

Control Number: 51023



Item Number: 693

Addendum StartPage: 0

SOAH DOCKET NO. 473-21-0247 PUC DOCKET NO. 51023

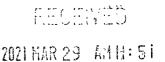
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APPLICATION OF THE CITY OF SAN ANTONIO ACTING BY AND THROUGH THE CITY PUBLIC SERVICE BOARD (CPS ENERGY) TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE PROPOSED SCENIC LOOP 138-KV TRANSMISSION LINE BEFORE THE STATE OFFICE.

OF

ADMINISTRATIVE HEARINGS

BEXAR RANCH, L.P.'S FIRST SUPPLEMENTAL RESPONSES TO ANAQUA SPRINGS HOMEOWNERS' ASSOCIATION'S FIRST REQUEST FOR INFORMATION AND ADMISSIONS TO BEXAR RANCH, L.P.

Bexar Ranch, L.P. provides the following First Supplemental Responses to Anaqua Springs Homeowners' Association's First Requests for Information and Admissions to Bexar Ranch, L.P. Pursuant to the Public Utility Commission's Procedural Rules, these responses may be treated as if they were filed under oath.

Respectfully submitted, SPIVEY VALENCIANO, PLLC McAllister Plaza – Suite 130 9601 McAllister Freeway San Antonio, Texas 78216 Telephone: (210) 787-4654 Facsimile: (210) 201-8178

By:

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ATTORNEYS FOR BEXAR RANCH, L.P.

CERTIFICATE OF SERVICE

I hereby certify that the foregoing document has been filed in the records of Docket 51023 on this 29th day of March 2021.

Soledad M. Valenciano

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SOAH DOCKET NO. 473-21-0247 PUC DOCKET NO. 51023

APPLICATION OF THE CITY OF SAN	§	BEFORE THE STATE OFFICE
ANTONIO ACTING BY AND THROUGH	§	
THE CITY PUBLIC SERVICE BOARD	§	
(CPS ENERGY) TO AMEND ITS	§	OF
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NECESSITY FOR THE PROPOSED	Š	
SCENIC LOOP 138-KV TRANSMISSION	ΙŠ	ADMINISTRATIVE HEARINGS
LINE	Š	

BEXAR RANCH, L.P.'S RESPONSES TO ANAQUA SPRINGS HOMEOWNERS' ASSOCIATION'S FIRST REQUEST FOR INFORMATION AND ADMISSIONS TO BEXAR RANCH, L.P.

Anaqua Springs 1-1

Please provide the amount of Golden-Cheeked Warbler habitat crossed by Segment 43 and the locations along Segment 43 that include this habitat.

RESPONSE:

According to data reported in POWER Table 4-2 Environmental and Land Use Data for Segment Evaluation (Amended), Segment 43 crosses 14.89 acres of Moderate High to High Quality (modeled) GCW Habitat and 4.12 acres of Low to Moderate Quality (modeled) GCW Habitat. No field survey has been conducted. Consequently, actual locations have not been ground truthed. Refer to POWER interpretation of Diamond Report for pixel imagery of Segment 43 area. Given the natural state of Bexar Ranch has increased and/or become denser over the years since this report, I would not be surprised if the reported acreage or "Quality" has improved.

Prepared by: Mark Turnbough Sponsored by: Mark Turnbough

FIRST SUPPLEMENTAL RESPONSE:

See CPS Tables 4-1 and 4-2; Diamond Report referenced in CPS Energy's Application and Tables 4-1 and 4-2; and attached 2008 Golden – Cheeked Warbler Survey prepared by PBS&J for CPS Energy.

Prepared by: Michael Bitter, with assistance from counsel

Sponsored by: Michael Bitter

SOAH DOCKET NO. 473-21-0247 PUC DOCKET NO. 51023

APPLICATION OF THE CITY OF SAN	§	BEFORE THE STATE OFFICE
ANTONIO ACTING BY AND THROUGH	§	
THE CITY PUBLIC SERVICE BOARD	§	
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LINE	§	

BEXAR RANCH, L.P.'S RESPONSES TO ANAQUA SPRINGS HOMEOWNERS' ASSOCIATION'S FIRST REQUEST FOR INFORMATION AND ADMISSIONS TO BEXAR RANCH, L.P.

Anaqua Springs 1-17

Please provide all documentation supporting the contention in Michael Bitter's testimony at page 26, line 21- page 27, line 2 that Bexar Ranch is already burdened with a CPS transmission line.

<u>RESPONSE</u>: Bexar Ranch objects to this Request as overly broad and seeking information that is of public record. Subject to and without waiver of the foregoing objection(s), Bexar Ranch states: This easement can be found in the real property records of Bexar County, Texas. See also CPS Application Figure 2-4 (amended constraints map).

Prepared by: Michael Bitter and Sarah Bitter, with assistance from counsel

Sponsored by: Michael Bitter

FIRST SUPPLEMENTAL RESPONSE: See attached production.

Prepared by: Michael Bitter Sponsored by: Michael Bitter



Curt D. Brockman cdbrockman@cpsenergy.com Direct (210) 353-2423 Fax: (210) 3536829

April 3, 2009

Dr. Joseph Bitter 446 County Road 115 Edna, Texas 77957

Re: Cagnon-to-Kendall Transmission Line: 2008 Bird Survey.

Dear Dr. Bitter:

As requested, enclosed is the 2008 Golden-Checked Warbler Survey Report for 2008. If you have any questions, please do not hesitate to contact Barbara Broll or me at (210) 353-2423.

Sincerely,

Curt D. Brockmann Attorney at Law

CDB/re Enclosures

cc: w/ attach.: Hayden and Cunningham

Attn: Michael Bitter 7750 Broadway

San Antonio, Texas 78209

cc: w/o attach.: Barbara Broll

Golden-Cheeked Warbler Survey for CPS Energy's Cagnon-Kendall 345-kV Transmission Line Bexar County, Texas Spring 2008 Document No. 080089 PBS&J Job No. 100001529

GOLDEN-CHEEKED WARBLER SURVEY FOR CPS ENERGY'S CAGNON-KENDALL 345-KV TRANSMISSION LINE BEXAR COUNTY, TEXAS

SPRING 2008

Prepared for:

CPS Energy P.O. Box 1771 San Antonio, Texas 78296-1771

Prepared by:

PBS&J 6504 Bridge Point Parkway Suite 200 Austin, Texas 78730

December 2008

Printed on recycled paper

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1.0 INTRODUCTION

CPS Energy energized its 30-mile (48-kilometer [km]) long Cagnon-Kendall 345-kilovolt (kV) transmission line on January 31, 2007. This line connects the Cagnon Substation in Bexar County to a tie-point with LCRA's 345-kV transmission line at the Kendall County line (Figure 1). Most of the project is located in Bexar County, with only 33 of the 155 poles being in Medina County. The line includes a 100-to 150-foot (ft) (30- to 46-meters [m]) right-of-way (ROW) over most of the route. Each pole averages approximately 160 ft (49 m) in height, is bolted to a foundation, and extends 14 to 56 ft (4 to 17 m) below ground. The distance between each pole varies between 230 and 1,570 ft (70 and 479 m). The Cagnon-Kendall line was constructed to address potential low voltage conditions in this region, which includes Bexar, Kendall, Medina, and surrounding counties of the Texas Hill Country.

Construction of certain creek crossings for the access road required verification from the U.S. Army Corps of Engineers (USACE) that construction was authorized under Clean Water Act Nationwide Permit 12. Because it was known that some of the crossings were in the vicinity of habitat for the golden-cheeked warbler (GCWA – *Dendroica chrysoparia*), the USACE consulted with the U.S. Fish and Wildlife Service (FWS) under Endangered Species Act section 7(a)(2). PBS&J prepared a draft biological assessment, dated October 2005, which the USACE adopted as its Biological Assessment. The FWS issued its no jeopardy Biological Opinion on June 23, 2006. The USACE then verified CPS Energy's authorization to construct crossings related to the line under Nationwide Permit 12 on July 27, 2006.

As part of the voluntary avoidance, minimization, and conservation measures, CPS Energy agreed to conduct annual presence/absence surveys for the GCWA for 4 years along certain portions of the proposed ROW in Bexar County once the line had been constructed and energized. The presence/absence surveys started on the first full season following energization of the line (i.e., 2007) and will continue annually through 2010.

This report presents the results of the Year 2 (2008) presence/absence surveys that PBS&J performed. The survey protocols adhere to FWS's recommended minimum procedures for determining the presence/absence of GCWAs, as outlined in PBS&J's Federal Fish and Wildlife Permit (Permit No. TE-820022). Section 2.0 of this report presents biological information about the GCWA. Section 3.0 presents the methods PBS&J employed to perform the 2008 surveys, while Section 4.0 provides a discussion of the findings of the presence/absence surveys. Section 5.0 provides a summary and Section 6.0 is the reference section.

2.0 BIOLOGICAL BACKGROUND

2.1 GOLDEN-CHEEKED WARBLER (Dendroica chrysoparia)

Description: The GCWA is a medium-sized (length ca. 12–13 centimeter [cm]) insectivorous songbird. Breeding adult males have black on the forehead, crown, nape, and back. The cheeks are a bright golden

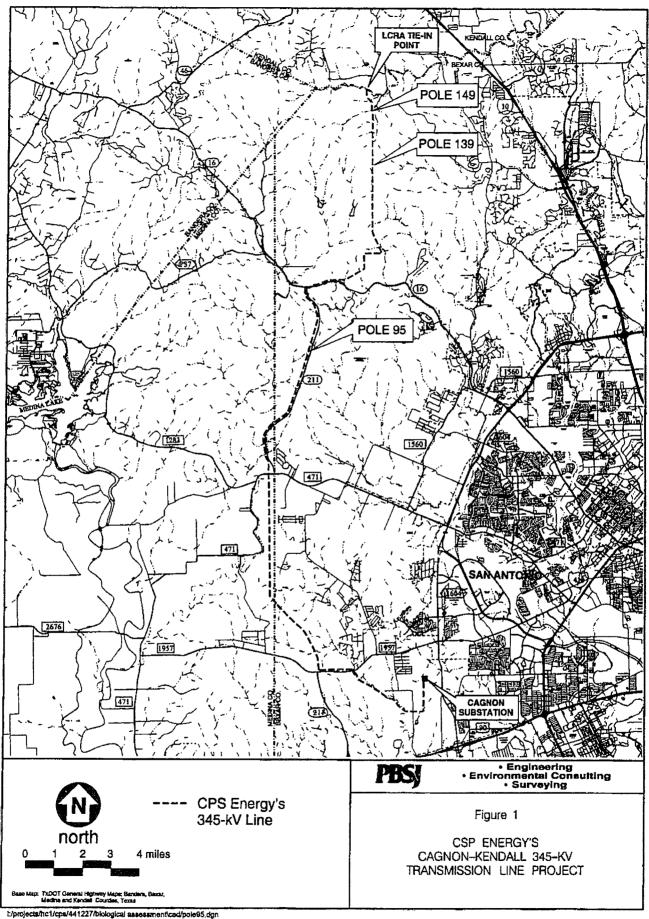
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yellow, interrupted by a black eyeline. The throat and upper breast are black, which continues as streaking along the sides and flanks. The remaining underparts are white. The wings are black with two distinct white wing-bars. Adult females are similar in coloration, but are comparatively duller; the crown and back are olive-green with some black streaking (Oberholser, 1974; Pulich, 1976; Ladd and Gass, 1999).

Range: The GCWA is the only bird species that nests exclusively within the state's boundaries. Data indicate the species historically nested in 41 of Texas's 254 counties; however, current confirmed breeding records exist from approximately 27 Texas counties (Pulich, 1976; FWS, 1995; Texas Ornithological Society [TOS], 1995; Lasley et al., 1997; Ladd and Gass, 1999; Lockwood and Freeman, 2004). Currently, the species is a rare to locally common summer resident from Young and Palo Pinto counties, south through the eastern and south-central parts of the Edwards Plateau to Real and Uvalde counties (Lockwood and Freeman, 2004). GCWAs winter in pine and pine-oak woodlands in the highlands of southern Mexico, Guatemala, Honduras, and Nicaragua (Ladd and Gass, 1999). In Bexar County, the species is a fairly common spring migrant and summer resident (San Antonio Audubon Society [SAAS], 2004).

Habitat: GCWA breeding habitat consists of mature oak-juniper woodlands in the Edwards Plateau, Lampasas Cut-Plain, and Llano Uplift regions, and to a lesser extent on portions of the Comanche Plateau, Western Cross Timbers, and North-Central Prairies (Ladd and Gass, 1999; Lockwood and Freeman, 2004). Ashe juniper (Juniperus ashei) and various oaks, such as Texas red oak (Quercus buckleyi) and plateau live oak (Quercus virginiana var. fusiformis), are the dominant tree species throughout the GCWA's breeding range. Other common canopy constituents include post oak (Quercus stellata), Lacey oak (Quercus laceyi), shin oak (Quercus sinuata var. sinuata), cedar elm (Ulmus crassifolia), walnut (Juglans spp.), escarpment black cherry (Prunus serotina var. eximia), hackberry (Celtis spp.), Texas ash (Fraxinus texensis), and sycamore (Platanus occidentalis) (Ladd, 1985; Ladd and Gass, 1999). GCWAs use the shredding bark of mature Ashe junipers to construct nests and, therefore, require some mature juniper in their nesting habitat; however, GCWAs may occur in areas with little juniper provided that other key components of their habitat are present. Preferred woodlands typically have a moderate to high density of mature trees and a dense canopy cover in the middle and upper layers (FWS, 1992; Ladd and Gass, 1999). GCWAs typically occur in areas containing steep slopes, such as canyons and draws, as well as adjacent ridgetops, but may occur elsewhere provided suitable habitat is present (Pulich, 1976; Ladd and Gass, 1999).

Status: On May 4, 1990, FWS published an emergency listing of the GCWA as endangered (55 FR 18844), as well as a proposed rule to formally list the GCWA as endangered. On December 27, 1990, FWS published the final rule for listing as endangered (55 FR 53153). The Texas Parks and Wildlife Department (TPWD) also lists the species as endangered.



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2.2 PRESENCE IN THE GENERAL AREA

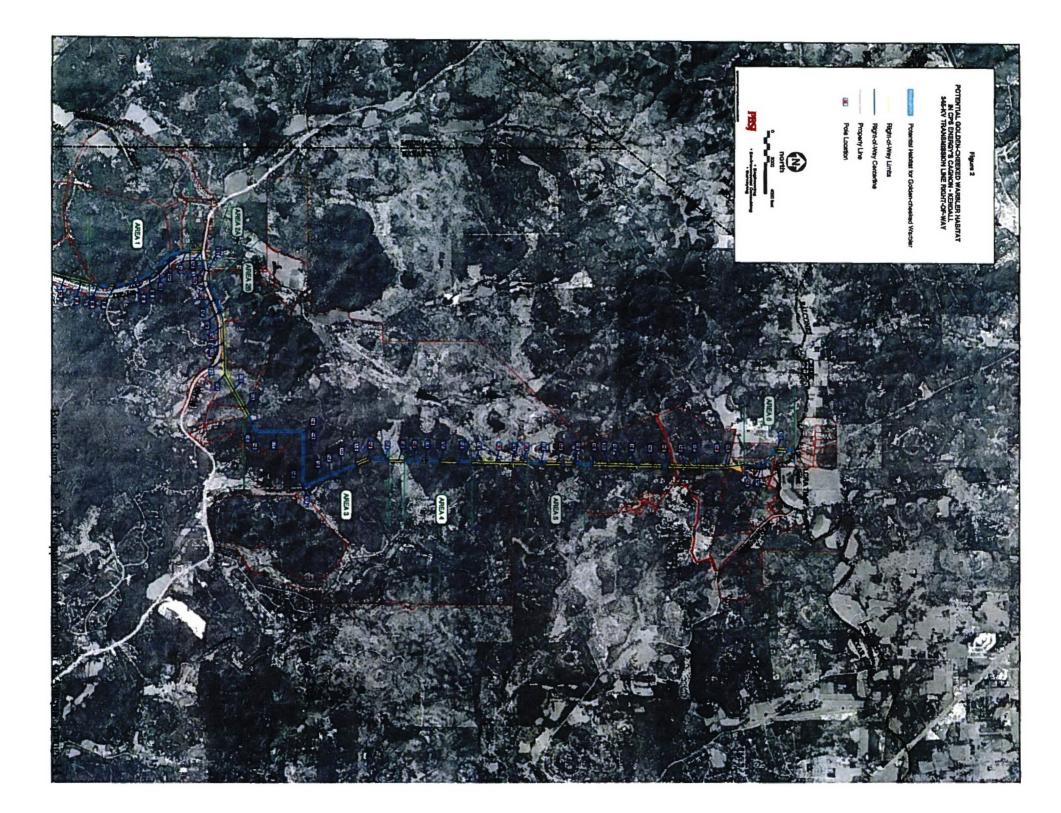
According to TPWD's Natural Diversity Database (TPWD, 2005), no previously documented GCWA records existed from within the Cagnon-Kendall transmission line ROW prior to the 2007 presence/absence surveys. However, documented GCWA records did exist from several locations in the general vicinity of the ROW (Keddy-Hector, 1997; Elliott, 2004; FWS, 2005, TPWD, 2005; Zara Environmental, 2006). The Elizabeth P. Hill Preserve, established in 1996 via a conservation easement from Christopher C. Hill to the Nature Conservancy of Texas, is located near the southwest corner of State Highway (SH) 211 and SH 16. Keddy-Hector (1997) reported seven territories on this preserve, while Elliott (2004) recorded two male GCWAs proximate to the ROW. One of Elliot's warblers was west of Pole 98, while the other was near Pole 99. Zara Environmental (2006) identified one or two warbler territories on the Morales Pasture of MWM property. These territories are north of poles 118-120 and west of poles 122-123. Apart from these records, other nearby records include two west of the ROW (west and southwest of Pole 140), another north of the ROW (north of Pole 107) along SH 16, and a fourth approximately 2 miles north of Pole 107 (TPWD, 2005). In addition, approximately 50 GCWA territories are located within Government Canyon State Natural Area, which is located east of SH 211 and south of SH 16, approximately 1 mile from the Cagnon-Kendall transmission line ROW (FWS, 2005). Prior to the spring 2007 surveys, PBS&J had not encountered any GCWAs within the Cagnon-Kendall transmission line ROW or vicinity.

3.0 METHODOLOGY

PBS&J conducted presence/absence surveys in previously identified occupied/potential GCWA habitat along or adjacent to the existing Cagnon-Kendall transmission line ROW and any associated permanent access roads along the 11-mile portion of the line between Pole 95 on SH 211 and the Kendall County line at Balcones Creek, just north of Pole 152 (Figure 2, map pocket). The ROW is approximately 150 ft wide and includes some of the access roads. Based on habitat assessments conducted in October and November 2004 prior to CPS Energy's construction of the transmission line, PBS&J identified six general areas of potential GCWA habitat within this portion of the line. PBS&J conducted presence/absence surveys of these six areas during spring 2007 (PBS&J, 2007) and in spring 2008 (this report). They are as follows (see Figure 2):

- Area 1: Adjacent to the west side of SH 211 from approximately 300 ft south of Pole 96 to approximately 200 ft north of Pole 102, with gaps.
- Area 2: (A) Adjacent to the south side of SH 16 from approximately 600 ft east of Pole 103 to near Pole 104; (B) Adjacent to the north side of SH 16 from approximately 225 ft west of Pole 106 to approximately 100 ft east of Pole 108.
- Area 3: From approximately 480 ft southwest of Pole 115 to approximately 170 ft north of Pole 127, with gaps; paved access road.
- Area 4: From approximately 570 ft south of Pole 129 to approximately 300 ft south of Pole 133, with gaps.





- Area 5: From approximately 300 ft north of Pole 136 to approximately 750 ft north of Pole 139 (Note: PBS&J originally identified additional potential GCWA habitat in several areas between poles 139 and 145; however, a large area of land, including these areas, was subsequently cleared by an unrelated third-party before CPS Energy started its construction and, therefore, could not be surveyed during spring 2007. The clearing stretches from the fence line between poles 139 and 140 to the fence line near Pole 149 (see Figure 2). The clearing was mostly of Ashe juniper, leaving the larger hardwoods.
- Area 6: From approximately 100 ft north of Pole 150 to Balcones Creek, with gaps; gravel access
 road.

According to McMahan et al. (1984), the dominant vegetation communities in the area are live-oak-Ashe juniper parks, live oak-mesquite-Ashe juniper parks, live oak-Ashe juniper woods, and mesquite-live oak-bluewood parks. These upland community types occur as open savannah or as woodland tracts dominated by oaks and Ashe juniper, the degree of canopy coverage being dependent upon the amount of clearing that has taken place.

Within the transmission line ROW, dominant canopy species within potential golden-cheeked warbler habitat include Ashe juniper, plateau live oak, Texas red oak, Lacey oak, escarpment black cherry, black walnut (Juglans nigra), cedar elm, and sugar hackberry (Celtis laevigata). Common midstory and understory species include Texas mountain laurel (Sophora secundiflora), Texas persimmon (Diospyros texana), elbowbush (Forestiera pubescens var. pubescens), Texas redbud (Cercis canadensis var. texensis), red buckeye (Aesculus pavia var. flavescens), Mexican buckeye (Ungnadia speciosa), agarito (Berberis trifoliata), Lindheimer's silktassel (Garrya ovata ssp. lindheimeri), catclaw mimosa (Mimosa aculeaticarpa var. biuncifera), and gum bumelia (Sideroxylon lanuginosum ssp. rigidum). Other associated understory species include greenbriar (Smilax sp.), mustang grape (Vitis mustangensis), Virginia creeper (Parthenocissus quinquefolia var. quinquefolia), heartleaf ampelopsis (Ampelopsis cordata), cedar sedge (Carex psilostachya), and twistedleaf yucca (Yucca rupicola).

PBS&J performed the presence/absence surveys in accordance with the procedures outlined by FWS (Permit No. TE-820022). Current FWS survey protocol establishes the GCWA survey season as March 15 to May 15. PBS&J began the presence/absence surveys on April 11, 2008, with subsequent presence/absence surveys on April 12, 17, 18, 24, 25, and 30; and May 1, 5, 7, and 8 (Table 1). During these visits, PBS&J ornithologists surveyed each of the six habitat areas five times, except for Area 4, which was surveyed six times. No more than one survey was conducted in any habitat area within a 5-day period, with the exception of Area 4, which was survey on two consecutive days (April 24 and 25). Ornithologists played cassette tapes of GCWA vocalizations to elicit responses from the target species, but only after the fifth visit to areas where no GCWAs had been previously detected.

TABLE 1
SUMMARY OF SURVEY EFFORT AND WEATHER CONDITIONS

Date	Area	Beginning/ Ending Times	Temperature (°F)	Wind Direction and Speed (mph)	Cloud Cover, etc.	Personnel ¹	Comments
4/11/08	1	06.5008:15	68-69	N 5-10	Overcast	DG	No GCWAs detected
	2	08:20-09:20	69-70	N 5-10	Partly cloudy	DG	No GCWAs detected
	6	10.11–11:18	72-74	N 5-10	Partly cloudy	DG	No GCWAs detected
4/12/08	3	07:20-08:45 10:00-14:05	56–74	N 5-10	Clear	DG	2-3 GCWAs detected
	4	08:51-09:55	60-63	N 5-10	Clear	DG	1 GCWA detected
4/17/08	6	07.00-08:22	57 -6 6	SE 10-15	Overcast	MH	No GCWAs detected
	3	07.57-12:05	66–74	S 10–15	Overcast; partly cloudy	DG	2 GCWAs detected
	1	08.52-10:40	68–71	SSW 10-15	Partly cloudy	MH	1 GCWA detected
	2	10:50-11.50	71–74	SSW 10-15	Mostly sunny	MH	No GCWAs detected
4/18/08	4	08:31-10 23	54–63	N 5-10	Partly cloudy	DG	1 GCWA detected, 2 GCWAs detected Area 3
	5	10:38-11:18	63-64	N 5-10	Clear	DG	No GCWAs detected
4/24/08	3	07:45-13:11	72-76	S 0-5	Overcast	DG, GN	7 GCWAs detected
	6	07:40-08:30	72-73	SE 5-10	Overcast	MH	1 GCWA detected
	5	08:45-09:50	7374	SE 5-10	Partly sunny	МН	No GCWAs detected
	1	11:15-12 34	74-75	SE 5-10	Partly cloudy	мн	1 GCWA detected
	2	12:38-13.30	75–77	SE 5-10	Mostly cloudy	мн	No GCWAs detected
	4	1 5 :45–16.55	78-80	S 5-10	Overcast	DG, GN	1 GCWA detected
4/25/08	4	07:37–09 32	72–74	S 0–5	Overcast; sporadic drizzle	DG, GN	3 GCWAs detected
4/30/08	3	07:22-13 27	60-80	SSE 0-5	Mostly clear	DG, GN	18 GCWAs detected
	6	07:35-08:42	61 6 3	SSE 5-10	Clear	MH	No GCWAs detected
	5	09:02-09:45	63–6 6	SSE 10-15	Clear	MH	1 GCWA detected
	1	10:18-11:30	70-74	SSE 10-15	Mostly clear	МН	2 GCWAs detected
	2	11:40-12:40	75–78	SE 10-15	Clear	MH	No GCWAs detected
5/1/08	4	07:27-09:29	69-71	S 0-5	Overcast	DG, GN	4 GCWAs detected
	5	09:44-10.30	71–72	S 0-5	Overcast	DG, GN	No GCWAs detected
5/5/08	6	09:40-10:40	70–75	SE 0-5	Overcast, drizzle	мн	1 GCWA detected
	5	10:55–11:59	76–82	SE 0-5	Partly cloudy	MH	1 GCWA detected (tape played)
	1	12:33–13:55	83–85	SE 0-5	Partly cloudy	MH	2–3 GCWAs detected (tape played)
	2	14:10–15:10	85– 87	SE 0-5	Partly cloudy	мн	No GCWAs detected (tape played)
5/7/08	3	07:27-13:35	70-83	S 0-5	Overcast	DG	11-12 GCWAs detected
5/8/08	4	07:43-09:49	62-72	NE 0-5	Clear	DG	4 GCWAs detected

¹Personnel – Derek Green (DG), Mike Horvath (MH), Gary Newgord (GN)



As with the 2007 survey, PBS&J's right-of-entry (ROE) was restricted to CPS Energy's easements; therefore, the survey routes employed by PBS&J during the spring 2008 survey were restricted to areas within these easements, including the transmission line ROW and permanent access roads. For each respective survey area (e.g., Area 1, Area 2, etc.), PBS&J ornithologists would pick a starting point and would then walk the centerline of the transmission line ROW or access road until reaching a designated ending point. Occasionally, topographic features (e.g., bluffs, cliffs, extremely steep terrain, etc.) necessitated slight deviations from these routes. Slight deviations also occurred when ornithologists investigated detections of nearby GCWAs. PBS&J made attempts to alternate the direction of routes and the order of areas surveyed for each visit, to allow surveys to occur during different times of the day.

PBS&J performed surveys using the spot-mapping method, as described by the International Bird Census Committee (IBCC) (1970). Ornithologists used aerial photography and U.S. Geological Survey (USGS) 7.5-minute topographic quadrangles (San Geronimo, Helotes, Jack Mountain, and Van Raub, Texas, quadrangles) and recorded field observations with handheld Garmin[™] Global Positioning System (GPS) units (estimated accuracy <10 m).

4.0 RESULTS

PBS&J ornithologists conducted GCWA presence/absence surveys on April 11, 12, 17, 18, 24, 25, and 30; and May 1, 5, 7, and 8, 2008. The presence/absence survey effort occurred on 11 separate days, for a total of 59 survey hours. During the 2008 presence/absence survey effort, PBS&J ornithologists encountered GCWAs on all but the first day of the survey (April 11). Table 1 presents data including survey dates, area(s) surveyed, survey begin/end times, weather conditions, personnel, and general comments. Figures 3 through 15, located in Appendix A, depict the locations and directions of movements of observed GCWAs, with individual observations represented by the appropriate IBCC symbol and annotated chronologically (e.g., 0412A, 0412B, 0424A, etc.). Appendix B presents detailed information for each GCWA observation, including date, time, observer, visit number, survey area, location data (latitude/longitude), number of individuals, sex, vocalizations, contact type, and whether a tape was used. Appendix C presents additional bird species that ornithologists encountered in the area during the 2008 survey period, while Appendix D shows project photographs.

4.1 AREA 1

On April 11, 2008, PBS&J ornithologists conducted the first of five visits to Area 1. Subsequent visits were made on April 17, 24, and 30, and on May 5, 2008. While no GCWAs were encountered during the initial visit, PBS&J ornithologists detected a singing adult male GCWA (0417C) at the edge of the transmission line ROW, just northwest of pole 99 during the second visit on April 17 (Figure 3). On the third visit to Area 1 on April 24, 2008, PBS&J detected a singing male (0424M) approximately 300 ft west of Pole 99. This bird was heard at two subsequent locations (0424N and 0424O). PBS&J detected

two singing males during the fourth visit on April 30: 0430L and 0430M southeast of Pole 101 and 0430Q, 0430R, and 0430S west of Pole 99 (see Figure 3).

The fifth and final visit to Area 1 was conducted on May 5, 2008, when PBS&J heard two or three singing males: 0505E, 0505F and 0505G between poles 101 and 102; 0505H near Pole 99; and 0505I just northwest of Pole 101 (see Figure 3). This latter male may have been the same one heard earlier (i.e., 0505E, 0505F and 0505G). During this fifth visit, PBS&J ornithologists also played a cassette tape of GCWA vocalizations to elicit responses from the target species in the portions of Area 1 where no GCWAs had been detected in earlier visits. The taped call elicited no responses.

PBS&J ornithologists detected a total of six or seven adult male GCWAs in Area 1 during the spring 2008 survey (see Figure 3). However, several of these observations were likely of the same bird in subsequent visits. It is likely that the singing males represent a total of 2–3 territories in Area 1. No female or juvenile GCWAs were heard or observed in Area 1. While suitable habitat for the GCWA is present in and adjacent to portions of the ROW within Area 1, much of the habitat is of low quality and of limited extent. In addition, the transmission line ROW runs adjacent and parallel to SH 211. During surveys, PBS&J ornithologists noted significant traffic noise from the roadway, which could have an effect on the number of GCWAs recorded in these areas. Furthermore, the proximity of the ROW to SH 211 may have an effect on the number of GCWAs occupying suitable habitat within Area 1. In 2007, two GCWAs were detected in Area 1 (see Figure 3).

4.2 AREA 2

PBS&J ornithologists made five visits to Area 2 in 2008 on the following dates: April 11, 17, 24, and 30, and on May 5. No GCWAs were detected in Area 2 during any of the first four visits. Thus, on the fifth and final visit to Area 2, PBS&J ornithologists played a cassette tape of GCWA vocalizations to elicit responses from the target species. No GCWAs responded to the tape.

While suitable habitat for the GCWA is present in and adjacent to portions of the ROW within Area 2, much of the habitat is fragmented, of low quality, and of limited extent. In addition, the transmission line ROW runs adjacent and parallel to SH 16. During surveys, PBS&J ornithologists noted significant traffic noise from the roadway, which could have an effect on the number of GCWAs detected in these areas. Like Area 1, the proximity of the ROW to SH 16 may have an effect on the number of GCWAs occupying suitable habitat within Area 2. For comparison, in 2007, only one GCWA was detected in Area 2 (see Figure 3). This male started signing in response to the cassette tape.

4.3 AREA 3

PBS&J ornithologists conducted five presence/absence visits in Area 3 during the spring 2008 survey: April 12, 17, 24, 30, and May 7. In addition, male GCWAs were heard singing in Area 3 during a visit to Area 4 on April 18, 2008. Because numerous GCWAs were detected in this area, the results are broken down by visit.

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4.3.1 Visit 1

The first 2008 visit to Area 3 occurred on April 12. During this visit, PBS&J ornithologists detected at least two and possibly three adult male GCWAs (Figure 4). The first adult male GCWA (0412A) was heard singing in the canyon between poles 124 and 125. The second adult male GCWA (0412B) was heard farther down the canyon 7 minutes later and may have been the same male. The third adult male GCWA (0412C) was singing just east of Pole 125 and then was heard singing just north of its initial location (0412D).

4.3.2 Visit 2

The second visit to Area 3 was conducted on April 17, 2008. During this visit, PBS&J ornithologists detected two adult male GCWAs (see Figure 4). The first adult male GCWA (0417A) was heard singing just northwest of Pole 121, while the second was heard singing on the south side of the Morales Road, southwest of Pole 120. While surveying Area 4 on April 18, 2008 (see below), two GCWA males were heard singing in Area 3. The first (0418B) was in the transmission line ROW just north of Pole 126 and the second (0418C) was just southeast of Pole 126 (see Figure 4).

4.3.3 Visit 3

PBS&J conducted the third visit to Area 3 on April 24, 2008. During this visit, PBS&J ornithologists detected seven adult male GCWAs (see Figure 4). Five of the seven GCWAs were detected along the portion of transmission line ROW between poles 121 and 127, while the other two were encountered along the portion of transmission line ROW between poles 115 and 121. The first adult male GCWA (0424B) was singing within the transmission line ROW on the southern side of the canyon just south of Pole 125. Five minutes later this bird was visually observed slightly farther up the slope. It had nesting material in its mouth (0424C). The second male (0424D) was heard singing just east of the ROW between poles 125 and 126. The third male GCWA (0424E) was first heard singing just west of the ROW between poles 124 and 125. Eight minutes later it had moved closer to Pole 124, and 3 minutes later it was visually observed in the ROW approximately 150 ft west of Pole 124 (0424F). The fourth male (0424G) landed nearby and was visually observed being chased by the third male. The third male was then visually observed singing again at the edge of Pole 124 (0424H). The fifth male (0424I) was heard singing and then observed visually in the ROW, just southeast of Pole 123. The sixth male was heard singing in the ROW just east of Pole 120 (0424J) before moving north of the ROW (0424K). The seventh male (0424L) was heard singing northeast of Pole 118, just outside of the ROW.

4.3.4 Visit 4

PBS&J conducted the fourth visit to Area 3 on April 30, 2008. During this visit, PBS&J ornithologists detected at least 16 adult male GCWAs, a female, and a juvenile (Figure 5). Ten of the 16 male GCWAs and the female were detected along the portion of transmission line ROW between poles 115 and 121,

while the other 6 males and a juvenile were encountered along the portion of transmission line ROW between poles 121 and 127.

The first male (0430A) was singing just outside of the ROW southeast of Pole 120. A different male (0430B) was heard singing northeast of Pole 120, which then moved farther west (0430C). A third male (0430D) was heard within the transmission line ROW just west of Pole 120 on the east slope of a ravine. The fourth male (0430E) was heard singing in a ravine just northeast of Pole 119, while a fifth male (0430F) was heard singing in the transmission line ROW just north of Pole 117. A sixth male (0430H) was heard singing just northeast of Pole 116. Male 5 was heard again near the original spot (04301). Walking back along the Morales Road, PBS&J visually observed a male (0430J) and two minutes later a female (0430K) southeast of Pole 119. Both were chipping. Eventually the male started to sing. The pair was under observation for 22 minutes before PBS&J moved on, the pair still there and the male still singing. Where the Morales Road passes by Pole 120, PBS&J heard three males singing simultaneously: 0430N was just northwest of Pole 120, while 0430O was on the southwest side of the road and 0430P on the east side of the road south of Pole 120. Male 0430P was likely Male 0430A heard earlier that morning, while Male 0430N was likely Male 0430D, also heard earlier that morning. Farther south along the road, PBS&J heard another male (0430T) on the east side of the road and then saw it fly across to the west side of the road where it continued singing (0430U and 0430V). PBS&J heard yet another male (0430W) farther along the road on the southwest side.

In the northern portion of Area 3 (poles 121-127) PBS&J encountered six male GCWAs and a juvenile. The first (0430X) was heard singing just outside of the ROW northeast of Pole 124. Another male (0430Y) was visually observed within the ROW approximately 400 ft northwest of Pole 124. This bird did not sing, but chipped, and was accompanied by a juvenile. Another male (0430Z) was heard singing just east of the ROW approximately midway between poles 124 and 125 while male 0430Y was still in sight. Yet another male (0430AA) was heard singing on the western edge of the ROW upslope of 0430Z while 0430Z was still singing. Another male (0430BB) was heard singing east of the ROW between poles 126 and 127 and then moved slightly north to continue singing (0430CC). Finally, male 0430DD was heard singing near Pole 124. Thus, five separate male GCWAs likely occur in this area between poles 124 and 125.

In summary, PBS&J encountered at least 16 different male GCWAs, as well as 1 female and 1 juvenile during Visit 4.

4.3.5 Visit 5

On May 7, 2008, PBS&J conducted the fifth and final visit to Area 3. During this visit, PBS&J omithologists detected 11–12 adult male GCWAs (Figure 6). Eight of these male GCWAs were detected along the southern portion of Area 3 (between poles 115 and 121), while the other three or four were detected in the northern portion of Area 3 (poles 121-127).



The first adult male GCWA (0507A) was heard singing in the transmission line ROW just north of Pole 116. The second male (0507B) was heard singing in the ROW just northeast of Pole 115. The third and fourth males were also heard singing within the transmission line ROW, the third (0507C) just north of Pole 117 and the fourth (0507D) about 600 ft south of Pole 118. The fifth male (0507E) was heard singing outside of the transmission line ROW and just northeast of Pole 118. A sixth male (0507F) was heard singing just north of the ROW northeast of Pole 120 and then moved slightly west (0507G). Male seven (0507H) was heard singing in the ROW immediately east of Pole 119 on the west slope of a ravine. The eighth male (0507I) was encountered on the south (upper) side of the Morales Road south of Pole 120. This bird was singing despite the slight drizzle.

In the northern portion of Area 3, a ninth male (0507J) was heard singing within the ROW in the canyon just southeast of Pole 125. The tenth male (0507K) was heard singing in the ROW in a creek area just north of Pole 126. On the return journey, an eleventh male (0507L) was heard singing within the ROW in the canyon just south of Pole 125. This could easily have been a male GCWA (0507J) heard earlier in the same location. However, from previous surveys earlier in the year it is known that three males occur in this general vicinity. A twelfth male (0507M) was heard singing briefly in the ROW just southeast of Pole 123.

4.3.6 Summary

PBS&J ornithologists conducted five visits to Area 3 during the spring 2008 survey. During these visits, PBS&J ornithologists recorded 56 encounters with GCWAs, which included adult males, an adult female, and a juvenile of unknown sex. While territory mapping was not in PBS&J's scope, we estimate that the 56 encounters may represent 24–26 GCWA territories (figures 7 and 8).

4.4 AREA 4

PBS&J ornithologists conducted six presence/absence visits to Area 4 during the spring 2008 survey on April 12, 18, 24, 25, and May 1 and 8. The reason for an extra visit was because during visit 3 (April 24) the conditions were not optimal (even though a male GCWA was heard singing) and so the survey was repeated the following day (April 25). During the initial visit on April 12, 2008, PBS&J ornithologists heard one adult male (0412E) singing in a canyon just east of Pole 132 (Figure 9). This bird moved north (0412F and 0412G). During the second visit on April 18, one male GCWA (0418A) was visually observed singing on the north slope of a canyon just southwest of Pole 132. The singing perch was the same one used the year before during spring 2007. During this second visit, two male GCWAs (0418B and 0418C) were detected in Area 3 (see Figure 4). During the third visit to Area 4 on April 24, a male GCWA (0424P) was heard singing just northeast of Pole 130 (see Figure 9).

During the fourth visit (April 25), three males were encountered (see Figure 9). The first (0425A) was heard singing just west of Pole 129. The second (0425B) was heard singing then visually observed on the east side of the access road southeast of Pole 129 and near the southern edge of Area 4. This bird then flew west into the transmission line ROW and was heard singing along the creek (0425C). The third male

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(0425D) was visually observed singing southwest of Pole 132 from the same perch as the week before and during the 2007 spring survey.

During the fifth visit (May 1), four male GCWAs were encountered (see Figure 9). The first (0501A) was visually observed within the transmission line ROW in a ravine just south of Pole 133. It was chipping, but not singing. The second male (0501B) was heard singing in the ROW between poles 130 and 131. The third male (0501C) was heard singing in the transmission line ROW just south of 129 and just north of the creek. The fourth male (0501D) was heard singing just southeast of Pole 132. It moved slightly to the east (0501E). When first heard, this bird was singing the A song. After approximately 6 minutes, it changed to the B song.

The sixth and final presence/absence visit to Area 4 (and, indeed, the spring 2008 survey) was conducted on May 8, 2008. Four adult male GCWAs were detected during this visit (see Figure 9). Despite seemingly ideal conditions, no GCWAs were detected until a male (0508A) was heard singing southwest of Pole 129. This male was heard continuously as it moved southeast (0508B and 0508C). During this time it changed from its A song to its B song. It was visually observed flying east across the access road, where it continued with its B song (0508D). It then moved slightly northeast (0508E). This bird was heard continuously for over 20 minutes.

The second adult male GCWA (0508F) was heard chipping and visually observed just outside of the ROW midway between poles 130 and 131. Then it started its B song and was observed flying west into the ROW, where it continued its B song (0508G). A third adult male GCWA (0508H) was heard singing its B song near the fence line southeast of Pole 132 in an area where a male GCWA had been heard on previous occasions. The fourth and final male (0508I) was heard singing (A song) east of the transmission line ROW and on the south side of a creek between poles 132 and 133.

During the spring 2008 survey, PBS&J ornithologists made 23 encounters with adult male GCWAs within Area 4. Based on the locations and timing of these GCWA encounters, as well as local topography, PBS&J ornithologists estimate that five or six adult male GCWAs were present in Area 4 during the spring 2008 survey. No female or juvenile GCWAs were heard or observed in Area 4.

4.5 AREA 5

PBS&J ornithologists conducted five surveys within Area 5 on April 18, 24, 30, and May 1 and 5, 2008. GCWAs were encountered in this area on only two of the survey days: April 30 (third visit) and May 5 (fifth and final visit) (Figure 10). On April 30, 2008 an adult male (0430G) was heard singing in the transmission line ROW north of Pole 139. On May 5, 2008, an adult male (0505C) was heard singing the B song east of the transmission line ROW between poles 139 and 140. It then moved to just north of the fence line (0505D). Although GCWAs had been encountered in Area 5, during the fifth and final visit, PBS&J ornithologists played a cassette tape of GCWA vocalizations to elicit responses from the target species in the portions of Area 5 where no GCWAs had been detected in earlier visits. No GCWAs responded to the taped GCWA songs.

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In PBS&J's original habitat assessment identifying potential GCWA habitat conducted prior to construction of the transmission line, Area 5 extended farther north to Pole 149, primarily because of its proximity to other potentially suitable GCWA habitat. However, prior to the initial survey in spring 2007 this habitat was cut down during clearing activities by a third party unrelated to CPS Energy from the fence line between poles 139 and 140 to the fence line near Pole 149 prior to construction of the transmission line. Nevertheless, during the drive along the transmission line ROW to access areas 4 and 5, PBS&J heard singing male GCWAs on two occasions north of Area 5. On April 18, 2008 PBS&J encountered a singing male east of Pole 144 (0418D), and in 2007, PBS&J heard a male GCWA singing just east of Pole 145 (see Figure 10).

4.6 AREA 6

PBS&J ornithologists conducted the 2008 surveys within Area 6 on April 11, 17, 24, 30 and May 5. GCWAs were encountered in Area 6 on only two of the visits: April 24 (third visit) and May 5 (fifth and final visit) (Figure 11). On April 24, 2008, PBS&J ornithologists heard a singing adult male GCWA (0424A) in the transmission line ROW near the creek crossing between poles 151 and 152. On May 5, 2008, PBS&J heard a singing male (0505A) in almost the same place. It then flew across the access road (0505B).

During the spring 2008 survey, PBS&J ornithologists had three encounters with adult male GCWAs within Area 6. Based on the locations and timing of these GCWA detections, as well as local topography, PBS&J ornithologists estimate that one adult male GCWA was present in Area 6 during the spring 2008 survey. No female or juvenile GCWAs were detected in Area 6.

5.0 SUMMARY AND CONCLUSIONS

PBS&J ornithologists recorded 99 detections of GCWAs during the spring 2008 survey, including adult males, an adult female, and a juvenile of unknown sex. These 99 detections may represent 33–37 possible territories. A total of 18 GCWAs was visually verified, while the remaining GCWAs were heard only. Figures 3 through 15 depict the locations and direction of movement of the GCWA encounters (see Appendix A). Appendix B presents detailed information for each GCWA encounter, including date, time, observer, visit number, survey area, location data (latitude/longitude), number of individuals, sex, vocalizations, contact type, and whether a tape was used. Appendix C presents additional bird species that ornithologists encountered in the area during the 2008 survey period, while Appendix D shows project photographs.

Table 2 compares the results of the 2007 and 2008 surveys by area. Excluding the male detected just northeast of Pole 145 near Area 5 (see Figure 10), PBS&J estimated that the 106 detections of GCWAs in 2007 may represent 25–29 territories (PBS&J, 2007). For 2008, excluding the male detected just east of Pole 144 near Area 5 (see Figure 10), PBS&J estimates that the 99 detections of GCWAs may represent 33–37 territories, a slight increase over last year. The biggest increase was in Area 3, where PBS&J



recorded 24–26 territories in 2008, compared to 16–18 in 2007. Area 4 showed a slight increase from 4–5 territories (2007) to 5–6 territories (2008), while Area 1 also showed a slight increase in 2008 with at least 2 and possibly 3 territories, compared to just 2 in 2007. PBS&J recorded 1 territory in Area 5 in 2008, whereas no birds were detected in 2007. PBS&J assumes that the male heard near Area 5 in 2008 was the same individual that was heard in 2007, or at least a bird occupying the same territory. Two areas, however, showed a slight reduction from 2007. PBS&J detected no GCWAs in Area 2 in 2008 despite playing a tape after the fifth and final visit. In 2007, PBS&J had detected one male GCWA in Area 2, which responded to a cassette tape after the fifth and final visit. In Area 6, PBS&J recorded only one territory in 2008, compared to 2–3 territories in 2007.

TABLE 2

ESTIMATED NUMBER OF GCWA TERRITORIES, 2007 AND 2008

	2007	2008
Area 1	2	2-3
Area 2	1	0
Area 3	16–18	24-26
Area 4	4–5	5 –6
Area 5	0	1
Area 6	2–3	1
Total	25–29	33–37

It is assumed that the male golden-cheeked warblers encountered in the study area in 2008 also breed there. Evidence of nesting is not common. One male in Area 3 was observed with nesting material in its mouth, while another male in Area 3 was accompanied by a juvenile of unknown sex. The only female observed this year was also in Area 3, and was accompanying a male. In 2007, the surveys continued into August to include monitoring during CPS Energy maintenance activities. During that period, more family groups were observed, indicating successful reproduction. Similar to 2007, the warblers in 2008 appear to be readily and successfully using areas adjacent to the line and do not appear to be disturbed by its presence. PBS&J found no evidence of warblers or other birds striking the lines, which is not surprising considering the average flight patterns.

6.0 REFERENCES

American Ornithologists' Union (AOU). 1998. Check-list of North American birds. 7th edition. Allen Press, Inc., Lawrence, Kansas.

———, 2000. 42nd supplement to the check-list of North American birds. Auk 117:847-858.

-----. 2002. 43rd supplement to the check-list of North American birds. Auk 119:897–906.

-----. 2003. 44th supplement to the check-list of North American birds. Auk 120;923–931.

- 2004. 45th supplement to the check-list of North American birds. Auk 121:985-995.
 2005. 46th supplement to the check-list of North American birds. Auk 122:1026-1031.
 2006. 47th supplement to the check-list of North American birds. Auk 123:926-936.
 2007. 48th supplement to the check-list of North American birds. Auk 124:1109-1115.
 Elliott, L. 2004. Elizabeth P. Hill Preserve golden-cheeked warbler survey. Unpublished report. 14 June.
- Fish and Wildlife Service (FWS), U.S. Department of the Interior. 1992. Golden-cheeked warbler (*Dendroica chrysoparia*) Recovery Plan. Albuquerque, New Mexico.
- -----. 1995. Threatened and endangered species of Texas (Revised). U.S. Fish and Wildlife Service, Austin, Texas. June 1995.
- ———. 2005. Maps provided to Alan Glen by Jana Milliken, U.S. Fish and Wildlife Service, Austin, Texas. 13 September.
- International Bird Census Committee (IBCC). 1970. An international standard for a mapping method in bird census work recommended by the International Bird Census Committee. Audubon Field Notes 24:722-726.
- Keddy-Hector, D.P. 1997. Elizabeth P. Hill Preserve: 1997 golden-cheeked warbler survey. Unpublished report. 1 November.
- Ladd, C.G. 1985. Nesting habitat requirements of the golden-cheeked warbler. M.S. Thesis. Southwest Texas State University, San Marcos.
- Ladd, C., and L. Gass. 1999. Golden-cheeked warbler (*Dendroica chrysoparia*). In: The birds of North America, No. 420 (A. Poole and F. Gill, editors). The Birds of North America, Inc., Philadelphia, Pennsylvania.
- Lasley, G., C. Sexton, W. Sekula, M. Lockwood, and C. Shackelford. 1997. Texas region, spring migration, March 1-May 31, 1997. Field Notes 51:892-897.
- Lockwood, M.W., and B. Freeman. 2004. The Texas Ornithological Society handbook of Texas birds. Texas A&M University Press, College Station.
- Oberholser, H.C. 1974. The bird life of Texas. 2 vols. University of Texas Press, Austin.
- PBS&J. 2007. Golden-cheeked warbler survey for CPS Energy's Cagnon-Kendall 345-kV transmission line, Bexar County Texas: Spring 2007. Document No. 070288. PBS&J, Austin, Texas. November.
- Pulich, W.M. 1976. The golden-cheeked warbler: a bioecological study. Texas Parks and Wildlife Dept., Austin.

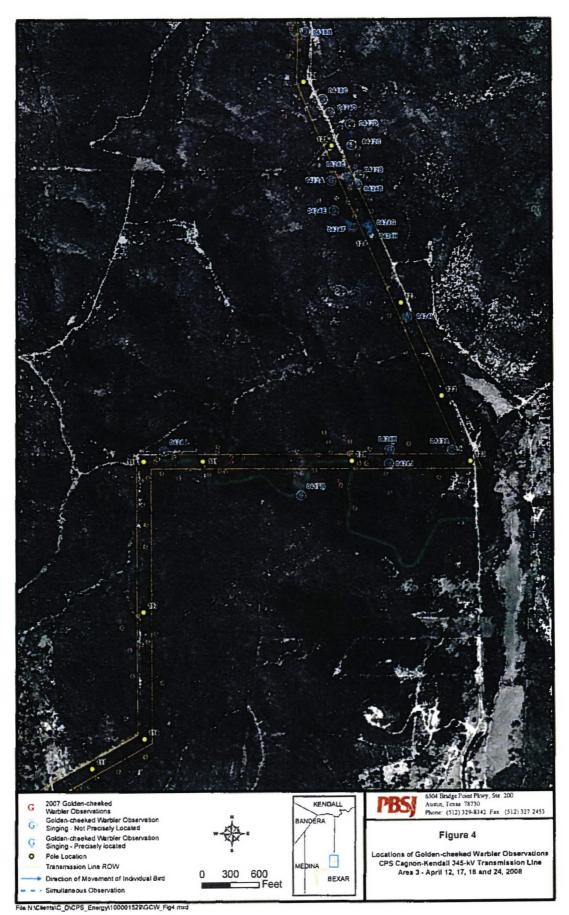
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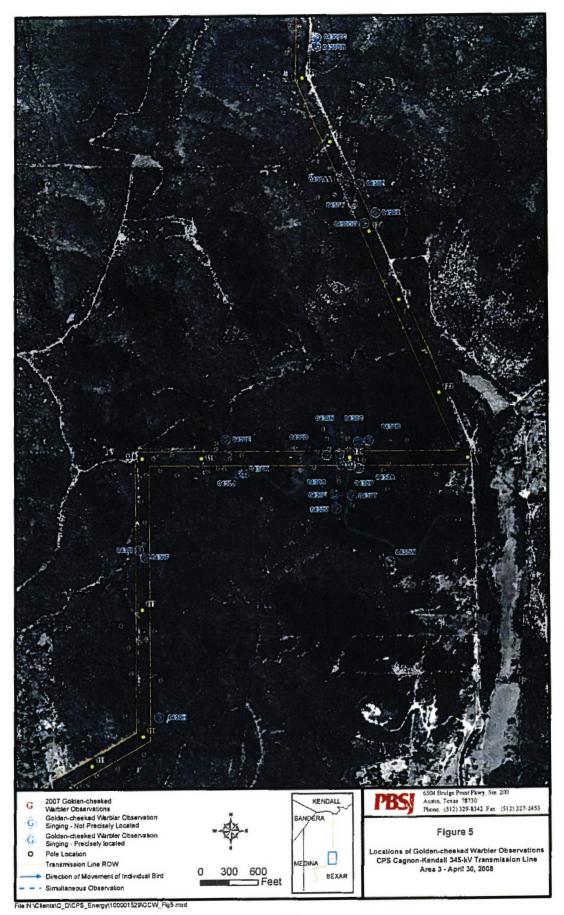
- San Antonio Audubon Society (SAAS). 2004. Birds of Bexar County, Texas: a seasonal field checklist. 2004 Edition. San Antonio Audubon Society.
- Texas Ornithological Society (TOS). 1995. Checklist of the birds of Texas. 3rd edition. Capital Printing, Austin.
- Texas Parks and Wildlife Department (TPWD). 2005. Special species and natural community data files and Texas Natural Diversity Database data on USGS topographic maps.
- Wahl, R., D.D. Diamond, and D. Shaw. 1990. The golden-cheeked warbler: a status review. Prepared for the U.S. Fish and Wildlife Service, Fort Worth, Texas.
- Zara Environmental, LLC. 2005. Golden cheeked warbler Habitat assessment, R.L. White Ranch, Morales Pasture. Unpublished report. September 30. Buda, Texas.
- ———. 2006. Golden-cheeked warbler survey, R.L. White Ranch, Morales Pasture, Bexar County, Texas. Unpublished report. May 22. Buda, Texas.

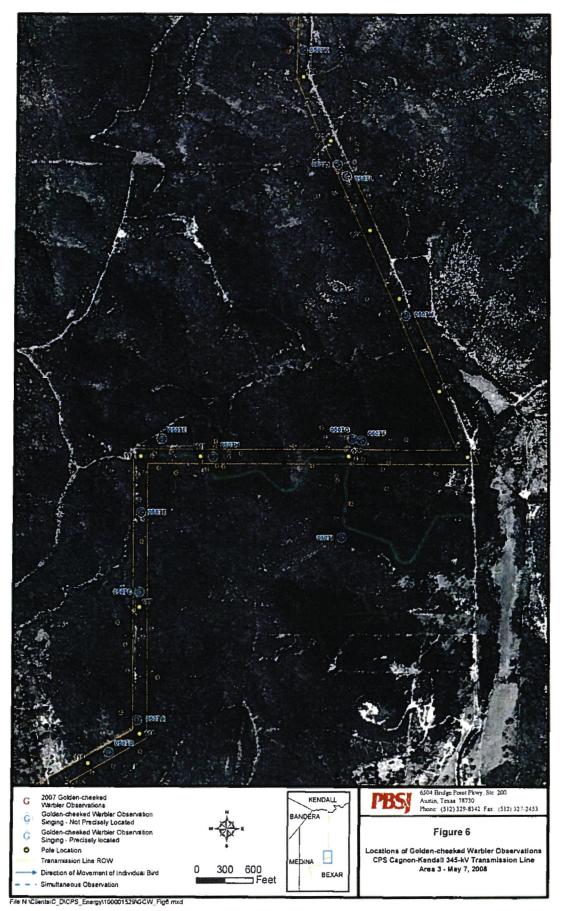
Appendix A

Figures of GCWA Locations









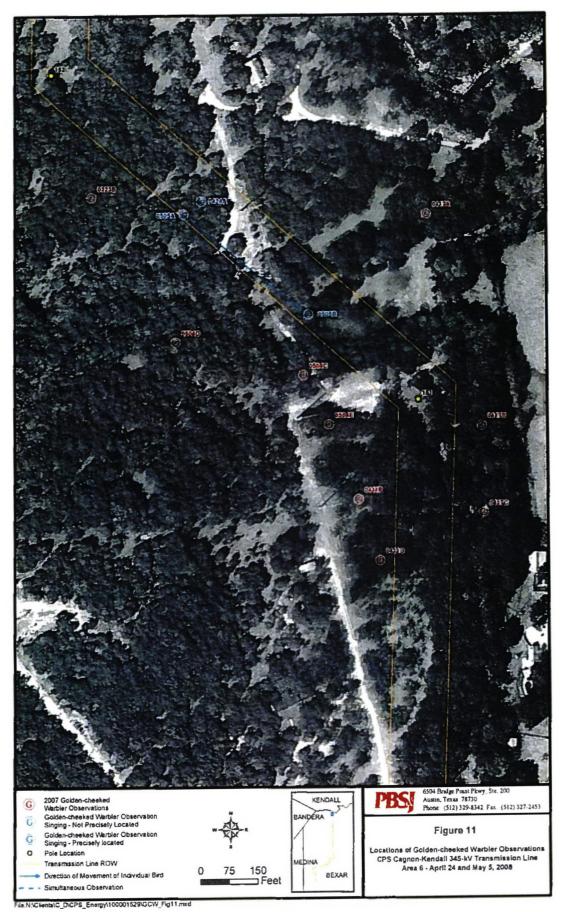
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Appendix B

Observation Data and Locations

APPENDIX B - OBSERVATION DATA AND LOCATIONS: SPRING 2008

29/080089	ID	Date	Time	Observer ¹	Vicit	Area ²	Latitude ³	Longitude ³	Number	Sex ⁴	Vocalization	Contact Type	Visual/ Aural ⁵	Tape? (Y/N)
Ф	0412A	4/12/2008	08:18	DG	1	3	N 29 38 36.269204	W 98 44 39.127771	1	M	A	Single	A	N N
	0412B	4/12/2008	08:25	DG	1	3	N 29 38 36.868547	W 98 44 35.852149	1	M	A	Single	Ā	N
	0412C	4/12/2008	08:34	DG	1	3	N 29 38 39.965873	W 98 44 36.730220	1	M	Ä	Single	A	N
	0412D	4/12/2008	08:36	DG	1	3	N 29 38 42.119640	W 98 44 36.878829	1	M	Ä	Single	A	N
	0412E	4/12/2008	09:13	DG	1	4	N 29 39 42.076332	W 98 44 39.076872	1	M	Ä	Single	Ā	N
	0412E	4/12/2008	09:18	DG	1	4	N 29 39 42.772925	W 98 44 39.414497	1	M	Ā	Single	A	N
	0412G	4/12/2008	09:29	DG	1	4	N 29 39 43.146698	W 98 44 39.428306	1	M	A	Single	A	N
	0417A	4/17/2008	08:09	DG	2	3	N 29 38 08.362467	W 98 44 24.929089	1	M	Ä	Single	A	N
	0417B	4/17/2008	09:49	DG	2	3	N 29 38 03.764332	W 98 44 42.877729	1	M	Ä	Single	Ä	N
	0417C	4/17/2008	10:12	MH	2	1	N 29 36 33.679360	W 98 46 54.240721	1	M	Ä	Single	A	N
	04170	4/18/2008	08:37	DG	2	4	N 29 39 41.454561	W 98 44 42.646116	1	M	A, B	Single	v	N
	0418B	4/18/2008	09:21	DG	-	3	N 29 38 51.652105	W 98 44 42.093410	1	M	A	Single	Ä	N
	0418C	4/18/2008	09:27	DG	_	3	N 29 38 44.683051	W 98 44 40.069458	1	M	Ä	Single	A	N
	0418D	4/18/2008	11:29	DG	_		N 29 41 43.009504	W 98 44 34.784153	1	М	. A	Single	A	N.
	0410D	4/24/2008	08:07	MH	3	6	N 29 38 08.406168	W 98 44 59.194464	1	M	Ä	Single	A	N
	0424B	4/24/2008	08:25	DG. GN	3	3	N 29 42 56.193979	W 98 44 44.878877	1	M	Ä	Single	A	N
	0424C	4/24/2008	08:30	DG, GN	3	3	N 29 38 35.859555	W 98 44 36.085826	1	M	A	Single	V	N
	0424D	4/24/2008	09:10	DG, GN	3	3	N 29 38 36.703210	W 98 44 37.354804	1	M	A	Single	À	N
	0424E	4/24/2008	09:40	DG, GN	3	3	N 29 38 43.335574	W 98 44 39.263955	1	M	A	Single	Α	N
- -7	0424F	4/24/2008	09:51	DG, GN	3	3	N 29 38 33.174605	W 98 44 38,808183	1	M	Α	Single	V	N
	0424G	4/24/2008	09:52	DG, GN	3	3	N 29 38 31.448889	W 98 44 36.655247	2	М	Α	Single	V	N
	0424H	4/24/2008	09:56	DG, GN	3	3	N 29 38 31.678154	W 98 44 34.593287	1	М	Α	Single	V	N
	04241	4/24/2008	10:17	DG, GN	3	3	N 29 38 30.561436	W 98 44 34.456362	1	М	Α	Single	V	N
	0424J	4/24/2008	10:51	DG, GN	3	3	N 29 38 22.074714	W 98 44 30.231830	1	М	В	Single	Α	N
	0424K	4/24/2008	10:57	DG, GN	3	3	N 29 38 06.999469	W 98 44 32.505984	1	М	В	Single	Α	N
	0424L	4/24/2008	11:34	DG, GN	3	3	N 29 38 08.407335	W 98 44 32.415742	1	М	Α	Single	Α	N
	0424M	4/24/2008	11:40	MH	3	1	N 29 36 32.381930	W 98 46 55.403223	1	М	Α	Single	Α	N
	0424N	4/24/2008	11:42	MH	3	1	N 29 36 30.389686	W 98 46 53.875285	1	М	Α	Single	Α	N
	04240	4/24/2008	11:44	MH	3	1	N 29 36 29.523752	W 98 46 55.601801	1	М	Α	Single	Α	N
	0424P	4/24/2008	16:08	DG, GN	3	4	N 29 39 24.202389	W 98 44 39.830418	1	М	Α	Single	Α	N
	0425A	4/25/2008	08:27	DG, GN	4	4	N 29 39 15.999810	W 98 44 43.451403	1	M	Α	Single	Α	N
	0425B	4/25/2008	08:40		4	4	N 29 39 10.518543	W 98 44 40.401494	1	M	Α	Single	V	N
	0425C	4/25/2008	08:42		4	4	N 29 39 10.574344	W 98 44 42.261679	1	M	Α	Single	Α	N
	0425D	4/25/2008	09:15	DG, GN	4	4	N 29 39 41.454561	W 98 44 42.646116	1	М	-	Single	V	N
	0430A	4/30/2008	07:49	•	4	3	N 29 38 06.197108	W 98 44 35.783893	1	М	Α	Single	Α	N
	0430B	4/30/2008	07:56	•	4	3	N 29 38 36,021861	W 98 44 37.972289	1	M	В	Single	Α	N
	0430C	4/30/2008	08:00	•	4	3	N 29 38 09.082847	W 98 44 34.612917	1	M	Α	Single	Α	N
	0430D	4/30/2008	08:12	•	4	3	N 29 38 49.726341	W 98 44 40.646411	1	M	Α	Single	Α	N

Bexar Ranch, L.P. First Supplemental Production to Anaqua Springs 39

100001529/080089

APPENDIX B - OBSERVATION DATA AND LOCATIONS: SPRING 2008

	ID	Dete	7	Ohno	14. "	0 2	3	3					Visual/	Tape?
· -	ID 0430E	Date 4/30/2008	Time	Observer ¹		Area ²		Longitude ³	Number	Sex⁴	Vocalization	Contact Type	Aural ⁵	(Y/N)
	0430E 0430F		08:35	DG, GN	4	3	N 29 38 08.929566	W 98 44 35.860847	1	M	В	Single	Α	N
		4/30/2008	09:02	DG, GN	4	3	N 29 38 50.629178	W 98 44 40.608485	1	M	A	Single	Α	N
	0430G 0430H	4/30/2008	09:20	MH DO ON	4	5	N 29 38 07.576641	W 98 44 39.659143	1	M	A	Single	Α	N
	0430H 0430I	4/30/2008	09:24	DG, GN	4	3	N 29 38 31.420259	W 98 44 34.978203	1	М	A	Single	Α	N
	0430I 0430J	4/30/2008 4/30/2008	09:54	DG, GN	4	3	N 29 38 09.241838	W 98 44 51,624394	1	М	Α	Single	A	N
	04305 0430K		10:16	DG, GN	4	3 3	N 29 37 57.181822	W 98 45 01.267835	1	M	A	Single	V	N
	0430K 0430L	4/30/2008 4/30/2008	10:18 10:30	DG, GN MH	4 4	-	N 29 40 58.292909 N 29 37 40.818167	W 98 44 39.116875 W 98 44 59.714035	1	F	Chips	Single	V	N
	0430L 0430M	4/30/2008	10:30	MH		1 1	N 29 37 57.931689		•	M	A	Single	A	N
	0430N	4/30/2008	10:32	DG, GN	4	•		W 98 45 02.051231	1	М	A	Single	A	N
					4	3	N 29 38 05.683907	W 98 44 50.015156	1	М	A	Simultaneous	A	N
	04300	4/30/2008	10:44	DG, GN	4	3	N 29 38 05.724397	W 98 44 49.443952	1	M	A	Simultaneous	Α	N
	0430P	4/30/2008	10:44	DG, GN	4	3	N 29 36 42.732084	W 98 47 03.647085	1	M	A	Simultaneous	A	N
	0430Q 0430R	4/30/2008	10:47	MH	4	1	N 29 36 41.385213	W 98 47 01.980793	1	M	A	Single	A	N
		4/30/2008	10:48	MH	4	1	N 29 38 07.709506	W 98 44 38.088267	1	M	A	Single	A	N
	0430\$ 0430T	4/30/2008	10.49	MH	4	1 3	N 29 38 06.575439 N 29 38 06.510777	W 98 44 37.924570	1	M	A	Single	A	N
	04301 0430U	4/30/2008 4/30/2008	10:49	DG, GN DG, GN	4	3	N 29 36 06.5 10777 N 29 36 32.547504	W 98 44 36.734935 W 98 46 53.831433	1	M M	A	Single	A	N
			10:49	•	4		N 29 36 32.547504 N 29 36 30.913380	W 98 46 53.082385	1	M	A	Single	٧	N
	0430V 0430W	4/30/2008 4/30/2008	10:52 10:56	DG, GN DG, GN	4	3 3	N 29 36 31.066563	W 98 46 56.496436	1	M	A A	Single	A	N N
							N 29 38 03.412999	W 98 44 36.600022	1			Single	A	
	0430X	4/30/2008	11 44	DG, GN	4	3	N 29 38 03.559602	W 98 44 38.697086	2	M	A	Single Simultaneous	A V	N
	0430Y 0430Z	4/30/2008	12.03	DG, GN	4	3	N 29 38 02.077283	W 98 44 38.507067	1	M, J	Chips		-	N
		4/30/2008	12.03	DG, GN	4	3	N 29 37 56.612474	W 98 44 38.507067 W 98 44 32.177721	1	M	A	Simultaneous	A	N
		4/30/2008	12:03	DG, GN DG, GN	4	3 3	N 29 37 36.612474 N 29 38 32.526366	W 98 44 33.632907	1	M	B A	Simultaneous	A	N
		4/30/2008 4/30/2008	12:28	DG, GN DG, GN	4	3	N 29 38 33.465650	W 98 44 36.339264	1	M	A	Single Single	A	N
		4/30/2008	12:30 13:02	DG, GN DG, GN	4 4	3	N 29 38 35.487820	W 98 44 35.514370	1	M	A	Single	A A	N
	0501A	5/1/2008	07:29	DG, GN DG, GN	5	3 4	N 29 39 49.335315	W 98 44 40.711188	1	M	Chips	Single	v	N
	0501A 0501B	5/1/2008	07:57	DG, GN DG, GN	5 5	4	N 29 39 27.306834	W 98 44 41.401383	1	M	A Chips	Single	A	N
	0501C	5/1/2008	08:15	DG, GN DG, GN	5	4	N 29 39 13.804894	W 98 44 41.376494	1	M	A	Single	Â	N
	0501D	5/1/2008	09:08	DG, GN DG. GN	5	4	N 29 39 41.394420	W 98 44 39.668842	1	M	Ā	Single	Â	N
	0501E	5/1/2008	09:08	DG, GN DG, GN	5 5	4	N 29 39 41.408103	W 98 44 39.083644	1	M	В	Single	Â	N
	0505A	5/5/2008	09:40	MH	5	6	N 29 42 55.862613	W 98 44 45.408187	1	M	A	Single	A	N
				MH	5	6	N 29 42 53.259080	W 98 44 41.681539	1	M	A	Single	Â	N
	0505B	5/5/2008	09:41	MH	5 5	5	N 29 40 58.534196	W 98 44 36.980285	1	M	В	Single	Ā	N
	0505C 0505D	5/5/2008 5/5/2008	10:59	MH	5 5	5 5	N 29 40 56.534 196 N 29 41 01.294953	W 98 44 36.903004	1	M	В	Single	A	N
	0505E		11:00	MH	ວ 5	1	N 29 36 47.198541	W 98 47 06.714108	1	M	A	Single	Ä	N.
	0505F	5/5/2008 5/5/2008	12:43 12:43	MH	5 5	1	N 29 36 48.432366	W 98 47 09.231646	1	M	A	Single	Ä	N
					_				•			-		N
	0505G	5/5/2008	12:44	MH	5	1	N 29 36 50.391388	W 98 47 07.678313	1	М	A	Single		Α

APPENDIX B - OBSERVATION DATA AND LOCATIONS: SPRING 2008

9/080089	M				<u></u>		3	2					Visual/	Tape?
88	ID	Date	Time	Observer'	Visit	Area ²		Longitude ³	Number	Sex⁴	Vocalization	Contact Type	Aural ⁵	(Y/N)
	05 0 5H	5/5/2008	13:00	MH	5	1	N 29 36 31.277516	W 98 46 52.240845	1	M	Α	Single	Α	N
	05051	5/5/2008	14:00	MH	5	1	N 29 36 45.311041	W 98 47 06,750846	1	М	Α	Single	Α	N
	0507A	5/7/2008	08:01	DG	5	3	N 29 37 40.248082	W 98 45 01.893469	1	M	Α	Single	Α	N
	0507B	5/7/2008	08.11	DG	5	3	N 29 37 36,980966	W 98 45 05.242235	1	M	Α	Single	Α	N
	0507C	5/7/2008	08:27	DG	5	3	N 29 37 53.368460	W 98 45 01.673745	1	M	Α	Single	Α	N
	0507D	5/7/2008	08-37	DG	5	3	N 29 38 01.524292	W 98 45 01.497487	1	M	Α	Single	Α	N
	0507E	5/7/2008	09:23	DG	5	3	N 29 38 09.130388	W 98 44 59.105649	1	M	Α	Single	Α	N
	0507F	5/7/2008	10:18	DG	5	3	N 29 38 08.948681	W 98 44 35.375601	1	M	В	Single	Α	N
	0507G	5/7/2008	10:24	DG	5	3	N 29 38 09.087123	W 98 44 36.436877	1	M	В	Single	Α	N
	0507H	5/7/2008	10:58	DG	5	3	N 29 38 07.236750	W 98 44 53.052845	1	M	Α	Single	Α	N
	05071	5/7/2008	11:24	DĢ	5	3	N 29 37 58.969341	W 98 44 37.680277	1	M	Α	Single	Α	N
	0507J	5/7/2008	12:20	DG	5	3	N 29 38 37.432547	W 98 44 38.238508	1	M	Α	Single	Α	N
	0507K	5/7/2008	12:37	DG	5	3	N 29 38 49,279229	W 98 44 42.393003	1	M	Α	Single	Α	N
	0507L	5/7/2008	12:59	DG	5	3	N 29 38 36.230268	W 98 44 37.179849	1	M	Α	Single	Α	N
	0507M	5/7/2008	13:17	DG	5	3	N 29 38 21.813888	W 98 44 30.190703	1	M	Α	Single	Α	N
œ	0508A	5/8/2008	08:25	DG	6	4	N 29 39 15.482200	W 98 44 42.819553	1	M	Α	Single	Α	N
ώ	0508B	5/8/2008	08:29	DG	6	4	N 29 39 14.869504	W 98 44 42.049925	1	M	Α	Single	Α	N
	0508C	5/8/2008	08:39	DG	6	4	N 29 39 13.766515	W 98 44 41.524140	1	M	В	Single	Α	N
	0508D	5/8/2008	08:43	DG	6	4	N 29 39 11.035410	W 98 44 40.228106	1	M	В	Single	٧	N
	0508E	5/8/2008	08:46	DG	6	4	N 29 39 11.749382	W 98 44 39.439925	1	M	В	Single	Α	N
	0508F	5/8/2008	09:11	DG	6	4	N 29 39 28.064137	W 98 44 39.941359	1	M	Chips	Single	V	N
	0508G	5/8/2008	09:17	DG	6	4	N 29 39 28.068771	W 98 44 41.204745	1	M	В	Single	V	N
	0508H	5/8/2008	09:30	DG	6	4	N 29 39 40.581183	W 98 44 38.992125	1	М	В	Single	Α	N
	05081	5/8/2008	09:43	DG	6	4	N 29 39 48.451763	W 98 44 39.449182	_1	M	Α	Single	A	N

¹Derek Green (DG), Mike Horvath (MH), Gary Newgord (GN)

²Area 1: SH211 (Poles 95-102); Area 2: SH16 (Poles 104-108); Area 3: Morales (Poles 115-127); Area 4: Billers/Moore; Area 5: Poles 136-145(Poles 128-133); Area 6: Recht (Poles 150-153)

³All coordinates are in Lat/Lon hddd°mm'ss.s", North American Datum 1983, feet

⁴Male (M), Female (F), Juvenile - unknown sex (J)

⁵Visual (V), Aural (A)

Appendix C

Avian Species Encountered Spring 2008

APPENDIX C

AVIAN SPECIES ENCOUNTERED CAGNON/KENDALL 345-KV TRANSMISSION LINE SPRING 2008

Common Name ¹	Scientific Name ¹
Wild turkey	Meleagris gallopavo
Northern bobwhite	Colinus virginianus
Great blue heron	Ardea herodias
Black vulture	Coragyps atratus
Turkey vulture	Cathartes aura
Cooper's hawk	Accipiter cooperii
Red-tailed hawk	Buteo jamaicensis
Crested caracara	Caracara cheriway
American kestrel	Falco sparverius
Killdeer	Charadrius vociferus
White-winged dove	Zenaida asiatica
Mourning dove	Zenaida macroura
Yellow-billed cuckoo	Coccyzus americanus
Greater roadrunner	Geococcyx californianus
Common nighthawk	Chordeiles minor
Chimney swift	Chaetura pelagica
Black-chinned hummingbird	Archilochus alexandri
Golden-fronted woodpecker	Melanerpes aurifrons
Ladder-backed woodpecker	Picoides scalaris
Downy woodpecker	Picoides pubescens
Northern flicker	Colaptes auratus
Eastern phoebe	Sayomis phoebe
Ash-throated flycatcher	Myiarchus cinerascens
Great crested flycatcher	Myiarchus crinitus
Western kingbird	Tyrannus verticalis
Scissor-tailed flycatcher	Tyrannus forficatus
White-eyed vireo	Vireo griseus
Warbling vireo	Vireo gilvus
Blue jay	Cyanocitta cristata
Western scrub-jay	Aphelocoma californica
Common raven	Corvus corax
Purple martin	Progne subis
Cliff swallow	Petrochelidon pyrrhonota
Barn swallow	Hirundo rustica
Carolína chickadee	Poecile carolinensis
Black-crested titmouse	Baeolophus atricristatus
Bushtit	Psaltriparus minimus
Canyon wren	Catherpes mexicanus



APPENDIX C (Concluded)

Common Name ¹	Scientific Name ¹
Carolina wren	Thryothorus Iudovicianus
Bewick's wren	Thryomanes bewickii
Ruby-crowned kinglet	Regulus calendula
Blue-gray gnatcatcher	Polioptila caerulea
American robin	Turdus migratorius
Northern mockingbird	Mimus polyglottos
European starling	Sturnus vulgaris
Orange-crowned warbler	Vermivora celata
Nashville warbler	Vermivora ruficapilla
Yellow-rumped warbler	Dendroica coronata
Golden-cheeked warbler	Dendroica chrysoparia
Black-and-white warbler	Mniotilta varia
Summer tanager	Piranga rubra
Rufous-crowned sparrow	Aimophila ruficeps
Chipping sparrow	Spizetla passerina
Field sparrow	Spizella pusilla
Lark sparrow	Chondestes grammacus
Savannah sparrow	Passerculus sandwichensis
White-crowned sparrow	Zonotrichia leucophrys
Northern cardinal	Cardinalis cardinalis
Blue grosbeak	Passerina caerulea
Painted bunting	Passerina ciris
Great-tailed grackle	Quiscalus mexicanus
Brown-headed cowbird	Molothrus ater
House finch	Carpodacus mexicanus

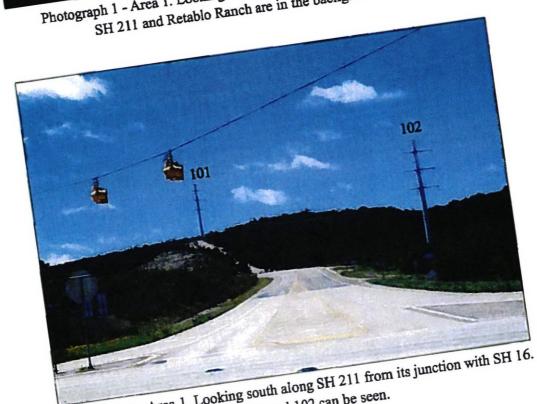
¹ Nomenclature follows American Ornithologist's Union (AOU) Check-list of North American Birds (1998, 2000, 2002, 2003, 2004, 2005, 2006, 2007)



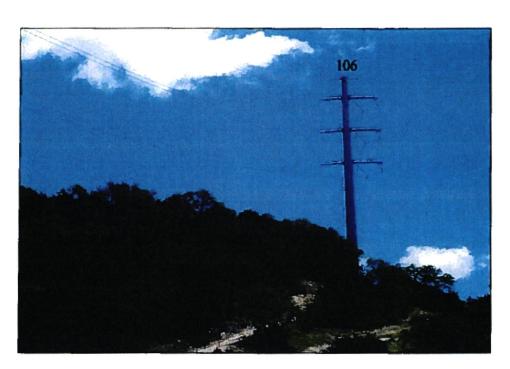
Appendix D Project Photographs



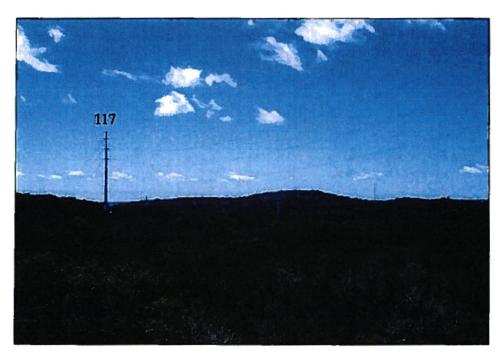
Photograph 1 - Area 1. Looking south from Pole 98 toward Pole 97. SH 211 and Retablo Ranch are in the background.



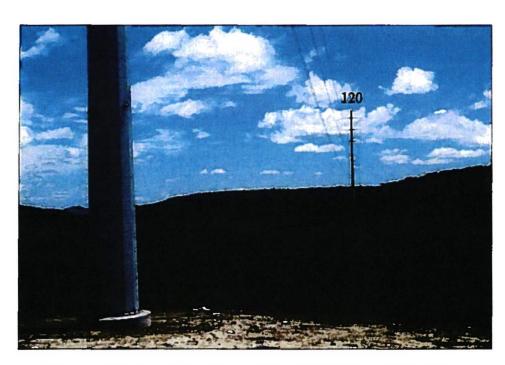
Photograph 2 - Area 1. Looking south along SH 211 from its junction with SH 16.



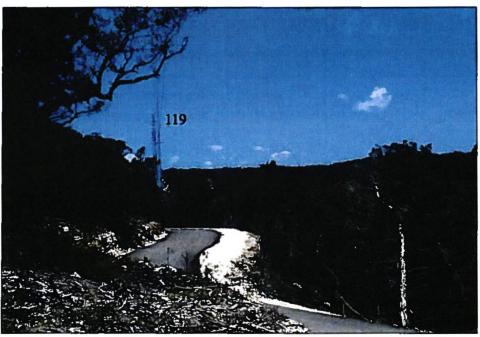
Photograph 3 - Area 2B. Looking east toward Pole 106 from SH 16.



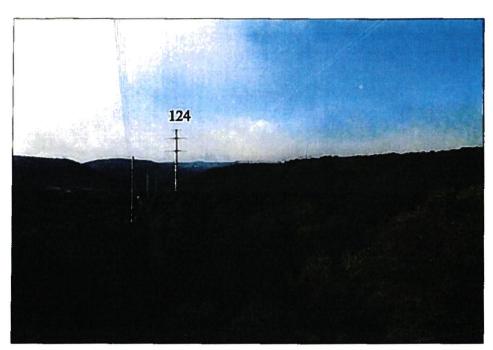
Photograph 4 - Area 3. Looking south from ROW near Pole 118.



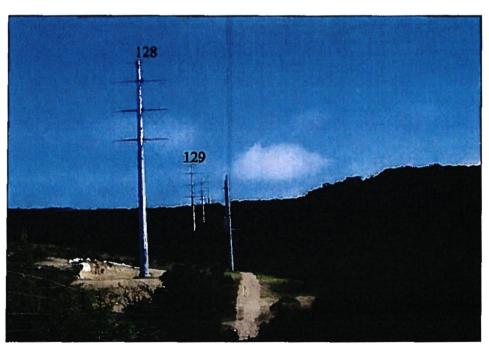
Photograph 5 - Area 3. Looking east from Pole 119 toward Pole 120.



Photograph 6 - Area 3. Looking west from Pole 120 along the permanent access road toward Pole 119.



Photograph 7 - Area 3. Looking south from Pole 125 toward Pole 124. Helotes-Cico 138-kV transmission is on the left.



Photograph 8 - Area 4. Looking north. Area 4 starts between Poles 128 and 129. Helotes-Cico 138-kV transmission line is on the right.

 $\sqrt{666065}$

STATE OF TEXAS I

KNOW ALL MEN BY THESE PRESENTS:

That JOHN H. WHITE, JOELLA WHITE BITTER, and EVELYN WHITE THOM/SON, Individually and as Executors and Trustees under the Wills of ETHEL SMYTH WHITE and R. L. WHITE, Deceased, joined by JOHN A. BITTER, JR. and FREDERICK L. THOMPSON, JR., all of Bexar County, Texas, for and in consideration of One Thousand Four Hundred and Twenty Five Dollars (\$1,425.00) to us in hand paid by the CITY PUBLIC SERVICE BOARD, OF SAN ANTONIO, a municipal board of the CITY OF SAN ANTONIO set up and created under the Indenture executed by the CITY OF SAN ANTONIO to HARRIS TRUST AND SAVINGS BANK and F. O. MANN, Trustees, dated February 1, 1951, and recorded in Volume 2966, Pages 287-376 of the Deed of Trust Records of Bexar County, Texas, the receipt and sufficiency of which is hereby acknowledged and confessed, have granted, sold and conveyed and by these presents do grant, sell and convey unto the CITY OF SAN ANTONIO in Bexar County, Texas, as part of its electric and gas system, an easement and right-of-way fifty feet in width for electric transmission lines consisting of a variable number of wires, and with all necessary or desirable appurtenances (including not more than eighteen towers and/or thirty-eight poles made of wood, metal or other materials, telephone and telegraph wire, props and guys), at or near the location, and along the general course now located and staked out by the said City of San Antonio, over, across, and upon the following described lands located in Bexar County, Texas, to-wit:

> Beginning at a point on the south line of R. L. White Ranch joining L. Morales Estate at the most northerly northwest corner of the L. Morales Estate Tract at Station Number 687 / 98.47 and extending to the north line between R. L. White Ranch and H. M. Crighton Estate, at a point 132 feet east of the southwest corner of the H. M. Crighton Estate Tract to Station Number 820 / 34, this being a parcel or tract of land out of the H. & G.N.R.R. Co. Survey, C.C.S.D. &. R.G.N.G.R.R. Co. Survey #1, Larkin T. Smith Survey #2 and the Mrs. M. H. DeMoralla Survey #921 and being the same land conveyed to R. L. White by deed dated May 16, 1927 and recorded in Volume 954, Page 188 and deed dated August 30, 1924 and recorded in Volume 786, Page 286, both deeds being recorded in the Deed Records of Bexar County, Texas.

Together with the right of ingress and egress over, across and upon said right-of-way for the purpose of constructing, reconstructing, inspecting, patroling, hanging new wires on, maintaining and removing said lines and appurtenances; the right to relocate said lines within said right-of-way, the right to remove from said lands all trees and parts thereof, or other obstructions, which endanger or may interfere with the efficiency of said lines or their appurtenances; and the right of exercising all other rights hereby granted, and Grantors expressly covenant and agree for themselves Anaqua Springs 49 their heirs and assigns, that no building or obstruction of any kind will be placed on said easement right-of-way herein granted.

WITNESS our hand this 1774 day of	
JOHN A. BITTER, JR. Hederick & Homson J. FREDERICK L. THOMPSON, JR.	John H. White JOHN H. WHITE JOELLA WHITE BITTER
	Evely WHITE THOMPSON
STATE OF TEXAS I	
BEFORE ME, the undersigned authority JOHN H. WHITE, Individually and as Executor and Ethel Smyth White and R. L. White, deceased, kname is subscribed to the foregoing instrument executed the same for the purpose and considerable state of the control of the cont	d Trustee under the Wills of nown to me to be the person whose , and acknowledged to me that he ation therein expressed, and in
VER UNDER MY HAND AND SEAL OF OFFICE A.D. 1965.	Kosie Zaizecco
OF ATT Notary P	Texas County,
STATE OF TEXAS I	
BEFORE ME, the undersigned authority JOELLA WHITE BITTER, Individually and as Execu of Ethel Smyth White and R. L. White, deceased whose name is subscribed to the foregoing inst that she executed the same for the purpose and in the depacities therein set forth.	tor and Trustee under the Wills , known to me to be the person rument, and acknowledged to me

UNDER MY HAND AND SEAL OF OFFICE this 1774 day of

A.D. 1965.

Bexar Ranch, L.P. First Supplemental Production to Anaqua Springs 50

31411

STATE	OF	TEXAS	Ĩ
COUNTY	OI	BEXAR	Ĭ

BEFORE ME, the undersigned authority, on this day personally appeared JOHN A. BITTER, JR., known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for

the purpose and consideration therein expressed. diven under MY HAND AND SEAL OF OFFICE this 1706 day of May A.D. 1965. STATE OF TEXAS COUNTY OF BEXAR BEFORE ME, the undersigned authority, on this day personally appeared EVELYN WHITE THOMPSON, Individually and as Executor and Trustee under the Wills of Ethal Smyth White and R. L. White, deceased, known to me to be the person rame is subscribed to the foregoing instrument, and acknowledged to me she executed the same for the purpose and consideration therein expressed, in the apacities therein set forth. GIVEN UNDER MY HAND AND SEAL OF OFFICE this / day of Notary Public

STATE OF TEXAS COUNTY OF BEXAR

BEFORE ME, the undersigned authority, on this day personally appeared PREDERTCK L. THOMPSON, JR., known to me to be the person whose name is subscribed of the foregoing instrument, and acknowledged to me that he executed the same the purpose and consideration therein expressed.

CIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of A.D. 1965.

Bexar Ranch, L.P. First Supplemental Production to Anaqua Springs 51