BARTON CREEK GREENWAY Draft Concept Plan

Prepared by:

National Park Service Southwest Regional Office Rivers, Trails, and Conservation Assistance Program

City of Austin
Parks and Recreation Department

July 1992

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A Joint Project of:

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"The maintenance of the regional setting, the green matrix, is essential for the culture of cities..."

Lewis Mumford

SUMMARY

THE BARTON CREEK GREENWAY: A VISION FOR THE REGION'S FUTURE

The Barton Creek Greenway Plan is a cooperative effort, led by the City of Austin Parks and Recreation Department and the National Park Service, to protect and enhance the unique character and fragile resources of Barton Creek. Concern and government action related to conservation of the Barton Creek watershed have spanned several decades. The City of Austin has taken an active role in protecting Barton Creek, and providing for public use of the area, through land use regulations and land acquisition. This plan explores a range of federal, state, local, and private actions that can be taken to more effectively conserve and manage the special features of Barton Creek.

THE NEED FOR THE GREENWAY PLAN

The Barton Creek Greenway Plan outlines a strategy for increasing and coordinating efforts to wisely manage the special resources of the region. The concepts laid out in the Greenway Plan are intended to further the following goals:

- To protect the natural resources of the Barton Creek area;
- To preserve water quality;
- To enhance public use and enjoyment of the area;

- To protect endangered species;
 and
- To preserve open space and the scenic qualities of the region.

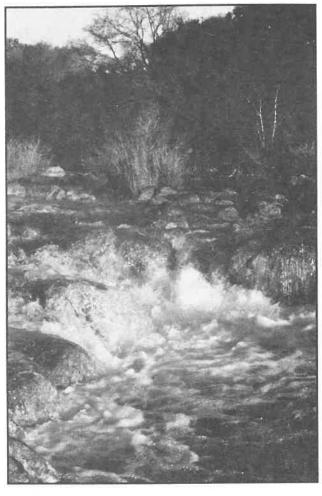
Although the Greenway Plan can be an integral part of efforts to protect endangered species, water quality, and other outstanding features of the Barton Creek area, it must be linked to broader regional programs to effectively meet these and other Austin conservation objectives. The Greenway Plan places a strong emphasis on managing the Barton Creek area for appropriate public uses, and should enhance its value for public recreation, education, and inspiration.

WHAT MAKES BARTON CREEK SPECIAL

The Barton Creek area holds a remarkable diversity of highly significant resources. These resources, and the large natural area that surrounds the creek, represent

both a conservation challenge and an exceptional "quality of life" treasure for Austin's residents and visitors. The foundation for the Barton Creek Greenway Plan is an inventory and evaluation of the important natural, cultural, and recreational resources associated with the creek. The Greenway Plan focuses on a portion of the Barton Creek watershed surrounding the creek corridor—an area that could be effectively managed for conservation and public access purposes.

Most of the Barton Creek watershed remains undeveloped. Current land uses include a mix of established ranchlands and more recent residential and mixed-use developments. Planned development activities could radically alter the character of the region within the next few decades.



Surface and sub-surface waters are both critical to the ecology of the arid hill country. The outstanding water quality in Barton Creek and the inter-connected aquifers, springs, and seeps of the region are invaluable to wildlife, recreational users, and residents, and are a fundamental element of the environmental integrity of the study area.

The Barton Creek watershed supports a rich diversity of vegetation and wildlife. Substantial tracts of forested woodlands and other natural habitats host a unique wildlife population. A variety of rare and endangered plants and animals, including several species protected under federal and state law, live in the Barton Creek area.

Barton Creek flows through two very significant geological regions: the Edwards plateau, and the Balcones fault zone. Caves and other karst features are a unique, sensitive resource in the fault zone. The area's prominent topography, steep slopes, bluffs, rimrock, and sinkholes--both limits development of the area and creates important scenic and environmental resources.

Barton Creek has a long history of associated human activities. Although incompletely documented, prehistoric and historic sites and artifacts can play an important role in understanding and interpreting the relationship to the Barton Creek environment of indigenous peoples, colonists, and current residents.

The Barton Creek Greenbelt is the focus of public recreational activities in the study area, attracting over 30,000 visitors a year to the trails and natural areas.

CRITICAL GREENWAY PLANNING AND MANAGEMENT ISSUES

The Barton Creek Greenway Plan takes into consideration issues and concerns expressed by the broad range of interests -- land-owners, recreational groups, government authorities, environmental activists, resource experts, and

eliminate any conflicts resulting from public activities; and generally work to create a partnership where the Greenway is valued by its neighbors.

Historic and pre-historic sites, buildings, and artifacts along Barton Creek are important resources which could be enhanced by increased protection and management for public use.

Perhaps the greatest potential benefit of the Barton Creek Greenway is as an educational resource. Effective use of the area as an outdoor classroom, laboratory, library, and studio will need to involve a mix of organizations, programs, and facilities.

PRIORITIES AND CONCEPTS BEHIND THE GREENWAY VISION

The Barton Creek Greenway Plan strives to create a framework that integrates four management priorities:

- Protect Barton Creek's outstanding environmental features;
- Develop the area for educational purposes;
- Encourage joint private/public participation;
 and
- Promote and manage appropriate public recreation

A Conservation Management Area--the area of greatest concern with regards to protecting Barton Creek's environmental integrity--was identified using an overlay analysis of 13 significant features found within the study area. (See map page 81.)

Public access to the Barton Creek Greenway is divided into four different units that will support different activities, and require different management strategies to protect the significant resources and private land use patterns found in each area. (See map page 85.)

 The Urban Natural Area will be managed to accommodate a relatively high level of diverse public uses, while protecting some of the most significant environmental areas in the Barton Creek watershed. others -- that have a stake in the future of Barton Creek.

Many residents of Austin regard protecting the outstanding water quality in Barton Creek, the Edwards aquifer, and Barton Springs as one of the most important environmental issues facing the community.

The need for special wildlife management practices and careful review of all development activity is another key issue for the community, due to federal and state legal requirements, and the community's interest in protecting Barton Creek's endangered species and diverse wildlife population.

Projections of widespread development in the Barton Creek watershed have raised broad-based concern that the area's environmental integrity, esthetic qualities, and recreational opportunities will be compromised. At the same time, the high economic value of existing and planned developments has created a very strong interest in accommodating additional activity in the region.

Public and private interests affected by the Greenway proposal both felt that the economic costs and benefits associated with the initiative are critical issues. The cost of creating a Barton Creek Greenway should be weighed against its value to the community as an important "quality-of-life" asset, and the potential for generating various direct and indirect economic benefits.

There is general agreement that the Barton Creek area represents an extraordinary untapped opportunity for public recreation. However, there is also a growing concern that any development and use of the area must be sensitive to the unique environment, and that future recreational use should be limited to non-impacting, low-level activities.

Private land-owners will continue to be primary stewards of the Barton Creek watershed. The Barton Creek Greenway Plan must treat land-owners in an equitable fashion; strive to

- The Suburban Area will have limited public access and use. Management will emphasize protection of the creek corridor as a linkage of the urban area to the open countryside, and avoiding conflicts with adjacent land-owners.
- The Regional Park/Preserve will provide the public with diverse opportunities for passive recreation and educational activities in a preserve setting.
- The Rural Conservation Area will emphasize continuing the current traditional ranching activities on private lands. Public access and use will be very limited, but opportunities will be available for research and other special uses arranged with land-owners.

Although each public access unit could be created as a separate entity, coordinated management of the entire Greenway, and areas beyond, would provide the optimum conservation and public use value.

REALIZING THE VISION: STRATEGIES FOR GREENWAY ACTION

Acquiring, developing, and managing the Barton Creek Greenway will require the coordinated action of federal, state, and local agencies, as well as private organizations and individuals.

Public and private stewards will need to acquire lands or property rights in those areas that are to be managed for public use or permanent protection. Acquisition can be accomplished through a variety of mechanisms, and may involve obtaining easements or rights short of full ownership.

The funding needed to create the Greenway can be raised by public and private entities in a number of different ways. Targeting specific funding strategies to specific activities may promote broader involvement and increase support for the Greenway as a whole.

Management of the Barton Creek Greenway will be linked to ongoing efforts to preserve water quality and protect endangered species, as well as other strategies to reduce the impacts of land and water use activities in the region. Priority will be given to developing management actions that reinforce protection of the area's significant natural and cultural resources. In providing for public use of the Greenway, managers will emphasize explaining and interpreting Barton Creek's unique environment. Creative partnerships will be needed to fully develop the area's potential to provide for a range of social benefits in addition to recreational use. Limited facilities will need to be developed to reduce the impacts of unmanaged use of the Greenway and enhance the visitor experience.

The Barton Creek Greenway Plan recommends focused protection and management of approximately 8,000 acres of land within Travis County. Management of this greenway will be closely coordinated with public and private efforts to conserve the environmental integrity of the greater region. The Greenway will connect the downtown urban center to open natural countryside. Realization of this plan will create a public open space area of regional significance.



"Last Saturday being the day appointed by the pupils of the Methodist Sabbath School for their an nual picnic; city hacks, buggies, ambulances, and furniture wagons were seen hurrying past freighted with happy children and smiling older people, enroute for Barton's creek."

Austin Daily Statesman, May 18, 1881

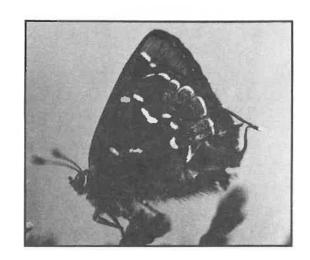
I.INTRODUCTION

BACKGROUND

In Austin, there has been a long history of respect and concern for the unique character and fragile resources of the Barton Creek watershed. In 1990, this concern led citizens and city officials to launch an initiative to increase and coordinate federal, state, and local efforts to protect Barton Creek. The Austin City Council passed a formal resolution calling on city staff to investigate the possibility of state and federal assistance in preserving the area. After discussions with the Mayor's office and others, the National Park Service, through the Rivers, Trails, and Conservation Assistance Program, and the Austin Parks and Recreation Department agreed to work together on developing a cooperative plan for the Barton Creek area. In September 1991, Bruce Todd, the Mayor of Austin, signed a memorandum of understanding officially initiating a joint study known as the Barton Creek Greenway Plan.

Although the immediate motivation for this study stems from a number of recent threats and impacts to the Barton Creek environment, the history of citizen concern and governmental action to protect the creek spans several decades. In order to fully appreciate the meaning of Barton Creek and the surrounding natural areas to the community, the following represents a chronological synopsis of key events:

The Barton Creek
Greenway study is a
cooperative effort, led
by the City of Austin
Parks and Recreation
Department and the
National Park Service,
to protect and
enhance the unique
character and fragile
resources of Barton
Creek.



CHRONOLOGICAL HIGHLIGHTS

1970 A citizen, urging the Austin City Council to preserve the Barton Creek Canyon from Zilker Park to State Highway 71, testified that Barton Creek is

"... a refuge of tranquility and relaxation for the public ... an extraordinary enclave of wilderness so close to the heart of downtown; a free-flowing stream with rapids, with pools that reflect precipitous bluffs, a marvel of variety in colors, textures, and shapes, a place to see flowers rarely seen in a city, to hear bird songs rarely heard by city dwellers."

1974 The City of Austin Environmental Board recommended that

" ... development of the Barton Creek watershed should proceed in such a manner as to minimize impervious cover in order to control pollution of Barton Creek and the Edwards aguifer by urban runoff."

1975 The first of a series of local bonds was passed to support acquisition of the Barton Creek Greenbelt. The Greenbelt was planned to begin at Zilker Park, near the center of Austin, and follow the creek over 8 miles up stream. By the early 1980s, the present Greenbelt, encompassing around 800 acres, and currently enjoyed by over 30,000 visitors a year, was essentially complete.

1976-

- 1977 The Austin City Council instructed City staff to proceed with a Barton Creek watershed study. The stated purposes of the resulting plan were:
 - To preserve Barton Springs water quality to the greatest extent feasible for recreational use, and for use as a part of the City of Austin water supply;
 - To preserve Barton Creek water quality for recreational use in the creek, and, indirectly, to maintain water quality of the springs; and
 - To preserve environmentally sensitive areas for recreational, scenic, and wildlife values.
- 1979 The Austin City Council ordered a special study of the Barton Creek watershed. A two-volume environmental analysis was completed by Espey, Huston and Associates. Further review and input were completed by City staff and the Barton Creek Citizen Task Force. Subsequently, a draft ordinance for protecting the Barton Creek watershed was produced.
- 1980 The Austin City Council passed Ordinance No. 810439-L, which provided standards for the development of land within the Barton Creek watershed. The objectives of the ordinance were to prevent deterioration of the ecosystem, to protect the base flow and water quality of Barton Creek, and to prevent the loss of recharge, as well as to protect water quality of the Edwards aquifer.
- 1982 The Austin City Manager appointed a task force of City staff from the Environmental Management, Water and Wastewater, Public Works, Planning, Engineering, Legal, and Health departments. The task force was directed to explore various options for preserving the water quality of Barton Springs and the Edwards aquifer. The task force outlined the following goals:

Concern and government action related to conservation of the Barton Creek watershed have spanned several decades.

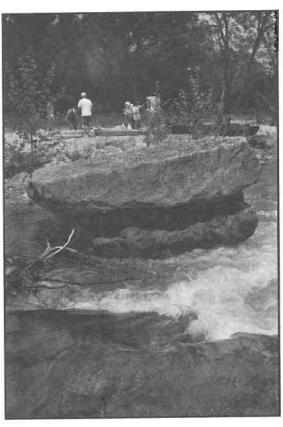
- Maintain Barton Springs in a manner suitable for contact recreation;
- Maintain surface water quality in Barton Creek, and other creeks contributing to the aquifer; and
- Maintain adequate flow at the springs the year round.
- The Austin City Council passed a
 Comprehensive Watersheds Ordinance,
 which provided standards for development
 for Austin's watersheds, including Barton
 Creek. The objectives of the ordinance
 included the following:
 - To protect the City's drinking supply, critical environmental features, and recreational and esthetic resources;
 - To maintain a pleasing natural environment, recreational opportunities in close proximity to the City, and the continued economic growth of the City; and
 - To establish rules and regulations to ensure watershed protection through the control and abatement of non-point source pollution.
- 1990 A major development proposal within the watershed, known as the Barton Creek Planned Unit Development, was submitted to the Austin City Council. The proposal called for development of approximately 4.000 acres for residential and mixed-use purposes. At the City Council meeting to review the proposal on June 7, 1990, more than 800 citizens signed up to speak concerning the proposed development -most of them voicing opposition to the project. After hearing 17 hours of testimony, the City Council voted unanimously to deny the project. The public controversy sparked a continuing community-wide debate concerning water quality protection, especially in the Barton

Creek watershed. A strict
"interim" Barton Creek
protection ordinance was passed
by the City Council while a
revision to Austin's
Comprehensive Watersheds
Ordinance was being prepared.

The City of Austin's
Environmental and Conservation
Services Department compiled
the "Strengthening Provisions of
the Barton Springs Zone
Amendments to the
Comprehensive Watersheds
Ordinance." After extensive
review by local boards and
commissions, as well as citizen
input, the City Council passed
the ordinance amendment on a
split vote.

In February, a committee of 1992 governmental agencies and citizens presented the final draft of the Balcones Canyonlands Conservation Plan (BCCP). This plan is intended to protect numerous species in western Travis County that are listed as endangered under the federal Endangered Species Act, while allowing land development to proceed. The Plan proposes establishing a regional preserve system to conserve and enhance critical habitat areas. The extensive preserve system is divided into different "macro sites," of which Barton Creek is the second largest, at 9,631 acres. The sites would be acquired, or otherwise set aside, to preserve endangered species, to protect water quality, and to enhance recreational opportunity.

In March 1992, a citizens' group known as "Save Our Springs" submitted an alternate Barton Creek ordinance to replace the one passed by the City Council in the fall of 1991. This new ordinance was submitted as



The City of Austin has taken an active role in providing for public use of the area, through land use regulations and land acquisition.

a citizens' initiative petition, accompanied by over 30,000 signatures of qualified voters. The initiative will place the new ordinance, which is more stringent than the current ordinance, before the voters for approval in August 1992.

The Mayor of Austin convened a task force of local citizens to make recommendations to accomplish the goal of preserving Barton Springs and the associated Edwards aquifer for future generations. To date, the Mayor's task force has primarily recommended that "... the City of Austin assume a leadership role in a concerted intergovernmental effort to purchase a substantial portion of the Barton Springs Zone for wilderness park and preserve uses."

The preceding chronology demonstrates a deep concern for Barton Creek and Barton Springs. The Barton Creek Greenway Plan is another chapter in this decades-long effort to preserve and protect a valuable resource. It is hoped that this plan for protection and compatible use of this special area will be a significant contribution to this legacy.

PURPOSE

variety of measures have been taken, and several efforts are currently ongoing, to protect the Barton Creek watershed. The Barton Creek Greenway Plan, rather than replacing these efforts, will attempt to reinforce, expand upon, and link related activities behind common goals. The general intent of the Plan is to develop a range of conservation strategies, and to explore opportunities for public access, use, and enjoyment of the Barton Creek corridor. This planning effort is a cooperative venture, which incorporates input from a broad spectrum of interested organizations and individuals. The proposed Plan is intended to be realistic, in that it can be accomplished using the community's existing public and private resources and

As the summary of recent events indicates, a

The Barton Creek
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outlines a strategy for
increasing and
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the region.

authorities. The Plan will attempt to further several of the community's fundamental goals for Barton Creek, which may be outlined as follows:

- To protect the natural resources of the Barton Creek area;
- To preserve water quality;
- To enhance public use and enjoyment of the area;
- · To protect endangered species; and
- To preserve open space and the scenic qualities of the region.

Although the Barton Creek Greenway Plan can contribute to achieving each of these goals, it alone will not resolve all of the conservation needs for the area. For example, the Plan includes strategies that will help conserve the water quality of Barton Creek, but the Plan will not completely ensure water quality protection. Water, and pollutants, from five other creek basins can flow into the aguifer that underlies the lower reaches of the creek and feeds Barton Springs. The Plan will preserve areas containing habitat for endangered species, but includes only a portion of the critical habitat needed to protect these species from extinction. The Barton Creek Greenway Plan will be most effective in conjunction with the community's overall strategy to conserve the region's natural resources. Therefore, this Plan must work hand in hand with other efforts such as Austin's Comprehensive Watershed Ordinance and the Balcones Canyonlands Conservation Plan, in order to optimally protect Barton Creek.

The Barton Creek Greenway Plan attempts to strike a delicate balance that will increase recreational opportunities and public access along Barton Creek while conserving the integrity of the creek's outstanding resources. The Plan rests on a foundation of both scientific data on the nature of the Barton Creek area and professional and non-professional evaluations, preferences, and opinions regarding potential management options. The study process has involved three major activities:

 An inventory and analysis of natural, recreational, and cultural resources; While the Greenway
Plan can be an
integral part of
efforts to protect
endangered species,
water quality, and
other outstanding
features, it must be
linked to broader
regional programs to
effectively meet
conservation
objectives.

- The identification and evaluation of management options for enhancing public recreation opportunities while protecting critical resources, and;
- A process for encouraging citizen participation in the development and implementation of the Greenway Plan.

The Barton Creek Greenway Plan is unique in that it looks at the full range of natural, cultural, and recreational resources present in the region. In addition to endangered species and water quality, the Plan gives consideration to other special resources, such as archeological and historical remnants, scenic vistas, important woodlands, wildlife, caves, and recreational opportunities. The Plan recommends various conservation options, including public land acquisition, private scenic and conservation easements, land use agreements, research and monitoring, and land use regulations. Implementation of the Barton Creek Greenway Plan will result in a conservation and public-use tapestry that is tailored to protect sensitive resources and provide singular educational, recreational, and inspirational experiences. If the Plan is successful, Barton Creek will continue to be a natural jewel set in the Austin metropolitan area; a source of community pride and identity to be appreciated by generations to come.