

Oasis Valley Conceptual Trail Plan

Beatty, NV

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1. Overview

This conceptual plan provides guidance and suggestions for the creation of a shared-use trail system in the Oasis Valley near Beatty, NV. This trail system will capitalize on the growing recreation demand for trails that are optimized for mountain bicycling. Most of the open lands surrounding Beatty are Bureau of Land Management (BLM) parcels, part of the Beatty River Corridor, or are owned by community-minded individuals. These entities are motivated to transform the Oasis Valley into a world-class mountain biking destination.

The closest international airport to Beatty is McCarran International in Las Vegas, NV, 124 miles to the south and less than two hours via US Hwy 95. Oasis Valley and Beatty lie at the eastern edge of Death Valley National Park and are known as the gateway to it. It is one of America's most iconic National Parks and attracts nearly one million visitors to the area. Many of these visitors come from Las Vegas, the Bay Area and Los Angeles, all of which lie within a six-hour drive of the study area. These population centers contain at least 20 million inhabitants of which we can estimate, according to the Outdoor Recreation Participation Report 2009, a minimum of 3.4% are mountain bike enthusiasts and therefore potential visitors to a top level mountain biking destination.

In this concept plan, the town of Beatty is envisioned as the gateway to an extensive network of purpose built trails. These trails will radiate from the town itself and from selected access points, trailheads, and parking areas. 14 zones have been identified as having the terrain and proximity to develop trails for mountain biking and other non-motorized use.

Target Zones

1. Beatty
2. Fluorspar
3. Rhyolite
4. Rainbow Mountain
5. Sober Up Gulch
6. Spicer Ranch
7. Beatty Wash
8. Perlite Canyon
9. Secret Pass
10. Trans Vaal
11. Bullfrog Hills
12. Oasis Mountain
13. Springdale Mountain



14. Grapevine Mountains

About IMBA

The International Mountain Bicycling Association (IMBA) is a 501(c)(3) non-profit educational association whose mission is to create, enhance, and preserve great mountain bicycling experiences. Since 1988, IMBA has been bringing out the best in conservation-minded mountain bicyclists by encouraging low-impact riding, volunteer trail work participation, cooperation among different trail user groups, grassroots advocacy, and innovative trail management solutions.

Based in Boulder, CO, and with staff distributed across the country and the world, IMBA meets its goals through programs, notably the Trail Care Crew (TCC) and Trail Solutions (TS) consulting teams. IMBA has a strong history of working with the BLM, with notable projects in the King Range National Conservation Area, CA; the Sandy Ridge Trails outside of Portland, OR; Sun Valley Area, ID and The Black Canyon Trail outside of Phoenix, AZ. In 2003, the IMBA TCC and TS teams won Nevada State's "Best Trail Project" award with a shared-use collaboration and makeover construction of the Evans Creek Canyon Trail in Reno.

2. Project Approach and Objectives

This project is crafted with the idea of developing a wholly new network of trails that are *singletrack* or *purpose-built trails*. *Clusters* or *stacked loops* of trails will be crafted that feature sustainable design and construction, and meet conservation, education, and recreation objectives. These loops will create a progression of experiences and challenges as trail users explore them in more depth with each visit. Individual segments must provide consistent and expected experiences. The design of this system is similar to that of a well-designed ski trail system, with a collection of easier/green, more challenging/blue, and most challenging/black trails. This network will be enhanced by unique cultural and natural resource interpretation facilities, efficient way-finding signage, and a variety of trail types. These characteristics will appeal to a broad cross section of off-road bicyclists, from family-oriented entry-level riders to highly skilled enthusiasts.

While the quality of the trail experience provided is paramount, as a "destination" trail system, quantity must also be considered. To draw trail-focused visitors from distant metro areas, this approach recommends that final implementation include 8 - 30 miles of high-quality singletrack trails at each trail network zone. Combining several trail network zones with links may eventually bring Beatty up to between 100 - 200 miles of singletrack trail. This will provide a wide enough variety of



experiences for multiple days of recreation with minimal need to revisit the same trail twice.



Objective: Educating the public about conservation by providing a high-quality recreation experience in the Oasis Valley

Sustainably designed singletrack is one of the best ways for the Oasis Valley to satisfy its core mission. Singletrack trails can be sculpted to enhance and interpret the landscape. Weaving through the canyons, past old mines, along the rim country and stopping at the many springs. Purposefully designed and well-built trails can lead visitors to the multitude of unique sites and viewpoints surrounding Beatty. This intimate way of traveling across the landscape provides an unparalleled opportunity to take in the cultural, natural, and geological history of the area.

This use of the land for sustainable recreation will also highlight the area's successful history of natural resource protection in partnership with land use. Conservation efforts by the group STORM-OV (Saving Toads thru Off-Road Racing, Ranching & Mining in Oasis Valley) have resulted in preventing the threatened



Amargosa Toad from falling onto the Endangered Species list. Their work to restore habitat, create safe havens for migratory birds and remove invasive vegetation has created a model for progressive land stewardship.

STORM-OV and the local community have partnered with the “Tough Mudder” adventure/obstacle race series to hold an event on the Spicer Ranch near Beatty.

With thousands of participants, the event provides a critical economic boost for the community and forms an excellent case for why recreation, events and conservation can work hand in hand.



Objective: Economic benefits for the community

High-quality singletrack trails will attract mountain bicyclists, hikers, and trail runners. The development of *model trails* and other high demand trail types will create the experiences that draw visitors to the Oasis Valley and establish it as a recreation icon. Through careful planning, design and construction, the Oasis Valley trail network must become the basis for a new economic engine, which sustains the community. It is critical to attract and satisfy visitor’s desires with the full range of experiences for which they are looking. An inexperienced or not physically fit visitor may be forced to turn back if they encounter a mandatory obstacle on an otherwise “green”-rated trail. Similarly a high level rider may not bother to visit a destination



that lacks the physically challenging and technically demanding trails that an established location such as Sedona, AZ, is famous for.

A well-designed trail system that includes clear designation of trails that are compatible for large-scale events also provides opportunities for events and competitions throughout the year. Having a well-known event initiates good community marketing, draws visitors, boosts the area economy and creates recreation based employment opportunities.



Objective: Enhance community health and connect the population with the surrounding environment

The citizens of Beatty should have safe and easy access to healthy recreation options. Singletrack trails should tie directly into the community and provide opportunities for citizens to be active. These health enhancing activities are a vital asset to any community and are proven to improve quality of life.

Objective: Become an IMBA Ride Center®

IMBA Ride Centers® are extensive trail networks, masterfully designed for mountain bicyclists of every skill level and built by professional trail builders. They



serve as social and educational hubs, where visitors can connect and learn new riding techniques. Ride Centers® provide the full range of mountain bicycling experiences today's riders crave, from long singletrack journeys to family-friendly loops, and areas with expertly designed technical challenges for advanced riders.

Oasis Valley Ride Center - By creating a high-quality purpose-built mountain bicycle trail system Oasis Valley has an opportunity to become an IMBA Ride



Center®. This designation represents IMBA's recognition of large-scale mountain bike facilities that offer something for every rider. As an IMBA Ride Center®, Oasis Valley can successfully promote itself as a well-respected destination that offers a complete mountain bicycling experience; from backcountry adventures to shuttle-served gravity trails, and from experts-only to family-friendly singletrack. With a ride center designation in place, visitors can be assured that they can expect to encounter the best the sport has to offer.

Being designated as a Ride Center® would clearly identify the Oasis Valley as being among the best places in the world to go mountain bicycling. This means the community will see an increase in both visitors and improvements in quality of life for residents because of better opportunities for outdoor recreation.

Developing the trails and facilities that are required for Ride Center® status are not insignificant. In the Oasis Valley's case the costs will be considerable because of the



current lack of legitimate sustainable purpose-built trails. Actual costs for constructing trails and amenities to meet the requirements are estimated at \$1.5 – \$3.0 million dollars over the next ten years.

Tourism Benefits - Ride Center® bring economic benefits to their host communities. Given the Oasis Valley's proximity to major population centers it is not unreasonable to assume that the Beatty Oasis Valley Ride Center® could have, in the future, up to 80,000 – 120,000 visitors annually coming for the purpose of riding the trails. It is assumed that most of these visitors will be staying at least one night and possibly two.



IMBA Ride Center Success Stories

Park City, UT

Several years ago, IMBA was searching for the ideal location to host the organization's biannual World Summit mountain bike gathering. The winning candidate was Park City because it offered a successful local mountain bike community, diverse riding opportunities, and jaw-dropping natural beauty. That was 2008, and since then Park City has continued expanding and improving its facilities, so much that IMBA enthusiastically awarded it the highest level of Ride Center status. How did Park City become a gold-level designation? Through a



combination of community support, master planning, and detailed execution. No location better exemplifies the Ride Center ideal of offering great options for any level of rider and any style of riding. From standout beginner-to-intermediate trails to technical challenge and expert-only terrain, the options are expansive, with the trails quickly being augmented by lift-served downhill runs and community bike parks. Not surprisingly, Park City offers all the lodging and dining options you'd expect from a world-class resort. At the heart of it all, the IMBA-affiliated Mountain Trails Foundation pulls riders into a true mountain bike community and keeps them energized with new projects. It all works together at Park City and has resulted in the resort being the “gold” standard for mountain biking.



Oakridge, OR

The Oakridge Area Ride Center embodies the notion that the whole can be more than the sum of its parts. It's an incredible place to ride, not just because of the gorgeous trails but because the entire community supports the network of trails that has brought life to this community.

When logging on federal lands decreased in the 1980s, dozens of towns in Washington, Oregon, and northern California became threatened. Many are former shells of themselves, with mills shuttered and main streets vacant. Oakridge was in a similar situation but a visionary group of citizens refused to give up on their hometown and instead began to look to mountain bicycling as a niche activity to provide them a livelihood. Over many years and countless volunteer hours, the City of Oakridge has firmly established itself as a “must ride” stop for the fat-tire crowd. With this inspiring backstory it is no surprise that Oakridge is a silver-level Ride Center. The trails range from adventurous backcountry routes to close-to-town loops, with the stunning Cascades scenery as a backdrop. Local businesses have



responded by developing bike-friendly lodging, an amazing pub geared towards hungry and thirsty riders, an extensive shuttle service to deliver the goods, and world-famous races and events. With the upcoming addition of more purpose-built trails the community is well on it's way to being upgraded to gold-level Ride Center status. That Oakridge is an international destination is not an exaggeration. Every year, visitors travel from Canada, Europe, Asia, and Australia to ride the epic singletrack. The famed Mountain Bike Oregon festival continues to be a mainstay of the town, providing recreation-based employment opportunities for residents in a town that refused to accept the fate of many of its timber-dependent neighbors, resulting a rural community that is determining its own future.

3. Existing Conditions and Opportunities

A wealth of public lands and cooperative land management

Beatty is circled by extensive terrain that is appropriate for trail development and managed by the Bureau of Land Management (BLM). The BLM has already indicated that it fully supports this initiative to develop a recreational trail system on BLM lands and connect them to the community. This plan should be integrated into the BLM's upcoming Battle Mountain District Resource Management Plan Revision review process. Some of these areas are being used for active mining concerns but these can be avoided without affecting the overall scheme.

Unique history

The long history of mining in the Oasis Valley has left the landscape dotted with sites of historical interest. Old mines and the equipment need to operate them can be found abandoned and weathering away. These sites create unique control points that will draw users to them. Good trails use these interesting features to interpret the land and its' history.

Conservation success story on display

The springs that have been restored to maintain habitat for the Amargosa Toad also have become oasis in the desert. As sources of fresh water, they are magnets attracting migratory neotropical birds and a variety of animals as well as humans. Trails that connect these springs as a network will create an intriguing challenge for many peoples concept of what a desert is.

Suitable terrain

The area has good topography for the construction of sustainable purpose-built mountain bicycle trails. The steepened terrain provides great conditions for trail work and minimal maintenance if trails are carefully planned and well constructed.



Hut-to-hut

The large number of springs provides an excellent theme for a hut-to-hut biking route. These types of trips have been growing in popularity over the last few years. Hut-to-hut trips are usually 25 - 200 mile trips that require 2 - 10 days to complete. Each day users stop for the night at small cabins or shelters that are stocked with supplies and sleeping areas. The springs and historical mining sites of the Oasis Valley would be perfect places to locate these shelters. These types of routes usually rely on a mixture of doubletrack and singletrack with a ratio that encourages at least 50% of the trails, including all of the descents, are preferably singletrack. This provides an opportunity for employment as well. Successful examples would be the San Juan Huts in Colorado and the Cascade Huts in Oregon.

Good road access

The trend in mountain bike trails is towards gravity-oriented trails. These kinds of trails are primarily descending routes that rely on easy climbs or shuttles to access the highest entry point. The roads around Beatty although mostly gravel or dirt, are well maintained and provide ready access to the higher terrain. This is especially valuable for accessing Fluorspar Canyon and Rainbow Mountain.

Shuttle business

Mountain bikers are increasingly attracted to gravity trails. To get them to the top, entrepreneurs in many destinations have seized the opportunity and have begun offering a shuttle service. Transporting riders and their bikes has become a lucrative business in places such as Moab, UT, and Downeyville, CA.

Events

The community has already proven the value of promoting events with the Tough Mudder bringing thousands of participants to the area. Events are excellent tools for attracting visitors and showcasing a destination. The Spicer Ranch has been used for this purpose in the past and it would be an excellent venue for new events such as mountain bike races or festivals. It's proximity to BLM lands makes it well suited as an event focal point.

Good Weather

The climate is arid, receiving less than five inches of rain in the average year. These sunny skies make the Oasis Valley an attractive place for visitors from wetter areas such as western Canada and the Pacific Northwest. The lack of rain also results in dry soils that may resist compaction. When rain does fall it creates significant



erosion, especially near existing drainage. These flood zones are not optimal locations for the siting of trails and should be avoided if possible.

Strong Partnerships and funding potential

The community has shown that strong partnerships can create powerful results. The partnership between STORM-OV and the BLM is an excellent example. These partnerships can also become the seed for generating project funding. Potential partners for the development of this trails concept include:

- Bureau of Land Management
- United States Fish & Wildlife Service
- Nevada Division of Wildlife
- National Resource Conservation Service
- Environmental Protection Agency
- The Nature Conservancy
- Amargosa Conservancy
- Tough Reno Race (Best in Desert)
- Stagecoach Casino
- D&H Mining
- Valley Electric
- Barrick Mining of North America Inc.
- Corvus Gold
- International Mountain Bicycling Association



Rhyolite ghost town and railroad grade

The ghost town of Rhyolite is just a few miles west of Beatty. It is dotted with the ruins of old homes, hotels, businesses, and a very iconic house built with glass bottles. The old railroad grade connecting Rhyolite with Beatty should be developed as an “easier” family oriented mountain bike ride. This trail should be non-motorized and easements across private property should be secured as soon as possible.

4. Proposed Trail Concepts for Target Zones

The following are guidelines for the construction and maintenance of existing and future trails in and around the Oasis Valley. The natural environment is dynamic and unpredictable. The nature of recreational trails and roads, the desired user experience, and the constant forces acting on natural surface trails and roads make strict standards untenable and undesirable. As such, the guidelines below are simply that: best management practices that should be followed within environmental constraints.

Develop Sustainable Trails



A sustainable trail balances many elements. It has little impact on the environment, resists erosion through proper design, construction, and maintenance, and blends with the surrounding area. A sustainable trail also appeals to and serves a variety of users, adding an important element of recreation to the community. It is designed to provide enjoyable and challenging experiences for visitors by managing their expectations and their use effectively. Following sustainable trail design and construction guidelines allows for high-quality trail and education experiences for users while protecting the land's sensitive resources. For additional trail design, construction, and maintenance techniques, refer to *Trail Solutions: IMBA's Guide to Building Sweet Singletrack*. These guidelines are appropriate for any hike, bike, or equestrian trail.

Market Segmentation and Corresponding Mountain Bicycle Trail Types

In the years since the late-1970s when the first mountain bicycles were put to use the market has matured and diversified. A well thought out and executed conceptual plan creates potential for these diversified user bases to successfully coexist. Oasis Valley has potential for trails that cater to all of the following riding styles and bicycles that currently exist:

Cross-country (XC)

Characterized by the lightest-possible bicycles with a focus on pedaling efficiency over comfort or control, XC riding is primarily the domain of racers who compete on less-technical trails and for whom physical fitness is more important than riding skill. Prefers narrower traditional singletrack trail that is often multi-use.

Trail (TR)

Utilizing bikes with increasing amounts of front and rear suspension (4" – 5"), pedaling efficiency is marginally sacrificed for more stability and comfort. Riders in this category frequently endeavor themselves to long backcountry rides where solitude, challenge, and self-sufficiency are key. Prefers narrower traditional singletrack trail that is often multi-use but is not averse to purpose-built MTB trails.

All Mountain/Enduro (AM)

Typically sporting between 5" – 7" of suspension travel in both the front and the rear of the bicycle, the AM category rider prizes descending but expects to use his or her own power to gain all or some of the necessary elevation. The trails most frequently used by AM bicyclists include both multi-use trails and bike-specific trails that optimize the fun and efficiency of a bicycle, particularly the undulating feel of a serpentine trail. This is currently the largest portion of the mountain bicycle market by volume of sales.

Freeride (FR)

With growing amounts of front and rear suspension, typically between 6" – 8", freeride mountain bikes focus on control and maneuverability in technically



challenging conditions, including man-made and natural jumps, drops, rocky areas, and steep terrain. Almost all of the trails ridden with FR bikes are gravity-fed as the bikes are not designed for uphill trail riding efficiency. Riders frequently wear more protective gear than those riders in previous categories, including full-face helmets, goggles, and body armor.

Downhill (DH)

A longer wheelbase and up to 10" of suspension provide downhill bikes with stability at high speeds. Used in the most technically challenging and fastest terrain, downhill riders and racers also typically wear full-face helmets, goggles, and body armor. Terrain can be naturally occurring or man-made.

Other categories

Other styles of mountain bicycling with varying degrees of participation include dirt jumping, slopestyle, four-cross, and dual slalom. The continued evolution of the sport ensures that categories will combine and as well as mutate, driven by the symbiotic combination of improved technology, bicycle-specific trails, and athletes pushing the boundaries of what is possible on a bicycle. These riders tend to prefer the purpose built terrain of bike parks. These bike parks usually include pump tracks, dirt jumps, slopestyle courses and skills features such as log rides or rock obstacles.

Skill level

The ridership within each category can be divided into the following groups: novice, beginner, intermediate, advanced, and expert. Using a basic bell curve distribution it can be assumed the majority of mountain bicyclists in any category and as a whole are intermediate riders.

Target Zone Concepts

Each Target Zone, lends itself to a particular type of trail amenities that will appeal to different trail users and their desired experience goals. Each zone has been assigned a priority for development:

- Priority 1 – Initiate development in the next 1-3 years
- Priority 2 – Initiate development in the next 4-7 years
- Priority 3 – Initiate development in the next 8-10 years



Oasis Valley Conceptual Trail Plan

Target Zone	Priority	Conceptual Trail Amenities
Beatty	1	<ul style="list-style-type: none"> Community Bike Park/Skills Area Beatty River Trail Connectivity to Rainbow Mountain, Fluorspar Canyon, Perlite Canyon, Rhyolite Zones Rhyolite Rail to Trail
Fluorspar	1	<ul style="list-style-type: none"> Gravity-based trails – AM, FR, DH Hut to Hut route
Rhyolite	1	<ul style="list-style-type: none"> Rhyolite Rail to Trail Hut to Hut route
Rainbow Mountain	1	<ul style="list-style-type: none"> Flow-based trails – TR, AM Hut to Hut route Traditional singletrack trails – XC, TR
Spicer Ranch	1	<ul style="list-style-type: none"> Base for competitions, events and festivals Flow-based trails – TR, AM Hut to Hut route Traditional singletrack trails – XC, TR
Perlite Canyon	1	<ul style="list-style-type: none"> Hut to Hut route Traditional singletrack trails – XC, TR Flow-based trails – TR, AM
Sober Up Gulch	2	<ul style="list-style-type: none"> Flow-based trails – TR, AM Hut to Hut route Traditional singletrack trails – XC, TR
Beatty Wash	2	<ul style="list-style-type: none"> Hut to Hut route Traditional singletrack trails – XC, TR
Oasis Mountain	2	<ul style="list-style-type: none"> Hut to Hut route Traditional singletrack trails – XC, TR
Trans Vaal	3	<ul style="list-style-type: none"> Hut to Hut route Backcountry singletrack trails – XC, TR
Bullfrog Hills	3	<ul style="list-style-type: none"> Hut to Hut route Backcountry singletrack trails – XC, TR
Secret Pass	3	<ul style="list-style-type: none"> Hut to Hut route Traditional singletrack trails – XC, TR
Springdale Mountain	3	<ul style="list-style-type: none"> Gravity-based trails – AM, FR, DH
Grapevine Mountains	3	<ul style="list-style-type: none"> Hut to Hut route Backcountry singletrack trails – XC, TR



5. Next Steps

Since the region surrounding Beatty is vast and open, the most important next step is to clarify exact access points, trailheads, parking hubs, staging areas, and campgrounds, Hut-to-hut locations, springs, viewpoints and other points of interest. There may be parking areas in town that are perfect for neighborhood access, but they are not appropriate to contain large visitor intrusions. For these types of events the Spicer Ranch may be a valuable amenity. The Beatty River Trail would provide valuable connectivity to other trail zones as well as a “family” trail experience. Meanwhile, larger parking hubs that allow for a growing trail network and space for commercial operators such as bike rentals and bike shuttles should be sought out.

Once these *hubs* are pinpointed, trail corridor design begins, typically by mapping, collecting GPS data points, and finally flagging potential corridors deemed acceptable by the land manager. In the case of BLM lands, any new trail development will undergo National Environmental Policy Act review, and a series of walk-throughs to justify the layout.

It is optimal to flag the corridors just before the review team is available to physically tour the flag-line, so as not to lose flags from sunlight, wind, animal, human, and natural elements. Design and flagging costs will depend on conditions, accessibility, terrain, time of year, and other factors. A 12 – 20 mile initial trail clearance goal is a good target for the first season of trail design and construction.

The synergy of creating traditional shared-use singletrack trails, supported by community bike parks and combined with enticing gravity trails, will guarantee a unique destination, drawing riders from afar while giving local families and residents an exhilarating outdoor activity close to home. The Oasis Valley has no existing singletrack trails. This allows for a fresh start and, if well planned, the opportunity to create an ideal mountain biking destination. For the short term, some double track roads and routes may be included in the overall design to reach more trail mileage and provide easy trail access.



Appendix A: Map of Target Zones

