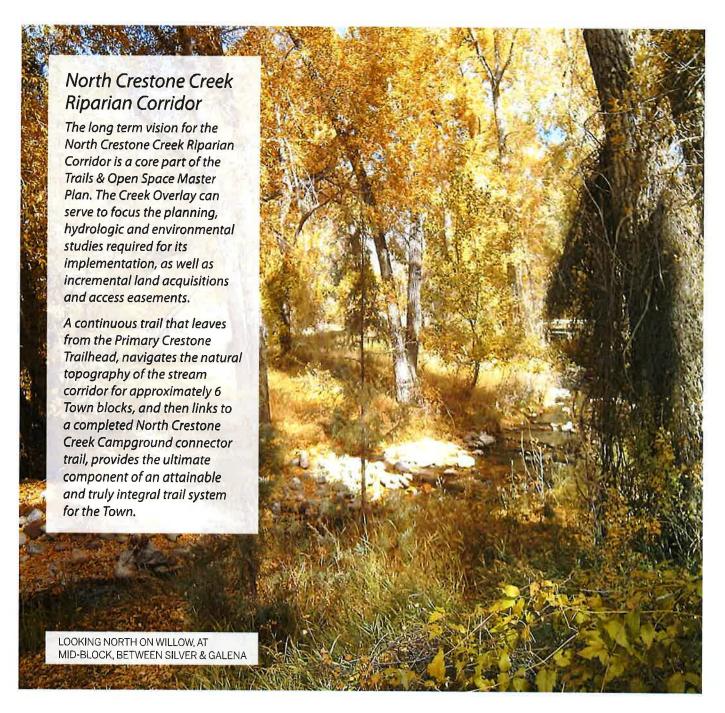


PREPARED FOR THE TOWN OF CRESTONE
DECEMBER 31, 2016



This Project is funded in part by an Economic Development Grant provided by the San Luis Valley Regional Council of Governments

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Cover spread of Crestone's "Fourteeners": Challenger Point 14,081'; Kit Carson Peak 14,165'; Crestone Peak 14,294'

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#### INTRODUCTION

### Town of Crestone: Trails & Open Space Master Plan

The objective for the Trails Master Plan for Crestone is twofold. First. the Town's trails are intended to meet the needs of those who reside in-and-around the Town, and call Crestone their home. For these, the establishment of a system of trails within the Town will foster a culture of hiking, preserve and make accessible precious wildlife and native vegetation areas, offer safe routes to the Charter School, and serve the needs of residents who might not otherwise be aware of, or able to navigate, some of the Town's lovely riparian and upland desert habitats.

Secondly, the Town's trails system reaches out and connects to existing and future trails on surrounding jurisdictions, assuming responsibility as a primary wayfinding, provisioning, and hospitality hub for visitors who come to the area to access the extraordinary features of the region. This objective is not only a privilege, but a vital necessity to the overall sustainability of our rural community.

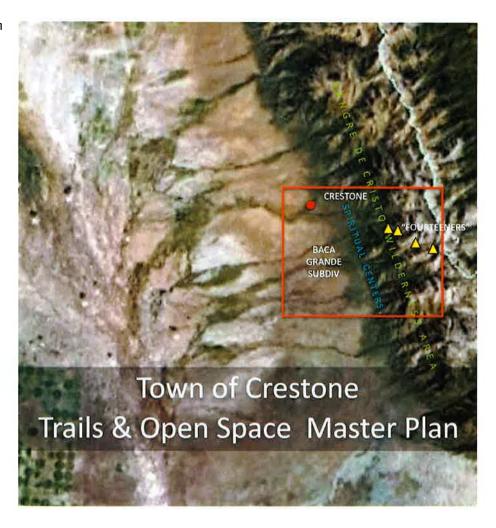
Crestone – whether by chance or fate – finds itself today fortuitously positioned at the very heart of a vast treasury of protected public lands and outdoor recreational opportunities. Given the Town's remote location, its powerfully austere setting, and its destination as an international center for contemplative retreats, the Town of Crestone possesses an unparalleled allure for those seeking deep, personally meaningful adventure.

The Trails Master Plan provides a thorough analysis of potential trail assets and opportunities within Town Limits, and offers recommendations for immediate and long term trail routes and connections. In addition the Plan presents an opportunity to preserve some 30 linear blocks of platted right-of-way in permanent open space. Lastly, the Master Plan places strong emphasis on the opportunities presented by the regional context within which the Town is situated. We believe the financial capacity to implement the components of this Plan within the Town Limits will hinge, in large part, upon our ability to capitalize on these external assets.

The proposed Eastern San Luis Valley Trail System (ESLVTS) creates a unique opportunity for the Town to become the central 'hub' and gateway for information, orientation, and services for visitors seeking access to this regional trail network. By working together with the neighboring Baca Grande Subdivision and with the Town's regional partners, Crestone can become a catalyst for – and ultimately a beneficiary of – this future Eastern San Luis Valley Trail System.

We conclude that by creating a bona fide, natural, non-commercialized. non-motorized pathway system - for birding, walking, hiking, photography, environmental education, biking, etc. - not only will a culture of walking and hiking be nurtured within the community, but in such an environment visitors will experience the power and pristine beauty of these extraordinary surroundings. In this exchange, the need for support services will grow and will be met, as locals respond to new opportunities. This relationship – when undistorted by other factors - can be mutually productive and dynamic for the community.

As a consequence, the most important recommendation of this report is that the Board of Trustees formally adopt this Crestone Trails and Open Space Master Plan, (with amendments and modifications as necessary). By adopting this Plan as a statement of Policy, the Town is declaring its intention with respect to the preservation of wildlife and native vegetation areas, the importance



of the North Crestone Creek Riparian Corridor, the willingness to collaborate with local and regional partners, and the desire to share with others a taste of the secret elixir that satisfies all hunger – the wilderness experience.

Being surrounded by one of the largest interconnected wilderness areas in the lower continental U.S., Crestone is already as a "destination" trailhead comparable to Telluride, Aspen or Crested Butte.

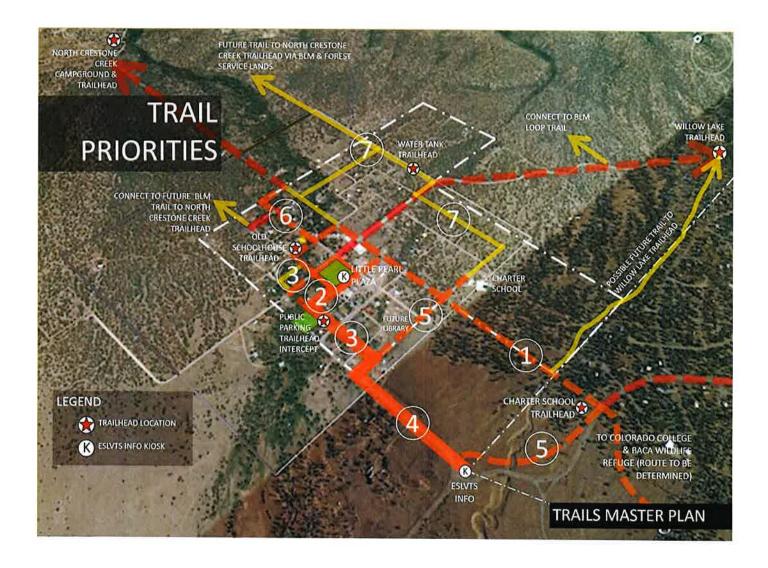
#### SUMMARY OF RECOMMENDATIONS

### Summary of Recommendations

### Introduction

The Trails planning process included public meetings held on two occasions to present the preliminary and final plans. These meetings were conducted to solicit public input and comments. In addition, 44 individuals – representing a cross section of citizens, local hikers, business owners, Town officials

and ESLVTS Coalition members – were invited to participate in a review and discussion of the proposed Trails Master Plan. The results from this meeting were shared with the target group for their review. In particular we would like to thank Kizzen Laki and Jim McCalpin for their special contributions.



### Summary of Recommendations

- Adopt Crestone Trails & Open Space Master Plan. Include provisions for future changes and modifications to the Plan based on neighborhood participation, demographic changes, and future growth and development.
- Establish Trail Priorities within the town, The Illustrative Trail Priorities map to the left suggests a sequence in which trails can be constructed, recognizing the pattern of existing social trails and the importance of safe routes to school for youth. The Plan's two proposed IN-TOWN LOOP TRAILS and three CONNECTOR TRAILS represent the optimum combination of riparian habitat, open space opportunities and inviting hikes.
- Coordinate trail activities with Baca Grande Subdivision and Eastern San Luis Valley Trails Coalition. Become a key and effective Coalition Partner for the region
- Explore Funding Sources and submit Planning Grant Applications
- Develop and execute formal agreements as required with adjoining Charter School and Baca Grande Subdivision to permit implementation of Priority 1: Charter School Trail.

- Retain Consultant for Land Use Planning for Town of Crestone Tract 1 (adjacent to Charter School Tract 2). Include representation from Charter School and Baca Grande Subdivision in planning process, as well as private property owners. The goal of this work is to optimize street alignments and development potential, accommodate natural terrain and drainage, protect tree stands, and define open space and trail corridors.
- Retain Consultant for Design of Charter School Trail. Issue Invitation for Bids, award contract, and construct trail.
- Maintain ongoing dialog with Coalition partners and the Baca Grande Subdivision regarding the opportunity for development of two regional connecting trails and associated trailheads – identified in the Trails Master Plan as the Lower South Crestone Creek Trail, and the Campground Trail.
- Strategically implement a consistent trails wayfinding system that is compatible with both public lands standards and the Town's signage system. Focus on quality, effective communication of information, and a reliable maintenance program. Add interpretive and educational signage to the Trails System over time as budgets permit.

- Keep trail types few and standards basic. Recommended trails are of three types. Experience has shown that proper construction is essential, without over-building. These trails are durable under use, uncomplicated to maintain, and efficient in terms of cost/benefit.
- Identify "areas of interest" for future acquisition and potential easements within the proposed North Crestone Creek Overlay. Future floodplain mapping along North Crestone Creek will undoubtedly render some areas costly to flood-protect or un-buildable. Opportunities for incremental acquisition of lands and R.O.W. trades for specific parcels can result in improved private property buildability, reduce flooding hazards, and optimize public trail opportunities.
- Retain Consultant to perform a study of the Burnt Gulch drainage.
   Explore the potential for a nonmotorized multi-use trail along this natural drainageway. This trail would connect the Cedar Street/ Golden Avenue Charter School Trail with the Water Tank Trailhead at Galena and Pinion.

#### PART ONE: REGIONAL OVERVIEW

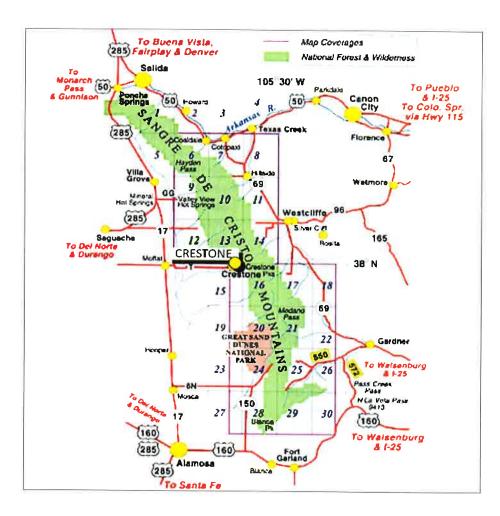
### The Sangre de Cristo Wilderness Area as a Regional Asset

The Sangre De Cristo Wilderness Area extends 70 linear miles, from Poncha Springs to Mount Blanca. At 221,000 acres, it represents the state's third largest wilderness, and when we include abutting Forest Service, BLM and US Fish and Wildlife lands, it becomes one of the largest contiguous open spaces in the continental U.S. containing 180 miles of scenic hiking trails.

Extensive studies have been done to ascertain the impacts and importance of our national forests and their contributions to quality of life and economic development through recreation. Visitors to all of Colorado's public lands combined contribute \$21 billion annually to the State's economy.

### U.S. Forest Service Trailheads

Regionally important Trailheads in the Crestone vicinity include San Isabel, North Crestone Creek, Willow Lake, Cottonwood Creek and Liberty Creek. In this report we focus on the North



Crestone Creek and Willow Lake/ South Crestone Creek access points.

North Crestone Creek is one of the most important trailheads in the Rio Grande National Forest, and currently provides 13 camping sites. According to the Forest Service (USFS), a campground with 10-12 sites can

generate more than \$1 million in annual revenue. A study conducted in 2001, estimated that the amount of money each visitor to the Rio Grande National Forest spent per visit within a 50 mile radius of the recreation site amounted to over \$1,000 in food, lodging and transportation costs.

### The Wilderness Act of 1964:

The term wilderness is defined as "an area where the earth and community of life are untrammeled by man, where man himself is a visitor who does not remain" and "an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions."

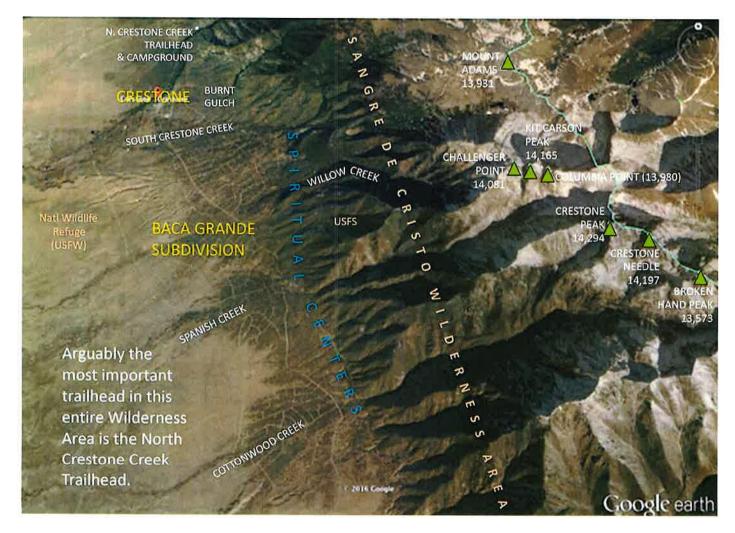
# The "Fourteeners" as a Major Regional Asset

Dominating the backdrop of the Town of Crestone are several of the most important mountaineering objectives in the lower 48. These include four of Colorado's 54 "Fourteeners", Kit Carson, Challenger Peak, Crestone Peak, and the Crestone Needle. These peaks are the most highly visited destination within the Sangre de Cristo Wilderness Area.

Kit Carson and Challenger Peak are accessed directly from the Town of Crestone via east Galena Avenue. Virtually all of those coming to climb these peaks, in their quest to summit all 54 of the States "Fourteeners", will leave from the Willow Lake/South Crestone Creek Trailhead.

The economic impact of roughly 260,000 people summiting the

"Fourteeners" each year is estimated at over \$70 Million statewide. The Crestone peaks average about 3,000 ascents per year – a number that can surely grow – and yet at an average of \$270/climber that's over \$800,000 contributed to the statewide economy, a major percentage of which enters the local economy.



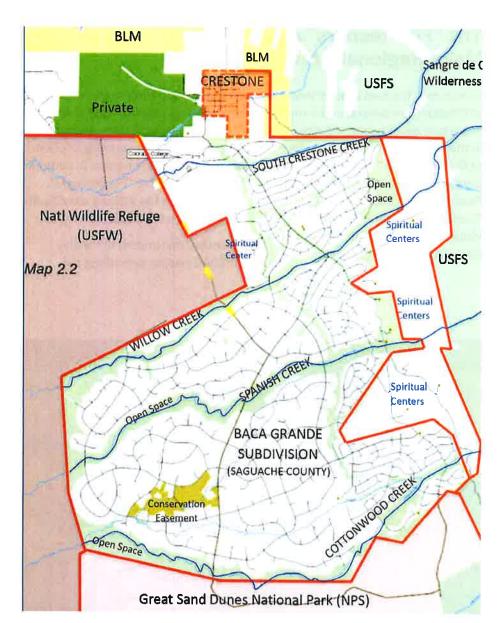
#### PART ONE: REGIONAL OVERVIEW

### Baca Grande Subdivision

The single most important partner for meaningful development of a long term interconnected trail network in the region may be the Baca Grande Subdivision (BACA). Compared to the estimated population of the Town of Crestone (TOC), at less than 140 (2015 census), this complex and diverse community of roughly 1,500 is served by the Town of Crestone. The Baca Grande Subdivision was created in the 1970's when delicate desert riparian areas and wetlands were not well understood. As a result, institutions such as the Manitou Foundation reduced the number of platted lots and ultimately helped create the Baca National Wildlife Refuge to the west in an attempt to mitigate the environmental impacts.

The primary challenge of interfacing with the Baca Grande Subdivision will be the private/public interface points. The subdivision has a detailed series of open space overlays on each of its main riparian corridors and some of these have intermittent social trails. All of these abut the USFS, but access has been cut off at Spanish Creek and Cottonwood Creek.

Currently, a well-used and effective trailhead at the cul-de-sac atop Pinecone Drive provides access for members of the POA to reach the



Willow Lake trailhead. Another series of well-established social trails links the Charter School in the Town of Crestone to the Baca.

The TMP recommends that a new trailhead and permanent Charter

School Trail be established, and a Lower South Crestone Creek Trail be extended from the Willow Creek Trailhead south to this new trailhead within the existing BACA open space.

### Baca National Wildlife Refuge & San Luis Valley Avian Corridor

While Crestone can look towards hikers and backpackers as the core user groups for trail linkages to the USFS and BLM lands to the east, the Town is bordered on the west by the 79,000 Acre BACA National Wild Life Refuge. The refuge attracts birders and other diverse visitors that will stay in Crestone and use the BACA and accommodations there. Local Pathways in town should therefore serve both hikers as well as birders and people interested in local ecology.

To this end the initial phases of the proposed North Crestone Creek overlay should be coordinated with the Preserve and the College to provide a continuous trail narrative.

Studies show that 80% of all habitat is directly connected to riparian corridors, thus a delicate balance between preserving habitat and providing a quality nature trail experience should be encouraged.

As a key player in the ESLVTS, the Refuge will provide an increasingly important role to the Town of Crestone as its visitor programs and trail networks are developed. Through their partnership with students at the Colorado College Campus they can provide on the ground interactive studies that will enhance and help establish the Town of Crestone as a destination center for nature lovers nationwide.

Challenges for the BNWR include trail construction. The sandy soils and large trail distances indicate that some sort of surfacing appropriate for bikes would be beneficial. However, this is likely to conflict with habitat and landscape preservation. Another possibility may be to encourage hiking and horseback trails since these would fulfill much of the program.

Currently several connector points within the BACA subdivision have been envisioned by the ESLVTS. Direct tie-ins to the Town of Crestone are proposed via the Baca Subdivision Charter School trail and trailhead.

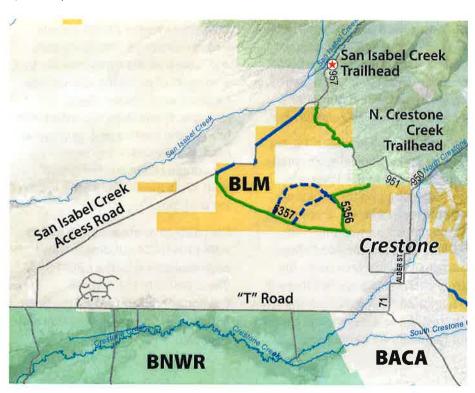


### America's National Wildlife Refuges

- National network of 59 Refuges conserve America's fish, wildlife and plants.
- More than 41 million people visit National Wildlife Refuges each year.
- ACTIVITIES: Wildlife observation, photography, environmental education and interpretive programs, hunting and fishing.
- FUTURE DEVELOPMENT: The developing program at the Baca Wildlife Refuge offers visitors a fascinating and accessible destination to nourish spirit and connect to the environment.

### Bureau of Land Management (BLM) Lands

The BLM is an important coalition partner for the Town because of existing social trails within sections of the BLM lands that abut the Town.



### The BLM Colorado Recreation Program Mission Statement:

"BLM Colorado recreation will; through innovative partnerships, stakeholder commitment, and community-based collaboration; maintain the valued recreation opportunities, desired landscape settings and public land health ensuring long-term ecological sustainability while providing benefits to visitors, communities. and the natural and cultural environment."

### **Great Sand Dunes National Park**

Geographically landlocking the southern boundary of the Baca Grande Subdivision, the GSDNP is what makes Crestone the remote and quiet place that it is. Coupled with the Baca Wildlife Refuge, these areas preserve in perpetuity the "pristine" quality that is characteristic of the San Luis Valley.

Though known primarily for its Dunes, the GSDNP has extraordinary high alpine backcountry assets which, due to the remote nature of the park and its complete lack of motorized access, remain as some of the most unspoiled in the nation.

Currently the single access from Crestone to the northern portion of the GSDNP is through the Baca Grande Subdivision via the Liberty

- 280,000+/- visitors per year
- 149,000 acres encompass the entire Sand Creek and Medano Creek watersheds
- Multiple ecosystems

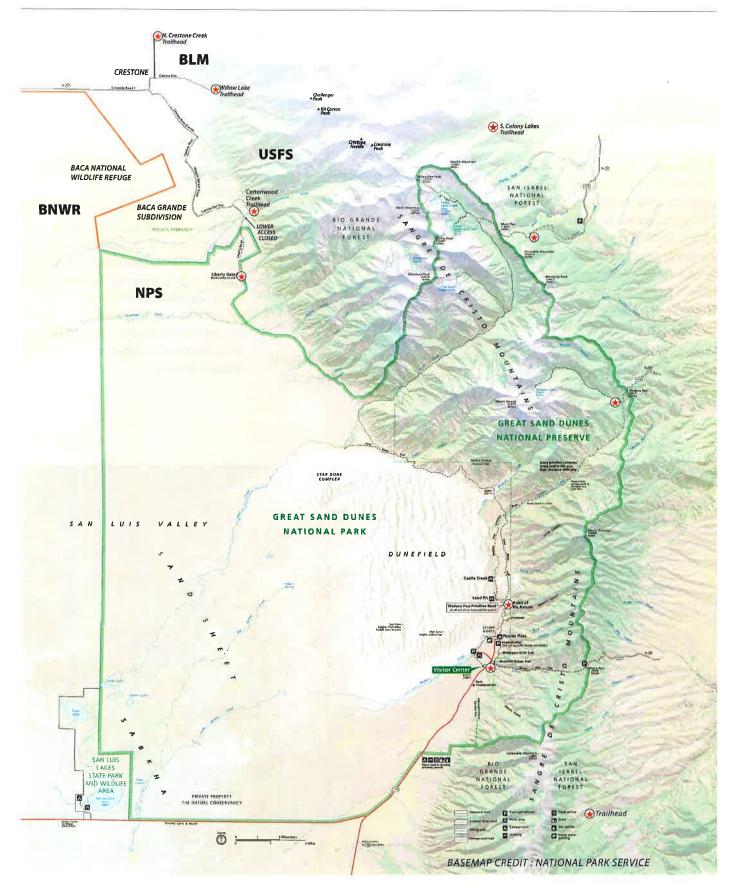
   ranging from mixed conifer
   forests to alpine tundra, and
   including pristine alpine lakes

   and major creek headwaters

Gate Trailhead. From this trailhead it is possible to hike for 7.5 miles to reach the Park system trails at Sand Creek.

- Habitat to six endemic species of insects. Many birds, amphibians, and mammals spend part of their lives in the dunes, and depend on the natural quiet to communicate
- 'Star Dune' is the tallest dune in America at 755 ft.
- ATVs are not permitted anywhere in the national park and preserve

### **REGIONAL PARTNERS & EXISTING TRAILHEADS**



#### PART TWO: TOWN OF CRESTONE

### Town Of Crestone Trails & Open Space Master Plan

The purpose of the adoption of this Trails Master Plan is to establish policy intention with respect to Trail Corridors and the protection of wildlife and native vegetation areas in permanent Open Space reserves. Once formalized, elements of the trail system can be implemented one-byone as funding becomes available and socio/political conditions permit.

In the long term this system of trails within the Town will foster a culture of hiking, preserve and make accessible precious native assets, allow for the creation of safe non-motorized routes to the Charter School, and serve the needs of residents who might not otherwise be aware of, or able to navigate, some of the Town's most appealing riparian and upland desert habitats.

Further, by connecting to existing and future trails to surrounding jurisdictions at its perimeter, the community readies itself for the opportunity to become a regional wayfinding, provisioning, and hospitality hub for visitors coming to access recreational opportunities in adjoining wilderness areas. Accepting this role is a vital necessity to the ongoing sustainability of the community.

The Trails Master Plan represents the Town's goals at a point in time. toward which the development of trail components progresses. Routes and Open Space designations are not intended to be proscriptive. Ownerships and neighborhood values, coupled with drainage requirements, as well as socio-economic changes over time, will determine development in each locale. At the same time however, the designation of open spaces to be preserved does not in any way obviate the Town's jurisdiction over these areas, nor allow private encroachment, usurpation or development without the Town's official consent.



### Town of Crestone Trailhead

The ideal location for all trail systems to start from is at the existing Public Parking Intercept Lot. This becomes the Information Point and Main Hub for visitors and locals alike.

#### This location is ideal for visitors because:

- The Park & River Trail express the Town's best natural habitat and character. This targets visitors to the BNWR & Sangre de Cristo Wilderness Area.
- A Paved Trail provides easy access to the Little Pearl Plaza one block away:
  - This includes visitors of all ages & activity levels
  - It creates a transition from cars such that people "find" the Town center and circulate as pedestrians.
- A Kiosk at this location orients backpackers and climbers to the greater network of regional trailheads; and orients tourists to the town and spiritual centers in the BACA.
- Remembering that visitors participating in these activities will typically arrive the day prior to their departure, this hub brings them into a community where they will want to linger, explore and prepare for their trip.

### This location is ideal for locals because:

- · It supports quality of life for locals.
- Neighborhood character is protected by providing parking for visitors' cars.
- 90% of the local population lives in the Baca. With preferred long-term parking and a bathroom at a trailhead that links to the Town core, and easy meandering loops to the school, this becomes the preferred place from which to Park and Walk.
- By focusing trail development on select areas of Open Space, wildlife and vegetation are preserved. Random social trails are replaced with better more efficient trails that enhance rather than impact these assets.
- The Perimeter Loop Trail links all neighborhoods into the town's commercial center and with the Charter School.

### **Town of Crestone's Goals**

- Protect local wildlife and natural vegetation areas
- Preserve local neighborhood character
- Welcome visitors and direct them to trail assets
- Encourage a hiking culture within the community

- Access and enhance the Town's natural assets
- Separate vehicles and pedestrians
- Locate tie-in points (links) to trails on surrounding lands
- Include small parking clusters at Trailheads

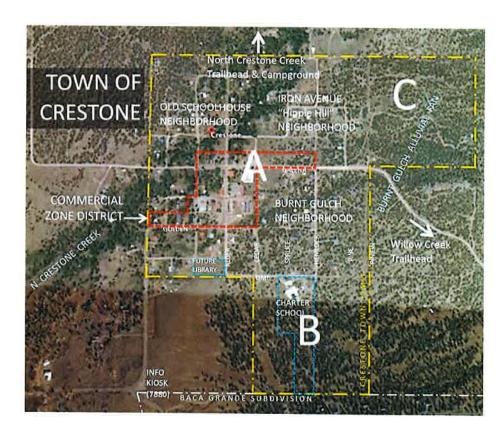
- Develop a wayfinding system and signage aesthetic
- Establish priorities for implementation
- Define a Central Hub from which all trail systems can start.

#### PART TWO: TOWN OF CRESTONE

### **Crestone Existing Conditions**

### For purposes of this TMP, the Town is separated into 3 zones:

- Zone A relates to the original grid laid out in 1886. This area consists of many Right of Way (ROW) areas that have never been improved and which are not needed for lot access. These are identified as potential Open Space and Trail Asset locations.
- Zone B includes a tract owned by the Town of Crestone that provides a critical link to the BACA to the south. This link will be described separately.
- Zone C is privately owned as two 20-acre parcels.



# The Town grid is located on the Burnt Gulch alluvial fan, straddling North Crestone Creek. It can be roughly divided, by character, into an historic riparian zone and an upland desert zone.

- The sole access to Crestone is via "T" Road. As "T" Road approaches town, it hits the intersection at the entrance to the BACA. Currently an Information Kiosk is maintained at this location. This intersection is the "front door" of the community.
- The historic structures and old growth habitat of giant Cottonwood Trees and riparian influence are located primarily along the creek in the Old Schoolhouse neighborhood.
- This feature extends to Town (Kids') Park.

- A historically significant artesian spring is located in the Commercial Core adjacent to Town Hall. This is the heart of the Town. All public amenities such as hotels, restaurants, grocery and gas stations are located in this commercial core.
- A dry and largely forested hillside of Pinon and Juniper make up the Iron Avenue and Burnt Gulch Neighborhoods on the hillside to the east. These gently sloping residential areas are largely unbuilt and are split by a primary USFS

- access road (Galena Ave.) leading for about a mile to the Willow Lake Trailhead.
- To the south of town is a large section of town that is undeveloped, except for the Charter School, which abuts directly with the Baca Grande Subdivision.
- Immediately north of town the county road continues up to the North Crestone Creek Trailhead and Campground.

### **Crestone Existing Conditions**

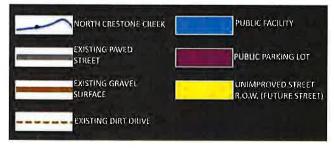


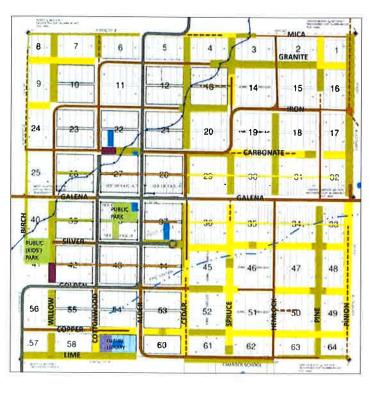
#### **Street Master Plan**

Paved streets (gray) are shown, as well as existing gravel and dirt roads (brown) and parking lots (purple). Roads that have not been built, but will be required if all developable lots in town are to have future access, are shown in yellow.

What is "leftover" is for use as Open Space.

### LEGEND





### **Open Space Plan**

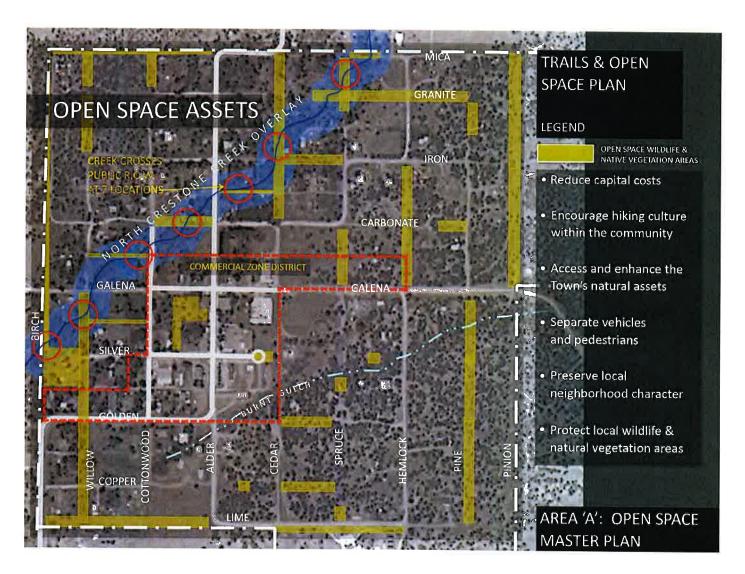
It is the recommendation of this report that these areas be preserved through town ordinance as follows:

- Open Space Tracts as defined in the TMP are to remain unencumbered by either utilities or vehicular roadways of any kind.
- **Native Vegetation** and ground cover is to be preserved such that these areas provide habitat and maintain their natural character.
- Foot Trails as outlined in the TMP are approved and encouraged through these areas in the designated locations such that they link global routes in an attempt to enhance a pedestrian interface throughout the community.

### PART TWO: TOWN OF CRESTONE

### **Open Space Assets**

The existing conditions of these major Open Space Assets are cataloged in this map. New trail systems within town are to be located within Open Space or share adjacent roadways.



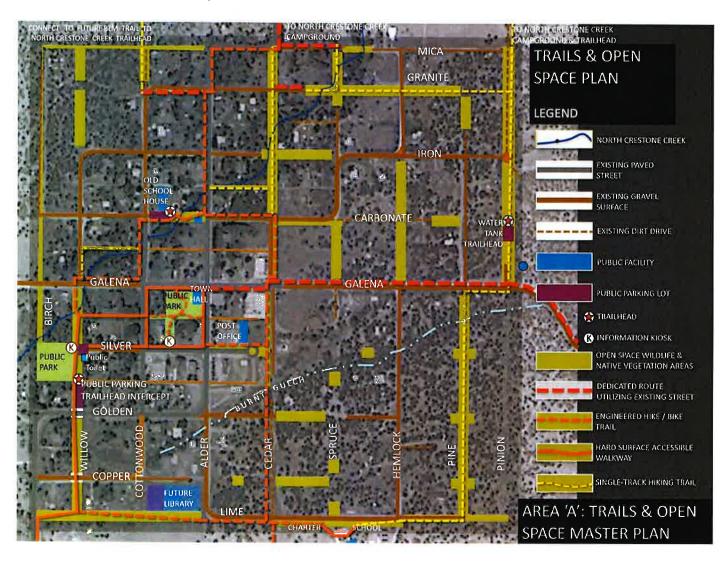
### North Crestone Creek Overlay (shown in blue shaded area)

A long term vision for the North Crestone Creek riparian corridor is likely decades out and provides many hurdles. Without being included in the TMP, however, the necessary components of land acquisition,

hydrologic study, flood control and environmental impact may not be implemented. The long-term vision of a contiguous singletrack trail that leaves from the TOC Trailhead, and navigates the natural topography of the stream corridor for approximately six town blocks, represents the primary component of an attainable and integral trail system.

### Materials Key & Trail Locations

The Trails & Open Space Plan represents a global diagram of all trails and routes possible within Town Limits along with segments of unencumbered Open Space and is keyed to their proposed materials. Specifications are covered in Part Four.



#### **Information Centers:**

- Existing "T" Road Info Kiosk & Parking (Beyond Town Limits)
- · Little Pearl Plaza Kiosk
- Town Park Kiosk
- Town Hall/ Museum Building

#### **Trailheads:**

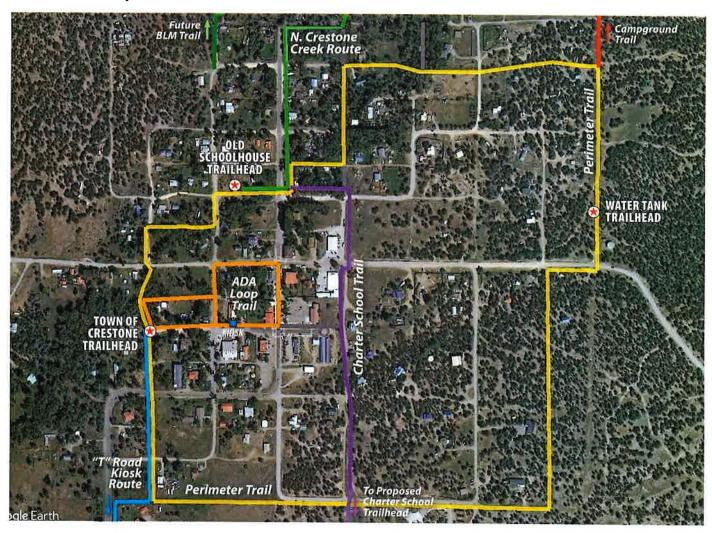
- Town of Crestone Trailhead & Long Term Parking
- Water Tank Trailhead
   North Crestone
   Creek Access
- Old Schoolhouse Trailhead and the BLM tie-in to North Crestone Creek

### **Trail Types:**

- Singletrack: unimproved dirt trail
- Engineered: gravel appropriate for high traffic including bikes
- Paved: hard surface conforming to ADA standards

#### PART TWO: TOWN OF CRESTONE

### **In-Town Loop Trails**



### **Perimeter Loop Trail**

#### COLOR:

This loop connects all the neighborhoods of town to the town's center, and all regional trails to the town trailhead.

Half of the Perimeter Loop is focused on the North Crestone Creek Overlay. This area should be developed over time as more river frontage becomes available for trail building. Pockets of natural river should be maintained as habitat and undeveloped Open Space.

### **ADA Loop Trail**

COLOR:

This ADA loop provides paved access for wheelchairs, connecting the Town Trailhead, Little Pearl Plaza, Town Center, Town Park and Town Hall.

### Charter School/ North Crestone Creek Route

COLOR: 1

This route separates bicycles and pedestrians from cars on N. Alder and continues to the North Crestone Creek campground and trailhead.

### **Town Connector Trails**



### "T" Road Kiosk Route

### **Charter School Trail**

COLOR:

The current Information Kiosk located at the intersection of "T" Road and Camino Baca Grande, provides regional information for visitors.

A paved, ADA-accessible walkway from the Kiosk to the Town Trailhead is proposed on the east side of Birch Street extending to Lime Avenue, and from there via Open Space to the Town Trailhead. COLOR:

The BACA and the TOC both share the need to improve the existing social trails and pathways that have been created by people walking to the Charter School, and to and from Town.

In the Baca, a new trailhead and Intercept Parking Lot is envisioned. A number of social trails braid through this and the adjoining Charter School Property. Tract 1 is owned by the Town and extends south to the BACA boundary.

The Charter School Trail is an engineered hiking/biking trail that extends from the Baca (Charter School Trailhead) to the center of downtown.

#### PART THREE: TRAIL PARTNERSHIPS

### Proposed Eastern San Luis Valley Trail System Trails

Without interconnected trails through these areas the greater Crestone Trails project is primarily a series of urban walking paths, which while important for the local residents on a daily basis, will not create a nexus for visitors from which to access the multitude of regional trail and wilderness assets.

The ESLVTS envisions a number of trails. In relationship to the TOC, three of these relate directly to this TMP. The TMP seeks to utilize all of these trail segments. They are numbered as follows:

#### Trail 201

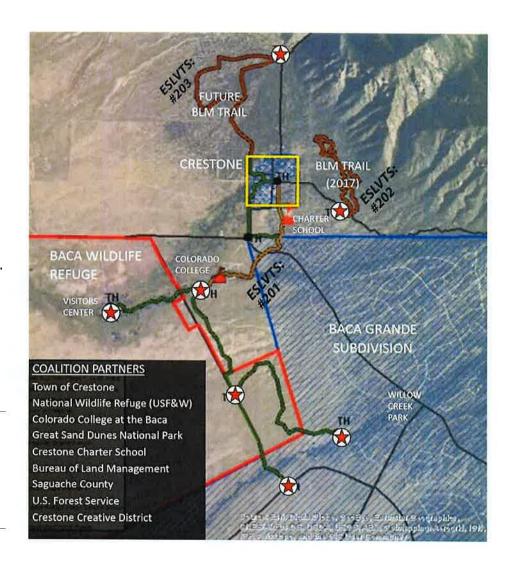
A trail extension from the CC Campus, through the BACA and on to the TOC Charter School and Town Center.

#### Trail 202:

Proposed for construction in 2017 off of upper Galena Ave.

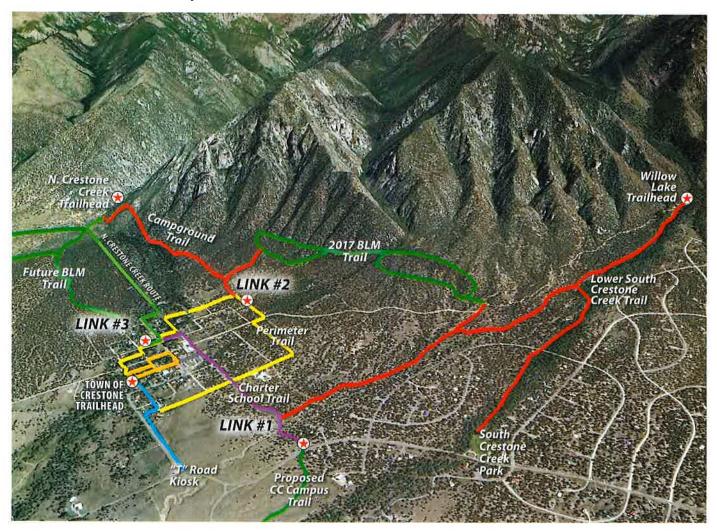
#### Trail 203:

Future proposed BLM linking the Town of Crestone to North Crestone Creek Campground, east of the creek.



The intent of the TMP is to function as a key and effective coalition partner to the greater ESLVTS.

### **Trails Overview Map**



### **Link Points**

Link Point 1 connects the Charter School Trail to the Baca Grande Subdivision. Town-owned property currently has a series of braided social trails which are used on a daily basis. The ESLVTS proposes a trail connecting the BNWR to the Charter School via the CC Campus. In this way the Town of Crestone Trailhead is linked to the Baca and ultimately to the Wildlife Refuge.

Link Point 2 is via pre-existing mining tracks and social trails located on BLM and USFS land that could link the TOC directly to the Campground at the North Crestone Creek Trailhead. This proposed trail is called the "Campground Trail".

Although beyond the scope of this report it is suggested that an ultimate trails plan would explore a singletrack extension from midway along the proposed Campground Trail, up an abandoned miners track in order to converge with the 2017 BLM trail at it's mid point.

**Link Point 3** in the TMP begins at the Old School House. The "Old School House Trailhead" serves as an auxiliary parking area at Carbonate and Cottonwood. This trailhead occurs at the heart of a River Trail along the North Crestone Creek Overlay.

#### PART THREE: TRAIL PARTNERSHIPS

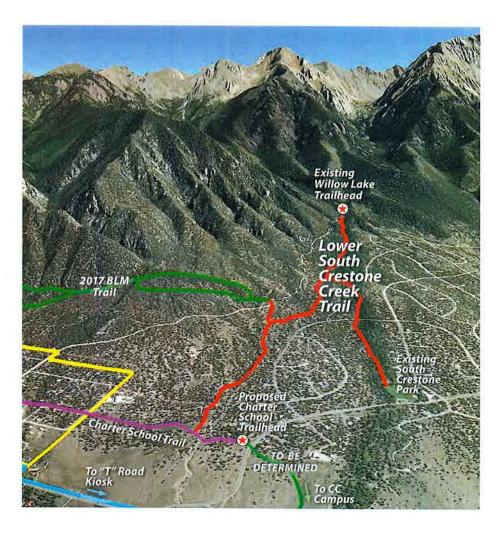
# Lower South Crestone Creek Trail

COLOR:

South Crestone Creek is the second largest drainage basin in the central Sangre De Cristo Mountains. Maps show the Willow Lake drainage as a small tributary compared to South Crestone Creek, and although the USFS Trailhead is named "Willow Lake Trailhead," it is located on South Crestone Creek. From here the main trail artery heads up toward Mount Adams and is absorbed into the 180 miles of trails crisscrossing the entire range.

Because South Crestone Creek drains at the edge of the BACA, it is often missed by motorists as they pass by South Crestone Park (by the fire station). As it flows west, it joins North Crestone Creek, charging the region's most important aquifer and providing life for the diversity of wildlife in the BNWR.

Although outside the Town's jurisdiction, the TMP encourages the establishment of a new Lower South Crestone Creek Trailhead in the BACA. Located approximately 2 miles below the Willow Lake Trailhead, this singletrack trail would utilize existing singletrack social trails, and when combined with the ESLVTS linkage to the CC Campus and the TOC, would allow students, residents and visitors to access some of the most beautiful and varied terrain in the range.



This drainage was not overlooked by the original developers of the BACA, and like the other primary drainages, South Crestone Creek has an open space overlay. BACA residents currently access the Willow Lake Trail system via a cul-de-sac atop Pine Cone Way. This trail and the proposed Lower South Crestone Creek Trail enter Forest Service Lands at their highest points.

This link would provide a direct experiential route to the high peaks

and onward to other trail systems.

As shown on this map, the trail originates in a dry gulch along the perimeter of the Baca, and as it heads east, it intersects South Crestone Creek. Access easements along this route will be required.

### **Campground Trail**

COLOR:

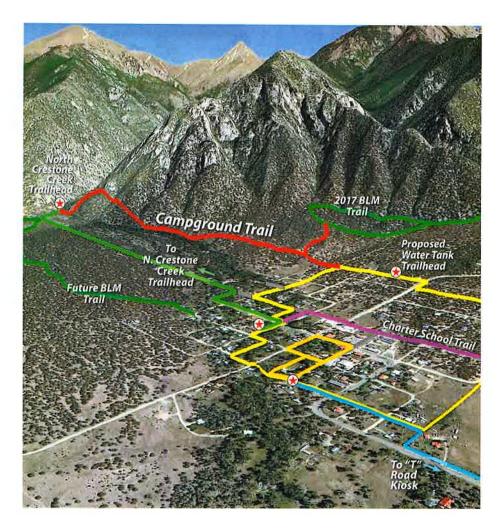
The Campground Trail links the TOC to The North Crestone Creek Campground and Trailhead via BLM and USFS lands.

The TMP ultimately envisions this important trail as being served by it's own new trailhead called the Water Tank Trailhead, however it can also be accessed via the North Crestone Creek Overlay, linking directly to the TOC Trailhead from the Perimeter Trail.

Until such time that portions of the Perimeter Trail within the North Crestone Creek Overlay are developed, a simple route up Galena Avenue can begin the traverses of the Campground Trail through the Pinon Street ROW.

Reconnaissance of this section of trail demonstrates well-used social trails on the eastern land locked section of North Crestone Creek. This in effect creates a remote and beautiful setting overlooking the riparian area below. Game trails lead up and over a small knoll providing expansive views of the entire San Luis Valley before wrapping around and into the North Crestone Creek Campground.

Two other important Trails are envisioned in the ESLVTS that relate to the Campground Trail. The first (2017 BLM Trail) is to be constructed



in 2017 and branches off of upper Galena onto the mountainside above the Campground Trail. The abandoned mining road that makes up the first half of the Campground Trail climbs steeply uphill once it leaves the Town Limits, and it is likely that this could provide a Link Point to this trail.

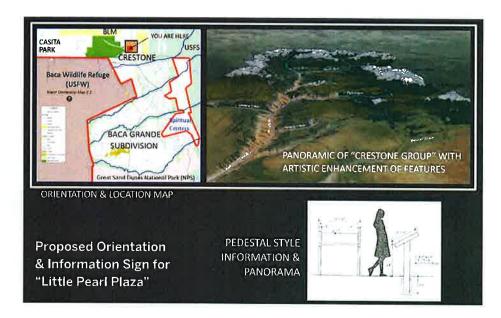
The second "Future BLM" Trail attempts to link the TOC to the North Crestone Creek Trailhead

on the west side of the creek. This trail, in conjunction with the Campground Trail, would mark the completion of a large loop hike of the highest caliber. A secondary parking and trailhead location at the Old Schoolhouse has been recommended as a "Start Point" for this loop.

### Signage

Trail users rely on signs and symbols to find their way and to understand their surroundings. Trail signage identifies points of interest, warns hikers of unusual conditions, educates and promotes protection of Nature, interprets natural and cultural features, defines regulations and guidelines, and most of all, provides destinations and distances along the route.

First impressions are critically important, and signage is the quickest and perhaps least expensive way to make a positive impression. High quality, properly located, clearly messaged, and well maintained signs will create a sense of trail identity and cultivate public support for the Town's trail system.



Compatibility with the standards of Trails Coalition partners is highly desirable. Uniform standards and fabrication techniques compatible with local and Valley skills will expedite production and replacement, and contain cost. Annual trail assessments of the system can identify ongoing maintenance and needed improvements.

### Trailhead Kiosks:

The FUTURE TRAILHEAD SYSTEM identifies a full complement of Trailheads connecting the Town with surrounding destinations. Each Trailhead has an information Kiosk. For purposes of this Plan we call out those within the Town, and two others pertinent to the Town's Trail System, as follows:

**Little Pearl Plaza:** As part of a Town informational sign this sign will differ in character from the Trails Kiosks, which will be more rugged and of natural materials. See illustrations this page.

**Kiosk One:** "T-Road Information Center": "T" Road Information Area. This signage should include an overview showing trailheads from San Isabel to the Great Sand Dunes.

Kiosk Two: "Town Parking Intercept Trailhead"

Kiosk Three: "Old Schoolhouse Trailhead"

Kiosk Four: "Water Tank Trailhead"

Future Kiosk Five (Baca): "Charter School Trailhead"



Two 4'x8' timbers sandwiching 2'x6' T&G. Anywhere there is a kiosk there should be no "signs." Signs are for other intersections.

### **Primary Signage:**

Primary signage is defined as medium to large wayfinding signs that identify destinations and include distances and directions. This signage is primarily vehicular oriented, and for Crestone the following key locations are recommended:

- Moffat turnoff to Crestone at "T" Road
- T-Road Information Center
- Town Parking Intercept
- Town Hall Museum & Welcome Center (Galena and Alder)
- Exiting Town on East Galena at Town Limit
- Exiting Town on North Alder/ Cedar at Town Limit



Kiosk & Trailhead Signage Examples

### Secondary Signage:

For Crestone, the implementation of the trails wayfinding system can be accomplished strategically over time, in a layered manner, with directional and route marker signage completed first, and regulatory, interpretive and historical signage in-filled along trails at a later time.

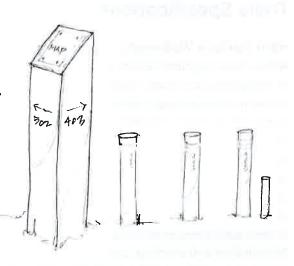
**Directional signs at trail intersections:** Wood 8x8 or log posts with colored stripes designating trails. Posts to have destinations and distance, and designed such that additional information can be added as routes are established.

Route markers: Wood 4x4 or log posts, with colored stripes designating trails. Color schemes to be determined. Route markers have no words, are color coded, and are keyed to maps at kiosks.

### Secondary Signage

3x3 round posts, 42" tall. Trail numbers and or colors denote trail.

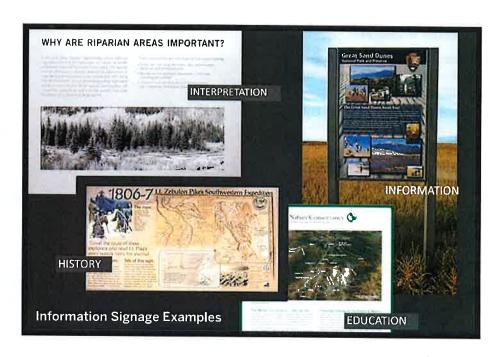
Defined as medium to large way finding signs. They should include distances and be 8x8 timbers with a beveled top with a map on it.



#### **Trails Standards**

Abundant resource information is available regarding Trails design, construction, maintenance and operation, from both public agencies and private organizations. Links to key resources for detailed information are included in the Appendices of this report, and basic standards that address issues such as tread width, clearing height & width, slope and cross slope, trail surface, etc., can be found there. For the purposes of this Master Plan the objective is simply to define trail types that are few in number, high in quality without overbuilding, durable in performance, uncomplicated to maintain, and low in amortized cost.

An approach based on the experience of communities that have experimented with various approaches to trail building – from the simple and inexpensive to the more sophisticated trail building technologies – is recommended



for Crestone to achieve the desired performance.

Each trail type is appropriate to its setting and its use. Consistency between trail types is largely achieved through signing and transitions in setting. Trail segments that are designed to be fully accessible must meet Accessible

Surface Standards, and whereas a surface in a semi-primitive area might be a stabilized aggregate such as granite fines, a fully accessible surface within the Town of Crestone will require either asphalt or concrete, or other hard surface meeting ADA requirements.

### **Trails Specifications**

#### Hard Surface Walkways:

Within those segments which will be designated Accessible Routes, it is recommended that pathways be poured concrete sidewalks conforming to standards for urban sidewalks, including soil prep, base, compaction and reinforcing. The use of asphalt, while an attractive alternative in terms of cost, is discouraged due to premature deterioration and cracking. Long term appearance and total cost amortized

over lifespan must be considered. The minimum width is 5 feet.

#### Hike/Bike Engineered Trails:

The design intent of these trails is to mitigate loose sand, erosion and "trenching" where everyday use occurs. If properly installed and maintained these pathways are accessible in any weather condition and are appropriate for large tire bikes such as Mountain Bikes or Cross Bikes. Minimum width is 5 feet.

These trails can be laid out in flowing lines and where possible should follow existing social paths where the subsurface is pre-compacted and requires only the application of road base to create a "crowned" surface for drainage.

In locations of loose soil and sand, large diameter cobbles (2" to 3") should be added with a recommended depth of 18" to 24". 8"-12" of CDOT Road base should be applied and compacted over this.

A layer (4" to 6") of local "grey fines" should be applied over the entire surface such that no road base is visible. No soil fabrics or edging should be used. These guidelines are based on extensive experience and should not be ignored without adequate consideration.

Large diameter culverts should be installed under the trail where conflicts with natural drainage occur. At larger gullies and ravines timber bridges with concrete abutments can be installed. These structures should be no higher than 30" above grade at the crown, and a full 60" in width. Larger ravines will require engineered bridges.

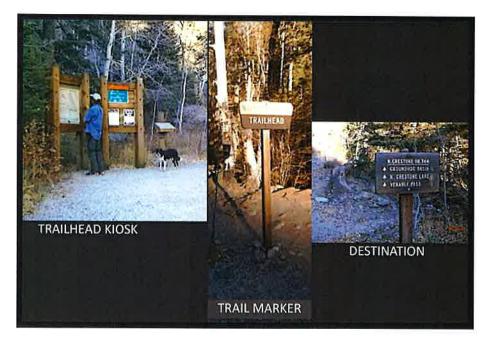
Any bridges crossing a USGS named waterway will require an Army Corps of Engineer Permit and special flood area calculations insuring that the bridge is built to the proper elevation and standards. These trails should be open to hikers and bikers, but will be adversely affected by horseback use.

Budgeting for these trails should include a small "Toro" landscaping vehicle that can navigate these trails for maintenance purposes, including the annual addition of fines to trails.

#### **Hiking Trails:**

Although described as "unimproved singletrack" a number of considerations must be taken into account. The intent is for these trails to appear as natural as possible thus avoiding large cuts or fills. They should mirror the trails in the Sangre De Cristo Wilderness area in scale and "feel".

All trails should attempt to slope at no more than 3% grade. If obstacles



exist, rock steps can be constructed. Water bars should be installed as required for drainage. In sandy soils a mix of organic material consisting of wood chips and gravel may be added in an attempt to "bond" to loose sands. Organic top soils high in "clay" will combine over time to create "loam" rather than sand, and such trails become hard packed. This condition tends to exist in forested areas and should be replicated wherever practicable.

Imported road base can also be used in select sandy locations but is generally discouraged. The objective in design is to locate these trails where organic materials from pinion, juniper or cottonwood already exist and have begun to "bond" the loose sand into a hard pack surface.

Solutions are available for trouble areas and techniques such as "armoring" wet or soft areas with plates of stone are appropriate.
These techniques are widely used by

various trail-building association's and it is suggested that these agencies be contacted for guidance for longer and more difficult segments of singletrack.

#### **Safety Considerations:**

Rails, when used, should follow the natural contour and not be laid out in straight lines. Logs and trees should be removed as necessary, but not rocks or boulders. These trails should be open to hikers, bikers and horseback riders. Trails should be avoided when wet.

#### Maintenance:

Seasonal maintenance and inspection of these trails should include removing branches and deadfall. Where social "braiding" and cutting of corners occurs obstacles should be installed. Filling of deep water holes and other maintenance may be required but all work should be possible with a shovel, saw and minimal effort.

#### **APPENDIX**

### **ABBREVIATIONS:**

TMP:

Trails Master Plan

TOC:

Town of Crestone

ESLVTS:

Eastern San Luis Valley Trail System

The BACA:

Baca Grande Subdivision and POA

**USFS**:

**United States Forest Service** 

BLM:

Bureau of Land Management

GSDNP:

**Great Sand Dunes National Park** 

**CC Campus:** 

Colorado College Campus

BNWR:

Baca National Wildlife Refuge

**ROW:** 

Right of Way

TH:

Trailhead

K:

Information Kiosk

### **DEFINITIONS:**

#### Link:

A link is the interface between the Town of Crestone's specific pathway and a trail administered by a different entity.

#### Routes:

Designated Routes share existing roadways, gravel or paved, with directional signage.

#### Pathways:

Interconnected pedestrian access used by locals on a daily basis primarily within the Town of Crestone.

#### Trails:

Denoted "Routes" made up of all trail types linking a Trailhead to a trail network. Example: The North Crestone Creek Campground "Trail".

# Hard Surfaced Pathways (concrete sidewalks or equivalent):

These link the Information Kiosk and Little Pearl Plaza, and are expanded by ongoing sidewalk efforts, thus providing ADA-level access to both Parks, Town Hall, and the "T" Road Info Kiosk.

#### **Engineered Trails five feet wide:**

These link the Charter School to the Mercantile Grocery store and to the BACA.

#### Singletrack Trails:

These are made up of narrow unimproved trails. Waterbars and armoring is appropriate, and trails should match USFS hiking trails standards.





### **REFERENCES:**

References pertaining to sources for Trail Design, Construction, Maintenance, Operation and Signs:

### DOT Manual & Guides for Trail Design, Construction, Maintenance Operation & Signs:

This site list numerous manuals and best practices guides and resources from government agencies or nonprofit organizations.

http://www.fhwa.dot.gov/ environment/recreational\_trails/ guidance/manuals.cfm

#### **Trails Standards**

https://search.yahoo.com/yhs/ search?hspart=adk&hsimp= yhs-adk\_sbnt&p=TRAILS+STAN-DARDS&type=pythondirect\_em\_ ff&param1=20151117&param2=40b-3d3eb-119e-4d68-b82d-d0f7169ddc2f&param3=email\_0.0.12~US~pythondirect&param4=pd\_gs\_email\_ gmail\_account-bb8~Firefox

#### **US Forest Service**

http://www.fs.fed.us/recreation/ programs/trail-management/ trailplans/index.shtml

#### US Forest Service Trail Plans & Specifications

http://www.fs.fed.us/recreation/ programs/trail-management/ trailplans/index.shtml

# US Forest Service Trail Accessibility Guidelines

http://www.fs.fed.us/recreation/programs/accessibility/

#### **National Park Service**

Handbook for Trail Design, Construction and Maintenance

#### **North Country Trail Handbook**

https://www.nps.gov/ noco/learn/management/ ncttrailconstructionmanual1.htm

# IMBA (International Mountain Biking Association)

https://www.imba.com/resources

#### IMBA Rules of the Trail

https://www.imba.com/ about/rules-trail

#### **BLM (Bureau of Land Management)**

http://www.blm.gov/id/st/en/prog/planning/Travel\_Management/Craters\_of\_the\_Moon/Road\_Trail\_Classifications.html

## Professional Trailbuilders Association

The Professional Trailbuilders' Association represents the leading edge in sustainable trail development, including trail design, construction, management and advocacy that enhance resource protection, recreational opportunities, economic development, active citizenry, and communities worldwide.

http://www.trailbuilders.org/





