

**DEPARTMENT OF THE INTERIOR****Fish and Wildlife Service****50 CFR Part 17**

[FWS-R4-ES-2008-0047; 92210-1117-0000-FY08-B4]

RIN 1018-AV52

**Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Louisiana Black Bear (*Ursus americanus luteolus*)****AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Proposed rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), propose to designate critical habitat for the Louisiana black bear under the Endangered Species Act of 1973, as amended (Act). Concurrently, we withdraw our December 2, 1993, proposal for Louisiana black bear critical habitat (58 FR 63560). In total, approximately 1,330,000 acres (538,894 hectares (ha)) fall within the boundaries of this proposed critical habitat designation. The proposed critical habitat is located in Avoyelles, East Carroll, Catahoula, Concordia, Franklin, Iberia, Iberville, Madison, Pointe Coupee, Richland, St. Martin, St. Mary, Tensas, West Carroll, and West Feliciana Parishes, Louisiana.

**DATES:** We will accept comments received or postmarked on or before July 7, 2008. We must receive requests for public hearings, in writing, at the address shown in the **ADDRESSES** section by June 20, 2008.

**ADDRESSES:** You may submit comments by one of the following methods:

- *Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.
- *U.S. mail or hand-delivery:* Public Comments Processing, Attn: FWS-R4-ES-2008-0047; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, Suite 222; Arlington, VA 22203.

We will not accept e-mail or faxes. We will post all comments on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us (see the Public Comments section below for more information).

**FOR FURTHER INFORMATION CONTACT:** James Boggs, Field Supervisor, U.S. Fish and Wildlife Service, Louisiana Fish and Wildlife Office, 646 Cajundome Boulevard, Suite 400, Lafayette, LA 70506; telephone 337-291-3100; facsimile [337-291-3139]. If you use a

telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800-877-8339.

**SUPPLEMENTARY INFORMATION:****Public Comments**

We intend that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, we request comments or suggestions on this proposed rule. We particularly seek comments concerning:

(1) The reasons why we should or should not designate habitat as "critical habitat" under section 4 of the Act (16 U.S.C. 1531 *et seq.*), including whether there are threats to the species from human activity, the degree of which can be expected to increase due to the designation, and whether the benefit of designation would outweigh threats to the species caused by the designation, such that the designation of critical habitat is prudent.

(2) Specific information on:

- The amount and distribution of Louisiana black bear habitat,
- What areas occupied at the time of listing that contain features essential for the conservation of the species we should include in the designation and why,
- What areas not occupied at the time of listing are essential to the conservation of the species and why, and
- Data or comments to assist us in more clearly defining and delineating critical habitat boundaries.

(3) Land use designations and current or planned activities in the subject areas and their possible impacts on proposed critical habitat.

(4) Any foreseeable economic, national security, or other relevant impacts resulting from the proposed designation, and, in particular, any impacts on small entities, and the benefits of including or excluding areas that exhibit these impacts.

(5) Whether we could improve or modify our approach to designating critical habitat in any way to provide for greater public participation and understanding, or to better accommodate public concerns and comments.

(6) Whether the benefits of exclusion of any particular area from critical habitat would outweigh the benefits of inclusion under section 4(b)(2) of the Act, and more specifically, whether U.S. Department of Agriculture (USDA) Wetland Reserve Program permanent easements on privately owned lands provide sufficient protection and management to satisfy the criteria necessary for exclusion from critical

habitat (*i.e.*, the benefits of exclusion outweigh the benefits of inclusion).

You may submit your comments and materials concerning this proposed rule by one of the methods listed in the **ADDRESSES** section. We will not consider comments sent by e-mail or fax or to an address not listed in the **ADDRESSES** section.

If you submit a comment via <http://www.regulations.gov>, your entire comment—including any personal identifying information—will be posted on the Web site. If you submit a hardcopy comment that includes personal identifying information, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we will be able to do so. We will post all hardcopy comments on <http://www.regulations.gov>.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on <http://www.regulations.gov>, or by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Louisiana Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

**Background**

It is our intent to discuss only those topics directly relevant to the designation of critical habitat in this proposed rule. For more information on the threatened Louisiana black bear or its habitat, refer to the final listing rule published in the **Federal Register** on January 7, 1992 (57 FR 588), and to our 1995 final recovery plan, which is available online at <http://www.regulations.gov> or from the Louisiana Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

This proposal replaces our original critical habitat proposal for the Louisiana black bear published on December 2, 1993 (58 FR 63560). In that rule, we proposed three critical habitat units encompassing most of the Lower Mississippi River Valley in Louisiana: (1) Tensas River Basin (1,671,782 ac (676,546 ha)), a small portion of which was located in the State of Mississippi lying west of the Mississippi River Main channel; (2) Atchafalaya Floodway (978,279 ac (395,895 ha)); and (3) Lower Iberia-St. Mary Parish (364,770 ac (147,617 ha)). The total area within the proposed boundary was approximately 3 million acres (1,220,058 ha), of which approximately 1.25 million acres (505,857 ha) were estimated to contain the essential physical and biological features. There has been a significant amount of new information gathered

about this subspecies and its habitat since 1993. We are therefore withdrawing our original December 2, 1993, proposal to consider that new information and to comply with a September 5, 2007, order from the U.S. District Court for the Western District of Louisiana (see Previous Federal Actions section).

The Louisiana black bear is one of 16 subspecies of the American black bear (*Ursus americanus*). The black bear is a large, bulky mammal with long black hair and a short, well-haired tail. The facial profile is blunt, the eyes small, and the nose pad broad with large nostrils. There are five toes with short, curved claws on the front and hind feet. Although weight varies considerably throughout their range, adult male black bears can weigh more than 600 pounds (lbs) (272 kilograms (kg)); adult females generally weigh less than 300 lbs (136 kg) (Pelton 1982, p. 504). The median estimated weights for male and female Louisiana black bears in north Louisiana were 292 lbs (133 kg) and 147 lbs (67 kg) respectively (Weaver 1999, p. 26).

Bear activity revolves primarily around the search for food, water, cover, and mates during the breeding season. Bears are best described as opportunistic feeders, as they eat almost anything that is available; thus, they are typically omnivorous (Pelton 1982, p. 504). Their diet varies seasonally and includes primarily succulent vegetation during spring, fruits and grains in summer, and hard mast (such as acorns and pecans) during fall (Weaver 1999, pp. 149, 157). Black bears utilize all levels of the forest for feeding; they can gather foods from tree tops and vines, but also grub in fallen logs for insects. The growth rate, maximum size, breeding age, litter size, and cub survival of black bears are all correlated with nutrition (Black Bear Conservation Committee (BBCC) 1997, p. 17).

Home range sizes vary annually and seasonally (BBCC 2005, p. 11) and home range configuration appears to be influenced by available forest cover (Marchinton 1995, p. 48). Black bears do not truly hibernate, but go through a dormancy period termed "carnivore lethargy," which is a period of torpor which helps them survive food shortages and severe weather during the winter. In warmer climates, such as in Louisiana, bears can remain active all winter (Wagner 1995, pp. 24–25). Bears den in heavy cover or tree cavities during the winter months (Weaver 1999, p. 118) and den type may vary depending on the habitat. Cubs are born in winter dens at the end of January or the beginning of February (Weaver 1990, p. 5). Bears may enter dens between

November and early January depending on latitude, available food, sex, age, and local weather conditions (Weaver 1990, p. 6). Adult females generally enter the den first, followed by subadults and adult males. At the end of the dormancy period, females with cubs are usually the last to leave the den. Adult male bears generally have home ranges 3 to 8 times larger than adult females (Pelton 1982, p. 507) and have been observed to travel up to 35 miles (mi) (56 kilometers (km)) from their capture site (BBCC 2005, p. 11). Changes in food resources can provide the stimulus for extensive movements (Pelton 1982, p. 507). Additionally, older adult males exert social pressure on younger bears, especially during the spring and summer breeding season, forcing them to disperse to other areas (Pelton 1982, p. 507).

Like other black bears, the Louisiana black bear is a habitat generalist. Large tracts of bottomland hardwood (BLH) forest communities having high species and age class diversity can provide for the black bear's life requisites (e.g., escape cover, denning sites, and hard and soft mast supplies) without intensive management (BBCC 2005, p. 21). We use the term BLH forest community with no particular inference to hydrologic influence; we use this term to mean forests within southeastern United States floodplains which can consist of a number of woody species occupying positions of dominance and co-dominance (BBCC 1997, p. 15). Other habitat types may be utilized, including marsh; upland forested areas; forested spoil areas along bayous, brackish marsh, and freshwater marsh; salt domes; and agricultural fields (Nyland 1995, p. 48; Weaver 1999, p. 157). Large cavity trees (especially cypress or tupelo gum) that are commonly found along water courses are important for denning.

The Louisiana black bear was once a common inhabitant of forested areas in east Texas, Louisiana, and southern Mississippi (BBCC 1997, p. 10). Bear densities were likely highest within BLH and oak-hickory forest communities where hard mast production was greater than in other habitats (BBCC 1997, p. 12). While Hall included the southernmost counties in Arkansas as part of the historic range (1981, p. 950), there were no data to support doing so at the time of listing; accordingly, Arkansas is not considered part of the listed range (January 7, 1992; 57 FR 588).

The Louisiana black bear was listed as threatened under the Act on January 7, 1992 (57 FR 588), due to extensive habitat loss and modification, as well as

the ongoing threats of continued habitat modification and human-related mortality. More than 80 percent of suitable Louisiana black bear habitat had been lost by the time of listing (1992) primarily due to clearing land for agriculture (Weaver 1990, p. 1); the remaining habitat quality had been reduced by fragmentation and human activities. At that time, Louisiana black bears were generally known to occur in the Lower Mississippi River Alluvial Valley BLH forest communities of the Tensas River Basin of northeastern Louisiana and the Atchafalaya River Basin in central and southern Louisiana (Weaver 1990, p. 2; BBCC, 1997, p. 12); however, occupied habitat had not been definitively delineated. Those forest communities were likely sites for population persistence due to their remoteness and habitat productivity (BBCC 1997, p. 13). All known breeding populations were believed to be demographically isolated at the time of listing (BBCC 1997, p. 10). Bears had been occasionally reported in Louisiana outside of these areas, but it was unknown if those bears were reproducing females or only wandering subadults and adult males. Black bears were also known to exist in Mississippi along the Mississippi River (Weaver 1990, p. 2) and smaller areas in the lower East Pearl River and lower Pascagoula River basins of southern Mississippi (Weaver 1990, p. 2). The last native breeding group in Mississippi was last documented about 1980 (Nowak 1986, p. 7). Except for wanderers, the bear has not appeared in eastern Texas for many years (Nowak 1986, p. 7).

We use the term "breeding habitat" for the Louisiana black bear to indicate areas with physical evidence of reproduction (young, females with young, or lactating females). Louisiana black bear resource managers and biologists commonly refer to such areas as occupied habitat (USFWS 1995, p. 2; BBCC 1997, p. 72); however, we will use the term "occupied habitat" to indicate the subspecies' presence in an area at the time of listing. In contrast to sightings of adults without reproductive information, reproduction is considered evidence of a resident bear population. Dispersal by female black bears is uncommon and typically is of a short distance (Rogers 1987, p. 43). Male black bear home ranges usually encompass several female home ranges (Rogers 1987, p. 19). For instance, in the Tensas population, most male Louisiana black bear home ranges (95 percent minimum convex polygon (MCP)) were observed to include numerous female

home ranges (Weaver 1999, p. 74 and p. 308, Figure E-5). Therefore, while breeding habitat does not necessarily include all areas where individual bears may occur, it does encompass the areas known to support resident, reproducing populations. Clark *et al.* (2005, p. 246) used a similar method to update black bear distribution maps for the southeastern United States. Clark (1999, p. 105) states researchers and managers should focus on the population parameters of greatest consequence to population growth. Adult female survival is the most influential factor affecting black bear population growth (Clark 1999, pp. 103–105). Hellgren and Vaughan (1994, p. 283) conclude that managed female survival is a critical conservation need. The Black Bear Conservation Committee's (BBCC) restoration plan identified breeding habitats (as defined above) as those areas where essential management and restoration activities for the Louisiana black bear must be focused (BBCC 1997, p. 4).

Currently, Louisiana black bear breeding populations are predominantly restricted to three disjunct core (concentrated) populations, the Tensas, and the Upper Atchafalaya, and the Lower Atchafalaya River Basins, Louisiana. A fourth additional, newly forming, repatriation core population occurs in east-central Louisiana, in the vicinity of the Red River and Three Rivers Wildlife Management Areas (WMA), and Lake Ophelia National Wildlife Refuge (NWR). The Tensas River Basin (Tensas) breeding population occurs on a complex of BLH forests comprised of Tensas River NWR, adjacent Big Lake WMA, and four nearby small, relatively isolated, forested tracts formerly owned by Deltic Timber Corporation (now owned by Epps Plantation) in Tensas, Madison, Franklin, East Carroll, and Richland Parishes in Louisiana. The Deltic tracts support one of the highest densities of black bears reported for the southeastern coastal plain (Beausoleil 1999, p. 80). The Deltic tracts are approximately 14 mi (23.5 km) north of the Tensas River NWR; their closest areas are separated by only 2.5 mi (4 km) and by U.S. Interstate 20 (I-20). Historically, Louisiana black bears inhabiting the Tensas River NWR group have generally been considered a separate group of bears from those inhabiting the Deltic tracts. Only one instance of a bear moving between these two areas has been documented (Anderson 1997, p. 70). Though the two subgroups are separated by I-20 and U.S. Highway 80, a significant amount of habitat between

those subgroups has been restored primarily within the last 10 years. Increased sightings and vehicular mortality of bears in the vicinity of I-20 indicate that bears are attempting to disperse (Benson 2005, p. 97). The 6 bear mortalities documented on I-20 in 2004 and the continuing regular occurrence of mortalities, versus the total of 5 mortalities in the previous 10 years indicate that bears are moving between these previously isolated populations (LDWF 2007, p. 20) and that the two subgroups have likely begun to function as one population.

Two Louisiana black bear populations are located in the Atchafalaya River Basin (BBCC 1997, p. 10). The Upper Atchafalaya River Basin population (Upper Atchafalaya) is located primarily within the Morganza Floodway and the forested areas between that Floodway and False River in Pointe Coupee Parish in Louisiana, and is approximately 110 mi (177 km) south of the Tensas population. Much of the land between these two populations has been cleared for agricultural use. The Lower Atchafalaya River Basin population (Lower Atchafalaya) is found primarily south of U.S. Highway 90 (Hwy. 90) and west of the lower Atchafalaya River and Delta, in the coastal area of St. Mary and Iberia Parishes. It is located approximately 70 mi (113 km) south of the Upper Atchafalaya population and is separated from that population by U.S. Interstate 10, Hwy. 90, the Atchafalaya River, Bayou Teche, agricultural lands, developed areas, and permanently and seasonally inundated portions of the Atchafalaya River Basin, which is not currently believed to contain breeding bears due to the flooding regime. Population expansion in the coastal area is limited by development along Hwy. 90 to the north, and by the surrounding coastal marsh, which is believed to be unsuitable for sustaining bear populations.

A fourth breeding population has been recently established in Avoyelles and Concordia Parishes, Louisiana, near the confluence of the Mississippi and Red Rivers, an area containing approximately 100,000 ac (40,469 ha) of publicly owned, forested land. This area is separated from the Tensas and the Upper Atchafalaya populations primarily by agricultural lands. As the result of a multi-agency repatriation project, 36 adult females and 82 cubs have been relocated to public lands in this area between 2001 and 2007, to reduce demographic isolation of existing populations (LDWF 2007, p. 15). This project was developed on the assumption that relocated females

would remain at the new location and would be discovered by males traveling through the area. Natural reproduction of those bears was first documented in 2005, and reproduction has since been documented in 5 litters (LDWF 2006, p. 1), resulting in an additional breeding population in Louisiana.

Louisiana black bear reproduction was speculated to occur in Mississippi at the time of listing (1992) (Stinson 1996, p. 15), but was not confirmed until 2005 when a radio-collared female, moved as part of a reintroduction project in Louisiana, crossed into Mississippi and had cubs (Telesco 2006, p. 12). Breeding has been subsequently documented for several additional individuals, but to date no core breeding populations are known to exist, and it is generally believed that the majority of bears in Mississippi are males that have dispersed from populations in other States (Young 2006, p. 14). The Texas Parks and Wildlife Department has also documented black bear sightings in eastern Texas in the last 7 years, though there are currently no known Louisiana black bear breeding populations in eastern Texas (TPWD 2005, p. 3). It is probable that most of those bears are juvenile or subadult males that have roamed into the area from expanding bear populations in Arkansas and Oklahoma (TPWD 2005, p. 7). Clark *et al.* (2005, p. 250, Figure 1) indicated the presence of a small breeding population with a few individuals crossing between Louisiana and Arkansas. This is likely the result of a black bear reintroduction project in Arkansas where female bears, reintroduced onto Felsenthal National Wildlife Refuge in Arkansas, have moved south into Louisiana (LDWF 2007, p. 1).

In 1997, the Statewide Louisiana black bear population was estimated to range from 200 to 400 bears (Pelton and Van Manen 1997, p. 38). No reliable overall Louisiana black bear population estimate currently exists; however, estimates have been developed for specific geographic areas. Estimates for the Tensas River NWR population range from 119 to 131 bears (Boerson *et al.* 2003, p. 203) and, for the nearby Deltic tracts, from 34 to 47 bears (Beausoleil 1999, p. 51). The Upper Atchafalaya population was estimated to range from 68 to 86 bears and, for the Lower Atchafalaya, from 28 to 47 bears (Triant *et al.* 2004, p. 653), but these may be underestimates of the actual population numbers (Triant *et al.* 2004, p. 655). There are no population estimates for the repatriation population; however, a total of 36 females and 82 cubs have been moved to this area. Most studies of the Louisiana black bear have been

conducted in these core breeding habitat areas and therefore probably small, but unknown, numbers of bears occurring outside those areas are not included in population estimates. Population estimates for Louisiana black bears at the time of listing appear to be lower than what recent research would indicate, and there is circumstantial evidence that the population is growing (LDWF 2007, p. 22).

#### Previous Federal Actions

We listed the Louisiana black bear (*Ursus americanus luteolus*) as threatened under the Act on January 7, 1992 (57 FR 588). Other free-living bears of the species *U. americanus* within the same range specified in that rule were designated as threatened by similarity of appearance. In our final rule listing this subspecies, we determined that normal forest management activities supporting a sustained yield of timber products and wildlife habitats were compatible with Louisiana black bear's needs.

Accordingly, we promulgated a special rule at 50 CFR 17.40(i) exempting the effects incidental to normal forest management activities within the subspecies' historic range, except for activities causing damage to or loss of den trees, den tree sites, or candidate den trees (57 FR 588). For the purposes of that exemption, normal forest management activities were those activities that support a sustained yield of timber products and wildlife habitats, thereby maintaining forestland conditions in occupied (*i.e.*, breeding) habitat. Research has supported this decision. In fact, in some cases, such as leaving downed tree tops and creating openings, timber management can provide or enhance black bear habitat (Weaver 1999, pp. 126–128; Hightower *et al.* 2002, p. 14; Weaver *et al.* 1990, p. 344; Lindsey and Meslow 1977, p. 424). Therefore, we do not propose changing the special rule at 50 CFR 17.40(i) as part of the critical habitat designation.

Designation of critical habitat was found to be not determinable at the time of listing. We proposed critical habitat for the Louisiana black bear on December 2, 1993 (58 FR 63560). That proposal had a 90-day comment period, ending March 2, 1994. We then reopened the public comment period from March 7, 1994 (59 FR 10607) through April 4, 1994. During that reopened comment period, we held a public hearing in New Iberia, Louisiana, on March 23, 1994. On April 1, 1994, we extended the reopened comment period through May 25, 1994, and announced two more public hearings (May 10, 1994, in West Monroe, Louisiana, and May 11, 1994, New

Iberia, Louisiana) (59 FR 15366). We never published a final rule designating critical habitat. On September 6, 2005, Mr. Harold Schoeffler and Louisiana Crawfish Producers Association—West filed suit in U.S. District Court for the Western District of Louisiana (Civil Action No. CV05–1573 (W.D. La.)) regarding the Service's failure to designate critical habitat for the Louisiana black bear.

On June 25, 2007, the District Court ordered the Service to withdraw the December 2, 1993, proposed critical habitat rule and create a new proposed critical habitat designation by no later than 4 months from the date of the judgment and to publish a final designation by no later than 8 months from the date of the proposed or new rule. On September 5, 2007, following a settlement agreement, the Court revised its order to require the Service to: (1) Withdraw the December 2, 1993, proposed rule and submit a prudency determination and, if prudent, a new proposed critical habitat designation to the **Federal Register** by April 26, 2008; and (2) submit a final critical habitat determination, if applicable, to the **Federal Register** by February 26, 2009. This publication is: (1) Our withdrawal of the 1993 proposal; (2) our new prudency determination; and (3) our proposed rule to designate critical habitat for the Louisiana black bear in accordance with section 4(b)(2) of the Act. For more information on previous Federal actions concerning the Louisiana black bear, refer to the proposed critical habitat rule published on December 2, 1993 (58 FR 63560).

#### Critical Habitat

Critical habitat is defined in section 3(5)(A) of the Act as:

(1) The specific areas within the geographical area occupied by a 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 a 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 the use of all methods and procedures that are necessary to bring any endangered species or threatened species to the point at which the measures provided under the Act are no longer necessary.

Critical habitat receives protection under section 7 of the Act through the prohibition against Federal agencies carrying out, funding, or authorizing the destruction or adverse modification of critical habitat. Section 7 of the Act requires consultation on Federal actions that may affect 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 the landowner. Where the landowner seeks or requests Federal agency funding or authorization that may affect a listed species or critical habitat, the consultation requirements of section 7 of the Act would apply, but even in the event of a destruction or adverse modification finding, the landowner's obligation 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 features that are essential to the conservation of the species. Critical habitat designations identify, to the extent known using the best scientific data available, habitat areas that provide essential life cycle needs of the species (areas on which are found the primary constituent elements, as defined at 50 CFR 424.12(b)).

Occupied habitat that contains the features essential to the conservation of the species meets the definition of critical habitat only if those features may require special management considerations or protection.

Under the Act, we can designate unoccupied areas as critical habitat only when we determine that the best available scientific data demonstrate that the designation of that area is essential to the conservation needs of the species.

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 represent 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 should be proposed 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 often dynamic, and species may move from one area to another over time. Furthermore, we recognize that designation of critical habitat may not include all of the habitat areas that we may eventually determine, based on scientific data not now available to the Service, 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 support populations, but are outside the critical habitat designation, will continue to be subject to conservation actions we implement under section 7(a)(1) of the Act and our other wildlife authorities. They are also subject to the regulatory protections afforded by the section 7(a)(2) jeopardy standard, as determined on the basis of the best available scientific information at the time of the agency action. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may result in jeopardy findings in some cases. 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 to these planning efforts calls for a different outcome.

#### Prudency Determination

Section 4(a)(3) of the Act and its implementing regulations (50 CFR 424.12) require that, to the maximum extent prudent and determinable, we

designate critical habitat at the time a species is listed as endangered or threatened. Our regulations at 50 CFR 424.12(a)(1) state that the designation of critical habitat is not prudent when one or both of the following situations exist: (1) The species is threatened by taking or other activity and the identification of critical habitat can be expected to increase the degree of threat to the species; or (2) the designation of critical habitat would not be beneficial to the species. In our January 7, 1992, final rule (57 FR 588) we determined that designating critical habitat may be prudent, but was not determinable at that time. We subsequently proposed critical habitat for the Louisiana black bear on December 2, 1993 (58 FR 63560); however, we did not explicitly state in our proposed rule that such designation was prudent.

The Louisiana black bear was listed as threatened under the Act on January 7, 1992 (57 FR 588), due to extensive habitat loss and modification, and the ongoing threats of continued habitat modification and human-related mortality. The majority of area lands within the Louisiana black bear's historic range are privately owned. Some of those lands remain forested; however, most have been cleared for other uses such as agriculture. Conservation of the Louisiana black bear will require habitat protection and restoration and, therefore, is dependent upon the voluntary protection and restoration of privately owned lands.

Significant progress has been made in habitat restoration for the Louisiana black bear. Habitat and management actions voluntarily taken by private landowners are one important component of those restoration activities. Over 55,000 ac (22,250 ha) of private lands have been enrolled in the Natural Resource Conservation Service's Wetland Reserve Program (WRP) which has benefited Louisiana black bear conservation since 1992. WRP provides an incentive for private landowners to convert non-productive farmland back to bottomland hardwoods, and many of these lands received higher rankings (when evaluated for enrollment) because of their benefit to Louisiana black bear conservation. Landowners enrolling in the WRP sign permanent easements protecting the restored land from future conversion or development. Designation of critical habitat on private lands may significantly reduce the likelihood that landowners will support and carry out conservation actions. Many landowners fear a decline in their property value due to real or perceived restrictions on land-use options where threatened or endangered species are

found. Consequently, harboring endangered species is viewed by many landowners as a liability. This perception results in anti-conservation incentives, because maintaining habitats that harbor endangered species represents a risk to future economic opportunities. This response was observed during the 1993–1994 Louisiana black bear critical habitat proposal process, when the majority of comments received were in opposition to designation, and several landowners who had previously allowed black bear research activities on their lands subsequently denied access to researchers and agency personnel.

Thus, there is potential, as a result of critical habitat designation, for a decline in WRP enrollment within Louisiana black bear habitat and restricted access to private lands for research; however, we will continue to work with Federal and State agencies, private organizations, and individuals in carrying out conservation activities for the Louisiana black bear, including habitat restoration, population surveys, and population restoration. Furthermore, the identification of areas that are necessary to ensure the conservation of the species is beneficial and critical habitat designation may provide additional information to individuals, local and State governments, and other entities engaged in long-range planning, since areas with features essential to the conservation of the species are clearly delineated and, to the extent currently feasible, the physical and biological features of the habitat necessary to the survival of this subspecies are specifically identified. This process is valuable to land owners and managers in developing conservation management plans for identified areas, as well as any other occupied habitat or suitable habitat that may not have been included in the Service's designation of critical habitat.

The additional threat, identified in the final rule listing the subspecies (57 FR 588), of illegal killing of Louisiana black bears remains an ongoing threat; however, such takings are believed to be opportunistic or in response to black bear nuisance activities. In the case of large mammals, such as the Louisiana black bear, population locations are already generally known and we do not expect identification of critical habitat to increase the degree of this threat.

Accordingly, we determine that designation of critical habitat will not increase the degree of threat to the species and will be beneficial for the Louisiana black bear; therefore, we determine that designation of critical habitat is prudent for this subspecies. At

this time, we have sufficient information necessary to identify specific areas that meet the definition of critical habitat and as such, believe the critical habitat is also determinable. Therefore, we are proposing critical habitat for the Louisiana black bear.

## Methods

As required by section 4(b) of the Act, we used the best scientific data available in determining areas occupied at the time of listing that contain features essential to the conservation of the Louisiana black bear, and areas unoccupied at the time of listing that are essential for the conservation of the Louisiana black bear, or both. We are not currently proposing any areas outside the geographical area presently occupied by the subspecies because the occupied areas being proposed are sufficient for the conservation of the subspecies.

We have also reviewed available information that pertains to the habitat requirements of this subspecies. After reviewing pertinent material, we consider it likely that the Louisiana subspecies is not significantly different from other black bears, because it is a habitat generalist. Material reviewed for the development of this critical habitat proposal included information from the January 7, 1992 (57 FR 588), final rule listing the Louisiana black bear as threatened; the December 2, 1993 (58 FR 63560) proposed rule to designate critical habitat; information and survey observations published in peer-reviewed literature, academic theses, and agency reports; location data and survey information provided in agency reports and maps; habitat analyses and other information provided in the 1995 Louisiana Black Bear Recovery Plan and the complementary BBCC Black Bear Restoration Plan (1997); and material submitted during consultations under section 7 of the Act.

The following geospatial and tabular data sets were used in preparing this proposed critical habitat: Occurrence data for the Louisiana black bear (Louisiana Department of Wildlife and Fisheries, the U.S. Fish and Wildlife Service, Louisiana State University, and the University of Tennessee); 1998, 2004, and 2005 1:24,000 digital raster and digital orthophoto quarter-quadrangles (DOQQ); and 1:24,000 scale digital raster graphics (DRG) of the U.S. Geological Survey (USGS) topographic quadrangles. Habitat data was determined from the 2001 grid (raster) National Land Cover Dataset (NLCD) developed by The Multi-Resolution Land Characteristics (MRLC) Consortium. The MRLC is a group of

Federal agencies who develop datasets used to track regional and global changes in land cover and land use, including such essential categories as forest and grassland cover. The MRLC consortium is specifically designed to meet the current needs of Federal agencies for nationally consistent satellite remote sensing and land-cover data. We transformed the digital raster data to a vector format in order to obtain the most accurate area estimates of critical habitat when overlaid onto the critical habitat boundaries of lands containing features essential to the conservation of the subspecies. Land ownership was determined from geospatial data sets developed by the Service's Southeast Region Realty Division and the Louisiana State Lands Office.

We obtained additional information through personal communications with biologists, scientists, and land managers familiar with the Louisiana black bear and its habitat, including individuals affiliated with the Louisiana Department of Wildlife and Fisheries (LDWF), the Service, the BBCC, Louisiana State University, and the University of Tennessee. Specific information from these sources included estimates of historic and current distribution, abundance, and home range sizes, as well as data on resources and habitat requirements.

To delineate areas currently used by breeding populations, we acquired all available raw telemetry data (*i.e.*, telemetry points) from those above-referenced sources (recognizing the geographic limits of existing data in that they were collected from areas within known Louisiana black bear populations). Those telemetry points were buffered with average adult female home range sizes (as determined from published research) and were coalesced into polygons for each Louisiana black bear population. Those polygons were further refined based on habitat presence (as determined from DOQQs), contiguity of suitable habitat, proximity to non-contiguous suitable habitat, direct evidence of bear use, habitat patch size, and significant landscape features. We determined proposed critical habitat to be all areas within those polygons, except for those tracts that do not contain the physical and biological features essential to the conservation of the subspecies. We used telemetry data (where available), and DOQQs and DRGs to delineate habitat corridors. Areas proposed as critical habitat include areas that contain the physical and biological features essential to the conservation of the subspecies and either: (1) Currently

support a breeding population of Louisiana black bears; or (2) function as corridors to maintain movement between core populations.

## Primary Constituent Elements

In accordance with section 3(5)(A)(i) of the Act and the regulations at 50 CFR 424.12, in determining which areas occupied at the time of listing to propose as critical habitat, we consider the physical and biological features (PBFs) that are essential to the conservation of the species to be the specific primary constituent elements (PCEs) laid out in the appropriate quantity and spatial arrangement for the conservation of the species. 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 historic, geographical, and ecological distributions of a species.

We derive the specific primary constituent elements (PCEs) for the Louisiana black bear from its biological needs.

### *Space for Individual and Population Growth and Normal Behavior*

Louisiana black bear populations are currently found in the BLH forest communities and associated habitat of the Lower Mississippi River Alluvial Valley. Prime black bear habitat is characterized by relatively inaccessible terrain, thick understory vegetation, and abundant food sources in the forms of shrubs or tree-borne soft or hard mast (Pelton 1982, p. 507). BLH forest community types in the range of the Louisiana black bear, expressed in terms of dominance-codominance, include *Taxodium distichum* (bald cypress); *T. distichum*-*Nyssa aquatica* (bald cypress-water tupelo); *Betula nigra*-*Platanus occidentalis* (river birch-American sycamore); *Populus deltoides* (cottonwood); *Celtis laevigata*-*Ulmus americana*-*Fraxinus pennsylvanica* (sugarberry-American elm-green ash); *Quercus nuttallii*-*U. americana*-*F. pennsylvanica* (Nuttall oak-American elm-green ash); *Q. lyrata*-*Carya aquatica* (overcup oak-water hickory); *Liquidambar styraciflua*-*Q. nigra* (sweetgum-water oak); and *Q. michauxii*-*Q. falcata* (swamp chestnut oak-cherrybark oak) (BBCC 1997, p. 15).

Benson (2005, p. 56, Table 4.1) described habitat types in terms of species, flooding regime, and age as: (1) Upland forests—BLH forests in relatively high elevation sites not subject to frequent flooding; and (2) lowland forest—BLH forests in relatively low elevations subject to seasonal or annual flooding. Louisiana black bear habitat in the Lower Atchafalaya population differs from the Tensas and Upper Atchafalaya areas in that it includes, in addition to forested wetlands (e.g., deciduous forests, cypress forests, deciduous and bald cypress forests, shrub-scrub marshes), open marshes, deciduous forest spoil banks, and upland hardwood forest (Nyland 1995, p. 58). The interspersed of these communities may be important in meeting the seasonal needs of the Lower Atchafalaya Louisiana black bear population (Nyland 1995, p. 58). The coastal (or wetland) habitats may provide escape cover, food sources, and secure travel corridors between other habitat types (Jones and Pelton 2003, p. 193).

The minimum size of an area necessary for black bears may differ depending on density, habitat quality, conservation goals, and assumptions regarding minimum viable populations (Rudis and Tansey 1995, p. 172). For example, Rudis and Tansey (1995, p. 172), citing personal communications, reported estimates of minimal areas needed to support a black bear population ranging from 79,000 ac (32,000 ha) in forested wetlands to 80,000 ac (197,700 ha) in upland forests. Cox *et al.* (1994, p. 50) estimated that a population of 200 or more bears could require a habitat base of approximately 490,000 to 980,000 ac (198,000 to 397,000 ha). Maintaining and enhancing key habitat patches within breeding habitat is a critical conservation strategy for black bears (Hellgren and Vaughan 1994, p. 276). Areas should be large enough to maintain female survival rates above the minimum rate necessary to sustain a population (Hellgren and Vaughan 1994, p. 280). Weaver (1999, pp. 105–106) documented that bear home ranges and movements were centered in forested habitat and noted that actions to conserve, enhance, and restore that habitat would promote population recovery, although no recommendations on minimum requirements were provided. Hellgren and Vaughn (1994, p. 283) concluded that large, contiguous forests are a critical conservation need for black bears.

One approach to assess Louisiana black bear habitat needs is to look at existing densities; however, density

estimates should be used with caution as they can be influenced by population estimation methodology and study area delineation. No single area-density relationship has been developed for Louisiana black bears; however, density estimates have been developed for Louisiana black bears in two locations. Bear density for the Tensas River NWR subgroup was estimated to be 1 bear per 686 ac (0.36 per km<sup>2</sup>). This is low compared to other southeastern populations and to the adjacent Deltic subgroup with a density of 1 bear per 173 ac (1.43 per km<sup>2</sup>) (Boersen *et al.* 2003, p. 204). The unusually high densities observed on the Deltic tracts may be the result of the small size of the habitat fragments and accessibility to adjacent desirable agricultural crops (Boersen *et al.* 2003, p. 204).

Another approach to assess Louisiana black bear habitat requirements is to examine bear movements and home ranges. The home ranges of Louisiana black bears appear to be closely linked to forest cover (Marchinton 1995, p. 48). Female range size may be partly determined by habitat quality (Amstrup and Beecham 1976, p. 345), while male home range size may be determined by efficient monitoring of a maximum number of females (Rogers 1987, p. 19). Male black bears commonly disperse, and adult male bears can be wide-ranging with home ranges generally three to eight times larger than adult females (Pelton 1982, p. 507) and that may encompass several female home ranges (Rogers 1987, p. 19). Dispersal by female black bears is uncommon and typically is a short distance (Rogers 1987, p. 43). Females without cubs generally had larger home ranges than females with newborn cubs (Benson 2005, p. 46), although this difference was observed to vary seasonally, with movements more restricted in the spring (Weaver 1999, p. 99). Following separation of the mother and yearling offspring, young female black bears commonly establish a home range partially within or adjacent to their mother's home range (Rogers 1987, p. 39). Young males, however, generally disperse from their maternal home range. Limited information suggests that subadult males may disperse up to 124 mi (200 km) (BBCC 1997, p. 22).

Home range estimates vary for the Louisiana black bear. Mean median MCP home range estimates for the Tensas River NWR population were 35,736 ac (14,462 ha) and 5,550 ac (2,426 ha) for males and females, respectively (Weaver 1999, p. 70). Male home ranges (MCP) in the Upper Atchafalaya population may be as high as 80,000 ac (32,375 ha), while female

home ranges are approximately 8,000 ac (3,237 ha) (Wagner 1995, p. 12). Lower Atchafalaya population home ranges (MCP) were estimated to be 10,477 ac (4,200 ha) for males, and 3,781 ac (1,530 ha) for females (Wagner 1995, p. 12). The smaller home ranges of Lower Atchafalaya bears when compared to Upper Atchafalaya bears may be due to superior habitat quality in the coastal area (Wagner 1995, p. 25). Louisiana black bears located on the Deltic lands in the Tensas River population have very small home ranges compared to other black bear populations with an estimated average home range (MCP) for males of 1,729 ac (700 ha) and for females 1,038 ac (420 ha) (Beausoleil 1999, p. 57). The smaller home ranges for this population are believed to be a result of the bears' reliance on the surrounding agricultural crops for forage (Benson 2005, p. 95) and the overall higher quality of the forested habitat (Weaver 1999, pp. 90–91). Based on observations of the Deltic populations, Benson (2005, p. 95) suggested that it may be possible for a relatively large number of bears to require less space and persist in limited forest habitat if food is sufficiently abundant and diverse.

Habitat loss, besides reducing the overall area, can result in fragmentation or isolation of habitat, as is evident for the Louisiana black bear (Clark 1999, p. 107). Habitat fragmentation can restrict bear movements both within and between populations (BBCC 1997, p. 23). This can result in increased mortality as bears are forced to forage on less protected sites, travel farther to forage, or cross barriers such as roads (Pelton 1982, p. 507; Hellgren and Maehr 1992, pp. 154, 155, 156). Open areas, roads, large waterways, development, and large expanses of agricultural land may affect habitat contiguity. Such features tend to impede the movement of bears (Clark 1999, p. 107). Habitat fragmentation also limits the potential for the present Louisiana black bear population to expand its current breeding range (USFWS 1995, p. 8). Habitat fragmentation can create barriers to immigration and emigration that can affect population demographics and genetic integrity (Clark *et al.* 2006, p. 12). Bear populations in a relatively large habitat patch are not ensured of long-term survival without recolonization by bears from adjacent patches (Clark 1999, p. 111). The long term protection of habitat and interconnecting corridors or habitat linkages between viable breeding populations is one of the recovery



criteria for the Louisiana black bear (USFWS 1995, p. 14).

Habitat linkages or corridors providing vegetative cover can facilitate the movement of bears through agricultural (or other open) lands, particularly when bears reside in fragmented tracts of forest, as is the case for the Louisiana black bear (Weaver *et al.* 1990b, p. 347). Based on telemetry locations and visual observations, Marchinton (1995, p. 53) determined that wooded drainages were important travel corridors for movement between forested tracts. He noted that those drainages may facilitate movements across agricultural lands and may be important for dispersal outside the study area. Likewise, Weaver (1999, p. 67) found significant use of habitat linkages between larger forested tracts, including forested edges associated with bayous, their tributaries, various dry ditch bottoms, and brushy ditch and canal banks in various agricultural tracts. Bears were also observed to frequent certain areas of intact forest such as banks of rivers, sloughs, ditches, and bayous, and Weaver (1999, p. 82) suggested that the term "habitat linkages" may be more appropriate than travel corridors when referring to the remnant habitat features that link disjunct wooded tracts.

Beausoleil (1999, p. 62) observed that female Louisiana black bears would not move between woodlots unless they were connected by a forested corridor or were closer than 1,640 feet (ft) (0.5 km) apart. Anderson (1997, p. 74 via T. Edwards, USFWS pers. communication) found that female bears would not travel between expansive agricultural fields that separated forested tracts by 4,541 ft (1.3 km) and observed that bears traveled along tree-lined ditches that were as narrow as 16 ft (5 m) in width (Anderson 1997, p. 74). Similarly, Van Why (2003, pp. 30, 46) observed Louisiana black bears using narrow strips of vegetation (less than 33 ft (10 m)) to travel through inhospitable habitats such as open fields. Weaver *et al.* (1990b, p. 347) recommended a 197-ft (60-m) buffer zone along waterways as a travel corridor or habitat linkage. Bears will travel through open habitat (Weaver 1999, p. 81), but they may travel farther from the forested edge when in a wooded corridor versus in an open field (Anderson 1997, p. 42).

Habitat linkages, as described in Louisiana black bear population studies, are generally described as narrow and linear in shape, most likely resulting from the fact that ditches and bayous are the only remaining features connecting habitat fragments within a population. Non-linear habitat patches located

between existing populations may also provide areas for bear movement. Such linkages increase the amount of forested habitat (Beausoleil *et al.* 2005, p. 408) and may serve not only as pathways for concealed travel, but may also provide other functions such as escape cover, bedding and denning sites, routes for juvenile dispersal, and avenues for genetic exchange (Weaver 1999, pp. 82–83). Habitat linkages ranging from 2.5 ac to 12 ac (1 ha to 5 ha) can provide cover for black bears (Pelton and Van Manen 1997, p. 33). Smaller areas (*i.e.*, 2.5 ac (1 ha)) may provide suitable movement paths for shorter, within-population movements but may not be sufficient for establishing larger movement paths between populations. Beausoleil *et al.* (2005, pp. 409–410) recommended the establishment of habitat corridors to reduce the isolation of forested habitats for black bears and suggested that corridor width should vary with length and increase with distance. Similarly, Cox *et al.* (1994, p. 35) suggested that black bears likely require broader habitat areas rather than thin corridors when connecting distant populations.

While there is scientific discussion regarding the relative importance of wildlife corridors in general, they have been shown to be important for black bears (Cox *et al.* 1994, p. 34). Furthermore, in modeling spatial landscape structure and species dispersal, King and With (2002, p. 33) found that habitat clumping may help mitigate the negative effect that habitat loss has on dispersal success. Habitat linkages (or corridors) are needed to facilitate bear movement between habitat patches within and between black bear populations (BBCC 1997, p. 54). Telemetry data on Louisiana black bear movements in the Tensas River Basin demonstrate that habitat linkages should be considered in management plans intended to ensure Louisiana black bear population viability in fragmented habitats and to provide for the large home ranges (particularly of males) needed for unimpeded breeding and dispersal (Weaver 1999, p. 106).

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

The Louisiana black bear's diet is dominated by plant material throughout the year (Pelton 1982, p. 508; Anderson 1997, p. 77; Benson 2005, p. 20). A portion of the diet is made up of animal matter, primarily beetles and other insects (which are consumed year-round (Anderson 1997, p. 79)), and occasionally carrion (Pelton 1982, pp. 508–509; Benson 2005, p. 27). Diets vary seasonally in relation to food

availability as does habitat use (Nyland 1995, p. 53). After den emergence in the spring, bears utilize remaining fat reserves (Pelton 1982, p. 509). As this is generally a time of lower food abundance, bears may lose weight but will soon take advantage of any available protein-rich foods (Pelton 1982, p. 509). On the Deltaic tracts, such items include grasses, sedges, oats, wheat, and beetles (Anderson 1997, p. 49; Benson 2005, p. 26). During the summer, food abundance and diversity increases, and soft mast, found primarily in forest openings, becomes a major food source. Soft mast may include such items as blackberry, grape, mulberry, sassafras, and paw paw (Weaver *et al.* 1990b, p. 344; Anderson 1997, p. 78; BBCC 1997, p. 18; Benson 2005, p. 26). Recently timbered areas can provide foraging opportunities for bears as they allow light penetration through canopy openings and provide rotting wood that harbors beetles and grubs (Weaver *et al.* 1990b, p. 344). Louisiana black bears were also observed using early successional areas (*e.g.*, planted with trees or regenerating naturally) planted with trees (0 to 12 years) or by an open canopy and dense understory of shrubs, vines, and saplings (Benson 2005, p. 56, Table 4.1). Such areas provide food and cover similar to natural openings in forests.

Food availability during the late summer and fall is critical as bears need to increase their fat stores in preparation for winter dormancy and denning (Pelton 1982, p. 509; BBCC 1997, p. 18). Acorns and other hard mast are important food items during this period (Pelton 1986, p. 51; Benson 2005, p. 27). Extensive foraging may occur and bears may travel great distances in search of food (Pelton 1982, p. 509). It is not uncommon for a bear to gain one to two pounds of fat daily (Pelton 1986, p. 51). Bears will forage on agricultural crops, which may dominate the diet depending on availability (Nyland 1995, p. 59; Anderson 1997, p. 78; Benson 2005, p. 20).

An important factor affecting black bear populations appears to be variation in food supply and its effect on physiological status and reproduction (Rogers 1976, pp. 436–437). Black bear cub survival and development are closely associated with the physical condition of the mother (Rogers 1976, p. 434). Cub mortality rates and female infertility are typically greater in single or successive years of poor mast production or failure (Rogers 1987, p. 53; Eiler *et al.* 1989, p. 357; Elowe and Dodge 1989, p. 964). Nutrition may affect the age of female reproductive maturity and subsequent fecundity



(Pelton 1982, p. 504). Reproduction may occur as early as 2 years of age for black bears in high quality habitat; in poor or marginal habitat, reproduction may not occur until 7 years of age (Rogers 1987, pp. 51–52, Table 8). Litter size may be affected by food availability prior to denning (Rogers 1987, p. 53, Table 10). During periods of food shortages, bears range farther in search of food. This increased movement substantially increases their chances for human encounters and human-related mortality (Rogers 1976, p. 436; Pelton 1982, p. 509). These high mortality rates are suspected to be greater for yearling and subadult black bear males dispersing from the family unit, and are probably the result of starvation, accidents (e.g., vehicular collisions), and poaching.

#### *Cover or Shelter*

Black bears undergo a period of winter dormancy that allows them to circumvent food shortages and severe weather (Pelton 1982, p. 508). Louisiana black bears generally enter dens in early December and emerge in mid-April (Weaver 1999, p. 116, Table 4.1). They may remain somewhat active during this period and have been observed changing den sites and foraging, although their home range sizes are reduced (Weaver 1999, p. 115; Hightower *et al.* 2002, p. 16). Louisiana black bears use trees, brush piles, and ground nests for denning (Weaver 1999, p. 118; Hightower *et al.* 2002, p. 14). An individual bear may use one or more different den types, often within the same season (Weaver 1999, p. 118). Weaver (1999, p. 120) noted that most den trees were bald cypress, but also observed bear use of other species such as overcup oak and American sycamore. Den tree cavities appeared to result from broken tops or limbs and averaged approximately 49 ft (15 m) in height (Weaver 1999, p. 121). Den trees primarily occur along permanently flooded sloughs, seasonally flooded flats, lakes, bayous, and rivers (Weaver 1999, p. 130). Ground nests were located in wooded habitat and constructed from stacked palmetto and vegetation arranged in a wreath-like manner. Many of the wreath-like nests included excavated depressions, but those created from stacked palmetto did not (Weaver 1999, pp. 121–122). Nests were observed in forested habitat and constructed against a backdrop such as a felled log, a tree top, or the base of a tree (Weaver 1999, p. 122). In the Tensas population, thirteen of 17 nests were located in forested stands that were at least partially timbered within the last 5 years (Weaver 1999, p. 122). Brush pile dens were observed in residual tree

tops that were felled during recent timber harvests (Weaver 1999, pp. 122; Hightower *et al.* 2002, p. 14). Trees large enough and sufficiently mature to contain useable cavities are almost always found in places inaccessible to logging (Marchinton 1995, p. 55), or are left standing due to their low economic value.

The importance of high-quality cover for bedding, denning, and escape cover increases as forests become smaller and more fragmented, and as human encroachment and disturbance in bear habitat increases (Pelton 1986, p. 52). The thick understory found in some BLH forests and adjacent areas provides high-quality escape cover, which is considered especially important where fragmented habitats put bear populations in closer proximity to humans. Bears frequently use forested areas and scrub-shrub habitat as escape cover and as resting sites or “daybeds” (Weaver *et al.* 1990b, p. 347). Daybeds are generally shallow, unlined depressions excavated in soft ground or leaf litter (BBCC 2005, p. 13). Secure areas for bedding, denning, and escape can be found in cover that limits visibility, slows foot travel, and creates noise when traversed (Weaver *et al.* 1990b, p. 347).

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

The average age for first female reproduction varies widely across black bear studies; however, most describe breeding occurring between 3 years and 5 years of age (Weaver 1990, p. 5). Breeding occurs in summer and the gestation period for black bears is 7 to 8 months (Weaver 1990, p. 5). Delayed implantation occurs in the black bear; blastocysts float free in the uterus and do not implant until late November or early December (Pelton 1982, p. 505). Because of this, pregnant females are not subject to the nutritional drain of a developing fetus while they forage to increase fat reserves for winter torpor (Weaver 1990, p. 5). Additional information on female habitat requirements is described in the “Space for Individual and Population Growth and Normal Behavior” discussion above. Females give birth during the denning season. The normal litter size is two, although litter sizes of one to four cubs (and rarely five) do occur. Cubs are altricial (helpless) at birth (Weaver 1990, p. 5) and generally exit the den site with the female in April or May. Young bears stay with the female through summer and fall, and den with her the next winter. The young disperse in their second spring or summer, prior to the female’s period of estrus (Pelton

1982, p. 505). Estrus starts when the female becomes physiologically capable of reproducing again. However, not all females produce cubs every other winter; reproduction is related to physiological condition (*i.e.*, female bears that do not reach an optimal weight or fat level may not reproduce in a given year) (Rogers 1987, p. 51).

Females give birth while in their winter dens. Den site characteristics were described in more detail in the “Cover or Shelter” discussion above. Secure den sites for reproduction are particularly important as the young would not survive without their mother should she abandon her den because of disturbance. Benson (2005, p. 84) found that female reproductive status affected den type use, as females with cubs used trees for dens more frequently than ground dens. However, Hightower *et al.* (2002, p. 14) did not detect differences in den type use by females based on their reproductive status.

Tree dens may be an important component for female reproductive success in areas subject to flooding (Hellgren and Vaughan 1989a, p. 352). Den trees located in cypress swamps would appear to provide an increase in security (e.g., decrease in disturbance) compared to ground dens. The availability of den trees, however, does not appear to be a limiting factor for reproductive success (Weaver and Pelton 1994, p. 431); den trees may not be necessary for Louisiana black bears if flooding and disturbance are minimized (Hightower *et al.* 2002, p. 15).

To afford additional protection to denning bears, when we listed the Louisiana black bear, we extended legal protection to candidate and actual den trees by promulgating a special rule at 50 CFR 17.40(i) under section 4(d) of the Act (57 FR 588). As the terms imply, “actual den tree” refers to any tree used by a denning bear during the winter and early spring seasons. Candidate den trees are defined in the final rule as *Taxodium distichum* (bald cypress) and *Nyssa sp.* (tupelo gum) in occupied Louisiana black bear habitat having a diameter at breast height of 36 inches or greater, with visible cavities, and occurring in or along rivers, lakes, streams, bayous, sloughs, or other water bodies. Results of recent research involving Louisiana black bears indicate that they will use virtually any species of tree for a den site (including overcup oak, American elm, sweetgum, water hickory, and sycamore), contingent upon it meeting the minimum diameter and cavity presence criteria described above (Hightower *et al.* 2002, p. 16).

### *Habitats That Are Protected From Disturbance*

Remoteness is an important spatial feature of black bear habitat. In the southeastern United States, remoteness is relative to forest tract size and the presence of roads. Examples of remoteness important for black bear habitat include: A tract of timberland 0.5 mi (0.8 km) from well-maintained roads and development (Rudis and Birdsey 1986, p. 5), a forested tract of more than 2,500 ac (1,000 ha) (Rudis and Tansey 1988, p. 172), or a tract with 0.8 mi or less of road per mile<sup>2</sup> (0.5 km/km<sup>2</sup>) of forest (Pelton 1986, p. 52). Remote timberlands, by this definition, are relatively rare within the historical range of black bears and are located primarily in Louisiana (Rudis and Birdsey 1986, p. 5). Increasing road density increases the likelihood of human disturbances, which can limit habitat suitability and use for black bears.

In some cases, where remoteness does not exist, bears are adaptable and through changes in behavior can survive and thrive in proximity to humans if afforded areas of retreat that ensure little chance of close contact or visual encounters. For example, bears may shift home range locations in response to increases in road densities (Brody and Pelton 1989, p. 10). However, in areas of fragmented habitat, behavioral adjustments may not be sufficient to offset the negative effects of barriers such as roads. Approximately 38 percent of known Louisiana black bear mortalities are the result of road kills (Pace *et al.* 2000, p. 368).

### *Primary Constituent Elements (PCEs) for the Louisiana Black Bear*

Within the geographical area occupied by Louisiana black bear at the time of listing, we must identify the PCEs laid out in the appropriate quantity and spatial arrangement essential to the conservation of the subspecies (*i.e.*, essential physical and biological features) that may require special management considerations or protections.

Based on the above needs and our current knowledge of the life history, biology, and ecology of the subspecies, we have determined that the Louisiana black bear's PCEs are:

(1) Breeding habitat (*i.e.*, within or contiguous to the home range of females in a core breeding population) consisting of hardwood forest areas having a diversity of age class and species and containing sources of hard mast (acorns and nuts) produced by such species as mature oaks, hickories,

and pecan, and that may include one or more of the following:

(a) Areas containing soft mast provided by a diversity of plant species, including, but not limited to, blackberry, grape, mulberry, sassafras, paw paw, etc., occurring primarily in forest openings, on spoil banks, and in areas adjacent to forested habitat;

(b) Areas within forested habitat providing protein sources consisting of beetles and other colonial insects found in rotting and decaying wood found on the forest floor;

(c) Grasses and sedges found in forest openings, on spoil banks with open canopies, and in vegetated areas adjacent to forested habitats; and

(d) Secure areas for reproduction, winter dormancy, day bedding, and escape. These include areas with den trees (*e.g.*, bald cypress, overcup oak, American sycamore, etc.); areas with a thick understory, shrub-scrub habitat, openings along spoil banks, vegetated areas adjacent to forests, or any vegetation that provides cover, limits visibility, slows foot travel, or creates noise when traversed; early successional forests (0 to 12 years) with an open canopy and dense understory of shrubs, vines, and saplings; or areas with vegetation such as palmetto, greenbriars, blackberry, dewberry, and downed trees.

(2) Corridors consisting of:

(a) Habitat patches 12 acres (5 hectares) or greater in size; or

(b) Forested areas greater than 150 feet (46 meters) along waterways and sloughs and having a diversity of plant species and age-classes of sufficient area, quality, and configuration, as described in PCE 1 above, to provide dispersal habitat between breeding populations to maintain genetic variability and promote stable or increasing populations, and to provide habitat supporting safe movement, foraging, and denning.

As described in the Primary Constituent Elements section, breeding habitat (PCE-1) must be interspersed and connected by suitable corridors (PCE-2) to allow for movement between core populations.

We have designed this proposed designation for the conservation of physical and biological features necessary to support the life history functions that were the basis for our proposal and the areas containing those features. Because not all life history functions require all the PCEs, not all proposed critical habitat units will contain all the PCEs.

We propose units for designation based on sufficient PCEs being present to support at least one of the subspecies'

life history functions. Some units contain all of these and support multiple life processes, those necessary to support the subspecies' particular use of that habitat, while some units contain some of the PCEs.

### **Special Management Considerations or Protections**

When designating critical habitat, we assess whether the occupied areas contain features that are essential to the conservation of the species and that may require special management considerations or protections. Threats to the physical and biological features essential to the conservation of the Louisiana black bear include the direct and indirect impacts of land clearing or development resulting in habitat fragmentation and land use conversion, primarily to agriculture and development. Specific details can be found in the final listing rule (January 7, 1992; 57 FR 588). Due to one or more of the threats described above, and addressed in more detail in the individual unit descriptions below, we find that all of the occupied areas we are proposing for designation as critical habitat contain the PBFs that may require special management considerations or protections to ensure the conservation of the Louisiana black bear.

### **Criteria Used To Identify Critical Habitat**

Our conservation strategy is based on a review of the biological needs of this subspecies as described in the literature, and the recovery strategy outlined in the Louisiana black bear recovery plan. In proposing critical habitat, our two-fold strategy is to: (1) Reduce the potential for extinction by providing the habitat in areas of sufficient composition and size to maintain the viability of existing reproducing populations (as determined by occupied habitat); and (2) ensure the demographic vigor and genetic variability of existing populations by providing habitat of sufficient composition and location to provide areas of connectivity between adjoining populations.

We include land within the proposed critical habitat unit boundaries contingent upon that land satisfying one of the following criteria: (1) It was occupied at the time of listing, serves as breeding habitat, and contains the physical and biological features essential to the conservation of the Louisiana black bear, or (2) it was occupied at the time of listing, serves as an immigration or emigration corridor between the core breeding populations, and provides habitat that contains the

physical and biological features essential to the conservation of the Louisiana black bear.

At the time of listing (January 7, 1992), there were limited data documenting Louisiana black bear distribution and reproduction. Range maps were generalized and seem to have been heavily based upon information such as landscape features (e.g., extent of forested habitat) and anecdotal data (e.g., unconfirmed sightings), in addition to the best available scientific data. Based on the considerable amount of data collected since 1992, the most accurate occupied habitat map at the time of listing appears to be the one published in the Louisiana Black Bear Recovery Plan (USFWS 1995, p. 4). That map and several other distribution maps developed around the time of listing indicate that bears may not have occurred in one area between the Tensas and Upper Atchafalaya River populations at that time. Those maps, however, vary considerably depending on whether or not they included all sightings outside of breeding populations, and they do not always indicate the information used (Pelton 1989, p. 8, Figure 6; Weaver *et al.* 1990a, p. 24, Figure 1; Hammond 1988, p. 75, Figure 32). Habitat corridors still existed between breeding populations around the time of listing, and those populations were probably not totally disjunct (Pelton 1989, pp. 16–18). Similarly, Weaver (1999, pp. 87–88) noted that despite habitat fragmentation and degradation, the observed dispersal capability of Louisiana black bears, coupled with the proximity to other breeding populations in Arkansas and the Upper Atchafalaya, indicated that bears in the Tensas population were not completely isolated. Hammond (1989, pp. 17–19, 42) had evidence, based on sightings and damage reports submitted to the LDWF, as well as reports he verified, of bear occurrence within this area. Therefore, while there is no evidence to indicate that this area contained a breeding population at the time of listing, we believe that this area was occupied and utilized by some small numbers of bears.

Since the time of listing in 1992, the Louisiana black bear has been studied extensively by numerous researchers with various affiliations, and substantial amounts of data now exist for all populations of the Louisiana black bear. Those studies and resultant data have generally resulted in publications in peer-reviewed scientific journals. Though important in many aspects of the critical habitat designation process, the summarized data format of those

publications provides insufficient detail for the accurate delineation of currently occupied habitat. Therefore, we gathered all currently available raw telemetry data associated with those publications (Anderson 1997; Beausoleil 1999; Marchinton 1995; Wagner 1995; and Weaver 1999) from the authors and affiliated research groups including the Louisiana Department of Wildlife and Fisheries, the U.S. Fish and Wildlife Service, Louisiana State University, and the University of Tennessee.

Adult female home range sizes for the Upper and Lower Atchafalaya River populations (8,080 ac (3,270 ha) and 3,781 ac (1,530 ha), respectively) were taken from Wagner (1995, p. 12); adult female home range sizes for the Tensas River NWR subgroup (5,995 ac (2,426 ha)) were taken from Weaver (1999, p. 70). Adult female home range size for the Deltic subgroup (1,766 ac (715 ha)) was based on an average of the estimates provided by Anderson (1997, p. 37), Beausoleil (1999, pp. 57, 60), Marchinton (1995, p. 31), and Weaver (1999, p. 70). Adult females that were relocated as part of the Louisiana black bear repatriation project are generally more nomadic and have larger and less clearly defined home ranges than anticipated, likely as a result of their reaction to displacement in an unfamiliar setting. Home range size for those females (7,038 ac (2,848 ha)) was, therefore, estimated by averaging home range sizes for the Upper Atchafalaya population (which is the geographically closest population to the repatriated bears) and the Tensas River NWR subgroup (which has served as a donor population for most of the repatriated bears). Raw telemetry data (*i.e.*, telemetry points) were buffered with those adult female home range sizes and were coalesced into polygons for each Louisiana black bear population. Those polygons formed the approximate boundary of occupied habitat, which was further refined based on habitat suitability, contiguity of suitable habitat, proximity to non-contiguous suitable habitat, direct evidence of bear use, habitat patch size, and significant landscape features.

We have defined breeding habitat as bottomland and upland hardwood forests and adjacent vegetated habitats having a diversity of plant species and age-classes with evidence of use by at least five adult female bears, having home ranges that partially or completely overlap (core areas). An area that is completely or partially within one or more of those home ranges, but outside of the core area, as defined above, would be considered breeding habitat if it: (1) Has demonstrated use (via radio

telemetry) of at least one female bear and is larger than 5 ac (2 ha) in size; or (2) is larger than 100 ac (40 ha) in size, regardless of telemetry confirmation of female presence, and is not separated from the breeding habitat core area by a landscape feature that may negatively influence natural bear movements (*e.g.*, a State or Federal road, or a large waterway). Evaluation of existing telemetry data suggests that forest use by fewer than 5 females is generally indicative of temporary residence as a result of dispersal (noted most often within, and surrounding, the repatriation complex).

Due to current data limitations and habitat variations, it is not possible to reliably determine the minimum habitat requirements for a viable Louisiana black bear population or subgroup. Data concerning Louisiana black bear population size, survival and mortality rates, and overall population viability are dated for all but the Tensas population. In 1997, the Statewide Louisiana black bear population was estimated to range from 200 to 400 bears (Pelton and Van Manen 1997, p. 38). No reliable overall Louisiana black bear population estimate currently exists; however, a comprehensive population dynamics study involving many existing Louisiana black bear populations is currently being conducted by the University of Tennessee and the LDWF, but is not complete at this time. According to the LDWF, there is circumstantial evidence that the Louisiana black bear population is growing (LDWF 2007, p. 22). Currently, the Tensas River NWR subgroup of the Tensas population is the only population and/or subgroup of Louisiana black bears that: (1) Has scientifically reliable data; (2) has been determined to be viable (*i.e.*, has a 95 percent or better chance of persistence over 100 years (FWS 1995, p. 14; BBCC 1997, pp. 33–34)); and (3) sustains itself almost entirely on habitat containing PBFs (*i.e.*, bottomland and upland hardwood forest habitat). Therefore, the Tensas River NWR subgroup data were used to assess habitat requirements for existing populations.

The Tensas River NWR subgroup (estimated at 115 Louisiana black bears) inhabits 142,000 ac (57,465 ha) of habitat (containing the PCEs). We assumed that the Tensas River NWR subgroup, which population viability analyses indicate to be stable, currently exists at minimum population and habitat sizes necessary to maintain long-term viability. Population viability analyses for the Upper and Lower Atchafalaya populations (using best available data) indicate that those

populations may not be stable. Consistent with our assumption and those analyses, we propose to designate all known breeding habitat (that was also occupied at time of listing) containing the primary constituent elements for all populations and subgroups. Including all such areas would incorporate a habitat quantity that is at least equivalent to that currently available to the Tensas River NWR subgroup and is estimated to provide sufficient habitat necessary to maintain long-term viability for three of the other populations. The Deltic subgroup is an exception because of its unusually high population density due to the availability and use of surrounding agricultural lands. All habitats occupied by the Deltic subgroup currently and at the time of listing are included in the proposed critical habitat boundary, although it is a smaller area than that included for all other populations.

One of the criteria necessary to meet the recovery goal of delisting the Louisiana black bear, as identified in the Service's recovery plan for this species, is the presence of "immigration and emigration corridors between the two viable populations used as justification for delisting" (USFWS 1995, p. 14). Including such areas will reduce forested corridor fragmentation within the current geographic distribution of the Louisiana black bear. Therefore, we propose to designate as critical habitat areas between the core breeding population centers. Those areas contain the essential physical and biological features and will maintain existing forested immigration and emigration corridors between existing breeding habitat. Based on available data, we believe that all of those corridors were occupied at the time of listing.

The length of the corridors was primarily defined by the distance between existing core breeding populations. Corridor boundary width varies and was determined by the following three factors (listed below in order of decreasing significance):

(1) The width necessary to incorporate more than one potential habitat linkage. Selection of only one path of habitat linkages would not account for the nomadic nature of bears, nor for their spatially large habitat requirements, and would assume (likely incorrectly) that all bears would select the same path while traveling the significant distance that separates existing populations. According to Cox *et al.* (1994, p. 35), "black bears likely require broader habitat areas rather than thin corridors if connecting distant populations is a goal."

(2) The feasibility of delineating all existing forested areas that are suitable for smaller scale movements that occur during immigration and emigration between existing populations. Anderson (1997, p. 74 via T. Edwards, USFWS, personal communication) found that bears would travel along "tree-lined ditches" that were as narrow as 16 ft (5 m) in width. Delineation of such small linkages (which are often abundant and sinuous) that provide connectivity between existing populations is not technically feasible.

(3) The presence of existing landscape features, such as large water bodies, and State and Federal highways. Placing critical habitat boundaries along large landscape features is preferable because those features often affect or direct bear movements (*i.e.*, form the actual boundary of such movements) and because large landscape features can be clearly defined for regulatory purposes.

We are proposing two such corridors for inclusion within the critical habitat boundary. One occurs in the central portion of Unit 1, and the other is the approximate southern half of Unit 2. The Unit 1 corridor location was selected because it incorporates more habitat containing the essential physical and biological features (including Buckhorn Wildlife Management Area and Bayou Cocodrie National Wildlife Refuge) than any other feasible linkage between the existing populations in that unit. Passage from one core breeding population center to another, outside of that corridor, would involve relatively significant lateral movements that would increase the travel distance between populations, and would require the crossing of natural hydrologic (*e.g.*, the Tensas River) and manmade barriers (*e.g.*, several state highways) that would be otherwise unnecessary with a more direct north to south route as currently delineated with the proposed corridor. Similarly, the Unit 2 corridor location was selected to maximize the inclusion of habitat containing the essential physical and biological features (including Attakapas Island Wildlife Management Area), and to provide the most direct linkage between populations occurring in the northern portion of this unit and in Unit 3. That corridor is located entirely within the Atchafalaya River Basin to avoid the urban development and agricultural expanses occurring outside the Basin levees. We delineated that corridor along the western edge of the Atchafalaya River Basin to incorporate higher elevational areas (based on recent surveys), as those areas would include a higher proportion of suitable habitat. Those higher elevations are considered more suitable

because they would facilitate bear movement (by providing more opportunities for dry passage) within the Basin, which is subject to seasonal, long-term, and often severe riverine flooding.

There are lands within the critical habitat boundaries as depicted on the map and described by the Universal Transverse Mercator (UTM) coordinates for the corridors that do not contain the physical and biological features essential for the conservation of the subspecies. We attempted to be as precise as possible in delineating the critical habitat based on the presence of essential features. Using the best available data, we delineated possible travel corridor locations at a landscape level (*i.e.*, between populations). However, the nomadic nature of bears and their spatially large habitat requirements make it difficult to predict, at a local scale (*e.g.*, shrub-lined ditches and bayous, spoil banks, etc.), what route within the corridor a bear may take while traveling the significant distance that separates existing populations.

When determining proposed critical habitat boundaries within this proposed rule, we made every effort to avoid including developed areas such as buildings, paved areas, and other structures, as well as areas in agricultural land use that lack the essential physical and biological features for the Louisiana black bear. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed or agricultural land use areas. Any such structures and the land under them inadvertently left inside critical habitat boundaries shown on the maps of this proposed rule have been excluded by text in the proposed rule and are not proposed for designation as critical habitat. Therefore, Federal actions involving these areas would not trigger section 7 consultation, unless the specific action would affect the primary constituent elements in the surrounding critical habitat.

#### Proposed Critical Habitat Designation

We are proposing three units as critical habitat for the Louisiana black bear. The critical habitat areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for the Louisiana black bear. Table 1 shows the occupied units. The three areas we propose as critical habitat are: (1) Tensas River Basin, (2) Upper Atchafalaya River Basin, and (3) Lower Atchafalaya River Basin. The

approximate area of each proposed critical habitat unit is shown in Table 2.

TABLE 1.—OCCUPANCY OF LOUISIANA BLACK BEAR BY PROPOSED CRITICAL HABITAT UNITS

[Total area estimates reflect all land within critical habitat unit boundaries. Acre and hectare values were individually computer-generated using GIS software, rounded to nearest whole number, and then summed. Totals may not match due to rounding]

| Unit                                  | Occupied at time of listing? | Currently occupied? | Size of unit in acres (hectares) |
|---------------------------------------|------------------------------|---------------------|----------------------------------|
| 1 Tensas River Basin .....            | Yes .....                    | Yes .....           | 677,256 (274,076)                |
| 2 Upper Atchafalaya River Basin ..... | Yes .....                    | Yes .....           | 435,227 (176,130)                |
| 3 Lower Atchafalaya River Basin ..... | Yes .....                    | Yes .....           | 219,152 (88,688)                 |

TABLE 2.—PROPOSED CRITICAL HABITAT UNITS FOR THE LOUISIANA BLACK BEAR BY LAND OWNERSHIP TYPE

[Total area estimates reflect all land within critical habitat unit boundaries. Acre and hectare values were computer generated individually using GIS software, rounded to nearest whole number, and then summed. Totals may not match due to rounding]

| Critical habitat unit                  | Federal in acres (hectares) | State in acres (hectares) | Private in acres (hectares) | Total in acres (hectares) |
|----------------------------------------|-----------------------------|---------------------------|-----------------------------|---------------------------|
| 1. Tensas River Basin .....            | 99,955 (40,450)             | 119,276 (48,269)          | 458,025 (185,356)           | 677,256 (274,076)         |
| 2. Upper Atchafalaya River Basin ..... | 15,765 (6,380)              | 83,314 (33,716)           | 336,148 (136,148)           | 435,227 (176,130)         |
| 3. Lower Atchafalaya River Basin ..... | 7,505 (3,037)               | 2,003 (811)               | 209,644 (84,840)            | 219,152 (88,688)          |
| Total .....                            | 123,225 (49,867)            | 204,593 (82,796)          | 1,003,817 (406,344)         | 1,331,635 (538,894)       |

We present brief descriptions of all units, and reasons why they meet the definition of critical habitat for the Louisiana black bear, below.

#### Unit 1: Tensas River Basin Unit

Unit 1 consists of 677,256 ac (274,075 ha) of Federal, State, and privately owned lands in the Tensas River Basin. It includes portions of Avoyelles, East Carroll, Catahoula, Concordia, Franklin, Madison, Richland, Tensas, West Carroll, and West Feliciana Parishes.

This unit was occupied at the time of listing, and currently provides breeding and corridor habitat for the Louisiana black bear. The perimeter of the northern portion of Unit 1 approximately coincides with the boundaries of the Deltic Timber tracts, Tensas River National Wildlife Refuge, and Big Lake Wildlife Management Area. The perimeter of the southern portion of Unit 1 is bounded primarily by the Red River Wildlife Management Area and Three Rivers Management Area on the north and east, by the Red River, Bayou Jeansonne, and Bayou des Glaises on the west, and the Lower Old River on the south.

The central portion of this unit serves as a corridor and extends from the south boundaries of Big Lake Wildlife Management Area and Tensas River

National Wildlife Refuge in Franklin and Tensas Parishes, to the north boundary of Red River Wildlife Management Area in Concordia Parish. The Tensas River and Bayou Cocodrie form most of the western boundary of that corridor. The eastern boundary of that corridor includes the east property boundary of Buckhorn Wildlife Management Area, and Louisiana State Highways 573, 566, and 15. This area contains features essential to the conservation of the Louisiana black bear because it serves as a corridor to maintain habitat linkages for immigration and emigration between the existing breeding populations at the northern and southern extents of this unit. Two of the three recovery criteria listed in the Louisiana black bear recovery plan (USFWS 1995, p. 14) specifically state that the eventual delisting of the Louisiana black bear is contingent upon the establishment (where absent) and long-term maintenance of such corridors. According to Clark (1999, p. 111), the stability and long-term viability of disjunct populations may be precluded in the absence of such corridors.

A relatively small section of breeding habitat along the west border of this unit is not included within the proposed critical habitat boundary because we

determined it does not contain the physical and biological features that are necessary for the conservation of the Louisiana black bear. Our determination was based on the following factors: (1) The area does not function as a corridor between existing populations; (2) telemetry data suggest minimal bear use; and (3) the minimum required area that was determined necessary for maintenance of a viable population is achieved for the adjacent subpopulation within Unit 1 without the inclusion of that area.

A significant portion of Unit 1 occurs within State and federally owned or managed lands that include Tensas River National Wildlife Refuge (70,000 ac (28,328 ha)), Big Lake Wildlife Management Area (19,231 ac (7,783 ha)), Buckhorn Wildlife Management Area (11,262 ac (4,558 ha)), Bayou Cocodrie National Wildlife Refuge (13,000 ac (5,261 ha)), Lake Ophelia National Wildlife Refuge (18,000 ac (7,284 ha)), Red River Wildlife Management Area (41,681 ac (16,868 ha)), Three Rivers Wildlife Management Area (27,380 ac (11,080 ha)), and Grassy Lake Wildlife Management Area (12,983 ac (5,254 ha)). Habitat restoration within Unit 1 has been primarily accomplished through the WRP, administered by the Natural Resources Conservation Service

(NRCS)), and a major carbon sequestration/habitat restoration project, initiated by Entergy Corporation, the Trust for Public Land, Environmental Synergy, Inc., and the U.S. Fish and Wildlife Service. Since the Louisiana black bear was listed as a threatened subspecies in 1992, approximately 53,487 ac (21,645 ha) of marginal agricultural land has been restored in this unit as a result of the WRP program; the program includes perpetual protection through conservation easements for most such tracts. The State of Louisiana has purchased 2,420 ac (979 ha) of Wetland Reserve Program lands as an addition to the Buckhorn Wildlife Management Area. As part of an ongoing carbon sequestration initiative, approximately 10,000 acres of marginal agricultural land are planned for purchase, reforestation, and transfer to the Service as an addition to the Tensas River National Wildlife Refuge. The first phase of this project was completed in 2005 and involved reforestation of 2,900 ac (1,174 ha) of land that were added to the Refuge.

Unit 1 contains PCEs 1 and 2. Threats to this subspecies and its habitat that may require special management of the physical and biological features essential for the conservation of the subspecies in this unit include continued habitat fragmentation (from such sources as hydrocarbon exploration and production, transportation development, agricultural activities, and urban sprawl), and human-induced mortality (such as poaching, vehicle strikes, and nuisance abatement activities) which is exacerbated by habitat fragmentation.

#### *Unit 2: Upper Atchafalaya River Basin Unit*

Unit 2 consists of 435,227 ac (176,130 ha) of Federal, State, and privately owned lands in the Upper Atchafalaya River Basin. It includes portions of Iberia, Iberville, Pointe Coupee, St. Martin, and St. Mary Parishes. This unit was occupied at the time of listing and currently supports breeding and corridor habitat for the Louisiana black bear. The northern half of Unit 2 is bounded primarily by Louisiana Highway 1 on the north, Louisiana Highway 1 and the East Atchafalaya Basin Flood Protection Levee on the east, the Atchafalaya River on the west, and U.S. Interstate 10 on the south. The southern portion extends from U.S. Interstate 10 in St. Martin Parish to U.S. Highway 90 in St. Mary Parish. Its east and west boundaries approximately follow the West Atchafalaya Basin Flood Protection Levee and the Atchafalaya River, respectively. The

southern portion of Unit 2 serves as a corridor to maintain immigration and emigration between the existing core breeding populations in Unit 3 and in the northern half of this unit. Two of the three recovery criteria listed in the Louisiana black bear recovery plan (USFWS 1995, p. 14) specifically state that the eventual delisting of the Louisiana black bear is contingent upon the establishment (where absent) and long-term maintenance of such corridors. According to Clark (1999, p. 111), the stability and long-term viability of disjunct populations may be precluded in the absence of such corridors.

Portions of Unit 2 occur within State and federally owned and managed lands that include Atchafalaya National Wildlife Refuge (15,220 ac (6,159 ha)), Sherburne Wildlife Management Area (11,780 ac (4,767 ha)), the U.S. Army Corps of Engineers-owned Bayou Des Ourses Area (17,000 ac (6,880 ha)), and Attakapas Island Wildlife Management Area (27,962 ac (11,316 ha)). Habitat restoration within Unit 2 has been relatively limited and primarily accomplished through the WRP program. Approximately 1,526 ac (618 ha) of marginal agricultural land has been restored in this unit as a result of that program; the program includes perpetual protection through conservation easements for most such tracts.

Unit 2 contains PCEs 1 and 2. Threats to this subspecies and its habitat that may require special management of the physical and biological features essential for the conservation of the subspecies in this unit include continued habitat fragmentation (from such sources as hydrocarbon exploration and production, transportation development, agricultural activities, and urban sprawl), and human-induced mortality (such as poaching, vehicle strikes, and nuisance abatement activities), which is exacerbated by habitat fragmentation.

#### *Unit 3: Lower Atchafalaya River Basin Unit*

Unit 3 consists of 219,152 ac (88,688 ha) of Federal, State, and privately owned lands in the Lower Atchafalaya River Basin. It lies south of U.S. Highway 90 (Hwy. 90) in Iberia and St. Mary Parishes. This unit was occupied at the time of listing by the Louisiana black bear and currently supports breeding habitat.

In addition to bottomland hardwood forests, bears within this unit also utilize upland hardwood habitats associated with four salt domes (Avery, Cote Blanche, and Weeks Islands, and

Belle Isle) and coastal marshes adjacent to those forests. Virtually all of Unit 3 is privately owned, with the exception of the 9,028-ac (3,654-ha) Bayou Teche National Wildlife Refuge, which is unique in that it is the only National Wildlife Refuge established specifically for the conservation of the Louisiana black bear. The boundaries of Unit 3 approximately coincide with U.S. Highway 90 to the north, the Gulf Intracoastal Waterway to the south, Avery Island to the west, and the Lower Atchafalaya River to the east.

A relatively small section of breeding habitat along the southeast border of this unit was not included within the critical habitat boundary because we determined it does not contain physical and biological features that are necessary for the conservation of the Louisiana black bear. Our determination was based on the following factors: (1) The area consists primarily of marsh habitat, which is of minimal value for bears (particularly in regard to foraging, bedding, and denning); (2) the area does not function as a corridor between existing populations or areas of high habitat value; (3) telemetry data indicate minimal bear use; and (4) the minimum required area that was determined necessary for maintenance of a viable population is achieved for the adjacent subpopulation within Unit 3 without the inclusion of that area.

A significant acreage of bottomland hardwood forests in private ownership not associated with the four salt domes is flood-protected via levees, man-made ditches, and pumps. Those flood protection features have caused such forests to lose their wetland classification and associated regulatory protection under the Clean Water Act. Subsequently, there is continual development along the Hwy. 90 corridor within Unit 3, most of which is not subject to Federal regulation. The Federal Highway Administration and the Louisiana Department of Transportation have proposed an upgrade of U.S. Highway 90, within this unit, to Interstate Highway System standards as an extension of U.S. Interstate Highway 49.

Unit 3 contains PCE 1. Threats to this subspecies and its habitat that may require special management of the physical and biological features essential for the conservation of the subspecies in this unit include continued habitat fragmentation (from such sources as hydrocarbon exploration and production, transportation development, agricultural activities, and urban sprawl), and human-induced mortality (such as poaching, vehicle strikes, and nuisance

abatement activities), which is exacerbated by habitat fragmentation.

## Effects of Critical Habitat Designation

### Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out are not likely to destroy or adversely modify critical habitat. Decisions by the 5th and 9th Circuit 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 et al.*, 245 F.3d 434, 442F (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 proposed Federal action, the affected critical habitat would remain functional (or retain the current ability for the PCEs, and therefore the essential physical and biological features) to be functionally established) 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 ensure 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, and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species 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:

- Can be implemented in a manner consistent with the intended purpose of the action,

- Can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction,

- Are economically and technologically feasible, and

- 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.

If a species is listed or critical habitat is designated, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or to destroy or adversely modify its critical habitat. 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(a)(2) consultation process. 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(a)(2) 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, or would retain its current ability for the primary constituent elements to be functionally established. Activities that may destroy or adversely modify critical habitat are those that alter the PCEs, and subsequently the essential physical and biological features) to an extent that appreciably reduces the conservation value of critical habitat for the Louisiana black bear.

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 Louisiana black bear include, but are not limited to:

(1) Actions that would reduce the extent of habitat available for population maintenance or expansion or that would negatively alter the function of forested corridors, which facilitate genetic exchange between existing populations, through the permanent conversion or fragmentation of those forested habitats. Such activities could include, but are not limited to, initiation or expansion of agricultural operations; hydrocarbon exploration and development; commercial, industrial, and residential development; flood control projects that involve clearing of woody vegetation on U.S. Army Corps of Engineers flowage easement lands; and other activities that would require the permanent removal or fragmentation of forested wetlands.

(2) Actions that would create significant barriers to movement both within and among existing populations. Those activities could reduce the availability of habitat for foraging, denning, escape, reproduction, and sheltering within populations, and severely limit or prevent dispersal and genetic exchange among populations. Such actions could include, but are not limited to road construction, large-scale or wide-ranging development, and flood-control projects that would involve barriers that are impermeable to bears.



(3) Actions performed by the U.S. Army Corps of Engineers that would result in significant habitat losses on their flowage easement lands within the Atchafalaya River Basin. Those activities could include large-scale, temporary clearing of all woody vegetation on easement lands to facilitate drainage of the Mississippi and Atchafalaya Rivers during extraordinarily high water periods. Such activities could temporarily eliminate habitat for foraging, denning, escape, reproduction, and sheltering within populations occurring in Unit 2, and severely limit or prevent dispersal and genetic exchange between populations within Units 2 and 3.

#### **Exclusion Under Section 4(b)(2) of the Act**

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

Section 4(b)(2) of the Act states that the Secretary must designate and revise 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. 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. The Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making that determination, the legislative history is clear that the Secretary has broad discretion regarding which factors to use and how much weight to give to any factor.

Under section 4(b)(2) of the Act, we must consider all relevant impacts, including economic impacts. We consider a number of factors in a section 4(b)(2) analysis. For example, we consider whether there are lands owned or managed by the Department of Defense (DOD) where a national security impact might exist. We also consider whether the landowners have developed any conservation 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 proposal, we have determined that the lands within the proposed designation of critical habitat for Louisiana black bear are not owned or managed by the Department of Defense, there are currently no Habitat Conservation Plans (HCPs) for Louisiana black bear, and the proposed designation does not include any Tribal lands or trust resources. At the time of listing, approximately one-half of Louisiana black bear breeding habitat was privately owned (BBCC 1997, p. 31). Voluntary conservation efforts by private landowners are vital for the conservation and recovery of this subspecies. Significant progress has been made in habitat restoration for the Louisiana black bear since listing. Since the Louisiana black bear was listed we estimated an increase of more than 600,000 acres that are under some form of protection from development or land conversion and that benefit black bear conservation. One important component of those restoration activities is management actions taken by private landowners. Within critical habitat, over 55,000 ac (22,250 ha) of private lands have been enrolled in the NRCS WRP, which has benefited Louisiana black bear conservation since 1992. The WRP provides an incentive for private landowners to convert non-productive farmland back to bottomland hardwoods and many of these lands received higher rankings (when evaluated for enrollment) because of their benefit to Louisiana black bear conservation. Landowners enrolling in the WRP sign permanent easements protecting the restored land from future conversion or development. At this time, we are evaluating the sufficiency of protection these WRP permanent easements provide. Therefore, we are specifically soliciting public comments on the possible exclusion here of private lands enrolled in the WRP via a permanent easement.

We anticipate no impact to national security, Tribal lands, or HCPs from this proposed critical habitat designation. Based on the best available information, we believe that all of these units contain the features essential to the subspecies. At this time, we have not analyzed areas for which the benefits of exclusion outweigh the benefits of inclusion; therefore we are not identifying any specific exclusions for the final rule designating critical habitat for Louisiana black bear. However, during the development of a final designation, we

will be considering economic and other relevant impacts and additional conservation plans, if available, such that areas may be excluded from the final critical habitat designation under section 4(b)(2).

#### *Economics*

Section 4(b)(2) of the Act allows the Secretary to exclude areas from critical habitat for economic reasons if the Secretary determines that the benefits of such exclusion exceed the benefits of designating the area as critical habitat. However, this exclusion cannot occur if it will result in the extinction of the species concerned.

We are preparing an analysis of the economic impacts of proposing critical habitat for the Louisiana black bear. We will announce the availability of the draft economic analysis as soon as it is completed, at which time we will seek public review and comment. At that time, copies of the draft economic analysis will be available for downloading from the Internet at <http://www.regulations.gov>, or from the Louisiana Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**). We may exclude areas from the final rule based on the information in the economic analysis.

#### *Peer Review*

In accordance with our joint policy published in the **Federal Register** on July 1, 1994 (59 FR 34270), we will seek the expert opinions of at least three appropriate and independent specialists regarding this proposed rule. The purpose of peer review is to ensure that our critical habitat designation is based on scientifically sound data, assumptions, and analyses. We have invited these peer reviewers to comment during this public comment period on our specific assumptions and conclusions in this proposed designation of critical habitat.

We will consider all comments and information we receive during this comment period on this proposed rule during our preparation of a final determination. Accordingly, our final decision may differ from this proposal.

#### *Public Hearings*

The Act provides for one or more public hearings on this proposal, if we receive any requests for hearings. We must receive your request for a public hearing by the date in the **DATES** section. Send your request to the address shown in the **ADDRESSES** section. We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings, as well as how to obtain

reasonable accommodations, in the **Federal Register** and local newspapers at least 15 days before the first hearing.

### Required Determinations

#### *Regulatory Planning and Review*

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

(a) 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.

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

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

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

#### *Regulatory Flexibility Act*

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 proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (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. 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.

At this time, we lack the full economic information necessary to provide an adequate factual basis for the required RFA finding. Therefore, we defer the RFA finding until completion of the DEA prepared under section 4(b)(2) of the Act and E.O. 12866. Our draft economic analysis will provide updated and more complete information and the required factual basis for the RFA finding. Upon completion of the draft economic analysis, we will announce availability of the draft economic analysis of the proposed designation in the **Federal Register** and

reopen the public comment period for the proposed designation. We will include with this announcement, as appropriate, an initial regulatory flexibility analysis or a certification that the rule will not have a significant economic impact on a substantial number of small entities accompanied by the factual basis for that determination. We have concluded that deferring the RFA finding until completion of the draft economic analysis is necessary to meet the purposes and requirements of the RFA. Deferring the RFA finding in this manner will ensure that we make a sufficiently informed determination based on adequate economic information and provide the necessary opportunity for public comment.

#### *Unfunded Mandates Reform Act*

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

(a) This rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or Tribal governments, or the private sector, and includes both "Federal intergovernmental mandates" and "Federal private sector mandates." These terms are defined in 2 U.S.C. 658(5)–(7). "Federal intergovernmental mandate" includes a regulation that "would impose an enforceable duty upon State, local, or [T]ribal 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 destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above on to State governments.

(b) We do not believe that this rule will significantly or uniquely affect small governments. The government owned lands we are proposing for critical habitat designation are owned by the State of Louisiana, U.S. Fish and Wildlife Service, Natural Resources Conservation Service, and the U.S. Army Corps of Engineers. None of these government entities fit the definition of "small governmental jurisdiction." Therefore, a Small Government Agency Plan is not required. However, we will further evaluate this issue as we conduct our economic analysis, and review and revise this assessment as warranted.

#### *Takings*

In accordance with E.O. 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for the Louisiana black bear in a takings implications assessment. The takings implications assessment concludes that this designation of critical habitat for the Louisiana black bear does not pose significant takings implications for lands within or affected by the designation.

#### *Federalism*

In accordance with E.O. 13132 (Federalism), this proposed 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 proposed critical habitat designation with appropriate State resource agencies in Louisiana. The designation of critical habitat in areas currently occupied by the Louisiana black bear may impose little additional restrictions to those currently in place and, therefore, is believed to have little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments because the areas that contain the features essential to the conservation of the species are more clearly defined, and the primary constituent elements of the habitat essential to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist local governments in long-range planning (rather than having them wait for case-by-case section 7 consultations to occur).

#### *Civil Justice Reform*

In accordance with E.O. 12988 (Civil Justice Reform), the regulation meets the applicable standards set forth in sections 3(a) and 3(b)(2) of the Order. We have proposed designating critical habitat in accordance with the provisions of the Act. This proposed rule uses standard property descriptions and identifies the primary constituent elements within the designated areas to assist the public in understanding the habitat needs of the Louisiana black bear.

#### *Paperwork Reduction Act*

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

#### *National Environmental Policy Act (NEPA)*

It is our position that, outside the jurisdiction of the Circuit Court of the United States for the Tenth Circuit, we do not need to prepare environmental analyses as defined by 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 assertion was upheld by the Circuit Court of the United States for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied, 516 U.S. 1042 (1996)).

#### *Clarity of the Rule*

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (a) Be logically organized;
- (b) Use the active voice to address readers directly;
- (c) Use clear language rather than jargon;
- (d) Be divided into short sections and sentences; and
- (e) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in the **ADDRESSES** section. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

#### *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), E.O. 13175, 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 at the time of listing that contain the features essential for the conservation, and no Tribal lands that are essential for the

conservation, of the Louisiana black bear. Therefore, we have not proposed designation of critical habitat for the Louisiana black bear on Tribal lands.

#### *Energy Supply, Distribution, or Use*

On May 18, 2001, the President issued an Executive Order (E.O. 13211; Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) on regulations that significantly affect energy supply, distribution, and use. E.O. 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. We do not expect this proposed rule to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required. However, we will further evaluate this issue as we conduct our economic analysis, and review and revise this assessment as warranted.

#### *References Cited*

A complete list of all references cited in this rulemaking is available upon request from the Field Supervisor, Louisiana Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

#### *Author(s)*

The primary author of this package is the Louisiana Fish and Wildlife Office.

#### **List of Subjects in 50 CFR Part 17**

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

#### **Proposed Regulation Promulgation**

Accordingly, we propose to 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; Public Law 99–625, 100 Stat. 3500; unless otherwise noted.

2. In § 17.11(h), revise the entry for “Bear, Louisiana black” under “MAMMALS” 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                    |                                                                                                                                                                                                                                                                                    |                                                      |        |             |                  |                   |
| MAMMALS               |                                    |                                                                                                                                                                                                                                                                                    |                                                      |        |             |                  |                   |
| *                     | *                                  | *                                                                                                                                                                                                                                                                                  | *                                                    | *      | *           | *                | *                 |
| Bear, Louisiana black | <i>Ursus americanus luteolus</i> . | U.S.A. (LA-all counties; MS-all counties south of or touching a line from Greenville, Washington County, to Meridian, Lauderdale County; TX-all counties east of or touching a line from Linden, Cass County, SW to Bryan, Brazos County, thence SSW to Rockport, Aransas County). | Entire                                               |        | T           | 456              | 17.95(a) 17.40(i) |
| *                     | *                                  | *                                                                                                                                                                                                                                                                                  | *                                                    | *      | *           | *                | *                 |

3. In § 17.95, amend paragraph (a) by adding an entry for Louisiana black bear (*Ursus americanus luteolus*), in the same order that the subspecies appears in the table at § 17.11 (h), to read as follows:

**§ 17.95 Critical habitat—fish and wildlife.**

(a) Mammals.

\* \* \* \* \*

Louisiana Black Bear (*Ursus americanus luteolus*)

(1) Critical habitat units are depicted for Avoyelles, East Carroll, Catahoula, Concordia, Franklin, Iberia, Iberville, Madison, Pointe Coupee, Richland, St. Martin, St. Mary, Tensas, West Carroll, and West Feliciana Parishes, Louisiana, on the maps below.

(2) The primary constituent elements of critical habitat for the Louisiana black bear are the habitat components that provide:

(i) Breeding habitat (*i.e.*, within or contiguous to the home range of females in a core breeding population) consisting of hardwood forest areas having a diversity of age class and species and containing sources of hard mast (acorns and nuts) produced by such species as mature oaks, hickories, and pecan, and that may include one or more of the following:

(A) Areas containing soft mast provided by a diversity of plant species, including, but not limited to, blackberry, grape, mulberry, sassafras, paw paw, etc., occurring primarily in forest openings, on spoil banks, and in areas adjacent to forested habitat.

(B) Areas within forested habitat providing protein sources consisting of beetles and other colonial insects found in rotting and decaying wood found on the forest floor.

(C) Grasses and sedges found in forest openings, on spoil banks with open canopies, and in vegetated areas adjacent to forested habitats.

(D) Secure areas for reproduction, winter dormancy, day bedding, and escape. These include areas with den trees (*e.g.*, bald cypress, overcup oak, American sycamore, etc); areas with a thick understory, shrub-scrub habitat, openings along spoil banks, vegetated areas adjacent to forests, or any vegetation that provides cover, limits visibility, slows foot travel, or creates noise when traversed; early successional forests (0 to 12 years) with an open canopy and dense understory of shrubs, vines, and saplings; or areas with vegetation such as palmetto, greenbriars, blackberry, dewberry, and downed trees.

(ii) Corridors consisting of:

(A) Habitat patches 12 ac (5 ha) or greater in size; or

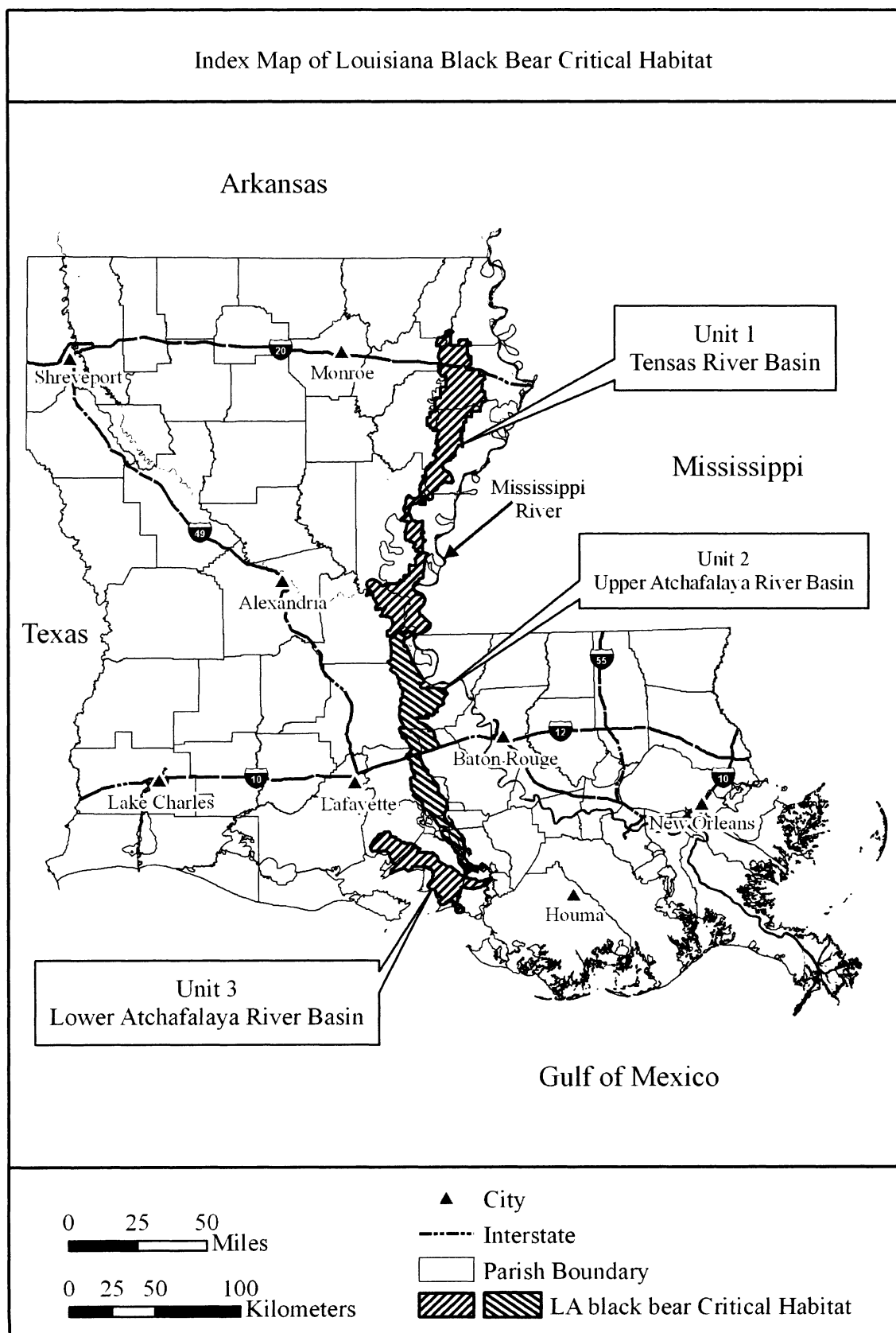
(B) Forested areas greater than 150 ft (46 m) along waterways and sloughs and having a diversity of plant species and age-classes of sufficient area, quality, and configuration, as described in paragraph (2)(i) of this entry, to provide dispersal habitat between breeding populations to maintain genetic variability and promote stable or increasing populations, and to provide habitat supporting safe movement, foraging, and denning.

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

(4) *Critical habitat map units.* Data layers defining map units were created on a base of USGS digital ortho-photo quarter-quadrangles, and critical habitat units were then mapped using Universal Transverse Mercator (UTM) Zone 15N coordinates.

(5) Note: Index map follows:

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(6) Unit 1: Tensas River Basin.

(i) From USGS 1:24,000 scale digital ortho-photo quarter-quadrangles: Acme SE; Acme SW; Big Bend NE; Big Bend

NW; Big Bend SE; Big Bend SW; Como NE; Como SE; Crowville NE; Crowville SE; Deer Park NW; Deer Park SW; Delhi

NE; Delhi NW; Delhi SE; Delhi SW;  
Dunbarton NE; Dunbarton NW;  
Dunbarton SE; Dunbarton SW; Epps NE;  
Epps NW; Epps SE; Epps SW; Fairview  
NW; Fairview SW; Ferriday North NE;  
Ferriday North NW; Ferriday South NW;  
Ferriday South SW; Fort Adams NW;  
Fort Adams SE; Fort Adams SW;  
Fortune Fork NW; Fortune Fork SW;  
Foules NE; Foules NW; Foules SE;  
Foules SW; Frogmore NE; Frogmore  
NW; Frogmore SE Frogmore SW; Gretna  
Green NE; Gretna Green NW; Gretna  
Green SE; Gretna Green SW; Ile  
Natchitoches NE; Ile Natchitoches NW;  
Ile Natchitoches SE; Ile Natchitoches  
SW; Indian Lake NE; Indian Lake NW;  
Indian Lake SE; Indian Lake SW; Innis  
NE; Lac Sainte Agnes NE; Lac Sainte  
Agnes NW; Lac Sainte Agnes SE; Lake  
Bruin NW; Lake Mary NW; Lake Mary  
SW; Lamar SE; Larto Lake South SE;  
Larto Lake South SW; Lower Sunk Lake  
NE; Lower Sunk Lake NW; Lower Sunk  
Lake SE; Lower Sunk Lake SW;  
Monterry NE; Monterry SE; Newlight  
NE; Newlight NW; Newlight SE;  
Newlight SW; Oakley NE; Oakley SE;  
Oakley SW; Panther Lake NE; Panther  
Lake NW; Panther Lake SE; Panther  
Lake SW; Saranac NW; Saranac SW;  
Simmesport NE; Simmesport NW;  
Slocum NE; Slocum NW; Slocum SE;  
Slocum SW; Somerset NW; Tallulah  
SW; Tendale NE; Tendal NW; Tendal  
SE; Tendal SW; Tensas Bluff NE; Tensas  
Bluff NW; Tensas Bluff SE; Tensas Bluff  
SW; Turnbull Island NE; Turnbull  
Island NW; Turnbull Island SE;  
Turnbull Island SW; Waterproof NE;  
Waterproof NW; Waterproof SE;  
Waterproof SW; Waverly SE NE;  
Waverly SE NW; Waverly SE SE;  
Waverly SE SW; Westwood NE;  
Westwood NW; Westwood SE;  
Westwood SW; Louisiana. Land  
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15N, North American Datum of 1983  
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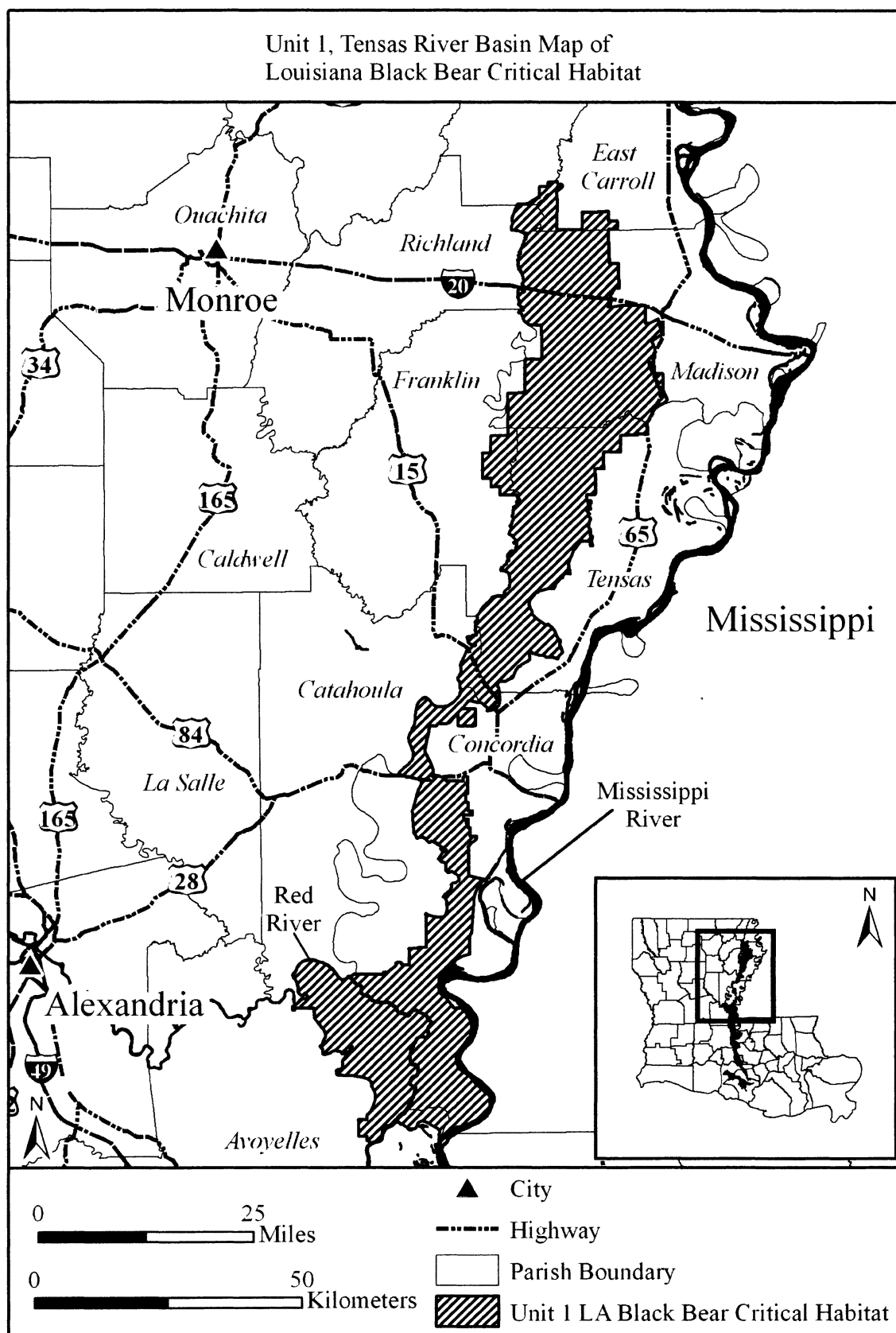
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(ii) Map of Unit 1, Tensas River Basin, follows:

BILLING CODE 4310-55-P





(7) Unit 2: Upper Atchafalaya River Basin.

(i) From USGS 1:24,000 scale digital ortho-photo quarter-quadrangles: Batchelor NE; Batchelor NW; Batchelor

SE; Batchelor SW; Bayou Current NE; Bayou Current NW; Bayou Current SE; Big Bend SE; Butte La Rose NE; Butte

La Rose NW; Butte La Rose SE; Butte La Rose SW; Catahoula NE; Catahoula NW; Catahoula SE; Catahoula SW; Centerville NE; Centerville NE SW; Centerville NW; Centerville NW NE; Centerville NW NW; Centerville NW SE; Centerville NW SW; Centerville SE; Charenton NE; Charenton SE; Cow Bayou NW; Cow Bayou SW; Erwinville NW; Fordoche NE; Fordoche NW; Fordoche; Grand River SW; Innis NE; Innis NW; Innis SE; Innis Jackass Bay NE; Jackass Bay NW; Jackass Bay SE; Jackass Bay SW; Krotz Springs NE; Krotz Springs SE; Lacour SW; Lake Chicot NW; Lake Chicot SW; Lake Mongoulois NE; Lake Mongoulois NW; Lake Mongoulois SE; Lake Mongoulois SW; Loreauville NE; Lottie NE; Lottie NW; Lottie SE; Lottie SW; Maringouin NE; Maringouin NW; Maringouin NW NE; Maringouin NW NW; Maringouin NW SE; Maringouin NW SW; Maringouin SE; Maringouin SW; Melville NE; Melville NW; Melville SE; Melville SW; Morganza NE; Morganza NW; Morganza SE; Morganza SW; New Roads NW; New Roads SW; North Bend NE; Patterson NE; Patterson NW; Portage NE; Simmesport NE; Simmesport SE; Swayze Lake NE; Tiger Island NW; Tiger Island SE; Tiger Island SW; Turnbull Island SE; Turnbull Island SW; Louisiana. Land bounded by the following UTM Zone 15N, North American Datum of 1983 (NAD83) coordinates (E, N): 627070, 3431218; 622846, 3423182; 633656, 3402371; 632966, 3398656; 646698, 3394803; 624888, 3428860; 622925, 3423142; 633606, 3402336; 634014, 3398693; 646362, 3394427; 624679, 3428635; 623229, 3423055; 633535, 3402289; 635504, 3398712; 646209, 3394250; 624539, 3428524; 623782, 3422928; 633479, 3402262; 635494, 3399338; 646050, 3394104; 624367, 3428418; 623915, 3422888; 633437, 3402238; 635494, 3399372; 645933, 3393974; 624042, 3428281; 623970, 3422841; 633381, 3402196; 635496, 3399396; 645881, 3393906; 623468, 3428034; 624010, 3422775; 633347, 3402167; 635544, 3399422; 645661, 3393580; 622430, 3427587; 624036, 3422708; 633323, 3402151; 635846, 3399597; 645589, 3393480; 622200, 3427492; 624039, 3422621; 633302, 3402130; 635918, 3399551; 645468, 3393332; 622060, 3427426; 624042, 3422497; 632779, 3401762; 635951, 3399527; 645404, 3393228; 621981, 3427370; 624039, 3422327; 632003, 3401548; 636040, 3399480; 645322, 3393064; 621946, 3427328; 624050, 3422216; 631942, 3401534; 636154, 3399421; 645108, 3392480; 621888, 3427251; 624055, 3422145; 631868, 3401529;

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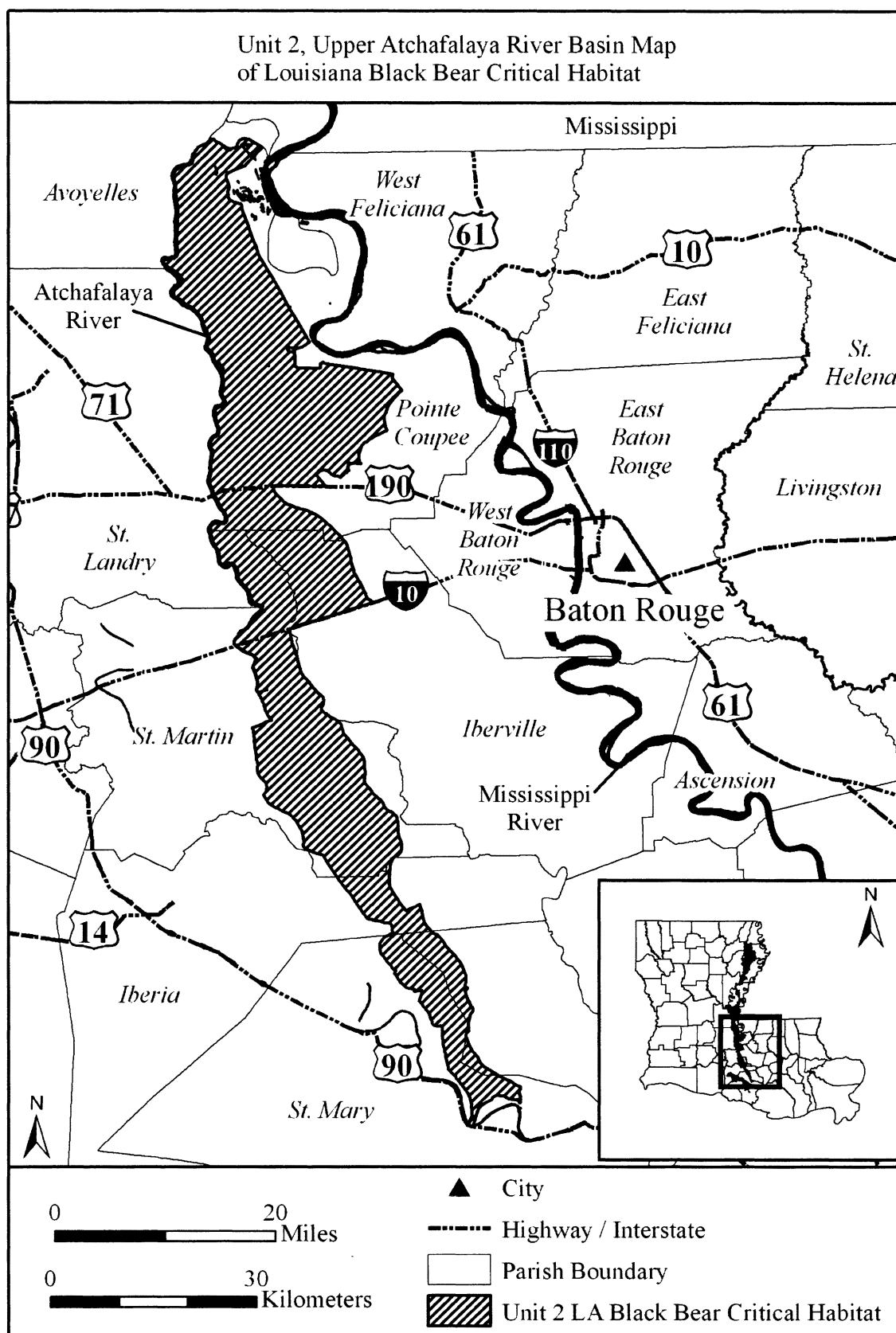
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(ii) Map of Unit 2, Upper Atchafalaya River Basin, follows:

BILLING CODE 4310-55-P



BILLING CODE 4310-55-C

(8) Unit 3: Lower Atchafalaya River Basin.

(i) From USGS 1:24,000 scale digital ortho-photo quarter-quadrangles: Belle Isle NE; Belle Isle NW; Belle Isle SE;

Belle Isle SW; Centerville SW; Delcambre NE; Delcambre SE; Delcambre SW; Ellerslie NE; Ellerslie

NW; Eilerslie SE; Eilerslie SW; Franklin NE; Franklin NW; Franklin SE; Franklin SW; Hammock Lake NE; Hammock Lake NW; Jeanerette SE; Jeanerette SW; Kemper NE; Kemper NW; Kemper SE; Kemper SW; Marone Point NW; Morgan City NW; Morgan City SW; New Iberia South NW; New Iberia South SE; New Iberia South SW; North Bend NE; North Bend NW; North Bend SE; North Bend SW; Patterson NE; Patterson NW; Patterson SE; Patterson SW; Point Chevreuil NE; Point Chevreuil SE; Tigre Lagoon NE; Tigre Lagoon NW; Weeks NE; Weeks NW; Weeks SE; Weeks SW; Louisiana. Land bounded by the following UTM Zone 15N, North American Datum of 1983 (NAD83) coordinates (E, N): 657063, 3286619; 671647, 3285905; 667016, 3281314; 657375, 3280537; 654804, 3269766; 657073, 3286613; 671861, 3285961; 666873, 3281180; 657139, 3280592; 654915, 3269700; 657657, 3286429; 672126, 3286077; 666730, 3281063; 656978, 3280629; 655005, 3269623; 657665, 3286430; 672911, 3286434; 666529, 3280920; 656793, 3280661; 655119, 3269546; 657665, 3286429; 672967, 3286246; 666368, 3280867; 656644, 3280698; 655148, 3269506; 657852, 3286390; 672967, 3285937; 666069, 3280780; 656300, 3280764; 655185, 3269459; 658082, 3286365; 673010, 3285579; 665849, 3280777; 655978, 3280843; 655193, 3269377; 658302, 3286356; 672934, 3285412; 665667, 3280791; 655737, 3280899; 655193, 3269334; 658609, 3286347; 672740, 3285154; 665521, 3280783; 655513, 3280933; 655164, 3269252; 658847, 3286323; 672633, 3285003; 665331, 3280761; 655185, 3279748; 655143, 3269184; 659180, 3286275; 672470, 3284865; 665169, 3280719; 655063, 3279389; 655143, 3269109; 659564, 3286212; 672296, 3284718; 664944, 3280640; 654873, 3278907; 655159, 3269027; 660786, 3286026; 672129, 3284539; 664796, 3280587; 654690, 3278312; 655177, 3268956; 663189, 3285655; 671998, 3284353; 664645, 3280547; 654616, 3277952; 655209, 3268863; 663376, 3285622; 671847, 3284178; 664471, 3280481; 654532, 3277751; 655243, 3268797; 663408, 3285611; 671760, 3284059; 664283, 3280425; 654423, 3277494; 655317, 3268768; 663516, 3285582; 671621, 3283952; 664159, 3280391; 654264, 3276941; 655410, 3268721; 663667, 3285521; 671474, 3283880; 663934, 3280333; 653780, 3275526; 655463, 3268670; 663799, 3285434; 671307, 3283813; 663616, 3280253; 653386, 3274303; 655500, 3268623; 664268, 3285043; 671208, 3283726; 663352, 3280198; 653225, 3273803;

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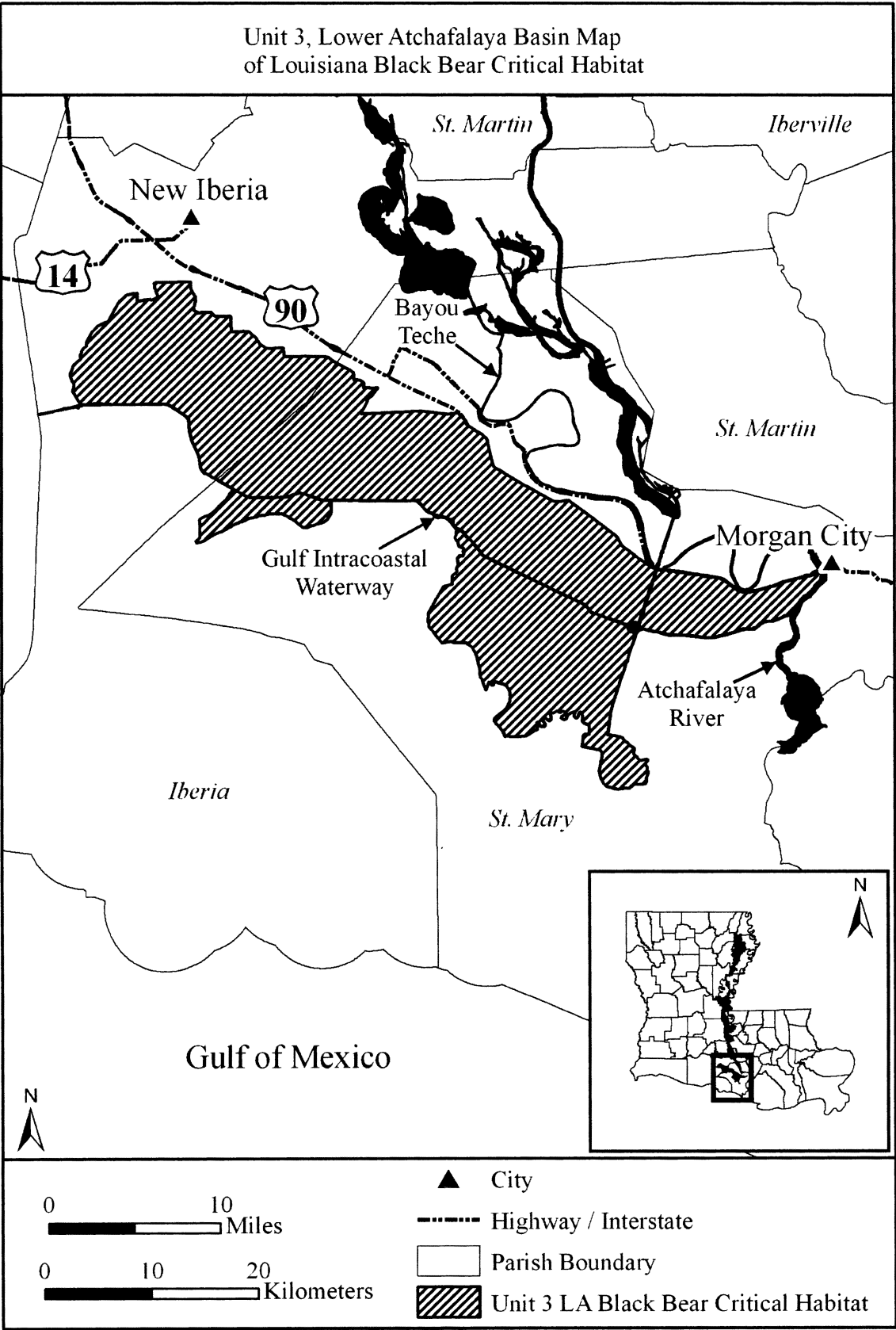
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(ii) Map of Unit 3, Lower Atchafalaya River Basin, follows:

BILLING CODE 4310-55-P



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Dated: April 24, 2008.

**Lyle Lavery,**

*Assistant Secretary for Fish and Wildlife and  
Parks.*

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**BILLING CODE 4310-55-C**