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Biological Opinion for TE-102437-0 (Cibolo Canyon Master Phase II)

This document transmits the U.S. Fish and Wildlife Service's (Service) non-jeopardy biological opinion regarding the issuance of an incidental take permit under the Endangered Species Act of 1973 (Act), as amended, authorizing incidental take of the federally listed endangered golden-cheeked warbler (*Dendroica chrysoparia*) under the authority of §10(a)(1)(B) and §10(a)(2) of the Act. Lumbermen's Investment Corporation (LIC) has submitted an application for an incidental take permit under the Act for take of the golden-cheeked warbler (GCWA). An Environmental Assessment/Habitat Conservation Plan (EA/HCP) has been reviewed for mitigation acceptability. The implementing regulations for §10(a)(1)(B) of the Act, as provided for by 50 CFR 17.22, specify the criteria by which a permit allowing incidental "take" of listed endangered species pursuant to otherwise lawful activities may be obtained. The purpose and need for the §10(a)(1)(B) permit is to ensure that the impacts of the incidental take resulting from the proposed construction and operation of the Cibolo Canyon Master Phase II development in Bexar County, Texas, (Figure 1) will be minimized and mitigated to the maximum extent practicable, and that the take is not expected to appreciably reduce the likelihood of the survival and recovery of this federally listed endangered species in the wild. Since no critical habitat has been designated for the GCWA, none will be adversely modified or destroyed.

This biological opinion (BO) is based on information provided in the Cibolo Canyon Master Phase II EA/HCP, Golden-cheeked Warbler Recovery Plan (U.S. Fish and Wildlife Service 1992), field investigations, and other sources of information in our files. A complete administrative record of this consultation is on file at the Austin, Texas, field office.

Consultation History

On January 30, 2002, the Service sent LIC a letter requesting a meeting to discuss the proposed development and possible endangered species impacts. LIC responded with a February 4, 2002, letter agreeing such a meeting would be beneficial. The meeting was held on February 12, 2002, which initiated the consultation process. Since that time numerous meetings have been both on-site, and at the Service's office. From September 2003, to May 2005, the Service reviewed and commented on six draft versions of the EA/HCP. The Notice of Availability of the EA/HCP and Receipt of Application for an Incidental Take Permit was published May 2, 2005, for a 60-day public comment period.

BIOLOGICAL OPINION

I. Description of Proposed Action

The proposed action includes the issuance of a permit under §10(a)(1)(B) of the Act to authorize incidental take of the GCWA during the construction and operation of a mixed use community, including hotel-resort, golf, commercial, and residential development. The Cibolo Canyon property has been divided into two development phases: Master Phase I and Master Phase II (Figure 2). Master Phase I is located in the southern and western sections of the Cibolo Canyon

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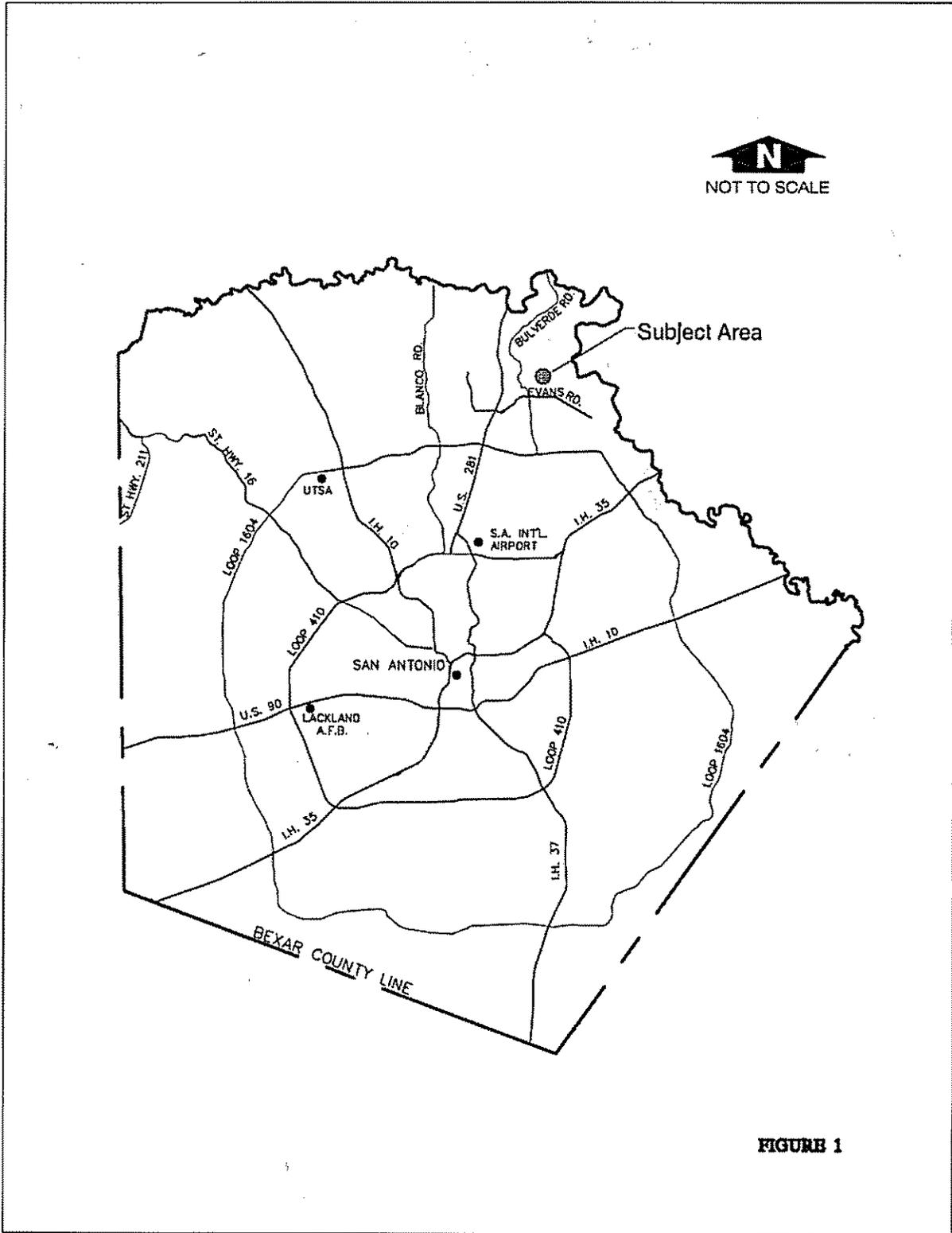


FIGURE 1

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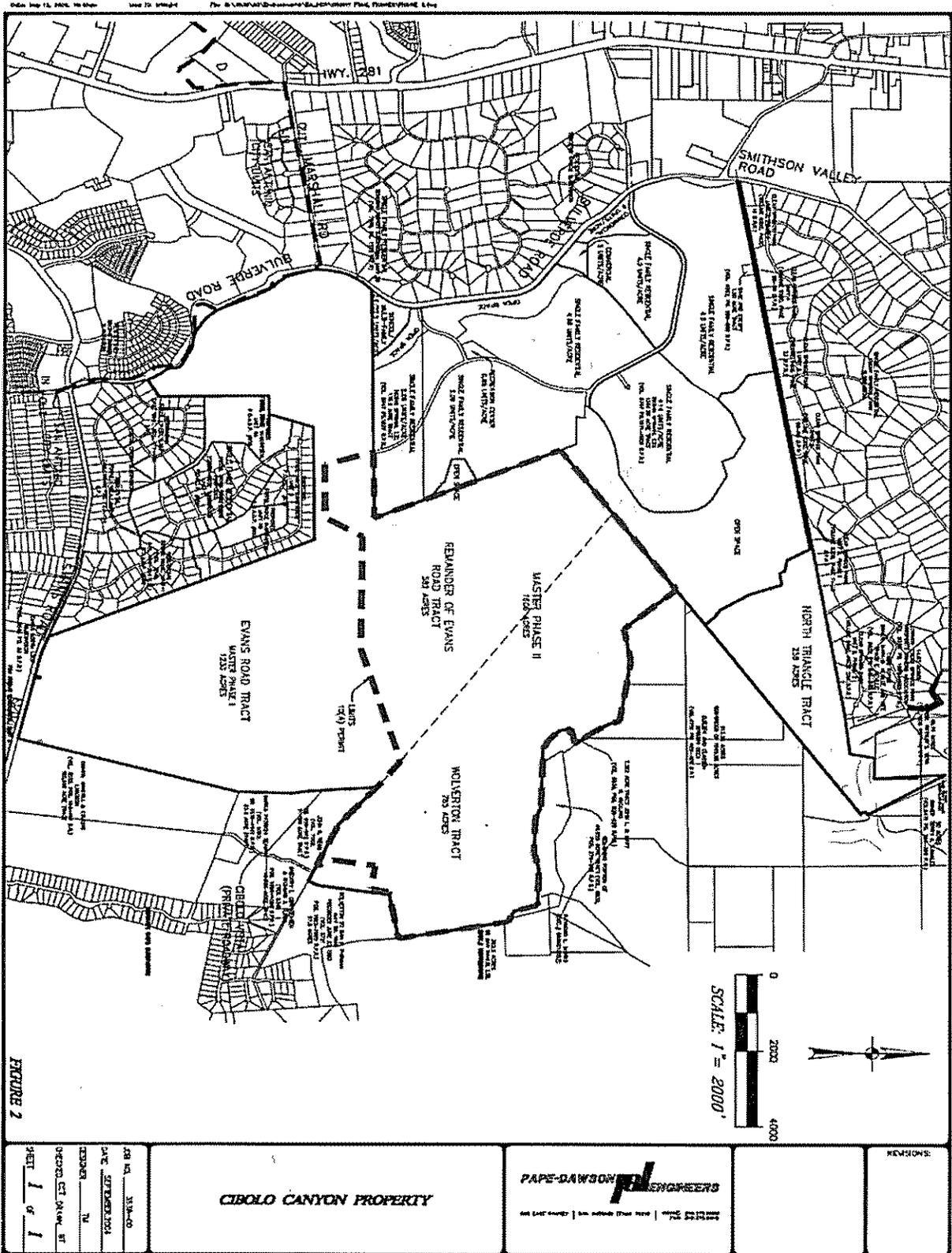


FIGURE 2

<p>ASB BY: 3/19/03 DATE: 3/19/03 DRAWN: TL CHECKED: CCI/PAW/ST SHEET 1 of 1</p>	<p>CIBOLO CANYON PROPERTY</p>	<p>PAPE-DAWSON ENGINEERS</p> <p>1000 N. GARDNER STREET, SUITE 1000, DENVER, CO 80202 TEL: 303.733.8800 FAX: 303.733.8801 WWW.PAPE-DAWSON.COM</p>	<p>REVISIONS:</p>
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property and totals approximately 1,249 acres (505.5 hectares). Based upon the information LIC had available, it determined no impacts to threatened or endangered species would occur as a result of developing Master Phase I. As such, it elected not to pursue coverage under the Act with respect to Master Phase I. Master Phase II is located in the northern and eastern section of the Cibolo Canyon Property and totals approximately 1,606 acres (650 hectares). This biological opinion addresses impacts to federally-listed species as a result of Master Phase II only.

II. Status of the Species

Presently there are eleven federally listed species that occur in Bexar County, two neotropical migratory songbirds and nine karst invertebrates. The eleven listed species include the following: GCWA, black-capped vireo (*Vireo atricapilla*) (BCVI), Helotes mold beetle (*Batrisesodes venyivi*), Cokendolpher Cave harvestman (*Texella cokendolpheri*), Robber Baron Cave spider (*Cicurina baronia*), Madla's Cave meshweaver (*C. madla*), Government Canyon Bat Cave spider (*Neoleptoneta microps*), Government Canyon Bat Cave Meshweaver (*C. vespera*), Braken Bat Cave Meshweaver (*C. venii*), and two beetles (*Rhadine exilis* and *R. infernalis*) that do not have common names.

In addition, another nine species listed as threatened, endangered, or candidate species reside in the San Marcos, Comal, Fern Bank, and Hueco springs and their associated aquatic ecosystems, and the San Antonio Segment of the Edwards (Balcones Fault Zone) Aquifer. Portions of the recharge, contributing, and artesian zones of this segment are included within Bexar County and certain activities occurring within these areas may or may not affect the quality and/or quantity of water within the Edwards Aquifer, and thereby may or may not affect these species. Seven of these species are endangered: Peck's cave amphipod (*Stygobromus pecki*), Comal Springs riffle beetle (*Heterelmis comalensis*), Comal Springs dryopid beetle (*Stygoparnus comalensis*), San Marcos gambusia (*Gambusia georgei*), fountain darter (*Etheostoma fonticola*), Texas blind salamander (*Typhlomolge rathbuni*), and Texas wild-rice (*Zizania texana*). The San Marcos salamander (*Eurycea nana*) is listed as threatened. These eight species are referred to as "Edwards Aquifer Species." The Cagle's map turtle (*Graptemys caglei*), restricted almost exclusively to the Guadalupe and San Marcos rivers, may also be influenced by flows from the Edwards Aquifer and is designated as a candidate species.

There is no evidence of any threatened or endangered species other than the GCWA occurring on or adjacent to the Property (see Sections 3.3.2 and 3.3.3 of the EA/HCP). Additionally, no significant impacts to Edwards Aquifer Species are anticipated (see Sections 5.1.2.3, and 5.1.4.3 of the EA/HCP). Therefore, only the GCWA will be considered further in this BO. Critical habitat has not been proposed for the GCWA, and will not be discussed further in this BO.

Golden-cheeked warbler

A complete description of the GCWA, threats to the species, and its life history are located in the Golden-cheeked Warbler Recovery Plan (U.S. Fish and Wildlife Service 1992).

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III. Environmental Baseline

A. Range-wide Status of the GCWA

GCWA Range-wide Habitat

The GCWA's entire breeding range is found within the Edwards Plateau and the Lampasas Cut Plain. The species is known to occur in 26 counties and may possibly occur in another 12 counties. It no longer occurs in three counties within its historic range. 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, U.S. Fish and Wildlife 1996, Lasley et. al. 1997).

As of 1988, there were an estimated 814,220 acres (329,503 hectares) of potential GCWA habitat available (from Wahl et al. 1990). Later studies using Landsat data (McKinney and Sansom 1995, Diamond and True ca. 1999) estimated a total of 1,271,236 acres (514,451 hectares) to 1,349,066 acres (545,948 hectares) of potential GCWA habitat range wide. Based upon 1996 and 1997 satellite imagery, Diamond and True (1999) estimated there was 61,132 acres (24,740 hectares) of warbler habitat in Bexar County, of which approximately 20,479 acres (8,288 hectares) were in patches greater than 618 acres (250 hectares). No more recent analysis on the amount of GCWA habitat range-wide or in Bexar County exists. However, these studies are currently underway.

Both authorized and unauthorized destruction of GCWA habitat in the San Antonio area has occurred over the years. Clark (1985) observed a loss of woody cover at an 11.6 percent annual rate in the San Antonio area, and a 5.3 percent annual rate in the urban corridor between Austin and San Antonio for the period 1973 to 1979. Similarly, Wahl et al. (1990) observed an annual rate of loss of 4.4 percent in the same area (Canyon Lake) for GCWA habitat. It is likely these rates have continued since these studies, and that substantially less habitat than the estimates identified above remain. Unfortunately because of the inherent errors in the necessarily gross estimates and lack of adequate ground truthing, the numbers above cannot be translated into estimates of land use change or population size. Nevertheless, in all studies, Travis County ranked first or second in having the most habitat in the largest contiguous blocks. Adjacent Williamson, Hays, Blanco, and Burnet counties also contain GCWA habitat, but it tends to be found in smaller, more fragmented blocks. Other large blocks of habitat occur on the Fort Hood military reservation in Bell and Coryell counties and in Real, Bandera, and Kerr counties. Comal and Bexar counties also have significant amounts of habitat. There is little connectivity between the large habitat blocks in Travis County and other large blocks in adjacent recovery regions to the north and the south (Pulich 1976, Wahl et al. 1990, McKinney and Sansom 1995, Diamond and True ca. 1999).

GCWA Rangewide Population

Annual reports from Fort Hood and the Balcones Canyonlands Preserve (BCP) indicate that the species currently appears to be relatively stable (City of Austin and Travis County 2003, Holiman and Craft 2000, Anders 2000), but urban development is continuing in GCWA habitat. Existing estimates of population size have been based on assessments of suitable habitat and

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territory size. In 1974, Pulich (1976) estimated the total population at 15,000 to 17,000 adults. Wahl et al. (1990) estimated the population size to be 4,822 to 16,016 pairs. In 1990, the Service reviewed all available information and estimated the population to be approximately 13,800 territories [pairs] (U.S. Fish and Wildlife 1992). There have been no recent estimates of population size.

Studies at Fort Hood military reservation in Bell and Coryell counties have found fledging rates ranging from 0.75 to 1.74 per adult warbler over 10 years of observations (Anders 2000). At Fort Hood, approximately 87 percent of all territorial males are mated (T. Hayden, US Army-CERL, pers. comm.). Over four years, survival rates for GCWAs in their first year were estimated at 30 to 42 percent and after their first year at 56 to 69 percent (Unpublished data, Texas Nature Conservancy, Fort Hood project; Pulich 1976; unpublished data, Balcones Canyonlands National Wildlife Refuge; U.S. Fish and Wildlife 2002). The dispersal distance of birds from their birth site to their first breeding site is not well known, but could possibly be as much as 124 miles (200 kilometers) (Robinson 1992). Adult GCWAs, on the other hand, show high site fidelity (Holiman and Craft 2000, Anders 2000), and the return rate of banded birds at Fort Hood is considered to approximate the survival rate for adults (U.S. Fish and Wildlife 2002).

Rangewide Recovery Strategy

The recovery strategy outlined in the Golden-cheeked Warbler Recovery Plan (U.S. Fish and Wildlife 1992) divides the range of the GCWA into eight regions and calls for the protection of sufficient habitat to support at least one self-sustaining population in each region. The 1996 and 2002 population viability analyses (PVAs) recommend that a self-sustaining population should be approximately 3,000 pairs (U.S. Fish and Wildlife Service 1996, 2002). These PVAs have shown that the most sensitive factors affecting the continued existence of the species are population size per patch, fecundity (productivity or number of young per adult), and fledgling survival. GCWA occupancy and productivity of "small" patches of habitat are considerably lower than in larger patches (Coldren 1998, Maas-Barleigh 1997). The 1996 PVA found that the risk of extinction for a GCWA population increases dramatically as the carrying capacity drops below 1,000 breeding pairs. This suggests that a minimum habitat objective for management of this species should be creation or maintenance of enough habitat to support a potential population of at least 1,000 breeding pairs. At an average of 10.6 acres (4.3 hectares) per pair, based on Fort Hood data, 10,637 acres (4,305 hectares) of high quality habitat would be required. If the population shows characteristics of a metapopulation, as is likely, the size of the population per patch can be lower, depending on dispersal and recolonization rates (U.S. Fish and Wildlife 1996, 2002).

Currently there are only three large GCWA populations receiving some degree of protection: at the BCP [a regional habitat conservation plan PRT-788841] in Travis County; the nearby Balcones Canyonlands National Wildlife Refuge in Travis, Burnet, and Williamson counties; and Fort Hood Military Reservation (Anders 2000) in Coryell and Bell counties. Other important areas receiving some protection include Government Canyon State Natural Area and Camp Bullis in Bexar County, Kerr Wildlife Management Area in Kerr County; and Lost Maples

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State Park in Bandera County. It is likely that preservation and management of the 760-acre preserve, as proposed under the Cibolo Canyon HCP, along with the adjacent 331-acre (134 hectares) Indian Springs GCWA preserve will contribute significantly towards the creation and establishment of an important new third GCWA preserve in the Bexar County area. This may have significant benefits towards achieving recovery of the species.

The recovery plan is however likely to be revised in the future. In response to this, and based on Landsat data and suggestions from the Golden-Cheeked Warbler Recovery Team, during a 1998 meeting, the Service redrafted the Golden-Cheeked Warbler Recovery Unit boundaries. In 2003, maps with the proposed boundary changes were sent to all Golden-Cheeked Warbler Recovery Team members for comment. These boundaries have not yet been officially approved but are likely to be incorporated into any revision. The new configuration would encompass the same total area within six recovery units instead of eight. Eight viable populations would still be necessary before down-listing would be considered. One viable population would be required for each of four units and two viable populations would be necessary in the two units considered to encompass the core range of the species. The two core revised recovery units are 3 and 5. Recovery unit 5 encompasses Bexar and Comal counties, almost all of Kendall County, the eastern portions of Bandera, Kerr, and Medina counties, southern portions of Blanco and Hays counties, and a very small portion of southeastern Travis County. The Cibolo Canyon Property is located within the revised, but not approved, recovery unit number 5. Studies are currently underway to determine the feasibility of establishing two viable populations in this recovery unit. Preliminary information from this study indicates there are currently approximately 257,591 acres of known and potential habitat within the proposed recovery unit 5 (Paul Sunby, SWCA, pers. comm. 2005).

B. Status of the GCWA within the Action Area

The proposed section 10(a)(1)(B) permit is to cover impacts to the GCWA associated with development and operation of Master Phase II of the Cibolo Canyon Property. Because of this, the Service considers the action area to be Master Phase II. Master Phase II is located in the northern and eastern section of the Cibolo Canyon Property and totals approximately 1,606 acres (Figure 2).

The Master Phase II property provides habitat of varying quality for the GCWA. Habitat in this context is not limited to just breeding habitat, but also includes feeding and sheltering habitat. During the course of a breeding season, it is expected the GCWA could be found exhibiting breeding, feeding, and/or sheltering behavior at locations across much of Master Phase II. Generally, the upland area consists of varying quality GCWA habitat, while steep canyon areas are higher quality habitat. The structural and compositional vegetative elements of the proposed development site constitute lower quality GCWA habitat than the area proposed for mitigation. Low quality habitat equates to sub-optimal vegetation for GCWA feeding, sheltering, and/or breeding. In comparison, the structural and compositional vegetative elements of the GCWA habitat in the 760-acre conservation area constitutes optimal GCWA habitat as indicated by increased canopy cover, higher densities of GCWAs, and more intense GCWA utilization.

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GCWA surveys have been conducted on portions of the Cibolo Canyon property at various times since 1995. As shown on Figure 3, these surveys have detected the presence of the GCWA across much of the Master Phase II Property. Surveys of GCWAs were conducted by Horizon in 1995, 1997, 1998, 1999, and 2004 on all or a portion of the Evans Road Tract (western most tract of Master Phase II). In addition, in 2002 aci conducted a one-day GCWA census on the Master Phase II portion of the Evans Road Tract (aci 2002b). In 2003 and 2004, aci conducted GCWA surveys on the North Triangle Tract (northern most tract of Master Phase II). Finally, in 2004 Horizon conducted GCWA surveys on portions of the Wolverton Tract (eastern most tract of Master Phase II). The Service has reviewed all Horizon and aci survey reports and available field data. Figure 3 is a map prepared by the Service depicting all GCWA observations from all of these survey efforts, with the observations coded both by year, and by observing party.

Critical habitat has not been designated for the GCWA. Therefore, none will be impacted.

IV. Effects of the Action

Direct Effects

Direct effects include the direct or immediate effects of the project on the species or its habitat. Future Federal actions that are not a direct effect of the action under consideration (and not included in the environmental baseline or treated as indirect effects) are not considered in the BO.

Issuance of this permit will result in the destruction of 846 acres of GCWA habitat. At various times during the previous survey efforts, GCWAs have been observed using most of the 846-acre development envelope (Figure 3). These surveys, however, have been conducted at a "presence/absence" level of effort, thus limiting the ability to either delineate or reliably count GCWA territories that may have been present. Based on the Service's review of all of the survey data, it estimated that as many as 8 territories have been supported, or partially supported, within the proposed development area. Under the proposed alternative, clearing in all areas of GCWA habitat would occur during the time of year when the GCWA has migrated and is not present. Potential impacts to the GCWA could occur when returning individuals find previous habitat areas have been modified and as a result, there has been a general reduction in available habitat.

GCWA surveys on the North Triangle and Wolverton Tracts (area to be preserved and managed for the GCWA) have estimated that 12 GCWA territories that have been supported, or partially supported, within the approximately 760-acre conservation area (Figure 3). The 760-acre conservation area occurs adjacent to a 331-acre block of preserved contiguous GCWA habitat to the west, and a large block of privately-owned potential GCWA habitat to the east, which opens onto extensive ranch lands. Therefore, the GCWA habitat proposed as mitigation in this permit will be a part of a larger high quality patch of GCWA habitat to remain undisturbed in perpetuity. Since the 760-acre conservation area would be managed to preserve, maintain, and

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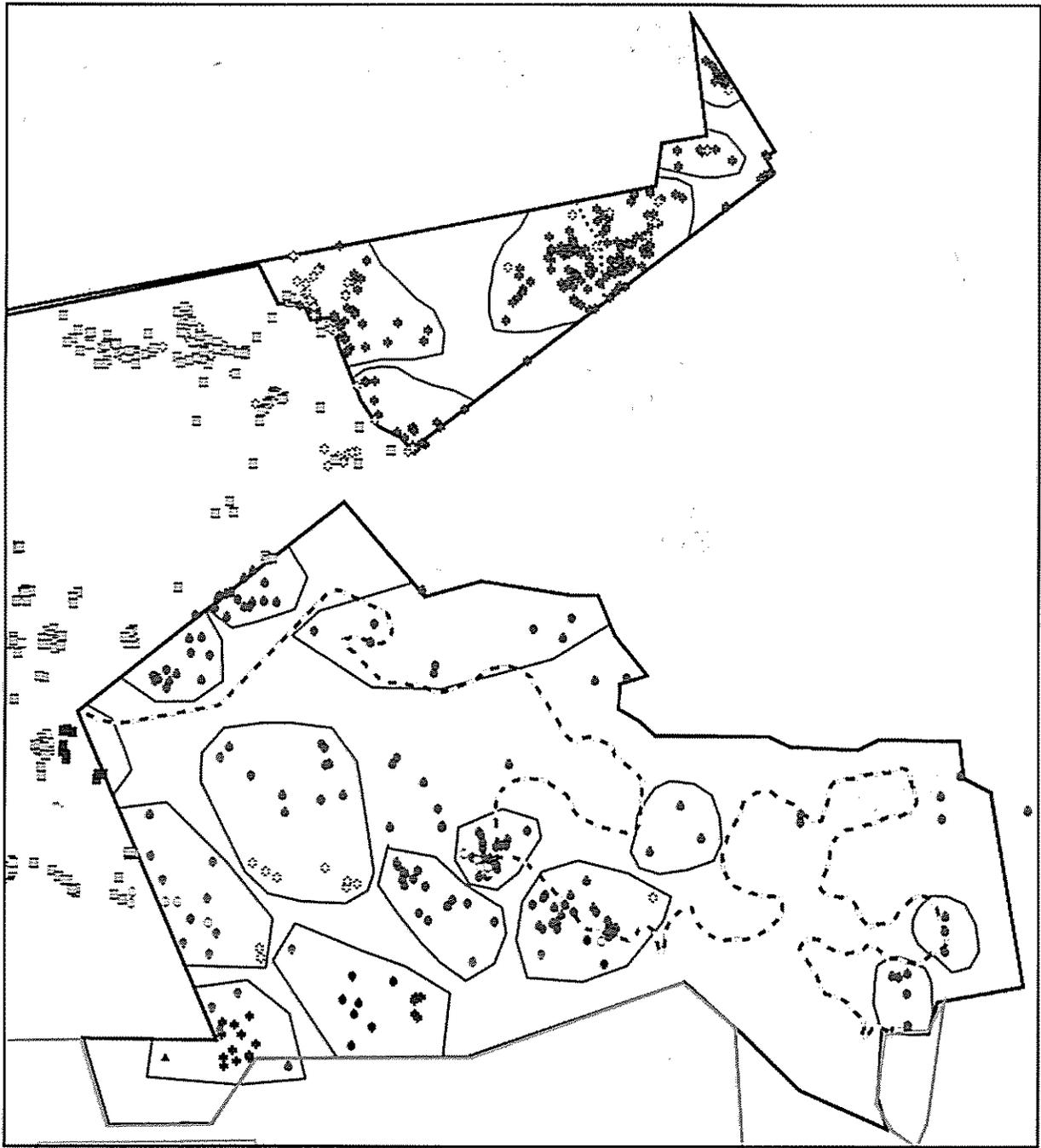


Figure 3. Cibolo Canyon GCWA survey information

- 1997 Horizon ▲ 2003 Service
- 1998 Horizon ⊕ 2004 ab
- ⊖ 1999 Horizon ⊛ 2004 Horizon
- ▨ 2001 SWCA ▭ Cibolo canyon master phase 1
- ▧ 2002 SWCA ▩ Cibolo canyon master phase 2
- ⊕ 2002 ab — territories
- ▩ 2003 SWCA — Cibolo Canyon Dev Line
- ⊕ 2003 ab approximate territory boundary



0 500 1,000 2,000 3,000 4,000 Feet

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improve the existing habitat for the benefit of the GCWA, it is expected this population will continue to thrive and possibly expand.

No Critical Habitat has been designated for this species. Therefore, none will be impacted.

Indirect Effects

Indirect effects are caused by or result from the proposed action, are later in time, and are reasonably certain to occur.

Indirect impacts as a result of issuing this permit may include a reduction in overall nesting, foraging, and breeding on adjacent remaining habitat. This would be primarily from the encroachment of noise and activity within close proximity of GCWA habitat, introduction or increase of predator species (e.g., scrub jays [*Aphelocoma coerulescens*], cats), and increase of species that may compete with the GCWA for shelter, feeding and nesting resources (such as brown-headed cowbirds [*Molothrus ater*]). The habitat identified as being preserved will likely experience some level of indirect impacts. These impacts may be lessened in the future as a result of a shift in the location of some birds away from the development. It is expected enough habitat will remain for the GCWA to persist.

These potential indirect impacts will be minimized and mitigated to the maximum extent practicable by the conditions identified in the HCP, and by the synergism resulting from the combined effects of preserving adjacent tracts for the beginnings of a new, third GCWA preserve for this recovery unit. This is particularly significant in that it will help provide a critical link between habitats in the Bexar County area to several existing preserves in the central and northern portions of the GCWAs range (Balcones Canyonlands Preserve, Balcones Canyonlands National Wildlife Refuge, and Fort Hood).

Cumulative Effects

Cumulative effects include the effects of future State, tribal, 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 §7 of the Act.

No other future State, tribal, local, or private actions are known. Additionally, because of the preservation of the remaining 760 acres, the adjacent 331-acre Indian Springs preserve, and the topography on other adjacent land, no other actions are likely or reasonably certain to occur within or adjacent to the action area (Master Phase II).

VI. Conclusion

After reviewing the current status of the GCWA, the environmental baseline for the action area, the effects of the proposed development, and the cumulative effects, it is the Service's biological opinion that the issuance of a §10(a)(1)(B) permit to LIC, as proposed, is not likely to jeopardize the continued existence of the GCWA. No critical habitat has been designated for this species;

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therefore, none will be affected.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to §4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of §7(b)(4) and §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 the terms and conditions of this incidental take statement.

The proposed HCP and its associated documents clearly identify anticipated impacts likely to result from the proposed taking and the measures that are necessary and appropriate to minimize those impacts. All conservation measures described in the proposed HCP, together with the terms and conditions described in any §10(a)(1)(B) permit or permits issued with respect to the proposed HCP, are hereby incorporated by reference as reasonable and prudent measures and terms and conditions within this Incidental Take Statement, pursuant to 50 CFR 402.14 (i). Such terms and conditions are nondiscretionary and must be undertaken for the exemptions under §10(a)(1)(B) and §7(o)(2) of the Act to apply. If the Permittee fails to adhere to these terms and conditions, the protective coverage of the §10(a)(1)(B) permit and §7(o)(2) may lapse. The amount or extent of incidental take anticipated under the proposed Cibolo Canyon HCP, associated reporting requirements, and provisions for disposition of dead or injured animals are as described in the HCP and its accompanying §10(a)(1)(B) permit.

Amount or Extent of Take Anticipated

The Property has been evaluated for all federally-listed threatened or endangered species. Other than evidence of use of the Property by the GCWA, there is no evidence of any other threatened or endangered species on Master Phase II. Past survey efforts have provided valuable information in determining the extent of GCWA occupation on the Property. However, it does not provide a precise mechanism for predicting the number of GCWAs that may actually be "taken" by the proposed action. The effectiveness of GCWA surveys in counting the number of birds in an area can be somewhat limited. For example, GCWA males are much more easily observed than females or fledglings during surveys due to their territorial behavior and frequent vocalization. Moreover, the GCWA occupation of a given area can vary significantly from year to year, and appears to have done so on this property depending on a wide variety of factors. In addition, the impacts may not be fully felt in a single season and may be spread over several, or even many years during which utilization of the site may vary quite significantly for reasons

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unrelated to the proposed community. For these reasons, it is not possible to predict a precise number of GCWAs that may, over time, be taken or preserved as a result of the proposed action. It is more accurate that, over time an area that has been observed to support GCWAs may or may not be rendered unsuitable for the GCWAs. "Take" or mitigation, therefore, is not in this document characterized by a precise bird count, but by the loss or preservation of areas, the relative quality of which is in part determined by the levels of prior observed GCWA utilization as well as the assessment of vegetated assemblages and other factors that may or may not impact the GCWA.

The Proposed Alternative is expected to result in development of 846 acres of the overall 1,606 acres. Upon completion of Master Phase II, the viability of GCWA habitat within developed areas of the Property is uncertain for the reasons previously stated. Therefore, this modified GCWA habitat, which has been documented to support, or partially support as many as 8 GCWA territories will be lost. This loss of habitat and the associated territories will be mitigated by the preservation and management of approximately 760 acres, which has been observed to support or partially support at least 12 GCWA territories. Based upon topographic and vegetative characteristics, the area proposed for preservation likely supports, and with further management will support higher quality GCWA habitat.

Effect of the take

In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat. This determination of non-jeopardy is based primarily on the fact that:

- Approximately 760 acres of higher quality GCWA habitat (lower quality within the development envelope) will be preserved on-site for the benefit of the species and is adjacent to a separate 331-acre block of preserved contiguous GCWA habitat. These two preserves will likely result in the establishment of a new, third GCWA preserve for this recovery unit. This is particularly significant in that it will help provide a critical link between habitats in the Bexar County area to several existing preserves in the central and northern portions of the GCWA's range (Balcones Canyonlands Preserve, Balcones Canyonlands National Wildlife Refuge, and Fort Hood). This third preserve could help contribute to the eventual recovery of the species.
- The 846-acre development site constitutes lower quality habitat. This is based upon the structural and compositional vegetative elements of the proposed development site. Low quality habitat equates to sub-optimal vegetation for GCWA foraging, sheltering, and/or breeding. In comparison, the structural and compositional vegetative elements of the GCWA habitat in the 760-acre conservation area constitutes optimal GCWA habitat as indicated by increased canopy cover, higher densities of GCWAs, and more intense GCWA utilization.
- The Applicant proposes to conduct additional conservation actions on the property to avoid or minimize potential take of the species.
- A conservation plan has been developed to ensure that this project minimizes and mitigates to the maximum extent practicable all incidental take of the GCWA.

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- As identified in the Environmental Baseline above, extensive amounts of habitat remain range wide, including in Bexar County. Additionally, within Bexar County there are two other large (5,000+ acre [2,023 hectare]) protected areas known to support a large population of GCWAs. These include Government Canyon State Natural Area and Camp Bullis.

The determination of no adverse modification of critical habitat was based upon the fact that no critical habitat exists for this species.

REASONABLE AND PRUDENT MEASURE

The Service believes the following reasonable and prudent measure is necessary and appropriate to minimize impacts of incidental take of GCWAs:

The Service shall require LIC to comply with and implement the issued §10(a)(1)(B) incidental take permit.

The reasonable and prudent measure, with its implementing term and condition, is designed to minimize the impacts of incidental take that might otherwise result from the proposed actions.

Term and Condition

In order to be exempt from the prohibitions of §9 of the Act, the following non-discretionary term and condition, which implements the reasonable and prudent measure described above and outlines required reporting/monitoring requirements, must be complied with:

The authorization granted by the permit is subject to full and complete compliance with, and implementation of, the EA/HCP for the Cibolo Canyon Master Phase II development in Bexar County, Texas, and all specific conditions contained in the permit.

If, during the course of the action, the level of incidental take discussed in the EA/HCP is exceeded, such incidental take represents new information requiring reinitiation of consultation and review of the reasonable and prudent measures provided.

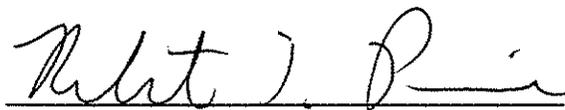
This permit also constitutes a Special Purpose Permit under 50 CFR § 21.27 for the take of the listed GCWA in the amount and/or number and subject to the terms and conditions specified herein. Any such take will not be in violation of the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. §§ 703-712).

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Reinitiation Notice

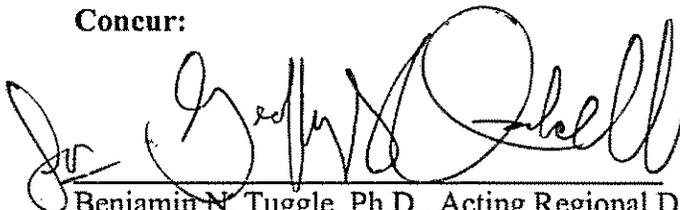
This concludes formal consultation on the issuance of a 10(a)(1)(B) permit for incidental take of the golden-cheeked warbler. As provided in 50 CFR § 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or 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 opinion; (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 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.

Approved:


Robert T. Pine, Supervisor

2/17/06
Date

Concur:


Benjamin N. Tuggle, Ph.D., Acting Regional Director

2/28/06
Date

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