Billing Code

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[FF09E21000 FXES11110900000 212]

Endangered and Threatened Wildlife and Plants; Two Species Not Warranted for Listing as Endangered or Threatened Species

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notification of findings.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), announce findings that two species are not warranted for listing as endangered or threatened species under the Endangered Species Act of 1973, as amended (Act). After a thorough review of the best available scientific and commercial information, we find that it is not warranted at this time to list Black Creek crayfish (*Procambarus pictus*) or hairy-peduncled beakrush (*Rhynchospora crinipes*). However, we ask the public to submit to us at any time any new information relevant to the status of any of the species mentioned above or their habitats.

DATES: The findings in this document were made on [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Detailed descriptions of the bases for these findings are available on the Internet at *http://www.regulations.gov* under the following docket numbers:

Species	**Docket Number**
Black Creek crayfish	FWS–R4–ES–2021–0045
Hairy-peduncled beakrush	FWS–R4–ES–2021–0046

Supporting information used to prepare this finding is available by contacting the appropriate person as specified under **FOR FURTHER INFORMATION CONTACT**. Please submit any new information, materials, comments, or questions concerning this finding to the

appropriate person, as specified under **FOR FURTHER INFORMATION CONTACT**.

FOR FURTHER INFORMATION CONTACT:

Species	Contact Information
Black Creek crayfish	Lourdes Mena, Chief of Listing and Recovery, Jacksonville Fish and Wildlife Office, 904–731–3134, lourdes_mena@fws.gov
Hairy-peduncled beakrush	Stephen Ricks, Field Supervisor, Mississippi Ecological Services Field Office, 601-321-1122, stephen_ricks@fws.gov

If you use a telecommunications device for the deaf (TDD), please call the Federal Relay Service at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Background

Under section 4(b)(3)(B) of the Act (16 U.S.C. 1531 *et seq.*), we are required to make a finding whether or not a petitioned action is warranted within 12 months after receiving any petition for which we have determined contains substantial scientific or commercial information indicating that the petitioned action may be warranted ("12-month finding"). We must make a finding that the petitioned action is: (1) Not warranted; (2) warranted; or (3) warranted but precluded. We must publish a notification of these 12-month findings in the *Federal Register*.

Summary of Information Pertaining to the Five Factors

Section 4 of the Act (16 U.S.C. 1533) and the implementing regulations at part 424 of title 50 of the Code of Federal Regulations (50 CFR part 424) set forth procedures for adding species to, removing species from, or reclassifying species on the Lists of Endangered and Threatened Wildlife and Plants (Lists). The Act defines "species" as any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature (16 U.S.C. 1532(16)). The Act defines "endangered species" as any species that is in danger of extinction throughout all or a significant portion of its range (16 U.S.C. 1532(6)), and "threatened species" as any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its

range (16 U.S.C. 1532(20)). Under section 4(a)(1) of the Act, a species may be determined to be an endangered species or a threatened species because of any of the following five factors:

(A) The present or threatened destruction, modification, or curtailment of its habitat or range;

(B) Overutilization for commercial, recreational, scientific, or educational purposes;

(C) Disease or predation;

(D) The inadequacy of existing regulatory mechanisms; or

(E) Other natural or manmade factors affecting its continued existence.

These factors represent broad categories of natural or human-caused actions or conditions that could have an effect on a species' continued existence. In evaluating these actions and conditions, we look for those that may have a negative effect on individuals of the species, as well as other actions or conditions that may ameliorate any negative effects or may have positive effects.

We use the term "threat" to refer in general to actions or conditions that are known to or are reasonably likely to negatively affect individuals of a species. The term "threat" includes actions or conditions that have a direct impact on individuals (direct impacts), as well as those that affect individuals through alteration of their habitat or required resources (stressors). The term "threat" may encompass—either together or separately—the source of the action or condition or the action or condition itself. However, the mere identification of any threat(s) does not necessarily mean that the species meets the statutory definition of an "endangered species" or a "threatened species." In determining whether a species meets either definition, we must evaluate all identified threats by considering the expected response by the species, and the effects of the threats—in light of those actions and conditions that will ameliorate the threats—on an individual, population, and species level. We evaluate each threat and its expected effects on the species, then analyze the cumulative effect of all of the threats on the species as a whole. We also consider the cumulative effect of the threats in light of those actions and conditions that will have

positive effects on the species, such as any existing regulatory mechanisms or conservation efforts. The Secretary determines whether the species meets the definition of an "endangered species" or a "threatened species" only after conducting this cumulative analysis and describing the expected effect on the species now and in the foreseeable future.

The Act does not define the term "foreseeable future," which appears in the statutory definition of "threatened species." Our implementing regulations at 50 CFR 424.11(d) set forth a framework for evaluating the foreseeable future on a case-by-case basis. The term "foreseeable future" extends only so far into the future as the Service can reasonably determine that both the future threats and the species' responses to those threats are likely. In other words, the foreseeable future is the period of time in which we can make reliable predictions. "Reliable" does not mean "certain"; it means sufficient to provide a reasonable degree of confidence in the prediction. Thus, a prediction is reliable if it is reasonable to depend on it when making decisions.

It is not always possible or necessary to define foreseeable future as a particular number of years. Analysis of the foreseeable future uses the best scientific and commercial data available and should consider the timeframes applicable to the relevant threats and to the species' likely responses to those threats in view of its life-history characteristics. Data that are typically relevant to assessing the species' biological response include species-specific factors such as lifespan, reproductive rates or productivity, certain behaviors, and other demographic factors.

In conducting our evaluation of the five factors provided in section 4(a)(1) of the Act to determine whether Black Creek crayfish or hairy-peduncled beakrush meet the definition of "endangered species" or "threatened species," we considered and thoroughly evaluated the best scientific and commercial information available regarding the past, present, and future stressors and threats. We reviewed the petitions, information available in our files, and other available published and unpublished information. Our evaluation may include information from recognized experts; Federal, State, and Tribal governments; academic institutions; foreign

governments; private entities; and other members of the public.

The species assessment forms for these species contain more detailed biological information, a thorough analysis of the listing factors, a list of literature cited, and an explanation of why we determined that the species does not meet the Act's definition of an endangered species or a threatened species. A thorough review of the taxonomy, life history, and ecology of the Black Creek crayfish and the hairy-peduncled beakrush is presented in the species' Species Status Assessment reports. This supporting information can be found on the Internet at *http://www.regulations.gov* under the appropriate docket number (see **ADDRESSES**, above). The following are informational summaries for the findings in this document.

Black Creek Crayfish

Previous Federal Actions

On April 20, 2010, the Service received a petition from the Center for Biological Diversity (CBD), Alabama Rivers Alliance, Clinch Coalition, Dogwood Alliance, Gulf Restoration Network, Tennessee Forests Council, and West Virginia Highlands Conservancy to list 404 aquatic, riparian, and wetland species, including the Black Creek crayfish (*Procambarus pictus*), from the southeastern United States as endangered or threatened species under the Act (CDB 2010, entire). On September 27, 2011, we published a 90-day finding (76 FR 59836) for 374 of the 404 petitioned species, including the Black Creek crayfish, stating the petition presented substantial information that listing the Black Creek crayfish may be warranted, due to the threats of present or threatened destruction, modification, or curtailment of the species' habitat or range and inadequacy of existing regulatory mechanisms. The finding solicited information on, and initiated status reviews for, the 374 species, including the Black Creek crayfish.

On February 27, 2020, CBD filed a complaint alleging, among other things, that the Service failed to make statutorily required 12-month findings for 241 species, including the Black Creek crayfish. The Service moved to dismiss most of the actions, including the 12-month

finding claim for the Black Creek crayfish, on May 4, 2020. The motion is fully briefed, and the court has not ruled on it as of July 12, 2021. However, we are effectively mooting the claim by publishing this notification, which fulfils our statutory duty to make a 12-month finding for the Black Creek crayfish.

Summary of Finding

The Black Creek crayfish is endemic to four northeastern Florida counties (Clay, Duval, Putnam, and St. Johns) in the Lower St. Johns River Basin. This small to medium-sized crayfish has dark claws and a dark carapace with a white or yellowish mid-dorsal stripe, white spots or streaks on its sides, and a rust-colored abdomen. The Black Creek crayfish lives about 16 months and reproduces once during its life cycle. The Black Creek crayfish occurs in flowing, sand-bottomed, tannic-stained streams that contain cool, unpolluted water, and maintain a constant flow of highly oxygenated water (5 to 8 parts per million). Within these streams, Black Creek crayfish require aquatic vegetation and debris for shelter with alternating shaded and open canopy cover where they eat aquatic plants, dead plant and animal material, and detritus.

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats to the Black Creek crayfish, and we evaluated all relevant factors under the five listing factors, including any regulatory mechanisms and conservation measures addressing these threats. The potential threats affecting the Black Creek crayfish are due to land conversion impacts and from climate change. The threat of land conversion impacts includes water quality and water quantity degradation from urbanization mining, logging, and agriculture, and the threat of climate change primarily is from sea level rise (SLR), and combined effects. These threats can impact the Black Creek crayfish by degrading or inundating its habitat. The effects from these impacts may result in a decrease in habitat quality and quantity across the species' range during some years. However, significant ongoing conservation actions are protecting the species.

Currently, 47% of Black Creek crayfish habitat is protected, including Camp Blanding

Joint Training Center (Camp Blanding) conservation agreements. The range of the Black Creek crayfish largely overlaps public lands managed by the Florida Army National Guard, Camp Blanding, and the Florida Forest Service, specifically 2 state forests: Jennings and Etoniah Creek. These lands are wildlife management areas wherein wildlife is managed by the Florida Wildlife Conservation Commission and the Florida Forest Service. Additional conservation lands with occurrence records for Black Creek crayfish include parcels owned by the St. John's River Water Management District (District) and mitigation banks. Management of the upland habitat adjacent to Black Creek crayfish habitat is provided by Camp Blanding and the Florida Forest Service, while the District has regulatory authority regarding water quality.

Upon examining the current trends and future forecast scenarios, we expect that the primary threats--water quality and water quantity degradation due to land conversion, and SLR from climate change--may impact the Black Creek crayfish. But a substantial portion (47 percent) of the habitat is protected (Camp Blanding conservation agreements, Florida Forest Service, and the District), alleviating many of the primary threats to the crayfish. Habitat protection and conservation measures, including measures to manage and protect water quality and water quantity degradation, maintain adequate water conditions and flows that will keep a sufficient number of populations viable to ensure overall species viability into the foreseeable future (30-50 years). In addition, protection of special management zones (SMZs) may reduce its contribution to nonpoint source water pollution. SMZs are meant to provide shade for temperature regulation, a natural vegetation strip, intact ground cover, large and small woody debris, leaf litter, and a variety of tree species and age classes, most of these benefitting Black Creek crayfish. Also, monitoring of SLR by Camp Blanding and the District in protected habitat areas will help inform the Service on the status of the SLR threat. All 19 extant Black Creek crayfish populations are expected to maintain resiliency, redundancy, and representation under examined future scenarios out to 2050 and 10 out to 2070 with conservation measures. We examined the interactions of the white tubercled crayfish (*Procambarus spiculifer*), and while

uncertainty still exists, the possibility remains that white tubercled crayfish may have the potential to decrease occupancy and abundance of Black Creek crayfish; however, the best available information indicates that it is likely that the two species co-exist at sites where Black Creek crayfish occur (Service 2020, p.37, 39, Fig. 4-6)). We expect that existing regulatory mechanisms and conservation measures are adequate and would continue to help ameliorate or reduce impacts of threats to the species and protect the Black Creek crayfish and its habitat which would also help the Black Creek crayfish continue to maintain an adequate level of resiliency, representation, and redundancy now and into the foreseeable future (30 to 50 years). For Black Creek crayfish, we considered whether the threats are geographically concentrated in any portion of the species' range at a biologically meaningful scale. We examined the following threats: land use conversion impacts and climate change, including cumulative effects. Based on the species' response to threats, current resiliency, and predicted future resiliency throughout its range, we found no concentration of threats in any portion of the Black Creek crayfish's range at a biologically meaningful scale. We found that the identified threats act uniformly throughout the range, because it occurs in four northeastern Florida counties (Clay, Duval, Putnam, and St. Johns) in the Lower St. Johns River Basin that are geographically close to each other. Thus, there are no portions of the species' range where the species has a different status from its range-wide status.

After evaluating the best available scientific and commercial information on potential threats acting individually or in combination, we found that all 19 extant Black Creek crayfish populations are expected to maintain resiliency, redundancy, and representation, under examined future scenarios out to 2050, and 10 out to 2070 with conservation measures, in all or a significant portion of the species' range.

Our review of the best available scientific and commercial information regarding the past, present, and future threats to the species indicates that the Black Creek crayfish is not in danger of extinction nor likely to become endangered within the foreseeable future throughout

all or a significant portion of its range, and that the Black Creek crayfish does not meet the definition of an endangered species or a threatened species under the Act. Therefore, we find that listing the Black Creek crayfish as an endangered or threatened species under the Act is not warranted at this time. A detailed discussion of the basis for this finding can be found in the Black Creek crayfish species assessment form and other supporting documents (see **ADDRESSES**, above).

Hairy-peduncled beakrush

Previous Federal Actions

On April 20, 2010, the Service received a petition from CBD, Alabama Rivers Alliance, Clinch Coalition, Dogwood Alliance, Gulf Restoration Network, Tennessee Forests Council, and West Virginia Highlands Conservancy to list 404 aquatic, riparian, and wetland species, including hairy-peduncled beakrush (*Rhynchospora crinipes*), from the southeastern United States as endangered or threatened species under the Act (CDB 2010, entire). On September 27, 2011, we published a 90-day finding (76 FR 59836) for 374 of the 404 petitioned species, including hairy-peduncled beakrush, stating that the petition presented substantial information indicating that listing hairy-peduncled beakrush may be warranted, due to the threats of present or threatened destruction, modification, or curtailment of the species' habitat or range and inadequacy of existing regulatory mechanisms. The finding solicited information on, and initiated status reviews for, the 374 species, including hairy-peduncled beakrush. Hairy-peduncled beakrush is on the Service's National Workplan for a 12-month finding in Fiscal Year 2021.

On February 27, 2020, CBD filed a complaint alleging, among other things, that the Service failed to make statutorily required 12-month findings for 241 species, including the hairy-peduncled beakrush. The Service moved to dismiss most of the actions, including the 12-month finding claim for the hairy-peduncled beakrush, on May 4, 2020. The motion is fully briefed, and the court has not ruled on it as of July 12, 2021. However, we are effectively

mooting the claim by publishing this notification, which fulfils our statutory duty to make a 12-month finding for the hairy-peduncled beakrush.

Summary of Finding

A member of the sedge family (Cyperaceae), hairy-peduncled beakrush is a perennial grass-like herb that occurs solitary or as clumps to dense mats of plants typically 2–3¼ feet (60–100 centimeters) tall. Hairy-peduncled beakrush has a broad geographic range within the southeastern United States, spanning nearly 700 miles (over 1,100 kilometers) from southwestern Mississippi to central North Carolina. The species has been found in at least 28 counties in 5 southeastern States: Mississippi (5 counties), Alabama (6 counties), Florida (5 counties), Georgia (10 counties) and North Carolina (2 counties).

Hairy-peduncled beakrush typically occurs on banks and bars along blackwater streams and associated spring runs that are prone to flooding and periodic scouring. Within these systems, plants are often found in peaty silt on streamside shelves or sandy-clay stream bars, but have also occasionally been found rooting on stumps and tree bases as well as in the streambed. The species is an obligate wetland species, meaning that they are almost always found in standing water or soils that are seasonally saturated. Hairy-peduncled beakrush plants typically occur in full sun to partly shady conditions under open to filtered canopies, often along north-south oriented streams. The species' deep, extensive root system provides a strong attachment to the substrate and allows it to withstand strong flood events, which may also provide a competitive advantage over other species with weaker root systems that are more readily washed away during flood events. Likewise, hairy-peduncled beakrush's ability to root at its nodes allows it to withstand being partially buried by sediment deposited during flooding events and facilitates clonal spread. Together, these adaptations to flooding and sedimentation suggest that hairy-peduncled beakrush is not only tolerant of disturbance, but may be disturbance-dependent, with periodic disturbances (such as scouring floods) being required to remove competing vegetation from occupied and unoccupied habitat, thereby allowing the species to thrive and

spread locally and disperse more widely.

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats to hairy-peduncled beakrush, and we evaluated all relevant factors under the five listing factors, including any regulatory mechanisms and conservation measures addressing these stressors. The primary stressors affecting the hairy-peduncled beakrush include sedimentation from development and urbanization, incompatible logging practices, military and recreational activities, sand and gravel mining, and an altered hydrologic regime resulting from climate change and development and urbanization. Sedimentation currently represents a localized threat to hairy-peduncled beakrush. Activities that produce excessive sedimentation may smother plants or otherwise degrade habitats; however, hairy-peduncled beakrush is able to tolerate at least some sediment deposition, as partially buried plants have been observed rooting at their buried nodes. This adaptation limits the threat to hairy-peduncled beakrush from all but the most extreme sedimentation events. Flooding has been suggested as a threat to hairy-peduncled beakrush; however, natural flooding is unlikely a major threat to hairy-peduncled beakrush rangewide in light of its association with systems that are subject to periodic flooding and various other natural disturbances that may contribute to extreme flooding (e.g., hurricanes, tropical storms), which suggests that the species is adapted to tolerate such periodic disturbances.

Sedimentation and hydrologic regime changes are influenced by development and urbanization, incompatible logging practices, sand and gravel mining, activities on military installations, and right-of-way maintenance; however, most of these threats are considered historical, or occur on a very limited number of sites, or are actively managed and monitored by Federal and State agencies through adequate regulatory protections. In the assessment of hairy-peduncled beakrush current condition, 30 populations (of a total of 39 populations) exhibit moderate to high resiliency, as evidenced by population size, multiple subpopulations, current status and resilience through time, and little evidence of threats. Although changes in the

hydrologic regime may occur as a result of climate change, the species is resilient to fluctuating water levels and relies on periodic high flow events to some extent for dispersal of propagules and removal of competing vegetation (i.e., hairy-peduncled beakrush is a disturbance-dependent species).

Our future scenarios assessed the viability of hairy-peduncled beakrush over a 40-year time period in response to urbanization and hydrological changes. In Scenario 1, current land protection and management are projected to remain unchanged, urbanization continues at the current pace, and changes to the hydrological regime are those predicted under a moderate emissions scenario, representative concentration pathway 4.5 (RCP 4.5). Under this scenario, 37 of 39 populations are predicted to remain at their current levels of resiliency, while 2 populations are expected to exhibit decreased resiliency by 2060. In Scenario 2, current land protection and management are projected to remain unchanged, urbanization increases relative to Scenario 1, and changes to the hydrological regime are those predicted under a higher atmospheric emission scenario (RCP 8.5). Under this scenario, four populations are expected to exhibit decreased resiliency and one population is expected to exhibit increased resiliency, while 34 are predicted to remain at their current levels of resiliency. We expect the species' representation and redundancy to remain high under both future scenarios.

For hairy-peduncled beakrush, we considered whether the threats are geographically concentrated in any portion of the species' range at a biologically meaningful scale. We examined the following threats: sedimentation and hydrologic regime change, including cumulative effects. Based on the species' adaptation to stressors, current resiliency, and predicted future resiliency throughout its range, we found no concentration of threats in any portion of hairy-peduncled beakrush's range at a biologically meaningful scale. Thus, there are no portions of the species' range where the species has a different status from its range-wide status.

After evaluating the best available scientific and commercial information on potential

stressors acting individually or in combination, we found no indication that the combined effects are causing a population-level decline, or that the combined effects are likely to do so in the next 10 to 40 years, in all or a significant portion of the species' range.

Therefore, we find that listing hairy-peduncled beakrush as an endangered species or threatened species under the Act is not warranted. A detailed discussion of the basis for this finding can be found in the hairy-peduncled beakrush species assessment and other supporting documents (see **ADDRESSES**, above).

New Information

We request that you submit any new information concerning the taxonomy of, biology of, ecology of, status of, or stressors to the Black Creek crayfish or hairy-peduncled beakrush to the appropriate person, as specified under **FOR FURTHER INFORMATION CONTACT**, whenever it becomes available. New information will help us monitor these species and make appropriate decisions about their conservation and status. We encourage local agencies and stakeholders to continue cooperative monitoring and conservation efforts.

References Cited

A list of the references cited in these petition findings is available on the Internet at *http://www.regulations.gov* in the species assessment form or in the appropriate docket provided above in **ADDRESSES**, or upon request from the appropriate person, as specified under **FOR FURTHER INFORMATION CONTACT**.

Authors

The primary authors of this document are the staff members of the Species Assessment Team, Ecological Services Program.

Authority

The authority for this action is section 4 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq*.).

Martha Williams
Principal Deputy Director,
Exercising the Delegated Authority of the Director,
U.S. Fish and Wildlife Service.

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