

**Tier III Land Management Plan
BALCONES CANYONLANDS PRESERVE
LAND MANAGEMENT PLAN**

TIER III

**CITY OF AUSTIN
BLACK CAPPED VIREO RESEARCH AREA
WEST AUSTIN MACROSITE**



August 2007

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1.0 BACKGROUND INFORMATION

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

2.0 MANAGEMENT PROGRAM

2.1 Plan Administration

See Tier II-B Plan Administration for the description of City of Austin Water Utility Department 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.

2.2 Management Goals

2.2.1 Primary Management Goal

A primary goal is management of approximately 190 acres for vireo habitat and recovery and stabilization of the vireo population.

2.2.1.1 Golden-cheeked Warbler

Enumeration surveys are conducted in accordance with the BCP protocols.

2.2.1.2 Black-capped Vireo

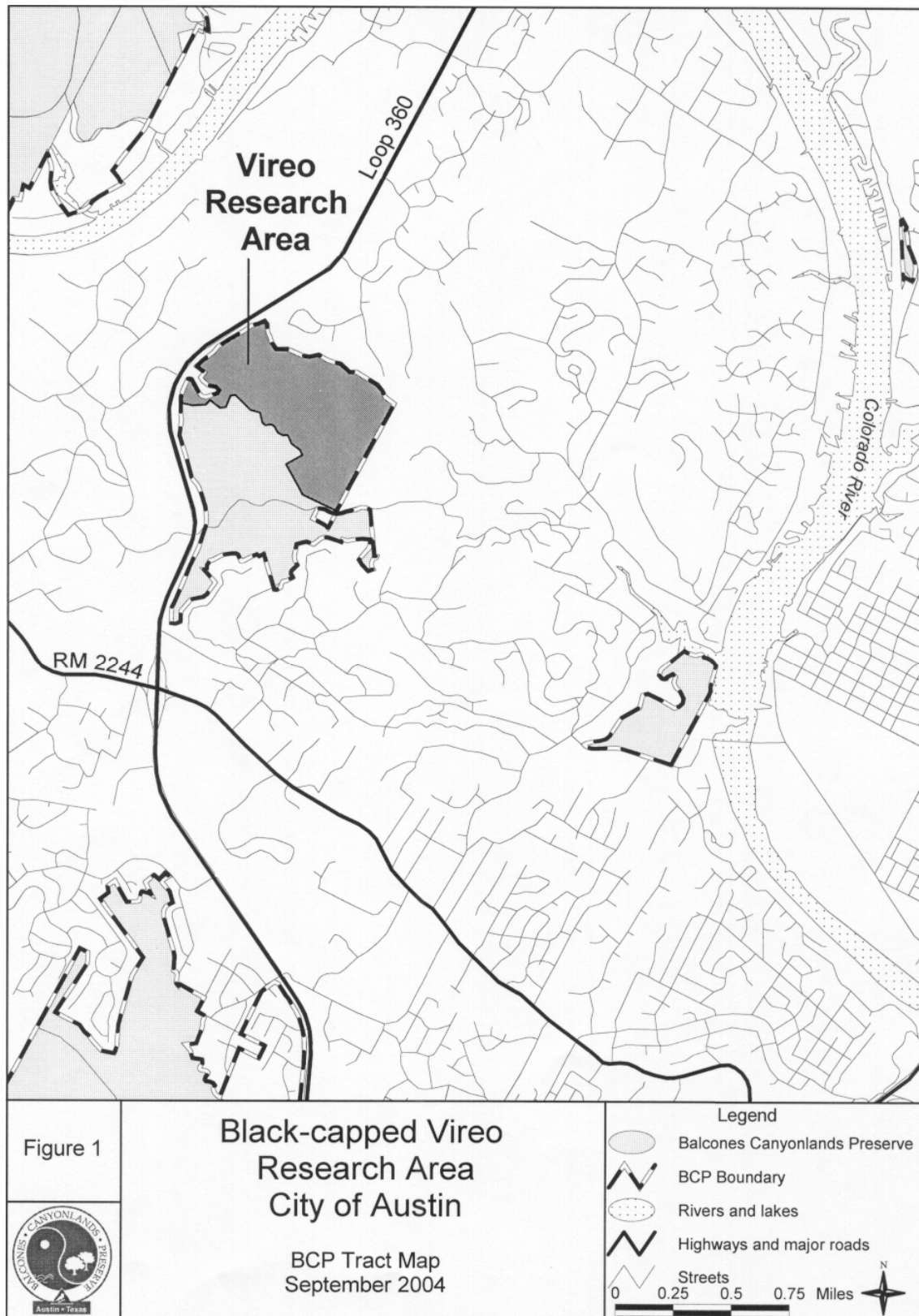
The City will manage for BCVI by reducing browse impacts, managing 190 acres of BCVI habitat via burning, hand cutting or hydro-axing, working with adjacent BCP managers to encourage management of additional acres for BCVI, monitoring BCVI, and by controlling any future problems, such as brown-headed cowbirds, feral animals, and reproduction-limiting predation, as needed.

2.2.1.3 Federally Listed Karst Species

Not applicable

2.2.1.4 Species of Concern

Not applicable

FIGURE 1: LOCATION MAP

2.2.2 SECONDARY MANAGEMENT GOALS

Manage the land in its natural state for the purposes of watershed protection, including protecting and improving water quality and water supplies, reduction of erosion, and increasing water infiltration to reduce flooding, by using habitat-management techniques, including re-vegetation and access control, to the extent feasible with given staffing and funding levels.

2.3 Issues

Working closely with adjacent property owners and managers will be important to any future colony of vireos at this site. The original colony occupied portions of what are now Davenport Ranch subdivision, Loop 360, maturing woodlands along the shared boundary with Wild Basin Wilderness and lands west of and adjacent to Loop 360. In addition, the areas to be managed for BCVI habitat will require tree shearing, hydro-axing, hand clearing or prescription burning in order to maintain BCVI habitat.

2.4 Management Objectives

Tier II objectives for the West Austin Macrosite include (1) protection of endangered species and species of concern and their habitats, enforcing regulations, (2) management of public access, habitat, and water quality, and (3) monitoring. The goals and objectives of the Macrosite and this unit will be implemented through the objectives and activities listed below.

1. Maintain/reestablish habitat of suitable structure and composition for vireos, and monitor habitat changes. Due to the preserve size and recent history of vireo occupation, the preserve will be managed as one habitat unit for the purpose of habitat restoration via mechanical or manual vegetation cutting or prescribed burns.
 - a. Annually, describe and quantify vegetation composition and structure using aerial photography and on-site monitoring, following BCP protocols.
 - b. Manipulate vegetation as described in BCP protocols.
 - c. After manipulating, and based on vegetation monitoring data, conduct minor vegetation manipulations between August 31 and March 1, to maintain accepted characteristics appropriate for black-capped vireo habitat using hand tools or cool, late winter prescription burning.
 - d. Use territory maps and occupation by black-capped vireos to indicate suitability of managed habitat.
2. Protect and manage existing golden-cheek warbler habitat within the preserve.
 - a. Exclude existing warbler habitat from vireo habitat management areas.
3. Control browsing levels as needed to maintain healthy BCVI nesting habitat.
 - a. Annually monitor browsing impacts on deciduous leaf density at 0 to 3 meters via direct examination, photography, and vegetation surveys.
 - b. Census white-tailed deer and limit impacts on browse, as needed, so that recruitment of *Quercus buckleyi* increases.

4. Control parasitism by brown-headed cowbirds.
 - a. Trap brown-headed cowbirds.
 - b. Remove cowbird eggs or fledglings from parasitized vireo nests per BCP protocols.
5. Annually survey for and suppress Oak Wilt in the Research Area and use sterilized tools and paint oak tree wounds.
6. Establish a Fire Management Plan.
7. Monitor black-capped vireo and golden-cheeked warbler populations, measuring demographic changes and mapping territories per BCP protocols.
8. Reduce predation effects on vireo fecundity, as needed.
 - a. Monitor the preserve for imported fire ant populations and treat these areas per existing City of Austin Nature Preserves Policy.
 - b. Remove domestic and feral animals, as needed.
 - c. Monitor for impacts by other problematic predators, such as raccoons, and remove as needed.
9. Reduce detrimental human activities by developing and implementing public relations programs, and provide monitored public access through interpretive, educational, and volunteer programs.
 - a. Permit only staff use and access during the nesting season.
 - b. Annually from September to February, provide a public service outing on endangered species habitat restoration and site protection activities, and other public education programs which explain habitat requirements of the black-capped vireo, local efforts to manage habitat, biology of the birds, causes of their endangered status, and what the visitor can do to help.
 - c. Prohibit the playback of recorded birdcalls and songs or any other recordings unless specifically authorized by the BCP Program. Post this prohibition on-site and list it in any literature about the preserve.
 - d. Provide student educational and internship opportunities.
 - e. Recruit skilled volunteers or train volunteers to conduct surveys and programs via Wild Basin.
 - f. Control perimeter with fencing and post signs with “no trespassing” and “authorized personnel only” and with information regarding rules, fines and emergency phone numbers.
 - g. Monitor the perimeter and the preserve regularly to deter unauthorized access on foot, mountain bike or horseback.
 - h. Establish neighborhood watch/guardian and education programs for the preserve neighbors.
 - i. Provide information on how adjacent land uses can be compatible with endangered species needs and how to avoid negative impacts, i.e., feeding wildlife.
 - j. Design and distribute educational brochures relative to the Management Area.

- k. Encourage adjacent property owners to participate in a regional management strategy for black-capped vireo habitat along the West Lake peninsula portion of Loop 360 by initiating meetings with responsible individuals.

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

TABLE 1: OBJECTIVES

Activities	04	05	06	07	08
<i>Vegetation Management</i>					
Hydro-ax selected portions of non-GCWA habitat		X			
Prescription burn selected portions of non-GCWA habitat		X	X	X	X
Manage GCWA habitat	X	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 per established BCP protocols	X	X	X	X	X
Increase <i>Q. buckleyi</i> recruitment by controlling browse	X	X	X	X	X
Encourage adjacent owners to manage for BCVI		X	X	X	X
<i>Animal Management</i>					
Control red imported fire ants	X	X	X	X	X
Monitor GCWA and BCVI	X	X	X	X	X
Control Brown-headed Cowbirds, and problematic predators	X	X	X	X	X
<i>Physical and Cultural Management Procedures</i>					
Develop and maintain contact list of adjacent residents	X	X	X	X	X
Develop and implement fire control plan		X			
<i>Visitor Management/Education</i>					
Secure boundaries with fences, signs, and patrols	X	X	X	X	X
Develop and implement educational, research and service activity protocols for adjacent neighbors and nearby schools	X	X	X	X	X
Continue guided educational programming	X	X	X	X	X

2.5 Implementation Strategies

All implementation will follow applicable 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, City of Austin Drainage Utility Department, and the Austin Parks and Recreation Department. All pesticide applications are performed under the direction of a licensed non-commercial pesticide applicator.

Authorized staff may access the preserve by the most appropriate method, including by foot, motorized vehicle or bicycle. Vehicles are restricted to existing roads unless specifically approved by the land manager. Springs and spring runs are restricted to foot access only.

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.