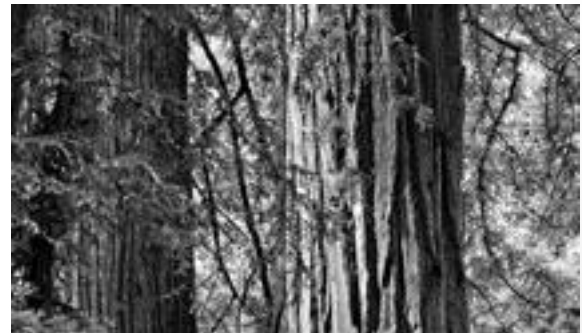


# **Parking & Shuttle Reservation System for Muir Woods**

Second Public Scoping Meeting  
June 18, 2014



# Meeting Objectives

- ❖ End speculation on Panoramic Highway Parking lot and Muir Woods visitation projections
- ❖ Describe a proposed reservation system for parking and shuttles at Muir Woods
- ❖ Address community questions and concerns about the reservations system
- ❖ Communicate opportunities for public engagement, including review of the draft proposal



# GMP Clarification

## TO BE INCLUDED IN THE RECORD OF DECISION (ROD) THAT CONCLUDES THE GENERAL MANAGEMENT PLAN/FEIS:

The FEIS states (Volume 1, page 124): "Improvements east of Panoramic Highway in the vicinity of Homestead Hill could enhance trail and transit access to Muir Woods and other nearby park destinations."

The statement on page 124 is not intended to suggest construction of a new parking lot to serve Muir Woods visitors. A parking lot was mentioned as an idea in a scoping meeting for Muir Woods transportation planning projects in September 2013. Based on public concerns and agency analysis, this idea has been eliminated from further consideration. **The NPS will not construct a parking lot on Panoramic Highway.** Future improvements in the area could include wayfinding signage, trail enhancements, and an improved bus stop for the West Marin Stagecoach which currently runs along Panoramic Highway.





A photograph of a forest path. In the foreground, a paved path with wooden railings curves through a lush green forest. Two people, a man in a dark shirt and a woman in a light blue shirt, are walking away from the camera on the path. The background is filled with tall, thick tree trunks, likely redwoods, and dense green foliage. Sunlight filters through the trees, creating dappled light on the path and ground.

❖ Legacy of Stewardship and  
Amazing Forest Experiences

**1. Summary**

**2. Background**

**3. Proposed Project**

**4. Project Benefits**

**5. Schedule and Next Steps**



# 1. Summary – Proposed Parking & Shuttle Reservation System

	Cart		Keep Shopping		
	Sun Sep 8 2013	Mon Sep 9 2013	Tue Sep 10 2013	Wed Sep 11 2013	Thu Sep 12 2013
Drive	—	—	—	—	—
Drive & Shuttle	—	—	12:00 pm	9:30 am	9:30 am
	—	—	12:30 pm	12:00 pm	12:00 pm
	—	—	1:00 pm	12:30 pm	12:30 pm
	—	—	1:30 pm	1:00 pm	1:30 pm
Ferry & Shuttle	—	2:40 pm	2:10 pm	2:10 pm	2:10 pm
Commercial Tours	—	—	2:40 pm	2:40 pm	2:40 pm
	—	—	3:20 pm	3:20 pm	—
	—	—	3:50 pm	—	—

<< Previous 5 days    Next 5 days >>

**Reservation  
System**



**Parking  
Management**



**Muir Woods  
Shuttle**



## Summary – **Eliminated & Potential Future Actions**

### **Actions that HAVE BEEN ELIMINATED from further consideration** (scoping)

- Panoramic Highway Parking Lot (on Homestead Hill)
- Operating Muir Woods Shuttle with parking on Panoramic Highway
- Converting Frank Valley-Muir Woods Rd to one-way travel
- Utilize Muir Beach parking lot for Muir Woods shuttle

### **Actions that COULD BE CONSIDERED in a separate future infrastructure project**

- Extend & improve pedestrian paths at the entrance to Muir Woods
- Further reduce road shoulder parking on Frank Valley-Muir Woods Road
- Reconfigure existing parking lots to improve auto & bus circulation at Muir Woods



## Summary – **Reduced Visitation, Traffic, & Impacts**

### **Reduced Visitation**

- Will reduce visitation by approximately 10% from 2012 level when implemented

### **Reduced Daily # of Vehicles**

- 25-35% reduction during peak season

### **Reduced Hourly # of Vehicles**

- 50-60% reduction in MW-bound trips during peak-season

### **Reduced # of Vehicles Parked on Road Shoulder**

- Greater than 70% reduction during peak season, with better management and reduced environmental impacts



## 2. Background – **Actions Taken to Manage Visitation**

### **Muir Woods Shuttle**

- 10,000 Trips in 2008: 75,000 in 2013

### **Four Changeable Message Signs**

- “Muir Woods Parking Full, Use Shuttle”

### **“No-Parking” Signs**

- Shoulder parking prohibited in areas unsafe and damaging to resources

### **Management**

- Increased parking managers along the road and at Muir Woods lots

### **Enforcement**

- Limited staff resources; jurisdiction issues. Tickets ineffective for one-time visitors

### **Messaging**

- Website, articles, phone inquiries... convey congestion issues and alternatives



## Background – **Where We Are Now**

**Status Quo =  
Continued Increase  
in Visitation**

- 2013 – **100%** of **peak-season weekend** days 4000+ visitors
- 2013 – **first year with 6,000+** visitor days



# Background – **Top Scoping Comments**

## **Site Improvement Project** (separate future project)

- Opposition to Panoramic Hwy Parking Lot
- Opposition to Muir Woods Shuttle with Parking on Panoramic Hwy
- Support for Carrying Capacity Study

## **Parking & Shuttle Reservation System Project**

- **Support for Reservation System**
- **Support for Carrying Capacity Study**
- **Support for increased Shuttles and Integration with Public Transit**



373 comments received between September 18, 2013 and January 11, 2014

# Background – Capacity Strategy

## General Management Plan

- User Capacity, Chapter 7 – **Indicators and Standards** to manage visitors in the park
- *People per view...*
- *Encounters along trails...*
- *Arrival time...*
- *Quiet...*
- **Confluence at 3,500-4,000 MAX**

## Performance Monitoring Program

- Monitor GMP performance metrics over time
- Correlates with transportation capacity
- Out-of-standard triggers management action

## Parking & Shuttle Reservation System

- Manage key modes of transportation to achieve GMP goals
- Use data from Performance Monitoring Program to adjust transportation capacity

**Preserve Ecosystem and Watershed Health**



### 3. Proposed Project – **Integrated Management System**



	Sun Sep 8 2013	Mon Sep 9 2013	Tue Sep 10 2013
Drive	—	—	—
Drive & Shuttle	—	—	12:00 pm 12:30 pm 1:00 pm 1:30 pm
Ferry & Shuttle	—	2:40 pm	2:10 pm 2:40 pm

#### **Reservation System**

- Website and call center options
- Reserve parking and shuttle time slots
- Reservations released at rate that meets user capacity management goals



#### **Parking Management**

- Muir Woods Parking Lots (~150 existing spaces)
- Lower Muir Woods Rd - reduced to 110 (from ~400)
- New Parking Enforcement Zone and Authority



#### **Muir Woods Shuttle**

- Continued Partnership with Marin Transit
- Pohono St/101 and SF-Sausalito Ferry Terminal
- Approximately 140 days/year



# Proposed Project – Road Management

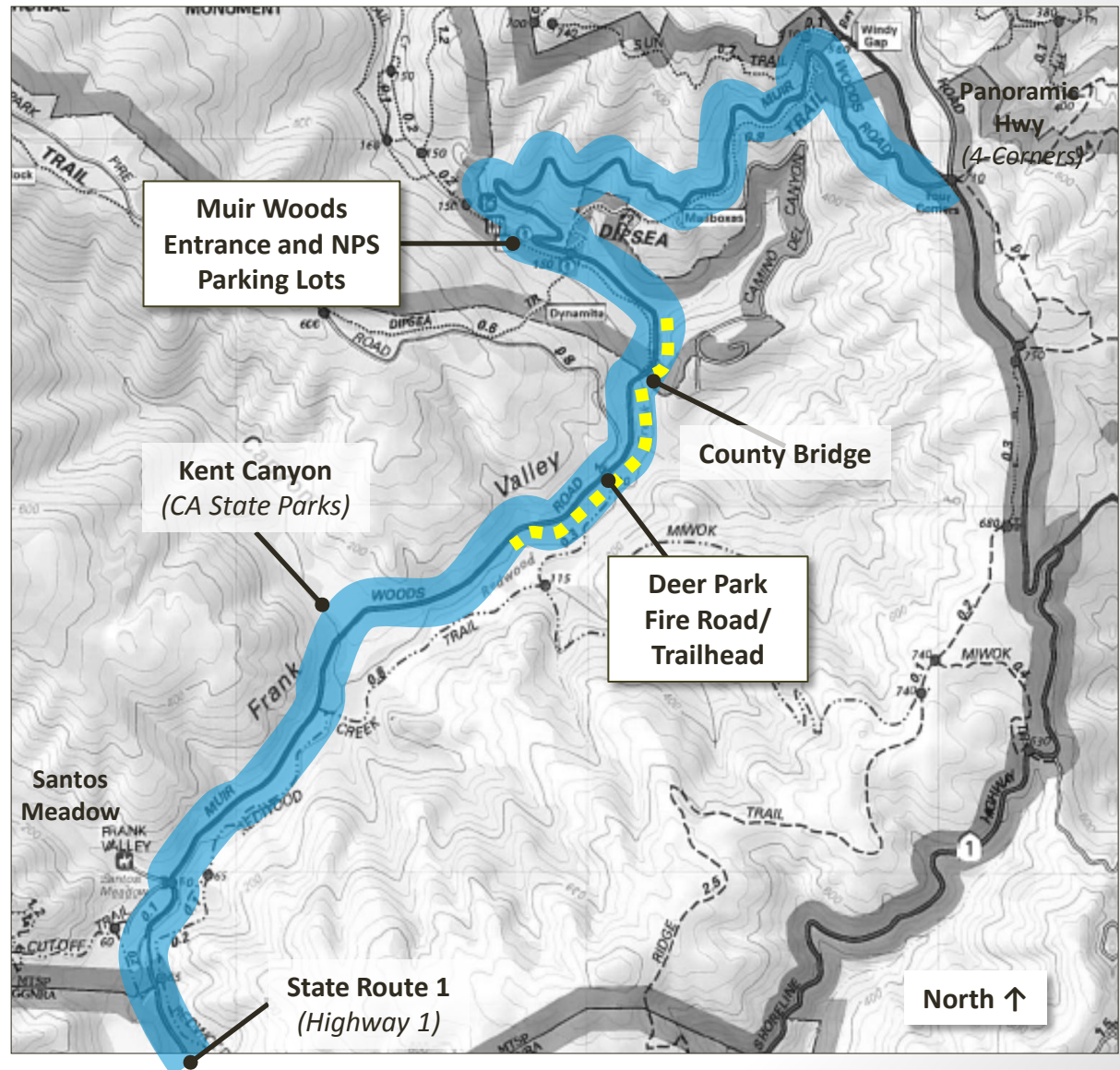
## PARKING MANAGEMENT CORRIDOR

*Panoramic Highway to State Route 1. May include signs, fences & other management features*

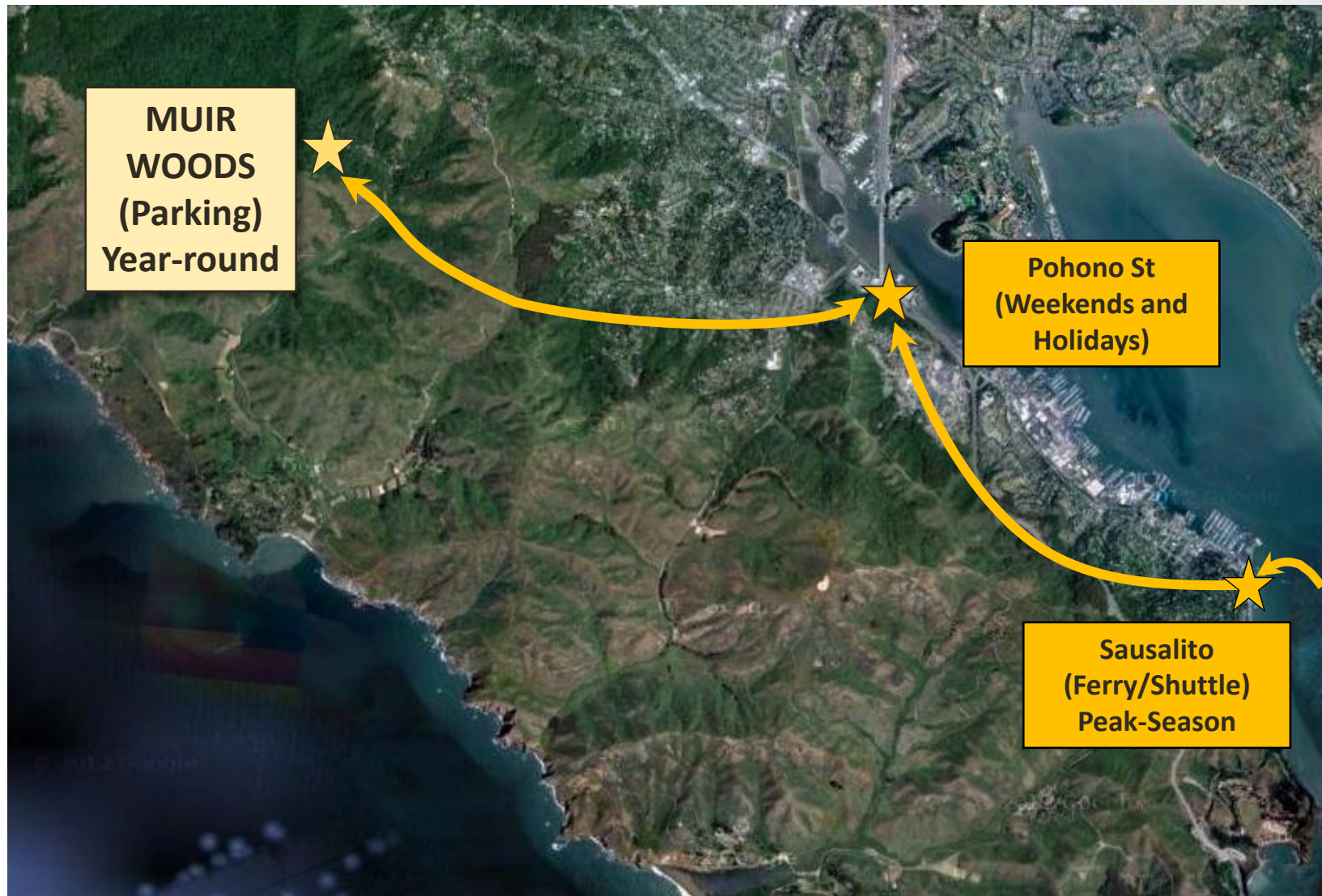
## EXTENT OF PARKING SPACES TO BE RESERVED



*110 spaces, all on the east side of lower Muir Woods/ Frank Valley Road*



# Proposed Project – **Shuttles**



## 4. Project Benefits – **Reduced Visitation, Traffic, & Impacts**

### **Reduced Visitation**

- Will reduce visitation by approximately 10% from 2012 level when implemented

### **Reduced Daily # of Vehicles**

- 25-35% reduction during peak season

### **Reduced # of Vehicles During Peak Hours**

- 50-60% reduction in MW-bound trips during peak-season
- Approximate 30% reduction during off peak months.

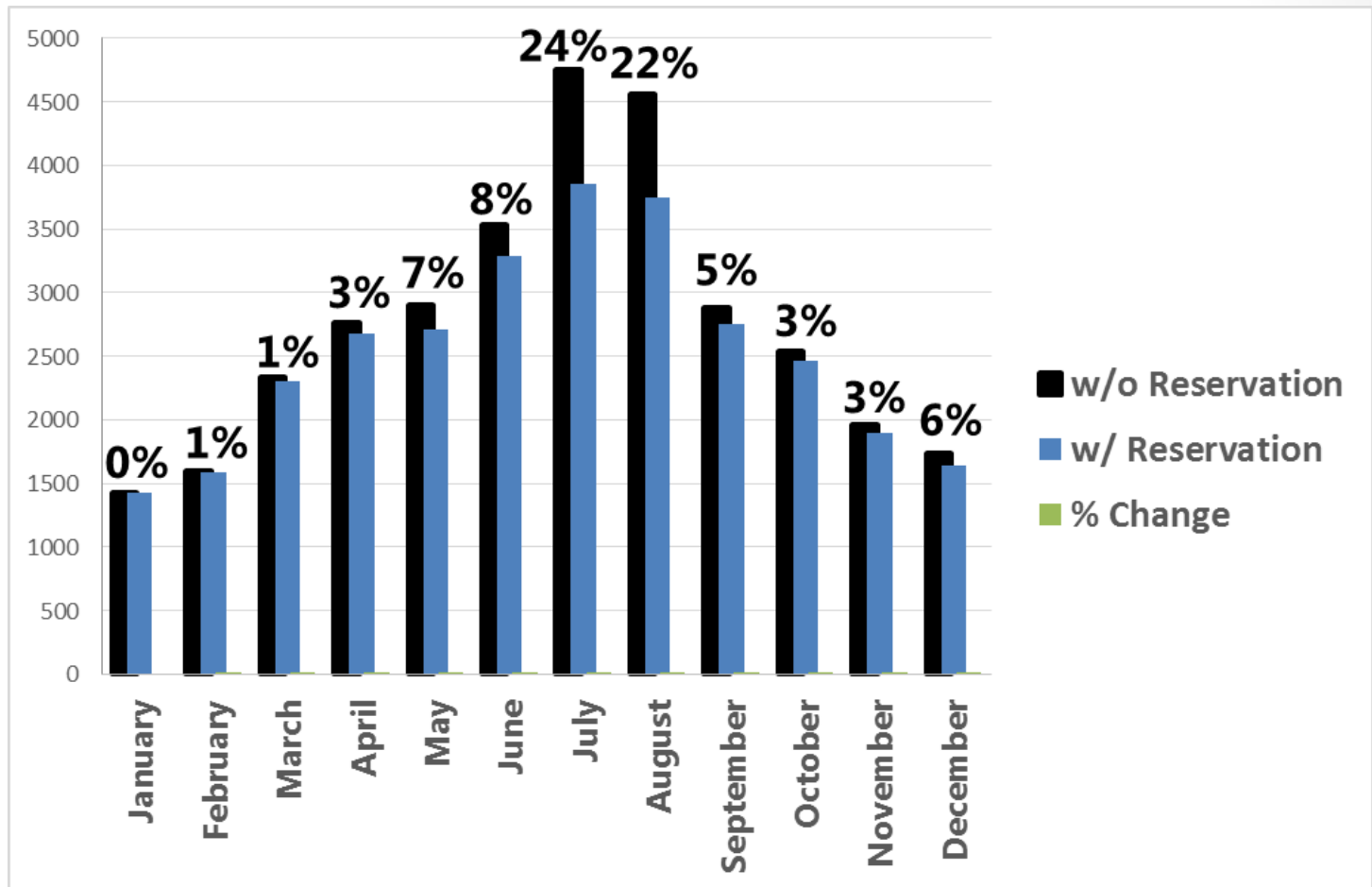
### **Reduced # of Vehicles Parked on Road Shoulder**

- Greater than 70% reduction during peak season
- Reduced environmental impacts



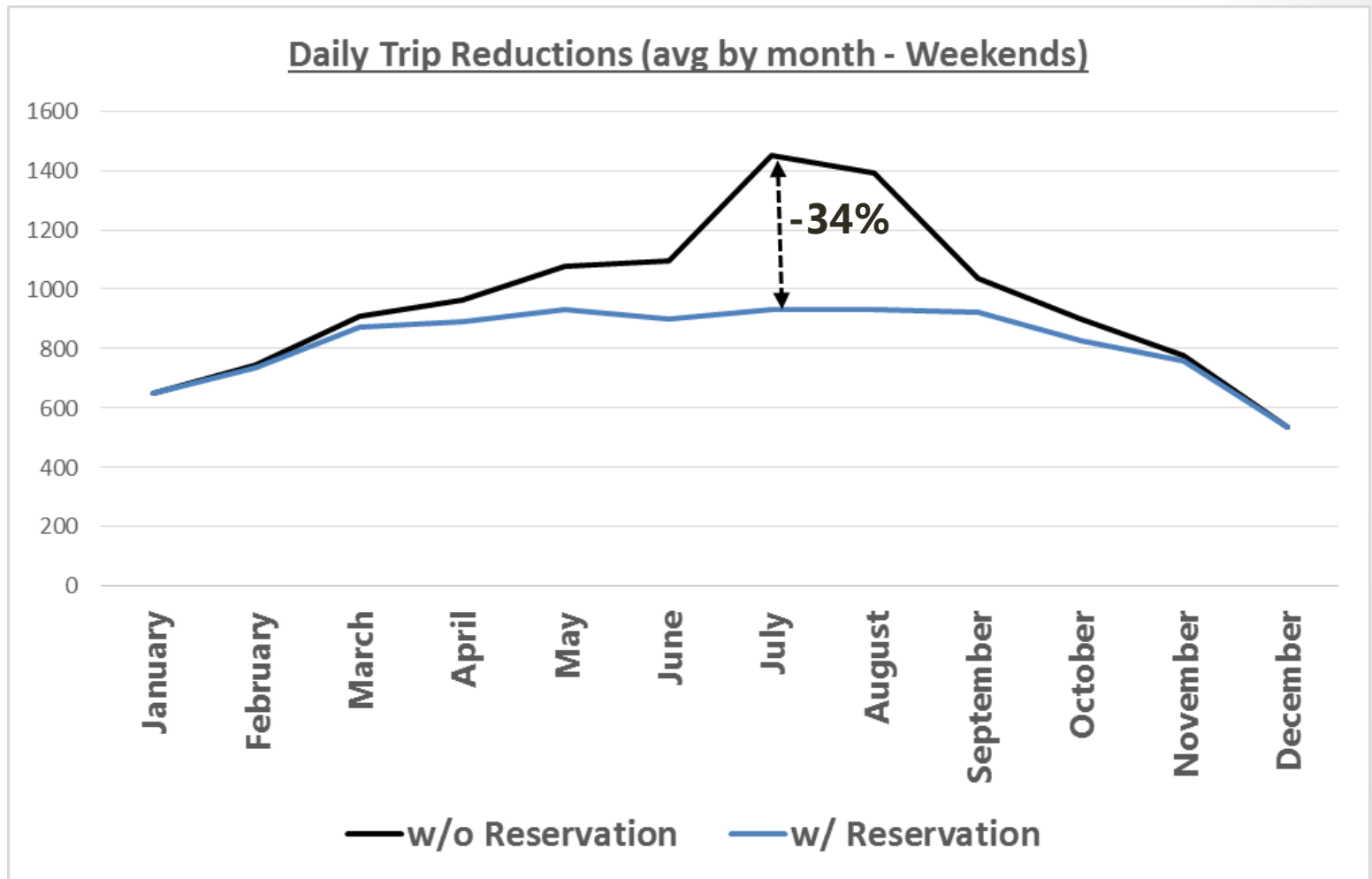
## Project Benefits – Reduced Visitation by Month

Will reduce visitation when implemented compared to 2012

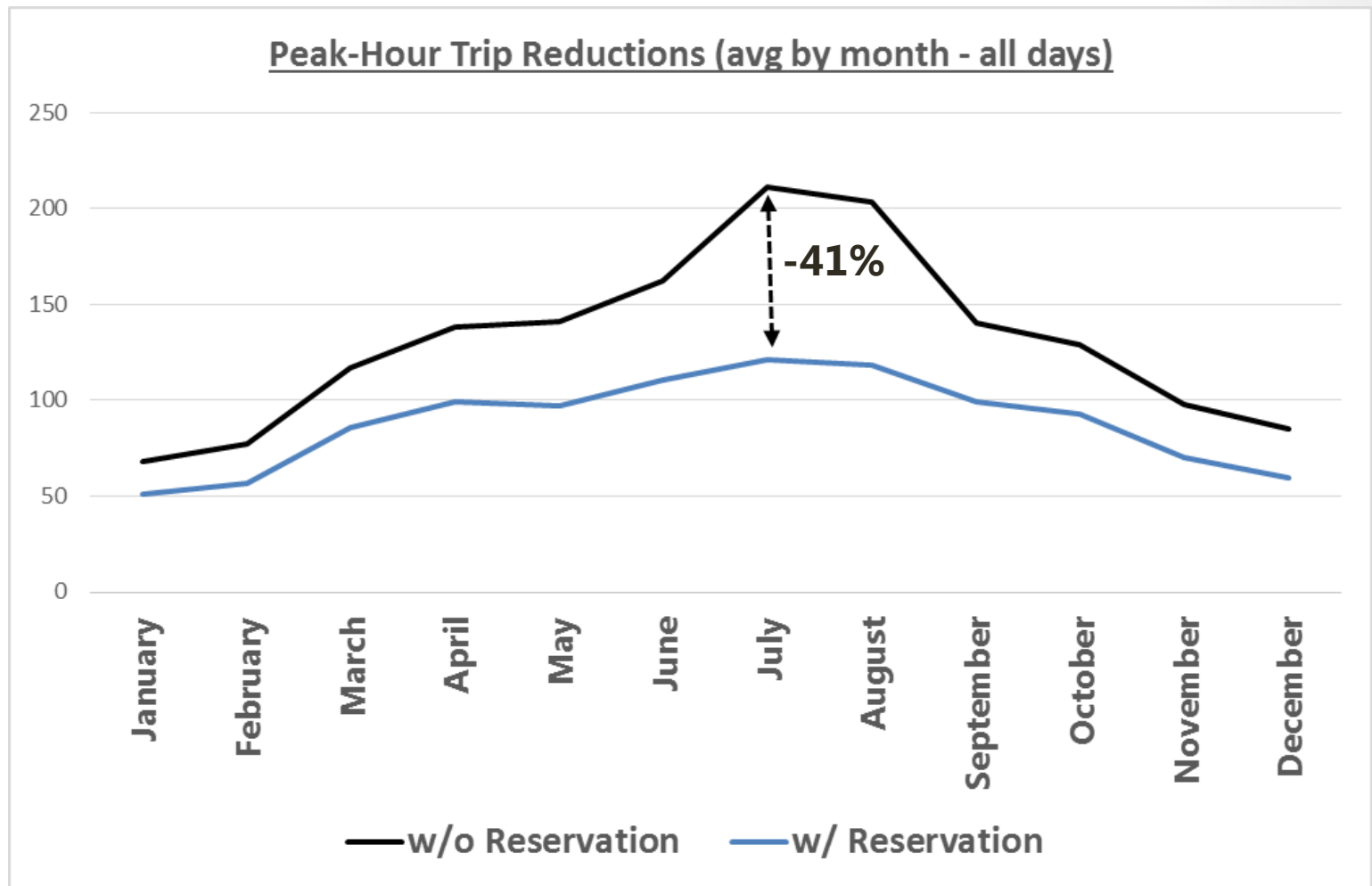


## Project Benefits – Reduced Daily Vehicle Trips

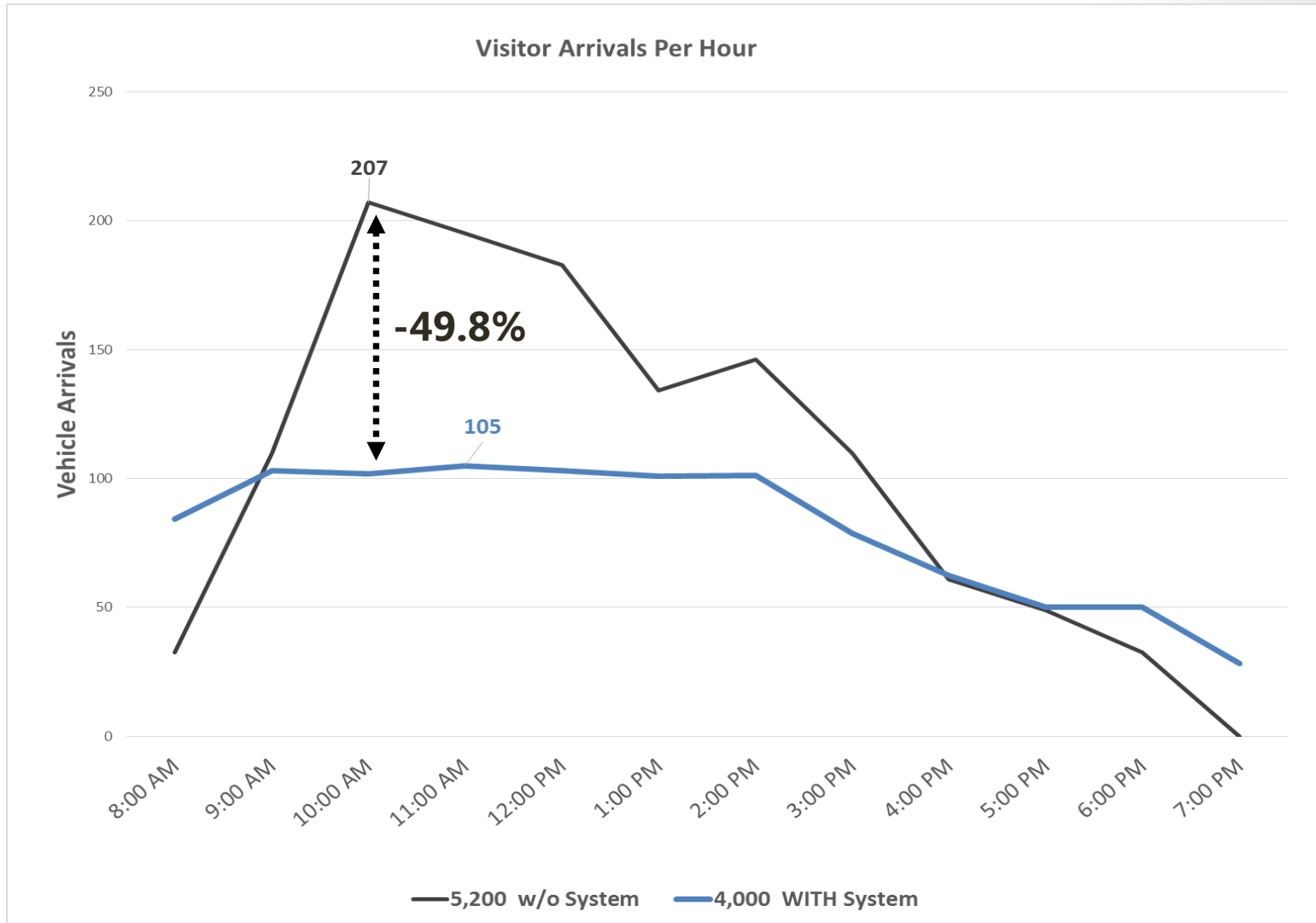
Will reduce peak-season daily trips by 34% when implemented



## Project Benefits – Reduced Peak-Hour Vehicle Trips



## Project Benefits – Reduced Vehicle Arrivals Per Hr.



## Project Benefits – **Safety on MW Road**

Management and enforcement **improves safety** and ensures compliance with parking regulations

**Improves response time** for emergency vehicles

Regulated and limited parking **improves paths of travel** for pedestrians

Reduced congestion and peak hour flows supports **traffic calming**



## Project Benefits – **Resource Protection**

Improved **Air Quality** – fewer vehicles and circulation reduces emissions

Improved **Natural Soundscape/Noise**

Improved **Water Quality** along Redwood Creek

Improved **Vegetation & Wildlife** along Redwood Creek

\*Based on initial impact assessment by NPS interdisciplinary team



## Project Benefits – **Visitor Experience**

Provides **certainty** for visitors that they will have a safe and appropriate parking space

**Reduces frustration** from congestion on the roads in the community and park

Allows for more **enjoyable visit**



## 5. Schedule & Next Steps – **Summary**



### **NPS Proposal:**

#### **INSTITUTE A RESERVATION SYSTEM FOR PARKING AND SHUTTLES**

- Reservation system will serve as the **critical tool** to help reduce and manage visitation to Muir Woods
- Seeking public support to enter an **agreement** with the County to manage and enforce parking reservations on Muir Woods Road
- Will be **adaptively – managed** to ensure consistency with goals for resource preservation, safety, traffic congestion, and visitor experience



## Schedule & Next Steps – Timeline

TASK	DATE
First Reservation System Scoping Meeting	September 2013
<b>SECOND RESERVATION SYSTEM SCOPING MEETING (TODAY)</b>	<b>JUNE 18, 2014</b>
Refine plan with environmental analysis for public review and comment	Summer 2014
Review comments. Prepare final plan	Fall 2014
Public Presentation to Marin Co. Board of Supervisors for Muir Woods Rd. Agreement	Fall 2014
Continue planned implementation with <b>ongoing public communication and monitoring</b>	Fall 2014 to Spring 2016



# Q&A

