Chattahoochee & Hichitee Creeks-Chattahoochee River 

HUC 8 Watershed: Middle Chattahoochee-Walter F. George

Counties:
Chattahoochee, Stewart

Major Waterbodies (in GA):
Hichitee Creek, Chattahoochee River, Oswichee Creek, Little Hichitee Creek, Gilbert Creek, Bagley Creek, Harps Creek, Weems Pond, Harps Pond

Federal Listed Species:
(historic, known occurrence, or likely to occur in the watershed)

E - Endangered, T - Threatened, C - Candidate, CCA - Candidate Conservation species, PE - Proposed Endangered, PT - Proposed Threatened, Pet - Petitioned, R - Rare, U - Uncommon, SC - Species of Concern.

Red-cockaded Woodpecker (Picoides borealis) US: E; GA: E
Occurrence; Survey period: habitat any time of year or foraging individuals: 1 Apr - 31 May.

Georgia Rockcress (Arabis georgiana) US: T; GA: T
Occurrence; Survey period: 1 May - early July.

Dwarf (Michaux's) Sumac (Rhus michauxii) US: E; GA: E
Occurrence; Survey period: 1 Jun - 31 Oct.

Federal Candidate, Candidate Conservation, or Petitioned Species:
(likely or known to occur in the watershed)

Gopher Tortoise (Gopherus polyphemus) US: C; GA: T
Occurrence; Survey period: Year-round

Alligator Snapping Turtle (Macrochelys temminckii) US: Pet; GA: T
Occurrence; Survey period: habitat any time of year or foraging individuals: 1 Apr - 31 May.

Florida Pine Snake (Pituophis melanoleucus mugitus) US: Pet
Occurrence; Surveys are best conducted spring (May – June) or fall (September – October). May also be conducted during July and August, or in warmer periods of late March and April.

State Listed or Other At-risk Species:

Updated: 1/28/2020
Georgia Ecological Services U.S. Fish & Wildlife Service
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Grainy Crayfish (Procambarus verrucosus) GA: R
Occurrence; Please consult with GDNR for survey efforts.

Sly Crayfish (Procambarus versutus) GA: R
Occurrence; Please consult with GDNR for survey efforts.

Spotted Bullhead (Ameiurus serracanthus) GA: R
Occurrence; Please consult with GDNR for survey efforts.

Bluestripe Shiner (Cyprinella callitaenia) GA: R
Occurrence; Please consult with GDNR for survey efforts.

Goldstripe Darter (Etheostoma parvipinne) GA: R
Occurrence; Please consult with GDNR for survey efforts.

Broadstripe Shiner (Pteronotropis euryzonus) GA: R
Occurrence; Please consult with GDNR for survey efforts.

Apalachicola Floater (Utterbackiana heardi) GA: R
Occurrence; Please consult with GDNR for survey efforts.

Bald Eagle (Haliaeetus leucocephalus) GA: T
Occurrence; Survey period: year-round.

Bachman's Sparrow (Peucaea aestivalis) GA: R
Occurrence; Please consult with GDNR for survey efforts.

Barbour's Map Turtle (Graptemys barbouri) GA: T
Occurrence; Survey period: 1 Apr - 30 Sep.

Southern Hog-nosed Snake (Heterodon simus) GA: T
Occurrence; Survey period: Surveys not practical.

Heartleaf Brickellia (Brickellia cordifolia) GA: T
Occurrence; Please consult with GDNR for survey efforts.

Lax Water-milfoil (Myriophyllum laxum) GA: R
Occurrence; Please consult with GDNR for survey efforts.
Plumleaf Azalea (Rhododendron prunifolium) GA: T
Occurrence; Please consult with GDNR for survey efforts.

Bay Star-vine (Schisandra glabra) GA: T
Occurrence; Please consult with GDNR for survey efforts.

Any of the above species may occur in suitable habitat in this HUC 10 watershed. Survey dates are provided for reference only. Please coordinate with your lead federal agency, Georgia Department of Natural Resources, or USFWS to determine if surveys will help assess project impacts to species of concern.

Watershed Specific Concerns:
There are federally listed terrestrial species, but no federally listed aquatic/wetland species that occur or could occur in this watershed. If the project contains suitable habitat for listed species, please contact your lead federal agency to determine the appropriate next step for those species to inform their NEPA and ESA decisions. Coordination with Georgia Department of Natural Resources may also be helpful in those decisions.

Bald Eagle: Bald Eagles and their nests are protected from take, including disturbance, under the federal Bald and Golden Eagle Protection Act. For information about Bald and Golden Eagles see the Service's regional web page: https://www.fws.gov/southeast/our-services/permits/eagles/

Red-cockaded Woodpecker: Red-cockaded Woodpecker requires large expanses of mature (approximately 60-80 years old or older), open pine forest, preferably longleaf, slash, or loblolly pine or younger forests with artificial nesting cavities. Natural nest cavities are excavated in mature living pines and may take several years to complete. Red-cockaded woodpecker colonies require large, contiguous tracts of habitat, ranging in size from approximately 60-600 acres per family group, depending upon the quality of the habitat. Currently, its range is fragmented and most populations are found on public lands where timber harvesting has not been maximized.

Georgia Rockcress: Georgia Rockcress occurs in shallow soils of rocky slopes/bluffs and river banks, over limestone or granite. This species is identifiable when fruiting, from May to early July.

Dwarf Sumac: Dwarf Sumac commonly occurs on rocky ridges or river bluffs in open forest patches over mafic bedrock with high levels of calcium, magnesium, or iron. Flowering occurs from June through August and fruiting occurs from August through October. This species can be identified year-round, through its low-growing nature and hairy leaves and stems. If populations are found that are under threat of destruction, please contact our office to organize translocation efforts.

Gopher Tortoise: This species requires well-drained, sandy soil for burrowing, abundant sunlight availability, and rich herbaceous vegetation for foraging. It is a characteristic species of the disappearing longleaf pine and wiregrass community, which includes sandhills, dry flatwoods, and turkey oak scrub. Very little of this community remains, so many individuals have been forced to utilize artificial habitats such as roadsides or old fields that retain the three main habitat requirements. In Georgia, extant and historical populations are generally known throughout the state below the fall line. Avoiding direct impacts to Gopher Tortoise, including burying burrows and fragmenting colonies, and the use of upland culverts as wildlife passages to reconnect colonies where colonies are already fragmented by existing roadways can help minimize risk of harm to this species.

Priority Soils for Gopher Tortoise and Eastern Indigo Snake: This watershed contains high priority soils identified from GIS analysis as habitat for candidate species Gopher Tortoise and threatened Eastern Indigo Snake. This dataset was developed to identify high priority habitat for both species. Specifically, higher priority rankings generally indicate known occupied habitat, with some areas containing both species and/or known "minimum viable populations" of Gopher Tortoise. Please note that for projects located outside of the range of Eastern Indigo Snake, potential impacts to this species do not need to be considered. This dataset was developed to identify high priority habitat for both species. Specifically, higher priority rankings generally indicate known occupied habitat, with some areas containing both species and/or known "minimum viable populations" of
Gopher Tortoise. Please note that for projects located outside of the range of Eastern Indigo Snake, potential impacts to this species do not need to be considered.

**Alligator Snapping Turtle**: The Alligator Snapping Turtle (Macrochelys spp.) was recently split into three distinct species. In this watershed, the species is Macrochelys apalachicolae. The Alligator Snapping Turtle is found in large streams and small to large rivers. Adults are largely sedentary where they will sit on stream bottoms near rock outcrops, ledges, undercut banks, and around large woody debris. This type of habitat could be found within the project action area. Temporary structures such as work bridges, bulkheads, and cofferdams may affect this species. Special provisions and consideration of enhanced erosion control Best Management Practices (BMPs) may help protect species habitat and their food sources. Please coordinate with the Georgia Department of Natural Resources to determine if aquatic surveys for the Alligator Snapping Turtle are necessary for the project and to identify measures to minimize impacts from this project to the species during construction.

**Priority Watershed**: This watershed has been identified as a moderately significant high priority watershed for aquatic species. This indicates that the watershed contains important populations of high priority aquatic species or is an important watershed for aquatic organisms. For more information, please see the following fact sheet: [https://www.fws.gov/athens/transportation/pdfs/SWAP_Priority_Watershed_fact_sheet_2017.pdf](https://www.fws.gov/athens/transportation/pdfs/SWAP_Priority_Watershed_fact_sheet_2017.pdf)

**Species and Habitat Concerns**

**Bridges / Culverts / Structures**: Bridges, culverts, and structures (barns, buildings, etc.) can be used by migratory bird species for nesting and roosting and by federally listed and sensitive bat species for roosting. To comply with the national programmatic agreement between FHWA, FRA, and FWS and to assess risk and potential impacts to species protected under the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 et seq.), or state protected bat species, inspections of all bridges, culverts, and structures will help determine if there is evidence of roosting bats. If an inspection is conducted, please fill out the “Georgia Bats in Bridges” datasheet and submit the data online to GA DNR (a website address is provided on the datasheet) and a scanned copy with any report to the lead federal agency. Please note that there is an updated version of the datasheet and new link to the website (https://ee.kobotoolbox.org/x/#YVhJ). Please follow any previous coordination with the Service and/or Georgia Department of Natural Resources related to activities impacting roosting bats or nesting migratory birds.

**Erosion Control Netting**: Monofilament or plastic mesh commonly used for slope stabilization can ensnare snakes and other wildlife, including listed species. The use of alternative natural fibers (e.g., coir, jute, or wood fiber) and moveable mesh strands can reduce impacts to wildlife.

**Fish and Wildlife Coordination Act and additional Endangered Species Act Considerations**

The Fish and Wildlife Coordination Act (FWCA) requires federal agencies to consider the effects of their water-related actions (that modify or control natural streams or waterbodies) on fish and wildlife resources. Many of the following recommendations are also specific to endangered or threatened aquatic species protected under the Endangered Species Act. The following may be applicable to proposed project actions.

**Riparian Buffer, Streambank, and Stream Channel Protection**

Minimize disturbance to stream banks and riparian areas during project work. Do not operate equipment in the stream channel or ford the channel during work. Service recommendations for riparian buffer protection are consistent with those of the Metropolitan North Georgia Water Planning District requiring maintenance of a 50 ft. undisturbed buffer and an additional 25 ft. impervious setback on all streams. Any staging areas, the storage of materials and equipment, borrow pits, or waste sites should not occur in buffer areas or other environmentally sensitive areas. Additionally, when impacts to streambanks and/or stream channel occur, the Service recommends a biotechnical approach to streambank and channel stabilization and restoration where feasible. The use of hard armoring of streambanks or channels should be minimized except where necessary for safety or the protection of structures or property.

**Wetland Protection**

Wetland losses diminish important wetland values including: the provision of habitat which wetland and terrestrial fauna need for reproduction and/or survival, the storage of storm and flood waters with resultant moderation of flow extremes to receiving waters, and the natural filtration processes that enhance water quality. Wetlands along riparian corridors can provide important connectivity for wildlife movement at the landscape-level. Bridge or culvert construction associated with wetland impacts can alter stream hydrology, degrade water quality, create fish passage barriers, and result in the loss of stream bottom habitat. Measures to avoid and reduce impacts to wetlands and
Wetland hydrology should be considered during project design.

**Water Quality Protection**
The Service recommends use of erosion control practices, post construction stormwater management, and other best management practices to protect water quality. The Service’s recommendations can be found below.

**Erosion and Sedimentation** Sedimentation from construction sites is regulated through Georgia’s Erosion and Sedimentation Act, which in most cases is administered by local jurisdictions that have been delegated enforcement authority. We recommend all projects ensure compliance with the Georgia Erosion and Sedimentation Act and encourage consistent communication with the local issuing authority or Georgia Environmental Protection Division both in the design phase and during construction.

**Stormwater** Post construction stormwater management recommendations are consistent with performance standards for Water Quality protection (WQv) and Channel Protection (CPv) found in the Georgia Stormwater Management Manual, otherwise known as the Blue Book ([https://atlantaregional.org/georgia-stormwater-management-manual/](https://atlantaregional.org/georgia-stormwater-management-manual)). The Service recommends both the Water Quality and Channel Protection performance standards be met on all projects when applicable under the Blue Book, to minimize impacts to water quality associated with stormwater runoff. For projects that drain to streams or wetlands with federally protected species, we would recommend that additional water quality protection be provided through implementation of the Runoff Reduction performance standard, also found in the Blue Book.

**Other Protections** For all project types, the Service recommends equipment storage, equipment maintenance, supply storage, and use of pesticides, herbicides, and/or other chemicals not occur within the 100-year floodplain or 200 feet from the stream banks or wetland edge, whichever is greater. All storage and maintenance areas should be protected with secondary containment. Material utilized in, or adjacent to aquatic resources for temporary fill, permanent fill, or bank protection shall consist of suitable material, free from toxic contaminants in other than trace quantities. Materials that contain toxic contaminants, such as used asphalt, pressure treated lumber, and uncured concrete, should not be used because it can alter water quality causing mortality in aquatic organisms and can be harmful to public health. For projects authorized by the U.S. Army Corps of Engineers, please ensure that all permit conditions are followed.

**Road Stream Crossings (Bridges, Culverts)**
Many road stream crossings, especially where pipe culverts are used, limit aquatic organism passage upstream and downstream, leading to fragmentation of aquatic populations. The construction, repair, and replacement of stream crossings can also increase turbidity and sedimentation downstream of road crossings leading to degradation of aquatic habitat. The Service recommends designs that provide habitat continuity through the crossing by maintaining or recreating natural stream reach geomorphic elements including slope, channel width, bed material, and bedform.

Bridges and arch spans are the preferred option for stream crossings from an aquatic habitat continuity perspective. However, when spanning the stream is prohibitively expensive, use of culverts at stream crossings must be designed and implemented in a way that ensures the structures do not become barriers to aquatic organism passage. Making culverts suitable for aquatic organism passage requires preventing excessive water velocities in culverts at base flow conditions, preventing drops resulting from scour in and around the culvert, and providing adequate depth in the culvert at base flows.

The Service recommends following the U.S. Army Corps of Engineers, Savannah District Regional Conditions for Nationwide Permits when designing culverts. The Regional Conditions contain specific guidelines for designing and constructing culverts to promote the safe passage of fish and other aquatic organisms.

Additional information about regional conditions can be found at the following web address: [http://www.sas.usace.army.mil/Missions/Regulatory/Permitting/General-Permits/Regional-General-Permits/](http://www.sas.usace.army.mil/Missions/Regulatory/Permitting/General-Permits/Regional-General-Permits/)

For culvert replacements or extensions involving less than 100 feet of all stream impacts in total, FWCA coordination is not required where no federally listed aquatic species occur. When modifying the design of a culvert that was previously consulted on under FWCA (but excluding those previously exempt from past coordination), new consultation would not be required unless stream impacts have been increased by more than 10% or 50 feet (whichever is less), or the change results in modifications to the morphology or flow of the waterbody.

When bridges or arch spans are the chosen construction method, the Service recommends minimizing the number of in-stream piles or structures and aligning them with the natural stream flow. Additionally, the use of bridge scuppers that directly discharge stormwater to streams should be minimized, except where necessary for safety. For bridge construction activities that require the use of temporary in-stream construction access (e.g., jetties, work bridges,
barges, etc.), the Service recommends performing all work in a manner that does not inhibit aquatic organism passage, including minimizing river constriction. For situations where river constriction is greater than 25% of the cross sectional area of the critical flow, we would recommend a flow analysis to evaluate water velocity alterations and development of a contingency plan in the event channel scour, bank erosion, or undesirable conditions occur. Upon completion of activities, temporary fills should be entirely removed and the site restored to pre-existing elevation. Equipment should not be stored on any in-stream structure to reduce equipment loss if flows exceed the height of the in-stream structure and reduce contamination from pollutant leakage during off-use times.

Direct all stormwater runoff from road approaches toward floodplains, letting the runoff discharge as sheet flow across the floodplain or into stormwater management structures. When road approaches are composed of unpaved surfaces, consider paving the road approaches to improve the water quality of stormwater runoff around stream crossing locations. If spread footers, containment structures, or other structures require the use of dry or poured concrete, flowable fill, or similar materials and are elected for use in the construction within any waterway, such methods shall be constructed using cofferdams or similar containment structures. If uncured, dry or wet concrete will be used, the water used for curing shall not be allowed into the waterways. The use of uncured concrete in a waterway can raise the pH of the surrounding water causing mortality in aquatic organisms and potential public health concerns.

The Service also recommends incorporating measures to provide connectivity and reduce mortality to terrestrial wildlife species during project design. Opportunities for terrestrial species to cross under road crossings at stream crossing locations exist both within the banks of the stream along constructed benches, as well as, in the floodplain when additional structures are used to pass flood flows.

**Utility Stream Crossings** Construction, relocation, and maintenance of powerlines and other utilities can disturb aquatic systems and affect fish and other populations. To minimize impacts from these activities, use best management practices to control stormwater runoff from the project area during construction. Direct runoff via sheetflow to vegetated areas or stormwater treatment basins and utilize rolling dips or water bars to divert water from the utility right-of-way (ROW) into vegetated areas on slopes to minimize erosion.

**Underground Utilities** Directional boring is preferred when a utility line must be installed across a perennial stream that supports federally protected aquatic species. Bore pits should be located as far away from the stream channel as possible.

Dry open trench pipe installation using isolation crossing diversions, such as coffer dams, are preferred for all other perennial stream crossings. The diversions should not dewater downstream reaches or create excessive water velocity that could scour downstream reaches. Wet open trench construction should be avoided in all perennial streams unless no other method is feasible, or if it can be shown that alternative methods would cause greater sedimentation and environmental harm. For both wet and dry open trench installation, stream banks and channels should be restored to their original contours and the banks stabilized with native vegetation (except in areas where permanent road crossings are to be maintained). In-channel stream restoration techniques should be considered to stabilize the channel elevation and protect buried utility lines. In-channel restoration techniques can also effectively prevent downstream scour or upstream head cutting which can result from open trenching.

Wet open trench installation should not be conducted during the sensitive reproductive periods of federally-listed aquatic species, when eggs and newly-hatched larvae are most likely to be buried or harmed by increased turbidity and sedimentation. Only directional boring or isolation crossing methods should be used during these times of year. Please consult the Service for timing of sensitive reproductive periods for aquatic species in this watershed.

**Aerial Utilities** Maintain a 100-foot undisturbed riparian buffer within the powerline’s ROW on both sides of all streams with endangered or threatened aquatic species. No crossings, either temporary or permanent, via culverts, fords, or other methods should be constructed and all access roads should end at the buffer’s edge farthest from the streambank. The buffer, where possible, should be retained in or planted with native vegetation of at least shrub size.

Within the powerline’s ROW, maintain a 50-foot riparian buffer on both sides of other perennial and intermittent streams that will be crossed. Some vegetation within these buffer zones may be temporarily disturbed if culverts, fords, or other stream crossings are necessary, but streambanks should be restored to normal contours and stabilized after the crossing is removed.

**Impoundments/Farm Ponds**

For proposed impoundments, the Service recommends excavated ponds be constructed where feasible. Though the volume of material requiring excavation is greater to construct an excavated pond, they have fewer problems than dammed ponds, which can be plagued with muddy water, rapid filling with silt, flow rate fluctuations, aquatic weeds,
temperature fluctuations, and wild fish invasions.

The Service recommends consulting the county Natural Resources Conservation Service office (https://www.nrcs.usda.gov/wps/portal/nrcs/site/ga/home/) or the Georgia Department of Natural Resources for advice regarding pond construction and avoiding or minimizing downstream impacts from sediment and toxicant input into aquatic systems.

Stream Gage Replacement
If a U.S. Geological Survey (USGS) stream gage will potentially be impacted by a proposed project, the Service recommends assessing what coordination or compensation may need to occur with the USGS related to the disturbance, moving, and recalibration of the gage structure prior to project implementation.

Conservation Lands in Georgia and within the Watershed:
Chattahoochee Co Rec Center

Fort Benning

U.S. Army Corps of Engineers - Lake Walter F. George

If your project crosses watershed boundaries, please use the appropriate guidance document for each portion of the project area.

Your agency or lead federal agency may have coordination procedures in place or determination keys for urban areas or activities with classified as having "no effect" on listed species. Please use those guidelines to help determine impacts to federally listed species.

If you have questions relating to this guidance, please contact our office at gaes_assistance@fws.gov or 706-613-9493.

Data provided in this document is for guidance only and applies to portions of the watershed within the Georgia State Boundary. Please contact the appropriate FWS Field Office for coordination outside of the state. This document does not replace any requirements for consultation under the Endangered Species Act.

As written in 50 CFR § 402.16 of the Endangered Species Act, obligations under the Act must be reconsidered if a new species is listed or critical habitat is determined that may be affected by the project, or new information indicates that the project may affect listed species or critical habitat in a manner not previously considered. We will continue to update these documents to help project proponents meet their obligations under the Endangered Species Act.