Gaines Greenbelt

2016 Annual Report

Submitted by the City of Sunset Valley
Introduction
The Gaines Greenbelt is owned and managed by the City of Sunset Valley as part of the Balcones Canyonlands Preserve (BCP). The Gaines Greenbelt provides habitat for the federally endangered Golden-Cheeked Warbler (Setophaga chrysoparia, GCWA) and a portion contains a public use hike and bike trail. Sunset Valley has signed a Managing Partner Agreement with the Balcones Canyonlands Conservation Plan (BCCP). The Sunset Valley – BCCP Managing Partner Agreement adds the Sunset Valley Gaines Greenbelt to the BCP Barton Creek Macrosite. The Managing Partner Agreement was officially filed in March of 2014.

The Gaines Greenbelt parcel is approximately 21.9 acres located in Travis County, Texas, at the northern edge of the City of Sunset Valley. The parcel’s south side borders the back lot lines of residential sites, a hotel, and a Texas Department of Transportation stormwater pollution prevention facility located along US Highway 71/State Highway 290 West; east of the tract lies a residential area; and, the remaining parcel borders the City of Austin’s Barton Creek Greenbelt trail system (Appendix A).

Golden-cheeked Warbler Survey
Between March and May of this year presence/absence surveys were conducted in the Gaines Greenbelt consistent with U.S. Fish and Wildlife Service protocols. No Golden-cheeked Warblers were recorded on these visits. Based on the survey from 2014 it was estimated that one male had been utilizing the Gaines Greenbelt and adjacent City of Austin land. Complete results of the presence/absence survey can be found in Appendix B.

Trail Management Activities
Hill Country Conservancy oversees the operation and maintenance of the Violet Crown Trail within the Gaines Greenbelt. They have created a report of activity within the existing and proposed Violet Crown Trail corridor. That report is attached in Appendix C.

Boundary Fence Installation
In early 2016 a boundary fence was installed at the southern border to the Gaines Greenbelt. This fence is approximately 1,200 feet in length and is six feet tall. The fence was installed between the commercial areas along Highway 290 and the greenbelt to reduce unauthorized access. Appendix D contains a map with the
location of the new fence.

Budget
The budget for expenses related to the management of the Gaines Greenbelt is attached in Appendix E. In 2016 funds were expended specifically for the boundary fence and surveys. Total expenditures were for $16,242.19. At this time, the City does not track staff time related to open space management activities, thus staff time is not included in the budget.
Appendix A
Map of Gaines Greenbelt
Appendix B
Results of Golden Cheek Warbler Surveys

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 36% 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

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:

JENNIFER BLAIR, CWB
SENIOR ENVIRONMENTAL SCIENTIST
ENVIRONMENTAL PROJECT MANAGER

PRINTED NAME

JULY 5, 2016
DATE
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Temperature (°F)</th>
<th>Wind Direction</th>
<th>Wind Speed (mph)</th>
<th>Cloud Cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/24/2016</td>
<td>10:30</td>
<td>55</td>
<td>90</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>2/15/2016</td>
<td>09:10</td>
<td>65</td>
<td>180</td>
<td>5</td>
<td>0.2</td>
</tr>
</tbody>
</table>

**TABLE 1.** Survey Dates, Duration, Personal & Weather Conditions for the 2016 Gaines Greenbelt GCW P/A Survey.
<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood duck</td>
<td>Aix sponsa</td>
</tr>
<tr>
<td>Black-chinned hummingbird</td>
<td>Archilochus alexandri</td>
</tr>
<tr>
<td>Black-crested titmouse</td>
<td>Baeolophus atricristatus</td>
</tr>
<tr>
<td>Cedar waxwing</td>
<td>Bombycilla cedrorum</td>
</tr>
<tr>
<td>Great-horned owl</td>
<td>Bubo virginianus</td>
</tr>
<tr>
<td>Red-shouldered hawk</td>
<td>Buteo lineatus</td>
</tr>
<tr>
<td>Northern cardinal</td>
<td>Cardinalis cardinalis</td>
</tr>
<tr>
<td>Lesser goldfinch</td>
<td>Carduelis psaltria</td>
</tr>
<tr>
<td>House finch</td>
<td>Carpodacus mexicanus</td>
</tr>
<tr>
<td>Canyon wren</td>
<td>Catherpes mexicanus</td>
</tr>
<tr>
<td>Yellow-billed cuckoo</td>
<td>Cocczyzus americanus</td>
</tr>
<tr>
<td>Rock dove</td>
<td>Columba livia</td>
</tr>
<tr>
<td>Common ground dove</td>
<td>Columbina passerina</td>
</tr>
<tr>
<td>Black vulture</td>
<td>Coragyps atratus</td>
</tr>
<tr>
<td>Blue jay</td>
<td>Cyanocitta cristata</td>
</tr>
<tr>
<td>Northern mockingbird</td>
<td>Mimus polyglottos</td>
</tr>
<tr>
<td>Brown-headed cowbird</td>
<td>Molothrus ater</td>
</tr>
<tr>
<td>Monk parakeet</td>
<td>Myiopsitta monachus</td>
</tr>
<tr>
<td>House sparrow</td>
<td>Passer domesticus</td>
</tr>
<tr>
<td>Painted bunting</td>
<td>Passerina ciris</td>
</tr>
<tr>
<td>Ladder-backed woodpecker</td>
<td>Picoides scalaris</td>
</tr>
<tr>
<td>Summer tanager</td>
<td>Piranga rubra</td>
</tr>
<tr>
<td>Carolina chickadee</td>
<td>Poecile carolinensis</td>
</tr>
<tr>
<td>Blue-gray gnatcatcher</td>
<td>Polioptila caerulea</td>
</tr>
<tr>
<td>Great-tailed grackle</td>
<td>Quiscalus mexicanus</td>
</tr>
<tr>
<td>Ruby-crowned kinglet</td>
<td>Regulus calendula</td>
</tr>
<tr>
<td>Eastern phoebe</td>
<td>Sayornis phoebe</td>
</tr>
<tr>
<td>Yellow-rumped warbler</td>
<td>Setophaga coronata</td>
</tr>
<tr>
<td>Dickcissle</td>
<td>Spiza americana</td>
</tr>
<tr>
<td>Bewick's wren</td>
<td>Thryomanes bewickii</td>
</tr>
<tr>
<td>Carolina wren</td>
<td>Thryothorus ludovicianus</td>
</tr>
<tr>
<td>Western kingbird</td>
<td>Tyrannus verticalis</td>
</tr>
<tr>
<td>White-eyed vireo</td>
<td>Vireo griseus</td>
</tr>
<tr>
<td>Red-eyed vireo</td>
<td>Vireo olivaceus</td>
</tr>
<tr>
<td>White-winged dove</td>
<td>Zenaida asiatica</td>
</tr>
<tr>
<td>Mourning dove</td>
<td>Zenaida macroura</td>
</tr>
</tbody>
</table>
FIGURE 4
RESULTS OF THE 2014 ENDANGERED SPECIES SURVEY
CITY OF SUNSET VALLEY GAINES GREENBELT, TRAVIS COUNTY, TEXAS
This status report is intended to convey the broad spectrum of partners and other resources being deployed to implement the maintenance and operation of the existing portions of the Violet Crown Trail (VCT). Construction from Zilker Park to LBJWC/Veloway is in various stages of implementation with a goal of completing construction on this 13 miles of VCT known as “Phase I” by March, 2018.

**Volunteer Efforts**

- Austin Ridge Riders have entered into a formal agreement with HCC for performing approved trail maintenance for Phase 1 of the Violet Crown Trail (VCT). This association remains in place and is active.
- Several hundred volunteer hours have been achieved through annual National Public Lands Day and National Trails Day.
- Several businesses have donated time, labor and materials to accomplish both large and small projects... This participation includes: Apple, AT&T, DPR Construction Company, Summit Materials and several architectural firms. Additional volunteer services were provided by the Texas Conservation Corps.
- EPIC (Emerging Professionals In Conservation) is a membership group associated with HCC. They offer financial, educational and volunteer services. EPIC performs a day of trail clean-up and minor maintenance quarterly.

**Wayfinding and Informational Signs Installed**

HCC employed the Texas Conservation Corps to install a complete system of wayfinding and information signs along Segment I of the VCT and the entire length of the Barton Creek Greenbelt Trail. This included GPS notation of each quarter mile sign, along with 911 information for each sign location. This information was provided to the regional 911 service provider. This project, which provided more than eighty (80) installed signs, was funded by a $100,000 grant from the Austin Parks Foundation.

**Ecological Restoration**

Restoration was conducted at the VCT 290 trail head and first quarter mile of the
new trail. Invasive plants were removed and native plant and flower seeds were established through the reclaimed areas. These efforts will be followed with interpretive and educational information.

**Interpretation and Education**
A Butterfly Garden was established at the VCT Highway 290 trail head in order to explain and educate trail users about the importance of pollinator species. Interpretive signs are being designed and produced for these areas. HCC has hired an interpretive consultant to assist with interpretation planning and message delivery. The process will result in a system of educational facilities, “desired behaviors” messaging, and a corps of steward and docent volunteers. This process will serve as a prototype for the entire trail system.

**Stewardship Council**
The VCT Stewardship Council has been formed and is now meeting quarterly. The Council serves as a forum for trail partners to update each other on various aspects of VCT. A Stewards and Docents committee has been formed to explore and implement a comprehensive program to engage all partners and volunteers in the care and management of the VCT.

**Trail Management & Trail Monitoring**
Photo points have been located by GPS, and photos taken at strategic locations along the newly created Gaines Creek segment of VCT from the existing Barton Creek Greenbelt Trail to the Highway 290 trail head, and a game camera is being installed at the trail head. The photos and data collected will serve to learn trail user patterns and monitor trail conditions over time. The results will be used to repair and restore any trail damage if needed. This monitoring and data collection is being done in part to fulfill BCP permit requirements. A “game camera” is being installed at the Highway 290 trail head to assess the number and type of trail users entering the trail. The results will be used to report activity as to time and season. It will also report the number of users as hikers, bikers, dog walkers, dogs on or off leash, and other categories. This information will be used to help manage trail use.

**Trail Improvements**
A PARD/TxCC program of trail maintenance on the VCT and Barton Creek Greenbelt Trail will be completed this fall. This project includes trail tread repair,
correcting drainage problems, corridor clearing of overgrowth, poison ivy abatement, and repair of deteriorating trail head facilities at the 360 trail head. The Texas Conservation Corps will conduct these projects with a $100,000 grant from the Austin Parks Foundation in coordination with PARD.
HCC is consulting with Walter P. Moore Engineering Company to evaluate, design and engineer a replacement bridge along the Barton Creek Greenbelt Trail (downstream from the Loop 360 Trail head) that was washed away by flooding.

**Trail and Trail Facility Planning**

In collaboration with Austin Parks Foundation (APF) and City of Austin Parks & Recreation Department, HCC will select a design firm in December, 2016, to design a new trail head at the Zilker entrance to the VCT / Barton Creek Greenbelt Trail. This facility will emphasize education of the natural resources of the area. The facility will also set the tone for “desired behaviors” by trail users to gain respect and support the trail and its environment. HCC and APF will fund the design, engineering, permitting and construction of this facility.
HCC is engaged in a similar process for design and construction of trailheads on Home Depot Boulevard in Sunset Valley, and at Davis and Slaughter Lanes.

**Operations & Maintenance – Additional Resources**

In addition to the significant donation of labor and materials to VCT during the past five years with an estimated value of $650,000, HCC and Austin Parks Foundation have created a VCTG Stewardship Endowment at Frost Bank. The current balance is $100,000. HCC will increase the balance to at least $200,000 before January 1, 2017. The current HCC Capital Campaign Budget includes raising $1.7 million for this Fund. The goal is to increase the Fund to $2 million by 2020.

**Friends of the Violet Crown Trail**

HCC continues to enjoy the support of both formal partners and other interested organizations. Their participation is key to the on-going management and maintenance of the VCT as a community based project. Some of these partners include:

- The Austin Parks Foundation
- Austin Ridge Riders
- Central Texas Trail Tamers
- City of Austin
- Emerging Professionals in Conservation (EPIC)
• Greenbelt Guardians
• Lady Bird Johnson Wildflower Center
• Master Naturalist Chapters
• Neighborhood Associations including Deer Park, Sendera, Circle C
• REI
• Real Estate Council of Austin
• Save Barton Creek Association
• The City of Sunset Valley
• Texas Conservation Corps (American Youthworks)
• Businesses including Apple, AT&T, DPR Construction Company, Garza Ranch (Brandywine), HEB, Primrose Pre-K, Randall’s and United Heritage Credit Union
### Appendix E  
**2016 Budget**

<table>
<thead>
<tr>
<th>Project/Program</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boundary Fence</td>
<td>13,546.21</td>
</tr>
<tr>
<td>Surveys</td>
<td>2,695.98</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16,242.19</strong></td>
</tr>
</tbody>
</table>