



## PCI ECOLOGICAL

### MEMO

**Date:** March 5, 2025

**To:** Marin County Open Space District - Jason Hoorn

**From:** PCI Ecological – Mike Jensen, Emily Mallard

**Subject:** Buck Gulch Falls Accessible Trail Feasibility Study: Supplemental Study

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PCI was asked to perform an additional feasibility study on a segment of the trail located upstream of the proposed bridge site to minimize impacts to the creek. This area features steeper inclines, denser tree cover, and more boulders, culminating in a steep ascent to the waterfall viewing area. The portion of the trail evaluated extends 320 feet upstream from the waterfall viewing area. The primary aim of this study is to assess the feasibility of guiding the user approximately 13 feet upslope so that the trail remains uphill of the large boulder near the waterfall. This approach avoids placing the trail on the opposite side of the boulder, which would position it within the creek zone. The evaluation also indicates the trail segment can adhere to the Marin County Improved Access Trails Standards, maintaining a minimum width of 48 inches and complying with AGODA slope standards.

This alternative route would maintain the creek's integrity while guiding users to an elevation that is close to the viewing area. The pathway would follow a gradual ascent through a series of switchbacks, with inclines between 6% and 8%. It would also include approximately 110 feet of retaining wall, with heights varying from 2 to 5 feet, facilitating a comfortable and efficient ascent to the designated elevation for accessing the waterfall viewing area. To ensure safety and regulatory compliance, handrails would be necessary along the switchback ramp.

Provided that sufficient bedrock is present to guarantee slope stability, it *may* be feasible to construct the trail and walls on a cut slope. As noted in the feasibility study, comprehensive construction documentation and a geotechnical assessment will be essential for a thorough evaluation of this option.

Below is a photograph of the current conditions at the boulder near the waterfall, along with an example image of a switchback trail.



Photo 1. View from across the creek looking at the existing boulder and social trail near the waterfall viewing area



Photo 2. Example of a switchback trail in construction from Fitch Mountain

