



United States Department of the Interior

FISH AND WILDLIFE SERVICE

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SEP 30 2008

Mr. Steven Brooks
Chief, Regulatory Branch
Fort Worth District, U.S. Army Corps of Engineers
P.O. Box 17300
Fort Worth, Texas 76102-0300

Consultation # 21450-2008-F-0197

Dear Mr. Brooks:

This transmits our biological opinion regarding the proposed construction of Bella Terra Ranch residential project located in Kendall County, Texas (proposed project). At issue are potential effects to the federally-endangered golden-cheeked warbler (*Dendroica chrysoparia*) from construction of the proposed project. This biological opinion is pursuant to section 7 of the Endangered Species Act of 1973, as amended (Act)(16 U.S.C. 1531 *et seq.*).

The findings and recommendations in this consultation are based on: (1) various emails, meetings, and telephone conversations between Mr. Yates, his attorney Robert Kelly, his biological consultant (Glenn Norton), and the U. S. Fish and Wildlife Service (Service) from May 2008 through present day; (2) a site visit to the proposed project site; (3) follow-up meetings with Mr. Yates and his attorney regarding the proposal; and, (4) other sources of information available to the Service. A complete administrative record of this consultation is on file at this office.

Consultation History

- May 2, 2008:* A site visit with Mr. Yates, his attorneys (R. Kelly, J. Hill), Service biologist (A. Arnold) and Service law enforcement (E. Jumper), Kendall County attorney (D. Allee), and Mr. Yates biological consultant (G. Norton).
- May 14, 2008:* A letter from Mr. Yates via his attorney relaying a proposed residential development.
- June 4, 2008:* A meeting attended by the Service (A. Arnold), Mr. Yates, and his attorney R. Kelly regarding the project design, the proposed preserve design, and other options for mitigation, as appropriate.
- August 1, 2008:* A meeting attended by the Service (A. Arnold), Mr. Yates, and his attorney R. Kelly to discuss the draft BO, specifically regarding the establishment of the boundaries around the proposed preserved areas.

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September 4, 2008: The Service issued a draft biological opinion for review and comment. No changes were requested to the draft.

Definitions

Disturbance Area. Primary disturbance acreage will be determined by the project area; however, the disturbance area may exceed the project area because a 300 feet(ft)(100 meter(m)) buffer from the edge of habitat is incorporated to include essential habitat components. Disturbance may be temporary and/or permanent and should consider: (1) opportunities to avoid habitat within the project area; (2) area, timing, and duration of the disturbance; and, (3) temporary haul roads and equipment staging areas.

Habitat. For the purposes of this biological opinion, habitat for the species will be defined as all habitat for golden-cheeked warblers that occurs within the property boundaries for the proposed development. Occupied habitat is defined by survey results from Glenn Norton indicating bird detections recorded during the 2008 season and is intended to represent habitat that was occupied during the 2008 nesting season. Suitable habitat is defined by vegetation community type and abiotic factors such as slope and canopy structure.

Permanent Effects. Permanent effects are those project activities that result in loss of habitat and/or permanently remove essential habitat components. Temporary projects that exceed two seasons to complete will be considered permanent effects.

Season. A season is defined as the period between March 1st and September 1st, when golden-cheeked warblers are typically present in Texas. Project effects that can be completed outside of this period or, if necessary, within the same calendar year with an approved extension, will be considered occurring within one season.

Temporary Effects. Temporary effects are project activities that temporarily remove essential habitat components, but can be restored to pre-project conditions of equal or greater habitat value. Projects that are to be considered temporary effects must be able to implement the project and restore the affected habitat within two years.

BIOLOGICAL OPINION

Project Description

R. Yates Properties II, Ltd. (Applicant) proposes to construct a residential development (Bella Terra Ranch) consisting of approximately 43 lots within the approximately 458 acre (ac) tract. The proposed project site is located off of Upper Cibolo Creek Road just a few miles west of Boerne in Kendall County, Texas. The 458 ac tract is undeveloped with the exception of two residences with a barn and caliche roads traversing the site. Water supplies will be provided by water wells and wastewater treatment will be addressed by on-site septic systems approved and permitted by Kendall County and the Texas Commission on Environmental Quality (TCEQ), if necessary.

One jurisdictional waterway (Cibolo Creek) occurs on the proposed project site that will be impacted. A crossing of Cibolo Creek from Upper Cibolo Creek Road is unavoidable due to access restrictions of the site and, therefore, requires authorization pursuant to section 404 of the Clean Water Act in order to provide access.

Areas within the proposed project site and in the vicinity of Cibolo Creek have been determined to contain suitable habitat for the golden-cheeked warbler. Suitable habitat within the proposed project site is approximately 260 acres(ac)(157 ac of prime habitat plus a 300-ft woodland habitat buffer that, when established, will consist of approximately 103 ac). Surveys conducted in April and May 2008, detected approximately seven pairs of golden-cheeked warblers on the proposed project site. Analysis indicates two acres of suitable habitat will be directly or indirectly affected by the proposed development. Approximately six acres of buffer zone area will be directly or indirectly affected by the proposed development. Existing roads occur with 1.5 ac of suitable habitat and 2.3 ac of the buffer zone. Of the 458 total ac, 208 ac will be developed and approximately 249.7 ac will be unaffected and preserved.

Proposed Conservation Measures

The Applicant voluntarily proposes the following conservation measures, not required by this biological opinion, to minimize and avoid adverse effects and provide beneficial effects to golden-cheeked warblers from construction activities. The Applicant proposes to:

1. Clearing activities will occur outside of the nesting season (August 16 – February 28);
2. Minimize clearing for home sites, roads, and amenities;
3. Restore all newly-disturbed, non-impervious areas (including landscaping) with native vegetation including broadleaf trees (oaks) and shrubs;
4. Permanently preserve 249.7 acres of known occupied golden-cheeked warbler habitat through the establishment of permanent conservation easements to be in effect in perpetuity. Generally, the easement will be established within and around occupied canyons that occur throughout the property.
5. Survey the conservation easement but not stake it at this time;
6. Post the conservation easement against trespass with conspicuous signage;
7. Erect some partial fencing;
8. Subject all sales of any of the proposed lots in Bella Terra Ranch to the deeded conservation easement, a copy of which will be provided as an exhibit at each closing;
9. Include the terms of the conservation easement in the Conditions, Covenants, and Restrictions (CCRs), which will be filed as a matter of public record and enforceable by the applicable property owners association (POA) as well as each individual member of the POA;
10. File the deeded conservation easement and CCRs as a matter of record within a mutually agreeable, reasonable time following approval of this application; and,
11. Conduct annual golden-cheeked warbler surveys, as appropriate, with an initial protocol survey to be conducted in the spring of 2009.

Status of the species

For more information regarding the biology of the golden-cheeked warbler, please see the *1992 Golden-cheeked Warbler Recovery Plan* (Recovery Plan).

Species Description and Life-History

The golden-cheeked warbler was emergency listed as endangered on May 4, 1990 (55 Federal Register (FR) 18844). The final rule listing the species was published on December 27, 1990 (55 FR 53160). No critical habitat is designated for this species.

The golden-cheeked warbler is a small, insectivorous songbird, 4.5 to 5 inches (11.4 to 12.6 centimeters) long with a wingspan of approximately eight inches. Average breeding weight is 0.36 ounces (10.2 grams) for adult males and 0.33 ounces (9.4 grams) for adult females. Wings are black with two distinct white wing-bars. Males have a black back, throat, and cap, and yellow cheeks with a black eye strip. Females are similar, but duller overall in color (Service 1992).

Golden-cheeked warblers breed exclusively in the mixed Ashe juniper/deciduous woodlands of the central Texas Hill Country west and north of the Balcones Fault and require, for nest material, the shredding bark produced by mature Ashe junipers. Kroll (1980) estimates Ashe junipers begin producing this shedding bark at about 20 years of age. Typical deciduous woody species include Texas oak (*Quercus buckleyi*), Lacey oak (*Quercus glaucoides*), live oak (*Quercus fusiformis*), Texas ash (*Fraxinus texensis*), cedar elm (*Ulmus crassifolia*), hackberry (*Celtis occidentalis*), bigtooth maple (*Acer grandidentatum*), sycamore (*Platanus occidentalis*), Arizona walnut (*Juglans major*), and pecan (*Carya illinoensis*).

Breeding and nesting golden-cheeked warblers feed primarily on insects, spiders, and other arthropods found in Ashe junipers and associated deciduous tree species (Pulich 1976).

Male golden-cheeked warblers arrive in central Texas beginning on March 1st and begin to establish breeding territories, which they defend against other males by singing from visible perches within their territories. Females arrive a few days later, but are more difficult to detect in the dense woodland habitat. Three to five eggs are generally incubated in April, and unless there is a second nesting attempt, nestlings fledge in May to early June. By early August, golden-cheeked warblers begin their migration south. Golden-cheeked warblers winter in the highland pine-oak woodlands of southern Mexico and northern Central America.

Historic and Current Distribution

The golden-cheeked warbler's entire breeding range occurs on the Edwards Plateau and Lampasas Cut Plain of central Texas. Golden-cheeked warblers are confirmed in 26 counties and may occur in another 12 counties. However, many of the counties where it is known to occur, now or in the past, have only small amounts of suitable habitat (Pulich 1976, USFWS

1995b). For estimates of golden-cheeked warbler habitat availability rangewide, see McKinney and Sansom (1995) and Diamond and True (2002).

Travis County contains the greatest amount of golden-cheeked warbler habitat in large, contiguous blocks and lies at the center of the species' range (USFWS 1992). However, Bexar County also contains golden-cheeked warbler habitat, with the only remaining large blocks associated with Government Canyon State Natural Area and Camp Bullis. Other smaller areas in Bexar County that provide habitat include land owned and managed by the City of San Antonio Parks and Recreation Department, including Friedrich Wilderness Park, Crownridge, and Ironhorse.

Currently, there are only four significant known golden-cheeked warbler populations receiving some degree of protection: (1) those at the Balcones Canyonlands Preserve (BCP) in Travis County; (2) the nearby Balcones Canyonlands National Wildlife Refuge in Travis, Burnet, and Williamson counties; (3) the Fort Hood Military Reservation (Weinberg 1995) in Coryell and Bell counties; and, (4) Camp Bullis in Bexar County.

Before 1990, the primary reason for golden-cheeked warbler habitat loss was juniper clearing to improve conditions for livestock grazing. Since then, habitat loss has occurred as suburban developments spread into prime golden-cheeked warbler habitat along the Balcones Escarpment. Golden-cheeked warbler populations are limited primarily by the amount and configuration of available habitat. Pulich (1976) estimates that approximately 130,000 ac (52,608 ha) of potential habitat, or 35 percent, were lost from 1962-1990 and nesting territories have declined approximately 25 percent during that same period.

Activities that continue to threaten golden-cheeked warblers include the clearing of deciduous oaks upon which the warblers forage, oak wilt, nest parasitism by brown headed cowbirds (*Molothrus ater*) (Engels and Sexton 1994), drought, fire, stress associated with migration, and competition with other avian species (Ladd and Gass 1999).

Specifically, golden-cheeked warblers are threatened by loss of habitat from urbanization. Human activities have eliminated habitat within the central and northern parts of their respective ranges, particularly areas associated with the Austin and San Antonio metropolitan areas. Populations of golden-cheeked warbler and other neotropical migrants are less stable in small habitat patches surrounded by urbanization (Coldren 1998, Engels 1995, Arnold et al. 1996, Bolger et al. 1997). Some studies indicate that the abundance of several bird species, including golden-cheeked warblers, is reduced within 656-1640 feet (200-500 meters) of an urban edge (Engels 1995, Arnold et al. 1996, Bolger et al. 1997, Coldren 1998). Coldren (1998) reported that golden-cheeked warbler occupancy declined with increasing residential development and roadway width.

Range-wide Survival and Recovery Needs

The recovery strategy outlined in the Recovery Plan divides the breeding range of the golden-cheeked warbler into eight regions, or units, and calls for the protection of sufficient habitat to support at least one self-sustaining population in each unit. These recovery units were delineated based primarily on

watershed, vegetational, and geologic boundaries (USFWS 1992). The proposed action is located within Recovery Unit 6, which includes Bexar, Kendall, Comal, and portions of Bandera, Kerr, Gillespie, and Blanco counties.

Based on the Recovery Plan, protection and management of occupied habitat and minimization of further degradation, development, or environmental modification of unoccupied habitat are necessary to provide for the survival of the species. Habitat protection must include elements of both breeding and non-breeding habitat (i.e., associated uplands and migration corridors). Efforts to create new and protect existing habitat will enhance the golden-cheeked warbler's ability to expand in distribution and numbers. Efforts to increase numbers of existing viable populations is critical to the survival and recovery of this species, particularly when rapidly expanding urbanization continues to result in the loss of prime breeding habitat.

Catastrophic fires within occupied habitats could result in the loss of significant portions of habitat and/or entire existing populations within each recovery unit. Efforts to control accidental fires should continue to be a priority to minimize the chance of significant loss of breeding golden-cheeked warblers and the habitat necessary to allow for expansion of distribution and numbers of golden-cheeked warblers.

In order to accurately assess the status of the golden-cheeked warbler, formal surveys need to be conducted across its range in Central Texas. However, access to private lands to conduct formal surveys continues to be difficult to obtain. The *Golden-cheeked Warbler Population and Habitat Assessment Report* (USFWS 1995b) indicates that only a few counties (e.g., Bexar, Travis, Bell, Coryell) have been intensively surveyed in an appropriate manner. Other counties within the species' range also require surveys.

Population viability assessments on golden-cheeked warblers have indicated the most sensitive factors affecting their continued existence are population size per patch, fecundity (productivity or number of young per adult), and fledgling survival. It is estimated that a minimum of 32,500 acres (13,152 hectares) of prime unfragmented habitat must be preserved to reduce the possibility of extinction in the next 100 years to less than five percent (USFWS 1995b). This acreage is estimated to provide the carrying capacity for 3,000 breeding pairs. Further, this minimum carrying capacity threshold estimate increases with poorer quality habitat (i.e., patchy habitat resulting from urbanization).

Environmental Baseline

Golden-cheeked warbler

Status within the Action Area

The Service considers the action area to include all habitat located within the property boundaries of the proposed development.

The proposed project area includes approximately 260 ac of golden-cheeked warbler habitat. Of this, 103 ac are suitable habitat, but not known to be occupied, and 157 ac are known to be occupied habitat. The habitat areas are found mostly on various forested hillsides and canyons found on the property.

Golden-cheeked warblers were first documented on the property in 2008 using non-Service protocol level surveys. Numerous audible and visual occurrences were documented. Based on the proximity of each observation to other observations (clusters), we are estimating that as many as five territories are located within the canyons throughout the property.

Factors affecting golden-cheeked warblers within the action area

Surrounding pressures from the expanding urbanization of Boerne and the greater San Antonio area continue to result in a reduction in the amount of habitat available to golden-cheeked warblers. Adverse effects from construction of the proposed project may include habitat disturbance and/or destruction.

Five previous Service golden-cheeked warbler consultations have involved lands near the action area: (1) Government Canyon - Housing and Urban Development land disposal of San Antonio Ranch in Bexar County resulting in take of 45.1 ac (18 ha) of golden-cheeked warbler habitat (Service File 21450-1993-F-0170); (2) Canyon Springs Ranch – Mayberry Tract in Bexar County just north of the intersection of Hwy 281 and Stone Oak Pkwy resulting in two territories and 11.25 ac of habitat modified (surveys prior to construction identified 15 ac (6 ha) of suitable habitat and two pairs were detected) (Service File 21450-1997-F-0386); (3) a consultation involving golden-cheeked warblers was conducted for the construction of a City Public Services transmission line near Government Canyon State Natural Area resulting in direct and indirect take of golden-cheeked warblers potentially occurring within 10.59 ac of golden-cheeked warbler habitat (Consultation Number 21450-2003-F-0344); (4) a consultation regarding routine operations of Camp Bullis military installation (21450-2002-F-0315); and, (5) Camp Stanley (21450-2007-F-0128), northwestern Bexar County.

Effects of the Proposed Action

Beneficial effects – Occupied habitat proposed for protection through on-site permanent conservation easements will provide population benefits that are not threatened by the factors that contributed to listing the species. Conservation measures implemented now shall secure protected habitat areas distributed across the proposed project area and shall contribute to securing habitat within an area threatened by urbanization.

Direct effects – Projects that may remove vegetation or create erosive conditions could result in direct effects to golden-cheeked warblers. Any given disturbance within the nesting season near occupied habitat areas could cause golden-cheeked warblers to move into areas of unsuitable habitat where they will experience greater risk of predation or other sources of mortality.

Indirect effects – Utility lines, road improvements, drainage facility improvements, and recreational structures, may all potentially increase use of areas not previously used and may have indirect effects to

golden-cheeked warblers. Activities that create noise associated with construction could also indirectly effect golden-cheeked warblers.

Timing – Projects occurring outside of the nesting and post-fledging periods for golden-cheeked warblers minimize and avoid most adverse effects to golden-cheeked warblers. However, construction activities occur year round and there is very little flexibility to alter timing of activities for this project. To the greatest extent practicable, those projects that occur in golden-cheeked warbler habitat will be implemented outside of the nesting and post-fledging season.

Establishment of nesting territories by, and post-fledging activity of, golden-cheeked warblers generally occurs March to September. Golden-cheeked warblers generally fledge in late April to mid-May and spend the rest of the summer foraging in upland and/or riparian habitats. Initial nesting success and successful foraging through the nesting and post-fledging period is critical to reproductive success for both species. Disturbance during this time may lessen reproductive success.

Cumulative Effects

Cumulative effects include the effects of future State, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

An undetermined number of future land use conversions and routine agricultural practices are not subject to Federal authorization or funding and may alter the habitat or increase incidental take of golden-cheeked warblers, and are, therefore, cumulative to the proposed project. These additional cumulative effects include: (1) unpredictable fluctuations in habitat due to urbanization; (2) increase in impervious cover due to urbanization and the installation of appurtenant facilities, i.e., roads, etc.; (3) use of pesticides on listed species habitat; (4) contaminated runoff from agriculture and urbanization; (5) nest parasitism; and, (6) predation by feral animals and pets.

The proposed conservation easements that contain golden-cheeked warbler habitat represent safe havens for nesting golden-cheeked warblers within and ever urbanizing landscape. The area around Boerne is quickly being developed and habitat for listed species, including golden-cheeked warblers, continues to be converted to other uses. It is theorized that much of the increase in densities of golden-cheeked warblers on protected areas has been attributed, in part, to habitat loss immediately surrounding the protected area creating a sink for golden-cheeked warblers.

Other than three Parks (Government Canyon State Natural Area, Guadalupe River State Park and Friedrich Wilderness Park) and Camp Bullis military installation, there is continued conversion of golden-cheeked warbler habitat to urban uses around Boerne. Although construction of a residential community will cause take, the overall effect of protecting occupied areas within the property through a permanent conservation easement will benefit the species. In addition, the construction plans will serve to minimize or avoid detrimental effects.

Conclusion

After reviewing the current status of the golden-cheeked warbler, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is the Service's biological opinion that the project, as proposed, will not likely jeopardize the continued existence of the golden-cheeked warbler. No critical habitat occurs within the project area for these species, therefore, none will be affected.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined by the Service as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding and sheltering. Harm is defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by impairing behavioral patterns including breeding, feeding, and sheltering. Incidental take is defined by the Service as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act, provided that such taking is in compliance with this Incidental Take Statement.

The measures described below are nondiscretionary and must be implemented by Mr. Yates and the Corps so that they become binding conditions of future acquisition of the site, either as a whole or in part, in order for the exemption in section 7(o) (2) to apply. The Corps has a continuing duty to regulate the activity covered by this Incidental Take Statement. If the Corps (1) fails to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the authorizations, and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

Amount or Extent of Take

Individual golden-cheeked warblers are difficult to detect unless they are observed, undisturbed, in their environment. Most close-range observations of golden-cheeked warblers represent chance encounters that are difficult to predict. The project effects authorized under this biological opinion will vary, but are expected to have moderate indirect and direct effects. The Service anticipates incidental take of golden-cheeked warblers will occur as a result of the proposed action. Although the majority of the occupied habitat will be permanently protected (249.7 ac), the Service anticipates that as many as two pairs of golden-cheeked warblers may become displaced by the construction, specifically the two pairs detected in the front portion of the property nearest Upper Cibolo Creek. Beneficial effects will result

from long-term management actions that will be implemented through the establishment and management of a permanent conservation easement and will likely off-set adverse actions that result from the proposed action and provide additional benefits to the conservation of the golden-cheeked warbler.

The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize the effects of incidental take that might otherwise result from the proposed action. With implementation of these measures, the Service believes that no more than 20 ac of golden-cheeked warbler habitat will be temporarily or permanently affected by the proposed construction and approximately 249 ac will be permanently protected by the establishment of the permanent conservation easement.

Take associated with scientific collection and monitoring purposes for listed species will be authorized by individual section 10(a)1(A) permits.

Effect of the Take

In the accompanying biological opinion, the Service has determined that this level of anticipated take is not likely to result in jeopardy to the golden-cheeked warbler. No critical habitat is designated for the golden-cheeked warbler, therefore, none will be affected.

Reasonable and Prudent Measures

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize incidental take of golden-cheeked warblers.

The Corps shall:

1. Minimize harassment and harm of golden-cheeked warblers during activities associated with implementing the project authorized by this biological opinion; and,
2. Minimize effects of temporary and/or permanent losses and degradation of habitat of golden-cheeked warblers and, to the greatest extent practicable, minimization shall include habitat restoration to pre-project conditions.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the Act, the Corps must comply with the following terms and conditions that implement the reasonable and prudent measures described above and outline required reporting/monitoring requirement. These terms and conditions are non-discretionary.

1. The following terms and conditions implement reasonable and prudent measure number one and two:

- A. The Corps and the property owner shall implement the conservation measures listed on page 3 and 4 of this biological opinion;
 - B. To the greatest extent practicable, authorized activities within or near (within 300 feet of) golden-cheeked warbler habitat should be conducted between September 1 and February 28. This is the non-nesting period for golden-cheeked warblers and potential adverse effects are minimized and avoided;
 - C. All personnel involved in any authorized activity covered by this biological opinion shall be informed of the terms and conditions of this biological opinion prior to the implementation of the authorized activity;
 - D. Golden-cheeked warblers encountered during authorized activities should be allowed to move away from activities on their own. Capture and relocation of trapped or injured individuals can only be attempted by personnel or individuals with current Service recovery permits pursuant to section 10(a)1(A) of the Act;
 - E. To the greatest extent practicable, movement of heavy equipment to and from a project site shall be restricted to established roadways to minimize habitat disturbance; and,
 - F. Golden-cheeked warbler surveys shall be conducted annually, as appropriate, to facilitate routine operation planning efforts to avoid and minimize adverse effects caused by routine operations.
2. The following terms and conditions implement reasonable and prudent measure number two:
- A. Known occupied habitat of golden-cheeked warblers shall be designated as Environmentally Sensitive Areas and personnel shall, to the greatest extent practicable, avoid such areas;
 - B. After completion of activities covered by this biological opinion that result in habitat alteration, any temporary fill, construction, or other debris shall be removed and, wherever feasible, disturbed areas shall be restored to pre-project conditions utilizing native plants for re-vegetation; and,
 - C. The Corps shall ensure compliance with the Reporting Requirements below to assist in management decisions to avoid and minimize effects on golden-cheeked warblers and their associated habitats.

Reporting Requirements

Appropriate Corp and/or construction personnel shall notify the Service immediately if golden-cheeked warblers are found on site as detailed in term and condition 1D, and will submit a report including

date(s), location(s), habitat description, and any voluntary corrective measures taken to protect each bird found. Appropriate personnel shall submit locality information to the TPWD no more than 90 calendar days after completing the last field visit of the project site. Each form shall have an accompanying scale map of the site such as a photocopy of a portion of the appropriate 7.5 minute U.S. Geological Survey map and shall provide at least the following information: name of the quadrangle; dates (day, month, year) of field work; number of individuals and life stage (where appropriate) encountered; and a description of the habitat by community-vegetation type.

Where temporary or permanent adverse effects occur, a post-activity report shall be forwarded to the Field Supervisor, Austin Ecological Services Field Office, within 60 calendar days of the completion of such activities. This report shall detail (1) dates that activity occurred; (2) pertinent information concerning the success in implementing restoration measures; (3) an explanation of failure to meet such measures, if any; (4) known project effects on federally-listed species, if any; (5) occurrences of incidental take of federally listed species, if any; and (6) other pertinent information.

The Austin Ecological Services Field Office is to be notified within three working days of the finding of any dead listed species or any unanticipated harm to the species addressed in this programmatic biological opinion. The Service contact person for this is the Field Supervisor at (512) 490-0057.

Review Requirements

The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize the effects of incidental take that might otherwise result from the proposed action. If, during the course of the authorized activities, the level of incidental take authorized by this biological opinion is exceeded prior to the annual review, such incidental take represents new information requiring review of the reasonable and prudent measures provided. The Corps must immediately provide an explanation of the causes of the taking and review with the Service the need for possible modification of the reasonable and prudent measures. This biological opinion will expire five years from the date of issuance of this biological opinion. Issuance of a new or revised biological opinion will be subject to evaluation of the recovery of the species.

Conservation Recommendations

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

The recommendations provided here relate only to the proposed action and do not necessarily represent complete fulfillment of the agency's section 7(a)(1) responsibilities for these species.

1. The Corps should assist the Service in the development and implementation of the recovery plan for the golden-cheeked warbler;

2. The Corps should incorporate into permits the terms and conditions of this biological opinion, when appropriate; and,
3. The Corps, in partnership with the Service, should develop maintenance guidelines for Corps projects that will reduce adverse effects on listed species and their habitat and work with the Service to develop programmatic biological opinions, as appropriate. Such actions may contribute to the delisting and recovery of listed species by preventing degradation of existing habitat and increasing the amount and stability of suitable habitat.

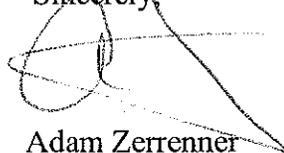
In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

Reinitiation Notice

This concludes formal consultation on the construction of Bella Terra Ranch residential project located in Kendall County, Texas. As provided in 50 CFR Sec. 402.16, reinitiation of formal consultation is required where discretionary federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this consultation; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this biological opinion; or, (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

If you have any questions regarding this biological opinion, please contact Allison Arnold at (512) 490-0057, extension 242.

Sincerely,



Adam Zerrenner
Field Supervisor

cc: Rodney Yates, Yates Insurance, Boerne, Texas
Robert Kelly, Kelly and Nevins, L.L.P., Kerville, Texas

Literature Cited

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