



## Muir Woods Transportation and Access Site Improvements Project Purpose, Need and Objectives

### PROJECT PURPOSE

The purpose of this action is to better manage Muir Woods visitor demand and transportation services in order to improve the visitor experience and safety, improve existing facilities, and reduce on-going impacts to natural and cultural resources from the existing transportation system.

The NPS action is in support of park goals identified in the park's General Management Plan (Draft, 2011; Final anticipated, 2013) and will integrate NPS objectives with the interests of Marin County, Mount Tamalpais State Park, and the communities that neighbor Muir Woods.

### NEED FOR ACTION

The project is needed to address serious longstanding problems with traffic, safety, park resources, and visitor experience caused by growing visitor demand. The resulting conditions do not meet park goals outlined in the GMP and Watershed Management Plan for much of the year.

#### Traffic and Safety

Traffic and safety problems include a congested entry experience on upper and lower Muir Woods Road and in the monument's tight parking lots where cars, buses, bicyclist, and pedestrians mix. This congestion contributes to back-ups on the surrounding roadway network in various areas, such Shoreline Highway at Tamalpais Junction.

- Traffic congestion is resulting in safety concerns such as when parking areas are full visitors park on Muir Woods Road shoulders and walk over a mile to the park entrance.
- Visitors walking along Muir Woods Road to the park entrance are in the roadway with heavy visitor traffic, including large vehicles such as tour buses and park shuttles, presenting a safety hazard for both pedestrians and vehicles.
- These safety concerns are exacerbated by the fact that Muir Woods Road is a narrow two-lane narrow and is not designed for shoulder parking or pedestrian traffic.

#### Natural Resources

Unregulated shoulder parking, traffic congestion, and lack of designated pedestrian pathways are causing degradation of the natural resources and habitat in the Redwood Creek watershed. This watershed is home to several threatened and endangered species, among them Coho salmon, steelhead trout, and northern spotted owl.

- Road shoulder parking, in some areas, has destroyed native vegetation and increased erosion. Off-road and off-trail pedestrian travel also contributes to these impacts.
- Sediment and other roadside pollutants from pedestrian and vehicle traffic along the Muir Woods Road corridor are entering Redwood Creek, degrading water quality.

## **Cultural Resources**

Road shoulder parking and off-road/off-trail pedestrian travel also has the potential to impact cultural resources found at Muir Woods.

- The area surrounding Muir Woods likely contains undiscovered prehistoric resources that may be destroyed or degraded by the current use.
- Other important cultural features with the potential to be impacted include the historic Dipsea Trail, Lower Conlon Avenue intersection, and entrance to Muir Woods.

## **Visitor Use and Access**

The experience of most visitors to Muir Woods is diminished by traffic conditions, unmanaged parking at the Woods, gaps in the surrounding trail system which do not connect parking to the entry plaza, and aging and inadequate facilities in the entrance area.

- On busy days, existing conditions cause visitors to circle looking for traffic, park long distances from the entry, and create safety concerns (discussed above) that detract from the overall visitor experience to Muir Woods.
- With the lack of a safe pedestrian corridor and inadequate orientation, visitors are also faced with a confusing and dangerous approach to the park.
- This lack of orientation to designated trails and on to the entry plaza, results in confusion and use of undesignated trails to reach their desired destination.
- For those who choose not to arrive by private automobile or commercial tour bus, public transportation is limited in scope and availability, making it difficult or impossible to access Muir Woods by this method.

## **Park Facilities and Infrastructure**

The existing entrance area includes aging, incomplete and undersized infrastructure. Most facilities date to the 1960s.

- Heavily used trails are in poor condition with rutted, uneven surfaces, failed embankments and culverts. Many do not meet accessibility guidelines.
- The restrooms are undersized for most visitation days and often result in long lines for the visitor.
- Parking lots are narrow and crowded; most lack pedestrian paths which results in visitors to mixing with vehicles.
- The entrance plaza was converted from a small asphalt lot in 2010 but aspirations for a more functional, natural and attractive space has not been realized.

## **PROJECT OBJECTIVES**

Project objectives are “what must be achieved to a large degree for the action to be considered a success” (NPS 2001). All alternatives developed and selected for detailed analysis will meet project objectives to a large degree and resolve the purpose of and need for action. Objectives are grounded in the park’s establishing legislation, purpose, significance, and mission goals of the park, and are compatible with direction provided in the park’s GMP. The following are the project objectives:

### **Traffic and Safety:**

- Better manage vehicular access to Muir Woods, including car, shuttle, bicycle and tour bus circulation and parking, to enhance visitor safety and the visitor experience. This management includes providing a safe pedestrian pathway from all private vehicles and reducing or eliminating informal roadside parking spaces.

- Reconfigure car parking, and where possible, increase the capacity of parking in the vicinity of Muir Woods National Monument to continue to meet demand during off-peak periods.
- Facilitate access to the park by public transit by providing shuttle loading and unloading areas with sufficient capacity to meet managed peak shuttle and commercial tour demand and that reduce potential conflicts with other visitors (those in cars, bicycles, and pedestrians).
- Continue to provide access for park operations and staff, as well as access for emergency vehicles.

#### **Natural Resources:**

- Minimize impacts to park resources due to visitation, including reducing impacts along trails, roadways, in parking lots, and in the entrance plaza by creating established pedestrian trails and reducing or eliminating roadside parking.
- Reduce erosion and sediment runoff from roadside parking areas.
- Preserve critical habitat for threatened and endangered species.
- Design potential improvements in a manner that allows for and encourages future restoration or enhancement projects for park resources in the watershed.

#### **Cultural Resources:**

- Preserve contributing archeological and cultural landscape resources.

#### **Visitor Use and Access:**

- Provide a designated pedestrian corridor from all private vehicle parking areas to the entry plaza, removing pedestrian traffic on Muir Woods Road.
- Enhance visitor orientation from parking and shuttle unloading areas to facilitate access to the plaza area.
- Improve the entry experience for visitors by reducing crowding and congestion, and providing high quality services and facilities.
- Coordinate with visitors, commercial service providers, and local communities to share information about improvements as they are implemented.

#### **Park Facilities and Infrastructure:**

- Expand and/or upgrade restroom facilities to accommodate the reconfigured arrival experience and managed visitor demand.
- Enhance the plaza to better welcome and orient visitors.
- Incorporate energy conservation measures.