

CHAPTER I: INTRODUCTION



“What are the natural features which make a township handsome? A river, with its waterfalls and meadows, lake, a hill, a cliff or individual rocks, a forest, and ancient trees standing singly. Such things are beautiful; they have a high use which dollars and cents never represent. If the inhabitants of a town were wise, they would seek to preserve these things, though at a considerable expense; for such things educate far more than any hired teachers or preachers, or any present recognized system of school education. I do not think him fit to be the founder of a state or even of a town who does not foresee the use of these things.”

Henry David Thoreau
Journal, 1861

Open Space and Parks Spectrum

Open Space

In the context of this plan, open space is defined as an interconnected system of protected lands that are conserved in their natural state, restored, or improved with appropriate native landscaping to retain a natural or natural-appearing condition. Open space areas provide resource conservation, visual, wildlife, and recreational benefits, as well as relief from urban development. Allowed uses vary depending upon resource sensitivity and management objectives, but some areas can accommodate passive recreational uses and facilities such as trails, trailheads, overlooks, rest areas and interpretive signage.

Nature Preserves: Clark County Wetlands Park, Bird Viewing Preserve

Natural Areas: Whitney Mesa Nature Preserve, Lake Las Vegas Wetlands Park

Corridors: Pittman Wash

Common Areas

Areas set aside for the use and benefit of the residents of a particular subdivision or development. These areas vary widely in character, from sites with developed facilities to sites that retain a more natural character. Typically, these areas are privately owned and maintained by the developer or homeowner association.

Streetscapes

Medians

HOA Lands

Parks

Park areas programmed for active recreational use. These areas are typically owned and maintained by the City and contain an array of developed uses, recreational facilities, and landscape improvements.

Community Parks

Neighborhood Parks

Sports Complexes

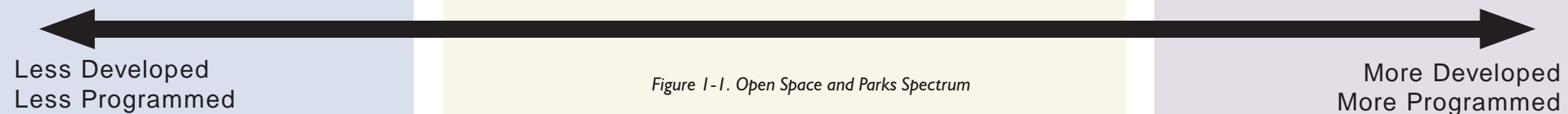


Figure 1-1. Open Space and Parks Spectrum

INTRODUCTION

The Mojave Desert is home to many unique desert plants and animals, in addition to being our home. As the most arid desert in North America, the Mojave is a place of beauty and displays an intricate evolutionary interplay between water, earth, and life. Mountain and desert wild land backdrops, and the natural areas within the City define our community's sense of place and provide opportunities for recreation and relaxation. Especially notable in the desert are its washes, ridgelines, and mountain chains—which are critical lifelines for plants and animals.

The Mojave is also home to the fastest growing city in America: the City of Henderson. With a current population of approximately 246,000, the City is expected to continue to experience tremendous population growth in West Henderson and through infill projects. Because the City of Henderson still has extensive areas of vacant lands and is adjacent to public lands, many residents take the region's open space for granted. But even newcomers can see that development is beginning to affect the landmarks that make Henderson a place to come home to: its mesas, mountains, and washes. Thus, residents and City leadership have acknowledged the need to begin protecting the special places that make Henderson a desirable community.

Today, as Henderson's focus shifts from industry to lifestyle, the quality of the natural environment can no longer be seen as an "amenity." Rather, it is essential to the evolution of a successful and sustainable community, cultivating civic identity, stimulating development, and providing a reprieve from the often overwhelming intensity of urban life. Residents and business owners increasingly demand that the City work to protect the region's special places, create a connected trail system, and provide natural amenities within urban areas.

Open space and trails are good investments; open space improves our quality of life, provides an escape from the urban setting, promotes awareness and respect for our desert environment, and defines a buffer for growth. Trails accommodate several of the most popular recreation activities residents enjoy, such as walking, jogging, bicycling, walking with pets, photography, or just simply relaxing. There is a growing recognition that cities that provide quality natural environments continue to attract brain power, economic investment, and creativity. Open space investments truly pay dividends for those cities bold enough to plan, protect, finance, and build attractive and centrally-located parks, open space, and trail systems.

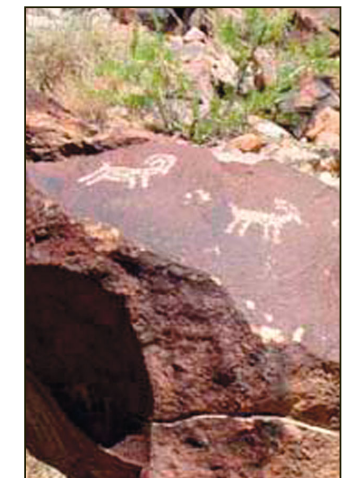
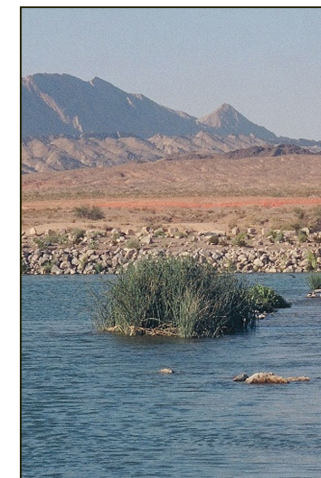
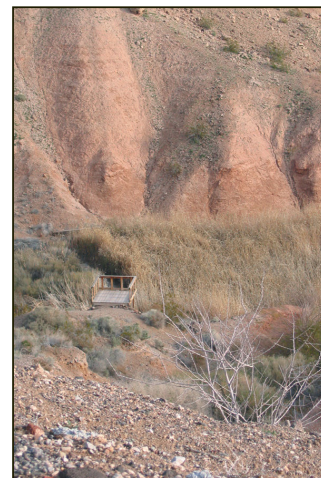
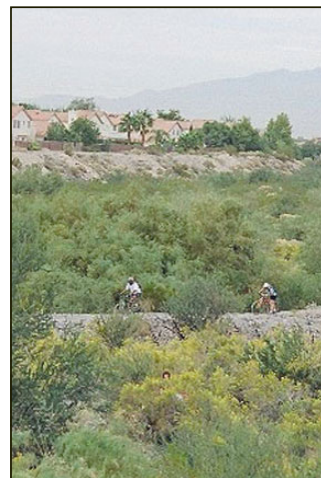
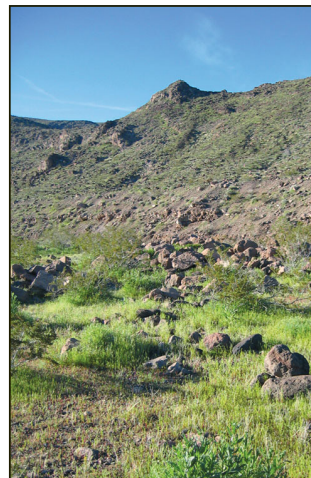
In a recent community-wide survey, 9 out of 10 residents stated that preserving open space was important to them, and 8 out of 10 residents stated that increasing the number of trails and walking paths was important.

The City has defined a goal of respecting the land and integrating the desert environment into the community as it grows. Henderson aims to protect, restore, and conserve the beauty of our desert home, provide wildlife corridors and habitat for birds, and provide relief for residents from continuous development. Henderson is *learning to conserve through development*, as demonstrated by recent master planned communities built around the "green infrastructure" of trails, greenways, natural washes, and open spaces.

WHAT IS OPEN SPACE?

Open space occurs on a spectrum, from natural environments, to common areas, to parks. Often, natural open spaces occur within or adjacent to programmed park sites, such as Equestrian Park (at Magic Way and Equestrian Drive), or the dune formations at Sunset Park as shown in Figure 1-1.

In the context of this plan, *open space is defined as an interconnected system of protected lands that are conserved in their natural state, restored, or improved with appropriate native landscaping to retain a natural or natural-appearing condition.* Open space areas provide resource conservation, visual, wildlife, and recreational benefits, as well as relief from urban development. Allowed uses vary depending upon resource sensitivity and management objectives, but some areas can accommodate passive recreational uses and facilities such as trails, trailheads, overlooks, rest areas and interpretive signage.



Bicycle and Pedestrian Facilities Spectrum

On-Street Lanes

- Shared Roadways
- Bike Lanes
- Bike Routes



Sidewalks / Shared Use Paths

Many sidewalks adjacent to streets in Henderson are landscaped and designed to carry large amounts of pedestrians. However, due to the number of curb cuts and intersections, motorized vehicle conflicts at sidewalks are not ideal for other users, such as bicyclists and in-line skaters.



Primary and Secondary Trails

Trails provide connections to parks, schools, employment areas, and retail centers for recreational and non-motorized use. They often occur within vehicular right-of-ways, with landscaping or other barriers that physically separate users from motor vehicle traffic. However, trails ideally occur in non-vehicular corridors such as utility corridors, flood control channels, or railroad easements, featuring appropriate pedestrian amenities, aesthetic enhancements, and connections.



Landmark Corridors

Trails can be located in open space corridors that have regional significance and are recreational destinations in and of themselves, or lead to or through destinations such as Wetlands Park, Lake Mead, or Sloan Canyon National Conservation Area. These corridors provide a greater degree of connectivity, interpretation, safety, pedestrian amenities, and grade-separated crossings.



Most Vehicular Conflicts
Least Recreative

Least Vehicular Conflicts
Most Recreative

Figure 1-2. Bicycle and Pedestrian Facilities Spectrum

WHAT IS A TRAIL?

Trails also occur on a spectrum, ranging from soft-surface trails in backcountry areas to shared-use paths adjacent to major roadways (see Figure 1-2). In urban areas, Henderson seeks to set a new standard for what makes a trail: *ideally, trails occur in non-vehicular corridors with appropriate pedestrian amenities, aesthetic enhancements, and connections.* Although this is not always an achievable goal (especially in built areas), Henderson seeks to separate pedestrians from vehicles in order to enhance safety and the recreational experience, as well as promoting functional alternative modes

of transportation. *On-street lanes, sidewalks, and other “neighborhood trails” (6-8 foot sidewalks within subdivisions) are not addressed in this plan, but will be addressed in updates of transportation, bicycle, and pedestrian plans, such as the Master Streets and Highways Plan.*



OTHER IMPORTANT TERMS USED IN THIS PLAN

Green Infrastructure

Green infrastructure is a planning approach that attempts to maximize the benefits ecosystems provide to surrounding human populations. The counterpart to green infrastructure is gray infrastructure, the system of human-constructed elements (roads, water treatment plants, airports, etc.) that supports our lifestyles. While the pervious character of green infrastructure allows plant and animal communities to flourish and water to infiltrate the soil, the impervious character of gray infrastructure generally excludes nature and prevents absorption of water.

In order to encourage thriving natural and human communities, green infrastructure planning treats open spaces as a necessary and beneficial aspect of urban and suburban environments. By incorporating green space networks into our communities, we improve our own quality of life as well as the health of the natural world. Green infrastructure plans also help us decide how to expand our communities in the best possible manner, just as gray infrastructure plans help us efficiently distribute services to human populations. Both types of infrastructure must be planned judiciously to ensure the best future for us and for the ecosystems we live in.

Ecosystem Services

Ecosystem services are the processes of the natural world that provide benefits to human communities. These benefits come in many forms and are often forgotten when planning for human populations. Ecosystem services provide us with, for example, clean water, habitat for raising and harvesting food, climatic moderation and protection from ultraviolet solar radiation, detoxification and decomposition of waste products, purification of air, recycling of essential nutrients, pollination of crops and natural vegetation, etc. Without these benefits, human communities would deteriorate and eventually cease to function. Hence, we must consider and place great importance on ecosystem services when developing our communities.

Landscape Ecology

Landscape ecology is a discipline that studies the interactions between organisms at a scale large enough to show emergent spatial patterns and structures (viewing the Earth from an airplane window provides a good sense of the scale of landscapes). These patterns and structures transform over time and can be roughly divided into patches, corridors or strips, and background matrices. Various factors such as weather, soils, precipitation, solar aspect, elevation, etc., determine how these spatial patterns array themselves on the land. As human communities have consumed ever more open space, however, pre-existing ecosystems have been disrupted and altered. Roads, for example, fragment landscapes and create barriers that are difficult for plants and animals to cross. Understanding landscape ecology and applying its principles enable planners and designers to create strategies for human communities that respect and value the natural world.



Citizens Steering Committee field trip with Sarah Sutherland (Sloan Canyon NCA)



Citizen Steering Committee field trip to Pittman Wash

Phase	Tasks	Timeframe	Communication and Participation Methods
Project Initiation and Inventory	Project Initiation Natural Resource Inventory Trails Inventory Agency Interviews Vision Development	October 2004 – January 2005	Public Meeting #1 Webpage Newsletter
Analysis	Natural Resource Analysis Needs Assessment	January 2005 – March 2005	Webpage Postcard Mailing Utility Bill Insert
Framework Development	Opportunities and Constraints Framework Themes	April 2005 – May 2005	Public Meeting #2 Webpage Press Release Newsletter
Recommendations	Principles and Policies Implementation Strategies Action Plan Draft Plan	June 2005 – September 2005	Public Meetings #3 and #4 Draft Sections for Comment Webpage Press Release Newspaper Advertisement Radio Announcement TV news spotlight Newsletter Draft Report for Comment
Adoption	Final Plan	August 2005 – November 2005	Property Management Committee Parks and Recreation Board Meeting Planning Commission Public Hearing City Council Public Hearing

Table I-1. Public Involvement Process



Public Meeting #1



Public Meeting #3

WHAT WILL THIS OPEN SPACE PLAN ACCOMPLISH?

Some view land primarily as a source of wealth, a commodity that is bought and sold, an investment, a subject of laws and regulations, a matter of real estate, an object for tax policies, or a resource of the free market. Others view land primarily as a living dynamic system, a place to live, a habitat containing plants and animals, a site of history, culture, aesthetics, and inspirations, or something that is planned, conserved, designed, managed, and cared for. Often these two perspectives are framed as being directly incompatible to one another in popular discourse, although that is not the case.

The City of Henderson seeks to balance these seemingly competing goals. The purpose of the Open Space and Trails Plan is to take advantage of some clear opportunities to protect special places, provide accessible trails, and conserve natural resources while maintaining the City's vibrant economy. The Plan focuses on protecting lands for resource conservation, wildlife, or passive recreational activities like jogging and horseback riding. Like parks, open space increases property values and provides educational opportunities, in addition to providing a number of "free" ecosystem services like flood storage. Principles and policies established in the Plan will be incorporated into the City's Comprehensive Plan. In conjunction with the 2005 Comprehensive Plan Update, the Plan assists in answering important questions about how to best improve citizens' quality of life, such as:

Special Places

- What special places in Henderson should be protected? What should be the priorities?
- Are there other ways to protect special places besides acquiring them?
- How should open spaces be funded and managed?

Edges

- How should urban development relate to protected desert environments?
- How can public access be maintained at the edge, while still protecting the desert environment?

Trails and Corridors

- How can we enhance trail system connectivity? How can the trail classification system be improved?
- How can flood control projects better contribute to an interconnected system of wildlife habitat areas, parks, trails and open space? Specifically, how can we better utilize flood control projects for pedestrian circulation? Should we incorporate aesthetic treatments (including landscaping) in the design of storm drainage improvements?
- Should we protect significant natural channels as greenways and landscape features?

Guiding Principles

In February 2004, City Council adopted a set of guiding principles for developing an Open Space and Trails Plan. City Council direction formed the basis for the vision, principles, and policies presented in Chapter 3.

These guiding principles are reinforced by City Council's vision and priority for natural resource management: "to protect and preserve our natural resources for future generations."

City Council Open Space and Trails Plan Guiding Principles

1. Recognizing that open space improves our quality of life, provides an escape from the urban setting, and defines a buffer for growth, we should continue to provide open space areas of our community.
2. Because of the potential loss of open space resources that may be caused by growth, there is an urgency to develop a plan that identifies natural areas that are appropriate for continued and future preservation.
3. In developing a common definition of open space, which may be used to develop standards and future goals, it is key to recognize the various types of open space located throughout our community and ensure that the multiple needs of our diverse population are balanced.
4. Take advantage of natural resources and ensure the protection of sensitive lands, including hillsides, view sheds, natural drainage facilities, and areas containing wildlife, cultural, historical, and biological resources, through the initiation of conservation strategies and the promotion of public education regarding open space issues.
5. Enhance opportunities to provide trail connections between local and regional facilities, open spaces, and residences, and adjacent federal lands, including the Sloan Canyon National Conservation Area.
6. In promoting fiscally sound open space planning, it is important to: 1) understand the various funding sources available for open space preservation and development, and 2) create a sensible and realistic plan that recognizes future operations and maintenance costs incurred by the City as a result of plan implementation.

— adopted February 2004

HOW WAS THE PLAN CREATED?

The Plan was prepared under the direction of City Council, the Planning Commission, and the Parks and Recreation Board. Each of these commissions provided key considerations and strategies at regular intervals throughout the planning process during public work sessions. A Citizens Steering Committee, with representation from a cross-section of the community, met regularly for 10 months in a public forum to debate and refine the Plan's content. A Technical Advisory Committee composed of City staff from nine separate departments also met monthly to coordinate and contribute to the Plan. The consulting firm EDAW and the National Park Service's Rivers, Trails, and Conservation Assistance Program assisted in facilitating the planning process.

In addition to the many City Council, Planning Commission, Parks and Recreation Board, and Steering Committee work sessions that were open to the public, several other public input opportunities were provided including four public meetings at four separate locations throughout the City (Table 1-1).

In addition to ensuring numerous public participation opportunities, the project team consulted regularly with Clark County, the Southern Nevada Regional Planning Coalition, the Regional Transportation Commission, the Regional Flood Control District, BLM staff representing the Sloan Canyon National Conservation Area, and other agencies to ensure trail connectivity and achievement of conservation objectives. Comments from each public event were recorded and reflected in the plan. Thus, the Plan's recommendations truly represent the values of a broad and diverse community.

HOW IS THE PLAN ORGANIZED?

Chapter 2: Today summarizes the City's growth trends, existing open space and trail resources, relevant policies, and other related issues. Chapter 3: Tomorrow establishes a common vision, an Open Space and Trails Framework, principles and policies, a list of potential projects, and design guidelines for trail facilities. Chapter 4: Strategies identifies open space protection, management, and financing strategies, trail prioritization strategies, and an action plan.

Works Consulted

Dramstad, W. E., J. D. Olsen, and R. T. Forman.
Landscape Ecology Principles in Landscape Architecture and Land-Use Planning. Island Press. 1996.

EDAW. *Urban Transformations: Parks as Urban Regenerators*. 2005