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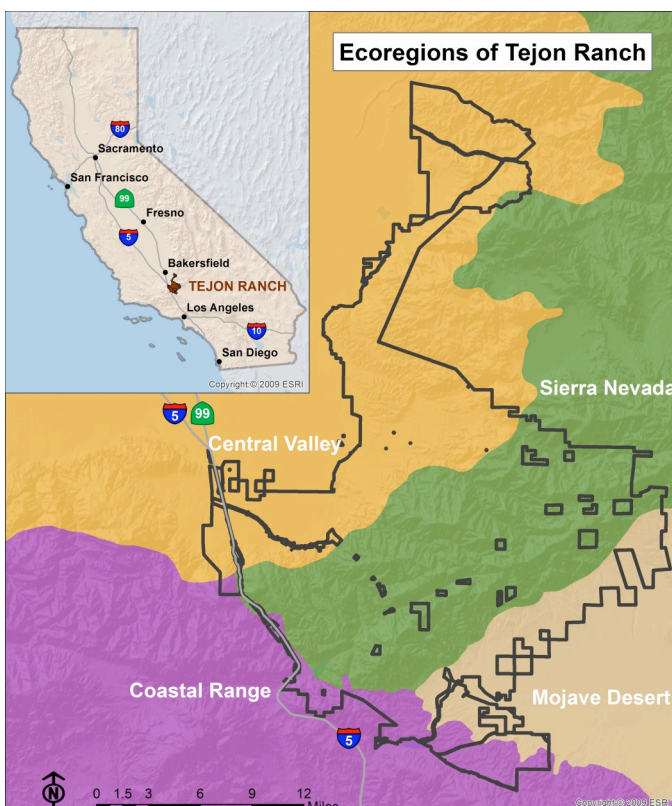
Tejon Ranch Conservancy

## Assessing Resources for Public Access at Tejon Ranch, CA

### Project Overview

Tejon Ranch is the largest contiguous private property in California, spanning four ecological regions: Mojave Desert, Coastal Range, Central Valley, and Sierra Nevada. In exchange for developing 30,000 acres of the Ranch, 240,000 acres were placed under a conservation easement by a landmark agreement in 2008 between the Tejon Ranch Company (TRC) and five environmental organizations. The agreement mandated the Tejon Ranch Conservancy to develop a Ranch-Wide Management Plan that specifically includes a Public Access Plan.

Our project helps the Conservancy develop this plan by providing a broad management framework for public access on the Ranch, aligning public access with the Conservancy's mission of conservation and the restrictions of the Agreement.



### Project Objectives

- Assess regional public access opportunities
- Determine demand for activities
- Provide a geospatial analytical planning tool
- Provide an adaptive management framework for future planning



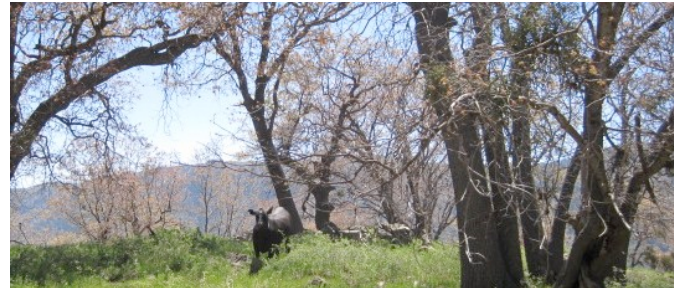
Pronghorn are one of over 200 vertebrate species on the Ranch.

### Key Recommendations

- Offer activities that highlight the unique resources of Tejon Ranch to attract visitors and leave them with a meaningful impact. Visitors should want to experience the Ranch rather than just participate in activities that they feel they can do anywhere.
- Assessing environmental impacts is important for balancing public access with conservation. Our site analysis tool serves as a starting point for this assessment, but ground-truthing is necessary.
- Clearly set visitor expectations and inform them about activities with more details (e.g. maps).
- All activities are currently guided, but there is a demand and an opportunity for self-guided interpretive activities. With docent monitoring, these activities can be implemented in low impact areas to satisfy visitors who want to see the Ranch at their own pace.
- Implement adaptive management for both environmental impacts and visitor satisfaction. Utilize visitors and docents to help monitor and respond to issues like vandalism and littering.

### Restrictions on Public Access

TRC retains several historical uses and reserved rights including hunting, cattle grazing, and filming, which continue to operate on the Ranch under the easement. Additionally, several private properties within the Ranch are owned by other parties. To avoid conflicts with these uses and property owners, TRC currently allows only guided access. Public access is also constrained by specific restrictions in the Tehachapi Upland Multi-Species Habitat Conservation Plan, which was established to mitigate habitat loss from the proposed development on the Ranch.



Tejon Ranch continues to operate as a cattle ranch.

### Stakeholders

To understand whom public access will serve, we conducted two online surveys: one of past visitors about their preferences and experiences on the Ranch and one of the Conservancy's Board members to understand what they envisioned for public access.

Most past visitor survey respondents enjoy hiking, wildflower and wildlife viewing, birdwatching, and camping and want to see those activities offered on

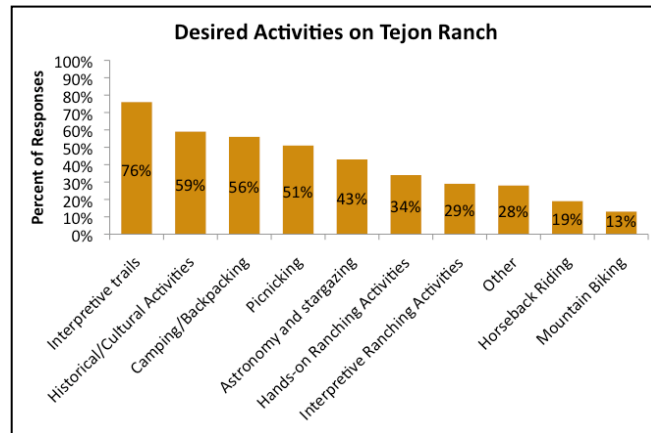
### Current Public Access

- Guided Hikes
- Citizen Science Events
- Vehicle Tours
- Wildflower Viewing

For more information, visit <http://www.tejonconservancy.org>

the Ranch. Mountain biking and horseback riding were the least popular amongst past visitors. All visitors enjoyed their visit (62% rated their visit a 5 out of 5). While, many past visitors preferred un-guided or self-guided activities, many respondents also commented on the high quality of the Conservancy staff and guides. The combination of guided activities and excellent staff helps distinguish the Ranch from other open spaces in the region.

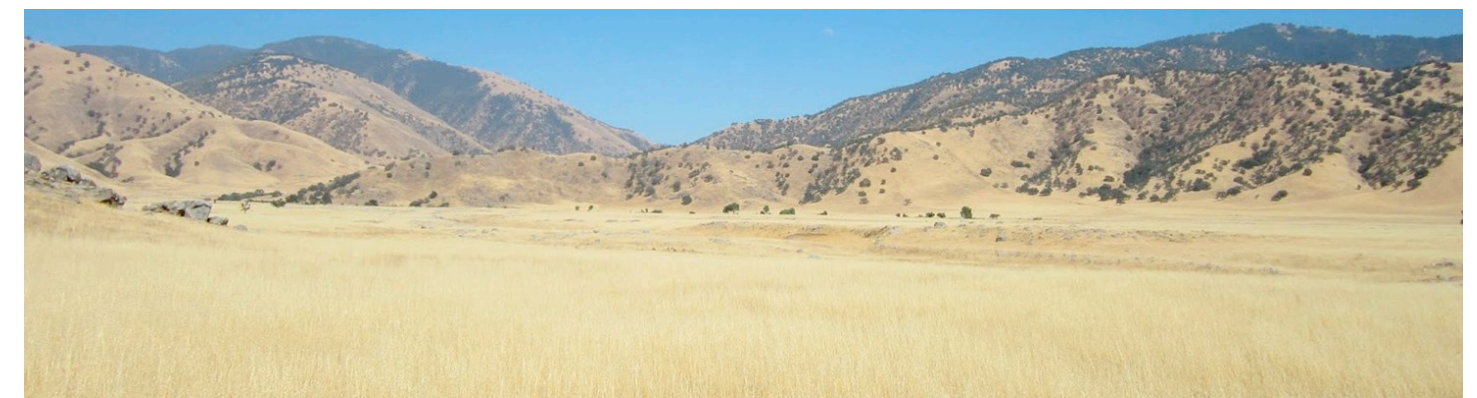
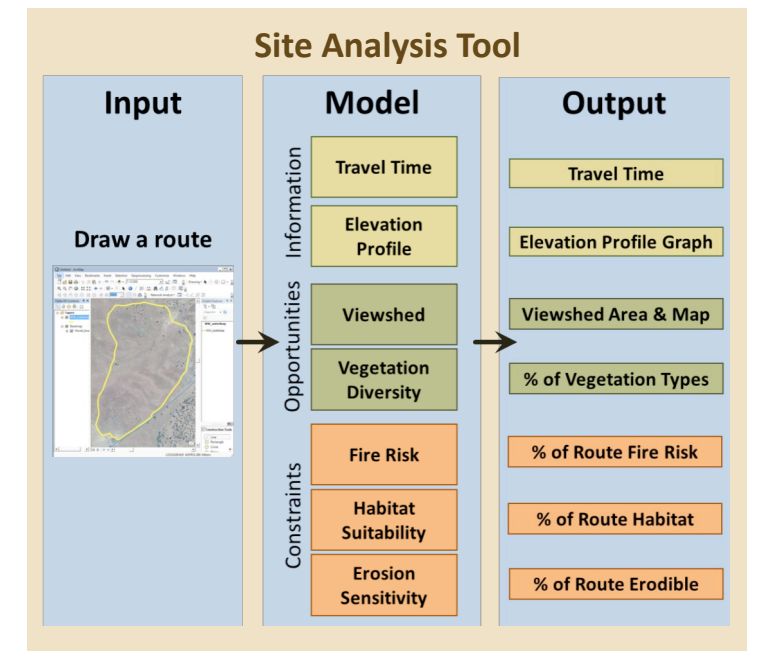
The Conservancy is also tasked with providing public access for underserved communities, who we have identified to currently be Hispanic communities, adolescent youths, and low-income households.



Public access activities that survey respondents would like to see offered on the Ranch.

### Opportunities & Constraints

To aid the Conservancy in planning public access, we created a geospatial site analysis tool using ArcGIS ModelBuilder. The Conservancy selects a route or area as an input to the tool. The tool analyzes the input against seven attributes in a model and produces an output summarizing them. The *Information* outputs help communicate the duration and difficulty of an activity. The *Opportunities* outputs help identify features that can enhance visitor experience. Finally, the *Constraints* outputs help identify possible negative environmental impacts resulting from the activity. With the enormous size of the Ranch, the Conservancy can use this tool to help narrow down appropriate locations for activities. This tool serves as a starting point for evaluating potential areas and routes, but ground-truthing specific sites will be needed as the planning process proceeds and before decisions and actions are made.



### Case Study: Pacific Crest Trail (PCT)

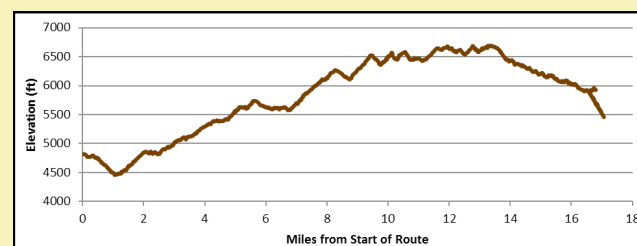
From the Agreement, 38 miles of the PCT will be re-routed onto Tejon Ranch. This case study looks at a 17-mile segment on the crest of the mountains. Recommendations are based on our research and outputs of our Site Analysis Tool.

#### Information

##### Travel Time

A hiker traveling at a speed of 2 mph would take about 8.5 hours to finish the trail. A horseback rider traveling at a speed of 4 mph would take 4.25 hours to finish this section.

##### Elevation Profile



### Constraints

#### Habitat

Species*	% of Route
Bobcat	100%
Mountain Lion	76%
Golden Eagle (Reproduction)	59%
Black Bear	35%
White-tailed Kite (Reproduction)	24%

\*out of 8 selected species of concern



#### Erosion

Erosion Potential (1=Low; 6=High)	% of Route
1	10%
2	46%
3	36%
4	8%
5	1%

#### Fire Risk

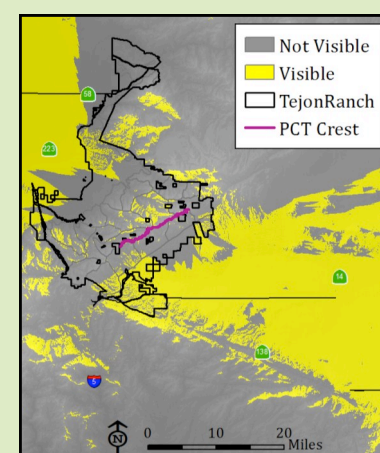
Ignition Risk	% of Route
High	19%
Medium	81%

Potential Severity	% of Route
High	49%
Low	51%

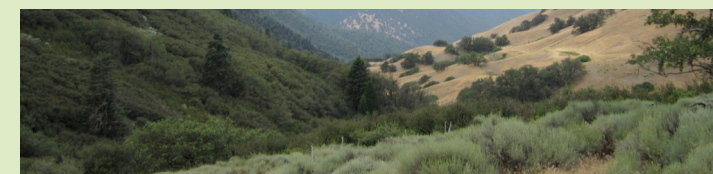
### Opportunities

#### Viewshed



#### Vegetation Diversity

Vegetation Type	% of Route
Canyon Oak Woodland	26%
Chaparral	21%
Brewers Oak Scrub	20%
Mixed Oak Woodland	15%
White Oak Savannah	7%
White Fir/Mixed Oak	4%
White Fir Stand	3%
Black Oak Woodland	2%
Mixed Oak Savannah	2%
Intermixed Conifer	1%



### PCT Recommendations

1. PCT traverses fire prone vegetation communities. Carefully define fire policies to minimize fire risk and monitor for visitor compliance. Remind visitors of fire policies with signs.
2. Advise PCT users to avoid hiking or horseback riding at dawn or dusk on this segment when bobcats and mountain lions are most active. To avoid disturbing golden eagle nests, surveys should be performed to identify any nests along this segment so that the trail will be routed at least ¼ mile away from any active nests.
3. Much of the trail has low-moderate to moderate erosion potential; use technical expertise during trail design and construction to minimize soil creep and erosion.

### Case Study: 290th St. Loop Trail

We selected a hypothetical 1.2 mile loop-trail because of its proximity to a major access point (290th St.) and the proposed Visitor Center. Output from our Site Analysis Tool showed that none of our selected species were flagged, potential erosion for the area is very low, and ignition risk and potential fire severity were low. The low potential impact makes it a good location for self-guided interpretive activities, which allows visitors to enjoy the area at their own pace. Interpretive signs should be in both English and Spanish to serve the largely Hispanic populations of the area. A sign-in/out system can help keep track of visitors. Docents can help provide information to visitors and monitor for issues like littering, vandalism, or unauthorized off-trail use.



Joshua trees at 290th St. Loop Trail

### Regional & Private Lands Context

National Forests, state parks, preserves, and reserves surround Tejon Ranch. This abundant, accessible open space makes it important to identify the unique opportunities the Ranch can provide. We analyzed activities and landscape characteristics of 25 surrounding open space areas to better understand public access opportunities in the region and found hiking to be the most commonly offered activity.

We also found that National Forest visitors tended to visit areas more for the activity than for the location. Therefore, the Conservancy should highlight the unique attributes and activities of the Ranch to draw in visitors. With the abundance of open space in the region, visitors seeking activities potentially incompatible with the Ranch have ample opportunities elsewhere. For example, the Los Padres National Forest is a popular mountain biking destination.

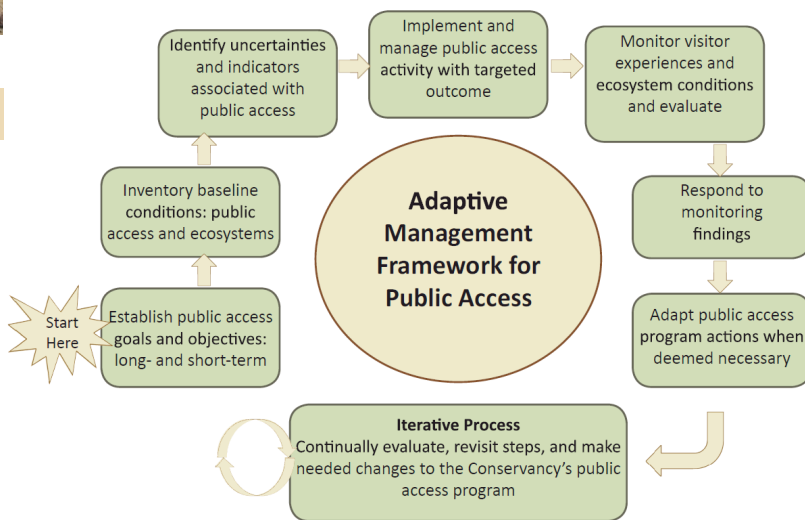
Examination of other private lands highlights the uniqueness of public access on Tejon Ranch’s working landscape. Within California, only 5 out of 74 land trusts were found to hold properties comparable to the Ranch.

### Adaptive Management

Several key steps are needed to establish an adaptive management framework for public access on the Ranch. Goals and objectives for the public access program must first be developed and put in context of baseline conditions on the Ranch. The Conservancy must also be aware of uncertainties and indicators associated with public access. These uncertainties and indicators include possible impacts from recreation in natural areas and accompanying uncertainties, as well as the degree of visitor satisfaction.

Consistent and thorough monitoring informs the manager whether the implemented actions are working for their intended purpose, what impacts are resulting from the actions, and what changes might be necessary.

The adaptive management mechanism presented is comparable to those used for ecological systems. However, adaptive management for public access differs in explicitly considering both management of users and the landscape by trying to balance user satisfaction with minimal environmental impacts.



### Acknowledgements

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For more information, please visit our website:

<http://www.bren.ucsb.edu/~tejonaccess>

