Trail Assessment Report - DRAFT

Canyon Trail Placerita Canyon Natural Area

Prepared for Los Angeles County Department of Parks and Recreation

Prepared by
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June 26, 2012

A. Introduction

This report was prepared in response to a request to allow bicycle use on the Canyon Trail in Placerita Canyon Natural Area. Placerita Canyon is a State Park unit and managed and operated by the County as a Natural Area under the guidance of an operating agreement with California State Parks (State Parks) and the County of Los Angeles Department of Parks and Recreation Natural Area Staff Handbook, 2000. The Natural Area Staff Handbook precludes the use of bicycles in Natural Areas, referring such use to designated and approved trails which are located primarily in Regional Parks.

State Parks allows bicycles on some of its trails but "...trails are not designed or intended to serve as active recreation facilities where nature appreciation may be secondary to athletic or skill challenge...trails are generally designed to accommodate a passive, nature-oriented type of shared trail use..."

Although mountain bikes have never been an allowed use on Canyon Trail, multi-use signage showing mountain bikes, equestrians, and hikers was mistakenly posted at the trailhead in 2007. This mistake resulted in Placerita Canyon Trail becoming a popular trail for mountain bikers. When the signage was corrected and this use was removed in 2011, numerous individuals signed a petition to open the trail to mountain biking. In response to this petition and the high level of interest in opening the trail for mountain bike use, the Los Angeles County Department of Parks and Recreation (County Parks) contracted with The Planning Center | DC&E to complete a Trail Use Change Survey modeled after the process used by California State Parks.

¹ Administrative Draft Trail Use Conflict Study California State Parks Road and Trail Change-in-Use Evaluation Process, prepared by Alta Planning + Design, October 10, 2011; page 1-3.

The Trail Use Change evaluation process provides an objective process for evaluating the current conditions of a trail and determining whether additional uses are appropriate. The process and survey forms used by the County are almost identical to that used by State Parks, although the County's survey forms have been modified slightly to reflect County standards and classification systems. The process consists of completion of detailed trail logs that document existing conditions and assess sustainability under current usage; completion of detailed action logs that recommend improvements necessary to create a sustainable trail for existing and/or additional uses; completion of the Trail Use Change Survey evaluation form; and recommendations reports. This process is designed to objectively evaluate change in use proposals according to the following seven criteria:

- ♦ Existing conditions
- ♦ Compatibility for multi-user trails
- Effects to trail circulation patterns within the Park
- ♦ Effects to trail user safety
- Effects to trail sustainability
- Effects or impacts to the Natural and Cultural Resources
- Effects or impacts to the facility maintenance and operational costs

State Parks' provided training for County Staff and The Planning Center | DC&E on use of the Trail Use Change process, using the Canyon Trail as an example. On February 15 and 16, 2012, State Parks provided training and assisted in the completion of a field review, initiation of trail logs and action logs, and initial evaluation using the Trail Use Change Survey. The Trail Use Change Survey was filled out by a review team consisting of the consultant team and County staff members that participated in the field review and/or are knowledgeable about current trail conditions. The review team included: Karl Knapp and Brad Michalk from State Parks; Lorrie Bradley, Stephen Copley, Dwight LaCroix, and Ralph Beltran from LA County; and Melissa Erikson, Isby Fleischmann, and Isabelle Minn from The Planning Center | DC&E. The Planning Center | DC&E conducted additional field work to complete the trail logs on March 5 and 6, 2012 and finalized the evaluation based on additional coordination with the review team.

The possible outcomes of the Trail Use Change process include allowing mountain bike use; allowing mountain bike use with conditions and/or improvements; allowing partial mountain bike use; allowing partial mountain bike use with conditions and/or improvements; not allowing mountain bike use; and potentially removing other uses and/or closing the trail.

B. Summary of Existing Trail Conditions

Canyon Trail, per trail signage is a 1.85 mile trail that connects from the Placerita Canyon Nature Center to the Walker Ranch Staging Area; 1.65 miles of trail were logged in the field. A picnic area, restrooms, and the trailheads for Los Pinetos Trail and the Waterfall Trail are located at this staging area. The trail generally follows Placerita Creek, with some segments utilizing an old road bed that has been severely narrowed from erosion. The western portion of the trail is generally in fairly good condition

with even grades, yet includes two in-creek crossings and is entrenched in many locations. In addition, a small section of the trail is located within the creek bed. The eastern portion of the trail includes steeper grades and more substantial erosion.

Baseline information

- Existing trail connections: Waterfall Trail, Los Pinetos Trail, Manzanita Trail, and Hillside Trail (all trailheads within Placerita Canyon Natural Area)
- ♦ Adjacent open space: Forest Service, Disney property
- ♦ Allowed uses: hiking, equestrian
- ◆ Level of Use: High use, including docent-led school groups from the Nature Center
- ◆ Parking: Parking is available at the Nature Center. The Walker Ranch Staging Area is currently closed to parking.
- ♦ Tread: Natural, 42 to 48 inches wide in most areas
- ◆ Special Status Species with ranges bisected by trail: Slender-horned spineflower (*Dodecahema leptoceras*), Palmer's grapplinghook (*Harpagonella palmeri*), California Orcutt grass (*Orcuttia californica*)²; Hammond's two-striped garter snake (*Thamnophis hammondii*), yellow warbler (*Setophaga petechia*), and spotted owl (*Strix occidentalis occidentalis*)³
- ◆ Sensitive communities bisected by trail: Southern Riparian Scrub and Southern Sycamore Alder Riparian Woodland⁴

C. Findings

This section summarizes findings and considerations of the evaluation based upon the existing conditions noted above. Additional information regarding existing trail conditions is provided in this section as it relates to considerations and findings.

◆ Potential Connectivity. There is not a route from the Nature Center to Los Pinetos Trail which currently allows mountain bikes. Los Pinetos Trail is located both within the Natural Area and within US Forest Service jurisdiction, where mountain biking is an allowable use. Los Pinetos connects to other Forest Service trails where mountain bikes are allowed. Currently, mountain bikers must park on an unimproved shoulder along Placerita Canyon Road outside of the Walker Ranch staging area (closed to vehicular traffic) or park at the Nature Center and ride along Placerita Canyon Road to the trailhead; Placerita Canyon Road is a two-lane road with no bike lanes and limited shoulders. Opening the Canyon Trail to mountain bikes would

² Based on review of CNDDB, April 2012

³ Based on Placerita Canyon Interpretive Master Plan, May 2010 prepared by The Acorn Group in collaboration with General Graphics Exhibits, page 10.

⁴ Based on review of CNDDB, April 2012

- allow mountain bikers to park at the Nature Center and connect to Los Pinetos and other mountain bike accessible trails with improved safety.
- Soil and Erosion. The trail bed is comprised entirely of natural tread. Natural soils are primarily sandy with a partial soil profile (64 percent of trail), with sections of sandy soil near the creek (9 percent) and rocky soil in the steeper sections to the east (24 percent). Based on the survey, 82 percent of the trail is mildly entrenched (typically less than 6") and it is estimated that there has been over 500 cubic yards of soil loss from the trail tread surface. The main factors in erosion appear to be sections that are too steep for the high level of use (eastern section of trail), and level areas in the Canyon where outslope cannot be maintained.
- ◆ Creek Crossings. The trail crosses directly through the creek bed in two locations and a small portion of the trail occurs within the creek bed itself.
- ◆ Sight distance. With brushing and proper maintenance, sight distances are acceptable in most locations. There are three areas for which pinch-points or similar features are recommended to improve site distances should mountain bikes become an allowable use.
- Passing Space. The tread width is 42 to 48 inches wide in most areas, and there is generally room to step off trail as needed to allow for passing or adequate site distance to see other users approaching narrow sections and employ common trail etiquette.
- Facilities and Maintenance. Increased use of the trail and the Nature Center from mountain bikes will put an additional burden on County Parks for maintenance needs and may require additional law enforcement patrols to ensure user compliance.

D. Potential Trail Modifications if Bicycle Use is Allowed

- Pinch Points. Pinch points will need to be established in three areas to slow speeds and accommodate for short sight distances. Pinch points, also known as choke points, trail anchors, or technical trail features, are established by strategically placing large objects such as rocks or logs to narrow a trail, requiring mountain bikers to slow down in order to navigate the objects. The objects should be offset from each other so as to appear narrow from a distance, yet continue to allow for adequate tread width.
- ◆ Walk Zone. A portion of the Canyon Trail closest to the nature center is used extensively by school groups. A walk zone should be considered to prevent conflicts between trail users and docent led school groups. This could be accomplished by placing step overs within the area used by the

school groups. The step overs will require cyclists to dismount to lift their bicycle over the step over.

In addition, it is recommended that additional signage be installed to warn trail users that the trail is heavily used by students and other docent-led groups.

E. Other Trail Modifications to Consider for Trail Sustainability for All Users

- ◆ Trail reconstruction. Basic trail reconstruction is recommended along much of the trail to remove berms and correct outslope. Material for reconstruction is generally available in the form of berms and slough areas.
- ◆ Turnpikes. The construction of turnpikes is recommended in areas for which trail reconstruction is not adequate to address entrenchment. These sections are generally located in the western portion of the trail where there is little to no side slope.
- ◆ Trail re-routes. Re-routes of the trail are recommended in three areas to improve sustainability and/or trail safety, and may be considered in several other areas in order to avoid turnpikes. Trail reroutes should be designed to avoid impacts to cultural resources and natural resources, including special status species and sensitive habitats.
- Reinforced Trail. A re-route should be considered for the long, steep section of trail that ascends from the creek towards the oil seep. However, if this is not possible due to cultural and natural resources and/or property boundaries, this section of the trail should be reinforced with rock rip rap or similar materials.
- Armored drainage crossings. Many drainages cross the trail and cause erosion. Armored drainage crossings should be constructed using rock rip rap at the location of these drainages.
- ◆ Creek Crossings. Currently, trail users are required to cross through the creek in two locations to continue on the trail. Two creek crossings should be constructed to allow trail users to use the trail without entering the creek. In addition, a small segment of the trail is located within the creek bed due to a rock face. A raised trail or puncheon should be constructed to raise the trail out of the creek bed.

F. Additional Considerations

County staff and The Planning Center | DC&E has utilized State Parks' Trail Use Change Process to assess the existing conditions of the Canyon Trail, review the trail's current condition and sustainability, determine if additional use is potentially viable given existing conditions, and to determine

modifications that would be necessary to allow mountain bikes to use the trail. In reviewing the trail's existing condition and evaluating the potential for additional use, several related items were identified that need further consideration and resolution by the County. Resolution of these considerations will inform the findings of this evaluation and the County's final decision on next steps.

- ◆ Purpose of Trails (Policy consideration). The purpose of State Parks' trails is to provide opportunities for visitors to experience parks, while protecting the natural resource. The County provides trails for recreation, which is a different mandate and could result in different evaluation mandates.
- ◆ Different Policy for Natural Areas. Prior to making any recommendations, the County must consider the intent of trails within Natural Areas. It is possible that the policy for trails within Natural Areas differs from the policies for recreational trails located in other County Parks. The Trails Manual 2011 points to access and recreation as the two general purposes of County trails: "Trails offer multiple recreational opportunities to County residents and visitors, providing access to open space and related natural resources, and facilitating exercise, outdoor education, and opportunities to explore new environments." (Trails Manual 2011, page 1-1).
- ◆ State Parks Consistency. Placerita Canyon Natural Area is a unique Natural Area as it is the only Natural Area that is a State Park managed by the County. The County's operating agreement with State Parks requires that rules and regulations adopted by the County must conform to and be consistent with the rules and regulations adopted by State Parks. State Parks typically allows mountain biking on their trails.
- Maintenance Thresholds. The level of acceptable trail conditions is a key consideration when determining the sustainability of a trail and recommended improvements. County staff should consider the conditions that are acceptable for County trails. Levels of entrenchment, frequency of social trails, and desired condition of drainage crossings should be determined.
- ◆ Speed Limit. There are currently no speed limits on trails. The County relies on County Code which requires reasonable and prudent speed based on conditions and to protect people and property. Given the amount of foot traffic on Canyon Trail and the significant number of school-age children, establishing and posting a speed limit would address safety concerns. A speed of 15 mph is recommended which is consistent with posted speed limits in several other park systems.
- ◆ As-Is Assessment; Policies and Standards for Existing versus New Trails, and for Different Uses. Assessing trails in their current conditions ("as is" assessments) may lead to determining that a trail is not sustainable and that use or uses should be removed. Given the County's commitment to multiuse trails, the County should consider whether it would remove all use or

select incompatible uses to be removed. If the latter approach is selected, the County will need to consider how standards for existing trails differ from standards for new trails (identified in the Trails Manual 2011), and consider how criteria for equestrian, bike and pedestrian use may differ. State Parks' criteria are identified in their Checklist for Low- Conflict Multi-Use Trail Design.

G. Recommendation and Implementation

Consideration was given to the above stated Potential Trail Modifications and Additional Considerations. The recommendation, contingent on the addition of pinch points, signage, erosion control measures, and other improvements, is to allow mountain bikes on Canyon Trail.

The County will need to review the needed improvements, determine costs and funding for the needed improvements, prioritize those needed for safety, determine what work can be done by County staff (assuming hand tools and limited mechanical means) and what will need to be contracted out due to technical needs or inaccessibility of the area needing improvements. The Canyon Trail cuts through special status species' habitats. Avian nesting surveys will be necessary to identify nesting sites which may impact when construction can occur. The County could consider feasibility of implementing alternating days of use, different hours of use, one way travel, and/or seasonal closures. Enforcement is the key aspect of this approach; these are only viable options if adequate staffing is available to enforce these management options. It is also suggested that the County track incident reports, whether formally filed or informally conveyed to staff or docents, in order to evaluate any potential negative impacts from allowing this additional trail user group.

Safety items needed before mountain bikes are allowed on the trail include items such as:

- Installing signage
- Installing small pinch points
- Additional trail signage to identify slow speed zones

Other items to consider for trail sustainability regardless of user group:

- Re-grading trail to remove rills and erosion channels
- Re-contouring trail tread and shoulders to provide proper cross slope for drainage
- Revegetating user created trails (social trails)
- Basic trimming of vegetation
- Armoring drainage crossings
- Protecting the oil seep
- Minor rerouting of trail to address abrupt grade change
- Reviewing trail and removing potential tree hazards upslope from trail (not noted in the trail logs but observed in the field)
- Installing railing

While those improvements needed for safety should be prioritized, some of the improvements may need to be phased due to funding constraints, the need for engineering design, or environmental analysis. Examples of these improvements include items such as:

- Improved creek crossings
- Installing puncheons (boardwalks) near creek bed
- Creating larger pinch points
- Armoring large drainage crossings
- Reconstructing shoring walls
- Manipulation of rock face to provide a safe and level trail surface

Preliminary cost estimates, prioritization of improvements, identification of funding sources and phasing, and completion of initial safety improvements will be necessary before mountain bikes are allowed on the trail.

The final decision regarding allowed trail use rests with the County, taking into consideration this recommendation, staffing availability, budget constraints, project prioritization, and environmental constraints.