Fish and Wildlife Service general information and guidance for FEMA projects regarding the proposed alligator snapping turtle

Louisiana Ecological Services Office

Areas and Habitat Conditions likely to host AST

The alligator snapping turtle (AST) has a wide geographic range and occurs in bayous, rivers, streams, swamps, and lakes in Texas, Louisiana, Oklahoma, Arkansas, Missouri, Illinois, Kentucky, Tennessee, Mississippi, Alabama, Georgia, and Florida. They prefer water bodies (small streams [perennial], bayous, canals, swamps, lakes, reservoirs, ponds, and oxbows) with overhang banks and adjacent riparian forest, especially bald cypress bordered banks. Sections of waterways with steep-sloped banks, or those lined with concrete, stone, etc. are likely avoided, especially when there are no trees on the bank. However, relatively short sections of non-preferred bank composition do not necessarily preclude occupation of the entire waterway. They may venture onto the adjacent floodplain during high water events. Although they have been found at the edge of the Gulf of Mexico, coastal marshes and saline water are not their preferred habitat type. They also prefer waterbodies with snags and submerged logs, tree root masses, or other debris in the water. Adults generally stick to deeper water (enough to cover their body to deeper than 20ft), but in areas with deep, loose mud, they have been found in 10 inches of water with a mud layer of several feet. Juveniles can be found in shallow streams less than 1 foot deep. AST are sensitive to water temperature and will change locations as needed to thermoregulate. AST generally stay on the water bottom, but they do move along the bottom, and can travel considerable distances (miles) in just days or weeks. Trapping surveys are generally effective at locating AST, but lack of capture, especially during short-term limited area survey efforts, does not confirm absence.

AST rarely leave the water except for nesting females generally from April to early July (typically April-May in southern parts of the range including Louisiana and May-July in north/western portion of the range). Egg incubation time is generally between 96 and 143 days. Nesting areas may have varying amounts of canopy cover. Nests are generally located between 4 and 656 feet from the water line, and more likely less than 300 feet from the water line.

Potential project effects on the species

<u>Individuals</u>

Adults, juveniles, and hatchlings could be killed, injured, or stressed by instream operation of heavy equipment (e.g., excavator, bucket dredge, hydraulic dredge, shallow water watercraft, etc.)

Nesting females, eggs, and hatchlings could be killed, injured, or stressed by operation of heavy equipment or other disturbance in the riparian zone adjacent to waterbodies during the nesting/hatching season.

<u>Habitat</u>

Removal of snags, submerged logs, and other debris would decrease the value of or eliminate aquatic habitat.

Removal of trees at the bank and adjacent forest could degrade nesting habitat and would likely decrease the use of adjacent aquatic habitat.

Bank hardening and change of bank incline would likely eliminate nesting in the area, and significant use of the adjacent aquatic habitat.

Conservation Recommendations

To minimize effect on AST habitat:

Limit work to deepest part of channels

Limit work to areas previously disturbed or lacking snags, submerged logs or other cover used by AST

Use floating work platform instead of ground-based equipment

Relocate woody debris to streamside instead of removing completely

Minimize removal of trees and brush on bank adjacent to waterbodies

Avoid the use of concrete or other bank hardening methods

To minimize effect on individuals:

Limit work to areas unlikely to be occupied by adult or juvenile AST or live AST nests

Use floating work platform instead of ground-based equipment

If removing snags is necessary, pull up from above water instead of digging out

Avoid work on streamside from the water's edge to 200 meters away during times of the year when nesting/hatching are occurring

Limit work to deepest part of main channels except during the hottest times of the year

Conferencing with Fish and Wildlife Service

Because the AST is proposed, the only requirement for federal agencies is to "confer" (rather than consult) with the Service if any proposed actions are determined by them to be likely to jeopardize the existence of a proposed species or result in destruction or adverse modification of critical habitat. There is currently no critical habitat designated, or proposed, for the AST, so the focus would be mostly on the species itself. Note that regardless of critical habitat, effects on habitat are still considered when analyzing effects on species. (Note: *In certain circumstances, emergency actions in presidentially declared disaster areas can be exempted from the requirements of consultation under sec 7(a)(2) of the Endangered Species Act*.).

Project actions that "may affect" the species do not necessarily make the action, "likely to jeopardize the existence of a proposed species". Actions that kill an individual or even multiple individuals also may not necessarily result in a likely jeopardy determination. The AST has a large multistate range, and the

species is estimated to be comprised of many thousands of individuals. Any effects determination should consider the spatial extent of project effects when analyzing effects on populations and ultimately the species as a whole.

It is the policy of the Service to conduct conferencing if the lead federal agency requests a conference. The Service would require all the same types of information about the project(s) including project timing, specific work, equipment, and expected effects on the species, as when conducting a consultation for a listed species. The Service's practice is to conduct and conclude conferencing in the same manner and time frame as consultations which require variable amounts of time to complete depending on complexity and whether the conference is informal or formal.