on the supply, distribution, or use of energy. Consequently, FRA has determined that this regulatory action is not a "significant energy action" within the meaning of Executive Order 13211.

Privacy Act

Anyone is able to search the electronic form of all our comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (Volume 65, Number 70; Pages 19477–78) or you may visit *http://www.regulations.gov.*

List of Subjects in 49 CFR Part 225

Investigations, Penalties, Railroad safety, Reporting and recordkeeping requirements.

The Rule

■ In consideration of the foregoing, FRA amends part 225 of chapter II, subtitle B of title 49, Code of Federal Regulations, as follows:

PART 225—[AMENDED]

■ 1. The authority citation for part 225 continues to read as follows:

Authority: 49 U.S.C. 103, 322(a), 20103, 20107, 20901–02, 21301, 21302, 21311; 28 U.S.C. 2461, note; and 49 CFR 1.49.

■ 2. Amend § 225.19 by revising the first sentence of paragraph (c) and revising paragraph (e) to read as follows:

§ 225.19 Primary groups of accidents/incidents.

* * * * *

(c) *Group II—Rail equipment.* Rail equipment accidents/incidents are collisions, derailments, fires, explosions, acts of God, and other events involving the operation of on-track equipment (standing or moving) that result in damages higher than the current reporting threshold (*i.e.*, $6,700 for calendar years 2002 through 2005, $7,700 for calendar year 2006, $8,200 for calendar year 2007, $8,500 for calendar year 2008, $8,900 for calendar year 2009, $9,200 for calendar year 2010 and $9,400 for calendar year 2011) to railroad on-track equipment, signals, tracks, track structures, or roadbed, including labor costs and the costs for acquiring new equipment and material. * * *

* * * * *

(e) The reporting threshold is $6,700 for calendar years 2002 through 2005, $7,700 for calendar year 2006, $8,200 for calendar year 2007, $8,500 for calendar year 2008, $8,900 for calendar year 2009, $9,200 for calendar year 2010 and $9,400 for calendar year 2011. The procedure for determining the reporting threshold for calendar years 2006 and beyond appears as paragraphs 1–8 of appendix B to part 225.

* * * * *

Issued in Washington, DC, on December 2, 2010.

Karen J. Hedlund,

Chief Counsel.

[FR Doc. 2010–30824 Filed 12–6–10; 8:45 am]

BILLING CODE 4910–06–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R4–ES–2009–0079; MO 92210–1117–0000–B4]

RIN 1018–AW52

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Vermilion Darter

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), designate critical habitat for the vermilion darter (*Etheostoma chermocki*) under the Endangered Species Act of 1973, as amended (Act). We designate as critical habitat approximately 21.0 kilometers (km) (13.0 miles (mi)) of stream in 5 units within the Turkey Creek watershed in Jefferson County, AL.

DATES: This rule becomes effective on January 6, 2011.

ADDRESSES: This final rule, the final economic analysis, comments and materials received, as well as supporting documentation we used in preparing this final rule, are available for viewing on the Internet at *http://regulations.gov* at Docket No. FWS–R4–ES–2009–0079 and, by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Mississippi Fish and Wildlife Office, 6578 Dogwood View Parkway, Jackson, MS 39213; telephone 601–321–1122; facsimile 601–965–4340.

FOR FURTHER INFORMATION CONTACT: Stephen Ricks, Field Supervisor, U.S. Fish and Wildlife Service, Mississippi Fish and Wildlife Office (*see* **ADDRESSES** above). If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Background

It is our intent to discuss only those topics directly relevant to the designation of critical habitat for the vermilion darter under the Act (16 U.S.C. 1531 *et seq.*), in this final rule. For more information on the biology and ecology of the vermilion darter, refer to the final listing rule published in the **Federal Register** on November 28, 2001 (66 FR 59367) and the Vermilion Darter Recovery Plan, available on the Internet at *http://ecos.fws.gov/docs/recovery_plan/070802.pdf.* For information on vermilion darter critical habitat, refer to the proposed rule to designate critical habitat for the vermilion darter published in the **Federal Register** on December 3, 2009 (74 FR 63366). Information on the associated draft economic analysis for the proposed rule to designate revised critical habitat was published in the **Federal Register** on June 29, 2010 (75 FR 37350). *See also* the discussion of habitat in the *Physical and Biological Features* section below.

Description and Taxonomy

The vermilion darter (*Etheostoma chermocki* (Teleostei: Percidae)) was officially described in 1992 from Turkey Creek, a tributary of the Locust Fork, which is within the Black Warrior River drainage of Jefferson County, Alabama. The vermilion darter belongs to the subgenus *Ulocentra* (snubnose darters), which includes fish that are slightly laterally compressed, have complete lateral lines, broadly connected gill membranes, a short head, and a small pronounced mouth. The vermilion darter is a medium-sized darter, reaching about 7.1 centimeters (2.8 inches) total length (length from tip of snout to longest portion of tail fin).

Distribution and Habitat

The vermilion darter is a narrowly endemic fish species, occurring in sparse, fragmented, and isolated populations. The species is only known in parts of the upper mainstem reach of Turkey Creek and four tributaries in Pinson, Jefferson County, Alabama (Boschung and Mayden 2004, p. 520). Suitable streams have pools of moderate current alternating with riffles of moderately swift current, and low water turbidity.

The vermilion darter was listed as endangered (66 FR 59367, November 28, 2001) because of ongoing threats to the species and its habitat from urbanization within the Turkey Creek watershed. The primary threats to the species and its habitat are degradation of water quality and substrate

components due to sedimentation and other pollutants, and altered flow regimes from activities such as construction and maintenance activities; impoundments (five within the Turkey Creek and Dry Creek system); instream gravel extractions; off-road vehicle usage; road, culvert, pipe, bridge, gas, sewer and water easement construction; and inadequate stormwater management (Drennen pers. obs. 2007–2009; Blanco and Mayden 1999, pp. 18–20). These activities lead to water quality degradation; the production of pollutants (sediments, nutrients from sewage, pesticides, fertilizers, and industrial and stormwater effluents); stream channel instability; fragmentation; reduced connectivity of the habitat from alteration of stream banks and bottoms; degradation of riffles, runs, and pools; and changes in water quantity and flow necessary for spawning, feeding, resting, and other life-history processes of the species.

Previous Federal Actions

The vermilion darter (*Etheostoma chermocki*) was listed as endangered under the Act on November 28, 2001 (66 FR 59367). At the time of listing, we found that designation of critical habitat was prudent. However, due to budgetary constraints, we did not designate critical habitat at that time. We approved a final recovery plan for the vermilion darter on June 20, 2007 (Service 2007), and announced its availability to the public through a notice published in the **Federal Register** on August 2, 2007 (72 FR 42426).

On November 27, 2007, the Center for Biological Diversity filed a lawsuit against the Secretary of the Interior for our failure to timely designate critical habitat for the vermilion darter (*Center for Biological Diversity* v. *Kempthorne* (07–CV–2928)). In a court-approved settlement agreement, the Service agreed to submit to the **Federal Register** a new prudency determination, and if the designation was found to be prudent, a proposed designation of critical habitat, by November 30, 2009, and a final designation by November 30, 2010. We published a proposed critical habitat designation for the vermilion darter on December 3, 2009 (74 FR 63366), and accepted public comments for 60 days.

Summary of Comments and Recommendations

We requested written comments from the public on the proposed designation of critical habitat for the vermilion darter (74 FR 63366) during the December 3, 2009, to February 1, 2010, comment period. We contacted appropriate Federal, State, and local agencies; scientific organizations; and other interested parties, and invited them to comment on the proposed rule. We issued a press release and published a legal notice in the *Birmingham News.* On June 29, 2010, we published a notice reopening the comment period until July 29, 2010, as well as announcing the availability of a draft economic analysis and amended required determinations (75 FR 37350). We directly notified, and requested comments from the State of Alabama. During the open comment periods we received a total seven comments letters: five from organizations and individuals and two from peer reviewers, one of whom also represented the State of Alabama. All comments supported designation of critical habitat for the vermilion darter. We reviewed all comments for substantive issues and new data regarding vermilion darter critical habitat and the economic analysis. Written comments are addressed in the following summary. For readers' convenience, we have combined similar comments into single comments and responses.

Peer Review

In accordance with our policy published in the **Federal Register** on July 1, 1994 (59 FR 34270), we solicited expert opinions from three knowledgeable individuals with scientific expertise that included familiarity with the species, the geographic region in which the species occurs, and conservation biology principles. The purpose of such review is to ensure that the designation is based on scientifically sound data, assumptions, and analysis, including input of appropriate experts and specialists. We received written responses from two of the three peer reviewers whom we contacted. The peer reviewers generally agreed that the rule incorporated the best scientific information available, accurately described the species and its habitat requirements (primary constituent elements), accurately characterized the reasons for the species' decline and the threats to its habitat. Both peer reviewers concurred with our critical habitat selection criteria and use of the Vermilion Darter Recovery Plan (USFWS 2007) as a foundation for the proposed designation. Both peer reviewers provided additional information, clarifications, and suggestions to improve the final critical habitat rule. These editorial revisions and clarifications have been incorporated into the final rule, as appropriate. One peer reviewer recommended an additional area for critical habitat designation.

Peer Reviewer Comments

Comment 1: The six-lane Northern Beltline Corridor and the right-of-way segment for the Northern Beltline Corridor between Alabama Highway 79 and Alabama Highway 75 north of Pinson will have direct and indirect impacts on the critical habitat of the vermilion darter and the general water quality of the Turkey Creek watershed.

Our Response: The Northern Beltline crosses the northern portions of Dry Creek. Only 0.6 km (0.4 mi) of Dry Creek below Innsbrook Lake is designated as critical habitat and this is not within the immediate area of the Northern Beltline. We reviewed and evaluated the Northern Beltline Corridor in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) and the Endangered Species Act. We found that the project would not adversely affect the vermilion darter or any federally listed species. We will reinitiate consultation if new information indicates that the Northern Beltline is a threat to the species or its designated critical habitat, or if the project is modified in a manner or extent not previously considered.

Comment 2: Stormwater management is a much larger issue to critical habitat than what is presented in the rule. There is no maximum instream flow limit in reference to the impacts of stormwater on critical habitat.

Our Response: Stormwater management and its implications to water quality are addressed within the threats section of this rule. In regard to water quantity and stormwater management, an instream flow regime with a minimum average daily discharge over 50 cubic feet per second (compiled from U.S. Geological Survey flow data) is critical to the vitality of the critical habitat and is discussed in this rule. However, at this time, we do not have sufficient scientific information to determine a maximum stormwater management flow for the designated critical habitat. Average discharges of greater than 100 cubic feet per second, inclusive of both surface runoff and groundwater sources (springs and seepages), occur sporadically throughout the hydrologic cycle of the critical habitat and may be important maximum flow benchmarks in the future for determining the maximum flow. However, it is not known at this time at what point, or velocity in cubic feet per second, a flow within the hydrological year changes from a

flushing flow to a flow that causes geomorphologic or biological damage.

Comment 3: The commenter states that protection of aquifers and groundwater recharge areas is especially important because of the impacts of climate change on the habitat of the vermilion darter; specifically those impacts "resulting in higher stream water temperatures and lower flows, and stormwater management needs and higher flows." The Service should be consulted for disturbances within the critical habitat area as well as beyond the immediate critical habitat area within the recharge areas particularly in regard to springs and seeps.

Our Response: Critical habitat only affects Federal agencies and those projects which have a Federal nexus. All Federal agencies must comply with section 7 of the Act. Section 7 requires consultation on Federal actions that may adversely affect critical habitat. Under section 7 of the Act, the Federal action agency must provide an analysis of cumulative effects along with other information, when requesting formal consultation. The Service will be consulted for disturbances to areas both within the critical habitat units as well as those within the recharge area, including springs and seeps that contribute to the instream flow in the tributaries, especially during times when stream flows are abnormally low. *See* the Effects of Critical Habitat Designation section of this rule for additional information on section 7 consultation.

Comment 4: The Service should include the spring run on the east side of north bound Alabama Highway 79 as part of the critical habitat designation. Vermilion darters have been collected there during the spawning season.

Our Response: We acknowledge that there have been some sporadic collections of the vermilion darter at this spring run. We did not designate this site as critical habitat because the available information demonstrated that it did not contain the physical and biological features essential to the conservation of the species. See the Primary Constituent Elements section of this rule for areas essential to the conservation of the species. The spring run is located in a road-side ditch about 30 feet long. The run is bordered on all sides by pipes, roads, and a parking lot. It is disjunct and drains into Unit 5 but first must traverse about 100 feet within a pipe under Highway 79. However, although the spring run is not designated as critical habitat, the site will continue to be subject to conservation actions we implement under section 7 of the Act. *See* the Effects of Critical Habitat Designation section of this rule for additional information on section 7 consultation.

Public Comments

Comment 5: The size of the critical habitat for the vermilion darter is inadequate. The entire watersheds of the proposed stream units should be designated as critical habitat. At a minimum, the Service should designate a 300- to 500-foot buffer zone along each bank of all 5 stream units as critical habitat.

Our Response: The Act requires us to designate specific areas within the geographical area occupied by a species at the time it is listed which contain physical or biological features that are essential to the conservation of the species, and that may require special management considerations or protection. Specific areas outside the geographical area occupied by a species at the time of listing may also be designated critical habitat if it is determined that such areas are essential for the conservation of the species. We believe the five stream units that were proposed as critical habitat are occupied by the vermilion darter, are essential to its conservation, and require special management considerations or protection. As described in the proposed rule (74 FR 63366), we considered additional areas; however, they did not meet the criteria for designation as critical habitat.

When evaluating the effects of any Federal action subject to section 7 consultation, all activities which have the potential to destroy or adversely modify designated critical habitat must be considered. Adverse impacts to vermilion darter critical habitat might result from stormwater runoff, eutrophication, or potential changes in hydrology, geomorphology, etc. (*see* Effects of Critical Habitat Designation section below), that would include areas upstream of or adjacent to areas of stream channels that were designated critical habitat. Therefore, specific designation of these areas is unnecessary. Identification of the stream channel as critical habitat provides notice to Federal agencies to review activities conducted anywhere within the drainage for their potential effects to the designated portion of the channel. Critical habitat designation will alert third parties of the importance of the area to the survival of the vermilion darter.

Comment 6: The six-lane Northern Beltline Corridor will cross Dry Creek and follow the hilly terrain within the Turkey Creek watershed. Dry Creek will be placed in culverts at two locations and the general water quality of the Turkey Creek watershed, along with the habitat of the vermilion darter, will be impacted negatively.

Our Response: We evaluated the potential effects of the Northern Beltline on the vermilion darter and other trust resources in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. *et seq.*) and the Endangered Species Act and found that the project would not adversely affect any federally listed species. We will reinitiate consultation if new information indicates that the Northern Beltline is a threat to the species or its designated critical habitat, or if the project is modified in a manner or extent not previously considered (*See Comment 1* in the *Peer Reviewer Comments* section).

Comment 7: Strip mines are occurring along the Locust Fork of the Black Warrior River near Turkey Creek, outside of the vermilion darter's range and the critical habitat, but within the lower portion of the Turkey Creek watershed. The Majestic Mine is permitted to discharge within Turkey Creek via the creek's tributaries. The Service may want to consider extending the critical habitat of Turkey Creek downstream (from the lower section) to the confluence with the Locust Fork of the Black Warrior River, thus allowing the future downstream migration or reintroduction of the species.

Our Response: The areas below the most downstream point of Turkey Creek do not contain, at this time, the physical and biological features essential to the conservation of the vermilion darter. Current and proposed coal mining activities, along with current geomorphic conditions, limit the expansion of the vermilion darter beyond this point within Turkey Creek.

Comment 8: We are skeptical that the rule provides conservation standards adequate for the vermilion darter because critical habitat designation is based on data collected over a decade ago when the species was listed. An updated assessment may have expanded critical habitat to other areas.

Our Response: We utilized the most current information available when preparing this designation, including information from studies conducted since the vermilion darter listing in 2001 (*i.e.,* Khudamrongsawat 2007, Khudamrongsawat *et al.* 2005, Rakes and Shute 2005, USFWS 2007). We have determined that sufficient information is available to identify basic features essential to the conservation of the species as well as specific areas that meet the definition of critical habitat (*see* Critical Habitat section below).

Comment 9: Ensure the continuity in water flow in the Units to promote genetic flow within Turkey Creek, to prevent the extinction of the vermilion darter.

Our Response: We will implement the requirements of the Act and continue to monitor all activities that might affect stream flow and continuity within the designated area in light of their effects on water quality or quantity (*see Physical and Biological Features* and Effects of Critical Habitat Designation sections below).

Comments From States

We received two editorial comments to the critical habitat rule from the Alabama Department of Conservation and Natural Resources, which have been incorporated into this final rule. No official position was expressed by the State on the critical habitat designation.

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.

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 under 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 insure, 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 seeks or 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) 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.

For inclusion in a critical habitat designation, habitat within the geographical area occupied by the species at the time it was listed must contain the physical or biological features which are essential to the conservation of the species, and which may require special management considerations or protection. Critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical and biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat), focusing on the principal biological or physical constituent elements (primary constituent elements) within an area that are essential to the conservation of the species (such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type). Primary constituent elements are the elements of physical and biological features that, when laid out in the appropriate quantity and spatial arrangement to provide for a species' life-history processes, are essential to the conservation of the species.

Under the Act, we can 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. We designate critical habitat in areas outside the geographical area occupied by a species only when a designation limited to its range would be inadequate to ensure the conservation of the species. When the best available scientific data do not demonstrate that the conservation needs of the species require such additional areas, we will not designate critical habitat in areas outside the geographical area occupied by the species. An area currently occupied by the species but that was not occupied at the time of listing may, however, 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 and commercial data available. Further, our Policy on Information Standards under the Endangered Species 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 data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific 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 we should designate as critical habitat, our primary source of information is generally the information developed during the listing process for the species. 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, or other unpublished materials and expert opinion or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. In particular, we recognize that climate change may cause changes in the arrangement of occupied habitat stream reaches. Climate change may lead to increased frequency and duration of severe storms and droughts (Golladay *et al.* 2004, p. 504; McLaughlin *et al.* 2002, p. 6074; Cook *et al.* 2004, p. 1015). From 2006 to 2007, drought conditions greatly reduced the habitat of the vermilion darter in Jefferson County (Drennen, pers. obs. 2007). Fluker *et al.* (2007, p. 10) and Drennen (pers. obs. 2007) reported that ongoing drought conditions, coupled with rapid urbanization within watersheds containing imperiled darters, render the populations vulnerable to anthropomorphic

disturbances such as water extraction, vehicles within Turkey Creek and its tributaries, and increased clearing or draining of vulnerable wetlands and spring seeps; especially during the breeding season when the darters concentrate in specific habitat areas of Turkey Creek and its tributaries.

The information currently available on the effects of global climate change and increasing temperatures does not make sufficiently precise estimates of the location and magnitude of the effects. Nor are we currently aware of any climate change information specific to the habitat of the vermilion darter that would indicate what areas may become important to the species in the future. Therefore, as explained in the proposed rule (74 FR 63366), we are unable to determine what additional areas, if any, may be appropriate to include in the final critical habitat for this species to address the effects of climate change.

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 required 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 insure their actions are not likely to jeopardize the continued existence of any endangered or threatened species, and (3) the prohibitions of section 9 of the Act if actions occurring in these areas may affect the species. 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 and Biological Features

In accordance with sections 3(5)(A)(i) and 4(b)(1)(A) of the Act and regulations at 50 CFR 424.12(b), in determining which areas within the geographical area occupied at the time of listing to designate as critical habitat, we considered the physical and biological features that are essential to the conservation of the species and which may require special management considerations or protection. These include, but are not limited to:

(1) Space for individual and population growth and for normal behavior;

(2) Food, water, air, light, minerals, or other nutritional or physiological requirements;

(3) Cover or shelter;

(4) Sites for breeding, reproduction, or rearing (or development) of offspring; and

(5) Habitats that are protected from disturbance or are representative of the historical, geographical, and ecological distributions of a species.

We derive the specific physical and biological features required for the vermilion darter from the biological needs of the species as described in the Critical Habitat section of the proposed rule to designate critical habitat for the vermilion darter published in the **Federal Register** on December 3, 2009 (74 FR 63366), and in the information presented below. Additional information can be found in the final listing rule published in the **Federal Register** on November 28, 2001 (66 FR 59367), and the Vermilion Darter Recovery Plan, available on the Internet at *http://ecos.fws.gov/docs/recovery_plan/070802.pdf.* We have determined that the vermilion darter requires the following physical and biological features:

Space for Individual and Population Growth and for Normal Behavior

While little is known about the specific space requirements of the vermilion darter within the Turkey Creek system, darters, in general, depend on space from geomorphically stable streams with varying water quantities and flow. Studies show that vermilion darters are found in the transition zone between a riffle (shallow, fast water) or run (deeper, fast water) and a pool (deep, slow water) (Blanco and Mayden 1999, pp. 18–20), usually at the head and foot of the riffles and downstream of the run habitat. Construction of impoundments and inadequate storm water management in the Turkey Creek watershed have altered stream banks and bottoms; degraded the riffles, runs, and pools; and altered the natural water quantity and flow of the stream. A stable stream maintains its horizontal dimension and vertical profile (stream banks and bottoms), thereby conserving the physical characteristics, including bottom features such as riffles, runs, and pools and the transition zones between these features. The riffles, runs, and pools not only provide space for the vermilion darter, but also provide cover and shelter for breeding, reproduction, and growth of offspring.

In addition, the current range of the vermilion darter is reduced to localized sites due to fragmentation, separation, and destruction of vermilion darter populations. There are both natural (waterfall) and manmade (impoundments) dispersal barriers that not only contribute to the separation and isolation of vermilion darter populations, but also affect water quality. Fragmentation of the species' habitat has isolated the populations within the Turkey Creek system, reduced space for rearing and reproduction and population maintenance, reduced adaptive capabilities, and increased likelihood of local extinctions (Hallerman 2003, pp. 363–364; Burkhead *et al.* 1997, pp. 397–399). Genetic variation and diversity within a species are essential for recovery, adaptation to environmental changes, and long-term viability (capability to live, reproduce, and develop) (Noss and Cooperrider 1994, pp. 282–297; Harris 1984, pp. 93–107). Long-term viability is founded on numerous interbreeding, local populations throughout the range (Harris 1984, pp. 93–107). Continuity of water flow between suitable habitats is essential in preventing further fragmentation of the species' habitat and populations; conserving the essential riffles, runs, and pools needed by vermilion darters; and promoting genetic flow throughout the populations. Continuity of habitat will maintain spawning, foraging, and resting sites, as well as provide gene flow throughout the population. Connectivity of habitats, as a whole, also permits improvement in water quality and water quantity by allowing an unobstructed water flow throughout the connected habitats.

Based on the biological information and needs discussed above, it is essential to protect riffles, runs, and pools, and the continuity of these structures, to accommodate feeding, spawning, growth, and other normal behaviors of the vermilion darter and to promote genetic flow within the species.

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

Water Quantity and Flow

Much of the cool, clean water provided to the Turkey Creek main stem comes from consistent and steady groundwater sources (springs) that contribute to the flow and water quantity in the tributaries (Beaver Creek, Dry Creek, Dry Branch, and the unnamed tributary to Beaver Creek). Flowing water provides a means for transporting nutrients and food items, moderating water temperatures and dissolved oxygen levels, and diluting nonpoint- and point-source pollution. Impoundments within Turkey and Dry Creeks not only serve as dispersal barriers but also have altered stream flows from natural conditions. Without clean water sources, water quality and water quantity would be considerably lower and would significantly impair the normal life stages and behavior of the vermilion darter.

Favorable water quantity is an average daily discharge of over 50 cubic feet per second within the Turkey Creek main stem (U.S. Geological Survey 2009, compiled from average annual statistics), inclusive of both surface runoff and groundwater sources (springs and seepages) and exclusive of flushing flows. However, the favorable upper limit for the average daily discharge is not known. Along with this average daily discharge, both minimum and flushing flows are necessary within the tributaries to maintain all life stages and to remove fine sediments and dilute other pollutants (Drennen pers. obs., February 2009a; Instream Flow Council 2004, pp. 103–104, 375; Gilbert *et al.* eds. 1994, pp. 505–522; Moffett and Moser 1978, pp. 20–21). These flows are supplemented by groundwater and contribute to the overall stream-cleansing effect by adding to the total flow of high-quality water. This, in turn, helps in maintenance of stream banks and bottoms, essential for normal life stages and behavior of the vermilion darter. However, excessive stormwater flow can alter the geomorphology of the existing stream by disturbing bottom substrate and banksides along with dislodging vegetation.

Water Quality

Factors that can potentially alter water quality are decreases in water quantity through droughts and periods of low seasonal flow, precipitation events, nonpoint-source runoff, human activities within the watershed, random spills, and unregulated stormwater discharge events (Instream Flow Council 2004, pp. 29–50). These factors are particularly harmful during drought conditions when flows are depressed and pollutants are concentrated. Impoundments also affect water quality by reducing water flow, altering temperatures, and concentrating pollutants (Blanco and Mayden 1999, pp. 5–6, 36). Nonpoint-source pollution and alteration of flow regimes are primary threats to the vermilion darter in the Turkey Creek watershed.

Aquatic life, including fish, requires acceptable levels of dissolved oxygen. The type of organism and its life stage determine the level of oxygen required. Generally, among fish, the young life forms are the most sensitive. The amount of dissolved oxygen that is present in the water (the saturation level) depends upon water temperature. As the water temperature increases, the saturated dissolved oxygen level decreases. The more oxygen there is in the water, the greater the assimilative capacity (ability to consume organic wastes with minimal impact) of that water; lower water flows have a reduced assimilative capacity (Pitt 2000, pp. 6–7). Low-flow conditions affect the chemical environment occupied by the fish, and extended low-flow conditions coupled with higher pollutant levels would likely result in behavior changes within all life stages, but could be particularly detrimental to early life stages (*e.g.,* embryo, larvae, and juvenile).

Optimal water quality lacks harmful levels of pollutants such as inorganic contaminants like copper, arsenic, mercury, and cadmium; organic contaminants such as human and animal waste products; endocrine-disrupting chemicals; pesticides; nitrogen, potassium, and phosphorous fertilizers; and petroleum distillates. Sediment is the most abundant pollutant produced in the Mobile River Basin (Alabama Department of Environmental Management 1996, pp.13–15). Siltation (excess sediments suspended or deposited in a stream) contributes to turbidity of the water and has been shown to reduce photosynthesis in aquatic plants, suffocate aquatic insects, smother fish eggs, clog fish gills, and fill in essential interstitial spaces (spaces between stream substrates) used by aquatic organisms for spawning and foraging; therefore, siltation negatively impacts fish growth, physiology, behavior, reproduction, and survival. Eutrophication (excessive nutrients present, such as nitrogen and phosphorous) promotes heavy algal growth that covers and eliminates clean rock or gravel habitats necessary for vermilion darter feeding and spawning. High conductivity values are an indicator of hardness and alkalinity and may denote water nitrification (Hackney *et al.* 1992, pp.199–203). Generally, early life stages of fishes are less tolerant of environmental contamination than adults or juveniles (Little *et al.* 1993, p. 67).

Adequate water quality and good to optimal water quantity are necessary to dilute impacts from storm water and other non-natural effluents. Harmful levels of pollutants impair critical behavior functions in fish and are reflected in population-level responses (reduced population size, biomass, year class success, etc.). Adequate water quantity and flow and good to optimal water quality are also essential for normal behavior, growth, and viability during all life stages. However, excessive water quantity as stormwater runoff may destabilize and move bottom and bankside substrates as well as increase instream sedimentation and decrease water quantity in general.

The vermilion darter requires relatively clean, cool, flowing water within the Turkey Creek main stem and tributaries. The Clean Water Act (33 U.S.C. 1251 *et seq.*), Water Quality Act (Pub. L. 100–4), and Alabama Water Pollution Control Act (Ala. Code § 22–22–1) establish guidelines for water usage and standards of quality for the State's waters necessary to preserve and protect aquatic life. Essential water quality attributes for darters and other fish species in fast to middle water flow streams include: dissolved oxygen levels greater than 6 parts per million (ppm), temperatures between 7 and 26.7 °Celsius (C) (45 and 80 °Fahrenheit (F)) with spring egg incubation temperatures from 12.2 to 18.3 °C (54 to 65 °F), a specific conductance (ability of water to conduct an electric current, based on dissolved solids in the water) of less than approximately 225 micro Siemens per centimeter at 26.7 °C (80 °F), and low concentrations of free or suspended solids (organic and inorganic sediments) less than 10 Nephelometric Turbidity Units (NTU; units used to measure sediment discharge) and 15 mg/L Total Suspended Solids (TSS; measured as mg/L of sediment in water) (Teels *et al.* 1975, pp. 8–9; Ultschet *et al.* 1978, pp. 99–101; Ingersoll *et al.* 1984, pp. 131–138; Kundell and Rasmussen 1995, pp. 211–212; Henley *et al.* 2000, pp. 125–139; Meyer and Sutherland 2005, pp. 43–64).

Food

The vermilion darter is a benthic (bottom) insectivore consuming larval chironomids (midges), tipulids (crane

flies), and hydropsychids (caddisflies), along with occasional microcrustaceans (Boschung and Mayden 2004, p. 520; Khudamrongsawat *et al.* 2005, p. 472). Caddisflies and crane flies are pollution-sensitive organisms found in good to fair water quality (Auburn University 1993, p. 53). Variation in instream flow maintains the stream bottom where food for the vermilion darter is found, transports these organisms, and provides oxygen and other attributes to various invertebrate life stages. 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 2001, pp. 132–135). In addition, eutrophication promotes heavy algal growth that covers and eliminates the clean rock or gravel habitats necessary for vermilion darter feeding and spawning. A decrease in water quality and instream flow will correspondingly decrease the major food species for the vermilion darter. Excessive water quantity as stormwater runoff may destabilize and move bottom and bankside substrates as well as increase instream sedimentation and decrease water quantity in general. Thus, food availability for the vermilion darter is affected by instream flow and water quality.

Based on the biological information and needs discussed above, we believe it is essential that vermilion darter habitat consist of unaltered, connected, stable streams to maintain flow, prevent sedimentation, and promote good water quality absent harmful pollutants.

Cover or Shelter (Sites for Breeding, Reproduction or Rearing)

Vermilion darters depend on specific bottom substrates for normal and robust life processes such as spawning, rearing, protection of young during life stages, protection of adults when threatened, foraging, and feeding. These bottom substrates are dominated by fine gravel, along with some sand, coarse gravel, cobble, and bedrock (Blanco and Mayden 1999, pp. 24–26; Drennen pers. obs., February 2009b). The vermilion darter prefers small-sized gravel for spawning substrates (Blanchard and Stiles 2005, pp. 1–12). Occasionally, there are also small sticks and limbs on the bottom substrate and within the water column (Stiles pers. comm., September 1999; Drennen pers. obs., May 2007).

Excessive fine sediments of small sands, silt, and clay may embed in the larger substrates, filling in interstitial spaces between these structures. Loss of these interstitial areas removes spawning and rearing areas, foraging and feeding sites, and escape and protection localities (Sylte and Fischenich 2002, pp. 1–25). In addition, dense, filamentous algae growth on the substrates may restrict or eliminate the usefulness of the interstitial spaces by the vermilion darter. Excessive fine sediment can also impact aquatic vegetation by reducing sunlight due to turbid water or by covering the vegetation with fine silt. Aquatic vegetation is likely also used by vermilion darters as a spawning substrate (Kuhajda pers. comm., May 2007).

Geomorphic instability within the streambed and along the banks from high stormwater flow results in scouring and erosion of these areas, leading to sedimentation and loss of vegetation and substrate for shelter and cover for vermilion darters, their eggs, and their young. This fine sediment deposition also reduces the area available for food sources, such as macroinvertebrates and periphyton (Tullos 2005, pp. 80–81).

Thus, based on the biological information and needs above, essential vermilion darter habitat consists of stable streams with a stream flow sufficient to remove sediment and eliminate the filling in of interstitial spaces and substrate to accommodate spawning, rearing, protection of young, protection of adults when threatened, foraging, and feeding.

Primary Constituent Elements for Vermilion Darter

Under the Act and its implementing regulations, we are required to identify the physical and biological features essential to the conservation of the vermilion darter in areas occupied at the time of listing, focusing on the features' primary constituent elements. We consider primary constituent elements to be the elements of physical and biological features that, when laid out in the appropriate quantity and spatial arrangement to provide for a species' life-history processes, are essential to the conservation of the species. Areas designated as critical habitat for vermilion darter contain only occupied areas within the species' historical geographic range, and contain sufficient primary constituent elements to support at least one life-history process.

Based on our current knowledge of the life history, biology, and ecology of vermilion darter and the requirements of the habitat to sustain the life-history processes of the species, we determined that the primary constituent elements specific to vermilion darter are:

Primary Constituent Element 1. Geomorphically stable stream bottoms and banks (stable horizontal dimension and vertical profile) in order to maintain the bottom features (riffles, runs, and pools) and transition zones between bottom features, to promote connectivity between spawning, foraging, and resting sites, and to maintain gene flow throughout the species' range.

Primary Constituent Element 2. Instream flow regime with an average daily discharge over 50 cubic feet per second, inclusive of both surface runoff and groundwater sources (springs and seepages) and exclusive of flushing flows.

Primary Constituent Element 3. Water quality with temperature not exceeding 26.7 °C (80 °F), dissolved oxygen 6.0 milligrams or greater per liter, turbidity of an average monthly reading of 10 NTUs and 15mg/l TSS or less; and a specific conductance of no greater than 225 micro Siemens per centimeter at 26.7 °C (80 °F).

Primary Constituent Element 4. Stable bottom substrates consisting of fine gravel with coarse gravel or cobble, or bedrock with sand and gravel, with low amounts of fine sand and sediments within the interstitial spaces of the substrates along with adequate aquatic vegetation.

With this designation of critical habitat, we intend to identify the physical and biological features essential to the conservation of the species, through the identification of the appropriate quantity and spatial arrangement of the primary constituent elements sufficient to support the life-history processes of the species. Each of the areas identified as critical habitat in this rule contains sufficient primary constituent elements to provide for one or more of the life-history processes of the vermilion darter.

Criteria Used To Identify Final Critical Habitat

As required by section 4(b)(1)(A) of the Act, we used the best scientific and commercial data available to designate critical habitat. We reviewed available information pertaining to the habitat requirements of this species. In accordance with the Act and its implementing regulation at 50 CFR 424.12(e), we considered whether designating additional areas—outside those currently occupied as well as those occupied at the time of listing—are necessary to ensure the conservation of the species. We are designating all stream reaches in occupied habitat as critical habitat. We have defined "occupied habitat" as those stream reaches occupied at the time of listing, all of which are still known as of the publication date of this rulemaking to be

occupied by the vermilion darter; these stream reaches comprise the entire known range of the vermilion darter. We are not designating any areas outside the known range of the species because the historical range of the vermilion darter, beyond currently occupied areas, is unknown, and dispersal beyond the current range is not likely due to dispersal barriers.

We used information from surveys and reports prepared by the Alabama Department of Conservation and Natural Resources, Alabama Geological Survey, Samford University, University of Alabama, and the Service to identify the specific locations occupied by the vermilion darter. Currently, occupied habitat for the species is limited and isolated. The species is currently located within the upper mainstem reaches of Turkey Creek and four tributaries: unnamed tributary to Beaver Creek, Beaver Creek, Dry Creek, and Dry Branch in Pinson, Jefferson County, Alabama (Blanco and Mayden 1999, pp.18–20; Drennen pers. obs. March 2008).

Following the identification of the specific locations occupied by the vermilion darter, we determined the appropriate length of stream segments to designate by identifying the upstream and downstream limits of these occupied sections necessary for the conservation of the vermilion darter. Populations of vermilion darters are isolated due to dispersal barriers. Accordingly, we set the upstream and downstream limits of each critical habitat unit by identifying landmarks (bridges, confluences, road crossings, and dams) above and below the upper- and lower-most reported locations of the vermilion darter in each stream reach to ensure incorporation of all potential sites of occurrence. These stream reaches were then digitized using 7.5-minute topographic maps and ARCGIS to produce the critical habitat map.

The five final critical habitat units contain physical and biological features with one or more of the primary constituent elements in the appropriate quantity and spatial arrangement for the features to support multiple life processes for the vermilion darter and to be essential to the conservation of this species.

When identifying final critical habitat boundaries, we make every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands usually lack primary constituent elements for endangered or threatened species. Areas identified as critical habitat for the vermilion darter below include only stream channels within the ordinary high-water line and do not contain any developed areas or structures.

Special Management Considerations or Protections

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

The five units we are designating as critical habitat will require some level of management to address the current and future threats to the physical and biological features essential to the conservation of the species. None of the final critical habitat units are presently under special management or protection provided by a legally operative plan or agreement for the conservation of the vermilion darter. Various activities in or adjacent to the critical habitat units described in this final rule may affect one or more of the physical and biological features. For example, features in the final critical habitat designation may require special management due to threats posed by the following activities or disturbances: 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; significant changes in the existing flow regime within the streams due to water diversion or withdrawal; significant alteration of water quality; significant alteration in the quantity of groundwater and alteration of spring discharge sites; significant changes in stream bed material composition and quality due to construction projects and maintenance activities; off-road vehicle use; sewer, gas, and water easements; bridge construction; culvert and pipe installation; stormwater management; and other watershed and floodplain disturbances that release sediments or nutrients into the water. Other activities that may affect physical and biological features in the final critical habitat units include those listed in the Effects of Critical Habitat Designation section below.

Final Critical Habitat Designation

We are designating 5 units, totaling approximately 21.2 stream km (13.1 stream mi), as critical habitat for the vermilion darter. The critical habitat units described below constitute our best assessment of areas that currently meet the definition of critical habitat for the vermilion darter. Table 1 identifies the final units for the species, the occupancy of the units, the final extent of critical habitat for the vermilion darter, and ownership of the final designated areas.

TABLE 1—OCCUPANCY AND OWNERSHIP OF THE FINAL CRITICAL HABITAT UNITS FOR THE VERMILION DARTER

Unit	Location	Occupied	Private ownership stream kilometers (miles)	State, county, city ownership stream kilometers (miles)	Total
1	Turkey Creek	Yes	14.9 (9.2)	0.3 (0.2)	15.2 (9.4)
2	Dry Branch	Yes	0.7 (0.4)		0.7 (0.4)
3	Beaver Creek	Yes	0.9 (0.6)	0.1 (< 0.1)	1.0 (0.6)
4	Dry Creek	Yes	0.6 (0.4)		0.6 (0.4)
5	Unnamed Tributary to Beaver Creek	Yes	3.3 (2.0)	0.4 (0.2)	3.7 (2.2)
Total			20.4 (12.6)	0.8 (0.5)	21.2 (13.1)

We present brief descriptions of each unit and reasons why they meet the definition of critical habitat below. The final critical habitat units include the stream channels of the creek and tributaries within the ordinary high-water line. As defined in 33 CFR 329.11, the ordinary high-water line on nontidal rivers is the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural water line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding areas. In Alabama, for nonnavigable waterways, the riparian landowner owns the stream to the middle of the channel.

For each stream reach of final critical habitat, the upstream and downstream boundaries are described generally below; more precise descriptions are provided in the Regulation Promulgation section at the end of this final rule.

Unit 1: Turkey Creek, Jefferson County, Alabama:

Unit 1 includes 15.2 km (9.4 mi) in Turkey Creek from Shadow Lake Dam downstream to the Section 13/14 (T15S, R2W) line, as taken from the U.S. Geological Survey 7.5-minute topographical map (Pinson quadrangle).

Approximately 14.9 km (9.2 mi), or 98 percent of this area is privately owned. The remaining 0.3 km (0.2 mi), or 2 percent is publicly owned by the City of Pinson or Jefferson County in the form of bridge crossings and road easements.

Turkey Creek supports the most abundant and robust populations of the vermilion darter in the watershed. Populations of vermilion darters are small and isolated within specific habitat sites of Turkey Creek from Shadow Lake dam downstream to the old strip mine pools (13/14 S T15S R2W section line, as taken from the U.S. Geological Survey 7.5-minute topographical map (Pinson quadrangle)). We consider the entire reach of Turkey Creek that composes Unit 1 to be occupied.

One of the three known spawning sites for the species (Stiles, pers. comm. 1999) is located within the confluence of Turkey Creek and Tapawingo Spring run (Primary Constituent Element 4). In addition, Turkey Creek provides the most darter habitat for the vermilion darters with an abundance of pools, riffles, and runs (Primary Constituent Element 1). These geomorphic structures provide the species with spawning, foraging, and resting areas (Primary Constituent Elements 1 and 4), along with good water quality, quantity, and flow, which support the normal life stages and behavior of the vermilion darter and the species' prey sources (Primary Constituent Elements 2 and 3).

There are five impoundments in Turkey Creek (Blanco and Mayden 1999, pp. 5–6, 36, 63) limiting the connectivity of the range and expansion of the species into other units and posing a risk of extinction to the species due to changes in flow regime, habitat, water quality, water quantity, and stochastic events such as drought. These impoundments accumulate nutrients and undesirable fish species that could propose threats to vermilion darters and the species' habitat. Other threats to the vermilion darter and its habitat in Turkey Creek which may require special management and protection of primary constituent elements include the potential of: urbanization activities (such as channel modification for flood control, inadequate stormwater management, or gravel extraction) that could result in increased bank erosion; significant changes in the existing flow regime due to 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 construction; culvert and pipe installation; and other watershed and floodplain disturbances that release sediments or nutrients into the water.

Unit 2: Dry Branch, Jefferson County, Alabama:

Unit 2 includes 0.7 km (0.4 mi) of Dry Branch from the bridge at Glenbrook Road downstream to the confluence with Beaver Creek.

Most of the 0.7 km (0.4 mi) or close to 100 percent of this area is privately owned. Less than 1 percent of the area is publicly owned by the City of Pinson or Jefferson County in the form of bridge crossings and road easements.

Dry Branch provides supplemental water quantity to Turkey Creek proper (Unit 1) and provides connectivity to additional bottom substrate habitat and possible spawning sites (Primary Constituent Elements 1, 3, and 4). One of the three known spawning sites for the species is located within the confluence of this reach (Primary Constituent Element 1 and 4) and Beaver Creek (Stiles, pers. comm. 2009).

Threats to the vermilion darter and its habitat at Dry Branch which may require special management and protection of Primary Constituent Elements 1, 3, and 4 include the potential of: urbanization activities (such as channel modification for flood control, inadequate stormwater management, construction of impoundments, and gravel extraction) that could result in increased bank erosion; significant changes in the existing flow regime due to construction of impoundments, 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 construction; culvert and pipe installation; and other watershed and floodplain disturbances that release sediments or nutrients into the water.

Unit 3: Beaver Creek, Jefferson County, Alabama:

Unit 3 includes 1.0 km (0.6 mi) of Beaver Creek from the confluence with the unnamed tributary to Beaver Creek and Dry Branch downstream to the confluence with Turkey Creek.

Almost 0.9 km (0.6 mi), or 94 percent of this area, is privately owned. The remaining 0.1 km (under 0.1 mi), or 6 percent is publicly owned by the City of Pinson or Jefferson County in the form of bridge crossings and road easements.

Beaver Creek supports populations of vermilion darters, and provides supplemental water quantity to Turkey Creek proper (Primary Constituent Elements 1 and 2). The reach also contains adequate bottom substrate for vermilion darters to use in spawning, foraging, and other life processes (Primary Constituent Element 4). Beaver Creek makes available additional habitat and spawning sites, and offers connectivity with other vermilion darter populations within Turkey Creek, Dry Branch, and the unnamed tributary to Beaver Creek (Primary Constituent Elements 1 and 4).

Threats to the vermilion darter and its habitat at Beaver Creek which may require special management of Primary Constituent Elements 1, 2, and 4 include the potential of: urbanization activities (such as channel modification for flood control, construction of impoundments, gravel extraction) 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 construction; culvert and pipe installation; and other watershed and

floodplain disturbances that release sediments or nutrients into the water.

Unit 4: Dry Creek, Jefferson County, Alabama:

Unit 4 includes 0.6 km (0.4 mi) of Dry Creek from Innsbrook Road downstream to the confluence with Turkey Creek.

One hundred percent of this area, is privately owned.

Dry Creek supports populations of vermilion darters and provides supplemental water quantity to Turkey Creek proper (Primary Constituent Elements 1 and 2). The reach also contains adequate bottom substrate for vermilion darters to use in spawning, foraging, and other life processes (Primary Constituent Element 4). Dry Creek makes available additional habitat and spawning sites, and offers connectivity with vermilion darter populations in Turkey Creek (Primary Constituent Element 1).

There are two impoundments in Dry Creek (Blanco and Mayden 1999, pp. 56, 62) which limit the range and expansion of the species within the unit and increases the risk of extinction due to changes in flow regime, habitat or water quality, water quantity, and stochastic events such as drought. These impoundments amass nutrients and undesirable fish species that could propose threats to vermilion darters and to its habitat. Threats that may require special management and protection of primary constituent elements include: urbanization activities (such as channel modification for flood control and gravel extraction) that could result in increased bank erosion; significant changes in the existing flow regime due to inadequate stormwater management and impoundment construction, 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 construction, culvert and pipe installation, and other watershed and floodplain disturbances that release sediments or nutrients into the water.

Unit 5: Unnamed Tributary to Beaver Creek, Jefferson County, Alabama:

Unit 5 includes 3.7 km (2.3 mi) of the unnamed tributary of Beaver Creek from the Section ½ (T16S, R2W) line, as taken from the U.S. Geological Survey 7.5-minute topographical map (Pinson quadrangle), downstream to its confluence with Beaver Creek.

Almost 3.3 km (2.1 mi), or 89 percent of this area, is privately owned. The remaining 0.4 km (0.2 mi), or 11 percent, is publicly owned by the City of Pinson or Jefferson County in the form of bridge crossings and road easements.

The unnamed tributary to Beaver Creek supports populations of vermilion darters and provides supplemental water quantity to Turkey Creek proper (Primary Constituent Elements 1 and 2). The unnamed tributary to Beaver Creek has been intensely geomorphically changed by man over the last 100 years. The majority of this reach has been channelized for flood control, as it runs parallel to Highway 79. There are several bridge crossings, and the reach has a history of industrial uses along the bank. However, owing to the groundwater effluent that constantly supplies this reach with clean and flowing water (Primary Constituent Elements 2 and 3), the reach has been able to support significant aquatic vegetation and a population of vermilion darters at several locations. One of the three known spawning sites for the species is located within this reach (Primary Constituent Element 4) (Kuhajda, pers. comm. May 2007).

The headwaters of the unnamed tributary to Beaver Creek is characterized by natural flows that are attributed to an abundance of spring groundwater discharges contributing adequate water quality, water quantity, and substrates (Primary Constituent Elements 1, 2, and 3). Increasing the connectivity of the vermilion darter populations (Primary Constituent Element 1) into the upper reaches of this tributary is an essential conservation requirement as it would expand the range and decrease the vulnerability of these populations to stochastic threats.

Threats to the vermilion darter and its habitat which may require special management and protection of primary constituent elements are: urbanization activities (such as channel modification for flood control, and gravel extraction) that could result in increased bank erosion; significant changes in the existing flow regime due to inadequate stormwater management and impoundment construction, 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 construction; 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 insure that actions they fund, authorize, or carry out are not likely to destroy or adversely modify critical habitat. Decisions by the Fifth and Ninth Circuits Courts of Appeals have invalidated our definition of "destruction or adverse modification" (50 CFR 402.02) (*see Gifford Pinchot Task Force* v. *U.S. Fish and Wildlife Service,* 378 F.3d 1059 (9th Cir. 2004) and *Sierra Club* v. *U.S. Fish and Wildlife Service,* 245 F.3d 434, 442 (5th Cir. 2001)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the statutory provisions of the Act, we determine destruction or adverse modification on the basis of whether, with implementation of the final Federal action, the affected critical habitat would continue to serve its intended conservation role for the species.

If a species is listed or critical habitat is designated, section 7(a)(2) of the Act requires Federal agencies to insure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or to destroy or adversely modify its critical habitat. 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. As a result of this 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, or 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 or destroy or adversely modify critical habitat, we also provide reasonable and prudent alternatives to the project, if any are identifiable. 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 jeopardizing the continued existence of the listed species or 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 may sometimes 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.

Federal activities that may affect the vermilion darter or its designated critical habitat require section 7 consultation under the Act. Activities on State, tribal, local, or private lands requiring 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 us under section 10 of the Act) or involving some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency) are subject to the section 7 consultation process. For instance, the Service should be consulted for disturbances to areas both within the final critical habitat units as well as upstream of those areas known to support vermilion darter, including springs and seeps that contribute to the instream flow in the tributaries, especially during times when stream flows are abnormally low (*i.e.,* during droughts). Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded, authorized, or permitted do not require section 7 consultations.

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 alter the physical and biological features to an extent that appreciably reduces the conservation value of critical habitat for the vermilion darter. As discussed above, the role of critical habitat is to support life-history needs of the 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, when carried out, funded, or authorized by a Federal agency, may affect critical habitat and therefore should result in consultation for the vermilion darter include, but are not limited to:

(1) Actions that would alter the geomorphology of the stream habitats. Such activities could include, but are not limited to, inadequate stormwater management, instream excavation or dredging, impoundments, channelization, and discharge of fill materials. These activities could cause aggradation or degradation of the channel bed elevation or significant bank erosion and could result in entrainment or burial of this species, as well as other direct or cumulative adverse effects to this species and its life cycle.

(2) Actions that would significantly alter the existing flow regime. Such activities could include, but are not limited to, inadequate stormwater management, impoundments, water diversion, water withdrawal, and hydropower generation. These activities could eliminate or reduce the habitat necessary for growth and reproduction of the vermilion darter.

(3) Actions that would significantly alter water chemistry or water quality (for example, changes to temperature or pH, introduced contaminants, or excess nutrients). Such activities could include, but are not limited to, inadequate stormwater management, the release of chemicals, biological pollutants, or heated effluents into surface water or connected groundwater at a point source or by dispersed release (nonpoint source). These activities could alter water conditions that are beyond the tolerances of the species and result in direct or cumulative adverse effects on the species and its life cycle.

(4) Actions that would significantly alter stream bed material composition and quality by increasing sediment deposition or filamentous algal growth. Such activities could include, but are not limited to, inadequate stormwater management; construction projects; road and bridge maintenance activities; livestock grazing; timber harvest; off-road vehicle use; underground gas, sewer, water, and electric lines; and other watershed and floodplain disturbances that release sediments or nutrients into the water. These activities could eliminate or reduce habitats necessary for the growth and reproduction of the species by causing excessive sedimentation and burial of the species or their habitats, or eutrophication leading to excessive filamentous algal growth. Excessive filamentous algal growth can cause extreme decreases in nighttime dissolved oxygen levels through vegetation respiration, and cover the bottom substrates and the interstitial spaces between cobble and gravel.

Exemptions

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

The Sikes Act Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an integrated natural resource management plan (INRMP) by November 17, 2001. An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found on the base. Each INRMP includes:

(1) An assessment of the ecological needs on the installation, including the need to provide for the conservation of listed species;

(2) A statement of goals and priorities;

(3) A detailed description of management actions to be implemented to provide for these ecological needs; and

(4) A monitoring and adaptive management plan.

Among other things, each INRMP must, to the extent appropriate and applicable, provide for fish and wildlife management; fish and wildlife habitat enhancement or modification; wetland protection, enhancement, and restoration where necessary to support fish and wildlife; and enforcement of applicable natural resource laws.

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108–136) amended the Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) now provides: "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 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. Therefore, there are no specific lands that meet the criteria for being exempted from the designation of critical habitat under section 4(a)(3) of the Act.

Exclusions

Application of Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that the Secretary shall designate or 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 and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned. In making that determination, the statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor.

Under section 4(b)(2) of the Act, we may exclude an area from designated critical habitat based on economic impacts, national security impacts, and any other relevant impacts. In considering whether to exclude a particular area from the designation, we must identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and determine whether the benefits of exclusion outweigh the benefits of inclusion. If based on this analysis, we make this determination; we can exclude the area only if such exclusion would not result in the extinction of the species.

Exclusions Based on Economic Impacts

Under section 4(b)(2) of the Act, we consider the economic impacts of specifying any particular areas as critical habitat. In order to consider economic impacts, we prepared a draft economic analysis of the proposed critical habitat designation and related factors (RTI International 2010a). The draft analysis (dated June 29, 2010) was made available for public review from June 29, 2010, through July 29, 2010 (75 FR 37350). No comments were received on the draft economic analysis. Following the close of the comment period, a final analysis (dated July 2010) of the potential economic effects of the designation was developed, taking into consideration any new information (RTI International 2010b).

The intent of the final economic analysis (FEA) is to quantify the economic impacts of all potential conservation efforts for the vermilion darter. Some of these costs will likely be incurred regardless of whether we designate critical habitat (baseline). The economic impact of the final critical habitat designation is analyzed by comparing scenarios both "with critical habitat" and "without critical habitat." The "without critical habitat" scenario represents the baseline for the analysis, considering protections already in place for the species (*e.g.,* under the Federal listing and other Federal, State, and local regulations). The baseline, therefore, represents the costs incurred regardless of whether critical habitat is designated. The "with critical habitat" scenario describes the incremental impacts associated specifically with the designation of critical habitat for the species. The incremental conservation efforts and associated impacts are those not expected to occur absent the designation of critical habitat for the species. In other words, the incremental costs are those attributable solely to the designation of critical habitat above and beyond the baseline costs; these are the costs we consider in the final designation of critical habitat. The analysis looks retrospectively at baseline impacts incurred since the species was listed, and forecasts both baseline and incremental impacts likely to occur with the designation of critical habitat.

The FEA also addresses how potential economic impacts are likely to be distributed, including an assessment of any local or regional impacts of habitat conservation and the potential effects of conservation activities on government agencies, private businesses, and individuals. The FEA measures lost economic efficiency associated with residential and commercial development and public projects and activities, such as economic impacts on water management and transportation projects, Federal lands, small entities, and the energy industry. Decision-makers can use this information to assess whether the effects of the designation might unduly burden a particular group or economic sector. Finally, the FEA looks retrospectively at costs that have been incurred since 2001, when the vermilion darter was listed under the Act (66 FR 59367), and considers those costs that may occur in the 25 years following the designation of critical habitat, which was determined to be the appropriate period for analysis because limited planning information was available for most activities to forecast activity levels for projects beyond a 25-year timeframe. The FEA quantifies economic impacts of vermilion darter conservation efforts associated with the following categories of activity: Water management, activities that impact water quality, dredging activities and other impacts (*e.g.,* bridge replacement, management plans, and natural gas pipelines).

Total baseline impacts (costs attributable to listing alone) are estimated to be $550,000 annually over the next 25 years, assuming a 7 percent discount rate, and the total incremental costs (costs attributable to designation alone) associated with this rule are estimated to be $39.24 annually over the next 25 years, assuming a 7 percent discount rate (RTI International 2010b).

The critical habitat designation will result in minimal incremental costs because any adverse modification decision would likely be coincident to a jeopardy determination for the same action due to the species' narrow range. Therefore, the only incremental costs are those resulting from the additional administrative costs by the Service and the action agency to include an adverse modification finding within the biological opinion and biological assessment as part of a formal consultation.

Our economic analysis did not identify any disproportionate costs that are likely to result from the designation. Consequently, we have determined not to exert our discretion to exclude any areas from this designation of critical habitat for the vermilion darter based on economic impacts. A copy of the FEA with supporting documents may be obtained by contacting the Mississippi Fish and Wildlife Field Office (*see* **ADDRESSES**) or by downloading from the Internet at *http://www.regulations.gov.*

Exclusions Based on National Security Impacts

Under section 4(b)(2) of the Act, we consider whether there are lands owned or managed by the Department of Defense where a national security impact might exist. In preparing this final rule, we have determined that the lands within the designation of critical habitat for the vermilion darter are not owned or managed by the Department of Defense, and, therefore, we anticipate no impact to national security. Consequently, we have determined not to exert our discretion to exclude any areas from this final designation based on impacts to national security.

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 landowners have developed any HCPs or other management plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion of lands from, critical habitat. In addition, we look at any tribal issues, 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 completed HCPs or other management plans for the species, and the final designation does not include any tribal lands or trust resources. We anticipate no impact to tribal lands, partnerships, or management plans from this final critical habitat designation. Consequently, we are not considering any areas for exclusion from this final designation based on other relevant impacts.

Required Determinations

Regulatory Planning and Review—Executive Order 12866

The Office of Management and Budget (OMB) has determined that this rule is not significant under Executive Order 12866. OMB bases its determination upon the following four criteria:

(1) Whether the rule will have an annual effect of $100 million or more on the economy or adversely affect an economic sector, productivity, jobs, the environment, or other units of the government.

(2) Whether the rule will create inconsistencies with other Federal agencies' actions.

(3) Whether the rule will materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients.

(4) Whether the rule raises novel legal or policy issues.

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 (SBREFA) of 1996), whenever an agency must publish a notice of rulemaking for any 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 (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 statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities. In this final rule, we are certifying that the critical habitat designation for the vermilion darter will not have a significant economic impact on a substantial number of small entities. The following discussion explains our rationale.

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; as well as small businesses. 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 consider the types of activities that might trigger regulatory impacts under this rule, as well as the 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.

To determine if the rule could significantly affect a substantial number of small entities, we consider the number of small entities affected within particular types of economic activities (*e.g.,* housing development, grazing, oil and gas production, timber harvesting). We apply the "substantial number" test individually to each industry to determine if certification is appropriate. However, the SBREFA does not explicitly define "substantial number" or "significant economic impact." Consequently, to assess whether a "substantial number" of small entities is affected by this designation, this analysis considers the relative number of small entities likely to be impacted in an area. In some circumstances, especially with critical habitat designations of limited extent, we may aggregate across all industries and consider whether the total number of small entities affected is substantial. In estimating the number of small entities potentially affected, we also consider whether their activities have any Federal involvement.

Designation of critical habitat only affects activities authorized, funded, or carried out by Federal agencies. Some kinds of activities are unlikely to have any Federal involvement and so will not be affected by critical habitat designation. In areas where the species is present, Federal agencies already are required to consult with us under section 7 of the Act on activities they authorize, fund, or carry out that may affect the vermilion darter. Federal agencies also must consult with us if their activities may affect critical habitat. Designation of critical habitat, therefore, could result in an additional economic impact on small entities due to the requirement to reinitiate consultation for ongoing Federal activities (*see Application of the* "*Adverse Modification Standard*" section).

In our final economic analysis of the proposed critical habitat designation, we evaluated the potential economic effects on small business entities resulting from conservation actions related to the listing of the vermilion darter and the proposed designation of critical habitat (*see* Section 6 in RTI International 2010b). The analysis is based on the estimated impacts associated with the rulemaking as described in sections 2 through 4 of the analysis, and evaluated the potential economic impacts related to future development, road construction, wastewater treatment, stream alteration, and water withdrawal.

According to the FEA, the Service and action agency are the only entities with direct compliance costs expected to be assessed with the critical habitat designation. Thus, based on the above reasoning and currently available information, we concluded that this rule would not result in a significant economic impact on a substantial number of small entities. Therefore, we are certifying that the designation of critical habitat for the vermilion darter 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. We do not expect this rule to significantly affect energy supplies, distribution, or use. Although two of the final units are below hydropower reservoirs, current and proposed operating regimes have been deemed adequate for the species, and therefore their operations will not be affected by the final designation of critical habitat. All other final units are remote from energy supply, distribution, or use activities. 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 would 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, 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; AFDC 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 jeopardize the continued existence of the species, or destroy or adversely modify critical habitat under section 7 of the Act. 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 listing these species or designating critical habitat shift the costs of the large entitlement programs listed above on to State governments.

(2) We do not believe that this rule would 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 Executive Order 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for the vermilion darter in a takings implications assessment. The takings implications assessment concludes that this designation of critical habitat for the vermilion darter does not pose significant takings implications.

Federalism—Executive Order 13132

In accordance with Executive Order 13132 (Federalism), the 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 critical habitat designation with appropriate State resource agencies in Alabama. The critical habitat designation may have some benefit to this government in that the areas that contain the features essential to the conservation of the species are more clearly defined, and the primary constituent elements of the habitat necessary to the conservation of the species are specifically identified. While making this definition and identification does not alter where and what federally sponsored activities may occur, it may assist these local governments in long-range planning (rather than waiting 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) of the Act 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 regulation 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. This final rule uses standard property descriptions and identifies the physical and biological features essential to the conservation of the vermilion darter within the designated areas to assist the public in understanding the habitat needs of the species.

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 (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 (NEPA; 42 U.S.C. 4321 *et seq.*) 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 have determined that there are no tribal lands occupied by the vermilion darter at the time of listing that contain the features essential for the conservation of the species, and no tribal lands that are unoccupied by the vermilion darter that are essential for the conservation of the species. Therefore, we have not designated critical habitat for the vermilion darter on tribal lands.

References Cited

A complete list of all references cited in this rulemaking is available on the Internet at *http://www.regulations.gov* and upon request from the Field Supervisor, Mississippi Fish and Wildlife Office (*see* **FOR FURTHER INFORMATION CONTACT** section).

Author(s)

The primary authors of this package are staff members of the Mississippi Fish and Wildlife 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—[AMENDED]

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

Authority: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

■ 2. In § 17.11(h), revise the entry for "Darter, vermilion" under FISHES in the List of Endangered and Threatened Wildlife to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
*	*	*	*	*	*		*
			FISHES				
*	*	*	*	*	*		*
Darter, vermilion	*Etheostoma chermocki.*	U.S.A. (AL)	Entire	E	715	17.95(e)	NA
*	*	*	*	*	*		*

■ 3. In § 17.95(e), add an entry for "Vermilion Darter (*Etheostoma chermocki*)," in the same alphabetical order as the species appears in the table at § 17.11(h), to read as follows:

§ 17.95 Critical habitat—fish and wildlife.

* * * * *

(e) *Fishes.*

* * * * *

Vermilion Darter (Etheostoma chermocki)

(1) Critical habitat units are depicted for Jefferson County, Alabama, on the map below.

(2) Within these areas, the primary constituent elements of the physical and biological features essential to the conservation of the vermilion darter consist of four components:

(i) Geomorphically stable stream bottoms and banks (stable horizontal dimension and vertical profile) in order to maintain bottom features (riffles, runs, and pools) and transition zones between bottom features, to promote connectivity between spawning, foraging, and resting sites, and to maintain gene flow throughout the species range.

(ii) Instream flow regime with an average daily discharge over 50 cubic feet per second, inclusive of both surface runoff and groundwater sources (springs and seepages) and exclusive of flushing flows.

(iii) Water quality with temperature not exceeding 26.7 °C (80 °F), dissolved oxygen 6.0 milligrams or greater per

liter, turbidity of an average monthly reading of 10 NTU and 15mg/l TSS (Nephelometric Turbidity Units; units used to measure sediment discharge; Total Suspended Solids measured as mg/l of sediment in water) or less; and a specific conductance (ability of water to conduct an electric current, based on dissolved solids in the water) of no greater than 225 micro Siemens per centimeter at 26.7 °C (80 °F).

(iv) Stable bottom substrates consisting of fine gravel with coarse gravel or cobble, or bedrock with sand and gravel, with low amounts of fine sand and sediments within the interstitial spaces of the substrates along with adequate aquatic vegetation.

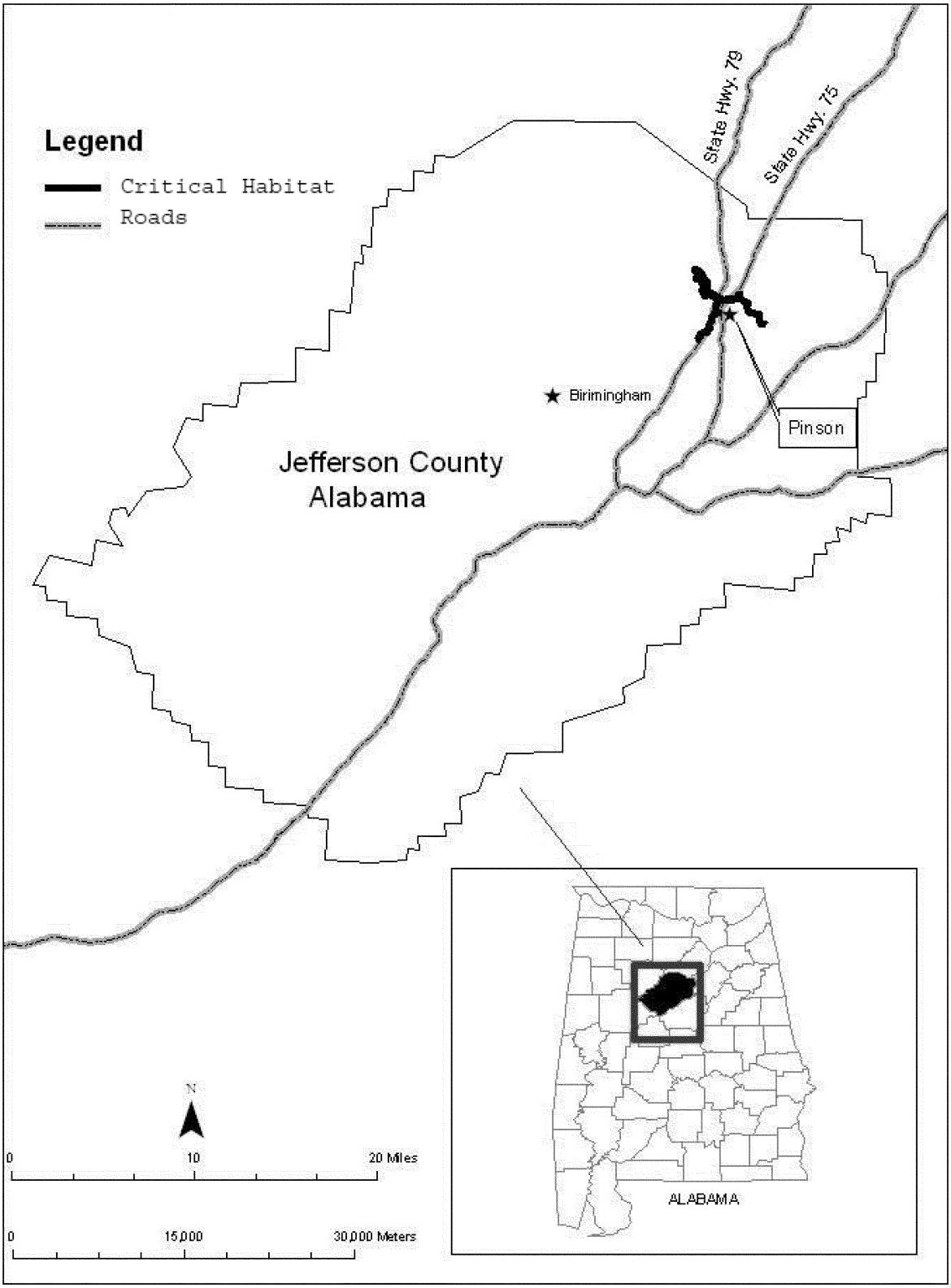
(3) Critical habitat does not include manmade structures existing on the effective date of this rule and not containing one or more of the primary constituent elements, such as buildings, bridges, aqueducts, airports, and roads, and the land on which such structures are located.

(4) Critical habitat unit map. The map was developed from USGS 7.5′ quadrangles. Critical habitat unit upstream and downstream limits were then identified by longitude and latitude using decimal degrees.

(5) *Note:* Index map of critical habitat units for the vermilion darter follows:

BILLING CODE 4310–55–P

Index Map - Vermilion Darter



BILLING CODE 4310–55–C

(6) Unit 1: Turkey Creek, Jefferson County, Alabama.

(i) Unit 1 includes the channel in Turkey Creek from Shadow Lake Dam (086°38′22.50″ W long., 033°40′44.78″ N lat.) downstream to the Section 13/14 (T15S, R2W) line (086°42′31.81″ W long., 033°43′23.61″ N lat.).

(ii) Map of Unit 1 is provided at paragraph (10)(ii) of this entry.

(7) Unit 2: Dry Branch, Jefferson County, Alabama.

(i) Unit 2 includes the channel in Dry Branch from the bridge at Glenbrook Road (086°41′6.05″ W long., 033°41′10.65″ N lat) downstream to the confluence with Beaver Creek (86°41′17.39″ W long., 033°41′26.94″ N lat.).

(ii) Map of Unit 2 is provided at paragraph (10)(ii) of this entry.

(8) Unit 3: Beaver Creek, Jefferson County, Alabama.

(i) Unit 3 includes the channel of Beaver Creek from the confluence with the unnamed tributary to Beaver Creek and Dry Branch (086°41′17.54″ W long., 033°41′26.94″ N lat.) downstream to its confluence with Turkey Creek (086°41′9.16″ W long., 033°41′55.86 N lat.).

(ii) Map of Unit 3 is provided at paragraph (10)(ii) of this entry.

(9) Unit 4: Dry Creek, Jefferson County, Alabama.

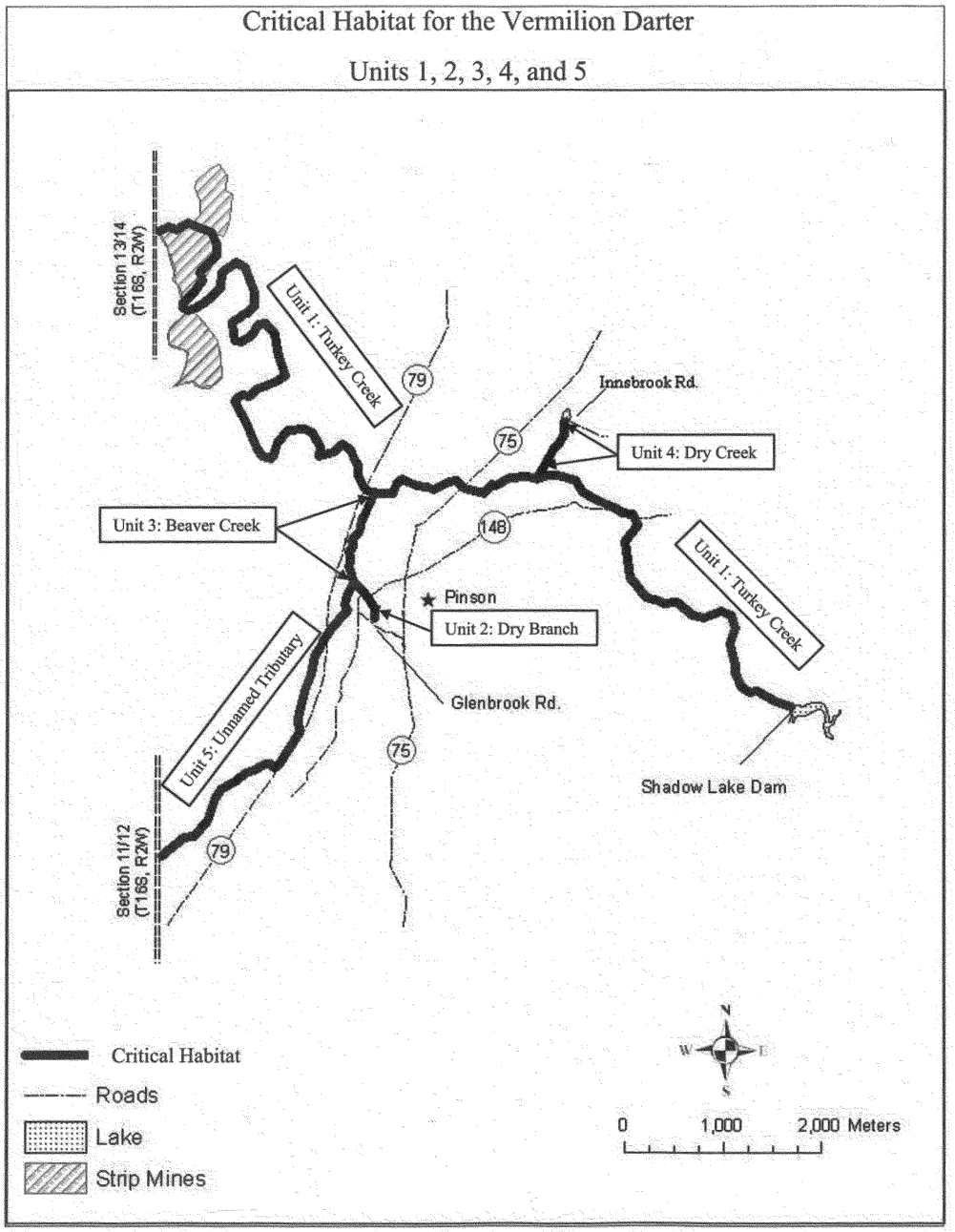
(i) Unit 4 includes the channel of Dry Creek, from Innsbrook Road (086°39′53.78″ W long., 033°42′19.11″ N lat) downstream to the confluence with Turkey Creek (086°40′3.72″ W long., 033°42′1.39″ N lat).

(ii) Map of Unit 4 is provided at paragraph (10)(ii) of this entry.

(10) Unit 5: Unnamed Tributary to Beaver Creek, Jefferson County, Alabama.

(i) Unit 5 includes the channel of the Unnamed Tributary from its confluence with Beaver Creek (086°41′17.54″ W long., 033°41′26.94″ N lat.), upstream to the 1/2(T16S, R2W) section line (086°42′31.70″ W long., 033°39′54.15″ N lat.)

(ii) Map of Units 1, 2, 3, 4, and 5 (Map 2) follows:



* * * * *

Dated: November 26, 2010.

Jane Lyder,

Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 2010–30420 Filed 12–6–10; 8:45 am]

BILLING CODE 4310–55–C