

**ALLIGATOR GAR SPAWNING EVENT CLOSURE
EMERGENCY ADOPTION PREAMBLE**

1. Introduction.

Pursuant to Parks and Wildlife Code, §12.027, the Texas Parks and Wildlife Department adopts, on an emergency basis, an amendment to §57.977, concerning Spawning Event Closures. The emergency action prohibits the take or attempted take of alligator gar on a segment of the Trinity River. Alligator gar are a nongame species under Parks and Wildlife Code, Chapter 67, and therefore subject to regulation by the Texas Parks and Wildlife Commission (Commission).

In 2014 the Commission adopted new §57.977 (39 TexReg 6495) to establish a process to allow the department to temporarily prohibit the take of alligator gar in places where they are spawning or are about to spawn. Alligator gar populations are believed to be declining throughout much of their historical range in North America, which includes the Mississippi River system as well as the coastal rivers of the Gulf of Mexico from Florida to northern Mexico. Observed declines in other states, vulnerability to overfishing, and increased interest in the harvest of trophy gar indicate that a conservative management approach is warranted until populations and potential threats can be fully assessed. On that basis, the Commission in 2009 adopted a daily bag limit of one alligator gar per person, which was intended to protect adult fish while allowing limited harvest, thus ensuring population stability. Since 2009, the department has conducted (and is continuing to conduct) research to determine the estimated harvest of alligator gar, quantify reproduction, understand habitat usage, and determine geographic differences in populations. Initial analysis of the research data indicate that alligator gar in Texas have the greatest chance of spawning success if the creation of preferred spawning habitat (the seasonal inundation of low-lying areas of vegetation) occurs in late spring through early summer. Since each year does not necessarily bring seasonal inundation at the optimum time, spawning success varies greatly.

The Trinity River supports the most significant alligator gar fishery in Texas. Department data for the middle Trinity River indicate that between 1980 and 2018, high

reproductive success occurred in 6 years (1980, 1989, 1990, 1991, 2007, and 2015). Because the conditions for spawning do not exist on a regular or cyclical basis, and because spawning occurs in shallow waters where numerous gar can be concentrated in one area, alligator gar are extremely vulnerable to harvest during spawning. To protect alligator gar from excessive harvest during spawning, the rule allows the executive director of the department to prohibit the take of alligator in an affected area, which is defined as "an area of fresh water containing environmental conditions conducive for alligator gar spawning" or "an area of fresh water where alligator gar are in the process of spawning activity." The rule defines "environmental conditions conducive for alligator gar spawning" as "the components of a hydrological state (including but not limited to water temperatures, duration and timing of flooding events, river discharge rates, and any other factors that are known to be conducive to gar reproduction) that are predictors of the likelihood of spawning activity of alligator gar." An emergency closure has been implemented once and that was in 2015 from May 12 through June 10.

Above average rainfall has recently occurred in the upper Trinity River watershed, and the potential for continued heavy rains could cause ongoing elevated river levels below the Dallas/Fort Worth metroplex to become favorable for alligator gar spawning activity. The department has selected as one of the trigger criteria of environmental conditions conducive for alligator gar spawning the designation of a moderate flood condition, as defined by U.S. Geological Survey gauges, as these levels are sufficient to permit significant inundation of adjacent low-lying areas to occur. Additionally, a water temperature of 68° F or higher, was selected as a trigger criterion because the literature suggests it is an optimum temperature for spawning. Based on the likelihood of additional rain and that water temperatures have recently exceeded 68° F, the department concludes that environmental conditions conducive for alligator gar spawning are occurring and will persist, and that there is therefore an immediate danger to alligator gar resources in the river extent from U.S. Highway 287 in Anderson and Freestone counties downstream to the State Highway 7 bridge in Leon and Houston counties, which must therefore be designated an affected area within which the take or

attempted take of alligator gar is prohibited. As provided in §57.977, this emergency amendment will expire when the department withdraws the emergency action, or 30 days from filing, whichever first occurs.

The amendment is adopted on an emergency basis under Parks and Wildlife Code, §12.027, which provides that if the commission or the executive director finds that there is an immediate danger to a species authorized to be regulated by the department, the commission or the executive director may adopt emergency rules as provided by Government Code, §2001.034.

2. Text.

§57.977. Spawning Event Closures.

(a) Definitions. For purposes of this section, the following terms shall have the following meanings:

(1) Affected area--

(A) an area of fresh water containing environmental conditions conducive for alligator gar spawning; or

(B) an area of fresh water where alligator gar are in the process of spawning activity.

(2) Environmental conditions conducive for alligator gar spawning--the components of a hydrological state (including but not limited to water temperatures, timing and duration of flood events, river discharge rates, and any other factors that are known to be conducive to alligator gar reproduction) that are predictors of the likelihood of spawning activity of alligator gar.

(b) The Executive Director shall prohibit the take or attempted take of alligator gar in an affected area and shall provide appropriate notice to the public when the take or attempted take of alligator gar in an affected area is prohibited. The Executive Director shall provide appropriate public notice as to when lawful fishing in the affected area or areas may resume. An action under this section shall not exceed 30 days in duration.

(c) No person may take or attempt to take alligator gar by any means in an

affected area declared by the Executive Director under subsection (b) of this section until the Executive Director gives notice that the lawful take of alligator gar may resume.

(d) The Executive Director declares that portion of the Trinity River and tributary waters from the U.S. Highway 287 bridge in Anderson and Freestone counties downstream to the State Highway 7 bridge in Leon and Houston counties to be an affected area within which the take or attempted take of alligator gar is prohibited.

This agency hereby certifies that the emergency adoption has been reviewed by legal counsel and found to be a valid exercise of the agency's authority.

Issued in Austin, Texas, on