

# ENDANGERED SPECIES SURVEY SUMMARY

## FOR GAINES GREENBELT, IN TRAVIS COUNTY, TEXAS

BOWMAN PROJECT NO. 009935-01-001

JULY 5, 2016

### 1.0 GENERAL INFORMATION

PROJECT NAME: Gaines Greenbelt Golden-cheeked Warbler Survey

COUNTY: Travis County, Texas

LOCATION: Approximately 0.5 mile north of the City of Sunset Valley between Mopac (Loop 1) and U.S. 290

USGS 7.5-QUAD: Oak Hill, Texas

PROPERTY SIZE: Approximately 21 acres

CLIENT: City of Sunset Valley  
Public Works Department – Environmental Programs  
Attn: Carolyn Meredith  
3205 Jones Road  
Sunset Valley, Texas 78745

SUBJECT SPECIES: Golden-cheeked warbler (GCW, *Setophaga chrysoparia*)

HABITAT AREA: GCW – Approx. 21 acres of potential suitable habitat

SURVEY PERSONNEL: Jennifer Blair, CWB and Erin Swanson

SURVEY DATES: March 21– May 20, 2016 (Table 1)

TOTAL SURVEY TIME: Approximately 10 hours and 35 minutes (Table 1)

NUMBER OF VISITS: 5

## 2.0 METHODS

This endangered species survey summary covers the approximately 21-acre City of Sunset Valley Gaines Greenbelt in south-central Travis County, Texas. Survey methods used spot-mapping techniques and were consistent with U.S. Fish and Wildlife Service (USFWS) protocol for GCW presence/absence surveys (January 13, 2010 version). The compiled track-logs from the GPS receivers are shown in Figure 2, and represent the routes walked by survey personnel during the 2016 survey visits.

As shown in Table 1, five visits were made to each survey area, with all visits at least 5 days apart. Survey hours exceeded the minimum requirement of one hour per survey visit for 25 acres of potential habitat required for a complete survey. Weather conditions were acceptable for completing field surveys. Survey visits began within 30 minutes of sunrise or within 7 hours after sunrise.

Field observations were recorded with Garmin GPS Map 76CSx receivers capable of 3-meter accuracy. No audio tapes were used during this survey. Jennifer Blair, CWB and Erin Swanson were covered by USFWS permit TE-841353-1.

## 3.0 HABITAT ASSESSMENT

The entire approximately 21-acre Gaines Greenbelt contains potentially suitable habitat for the GCW. Ashe juniper woodlands occurred along the slopes and riparian hardwood woodlands occurred within and adjacent to the tributaries to Barton Creek. Field observations of habitat in the study area were generally consistent with the descriptions of suitable GCW habitat provided in Campbell (2003).

## 4.0 RESULTS

No GCW detections were made during the 2016 surveys. No GCW surveys were completed in 2015, however, a total of 13 GCW detections were made during the 2014 surveys, all of male birds. Of the total number of GCW observations in 2014, 5 were precisely located, and all of the precise locations were recorded with GPS units in the field. Approximately 39% of the total GCW observations in 2014 (five observations) were recorded within the boundary of the Gaines Greenbelt property, and 61% (eight observations) occurred on the adjacent City of Austin Balcones Canyonlands Preserve (COA BCP) to the north of the study area.

For Hill Country Conservancy, Bowman biologists also completed construction monitoring from March 3 to April 2, 2014 of the Violet Crown Trail that travels through portions of the Gaines Greenbelt. Beginning March 31, 2014, a total of 11 GCW detections were made during the construction monitoring within and adjacent to the Gaines Greenbelt study area (Figure 3 and 4).

Based on the 2014 observations mapped in Figure 4, one GCW territory was mapped within and adjacent to the study area. Overall, we estimated in 2014 that one male was utilizing the entire study area and the adjacent COA BCP land.

Other bird species observed during the 2016 GCW survey are listed in Table 2.

## 5.0 REFERENCES

Campbell, L. 2003. Endangered and threatened animals of Texas – Their life history and management. Texas Parks and Wildlife Department, Wildlife Division. Austin, Texas. 127 pp.

## 6.0 ATTACHMENTS

- FIGURE 1. Gaines Greenbelt study area.  
FIGURE 2. Routes walked during the 2016 GCW survey.  
FIGURE 3. Results of the 2014 GCW survey (USGS topographic map)  
FIGURE 4. Results of the 2014 GCW survey (2015 Aerial Imagery)
- TABLE 1. Survey dates, duration, personnel, and weather conditions for the 2016 Gaines Greenbelt GCW P/A survey.  
TABLE 2. Birds observed on Gaines Greenbelt (Spring 2016).

## 7.0 SIGNATURES

This report was prepared by professional biologists at the consulting firm of Bowman Consulting Group, Ltd. in conformance with the methods and limitations described herein. The findings of this submittal are completely and accurately documented in this application package.

PREPARED AND APPROVED BY:

  
SIGNATURE

JENNIFER BLAIR, CWB  
SENIOR ENVIRONMENTAL SCIENTIST  
ENVIRONMENTAL PROJECT MANAGER  
PRINTED NAME

JULY 5, 2016  
DATE

**TABLE 1. SURVEY DATES, DURATION, PERSONNEL, & WEATHER CONDITIONS FOR THE 2016 GAINES GREENBELT GCW P/A SURVEY.**

Date	Time			Temperature (°F)		Wind Direction		Wind Speed (mph)		Cloud Cover (percent)		Personnel	Comments
	Start	End	Total Hrs	Start	End	Start	End	Start	End	Start	End		
3/21/2016	10:05	12:10	2:05	48	58	SSE	SSW	0-3	5-7	0	0	J. Blair & E. Swanson	No GCWs observed, lots of traffic noise, 7 hikers, 3 dogs
4/5/2016	7:15	9:15	2:00	52	60	WSW		0-2	CALM	0	0	J. Blair & E. Swanson	No GCWs observed, lots of traffic noise, 1 mtn biker, 4 hikers
4/29/2016	6:30	8:30	2:00	75	76	N	NE	0-4	4-6	100	100	E. Swanson	No GCWs observed, lots of traffic noise
5/12/2016	7:35	10:05	2:30	72	77	NW	SW	6-8	4-5	80	100	E. Swanson	No GCWs observed, lots of traffic noise
5/20/2016	9:25	11:25	2:00	68	74	VAR	NNE	0-3	0-4	70	60	E. Swanson	No GCWs observed, lots of traffic noise, group of 12 kids, 4 adults, and 1 dog; group of 6 kids, 4 adults, and 2 dogs
Total Survey Time:			10:35:00										

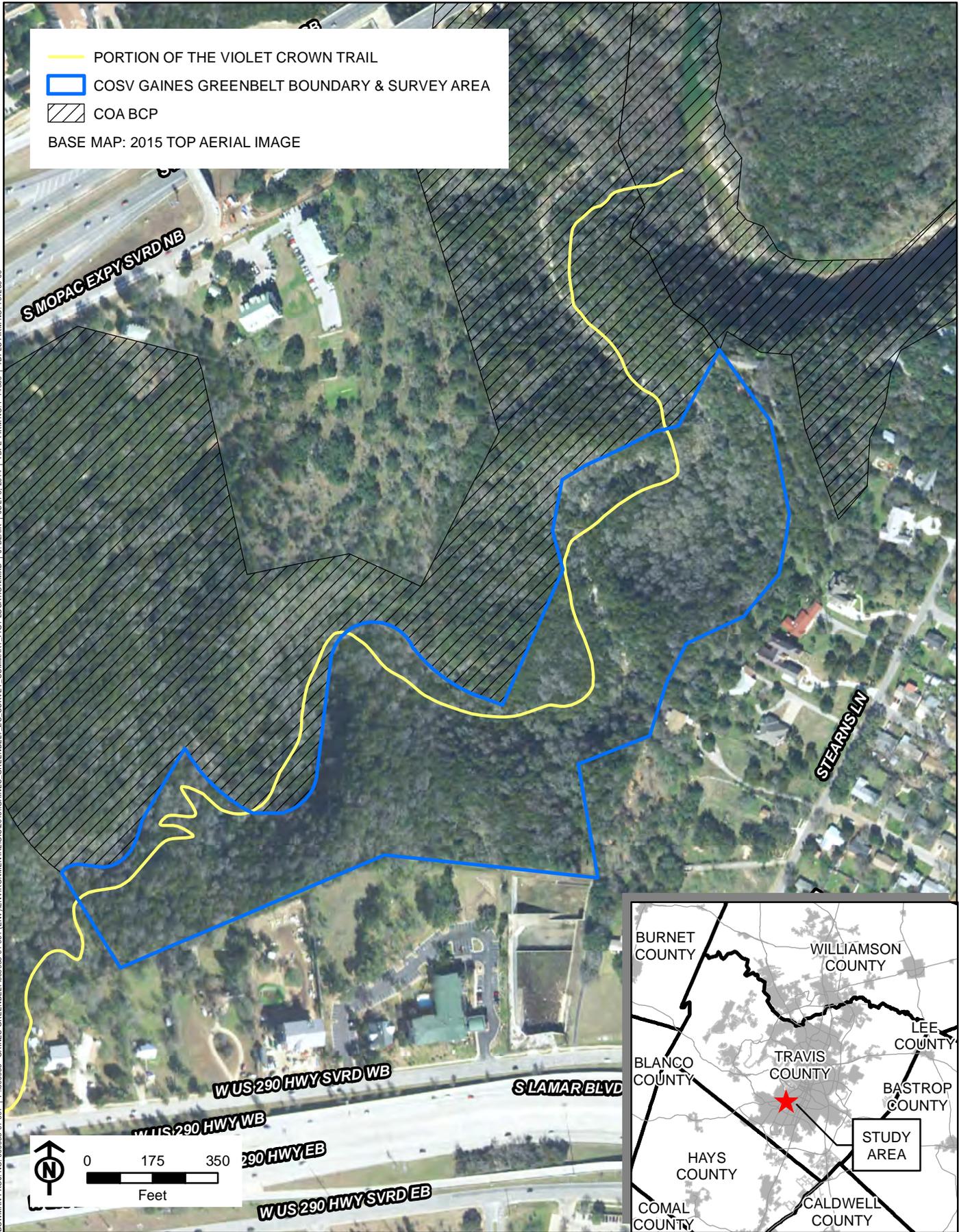
**TABLE 2. BIRDS OBSERVED ON GAINES GREENBELT (SPRING 2016).**

Common Name	Scientific Name
<b>Birds</b>	
Wood duck	<i>Aix sponsa</i>
Black-chinned hummingbird	<i>Archilochus alexandri</i>
Black-crested titmouse	<i>Baeolophus atricristatus</i>
Cedar waxwing	<i>Bombycilla cedrorum</i>
Gret-horned owl	<i>Bubo virginianus</i>
Red-shouldered hawk	<i>Buteo lineatus</i>
Northern cardinal	<i>Cardinalis cardinalis</i>
Lesser goldfinch	<i>Carduelis psaltria</i>
House finch	<i>Carpodacus mexicanus</i>
Canyon wren	<i>Catherpes mexicanus</i>
Yellow-billed cuckoo	<i>Coccyzus americanus</i>
Rock dove	<i>Columba livia</i>
Common ground dove	<i>Columbina passerina</i>
Black vulture	<i>Coragyps atratus</i>
Blue jay	<i>Cyanocitta cristata</i>
Northern mockingbird	<i>Mimus polyglottos</i>
Brown-headed cowbird	<i>Molothrus ater</i>
Monk parakaet	<i>Myiopsitta monachus</i>
House sparrow	<i>Passer domesticus</i>
Painted bunting	<i>Passerina ciris</i>
Ladder-backed woodpecker	<i>Picoides scalaris</i>
Summer tanager	<i>Piranga rubra</i>
Carolina chickadee	<i>Poecile carolinensis</i>
Blue-gray gnatcatcher	<i>Polioptila caerulea</i>
Great-tailed grackle	<i>Quiscalus mexicanus</i>
Ruby-crowned kinglet	<i>Regulus calendula</i>
Eastern phoebe	<i>Sayornis phoebe</i>
Yellow-rumped warbler	<i>Setophaga coronata</i>
Dickcissle	<i>Spiza americana</i>
Bewick's wren	<i>Thryomanes bewickii</i>
Carolina wren	<i>Thryothorus ludovicianus</i>
Western kingbird	<i>Tyrannus verticalis</i>
White-eyed vireo	<i>Vireo griseus</i>
Red-eyed vireo	<i>Vireo olivaceus</i>
White-winged dove	<i>Zenaida asiatica</i>
Mourning dove	<i>Zenaida macroura</i>

BOWMAN PROJ. NO. 009935-01-001 | P. 009935 - GAINES GREENBELT 009935-01-001 (ENVIRONMENTAL)GIS2016(GAINES GREENBELT ES SURVEY SUMMARY FIG1-LOCATION.MXD | J. BLAIR | JULY 5, 2014 | TBPE FIRM NO. F-14309 | TBPLS FIRM NO. 107206-00

- PORTION OF THE VIOLET CROWN TRAIL
- COSV GAINES GREENBELT BOUNDARY & SURVEY AREA
- ▨ COA BCP

BASE MAP: 2015 TOP AERIAL IMAGE



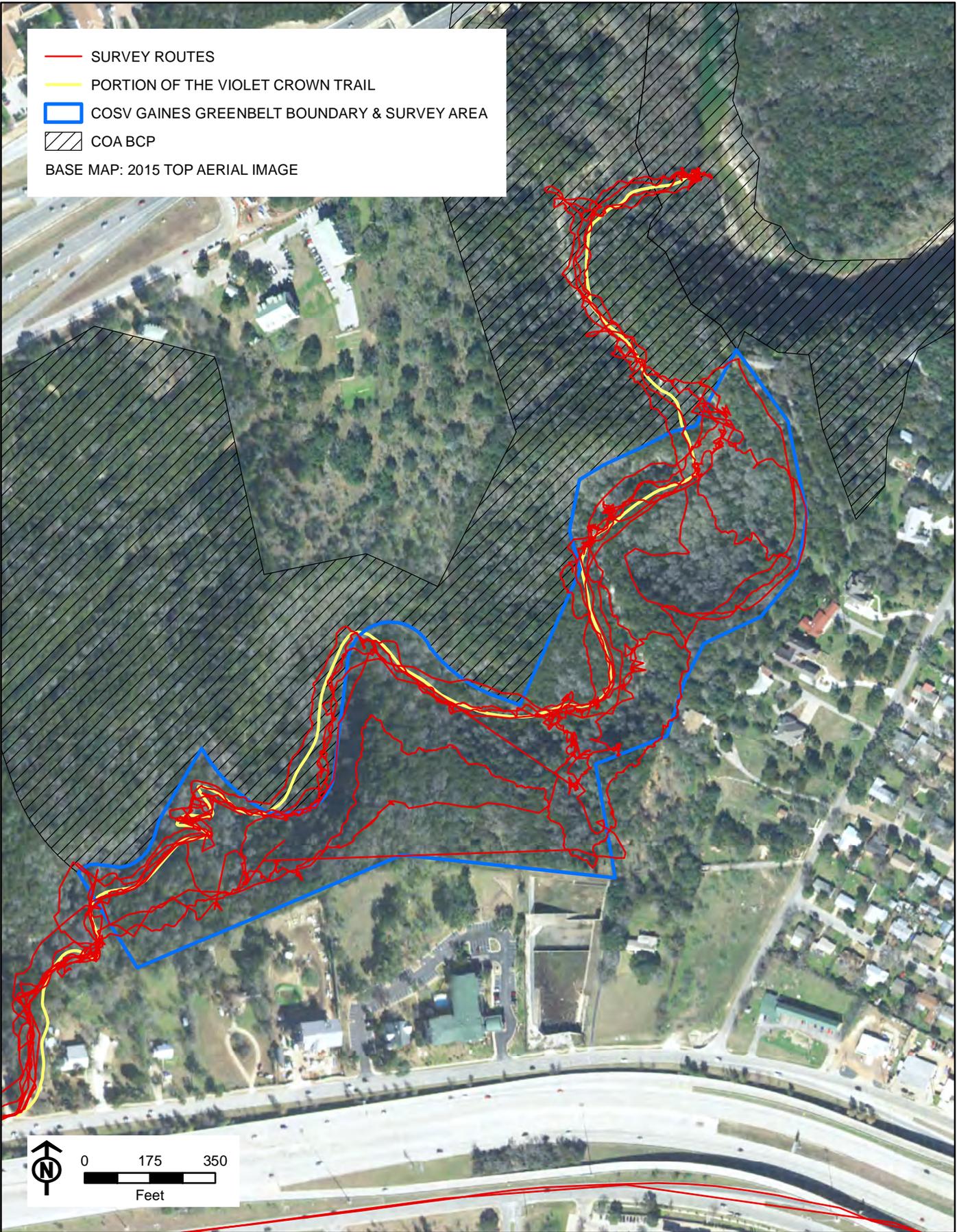
**FIGURE 1**  
STUDY AREA

CITY OF SUNSET VALLEY GAINES GREENBELT, TRAVIS COUNTY, TEXAS

BOWMAN PROJ. NO. 009935-01-001 | ENVIRONMENTAL/GIS/2016/GAINES\_GREENBELT\_ES\_SURVEY\_SUMMARY\_FIG2-ROUTES.MXD | J.J. BAHR | JULY 5, 2016 | TEPSE FIRM NO. E-14309 | TEPPLS FIRM NO. 101206-00

-  SURVEY ROUTES
-  PORTION OF THE VIOLET CROWN TRAIL
-  COSV GAINES GREENBELT BOUNDARY & SURVEY AREA
-  COA BCP

BASE MAP: 2015 TOP AERIAL IMAGE



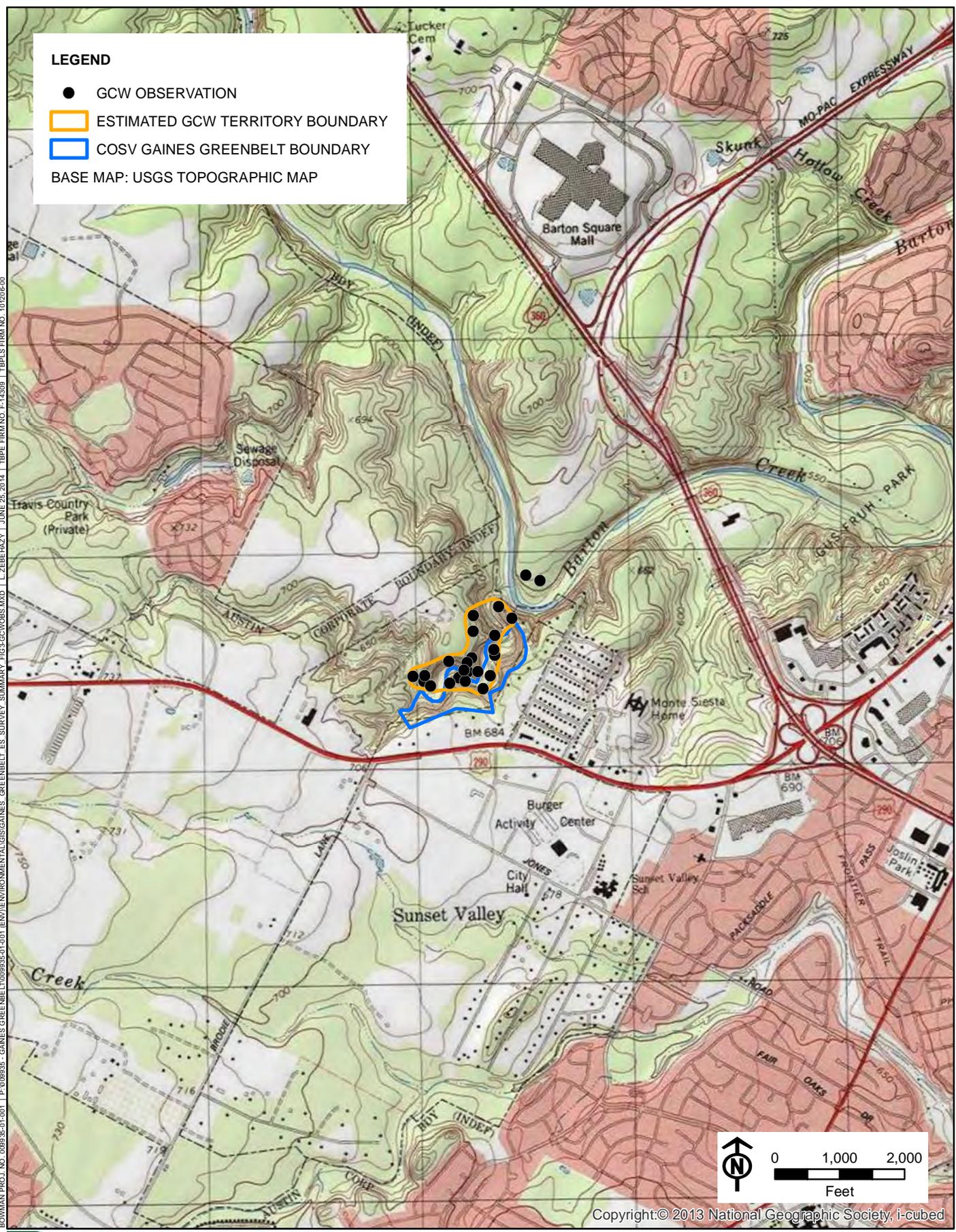
**FIGURE 2**  
ROUTES WALKED DURING THE 2016 GCW SURVEY  
CITY OF SUNSET VALLEY GAINES GREENBELT, TRAVIS COUNTY, TEXAS

BOWMAN PROJ. NO. 08935-01-001 | P. 108935 - GAINES GREENBELT | 08935-01-001 ENVIRONMENTAL/GAINES GREENBELT ES SURVEY SUMMARY FIG.3-GCW OBS. M.D. | L. ZEBEL-HAZY | JUNE 25, 2014 | T.BPE FIRM NO. F-14309 | T.BPLS FIRM NO. 101206-00

**LEGEND**

- GCW OBSERVATION
- ▭ ESTIMATED GCW TERRITORY BOUNDARY
- ▭ COSV GAINES GREENBELT BOUNDARY

BASE MAP: USGS TOPOGRAPHIC MAP



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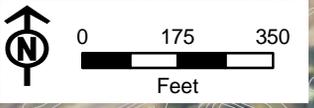
**FIGURE 3**  
GCW OBSERVATIONS IN THE STUDY AREA  
CITY OF SUNSET VALLEY GAINES GREENBELT, TRAVIS COUNTY, TEXAS

BOWMAN PROJ. NO. 009335-01-001 | P. 1026095 - GAINES GREENBELT 009335-01-001 ENVIRONMENTAL/GAINES GREENBELT ES SURVEY SUMMARY FIG.4-RESULTS.MXD | L. ZEBEHAZY | JUNE 25, 2014 | TBP. FIRM NO. F-43309 | TBP. FIRM NO. 10-1206-09

**BASE MAP LAYERS**

- 10-FT CONTOUR
- PORTION OF THE VIOLET CROWN TRAIL
- ▨ COA BCP
- ▭ COSV GAINES GREENBELT BOUNDARY & SURVEY AREA

BASE MAP: 2012 USDA NAIP AERIAL IMAGE



**LEGEND**

<b>G CW OBSERVATION</b>	<b>OTHER OBSERVATIONS</b>	<b>SURVEY VISITS</b>
G MALE	→ MOVEMENT OF INDIVIDUAL BIRD	■ APRIL 18, 2014
<b>OBSERVATION PRECISION</b>	● GCW OBSERVATION FROM VCT CONSTRUCTION MONITORING	■ APRIL 25, 2014
(SIZE DENOTES ESTIMATED ACCURACY)	▭ ESTIMATED GCW TERRITORY BOUNDARY	■ MAY 2, 2014
▭ PRECISE		■ MAY 9, 2014
▭ IMPRECISE		■ MAY 23, 2014



**FIGURE 4**  
RESULTS OF THE 2014 ENDANGERED SPECIES SURVEY  
CITY OF SUNSET VALLEY GAINES GREENBELT, TRAVIS COUNTY, TEXAS