SANTA CATALINA TRAIL PLAN



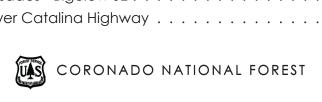
CORONADO NATIONAL FOREST | JUNE 2023



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A THANK YOU TO OUR PARTNERS

Thank you to our partners and community organizers who were instrumental in assisting the Coronado National Forest through the development of the Santa Catalina Trail Plan.

Prepared by the Coronado National Forest: Santa Catalina Ranger District and the Supervisor's Office Photographs by Adam Milnor & Amber Wong unless otherwise noted

> Cover photo by Eric Ruljancich Upper Esperero Trail, Santa Catalina Mountains

PROJECT PURPOSE AND NEED

The Santa Catalina Ranger District of the Coronado National Forest (CNF) is an important community asset, natural landscape, and cultural resource. It contains over 265,000 acres of rugged sky island canyons and mountains at the edge of the growing Tucson metropolitan area.

The final Santa Catalina Trail Plan provides a collaborative framework for maintaining, enhancing, and expanding the area's trail network. The district contains approximately 240 miles of trails including the Arizona National Scenic Trail (AZNST). These trails are predominantly open to non-motorized uses including hiking, mountain biking, running, horseback riding, hunting, and rock climbing with a smaller share of the system available for motorized use. Although trail use is the leading recreation activity on the CNF, a holistic trail planning effort for the district has never been completed.

The trail plan seeks to respond to evolving trail use patterns driven by population growth, shifting visitor preferences, and recreation technology. Key trends include increased recreation use during and following the pandemic, growing popularity of mountain biking and rock climbing, and a more prominent role for outdoor recreation in the local tourism economy.

The robust use of trails, especially on Mount Lemmon, along the Catalina Highway and at the accessible base of the Santa Catalina Mountains, has led to some undesirable outcomes including trail degradation, conflicts between users, and the creation of unauthorized trails. In many locations, existing trailheads and trail access points are insufficient or not legally secured. The current trail system provides limited opportunities for beginners or those with mobility limitations. Additionally, the Bighorn Fire of 2020 impacted more than half of the trail system, altering recreation settings, and compounding the challenge of trail maintenance.



Ridgeline climbing crag, Mount Lemmon

The purpose of this project is to create a system of trails that will be ecologically, economically, and socially sustainable. It seeks to make that system a reality through thoughtful planning and open collaboration with partners and the community.



Pima Canyon Trail, Santa Catalina Mountain front range

Geographic Scope

The geographic scope of this plan is all Santa Catalina Ranger District trails and trailheads. Direction from previous planning efforts for Sabino Canyon Recreation Area (Sabino Canyon Concept Plan, 2015), Catalina State Park (Catalina State Park Master Development Plan, 2021), and Redington Pass (Collaborative Area Management Plan, 2016) have been incorporated into the trail plan.

What the Plan Is and Is Not

The Santa Catalina Trail Plan is a framework for identifying and prioritizing trail and trail access projects as well as regular trail stewardship. It is an aspirational, conceptual-level plan that helps the US Forest Service and our partners efficiently improve the visitor experience in the busiest portion of the CNF. The plan serves as a connection between the forest plan and site-specific projects.

Projects described in this plan are conceptual only; specific locations and trail alignments may change as projects are fully analyzed for their environmental impacts under the National Environmental Policy Act.

The plan is not a proposed action under the National Environmental Policy Act (NEPA) or a formal decision. All projects will be fully analyzed for their effects to cultural and natural resources before they are implemented.

The plan itself is intended to provide program guidance for 15 years, but may be updated or adjusted at the discretion of the Santa Catalina District Ranger based on new information, including the pace and scale of implementation.



PROJECT APPROACH AND VALUES

The project was launched in 2021 with a commitment to collaboration and transparency. The project is rooted in the five US Forest Service values captured in This is Who We Are:

Service | Interdependence | Conservation | Diversity | Safety

The plan was crafted through the direct input of community partners, recreation users, volunteers, and residents.

We wish to express our appreciation to the Arizona Trail Association, Pima County, Pinal County, County Line Riders of Catalina, Tucson Saddle Club, Southern Arizona Hiking Club, Tucson Off-Road Cyclists and Activists, Sonoran Desert Mountain Bicyclists, American Conservation Experience, Climbing Association of Southern Arizona, Arizona Game and Fish Department, Friends of Santa Catalina Trails, and others who helped develop the recommendations contained within this plan.

Throughout the planning process and upcoming implementation, the US Forest Service strives to respect our shared heritage and the unique sky island environment.

What Changed from the Draft to the Final Plan

Feedback received on the draft plan and additional field scouting led to several changes from the draft to final plan. However, the goals and objectives of the plan, as well as the overall guiding principles, have remained the same. Key project changes include:

- The restoration of the Samaniego Trail as the primary top to bottom, non-wilderness trail option is no longer included in the final plan. The plan includes an alternative project involving Red Ridge;
- A portion of the Box Camp Trail will no longer be removed from the National Forest System (NFS);
- A recommendation to move the Arizona National Scenic Trail to the existing Red Ridge and Catalina Camp trails in order to avoid conflicts with private property and roads open to motor vehicles;
- Several additional reroutes have been included, such as on the Pima Canyon, westernmost segment of Bug Springs, and Red Ridge trails;
- Additional detail has been provided on the Golder Ranch 50 Year adoption and improvement proposal. These changes were identified through a collaborative process with users;
- A short connector between Green Mountain and Brush Corral has been included;
- The proposals for Davis Spring and Knagge have been modified to include a loop option, while removing some remaining pieces of those trails from the NFS.

The trail management table has been updated to reflect some additional changes in trail classification, mainly adjustments from maintenance Class 3 to maintenance Class 2 to reflect actual conditions and practical future intent. More detail has been provided on the designed and managed use for each trail segment. Lastly, updates have been made to the identified trail partners for each segment.

A section has been added that outlines the process for implementation of the plan. It includes a proposed phasing plan, as well as more information on the components of environmental compliance and likely time frames. A summary of available personnel and financial resources is also included.

In response to input during the fall 2022 feedback period, a listing of contingency projects has been added, along with some simple criteria for their future consideration.



View from Seven Cataracts Vista Point, towards Catalina Highway

History and Significance

People have been using the Santa Catalina and Rincon Mountains for centuries. The Tohono O'odham and their ancestors lived in the lower elevations and visited the peaks and forested areas of the mountains long before Spanish, Mexican, and Anglo settlers arrived in the region.

Plants and animals of the mountains supplemented crops grown along the Santa Cruz River, and springs in the mountains were vital places. Representatives of the Four Southern Tribes have indicated that they consider the Santa Catalina Mountains to be a traditional cultural property. Numerous other tribes including the Hopi, Zuni, and Apache tribes claim the area as an important place.

The current recreational trail system is based, in part, on historical routes for hunting, gathering, or spiritual purposes. Later, trails were developed for transportation and firefighting, especially before the construction of the Control Road in 1920 and the Catalina Highway in the 1950's. Box Camp, Soldier, and Knagge trails are all known to have been used as historical access routes.

The routing of the Arizona National Scenic Trail through the district, while more recent, is another important milestone that helped link the trail from Mexico to Utah and earned its National Scenic Trail status in 2009. A variety of trail segments and connections are associated with the development of the AZNST.



AGENCY POLICY AND DIRECTION

There is a wide foundation of laws, regulations and polices that guide recreation and trail management planning on National Forest System lands. Other documents provide strategic guidance. Below are the most relevant for this plan.

Coronado National Forest Land and Resource Management Plan, 2018

This plan (referred to as the "forest plan") provides formal guidance for management of the CNF. Forest plan decisions include six main elements: desired conditions, objectives, standards, guidelines, the designation of special areas and management areas, the identification of management suitability, and monitoring and evaluation. Many of the forest plan decisions are relevant to the trail plan; the most important are included as an appendix to this document. Any projects identified in this document must be consistent with the forest plan.

Among the most critical of these is the classification of lands within the Recreation Opportunity Spectrum (ROS), which identifies the appropriate recreation settings and management activities through the district.

Forest Service Policy

US Forest Service policy, based on laws and regulations, is contained in agency manuals and handbooks. The most relevant to this project include:

- Forest Service Handbook 2309.13 Recreation Sites
- Forest Service Handbook 2309.18 Trails Management
- Forest Service Manual 2310 Sustainable Recreation Planning
- Forest Service Manual 7700 Travel Management
- Forest Service Handbook 2320 Wilderness Management

Coronado National Forest Sustainable Recreation Action Plan. 2021 to 2025

This document includes a set of initiatives, actions, and best practices for the forest's recreation program. It identifies the Santa Catalina Ranger District as a top priority for trail and recreation planning.

National Strategy for a Sustainable Trail System, 2017

This document establishes a set of core values that will guide the behaviors and efforts of the agency and its partners. It also commits the Forest Service to act in six different areas to meet the challenges of achieving a sustainable trail system.

National Trail System Act of 1968

National Scenic Trails are continuous, extended routes of outdoor recreation within protected corridors. The Act was amended in 2009 to designate the Arizona National Scenic Trail, which travels through the planning area. The trail provides non-motorized recreation opportunities with the most common activities including hiking, backpacking, running, horseback riding, and mountain biking.



Wilderness Act of 1964

The Wilderness Act of 1964 defines wilderness as "an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain." The Act's purpose is to preserve and protect the natural ecosystems and wild areas and provide opportunities for solitude and primitive recreation. There are two designated wilderness areas in the Santa Catalina Ranger District – Pusch Ridge and Rincon Mountain wilderness areas.

Endangered Species Act of 1973

The Endangered Species Act (ESA) is designed to protect species from extinction. It contains legal direction for the protection of species listed as threatened or endangered, including the development of recovery plans and the designation of critical habitat. The planning area contains habitat for numerous listed species. The most consequential of which is the Mexican Spotted Owl, which is present in much of the higher elevations of the Santa Catalinas. Along with the National Environmental Policy Act, the ESA is a key component of the environmental review process for any actions recommended in the trail plan.

Catalina Highway Scenic Values, Public Law 409

This law from 1946 establishes limitations on mining and timber management activity within 400 feet of the centerline of the Catalina Highway to protect scenic values.

Other Technical References

The team relied on several technical references including the Visitor Use Management Framework, prepared by the Interagency Visitor Use Management Council, and the Guidelines for a Quality Trail Experience, developed by the Bureau of Land Management. The team also referenced trails and open space master plans developed by Pima and Pinal Counties, along with the Statewide Comprehensive Recreation Plan and the Arizona Trails Plan 2020 both prepared by Arizona State Parks and Trails.





Left: Tanque Verde Canyon as seen from the planned viewpoint in the Tanque Verde Falls Recreation Enhancement Project

Above: Cholla cactus in Tanque Verde Canyon

CURRENT CONDITIONS

The Trail System

The planning area includes approximately 240 miles of National Forest System (NFS) trails. Nearly half (47%) are in the Pusch Ridge and Rincon Mountain wilderness areas.

The Arizona National Scenic Trail (AZNST) forms the backbone of the trail system. Over 53 miles of the AZNST traverse the district, or roughly 21% of the entire trail system. An additional 22.1 miles are an identified route around Pusch Ridge Wilderness intended for cyclists and equestrians. The CNF has a strong relationship with the Arizona Trail Association that includes shared investment in trail maintenance and access.

Existing Trail System

The majority of the current system is identified as a Class 3 trail (developed, trail is continuous and obvious). Approximately one fifth of the system is identified as Class 2 (moderately developed, trail is narrow and rough).

Just under 6 miles of the trail are open to motorized use, primarily in the Redington Pass area. While half of the system is technically open to mountain bicycling, only 50 miles or approximately one fifth of the system is reasonably bikeable based on trail grade and location.



View towards Pusch Peak on the Linda Vista Trail

A full listing of the trail names, lengths, and existing as well as proposed classifications can be found in the Trail Management Direction section.

A Note on Forest Service Trail Management

Managed Use is a mode of travel that is actively managed and appropriate on a trail, based on its design and management.

- Managed Use indicates management intent to accommodate a specific use.
- There can be more than one Managed Use per trail or trail segment.
- The Managed Uses for a trail are usually a small subset of all the allowed uses on the
 trail; that is, uses that are allowed unless specifically prohibited. For example, on a trail
 that is closed to all motorized use but open to all non-motorized use, the Managed
 Uses could be hiker and pedestrian, and pack and saddle. The allowed uses, however,
 would also include bicycles and all other non-motorized uses.

Designed Use is the single Managed Use of a trail that requires the most demanding design, construction, and maintenance parameters and that, in conjunction with the applicable Trail Class, determines which Design Parameters will apply to a trail.

• There is only one Designed Use per trail or trail segment. Although a trail or trail segment may have more than one Managed Use and numerous uses may be allowed, only one Managed Use is identified as the design driver or Designed Use.

• In some situations involving more than one Managed Use, the Designed Use may not be readily apparent, as is often the case when there are fewer differences between the applicable sets of Design Parameters than in the example above. For example, on a trail that is actively managed for hiker and pedestrian, pack and saddle, and bicycle use, pack and saddle use would likely be the Designed Use because of the three Managed Uses, pack and saddle use generally has the most limiting design requirements. While the Bicycle Design Parameters are very similar to the Pack and Saddle Design Parameters, the Design Parameters for this trail may need to be adjusted to accommodate bicycles.

E-Bikes

Class 1, 2, and 3 e-bikes are allowed on motorized trails and NFS roads.

Local Forest Service officials may consider new opportunities for e-bike use on non-motorized trails and in non-motorized areas by utilizing a designation process in accordance with the Travel Management Rule (36 CFR Part 212, Subpart B). Designations involve appropriate environmental analysis, public involvement, and local decision-making. Based on the extremely limited public feedback related to e-bike trails in the sensing and feedback periods, this plan does not recommend allowing e-bikes an any current non-motorized trail.

Existing Trailheads and Parking Capacity

There are 23 improved, designated trailheads along the Catalina Highway that offer direct access to NFS trails. In total, these provide 326 parking spaces. Assuming 3 people per vehicle, these trailheads offer a cumulative total of 984 People at One Time (PAOT). This represents an increase of approximately 25% from 1998, prior to the full implementation of Catalina Highway improvement project. However, it only provides parking capacity for roughly one quarter of the average daily vehicle traffic as measured by Pima County. Many of these trailheads have been improved to offer paved parking, trash service, vault restrooms and some visitor information. While the highway itself is operated by Pima County Department of Transportation under an easement, recreational facilities are managed by the CNF. Some sites charge an \$8 per day standard amenity fee; these fees are critical in supporting operations and maintenance of these sites.

Numerous developed trailheads are located at the base of the mountains including Agua Caliente, Bear Canyon, Sabino Canyon, Ventana Canyon, Finger Rock, Pima Canyon, Catalina State Park, and Linda Vista. In total, these trailheads offer approximately 650 parking spaces with a cumulative total of 1,950 People at One Time (PAOT). These trailheads feature a range of amenities and all, except for Sabino Canyon and Catalina State Park, are free.

Developed parking is limited elsewhere, such as Redington Pass, along the Control Road (NFSR#38), and Happy Valley. Parking in these areas is less constrained by topography and surrounding development.

Despite this relatively robust capacity, several locations at all elevations can become overwhelmed and congested especially during the November to April high-use season.



TRAILHEADS THAT PROVIDE NFS TRAIL ACCESS

Location	Parking Capacity	Fee Status	Notes
Soldier Trailhead	6	No Fee	Wilderness access
Babad Do'ag Scenic Overlook	17	No Fee	Wilderness access
Molino Canyon Vista Point	15	No Fee	Non-wilderness access
Molino Basin Picnic Area/Trailhead	19	Fee	Restrooms; Picnic tables; Parking includes 10 fee sites, 7 AZNST fee free sites (per settlement agreement), 2 trailer sites
Hirabayashi Trailhead (Front only)	15	No Fee	Primarily non-wilderness access; Campground with restrooms
Lower Bug Springs Trailhead	10	No Fee	Non-wilderness access
Lower Green Mt/Upper Bug TH	6	No Fee	Non-wilderness access
Chihuahua Pine Picnic Area	16	Fee	Restrooms; Picnic tables; Non-wilderness access
Windy Point	33	No Fee	Restrooms; Non-wilderness access
Rose Canyon (Outside gate)	16	No Fee	10 in paved/unlined area, 6 in unpaved/unlined pullout next to lot
Rose Canyon (at lake)	40	Fee	Concessionaire operated; Restrooms; Non-wilderness access
Green Mountain Trailhead	10	No Fee	Non-wilderness access
San Pedro Vista Point	10	No Fee	Non-wilderness access
Bigelow Trailhead	10	Fee	Restrooms; Potable water; Non-wilderness access
Palisades Trailhead	4	No Fee	Wilderness access
Palisades Visitor Center	10	Fee	Visitor center; Restrooms; Potable water; Non-wilderness access
Box Camp Trailhead	10	No Fee	Wilderness access
Butterfly Trailhead	14	Fee	Restrooms; Non-wilderness access
Sunset Trailhead	10	No Fee	Non-wilderness access
Red Ridge Trailhead	3	No Fee	Non-wilderness access
Summit Trailhead	13	No Fee	Primarily non-wilderness access
Summit Storage Area at Radio Ridge	10	No Fee	Non-wilderness access
Marshall Gulch (lot across bridge)	8	Fee	Restrooms; Wilderness and non-wilderness access
Marshall Gulch (small lot)	6	Fee	Restrooms; Wilderness and non-wilderness access
Marshall Gulch (main)	15	Fee	Restrooms; Wilderness and non-wilderness access

Total Trailhead Parking

326



OTHER DAY USE DEVELOPED PARKING

Location	Parking Capacity	Fee Status	Notes
Thimble Peak Vista Point	10	No Fee	Vista
Seven Cataracts Vista Point	10	No Fee	Vista
Cypress Picnic Area	8	Fee	Restrooms; Picnic sites
Middle Bear Picnic Area	8	Fee	Restrooms; Picnic sites
Manzanita Vista Point	5	No Fee	Vista; Additional unlined parking on sides
Geology Vista Point	8	No Fee	Vista
Hoodoo Vista Point	5	No Fee	Vista
Sycamore Vista Point	10	No Fee	Vista
Aspen Vista Point	16	No Fee	Vista
Inspiration Rock Picnic Area	20	Fee	Marked & unmarked parking throughout area; Restrooms; Picnic sites
Box Elder Picnic Area	10	Fee	Restrooms; Picnic sites
Alder Picnic Area	10	Fee	Restrooms; Picnic sites
Loma Linda Picnic Area	10	Fee	Restrooms; Picnic sites

Total Other Day Use Parking

130

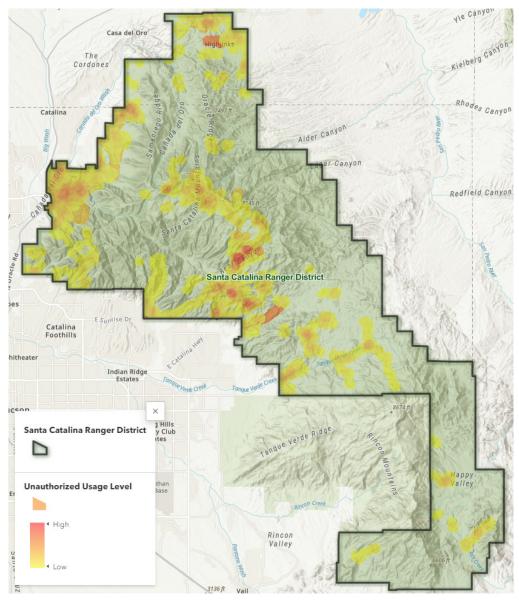


Interpretive trail at Windy Point along Catalina Highway

UNAUTHORIZED TRAILS

Unauthorized trails are purposefully or incidentally created by users without the approval of the land manager or owner. They can be the result of purposeful construction or through incidental regular use that creates a visible travel route for others to follow. They are also referred to as "user-created", "wildcat", "non-system" or "social" trails.

Unlike system trails, unauthorized trails do not receive regular, formal maintenance from the land manager and are not listed on formal trail maps because they are not part of the authorized trail system. However, unauthorized trails are often included in user-generated or third-party maps, leading to confusion among visitors about the acceptability of their use.



The image above is a heat map showing areas in which recreationists go off trail. As off-trail use increases in the area, the color goes from yellow, to orange, to red. Red represents high levels of off-trail recreational use.

There are 240 miles of primarily non-motorized, unauthorized trails in the planning area, with roughly 40 miles of those receiving moderate or regular use. Others may be routes used a handful of times before being grown over by vegetation. Estimated unauthorized trail mileage in the planning area is approximate based on multiple data sources including the tracking app Strava, websites like Mountain Project or All Trails, and CNF and partner inventories. This estimate has not been fully field verified.

The presence of an unauthorized trail often reflects a past or present demand for recreation use or access. An unauthorized trail or system of trails often serves a recreational function that authorized trails do not.

Potential Effects of Unauthorized Trails

A variety of resource impacts have been tied to use or presence of recreational trails. These include vegetation loss, soil erosion or loss, wildlife disturbance, water quality impacts, and the spread of invasive species. Unauthorized trails do not receive the same level of design and analysis as authorized trails, which make these unintended impacts more likely.



Secret Trail, near Mount Bigelow

Legality

The purposeful construction of trails without prior authorization is prohibited. However, it is generally true for non-motorized users that subsequent use of an unauthorized trail is not prohibited unless there is a site-specific regulation or closure, such as the bighorn sheep seasonal closure in Pusch Ridge Wilderness.

Similarly, off-trail incidental and repeated use that creates a visible travel route, but that does not involve purposeful construction, is not prohibited. Many appropriate and desirable recreation activities such as nature study, rock climbing, fishing, or hunting necessitate off-trail travel that may create unauthorized trails. For motorized use, users are required to stay on designated routes identified on the Motorized Vehicle Use Map and use of an unauthorized trail could constitute a violation.

Options for Addressing Unauthorized Trails

- No action
- Adoption with modifications or reroutes
- Adoption in place
- Closure and naturalization or restoration

VOLUNTEER AND PARTNER CONTRIBUTIONS

In FY2019 (October 1, 2018 through September 30, 2019), the district recorded a total of 3,510 volunteers and service participants contributing 112,185 hours. This represents 70% of the total volunteer efforts on the CNF. Due to the pandemic, volunteerism dropped off significantly on the district and forest-wide.

Volunteers contributed 11,920 hours to trail maintenance and construction and 23,855 hours to trail patrols. The majority (82%) of trail maintenance and construction was completed by organized groups leading volunteer events for their members.

PUBLIC SENSING RESULTS

Beginning in June 2021, the planning team began discussions with trail, community, and conservation partners to collect valuable input for the development of a trail plan. By November of the same year, the team launched a virtual interactive story map where members of the public could drop comments in geographical locations under four categories: values, opportunities, concerns, and successes. During the 70-day comment period, the team tabled in-person on Mount Lemmon with large paper maps, engaging visitors and answering questions about the creation of the trail plan.

Nearly 900 comments and over 2,000 agree/disagree reactions were documented – these comments were coded and analyzed to distill common themes, hot spots of key issues, and more. The full Public Engagement Report was published in April 2022 and is available online in the link below, with a complete list of categorized themes found on page 7. The comment tallies, top themes, and subsequent discussions with community partners guided the team's direction for this trail plan.

An overview highlighting the engagement numbers from the Public Sensing period

SANTA CATALINA TRAIL PLAN
ENGAGEMENT
NUMBERS

ORGANIZATIONS
ENGAGED
70
DAYS OPEN FOR COMMENT

COMMENT

COMMENTS
861
OF AGREE 6
DISAGREE REACTIONS

ADOPT
TRAILS

BIKE ONLY
TRAILS

Learn more about the <u>Public</u> <u>Sensing Phase</u>, or read the full Public Engagement Report.



Top Themes

- 1. More Trails: The top theme was an overwhelming call for more trails. But more trails can mean different things for different users: 39.4% of commenters suggested the establishment of more trails, without further specification. Connector trails (23.2%) and loop trails (14.1%) followed, with more beginner trails, a developed bike park with jumps and other features, and downhill biking trails close behind.
- 2. Adopt Trails: Commenters identified well-loved trails that are currently not part of the National Forest Service Trail System. A call to adopt trails (in general) along with specific trails (Milagrosa and 50 Year claimed nearly 60% of this theme), means that the Forest Service would be able to log and maintain trail status with crews, volunteer groups, and contractors.
- **3. Bike-Only Trails:** With the increasing popularity of mountain biking in the Catalinas, both bikers and non-bikers alike called for single-use, bike-only trails to increase safety and to reduce crowding.

The public also expressed interest for increased visitor information and signs, agency presence and trail maintenance. User conflict, crowding, natural resources considerations, and highway safety were also common themes. Some topics, such as e-bikes, were relatively infrequent during the sensing period.

Identified Management Issues

The following issues were derived from public sensing, partner engagement, and staff discussion.

Access

- The lack of permanent, legal public access to forest lands puts long term public use at risk. The NFS lands north of Catalina State Park near the terminus of the official 50 Year Trail that originates on state lands, the forest boundary near Milagrosa and Agua Caliente Canyons, and the northern terminus of Charouleau Gap Road #736 are most at risk. The informal, unsecured nature of this access can also cause issues for nearby property owners.
- Parking availability at some designated trailheads is becoming strained. This issue
 is especially notable at several hotspot locations including Finger Rock, Gordon
 Hirabayashi, Molino, and Sunset trailheads. As population and recreation demand
 increases, this issue is expected to become more acute in the future.
- There are inadequate trail opportunities for those with limited mobility.
- Snow play often strains road capacity, parking infrastructure, and public safety personnel for Pima County and other emergency personnel.
- Visitors to the CNF, including the Santa Catalina Ranger District, do not reflect the
 demographics of the community leading to an "equity gap". This gap is especially
 notable in terms of the relative lack of visitors who claim African American, Hispanic, or
 Latino heritage compared to the proportion of those demographics in Pima and Pinal
 Counties.



Trail Character and Sustainability

- The trail system has a lopsided range of trail difficulty, offering an abundance of higher difficulty trails with steep grades and rough tread surfaces. There are relatively limited beginner and intermediate opportunities, especially in the higher elevations accessed by the Catalina Highway.
- The existing system trail conditions often do not meet USFS or professional trail standards
 for sustainability based on their location, cross slopes, and grades. The system was
 largely adopted from historic trails or constructed before the application of sustainable
 trail design principles.

Agency Capacity

- The USFS has been challenged to adequately maintain the system, especially more remote backcountry trails. Effects from the Bighorn Fire of 2020 on trails such as Romero, Lemmon, and Butterfly are likely to generate additional maintenance needs for an extended period. Some trails are slowly disappearing due to the lack of maintenance. Limited water availability due to drought effects compounds the challenge of backcountry trail maintenance.
- There is a growing demand for providing commercial services in the form of recreation events and outfitting and guiding. These activities may enhance or interfere with regular recreation use and require USFS staff time for administration and monitoring.
- There are inadequate USFS resources for enforcement and visitor contact in areas that could benefit from sustained agency presence.

Visitor Experience

- Demand has grown for mountain biking opportunities, yet only 20 percent of trails within the system are suitable for mountain biking. This imbalance concentrates mountain bike use on a limited number of trails.
- Steep topography and limited holistic planning mean there is relatively poor connectivity between trails, eliminating options for loops and increasing the number of interactions between users.
- Several trails are experiencing moderate user conflict, primarily in locations attractive for both hiking and mountain biking such as Aspen Draw.
- Visitor information quality and availability could be improved and modernized, especially for advanced trip planning.
- The AZNST is co-located with roads in several locations, leading to safety issues and a sub par visitor experience that is not in line with the trail's management direction and establishing legislation.
- The Sun Corridor Trail has been proposed to travel across CNF lands, but a viable route that uses existing trails does not currently exist in some areas.
- There is a relatively high frequency of search and rescue operations, especially during the summer months. These operations are overseen by the Southern Arizona Rescue Association. Preventive search and rescue and visitor contact services are performed by the Santa Catalina Volunteer Patrol.

Resource Considerations

• The Golder Ranch – 50 Year area has an extensive unauthorized trail network. Nearby



- areas are dense with important cultural resources.
- The creation and regular use of unauthorized trails, including those that access climbing crags, has the potential to cause soil erosion and loss.
- Threatened, endangered and sensitive species can be negatively impacted by high levels of recreation use. The breeding season for the Mexican Spotted Owl (March 1 to August 31) occurs during the most popular portion of the year for recreation activities in some locations.
- Desert Bighorn Sheep habitat is closely aligned with popular and accessible portions
 of the Pusch Ridge Wilderness. Some types of recreation including off-leash dogs and
 traveling off trail can impact sheep behavior especially during the January to April
 breeding season.
- It is a near certainty that future wildfires will impact recreation infrastructure in the district.
- Some locations with high levels of visitor use have inadequate amenities, such as potable water, trash service, and restrooms.



Volunteer working to brush Butterfly Trail in 2021

Draft Plan Feedback

The feedback period for the Draft Santa Catalina Trail Plan started on November 3, 2022 and ended on December 2, 2022. The project was covered in local media and shared via social media channels. An in-person public meeting was held at the Tucson Jewish Community Center and attended by approximately 45 people. In total, 105 letters were received. Feedback primarily focused on support or disagreement with specific projects in the draft plan.

PARTNER DATA SOURCES

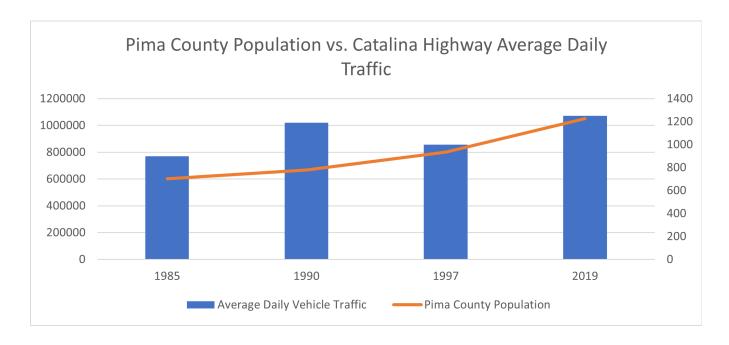
Valuable visitor data is collected across the district by various state and county entities. This information is shared to form a more comprehensive picture of use patterns on the Coronado National Forest.

Catalina Highway – Pima County Department of Transportation Data

Pima County has collected traffic data on the Catalina Highway sporadically for more than 40 years. A vehicle counter at the base of the mountain shows a variable visitation pattern. Data collected in 2018 and 2019 indicates an average of 1,260 vehicles travel up the highway each day, peaking at 3,408 vehicles during Labor Day weekend.

The highway data paints a mixed picture about trends in recreation use. While traffic is up over 25% from 1997, this growth in visitation hasn't kept pace with population growth. Current average daily traffic is only slightly increased from 1990, when Pima County had 382,000 fewer residents. This may indicate that proportionally fewer locals are using the recreation offerings along the Catalina Highway even as total visitation has increased.

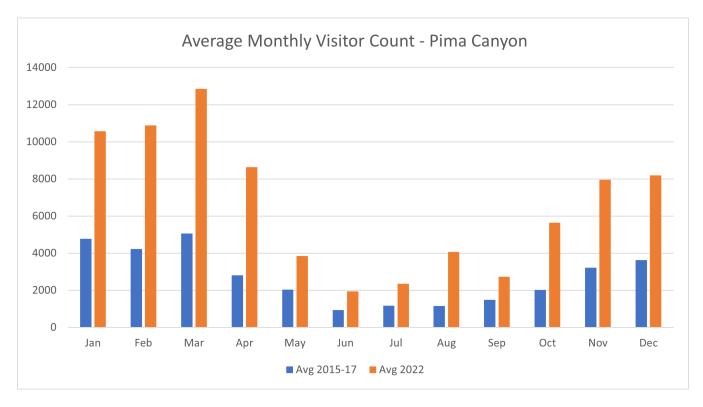
Data suggests that visitation along the Catalina Highway is spread less evenly throughout the year. Busy days are busier than in the past, increasing chances for localized congestion.



Pima County Natural Resources Parks and Recreation

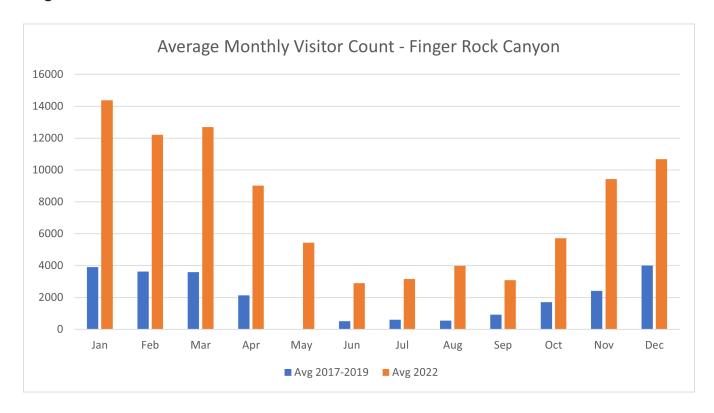
One noteworthy area has shown significant increase in recreation use: the trails that lead into the canyons of the Pusch Ridge Wilderness, especially Pima Canyon and Finger Rock. Data collected by the Pima County Natural Resources, Parks and Recreation Department paints a picture of heavily used trails during peak recreation season.

Pima Canyon



The graph above depicts the increased visitor usage of the Pima Canyon Trail. Monthly averages are compared between 2015-2017 (blue) and 2022 (orange). The use of trails has increased significantly since 2017, especially with more visitors heading to trails during the COVID pandemic. There has been a 40% to 200% increase in visitors when comparing prepandemic data to 2022 numbers.

Finger Rock



Finger Rock shows an even larger increase in visitation between 2017-2019 averages and 2022. The percentage increase between pre-pandemic and 2022 are between 167% (December) and 627% (August). May data for 2017-2019 averages are unavailable due to trail counter malfunction.

Arizona Office of Tourism Mobile Device Data

Data provided to the Arizona Office of Tourism from the mobile device data analysis service Arrivalist sheds light on the origin of visitors to the planning area. The data is generated from mobile devices users who opt into location services on a variety of applications; it remains fully anonymous. The resulting data indicates the origin and length of stay for visitors who travel from farther than 50 miles away. Other data sources indicate that visitors traveling from over 50 miles away account for over 40% of total visitors.

The top areas of origin for visitors to the Santa Catalinas are Phoenix (31%), Los Angeles (4%), Chicago (3.6%), Minneapolis (3.3%) and Denver (2.8%).

For Sabino Canyon the information indicates:

- January to April is by far the busiest period for visitation from out-of-area visitors, peaking at over 500 people per day in March 2021.
- Other locations visited by Sabino Canyon visitors include Mount Lemmon (16%), Arizona-Sonora Desert Museum (13%), Saguaro National Park (8%), Tombstone (8%), and Grand Canyon National Park (5%).

For Catalina Highway the information indicates:

- There is a relatively even distribution pattern of out-of-town visitors throughout the year, although it peaks in March, April, and May.
- Other locations visited by Catalina Highway visitors include Tombstone (9%), Sabino Canyon (9%), Arizona-Sonora Desert Museum (8%), Saguaro National Park (6%), and Flagstaff (5%).

Arizona State Parks and Trails, State Trails Plan Survey Data

Arizona State Parks and Trails produced a report for Pima County in 2020. This document is supplemental to the statewide random sample survey (RSS) providing analysis at the county level. RSS is conducted every five years and informs the Arizona Trails Plan. Access the full <u>Pima County Report here.</u>

Below are seven highlights from the report:

Pima County User Profile: 80% non-motorized, 20% motorized

- 1. 98% of non-motorized users visit trails to hike, run, or backpack, and 80% of motorized users drive 4x4s, quads, side-by-sides, ATVs or UTVs on trails.
- 2. Nearly 99% of non-motorized trails users report hiking, 26% report bicycling and 19% report horseback riding.
- 3. About 50% of both user types responded that access to trails in the last 5 years has stayed about the same, while about one third said that access has gotten better.
- 4. The data shows that about three quarters of motorized (75%) and non-motorized (79%) users view trails as somewhat or very important when deciding to live in AZ. They value trails even more when deciding to make travel or leisure decisions (82% and 83% respectively).
- 5. Different types of users find information about trails in different ways. Motorized and non-motorized users differed most in this category. A host of tools are utilized to find and use trails: 70% of motorized users primarily depend on GPS, while 64% of non-motorized users rely on word of mouth. Trail signs and smartphone apps follow for both user groups.
- 6. The top environmental or cultural concern for both user groups is litter or trash dumping. In a social context, non-motorized users were most concerned about poor trail etiquette by others, while motorized users sited vandalism as their top concern.
- 7. Overall, non-motorized users prioritized all categories of management higher than motorized users. This indicates that they attribute a higher level of importance to each issue. The two of the three highest categories were similar across user groups: providing trail signs and preventing or repairing damage to environmental and cultural sites near trails. The highest for non-motorized users is maintaining existing trails.



Volunteers clearing downed trees on the Esperero Trail in the Pusch Ridge Wilderness



FOREST SERVICE DATA SOURCES

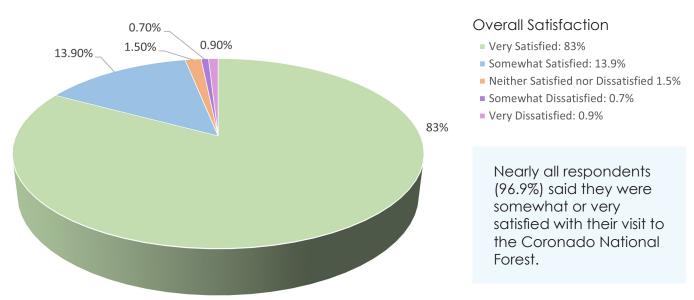
National Visitor Use Monitoring (2007/2012/2017/2022)

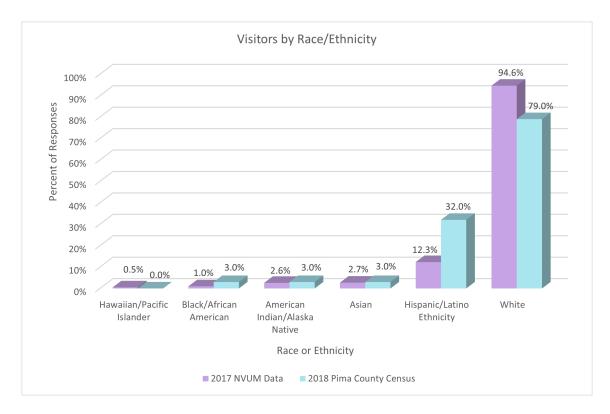
The National Visitor Use Monitoring (NVUM) program was developed for the US Forest Service to collect reliable information about recreation visitors managed at the national, region, and forest levels. Visitor data is collected on-site using a standardized survey instrument over one year and repeats every five years. The most recent CNF NVUM publication is from fiscal year 2017, with the next CNF NVUM survey conducted in 2022. As of June 2023, the 2022 NVUM survey results have not yet been published. More information about the NVUM program, including the full report can be found at https://apps.fs.usda.gov/nvum/results.

It is important to note that NVUM is not designed to collect data specific to district or site recreation use patterns, so the following results are at the forest scale. During an NVUM survey year, staff ask recreators about their reason for visiting the forest, activities they plan to participate in, facilities or sites they plan to use, and how far they traveled to get to the forest. In addition to the description of their recreation visit, demographic data is also gathered about age, race/ethnicity, gender, income level, and zip code to create a picture of who is, and isn't, recreating in the forest.

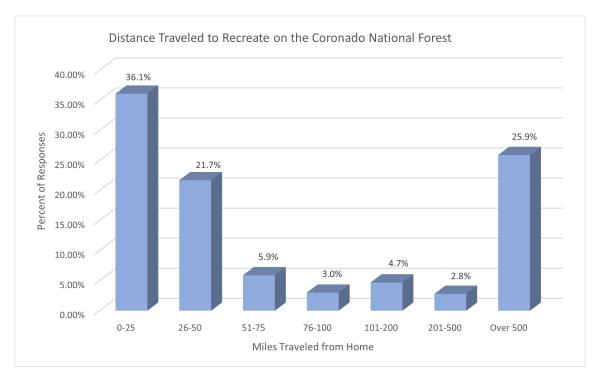
Key findings from the 2017 survey:

- 5.4% of visits included a group member with a disability, and of this group, 97.9% said facilities at site visited were accessible.
- NVUM data shows that 96.9% of visitors are Very Satisfied or Somewhat Satisfied with their recreation experience on the Coronado National Forest.
- The average group size was 2.4 people.
- Approximately two thirds of CNF visitors had a household income over the median income for Pima County.
- 35% of visitors made their trip with an overnight stay away from home; of these visitors, almost one third camped on the CNF.
- The average trip spending per party was \$953.

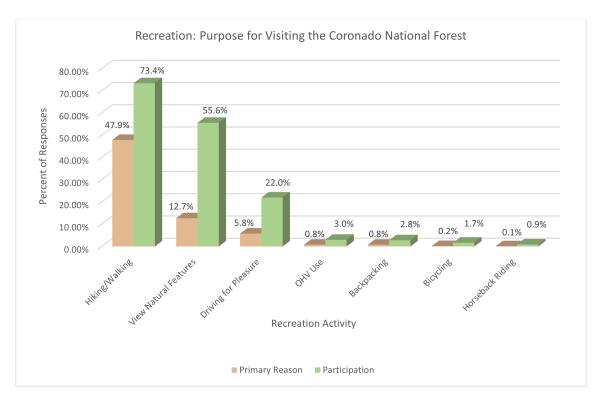




Comparison of CNF visitor demographics from NVUM Data (2017) and Pima County Census data (2018) by race and ethnicity.



Over half (57.8%) of forest visitors are traveling 50 miles or less to visit, and a quarter are traveling more than 500 miles.



The NVUM Data shows that most visitors are hiking/walking or viewing natural features as both their primary reason and as a participant.

TRAIL PLAN MANAGEMENT DIRECTION



Before and after conditions on the Palisade Trail. Photos by Wild Arizona.



Santa Catalina Trail Plan Management Direction

Trail Plan Goals and Objectives

Goal #1: Create a system of trails and trail access points that will meet the needs of current and future users, while seeking balance with resource availability and capability.

- **Objective 1a.** Seek permanent, legal public access to NFS lands and recreation assets. Seek to resolve one public access deficiency every three years, consistent with forest plan direction.
 - Work with Pima and Pinal Counties to ensure access up to the Forest boundary.
 - Use easements and fee title acquisition to secure key access roads and/or trails.
- **Objective 1b.** Improve parking capacity to the trail system, reducing the frequency of unsafe parking lot overflow.
 - Identify locations for expanded, improved or new parking where it would result in the least disturbance and the lowest up front and long-term cost. Seek to increase trailhead parking along Catalina Highway by at least 20%.
- **Objective 1c.** Ensure that all segments of the Arizona National Scenic Trail meet the trail's nature and purposes and comprehensive plan by 2035.
 - Ensure trail user safety by moving sections of the AZNST that are co-located with roads, such as Oracle Ridge.
- **Objective 1d.** Better provide for the full range of trail difficulty, increasing the share of the system for beginner and intermediate users.
 - Construct new trails or improve existing trails to reduce trail grades and improve tread surfaces to welcome beginner and intermediate users.
 - Construct opportunities that cater to those with limited mobility, consistent with Forest Service Trail Accessibility Guidelines.
 - Construct trails appropriate for the Recreation Opportunity Spectrum classification and concentrate new development in the Roaded Natural and Rural classifications where possible.
- **Objective 1e.** Meet expected recreation demand through a net increase to system mileage of 10%, or approximately 25 miles, under CNF maintenance responsibility, including adoption and new construction.
 - Trails maintained by other entities such as Catalina State Park and potential segments of the Sun Corridor Trail are not included in this target.

Goal #2: Improve trail conditions and quality.

- **Objective 2a.** Improve recreation user safety through trail relocation or construction, especially when hikers are using busy roads.
- **Objective 2b.** Review and update the trail classification of all trails within SCRD to reflect current and future conditions. Create a prioritized maintenance schedule based on revised classifications, trail management objectives and visitor use.
- **Objective 2c.** End investment in some official trails that a) receive relatively low levels of visitor use b) provide redundant opportunities c) are difficult to maintain and/or d) present resource impact concerns.
 - These trails would be removed from the NFS.
 - Associated steps include removing signs or signing as not a designated trail (as conditions dictate); blocking the trail within visual sight distance from its access point; re-contouring or fully decommissioning the trail only at sensitive locations

like water crossings, if they are present; and informing the public that these trails are no longer maintained.

- **Objective 2d.** Promote trail stewardship partnerships with user groups, individual volunteers, and nonprofit organizations. Update or create working agreements with partners and individuals on a continuous basis.
- **Objective 2e.** Increase external support (in the form of volunteer hours and third-party contributions for trail stewardship) by 20% above 2020 baseline.
 - Improve volunteer recruitment, recognition, and coordination.
 - Explore adopt-a-trail arrangements for selected high use trails.
 - Ensure new construction is connected to partner maintenance commitments.

Goal #3: Mitigate the proliferation of unauthorized trails.

- **Objective 3a.** Add sustainable trails with demonstrated recreation value and low resource conflicts to the National Forest System. Complete reroutes or trail improvements where necessary to meet USFS standards.
- **Objective 3b.** Obliterate and restore trails that are damaging to natural resources and can't be maintained to be sustainable.
- **Objective 3c.** Work collaboratively with the rock climbing community to identify important climbing approaches and identify management prescriptions, consistent with national USFS policy. This will include preparation of a climbing management plan.

Goal #4: Effectively manage trails to reduce user conflicts.

- **Objective 4a.** Ensure shared use trail principles for the majority of the non-wilderness trail system, using educational efforts, signage and on-site patrols to encourage appropriate trail etiquette.
- **Objective 4b.** Ensure trail conditions that encourage safe use of shared use trails by enhancing sight lines and ensuring firm trail tread.
- Objective 4c. Construct directional mountain bike opportunities.
- **Objective 4d.** Test use sharing and allocation techniques, such as an odd/even day arrangement for hikers and mountains bikers.

Goal #5: Advance non-recreation program goals with recreation management, where possible.

- **Objective 5a.** Co-locate recreation trails with fire breaks and fire management operational boundaries, where possible.
- **Objective 5b.** Concentrate new trail development in areas with current human and noise disturbance, such as near roads where suitable.
- **Objective 5c.** Continue management measures to prevent impacts to bighorn sheep, including public education and an enforceable, seasonal prohibition on off-road travel.

PROPOSED TRAIL MANAGEMENT MODIFICATIONS

			Current Conditions			Trail Manag	gement Objec	tives		Proposed Changes
Trail Name & N (Wilderness Loc		Length (Miles)	Notes	Relative Use Levels	Trail Class	Managed Use	Designed Use	Maintenance Frequency	Stewardship Partner	(Improvement or Closure)
Agua Caliente Hill	46	4.5	Accessed by a Pima County-operated trailhead	Medium	3	Hiker and Pedestrian; Pack and Saddle	Hiker and Pedestrian	3 years		Add to Contingency Plan: build connector to adopted Milagrosa Trail
Aspen (Pusch Ridge)	93	3.8	Hiking trail link between Radio Ridge and Marshall Gulch	Medium	3	Hiker and Pedestrian; Pack and Saddle	Pack and Saddle	Annually		
Aspen Draw	423	1.0	Within the Ski Valley permit area; popular for hiking and mountain biking	High	3	Hiker and Pedestrian	Hiker and Pedestrian	Annually	TORCA, Ski Valley	
Babad Do'ag (Pusch Ridge)	705	2.5	Hiking trail on lower elevations of Catalina Highway	Medium	2	Hiker and Pedestrian	Hiker and Pedestrian	3 years		
Bajada Loop	38	0.2	Short interpretive loop adjacent to the Sabino Canyon Visitor Center	High	4	Hiker and Pedestrian	Hiker and Pedestrian	Annually	FOSC	
Bear Canyon (Pusch Ridge)	29	6.7	Within Sabino Canyon Recreation Area. One of the most popular trails within the region, accesses Seven Falls	Very High	3	Hiker and Pedestrian; Pack and Saddle	Pack and Saddle	Annually	FOSC	
Bellota	15	10.7	AZNST; available for mountain biking	Medium	3	Hiker and Pedestrian; Bicycle; Pack and Saddle	Pack and Saddle	3 years	ATA, TORCA	
Bigelow	520	0.9	Short connector near Mount Bigelow; popular for mountain biking	Medium	3	Hiker and Pedestrian	Hiker and Pedestrian	Annually	TORCA	

			Current Conditions	,		Trail Manag	gement Objec		D	
Trail Name & N (Wilderness Loc		Length (Miles)	Notes	Relative Use Levels	Trail Class	Managed Use	Designed Use	Maintenance Frequency	Stewardship Partner	Proposed Changes (Improvement or Closure)
Blackett's Ridge (Pusch Ridge)	48	1.9	Within Sabino Canyon Recreation Area; increasingly popular for running and hiking	High	2	Hiker and Pedestrian	Hiker and Pedestrian	3 years	FOSC, SAHC	Change to Class 3
Bluff	51	0.2	Within Sabino Canyon Recreation Area	Very High	3	Hiker and Pedestrian	Hiker and Pedestrian	Annually	FOSC	
Box Camp (Pusch Ridge)	22	7.1	North-south wilderness connector	Medium	3	Hiker and Pedestrian; Pack and Saddle	Pack and Saddle	3 years	Tucson Trail Runners	
Box Spring (Pusch Ridge)	22A	0.3	Short spur from Box Camp	Medium	3	Hiker and Pedestrian; Pack and Saddle	Pack and Saddle	3 years		
Brush Corral	19	7.4	Long hiking and backpacking option starting on the NE side of Green Mountain	Low	3	Hiker and Pedestrian; Bicycle; Pack and Saddle	Pack and Saddle	3 years	CASA	Change to Class 2. Remove lower 4.06 mi. Connect to Green Mountain
Bug Springs	10	5.5	AZNST recommended mountain bike route; very popular mountain biking trail	High	3	Hiker and Pedestrian; Bicycle; Pack and Saddle	Pack and Saddle	Annually	TORCA	Reroute portion of upper hike-a-bike section, where feasible
Butterfly	16	5.2	AZNST recommended mountain bike route; popular hiking trail, but not well suited for mountain biking; passes through Butterfly Research Natural Area	High	3	Hiker and Pedestrian; Bicycle; Pack and Saddle	Pack and Saddle	Annually	ATA, Fo\$CT	

			Current Conditions			Trail Manag	gement Objec	tives		Proposed Changes
Trail Name & N (Wilderness Loc		Length (Miles)	Notes	Relative Use Levels	Trail Class	Managed Use	Designed Use	Maintenance Frequency	Stewardship Partner	(Improvement or Closure)
Cañada Del Oro (CDO)	4	7.7	Heavily impacted by Bighorn Fire, previously growing into a destination backcountry mountain bike ride	Low	3	Hiker and Pedestrian; Bicycle; Pack and Saddle	Pack and Saddle	N/A	TORCA	Reroute lower 1.4 mi out of drainage, and rename Red Ridge. Remove 5.25 mi portion between Samaniego and Red Ridge from NFS. Rename upper portion Samaniego.
Catalina Camp	401	1.7	Converted two track road serving primarily as a connector between Oracle Ridge and Red Ridge	Very Low	3	Hiker and Pedestrian; Bicycle; Pack and Saddle	Pack and Saddle	3 years		Change to Class 2. Move AZNST segment from upper Oracle Ridge to this trail
Cathedral Rock (Pusch Ridge)	26	2.9	Provides access to Pusch Ridge Wilderness crest	Low	2	Hiker and Pedestrian	Hiker and Pedestrian	5 years		
CDO Link (Pusch Ridge)	4A	0.3		Low	1	Hiker and Pedestrian	Hiker and Pedestrian	N/A		Remove entire 0.3 mi from NFS
Cody	9	1.8	AZNST	Low	3	Hiker and Pedestrian; Bicycle; Pack and Saddle	Pack and Saddle	5 years	ATA	
Connector A	654A	0.1		Low	3	Hiker and Pedestrian; Pack and Saddle	Pack and Saddle	3 years		
Connector B	654B	0.1		Low	3	Hiker and Pedestrian; Pack and Saddle	Pack and Saddle	3 years		

			Current Conditions			Trail Manaç	gement Objec	tives		Proposed Changes
Trail Name & N (Wilderness Loc		Length (Miles)	Notes	Relative Use Levels	Trail Class	Managed Use	Designed Use	Maintenance Frequency	Stewardship Partner	(Improvement or Closure)
Creek	52	0.5	Within Sabino Canyon Recreation Area	High	3	Hiker and Pedestrian	Hiker and Pedestrian	3 years	FOSC	
Crystal Spring	17	3.6	AZNST recommended mountain bike route; moderately popular hiking trail, but not well suited for mountain biking	Medium	3	Hiker and Pedestrian; Bicycle; Pack and Saddle	Hiker and Pedestrian; Bicycle; Pack and Saddle	3 years	ATA	Change to Class 2
Davis Spring	31	6.0	Long hiking and backpacking option starting near Butterfly Peak	Low	2	Hiker and Pedestrian; Pack and Saddle	Hiker and Pedestrian; Pack and Saddle	5 years	FoSCT	Connect to Knagge for smaller loop trail. Remove lower 4.75 mi from NFS
East Fork (Pusch Ridge)	24A	2.1	AZNST	Medium	3	Hiker and Pedestrian; Pack and Saddle	Hiker and Pedestrian; Pack and Saddle	3 years	ATA	
Esperero (Pusch Ridge)	25	6.7	Steep and scenic canyon, connects Sabino Canyon Recreation Area to the Pusch Ridge Wilderness crest	Medium	3	Hiker and Pedestrian	Hiker and Pedestrian	3 years		Connect with Sabino Overflow Lot via adoption of unauthorized trail
Evans (Pusch Ridge)	32	5.1	Difficult to follow in places	Very Low	2	Hiker and Pedestrian	Hiker and Pedestrian	N/A		Remove entire 5.1 mi from NFS
Finger Rock (Pusch Ridge)	42	6.3	Accessed by Pima County-operated trailhead	Very High	3	Hiker and Pedestrian	Hiker and Pedestrian	Annually	CASA	Connect with Pontatoc Trail
Green Mountain	21	4.2	Popular AZNST recommended mountain bike route	High	3	Hiker and Pedestrian; Bicycle; Pack and Saddle	Pack and Saddle	Annually	TORCA	Multiple short reroutes under 500 ft in length to improve sustainability

			Current Conditions			Trail Manag	gement Objec	ctives		Proposed Changes
Trail Name & N (Wilderness Loc		Length (Miles)	Notes	Relative Use Levels	Trail Class	Managed Use	Designed Use	Maintenance Frequency	Stewardship Partner	(Improvement or Closure)
Green Mountain Shortcut	21A	0.9	Forms a hiking loop with Brush Corral and Green Mountain Trail	Medium	3	Hiker and Pedestrian; Bicycle; Pack and Saddle	Pack and Saddle	3 years	CASA	
Guthrie	704A	0.8		Very Low	2	Hiker and Pedestrian	Hiker and Pedestrian	3 years		
Incinerator Ridge	18A	1.6	AZNST recommended mountain bike route	Medium	3	Hiker and Pedestrian; Bicycle; Pack and Saddle	Pack and Saddle	3 years	TORCA	Implement small- scale reroutes and drainage improvements
Italian Spring (Rincon Mountain)	95	3.6	AZNST; connects Redington Pass to Saguaro National Park	Low	3	Hiker and Pedestrian	Hiker and Pedestrian	3 years	ATA	
Kellogg	45	0.5		Low	3	Hiker and Pedestrian	Hiker and Pedestrian	5 years		
Knagge	18	9.5	Long backpacking and hiking option connecting Incinerator Ridge and Davis Spring	Low	3	Hiker and Pedestrian; Bicycle; Pack and Saddle	Pack and Saddle	5 years	FoSCT	Change to Class 2. Connect to Davis Spring for smaller loop trail. Remove lower 2.1 mi from NFS
Lemmon Rock Lookout (Pusch Ridge)	12	2.0	Steep trail connects to Lemmon Rock Lookout fire tower and Wilderness of Rocks	Medium	3	Hiker and Pedestrian; Pack and Saddle	Pack and Saddle	3 years		
Linda Vista (Pusch Ridge)	49	3.7	Accessed by Oro Valley- operated trailhead	Very High	3	Hiker and Pedestrian	Hiker and Pedestrian	Annually		
Lower Bear Link	29A	0.1		High	2	Hiker and Pedestrian; Pack and Saddle	Pack and Saddle	Annually		

			Current Conditions			Trail Manaç	gement Objec	tives		Proposed Changes
Trail Name & N (Wilderness Loc		Length (Miles)	O NOTES I I		Trail Class	Managed Use	Designed Use	Maintenance Frequency	Stewardship Partner	(Improvement or Closure)
Lower Tanque Verde Falls	342	0.4	Hiking trail constructed by the Southern Arizona Rescue Association to provide safer access to the canyon bottom	High	2	Hiker and Pedestrian	Hiker and Pedestrian	3 years	FRP, SARA	Change to Class 3. Improve and connect as part of Tanque Verde Falls Recreation Enhancement Project
Marshall Gulch (Pusch Ridge)	3	1.3	AZNST; one of the few forested beginner-friendly trails	Very High	3	Hiker and Pedestrian	Hiker and Pedestrian	Annually	ATA	Extend and connect to Summerhaven proposed parking project
Maverick Spring	704	0.4	Popular mid-mountain hiking and mountain biking option	Low	2	Hiker and Pedestrian	Hiker and Pedestrian	5 years		
Meadow	5A	0.8	Hiking trail option in Summerhaven	High	3	Hiker and Pedestrian; Bicycle; Pack and Saddle	Pack and Saddle	3 years		
Mint Spring	20	1.6	Hiking trail option in Summerhaven	Medium	3	Hiker and Pedestrian; Pack and Saddle	Pack and Saddle	3 years		
Molino Basin	11	2.8	AZNST; one of the few options for equestrians. Also popular with trail runners, hikers, and mountain bikers	High	3	Hiker and Pedestrian; Bicycle; Pack and Saddle	Pack and Saddle	Annually	TORCA, ATA	
Molino Vista	11A	0.1	Nature trail at the Molino Vista site	High	4	Hiker and Pedestrian	Hiker and Pedestrian	Annually		

	Trail Name & Number (Wilderness Location) Length (Miles)		Current Conditions			Trail Manag	gement Objec	ctives		Duan and Change
			Notes	Relative Use Levels	Trail Class	Managed Use	Designed Use	Maintenance Frequency	Stewardship Partner	Proposed Changes (Improvement or Closure)
Mount Lemmon (Pusch Ridge)	5	5.8	Heavily impacted by Bighorn Fire	Medium	3	Hiker and Pedestrian; Pack and Saddle	Pack and Saddle	3 years		
OHV 1	651	1.2	Connecting motorized trail in Redington Pass	Medium	2	Wheeled OHV <= 50"	All Terrain Vehicle	3 years		
OHV 2	652	1.5	Connecting motorized trail in Redington Pass	Medium	3	Wheeled OHV <= 50"	All Terrain Vehicle	3 years		
OHV 3	653	1.5	Connecting motorized trail in Redington Pass	Medium	3	Wheeled OHV <= 50"	All Terrain Vehicle	3 years		
OHV 4	654	1.4	Connecting motorized trail in Redington Pass	Medium	3	Wheeled OHV <= 50"	All Terrain Vehicle	3 years		
Oracle Ridge	1	11.5	AZNST; relatively underutilized northside trail dropping from near Summerhaven to Oracle	Low	3	Hiker and Pedestrian; Bicycle; Pack and Saddle	Pack and Saddle	3 years	ATA	Move AZNST off upper portion to Red Ridge and Catalina Camp. Lower segment: improve tread and construct reroutes off NFS roads
Palisade (Pusch Ridge)	99	6.2	North-south wilderness connector	Medium	3	Hiker and Pedestrian	Hiker and Pedestrian	3 years		Change portion beyond Organization Ridge to Class 2. Connect to Palisades Visitor Center. Re-establish and improve tread
Phoneline (Pusch Ridge)	27	4.5	Within Sabino Canyon Recreation Area; popular hiking and trail running option	Very High	3	Hiker and Pedestrian	Hiker and Pedestrian	Annually	FOSC	

			Current Conditions			Trail Manag	gement Objec	tives		Proposed Changes
Trail Name & N (Wilderness Loc		Length (Miles)	Notes	Relative Use Levels	Trail Class	Managed Use	Designed Use	Maintenance Frequency	Stewardship Partner	(Improvement or Closure)
Phoneline Link (Pusch Ridge)	27A	0.8	Within Sabino Canyon Recreation Area	High	3	Hiker and Pedestrian	Hiker and Pedestrian	Annually	FOSC	
Pima (Pusch Ridge)	62	7.6	Accessed by Pima County-operated trailhead; classic canyon hike offering access to Pusch Ridge Wilderness crest	Very High	3	Hiker and Pedestrian	Hiker and Pedestrian	Annually	Pima County, FoSCT	Implement small- scale reroutes and drainage improvements in vicinity of Pima Saddle to improve trail sustainability
Pontatoc (Pusch Ridge)	410	2.8	Steep and scenic wilderness route accessed from Finger Rock Trailhead	High	3	Hiker and Pedestrian	Hiker and Pedestrian	3 years		Extend trail to create a loop with Finger Rock. Remove 0.9 mi from end
Pontatoc Ridge (Pusch Ridge)	411	1.8	Steep and scenic wilderness route accessed from Finger Rock Trailhead	Medium	2	Hiker and Pedestrian	Hiker and Pedestrian	3 years		Change to Class 3
Rattlesnake	50	0.4	Within Sabino Canyon Recreation Area	Medium	3	Hiker and Pedestrian	Hiker and Pedestrian	3 years	FOSC	
Red Ridge	2	5.0	Steep northside trail used for mountain biking and hiking	Medium	3	Hiker and Pedestrian; Bicycle; Pack and Saddle	Pack and Saddle	3 years	TORCA	Reroute small segments for sustainability. Reroute lower portion to reach Charouleau Gap, and connect to 50 Year area. Move AZNST to upper Red Ridge

			Current Conditions			Trail Manag	gement Objec	tives		Brancod Changes
Trail Name & Number (Wilderness Location)		Length (Miles)	Notes	Relative Use Levels	Trail Class	Managed Use	Designed Use	Maintenance Frequency	Stewardship Partner	Proposed Changes (Improvement or Closure)
Romero (Pusch Ridge)	8	7.2	Popular trail accessed from Catalina State Park that leads to Romero Pools and beyond; upper trail heavily impacted by Bighorn Fire	Very High	3	Hiker and Pedestrian; Pack and Saddle	Hiker and Pedestrian	Annually to Romero Pools 3 years upper	Catalina State Park	
Rose Canyon Lake	37	0.2	Within concession permit area, accessible trail providing lake access	Very High	5	Hiker and Pedestrian	Hiker and Pedestrian	Annually	Vista Recreation	
Sabino Canyon (Pusch Ridge)	23	2.5	Within Sabino Canyon Recreation Area	Medium	3	Hiker and Pedestrian	Hiker and Pedestrian	3 years	FOSC	
Sabino Creek (Pusch Ridge)	52A	0.2	Within Sabino Canyon Recreation Area	Very High	3	Hiker and Pedestrian	Hiker and Pedestrian	Annually	FOSC	
Sabino Dam (Pusch Ridge)	33	0.3	Within Sabino Canyon Recreation Area	Very High	3	Hiker and Pedestrian	Hiker and Pedestrian	Annually	FOSC	
Sabino Historic (Pusch Ridge)	23A	0.7	Within Sabino Canyon Recreation Area	Very High	3	Hiker and Pedestrian	Hiker and Pedestrian	Annually	FOSC	
Sabino Lake (Pusch Ridge)	30	0.6	Within Sabino Canyon Recreation Area	Very High	3	Hiker and Pedestrian	Hiker and Pedestrian	Annually	FOSC	
Sabino Walkway (Pusch Ridge)	53	0.5	Within Sabino Canyon Recreation Area	High	5	Hiker and Pedestrian	Hiker and Pedestrian	Annually	FOSC	

	,		Current Conditions			Trail Manaç	gement Objec	tives		Proposed Changes
Trail Name & N (Wilderness Loc		Length (Miles)	Notes	Relative Use Levels	Trail Class	Managed Use	Designed Use	Maintenance Frequency	Stewardship Partner	(Improvement or Closure)
Samaniego	7	8.9	Long distance northside trail offering expansive views, connecting CDO and Charouleau Gap road but unsustainable in places and difficult to follow	Low	3	Hiker and Pedestrian; Bicycle; Pack and Saddle	Pack and Saddle	3 years		Change to Class 2. Lower portion: complete reroutes just south of Charouleau Gap to improve usability. Middle portion: remove 5.28 mi from NFS. Upper portion: extend trail to Sutherland Trailhead, what is currently named CDO
Soldier (Pusch Ridge)	706	2.6	An out-and-back day hike option in Pusch Ridge Wilderness	Medium	3	Hiker and Pedestrian	Hiker and Pedestrian	5 years		Change to Class 2
Sunset	90	1.2	Popular high-country hiking and biking trail connecting Marshall Gulch and Soldier Camp area; provides access to some climbing areas	High	3	Hiker and Pedestrian	Hiker and Pedestrian	3 years		
Sutherland (Pusch Ridge)	6	3.5	Heavily impacted by Bighorn Fire; extremely steep and some segments are near impossible to follow	Very Low	3	Hiker and Pedestrian; Pack and Saddle	Pack and Saddle	N/A		Remove entire 3.5 miles from NFS up to Catalina State Park boundary
Sycamore Reservoir (Pusch Ridge)	39	3.2	AZNST; part of the connector from Hirabayashi to Bear Canyon and Sabino Canyon	High	3	Hiker and Pedestrian	Hiker and Pedestrian	3 years	ATA	

			Current Conditions			Trail Manag	gement Objec	:tives		Proposed Changes
Trail Name & Number (Wilderness Location)		Length (Miles)	Notes	Relative Use Levels	Trail Class	Managed Use	Designed Use	Maintenance Frequency	Stewardship Partner	(Improvement or Closure)
Turkey Creek (Rincon Mountain)	34	1.8	Provides access to the high country of Saguaro National Park	Low	3	Hiker and Pedestrian	Hiker and Pedestrian	5 years		Change to Class 2
Upper Tanque Verde Falls	343	0.2	Short but popular trail offering access to the canyon bottom	High	3	Hiker and Pedestrian	Hiker and Pedestrian	3 years		Improve and connect as part of Tanque Verde Falls Recreation Enhancement Project
Ventana (Pusch Ridge)	98	7.9	Accessed by Pima County-operated trailhead; classic canyon hike, especially up to Maiden Pools	High	3	Hiker and Pedestrian	Hiker and Pedestrian	Annually	Pima County	
Vista	14	0.3		Very Low	3	Hiker and Pedestrian	Hiker and Pedestrian	N/A		Remove entire 0.3 mi from NFS
West Fork (Pusch Ridge)	24	6.8	AZNST; remote-feeling hiking and backpacking option	Medium	3	Hiker and Pedestrian; Pack and Saddle	Pack and Saddle	3 years	ATA	
Wilderness of Rocks (Pusch Ridge)	44	4.0	AZNST; wilderness thoroughfare typically accessed from Marshall Gulch	High	3	Hiker and Pedestrian; Pack and Saddle	Pack and Saddle	3 years	ATA	Implement small- scale reroutes

Partner Acronym List

Listed alphabetically:

- ATA: Arizona Trail Association
- CASA: Climbing Association of Southern Arizona
- FOSC: Friends of Sabino Canyon
- FoSCT: Friends of Santa Catalina Trails

- FRP: Friends of Redington Pass
- SAHC: Southern Arizona Hiking Club
- SARA: Southern Arizona Rescue Association
- TORCA: Tucson Off-Road Cyclists and Activists



TRAIL DEVELOPMENT AND CONNECTIVITY LISTING - SUMMARY

Project Name	Miles
New Construction	
Bug Junior Directional Mountain Bike Trail	6.00
Molino Canyon Trail	1.00
Finger Rock to Pontatoc Connector	1.90
TV Falls Canyon Rim and Connector	1.45
Marshall Gulch to Summerhaven	1.00
Fireline to Bigelow Connector	1.25
Rose Canyon Hiker Access	1.50
Tucson Vista (all segments)	8.50
Palisades to Vista extension	0.16
Vista to 1918 Connector	0.50
Green Mountain to Vista Connector	0.25
Fireline Trail	1.40
Green Mountain to Brush Corral Connector	0.25
Knagge to Davis Spring Loop Connector	4.50
CDO to Gap Connector	3.00
Middle Gate to 50 Year Forest Boundary Connector	1.80
Total	34.46

Project Name	Miles
Adoption	
Milagrosa	3.75
1918/Sunset/Secret	1.00
Bigelow Roadbed	0.30
Esperero Connector	0.80
Alamo Canyon (Catalina SP)	N/A
Golder Ranch - 50 Year: Adopt with Some Reroutes	14.05
Upper Tanque Verde Falls	0.38
Total	20.28

Removal From System						
Lower Brush Corral	4.06					
Evans Mountain	5.01					
Sutherland	3.53					
Cañada del Oro	5.00					
Cañada del Oro link	0.30					
Lower Davis Spring	4.75					
Lower Knagge	2.10					
Samaniego from Peak 7494 to Charouleau Gap	5.28					
Pontatoc above connector	0.90					
Total	30.93					

Total Mileage Amounts

	Miles
Current System Total	240.00
plus Adoption	+20.28
minus Removal from System	-30.93
plus New Construction	+34.46
Total	263.81
New Total Growth Scenario	109.92%

Reroute miles not accounted for in New Total Growth Scenario

Reroutes						
Lower CDO	1.68					
Arizona Trail - Oracle Ridge	3.00					
Red Ridge	0.20					
Green Mountain	0.25					
Incinerator Ridge	0.25					
Pima Canyon	0.25					
Wilderness of Rocks	0.30					
Bug Springs	0.50					
Finger Rock	0.25					
Total	6.68					

PROPOSED PROJECTS

All projects identified in this plan are subject to modification at the site-specific planning scale. Alternative locations may be considered to accomplish project objectives if the project as described is found to be non-viable during the trail design and NEPA process, or if partner commitments change.

Trail Development and Connectivity Projects

Phase	Project ID	Project Description	Rationale
1	1D	Adopt Milagrosa Trail into the National Forest System. Incorporate 3.75 miles of the currently unauthorized Milagrosa Trail into the National Forest System as a Class 3 non-motorized trail. Accessed from a Pima County- operated access point on the south and Bellota trail on the north.	The Milagrosa trail provides scenic hiking and mountain biking opportunities, as well as access to climbing areas. It was the most frequently mentioned unauthorized trail during public sensing. Pima County Natural Resources, Parks, and Recreation does not currently have fully continuous, permanent, legal public access but is actively seeking it. However, the trail could be connected to the Agua Caliente Trailhead if conditions dictate.
1	2D	Adopt the Golder Ranch - 50 Year Trail System on NFS lands by adopting, realigning, and improving existing trails into the NFS system; overall system would total up to 16 miles. This action would be complemented by an increased and holistic effort to fully document and steward cultural resources in the area. Access controls to cultural sites listed on the National Register, would be enhanced in partnership with other organizations and the site steward program if conditions indicate adverse impacts. The existing system of trails would require a full sustainability evaluation, and likely require reroutes or closures based on erosion or proximity to cultural resources before official adoption. The intended result is a shared use non-motorized system with permanent access that provides desirable recreation experiences.	The 18 miles of unauthorized trails in the vicinity of the 50 Year Trail are heavily used for scenic hiking, horseback riding, and mountain biking opportunities. Observation from users indicate upwards of 60 vehicles access the system daily on busy weekends. It was the second most frequently mentioned unauthorized trail area during public sensing. Adjacent development and population growth are expected into the future. Continuation of the current management approach is likely to lead to further proliferation of unauthorized trail, risk to cultural resources, and conflict between users. An active management program implemented by the USFS and our partners would seek a long term balance. There is currently no fully continuous, permanent, legal public access to the forest boundary between Charouleau Gap Road and Catalina State Park across state land, and the boundary between land ownerships is unknown to most users. Should legal access not be obtained prior to the expiration of the 50 Year easement, USFS would cease investment in the trail system.

Phase	Project ID	Project Description	Rationale
1	3D	Adopt Esperero Connector Trail. Adopt an existing 0.8 mile unauthorized trail that provides a shortcut from the Sabino Canyon overflow lot to the Esperero Trail. Reroute the southernmost portion to intersect with the Overflow Trail. Manage as a Class 2 trail.	A trail connector would provide a higher quality wilderness trail experience by eliminating the need to use the main Sabino Canyon road. USFS assessment indicates the unauthorized trail generally has sustainable grades and cross slopes.
1	4 D	Construct a new 1.9 mile connecting trail between Finger Rock and Pontatoc. Develop a Class 2 non-motorized trail from approximately mile marker 2 of the Finger Rock Trail to Pontatoc Trail. This trail is located within Pusch Ridge Wilderness and the Bighorn Sheep Management Area. An extremely steep and unsustainable 1 mile portion of the existing Pontatoc alignment would be removed from the NFS system and rehabilitated.	While new trail construction in wilderness must meet high standards for the protection of wilderness character, a new connection between these two popular trails would allow hikers to make an impressive 6.8 mile loop and improve opportunities for solitude by reducing encounters between trail users without impacting group size or trailhead access. Visitor data indicates the Finger Rock trailhead receives 8,000 visitors per month during peak season. Available data indicates this area is not heavily used by the range's resident bighorn sheep population. Removing 1 mile of existing NFS trail would mitigate impacts to wilderness character.
1	5D	Construct Tanque Verde Falls Canyon Rim and Connector Trails, adopt other existing unauthorized trails. Complete trail elements identified in the Tanque Verde Falls Recreation Enhancement Project including construction of 1.5 miles of trail and adoption of 0.5 miles.	The Tanque Verde Falls area is a heavily used dispersed recreation area without appropriate sanitation, visitor information, and other management controls. The trail actions within this project will provide beginner and intermediate options that improve public safety. See the decision notice for full rationale for this project.
1	6D	Construct a new 1 mile Molino Canyon Trail. Develop a Class 3 non-motorized trail in the lower portion of Molino Canyon, accessible from the Arizona National Scenic Trail and the proposed Molino Canyon Trailhead expansion.	This trail will help meet visitor demand for beginner level hiking opportunities on the lower portion of the Catalina Highway. Molino Canyon is highly scenic and currently has a poorly aligned unauthorized trail.
2	7D	Construct a new 6 mile directional mountain biking trail. Develop a downhill directional mountain biking trail between Bug Springs and the Catalina Highway. Trail would be Class 3 with bike-specific trail specifications. See Project Spotlight #3 for details. Note that another location for this trail has been evaluated on the ridgeline between Catalina Highway and Milagrosa. Evaluation may continue before project specific planning.	Public sensing indicated the growing demand for mountain biking trails. Currently less than one quarter of the system is available for mountain biking due to wilderness designations or practical topographic constraints. Directional mountain bicycling trails have proven an effective means to provide quality trail experiences and concentrate biking use.

Phase	Project ID	Project Description	Rationale
2	8D	Construct the Tucson Vista Trail connecting Rose Canyon, Palisades, higher elevation campgrounds, and Sunset Trailhead. Develop an approximately 8.5 mile, Class 3 trail that begins at the top of the Rose Canyon access road and approximately parallels the Catalina Highway outside of the wilderness boundary. The trail would connect Sollers Cabin, Palisades, Showers Point, Whitetail, Spencer Canyon and Sunset Trailhead. The trail would be available for non-motorized use with expected high use from hiking, running, and mountain biking. It would be constructed at the least steep grade practical for sustainability purposes and to encourage beginner use. If fully constructed, the trail could become the identified Arizona National Scenic Trail alternative route to traveling through the wilderness. The trail is co-located with planned firebreaks that would be used in wildfire planning and protection. Existing roadbeds would be converted to trail use; these segments total approximately 1.5 miles or nearly 20 percent of the total.	Two main themes came through clearly in public sensing: the lack of beginner and intermediate trail opportunities especially in higher elevations, and the limited connectivity of the existing system for multiple trail users. The Tucson Vista Trail would address these issues by creating a marquee trail that provides equitable access for those with a range of trail experience and mobility. The intent is also to maximize terrain and views with available parking by connecting existing developed recreation sites. This has the added benefit of placing the trail in an area with relatively high auditory and other disturbance from the highway and other features. Furthermore, the trail has the potential to replace an existing AZNST wilderness bypass (including Butterfly Trail) that is not practical for all but the most skilled mountain bikers and equestrians. Lastly, co-location with firebreaks would efficiently minimize the amount of disturbance.
3	9D	Construct a Green Mountain to Tucson Vista Connector. This short Class 3 trail would link the upper Green Mountain trailhead with the eastern terminus at the Tucson Vista Trail near the Rose Canyon access road.	This short segment would improve system connectivity and allow the new Tucson Vista Trail to serve as "non Congressionally designated trail alternative located outside wilderness for Arizona National Scenic Trail users without using the highway." The highway crossing at the proposed location has relatively good sight lines.
2	10D	Connect Palisades Trail to Palisades Visitor Center. Construct a short 0.4 mile Class 3 trail that connects the Palisades trail up to the parking area for the Palisades visitor center and parking area.	This trail segment would improve trail connectivity and make better use of existing parking. The current unsurfaced trailhead for Butterfly Trail reaches capacity during the high use season, while the paved Palisades trailhead often has excess capacity. The current Palisades trailhead could be signed for horse trailer parking only, if demand dictates.
2	11D	Construct a 1.4 mile Rose Canyon Lake Hiker Access Trail. Develop a new Class 3 pedestrian-only trail that links the top of the Rose Canyon access road parking area to the primary day use lake parking. The trail would be developed with minimal grades (6% target) and a wide, stable tread surface so it is appealing for lake users.	Rose Canyon is popular for fishing, hiking, and picnicking. When the day use area parking lot reaches capacity, visitor walk along the narrow campground and lake access road, leading to safety hazards.



Phase	Project ID	Project Description	Rationale
2	12D	Adopt 1918/Sunset/Secret Trails from the Mount Bigelow Road to the Catalina Highway and rename it the Bear Wallow Trail. Approximately 1 mile of popular unauthorized trail in the Bigelow/Bear Wallow area would be improved for sustainability and adopted into the system. Modifications may include short reroutes, drainage improvements, and removal of constructed features.	The trails have been used for decades and provide a rare opportunity to experience lush mixed conifer forest. The popularity of dispersed camping around Mount Bigelow has increased the visitor use of these trails. When combined with the Fireline and Bigelow to Fireline Trail Connector, the area would offer a modest system of connected non-motorized trail options. This entire area is classified as Roaded Natural, which allows for moderate to high interaction between users.
2	13D	Construct a 1.4 mile Fireline Trail on the northern slope of Mount Bigelow. Develop a new Class 3 non-motorized trail that is co-located with an existing fire line used for wildfire management purposes. This downhill directional trail would offer an intermediate mountain biking experience in a forested environment, including features constructed with natural materials (soil and rocks) that provide skills progression opportunities.	There are limited opportunities for mountain biking and hiking in the higher forested elevations of the Santa Catalinas, however demand is substantial. This trail, when combined with the adoption of 1918 and construction of the Bigelow to Fireline Trail Connector, would allow for interconnected loops especially when used with the Tucson Vista Trail. The location was selected based on terrain and the planned location of fire line maintained to protect forest values at risk. The area's open terrain would allow for good sight lines.
3+	14D	Construct a 1.25 mile Bigelow to Fireline Trail Connector on the south side of Mount Bigelow Road. Develop a new Class 3 non-motorized trail that parallels that Mount Bigelow Road from the Bigelow Trail to the east terminus of the proposed Fireline Trail.	Several user-created trails are present in this area. This shared use non-motorized trail would improve connectivity in the area with a sustainable alignment. It would also support fire management objectives for protecting the substantial values on Mount Bigelow.
2	15D	Extend the Marshall Gulch Trail 1 mile to the new Summerhaven parking area. Construct a Class 3 connector between the Marshall Gulch Trail and the 75 unit parking area proposed by Pima County and the Federal Highways Administration. The trail would become a segment of the Arizona National Scenic Trail.	This project addresses multiple goals of the project, including providing more beginner trail opportunities, linking trailheads to make best use of available parking, and ensuring the AZNST conforms with its non-motorized purpose as identified by Congress.
2	16D	Construct a Mount Lemmon Interpretive Trail. Construct a short Class 5 paved or concrete interpretive trail near the summit of Mount Lemmon. Interpretive themes along this accessible trail would be identified through a collaborative partnership with the University of Arizona, tribes, and other partners.	The summit of Mount Lemmon is a regular destination for visitors, but accessibility and available interpretive information are both limited. There are numerous themes and stories related to the indigenous, historical, and current use of the mountain that are not highlighted.

Phase	Project ID	Project Description	Rationale
3+	17D	Davis Spring to Knagge Connector. Construct a 4.5 mile, Class 2 connector between the Davis Spring and Knagge trails. The segments of the Davis Spring and Knagge trails above this connecting trail would be re-established. The segments below this loop would be removed from the NFS system.	This project was identified by the Friends of Santa Catalina Trails to rebuild and connect some lost portions of the NFS system. This will create a long day hiking or short backpacking loop.
3+	18D	Recommend a relocation of the Arizona National Scenic Trail from Oracle Ridge to Red Ridge and Catalina Camp. In order to meet the nature and purposes of the AZNST, relocate the trail from its current location on Oracle Ridge to Red Ridge and Catalina Camp, both are existing NFS trails.	This alignment would eliminate conflicts with motor vehicle traffic and land uses on private property.
2	19D	Reroute 1.4 miles of the lower Cañada del Oro (CDO) Trail and add to Red Ridge Trail. This Class 2 reroute would move the northernmost portion of the CDO Trail between Red Ridge Trail and NFS Road 736 from the bottom of the drainage to suitable terrain to the east. The trail segment would be joined to the Red Ridge Trail and renamed as such.	The CDO drainage is an area heavily impacted by the Bighorn Fire. While the middle portion of the CDO Trail has been identified for removal from the official system, this lower segment is important for continuity. Its current location is not sustainable. This reroute will ensure that Red Ridge is connected to Charouleau Gap Road. The area's classification as Semi-Primitive Non-Motorized requires recreation experiences availability in this area continue to emphasize solitude and self-reliance.
1	21D	Adopt trails within Catalina State Park. Adopt 15 miles of trail into the NFS per the Catalina State Park Master Development Plan, including the proposed Alamo Canyon and 50 Year Loop trails.	Catalina State Park is located on NFS lands. It is operated by Arizona State Parks and Trails under a Special Use Permit from the CNF. The park's recently accepted Master Development Plan identified trails for inclusion into the NFS. These trails would be fully maintained by the park and therefore are not included in this plan's 10% growth scenario.
2	22D	Red Ridge Connector Trail/Gap Road alternative. Construct a 3 mile long, Class 2 non-motorized trail parallel to the Charouleau Gap road between the current CDO Trail up to the gap.	A top to bottom trail experience in an important offering for a portion of the mountain biking community. This will eliminate non-motorized traffic using the steep Charouleau Gap Road, which is popular with motorized users.

Phase	Project ID	Project Description	Rationale
3+	23D	Complete sustainability focused reroutes on priority trails including Bug Springs, Wilderness of Rocks, Pima Canyon, Finger Rock, Red Ridge, Incinerator Ridge, and Davis Spring. Numerous short reroutes varying in length from 50 yards to 0.3 miles have been identified at the conceptual level. The reroutes would focus on reducing erosion and improving tread condition. Other trails may be identified.	Several segments of these trails are steep, eroded and don't meet USFS standards for sustainability. They also provide sub par user experiences.

Trailhead and Access Project Listing

Phase	Project ID	Project Description	Rationale
3+	1A	Seek permanent legal access to Milagrosa. Assist Pima County, as needed, to secure permanent legal access to the Milagrosa Trail. A long-term parking and trailhead solution should offer adequate parking and direct canyon access while minimizing impacts on surrounding neighborhoods. This includes signs to direct users to appropriate parking locations, prohibiting overnight parking, and preventing intersections from being blocked.	Milagrosa Canyon was one of the most frequently mentioned locations during public sensing. As the east side of the Tucson metropolitan area grows, demand for access to this scenic area is likely to increase.
1	2A	Seek permanent legal access to the Golder Ranch - 50 Year Trail area. Work with the Arizona Game and Fish Department, Pima County, and other partners to secure a permanent vehicular access route to the forest boundary and adequate trailhead parking.	There is no legal permanent access to the forest boundary between Catalina State Park and Charouleau Gap Road. The 50 Year Trail easement is set to expire in the late 2030's and the roads up to the forest boundary across state lands lack any form of easement. Future development in this area has the potential to eliminate both forest administrative and legal recreation access.

Phase	Project ID	Project Description	Rationale
1	3A	Construct Tanque Verde Falls Western Slope and Upper Trailheads. Implement the approved Tanque Verde Falls Recreation Enhancement Project, providing a more structured and high-quality recreation experience in this popular area at the base of Redington Pass. Includes 70 new parking spaces for passenger vehicles and trailer parking along with visitor information, sanitation, and associated amenities.	This project has been fully analyzed and approved by the CNF in 2020. The Tanque Verde Falls area is a heavily used dispersed recreation area without appropriate sanitation, visitor information, and other management controls. See the decision notice for full rationale for this project. This effort was originally identified in a USFS plan in 1976 and recommended again in the Collaborative Area Management Plan, prepared by the Friends of Redington Pass.
1	4A	Seek permanent legal access to the north end of Charouleau Gap Road. Secure legal access to the road through fee title or easement acquisition by working with willing landowners and partners like the Trust for Public Land. Purchasing this property was selected in the FY24 Land and Water Conservation round of funding for the USFS.	The Charouleau Gap Road is one of two access points into the Santa Catalinas from the north near Oracle. It is a popular and important option for 4-wheel drive enthusiasts; the road has been adopted by Tucson Rough Riders. A decision by one of the private landowners to block the road would result in a practical sense of the loss of access to thousands of acres of NFS land due to the condition of the road to the south.
1	5A	Molino Trailhead expansion. Improve the availability of parking and reduce the instance of unsafe roadside parking in Molino Basin by constructing a new 20 to 25 parking space, pull through trailhead on the northeast side of Hitchcock Highway. Parking would be prohibited on the road shoulder. Amenities will include a restroom, trash service, visitor information, and agency presence. Seek approval to extend the standard amenity fee to the new site. Convert some day use parking at existing day use parking to overnight camping. Maintain designated fee-free parking for AZNST users consistent with the Mount Lemmon fee settlement agreement.	The popularity of the lower highway often results in parking demand exceeding available supply. Visitors then park in the road shoulders at a sharp curve in the highway. This project would increase parking capacity in a low impact location and minimize the frequency of unsafe access.
1	6A	Gordon Hirabayashi re-configuration. The distribution of day use, and overnight parking would be modified within Gordon Hirabayashi Recreation Site to better provide opportunities for day use parking. This change would create campsites in the group site turnaround at the end of the facility, while re-purposing four campsites closer to the entrance as day use parking to add approximately 17 regular parking spaces and 8 horse trailer parking spaces.	Hirabayashi is a hub for trail access on the lower portion of the highway. Visitors use the site to access the AZNST, Soldier, and Bug Springs trails. The current layout and vehicle flow pattern is unclear and difficult to manage. The overall change would increase parking capacity for day use visitors without additional surface disturbance, while ensuring access for horse trailers.



Phase	Project ID	Project Description	Rationale
2	7A	Better utilize Palisades as a trail hub. A medium-sized existing parking lot around the Palisades Ranger Residence and Visitor Center is currently for administrative use only. This area would be improved, striped, and made available for visitor day use parking; this would provide an additional 12 parking spaces. Working with Pima County, the public signing from Catalina Highway would be improved to direct visitors to this area.	Available parking is limited in the higher elevations. This area is often underutilized for administrative purposes. Making better use of the paved area would provide a natural location for access to the Palisades Trail (via a new connection) and Tucson Vista Trail without costly construction. The visitor center is operated under a successful partnership with the Public Lands Interpretive Association.
		Longer term, a conceptual plan would be developed to fully realize the recreation potential of the Palisades area. In response to visitor demand and partner interest, the site could include a reconstructed or improved visitor center, transit service in partnership with the regional transit authorities, enhanced outdoor interpretation, drinking water, and restrooms.	Realizing future potential would involve leveraging partnerships with the University of Arizona's Steward Observatory, Pima Association of Governments, and others. This longer-term vision would provide a more welcoming, clear, and comfortable visitor portal for the higher elevations of the Catalinas to complete the offerings in Summerhaven. This enhanced degree of development would be focused at a location with preexisting disturbances, utilities, and proximity to facilities on Organization Ridge.
2	8A	Formalize and expand parking at the top of the Rose Canyon Access Road. An area to the northeast of the existing paved parking area on the shoulder of the road would be graded, paved, and striped to accommodate an additional 10 to 15 standard vehicle spaces.	This parking area sees regular use year-round. A connection to the proposed Tucson Vista Trail would increase demand. Hikers accessing Rose Canyon Lake would still be required to pay the use fee, consistent with the concession permit terms.
2	9A	Expand Sunset Trailhead capacity. Options to increase vehicle capacity at Sunset Trailhead would be evaluated. Any improvements to trailhead capacity to ensure that ingress/egress to recreation residences was considered.	Sunset Trailhead provides access for hikers, bikers, climbers, and others to enjoy a beautiful, forested part of the high country. It is one of the most frequently congested based on the limited parking availability. The parking area provides access to the Raycreation climbing area and was identified by the climbing community as one of the top priorities for potential improvement.

Phase	Project ID	Project Description	Rationale
1	10A	Complete the Marshall Gulch Trailhead and Picnic Area Improvement Project. This project will re-develop the Marshall Gulch picnic area and trail access points through a one-way loop road design. It moves more of the parking facilities to the east side of Sabino Creek and removes parking that is currently on top of lower Marshall Gulch. In total, the new trailhead will offer 28 parking spaces and multiple picnic sites.	This project has been fully analyzed and approved by the Coronado NF in 2018. Marshall Gulch is among the most popular day use locations on Mount Lemmon. The project addresses a need to improve the safety of motorized and non-motorized travel with the site, provide more fluid circulation, and improve accessibility. Ecological riparian benefits are also anticipated.
3+	11A	Summerhaven - Sabino Canyon Park Road Project. The Federal Highways Administration is planning to construct a new day use and trailhead parking facility along Sabino Canyon Park Road that would be operated by Pima County. This project includes the construction of a new paved parking lot consisting of 75 parking spaces, a kiosk for AZNST information, a public restroom, and the improvement of Sabino Canyon Park Road to accommodate 21 new on-street parking stalls, an asphalt surface rehabilitation for approximately half a mile, and the installation of a 5-foot-wide pathway as part of the AZNST. The project improvements will provide a new paved surface, roadway excavation, tree clearing, ditch construction/reconditioning to improve drainage, installation of culverts, a new public bathroom, and the installation of new street signage. More information available at: https://highways.dot.gov/federal-lands/projects/az/flap-pim-fr510-1 .	The purpose of this project is to improve multi-modal access and safety to the Coronado NF and Summerhaven on Sabino Canyon Park Road from Carter Canyon Road to the USFS gate north of Marshall Gulch. This project is a partnership between Pima County and the Federal Highway Administration. It has been selected for funding through the Arizona Federal Highways. The project was identified during the congestion management study completed for the Summerhaven area.
2	12A	Seek to expand Mount Lemmon summit parking at Radio Ridge Junction by working with Ski Valley. The existed unsurfaced parking and storage area along Ski Valley Road and its junction with Radio Ridge would be improved and defined in a manner that is consistent with Ski Valley's special use permit-related needs. Where possible, aesthetic improvements would be incorporated into the new parking area. This would also provide access to the proposed Mount Lemmon Interpretive Trail.	This location is one of the few disturbed locations capable of providing additional parking in a congested area. It is a frequent stop for first time visitors based on its location at the summit of the mountain and outstanding views. The location is included within the Special Use Permit boundary for Ski Valley.

Phase	Project ID	Project Description	Rationale
3+			This project was identified in the Collaborative Area Management Plan for Redington Pass.

Supporting Actions

Phase	Project ID	Project Description	Rationale
1	18	Renovate the visitor information to all trailheads leading into the Bighorn Sheep Management Area. Information should include content about the history of bighorn sheep management, wilderness stewardship, leave no trace ethics, and relevant rules and regulations (including no dogs and the off-trail travel prohibition). A specific location of emphasis would the unauthorized Pusch Peak Trail, which is subject to closure during lambing season. This would be a partnership with Pima County and Arizona Game and Fish Department.	The trailheads leading into the lower canyons of the Pusch Ridge Wilderness are extremely popular, together hosting tens of thousands of visitors per month. The interpretive information is unsightly, worn, and in some cases outdated.
1	2S	Create a Visitor Information Portal on the Catalina Highway between Molino Canyon overlook and Molino Basin Trailhead. The former location of the Catalina Highway fee booth has substantial parking to provide needed visitor information. The pullout on the east side of the highway would include maps, wayfinding, introductory interpretation, and other information. An electronic fee station could be provided here, with the required clarification of which recreation sites require a day use standard amenity fee.	No site currently serves as a easily accessible information portal that provides basic introductory information about Catalina Highway and Mount Lemmon. With the high proportion of first-time visitors, this information is needed. A method for fee payment would provide convenience and is consistent with the terms of the Mount Lemmon feerelated settlement agreement.
2	3\$	Improve the interpretive and visitor information at the Palisades Visitor Center. Work with the Public Lands Interpretive Association and other partners to improve the quality and relevancy of information at the visitor center.	Palisades can serve as an upper elevation recreation hub for the Catalinas. The existing visitor center can better serve those seeking information.

Phase	Project ID	Project Description	Rationale
1	4\$	Construct belay platforms and manage erosion at identified climbing crags. Select Crags Against Humanity as a pilot project to maintain approaches, reduce erosion, and construct stable native soil platforms to level and increase safety measures at the base of the crag. If this pilot is successful and the climbing community and CNF have the capacity to address more areas, other crags that are being considered for similar management include: Barnum Rock, Raycreation, Boneyard, Wall of Flying Scorpions, It Cliff, Sky Valley, and Chessman.	Approaches to climbing crags are identified as unauthorized trails, so partner groups like CASA are unable to construct or maintain these areas. By adopting crags, CASA and community members can protect the resources around the crags, create safer belay areas, and prevent further erosion. National policy for management of climbing opportunities on NFS lands, including wilderness, is expected shortly. Forest direction may change with the development of a climbing management plan specific to the Santa Catalinas.
2	5\$	Better define dispersed campsites on Mount Bigelow and limit off-road vehicle travel. This project would seek to limit motor vehicle access to the popular camping sites on Mount Bigelow Road to the road prism. Boulders and other barriers would be installed that limit driving off-road.	Limiting vehicles to the improved and defined surface will limit erosion and reduce the impacted footprint of campsites.
3+	6S	Remote rainwater collection system along the Arizona National Scenic Trail. To address limited natural water sources, the Arizona Trail Association (ATA) has developed an innovate remote rainwater collection system. This metal feature provides treatable water along the trail. Such a device has been requested north of Italian Spring. The facility would be analyzed through the Special Uses Program, with ATA taking on maintenance responsibility.	Long term changes to water availability are impacting long distance trail users. The remote rainwater collection system has proven an effective technique elsewhere along the Arizona National Scenic Trail.
3+	7 S	Create a user allocation management system (odd/even days) on Aspen Draw Trail to mitigate user conflict. Develop and test a visitor use recommendation for the entirety of Aspen Draw Trail that specifies on weekends and holidays, the trail would be open to either mountain biking or hiking. For example, on odd days the trail would be open to hiking and not bicycling; on even days, vice versa. During the week both uses would be allowed. The trail would be signed at both ends. The USFS and our partners would undertake a public awareness campaign. This approach would be evaluated after one year with representatives from hiking and mountain biking organizations to determine its effectiveness.	Aspen Draw Trail was one of the most frequently mentioned locations for user conflict during public sensing. The trail's steep grade and mixed conifer forest type make it a popular option for both hikers and mountain bicyclists. However, poor sight lines and the volume of use make some user conflict inevitable even if all users followed standards of trail etiquette. Experimenting with a pilot project to allocate days is one low-cost attempt to try and improve the situation. The alternating day recommendation would allow each type of user a chance for their desired experience. This method of allocating days to different uses has been proven effective at other popular shared use trails, including National Forest System Trails like the Tahoe Rim Trail.

Phase	Project ID	Project Description	Rationale
3+	8\$	Support partnership opportunities to expand transit and alternative transportation at Sabino Canyon and along Catalina Highway. Working with the Pima Association of Governments and other partners, the CNF will engage on options to establish transit service. This service may require modifications to existing parking areas, permitting arrangements, and other supporting actions. The detail of any potential service is not known at this time. The most appropriate juncture for considering this service as during the next update to the long range transit plan.	Establishing transit service to Sabino Canyon has been a long-held goal. Similarly, increasing use of the Catalina Highway and an interest in reducing private automobile use have made public transit an attractive option for decades to higher elevations. In 1997, Pima County passed a transportation bond aimed at bringing shuttle service to Mount Lemmon. While that concept ultimately was not implemented, there may be opportunities for partners to establish and operate equitable transit opportunities.

Contingency Projects

Numerous projects were identified throughout the planning process by USFS staff, partners or members of the public that meet the goals and objectives of the plan. However, based on the plan's approach to limit system growth to a maximum of 10%, these projects have not been included in the current project listing. Instead, these projects are listed below as contingency projects that could be implemented under the following conditions:

Projects in the listings above become impractical based on unforeseeable design, natural resource, cultural resource, or partner capacity challenges.

and/or

Progress on the identified projects above and community support for trail stewardship surpasses the pace and scale currently foreseen by the USFS planning team during the intended 15-year lifespan of the plan.

The determination of whether the above conditions have been met for any contingency project is at the discretion of the Santa Catalina District Ranger. This determination should consider available stewardship resources and continued partner commitments for ongoing maintenance.

Project ID	Project Description	Rationale
1C	Construct and Adopt a 1.5 mile long trail on the south side of Tanque Verde Canyon.	This could be incorporated into a future alignment of the Sun Corridor Trail between Saguaro National Park and Tanque Verde Falls. This project was proposed by the Southern Arizona Rescue Association.
2C	Green Mountain to Bug Springs Connector. This would be a 5 mile Class 2 non-motorized trail that would connect from Guthrie Mountain Trail to the saddle on Bug Springs Trail using the ridgeline of middle Bear Canyon.	This project would improve connectivity between the non-wilderness trails on the north side of the Catalina Highway, creating loops between Green Mountain and Bug Springs Trail. However, the terrain in this area is challenging and general habitat quality is high. It was proposed by the Tucson Off-Road Cyclists and Activists.
3C	Construct a 1 mile Agua Caliente Spur Trail. This relatively short, Class 2 or 3 trail would originate near the trailhead and contour around to a small canyon to the southeast of the existing trail.	The Agua Caliente Hill South Trailhead is relatively underutilized compared to other trailheads at the fringe of the metro area, but the trails are steep and relatively difficult. This short spur trail would provide mellower grades and a good option for those hiking with dogs.



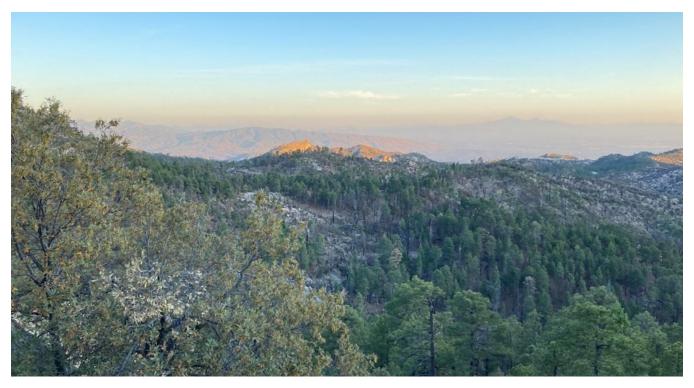
Coronado staff complete crosscut saw work to remove downed trees on Bigelow Trail in 2023



Project ID	Project Description	Rationale
4C	Milagrosa to Agua Caliente Connector. Construct a 3.5 mile connection between the South Agua Caliente Hill South Trailhead and the Milagrosa Trail to ensure a minimum level of public access if the current access point becomes unavailable.	As identified above, the Milagrosa Trail does not have secured, permanent legal public access.
5C	Golder Ranch Trail System additions. Consider future connections and loops to the Golder Ranch - 50 Year Trail System. Trails should be consistent with the targeted trail experience and shared use nature of the system. Addition of any user-specific trails should be considered in a collaborative setting with trail users.	The current level of popularity of the Golder Ranch - 50 Year Trail System indicates that improvements are likely to be well received. In order to sustainably accommodate future visitor demand, additional connectors or loops may be added.
6C	Sun Corridor Trail. Work with the Sun Corridor Trail Alliance and Pima County to identify a viable route for the Sun Corridor Trail through the district on system trails. Likely segments include all components of trails located outside of wilderness. The trail could be used by AZNST enthusiasts to bypass the wilderness (including proposed Tucson Vista Trail), adopted trails in the Golder Ranch - 50 Year Trail System and the adopted Milagrosa Trail. CNF will also work to identify a viable route from the boundary of Saguaro National Park (if the trail is approved within park boundaries) to Milagrosa. Several options exist including connection to the Italian Trap segment of the AZNST or new construction that connects with Tanque Verde Falls and Agua Caliente Hill South Trailheads. The trail (ranging in length from 6 to 18 miles depending on final location) was originally proposed to be designed, built, and maintained by Pima County Natural Resources, Parks and Recreation per written correspondence. Future development of this trail would require a leadership role from the County.	The Sun Corridor Trail is a proposed, long-distance non-motorized trail that connects Douglas, Arizona with Las Vegas, Nevada. The counties in Arizona have taken a leading role in planning the trail, forming the Sun Corridor Trail Alliance. The trail is approximately 1,500 miles long and broken into 6 segments. The trail is also co-located with Pima County's Tribute Trail and in some locations, proposed by the Alliance to be located along with the Arizona National Scenic Trail.
7C	Motorized Singletrack Connections in the Vicinity of Rice Peak. Connect several NFS roads including 4471, 4472, and 4473 with approximately 4.5 miles of singletrack motorized trail primarily to facilitate dirt bike loops in the vicinity of Control Road and Peppersauce beneath Rice Peak.	There are good opportunities for motorized recreation in the northern Santa Catalina Mountains, but limited connectivity. This proposal from users would enable customizable trip lengths. However, motorized trails were not among the top categories of responses during initial sensing or the feedback period. This project was proposed by the Trail Riders of Southern Arizona.



PROJECT SPOTLIGHT #1: TUCSON VISTA TRAIL



Scenic view from the potential Tucson Vista Trail

Trail Working Title: Tucson Vista

Design Parameters: Trail Class 3, shared

use trail

Trail Length: Approximately 8.5 miles

Managed Uses: Mountain bike,

pedestrian, equestrian

Typical Tread Width: 24" to 36", with some exceptions where old roadbeds

are repurposed

Target Average Grade: 6% to 8%

Maximum Sustained Grade: 12% for 50'

Surface Type: Native soil. Firm and stable to provide reliable tread conditions. May require onsite borrow or imported natural materials from nearby

Access: Parking available at the top of the Rose Canyon Access Road, Palisades, Showers Point, Spencer Canyon, Whitetail, and Sunset Trailhead

Connects To: Green Mountain Trail, Palisades, Box Camp, Sunset, proposed Bear Wallow Trail

Recreation Opportunity Spectrum:

Roaded Natural, Rural

Targeted User Experience

Tucson Vista Trail is a shared use non-motorized trail that is intended to provide convenient and scenic hiking, biking, running and horseback riding opportunities. It seeks to meet trail user objectives related to scenery, nature, and connectivity. The trail name is meant to clearly associate the trail with sweeping views of the Tucson metropolitan area from many locations on the trail.

The trail is intended as a marquee, all-ages, introductory trail experience in the higher elevations of the Santa Catalinas. Visitor information, including distance markers, should be direct, visible, and reassuring. Signage should be provided in Spanish and English.

The intended difficulty level is beginner. Where this is not possible due to side slopes that difficulty level will not exceed intermediate. Users of nearly all ability levels should be able to use some portion of the trail. However, the targeted experience is not for a fully accessible trail with non-native surfacing. The trail grades, surface, and distance will be clearly marked; this will allow those with some mobility limitations to determine their own capabilities.

Once completed and connected, the trail could serve as the non-Congressionally designated trail for Arizona National Scenic Trail enthusiasts to detour around the wilderness. The trail would receive stewardship support from the Arizona Trail Association.

Anticipated Partners

Arizona Trail Association, National Forest Foundation, Tucson Off-Road Cyclists and Activists, Southern Arizona Hiking Club



View from the Mount Bigelow Dispersed Camping area on Mount Lemmon



PROJECT SPOTLIGHT #2: GOLDER RANCH - 50 YEAR TRAIL SYSTEM



The 50 Year Trail System on the west foothills of the Santa Catalina Mountains

This plan recommends adoption of the popular, unofficial trail system located on CNF lands north of Catalina State Park and west of Golder Ranch at the terminus of the 50 Year Trail. The current system is an extensive network of unauthorized, non-motorized trails that center around the 50 Year Trail, which runs for approximately 7.6 miles from Catalina State Park north to the forest boundary. The 50 Year Trail is protected by a 50-year lease agreement between Arizona State Parks and Trails and the Arizona State Land Department which expires in 2038. There are approximately 18.35 miles of unauthorized trail on CNF lands adjacent to 50 Year Trail that are commonly referred to as the Golder Ranch trail system. Observations indicate the area is extremely popular, hosting hundreds of trail users on busy weekends. The area also has known game hunting opportunities.

After adoption into the CNF system, numerous realignments and improvements to the current trail network would be completed to improve trail sustainability while preserving the overall character of the existing trail experience. Some new connectors should also be considered to improve useability and improve the coherence of the system. Short, duplicative segments of trail that serve little recreation function or present a concern to cultural resources would be rehabilitated and closed rather than adopted into the formal system. In some locations, small bypass or alternative trail alignments should be provided to ensure safe trail use. In total, the overall system on NFS lands total up to 16 miles.

Access

The CNF and other public entities lack legal, permanent, public access to the boundary of the forest between Charouleau Gap Road and Catalina State Park due to the presence of approximately 1,700 acres of Arizona State Trust lands. Purchase of lands or interest in lands, such as an easement, is a fundamental requirement for long-term access to this area that should be a top priority for trail partners. Should the 50 Year Trail easement expire and no public access has been secured, the CNF would re-evaluate trail maintenance investments and consider other management actions, including closure.

Cultural Resource Considerations

Trail improvements would be complemented by an increased and holistic effort to fully document and steward cultural resources in the area. The intended result is a shared use non-motorized system with permanent access that provides desirable recreation experiences while mitigating threats to cultural resource integrity.

The area holds an important record of human and cultural history. Extensive rock art sites are found here and are particularly important to the Tohono O'odham. These sites are listed on the National Register of Historic Place. These areas would be avoided in terms of any new trail development, or official adoption of unauthorized trails. Additionally, access controls to important cultural resources would be enhanced in partnership with other organizations and the site steward program. Trail system development should be done in such a way so that it serves as a catalyst of, rather than a threat to, cultural resource preservation.

Managed Uses: Pedestrian, equestrian, mountain bike

Trail Length: 16 miles in total when including adoptions, re-routes and new connectors. An additional 5 miles are identified as a contingency project if visitor use of the system justifies expansion and stewardship resources are available

Surface Type: Natural surface

Target Average Grade: Less than 6% to 8% on constructed tread based on erodible soils such as decomposed granite; exceptions for bedrock areas where steeper grades are sustainable

Recreation Opportunity Spectrum:

Roaded Natural, Semi-primitive motorized and non-motorized depending on location

Anticipated Improvements and Reroutes:

While much of the system is suitable for adoption, some segments of trail may be closed or realigned due to heavy erosion, poor sightlines, or natural or cultural resource concerns. Projects identified for early completion include:

- Reroute the southern portion of Middle Gate Trail to move it off State Trust Lands
- Partially reroute Dynamite Trail that is currently in an unsustainable location within Sutherland Wash
- Partially reconstruct trails informally known as Cow Pies and Baby Jesus, to be renamed Stone Cactus Loop
- Construct a 0.9 mile connector between Middle Gate and Upper 50 Year to enable shorter loops
- Construct a 0.9 mile connector between Middle Gate and Stone Cactus Loop to provide an access trail to the overall system on NFS lands

Targeted User Experience

This system provides a well-known and well-loved shared use, stacked loop trail system in the frontcountry that offers unique experiences for hikers, runners, equestrians, and mountain bikers. The system is regarded as a premier location for non-motorized trail use by residents and visitors.



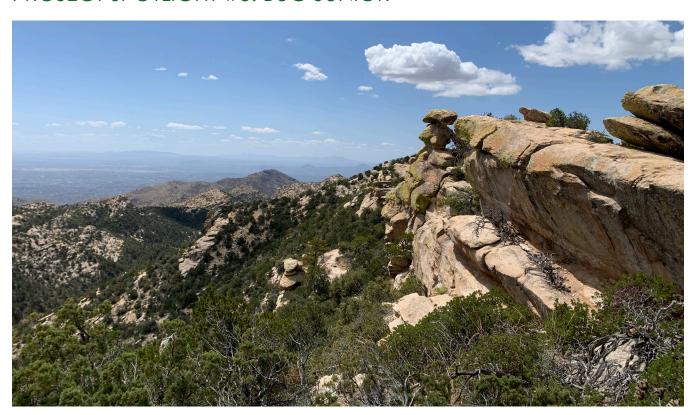
Access to the system from the south and east is on properly defined, beginner-friendly trails that offer outstanding views of the eastern face of the Santa Catalina Mountains and Samaniego Ridge. Trails range in difficulty throughout the system. In some locations, rock formations offer challenging technical features for mountain bikers. Good trailer access, proximity to home, and outstanding scenery make this a popular place for horseback riding. Hikers are drawn to the expansive views and unique scenic blend of rounded granite outcrops and upland Sonoran Desert vegetation. The layout of the system means trip lengths can be tailored and adjusted.

Trails are well signed; this combined with users' appreciation of the importance of the area's cultural resources mean that use off designated trails is rare and quickly remedied. Similar to other shared use trail systems managed by Pima County in Tucson Mountain Park or Sweetwater Preserve, the shared use nature of the system is widely understood and appreciated. Users come expecting to encounter other users and successfully share the trail.

Anticipated Partners

County Line Riders of Catalina, Pima County Natural Resources, Parks and Recreation, Tucson Off-Road Cyclists and Activists, Sonoran Desert Mountain Bicyclists, Southern Arizona Hiking Club (and other local hiking clubs), Archeology Southwest

PROJECT SPOTLIGHT #3: BUG JUNIOR



View from potential site of Bug Junior Trail

Trail Working Titles: Bug Junior or

Downdraft

Design Parameters: Trail Class 3, developed one-way singletrack

bicycle trail

Trail Length: Approximately 6 miles

Designed Use: Mountain bike

Managed Use: Mountain bike, pedestrian (hiking and trail running)

Typical Tread Width: 12" to 30"

Target Average Grade: 6% to 12%

Maximum Sustained Grade: 15% for less

than 50' due to highly erodible soils

Maximum Short Pitch Maximum Grade: 30% on solid rock or highly armored

Surface Type: Native soil. Variable and loose in places. Relatively little onsite borrow based on soil conditions. Use natural hardening with native stone on berms and obstacles to minimize maintenance requirements. No imported materials or constructed features intended.

Access: Parking available at Lower Green Mountain Trailhead, Bug Springs Trailhead, and Hirabayashi

Connects To: Bug Springs

Recreation Opportunity Spectrum:

Roaded Natural

Targeted User Experience

Directional mountain bike trail that is intended to provide sustained descents and utilize natural technical features that the terrain provides. It seeks to provide trail user objectives related to challenge, nature, and scenery. It would be the only identified directional trail in the CNF and the only bike-optimized directional trail in southern Arizona with considerable elevation loss. The uniqueness of the trail experience would likely make it a draw for residents and visitors.

The intended difficulty level is black diamond, but within reach of riders of upper intermediate skill level. All features in the main line must be rollable, with no mandatory gaps.

While the trail has a designed use for directional mountain biking, pedestrian use including hiking and trail running may be appropriate with adequate signage (identifying the trail as recommended for bikes and directing pedestrians to yield to bikes) and a direction to hike/run uphill (with bikes being directed to travel downhill). This approach is consistent with the large majority of directional, bike-optimized trails that are located within popular shared use trail areas on federal lands. Should the final trail design preclude hiking use based on sight lines and safety considerations, the trail would only be open to mountain biking. This trail will not be suitable for equestrian use.

Anticipated Partners

Tucson Off-Road Cyclists and Activists, National Forest Foundation



PROJECT SPOTLIGHT #4: CRAGS AGAINST HUMANITY



Rock climbing area, Crags Against Humanity, just off the Catalina Highway. Photo by Luke Bertelsen

Project Summary

Located low on Mount Lemmon, Crags Against Humanity is one of the most popular and accessible rock climbing areas for all levels (route grades spanning from 5.5 to 5.12). The crag boasts near year-round climbing, with the busiest months being October to May. 51 climbing routes are concentrated in the compact footprint which is accessed immediately off the Catalina Highway, just past Milepost 4. There are 4 distinct areas within this crag, and construction in each section will be phased. The following improvements are proposed for the CNF's first rock climbing pilot initiative:

Approach: Maintain and improve the short approach from the paved parking area to the cliff face. Create a sustainable access route to reduce erosion and resource damage. Improvements can include stone steps, new or widened trail tread, and stone reinforcement where needed. Close and restore braided, redundant trails.

Belay Terraces: Maintain and improve belay terraces at the base of cliff faces to reduce further soil erosion and resource damage, increase safety for climbers, and contain the area of impact. All terraces will be 10-12 feet wide to accommodate climbers and belayers, and some areas may require retaining walls to achieve a level platform.

Signage: Install a kiosk that includes signage regarding climbing etiquette and Leave No Trace principles, a map of climbing areas and routes, and signage at trail junctions. This will benefit all climbers at this crag as a regular reminder, but it will especially be useful for beginner climbers who may still be learning outdoor skills. The kiosk information will also educate curious non-climbers that see the activity in this highly visible area.

Access: Parking is available just below the crag, in a paved pullout off the Catalina Highway (unlined parking spaces for approx. 10 angled vehicles) **Designed Use:** Pedestrian

Surface Type: Native soil

Recreation Opportunity Spectrum:

Roaded Natural

Anticipated Partners

Climbing Association of Southern Arizona, Public Lands Interpretive Association, National Forest Foundation

PROJECT SPOTLIGHT #5: MOUNT LEMMON INTERPRETIVE TRAIL



View near the summit on Mount Lemmon

Trail Working Title: Mount Lemmon

Interpretive Trail

Design Parameters: Trail Class 5, highly

developed

Trail Length: Approximately 500'

Designed Use: Pedestrian

Recreation Opportunity Spectrum:

Roaded Natural

Typical Tread Width: 36" with turnouts

Target Average Grade: Under 5%, consistent with Forest Service Trail

Accessibility Guidelines

Surface Type: Asphalt or concrete

Access: Parking is available at the junction of the Ski Valley and Radio

Ridge roads



Targeted User Experience

This trail should provide an expansive, high elevation experience for those with limited mobility. It would serve as a regular stop for first-time visitors seeking to understand the indigenous and historical context of the Santa Catalinas and Mount Lemmon. Bilingual signs would highlight interpretive themes identified through collaboration. Tribes with a connection to the area would be welcomed to partner on the project.

Anticipated Partners

University of Arizona, Public Lands Interpretive Association, National Forest Foundation, Tribal Partners

PROJECT SPOTLIGHT #6: GORDON HIRABAYASHI RECONFIGURATION

Project Summary

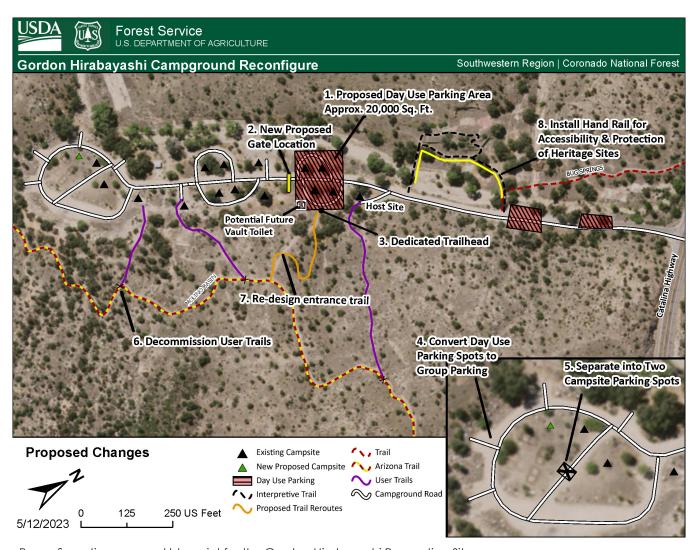
Gordon Hirabayashi Recreation Site is one of the most popular locations on the lower half of the Catalina Highway. It serves as an important access point to the AZNST, especially for equestrians.

The purpose of the Gordon Hirabayashi Campground Reconfiguration Project is to convert current mixed recreation use to clearly designate the entrance area as day use only and anything beyond as campground use only. With this conversion, sustainable recreation opportunities in the Santa Catalina Mountains would be increased and visitor experiences improved by ease-of-access.

This project would address current issues with the overall recreation experience for visitors to the campground. These include day use visitors being unclear where to park, using campground parking spots during high use days, trail users entering the campground on routes through campsites, confusion on the trail connection between Bug Springs & Molino Basin, and potential vandalism or damage to structure remnants by the open nature of the interpretive trail.

Numbers reference the image following image: (1) New day use parking lot would be constructed by removing 4 existing campsite features to provide additional vehicular parking spots and horse trailer parking spots. The total amount of potential cleared parking area is estimated at 20,000 square feet. Parking blocks would be used to designate each parking stall with room for 3 rows of parked vehicles lined South to North. In conjunction with this lot, the entrance gate (2) would be re-located at the South side of the proposed lot to provide clear separation from the campground itself. With this designated parking area for day use, an official trailhead entrance (3) would be constructed on the East side of the lot in connection with the nearby Molino Basin Trail (AZNST). This trailhead would include a multi-panel kiosk with relevant trail & fee information posted. This cleared area would also have space for a new vault toilet in the Southeast corner if ever desired.

At the equestrian group site where the campground ends, there are multiple proposed changes designed to secure and expand camping capacity for visitors. The three parking spurs being unofficially used as day use overflow would be converted into additional campsite parking spots (4). To provide improved parking for the middle campsites, the middle road would be separated by parking blocks (5) to create parking spurs for the adjacent 3 existing campsites. The intention is to add this group site to the reservation system for equestrian groups to be able to reserve ahead of time, while allowing use by standard camp visitors during non-reservation periods.



Reconfiguration proposal blueprint for the Gordon Hirabayashi Recreation Site

Project Design Features

The following project design features will be incorporated on the project level, as applicable:

Recreation

- Projects should rely on the "Coronado National Forest Transition Plan" (USDA FS 2006), "Forest Service Outdoor Recreation Accessibility Guidelines" (USDA FS 2013a), and "Forest Service Trail Accessibility Guidelines" (USDA FS 2013b) to improve accessibility for visitors.
- Notify the public and recreation users when projects are expected to impact or interfere with regular recreation use.
- When possible, minimize project activity on weekends and holidays and during seasons of high use, especially near high-use trails and recreation sites.
- New construction activities should be implemented prior to decommissioning activities, when possible, to minimize loss of recreation opportunities and discourage further creation of unauthorized trails and parking areas.
- Keep the public informed on project activities prior to and during implementation. Notification methods may include posting warning signs and project information in developed sites and along trails, putting announcements on the CNF website, and/or writing a news release for media publication.

Scenery

- Projects should use the scenery management system implementation guide during project design and planning.
- Facilities should be designed to complement the landscape by siting them to reduce scenic impacts, using dark, neutral colors, and repeating the line, form, texture, pattern, and scale of the landscape to blend structures into their surroundings.

Cultural Resources

- Archaeological surveys and clearances will be obtained prior to ground disturbing activities.
- All sites unevaluated or eligible to the National Register of Historic Places (NRHP) would be considered during project planning and analysis.
- Archaeological site conditions should be monitored after project implementation to address potential looting and vandalism due to increased traffic and visibility.
- Should any previously unidentified cultural materials be discovered during project implementation, work must cease immediately, and the Forest Archeologist must be contacted to initiate the consultation process as outlined in the Advisory Council on Historic Preservation Regulations (36 CFR Part 800.13).
- Unauthorized trails identified for closure and restoration will be evaluated for cultural resources inventory and survey needs prior to implementation.

Wildlife

 Where an existing or current survey is not already available, Mexican spotted owl surveys would be coordinated with the US Fish and Wildlife Service to determine occupancy of owls in the project area during implementation. Surveys include the project footprint plus ½ mile beyond the perimeter of the project boundary.



- To minimize disturbance to the Mexican spotted owl, any construction would not occur
 within 0.25 miles of known nest or roost locations during the breeding season (March
 1 to August 31). If the nest/roost site is unknown, where feasible, these activities would
 not occur within 0.25 mile of the boundary of designated nesting areas (known as a
 Protected Activity Centers or PACs).
- Minimize removal of key components of Mexican spotted owl habitat during project activities including hardwoods and large trees, snags and logs, consistent with the Recovery Plan.
- When installing toilets or signposts, ensure that all open top vertical pipes with an inside diameter greater than 1 inch should be capped or otherwise designed to prevent animal entrapments (FW-WFP-G 7).
- No event camping will be permitted within Mexican Spotted Owl Protected Activity Centers at any time.
- Clearing of vegetation to create new facilities and trails will not occur in yellow-billed cuckoo nesting habitat or foraging habitat typically used by the species. No construction will occur in riparian or Madrean encinal, which are habitat types known to be used by yellow-billed cuckoos on the Santa Catalina Ranger District.
- Disturbance related to noise from construction equipment to potential breeding yellowbilled cuckoos in the action area will be avoided because work involving excavation, fill, or construction equipment such as backhoes or similar machines will not be implemented within the yellow-billed cuckoo breeding season of June 15th through September 30th.

Non-native Plants

- For new construction, decommissioning and restoration, all equipment to be used off of system roads would be cleaned prior to entering Forest Service lands. This is to reduce the likelihood of introduction or spread of non-native invasive plants. In all project related contracts, include provisions that require equipment cleaning before project implementation.
- Avoid routing trail through known infestations of non-native invasive plants or treat them before putting in trail.
- Where available, any plant materials used for decommissioning and restoration would be from on-site sources (chipped wood, etc.). All plant material from off-site sources (straw, mulch, etc.) must be certified weed free.

Soils and Other Resources

- Trail Construction will follow all applicable best management practices (BMPs) for motorized and non-motorized trails outlined in FS-990a, National Best Management Practices for Water Quality Management on National Forest System Lands (pg. 91-93).
- Locate or relocate trails to conform to the terrain, provide suitable drainage, provide adequate pollutant filtering between the trail and nearby water bodies, and reduce potential adverse effects to soil, or riparian resources.
- Locate new trail segments on hill contours as much as possible. Out-slope tread surface, with grade reversals and rolling dips to decrease and minimize sediment production and transport.
- Stabilize slopes, creating natural vegetation buffers, diverting runoff from exposed areas, controlling the volume and velocity of runoff, and conveying that runoff away



- from the construction area to reduce erosion.
- After wildfires in areas of high or moderate soil burn severity, trail construction will not begin until at least four seasons after the wildfire. If construction is planned within less than four seasons, coordination will occur the Forest Hydrologist for evaluation and to ensure proposer mitigations are in place for these areas.
- In areas of high traffic or steep slopes, armor the trail with large material and increase the occurrences of gradient reversal.
- Locate new trail segments away from drainage bottoms in an upland position. Distance away from stream channel should increase if trail is located on soils with moderate or severe erosion potential.
- Minimize drainage crossings and try to cross drainage as close to perpendicular as possible. Utilize rock and wood to stabilize streambanks where trails cross streams.
- Avoid the use of equipment and machines during wet months when soil saturation and water levels are high. Limit use of National Forest System land for event staging and encourage staging off of National Forest System land.
- Trails passing through cattle allotment and pasture fencing will have proper gates installed that accommodate equestrians and pack stock, gates should be at least 6 feet wide and designed to be closed easily from horseback.

IMPLEMENTATION STRATEGY

Funding Sources

The CNF will utilize multiple federal and non-federal funding sources to implement this plan.

The CNF receives funds dedicated to trail system management, including maintenance and new construction. These are referred to as CMTL funds, and the CNF receives between \$45,000 and \$65,000 annually across all five ranger districts.

Recreation fees collected on the CNF are available for improvement of trails, trailheads, and associated amenities used by fee-paying visitors. For example, this would include trails accessible from fee sites like Molino or Mount Lemmon Recreation Sites. Additionally, special use fees to the CNF paid by outfitter-guides operating under Special Use Permits are available for the improvement of assets like trails uses by these businesses.

The Great American Outdoors Act created a five-year funding stream to address deferred maintenance of assets on National Forests across the country. The CNF has been successful in competing for trail maintenance funds through this federal opportunity. As they are approved and released each year by Congress, these funds will be directed toward priority maintenance projects, re-routes, and some trail improvement as directed in this plan.

Federal and non-federal grants are available for recreational trails. The Recreational Trails Program (RTP) and Heritage Fund are two key sources in Arizona. For example, CNF has partnered with National Forest Foundation to secure a \$100,000 Heritage Fund grant to help restore trails affected by the Bighorn Fire. As projects are approved through the environmental compliance process, they will become an option for grant applications either from the USFS or partner organizations.



Volunteer labor is a significant source of trail work. Organizations like Friends of Santa Catalina Trails, Tucson Off-Road Cyclists and Activists, Arizona Trail Association, and the Climbing Association for Southern Arizona among others will be critical in helping improve trails and then maintain them into the future.

NEPA and Environmental Compliance

To comply with Section 7 of the Endangered Species Act, the CNF must complete consultation with the US Fish and Wildlife Service (USFWS) to ensure that projects undertaken will not jeopardize the continued existence of any listed species, such as the Mexican Spotted Owl and Yellow-billed Cuckoo. The CNF submitted numerous projects to USWFS each year. The process for formal consultation can take up to 20 months depending on the circumstances.

Many projects included in this plan are likely to be categorically excluded from documentation in an environmental impact statement (EIS) or an environmental assessment (EA). The applicable categories of actions are identified in agency procedures as:

- 36 CFR 220.6(d)(5) Repair and maintenance of recreation sites and facilities,
- 36 CFR 220.6(e)(1) Construction and reconstruction of trails, and
- 36 CFR 220.6(e)(20) Activities that restore, rehabilitate, or stabilize lands occupied by
 roads and trails, excluding National Forest System roads and National Forest System
 trails to a more natural condition that may include removing, replacing, or modifying
 drainage structures and ditches, reestablishing vegetation, reshaping natural contours
 and slopes, reestablishing drainage-ways, or other activities that would restore site
 productivity and reduce environmental impacts.

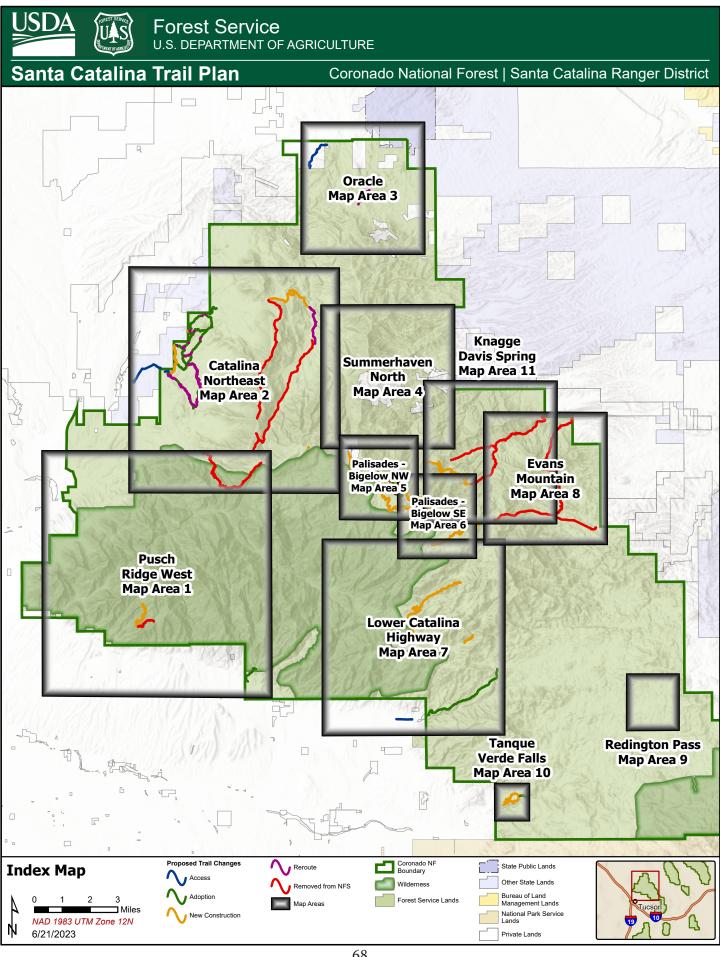
The determination to conduct public scoping for individual projects analyzed under Categorical Exclusion will up to the decision maker.

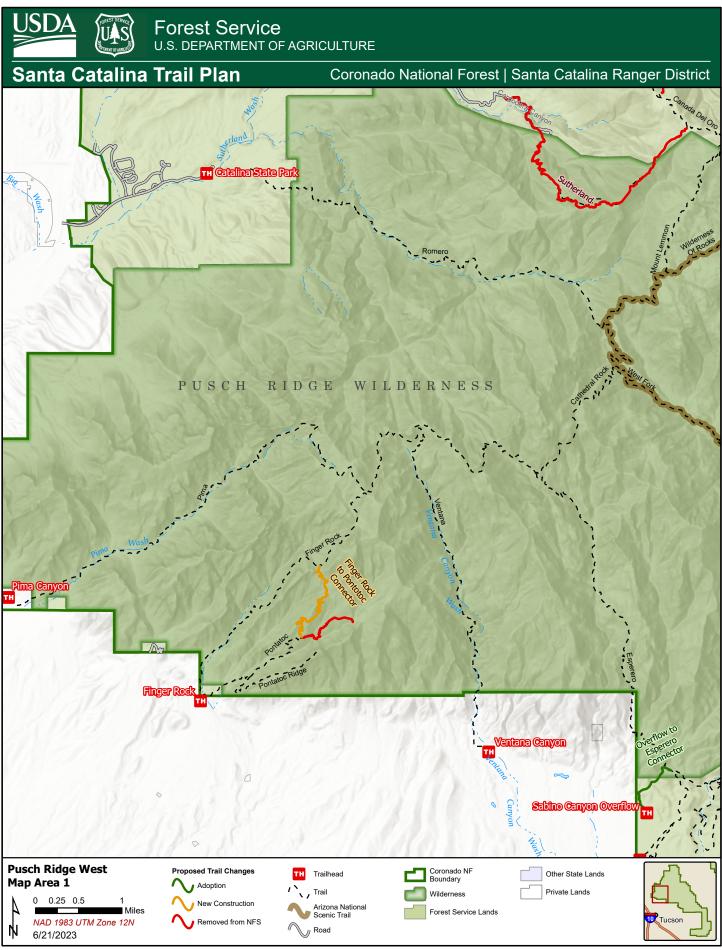
Project Phasing

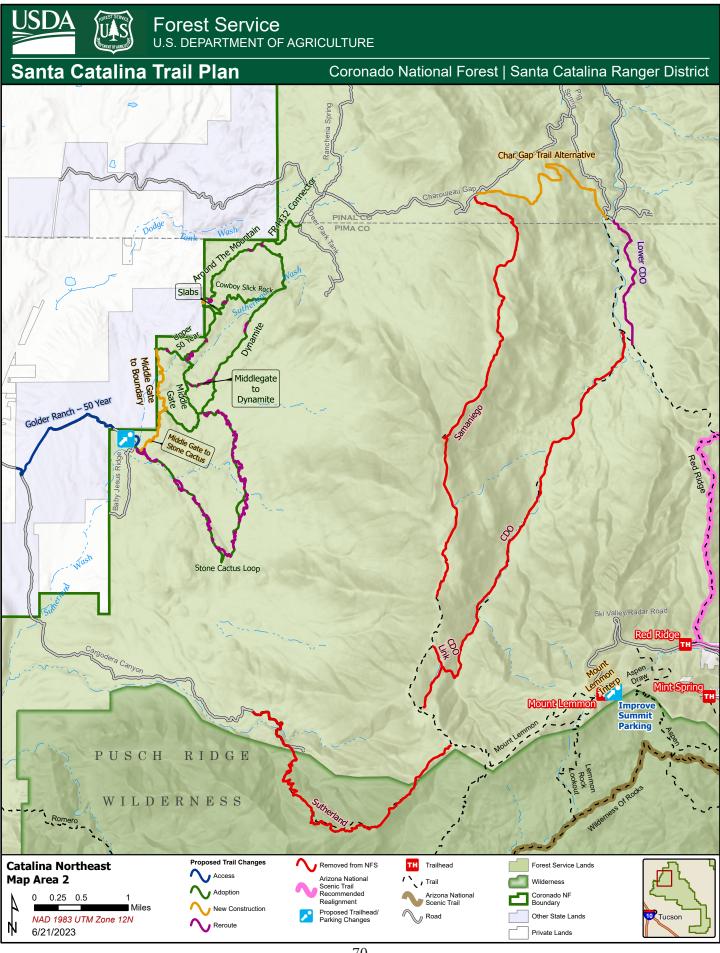
The processes required by NEPA and ESA, along with availability of funds, will the driving factors for implementation.

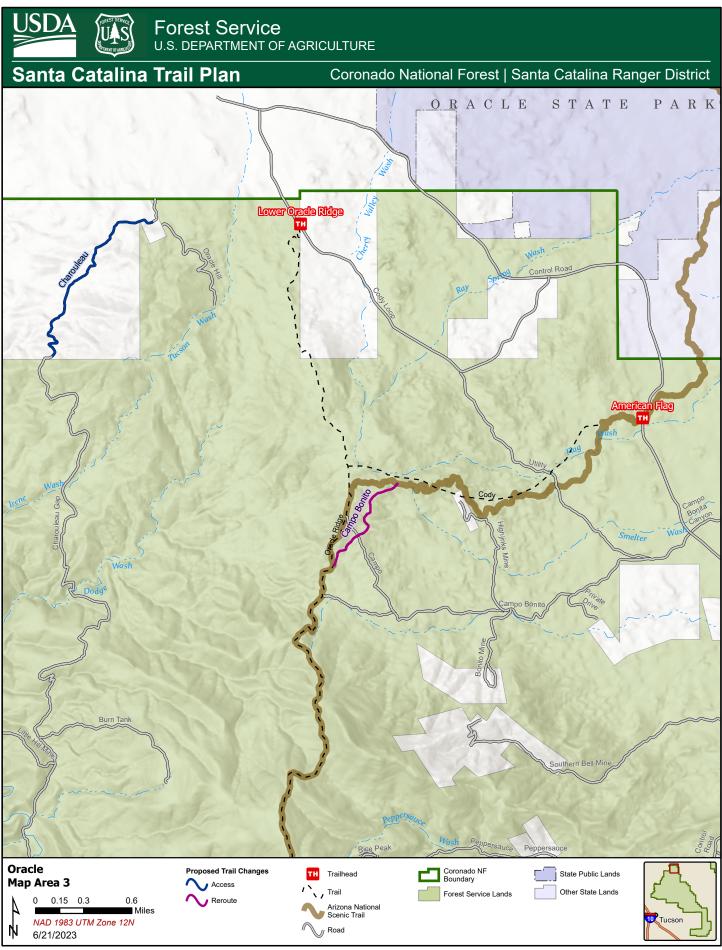
Phase	Project Listing	Anticipated NEPA Analysis Completed	Anticipated Implementation
Phase 1 These projects have lower complexities regarding threatened and endangered species	Tanque Verde Falls Recreation Enhancement Project Marshall Gulch Picnic Area and Trailhead Improvement Phase 1 of Golder Ranch - 50 Year Trail System (Trail adoption, larger loop reroutes, Dynamite Canyon re- construction, Stone Cactus - 50 Year Trail connector) Molino Canyon Trail Molino Canyon Parking Expansion Finger Rock - Pontatoc Connector	November 2023, if not already completed	October 2023 - December 2025

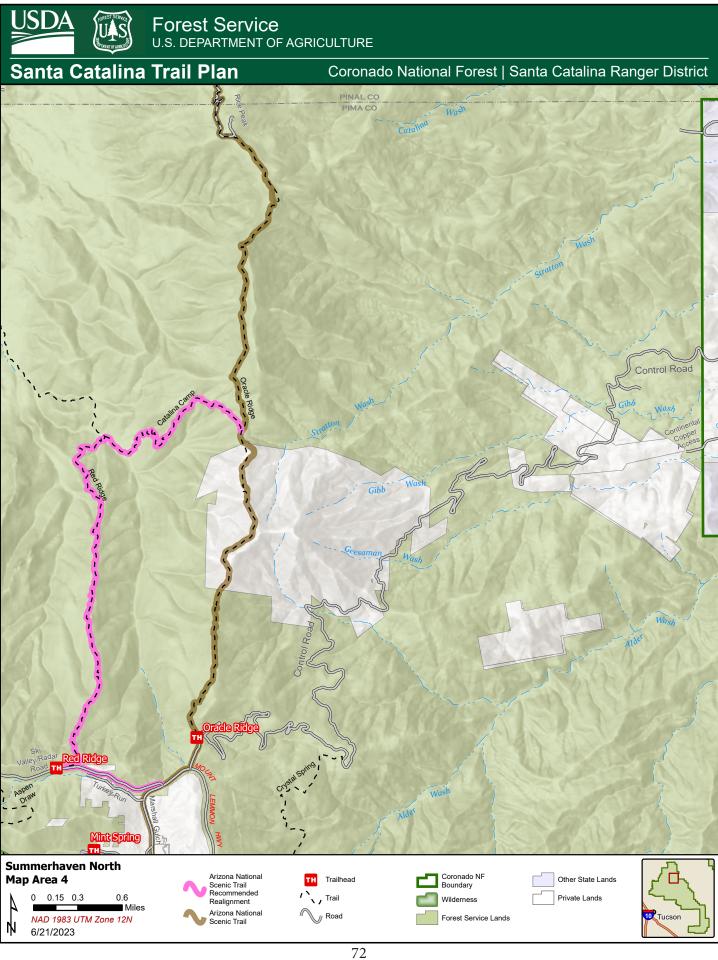
Phase	Project Listing	Anticipated NEPA Analysis Completed	Anticipated Implementation
Phase 1 (continued)	Adoption of Milagrosa Trail and Esperero Connector Trail	November 2023, if not already completed	October 2023 - December 2025
These projects have lower complexities	Crags Against Humanity Climbing Area Improvement and Erosion Control		
regarding threatened and endangered	Gordan Hirabayashi Reconfiguration		
species	Pusch Ridge Wilderness Visitor Info		
	Alhambre Toilet Removal		
	Trail Reroutes		
Phase 2	Tucson Vista Trail	No sooner than November 2024	Winter 2025 – 2030
These projects	Bug Junior	November 2024	
are likely to require formal consultation	Mount Lemmon Interpretive Trail		
Consultation	Marshall Gulch to Summerhaven Connector/AZNST		
	Fireline Trail		
	Secret Trail Adoption		
	Rose Canyon Lake Hiker Access		
	Palisade Trailhead Expansion		
	Sunset Trailhead Expansion		
	Oracle Ridge/Rice Peak Reroute		
	Davis Spring - Knagge Connector		
	Smaller reroutes on Wilderness of Rocks, Bug Springs, Incinerator and Green Mountain		
	Additional climbing projects		

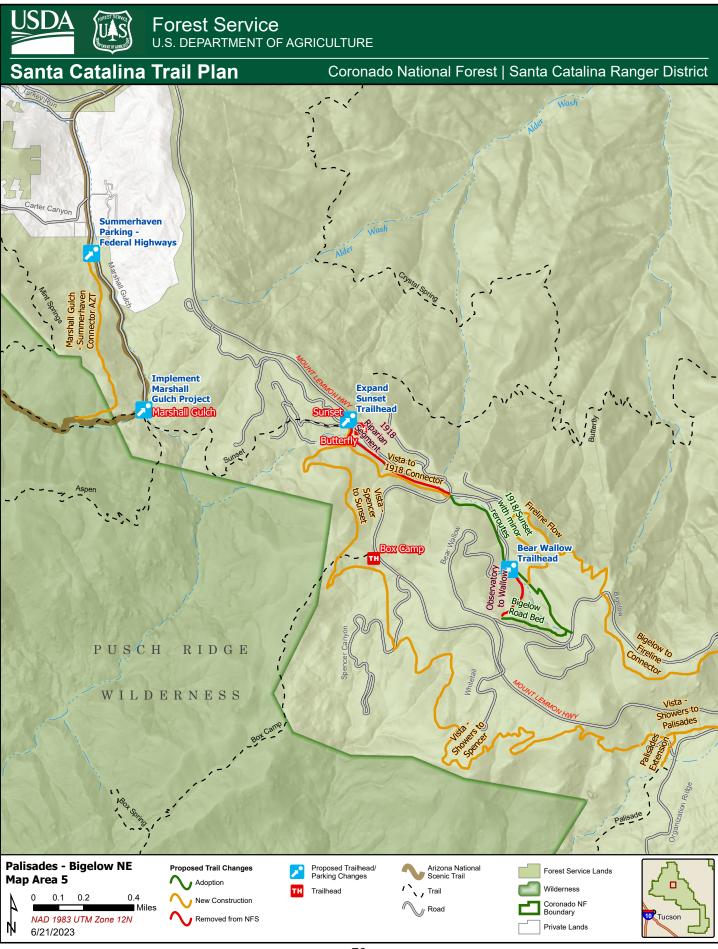


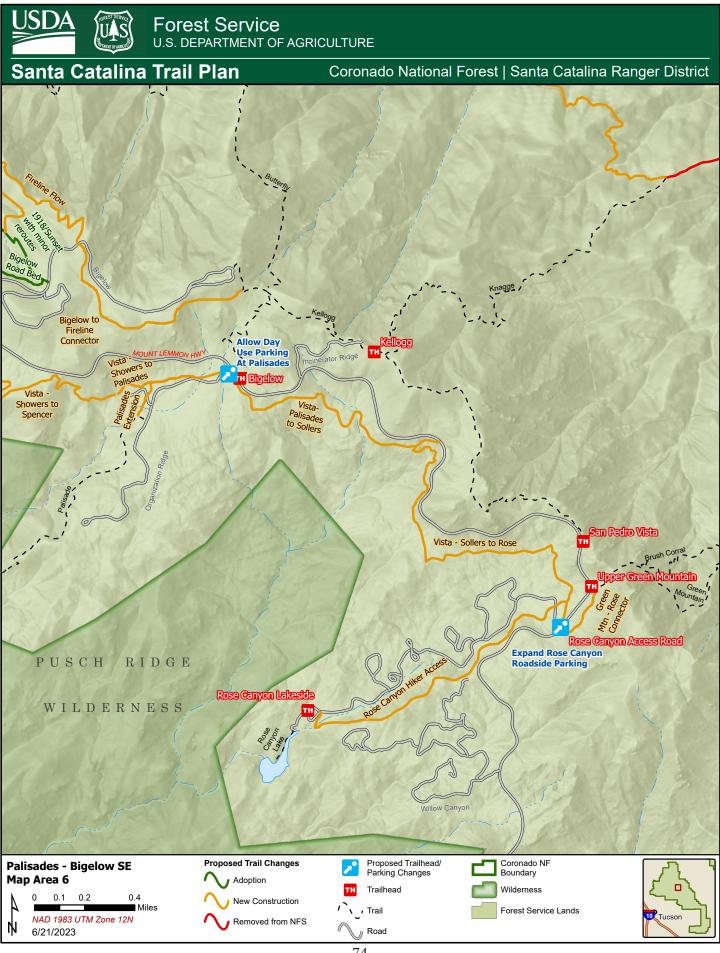


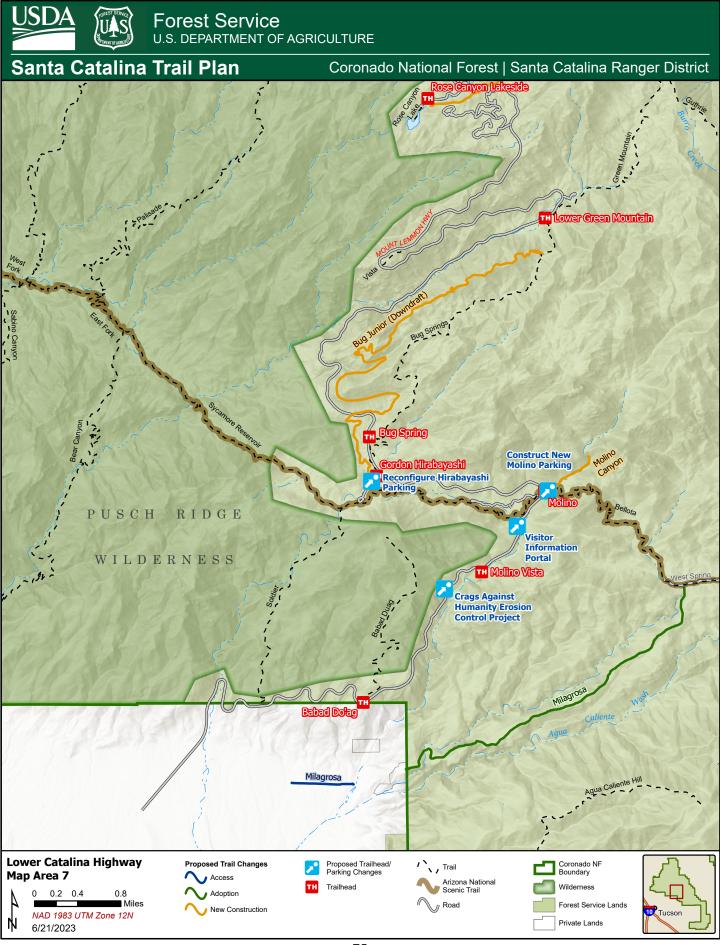


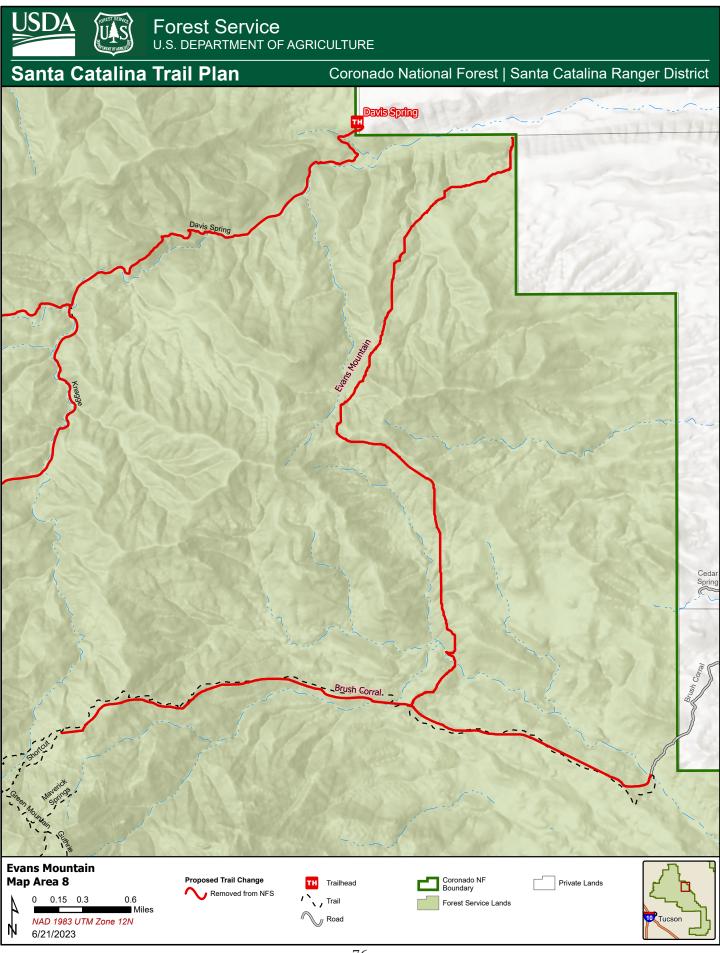




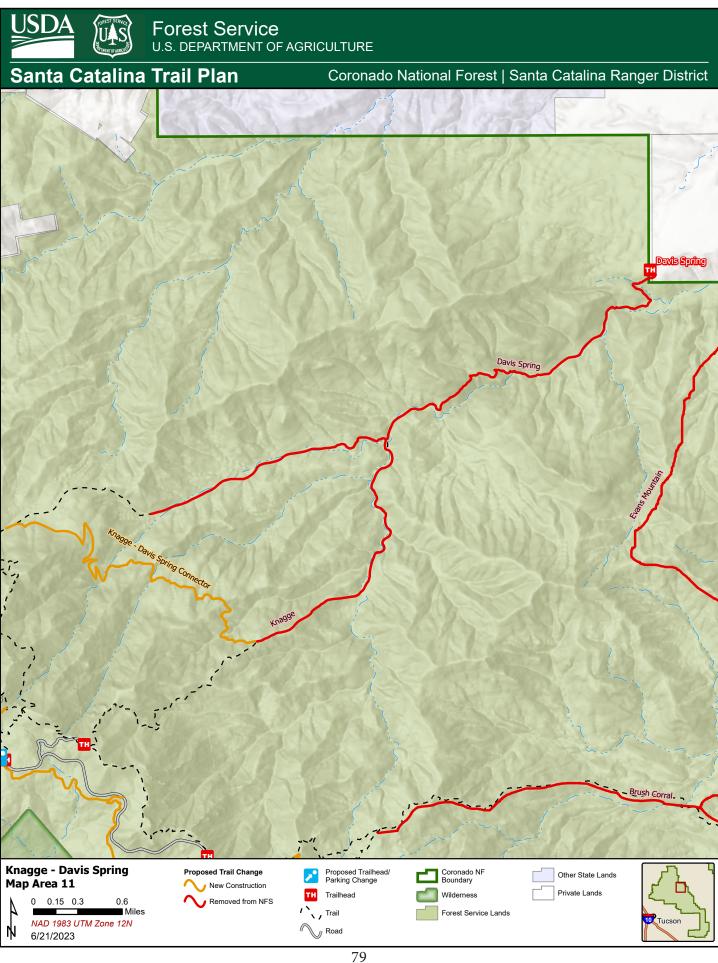












APPENDICES AND SUPPORTING INFORMATION

Forest Service Management Tools

The Forest Service incorporates several standardized trail management concepts and tools in the administration and management of over 150,000 miles of NFS trails. These tools help ensure that each trail is designed, constructed, and maintained to provide the desired user experience and meet the management intent for the trail. These include:

- The five Trail Fundamentals: Trail Type, Trail Class, Managed Use, Designed Use, and Trail Design Parameters
- Trail Assessment and Condition Surveys (TRACS)
- Standard Trail Plans and Specifications
- Forest Service Trail Accessibility Guidelines

These concepts will not be summarized in this place but are available here for review: https://www.fs.usda.gov/managing-land/trails/trail-management-tools

Relevant Direction from the Forest Plan

Desired Conditions for Santa Catalina Ecosystem Management Area

(Coronado National Forest Land and Resource Management Plan 2018)

The Santa Catalina Ecosystem Management Area offers a wide spectrum of developed recreation opportunities for a growing population, while large tracts of undeveloped areas remain for primitive and dispersed recreation. In the Sabino Canyon Recreation Area, developed recreation opportunities exist along the roadways, including access to the biologically rich Sabino Creek, and opportunities for dispersed and quiet recreation exist away from the main travel corridors. In the Redington Pass area, backcountry-touring routes are available for visitors who operate off-highway and all-terrain vehicles responsibly. Visitors to this area can enjoy the outdoors in clean, natural settings without conflicts with unsafe or illegal activities or exposure to excessive noise and disturbance. Recreational target shooting occurs in safe and well-monitored locations. The Sky Island Scenic Byway retains the qualities that earned national designation as a scenic byway. It provides year-round vehicular access to outstanding natural scenery and high elevations for a variety of developed and undeveloped recreational opportunities, as well as access to the community of Summerhaven. Interpretive signs help visitors learn about conservation of the natural and cultural resources in the area.

Fishing opportunities at Rose Canyon Lake are available to the public. Water based recreational activities do not contribute to the spread of invasive aquatic species. Up-to-date, locally focused, and science based natural and cultural information is available to visitors at the Palisades and Sabino Canyon Visitor Centers. Watersheds provide high quality surface and ground water flows. Recreation residences and organization camps blend well with the natural landscape and do not expand beyond their authorized footprints. The geologic features and rock formations that dominate the Santa Catalina scenery sustain a rich heritage of rock climbing. Recreation user groups use practices that decrease the likelihood of resource damage and abide by restrictions needed for wildlife protection. Ski Valley offers periodic snow based and other year-round recreation opportunities. The Arizona National Scenic Trail offers opportunities for hiking, cycling, and horseback riding across the ecosystem management area along a continuous north-south trending transect. The dark skies above the Santa Catalina Ecosystem Management Area present conditions conducive to astronomical research. Existing telescopes offer educational opportunities and promote scientific discovery.



Small stands of corkbark fir exist on cool, wet sites at the highest elevations. A complex assemblage of endemic pine trees exist in the Santa Catalina Ecosystem Management Area. Buehman Canyon retains the characteristics required to be designated an "Outstanding Arizona Water" by Arizona Department of Environmental Quality. Sabino Creek supports a diverse assemblage of native aquatic species. Habitat exists for bighorn sheep, Gould's wild turkey, and Santa Catalina gray squirrel. Unique vegetation species are perpetuated in the Santa Catalina, Butterfly, and proposed Finger Rock Canyon Research Natural Areas. The unique values of Alder Canyon are perpetuated.

Desired Conditions for Recreation on the Coronado National Forest

(Coronado National Forest Land and Resource Management Plan, 2018)

The diverse landscapes of the Coronado National Forest offer a variety of settings for a broad range of recreational opportunities and a place for visitors to escape from busy urban life into quiet, natural, wild places. Landscapes range from primitive settings that provide opportunities for solitude to more developed, rustic settings that provide opportunities for social interaction and greater human comforts. Although development and population in the region continue to grow, recreation settings on the Coronado National Forest are stable, retaining their natural character, and loss of remote, undeveloped settings does not occur. Recreation activities are balanced with the ability of the land to support them and create minimal user conflicts. The Coronado National Forest fulfills a unique and vital role as a place of learning and caring about the environment.

Demand for recreation is accommodated within the capacity of the land to support it, and areas that can accommodate additional use, such as at Peña Blanca Lake, are fully utilized. Recreation on the Coronado National Forest enhances the quality of life for residents and provides tourist destinations, which contribute to local economies. Interpretation and visitor education programs help visitors understand how to reduce their impacts on ecosystems, and visitors actively help support the Coronado National Forest's efforts to protect natural resources and wilderness values.

Low-impact recreation principles are promoted and widely practiced by the visiting public.

Developed recreation facilities such as campgrounds and picnic areas provide a range of visitor needs; most areas have simple facilities like picnic tables and vault toilets, while some offer additional amenities such as paved roads, flush toilets, and recreational vehicle hookups. Recreation facilities are clean, in good repair, and provide a safe setting for visitors. Most meet accessibility guidelines. Visitor centers are open to the public on busy days and provide places where visitors can find information and learn about natural and cultural resources on the Coronado National Forest. Heritage sites provide unique opportunities for visitors to connect with the past. Interpretive features help people learn about the special places they visit. Facilities and infrastructure are maintained and replaced as needed. Developed sites blend with the natural setting and uses in these places do not cause damage to ecologically sensitive areas.

Special use permits augment the variety of suitable outdoor recreation experiences on the Coronado National Forest. Permitted facilities blend well into the natural landscape.



Dispersed recreation activities on the Coronado National Forest include hiking, viewing natural features and wildlife, relaxing, driving for pleasure, nature study, picnicking, camping, off-highway vehicle riding, fishing, and hunting, among others. Visitors use off-highway vehicles responsibly, staying on designated routes and in identified camping areas. Forest-wide dispersed recreation sites are small and clean, and resource damage is minimal. Managed activities such as paint balling, geocaching, and rock climbing do not permanently detract from the natural character of the national forest or adversely affect resources.

Opportunities exist for motorized recreation where designated, with varying experiences for a variety of vehicle classes. Forest visitors can enjoy semi-primitive motorized recreation and explore the backcountry in off-highway vehicles along designated routes. Noise from motorized vehicles is infrequent in locations away from areas of higher road density. In other areas, the presence and impact of people and machines is unobtrusive. These areas offer non-motorized recreation opportunities in a variety of settings that provide differing levels of challenge and seclusion, while limited primitive or high-clearance roads allow for motorized access.

Places such as Redington Pass that receive heavy dispersed recreation use and are within easy driving distance of urban areas provide opportunities for safe, well-managed recreation. Visitors to these areas can enjoy the outdoors in clean, natural settings without conflicts with unsafe or illegal activities, or exposure to excessive noise and disturbance.

A system of well-marked and well-maintained non-motorized trails provides opportunities for visitors to explore the Coronado's wilderness areas and other places without roads. Wilderness and other settings where visitors can experience quiet and solitude are well dispersed throughout the national forest and easily accessed. Roads to trailheads are open and maintained, and trailheads provide adequate parking and vehicle turnaround space. Damage to resources from trailheads and trails is minimal. Historic trails are preserved and reestablished where appropriate and feasible. Unauthorized user-created ("wildcat") trails are rare.

Visitors enjoy the beautiful scenery, while understanding that fire and vegetation management projects are necessary for the health of vegetation communities within the forest landscape. Recreation sites and settings along the international border with Mexico are clean and border security infrastructure blends well with the landscape. Visitors understand the risks associated with illegal border activity and are informed about appropriate safety precautions.

Objectives for Recreation Management

- 1. Install wildlife-resistant trash cans at all developed recreation areas and wildlife-resistant food storage boxes at all developed campgrounds within 10 years of plan approval.
- 2. Evaluate 5% of recreation sites annually for conformity with Region 3 Sustainable Recreation Strategy Performance and Accomplishment Measures as applicable.
- 3. Provide opportunities for volunteers to participate in recreation planning, project implementation, or operations and maintenance at 15 to 30 recreation sites or facilities annually.
- 4. Manage wilderness areas to minimum stewardship level within 10 years of plan implementation.



Guidelines for Recreation Management

- 1. The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented.
- 2. Recreation sites should be managed for capacities that do not cause unacceptable resource damage or affect the landscape character.
- 3. When possible, activities that affect visitors should be scheduled outside of the major recreation season.
- 4. The Coronado National Forest paint color guidelines, the Forest Service's "Built Environment Image Guide" (USDA FS 2001) and the "Coronado National Forest Architectural Guidelines for Recreation Residences" (USDA FS 2015a) should be used for public and private facilities across the Coronado.
- 5. In recreation areas popular with Spanish-speaking visitors, information should be provided in both English and Spanish.
- 6. Rock climbing should be managed to balance demand for the activity and the need to protect plants, animals, and other natural resources.

	Motorized Recreation	Roaded Backcountry	Wild Backcountry	Wilderness	Recommended Wilderness	Special Management Area
15,654	2,537	35,224	111,877	93,847	0	1057

Acres per Land Use Zone, Santa Catalina Ecosystem Management Area





Guide to the Recreation Opportunity Spectrum

Primitive: Characterized by essentially unmodified natural environment. Interaction between users is very low and evidence of other users is minimal. Essentially free from evidence of human-induced restrictions and controls. Motorized use within the area is generally not permitted. Very high probability of experiencing solitude, closeness to nature, tranquility, self-reliance, and risk

Semiprimitive non-motorized (SPNM): Characterized by a predominantly natural or natural appearing environment. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum onsite controls and restrictions may be present, but are subtle. Motorized use is generally not permitted. High probability of experiencing solitude, closeness to nature, tranquility, self-reliance, and risk.

Semiprimitive motorized (SPM): Characterized by a predominantly natural or natural appearing environment. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum onsite controls and restrictions may be present, but are subtle. Motorized use is generally permitted; roads are usually unpaved and often primitive. Moderate probability of experiencing solitude, closeness to nature, tranquility, self-reliance, and risk.

Roaded modified (RM): Characterized by a predominately natural or natural appearing environment. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum onsite controls and restrictions may be present, but are subtle. Roads are well maintained and provide easy access. Moderate probability of experiencing solitude, closeness to nature, self-reliance, and risk.

Roaded natural (RN): Characterized by a predominantly natural appearing environment with moderate evidence of the sights and sounds of other humans. Areas are usually road corridors where people drive to enjoy the scenery and are often on their way to a developed site (such as campgrounds, picnic area, or visitor center). Facilities harmonize with the natural environment, though interaction between users may be moderate to high. Roads are passable by low-clearance vehicles. Roaded natural areas often have rural and urban recreation opportunity settings along them, where there are opportunities to affiliate with other users in developed sites.

Rural (R): Characterized by a modified natural environment. The natural setting is the attraction, but there are many facilities such as buildings, roads, and signs. The sights and sounds of humans are readily evident, and the interaction between users is often moderate to high. Facilities are often provided for special activities (such as campgrounds, organization camps, and summer homes). Opportunity to observe and affiliate with other users is important, as is convenience of facilities.

Urban (U): Characterized by a substantially urbanized environment, although the background may have natural appearing elements. Characteristics include intensive use, clustered facilities, large numbers of people, and specialized activities. Examples include major recreation sites (such as large visitor centers) and other human needs (such as astrophysical structures and electronic sites). The opportunity to observe and affiliate with other users is very important, as is convenience of facilities.



Trails and Signage in Wilderness

Desired Conditions

An interconnecting system of trails provides visitors with delineated access into, through, and out of wilderness areas, as well as to certain destinations within each area. Heavily used trails are well marked and maintained, while more remote trails offer a more primitive experience. Trails blend into the landscape and do not dominate the viewshed. User-created trails are rare. Signage is durable and easy to locate without dominating the natural backdrop. Trail and trailhead development emphasizes wilderness recreation and watershed condition while maintaining wilderness resource values. Visitors engage in primitive and unconfined recreation.

Guidelines

- 1. Trail maintenance should be coordinated to avoid anticipated high use visitor periods to minimize encounters.
- 2. New trail construction should only be considered if the objective is to enhance wilderness character (to control overuse or limit resource degradation).
- 3. Bridges should not be constructed or installed.
- 4. Signs within wilderness areas should provide directional information only, unless a specific need exists for an individual wilderness area.
- 5. Natural and preferably locally available materials should be used in the construction and signing of trails within wilderness areas, except when specified otherwise for an individual wilderness area.

Pusch Ridge Wilderness

Pusch Ridge is one of the most prominent geographic features of the Santa Catalina Mountains. It forms the backbone of the 56,919-acre Pusch Ridge Wilderness designated in 1978. The Pusch Ridge Wilderness contains seven of the nine major vegetation communities.

Objectives of Pusch Ridge Wilderness

- 1. Annually, treat 200 to 1,000 acres of exotic invasive grass populations (primarily buffelgrass and fountain grass) on the southwest slopes of the Pusch Ridge Wilderness.
- 2. Standards for Pusch Ridge Wilderness.
- 3. Wilderness areas near Sabino Canyon Recreation Area, Mount Lemmon communication sites, and along the General Hitchcock Highway shall be managed at the highest possible level, with a scenic integrity level of very high.
- 4. The existing recreation opportunity spectrum classification shall be maintained at semiprimitive non-motorized in areas near heavily used trailheads and primitive elsewhere.
- 5. All areas treated for exotic invasive grass populations shall be monitored and re-treated as often as necessary to prevent reestablishment of the target invasive species.

Guidelines for Pusch Ridge Wilderness

- 1. Recreation facilities should not be developed in the Pusch Peak area.
- 2. Trailhead parking areas should be designed to passively limit visitor use at levels that maintain wilderness character.
- 3. Natural appearing materials suitable for a primitive recreation opportunity spectrum setting should be favored. Man-made materials should only be used in the construction



- and signing of trails when natural materials cannot be obtained at, or transported to, the site.
- 4. Cross-country travel should be discouraged to limit impacts to vegetation, soils, water, and wildlife.

Rincon Mountain Wilderness

The Rincon Mountain Wilderness was designated in 1984 at the southeastern edge of the Santa Catalina Ecosystem Management Area. This wilderness area spans 36,926 acres along the national forest boundary, and the highest elevation is 7,325 feet. The Rincon Mountain Wilderness contains six of the nine major vegetation communities.

The Rincon Mountain Wilderness is contiguous with the larger Saguaro Wilderness, which is administered by the National Park Service as part of Saguaro National Park-East.

Guideline for Rincon Mountain Wilderness

1. Trailhead parking areas should be designed to prevent motorized trespass beyond the wilderness boundary.

Eligible Wild, Scenic, and Recreational Rivers

There are no designated wild, scenic, or recreational rivers on the Coronado National Forest. However, in 1993, all rivers on the Coronado National Forest were evaluated to determine their eligibility as wild, scenic, or recreational rivers. This evaluation resulted in 16 river segments being eligible for designation. In 2008, the 16 river segments were reevaluated and all were determined still to be eligible. These 16 segments will be managed to maintain their eligibility. Table 12 (next page) displays the potential classification and outstanding remarkable values for each eligible segment.

Portions of Cañada del Oro (Recreation and Wild classifications), Romero Canyon (Recreation and Wild classifications), Sabino Canyon (Recreational and Wild classification), have been determined eligible in the planning area.

Objectives for Eligible Wild and Scenic Rivers

Wild rivers are free of impoundments and free flowing. The shoreline is essentially primitive with little or no evidence of human activity. The area is inaccessible except by trail and no developed recreation facilities exist. The water quality meets or exceeds State standards.

Scenic rivers are free of impoundments and free flowing. The shoreline is largely primitive and undeveloped, and there is no substantial evidence of human activity. Evidence of human activities generally diminishes over time. Roads may reach or bridge the river. Improvements that occur are minimally intrusive in the landscape.

Recreation rivers are generally readily accessible by road or trail. Encounters with people are expected and recreation opportunities vary depending on their compatibility with the outstandingly remarkable value of the eligible segment. Vegetation management is used to enhance recreation river values. Improvements (such as primitive roads, trails, bridges, fences, or signs) may dominate the landscape. Facilities are visually complementary with the landscape. Roads and trails provide access within the river corridor consistent with



protection and enhancement of scenic, cultural/historic, wildlife, and fish outstandingly remarkable values, and protection of soil and water quality. The transportation system supports interpretation, recreation, and resource management activities.

Standards for Eligible Wild and Scenic Rivers

1. The conditions that support the classification and outstandingly remarkable values will be maintained when implementing projects.

Research Natural Areas, Botanical, Zoological, and Other Special Areas

Research natural areas and botanical and zoological areas are designated to ensure protection of specific biological and zoological communities. Research natural areas are areas that the Forest Service has designated to be permanently protected and maintained in natural condition, so they may serve as experimental research controls and monitoring sites for the particular ecosystem they represent and used for education.

There are three existing research natural areas on the Santa Catalina Ranger District: Butterfly Peak, and Santa Catalina Research Natural Areas. In the 1986 plan, it was proposed that the Santa Catalina Research Natural Area would be reduced from 4,040 acres to 634 acres, but this reduced area was never established. The revised plan proposes one new research natural area—Finger Rock Canyon—which falls almost entirely within designated wilderness, but this has not yet been established.

Desired Conditions for Special Areas

All special areas are characterized by generally unmodified environments in which unique natural features are preserved. Each special area provides an example of one or more unique features within the Coronado National Forest. Scenic conditions are natural, unaltered, and wholly intact. Landscape character and sense of place are evident at the highest possible level. Research and monitoring activities do not disturb archaeological sites.

Research natural areas have excellent examples of the ecological features for which they were designated, with little evidence of human activity or disturbance. Visitor access and use occurs at environmentally acceptable levels to maintain the research values of the research natural area. Special use permits within these areas are inappropriate unless they are related to research for which the area is designated. Fire management mimics natural fire processes and is compatible with ongoing research.

Botanical areas protect the plants and plant communities for which they are designated. Plants and plant communities within these areas are resilient and are not negatively impacted by human activities. Non-motorized recreation is allowed on a limited basis on designated trails to protect soil conditions and hydrologic flow. New trails are discouraged. Zoological areas protect the unique wildlife and associated habitat for which they are designated. These areas contain unique or significant animals, animal groups, or animal communities, habitat, location, life history, ecology, environment, rarity, or other features.

Arizona National Scenic Trail

Desired Conditions

The Arizona National Scenic Trail provides both short and long distance non-motorized recreation opportunities in mainly remote and primitive settings representative of the dramatic natural landscapes and varied vegetation of Arizona. Along most of the trail, infrastructure and facilities are few and are constructed in such a way as to be compatible with the scenic, natural, historic, and cultural qualities for which the trail was established. In remote areas, the sights and sounds of roads, motorized trails, utility corridors, and other facilities are rarely encountered. Near towns and developed recreation facilities, the Arizona Trail may become a more accessible and highly developed route with access to amenities via connector trails. Recreation and other activities on or adjacent to the Arizona Trail do not negatively impact cultural and natural resources, scenic integrity, or the non-motorized recreation experience. User conflicts are infrequent. Signage, while unobtrusive, is sufficient to help long-distance travelers find nearby developed sites, trailheads, recreation facilities, and drinking water sources. Trailheads are conveniently placed and, where equestrian use is common, sufficient parking space for vehicles pulling trailers exists.

Guidelines

- 1. Management actions within ½ mile on each side of the Arizona National Scenic Trail planning right-of-way should not result in recreation setting changes from less to more developed unless for the purpose of constructing or improving trail access or trail related facilities.
- 2. Permitted recreation special use authorizations should be managed to protect the desired recreation setting for a non-motorized trail.
- 3. New road or motorized trail construction across or adjacent to the Arizona National Scenic Trail should be avoided unless needed for resource protection or to meet statutory requirements, such as mining law or laws to protect public health and safety.
- 4. Placement of new utility corridors and communication facilities should be avoided by choosing alternate locations or co-located with existing utility corridors and facilities.
- 5. Utility lines should be buried when feasible to mitigate visual impacts.
- 6. Forest health projects should be managed to minimize long-term visual impacts within and adjacent to the Arizona National Scenic Trail corridor.
- 7. Fire on or in the foreground of the Arizona National Scenic Trail should be managed using minimum impact suppression tactics, or other tactics appropriate for the protection of values and resources for which the trail was designated.
- 8. Maintain the trail to keep it in good condition, with no major erosion or drainage issues, and stewardship of the AZNST and facilities is shared by managing agencies, the Arizona Trail Association, and other partners.
- 9. Trailheads are conveniently located and have suitable access. Where equestrian access is needed, sufficient parking space for vehicles pulling trailers is provided.
- 10. Where the AZNST coincides with wilderness, the management of the AZNST and its associated uses must be compatible with wilderness management.

THE PLANNING TEAM

Name	Title			
Adam Milnor	Forest Recreation, Heritage, Lands and Recreation Staff Officer			
Amber Wong	Forest Dispersed Recreation Project Lead			
Mena Showman	District Recreation Staff Officer, Retired			
Jake Baechle	District Developed & Dispersed Recreation Program Manager			
Gregg Sasek	Former District Trails & Wilderness Manager			
Lauren Atkinson	Assistant Forest Recreation Staff Officer			
Brandon Hollingshead	Assistant Forest Recreation Staff Officer, Acting			
Emily Reynolds	NEPA Planner			
Steve Mantani	Forest GIS Coordinator			
Dave Mehalic	Forest Archeologist			
Brian Halstead	Assistant Forest Archeologist			
Neil Dutt	District Wildlife Biologist			



Samaniego Trail