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# Las Vegas Valley **Perimeter Open Space Plan** Phase 1: **Open Space Locations + Vias Verdes Report**

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Prepared by the Clark County Department of Air Quality and Environmental Management and the Department of Comprehensive Planning

With support fromEDAWAECOM

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#### **Terms Used In This Document**

**Open Space**: The SNRPC defines open space as "land that remains largely unaltered by urban activities. Generally, it is land that has not been converted to other uses and it provides the opportunity to experience solace from urban development in the midst of a natural or naturalistic environment. These lands may also possess unique values such as outstanding scenic quality, rare flora, riparian quality, wetlands, critical wildlife habitat, fragile areas or unusual geologic or topographical formations. When set aside, assembled, configured and maintained these lands are of adequate size and quality to achieve the intended infrastructure functions such as flood hazard reduction and benefits including conservation, preservation, outdoor education and low impact recreation. Open space may consist of: desert; mountains; special geological and topographical features; meadows-, wetlands-, washes; lakes-, working agricultural and ranch land; and other valued landscapes and ecosystems" (SNRPC 2006).

**Open Space Advisory Committee (OSAC)**: a study group convened to broadly represent the diverse interests and needs of the communities and government agencies in the development of the Las Vegas Valley Open Space Plan.

**High Priority Open Spaces**: Regionally-significant resources identified by the OSAC that possess an intrinsic, compelling rationale to remain as public land under some type of conservation status. High Priority Open Spaces have multiple, high value resources, occur in contiguous units at a regional scale, and are located in realistic and implementable places. The fact that some areas lack the designation of a High Priority Open Space does not suggest they lack notable resource values. Not all High Priority Open Spaces will be protected; rather they serve to inform future land use decisions.

**Areas Requiring Further Analysis**: Areas where the OSAC felt that specific boundaries could not be drawn without further analysis. These areas will be considered further in Phase II of the planning effort with oversight by the local jurisdictions through their participation on the SNRPC Regional Open Space and Trails Work Group and final approval by the SNRPC Board.

**Vias Verdes**: An open space corridor and continuous trail between the Backdrop and urban areas that encircles the Las Vegas Metro Area, which links recreational destinations and protects scenic, ecosystem, and cultural resources.

**Key Edge Node**: Specific locations that offer an opportunity for creating an attractive transition from the denser urban zone to the more rural public lands.

## **Acknowledgements**

This Phase 1 report of the Las Vegas Valley Perimeter Open Space Plan is an important implementation action of the SNPRC Regional Open Space Plan, which called for the region to identify and protect regional open space resources, strengthen partnerships, and improve interjurisdictional and interagency collaboration. It was prepared through a partnership among the communities of the Southern Nevada Regional Planning Coalition. The study focuses on the Las Vegas Valley, and was produced with representation from municipal staff from North Las Vegas, Las Vegas, Henderson and Clark County; and business, academic, and community leaders from throughout the Metro Area. The following groups and individuals are recognized for their contributions to this report.

#### Southern Nevada Regional Planning Coalition

Councilwoman Andrea Anderson, City of Boulder City (Chair) Commissioner Chris Giunchigliani, Clark County (Vice Chair) Councilwoman Shari Buck, City of North Las Vegas Councilwoman Stephanie Smith, City of North Las Vegas Councilwoman Gerri Schroder, City of Henderson Councilwoman Gerri Schroder, City of Henderson Mayor Oscar Goodman, City of Las Vegas Councilwoman Lois Tarkanian, City of Las Vegas Councilman Steve Wolfson, City of Las Vegas Councilman Steve Wolfson, City of Las Vegas Commissioner Susan Brager, Clark County Commissioner Lawrence Weekly, Clark County Terri Janison, Clark County School District Board of Trustees

#### **Board of County Commissioners**

Bruce L. Woodbury Tom Collins Chip Maxfield Lawrence Weekly Chris Giunchigliani Susan Brager Rory Reid

In order to prepare this plan, Clark County Air Quality and Environmental Management staff and the consultant team relied on the policy and subject matter expertise of a wide range of committed individuals who served on an Open Space Advisory Committee. Committee members generously contributed their time and talents to assist in the development of this Plan, and Clark County and consultants express their sincere appreciation for the many hours of hard work from these individuals.

#### **Open Space Advisory Committee**

Elaine Houser, Focus Property Group Richard Serfas, American Nevada Development Corporation Jeff Rhoads, The Argonaut Company Tom Warden, Howard Hughes Corporation Beth James, Howard Hughes Corporation Dr. Peg Rees, UNLV Public Lands Institute Debra March, Lied Institute for Real Estate Studies Thom Reilly, Reilly Group Eric Blumensaadt, Sierra Club, Southern Nevada Group Mauricia Baca, The Nature Conservancy Mike Ford. The Conservation Fund John Hiatt, Red Rock Audubon John Holman, River Mountain Loop Trail Partnership Helen Mortenson, Archeo-Nevada Society Scot Rutlege, NV Conservation League Lisa Mayo -De Riso, Mayo & Associates Bob Taylor, Bureau of Land Management Patrick Putnam, Bureau of Land Management Jennifer Haley, Southern Nevada Agency Partnership Deb Reardon, NPS Rivers, Trails, Conservation Assistance Cathryn Cherry, Southern Nevada Water Authority Frank Fiori, City of North Las Vegas Advanced Planning Manager Mary Ellen Donner, City of Henderson Parks & Recreation Director Tom Perrigo, Las Vegas Assistant Planning Director

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## Las Vegas Valley Perimeter Open Space Plan, Phase 1 Executive Summary

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## Overview + Purpose

The Las Vegas Valley is surrounded by some of the most spectacular concentrations of public lands in the nation. Increasingly, the region is gaining recognition not only as a resort destination, but also as one of the best places to live and play in the great outdoors. Proximity and access to public lands is the single biggest reason why the Las Vegas area was selected as the "best place to live and play" by National Geographic Magazine.

Protecting this setting has emerged as a high priority in several regional planning efforts, most notably the 2006 Southern Nevada Regional Open Space Plan. This plan called on the greater Las Vegas community to:

Preserve an interconnected and protected ring of open space and wildlands encircling the Greater Las Vegas area including protecting scenic, ecosystem, and cultural resources. Within this protected area, construct a continuous trail encircling and connecting to the Las Vegas Metro Area.

The Las Vegas Valley Perimeter Open Space Plan (LVVPOSP) is an effort to realize the SNRPC's vision. This document's recommendations were developed in close cooperation with a blue ribbon advisory group that included representatives of each municipality in the Las Vegas valley, federal agencies, Federal agencies, and individuals representing the real estate and environmental communities.

The region has recognized that much of the remaining opportunity to protect open space in the



Las Vegas area rests on public lands managed by the Bureau of Land Management that are currently outside of the congressionally designated BLM disposal boundary. Although these lands are not currently subject to disposal, the boundary has changed several times in the past and it is likely to be changed again in the future. It is therefore critical to identify an open space system that meets identified needs and fulfills the region's vision before the opportunity is lost or costs become too great.

## A Phased Approach

Phase 1 of the LVVPOSP identified the most regionallysignificant lands that possess an intrinsic, compelling rationale to remain as public land under some type of conservation status. These High Priority Open Spaces are shown on the attached Vision Map. Also shown on the map is a preliminary location for the Vias Verde trail corridor, which would encircle the Las Vegas Valley and create a trail opportunity that is unique in the nation.

The next phase of the planning effort will build on the results of Phase 1, seeking wider comment on the open space vision while addressing implementation issues. Among these are strategies for land acquisition and protection, land management, funding, and organizational responsibilities.















Trailheads key Edge Nodes 🗸 Railroad

Study Focus Areas

Streets and Highways

National Park Service Reclamation Lands

Conservation Transfer Area - No Action

National Conservation Areas Other BLM Lands

BLM Disposal Area Boundary

Boulder City Conservation Area Boulder City Parks and Open Space

State Land



The Vision Map highlights High Priority Conservation Areas based on Phase I of the LVVOSP, and are subject to change. No liability is assumed as to the accuracy of the data delineated heron. All of the maps and data are for display purposes only and are provided without warranty of any kind, expressed or implied.

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## **Chapter 1 – Purpose and Context**

Conserving open space has been an issue within Clark County, and particularly in the Las Vegas Valley, for years. Some significant areas, such as the Wetlands Park, have been acquired during this time, but not within the context of a valley-wide open space planning effort. In the Las Vegas Valley, much of the opportunity to preserve current and future open space rests on Bureau of Land Management

"Open space has vital functions and benefits including:

- Public Safety and Hazard Reduction
- Vital Urban Resource Protection
- View Preservation
- Solace and Link to Nature
- Health and Wellness
- Access and Linkage
- Biodiversity
- Special Landscape Preservation
- Agricultural Lands Preservation
- Economic Value
- Community Identity and Character"
  - SNRPC Regional Open Space Plan

(BLM) public lands currently outside the congressionally designated disposal boundary. In the future, the disposal boundary could be expanded, making these lands eventually privatized or held in trust by local jurisdictions. Identifying the desired open space system now is of utmost importance to preserving future opportunities and minimizing future costs of acquisition.

The Clark County Board of Commissioners, through acceptance of the Environmentally Sensitive Lands and Growth Management Task Force reports, directed Clark County staff to pursue countywide open space planning in 2007. The Clark County Department of Air Quality and Environmental Management managed the Las Vegas Valley Perimeter Open Space Plan, supported by EDAW as the lead consultant and the Outside Las Vegas Foundation assisting with stakeholder outreach.

The cities of Las Vegas and Henderson have both completed open space planning efforts, and in 2006 the Southern Nevada Regional Planning Coalition (SNRPC) finalized a plan for the entire region. This interim document is an important step in implementing the SNRPC Regional Open Space Plan.

#### 1.1 Project Goal

The ultimate goal of the Las Vegas Valley Perimeter Open Space Plan, as defined by the LVVPOSP Open Space Advisory, Committee is to:

"Preserve an interconnected and protected ring of open space and wildlands encircling the Greater Las Vegas area including protecting scenic, ecosystem, and cultural resources. Within this protected area, construct a continuous trail encircling and connecting to the Las Vegas Metro Area."

In an effort to achieve this vision, the Phase I planning effort identified all existing and potential open space areas at the urbanizing periphery of the Las Vegas Valley. Development of a plan to protect open space along the Las Vegas Valley Perimeter was also a key recommendation of the Southern Nevada Regional Planning Coalition's Regional Open Space Plan. The plan also builds upon such efforts as the:

- Clark County Environmentally Sensitive Lands Study
- City of Henderson Open Space and Trails Plan
- City of Las Vegas Northwest Open Space Plan
- City of North Las Vegas Park Master Plan
- BLM Las Vegas Field Office Resource Management Plan

#### **1.2 Project Focus Areas**

The SNRPC Regional Open Space Plan recommends five components that, if realized, will preserve the vital outdoor elements of the Greater Metro Las Vegas and leave an enduring legacy. These components were presented on an Opportunities Concept Map to depict how the five components will help shape the future character of the Greater Metro Las Vegas Valley:

- The Mountain and Desert Backdrop (Preserving the viewscapes and wildlands that encircle the Valley) – shown in green;
- The Vias Verdes (Designing an attractive transitional belt between the Backdrop and the urbanizing area encircling the Valley including an interconnected trail system) – shown as green chain links;
- The Washes (Preserving and enhancing the drainageways as attractive corridors with attractive landscaping and trails where appropriate) – shown in blue;
- The Regional Trails Network (An interconnected multiuse trail system running through attractive open space corridors) – shown as green dots; and
- Regionally Significant/Heritage Open Space (Preserving special landscapes of scenic, natural or cultural value throughout the Valley) – shown in red.

Figure 1-1 shows an excerpt of the Opportunity Concept Map (for more detail on the map, refer to the SNPRC Regional Open Space Plan, Chapter 4). This project's planning area focuses primarily on the "Vias Verdes" and "Mountain and Desert Backdrop" concepts, which were defined by the SNRPC to include areas outside the BLM disposal boundary. The planning area also included important open space connections or wildlife corridors from the Vias Verdes area to the Las Vegas Metro Area.

#### QUESTION: How should I use this Plan? Will it affect future development or annexations?

**ANSWER:** This plan is primarily a process document, chronicling the discussion and areas of consensus of the Open Space Advisory Committee during Phase 1 of a multi-year planning process. The purpose of the overall planning effort is to ultimately conserve regionally-significant open spaces in perpetuity for the benefit of the public, whether they are under the ownership of the federal government, a local government, or a nongovernmental agency. Future phases could include developing acquisition and protection techniques, land management strategies, funding sources, project prioritization, or informing the federal decision-making process should the BLM disposal boundary change.

The lands considered in the study are all publicly owned lands that are outside of the Congressionallydefined disposal boundary. Therefore, there would be no immediate impact on future development. Nevertheless, a fundamental premise of the study is to recognize the possibility that the disposal boundary might be adjusted at some point in the future. In anticipation of that possibility, a primary purpose of the study is to identify those public lands with the highest resource values that should remain in public ownership or under some form of protected status. Conflicts with urban growth are avoidable and an important goal of the study is to define an open space system that is consistent with community growth plans.

The open space plan does not speak to annexation. If a local jurisdiction is interested in annexing public lands outside of the current BLM disposal boundary, including those identified as having high resource values, this plan would not prevent that from occurring.



Figure 1-1. SNRPC Regional Open Space Plan Opportunities Concept Map

Within the planning area, public lands within 9 Focus Areas were identified. For map display purposes, the Las Vegas Valley was divided into 4 quadrants: NE, NW, SW, and SE. The 9 Focus Areas were delineated based on 3 criteria, as shown in Figure 1-2:

- Outside of the disposal area boundary. The planning effort did not revisit decisions previously made in the Southern Nevada Public Lands Management Act of 1998 concerning public lands identified for disposal. Instead, it focused on lands that may be targeted for future disposal, recognizing that the disposal boundary has been expanded several times since the initial boundary was drawn in 1998. One Focus Area is an exception to this criterion: the Clark County Shooting Park. This area was included to better inform future shooting park master planning efforts by the County.
- 2. **Inside the Las Vegas Valley watershed.** The Las Vegas Valley watershed boundary serves to define the initial extent of the mountain backdrop.



Figure 1-2. LVVPOSP Focus Areas. Focus Areas are shown in yellow; map quadrants are shown in purple

#### **Evolution of a Nationally Recognized Open Space and Trails System**

The Greater Metro Las Vegas Valley community shares the ultimate goal of creating and maintaining a world-class, integrated and interconnected open space and trails system. This goal can be achieved through the incremental actions of citizens, the business community, and City, County, State and Federal agencies. These incremental steps generally include the following:

The 2006 SNRPC Regional Open Space Plan constituted Step 1: identifying the conceptual locations of significant resources, supported by general policies that ideally would lead to their eventual protection. Phase I of the Las Vegas Valley Perimeter Open Space Plan has been designed to assist the region in beginning Step 2 through a definition of focus areas, highlighting the rationale for additional protection of particular sites (i.e., Candidate Areas).

- 1. **City or Regional Planning:** A community-based effort, led by a local government or Federal agency, identifies the conceptual locations of significant resources and their threats, adopting general policies for their eventual protection.
- 2. Land Evaluation: A cursory assessment of the intrinsic natural or cultural characteristics of a focus area highlights the most significant resources of a particular site.
- 3. **Site Nomination:** Once a compelling rationale for protection is established, the site is nominated for designation or acquisition to the appropriate party.
- 4. **Develop Legal, Legislative and Financial Foundation:** For the formation of a managing agency that will be responsible for the management and acquisition of open space assets as they become available
- 5. Nomination Evaluation: A Site Nomination is evaluated by appropriate partners, often by legislative and executive branches of City, County, State, and Federal entities, as well as in public discourse. At this time, partnerships and funding mechanisms are established. Often additional technical and field investigation and surveys are completed during this phase to validate the cursory assessment.
- 6. **Protection or Acquisition:** The site is acquired or formally designated specifying the natural or cultural assets to protect, with legal recordings if appropriate. Existing or planned utility or transportation corridors or grandfathered uses are recognized at the time of designation.
- 7. **Management Planning:** A resource management plan is prepared with adequate public involvement (draft documents, hearings, etc.) to document how portions of the site should be restored and maintained. The general location of public facilities and enhancements are also identified. Detailed baseline studies for archeology, wildlife, scenery, and other resources are prepared so that appropriate levels of use can be evaluated and monitored.
- 8. **Design and Construction:** Site-specific infrastructure and vegetation management plans are prepared and facilities (e.g., fencing, signage, trailheads) are constructed to accommodate public use or resource protection.
- 9. **Public Access:** While the public may have access to the site during any of the above phases, at this point the site officially opens for public enjoyment.
- 10. **Ongoing Management Actions:** Daily maintenance and enforcement activities occur, including additional facility or safety improvements. After a specified interval (usually 5-10 years), the resource management plan is updated, repeating steps 5-8 in a cyclical process.
- 3. **Congressionally designated lands.** The Las Vegas Valley is bordered on many sides by lands designated for conservation by Congress, such as
  - Desert National Wildlife Refuge
  - Nellis Air Force Base (including the Small Arms Firing Range)
  - Lake Mead National Recreation Area
  - Sloan Canyon National Conservation Area
  - Red Rock National Conservation Area
  - Las Vegas Paiute Tribal Reservation

These Congressionally designated lands were not considered as Focus Areas. However, potential Vias Verdes connections through Congressionally designated lands were considered; consequently, the input of Desert NWR, Air Force, NPS, BLM, and Paiute representatives were solicited throughout the OSAC planning process.

Lands within the Focus Areas are primarily managed by the BLM, followed by Clark County Parks and the Bureau of Reclamation, as shown in Table 1. Private lands within Focus Areas were considered during the study, but recommendations apply only to public lands. The 9 Focus Areas were named after the geographic landmarks they encompassed.

	L				
Focus Area Name	BLM	Clark County	Private	Reclamation	Total Acres
Black Hills	10,398		86	16	10,500
Box Canyon	4,218		340		4,558
Corn Creek	16,378				16,378
Kyle Canyon	1,732		867		2,599
Nellis Dunes	15,327				15,327
<b>River Mountains</b>	7,338		310	7,706	15,354
Shooting Park		2,913			2,913
Southwest	63,488		1,913		65,401
Sunrise					
Mountains	16,598		436	884	17,918
Total Acres	125,326	13,064	3,952	8606	150,948

#### Table 1-1. LVVPOSP Focus Areas

#### 1.2.1 Relationship to BLM Resource Management Planning

The process was designed to assist the BLM in reconciling regional issues in support of their mission. Specifically, the LVVPOSP seeks to create a defensible platform for joint BLM and SNRPC member recommendations, and proactively seeks to avoid the challenges presented by the Upper Las Vegas Wash Conservation Transfer Area. Later phases of the project should identify management responsibilities that support the BLM's mission. The LVVPOSP does not suggest changes to BLM land management practices, as these are governed by the 1998 Las Vegas Field Office Resource Management Plan.

As described above, the Focus Areas primarily include BLM-managed lands that are not congressional designated for conservation. While portions of some Focus Areas have special administrative designations, like Areas of Critical Environmental Concern (ACEC), most lands historically have lacked either distinctive resource values or public awareness sufficient to merit state and Federal consideration.

#### 1.2.2 Relationship to the BLM Disposal Area Boundary

Similarly, the LVVPOSP does not suggest changes to the Disposal Area Boundary, as these are governed by the Southern Nevada Public Lands Management Act and the 2004 Las Vegas Valley Disposal Boundary Environmental Impact Statement. By using the best available spatial data in decision-making, making the data publicly

understandable, and developing criteria for candidate open space areas through a meaningful, consensus-based process, the LVVPOSP could serve as a resource to inform any potential change to the disposal area boundary; the intent of the process being to preserve an interconnected and protected ring of open space and wildlands encircling the Greater Las Vegas area.

QUESTION: Why evaluate public land outside the disposal area boundary for open space, if public land is already open space?

**ANSWER:** Except where abutting lands protected by Congress (National Conservation Areas, Military Lands, etc.), the disposal area boundary is a temporary boundary. It has changed several times since its establishment to accommodate the Valley's urban needs. The Las Vegas Valley Open Space Plan does not suggest a change – or conversely no change – to the disposal area boundary. Instead the Plan identifies those lands with the highest open space values so that special designations, partnerships, and/or funding can be used to ensure that important resource values in these areas are protected. These public lands, which are currently located outside the disposal area boundary, provide numerous open space benefits to residents of the Las Vegas Valley.

Lastly, it should also be noted that public lands beyond the disposal area boundary are not immune to change. Vandalism, unauthorized recreational activities, invasive species, utilities, transportation, and many other actions can compromise a landscape's open space values. These long-term management issues must also be addressed.

#### 1.3 Project Approach

During Phase 1 of the project, an Open Space Advisory Committee was convened to assist the community in identifying and categorizing the locations of new candidate open spaces based on available resource information and the vision defined in the Regional Open Space Plan. Once identified, these lands will be mapped via aliquot part identification. (An aliquot part, in the U.S. Public Land Survey System, is the standard subdivision of area of a section, e.g., a half section, quarter section, or quarter-quarter section). The results of the collaborative effort will be documented in a Phase 1: Open Space Locations and Categories Report, as shown in Figure 1-3.

Future phases could include developing acquisition and protection techniques, land management strategies, funding sources, and project prioritization. The purpose of the planning effort is to ultimately conserve these open spaces in perpetuity for the benefit of the public, whether they are under the ownership of the federal government, a local government, or a nongovernmental agency. The studies will inform the federal decision-making process should the BLM disposal boundary change.



Figure 1-3. LVVPOSP Process

#### 1.4 Stakeholder Involvement

Stakeholders participated in the LVVPOSP through stakeholder interviews, the OSAC, and the SNRPC Open Space and Trails Work Group.

#### 1.4.1 Open Space Advisory Committee

The Open Space Advisory Committee (OSAC) is a study group convened by Clark County to broadly represent the diverse interests and needs of the communities and government agencies in the development of the Las Vegas Valley Perimeter Open Space Plan. The OSAC was established to serve three primary purposes:

- 1. To increase the project's accountability to stakeholder input on the plan, providing a sounding board for issues and work in-progress; and to ensure that stakeholder input reflects the scientific, social, political, and economic concerns that need to be considered.
- 2. To support the SNRPC for the achievement of milestones in implementing the SNRPC Regional Open Space Plan.
- To assist the Las Vegas community in defining criteria and categories, and identifying the locations of candidate open spaces within the LVVPOSP focus areas.

Another important role of OSAC members was to communicate the information presented with their respective organizations, and to share with the project team the collective feedback of their organizations. There were 3 formal OSAC meetings during Phase 1.



#### 1.4.2 Relationship to the SNRPC Open Space and Trails Work Group

The OSAC and the newly formed SNRPC Open Space and Trails Work Group complement and coordinate with one another to implement the LVVPOSP. For years, like-minded local government and agency staff have coordinated open space and trail projects in an ad-hoc manner. Beginning in 2008, a new coordinating body, the SNRPC Open Space and Trails Working Group, was convened on a monthly basis to facilitate regional dialogue between the SNRPC and the Southern Nevada Agency Partnership (SNAP). As recommended in a Statement of Intent, signed by 14 agencies at the Southern Nevada Regional Open Space & Trails Summit in 2007, the Working Group is the lead organization that supports the SNRPC Board in implementing the SNRPC Regional Open Space Plan. However, the SNRPC relies on the actions of its members, such as Clark County, to manage projects that are specific components of the plan. Therefore, Clark County and its OSAC function as an *action body* focused on developing the LVVPOSP plan, while the Working Group is a *coordinating body* that is regularly informed about the LVVPOSP as one of many regional initiatives.

Two goals of coordinating with the SNRPC Open Space and Trails Work Group are to implement specific SNRPC Regional Open Space Plan recommendations, and incorporate the open space plans of other jurisdictions. Approximately one-fourth of OSAC members are also represented on the Work Group. Clark County staff reported

QUESTION: Why isn't the SNRPC leading this Plan, since the Plan makes recommendations for the region?

**ANSWER**: The SNRPC relies on the actions of its member governments, such as Clark County, to implement its initiatives. This Plan is designed to assist the SNRPC in completing the following recommendations from Chapter 5: Implementation of the SNRPC Regional Open Space Plan.

- 5.2.2. Vias Verdes Implementation Strategies *Recommendation 1*: Work closely with federal and state agencies through a joint planning effort to implement this strategy.
- 5.2.5. Regional Open Spaces and Heritage Lands Conservation Strategies
   *Recommendation 2*: Identify and protect regional open space resources prior to land auctions.
   *Recommendation 4*: Develop local master plans for regional open space/heritage land sites.
- 5.3 Land Management and Funding Strategies *Recommendation 5*: Strengthen open space partnerships.
- 5.4. Community Involvement Strategies *Recommendation 2*: Coordinate with federal agencies.

#### 1.4.3 Stakeholder Outreach

The Las Vegas Valley Perimeter Open Space Plan is designed as a cooperative planning process led by Clark County, which partners with land management agencies, interested citizens, and the SNRPC in implementing the 2006 SNRPC Open Space Plan. To that end, the project team conducted phone, in-person, and small group interviews with over 80 individuals between November 2007 and March 2008 to inform the planning process.

Individuals from the following organizations were contacted, listed by stakeholder category.

User Groups + Conservation Organizations

- River Mountain Loop Trail Partnership
- Southern Nevada Regional Trails Partnership
- Anthem Trail Hikers
- Old Spanish Trail Association
- Nevada Historical Society
- Archeo-Nevada Society
- Goodsprings Citizens Advisory Council
- Nevada Wildlife Federation
- The Nature Conservancy
- The Sierra Club
- Red Rock Audubon
- The Conservation Fund
- Protectors of Tule Springs
- UNLV Public Land Institute
- Springs Preserve
- Utah State University (Upper Las Vegas Wash)
- San Bernardino Museum, California (Upper Las Vegas Wash)

#### Political Stakeholders and Legislative Delegation

- City of Las Vegas
- City of North Las Vegas
- City of Henderson
- Boulder City
- Clark County
- Office of Senator Harry Reid
- Office of Congresswoman Berkeley
- Office of Senator Ensign
- Office of Congressman Porter

#### Development and Business Interests

- Southern Nevada Homebuilders
- The Argonaut Company
- Focus Property
- Lucchesi-Galati Architects
- Southern Nevada Homebuilders Association
- UNLV Lied Institute for Real Estate Studies

#### Resource and Land Management Agencies

- Bureau of Land Management
- Nevada Division of State Parks
- Nevada Division of Forestry
- Nevada Department of Wildlife
- Lake Mead National Recreation Area
- Bureau of Reclamation
- NPS Rivers, Trails Conservation Assistance Program
- Southern Nevada Water Authority
- Nellis Air Force Base
- Nevada State Historic Preservation Office

#### 1.5 Document Organization

This document was prepared to summarize the consensus-based recommendations of the Las Vegas Valley Open Space Advisory Committee. Chapter 2 provides a summary of the resource inventory and prioritization process. Chapter 3 describes the committee's vision for open space and a continuous trail corridor around the Las Vegas Metro Area. As Phase 1 in a multi-phase process, future phases of the project will add to these findings.

#### How Do I Stay Involved?

To find out how you can be involved in the planning process, contact:

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## Chapter 2 – Focus Area Resources

The Open Space Advisory Committee identified High Priority Open Space areas by first reviewing an inventory of all pertinent, available data for the Focus Areas. The data was inventoried and ranked through a composite resource analysis process described in this chapter, as a supplement to their collective experience and professional judgment.

#### 2.1 Resource Mapping Categories

The project team compiled a GIS database of the most accurate, available resource information for each Focus Area. Sources included Clark County and multiple local, state, and federal agencies. Specific questions about each dataset should be referred to the appropriate county department or source agency. Locations of sensitive or confidential data, such as archeological and biological data, are deliberately shown with only a general location indicated.

Over 4,000 files were evaluated by the project team to determine their suitability for use in this study. Similar to the Environmentally Sensitive Lands Study (Clark County 2004), data was categorized into 6 resource areas.

- 1. Biology Resources
- 2. Physical Resources
- 3. Land Management
- 4. Planned Land Uses
- 5. Infrastructure
- 6. Cultural and Scenic Resources

Table 2-1 lists the data source, file name, extent, and year for every applicable GIS dataset within the 6 categories. Dates of data creation vary from the early 2000s to 2007, and every effort was made to locate the most recent data through interviews and contacts with stakeholders. For reference, Table 2-1 also notes whether the dataset was utilized in the 2004 Environmentally Sensitive Lands Study. The final column, Ranking, highlights how the data layer was utilized in the composite resource model, which is described in the following section.

All resource mapping is provided in the map appendix to this document.

#### 2.1.1 Biological Map

The Biological Map displays the distribution of vertebrate and plant species that fall within each Focus Area, and important connectivity to adjacent lands. The most important sources include:

 A habitat richness model prepared from the 37 vertebrate species covered under the Clark County Multiple Species Habitat Conservation Plan. The source for the habitat models was the Southwest Regional GAP Analysis Project, led by the U.S. Environmental Protection Agency. The habitat richness model shows the areas with potentially low, moderate, and high concentrations of the 37 terrestrial species (i.e., fish, insects, plants are included in the SW ReGAP model).

Table 2-1. Data Sources and Category Ranking

				Used	
Category	Source	Details	Year	in ESL	Ranking
	BLM	Bighorn habitat	2004		crucial bighorn habitat = high; winter range = medium
	BLM	Chuckar habitat	2004		crucial habitat = high
	BLM	Quail habitat	2004		crucial habitat = high
	NNHP and TNC	Bearpoppy locations	2006		high
	USDA	Bee locations	2005		half mile buffer = low
1. Biology Resources	USGS	Species richness model of ReGAP layers for 37 species from CC Desert Conservation Program list	2004		24-30 species overlap = high; 15-23 species overlap = medium; 2-14 species overlap = low
	USGS	Landcover data (riparian habitats)	2004		high
	TNC	Mojave Desert Ecoregion Conservation Portfolio	2001	x	medium
	Clark County	Desert Tortoise Critical Habitat area		х	high
	BLM	Spring Locations	2004	Х	quarter mile buffer = medium
	EPA	Stream Reach File used to determine wash areas	1998		delineated washes = high; rivers buffered a tenth of a mile = high
	Clark County	Water Bodies			display purposes
2. Physical	CCRFCD	Watersheds and sub-boundaries			display purposes
Resources	FEMA	FEMA floodplains	2002		50 year or 100 year flood areas = high
	Clark County	Flood control channels			display purposes
	Clark County	Flood control basins			display purposes
					over 25% = high; 12-25% =
	USGS	Percent slope - derived		Х	medium
	BLM	Areas of Critical Environmental Concern	2007	x	display purposes
	BLM	Disposal Area Boundary	post 2005	x	display purposes
		Public Lands Management - overall			
	BLM	general management	2006		display purposes
	BLM	National Conservation Areas	2003	Х	display purposes
	BLM	Wildlife and Natural Areas	2004		display purposes
	BLM	Indian Reservations	2004		display purposes
З.	BLM	County-wide land ownership	2004		display purposes
Management /	BLM	Wilderness Areas	2007	Х	display purposes
Administrative	BLM	Wilderness Study Areas	2007	X	display purposes
Areas	FWS	Desert National Wildlife Refuge		Х	display purposes
	BOR	BOR Lands			display purposes
	Clark County	Existing parks and open space	2007		display purposes
	Clark County	Parcel database	2006		display purposes
	BLM	Desert Conservation Area in Enterprise Township	2004		display purposes
	Clark County	Red Rock design overlay (planning)			display purposes
	BLM	Conservation Transfer Area			display purposes
	Clark County	Boulder City conservation easemt.			display purposes

Table 2-1. Data Sources and Category Ranking

				Used	
Category	Source	Details	Year	in ESL	Ranking
	N Las Vegas	Planned Land Use			display purposes
	Henderson	Planned Land Use			display purposes
	Las Vegas	Planned Land Use			display purposes
	Whitney	Planned Land Use			display purposes
	Enterprise	Enterprise Comp Plan land uses			display purposes
	Enterprise	Enterprise Desert Conservation Area			display purposes
4. Planned	Lone Mountain	Lone Mountain Comp Plan land uses			display purposes
Land Uses	Lone Mountain	Lone Mountain planned rural neighborhood preservation areas			display purposes
	Sunrise Manor	Sunrise Manor Comp Plan land uses			display purposes
	Clark County	Clark County's Comprehensive Plan land uses			display purposes
	Nellis AFB	Noise and maneuver areas, including security and safety areas			display purposes
	Boulder City	Planned Land Use		Х	display purposes
	GISMO	Street centerlines	2007		display purposes
	Clark County	Rail lines	2003		display purposes
	Clark County	Inventory of unpaved roads	2003		display purposes
5.	BLM	Clark County Recreation Inventory Data, in-progress	2007		display purposes
Infrastructure	RTC	RTC Comprehensive Trail System (off-street), proposed and existing	2007		display purposes
	Clark County + others	Gas lines, transmission lines, some row's, etc. (may be incomplete)	multiple		display purposes
	SNWA	Water pipelines			display purposes
	SHPO	State Historical Markers		Х	quarter mile buffer = medium
	Clark County	List of Significant Historical Sites		Х	quarter mile buffer = medium
	SHPO	Sample of archeological sites		Х	high
	SHPO	Pre-buffered Spanish Trail areas			low
	BLM	Visual Resource Management Classes			VRM II = high
6. Cultural +	Clark County	Scenic Points/Features (springs, canyons, and built features)		х	display purposes
Scenic Resources	EDAW	Viewshed analysis			moderate-high visibility = high; low visibility = medium
	NDOT	Kyle Canyon Road State Scenic Byway			display purposes
	NDOT	Red Rock Road State Scenic Byway			display purposes
	NDOT	Mt. Charleston/Lee Canyon Road State Scenic Byway			display purposes
	BLM	Scenic Byway gateways			half mile buffer = high
	BLM	Trailheads			quarter mile buffer = high

- Data from The Eco-Region Conservation in the Mojave Desert 2001 report by The Nature Conservancy was utilized in the 2004 Environmentally Sensitive Lands Study. It shows that portions of the River Mountains, Rainbow Gardens, Corn Creek, and Kyle Canyon Focus Areas are likely to contain high biodiversity.
- Single species of concern to Nevada Department of Wildlife (NDOW) or other agencies, such as bighorn sheep and desert tortoise.
- Rare plant locations identified by Clark County, The Nature Conservancy, or the Nevada Natural Heritage Program.

#### 2.1.2 Physical Resources

The Physical Resources Map displays the Valley's topography, emphasizing steep slopes, washes, and floodplains within each Focus Area. Important sources include:

- A digital elevation model has been used to illustrate areas with slopes from 12-25% and 25% plus slope. Clark County Title 30.56.100 places conditions on or prevents development of lands with these slope classes.
- Floodplain data shows the location and extent of 50- and 100-year floodplains, from FEMA.
- Multiple drainages that braid together to form a wash, from the EPA. Most washes only carry water during storm events, the primary exception being the Lower Las Vegas Wash.
- Natural spring locations are shown, from the BLM.
- Existing and planned Clark County Regional Flood Control flood channels and detention basins. These structures are used to control water and sediment, but also affect natural drainages.

#### 2.1.3 Land Management

The Land Management Map displays land ownership, administrative designations, and other designations within each Focus Area. Important categories include:

- BLM Lands
  - o Areas of Critical Environmental Concern
  - o Wilderness Areas
  - Conservation Transfer Areas (the boundaries for the No Action and Alternative Action 5)
  - National Conservation Areas
- Clark County
  - Red Rock Design Zoning Overlay
  - o Desert Conservation Area Overlay, Enterprise Township
  - Nellis Dunes Recreation Area
- Other Public Lands
  - City of Las Vegas Park (Floyd Lamb Park)
  - Bureau of Reclamation
  - National Park Service
  - Desert National Wildlife Refuge
  - o Clark County Parks and Open Space

- Nellis Air Force Base and Small Arms Range
- o Boulder City Public Lands and Conservation Area

#### 2.1.4 Planned Land Uses

The Planned Land Uses Map displays planned future land uses that have been defined by Clark County and municipal governments. For locations where County and municipal planning areas overlap, the municipal future land use takes precedence graphically. Land use classes have been generalized for the purposes of this study.

- Future land use has been provided by:
  - Clark County and Townships
  - City of North Las Vegas
  - City of Henderson
  - Boulder City
  - City of Las Vegas
- Conservation Transfer Areas (the boundaries for the No Action and Alternative Action 5)

#### 2.1.5 Infrastructure

The Infrastructure Map displays gas pipelines, transmission lines, trails, and easements within each Focus Area. The most important sources include:

- Existing and Planned Bike Paths and Trails, which have been adopted by the County and municipalities. This data was provided by the Regional Transportation Commission (RTC). The planning team recognizes that many entities (BLM, municipalities, etc) have developed more detailed trail plans for mapping purposes, only regional data was displayed.
- Trailheads within the BLM National Conservation Areas that include visitor centers and parking areas. This data was provided by BLM or determined from maps.
- Underground gas pipelines show where easements are located and are potential locations for trails, as provided by Clark County.
- Electrical transmission lines show where easements are located and are potential locations for trails, as provided by Clark County and BLM.
- Other rights-of-way on BLM land for access to private land, utilities, and other purposes is illustrated within study areas, as provided by BLM.

#### 2.1.6 Cultural and Scenic Resources

The Cultural and Scenic Resources Map displays areas with high aesthetic or cultural significance. The most important sources include:

- Aesthetic points include distinct land forms, scenic locations, and historic sites, provided by Clark County.
- Recreation Gateways at the starting point of state scenic byways.
- BLM Visual Resource Management Class II, or lands with high management designations for the conservation of visual resources.

- Mountain Backdrop as determined through a viewshed analysis from interstates within the Disposal Area Boundary.
- Culturally significant sites provided by the Nevada State Historical Preservation Office, such as the Spanish Trail. Culturally significant sites were buffered for mapping purposes so as to protect sensitive sites.

#### 2.2 Ranking Criteria and Composite Resource Maps

To begin understanding where multiple resources occur, a simple ranking methodology was utilized (see Figure 2-1).

- First, each layer was organized into a resource category.
- Second, each resource layer within each category was assigned a ranking of Low, Moderate, or High. For instance, for the FEMA floodplain layer, all 50- or 100-year floodplains were ranked as High. Some data, by nature, does not describe a resource on-the-ground, so layers from the Land Management, Planned Land Use, and Infrastructure categories were omitted from the initial composite resource model.
- Third, resource layers within each category were aggregated to determine the Low, Moderate, or High resource values for each category.
- Fourth, the Low, Moderate, or High resource areas for each category were combined across categories to produce a Composite Resource Area Map. Where a higher ranking of an area occurs in the same location as a lower ranked area, the higher rank took precedence. In areas where two or more High ranking areas overlap, the area becomes classified as Very High.



Figure 2-1. Composite Ranking Process

BLM designated Areas of Critical Environmental Concern (ACECs) were not considered in the composite ranking model as a resource value in and of itself. While ACECs are designated for their resource values, an ACEC's geographic boundaries do not always directly correspond with the resource occurrence. For modeling purposes, the land within an ACEC would require wildlife, physical or visual resource values to elevate it within the ranking exercise. An example of a management consideration that contains a resource value is the Desert Tortoise Critical Habitat area located in the southwest section of the study area. ACECs and other special management areas are overlaid on the composite resource map for display purposes.

#### 2.3 Composite Rankings

The Composite Resource Analysis Maps in the map appendix display how the rankings were distributed across the Focus Areas. The Open Space Advisory Committee utilized the map data and their collective professional experience in determining High Priority Open Space areas as described in Chapter 3.

**None** = lands that have been degraded by mining activities or other major disturbances, including major overhead transmission lines. These areas are overlaid on the composite map.

**Low** = lands that have some resource value but are the least significant in importance. An example of a low resource value would be an area falling within the quarter mile buffer of a historical marker that lacks other defined resource values.

**Moderate** = lands that remain in a generally natural condition and have some resource values, but lack notable qualities or other attributes. An example of a moderate resource is bighorn sheep winter range.

**High** = lands that contain significant resource values. An example of a high resource value is area identified as critical bighorn sheep winter range.

**Very High** = lands that contain a resource ranking of High for two or more resource categories are classified as very high.

The resulting rankings were reviewed with OSAC and observed in the field as practical in order to validate and refine the results.

## Chapter 3 – Vision

Demands for open space and trails have been growing exponentially in the Las Vegas Valley for years. Two recent regional initiatives, the SNRPC Regional Open Space Plan and the Clark County Growth Task Force, both recognized that the urbanizing valley edge presented the greatest opportunity for successful open space conservation at a regional level.

Open space and trails are beginning to define the Valley's sense of place, a fact recognized by National Geographic Adventure Magazine which rated Las Vegas the #1 Best Place to Live and Play. National Geographic noted that "With more outdoor action within a 200-mile radius than any other major town in the nation, Sin City has got a new slogan: Whoever plays in Vegas, stays in Vegas."

The recommendations of this plan have been designed so that as the urban area grows, ribbons of open space will be preserved and connections to adjacent recreation and federal lands will be maintained. While this article highlights recreational destinations within a 200 mile radius, there are many venues that could be linked within a 25 mile radius which is the focus of the Las Vegas Valley Perimeter Open Space Plan.



The Open Space Advisory Committee (OSAC) – comprised of development, conservation, business, academic, and jurisdictional leaders – guided the Phase 1 outcome of the Las Vegas Valley Open Space Plan. It was not a County effort, but a community effort. The committee was guided by a vision to:

"Preserve an interconnected and protected ring of open space and wildlands encircling the Greater Las Vegas area including protecting scenic, ecosystem, and cultural resources. Within this protected area, construct a continuous trail encircling and connecting to the Las Vegas Metro Area."

The vision was translated to map form, shown as Figure 3-1. This chapter summarizes the Vision Map and the committee's consensus towards the two major components of the vision: High Priority Open Space Areas, and a Vias Verdes corridor. As described in Chapter 1. these components are not growth boundaries nor should they be construed as incompatible with development and/or



annexation. For a definition of these and other terms used throughout this document, see the Table of Contents.

Figures 3-2 through 3-5 show the High Priority Open Spaces that, according to the OSAC and project team, have a compelling rationale for conservation. The fact that some areas do not have a designation as a High Priority Open Space does not mean that they lack notable resource values. See Chapter 2 and the map appendix for resource information on each Focus Area, including a discussion of the composite resource model used by the committee to identify High Priority Open Spaces.

Areas of consensus are described below, by quadrant. As there is an identified need for balance between opportunities for conservation and future development in the southwestern quadrant, further analysis of this area is needed. This analysis will be accomplished in consultation with the local entities through their participation on the SNRPC Open Space and Trails Work Group.

Each circle on the maps indicates a key edge node. These nodes offer an opportunity for creating an attractive transition from the denser urban zone to the more rural public lands. Desert edge treatments may be needed on all the Priority Areas. An example of this is the desert edge being created by the City of Henderson adjacent to Sloan Canyon NCA near the future visitor center complex.



Figure 3-1. Vision Map (valley-wide)



Figure 3-2. Northeast Area Vision Map Quadrants



Figure 3-3. Southeast Area Vision Map Quadrants



Figure 3-4. Southwest Area Vision Map Quadrants



Figure 3-5. Northwest Area Vision Map Quadrants

#### 3.1 Northeast Quadrant

- Only one high priority area was identified in this quadrant the northern portion
  of the *Rainbow Gardens ACEC*, an area that forms an important portion of the
  mountain backdrop and contains a number of scenic features, interesting
  geologic features, cultural, rare plants and other resource values.
- The planning team and OSAC also agree that the *Nellis Dunes Recreation Area* should remain in its current use in some form of public ownership, but with better control and management.

#### 3.2 Southeast Quadrant

Several high priority open space areas were identified within this quadrant, as discussed below:

- The southern portion of the *Rainbow Gardens ACEC*, for the same reasons discussed above.
- *River Mountains*: The highest value lands generally fall within the ACEC. Resource values include high species richness, desert bighorn winter range, and its importance in defining the scenic mountain backdrop for the cities of Henderson and Boulder City.
- **Black Hills**: This area has similar resource values to those described for the River Mountains. The area also provides connectivity between Sloan Canyon NCA and Boulder City conservation lands, as well as to the River Mountains to the north.

Other issues that were highlighted in the Southeast quadrant include:

- Additional effort will be required to retain connectivity between public land and larger blocks of private land.
- The BLM Resource Management Plan identified approved utility corridors. There may be some adjustments in routing and width based on the West Wide Energy Corridor EIS, but not significant changes. The changes mostly will be along the east boundary of the Desert National Wildlife Refuge. There will be a push to find ways to get the power generated from the alternative energy projects to the Las Vegas Valley.
- The BLM still owns the Sunrise Mountain landfill. Once Republic completes compliance with the EPA requirements, the County will buy the landfill site and develop a reuse plan. Trails and open space are potential reuse options for the landfill.
- An "edge node" was defined on the Bureau of Reclamation lands adjacent to the west side of the River Mountains. This is an area that needs careful development because of the values present in the River Mountains.

#### 3.3 Southwest Quadrant

This is the largest and most complex of the four quadrants considered. As a result, there was a lack of consensus on the boundaries of the high priority open space areas in this quadrant and an agreement that these boundaries should be considered in

more detail and further refined in Phase II. Further analysis will be accomplished in consultation with the local entities through their participation on the SNRPC Open Space and Trails Work Group.

- There was consensus that much of the **area west of I-15** is a high priority for conservation, particularly the central core of the area that includes a series of ridges and more rugged topography. This area has high species richness and provides winter range for desert bighorn sheep. A portion of the area is also critical habitat for desert tortoise.
- The **area north of Highway 160 near Gypsum Ridge** is a high priority area. This area is an important portion of the mountain backdrop and a buffer to Red Rocks NCA. The area also has high species diversity.

Other issues that were highlighted in the Southwest quadrant include:

 Congressionally established utility corridors are located one half mile on east side of I-15. This, combined with the proposed heliport, makes an open space connection between Sloan and Red Rock NCA difficult. Generally, the group felt there may not be wildlife values in creating a corridor that crossed I-15, but an open space break helps give a sense of place and visual break for people entering the Las Vegas Valley from the south on I-15.

#### 3.4 Northwest Quadrant

This is another area where further review and analysis is needed to refine the boundaries of the high priority conservation areas.

- **Upper Las Vegas Wash:** The area in the vicinity of the Upper Las Vegas Wash has world class fossil resources. Portions of this area are also planned for future development. There is consensus that a core conservation area along the wash and adjacent to the Desert National Wildlife Refuge should be conserved.
- **Box Canyon**: An area along Box Canyon adjacent to Red Rock NCA was also identified as a high priority conservation area. The area is scenic and provides desert bighorn winter habitat.

Other issues to consider in this quadrant include the following:

- Connectivity between Red Rock and Desert NWR is an important function of the Corn Creek focus area.
- There's a need to provide a protective buffer adjacent to the Desert National Wildlife Refuge.

#### 3.5 Vias Verdes Recommendations

#### 3.5.1 The Vias Verdes Concept

Like the SNRPC Regional Open Space Plan, the committee unanimously endorsed the concept of an open space corridor and continuous trail encircling the Las Vegas Metro Area, or Vias Verdes, to link recreational destinations and protect scenic, ecosystem, and cultural resources. Themes identified by the OSAC include:

- Vias Verdes is the thread that binds the fabric of many land management areas, recreational destinations, municipalities, and agencies together.
- Vias Verdes is the element that will generate the most public interest and support.
- Vias Verdes is the central connecting artery for the regional trails and open space network, with numerous interconnections to urban areas and designated trails managed by agencies.
- The primary experience along the Vias Verdes is an open space experience, viewed from a trail. Therefore, the corridor must be of sufficient width to maintain an open space experience, rather than the width of a trail tread alone.
- A Vias Verdes corridor must be identified early and accounted for in local government land use planning, prior to options being foreclosed, due to development. Site-specific trail alignments need to be surveyed, but only after a corridor is protected.

The committee's themes are consistent with the SNRPC's objectives for the Vias Verdes, stated below from the Regional Open Space Plan:

- Maintain an attractive transitional belt between the mountain backdrop and urbanizing area. The former is generally on land managed by federal agencies, the latter by private interests.
- Provide a continuous multi-use trail around the valley.
- Connect both urban trails in the metro area and designated recreation areas on public land.
- Interpret natural and cultural resources, and provide visual access to nature.
- Provide a venue for local, state, national, and international trail related events.
- Improve the health and fitness of our community.
- Provide limited vehicular access for land management and emergency access purposes.
- Protect the more sensitive federal lands of the mountain backdrop by buffering urban encroachment and directing recreationalists to authorized trails and recreation areas.

Note: As important as these themes and objectives are, they may not be met in every case as some opportunities are already restricted by development. As contemplated in the SNRPC Regional Open Space Plan, near-term coordination with existing trail plans with each jurisdiction and agency is paramount to achieving a unified system.
	River Mountains Loop	Vias Verdes
Length in Miles	35	113
Local Governments Involved	3 – Henderson, Boulder City, Clark County	<ul> <li>5 – Henderson, Boulder City, Clark County, Las Vegas, North Las Vegas, Enterprise</li> </ul>
Land Management Agencies Involved	5 – NPS, BLM, BOR, SNWA, NDOT	> 7 - BLM, BOR, Clark County, SNWA, NDOT, State Parks, Desert NWR, Municipalities
Organizational Structure	River Mountains Loop Partnership	Multiple, e.g., Sloan Canyon NCA, Red Rock NCA, etc.

Table 3-1. Vias Verdes and the River Mountains Loop Trail

In reality, the Vias Verdes concept is not new; it has already been realized at a smaller scale through the River Mountains Loop Trail (RMLT). Planning for a continuous loop trail around the River Mountains, connecting Henderson, Boulder City, and Lake Mead National Recreation Area began in 1996. Agencies and committed citizens established the River Mountains Trail Partnership with the common goal of "expanding trail opportunities close to local residents, and increase tourism of public recreational resources." Like the Vias Verdes, the RMLT crosses highways, neighborhoods, and public land managed by 6 different agencies (see Table 3-1).



#### 3.5.2 Vias Verdes Planning Criteria and Alternative Development

The second basic question for Phase 1 then, was whether the SNRPC vision for Vias Verdes could be physically validated. In other words, "do opportunities for a continuous open space corridor that includes a trail feature around the perimeter of the Valley still exist?"

Due to the need for future coordination with federal agencies and other stakeholders, the SNRPC Regional Open Space Plan did not specify the detailed locations or corridors in which the Vias Verdes might occur. The SNRPC Plan did, however, suggest that the corridor would be located on the more gently sloping land between the steeper, more sensitive terrain of the surrounding wildlands and the developed and developing areas of the metro area.

The Vision Map (Figure 3-1) shows a ½-mile study corridor encircling the entire valley, based on OSAC input. As a study corridor, rather than a site-specific trail alignment, further engineering and surveying work will be needed to determine a trail alignment.

The analysis effort began with planning criteria, to map the opportunities and constraints for potential Vias Verdes corridors. Potential corridors were then prioritized by the project team as preferred and alternate corridors, and refined by the OSAC.

#### Constraints

.

- Minimize the number of trail bridges and underpasses
  - Control cost where feasible by
    - o Limiting trail length
    - Avoiding slopes above 25% and complex topography
    - o Crossing interstates where over/underpasses exist
    - Cross railroads at public road intersections
- Limit length in floodplains and sensitive habitat areas
- Avoid conflicting land uses
  - Nellis Air Force Base
  - o Paiute Reservation
  - o Urban areas where existing or planned trails are absent
  - o Nellis Dunes OHV Recreation Area
  - Clark County Shooting Park

#### **Opportunities**

- Utilize existing or planned RTC regional trails:
  - McCullough Hills Trail
  - River Mountains Loop Trail
  - West Henderson Trails
  - Upper Las Vegas Wash CTA Trails
  - Clark County Wetlands Park Trails
- Connect to destinations such as:
  - o Urban Parks
  - o BLM Trailheads
  - o Red Rock Visitor Centers
  - Sloan Canyon Visitor Center (proposed)
  - Upper Las Vegas Wash CTA

- o Floyd Lamb Park
- Clark County Wetlands Park
- Utilize existing dirt roads
- Use the rights of way of major transportation features such as the Sheep Mountain Parkway alignment where open space corridors are not feasible
- Parallel washes and maximize length in scenic areas
- Where the above opportunities are not present, utilize utility corridors

#### 3.5.3 Vias Verdes Corridors

The Vision Map shows a preferred and alternate alignment for the Vias Verdes Corridor. Coordination with affected agencies and jurisdictions, and incorporating Vias Verdes into their planning documents is paramount to preserving a corridor.

Nearly 70% of the preferred corridor is comprised of trail alignments already approved in existing trail plans by the Regional Transportation Commission or local governments, therefore complementing the regional trails network (Table 3-2).

Table 3-2.	Preferred Vias Verdes Corridor Characteristics by Local Governmen	t
and RTC T	ail Status	

Preferred Trail Status (in miles)	Clark County	City of Henderson	City of Las Vegas	City of North Las Vegas	Nellis AFB	Total
Built Segments	0	8.6	0.3	0	0	8.9
RTC Planned Segments	24.4	10.9	4.0	0	0	39.2
New Segments (not accounted for in existing plans)	41.2	1.8	7.5	14.9	0	65.4
Grand Total (in miles)	65.6	21.3	11.8	14.9	0	113.5

The majority of the preferred corridor for Vias Verdes resides on public lands managed by the BLM, suggesting the need for continual coordination. The BLM requires that recreational facilities desired by the community be reflected in their management plans prior to implementation.

Table 3-3. Preferred Vias Verdes Corridor Lengths by Land Management Agency	Table 3-3.	Preferred Vias	Verdes Corrido	r Lengths by	/ Land Mana	gement Agency
-----------------------------------------------------------------------------	------------	----------------	----------------	--------------	-------------	---------------

	BLM	NPS	BOR	Desert NWR	Nellis AFB	Private	Total (in miles)
Preferred Trail Length	11.3	0	85.9	0	0	16.3	113.5

The preferred Vias Verde corridor is described below, alternative corridors noting segments where additional effort is required.

• Beginning at the Clark County Shooting Park in northwest Las Vegas, a multiuse path is proposed in the Northwest Open Space Plan adjacent to the southern boundary of the Clark County Shooting Park. This trail parallels the Desert NWR boundary until reaching the future University of Nevada campus west of the Nellis AFB Small Arms Range.

- No trails are currently permitted in the Nellis AFB Small Arms Range, so the corridor travels southeast across the UPRR and I-15 at the Speedway Boulevard.
- The Nellis Dunes OHV Recreation Area lies to the north of Nellis AFB, providing an opportunity to travel near the Nellis AFB boundary while avoiding areas where more intense OHV use occurs to the north. OHV conflicts would need to be addressed in and around the Nellis Dune OHV Recreation Area.
- At Padco, the corridor turns south and southwest along a transmission ROW following a RTC alignment through the Rainbow Gardens to connect to the center of the Clark County Wetlands Park, as recommended in the Clark County Wetlands Park Master Plan.
- From the Clark County Wetlands Park, the corridor travels south through east Henderson along the River Mountains Loop Trail to Boulder Highway.
- At Boulder Highway, the corridor turns west through the College Area to the future BLM Dutchman Pass Parking Area.
- The corridor traverses the Sloan Canyon NCA on previously identified alignments: the McCullough Hills Trail and Anthem East. Any new NCA corridors would be determined through the Sloan Canyon NCA Trails Plan.
- West of I-15, the corridor travels northwest along the UPRR and a transmission ROW until NV 159 at Blue Diamond Hill.
- At Blue Diamond Hill, two alternatives are presented:
  - The preferred western alignment follows an old railroad bed to enter the Red Rocks NCA.
  - The eastern alignment follows Clark County open spaces adjacent to developed areas.
  - Any new NCA corridors would be determined through the Red Rocks NCA Trails Plan.
- The preferred alignment then traverses Summerlin north-south in an alignment to be determined through their land use and transportation master planning. Alternative trails could allow users to experience washes and wilderness the Red Rocks NCA.
- From Lone Mountain, the corridor continues north along a transmission ROW and northeast to the Clark County Shooting Park, crossing US 95 at an interchange south of the Las Vegas Paiute Reservation, per the Northwest Open Space Plan.

Future efforts needed in order to further the Vias Verdes concept are described in Chapter 4.

#### 3.6 Open Space Categories

As described in the Chapter 1, *Evolution of a Nationally Recognized Open Space and Trails System*, much work remains in order to nominate sites, form partnerships,

establish funding and protection mechanisms, and determine the specific management protocols for individual sites. One tool to facilitate these subsequent steps is an open space categorization system that coherently organizes diverse lands based on general resource and use characteristics.

Open space in the Las Vegas Valley constitutes a large, diverse system of public lands and recreational amenities managed by a number of City, County, State, and Federal agencies. Previous planning efforts, namely the SNRPC Regional Open Space Plan, the Henderson Open Space and Trails Plan, and the City of Las Vegas Northwest Open Space Plan have categorized diverse lands based on general resource and use characteristics. The SNRPC Regional Open Space Plan envisioned five of the most relevant components or categories that if protected will preserve the vital outdoor elements of the metro area and Southern Nevada, and leave an enduring open space legacy for residents and visitors alike:

- The Mountain and Desert Backdrop
- The Vias Verdes
- The Washes
- Regional Trails Network
- Regionally Significant / Heritage Open Space

Additionally, the SNRPC Open Space Plan identified five subcategories:

- Resource Protection Lands
- Environmental Lands
- Historic and Cultural Lands
- Flood Control Facilities
- Recreation Lands

This section elaborates and expands on these functional subcategories of open space for the diverse High Priority Open Space Areas outside of the Las Vegas Valley disposal area boundary. They provide the underpinnings for plan implementation and highlight the need to evaluate future protection and management scenarios, partnerships, and funding strategies for each High Priority Open Space Areas. Additionally, the subcategories acknowledge the critical role of the Clark County Multi-Species Habitat Conservation Plan (MSHCP) and Federal agencies in regional open space planning. A future step in the project will be to categorize each High Priority Open Space Areas into one of the following open space subcategories. Table 3-4 highlights the unique opportunities and natural, infrastructure and recreational functions of each subcategory.

Type + Purpose	Conservation of Natural Resources + Environmental Features	Education + Interpretation	Recreation + Trails	Scenic, Cultural + Archaeological	Infrastructure Functions + Protection from Natural Hazards	Examples and Lead Managers
The Mountain and Desert Backdrop A protected belt of largely wild places and rugged terrain with special scenic, natural resource and recreational values that virtually surrounds Greater Las Vegas.	These lands protect significant recognizable natural habitat, as well as visual, historic and cultural values. They are large enough to sustain and support diverse plant and animal populations. Special attention – in the form of cooperative stewardship agreements and coordination protocols – is needed at the interface of protected, developed and/or developing lands.	<ul> <li>A variety of interpretation occurs at designated use areas (trailheads, visitor centers), such as:</li> <li>Geology, hydrology (water conservation, flood control) partnership with SNWA/CCRFCD</li> <li>Air quality (vis a vis visual/scenic values) partnership with CCDAQ&amp;EM, NVDEP, etc.</li> <li>MSHCP-Desert Tortoise Program – Mojave Max's home (Desert Backdrop)</li> <li>Education and Stewardship to limit desert dumping/littering, vandalism, and non-permitted activities like OHV, camping, shooting.</li> </ul>	Recreation occurs at designated use areas (trailheads, visitor centers) and through an interconnected trail and integrated open space system called the Vias Verde.	The Mountain and Desert Backdrop forms the very distinct, beautiful and highly vulnerable visual backdrop for the entire Metro Area. This scenic feature and view corridors are largely unscarred but easily prone to degradation. Promote cooperative agreements and management polices that protect the integrity of these lands, especially protecting the visual backdrop from scars, structures, towers and other visual impacts through protective restrictions; land acquisition; strategic location of structures to minimize view impact; camouflage, or, where necessary and appropriate, land acquisition.	Local jurisdiction development agreements BLM R&PP leases/ROWs Economic resources (mining claims) Utility corridors Flood Control policies (vis a vis local jurisdiction management – Public Works Dept. policies)	These are predominately lands under the management of the federal government (National Park Service, Bureau of Land Management, Forest Service and Military Lands) but also includes state, county and local public lands, privately held properties, and the Moapa Band of the Paiute Reservation. RRCNCA SCNCA CC Gypsum Ridge Blue Diamond Hill DNWR Arden ACEC Nellis AFB Upper LV Wash CTA LV Wash – CC Wetlands Park (that hillside development in COH) etc.

Type + Res	servation of Natural Education + sources + Interpretation	Recreation + Trails	Scenic, Cultural +	Infrastructure Functions + Protection from	Examples and Lead Managers
Lype + PurposeRes EnvirThe Vias VerdesThis la a prote more s lands and the urbanizing area. Generally this is the more gently sloping land between the steeper, more sensitive terrain of the surrounding 	Sources + ironmental ceaturesEducation + Interpretationand serves as ection to sensitive of the trop by fering urban croachment; ecting reationalists authorized ls and reation areas; ering bortunities to erpret and berience the ckdrop in less ations.Interpret cultural resources, and provide visual access to nature, with themes such as: • Desert dumping/vandalis m, etc. (existing programs inc. Tread Lightly, Don't Trash Nevada, coord with Metro and SNAP Law Enforcement Team) • Urban encroachment and sustainability – smart growth (COH Desert Edge Policy)• Condition areas; ering bortunities to erpret and berience the ckdrop in less istive ations.Interpret cultural resources, and provide visual access to nature, with themes such as: • Desert dumping/vandalis m, etc. (existing programs inc. Tread Lightly, Don't Trash Nevada, coord with Metro and SNAP Law Enforcement Team) • Urban encroachment and sustainability – smart growth (COH Desert Edge Policy)	<ul> <li>Provide a continuous multiuse trail around the valley and connect to both urban trails in the Metro Area and designated recreation areas on public land.</li> <li>Provide a venue for local, state, national and international trail related events</li> <li>Improve the health and fitness of our community</li> <li>(SN Health District, CCSD)</li> <li>Economic impacts - EcoTourism</li> </ul>	Scenic, Cultural + Archaeological Maintain an attractive transitional belt between the mountain backdrop and urbanizing area.	Functions +	

Type + Purpose	Conservation of Natural Resources + Environmental Features	Education + Interpretation	Recreation + Trails	Scenic, Cultural + Archaeological	Infrastructure Functions + Protection from Natural Hazards	Examples and Lead Managers
The Washes Drainageways and flood corridors that flow from the foothills through developed areas. They may vary in width from less than 100' to 1000' or more, depending on the terrain, flows, and other factors.	Preserve an area wide enough to convey storm flows while accommodating the natural geomorphology (meandering) of the terrain. Minimal, context-sensitive engineering (such as detention basins, channel armoring, and drop structures) may be necessary to accommodate public access and control erosion. These should be as natural appearing as possible and provide for: • Critical corridors for native faunal movement through and around the Valley. • Critical for flood control. • Important for surface groundwater recharge.	Interpret the biodiversity and infrastructure benefits of washes and riparian areas, and provide visual access to nature with messages such as: • Geology, hydrology (water conservation, flood control) partnership with SNWA/CCRFCD • MSHCP-Desert Tortoise Program – Mojave Max's home (Desert Backdrop)	Provide trails and connecting corridors of open space where appropriate. Work cooperatively with the local public works and park and recreation agencies to appropriately allocate management functions. Washes provide the best in-Valley experience of flora and faunal density; geology/hydrology in action (past episodes and current events). Dramatic interpretation and education opportunities – in and on top of arroyos. Master planned communities use as linear parks/trail corridors (Summerlin, Aliante, Kyle Canyon, Inspirada).	Promote policy/management changes within local jurisdiction public works departments that support CCRFCD and developer's alternative design and maintenance for flood control structures.	Manage for dual- purpose recreational access and stormwater management infrastructure benefits. Establish an interagency and interdisciplinary group to design and facilitate multi-objective drainage channels that accommodate recreation, wildlife habitat and migration, urban beautification, and other benefits along with drainage and flood hazard reduction.	<ul> <li>Examples include many of the above as well as:</li> <li>Upper Las Vegas Wash CTA</li> <li>DNWR southern boundary</li> <li>Master Planned Communities (Summerlin's Pueblo Park, Inspirada, Kyle Canyon) use arroyos for linear parks/trails.</li> <li>CC Wetlands Park</li> <li>COH Pittman Wash</li> <li>CLV &amp; CNLV Las Vegas Wash Trail</li> </ul>

Type + Purpose	Conservation of Natural Resources + Environmental Features	Education + Interpretation	Recreation + Trails	Scenic, Cultural + Archaeological	Infrastructure Functions + Protection from Natural Hazards	Examples and Lead Managers
	In new large-scale developments, improve and manage these corridors as amenities with regionally adapted landscape – such as Summerlin. Planning for these corridors should also envision the edges of these corridors where the drainageways interface with development, considering erosion control, regionally adapted landscaping and other measures so that these corridors provide multiple benefits to the community.					

Type + Purpose	Conservation of Natural Resources + Environmental Features	Education + Interpretation	Recreation + Trails	Scenic, Cultural + Archaeological	Infrastructure Functions + Protection from Natural Hazards	Examples and Lead Managers
Regionally Significant / Heritage Open Space These are sites and landscapes of regional natural, historic, or cultural significance, highly valued for ecosystem conservation and/or public use.	Through regional designation, each site should serve primarily an ecological purpose and may also include managed public access and use. Development is limited to the minimum required for public safety and resource protection.	Manage as appropriate to the character and intended use of each respective open space parcel. Conserve native ecosystems and landscapes that otherwise would not receive attention due to a lack of a compelling threat to the environment. Where applicable, manage to protect the special cultural and historic values. Some sensitive areas, such as those that contain special ecosystems, artifacts or vulnerable geological features, may have limited or no public access.	Trails are limited to those necessary for research or maintenance. Public access allowed only under the supervision of staff and/or by permit. Special Resource Areas may be closed to public access to protect unique resources.	Access, protection, promotion, and education dictated by various Federal laws and SPHO oversight. Local governments, not necessarily required to comply (if not using fed \$), so should develop internal policies/agreements that require consultation with SHPO and local historic preservation commissions (like CLV) review/oversight in open space, trails, recreation planning.		Cultural and historic landscapes in the Metro Area such as Las Vegas Springs Preserve, Floyd Lamb State Park, and Lone Mountain Park – while not within the LVVOSP Focus Areas – are examples of exceptional historic and cultural places that are key to preserving an important part of the Las Vegas Valley history and settlement pattern. Examples within the Focus Areas include: • Areas of Critical Environmental Concern (ACECs) • Gypsum Ridge – historic narrow gauge railroad bed remains • Old Spanish Trail crosses through Valley from NE and SE to central Valley (Springs Preserve & downtown) to SW

## **Chapter 4 – Future Efforts**

As stated in Chapter 1, Evolution of a Nationally Recognized Open Space and Trails System, the inventory and prioritization achieved in Phase 1 is not the end but rather one of several significant milestones. As recommended by the SNRPC Regional Open Space Plan, many milestones lay ahead, such as increasing public awareness, refining the Verdes corridors Vias and regionally significant sites, developing strategies for land conservation and management, and financing programs.

The 2006 SNRPC Regional Open Space Plan constituted Step 1: identifying the conceptual locations of significant resources, supported by general policies that ideally would lead to their eventual protection. Phase I of the Las Vegas Valley Perimeter Open Space Plan has been designed to assist the region in beginning Step 2 through a definition of focus areas, highlighting the rationale for additional protection of particular sites (i.e., High Priority Open Space Areas).

To that end, one important goal of Phase 2 will be to broaden acceptance and endorsement of the High Priority Open Space Areas and Vias Verdes corridors. To this end, efforts should be made to reach several primary audiences: SNRPC Boards and Committee, participating municipalities, and the general public.

The SNRPC Open Space and Trails Work Group have outlined a number of implementation actions for the SNRPC Regional Open Space Plan, many of which are being or will be fulfilled through this project, as described in Table 4-1.

As funding permits, the OSAC will be reconvened with additional expert legislative, management, legal, and agency stakeholders. Working groups within the OSAC could be created to focus attention separately on Vias Verdes, High Priority Open Space Areas, land management, and/or administrative units.

# Table 4-1.SNRPC Open Space and Trails WorkGroup Implementation Actions.

Group Implementation Actions.	
Section 1. Organizational Structures	Phase
1.1. Maintain current ad hoc structure but begin discussion regarding the formation of one of the regional approaches recommended.	II
1.3. Based on the evaluation of the regional structure selected, establish as a permanent regional structure. If necessary, revise structure and implement alternative.	II
Section 2. Regional Open Space Strategies	
2.1. Federal land managers, state agencies, and local community representatives should form an interagency cooperative staff task force that meets regularly with scheduled work products. The task force will identify landscapes within the Desert and Mountain Backdrop and draft policies and coordination strategies to protect these resources, work together to prevent the visual scarring or obstruction of the Desert and Mountain Backdrop, and monitor changes.	1
2.3. Conduct an inventory of all property owners within the Desert and Mountain Backdrop and pursue protection measures.	I, II
2.5. Work with federal, state, and local agencies through a joint planning effort to implement the Vias Verdes vision.	II
2.13. Develop and maintain an inventory of regional open space resources.	I, II
2.14. Identify and protect regional open space resources prior to the land nomination process, direct sales, or other methods of privatization.	II
Section 3. Land Management and Funding Strategies	
3.3. Implement long-term operating programs for Regional Open Space.	II
3.5. Strengthen open space partnerships.	
Section 4 Community Involvement Strategies	
4.1. Engage the community through a Greater Metro Las Vegas Valley Open Space Forum and a public outreach process.	I, II
4.2. Coordinate with federal, state and local to determine how the Regional Open Space Plan recommendations interface with federal land management strategies.	I, II

Vias Verdes corridors and High Priority Open Space Areas will be further refined and prioritized, considering factors such as:

- Regional significance
- Assets that may face threats of deterioration or loss
- Functional classification
- Frequency of use
- Importance to the public

Issues related to Vias Verdes will continue to be resolved, such as the relationship between objectives (recreation versus commuter travel, etc.); types of users and user conflicts (OHV, equestrian users, commuters, etc.); alternative trail standards for the variety of environments traversed; funding capital and operational costs; and defining strategies for trail maintenance and law enforcement.

Following the refinement of Vias Verdes corridors and High Priority Open Space Areas, additional efforts will be made to develop strategies for protecting these areas. It is anticipated that a combination of strategies will be considered, such as strengthening BLM management of some areas and working to ensure they remain in public ownership. Another option to consider, as recommended in the SNRPC Regional Open Space Plan, is a new regional organization charged with acquiring and maintaining lands as open space.

Land management strategies for open space types and the expenses associated with them will also be defined. Each category of open space may require a different management strategy, and within those categories there may be significant variations. It is anticipated that resource management planning and appropriate public outreach for individual properties will also occur through future efforts. Lastly, new and existing funding sources will be evaluated for eligibility in order to maximize the region's competitiveness in achieving both short- and long-term goals.