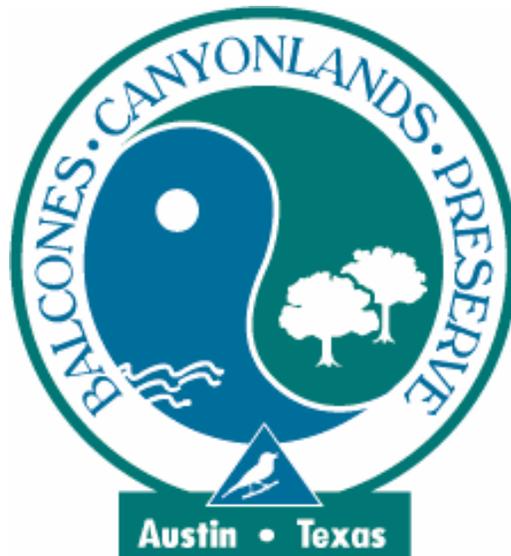


**Tier III Land Management Plan  
BALCONES CANYONLANDS PRESERVE  
LAND MANAGEMENT PLAN**

**TIER III**

**CITY OF AUSTIN  
ULLRICH HABITAT MANAGEMENT AREA  
WEST AUSTIN MACROSITE**



**August 2007**

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## **1.0 BACKGROUND INFORMATION ON TRACT**

The Ullrich Water Treatment Plant Habitat Management Area, owned and operated by the Austin Water Utility, participates in the Balcones Canyonlands Conservation Plan (BCCP) on behalf of an on-site population of bracted twistflower (*Streptanthus bracteatus*) and Bee Creek Cave Harvestman (*Texella reddelli*). The Habitat Management Area is part of the Balcones Canyonlands Preserve (BCP) within the West Austin Macrosite as defined by the BCCP. All background information for the Ullrich Habitat Management 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 document for a description of the City of Austin's Austin Water Utility as a BCP participant and property manager. The Balcones Canyonlands Preserve manager is responsible for plan administration at this site. Details regarding staffing levels, equipment inventory, budget and report requirements can be found in the Tier 11-B document.

### **2.2 Management Goal**

#### **2.2.1 Primary Management Goal**

- Protect and maintain habitat for golden-cheeked warblers.
- Protect karst features and cooperatively monitor for karst invertebrate populations, particularly the Bee Creek Cave Harvestman.
- Protect onsite population of bracted twistflower.
- Protect Little Bee Creek watershed's water quality.

##### **2.2.1.1 Golden-Cheeked Warbler (GCWA)**

The City's Austin Water Utility will protect and manage GCWA on this site by managing 18 acres of habitat in its natural state, limiting access to the preserve tract, and by working cooperatively with other BCP partners in regional solutions to common problems such as wildfire, oak wilt, deer management, brown-headed cowbirds, and non-native species,

FIGURE 1: LOCATION MAP

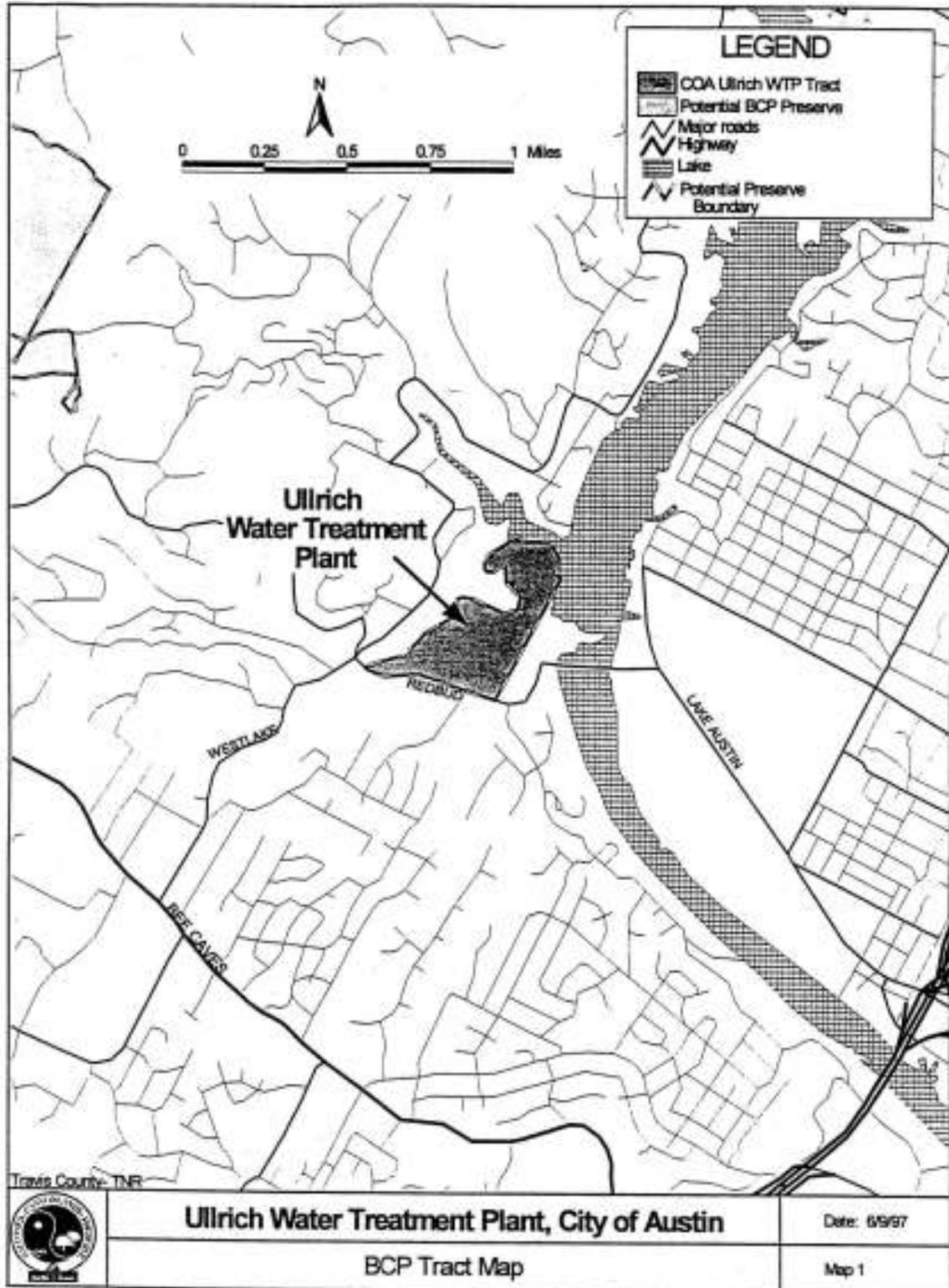
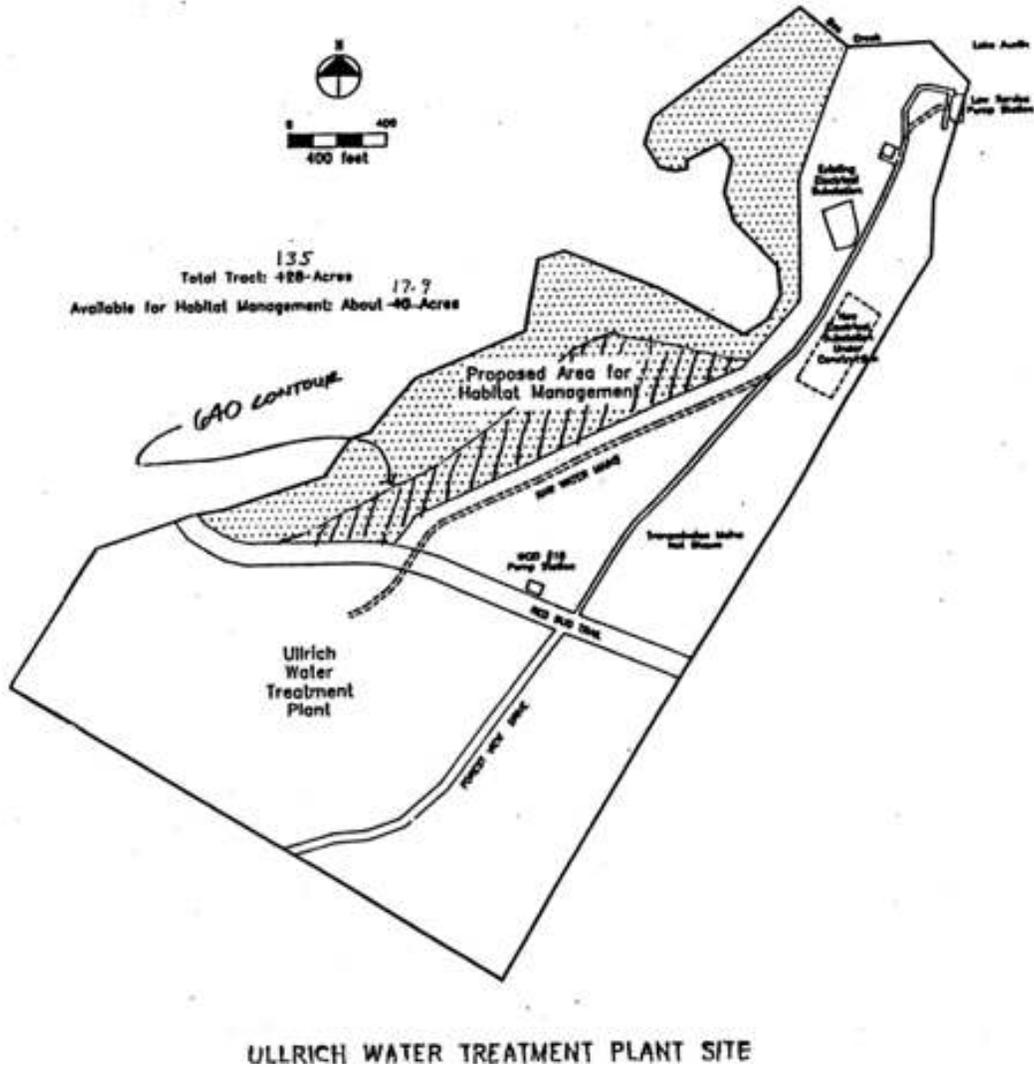


FIGURE 2: SITE MAP



including red imported fire ants and non-native invasive vegetation. The preserve area is protected from deer browse and human traffic by an eight-foot game fence installed in 2004.

#### 2.2.1.2 Karst Species

Populations of the endangered Bee Creek Cave Harvestman (*Texella reddelli*) have been found in Little Bee Creek Cave, a designated BCP cave that must be protected. Species of concern such as the ground beetle (*Rhadine austinica*) must also be protected. The entrance to this cave will be gated to protect from unauthorized public access. The Utility will work cooperatively with BCP and academic investigators who work on karst biology projects in the area's karst features to expand our knowledge of these resources.

#### 2.2.1.3 Plants

A population of bracted twistflower (*Streptanthus bracteatus*) has been known from the site since at least 1989 (McNeal, 1989; Damude and Poole, 1990). A perimeter game fence designed to prevent human use impacts and deer over browsing protects this population. This site may continue to serve as a research study site for this species.

### 2.2.2 Secondary Management Goals

The City of Austin's Austin Water Utility will manage this property for water quality benefits in the Bee Creek watershed by improving native habitats and reducing erosion. When the Ullrich Water Treatment Plant expansion construction began in 1998, mitigation efforts were planned to reduce erosion and non-point source pollution from adversely affecting the designated preserve area, the karst features, and Little Bee Creek. Since such discharges would enter Lake Austin upstream of the water supply intakes, this goal of water quality protection is crucial to a high quality drinking water supply for the citizens of Austin.

### 2.3 Issues

The goal of the Austin Water Utility is to operate the Ullrich Water Treatment Plant to provide quality drinking water in sufficient quantities to the citizens of Austin, while being sensitive to the protection of the undisturbed Habitat Management area for endangered species and plants. Recently authorized upgrades of the plant's capacity will place pressure on the construction activities and practices to prevent deterioration of the unique habitat and species resources found there.

The preserve area has been fenced to prevent illegal trespass and over browsing of bracted twistflower by deer.

Unauthorized public access into Little Bee Creek Cave, which contains the endangered Bee Cave harvestman, has caused littering of the cave interior and building of fires, which may adversely affect the species. Installation of a cave gate at the entrance is planned to stop such unauthorized access.

Growing deer populations along Stratford Drive and in West Lake Hills have caused excessive deer browsing of the Habitat Management Area as other undisturbed natural habitat areas have been eliminated. The Utility constructed a deer proof fence to protect the site from deer browse.

## **2.4 Management Objectives**

The Austin Water Utility plans to leave the Habitat Management Area in its current unimproved state and ensure compatibility with the expanded water treatment plant. During the planning/design phase for the planned infrastructure improvements, every effort will be undertaken to maximize co-existence between the developed acreage and that dedicated to the BCP.

The Austin Water Utility is aware of the unique Tier II objectives for the West Austin Macrosite. It will act cooperatively with other preserve partners to protect endangered species and species of concern, to manage public access, habitat, and water quality, and to monitor resources:- With the expansion of the adjacent lands as an operational water treatment plant, public access will not be allowed. The management goals here will be implemented through the objectives and activities listed below.

### **1. Protect natural resources from unauthorized human activities.**

- a. Continue to keep the area closed to unauthorized personnel by routine inspection of the perimeter fence.
- b. Restrict access to authorized monitoring personnel.
- c. Increase patrol efforts by plant personnel to decrease illegal access.
- d. Install cave gate to protect Little Bee Creek Cave.

### **2. Participate in a cooperative fashion on monitoring efforts of land and water resource management success, as staff and funding assistance is available.**

- a. Identify study sites for cooperative karst surveys and other biological and vegetation monitoring.

- b. Manage land and water resources by the following means as staffing and funding permit.
- c. Cooperate in regional oak wilt surveys and suppression of diseased trees.
- d. Passively manage GCWA habitat per Tier II Management Handbook protocols.
- e. Periodically survey for non-native species and control them as appropriate using methods endorsed by COA Integrated Pest Management Committee and USFWS. No pesticide use will be allowed in vicinity of caves (considering surface and underground hydrology and following USFWS protocols).

**Table 1: Objectives**

Objectives	04	05	06	07	08
<i>Vegetation Management</i>					
Survey and suppress oak wilt as needed	X	X	X	X	X
Control aggressive non-native species	X	X	X	X	X
Fence bracted twistflower populations (finished)		X			
<i>Animal Management</i>					
Monitor cooperatively on karst invertebrates	X	X	X	X	X
<i>Physical and Cultural Management</i>					
<b>Protect area from adjacent construction.</b>	X	X	X	X	X
Gate Little Bee Creek Cave			X		
<i>Visitor Management</i>					
Routinely inspect perimeter fence and make needed repairs to prevent illegal trespass.	X	X	X		X

**2.5 Specific Implementation Strategies**

All implementation will follow applicable BCP guidelines and other accepted procedures in use by the USFWS, Texas Parks and Wildlife Department, Texas Forest Service, Natural Resources Conservation Service, Texas Department of Agriculture, City of Austin Watershed Protection and Development Review, and Texas Committee on Environmental Equality. All

pesticide applications will be performed under the direction of a licensed applicator with appropriate sensitivity to the presence of rare plants and subterranean karst invertebrates. No mowing of the area will be permitted.

The Utility will continue its cooperative approach with academic investigators who have been studying the site's plant and cave resources. It envisions a permit system that authorizes access for monitoring. The Utility will work cooperatively in deer control, oak wilt suppression, and other regional preserve initiatives.

The plant site is surrounded by a six-foot high chain-link fence with an additional 3 strands of barbed wire on top and locked rolling gates at the primary entrances along Redbud Trail. Boat traffic can access the northern shoreline and will be difficult to stop, although signage may be erected. Additional internal signage may be erected to distinguish between the plant site and natural areas as onsite development nears.

Erecting the cave entrance gate at Little Bee Creek Cave is the priority species protection. The site may be too small to support nesting warbler populations; however, the habitat will be protected for occasional use by these birds.

During ongoing treatment plant expansions, all required water quality protections will be established to protect Little Bee Creek whose mouth is near the Lake Austin water intakes. The current site development permit requires two storm water detention ponds within the main plant site to control erosion/sedimentation and runoff contamination. Pipeline construction near the Habitat Management Area will use adequate water quality controls and be inspected regularly to ensure proper functioning.

### **3.0 MONITORING**

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