



# United States Department of the Interior

**FISH AND WILDLIFE SERVICE**  
 Division of Ecological Services  
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September 29, 2005

Donald Silawsky  
 Office of Petroleum Reserves  
 Department of Energy  
 1000 Independence Avenue S.W.  
 Washington, DC 20585-0301

Dear Mr. Silawsky:

This responds to your September 9, 2005 letter requesting threatened and endangered species information for the proposed expansion of the Strategic Petroleum Reserve (SPR) to its 1-billion barrel authorized capacity. Two Texas sites are being considered as part of the proposed project. The first site is the expansion of the existing SPR facility at Big Hill in Jefferson County. The second involves the construction of a new SPR facility at Stratton Ridge in Brazoria County.

U.S. Fish and Wildlife Service files indicate that a pair of bald eagles *Haliaeetus leucocephalus* is known to nest to the northwest of the proposed Stratton Ridge site. The approximate location of the nest is N 29.04140 W 95.38071.

Once a suitable nesting territory is established, the eagle pair will return to the same area year after year, though they may use alternate nests within the territory during different breeding years. If a given nest or nest tree is lost, the pair often returns to the same territory to begin another. Nesting territories can even be inherited by subsequent generations. Additional information on bald eagles is enclosed.

Individual bald eagles exhibit considerable variation in their responses to human activity, depending upon the type, frequency, and duration of activity; the extent of environmental modification; the point in time of the bird's reproductive cycle; and various other factors not well understood. Although it cannot be predicted with absolute certainty the effects a given disturbance might have on a specific eagle or eagle pair, certain activities are known to disturb bald eagles more than others. The enclosed habitat management guidelines address some of these concerns and identify recommended restrictions that may avoid potential impact to bald eagles if they should occur at or near the proposed project site.

Our records of known threatened and endangered species are limited. You should also use the county by county listing of federally listed threatened and endangered species, available at <http://ifw2es.fws.gov/endangeredspecies/lists/ListSpecies.cfm>, and other current species information to determine whether suitable habitat for a listed species is present at each project site. If suitable habitat is present, a qualified individual should conduct surveys to determine whether a listed species is present.

After completing a habitat evaluation and/or any necessary surveys, you should evaluate the project for potential effects to listed species and make one of the following determinations:

**No effect** – the proposed action will not affect federally listed species or critical habitat (i.e., suitable habitat for the species occurring in the project county is not present in or adjacent to the action area). No

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coordination or contact with the Service is necessary. However, if the project changes or additional information on the distribution of listed or proposed species becomes available, the project should be reanalyzed for effects not previously considered.

**Is not likely to adversely affect** – the project may affect listed species and/or critical habitat; however, the effects are expected to be discountable, insignificant, or completely beneficial. Certain avoidance and minimization measures may need to be implemented in order to reach this level of effects. You should seek written concurrence from the Service that adverse effects have been eliminated. Be sure to include all of the information and documentation you used to reach your decision with your request for concurrence. The Service must have this documentation before issuing a concurrence.

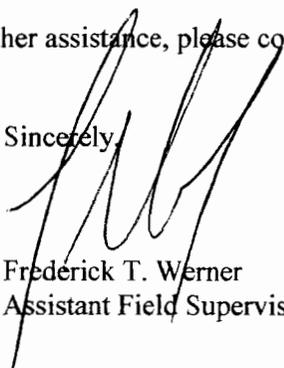
**Is likely to adversely affect** – adverse effects to listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not discountable, insignificant, or beneficial. If the overall effect of the proposed action is beneficial to the listed species but also is likely to cause some adverse effects to individuals of that species, then the proposed action “is likely to adversely affect” the listed species. An “is likely to adversely affect” determination requires formal Section 7 consultation with this office.

Regardless of your determination, the Service recommends that you maintain a complete record of the evaluation, including steps leading to the determination of affect, the qualified personnel conducting the evaluation, habitat conditions, site photographs, and any other related articles.

Finally, a concern with major projects is the length of time that passes between environmental review, project planning and then construction. During this time, new locations of threatened and endangered species can be established and/or discovered or new species can be listed. Therefore, it is important that a mechanism be included in project planning so that updated threatened and endangered species information is gathered and reviewed periodically up until initiation of construction.

If you have any questions, or if we can be of further assistance, please contact Edith Erfling or Catherine Yeagan at [REDACTED].

Sincerely,



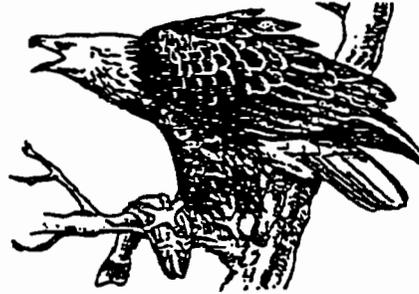
Frederick T. Werner  
Assistant Field Supervisor, Clear Lake ES Field Office

Enclosures

**STATUS:** Endangered (32 FR 4001-March 11, 1967; 43 FR 6233-February 14, 1978) without critical habitat in all but five of the contiguous 48 states (listed as threatened in Washington, Oregon, Minnesota, Wisconsin, and Michigan)

**DESCRIPTION:** Large hawk-like bird with 6-7 feet wingspan and unfeathered feet. Adult has white head, neck, and tail. While gliding or soaring it keeps wings flat, not uplifted like vultures. Immatures are mostly dark, and may be confused with immature golden eagles. However, golden eagles have a more sharply defined white pattern on underside of wings and tail.

**HABITAT:** In Texas, preferred nesting habitat is along river systems, or within 1-2 miles of some other large body of water, such as a lake or reservoir. Nests are often located in areas where forest, marsh, and water meet. Large, tall (40-120 ft.) trees are used for nesting and roosting (taller than the general forest canopy, providing an unobstructed flight path to nest). Tree species used for nesting in Texas include loblolly pine, bald cypress, oak, cottonwood, and sycamore. Nearby (within 0.5 miles) wetland areas are necessary for feeding. Fish is generally the primary food, but eagles in Texas also prey on waterfowl, turtles, small mammals, and carrion.



**DISTRIBUTION:**

**Present:** Nesting populations are gradually increasing in Texas, with territories located primarily along rivers, near reservoirs, and along the Gulf Coast. Wintering eagles may occur statewide on rivers, streams, reservoirs and other areas of open water where fish, waterfowl, and carrion are available for food. See Bald Eagle Wintering Areas in Texas on the following page.

**Historic:** Found throughout the contiguous United States, Canada, and northern Mexico.

**THREATS AND REASONS FOR DECLINE:** Past threats include reproductive failure caused by pesticides, loss of riparian habitat, and unrestricted killing by humans (including shooting, poisoning, and trapping). Current threats are habitat loss, human encroachment on nesting sites, and lead poisoning (even low levels can cause neurological dysfunction, behavioral abnormalities, anemia, and increased susceptibility to disease).

**OTHER INFORMATION:** In Texas, bald eagle nesting typically occurs from October to July. Clutch size varies from 1 to 3, dull white eggs are incubated for approximately 35 days. Young generally fledge in April, after 10-12 weeks of growth, but parental care continues for another 4-6 weeks. Northern migration begins in May; occasionally, a pair will remain within a territory year-round. Wintering Bald eagles may arrive in north Texas as early as October and return north February through March. Bald eagles are particularly vulnerable to disturbance during the nesting period. Bald eagles are protected by the Endangered Species Act, Bald Eagle Protection Act and Migratory Bird Treaty Act.

**REFERENCES:**

- Lish, J.W. 1975. Status and Ecology of Bald Eagles and Nesting Golden Eagles in Oklahoma. Unpubl. Thesis, Oklahoma State University, Stillwater, Oklahoma.
- Texas Parks and Wildlife Department. 1993. Job No. 30: Bald eagle nest survey and management. Performance report, Federal Aid Project No. W-125-R-4. TPWD, Austin, TX.
- Texas Parks and Wildlife Department. 1993. Job No. 59: Bald eagle post-fledging survival and dispersal. Final report, Federal Aid Project No. W-125-R-4. TPWD, Austin, TX.
- U.S. Fish and Wildlife Service (USFWS). 1983. Northern States Bald Eagle Recovery Plan. USFWS, Endangered Species Office, Twin Cities, MN.
- . 1989. Southeastern States Bald Eagle Recovery Plan. USFWS, Endangered Species Office, Atlanta, GA.

The following management guidelines were developed for the purpose of helping landowners and managers maintain or improve their land for the benefit of bald eagles, if the species occurs on their property, by protecting the environmental conditions the species requires. Emphasis is placed on providing information so that landowners may recognize and avoid or minimize those human-related activities which may adversely affect bald eagles, particularly nesting pairs. Bald eagles are protected by a number of Federal and State laws and regulations (including the Endangered Species Act, Bald Eagle Protection Act, and Migratory Bird Protection Act) which prohibit such acts as harassing, harming, disturbing, pursuing, etc. bald eagles, or destroying their nests. Individual bald eagles exhibit considerable variation in their responses to human activity, depending upon the type, frequency, and duration of activity; the extent of environmental modification; the point in time of the bird's reproductive cycle; and various other factors not well understood. Although it cannot be predicted with absolute certainty the effects a given disturbance might have on a specific eagle or eagle pair, certain activities are known to disturb bald eagles more than others. ALTHOUGH ADVISORY ONLY, the following guidelines address some of these concerns and identify recommended restrictions that should avoid potential impact to bald eagles (and avoid conflict with protective regulations). FOR ADDITIONAL INFORMATION, PLEASE CONTACT THE CLEAR LAKE OFFICE OF THE U.S. FISH AND WILDLIFE SERVICE (FWS) AT 713-286-8282, OR THE TEXAS PARKS AND WILDLIFE DEPARTMENT (512-389-4505 or 512-448-4311).

**NESTING:**

**GENERAL INFORMATION:** Due to surveys carried out annually by the Texas Parks and Wildlife Department, bald eagle nest sites are currently known to occur in 27 southeastern Texas counties, although only a portion of these are active or successful each year. THE BALD EAGLE NESTING PERIOD IN TEXAS IS NORMALLY OCTOBER TO JULY, with peak egg-laying in December and hatching primarily in January. The young generally fledge in April after 10-12 weeks of growth, but parental care continues for another 4-6 weeks. Adults and young begin to migrate north in May, with a pair sometimes remaining within a territory all year. EAGLES ARE VULNERABLE TO DISTURBANCE THROUGHOUT THE NESTING PERIOD, but particularly during the first 12 weeks (during courtship, nest building, egg-laying, incubation, and brooding). Disturbance at this time may cause nest abandonment and chilled or overheated eggs or young. However, human activity even late in the nesting cycle may cause premature fledging and reduce the young's chances for survival.

Not only is protection of an actual NEST important; so is protection of the NEST SITE itself and all the component factors that attracted the pair to the area in the first place. Once a suitable breeding territory is found, breeding pairs will return to the same area year after year, often using alternate nests within the territory during different breeding years. Although a given nest may be lost due to weather or age of the tree, a pair often returns to the same territory to begin another. In cases where one member of a pair dies, the nest may go unused for several years but then be recolonized by the surviving member returning with a new mate. Nesting territories can even be inherited by subsequent generations. Therefore, guidelines intended to protect a nesting territory should apply to an "abandoned" nest site for at least five consecutive years of documented non-use.

**MANAGEMENT ZONES FOR NESTING HABITAT:** THE FOLLOWING HABITAT MANAGEMENT GUIDELINES, DEVELOPED BY THE FWS AND TPWD FOR NESTING BALD EAGLES IN TEXAS, ARE BASED ON THE IDENTIFICATION OF TWO MANAGEMENT ZONES SURROUNDING EACH NEST SITE, WITH CERTAIN RECOMMENDED RESTRICTIONS APPLYING TO EACH ZONE.

**A. PRIMARY MANAGEMENT ZONE FOR NEST SITES:**

THIS ZONE SHOULD ENCOMPASS AN AREA EXTENDING 750 TO 1,500 FEET OUTWARD IN ALL DIRECTIONS FROM THE NEST SITE. THE FWS RECOMMENDS THAT THE FOLLOWING ACTIVITIES NOT OCCUR WITHIN THIS ZONE:

1. Alteration of habitat or change in land use, such as would result from residential, commercial, or industrial development; construction projects; or mining activities.
2. Tree-cutting, logging, or removal of trees, either living or dead.
3. Use of chemicals toxic to wildlife.
4. Placement of above-ground electrical transmission or distribution lines. (Collision with powerlines and electrocution on powerline structures remain important causes of raptor mortality. Placement of underground lines is strongly recommended near bald eagle nests and winter concentration sites.)
5. Helicopter or fixed-wing aircraft operation within 500 feet vertical distance or 1,000 feet horizontal distance of the nest site, except during the non-nesting season (about late-July to early-October).
6. Human entry, except as described below (or as otherwise specifically allowed):
  - a) Minimal-disturbance activities (such as hiking, fishing, camping, bird-watching), and certain land-use activities (such as farming, ranching, hunting) which are existing practices and have occurred historically on the site, can be carried out safely during the non-nesting period if no physical alteration of the primary zone is involved.
  - b) The activities mentioned in (a) above which are existing practices and have occurred historically on the site during the nesting season, and do not appear to be adversely impacting the success of the nest site, can be carried out safely during the nesting season as well (late-October to early-July) if:  
(continued)