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**Date**

6/27/2005

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**Subject**

THUNDERBIRD PARK

**Description**

THUNDERBIRD CONSERVATION PARK MASTER PLAN

**Name(s)**


**Location**

THUNDERBIRD PARK

**Ordinance #**


**Resolution #**


**Contract #**


**Job #**


**Index By**

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TO: Honorable Mayor and City Council

FROM: Ed Beasley, City Manager

PRESENTED BY: Becky Benná, Parks and Recreation Director

SUBJECT: THUNDERBIRD CONSERVATION PARK MASTER PLAN

Purpose

This is a request for City Council to approve a resolution adopting the Thunderbird Conservation Park Master Plan.

Council Strategic Goals Or Key Objectives Addressed

The Thunderbird Conservation Park Master Plan addresses the Council’s strategic goal of providing high quality services for citizens.

The 2002 Parks and Recreation Master Plan recommended that a master plan be completed to protect and manage Thunderbird Conservation Park.

Background

Based upon the 2002 Parks and Recreation Master Plan recommendation to develop a master plan for Thunderbird Conservation Park, the city and the community began the process to develop a master plan for the park in 2004. That process has included a wide-range of public input, surveys of both the community and park users, studies and analysis of the park site.

The master plan is a general long-range planning tool that will guide staff and the community in protecting and managing Thunderbird Conservation Park. The key areas addressed in development of the plan included park use, standards for maintenance, and park management practices.

In September 2005, a draft of the preliminary master plan was presented to the community. At that time, public feedback indicated the need to reconsider the recommendations for the plan. Since then, additional steps were taken to provide opportunities for public input and collect additional park information.
As a result, the recommendations for changes to the plan are based on the following priorities:
limit park improvements; repair/replace restrooms; provide safe drinking water; provide a safe and clean park; improve signage for parking, rules and regulations, trail markers, and plant and wildlife identification; provide shade and picnic areas; provide areas for interpretive education discussions; provide parking but limit expansion; enhance and preserve wildlife; maintain existing trails; connect trails, and restore areas with native vegetation, as well as preserve native vegetation already in the park.

**Previous Council/Staff Actions**

The master plan recommendations were presented and discussed at the June 6, 2006 City Council Workshop.

In September 2005, the draft preliminary plan previously reviewed by the Park and Recreation Commission in 2004 was presented to the public. At that time, public feedback indicated the need to reconsider the recommendations for the plan. During the past nine months, additional steps were taken to provide opportunities for public input through on-site surveys of park users, observation of uses and demands on the park, examination of other area mountain preserves and parks, and additional public meetings.

The draft of the preliminary master plan was presented to the Parks and Recreation Commission in June 2004. However, the Thunderbird Conservation Park Master Plan was postponed until the 59th Avenue Road design public process was completed in early 2005.

**Community Benefit**

The Thunderbird Conservation Park Master Plan is intended to protect and manage the resources of the park. It will be the guide for accomplishing the mission of insuring that the park continues to be cared for and utilized as identified by the community.

**Public Input**

The community has been involved in the development of a master plan to address park use, standards for care and maintenance, and best management practices for the park. The process has been lengthy, but it has involved extensive public input through a series of public meetings, Park and Recreation Commission presentations and public comment, surveys of the community and park users, tours of other area mountain parks, and various park site studies.

As a result of the public process, parks and recreation staff presented the proposed conceptual changes to the Thunderbird Conservation Preliminary Master Plan at the April 10, 2006 Parks and Recreation Commission Meeting. Two public meetings were also held on April 26 and 29, 2006 to present and review the proposed changes to the plan.
Staff presented the Preliminary Master Plan Executive Summary to the Parks and Recreation Commission at its May 8, 2006 meeting. The Commission unanimously approved the proposed changes to the plan and directed staff to proceed with completion of the master plan.

**Recommendation**

Waive reading beyond the title and approve a resolution adopting the Thunderbird Conservation Park Master Plan.

[Signature]

Ed Beasley
City Manager
DATE: June 27, 2006

TO: Ed Beasley, City Manager

FROM: Becky Benna, Parks and Recreation Director

SUBJECT: Thunderbird Conservation Park Master Plan

ATTACHMENT(S):

1. Resolution
2. Master Plan
RESOLUTION NO. _____ NEW SERIES

A RESOLUTION OF THE COUNCIL OF THE CITY OF GLENDALE, MARICOPA COUNTY, ARIZONA, ADOPTING THE THUNDERBIRD CONSERVATION PARK MASTER PLAN FOR THE CITY OF GLENDALE.

WHEREAS, based upon the 2002 Parks and Recreation Master Plan recommendation to develop a master plan for Thunderbird Conservation Park, the City of Glendale and the community began the process to develop a master plan for the park in 2004. That process has included a wide-range of public input, surveys of both the community and park users, studies and analysis of the park site;

WHEREAS, the master plan is a general long-range planning tool that will guide staff and the community in protecting and managing Thunderbird Conservation Park. The key areas addressed in development of the plan included park use, standards for maintenance, and park management practices;

WHEREAS, in September 2005, a draft of the preliminary master plan was presented to the community. At that time, public feedback indicated the need to reconsider the recommendations for the plan. Since then, additional steps were taken to provide opportunities for public input and collect additional park information; and

WHEREAS, as a result, the recommendations for changes to the plan are based on the following priorities: limit park improvements; repair/replace restrooms; provide safe drinking water; provide a safe and clean park; improve signage for parking, rules and regulations, trail markers, and plant and wildlife identification; provide shade and picnic areas; provide areas for interpretive education discussions; provide parking but limit expansion; enhance and preserve wildlife; maintain existing trails; connect trails, and restore areas with native vegetation, as well as preserve native vegetation already in the park.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF GLENDALE as follows:

SECTION 1. That the Thunderbird Conservation Park Master Plan for the City of Glendale is hereby adopted and is incorporated herein by this reference. Three copies of the Thunderbird Conservation Park Master Plan shall be maintained in the office of the City Clerk.
PASSED, ADOPTED AND APPROVED by the Mayor and Council of the City of Glendale, Maricopa County, Arizona, this _____ day of ________________, 2006.

________________________________________________
MAYOR

ATTEST:

______________________________
City Clerk (SEAL)

APPROVED AS TO FORM:

______________________________
City Attorney

REVIEWED BY:

______________________________
City Manager

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ACKNOWLEDGEMENTS

Special thanks to the residents of Glendale who participated in focus groups, public meetings and surveys, and special thanks also to the following individuals who were instrumental in the guidance and planning of this document.

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City of Glendale
Thunderbird Conservation Park Master Plan

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1.0 INTRODUCTION

1.1 Purpose

The master plan serves as a long-range planning tool that guides the community and staff in protecting and managing the park.

1.2 Background

In 1956, the City of Glendale entered into a sale/lease agreement with the Bureau of Land Management to obtain 1,062 acres of the Hedgpeth Hills that would eventually become known as Thunderbird Conservation Park (TCP). In a later land exchange with the City of Phoenix, Glendale acquired an additional 66 acres to add to TCP north of Pinnacle Peak Road. Land use restriction changes enacted by the Glendale City Council also added an additional 57 acres. The current area encompassed by TCP is 1,185 acres.

Figure 1. Location Map
THUNDERBIRD CONSERVATION PARK & TRAILS
59th Avenue, north of Deer Valley Road

Park Hours: Sunrise to Sunset
Gates locked at sunset

Ramadas are numbered
dotted Trail
H-1 Trail Name
* Wildlife Viewing Blinds
• Parking lots are Lettered
Road
Restroom

Figure 2.
Thunderbird Conservation Park and Trails Map
In 1967, the City of Glendale adopted the Master Development Plan for Thunderbird Semi-Regional Park. This master plan emphasized development of passive recreation, such as picnicking, hiking, and horseback riding with some limited areas of development, such as an amphitheater and golf course. At the time, the development activities were seen as being compatible with the pristine, unspoiled desert and open space that characterizes the park.

The Glendale Parks Master Plan 1985-1995 placed TCP in the conservation category. This updated plan maintained that conservation parks should include natural areas, varying topography, water features, picnic areas, hiking and riding trails, scenic drives, and other facilities not requiring intensive development.

The 2002 Parks and Recreation Department Master Plan continued to place TCP in the conservation category. Based on the continued designation as a conservation park, in 2004 the city of Glendale and the community began developing a new master plan for the park. Key areas addressed in the plan include park use, standards for maintenance, and park management practices. The process was highlighted by the gathering of wide-ranging public input in meetings, surveys of both the community and park users, and studies and analysis of the park site.

In September 2005, a draft of the Preliminary Master Plan was presented to the community. At that time, public feedback indicated the need to reconsider the recommendations for the plan. Since then, additional steps were taken to listen to the public and collect additional park information. As a result, the recommendations for changes to the plan are based on the following priorities:

- Limit park improvements
- Repair/replace restrooms
- Provide safe drinking water
- Provide a safe and clean park
- Improve signage for parking, rules and regulations; trail markers, and plant and wildlife identification
- Provide shade and picnic areas
- Provide areas for interpretive education discussions
- Provide parking but limit expansion
- Enhance and preserve wildlife
- Maintain existing trails
- Connect trails
- Restore areas with native vegetation, as well as preserve native vegetation already in the park

1.3 Master Plan Process and Park Inventory Analysis Overview

Listed below are the steps taken in development of the Thunderbird Conservation Park Master Plan:

- As part of an open space and trails planning process, a community-wide needs assessment was distributed to 2,000 random Glendale households in the winter of 2003-04 with 403 responses. Part of the assessment included questions regarding Thunderbird Conservation Park. The questions addressed the public’s interest in park elements and needs for use of the park.
- The first public meeting was held in January 2004.
- A focus group meeting was held in April 2004 with representation by equestrians, hikers, bicyclists, clubs and organizations.
- A second public meeting was held in April 2004.
- During the meetings, requests of the community were to protect the park, conserve its resources, and plan for its use.
Based on information collected from the public meetings, survey and studies, three alternative preliminary plans were developed and presented to the Parks and Recreation Commission and published on the city web site for public comment.

Five resource analysis studies of the park area were completed by Logan Simpson Design, Inc. Those studies included: Biological, Cultural, Visual, Land Use, and Soil/Slope/Geological assets.

Based on concerns regarding park drainage, JE Fuller/Hydrology & Geomorphology, Inc. also completed a watershed analysis for the park.

The draft of the preliminary master plan was presented to the Parks and Recreation Commission in June 2004. At that time and since then, the public has provided a strong message to take steps to conserve, enhance, and protect this environmentally sensitive land.

The Thunderbird Conservation Park Master Plan was postponed until the 59th Avenue Road design public process was completed. That street public process and design approval was completed earlier this year.

Once the road project design was approved, the City determined that more public input was needed for the park master plan project.

Another focus group meeting with park users and interested organizations was conducted on September 6, 2005.

The draft preliminary plan was again presented and discussed with the Parks and Recreation Commission on September 12, 2005. The plan and process updates were reviewed with the Parks and Recreation Commission at its monthly meetings since September 2005.

Two public meetings were held on September 14 and 17, 2005, to present the draft preliminary master plan and solicit feedback. At that time, public feedback indicated the need to reconsider the recommendations for the plan.

The Thunderbird Conservation Park web page continued to be updated and included in the plans, reports, surveys, updates and opportunities for the public to provide comment.

Staff conducted an on-site user questionnaire at Thunderbird Conservation Park on various days of the week and times of the day in September and October 2005. A total of 751 park users responded to the questionnaire.

On November 15, 2005, city staff and the consultant presented an overview of the draft preliminary master plan to the City of Glendale Commission on Persons with Disabilities. Park accessibility and proposed amenities were discussed.

At the December 12, 2005, Parks and Recreation Commission meeting, Commission members reviewed the summary of 2005 public meetings, comments from the Commission on Individuals with Disabilities, results of 751 on-site user questionnaires, the most frequently asked questions compiled from collected public comment, and observations from the Commission tours of the City of Phoenix North Mountain Preserve and visitor center, and Thunderbird Conservation Park.

At the January 9, 2006, Parks and Recreation Commission meeting staff provided an update on the collection and evaluation of public input to date, as well as comments provided at public meetings and through responses to the website’s “Frequently Asked Questions.” Public comments were also heard at this meeting.

In January 2006, the Glendale Park Rangers and Park Maintenance staff provided additional comments and ideas regarding the park master plan. Also, ranger and park staff conducted periodic observations of parking lot uses from November 24 (Thanksgiving Day) through December 31, 2005.

In January 2006, staff video-taped Thunderbird Conservation Park, City of Scottsdale Pinnacle Peak Park and City of Phoenix North Mountain Preserve to identify and provide visual comparison opportunities for park features, such as trails, signage, parking designs, shade structures, picnic areas, restroom, visitor and park office facilities. This video was presented at the March 2006 Park and Recreation Commission meeting.
o Staff photographed park elements of other area mountain parks for purposes of presenting examples of designs and materials utilized for signage, shade structures, seating, vegetation, facilities and parking. The photos were incorporated into presentations provided to the Parks and Recreation Commission and at the April 2006 public meetings.

o Police, Parks, Recreation and Ranger staff and several residents met on-site to discuss the 59th Avenue culvert. Parks and Recreation staff also contacted other area organizations that utilize culverts for trail connection to discuss design and operational impacts.

o Staff toured the park with an Arizona Game and Fish representative to discuss the wildlife and vegetation in the park.

o Park and Recreation Commission member representatives and staff met with various school representatives to discuss input on the proposed park designs and how schools may utilize the park.

o City staff met with Arrowhead Lakes Homeowners Association, Arrowhead Amenities representatives, residents and the Arizona Game and Fish representative at the park's sedimentation area to share information about the sedimentation basin and tour the site on April 1, 2006.

o A study of sediment in the lake was completed in April 2006.

o Parks and Recreation staff met on-site with an American Conservation Experience (ACE) trail maintenance representative to review the trail system and identify designated and undesignated trails.

o Parks and Recreation staff reviewed proposed conceptual changes to the Thunderbird Conservation Master Plan at the April 10, 2006 Parks and Recreation Commission Meeting.

o Two public meetings were conducted to present and review the proposed changes to the master plan. The meetings were held on April 26 and 29, 2006 at Deer Valley High School. A total of 43 citizens attended the meetings.

o Parks and Recreation staff presented the proposed master plan changes and comments from the public meetings to the Parks and Recreation Commission on May 10, 2006.

o Parks and Recreation staff presented the Master Plan recommendations to the City Council at its June 6, 2006 Workshop Meeting.

o City Council adopted the Thunderbird Conservation Pak Master Plan on June 27, 2006.
2.0 INVENTORY AND ANALYSIS OVERVIEW

2.1 Summary of Studies
The Thunderbird Conservation Park (TCP) Master Plan Inventory and Analysis includes the documentation of existing infrastructure and facilities; existing and planned adjacent land uses as related to open space and trails; visual, cultural, and biological resources; and environmental considerations. The purpose of the inventory and analysis is to identify and describe the physical and functional relationship of the park’s resources to the opportunities and constraints that apply based on these existing data.

The following are summaries of resource studies completed. Study details are located in Appendix A.

**Soil, Slope and Geological Resources**
The purpose of this study was to provide an overview of soil conditions to determine erosion risk areas and locations suitable for development in the park.

- Determined on-site soils were adequate for supporting normal building foundations, although more detailed and site-specific evaluations should be conducted before any construction.
- Identified most suitable areas for improvements

**Biological Resources**
The purpose of this study was to review the ecological issues that impact planning and implementation of a master plan. The overview documented existing conditions in the park, qualified habitat values, and wildlife conditions.

- Identified presence of suitable habitat, water sources, degree of invasive species
- Identified areas that need to be enhanced or conserved for cover, food and movement of wildlife

**Cultural Resources**
The purpose of this study was to identify and preliminarily evaluate all historic and prehistoric cultural resources within the park.

- Determine management decisions needed to avoid, preserve or mitigate known cultural resources per the National Historic Preservation Act.
- Researched through the Bureau of Land Management (BLM), State Historic Preservation Office (SHPO), and the National Park Service Register as well as field reconnaissance.
- Determined no cultural resources observed, recorded and limited evidence of small-scale ground stone manufacturing in the pass along 59th Avenue. No evidence of rock art. Low density of small, prehistoric activity and the potential to encounter significant cultural resources is low.

**Visual Resources**
The purpose of this study was to establish the existing visual resources of the cultural and physical landscape within the park. The analysis will be used to protect and enhance the park’s character and create aesthetic value.

- Based on USDA Forest Service Handbook for Scenery Management (1995), and modified for this study to account for a more developed rural setting.
- Distinctiveness – memorableness of an element or a pattern of elements in the landscape.
- Unity – visual cohesiveness
- Intactness – integrity of order, elements and patterns
- Sensitivity

**Land Use Resources**

The purpose of this study was to identify existing and planned land uses within and adjacent to the park.

- Existing and planned land uses were identified within 1 mile of the park boundary.
- Regional trails and open space were identified within at least 5 miles of the park boundary.

**Utilities, Infrastructure, and Drainage Overview**

The purpose of this overview was to identify type and location of existing utilities and infrastructure within the park.

- Generally located around the picnic area adjacent to the wash corridor and other smaller picnic areas dispersed throughout the park.
- Existing utilities consist of electrical for site lighting, potable water for restroom buildings and drinking fountains, and septic systems.
- All restroom buildings are on individual septic systems that have or will reach their capacity within the foreseeable future.
- The nearest available sewer lines are located within the Arrowhead Ranch subdivisions, 67th Avenue, and Pinnacle Peak Road. No sewer lines exist within the 59th Avenue right-of-way.
- An existing electrical service located along 59th Avenue appears to be sufficient for the existing and future park demands required along the main wash corridor.
- Numerous drainage and utility easements exist along the southern and northern boundaries of the park where residential lands abut the park property. In addition, a 15’ equestrian easement connects to the north boundary of the park, just east of 67th Avenue.

**Architectural/Existing Structures Overview**

The purpose of this overview was to identify existing park architecture and structures.

- Architecture consists of concrete pier picnic ramadas, slump block restroom buildings, stone barbeque grills, concrete picnic tables, and a stone amphitheater.
- The majority of ramadas, tables, and restroom buildings are not ADA accessible.
- The restroom buildings are old enough not to meet current building code requirements.

The existing stone amphitheater is degrading rapidly and does not meet current ADA and building code requirements, however, it may remain in place as an architectural remnant.

**Site Analysis**

The purpose for the Site Analysis section is to compile all the inventory and analysis information presented in the previous subsections of this report.
• Three major arterial roads provide access to the park site.
• Current park use areas include the equestrian staging area near 67th Avenue, the large picnic area adjacent to the wash corridor, and the Pinnacle Peak trailhead area.
• The existing picnic area creates one of the largest disturbed areas within the park and has had a large negative impact on the park’s main wildlife corridor.
• Two major built features exist within the park and are located between 59th and 67th Avenues. The existing water reservoir is very visible from 67th Avenue and is currently painted white, therefore not blending into the natural desert environment. The existing stone amphitheater is located west of the wash corridor and naturally blends into the rocky hillside.
• The Pinnacle Peak Road trailhead area includes a dirt parking area and access to the trails located in the eastern portion of the park.
• An existing trail system includes designated and secondary (undesignated) trails throughout the park.

Watershed Analysis

The purpose of the hydrology study was to delineate the inundation boundaries of the natural wash for the 2,10,50 and 100 year flood events and establish the nature of the basin with respect to sediment trapping.

• Floodplain delineations indicated a breakout of larger flows in the upstream portion of the reach located north of Thunderbird Conservation Park and south of Pinnacle Peak Road.
• Determined that the flows are directed under the box culvert into the basin located east of the 59th Avenue.
• Existing hydrology for the natural wash located between the Pinnacle Peak Road and the 59th Avenue was reviewed. Floodplain boundaries were delineated.
• Documentation related to the basin located adjacent to the 59th Avenue was reviewed and it was determined that the basin was designed to act as a sedimentation basin in addition to other purposes.

Sedimentation Basin Topographic Survey

The purpose of this analysis was to measure the amount of sediment in the lake, and compare those measurements to the as built plans completed in the mid 1980’s.

• Analysis of 11 points throughout the basin indicated that since approximately 1984, an average increase in elevation of the lake over the past 22 years was 2 feet, 2 inches.
• Determined the sedimentation basin is meeting and/or exceeding expectations for its purpose.

Park Amenities Analysis

The purpose of these studies was to determine amount and condition of existing amenities and their current utilization.

• A parking lot count was conducted by Parks and Recreation staff during the Winter of 2005-06. The purpose of this analysis was to observe and track the utilization of existing parking areas.
• A study of other park amenities such as picnic ramadas, grills, tables, trash receptacles, signage, restrooms and drinking fountains.
The trails system, including both designated and undesignated trails throughout the park, was analyzed for condition, usage, and best conservation practices.

The sedimentation basin, located in the south portion of the park, was studied for condition and trends pertaining to sedimentation deposits and the overall functionality of the basin.

Analysis of Comparable Park Facilities

The purpose of this analysis was to develop a benchmark for conservation park amenities.

- As a benchmark for evaluating Thunderbird Conservation Park and its amenities, staff, consultant and Parks and Recreation Commission members conducted site visits of Valley mountain preserves and parks. Parks included the Deer Valley Rock Art Center, Scottsdale’s Pinnacle Peak Park, and Phoenix North Mountain Preserve.

- While on site, the trails and park facilities were analyzed for comparable information to Thunderbird Conservation Park.

Photo 1. Examples of Outdoor Seating Area for Park Interpretive Discussions

Photo 2. Example of Interpretive/Accessible Trail

Photo 3. Example of Resting Bench
Photo 4. Example of Revegetation Area

Photo 5. Example of Park Information/Interpretation Signage

Photo 6. Examples of Other Types of Signage

Photo 7. Example of Ramada – Shade and Seating Area
Photo 8. Example of Ramada – Shade and Seating Area

Photo 9. Example of Park Information Facility

Photo 10. Example of Park Information Facility with Restroom Access, Drinking Fountain, and Shade
School Park Usage Analysis
The purpose of this analysis was to determine interest and need for interpretive facilities.
- Staff and Parks and Recreation Commission members conducted interviews with school representatives to determine the interest and need for facilities to enhance the student learning experiences in association with their curriculum.

Park User Analysis
The purpose of this analysis was to determine park use.
- During September and October 2005, staff conducted 751 on-site surveys with park users to determine types of park use, mode of transportation to the park, distance traveled, what park patrons liked most about the park, changes they would like to see in the park and whether they had previously participated in the public input process for the master plan.
3.0 Master Plan Public Participation Process

3.1 Summary

Nearly twenty public forums were held between January 2004 and May 2006, resulting in wide-ranging public input. Minutes and notes from these meetings and survey results are included in Thunderbird Conservation Park (TCP) Master Plan Appendix B.

As a result, the recommendations for changes to the preliminary master plan were presented to the Parks and Recreation Commission at its April 10, 2006 meeting. As a result, the Commission directed staff to continue to refine the proposed changes and present them at the two public meetings that were held at Deer Valley High School on April 26 and 29, 2006. The public’s general comments regarding the changes to the plan were positive.

Based on the completed public input, park studies and analysis, the Parks and Recreation Commission accepted the revised preliminary master plan at its May 8, 2006 meeting and directed staff to complete the plan and present it to City Council for consideration and approval. On June 6, 2006 the City Council reviewed the plan’s recommendations and indicated it was supportive of the plan. The plan was formally adopted by City Council at its June 27, 2006 meeting.

The plan’s recommendations are based on utilizing existing park conditions as the benchmark for improvements. The overall guiding priorities include:

- Limit park improvements
- Repair/replace restrooms
- Provide safe drinking water
- Provide a safe and clean park
- Improve signage for parking, rules and regulations; trail markers, and plant and wildlife identification
- Provide shade and picnic areas
- Provide areas for interpretive education discussions
- Provide parking but limit expansion
- Enhance and preserve wildlife
- Maintain existing trails
- Connect trails
- Restore areas with native vegetation, as well as preserve native vegetation already in the park

3.2 Preliminary Master Plan Public Participation (2004)

Introduction

Providing opportunities as a community to actively participate in the master planning process of Glendale’s only conservation park, was crucial to the development of the TCP Master Plan. Public meetings, focus group meetings, and Technical Advisory Committee (TAC) meetings were held to identify the community’s diverse interests, issues, and needs in an effort to provide a common vision and comprehensive foundation for the development of the master plan. These meetings were also held to solicit the public’s input on the conceptual master plan alternatives and preliminary master plan.

Public Needs Assessment

As an additional public participation tool, and to best understand the needs and desires of the community at large, a needs assessment was conducted. This needs assessment consisted of a statistically valid random survey given to City of Glendale residents by mail or phone. Specific questions relating to open
space, trails, and park and recreation facilities were developed to identify the community’s needs and desires as well as prioritize what those needs and desires are.

Public Focus Group Meeting No. 1

To help consultants and staff better understand the needs of the major park user groups, representatives from the Glendale Bicycle Advisory Committee, the Glendale Equestrian Club, Glendale Hiking Club, Pebble Kickers Hiking Club, Sonoran Audubon Club, and Girl Scouts were asked to attend a focus group meeting.

Public Meeting No. 1

Public Meeting No. 1 was conducted in two parts. Part One included the park’s history and an overall background of the project, which identified the need for developing an updated master plan. Continuing pressures of adjacent urban development and the need to manage the amount and types of activities within the park are crucial to the conservation of its cultural, natural, and scenic resources. In addition, existing facilities constructed 30–50 years ago have degraded to a point of non- or limited-use due to physical condition or are in non-compliance of current building codes and federal laws (ADA).

Also presented in Part One of Public Meeting No. 1 was an overview of the master planning process and the purpose of this first meeting. Public Meeting No. 1, being one of the first steps in the master plan process, was particularly important since the information gathered from the public at this meeting would assist in developing the park’s program elements. This information along with the results of the needs assessment would provide the basis for identifying the types of amenities TCP would need to meet the future demands and desires of the community as a whole.

Part Two of Public Meeting No. 1 consisted of an interactive solicitation of the public’s values, issues, and needs as they related to TCP. The values were based on the premise of “if you were to move away from Glendale for five years, what elements or aspects of TCP would you want to stay the same?” Likewise, issues and needs were solicited under the same premise, except “what would you change?”

Public Meeting No. 2

Public Meeting No. 2 consisted of a presentation to the public on the following items:

- Summary of the inventory and analysis of the biological, cultural, visual, geological, and land use resources of the site.
- Summary and results of Public Meeting No. 1, including handouts of the public meeting survey results and the needs assessment results.
- Preliminary program elements based on the values, issues, and needs; the public meeting survey results; the community-wide needs assessment results; and staff input.
- Draft Vision, Goals, and Objectives were developed from information received at Public Meeting No. 1 and the needs assessment, as well as responding to specific action items adopted in the Glendale 2025 General Plan and the 2002 Parks and Recreation Master Plan.
- Three Conceptual Master Plan Alternatives based on all the above information.
- Concept C was the preferred of the three conceptual plans presented.

Parks and Recreation Commission Meeting

Public Meeting No. 3 in the master planning process consisted of a presentation of the Draft Preliminary Master Plan to the Parks and Recreation Commission in an open public forum on June 14, 2004. The Commission recommended the Preliminary Master Plan to be forwarded to the City Council.
Project Deferred Pending 59th Avenue Design
At Glendale’s northern boundary, 59th Avenue runs through Thunderbird Conservation Park. At approximately the same time period the park master plan was being developed, plans for 59th Avenue roadway improvements were also being considered. Thunderbird Conservation Park Master Plan was deferred until the roadway project public process was completed.

3.3 Revised Master Plan Public Participation (2005-2006)

Public Focus Group Meeting to Resume Public Process
To resume the public process, a second public focus group meeting was held with representation expanded to include additional stakeholders. Additional hiking, biking and equestrian groups were asked to attend as well as representatives from the Sonoran Audubon Society, the Arizona Game and Fish, elementary, middle and high schools, the Glendale Women’s Club, Glendale Rotary, Save-the-Park, Arrowhead Ranch Amenities and Water Resources Management.

Public Meetings to Review Previously Presented Draft Preliminary Master Plan
Two public meetings were held in September 2005 to review the Draft Preliminary Master Plan developed in 2004, and obtain public comment.

Parks and Recreation Commission Meetings
The Parks and Recreation Commission resumed discussions on the development of the Thunderbird Conservation Park master plan at its September 2005 regular monthly public meeting, and continued to include this project as a regular agenda item that included public comment through completion in May 2006.

On-Site Park User Survey
To gain a better understanding of park user needs, staff was on site several weeks in September and October various times of the day and days of the week. One-on-one contact with park users resulted in 751 completed questionnaires relating to park use. Questions included frequency of park use, type of activity engaged in, mode of transportation used to travel to the park, distance traveled to the park, what they like most about the park, changes they would like to see in the park, and whether they had participated in the public input process previously.

Commission on Persons with Disabilities Meeting
The Glendale Commission on Persons with Disabilities reviewed the Draft Preliminary Master Plan and provided input specific to special needs for public access.

Public Stakeholder Meeting at Sedimentation Basin
Staff, Arrowhead Lakes Homeowner Association and Arrowhead Amenities representatives, residents and an Arizona Game and Fish representative met at the park’s sedimentation basin and toured the site in April 2006.
Public Open House Meetings

Two open house style public meetings were held in April 2006 to answer questions and take comments on the Final Draft Master Plan. Overall, public input to the revisions made to the plan were positive. Based on the positive public input, the preliminary Master plan was brought back to the Parks and Recreation Commission for their final recommendation.
4.0 MASTER PLAN

4.1 Master Plan Recommendations

The Master Plan’s recommendations reflect the community feedback and information collected through the public input process, park users and park analysis. The plan recommendations were based on utilizing existing park conditions as the benchmark for the changes and to insure that the plan reflects maximizing use of park elements that already are located in the park.

First, the plan’s recommendations include overall priorities for the park which are listed below:

**Overall Priorities for the Entire Park**

1. Provide consistent maintenance and design standards for park trails, trailheads, trail nodes, signage, trash cans, ramadas, picnic tables, drinking fountains, equestrian hitching posts and troughs, restrooms, parking, facilities and lighting.
2. Establish surfacing and marking standards for parking lots and roads (paved and unpaved).
3. Insure the park property boundaries are clearly identified to prevent encroachment onto park property.
4. Provide mileage indicators and clearly mark all designated trails.
5. Establish and annually update an operations plan to manage and maintain the park.
6. Develop a community education outreach program regarding park wildlife, vegetation, geology and other natural areas in the park.

Second, the plan is divided into four major areas of the park (see Figure 3, *Master Plan Site Area Map*). Maps in this section correspond to the numbered recommendations identified in each respective May Key that precedes each master plan figure listed below:

- 55th Avenue and Pinnacle Peak Area
- Sedimentation Basin Area
- 59th Avenue Wildlife Habitat and Amphitheater Area
- 67th Avenue Equestrian Trail Area
Map Key for Figure 4, 55th Avenue and Pinnacle Peak Road Area

1. Establish a trail node at the traffic signal at Pinnacle Peak Road and 55th Avenue signalized street crossing including a new trail entrance node into the park
   - More pedestrian-friendly and designated crossing to the park at 55th Avenue/Pinnacle Peak Road

2. Establish a pedestrian entrance located at 55th Avenue and Pinnacle Peak Road
   - More pedestrian-friendly and designated crossing to the park at 55th Avenue/Pinnacle Peak Road

3. Keep the existing parking lot with 68 unpaved parking spaces and provide option for limited expansion of parking along Pinnacle Peak Road
   - Improve surfacing for dust control
   - Limit park improvements of existing parking lot — additional 34 spaces, include designated handicap parking
   - Provide option for future limited expansion of up to 100 parking spaces. This identifies future parking as needed and insures parking remains adjacent to the road, and not encroaching further into the park

4. Establish a new bus parking area off of new parking lot
   - Provide parking for school bus parking, to deter utilizing car parking spaces

5. Upgrade designated trailhead entrance at west end of parking lot for H-2 and H-1 Trails
   - Improve park information and trail use signage

6. Add a new non-enclosed, shaded seating area for interpretive discussions — seating 60-100 people
   - Provide areas for interpretative education discussion for area schools and other groups
   - Provide accessible shade and seating that meet ADA (American Disabilities Act) standards

7. Add three single-use (up to two picnic tables) ramadas located south of the existing parking lot with option for two additional single-use ramadas
   - Provide areas shade and resting, designated area for meeting other park users

8. Add restroom with drinking fountains
   - Provide support elements to park users that currently do not exist; park users and schools indicated need for access to water and restrooms

9. Add 53rd and Pinnacle Peak Road secondary entrance
   - Creates a loop for emergency vehicles to enter and exit the parking lot

10. Add a new handicap accessible trail with two access points at east and west ends of the existing parking lot
    - Provides trail access to individuals who may be disabled

11. Add trail node entrance to accessible trail on southeast end of the parking lot
    - Provides point of entrance to ramada and restroom area

12. Add trail node entrance to accessible trail on east end of parking lot
    - Provides direct access to the interpretive/accessible trail

13. Modify and upgrade existing trail to meet ADA standards and provide interpretive signage along the trail
    - Provide accessible trail for disabled or others who do not wish to hike the more strenuous trails
    - Provides education experience along the trail that identifies park vegetation, geology and wildlife

14. Add a pedestrian trail node at 51st Avenue and Pinnacle Peak Road on northeast side of the park
    - Designates a current undesigned trail and provide pedestrian access to this area of the park

15. Consider optional resting benches located along the interpretive/accessible trail
    - Provides locations along the trail for users to rest
16. Add informational signage at the top of the H-2 Trail with an option for 2-4 resting benches
   - Identifies various foothill and mountain peaks in the area
   - Provides educational opportunity to learn more about the area
   - Provides designated resting areas at the top of the trail

17. Add optional new trail node and designating an undesignated trail that leads to a view point located on the eastside of the park
   - Designates a currently undesignated trail and provides a scenic view of the valley and golf course area.

18. Restore native vegetation
   - Restore vegetation in areas affected by the 2005 fire and identify areas to remove invasive vegetation
Thunderbird Conservation Park

Master Plan

55th Avenue and Pinnacle Peak Road

Figure 4. Master Plan Map
55th Avenue and Pinnacle Peak Road Area
Map Key for Figure 5, Sedimentation Basin Area

1. Keep existing paved parking (four spaces) and viewing blind area west of the lake

2. Provide for interpretative signage along the trail and at the viewing blinds located north of the sedimentation lake
   - Provide educational opportunities about the lake, vegetation and wildlife in this area

3. Improve existing H-1 Trail that leads from 51st Ave to the 55th Ave and Pinnacle parking lot and 59th Avenue parking lot
   - Upgrade the existing trail to meet state and national trail standards that staff is also utilizing for other trails in the park

4. Address vegetation restoration in the sedimentation lake area
   - Identify and remove invasive vegetation and restore native vegetation that also accommodates wildlife

5. Provide two water guzzlers for wildlife
   - Provides areas in the wildlife habitat area for access to water that is generated by rainfall
Thunderbird Conservation Park
Master Plan
Sedimentation Basin Area

Figure 5. Master Plan Map
Sedimentation Basin Area
Map Key for Figure 6, 59th Avenue Wildlife Corridor and Amphitheater Area

1. Retain existing Parking Lot B – 20 paved parking spaces with option to add 20 parking spaces
   - Current parking lot is not utilized regularly, provides support parking to new trail connection
   - Identifies future parking location in the park
2. Continue portion of the H-5 Trail currently undesignated that leads from Parking Lot B to H-4 and H-1 Trails
   - Designates an undesignated trail that provide additional access to the H-4 and H-1 Trails
3. Add new trail located at Parking Lot B – connects to H-3 Trail
   - Relieves demand on the only trailhead entrance to H-3 Trail located at Parking Lot A
   - Encourages use of Parking Lot B that will alleviate parking demands on Parking Lot A
4. Add new trailhead at Parking Lot B
   - Provides park and trail information to trail users
5. Remove Parking Lot G – 12 paved parking lot spaces, restroom located at north end of the wildlife corridor
   - Removes park elements for the north end of the wildlife corridor and wash
   - Maximize use of current parking spaces that survey west side of the 59th Avenue park area
   - Designate area in existing parking lots for two parking lot bus spaces
   - Add vegetation to buffer and reduce erosion between the parking lots and the wash area
7. Remove Parking Lot F – 26 paved parking spaces located at south end of wildlife corridor
   - Removes elements for the south end of the wildlife corridor and wash
8. Keep existing single use ramada that accommodates two picnic tables. Add new restroom and drinking fountains adjacent to Parking Lot A. Option: Add single-use ramada with grill
   - Maximize existing park elements and provide support amenities to the heavily used H-3 Trail and Parking Lot A
9. Upgrade H-3 Trailhead and keep Parking Lot A – 19 paved spaces
   - Provides updated park and trail information to users
10. Upgrade existing connector trail to H-4 and H-1 Trails
    - Improve the surfacing of the trail connector which is heavily used
11. Add new trail connector from 55th Avenue to the ranger/park information station
    - Connects the park to bikeway and sidewalk at 55th Avenue
12. Add new ranger and park information station approximately 2,000 square feet to include ranger and park information office, maintenance storage, restrooms and drinking fountain. Add parking lot adjacent to station – 30 parking spaces and group shade area
    - The facility is centrally located in the park and addresses the following functions:
      - Enhances safety of park visitors by providing a centralized location for emergencies and information
      - Display and distribution of park information, rules and regulations
      - Access to restrooms and water
      - On-site storage of ranger and park maintenance equipment and supplies
    - Parking replaces spaces currently provided by Parking Lot F, which is proposed to be removed new trailhead for 59th Avenue trail connect at ranger/park information station
    - Provides park and trail information to park users
13. New trailhead that begins at the Ranger/Information Station
• Provide access point to the trail connection to 59th Avenue sidewalk and bikeway

14. Remove existing equestrian hitching posts at south end of wildlife corridor
   • Removes the posts out of the wildlife corridor and wash area

15. Add new trail node connection to H-1 and H-4 Trails
   • Identifies point of entry and provides directional signage for these trails

16. Remove three restrooms from the wash
   • Removes building structures from the wildlife corridor and wash

17. Add -one group ramada that accommodates 6-10 picnic tables, grills, and restroom with drinking fountain
   • Provide ADA accessible shaded area, restrooms and water for groups and park users

18. Option: Add two single use ramadas that accommodate two picnic tables per ramada with grills
   • Provides designated location for future shade and picnic structures

19. Designate new trail node to existing trail H-4 and H-1 Trails on the northeast side of the amphitheater
   • Identifies point of entry and provides directional signage for these trails

20. Remove seven ramadas, picnic tables and grills located in the wash
    • Removes structures from the wildlife corridor and wash area

21. Add new trail node access at 59th Avenue from sidewalk and bike lane
    • Identifies point of entry for the park and directional signage for the trail

22. Add new land bridge to cross 59th Avenue
    • Provides safe connection for park users between the east and west side of the park

23. Upgrade two single-use ramadas adjacent to land bridge area
    • Improve and utilize two existing ramadas for resting and shade

24. Restore amphitheater
    • Repair areas in the amphitheater, such as where tree roots have damaged seating

25. Option: Add future parking north of amphitheater – 20 parking spaces
    • Identify designated area for future parking as needed

26. Revegetate the wildlife corridor and wash areas, as well as identify other areas in the park that require revegetation
    • Re-establish native vegetation that encourages wildlife habitation and reduces erosion
Map Key for Figure 7, 67th Avenue Equestrian Trail Area

1. Keep parking lot entrance at 67th Avenue and Patrick Lane
   - This is a traffic signal-controlled and gated entrance

2. Existing Parking Lot K - includes 20 paved and unpaved spaces, equestrian trailer parking, and water trough. Extend corral area on south end of parking lot
   - Provide parking that is heavily utilized by park visitors and designates trail parking to the south of the current parking lot

3. Add new trailhead at H-1 Trail at equestrian corral area
   - Provide park and trail information to trail and equestrian users

4. Existing Parking lot J - includes 39 paved parking spaces. Add two linear bus parking spaces
   - Maximize current parking lot that is sporadically used, allow for parking space on the west side of the park

5. Improve park road from K to J Parking Lots to allow for two-way traffic
   - Current road only provides for single lane car access, provides safe entrance and exit of Parking Lot J

6. Keep and upgrade two existing single-use ramadas that accommodate two picnic tables per ramada at Parking Lot J. Add two single-use ramadas, and one group ramada that accommodates 6-10 picnic tables, include grills; add native vegetation to deteriorated areas of the park and add buffering between parking lot and the residential area north of the parking lot
   - Maximizes use of current picnic area and parking lot
   - Provides opportunity for shaded seating for group discussions and picnics
   - Restore native vegetation and provides buffer to ramada area and parking lot

7. Add new trailhead and trail connection to H-5A and H-5 Trails
   - Designate an undesigned trail to connect to H-5A and H-5 Trails
   - Provide new access to trails to relieve demand only designated trailhead at Parking Lot K
   - Provide trail connection to restroom with access to water from H-5A and H-5 trails

8. Upgrade or replace existing restrooms at Parking Lot J
   - Current restroom is inoperable
   - Provides access to water and restroom facilities at west side of park

9. Add new trailhead at Parking Lot H to existing trail H-5A
   - Provides park and trail information to heavily used trail

10. Existing parking area - includes 11 paved parking spaces
    - Provides parking to 3 single-use ramadas used for shade and picnicking
    - Location for trailhead access to H-5A and H-4A Trails

11. Remove existing restroom and add new restroom at Parking lot H
    - Current restroom is inoperable
    - Provides access to water and restrooms for ramadas and trail users

12. Upgrade three existing ramadas at Parking Lot H
    - Current ramadas are consistently utilized and require improvements due to deterioration

13. Add new trailhead at Parking Lot H going south to existing H-4A Trail
    - Provides park and trail information to heavily used trail

14. Existing undesigned trail to become designated trail connects H Parking Lot to H-5 Trail
    - Trail is currently undesigned and is consistently used

15. Swing gate relocated from west side of Parking Lot J to east side
    - This will allow parking access from the 59th Avenue side of the park and relieve parking demand on Parking Lot K, but still prevents "cut-through" traffic between 59th and 67th Avenues
- Will allow for maximizing use of Parking Lot J which is sporadically utilized

16. New swing gate installed on east side of Parking Lot J  
   - Prevents traffic from driving up to Parking Lot J  
   - Allows for flexibility in utilizing the road east of Parking Lot J

17. Remove trails due to erosion issues  
   - Identify as part of the trail evaluation that undesignated trails have caused erosion and should not continue to be used as undesignated trails

18. Upgrade trailhead connection at existing west entrance to H-5 Trail  
   - Improve and update existing park and trail information at the entrance to the H-5 Trail

19. Revegetation of area with native vegetation around water reservoir area  
   - Provide vegetation screening and restoration of vegetation to the area around the water reservoir area

20. Remove two undesignated trails due to erosion  
   - Identify as part of the trail evaluation that undesignated trails have caused erosion and should not continue to be used as undesignated trails

21. Existing undesignated trail to become designated trail: connects H-1 Trail to Parking Lot B area  
   - Identified as part of the trail evaluation that the undesignated trail is consistently used and should be identified as a designated trail

22. Existing undesignated trail to become designated trail: connects H-1 and H-4A Trails  
   - Identified as part of the trail evaluation that the undesignated trail is consistently used and should be identified as a designated trail

23. Existing undesignated trail to become designated trail: connects H-1 and H-5A  
   - Identified as part of the trail evaluation that the undesignated trail is consistently used and should be identified as a designated trail

24. Add accessible trail that connects to ramadas and restrooms at Parking Lot J  
   - Provides ADA access for disabled individuals to shade, restrooms and water
Thunderbird Conservation Park

Master Plan
67th Avenue Equestrian Trail Area

Figure 7. Master Plan Map
67th Avenue Equestrian Trail Area
4.2 Funding and Implementation

The projected cost to complete the improvements identified in the master plan is approximately $5.5 million. Resources to fund the improvements include grants, operating and capital improvement funds. In addition, staff plans to also pursue alternative funding sources through community partnerships.

Funds currently available to begin to address the plan’s recommendations total to approximately $300,000. Those funds are proposed to be utilized for trail repairs and improvements, signage upgrades, trash can and picnic table repair and replacement and revegetation. In addition, a land bridge will be constructed over 59th Avenue that will connect the park’s east and west sides and improvements to the gate park entrance will be completed as part of the road improvement project. Funding is planned in future fiscal years that will continue the completion of the master plan recommendations.

Staff recommends phasing the improvements to the park based on the following priorities:
1.) Continue repair and maintenance of trails; 2.) removal of invasive plant species and revegetation of the park with native plants; 3.) repair and upgrade existing park elements, 4.) remove park elements from the wash located at 59th Avenue that will allow for restoration of the wildlife corridor and vegetation; and 5.) installation of new park elements.
4.3 Summary

Staff presented the Preliminary Master Plan Executive Summary to the Parks and Recreation Commission at its May 8, 2006 meeting. The Commission unanimously approved the proposed changes to the Preliminary Master Plan and directed staff to proceed with completion of the finalized master plan.

Based on the completed public process, park studies and analysis, the Parks and Recreation Commission accepted the revised master plan and directed staff to complete the plan. Staff presented the Master Plan recommendations to City Council for consideration at its June 6, 2006 Workshop meeting. City Council adopted the master plan at its June 27, 2006 meeting.
City of Glendale
Thunderbird Conservation Park Master Plan

APPENDIXES

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A.1 Introduction and Methodology
Five resource analysis studies of the park area were completed by Logan Simpson Design, Inc. Those studies included: Soil/Slope/Geological, Biological, Cultural, Visual, and Land Use resources as indicated below. Based on concerns regarding park drainage, JE Fuller/Hydrology & Geomorphology, Inc. also completed a watershed analysis for the park and is included in this section. Located southwest of the intersection of 51st Avenue and Pinnacle Peak Road and about 1 mile north of State Route (SR) 101 Loop, the park includes all of Section 17; the N ½ of the S ½, the S ½ of the N ½, and the NE ¼ of the NE ¼ of Section 18; and portions of the NE ¼ and SE ¼ of Section 20, in Township 4 North, Range 2 East. It encompasses the west-central portion of the Hedgpeth Hills within the City of Glendale, Maricopa County (Figure 1, Location Map).

This section is organized into the following subsections:

- Soil, Slope, and Geological Resources
- Biological Resources
- Cultural Resources
- Visual Resources
- Land Use Resources
- Utilities, Infrastructure, and Drainage Analysis
- Architectural/Existing Structures Analysis
- Site Analysis
- Watershed Analysis
- Sedimentation Basin Topographic Survey
- Park Amenities Analysis
- Thunderbird Conservation Park Trail Inventory
- School Park Usage Analysis
- On-Site Park User Questionnaire
- Additional Arizona Game and Fish Department Recommendations
- American Conservation Experience Trail Review
- Culvert Research Report
- Parking Lot Observations

Figure 1. Park Location Map
A.2 Soil, Slope, and Geological Resources

An evaluation of the soils, slopes, and landforms of TCP was undertaken to determine erosion risk areas and locations suitable for development. The soils evaluation involved archival research using available United States Department of Agriculture (USDA) soil survey reports to identify and qualitatively describe the erosion risk associated with the soils in TCP (Hartman et al. 1977). In addition to erosion risk assessment, the soil evaluation was used to identify distinct landform assemblages and describe their degree of stability and suitability for the location of future park facilities.

The study was designed to provide an overview of soil conditions and to identify erosion risks for broad areas. It is anticipated that additional, site-specific testing will be required for any construction within the park.

Methodology

The evaluation of soil erosion risk used here is a qualitative approach using the USDA soil survey reports and soil series descriptions to obtain and evaluate factors involved in erosion dynamics (USDA 2003). These main factors were used for the qualitative assessment of soil erosion risk:

- **Slope** – the percent slope is the most important factor affecting a soil’s susceptibility to erosion.
- **Soil/Geology** – the soil type and geology of an area determines the soil texture, permeability, and soil depth.
- **Runoff/Erodibility** – runoff refers to the speed at which water pools and flows over the soil surface. Erodibility refers to the resistance of the soil to erosion.

These three factors interact with each other in ways that affect the overall soil erosion risk. Additional factors that can influence the magnitude of this risk are the extent and type of vegetation cover, the slope aspect, and adjacent land uses. These also interact with each other and with the three main factors.

Each of the factors described above is assessed for each of the soils found within TCP and is summarized below.

Erosion

The soil erosion risk for TCP is depicted in *Table 1, Erosion Risk Summary* and *Figure 2, Soils*. Erosion risk is categorized as slight, slight-to-moderate, moderate, moderate-to-high, and high. In general, areas of higher risk are located on steep slopes with less permeable and/or shallow soils.

Soil/Landform Grouping

In addition to erosion risk assessment, the soils were used to identify distinct soil/landform assemblages and describe their degree of stability and suitability for the location of future park facilities. (Refer to *Table 1*). TCP consists of four general soil/landform groupings: hill slopes, stream channels/floodplains, Pleistocene terraces, and alluvial fans (*Figure 2*).

- **The hill slope** soil/landforms in TCP are erosional landforms with thin soil on top of bedrock. These areas are the most susceptible to erosion, and special consideration must be taken to prevent soil loss.
- **The stream channel/floodplain** soil/landforms in TCP are associated with stream channels and recently deposited sediment. These areas are generally stable but are subject to periodic flooding, bank erosion, and wind erosion.
- **The Pleistocene terrace** soils/landforms in TCP are stable areas no longer exposed to flooding. These areas have impermeable soil layers that are often associated with these landform and soil groupings.
- The alluvial fan soils/landforms in TCP are gently sloping landforms at the base of the hills and are often crossed by many small channels that sometimes carry flash floods.

**Soil Analysis**

There are large areas of TCP that fall under the hill slope soil/landform grouping (*Figure 2*). These areas are highly sensitive to erosion and are inherently fragile and should be excluded from consideration when selecting sites for park facilities; furthermore, the placement of trails should be considered carefully to prevent erosion and gullying.

The stream channel/floodplain soil/landform groupings make up only a small portion of the TCP and are located along 59th Avenue between the basalt hills to the west and the granitic hills to the east (*Figure 2*). The stream channel/floodplain grouping should be carefully evaluated when considering sites for any park facilities. These areas are subject to occasional flooding and lateral channel erosion. The on-site soils should provide adequate support for normal building foundations, although more detailed and site-specific evaluations should be conducted before any construction. Trails may be suitable on this landform grouping, but they may need regular maintenance because of the occasional flooding.

The Pleistocene terrace soil/landform grouping occupies a small area on the far eastern and western sides of TCP (*Figure 2*). It is a poor choice for the placement of any park building facilities because of impermeable soil layers often associated with this landform and soil grouping. However, the Pleistocene terrace soil/landform grouping is suitable for trails and picnic areas.

The alluvial fan soil/landform grouping surrounds the hill slope landform and soil grouping and is characterized by deep, well-drained, coarse-grained alluvial soils suitable for the location of most types of park facilities (*Figure 2*). The on-site soils should provide adequate support for normal building foundations, although more detailed and site-specific evaluations should be conducted before any construction.
<table>
<thead>
<tr>
<th>Soil abbreviation</th>
<th>Soil name</th>
<th>Percent Slope</th>
<th>Runoff</th>
<th>Erodibility</th>
<th>Depth to impermeable layer</th>
<th>Texture</th>
<th>Soil/Landform grouping</th>
<th>Erosion risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>AbA</td>
<td>Antho Sandy Loam</td>
<td>1 to 3</td>
<td>medium</td>
<td>moderate</td>
<td>deep (&gt; 150 cm)</td>
<td>sandy loam</td>
<td>alluvial fans</td>
<td>moderate</td>
</tr>
<tr>
<td>Ae</td>
<td>Antho-Brios Sandy Loam</td>
<td>0 to 1</td>
<td>slow</td>
<td>slight</td>
<td>deep (&gt; 150 cm)</td>
<td>sandy loam</td>
<td>streams</td>
<td>slight</td>
</tr>
<tr>
<td>AiA</td>
<td>Antho Carrizo complex</td>
<td>0 to 1</td>
<td>slow</td>
<td>slight</td>
<td>deep (&gt; 150 cm)</td>
<td>sandy loam</td>
<td>streams</td>
<td>slight</td>
</tr>
<tr>
<td>CO</td>
<td>Cherioni-Rock Outcrop complex</td>
<td>3 to 25</td>
<td>medium</td>
<td>moderate</td>
<td>shallow (0-49 cm)</td>
<td>loam</td>
<td>streams</td>
<td>high</td>
</tr>
<tr>
<td>Cp</td>
<td>Coolidge Sandy Loam</td>
<td>0 to 1</td>
<td>medium-to-slow</td>
<td>slight-to-moderate</td>
<td>deep (&gt; 150 cm)</td>
<td>sandy loam</td>
<td>alluvial fans</td>
<td>slight</td>
</tr>
<tr>
<td>EbD</td>
<td>Ebon Gravely Loam</td>
<td>0 to 8</td>
<td>medium</td>
<td>slight-to-moderate</td>
<td>moderately shallow (50-99 cm)</td>
<td>gravelly loam</td>
<td>alluvial fans</td>
<td>slight-to-moderate</td>
</tr>
<tr>
<td>Ge</td>
<td>Gilman Fine Sandy Loam</td>
<td>0</td>
<td>slow</td>
<td>slight-to-moderate</td>
<td>deep (&gt; 150 cm)</td>
<td>sandy loam</td>
<td>streams</td>
<td>slight</td>
</tr>
<tr>
<td>GgA</td>
<td>Gilman Loam</td>
<td>0 to 1</td>
<td>slow</td>
<td>slight-to-moderate</td>
<td>deep (&gt; 150 cm)</td>
<td>loam</td>
<td>streams</td>
<td>moderate</td>
</tr>
<tr>
<td>GxB</td>
<td>Gunsight-Rillito complex</td>
<td>1 to 3</td>
<td>slow-to-medium</td>
<td>slight-to-moderate</td>
<td>deep (&gt; 150 cm)</td>
<td>gravelly loam</td>
<td>alluvial fans</td>
<td>slight-to-moderate</td>
</tr>
<tr>
<td>LcA</td>
<td>Laveen Loam</td>
<td>0 to 1</td>
<td>slow</td>
<td>slight</td>
<td>deep (&gt; 150 cm)</td>
<td>loam</td>
<td>alluvial fans</td>
<td>slight-to-moderate</td>
</tr>
<tr>
<td>LcB</td>
<td>Laveen Loam</td>
<td>1 to 3</td>
<td>medium</td>
<td>moderate</td>
<td>deep (&gt; 150 cm)</td>
<td>loam</td>
<td>alluvial fans</td>
<td>moderate</td>
</tr>
<tr>
<td>Mp</td>
<td>Mohall Loam</td>
<td>0 to 1</td>
<td>medium</td>
<td>slight</td>
<td>deep (&gt; 150 cm)</td>
<td>loam</td>
<td>alluvial fans</td>
<td>moderate</td>
</tr>
<tr>
<td>PT</td>
<td>Pinal Gravely Loam</td>
<td>0 to 3</td>
<td>medium</td>
<td>slight-to-moderate</td>
<td>deep (&gt; 150 cm)</td>
<td>gravelly loam</td>
<td>alluvial fans</td>
<td>slight-to-moderate</td>
</tr>
<tr>
<td>PeA</td>
<td>Perryvill Gravely Loam</td>
<td>0 to 1</td>
<td>slow-to-medium</td>
<td>slight-to-moderate</td>
<td>deep (&gt; 150 cm)</td>
<td>gravelly loam</td>
<td>alluvial fans</td>
<td>slight-to-moderate</td>
</tr>
<tr>
<td>PsB</td>
<td>Pinal Loam</td>
<td>1 to 3</td>
<td>medium</td>
<td>slight-to-moderate</td>
<td>shallow (0-49 cm)</td>
<td>loam</td>
<td>pleistocene terrace</td>
<td>moderate</td>
</tr>
<tr>
<td>RS</td>
<td>Rock Outcrop Cherioni complex</td>
<td>3 to 80</td>
<td>high</td>
<td>moderate</td>
<td>shallow (0-49 cm)</td>
<td>bare rock/loam</td>
<td>hill slope</td>
<td>high</td>
</tr>
</tbody>
</table>


° Logan Simpson Design's qualitative interpretation
Figure 2. Soils
Slope Overview

There are five distinct areas with regard to the slopes that occur within the park (Figure 3, Slope). These slopes can be characterized as surface topographies that range from 0 to 3 percent, 8 to 12 percent, 12 to 20 percent, and greater than 20 percent slope. Slopes in the range of 0 to 3 percent can be easily developed with minimal impact to the environment while providing easy access for all users that is compliant with the Americans with Disability Act (ADA) requirements. Areas with slopes that range from 3 to 8 percent are suitable for limited development, but at higher construction costs and more impact to the environment than the 0 to 3 percent areas. Slopes greater than 8 percent would require substantial sitework activities and construction costs for facilities with a larger footprint such as buildings and parking areas. Park facilities in these areas should be limited to trail and scenic node development. The majority of landforms fall within the 8 percent to greater than 20 percent range. These areas are recommended for only limited trail development as indicated on the Master Plan.

Geology Overview

The geology of TCP is unique in that it is at a contact between Miocene-aged (23.8 to 5.3 million years ago) basalt flows, which are volcanic in origin, and Proterozoic-aged (2,500 to 680 million years ago) metamorphic rocks such as granite, schist, and quartzite (Leighty and Huckeleberry 1998). The Miocene basalt flows are located in the eastern portion of TCP, south of Pinnacle Peak Road and east of 59th Avenue. The western portion of TCP is composed of Proterozoic-aged granite, schist, and quartzite, similar to the central portions of the McDowell Mountains to the east. The contact between these two rock units is located near the pass through which 59th Avenue runs (Figure 4, Geology). An unnamed stream channel runs from north to south through this pass along the contact between the two main geological features.

The hills in TCP have large areas of exposed rock near their summits. As one moves downslope, overlying sediments become thicker and form alluvial fans. These alluvial fans are composed of a mixture of materials eroded from the steeper hill slopes above and form a transition from the steep exposed bedrock hills of TCP and the flat, valley floodplains that surround TCP. The upper portions of the alluvial fans are characterized by coarse material, while the bases of the alluvial fans tend to be made of finer material. The ages of these alluvial landforms vary across TCP, ranging from 750,000 years ago to present. The base of the alluvial fan just east of 59th Avenue is composed of Middle Pleistocene sediment (750,000 to 250,000 years ago to present), mainly derived from granite. At the western edge of this fan, along 59th Avenue, is a Holocene (10,000 years ago to present) stream channel and associated floodplain that flow south along 59th Avenue and emerge onto a broad flat plain south of TCP. On the east and west sides of TCP are Pleistocene (10,000 to 250,000 years old) floodplains or terraces (Leighty and Huckeleberry 1998). The mosaic of different-aged landforms within TCP contains a 750,000-year record of landscape change and evolution.
Figure 3. Slope

Key

- Thunderbird Conservation Park
- 0-3% Slope
- 3-8% Slope
- 8-12% Slope
- 12-20% Slope
- 20+% Slope

Slope Report
Soils, Slope, and Geological References


Hartman, G. W. Soil Survey of Maricopa County, Arizona, Central Part. United States Department of Agriculture Soil Conservation Service in cooperation with University of Arizona Agricultural Experiment Station.

A.3 Biological Resources

In project planning and development, the planning team must be aware of the potential ecological issues within the project area. Ultimately, this knowledge can help avoid delays, reduce unforeseen costs, and ensure compliance with regulations in the project planning and implementation phases. Potential ecological issues that can affect project planning and implementation include the presence of and suitable habitat for threatened, endangered, and/or sensitive species; the extent of areas of undisturbed natural habitat; the existence of water sources; and the degree of invasion by undesirable species. Documenting habitat types, vegetative communities, water sources, and areas of invasive species can indicate the potential for protected species to occupy the area; help identify areas native wildlife might use for food, cover, or movement; and highlight those areas that need to be conserved or remediated. Often, obtaining certain types of environmental permits (e.g., Section 404 of the Clean Water Act permits) are required for ground-disturbing projects in order to avoid or minimize impacts to natural resources.

This biological overview documents existing conditions at TCP, qualifies habitat values, and makes wildlife-management recommendations. In addition, lists of potentially occurring plants, mammals, birds, reptiles, and amphibians were collated from the existing literature using distribution maps and habitat requirements of various Arizona flora and fauna. These lists are included in Tables 3 through 6 of this subsection. Biologists conducted a ground reconnaissance survey at TCP on September 17, 2003, to photo-document existing conditions and record wildlife and plant species inhabiting the area.

General Description of Habitat

TCP is located in a transition zone of two vegetative communities as defined by Turner and Brown (1994): the Lower Colorado River Valley (LCRV) (creosote bush-bursage series) and Arizona Upland (AU) (palo verde-cacti-mixed scrub series) subdivisions of the Sonoran Desertsrub biotic community (Figure 5). The LCRV subdivision includes the areas of low relief where the vegetative structure is open and simple. The dominant plant species is creosote bush interspersed with bursage and desert broom (Photo 1). The AU subdivision predominates in the Hedgpeth Hills and is marked by higher elevation and steeper terrain. Numbers of mesquite, palo verde, and saguaro are higher and numerous species of cholla, prickly pear, barrel cactus, and other cacti are present (Photo 2). One large xeroriparian, or dry, wash bisects TCP west of 59th Avenue (Figure 5). East of 59th Avenue the wash channel has been modified to form a small pond. The pond contains water year-round and is lined by such riparian species as willow and salt cedar.

Most of the park is dominated by native vegetation, with the notable exception of the foothills area east of 59th Avenue, where a revegetation project is in progress (Figure 5).

![Photo 1. Example of LCRV Subdivision Vegetation.](image)

![Photo 2. Example of AU Subdivision Vegetation.](image)
Figure 5. Vegetation Communities and Baseline Ecological Features
The revegetation area is dominated by London rocket, a member of the mustard family (Photo 3). Although the mustard provides dense cover and an ample food supply of seeds for ground-foraging birds, this plant is an exotic weed that frequently excludes native vegetation and is extremely difficult to remove.

**General Description of Wildlife**

The number of native wildlife species present in rural-suburban transition areas is generally inversely related to the extent of removal of native vegetation and the intensity of human disturbance. Rural residential areas with significant amounts of native vegetation will support many of the species normally present in the undisturbed vegetation communities. High-density residential areas and commercial and industrial properties will support very few species.

Most of the wildlife observed during the reconnaissance survey were birds, which is expected because most birds are active and visible during daylight hours and are the most likely group of vertebrates to be encountered during a brief field survey. Species such as curve-billed thrasher, cactus wren, Gambel's quail, house finch, morning dove, and Inca dove were readily observed in upland areas of TCP. The wildlife-viewing pond teemed with fish, and bird life observed there during the survey was abundant. Cormorants, belted kingfishers, various egrets and herons, and a single osprey were tallied (Figure 5).

Mammals likely to be seen in the study area include desert cottontails, ground squirrels, jackrabbits, coyotes, and javelina. Seven javelina were observed during the field survey at the base of the ridge that overlooks the golf course (Figure 5). Several species of bats may forage for nectar and/or insects throughout the park. Also, several unidentified lizards were observed sunning themselves or scurrying across rocks during the survey. Other wildlife species that potentially occur in the vicinity of TCP either all or part of the year are listed in Tables 3 through 6.

A list of threatened, endangered, proposed, and candidate species for Maricopa County was obtained from the US Fish and Wildlife Service (USFWS) (Table 2). The field reconnaissance revealed the absence of suitable habitat for any federally listed threatened or endangered species. Also, the Arizona Game and Fish Department's (AGFD's) Heritage Data Management System, which includes sensitive species that are known to occur within 5 miles of the park boundary, was queried. AGFD lists species whose occurrence in Arizona is or may be in jeopardy. AGFD provided a letter indicating that no sensitive species were known to occur within 5 miles of TCP (see page 60). However, a desert tortoise was observed during a cultural field survey on August 20, 2003, at the trailhead on 51st Ave. near the entrance to Arrowhead Lake Estates (Figure 5).
Table 2. Federally Listed Threatened, Endangered, Proposed, and Candidate Species for Maricopa County

<table>
<thead>
<tr>
<th>Species</th>
<th>Legal status</th>
<th>Habitat and elevational range</th>
<th>Suitable habitat present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona agave (Agave arizonica)</td>
<td>E</td>
<td>Transition zone between oak-juniper woodland and mountain mahogany-oak scrub. 3,000–6,000 ft</td>
<td>No</td>
</tr>
<tr>
<td>Arizona cliffrose (Purshia subintegra)</td>
<td>E</td>
<td>Characteristic white soils of tertiary limestone lakebed deposits. &lt;4,000 ft</td>
<td>No</td>
</tr>
<tr>
<td>Desert pupfish (Cyprinodon macularius)</td>
<td>E</td>
<td>Shallow springs, small streams, and marshes. Tolerates saline and warm water. &lt;5,000 ft</td>
<td>No</td>
</tr>
<tr>
<td>Gila chub (Gila intermedia)</td>
<td>P</td>
<td>Pools, springs, cienegas, and streams. &lt;3,500 ft</td>
<td>No</td>
</tr>
<tr>
<td>Gila topminnow (Poeciliopsis occidentalis occidentalis)</td>
<td>E</td>
<td>Small streams, springs, cienegas, and vegetated shallows. &lt;4,500 ft</td>
<td>No</td>
</tr>
<tr>
<td>Razorback sucker (Xyrauchen texanus)</td>
<td>E</td>
<td>Riverine and lacustrine areas, generally not in fast-moving water, may use backwaters. &lt;8,000 ft</td>
<td>No</td>
</tr>
<tr>
<td>Bald eagle (Haliaeetus leucocephalus)</td>
<td>T</td>
<td>Large trees or cliffs near water. Elevation varies.</td>
<td>No</td>
</tr>
<tr>
<td>California brown pelican (Pelecanus occidentalis californicus)</td>
<td>E</td>
<td>Transient to lower Colorado River and large, open bodies of water statewide at various elevations.</td>
<td>No</td>
</tr>
<tr>
<td>Cactus ferruginous pygmy-owl (Glaucidium brasilianum cactorum)</td>
<td>E</td>
<td>Mature cottonwood/willow, mesquite bosques, and Sonoran desertscrub. &lt;4,000 ft</td>
<td>No</td>
</tr>
<tr>
<td>Mexican spotted owl (Strix occidentalis lucida)</td>
<td>T</td>
<td>Mixed-conifer, spruce-fir, or pine-oak forests. 4,100–9,000 ft</td>
<td>No</td>
</tr>
<tr>
<td>Southwestern willow flycatcher (Empidonax traillii extimus)</td>
<td>E</td>
<td>Dense riparian vegetation near a permanent or semipermanent source of water or saturated soil. &lt;8,500 ft</td>
<td>No</td>
</tr>
<tr>
<td>Yellow-billed cuckoo (Coccyzus americanus)</td>
<td>C</td>
<td>Large blocks of riparian woodlands. &lt;6,500 ft</td>
<td>No</td>
</tr>
<tr>
<td>Yuma clapper rail (Rallus longirostris yumanensis)</td>
<td>E</td>
<td>Fresh water and brackish marshes, associated with dense emergent riparian vegetation. &lt;4,500 ft</td>
<td>No</td>
</tr>
<tr>
<td>Lesser long-nosed bat (Leptonycteris curasoae yerbabuenae)</td>
<td>E</td>
<td>Desertscrub habitat with agave and columnar cacti present as food plants. &lt;6,000 ft</td>
<td>No</td>
</tr>
<tr>
<td>Sonoran pronghorn (Antilocapra americana sonoriensis)</td>
<td>E</td>
<td>Broad, intermountain alluvial valleys with creosote-bursage and paloverde-mixed cacti associations. &lt;4,000 ft</td>
<td>No</td>
</tr>
</tbody>
</table>

* Status Definitions: E=Endangered, T=Threatened, P=Proposed Endangered, C=Candidate (USFWS has sufficient information on biological vulnerability and threats to support proposals to list as endangered or threatened under the Endangered Species Act; however, proposed rules have not yet been issued because such actions are precluded at present by other listing activities.)
Habitat Quality

Using observations gathered from field reconnaissance and aerial photography showing topography and vegetation, LSD was able to qualify habitat areas at TCP into "high," "medium," and "low" values (Figure 6, Habitat Values and Recommendations). A determination of "high" habitat quality is given to undisturbed areas of vegetation, especially dense xerophytes along washes, or ponds and wetlands with good water quality and native vegetation. Large washes that allow the movement of wildlife across long distances in the landscape receive a "high" rating. "Medium" areas can be either disturbed or undisturbed and provide moderate cover, food, and water. Such areas' values are enhanced by the presence of adjacent high-value habitat. Smaller washes and degraded larger washes merit a "medium" rating because they are still an attractant to wildlife looking to avoid human contact as they move across the landscape. Upland areas with plentiful cacti and small trees can be qualified as "medium." Disturbed areas that have scant cover, food, and water available are rated "low." Areas that have been previously cleared or contain built structures, natural areas with moderate-to-severe degradation (especially those next to cleared areas or with weed infestations), or areas of natural vegetation greatly isolated from other areas of natural vegetation are all rated "low" in habitat quality.

Most of TCP consists of undisturbed upland areas that rate a "medium" value. The large wash west of 59th Avenue rates only a "medium" because it does not have thick xerophytes and is truncated by developed residential areas outside of TCP. Flatter areas at the base of the hills rate a "low" value because they are dominated by creosote bush or are infested with London rocket. The wildlife viewing pond and its surrounding banks rate a "high" value. The pond not only provides water and cover for surrounding desert wildlife, but a number of species, especially certain birds, are present that occur only near lakes and streams in deserts and not in the expansive upland areas. Additionally, the pond is large enough and supports sufficient fish population that migratory species are most likely attracted to the pond every year.

Management Recommendations

Preserving and possibly improving habitat quality should be one of the first ecological considerations of a conservation park. Most of TCP ("medium"-quality upland areas) can maintain its value simply by remaining undeveloped. Keeping park users on marked trails and preventing random upland access (by mountain bikers, for instance) would preserve upland vegetation. Continued efforts to eradicate invasive species in the "low"-value area in the northern part of TCP could rehabilitate that area and increase natural habitat quality. Remediation of the large wash west of 59th Avenue could also be undertaken to increase its "medium" value. While achieving better connectivity with washes outside of TCP is difficult because the City of Glendale does not necessarily manage those lands, the planting and monitored establishment of trees such as mesquite in the wash within TCP would increase xerophyte density and would be beneficial to wildlife by providing additional cover and food. "High"-value areas, namely the wildlife-viewing pond, should be preserved because open water sources in the desert are rare, and it has already been documented that this site supports plants and animals found nowhere else at TCP (Photo 4).

Key

- Thunderbird Conservation Park
- High Habitat Value
- Medium Habitat Value
- Low Habitat Value
- Proposed Wildlife Guzzler Location

Figure 6. Habitat Values and Recommendations
However, while preserving or improving habitat quality in TCP, a fundamental question needs to be answered before formulating a wildlife management plan for the park: "Does TCP want more or less wildlife?" Wildlife is a valuable resource in a conservation park, but careful consideration, planning, and public input should be given to any management decisions. If the decision is made to increase wildlife in TCP, coyotes and javelina are likely to benefit from habitat improvements. Both species are known to cause conflicts with people in the surrounding residential developments. In the Arrowhead Lakes development, AGFD has recorded complaints from homeowners about coyotes eating pets and javelina eating landscape plants. Some homeowners believe that TCP is the source of these depredating animals. If the decision is made to increase wildlife, the City of Glendale should be prepared to deal with wildlife-related complaints. To inform local residents and to provide tips on the prevention of wildlife-related problems, AGFD has pamphlets and videos on its "Living with Wildlife" campaign. The Arizona Game and Fish Department's urban wildlife specialist is available to provide additional information on problem resolution.

The wildlife-viewing pond currently provides somewhat-limited opportunities for desert birds and animals to drink because the steep banks are lined with concrete, the surrounding vegetation is dense, and the water is deep in the pond. An alteration to the existing bank design that would provide shallow, easily accessible water at the pond would assist in wildlife population growth. Removal and control of nonnative salt cedar would allow the growth of additional native riparian vegetation. In addition, consideration should be given to removing some of the large trees along the north bank of the pond. The trees have grown so big that little of the lake can be seen from the wildlife viewing stands. Removal of some of the trees would open the area for increased bird-watching without affecting the numbers or species of birds using the lake. Trees on the south side of the pond can be left intact to ensure the privacy of adjacent homeowners and to provide roosting cover for wading birds. Trees removed from the shoreline could be placed in the water to increase perches for fish-eating birds and provide habitat for additional species of fish. Consideration should be given to increased access for elderly or disabled people interested in using the wildlife viewing stands. Improved water quality in the pond itself would allow the development of an urban fishery. Prior to any modifications of the pond, coordination must occur with the City of Glendale Utilities Department and Arrowhead Amenities.

Additional improvements that would provide drinking water for wildlife would be to add small water basins with a reliable water source at the existing wash area west of 59th Avenue that would enhance the existing wildlife corridor. Also, developing two wildlife water developments (called "guzzlers") in the canyons on the east side of the park would help to increase wildlife numbers in the most remote area of the park (see Figure 6, and Photos 5 and 6).

Wildlife guzzlers, or concrete-lined water catchment basins, could be constructed and would provide a reliable source of water throughout the year. The area around the guzzlers could be planted with additional mesquite trees, which would provide dense cover and the beans would provide an excellent food source. These developments would qualify for an AGFD Heritage Grant because they meet the two basic requirements: benefiting wildlife and being available to the public. AGFD provides information and training on how to apply for a Heritage Grant, and the Arizona chapter of the Wildlife Federation often provides volunteer labor to construct water developments. Additionally, installation of bat nest boxes would aid in insect control around water developments.

Volunteer groups from universities or local high schools may be interested in monitoring wildlife populations in the park through mark and recapture techniques. Animals such as rabbits, kangaroo rats, and rattlesnakes could be captured and marked and their activities monitored by visual sightings.

If the decision is made to reduce wildlife at TCP, different habitat modifications should be considered. The London rocket could possibly be removed to reduce seed availability and no new water developments should be constructed. Mesquite or palo verde thickets should be discouraged, and no new food or cover plots planted.
Photo 5. Proposed Location of Wildlife Guzzler (See Figure 6)

Photo 6. Proposed Location of Wildlife Guzzler (See Figure 6)
Biological References


Table 3. Plants Potentially Occurring at TCP and the Vegetation Communities in Which They Occur.

<table>
<thead>
<tr>
<th>Common name</th>
<th>Scientific name</th>
<th>Lower Colorado River Subdivision</th>
<th>Arizona Upland Subdivision</th>
<th>Xeroriparian/Ponds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three-awn grass</td>
<td>Aristida spp.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Buffelgrass</td>
<td>Cenchrus ciliarus</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Bermuda grass</td>
<td>Cynodon dactylon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluffgrass</td>
<td>Erioneuron pulchellum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Johnson grass</td>
<td>Sorghum halepense</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Mistletoe</td>
<td>Phoradendron spp.</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Four-wing saltbush</td>
<td>Atriplex canescens</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Allscale</td>
<td>Atriplex polycarpa</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
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<td>Arrow weed</td>
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Sources: Kearney and Peebles 1960; Lehr 1978. ✓ = potentially occurring
Table 4. Mammals Potentially Occurring at TCP and the Vegetation Communities in Which They Occur

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific name</th>
<th>Lower Colorado River Subdivision</th>
<th>Arizona Upland Subdivision</th>
<th>Xeroriparian/Ponds</th>
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<tbody>
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<td>Cave myotis</td>
<td>Myotis velifer</td>
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<td>Myotis californicus</td>
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<td>Southern grasshopper mouse</td>
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<td>Arizona cotton rat</td>
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<td>Neotoma lepida</td>
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✓ = potentially occurring
Table 4. Mammals Potentially Occurring at TCP and the Vegetation Communities in Which They Occur (continued)

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<tr>
<th>Common Name</th>
<th>Scientific name</th>
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<th>Arizona Upland Subdivision</th>
<th>Xeroriparian/Ponds</th>
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<tbody>
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✓ = potentially occurring
Table 5. Birds Potentially Occurring at TCP and the Vegetation Communities in Which They Occur

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<td>Eared grebe</td>
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✓ = potentially occurring
Table 5. Birds Potentially Occurring at TCP and the Vegetation Communities in Which They Occur (continued)

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<tr>
<th>Common Name</th>
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<th>Arizona Upland Subdivision</th>
<th>Xeroriparian/Ponds</th>
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<td>Baird's sandpiper</td>
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✓ – potentially occurring
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Sources: Peterson 1990; Witzeman et al. 1997; American Ornithologists' Union 1998; National Geographic Society 1999. ✓ = potentially occurring
Table 5. Birds Potentially Occurring at TCP and the Vegetation Communities in Which They Occur (continued)

<table>
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<tr>
<th>Common Name</th>
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<th>Arizona Upland Subdivision</th>
<th>Xeroriparian/Ponds</th>
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✓ = potentially occurring
### Table 6. Reptiles and Amphibians Potentially Occurring at TCP and the Vegetation Communities in Which They Occur

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<tr>
<td>Gopher snake</td>
<td>Pituophis melanoleucus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common kingsnake</td>
<td>Lampropeltis getulus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-nosed snake</td>
<td>Rhinocelurus lecontei</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Checkered garter snake</td>
<td>Thamnophis marcianus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western ground snake</td>
<td>Sonora seminannulata</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western shovel-nosed snake</td>
<td>Chionactis occipitalis</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

✓ = potentially occurring
Table 6.  Reptiles and Amphibians Potentially Occurring at TCP and the Vegetation Communities in Which They Occur (continued)

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Lower Colorado River Subdivision</th>
<th>Arizona Upland Subdivision</th>
<th>Xeroriparian/ Ponds</th>
</tr>
</thead>
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<tr>
<td>Banded sand snake</td>
<td>Chillo-meniscus cinclus</td>
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<tr>
<td>Arizona coral snake</td>
<td>Micruroides euryxanthus</td>
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<td>✓</td>
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<tr>
<td>Western diamond-back snake</td>
<td>Crotalus atrox</td>
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<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Sidewinder</td>
<td>C. cerastes</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Tiger rattlesnake</td>
<td>C. tigris</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Mojave rattlesnake</td>
<td>C. scutulatus</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

✓ = potentially occurring
August 28, 2003

Mr. Steve Fairaizl
Logan Simpson Design Inc.
51 W. Third St.
Suite 450
Tempe, AZ 85281

Re: Special Status Species Information for Township 4 North, Range 2 East, Sections 17 and 18; Proposed Master Plan for Thunderbird Regional Park at 59th Avenue and Loop 101 in Glendale.

Dear Mr. Fairaizl:

The Arizona Game and Fish Department (Department) has reviewed your request, dated August 21, 2003, regarding special status species information associated with the above-referenced project area. The Department’s Heritage Data Management System (HDMS) has been accessed and current records do not indicate the presence of any special status species as occurring in the project vicinity (5-mile buffer). In addition, this project does not occur in the vicinity of any proposed or designated Critical Habitats.

The Department’s HDMS data are not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity.

Making available this information does not substitute for the Department’s review of project proposals, and should not decrease our opportunities to review and evaluate new project proposals and sites. The Department is also concerned about other resource values, such as other wildlife, including game species, and wildlife-related recreation. The Department would appreciate the opportunity to provide an evaluation of impacts to wildlife or wildlife habitats associated with project activities occurring in the subject area, when specific details become available.

AN EQUAL OPPORTUNITY REASONABLE ACCOMMODATIONS AGENCY
Mr. Steve Fairaizl  
August 28, 2003  
2  

If you have any questions regarding this letter, please contact me at (602) 789-3618. General status information and county distribution lists for special status species are also available on our new web site at http://www.azgfd.com/hdms, as well as some abstracts for special status species.

Sincerely,

Sabra S. Schwartz  
Heritage Data Management System, Coordinator  

SSS: ss  
cc: Bob Broscheid, Project Evaluation Program Supervisor  
Russ Haughey, Habitat Program Manager, Region VI  

AGFD# 08-20-03(05)
A.4 Cultural Resources

The cultural resources overview of Thunderbird Conservation Park (TCP) was undertaken to identify and preliminarily evaluate all historic and prehistoric cultural resources within TCP and consisted of two initial phases: 1) background research to identify previously recorded cultural resources surveys and archaeological sites within TCP, and 2) a field reconnaissance to identify potentially significant cultural resources areas. The goals of the TCP Master Plan project necessitated the preparation of this cultural resources inventory of the project area to assist with management decisions, such as whether to avoid, preserve, or mitigate known cultural resources located within TCP.

Legislation

Several federal, state, and local laws have been enacted to preserve cultural resources in Arizona and throughout the United States. The National Historic Preservation Act (NHPA) of 1966 (16 United States Code [U.S.C.] 470 et seq.), as amended, requires that projects that occur on federal lands, are funded by federal monies, or that require a federally issued permit be evaluated for their impacts to historic properties. Other important federal laws include the National Environmental Policy Act of 1969 (42 U.S.C. 4321), the Archaeological Resources Protection Act of 1979 (16 U.S.C. 470aa-mm), the Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. 3001–3013), and Section 4(f) of the Department of Transportation Act of 1986 (23 U.S.C. 138). Section 106 of the NHPA defines the consultation process that agencies must follow to evaluate impacts that undertakings may have on historic properties and identify ways to mitigate or avoid adverse effects. The Arizona State Historic Preservation Act of 1982 similarly directs state agencies to consider impacts that projects on state land or that are state-funded may have on historic properties owned or controlled by the agency. Arizona Revised Statutes (A.R.S.) section 41-841 through 41-847 and A.R.S. 41 section 861 through 881 have been enacted to protect cultural resources and Native American graves during undertakings within the state that do not fall under federal jurisdiction.

Environmental Setting and Cultural Overview

TCP encompasses the west-central portion of Hedgepeth Hills, a major topographic feature located within the city of Glendale, Maricopa County; it includes all of Section 17; the SW¼ of the SW ¼ of Section 7; the S¼ of the SE¼ of Section 8; the N½ of the S½ the S¼ of the N½; and the NE¼ of the NE¼ of Section 18; and portions of the NE¼ and SE¼ of Section 20, in Township 4 North, Range 2 East (GSR&B&M) (Figure 1). Elevation within TCP ranges between 1,300 and 1,331 feet above mean sea level (amsl) (Figure 7).

TCP lies in an area referred to archaeologically as the Northern Periphery of the Phoenix Basin. The Phoenix Basin proper represents the core area of the prehistoric Hohokam occupation in the Salt River Valley. Traditionally, archaeologists have defined the Northern Periphery as a transitional region, both geographically and culturally. Geographically, it extends 30 to 60 miles north of Phoenix and represents the northern edge of the Salt-Gila Basin. It is characterized by basin and range topography at its southern end and by high plateau and mountains at its northern limit. It is also a biological transition zone between the Lower and Upper Sonoran life zones encompassing the Agua Fria River and New River (and Cave Creek) drainages (Gumerman and Spoerl 1980). The New River flowed seasonally and its capacity was not as large as the Agua Fria River, but it helped support and maintain a moderate-sized population for as much as a thousand years or more, providing numerous microenvironments that provided a variety of resources for the prehistoric inhabitants. Culturally, the physical manifestations identified in the region tend to favor the Hohokam tradition to the south, but as the gateway to the Verde Valley (the Sinagua) and Flagstaff region (the Anasazi), the Northern Periphery enjoys cultural diversity in the form of architectural styles and the distribution of trade goods.

Twenty years ago, when archaeological research in the region was in its infancy (see Doyel and Plog 1980), the material culture and social organization of the Hohokam was considered to be less complex when compared to the Phoenix Basin or core area (Wilcox and Shenk 1977; also see Whittlesey 1997 for a review). Subsequent research in the mid- to late-1980s along the New River and Agua Fria River...
drainages tended to support these traditional ideas, although with more substantive data from excavation (Doyel and Elson 1985; Green 1989). Recent research in the area, however, depicts a lifeway that represents specialized adaptations to various microenvironments and the development and organization of several large community groups or villages beginning in the Sedentary period, with shifts in settlement location, not abandonment, during the Classic period. The change in perspective is likely related to the increase in archaeological research (survey and data recovery projects) that has resulted from urban sprawl.

- **Paleoindian Period**

Human presence in the Southwest began as long as 11,000 years ago. The initial period of occupation, during the Paleoindian period dating from approximately 9500 B.C. to 5000 B.C., appears to have been intermittent, given the limited amount of recovered evidence. The evidence consists primarily of isolated surface finds of Clovis points, as well as buried megafaunal kill sites in alluvial contexts that have yielded associated lithic assemblages (Haynes 1980). Based on these scant data, the period appears to be characterized by dispersed mobile groups that primarily hunted now-extinct megafauna and possibly supplemented their diet with collected wild plant materials (Waters 1986). Although only a few archeofactual surface finds have been reported in the general region (Agenbroad 1967; Huckell 1982), it is likely that most Paleoindian-period remains are currently buried by substantial Holocene alluvial deposits. Evidence in the Northern Periphery consists of an isolated projectile point found near Deadman Wash (Crowover 1994) and another from near the town of New River (Huckell 1982); other sites and isolated artifact discoveries have been elsewhere identified in southern Arizona (Haury 1950; Huckell 1982, 1984; Mabry 1999).

- **Archaic Period**

Following climatic amelioration and the extinction of the previously exploited megafauna, a new cultural pattern emerged, the Southwestern Archaic, manifested by small, mobile, residential groups that hunted medium-sized to small game and foraged for a diversity of floral resources. The Archaic period is divided into Early, Middle, and Late, during which time there was a trend toward an increased reliance on migratory patterns based on seasonally available foodstuffs, as evidenced by the increased prevalence of grinding tools in the artifact assemblage. Early Archaic period-sites (8500–5000 B.C.) have been identified in the Phoenix Basin, and the Middle Archaic (5000–1500 B.C.) is not well understood because of environmental processes that helped to destroy or bury many such sites (see Phillips et al. 2001:5). Middle Archaic sites are characterized by occupational surfaces, thermal or roasting pits; and an abundance of fire cracked rock (FCR); structures, which are scarce, tend to be shallow and subcircular and contain possible hearths (see Hack Barth 1998). By the Late Archaic period (1500 B.C. to A.D. 1), some groups occupied well-watered upland locations or lived along primary or secondary stream courses where crops could be planted. In these locations they adopted maize horticulture, maintained substantial storage facilities, and established a semisedentary subsistence-settlement pattern (Huckell 1995; Mabry 1998). Around 500 B.C. large, seasonally occupied villages, some with communal structures, were established in some areas of southern Arizona (Mabry 1998).

Archaic-period sites and isolated artifacts have been identified with increasing frequency in the northern periphery of the Phoenix Basin, and several sites have been excavated, including Brown’s Ranch and the Herberger site/Pinnacle Peak Village, both of which also contain later occupations (see Hack Barth 1998 for a review). Other excavated sites include AZ T:4:122 (Arizona State Museum [ASM]), a multicomponent site located in the New River drainage that contained a large quantity of flaked-stone artifacts and few ceramic sherdos. Although it is likely that the site functioned as a hunting and gathering campsite, radiocarbon dates were relatively late, ranging from A.D. 395 to A.D. 635 (Potter and Neal 1999). Radiocarbon dates from two roasting features suggested a possible Archaic use at AZ T:4:40 (ASM), a large village excavated in the mid- to late-1980s (Green 1989).

Rock shelters are a common feature of Archaic period sites, and the assemblages typically include identifiable Archaic-style projectile points and the prevalence of fine-grained lithic
material. Late Archaic sites are further distinguished from early Formative sites on the basis of a low artifact density, formal tools with retouch, strategically placed sites, and evidence for resource processing in thermal features (Hackbarth 1998:11). As noted by Hackbarth (1998:17) and Roth (1992:301), Archaic sites are more common at high elevations and less frequently found in lower bajada settings. However, those habitation sites that do occur at lower elevations indicate a successful subsistence strategy that was markedly different from the earlier Archaic occupations. Until relatively recently, the introduction and early development of plain-ware ceramics was exclusively associated with the subsequent Early Formative period; there is now evidence of crude, thick plain wares at a few of the Late Archaic habitation sites.

- **Formative Period**

The Formative Period in south-central Arizona begins with the first evidence of the Hohokam cultural tradition, which is defined by the distribution of decorated red-on-buff ceramics, irrigation agricultural practices, and cremation burials. Archaeologists tend to describe the Hohokam as a "regional system," rather than as a specific population group (Wilcox 1979), who inhabited the area for more than 1,400 years. Over this period of time, there is evidence of increased sedentism and social complexity (Haury 1976; Wilcox 1979).

Hohokam occupation traditionally is divided into four temporal periods, each with one or more phases distinguished by certain hallmarks of material culture or developmental peaks. Variations to the chronology exist (e.g., Doyel 1991; Haury 1976), but there is strong consensus for the ordering of the phase sequence. In the Northern Periphery, there is little evidence of Pioneer- and early Colonial-period occupation. AZ T:4:1 (Arizona State University [ASU])—also known as the Stricklin site, an Archaic-period component (Kenny 1988)—is likely one of the earliest identified Hohokam sites in the region, with evidence of limited use during the Pioneer period (Macnider and Green 1990). However, continuously occupied permanent habitation sites such as Palo Verde Ruin, which was first occupied during the Santa Cruz phase of the Colonial Period (Northland Research, Inc., in press), tend to date later.

Significant population growth during the subsequent Sedentary period led to increases in village size, canal systems, and more widespread trading in the Hohokam core area. It also resulted in significant population movement from the core area to the Northern Periphery, as indicated by the increased number of permanent habitation sites during the Sedentary period and the development of large villages and community centers, such as Palo Verde Ruin. Agricultural sites associated with canal irrigation, terraced gardens, and hillside terraces flourished in portions of the Agua Fria and Verde Rivers (Dittert 1976; Green 1989; Weaver 1986; Whittlesey 1997).

In the Phoenix Basin, the Classic period (ca. A.D. 1100–1450) is marked by the construction of large platform mounds, aboveground dwellings, and compound walls, which reflect a significant change in Hohokam social, political, and economic organization compared to the preceding period (Gregory 1987). In the Northern Periphery, changes in settlement are evident during the Classic period but not at the same scale as in the core area. Some large sites, such as the Palo Verde Ruin, were abandoned. A shift to multistoried structures in the core area and masonry architecture in the periphery, along with the wide distribution of Salado polychrome pottery and the increased practice of inhumation-style burials, are often cited as evidence for the intrusion of non-Hohokam people into the region during this period.
Protohistoric and Historic Occupation

The period between the prehistoric occupation and historic use of the area is referred to as the Protohistoric period by archaeologists. The beginning of this period tends to be viewed as a continuation of the terminal Classic period or Polvoron phase. Population groups were more dispersed than previously and settlements were smaller. Historic Native American groups, including the Pima, Maricopa, and Yavapai, probably exploited the lower reaches of the Agua Fria (and probably the New River) for its numerous resources, including saguaro fruit, mesquite beans, and various tubers. Ezel’s (1983) map of Upper Piman territory during the late seventeenth century shows Piman groups only slightly north of the Gila River. During the eighteenth century, the Pima expanded further north along the Agua Fria and New Rivers (although still several miles south of the modern town of New River) (Harwell and Kelly 1983: Figure 2). Hunting would likely have been limited to small birds and rabbits and the occasional deer. However, permanent settlements were rare because neither of the two rivers was a reliable source of water. During the nineteenth century, the Yavapai inhabited the upper reaches of the Agua Fria and New River drainages, and populations spread wide to the west, east to the Tonto Basin, and north to the Flagstaff area (Khera and Mariella 1983: Figure 1).

The Homestead Act of 1862 and the discovery of gold near Prescott in 1863 prompted the first settlements in the study area by 1865. This severely disrupted the traditional hunting and gathering lifestyle of the Native Americans. Forts and military camps were constructed to protect the settlers from the Yavapai and Apache, who raided the Anglo crops and livestock until hostilities ended in the mid-1870s. The Black Canyon Wagon Road between Prescott and Camp McDowell was established by the U.S. Army in 1870, and a stage route developed along the same path. Another stage route was established between Phoenix and Wickenburg along the Agua Fria River by the late 1870s, and the Prescott Wagon Road was constructed in 1894. The economy of the area during the late 1880s was based primarily on ranching, but also on mining (Macnider and Green 1990).

Cultural Resources Inventory of TCP

Cultural resources inventory data include records of historic properties. Historic properties include those prehistoric and historic (older than 50 years) cultural resources sites, buildings, structures, or objects that are eligible for inclusion in the National Register of Historic Places (NRHP). To be listed in the NRHP, a property must be demonstrably significant under at least one of four criteria and must possess a combination of seven aspects of integrity. The criteria of consideration for the NRHP are association with an important historic event (Criterion [A]) or person (Criterion [B]), embodiment of an important design or method of construction (Criterion [C]), or the potential to yield important information about history or prehistory (Criterion [D]). The aspects of integrity are location, design, setting, materials, workmanship, feeling, and association.

The cultural resources study area encompasses 1,182 acres within TCP; the surrounding one-mile area is included for purposes of conducting background research. Background research, consisting of a record search and site files check, is undertaken to determine whether previous surveys and previously recorded cultural resources are located within the study area. Research was performed through AZSITE, the state’s electronic cultural resources inventory database, and at ASM, the Bureau of Land Management (BLM) Phoenix Field Office, and the Arizona State Historic Preservation Office (SHPO). The National Park Service’s National Register Information System was also consulted to determine whether any Register-listed properties exist within the study area. Additional literature was provided by the City of Glendale.

In addition to background research, archaeologists conducted a field reconnaissance of TCP on August 20, 2003, to identify areas of potentially significant resources. Potentially significant resources that might be expected to occur within the study area include, but are not limited to, petroglyphs/rock art sites, flaked- and ground-stone tool procurement and production areas, and historic structures. Field reconnaissance consisted of a vehicular survey along the main (paved) routes to obtain an idea of the
range of variation in topography and geology across the study area, both of which have implications for the locations of cultural resources. Several areas were then more closely inspected using nonsystematic, pedestrian survey methods.

Summary of Inventory Results

Historical Records – The earliest available General Land Office plat map on file at BLM in Phoenix shows that the U.S. government first surveyed the area in 1893 (file 00165, dated 4-13-1895). No historical features were recorded. The Desert Claims Act of 1877, and the Rio Verde Canal Company’s 1891 proposal to irrigate 200,000 acres of land across Paradise and Deer Valleys (the Paradise-Verde Irrigation Project), first opened the area to homesteading. However, the earliest homestead claim within the vicinity of the park was not filed until 1917, and the first claims within what became the 1963 park boundaries were filed in 1925 (Arizona Historical Foundation 1963). Most of the early claims in the area were withdrawn or cancelled. A patent agreement between the City of Glendale and BLM was signed in 1957, and in 1963, the City signed a lease with Maricopa County; the latter agreement gave the city ten dollars annually while the County agreed to plan, develop, maintain, and operate Thunderbird Park as a recreational area (Gamez 1990).

The City of Glendale and the Glendale Women’s Rotary Club attempted to purchase the park from the federal government in the early 1950s; deeds of patent were issued but ultimately withdrawn or cancelled. An unofficial history of Glendale written by Dr. Robert Easley (n.d.) outlines the events of the park’s development, including the construction of the amphitheatre, which was partially completed by 1954.

The Arizona Historical Foundation completed a historical survey of Thunderbird Regional Park, as it was then called, for Maricopa County Parks and Recreation Department in 1963. The purpose of the survey was to “ascertain what might be represented historically, i.e., towns, villages and hamlets; habitations; mines and mining claims, walls, watering places, and corrals; ranches, farms, and grazing lands; trails, roads, and highways; stage routes, wagon routes; rivers and streams; landing strips or airports, canals, battlefields; forts and other pertinent historical sites,” and to provide their location (Arizona Historical Foundation 1963:1). No historic features or sites were identified within the park boundaries.

Archaeological Records – The growth and urbanization of the greater Phoenix Metropolitan Area have been an impetus for many cultural resources investigations in the Northern Periphery since the 1960s, as discussed recently in several overviews completed for various master plan and multimodal transportation projects on behalf of the Flood Control District of Maricopa County and the Maricopa Association of Governments (Giacobbe and Larkin 1998; Rodgers 2000; Walsh 2000). Those projects relevant to the portion of the Northern Periphery that encompasses TCP are summarized below.

A single cultural resources survey encompassing a limited portion of TCP was previously completed as part of the Adobe Dam study for the US Army Corp of Engineers (Dittert 1976). The survey included only the valley floor and lower slopes on the east and north sides of the Hedgpeth Hills in Section 17 up to an elevation of 1,420 feet amsl (Dittert 1976:39). No cultural resources were identified as a result of that survey.

An examination of the one-mile radius surrounding TCP revealed that relatively few surveys have been conducted; seven sites have been recorded on the edge of the study area (Figure 7; Tables 7 and 8); these sites are actually part of the Skunk Creek Archaeological District, which refers to a plethora of prehistoric sites located in the Adobe Dam Recreation Area (see Bruder 1983). One well-known site within this group is AZ T:8.3 (ASM), the Hedgpeth Hills Rock Art Site, which is listed in the NRHP. The site contains over 1,500 petroglyphs on nearly 600 boulders within a 47-acre preserve operated by Arizona State University’s Deer Valley Rock Art Center.

One of the first surveys in this portion of the Northern Periphery was undertaken by ASU upon receipt of a National Science Foundation grant to record cultural resources sites along the Salt River and its tributaries; survey resulted in the recording of 107 sites along the Agua Fria and New Rivers (Ruppe 1966). In 1970, the Central Arizona Ecotone Project was undertaken by ASU to record additional cultural resources across three major physiographic zones in central Arizona (Gumerman and Johnson 1971; Gumerman and Spoel 1980). This survey resulted in the identification of four site types or categories
including hilltop sites, habitation sites, sherd and lithic scatters, and agricultural/water control (field) systems; several of the sites were subsequently excavated. During the mid-1970s, the US Army Corps of Engineers implemented the Phoenix City Streams Project focusing on flood control measures for the major drainages—the New River, Cave Creek, and Skunk Creek; the survey within the lower elevations of TCP was part of this project undertaken by ASU to record the presence and value (i.e., recommendation of eligibility for the NRHP) of cultural resources in the project area (Dittert 1976). Additional surveys and relatively limited data recovery investigations were subsequently conducted as part of this project (Henderson and Rodgers 1979). The Museum of Northern Arizona (MNA) conducted additional studies of the New River drainage in the late 1970s in the vicinity of the New River Dam site (Ciolek-Torrello 1981, 1982), and identified nearly 50 sites in that project area. The project culminated with data recovery investigations at 19 of these sites during the early 1980s (Doyel and Elson 1985).

Table 7. Previous surveys within TCP and its vicinity.

<table>
<thead>
<tr>
<th>Author/year</th>
<th>Reference number</th>
<th>Acres</th>
<th>Project name</th>
<th>Sites</th>
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<tr>
<td>___________</td>
<td>ASU 1970</td>
<td>__</td>
<td>Central Arizona Ecotone Project</td>
<td>AZ T:8:41-43 (ASU)</td>
</tr>
<tr>
<td>___________</td>
<td>ASU 1970</td>
<td>__</td>
<td>Central Arizona Ecotone Project</td>
<td>AZ T:8:89 (ASU)</td>
</tr>
<tr>
<td>Bruder 1983</td>
<td>__</td>
<td>__</td>
<td>Adobe Dam Alternative No. 4</td>
<td>AZ T:8:3 (ASM)</td>
</tr>
<tr>
<td>Dittert 1976</td>
<td>__</td>
<td>__</td>
<td>Phoenix City Streams</td>
<td>__</td>
</tr>
<tr>
<td>Kober 2000</td>
<td>2000-653</td>
<td>80.0</td>
<td>57th Avenue and Alameda Road</td>
<td>__</td>
</tr>
<tr>
<td>Larkin 1995</td>
<td>1995-473</td>
<td>40.1</td>
<td>Wyndham Place</td>
<td>AZ T:8:69 (ASM)</td>
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<td>Ryden 2002</td>
<td>2002-186.ASM</td>
<td>165.8</td>
<td>Hedgpeth Hills 143 Survey</td>
<td>AZ T:8:164-165 (ASM)</td>
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Table 8. Previously recorded sites within the vicinity of TCP.

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<th>Corresponding site number/name</th>
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<th>Affiliation/age</th>
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<td>Hedgpeth Hills Rock Art Site</td>
<td>Rock art</td>
<td>Prehistoric/possible Historic</td>
</tr>
<tr>
<td>AZ T:8:12</td>
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<td></td>
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</tr>
<tr>
<td>AZ T:8:41</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>AZ T:8:69</td>
<td></td>
<td>Cement foundation and pit</td>
<td>Historic/Modern</td>
</tr>
<tr>
<td>AZ T:8:164</td>
<td>AZ T:8:41 (ASU)</td>
<td>Habitation/resource procurement</td>
<td>Archaic/Hohokam, 1200 B.C.–A.D. 1500</td>
</tr>
<tr>
<td>AZ T:8:165</td>
<td></td>
<td>Limited habitation</td>
<td>Prehistoric</td>
</tr>
<tr>
<td>AZ T:8:42</td>
<td></td>
<td>FCR concentrations</td>
<td>Unknown</td>
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<tr>
<td>AZ T:8:43</td>
<td></td>
<td>FCR concentrations</td>
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</tr>
<tr>
<td>AZ T:8:89</td>
<td></td>
<td>Artifact Scatter</td>
<td>Unknown</td>
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</tbody>
</table>
The construction and development of the Central Arizona Project canals during the 1980s led to two cultural resources surveys of more than 4,200 acres on behalf of the Bureau of Reclamation (Green 1985, 1989; Green and Rankin 1988). Subsequent data recovery investigations prior to the construction of the New Waddell Dam provide the most comprehensive information on archaeological sites along the Agua Fria River to-date. Two recent projects in the northern portion of the study area are directly related to the growth of Phoenix during the 1990s. In 1994, more than 5,600 acres of land were surveyed prior to the development of the Del Webb Corporation’s Anthem community (Neal 1994). This survey resulted in the identification of 13 sites and subsequent data recovery excavations at 6 of the sites, including 3 that were located in the New River drainage (Potter and Neal 2000). Finally, the Palo Verde Ruin, which was recorded during the 1970s by ASU (Dittett 1976) and further examined by MNA (Ciolek-Torello 1982), was excavated by Northland Research, Inc in the late 1990s prior to the construction of residential subdivisions.

The types of sites that are most likely or expected to occur within the boundaries of TCP consist of limited-activity sites, such as for resource procurement and processing, lithic tool production, and those related to rock art. Dittett’s (1976) earlier survey of the lower elevation at TCP, although cursory, suggests that the potential to encounter habitation sites is low.

Summary of Field Reconnaissance

On August 20, 2003, archaeologists performed a limited pedestrian reconnaissance of TCP. Based on aerial photographs, the local geology, maps, and previous research, a few areas with possible potential for cultural resources were targeted. Within the park, Tertiary basalt flows are present in the eastern portion south of Pinnacle Peak Road and east of 59th Avenue. The western portion of the park is composed of granite, schist, and quartzite. The contact between these two rock units is located near the pass though which 59th Avenue currently runs.

The August 2003 reconnaissance of the basalt flows and rock outcrops in the eastern portion of the park covered the area south of Pinnacle Peak Road and east of 59th Avenue to the south park boundary. No cultural resources were observed in this area. Limited evidence of possible small-scale ground stone manufacturing, consisting of a light scatter of basalt flakes, was noted in the pass along 59th Avenue.

The amphitheatre, located within the western portion of the park, is likely a historic structure based on the history of the park provided by Dr. Easley (n.d.). One plaque commemorating the establishment of the park is affixed to a stone monument located at the southern entrance to the park on 59th Avenue. It states that the park was created in 1952 and that the stone monument was erected in 1957.

Subsequent to the field visit, the Deer Valley Rock Art Center was contacted for additional information. According to Marilyn Sklar, curator, local hikers have covered the area extensively over the past 30 years and report no evidence of rock art within the park boundaries (personal communication August 28, 2003).

Summary of Recommendations

Background research and limited field reconnaissance of TCP was completed to determine whether TCP was previously surveyed, to identify previously recorded archaeological sites, and to locate potentially significant cultural resources areas. The results of this inventory indicate the following:

- Past survey of TCP was incomplete (less than 100 percent)
- TCP likely contains a low density of small, prehistoric activity areas
- There is limited evidence of prehistoric ground-stone manufacturing within TCP
- Because the construction of the amphitheatre dates between 1952 and 1954 and therefore meets the age criterion for determining NRHP eligibility, it should be formally evaluated
- None of the other existing park facilities appear to be historic
- The likelihood of historic homesteads within TCP is low
The potential to encounter significant cultural resources areas within TCP is low.

Based on these findings, a systematic Class III survey that meets current ASM and SHPO standards should be completed in compliance with the State Historic Preservation Act of 1982 as stipulated in A.R.S. sections 41-861 through 41-864. A Class III survey would be required if federal funds may be used in the development of TCP.

A new survey is also recommended because the previous survey of TCP occurred prior to 1990, encompassed a limited area, and was not completed systematically (less than 100 percent complete). Under the Arizona Antiquities Act, a blanket permit must be obtained from ASM prior to undertaking a Class III survey on state or municipal land. Any newly recorded cultural resources sites recommended as eligible or potentially eligible for inclusion in the Arizona or NRHP should be avoided or subject to testing and/or data recovery, as necessary. Although unlikely, a burial discovery agreement with ASM should be requested and implemented pursuant to A.R.S. 41-844 and 41-865 if ground-disturbing activities on state or private land (including municipal land) have the potential to result in the discovery of human remains.

Preliminary research suggests that there are no known NRHP-eligible cultural resources within TCP. NRHP eligibility is based on the significance and integrity of a property. Although the amphitheatre is at least 50 years old, there is nothing to suggest it is significant under the National Register Criteria: (A) association with historic events or activities, (B) association with important persons, (C) distinctive design or physical characteristics, or (D) potential to provide important information about prehistory or history. Avoidance of further treatment of the amphitheatre is likely to be unnecessary. However, all identified cultural resources 50 years in age or older should be evaluated within an appropriate historic context for their significance and eligibility for inclusion in the Arizona and NRHP. According to National Register Bulletin 16A, "historic contexts are those patterns, themes, or trends in history by which a specific occurrence, property, or site is understood and its meaning (and ultimately its significance) within prehistory or history is made clear" (National Park Service 1991). Avoidance or treatment of any cultural resources that are recommended as eligible for inclusion in the Arizona or NRHP should be discussed consistent with the Secretary of the Interior's Guidelines for the Treatment of Historic Properties and applicable state laws. Results of any Class III Inventory would be submitted to the SHPO for review.

If at any time the project becomes a federal undertaking, the survey and report should be completed to meet applicable federal guidelines, and a good faith effort must be made to consult with interested Native American tribes. As part of the Section 106 process, Native American tribes having potential interest in the area should be consulted to identify any traditional cultural properties or properties of religious significance. The tribes that claim affiliation with the area encompassed by TCP include the Hopi Tribe, the Pueblo of Zuni, the Salt River Pima-Maricopa Indian Community, the Gila River Indian Community, the Tohono O'odham Nation, the Ak-Chin Indian Community, the San Carlos Apache Indian Tribe, the White Mountain Apache Tribe, the Fort McDowell Yavapai Nation, the Yavapai-Apache Nation, and the Yavapai-Prescott Tribe. It is recommended that any identified resources or traditional cultural properties be avoided by all project activities. Continued consultation is recommended if traditional cultural properties cannot be avoided.
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A.5 Visual Resources

The purpose of the TCP Master Plan visual analysis is to establish the existing visual resources of the cultural and physical landscape within the park. This analysis is subsequently used in consideration of a master plan that will protect and enhance the park's character and aesthetic value. The methodology, terms, and premises used in the evaluation of the visual resources are based on the US Department of Agriculture's A Forest Service's *National Forest Landscape Management Volumes 1 and 2* (1974), and *Landscape Aesthetics: A Handbook for Scenery Management* (1995). The Forest Service's visual resource management process is used as the basis of this visual analysis because its approach has been generally accepted throughout the United States as the standard in defining and managing the aesthetics of large, natural landscapes. The Forest Service's methodology has been modified for this study in order to account for assessing a more developed urban setting rather than a completely natural landscape.

*Methodology*

Visual resources of the study area were evaluated in terms of the existing visual conditions and landscape character. The visual conditions analysis included an identification of distinct features, notable utility and transportation corridors, areas of preservation and disturbance, key landmarks, and location of major viewpoints. Distinct features are those features comprising landscape elements and patterns that make a memorable visual impression. Viewpoints, as well as the other components of the existing visual conditions, are described based on publicly accessible locations within the park. A major viewpoint is one where the distant view of distinct landforms/landmarks attracts attention away from the foreground area. The foreground is defined as the area within 0.25 mile of the viewer's position.

The second component of the visual resource evaluation for the TCP Master Plan is the delineation of landscape character units. Landscape character is the physical appearance of the landscape, including the natural, physical, and architectural/cultural features that give it an identity and "sense of place." The existing landscape character is based on defining areas of similar land use, vegetation, spatial enclosure, landform, or architectural/cultural patterns. For each landscape character unit, the relative scenic quality, level of intactness, and visual sensitivity of the landscape were determined. Scenic quality or attractiveness is a combination of attributes based on landforms, water characteristics, vegetation patterns, and architectural/cultural elements. Scenic quality was rated as very low, low, moderately low, moderate, moderately high, high, and very high, depending on the distinctiveness, unity, and intactness of the patterns and attributes of the area. Distinctiveness refers to the memorableness of an element or a pattern of elements in the landscape. Unity is the visual coherence and harmony of the landscape when considered as a whole. Visual intactness relates to the integrity of visual order in the natural and built landscape, and the extent to which the landscape elements and patterns that they create are cohesive.

The last component, general visual sensitivity of the park, has also been considered. Visual sensitivity is the measure of people's concern for the visual environment based on the viewers' activity and awareness as well as their values, opinions, and preconceptions. The general public, adjacent property owners, or special interest groups were not sent questionnaires to determine their relative sensitivity to change in the landscape. The evaluation of visual sensitivity was, therefore, based on viewer activities related to existing developed land use rather than any visual preference evaluations. Visual sensitivity was rated as high for residential and recreation use and undisturbed natural lands; moderate for commercial, office, and light industrial uses; and low for heavy industrial land uses and areas of disturbance.

Additionally, viewshed analysis was calculated using the topographic information, provided in the electronic format by the City of Glendale. Each trail and adjacent road was automatically broken down into several viewing points by 3D-Analyst (ESRI) to generate a 'seen area'. Vegetation (natural or planted) was not considered while calculating the seen area and some areas that are depicted as visible may be camouflaged by vegetation. Visibility of each trail and road were compiled into one composite map to identify the most visible areas and those not seen.
Existing Landscape Character

Visual conditions analysis

This section of the report describes the existing visual conditions within TCP. A graphical representation of the existing visual conditions within the foreground distance zone of the park is provided in Figure 8, Existing Visual Conditions, which identifies distinct features, disturbed areas, terrain and vegetation characteristics, and major viewpoints.

There are numerous built (or manmade) and natural distinct features within the park. Existing distinct built features include the 59th Avenue transportation corridor, amphitheater, the City of Glendale’s water supply reservoir, and the small pond. The outstanding natural features within the park are the Hedgpeth Hills and the panoramic vistas from these landforms.

Within TCP, the Sonoran Desertscrub vegetation is punctuated by volcanic rockslides, rock outcroppings, and statuesque saguaros. Currently, three general areas of disturbance are evident in the park. Sparse vegetation, areas containing invasive plant species, and/or large areas of exposed dirt and asphalt characterize these areas. Dense areas of vegetation, primarily mesquite trees, are associated with ephemeral drainages crossing through the park. On the western edge of the park, a small wetland area located adjacent to 67th Avenue also has dense vegetation. Portions of the trails are highly visible because of the contrast in color and line that these dirt-surfaced pathways create in the landscape. The small enclosed basin in the eastern portion of the park is relatively undisturbed and contains a variety of plant material and rock outcroppings. Major viewpoints within the park include the designated trails, tops of ridges, and 59th Avenue.

Landscape character units

To further describe the visual resources of TCP, the specific site areas are broken into broad-based landscape character units (Table 9 and Figure 9). Landscape character units, as previously stated, are based on the presence and type of vegetation, land use, degree of spatial enclosure, and the presence of notable landform or architectural/cultural patterns in the landscape. The resulting units are areas of similar visual character. Each unit has been named and described in terms of its vegetative cover, landform, land use, and special features in the foreground, middleground, or background. Distance zones refer to the relative position from the observation point as follows: (1) foreground — up to 0.25 miles; (2) middleground — 0.25 mile to three miles; and (3) background — three to five miles. The relative scenic quality is also provided for each of the landscape character units. In total, there are 12 different units found within the park:

- Hedgpeth Flats
- Fishhook Basin
- Hilltop
- Undisturbed Hillside
- Disturbed Hillside
- Waterfowl Refuge
- Active Use Area
- Reservoir
- School Flats
- Disturbed Areas
- The Pass
- 59th Avenue
Figure 8. Existing Visual Conditions

Thunderbird Conservation Park
City of Glendale

Key

- Thunderbird Conservation Park
- Sloping Terrain
- Flat Terrain
- Disturbed Areas
- Regional Transportation Corridor
- Park Motorized Circulation System
- Park Non-motorized Circulation System
- Preservation Area
- Notable Volcanic Rock Outcropping
- Notable Volcanic Rock Slide Area
- Major Viewpoint
- Unobstructed View
- Distinct Built Feature
- Distinct Natural Feature
- Staging Area
- Wildlife Viewing Area
- Dense Area of Vegetation
- Notable Vegetation

- Scale: 0 - 1000 - 2000 Feet

Figure 8: Existing Visual Conditions
<table>
<thead>
<tr>
<th>Character unit</th>
<th>Unit photograph</th>
<th>Visual character</th>
<th>Scenic quality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hedgpath Flats</strong></td>
<td><img src="image" alt="Hedgpath Flats" /></td>
<td>Foreground: Parking area and trail head. Pinnacle Peak Road is a major transportation element bordering to the north. Medium-density housing is visible to the north. Trails lead away from the parking area. Vegetation consists of creosote bush, bursage, and the invasive mustard plant within the disturbed areas of the western portion of this unit. More natural vegetation grows within the eastern part of the unit. Large, open flat terrain. Views are directed inward toward the rising hills. Middleground: Deam Hills and Pyramid Peak are visible to the north. Rising terrain (Hedgpath Hills) limits views of middleground area. Background: Not visible.</td>
<td>Distinctiveness: • Vegetation typical. • Relatively flat terrain does not create a memorable landscape. • Adjacent hillsides provide notable visual contrast. • Parking area is identifiable. Level of intactness: • Parking area in dominant built form. • Terrain has been disturbed in the western area. • Low level of intactness. Unity: • Exiting vegetation contrasts with areas of bare ground creating visual contrast in the landscape.</td>
</tr>
<tr>
<td><strong>Undisturbed Hillside</strong></td>
<td><img src="image" alt="Undisturbed Hillside" /></td>
<td>Foreground: Rising terrain with black volcanic rock outcroppings located throughout the hillside. Views are open to the north and south. Vegetation consists of creosote bush, bursage, desert broom, mesquite, paloverde, and saguaro, cholla, prickly pear, barrel cactus, and other cacti. Medium-density housing is visible adjacent to the park boundary. Pinnacle Peak Road and 59th Ave are visible major transportation. Trails are visible on the flat terrain below. Middleground: Deam Hills and Pyramid Peak are to the north and are visible from north-facing slopes. Phoenix metropolitan area is visible from south-facing slopes. Rising terrain (Hedgpath Hills) limits southern views. Background: Distant New River and South Mountains visible to the north and south.</td>
<td>Distinctiveness: • Dry-grown scrub vegetation is common to the area and region. • Black volcanic rock outcroppings/sides are void on the hillside. • Hilly terrain creates a memorable landscape. • Saguaros are more notable. Level of intactness: • Minimal evidence of visual encroachment. • Moderately high level of intactness. Unity: • Vegetation pattern creates a cohesive landscape. • Slope is consistent.</td>
</tr>
<tr>
<td><strong>Fishhook Basin</strong></td>
<td><img src="image" alt="Fishhook Basin" /></td>
<td>Foreground: Large open flat area with rising hillsides to the north, west, and south. The adjacent golf course, greenways, fairways, and water pond are highly visible to the east. Vegetation consists of creosote bush, bursage, desert broom, mesquite, paloverde, and saguaro, cholla, prickly pear, barrel cactus, and other cacti. Middleground: Adobe Dam is visible to the west from the hillside. Medium-density residential housing to the west is visible from the hillsides. Background: McDowell Mountains are visible to the west from the ridge.</td>
<td>Distinctiveness: • Enclosed basin. • Black volcanic rock outcroppings/sides are void on the hillside. • Hilly terrain with rock outcropping and saguaro cacti create a memorable landscape. • Desert vegetation is dominant. Level of intactness: • Little evidence of visual encroachment. • High level of intactness. Unity: • Vegetation pattern creates a cohesive landscape.</td>
</tr>
</tbody>
</table>

Table 9. Landscape Character Units
<table>
<thead>
<tr>
<th>Character unit</th>
<th>Unit photograph</th>
<th>Visual character</th>
<th>Scenic quality</th>
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<tr>
<td><strong>Hilltop</strong></td>
<td><img src="image1" alt="Image" /></td>
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<td></td>
<td></td>
<td>Foreground:</td>
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<tr>
<td></td>
<td></td>
<td>• Rocky terrain</td>
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<td></td>
<td></td>
<td>• Views are generally open in all directions</td>
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<td></td>
<td></td>
<td>• Vegetation consists of cacti, bush, desert broom, and some palm trees</td>
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<td></td>
<td></td>
<td>• Phoenix, Skyline, and some portions of the hills are visible</td>
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<td></td>
<td></td>
<td>Middleground:</td>
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<tr>
<td></td>
<td></td>
<td>• Deep hills and Pyramid Peak are to the north</td>
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<td></td>
<td></td>
<td>• Rising terrain (Hedgpeth Hills) creates views in some directions</td>
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<td></td>
<td></td>
<td>Background:</td>
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<tr>
<td></td>
<td></td>
<td>• Various distant mountain ranges are visible in all directions</td>
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<td></td>
<td></td>
<td>• Phoenix's skyline is visible to the southeast</td>
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<tr>
<td>Distinctiveness:</td>
<td>Black volcanic rock outcroppings are visible along the ridges</td>
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<tr>
<td></td>
<td></td>
<td>• Hilltop creates a memorable landscape</td>
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<tr>
<td></td>
<td></td>
<td>• Hilltop and ridges are abundant desert vegetation</td>
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<tr>
<td>Level of Intactness:</td>
<td>Minimal evidence of visual encroachment</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Moderately high level of intactness</td>
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</tr>
<tr>
<td>Unity:</td>
<td>Spatial openness in all directions</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Level of scenic quality:</strong></td>
<td>High</td>
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<tr>
<td><strong>Disturbed Hillside</strong></td>
<td><img src="image2" alt="Image" /></td>
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<td></td>
<td></td>
<td>Foreground:</td>
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<td></td>
<td></td>
<td>• Rocky terrain with black volcanic rock outcroppings line the hillside</td>
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<td></td>
<td></td>
<td>• Views inward are concealed by undulating terrain</td>
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<td></td>
<td></td>
<td>• Vegetation consists of cacti, bush, desert broom, and some palm trees</td>
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<td></td>
<td></td>
<td>• 59th Avenue and 67th Avenue are major visible transportation elements</td>
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<td></td>
<td></td>
<td>• Parking area is located to the northwest</td>
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<td>• Trails are visible on the flat terrain below and along the hillside</td>
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<td></td>
<td></td>
<td>• Medium-density housing is visible to the south and west</td>
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<tr>
<td>Middleground:</td>
<td></td>
<td>• Rising terrain (Hedgpeth Hills) limits inward views</td>
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<td></td>
<td></td>
<td>• Phoenix metropolitan area is visible to the south</td>
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<tr>
<td>Background:</td>
<td></td>
<td>• Distant mountain ranges are visible to the west and south</td>
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</tr>
<tr>
<td>Distinctiveness:</td>
<td>Black volcanic rock outcroppings line the hillside</td>
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<tr>
<td></td>
<td></td>
<td>• Presence of trails and notable areas devoid of vegetation, encroaches on the otherwise intact landscape</td>
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<td></td>
<td></td>
<td>• Low level of intactness</td>
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<tr>
<td>Level of Intactness:</td>
<td>Minimal evidence of visual encroachment</td>
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<tr>
<td></td>
<td></td>
<td>• Trails create contrast in terms of color and line in the landscape and visually detract from the setting</td>
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<tr>
<td>Unity:</td>
<td>Spatial openness in all directions</td>
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<tr>
<td><strong>Level of scenic quality:</strong></td>
<td>Moderate</td>
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<tr>
<td><strong>Waterfowl Refuge</strong></td>
<td><img src="image3" alt="Image" /></td>
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<td></td>
<td></td>
<td>Foreground:</td>
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<td></td>
<td></td>
<td>• Large open pond visible from 59th Avenue</td>
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<td></td>
<td></td>
<td>• Large trees and shrubs line the water's edge</td>
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<td></td>
<td></td>
<td>• Hedgpeth Hills rise to the north</td>
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<td></td>
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<td>• Viewing area and blind with landscaping adjacent to the west</td>
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<td></td>
<td></td>
<td>• 67th Avenue is a major visible transportation element adjacent to the west</td>
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<td></td>
<td></td>
<td>• Views are focused toward water</td>
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<tr>
<td>Middleground:</td>
<td></td>
<td>• Not visible</td>
<td></td>
</tr>
<tr>
<td>Background:</td>
<td></td>
<td>• Not visible</td>
<td></td>
</tr>
<tr>
<td>Distinctiveness:</td>
<td>Dense vegetation</td>
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<tr>
<td></td>
<td></td>
<td>• Water creates a memorable landscape</td>
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<tr>
<td></td>
<td></td>
<td>• Adjacent hillsides provide notable visual contrast</td>
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</tr>
<tr>
<td>Level of Intactness:</td>
<td>Minimal evidence of visual encroachment</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>• High level of intactness</td>
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<tr>
<td>Unity:</td>
<td>Spatial openness in all directions</td>
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<tr>
<td><strong>Level of scenic quality:</strong></td>
<td>High</td>
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Table 9. Landscape Character Units (continued)
<table>
<thead>
<tr>
<th>Character unit</th>
<th>Unit photograph</th>
<th>Visual character</th>
<th>Scenic quality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active Area</strong></td>
<td>![Active Area Image]</td>
<td>Foreground: Flat terrain, Wash runs south lined with higher concentration of vegetation. Vegetation consists of mesquite, paloverde, and other native species. Bulkt features include amphitheater, parking area, trailhead, picnic structures, restroom, and pedestrian bridges. 58th Avenue is a major visible transportation element. Unpaved trails lead away from the parking area. Middleground: Rising terrain (Hedgepeth Hills) limited views. Background: Not visible.</td>
<td>Distinctiveness: Amphitheater along hillside. Dense riparian vegetation along wash. Level of Intactness: Infrastructure and buildings create inconsistent and random pattern. Large barren areas of disturbed ground. Very low level of intactness. Unity: Low contrast of color of natural features with surroundings. Consistency of type of built structures. Level of scenic quality: Moderate Low</td>
</tr>
<tr>
<td><strong>Reservoir</strong></td>
<td>![Reservoir Image]</td>
<td>Foreground: Water reservoir is concealed from the view below. Water tank is a large white structure. Views to the west are open. Middleground: Medium-density housing is visible to the west. Rising terrain (Hedgepeth Hills) limits views to the north, east, and south. Background: Distant mountain ranges are visible to the west and south.</td>
<td>Distinctiveness: Reservoir. Level of Intactness: Low level of intactness. Unity: Contrasting color and form of reservoir cover with surroundings. Level of scenic quality: Low</td>
</tr>
<tr>
<td><strong>School Flats</strong></td>
<td>![School Flats Image]</td>
<td>Foreground: 67th Avenue is a major transportation element visible to the west. Trails and disturbed areas break up vegetation patterns within the unit. Large, open, flat terrain with rising hillside to the east. Views outward to the east are limited by hills. Middleground: Medium density housing and a high school are adjacent to the west. Background: Not visible.</td>
<td>Distinctiveness: Vegetation typical. Relatively flat terrain does not create a memorable landscape. Level of Intactness: Parking area is dominant man-made feature. Terrain disturbed by several trails. Low level of intactness. Unity: Vegetation and barren areas create visual contrast and disharmony in the landscape. Level of scenic quality: Moderately Low</td>
</tr>
</tbody>
</table>

Table 9. Landscape Character Units (continued)
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<thead>
<tr>
<th>Character unit</th>
<th>Unit photograph</th>
<th>Visual character</th>
<th>Scenic quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disturbed Area</td>
<td><img src="image" alt="Disturbed Area Image" /></td>
<td>Foreground: Large, flat terrain. Wash levee. Vegetation consists of both native and invasive species. 159 Avenue is a major transportation element bordering on east. Middleground: Oom Hills and Pyramid Peak rise to the north. Rising terrain (Hedgepeth Hills) limits views of middleground area. Background: Not visible.</td>
<td>Distinctiveness: Barren graded area creates a distinct pattern in the landscape. Existing terrain has been cleared or modified. Level of intactness: Clear, natural area has modified the terrain and does not conform to the surrounding landscape. Processing: Low level of intactness. Unity: Disturbed area is not visually compatible; severely contrasts in terms of form, line, and color.</td>
</tr>
<tr>
<td>The Pass</td>
<td><img src="image" alt="The Pass Image" /></td>
<td>Foreground: Rocky terrain. Siltstone rock outcropping/wall are highly visible. Views are open to the north and northeast. Vegetation is dominated by grasses and low shrubs. Middleground: Oom Hills and Pyramid Peak rise to the north. Rising terrain (Hedgepeth Hills) limits views outward. Background: Views of New River Mountains are visible to the north.</td>
<td>Distinctiveness: Spatial enclosure created by adjacent landforms. Views of volcanic rock outcroppings/walls are wide on the hillside. Landscape creates a memorable landscape. Vegetation dominated by single species. Level of intactness: Some visual encroachment by the roadway. Moderately low level of intactness. Unity: Vegetation pattern creates a cohesive landscape.</td>
</tr>
<tr>
<td>59th Avenue</td>
<td><img src="image" alt="59th Avenue Image" /></td>
<td>Foreground: Two-lane paved roadway. Large culverts at the south end of the park. Views are focused along roadway and directed upward along hillside. Middleground: Rising terrain (Hedgepeth Hills) limits views. Background: Not visible.</td>
<td>Distinctiveness: Notable expanse of roadway creates strong linear form. Roadway features are not visually distracting. No vegetation or streetscape elements are present. Roadway creates modification to the existing landforms resulting in fill slopes. Level of intactness: Infrastructure is visually consistent and provide a uniform pattern. Moderate level of intactness. Unity: Roadway interrupts the natural form of the terrain of the landscape. Inconsistent roadside treatment detracts slightly from setting.</td>
</tr>
</tbody>
</table>

Table 9. Landscape Character Units (continued)
Visual Sensitivity

The visual sensitivity within the park is associated, as previously mentioned, with land use. Because of the nature and location of this project, the park and the majority of the adjacent properties are considered to have a high level of visual sensitivity.

A viewshe or seen area analysis using a digital elevation model and GIS was conducted to show which areas of the park are visible and not visible from major roadways and designated trails within or immediately adjacent to the park. The locations analyzed include portions of 59\textsuperscript{th} Avenue, 67\textsuperscript{th} Avenue, and Pinnacle Peak Road that are adjacent or within TCP. Additionally, each of the existing Hedgpeth Trails were analyzed (Figures 10 and 11). The modeling assumes that there are no obstructions blocking the view from the viewing platform to the surrounding landscape and that there are no trees or other vegetation to screen the views. The “not visible” category shows areas within TCP concealed by the existing topography from viewers.

Figure 11 shows a composite of the seen area analysis by illustrating areas that are most visible and not visible from the existing designated trails and major roads. In general, the most visible areas within the TCP are the upper most part of the Hedgpeth Hills within the central area of the park. Less visible areas include the water supply reservoir and areas near the western edge of the TCP. The basin located on the eastern edge of TCP is not visible from any trails or roadways because the topography blocks views into this area.

Summary of Recommendations

Limited field reconnaissance of TCP was completed by LSD to inventory and evaluate the park’s visual resources. The existing visual conditions of the park and scenic quality of each character unit within the park’s boundaries were assessed as well as an evaluation of areas most and least visible within the park. The following summarizes the results of this visual resource analysis and provides recommendations for consideration in the master planning process:

Hedgpeth Flats — Located on the northeast corner of the park, this unit has a moderately low level of scenic quality. The park improvements in the way of well-designed facilities that blend in terms of scale, color, and form and successful revegetation of disturbed areas could improve the unit’s scenic values. Special consideration should be given to this unit because it is a highly visible area, particularly from Pinnacle Peak Road, and serves as the north entry area to the park.

Fishhook Basin — Located in the most eastern end of the park, this unit has a high level of scenic quality. Fishhook Basin is relatively undisturbed and isolated from the rest of the park by topography, which conceals all views from adjacent roads and designated trails within the park. The diversity of vegetation and dramatic contrasting volcanic rock outcropping make this unit one of the most valued scenic resources and is an area that is recommended for preservation within TCP.

Hilltop — Located at the highest elevations of the Hedgpeth Hills, this unit also has a high level of scenic quality. One of the greatest scenic resources within the park is the spectacular views that are offered from the ridges and hilltops of these landforms. These hilltop areas serve as major hiking destinations within the park. The ridgelines of the Hedgpeth Hills are also some of the most highly visible areas from adjacent roads and designated trails within the park. Restricting development within this unit is recommended to preserve the visual integrity of the hilltops.

Undisturbed Hillside — Located east of 59\textsuperscript{th} Avenue, this unit has a moderately high level of scenic quality. This area appears visually undisturbed and provides visual interest with the contrasting black volcanic rock outcropping intermixed with desert vegetation. The upper regions of these hillsides are also highly visible from adjacent roads and designated trails within the park. The design and placement of new trails along the hillsides should consider line and color to minimize creating contrast that would lower the integrity and scenic quality of the unit.
Figure 10. Viewshed Analysis: Roads and Designated Trails
Figure 10. Viewshed Analysis: Roads and Designated Trails (continued)
Figure 11. Composite Viewshed Analysis
**Disturbed Hillside** – Located west of 59th Avenue, this unit has a moderate level of scenic quality. Offering views of more uniform vegetation and landform, the Disturbed Hillside Unit appears visually disturbed by existing designated and undesignated trails that cut across the desert vegetation. The upper regions of these hillsides are also highly visible from adjacent roads and designated trails within the park. Consideration should be given to the restoration of trails to lower the visual contrast. For example, soil staining or randomly placing native boulders to obscure the outside edge of the trail would reduce the visibility of the trails.

**Waterfowl Refuge** – Located adjacent to 59th Avenues on the southern portion of the park, this unit has a high level of scenic quality. The resources of water and dense vegetation are a memorable landscape and make this unit highly valuable as a scenic resource within the park. Because of the landmark created by this water feature, restricting development within this unit is recommended to preserve its visual integrity.

**Active Use Area** – Located adjacent to Waterfowl Refuge unit and in the northwestern and central areas of TCP, this unit has a moderately low level of scenic quality. Incorporating the majority of the built structures (e.g. amphitheater, restrooms, and ramadas), portions of this unit are highly visible from 59th Avenue and from surrounding hilltops. Vegetation is primarily limited to the small wash that crosses the unit. The redevelopment of this area could improve the scenic quality, particularly if the design of the facilities complements the surrounding landforms, materials, and color.

**Reservoir** – This unit has low scenic quality. The existing reservoir shape and cover creates a highly contrasting form and color adjacent to the surrounding landscape. Because of the location of the reservoir, it is only highly visible from the western hilltops of the Hedgpeth Hills. Coloring the cover to blend with the adjacent landscape would minimize the contrast, reduce the distraction from the surrounding landscape, and improve the scenic quality of the area.

**School Flats** – Located in the western end of the park, this unit has a moderately low level of scenic quality. The park improvements in the way of well-designed facilities that blend in terms of scale, color, and form and successful revegetation of disturbed areas could improve the unit’s scenic values.

**Disturbed Areas** – Located in the southern portion of TCP, this unit has a moderate level of scenic quality. Trail improvements, well designed pedestrian facilities, and revegetation of disturbed ground would substantially improve the unit scenic values.

**The Pass** – Located in the north-central area of TCP, this unit has a moderate level of scenic quality and appears visually disturbed by designated trails that cut across the landscape with a uniform line and contrasting soil color. This unit is spatially enclosed by the Hedgpeth Hills, which limits the views of the motorists along 59th Avenue and the non-motorists using the trails. Rehabilitation of the trails to blend with the adjacent landscape would minimize the contrast, reduce the distraction from the surrounding landscape, and improve the scenic quality of the area.

**59th Avenue** – Located in the center of the park on a north/south alignment, this unit has a moderately low scenic value. This roadway corridor provides a strong linear form but lacks any vegetation or streetscape enhancements. As a viewing platform, 59th Avenue provides the greatest amount of viewers within the park and therefore any change or modifications within its viewshed should be given careful consideration.

**Visual References**


A.6 Land Use Resources

The purpose of the land use and regional recreation analysis of the TCP Master Plan is to identify existing and planned land uses within and adjacent to the park. A regional inventory of existing and proposed recreational trail corridors and open space of the surrounding area was also identified as part of this study.

Methodology

Inventory methods include a review of existing planning documentation, aerial photography, and a field verification of the region that was conducted in September 2003. Existing and planned land uses were identified within one mile of the park boundary, and regional trails and open space were identified within five miles of the park boundary. In addition county and municipalities within the study area were contacted for new and updated information.

This study was divided into Land Jurisdiction and Ownership, Existing Land Use, Planned Land Use, and Regional Recreation. These components document land use, legislative designations, and land management that occur within the study area.

Land Jurisdiction and Ownership

Land jurisdiction was identified from the Maricopa County digital database. The study area is located within the jurisdictions of the Cities of Glendale, Peoria, and Phoenix. The TCP boundary is located within the city of Glendale with a small portion of quasi-jurisdictional land located within the City of Phoenix's jurisdictional boundary. Adjacent lands are privately and publicly owned.

Existing Land Use

The following categories of existing land use were identified within the one-mile study area (Figure 12, Existing Land Use).

Residential — This category refers to all low-density, medium-density and high-density residential development as well as to dispersed rural residences. The majority of the adjacent land use is medium-density residential communities. Low-density residential development is located in areas northwest of the park.

Vacant/Undeveloped — This category includes undeveloped subdivisions, vacant lots, abandoned fields, and fallow land. Large areas of undeveloped land are located northeast and northwest of the park.

Commercial/Business Park — This category includes commercial land uses, such as convenience stores, restaurants, retail shopping stores, and business offices. Nearby commercial districts are located at the northwest corner of the Deer Valley Road and 67th Avenue intersection and at the traffic interchange of 59th Avenue and State Route (SR) 101 Loop.

Institutional — This category includes hospitals and churches. Two churches are located adjacent to the park along 67th Avenue. At the northwest corner of the park, another church is located along Pinnacle Peak Road.

Public Facilities/Educational — One fire station and five schools and a community college are located within one mile of TCP.

Parks and Open Space — Golf courses are located to the south and west of the park. The Adobe Dam Recreation Area is directly adjacent to the east. Several neighborhood parks are located to the southwest. A large parcel of open space owned by the City of Glendale is located directly north of TCP.
Planned Land Use

This section includes all general and specific planned land uses not otherwise identified in the preceding components. Sources of the planned land use information include Maricopa Association of Governments, Glendale General Plan: The Next Step 2025 (2003), City of Phoenix General Plan: Deer Valley Village General Plan Land Use (2002), and Peoria General Plan (revised 2002) (Figure 13, Planned Land Use).

According to the Phoenix General Plan, the majority of vacant land located north of the park is planned for low-density residential housing. Planned commercial areas are located at the northwest corner of Deer Valley Road and 67th Avenue intersection, at the traffic interchange of 56th Avenue and 101 Loop Freeway, and along Happy Valley Road and the north end of the study area. The land adjacent to the park on the eastern boundary is planned open space.

Regional Recreation Systems

The following categories of regional recreation systems were identified within the regional study area of TCP (Figure 14, Regional Recreation Systems).

Trails – Maricopa County identified several conservation trails and several proposed trails in the TCP’s regional study area as part of the County’s transportation plan. These trails provide public access that will accommodate nonmotorized travel modes along roadways. The Skunk Creek channel is identified as an alignment for proposed trails within the regional study area. Several other arterial and collector streets, as well as additional ephemeral drainage features within the regional study area, are proposed as nonmotorized corridors to connect recreational destinations. Additionally, the New River Area Plan calls for a nonmotorized trailway system between Lake Pleasant and Cave Creek Park. This may include several planned regional trails in this study area that are designated by Maricopa County Parks and Recreation Department (MPRD) as part of the regional trail system: the trail corridors along the Maricopa County Regional Trail, Lake Pleasant to Cave Creek alignment, and the Central Arizona Project (CAP) Canal. Five local trails are located within TCP.

Bikeways – MAG Regional Bicycle Plan (January 1999) routes were designed as a system of long, interconnected routes for use by commuting, touring, recreational, or training users for travel within or through the Phoenix Metropolitan Area. The regional system forms a skeleton from which each jurisdiction can provide localized service to important destinations. The Regional Recreation Systems map identifies existing and proposed paved bicycle routes within the TCP regional study area.

Parks – Several parks are located within the TCP regional study area. The purpose of these parks is to provide primary recreation services and facilities that are easily accessible and available to local residents. City of Glendale parks include several neighborhood parks, the majority of which are located west and south of TCP. Figure 14 indicates the location of recreational areas within the regional study area.

Recreation Sites – Located east of TCP, the Adobe Dam Recreation Area (also known as Adobe Mountain Park) contains 1,526 acres of mixed recreational use serving a variety of interest groups including go-kart racing, remote-controlled airplane activities with landing strips, model railroads, a sports complex, a water park, and a golf course. The Adobe Dam Recreation Area is managed by Maricopa Parks and Recreation Department (MPRD). In the northern portion of the regional study area, the Ben Avery Shooting Facility (Ben Avery Recreation Area) is the largest public shooting facility (1,650 acres) in the country. It is publicly owned and operated by the Arizona Game and Fish Department in cooperation with the Arizona State Rifle and Pistol Association. Additionally, Cave Creek and Cave Buttes Recreation Areas are located within the eastern portions of the regional study area, offering open space, trails, and additional recreational amenities. The planned Deem Hills Recreation Area will be located north of TCP and will offer unprogrammed open space in addition to a proposed dog park.

Open space – Within the TCP’s regional study area, a number of functions, such as recreation, aesthetics, and flood control are available. Open spaces within the surrounding jurisdictions would include the parks discussed above as well as larger designated open spaces, including larger tracts of open space that are identified by the Sonoran Preserve Master Plan (1999). Additionally, Adobe Dam Recreation Area, Cave Buttes Recreation Area, Cave Creek Recreation Area, and the Ben Avery...
Shooting Facility all incorporate open space and are multiuse recreational destinations. Much of the vacant land north of TCP is currently owned and managed by the Arizona State Land Department (ASLD) and has been identified for preservation as part of the Sonoran Preserve Master Plan. Currently, ASLD provides recreational access to these lands through Recreational Use Permits. Typically, permits are given for the purpose of hiking, equestrian use, bicycling, rock climbing, all terrain vehicles (ATV) use, and jeep tours. Hot air ballooning is also a permitted use on ASLD lands.
Figure 13. Planned Land Use

Thunderbird Conservation Park
City of Glendale
Land Use References

Aerial Photograph, City of Glendale. 2002

City of Glendale. Glendale General Plan: The Next Step 2025. 2003

City of Peoria. Peoria General Plan. Revised 2002


Maricopa County. Maricopa County GIS Database. 2002


A.7 Utilities, Infrastructure, and Drainage Overview

The existing utilities and infrastructure within the park are generally located around the existing picnic area adjacent to the wash corridor and other smaller picnic areas dispersed throughout the park. Existing utilities consist of electrical for site lighting, potable water for restroom buildings and drinking fountains, and septic systems. All restroom buildings are on individual septic systems that have or will reach their capacity within the foreseeable future. The nearest available sewer lines are located within the Arrowhead Ranch subdivisions, 67th Avenue, and Pinnacle Peak Road. No sewer lines exist within the 59th Avenue right-of-way. It is anticipated that future restroom facilities will be incorporated into the City of Glendale’s sewer system and/or alternative “green” solutions such as self-composting toilets utilized where feasible.

In the mid-1980’s an 8” DIP water line main was looped through the western portion of the park from 59th Avenue to 67th Avenue and 61st Drive. All existing water services for park facilities come off of this line. It is anticipated that future water demands within the park will be sufficiently served by this 8” line in the western portion of the park. Any required new water services for the eastern portion of the park will come off of the 59th Avenue and/or Pinnacle Peak Road water line. A non-potable water line exists at the southern boundary of the park near the sediment basin and supplies water to the Arrowhead Ranch amenities.

An existing electrical service located along 59th Avenue appears to be sufficient for the existing and future park demands required along the main wash corridor. Additional electrical services may be required for future park amenities located off of 67th Avenue and Pinnacle Peak Road, since no electrical services for the park currently exist in these areas.

Numerous drainage and utility easements exist along the southern and northern boundaries of the park where residential lands abut the park property. In addition, a 15’ equestrian easement connects to the north boundary of the park, just east of 59th Avenue.

There is an existing paved park road with no shoulders that provides access from 59th Avenue to the main picnic area, the viewpoint north of the water reservoir, and to two secondary picnic areas. It does not provide a loop-through to 67th Avenue and has recently been resurfaced. The defined parking areas appear to be insufficient as many people are parking along the road and damaging the native landscape. Boulders and logs are being utilized as barriers to contain vehicles to the defined parking areas and roadway, particularly where the parking and/or roadway are dirt. The parking and access from 67th Avenue and Pinnacle Peak Road are currently dirt or decomposed granite surfaces. It is anticipated that parking areas and roadways will be asphalt or stabilized decomposed granite surfaces with defined edges and spaces and meet Americans with Disabilities Act (ADA) requirements.

A.8 Architectural/Existing Structures Overview

The existing park architecture consists of concrete pier picnic ramadas, slump block restroom buildings, stone barbeques, concrete picnic tables, and a stone amphitheater. Most of these elements were built anywhere from 20-50 years ago when the park was under Maricopa County management. The stone structures (barbeques and amphitheater) were most likely built 40-50 years ago, however, they have not been identified as historically significant (see Subsection A.4, Cultural Resources). The majority of ramadas, tables, and restroom buildings are not ADA accessible. In addition, the restroom buildings are old enough not to meet current building code requirements. While many of the picnic ramadas may remain in place or be relocated depending on the master plan recommendations, it is anticipated that all existing restroom buildings will be replaced with new facilities and waste systems that meet current ADA and building codes.

The concrete picnic tables and ramadas, that are in good physical condition, may be reused at new locations or remain in place, depending on the overall master plan development and if the desired park character is compatible with the existing table and ramada styles.

The existing stone amphitheater is degrading rapidly and does not meet current ADA and building code requirements, however, it may remain in place as an architectural remnant.
A.9 Site Analysis

The Site Analysis is a composite of all the inventory and analysis information presented in the previous subsections of this report. Three major arterial roads provide access to the park site: 67th Avenue creates the west boundary of the park and provides access to the existing equestrian staging area, Pinnacle Peak Road creates the north boundary from the east side of the park to 59th Avenue, and 59th Avenue provides access to the main use area (picnic) area of the park. The alignment of 59th Avenue bisects the park creating challenges for trail users to cross from one side of the park to the other.

Current park use areas include the equestrian staging area near 67th Avenue, the large picnic area adjacent to the wash corridor, and the Pinnacle Peak trailhead area. The existing equestrian staging area provides minimal parking for equestrian trailers and other park users. Other amenities at this location include a water trough, hitching rails, and an interpretive sign. This area appears to be a single use area—providing access for trail users.

The existing picnic area creates one of the largest disturbed areas within the park and has had a large negative impact on the park’s main wildlife corridor. No buffer zone between the picnic area and the wash corridor has encouraged an encroachment of activities incompatible with maintaining the natural riparian habitat. Other impacts to the area have occurred from vehicles. Undeﬁned parking areas and road edges has encouraged users to park where convenient or available regardless of the existing vegetation and habitat.

Two major built features exist within the park and are located between 59th and 67th Avenues. The existing water reservoir is very visible from 67th Avenue and is currently painted white, therefore not blending into the natural desert environment. The existing stone amphitheater is located west of the wash corridor and naturally blends into the rocky hillside.

The Pinnacle Peak Road trailhead area includes a dirt parking area and access to the trails located in the eastern portion of the park. A major pedestrian/vehicle interface exists at the intersection of Pinnacle Peak Road and 59th Avenue since it is the only defined crossing within the park that park users can cross 59th Avenue. Park users also cross 59th Avenue at the summit of 69th Avenue where two existing ramadas are located. This is neither a deﬁned, marked crossing or a safe one.

An existing trail system includes designated and secondary (undesignated) trails throughout the park. Trails located within the eastern portion of the park tend to be more difﬁcult and longer with minimal opportunities for loop routes. Existing and planned bike routes, planned multi-use paths, and planned equestrian trails adjacent to the park site provide good connectivity to regional systems (i.e. New River corridor).

The majority of the park site consists of slopes greater than 8% and includes natural rock outcroppings and a large protected basin area on the east side of the park. This allows for prominent viewpoints not only along the ridgelines, but also in a variety of locations higher on the slopes. These viewpoints are ideal locations for rest nodes for hikers, bikers, and equestrians, and for viewing wildlife. Two canyons that lead up from the east basin area provide good opportunities for developing natural wildlife enhancement areas (wildlife guzzlers) for the existing populations of wildlife that frequent this area. Two areas along the eastern side of the park are also located within the FEMA 100 year floodplain.

Large areas of the park have been disturbed over the years from construction activities, ﬁre, unmanaged activities, and overuse. The majority of these areas occur on slopes less than 3% which have a tendency to be more accessible and assist in identifying areas that are most suitable for use and revegetation.
A.10 Watershed Analysis
(21 pages, not including this page)
ARROWHEAD LAKES HYDROLOGY/HYDRAULICS ANALYSIS

Prepared for

logan simpson design inc.

Logan Simpson Design, Inc.

Prepared by

je fuller
hydrology & geomorphology, inc.

JE Fuller/Hydrology & Geomorphology, Inc.

May 2005
May 2005

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1 PROJECT BACKGROUND

The focus of the project is the natural wash and the sediment basin adjacent to the Arrowhead Lakes Development. The area to be studied is at the Thunderbird Park located in the City of Glendale near 59th Avenue south of Pinnacle Peak road. The natural wash flows south through the park into the sediment basin. The sediment basin is connected to the Arrowhead Lakes through a weir. There is also a recirculation of some flows from the Arrowhead Lakes into the sediment basin. In addition, there is some effluent discharged into the sediment basin. The purpose of the study is to delineate the inundation boundaries of the natural wash for the 2, 10, 50 and 100 year flood events and establish the nature of the basin with respect to sediment trapping.

2 DATA COLLECTION

Data collection was performed to review existing hydrology and hydraulics. The hydrology information was obtained from the Glendale-Peoria Area Master Plan Update Reports by Entellus, Inc. The report contains a volume that addresses the Arrowhead Lakes Hydrology. This volume of the reports provided the HEC-1 model for the area of interest. This HEC-1 model is part of a larger HEC-1 model developed by that study. The watershed boundary for the region is shown in Appendix A as presented in the Glendale-Peoria Area Master Plan Update Reports.

A field visit was conducted to determine the existing conditions. Photographs taken during the field visit are presented in Appendix B. The field visit showed the presence of sandy channel bottom in most wash with dense vegetation in the downstream most section upstream of 59th Avenue.

The topography information was provided by Logan Simpson Design Inc.

The as-builts for the sedimentation basin were obtained from the City of Glendale.
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3 HYDROLOGY

The existing hydrology was obtained from the Glendale-Peoria Area Master Plan Update Reports by Entellus Inc. The HEC-1 model obtained from that report contained the hydrologic model for the 100-year 24-hour storm event. For the purpose of this study, this model was modified to obtain the hydrology for the 2yr, 10yr, 50yr and the 100yr events. This was performed by using the data in the PREFRE portion of the model within DDMSW software. The peak flows obtained from the hydrology models are presented in Table 1.

<table>
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<td>2 Year</td>
<td>133</td>
</tr>
<tr>
<td>10 Year</td>
<td>568</td>
</tr>
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<td>50 Year</td>
<td>993</td>
</tr>
<tr>
<td>100 Year</td>
<td>1184</td>
</tr>
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</table>

4 HYDRAULIC ANALYSIS

The hydraulic analysis was performed using the HEC-RAS (Version 3.1.2) software by US Army Corps of Engineers. The topography information provided by Logan Simpson Design was used to provide the cross-section geometries. ArcGIS software and GEORAS extension were used to generate the cross-section geometries.

The Manning’s n values were set based on the observations during the field visit. A value of 0.03 was used for the sandy channels and 0.045 was used for the overbanks. A value of 0.035 was used in the downstream portion where more dense vegetation was observed.

The field visit revealed the presence of a box culvert at 59th Avenue and 2 RCP culverts at road crossings inside the Thunderbird Park. These culverts were modeled by using approximate dimensions observed during the field visit.
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The peak flows presented in Table 1 were used as the flow data in the HEC-RAS model. A normal depth boundary condition was used at the downstream boundary.

The model results are presented in Appendix C.

5 Floodplain Delineations

The water surface elevations from the results presented in Appendix C were used to generate the flood inundation boundaries for the 2, 10, 50 and 100 year flow events. The delineations are approximate and are presented in Appendix D. The delineations indicate a breakout for larger flows in the upstream portion of the reach located north of Thunderbird Park and south of Pinnacle Peak road. The presence of a small ridge contains the larger flows and directs the flow into the natural wash as flows move south. The presence of the berm in the south side downstream portion of the reach (upstream of 59th Avenue) contains flow in that side of the reach. The flows are directed under the box culvert into the basin located east of the 59th Avenue.

6 Sedimentation Basin

The as-builts of the basin located in the region northeast to the intersection of 59th Avenue and Melinda Drive were obtained from the City of Glendale. The asbuilts shows that the basin is, in fact, designed and built as a sedimentation basin. The as-builts also indicate that the effluents are discharged in this basin from the near-by wastewater treatment plant.

7 Summary

The existing hydrology for the natural wash located between the Pinnacle Peak Road and the 59th Avenue was reviewed. The existing HEC-1 model was used to obtain the 2, 5, 10, 50 and 100 year peak flows. A field visit was conducted to document the existing conditions. A hydraulic model was developed and floodplain boundaries are delineated. Documentation related to the basin located adjacent to the 59th Avenue were reviewed.
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and it was determined that basin was designed to act as a sedimentation basin in addition to other purposes.

8 ACKNOWLEDGEMENTS

JE Fuller/Hydrology & Geomorphology, Inc. would like to thank Entellus Inc. for providing access to the Glendale-Peoria Area Master Plan Update Reports.

9 REFERENCES


APPENDIX A
WATERSHED DELINEATIONS
APPENDIX B
FIELD VISIT PHOTOGRAPHS
Photo 1. Box Culvert at 59th Avenue (looking u/s)

Photo 2. Downstream of outlet of Box Culvert at 59th Avenue

Photo 3. Basin at 59th Avenue

Photo 4. Drop Structure at u/s of Box culvert
Photo 9. Berm near south end of reach

Photo 10. Culvert (looking d/s) located south in Park

Photo 11. Culvert (looking u/s) located north of Park

Photo 12. Mid-Reach Channel (looking d/s)
Photo 13. Mid-Reach Channel (looking u/s)  

Photo 14. Mid-Reach Right Overbank (looking d/s)  

Photo 15. Mid-Reach Left Overbank (looking d/s)  

Photo 16. Upstream Reach Channel (looking d/s)
Photo 17. Upstream Reach Channel (looking u/s)

Photo 18. Upstream Reach Right Overbank (looking d/s)

Photo 19. Upstream Reach Left Overbank (looking d/s)

Photo 20. Ridge located south of Pinnacle Peak Rd
APPENDIX C
HEC-RAS HYDRAULIC MODEL RESULTS
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HEC- RAS Plan: plan
Reach

River

Sta

River: River
Profile

Reach: Reach

Q

Min

W. S.

Crit

E. G.

E. G.

Vel

Flow

Top

Total

Ch El

Elev

W. S.

Elev

Slope

Chnl

Area

Width

cfs)

a
4110

410

411/

11.

(

ft)

(

ft)

(

ft)

(

ft)

(

ft/ft)

(

ftls)

( sq ft)

(

Froude
#

Chl

ft)

Reach

5998. 502

2YR

133

1345. 8

1347

1346. 5

1346. 7

0. 019219

3. 57

37. 26

99. 3

Reach

5998. 502

10YR

568

1345. 8

1347

1347. 1

1347. 6

0. 013927

5. 16

110. 16

133

1. 03
1

Reach

5998. 502

50YR

993

1345. 8

1348

1347. 6

1348. 1

0. 013152

5. 89

168. 61

160

1. 01

Reach

5998. 502

100YR

1184

1345. 8

1348

1347. 7

1348. 3

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APPENDIX D
FLOODPLAIN DELINEATIONS
A.11 Sedimentation Basin Topographic Survey

Survey Completed by Brady, Aulerich & Associates, Inc.

Findings

Overall, the survey of the sedimentation basin and the water velocity dissipation system ("dragon’s teeth") located between the culvert and the basin edge, appear to be meeting or exceeding the design expectations intended.

The lake was thought to be constructed in 1984, and as-built plans have been obtained from the original project construction. The as-built plans indicate an initial lake depth of approximately 15 feet at the center of the lake/sedimentation basin.

The intent of the basin is to trap and filter sedimentation particles, silt, sand, rocks and other debris before the water enters into the rest of the Arrowhead Lakes system.

Since the original as-built plans for the basin were surveyed in a conventional manner while no water was in the basin, and the survey conducted in 2006 was done using GPS while the lake was full, it is difficult to do an exact comparison. Survey points, however, allow for some fairly accurate comparisons of the basin bottom as it was built in comparison to the current day. These comparisons can then be used to approximate the amount of silt, sand and general debris that have settled onto the lake bottom over the past 22 years.

An analysis of 11 points throughout the basin indicated an average increase in the elevation of the lake bottom of 2 feet, 2 inches. The 11 points ranged from a decrease in depth from as little as .7 inches, to a maximum decrease of 4 feet at a point on the southwest portion of the basin. In general, however, the majority of the points fell within the range of 1.5 – 2.5 inches of silt.

Given an average increase of 2 feet, 2 inches over 22 years, the average annual silt increase or bottom depth decrease of the basin is approximately 1.2 inches per year. This is only an average over the past 22 years. The basin has likely experienced heavier influxes of silt during the years where significant storms pushed higher amounts of sediment into the basin, and less amounts during dry years.

If the current pattern continues given the current effectiveness of the basin, it will be many years before any significant dredging will be required.

The current vegetation between the culvert and the lake edge is acting as a natural barrier to large flows of silt entering the basin. Proposed revegetation of the wash upstream would further limit sediment run-off into the basin. Periodic monitoring of the basin depth would be advisable in years where heavy water flows are present. Now that the survey has been done using a GPS system, it will be much easier to take readings at a few identical locations, rather than re-surveying the entire basin.
TOPOGRAPHIC SURVEY
FOR
CITY OF GLENDALE
6210 WEST MYRTLE AVENUE
SUITE 111
GLENDALE, ARIZONA 85301

Figure 15a. Sedimentation Basin Topographic Survey
### A.12 Park Amenities Analysis

#### Thunderbird Conservation Park Amenities

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<th>Number of Shade Structures</th>
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Thunderbird Conservation Park Amenities (continued)

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A.13 Thunderbird Conservation Park Trail Inventory

As part of the on-site analysis conducted from September 2005 through April 2006, staff and the State Park Trail Maintenance Crew Representative inventoried existing designated trails as well as undesignated trails (social trails). They found that currently the park offers 12 designated trails totaling to approximately 17 miles. In addition, 10 undesignated trails were identified of which several are recommended for designation and others for removal. (See master plan recommendations and Thunderbird Conservation Park and Trails Map [page 2] for details).

Current Designated Trails

<table>
<thead>
<tr>
<th>Designated Trails</th>
<th>Approximate Length</th>
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<td>1. H-1</td>
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<td>3. H-2</td>
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</tr>
<tr>
<td>11. H-5A</td>
<td>0.4 mile</td>
</tr>
<tr>
<td>12. Unmapped Trail</td>
<td>0.2 mile</td>
</tr>
</tbody>
</table>

(Extension of H-5 from Lot B-Lot G) 17.1 MILES

Current Undesignated Trails

1. North fence line between 67th and 59th fence line
2. SW of 59th Avenue along residential wall
3. East of 67th to H-1
4. Parking lot B to H-1
5. Three spider trails at ramadas 9, 10, 11
6. Two spider trails at H-4 at top
7. At ramadas 14 & 15 leads to H-2
8. 51st/Pinnacle Peak Road
9. 55th Parking lot to H-1/H-2
10. 55th/North of Pinnacle Peak Road
A.14 School Park Use Analysis

City of Glendale
Parks and Recreation Department Memorandum

Date: April 27, 2006
To: Becky Benné, Parks and Recreation Director
Cc: Parks and Recreation Commission Chair Ted Hansen
          Parks and Recreation Commissioner Stanley Long
From: Shirley Medler, Deputy Parks and Recreation Director
Subject: Thunderbird Conservation Park Master Plan School Utilization Report

Parks and Recreation Commission Chair Ted Hansen, Commissioner Stanley Long, and Parks and Recreation Department Deputy Director Shirley Medler conducted interviews with school representatives in March and April, 2006 to determine school's current uses and future needs for Thunderbird Conservation Park. Chairman Hansen developed a set of questions as follows:

Ties with current curriculum requirements
- What are current requirements at different grade levels
- Foreseen future curriculum requirements
  - What is required to work in conservation education
    - Would P&R supply field trip destination alone or is the requirement broader

Number of field trips per year per school
- Number of trips for this purpose
- Grades that would use for Conservation education
- Ages

Arrangement
- Amount of time ahead schools would schedule trips
- How to schedule — web? phone?

Organization of examples and education presentations
- Need to be hands-on?
- Exhibit indoors?
- In glass case indoors / outdoors?
- Outdoors signs?

Min requirements to make this a field trip
- Does there need to be a classroom
- Would an outdoor presentation area
- Require lesson material ahead?
- Amenity requirements
  - Classroom? AV? White board?

Structure of a successful field trip
- Length of time total
  - Age / Grade dependent?
- length of time doing lecture
- how many times unload /load from bus
  - desired vs acceptable
Transportation requirements
Bus parking? Off site parking
Bus turn around, straight through?
one way ok?
Special needs van requirements?

If Outdoor Meeting area requirements
Max temperature for kids to have a ranger talk outdoors
Min temp
Shade requirement
Seat design
Required amenities
Water, bathroom, other?

Time of year field trips would happen
Normal school visits
Summer school

Other venues currently used by your schools for conservation Ed
Will this duplicate what is available?
(eg Rock Museum, Mesa Museum, State park conservation center, botanical garden)
What would make a TCP unique?
What would make you want to schedule a field trip to TCP?

Non-school education (weekend, summers, after hours)
What are your recommendations
- how this could be accomplished
- What would make this a destination
  Unique features of TCP?
  Desert education?
  (eg Rock Museum, Mesa Museum, State park conservation center)

Using this set of questions as a guide, the committee gained a broader perspective on the needs of our community's schools through one-on-one interviews with principals, athletic director, science teachers and coordinators.

Schools Visited

Copper Canyon High School (Tolleson School District)
Glendale Union High School District Science Department
Deer Valley High School (Deer Valley School District)
Mountain Ridge High School (Deer Valley School District)
Canyon Elementary School (Peoria School District)
Copper Creek Elementary (Deer Valley School District)
Legend Springs Elementary (Deer Valley School District)
Hillcrest Middle School (Deer Valley School District)

Committee Findings

Generally, we found that elementary, middle and high schools would use the park to enhance their students understanding of biology, ecology and social studies. High schools would also use the park for dual or multi-team cross-country meets.

Students at the elementary and middle school levels would be able to use the park for field trips and would likely be at the park for 1 - 4 hours in most cases. During that time, they would want to have an expert-lead talk and study the actual outdoors, which could include interpretive interactive activities. The schools would need accessible shade, water and restrooms, and might have lunch at the park. Visits
from elementary schools would likely include an entire grade, with 60 – 100 people including parent chaperones. Middle schools would typically range from 80 – 120 for educational visits, or possibly larger for team building visits. In all cases, parking for buses on-site or nearby is desirable.

High schools would likely only be at the park for an hour or less in most cases. They would also use the park for cross country track meets, hiking clubs, science and ecology clubs, and other extracurricular activities on the weekends and after school hours.

All schools wanted to have an expert on site to assist with their field trips. The expert ideally would provide an introductory talk about the park and what they would see while sitting in a shaded area. The level of direction and assistance required increases the lower the grade level. Materials that the schools could use in the classroom ahead of time would be helpful in helping teachers prepare, allow students to study what they would see at the park ahead of time, and help in class follow-up after the visit. Some schools suggested having the ability to have powered amplification for the introductory talks. They all wanted us to follow the State Standards for Education in the sciences and social studies areas in preparation and provision of those materials.

All elementary grades would use the Park for education, especially grades 3-6. Topics suggested by the schools keep in line with Arizona Standards around science, math and social studies. They included conservation, wildlife and biology, wetlands and geology, and desert education. The middle school visited suggested these, as well as social studies. High school programs would include these programs at a more advanced and focused level.

The schools indicated the most likely time for Park field trips would be late October or November to early April as these are cooler and conflict less with testing. All schools indicated individual teachers make the activity arrangements typically up two to five weeks ahead, with the teachers establishing their lesson plans in advance of that. They indicated having information in advance about park program, event opportunities and available time slots would help teachers and athletic staff with planning an event and making arrangements.

The schools, with exception of those within a few blocks of the park, would bus students to the park. Parking for buses either at the park, or outside the park and return when needed would also work in most cases.

Locations currently used, or suggest for similar field trip experience, include Lake Pleasant, the Botanical Gardens, White Tank Mountains, Pioneer Village.

Other educational opportunities suggested by the schools included courses with Glendale Community College, and Seniors Desert Education.
A.15 On-Site Park User Questionnaire

Answers are followed by number of responses for each. Some respondents replied with multiple answers.

1. Did you come to Thunderbird Conservation Park to:

- Hike: 277
- Mountain Bike: 20
- Trail Ride: 7
- Picnic: 13
- Jog/Run: 67
- Watch Wildlife: 17
- Other: play guitar, road bike, walk dogs, visit with friends, train for hike

2. How often do you come to Thunderbird Conservation Park?

Every day: 39
2 - 3 times/month: 35
No answer: 1
2 - 3 times/week: 132
Once a month: 12
Once a week: 83
A few times a year: 16

3. By which mode of transportation do you come to Thunderbird Conservation Park?

- Drive: 290
- Bike: 23
- Walk: 20
- Horse: 2
- Other: 2 (motorcycle)

4. How far do you travel to come here (one way)?

- 1 Block: 3
- 4 Blocks: 1
- 5 Blocks: 4
- 1 mi: 42
- 1.5 mi: 4
- 2 mi: 37
- 2.5 mi: 4
- 3 mi: 45
- 3.5 mi: 1
- 4 mi: 13
- 5 mi: 43
- 6 mi: 20
- 7 mi: 9
- 8 mi: 7
- 9 mi: 2
- 10 mi: 18
- 12 mi: 3
- 13 mi: 1
- 15 mi: 9
- 16 mi: 1
- 18 mi: 2
- 20 mi: 4
- 25 mi: 4
- 5, 10, 15, 25 minutes: 4
- 420 minutes: 2

5. What do you like about Thunderbird Conservation Park?

- Good trails: 87
- Convenient/Close to home: 68
- Clean: 37
- Good hiking, walking: 35
- Natural preserve in the city: 35
- Trail difficulty choices: 35
- Beauty, view: 32
- Everything: 19
- Privacy/quiet: 14
- Open space: 13
- Safety: 8
- Friendly people: 7
- Nice running area: 5
- Picnic facilities: 4
- Hours: 3
- Good parking: 3
- Easy access: 3
- No fees: 3
- Restrooms: 2
- Pond: 1
- Amphitheater: 1

6. What changes, if any, would you like to see at Thunderbird Conservation Park?

- None: 122
- More Restrooms: 24
- Improved/More Parking: 8
- Smoother Trails: 8
- Working Restrooms: 7
- Water Fountains/Stations: 6
- More Trails: 6
- Land Bridge across 59th Ave: 4
- Maps: 4
- Playground: 4
- Enforce Picking up after Dogs: 4
- Safe crossing/connection: 4
- Less Traffic: 4
Enforce Leash Laws: 3  No Dogs on Trail: 3  Horse Poop Bags: 3
Looped Trails East of 59th: 3  More Trash Cans: 3  Trail Markers: 3
Less Encroachment of Homes/No More Houses: 3  Unlocked Restrooms: 2
No Horses on Trails: 2  Trail Maintenance: 2  Neighborhood Access: 2
Designated Mountain Bike Trails: 2  Cleaner Restrooms: 2


7. Have you participated in a Thunderbird Conservation Park Master Plan public input process previously?
   Yes, Focus Group Meeting: 2  No: 292
   Yes, Public Meeting: 7  No reply: 3
   Yes, Survey Completion: 2
A.16 Additional Arizona Game and Fish Department Recommendations

Email Correspondence:

-----Original Message-----
From: Joe Yarchin [mailto:JYarchin@azgfd.gov]
Sent: Tuesday, March 14, 2006 2:10 PM
To: Cardin, RJ
Cc: Eric Swanson; Alicia Jontz
Subject: Thunderbird Park Master Plan Review

R.J.,

Using the Master Plan Process Summary, I have reviewed the Thunderbird Conservation Park Master Plan from biological and watchable wildlife program perspectives.

The Biological Resources section is sound. On page nine of that section, the Arizona Game and Fish Department (Region VI) contact needs to be updated. I am no longer in the Urban Wildlife Specialist position. The Arizona Game and Fish Department (AGFD) is still available to assist with wildlife-related conflicts. The contact number for the Urban Wildlife Specialist is 480.981.3400 ext. 3554. Currently, that position is vacant but will be filled soon. The Regional office can assist in the interim. Communication avenues should remain open between the city, local residents and Region VI to minimize the impact of wildlife through education and, if necessary, conflict resolution recommendations. New and current local residents should be made aware of the reality of living in close proximity to the park and its amenities.

The Preliminary Master Plan (Sept. 6, 2005) does not include either of the two wildlife guzzlers which were included in each of the three alternatives (April 21, 2004). Any supplemental water for wildlife is going to be useful and should remain in the plan.

The spatial separation of the various areas (staging, wildlife, outdoor group) should enhance the experience of the different users. The plan for a new interpretive/accessible trail system accompanied by the revegetation areas and interpretive garden will improve the educational emphasis of the outdoor group area. The planned restorations appear to be in appropriate sites. The areas of human use will be augmented by the planned native revegetation (outdoor group area) and wildlife habitat restoration (west side corridor and east side sediment basin). The specific plants and their arrangement are not discussed in the plan and should be reviewed by qualified individuals before implementation occurs. Opportunities from wildlife habitat restoration efforts and related interpretive plans will be of interest to the department and the Urban Wildlife Heritage Grant process can be approached for assistance with both.

There is a potential of substantial increase in public use of the sediment basin area once it is opened to public access from the west side of 59th Ave. Increased O and M considerations will need to be addressed. The extra human traffic could negatively affect wildlife behavior and possibly use of the site. Signs should be placed to inform visitors of proper wildlife viewing etiquette as well as information on wildlife likely to be seen. Again, there is potential for assistance through the AGFD Heritage Grant process. As mentioned in one of the comment sections of the Process Summary, there should be some attempt to exclude public access to the south shore of the sediment basin.

The existing wildlife viewing blinds are not useful with the current low water level in the sedimentation basin. They are a bit far-removed to be functional for basin-related wildlife (including bird) viewing. During the planning stages of the Heritage-funded blinds, the parks and recreation superintendent and the city engineering landscape architect assured AGFD the water level would consistently be at the (higher) established banks, close enough to have the blinds be beneficial for watching wildlife (January 15, 2002; S. Medler to V. Supplee e-mail). The department would like every effort be made to increase the water level to allow the Heritage-funded blinds to fulfill their original purpose. If salt cedar (tamarisk) eradication along the shore of the basin is implemented, it should only occur if the vegetation is replaced by...
cottonwood/willow stands. The tamarisk is used by wildlife and removal would leave a void if nothing replaced it.

With the potential for increased public use of the Conservation Park, AGFD would like to continue to assist and advise on incorporating wildlife viewing and conservation strategies to enhance experienced-based recreational activities. As presented, the plan is well-rounded and should be successful in fulfilling the desired goal of allowing multiple use of the park while minimizing the negative impacts of increased use. It is important that general and specific regulatory issues be carefully addressed to solidify the conservation/preservation efforts put forth in the plan.

Thank you for the opportunity to comment on the plan.

Joe Yarchin
Watchable Wildlife Project Manager
Arizona Game and Fish Department
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602.789.3568 (office)
602.789.3926 (fax)
jyarchin@azgfd.gov
A.17 American Conservation Experience Trail Review

Thunderbird Conservation Park Trail Maintenance Grant
Accomplishments and Recommendations
April 2, 2006

What has been Accomplished
To date, the trail maintenance crews with the American Conservation Experience (ACE) group have completed about 1.5 miles of trail maintenance. They began on H-4 behind the amphitheater, went in a westerly direction around the north side of the mountain, then south, and then east to the lookout at the top. Upon the completion of this one-mile stretch of trail, they then walked the entire mile and picked up all loose trash that had been dropped by the public.

During their work on this one-mile piece of trail, there were two sections of trail that were abandoned because they were too steep to repair and maintain and two short reroutes were created. In one case we abandoned a 20-foot section and rerouted a 30-foot trail. In the second case we abandoned about 30 feet and rerouted to the east and created about 45 feet of new trail. There was also one social trail that was developed into a designated trail because of the heavy traffic that it carries and because it was a logical loop off the top of the mountain. This new section of designated trail is about 90 feet long.

The Trail Crew then backtracked to the ridgeline and worked another half mile of trail heading west on H-4b to connect with H-1, and then they will be going east on H-1 to the parking lot at 59th Avenue.

To date Arizona State Parks has spent $30,465 on our trail system. A calculator will show that we are paying about $20,300 per mile for trail maintenance, but that number will go down dramatically as the crews get to easier sections of trails. They started in one of the most difficult sections.

Trail Change Recommendations
Changes to our existing designated trails were recommended at an on site meeting with State Parks on March 7, a walk-through of trails with Ronny West, an ACE Crew Leader on March 23, and numerous informal conversations with Chris Baker, head of ACE, and other crew leaders.

• If the existing trail head at parking lot J is improved, then sections of the old BMX motocross trail should be naturalized, leaving only one trail improved. There are several short cuts that go west from 5A and should be eliminated and naturalized.
• ACE recommends the elimination of several short cuts going west from Ramadas 9, 10, and 11.
• ACE also recommends changing part of the H-5 undesignated trail system to a designated and improved status because of existing usage that serves the public interest. This would add about ½ mile of designated trail. This trail connects parking lot G to H-4.
• One of the best horse trails in the park is undesignated and should become an official trail. It starts at the south end of the 67th Avenue parking lot, south to the park boundary and then east to H-1. It is about a ½ mile in length.
• A very wide trail that parallels the north boundary fence is used by hikers, equestrians and Rangers on patrol and should become a designated trail and maintenance road.
• On the east side of the park there is a ½ mile section of trail that should be abandoned because it goes directly up a fall line and cannot be maintained. A reroute is too long for the scope of this project but could be addressed through a State Parks Heritage Trails grant.
• More recommendations will be forthcoming as the crews move to new areas in the park.

Standards
ACE is following a Best Practices Design Guide that was published in 2001. This publication is what has set National Trail Standards and Arizona State Parks has endorsed as their guide for trail construction and maintenance. The publication talks about such things as shared-use path width, passing spaces, protruding objects, grade, resting intervals, edge protection and trail surfaces. The standards that are applicable to our Thunderbird Conservation Park trail system include:
• A 4-foot width trail (which includes the narrowing of some trail corridors)
• A firm and stable trail surface (removal of loose gravel)
• Boulder removal and tread leveling

Thunderbird Conservation Park
City of Glendale

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• Utilizing native tread surfaces as much as possible
• Installation of erosion control features (check dams, drain dips)
• Construction of retaining walls in areas of slope failure and switchbacks
• In-filling of trench sections with native materials

Ongoing Maintenance
ACE is developing suggestions for continued trail maintenance that are appropriate for our desert trail system and will be making those recommendations at the completion of their work. They will likely include things like:
  • Volunteer groups that do trail maintenance will need to have a trained trail supervisor present
  • The check dams and drain dips will need attention after rains to clear and reshape them as needed
  • See attached communication from Chris Baker, American Conservation Experience.
A.18 Culvert Research Report

Research on Use of culverts and underpasses in the metropolitan area –
In developing recommendations for inclusion of the culvert at 59th Avenue, north of Deer Valley Road for a trail connection, staff spoke with Planning and Parks and Recreation professionals from valley cities and Maricopa County. All agreed that culverts work as trail connectors, but they are not the best solution to connectivity needs. Culverts provide connectivity for continuous, off-road, multi-use regional trail systems. They do help to keep trails off streets away from vehicular traffic, but diligence is necessary to keep them clean and safe for the multi-use they provide.

Scottsdale -
Trails with tunnels including Indian Bend Wash. Over 30 underpasses with some culverts are planned in the trails master plan.
Comments - not optimal, some graffiti and at times are a venue for a hang out for kids.

Phoenix -
Trails in the Phoenix Mountain Preserve with culverts: Trail 100 at 7th St. and Cave Creek Rd under 51st St, Dreamy Draw.
Graffiti is minimal but culverts need to be cleaned of soil deposits, debris and brush regularly to keep them useful and safe. Phoenix is planning to add lights to the tunnels. The 51st Avenue tunnel is a little more complex because it is longer and is owned by ADOT.

Mesa -
Trails under two areas of the 202 utilize the underpass, one on the far edge of the city and one at the CAP Canal. Both are lighted, but the trail to them is not. Concrete trails are being planned, and believes because these are so far away from activity that they are experiencing more use by people living in them and vandalism (breaking the lights out, and graffiti) than when the trails are more heavily used in the future. The equestrians like the underpasses because they don't want to on the street level. The trails are important because of the regional connectivity (part of the Sun Circle Trail).

Peoria -
Use of box culverts at Lake Pleasant Parkway - functional, but not pretty. Provided ideas for more attractive culvert trail connectors, which they plan to use in the future.

Maricopa County -
No culverts in any of the county parks, but do have an underpass under I17 that will connect Spur Cross Park (north of the city of Cave Creek) to Lake Pleasant. Recommend no less than 10 feet height (for 2 lane roadway) and 12 feet height for more than two lanes. The length of the tunnel determines the necessary height because, though mountain bikers don't have a problem with it, equestrians like to "see the light at the end of the tunnel".

Glendale -
Grand Canal, Skunk Creek, Thunderbird Paseo - several underpasses in all of these regional linear parks. Some graffiti, maintenance involved. At times find evidence of people spending time under them. But, the park users enjoy being able to be off the streets, and at approximately 61st Avenue and Union Hills another underpass is being constructed through the GO funds based on citizen requests for this final off-street connection in the Skunk Creek Trail system.

Tempe -
Underpasses are used in the Indian Bend Wash trail system from Town Lake in Tempe to McKelleps Park in Scottsdale. In Kiwanis Park, the All American Way trail extends under a bridge that is well lighted. At Papago Park, under Kerry Road, the lighting has been vandalized once in a while, but they attribute that to being so far out of the way. With more activity, the vandalism occurs less often.
Queen Creek -
They are planning on trail systems that will need to run under roadways, but do not have any at this time.

Cave Creek –
They have plans to run the trail over a box culvert, and using the culverts and tunnels in the rights of way in planning the trails system for equestrians, bicyclists and hikers.

Meeting at 59 Avenue Culvert with Police and Park Rangers - February 9, 2006
Attendees:
Glendale Police Department Community Action Team officers, Ida Trompeter and Juan Rivera
Glendale Police Department city liaison, Joan Campbell
Ranger Supervisor, Wayne Drummond
Deputy Parks and Recreation Director, Shirley Medler

We looked at the culvert from both the east and west sides and concluded that, if we determine the culvert to be a feasible trail connector, some suggested recommendations from the police department regarding its design and use include:

The goal is for a safe yet convenient route, identifying the space as public access, yet not isolating it;
Make sure it is lighted (suggest low sodium);
Maintain open landscape of the area for visibility;
Make sure emergency vehicles can access it;
Install a street sign above the culvert for easy orientation by users;
Establish pride of ownership at the design stage;
Monitor the use

Meeting with representatives from “Save the Park” group, Parks and Recreation staff, and Community Action Team members, Ida Trompeter and Juan Rivera – 3-9-06

Concerns with:
Lights or no Lights
Keeping people from using the trail for access to back yards of homes adjacent to park
Water flows – safety of trail users, water hydrology/engineering for direction and force
Baffling – how do we keep that for water flow and allow for horses and bikers, hikers?
What will be the cost?
Does the Army Corp of Engineers need to be involved? Maricopa County?
Policing – CAT team members didn’t say no to the idea, just to be aware of precautions in design and monitoring.
Wildlife – concerns with them now more prevalent, but could go away due to more exposure – example: Bald Eagle now there when never before
Trail connectivity – RJ let them know the trail would be connected at the viewing blinds 1, 2, 3
Ida let them know that more of the type of activities we’re promoting, hiking, biking and equestrian use, helps deter the illegal activities. Crucial to have neighborhood support.
Concerns are with crimes already not being responded to by PD.
Security and emergency access would be at the maintenance gate north of the culvert.
A.19 Parking Lot Observations

Thunderbird Parking Lot Observations

There currently are a total of 13 parking lots located within Thunderbird Conservation Park with a total capacity of approximately 271. Between the end of November through December 2005, staff conducted periodic observations of the parking lots to record the number of vehicles in the lots. The observations were random and at different times of the day and week. Based on capacity, staff found that Parking Lots A, F, K, and 55th Avenue were the most heavily used, Parking Lots C, D, E were moderately used; and Parking Lots B, G, H, and J were the least used. Parking areas not included in the observations were two parking spaces located between Parking Lots A and B and the viewing blinds parking lot located adjacent to the sedimentation basin lake area.

As a result of the observations, staff determined that existing parking areas are not be maximized. The master plan recommendations include utilizing signage, trailheads and gate access to better direct park users to available parking and provide relief to the parking lots that are the most heavily used. In addition, minimal expansion of parking and locations are proposed for the future and are identified in the master plan recommendations.
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APPENDIX B: PUBLIC PARTICIPATION PROCESS (2004)

B.1 Introduction
Providing opportunities for the community to actively participate in the master planning process of Glendale's only conservation park, was crucial to the development of the Thunderbird Conservation Park (TCP) Master Plan. Public meetings and focus groups were held to identify the community's diverse interests, issues, and needs in an effort to provide a common vision and comprehensive foundation for the development of the master plan. These meetings were also held to solicit the public's input on the conceptual master plan alternatives and preliminary master plan, as well as the draft of the final master plan.

Following is a summary of the needs assessment, public meetings, and focus group meeting that provided the basis for the park's programming and the development of the Draft Preliminary Master Plan.

B.2 Needs Assessment
TCP is classified as a regional park facility and therefore meant to serve residents within an area equal to a 30-minute drive. Likewise, the Open Space and Trails Master Plan is meant to serve the entire area within the City of Glendale city limits. As an additional public participation tool, and to best understand the needs and desires of the community at large for both master plans, a joint needs assessment was undertaken. This needs assessment consisted of a statistically valid random survey given to City of Glendale residents by mail or phone. Specific questions relating to open space, trails, and park and recreation facilities were developed to identify the community's needs and desires as well as prioritize what those needs and desires are. Following is a summary of the TCP needs assessment results.
THUNDERBIRD CONSERVATION PARK MASTER PLAN
COMMUNITY-WIDE NEEDS ASSESSMENT (403 Respondents)

From a list of 24 improvements that could be made to Thunderbird Conservation Park, respondents were asked to rate the importance of each one. The following summarizes their responses.

<table>
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<tr>
<th>Improvement</th>
<th>Very Important</th>
<th>Somewhat Important</th>
<th>Total</th>
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<td>Restrooms</td>
<td>63%</td>
<td>20%</td>
<td>83%</td>
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<tr>
<td>Shade Trees</td>
<td>62%</td>
<td>18%</td>
<td>80%</td>
</tr>
<tr>
<td>Drinking Water</td>
<td>63%</td>
<td>17%</td>
<td>80%</td>
</tr>
<tr>
<td>Parking</td>
<td>51%</td>
<td>29%</td>
<td>80%</td>
</tr>
<tr>
<td>Emergency Response Services</td>
<td>59%</td>
<td>19%</td>
<td>78%</td>
</tr>
<tr>
<td>Picnicking Areas</td>
<td>45%</td>
<td>32%</td>
<td>77%</td>
</tr>
<tr>
<td>Hiking Trails</td>
<td>49%</td>
<td>26%</td>
<td>75%</td>
</tr>
<tr>
<td>Rest Areas along the Trails</td>
<td>46%</td>
<td>28%</td>
<td>74%</td>
</tr>
<tr>
<td>Scenic Vistas for Viewing along the Trails</td>
<td>27%</td>
<td>41%</td>
<td>68%</td>
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<tr>
<td>Historic Restoration of Amphitheater/Ramadas</td>
<td>30%</td>
<td>37%</td>
<td>67%</td>
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<tr>
<td>Wildlife &amp; Bird Watching Areas</td>
<td>31%</td>
<td>34%</td>
<td>65%</td>
</tr>
<tr>
<td>Multi-Use Trails</td>
<td>29%</td>
<td>36%</td>
<td>65%</td>
</tr>
<tr>
<td>Playground Equipment</td>
<td>35%</td>
<td>29%</td>
<td>64%</td>
</tr>
<tr>
<td>Handicapped Accessible Trails</td>
<td>37%</td>
<td>25%</td>
<td>62%</td>
</tr>
<tr>
<td>Star Watching Areas</td>
<td>26%</td>
<td>36%</td>
<td>62%</td>
</tr>
<tr>
<td>Interpretive Nature Trails</td>
<td>21%</td>
<td>37%</td>
<td>58%</td>
</tr>
<tr>
<td>Outdoor Amphitheater</td>
<td>17%</td>
<td>38%</td>
<td>55%</td>
</tr>
<tr>
<td>Mountain Biking Trails</td>
<td>22%</td>
<td>31%</td>
<td>53%</td>
</tr>
<tr>
<td>Environmental/Interpretive Center</td>
<td>20%</td>
<td>33%</td>
<td>53%</td>
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<tr>
<td>Special Event Areas</td>
<td>13%</td>
<td>39%</td>
<td>52%</td>
</tr>
<tr>
<td>Equestrian Trails</td>
<td>12%</td>
<td>27%</td>
<td>39%</td>
</tr>
<tr>
<td>Public Art within the Park</td>
<td>8%</td>
<td>30%</td>
<td>38%</td>
</tr>
<tr>
<td>Equestrian Staging Areas</td>
<td>8%</td>
<td>27%</td>
<td>35%</td>
</tr>
<tr>
<td>Concessions Area</td>
<td>11%</td>
<td>22%</td>
<td>33%</td>
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B.3 Public Meeting No. 1

Public Meeting No. 1 was conducted in two parts. Part One included the park’s history and an overall background of the project, which identified the need for developing an updated master plan. Continuing pressures of adjacent urban development and the need to manage the amount and types of activities within the park are crucial to the conservation of its cultural, natural, and scenic resources. In addition, existing facilities constructed 30–50 years ago have degraded to a point of non- or limited-use due to physical condition or are in non-compliance of current building codes and federal laws (ADA).

Also presented in Part One of Public Meeting No. 1 was an overview of the master planning process and the purpose of this first meeting. Public Meeting No. 1, being a first step in the master plan process, was particularly important since the information gathered from the public at this meeting would assist in developing the park’s program elements. This information along with the results of the needs assessment would provide the basis for identifying the types of amenities TCP would need to meet the future demands and desires of the community as a whole.

Part two of Public Meeting No. 1 consisted of an interactive solicitation of the public’s values, issues, and needs as they related to TCP. The values were based on the premise of “if you were to move away from Glendale for five years, what elements or aspects of TCP would you want to stay the same?” Likewise, issues and needs were solicited under the same premise, except “what would you change?”

The following is a list of the values, issues, and needs that were received and documented at Public Meeting No. 1. This input, along with the results of the needs assessment, provided the foundation for forming the vision, goals and objectives of the TCP Master Plan.

Values

- Preserve the park (guarantee)
- Preserve the wash
- Preserve adjacent undeveloped lands
- Natural trails
- Preserve hiking trails
- Preserve plant life (cactus)
- Keep existing wildlife
- Maintain wilderness
- Marginal isolation
- Maintain connections to open space
- Maintain/preserve adjacent area
- Maintain equestrian/hiking trails
- Education (maintain preservation)(appropriate signage)
- Orientation/educate new users
- Scenic resources; natural landscape character
- Carrying capacity
- Restriction of use (dogs)
- Maintain cleanness
- Broad public use
- Maintain horse trailer area
- Existing/historic amphitheater
- Conservation for research – high level
- Quiet
- No lighting
- Free use (no fees)
- Children friendly
- Keep 59th Avenue a two lane roadway
- Safe feeling in the park
- Friendly Park Staff
Issues

- Not enough pedestrian friendly access into the park
- Multiuse trails
- Separation of users (conflict)
- Privacy of trails
- No handicapped accessible trails
- Trails are not maintained
- 67th Avenue side of park – trails not maintained
- Trail litter
- Trash across from Mountain Ridge High School
- Horse waste
- Dog waste
- Leash enforcement
- Level of usage needs to be defined
- Perimeters are not defined
- Picnic is adequate for existing areas
- Number of functioning bathrooms
- Dust control from parking lots
- Erosion
- Air traffic
- Available funding
- Encroachment of housing near trails along the northern edge
- Level of maintenance
- Operation budget to follow through
- Cost of changing the park
- Security rural enforcement
- Shooting along the southern boundary near 59th Avenue
- Lack of secure bike storage
- Proximity of fire station
- Protect the pristine environment against a catastrophic event (fire protection)
- Parking along 59th Avenue
- Semi-truck traffic pollution and noise
- Speed of 59th Avenue
- Noise from 59th Avenue traffic
- Accidents along roadway curve
- Continuous wildlife crossing
- Plans to make 59th Avenue a four lane highway (threaten park environment)
- Safety of 59th Avenue
- Undefined parking along roadways
- Litter from roadway

Needs

- Drinking fountains along 67th Avenue
- Restroom by Pinnacle Peak Road parking lot
- Handicap accessible trails (graded trails not necessarily paved)
- Better access to wildlife blinds
- Safe access to cross 59th Avenue
- Maintain trails
- Dog waste bags and receptacles
- Hiking trail for dog lovers
- Accessible handicap trails
- Natural interpretive areas
- Acquire adjacent land
- Rest areas along trails
- Provide recyclable containers
- Loop trail along east side of park
- More shade and restroom around amphitheater
- Buffer zone around outside boundary
- Connection across public road (south/east)
- Maintain access to peninsula

In addition to the values, issues, and needs solicitation, a public meeting survey identifying types of park characteristics, facilities, and amenities was made available to the attendees to fill out in order to assist in identifying how strongly they felt about specific park elements. The survey required the respondents to rank their preferred components on a scale of least, somewhat, major, or most importance. The results of this survey assisted in determining the types of facilities and components the survey respondents desired and how they prioritized their selections. The following summarizes the survey results of the public's feedback from Public Meeting No. 1. Following the survey results is additional comments that were received from the Public Meeting No. 1 attendees.

THUNDERBIRD CONSERVATION PARK MASTER PLAN
PUBLIC MEETING #1 SURVEY RESULTS (57 Respondents)

The following information chart assisted in determining the type of facilities and components you desired and their prioritization. This information helps to identify how strongly you felt about each item and characteristic of your park.

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<tr>
<th>MASTER PLAN ELEMENT</th>
<th>SCALE OF IMPORTANCE</th>
<th>TOTAL RESPONDENTS</th>
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<tbody>
<tr>
<td></td>
<td>LEAST</td>
<td>SOMewhat</td>
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<tr>
<td>1) What planning and development guidelines do you feel are most appropriate for this park?</td>
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<tr>
<td>Preservation of Park Resources</td>
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<td>0%</td>
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<tr>
<td>Conservation of Park Resources</td>
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<tr>
<td>Historical Restoration</td>
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<tr>
<td>Recreational Development</td>
<td>49.1%</td>
<td>35.8%</td>
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<tr>
<td>2) What types of park facilities would you use or enjoy?</td>
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<td>Open Picnic Tables with BBQs</td>
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<td>14.3%</td>
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<td>65.3%</td>
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<tr>
<td>Group Picnic Ramadas/Area</td>
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<td>17.0%</td>
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<tr>
<td>Special Gathering/Events/Activity Area</td>
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<td>23.5%</td>
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<tr>
<td>Play Areas (6-12 year olds)</td>
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<td>13.7%</td>
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<tr>
<td>Tot Lots (2-5 year olds)</td>
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<td>11.5%</td>
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<tr>
<td>Sand Volleyball Courts</td>
<td>94.2%</td>
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<tr>
<td>Basketball Courts</td>
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<td>3.8%</td>
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<td>SOMEWHAT</td>
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<tr>
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3) What amenities are the most important to include in the park?

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<td>30.9%</td>
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</tbody>
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THUNDERBIRD CONSERVATION PARK MASTER PLAN
PUBLIC MEETING #1 SURVEY RESULTS (57 Respondents)

The following information was identified to be the major and/or most important facilities and components for the park, from the surveys distributed at the first public meeting. Percentages were derived from the total number of completed surveys submitted.

1) What planning and development guidelines do you feel are most appropriate for this park?

- Preservation of Park Resources 100%
- Conservation of Park Resources 93%
- Historical Restoration 33%
- Recreational Development 15%

2) What types of park facilities would you use or enjoy?

- Hiking Trails 94%
- Unpaved Trails 92%
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<td>Historical/Cultural Interpretive Areas</td>
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<td>Sand Volleyball Courts</td>
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<tr>
<td>Basketball Courts</td>
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3) What amenities are the most important to include in the park?

<table>
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<td>Signage</td>
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</tr>
<tr>
<td>Off-Trail Rest Areas</td>
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</tbody>
</table>

Additional Comments from Public Meeting No. 1

1. Please don't ruin what we have. It can't be replaced!
2. Parking is important for me. I would like trails marked. An outer bike trail would be nice. More information is needed on aspects of the park. Avenue 67 cannot take overflow from 59th Ave.
3. Planning & development guidelines, etc. …
I didn't attend or I would understand the difference between "preservation" & "conservation." All guidelines should be directed toward accessibility & preserving or conserving the original condition of the land, rocks, paths, vegetation, wildlife, etc.

I'm not sure what "recreational" includes. If hiking is a recreation, it should be made available & accessible to children, physically fit hikers, seniors, people with their great grandmothers, etc. "Games" are appropriate to another type of park.

Pets should be prohibited. Cats won't come. Dogs will come & scare both people & the wildlife, besides messing up the trails. Without extensive & ugly fences, they will not be restricted to special areas. Dogs are smart, but dog owners are often not responsible. If dogs are allowed, there will be no controlling them. People are bad enough. The city will have to ensure frequent clean-ups, garbage collections, and restroom servicing. You will find that people like to trash rest rooms. I suggest a program to label every installed utility or device with a price tag for taxpayers.

All motorized equipment should be prohibited with the exception of transportation to the park, which should be restricted to the road(s) & parking lot(s).

People should be able to picnic, I suppose, though it is of no interest to me, but that too requires enforced restrictions with respect to fires, garbage, noise, & inebriation. If we have the money to police the area full-time during weekends & a substantial time during week-days, then wider usage can be tolerated. But don't allow what we can't afford to police or we will wind up with a noisy, wildlife-free garbage dump that's a haven to rats, pigeons, & obese ex-wildlife like us.

I am opposed to "cours" of any kind. If someone wants to play volleyball why would they come to the woods? People will be free to put two stakes in the ground for horseshoes, or play cards or chess on the tables, but nothing that interferes with the serenity of the woods. That would definitely include basket- & volley- ball.

I would keep horses out, or reserve the part of the park east of 59th Ave. for them.

Except for a trail for the handicapped, all trails should be unpaved. Even older people will find a dirt trail with the rocks cleared out much more comfortable than a concrete one. Concrete only for wheel chairs & strollers.

Signage: Enough for rules & to keep people ON the trail & make it easy for them to find their way back to where they began. For distances, count paces. I can't imagine the trails being long enough to require Rest Areas except at rendezvous points (beginning/end). People can bring their own water.

Trailhead parking sounds like avoiding a walk to start a hike! One lot should do.

We may find that the best way to protect the park would be to leave it alone & let it grow, as it will. We could un-pave the roads in & into the park to encourage this.

4. Visual access to Lake is restricted from observation sites from 59th Ave., even with scope, it's hard to identify waterfowl since they tend to gather toward the East end of the lake. And from the off-trail sites, trees greatly limit visibility to most likely bird feeding/nesting areas.

5. The park, the road through the park, and the surrounding neighborhoods need to be looked at as a whole area, not each individually. Many people moved north of the Thunderbird Mt. Park to be somewhat away from development. If a 4 lane road is built across the park (59th Ave. widening) encouragement of more usage of the road will occur. The quality of life will be affected for those who use the park - increased noise from traffic, reduction in animal life in the park, access to both sides of the park from either side (more traffic, harder to cross road), and change of park as will need to take park area to increase road to 4 lanes. But, the quality of life will also be affected for those who live in the surrounding neighborhoods as more traffic noise and reduction in animal life. I've seen a reduction in animal life just in a year from new home construction on north side. Survey the users of the park, not random Glendale residents who may never use the park and have no true feelings about the area!
6. Need walking & biking entrances to park- not just vehicles. Need safe way to get across 59th. Add restrooms at newest parking lot area. Add another trail at NE area.

7. 1) The benches could serve as sitting/rest areas but also you could have benches that could be purchased as memorials - Squaw Peak & The White Tank Mountain areas both have memorial benches. I prefer the natural rock benches at Squaw Peak- but the benches could defray some of the expenses of up keep at the TCP. 2) You need markers for wildlife in the area- types of cacti & trail markers w/distance. 3) Place to dispose of animal waste. 4) Please leave the park as natural as possible. 5) Keep park open for extended hours. 6) Moonlight/full moon hikes.

8. I was out-of-town for the meeting- but my neighbor provided this copy for me. I want to let you know that I appreciate the opportunity to voice an opinion regarding this park which my home is adjacent to.

9. I feel the master planning committee is trying to sneak something past the public by not addressing the proposed development of 59th Ave. as part of the master plan for Thunderbird Park. Since this road bisects the park itself, it directly affects ALL of the values; issues; and needs of the park. All of these things will cease to exist or be drastically reduced. The discussions that occurred at the public meeting will be moot. Frankly, as a Glendale tax-payer I do not feel it is my responsibility to provide access to Phoenix residents and Peoria residents. Both of whom refuse to allow freeway exits into their own neighborhood but drive through our residential neighborhoods creating an impact to the roads, traffic, pollution, etc. that they do not pay to alleviate. Why are we forced to incur this and carry the load? As Mr. Martinez stated this park is a crowning jewel of Glendale. I feel it cannot be kept pristine as it is now if this road expansion goes through.

10. I like the quietness of this park, which has the amenities spread out to promote the quiet. I'd like as little change as possible- (connecting the two trails you mentioned would be good.) If only 59th Ave. didn't need to be doubled in size- people whiz along there like they're on a freeway already. I'd like a connection of the trails you mentioned to make a loop- a little more parking- a few more bathrooms. Keep the park as pristine as possible!

11. 1) Encourage Phoenix to put Trails on Ludden Mountain (just a mile away, on Happy Valley Road). This could greatly reduce pressure on Thunderbird Park. 2) Keep 59th Ave. two lanes, with bike lanes, and restrict it to passenger cars. 3) Putting a portion of 59th Ave. underground is a captivating idea! 4) Trail H1 (to the south) is now a dead end, rather than a loop. This keeps usage down, past the water-bird blinds. Not sure how I feel. Low usage is nice. So is a loop. Lot of Javelina over there.

12. 1) Maintaining PRIVACY OF HOMES is most critical! 2) DO NOT make 59th 4 lane! Rubberize what's already there! 3) LEAVE TRAILS ALONE! Do not add more, maintain those already there! 4) I ENJOY seeing the horses on the multi-use trails. It's simple, just move over and let them pass!

13. I love this park. I hate dog poop! Please preserve what makes the park wonderful- open space, trails, wildlife, retreat from traffic/noise. Closing 59 Ave. is unacceptable, so work around for crossing from area to area is necessary. Create closer pedestrian access from 67 Ave. / preserve berm to walk in/out on 59 Ave. Create loop at 51st Ave. to return to parking on Pinnacle Peak who having to backtrack same path.

I was in the park over the weekend and it was packed! The high school has impacted pedestrian access on 67th Ave. - I would love to be able to get in at the fence just beyond the orange trees near the asphalt path! Otherwise- it is Glendale's jewel.

14. 1) Keep the park CLEAN. QUIET. and for HIKING TRAILS ONLY. 2) Make sure there is enough money available for ongoing maintenance. Currently, there is not enough money to even keep the restrooms working. 3) No "recreational" improvements- no skateboard parks or basketball courts or volleyball courts. These facilities will not be maintained and attract large, noisy groups. 4) Improve security (fire & police). Fire danger extreme with no plan to control/contain it. Police don't even bother to show up when told someone is shooting a rifle into a public park with hikers all over the hill!
15. I don't share the need to be able to cross 59th Ave. from one trail to another- as long as there is parking available on each side. I think the park is fine as it is. I especially enjoy when the horses are on the hiking trails. I also don't mind when a mountain bike goes by- normally the hikers give them right away. There is no reason the trails can't be multi-use.

16. I am against the widening of 59th Ave. to a 4-lane as it will impact the park with pollution, noise, potentially encouraging all issues raised tonite to occur in greater amount than present. Whatever development, improvement or changes are made in the park must be sensitive to environmental quality & impact these changes will produce. In addition, whatever changes are made must be done right the 1st time so construction won't be re-worked & over again, i.e., if 59th Ave. improvements are to include a pedestrian tunnel to access the park, design & build this when the street is widened to avoid tearing up the street twice. Why can't the park be left alone as is?

17. Major concern is the damage to hiking trails by horses & the leaving of "road apples". The high usage of the trails produce a lot of loose dirt which erodes with rain. Even with properly layedout trails the low side of the trail builds up resulting in water running down the trail and producing erosion. Plans must include at least yearly maintenance. Horses damage water bars installed to control erosion which requires rebuilding/repair of the water bars. People do not keep their dogs on leashes or clean up after them. The only solution seems to be to not allow dogs. Need signs at each trailhead to emphasis staying on the trail and not "bush wacking". I am a member of the Glendale hiking club and have been doing volunteer trail maintenance.

18. Need a restroom at Pinnacle Peak parking area. Needed a safe place to cross 59th Ave. to get to other hiking trail.

19. A system is composed of many parts just as a corporation is composed of many departments. Optimizing one department (part) frequently comes at the expense of another. Therefore, compartmentalizing the 59th Ave. expansion as an issue separate from Thunderbird Park is antediluvian. I moved to Phoenix in 1964. One of the first things I encountered was how to drive around the major Parks- Camelback, South Mountain, Squaw Peak. People can drive around Thunderbird Park also. "Growth" is not a major value for many of us. We are educated. We value our environment. And many of us don't want to look like Scottsdale where "growth" took over and charm was lost.

20. Unless there is going to be enough "operating" budget each year for maintenance, ranger and security, don't waste the money doing anything!

21. Important to integrate plans with other plans (i.e. 67th Ave. widen & 59th Ave. Rd. proposals). Best idea heard: close 59th Ave. and preserve the park & unite the 2 parts of park. Let people figure alternate routes north. Staff underestimated the response to this meeting. Needed mic & better seating. Facilitator needs to repeat questions/points so everyone can hear. Helps to keep group focused. Facilitator did a great job! Interesting that only one person in room had received mail survey. Make planning documents available on internet. Would have been interesting to see where the attendees were from (At least 6 folks from my neighborhood which backs up to TCP on south side). No additional lights in park. Preserve darkness (wilderness, etc.).

22. We were unable to attend the mtg. (last minute conflict w/ the kids' schedules). We are interested most in noise abatement. The park is beautiful. Perhaps a 4ft. retaining/decorative perimeter wall to define its borders and help absorb the road noise would be helpful. Also, rubberized asphalt would also help absorb sound for the park and nearby residents. Don't change the park interior too much; its ruggedness is much of its beauty. Thank you for the opportunity to provide feedback. Please keep us on the mailing list. Thank you for the mtg. notices and for placing us on the mailing list.

23. The project to widen 59th Avenue is obviously a foregone conclusion. The people directly concerned with it's implementation will continue to push this project forward, regardless of the fact that virtually all of the people at this meeting showed their disapproval of a "4-lane" 59th avenue through the park. It is unfortunate that those involved in the project would feign "listening to people objectively," when all along they intended to consummate the project by whatever means
necessary. 4-lanes of 59th Avenue may ease traffic flow, but it will not be beneficial to Thunderbird Park.

24. Keep the park as it is- fix the restrooms- install restrooms at Pinnacle Peak parking lot- stop light at park entrance- tunnel if 59th is widened, too slow traffic on 59th Ave. Require high school to pick up on 67th Ave. Require leash law enforcement.

25. Please do not build a 4-lane highway through the park! Tell Dan Sherwood to look into putting 59th Ave. in a tunnel under the park.

26. The PRESERVATION aspects of this meeting were great and well managed by the parks and recreation people. The issue of widening 59th Ave. unfortunately overshadowed the great forum. I realize the street improvement issue was not an agenda item, but to ask people to tell you what they want for a great regional/Glendale park (a jewel is what you said) and not address the street project makes me wonder how city government really operates. I realize we need to balance all needs but you missed the mark by not addressing this issue.

27. We own dogs and believe they should be leashed.

28. Preserve bird sanctuary. Improve park but maintain, at all cost, its "naturalness". With proposed BBQ pits, family areas etc. you are inviting the "common" person- those interested in entertainment rather than nature. The park will be destroyed. Keep it closed at nite!

29. No more trailhead parking. Provide signage for educational purposes (leash/waste).

30. 1) Dog waste bags - brightly colored to discourage discarding anywhere other than designated receptacles. 2) Recycle bins in picnic areas. 3) Wheel chair accessible trail that doesn't conflict with bikes, horses - pedestrian only. 4) Keep park dark as it is - no additional lighting - close at dusk. 5) Can 47 Ave. N. of Beardsley be considered as alternate route through park- road leads to PHX H2O site & down to 1 private residence- multi-use recreation area on N. side (i.e. water world etc. I think this is PHX but Glendale & PHX could partner up)

31. Leave current amphitheater in place. Keep existing restrooms as long as working. No more parking- park is overused as is. Keep signage to minimum and blend in with natural colors.

32. 1) Please keep park closed at dusk do not add any lighting. 2) Provide dog waste bags (preferably a bright color to discourage discarding along trails). 3) Provide convenient dog waste receptacles. 4) Do not develop any more parking lots, the park is already over used. 5) Wheel chair accessible trail, similar to the waterfall trail at White Tanks. 6) Big wishful thinking- tunnel 59 Ave. at saddle (similar to Margt T. Hance Park- if 59th must be widened. Top of tunnel to be revegetated to connect both sides of park. Thank you for the opportunity to have input RE the TCP master plan. I look forward to learning more about the outcome of tonites (17/04) well-attended meeting. Congratulations to the Glendale Parks & Rec. dept. for all their hard work and for keeping TCP the jewel that it is. Please keep us informed.

33. It seems unwise to have bathroom facilities that are in place but locked. I think it is imperative to have water available in a desert park.

34. I still call the park "G" mountain for the white "G" painted on the mountain south of the amphitheater. Thanks.

35. I bring my own water, so can other people.

36. One of the discussions tonight was about widening of 59- why not get together with Phoenix and put 35th Ave. through from Pinnacle Peak to Happy Valley and relieve the pressure off of 59th Ave. I use the park 3 times a week and live in Phoenix and don't want to see 59th Ave. widened.

37. Do not even consider developing this park further. Your goal should be to preserve and protect the resource in as pristine and wild a state as possible. Even too many hiking trails should be avoided. Really, the only thing needed is to pave the parking lot along Pinnacle Peak to keep the dust down and forbid dogs, since their owners universally ignore the rule to clean up after them.
38. How will the city conserve, enhance, & protect the boundary lines of Thunderbird Park from encroachments outside of designated city limits yet portions of which are continuous to Thunderbird Park as such? Especially that portion north of Pinnacle Peak Rd.- (City of Phoenix).

39. Concession stand- water, energy foods, etc. staffed by a ranger/officer/medic.

40. No "Play Areas (6-12 years old)", No "Tot lots (2-5 years old)". No "Sand Volleyball Courts". No "Basketball Courts". No "Horseshoe Pits". No "Paved Paths". Unpaved Path for Handicapped Trail. No "Equestrian Outdoor Arena". No "Public Art within the Park". No "Fitness Course".

41. For item #2 there is no topic addressing wheel chair accessible trails. I would like to see a graded level "natural" dirt trail i.e. White Tanks H/C W/C Trail at TB Park.

42. I like the park as it is - giving you a sense of being out in the desert...away from traffic, houses, garbage, dogs, people, noise, pollution, buildings. Please leave it rugged, beautiful and a pleasant outdoor experience.

43. I enjoy the park and I thought the "Santa on the Mountain" was a great idea.

44. Conservation of the park in its natural state is my first concern. I would not want to add anything that would take away from its' Preserve status. 67th Ave. N gets Peoria residents home. 59th Ave. N gets Phx residents home. Why should Glendale be charged with providing their roads?

45. Leave it exactly as it is!

46. Thunderbird Park is overrun with too many people now. I live at 55th Ave. & Melinda Lane & every weekend there are kids late at night "off trail" raising hell & destroying desert landscaping. During the day lots of people are "off trail" destroying landscaping and going wherever. Someone from the park service needs to live here to understand what a problem it is here. Need to fix existing problems before we create more. Thank you.

Other Public Comments (Prior to or Subsequent to Public Meeting #1)

1. Just some thoughts since we were unable to make the meeting this week.

We would like noise reduction measures as part of the overall road improvement master plan. These might include rubberized asphalt paving and a low (4 foot) retainer wall to both redefine and identify more clearly the Park borders and decrease the noise level. I heard there was also discussion about lowering the road-this would also help.

Please ensure that the beautiful wildlife refuge on the east side of the road remains undisturbed, unless slightly more accessibility is added. The variety of birds here locally is just amazing and we so love watching the white cranes and blue herons fly over...all are part of this refuge.

Please recommend too that the construction plans are clearly communicated and that dust levels are strictly monitored. It really helps to have those signs posted with the phone numbers to call if the dust levels are getting too high - we used to live on the other side of the Skunk Creek linear park and when they dug that out and cleaned it up it was really messy and dusty. The construction guys were great though and signs were posted for dust control. This was helpful.

Thanks for the opportunity to provide feedback.

2. Foremost on my priority list is that the park be kept as wild and natural as possible. I see no reason for additional "pavement", with the possible exception of the large parking area on Pinnacle Peak Road. To that end, the ramada on the south side of the road could be made into a nice walk-in picnic area with the removal of the rest of the paving. Keeping the area wild enhances wildlife habitat and also helps to keep maintenance costs low.

My second priority would be a safe means of crossing Pinnacle Peak. This could involve an overpass, tunnel or something as simple as a pedestrian light. A light would have the added advantage of (maybe) somewhat slowing traffic. Such a crossing would enable many miles of hiking without repeating a trail.
A third improvement would be removal of the amphitheatre, as it is not consistent with "wild and natural." Repairs would be costly, especially for a facility that is only used once a year.

Thank you for the opportunity to provide input.

3. My comments are based on my hiking experience more than five years ago.

My daughter and I have hiked in the park many times, now due to aging and accompanying disabilities I cannot hike out of doors but now we walk at Arrowhead Mall early in the morning—6 AM. daily.

To get back to the preservation issue. Please exert your efforts to the preservation of each and every acre (1185A) as a protected park.

The maintenance of roads, parking areas and ramadas, etc. should be continued. It is a jewel in the center of a developed area, which a lot of communities would like to have.

Should we lose it to development where would citizens go for hiking, picnicking etc. Perhaps up to southern Yavapai County or Peoria?

Thanks for the information on the meeting.

4. We were sorry that we were not able to attend the program. We know that the park is in a beautiful area. A couple of items that may help is restoration of the amphitheater for use by various groups. For the picnic areas the possibility of lights and power sources for picnicker's to use electric skillets when we are under a high fire watch.
B.4 Conceptual 2004 Master Plan Alternatives

Introduction

Three Conceptual Master Plan Alternatives were developed for TCP and were based on two general premises: maintaining the conservation category of the park by preserving and/or restoring the natural habitat, and providing appropriate park facilities for current and future uses to better manage the conservation of the park's resources. Each conceptual alternative represented varying degrees of preserving, restoring, and managing the park’s resources in balance with the desired activities. The conceptual alternatives were developed to present variable scenarios, ideas, and pros and cons for the public and City to consider and discuss. These alternatives were presented at Public Meeting No. 2 and are illustrated in this subsection, Conceptual Master Plan Alternatives. Following the Conceptual Master Plan Alternatives presentation, the public was invited to discuss the alternatives with the consultant team and staff in an open house format. Public participants were also given the opportunity to select their preferred alternative or combination of alternatives on a comment card, along with additional comments they felt were relevant to the development of the Preliminary Master Plan. A summary of their comments is located at the end of this section.

Conceptual 2004 Master Plan Alternatives

All alternatives indicate a complete trail loop system for both sides of the park, with convenient trailhead access points, including parking, restrooms, and amenities, such as shade ramadas, picnic tables, drinking fountains, and trash receptacles. Each alternative also indicates two grade-separated trail crossings for 59th Avenue, one at the top of the mountain pass and one near the southern end for the regional trail that passes through TCP. An additional at-grade trail crossing is anticipated at the intersection of 55th Avenue and Pinnacle Peak Road. An existing signalized intersection at 67th Avenue and Patrick Lane also provides an at-grade crossing. All alternatives tie into adjacent existing and/or planned trail systems to the west, the north, and the southeast for regional connectivity.

All three alternatives indicate revegetation and/or habitat restoration for most disturbed areas within the park. These are generally located south of Pinnacle Peak Road, west of 67th Avenue, and on both sides of the main wash corridor located west of 59th Avenue.

Three main use areas were identified for park improvements, with the majority of the acreage remaining in its natural, passive state. These areas include an equestrian staging area, a wildlife habitat interpretive area, and a day-use area. Following is a brief description of these areas for each alternative concept.
Alternative 'A'

Alternative 'A' included an improved equestrian area with a new restroom building located in its existing location off of 67th Avenue. The existing picnic area is relocated to the area south of Pinnacle Peak Road to allow reestablishment of the main wash/wildlife corridor where new trailheads and interpretive trails would be located for wildlife viewing and interpretation of a natural Sonoran desert riparian habitat. An environmental education center was located between the wash corridor and the equestrian staging area near the north property line to allow convenient access to the main wildlife/environmental resource area of the park; however, the center's site location is somewhat limited by the amount of disturbance that would occur in an area that is not currently compromised and it would limit convenient access from 59th or 67th Avenue.

In addition to the main picnic area adjacent to Pinnacle Peak Road, a special event area for group events and/or activities also provides access for a new loop trail on the east side of the park with remote star gazing areas and wildlife guzzlers (water catchments).

Figure 16. Conceptual Master Plan Alternative 'A'
Alternative 'B'

Alternative 'B' was developed using the same premise as Alternative 'A' with the following exceptions:

- Two group picnic areas were identified for the park, one at the equestrian staging area and one at the Pinnacle Peak Road location.
- The environmental education center was located adjacent to the main wash corridor and would be directly accessible from 59th Avenue.
- The special events area and the group picnic area are located south of Pinnacle Peak Road. A generous buffer zone is provided between the park use areas and 67th Avenue. Star gazing and wildlife guzzlers are similar to Alternative 'A'.

Figure 17. Conceptual Master Plan Alternative 'B'
Alternative 'C'

Alternative 'C' was developed using the same premises as Alternative 'A' and 'B' with the following exceptions:

- No vehicular access is provided from 59th Avenue, and the environmental education center is located at the Pinnacle Peak Road location. The west side of the park, between 59th and 67th Avenues, is identified as the equestrian and wildlife habitat section of the park.

- All active programmed facilities are located adjacent to Pinnacle Peak Road, with a generous buffer between them and the roadway. The group picnic area, special event area, and environmental education center are located with convenient access and parking off of Pinnacle Peak Road. The east side of the park, east of 59th Avenue, remains predominantly passive, with natural trails and access to star gazing and wildlife guzzlers similar to Alternatives 'A' and 'B'.

Figure 18. Conceptual Master Plan Alternative 'C'
B.5 Public Focus Group Meeting

Through public input and participation in Public Meeting No. 1, specific stakeholders and special interest user groups (Sonoran Audubon Society, Arizona Desert Animal Plant Team (ADAPT), Arizona State Horseman’s Association (ASHA)/Glendale Equestrian Club, Citizens Bicycle Advisory Committee, Glendale Hiking Club, Pebble Kickers, Girl Scouts) were identified and representatives from each group invited to participate in a public focus group meeting. The purpose of the focus group meeting was to identify the level of specific usage desired by each representative user group. Participants included representatives from Glendale Hiking Club, ADAPT, ASHA, and Citizens Bicycle Advisory Committee. Specific user needs, concerns, conflicts, and compatibilities were discussed. The focus group then evaluated these items in comparison to drafts of the three Conceptual Master Plan Alternatives. Their comments and input were incorporated into the final development of the Conceptual Master Plan Alternatives presented at Public Meeting No.2. Following is a summary of their comments.

- Would like to have a bike lane on 59th Avenue
- Would like to have a “resting station” with facilities at the 59th Avenue entrance
- Would like the use areas to be separated to minimize user conflicts
- Equestrians prefer the west side of the park, west of 59th Avenue and like the idea of moving the picnic area to the Pinnacle Peak area (noise and activity scares the horses)
- Like the idea of restoring the wash and re-establishing the natural wildlife habitat
- Prefer to have “land bridges” versus a pedestrian bridge overpass or tunnel
- Would like to complete the east boundary trail as a loop trail
- Would like equestrian staging area, corral, trailer parking, and mounting platform

The focus group preferred Alternative 'C' with modifications addressing the above comments.

B.6 Public Meeting No. 2

Public Meeting No. 2 consisted of a presentation to the public of the following items:

- Summary of the inventory and analysis of the biological, cultural, visual, geological, and land use resources of the site (See Section A, Inventory and Analysis).
- Summary and results of Public Meeting No. 1, including handouts of the public meeting survey results and the needs assessment results (See Subsection B.2, Public Meeting No. 1).
- Preliminary program elements based on the values, issues, and needs; the public meeting survey results; the community-wide needs assessment results; and staff input.
- Draft Vision, Goals, and Objectives were developed from information received at Public Meeting No. 1 and the needs assessment, as well as responding to specific action items adopted in the Glendale 2025 General Plan and the 2002 Parks and Recreation Master Plan.
- Three Conceptual Master Plan Alternatives based on all the above information.

Following is the Draft Vision, Goals and Objectives and Preliminary Program presented at Public Meeting No. 2. The Conceptual Master Plan Alternatives are presented in Section B.4, Conceptual Master Plan Alternatives followed by comments that were received from Public Meeting No. 2. An information chart that compiles the survey results from Public Meeting No. 2 according to which Conceptual Master Plan Alternative the public participants preferred is also located in Section B.8.

The vision is a concise statement that embodies the key values identified by the community. The goals address key issues that relate to the values contained within the vision statement, and the objectives support each goal by identifying an action that causes the goal to be achieved.

**Vision**

We envision Thunderbird Conservation Park preserving, protecting, and enhancing the area’s natural character, including the native vegetation, wildlife, cultural, and scenic resources. The natural environment will be preserved, protected, and/or enhanced while providing a network of facilities such as
trails, interpretive areas, and passive recreational components that allow for the education and interaction of all ages and user groups. Thunderbird Conservation Park will provide a safe, clean, nonmotorized trail and path system for diverse user groups as well as public safety and emergency personnel. It will include links to adjacent paths, trails, bike routes, schools, and community nodes.

**Goals**

**Goal 1:** Create a park master plan that is compatible with preserving, protecting, and/or enhancing the natural environment.

**Objective 1.1:** Identify and locate environmentally sensitive areas and their level of significance for preservation, conservation, and/or enhancement.

**Objective 1.2:** Determine the appropriate level and type of management, as well as potential enhancements of park features, to ensure the preservation and conservation of resources for future generations.

**Objective 1.3:** Develop a program of park and recreation facilities that is appropriate for the park's carrying capacity and compatible with the park's environmental resources.

**Objective 1.4:** Appropriately locate the desired park and recreation facilities to minimize impacts to the natural environment.

**Objective 1.5:** Provide a means for controlling internal and adjacent developmental pressures.

**Goal 2:** Create a park master plan that is compatible with existing and proposed land uses adjacent to the site.

**Objective 2.1:** Determine the appropriate character and types of recreational facilities that are most compatible with adjacent land uses.

**Objective 2.2:** Determine the appropriate locations of recreational facilities and buffer these facilities from adjacent land uses.

**Objective 2.3:** Establish linkages to neighborhoods, community nodes/activity centers, and use areas within the park.

**Objective 2.4:** Protect adjacent land uses from potential noise and glare nuisances.

**Goal 3:** Preserve, protect, and/or enhance existing wildlife habitat.

**Objective 3.1:** Identify and locate existing and potential wildlife habitat areas and their level of viability.

**Objective 3.2:** Identify the type of wildlife habitat desired and the type and level of human interface desired (e.g., viewing, interpretive, interactive).

**Objective 3.3:** Develop a management plan to maintain and/or enhance the desired type and level of wildlife habitat.

**Objective 3.4:** Provide the appropriate types and locations of wildlife water sources and associated riparian habitats.

**Objective 3.5:** Develop a habitat enhancement plan to address invasive species and revegetation to provide plants with higher wildlife value.

**Goal 4:** Develop a safe, interconnected, trail and path system throughout the park.

**Objective 4.1:** Develop a trail and path system that provides for all age groups and types of users.

**Objective 4.2:** Define the appropriate types and locations of trail and path segments based on user compatibilities, related park facilities, adjacent land uses, and natural terrain.

**Objective 4.3:** Provide a continuous trail and path system that links adjacent neighborhoods, community node/activity centers, and use areas within the park.
Objective 4.4: Coordinate linkages, trail and path types, and standards with the City of Glendale Open Spaces and Trails Master Plan and with adjacent municipalities.

Objective 4.5: Coordinate safe trail and path crossings and access points with the City of Glendale Transportation Plan.

Goal 5: Preserve and/or enhance the visual intactness and aesthetic continuity of the park.

Objective 5.1: Identify visually sensitive areas and view corridors within and adjacent to the park.

Objective 5.2: Identify appropriate locations of park facilities and trails and paths to minimize impacts to the visual character of the park.

Objective 5.3: Identify appropriate access points and/or improvements of 59th Avenue to minimize impacts to the natural and visual environment.

Objective 5.4: Identify appropriate alignments of and/or improvements to vehicular circulation within the park.

Objective 5.5: Identify appropriate plant material and revegetation methods to enhance the existing native vegetation and the overall natural character of the park.

Objective 5.6: Develop the aesthetic quality of proposed park and recreation facilities to blend and integrate into the natural environment and reflect the regional context.

Preliminary Program

New program elements and/or enhancements to existing elements shall support the preservation and conservation goals and objectives identified from the values, issues, and needs of the users. The following program elements are a listing of the improvements most desired of the Public Meeting #1 Survey and Community-wide Needs Assessment Respondents.

- Hiking/Unpaved Trails
- Multi-Use Trails
- Designated Single-Use Trails
- Accessible Trails
- Interpretive Nature Trails
- Mountain Biking Trails
- Pedestrian and Bike Access Points
- Improved Parking
- Safe 59th Avenue Crossings
- Wildlife/Bird Habitat Interpretive Areas
- Restrooms
- Drinking Fountains
- Shade Trees
- Picnic Areas
- Playground Equipment
- Emergency Response System
- Trailhead Parking
- Trail Distance Markers
- Trail Rest/Scenic Areas
- Historic restoration of amphitheater/ramadas
- Outdoor Amphitheater
- Environmental Interpretive Center
- Special Event Areas
- Star Watching Areas
- Signage (way finding, educational, and interpretive)
General Comments from Public Meeting No. 2

1. You're really doing a great job of including the public. I appreciate your tireless efforts.

2. I would like to see the Salt Cedar removed from around the lake (pond) and plantings of willow and cottonwood there. The Salt Cedar is growing through the liner. I think mesquite and paloverde should be planted along the washes. There's an old road that runs along the edge of the pond. People think that they can walk along the road. The area north of the pond should be restored to desert habitat plantings of cactus etc. They wouldn't have to be watered once established. Figure out a way to keep people from walking around the south side of the pond. That makes the owners of the homes at the edge of the pond nervous and I don't blame them. Put in a boardwalk from the eastern viewing station to the pond.

3. Please add us to the mail list for future meetings regarding 59th Ave. & TCP. It would have been nice to hear other peoples' questions in a Q & A session.

4. No comment.

5. No comment.

6. The master plan/goals pretty much emphasis preservation. I believe that many of the improvements are not in the best interest of the park. With that said, I hope each improvement is looked at very conservatively. Once you dig a footway or make another trail you cannot take it back. It takes years to restore the desert. Please make good decisions.

7. No comment.

8. No comment.

9. No comment.

10. No comment.

11. No comment.

12. No comment.

13. Good plan for C is eliminate the dangerous access on 59th.

14. No comment.

15. No comment.

16. This park has become a refuge for me and my horses as state land falls to developers. I live on horse property and the park is the only place left that we horse owners can ride without having to use a trailer. I know people object to horse apples, but they smell much more pleasant than dog droppings. Please consider adding to the ranger staff for the park or train volunteer rangers to patrol (sign me up!) to keep control of dog owners who don't clean up after their pets and who persist in hiking off trails. Thunderbird Park is a truly marvelous place. Keep it as natural as possible. No tot lots, ball courts or other amenities.

17. Roger- thanks for your effort. Please maintain park in current condition including the existing restrooms (functioning). PS at summit of Hedgpeth trail is a group of butterflies that obviously thrives in this environment. Please leave summits in their natural/pristine states. Rubberized asphalt for 59 Ave.

18. No comment.

19. No comment.

20. Like concept C.

21. I work in north Scottsdale and make the commute every day because our location at the base of Thunderbird Conservation Park is so very appealing. We looked at many nice neighborhoods, but proximity to the serenity of the park was the draw. Hiking in this park is so special because of the natural qualities it espouses. Please don't change that.

22. "Do not" allow park access from Hill/Robin Lane. HOA offset area.
23. Please repair trails and misused areas as well as erosion. Non-motorized use is commended. Do not pave trails except in small amounts. Tie trails into other systems for access & usage. Enforce speed limits.

24. Equestrian use of the park has become increasingly prevalent behind the overlook & the Pinnacle areas that border the park increasing dust, flies, etc. Equestrian trails should be set back away from back yards.

25. No comment.

26. I like the star watching areas idea. Of course, a remote area such as this may invite unacceptable & even criminal behavior during night hours. Is there a plan to mitigate this concern?

27. Should have had alternatives shown on an easy to read handout rather than relying on verbal explanation during the presentation. Also, the proposed project to upgrade 59th Avenue through the park should not be linked with any of the alternatives.

28. Based on the results of the survey’s, I don’t see why equestrian trails/ arena are being considered, along with outdoor amphitheater, pet run, education. These areas would just take valuable area away from other requested areas. Also, the idea of making the lake easier to access for local animals presents possible risks to homes in the area that abut the lake. The Lake in the park is, in fact, the sediment basin for the body of water comprising Arrowhead Lakes. As such, its condition is paramount to the health of the whole lake chain. The health of the sediment lake is crucial to its use as a wildlife habitat. Some of the presented possibilities to provide better access to the lake homeowners are responsible for maintenance of the sediment lake. Are they a party to any decisions made? Severe fish kills have occurred in both the sediment lake & the down stream lakes in the Arrowhead lakes housing community. Bob Revolinski, of Water Resources Management, is contracted by the Arrowhead Lakes home owners assoc. to monitor & maintain water quality. Is he a party to any contemplated changes and does he have a voice in decision making. Arrowhead Lakes Homeowners Assoc. has a Lakes Comm. Which monitors the lakes condition & use, they would like to be a party to any changes which would effect the health of the lakes which are a great part of the environment and value of our community.

29. No comment.

30. No comment.

31. No comment.

E-mail Comments

Our daughter Sonya has cerebral palsy and is confined to a wheelchair. Sonya loves the great outdoors and as a family we all enjoy picnicking and hiking often. The closest wheelchair accessible trail to us is at the White Tanks Park and although we like to visit this beautiful park it is a considerable distance for us to drive since we can walk to Thunderbird Park from our house. We do walk along the paved drive at Thunderbird, but there is no designated walking /bike lane for us to feel safe from passing cars, and much of the drive is at a considerable incline. We were hoping that the city would consider adapting a trail for wheelchair accessibility. The Thunderbird H1-A loop trail, located by the Pinnacle Peak parking lot, would be wonderful for this purpose because it’s established, flat and runs along the base of the mountain. Benches and shade along the trail would also be helpful to those who are limited in walking abilities, such as those with walkers. Please consider this request in making this beautiful park accessible for everyone to enjoy. I look forward to hearing from you in this matter.
B.7 Public Comments on Conceptual 2004 Master Plan Alternatives

Public Meeting No. 2/Conceptual Alternatives Comments (April 21, 2004)

1. Drop the star gazing- or at least make it small & hidden.
   I really like closing access from 59th (dangerous) and consolidating all "facilities" in one place leaving the rest of the park natural.

2. No comment.

3. Having the education center away from the entrance (why I don't like concept B). A tunnel to connect the two sides (under 59th Ave.). I feel strongly about keeping the main entrance (I don't like concept C). I like the parkway idea. This would look nice and help traffic. Keep the amphitheater and improve it so it is used more.

4. The wildlife conservation & "remoteness" of Alt. C, but parking in B seems like a good combination. I am against widening 59th Ave. because it will detract from the natural aspect of the park. Also, widening the road would make it harder for wildlife (i.e. javelina) to safely cross.
   I am interested in volunteer opportunities at the park, such as trail maintenance or studying wildlife. Who do I contact? I marked the trails about 2 years ago for Charlie Hixson for trail maintenance program. Would like to get involved in park.

5. No comment.

6. 1. The education center is best on plan B/C because in plan A you must build on new land.
   2. The star gazing areas need to be just one spot. Minimize impact to the park! I see very few public comments asking for a star gazing site.
   3. The new access path under 59th to the north side of the lake cuts through an area that has been under restoration for 5 years. Does this make sense? It also passes where all animal life passes. Lots of snakes (Diamondbacks) live here.

7. No comment.

8. The project C in that all of the activity areas are concentrated on the north side. I would still want access off of 59th Ave. though.

9. 1. I resent the obvious attempt to suppress criticism and dissent by not allowing open Q & A.
   2. It is obvious that the developers are committed to doing certain things regardless of our wishes – example: why do all concepts include picnic tables & ramadas even though the people who use the park clearly do not want them?

10. I much prefer the passive treatment of the existing park areas to maintain its purity as much as possible. It moves all the disturbing activities away from the more natural habitats areas.
    I am very much opposed to making 59th Ave. into a parkway or major artery.
    I strongly agree with point #9 and #23 on the Jan. 7 public meeting #1 comments.

11. I like keeping the wildlife channels open so wildlife can migrate in and out of Thunderbird Park.
    (No to plan B)
    No mention was made of the amphitheater, a hallmark of high school cross country meets in the 80's. I hope it does not disappear.

12. C is good to keep all recreation areas in the NE part, but I like B for the 59th Ave. entrance & education center.

13. Pinnacle Road good place for SE area. Education center might be good for viewing wildlife in B, but will it scare wildlife. I like tunnel idea for 59 so wildlife & people can go over. Good plans. Good to see trail connect on East side.

14. Put facilities & cars at one spot. Like pedestrian crossover over 59th Ave. Like playground too! Like the idea of somewhere for hikers to obtain water & A/C! Like somewhere for horse trailers.

16. No access to the park on 59th Ave. That has always seemed dangerous to me and with the increased traffic it’s more so also if you are going to have an educational center & parks, putting them where they will have the least impact on wildlife & vegetation makes sense.

17. I like the idea of combining picnic areas away from wildlife corridors. Please do not “enhance” any summit with benches regardless of configuration. “Special events” areas should be relocated to another park (i.e. Foothills) and TCP is a conservation park. Please keep signage to an absolute minimum.

18. Like about A: moving picnic area to Pinnacle Peak Road; enhancing habitat area (get rid of amphitheater); divided road way for 59th; crossings for wildlife; connections to Phoenix system to allow animal migration. Changes to A: close access point from 59th; move education center to Pinnacle Peak Road Parking area; less rest areas.

19. Without the added trail on the east side. Without the watering guzzlers. I like this alternative because it eliminates a traffic hazard at the park entrance off 59th Ave.

20. Intensive use area on disturbed area off Pinnacle Peak combine environmental ed. Area, handicap wildlife viewing areas & picnic high intensity usage. Completion of hiking loop along the east side of park. Reestablish wildlife corridor in current high use area. Remove current inadequate bathrooms from current picnic areas. The concept of putting 59th depressed and establishing a land bridge between the east & west park. Please plan on removing the amphitheatre. The land bridge should be a minimum of 100 ft. wide. Need auto access to west side from 59th Ave.

21. Eliminating the 59th entrance as C shows makes sense. However, leaving the EC area where it is on B is a good idea, especially if the habitat will not be disturbed by traffic coming in from 59th.

22. Split development in disturbed areas- moves larger traffic to perimeter. Keep central entrance point on 59th- max flexible on use of trails- both trails & hiking directions. Two crossing points on 59th (safety) under or over. Good development of internal green belt. Like split roadway- softens impact- may help with road noise. Like new east trail on plan C better. Dogs to be allowed on all trails- enforce leash or cleanup rules- have seen many owners ignore- free bags- great addition-no excess now! Agree: limit playground & lighting: this is nature park.

23. Maintaining or improving wildlife habitat is most important. “Conservation is key.” Minimize traffic in park. Minimize paving for parking in park- keep on outside, disturbed areas.

24. Move the southern most trail to the other side of the dike/drainage towards the road. Move the parking area to that trail further north on that same side as the path. Move the north parking lot for the proposed picnic area so that it is adjacent (direct line with 55th Ave.). Add a street light at that intersection. Install photo radar to control speed & surface the new road with rubberized asphalt for noise control. Change grading of the road to make navigation of the curves easier.

25. Plan A or B would facilitate the movement of traffic through the park.

26. All of the options (A, B, & C) have merit & show innovative thought. This effort is appreciated. Each alternative and permutations will be degraded by busy (and undoubtedly growing) traffic volumes on 59th Ave. I would like the park to emphasize natural quiet & solitude so outdoorsy people can find refuge amidst nature. To help achieve this goal, I suggest tunneling 59th Ave. through the mountain pass at the higher elevation. While not all of the road thru the park should be below grade, if a substantial portion near and allow travel across the park without the obstruction of the road. Good luck achieving compromise!

27. All of the alternatives presented were good, however, we favored Alternative C with one modification. The parking area and restroom building has to be move north of the dyke for the following reasons:
   1. The proposed parking lot will be small but things have a habit of growing.
   2. Any lighting (and light poles) for this parking lot will be visible from and closer to my backyard.
   3. Even though the proposed parking lot at the trail head will be small, there still will be a steady stream of noise from car engines starting, car radios, car stereo systems, kids (and adults) yelling, babies crying, wailing of car burglar alarms, etc.
4. The proposed parking lot will provide a closer starting point for any burglar wanting to hop the back wall to gain access to the back of houses abutting the park. And yes, any burglar presently has the same access from the existing parking lot but the burglar has to cross more open ground. This open ground elevates the risk of being observed and/or caught.

5. The wall facing the park will become a prime location for spray painters. After all, they can then admire their work from the parking lot. It’s now closer so they can see it better. And yes, as previously mentioned, spray painters too have access to the back of my wall from the existing parking lot, but the open ground elevates the risk of being spotted and caught. Locating this parking closer to my wall lessens this risk.

6. The restroom building will just be a visual eyesore. I am assuming it will not smell. Also, I can imagine the city doing their regular maintenance activities (like pumping out the septic tank) at off times of the day (like 2:00 AM) with the resulting noise.

7. People using this parking lot are hikers and they will welcome any additional walking caused by locating the parking lot north of the dyke.

8. Because of its isolated location, I am sure non-hikers will also use this parking lot for other activities. I will differ to the police Department to advise of all the other activities that happen in an isolated parking area.

28. All bad choices

29. We prefer the alternative that maintains 59th Ave. as a 2 lane road. The road should not compromise the park further than it already does. Improving sight lines, road surfaces & road aesthetics is fine but not at cost to the park space/experience. Vehicle speeds should be carefully monitored thru the park and posted speeds should not be greater than 35 mph. Since Glendale PD seems unable to limit speeds now on 59th, perhaps photo-radar is needed.

30. 1. I like the park as a conservation area, not a conventional recreation park and ballfields etc.
2. Closing the main park entrance on 59th Ave. and moving the picnic area to Pinnacle Peak Road seems admirable. But then I am not a picnic person and would object to the move if I were.
3. I would prefer to keep 59th Ave. two-lanes if possible, and to cover it with those culvert-tunnel structures (several) in the saddle area. This would provide an E-W transit route, and possibly a wildlife corridor.
4. It is also desirable to provide an E-W crossing and wildlife corridor at the southern end near where the wash goes under 59th Ave.
5. There are now 3 park access points (maybe 4, if you count Pinnacle Peak Road. Or even 5, counting 51st Ave.) So closing the current main entrance would increase congestion. Need to provide several access points.
6. Looping the south-eastern trail back to Pinnacle Peak Road along the Eastern Park boundary is desirable, unless it excessively stresses park wildlife. Installation of watering holes is a great idea.
7. Stargazing: There are now very powerful athletic field lights in the flood-plain area north of Adobe Dam and east of Thunderbird Park. They seem to run all night.
8. How well do bike lanes work, if 59th Ave. is put through tunnels?

31. I like C because it doesn’t expand 59th Ave. I have concerns about the impact of this. I like A because of the added trails & pinnacle Peak access/parking etc. I think a better alternative would be to add an underpass for people to use to cross 59th Ave. (like they have at 7th St. & other parks) and add slowing bumps on 59th Ave. and wider shoulders, etc., to address the traffic & accident issues. Thank you for allowing public input!

32. None- part of B. A restroom is needed. Preserve the naturalness of the park – overwhelmingly asked for. In other words- leave it alone. It’s very difficult improving on Mother Nature. All of the suggested “improvements” will really mess with the balance of nature. If you put in the trail to look to 59th Ave. & the lake you will disturb a large population of rattlesnakes which are rodent control. They will then seek a new area and then there will be sightings on the existing trails- on & on. The “star gazing path” is really a joke. The park is closed after dark. You have a driving range directly to the east of it (lights on until 10PM). This area is also frequented by wild life at night. Another disruption to Mother Nature. I always wonder what the need is to improve or fix something that isn’t broken or works very well as it is.
If you must put in an education center put it where the desert has already been trashed- why where it is still natural? Trees? We're in a 10-year drought- they do take water. When it is 100° plus, trees or not, it is still hot. If we are to preserve the natural park, conserve what we have, please, please, leave it alone.

The information presented and supplied by Logan Simpson was very informative and well done.
The following information chart identifies how meeting participants heard about the meeting and what they thought about the format, the information they received, and if they felt they had adequate opportunity to express their thoughts.

<table>
<thead>
<tr>
<th>Preferred Alternative</th>
<th>Preferred Alternative</th>
<th>Preferred Alternative</th>
<th>Preferred Alternative</th>
<th>Notification received regarding meeting</th>
<th>Information presented in an easy to understand format?</th>
<th>Adequate opportunity to express your views and opinions?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>Combination</td>
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B.8 Public Meeting No. 3

The third public meeting in the master planning process consisted of a presentation of the Draft Preliminary Master Plan to the Parks and Recreation Commission in an open public forum. The Commission unanimously approved the Draft Preliminary Master Plan with no adjustments and motioned that the TCP Master Plan to be forwarded to the City Council.

Following are the Draft Preliminary Master Plan figures as they were presented at the Commission meeting. The excerpts of the Commission meeting follow the master plan figures.
Draft Preliminary Master Plan

Based on the public and City's input of the Conceptual Master Plan Alternatives, a Preliminary Master Plan was developed and presented at a Parks and Recreation Commission meeting on June 14th, 2004. Following is an overview of the Preliminary Master Plan as it is shown in Figures 19 – 22.

Draft Preliminary Master Plan

The Draft Overall Preliminary Master Plan (Figure 19, Draft Preliminary Master Plan) is based on a foundation of preservation and conservation of natural resources as identified in Section A, Inventory and Analysis. Three general use areas were identified for meeting the park and recreation needs of the community. They are: an Equestrian Staging Area located in its existing general location off of 67th Avenue, a Wildlife Habitat/Interpretive Area located along the existing wash corridor and picnic area, and an Active Use Area located near Pinnacle Peak Road.

The specific siting of each use area was based on the suitability of their respective activities with the park's resources, adjacent land uses, available infrastructure, and compatibilities with other park activities. Following is a description of each use area.

Figure 19. Draft Preliminary Master Plan
Equestrian Staging Area

The Equestrian Staging Area (Figure 20, Draft Preliminary Master Plan - Equestrian Staging Area) is accessed from 67th Avenue with a new park entrance aligned with Patrick Lane (a signalized intersection). This use area generally incorporates a seventeen acre area located northwesterly of the existing water reservoir and includes the following elements:

- An improved equestrian staging area with a corral and mounting area, an unloading area, and five trailer parking spaces.
- Directly north of the staging area is a new restroom building, ranger station/administration office, trailhead parking with approximately 30 spaces (12 spaces currently exist), and a park maintenance facility.
- The existing picnic area located along the north boundary has been improved with the following amenities: replacement of the existing restroom with a new restroom building, the addition of three new picnic ramadas, upgrade the two existing ramadas, and an improved parking area with new surfacing and curbing (35 existing spaces, 33 new spaces) for picnicking and trailhead users. It is also anticipated that this area could be utilized for organized group events such as high school track events.
- The viewpoint area directly north of the existing water reservoir would remain as is with the following exceptions: replacement of the existing restroom with a new restroom building, incorporation of an interpretive monument, improved parking surfacing and curbing (12 existing spaces).

Approximately twenty-nine (29) acres of disturbed and degraded desert areas are identified for revegetation within and adjacent to this use area of the park.

Figure 20. Draft Preliminary Master Plan – Equestrian Staging Area
Wildlife Habitat/Interpretive Area

The Wildlife Habitat/Interpretive Area (Figure 21, Draft Preliminary Master Plan – Wildlife Habitat/Interpretive Area) is accessed from 59th Avenue with an extended new park entrance providing a better transition for ingress and egress movements. This area is generally comprised of the area along the existing wash corridor (approximately 44 acres), picnic and parking areas, and the amphitheater, and contains the highest level of potential wildlife habitat within the park. It includes the following elements:

- Relocation of the main picnic area to the Pinnacle Peak Road area to allow for wildlife habitat restoration of all disturbed and degraded desert areas including the wash corridor itself.
- Two interpretive trailheads: a north trailhead with a new restroom building, a shade ramada, and approximately 75 parking spaces, and a south trailhead with a new restroom building, a shade ramada, and approximately 30 parking spaces.
- Defined interpretive trails and viewing areas.

Approximately forty-eight (48) acres within and adjacent to this use area of the park will be restored, revegetated or landscaped with native plants that have a high wildlife value.

Figure 21. Draft Preliminary Master Plan – Wildlife Habitat Interpretative Area
Active Day Use Area

The Active Day Use Area (Figure 22, Draft Preliminary Master Plan – Active Day Use Area) is accessed from Pinnacle Peak Road with three ingress and egress locations. The main park access is aligned with 55th Avenue, which is planned to be a signalized intersection. This area is generally comprised of the area along Pinnacle Peak Road from the east boundary to the 55th Avenue intersection, and contains the largest disturbed and degraded area within the park. It includes the following elements:

- The main group picnic area with six group picnic ramadas and six single family picnic ramadas, a new restroom building, parking (approximately 190 spaces), and a tot lot/playground.
- A main trailhead area with parking (30 spaces), a new restroom building, and a shade ramada.
- A passive outdoor activity area meant to be used for organized events in a natural desert setting such as star gazing.
- An environmental education center with an associated amphitheater for outdoor classes and activities, associated parking (approximately 300 spaces) and bus drop-off area, and a secondary trailhead to access the east trail loop.
- A primary maintenance facility with yard and building are located near the northeast corner of the park.
- Wildlife guzzlers located within the east basin area to encourage the dispersal of wildlife within the park.

Approximately sixty (60) acres of disturbed and degraded desert areas are identified for revegetation and native landscaping within and adjacent to this use area of the park.

Figure 22. Draft Preliminary Master Plan – Active Use Area
CITY OF GLENDALE, ARIZONA
EXCERPTS OF THE REGULAR MEETING OF THE
PARKS AND RECREATION ADVISORY COMMISSION
HELD MONDAY, JUNE 14, 2004
GLENDALE MUNICIPAL OFFICE COMPLEX, ROOM B-35850 WEST GLENDALE AVENUE

The meeting was called to order at approximately 7:05 p.m. by Chairperson Kathe Neyer, with Commissioners Sue Klima, Michael Socaciu, Abilena Acosta, Taylour Miller, Ted Hansen, and Ruben Gutierrez present. Commissioners Richard Gitelson and Chuck Jared were absent. Representing city staff were Warren Smith, Gloria Santiago-Espino, Shirley Medler, R. J. Cardin, Mike Gregory, Chris Gallagher, Roger Boyer, Wayne Baxter, Jackie Anderson, Jenn Godbehere, Tim Quinn, Raul Daniels, Bob Rhodes, Pete Vargas, Rosalind Johnson, Christine Gonzales, and Stephanie Montoya.

Approval of Minutes

Chairperson Neyer called for approval of the May 10, 2004, meeting minutes.

Commissioner Socaciu requested that a sentence be added to the end of paragraph five, page two. He clarified that some people desire a more mature look, but he prefers smaller trees. Also, on page six, paragraph 11, Commissioner Socaciu stated he said the opposite of what was written, stating the commission should place an emphasis on teens as they are the most at risk group to be served by the city.

Chairperson Neyer asked that Commissioner Phyllis Grosscup's name be removed as she is no longer a commissioner.

A motion was made by Commissioner Socaciu to approve the minutes as amended. Commissioner Klima seconded the motion. The motion carried unanimously.

Public Comments

Chairperson Neyer asked for comments from the public.

There were none.

THUNDERBIRD REGIONAL CONSERVATION PARK MASTER PLAN

Mr. Boyer provided background information for the commission regarding the Thunderbird Regional Conservation Park Master Plan. Mr. Boyer stated the park is in need of infrastructure improvements. He introduced Ms. Jackie Keller, Senior Landscape Architect with Logan Simpson Design, Inc.

Ms. Keller began her presentation by explaining the master planning process. She stated there are three parts to public participation: the public meetings; the focus group meetings; and the Needs Assessment Survey.

Ms. Keller said three conceptual designs were developed and were presented at a public meeting to the focus group, technical advisory committee, and were shown on the city's website. The preliminary master plan is a melding of individual citizen input and ideas from major clubs and organizations that utilize Thunderbird Park the most. The overwhelming request of the community is to preserve the native desert areas as a conservation park, protecting its natural resources while planning for continued recreational use by the public.
The first public meeting was held on January 7, 2004 at the Foothills Library. There were 110 people in attendance and 57 questionnaires were received. Respondents stated the preservation of park resources was most important. They indicated some facilities, which were most important were multi-use trails, designated single-use trails, unpaved trails, hiking trails, and wildlife/bird habitat interpretive areas. On April 21, 2004 a second public meeting was held with 59 people in attendance. A focus group meeting took place on April 13, 2004, with six representatives from hiking, biking, equestrian, wildlife, and flora/fauna clubs/organizations to provide their perspectives. A community-wide needs assessment was conducted with the open space and trails master planning process with 403 persons responding. Respondents indicated they and/or members of their households have a need for sidewalks for walking, biking, or running; paved walking and biking trails in parks; paved as well as unpaved walking and biking trails linking destinations; large natural areas for open space; large natural areas for protecting wildlife; bike lanes along streets; large natural areas for observing wildlife; nature/interpretive trails; unpaved trails for mountain biking; handicapped accessible trails; and unpaved trails for equestrian use.

Ms. Keller stated a 20-member technical advisory committee, representing 11 different department/division perspectives met three times to make recommendations on the technical feasibility of what the public was requesting.

Last, Ms. Keller stated that two public meetings on the 59th Avenue street improvement project were held by the engineering department. Citizen input pertaining to road crossing preferences was derived from these meetings and incorporated into the preliminary master plan. She explained the entrance at 59th Avenue would be relocated back into the park, farther away from the main road. She stated the goal was to create safe pedestrian and wildlife crossings.

In response to a question from Chairperson Neyer, Ms. Keller explained there would be a north and south land bridge. The bridges would be straight across a depressed road, approximately 36 feet wide. Mr. Boyer added that a depressed road would offer reduced traffic noise.

Commissioner Socaciu asked if it would be practical for wildlife to cross the land bridge. Ms. Kellar stated the land bridge would encourage animals, after some time, to cross safely.

In response to a question from Commissioner Socaciu concerning possible pollution of the lake from construction debris, Ms. Keller explained that water runoff would be the responsibility of the engineering department to address, mandated by federal regulation.

Commissioner Socacin questioned with all best practices being used, what would take place if the wildlife were disturbed. Ms. Keller explained that severe fines would be imposed.

Commissioner Miller asked if the depressed road would flood. Ms. Keller assured him the depressed roads have adequate drainage.

Commissioner Socaciu asked if the sedimentation basin was part of the park. Mr. Paul Monaghan, Arrowhead Amenities Board, stated that although the basin is located on city land, the Arrowhead Amenities provides and maintains the sedimentation basin at no charge to the city.

Commissioner Hansen stated he has attended meetings where the primary concern was runoff.

Commissioner Klima stated she was concerned about the traffic on Pinnacle Peak, east of 59th Avenue. Mr. Boyer explained that the City of Phoenix would be installing streetlights at 55th Avenue and Pinnacle Peak Road.
Commissioner Socaciu expressed his concern with widening of the roads. Mr. Smith stated the width of the roads would be determined by another department, as parks and recreation does not have the expertise in this area. Commissioner Socaciu said the parks department should ask for what they would like regarding roads instead of leaving the decision to another department. He said the parks department should have input on this matter as well as the land bridges and the connectivity. Mrs. Smith replied, our concern is to get recreation users safely across 59th Avenue and to protect and preserve as much of the park from scouring as possible.

Commissioner Hansen asked if play areas and tot lots were of interest to those survey respondents. Ms. Keller stated those uses were rated least important. She added this park is a destination park, not a neighborhood park where tot lots are usually located.

Ms. Keller described the environmental education center, which would be located near 51st Avenue. Mr. Boyer stated that currently the amphitheater area has been used by the Campfire Girls and was recently used for star gazing events. No loud concerts will take place. The new amphitheater area will have the required accessibility the current area does not have.

Commissioner Hansen asked if the new parking area would be lighted. Ms. Keller said yes, and added the existing parking area is lighted. Commissioner Hansen stated he was concerned with the residences, which back onto the park, receiving the lighting overflow. Ms. Keller felt this was not a concern adding that improved light fixtures will be used.

A member of the audience questioned why the City of Glendale is allocating monies of all Glendale residents to renovate a park, which is close to the Phoenix and Peoria borders. Ms. Keller explained this is the best area suitable for a destination park. Mr. Smith emphasized the park is for all Glendale residents. It is a unique destination park located at Glendale's north end, and because of our unique shape we meet this challenge with location of all our residential facilities.

One member of the audience was concerned with park visitors viewing the backyards of the nearby Arrowhead residents.

One member of the audience asked if the pedestrian crossings would be tunnels. Ms. Keller stated the survey respondents preferred tunnels, however, the police department stated there are safety concerns with tunnels, as well as lighting, graffiti, and vandalism concerns.

Mr. Monaghan stated that drainage would occur from the City of Peoria, as they have been very busy moving land. The basin was not built to catch all this water. It was constructed to hold the water from the treatment plant. This water was sold to Arrowhead Lakes and Arrowhead Lakes maintains the basin. Mr. Monaghan was happy to say that the lake has drawn a tremendous amount and variety of various animals.

Mr. Smith closed by stating that although there are concerns with the roadways, the primary issue is to safeguard the park, and the plan will suggest opportunities to improve and preserve Thunderbird Park.

Commissioner Klima made a motion to forward the master plan to the City Council. Commissioner Miller seconded the motion. The motion carried unanimously.
APPENDIX C: PUBLIC PARTICIPATION PROCESS (2005-2006)

C.1 Introduction

In September 2005, a draft of the preliminary master plan was presented to the community. At that time, public feedback indicated the need to reconsider the recommendations for the plan. Since then, additional steps were taken to listen to the public and collect additional park information. As a result, the recommendations for changes to the plan are based on the following priorities:

- Limit park improvements
- Repair/replace restrooms
- Provide safe drinking water
- Provide a safe and clean park
- Improve signage for parking, rules and regulations; trail markers, and plant and wildlife identification
- Provide shade and picnic areas
- Provide areas for interpretive education discussions
- Provide parking but limit expansion
- Enhance and preserve wildlife
- Maintain existing trails
- Connect trails
- Restore areas with native vegetation, as well as preserve native vegetation already in the park

C.2 Focus Group Meeting (September 2005)

Focus Group Meeting Summary – September 6, 2005
Thunderbird Conservation Park Master Plan Process

Attendance: Nine people, representing various interests: Diane Cunningham, Glendale Equestrian Club; Dale Woods, Larry Clark, Allan DeFranco, Save The Park group; Bob Revolinski, Water Resource Management, Inc.; Barbara Dobbs, Principal, Deer Valley High School; Carol Butler, Principal, Legend Springs Elementary School; Mike Wood, Glendale Bicycle Advisory Committee; Paul Monaghan, Arrowhead Ranch Amenities, Inc.

Program: Becky Benna', Director of Parks and Recreation, welcomed the group and spoke about the overall process and need for developing a master plan for Thunderbird Conservation Park. Shirley Medler, Deputy Director, described the efforts to date. Jackie Keller, of Logan Simpson Design, and her team presented the draft preliminary master plan. She emphasized how public input and technical factors influenced the preliminary draft of the plan.

Discussion: Dr. Marty Rozelle facilitated an informal discussion with the group. The discussion focused on aspects of the draft master plan that people appreciated, and those specific features that some participants felt should be modified or deleted. The team also answered questions. Notes were taken on a flip chart for all to see.

Participants appreciated many features about the preliminary plan including;
- Education – the school representatives mentioned the importance of this type of activity to help meet state standards for science education.
- Plans for revegetation area along sedimentation basin – stabilization of the area and opportunities for wildlife enhancement are important.
- Separation of Uses – the park area is large and the ability to have separate activities going on at the same time without interference is appreciated.
• Trail connectivity – outside of the park is an important improvement to the bicycling community.
• Safe crossings – along 59th Avenue were well supported.
• Larger observation areas – than currently exist. People love to come to the park and have a safe place to quietly enjoy the views.
• Pleased that new or refurbished restrooms will be built – suggest making them higher tech than currently exist.
• Revegetation is good – bring back the natural plants and get rid of the ‘exotics’ (weeds).
• In general, everyone supported the plans for the group picnicking areas, but some questioned the number of spaces. Jackie explained that the proposed number of spaces for picnickers is less than currently exist.
• Everyone agreed that interpretive areas are important and appreciated, with specific mention of the history of Hedgpath Hills.

They made suggestions and asked questions, including;
• More facilities equal more users. Too many parking spaces are shown on the plan, and this will only encourage more users. Five hundred spaces are too many. “Once park amenities are built, we cannot return to the natural state. These future amenities will be expensive and we will lose more of the natural area.”

Jackie explained that the parking spaces would serve the current and projected needs. They would be attractively designed possibly using some type of material other than asphalt. The team would look at similar types of parks within the Valley for comparisons of parking required for the types of existing and proposed activities at the park.
• Accessibility – places for wheelchair users, etc. to access areas of the Park
• Need for a lower trail system for horses – current trails are relatively steep and not wide enough for horses, hikers, and bikers.
• The cars parking within equestrian areas can make trailer parking difficult.

Jackie clarified that trailer parking is designed to be a separate area from car parking and both will be signed and enforced.

• Outdoor learning area and a center – was generally supported, but the proposed 10,000 square foot building seems too large to some participants. A suggestion for a shade structure with canopy features to be incorporated with the building to provide the use area but with a smaller building. The outdoor learning area to seat 100 people/children needs more discussion.
• A natural barricade – is needed to keep people from entering the south side of the lake. This is considered a safety issue.
• Management of the sediment basin – and removal of sediment is a concern.
• Natural revegetation is important for wildlife needs. People would like to see more wildlife.
• Plans for vehicular control – between 56th Avenue and 67th Avenue. This entry should be gated. Students from the high school love to cut through the park when the gate is open.
• Consider a Junior Ranger Program – based out of the proposed Ranger Station.
• Reduce the posted speed – along 59th Avenue to 35 mph.
C.3 Public Meetings (September 2005)

THE CITY OF GLENDALE
PARKS AND RECREATION DEPARTMENT
THUNDERBIRD CONSERVATION PARK PRELIMINARY MASTER PLAN

DEER VALLEY HIGH SCHOOL CAFETERIA
18424 NORTH 51ST AVENUE
GLENDALE, AZ 85308

SEPTEMBER 14, 2005
6:30PM

The public meeting began at approximately 6:40pm.

Ms. Becky Benná, Parks and Recreation Director, began the meeting by introducing those in attendance. She introduced Parks and Recreation staff Shirley Medler and R.J. Cardin as well as Parks and Recreation Commissioners Ted Hansen and Chuck Jared. Also in the audience was Councilmember Manny Martinez. Ms. Benna introduced tonight’s meeting facilitator, Dr. Marty Rozelle, from the Rozelle Group.

Tonight’s public meeting began with a presentation of the draft preliminary Thunderbird Conservation Park Master Plan. Presenting this evening will be landscape architect Ms. Jackie Keller, Logan Simpson Design, Mr. Steve Fairaizl, senior biologist with Logan Simpson Design, trails coordinator, Tom Fitzgerald, Logan Simpson Design, Jennifer Cleveland, Logan Simpson Design and hydrologist Mr. Jon Fuller, JD Fuller Hydrology.

The public meeting was opened for comments and questions from the public. Dr. Rozelle facilitated this portion of the meeting. The following portion of these minutes lists the questions and answers from this portion of the meeting:

1.) What is the size of the proposed education structure / outdoor learning center? Ms. Keller stated the proposed building could be up to 10,000 square feet, which will include two classrooms to accommodate 30 children per classroom.

2.) How much additional parking is being proposed? Ms. Keller explained the formula to determine the amount of parking spaces needed. Mr. Fitzgerald said that he took information such as miles of trails and number of parking spaces from many valley parks such as Pinnacle Peak, Squaw Peak, and White Tanks to determine how many miles of trails each had. On an average there are between 20 and 50 parking spaces provided for each mile of trail. Based on this formula, Thunderbird Park should have 640 parking spaces. He said 250 parking spaces currently exist with an additional 400 spaces being proposed. This equates to 32 parking spaces per trail mile.

3.) Would it be possible not to reduce the picnic area for revegetation and upgrade the existing picnic area? Ms. Keller stated the goal of the project is to raise the conservation level of the park by trying to get the highly used facilities out of the wash corridor areas. She explained that even if the existing areas were upgraded the challenge of keeping users out of the wash corridors would still exist as well as keeping the sediment out of the wash areas during flood times.

4.) Would the parking lot for the handicapped viewing blinds be increased to allow for more people to visit the other viewing blinds? Ms. Keller explained that providing trailheads along the wash corridor would provide access to the trail system on the west side of the park. The existing parking at the west end of the sediment basin would not be increased. This issue was investigated at the start of the master plan process. What is trying to be provided is easier and better pedestrian access to the existing viewing
blinds. She said there is parking where persons wanting to visit the three existing viewing blinds could access them.

5.) Are we not moving away from conservation by introducing the education building? Ms. Keller stated there have been many discussions regarding the meaning of conservation. Conservation is preservation, restoration, and management. This would include managing the activity so that we conserve the resources of the park. She stated they are attempting to revegetate many areas of the park. Part of conservation is education as to how the conservation efforts are performed.

6.) Will the pathways be improved (removal of large rocks)? Ms. Medler stated that many comments similar to this one have been received. She explained that the city has applied for and received funding through an Arizona State Parks Heritage Grant. She stated the Heritage Grant has been awarded and will provide funding for manpower as well as cover the cost of materials needed to fill areas around the large, exposed rocks and to stabilize these areas as well. This grant will also provide specialists who will analyze the trail to see where rest areas along the trails need to be provided.

7.) What is the budget for the project, what is the funding cycle, and what is the construction timetable? Ms. Medler explained that this is a master plan where a budget exists in the Capital Improvement Plan (CIP) funded by the Open Space and Trails bond election. In 2003, the City Council allocated monies for this project. The Thunderbird Conservation Park Master Plan was determined to be one of the priorities. She reminded the group that this is just a draft preliminary master plan. Ms. Medler stated funding is currently available for the trail improvements. Ms. Keller added a Master Plan took place in 1967 by Maricopa County. She explained that a master plan is only a guideline, which changes throughout the years based on the needs of the community. She explained the Growing Smarter and Growing Smarter Plus requirements that must be achieved. Ms. Benna stated that the master plan process helps to prioritize to identify what the community needs the most.

8.) How many people can currently picnic on 55th Avenue? Ms. Keller stated there isn’t currently any picnicking available in that area. She stated that 330 people could currently picnic at the park. However, the amount proposed would be reduced to 210 people after improvements have been made. Ms. Keller confirmed that the number of picnickers would be reduced from 330 to 210.

9.) Are the horse trails distinct from the hiking trails? Ms. Keller stated that all trails will be shared by hikers and equestrians. However, the equestrian group that was contacted stated they mainly use the west side of the park.

Other Comments Followed:
One speaker commented that construction of the education facility at the Phoenix border for the citizens of Phoenix did not make sense. He stated the facility should be constructed at 67th Avenue as the facility would be surrounded by a Glendale elementary school, a junior high, and a high school. He stated that staff explained construction at that location would not be possible because there was not enough flat land. He suggested to staff that they think “outside the box”. He felt if homes can be constructed on the sides of the mountain, the construction of the education facility is possible. If the facility cannot be built along 67th Avenue, then he suggested not constructing the building at all as there are other north Glendale facilities, which could accommodate children. He felt that additional patrolmen would be needed with the additional proposed parking spaces. He felt that many people that use the park would say to leave the park alone and not make any changes.

One of the attendees commented on the traffic flow along 55th Avenue and Pinnacle Peak Road. She stated if this project is to ever be constructed and completed the amount of traffic in this area would be unrealistic. She felt the entrance along Pinnacle Peak Road would be unable to handle the amount of traffic entering into the park. She asked for the current plan to handle a brush fire as one has already occurred.

Another attendee stated there is a limited amount of desert remaining and questioned why the desert should be disrupted to construct an education facility to explain to children about how wonderful the desert used to be.
Additional Questions Followed:
1.) Have the consultants contacted ADA regarding the trails and the education building? Ms. Keller stated that at the point when comments are received from the public and the plan is beginning to be composed, the ADA would be contacted for input. She added that those with disabilities had requested challenging trails for themselves and not just flat trails. A variety of trails are provided in this plan. All new buildings must comply with ADA regulations.

2.) Will Pinnacle Peak Road be widened? Mr. Fitzgerald stated the city of Phoenix CIP indicates the Pinnacle Peak Road will be widened beginning at 35th Avenue. He was unsure of the western boundary.

A citizen commented as to how could a master plan be prepared for Thunderbird Conservation Park when the consultants are unsure or unaware of the Pinnacle Peak Road widening? Mr. Fitzgerald stated the city of Phoenix would be contacted.

3.) Is there a possibility of reducing the speed along 59th Avenue? Another attendee stated the city of Phoenix refused to look at the speed limit concern along 59th Avenue.

A citizen commented about the possibility of the speed along 59th Avenue being looked at now that Thunderbird Conservation Park has truly been categorized as a conservation park.

A citizen commented that she is very disappointed and felt that consultants and everyone involved is not taking a realistic approach regarding the Park. She stated there is an enormous influx of population coming into the area and currently the roads cannot accommodate the users today or in the future.

Dr. Rozelle reminded all attendees to complete the yellow comment forms located at the back of the room.

Ms. Benne provided some closing comments and asked the attendees to provide any ideas or comments that would assist staff and the consultants in the master plan process. She encouraged all in attendance to complete the yellow comment forms. She stated the next public meeting would take place on Saturday, September 17 at 1:00 p.m. at the Foothills Library. Everyone is welcome.

The meeting concluded at 8:43 pm.

Respectfully submitted,

Diana Figueroa
CITY OF GLENDALE
PARKS AND RECREATION DEPARTMENT
THUNDERBIRD CONSERVATION PARK PRELIMINARY MASTER PLAN

FOOTHILLS LIBRARY
GLENDALE, AZ

SEPTEMBER 17, 2005
1:00PM

The public meeting began at approximately 1:00 p.m.

Ms. Becky Benná, Parks and Recreation Director, began the meeting by announcing those in attendance. She introduced Park and Recreation staff Shirley Medler, R.J. Cardin, Roger Boyer and Parks and Recreation Commissioners Ted Hansen and Raymond Kultala. Also in the audience were Councilmembers Manny Martinez, Joyce Clark, Phil Lieberman, and Tom Eggleston. Mayor Elaine Scruggs was also in attendance. Ms. Benná introduced today’s meeting facilitator, Dr. Marty Rozelle, from the Rozelle Group.

Today’s public meeting began with a presentation of the draft preliminary Thunderbird Conservation Park Master Plan. Presenting today will be landscape architect Ms. Jackie Keller, Logan Simpson Design, Mr. Steve Fairaizl, senior biologist with Logan Simpson Design, trails coordinator, Tom Fitzgerald, Logan Simpson Design, Jennifer Cleveland, Logan Simpson Design and hydrologist Mr. Jon Fuller, JD Fuller Hydrology.

The public meeting was opened for comments and questions from the public. Dr. Rozelle facilitated this portion of the meeting. Following are a list of the questions and answers:

1.) Where is the topo map? Ms. Keller pointed out and explained the topography aerial. She reviewed the elevations maps for clarification. Mr. Fuller asked that anyone interested in a more detailed map provide their email address to him. He will send a more detailed map electronically.

2.) What is the cost estimate for the total project? Ms. Benná explained that this public meeting process will assist in determining what the costs for the Master Plan process will be. First, the community must determine what the priorities are and this will lead to cost estimates. Second, staff will look at funding sources for this project.

3.) Is permanent staffing required and what is the cost? Ms. Benná again stated costs are based on the needs and requests of the community.

4.) Do you have any statistics that indicate increased equestrian traffic in the future? Currently, it appears to be minimal. Ms. Keller stated a statistical analysis has not occurred. Mr. Fitzgerald stated there are statistics indicating that the amount of hikers has increased although the equestrian traffic appears to remain the same or less. Equestrians feel there is competition for the trails among the users. The amount of development nearby also adds to the reduction of equestrians. Ms. Keller displayed the area which is being used by equestrians. The equestrians are interested in longer rides and suggested these trails connect with others to allow this to happen.

5.) What happens between now and the November 5 meeting? And what happens after that? Ms. Benná stated that in the focus group meeting, all in attendance suggested that staff take their time in developing the master plan. Ms. Benná asked that people provide their contact information so that they can continue to be notified of upcoming meetings. There will be more opportunities to provide input.
6.) Why was the wash corridor developed originally? Ms. Keller stated that twenty years ago that is where people recreated, right along the rivers and the lakes, which lead to erosion. Uses must be moved to appropriate park areas.

7.) Lights are currently an intrusion to the park. Are you proposing more lights? Ms. Keller stated the only areas that will include new lighting will be the parking areas, the restrooms, and ramadas. The proposed culvert under 59th Avenue will also be lit. The lighting will be placed inside. The proposed education center will be lighted only on the inside.

8.) How are you going to control and protect the 2 to 12 year olds in the new recreation area? Ms. Keller said although there is no way to control every child, the intent of the area will be to provide areas which will allow children the opportunity to touch and experience different desert related items.

9.) Why not restore the Dragon’s Tooth catchment basin? Mr. Fuller stated the Dragon’s Tooth catchment basin is part of the sedimentation basin. They are originally designed to capture the sediment. What to do with the basin, when to empty the basin, and how often to empty it without disrupting the wildlife are issues that are being discussed.

10.) Don’t catchment basins breed mosquitoes and what is the plan to prevent this? Mr. Steve Fairaizl stated that water does trap mosquitoes and gives them the opportunity to breed. He explained there are different ways to prevent the mosquitoes from breeding. He understands the concern because of the West Nile Virus. Ms. Keller stated the catchment basins are designed to prevent standing water, which is what mosquitoes prefer. The basins would hold natural rainfall only.

11.) Low value habitats? In the interest of conservation, should those areas be kept looking that way? Mr. Steve Fairaizl said yes, this low quality wildlife can be increased or decreased. This would depend upon the amount of vegetation or revegetation that is added to specific areas.

12.) Why would areas changed from yellow to green? Mr. Steve Fairaizl indicated that depends upon what is requested by the users. Would users like more wildlife or less wildlife?

13.) Aren’t soils typically an excellent medium for growing most plants? Ms. Keller stated the colors would change based upon how much wildlife is requested in each areas. Ms. Keller explained the different types of plants available in any area draws different types of wildlife. She said this is the challenge, how to get good plants to grow in an area that has been disturbed.

14.) Why isn’t the wash area shown in yellow? Mr. Steve Fairaizl explained the wash area barely contains levels of food and shelter for wildlife that currently exists. Ms. Keller added that the picture shows how dry the area is now with not much vegetation.

15.) Won’t the city open themselves up to a lawsuit by using the culvert as a trail? Ms. Bennà stated that this issue would be part of the evaluation process. If this were an issue, we would need to determine how any potential risks could be minimized.

16.) If the culvert were used, would it be possible to install screen doors that lock? Ms. Bennà stated this issue could be discussed during the planning process.

17.) Can the education facility be placed near the existing picnic area but outside the 100-year floodplain? Ms. Keller stated that something could be placed near this area but she felt the facility, which includes parking needs to be placed in an area that is more developed.

18.) How about locating the facility along 67th Avenue? Ms. Keller stated this is the main equestrian entrance and is a more intensive use for the area. The facility would require more parking that what would be able to be constructed along that area. If the facility was placed in this area, it would mean disturbing more of the desert.
19.) What can be done in a building approximately 3,000 square feet? Ms. Keller stated the size of the building has yet to be determined. What is being proposed is two classrooms, bathrooms, with a ranger area. What was shown in the presentation were pictures of other education facilities. The Thunderbird Conservation Park educational facility size has yet to be determined.

20.) Why are so many trailheads shown in the Pinnacle Peak area? Ms. Keller explained they wanted to distribute the use to lessen the impact. She stated three trailheads would be added to disperse usage. This would accommodate those coming to the park from the east loop. This would encourage people to remain on the trails by providing parking near the trails they are wishing to utilize. This will also help to deter the number of social trails that are created by those cutting across the desert to access the trail they are interested in. The key to park planning is placing convenient parking for the areas that people are going to access.

21.) Regarding the culvert – what is the plan to consult with the police before proposing pedestrians to use the culvert? Ms. Bennà stated that this would be part of the operation process. Receiving input from the police department would be part of the master plan process. There have been discussions with Officer Joan Campbell of the Glendale Police Department.

22.) Doesn’t it take hundreds of years to restore plants and soils in the wash? Mr. Steve Fairaizl said “no”. There is a real science to restoring plants and soils and if done properly it can happen quickly. Ms. Keller stated that one of the techniques is to salvage the topsoil, approximately six inches off the top. This is stored until needed.

23.) Will the education center be built on a medium value habitat? Ms. Keller stated this is a possibility but recommend building on an area that is already disturbed. There are reasons as to why the flatter, already disturbed areas of the park are preferred.

24.) Where would the parking be for those utilizing the 51st Avenue trail? Parking for all park trails will be at the park entrances at 57th, 59th and 55th Avenues. For those driving to the park to use the 51st Avenue trail, the closest parking is at 55th Avenue off Pinnacle Peak Road.

25.) Where would the parking be for those wanting to utilize the 51st Avenue bacterial trail? Ms. Medler explained the route of the 51st Avenue bacterial trail. The 51st Avenue bacterial trail connection is for equestrians already on horseback, hikers or bicyclists using the trail as an entrance to the park. No parking would be provided at this point, and the access would not become a designated trailhead, but rather a connection to an existing regional trail system.

26.) How many parking spaces are needed? Ms. Keller explained the formula for estimating the number of parking spaces needed. She stated that approximately 30 spaces are needed for each trail mile. This results in approximately 650 parking spaces. This would assist in keeping vehicles from parking in the surrounding neighborhoods.

27.) Does this formula consider the attractiveness of the trail? Ms. Keller stated more parking would be provided for the more popular trails, and less for the lesser used trails.

The speaker in the audience suggested a more detailed audit take place rather than what has been formulated. Ms. Keller explained that during their research they would determine which trails are the most popular. Those trails would require more parking spaces.

28.) What documentation exists showing how many people are using Thunderbird Park for picnicking? Large groups? Individuals? Do we have information on peak days or times? Are they there for hiking or picnicking? Ms. Medler stated staff reviewed the number of reservations for the ramadas that were made. Approximately 100 reservations are taken each year for the group picnic area. Other ramadas located in the park are only one or two table ramadas and many of those are not reserved, but are used on a first come, first served basis. She explained that the Traffic Division of the city of Glendale had done a traffic count to see how many vehicles were entering into the park when they did their street analysis. On the
one Sunday during the study 1,700 vehicles entered into Thunderbird Conservation Park from 59th Avenue. Ms. Benná stated that staff could conduct more surveys to determine the reasons why people are coming to the park.

29.) Any information on peak days / times? Ms. Benná stated more surveys should be conducted to gather more information.

30.) Is there any documentation on how often the amphitheater is used? Ms. Benná stated from her personal observation she has seen people using the amphitheater to stretch or to sit and rest. This area does not require a reservation. Ms. Medler stated this area was used for sunrise religious services and for cross country track meets. Ms. Medler stated for a track meet there are approximately eight buses, each carrying 40 students for a total of 320 participants, plus spectators.

31.) How has the plan come so far when an exhaustive analysis has not been conducted asking for the most uses? How can the consultants plan to change the area when they aren’t sure who uses the park? Shouldn’t the process have begun by determining how the users are utilizing the park? Ms. Benna stated that a community-wide survey was sent to 2,000 random Glendale households in the winter of 2003-04 with a return of 403 responses. Public meetings and a focus group meeting were held during that time period. Since then another focus group meeting has been held, and this meeting tonight is the second of a series of public meetings being held to continue the public input process. On-site surveys of users will also be conducted this Fall.

32.) Why are there three entrances proposed from Pinnacle Peak? Ms. Keller stated that the emergency personnel asked for more than one entrance. Having more than one entrance provides a safe loop system for people entering and exiting the park.

It was mentioned that 700 parking spaces are required to support events. Ms. Keller clarified the amount of parking spaces proposed is 620. She explained the formula that determines the number of spaces needed.

33.) How much acreage is consumed for parking lots? Ms. Keller stated that 2.2 acres of parking current exists. She said an additional 2.7 acres of parking is proposed for a total of 4.9 acres of total parking. There are nine acres proposed for picnicking.

34.) Does this figure include the roadways and the area between the landscape and the parking areas? Ms. Keller stated no, the acreage is only the paved area. She said there is currently 1.4 miles of roadways and the master plan proposed 2.05 miles total. Some of the roadway is being removed in order to restore the wash corridor.

35.) Shouldn’t we target a lower trail per person density? After some calculations, this would show one person on every 40 yards of trails. Mr. Fitzgerald explained that people are coming to utilize the park and we need to determine how to accommodate all these people. This can be done by designating which are the high use areas and how to plan to maintain these areas for future use.

36.) Will energy efficient restrooms be provided? Ms. Keller stated that they are looking at different types of building materials, lighting, and handling of waste in order to improve the restrooms. This would provide technically advanced but conservation oriented restrooms.

37.) How does the city plan to engage the disabled? Ms. Benná explained that part of the analysis includes working with regulations set up by the American’s with Disabilities Act. We will also take the draft preliminary master plan to the City of Glendale’s Commission on Persons with Disabilities for their ideas on the proposed accessible trails.

38.) How will the schools and educators be involved? Ms. Benná stated these groups were part of the focus group, and that staff would continue to communicate with them and solicit their input.
39.) Will there be parks operations separate buildings – one of the east side and one of the west side? Ms. Jackie explained the travel time would be of concern. There is a high density of trails along the west side, which are mainly equestrians. The types of usage for park operations must first be identified in this process and to determine how these separate areas could be used.

40.) Will a monument marker would be constructed at the highest point? Ms. Keller stated no, this would be the lookout area, and added nothing new would be constructed at this location.

41.) How much distance does the wildlife need away from people to survive? Mr. Steve Fairaizl explained that urban animals have adapted to people and roads. They have learned to adapt and required only small areas and short distances from people to survive.

An attendee commented that signage at the education center should be kept there. Do not place signage throughout the park identifying each type of plant or bush.

42.) Is the education center a “done deal”? Ms. Bennà stated no, the purpose of the public meetings is together feedback, comments and concerns. All the input collected will be considered when completing the master plan.

43.) Does the White Tank Mountain Park have an education center? Mr. Fitzgerald was unsure. He noted some of the parks, which he was aware, had an education center.

44.) There is a small wash located at the northeast corner. Has this area been looked at with regards to hydrology? Mr. Fuller stated no, this area has not been researched. An attendee asked that this area be considered when reviewing the overall park.

45.) Has the parking issue has been addressed regarding the 67th Avenue equestrian center? The parking area that currently exists for the equestrians trailers is experiencing problems due to the high school kids parking their vehicles and then crossing the street to get to school. Ms. Medler stated this issue has been addressed. Signage has been posted to restrict students from parking in that lot.

An attendee stated he liked the idea of the picnic areas being removed. He likes the increase in vegetation and adding water bowls for the wildlife. He sees a contradiction with the number of parking spaces being increased. He is concerned with the wildlife being scared off by those visiting the park.

Another attendee appreciates the city staff for listening to the residents’ concerns. He added he is concerned about the reduced picnic areas, stating that maybe too much are being removed. He felt that too many parking spaces are being proposed. He asked for the size of the education center. He said let’s determine the priorities for the Park and let’s addresses those first. He felt that vending machines with water sales would be a good addition to the Park and he also felt the washes needed to be reclaimed.

Another commenter stated that he was informed of this meeting when he encountered park staff distributing surveys at the Park. He stated that he felt the access issues have not yet been addressed as there are people parking in the neighborhoods.

An attendee stated only the proposed improvements should take place. She does not want to see another South Mountain Park or Piestewa Park created.

A comment from a previous speaker stated that he does not see the area being protected and preserved.

Mr. Ted Hansen, Parks Advisory Committee Chairperson, reminded everyone in attendance that this is part of the public process. He added he liked the flat areas and would like to see these areas or the yellow areas preserved and kept flat.
With no further comments, Ms. Benné stated the tentative date of the next meeting is November 5th. She advised all attendees that the consultants and staff would be available for questions after today's meeting. She thanked everyone for attending this meeting.

The meeting concluded at 4:14pm.

Respectfully submitted,

Diana Figueroa
C.4 Public Comments Following September Public Meetings

Thunderbird Conservation Park Master Plan Comments
Received via the city webpage following September 2005 Public Meetings

Dated: October 11-13, 2005
8 separate emails, 8 citizens

* No Outdoor Group Area
* No Youth Outdoor Experience Area

equestrians (widen switchbacks), not only hikers instead of new trails and parking

Pinnacle Peak Road

and information center, additional info centers at 67th Ave and old amphitheater

speed cameras, etc. to attract commuter traffic onto other roads away from the park

(rubberized asphalt)

Citizen Email Requests
Dated: October 12 - 28, 2005
8 separate emails, letters, phone calls from 7 citizens

Leave the park as it is
* No additional or expanded parking lots
* No additional development, including trails, on east side
* Pedestrian bridge/equestrian trail user concerns
Clarification of Master Plan revisions

Wildlife Corridor concerns

* No expansion of amenities
* Remove picnic tables from Wildlife Corridor
* Add wildlife watering holes
* Repair sedimentation basin moguls
* Reclaim the wash for animal habitat

Add an interpretive center
Additions & updating of restrooms
Add water fountains or secured machines at trailheads
Add mountain biking trails
Separate equestrian parking and staging area from hikers
Create ADA access areas & interpretive trails
Concur with the flush deck bridge crossing over 59th Avenue
Too many parking spaces being created
Oppose group picnic ramadas
Utilize State Parks grant to improve 67th Avenue parking lot

THUNDERBIRD CONSERVATION PARK MASTER PLAN
Comments by Ted Hansen, Parks & Recreation Commission Chair
16-Dec-05

Positive Features of the Plan:
Better organized facilities for equestrians
Revegetation of 67th Ave. areas
Restrooms for 67th Ave.
Additional ramadas near 67th Ave, but spaced better
Improvement of 67th Ave. parking although recommends fewer spaces added
Planned stabilization of the park trails
Habitat restoration along central wash corridor
Removal of parking next to wash corridor
Removal of the road along the west side of the wash
Removal of picnic tables within the 10-20 year flood plain
Parking plans for 59th Ave.
Accessible trails in Pinnacle Peak & 59th Ave. areas
Outdoor shaded education area, limited to about 50 people

Suggested Improvements to the Plan:
Would like to see more of the documentation done by Logan Simpson Design
Better definition of “conservation”
Map key does not include 'Existing Park Road'
Map key doesn't include planted trees
The size of the 67th Ave. Park Operations area near 67th Ave. is too large
Need more spacing between ramadas near 67th Ave.
Driving access between 67th & 59th should be gated
At 67th Ave, do not route hiking vehicle traffic through equestrian parking lot
Use 10-20 year flood line not 100 year for placing of amenities
Why remove existing picnic areas & ramadas that are outside 10-20 year flood?
Would prefer to use existing dam trail rather than create new trails along W. side of 59th Ave.
Favors a "Y" along 59th Ave. so that trail users don't have to go through wash interpretive trail
Need water at ramada and picnic areas
The 'disturbed' land map should be corrected to remove 51st-53rd & Pinnacle Peak area.
Do not upgrade yellow habitat to green habitat
Do not pave over the wash at 53rd Ave.
The proposed parking lots along Pinnacle Peak are too spread out.
Incorporate existing Pinnacle Peak parking lot into proposed
Too many trees and too much parking in the Pinnacle Peak area.
Too many parking lot entrances at Pinnacle Peak
Parallel driveways at Pinnacle Peak unnecessary
59th Ave. bus parking is not addressed
Need more educator input for bus travel around park
Park Ops buildings at Pinnacle Peak & 51st Ave. should be attached to Educational building
Pinnacle Peak ramadas are too close together
Why are there single ramadas near most of the large parking lots?
Trail along eastern boundary doesn't follow land contour
Recheck trail user density figures
Proposed education center size is disproportionate to the size of the park

Additional Comments:

Conservation Park' name should be used consistently
Create a Conservation Mission Statement and Conservation Principles
When surveying park users, find out what city they live in
Determine whether the sed. Basin management is included or excluded from the master plan
Don't develop the Pinnacle Peak area between 51st and 53rd Avenues.
Plan for only 2 bus parking spots
Continue to investigate how to minimize the amount of roadways and parking
Recommend 2,000 - 3,000 square foot educational facility
Design Ed. Center with outside access restrooms
Open discussions with Adobe Dam to wind new easternmost trail over the park boundary
Research further parking needs
Consult with police about using culvert
Continue to involve schools/educators on this master plan process
Include people with disabilities in future focus group discussions
Use user-identified priorities to create a phasing of plans
Estimate staffing requirements for each phase of the plan
Further define "Trail Viewpoint" and what would be done there
Further research picnic table usage at peak times. May not be able to reduce.
Provide further detail of how parking lot drains would catch water and filter it.
Provide more detail of how wash drainage gets past new developments north of the park
Further research how we can market the park to all Glendale
Provide details on the consultant's proposal of using a portion of the amphitheatre for presentations and part of it for plantings and viewing.
C.5 Public Stakeholders Meeting at Sedimentation Basin

City of Glendale
Thunderbird Conservation Park
Sedimentation Basin Meeting
April 1, 2006
9:00 a.m.

Welcome and Introductions
Becky Benná, Parks and Recreation Director welcomed everyone and asked attendees to introduce themselves.

Master Plan Update
Ms. Benná provided a brief update on what has been happening in the park master plan process. She stated that the master plan will include a component to address management of the park, and this type of meeting gives staff the chance to talk with all citizens and the different stakeholder groups who help care and manage the various components of the conservation park.

Sedimentation Basin Lake History and Purpose

Ken Reedy, Deputy City Manager stated that the purpose of the sedimentation basin lake is to collect run off water, run it through Arrowhead Lakes, and out through the 55th Avenue drainage channel. It also is at the top of the Arrowhead effluent water distribution system, and the city is responsible for the distribution lines that deliver effluent water into the sedimentation basin. Arrowhead Amenities is responsible for the water after it is delivered to the basin.

The sedimentation basin is the last point in the city effluent distribution system in this area.

In the early 1980’s the Paloma Corporation started to develop the area with the sedimentation basin being developed around 1984. The company went out of business, and the city established the Arrowhead Ranch Amenities Corporation, a non-profit corporation, to act as water operations liaison between the city and the lakes in the Arrowhead Ranch development.

A question was asked as to where the drainage water went before the sedimentation basin was built. Mr. Reedy explained that before that there were no homes in the area and the water ran to the southeast through the area toward Skunk Creek.

A question was asked as to who owned the lake. Mr. Reedy stated that the land in the park is owned by the city and the water in the sedimentation basin is owned by Arrowhead Amenities. He stated that the land behind the homes and around the lake is city property, and it is illegal for private property owners to clear or trim the trees and brush around the lake.

A question was asked as to the responsibility of the quality of the lake water. Mr. Reedy stated that the quality of the water entering the lake is the city’s responsibility and the quality of the water after it is in the sedimentation basin lake is the responsibility of Arrowhead Amenities. The water is graded as Class A+ when it leaves the water treatment plant.

Bob Revolinski, Water Resources Management, the company contracted by Arrowhead Lakes HOA to control water quality in the lakes, stated that the treatment process removes the nitrates, but leaves phosphates (that allow the lake to be fertile). He stated, and Mr. Reedy reiterated, that the water quality
as it is present in the lake is as close to nature’s way as possible, with the added aeration systems, and fish adding to the care of that water.

Bob Revolinski stated that the water is at a quality that could be recharged into the ground.

Mr. Reedy also stated that the sedimentation basin was built to allow for water to be pumped into other developments. Paul Monaghan stated that option has never been used.

Larry Clark, homeowner, asked what is the purpose of the little building and antenna on the property next to the Wildlife Viewing Blinds. Larry Brotman from Utilities Department stated that the antenna communicates with the main treatment plant and is necessary to read the controls for water distribution.

Mr. Clark asked if anything could be done to improve the aesthetics of this area through moving the antenna or adding foliage.

Mr. Brotman stated he would check on possible options for location of the antenna, and the parks and recreation department staff will look into options for additional landscape screening.

A question was asked as to when the sedimentation basin would be full of sediment.

RJ Cardin, Parks and Recreation Department, stated that question would be discussed later on the agenda.

**Sedimentation Basin Wildlife**

Joe Yarchin from Arizona Game and Fish Department stated that the sedimentation basin provides good habitat, food and cover for wildlife. RJ Cardin stated that the city looked into designating the sedimentation basin area as a wildlife refuge, but the sedimentation basin will remain as a conservation park component due to the use of effluent water in the lake.

A question was asked as to the Salt cedar located around the basin, and whether this invasive plant should be eradicated. Mr. Cardin said that approximately 10% to 20% of the lake foliage is Tamarisk (Salt cedar). Mr. Yarchin stated we do want to try to control the Salt cedar and not necessarily remove all of it due to it’s potential for use by wildlife. However, if we remove the Salt cedar, we need to first consider how we’ll replace those plants with other more acceptable species such as Desert Willow and cottonwood, to retain the wildlife habitat value. The Salt cedar would grow again, so we would need a management plan to keep it within appropriate limits.

Mr. Yarchin discussed wildlife-oriented recreation that minimizes human disturbance. Such management practices as enforcement of leash laws, provision of public education on wildlife viewing etiquette for park visitors will allow wildlife to remain, help keep the conservation area healthy, and help residents who live next to the park live with wildlife, such as coyotes and raccoons. He said wildlife would definitely habituate, but not to let them become too comfortable with humans.

A question was asked as to how to get herons off a patio. Mr. Yarchin said that self-help information is available from the Arizona Game and Fish Department for those humans who feel invaded by wildlife. He said the bird needs to realize that your property is not an appropriate roosting site, and suggested “soft harassment” such as waving arms, use of wind-driven items and noise cans to drive them out.

Ms. Benna stated part of our management plan will include educating people on this type of thing and will work with AZ Game and Fish to provide the information to the public. Concerted community efforts and on-going communication are necessary.

A question was asked as to whether AZ Game and Fish have brochures available for HOA’s to distribute at their meetings. Mr. Yarchin said they are available at the Mesa regional office or the Phoenix office on Greenway east of I17. He said videos are also available for this type of group use.

A neighborhood Spring Fling is scheduled for April 29 from 10:00 a.m. to 2:00 p.m. at Arrowhead Lakes, and an information booth on living with wildlife is welcome at the event. Mr. Yarchin stated that if Game...
and Fish had not been notified, it should be done immediately. It might be too late to get a representative.

**Sedimentation Basin Lake Topographical Survey**

RJ Cardin reviewed a recently completed survey of the sedimentation basin lake comparing depth findings to the “as-built” design. Staff is still reviewing and analyzing the data due to just receiving the results on Friday, March 31. The quick analysis indicates that since 1984 the sediment has built-up as little as 5” to 6” inches up 2 to 2 1/2 feet at some areas of the basin and at the west end since the sedimentation basin was developed in 1984. Bubblers pick up sediment and disburse it nicely throughout the lake. The preliminary review of the survey results show that the lake is performing the way it was designed to do.

A question was asked as to when the sedimentation basin may be filled with sediment, and if any previous surveys had been conducted. Mr. Cardin stated that the water level was 15 feet deep when it was built and now has approximately 12 1/2 to 14 feet in depth. This survey will act as a benchmark to future studies.

A question was asked as to whether we would schedule these at specific intervals. Mr. Reedy said that a once every so many year survey may not be the best measurement of sediment buildup.

Mr. Revolinski asked what type of coring tool for the lake measurements was used, and RJ Cardin stated it was the same one Water Resources Management uses.

A question was asked about the moguls that should stop the silt from entering the basin. Mr. Reedy said those “dragon’s teeth” are meant to slow the water down, not to keep the sediment from entering the sedimentation basin. A question was asked as to whether many of the plants around the lake are doing what the dragon’s teeth did before. Mr. Reedy said that was possible, and that the basin has changed dramatically since it was built, and no plants were present. The plants aren’t necessarily taking the place of the dragon’s teeth. If a large flood event occurs again, the water could wash the sediment out of the teeth.

**Additional Comments and Questions**

Ms. Benno thanked everyone for coming and stated that an outcome of the master plan process will be to work closely with the Arrowhead Lake HOA, Arrowhead Amenities and the AZ Game and Fish Department to keep communications open and work together to be stewards of the park.

A question was asked as to what is being done about erosion off the area south of the viewing blinds north of the sedimentation basin. Ms. Benno said that area is being addressed as part of the master plan.

A comment was made that the sedimentation basin has exceeded our expectations to what we’ve needed it to do, and that anything we need to do to the basin should be done in a methodical way.

A question was asked as to a need for a 404 Permit if anything is done in the basin. Mr. Reedy said that this is not considered a part of the nation’s navigable waterways so it doesn’t need a 404 Permit. The permit is only needed if there is a filling in of any sections of navigable waterways.

A question was asked if the sedimentation basin could be renamed, such as Thunderbird Lake. Ms. Benno said we could explore that suggestion.

There was a question about golden algae and a plan to keep that from happening. Mr. Revolinski stated that he is responsible for those issues. Mr. Reedy reiterated that Arrowhead Amenities is responsible for the water in the basin.

Mr. Monaghan stated that any re-design or construction to the sedimentation basin needs to be worked out with the city. Mr. Yarchin stated that AZ Game and Fish could advise the HOA and city staff on wildlife issues.
A question was asked if there were no water in the sedimentation basin, whose responsibility would the dry basin be. Mr. Reedy stated that it's not necessarily the City's. Mr. Monaghan suggested that a reserve study be done to establish that.

Staff, AZ Game and Fish representative and several the meeting citizens toured the south side of the sedimentation area.

The meeting concluded at approximately 11:00am.
C.6 Public Meetings (April 2006)

CITY OF GLENDALE, ARIZONA
PARKS AND RECREATION DEPARTMENT

THUNDERBIRD CONSERVATION PARK
PRELIMINARY MASTER PLAN REVISIONS
PUBLIC MEETING

DEER VALLEY HIGH SCHOOL CAFETERIA
18424 NORTH 51st AVENUE
GLENDALE, ARIZONA

WEDNESDAY, APRIL 26, 2006
6:30PM TO 8:30PM

The open house began at 6:30pm with an introduction of city staff by Parks and Recreation Director, Becky Benná. In attendance were Parks and Recreation staff, RJ Cardin, Shirley Medler, Roger Boyer, Clyde Brown, Wayne Drummond, Paul Bernardo, and Deputy City Manager staff member, Matt Cohrs. Also in attendance were City Council Members Manny Martinez and Steve Frate with Parks and Recreation Commission Chairperson Ted Hansen, and Parks and Recreation Commissioner Stanley Long. There were approximately 21 citizens in attendance.

Ms. Benná encouraged those in attendance to visit each revised plan on display and to ask staff questions. She added there were color maps, each with a description of the proposed changes, available for review and to take home.

An open house to review the revised plans and talk with staff was conducted. Ms. Benná provided an overview of staff’s approach to the proposed revisions and visual examples. She began by stating that staff utilized information gathered in studies and surveys conducted prior to September 2005. Public input and park information collected from September 2005 to date was also considered. The proposed changes are based on existing park conditions as the benchmark. Ms. Benná explained the general guidelines for improvements to the Thunderbird Conservation Park. Improvements based on consistent maintenance and design standards to all park trails, trailheads, trail nodes, signage, trash cans, ramadas, picnic tables, drinking fountains, equestrian hitching posts and troughs, restrooms, parking lighting, and surfacing and marking standards for parking lots and roads, whether paved and unpaved. Also, the park property boundary, if not already identified, should be marked along the entire perimeter. Provide mileage indicators on all trails. Procedures and standards should be identified as they relate to special uses and requests. Ms. Benná stated a community education outreach program should be developed regarding park wildlife, vegetation, geology, and other natural areas in the park. Ms. Benná provided a slide presentation that included pictorial examples of outdoor seating area, interpretive and accessible trails, resting bench, revegetation, signage, entries to park trailheads and shade and seating ramadas, a park information office that included a restroom facility, drinking fountains, and also provided shade, different parking lots, explaining that parking lots could possibly exclude asphalt and utilize another type of material, and equestrian corral for trailer parking. Ms. Benná concluded her presentation by reviewing the proposed timeline to finalize the Thunderbird Conservation Park Master Plan. The Parks and Recreation Commission will meet on Monday, May 8, 2006 at 7 p.m., at City Hall, Meeting Room B-3 to consider forwarding the master plan recommendations to City Council. City Council will then have the opportunity to review the master plan at its June 6, 2006 Workshop, with a final approval of the plan tentatively scheduled for at the City Council meeting on Tuesday, June 27, 2006.

The meeting was opened for public comment.
Mr. Allan DeFranco, wanted to thank the Parks and Recreation staff for their dedication and hard work throughout this very long, public process. He thanked staff for gathering input and accepting email comments, for distributing surveys and questionnaires giving the public the opportunity to express their comments and concerns, and for taking the time to listen. Mr. DeFranco stated that he was concerned about the need for a 2,000 square foot ranger station. He felt that was too large and was unnecessary as information can be distributed from a kiosk. He said there is an existing storage area, which should be utilized. Although the building may be aesthetically pleasing, it will be obtrusive. Mr. DeFranco did suggest some type of vending machine, secured and locked, where park users could purchase bottled water and/or Gatorade type drinks. He suggested that fire extinguishers be placed at each ramada, or rather, have all grills removed as grills are a potential fire hazard. He felt users should be encouraged to use propane grills.

Mr. Jim Hughes, stated that the information centers that he has seen at other valley parks spoil the desert. He felt the ranger/information facility was not needed.

Mr. John Turbridy, felt this is a good plan. He stated the park is in need of trail maintenance as hiking damages the trails. Mr. Turbridy commented that the water guzzlers are not needed as wildlife has lived in the desert for centuries without any human assistance. However, if the guzzlers are installed, he suggested that a viewing blind be added to allow park visitors to observe wildlife drinking water.

Other written comments were received from attendees wishing not to speak.

Ms. Karen Huebschman, wrote she is very much relieved and pleased with the current version of the park master plan. The philosophy has clearly shifted to open space, native desert preservation with nice "people access".

R. E. Cheney, wrote thanks for leaving the park for hiking – no playground! Looks like a good design.

Van DiCarlo, inquired as to how much the total project would cost.

Mr. Charles Kangas, suggested to stick to native vegetation and attempt to remove as much of the invasive species as possible.

Shirley Klovstad, stated that she was glad to see it scaled back from the original plan.

Wally Klovstad, provided the following comments: 59th Avenue and Pinnacle Peak Road – resting benches on the flat area near the mountain ok; the one by Pinnacle Peak Road – no; need a bathroom – good; 55th Wildlife Corridor – remove restrooms from wash –good; remove ramada, picnic tables and grills from wash – good; add restroom by Parking Lot A – ok, no added ramada; remove and revegetate Parking Areas C, D, and E – they are too close to the wash, put Parking Lot E on south side of the road; remove or cut size of the amphitheater by 75% in both dimensions; group ramada 6-10 tables, not possible if you leave amphitheater and to big anyway 4-6 tables plenty; ranger/parking information station way too big, if needed at all, eliminate from proposed plan; 67th Avenue and Equestrian Area – your plan should include what to do with equestrian facilities when the need goes away in three years, a lot of horses are gone already; who is using the K & J Parking Lots – the students from MRHS - park not for student parking – needs addressed; plan needs revegetation on all sides of the water reservoir; Ponding Area – eliminate water guzzlers – there is water in the pond; existing parking area (4 spaces) – fenced with no access to get to the viewing blinds; loop trail H! near 51st end to trail node #17 on east side of 55th and Pinnacle Peak park area.

Ms. Bennã closed the meeting by thanking all the citizens in attendance. She encouraged everyone to continue to attend upcoming meetings and return comment forms or visit the Thunderbird Conservation Park web page to provide comment by May 4th.

This portion of the public meeting concluded at 8:03 p.m.
Respectfully submitted,

Diana Figueroa

CITY OF GLENDALE, ARIZONA
PARKS AND RECREATION DEPARTMENT

THUNDERBIRD CONSERVATION PARK
PRELIMINARY MASTER PLAN REVISIONS
PUBLIC MEETING

DEER VALLEY HIGH SCHOOL CAFETERIA
18424 NORTH 51ST AVENUE
GLENDALE, ARIZONA

SATURDAY, APRIL 29, 2006
9:00AM TO 11:00AM

The open house began at 9:00 a.m. with an introduction of city staff by Parks & Recreation Director, Becky Bennà. In attendance were Parks and Recreation staff, RJ Cardin, Shirley Medler, Roger Boyer, Clyde Brown, Deputy City Manager staff, Matt Cohrs, Marketing staff, Kim Larson, Neighborhood Partnership staff, Erik Strunk, and Assistant City Manager, Pam Kavanaugh. Also in attendance were Council member Manny Martinez, Mayor Elaine Scruggs, and Parks and Recreation Commission Chairperson Ted Hansen. There were approximately 22 citizens in attendance.

Ms. Bennà encouraged those in attendance to visit each revised plan on display and to ask staff questions. She added there were color maps, each with a description of the proposed changes, available for review.

An open house to review the revised plans and talk with staff was conducted. Ms. Bennà provided an overview of staff's approach to the proposed revisions and visual examples. She began by stating that staff utilized information gathered in studies and surveys conducted prior to September 2005. Public input and park information collected from September 2005 to date was also considered. The proposed changes are based on existing park conditions as the benchmark. Ms. Bennà explained the general guidelines for improvements to the Thunderbird Conservation Park. Improvements based on consistent maintenance and design standards to all park trails, trailheads, trail nodes, signage, trash cans, ramadas, picnic tables, drinking fountains, equestrian hitching posts and troughs, restrooms, parking lighting, and surfacing and marking standards for parking lots and roads, whether paved and unpaved. Also, the park property boundary, if not already identified, should be marked along the entire perimeter. Provide mileage indicators on all trails. Procedures and standards should be identified as they relate to special uses and requests. Ms. Bennà stated a community education outreach program should be developed regarding park wildlife, vegetation, geology, and other natural areas in the park.

Ms. Bennà provided a slide presentation that included pictorial examples of outdoor seating area, interpretive and accessible trails, resting bench, revegetation, signage, entries to park trailheads and shade and seating ramadas, a park information office that included a restroom facility, drinking fountains, and also provided shade, different parking lots, explaining that parking lots could possibly exclude asphalt and utilize another type of material, and equestrian corral for trailer parking. Ms. Bennà concluded her presentation by reviewing the proposed timeline to finalize the Thunderbird Conservation Park Master Plan. The Parks and Recreation Commission will meet on Monday, May 8, 2006 at 7 p.m., at City Hall, Meeting Room B-3 to consider forwarding the master plan recommendations to City Council. City Council will then have the opportunity to review the master plan at its June 6, 2006 Workshop, with a final approval of the plan tentatively scheduled for at the City Council meeting on Tuesday, June 27, 2006.
The meeting was opened for public comment.

Mr. Allan DeFranco wanted to thank the public for attending all the meetings. He felt it was a great process working with city staff. He appreciates the Mayor’s commitment to the Thunderbird Conservation Park. Last, Mr. DeFranco wanted to commend Ms. Benná and her staff on their dedication throughout this lengthy process. Thank you.

Other written comments were received from attendees wishing not to speak.

Ms. Denise Baker commented that she recognized the restrooms would have high use. To reduce trash associated with restroom install hand blow dryers or the alcohol based cleaning waterless hand wash i.e. Purell. I like your proposed changes and plan to use. Sedimentation basin area – get homeowners involved with invasive issues and removal. Get community involved at hands on level. Knock trees down at viewing blind at parking one area. I support the viewing blinds. Park signage – include information to users to bring water for themselves and their dogs.

Mr. Kenneth Wood, wrote that the final plan for both 59th Avenue improvement and Thunderbird Park modifications have been greatly influenced by public input. The final results do reflect what the user thinks, as opposed to the consultant’s think, serves us best. Wouldn’t it have been better to have had a lot of public input before the out-of-town planners proposed their rather fanciful ideas?

Ms. Barbara Hanley commented that she walks every morning. I want as little done as possible. It’s a conservation park – let’s leave it that way. Repair restrooms and trails. Thank you.

Ferne Ridley stated 3 liked the new “revisions” so far and 2) technical issue: takes a ‘long’ time to download plans on Internet. Don’t know if server problem; resolution, etc. Might consider moving a less detailed resolution diagram. 3) 59th Avenue Plan: a) interested in design, etc of building for ranger – information must be low, unobtrusive, etc. b) since parking will be associated with this – concerned about lighting, c) on lighting please revisit. Don’t know why lights stay on 10-11pm when park is closed. Let’s be a little energy efficient. Are they solar powered and/or controlled?

Ms. Benná closed the meeting by thanking all the citizens in attendance. She encouraged everyone to continue to attend upcoming meetings and to encourage others to complete comment forms and return them; or visit the Thunderbird Conservation Park web page and provide comment by May 4th.

This portion of the public meeting concluded at 10:17am.

Respectfully submitted,

Diana Figueroa
C.7 Public Comments Following April Public Meetings
(E-Mails and Phone Calls Received via Web Postings for Public Meetings on April 26 & 29, 2006)

Date Received: Monday, 4/24/06
Name: Suzanne Kannarr
Comments:
Thought that the amphitheater was going to cost too much because of accessibility issues and the park wasn't the right place for a crowd.

Date Received: Thursday, 4/27/06
Name: Karen Huebschman
Comments:
Expressed her appreciation for the fine result the city achieved with the plan for Thunderbird Park. She attended Wednesday's public meeting and felt that the staff did a great job of listening to public comments. Was happy to see desert open space retained, the needed grade level crossing of 59th Ave., and the making of nice little additions and small improvements that she felt everyone could live with.

Date Received: Thursday, 4/27/06
Name: Allan DeFranco
Comments:
He attended the Wednesday meeting and felt that the presentation gave a pretty clear picture of what may be done to specific areas.
Regarding the 67th Ave. area, and key item #21, he supports this trail becoming a designated trail and also suggests that scattered clusters of native trees be placed between the neighbors and Parking Lot J as a buffer to lessen the noise and loss of privacy for neighbors that will occur when this parking lot becomes fully utilized.

Date Received: Monday, 5/01/06
Name: Michael Bailey
Comments:
Wanted to thank Parks and Recreation for the trail work that is being done in Thunderbird Park. He felt that this is was very needed and it improves the quality of the park.

Date Received: Saturday, 4/29/06
Name: Tammy Weis-Trobridge
Comments:
She is a frequent hiker at Thunderbird Park and expressed frustration with horse owners who don't clean up their horse's waste. She wasn't asking for Rangers or Police to make people use common courtesy but asked if we could consider any other ways that would encourage people to clean their animal's waste off the trail.

Date Received: Sunday, 4/30/06
Name: Brad Geeck
Comments:
He has reviewed the plan and found it exciting. He attached a list of concerns and praises for the plan as follows:
55th Ave/Pinnacle Peak – Option 17. He does not favor a trail to a viewpoint on the east side of the park, and would like to see that section of the park left alone for wildlife.
59th Ave. Wildlife Corridor and Amphitheater – In regards to a new trail at parking lot B to H-3 Trail and a new trailhead for connector trail to H-3 Trail, he wonders why we need parallel trails? He asks that we not over-trail the park.
Facilities — He supports the new ranger station and feels that it is needed to keep out the bad element and to do interpretive programs.
He supports the removal of restrooms from the wash area.
He likes the idea of a land bridge to cross 59th Ave.
He supports the restoration of the amphitheater and adding 20 parking spaces to the north of it.

67th Ave. Equestrian/Trail Area — He felt that much of this area was destroyed by off highway vehicles in the 60's and if we choose to mitigate this area, there may be OHV 'gas tax' grant money available at Arizona State Parks through Amy Racki

Sedimentation Basin Area — Mr. Geeck feels that the existing viewing blinds should have been installed with raised pathways, raised viewing areas, and closer to the water. He would like to see the area that floods periodically be seeded with select wildflowers to provide an attractive viewscape and forage for wildlife.

Date Received: Monday, 5/01/06
Name: Jim Ellis (Phone call)
Comments:
Mr. Ellis is a hiker who enjoys the park regularly. He was happy to see the way the new plan has been developed and felt that there shouldn't be any more controversy. I told him that there were some objections to the size, or necessity of having, a Ranger Station in the park. Mr. Ellis said that managing a park the size of Thunderbird necessitated providing the park rangers with a base of operations. While he did not support the construction of the educational learning center, he strongly supports having a ranger/information building, as it is completely congruent with the nature of the park.

Date Received: Tuesday, 5/02/06
Name: Darren & Denise Sullivan
Comments:
They attended one of the public meetings at Deer Valley High School. They like the way the master plan is going but would like to see minimal impact to the park. They favor the improvement of trails and signage but not the construction of any buildings.

Date Received: Wednesday, 5/03/06
Name: Don Levine
Comments:
Mr. Levine attended the public meeting on Saturday. In general, as a hiker, he agrees with the new plan. He visited Pinnacle Peak Park in Scottsdale and felt that the building structures seemed reasonable and functional and the style fit well with their park and would with ours.

In regards to the parking lot at Pinnacle Peak Road, he favors paving the lot to hold down dust. Particulate matter in the air affects the view from the high parts of H-2 Trail, and the 'conservation' of the park should include the air above and around it. He recognizes that paving is not a 'natural' appearance but feels that it would be irresponsible to maintain a dirt parking lot.

He is concerned about the size of the Pinnacle Peak parking lot. When he uses it on Saturday mornings, the lot is fairly full and unlike parks in Phoenix, there isn't an area to handle overflow. Parking along Pinnacle Peak Road isn’t an option, so the parking lot needs to stay ahead of peak demand.

Date Received: Sunday, 5/07/06
Name: Damion
Comments:
He attended the Thunderbird Star Party put on by the Saguaro Astronomy Club on May 6. The park entrance at 59th Ave. was difficult to see, as it isn’t marked in any way. He feels that there should be a large sign at the entrance.
Public Comments Received Through Telephone and Webpage

Thunderbird Conservation Park
55th Ave. Pinnacle Peak Road Area.

TRAILS
17. Option: New trail node to identify and designate the current undesignated trail that leads to viewpoint located on the eastside of the park which provides a scenic view of the valley and golf course.

This a conservation Park according to the City’s Master Park Plans of the past. When I worked for the City, under Warren Smith, we made a conscience decision to leave the area next to the golf course alone simply for the wildlife.

59th Avenue Wildlife Corridor and Amphitheater Area

TRAILS
3. New trail at Parking Lot B to H-3 Trail
4. New trailhead for connector trail to H-3 Trail

Why have the parallel trails? Don’t over trail this park it is not very large to begin with. For every trail you build, there will be erosion, regardless of how carefully built.

What is the length of your Wildlife Corridor? Does it tie into the future Deem Hills park?

FACILITIES
12. New ranger and park information station approximately 2,000 square feet to include ranger and park information office, first aid room, storage, restrooms and drinking fountain. Add parking lot adjacent to station – 30 parking spaces and group ramada.1

Ranger needed to keep out bad element and do interpretative programs.
16. Remove restrooms from the wash

Good idea

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1 All things Southwest University/Campus. This would entail a large ramada site, in this case near the new ranger station. This site would be utilized by a wide spectrum of Glendale businesses, residents, and as an entertainment venue for the mayor and city council, and other dignitaries. It could also include Maricopa Community Colleges, vocational classes from the local high schools.

The site would be a recreation area, as well as an outdoor learning center. It could include partners such as Lowes, Homedepot, REI and the likes of those. Please contact me for the particulars. These partners could provide the facilities and products for the near future. Primarily, the area would be used as an outdoor cooking educational & entertainment venue. Other classes might include camping & hiking in the desert mountains classes. Using a GPS and map reading classes or wildlife classes might be other subjects.

The site would also be used to showcase local business talent, and promoting Glendale business opportunities.
22. New land bridge to cross 59th Avenue

Another good idea.
The reason Hedgpeth 1, crossed at 55th Ave, was because there was no other safe place to cross 59th or Pinnacle. Peak except there. We thought about going under the road way at the 59th Ave entrance into the park, but there was not enough room for a horse and rider, and we were afraid it may spook a skittish horse.

AMPHITHEATER

24. Restore amphitheater

25. Option: Add future parking north of amphitheater – 20 parking spaces

This is great.

67th Avenue Equestrian/Trail Area

Just a comment: Much of this area was destroyed by off highway vehicles in the 60’s and earlier. If you choose to mitigate this area, I believe that a fair portion of the cost could be covered by an OHV “gas tax” grant. This grant is administered by Arizona State Parks.

Sedimentation Basin Area

These blinds should have been installed with raised pathways and raised viewing area, and closer to the pond. Additionally, the area that floods periodically should be reseeded periodically with select wildflowers to provide an attractive viewscape, as for forage for the wildlife.
C.8 Parks and Recreation Commission Meeting Excerpts (September 2005 - May 2006)

CITY OF GLENDALE, ARIZONA
EXERPTS FROM MINUTES OF THE REGULAR MEETING OF THE
PARKS AND RECREATION ADVISORY COMMISSION
HELD MONDAY, SEPTEMBER 12, 2005
GLENDALE MUNICIPAL OFFICE COMPLEX, ROOM B-3
5850 WEST GLENDALE AVENUE

The meeting was called to order at approximately 7:03 p.m. by Chairperson Ted Hansen, with Commissioners Ruben Gutierrez, Chuck Jared, Sue Klima, Michael Socaciu, Raymond Kultala, and Stanley Long. Representing city staff was Becky Benna, Shirley Medler, RJ Cardin, Mike Gregory, Chris Gallagher, and Gloria Santiago-Espino.

Chairperson Hansen welcomed Commissioner Stanley Long to the Commission and asked that he introduce himself.

The Commission welcomed the new Commissioner.

Chairperson Hansen read the mission of the Parks and Recreation Commission.

The purpose of the Parks and Recreation Commission is to advise the City Council on policies, rules, and regulations referring to planning, acquisition, deposition, operations, use, care and maintenance of parks and recreation facilities. The Commission is also responsible for development of a continuous master plan for the city parks system and its recreation programs.

Approval of Minutes

Chairperson Hansen called for approval of the July 11, 2005, meeting minutes.

Commissioner Socaciu noted on page 3, paragraph 3, that the sentence should read protective ‘gear’.

Commissioner Kultala stated that the word ‘trial’ on the last sentence on page 1 should read ‘trail’.

Chairperson Hansen stated on page 4, his comment should read that he ‘observed’ rather than he questioned.

A motion was made by Commissioner Klima to approve the minutes as revised. Commissioner Socaciu seconded the motion. The motion carried unanimously.

Public Comments

Chairperson Hansen asked for comments from the public. There were none.

THUNDERBIRD CONSERVATION PARK MASTER PLAN UPDATE

Ms. Benna stated that the purpose of tonight’s meeting regarding the Thunderbird Conservation Park Master Plan is to review the past public input process, review the maps presented, and discuss the plan itself. Ms. Benna stated that at the June 2004 Parks and Recreation Commission meeting, staff had
presented an update on the Thunderbird Conservation Park Preliminary Master Plan. As stated at the
time, Thunderbird Conservation Park is a popular park for picnicking, hiking, horseback riding and
mountain hiking, and serves as a wildlife refuge in the urban setting. Ms. Benná introduced the members
that assisted the Department: professional facilitator Marty Rozelle from The Rozelle Group and
landscape architects, biologist and hydrologist from Logan Simpson Design. She stated a Focus Group
Meeting was held, September 6, 2005. In addition, staff conducted an on-site user survey. Staff was
stationed in the park on the morning of September 10 and distributed and collected surveys for
approximately four hours to those utilizing the park

Ms. Benná provided some background information regarding the history of the park. She stated in 1956
the City of Glendale entered into a sales lease agreement with the Bureau of Land Management to obtain
1,062 acres and eventually purchased an additional 66 acres followed by 57 acres, for a total acreage of
1,185. In 1967, the City of Glendale adopted the development master plan for Thunderbird Park, which
at that time was designated as a semi-regional park. In 1985 and 1995, the Glendale Parks Master Plan
included this park in the conservation category which states the plan should include natural areas, water
features, hiking and riding trails, and other facilities not requiring intensive development. The 2002 Parks
and Recreation Department Master Plan again identified the park in the conservation category. Events
currently held in the park such as the Starwatch Program, Cross Country Meets, Hike to Santa, Wonderful
Outdoor World, and Dutch Oven Cooking Class, just to name a few.

Ms. Shirley Medler provided the Commission with an overview of the public input process bringing them
up to date. In 2003, Logan Simpson Design was retained in order to develop a master plan through the
public process, which began with a community wide survey. A statistically valid compilation of 403
responses was received. Another informal survey was provided to all those that participated in the first
public meeting. Approximately 100 people attended this first meeting. In April 2004, a focus group
meeting was conducted which included representatives of the park user organizations. A follow up
meeting was held again in April where comments were received from the first January public meeting.
Three different alternatives were presented at the April 2004 meeting in which approximately 59 people
attended. Responses received from the public included: protect the park, conserve its resources, and plan
for managed use by the public so as to disturb the park as little as possible. The public suggested that a
watershed analysis take place as there were concerns regarding drainage in the park.

Ms. Benná introduced Jackie Keller with Logan Simpson Design who would be making tonight's
presentation.

Ms. Keller explained that a master plan is a guideline for approximately 20 years. A master plan is also a
living plan which can change periodically. She stated there are two basic phases for park planners, the
first being the physical assessment planning phase and the second is the programming phase which
includes public input. She explained the first map on display which was the valley's regional plan which
depicts the regional connectivity to another valley parks. She noted one of the important factors
regarding regional connectivity is to develop a regional trail system. This would provide access east and
west across the valley and eventually north to Lake Pleasant. She pointed out the multi-use trail which
heads west to New River as well as a bike route which also heads west to New River. Ms. Keller pointed
out the area which was included in the watershed analysis. At this point, she introduced Jon Fuller.

Mr. Fuller indicated where the wash corridor area was located and stated this area eventually drains into
the sedimentation basin located on the south side of the park. He explained the bottom three square miles
of the wash corridor has about a one hundred year discharge at approximately 1200 c.f.s. He displayed a
map of the floodplain in an area of the park which is more heavily used which he indicated its location for
the Commission.
Mr. Steven Fairaizel, senior biologist with Logan Simpson Design, provided a presentation to the Commission stating that the analysis showed the park does not contain any endangered species or State sensitive species. The species found in the park were those representative of the urban area. Because of the urban nature of the park it was found that there is potential to increase the abundance of the urban species that currently exist. He indicated where the highest area of habitat value occurs as well as where the medium and low value of habitat occurs. He explained that water could be increased throughout the park by creating devices that capture water for drinking. Another way to create freestanding water in the park is to construct shallow basins to provide water for wildlife. He also explained there are ways to increase or make habitat improvements. He added there is a great potential to provide wildlife education and research. This could include population surveys and observations could be conducted on how animals eat and where their food is located.

Ms. Keller reviewed the slopes analysis maps for the Commission explaining the different types of soils. She displayed photos of the existing areas of the park, which need improvement. She explained how the wash corridor is being used as a cut through to access the other side although there is a pedestrian bridge over the wash available. She added the main objective of the master plan is to restore the park. The plan proposes to restore the habitat and indicated which areas were low and needed improvement. She displayed a photo of the existing amphitheater. She said the proposal is to leave this area as it currently exists or to create a native desert garden area. The purpose is to create viewing areas of wildlife in this corridor. This would be a possible area to educate children about urban wildlife. The next map displayed the existing and proposed trails. She stated users are accessing the park from 59th Avenue by entering through the areas directly behind residences. She explained the proposed trail access from 59th Avenue would be moved away from the homes. She continued with the 67th Avenue area, which provides the equestrian access area to the park. She stated the map is showing a corral and mounting area off of 67th Avenue. Also proposed along a ranger station and storage used to house equipment needed for park maintenance in this area. She explained the upgrades that would take place to the ramadas, as well as restroom facility. Ms. Keller pointed out where the trailheads would be located to ensure that users do not cut across the park to access the trails. The picnic area would be increased by three ramadas. She stated the park currently holds 328 picnickers. By relocated some of the picnicking areas there would be a decrease to 208 people. The benefit of the decrease is to restore and return the habitat and revegetation. She identified where the location of trailhead would be along Pinnacle Peak Road. She explained that parking courts are preferred. Several parking lots are proposed with fewer parking spaces rather than one large park lot. She identified the proposed outdoor education area location. This area could possibly accommodate three or four classrooms of participants. This area could possibly have exhibits or meeting rooms with a restroom. This area could possibly contain a ranger station as well. Also proposed areas would be set up for users to rest rather stepping off the trail and again disturbing the desert.

Ms. Benná stated the plan is only in draft at this point. She stated the process is only beginning and will include input from the public. Ms. Benná stated that R.J. Cardin would provide information regarding the Focus Group meeting, which was held on September 6, 2005.

Mr. Cardin provided the Commission with an overview. He stated on August 6, 2005 staff mailed out invitations to approximately 20 organizations. Eleven people responded and attended the meeting. Participants appreciated the education areas and opportunities as well as the revegetation of several areas. Connectivity to trails outside of the park was appreciated as well as observation areas located just off of the trails. Refurbished restrooms were also requested. Those in attendance expressed concerns about the number of parking spaces presented in the plan. Accessible trails were of concern. It was suggested there be trails of all levels of difficulty for all types of users. Comments were received regarding the need for a trail system along the west side of the park, which would be more accessible for equestrians. Participants were concerned with the size of the education center and also asked that a shade structure be installed. Comments were also received regarding a junior park ranger program as well as the reduction of speed.
along 59th Avenue. Ms. Benná added a copy of these comments would be provided to the Commission once staff has had the opportunity to review them. Mr. Cardin provided the Commission the results of the on-site user survey conducted on September 10. He stated of the 306 responses, 277 of those surveyed came to the park to hike with others visiting the park to jog or run. The next reason for coming to the park was to mountain bike, watch wildlife, and last reason was to picnic. Of those surveyed over 1/3 of those surveyed stated they come 2 to 3 times a week; 83 said they visit the park once a week; 39 people stated they come each day. Most of these people stated they drive to the park with the most users traveling less than 5 miles or less. Suggestions of recommended changes were: none, and improvements to the restrooms, parking, trails, and water fountains.

Ms. Benná stated that public input process will occur during the upcoming months and there will be no rush to complete the master plan process. She stated this would be an on going agenda item for each meeting which would give the Commission to discuss any issues, concerns or ask any questions.

Commissioner Long asked if the use of Thunderbird Park has been designated as strictly a conservation park. Ms. Benná said yes. This park has been identified as Thunderbird Conservation Park in the conservation category.

Commissioner Klima asked if all the residents along the back of the park were notified of this master plan. Ms. Benná stated over 14,000 notices were mailed to residents in the surrounding area.

Chairperson Hansen asked if the sediment basin was part of the master plan. Ms. Medler explained that the water itself is being managed by the Arrowhead Amenities Group.

Chairperson Hansen asked if the sediment needs to be removed from the basin. He asked if this had taken place. Ms. Benna stated that she believed this had not occurred. This item is being discussed between the Amenities Group and the City of Glendale.

Several commissioners questioned which group is responsible for sediment removal. Ms. Benná stated this issue would need to be discussed between the two parties.

Commissioner Socaciu asked if the city has asked the Amenities Group to remove the sediment. Ms. Benná stated she did not believe so.

Commissioner Kultala asked if there are any planned uses for the sediment once it has been removed. Ms. Benná stated no, not at this time.

Commissioner Socaciu asked if the proposed access through the culvert would be lighted. Ms. Keller stated yes.

Commissioner Socaciu suggested the traffic circles be enlarged from the size proposed as people are unsure of how to handle them. He explained that the traffic circle must be large enough so that it is obvious to drivers that they must go around the traffic circle to the right.

Commissioner Socaciu wanted to ensure that there would be plenty of shade along the trails, stating shade could be provided by trees or structures.

Chairperson Hansen stated one of the trails is very close to the Adobe Dam Recreation Area. He said it appears that the trail along 59th Avenue seems very close to this Area. He asked if the city has been in discussed with this group in order to form a joint trail. Ms. Benná stated this is a great suggestion and staff would research this issue.
Chairperson Hansen asked if the schools have been part of the focus group. He said the city should be aware of what the schools’ needs might be. Ms. Benná stated that two representatives from the Deer Valley School District attended the most recent focus group meeting. He also suggested the Commission on Persons with Disabilities should have the opportunity to review the plan.

Commissioner Jared suggested staff check with the ADA official.

Chairperson Hansen opened the public hearing.

Mr. Allan DeFranco stated he resides adjacent to the sediment basin. He stated he help design a great alternative for the 59th Avenue roadway issue. He requested clarification as to what type of park Thunderbird will be. He asked is it a regional park or conservation park. He questioned where the funding would come from for this park. He asked if the city had considered larger stop areas or observation points along the trail. He asked that no benches be added along the trails. He expressed concern with the trash that is discarded along the trails. He asked how would the revegetation occur.

LCD’s Senior Biologist Mr. Steve Fairaizel stated that a portion of the desert would be removed with possibly a water source added. He said urban animals do very well in man made developments. He said comparing the area more to a native Sonoran desert type vegetation which constitutes high quality wildlife habitat. Thunderbird Conservation Park offer something similar.

Mr. DeFranco asked if it is possible for the desert to be recreated. Chairperson Hansen asked that the consultants be prepared to answer this type of question at the upcoming public hearings. Mr. Steve Fairaizel explained there are good examples of habitat restoration projects. They are able to restore the native vegetation. This is based on factors such as the types of herbicide and fertilizer used, the density of the plants, and cultivation techniques. He said there is the potential to increase the abundance of urban animals, food, shelter, and vegetation.

Mr. Larry Clark said being at the location near the entrance to the mountain he has the opportunity to talk with many of those visiting the mountain. He felt that the majority of those he spoke with wish to do nothing to the park. He discussed his concerns regarding 59th Avenue. He advised staff, the consultants, and the Commission to proceed slowly in order to develop the best park possible and take into consideration the suggestions of those that utilize the park.

Mr. DeFranco suggested vending machines with water for sale should be added to the park. He asked why the ranger station is in the smallest area of the park. Ms. Keller stated the ranger station would be part of the proposed education building, which would be constructed in the area as to least disturb the park.

Mr. DeFranco’s next comment was regarding the number of proposed parking spaces. Ms. Keller explained the formula to determine parking spaces. The proposed number of parking spaces is determined by the miles of trails a park contains.

Mr. Clark stated some of his concerns were the speed limit along 59th Avenue. He felt that should be looked into. Also, he stated he does not ever remember an event taking place at the existing amphitheater.

Commissioner Jared suggested that the existing amphitheater be used for the educational classes to be conducted by the park rangers.
The meeting was called to order at approximately 7:03 p.m. by Chairperson Ted Hansen, with Commissioners Ruben Gutierrez, Michael Socaciu, Raymond Kultala, and Stanley Long. Representing city staff was Becky Benna’, Clyde Brown, RJ Cardin and Chris Gallagher.

Chairperson Hansen read the mission of the Parks and Recreation Commission.

The purpose of the Parks and Recreation Commission is to advise the City Council on policies, rules, and regulations referring to planning, acquisition, deposition, operations, use, care and maintenance of parks and recreation facilities. The Commission is also responsible for development of a continuous master plan for the city parks system and its recreation programs.

Approval of Minutes
Chairperson Hansen called for approval of the September 12, 2005, meeting minutes.

Commissioner Socaciu requested the hours of the survey conducted by Parks and Recreation staff at Thunderbird Conservation Park be included. He said 5:30am to 9:30am should be added. Also, he had suggested during that meeting that a wider range of time periods be surveyed.

Chairperson Hansen suggested page 4 to read “is a ranger station” rather than along a ranger station. Also, in the same paragraph where Ms. Keller spoke it should read four trailheads rather than one. Ms. Keller also identified where the outdoor education area and the building were to be located. On page 6 regarding comments from Chairperson Hansen he said the Parks and Recreation Director stated she would check with the Commission on Persons with Disabilities and he would like that included in the minutes. Under Commission Goals, he did not encourage Commissioners to recruit new Commissioners. He said he would like the revised wording to read he pointed out that the two student commission seats were still vacant and asked if a commission subcommittee could be formed to recruit new commissioners. Ms. Benná stated she would look into whether this was an allowed practice and she will provide an update for the Commission.

A motion was made by Commissioner Long to approve the minutes as revised. Commissioner Socaciu seconded the motion. The motion carried unanimously.

Public Comments
Chairperson Hansen asked for comments from the public. There were none.

THUNDERBIRD CONSERVATION PARK PUBLIC INPUT UPDATE
Ms. Benná distributed information to the Commission showing where staff is with the public input process. She added this information is also on the Park and Recreation webpage. She explained the Parks
and Recreation website is available to receive public input regarding the Thunderbird Conservation Park preliminary master plan. Citizens who previously attended public meetings were either mailed or emailed a letter indicating the status of the public input process and encouraged to provide their input via the website or contact the Parks and Recreation Department.

Ms. Bennà stated staff will also be in Thunderbird Conservation Park at the 55th, 59th and 67th Avenues park entrance areas to conduct onsite user surveys on the following days and times to continue to collect additional input.

She and the consultants compiled the recent public meeting minutes and comments received regarding the plan and will provide the results of the public input at a future Parks and Recreation Commission meeting.

Ms. Bennà stated staff was out at Thunderbird Conservation Park early Friday, October 14th from 6am to 8am and collected 135 surveys and received good input. On Sunday, October 16th surveys were collected from picnickers, equestrian users, and hikers resulting in 81 surveys received from noon to 2pm and from 4pm to 6pm 112 surveys were collected. There are two more survey collection times scheduled. The next is for Friday between 2:30pm to 4:30pm and Wednesday from 4:30pm to 6pm. She added the same survey used previously is currently being used to stay consistent. The next step is to finish the collection of data and determine what the next steps. Ms. Bennà stated a tentative public meeting was scheduled for November 5, but it had been postponed.

Commissioner Kultala asked if there would be any use for the sediment which was discussed previously. Mr. Bennà stated that this issue needs to be researched. He suggested the sediment be transferred to the trails to make them smoother. She said this is an important issue, which will be addressed in working with the Arrowhead Amenities Group.

She concluded by stating that the Thunderbird Conservation Park preliminary master plan updates will be on future commission agendas.

Commissioners’ Comments
Commissioner Socaciu suggested the minutes to be posted on the parks website. Ms. Bennà stated she would look into this idea.

Next Meeting Agenda Items
Commission Goals
Thunderbird Park Update
Park Naming

Adjournment
The meeting was adjourned at 9:28 p.m.

Diana Figueroa, Recording Secretary
The meeting was called to order at approximately 7:23 p.m. by Chairperson Ted Hansen, with Commissioners Chuck Jared, Sue Klima, Ruben Gutierrez, Michael Socaciu, Raymond Kultala, and Stanley Long. City staff included Becky Benná, Clyde Brown, RJ Cardin, Shirley Medler, and Mike Gregory.

Chairperson Hansen read the mission of the Parks and Recreation Commission.

The purpose of the Parks and Recreation Commission is to advise the City Council on policies, rules, and regulations referring to planning, acquisition, deposition, operations, use, care and maintenance of parks and recreation facilities. The Commission is also responsible for development of a continuous master plan for the city parks system and its recreation programs.

Public Comments
Chairperson Hansen asked for comments from the public. There were none.

Director's Report
Ms. Benná provided an update regarding the Thunderbird Conservation Park. She stated staff has completed the on-site user surveys conducted in September and October. She said a total of 753 questionnaires were collected during various dates and times and locations. Ms. Benná distributed a copy of the public meeting minutes.

Commissioner Klima asked if any of the questionnaires were completed by the same park visitor. Ms. Medler stated that when asked to complete a questionnaire those that had previously been asked stated that they had already completed one.

Ms. Benná stated most of the questionnaires were completed by hikers. Mr. Cardin stated that the majority of those that completed the questionnaire were hikers and the second highest percentage visited the park to jog/run.

Chairperson Hansen asked if the visit to the North Mountain Park visit could take place on the same day as the Thunderbird Park site visit.

Ms. Benná stated that she along with Shirley Medler and Thunderbird Conservation Park Consultant Jackie Keller would be attending the November 15 Commission on Persons with Disabilities meeting to discuss the proposed master plan and solicit feedback regarding accessibility. Commissioner Jared stated he also plans to attend the meeting.

Adjournment
The meeting was adjourned at 9:09 p.m.

Diana Figueroa, Recording Secretary
The meeting was called to order at approximately 7:00 p.m. by Chairperson Ted Hansen, with Commissioners Chuck Jared, Ruben Gutierrez, Michael Socaciu, Raymond Kultala, and Stanley Long. Representing city staff was RJ Cardin, Shirley Medler, Mike Gregory, Roger Boyer, and Clyde Brown.

Chairperson Hansen read the mission of the Parks and Recreation Commission. The purpose of the Parks and Recreation Commission is to advise the City Council on policies, rules, and regulations referring to planning, acquisition, deposition, operations, use, care and maintenance of parks and recreation facilities. The Commission is also responsible for development of a continuous master plan for the city parks system and its recreation programs.

Approval of Minutes
Chairperson Hansen called for approval of the November 14, 2005, meeting minutes. A motion was made by Commissioner Long to accept the minutes as written. Commissioner Kultala seconded the motion. The motion carried unanimously.

Mr. Cardin announced that Parks and Recreation Director, Becky Bemá, would not be in attendance for tonight's meeting as she had a death in the family.

Public Comments
Chairperson Hansen asked for comments from the public. There were none.

VI. THUNDERBIRD CONSERVATION PARK
Ms. Shirley Medler stated she would like to review the public comments which have been received to date and to identify the most frequently asked questions and to identified areas which still need to be addressed. She stated staff would like to meet with the consultant and prepare a report to the Commission at the January Parks and Recreation Commission meeting.

Ms. Medler stated some of the comments received were as follows:
- Leave the park as it is.
- No additional or expanded parking lots.
- No additional development including trails on the east side.
- Equestrian trails users are concerned about the pedestrian bridge.
- Clarification on the master plan provisions, which was provided.
- Wildlife corridor concerns.
- No expansion of the amenities.
- Remove picnic tables from the wildlife corridor.
- Add wildlife watering holes and repair the sedimentation basin moguls.
- Add an interpretive center.
- Add a mountain biking trail.
- Concur with the flash deck bridge crossing over 59th Avenue.
- Utilize state park grants to improve the 67th Avenue parking lot.
- Improve the existing trails.
Ms. Medler stated staff visited the park and obtained information from the users. This took place at several different times throughout different days. She stated staff spoke to 751 park users that visited the park to hike, jog or run, watch wildlife, and to mountain bike. Some stated they visited the park to picnic or to trail ride. The majority of those surveyed stated they visit the park between two to three times per week.

Chairperson Hansen asked if those surveyed were questioned as to whether they were Glendale residents. Ms. Medler stated that was not one of the questions asked.

Ms. Medler indicated staff had received seven comments submissions through the Internet site & via email. Ms. Medler stated that staff visited the City’s Commission on Persons with Disabilities to receive their input. They suggested that staff publicize through the newspaper as well as the Internet articles as to what the park has to offer. They suggested trails that are handicapped accessible. They offered ideas for handicapped accessible restrooms. The Commission on Persons with Disabilities offered to provide advice on any design plans.

Ms. Medler reviewed a PowerPoint presentation on the Commission tour of City of Phoenix North Mountain Park and visitors center and Thunderbird Conservation Park for the Commission and asked for comments from the Commission.

Mrs. Medler also stated that the process is in the programming phase of the master plan development and this would be followed by the physical planning phase. Ms. Medler distributed a list of the frequently asked questions that staff wishes to post on the web page. She reviewed the questions and the Commission provided comments. The Commission congratulated staff for their hard work and dedication regarding the surveys.

Mr. Cardin stated that staff would like to post the frequently asked questions on the web site as soon as possible. He requested the Commission review these questions and provide input to the staff within ten days. The Commission agreed.

Next Meeting
The next meeting is tentatively scheduled for January 9, 2006, at 7:00 p.m. in room B-3 of the Municipal Office Complex.

Adjournment
The meeting was adjourned at 9:05 p.m.

Diana Figueroa, Recording Secretary
The meeting was called to order at approximately 7:04p.m. by Chairperson Ted Hansen, with Commissioners Chuck Jared, Michael Socaciu, Sue Klima, Raymond Kultala, and Stanley Long. Representing city staff was Becky Bennà, RJ Cardin, Mike Gregory, Roger Boyer, and Clyde Brown.

Several citizens were also in attendance.

Approval of Minutes
Chairperson Hansen wondered if more weight should be placed upon the public input for community or neighborhood parks. He continued with page 4, Thunderbird Conservation Park, he felt the entire presentation should be noted in the minutes. He felt the minutes should include statistics that were presented such as those surveyed, how many of those surveyed drove to the park, the distance drove, statistics on uses of the park, how many of those surveyed were Glendale residents, what they liked about the park, and what changes they would like to make. Also, please add that Ms. Medler indicated staff had received seven comment submissions through the Internet site and via email. This is important so that Council can tell the Internet is working the way it should. Also, he stated that Ms. Medler had indicated that staff had met with the Commission on Persons with Disabilities. Ms. Medler stated that the Commission had suggested signs with a preview of the amenities. He asked that this be included as he felt it was important. He said on page 5 the minutes read that Ms. Medler reviewed a PowerPoint presentation for the Commission and asked for comments. He felt it should read, “Ms. Medler reviewed a PowerPoint presentation on the Commission visits to North Mountain Visitors Center and Thunderbird Conservation Park.” He felt it should be included since it is one of the goals of the Commission. Also, Ms. Medler indicated that the process is in the programming phase of the master plan development and this would be followed by the physical planning phase. It would be good to reflect this in the minutes.

A motion was made by Commissioner Socaciu to accept the minutes as amended. Commissioner Long seconded the motion. The motion carried unanimously. 

Public Comments
Chairperson Hansen asked for comments from the public. There were none.

III. THUNDERBIRD CONSERVATION PARK
Ms. Bennà greeted the Commission and apologized for not being present at the last meeting. She reminded the Commission that this item would be placed on each agenda for discussion. She said staff continues to collect data via the onsite user interviews that were conducted in September and October. This information is posted on the web page. In addition, staff continues to respond to the frequently asked questions, which are posted on the web page. Staff has also conducted observations of parking lot use as this was noted to be of concern at the public meetings. Ms. Bennà stated that park maintenance and ranger staff recently met on-site to discuss some of their ideas regarding the park. She noted staff is still interested in meeting with the residents that live south of
the sedimentation basin in order to get their comments regarding the basin and the surrounding area. Also, staff would like to touch base with the educational system or the school systems to get some feedback from them regarding their interest in using the park. She felt the information gathered to date is very good and believes it is time to begin reviewing the plan itself. She would like to bring the plan to the February Commission meeting in order to determine any changes or modifications. However, she stated that staff will take the time to continue to review and consider all collected data before beginning to suggest changes to the plan. The goal is to present the revisions to the plans at public meetings in order to receive feedback.

Commissioner Long suggested these public meetings be advertised in the local paper. Ms. Benna stated this would take place.

Chairperson Hansen asked when staff would begin to meet with the education system. Ms. Benna stated once staff and the commission begin to identify the direction they would like to take in the next month or so, staff would like to begin the process with participation from the Commissioners. Also, she felt it would be helpful for the Commission members to meet with the residents along the sedimentation basin. Chairperson Hansen asked if there were any plans to meet with the residents along the west side embankment. Ms. Benna stated staff would be happy to do so.

Chairperson Hansen asked if the February presentation would be for what is presented to the consultant or for the results of what the consultant comes back with. Ms. Benna stated at that point it would be a discussion among staff and commission as to what would be presented to the consultant although there would be contact with them prior to the February meeting.

Chairman Hansen then asked for public comment regarding Thunderbird Conservation Park:

Mr. Allen DeFranco stated his first concern was the culvert trail. He reminded all in attendance that in the minutes of June 14, 2004, the police told the Commission that there were many safety concerns related to tunnels. Some other concerns were graffiti, lighting, and vandalism. In addition to which, when the road project was going through for 59th Avenue the residents were complaining about people walking through their backyards. He said there is already enough trouble with people messing around in the sedimentation basin. He said if you bring a trail through the culvert you are just asking for more trouble. The people who already live along the base already have intruders. According to Ms. Medler, there is discussion with Officer Joan Campbell regarding the culvert. He questioned what her job title is, what does she do for the police department, and what kind of discussions occurred. He felt they need to know these things. What do the police say? Also, he is concerned with some fuzzy math. In the September 17, 2005 public meeting, it was said there were 1700 vehicles entering into the park on a Sunday. Do the math. He said that would be one car every 40 seconds. “Frequently Asked Question” #5 reads now it is only 1250 on a Sunday with an average of 750 a day Monday through Saturday. That is still a lot of cars. He questioned how and where these numbers were received and shouldn’t they be questioned. The last concern is the reservation of ramadas. “Frequently Asked Question” #5 also states we got 3,000 reservations. Is everyone reading these questions and looking at the answers. There are a lot of other questions that are not showing up in these statistics. He felt the questions need to be answered and they need to be clear.

Mr. Larry Clark stated his main concern was the building of the educational facility that started out as a 10,000 square foot complex. He is familiar with the size of that building and what all is involved with it. He says his children and grandchildren use the park. But he believes they can receive their education about the geology and the wildlife and the plants by other means such as videos or receive it at school. He suggested they visit the
Rock Museum on 35th Avenue. He is very concerned about this as are many other citizens. He said the park isn’t as large as you think and the facility would take away from the park. It will be very costly to provide facilities for the facility. Also, it will need to have additional employees for safety and maintenance, additional costs. Consider insurance costs for fire and liabilities. You must provide for repairs of replacement costs such as plumbing, air conditioning, roof, electric, and improving roads and repaving. Many neighbors are concerned about additional lighting in the area. Without lighting you will not have security. Also, there is a problem with the toilet facilities. The more buildings and toilet facilities that are there, the more problems that will take place. These are all concerns that need to be considered in the planning process. Please consider that children can receive their education at their schools via tapes, etc. or the rock museum. Why not consider using displays such as those at the rest areas. The children are out of school during the hottest months of the year from May through August or September. Use canopies for shelter where they can be moved around for presentations. He said let children get their education about the outdoors outdoors not inside a building. The amphitheater is there and how often is that used? These are just some of the things that are bothersome to some of the people that visit the park. He believes this item should be removed from the plan as it is not practical. He said the majority of the people surveyed so far are opposed to any changes taking place at the park. The vast majority of the people do not want a building that large which will eat up the park. This is not a good investment and the funds can be better used elsewhere.

Commissioner Long asked if his main problem is the tax dollars spent. Mr. Clark said the funds allocated for the park could be used for other things such as trail improvement. He felt the facility would not be utilized to its full extent. The costs will be passed on to the citizens. A lot of security will be needed in the area. He felt the kids can get the same benefits without constructing this building. The overwhelming input that he has received support that no one is in favor of this facility.

Commissioner Klima said she felt perception is the problem. She would like everyone to visit the City of Phoenix North Mountain Park facility. She believes the public thinks there will be a big glass building in the park area that does not fit. The education for the children is absolutely awesome. The outdoor area is also very awesome. It isn’t going to be a big glass facility with parking all the way around it. The parking lot was even a color of brown to fit into the mountain park. She believes it would deter the fire concerns for the area.

Commissioner Kultala said this facility would also serve as a visitors’ center for people driving through the area wanting to know about the area.

Mr. Clark added increasing the traffic flow is not something that they wanted to see. Although the center may work well at North Mountain Park, that does not mean it will work for Thunderbird Park. Once the park has been nibbled away, you can never replace it.

Chairperson Hansen said when he looks at the park he looks at it with a capital “C” conservation. He felt the flatter areas are a little more delicate as far as the ecosystem is concerned. He believes in the conservation principle too. He felt in some of the presentations made by the consultant they have indicated these areas are trampled on land. He thinks the area east of 56th looks like the area north of Jomax. He said the biologist said he was going to relabel this area on their map.

Chairperson Hansen asked if a police study had been done on the culvert. Ms. Bennà
said she believed there wasn’t a police study. Mr. DeFranco said in the June 14, 2004 meeting minutes, there was a comment from the police stating that the tunnels or culverts were of concern. He asked if the police said they were concerned, why is this still being considered. He said during the discussions regarding 59th Avenue the police department stated their concerns with tunnels. A tunnel is a culvert and there is still concern.

Mr. Dale Woods stated his question is at the last meeting Ms. Medler referred to 751 survey responses and gave some numbers of what they resulted in stating the highest response was to do nothing. Mr. Woods represents an organization called Save the Park. He said the organization felt bad that one half acre of virgin parkland was used to cover the recent roadway project. He is now facing using 100 acres for the educational building. He is requesting copies of the survey sheets which were received by the Parks Department. In addition he would like copies of the emails receiving regarding this issue.

Ms. Bennà stated that a public requests form may be needed but she would research this issue.

Commissioner Jared said Officer Campbell should be invited to one of the Parks meeting. Ms. Bennà stated she appreciates the speakers’ interest. She said as a park user, as the Parks and Recreation Director, and as a resident of the community she also wants to make sure that the park is protected and managed properly. Staff will continue to stay flexible with the process and will continue to gather feedback and information for this very important decision.

Chairperson Hansen also thanked those that spoke stating the Commission doesn’t usually get public comments. He stated it is always good to get the viewpoints of those using the park.

Commissioner Klima stated 13 of her relatives were here for the Fiesta Bowl and they used the park at least four days out of seven.

Commission Comments

Commissioner Klima asked that the car count calculations be completed prior to the next meeting. Ms. Bennà stated that staff can provide this information to the Commission. Commissioner Socaciu felt that the citizens need to get an idea on what the educational center would look like. He said they do not have a reference point.

Commissioner Long asked for a video from the North Mountain Visitors Park. Ms. Bennà stated staff would check into this.

Next Meeting

The next meeting is tentatively scheduled for February 13, 2006, at 7:00 p.m. in room B-3 of the Municipal Office Complex.

Adjournment

The meeting was adjourned at 9:11 p.m.

Diana Figueroa, Recording Secretary
The meeting was called to order at approximately 7:00 p.m. by Chairperson Ted Hansen, with Commissioners Chuck Jared, Michael Socaciu, Ruben Gutierrez, Raymond Kultala, Stanley Long, Sarah Berry, and Loric Harding. Representing city staff was Gloria Santiago-Espino, Becky Benná, RJ Cardin, Shirley Medler, Roger Boyer, and Clyde Brown.

Members of the public were also in attendance.

Approval of Minutes
A motion was made by Commissioner Long to accept the minutes as written. Commissioner Kultala seconded the motion. The motion carried unanimously.

Public Comments
Chairperson Hansen asked for comments from the public.

Mr. Brian Brekke, Cactus District, stated that he was representing American Youth Soccer Organization, which is a nation wide organization serving the youth of Glendale and Peoria for the last 20 years. He stated the organization uses the fields at Sahuaro Ranch Park. He said the fields are deteriorating and are in desperate need of attention. The fields have many rocks and the grass is gone. He said the annual soccer tournament is held at Sahuaro Ranch Park and the Glendale Community College fields. This year it will be held the first weekend in March and more than 80 teams will be participating in the tournament with half of those teams coming from out of state. He said over 300 games will be played in two days. He asked that the fields be attended to and offered his assistance.

Chairperson Hansen introduced the two newest student commissioners, Sarah Berry and Loric Harding. Commissioners introduced themselves.

III. THUNDERBIRD CONSERVATION PARK
Ms. Benná reviewed Thunderbird Conservation Park (TCP) notebook that was distributed to the Commission. The notebook includes: 2004 TCP public meeting minutes; studies completed by consultant Logan, Simpson Design, Inc: the Biological Study, Cultural Study, Land Use Study, Soil, Slope and Geological Study, Visual Study, and Watershed Analysis; June 14, 2004 Parks and Recreation Commission meeting minutes and the PowerPoint presentation; on-site user surveys conducted in September and October 2005; draft preliminary master plan maps; TCP web page information and FAQ (Frequently Asked Questions); December 12, 2005, Park and Recreation Commission meeting minutes; park tours information; on-site survey results; meeting notes from the Persons With Disabilities Commission held on November 15, 2005; September 14 and 17, 2005, TCP public meeting minutes; and September 6, 2005, Public Focus Group meeting minutes. Ms. Benná stated she realized this is a lot of information, but felt it was important for the Commission to have all the documents in one location. She also stated the studies; several documents and information are also posted on the TCP web page.

Ms. Benná reviewed the action plan with the Commission regarding the progress of this project. She stated that administrative, park maintenance, and ranger staff met on-site again to review the draft preliminary master plan. The park staff also observed the use of the park’s parking lots from late November through December 2005. One observation determined that the north parking lot (between 59th and 67th Avenues) is not heavily used.
Ms. Bennà stated staff was reviewing current utilization of existing parking lots. She indicated it has been proposed to take out some of the parking along the Wash. These may need to be relocated. One observation determined that the north parking lot (between 59th and 67th Avenues) is not heavily used. Others, such as H3, are heavily used. Also, the 67th Avenue parking lot is well used.

Chairperson Hansen asked for clarification on the location of the H3 Trail. Ms. Bennà pointed it out for him.

Ms. Bennà stated staff has developed videotape of the similar park elements of other area mountain parks and the Thunderbird Conservation Park. This video will be presented at the March Parks and Recreation Commission meeting.

Ms. Medler provided an update regarding the on-site meeting that was held concerning the 59th Avenue culvert. She stated she met with the Park Rangers and the Community Action Team Police Officers Ida Trompeter and Juan Rivera and Police Department City Liaison Joan Campbell. If it is determined that the culvert is a feasible connector, the suggestions provided included to add low sodium lighting, maintain open landscape area round the culvert, make sure emergency vehicles are able to access the culvert, install street signs to keep users from getting disoriented (these types of signs are utilized at other city parks), and to establish a resident pride of ownership during the design stage.

Ms. Bennà stated that staff is also contacting other jurisdictions that have culverts in their parks. Feedback will be provided to the Commission.

Ms. Bennà continued with the next action step, which was to identify area school interest in the use of the park. Staff is planning to meet with representatives in the next month. Staff is also planning to meet on-site with residents that are adjacent to the sedimentation basin.

Deputy Director RJ Cardin stated he met with two representatives from the Arizona Game and Fish Department. One of the Arizona Game and Fish representatives included an Urban Wildlife Specialist. Part of his responsibilities is to watch for urban wildlife activities in the valley. Mr. Cardin said they walked the entire sedimentation basin area and looked at the surrounding vegetation. They continued with a drive of the entire park. Mr. Cardin said he would be providing Arizona Game and Fish the studies completed by Logan Simpson and Design. Game and Fish will provide comments on the studies. The representatives stated since the water for the sedimentation basin was effluent, no designations such as “wetland” could be attached. They did state that they were very impressed with this urban wetland. Ms. Bennà stated a study regarding the sedimentation in the lake should be completed end of February and March.

Ms. Bennà added although Logan Simpson and Design has provided much of the technical design and studies, the city staff is taking the lead role in completing the master planning process.

Chairperson Hansen asked if there were to be changes recommended, will Logan Simpson Design make those recommendations or will staff make recommendations to them. Ms. Bennà stated that staff will provide the change recommendations to Logan Simpson Design. The proposed changes will be reviewed and discussed with the Parks and Recreation Commission. Dates for public meetings will then be determined. The original draft of the preliminary master plan and one with proposed changes along with any estimated costs will be presented at the public meetings.

Ms. Bennà also stated that staff will also meet with Arrowhead Amenities and the Arrowhead Lakes Homeowners Association to discuss management and maintenance of the sedimentation basin.

The remaining action steps for completing the master plan process are still to be determined pending completing review of the public input and additional information that is being collected.

Commissioner Gutierrez asked how many school districts would be contacted. Ms. Medler stated she plans to contact one representative from each school district. She added that some members of the focus group were affiliated with the school districts and she planned to contact them as well.

Chairperson Hansen asked if Ms. Medler would also be including the Glendale School District. Ms. Medler said yes.
Chairperson Hansen asked how many restrooms are located at Pinnacle Peak. Ms. Bennà described the facilities for the Commission.

Ms. Bennà concluded her presentation and offered to answer any questions.

Chairperson Hansen opened the floor for public comment:

Mr. Mike Rupp addressed the Commission. He felt the planning process was out of control and inconsistent with the wants and needs of the frequent users of the park. He expressed that his greatest concern was the outdoor use area. He referred to his letter to the Mayor and City Council. He stated the entire area between the mountain and Pinnacle Peak Road will be developed. He said the consultants did many surveys, but had not conducted a user survey. This was completed by staff at the public’s request. He said the most received response was to do nothing to the park.

Commissioner Long referred to an article in the Arizona Republic where Mr. Rupp was quoted. Mr. Long stated he was concerned that Mr. Rupp was not reflecting accurate information in his article. Mr. Rupp stated the consultants have been disinterested and unresponsive to the repeated recommendations that have been made. He said after reviewing the Master Plan in September 2005, he was personally offended by planning process. He said based on the survey results received by staff, the users of the park are not interested in the changes proposed.

Chairperson Hansen asked if the most current preliminary master plan is displayed on the website. Ms. Bennà said yes. She indicated that the plan reflects what was presented to the public in September 2005. Changes have not yet been made to that plan until the collected additional information has been reviewed and completed. Once the changes have been determined, a revised plan will be developed and will be presented along with the original draft of the preliminary master plan.

Mr. Larry Clark addressed the Commission. He expressed his concern with the proposed educational facility. He says although he is in favor of education he is opposed to the development of this facility. He said this is a one of a kind park and should be treated differently. Mr. Clark said the surveys should be taken into consideration. Staff should listen to what the users say about the park. He added his concern with the existing wildlife. He appreciates staff taking their time to review the entire master plan. He felt that education can be provided by other means rather than having the children inside the proposed building. He said there were unobtrusive method might be interpretive boards and that these would be more cost effective. In closing, Mr. Clark felt that the original master plan guidelines should be followed as that was the purpose of the master plan and the purpose is still applicable today.

Mr. Dale Woods addressed the Commission. He stated after reviewing the combined survey results the most requested issue was that the bathroom facilities need repaired. He asked the Commission to take into consideration what the people are requesting and make that a priority.

Mr. Allan DeFranco stated his biggest on-going concern was the culvert. He stated the residents nearest the culvert expressed their concerns related to the culvert and changes were made and a meeting took place confirming that the police department does have concerns. He felt the trail near the sedimentation basin is unneeded and dangerous. He said the lighting in the culvert might effect wildlife using the culvert. He stated concerns about how access could be provided to emergency vehicles. He said the Audabon Society has found 39 species in the sedimentation basin area. He said everyone believes in education, however there are any means of providing education rather than constructing the 10,000 square foot building. He thanked the Commission for its time.

Commissioner Socaciu stated after reviewing the pictures provided to him, he wondered whether users have seen how disturbed the area already is.

Chairperson Hansen referred to Fishhook Basin and questioned that the area is low habitat value. Ms. Bennà stated staff would verify this information with the consultant.

Commissioner Jared stated that he agrees with what is taking place and would like to see events return to Glendale where they belong.

Commissioner Kultala suggested that the Commission hold a study session to discuss this item only.

Commissioner Socaciu questioned whether the definition of Conservation Park had been revised. Ms. Bennà stated the Parks and Recreation Department Master Plan provides definitions for each different type of city park.
Ms. Bennà reminded the Commission that the square footage of the proposed education facility was part of the draft preliminary plan presented to the public in September 2005. The square footage of such a facility has not been determined.

V. DIRECTOR'S REPORT
Ms. Bennà asked Parks and Recreation Project Coordinator Mr. Boyer to provide a brief update regarding the trail maintenance in Thunderbird Conservation Park. Mr. Boyer stated the crew is in the park working 10-hour days. He explained the current crew is international members all coming from outside of the United States. Mr. Boyer said the existing trails are being improved to state and national trail standards. He explained the order that the trails would be improved. In addition, the Glendale Hiking Club also assists in trail maintenance. The club and staff are working with the crew in order to obtain training as to how to maintain trails once the crews are no longer on-site.
Ms. Bennà added that publicity is expected on the trail maintenance.

Adjournment
The meeting was adjourned at 9:45 p.m.

Diana Figueroa, Recording Secretary
The meeting was called to order at approximately 7:05p.m. by Chairperson Ted Hansen, with Commissioners Chuck Jared, Michael Socaci, Ruben Gutierrez, Raymond Kultala, Stanley Long, Sarah Berry, and Lori Harding. Representing city staff was Gloria Santiago-Espino, Becky Benná, RJ Cardin, Shirley Medler, Roger Boyer, and Clyde Brown.

Citizens were also in attendance.

Approval of Minutes
Chairperson Hansen had the following corrections to the February 13, 2006, minutes:
Public Comments: Please insert that the American Youth Soccer Organization will hold its annual soccer tournament at Sahuaro Ranch Park and the Glendale Community College fields. This year “it will be held the first weekend in March and ...”
Thunderbird Conservation Park: Insert paragraph 3. Ms. Benná stated staff was reviewing current utilization of existing parking lots. She indicated the preliminary master plan proposed to remove some of the parking along the wash and relocated them. One observation determined that the north parking lot (between 59th and 67th Avenues) is not heavily used. Others, such as H3, 67th Avenue, and 55th Avenue and Pinnacle Peak parking lot are well used.

Public Comment:
Please add the speakers’ addresses. In this case Mr. Mike Rupp, Mr. Larry Clark, Mr. Dale Woods, and Mr. Allan DeFranco. Also, a comment by Mr. Clark should be added. Mr. Clark stated there were unobtrusive methods for park education could include interpretive boards and that these would be more cost effective.
In Mr. Dale Woods’ comments: Please add “combined” survey results the most requested issue
In Mr. DeFranco’s comments please add ...unneceded and dangerous. He said the lighting in the culvert might affect wildlife using the culvert. He stated concerns about how access could be provided to emergency vehicles. He said the Audubon Society has found 39 species in the sedimentation basin area. Mr. Allan DeFranco, Glendale, AZ, thanked the Commission for allowing him to speak this evening. He stated he would refer to the Thunderbird Conservation Park as TCP. He said he is grateful that this item has been on the agenda for the past few months. The preliminary master plan process has a very important purpose. To keep TCP a very unique park and unique, something that the city of Glendale is always striving for in everything that they do as we are not Phoenix, Tempe, Mesa or any other city. He felt that most everyone in the room can attest to that. He appreciates the time and effort that the Parks staff has given as well as the members of the Commission. However, he believes now is the time to change the hat. TCP needs to be looked at differently. This is a conservation park and is unique. He will not go into the lengthy definition of a conservation park as he felt all in attendance have heard it many times. He asked if anyone knew how unique TCP is. He said there is no other conservation park throughout the entire valley. He felt this was unique and it needs to be preserved, protected, valued, but don’t destroy it. When the park is gone, it is gone whether it’s one acre or one hundred. He reminded the Commission it took thousands of years for what is now appreciated. He quoted artist Joannie Mitchell, The Yellow Taxi. “They paved paradise and put up a parking lot with a pink hotel, a boutique, and a swinging hot spot. Don’t it always seem to go, that you don’t know what you’ve got ’til it’s gone. They paved paradise, paved paradise and put up a parking lot.” This evening’s presentation by the Parks and Recreation Department is of great
interest for all who use TCP. Are they really listening to the public and have they made modifications to the master plan. Many of us do not understand how this happened in the first place which began in January 2004. He recapped each public meeting for those in attendance. He said those in attendance repeated for a year for the park to be left as it is. Do we have to remind everyone here today about the organization “Save the Park” and why it was started? He said here we are today looking at destroying the park. He wanted to know if he was missing something with this picture. He was unsure. He said one would think with all the public outcry of the 59 Avenue road issue regarding the destruction of the park, staff would have come up with an alternative based on what they were hearing. Even when the preliminary master plan was brought forth, there should have been some modifications. That seemed logical to him. He said you asked for comments and concerns and why have you not listened. He hopes he will be able to sit back during the presentation and feel better about the process. Please consider about not comparing TCP to another park. Just because it works over there does not mean it will work at TCP.

Commissioner Socaciu clarified that public comment being heard currently should be for items not on the agenda.

Chairperson Hansen stated that was the purpose of this time.

Commissioner Socaciu said people will have the opportunity to discuss items on the agenda as they appear.

Chairperson Hansen stated that this time is for those wishing to comment on non-agenda items. He said he would prefer to defer those comments until the particular agenda item is heard although he does not wish to discourage anyone from speaking.

Commissioner Socaciu stated if this is the case each person will have two opportunities, totaling ten minutes, to speak to their particular concern thus making a very long meeting. He stated this time of the meeting is for citizens to speak to items not on the agenda.

Chairperson Hansen felt it made sense to him and asked if a motion needed to be made. He asked staff for guidance.

Ms. Benná stated that any public comments not on the agenda can be heard by the Commissioners, but cannot be addressed during the meeting. Ms. Benná stated that staff can obtain legal guidance regarding public comment guidelines and return with information for the Commission at the next meeting.

Commissioner Gutierrez stated it would be more efficient for speakers to voice their concerns or comments after their particular agenda item of interest is addressed by the Commission.

Chairperson Hansen stated he did not want to shortchange speakers and have them speak only 1-½ minutes each time they have the opportunity.

Commissioner Socaciu clarified that his intention is not to limit public comment. Chairperson Hansen stated at the City Council meetings there are two different speaker cards available to the audience. He explained the purpose of the different colored speaker cards. One allows the opportunity to speak to a specific agenda item while the other indicates a person is interested in speaking on an item not on the agenda. He said the Parks and Recreation Commission meetings only have one speaker card available. He thought they might want to take the City Council speaker card idea into consideration.

Chairperson Hansen asked that any individuals wishing to speak to non-agenda items, please speak at this time.

No audience members were interested in speaking on non-agenda items.

V. THUNDERBIRD CONSERVATION PARK MASTER PLAN (TCP)

Chairperson Hansen explained that the TCP preliminary master plan was voted on at the Parks and Recreation Commission June 2004 meeting. Also at that time, the completion of the design process for the 59 Avenue Road improvement was being conducted, so the TCP process was delayed until that road project design was completed. In the fall 2005, the TCP draft preliminary master plan item was brought back before the Commission and the public for additional opportunities to provide more input. Each Parks and Recreation Commission meeting since that time has discussed information for the public to review and provide comments. He indicated that surveys also were conducted. This meeting is also to allow
citizens the opportunity to provide comments as well as for staff to provide citizens accurate and up-to-date information regarding the master plan. This is for discussion purposes only. He thanked the interested citizens for attending.

Parks and Recreation Director Ms. Benná began her presentation regarding updates on
Thunderbird Conservation Park (TCP). The presentation overview explained the action steps that have occurred since September 2005, which were to collect additional public input and park information. She stated the staff conducted an on-site user survey during the months of September and October 2005; the draft preliminary master plan was presented to the City Commission on Persons with Disabilities for review and comment; additional on-site meetings were held at Thunderbird Conservation Park with park rangers and maintenance staff to review the plan and to discuss ideas about the use of the park; periodic observations of parking lot use in the park were conducted from the end of the month of November through December 2005; the Commission and staff toured TCP and other parks to view design and park elements; staff met on site with police and ranger staff and several residents to discuss the 59th Avenue culvert area and contacted other organizations that utilize culverts for trail connection; site tours of the park were conducted with the Arizona Game and Fish Department; additional evaluation of the sedimentation basin was also being completed; and meetings are being held with school representatives regarding the interest in park use. Ms. Benná stated staff also continues to solicit public input and provide updates to the Commission at its monthly meetings.

The 751 on-site user surveys that were collected in the fall 2005 indicated the most popular use was the trails. Ms. Benná reviewed where the trails are located in the park. She stated there are 12 designated trails, which means they are assigned a trail designation. She reviewed each trail and its length. She identified 10 undesignated trails for the Commission. These trails are also referred to as social trails and not assigned as official trails, but have been created informally by users of the park.

Ms. Benná indicated through periodic observations of current parking lot use from November through December 2005, it was found that parking lots K (located off of 67th Avenue), 57th and Pinnacle Peak parking lot, A (parking lot located at H-3 trail head) and F (located at south end of wash located west of 59th Avenue) are consistently utilized and at times have been filled or exceeded capacity. Also, it was observed that other parking lots such as B (located at northeast end of the park between 67th and 59th Avenues), J (located in the northwestern portion of the park between 67th and 59th Avenues, and G (located at the north end of the wash between 67th and 59th Avenue) were used on a limited basis. She suggested that directional signage and locations of trailheads should be considered to maximize use of parking lots.

Understanding the trail use and locations are important since the trails are one of the major use components of TCP.

Ms. Benná asked Parks and Recreation Project Coordinator Roger Boyer to provide an update regarding the TCP trail maintenance program. Mr. Boyer stated that the Parks and Recreation Department is receiving trail maintenance assistance from the Arizona State Parks Department and the Federal Highway Administration Recreational Trails Program through the American Conservation Experience group. He said there is a supervised trail maintenance crew that is helping to repair the use and wear on the trails.

The intent is to improve the trails to meet state and national trail standards which include things, such as having sufficient width for multi-use path users to pass safely along the trails and removing the obstructions that create trip and fall hazards. Also being installed along the trails are water deflection areas, which will move water off the trails as soon as possible so that the water will not wash away the natural soil and leave rock trails again. The trail maintenance crew includes international representatives from Korea, Belgium, Holland, Germany, England, Japan and Canada. They work a 4/10 schedule, Tuesday through Friday. The Trail Assistance program will continue for approximately 12 more weeks or until it becomes too warm to work. The crews have completed about one mile of trail and are beginning preliminary work on another 1.5 miles. They have divided the park into three work zones. They are working on trails between 67th Avenue and 59th Avenue presently. A second zone is north of Pinnacle Peak and the third zone is east of 59th Avenue. Staff has posted a public comment notebook at the trailhead where work is being completed to record public reaction to this trail maintenance program. Mr.
Cardin provided the Commission with the locations and the length of time these notebooks have been available to the public and he indicated over 90% were favorable comments.

Ms. Benná then presented what staff has learned over the past several months as a result of collecting additional public input and park information: 1) Limit park improvements, 2) repair and replace restrooms, 3) providing drinking water, 4) provide a safe and clean park, 5) improve signage for parking, rules/regulations, trail marker, interpretive/educational, 6) provide shaded areas, 7) provide picnic areas, 8) provide area for interpretive/education discussions, 9) provide parking, but limit expansion, 10) enhance and preserve wildlife, 11) maintain existing trails, 12) connect trails, 13) restore areas with native vegetation, and 14) preserve vegetation and wildlife in the park.

Commissioner Berry asked what the widths of the trails that are being improved. Mr. Boyer stated each trail that is being improved will be approximately three feet wide.

Chairperson Hansen asked if the social trails would be removed. Ms. Benná stated that the social, or undesignated, trails are being reviewed and the trail maintenance crews are working with staff to determine if those should remain or be filled. Staff will return before the Commission and provide recommendations.

Ms. Medler stated she, Chairperson Hansen and Commissioner Long are completing meetings with the school districts. Chairperson Hansen stated that based on the public input received, people have stated that they are for education and he felt that the preliminary master plan had a box that said “EC” possibly to represent an education center. He was curious if schools would visit the park if it had such a center. He felt it was worth the time to see if schools would use the education center if one was provided in the park.

Chairperson Hansen stated he wanted to know what the educators would want if a field trip were taken to the park. He said Commissioner Long and Ms. Medler have attended three meetings with Mountain Ridge High School, Legends Springs Elementary, and Copper Creek as well. There is a plan to visit one middle school and Deer Valley High School as well. Ms. Medler stated meetings may also be held with Glendale Unified School District, as well as Tolleson School District, and Peoria School District.

Chairperson Hansen said to date, they found that the three schools they’ve spoken to have indicated if they are taking a field trip, when they get off the bus, they want to stay out in the field and get “hands on” experience and not be placed into a classroom. They would like to have a place to sit down and have a discussion with a ranger or instructor and would like shade, water, and restroom facilities.

Commissioner Berry suggested they meet with the athletic directors in addition to meeting with the educators. Chairperson Hansen felt this was a good point.

Commissioner Jared stated he was thinking along the same lines. He said the cross-country meets used to take place at the Thunderbird Conservation Park. He suggested bringing the meets back to the park.

Chairperson Hansen stated the districts were concerned about balancing their needs against the other users of the park. They need to meet the standards of promoting conservation education and would appreciate any assistance.

Commissioner Harding asked if it was discussed with the principals and the teachers to place a survey into the school newspapers in order to obtain student input.

Chairperson Hansen said no, but a good idea to consider.

Chairperson Hansen announced that a video of park tours would be shown. This video shows various park elements and designs, and the pros and cons of amenities located in different valley parks as well as TCP. He asked if anyone would like to speak prior to the video.

Ms. Barbara Huber, of Glendale, stated that she is within walking distance of the park and does not use the parking lots. A master plan for Thunderbird Conservation Park - she understands that the park needs to be managed, but the most profound statement she heard was to better utilize the existing park. It is a conservation park. She hopes the wildlife would be enhanced and preserved, restore areas with native vegetation, and do not add picnic areas. With regards to the education center, does it have to be here and is a building needed? She said she doesn’t understand how this park can be improved upon. Please leave the pavement elsewhere.

Mr. Larry Clark, of Glendale, recapped the history of the park for all in attendance. Mr. Clark stated the three concerns he has which appear to violate the intent of the park master plan concept and the
forefathers that were so determined to preserve this park for future generations are as follows: 1) the education center – although he is in favor of education, a building of that magnitude is not needed; 2) the improvement of the culvert would involve intensive development; and 3) a welcome center located in the park would also require intensive development. These things would not fit well with what our forefathers envisioned for the park. How did we get so far off the beaten trail with big schemes? What does the word intensity mean? Things previously spoken of should be maintained. The Commission and the City Council are in a fiduciary capacity to do just that. He hopes that the Commission will think before they act on any intensive development ideas or concepts.

Mr. Jeff Allenbach, of Glendale, stated he loves the park, the way it is and would suggest to minimize the modifications that are made. He said he likes the existing amphitheater and does not understand why it is not being used. He says some of the best experiences he has had outdoors is related to music. He suggested music in the park on an afternoon for a couple of hours. He suggested an acoustic guitar musician. This might attract more people to the park.

Council member Phil Lieberman, of Glendale, speaking as a citizen stated he began to use the park in 1963. He provided some of his previous park experiences for the audience, staff, and Commission. Council member Phil Lieberman stated he also represents the citizens of the Cactus District. He suggested that a reasonable conclusion be reached and a plan which will allow all residents to use the park. He thanked everyone in attendance for coming to tonight's meeting.

Ms. Patricia Woods, of Glendale, stated that it is essential that this park remain a conservation park. She would like to be able to hear the sounds of the park. She would welcome the constituents of Mr. Lieberman or Mr. Goulet to come enjoy the park in its natural beauty. She felt the Commission and the Council could either go down in infamy by destroying the park or go down in history by saving it.

Mr. Allan DeFranco, of Glendale, thanked all in attendance. He does not understand why Council member Lieberman believes this is a north-south battle. He said we do need to educate our children. Children do not want to go from a classroom to a classroom. A field trip is called a field trip, because they want to be out in the field. Mr. DeFranco stated that the City of Glendale 2002 Master Plan clearly states that the city is short 150 acres of conservation park. Where is the city going to get this acreage?

Chairperson Hansen asked if there is a set limit of conservation park that the city should have. Ms. Benná stated the Parks and Recreation Department Master Plan guidelines for the number of neighborhood park, community parks, regional parks, etc that should be located within the city. Staff reviews this information each year to determine areas of growth. Mr. Cardin added that the New River area is currently being reviewed by staff as potential park land. There are two areas of Glendale that touch along New River. The city has entered into an intergovernmental agreement with the Maricopa County Flood Control District to provide trails along those reaches of the river corridor which will connect to trails in Phoenix and Peoria. Staff does actively look to add or partner with others to provide open space areas for the public.

Ms. Benná then presented the video of park elements and design features that featured different types and themes of signage, viewed different types of shade structures, various entry points, restrooms, use of various materials, lighting features, gates, and trash receptacles. The parks examples included: Scottsdale's Pinnacle Peak Park, Deer Valley Rock Art Center, Phoenix's North Mountain Preserve Park and TCP.

Commissioner Gutierrez asked how the Pinnacle Peak parking spaces were maintained. Ms. Benná stated she did not have that information on this item, but would obtain it.

Commissioner Soecaci asked about the tree cutting in the sedimentation basin shown on the video. Ms. Benná stated that staff did not cut down the trees. She did not know why the trees were being cut down. She said the staff needs to determine how it will manage and provide education to the community about the vegetation around the area. Mr. Cardin stated he has spoken with the Arrowhead Lakes Homeowner's Association President and is planning a meeting with those residing along the sedimentation basin to talk about the area.

Commissioner Gutierrez asked if there is any signage in this area. Mr. Cardin stated there are signs that state "No Trespassing".
Commissioner Socaciu stated that in the future if there are any more videos shown; comments from the public should be taken after the video. A lot of people spoke and left and did not see the video which may address their concerns and questions.

Chairperson Hansen again opened the meeting for public comments regarding Thunderbird Conservation Park.

Ms. Cathy Podolsky, of Glendale, stated she supports the comments made earlier regarding minimizing destruction of the park. She stated the presentations have been very informative. She has not seen any signage regarding “No Smoking” posted along 59th Avenue. She was very concerned about the fire that occurred last year. She stated the survey conducted regarding parking was completed during the months of November and December. She stated these may be the most popular months. She stated parking varies from month to month.

Mr. Karel Podolsky, of Glendale, suggested conducting parking surveys during the months of July or other months. He complimented staff on the meeting and added this is his first time attending. He stated he likes the idea of non-paved parking lots. However, the dust from 55th Avenue and Pinnacle Peak parking lot is too much for the valley. He would like to minimize pollution although he does not want to see if paved. He asked the Commission to research alternative solutions.

Ms. Benná stated staff will try to post the video onto the TCP webpage.

Commissioner Socaciu commented on the idea of having music in the park. He stated based on previous presentations by staff that there is a concern of the location of the current amphitheater and the parking issues related to it. He added there are sound limitations so that music will not be blaring throughout the park. He said he understood how someone could feel that there is a “north – south” issue related to the park. He said those near the park are very concerned with the parking and do not want any additional parking. Most of the citizens of Glendale would have to drive to the park. He added that dust is a big issue where there is gravel and heavy usage. He suggested different types of asphalt that would incorporate surrounding materials which would create a more natural look. He described the asphalt in Sedona, Arizona where the red rock material is incorporated which gives the asphalt a more natural color rather than black.

Commissioner Kultala said he and his wife visited the park on Sunday and spoke with other users. He stated only one person they chatted with was from Glendale.

Chairperson Hansen thanked all those in attendance.

Ms. Benná stated she also appreciates the citizens that attended tonight’s meeting as well as the Commission’s commitment to this process.

Chairperson Hansen questioned whether the Thunderbird Conservation Park item should remain on the agenda each meeting or only when new information is presented.

Chairperson Socaciu suggested it should be listed under “Staff Update”.

Adjournment
The meeting was adjourned at 9:56 p.m.

Diana Figueroa, Recording Secretary
The meeting was called to order at approximately 7:05 p.m. by Chairperson Ted Hansen with Commissioners Michael Socaciu, Ruben Gutierrez, Raymond Kultala, Stanley Long, and Eric Simon. Representing city staff was Becky Benne’, RJ Cardin, Shirley Medler, Roger Boyer, Clyde Brown and Larry Broyles.

Several citizens were also in attendance.

Chairperson Hansen read the mission of the Parks and Recreation Commission.

The purpose of the Parks and Recreation Commission is to advise the City Council on policies, rules, and regulations referring to planning, acquisition, deposition, operations, use, care and maintenance of parks and recreation facilities. The Commission is also responsible for development of a continuous master plan for the city parks system and its recreation programs.

Chairperson Hansen introduced the newest Park and Recreation Commissioner representing the Barrel District. Commissioner Eric Simon thanked the Chairperson and provided his background information.

Chairperson Hansen explained that the agenda has been revised to provide the opportunity for citizens to comment on “non-agenda” items following the meeting agenda items. He also explained the green speaker card would need to be completed by anyone wishing to speak to an agenda item and the yellow comment card would need to be completed by anyone wishing to speak on an item not on tonight’s agenda.

1. Approval of Minutes

Commissioner Socaciu asked that staff indicate which set of minutes are draft and for review and which are revised minutes from previous meetings.

Commissioner Socaciu referred to page 10 stating that his comments in paragraph three should read that he suggested different types of asphalt that would incorporate surrounding materials which would create a more natural look. He described the asphalt in Sedona, Arizona where the red rock material is incorporated which gives the asphalt a more natural color rather than black.

Chairperson Hansen referred to page six, first paragraph stating that the last line reads that Mr. Cardin indicated a majority of the comments received were positive. He suggested that the sentence state that 90% of the comments were favorable.

A motion was made by Commissioner Long to accept the minutes as amended. Commissioner Socaciu seconded the motion. The motion carried unanimously.
II. THUNDERBIRD CONSERVATION PARK MASTER PLAN

Becky Benná, Parks and Recreation Director, stated that staff would provide an update regarding the Thunderbird Conservation Park Master Plan. She stated that staff has worked diligently to complete the Action Plan in collecting additional information and public feedback regarding the park. Ms. Benná stated that within the last month Chairperson Hansen, Commissioner Long, and Ms. Shirley Medler have completed meetings with additional school organizations. She asked the Chair to provide an update.

Chairperson Hansen stated the group visited more schools, Deer Valley High School, Canyon Elementary School, Copper Canyon High School, Hillcrest Middle School, as well as the Glendale Union High School District. In general, previous comments were echoed stating that having to get students to and from the park in one class period’s time would be difficult. He said, high schools may not see much benefit as far as curriculum is concerned. There were a lot of clubs and extra curricular groups that could make use of the park and education amenities that may be provided. The Canyon Elementary School representative stated that they could typically take one and a half to three hours for a field trip. The instructors of the younger aged classes stated they would need the assistance of the park rangers for hands-on instructions. The three main themes heard from those visited are conservation education, desert education or desert survival education, and that the sedimentation basin could be used as for wetlands instruction. One of those interviewed stated that a classroom would be nice, but a field trip should take place in the “field”. At the request of Commissioner Berry, schools were questioned regarding the interest of having cross-country meets at the Park. All were interested.

Commissioner Kultala stated he has attended meets at the park in the past and they have worked well.

Commissioner Long said he was pleased with the positive reception from the schools especially from the elementary schools. He indicated that instructors wanted to verify the safety and well being of the children. They wanted to be sure the children would be sheltered from severe heat or cold weather. They also wanted to ensure the children would have a place to sit and possibly write or draw comfortably. The instructors liked the ideas of rangers speaking to the children.

Ms. Benná stated that a meeting was held at the sedimentation basin on Saturday, April 1, 2006. This meeting was coordinated with the Arrowhead Lakes Homeowners Association and city staff. The Arrowhead Amenities representatives that manage the lake water were also in attendance as well as representatives from Arizona Game and Fish. Ms. Benná stated Chairperson Hansen was in attendance as well as Ken Reedy, Deputy City Manager with the City of Glendale. Mr. Reedy provides background information and history regarding the sedimentation basin and lake. Mr. Cardin stated that staff reviewed as-built plans, which indicated the basin was construction in the mid-eighties. Mr. Reedy, informed the group that the construction actually was completed in 1984. The survey company had divided the lake into grids and had taken depth measurements of the lake. He said it was discovered that the silt level ranged from as little as six inches to 2 ½ feet. Mr. Reedy indicated the primary function of the lake was to filter the water and settle the sediment before it went into the rest of the Arrowhead Lake system. He felt the lake has far exceeded its original purpose. He stated there are currently no major concerns regarding the basin. Mr. Reedy suggested the basin should be monitored after large storm systems have passed.

Mr. Reedy stated that there was a concern with an area in front of the sedimentation basin, commonly referred to as “dragon’s teeth’’. There was a misconception that the teeth were designed to slow sediment; however, the original purpose is to slow the water down and dissipate the energy of the water. Sediment has settled into the teeth. If a large storm system comes through the teeth are designed to be self-cleaning and will clean themselves. In addition, there is currently a large amount of vegetation. This vegetation is helping to keep silt from entering the lake.
Ms. Benná stated that staff walked the park with the American Conservation Experience (ACE) trail maintenance crews to review the park’s designated trails and undesignated trails. She stated the crews have done a wonderful job. In addition, the crews have provided information to staff on how to maintain the trails. The crews will be on site until May. She suggested the commissioners visit the trails to see how the trails have been improved.

Ms. Benná provided a presentation to the Commission regarding the proposed conceptual changes for the Preliminary Master Plan. The recommended changes have been developed by Parks and Recreation staff as a result of the past seven months of additional review and analysis process.

Commissioner Long asked when the consultants would be asked to get involved. Ms. Benná said staff will utilize the consultants for their technical expertise as needed.

Ms Benná continued with a review of the approach to conceptual changes. Staff considered studies and surveys conducted by the consultant and staff prior to September 2005. Public input has been utilized and park information has been collected from September 2005 to date. Today, staff will be seeking the guidance from the Commission to regarding proceeding with changes to the preliminary master plan.

Ms. Benná reviewed the general proposed improvements to the Thunderbird Conservation Park. She stated consistent maintenance and design standards are needed for all park trails, trailheads, trail nodes, signage, trash cans, ramadas, picnic tables, drinking fountains, equestrian hitching posts and troughs, restrooms, parking, and lighting to the park. Staff needs to determine surfacing and marking standards for parking lots and roads both paved and unpaved. If not already identified, park property boundaries should be marked along the entire perimeter. Also, mileage indicators for all trails should be provided. Standards and procedures for park special uses and requests should be identified. A community education outreach program regarding park wildlife, vegetation, geology, and other natural areas in the park should be developed.

55th Avenue and Pinnacle Peak Road

Ms. Benná reviewed the proposed conceptual changes to the master plan beginning with the 55th Avenue and Pinnacle Peak Road area. She discussed the proposed main park entrance for this area at the traffic light at 55th Avenue and Pinnacle Peak Road. A secondary entrance east of the parking lot is proposed to allow for loop access for emergency vehicles. The existing parking lot which includes 68 parking spaces, should remain and is proposed to be extended to the west and east adjacent to Pinnacle Peak Road, with the number of spaces to be determined. Two linear parking spaces are proposed for buses. Update and extend the existing accessible trail and interpretive signage should be provided along the trail. Resting benches along the accessible/interpretive trail are proposed. The existing trailhead at the west end of the parking lot is proposed to be upgraded to include a restroom and drinking fountain. Also proposed is the addition of 3 single use ramadas and 2 optional single use ramadas on the south side of the Parking Lot for shade and resting. An outdoor shaded interpretive area that accommodates 60-100 persons (one of two location options) should be considered. The two existing single use ramadas located west of the traffic light along the H-1 trail should remain and be upgraded. The native vegetation in the areas affected by last year’s fire need to be restored. Two natural water guzzlers at the southeast wildlife habitat area should be provided. A few other options noted are future parking spaces and one single use ramada; consider option for maintenance storage area on the east end of the property; consider extending a current undesignated trail that leads to viewpoint located on the east side of the park that overlooks the valley east of the park; and resting benches and signage at the top of H-2 trail should be added to identify mountains and foothill areas.
Sedimentation Basin Area

Ms. Benná noted improvements proposed for the sedimentation basin area such as to improve the existing H-1 trail that leads from 51st Avenue to 55th Avenue and Pinnacle Peak to meet state and federal trail standards. Also, interpretive signage should be provided along the trail and at the viewing blinds located north of the sedimentation lake. Last, the plan should address vegetation restoration in the sedimentation lake area. She touched on the use of a land bridge north of the sedimentation basin and stated that would be the best form of a connection.

59th Avenue and Amphitheater Area

Ms. Benná stated the Parking Lots A, B, C, D, E, and H, should be retained for a total of 91 parking spaces. Parking Lots F and G located in the wash should be removed for a loss of 38 parking spaces. Two linear parking spaces for buses should be provided at Parking Lot E. A trailhead and trail and an information kiosk should be added to the south end of Parking Lot B. Also, Parking Lot B to help relieve the parking demand on Parking Lot A. Also Parking Lot B is proposed to be expanded and parking should be added for the ranger/information facility. In addition, the ranger/information facility propose, should include a restroom facility and a drinking fountain. There are currently three restrooms and seven ramadas located within the wash. These facilities should be removed. A large group ramada is proposed at the base of the amphitheater area, which should include a drinking fountain, restroom, and two single use ramadas. A single use ramada should be added near the existing ramada #1. The restoration of the existing amphitheater is proposed. Commissioner Simon suggested adding a bike rack at this area.

67th Avenue Park Entrance

Ms. Benná said the undesignated trail located along the north border fence line is proposed to be identified as a designated trail. The gate, located at the west end of the road between the 67th Avenue Parking Lot K and Parking Lot J, proposed to relocate the gate to the east road entrance and Parking Lot J. Parking Lot K, which includes 20 parking spaces, should remain. An equestrian corral is proposed to the south end of Parking Lot K. The existing trailhead at Parking Lot K should be upgraded and an information kiosk, and drinking fountain should be provided. Parking Lot J would remain and has 39 parking spaces. The roadway is proposed to be improved to allow for two-way traffic and a sewer line installed that leads to a restroom at Parking Lot J. Three are proposed ramadas should be added to Parking Lot J; two currently exist at this location. A new trailhead and information kiosk proposed at Parking Lot J. The existing restroom needs upgraded or replaced at Parking Lot J and a drinking fountain should be provided. The restroom at Parking Lot H needs repaired or replaced and the existing three ramadas should be upgraded. Revegetation of the area will be planned as needed.

Ms. Benná concluded the presentation with a review of the upcoming public meeting dates. That will be held on Wednesday, April 26 at 6:30pm in the Deer Valley High School cafeteria. A second meeting will be held at the same location on Saturday, April 29 at 9am.

No audience members were interested in speaking at this item.

The Commission Chair, Ted Hanson, provided staff direction to proceed with refinement of the proposed conceptual changes to the Preliminary Master Plan.

III. CITIZEN COMMENTS
Chairperson Hansen called for citizen comments.

Chairperson Hansen opened the floor public for public comments on the proposed conceptual changes. There were no public comments.

VII. Next Meeting – Monday, May 8, 2006 at 7pm in Room B-3 of the Municipal Office Complex.

Adjournment

The meeting was adjourned at 9:46 p.m.

Diana Figueroa, Recording Secretary
The meeting was called to order at approximately 7:00 p.m. by Chairperson Ted Hansen, with Commissioners Michael Socaciu, Ruben Gutierrez, Raymond Kultala, Morris Russell, Sarah Berry, Loric Harding, Stanley Long, and Eric Simon present. Representing city staff included Becky Benná, Shirley Medler, Clyde Brown, Raul Daniels, Bob Rhodes, and Gloria Santiago-Espino.

Several citizens were also in attendance.

Chairperson Hansen read the mission of the Parks and Recreation Commission.

The purpose of the Parks and Recreation Commission is to advise the City Council on policies, rules, and regulations referring to planning, acquisition, deposition, operations, use, care and maintenance of parks and recreation facilities. The Commission is also responsible for development of a continuous master plan for the city parks system and its recreation programs.

Chairperson Hansen stated there were Citizen Comments Cards located outside of the door of room B-3. He asked that anyone wishing to speak or submit comments please complete the appropriate cards.

Chairperson Hansen introduced the newest Parks Commissioner, Mr. Morris Russell. Commissioner Russell provided his background information and stated he was glad to be part of the group.

I. Approval of Minutes

Chairperson Hansen called for approval of the minutes. He asked that his name be corrected on page 6.

A motion was made by Commissioner Socaciu to accept the minutes as amended. Commissioner Long seconded the motion. The motion carried unanimously.

Chairperson Hansen introduced former Parks and Recreation Commissioner Chuck Jared and presented him with a plaque of appreciation for serving on the Commission for two full terms.

II. THUNDERBIRD CONSERVATION PARK MASTER PLAN

Ms. Becky Benná, Parks and Recreation Director, stated that staff would provide an update on the public meetings held on April 26 and 29, 2006 that presented the Thunderbird Conservation Park Revised Master Plan and proposed changes. She also distributed public comments received after the April 29 meeting. She explained the approach to the Master Plan and informed the Commissioners of the changes to the plan. She provided a PowerPoint presentation that displayed examples of park elements such as: outdoor seating areas, resting benches, signage, parking areas, ramada and park information facilities.

She also reviewed the Executive Summary for the plan, which explained the proposed changes to the plan.
In response to a question from Chairperson Hansen regarding funding for completing the plan's recommendations, Ms. Bennà stated there are existing funds available to begin to implement the recommendations, and future funding is planned to complete the recommendations.

Ms. Bennà stated City Council will meet in workshop on June 6, 2006 and staff would like to present the plan and proposed changes. Staff will update the Commission on the results of workshop at the June 12 Parks Commission meeting. She encourages the Commissioners to attend the City Council Workshop if they were available.

Commissioner Berry questioned why the equestrian trail does not connect. Ms. Bennà stated that the trail will connect to H5 and be a designated trail as currently it is undesignated.

Chairperson Hansen opened the public hearing.

Mr. Allan DeFranco, 5710 West Melinda, stated his comments this evening were with regard to the ranger station. He distributed a drawing showing a ranger station and approximate size of 1,200 square feet. He felt this would be plenty of area to house a ranger, park information, emergency phone, and storage area.

Ms. Bennà stated she would discuss the proposal with staff and ranger staff to ensure that the location and size would be suitable and functional.

Mr. Darwin Huber, 5555 West Melinda Lane, stated that he wished to address the Commission regarding a Salt Cedar. Mr. Huber provided results of information he has collected and stated there is Salt Cedar growing on the shores of the Thunderbird Conservation Park Sedimentation Basin. There has been discussion that Salt Cedar is a bad plant. His study was conducted to investigate and report the findings to the City of Glendale and the Parks and Recreation Department. He stated that Salt Cedar is an invasive exotic plant that is well established in the southwestern United States. It is incredibly aggressive, causing serious ecosystem problems and can grow 12 feet in a single season. A single Salt Cedar plant consumes 200 gallons of water per day. Its extensive taproot system can extent 60 feet choking stream beds. Salt cedar increases soil alkalinity. A single salt cedar produces seeds, which are widely dispersed by wind and water, which quickly germinate in moist areas. Salt Cedar re-sprouts vigorously if its top portion is damaged or removed. The drought-deciduous nature of Salt Cedar contributes to a heavy fuel load, increasing the frequency of fires. He provided the Commission with information on government legislation. He also explained various ways of eradicating the Salt Cedar. Mr. Huber concluded that Salt Cedar is an invasive exotic plant that is incredibly aggressive and destroys ecosystems. He said many states have taken serious action against salt cedar. He stated that permanent removal of Salt Cedar is the only solution.

Commissioner Long inquired about the square footage of the proposed ranger/park facility. Ms. Bennà stated that staff would review the square footage to ensure it could be functional.

A motion was made by Commissioner Simon to accept the Executive Summary and directed staff to move forward with the changes to the Preliminary Master Plan and for staff to proceed with it's presentation to City Council Workshop on June 6, 2006. Commissioner Marshall seconded the motion. The motion carried unanimously.
EXERPTS FROM MINUTES OF THE MEETING OF COMMISSION ON PERSONS WITH DISABILITIES
GLENDALE MAIN PUBLIC LIBRARY BOARD ROOM
5959 WEST BROWN STREET, GLENDALE, ARIZONA
NOVEMBER 15, 2005
6:30PM

Members Present: Robert Steiger Katherine McKinney
Elliot Abramowitz Clarence Schanlaub
Kathe Neyer Camille Donley
Vickie Loya, Chairperson Jo Ann Caufiled, Vice Chairperson

Members Absent: Robert Duncan, unexcused
Lynn Simon, excused
David O'Connell, excused
Ricki Ray, excused

Staff Present: Allison Eckert, Human Resources Department, and Diana Figueroa, Recording Secretary

1. Call to Order and Welcome
The meeting was called to order at approximately 6:30pm. A quorum was present.

Chairperson Loya asked that everyone present introduce themselves.

8. New Business
Chairperson Loya introduced Ms. Becky Bennà, Parks and Recreation Director, Shirley Medler, Deputy Director, and Jackie Keller, Logan Simpson Design. She explained that they would be providing the Commission with background information regarding the Thunderbird Conservation Park draft preliminary plan for the proposed park renovations specifically as they relate to trails for the disabled.

Ms. Keller provided an overview of the preliminary plan. In addition, she explained the trails which would be available for different types of users. She indicated that approximately 80% of the proposed trails would be wheelchair accessible. She explained the material used would be decomposed granite providing a solid surface where a wheelchair could be maneuvered easily.

Ms. Bennà asked if the Commission had any suggestions relating to the preliminary plan. Chairperson Loya suggested signage which would be pleasing to the surroundings. She also suggested that a legend should be provided at the entrance of the park indicating where the trails were located as well as important facilities such as the restrooms and drinking fountains.

The Commission asked that the Parks staff return to a Disabilities meeting in order to provide the Commission with an opportunity to comment on the construction plans.

Chairperson Loya thanked Parks staff for their presentation and their time.
Ms. Eckert passed around a thank you card to the Commission from Commissioner Caufield. Also, Ms. Eckert stated that information regarding employment opportunities were available for review at this meeting.

Commissioner Schanlaub asked for a 2006 meeting schedule. Chairperson Loya asked that Ms. George provide this information to the Commission.

10. Adjournment
With no further business, the meeting was adjourned at 7:55pm.

Respectfully submitted,

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Diana Figueroa, Recording Secretary