

Beatty Open Space Plan Nye County, Nevada

October 2009















Prepared for: Nye County Department of Planning 250 N. Highway 160, Suite 1 Pahrump, NV 89060

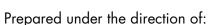
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Nye County, Nevada

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By:

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Stantec Consulting would like to express its sincere gratification to all the Beatty residents who particiapted as Stakeholders or as individuals who attended the community workshops providing valuable insight and input into this document.



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Hills above Beatty, Photograph by Sydster500

The Beatty Open Space Plan represents an investment in the health, well-being and long-term success of the community.

The strategy outcomes will augment recent planning efforts to develop an integrated trail system by providing a map of important scenic resources that should be connected and preserved.

1.0 Executive Summary

The natural environment is a principal ingredient in defining the character of Beatty. The small town in southern Nye County lies along the Amargosa River in a valley surrounded by peaks and ridges including Beatty Mountain, Montgomery Mountain, Rainbow Mountain and Bare Mountain, to name a few. The neighboring Oasis and Amargosa Valleys contain rich agricultural pastures and active ranch land. Beatty's citizens have a proud tradition of protecting its history, sense of place, and natural environment.

Much like notable places throughout the state of Nevada, the geologic features framing the Town on Beatty were once rich in gold resources. In 1905 Beatty became a railway center for the Bullfrog Mining District when gold was discovered in the area in 1904. The "Bullfrog strike" gave rise to the mining towns of Gold Center and Rhyolite which quickly swelled in population to nearly 8,000 people over a four-year time frame until production slowed in 1910. The Tonopah Tidewater Railroad provided rail service through Beatty between Las Vegas and Goldfield until 1940.

In more recent years, Beatty has become a gateway for visitors to Death Valley National Park via State Route 374. Current population estimates indicate a resident base of approximately 1,050 persons. The town actively markets its interesting mining history and unique attractions to travelers. At the Historic Rhyolite Townsite, visitors can walk former streets framed by remnants of historic buildings, view a 100-year old house constructed completely of bottles, and enjoy the artifacts and sculptures in the nearby outdoor park, Goldwell Open Air Museum. The Town of Beatty, with involvement from several state and local organizations, is actively expanding its reputation to become known as a sustainable destination community. To accomplish this goal, the preservation of the area's historic and scenic open spaces must be secured.





Rhyolite Mercantile, Photograph by Andrew Palchko

The open space visible to and frequently accessed by Beatty residents and visitors is predominately public land, either owned by the Bureau of Land Management (BLM) or the National Park Service. Information provided to Nye County by the BLM indicated that approximately 39,000 acres of land in the immediate area and throughout the Oasis and Amargosa Valleys was identified for potential disposal in the future. The term "potential disposal" as used in this reference suggests that the BLM may ultimately sell or trade some or all of the 39,000 acres, but only after a lengthy public input and review process. Because of the perceived threat to the vast open spaces enjoyed by community, the residents of Beatty and Nye County officials felt the time to act in developing an open space preservation strategy was now. The community is optimistic the open space planning can improve Beatty's aesthetic appeal, economic growth and recreational opportunities.

This plan provides the framework by which the County may pursue more specific actions to preserve public land for the benefit of the Town of Beatty and private land for the preservation of the Amargosa Toad's habitat and a walking trail along the Amargosa River. This Beatty Open Space Plan is based on a compilation of existing data from numerous sources including the Nye County Assessor, Nye County Planning Department, Bureau of Land Management, US Geological Survey, National Park Service, Nevada Department of Transportation, BEC Environmental Inc., and the citizens of Beatty to develop a strategy that identifies the public land that should be retained for open space preservation within the Beatty Taxing District. The scope of work did not include researching existing mining claims or patents on public land and this information was not provided by the BLM. Therefore, some areas designated for open space preservation may have to be refined slightly if this information becomes available to Nye County.

2.0 Introduction

What exactly is open space? Open space is land that is not intensively developed for residential, commercial, industrial or institutional use.



It serves many purposes, whether it is publicly or privately owned. It includes agricultural and forest land, undeveloped scenic lands, public parks and preserves. It also includes water bodies such as lakes, bays and ponds. What is defined as open space depends, in part, on its surroundings. A vacant lot, community garden or small marsh can be open space in a big city. A narrow corridor or pathway for walking or bicycling is considered open space even though it may be surrounded by development. Historic and archeological sites are often associated with significant open spaces and are a part of our common heritage.

The open spaces in Beatty include the nearby mountains, peaks and valleys, the Amargosa River, Bombo's Pond, the Cottonwood Gallery, Torrance and Parker Ranch Nature Conservancy areas, Specie Spring, Indian Springs, and countless historic mine sites scattered throughout the area. These environments all provide habitat for a diversity of plant and animal species and they serve a variety of human needs. The distribution and character of these natural, historic and cultural resources influence where people live, how they relate to each other, and attracts visitors to the area which bolsters the local economy.

Significant as they are, open space resources are also fragile. Poorly designed and unplanned development can permanently mar or destroy them. However, if a community can decide which areas should be retained as open space and which areas should be developed for more intensive use, then they can save what they love best about their community while accommodating desirable growth.

The process of getting everyone together to think about community open space needs is a worthwhile endeavor in itself. The plan can make a wide variety of recommendations about the future of a community. Some of the potential recommendations include: (1) new recreation facilities to enhance the economic and social life of the community; (2) enhance the downtown area by planting shade trees, adding benches and completing sidewalk enhancement projects; (3) protect





wetlands, stream corridors or ecologically important habitat features; and (4) establishment of linkages between open space areas and sites through a comprehensive trail system. The Beatty Open Space Plan identifies sections of BLM land that contain important features, historic sites, scenic locations and habitat that should be preserved. A limited number of trails have been designated in the context of preserving open space. These trails, in addition to the trails being planned by Beatty residents and agencies under a separate effort, will provide pedestrian and bicycle linkages to specific open space destinations. This Open Space Plan is not intended to serve as a trails plan.

An open space plan is the flip side of a development plan. After identifying important open spaces, it can be more apparent where development should occur. The information provided in this document may be used to develop appropriate land use recommendations and regulations in the county-wide comprehensive master planning effort currently underway.

Wild land has spiritual value.
While many people may never visit historic landmarks, they are glad to know they are there.
The awareness that special places have been set aside from development is a value that is difficult to measure.



Rock hill above Beatty, Photograph by Kit Hubert



The Benefits of Open Space

Open space provides numerous benefits to society, direct and indirect, short-term and long-term. People benefit socially, environmentally and economically from the conservation of open space in their communities. As previously discussed, the open spaces and historic and cultural sites make up the heritage of the Beatty residents. These places have substantial social benefits to Nye County and provide invaluable



opportunities for escape, relaxation and recreation. The historic landmarks in the area teach residents and visitors about the past and serve as foundations for the future. If we can succeed in making parks and other public lands accessible to people, Beatty can provide meeting places which bridge differences among the segments of our society.

Beatty open space, Photograph by Rachael Moore

Open spaces provide a place for

recreation and maintenance of physical health as well as a place for spiritual revitalization. Physical health often reduces stress, which can in turn ward off illness. Hiking up a mountain, riding on a trail or walking along the Amargosa River can provide inspiration. When people are healthy, they are motivated and more productive. When a community has such tremendous open space, historic and cultural resources as does Beatty, the general population can enjoy these societal benefits of the open space and the Town of Beatty and can enjoy economic benefits of marketing this open space to the general public.

The Beatty Open Space Plan
will allow the community
to provide the Bureau of
Land Management with a
community-based preservation
strategy that identifies the high
priority areas for protection
and preservation from
development.



Webster's Dictionary defines the words "open" and "space" as follows:

o pen 1. in a state which permits access, entrance or exit; not closed, covered, clogged, or shut. 2. in a state which permits freedom of view or passage; not enclosed, fenced in, sheltered, screened, etc.; unobstructed; clear [open fields]. 9. a) free to be entered, used, competed in, shared, visited, etc. by all. SYN. 1. any open, un-obstructed space on land or water. 2. an unenclosed area; the outdoors.

space 1. the continuous expanse extending in all directions or in three dimensions, within which all things exist, variously thought of as boundless or indeterminately finite. **2.** the distance, expanse, or area between, over, within things.

The Nature Conservancy (1975) defines a "natural area" as:
An area of land or water which: 1) either retains or has reestablished its natural character, although it need not be completely undisturbed, or which 2) retains unusual flora, fauna, geological or similar features of scientific or educational interest.

Definitions of Natural Areas and Open Space

One way to define open space is by function. Open spaces can be defined and identified by the role they play in the community and range of benefits they provide. In most cases, any one site may fall within more than one part of the definition. The definition has been developed from the core values expressed by the public as part of the workshop planning process. It serves to provide a framework for identification of public land for preservation, as well as for management strategies tailored to Beatty. The types of natural areas and open spaces include:

• Natural areas of local significance and lands with natural values and functions.

This type of open space contains outstanding natural resources. Sustainable forest communities, lands containing important wildlife habitat, as well as lands with significant geological and topographical features are included in this category. Open spaces with natural values include the Oasis Valley, Amargosa River and adjacent habitat areas, Parker Ranch and Torrance Ranch Nature Conservancy areas, Cottonwood Gallery, Specie Spring, Bombo's Pond and Swiss Cheese Rock.



Amargosa Toad, Photograph by Cheska Lorena



Bombo's Pond, Photograph by Joe Peart

Working Lands.

Working lands provide direct economic and/or functional benefit including those available for agricultural use, cattle grazing,



community gardens, forested areas, and mining claims. Open lands with functional value also include riparian strips, hedgerows and windbreaks. Working lands include farm lands in the Oasis Valley, riparian areas along the Amargosa River, mining claims in the Amargosa Valley and Bullfrog Hills.

Lands with scenic values.

The visual beauty of open spaces helps to define Beatty's character. The Town would not be the same without the natural views and aesthetic qualities offered by its open space. These lands include both view points and viewsheds, as well as roadsides, greenways, and natural strips. The open spaces with scenic values within the Beatty Taxing District include Beatty Mountain, Bullfrog Mountain, Indian Springs, Specie Spring, Burton Mountain, Cottonwood Gallery, the Nature Conservancy areas, Bombo's Pond along State Route 95, Swiss Cheese Rock, and Flourspar Canyon.







Oasis Valley, Photograph by Joe Peart

• Lands with recreational and educational values.

These are lands with specific recreational and educational values. The Town of Beatty currently has one fully developed community park. The local high school also provides recreational opportunities. A mural of historic Beatty, painted by a local artist on the side of a building, beautifies the intersection of Beatty's developing a Town



Square at the intersection of US 95 and Third Street. The Town Square is not named for its shape since it is triangular, but for its purpose and function: as a downtown focal point planned to include a turn-of-the-century clock tower, decorative walls to screen parking areas, a community Christmas tree, and picnic shelters. Beatty has an extensive system of undeveloped trails classified as "dispersed use" by the BLM that are used for hiking, biking, horse-back riding and use by all-terrain vehicles. Beatty also has numerous historical sites that offer educational values and numerous watering holes for birding activities and photography.

Lands with historical, cultural, archaeological and economic development values.

These lands include historical, cultural, archaeological and religious sites. Open spaces in the Beatty Taxing District with these types of values include the historic townsite of Rhyolite, Goldwell Open Air Museum, Gold Center, Amargosa River, Beatty Museum, Bailey's Hot Springs, Swiss Cheese Rock, and the Beatty Mudmound.

The Rhyolite Historic Townsite, located four miles west of the Town of Beatty, was founded in 1905 with the onset of a gold strike in the Bullfrog Hills and Montgomery Mine. The former town boasted three story buildings, banks, churches, a post office, train depot, an opera house, hotels, a school, and home sites complete with plumbing, electricity and telephone service. Abandoned since 1919, it is visited regularly by ghost town enthusiasts and photographers. The historic townsite includes Tom Kelly's Bottle House, the abandoned Cook Bank Building, the Las Vegas and Tonopah Train Depot, a Union Pacific caboose, and ruins of several other structures.



Photograph by Caroline Hunter



Photograph by James Neeley



Photograph by Sara Heinrich

¹Source: Beatty Recreation Trails Workshop Memorandum dated July 17, 2002. According to the memo, dispersed use refers to users who informally utilize trails on public land as part of informal recreation patterns but who are not officially directed to these multiple use resources.







Goldwell Museum Artwork, Photograph by Chris Jackson



Goldwell Museum Artwork, Photograph by Dre Peeters

Goldwell Open Air Museum is situated near the Rhyolite Historic Townsite. It consists of seven outdoor sculptures that are considered colossal in the size and placement within the spectacular and challenging landscape.

Gold Center was a mining town established in 1905 and quickly began publishing its own newspaper, brewing beer and distributing US mail. Today all that remains of the former town is the foundations of a stamp mill and footers for a tank at the cyanide plant.

Beatty Mudmound is located approximately two miles south and east of town. These Ordovician mudmounds were once huge underwater mud dunes that trapped sediments and currently display 480 million year old fossil remains of sponges, gastropods, brachiopods and others.

Bailey's Hot Springs is a rustic resort with three separate gravelbottom pools supplied by natural spring water that is geothermally heated. The pools are clean, covered and private.

Urban open space lands.

These lands are open spaces with values specific to an urban setting, such as neighborhood and community parks, golf courses, streetscapes, and cemeteries. Residents of Beatty frequent Cottonwood Park which is approximately 3.5 acres in size. The Desert Hills Cemetery is located just south of Amargosa Street and the Beatty High School. An informal driving range was maintained by the Beatty General Improvement District until recently. While it is currently not in operation, there is plenty of potential to resurrect this community amenity. It is located west of US 95 adjacent to the Desert Hill Cemetery.



The core values and benefits derived from open space and natural areas in Beatty include:

Natural Systems

- Wildlife corridors
- Water, nutrient flows
- Good air quality

Working Lands

- Agriculture
- Mining
- Energy development

Aesthetic

- Mountain vistas
- View corridors
- Recreation and Education
- Public access
- Passive recreation

Historical, Cultural, Archeological

- Historic sites and landscapes
- Cultural sites
- Archeological resources and education

Other Benefits

- Attraction for additional visitors and economic development
- Enhancement to commercial activity
- Stabilize and enhance property values
- Places for recreation and spiritual reflection

The Role of County Government in Protecting Open Space

Local government is the level of government that is closest to the people. It is also the level of government that is closest to the open space resources that people need and use. Local, state, and the federal governments can and do play an important role in open space conservation. They do this by planning for the protection and enhancement of important spaces, by managing growth that will accomplish this objective, acquiring open space and by practicing good stewardship of municipally-owned open spaces.

The Beatty Open Space Plan should be adopted into Nye County's Comprehensive Plan and the Beatty Area Plan in order to achieve complete integration of the overall county goals and objectives and the open space recommendations contained within this document. Specific land use designations may need to be developed for the Beatty Taxing District to protect the scenic and environmentally important areas and promote development on other public lands.

NRS Open Space Plan Requirements

This plan has to be in compliance with NRS 376A.010 and 020, allowing voters to consider a ballot authorizing the Board of County Commissioners to implement specific funding mechanisms for the purpose of protecting open space.

NRS 376A.010 defines open space land, open space plan, and open space use as follows:

1) "Open-space land" means land that is undeveloped natural landscape, including, but not limited to, ridges, stream corridors, natural shoreline, scenic areas, viewsheds, agricultural or other land devoted exclusively to open-space use and easements devoted to open-space use that are owned, controlled or leased by public or nonprofit agencies.



- 2) "Open-space plan" means the plan adopted by the board of county commissioners of a county to provide for the acquisition, development, and use of open-space land.
- 3) "Open-space use" includes:
 - a) The preservation of land to conserve and enhance natural or scenic resources
 - b) The protection of streams and stream environment zones, watersheds, viewsheds, natural vegetation and wildlife habitat areas;
 - c) The maintenance of natural and man-made features that control floods, other than dams;
 - d) The preservation of natural resources and sites that are designated as historic by the office of historic preservation of the department of museums, library and arts; and the development of recreation sites.

NRS 376A.020 requires the open space plan to provide for the following:

- a) The development and use of open space land for a period of 20 years.
- b) The financing for the acquisition of the open space land.
- c) The maintenance of open space land acquired pursuant to the open space plan and the maintenance of any existing open space land in the County.

The NRS requirements apply specifically to open space easements or land acquired with one or more of the allowed funding alternatives. It also serves as a guideline for open space easements and lands acquired through other means such as the Transfer Development Rights (TDR) program, private party transactions, federal land exchanges, or voluntary actions.



Beatty geologic features, Photograph by Fliegender



Beatty geologic features, Photograph by Johnathan Whelan





Sunset over Beatty, Photograph by Camera one

3.0 Purpose and Objective

The Town of Beatty and its surrounding environs may not be currently experiencing noteworthy growth, but the future looks bright as the urban exodus phenomenon and the tranquility and scenic qualities of Beatty attract new residents. Additionally, the rising costs of jet fuel will continue to affect vacationers' decisions on airline travel destinations. The Town of Beatty is strategically positioned to capitalize on a potential increase in the number of vehicle-related vacations, particularly to Death Valley National Park.²

This is the first Open Space Plan prepared for the Town of Beatty and the Beatty Taxing District. The document reflects a preservation strategy for the next 20 years, but its impact extends beyond this time frame. As the BLM continues to make the public land available for purposeful projects, for lease or for sale, the Beatty Open Space Plan will require future updates to maintain its currency.

The purpose and objective of the Beatty Open Space Plan is:



Sunset in Amaragosa Valley, Photograph by Andrew Palochko

- To gather community input and create a map that identifies the areas with outstanding values that should be preserved as open space for the preservation of significant, historical, cultural, and habitat areas, areas for outdoor recreational opportunities, and areas for economic development.
- To guide efforts to plan for and protect open space in a comprehensive and integrated fashion.

²According to the National Park Service statistical data for Death Valley National Park, the number of recreation visits declined from 1,188,212 in 1997 to 704,122 in 2007. Park Service projections reflect a continuing decline in visitors; however, these numbers may have been forecast prior to the escalating costs of jet fuel. More communities are marketing "staycations" to encourage residents to visit local or attractions within driving distances.





Amargosa River, Photograph by Judy Mosby

• To provide this information to the BLM for its consideration in modifying its public land disposal strategy.

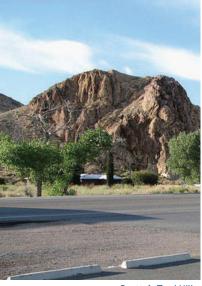
The Open Space Plan consolidates all currently available information regarding recreational, natural, scenic, and historic resources in the Beatty Taxing District in order to identify the most important areas to preserve as open space. The Open Space Plan is a reference map of BLM land for open space preservation. The map identifies major sections of land which have been determined as most important to protect. Its purpose is to provide a starting point for ongoing discussions with the BLM for protection of these resources for the longterm benefit of Beatty. Also included on the Open Space Plan map is an open space trail system that identifies the locations of several proposed walking/hiking trails to connect or link the designated open spaces and two multi-purpose trails—the Rhyolite Historic Rail Trail and the Bombo's Pond trail. The land required to implement the trail system is predominately public land; however, the proposed walking trail along the Amargosa River does affect a small number of private property owners. Section 5.0, Open Space Resources to be Preserved, identifies additional information regarding the proposed trail system.



Rhyolite, Photograph by Joe Peart



Death Valley, Photograph by Alain Lacroix



Beatty's Toad Hills, Photograph by Nadine Sellers

4.0 Open Space Planning Process

The open space planning process was developed using a combination of consulting resources in dialogue with stakeholder input and the general public. The Beatty Open Space Plan is built on the needs and desires articulated by the local community. The comments heard from the Stakeholders and general public at community workshops were synthesized by the consulting team with meeting minutes prepared and circulated to the community for comment. Residents were invited to complete a citizens' survey that was made available at local businesses and the Beatty Town Office. A summary of the relevant information gleaned from the questionnaires is included on the following pages. The consultant also obtained as much digital data as possible from Nye County, the BLM, US Geological Survey, the Nevada Department of Transportation, National Hydrography Data Center, the National Park Service, the Beatty Habitat Committee, and the United States Department of Agriculture. BEC Environmental, Inc. provided a paper map highlighting the right-of-way applications submitted to the BLM; this information was digitized and included in the constraints mapping. The use of geographic information systems (GIS) technology and digital data has facilitated the open space planning process by the generation of overlay maps of data from the multiple sources to allow for a more accurate assessment of detailed information such as topography, access, habitat, use, trail alignments and land ownership. The GIS files developed for the Beatty Open Space Plan will be given to Nye County for its use and maintenance. Table 1 summarizes the open space planning and approval process.

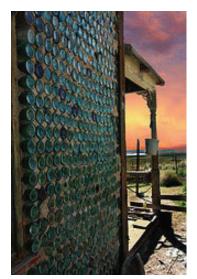


Table 1: Open Space Planning and Approval Process

February 2008	Project Start-up
	Background Research and Data Collection Obtain digital parcel and assessor files Conduct inventory and assessment Collect available demographic data from county and Census Bureau Trends analysis and societal values Prepare and distribute community survey throughout Beatty Compile data into common coordinate system and database
March – April, 2008	Stakeholder and Public Outreach Public workshop with community stakeholders Public workshop with general public Community survey
April - August 2008	Prepare Draft Open Space Plan
August - October 2008	Submit Draft Open Space and Trail Map to Stakeholders and County for Comment Revise Open Space Plan and Trails Maps
October - November 2008	Submit Draft Open Space Plan document to County Project Manager, Stakeholders and Beatty Town Board for review; revisions as necessary.
December 2008	Beatty Town Board approval
December 2008	Nye County Commission approval

Figure 1, Study Area Map, illustrates the geographic boundaries of the Beatty Taxing District, of which a large portion forms the outer boundary of the study area. The Study Area includes all of Tax Districts 16 and 17 and a majority of Tax Districts 1 and 15 which directly overlap each other. Encompassing approximately 697 square miles,





Kelly's Bottle House, Photograph by J. Odice

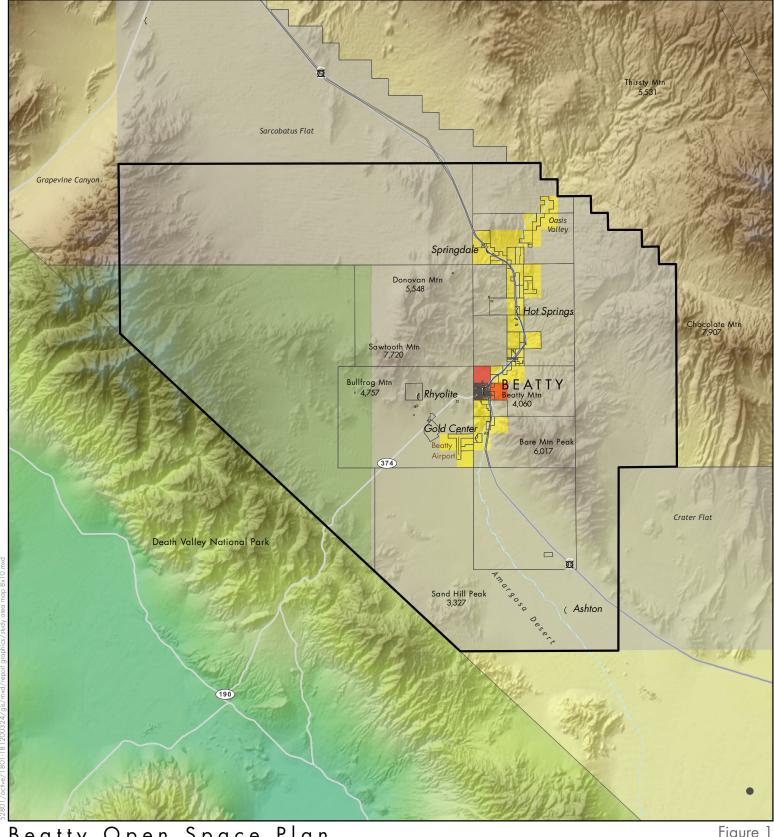
the study area is traversed by US Highway 95 and State Route 374. This intersection is a focal point in the Town of Beatty. The more intensely developed area of Beatty measures just one square mile. State Route 374 provides direct access to Death Valley National Park and Beatty markets the community as the "Gateway" to this national treasure.

The study area includes the Oasis Valley in the north and a portion of the Amargosa Desert in the south. The Oasis Valley contains rich verdant farm land for crops and cattle grazing. The abundant water resources and springs in the valley attracts migratory birds and bird watchers annually and sustains the habitat for a wide variety of plant and animal species. The Amargosa Desert is largely coincident with the Amargosa Valley but the Town of Amargosa Valley is outside the study area. The desert lies at an elevation of 2,600 feet on the east side of the Funeral Mountains and Amargosa Range that form the eastern boundary of Death Valley National Park. The Amargosa Desert is a completely waterless area approximately 40-50 miles across. This area has been targeted for solar and wind energy generation due to the amount of vast open space.

The Town of Beatty is surrounded by mountains and peaks which are visible in every direction and often times begin their rise right off of the highway. The Amargosa River is an intermittent stream that runs approximately 200 miles from its origin in the Oasis Valley to its terminus at the southern end of Death Valley. The Amargosa River flows through the Town of Beatty during very wet periods.

Figure 2, Land Ownership Map, illustrates the relatively small percentage of privately owned land contained within the study area. According to the Nye County Assessor data, approximately 5,195 acres of the total 446,602 acres (1.1% of the total) are privately held. Nature Conservancy lands are classified as private ownership. Private land is typically located along the Amargosa River or adjacent to US Highway 95 or State Route 374. The balance of the study area is public land managed by the Bureau of Land Management or the National Park Service.





Space Plan Beatty Open Nye County, Nevada

Figure 1 Study Area Map

Date: October 5, 2009

State Plane Nevada West Zone, NAD 83 **Projection:**

US Survey Foot

US Geological Survey; National Park Service; Source:

Nevada Department of Transportation;

Stantec Consulting Inc.

1 inch equals 30,000 feet Scale:

Legend

Tax District Boundary

NDOT/CalTrans Roads

US Highway

State Route

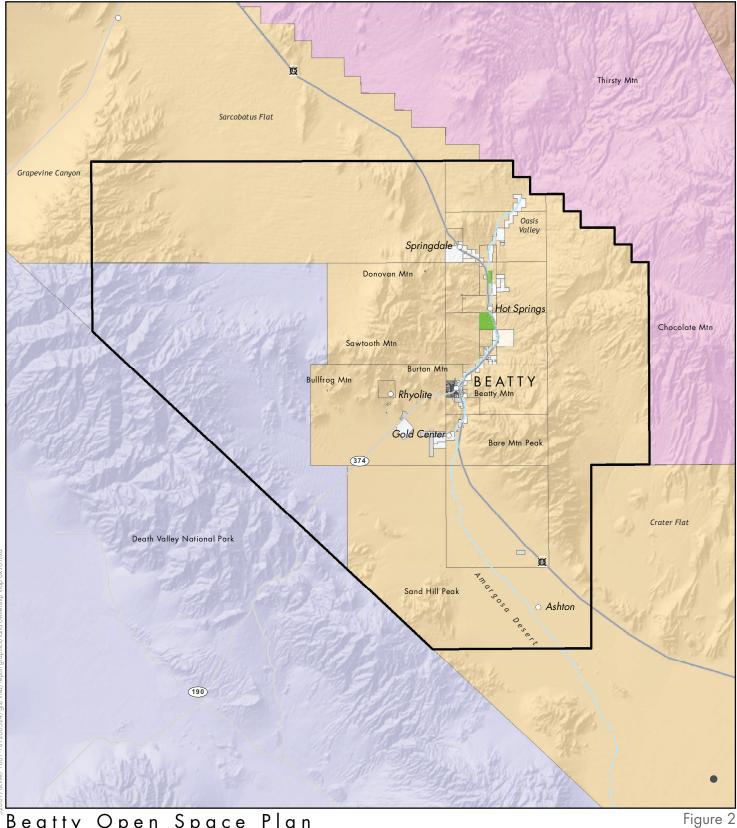
Amargosa River

National Park Service Boundary

Tax Districts 01 and 15

Tax District 16 Tax District 17 Note: The legend colors do not match graphic due to the color transparency function used to reveal the hillshade.





Beatty Open Space Plan Nye County, Nevada

Land Ownership Map

October 5, 2009 Date:

Projection: State Plane Nevada West Zone, NAD 83

US Survey Foot

Source: US Geological Survey; National Park Service; Nevada Department of Transportation;

Stantec Consulting Inc.

Scale: 1 inch equals 30,000 feet



Tax District Boundary Private Land

NDOT/CalTrans Roads

US Highway

State Route Amargosa River Bureau of Land Management

National Park Service

Nature Conservancy Department of Defense

Department of Energy

Note: The legend colors do not match graphic due to the color transparency function used to reveal the hillshade.





Nevada Desert, Photograph by Michael Pancier



Wind Energy, Photograph by John Arnold

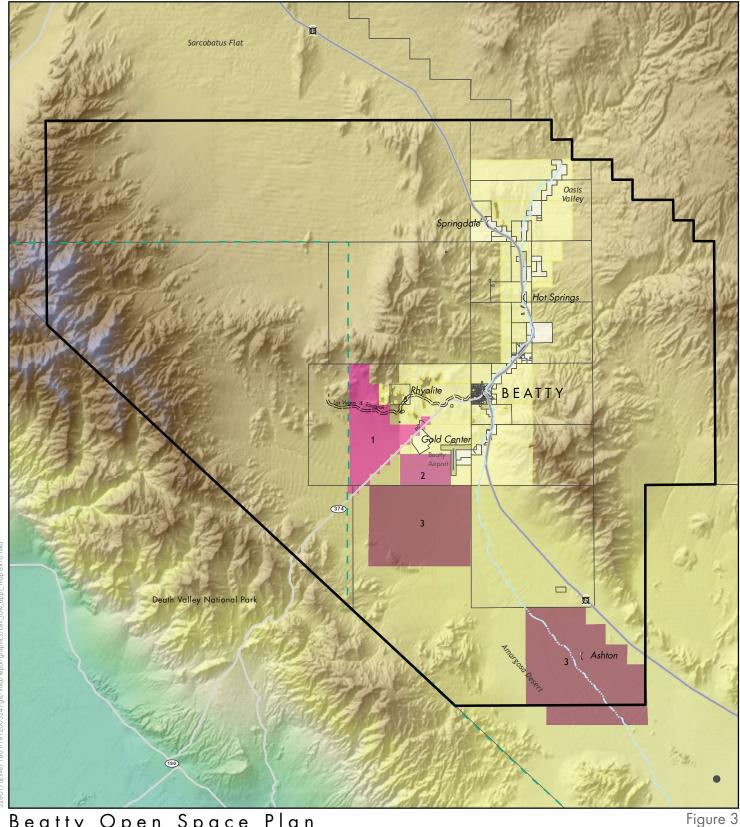


Solar Energy, Photograph by Scott Page

Figure 3, Right-of-Way Applications Filed with BLM, was created to display those public lands which are currently under consideration for energy production, both wind and solar power. Participants in both the Stakeholder and general public workshops did not openly express positive or adverse opinions toward the use of the public land shown on Figure 3 for these purposes; however, the environmental review and public input process is the appropriate stage for that discussion. According to the mapping provided, the application for solar energy covers approximately 7,446 acres of public land managed by the BLM land adjacent to, and on the north side of, SR 374 just outside of Rhyolite. The land area extends east to the National Park Service boundary and north to the base of Rainbow Mountain. The two separate applications for wind energy production are located south of SR 374 and west of US Highway 95. Application No. 2 is directly adjacent to the Beatty Airport and encompasses approximately 2,434 acres. Application No. 3 contains a request for wind energy on public land in two separate areas: approximately 12,837 acres south of the Beatty Airport; and 18,057 acres in the Amargosa Valley. It should be noted that a significant portion of the land area involved in these applications is adjacent to either SR 374 or US Highway 95 and therefore, the energy production activities would be highly visible to motorists. The required environmental review and assessment process will address the potential environmental and public concerns as part of the planning process. A representative from the Economic Development Corporation (EDC) did state during a public workshop the EDC's desire to develop light industrial activities around the Beatty Airport. Individual wells and septic disposal systems would be required to serve future industrial development in this area.

Figure 4, Constraints Map, illustrates the topographic features in the study area and the large number of fault lines that run throughout the ridges and peaks that form these topographic features. Fault lines are predominant in the Beatty Mountain and Bare Mountain areas and run north-south adjacent to the Amargosa River through Beatty. Other fault lines run through the Rhyolite townsite. Information prepared by





Beatty Open Space Plan Nye County, Nevada

October 5, 2009 Date:

Projection: State Plane Nevada West Zone, NAD 83

US Survey Foot

US Geological Survey; National Park Service; Nevada Department of Transportation; Bureau Source:

of Land Managmenet; bec environmental, inc.

Stantec Consulting Inc.

1 inch equals 25,000 feet Scale:

Legend

Tax District Boundary BLM Potential Disposal Land BLM ROW Application Boundaries

Developer

1 - Wind Energy

3 - Solar Energy

2 - Solar Energy

I National Park Service Boundary

Right-of-Way Applications Filed with BLM

Private Land

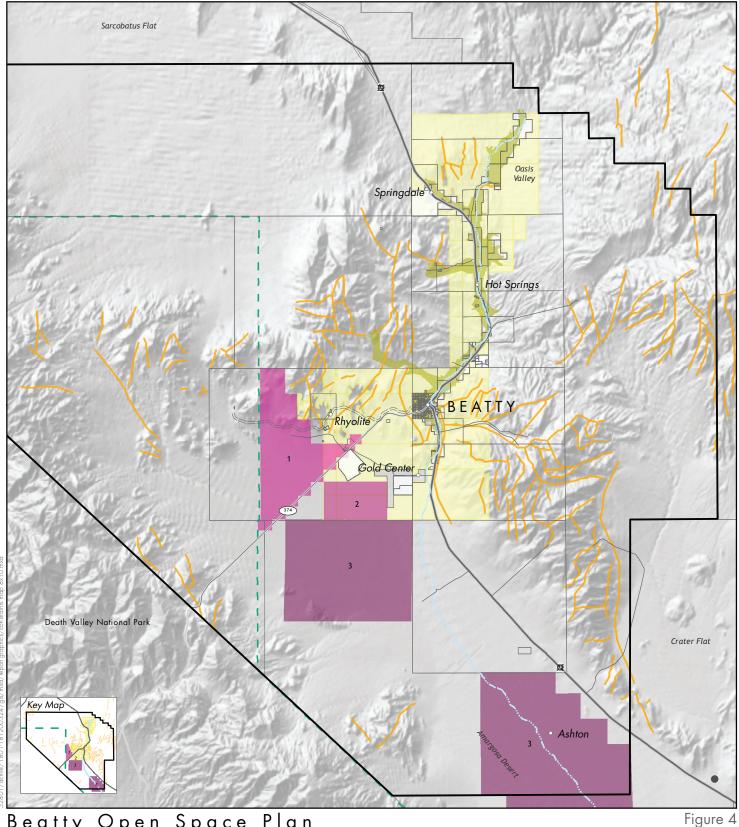
NDOT/CalTrans Roads US Highway

State Route

Amargosa River

Note: The legend colors do not match graphic due to the color transparency function used to reveal the hillshade.





Beatty Open Space Plan Nye County, Nevada

Constraints Map

Date: October 5, 2009

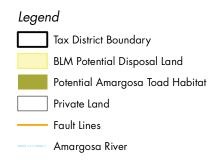
Projection: State Plane Nevada West Zone, NAD 83

US Survey Foot

Source: US Geological Survey; National Park Service; Nevada Department of Transportation; Bureau

of Land Management; Beatty Habitat Committee; bec environmental, inc., Stantec Consulting Inc.

Scale: 1 inch equals 20,000 feet



BLM ROW Application Boundaries Developer

1 - Wind Energy

2 - Solar Application3 - Solar Application

Note: The legend colors do not match graphic due to the color transparency function used to reveal the hillshade.

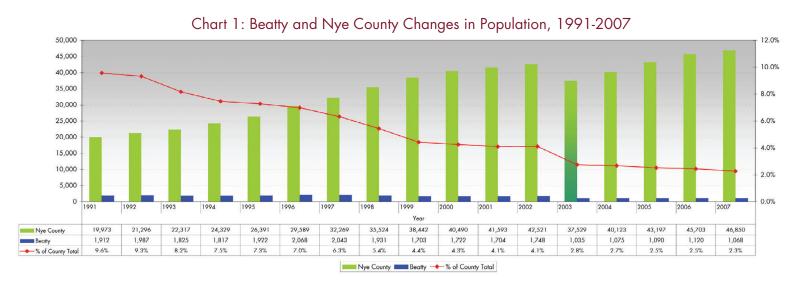


the U.S. Fish & Wildlife Service illustrates the extent of the potential Amargosa Toad Habitat boundary. The area measures approximately 6,630 acres along the Amargosa River and includes all Beatty. The Constraints Map also identifies the land currently identified by the BLM for potential disposal. The total acreage, according to the information provided by the BLM, is approximately 39,432 acres.

Demographics

According to the 2000 US Census data, the population profile of the Beatty CDP, or Census Designated Place, indicates a resident population that consists of proportionately more men than women (54.4% versus 45.6%), a population that is predominately white (90.9% versus 8.9% Hispanic or Latino), and age-wise, fairly representative of a traditional bell curve with approximately 27.2 percent of the total population age 55 years and over and 28.3 percent age 19 years and younger. Population data provided by Nye County Planning indicates that the total resident population in Beatty in 2007 was 1,068 persons. Beatty represents approximately 2.3 percent of the total population in Nye County.

The information provided below was provided by Nye County; however, the data provided was in draft form and is included herein



Beatty Train Mural by Laura Cunningham

Planning ideas expressed by Beatty residents during the public workshops:

"Habitat restoration in the river corridor is essential to preserving the designated toad habitat."

"The Beatty General Improvement District is governed by the statutes within NRS 318, including mosquito abatement (through the elimination of standing water bodies) and parks and recreation. The development of new recreation amenities will impact the GID and they want to be prepared."

"The Airport Support Network wants to ensure the airport can be expanded in the future without the threat of new development impeding that expansion. The costs to construct new amenities to utilize open space and maintain those amenities are a concern."

"We need to preserve the area's historic features, amenities and structures and make sure the open space plan does not compromise these historic treasures in any way."

"ATV users need education on the sensitivity of riding in the riverbed."

for reference purposes. The figures for the 2003 year were modified based on a Census Consistent benchmarking process which resulted in an approximately 15 percent downward adjustment in the total county population when compared to previous staff generated year-end estimates. The data below illustrates the downward trend in Beatty's population growth as compared to Nye County as a whole in earlier years but the trend has leveled off since 2003.

Public Participation – From the Vision to the Open Space Plan

The preservation of the scenic open spaces and valuable historic, cultural and environmentally sensitive areas is intended to enhance the quality of life for residents while expanding the economic opportunities for the community. This plan is for the present and the future. The abundant public land that occupies the Oasis and Amargosa Valleys and surrounds Beatty can be both beneficial and detrimental. Public land is a much-welcomed asset in many communities; however, when public land is considered for possible disposal, the uncertainty associated with the lands' future use naturally raises concern. In order to provide valuable input to the BLM about the public land within the Beatty Taxing District, the public was engaged to articulate their goals and develop a mission statement for the Open Space Plan.

Two community workshops were held at the community center to introduce the purpose and scope of the project and collect citizen input on which aspects of land conservation are most important to residents. The community Stakeholders attended a Friday workshop and the general public attended a Saturday workshop. Several Stakeholders also attended Saturday's workshop. The purpose for holding two separate meetings was to develop the goals and mission statement with the community's stewards and validate or invalidate those recommendations with the community at-large. An informal



survey was also conducted. The broad goals for the Beatty Open Space Plan as defined by the Stakeholders are:

- Install signage and implement a community-wide education program
 of the importance of staying out of the riverbed, particularly with
 ATVs, to protect the toad habitat.
- Classify historical sites and elements that are appropriate for general public use and promote them.
- Classify historical sites (such as early man and petroglyphs) that need to be removed from general public awareness so that they can be protected from potential degradation.
- Preserve open space around the airport.
- Develop solar energy.
- Protect sensitive habitat.
- Identify opportunities for future public recreation facilities.
- Identify appropriate activities in the Fish & Wildlife Service's designated sensitive toad habitat areas.
- Continue to pursue responsible mining for economic development.
- Establish rest areas along the highway with comfort facilities between Beatty and Goldfield.
- Identify trails for walking, ATV, mountain biking, equestrian activities and multi-model trails.

The Mission Statement created during the public involvement process for the Beatty Open Space Plan is:

To blend the preservation of the significant, historical, cultural, and habitat areas, with areas for outdoor recreational opportunities and areas for economic development.



What does open space mean to you?

Where there is no housing

Undisturbed land

Place where one can see the night sky and stars

Places to view wildlife and a place that provides habitat for the wild horses and burros

Viewsheds in this area

Places where there are walking trails

Parks sites and athletic complexes

Places far away from OHVs or ATV users

Historical sites

Bombo's Pond

Crystal Springs

Lower Indian Springs and all other seeps, pools and ponds

Areas that provide peace and quiet

The absence of industrial development

Cottonwood Gallery

Flourspar Canyon

To be able to see the desert from your front door

Pioneer mine (a historic and multi-use area)

The Amargosa River

The Rhyolite area

Pioneer and Mayflower Mine areas

Places that lend themselves to recreational activities

Walking trails, designated parks and flood control areas

Informal Citizen Survey Results

The informal citizens' survey was conducted in March and April 2008. The questionnaire was developed to inquire about the recreational activities, facilities and concerns of the community. These surveys were distributed at various business locations within Beatty and at the Beatty Town Office. This survey was also developed to gather general demographic information about the respondents. The survey was distributed for a five-week period and during that time, a total of 37 surveys were completed and returned to the Town Board staff. The results were categorized and tabulated to draw the following conclusions. This effort was not intended to draw statistically significant results, but instead to identify values and general attitudes regarding the use of open space for recreational purposes.

Demographics of Survey Respondents

Of the 37 survey respondents only five of the seven age groups were represented. No respondents were within the ages of 19 to 34 years of age. The 37 respondents represented additional family members totaling up to 80 individuals. The average household size was 2.16 persons per household. Interestingly, the percentage of male and female respondents roughly equaled the distribution in the total population: 57% of them were male and 43% were female. Full-time residency status for respondents was, on average, seven or more years.

Most Frequented Activities

The activities reported by the respondents were categorized into 17 separate classifications. As these were "write-in" responses, many respondents prioritized more than one activity resulting in a total of 63 activities from the 37 respondents. Frequenting Cottonwood Park was the favored activity and swimming at the community pool the second most frequented activity. Walking and/or hiking received slightly fewer responses than motorized activities, including ATV, dirt bike and automobile touring. All other activities fall in the broad





Photograph by Haven Holidays



Photograph by KLM03



Photograph by Bill Lollar

classification of nature enjoyment such as fishing, wildlife viewing, camping, historic recreation and exploring. These activities received some acknowledgment as individual activities but collectively, were activities the respondents engaged in with the same frequency as visiting Cottonwood Park. Athletic activities such as golf and softball are also popular among the respondents.

Facility and Activity Needs

Of the 37 survey respondents only five of the seven age groups were represented. An evaluation of the informal citizen's survey results indicates that golfing facilities, trails and improvements to nature areas are high on the list of priorities. When asked of their overall satisfaction of the facilities presently provided for the community, only 16 out of the 41 responses were satisfied (39%), but 37 of 41 responses indicated a desire for improvements (90%). Because a majority of the respondents are between the ages of 35 and 65 years of age, this response may appear significant since it indicates a desire for more variety in the respondents' activities. According to the answers on the survey, one improvement for 10% of the respondents would be to extend the swimming pool hours and to provide more programs for the youth.

Activities outside Beatty

In an effort to determine the level of activities that people engage in outside of Beatty we posed the question as to where their activities take them. Interestingly, 57% of the responses indicated the use of facilities and activities within the study area boundary. The balance, or 43%, actually traveled to Utah, California, Las Vegas, Pahrump, and Death Valley. Approximately 42% of those who traveled outside of the study area to recreate did so to golf in Death Valley. The Beatty driving range is presently closed; however, the infrastructure is in place and with resources and continued study on demand levels and willingness to pay issues, there may be impetus for funding or pursuit of grant money.







Photograph by Gary Minniss

Activities to be Included in the Open Space Plan

The number one priority for activities and facilities needing improvement and development were (1) walking trails, (2) pool improvements, (3) trail systems, (4) golf, (5) off-road all terrain vehicle (ATV) and high clearance vehicle (HCV) use, and (6) nature study/observation facilities. These six activities represented 23% of the total activities identified by those who completed a survey. Activities selected as a second priority for improvements include the addition of paved surfaces for bicycles. The other activities listed fell into a category of group use areas such as amphitheater, BMX, camping, nature areas, and dog park facilities.

The five highest priority recreation activities identified by the survey respondents for inclusion in the Open Space Plan are as follows:

Walking and trails systems	24%
Off Road and ATC activities	17%
Swimming	15%
Nature Observation / Camping	11%
Dog Park	_8%
Total	74%

General Conclusions

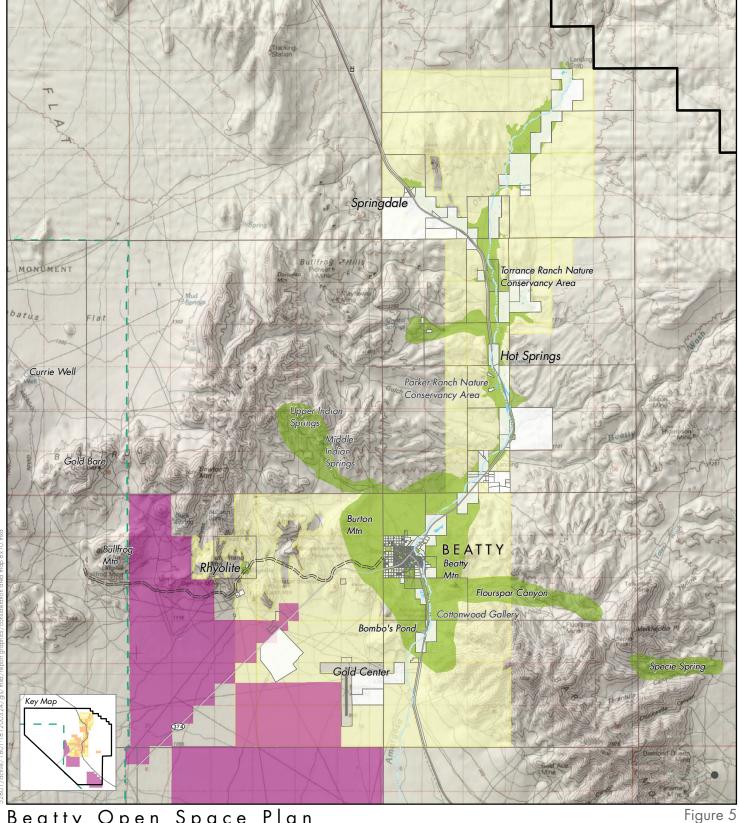
Based on the popularity of the activities listed in the survey questionnaire and the expressed desire for those facilities, it can be concluded that the survey respondents feel they are underserved for the recreation activities they desire most. To turn this trend around, protection and development of enhancements at Beatty's prime nature areas, viewsheds and network of ATV trails will go a long way to better address the present and future passive recreation demands of the community. Although it is outside of the scope of this study to make recommendations regarding programs, program changes within the present facilities may be able to provide an opportunity for expanded service with little additional costs to the community



Based on the popularity of the activities listed in the survey questionnaire and the expressed desire for those facilities, it can be concluded that the survey respondents feel they are underserved for the recreation activities they desire and could possibly be structured to be self-funding. One single, but important feature in demand by current residents is a dedicated dog park and a community size group use picnic area with an outdoor amphitheater and upscale site amenities.

The information gleaned from the community workshops and informal citizens' survey was incorporated with the GIS base mapping. By overlaying the BLM right-of-way application boundaries, the parcel base with ownership, the BLM potential disposal properties, and the USGS Quadrangle Map with the references points of mountains, mines and historic sites that were identified as important by the workshop participants, the preservation areas for the Open Space Plan were drawn. Since the scope of this effort did not include research mining claims and easements that have been acquired for private use from the BLM, it is possible some areas identified for preservation may encroach upon private easements. However, the preservation areas shown on Figure 5, Open Space Preservation Map, were all mentioned as important community resources during the community participation process. The open space areas requested for inclusion are: Bombo's Pond, Cottonwood Gallery, Flourspar Canyon, Lower, Middle and Upper Indian Springs, Oasis Valley, Rhyolite, Specie Spring, and all of the topographic features that surround downtown Beatty. These features are the community's viewshed from their front doors, back doors, and surface streets. These must be protected from residential, commercial, or industrial development and should not be used for energy development. The places identified on Figure 5 should remain as undeveloped open space with improvements to benefit access and usage by pedestrians, bicyclists, picnickers, wildlife viewers and photographers.





Beatty Open Space Plan Nye County, Nevada

c cosmy, ractada

Date: August 11, 2008

Projection: State Plane Nevada West Zone, NAD 83

US Survey Foot

Source: US Geological Survey; National Park Service;

Nevada Department of Transportation; Bureau of land Management; Beatty Habitat Committee; bec environmental inc., Stantec Consulting Inc.

Scale: 1 inch equals 12,000 feet

Legend

Areas of Open Space Consideration

Tax District Boundary

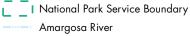
BIM Potential Disposal Land

BLM Potential Disposal Land
BLM ROW Application Boundaries

Private Land

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Open Space Consideration Map

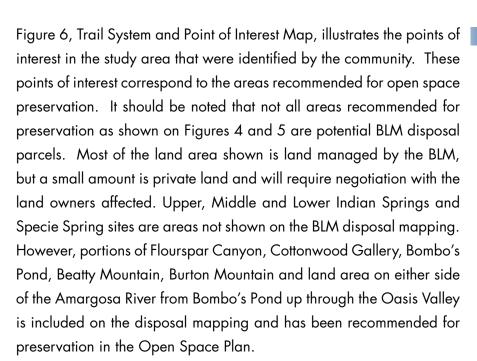


Note: The legend colors do not match graphic due to the color transparency function used to reveal the hillshade.



5.0 Open Space Resources to Be Preserved

There is ample national literature that documents the economic benefits of public investment in environmental open space, floodplain protection, and recreation. Several studies have documented regional economic and quality-of-life benefits that result from environmental recreational projects, including enhanced property values, improved wildlife diversity and habitat, recreational facilities, and improved overall quality of life. While this open space plan does not attempt to quantify these types of benefits, we use the anecdotal findings from other studies (see Appendix 4) to support the conclusion that the investment in environmental and recreational facilities will provide an economic return that is equal to the initial investment. The benefits to implementing the Beatty Open Space Plan would likely be in the form of improved quality of life, improved health, enhanced property values, and increased tourism to Beatty.



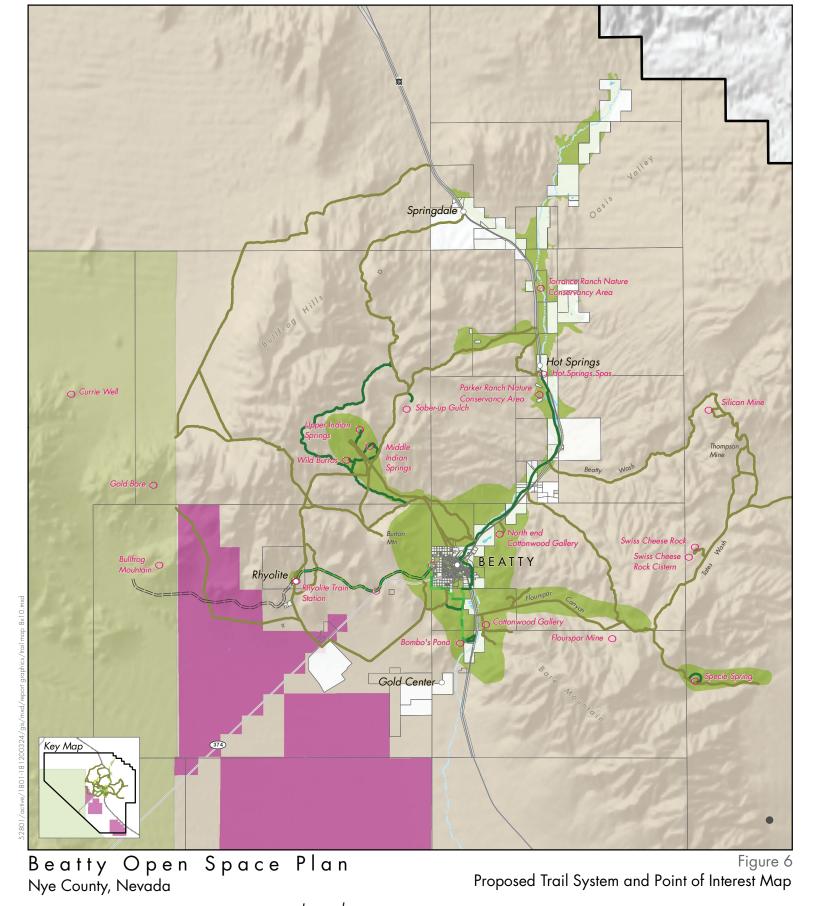


Hills above Beatty, Photograph by Kit Hubert



Big Red Hills, Photograph by Nadine Sellers





Date: August 11, 2008

Projection: State Plane Nevada West Zone, NAD 83

US Survey Foot

US Geological Survey; National Park Service; Source:

Nevada Department of Transportation;

Stantec Consulting Inc.

1 inch equals 12,000 feet Scale:

Legend

Tax District Boundary

Public Land

BLM ROW Application Boundaries

Areas of Open Space Consideration National Park Service Boundary

Private Land

Ö Proposed Railhead or Information Kiosk

Point of Interest 9

Open Space Trail System Existing 4WD/ATV

Multi-Purpose

Walking Trail

Note: The legend colors do not match graphic due to the color transparency function used to reveal the hillshade.



Proposed Trail System

The trail system identified in Figure 6 includes a proposed trail network to connect the points of interest. The three designated trail types recommended as part of the Beatty Open Space Plan include walking trails; multi-purpose trails; and 4WD/ATV trails which exist today, although informally. The 4WD/ATV trails shown were provided in digital format by the BLM. These roadway alignments were digitzed via Global Positioning System (GPS) units by BLM staff using all-terrain vehicles. The BLM designated the roadway alignments as being suitable for specific types of uses including all vehicles, 4WD, HCV, and ATV. The 4WD/ATV trails shown on Figure 6 are significantly fewer than the actual number of alignments that exist in the immediate area. The intent of the Trail System and Point of Interest Map was to illustrate how a reduced number of 4WD/ATV alignments continues to provide opportunities for recreation and access to the area's resources while responding to community desires for a reduction in the number of roadways utilized by 4WD/ATV users. Recommendations for nonmotorized trails include walking trails up through the Indian Springs area, Wild Burros, Sober Up Gulch, around Bombo's Pond, around Specie Spring, and along the Amargosa River to Bailey's Hot Springs; multi-purpose trails connect Bombo's Pond with Beatty and from Beatty to the Historic Rhyolite Townsite. The trail alignments are proposed to reflect the desires expressed by the Beatty residents. The open space plan identifies the areas with outstanding values and the proposed trail network could provide linkages between areas and to the Town of

By removing the land's development potential, the easement lowers its market value, which in turn lowers the estate tax. Whether the easement is donated during life or by will, it can make a critical difference in the heirs' ability to keep the land intact.



Wildflowers at Torrance Ranch, Photograph by Joe Peart



Indian Springs, Photograph by Joe Peart



Beatty. The information contained in this document can be used by staff and the BLM personnel in their ongoing efforts to complete a formal trails plan.



Trail concept designed by Joe Peart, Stantec.

Walking Trail

- 10' minimum trail made of suitable soil or gravel
- Equestrian uses would be permitted on walking trails
- Mountain bike uses would be permitted on walking trails
- Signage posted to limit access to walkers, bicyclists, and equestrian users

Multi-Purpose Trail

- Paved bi-directional trail
- 10' minimum (12' preferred asphalt or concrete)
- ADA compliant for use by walkers, joggers, bicyclists, wheelchairs, skateboards, and in-line skaters

• Existing 4WD/ATV

- These uses are encouraged on existing roads and trails located on land managed by the BLM. The number of roadways utilized for this activity should be reduced and/or restricted based on input gather during the community workshops. However, any formalization of the proposed trail network will involve a memorandum of understanding with the BLM and involvement by Nye County officials and staff.



Walking Trail, Photograph by Chris Cornwell

Proposed Trailheads

Trailheads can include extensive public amenities or offer limited features; the number of potential users and available funding typically determines the extent of improvements at a particular trailhead. Trailheads generally consist of some type of parking, kiosk signage, restroom facilities if utilities are proximate to the site, drinking water, and shade structure(s) with picnic tables.



Figure 7, Open Space Plan, illustrates the sections of land recommended for preservation by section number. The BLM Disposal Land and private property boundaries are included as a backdrop. The open space lands that are not complete sections managed by the BLM will ultimately have to be surveyed if these areas are to become public land managed by Nye County. Only public land managed by the BLM is included in the Open Space Plan. The goal was to provide a map that could be easily used by Nye County and the BLM in their discussions relative to disposal land and those areas that are worthy of long-term preservation to benefit the community of Beatty. Figure 7 has been provided in two page sizes and three scales: $8\frac{1}{2} \times 11$ at 1:12000 scale; 32×40 at 1:3000 scale; and a zoomed-in version at 1:2000 scale showing the trail alignments originating in the Town of Beatty. Appendix 3 provides a complete list the areas identified on Figure 7 including section, township, and range information for each area.

Open Space Preservation Techniques

Preservation techniques typically refer to some type of regulation or policy adopted by the local government to achieve a specific objective. For example, if Nye County's goal is to "protect water quality in the Amargosa River", the regulatory technique or tool to achieve this goal might consist of a requirement for a vegetated buffer strip, or prohibition of development within a specific distance from the river. However, preservation techniques may also include voluntary, incentive-laden measures that encourage private initiative to protect open space resources. The following paragraphs describe various techniques to protect resources and/or acquire open spaces. Following this section is a discussion of open space financing strategies.

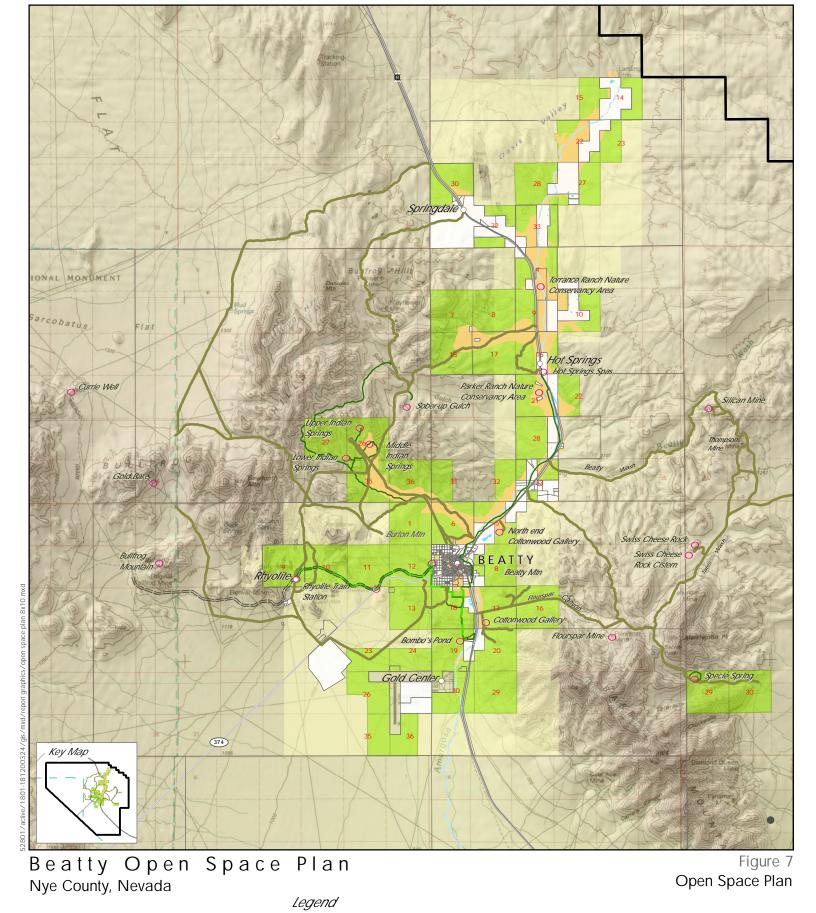
Conservation Easements

Voluntary donation of conservation easements is an excellent method of open space and natural resource protection. A conservation easement is an encumbrance on the property implemented through legal agreement between a landowner and a government agency



Mountain en route from Beatty, Photograph by Judy Baxter





Date: October 5, 2009

Projection: State Plane Nevada West Zone, NAD 83

US Survey Foot

US Geological Survey; National Park Service; Source: Nevada Department of Transportation; Bureau

of Land Management; Stantec Consulting Inc.

1 inch equals 12,000 feet Scale:

Tax District Boundary BLM Land for Open Space Preservation BLM Potential Disposal Land Potential Amargosa Toad Habitat National Park Service Boundary Private Land Amargosa River

Proposed Trailhead or Information Kiosk Point of Interest

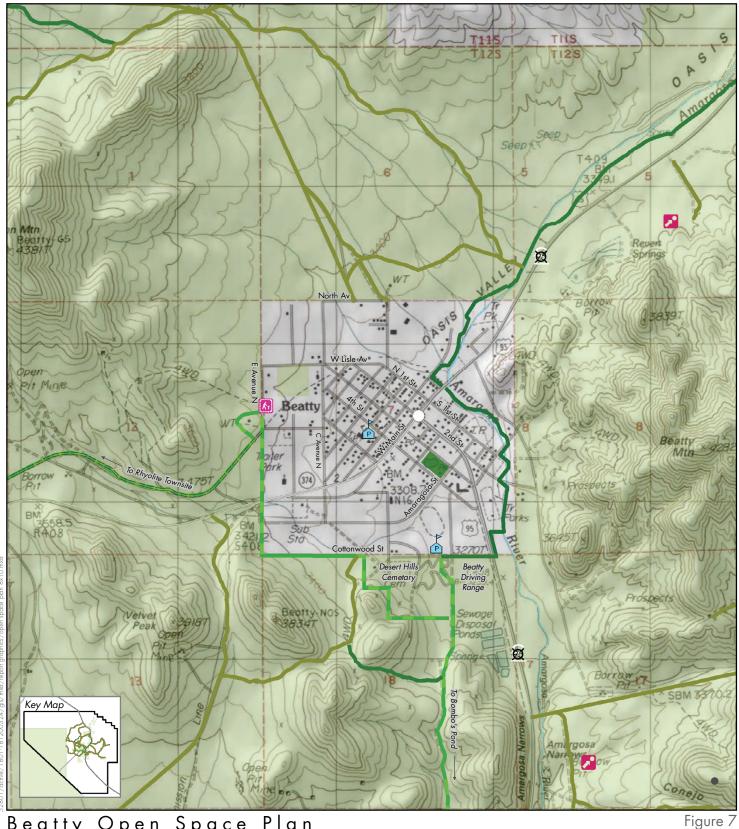
Open Space Trail System

Walking Trail

Existing 4WD/OHV Note: The legend colors do not match

graphic due to the color transparency function used to reveal the hillshade. Multi-Purpose





Space Beatty Open Plan Nye County, Nevada

Open Space Plan

October 5, 2009 Date:

Projection: State Plane Nevada West Zone, NAD 83

US Survey Foot

Source: US Geological Survey; National Park Service; Nevada Department of Transportation; Bureau

of Land Management; Stantec Consulting Inc.

Scale: 1 inch equals 2,000 feet Legend

Areas of Open Space Consideration

Cottonwood Park

Open Space Trail System

Existing 4WD/ATV

Multi-Purpose Walking Trail Proposed Railhead or Information Kiosk

Point of Interest O

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Note: The legend colors do not match graphic due to the color transparency function used to reveal the hillshade. Schools Amargosa River



or qualified land protection organization for purposes of conservation and protection of natural resources in exchange for tax benefits and other financial incentives.

Landowners who donate conservation easements permanently retain ownership and enjoyment of the property for certain agreed upon uses, such as for growing crops, but the land is protected from development of structures and other uses. Some development rights are always given up in exchange for the easement. The land remains the private property of the landowner but can be sold or passed on to heirs (with perpetual conservation restrictions). However, conservation easements do not make the land public. Since the landowner continues to privately own and manage the land, the terms of the conservation easement to confer specific uses to the public (i.e., access) would be agreed upon prior to the donation of the conservation easement to the public. In all cases, the public benefits because areas with important open space resources, such as along the Amargosa River, are permanently protected without additional regulation, and without cost to Nye County. Potential losses in property taxes may be offset by the reduced need for services.

In many cases, conservation easements provide estate planning benefits. Donated land to a land trust for a conservation easement can qualify as a tax-deductible charitable donation. Placing a conservation easement on private property also results in annual property tax savings to the owner. Perhaps most importantly, a

conservation easement can be essential for phasing land on to the next generation. By removing the land's development potential, the easement lowers its market value, which in turn lowers the estate taxes. Whether the easement is donated during life or by will, it can make a difference in the heirs' ability to keep the land intact.



Beatty overview, Photograph by Kit Hubert



Purchase of Development Rights

Purchase of Development Rights (PDR) is similar in effect to a conservation easement except the development rights are not



Cottonwood Gallery, Photograph by Joe Peart

donated but purchased from willing landowners by a county or other entity such as a land trust. The success of a PDR program is limited by available funds which may be obtained from various sources. The landowner retains ownership, and the property is protected in perpetuity. Owners who sell the development rights receive an income and continue to use their land while retaining other rights. PDRs are effective in communities with strong support to acquire land for open space preservation. Property owners' taxes also could be reduced.

Present Use Value Program

A present use value program promotes the continuation of agricultural and grazing activities by assessing property based on its actual use. Nye County could implement a program to reduce the property tax base for these types of lands that meet certain minimum acreage criteria and eligibility rules.

Land Donation

Donating land for conservation purposes is truly one of the finest legacies a person can leave to future generations and may be the best strategy for owners not wishing to leave the land to their heirs; owners who have substantial real estate holdings and wish to reduce estate tax burdens; and owners who wish to be relieved of the responsibility of caring and managing the land. An outright donation is not the only way to give land. Property owners can continue to live on the land by donating a remainder interest and retaining a reserved life estate. In this arrangement, an owner donates the property during his/her lifetime, but continues to live on and use the property. Upon death, a land trust, such as the Amaragosa Conservancy, gains full title and control over the property.





Coming into Beatty, Photograph by Judy Baxter

Another option is the charitable gift annuity. In this land donation option, the property is transferred to a specific charity and the charity agrees to make regular annuity payments to the owner or his/her beneficiaries for life.

Fee Simple Purchase

In some cases the fee simple purchase is the preferred alternative when public ownership and access is warranted. This may be the case for property along the Amargosa River and the community's desire to protect the toad's habitat. The Amargosa River corridor should be designated as a greenway corridor, accessible to the walking public. The river currently runs through the Town of Beatty and across numerous privately owned parcels. Preservation of the Amargosa Toad habitat will require acquisition of the land area along the river's edge either by fee simple purchase, purchase of development rights (PDR) or conservation easement. If either the PDR or conservation easement alternatives do not specifically allow public access, then a trail within the river corridor for the public would be unachievable from Bombo's Pond to Bailey's Hot Springs as currently recommended.

• Nevada Division of State Lands Q1 Grant Program

The Nevada Division of State Lands (NDSL) awards grants to counties, municipalities, state agencies, and non-profit conservation organizations for the purpose of protecting and preserving the state's natural, scientific, cultural, archaeological, agricultural, paleontological, historical, wetland, or riparian resources. Grants are also made to projects that enhance recreational opportunities, increase public access to lands and waters, and the achievement of goals specified in adopted open space plans. Grant awards are made on a competitive basis for project types that include: (1) Habitat Conservation Plans; (2) Open Space Plans; (3) Acquisition of Land and Water related to resource protection; (4) Carson River Corridor; and (5) the Lake Tahoe Path System. Complete program information is available at http://lands.nv.gov/Question1/Q1.htm.



Financial Strategies for Protecting Open Space

Nye County's success in implementing the Open Space Plan will be predicated on a sound financial status and a supportive County Commission. NRS 376A.040 and 050 allows a county whose population is less than 400,000 by ordinance to impose a maximum of one-quarter cent sales tax for the purpose of open space acquisition. The money received from the tax must be retained by the county or remitted to a city or general improvement district within the county.

Funds generated under NRS 376A.040 may be used to pay the cost of:

- a) The acquisition of land in fee simple for development and use as open space land;
- The acquisition of the development rights of land identified as open space land;
- The creation of a trust fund for the acquisition of land or development right of land; and
- d) The payment of debt service on bonds, etc. used to acquire land or development rights.

Funds generated under NRS 376A.050 to be utilized to pay the cost of:

- a) planning the acquisition and other administrative acts relating to the acquisition of open space land;
- b) the operation and maintenance of open space land.

State law prohibits the use of sales tax revenues to fund any neighborhood or community park or facility. State law also allows voters to approve the levy of a property tax or a real property transfer tax for the purpose of protecting open space. Neither of these funding sources is contemplated to be used to finance the open space plan, and can only be used with voter approval.

If the sales tax option is approved by the voters it will be restricted by state law to the purposes outlined above. The ballot question further



Beatty in the snow, Photograph by Kit Hubert

Funds generated under NRS
376A.050 to be utilized
to pay the cost of planning
the acquisition and other
administrative acts relating
to the acquisition of open
space land and the
operation and maintenance
of open space land.



restricts the use of the tax to be dedicated to funding the purchase of a development rights program. The tax revenues cannot be used for any other purpose.

State law allows the funds to be used to secure a bond or used on a pay-as-you-go basis. The determination of how the funds will be used is dependent upon the number of landowners willing to sell their development rights and available resources. If there is a large number of property owners willing to participate in the program and steps taken to ensure that an easement will be granted, a bond issue may be a practical, cost effective means to secure the easements. If the sales tax revenue is used to finance a bond, the recommendation is for the annual debt service on the bond not exceed 70% of the estimated revenues for the year in which the bonds will be issued. This provides a funding cushion should there be a downturn in the economy while still ensuring adequate funds to meet any debt service payments. It also leaves 30% of the funds available for a limited pay-as-you-go program and to fund administrative costs associated with the program.

A pay-as-you-go program will require proposals to be carefully evaluated and prioritized. A limited funding source may also place greater emphasis on using a combination of programs. There is no requirement for the payment for development rights to be made in a single lump sum payment. Limited resources may require annual or other structure for payments, which may in fact be an incentive to some property owners. This approach will eliminate issuance and interest costs associated with a bond issue.

Nationwide, the American public has spoken in favor of open space acquisition by voting to support local referenda designed to generate revenue in their communities through bonds, property tax increases and sale tax allocations. Funding through a bond issue is an acceptable method of ensuring a steady source of funds for acquisition and long-term maintenance.





Photograph by Elizabeth



Wild Burros, Photograph by Tompixels



Coming into Beatty, Photograph by Andrew Palochko

Depending on the depth of community support in the Beatty Taxing District, other strategies for protecting open space include real estate transfer taxes, cigarette taxes, cellular phone taxes, increments of sales taxes, levy a special tax, or impose a special fee. The proportion of the tax siphoned off for open space can be quite small in the initial phase of funding open space acquisition. It is important for the community to demonstrate support for these measures in order to leverage the revenue collected to pursue additional state and federal dollars.

As previously discussed, providing preferential tax treatment for owners who preserve important resource land, such as farm or grazing lands, encourages landowners to donate conservation easements. Prime farmland is often preserved when property tax credits of up to 50 or 100 percent are given to the property owner. It should be pointed out that some of these strategies require approval by the state legislature.

Funding from federal sources for land acquisition is certainly not plentiful but grants are available from the Land and Water Conservation Fund. This is one of the older federal land acquisition funds (signed into law in 1965). According to the US Department of the Interior, National Park Service report, State Summary by Grant Type, a total of 306 grants for planning, acquisition, development and redevelopment have been funded in the State of Nevada for a total of \$39 million; \$8.8 million of the total for the state has been for land acquisition. As of August 2008, a total of \$14.7 million has been obligated nationwide, with approximately 25 percent of the total used for land acquisition purposes.³ Since 1970, the Land and Water Conservation Fund has granted Nye County with approximately \$412,098 for improvements at Ichthyosaur State Park, Tonopah Pool and Park, Tonopah Memorial Park, Pahrump Recreation and Sports Complex, the Beatty Pool, and the Amargosa Valley Community Park.

Another possible source is the TEA-21 Enhancement Fund, which is allocated to states by the Transportation Equity Act for the 21st Century. Transportation enhancements are activities that are designed to bolster





Dolomite Dome, Photograph by Joe Pear



Rock Cistern, Photograph by Joe Peart

the cultural, aesthetic and environmental aspects of the transportation system. The enhancements program provides funding for a variety of non-traditional projects, ranging from the restoration of historic transportation facilities, to bike and pedestrian facilities, to landscaping and scenic easements, and water pollution migration from highway runoff. The Nevada Department of Transportation administers the federal grant funding from this program. The Rails to Trails Conservancy issued a fact sheet that describes all the transportation enhancement activities funded through the TEA-21 legislation. The activities that can be funded include: bicycle and pedestrian facilities; acquisition of scenic easements and historic sites; visitor and welcome centers; historic preservation; preservation of abandoned railway corridors by converting them to trails; archaeological planning and research; provision of wildlife undercrossings and protection of endangered or threatened species; provision of safety and educational activities for pedestrians and bicyclists; and establishment of transportation museums. The National Transportation Enhancements Clearinghouse (toll free number 1-888-388-NTEC) maintains a wide range of documents regarding trail funding opportunities.4

The Southern Nevada Public Land Management Act (SNPLMA) allows the BLM to sell public land within a specific boundary around Las Vegas for the purpose of funding a special account available to the Secretary of the Interior. While the state's general education fund and the water authority both have a share of the revenue, 85 percent of the proceeds can be used to fund parks, trails and natural areas; capital improvement projects; conservation initiatives; and environmentally sensitive land acquisitions among other programs.

Round 9 of the SNLPMA funding program includes a recommendation to fund acquisition of an environmentally sensitive 5-acre parcel in Nye County known as the Horseshutem Springs 2 which is part of

⁴http://www.railtrails.org/resources/documents/resource_docs/tgc_fs_tea21.



³http://waso-lwcf.ncrc.nps.gov/public/index.cfm



Sunrise in Beatty, Photograph by Kit Hubert

the patented April Fools Mill Site. There are several springs on the property that enhance valuable habitat for the desert tortoise and big horn sheep on site. There are numerous projects being considered for funding through this program throughout southern Nevada for park construction, trail construction and land acquisition.

Maintenance and Management of Public Land

The maintenance program for open space will vary depending on the tool(s) used to secure the open space. It is the goal of this plan to have the vast majority of open space retained by Nye County to benefit the Town of Beatty.

Uses within the areas shown as Open Space may include viewsheds, parks, trails and natural areas; the specific uses and characteristics will be implemented through a development agreement between the Town, County, developer and/or user. Financing of Open Space and/or maintenance shall be the responsibility of the proponent and defined in the development agreement.

The intent of the vast areas shown for Open Space is to allow for the adequate opportunities that exist within it. Ultimately the Town and the County in agreement with the developer or user of it will define its size and type. This action will be consistent with the desires of the Town, County, Developer or User.

6.0 Conclusion

The Beatty Open Space Plan was prepared to identify the public land within the Beatty Taxing District that is valued by the residents for a wide variety of reasons. The scenic lands visible from the Town of Beatty, major landmark areas, historic areas and sensitive habitat areas are recommended for open space preservation. With the involvement of members on the Steering Committee who represented





Mountains near Beatty, Photograph by Paul Lowry

various organizations and interests in the community as well as interested citizens, the goals for this open space plan and the areas of importance have been documented. A complete list of lands identified by their section, township and range numbers has been developed. The list and accompanying mapping will be utilized by Nye County staff, the Beatty Town Board and the BLM to ultimately decide on the future of these targeted land areas recommended for preservation.

A complete list of open space preservation techniques is included. The strength of the "toolbox" approach is that it does not rely on any one technique, but creates a spectrum of approaches appropriate for a range of situations, particularly with private land owners. The implementation of this open space plan and the preservation techniques will hopefully result in an improved quality of life for the town's residents, expanded recreational opportunities, foster increased tourism and economic growth, and avoid potential future conflicts with new growth and development.



Rainbow Desert, Photograph by Andrew Malone



Appendix 1: List of BLM Land for Open Space Preservation



Appendix A List of BLM Parcels for Open Space Consideration October 5, 2009

#	Section	Township Range	Acres
1	SEC14 MDM	T10S R47E	239.77
2	SEC15 MDM	T10S R47E	352.86
3	SEC21 MDM	T10S R47E	0.66
4	SEC21 MDM	T10S R47E	8.05
5	SEC22 MDM	T10S R47E	407.90
6	SEC22 MDM	T10S R47E	40.27
7	SEC23 MDM	T10S R47E	278.38
8	SEC27 MDM	T10S R47E	318.02
9	SEC27 MDM	T10S R47E	39.76
10	SEC28 MDM	T10S R47E	612.05
11	SEC30 MDM	T10S R47E	576.79
12	SEC32 MDM	T10S R47E	119.12
13	SEC32 MDM	T10S R47E	157.64
14	SEC33 MDM	T10S R47E	138.05
15	SEC33 MDM	T105 R47E	279.91
15	JECOO MDM	1100 (4) [2/ /./ 1
16	SEC26 MDM	T11S R46E	640.37
17	SEC27 MDM	T115 R46E	639.72
18	SEC35 MDM	T115 R46E	639.44
19	SEC36 MDM	T115 R46E	642.55
17	SECSO MDM	1113 K40L	042.33
20	SEC03 MDM	T11S R47E	2.40
21	SEC09 MDM	T11S R47E	524.18
22	SEC10 MDM	T11S R47E	365.10
23	SEC10 MDM	T11S R47E	80.58
24	SEC15 MDM	T11S R47E	2.06
25	SEC16 MDM	T11S R47E	567.95
26	SEC17 MDM	T11S R47E	655.55
27	SEC18 MDM	T11S R47E	637.29
28	SEC21 MDM	T11S R47E	542.55
29	SEC22 MDM	T11S R47E	324.12
30	SEC28 MDM	T115 R47E	485.85
31	SEC31 MDM	T115 R47E	321.41
32	SEC32 MDM	T11S R47E	321.06
33	SEC33 MDM	T115 R47E	40.03
34	SEC33 MDM	T115 R47E	80.24
35	SEC33 MDM	T115 R47E	160.86
36	SEC04 MDM	T115 R47E	572.15
3 <i>7</i>	SEC07 MDM	T115 R47E	634.91
38	SECON MDM	T115 R47E	641.77
30	SECOO MIDINI	1113 K4/E	041.//
39	SEC01 MDM	T12S R46E	640.77
40	SEC10 MDM	T125 R46E	645.83
41	SEC11 MDM	T125 R46E	641.66
42	SEC12 MDM	T125 R46E	640.70
74	OLC 12 IVIDIVI	1120 N40L	040.70

#	Section	Township Range	Acres
43	SEC13 MDM	T12S R46E	641.18
44	SEC23 MDM	T12S R46E	339.07
45	SEC24 MDM	T12S R46E	342.00
46	SEC26 MDM	T12S R46E	577.90
47	SEC35 MDM	T12S R46E	635.17
48	SEC36 MDM	T12S R46E	339.33
49	SEC09 MDM	T12S R46E	640.84
50	SEC07 MDM	T12S R47E	10.00
51	SEC16 MDM	T12S R47E	653.03
52	SEC17 MDM	T12S R47E	644.09
53	SEC18 MDM	T12S R47E	640.74
54	SEC19 MDM	T12S R47E	641.08
55	SEC20 MDM	T12S R47E	644.72
56	SEC29 MDM	T12S R47E	643.81
57	SEC30 MDM	T12S R47E	481.37
58	SEC30 MDM	T12S R47E	40.22
59	SEC05 MDM	T12S R47E	643.25
60	SEC06 MDM	T12S R47E	641.79
61	SEC08 MDM	T12S R47E	638.62
62	SEC29 MDM	T12S R48E	640.83
63	SEC30 MDM	T12S R48E	638.59
		TOTAL	26,777.94

Appendix 2: Annotated Bibliography of Literature on the Environmental and Recreational Benefits of Open Space, Flood control and Recreation



ANNOTATED BIBLIOGRAPHY OF LITERATURE ON THE ENVIRONMENTAL AND RECREATIONAL BENEFITS OF OPEN SPACE, FLOOD CONTROL AND RECREATION

Fausold, Charles J. and Robert J. Lillieholm. 1996. "The Economic Value of Open Space: A Review and Synthesis." Lincoln Institute of Land Policy Research Paper.

Protecting open space can stabilize or increase nearby or adjacent property values—avoiding the need for increased property tax rates.

Studies in a wide range of urban areas have documented increases in real estate value for residences located near parks, with increments in real estate value attributed to individual parks ranging into million of dollars. Homes near greenways have also been shown to sell for higher prices that those farther away.

Enhancement value is the tendency of open space to enhance the property value of adjacent properties. It "is also explicitly recognized by federal income tax law. U.S. Treasury regulation Sec. 14(h)(3)(i) requires that the valuation of a conservation easement take into account (i.e., be offset by) any resulting increase in the value of other property owned by the donor of the easement or a related person. Section 14(h)(4) sites as an example a landowner who owns 10 on-acre lots and donates an easement over eight of them: 'By perpetually restricting development on this portion of the land, (the landowner) be bordered by parkland, thereby increasing their fair market value....'"

Examples cited in this study:

"Parsons (1992) found that the land use restrictions in Maryland designed to protect Chesapeake Bay caused a considerable increase in housing prices, ranging from 14 to 27 percent for houses within the Critical Zone (1000 feet inland from the Bay and major tributaries) to between 4 and 11 percent for houses up to 2 miles away. Unfortunately, his analysis was not able to distinguish between price increase due to limitations on the supply of land available for development and increases due to the enhancement value of open space capitalized into the value of the land (and subsequently housing prices)."

"Theibodeau and Ostro (1981) utilized two methods to estimate the enhancement value of 8,535 acres of wetlands In Massachusetts's Charles River Basin. A multivariate regression analysis found that properties abutting the wetlands were valued \$400 more than non-abutting properties and that each acre of wetland added \$150 in value to adjacent properties. A survey of 15 appraisers and realtors yielded the estimate that each acre of wetlands contributes \$480 to the value of tan abutting parcel of property."

"In rural areas where most land is open space and likely to remain so (or at least is perceived to be at low risk for development) both market and enhancement value will be negligible. However, in urban or urbanizing areas where open space is scarce or diminishing (or in rural areas with unique amenities such as scenic views) market and enhancement value will be high. For advocates of open space protection, enhancement value is important because it offsets the negative effects of removing the market value of the open space itself (which is usually tax exempt or taxed at a low rate) from the local property base."

McAliney, Mike(ed.) December 1993. <u>Arguments for land Conservation:</u> <u>Documentation and Information sources for Land Resources Protection</u>, Trust for Public Land, Sacramento, California.

According to the National Park Service, "the highest increase in property values occurs in cases where parks highlight open space with some recreational access and limited use."

Ulrich, Dana. April 25, 1996. "Put a value on open space," Recorder Publishing Company.

According to Greg Delosier of the New Jersey Association of Realtors, "the exact amount by which a home's value increases with proximity to open space varies by community." But many studies have shown that in general, homes located adjacent to trails, parks, and even golf courses sell more quickly, are assessed at higher values, and are more likely to increase in value that home not near open spaces.

Miller, Stephen. May 1992. "The Economic Benefits of Open Space," Islesboro Islands Trust, Maine.

Study addressing the concern of municipal governments about the effect open space and conservation easements may have on local taxes-often their primary source of revenue.

"Property tax incentives recognize some of the common property economic benefits of open space. These benefits, such as aquifer recharge or scenic vistas are public. All members of the community benefit equally. Since development precludes or threaten these open space environmental services, discussions about growth and preservation should include them. Implied is a shift in perspective away from seeing natural resources and environmental services as free or incapable of being measured (and therefore of no empirical economic value) toward seeing open space values as integral to long-term economic well-being. Government seeks to protect the greatest social benefit. Maximization of total social welfare, with municipal revenues a part of that greater picture, will need to assess open space benefits. A true accounting of these benefits will list all measurable attributes of the open space, estimate the value of each then discount for any costs."

"Some techniques used to estimate the value of environmental services (attributes of open space such as wildlife habitat, clean drinking water and clean air, recreation, flood control, scenic views, biological diversity, quality of life, rural character, etc.) include "market and surrogate-market price valuations, property value techniques, travel-cost approach, and survey based techniques....a 1981 cost-benefit study in Massachusetts found annual wetlands values as high as \$170,000 per acre. A coal-fired power plan found those open space benefits to be in the range of \$400,000 to \$700,000 per year. Recreation values coming from unpaid use of private swimming area were, in one instance, \$685,000 annually."

"Open space provides additional positive economic benefit by supporting tourism: encouraging more cost-efficient development: allowing nature to perform its life-giving, valuable work: and establishing a quality of life that attracts businesses and others to relocate."

"An important additional conclusion is that environmental integrity and stability determine economic integrity and stability: that ecological welfare determines human welfare; that sustainable social benefits are inexorably tried to sustainable environmental benefits."

National Park Service. 1995-1996. "The Money Generation Model." Office of Social Science, Socio-Economic Studies Division, Denver, Colorado.

The Park Service has developed the "Money Generation Model" to measure the economic effects of direct and indirect expenditures by visitors in and around park sites.

"Due to the high economic benefit of tourism, the National Park Service developed the Money Generation Model (MGM) to measure the economic effects of direct and indirect expenditures by victors in an around park sites. The total amount of direct expenditures is compiles through the aggregate sum of individual parks, attendance, duration of stay, and daily expenditure rates, which includes visitor expenditure in local communities on meals and lodging. Indirect or induced expenditures refer to expenditures made by businesses in local communities to service visitors. Direct federal expenditures and salaries are separate from this formula. The Money Generation Model uses locally based factors, such as local employment rates, to estimate taxes and jobs created and annually by visitor expenditures."

Godbey, Geoffrey, Alan Grieve and Stephen W. James. June 1992. <u>The Benefits of Local Recreation and Park Services: A Nationwide Study of the Perception of the American Public.</u>

"Respondents to the telephone survey were asked about benefits received from local parks at an individual, household, and community level....the vast majority of respondents perceived benefits at all three levels and the strongest level of perceived benefit was the community level, where over six out of ten respondents said their community as a whole received a great deal of benefit from local par areas."

"A surprising 71% of non-users said they received a benefit....This reinforces the idea that use and benefit are not necessarily linked."

California Park and Recreation Society. 1995. "Park and Recreation services are Essential-Economic Statements compiled by CPRS."

"Urban recreational activities such as playing sports, visiting city and regional parks, jogging bicycle riding are by far the most frequently participated in activities in California. The limited data available on spending for urban recreation indicates that approximately \$620 million is spent by these recreationists." John B. Loomis, Economic Activity and Value Associated with Public Parks and Outdoor Recreation Areas in California.

Shepard, Richard C. March 1994. "Floodplain Development: Lessons Learned from The Great Flood of 1993. "<u>Urban Land.</u>

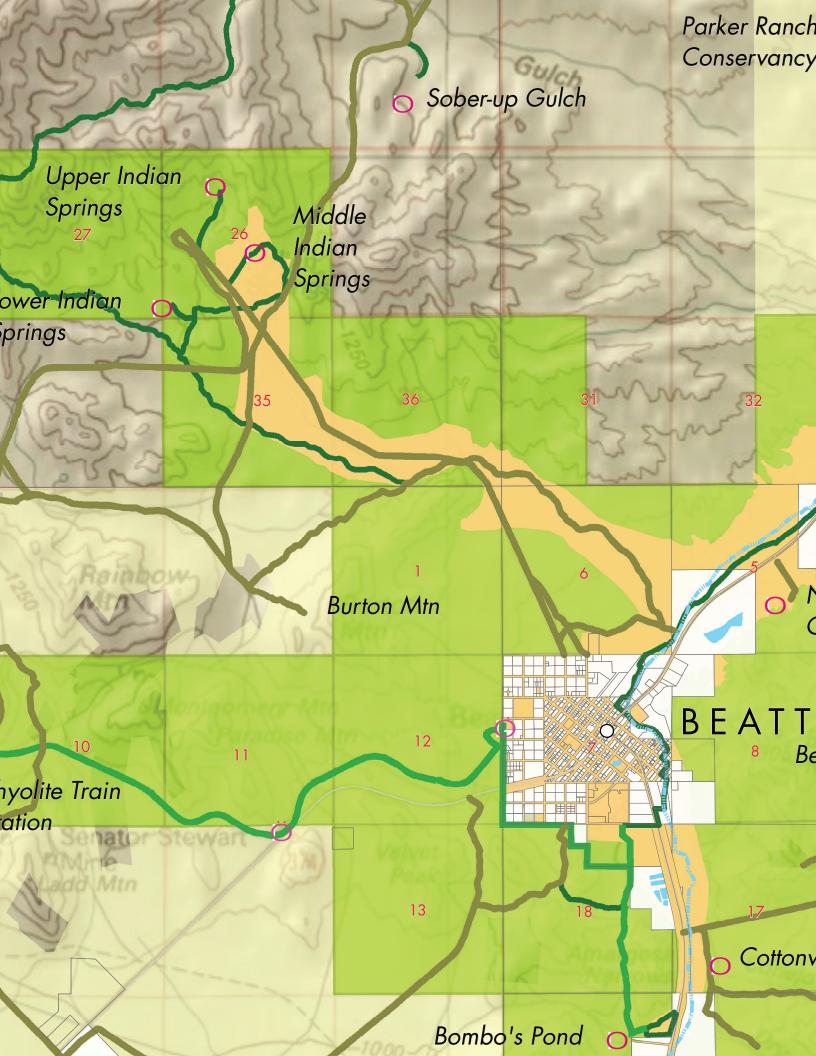
"The effects of the flood were far-reaching. Transportation was crippled; at least 18 bridges along the Missouri and Mississippi rivers were closed; roads buckled and were washed out; 500 miles of flooded track caused the rerouting of more than 1,000 trains; and 5,000 barges on the Mississippi were idled. Close to 7.1 million acres of farmland were flooded or saturated, resulting in a \$2.5 billion dollar crop loss. Drinking water was contaminated and water plants damaged; 58 systems serving more than 500,000 people cut off all service and plants serving more than 1 million other people were severely affected. Flooded wastewater systems daily dumped hundreds of millions of gallons of untreated sewage into the rivers."

"Many floodplain experts argue that the terminology itself- a 100-year frequency flood-is misleading and creates a false sense of security. Floods account for more than any other natural disaster in the United States, with the exception of some prolonged droughts. In most years, floods damages constitute the bulk of federal financial aid for disasters. From 1978 to 1987, NFIP paid out flood insurance claims totaling \$2.6 billion. More than 31 percent of the claims were for damage outside the 100-year floodplain. In the Midwest, 40 percent of the buildings that were flooded last summer lay outside the 100-year floodplain."

B. Bolitzer, Department of Economics University of California, and N.R. Netusil, Reed College, June 1998. "The Impact of Open Spaces on Property Values in Portland, Oregon."

"Open spaces such as public parks, natural areas and golf courses may have an influence on the sale price of homes in close proximity to those resources. The net effect of open-space proximity is theoretically uncertain because the positive externalities associated with proximity such as a view or nearby recreation facility might be out weighed by negative externalities, for example, traffic congestion and noise. The impact of open-space proximity and type is examined empirically using a data set that includes the sales price for homes in Portland, Oregon, a major metropolitan area in the United States, geographic information system derived data on each home's proximity to an open-space and open-space type, and neighborhood and home characteristics. Results show that the proximity to an open-space and open-space type can have a statistically significant effect on a home's sale price. These estimates provide an important step in quantifying the overall benefit from preserving open spaces in an urban environment."







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