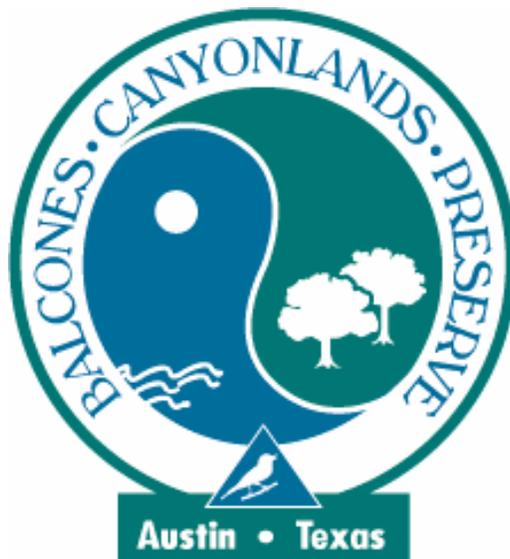


**BALCONES CANYONLANDS PRESERVE  
LAND MANAGEMENT PLAN**

**TIER III**

**CITY OF AUSTIN  
LIME CREEK TRACT  
CYPRESS CREEK MACROSITE**



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## **1.0 BACKGROUND INFORMATION**

All background information for the Lime Creek tract can be found in the first five-year set of three volumes entitled Balcones Canyonlands Preserve Land Management Plans (August 5, 1999).

On June 29, 1999, the City of Austin's Balcones Canyonlands Preserve took over title of the Texas Parks and Wildlife Foundation's (TPWF) Austin Simon tract. The Austin Simon tract, 100 acres (40 ha), is contiguous with the southwest portion of the Lime Creek tract. The Austin Simon tract was originally purchased as mitigation for the take of endangered karst invertebrates by Lake Line Mall. Lake Line Mall transferred ownership to TPWF. It was originally thought that the Austin Simon tract contained a cave with listed species. However, the cave was actually located on the City of Austin's Lime Creek Preserve. Due to the fact that the tract was no longer suitable for its original purpose/use, TPWF agreed to transfer title over to the City of Austin. The Austin Simon tract is managed by the City of Austin as part of the Lime Creek Tract.

With the addition of the Austin Simon tract, Lime Creek preserve is now 594 acres (240 ha).

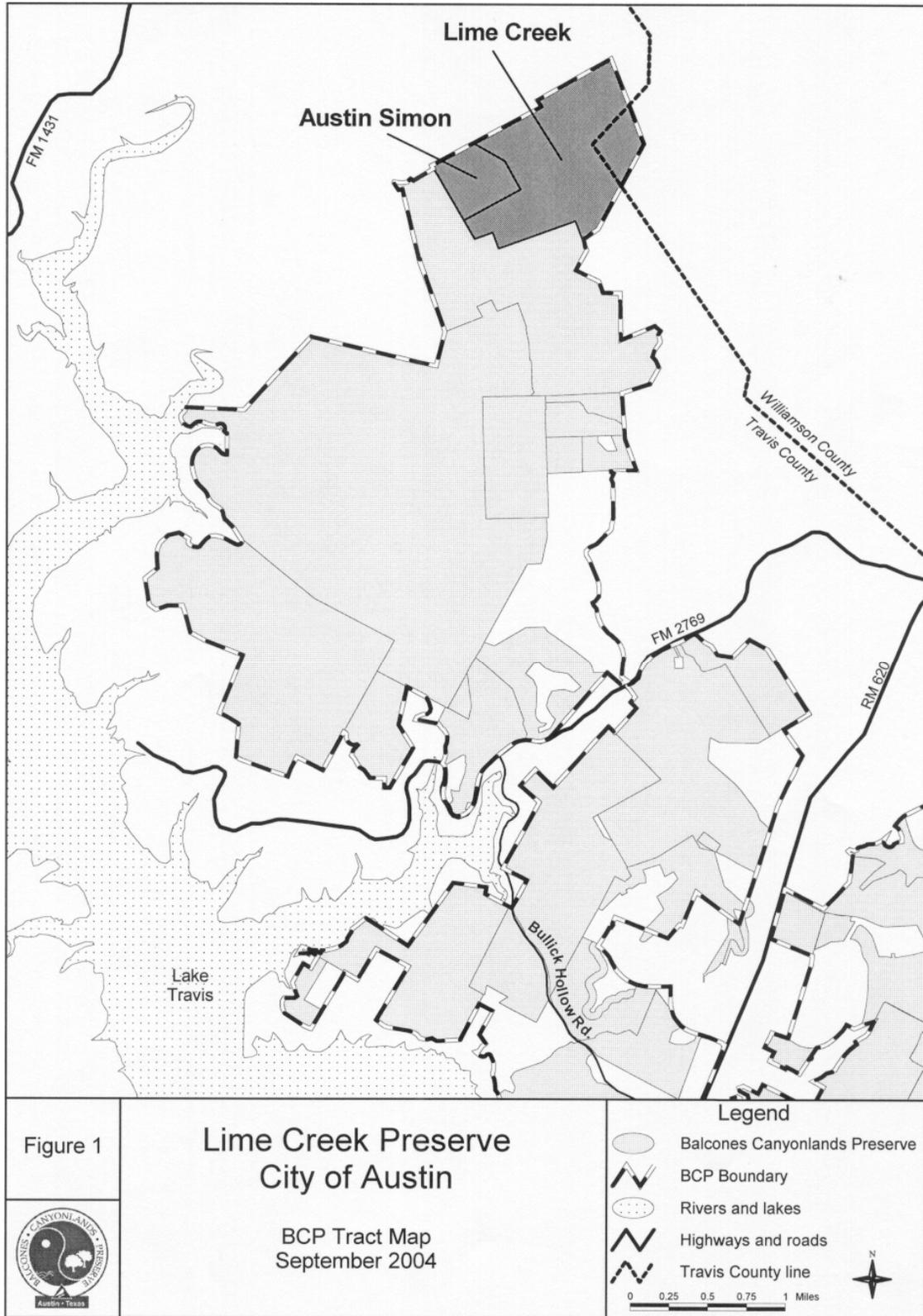
The initiation of the project to expand Anderson Mill Road (Lime Creek Road) was begun in 2004. A portion of the eastern boundary of the Lime Creek tract (1.023 acres) was acquired by Travis County to facilitate the road expansion. An approximately equal amount of acreage from the abandon portion of Lime Creek Road was deeded to the City of Austin by Travis County.

## **2.0 MANAGEMENT PROGRAM**

### **2.1 Plan Administration**

See Tier II-B Plan Administration for the description of City of Austin's Austin Water Utility as a managing entity, staffing levels, equipment inventory, budget and annual reports as they pertain to the City of Austin's management of the BCP.

FIGURE 1: LOCATION MAP



## 2.2 Management Goal

### 2.2.1 Primary Management Goal

- Protect, maintain and improve 494 acres of habitat for GCWA and karst species.
- Create and maintain 100 acres of new BCVI habitat.
- Participate in the implementation of the BCP long-term biological monitoring program for GCWA, BCVI and karst species.
- Protect and improve the watershed's water quality and quantity characteristics.

#### 2.2.1.1 Golden-cheeked Warbler

- Manage and protect GCWA by limiting access to the preserve unit
- Monitor GCWA populations
- Control white-tailed deer population
- Manage **594** acres of habitat per BCP protocols
- Work with adjacent property owners
- Control problems such as wildfire, oak wilt, brown-headed cowbirds, and non-native species, including red imported fire ants.

#### 2.2.1.2 Black-capped Vireo

- Control the white-tailed deer population
- Burn, hydro-ax, or hand-cut 100 acres
- Work with adjacent BCP managers to encourage management of additional acres for BCVI
- Monitor any BCVI populations which may ultimately use this newly created habitat
- Control problems such as wildfire, oak wilt, brown-headed cowbirds, nuisance animals, and non-native species, including red imported fire ants.

#### 2.2.1.3 Federally Listed Karst Species

The City will manage and protect karst species found in the several caves on the unit by limiting access to research and monitoring by authorized staff only, by limiting any pollution causing activities over karst, by monitoring the karst species at least annually for problems which may be addressed and for population information, and by controlling red imported fire ants over caves, using approved methods. It is not anticipated that gating or cave fencing will be needed, but these protection strategies will be used as needed. (See Karst Management Chapter for more details)

#### 2.2.1.4 *Species of Concern*

Not applicable.

### 2.3 Issues

Currently, the preserve tract is in a relatively rural area and adjacent to two BCP properties. One portion of the boundary abuts a low density area which will be fenced.

Areas scheduled to become BCVI habitat will require shearing, hydro-axing, or prescription burning. The first prescription burn will require additional planning and land preparation in order to gain a high degree of confidence in the safety of these projects.

Lime Creek is relatively unencumbered by unauthorized activities when compared to other COA-BCP units. Some of the perimeter is shared with other BCP properties. The boundary adjacent to Lime Creek Road is well secured with new fencing. Better perimeter fencing may be needed along other portions of the perimeter in the future as urbanization pressures increase. Lime Creek Road is currently being widened: noise and construction activity could be disturbing to nesting birds during construction and following completion of the roadway.

### 2.4 Management Objectives

Tier II objectives for the Cypress Creek Macrosite include (1) securing perimeters, controlling access, and reducing threats from wildfire; (2) managing public activities, closing unauthorized trails and roads, erosion control, fire ant control, public outreach, and habitat enhancement; and (3) conducting standardized surveys for GCWA, BCVI, cave invertebrates and plant species of concern, as well as evaluating public access and impacts.

The goals and objectives of the Macrosite and this unit will be implemented through the objectives and activities listed below.

#### 1. **Protect the preserve from direct human impacts:**

- a. Restrict public access to staff-guided educational and service activities.
- b. Secure the boundaries as needed with fencing and signs.
- c. Patrol the perimeter and interior of the unit routinely.
- d. Annually provide education to preserve neighbors about how to reduce their impacts on the preserve through educational programs and materials.
- e. By 2005 develop and implement guided public access for environmental education, scientific research and service activities compatible with the goals of this plan.
- f. Coordinate with adjacent land owners regarding mutual property line issues.

**2. Protect and monitor Rolling Rock Cave and Broken Arrow Cave by:**

- a. Limit land management activities over caves so that cave interiors are not disturbed.
- b. Annually monitor surfaces around cave entrances for erosion activities and control as needed.
- c. Limit cave access to research and monitoring related to pollution and endangered species management.
- d. Monitor the interior ecosystem of caves at least once annually for physical and biological condition per BCP monitoring protocols, and address any problems found.
- e. Only use methods approved by the City of Austin Integrated Pest Control Committee and USFWS to control imported red fire ant infestations near caves with endangered karst invertebrates or other species of concern.
- f. Continue to remove litter and hazardous materials from the caves as needed.

**3. Monitor endangered species and species of concern per established protocols.**

**4. Obtain baseline vegetation data and monitor vegetation changes.**

- a. Conduct “before and after” baseline vegetation monitoring per USFWS protocols in areas designated for BCVI habitat creation/management.
- b. Establish baseline vegetation monitoring using modified Land Condition Trend Analysis methodology in 1999 and continue monitoring woody species at least every five years.
- c. Annually monitor populations of wildlife and plant species of concern to measure responses to land management techniques per BCP protocols.

**5. Control problematic conditions.**

- a. In 2005 develop a fire control plan with the appropriate fire control district and determine when, where and how to suppress wildfires.
- b. Annually survey for and suppress oak wilt.
- c. Control brown-headed cowbirds and nuisance animals as needed.
- d. Survey annually for aggressive non-native plant species and remove as needed.
- e. At least once every autumn survey for imported fire ants and control them as needed, using Integrated Pest Management methods.

**6. Manage various plant/wildlife communities appropriately.**

- a. In 2005 select 100 acres for BCVI habitat creation/ management and implement management using hand tools, hydro-axing/tree shearing, and prescription burns, as appropriate.

- b. Using the most cost-effective and humane means available, limit white-tailed deer population in order to control over browse of vegetation, so that recruitment of *Quercus buckleyi* increases within five years.
- c. Manage GCWA habitat per BCP protocols.
- d. Increase acreage of potential GCWA habitat.

These objectives and activities are summarized in the following five-year timeline, and grouped into four categories (vegetation, animal, physical and visitor-related) with assigned action dates:

**TABLE 1: OBJECTIVES**

Objectives	04	05	06	07	08
<b>Vegetation Management</b>					
Improve/increase GCWA and BCVI habitat		X	X	X	X
Control non-native plant species	X	X	X	X	X
Survey for and suppress oak wilt	X	X	X	X	X
Monitor vegetation		X	X	X	X
Select additional acreage for BCVI habitat	X				
Increase <i>Q. Buckleyi</i> recruitment		X	X	X	X
Develop and implement hydro-axing, hand-cutting and/or prescription burning		X	X	X	X
<b>Animal Management</b>					
Monitor and control white-tailed deer population	X	X	X	X	X
Control red imported fire ants	X	X	X	X	X
Monitor GCWA, karst species, any BCVI and other species of concern	X	X	X	X	X
Control Brown-headed Cowbirds and nuisance animals	X	X	X	X	X
<b>Physical and Cultural Management Procedures</b>					
Protect caves from disturbances	X	X	X	X	X
Monitor caves	X	X	X	X	X
Develop and implement wildfire control plan		X			
<b>Visitor Management/Education</b>					
Secure/maintain boundaries with fences, signs, and patrols	X	X	X	X	X
Develop and implement educational, research and service activities for adjacent neighbors and nearby schools	X	X	X	X	X

Objectives	04	05	06	07	08
Coordinate with adjacent land owners regarding mutual property line issues	X	X	X	X	X

**2.5 Implementation Strategies**

All implementation will follow BCP guidelines and other accepted procedures in use by USFWS, Texas Parks and Wildlife Department, Texas Forest Service, Natural Resources Conservation Service, Structural Pest Control Board of Texas, and the Austin Water Utility. All pesticide applications are performed under the direction of a licensed non-commercial pesticide applicator.

Authorized staff may enter the preserve by the most appropriate method, including on foot, motorized vehicle, horseback or bicycle. Non-emergency vehicles are restricted to existing roads unless specifically authorized by the land manager.

**3.0 MONITORING**

The City of Austin will monitor and evaluate habitat management in accordance with applicable biological monitoring procedures as defined in Tier II-A Management Handbook. Evaluation and reporting procedures will comply with applicable portions of the Tier II-B Plan Administration.