

Butte County Trails Plan

A Framework for Collaboration



Butte County Resource Conservation District



and partners

AUGUST 28, 2018

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A bridge, built partly with the proceeds from a hiking guidebook, spans a creek in the PPPOA. Photo credit: Paradise Pines POA.

1. BUTTE COUNTY TRAILS PLAN

1.1 EXECUTIVE SUMMARY

Trails are key to Butte County’s quality of life. Improving our trail system would return significant public health benefits, stimulate economic development, increase the revenue base for local government, and help protect communities from wildfire. The Butte County General Plan recognizes the importance of trails -- and it also recognizes that a great trail system can only be achieved through collaboration. This understanding aligns perfectly with the strategic plans of many other agencies, notably those of the U.S. Forest Service.

Throughout this plan, the term “Butte County” usually refers to the geographic area, not the local government. Butte County, as a local government, owns and operates no trails and has limited capital resources to support trails. Nonetheless, the County is an important partner in supporting many trails-based organizations, facilitating public input, and collaborating with land managers that do own or operate trails.

Here in Butte County, trail users cherish their trails and are eager to help maintain them. They consistently ask for **better information** about trails, **better management** for reduced conflicts between users and reduced impacts on nature, and **better trail connectivity** (more loops). They want to preserve the access they have enjoyed for generations. And they want the opportunity to volunteer for their trails.

Butte County has a strong tradition of collaboration and partnership. Building on this tradition is vital for accomplishing trails projects. Through the Trails Plan Working Group process, nineteen potential future trails projects were identified and ranked (see section 5.1). Just as importantly, a shared vision for Butte County’s trail system was developed: a vibrant, interconnected system where recreation coexists with natural resource protection, every use and every user has a seat at the table, and **users, agencies, and land managers work together for the good of the land.**

The challenges of implementing this vision include a lack of funding, a shortage of skilled labor, Butte County’s rugged and highly varied terrain, a diverse patchwork of ownerships across the landscape, and the complexity of interagency collaboration. However, these problems can be overcome by building on Butte County’s culture of trail volunteerism, writing great grants, engaging new users, cultivating trail champions, and continuing to grow the local tradition of interagency partnership. This Plan is action-oriented and key action items can be found in section 7.

In the end, users, agencies, and land managers all see the same way forward: cultivating a sense of **shared stewardship** that will bring us closer not only to the land, but to each other.

1.2 PURPOSE OF BUTTE COUNTY TRAILS PLAN

The Butte County General Plan 2030 directs Butte County staff to “cooperate with appropriate agencies to conduct a countywide trails planning study.” Such a study should inventory existing trails, “identify new needed routes and connections” and also “address funding and management of trail facilities.” In June of 2016, the Butte County Resource Conservation District (BCRCD) undertook development of this countywide trails planning study.

Notably, the Scope of Work agreement between BCRCD and Butte County directs BCRCD to:

- Inventory existing trail resources, user groups, and land managers
- Focus on challenges and opportunities for maintenance and development of trails
- Conduct a comprehensive user input survey and report, identifying current trail user challenges, needs, and opportunities, including levels of satisfaction, barriers to usage, and areas of high usage as well as underutilization
- Identify and promote the acquisition of funding sources for trail maintenance and development
- Promote ongoing collaboration between all user groups, land managers, and agencies

1.3 MISSION STATEMENT

To provide Butte County residents and guests a diverse, fulfilling, and extensive recreational trails experience through a framework of collaboration, shared responsibility, and a vision for the future.... while treading lightly on the land

1.4 OBJECTIVES

The Trails Plan's objectives are derived from the General Plan as well as stakeholder input:

- Create a community-driven trails plan that guides Butte County area trail efforts. The Plan should facilitate cooperation among all stakeholder groups, public land managers, governments, and private property owners to improve area trails and promote new trails development.
- Involve and inspire volunteers, user groups, public land managers, governments, private property owners, and citizens from all walks of life to cherish and shape Butte County trails.
- Promote awareness and increase available information for current and future trails users.
- Promote maintenance of existing trails by:
 - Working with land managers and user groups to identify maintenance needs
 - Developing continuous training and educational opportunities for land managers and user groups
 - Encouraging official maintenance by recreation-, conservation-, and natural resource-based groups
- Create a database working map of current trails and support infrastructure to help guide maintenance and development strategies
- Identify opportunities to enhance the current trail areas by creating connectivity and loop trail experiences
- Promote the creation of sustainable trails. Sustainable trails are those that meet the needs of intended users while protecting natural resources, requiring minimal maintenance, and minimizing conflict between user groups.



Paddlers explore Paradise Lake. Photo credit: Wade Killingsworth

1.5 SCOPE OF PLAN

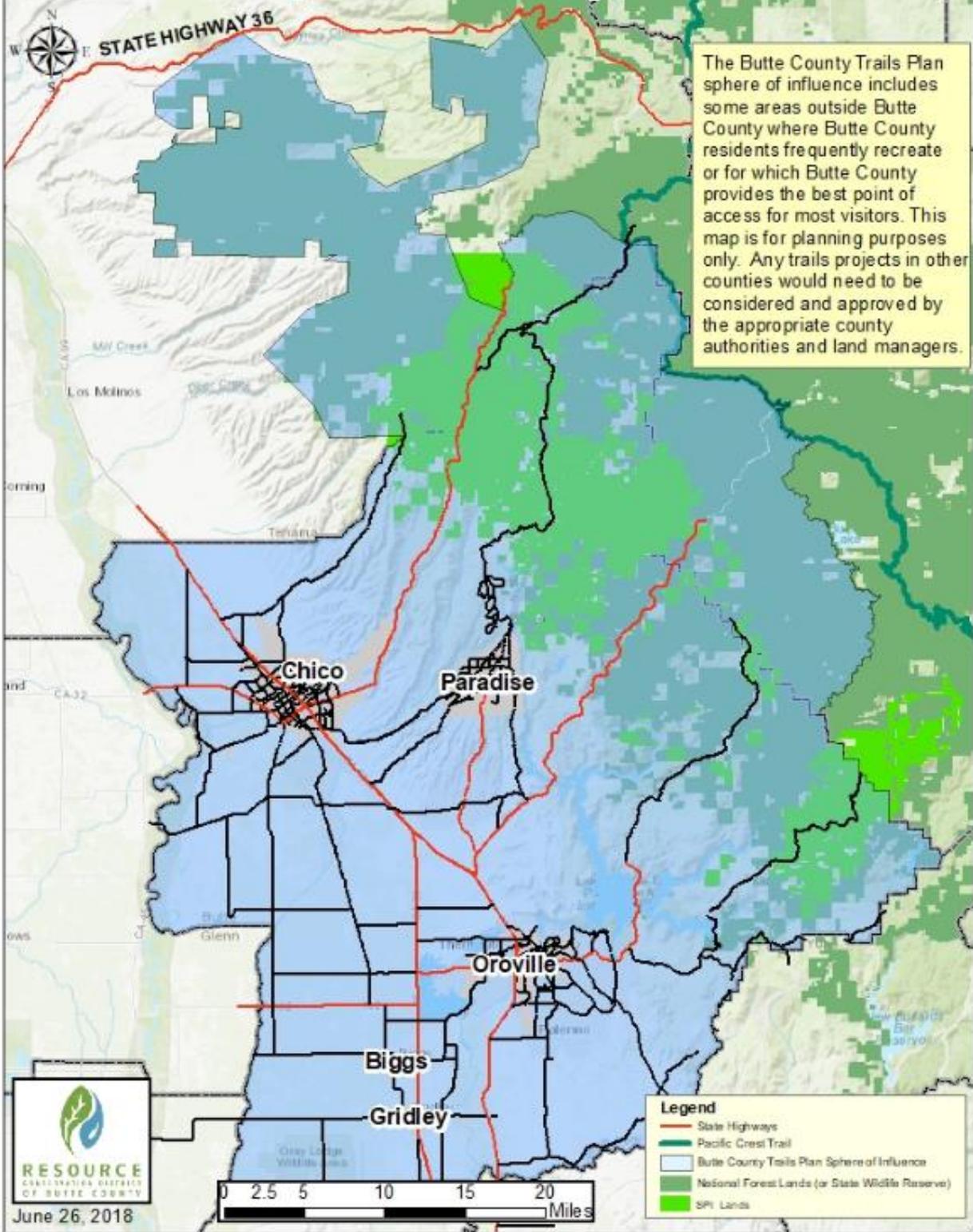
The scope of the Trails Plan “sphere of influence” extends beyond Butte County boundaries to incorporate ***nexus recreation areas*** that are close to Butte County and often visited by Butte County residents. For many of these out-of-county areas, Butte County serves as the best access point by road (or trail). What’s more, out-of-town visitors to these nexus areas would, in many cases, be most likely to spend their lodging, guiding, provisioning or dining dollars in Butte County. Butte County has a stake in regional recreational opportunities because trail-based recreation doesn’t stop at county lines, and the Trails Plan map reflects that.

Obviously, any trails project planning or implementation outside Butte County would have to be accomplished in collaboration with the relevant county’s stakeholders and the managing agency.



Photo credit: Wade Killingsworth

Butte County Trails Plan Sphere of Influence



June 26, 2018

WHAT THIS PLAN COVERS AND WHAT IT DOESN'T

The Butte County Trails plan is focused on **natural surface** trails, motorized and non-motorized. While the plan does mention paved bike/pedestrian trails, this is mostly to emphasize the need for connectivity from natural-surface trailheads to the places people work, play and live. Unlike recreational trails, “commuter trails” that connect communities are usually paved, relatively direct, and parallel to roads or railroads. They are an extremely important asset to any region, and many survey respondents specifically asked for more of them. However, they are not the focus of this plan.

This plan is not intended to provide **technical information about trail construction** or maintenance. Plenty of resources provide techniques and specifications for trail projects, and we have suggested several (see Appendix A, Resources). These and other resources can help supply the fundamental principles that apply to all trails, plus the specific principles that apply to particular uses. Publications are a good source of information but need to be reinforced with training and experience. Any trail construction or maintenance project must be developed in partnership with the land manager(s).

Although this trails plan deals with natural surface trails, it is important to mention **blue trails** (navigable waterways). For example, the Sacramento River Preservation Trust is currently working to establish a Blue Trail for the Sacramento River that travels through Butte County. Additionally, Butte County is home to some world class white water in the branches of the Feather River, Deer Creek and Butte Creek.

By law, navigable waterways are public: users can paddle blue trails even through private lands, but they *cannot* travel across private lands to access these public waters. Where possible, planners should work with landowners to allow public access to waterways. Planners and non-profits can also consider purchasing lands that can serve as public access. These public river access points are also important for other recreational activities such as fishing and swimming, and their positive economic impact on nearby communities can be considerable.

Use of **over snow vehicles (OSV)** and non-motorized snow travel is a popular form of winter recreation for Butte County residents. We recognize this importance and made sure the trails survey captured some usage data on over-snow trails (motorized and non-motorized). The continued development of over-snow recreation should be supported, as should the efforts of groups like the Butte Meadow Hillsliders -- who maintain winter road access to Colby Meadows and devote hundreds of hours a year to trail grooming. However, it was decided not to include over-snow trails as part of this plan, simply because over-snow trails have completely separate guidelines for development, use and maintenance.

With that said, some over-snow recreational resources provide opportunities to tie into natural surface trails. For example, the Jonesville Snowmobile Area, which is an OSV staging area as well as the trail head for the Colby Meadows XC ski and snowshoe area, also serves as a great summertime trailhead for both motorized and non-motorized recreation opportunities.



A trail volunteer has dragged a log to close off an illegal trail. Photo credit: Nick Repanich

The Butte County General Plan 2030 explicitly recognizes the importance of investing in trails:

Goal PUB-6 Support a comprehensive and high-quality system of recreational open space and facilities.

Goal PUB-8
Coordinate an interconnected multi-use trail system.

PUB-A8.2 Cooperate with appropriate agencies to **conduct a countywide trails planning study** to identify new needed routes and connections to the existing trails network, as well as to address funding and management of trail facilities.

No one agency can build a world-class trail system alone. Thus, the General Plan calls for ongoing collaboration across governments, districts, and communities:

Goal PUB-7 Encourage local, regional and State parks providers to engage in coordinated and cooperative planning efforts.

PUB-A7.1 Assist special districts with strategies for funding, planning and support for recreation and park facility development.

And, recognizing the County cannot grow unless its recreation and transportation infrastructures grow too...

PUB-P7.1 The County shall coordinate with the municipalities, park and recreation districts, and school districts to plan and develop additional regional and community parks, support and coordinate park master plans, coordinate financing for recreation and park facilities, and plan for the distribution of federal and State funds for recreation and park programs & facilities.

PUB-P8.7 New development projects should incorporate multi-use trails and connections to existing trail networks.

PUB-P6.1 Review of development proposals shall be coordinated with public agencies in order to designate sites for new parks and recreation facilities.

...the General Plan establishes policies for supporting, maintaining, developing and promoting Butte County's trails.

PUB-P8.2 The County shall coordinate with local jurisdictions, Lassen and Plumas National Forests, the Department of Water Resources, and the Department of Fish and Game to designate additional shared use trails along unpaved County roads, access roads and fire roads.

PUB-P8.5 The County supports development of additional off-road vehicle trails.

PUB-P8.4 The County supports development of additional equestrian trails, including safe routes along roads.

PUB-P8.1 The County shall coordinate with the municipalities and park and recreation districts to connect trails between incorporated and unincorporated regions of Butte County.

PUB-P8.3 The development of abandoned railroad rights-of-way, levee tops, utility easements and waterways for new multi-use trails shall be pursued where appropriate.

Finally, the General Plan recognizes that trail maintenance funding needs to be pursued collaboratively and brought home to Butte County:

PUB-A8.1 Coordinate with State and recreation districts to seek funding to publish Butte County trail maps for the public.

PUB-P8.6 The County supports acquisition of appropriate and adequate funding for the creation and ongoing maintenance of trails.



Like a well-designed trail, planning helps you see farther. Big Chico Creek Ecological Reserve.
Photo credit: Wade Killingsworth

1.7 CONGRUENCE WITH THE NATIONAL STRATEGY FOR A SUSTAINABLE TRAIL SYSTEM

The U.S. Forest Service is the largest land manager in Butte County. In November 2017, the U.S. Forest Service released its National Strategy for a Sustainable Trail System. This document introduces the Forest Service’s “shift to a model of shared stewardship”. That means

shifting from a model of the Forest Service attempting to ‘do it all’ to meet the expectations and needs of trail users and stakeholders, to a model where the Forest Service, trail users, and stakeholders form a collective community of stewards who provide support to and receive benefits from trails. (FS-1095b, 3)

The National Strategy lists seven core values for a sustainable trail system: safety, sustainability, commitment (to employees and community partners), access, inclusion, communication, and relationships. These values are also affirmed and upheld by this Trails Plan, which emphasizes the importance of land managers and users working together to create safe, sustainable trails.

1.8 PLAN CREATION

Most grant applications ask, “Is this project shovel-ready and part of a larger plan?” In spring 2016, while discussing a new cycle of Recreational Trails Program (RTP grants) that had become available, Butte County Forest Advisory Committee members realized the County had no such projects because it had no Trails Plan. In response, the BCRCDD decided to convene an ad hoc working group which would work toward creation of a Trails Plan. This Trails Plan Working Group (TPWG) held its first meeting in June 2016, and quickly attracted trail users, land management agencies, and the public, all driven by an ethic of shared responsibility to coordinate with each other to solve Butte County’s trails challenges.

In June 2017, recognizing the importance of this work, the County contracted with BCRCDD to develop the plan you are reading. The County asked for a comprehensive survey of trails users, the creation of a trails database, and the identification of action items and strategies for achieving them. In doing so, the County provided the foundation for building a collaborative framework to maintain, develop, and promote recreational trails for the benefit of Butte County residents, visitors, and future generations.

2. INTRODUCTION

2.1 TRAILS ARE OUR HERITAGE

Not so long ago, everyone reached Butte County by trail. Konkow, Maidu, Mechoopda, and other Native people maintained a sophisticated regional trail network, an infrastructure as essential to their lives as paved roads are to ours.



For thousands of years, Native Californian land management techniques shaped the land that is now called Butte County. Photo credit: Wade Killingsworth

Mountain man Jim Beckwourth used trails to guide a generation of immigrants across the Sierras, using a route so practical that sections of “the Beckwourth Trail” became the Oro-Quincy Highway. Other sections of this route can still be hiked through the same wild landscapes seen in Beckwourth’s day. Along Humboldt Road, wagon ruts left by other immigrants can still be seen under the wildflowers of spring.

When mining and logging operations came to Butte County, they built trails for

resource extraction. Designed for “point-A-to-point-B” access, with little consideration of impact, some trails left a legacy of erosion land managers still address. Other logging and mining trails were built with such craftsmanship people still walk or ride them today.

Just as numerous as the historical reasons for trails are the reasons Butte County residents enjoy them. Both motorized and non-motorized recreation have diverse subsets of uses and user groups. From a leisurely hike to Feather Falls, to a trail runner’s fast-paced workout, to an end-to-ender’s Pacific Crest Trail odyssey; from a family driving their 4x4 into Granite Basin for a picnic, to a dirt biker shredding it on a challenging single-track, residents and visitors look for many different experiences – while often utilizing the same trails and destinations.



The same trail will be used by many different users over time. Photo credit: Paradise Ridge Riders

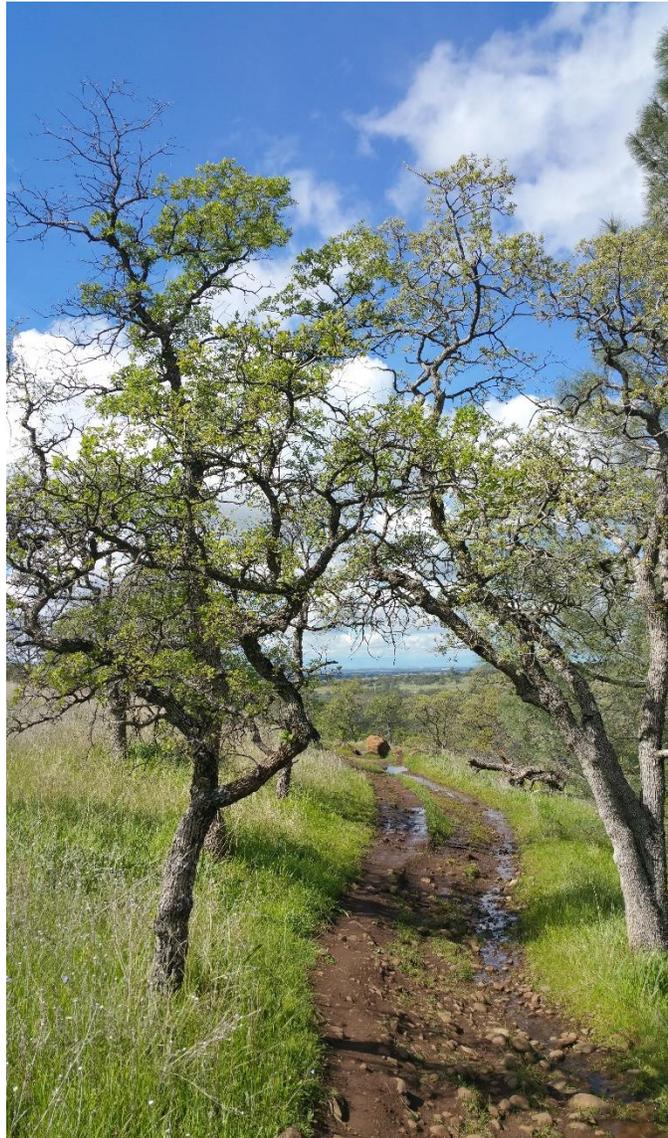
Trails are still a vital element of the Butte County economy. Trails can mean getting to work or attending school; they can even mean finding food, medicine or fiber. But most of all, trails mean accessing the outdoor recreation that has supported outstanding quality of life in Butte County for generations.

Butte County’s hundreds of miles of trails – and the hundreds of thousands of acres of publicly accessible lands that support them – are among the greatest assets the County has. But like any asset, trails and public lands must be nurtured. Key to sustained economic development in Butte County is a thoughtful, continual investment in local trails.

2.2 TRAILS AND LANDSCAPES SHAPE EACH OTHER

The same rugged diversity that makes the region’s trail system so exciting also makes it challenging to maintain. Here, the Sierras meet the Cascades, and each mountain range has its own geological vocabulary to be learned. Throw in a Mediterranean climate and an elevation range of over seven thousand feet (from about 80’ on the Feather River near Biggs to 7,124’ on the Plumas County line), and Butte County offers a taste of almost every trail-building and maintenance challenge in existence.

The volcanic Cascades are solid, inerodible basalt. Trails can go around basalt flows or sometimes over them, but never through them. In stark contrast, the granitic soils of the Sierras are ancient and constantly decomposing, so as soon as a trail is built, it starts eroding or exfoliating off its mountainside. Valley trails are beautifully flat, but flat trails don’t drain, so they liquefy each winter and often have to be seasonally closed.



Volcanic soils don’t drain well, presenting maintenance challenges. Upper Park, Chico. Photo credit: Wolfy Rougle.

Meanwhile, high-country trails generally experience more precipitation, and heavy rains or rapid snow melts can do significant damage to mountain trails built on decomposed granite soils.

When combined with razor-thin trails budgets and scarce staff time, these landscape factors make local trails maintenance a true challenge. The good news is that thoughtful trail

design which accounts for both the landscape and human elements of sustainability can drastically reduce maintenance needs. And as we shall see, dollars spent on trails more than repay themselves in benefits.

2.3 BENEFITS OF TRAILS

What are the benefits of trails? If you asked 10 different trails users, you might just get 10 different answers. This diversity hints at the key factor that makes trails so important to our communities: They provide something for everyone. Economic and health benefits are two of the most important factors, discussed below. But here are just a few of the other benefits trails provide at no extra charge:

- Trails protect environmental and cultural resources
- Trails provide access for fire protection
- Trails let kids get outside and discover nature
- Trails allow people to access natural resource activities like gold panning, berry picking, mushroom hunting, and more
- Trails provide access to tribal heritage
- Trails increase property values
- Trails can provide solitude...
- Or, trails can provide chances to connect with friends “in real life”
- Trails provide opportunities for ecological education
- Trails provide opportunities for events for community and economic development
- Trails provide opportunities for active transportation
- Trails provide enjoyment, solace, and spiritual comfort
- Trails reconnect us to what it means to be human.

Economic Benefits

Trails mean business. According to the Outdoor Industry Association's 2017 Report, the United States outdoor recreation economy generates \$887 billion in consumer spending annually, accounting for 7.6 million American jobs, and returning \$59.2 billion in tax revenue *just to local governments alone*^a. These are nationwide figures, but counties would do well to seize their share of the national pie: Even a remote county like Blaine County, Idaho can see \$120 million in income every single year from outdoor recreation^b. And a 2001 study showed that the average visitor to just one ordinary national forest spent over \$1000 per visit at businesses located within fifty miles of the trails-based recreation site^c.

Trails have economic value beyond what trails users spend on equipment and lodging. Three-quarters of Realtors say a home near a trail is easier to sell^d. A National Association of Homebuilders study found trails are the second most important community amenity potential homeowners cite when choosing a new community -- ahead of public parks, security, and access to shopping or business centers^e. A single greenway can raise property values so much that it lifts property tax revenue several million dollars a year^f.

To be sure, trails can be job creators all by themselves: The design and construction of walking and biking facilities create more jobs per dollar than any other kind of transportation infrastructure^g. Yet trails can do much more: They can tip the scales in one county's favor and make job creators choose to locate their businesses there.

Entrepreneurs who can move their tech businesses anywhere are increasingly choosing neighborhoods with great trails systems, because that's where their employees want to live. (And any worker who'd move to a city for its trail system is probably a frequent trails user, which means she is more likely than average to be energetic, focused, and healthy -- in other words, a great employee.)

In fact, trails are a great **public health investment** because they make exercise free, inviting, and fun. One study found that every dollar spent on trail development returned \$2.94 in direct medical savings^h. That's good for employers, good for taxpayers, good for governments and good for our kids.

So when visitors are attracted to Butte County's outstanding trails opportunities, it's not just the owner of the bike shop who benefits. County residents reap increased property values, public budgets that save on health care, and more job options – without lifting a finger. Therefore, ***the economic benefits of trails accrue to everyone in Butte County, not just trails users.***

This trails plan provides a glimpse of the economic importance of trails recreation, but can only offer a macro view. If, in the future, a more detailed economic impact study could be completed, it would be valuable for NEPA/ CEQA analyses, grant applications, and strategies to attract new businesses. All these in turn would lead to new opportunities and funding for trail development and maintenance.



Photo credit: Paradise Ridge Riders

Health Benefits

Our society faces a health crisis because of rising obesity and the increasing cost of healthcare. Trails can improve people’s health and extend their lives by providing convenient and attractive opportunities for exercise. Increased fitness through trail use has been shown to reduce many health problems: not just obesity, but also depression, cardiovascular disease, stroke, diabetes, anxiety, stress, sleep disorders, and even some types of cancer¹. Thus, communities that provide accessible trail connectivity can reap considerable healthcare savings.

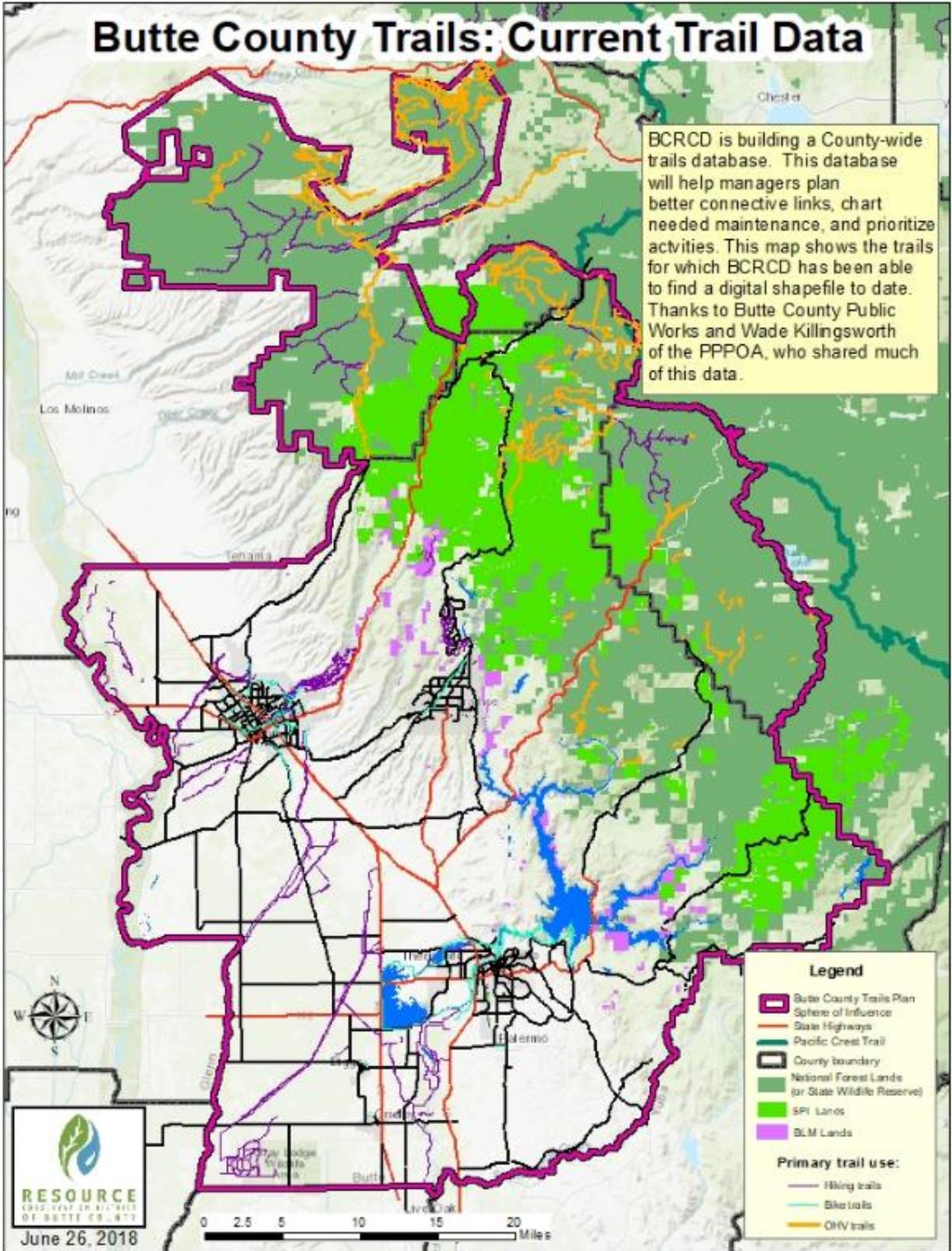
Indeed, when precious funding for grants can be found, it is often secured by public health agencies. Non-profits with wellness missions are valuable partners in expanding trails systems. Because today’s trails will be used for generations – and because healthy habits start early – communities with vibrant trail systems are great places for kids. Thus, organizations focused on child welfare can also be highly effective trails partners.



Those who help maintain their trails get double the exercise! Photo credit: Friends of the High Lakes

2.4 EXISTING TRAILS IN BUTTE COUNTY

As part of this plan-writing process, BCRCDC will create a database of all trails in the county. This part of the project will be ongoing. On the next page, you’ll find a map showing the state of digital trails data in the Trails Plan Sphere of Influence to date.



2.5 WHAT MAKES A GREAT TRAIL SYSTEM? CONNECTIVITY AND SUSTAINABILITY, BY DESIGN

World-class trail systems don't just happen: they are designed. Great trails planners study the natural pattern of human movement over the landscape, and then they design the optimal routes to take people where they want to go, while minimizing negative impacts. When it comes to natural surface recreational trails, the best routes are usually **not** the shortest ones. Instead, the greatest paths take into account topography, soils, climate, design needs of special places like wetlands, the physical needs of different types of travelers, and the desired experience of using the trail.

Great trails designers build in loops and connective links to give users a variety of travel options. The more possible trips originate from one access point, the more people will keep coming back for new experiences. They know they will never have the same adventure twice. If some possible loops are easy and others are challenging, there is truly something for everyone, and families can return to the same trailhead for generations. This tactic also makes the most of each dollar invested in trailhead amenities.

Sustainably built trails require less maintenance, so an extra year devoted to good design and planning can reduce expense and upkeep **for centuries**. The USFS National Strategy for a sustainable trail system identifies the social, ecologic and economic considerations as the essential elements of a sustainable trail system.

“Sustainability is achieved at the junction where trails are socially relevant and supported, ecologically resilient and economically viable.”

***– U. S. Forest Service
National Strategy for a
Sustainable Trail System***



Image credit: USFS

Thus, sustainability means everything from shaping a trail correctly so it doesn't erode a slope, to making a trail interesting enough that people will actually use it. It means putting a creek crossing in the right place and it means providing enough parking at trailheads. It means optimizing a trail for its intended users and it means crafting thoughtful policies that create a culture of respect between user groups. Sometimes, it can mean keeping one user group out of an area. It means helping users find their way. And it means passing on the skills and lessons learned from one generation to the next.



Wildflowers in Upper Park are best enjoyed by trail. Photo credit: Wolfy Rougle.

3. COMMUNITY INPUT

3.1 TRAILS SURVEY

TIMELINE AND METHODOLOGY

The Trails Survey was designed to learn how Butte County residents (and visitors) use trails, what problems and opportunities they perceive, and what trail system they want to see.

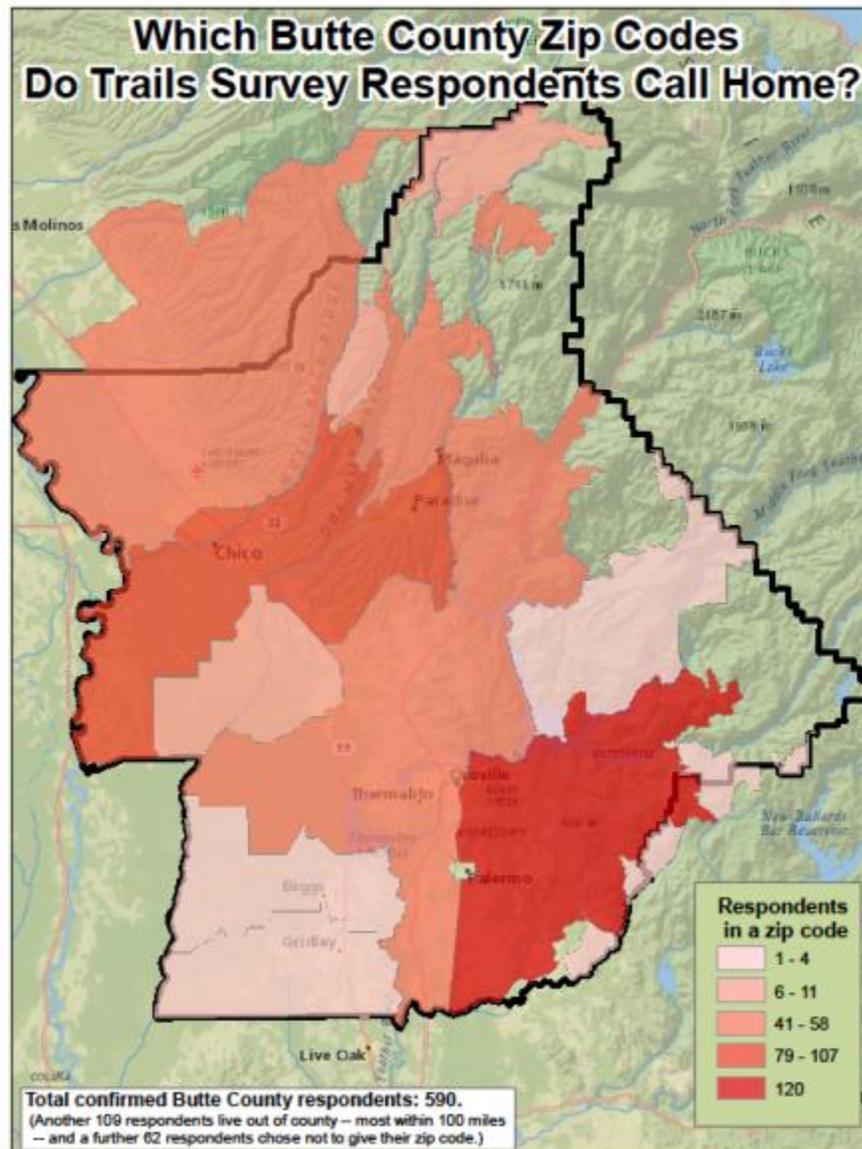
To create the Trails Survey, BCRCDD first reviewed literature about conducting a trails survey and examined other counties' trails surveys (see References). The 42-question Butte County survey contained items asking respondents about themselves, how they use trails, what problems and opportunities they see in Butte County trails, and how they would fix them. It had both multiple-choice and free-response sections. Most respondents completed every question. Respondents were also able to leave their email or phone number (optional) if they wanted to be contacted about upcoming trails maintenance opportunities, so the survey doubled as a volunteer recruitment tool.

The web app Surveygizmo was used to host the survey. This app allows survey authors to analyze, filter and compare responses from different groups of respondents. It also checks whether a person has already taken the survey and will not allow the same respondent to take the survey twice. The trails survey was open from April 1 until May 1, 2018. Any person was welcome to take the survey. The survey was publicized in newspapers, the BCRCDD's website, and through outreach to local chapters of the following groups:

- | | |
|---|--|
| Backcountry Horsemen of California | Friends of Bidwell Park |
| Butte County Forest Advisory Committee | Friends of the High Lakes |
| California Native Plant Society | Hillsliders |
| Chico Equestrian Association | LOBO (Lake Oroville Bicycle Organization) |
| Chico Hiking Association | Paradise Horsemen Association |
| Chico Velo / Trailworks | Paradise Pines Property Owners Association Trails Committee |
| Chico / Oroville Adventure Club | Sierra Club |
| Paradise Ridge Riders | |

WHO PARTICIPATED

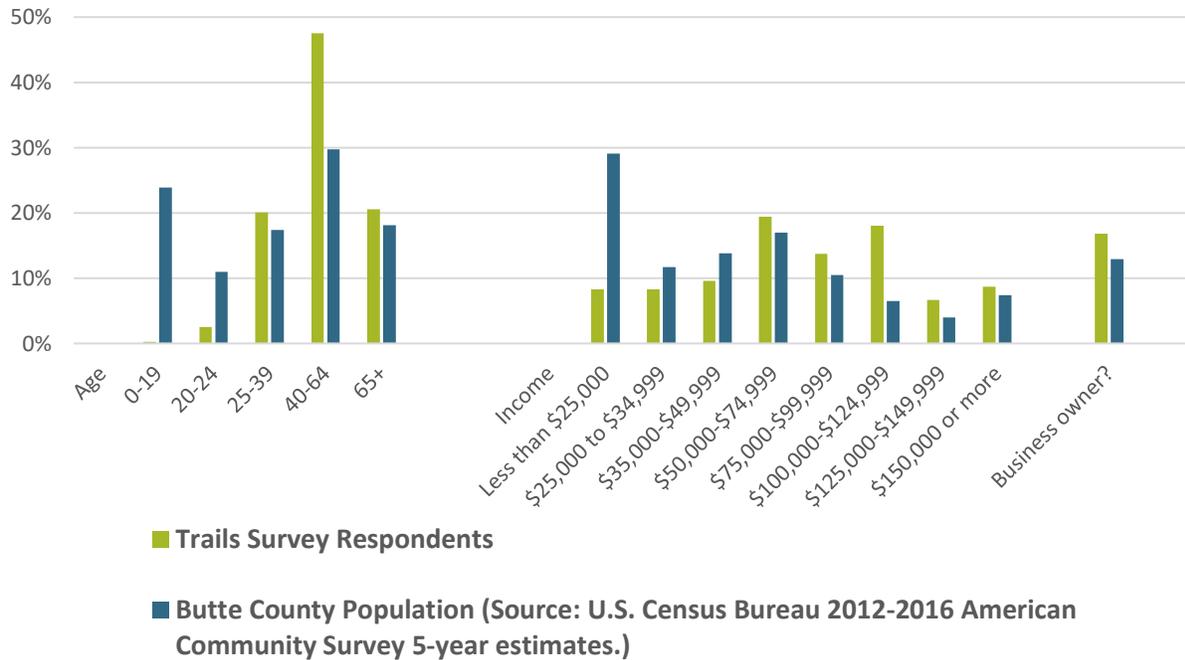
757 people responded to the trails survey, and 642 of them completed every single question. The survey was a success because trails organizations generally consider 300 responses to be a minimum valid sample!



Survey respondents came from every area of Butte County. The most vocal zip code was Oroville’s 95966, and the least vocal were Biggs and Gridley. In total, 590 survey respondents live in Butte County. Another 109 live outside the county, mostly in Northern California (especially in Grass Valley, Nevada City, northern Sutter County, and Redding). About 65 respondents did not provide a zip code.

Because survey outreach focused on trail user groups like Chico Velo and Friends of the High Lakes, survey respondents are not a random sample of Butte County residents. Compared to the general Butte County population, survey respondents are more likely to use trails: fully 95% of them said they had used a Butte County trail in the last 12 months. Survey respondents are also older, higher-income, and more likely to own a business:

Trails Survey respondents and Butte County demographics



Trails survey respondents had a median age of 53, while Butte County’s median age is just 38. Trails survey respondents had a median household income somewhere in the \$75,000 - \$99,000 range, while Butte County’s median household income is about \$44,500. Compared to the background population, survey respondents were less likely to live alone, and more likely to live in a two-person household. People living in a 3-person household and up, however, are just as common in the survey population as in the background population. No questions about race or gender were asked.

Survey respondents are local trails enthusiasts. Almost two-thirds of them use a trail at least twice a week in summer. (Impressively, 50% still get out on the trail at least twice a week in winter!) And when they get out on trails, over half of them stay on the trail for more than three hours at a stretch.

Because they care about trails, over 55% of survey respondents belong to at least one group or organization that champions trails-based recreation. These ranged from user advocacy groups like the Back Country Horsemen and the California 4 Wheel Drive Club, to a wide variety of recreation-based Meetups, to conservation groups like Audubon, the California Native Plant Society, and several local land trusts.

These residents and nearby visitors are the local experts on Butte County trails. *Half of them have lived in Butte County for over 20 years.* They offered insightful and nuanced comments about trail maintenance and development needs, often suggesting targeted improvements at specific trailheads or naming missing connectivity links that would improve the whole trail system.

3.2 KEY FINDINGS

HOW TRAILS ARE USED

Trails are a cherished asset. Over 85% of survey respondents agreed that “trails recreation, maintenance and development is an important factor in quality of life and future economic development in Butte County.”

When asked to pick a primary trail use, respondents were most likely to choose hiking or mountain biking. These two activities together accounted for over half of all users. Equestrians and off-highway vehicle users came next, with each group claiming about one in seven survey respondents. (See next page.)

Voices Of Trail Use

“Trail improvements to mitigate erosion and decrease closures. Year round mountain bike trails would be a huge draw!”

“Better trail system connecting different areas would be by far the most significant improvement”

“Connect up trails for overnight backpacking opportunities. PCT connection to Chico/Bidwell would be terrific.”

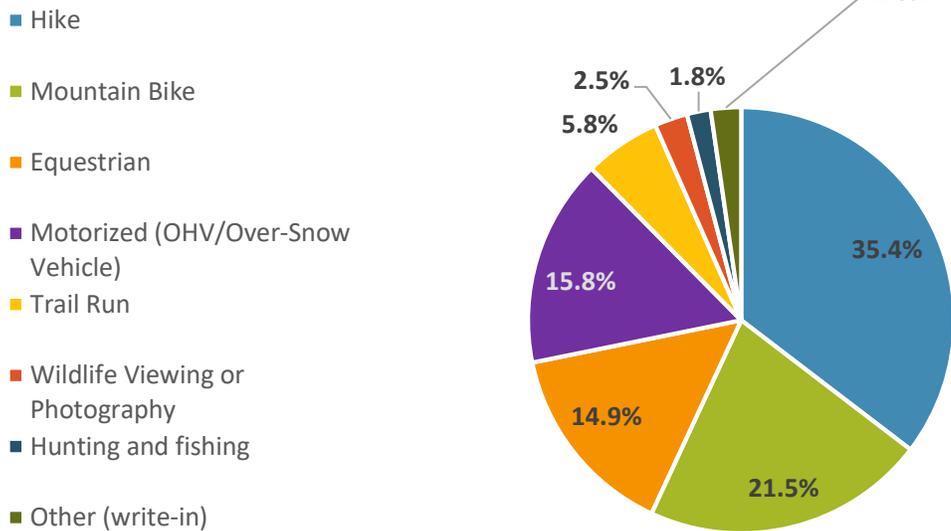
“Community organizing for trail building and maintenance volunteers would be beneficial, especially for CSU students who frequent the trails year round.”

“More bike lanes on rural roads. Tie Chico to Oroville with a Bike Trail.”

“Another connector loop from the pipejam trail to grassy lake would be awesome!”

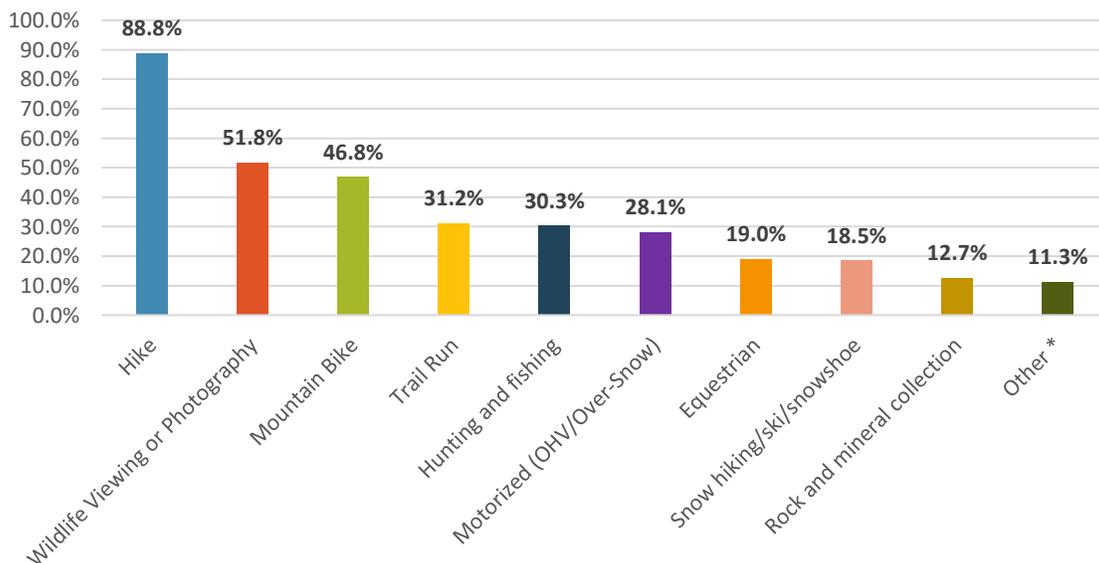
“I would happily help you write grants for this cause. User fees undermine egalitarianism.”

What is your *primary* trail use?



Of course, most respondents use trails more than one way – sometimes even during a single trip. When invited to name *all* the trail uses they enjoy, respondents painted an even more diverse picture of Butte County recreation:

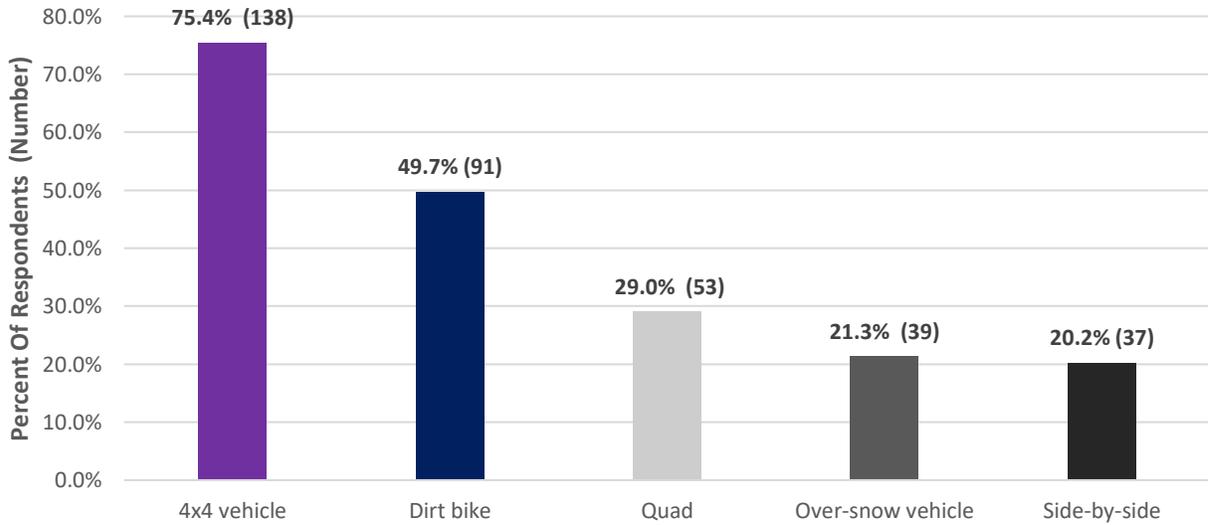
What are *all* the ways you use trails?



*Among respondents who wrote in an “other” use, about one-third (23 people) mentioned walking their dogs, and one-quarter (17 people) mentioned botanizing.

Finally, the survey also asked OHV users to specify which types of OHV(s) they used on trails in Butte County. Over three-quarters used 4x4 vehicles, with dirt bikes the next most popular.

Which off-highway vehicles (OHVs) do you use on Butte County trails?



Clearly, even within just one subset of trail users, many smaller subsets exist – each with their own needs and preferences.

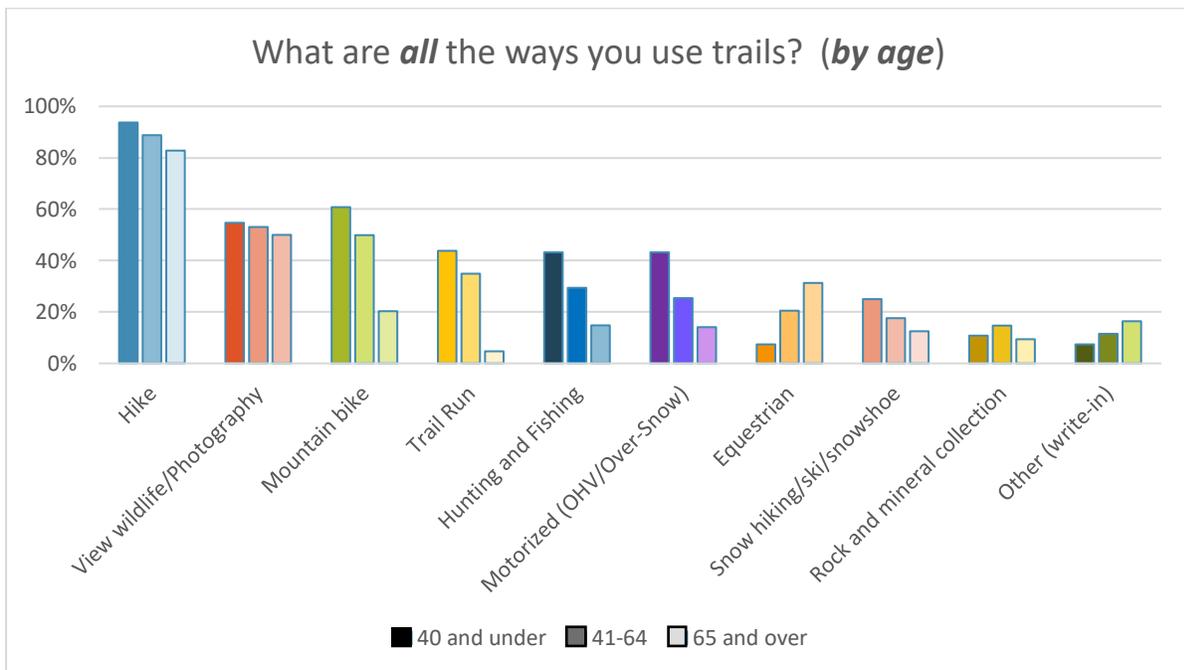


Photo credits: Paradise Ridge Riders, in Granite Basin (left); Wade Killingsworth (right)

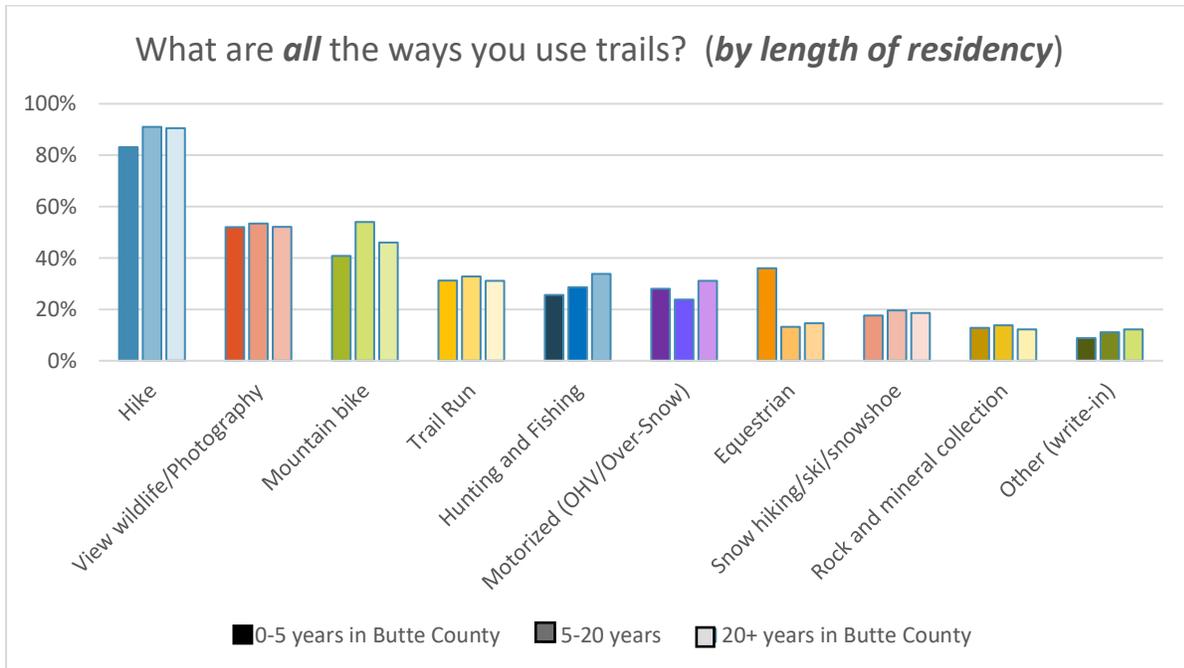
TRAILS USE BY AGE AND LENGTH OF TIME SPENT IN AREA

Time changes things... but not everything. No matter your age, you have about the same chance as everyone else in Butte County of being a hiker, birder, gold-panner or rockhound; people of all ages have an equal love for looking at wildlife and taking pictures on the trail. However, people under 40 are about three times as likely as their parents' generation to go mountain-biking, to hunt or fish, and to use OHVs or over-snow vehicles. They are also eight times as likely to trail-run. People over 65, on the other hand, are about four times as likely to be equestrians and about twice as likely to name "other" trail uses, which most often means dog-walking and botanizing.

These data show a snapshot in time, but they cannot tell us the future. Will today's young people eventually become the equestrians of 2048, after they accumulate enough money and stability? Or will they become a generation of silver-haired trail runners and mountain bikers? As for their parents' generation: did today's 70-year-olds once mountain-bike in larger numbers but stop because of physical difficulties, or did most of them never mountain-bike at all because they came of age before mountain biking was popular?



Next, we compare Butte County newcomers to long-time residents. If any one pattern emerges, it's simply that the people who are moving to Butte County aren't much different than those of us who are already here.



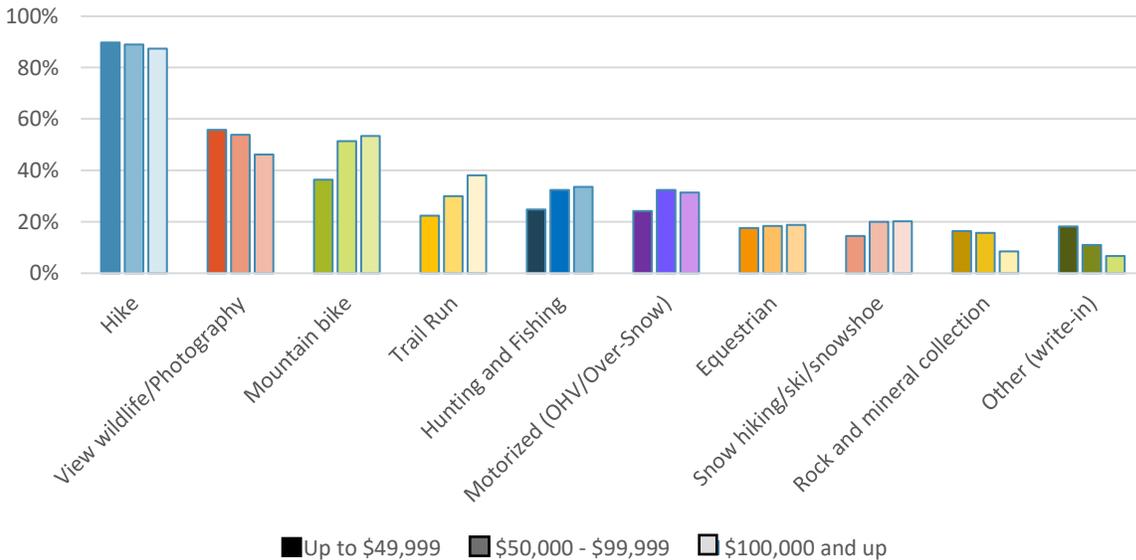
Interestingly, respondents who moved to Butte County in the last 5 years are about three times as likely as everyone else to name equestrian riding as their *primary* trail use. Meanwhile, the cohort of residents who arrived 5-10 years ago are twice as likely as anyone else to name mountain biking as their primary use.

BY INCOME AND SPENDING ON RECREATION

It is important to note that the trails survey did not reach a representative economic cross-section of Butte County residents. Well over one-quarter of Butte County households have an annual income under \$25,000, and almost none of them answered the trails survey. Survey respondents have been divided into three groups: the 26% of respondents who earn less than \$50,000 per year per household (not far from the Butte County median), the 33% earning up to \$100,000, and the other 33% who make over \$100,000*.

The data show a marked income gap in trails-based recreation. Households making under \$50,000 do significantly less of almost every trail-based activity, except hiking, wildlife-watching, rock-hounding, and (perhaps surprisingly) horse-riding. Notably, the lowest-income households are more than twice as likely as the wealthiest households to list “other” as a trail use, suggesting that people on a budget find creative, low-cost ways to enjoy trails.

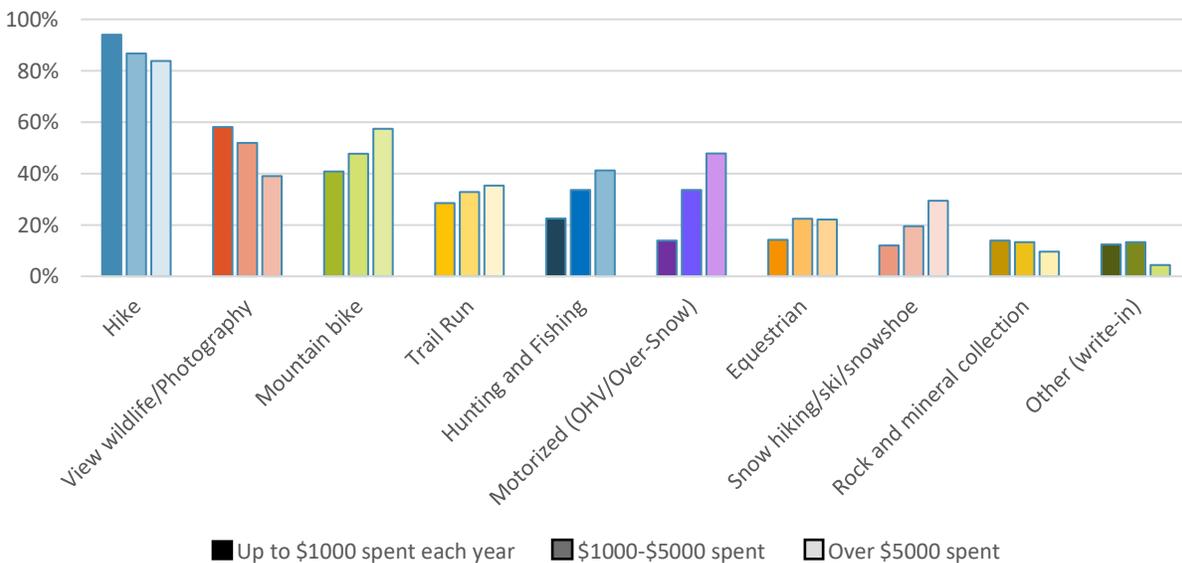
What are *all* the ways you use trails? (*by household income*)



*(About 7% of respondents chose not to disclose their income, so they are left out of this chart.)

The trails survey also asked respondents: “On average, how much does your household spend on trails-based recreation each year (not just in Butte County)? Be sure to include: travel, equipment, gas, lodging, etc. in your estimation.” Below, respondents are divided up based on whether they answered less than \$1000 per year (41.5% of respondents), \$1000-5000 per year (37.4% of respondents), or over \$5000 (21.1% of respondents).

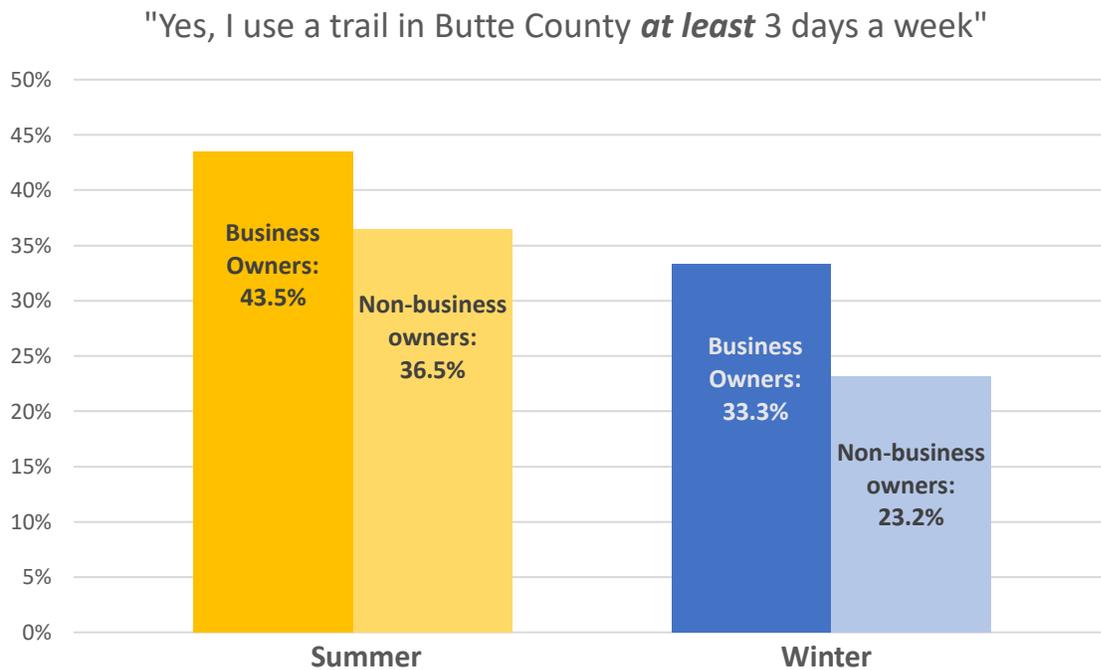
What are *all* the ways you use trails? (*by \$ spent on recreation*)



The data show that people who spend the most money on trails recreation are more likely than average to be mountain bikers, hunters and fishers, skiers, and – especially – OHV or snowmobile users. In fact, people who spend over \$10,000 per year on trails recreation are overwhelmingly either mountain bikers or OHV/snowmobile riders; compared to the general population, they are more than twice as likely to be motorized users and 1.8 times as likely to be mountain bikers.

BY BUSINESS OWNERSHIP

The survey also asked respondents whether they owned a business in Butte County. No trail uses chart is included here because the survey showed no significant difference in the ways business owners and non-business owners use trails. In other words, business owners enjoy every trail activity at the same rates as their neighbors, customers and employees. There's just one difference: If you're a business owner, you use trails **more often**.



SATISFACTION WITH TRAILS

When asked if Butte County area trails are generally well maintained, 43.5% of survey respondents said yes, 23.5% said no, and a third felt neutral. These numbers stay the same whether a respondent's primary trail use is hiking, trail running, or OHV riding. However, mountain bikers are the least likely to say trails are well maintained (at only 29.9%), while equestrians are the most satisfied with the current level of trail maintenance (at 58.7%).

When asked if there was sufficient information available to help people find trails and plan their outings, users' responses were less positive. Only 24.8% of people thought the publicly available stock of maps, guidebooks, and websites were sufficient for finding and navigating regional trails. Another 33% of respondents felt neutral or had no opinion. 37.7% of respondents – the largest group -- **did not** feel there was enough publicly available information on trails. This was as true for longtime residents as it was for newcomers, and it was true for all groups of trail users. (The outliers were trail runners, who were even more unsatisfied (59%!) than their fellow trail users.)

But what about once the trailhead is reached: Do Butte County area trails have sufficient signage to keep users on the right trail and get them to their intended destination? Less than a third of users say yes. Almost exactly the same number say they feel neutral or they're not sure. 36% of users say signage is not sufficient. Mountain bikers are more satisfied than average, trail runners less, but the differences are slight.

Finally, users were asked about trailhead facilities. These can include informational facilities like map kiosks, but also include parking and staging areas, restrooms, trash cans, water fountains, and so on. 27.7% of users feel trailhead facilities are sufficient on Butte County area trails, but 40.8% disagree. Newcomers are happier with local facilities than longtime residents: only 28.9% of those who have lived here less than 5 years are dissatisfied with trailhead facilities, while among those who have lived here longer than 20 years the dissatisfaction rate is 47.5%). The most dissatisfied were hikers, and the least dissatisfied were mountain bikers, but, again, the differences were slight.

To sum up: Only a quarter of respondents feel trails are not well maintained. But one in three said they

Voices Of Trail Use

"I do enjoy the ruggedness of most trails I currently use, but would appreciate a directory of trails and/or directional map. A directory in Upper Park would be great for both locals & visitors."

"Need improvements to the trail along Deer Creek from the Ponderosa Road to the Hwy 32 crossing. The Butte Meadows area is also in need of a good singletrack system."

"Maps should be provided in kml, kmz, etc format. If they're not already, they should be published on hiking websites, etc"

"Better maintenance and clean up. I'm going to Swazey Rec Area in Shasta more often now. Butte County could use a trail system like that."

"Trailforks is my primary trails info source. The app tells you who runs a trail -- and gives the option to donate now. I only need PayPal and internet to donate on the spot."

Voices Of Trail Use

“I have had several incidents where bikers have nearly run over my horse. I have had to leap my horse off the trail to avoid injury.”

“We need to make all the trails multi use trails. Trails for the horses only is a waste, only a few people get to use them.”

“Bikers want challenge, speed and burn through new trails. Hikers & equestrians want quiet and will use the same trails over and over. As long as there are different goals, it is important to ensure both groups (foot and wheels) have the trails they need, esp. separate trails.”

“Off leash dogs are also a HUGE problem. I rarely take my child hiking anymore because of 2 bites and being exposed to pepper spray defending against a third.”

“I would like to take my German Shepherds on the trail I bought my house here from TX assuming I could!!!”

“I feel the equestrians have the best access to trails. Everyone else gets the scraps.”

needed more information to find trails, navigate them, and stay on them once they found the trailhead. An even greater number would like to see trailheads spruced up with better parking, interpretive signage, and garbage cans.

WHAT ABOUT USER CONFLICTS?

Ask Butte County trail users about conflicts with other users, and you will get an earful. 41.6% of survey respondents said conflicts between users were an issue on Butte County area trails. Some told of feeling unwelcome, feeling unsafe, or even getting injured by other trail users. Some said they use trails less because of these bad experiences. A sobering 40% said that if user conflicts were not an issue, they would use trails more. Equestrians reported the most conflicts: 68.5% of them said conflicts were an issue. Trail runners reported the fewest, at 21.6%.

FOR A BETTER TRAIL SYSTEM: SHARE, BUT OPTIMIZE

If there's one take-away lesson from all those graphs, it's that age, length of residency, income and spending, and business ownership don't actually divide us into neat categories of trail use. Everyone does everything. For this reason, Butte County area trails require thoughtful management. People can share trails, but users do sometimes come into conflict with each other. To reduce conflicts and maximize scarce resources, decision-makers should strive to **optimize** trails for particular uses in the areas where those uses make the most sense. That means recognizing constituencies – like the single-track OHV riders who love Granite Basin, or the mountain bikers who champion the Colby Mountain trails – and building on existing infrastructure. Improving trail systems that are already “adopted” by particular user groups is cheaper, more efficient, and more sustainable. As we shall see, many existing trail areas even come with willing crowds of “silent volunteers” who are simply waiting to be asked for help.

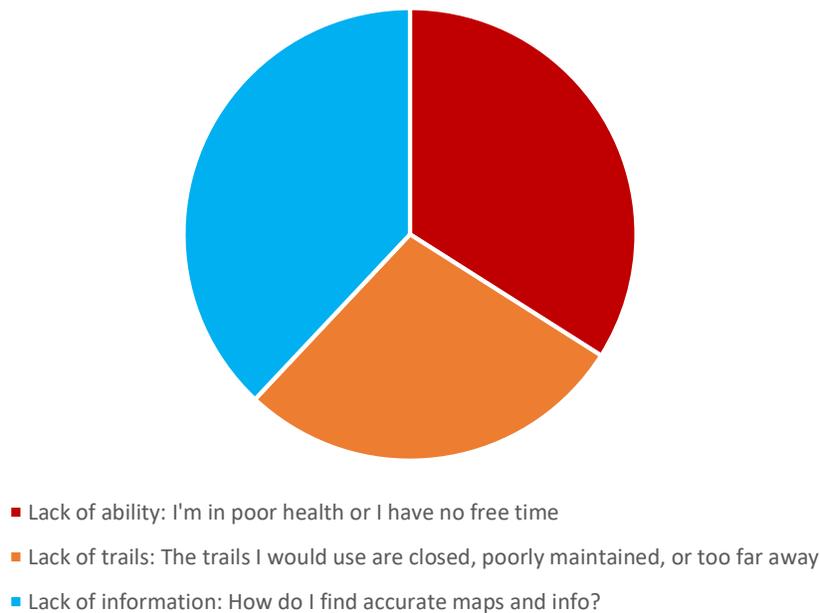
WAYS TO INCREASE TRAIL USE

One of the purposes of the survey was to identify gaps and areas for improvement in the Butte County trail system. It asked trail users what would increase their use and enjoyment of trails; it asked (a handful of) non-users what would turn them into trails users; and it asked everyone what would entice them to become committed trails volunteers.

WHAT NON-TRAIL USERS SAY

The non-trails users who answered the survey were few, yet they nonetheless provided some valuable insights into why people don't use trails. People have three main reasons for not using the trails: problems with their lives (health issues or no free time), problems with the trails (closures or perceived poor maintenance), and problems with information, such as not being able to find reliable maps. Several people mentioned that the trail and road closures resulting from the spillway disaster had cut off access to their favorite trails.

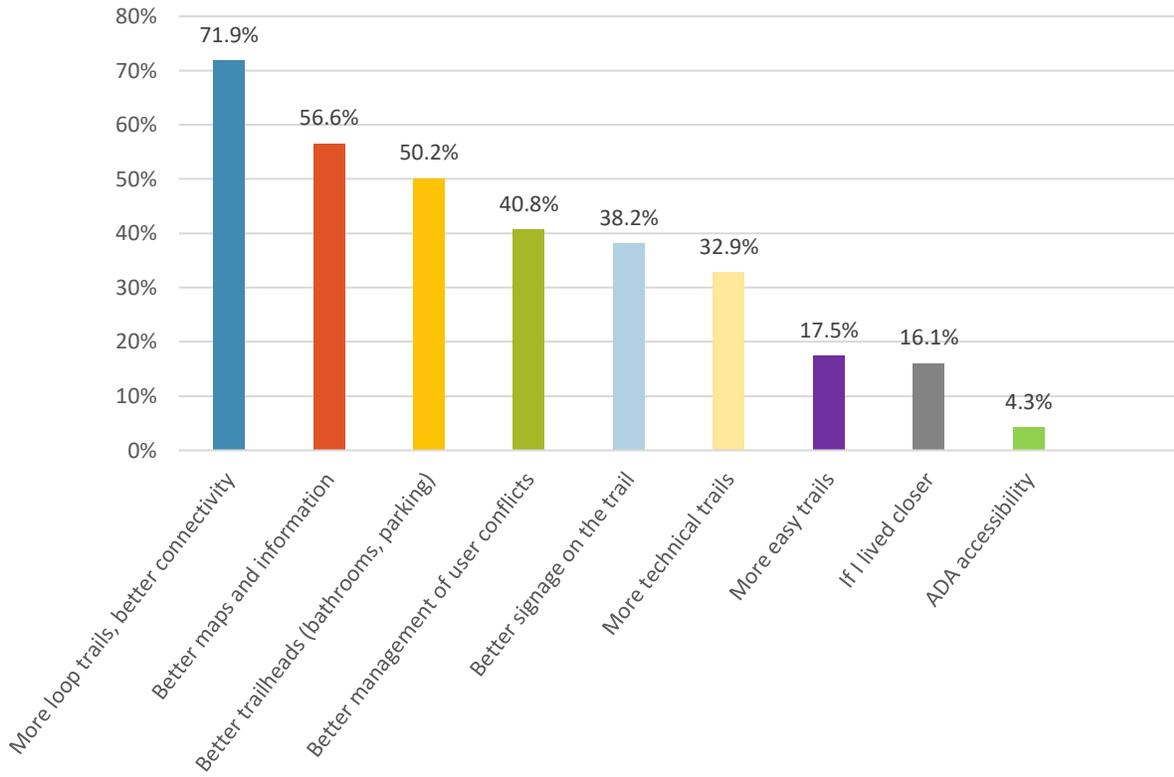
"Why haven't you used a trail in Butte County in the last 12 months?"



WHAT TRAIL ENTHUSIASTS SAY

Trails users were also asked what would make them use trails more. Here, respondents could select as many factors as they wanted. Three factors were chosen by more than half of respondents: better connectivity and loop trails, better trailheads, and better information.

"What would increase your use of Butte County trails?"



Two trail volunteers share a workday on the PCT near Humboldt Summit.
 Photo credit: Bob Gage, California Backcountry Horsemen, Sutter Buttes Unit.

WHAT TRAIL VOLUNTEERS SAY

With funding and staffing for trails notoriously scarce, trail volunteers are key to maintaining a usable system. Just over a third of survey respondents had participated in a trail work maintenance day on public lands in the last two years. When asked why they had not participated in a trail work day, less than 20% of people said they didn't want to or had physical limitations. Many more are simply waiting to be recruited:

44.9%

...don't know how to find work days

16.9%

.... just want training

**37.5% say:
"No one asked."**

Voices Of Trail Use

On Volunteering

"I never know when or where work is needed."

"There need to be more and consistent maintenance days."

"I have young kids, they'd have to be able to participate for me to find time to do it."

"Did not know this was a thing."

"I work a lot of weekends and swing shift, and that's when trail days are usually scheduled."

"LET THOSE THAT MESS THEM UP FIX THEM"

"I have no excuse. I really should have been helping out."

TRAIL USERS TACKLE THE PUBLIC BUDGET

Voices Of Trail Use

On Paying For It

“Charging at the gate discourages people from even starting. We want people to visit and spend money how they choose, not how we choose.”

“DWR owes the residents of Butte County big time after locking us out of / destroying much of our public land around Oroville Dam. DWR funds from water use should go back into trails.”

“Downieville has done amazing things combining grants, volunteers, donations, & fundraising to maintain some of the best trail systems around. If Butte County starts charging a fee, I’ll just go spend more time in Downieville.”

“I would support [a higher lodging tax] if it included a free visitor pass to our trails. Like a ‘resort fee’.”

“Fine the idiots who dump their garbage out there and use that money.”

“This is the sort of thing I would love to see my tax dollars go to.”

Trails are expensive to build and maintain. The trails survey asked respondents to put themselves in the shoes of a public manager, choosing first how to pursue funding and then how to allocate it.

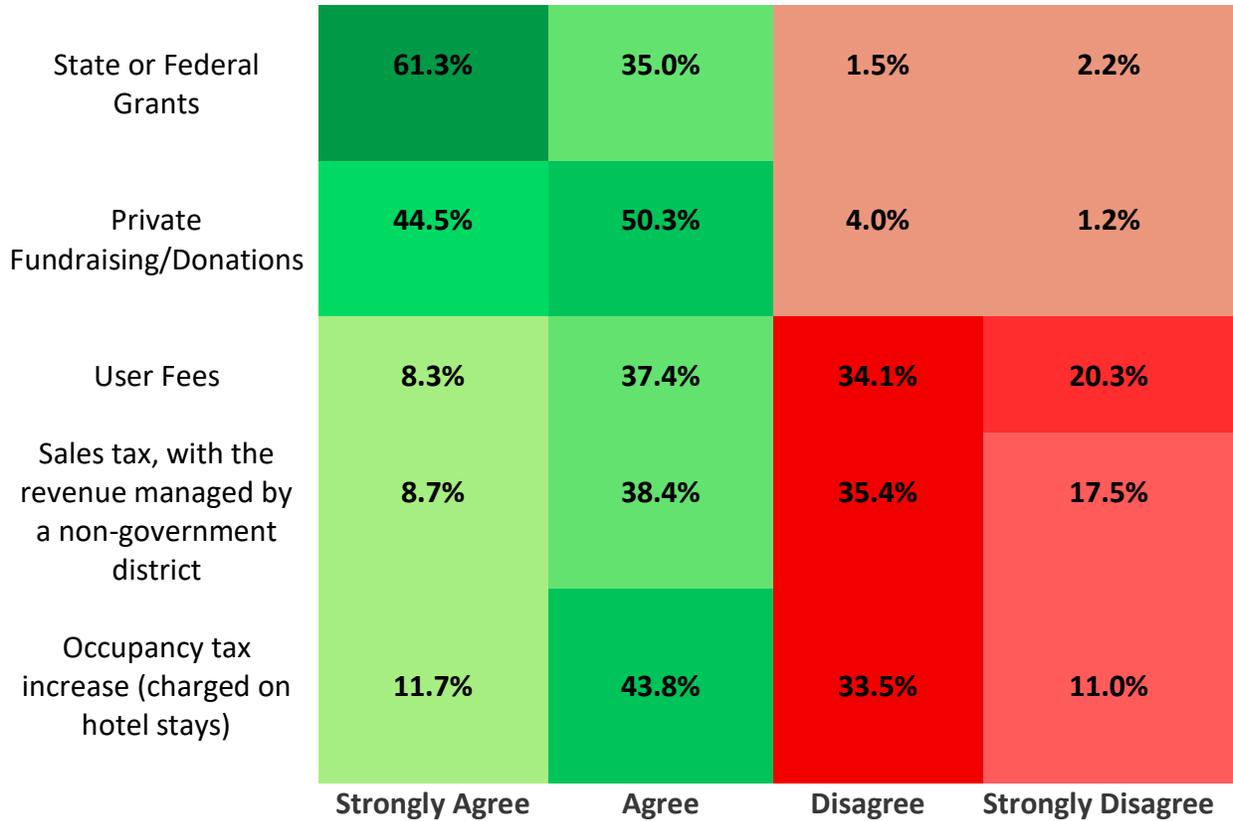


A group of trails users stand on the bridge they raised funds for and built themselves. Photo credit: Wade Killingsworth.

ACQUIRING FUNDS

The survey offered users five possible funding mechanisms for trails projects and asked them to rate their level of comfort with each. It is probably not surprising that user fees and a sales tax were the least popular ideas, and grants the most popular. But users also offered incisive comments (see sidebar, previous page) about how they would fund *their* trails budget.

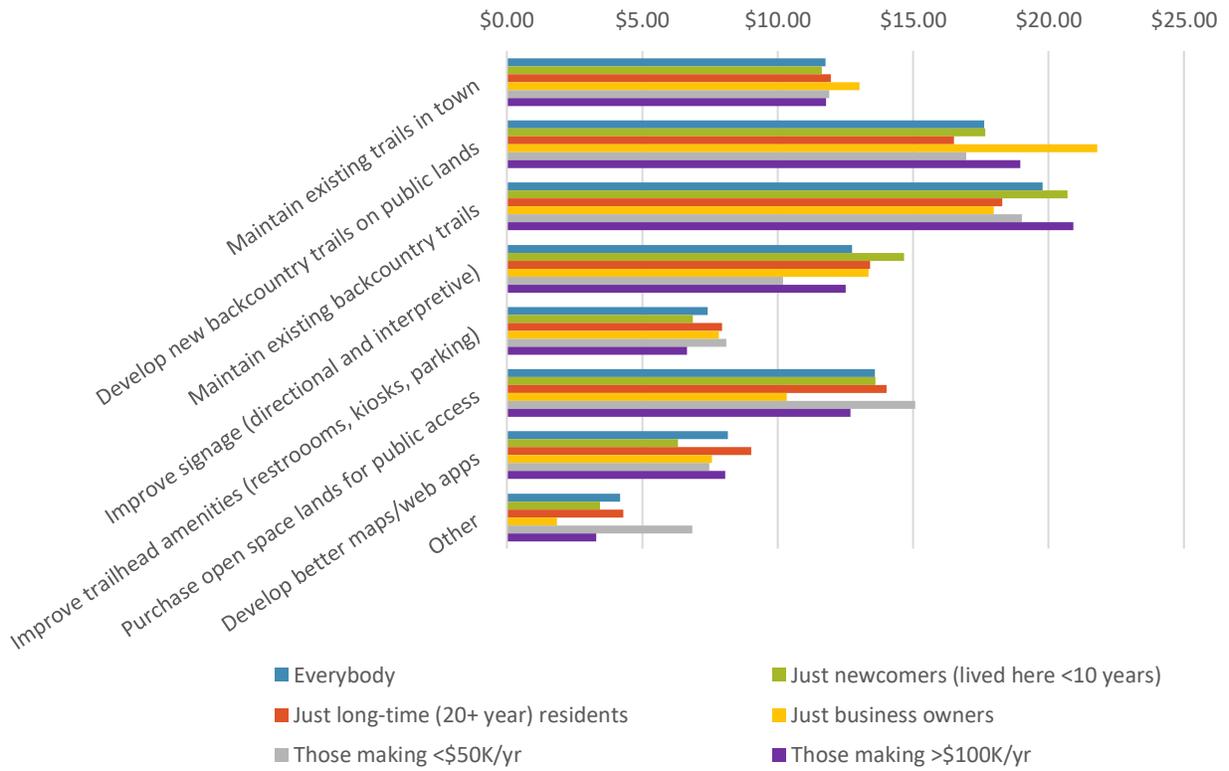
” Do you agree with these possible funding sources?”



ALLOCATING FUNDS

As any public manager knows, allocating money once you have it is often even harder than getting it in the first place. The trails survey asked users to imagine they had \$100.00 to spend and eight possible types of trails-related projects they could fund. They could spend their entire budget on one objective, or divvy it up equally or unequally. On the next page, you’ll see the budget they came up with.

"How would you allocate \$100 in trails funds?"

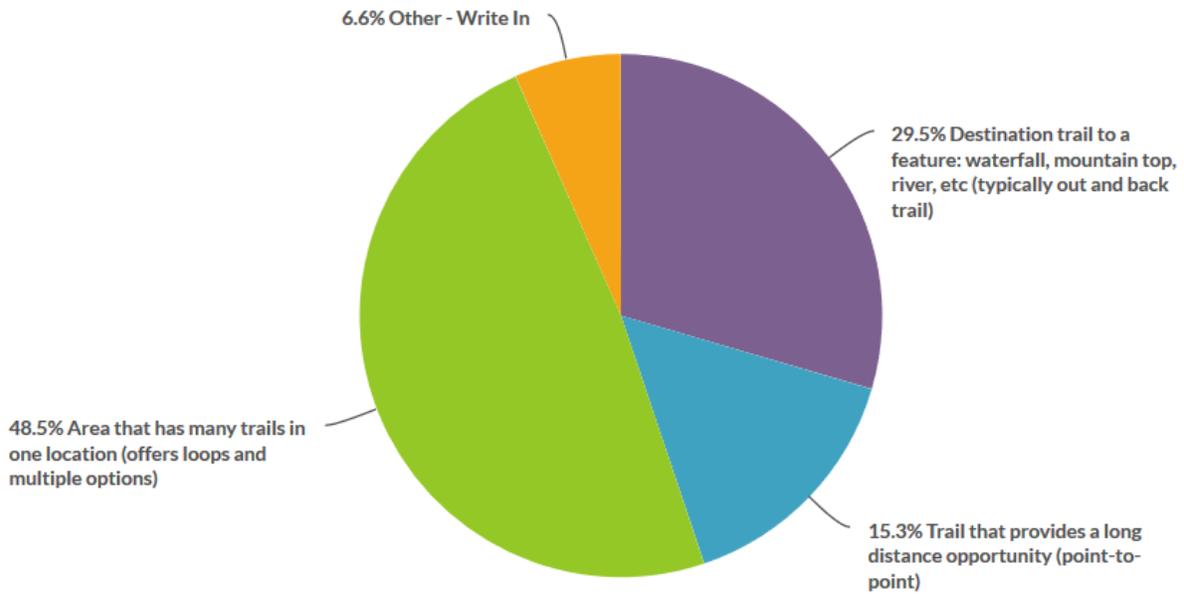


The best things in life are free.... after someone pays for them. Photo credit: Wade Killingsworth

TRAILS PEOPLE WANT TO SEE

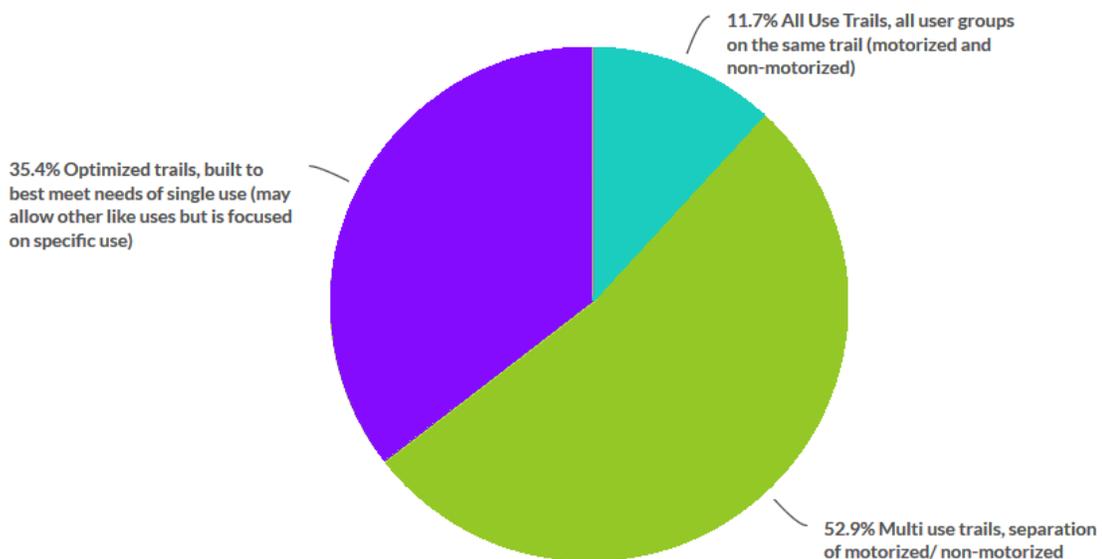
Finally, the trails survey asked people what kinds of new trails they would like to see. As the following charts show, respondents prefer trail networks that offer multiple loop options from a single trailhead....

“If new trails were developed in the Butte County area, what type of trails should they be?”



...and, they prefer trails to be mixed-use, but still keep motorized separate from non-motorized.

“If new trails were developed in the Butte County area, what type of use designation should they have?”



CONCLUSIONS: PEOPLE WANT ACCESS, INFORMATION, MAINTENANCE AND CONNECTIVITY

When survey respondents were asked to provide free-form comments, they composed hundreds of recommendations. In four words, they asked for **access**, **information**, **maintenance** (which, in many cases, they wished to be allowed to provide), and **connectivity**.

ACCESS

People spoke bitterly about lost access to cherished places. People grieve the closed trails on the far side of the Oroville Dam spillway – some spoke of missing Potter’s Ravine every day – and many do not feel the closures are fair or warranted. Users are angry at DWR for taking away their trails, and several argued that DWR should be forced to pay into a trails fund as reparations.

“Quit putting up gates to block people from going up there. I've seen it change in my lifetime, and it's not good. Blocked out of everywhere, and not targeting the people who dump their garbage all over.”

– Trails survey respondent

People also expressed a fear of losing access to cherished trails in the

future, especially to the flumes. Users are upset that PG&E wants people to stop using this trail system that has existed for generations. Several explicitly asked the County to intervene to preserve flume access. (The County has no jurisdiction over PG&E.)

“We would like to see PG&E more clearly indemnified so they don't feel the need to restrict access to their flume trails for fear of liability issues.”

– Trails survey respondent

INFORMATION

Other users are angry about the proliferation of locked gates on Forest Service lands. Many see these gates as unfairly blocking public access to public lands, ostensibly for the benefit of just one user (i.e., Sierra Pacific Industries, most assumed)¹.

¹ Sierra Pacific Industries, an important job creator and the largest private landowner in Butte County, is a private, family-run business. It generously allows non-motorized recreation on its lands. Any access to SPI lands that residents enjoy is a privilege, not a right. However, residents expressed they believe gates are going up *on Forest Service land* to keep people out of public lands where SPI is managing timber. This perception may be incorrect. When trail users don’t have enough information, they will draw their own conclusions to explain what they see on the ground. More information would help forest users feel more comfortable on their public lands.

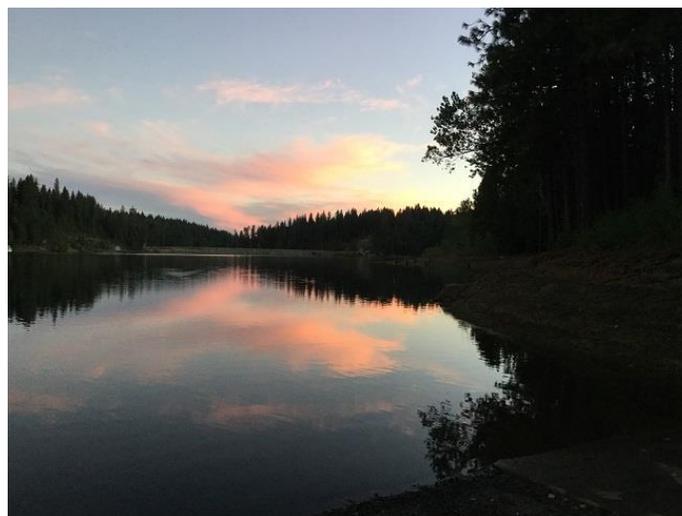
“I can't tell you how overgrown the Indian Springs trail is or how muddy Ditch Grade is down to Forks of Butte. But someone should be able to tell me -- there should be an online hub for trail reports.” - Trails survey respondent

People are upset because they feel they have no advance warning as to when – or why – the gates will go up. Some users asked for a comprehensive trails information clearinghouse that would offer accurate, up-to-date information about all local trails.

MAINTENANCE

People reported various maintenance issues around the County, but especially in upper Bidwell Park. Several users said they had approached the City of Chico parks department to volunteer their help maintaining Upper Park trails (either as individuals or as part of a user group) and reported being rebuffed or stonewalled. Respondents recognize that this land is part of the City of Chico and thus not under County jurisdiction, but they still asked the County if there was any way to intervene and encourage the City of Chico to collaborate more with users on maintenance. (The County Board of Supervisors does not have jurisdiction within the City of Chico.)

People also understand that maintenance issues arise, in part, from design issues. They noted that if official trails were better signed or more thoughtfully laid-out, or if a few new official trails were built in strategic places, illegal trail building would be greatly diminished. Users wanted planners to understand that erosion and other negative impacts could be reduced by better planning and signage.



Many of Butte County's most beautiful places can only be reached by trail. Photo credit: Wade Killingsworth.

CONNECTIVITY

Over and over again, people asked for connectivity. They asked for two kinds of connectivity: long-range regional links, and loop trails that provide multiple options from a single trailhead.

In terms of long-range links, respondents dreamed big: they asked for connectors from Bidwell Park to Forest Ranch, from Chico up to the PCT, from Oroville to Chico, from Forest Ranch to Cohasset (and onward into the Ishi Wilderness), and from Forest Ranch up to Butte Meadows. Constructing most of these links would be extremely challenging due to the multiple private ownerships they would cross. That said, the possibility of long-range trail travel tends to capture people’s imaginations, develop a momentum of its own, and – if the stars align -- make a region into a world-class destination. So if the opportunity arises to bring one of these long-range links closer to reality, perhaps planners should take the chance on acquiring that easement or right-of-way. After all, trails planning is not just for 2030. It’s also for 2130.

More immediately feasible are projects adding short-range connectivity – loops -- to existing trail networks. Giving users loop options can transform an unused trailhead into a buzzing destination. It is often described as the “low-hanging fruit” of trails development. Countless opportunities exist to create this kind of connectivity. Virtually every area of historical use in the County (see 4.1) could benefit from it.

Right now, Butte County Public Works and BCRCDC are working with the Plumas National Forest to add this type of connectivity in Granite Basin. This project is paid for by OHVMR grant



The PCT is the most famous example of long-range connectivity in the West. Here, three trail volunteers set out to improve it. Photo credit: Bob Gage, President, Backcountry Horsemen, Sutter Buttes

funds, with Butte County acting as the successful grant applicant, as well as providing grant administration. In the High Lakes region, Friends of the High Lakes and Lassen National Forest are likewise collaborating to add connectivity. To read about other opportunities and projects under development, see section 5.

RECOMMENDATIONS...

OPTIMIZE TO ACCOMMODATE DIVERSE USERS

Most people want to share trails and be good neighbors. But at the end of the day, not all uses are compatible with each other in all areas. To avoid user conflicts, planners should carefully consider all aspects of a trail system and decide if multiple use is really feasible, and if so, to what extent. Factors to analyze include terrain, historical use patterns, public sentiment, and realistically available trailhead facilities.

Sometimes, the best choice is to make a trail off-limits to one group to provide a good experience for another. (Of course, this needs to be done in a way that makes the prohibited group feel respected -- and offers them a comparable area of their own elsewhere.) More often, the best management solution is to **optimize** an area for one group at a time, while allowing other groups to share the trails under certain conditions.



Coexistence is the goal. Photo credit: Wade Killingsworth

EDUCATE AND INFORM

Trails users spoke loud and clear: They want more information. They want it in print, online, at the trailhead, and even on the trail itself. “More information” was the second most popular factor trails users cited when asked what would make them use the trails more. While signs, kiosks, maps and websites come with costs and challenges, user demand is strong enough – and the potential payoff of attracting new visitors high enough – that increasing public access to information should be considered a management priority.

BUILD THE CONNECTIVITY PEOPLE WANT

When asked what would make them use the trails more, trails users answered, “Connectivity,” more often than any other factor. They want to be able to take their kids on an easy one-mile

loop hike on Thursday, return for a challenging five-mile solo run on Friday, and then spend their whole weekend riding far into the backcountry on a 60-mile adventure. ***All from the same trailhead.*** This type of high-connectivity trail network makes the most of each trailhead dollar, maximizes public health benefits because people actually use it, and is socially inclusive because it attracts families and people of all ability levels.

3.3 WORKING GROUP

TIMELINE AND METHODOLOGY

In spring 2016, the Butte County Resource Conservation District (BCRCD) reached out to local trails stakeholders, inviting them to join a Trails Plan Working Group (TPWG). In building the Working Group, BCRCD wanted to achieve the broadest possible representation of recreational trail user groups, land managers, conservation groups, local governments, and organizations that have a connection to trail recreation. Although it is not possible to represent every use or group, efforts were made to include as many uses as possible. Stakeholders were identified through their active participation in Butte County's Forest Advisory Committee, by their status as current champions for groups and projects, or by their positions as public and private land managers.

The Working Group's first meeting was June 8th, 2016. They met a total of 9 times. Between meetings, TPWG members also met informally on numerous occasions, interviewed important local context experts on their own time, and continued TPWG work by convening Trails Plan-related discussions within their own organizations.

Upon acceptance of the Trails Plan by the Board of Supervisors, BCRCD recommends the ad hoc Trails Plan Working Group process be dissolved and replaced with a more lasting framework for collaboration, such as a Trails Committee.

BCRCD recommends sharing the trails survey research and the Trails Plan with cities, local agencies, park districts and other public land managers, as well as stakeholder groups.

The goal of developing a comprehensive local trails plan requires the collaboration and support of all entities in order to provide for the architecture of a regionally focused working group and the facilitation of further planning efforts (including NEPA/CEQA analysis) and grant funding opportunities.

In conclusion, the BCRCD recommends a Trails Committee form to address items in the Action Plan (pg.79) and further the discussion around trails in the area of Butte County. This "Trails Committee" would also provide a platform for continued dialogue, information sharing, and collaborative development and implementation of projects. A Trails Committee is necessary because there is currently no County agency or committee responsible for developing and implementing trails-based projects.

WHO PARTICIPATED IN THE TRAILS PLAN WORKING GROUP

TPWG participants ranged from representatives of agencies, non-profits, and special districts, to special event organizers, to ordinary citizens who are trail enthusiasts. The one common thread of the Trails Plan Working Group sessions was that everyone involved valued trails-based recreation. In addition to a committed core group, many guests with expertise in specific areas were invited to help the group make informed decisions by presenting their own insights on topics connected to trails recreation. In fact, everyone who participated in the TPWG process was, in one way or another, a trails champion. By giving these trails champions a forum to share their challenges, successes and goals with one another, the TPWG provided an opportunity to build a framework for collaboration and action.

The working group received good support and involvement from Butte County elected officials and staff. Even though the County of Butte does not own any lands that are managed for trails based recreation, and has no on-going funding available to support trails recreation, it used one-time funding to support this Plan. In addition, the County has applied for, and received, trails grants that improve access, increase safety, protect natural resources and improve recreation opportunities. Any future trails support will also need to be funded through grants. The County has limited staff resources to write, administer and implement grants.

Butte County is a vital partner for representing trail users by facilitating platforms for public input. The experience of the TPWG proved that County decision makers recognize the quality of life and economic value associated with trails recreation and intend that this document provides a stepping stone for collaborators to utilize going forward.

For a complete list of participants in the TPWG process, please see Contributions (part 9 of this report).



Photo credit: Paradise Ridge Riders.

3.4 WORKING GROUP KEY FINDINGS

The Butte County Trails Planning process combined a group of individuals with diverse backgrounds, interests, experience and trail uses. Members of the working group were selected because of their role as trails champions for their user group, their historical involvement in the public process, and their willingness to collaborate with other user groups and land managers.

Everyone in the working group approached the process and solutions differently, yet many common themes arose across the group throughout the planning process. Here is a list of these themes that resonated across all members of the group.

- Trails are one of the most important assets for quality of life in Butte County
- Every trail use is important and should have a place at the table
- Maintaining access and protecting public lands will sustain recreational opportunities for future generations
- Trails and trail head facilities need maintenance
- New trails should be developed when possible
- Shared cooperation and communication with land managers and other users is key
- Important to balance recreational access with natural resource protection

Having the involvement of land managers as part of the working group was a valuable resource and vital to the cooperative approach. It was important for the group to understand the opportunities and challenges that land managers face on a day to day basis. Land managers are challenged with representing the 'greatest good' -- what is best for the land **and** the greatest number of people -- which often places other priorities above recreation. When users gain an understanding of the challenges land managers face and the tools available to them, it sparks the opportunity for collaboration and doing what is best for our shared public lands.

Five clear themes emerged from public input.

The first is the need to **develop a comprehensive framework for ongoing maintenance** of trails. This framework needs to bring users and land managers to the table together, it needs to make innovative use of grants and synergies with other land management priorities (like fire suppression), and it needs to be driven primarily by volunteers.

To that end, a framework for **recruiting, engaging, training, deploying, and retaining volunteers** also needs to be developed. The will to volunteer for trails clearly exists in the community: People know *why* it is important to volunteer. However, they still need to be told *when* and *where* to show up, *how* to do the job right, and *who* is their responsible party. Creating this framework for volunteering is really inseparable from creating a framework for maintenance.

The good news is, the beginnings of this framework already exist: They are the trail champions who are already out there on the ground in many communities. They are the networkers, the visionaries, the people everyone seems to have heard of. In some places, they are achieving great things. In other places, (public perception is that) they get rebuffed by land managers, simply because no policy framework exists for accepting their help in an appropriate way. The need to **cultivate these trail champions** – and to create channels for accepting their help in a constructive way -- is the third theme emerging from public input.

Collaboration doesn't happen without communication, and the need for **providing better information** about trails to the public was an overwhelmingly common theme heard during public input. Better information is needed in all forms, but especially digitally, at the trailhead, and on the trail (signage). It needs to communicate not just hard facts like mileages and closures, but also transmit the *trail culture* everyone wants to experience: one that is respectful of other users and of the land.

Finally, everyone wants to see new and improved trails. It's why people get involved in the planning process in the first place! Unlike many counties, Butte County is blessed with amazing potential for **improving, expanding, and interconnecting its trail system**. That makes Butte County one of California's next adventure destinations waiting to happen. By

- capitalizing on areas of historical use,
- prioritizing the "low-hanging fruit" of projects that are already well-planned and broadly-supported, and
- thinking in terms of *sustainability, optimization and connectivity*,

partners in the Butte County region can grow our trails system **and** our economy.

4. CURRENT TRAIL RESOURCES

4.1 COUNTY TRAIL AREAS

To better identify existing trail resources and take stock of new opportunities, this plan divides the County into planning areas. These are not official designated areas but just visually helpful zones, which were based on their geography, public land access points, and natural boundaries like watersheds. Some of these areas already have lots of trails; others don't, but may have active groups of citizens advocating for trails. These planning areas are intended to help decision-makers create connectivity – both within an area and among the planning areas.

The planning areas are:

Valley and Sacramento River

Oroville

Stirling City

Concow / Yankee Hill

Forest Ranch / Forks of the Butte

The Feather River Canyon

Chico

Paradise Ridge

Cohasset

Highlakes / Philbrook

Lumpkin Ridge/Feather Falls

The Lassen Front-Country

Butte Meadows/Colby Mtn/Colby Meadows

Brush Creek/Berry Creek/French Creek and Granite Basin

TRAIL "HOTSPOTS"

Around the County area, there are certain "hotspots" for each possible trail use. These are the places where, while trails may be open to multiple users, one specific user group has "adopted" the area as their special playground. They did so because the trails there are already well optimized for their needs. Here are a few of the current recreational focuses for existing areas:

Granite Basin- OHV, dirt bike focus

High Lakes- OHV, 4-wheelers and side by sides

PCT- Hike and Equestrian

Feather Falls- Hiking

Table Mountain- Hiking

Oroville SRA – Equestrian

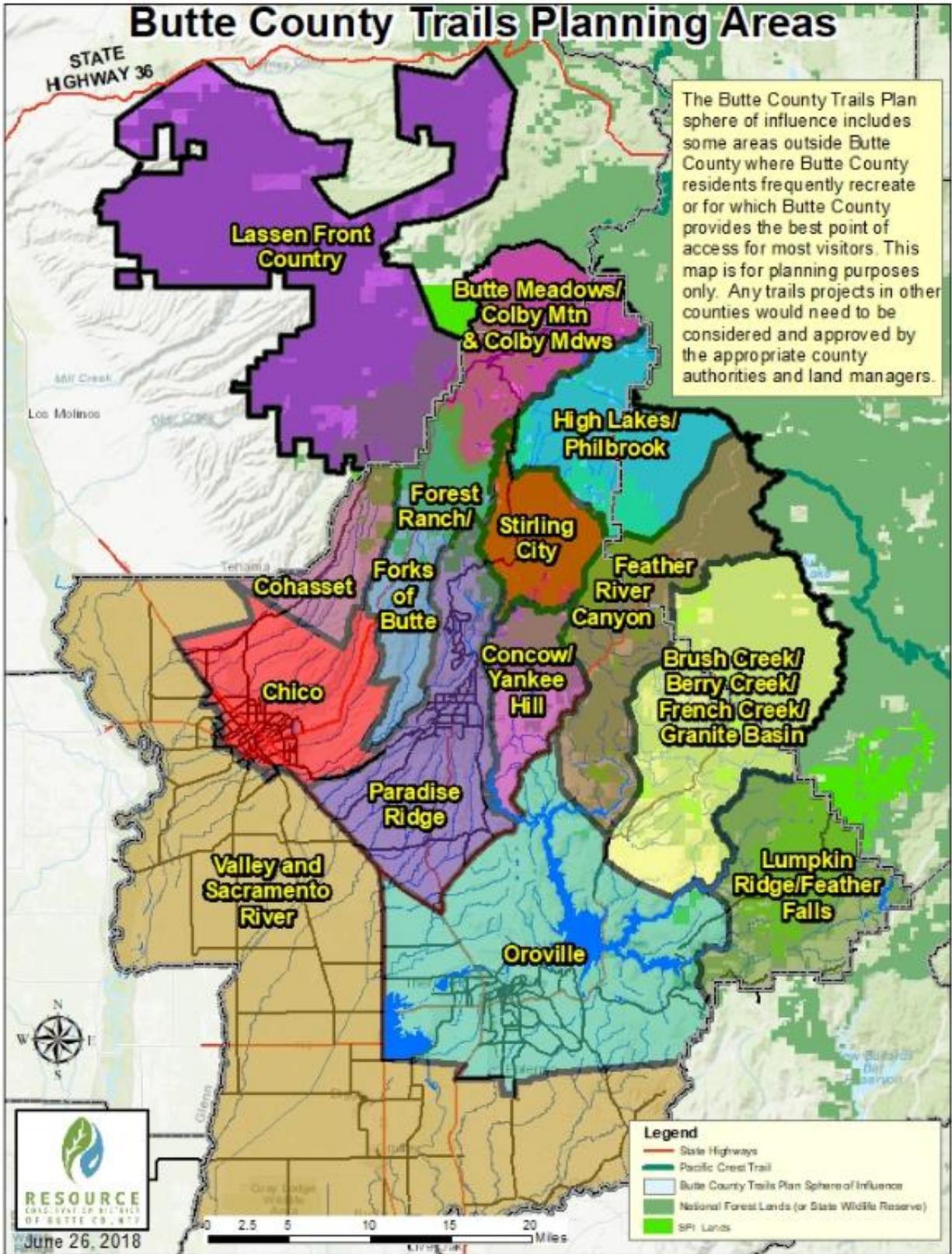
Forks of Butte (BLM) – Non-Motorized

Colby Mountain - Mountain Bike

Colby Meadows - Equestrian

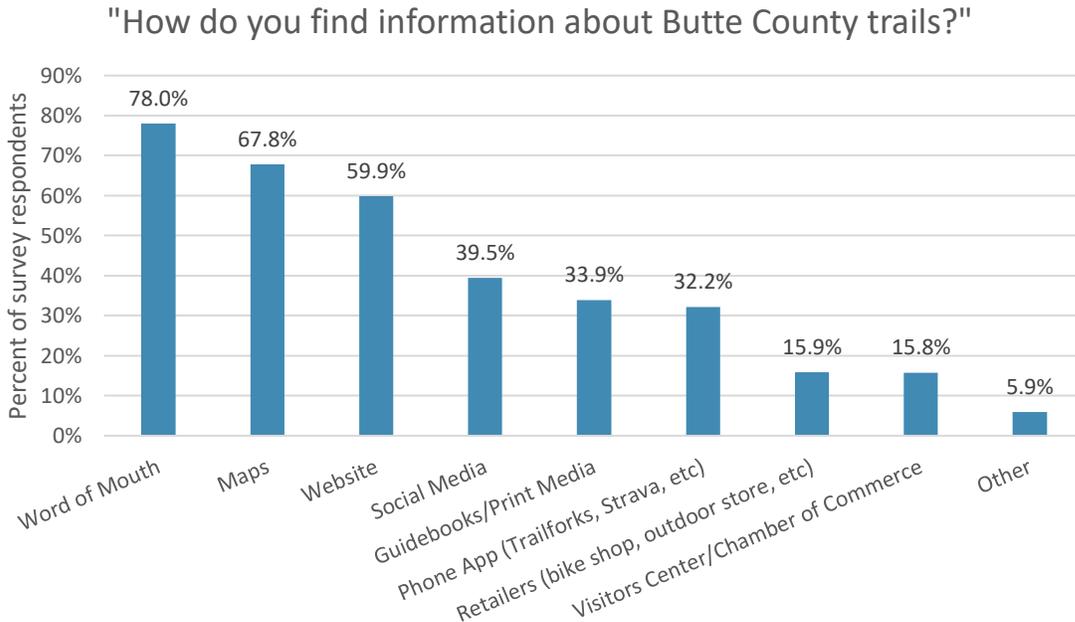
Paradise Ridge – Multi-Use

Bidwell Park – Multi-Use (Non-Motorized)



4.2 AVAILABLE MAPS AND RESOURCES

How do you find a trail? Historically, people have used maps, guidebooks, word of mouth and exploration. More recently, technology like apps and web resources have made finding information about trails easier, at least in theory. The Butte County Trails Survey found people use all these methods and more:



Even so, over half of respondents say they would **be more committed trails users** if they had more information. Delivering better information, then, is worth the effort. Yet this task is complicated by the wide variety of lands in Butte County, managed by numerous different owners and agencies, and enjoyed by a healthy diversity of user groups who all have specific information needs.

Perhaps that is why Butte County residents and visitors currently have limited, and fractured, information sources for accurate and up-to-date information about trails. Most available

57% of “sometimes” trail users say **information would boost** their trail use

38% of non- trails users say they **need more information** to find trails

Source: Butte County Trails Survey 2018

maps are macro-level, covering a whole region’s worth of trails and geared toward all user groups. They offer visitors a glimpse of what Butte County has to offer but are of limited use once one is on the ground.

On the other end of the spectrum, some excellent guidebooks exist for small areas (like the flumes of Paradise or the trails of Table Mountain), but these tend to be written for, and are best used by, committed locals.

Only **24.8%** of users say they **have enough information** about trails

Source: Butte County Trails Survey 2018

Recreation groups like the Friends of the High Lakes and Butte County Hiking Association have developed maps and web-resources for user groups. These efforts are on a small scale so far, but provide a good platform for scaling-up once more resources are found.

Trails information and resources don’t just show visitors how to get to a trail. They also play a crucial role in educating users about the culture and expectations of the area. Kiosks, maps, guidebooks and digital media can transmit awareness of Butte County area history, geology, wildlife, regulations, trail etiquette, safety and first aid, as well as instill a commitment to natural resource protection. Maps and other information resources are powerful marketing tools that can make up visitors’ minds to visit Butte County ... or take their dollars elsewhere.



Maggie Sitter, of Paradise High School, shows off her senior project: hand-crafted directional signs for her local trails. Photo Credit: Wade Killingsworth.

4.3 CURRENT OPPORTUNITIES FOR PUBLIC INPUT

Local citizens enjoy many avenues for expressing their opinions about trails.

In Oroville, the Plumas National Forest’s Feather River Ranger District Collaborative meets quarterly and is open to anyone. It has two subcommittees: “Forest Health and Wildlife Habitat” and “Recreation and Access”. To see what the Forest Service is planning on all its ranger districts across all forests, users can browse the USFS’ complete Schedule of Proposed Actions, or SOPA, at <https://www.fs.fed.us/sopa/>. This list offers an interactive map of projects and is searchable by forest. Each proposed action features links to opportunities for public comment. The BLM maintains its own interactive search site and calls it the E-Planning Portal, at https://eplanning.blm.gov/epl-front-office/eplanning/lup/lup_register.do.

State lands also provide opportunities for public comment. The California Department of Parks and Recreation, which runs the State Parks, posts upcoming public meetings on its website, including the quarterly meetings of the Off-Highway Motor Vehicle Recreation Commission and the Boating and Waterways Commission. Citizens can provide input about the popular recreational lands of the Lake Oroville State Recreation Area through State Parks public input processes as well as during the FERC relicensing process for Oroville Dam.

Local commission meetings are another great way for citizens to get involved in decisions about trails. These include the Bidwell Park and Playground Commission, the City of Oroville Park Commission, the Feather River Recreation and Park District (FRRPD), the Paradise Recreation and Park District, and the Chico Area Recreation and Parks District (CARD). All have meetings that are open to the public. Just as this report was being drafted, the FRRPD was seeking volunteers, the Feather River Ranger District was holding an open house to kick off its Collaborative to get citizens involved in their National Forest, the City of Oroville Park Commission *and* the FRRPD were advertising Board vacancies, and CARD was conducting special meetings to seek public input on its Master Plan.

4.4 FUNDING FOR PLANNING AND PROJECT IMPLEMENTATION

Budgets are tight, and compared to public safety goals like fire suppression or fuels reduction, recreational trails are low priority. Most trails budgets are barely adequate for proper maintenance, to say nothing of development. Nor are taxpayers ready to pay more for trails, regardless of how much they benefit from them. Therefore, land managers who want to fund trails must be creative in seeking out funding and in operating trails on a shoestring. Fortunately, some trails grants do exist, some trail champions are doing outstanding volunteer work, and the Butte County Trails Survey reveals an untapped current resource of willing volunteers who are waiting to be asked.

This is a working document. This list of funding sources was last updated in August 2018.

- One source of funds is OHV funding, popularly known as the “Green Sticker” program, administered by the Off-Highway Motor Vehicle Recreation (OHVMR) Division of CA State Parks. These funds allow for planning, development, restoration, education, law enforcement, and maintenance for FS roads that allow OHV access. The Butte County Sheriff can also access these funds to pay for patrols for natural resource protection and safety checks. Currently, these funds are being used in a Granite Basin trail development partnership between Butte County Public Works, the Plumas National Forest, and Butte County Resource Conservation District. This trail development project *adds new OHV mileage* and creates connectivity to improve the user experience.
- Another good source of funding is the Recreational Trails Program which provides federal highway funds to improve both motorized and non-motorized trails. Collected by the U.S. Department of Transportation’s Federal Highway Administration and administered by the State, this program recently funded a project in Butte County as well. In partnership with the Plumas National Forest, Butte County Public Works secured a grant to allow the Butte County Resource Conservation District to analyze all the “Table 2” OHV trails on the Feather River Ranger District. These are OHV trails that are currently closed but could be reopened with some mitigation or maintenance. This type of analysis is an important part of getting projects “shovel-ready,” and it could help Butte County secure even more OHV grant funds in the future.
- The Secure Rural Schools (SRS) program sends federal money to rural counties each year, compensating for diminished timber receipts. Butte County’s Resource Advisory Committee (RAC) decides how to allocate these funds. Trail projects qualify for these funds; for example, currently SRS funds are being allocated to fix the Dome Trail that connects Bald Rock Dome to the Feather River. The Butte County Resource Conservation District is administering this project.
- Some land manager budgets include funding for trails projects. Trails budgets may fluctuate widely from year to year in response to changing priorities and the availability of funding.
- Park bonds and other grant legislation may create future funding opportunities.

- Private funding should not be overlooked. Donations, whether monetary or in-kind, can make a big difference and in many cases save a trail. For example, the Dome Trail rebuild is being accomplished with \$5000 worth of materials donated by individuals in the community of Oroville.



A local biking club gets out to enjoy the Oroville sun. Photo credit: Wade Killingsworth

5. PROPOSED ACTIONS

5.1 PROPOSED TRAILS LIST

Every great trail project starts with a vision. The ultimate goal of the Butte County Trails Plan is to be action oriented, and its ultimate success will be measured by what is accomplished on the ground. The need for maintenance is always the top priority: take care of what you have before you add more. On the other hand, quality trail development has the ability to increase use and maintenance of existing trails and create a heightened stewardship ethic.

The Trails Plan Working Group has compiled a list of potential projects for future development: to date, 20 of them. This list comes from inputs from the working group, user groups and the trails survey. Some projects are just glimmers in a trail champion’s eye, while others have already undergone substantial planning and are nearing the grant-writing stage.

This project list, of course, is for planning purposes only. All projects would have to follow the design and development process mandated by the land manager and the law, including NEPA/CEQA.

Potential projects are listed by planning area, land manager, usage focus (single- or multi-use), priority, and potential funding source. The ranking is based on how much work has already been done, and the resultant likelihood a project will score well in grant applications. Projects that have had the most work done to date have the greatest potential to score well on grant applications, so they rank “High” and will receive more focused effort. This ranking can change quickly if a project champion emerges, additional funding becomes available or a land manager prioritizes a specific project. Also, this list is dynamic: New projects can be added any time. The list will be reviewed and updated on a regular basis.



Trail volunteers work on the Pipejam, a key link for OHV connectivity in the High Lakes region. Photo credit: Nick Repanich

Project Location	Agency	Planning Area	Primary Use	Priority	Possible Grant
Rock Jam Trail	Lassen NF	High Lakes	All OHV	High	OHVMR
Chambers Creek Trail	Lassen NF	High Lakes	All OHV	High	OHMVR
OHV Staging Area (accommodate expansion of road paving)	Lassen NF	High Lakes	All OHV	High	OHMVR
Table 2 Trails Implementation	Plumas NF	Granite Basin	Dirt Bike	High	OHMVR
Paradise Ridge - Backbone Trail (connects Paradise Lake to Magalia Reservoir to Lake De Sabla)	PID, Plumas NF, BLM	Paradise Ridge	Hike	High	RTP
Colby Mountain - mountain bike trail system	Lassen NF	Butte/ Colby Meadows	Mountain Bike	High	RTP / Private
Granite Basin - OHV Development and Maintenance	Plumas NF	Granite Basin	Dirt Bike	High	OHMVR
Table Mountain - Boardwalk, interpretive element, and parking expansion	CA-F&W	Table Mountain	Hike	High	DOC / RTP
Oroville SRA - Diversion Dam Trails, reconstruction	CA-SP	Oroville	Mountain Bike	High	RTP/State Park Bonds
Support of Recreation and Park District / Parks Division Projects (multiple in Butte County)	Multiple	Multiple	Multiple	High	N/A
Hurricane Point Rock Crawl	Lassen NF	High Lakes	All OHV	Med	OHMVR
Colby Meadows - equestrian trails	Lassen NF	Butte / Colby Meadows	Equestrian	Med	RTP
Four Trees - Beckwourth Trail - clearing, auto tour, interpretive signage	Plumas NF	Granite Basin	Hike / EDU	Med	Historical
Oroville SRA - Forebay Trails / Bike Park	CA-SP	Oroville	Hike / Bike	Med	RTP
Forks of Butte Trail Expansion	BLM	Paradise/ Forest Ranch	Hike	Med	RTP
Feather Falls - Trail Expansion/ Overlook Rebuild	Plumas NF	Feather Falls	Hike	Low	RTP
Feather River Canyon - Middle Fork	Plumas NF	Feather River Canyon	Hike	Low	RTP
Trail along Sacramento River	CA-SP and many others	Valley	Hike	Low	RTP
Mechoopda Casino Lands Trails	Tribal	Valley	Multiple	Low	Unknown
Oroville Wildlife Area Trails	CA - F&W	Oroville	Hike	Low	RTP/State Park Bonds
Native American Legacy of Land Management Trail - Educational Trail	Unknown	Unknown	Hike	Low	EDU

These projects are proposed by the Trails Plan Working Group and the public. All projects still have to be coordinated and planned with the land manager(s), and undergo NEPA/CEQA review including public input.

With limited available resources, and a number of well-loved historical use areas in Butte County, it is logical to focus on improving access, sprucing up trail-head facilities and creating additional trails within historical use areas, rather than to develop entirely new areas of trails. It makes sense to look for additional opportunities in places that have historical recreational use because these places *have existing infrastructure*. What's more, they often have existing social networks of users who are potential trail champions and volunteers.

Each historical use area tends to feature its own particular style of trail, which attracts one user group above others. For instance, an area like Colby Meadows has become popular with mountain bikers because it offers easy access to mountains with its large network of USFS roads and its great wintertime cross-country ski network. Developing its two under-used campgrounds could make it even more of a hotspot. The Oroville SRA and the PCT offer the right kinds of trails for equestrians, and trail improvements here should start with equestrians in mind. This does not mean a particular trail area would be designated for only one use and no other. It just means an area might be *optimized* for one use above all others.

Although most users are comfortable sharing trails with other users (multi-use), each type of trail use has its own needs and preferences. As more users going at different speeds share the same trail, there are additional opportunities for user conflict, such as between bikes and horses. Trail head facilities also need to be optimized for their expected use: for example, hikers and bikers typically require only a single car parking space each, while uses like OHV and equestrian can require turnaround areas and parking for large trailers.

The USFS Trail Management Objectives recognizes this concept and applies it to individual trails. Each USFS trail has its designed use (only one) and allowable use(s) (one or many). Even within an area of multi-recreational focus, it is possible to designate individual trails or loops for a particular use (hike only or down-hill travel only). This "focus area" strategy would also allow for trail maintenance or trail adoption by the "designed for" group to best meet their needs. Groups may be encouraged to find funding or grants to improve a particular area if they know their efforts will benefit their preferred use.

Here, again, are the existing areas of optimized use in and around Butte County:

Granite Basin - OHV, dirt bike focus

High Lakes - OHV, 4-wheelers and S x S

Feather Falls – Hiking

Table Mountain - Hiking

PCT - Hike and Equestrian

Oroville SRA - Equestrian

Colby Meadows - Mountain Bike and Equestrian (but on different, optimized, trails)

The above areas are the priority zones for trailhead improvement, volunteer organizing, nurturing trail champions, and user group capacity-building.

In addition to the above areas of historical use, the following areas (some overlapping the above) have been identified for increased maintenance and new development opportunity:

State Parks: Oroville State Recreation Area

Feather River Canyon

Paradise Ridge- PID, USFS, PID and SPI

Granite Basin and French Creek

High Lakes / Philbrook Lake

Feather Falls

Butte Meadows / Colby Meadows (Has 2 campgrounds being underutilized)

Historical Ranches and private lands

OPPORTUNITIES FOR NEW TRAILS DEVELOPMENT

What follows are trail development or expansion opportunities identified through Trails Plan Working Group meetings, input from stakeholders and the public, and conversations with land managers and user group leaders.

MOUNTAIN BIKE TRAILS

Mountain bikers are one of the fastest growing user groups, and the second-biggest primary user group in Butte County. However, only limited trails are available for mountain biking in Butte County. Many mountain bikers leave the area on the weekend to adventure to other areas around Northern California to ride (e.g., Redding, Downieville, Quincy, Tahoe, Ashland). With so much public land in Butte County, there's a rich opportunity to create a mountain bike- optimized area. This would not only provide Butte County residents the opportunity to bike locally; it would draw mountain bikers from other areas to Butte County. Having new areas for mountain biking -- with trails specifically geared to mountain bike use -- would also help take pressure off the limited existing areas. Additionally, it would help reduce the number of conflicts between users.

HISTORICAL TRAILS

Most of the existing trail infrastructure in the Butte County area was originally developed for resource extraction. Many of these trails can provide a great recreational experience and have limited natural resources impacts. Public lands are full of these historical trails from the mining and timber harvesting eras. Not all historical trails are suitable for reopening and, in many situations, it may be better to construct new trails using modern trail design principles that limit natural resource impacts and the need for maintenance.

Butte County is also blessed with a network of historic rail lines, dating from a time when trains were used for timber and minerals extraction. The tracks have long been removed, and these railbeds can provide a great recreational experience. Many of these trails are on Sierra Pacific Industries (SPI) lands, which allow non-motorized recreational usage. (However, SPI does not provide any maps or directions for any recreational resources on its lands.)

WATER CONVEYANCE TRAILS

Earthen water conveyance systems (levees and ditches) have historically been constructed and utilized for agricultural irrigation, livestock and resource extraction processes. Much of this infrastructure is no longer in use, but is still in place on public lands. Thus, it could create opportunities for future trails development. (Many such trails can be found in other areas of the Sierra Nevada.) These trails can also have historical significance which may limit any earth moving in the vicinity. Studying historical maps may provide some insight into locations for these water conveyance routes. **Please note we are not referring to PG&E flumes for these potential trails.**²

EQUESTRIAN TRAILS: LEGACY RECREATION AND THE NEED FOR IMPROVED ACCESS

Equestrian use for transportation, work and recreation in Butte County came long before motorized use. It came long before mountain bikes, and, indeed, most other forms of trails-based recreation we know today. Horses and pack animals made immigrant access across

² Flumes can provide access to some of the most beautiful and hard to reach places in the county. They also are low grade which offers the opportunity for a less physically demanding adventure. Paradise Ridge, in particular, has a large density of flumes that have historically served as popular access to places like the West Branch of the Feather River. Though many of the flumes travel across public lands, they are all owned and maintained by PG&E. In recent years PG&E has restricted access to flumes, citing safety concerns and liability issues. PG&E has taken an active role in the development of this trails planning process to encourage recreation in areas that are permitted, but to make sure the community realizes that access to the flumes is prohibited. It is the hope of the Trails Plan Working Group and many others that an agreement could be reached in the future to allow access.

the mountains possible and helped build our communities. As with all trail uses in Butte County, equestrians need additional trail maintenance and development.

Investing in equestrian access can return dividends, because horses and mules, with their abilities to carry heavy loads, can make lighter work of trail maintenance. In the Butte County area, the Sutter Buttes Unit of the Backcountry Horseman of California annually clears 30+ miles of the Pacific Crest Trail. Plus, they help pack in supplies for other trail projects.

In addition to the need for quality trails, equestrians also need extra parking and turnaround space, because they usually need to pull a large trailer. Most horse trailers are not high-clearance, much less four-wheel drive, so equestrians also need decent roads to the trailhead. Vehicle break-ins are sometimes a problem while riders are out on the trail, so law enforcement, when possible, should patrol popular equestrian staging areas to help limit crime.

On shared (multi-use) trails, all other users must yield to equestrians. In the Trails Survey, equestrian riders reported the highest number of issues with negative interactions on multi-use trails, especially between equestrians and mountain bikers. All users should respect one another, but special consideration should be taken around equestrian riders. Simple communication and a show of respect will limit negative interactions and improve the trail for everyone.

SIDE-BY-SIDE TRAILS (S X S)

Side-by-sides or UTVs (utility vehicles) are a form of OHV that's fast growing in popularity. With numerous Forest Service roads in Butte County that are open to all motorized vehicles, Butte County has a unique opportunity to draw riders for SxS adventures. (Riders must use the USFS Motor Vehicle Use Map, known as MVUM, to determine which trails are open to what type of OHV use and season of use.) Efforts could be made to market this opportunity and provide better signage and mapping for areas with high densities of 'all motorized vehicle' access. Opportunities should also be identified to develop new trails geared toward SxS use.



A community of Butte County-based OHV users gather for a field work day in the high country – complete with trailers full of rock to stabilize trails. Photo credit: Nick Repanich

EVENTS AND RACES

Many trail users, no matter their age, trail use or level of experience, like to participate in events and races. Competitive races let participants compete against one another or the clock. Other events have a non-competitive vibe and offer an opportunity to explore a new area or enjoy a shared experience with other users. Many participants in races and events will travel long hours and spend significant funds for an event. Just as importantly, they'll often return to an area after the event if they had a positive experience. Events can be a great way to promote an area and boost the local economy. Many events will support a local cause or organization. (There is no reason a race or event cannot raise funds for the very trail system it utilizes!) Each time an event or race is held in Butte County, it potentially builds support and funding for the local trail system – and creates new generations of returning visitors.

Although events can raise significant funds for a cause or a region, they don't always break even at first. And long after they've become household-name events, most are still run by volunteers! Local governments, public land managers, and agencies could consider offering support and assistance to event organizers, who often don't profit off the time and energy required to pull off a successful event. After all, these committed volunteers are usually trail champions; as such, they should be supported and nurtured.

All events on public lands must be organized under the authorization and permit process of the relevant land manager. Event organizers must also provide an event plan, proof of insurance, emergency action plan, and other related documents as required by the land managers. Most land managers also require a portion of the event profits be shared with the

land manager. (This varies by agency and event.) Although events have a much bigger impact on an area than a single user, event organizers should take every precaution to limit the impacts -- and repair any natural resource damage that occurs as a result of the event.

PRIVATE LANDS AND USE OF EASEMENTS

Private lands can be a trail designer’s challenge if they create a barrier to accessing public lands -- or if existing trails cross private lands but without the landowner’s blessing. It’s not uncommon in Butte County for “social trails” (non-authorized trails) to be developed on private land. This usually happens if the trails on public lands are not meeting a desired need, for whatever reason. Thanks to California’s recreational use statute, a landowner can allow public access without assuming legal liability for personal injuries³. But landowners are nonetheless often hesitant to allow access for a number of reasons.

However, it doesn’t have to be that way. Recreational easements and agreements are tools landowners can utilize to provide access for public use. Easements are a complex process and it’s best for interested land owners to connect with the local Land Trust (the Northern California Regional Land Trust) for assistance.

Developers should be encouraged to include trails within their projects whenever possible, as recommended in the Butte County General Plan 2030 in Policy P8.7. Commercial or residential developments built around trails tend to have higher property values for owners, create a deterrent against undesirable use, and provide a public asset.

Towns and cities should look for opportunities to purchase private lands that can be converted into public use. Lands that provide buffers or connectivity to existing public trails should be high priorities because even if they can't be developed right away, they can be great assets to our children’s or our grandchildren’s generation. However, before taking on additional lands, towns and cities must factor in the long-term cost for development and, especially, maintenance.

LAND SWAPS: ACQUIRING THE MISSING PIECE

Land swaps are a powerful but complex tool for land managers. Land swaps allow a public agency to exchange land with a private land owner. From a recreational context, land could be exchanged to create an opportunity for new trail development, provide trail connectivity, add a buffer zone to an existing recreational area, or connect public lands that are not currently accessible because they are land-locked by private property. Small isolated parcels of public lands are often of little recreational value, especially when they are not

³ Cal. Civ. Code § 846

accessible. If these smaller parcels could be connected, then their opportunity for recreational value is increased. One way to do that is through land swaps.

With USFS or other federal lands, land-for-land exchanges are a lengthy process. Two to four years is a typical time frame, or longer if complications arise. Land swaps must also go through the NEPA process. The USFS has a formal process to evaluate proposed exchanges, which includes a public input component.

5.2 TRAILS INFORMATION AND OUTREACH

During public input, the theme of needing more information came up again and again. Three main priorities for improving information have been identified:

WORK WITH LAND MANAGERS TO DEVELOP AREA MAPS

Most available maps cover either too vast or too small a region. Area maps, spanning natural recreation zones, are needed. These should be created through partnerships where recreation groups and land managers work together. A great example of an area map is the map of the High Lakes OHV Recreation Area, which was developed through collaboration between the Friends of the High Lakes and the Lassen National Forest.

Websites like Explore Butte have tremendous potential for connecting visitors (and locals) to trails. There is great room for improvement in digital outreach to potential visitors. Online maps could be improved so they show trailheads and trail information. For example, when users click on a trailhead icon, a new map window could open, offering users a downloadable, georeferenced map.

MAKE GEOREFERENCED MAPS FOR ELECTRONIC USE

These days, users don't need sophisticated software licenses to view and manipulate maps on a computer. Handheld devices like tablets and smartphones can display maps (even in the deep backcountry where no internet connection exists), and many users now prefer to navigate this way. Working with land managers, user groups should be encouraged to develop their own digital maps that help their users stay on trails, discover adventures, and protect natural resources. This fits perfectly with the U.S. Forest Service's National Strategy for a Sustainable Trail System, which calls for "Integrating Shared Data Collection and Use" as well as "Improving Data Tools." (Source: Action areas 6.1 and 6.2, FS-1095b).

SIGNAGE

More signage is needed – both directional and interpretive; that is, both to get users to the trail and help them stay on it once they're there. User groups should be encouraged to sign

volunteer agreements with land managers to install and maintain the signage users need. However, land managers have the right to specify what kind of signs can be placed on trails and where. (For example, on federal land, signs and posters are governed by specific criteria for consistency.)



Signs do more than tell you where you are: They transmit trail culture. Here, a user has taken the initiative to communicate expectations and promote a sense of shared stewardship. Photo credit: Nick Repanich, Friends of the High Lakes.

6. IMPLEMENTATION

Implementation of the proposed actions will take a coordinated effort between agencies, organizations, and volunteer groups. The Butte County Trails Plan is a “working document” that will be revised as projects are accomplished, new needs are identified, and additional funding opportunities are available. What follows is an overview of the challenges and opportunities facing local trails managers today.

6.1 CHALLENGES FOR IMPLEMENTATION

FUNDING: SHOVEL READY STATUS IS KEY

Trails are expensive to plan, build, maintain and promote. Required environmental assessments, such as NEPA and CEQA, take years and can be just as expensive as construction costs. Yet virtually no grants exist for this planning phase*. Instead, trails projects qualify for grants only when they are “shovel-ready”: i.e., the trail has been planned and designed, all environmental work has been completed, the public review process is over, and the trail is ready to build. Just getting a project to shovel ready status can take several years and be 40-50% of the total project cost. Even then, grants are so highly competitive that projects can sit shovel-ready with no available implementation funding for many years.

*The exception is OHV trails, which qualify for planning grants through the Green Sticker program. Partners in Butte County have a successful track record of obtaining these highly competitive funds for work in Granite Basin.

COORDINATION: THE NAME OF THE GAME

Every new trail that is built -- indeed, every foot of trail that is *maintained* -- takes a coordinated effort between agencies, organizations and volunteers. Effective communication and coordination are crucial for success. It is important for the user groups and agencies to express the needs, resources and constraints that they experience. Of course, this is true in any community project, even those that do not also have to overcome the huge hurdle of collaborating across land ownerships.

Trails happen on land, land is owned by someone, and work can't begin until land owners consent to it and put their consent in writing. (Non-landowning parties, of course, also need to write down their responsibilities and expectations in detail.) Crafting workable agreements usually takes more time than anyone expects, and the time and resources required to plan an agreement must be factored into decisions about what trails to build and where to build them. However, the hard work of building relationships across land ownerships pays off spectacularly when a large-scale, interconnected trail system finally links communities across landscapes – and it was built with competitive grant funds that reward collaboration.

If grants are to be the main source of funding for a project, it is important to look at the grant criteria and how projects are scored. Time spent writing a grant application is largely wasted if the grant is not awarded. To increase the likelihood of being successful in the grant process, it is best to take the front-end planning approach: prioritize staff time and resources on projects that have available funding. And, knowing that grants require match, project managers are well advised to start coordinating volunteer support (volunteer hours and "in kind" donations count as matching funds) as soon as possible.

PHYSICAL CONSTRAINTS: A SENSE OF PLACE

Butte County has a diverse topography. From the flat lands to the thin soils and lava cap of the foothills and the remote and steep terrain of the Sierra Nevada Range, all the region's landscapes have their own physical challenges. The climate in Butte County also presents challenges for recreational trail development, analysis, planning and maintenance. Our Mediterranean climate means cool wet winters, with rain in the valley and snow in the mountains, followed by hot dry summers, when our Valley and foothill soils seem to transform into concrete. In-between, there is a window when trail conditions are ideal for maintenance and proper tread compaction. But that window is brief.

Butte County's landscape also needs to be a fire-adapted one. The responsibility to keep communities safe from fire is often a chief reason land managers are forced to make recreational trails a low priority. But trails can help fight fires too: They provide firefighting access and can double as firebreaks. However, at least in some landowners' eyes, trails may also increase fire risk because they bring more of the chief cause of wildfires: humans.

SKILLED LABOR: GOOD HELP IS HARD TO FIND

Trail maintenance, planning, and development requires skilled labor. The Northern California region has a limited number of contractors who specialize in trails. Inmate crews are kept busy full-time with fire suppression and fuels reduction alone. Land management agencies have traditionally been storehouses of excellence in trail-building know-how, but staff reductions at agencies have left them with only a small number of seasoned employees who focus on trails. There is plenty of room for regional capacity-building in this area.

SOCIAL CHALLENGES: RESPECT AND COMMUNICATION ARE SOMETIMES MISSING

Most people want to share trails, recognizing that this allows the largest number of users to get the greatest benefit from limited (land or financial) resources. Yet 41.8% of Trails Survey respondents said that user conflicts were a problem on local trails – and 40% said user conflicts were keeping them from using trails as much as they'd like. From mountain bikers who startle horses, to unruly dogs, to littering, to unauthorized off-road use, to people using trails for target practice, users had plenty of stories to tell about a trail culture in need of improvement.

While we are addressing trail etiquette, off-highway vehicles (OHVs) and single-track dirt bikes deserve special mention. Butte County has some amazing opportunities for OHV recreation, OHV use is the third-largest primary use among Trails Survey respondents, and some of the Butte County area's greatest trail champions are OHV users. The OHV community understands the importance of protecting natural resources from unauthorized use and

subsequent damage. Measures to educate OHV and single-track users and prevent resource damage is critical to sustainable use and enjoyment.

SOCIAL CHALLENGES II: TRAILHEAD SAFETY AND SECURITY

Vehicles at trailheads are easy targets for vandals. This is true across all trail uses. Trail users have reported trailhead vehicle break-ins, thefts, and destruction of property. In the absence of trailhead cameras or law enforcement presence, trail user groups sometimes have to leave one person behind to keep watch over vehicles.

Vandalism of trailhead facilities also impacts the land manager, not just the user. But land managers usually have little to no funding for law enforcement or surveillance. It's important that users report all trailhead vandalism and crime, because it's the only way to enable land managers to focus their resources on high-incident areas. County law enforcement annually applies for and receives OHV grants. Incorporating user input into these grant applications is a good idea because trail users are the best authority on the timing and location of trail crimes.

SUSTAINABILITY: TRAILS (SHOULD BE) FOREVER

Trails connect people to nature, but they can end up damaging the landscapes they explore. Sensitive areas like wetlands require special care, as does habitat for rare species like the yellow-legged frog or the Butte County checkerbloom. Even on an ordinary dry slope, trails can flood or erode. When that happens, the water flow dumps sediment into creeks, which damages fish habitat, and sometimes the trails cease to exist as usable routes. User education is an important component of making sure trails and trail use don't damage the land. But an equally important, and more often overlooked, factor is trail design. It takes a surprising amount of experience, skill, and time to build a trail that drains well, follows its best route, and consistently invites users to make their best decisions.



This jeep road “became hydro-connected” – that is, it turned into a stream – and trail workers will have an uphill battle to reverse the damage done to the lands. Photo credit: Nick Repanich

Many routes used today in Butte County were not originally built with user experience or natural resource protection in mind. Rather, they are old roads originally built for resource

extraction. Historically, many of these roads are close to streams and utilize steep grades. Land managers have been left with the responsibility for caring for these routes and the impacts they create. This inventory of road maintenance projects can quickly outgrow a land manager's budget, so they may look for opportunities to decommission these roads. However, some of these routes are still being used for forest access despite their degraded condition. The loss of a route can create a contentious situation between land managers and users.

Users often feel that when one route is removed from public lands, it will lead to more trails being closed and reduced access. The trails planning process has identified these challenges and wants to encourage land managers to look for alternatives to unsustainable trails before closing an existing trail. Sometimes trails are in the wrong spot (crossing waterways or on fall line in steep terrain) and have no alternative location. Trail reroutes are usually most sustainable if they were located through a collaborative process between users and land managers.

Land managers sometimes close dead end trails and roads that they believe are not being utilized or have no recreational value, only to learn from the public that these dead-end routes were being used for dispersed camping or hunting. With that said, users also have to recognize and respect the responsibility and challenge that land managers face in managing an extensive network of roads and trails.



Some trails have drainage issues.

Even trails that are built in a sustainable way will require maintenance over time. Trails with higher use may require maintenance every year. If simple tasks like trail brushing (removing overgrown trailside vegetation) can be time-consuming, more complex tasks like fixing drainage issues on a flood-prone trail can shut down a trail for months or even years. If a new trail is constructed, it must have a maintenance plan or a group that is willing to assume responsibility for maintenance.

FUNDING: LEVERAGE VOLUNTEERS AND COLLABORATIONS

The trails planning process requires funding. Several fund-raising methods can be considered, such as user fees, new taxes, grant applications, private donors, family foundations, or crowdfunding. Another funding possibility is creatively writing a non-trails grant to include trails funding. Trails help communities meet public health, fire suppression, and economic development goals, so they are suitable for inclusion in certain grants focused on those goals.

An innovative way to reduce the expense of planning new trails projects is to hitch their NEPA/CEQA analyses to other projects, allowing them to be written in advance at very low cost. For a trail project, the NEPA/ CEQA process can cost 40-50% of the total -- and in most cases must be completed *before* applying for the first dollar of grant funds. Yet the NEPA/CEQA process needs to be done on virtually every forest project (not just trails), so NEPA/CEQA analyses are being produced constantly. If an agency or special district is going through the NEPA/ CEQA process for a fuels reduction, restoration, or forest health project, they could also include a trails planning project and utilize the same environmental analysis for both projects. With every project on public lands that must go through the NEPA/ CEQA process, managers could evaluate the possibility of including a recreational component as part of the project.

A sure-fire way to make any project more appealing in the eyes of a grant funder is to provide a generous community match. Match can certainly mean in-kind donations, like culverts and cement. But it does not have to roll in on a flatbed truck: Match can just as easily mean community volunteer hours.

Butte County enjoys a relatively robust culture of volunteering. One in three trails enthusiasts reported doing volunteer trails work at some point in the last 24 months. If all the civic engagement around trails in Butte County was accurately tracked and counted, it would likely add up to tens of thousands of hours per year. Telling the story of the Butte County culture of volunteering is key to securing new grants.

Another great way to make grant applications more competitive is to show a vibrant track record of collaboration. To achieve this, land managers and planners can look to the Trail Champions in their communities.

COORDINATION: CULTIVATE TRAIL CHAMPIONS

Trail projects take years or decades to go from vision to reality. When these projects finally come to fruition, it is usually because an individual or a group had a vision and persisted. Trail Champions are individuals or groups who have a long-term vision for a trail project and work with whatever is available, sometimes for decades, to accomplish a new project or

develop a culture of maintaining existing trails. When trails champions succeed it is usually because, somewhere along the way, they became experts in coordination. These individuals and groups are truly the civic glue that holds rural communities together.

Trail champions could be devoted campground hosts who return season after season, a historian who tirelessly works to preserve and interpret historic trails for future generations, a hikers' Meetup that adopts an amenity (like a kiosk or a pit toilet), or a 4x4 group who advocate for their trails through Forest Service collaboratives. With tight budgets at both the land manager and County government level, most trails maintenance and new development will rely heavily on trails champions from now on.



Trail champions are often found doing things like making new signs in their woodshop! Photo credit: Paradise Pines POA

The key to success, then, is to identify current and potential champions and provide them with support resources to allow them to realize their vision. Support opportunities exist at every stage of the trails planning process. Some forms of support are significant commitments; others cost virtually nothing. They can include: helping raise awareness for a project, such as by using the County website or social media; assisting with project development, environmental planning, or grant writing; organizing volunteers and tracking community donations; grant management; and helping champions communicate with land managers. Sometimes even an encouraging word or a friendly handshake after a public meeting is what turns last year's trail enthusiast into next year's trail champion.

LAND AND LABOR: MAKING THE MOST OF BUTTE COUNTY'S RESOURCES

Butte County is blessed with a vast stock of accessible lands, something many more populated counties can only envy. Just as having a large amount of public lands presents challenges for land managers, it also presents a great opportunity for recreation resources and utilizing the lands for economic sustainability. It is easy to focus on the challenges of coordinating trails projects across ownerships and lose sight of the remarkable asset Butte County has: a vast and spectacular landscape that is economically productive, publicly accessible, and vibrantly wild all at the same time.

Like grant dollars, skilled trail laborers may be scarce, but communities can develop and multiply them by leveraging community volunteer power. Yoking teams of volunteers to veteran trail-building artisans provides a mentorship experience for everyone involved, builds civic networks in a community, and (not incidentally) gets the job done. User groups are probably the most obvious source of volunteers, but land managers and planners can also look to many other sources of volunteer power: youth groups, Boy and Girl Scouts, neighborhood watch groups, extracurricular clubs at schools, senior groups, exercise groups, Meetups and church groups, to name a few.

All trail maintenance completed on public lands must be developed in conjunction with a land manager and completed under a volunteer agreement which is finalized and signed before any work begins.

Potentially, trail labor could be found in synergy with wildfire suppression efforts. Wildfire suppression is an important job creator in Butte County because many of our communities -- and most of our trails -- are in the Wildland-Urban Interface, or WUI. Representatives from CAL FIRE spoke at one Trails Plan Working Group meeting about the value of having trails to provide easier access for fire suppression. Without trail access, fire crews are often constructing hand lines to provide access -- which requires great time and energy to complete. If trail-building is reimagined as a firefighting resource, it instantly becomes eligible for far greater allocations of money and labor.



The Ridgeview Rangers maintain Paradise Pines POA trails to fulfill their coursework requirements at Ridgeview High School. Photo credit: Wade Killingsworth, PPOA

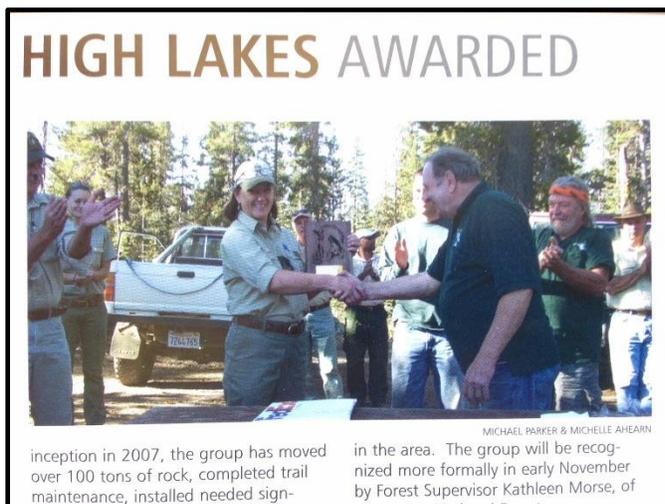
User groups: Always *coordinate with your land manager* to follow proper procedures and work within the scope of the agreement.

SOCIAL OPPORTUNITIES: BUILDING A CULTURE OF RESPECT ON THE TRAIL

Most users are aware of and follow the traditional right-of-way hierarchy of shared use trails. It's all summed up in the classic yellow 'yield to' sign at right. However, some users either don't yet know or don't respect this trail use etiquette.

More shared-use trail signage, such as the example at right, is needed to educate new users on proper etiquette. Those installing signage should also thoughtfully consider that, thanks to cell phones and headsets, more and more of today's trail users are distracted users. These users may need to be reached in innovative ways.

If there are areas with high levels of user conflicts, land managers can cite users for violating shared use trail policies, along with other forms of natural resource damage. When users are cited they often share a word of warning with other users, which may be the best way to have a lasting positive impact.



Butte County is home to an exemplary group of OHV-riding trail stewards, the award-winning Friends of the High Lakes. Photo credit: USFS and Nick Repanich.

Trail users who ride off-trail and through sensitive areas like meadows or streams need to be cited for violations. It is important for law enforcement to recognize the impacts improper use can have on forest resources. Hopefully, despite budget and staffing challenges, the law enforcement community and trail users can work together to make sure all users are one day as respectful of the land as the responsible majority has always been.

At the core of the user conflict issue is the need for **respect and communication**. If users respect one another and communicate with other users, conflicts will be reduced.

Local land managers struggle to maintain a large inventory of old roads, many of which are unsafe to drive and/or are causing significant resource impacts. Often, land managers will look for opportunities to decommission these roads. Some roads are not salvageable and *should* be completely decommissioned. But others can still serve as access for fire protection, provide recreation for OHV and non-motorized users, and offer connectivity to trails and desirable destinations like river access, views, historical trails, and dispersed camping sites. Before a road is decommissioned, land managers can check whether it has historical recreational use.

If so, land managers could consider an alternative to decommissioning: the road-to-trail conversion process. Where appropriate, road-to-trail-conversion can limit a road's resource impacts and reduce maintenance costs, while still providing opportunity for recreation. It is often accomplished by pulling culverts (which can require frequent clearing and if clogged create resource damage), by reshaping the road to a reduced tread width, and/or allowing for drainage. The process should take user experience into account as well.

To last generations, a trail needs to meet the triple demands of its intended users, the community, and the land. The elements of sustainable trail design include location, terrain, difficulty, exposure, tread width and distance – to name just a few factors. If trails are well-designed to begin with, they require little upkeep to minimize negative impacts, and they are cheap to maintain. Sustainable trails are also supported by community members, funded in some politically acceptable way, and are not unnecessarily risky to use. Because they were designed to meet the triple demands of land, community and individuals, sustainable trails don't erode or get vandalized, and they don't close down for want of funding.

What is more, sustainable trail systems are designed so people *want* to use them – not just once or twice, but for a lifetime. The kid who catches her first frog on a local nature trail may return to ride bikes with her friends in high school, challenge herself with technical climbs in midlife, and eventually bring her grandkids on a picnic – all from the same trailhead. Loop options, connectivity, and thoughtful design are key to building a world-class trail system that provides benefits -- forever.

7. ACTION PLAN

These action items were identified through public input, the Trails Plan Working Group, and conversations with land managers. They show the way forward to a better local trails system. There is currently no County committee or funded agency that can take on this important work. Therefore, the BCRC D recommends sharing the Plan with Butte County’s local governments, special districts, Chico State University and local public land managers, and encouraging stakeholder outreach to form a Trails Committee to implement Action Plan items.

Action Plan Component	Time Frame	Responsibility
A. Create a Structure to Facilitate Maintenance		
A.1 Coordinate with USFS on vision for shared stewardship model: What does it look like and how do we make it work for Butte County?	on-going	Trails Committee
A.2 Work with land managers to help identify / recruit volunteer groups: annual open house for trail volunteers	April 2019	Trails Committee
A.3 Work with land managers and user groups to develop a list of trails maintenance needs and a maintenance schedule	on-going	Trails Committee
A.4 Work with land managers on trail trainings for volunteer groups	May 2019	Trails Committee
A.5 Plan a county-wide National Trails Day event	June 2019	Trails Committee
B. Develop Outreach Strategy for Public Involvement		
B.1 Develop county-wide database for trails outreach, including survey contacts and user groups	September 2018	BCRC D
B.2 Send quarterly public update on trail work opportunities, achievements	Nov. 2018	Trails Committee
B.3 Outreach for public comment on trails projects and meetings	on-going	Trails Committee
B.4 Collaborate with public land managers to develop trails projects	on-going	Trails Committee
C. Pursue Trails Projects		
C.1 Identify potential funding sources for project wish list	Oct. 2018	Trails Committee
C.2 Refine project wish list based on USFS priority areas / resources	Oct. 2018	Trails Committee
C.3 Identify network of specialists to aid in project development/NEPA	on-going	Trails Committee
C.4 Refine Planning Map / Database to include projects	on-going	Trails Committee
C.5 Collaborate with public land managers on project identification and funding opportunities.	on-going	Trails Committee
D. Cultivate Trail Champions		
D.1 Identify trail champions, by user group and by project	on-going	Trails Committee
D.2 Develop support strategy for trail champions and projects	on-going	Trails Committee
D.3 Create communication network for trail champions, land managers	on-going	Trails Committee
E. Develop Strategy To Increase Available Information & Resources		
E.1 Work with land managers to create electronic version(s) of maps	on-going	Trails Committee
E.2 Identify source for trails information sharing and distribution	Oct. 2018	Trails Committee
E.3 Coordinate with land managers / user groups to develop additional maps and resources for users	on-going	Trails Committee
E.4 Prioritize trails for best fit for increasing information sharing	Oct. 2018	Trails Committee

This is a working document. Time frames may need to be adjusted and items updated or added from time to time.

8. CONCLUSION

Improving our trail system would be good for our health, great for our economy, and would be among the best investments we could make in our kids' future. And when it comes to building a great trail system, Butte County has opportunities most counties can only envy. We have the land, the public access, the amazing natural beauty, the outdoor recreation culture, and the spirit of volunteerism and collaboration. A well-maintained, highly interconnected, multi-use yet low-conflict trail system – in other words, exactly the kind of system Butte County residents ask for – is within our reach.

The days when a single agency could build a trail by itself are gone. Today's trail management involves protecting the environment and biodiversity right alongside of providing balanced recreational opportunities for hikers, bikers, birdwatchers, OHV users and equestrians. Shared stewardship is the way forward. There are, of course, plenty of obstacles to the realization of this vision: some common to all collaboration, some unique to the art of trail-building. The ingredients for realizing shared stewardship are a constant flow of respect and communication, the establishment of permanent collaboration as a leadership priority, a little forgiveness, a lot of patience – and getting out on the trail together. Walking Butte County's basalt, granite, and hard valley clay has a way of putting one's problems in perspective.

Trails budgets are almost non-existent, but grants exist, and partners within Butte County are already demonstrating success in applying for them. What's more, the County is rich in volunteers and trail champions. These people are assets who cost pennies to nurture but can return huge dividends in getting things done. What is needed is for agencies, governments, user groups and land managers to put their heads together and develop a shared framework for trails development. This framework will involve excelling at least four things: communicating, sharing resources, bringing in grants, and leveraging volunteers. If this framework can be built, trail partners in Butte County will find the challenge of building a world-class trails system to be no more insurmountable than Humbug Summit.

9. CONTRIBUTIONS

The compilers of the Trails Plan wish to thank everyone who assisted in the process. Some of the people listed below attended every single Trails Plan Working Group meeting, while others presented at a single meeting. Still others shared information by email or simply met for coffee to share their unique trails insights. The Trails Plan could not have been written without the help of these contributors. Many still serve in the organizations listed here, while some have moved on to follow new trails. If anyone was left off this list or if you see your name misspelled, we sincerely regret the error.

Michelle Ahearn, U.S. Forest Service, Plumas NF
Robin Bennett, Butte County, BOS--District 5
Gus Boston, CAL FIRE
Jim Broshears, Paradise Ridge Fire Safe Council
Carolyn Denero, Explore Butte
Bob Gage, California Back Country Horsemen
Randy Gould, U.S. Forest Service, Plumas NF
Casey Hatcher, Butte County, Economic and Community Development Manager
John Hunt - Northern California Regional Land Trust Executive Director
Karey Humphreys-Cooper, Intrepid Adventures
Louis Johnson, Butte County Public Works
Wade Killingsworth, Paradise Pines Property Owners Association
Stacy Kronner, U.S. Forest Service, Lassen NF
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Heather MacDonald, Butte County, Community and Economic Development
Jennifer Macarthy, Butte County, Economic & Community Development
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Sarah Reynolds, Butte County Resource Conservation District
Steve Roberts, Sierra Pacific Industries
Daniel Roskopf, U.S. Forest Service, Plumas NF
Wolfy Rouble, Butte County Resource Conservation District
Vance Severin, Paradise Ridge Riders
Ray Sousa, Sierra Access Coalition
Mary C. Sullivan, U.S. Forest Service, Plumas NF
Doug Teeter, Butte County Supervisor, District 5
Thad Walker, Chico Trailworks/Chico Velo
Dick Waugh, Trails West
Lia White, Pacific Gas & Electric

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LOCAL CLUBS AND ORGANIZATIONS

Adventure Outings CSU Chico
Butte County Historical Society
Butte County Search and Rescue
California Back Country Horsemen
California Native Plant Society
Chico Hiking Association
Chico Velo / TrailWorks
Chico-Oroville Outdoor Adventurers
Ducks Unlimited
Friends of Bidwell Park
Friends of the High Lakes
Map Makers
Paradise Ridge Riders
Philbrook Community Association
Ridgeview Rangers
Sierra Access Coalition
Sierra Club – Sierra Nevada - Yahí Group
Trails West

LOCAL AGENCIES AND LAND MANAGERS

Army Corps of Engineers
Bureau of Land Management (Department of the Interior)
Butte College
Butte County Forest Advisory Council
Butte County Resource Conservation District
Butte Fire Safe Council
California Conservation Corps
California Department of Fish and Wildlife
California State Parks
Chico Area Recreation and Park District – CARD
City of Biggs
City of Chico
City of Gridley
City of Oroville
Coon Hollow Ecological Preserve

CSU Chico
CSU Ecological Reserves (Big Chico Creek Ecological Reserve and Butte Creek Ecological Reserve)
Durham Recreation and Park District
Feather River Recreation and Park District (FRRPD)
Forest Ranch Fire Safe Council
Meadowbrook Ranch
Merlo Park
National Wildlife Refuges (US Fish and Wildlife)
Nature Conservancy
Northern California Regional Land Trust
Pacific Gas & Electric
Paradise Irrigation District
Paradise Pines Property Owners Association
Paradise Recreation and Park District (PRPD)
Paradise Ridge Fire Safe Council
Rails-To-Trails Conservancy
Richvale Recreation and Park District
River Partners
Sheriff's Crews
Sierra Nevada Conservancy
Sierra Pacific Industries
Town of Paradise
U.S. Forest Service (Department of Agriculture): Lassen, Plumas, and Mendocino National Forests
Yankee Hill Fire Safe Council

LOCAL BUSINESSES

AMain Bike Shop

Amain Sports and Hobbies

Big 5

Campus Bikes

Chico Bike and Board

Chico Sports LTD

Dick's Sporting Goods

Deer Creek Archery

Dogtown Archery

Greenline Cycles

Fins, Furs and Feathers

Fleet Feet

Hughes Ski Hut

Huntingtons Sportsmans Store

Mountain Sports LTD

North Rim Adventure Sports

Paradise Bikes

Play It Again Sports

Pullins Cyclery

Sports LTD

Sportsman's Warehouse

OTHER RECOMMENDED RESOURCES FOR TRAIL DESIGN, DEVELOPMENT AND MAINTENANCE

American Trails Association - Assists rural local governments with planning, design, education, research, and grant writing around trails and pathways. Resources for trail planners: <http://www.americantrails.org/resources/planning>

Birkby, Robert C., and The Student Conservation Association. 2006. *Lightly on the Land: The SCA Trail Building and Maintenance Manual*. 2nd edition. Seattle, WA: The Mountaineers Books.

Bureau of Land Management and International Mountain Bike Association. 2017. "Guidelines for a Quality Trail Experience." Available online at https://www.blm.gov/sites/blm.gov/files/uploads/Travel-and-Transportation_Guidelines-for-a-Quality-Trail-Experience-2017.pdf.

Hancock, Jan, et al. 2007 (December). *Equestrian Design Guidebook for Trails, Trailheads and Campgrounds*. USDA (U.S. Forest Service) pubn. 0723-2816-MTDC. Available online at https://www.fhwa.dot.gov/environment/recreational_trails/publications/fs_publications/07232816/

Headwaters Economics - Assists rural local governments with economic development, planning, and resource management. Many resources available online at <https://headwaterseconomic.org/topic/economic-development/trails-pathways/>

International Mountain Bicycling Association. 2004. *Trail Solutions: IMBA's Guide to Building Sweet Single Track*.

National Off Highway Vehicle Conservation Council (NOHVCC). 2015. *Great trails: providing quality OHV opportunities through sound management, conservation, and design*. Available online at <http://gt.nohvcc.org>.

Parker, Troy Scott. 2004. *Natural Surface Trails by Design*. Boulder, CO: Nature Shape LLC.

USDA (U.S. Forest Service) and DOT (Federal Highway Administration). 2016 (September). "Trail fundamentals and trail management objectives." Washington, D.C.: USDA (U.S. Forest Service) pubn. 0723-2816-MTDC. Available online at https://www.fs.fed.us/recreation/programs/trail-management/documents/trailfundamentals/1623-3801_TrailFdml+TMO_Sec508_11-14-16_150dpi.pdf.