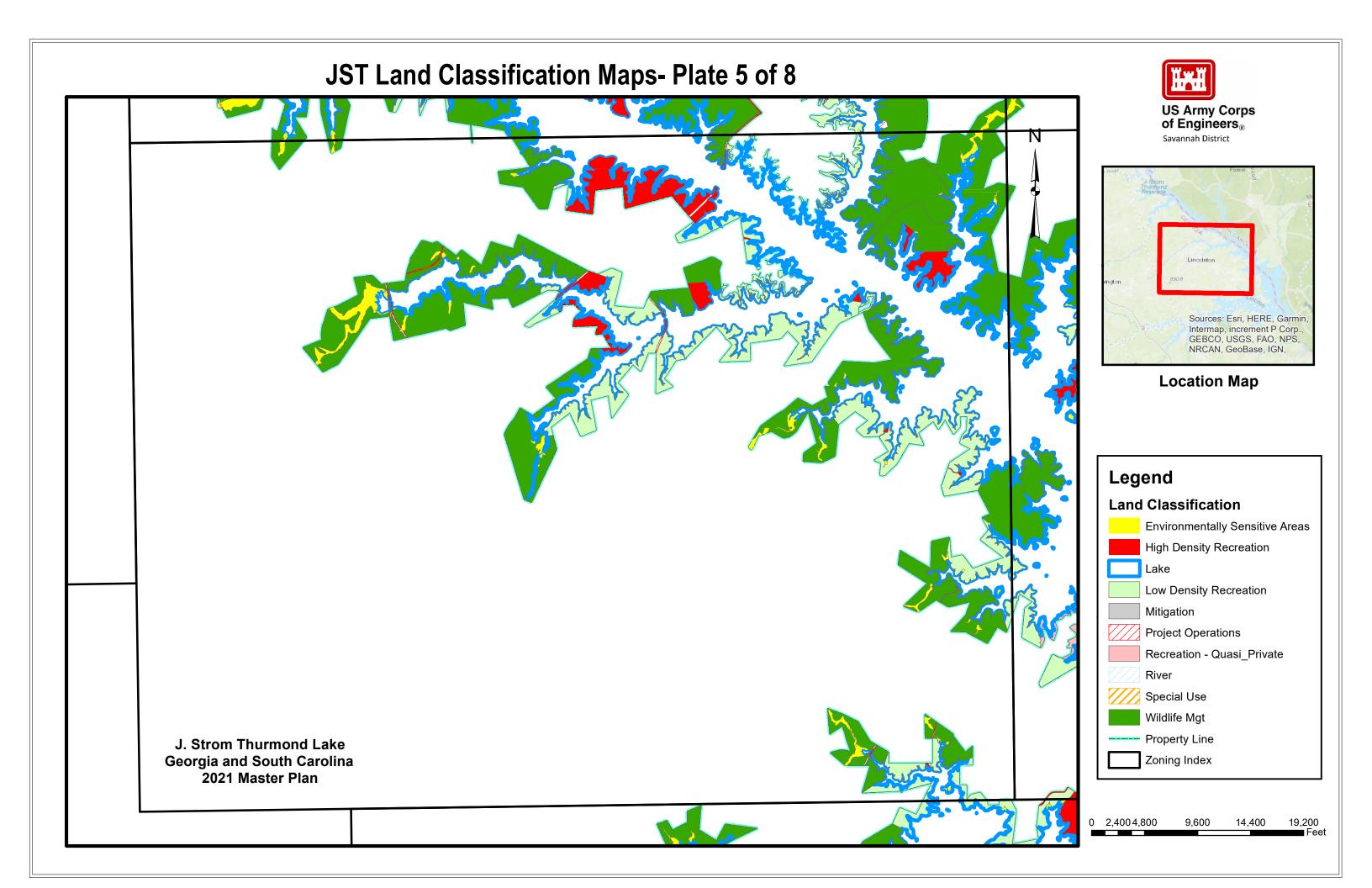
Location Map



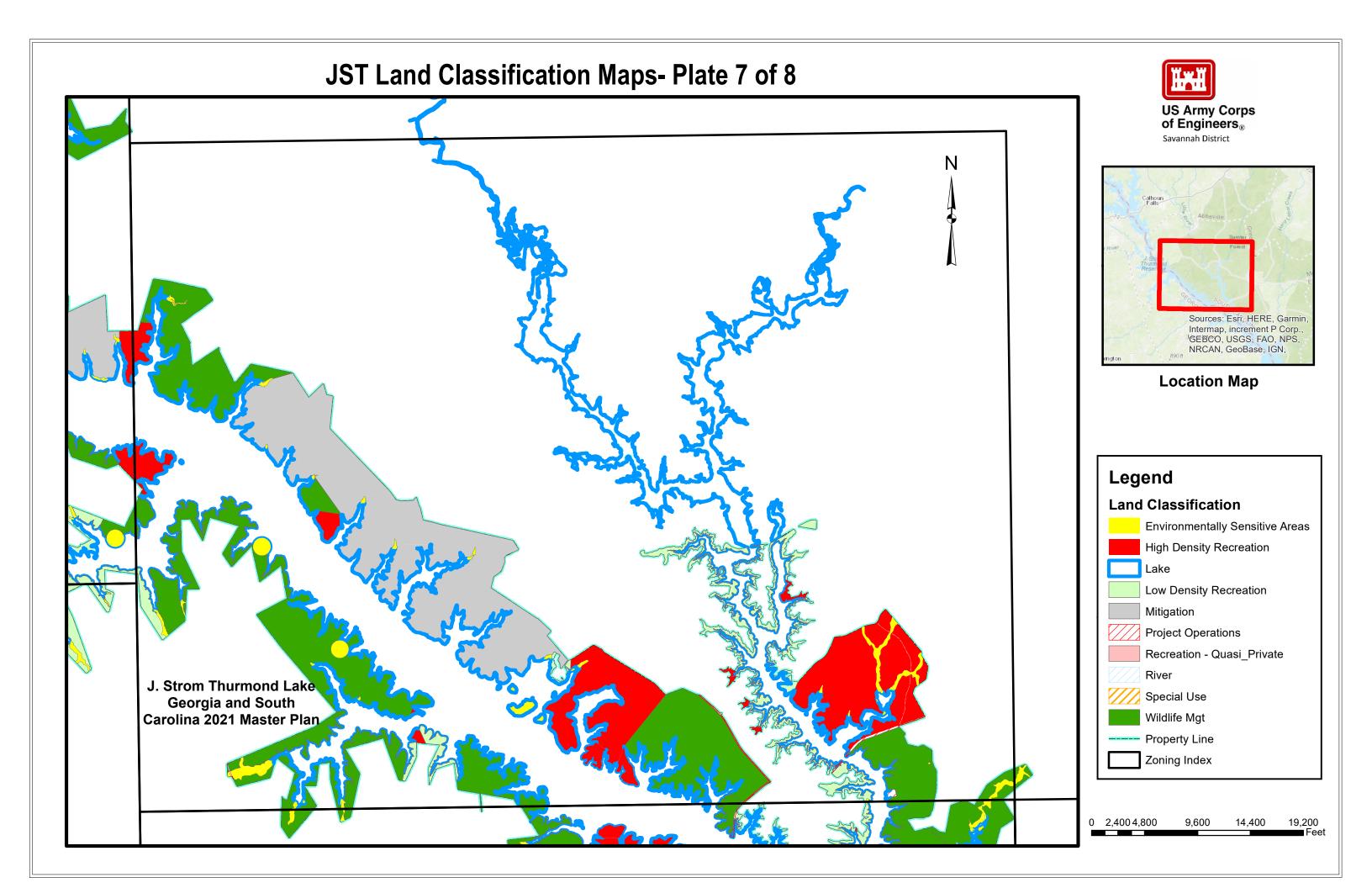
9,600

14,400 19,200





JST Land Classification Maps- Plate 6 of 8 US Army Corps of Engineers_® Savannah District Ν Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, **Location Map** Legend **Land Classification** Environmentally Sensitive Areas High Density Recreation Lake Low Density Recreation Mitigation Project Operations Recreation - Quasi_Private River Special Use Wildlife Mgt ---- Property Line J. Strom Thurmond Lake Zoning Index **Georgia and South Carolina** 2021 Master Plan 0 2,4004,800 9,600 14,400 19,200



JST Land Classification Maps- Plate 8 of 8 US Army Corps of Engineers_® Ν Savannah District Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, **Location Map** Legend **Land Classification** Environmentally Sensitive Areas High Density Recreation Lake Low Density Recreation Mitigation Project Operations Recreation - Quasi_Private River Special Use Wildlife Mgt --- Property Line J. Strom Thurmond Lake Zoning Index **Georgia and South Carolina** 2021 Master Plan 0 2,4004,800 14,400 19,200

Appendix B

Site-Specific Proposed Changes

LOCATION	OPERATOR	PROPOSED IMPROVEMENTS
Project Manager's Office/Visitor Center, Power Plant, Maintenance/Storage Compounds	USACE	 Necessary maintenance/renovation of existing buildings Replace aging storage buildings Add two bays to existing pole barn, USACE storage compound
Below Dam, SC Day Use Area	USACE	Necessary maintenance/renovation of existing facilities Improved parking and traffic flow at ramp
Clarks Hill Park	USACE	 Necessary maintenance/upgrade of existing facilities Relocate fish cleaning station/improve traffic flow Increase boat parking Install playground and two park host sites
Scotts Ferry Boat Ramp	USACE	- Necessary maintenance/upgrade of existing facilities
Modoc Campground	USACE	 Necessary maintenance/upgrade of existing facilities Electrical upgrades, sites 1-10, 12-15 Shoreline stabilization Re-establish beach area Invasive species treatment
JST Volunteer Village	USACE	- Necessary maintenance/upgrade of existing facilities - Addition of 12 campsites, full hook-ups
Modoc Boat Ramp	USACE	 Necessary maintenance/upgrade of existing facilities Additional 40-space parking Additional launch ramps Tournament weigh station, shelter station and restroom Invasive species treatment
Parksville Recreation Area	USACE	 Necessary maintenance/upgrade of existing facilities Disc golf course Playground and utilities, Shelter 2 Road realignment, expanded trailer parking Additional vault toilet

Dordon Creek Boat Ramp	USACE	- Necessary maintenance/upgrade of existing facilities - Additional parking
Hawe Creek Campground	USACE	 Necessary maintenance/upgrade of existing facilities Electrical upgrades, sites 25-34 Improved traffic flow at ramp Shoreline stabilization
Leroys Ferry Campground	USACE	 Necessary maintenance/upgrade of existing facilities Campsite renovation Shoreline stabilization Invasive species treatment
Mt. Carmel Recreation Area	USACE	Possible lease for following operations: - Development of overnight youth camp - Cabins/yurts - Minor marina - Add courtesy dock at day use ramp
Mt. Pleasant Boat Ramp	USACE	- Necessary maintenance/upgrade of existing facilities
Calhoun Fall Ramp	USACE	- Necessary maintenance/upgrade of existing facilities
Morrahs Boat Ramp	USACE	 Necessary maintenance/upgrade of existing facilities 20 additional trailer parking spaces Potable water and new restroom Shoreline stabilization
Gill Point Recreation Area	USACE	- Necessary maintenance/upgrade of existing facilities - Add vault toilet at ramp
Bussey Point Campground	USACE	- Necessary maintenance/upgrade of existing facilities - Add 10 campsites - Extend electricity and county water to area - Add park host site - Add Adirondack shelter, Area 3
Amity Recreation Area	USACE	 Necessary maintenance/upgrade of existing facilities Upgrade restroom at boat ramp Add second attendant pad Replace volleyball court
Winfield Campground	USACE	- Necessary maintenance/upgrade of existing facilities - Add waterborne shower facility

		- Construct group camp with 1-20 campsites
		- Add 15-20 individual campsites with hookups
		- Add boat ramp outside campground, 70 trailer
		parking spaces and courtesy dock
Ridge Road	USACE	- Necessary maintenance/upgrade of existing
Campground		facilities
		- Relocate gate house and attendant campsites
		- Add 20-30 campsites with hookups
		- Construct additional waterborne shower facility
		- Add boat ramp with 70 trailer parking spaces
		outside campground
		- Invasive species treatment
Keg Creek Boat	USACE	- Necessary maintenance/upgrade of existing
Ramp		facilities
		- Add trailer parking species
		- Improve restroom facility
		- Add street lights to bank fishing/trail parking
		and sidewalk
Deteroburg	USACE	- Shoreline stabilization
Petersburg Campground	USACE	- Necessary maintenance/upgrade of existing facilities
Campground		- Add 20-30 campsites with hookups
		- Add vaterborne shower facility
		- Add park host/volunteer campsite
		- Construct amphitheater (75-person capacity)
		- Construct additional parking (74-80 loop)
		- Additional support facilities and parking at
		Bartram
		Trail parking area
		- Shoreline stabilization
Lake Springs	USACE	- Necessary maintenance/upgrade of existing
Recreation Area		facilities
		- Add park attendant/volunteer campsite
		- Enlarge boat ramp parking area
		- Expand amenities at existing group shelters
		- Upgrade portions of Bartram Trail connector
		trail
West Dam Recreation	USACE	- Add pet beach area
Area	USACE	- Necessary maintenance/upgrade of existing facilities
		- Add park attendant/volunteer campsite
		- Expand amenities at existing group shelter
Below Dam, GA	USACE	- Necessary maintenance/upgrade of existing
Boat Ramp	30,102	facilities
2001.101119		- Improve traffic flow and parking at ramp
		- Maintain open vistas from upper parking area
	l	1 - Mantani Open vistas nom upper parking alea

Hamilton Branch State Park	SCPRT	- Necessary maintenance/upgrade of existing facilities
Baker Creek State Park	SCPRT	- Necessary maintenance/upgrade of existing facilities - Add courtesy dock and paved sidewalk, Hwy 378 boat ramp - Add ADA accessible fishing pier, picnic area
Hickory Knob State Park	SCPRT	- Necessary maintenance/upgrade of existing facilities - Construct new 100-room indoor access hotel, restaurant and convention center - Add 10 camper cabins adjoining campground
Bobby Brown Park	GADNR/Elbert County	 Necessary maintenance/upgrade of existing facilities Additional yurts Fuel dock Additional boat ramp and parking Beach area Amphitheaters 18-hole disc golf course Miniature golf course Outdoor education center and trails
Elijah Clark State Park	GADNR	- Necessary maintenance/upgrade of existing facilities
Mistletoe State Park	GADNR	- Necessary maintenance/upgrade of existing facilities
Clarks Hill Ball Field	McCormick County	- Necessary maintenance/upgrade of existing facilities
Parksville Wayside	McCormick County	- Necessary maintenance/upgrade of existing facilities
William Bryant Dorn Sports Fishing and Boating Facility	McCormick County	- Necessary maintenance/upgrade of existing facilities
Broad River Campground	Lincoln County	 Necessary maintenance/upgrade of existing facilities Add multi-lane boat ramp with 40-car/trailer parking area and restroom, across Hwy 79
Hesters Ferry Campground	Lincoln County	 Necessary maintenance/upgrade of existing facilities Add mini-marina with fuel, limited wet slips Add day use facilities Amphitheater Beach

		- Cabins/yurts
Dowlesses Doot Down	Line also Carrete	- Expand boat ramp parking
Parkway Boat Ramp	Lincoln County	- Necessary maintenance/upgrade of existing facilities
		- Improve traffic flow and parking
		- Add group shelter/amphitheater
		- Possible site for satellite marina
Eddie Fletcher Park	Lincoln County	- Necessary maintenance/upgrade of existing facilities
Cherokee Recreation	Lincoln County	- Necessary maintenance/upgrade of existing
Area		facilities
		- Amphitheater, pavilion/shelter
		- Additional parking
		- Fishing pier
		- Mountain bike/hiking trails
		- Campsites
		- Cabins/yurts
Clay Hill Campground	Lincoln County	- Necessary maintenance/upgrade of existing
	1	facilities
		- Add electric/water to primitive campsites
		- Add campsites
		- Add gatehouse, camp store
		- Upgrade existing boat ramp
Raysville	McDuffie	- Necessary maintenance/upgrade of existing
Campground	County	facilities
Big Hart Campground	McDuffie	- Necessary maintenance/upgrade of existing
big Hart Gampground	County	facilities
	1	- Add 15-20 campsites with hookups
		- Relocate gate house
		- Install dump station at group camp
		- Invasive species control (feral hogs)
Holiday Park	Wilkes County	- Necessary maintenance/upgrade of existing
-	·	facilities
Wildwood Park	Columbia	- Necessary maintenance/upgrade of existing
	County	facilities
		- Visitor Center with 25 parking spaces
		- Amphitheater with 1,000 seating capacity
		- Equestrian campground
		- ADA-accessible super playground (2-acre)
		- Lodge, 100-room capacity
		- Cabins (24)
		- Confidence course, team building area
		- Archery area
		- Additional hiking/biking/equestrian/multi-use
	1	9 9 .
		l trails
		- Relocate beach area

Plum Branch Yacht	Private	- Necessary maintenance/upgrade of existing
Club	Concessionaire	facilities
		- Additional wet slip moorage
		- Additional dry storage units
		- Additional campsites
		- New bath house/laundry facility
		- Restaurant expansion
		- Seawall expansion/shoreline stabilization
Savannah Lakes	Private	- Necessary maintenance/upgrade of existing
Marina	Concessionaire	facilities
		- Possible satellite marina development
Soap Creek Marina	Private	- Necessary maintenance/upgrade of existing
·	Concessionaire	facilities
		- Renovate/replace existing cabins and
		associated courtesy docks
		- Construct 8-12 new cabins
		- Replace existing aged caretaker cabin
		- Add additional beach
		- Install playground
		- Add additional campsites with hookups
		- Add second bath house facility
		- Add dry stack storage facility
		- Replace existing docks, as needed
		- Install additional wet slips/docks at proposed
		satellite marina location (below SR 220 bridge)
		- Miniature golf course/putting green
		- Swimming pool/splash pad and snack bar.
Raysville Marina	Private	- Necessary maintenance/upgrade of existing
	Concessionaire	facilities
		- Add restaurant
2		- Add waterborne shower facility
Clarks Hill	Private	- Necessary maintenance/upgrade of existing
(Thurmond) Marina	Concessionaire	facilities
		- Add restaurant
		- Additional wet slips and dry storage facilities
		- Add acreage from original marina lease for
Tu = al = \AP 1 B 4 1	Duiter	additional campground development
Trade Winds Marina	Private	- Necessary maintenance/upgrade of existing
	Concessionaire	facilities
		- Additional dry storage facilities
		- Boat rentals
		- Additional rental cabins
Dointon Wast Arms	IIC Arms / Ft	- RV Campground development
Pointes West Army	U.S. Army, Ft.	- Necessary maintenance/upgrade of existing
Resort (formerly Ft.	Gordon	facilities
		- Add 11 new cottages/lodging units

Gordon Recreation Area)		- Add 4 additional dry storage sheds - Replace existing bath house
Clarks Hill Training Site	S.C. Army National Guard	- Necessary maintenance/upgrade of existing facilities - Additional training facilities approved in 2016 National Guard Real Property Development Plan (RPDP), including barracks (250-person capacity), expanded facility maintenance compound, readiness and training area for the multi-role bridge company, training support facilities for classroom and simulation training, new HQ facility, new 100-person capacity conference center, additional campsites, new shower facility, four additional cabins, and associate road and parking improvements. No additional development beyond the 2016 RPDP will be approved.
The Family "Y"	Non-profit organization	- Necessary maintenance/upgrade of existing facilities - Under partnership with The Children's Hospital of Georgia, the approved 2014 development plan includes the following: - Multi-purpose gym facility - 10 double cabin with bathroom/shower facilities - 10 singe cabins with bathroom/shower facilities - Medical facility - Welcome center - Swimming pool complex - Adaptive playground - Staff/Director/Caretaker cabins - New administrative building - Fishing house - Media center - Covered pavilion - Chapel - Amphitheater - Associated roads and utilities

Appendix C

Common Terrestrial and Aquatic Plants, Mammals, Reptiles, Amphibians, Birds, and Fish of

J. Strom Thurmond Project

Terrestrial Plants

Common Name	Scientific Name
Overstory	
Southern Sugar Maple	Acer barbatum
Red Maple	Acer rubrum
Silver Maple	Acer saccharum
River Birch	Betula nigra
Bitternut Hickory	Carya cordiformis
Pignut Hickory	Carya glabra
Shagbark Hickory	Carya ovata
Mockernut Hickory	Carya tomentosa
White Ash	Fraxinus americana
Green Ash	Fraxinus pennsylvanica
Sweetgum	Liquidambar styraciflua
Yellow Poplar	Liriodendron tulipifera
Southern Magnolia	Magnolia grandiflora
Blackgum	Nyssa sylvatica
Shortleaf Pine	Pinus echinata
Slash Pine	Pinus elliottii
Longleaf Pine	Pinus palustris
Loblolly Pine	Pinus taeda
Virginia Pine	Pinus virginiana
Sycamore	Platanus occidentallis
Eastern Cottonwood	Populus deltoides
White Oak	Quercus alba
Swamp White Oak	Quercus bicolor
Scarlet Oak	Quercus coccinea
Southern Red Oak	Quercus falcata
Turkey Oak	Quercus laevis
Laurel Oak	Quercus laurifolia
Blackjack Oak	Quercus marilandica
Water Oak	Quercus nigra
Pin Oak	Quercus palustris
Willow Oak	Quercus phellos
Swamp Chestnut Oak	Quercus prinus
Northern Red Oak	Quercus rubra
Post Oak	Quercus stellata
Black Oak	Quercus velutina
Winged elm	Ulmus alata
American elm	Ulmus americana

Terrestrial Plants Continued

Common Name	Scientific Name
Midstory	Goldming Hamis
Boxelder	Acer negundo
Beauty-berry	Callicarpa americana
American Hornbeam, Musclewood	Carpinus caroliniana
Hackberry	Celtis occidentalis
Redbud	Cercis canadensis
Fringetree	Chionanthus virginicus
Dogwood	Cornus florida
Hawthorn	Craetagus sp.
Persimmon	Diospyros virginiana
American Beech	Fagus grandifolia
Honeylocust	Gleditsia triacanthos
American Holly	llex opaca
Black Walnut	Juglans nigra
Eastern Red Cedar	Juniperus virginiana
Red Mulberry	Morus rubra
Waxmyrtle	Myrica cerifera
Eastern Hop Hornbeam, Ironwood	Ostrya virginiana
Sourwood	Oxydendron arboreum
Black Cherry	Prunus serotina
Wild Plum	Prunus sp.
Winged Sumac	Rhus copallina
Black locust	Robinia pseudoacacia
Palmetto	Sabal minor
Black Willow	Salix nigra
Sassafras	Sassafras albidum
Strawberry Bush	Euonymus americanus
Southern Catapala	Catalpa bignonioides
Sparkleberry	Vaccinium arboreum
Switch Cane	Arundinaria tecta
River Cane	Arundinaria gigantea
Blueberry	Vaccinium corymbosum
Partridge Pea	Chamaecrista fasciculata
Ground Covers	
Trumpet Creeper	Campsis radicans
Yellow jessamine	Gelsemium sempervirens
Virginia Creeper	Parthenocissus quinquefolia
Ferns	Polystichum sp.
Elephant's-Foot	Elephantopus tomentosus
Spotted Wintergreen	Chimaphila maculata
Aster	Aster sp.
Dogfennel	Eupatorium capillifolium

Ground Covers Continued

Common Name	Scientific Name
Uniola	Uniola sp.
Poison Oak	Rhus quercifolia
Poison Ivy	Rhus radicans
Wild Sunflower	Helianthus sp.
Ragweed	Ambrosia artemisifolia
Poison Sumac	Rhus vernix
Partridge Berry	Mitchella repens
Blackberry	Rubus sp.
Greenbrier, Smilax	Smilax sp.
Panicum	Panicum sp.
Plumegrass	Erianthus sp.
Wood grass	Uniola sessiliflora
Beggarweed	Desmodium sp.
Periwinkle	Vinca minor
Bluestem Grass	Andropogon sp.
Muscadine	Vitis rotundifolia

Aquatic Plants

Common Name	Scientific Name
Brazilian elodea, egeria	Egeria densa
Alligatorweed	Alternanthera philoxeroides
American lotus, lotus lily	Nelumbo lutea
Fanwort	Cabomba caroliniana
Coontail, hornwort	Ceratophyllum demersum
Chara, musk grass	Chara sp.
Elodea	Elodea canadensis
Marsh Hibiscus	Hibiscus moscheutos
Southern watergrass	Hydrochloa caroliniensis
Water pennywort	Hyrocotyle umbellata
American Waterwillow	Justicia americana
Southern naiad	Najas guadalupensis
Slender naiad, spiny-leaf naiad	Najas minor
Fragrant waterlily	Nymphaea odorata
Maidencane	Panicum hemitomon
Water paspalum	Paspalum fluitans
Pickerelweed	Pontederia cordata
Pondweed	Potemogeton sp.
Arrowheads	Sagittaria sp.
Cattail	Typha sp.

Non Native Plants

Common Name	Scientific Name
Japanese honeysuckle	Lonicera japonica
China-berry	Melia azedarach
Kudzu	Pueraria lobata
Wisteria	Wisteria frutescens
Chinese Tallow	Sapium sebiferum
Giant Reed	Arundo donax
Chinese Privet	Ligustrum sinense
Old World Climbing Fern	Lygodium microphyllum
Johnson Grass	Sorghum halepense
Autumn Olive or Eleagnus	Eleagnus umbellata
Nandina	Nandina domestica
Brazilian Vervain	Verbena brasiliensis
Bamboo	Phyllostachys sp
Mimosa	Albizia julibrissin
Hydrilla	Hydrilla verticillata
Alligator Weed	Alternanthera philoxeroides
Parrot Feather	Myriophyllum aquaticum
Waterhyacinth	Eichhornia crassipes
Water primrose	Ludwigia hexapetala
Eurasian watermilfoil	Myriophyllum spicatum

Birds

Common Name	Scientific Name	Season
Ducks & Geese		
Wood Duck	Aix sponsa	Year Round
Mallard	Anas platyrhynchos	Year Round
Canada Goose	Branta canadensis	Year Round
Hooded Merganser	Lophodytes cucullatus	Year Round
Blue-winged Teal	Anas discors	Winter
Green-winged Teal	Podilymbus podiceps	Winter
American Black Duck	Anas rubripes	Winter
Northern Shovelers	Anas clypeata	Winter
American Wigeon	Anas Americana	Winter
Gadwall	Anas strepera	Winter
Northern Pintail	Anas acuta	Winter
Canvasback	Aythya vallisinera	Winter
Redhead	Aythya americana	Winter
Ring-necked Duck	Aythya collaris	Winter

Ducks & Geese Continued

Ducks & Occse Continued		
Common Name	Scientific Name	Season
Greater Scaup	Aythya marila	Winter
Lesser Scaup	Aythya affinis	Winter
Long-tailed Duck	Clangula hyemalis	Winter
Bufflehead	Bucephala albeola	Winter
Common Golden eye	Bucephala clangula	Winter
Common Merganser	Mergus merganser	Winter
Red Breasted Merganser	Mergus serrator	Winter
Ruddy Duck	Oxyura jamaicensis	Summer
	Loons	
Common Loon	Gavia immer	Winter
Pacific Loon	Gavia Pacifica	Winter
Red Throated Loon *	Gavia stellata	Winter
	Grebes	
Pied Billed Grebe	Podilymbus podiceps	Year Round
Horned Grebe	Podiceps auritus	Winter
Eared Grebe	Podiceps nigricollis	Winter
Rails,	Gallinules, & Coots	
King Rail *	Rallus elegans	Summer
Black Rail *	Laterallius jamaicensis	Summer
Virginia Rail	Rallus limicola	Winter
Common Moorhen	Gallinula chloropus	Winter
Purple Gallinule	Porphyrio martinica	Winter
American Coot	Fulica americana	Winter
Cormorants, V	Vaders, Pelicans, & Darters	
Double-crested Cormorant	Phalacrocorax auritus	Year Round
Great Egret	Ardea alba	Summer
Great Blue Heron	Ardea herodias	Summer
Green Heron	Butorides virescens	Summer
White Ibis	Eudocimus albus	Summer
Least Bittern*	Ixobryhus exilis	Summer
American Bittern *	Botaurus lentiginosus	Winter
Cattle Egret	Bubulcus ibis	Summer
Little Blue Heron	Egretta caerulea	Summer
Snowy Egret	Egretta thula	Summer
Black crowned Night Heron	Nycticorax nycticorax	Summer
Yellow crowned Night Heron	Nycticorax violacea	Summer
Wood Stork*	Mycteria americana	Late Summer
Brown Pelican	Pelecanus occidentalis	Winter
White Pelican	Pelecanus erythrorhynchos	Winter
Anhinga	Anhinga anhinga	Summer
	<u>. </u>	•

Birds Continued

Common Name	Scientific Name	Season
Common Name	Kingfisher	Ocason
Belted Kingfisher	Megaceryle alcyon	Year Round
Delted Kinghisher	Swifts	i cai Nouriu
Chimney Swift	Chaetura pelagica	Summer
	Hummingbird	Outilities
Ruby-throated Hummingbird	Archilochus colubris	Summer
Truby-tilloated Trufffffffgbild	Nightjars	Outilities
Chuck-will's-widow	Caprimulgus carolinensis	Summer
Whip-poor-will*	Caprimulgus vociferus	Summer
Common Nighthawk	Chordeiles minor	Summer
	ers & Sandpipers	Odminici
Killdeer	Charadrius vociferus	Year Round
Willet *	Tringa semipalmata	Winter
Greater Yellowlegs	Tringa melanoleuca	Winter
Lesser Yellowlegs*	Tringa melanoleaea Tringa flavipes	Winter
Dunlin *	Calidris alpinarcticola	Winter
Semipalmated Sandpiper	Calidris pusilla	Winter
Least Sandpiper	Calidris minutilla	Winter
Spotted Sandpiper	Actitis macularius	Winter
Upland Sandpiper	Bartramia longicauda	Winter
American Woodcock	Scolopax minor	Year Round
Wilson's Snipe	Gallinago delicate	Winter
Long- billed Dowitcher	Limnodromus scolopaceus	Winter
Short-billed Dowitcher *	Limnodromus griseus	Winter
Ruddy Turnstone *	Arenaria interpres	Winter
Traday Famorono	Gulls	VVIIICOI
Bonaparte's Gull	Chroicocephalus philadelphia	Winter
Herring Gull	Larus argentatus	Winter
Ring-billed Gull	Larus delawarensis	Winter
Lesser Black-backed Gull	Larus fuscus	Winter
	ers, Kites, Falcons, Osprey & E	
Turkey Vulture	Cathartes aura	Year Round
Black Vulture	Coragyps atratus	Year Round
Cooper's Hawk	Accipiter cooperii	Year Round
Sharp-shinned Hawk	Accipiter striatus	Winter
Red-tailed Hawk	Buteo jamaicensis	Year Round
Broad-winged Hawk	Buteo playtypterus	Summer
Red-shouldered Hawk	Buteo lineatus	Year Round
Northern Harrier	Circus cyaneus	Winter
Swallow-tailed Kite *	Elanoides forficatus	Summer

Vultures, Hawks, Harriers, Kites, Falcons, Osprey & Eagles Continued

vultures, nawks, narriers, Kites, Falcons, Osprey & Eagles Continued		
Common Name	Scientific Name	Season
Mississippi Kite	Ictinia mississippiensis	Summer
Peregrine Falcon *	Falco peregrinus	Winter
American Kestrel *	Falco sparverius	Year Round
Osprey	Pandion haliaetus	Year Round
Bald Eagle*	Haliaeetus leucocephalus	Year Round
Golden Eagle *	Aquila chrysaetos	Year Round
Pige	ons and Doves	
Mourning Dove	Zenaida macroura	Year Round
Common Ground Dove*	Columbina passerina	Year Round
Eurasian Collared - Dove	Streptopelia decaocto	Year Round
Rock Pigeon	Columba livia	Year Round
	Cuckoos	
Yellow-billed Cuckoo	Coccyzus americanus	Summer
	and New World Quail	
Northern Bobwhite	Colinus virginianus	Year Round
Wild Turkey	Meleagris gallopavo	Year Round
Waxwings		
Cedar Waxwing	Bombycilla cedrorum	Winter
Sparrows, Grosbeaks,	Buntings, & Old World Spa	arrows
Eastern Towhee	Pipilo erythrophthalmus	Year Round
Bachman's Sparrow *	Aimophila aestivalis	Year Round
Swamp Sparrow	Melospiza georgiana	Winter
Savannah Sparrow	Passerculus sandwichensis	Winter
Fox Sparrow	Passerella iliaca	Winter
Vesper Sparrow	Pooecetes gramineus	Winter
Chipping Sparrow	Spizella passerine	Year Round
White-throated Sparrow	Zonotrichia albicollis	Winter
White-crowned Sparrow	Zonotrichia leucophrys	Winter
Field Sparrow	Spizella pusilla	Year Round
Grasshopper Sparrow	Ammodramus savannarum	Year Round
Song Sparrow	Melospiza melodia	Year Round
White-throated Sparrow	Zonotrichia albicollis	Winter
Henslow's Sparrow *	Ammodramus henslowii	Winter
LeConte's Sparrow*	Ammodramus leconteii	Winter
Nelson's Sparrow *	Ammodramus nelsoni	Winter
Dark-eyed Junco	Junco hyemalis	Winter
Northern Cardinal	Cardinalis cardinalis	Year Round
Blue Grosbeak	Passerina caerulea	Year Round
Indigo Bunting	Passerina cyanea	Summer
Painted Bunting*	Passerina ciris	Summer
Dickcissel	Spiza americana	Winter
House Sparrow	Passer domesticus	Year Round

Birds Continued

Common Name	Scientific Name	Season
	Crows & Jays	1 0 0 0 0 0 0 0
American Crow	Corvus brachyrhynchos	Year Round
Fish Crow	Corvus ossifragus	Year Round
Blue Jay	Cyanocitta cristata	Year Round
,	Finches	
American Goldfinch	Carduelis tristis	Year Round
House Finch	Carpodacus mexicanus	Year Round
Purple Finch	Carpodacus purpureus	Winter
Pine Siskin	Spinus pinus	Winter
Black	birds and Orioles	•
Bobolink	Dolichonyx oryzivorus	Winter
Red-winged Blackbird	Agelaius phoeniceus	Summer
Rusty Blackbird *	Euphagus carolinus	Winter
Orchard Oriole	Icterus spurius	Summer
Brown-headed Cowbird	Molothrus ater	Summer
Common Grackle	Quiscalus quiscula	Summer
Eastern Meadowlark	Sturnella magna	Summer
	Shrikes	
Loggerhead Shrike*	Lanius Iudovicianus	Summer
Mocking	birds and Thrashers	
Northern Mockingbird	Mimus polyglottos	Year Round
Brown Thrasher	Toxostoma rufum	Year Round
Gray Catbird	Dumetella carolinensis	Year Round
Chick	adees and Titmice	
Tufted Titmouse	Baeolophus bicolor	Year Round
Carolina Chickadee	Poecile carolinensis	Year Round
	lood Warblers	
Pine Warbler	Dendroica pinus	Year Round
Yellow-breasted Chat	Icteria virens	Summer
Prothonotary Warbler *	Protonotaria citrea	Summer
American Redstart	Setophaga ruticilla	Summer
Hooded Warbler	Wilsonia citrina	Summer
Ovenbird	Seiurus aurocapilla	Summer
Louisiana Waterthrush	Seiurus motacilla	Summer
Black-and-White Warbler	Mniotila varia	Summer
Kentucky Warbler *	Oporornis formosus	Summer
Common Yellowthroat	Geothlypis trihas	Summer
Hooded Warbler	Wilsonia citrina	Summer
Northern Parula	Parula americana	Summer
Yellow-throated Warbler	Dendroica dominica	Summer
Prairie Warbler *	Dendroica discolor	Summer

Wood Warblers Continued

TTOOU TTUINICIS CONTINUCU		_
Common Name	Scientific Name	Season
Yellow-rumped Warbler	Dendroica coronata	Winter
Blue-winged Warbler *	Vermivora pinus	Summer
Cerulean Warbler *	Dendroica cerulea	Summer
Palm Warbler	Dendroica palmarum	Winter
Swainson's Warbler*	Limnothlypis swainsonii	Summer
Orange-crowned Warbler	Vermivoa celata	Winter
	Tanagers	
Summer Tanager	Piranga rubra	Summer
Scarlet Tanager	Piranga olivacea	Summer
Gnatcatchers	s, Kinglets, & Thrushes	
Ruby-crowned Kinglet	Regulus calendula	Winter
Golden-crowned Kinglet	Regulus strapa	Winter
Blue-gray Gnatcatcher	Polioptila caerulea	Summer
Wood Thrush*	Hylocichla mustelina	Summer
Eastern Bluebird	Sialia sialis	Year Round
Hermit Thrush	Catharus guttatus	Winter
American Robin	Turdus migratorius	Year Round
Nuthato	hes and Creepers	•
White-breasted Nuthatch	Sitta carolinensis	Year Round
Red-breasted Nuthatch	Sitta canadensis	Winter
Brown-headed Nuthatch*	Sitta pusilla	Year Round
Brown Creeper	Certhia americana	Winter
·	Starlings	
European Starling	Sturnus vulgaris	Year Round
Wren	, Pipits, & Larks	
Carolina Wren	Thryothorus Iudovicianus	Year Round
House Wren	Troglodytes aedon	Winter
Winter Wren	Troglodytes troglodytes	Winter
Sedge Wren*	Cistothorus platensis	Winter
Marsh Wren	Cistothorus palustris	Winter
American Pipit	Anthus rubescens	Winter
Horned Lark	Eremophila alpestris	Winter
Flycatchers		
Eastern Wood Pewee	Contopus virens	Summer
Acadian Flycatcher	Empidonax virescens	Summer
Great Crested Flycatcher	Myiarchus crinitus	Summer
Eastern Phoebe	Sayornis phoebe	Summer
Eastern Kingbird	Tyrannus tyrannus	Summer
	•	

Birds Continued

Vireos Vireo olivaceus		
Vireo olivaceus		
1110001110000	Summer	
Vireo Grieus	Summer	
Vireo flavifrons	Summer	
Vireo solitaries	Winter	
Noodpeckers		
Dryocopus pileatus	Year Round	
Melanerpes carolinus	Year Round	
Melanerpes erythrocephalus	Year Round	
Picoides pubescens	Year Round	
Picoides villosus	Year Round	
Sphyrapicus varius	Winter	
Colaptes auratus	Year Round	
Picoides borealis	Year Round	
Owls		
Bubo virginianus	Year Round	
Megascops asio	Year Round	
Strix varia	Year Round	
Tyto alba	Year Round	
Swallows		
Tachycineta bicolor	Summer	
Stelgidopteryx serripennis	Summer	
Progne subis	Summer	
Petrochelidon pyrrhonota	Summer	
Hirundo Rustica	Summer	
	Vireo flavifrons Vireo solitaries Woodpeckers Dryocopus pileatus Melanerpes carolinus Melanerpes erythrocephalus Picoides pubescens Picoides villosus Sphyrapicus varius Colaptes auratus Picoides borealis Owls Bubo virginianus Megascops asio Strix varia Tyto alba Swallows Tachycineta bicolor Stelgidopteryx serripennis Progne subis Petrochelidon pyrrhonota	

^{* -} Identified as species of concern under the Migratory Bird Treaty Act X - possible, not found on project,

Compiled from "Georgia Breeding Bird Atlas", Georgia Ornithological Society Records, UGA Museum of Natural History Records, Peterson Field Guide (2010) – Range maps, and field observations.

Mammals

Common Name	Scientific Name
Hispid Cotton Rat	Sigmodon hispidus
Golden Mouse	Ochrotomys nuttalli
Eastern Harvest Mouse	Reithrodontomys humulis
White-footed Mouse	Peromyscus leucopus
Cotton Mouse	Peromyscus gossypinus
Common Muskrat	Ondatra zibethicus

Mammals Continued

Common Name	Scientific Name
Common Name	Scientific Name
Oldfield Mouse	Peromyscus polionotus
Southern Flying Squirrel	Glaucomys volans
Eastern Gray Squirrel	Sciurus carolinensis
Eastern Fox Squirrel	Sciurus niger
Eastern Chipmunk	Tamias striatus
Southern Short-tailed Shrew	Blarina carolinensis
Least Shrew	Cryptotis parva
Eastern Mole	Scalopus aquaticus
Eastern Cottontail	Sylvilagus aquaticus
Swamp Rabbit	Sylvilagus floridanus
Eastern Pipistrille	Pipistrellus subflavus
Rafineques Big Eared bat	Corynorhinus rafinesquii
Southeastern Myotis	Myotis austroriparius
Big Brown Bat	Eptesicus fuscus
Little Brown Bat	Myotis lucifugus
Silver-haired Bat	Lasionycteris noctivagans
Eastern Red Bat	Lasiurus borealis
Hoary Bat	Lasiurus cinereus
Seminole Bat	Lasiurus seminolus
Evening Bat	Pipistrellus subflavus
Coyote	Canis latrans
Gray Fox	Urocyon cinereoargenteus
Red Fox	Vulpes vulpes
Bobcat	Lynx rufus
Striped Skunk	Mephitis mephitis
Spotted Skunk	Spilogale putorius
Long-tailed Weasel	Mustela frenata
Mink	Mustela vison
Northern Raccoon	Procyon lotor
Northern River Otter	Lontra canadensis
Virginia Opossum	Didelphis virginiana
American Beaver	Castor canadensis
Nine-banded Armadillo	Dasypus novemcinctus
White-tailed Deer	Odocoileus virginianus

Reptiles

Common Name	Scientific Name
Snak	es
Eastern Black Racer	Coluber constrictor
Corn Snake	Elaphe guttata
Rat Snake	Elaphe obsoleta

11

Snakes Continued

Snakes Continued	
Common Name	Scientific Name
Eastern Hognose Snake	Heterodon platirhinos
Southern Hognose	Heterodon simus
Mole Snake	Lampropeltis calligaster
Eastern King Snake	Lampropeltis getula
Scarlet King	Lampropeltis triangulum elapsoides
Brown Snake	Storeria dekayi
Coachwhip	Masticophis flagellum
Plain-bellied Watersnake	Nerodia erythrogaster
Northern Watersnake	Nerodia sipedon
Brown Watersnake	Nerodia taxispilota
Rough Green Snake	Opeodrys aestivus
Queen Snake	Regina septemvittata
Red-bellied Snake	Storeria occipitomaculata
Southeastern Crowned Snake	Tantila coronata
Eastern Ribbon Snake	Thamnophis suaritus
Common Garter Snake	Thamnophis sirtalis
Rough Earth Snake	Virginia striatula
Smooth Earth Snake	Virginia valeriae
Copperhead	Agkistrodon contortrix
Cottonmouth	Agkistrodon piscivorus
Timber Rattlesnake	Crotalus horridus
Pygmy Rattlesnake	Sistrurus miliarius
Liza	rds
Eastern Fence Lizard	Sceloporus undulatus
Green Anole	Anolis carolinensis
Five-lined Skink	Eumeces fasciatus
Southeastern Five-lined Skink	Eumeces inexpectatus
Six-lined Racerunner	Cnemidophorus sexlineatus
Slender Glass Lizard	Ophisaurus attenuatus
Eastern Glass Lizard	Ophisaurus ventralis
Broadhead Skink	Eumeces laticeps
Ground Skink	Scincella lateralis
American Alligator	Alligator mississippiensis
Turt	
Common Snapping Turtle	Chelydra serpentina
Eastern Box Turtle	Terrapene carolina
Pond Slider	Trachemys scripta
Painted Turtle	Chrysemys picta

Turtles Continued

Common Name	Scientific Name	
River Cooter	Pseudemys coninna	
Eastern Musk Turtle	Kinosternon subrubrum	
Common Musk Turtle	Sternotherus odoratus	
Spiny Softshell	Apalone spinifera	
Amphi		
Frogs and		
American Toad	Bufo americanus	
Fowler's Toad	Bufo fowleri	
Northern Cricket Frog	Acris crepitans	
Bird-voiced Treefrog	Hyla avivoca	
Cope's Gray Treefrog	Hyla chrysoscelis	
Green Treefrog	Hyla cinerea	
Barking Treefrog	Hyla gratiosa	
Squirrel Treefrog	Hyla squirella	
Spring Peeper	Pseudacris crucifer	
Upland Chorus Frog	Pseudacris feriarum	
Southern Chorus Frog	Pseudacris nigrita	
Eastern Narrowmouth Toad	Gastrophryne carolinensis	
Eastern Spadefoot Toad	Scaphiopus holbrookii	
Bullfrog	Rana catesbeiana	
Green Frog / Bronze Frog	Rana clamitans	
Pickerel Frog	Rana palustris	
Southern Leopard Frog	Rana sphenocephala	
Salama	nders	
Spotted Salamander	Ambystoma maculatum	
Marbled Salamander	Ambystoma opacum	
Mole Salamander	Ambystoma talpoideum	
Two-toed Amphiuma	Amphiuma means	
Spotted Dusky Salamander	Desmognathus conanti	
Two-lined Salamander	Eueycea bislineata complex	
Three-lined Salamander	Eueycea guttolineatta	
Atlantic Coast Slimy Salamander	Plethodon chlorobryonis	
Savannah Slimy Salamander	Plethodon savannah	
Mud Salamander	Pseudotriton montanus	
Red Salamander	Pseudotriton ruber	
**Compiled utilizing "Amphibians and Reptiles of Georgia" and the UGA Museum of		
Natural History Records website		

Fish

Common Name	Scientific Name	
Gam	ne Fish	
Bass	Moronidae	
Striped bass*	Morone saxatilis	
White bass	Morone chrysops	
Hybrid bass*	Morone saxaltils x Morone chrysops	
White perch	Morone americana	
Sunfish	Centrarchidae	
Largemouth bass	Micropterus salmoides	
Spotted bass	Micriopterus punctulatus	
Redeye bass	Micropterus coosae	
Black crappie	Pomoxis migromaculatus	
White crappie	Pomoxis annularis	
Bluegill	Lepomis macrochirus	
Redbreast	Lepomis auritus	
Green sunfish	Lepomis cyanellus	
Pumpkinseed	Lepomis gibbosus	
Flier	Centrarchus macropterus	
Warmouth	Chaenobryttus coronaris	
Redear	Lepomis microlophus	
Perch	Percidae	
Yellow perch	Perca flavescens	
Rouç	gh Fish	
Catfish	lctaluridae	
Channel catfish	Ictalurus punctatus	
White catfish	Ictalurus catus	
Blue catfish	Ictalurus furcatus	
Flat bullhead	Ictalurus platycephalus	
Brown bullhead	Ictalurus nebulosus	
Flathead catfish	Pylodictis olivaris	
Other		
Longnose gar	Lepospsteus osseus	
Chain pickeral (jack)	Esox niger	
Redhorse sucker	Maxostoma spp.	
Northern hogsucker	Hypentelium nigricans	
Spotted sucker	Minytrema melanops	
<u> </u>	Species	
Shad and herring	Clupeidae	
Gizzard shad	Dorosoma cepedianum	
Threadfin shad	Dorosoma petenense	
Blueback herring	Alosa aestivalis	

Forage Species Continued

· crage operior commune	
Minnows	Cyprinidae
Common carp	Cyprinus carpio
Grass carp*	Ctenopharyngodon idella
Spottail shiner	Notropics hudsonius
Golden shiner	Notemigonus chrysoleucas
Livebearers	Poeciliidae
Mosquito fish	Gambusia affinis

^{*} Stocked Species

Appendix D

Georgia Environmental Protection Division Order Concerning DDT Contamination

DEPARTMENT OF THE ARMY

SAVANNAH DISTRICT, CORPS OF ENGINEERS J. STROM THURMOND LAKE 510 CLARKS HILL HIGHWAY CLARKS HILL, SC 28621-9703 April 1, 2015

Subject: J. Strom Thurmond Lake Airstrip #1, HSI Site Number 10384, Compliance Status Report, Columbia County, Georgia, Thurmond Lake

Mr. John Maddox Georgia Department of Natural Resources Environmental Protection Division Hazardous Sites Response Program 2 Martin Luther King Jr. Drive, Suite 1462 East Atlanta, Georgia 30334-8600

Dear Mr. Maddox:

Enclosed is the Monitoring Evaluation Form for 2014 and 2015. J. Strom Thurmond Lake Airstrip #1, HSI Site Number 10384. There have been no changes to the site nor its land use designation in the Thurmond Master Plan.

If you have any questions regarding the compliance status report, please contact Environmental Compliance Coordinator Eric Haskell at 864-333-1171.

Sincerely,

Enclosure

Goott M. Hyatt Operations Project Manager

SITE USE AND TYPE 4 SOIL RRS MONITORING EVALUATION FORM

J Strom Thurmond Lake Airstrip#1, HSI Site No. 10384

TYPE	No.	CRITERIA RESPONSE	YES	NO
Land Use	1	Does this HSRA site meet the definition of non-residential property as defined in HSRA Rule 391-3-19.02(2)? "Non-residential property means any property or portion of a property not currently being used for human habitation or for other purposes with a similar potential for human exposure, at which activities have been or are being conducted that can be categorized in one of the 1987 Standard Industrial Classification major group"	X	
	1a	If no to 1, provide a written explanation (attached) to the EPD within 30 days.		
Exposure	2	Are site workers expected to be directly exposed to soils with chemical concentrations in excess of Type 4 RRS at this HSRA site in excess of 250 days per year?		X
	2a	If yes to 2, are these same site workers expected to be exposed to soils at this HSRA site in excess of 25 years throughout their career?		
Erosion	3	Is there evidence of soil erosion in the remedial areas of the site?		X
	3a	If yes to 3, is there evidence of erosion of these soils to off-site areas?		
	3b	If yes to 3a, are corrective measures being taken?		
	3с	If yes to 2, 3, 3a, and/or 3b, provide written explanation (attached) to the EPD within 30 days.		
Property Instruments	4	Do all leases or other property instruments for the site have the applicable deed notice language inserted into them.		N/A
	4a	If no to 4, provide a written explanation (attached) to the EPD within 30 days.		
Inspection	5	Date of inspection: 5 Mar 2014		
	5a	Name of inspector: Eric Haskell		
	5b	Photographs showing current land use (attached)	х	

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Scott M. Hyatt	Operations Project Manager
NAME (Please type or print)	TITLE

GNATURE April 2015
DATE

SITE USE AND TYPE 4 SOIL RRS MONITORING EVALUATION FORM

J Strom Thurmond Lake Airstrip#1, HSI Site No. 10384

TYPE	No.	CRITERIA RESPONSE	YES	NO
Land Use	1	Does this HSRA site meet the definition of non-residential property as defined in HSRA Rule 391-3-19.02(2)? "Non-residential property means any property or portion of a property not currently being used for human habitation or for other purposes with a similar potential for human exposure, at which activities have been or are being conducted that can be categorized in one of the 1987 Standard Industrial Classification major group"	X	
	1a	If no to 1, provide a written explanation (attached) to the EPD within 30 days.		
Exposure	2	Are site workers expected to be directly exposed to soils with chemical concentrations in excess of Type 4 RRS at this HSRA site in excess of 250 days per year?		X
	2a	If yes to 2, are these same site workers expected to be exposed to soils at this HSRA site in excess of 25 years throughout their career?		-
Erosion	3	Is there evidence of soil erosion in the remedial areas of the site?		X
	3a	If yes to 3, is there evidence of erosion of these soils to off-site areas?		
	3b	If yes to 3a, are corrective measures being taken?		
	3c	If yes to 2, 3, 3a, and/or 3b, provide written explanation (attached) to the EPD within 30 days.		
Property Instruments	4	Do all leases or other property instruments for the site have the applicable deed notice language inserted into them.		N/A
	4a	If no to 4, provide a written explanation (attached) to the EPD within 30 days.		
Inspection	5	Date of inspection: 1 Apr 2015		_
	5a	Name of inspector: Eric Haskell		
	5b	Photographs showing current land use (attached)	х	

Certification:

SIGNATURE

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Scott M. Hyatt	Operations Project Manager
NAME (Please type or print)	TITLE
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Appendix E

Memorandum of Agreement Between the U.S. Army Corps of Engineers, Savannah District and the U.S. Fish and Wildlife Service for Protected Species Surveys



THENS, G

USFWS

MEMORANDUM OF AGREEMENT BETWEEN

THE U.S. ARMY CORPS OF ENGINNERS, SAVANNAH DISTRICT AND

ATHENS, GA USFWS

THE U.S. FISH AND WILDLIFE SERVICE

SUBJECT: Protected Species Surveys at J. Strom Thurmond, Richard B. Russell, and Hartwell Lakes

- 1. References. Memorandum of Agreement Between the U.S. Army Corps of Engineers, Savannah District (USACE) and the U.S. Fish and Wildlife Service Concerning Protected Species Surveys at J. Strom Thurmond, Richard B. Russell, and Hartwell Lakes, 1995; Section 7, Endangered Species Act of 1973 (ESA); Bald and Golden Eagle Protection Act of 1940.
- 2. Purpose. A revision of the 1995 Agreement referenced above is needed for clarification and to accommodate project needs regarding resurveys. The revision includes making protected species surveys valid for two years.
- 3. Problem. The USACE has constructed and operates Hartwell, J. Strom Thurmond, and Richard B. Russell Lakes as multipurpose water reservoirs for the production of hydroelectric power, flood control, navigation, fish and wildlife management, and recreational uses. The routine operations and maintenance of these lakes involves activities that may potentially affect federally-protected plant and animal species that might be present. Based on the 1995 Agreement, protected species surveys are valid for only one year; however, many activities require longer than one year to complete.
- 4. Scope. The USACE and the U.S. Fish and Wildlife Service (USFWS) agree that the operations and maintenance programs at these lakes will be administered in accordance with the following guidelines regarding the necessity for protected species surveys under Section 7 of the ESA and the Bald and Golden Eagle Protection Act of 1940. Execution and implementation of this Agreement evidences that the USACE has satisfied its Section 7 ESA and Bald and Golden Eagle Protection Act responsibilities for all individual undertakings of this program.

5. Responsibilities.

a. Protected Species. Using the federal listings for Georgia and South Carolina as provided by the USFWS, the USACE agrees to protection of all species listed as federal "Endangered or Threatened"; and that further, all candidate species, though not required to be protected by law, will be given consideration and reported when found.

SUBJECT: Protected Species Surveys at J. Strom Thurmond, Richard B. Russell, and Hartwell Lakes

- b. Personnel Qualified for Surveying. Qualified personnel will include Savannah District Biologists or Park Rangers and contract biologists who are trained in protected species identification and qualified to conduct protected species surveys.
- c. Major and Minor Surveys. Minor surveys are those involving five acres or less and can be conducted by trained Park Rangers as described below. Major surveys are those involving more than five acres or any areas thought to contain the preferred habitat of a protected species and will be conducted by biologists with experience in protected species surveys. Sites with southern pine beetle activity in excess of five acres may be surveyed by trained Park Rangers.
- d. Park Ranger Training. By the terms of this agreement, Park Rangers conducting minor surveys will be trained to identify protected species occurring in the upper Savannah River basin. This training will minimally involve, but not be limited to, classroom instruction on the use of the USACE Protected Species Manual, field exercises, and guidance in completing survey work sheets. Training procedures will be periodically reviewed and altered as needed. Training will be conducted by the District Wildlife Biologist or a biologist with protected species survey experience. Refresher training will be provided as needed.
- e. USACE Manual. The USACE Protected Species Manual for the Upper Savannah River Basin will be used as a reference for species identification at the three lake projects. The manual will be updated by the USACE District Wildlife Biologist as species lists are changed by the USFWS. Copies of the manual are available online and hard copies have been distributed to each lake office.
- f. Protected Species Sites. All sites, as of the date of this agreement, known to support protected species will continue to be administered so as to protect these species in accordance with the ESA and the Bald and Golden Eagle Protection Act, including all additions and amendments thereto. Such sites are understood to include those which formerly supported documented species which currently may or may not be present, e.g. inactive bald eagle nests suitable for occupation. Any proposed modifications to a documented protected species site will require coordination with USFWS.
- g. Resurveys Seasonal. When suitable habitat is identified for a species and seasonal considerations prevent identification, resurveys will be conducted. Such resurveys will be done in accordance with instructions given in the USACE protected species manual and in consultation with the District Wildlife Biologist before a given activity commences.
- h. Resurveys New Activities. If activities are scheduled for a site more than two years after the initial survey, that site will be resurveyed for protected species.

SUBJECT: Protected Species Surveys at J. Strom Thurmond, Richard B. Russell, and Hartwell Lakes

- i. Identified Species. If a species federally-listed as endangered, threatened or a candidate is identified on a site, USFWS will be notified and the locations provided through the District Wildlife Biologist. If the identified species may be affected by the proposed action, the USACE will enter consultation with USFWS.
- j. Termination. Any party to this Agreement may terminate it by providing thirty (30) days notice to the other parties, provided that the parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. In the event of termination, the USACE will continue to comply with Section 7 of the ESA and the Bald and Golden Eagle Protection Act with regard to individual undertakings covered by this agreement.
- k. Specific Project Activities. The USACE will ensure that protected species surveys are conducted in advance of any undertaking by the USACE or outgrantee that may impact protected species. The following table identifies commonly occurring activities which require or do not require protected species surveys.

ACTIVITY	SURVEY REQUIRED	SURVEY NOT REQUIRED
Forest Management:	THE QUILLES	
Thinning or regeneration timber harvest	X	
Reforestation/Site preparation		X
New access roads, skidder trails, or herbicide use	X	
outside the harvest area		
Firebreaks – Prescribed burns	X	
Firebreaks – Wildfires		X
Timber harvest for construction or for insect	X	
damage suppression		
Cut and leave for insect damage suppression		X
Hazardous tree/stump removal		X
Salvage of storm damaged timber		X
Facility Construction/Expansion including		
infrastructure or other land disturbing		
activities:		
In unmaintained or undisturbed areas	X	
In areas routinely mowed or maintained		X
Boundary Line Marking:		X
Shoreline Management:		
Rip-rap placement		X

SUBJECT: Protected Species Surveys at J. Strom Thurmond, Richard B. Russell, and Hartwell Lakes

ACTIVITY	SURVEY REQUIRED	SURVEY NOT REQUIRED
French drains, underbrushing/walkway		X
Boat dock placement including anchor system		X
Snag/hazardous tree removal		X
Underground utility/light poles		X
Changing Shoreline Management allocation to Limited Development	X	
Real Estate:		
Issuance of a new lease, license or easement	X	
Renewal of a lease, license or easement without changes to activities or footprint		X
Renewal of a lease, license, or easement with changes to activities or footprint	X	
Disposal of Government Real Property	X	

6. Effective date. This agreement will become effective as of the last date indicated below and will remain in effect until terminated.

SANDRA TÚCKER Field Supervisor

U.S. Fish and Wildlife Service

Athens, Georgia

JEFFRY M. HALL Colonel, EN

Commanding

Date

JAY HERRINGTO Field Supervisor

U.S. Fish and Wildlife Service Charleston, South Carolina