3.7 Environment and Resource Protection

OVERVIEW

One of Bee Cave's strongest assets is its location within the scenic region known as Texas Hill Country, known for its karst topography, rugged hills, and beautiful open space views. Bee Cave is nearly surrounded by large conservation areas: Barton Creek Habitat Preserve, the Balcones Canyonlands Preserve, City of Austin Water Quality Protection Land, and the privately owned Shield Ranch that together contribute to the environmental protection of the region, as well as to the character and attractiveness of the City, setting it apart from other communities in the region. A large amount of land within the City and ETJ, over 2,000 acres, is classified as conservation land and currently preserved as open space, a critical resource for maintaining water quality, providing habitat for diverse species, and sustaining tree canopy (see Figure 3-10). Many thousands of acres adjacent to the ETJ are currently protected. These lands are a valuable asset to the City and surrounding communities.

Bee Cave is located primarily within the Little Barton Creek Watershed, with smaller portions of the City lying within the Barton Creek Watershed to the south, and the Lake Travis, Cedar Hollow, and Honey Creek Watersheds to the north. Barton Creek is a tributary of the Colorado River, a key component of natural scenic landscape that characterizes the Austin region. Bee Cave adopted Ordinance NO. 90-1 in 1990 to reduce contaminants from entering into stormwater and reduce runoff to maintain water quality of its three watersheds: Lake Travis, Lake Austin, and Barton Creek. Given its location in the environmentally sensitive Little Barton Creek Watershed and as a contributing zone to the Edwards Aquifer, the City has prioritized the management of nonpoint source pollution by capping impervious surfaces (20% for single-family residential and 40% for multi-family and non-residential uses) and requiring on-site stormwater pollutant removal at the start of development.

The Federal Emergency Management Agency (FEMA) ranks Travis County among the fastest growing areas in the nation and in the top 10% of flood-damage prone communities. Floodplains in Bee Cave occur irregularly along stream corridors throughout the area and the ETJ. Approximately 155 acres in Bee Cave, and approximately 677 acres in the ETJ, have been designated as 100-year floodplain.

Open Space Views at Nature Preserve

Where are we now?

- Large conservation areas are a strength of community identity and environmental protection.
- Community support for conservation.
- Limited impervious coverage ratio and NPS ordinance help to protect water quality and limit stormwater runoff.
- Need more guidance on Low Impact Development (LID) / green Best Management Practices (BMPs).

What is our Vision?

- Bee Cave is green and healthy, with an expanded network of parks, trails, recreational and sports facilities, and open spaces.
- A unique and memorable design quality, tailored to natural and cultural context.

Bee Cave is located within the Austin Basin with a subtropical and sub humid climate, with rainfall averaging about 30 inches annually. The topography varies throughout Bee Cave, from approximately 740 feet above sea level along Little Barton Creek to approximately 1,100 feet above sea level in the northwestern area. The terrain in the ETJ varies from about 860 feet above sea level to 500 feet above sea level near the Colorado River in the northeastern corner of the ETJ. The region has experienced intermittent drought conditions for several years and the regional water utilities limit outdoor water use and irrigation schedules as needed to help conserve water resources. Soils in Bee Cave are generally shallow, calcareous, and moderately alkaline. The largest soil types are Brackett and Tarrant Soils, both of which are not well suited for crops, and are better utilized for grazing or wildlife habitat. Figure 3-10 illustrates environmentally sensitive areas, including steep slopes and FEMA floodplains.

Watershed protection for the Edwards Aquifer, Barton Creek and Little Barton Creek are critical to the environmental health of the region.

ENVIRONMENT AND RESOURCE PROTECTION GOALS & STRATEGIES

Goal ERP-1:

Promote the conservation, enhancement, and protection of natural features and environmental resources within the City and region.

Watershed protection for the Edwards Aquifer, Barton Creek and Little Barton Creek are critical to the environmental health of the region. Little Barton Creek is a critical natural resource due to its role as a feeder stream for both Barton Creek and Barton Springs. There are many organizations, agencies, and municipalities collaboratively working together to improve and maintain environmental resources in Travis County and Bee Cave.

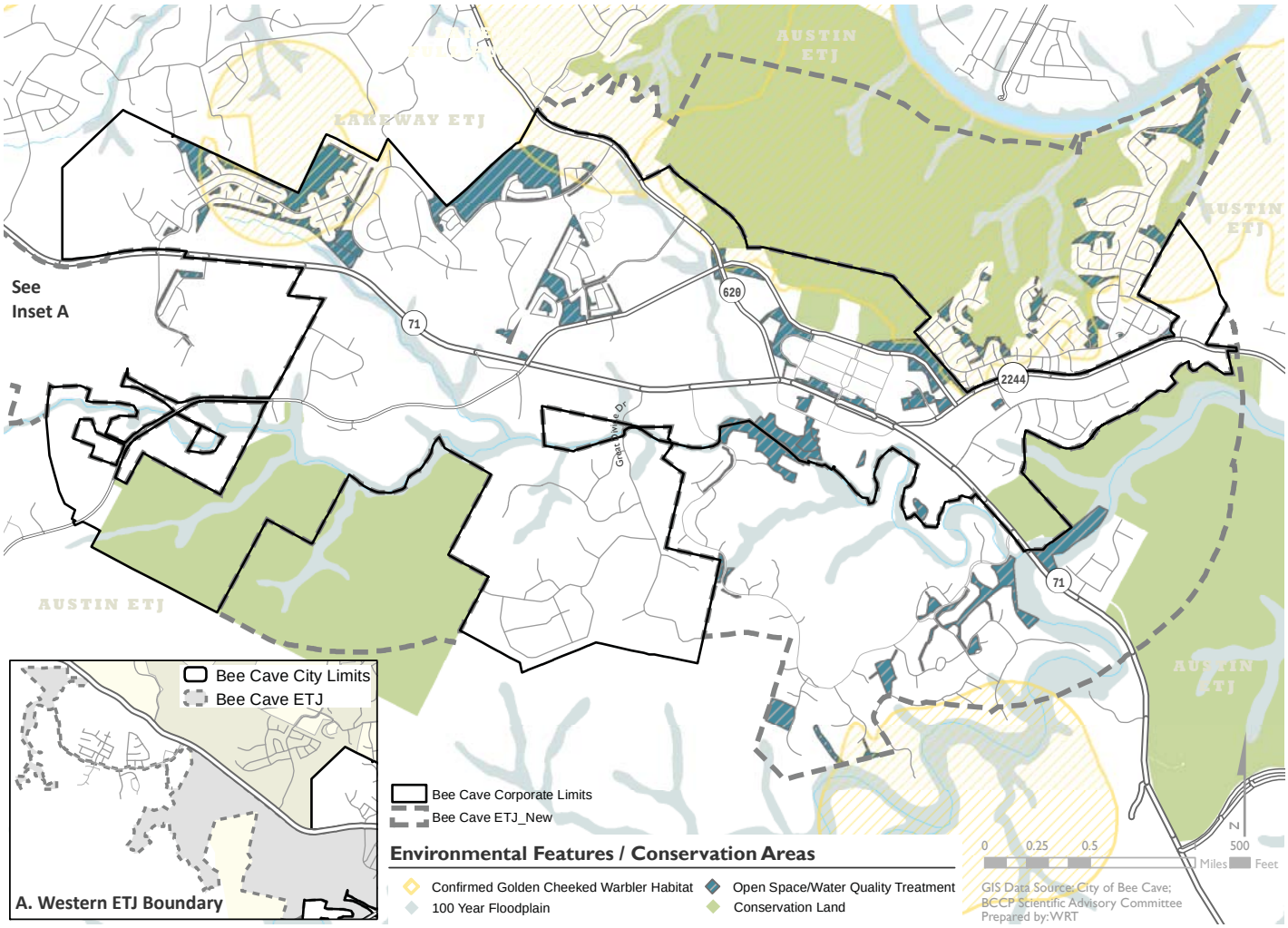
7.1 Conserve and protect ecologically sensitive areas including floodplains, ground water, wildlife habitat, steep slopes, and stream and river corridors through limited disturbance of soils and strict limitations on stormwater runoff. The City should continue to limit development in environmentally sensitive areas through its policies and ordinances. Bee Cave could also consider a set of criteria that would be used to prioritize environmentally sensitive land that could be facing development pressures with the potential for purchase to be used for parks or open space.

7.2 Enhance and preserve natural vegetation areas, especially within floodplains, buffers along waterways, and limits on the removal of healthy, native trees in areas to be developed. Bee Cave should coordinate and assist property owners in maintaining healthy floodplain buffers and native trees.

7.3 Promote responsible, low-impact public access (e.g., hiking and trail access) to open space and natural areas within the City and its ETJ. (See also PR 3.7).

7.4 Continue to maintain high standards for ground and surface water quality, limit impervious coverage, and minimize erosion during site or infrastructure construction through implementation of the City's NPS ordinance and subdivision standards.

Figure 3-10: Environmental Features



7.5 Encourage the use of stormwater management BMPs as sites are developed that are attractive and fit in with a natural setting, and where feasible, include trails or other pedestrian open space amenities.

Goal ERP-2:

Increase the conservation of undeveloped open space as development occurs and the City's population continues to increase.

One of Bee Cave's strengths most often identified by Bee Cave residents through the community process of developing the Comprehensive Plan is its proximity to large conservation areas and open spaces. As development occurs, there are opportunities to work with land owners interested in permanently conserving land – through conservation easements – and with developers to set aside environmentally sensitive areas for conservation. An informal newsletter survey as part of the planning process indicated support for funding and developing new public private partnerships to protect more conservation land.

7.6 Coordinate with local property owners and non-profit conservation organizations to raise awareness and expand interest in land conservation through techniques such as conservation development of large, undeveloped parcels in the City and its ETJ.

7.7 Work with landowners to encourage existing conservation land remain as conserved open space in perpetuity.

7.8 Continue to encourage open space dedication of environmentally valuable / sensitive land as development occurs.

7.9 Adopt incentives to encourage property owners to conserve open space through conservation easements or other means.

Goal ERP-3:

Conserve rural and open space views and increase Bee Cave's tree canopy.

7.10 Continue to support stringent development standards to limit light and noise pollution from roadways and all types of development. Bee Cave has strong standards regulating light pollution within its current ordinance. The International Dark Sky Alliance (IDA) recommends that lighting only be on when needed, only light areas where needed, be no brighter than necessary, minimize blue light emissions, and be fully shielded. The IDA has guidelines and a certification process for cities / places that wish to be designated as Dark Sky places, which is something Bee Cave could consider pursuing, but would require a coordinate effort and major commitment for the City and local businesses.

7.11 Conserve viewsheds, to the extent possible through careful attention to site design, and maintain rural character and views from scenic roadways such as Hamilton Pool Road.

7.12 Maintain landscape setbacks with specified planting densities in front yards, where appropriate.

7.13 Support Travis County targets for establishing contiguous uninterrupted tracts of land for conservation purposes in the Barton Creek and Little Barton Creek Watershed. Travis County adopted the Land, Water, & Transportation Plan (LWTP) in 2014. The plan includes capital improvement programs to guide growth while protecting critical natural resources in unincorporated Travis County. The County currently operates a conservation easement program that encourages residents to donate or sell conservation easements to be held by the county with the property ownerships remaining with the landowner. Travis County is committed to expanding conservation land through easements and purchase to increase conservation areas. While outside of Bee Cave's jurisdiction, the County's goals to conserve and protect additional land along Hamilton Creek and Pedernales River (west of Bee Cave) will contribute to the overall conservation of environmental land in the region, as well as the Barton Creek and Little Barton Creek watersheds.

Hamilton Pool Road Corridor View