Public Notice in this proceeding are hereby incorporated by reference.

6. Steps Taken To Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

25. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) and exemption from coverage of the rule, or any part thereof, for small entities.

26. The analysis of the Commission's efforts to minimize the possible significant economic impact on small entities as described in the previous *MF–II Order* FRFAs are hereby incorporated by reference. As discussed above, the requirements and procedures established in the *MF–II Challenge Process Handset Public Notice* are intended to provide small entities with sufficient flexibility to choose a device that fits their needs and budgets thereby minimizing significant economic impact on small entities.

7. Report to Congress

27. The Commission will send a copy of the *MF–II Challenge Process Handset Public Notice,* including this SFRFA, in a report to Congress pursuant to the Congressional Review Act. In addition, the Commission will send a copy of the *MF–II Challenge Process Handset Public Notice,* including this SFRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the *MF–II Challenge Process Handset Public Notice,* and SFRFA (or summaries thereof) will also be published in the **Federal Register.**

IV. Contact Information

28. For information on the one-time 4G LTE coverage data collection, see *4G LTE Collection Instructions Public Notice,* or consult the Commission's MF–II 4G LTE Data Collection web page at *www.fcc.gov/MF2-LTE-Collection.* Please note that responses to the MF–II 4G LTE data collection are due by January 4, 2018. Parties with questions about the collection should email *ltedata@fcc.gov* or contact Ken Lynch at (202) 418–7356 or Ben Freeman at (202) 418–0628.

29. For further information concerning the *MF–II Challenge Process Comment Public Notice,* contact Jonathan McCormack, Auctions and Spectrum Access Division, Wireless Telecommunications Bureau, at (202) 418–0660.

Federal Communications Commission.

William W. Huber,

Associate Chief, Auctions and Spectrum Access Division, WTB.

[FR Doc. 2017–28421 Filed 1–2–18; 8:45 am]

BILLING CODE 6712–01–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket Nos. FWS–R4–ES–2016–0029 and FWS–R4–ES–2016–0031; 4500030113]

RIN 1018–BA78; RIN 1018–BA79

Endangered and Threatened Wildlife and Plants; Endangered Species Status for Black Warrior Waterdog and Designation of Critical Habitat

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), determine endangered species status under the Endangered Species Act of 1973 (Act), as amended for the Black Warrior waterdog (*Necturus alabamensis*) and designate critical habitat. The effect of this regulation will be to add this species to the List of Endangered and Threatened Wildlife and designate critical habit for this species. In total, approximately 673 kilometers (420 miles) of streams and rivers in Blount, Etowah, Jefferson, Lawrence, Marshall, Tuscaloosa, Walker, and Winston Counties, Alabama, fall within the boundaries of the critical habitat designation.

DATES: This rule is effective February 2, 2018.

ADDRESSES: This final rule is available on the internet at *http://www.regulations.gov* and *http://www.fws.gov/daphne/.* Comments, materials, and documentation that we considered in this rulemaking will be available by appointment, during normal business hours, at: U.S. Fish and Wildlife Service, Alabama Ecological Services Field Office, 1208 Main Street, Daphne, AL 36526; by telephone 251–441–5184; or by facsimile 251–441–6222.

The coordinates or plot points or both from which the maps are generated are included in the administrative record for the critical habitat designation and are available at *http://www.regulations.gov* at Docket No. FWS–R4–ES–2016–0031, and at the Alabama Ecological Services Field Office (*https://www.fws.gov/alabama*) (see **FOR FURTHER INFORMATION CONTACT**). Any additional tools or supporting information that we developed for this final rule will also be available at the U.S. Fish and Wildlife Service website and Field Office set out above, and may also be included in the preamble and at *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: William Pearson, Field Supervisor, U.S. Fish and Wildlife Service (see **ADDRESSES** above). Persons who use a telecommunications device for the deaf (TDD) may call the Federal Relay Service at 800–877–8339.

SUPPLEMENTARY INFORMATION:

This document consists of: (1) A final rule to list the Black Warrior waterdog as endangered and (2) a final critical habitat designation for the Black Warrior waterdog.

Executive Summary

Why we need to publish a rule. Under the Endangered Species Act, a species may warrant protection through listing if it is endangered or threatened throughout all or a significant portion of its range. Listing a species as an endangered or threatened species can only be completed by issuing a rule.

What this rule does. This rule will finalize the listing of the Black Warrior waterdog (*Necturus alabamensis*) as an endangered species and will finalize designation of critical habitat for the species under the Act. We are designating critical habitat for the species in four units, on public and private property totaling 673 kilometers (420 miles) of streams and rivers in Blount, Etowah, Jefferson, Lawrence, Marshall, Tuscaloosa, Walker, and Winston Counties, Alabama. This rule adds the Black Warrior waterdog to the List of Endangered and Threatened Wildlife in title 50 of the Code of Federal Regulations at 50 CFR 17.11(h) and adds critical habitat for this species to 50 CFR 17.95(d).

The basis for our action. Under the Act, we may determine that a species is endangered or threatened based on 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. We have determined that the Black Warrior waterdog is endangered by habitat loss and water quality degradation resulting from point source and non-point source pollution, urbanization, legacy effects of past forestry and other land use practices, surface coal mining, sedimentation, and impoundments.

Under the Act, if we determine that any species is a threatened or endangered species we must, to the maximum extent prudent and determinable, designate critical habitat. Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species.

Economic analysis. We prepared an economic analysis of the impacts of designating critical habitat. We published an announcement and solicited public comments on the draft economic analysis (81 FR 69475, October 6, 2016). The analysis found no significant economic impact of the designation of critical habitat.

Peer review and public comment. We sought comments from independent specialists to ensure that our designation is based on scientifically sound data, assumptions, and analyses. We invited these peer reviewers to comment on our listing proposal. We also considered all comments and information received from the public during the comment period.

Previous Federal Action

Please refer to the proposed listing rule (81 FR 69500) and the proposed designation of critical habitat (81 FR 69475) for the Black Warrior waterdog, both published October 6, 2016, for a detailed description of previous Federal actions concerning this species.

Summary of Comments and Recommendations

In the proposed listing and critical habitat rules published on October 6, 2016, we requested that all interested parties submit written comments on the proposals by December 5, 2016. We also contacted appropriate Federal and State agencies, scientific experts and organizations, and other interested parties and invited them to comment on the proposal. Newspaper notices inviting general public comment were published in the following: *AL.com;* The Blount Countian; The Cullman Times; Daily Mountain Eagle; Decatur Daily; Moulton Advertiser; Northwest Alabamian; and The Times Record. We did not receive any requests for a public hearing.

Peer Reviewer Comments

In accordance with our peer review policy published in the **Federal Register** on July 1, 1994 (59 FR 34270), and our August 22, 2016, memorandum updating and clarifying the role of peer review of listing actions under the Act, we solicited expert opinions from five knowledgeable individuals with scientific expertise that included familiarity with the species and the geographic region in which the species occurs, the species' habitat and biological needs, and conservation biology principles. We received responses from four of the peer reviewers.

We reviewed all comments received from the peer reviewers for substantive issues and new information regarding critical habitat for the Black Warrior waterdog. The peer reviewers generally concurred with our methods and conclusions and provided additional information, clarifications, and suggestions to improve the final listing and critical habitat rule. Peer reviewer comments are summarized below and incorporated into the final rule as appropriate.

(1) Comment: Two reviewers stated that one of the proposed units, Lye Branch (Tuscaloosa County), should be removed from the critical habitat designation since the specimens collected there were not Black Warrior waterdog (*Necturus alabamensis*) but another species of *Necturus,* the Gulf Coast waterdog (*N. beyeri*).

Our Response: Based on the information provided, we have removed the Lye Branch unit from the designation in our critical habitat final rule. See Summary of Changes from the Proposed Rule, below, for more information.

(2) Comment: Several peer reviewers recommended that additional units be included in the critical habitat designation. Three peer reviewers recommended adding Clear Creek (Winston County), and two of those peer reviewers also recommended the addition of Turkey Creek (Jefferson County) to the critical habitat designation. One peer reviewer recommended ''other headwater streams, as not to overlook streams potentially important to the recovery.'' All three peer reviewers noted that these other areas have suitable habitat and potentially support (or may in the future support) the species and would be crucial to the recovery of the Black Warrior waterdog.

Our Response: The streams mentioned by the commenters are encompassed within the species' historical range, the upper Black Warrior Basin. However, the Black Warrior waterdog has never been documented in these headwater streams this far up in the basin, although some lower segments of these streams may contain suitable habitat. Since they do not provide connectivity between occupied sites for genetic exchange, and therefore it is unknown if a population of the species could be successfully reestablished in an area that never had waterdogs, we determined that these sites were not essential to the conservation of the species (see response to comment 11 below).

(3) Comment: One Federal agency and some public commenters expressed concern about the use of eDNA. The concern relates to the potential for ''false positives'' and potential limitations of the use of eDNA as a surrogate for species occurrence, as well as whether the use of eDNA warrants consideration as the best science to support both listing and designating critical habitat.

Our Response: Positive eDNA detections indicate that the DNA of the target species was present in the water sample (at the collection location), but it does not definitively reveal whether the species is still present. Studies on decay rate of eDNA indicate that it remains detectable for 2–3 weeks following release (Dejan *et al.* 2011), and, in using this guideline, we assume that the organismal source (Black Warrior waterdog) was present in the stream within the prior 2–3-week time window. Information that eDNA cannot provide is abundance of target species, whether the eDNA was derived from a living or dead individual(s), or if the population is viable.

We recognize that detection of eDNA does not confirm species' current presence with absolute certainty, because the target species may have died or moved from the sampled area. Additionally, a false positive, assuming presence of the targeted live organism at a site when it is absent, can occur if the eDNA was transported to the site via a

flood, or transferred between drainages by human collectors. However, because eDNA persists for only a few weeks, the frequency of such false positives is likely low. A false positive could also occur if the eDNA in a sample was from a closely related species and that eDNA was not distinguishable from Black Warrior waterdog eDNA. However, researchers have identified and applied eDNA markers unique to the Black Warrior waterdog that are distinct from markers in other *Necturus* species (*e.g.,* de Souza *et al.* p. 5 and S2), thus avoiding species misidentification.

Since the Black Warrior waterdog is difficult to capture, sampling for eDNA in the historical range of the species is an appropriate tool, bolstering confidence in assessing whether occupancy is likely. We used eDNA to narrow our focus on sites where additional sampling was more likely to capture live waterdogs, but we are not designating any streams as critical habitat, nor are we determining listing status, solely based on eDNA. That said, based on the comment, we have added more discussion about eDNA to the final rule.

(4) Comment: A Federal agency was concerned that our economic analysis may have been an underestimation of the costs associated with consultations under the Act, as well as of the number of additional consultations as a result of the listing and critical habitat designation for the Black Warrior waterdog.

Our Response: The economic analysis estimates that the incremental costs of critical habitat for the Black Warrior waterdog will be limited to administrative costs of consultation. This is due to the fact that all projects with a Federal nexus would already be subject to section 7 requirements regardless of whether critical habitat is designated due to the presence of the waterdog or other listed species with similar conservation needs. In addition, possible project modifications stemming from section 7 consultation are unlikely to be affected by the critical habitat designation because (a) the species is so closely associated with its aquatic habitat that there is unlikely to be a difference between measures needed to avoid jeopardizing the species in areas of occupied habitat and (b) in unoccupied areas, other listed aquatic species are impacted by similar factors as the waterdog. Specifically, there are 26 listed species that occur within the Black Warrior River Basin, including 14 aquatic species and 2 plant species that may be found within the critical habitat for the Black Warrior waterdog. Eight of these listed species have critical habitat that overlaps portions of the Black Warrior waterdog's critical habitat, and the entire range of the threatened flattened musk turtle (*Sternotherus depressus*) overlaps with the range of the Black Warrior waterdog. Therefore, any activities with a Federal nexus will be subject to section 7 consultation requirements regardless of the Black Warrior waterdog critical habitat designation.

Based on the historical consultation rate for species that co-occur or share habitat with the waterdog, the economic analysis estimates that fewer than 2 formal consultations, 23 informal consultations, and 206 technical assistance efforts are likely to occur in a given year.

(5) Comment: A Federal agency noted that some of its operations likely co-occur with proposed occupied and unoccupied critical habitat for the Black Warrior waterdog, at stream crossings used to access existing transmission line rights-of-way (ROWs) for maintenance purposes and construction of new transmission line ROWs. The Federal agency recommended that the Service specify suitable best management practices (BMPs) at stream crossings to minimize or prevent impacts to Black Warrior waterdog, so that actions at stream crossings either will not affect or are not likely to adversely affect this species.

Our Response: For stream crossing access for ROW and new transmission line construction, the Service will provide BMPs during informal or formal consultation. The additional administrative costs of such ROW projects with a Federal nexus are described above.

In accordance with policy, as published in the **Federal Register** on July 1, 1994 (59 FR 34272), we added ''transmission line ROW maintenance'' to the actions unlikely to result in a violation of section 9 of the Act if carried out in accordance with existing regulations (see Available Conservation Measures). These actions are now stated in the rule as ''Normal agricultural practices, silvicultural practices, and transmission line ROW maintenance, including herbicide and pesticide use, which are carried out in accordance with any existing regulations, permits, and label requirements, and best management practices.''

State Comments

(6) Comment: A State agency and some private organizations provided information on forestry compliance rates for BMPs and stream management zones (SMZs) and the positive impact on water quality.

Our Response: We acknowledge the improvements and progress that many agencies and organizations have made over the years in relation to land use and certified BMPs, including a 98 percent compliance rate in Alabama. We made changes to the listing and critical habitat designation to reflect these recent improvements in certified BMPs and forest management. We note that a majority of the adverse effects of forestry on waterdog habitat (*e.g.,* sedimentation, streambank and channel modification) appear to be the legacy of activities conducted prior to the existence of the Act and various other laws designed to protect water quality and aquatic habitats.

Public Comments

(7) Comment: A commenter suggested that there is not sufficient information on the Black Warrior waterdog's biology and ecological relationships upon which to make a listing determination.

Our Response: We are required to make our listing determination based on the best scientific and commercial data available at the time of our rulemaking. We found that the Black Warrior waterdog warrants listing as an endangered species under the Act, based on the severity and immediacy of threats currently impacting the species. The overall range has been significantly reduced, and the remaining habitat and populations face threats from a variety of factors such as water quality degradation and small populations that are isolated from each other by unsuitable habitat created mainly by impoundments and pollution (Factors A and E) acting in combination to reduce the overall viability of the species. The risk of extinction is high because the number of populations has decreased, and the remaining populations are small, isolated, and have limited potential for recolonization (Factor E).

(8) Comment: One commenter requested that the Black Warrior waterdog be listed as threatened instead of endangered, due to lack of information on the species' biology and needs.

Our Response: We considered the best scientific and commercial data available regarding the Black Warrior waterdog to evaluate its status under the Act and found that the species meets the definition of endangered due to the species' contracted range, loss of habitat due to water quality degradation (sedimentation, toxins, and nutrients), fragmentation of the populations caused by impoundments, rangewide (not localized) threats, and ongoing threats that are presently acting on the species. A threatened species status is not

appropriate for this species due to a reduction of suitable habitat available for the species and the severity of the stressors that are imminent and occurring rangewide, and are expected to continue into the future, such that the species is in immediate danger of extinction. Additionally, only two of the waterdog locations support strong numbers of animals to the point they can be collected on a routine basis. At the remaining sites surveyed since 1990, only one or two waterdogs have been captured, which speaks to the current poor status of the species.

(9) Comment: One commenter suggested the relevance of the flattened musk turtle as a surrogate species was not adequately explained.

Our Response: We used the flattened musk turtle as a surrogate species because the Black Warrior waterdog and flattened musk turtle occupy the same range and habitat, and similar factors influence the habitat and conservation of each species. However, we did not rely solely on the flattened musk turtle to discern the habitat needs of the Black Warrior waterdog. We also relied on information about the Neuse River waterdog (*Necturus lewisi*), a closely related species in the same genus, because of its similar biology and life history, as well as recently published Black Warrior waterdog research.

(10) Comment: One commenter noted that the lower 22.5 miles of Locust Fork and 44.5 miles of Mulberry Fork, both of which were proposed for designation as critical habitat, are navigable and used for barge traffic. The commenter requested that we consider whether those lower reaches exhibit the features of critical habitat for the Black Warrior waterdog. The commenter also requested that we identify measures to allow navigation maintenance activities ''without unreasonable burdens of cost or time'' if Section 7 consultation or Section 10 permitting is required.

Our Response: The Locust Fork critical habitat unit (Unit 2) is occupied by the Black Warrior waterdog and contains the following physical or biological features: Abundant rock crevices and rock slabs, leaf litter, and instream flow with moderate velocity and continuous daily discharge that allows for a longitudinal connectivity regime consisting of both surface runoff and ground water sources, exclusive of flushing flows caused by stormwater runoff, that are essential to the conservation of the Black Warrior waterdog. We have removed the Mulberry Fork unit (Unit 6 in the proposed rule), including its lower 44.5 miles from the final critical habitat rule. The Black Warrior waterdog has been extirpated from Mulberry Fork, likely because Mulberry Fork has incurred more habitat degradation in comparison to Locust Fork, where the waterdog remains extant. In short, Locust Fork meets the definition of critical habitat under the Act for occupied habitat. Mulberry Fork, however, does not meet the definition under the Act for unoccupied habitat as it is not essential for conservation of the species and therefore, is not included as critical habitat in the final rule (see our response to comment 11 below).

We would not expect direct effects to the species from navigation maintenance activities because areas with suitable physical and biological features in lower Locust Fork are close to the stream margins, away from the navigation channel. Navigation maintenance activities are unlikely to be affected by the critical habitat designation any more than they would be by the listing of the species because (a) the species is so closely associated with its aquatic habitat there is unlikely to be a difference between measures needed to avoid jeopardizing the species in areas of occupied habitat and (b) in unoccupied areas, other listed aquatic species are impacted by similar factors as the waterdog. Therefore, any activities with a Federal nexus will be subject to section 7 consultation requirements and, if necessary, section 10 permitting requirements to inform the consultation, regardless of the Black Warrior waterdog critical habitat designation.

(11) Comment: Several private organizations commented that our proposal to designate unoccupied areas as critical habitat had not been properly supported or explained in the proposed rule.

Our Response: In order to designate unoccupied areas, we are required by section 3(5)(A) of the Act to determine that such areas are essential for the conservation of the species. We determine from the record whether any unoccupied areas are necessary to support the species' recovery. The proposed rule outlined criteria for designation of critical habitat, which included a consideration of unoccupied areas that relied on the following criteria: (1) The importance of the stream to the overall status of the species and the contribution to the future recovery of the Black Warrior waterdog; (2) whether the area could be restored to contain the necessary habitat to support the Black Warrior waterdog; (3) whether the site provides connectivity between occupied sites for genetic exchange; and (4) whether a population of the species could potentially be reestablished in the area.

We received public comments indicating the Service inappropriately evaluated these units for inclusion in critical habitat and did not explain why these units were essential for the conservation of the Black Warrior waterdog. In response to these comments, we reevaluated the Lake Tuscaloosa, Lost Creek, and Mulberry Fork units, considering the four criteria listed above and the conservation strategy for the Black Warrior waterdog, and determined that our conclusion in the proposed rule, that the three unoccupied units are essential for the conservation of the Black Warrior waterdog, was in error.

Within the Lake Tuscaloosa unit, even though both of these sections are considered to be in the historical range of the species, both are isolated from each other and other populations of Black Warrior waterdog by two large impoundments (Lake Tuscaloosa and Holt Lake), and we had failed to consider this in the proposed rule. Upon further review, based on these impoundments, we now conclude habitat connectivity, one of the four criteria we considered in determining whether unoccupied areas are essential for the conservation of the species, is not met for the Lake Tuscaloosa unit. This lack of habitat connectivity with occupied sites in turn affects the unit's satisfaction of another criterion, the importance of the stream to the overall status of the species and its contribution to future recovery. Although this unit still contains suitable habitat in the upper reaches and may play a role in the recovery of the species, we find that because it does not provide habitat connectivity between occupied sites to allow for genetic exchange it is not essential for the conservation of the species.

Regarding the Lost Creek unoccupied unit, in a site assessment completed in March 2000, habitat in Lost Creek was determined to be poor to unsuitable water quality for the Black Warrior waterdog (Bailey 2000, pp. 7–8). This reduces the likelihood that a population of waterdogs could be established in this unit. More importantly, like the Lake Tuscaloosa unit, upon reevaluation we have determined that this unit is isolated from other occupied areas by an impoundment (Lake Tuscaloosa) and therefore lacks the connectivity to occupied stream reaches, which in the proposed rule was one of the criteria for determining that the area was essential for the conservation of the species. Similarly, the importance of the stream to the overall status of the species and

the contribution to the future recovery are also reduced due to this lack of habitat connectivity with occupied sites. While this unit still contains somewhat suitable habitat in the upper reaches and may play a role in the recovery of the species, we find that, because it does not provide habitat connectivity between occupied sites to allow for genetic exchange, it is not essential for the conservation of the species.

Regarding the Mulberry Fork unit, as with the other two units we have, upon reevaluation, determined that impounded areas at the confluence of occupied tributary streams prohibit natural recolonization of this unit. The lower reach of Mulberry Fork is impounded by Bankhead Lake as far upstream as the mouth of Blackwater Creek (Bailey 2000, p. 9). In a site assessment completed in March 2000, habitat was described as a sluggish, muddy, and impounded area at the confluence with Sipsey Fork (Bailey 2000, p. 10). While this unit does connect to the occupied Blackwater Creek unit, the large expanse of impounded water provides a barrier to the Black Warrior waterdogs expanding from the occupied unit into Mulberry Fork. Therefore, since the Mulberry Fork unit is isolated from other occupied areas by impounded areas of unsuitable habitat, it does not meet the connectivity criteria we considered in determining whether unoccupied areas are essential for the conservation of the species. The importance of the stream to the overall status of the species and the contribution to the future recovery are also reduced due to this lack of habitat connectivity with occupied sites. While this unit still contains somewhat suitable habitat in the upper reaches and may play a role in the recovery of the species, we find that it does not provide habitat connectivity between occupied sites to allow for genetic exchange and is not essential for the conservation of the species.

Although the proposed units Lake Tuscaloosa, Lost Creek, and Mulberry Fork may have some degree of suitable habitat in the upper reaches and may be able to support the reintroduction of Black Warrior waterdogs, in the proposed rule we incorrectly determined that these areas were essential for the conservation of the species, as noted in the public comments. However, we correctly identified these units as providing habitat for reintroduction and future recovery activities.

Therefore, we have determined that these four units are not essential for Black Warrior waterdog conservation and have not included these units in this final critical habitat designation. Although we no longer regard the unoccupied units (Lake Tuscaloosa, Lost Creek, or Mulberry Fork) as essential for the conservation of the species, we recognize that these areas may offer suitable habitat through restoration for the Black Warrior waterdog and may be useful for *ex situ* (offsite) conservation measures at a future time.

Summary of Changes From the Proposed Rule

We made the following significant changes to the rule based on peer review and public comments: We have removed four units from the final critical habitat designation—the Lye Branch, Lake Tuscaloosa, Lost Creek, and Mulberry Fork units.

Based on further analysis after taking into consideration information provided during the comment period, it was determined that the Lye Branch stream segment (16 kilometers (10 miles)) (set forth in the proposed rule as Unit 1) was not historically occupied by the Black Warrior waterdog but by another species of waterdog. Based on this information, we determined that the unit is outside the known historical range of the Black Warrior waterdog.

As described in our response to Comment 11, we have also removed the Lake Tuscaloosa unit, approximately 108 rkm (67 rmi) of stream and river habitat (set forth in the proposed rule as Unit 2), the Lost Creek unit, approximately 93 rkm (58 rmi) of stream and river habitat (set forth in the proposed rule as Unit 4), and the Mulberry Fork unit, approximately 183 rkm (114 rmi) of stream habitat (set forth in the proposed rule as Unit 6) from the final critical habitat designation because after further analysis we determined that those unoccupied areas were not essential for the conservation of the species and therefore did not fall within the definition of ''critical habitat.''

Summary of Biological Status

The Black Warrior waterdog is a large, aquatic, nocturnal salamander that permanently retains a larval form and external gills throughout its life (Conant and Collins 1998, pp. 419–420). Found only in streams within the Black Warrior River Basin (Basin) in Alabama, the waterdog inhabits streams above the Fall Line, which is the contact zone between the Coastal Plain and the adjacent Piedmont physiographic province. Due to their highly permeable skin (Duellman and Trueb 1986, p. 197) and external gills, Black Warrior waterdogs are very sensitive to declines in water quality.

Populations and Distribution

Historically, the waterdog was known from 11 sites, 2 of which have been lost due to impoundments. Since 1990 (current), the waterdog has been reported from 13 sites. These sites are in Blount (Blackburn Fork of the Little Warrior River), Marshall (Slab Creek, tributary to Locust Fork), Tuscaloosa (Yellow Creek, North River, Carroll Creek, Mulberry Fork), Walker (Lost Creek, Little Blackwater Creek), and Winston (Sipsey Fork, Blackwater Creek, Browns Creek, Brushy Creek, Capsey Creek) Counties, Alabama. Each of the 13 sites verified as a Black Warrior waterdog locality represents an individual population.

Information concerning the current status of Black Warrior waterdog populations is limited. Only the Sipsey Fork and Brushy Creek populations, in Bankhead National Forest (BNF), appear to be maintaining numbers sufficient enough to be captured regularly. At other sites surveyed since 1990, only one or two waterdogs have been captured. In Sipsey Fork, 52 waterdogs were captured over a 3-year period, representing 173,160 trap hours, a rate of 1 waterdog per 3,330 trap hours (Durflinger-Moreno *et al.* 2006, pp. 70–71). A high proportion of sexually mature individuals were captured during this period, suggesting that recruitment and survival rates of the young age classes may be low in Sipsey Fork (Durflinger-Moreno *et al.* 2006, p. 79). More recently, in surveys from 2012 to 2016 (Godwin 2016, entire), seven waterdogs were captured in Sipsey Fork (408 trap-nights; catch per unit effort (CPUE) = 0.017 waterdogs per trap-night) and four were captured in Brushy Creek (140 trap-nights; CPUE = 0.029). The density of Black Warrior waterdogs in Sipsey Fork and Brushy Creek in BNF, relative to the lower densities detected at other sites in the species' range, indicates the importance of this federally owned land for the species' recovery and long-term survival.

Because Black Warrior waterdogs are extremely difficult to detect in surveys, little is known regarding the species' demography. However, we may infer some of the characteristics of a healthy population based on capture data from the most the robust extant population (Durflinger-Moreno 2006, entire) in the Sipsey Fork drainage. We would expect a healthy population at a minimum to have an adult sex ratio close to 1:1. Additionally, a stable population would be expected to have larval, juvenile, and adult age classes present annually, as a measure of stable recruitment and reproduction rates. Species' abundance

data are lacking, but in 1938, during spring and fall, 135 specimens were collected at a single site in Mulberry Fork (Bart *et al.* 1997, p. 193). In comparison, 52 waterdogs were captured in Sipsey Fork over three years of sampling, in 1994, 1995 and 1997. Thus, based on these historic and current data, and given the Sipsey Fork population is likely depressed relative to historic populations, a recovered or conserved species could be estimated to have aggregations of at least 100 individuals per year, represented by all age classes, and at multiple sites within each currently occupied sub-basin in the Black Warrior river.

The captures of four waterdogs in Brushy Creek confirmed the accuracy of eDNA (environmental DNA, described below) previously detected in Brushy Creek water samples (de Souza *et al.* 2016, p. 8). In 2013 and 2014, eDNA samples indicated Black Warrior waterdogs may still present in Rush Creek (Brushy Creek tributary) and Locust Fork, and newly found in Gurley Creek (Locust Fork tributary) and Yellow Creek (Big Yellow Creek/Black Warrior River tributary), although no waterdogs were captured at the time (Godwin 2014, pers. comm.). Similarly, in 2016, a Black Warrior waterdog was captured in Yellow Creek, validating the results of the eDNA survey in that stream.

Detecting the presence of the Black Warrior waterdog is difficult, presumably because the species currently occurs only at low densities. The relationship between cumulative number of site visits and the cumulative number of sites containing waterdogs indicated that 200 additional surveys would be needed to discover a single new locality for the species (Guyer 1997, p. 4). This relationship is further supported by the findings of de Souza (2016, p. 10), which indicated that, at an occupied site, 10 and 32 eDNA replicate water samples in the cool season and warm season, respectively, would be necessary for 95 percent detection probability of the waterdog.

Only through the use of eDNA have we been able to determine that the waterdog is likely present at some historical locations. Researchers use eDNA as a surveillance tool to monitor for the genetic presence of an aquatic species. According to Strickler (2015, p. 1), ''. . . when an aquatic animal can't be seen or heard, it leaves traces of itself in the water by shedding skin, excreting waste, releasing gametes and decomposing. Investigators collect a water sample to detect the target species' DNA and determine whether the species has recently been in the water body.'' Positive eDNA detections indicate that the DNA of the targeted species was present in a water sample at the collection location but do not definitively tell us that the species is still present. Studies on decay rate of eDNA indicate it remains 2 to 3 weeks following release (Dejean *et al.* 2011), and, in using this guideline, we assume that the organismal source (Black Warrior waterdog) was present in the stream within the prior 2- to 3-week time window. Information that eDNA cannot provide is the abundance of the target species, whether the eDNA was derived from living or dead individuals, or if the population is viable.

To prevent incorrectly identifying presence of Black Warrior waterdog based on eDNA when a similar species was present, de Souza *et al.* (2016 p. 5 and S2) included DNA from similar *Necturus* species in analyses of the eDNA samples from the Black Warrior drainage. Part of the eDNA analyses included a primer search (primers are used to amplify DNA samples) that identified the primers that combined with Black Warrior waterdog DNA but not the DNA of non-target *Necturus* species (de Souza *et al.* 2016, S2). Non-target species (those to avoid misidentifying as Black Warrior waterdog) in the analyses were *N. lodingi,* an undescribed species in Gulf drainages from Mobile Bay eastward (Shelton-Nix, p. 200), mudpuppy, dwarf waterdog, and Gulf Coast waterdog. Among the non-target species only the Gulf Coast waterdog could potentially co-occur naturally at sites along the Fall Line, since its range extends from the Coastal Plain to the Fall Line, whereas the Black Warrior waterdog range extends from the Piedmont to the Fall Line. It is also possible that mudpuppies could co-occur as a result of introductions by human transport from the Tennessee River drainage, which lies just north of Black Warrior drainage divide. In summary, given the analytical design applied to the eDNA, it is unlikely any samples were from *Necturus* species other than Black Warrior waterdog.

Biology and Habitat

Black Warrior waterdogs are associated with stream depths of 1 to 4 meters (m) (3.3 to 13.1 feet (ft)), reduced sedimentation, and large leaf packs (leaves that fall into streams accumulate in packs usually behind branches, rocks, and other obstructions) supporting mayfly (Ephemeroptera spp.) and caddisfly (Trichoptera spp.) larvae.

Except for habitat affinities, life-history data concerning the Black Warrior waterdog and other species of *Necturus* waterdogs are somewhat limited. As closely related species in the same genus, there are general characteristics that all *Necturus* species share, such as retention of the larval state (*e.g.,* gills) as adults. As an example, although geographically separated (allopatric), the Black Warrior waterdog and the Neuse River waterdog both utilize high-gradient streams that are above the Fall Line and contain hard substrate, leafpacks, and macroinvertebrates. Because the two species likely evolved in similar habitats, an influential factor in determining life-history traits, we used the Neuse River waterdog as a surrogate to decipher some of the biological and ecological attributes that have not yet been determined for the Black Warrior waterdog. When such data were lacking for the Neuse River waterdog and Black Warrior waterdog, we relied on data from other *Necturus* species.

Summary of Factors Affecting the Species

The Act directs us to determine whether any species is an endangered species or a threatened species because of any one of five factors affecting its continued existence. In this section, we summarize the factors affecting the Black Warrior waterdog to assess the species' viability. For additional detail, see the proposed listing rule (81 FR 69500, October 6, 2016).

Factor A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

Water quality degradation is considered the primary reason for the extirpation of the Black Warrior waterdog over much of its historical range (Bailey 2000, pp. 19–20). Together with large impoundments (discussed below), it is the predominant threat to the continued existence of the species. Changes in water chemistry and flow patterns, resulting in a decrease in water quality and quantity, have detrimental effects on salamander ecology because they can render aquatic habitat unsuitable. Substrate modification is also a major concern for aquatic salamander species (Geismar 2005, p. 2; O'Donnell *et al.* 2006, p. 34). When interstitial spaces between substrates become compacted or filled with fine sediment, the amount of available foraging habitat and protective cover for salamanders is reduced, resulting in population declines. Most streams surveyed for the Black Warrior waterdog showed evidence of water quality degradation and were correspondingly biologically depauperate, lacking the full complement of species that would

be expected under natural, undisturbed habitat conditions (Bailey 1992, p. 2; Bailey 1995, p. 11; Durflinger-Moreno *et al.* 2006, p. 78).

Discharges

Contributors to water quality degradation in the Black Warrior Basin include point source (end of pipe) discharges and runoff from urban, mining, agricultural and, historically, forestry land uses (Deutsch *et al.* 1990, pp. 1–62; Upper Black Warrior Technical Task Force 1991, p. 1; O'Neil and Sheppard 2001, p. 2). These sources contribute pollution to the Basin via sediments, fertilizers, herbicides, pesticides, animal wastes, septic tank and gray water leakage, and oils and greases. Pollution has a direct effect on the survival of Black Warrior waterdogs, which, due to their highly permeable skin (Duellman and Trueb 1986, p. 197) and external gills, are very sensitive to declines in water quality.

Urbanization

Urbanization is a significant source of water quality degradation that can reduce the survival of aquatic organisms, including the Black warrior waterdog (Bowles *et al.* 2006, p. 119; Chippindale and Price 2005, pp. 196–197). Urban development can stress aquatic systems in a variety of ways, including increasing the frequency and magnitude of high flows in streams, increasing sedimentation, increasing contamination and toxicity, and changing stream morphology and water chemistry (Coles *et al.* 2012, pp. 1–3, 24, 38, 50–51). Sources and risks of an acute or catastrophic contamination event, such as a leak from an underground storage tank or a hazardous materials spill on a highway, increase as urbanization increases.

Several researchers have examined the negative impact of urbanization on stream salamander habitat, finding connections between salamander abundances and levels of development within a watershed. A study on the dusky salamander (*Desmognathus fuscus*) in Georgia (Orser and Shure 1972, p. 1,150) found a decrease in stream salamander density with increasing urban development. A similar relationship between populations and urbanization was found for dusky salamander, two-lined salamander (*Eurycea bislineata*), southern two-lined salamander (*E. cirrigera*), and other species in North Carolina (Price *et al.* 2006, pp. 437–439; Price *et al.* 2012a, p. 198), Maryland, and Virginia (Grant *et al.* 2009, pp. 1,372–1,375). Abundance of dusky and two-lined salamanders was most closely related to the amount and type of habitat within the entire watershed, as opposed to areas immediately adjacent to the stream (Willson and Dorcas 2003, pp. 768–770).

Large population centers such as the cities of Birmingham, Tuscaloosa, and Jasper contribute substantial runoff to the Black Warrior Basin. The watershed occupied by these three cities contains more industrial and residential land area than other river basins in Alabama. Streams draining these areas have a history of serious water quality problems, as described above. Entire species of fish, mussels, and snails (Mettee *et al.* 1989, pp. 14–16; Hartfield 1990, pp. 1–8), and populations of the flattened musk turtle (Service 1990, p. 3), have been extirpated from large areas of the watershed primarily due to water quality degradation.

Spills

Associated with urbanization is the development of transportation systems, including roads, rails, airports, locks, and docks. Accidents, crashes, and derailments, resulting in spills, occur along these transportation corridors. Since 1990, more than 1,200 spills in the Basin have been reported to the U.S. Coast Guard National Response Center. One of several spills in the Basin took place in the Black Warrior River in 2013. Approximately 164 gallons of crude oil were accidently pumped into the river. Emergency response teams cleaned the river, but a sheen of crude oil remained visible (Taylor 2013, entire). The threat from spills remains unchanged.

Forestry

Runoff from forestry operations and road construction has been a source of pollution in the Basin when certified BMPs were not followed to protect streamside management zones (Hartfield 1990, pp. 4–6; Service 2000, p. 13). Forestry activities that were poorly or inadequately managed in the past can have long-lasting effects in the high-gradient, highly erodible soils within the Basin, as seen by the legacy effects on Bankhead National Forest (Laschet 2014, pers. obs.). However, modern forestry operations in Alabama have a certified BMP compliance of 98 percent and, therefore, mostly are not currently significant contributors to nonpoint source pollution. According to Alabama's BMPs for forestry, SMZs should be a width of 35 ft (50 ft for sensitive areas) from the stream bank, providing a level of protection to instream habitat. Recently, the forest industry has begun to self-regulate SMZs through a third-party certification program in which mills will not accept timber from foresters who do not comply with SMZ requirements.

Surface Coal Mining

Surface coal mining represents another threat to the biological integrity of streams in the Basin and has undoubtedly affected the distribution of the Black Warrior waterdog (Bailey 1995, p. 10). Strip mining for coal results in hydrologic disturbance (*i.e.,* erosion, sedimentation, decline in groundwater levels, and general degradation of water quality) that affects many aquatic organisms (Service 2000, p. 12). Runoff from coal surface mining can generate pollution through acidification, increased mineralization, and sediment loading. Impacts are more often associated with past activities and abandoned mines, since presently operating mines are required to employ environmental safeguards established by the Federal Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1201 *et seq.*) and the Clean Water Act of 1972 (33 U.S.C. 1251 *et seq.*) (Service 2000, p. 12).

Coal mining in the Basin is currently a threat to the Black Warrior waterdog. Abandoned mines that have been inadequately reclaimed will continue to contribute pollutants to streams into the future. Recently, new coal mines, which have the potential to discharge additional pollutants into the waters in the range of the Black Warrior waterdog, have been proposed in Sipsey Fork and Mulberry Fork (Dillard 2011, pers. comm.; Alabama Surface Mining Commission 2012, pp. 1–4).

Impoundments

In addition to water quality degradation, creation of large impoundments has reduced suitable habitat within the Basin. Two historical populations of the Black Warrior waterdog, Black Warrior River near Tuscaloosa and Mulberry Fork at Cordova, have been lost due to impoundments. Impoundments behind Bankhead, Lewis, and Holt dams have flooded thousands of hectares (acres) of habitat previously considered suitable for the Black Warrior waterdog. The entire main channel of the Black Warrior River, over 272 kilometers (km) (170 miles (mi)), has been affected by impoundments (Hartfield 1990, p. 7), which do not have the shallow, flowing water associated with the waterdog. As a result, impoundments generally are unsuitable habitat for the species, although on one occasion two waterdogs were found in the upper end of Lewis Smith Reservoir (U.S. Forest Service record, in Godwin 2016, p. 5) where

Sipsey Fork enters and stream habitat transitions to lake habitat. The abundance of large predatory fish in impoundments further renders them unsuitable for the Black Warrior waterdog.

Historically, Brushy Creek was a tributary of Sipsey Fork. Construction of Lewis Smith Reservoir separated the flowing connection between Brushy Creek and Sipsey Fork, essentially splitting the single BNF population in two isolated halves. Impoundments have been entrapments for waterdogs, isolating and inhibiting genetic exchange between populations in tributaries no longer connected by suitable flowing habitat.

Summary of Factor A

The Black Warrior waterdog has experienced substantial destruction, modification, and curtailment of its habitat and range. Specific species stressors include degradation of water quality and habitat from point source discharges and runoff, urbanization, legacy effects of poor forest management, surface coal mining, agriculture, and the construction of dams and their impoundments, together affecting hundreds of stream miles in the species' range. The amount of habitat already lost amplifies the current and future threat from point and nonpoint source pollution, accidental spills, and violation of permitted discharges. Due to a reduction of suitable habitat available for the species and the severity and magnitude of this stressor, we consider the present or threatened destruction, modification, or curtailment of habitat and range a threat to the Black Warrior waterdog. While changes to land management and river operations have reduced impacts to the river system, ongoing activities continue to affect water quality.

Factor B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

Based on best available data, there is no evidence that overutilization for commercial, recreational, scientific, or educational purposes is a threat to the Black Warrior waterdog.

Factor C. Disease or Predation

No diseases or incidences of predation have been reported for the Black Warrior waterdog. Also, there is no evidence of predation on *Necturus* species by fish in creeks and streams as reported by Bart and Holzenthal (1985, p. 406). Predation of adult mudpuppy (*N. maculosus*) by fish, crayfish, turtles and watersnakes has been observed rarely (Petranka 1998, p. 429), and is almost certainly an occurrence for Black Warrior waterdogs as well. A study of dwarf waterdog (*N. punctatus*) feeding behavior in the presence of predators indicated movement of the species to leaf pack habitat was driven by food availability rather than predator avoidance (Sollenberger 2013, entire). Given the very infrequent observations of predation on waterdogs and no reports of deleterious effects of predation on *Necturus* species, we do not consider predation to be an important factor influencing Black Warrior waterdog populations. Therefore, the best available data do not indicate that disease or predation is a threat to the Black Warrior waterdog in its preferred habitat outside of impounded areas, which harbor greater densities of larger fish predators and are more open than stream habitats, providing less cover for avoiding potential predators such as birds.

Factor D. The Inadequacy of Existing Regulatory Mechanisms

Under this factor, we examine whether existing regulatory mechanisms are inadequate to address the threats to the Black Warrior waterdog discussed under other factors. Section 4(b)(1)(A) of the Act requires the Service to take into account ''those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species.'' In relation to Factor D under the Act, we interpret this language to require the Service to consider relevant Federal, State, and Tribal laws and regulations, and other such mechanisms that may minimize any of the threats we describe in threat analyses under the other four factors, or otherwise enhance conservation of the species. We give strongest weight to statutes and their implementing regulations and to management direction that stems from those laws and regulations. An example would be State governmental actions enforced under a State statute or constitution, or Federal action under statute.

The Federal Surface Mining Control and Reclamation Act of 1977 (SMCRA), as amended December 22, 1987, requires all permitted mining operations to minimize disturbances and adverse impacts to fish, wildlife, and related environmental values, as well as implement enhancement measures where practicable. It further recognizes the importance of land and water resources restoration as a high priority in reclamation planning. However, the continued decline of many species, including the flattened musk turtle, fishes, and a number of mussels in the Black Warrior Basin, is often attributed to mining activities (Dodd *et al.* 1988, pp. 55–61; Mettee *et al.* 1989, pp. 12–13; Hartfield 1990, pp. 1–8; Bailey and Guyer 1998, pp. 77–83; Service 2000, pp. 12–13), even though SMCRA is in effect.

The Alabama Department of Conservation and Natural Resources (ADCNR) recently added the Black Warrior waterdog to its list of non-game State-protected species (ADCNR 2012, pp. 1–4). Although this change will make it more difficult to obtain a collecting permit for the species, it does not offer any additional protection for habitat loss and degradation. The ADCNR also recognizes the Black Warrior waterdog as a Priority 2 species of high conservation concern in its State Wildlife Action Plan due to its rarity and restricted distribution (ADCNR 2005, p. 298). However, this designation also does not offer any regulatory protections.

Alabama Department of Environmental Management (ADEM) has established minimum water-quality standards for some occupied stream segments within the Black Warrior River drainage under the authority of the Clean Water Act of 1972. These standards are believed to be protective of aquatic species. In Locust Fork, Mulberry Fork, and other tributaries of the Black Warrior River occupied by the Black Warrior waterdog, a combined total of 275 km (171 mi) have been identified on the Alabama 303(d) List (a list of water bodies failing to meet their designated water-use classifications) as impaired by siltation and nutrients (ADEM 2010, pp. 1–3). The sources of these impairments have been identified as runoff from agricultural fields, abandoned surface mines, and industrial or municipal sites. Multiple stream reaches within the occupied habitat of the Black Warrior waterdog (Locust Fork, Mulberry Fork, Yellow Creek, and North River) fail to meet current regulatory standards. Even with current regulations, surviving waterdog populations are negatively affected by discharges, highway construction, mining (current and unreclaimed sites), and other activities with a Federal nexus (see discussion under *Factor A,* above).

Factor E. Other Natural or Manmade Factors Affecting Its Continued Existence

Demographic Factors

The remaining Black Warrior waterdog populations are isolated from each other by unsuitable habitat created by impoundments, pollution, and other

factors as described under the *Factor A* discussion, above. Waterdog population densities are low even in the relatively best localities, and factors related to low population compound these threats.

Species that are restricted in range and population size are more likely to suffer loss of genetic diversity due to genetic drift, potentially increasing their susceptibility to inbreeding depression, decreasing their ability to adapt to environmental changes, and reducing the fitness of individuals (Soule 1980, pp. 157–158; Hunter 2002, pp. 97–101; Allendorf and Luikart 2007, pp. 117–146). These low population densities combined with fragmentation of habitat renders populations extremely vulnerable to inbreeding depression (negative genetic effects of small populations, *e.g.,* Wright *et al.* 2008, p. 833) and may reduce mating to a frequency insufficient to sustain populations with newly recruited cohorts. Additionally, low population densities reduce species' resiliency to catastrophic events such as floods, droughts, or chemical spills (Black Warrior River Watershed Management Plan n.d., p. 4.4), which may be compounded by the effects of climate change in the future (see discussion below). It is likely that some of the Black Warrior waterdog populations are below the effective population size required to maintain long-term genetic and population viability. The long-term viability of a species is based on the conservation of numerous populations throughout its geographic range (Harris 1984, pp. 93–104), which provides a level of redundancy that reduces the risk of environmental change to the species as a whole (Shaffer and Stein 2000, p. 310). The level of isolation and fragmentation of Black Warrior waterdog populations makes natural repopulation following localized extirpations virtually impossible without human intervention.

Climate Change

Climate change has the potential to increase vulnerability of the Black Warrior waterdog to random catastrophic events. Various emissions scenarios suggest that, by the end of the 21st century, average global temperatures are expected to increase 0.3 °C to 4.8 °C (0.5 °F to 8.6 °F), relative to the period 1986–2005 (IPCC 2013, p. 15). By the end of 2100, it is virtually certain that there will be more frequent hot and fewer cold temperature extremes over most land areas on daily and seasonal timescales, and it is very likely that heat waves and extreme precipitation events will occur with a higher frequency and intensity (IPCC 2013, pp. 15–16). In the southeastern United States the frequency, duration, and intensity of droughts are likely to increase (Thomas *et al.* 2009, p. 112). Droughts cause decreases in water flow and dissolved oxygen levels and increases in temperature in the river system. Studies of aquatic salamanders have reported decreased occupancy, loss of eggs, decreased egg-laying, and extirpation from sites during periods of drought (Camp *et al.* 2000, p. 166; Miller *et al.* 2007, pp. 82–83; Price *et al.* 2012b, pp. 317–319).

Determination of Status

Section 4 of the Act (16 U.S.C. 1533), and its implementing regulations at 50 CFR part 424, set forth the procedures for determining whether a species is an endangered species or threatened species and should be included on the Federal Lists of Endangered and Threatened Wildlife and Plants (*i.e.,* ''listed''). Under section 4(a)(1) of the Act, we may list a species based on (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. Listing actions may be warranted based on any of the above threat factors, singly or in combination.

Determination of Status Throughout All of the Species' Range

We have carefully assessed the best scientific and commercial data available regarding the past, present, and future threats to the Black Warrior waterdog. Two populations have been extirpated due to construction of dams that eliminated habitat on the Black Warrior River (Factor A). Current threats to the species include habitat destruction and degradation from point source pollution, runoff, and contaminant spills from industry, urbanization, surface coal mining, agriculture, and legacy effects of past forestry practices (Factor A). The small size and level of fragmentation of remaining Black Warrior waterdog populations leaves the species vulnerable to inbreeding depression and reduced genetic fitness, natural stochastic events, including storms and droughts (Factor E). Existing regulatory mechanisms have not led to a reduction or removal of threats impacting the Black Warrior waterdog (Factor D). These ongoing threats to the species are rangewide and expected to continue in the future.

The Black Warrior waterdog is currently in danger of extinction throughout its entire range due to the immediacy and severity of threats currently impacting the species. The risk of extinction is high because there are few (13) extant populations and the majority of the populations are small and isolated. Several of these populations are likely below the effective size needed to remain viable without human intervention, owing to barriers to natural immigration. Therefore, on the basis of the best available scientific and commercial information, we list the Black Warrior waterdog as an endangered species. We find that a threatened species status is not appropriate for this species due to a reduction of suitable habitat available for the species and the severity of the stressors that are imminent and occurring rangewide, are ongoing, and are expected to continue into the future, such that the species is in immediate danger of extinction. Additionally, only two waterdog populations appear to be maintaining numbers sufficiently large to be captured regularly. At the remaining sites surveyed since 1990, only one or two waterdogs have been captured, which speaks to the current poor status of the species. Because of the contracted range and small population size of Black Warrior waterdog and because the threats are occurring rangewide, are ongoing, and are expected to continue into the future, we conclude that the species is in immediate danger of extinction.

Determination of Status in a Significant Portion of the Range

The Act defines an endangered species as any species that is ''in danger of extinction throughout all or a significant portion of its range'' and a threatened species as any species ''that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.'' The phrase ''significant portion of its range'' is not defined by the Act, and a district court has held that aspects of the Service's Final Policy on Interpretation of the Phrase ''Significant Portion of Its Range'' in the Endangered Species Act's Definitions of ''Endangered Species and ''Threatened Species'' (79 FR 37577 (July 1, 2014)) (SPR Policy) were not valid. *Center for Biological Diversity* v. *Jewel,* No. 14–cv–02506–RM (D. Ariz. Mar. 29, 2017) (Pygmy-Owl Decision).

Although the court's order in that case has not yet gone into effect, if the court denies the pending motion for reconsideration, the SPR Policy would become vacated. Therefore, we have examined the plain language of the Act

and court decisions addressing the Service's application of the SPR phrase in various listing decisions, and for purposes of this rulemaking we are applying the interpretation set out below for the phrase ''significant portion of its range'' and its context in determining whether or not a species is an endangered species or a threatened species. Because the interpretation we are applying is consistent with the SPR Policy, we summarize herein the bases for our interpretation, and also refer the public to the SPR Policy itself for a more-detailed explanation of our reasons for interpreting the phrase in this way.

An important factor that influences the question of whether an SPR analysis is necessary here is what the consequence would be if the Service were to find that the Black Warrior waterdog is in danger of extinction or likely to become so throughout a significant portion of its range. Two district court decisions have evaluated whether the outcomes of the Service's SPR determinations were reasonable. As described in the SPR Policy, both courts found that, once the Service determines that a ''species''—which can include a species, subspecies, or DPS under ESA Section 3(16)—meets the definition of ''endangered species'' or ''threatened species,'' the species must be listed in its entirety and the Act's protections applied consistently to all members of that species (subject to modification of protections through special rules under sections 4(d) and 10(j) of the Act). See *Defenders of Wildlife* v. *Salazar,* 729 F. Supp. 2d 1207, 1222 (D. Mont. 2010) (delisting of the Northern Rocky Mountains DPS of gray wolf; appeal dismissed as moot because of public law vacating the listing, 2012 U.S. App. LEXIS 26769 (9th Cir. Nov. 7, 2012)); *WildEarth Guardians* v. *Salazar,* No. 09–00574–PHX–FJM, 2010 U.S. Dist. LEXIS 105253, 15–16 (D. Ariz. Sept. 30, 2010) (Gunnison's prairie dog). The issue has not been addressed by a Federal Court of Appeals.

Consistent with the district court case law, we interpret that the consequence of finding that the Black Warrior waterdog is in danger of extinction or likely to become so throughout a significant portion of its range would be that the entire species would be listed as an endangered species or threatened species, respectively, and the Act's protections would be applied to all individuals of the species wherever found. Thus, the ''throughout all'' phrase and the SPR phrase provide two independent bases for listing. We note that in the Act Congress placed the ''all'' language before the SPR phrase in the definitions of ''endangered species'' and ''threatened species.'' This suggests that Congress intended that an analysis based on consideration of the entire range should receive primary focus. Thus, the first step we undertook, above, in our assessment of the status of the species was to determine its status throughout all of its range. Having determined that the species is in danger of extinction throughout all of its range, we now examine whether it is necessary to determine its status throughout a significant portion of its range.

We conclude that in this situation we do not need to conduct an SPR analysis. This conclusion is consistent with the Act because the species is currently in danger of extinction throughout all of its range due either to high-magnitude threats across its range, or to threats that are so high in particular areas that they severely affect the species across its range. Therefore, the species is in danger of extinction throughout every portion of its range, and an analysis of whether the species is in danger of extinction or likely to become so throughout any significant portion of its range would be redundant and unnecessary. In addition, because the phrase ''significant portion of its range'' (SPR) could provide a second and independent basis for listing the Black Warrior waterdog in its entirety, an SPR analysis could would be either unnecessary or confusing. An SPR analysis could lead to a conclusion that, in addition to being an ''endangered species'' because of its status throughout all of its range, the Black Warrior waterdog is also an ''endangered species'' or ''threatened species'' because of its status throughout a significant portion of its range. The former clearly would be an unnecessary finding, because we have already determined that the species is an ''endangered species'' because of its status throughout all of its range. The latter would create confusion because it could lead to a conclusion that the species warrants listing both as an endangered species (because of its status throughout all of its range) and as a threatened species (because of its status in the SPR). We accordingly conclude that we do not need to conduct further analysis of whether the Black Warrior waterdog is in danger of extinction or likely to become so in the foreseeable future throughout a significant portion of its range.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing actions results in public awareness and conservation by Federal, State, Tribal, and local agencies; private organizations; and individuals. The Act encourages cooperation with the States and other countries and calls for recovery actions to be carried out for listed species. The protection required by Federal agencies and the prohibitions against certain activities are discussed, in part, below.

The primary purpose of the Act is the conservation of endangered and threatened species and the ecosystems upon which they depend. The ultimate goal of such conservation efforts is the recovery of these listed species, so that they no longer need the protective measures of the Act. Section 4(f) of the Act calls for the Service to develop and implement recovery plans for the conservation of endangered and threatened species. The recovery planning process involves the identification of actions that are necessary to halt or reverse the species' decline by addressing the threats to its survival and recovery. The goal of this process is to restore listed species to a point where they are secure, self-sustaining, and functioning components of their ecosystems.

Recovery planning includes the development of a recovery outline, shortly after a species is listed, and preparation of a draft and final recovery plan. The recovery outline guides the immediate implementation of urgent recovery actions and describes the process to be used to develop a recovery plan. Revisions of the plan may be done to address continuing or new threats to the species, as new substantive information becomes available. The recovery plan also identifies recovery criteria for review of when a species may be ready for downlisting or delisting, and methods for monitoring recovery progress. Recovery plans also establish a framework for agencies to coordinate their recovery efforts and provide estimates of the cost of implementing recovery tasks. Recovery teams (composed of species experts, Federal and State agencies, nongovernmental organizations, and stakeholders) are often established to develop recovery plans. When completed, the recovery outline, draft recovery plan, and the final recovery plan will be available on our website (*http://www.fws.gov/endangered*), or from our Alabama Ecological Services Field Office (see **ADDRESSES**).

Implementation of recovery actions generally requires the participation of a

broad range of partners, including other Federal agencies, States, Tribes, nongovernmental organizations, businesses, and private landowners. Examples of recovery actions include habitat restoration (*e.g.,* restoration of native vegetation), research, captive propagation and reintroduction, and outreach and education. The recovery of many listed species cannot be accomplished solely on Federal lands because their range may occur primarily or solely on non-Federal lands. To achieve recovery of these species requires cooperative conservation efforts on private, State, and Tribal lands.

Following publication of this listing rule, funding for recovery actions will be available from a variety of sources, including Federal budgets, State programs, and cost share grants for non-Federal landowners, the academic community, and nongovernmental organizations. In addition, pursuant to section 6 of the Act, the State of Alabama would be eligible for Federal funds to implement management actions that promote the protection or recovery of the Black Warrior waterdog. Information on our grant programs that are available to aid species recovery can be found at: *http://www.fws.gov/grants.*

Please let us know if you are interested in participating in recovery efforts for the Black Warrior waterdog. Additionally, we invite you to submit any new information on this species whenever it becomes available and any information you may have for recovery planning purposes (see **FOR FURTHER INFORMATION CONTACT**).

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as an endangered or threatened species and with respect to its critical habitat, if any is designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of any endangered or threatened species or destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into consultation with the Service.

Federal agency actions within Black Warrior waterdog habitat that may require consultation as described in the preceding paragraph include management and any other landscape-altering activities on Federal lands administered by the Service, U.S. Forest Service, and Bureau of Land Management; issuance of section 404 Clean Water Act permits by the U.S. Army Corps of Engineers; construction and maintenance of gas pipeline and power line rights-of-way by the Federal Energy Regulatory Commission; construction and maintenance of roads or highways by the Federal Highway Administration; land management practices supported by programs administered by the U.S. Department of Agriculture; Environmental Protection Agency pesticide registration; and projects funded through Federal loan programs which include, but are not limited to, roads and bridges, utilities, recreation sites, and other forms of development.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to endangered wildlife. The prohibitions of section 9(a)(1) of the Act, codified at 50 CFR 17.21, make it illegal for any person subject to the jurisdiction of the United States to take (which includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these) endangered wildlife within the United States or on the high seas. In addition, it is unlawful to import; export; deliver, receive, carry, transport, or ship in interstate or foreign commerce in the course of commercial activity; or sell or offer for sale in interstate or foreign commerce any listed species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to employees of the Service, the National Marine Fisheries Service, other Federal land management agencies, and State conservation agencies.

We may issue permits to carry out otherwise prohibited activities involving endangered wildlife under certain circumstances. Regulations governing permits are codified at 50 CFR 17.32. With regard to endangered wildlife, a permit may be issued for scientific purposes, to enhance the propagation or survival of the species, and for incidental take in connection with otherwise lawful activities. There are also certain statutory exemptions from the prohibitions, which are found in sections 9 and 10 of the Act.

It is our policy, as published in the **Federal Register** on July 1, 1994 (59 FR 34272), to identify to the maximum extent practicable at the time a species is listed, those activities that would or would not constitute a violation of section 9 of the Act. The intent of this policy is to increase public awareness of the effect of a listing on proposed and ongoing activities within the range of species. Based on the best available information, the following actions are unlikely to result in a violation of section 9, if these activities are carried out in accordance with existing regulations and permit requirements; this list is not comprehensive:

(1) Normal agricultural practices, silvicultural practices, and transmission line ROW maintenance, including herbicide and pesticide use, which are carried out in accordance with any existing regulations, permit, and label requirements, and certified best management practices; and

(2) Normal residential development and landscape activities, which are carried out in accordance with any existing regulations, permit requirements, and best management practices.

Based on the best available information, the following activities may potentially result in a violation of section 9 the Act; this list is not comprehensive:

(1) Unauthorized introduction of nonnative species that compete with or prey upon the Black Warrior waterdog;

(2) Unauthorized collecting, handling, possessing, selling, delivering, carrying, or transporting of the species, including import or export across State lines and international boundaries, except for properly documented antique specimens of this taxa, as defined by section 10(h)(1) of the Act;

(3) Unauthorized destruction or alteration of Black Warrior waterdog habitat that results in destruction or loss of leaf packs and rocky substrate (rock crevices in the creek or stream);

(4) Unauthorized discharge of chemicals or fill material into any waters in which the Black Warrior waterdog is known to occur; and

(5) Actions, intentional or otherwise, that would result in the destruction of eggs or cause mortality or injury to hatchling, juvenile, or adult Black Warrior waterdogs.

Questions regarding whether specific activities would constitute a violation of section 9 of the Act should be directed to the Alabama Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Critical Habitat

Background

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features

(a) Essential to the conservation of the species, and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Our regulations at 50 CFR 424.02 define ''geographical area occupied by the species'' as an area that may generally be delineated around species' occurrences, as determined by the Secretary (*i.e.,* range). Such areas may include those areas used throughout all or part of the species' life cycle, even if not used on a regular basis (*e.g.,* migratory corridors, seasonal habitats, and habitats used periodically, but not solely by vagrant individuals).

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) of the Act would apply, but even in the event of a destruction or adverse modification finding, the obligation of the Federal action agency and the landowner is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act's definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical and biological features within an area, we focus on the specific features that support the life-history needs of the species, including, but not limited to, water characteristics, soil type, geological features, prey, vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic, or a more complex combination of habitat characteristics. Features may include habitat characteristics that support ephemeral or dynamic habitat conditions. Features may also be expressed in terms relating to principles of conservation biology, such as patch size, distribution distances, and connectivity.

Under the second prong of the Act's definition of critical habitat, we may designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. For example, an area currently occupied by the species but that was not occupied at the time of listing may be essential to the conservation of the species and may be included in the critical habitat designation

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific data available. Further, our Policy on Information Standards Under the Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554; H.R. 5658)), and our associated Information Quality Guidelines, provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific and commercial data available. They require our staff, to the extent consistent with the Act and with the use of the best scientific and commercial data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information developed during the listing process for the species. However, additional information sources may include the recovery plan for the species, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, other unpublished materials, or experts' opinions or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act, (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species, and (3) section 9 of the Act's prohibitions on taking any individual of the species, including taking caused by actions that affect habitat. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

Physical or Biological Features

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12(b), in determining which areas within the geographical area occupied by the species at the time of listing to

designate as critical habitat, we consider the physical or biological features that are essential to the conservation of the species and which may require special management considerations or protection. For example, physical features might include gravel of a particular size required for spawning, alkali soil for seed germination, protective cover for migration, or susceptibility to flooding or fire that maintains necessary early-successional habitat characteristics. Biological features might include prey species, forage grasses, specific kinds or ages of trees for roosting or nesting, symbiotic fungi, or a particular level of nonnative species consistent with conservation needs of the listed species. The features may also be combinations of habitat characteristics and may encompass the relationship between characteristics or the necessary amount of a characteristic needed to support the life history of the species. In considering whether features are essential to the conservation of the species, the Service may consider an appropriate quality, quantity, and spatial and temporal arrangement of habitat characteristics in the context of the life-history needs, condition, and status of the species. These characteristics include but are not limited to space for individual and population growth and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, or rearing (or development) of offspring; and habitats that are protected from disturbance.

We derive the specific physical or biological features essential for Black Warrior waterdog from studies of this species' habitat, ecology, and life history as described below. Additional information can be found in the proposed listing (81 FR 69500) and critical habitat rule (81 FR 69475), both published in the **Federal Register** on October 6, 2016. We have determined that the following physical or biological features are essential for Black Warrior waterdog.

Space for Individual and Population Growth and for Normal Behavior

The Black Warrior waterdog is found in the Black Warrior Basin above the Fall Line, characterized by rocky habitat with little sand. According to Mount (1981, p. 23), optimal habitat for the flattened musk turtle, a species listed as threatened under the Act (52 FR 22418; June 11, 1987) that has the same range as the waterdog, consists of a ''segment of a free flowing large creek or small river having the following characteristics: (1) Drainage area between 50 and 500 square miles, (2) depth averaging two feet, with vegetated shallows alternating with pools at least three to four feet deep, (3) pools with detectable current, (4) abundance of submerged rocks with crevices, overlapping flat rocks, or accumulations of boulders, (5) abundant molluscan fauna, (6) low silt load and minimal silt deposits, (7) relatively low nutrient content and bacterial count, (8) moderate temperatures (maximum 85 °F), and (9) minimal pollution by synthetic chemicals and toxic inorganic materials.'' Since the Black Warrior waterdog and the flattened musk turtle occupy the same range and similar habitats, this description of optimal habitat is applicable to both species with the difference that the Black Warrior waterdog finds refuge under boulders or rocks and in crevices, lays its eggs on the underside of boulders, and uses deposited leaf packs (Bailey and Guyer 2004, pp. 36–37; Durflinger-Moreno *et al.* 2006, pp. 69, 76, 78) on the streambed, likely for foraging on aquatic insect larvae and for sheltering.

Necturus species in general have similar feeding habits, reproductive strategies, and physical characteristics. For example, although geographically separated (allopatric), the Black Warrior waterdog and the Neuse River waterdog both utilize high-gradient streams that are above the Fall Line and contain hard substrate, leafpacks, and macroinvertebrates. Because the two species likely evolved in similar habitats, an influential factor in determining life-history traits, we used the Neuse River waterdog as a surrogate to determine some of the biological and ecological attributes that have not yet been determined for the Black Warrior waterdog. When such data were lacking for the Neuse River waterdog and Black Warrior waterdog, we relied on data from other *Necturus* species. Furthermore, as discussed above, because the flattened musk turtle has an identical range to the Black Warrior waterdog, we relied on the turtle's known habitat affinities to identify some of the habitat features important to the Black Warrior waterdog.

The tributaries of the Neuse River have gradients similar to the tributaries of the Black Warrior River Basin. According to Ashton (1985, pp. 103–104), adult and juvenile Neuse River waterdogs use habitats characterized by moderate stream flow and relatively high dissolved oxygen concentrations, which is consistent with other *Necturus* species found in southern States. Studies of the Neuse River waterdog indicate that adult waterdogs use areas with large bedrock outcrops, large boulders with sandy-gravel bottoms, and stream banks with rock outcroppings.

The Black Warrior waterdog needs geomorphically stable streams with substrate consisting of clay or bedrock with little sand, and containing abundant rock crevices, rock slabs, and leaf packs. The connectivity of these stream habitats is also essential in accommodating growth and other normal behaviors of the Black Warrior waterdog and in promoting gene flow within the species.

Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

Food—Feeding habits of the Black Warrior waterdog are likely similar to the feeding habits of Neuse River waterdog, since both species are found in similar microhabitats. Both adult and juvenile Neuse River waterdogs appear to be opportunistic feeders. Braswell and Ashton (1985 pp. 22–27) found that larval waterdog diets consist primarily of a variety of aquatic arthropods (orders *Ostracoda, Copepoda, Isopoda,* and *Amphipoda*) with some insect larvae (orders *Odonata, Ephemeroptera, Plecoptera, Trichoptera, Diptera,* and *Coleoptera*). Black Warrior waterdogs have been found in close association with mayfly (Ephemeroptera) and caddisfly (Tricoptera) larvae (Durflinger-Moreno *et al.* 2006). Adult Neuse River waterdog diet was more expansive than the juvenile diet and included aquatic arthropods, other aquatic and terrestrial invertebrates (earthworms, centipedes, beetles, grubs), and aquatic and terrestrial vertebrates (fish and salamanders) (Braswell and Ashton 1985, pp. 13, 24–25).

Since aquatic invertebrates are an important component of the Black Warrior waterdog's diet, it is essential to also take into consideration specific habitat requirements of these prey. Merrit and Cummins (1996) described caddisfly and mayfly habitat as a wide variety of standing and flowing water habitats, with the greatest diversity being found in rocky-bottom streams with an abundance of oxygen. As a result, they further identify the food sources for these aquatic insects as a variety of detritus (leaf packs), algae, diatoms, and macrophytes.

Water—As little is known about the specific water quality needs of the Black Warrior waterdog, we evaluated and based the water quality parameters on various factors, specifically Mount's (1983) description of optimal habitat, Neuse River waterdog literature, prey species requirements (insect larvae),

Alabama Department of Environmental Management (ADEM) water quality standards, and water quality requirements for currently listed aquatic species found in the Basin, as follows: rush darter (*Etheostoma phytophilum*), Alabama moccasinshell (*Medionidus acutissimus*), dark pigtoe (*Pleurobema furvum*), orangenacre mucket (*Lampsilis perovalis*), ovate clubshell (*Pleurobema perovatum*), triangular kidneyshell (*Ptychobranchus greenii*), upland combshell (*Epioblasma metastriata*), and southern acornshell (*Epioblasma othcaloogensis*).

Appropriate water quality parameters to support the Black Warrior waterdog's primary prey base and other listed species in the Basin include:

- Water that lacks harmful levels of pollutants, including inorganic contaminants such as copper, arsenic, mercury, and cadmium; organic contaminants such as human and animal waste products; endocrine-disrupting chemicals; pesticides; nitrogen, potassium, and phosphorus fertilizers; and petroleum distillates (ADEM 2014, pp. 12–15);
- Water temperature not exceeding 85 °F;
- Dissolved oxygen 5.5 milligrams per liter (mg/L) or greater;
- Turbidity of an average monthly reading of 15 nephelometric turbidity units (NTUs; units to measure sediment discharge) above background readings;
- 115 mg/L of total suspended solids (measured as mg/L of sediment in water) or less; and
- A specific conductance (ability of water to conduct an electrical current, based on dissolved solids in the water) of no greater than 225 microsiemens (µS) per centimeter at 80 °F (October 10, 2012; 77 FR 61664).

The Black Warrior waterdog has similar hydrologic requirements as those of the Neuse River waterdog, which are usually found in streams greater than 15 meters (m) (50 feet (ft)) wide and deeper than 100 centimeters (cm) (3 ft) and are not found in streams where water flow ceases under normal summer dry weather conditions (Braswell and Aston 1985, pp. 26–30). However, based on eDNA detections, the Black Warrior waterdog could be using streams as narrow as 4 m (13 ft) wide (Godwin 2014, pers. comm.). In regard to instream flow, the Black Warrior waterdog benefits from moderate stream velocity and continuous daily discharge that allows for longitudinal connectivity (the pathway along the entire length of a stream).

The quality of the chemical and physical environment of the streams in the upper Black Warrior River Basin is essential to the survival of the Black Warrior waterdog. Optimal water quality lacks harmful levels of pollutants, including inorganic contaminants such as copper, arsenic, mercury, and cadmium; organic contaminants such as human and animal waste products; endocrine-disrupting chemicals; pesticides; nitrogen, potassium, and phosphorus fertilizers; and petroleum distillates (ADEM 2014, pp. 13–15). A decrease in water quality and instream flow would cause a decline in the major food species for the Black Warrior waterdog.

Natural variations of instream flows maintain the stream bottom substrates, providing oxygen and other attributes to various invertebrate life stages. Sedimentation contributes to turbidity of the water and has been shown to reduce photosynthesis in aquatic plants, suffocate aquatic insects, smother aquatic eggs, clog gills, and fill in essential interstitial spaces used by aquatic organisms for spawning and foraging. Sedimentation has been shown to wear away and suffocate periphyton (organisms that live attached to objects underwater) and disrupt aquatic insect communities (Waters 1995, pp. 53–86; Knight and Welch 2004, pp. 132–135).

Cover or Shelter

Suitable substrates for the Black Warrior waterdog are dominated by clay or bedrock with little sand, and also contain abundant rock crevices and rock slabs for retreats (shelter) and areas for egg laying. Based on capture data, the Black Warrior waterdog utilizes leaf pack for shelter from predators and as foraging areas for prey species.

Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring

Little is known about the specific requirements of Black Warrior waterdog's reproduction. Based on Neuse River waterdog research, breeding sites are large bedrock outcrops or large boulders with sand and gravel beneath them (Ashton 1985, p. 95). Data collected from the Cincinnati Zoo (unpublished) indicate that the Black Warrior waterdog has similar tendencies of depositing eggs under rock slabs or in rock crevices, and the female guarding the eggs. Juvenile Black Warrior waterdogs are often found in leaf packs in the stream.

Sedimentation can be destructive to Black Warrior waterdogs and their habitat when it contains toxicants and is excessive. Bailey (2000, p. 2) reported that Black Warrior waterdogs are virtually in constant contact with the substrate and; therefore, also with any toxic chemicals present. He also reported that juveniles and adults are impacted by the exposure. Further, excessive sedimentation of the crevices and leaf packs removes foraging, feeding, breeding, and retreat areas for the Black Warrior waterdog (Laschet 2014, pers. obs.).

Habitats Protected From Disturbance or Representative of the Historical Geographical and Ecological Distributions of the Species

Currently, there are no areas that are undisturbed or that are representative of the historical geographical and ecological distribution of the species that the Black Warrior waterdog typically inhabits. The Bankhead National Forest is an area that can reveal a glimpse of representative historical geographical and ecological features of the species' habitat and is currently considered the stronghold of the species. Streams in this area typically are geomorphically stable with substrate consisting of clay or bedrock with little sand, and containing abundant rock crevices and rock slabs. These streams also contain cool, clean, flowing water having a dissolved oxygen level of 5.5 mg/L or higher; moderate water velocity; aquatic macroinvertabrate prey items; leaf packs; and adequate water quality (ADEM 2010, pp. 1–3).

In summary, based on the information described above, we have determined that the following physical or biological features are essential to the conservation of the Black Warrior waterdog.

(1) Geomorphically stable, medium to large streams (typically 4 m (13 ft) wide or greater) with:

(a) Substrate consisting of clay or bedrock with little sand, and containing abundant rock crevices, rock slabs, and leaf packs;

(b) Moderate water velocity; and

(c) Prey base of aquatic macroinvertebrates.

(2) Water that lacks harmful levels of pollutants, including inorganic contaminants such as copper, arsenic, mercury, and cadmium; organic contaminants such as human and animal waste products; endocrine-disrupting chemicals; pesticides; nitrogen, potassium, and phosphorus fertilizers; and petroleum distillates.

(3) Appropriate water quality parameters to support Black Warrior waterdog and primary prey base, including:

(a) Water temperature not exceeding 85 °F;

(b) Dissolved oxygen 5.5 mg/L or greater;

(c) Turbidity of an average monthly reading of 15 NTUs above background readings;

(d) 115 mg/L of total suspended solids or less; and

(e) A specific conductance of no greater than 225 μS per centimeter at 80 °F.

Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features that are essential to the conservation of the species and which may require special management considerations or protection.

The features essential to the conservation of the Black Warrior waterdog may require special management considerations or protections to reduce the following threats: (1) Urbanization activities and inadequate stormwater management (such as stream channel modification for flood control or gravel extraction) that could cause an increase in bank erosion; (2) significant changes in the existing flow regime within the streams due to water diversion or withdrawal; (3) significant alteration of water quality; (4) significant alteration in quantity of groundwater, prevention of water percolating into the aquifer recharge zone, and alteration of spring discharge sites; (5) significant changes in stream bed material composition and quality due to changes in stream flow characteristics, construction projects, and maintenance activities; (6) off-road vehicle use; (7) sewer, gas, and water easements; (8) bridge construction; (9) culvert and pipe installation; and (10) other watershed and floodplain disturbances that release sediments or nutrients into the water.

Management activities that could ameliorate these threats include, but are not limited to: Use of certified BMPs designed to reduce sedimentation, erosion, and bank side destruction; select harvest of trees along banks, and leaving 50 percent canopy cover (of deciduous trees) along banks; moderation of surface and ground water withdrawals to maintain natural flow regimes; increased use of stormwater management and reduction of stormwater flows into the systems; preservation of headwater springs and spring runs; regulation of off-road vehicle use; and reduction of other watershed and floodplain disturbances that release sediments, pollutants, or nutrients into the water.

These management activities could protect the physical or biological features essential for the conservation of the species by eliminating, or reducing to negligible levels, the threats affecting the physical and biological features of each unit. The major threats to the Black Warrior waterdog habitat are sedimentation, water quality degradation (increased nutrients, turbidity, and toxins), and fragmentation from impoundments.

Criteria Used To Identify Critical Habitat

As required by section 4(b)(2) of the Act, we use the best scientific data available to designate critical habitat. In accordance with the Act and our implementing regulations at 50 CFR 424.12(b) we review available information pertaining to the habitat requirements of the species and identify specific areas within the geographical area occupied by the species at the time of listing and any specific areas outside the geographical area occupied by the species to be considered for designation as critical habitat. We are designating critical habitat in areas within the geographical area occupied by the Black Warrior waterdog at the time of listing in 2017. We are not designating any areas outside the geographic area occupied by the species because we did not find any areas that were essential for the conservation of the species (see explanation under response to comment 11, above).

For the purpose of designating critical habitat for the Black Warrior waterdog, we defined the geographical area currently occupied by the species. We used information from surveys and reports prepared by the Alabama Department of Conservation and Natural Resources, Alabama Geological Survey, Alabama Natural Heritage Program, Auburn University, Alabama Power Company, U.S. Forest Service, Natural Resources Conservation Service, and Service to identify the specific locations occupied by the Black Warrior waterdog. Currently, occupied habitat for the species is isolated and limited to four units. Within these four units, the species is located within seven tributaries in the Black Warrior River Basin. Three of the tributaries are on Bankhead National Forest (Winston County) and include Sipsey Fork, Brushy Creek, and Rush Creek. The other four tributaries are Locust Fork; Gurley Creek, which feeds into Locust Fork (Blount and Jefferson Counties); Blackwater/Browns Creek in Winston County; and Yellow Creek in Tuscaloosa County (Godwin 2014, entire). We have determined that these four units (which include all seven tributaries)—Sipsey Fork, Locust Fork, Blackwater Creek, and Yellow Creek—meet the criteria for designation as critical habitat. As discussed below, some of these units contain all of the identified elements of physical or biological features and support multiple life-history processes. Some units contain only some elements of the physical or biological features necessary to support the Black Warrior waterdog's particular use of that habitat.

Mapping Black Warrior Waterdog Critical Habitat

In identifying critical habitat units for the Black Warrior waterdog, we proceeded through a multi-step process. We obtained and reviewed historical records for the Black Warrior waterdog's distribution from Bankhead National Forest and Alabama Natural Heritage Program, as well as both published and unpublished documentation from our files. Once the historical range was determined, we looked at whether the physical and biological features were present at these historical sites. Then, we reviewed surveys conducted over the last 8 years, including surveys currently being undertaken. We conducted species present-or-absent surveys of known and historical sites and sampled and observed the habitat. Since the Black Warrior waterdog is difficult to detect and capture, we contracted with Alabama Natural Heritage Program and Auburn University to conduct sampling surveys including the use of eDNA. With the survey results, we confirmed the Black Warrior waterdog's distribution in the Black Warrior River Basin. We determined occupied areas with data collected from surveys conducted over the last 8 years to present. We considered areas that do not have recent capture or sighting data to be unoccupied by the species.

Our approach to delineating critical habitat units was applied in the following manner:

(1) We overlaid Black Warrior waterdog locations into a GIS database. This provided us with the ability to examine slope, elevation, geologic type, hydrologic factors, vegetation community, and topographic features. These data points verified the previously recorded elevation ranges for Black Warrior waterdog.

(2) In addition to the GIS layers listed above, we then excluded impoundments and dams as barriers for the species, as described in *Physical or Biological Features,* above.

(3) We then drew critical habitat boundaries that captured the locations as discussed above. The final critical habitat designation was then mapped using Projected Coordinate System,

NAD 1983 UTM Zone 16N with a Projection of Transverse Mercator.

When determining critical habitat boundaries, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack physical or biological features necessary for the Black Warrior waterdog. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this rule have been excluded by text in the rule and are not designated as critical habitat. Therefore, a Federal action involving these lands would not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical or biological features in the adjacent critical habitat.

We are designating as critical habitat streams that we have determined are occupied at the time of listing and contain physical or biological features to support life-history processes essential to the conservation of the species.

Four units were designated based on one or more of the elements of physical or biological features being present to support the Black Warrior waterdog's life processes. Some units contained all of the identified elements of physical or biological features and supported multiple life processes. Some units contained only some elements of the physical or biological features necessary to support the Black Warrior waterdog's particular use of that habitat.

The critical habitat designation is defined by the maps, as modified by any accompanying regulatory text, presented at the end of this document in the rule portion. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document. We will make the coordinates or plot points or both on which each map is based available to the public on *http://www.regulations.gov* at Docket No. FWS–R4–ES–2016–0031, on the Service's website at *http://www.fws.gov/daphne/*, and at the field office responsible for the designation (see **FOR FURTHER INFORMATION CONTACT**, above).

Final Critical Habitat Designation

We are designating approximately 673 river kilometers (420 river miles) in five units as critical habitat for the Black Warrior waterdog. The critical habitat areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for the Black Warrior waterdog.

All of the areas designated as critical habitat for the Black Warrior waterdog include stream and river channels within the normal high water line.

Table 1 shows the occupancy status of each unit and units that overlap with existing critical habitat units for other federally listed species.

TABLE 1—BLACK WARRIOR WATERDOG CRITICAL HABITAT UNITS AND EXISTING OVERLAPPING CRITICAL HABITAT DESIGNATION FOR FEDERALLY LISTED SPECIES

Unit	Location	Private ownership rkm/rmi	Federal ownership rkm/rmi	Existing critical habitat rkm/rmi	Total length rkm/rmi
1	Yellow Creek	30/19			30/19
2	Locust Fork	391/243		* 101/63	391/243
3	Blackwater Creek	128/80			128/80
4	Sipsey Fork	11/7	113/71	** 103/64	124/78
Totals		560/349	113/71	204/127	673/420

* Alabama moccasinshell *(Medionidus acutissimus),* dark pigtoe *(Pleurobema furvum),* orangenacre mucket *(Lampsilis perovalis),* ovate clubshell *(Pleurobema perovatum),* upland combshell *(Epioblasma metastriata),* triangular kidneyshell *(Ptychobranchus greenii).*

** Alabama moccasinshell, dark pigtoe, orangenacre mucket, ovate clubshell, southern acornshell *(Epioblasma othcaloogensis),* triangular kidneyshell.

We present brief descriptions of all the units, and reasons why they meet the definition of critical habitat for the Black Warrior waterdog, below. All units are within private ownership, except Unit 4, which also includes Federal ownership.

Unit 1: Yellow Creek, Tuscaloosa County, Alabama

Unit 1 includes 30 rkm (19 rmi) of stream and river habitat. The unit consists of the headwaters of Yellow Creek to Holt Lake. This area is within the geographical area occupied at the time of listing (*i.e.,* currently occupied). Godwin (2016, pers. comm.) reported a capture of a Black Warrior waterdog in this area. This area contains the following physical or biological features that are essential for the Black Warrior waterdog: Abundant rock crevices and rock slabs, leaf litter, and instream flow with moderate velocity and continuous daily discharge that allows for a longitudinal connectivity regime inclusive of both surface runoff and ground water sources and exclusive of flushing flows caused by stormwater runoff.

Threats to the physical and biological features in Unit 1 that may require special management considerations or protection include:

- Agriculture, silviculture, and urbanization activities that could result in increased bank erosion;
- Significant changes in the existing flow regime due to inadequate stormwater management, water diversion, or water withdrawal;
- Significant alteration of water quality; and
- Significant changes in stream bed material composition and quality as a result of construction projects and maintenance activities; off-road vehicle use; sewer, gas, and water easements; bridge and road construction and maintenance; culvert and pipe installation; and other watershed and floodplain disturbances that release sediments or nutrients into the water.

Unit 2: Locust Fork, Blount, Etowah, Jefferson, and Marshall Counties, Alabama

Unit 2 includes 391 rkm (243 rmi) of stream and river habitat. The unit consists of the headwaters of Locust Fork to Bankhead Lake, from the headwaters of Slab Creek to the confluence of Locust Fork, from the headwaters of Blackburn Fork to the confluence of Locust Fork, and from the headwaters of Gurley Creek to the confluence of Locust Fork. This area is

within the geographical area occupied at the time of listing (*i.e.,* currently occupied). Based on a literature review by Bailey (2000, p. 1), Black Warrior waterdog specimens have been collected from the Locust Fork area. Black Warrior waterdogs were also collected in the upper Locust Fork in 2012 along with positive eDNA samples in this area. This area contains the following physical or biological features: Abundant rock crevices and rock slabs, leaf litter, and instream flow with moderate velocity and continuous daily discharge that allows for a longitudinal connectivity regime consisting of both surface runoff and ground water sources, exclusive of flushing flows caused by stormwater runoff, that are essential for the Black Warrior waterdog.

Threats to the physical and biological features in Unit 2 that may require special management considerations or protection include:

- Agriculture, silviculture, and urbanization activities that could result in increased bank erosion;
- Significant changes in the existing flow regime due to inadequate stormwater management, water diversion, or water withdrawal;
- Significant alteration of water quality; and
- Significant changes in stream bed material composition and quality as a result of construction projects and maintenance activities; off-road vehicle use; sewer, gas, and water easements; bridge and road construction and maintenance; culvert and pipe installation; and other watershed and floodplain disturbances that release sediments or nutrients into the water.

Unit 3: Blackwater Creek, Walker and Winston Counties, Alabama

Unit 3 includes 128 rkm (80 rmi) of stream and river habitat. The unit consists of the headwaters of Blackwater Creek to the confluence of Mulberry Fork, and from the headwaters of Brown Creek to the confluence of Blackwater Creek. This area is within the geographical area occupied at the time of listing based on a literature review by Bailey (2000, p. 1). Black Warrior waterdogs were collected in Brown Creek in 2006. Black Warrior waterdogs were likely still present based on eDNA results (Godwin 2014, pers. comm.). This area contains the following physical or biological features: Abundant rock crevices and rock slabs, leaf litter, and instream flow with moderate velocity and continuous daily discharge that allows for longitudinal connectivity regime consisting of both surface runoff and ground water sources, exclusive of flushing flows caused by stormwater runoff, that are essential for the Black Warrior waterdog.

Threats to the physical and biological features in Unit 3 that may require special management considerations or protection include:

- Agriculture, silviculture, and urbanization activities that could result in increased bank erosion;
- Significant changes in the existing flow regime due to inadequate stormwater management, water diversion, or water withdrawal;
- Significant alteration of water quality; and
- Significant changes in stream bed material composition and quality as a result of construction projects and maintenance activities; off-road vehicle use; sewer, gas, and water easements; bridge and road construction and maintenance; culvert and pipe installation; and other watershed and floodplain disturbances that release sediments or nutrients into the water.

Unit 4: Sipsey Fork, Lawrence and Winston Counties, Alabama

Unit 4 includes 124 rkm (78 rmi) of stream and river habitat. The unit consists of the headwaters of Sipsey Fork to Lewis Smith Lake, from the headwaters of Brushy Creek to Lewis Smith Lake, from the headwaters of Rush Creek to the confluence of Brushy Creek, and from the headwaters of Capsey Creek to the confluence of Brushy Creek. This area falls within the boundary of Bankhead National Forest, although some areas are private inholdings.

This area is within the geographical area occupied at the time of listing, based on recent captures (Godwin 2016, entire). This area contains the following physical or biological features: abundant rock crevices and rock slabs, leaf litter, and instream flow with moderate velocity and continuous daily discharge that allows for longitudinal connectivity consisting of both surface runoff and ground water sources, exclusive of flushing flows caused by stormwater runoff, that are essential for the Black Warrior waterdog.

Threats to the physical and biological features in Unit 4 that may require special management considerations or protection include:

- Agriculture, silviculture, and urbanization activities that could result in increased bank erosion;
- Significant changes in the existing flow regime due to inadequate stormwater management, water diversion, or water withdrawal;
- Significant alteration of water quality; and
- Significant changes in stream bed material composition and quality as a result of construction projects and maintenance activities; off-road vehicle use; sewer, gas, and water easements; bridge and road construction and maintenance; culvert and pipe installation; and other watershed and floodplain disturbances that release sediments or nutrients into the water.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action that is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

We published a final regulation with a new definition of destruction or adverse modification on February 11, 2016 (81 FR 7214). Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on State, tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded or

authorized, do not require section 7 consultation.

As a result of section 7 consultation, we document compliance with the requirements of section 7(a)(2) through our issuance of:

(1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or

(2) A biological opinion for Federal actions that may affect, and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define ''reasonable and prudent alternatives'' (at 50 CFR 402.02) as alternative actions identified during consultation that:

(1) Can be implemented in a manner consistent with the intended purpose of the action,

(2) Can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction,

(3) Are economically and technologically feasible, and

(4) Would, in the Director's opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or control over the action (or the agency's discretionary involvement or control is authorized by law). Consequently, Federal agencies sometimes may need to request reinitiation of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

Application of the ''Adverse Modification'' Standard

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that result in a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of the Black Warrior waterdog. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of these species or that preclude or significantly delay development of such features. As discussed above, the role of critical habitat is to support physical or biological features essential to the conservation of a listed species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation.

Activities that may affect critical habitat, when carried out, funded, or authorized by a Federal agency, should result in consultation for the Black Warrior waterdog. These activities include, but are not limited to:

(1) Actions that would significantly alter water chemistry or temperature. Such activities could include, but are not limited to, release of chemicals, biological pollutants, or heated effluents into the surface water or connected groundwater at a point source or by dispersed release (non-point source). These activities could alter water conditions to levels that are beyond the tolerances of the species' prey items and result in direct or cumulative adverse effects to the Black Warrior waterdog and its lifecycle.

(2) Actions that would significantly increase sediment deposition within the stream channel. Such activities could include, but are not limited to, excessive sedimentation from livestock grazing, road construction, channel alteration, timber harvest, off-road vehicle use, and other watershed and floodplain disturbances. These activities could eliminate or reduce the habitat necessary for the growth and reproduction of the Black Warrior waterdog by increasing the sediment deposition to levels that would adversely affect its ability to complete its lifecycle.

(3) Actions that would significantly alter channel morphology or geometry. Such activities could include, but are not limited to, channelization, impoundment, road and bridge construction, mining, dredging, and destruction of riparian vegetation. These activities may lead to changes in water flows and levels that would degrade or eliminate the Black Warrior waterdog and/or its habitat. These actions can also lead to increased sedimentation and degradation in water quality to levels that are beyond the tolerances of the Black Warrior waterdog or its prey items.

Exemptions

Application of Section 4(a)(3) of the Act

Section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) provides that: ''The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan [INRMP] prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.'' There are no Department of Defense lands with a completed INRMP within the final critical habitat designation.

Consideration of Impacts Under Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that the Secretary shall designate critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if she determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless she determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making that determination, the statute, as well as the legislative history, is clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor. In this final rule, we have not considered any areas for exclusion from critical habitat.

Consideration of Economic Impacts

Section 4(b)(2) of the Act and its implementing regulations require that we consider the economic impact that may result from a designation of critical habitat. In order to consider economic impacts, we prepared an incremental effects memorandum (IEM) and screening analysis which, together with our narrative and interpretation of effects, constitute our draft economic analysis of the proposed critical habitat designation and related factors (IEc 2015). The analysis, dated July 15, 2015, was made available for public review from October 6, 2016, through December 5, 2016. Following the close of the comment period, we reviewed and evaluated all information submitted during the comment period that may pertain to our consideration of the probable incremental economic impacts of this critical habitat designation. Additional information relevant to the probable incremental economic impacts of critical habitat designation for the Black Warrior waterdog is summarized below and available in the screening analysis for the Black Warrior waterdog (IEc 2015, entire), available at *http://www.regulations.gov* in Docket No. FWS–R4–ES–2016–0031.

The final critical habitat designation for the Black Warrior waterdog is likely to result, annually, in less than 2 formal consultations, 23 informal consultations, and 206 technical assistance efforts related to silviculture, mining, impoundments, commercial and residential development, pipelines, agriculture and other activities that impact water quality. According to the finding in the screening analysis, the administrative cost of addressing adverse modification in the consultations is estimated to be between about $410 to $9,000 per consultation. Accordingly, the incremental administrative cost is not likely to exceed $150,000 annually. This designation of critical habitat is not likely to cause more requirements under State or local regulations, nor is it expected to have perceptional effects on the markets.

Exclusions Based on Economic Impacts

As discussed above, the Service considered the economic impacts of the critical habitat designation and the Secretary is not exercising his discretion to exclude any areas from this designation of critical habitat for the Black Warrior waterdog based economic impacts.

A copy of the IEM and screening analysis with supporting documents may be obtained by contacting the Alabama Ecological Services Field Office (see **ADDRESSES**) or by downloading from the internet at *http://www.regulations.gov.*

Exclusions Based on Impacts to National Security and Homeland Security

Section 4(a)(3)(B)(i) of the Act may not cover all DoD lands or areas that pose potential national-security concerns (*e.g.,* a DoD installation that is in the process of revising its INRMP for a newly listed species or a species previously not covered). If a particular area is not covered under section 4(a)(3)(B)(i), national-security or homeland-security concerns are not a factor in the process of determining what areas meet the definition of ''critical habitat.'' Nevertheless, when designating critical habitat under section 4(b)(2), the Service must consider impacts on national security, including homeland security, on lands or areas not covered by section 4(a)(3)(B)(i). Accordingly, we will always consider for exclusion from the designation areas for which DoD, Department of Homeland Security (DHS), or another Federal agency has requested exclusion based on an assertion of national-security or homeland-security concerns. No DoD lands occur within or are affected by the designation.

Exclusions Based on Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors including whether there are permitted conservation plans covering the species in the area such as HCPs, safe harbor agreements, or candidate conservation agreements with assurances, or whether there are non-permitted conservation agreements and partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at the existence of tribal conservation plans and partnerships and consider the government-to-government relationship of the United States with tribal entities. We also consider any social impacts that might occur because of the designation.

In preparing this final rule, we have determined that there are currently no permitted conservation plans or other non-permitted conservation agreements or partnerships for the Black Warrior waterdog, and the final designation does not include any tribal lands or tribal trust resources. We anticipate no impact on tribal lands, partnerships, permitted or non-permitted plans or agreements from this critical habitat designation. Accordingly, the Secretary is not exercising his discretion to exclude any areas from this final designation based on other relevant impacts.

Required Determinations

Regulatory Planning and Review (Executive Orders 12866 and 13563)

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget will review all significant rules. OIRA has determined that this rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA; 5 U.S.C. 801 *et seq.*), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (*i.e.,* small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

According to the Small Business Administration, small entities include small organizations such as

independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and small businesses (13 CFR 121.201). Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than $5 million in annual sales, general and heavy construction businesses with less than $27.5 million in annual business, special trade contractors doing less than $11.5 million in annual business, and agricultural businesses with annual sales less than $750,000. To determine if potential economic impacts to these small entities are significant, we considered the types of activities that might trigger regulatory impacts under this designation as well as types of project modifications that may result. In general, the term ''significant economic impact'' is meant to apply to a typical small business firm's business operations.

The Service's current understanding of the requirements under the RFA, as amended, and following recent court decisions, is that Federal agencies are required to evaluate the potential incremental impacts of rulemaking only on those entities directly regulated by the rulemaking itself, and therefore, not required to evaluate the potential impacts to indirectly regulated entities. The regulatory mechanism through which critical habitat protections are realized is section 7 of the Act, which requires Federal agencies, in consultation with the Service, to ensure that any action authorized, funded, or carried out by the Agency is not likely to destroy or adversely modify critical habitat. Therefore, under section 7 only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction and adverse modification) imposed by critical habitat designation. Consequently, it is our position that only Federal action agencies will be directly regulated by this designation. There is no requirement under the RFA to evaluate the potential impacts to entities not directly regulated. Moreover, Federal agencies are not small entities. Therefore, because no small entities are directly regulated by this rulemaking, the Service certifies that the final critical habitat designation will not have a significant economic impact on a substantial number of small entities.

During the development of this final rule we reviewed and evaluated all information submitted during the comment period that may pertain to our consideration of the probable incremental economic impacts of this critical habitat designation. Based on this information, we affirm our certification that this final critical habitat designation will not have a significant economic impact on a substantial number of small entities, and a regulatory flexibility analysis is not required.

Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. OMB has provided guidance for implementing this Executive Order that outlines nine outcomes that may constitute ''a significant adverse effect'' when compared to not taking the regulatory action under consideration. The economic analysis finds that none of these criteria are relevant to this analysis. Thus, based on information in the economic analysis, energy-related impacts associated with Black Warrior waterdog conservation activities within critical habitat are not expected. As such, the designation of critical habitat is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*), we make the following findings:

(1) This rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or tribal governments, or the private sector, and includes both ''Federal intergovernmental mandates'' and ''Federal private sector mandates.'' These terms are defined in 2 U.S.C. 658(5)–(7). ''Federal intergovernmental mandate'' includes a regulation that ''would impose an enforceable duty upon State, local, or tribal governments'' with two exceptions. It excludes ''a condition of Federal assistance.'' It also excludes ''a duty arising from participation in a voluntary Federal program,'' unless the regulation ''relates to a then-existing Federal program under which $500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority,'' if the provision would ''increase the stringency of conditions of assistance'' or ''place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding,'' and the State, local, or tribal governments ''lack authority'' to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. ''Federal private sector mandate'' includes a regulation that ''would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.''

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule will significantly or uniquely affect small governments because it will not produce a Federal mandate of $100 million or greater in any year; that is, it is not a ''significant regulatory action'' under the Unfunded Mandates Reform Act. The designation of critical habitat imposes no obligations on State or local governments and, as such, a Small Government Agency Plan is not required.

Takings—Executive Order 12630

In accordance with E.O. 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of

designating critical habitat for the Black Warrior waterdog in a takings implications assessment. The Act does not authorize the Service to regulate private actions on private lands or confiscate private property as a result of critical habitat designation. Designation of critical habitat does not affect land ownership, or establish any closures, or restrictions on use of or access to the designated areas. Furthermore, the designation of critical habitat does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit actions that do require Federal funding or permits to go forward. However, Federal agencies are prohibited from carrying out, funding, or authorizing actions that would destroy or adversely modify critical habitat. A takings implications assessment has been completed and concludes that this designation of critical habitat for the Black Warrior waterdog does not pose significant takings implications for lands within or affected by the designation.

Federalism—Executive Order 13132

In accordance with E.O. 13132 (Federalism), this final rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of this final critical habitat designation with, appropriate State resource agencies in Alabama. We received comments from Alabama and have addressed them in the Summary of Comments and Recommendations section of the rule. From a federalism perspective, the designation of critical habitat directly affects only the responsibilities of Federal agencies. The Act imposes no other duties with respect to critical habitat, either for States and local governments, or for anyone else. As a result, the rule does not have substantial direct effects either on the States, or on the relationship between the national government and the States, or on the distribution of powers and responsibilities among the various levels of government. The designation may have some benefit to these governments because the areas that contain the features essential to the conservation of the species are more clearly defined, and the physical and biological features of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist these local governments in long-range planning (because these local governments no longer have to wait for case-by-case section 7 consultations to occur).

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) would be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

Civil Justice Reform—Executive Order 12988

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the applicable standards set forth in sections 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, the rule identifies the elements of physical or biological features essential to the conservation of the Black Warrior waterdog. The designated areas of critical habitat are presented on maps, and the rule provides several options for the interested public to obtain more detailed location information, if desired.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to the National Environmental Policy Act in connection with designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County* v. *Babbitt,* 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)).

Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to tribes. We determined that there are no tribal lands affected by the designation.

References Cited

A complete list of all references cited is available on the internet at *http://www.regulations.gov* and upon request from the Alabama Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this rulemaking are the staff members of the Alabama Ecological Services Field Office.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

■ 1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 1531–1544; and 4201–4245; unless otherwise noted.

■ 2. Amend § 17.11(h) by adding an entry for ''Waterdog, Black Warrior'' under ''AMPHIBIANS'' to the List of Endangered and Threatened Wildlife to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Common name	Scientific name	Where listed	Status	Listing citations and applicable rules
*	*	*	*	*
AMPHIBIANS				
*	*	*	*	*
Waterdog, Black Warrior	*Necturus alabamensis*	Wherever found	E	83 FR [Insert **Federal Register** page where the document begins], 1/3/2018.
*	*	*	*	*

■ 3. In § 17.95, amend paragraph (d) by adding an entry for ''Black Warrior Waterdog (*Necturus alabamensis*)'' in the same alphabetical order that the species appears in the table at § 17.11(h), to read as follows:

§ 17.95 Critical habitat—fish and wildlife.

* * * * *

(d) *Amphibians.*

* * * * *

Black Warrior Waterdog (*Necturus alabamensis*)

(1) Critical habitat units are depicted for Blount, Etowah, Jefferson, Lawrence, Marshall, Tuscaloosa, Walker, and Winston Counties, Alabama, on the maps in this entry.

(2) Within these areas, the physical or biological features essential to the conservation of the Black Warrior waterdog, which describe a riverine system with habitat to support all life-history stages of the Black Warrior waterdog, consists of the following components:

(i) Geomorphically stable, medium to large streams (typically 4 meters (m) (13 feet (ft)) wide or greater) with:

(A) Substrate consisting of clay or bedrock with little sand, and containing abundant rock crevices, rock slabs, and leaf packs;

(B) Moderate water velocity; and

(C) Prey base of aquatic macroinvertebrates.

(ii) Water that lacks harmful levels of pollutants, including inorganic contaminants such as copper, arsenic, mercury, and cadmium; organic contaminants such as human and animal waste products; endocrine-disrupting chemicals; pesticides; nitrogen, potassium, and phosphorus fertilizers; and petroleum distillates.

(iii) Appropriate water quality parameters to support Black Warrior waterdog and primary prey base, including:

(A) Water temperature not exceeding 85° F;

(B) Dissolved oxygen 5.5 milligrams per liter (mg/L) or greater;

(C) Turbidity of an average monthly reading of 15 nephelometric turbidity units above background readings;

(D) 115 mg/L of total suspended solids or less; and

(E) A specific conductance of no greater than 225 microsiemens (μS) per centimeter at 80 °F.

(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on February 2, 2018.

(4) *Critical habitat map units.* Data layers defining map units were created from the USGS National Hydrography Datasets High Resolution Flowline layer using Universal Transverse Mercator (UTM) Zone 16N coordinates. Segments were mapped using 1983 UTM Zone 16 projection. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at the Service's internet site at *http://www.fws.gov/daphne/,* at *http://www.regulations.gov* under Docket No. FWS–R4–ES–2016–0031, and at the field office responsible for this designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

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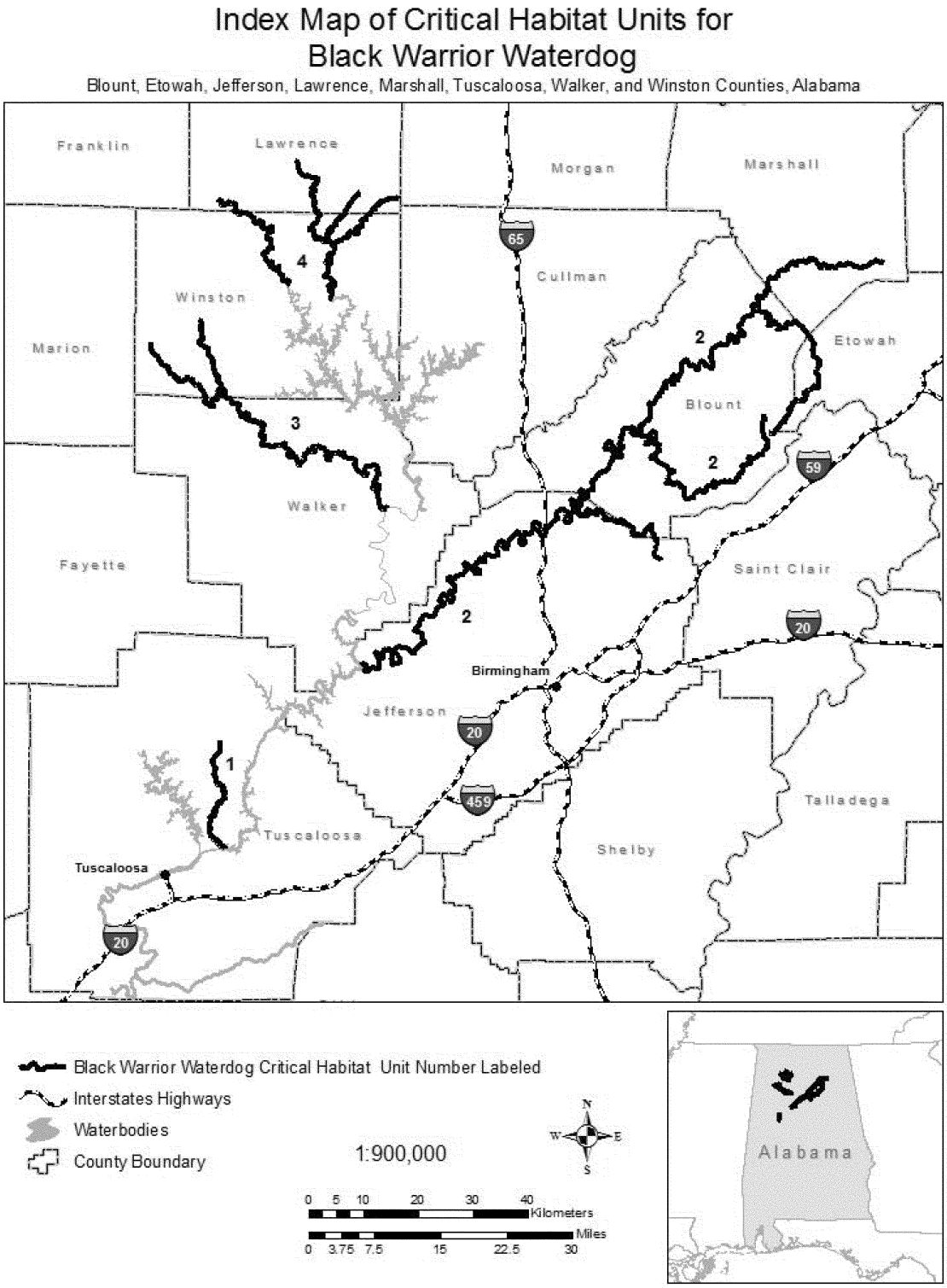
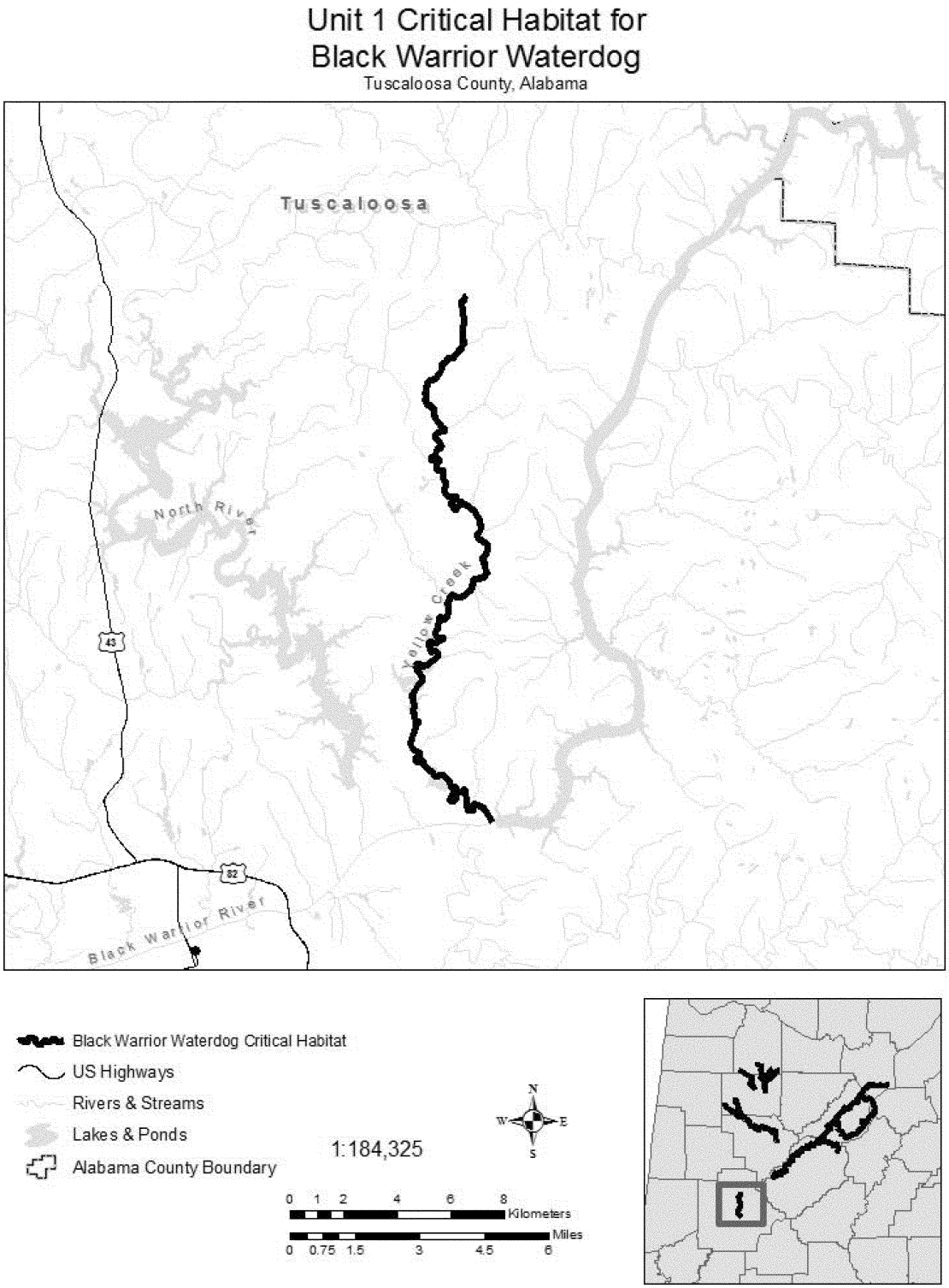
(5) *Note:* Index map follows:



(6) *Unit 1:* Yellow Creek; Tuscaloosa County, Alabama.

(i) *General description:* Unit 1 is approximately 30 rkm (19 rmi) of stream and river habitat from the headwaters of Yellow Creek to Holt Lake.

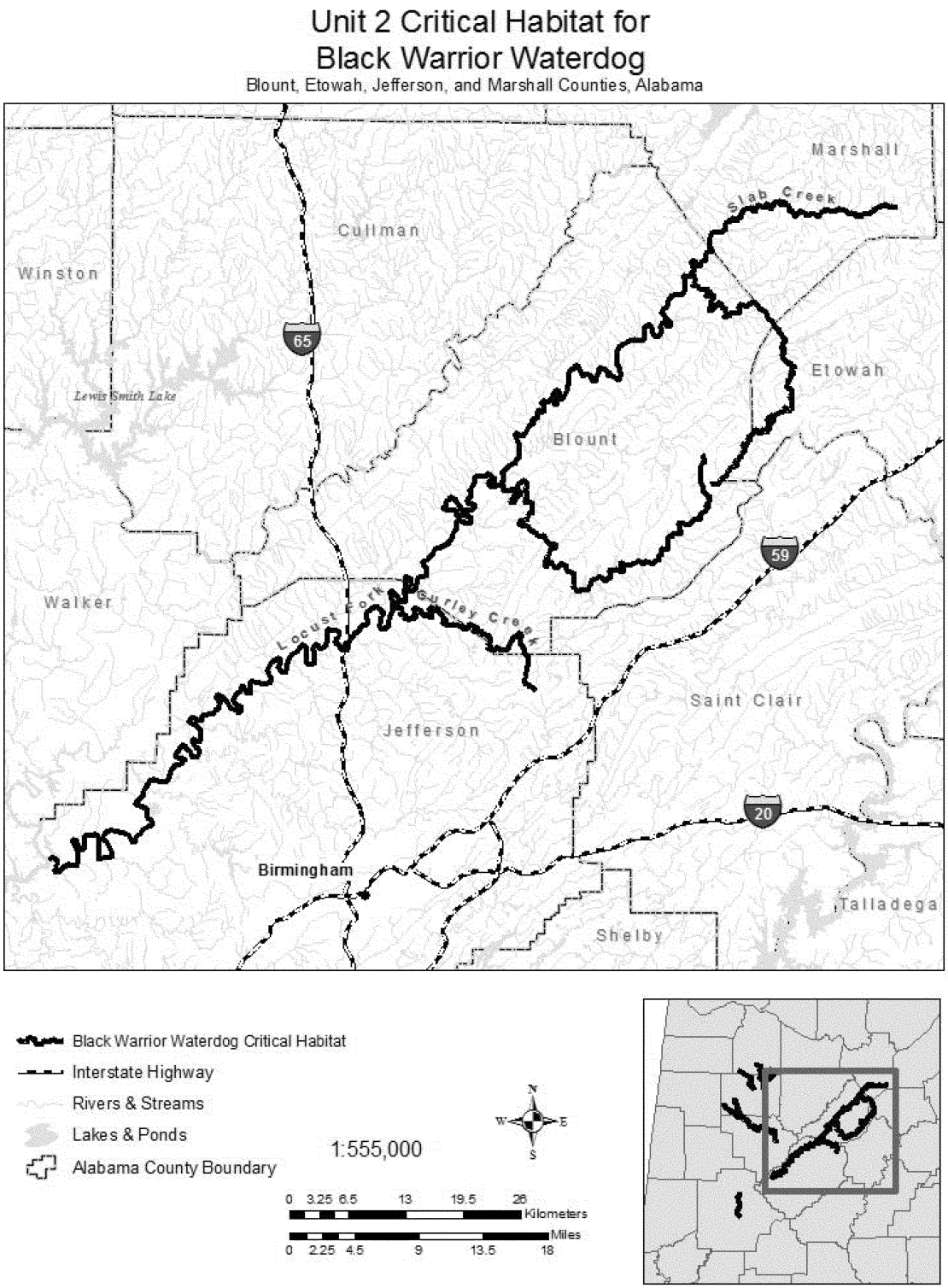
(ii) Map of Unit 1 follows:



(7) *Unit 2:* Locust Fork; Blount, Etowah, Jefferson, and Marshall Counties, Alabama.

(i) *General description:* Unit 2 is approximately 391 rkm (243 rmi) of stream and river habitat from the headwaters of Locust Fork to Bankhead Lake, from the headwaters of Slab Creek to the confluence of Locust Fork, from the headwaters of Blackburn Fork to the confluence of Locust Fork, and from the headwaters of Gurley Creek to the confluence of Locust Fork.

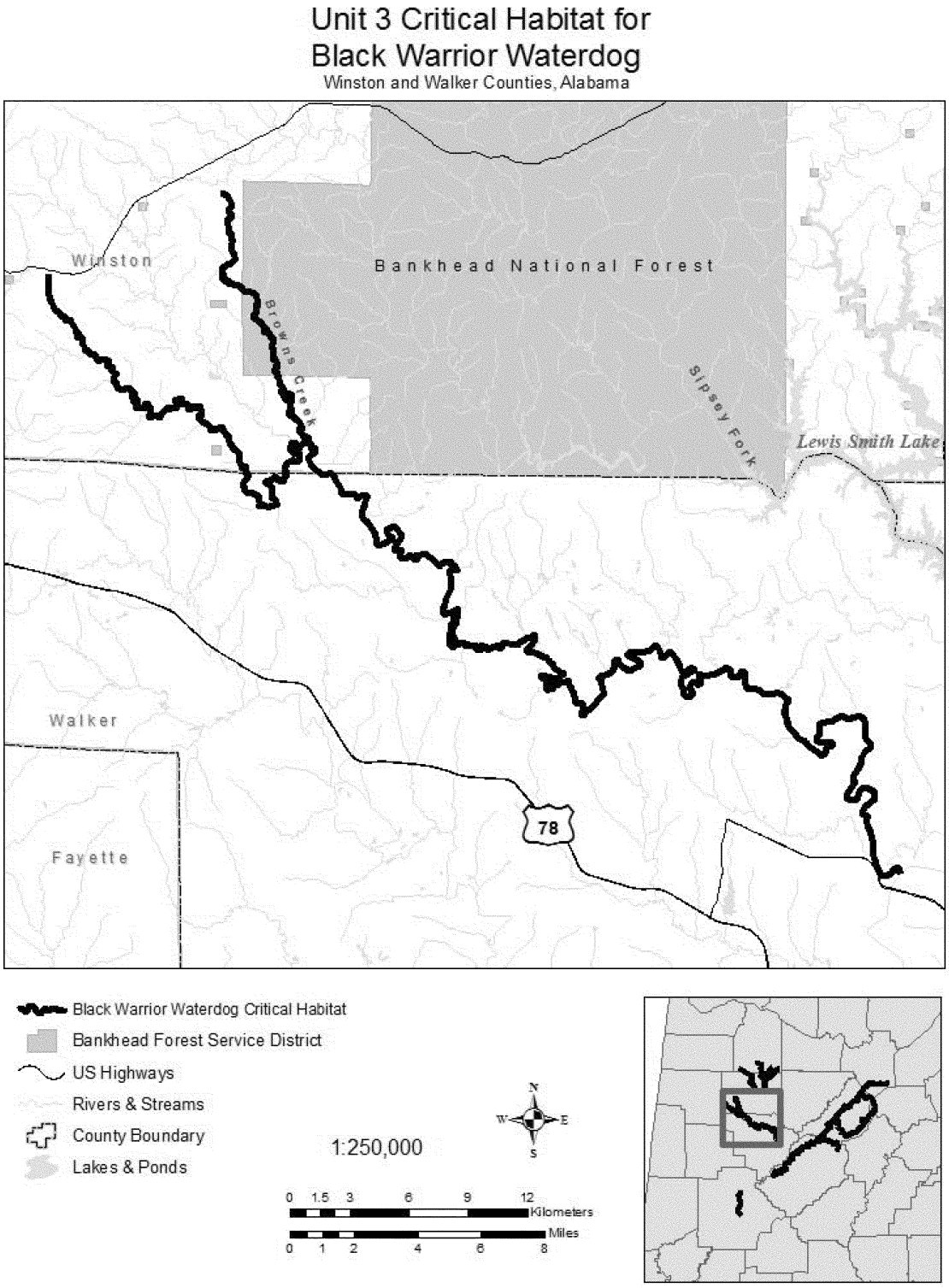
(ii) Map of Unit 2 follows:



(9) *Unit 3:* Blackwater Creek; Walker and Winston Counties, Alabama.

(i) *General description:* Unit 3 consists of approximately 128 rkm (80 rmi) of stream and river habitat from the headwaters of Blackwater Creek to the confluence of Mulberry Fork, from the headwaters of Brown Creek to the confluence of Blackwater Creek.

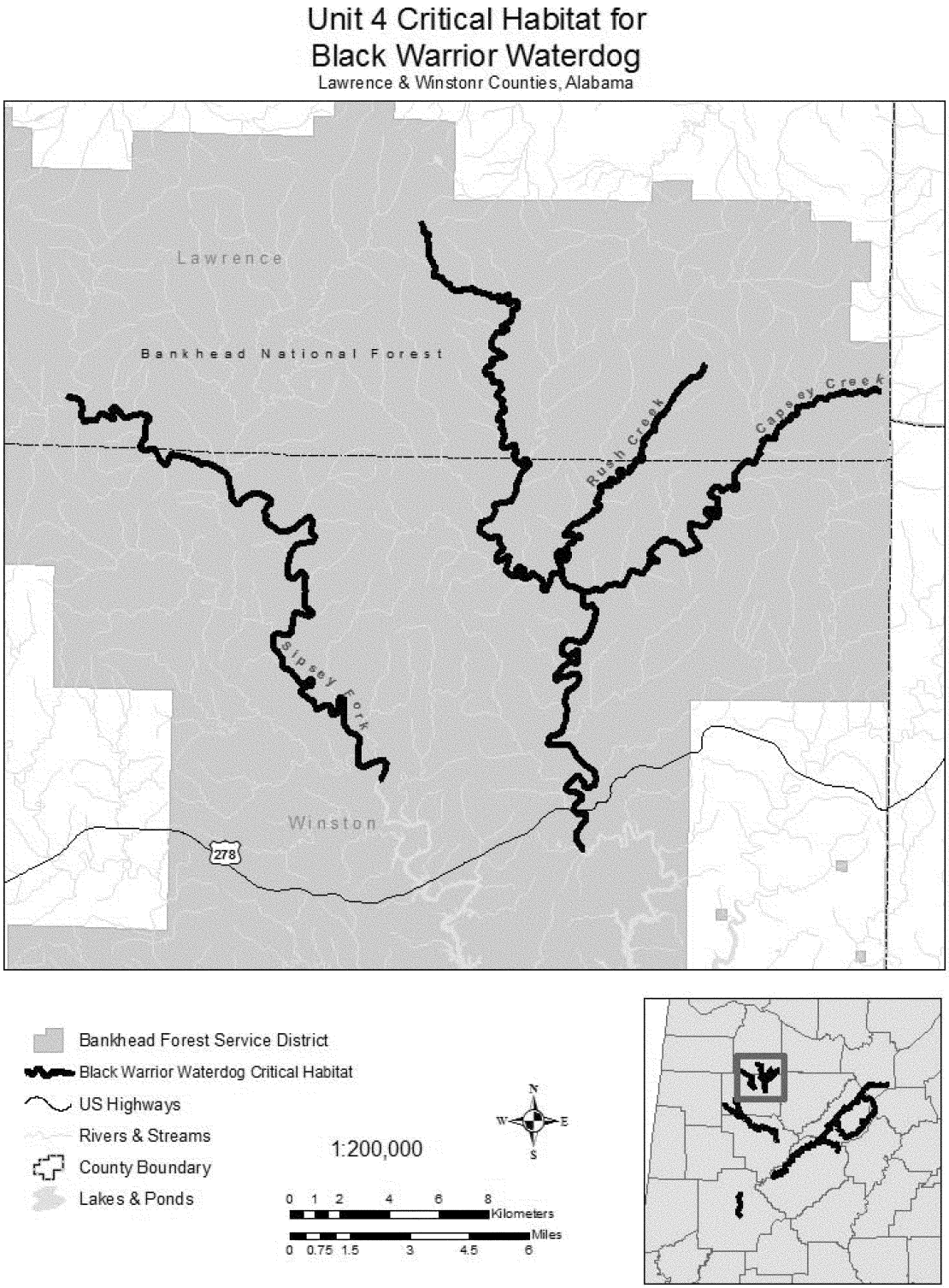
(ii) Map of Unit 3 follows:



(10) *Unit 4:* Sipsey Fork; Lawrence and Winston Counties, Alabama.

(i) *General description:* Unit 4 consists of approximately 124 rkm (78 rmi) of stream and river habitat from the headwaters of Sipsey Fork to Lewis Smith Lake, from the headwaters of Brushy Creek to Lewis Smith Lake, from the headwaters of Rush Creek to the confluence of Brushy Creek, and from the headwaters of Capsey Creek to the confluence of Brushy Creek.

(ii) Map of Unit 4 follows:



* * * * *

Dated: November 21, 2017.

James W. Kurth,

Deputy Director for U.S. Fish and Wildlife Service, Exercising the Authority of the Director for U.S. Fish and Wildlife Service.

[FR Doc. 2017–28386 Filed 1–2–18; 8:45 am]

BILLING CODE 4333–15–C

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 679

[Docket No. 160920866–7167–02]

RIN 0648–XF894

Fisheries of the Exclusive Economic Zone Off Alaska; Pacific Cod by Vessels Using Jig Gear in the Central Regulatory Area of the Gulf of Alaska

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Temporary rule; closure.

SUMMARY: NMFS is prohibiting directed fishing for Pacific cod by vessels using jig gear in the Central Regulatory Area of the Gulf of Alaska (GOA). This action is necessary to prevent exceeding the A season allowance of the 2018 Pacific cod total allowable catch apportioned to vessels using jig gear in the Central Regulatory Area of the GOA.

DATES: Effective 0000 hours, Alaska local time (A.l.t.), January 1, 2018, through 1200 hours, A.l.t., June 10, 2018.

FOR FURTHER INFORMATION CONTACT: Josh Keaton, 907–586–7228.

SUPPLEMENTARY INFORMATION: NMFS manages the groundfish fishery in the GOA exclusive economic zone according to the Fishery Management Plan for Groundfish of the Gulf of Alaska (FMP) prepared by the North Pacific Fishery Management Council under authority of the Magnuson-Stevens Fishery Conservation and Management Act. Regulations governing fishing by U.S. vessels in accordance with the FMP appear at subpart H of 50 CFR part 600 and 50 CFR part 679. Regulations governing sideboard protections for GOA groundfish fisheries appear at subpart B of 50 CFR part 680.

The A season allowance of the 2018 Pacific cod total allowable catch (TAC) apportioned to vessels using jig gear in the Central Regulatory Area of the GOA is 37 metric tons (mt), as established by the final 2017 and 2018 harvest specifications for groundfish of the GOA (82 FR 12032, February 27, 2017) and inseason adjustment (82 FR 12032, February 27, 2017).

In accordance with § 679.20(d)(1)(i), the Administrator, Alaska Region, NMFS (Regional Administrator) has determined that the A season allowance of the 2018 Pacific cod TAC apportioned to vessels using jig gear in the Central Regulatory Area of the GOA is necessary to account for the incidental catch in other anticipated fisheries. Therefore, the Regional Administrator is establishing a directed fishing allowance of 0 mt and is setting aside the remaining 37 mt as bycatch to support other anticipated groundfish fisheries. In accordance with § 679.20(d)(1)(iii), the Regional Administrator finds that this directed fishing allowance has been reached. Consequently, NMFS is prohibiting directed fishing for Pacific cod by vessels using jig gear in the Central Regulatory Area of the GOA. After the effective date of this closure the maximum retainable amounts at § 679.20(e) and (f) apply at any time during a trip.

Classification

This action responds to the best available information recently obtained from the fishery. The Assistant Administrator for Fisheries, NOAA (AA), finds good cause to waive the requirement to provide prior notice and opportunity for public comment pursuant to the authority set forth at 5 U.S.C. 553(b)(B) as such requirement is impracticable and contrary to the public interest. This requirement is impracticable and contrary to the public interest as it would prevent NMFS from responding to the most recent fisheries data in a timely fashion and would delay the directed fishing closure of Pacific cod by vessels using jig gear in the Central Regulatory Area of the GOA. NMFS was unable to publish a notice providing time for public comment because the most recent, relevant data only became available as of December 27, 2017.

The AA also finds good cause to waive the 30-day delay in the effective date of this action under 5 U.S.C. 553(d)(3). This finding is based upon the reasons provided above for waiver of prior notice and opportunity for public comment.

This action is required by § 679.20 and is exempt from review under Executive Order 12866.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: December 28, 2017.

Alan D. Risenhoover,

Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2017–28389 Filed 12–28–17; 4:15 pm]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 679

[Docket No. 160920866–7167–02]

RIN 0648–XF907

Fisheries of the Exclusive Economic Zone Off Alaska; Pacific Cod by Catcher Vessels Using Hook-and-Line Gear in the Western Regulatory Area of the Gulf of Alaska

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Temporary rule; closure.

SUMMARY: NMFS is prohibiting directed fishing for Pacific cod by catcher vessels using hook-and-line gear in the Western Regulatory Area of the Gulf of Alaska (GOA). This action is necessary to prevent exceeding the A season allowance of the 2018 Pacific cod total allowable catch apportioned to catcher vessels using hook-and-line gear in the Western Regulatory Area of the GOA.

DATES: Effective 0000 hours, Alaska local time (A.l.t.), January 1, 2018, through 1200 hours, A.l.t., June 10, 2018.

FOR FURTHER INFORMATION CONTACT: Josh Keaton, 907–586–7228.

SUPPLEMENTARY INFORMATION: NMFS manages the groundfish fishery in the GOA exclusive economic zone according to the Fishery Management Plan for Groundfish of the Gulf of Alaska (FMP) prepared by the North Pacific Fishery Management Council under authority of the Magnuson-Stevens Fishery Conservation and Management Act. Regulations governing fishing by U.S. vessels in accordance with the FMP appear at subpart H of 50 CFR part 600 and 50 CFR part 679. Regulations governing sideboard protections for GOA groundfish fisheries appear at subpart B of 50 CFR part 680.

The A season allowance of the 2018 Pacific cod total allowable catch (TAC) apportioned to catcher vessels using hook-and-line gear in the Western Regulatory Area of the GOA is 39 metric tons (mt), as established by the final