



USDA Forest Service San Bernardino National Forest

San Bernardino Association of Governments

Lytle Creek Canyon Recreation Management Plan

Lytle Creek, CA

Figure 1: Trail to Bonita Falls

January 2020

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Introduction

The San Bernardino National Forest, Front Country Ranger District is developing the “Lytle Creek Canyon Recreation Area Management Plan” to provide strategic direction and guidance to improve recreation opportunities within the Lytle Creek Recreation Area and to protect the natural and cultural resources of the canyon. The plan provides a framework for informed decision making, while guiding resource management, practices, uses, and projects.

This area receives extreme recreation use, especially during the summer months and holiday weekends. This results in user conflict, excessive trash, graffiti, and other activities that impact the health of the watershed and other natural resources. The impacts also create frustrations with local residents due to trash, crowds, and traffic. The existing facilities are inadequate to educate and service the recreating public in this area.

The project area includes forest service lands in Lytle Creek Canyon accessed by the Lytle Creek Road north of the Interstate 15, Sierra Avenue Exit (**Error! Reference source not found.**). The recreation corridor consists of multiple developed recreation areas including the Lytle Creek Ranger Station, featuring the Chaparral Neighborhoods Native Plant Garden and Nature Trail, Intake/Miller Narrows, Hidden Acres, South Fork, Lower Middle Fork, Middle Fork Trailhead, Applewhite Picnic Area, and Applewhite Campground. Additional dispersed recreation areas are available and considered in this plan including the Information Station (currently a pullout on Lytle Creek road with San Bernardino National Forest sign), Long Bridge, the Alders, Penstock, Hidden Acres Overflow, Middle Fork Road, and Upper Middle Fork.

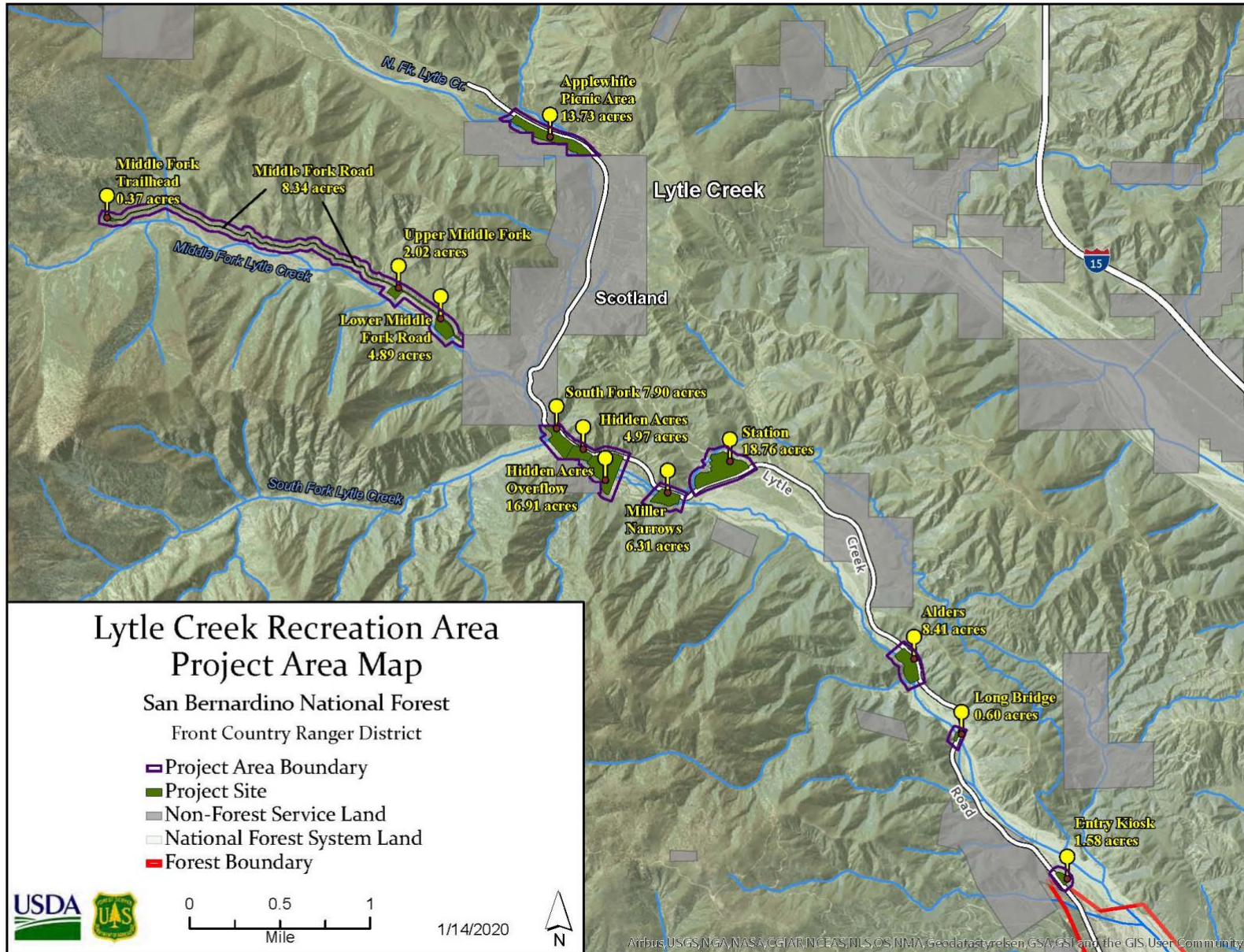
The desired future conditions for recreation within the Lytle Creek Canyon Recreation Area are to develop recreation sites that are pleasing to visitors, facilitate improved visitor access, meet the existing and anticipated uses, and provide interpretive and educational information about resource protection and recreational opportunities. The standards, guidelines and management approaches outlined in this plan will guide management direction and allow the USFS and partners to manage to the desired conditions for Lytle Creek Canyon.

The management plan is adaptive in that it can be amended to update management direction based on new knowledge and information. It is strategic in nature and does not attempt to prescribe detailed management direction to cover every possible situation. While all components necessary for protection of the natural and cultural resources of the canyon are included, the management plan also provides flexibility needed to respond to uncertain or unknown future events and conditions such as fires, floods, climate change, changing economies, and social changes that may be important to consider at the time future decisions are made.

The overall goal of the management plan is to provide recreation facilities that are sustainable and meet the needs of current and future recreation users. Through improved recreation facilities, bolster the ability of the areas’ natural resources to be more resilient to impacts from the recreating public and climate change. The plan will guide management actions to maintain the area’s identified desired conditions by meeting the following guiding principles:

- I. Improve the variety, quality and quantity of sustainable recreation opportunities in the Lytle Creek Canyon Recreation Area.

- II. Improve public communication, information, education, and engagement.
- III. Maintain, protect and enhance the natural resources.
- IV. Improve public health and safety



Background

Lytle Creek lies at the eastern-most extension of the San Gabriel Mountains, just east of the San Gabriel Mountains National Monument and the Cucamonga Wilderness Area. The area is highly dissected by deep canyons, steep slopes, cliffs, and narrow ridges. Steep, chaparral-covered hillsides with perennial and intermittent streams and fragmented riparian vegetation, coastal sage scrub, scattered groves of large sugar pine and bigcone Douglas-fir provide important wildlife habitat. The North, Middle, and South Forks of Lytle Creek are the dominant physical features, and have been popular recreation destinations for many generations of local residents from the cities of San Bernardino, Rialto, Fontana, and Colton.



Figure 3: Recreation along the Middle Fork of Lytle Creek

The Lytle Creek area offers popular year-round recreation opportunities for urban families and the area's ethnically diverse population dominated by Hispanic visitors. Family units share traditional, cultural values within the cool confines of the shaded streams and refreshing water during hot summer days. Water-based recreation is popular here during the warmer months, with water play, fishing, and picnicking concentrated mainly along the canyon bottoms of the Middle and North Forks of Lytle Creek.

Unlawful activities, such as trash dumping and property vandalism are reoccurring difficulties. Other unlawful activities, such as marijuana cultivation, methamphetamine lab dumps, and abandonment of stolen vehicles are increasing as areas adjacent to the national forest are being developed (USDA Forest Service 2005).



Figure 4: Graffiti along Bonita Falls Trail and in the Lower Middle Fork recreation area

The main season of use is July through mid-September. The canyon typically receives the highest use levels on holidays and summer weekends, when there can be 1,300-1,400 vehicles in the canyon, based on local observations. The high traffic levels increase safety concerns and traffic congestion where vehicles are backing into oncoming traffic, and there is limited parking capacity along the shoulder of the narrow canyon road. The average daily vehicle count in the canyon was reported to be 2,200 vehicles based on a 2012 traffic count conducted by the California Highway Department. Over the past several years, during high use days, all available parking is filled and it has been necessary for Lytle Creek Road to be closed at the base of the canyon to maintain access for emergency vehicles. Ongoing coordination between local government agencies and the Forest Service is needed to determine appropriate criteria for road closures and to identify the parties responsible for implementing the closures. In 2018, the Forest, in coordination with San Bernardino County and the community of Lytle Creek made the decision to eliminate public parking on the right side of road, heading up canyon, to ensure adequate access and parking for fire and other emergency vehicles.

Planning Area

The planning area consists of approximately 95 acres of National Forest System land accessed by Lytle Creek Road and Middle Fork Road. The community of Lytle Creek, with a population of approximately 900 people, is located within the project area. There are several private businesses that provide recreational opportunities within the canyon, including, Mountain Lakes Resort, a members only RV camping club; Green Mountain Ranch, a wedding and special event venue; Bonita Ranch Campground, a special use permit campground located on National Forest

System Lands; and the Lytle Creek Firing Line, a concession operated shooting range on National Forest System Lands.

Recreation Corridor:

The recreation corridor consists of multiple developed and dispersed recreation sites with informal roadside parking, simple information signs, dumpsters, and portable toilets. The hike to Bonita Falls has become a main attraction in the Canyon. Other developed sites include a native plant garden with paved walkways and interpretive signs at the Front Country Ranger Station, the Applewhite picnic area that features paved parking, picnic tables, grills, potable water, restrooms and a host site, and the Applewhite campground with a total of 44 sites, restrooms and potable water. The Middle Fork Day Use Area and Middle Fork Trailhead is accessible via the Middle Fork Road, Forest Road 2N58. The trailhead provides access to the Cucamonga Wilderness on Forest system trail 6W01. Additional information about recreation sites along the recreation corridor are included in the Design Narrative (Appendix B. Lytle Creek Canyon Recreation Area Design Narrative).



Figure 6: Bonita Falls



Figure 5: View of Trail from Middle Fork Trailhead

Management Plan Organization, Content, and Terminology

This plan is comprised of new management direction for Lytle Creek Canyon, as well as existing direction from the San Bernardino National Forest Land and Resource Management Plan (USDA Forest Service, 2005). The management direction for the canyon consists of four elements:

Desired conditions are the specific social, economic, and ecological characteristics of the plan area, toward which management of the land and resources is to be directed. They are concise statements that describe a condition desired to be achieved sometime in the future.

A *standard* is a mandatory constraint on project and activity decision-making, established to help achieve or maintain the desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements.

A *guideline* is a constraint on project and activity decision-making that allows for departure from its terms, so long as the purpose of the guideline is met. Guidelines are established to help achieve or maintain the desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements.

Management approaches are also listed for the area and are considered to be other plan content. Management approaches describe the principal strategies and program priorities the Forest and partners intend to use to carry out projects and activities under the management plan. Management approaches may discuss potential processes such as analysis, assessment, inventory, project planning or monitoring.

Indicators and thresholds are included to determine acceptable levels of impact from visitor use. The use of thresholds associated with monitoring originates from the fact that all visitor activities cause impact, thus some change in natural or cultural resource or experiential conditions is inevitable. While it may seem to make sense to focus purely on monitoring and managing the number the people, ultimately, it is the effects of visitor use we are concerned about, not the mere presence of people. Because of this reality, proactive management involves determining the acceptable level of change for the selected indicators. Thresholds serve this role by defining the point at which the effects of visitor use on desired resource and experiential conditions are anticipated to become enough of a concern that a different, corrective management response is required to keep conditions acceptable. In this role, thresholds serve as a stop sign or a “line in the sand”. Two critically important concepts for thresholds are that: (1) although defined as “minimally acceptable,” thresholds still represent acceptable conditions, not degraded or impaired conditions; and (2) establishing a threshold does not imply that nothing will be done prior to reaching the threshold. Management strategies should always strive to maintain conditions that are better than the thresholds. Refer to Appendix A. Key Indicators, Measures, Thresholds and Management Actions for thresholds and indicators for Lytle Creek Canyon.

Current Conditions and Management Issues

Internal scoping analysis identified the following resource concerns:

- The stream channel along the main recreation corridor transitions from steep and semi-confined to braided, with gentler slopes. Channel morphology has been impacted by a series of user created pools, or recreation dams, which act as grade controls and have severely impacted the slope of the channel. Levee creation, in addition to roads parallel to the channel, has limited the lateral movement of the channel. These recreation dams also act as barriers to aquatic organism passage, particularly at times of low water.



Figure 7: Recreational Dam – Middle Fork Lytle Creek

- Riparian area soils have been compacted by user-created trails and unmanaged recreation use, eliminating riparian vegetation regrowth. These barren soils, many along steep slopes, are erosive and due to their proximity to the channel, result in high sediment delivery on rills and gullies into Lytle Creek.
- Access trails and amenities need to be brought up to accessibility standards.
- Lytle Creek exhibits high water turbidity, particularly after weekends and holidays, which is attributed to high recreation use, but could also be contributed to by unknown in-channel work.

- Observed networks of toilet paper piles adjacent to stream channels indicate that stream quality is being affected by the introduction of human fecal matter, particularly at times of high water when creek-adjacent areas of the flood plain used as toilets are scoured.
- Sanitation facilities are inadequate to meet current recreation use levels, resulting in excessive amounts of litter at high use sites.
- At each site, there is a lack of clear multi-lingual signage for way-finding and resource protection.
- Graffiti on signs, constructed features, trees, and rocks is ubiquitous throughout Lytle Creek Recreation Area, particularly at sites with limited or obstructed visibility from nearby roads.
- There is inadequate parking to accommodate the current visitor demand, especially during holidays and summer weekends.
- Vehicular traffic along the narrow canyon road, and roadside parking pose safety concerns and conflict between visitors and local residents.

Existing Management Direction

Forest Service Lands

The San Bernardino National Forest Land and Resource Management Plan (Forest Plan, 2005) management direction for the plan area applies only to National Forest System lands and does not apply to other federal, state, or private lands.

A majority of the developed and dispersed recreation sites within the Lytle Creek recreation area are within the Developed Area Interface land use zone. This zone has a higher level of human use and infrastructure than in other zones. The Forest Service classifies recreation opportunities using the Recreation Opportunity Spectrum (ROS). The ROS objectives of this zone are Rural and Roaded Natural. The Middle Fork Trailhead is located within the Back Country land use zone. This zone includes areas of the national forest that are generally undeveloped with few roads. The characteristic ROS objectives are Semi-Primitive Motorized with limited areas of Roaded Natural (2005 Forest Plan Part 2, page 6).

The Forest Plan includes the following strategic goal:

Goal 3.1: Manage recreation in a natural setting – provide for public use and natural resource protection (2005 Forest Plan, Part 1, page 34).

This is in alignment with the National Strategic Plan Goal 3: Provide outdoor recreation opportunities. Outcome: Provide high-quality outdoor recreational opportunities on forests and

grasslands, while sustaining natural resources, to help meet the nation's recreation demands. (2005 Forest Plan, Part 1, page 54).

The Program Strategies and Tactics for recreation include (2005 Forest Plan, Part 2, page 142-143):

- REC 1 – Recreation Opportunity
- REC 2 – Sustainable Use and Environmental Design
- REC 3 – Recreation Participation
- REC 4 – Conservation Education
- REC 5 – Recreation Special Use Authorizations

The Forest Plan divided NFS lands under geographic areas called “Places”. The project area is part of the Lytle Creek Place. The Lytle Creek area is identified as a year round recreation area for urban families.

The following desired conditions apply to this Place:

Desired Condition: Lytle Creek Place is maintained as a natural appearing landscape that functions as a location for family-oriented, day-use and dispersed and developed recreation. The valued landscape attributes to be preserved over time are scattered riparian-area vegetation, the presence of mature stands of mixed conifer and bigcone Douglas-fir, the presence of sugar pines, coastal sage scrub, and an age class mosaic in chaparral. Chaparral and forested areas are managed to provide fire protection for adjacent communities, recreation areas, and wildlife habitat. Habitat conditions for threatened, endangered and sensitive species are improving over time. Heritage properties and Native American gathering areas are identified and protected. Access to the Cucamonga Wilderness is maintained. No new winter sports areas or expansion of existing winter sports areas are developed. Property lines are located and managed. Law enforcement presence in high-use areas minimizes unauthorized activities and conflicts.

Program Emphasis: Community protection from wildland fire in Lytle Creek is of the highest priority. It will be emphasized through public education, fire prevention, and fuels management in cooperation with city, county and state agencies. Community protection projects identified in the Cucamonga Wilderness may be implemented to reduce the risk of wildland fire to communities.

The scenic focus will be on maintaining a naturally appearing mosaic of chaparral, and mixed conifer forest, montane forest, bigcone Douglas-fir, and riparian vegetation. Habitats for federally listed and Region 5 sensitive species within the Place will be managed to promote species conservation and recovery, with maintenance of water flows and processes being a high priority. Monitoring sheep and sheep habitat response to the Grand Prix Fire of 2003, and working to identify and reduce recreation conflicts with sheep will be a priority. Prescribed fire will be used to develop more natural conditions in bighorn sheep range. Management of the coastal sage scrub community will be emphasized as will removal of invasive non-native species.

Important heritage properties will be recorded. We will work with Native Americans to identify traditional cultural properties and to protect gathering areas.

Management will focus on providing quality recreation opportunities, balanced with riparian resource protection and enhancement, for the culturally diverse visitors who come to this Place.

Existing recreation capacity control within Lytle Creek Canyon will continue and Multilingual Conservation Education Programs will be emphasized. An emphasis will be placed on retaining the primitive nature of the South Fork of Lytle Creek. The Lytle Creek Firing Line will continue to be managed under permit for recreational target shooting and can be used as a model for this activity in other locations.

The Lytle Creek Federal Energy Regulatory Commission (FERC) project will be maintained and monitored for TES species habitat effects and needed mitigations. A Watershed Conservancy partnership will be explored for implementation.

A recreation strategy for the Middle Fork of Lytle Creek and the Cucamonga Wilderness will be created. New recreation opportunities to create non-motorized, short, easy-to-moderate, day loop trails originating from the campground and picnic area will be explored. The Pacific Crest National Scenic Trail remains a priority for management and maintenance. Management of recreation residence special-use permit compliance will be improved and conflicts between permit holders and riparian values will be resolved. Accurate national forest boundaries will be reestablished and maintained and encroachment will be reduced. Forest Service field personnel and law enforcement staff will be highly visible. There will be a continued emphasis on preventing unauthorized off-route vehicle travel and unauthorized off-trail use by mountain bikes.

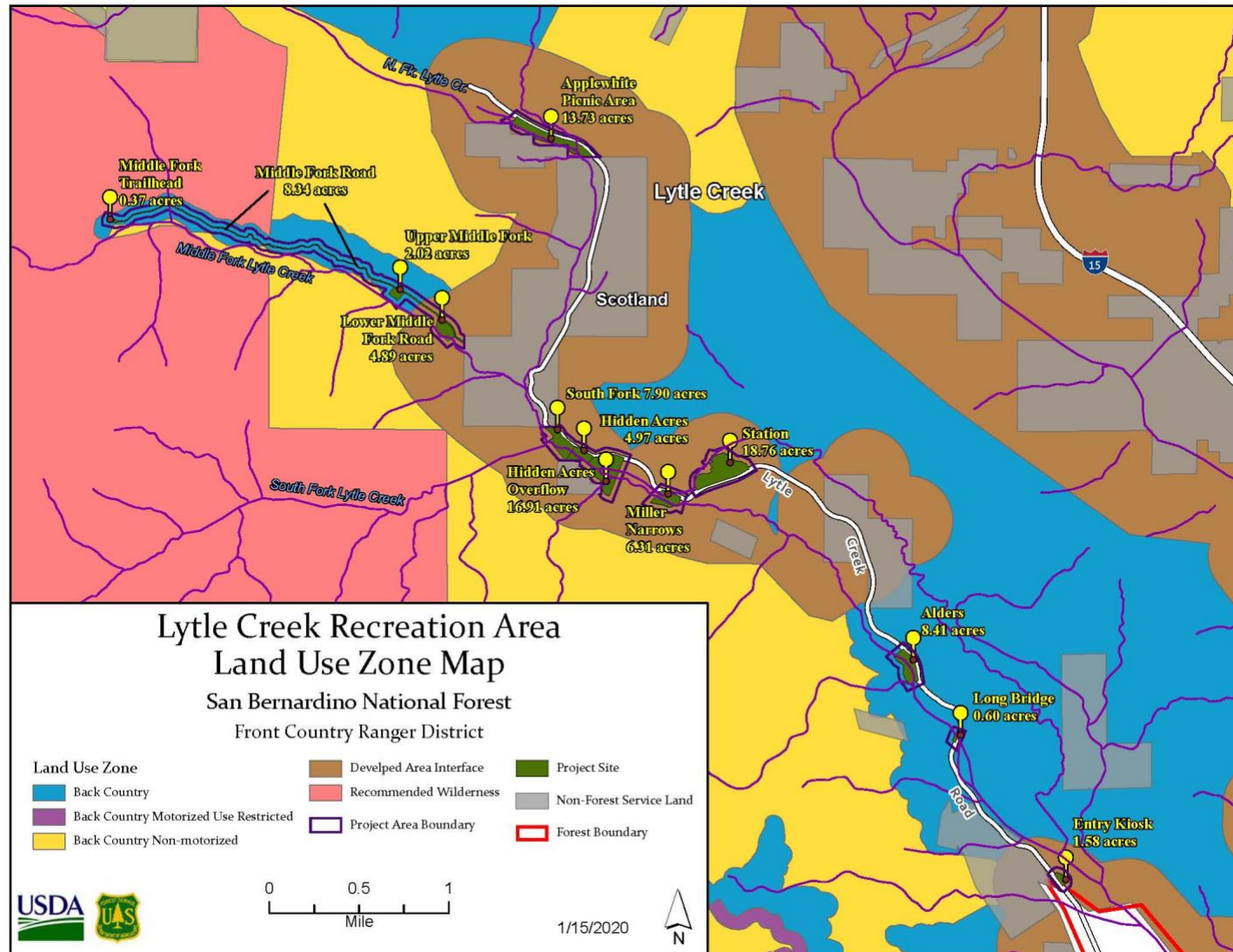


Figure 8: Lytle Creek Recreation Area Land Use Zone Map

Recreation Opportunity Spectrum

The Forest Service uses the Recreation Opportunity Spectrum (ROS) to classify and describe a range of recreation opportunities available. The recreational settings are described on a continuum ranging from Primitive to Urban (USDA Forest Service 1990).

The ROS is a system of classifications based on a range of recreation settings and probable activities that contribute toward the goal of providing a variety of outdoor recreation opportunities. A ROS setting is defined as the combination of physical, biological, social, and managerial conditions that give value to a place. By combining variations in these conditions it is possible to provide a diversity of recreational settings for visitors to enjoy.

The Forest Plan designates a majority of the dispersed recreation sites along Lytle Creek Canyon as Roaded Natural (RN), the Applewhite picnic area and campground are within the Rural ROS class. The Middle Fork Day Use area is designated as Semi-Primitive Motorized, while the Middle Fork Trailhead/Trail is within the Primitive ROS class.

Relationship to other federal land management or regulatory agencies

Interagency cooperation is necessary to manage the recreation area. Cooperation, coordination, and inter agency planning needs to be ongoing to achieve future management objectives (especially related to education, communication, enforcement, etc.) and to ensure consistency in management and enforcement. The Forest Service is also required to consult with the U.S. Fish and Wildlife Service and National Marine Fisheries concerning how forest management activities may affect threatened and endangered species.

Relationship with private landowners

Ongoing coordination with private landowners, and special recreation permit holders within the Lytle Creek recreation area will be critical to the successful implementation of this plan and management of the area.

Lytle Creek Canyon Management Direction

The overall goal of this proposed management plan is to provide recreation facilities that are sustainable and meet the needs of current and future recreation users. Through improved recreation facilities, bolster the ability of the areas' natural resources to be more resilient to impacts from the recreating public and climate change. The plan will guide management actions to maintain the area's identified desired conditions by meeting the following guiding principles:

- I. Improve the variety, quality and quantity of sustainable recreation opportunities in the Lytle Creek Canyon Recreation Area.
- II. Improve public communication, information, education, and engagement.
- III. Maintain, protect and enhance the natural resources.
- IV. Improve public health and safety

The following section describes the desired condition, and proposed management actions for each guiding principle.

I. Improve the variety, quality and quantity of sustainable recreation opportunities in the Lytle Creek Canyon Recreation Area.

Desired Conditions

Proactively managing the canyon for responsible, sustainable recreation provides many opportunities, including the following:

- *Responsible public enjoyment*
- *Protect natural resources-habitat and biodiversity*
- *Protect water quality and water supply*
- *Reduce graffiti and trash*
- *Protect local communities from visitor impacts*
- *Opportunity to educate people on stewardship, value and volunteerism*

Provide recreation facilities that meet the needs of current and future recreation users. Through improved recreation facilities, bolster the ability of the areas' natural resources to be more resilient to impacts from the recreating public and climate change.

Lytle Creek Canyon will be a place for safe, responsible and environmentally sustainable recreation while protecting the watershed and other natural resources.

Recreation opportunities, including products, services, and the built environment, support the needs and expectations of the diverse population.

While risk can never be completely eliminated due to environmental conditions, the culture will change so that families, youth, and local residents can enjoy the canyon with the expectation of safety and security. The quality of life for local residents and visitors will be preserved.

Standards

Each developed recreation site within the recreation corridor will require the Adventure Pass and fully meet the requirements of the Recreation Enhancement Act for standard amenity fee sites that provide designated developed parking, picnic tables, toilet facilities, security, interpretive signs and trash receptacles.

The Lytle Creek Recreation Area facilities will be designed to maximize accessibility using universal design principles to comply with the USDA Forest Service Outdoor Recreation Accessibility Guidelines (FSORAG) and Architectural Barriers Act Accessibility Standards (ABAAS).

Guidelines

Increase management capacity through staffing, volunteer hosts, and partnerships to ensure adequate staffing is available to allow all day-use sites to be open seven days a week during the summer.

Management Approach

Evaluate the sustainable recreation carrying capacity, as needed, in high use areas, following the Interagency Visitor Use Management Framework.

Consider opportunities for non-motorized connecting trails throughout the canyon.

II. Improve public communication, information, education, and engagement.

Desired Condition

The Forest Service provides visitors with culturally relevant and easily accessible information to guide and enrich their experience.

The road and trail system includes easy-to-interpret signage that includes standard symbols recognized internationally. Up-to-date maps are available and in different media formats that clearly identify roads and trails, recreation opportunities, parking, and alternative transportation options that are understood by visitors who may not speak English.

Youth are engaged in outdoor recreation and conservation education opportunities, fostering the next generation of public land stewards.

Standards

All appropriate visitor regulatory, safety, educational and informational signing use universal recreation symbols and public information and education is multilingual (English/Spanish) to ensure communication is intentional, meets information needs, and conveys a message of public access for all.

Guidelines

Develop education and interpretation around the following themes:

- Watershed and Water Quality - making the connection between people and the watershed.
- Restoration – erosion, vegetation
- Fire – history and safety
- History - Native American, mining. early settlers, points of interest
- Plants & Animals – bears, bighorn sheep, trout, alders
- Geology – San Andreas Fault, transverse range

Develop a targeted public outreach campaign with Forest Service personnel and partners to specifically educate the public on the negative impacts of recreation dams, litter, and human waste to natural resources.

Management Approach

Emphasis would be placed on providing high-quality visitor information and interpretation, outreach to youth and minority populations, and engagement with partners and gateway communities. Public communication, information, education, and engagement efforts would seek to both mitigate impacts from existing use patterns, and maximize benefits by providing accurate information to those seeking particular recreational opportunities. Fostering a connection between people and the land would, in turn, increase understanding of the connection between visitor actions and resource impacts, and lead to increased compliance with area rules and reduce recreation related resource impacts. Information and interpretive materials would be provide in a variety of formats, such as:

- Interpretive kiosks at recreation sites
- Printed Recreation Opportunity Guides available at Forest Service Offices and local businesses
- Online websites and social media sites
- Interpretive presentations at community events

Interpretation materials capture the rich cultural history that shaped the area, including Native Americans, Spanish missionaries and colonialists, Mexican rancheros, Euro-Americans, Asian settlers, Mormon settlers, and prospectors.

Public outreach and education uses contemporary social media, new technology, and culturally relevant media outlets. Engage schools, communities, universities, museums, and other educational institutions invested in elevating public awareness of the environment, conservation, and outdoor recreation.

Conduct outreach to find community partners and proactively use social media to help influence visitors so that they become more environmentally aware and responsible when they visit the canyon.

Consider an artist in residence program, or holding contests for local artists to paint murals on dumpsters and vault toilets as a means to engage local communities and deter graffiti (see example from San Gabriel Mountains National Monument).



Figure 9: Painted Dumpster in San Gabriel Canyon National Monument

Expand the network of partnerships to help meet the desired conditions and improve interpretive materials and educational opportunities. Seek partnerships at both local and regional scales. Maintain and expand existing partnerships such as:

- Lytle Creek Community Center
- Toyota/Home Depot/REI
- Artist in Residence
- Volunteers – adopt-a-site/adopt-a-road
- Universities – San Bernardino University, others

III. Maintain, protect and enhance the natural resources.

Desired Condition

Quality recreation opportunities are balanced with riparian resource protection and enhancement.

Habitat conditions are stable or improving over time as indicated by the status of focal species.

Cultural resources and historic properties are protected and preserved for cultural and scientific value and public benefit.

Public information is provided that leads to an increased understanding of the connection between visitor actions and resource impacts, and in turn an increased compliance with area rules and reduced occurrences of recreation related impacts.

Standards

No additional unauthorized building of dams/interference with the free flow of water shall be allowed.

Sanitation facilities including vault toilets and garbage dumpsters are adequate to accommodate use levels and protect natural resources.

Guidelines

Site design will include designated trails to access Lytle Creek, user created trails within the riparian area should be blocked or eliminated as soon as possible.

To the extent practicable, new facilities will be located away from the immediate vicinity of surface waters, floodplains and other sensitive areas, and will avoid unstable slopes and soils.

Management Approach

Implement design features so that the parking areas minimize damage to resources, prevent increased erosion, and allow restoration of existing areas of erosion. Consider site closure, as needed for resource protection.

Incorporate interpretation and information into site design and restoration projects to enhance public understanding of potential impacts and appropriate recreational activities.

IV. Improve public health and safety

Desired Conditions

Parking at recreation sites along the canyon is designed to Forest Service standards, safe, and adequate to accommodate visitors to the Canyon during peak seasons in a manner that minimizes adverse impacts to resources and private lands along the Canyon.

Lytle Creek Canyon is accessible through alternative transportation and public transportation options in coordination with other agencies and gateway communities to provide greater access for those who do not use personal vehicles, and for the benefit of reducing vehicle congestion, addressing parking capacity issues, and improving public safety.

The road and trail system includes easy-to-interpret signage that includes standard symbols recognized internationally. Up-to-date maps are available and in different media formats that clearly identify roads and trails, recreation opportunities, parking, and alternative transportation options that are understood by visitors who may not speak English.

A commitment is made to ensure adequate law enforcement coverage, especially on weekends and holidays by exploring partnership opportunities and developing agreements with California Highway Patrol, San Bernardino County Sheriff, and other relevant agencies as needed.

Standards

Maintain well-designed, safe parking at developed recreation sites on the left side of the road (heading up the canyon from Lytle Creek Ranger Station), and the right side of the road shall be used for emergency vehicle parking and access.

Establish Trail Management Objectives and maintain the FS trail to Bonita Falls to standard.

Animal proof garbage dumpsters will be provided at recreation sites.

An adequate number of vault toilets and garbage dumpsters will be provided at each recreation site to accommodate the designed site capacity to improve public health and safety, and protect water quality.

Parking, pathways, and site amenities meet accessibility standards.

Guidelines

All existing and new graffiti should be covered over and/or sandblasted as soon as possible.

Explore partnerships with local organizations and concerned citizens to leverage a volunteer workforce (consider including community service or correctional work programs) to assist with prompt graffiti removal.

Explore innovative ways to design graffiti-resistant or graffiti accommodating site features, such as:

- Protective graffiti-resistant coating
- Metal signs with the wording stamped through them like a stencil, so graffiti won't cover up the sign's message.
- Clear protective peel-off sign covers that can be easily replaced

Management Approach

Coordinate with local, county, and State governments on transportation planning.

Consider alternative transportation and public transportation opportunities, such as shuttles from a central parking facility, sites appropriate for bus access at key recreation areas, and linkage opportunities with existing public transportation networks.

Manage high visitor use and traffic congestion using the following strategies:

- Consider using temporary one-way traffic flows and closures during peak volume periods, incorporating adequate signage, guidance, and traffic controls consistent with established standards.

- Evaluate the use of parking capacity limits.
- Enforce parking capacity limits and locations established by the appropriate governing authority.
- Prevent or limit parking in riparian areas to reduce resource damage.
- Explore opportunities to increase or better distribute parking capacity in key areas, including providing access by shuttles or other forms of public transportation. Parking locations should be clearly identified and delineated.

Coordinate interagency law enforcement efforts through partnerships and agreements to increase uniformed presence and night patrol, as needed.

Implement saturation multi-jurisdiction law enforcement sweeps during heavy use periods. Cite and/or arrest offenders as needed.

Visitor Capacity

As visitor use and demand for recreational opportunities within Lytle Creek Canyon continues to increase, there may be a need to address visitor capacity within in the Canyon as a whole, or at specific high-use areas. This type of analysis would be guided by the Interagency Visitor Use Management Framework. An official visitor capacity analysis has not been conducted for this plan. The following information provides an overview based on the physical parking capacity proposed for Forest Service recreation sites in the design narrative (Appendix B).

Social capacity is the level of use beyond which social impacts such as crowding and conflict exceed desired conditions. Environmental or resource capacity occurs when biophysical factors cannot withstand a level of use, thereby creating unacceptable changes to resources such as soils and vegetation. These biophysical and social desired conditions are judgments that managers must make, with appropriate input from stakeholders.

This analysis considered available data, visitor use patterns, known resource and social issues, and desired conditions.

The limiting factor to visitor capacity in Lytle Creek Canyon is the physical ability to provide safe parking at the recreation sites along the canyon. Development of the maximum amount of parking that is safe and meets Forest Service design standards will guide site capacity and in-turn inform the appropriate number of vault toilets and garbage dumpsters to accommodate the use levels while maintaining sanitary conditions.

The need to provide safe parking that meets Forest Service standards and to eliminate dangerous user created parking areas may potentially reduce the total visitor capacity in some areas, based on available parking sites. There is an opportunity to ease parking congestion and safety concerns by establishing “drop off” locations near popular creek destination points, with larger parking areas provided where terrain allows. This approach would take some of the pressure off the demand for parking along the narrow canyon road. Future implementation of a shuttle system from a central parking facility is another means to accommodate the high demand for visitor use

within the canyon while also reducing the number of vehicles in the canyon and the associated parking congestion and safety concerns.

Due to the high demand for recreational use of the canyon, especially on summer weekends and Holidays, there is a need to clarify and establish the roles and responsibilities of each involved agency. A plan is needed to monitor site conditions and implement road closures, if deemed necessary to maintain access for emergency vehicles. There is a need to establish protocols to efficiently and consistently convey road closure information to the public.

The plan will identify roles and responsibilities including, but not limited to the following agencies:

- Forest Service/Law Enforcement – Lytle Creek Ranger Station
- San Bernardino County Sherriff
- California Highway Patrol
- Volunteer community members

The plan will identify the need for formal agreements or contracts to be established.

The plan will identify:

- Site monitoring and trigger points for action (for example, if Applewhite picnic area is $\frac{3}{4}$ full by a certain time, actions to initiate road closure procedures are taken)
- Communication plan – between agencies and with the public

Table 1, below, includes the designed parking capacity for sites included in the Design Narrative, Appendix B. The National Visitor Use Monitoring data for the San Bernardino National Forest indicates that the average group size for visitors to the forest is 2.7 people. With the maximum total parking option (264 vehicles), and average group size, the visitor capacity for developed day-use Forest Service recreation sites is approximately: 713 people at one time (PAOT). This does not include the informal day use parking available at undeveloped day-use sites, such as Long Bridge, parking available at the Lytle Creek Ranger Station, or Applewhite campground.

Table 1: Designed Vehicle Capacity for Day-Use Recreation within Lytle Creek Canyon

Recreation Site	Planned Capacity - Vehicles
Information Site	4
The Alders	17
Miller Narrows	Option 1: 0; Option 2: 9
Hidden Acres Overflow	50
Hidden Acres	4 and turn-around/drop off
South Fork	Option 1: 28; Option 2: 8
Lower Middle Fork	20
Upper Middle Fork	25
Middle Fork Trailhead	11
Applewhite Picnic Site	96
Maximum Total Parking	264
Minimum Total Parking	235

Implementation and Monitoring

The rate of implementation of this plan will be determined by the amount of funding available and the capacity of our organization, our volunteers, and our partners. The following guidelines should be used to help set priorities for allocation of funding and staff time:

- 1) Public safety
- 2) Protection of the natural and cultural resources within the canyon.
- 3) Activities that implement the decisions of this plan which receive outside or cooperative funding, have partners, or advance public stewardship would likely be given a higher priority.

Monitoring is accomplished by selecting indicators that are used to track trends in resource and experiential conditions. Established thresholds clearly define when conditions are becoming unacceptable for the selected indicators, thus alerting managers that a change in management action(s) is required (Visitor Use Management Monitoring Guidebook, page 1). Key Indicators, Measures, Thresholds, and Management Actions for Lytle Creek Canyon are included in Appendix A.

Management action in response to monitoring will be implemented in the order (education; perimeter control; management presence; redirection of use – if appropriate) described in Appendix D - Adaptive Mitigation for Recreation Uses (2005 Forest Plan Part 3), unless analysis of the conflict clearly indicates that a stronger measure is immediately necessary.

Appendix A. Key Indicators, Measures, Thresholds and Management Actions

Key Indicator	Measure	Threshold	Sampling Procedure and Frequency	Possible Management Actions Considered if Conditions are Not Met
Free flow of Lytle Creek	No obstruction to free-flow	No unauthorized new dams, diversions, straightening, riprapping or obstructions	Annual observation to ensure no obstructions to free-flow	Removal of obstruction; education of visitors
Water quality meets standards	Standards are set by California's DEQ in compliance with the Clean Water Act	Standards are set by California's DEQ in compliance with the Clean Water Act	Standards are set by California's DEQ in compliance with the Clean Water Act	Identify possible sources of pollutants Implement corrective actions to reduce pollutants to levels consistent with water quality standards
Graffiti	# of new instances	No new after site development	Weekly	Remove using latest technology Cameras Citations
Vandalism	# of new instances	No new	Weekly	Repair immediately Cameras in place Citations Barriers

Key Indicator	Measure	Threshold	Sampling Procedure and Frequency	Possible Management Actions Considered if Conditions are Not Met
Trash	# of pounds of trash exceeding dumpster capacity collected monthly	>5	Monthly	Education Additional dumpster facilities Citations
Social trails	# of new social trails within riparian areas	No new social trails once creek access routes are established	Yearly	Education/Interpretation Close/vegetate
Parking Availability	Number of visitor parking violations during summer season	No more than existing conditions, downward trend	Seasonal	Encourage use of drop-off/turn around areas; Consider use of shuttle system

Appendix B. Lytle Creek Canyon Recreation Area Design Narrative

References

Interagency Visitor Use Management Council. Monitoring Guidebook. Evaluating Effectiveness of Visitor Use Management. Edition One. June 2019.

United States Department of Agriculture Forest Service Pacific Southwest Region R5-MB-075 September 2005 Land Management Plan Part 1 Southern California National Forests Vision Angeles National Forest, Cleveland National Forest, Los Padres National Forest, San Bernardino National Forest

United States Department of Agriculture Forest Service Pacific Southwest Region R5-MB-079 September 2005 Land Management Plan Part 2 San Bernardino National Forest Strategy

United States Department of Agriculture Forest Service Pacific Southwest Region R5-MB-080 September 2005 Land Management Plan Part 3 Design Criteria for the Southern California National Forests Angeles National Forest Cleveland National Forest Los Padres National Forest San Bernardino National Forest

United States Department of Agriculture, ROS Primer and Field Guide, 1990.