Restoration of the Mariposa Grove Of Giant Sequoias

Yosemite National Park

National Park Service
U.S. Department of the Interior

Project Update
Open House
April 2012

Protection of the Mariposa Grove

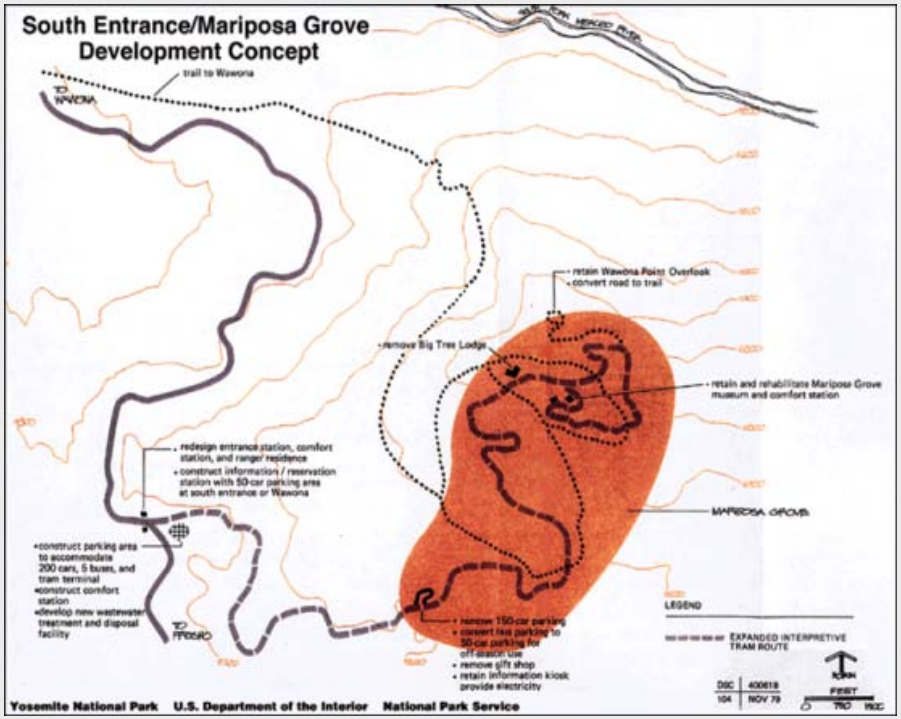
"An Act Authorizing a Grant to the State of California of the "Yo-Semite Valley," and of the Land embracing the "Mariposa Big Tree Grove"

--- signed by President Lincoln, June 30, 1864.

The first legislation passed by Congress to specifically set aside public lands for their scenic values and *"be held for public uses, resort and recreation."*

Wawona Tunnel Tree ca.1928

General Management Plan (NPS, 1980)



Mariposa Grove Goals:

- Provide only visitor facilities consistent with preservation of the unique ecosystem;
- Remove all other facilities not necessary for the enjoyment of the resources

South Entrance Goals

- Provide park orientation and information/reservation system
- Provide staging facilities for Mariposa Grove
- Provide adequate road to Mariposa Grove for buses

Project Need

Today, the Mariposa Grove is a popular all-season destination for visitors to Yosemite. Existing visitor use and site infrastructure are severely impacting the health of the ancient trees as well as the quality of the visitor experience.

Project Purpose

- Restore degraded Grove habitat
- Enhance the visitor experience
- Sustain long-term health of the Giant Sequoias

Issues Include:

Natural Resources
Giant sequoias have shallow surface roots. Healthy root structure is essential to ensure the longevity of these ancient giant trees.

Infrastructure
Existing infrastructure, including the tram fueling station, parking lot and gift shop, are located in prime sequoia habitat within the Grove

Sense of Arrival
The arrival experience can be confusing and frustrating for visitors

Congestion
The site has outgrown its ability to address current visitation needs

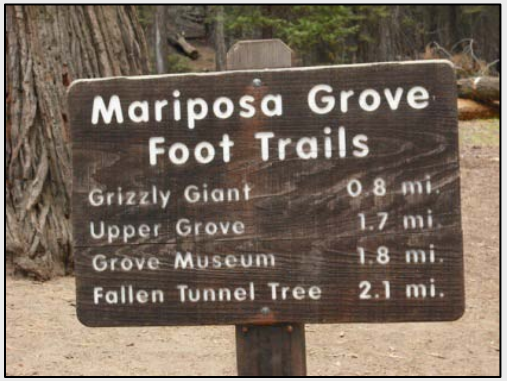
Public Scoping Comments

Visitor Use and Experience

- Manage visitation impacts to the Grove
- Improve accessibility (universal design)
- Trail signs are inadequate and confusing
- Gift shop is not an appropriate “welcome”
- Restrooms are completely inadequate

Protecting the Grove

- Establish more fencing to protect trees and to keep visitors on trails
- Sustainability of Grove health for the next 150-plus years is important
- Remove those portions of the tram and roads that are damaging trees and compacting soil
- Maintain burns to help sequoias ecologically



Public Scoping Comments

Transportation

- Parking at South Entrance is not sufficient
- Establish shuttle directly out of South Entrance vs. Wawona
- Remove Lower Grove parking lot
- Remove tram from Upper Grove but keep in Lower Grove

Soundscape

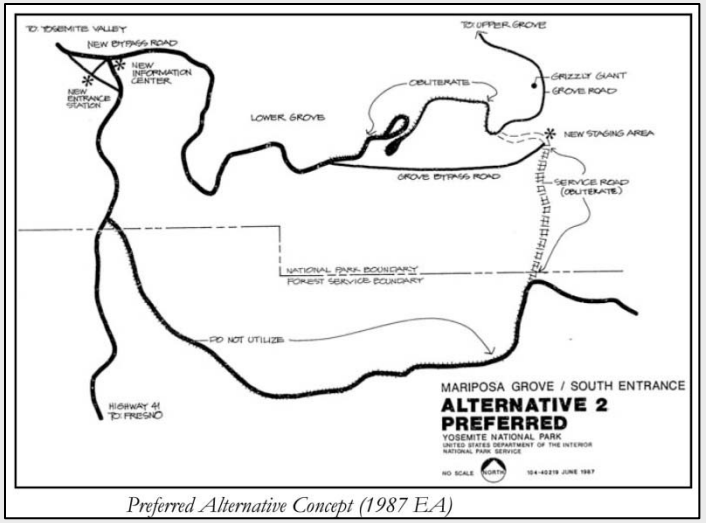
- Noise from buses and trams carry throughout Grove

NEPA Process

- Planning and Design should be coordinated with MRP planning process

Related Planning Efforts

- 1987 South Entrance/Mariposa Grove Concept Plan
- 2009 South Entrance Station Improvements (ARG Design Study)
- 2011 South Entrance Interim Safety Improvements (CE)
- Merced River Plan (DEIS, in progress)



Preferred Alternative Concept (1987 EA)

Data Collection

- Trees
- Hydrology
- Wildlife
- Cultural resources
- Transportation/Visitor Studies

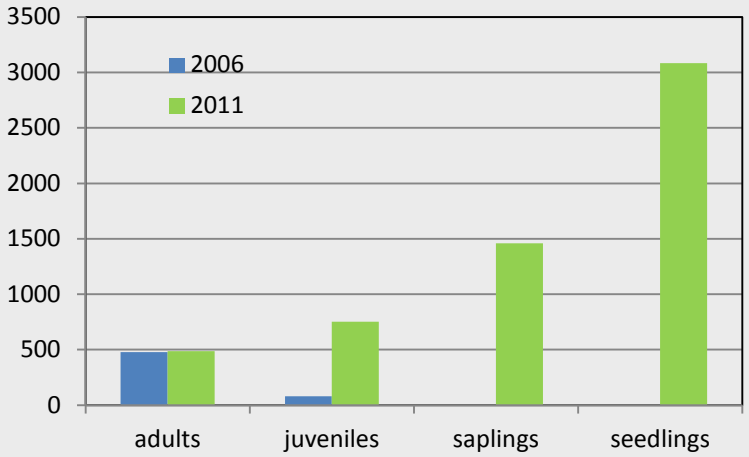
Restoration of the Mariposa Grove Of Giant Sequoias
Yosemite National Park

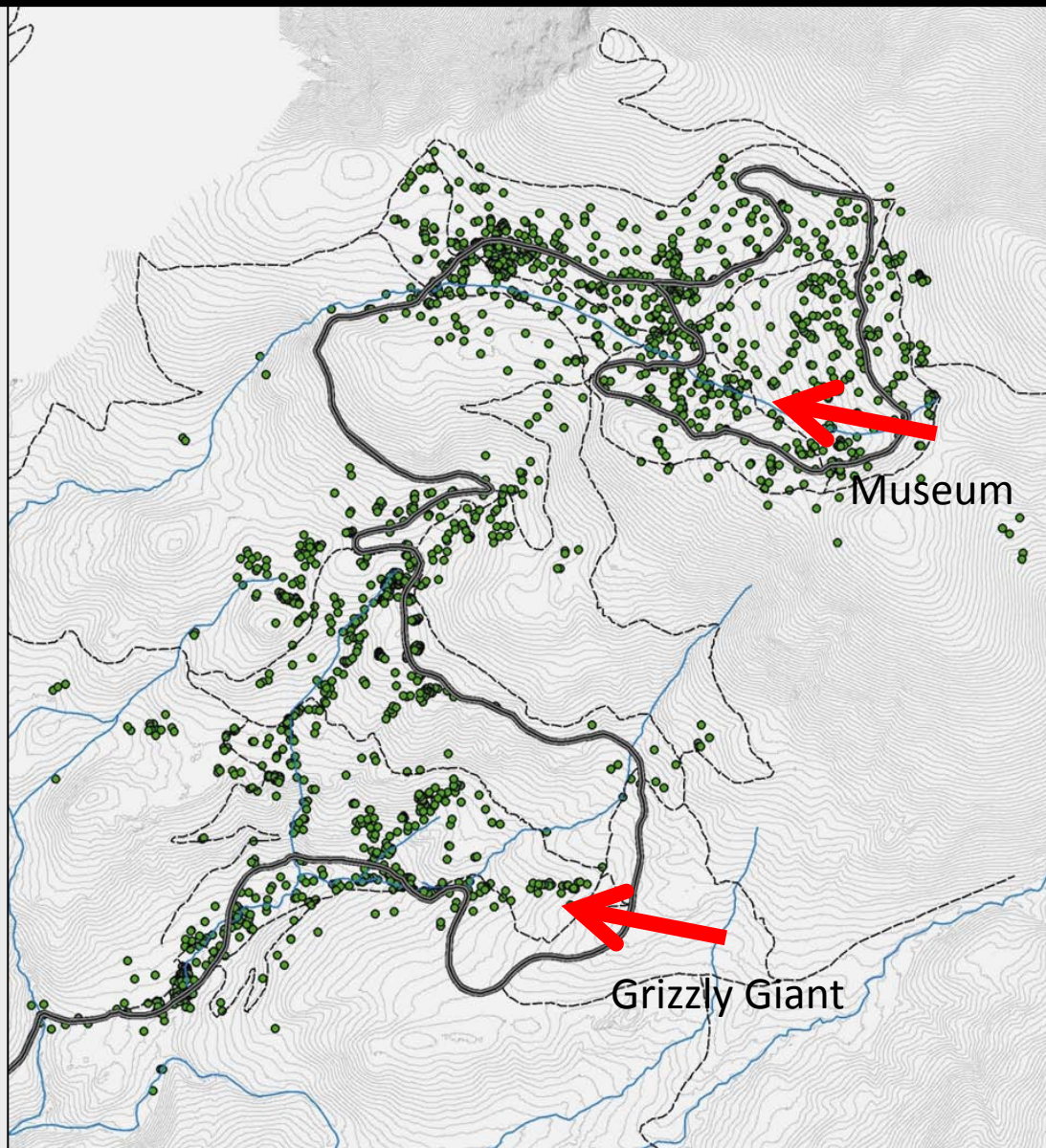
National Park Service
U.S. Department of the Interior

Giant Sequoia Inventory

- 484 adults
- 768 juveniles
- 1,467 Saplings
- ~3,084 seedlings

~5,803 live individuals





Restoration of the Mariposa Grove Of Giant Sequoias

Yosemite National Park

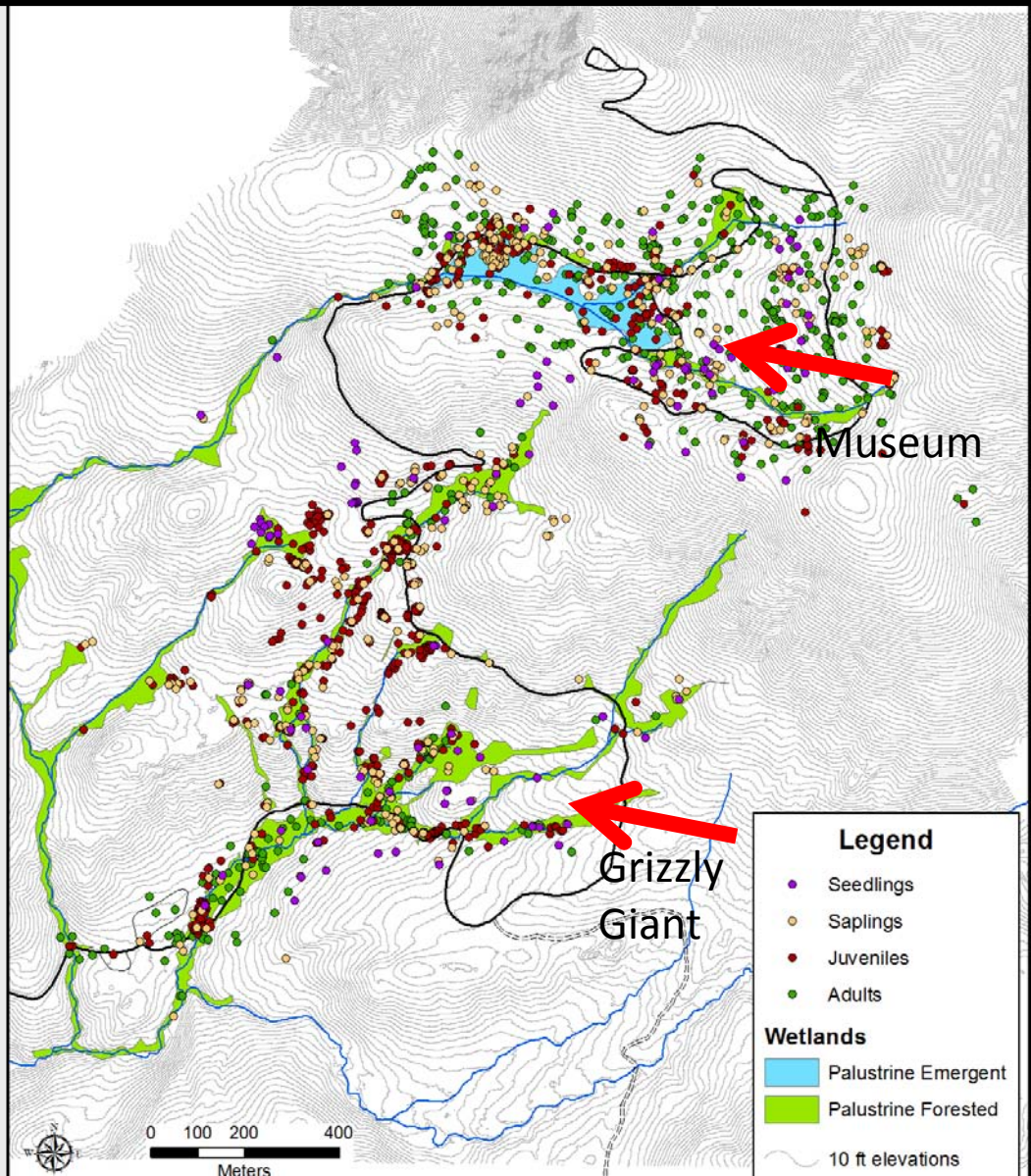
National Park Service
U.S. Department of the Interior

Natural Resources:

Giant sequoias and wetlands

Extremely important for giant sequoia longevity, germination and recruitment

- Adults
  - 25% within
  - 54% within 100 feet
- Juveniles
  - 37% within
  - 82% within 100 feet
- Saplings
  - 42% within
  - 68% within 100 feet
- Seedlings
  - 15% within
  - 31% within 100 feet



Hydrology:

- Important for giant sequoia longevity, germination and recruitment
- Roads and trails intercept and concentrate surface and shallow subsurface flow
- Runoff has been channeled through culverts and inside ditches increasing transit rates (less absorption into soil)
- 65% of culverts are compromised or non-functioning
- Infiltration and surface runoff is impacted by compacted soils
- Leaking utility pipes need repair

Natural Resources: Wildlife

Important breeding habitat for three special status species

Spotted Owl

Pacific Fisher

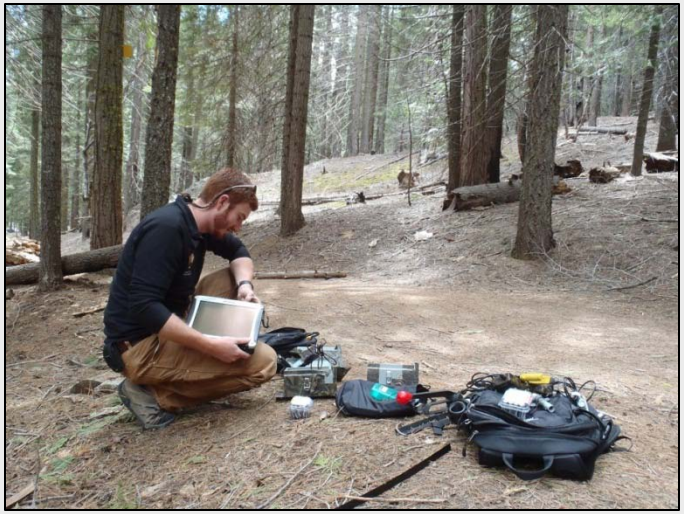
Pallid Bat

"…historic resources, especially those relating to the beginnings of a national conservation ethic; and evidences of the Indians that lived on the land…"

“The California big tree is also in a manner sacred to them [the Mono], and they call it woh-woh'-nau, a word formed in imitation of the hoot of the owl, which is the guardian spirit and deity of this great monarch of the forest.”

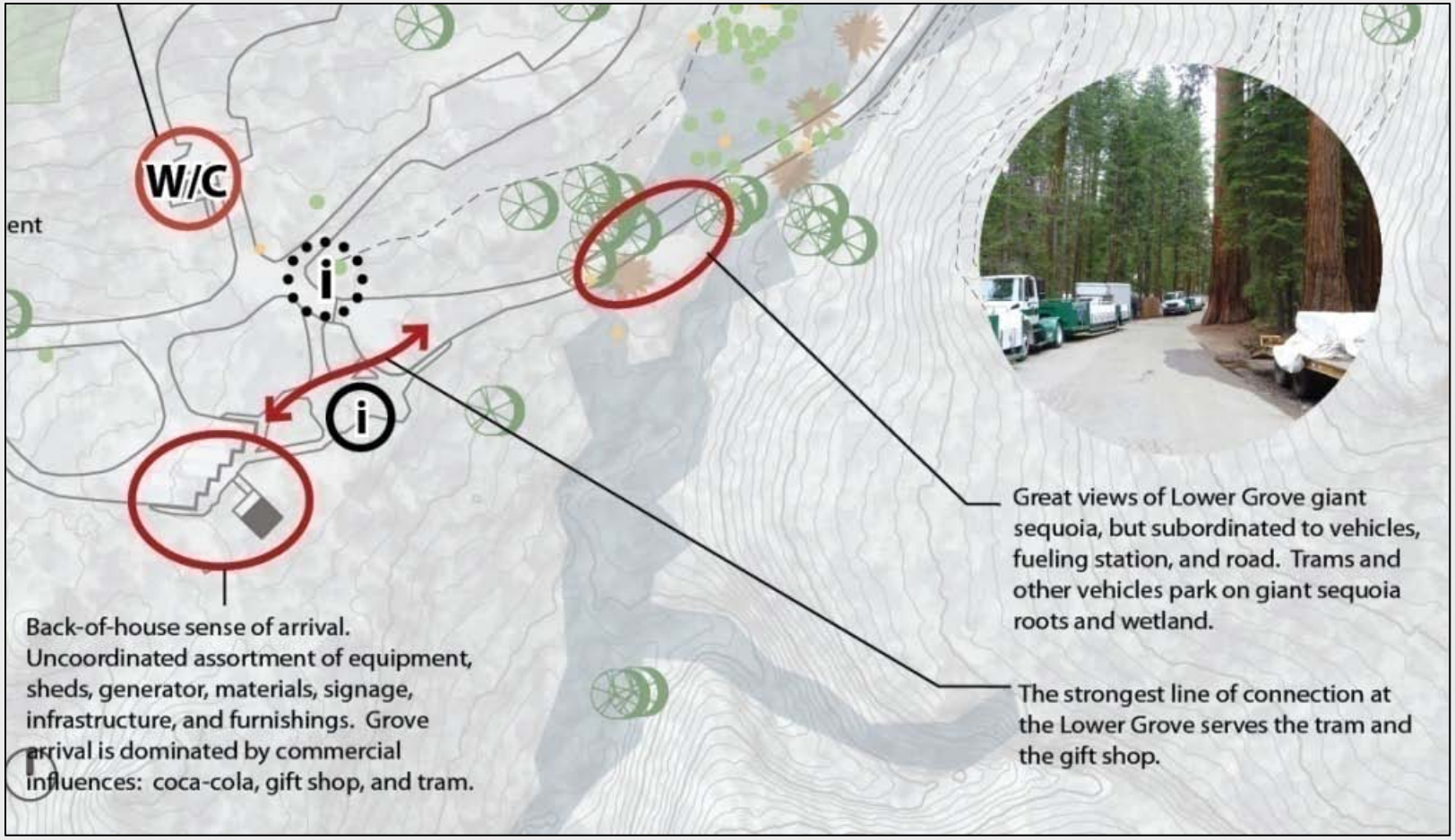
- Stephen Powers, 1887

Visitor Use and Transportation Assessment



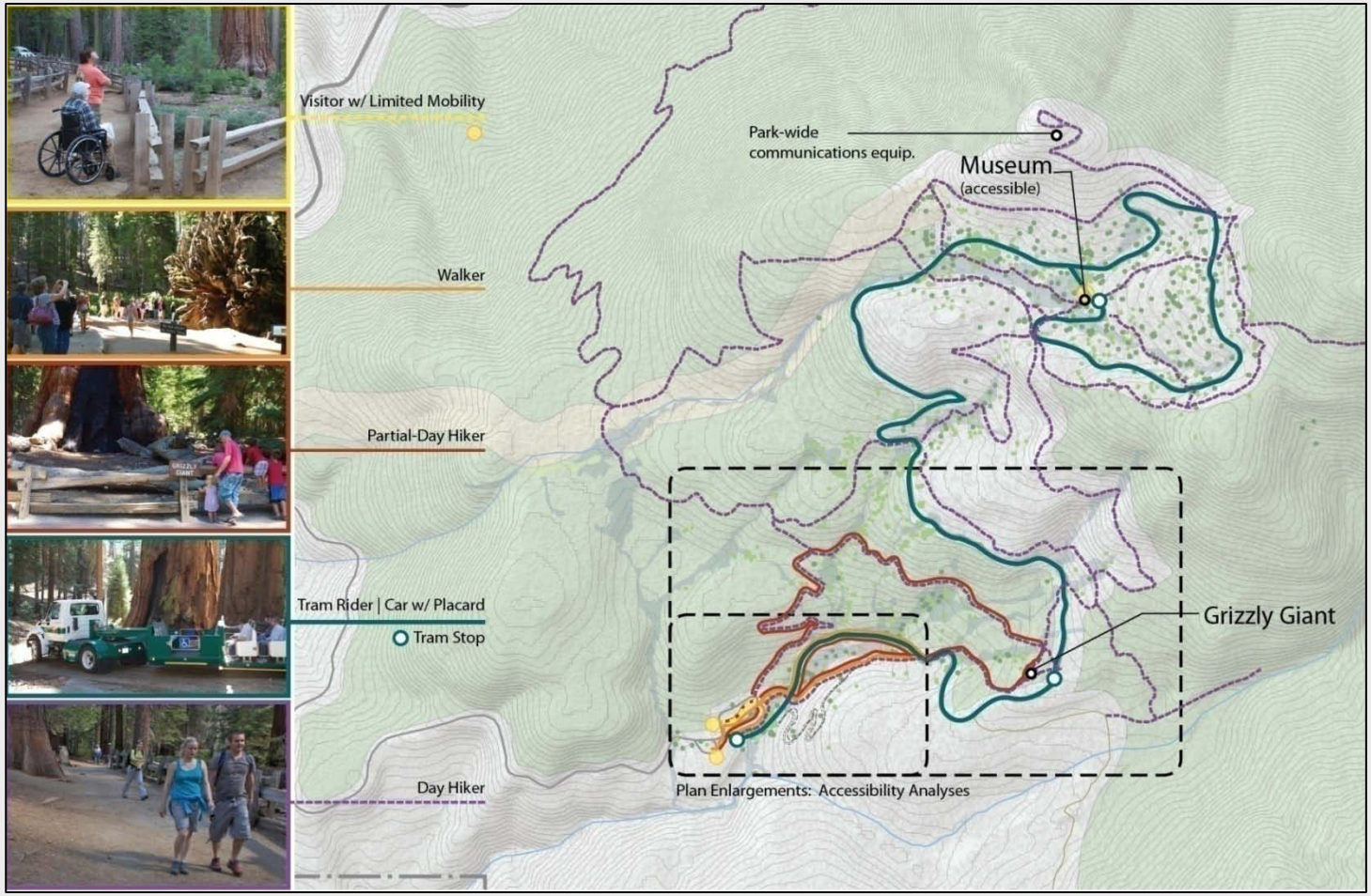
Design Charettes

- Helps generate ideas and solutions while engaging diverse points of view
- Interdisciplinary discussion
- Addresses design problems
- Typically breaks into sub-groups to address the range of issues
- Reporting out ensures all groups are aware of issues and discussions



Assessment of Site/Infrastructure

Improving Site Accessibility



Study of Visitation Patterns

Incorporating Sustainability

WATER CONSERVATION

-Stormwater management: bioswales, permeable materials

-Water conservation with interpretation

-Constructed wetland for wastewater treatment

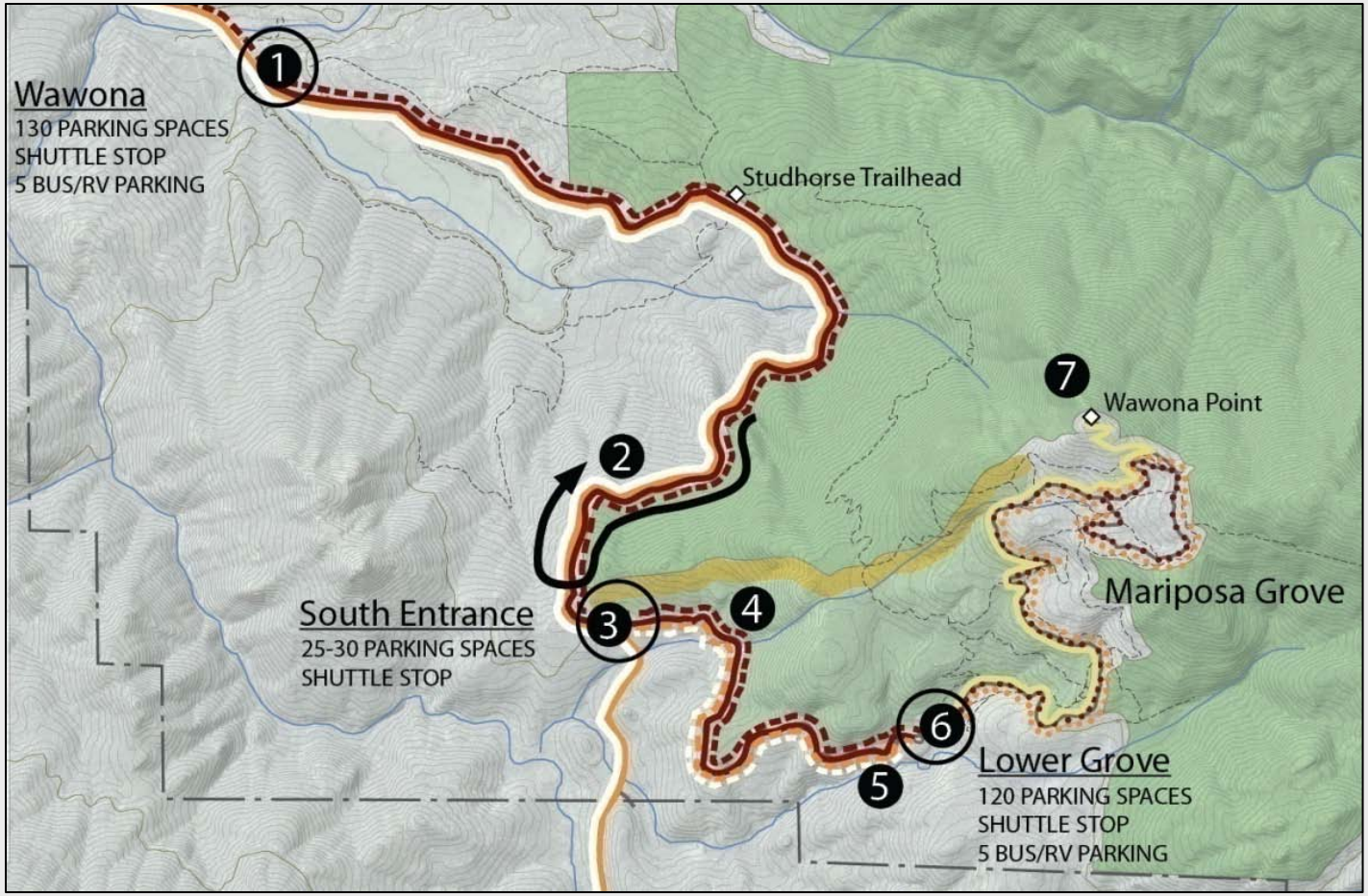
ENERGY CONSERVATION

-Renewable energy use

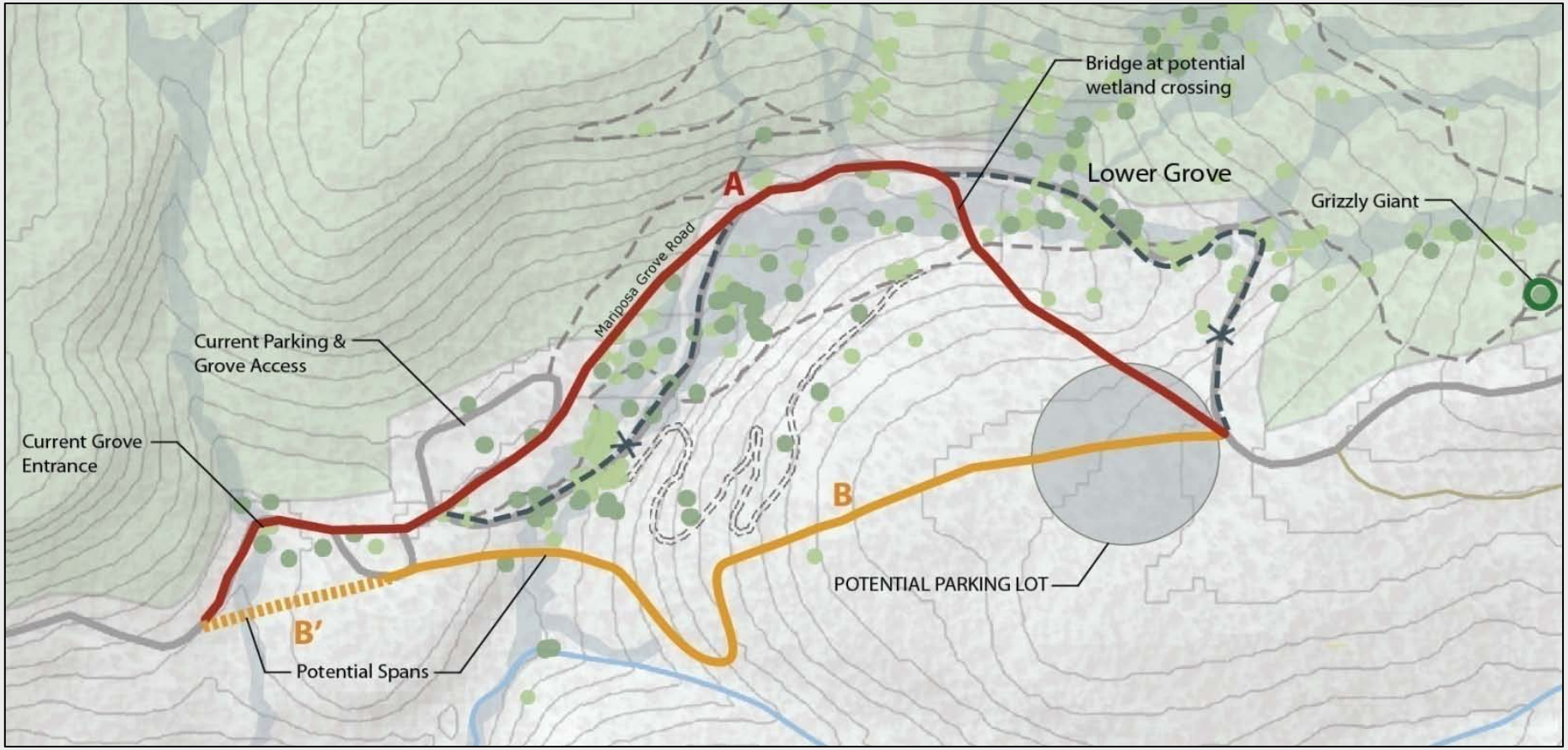
-Energy efficient structures and systems (i.e., passive design)

SUSTAINABLE TRANSPORTATION

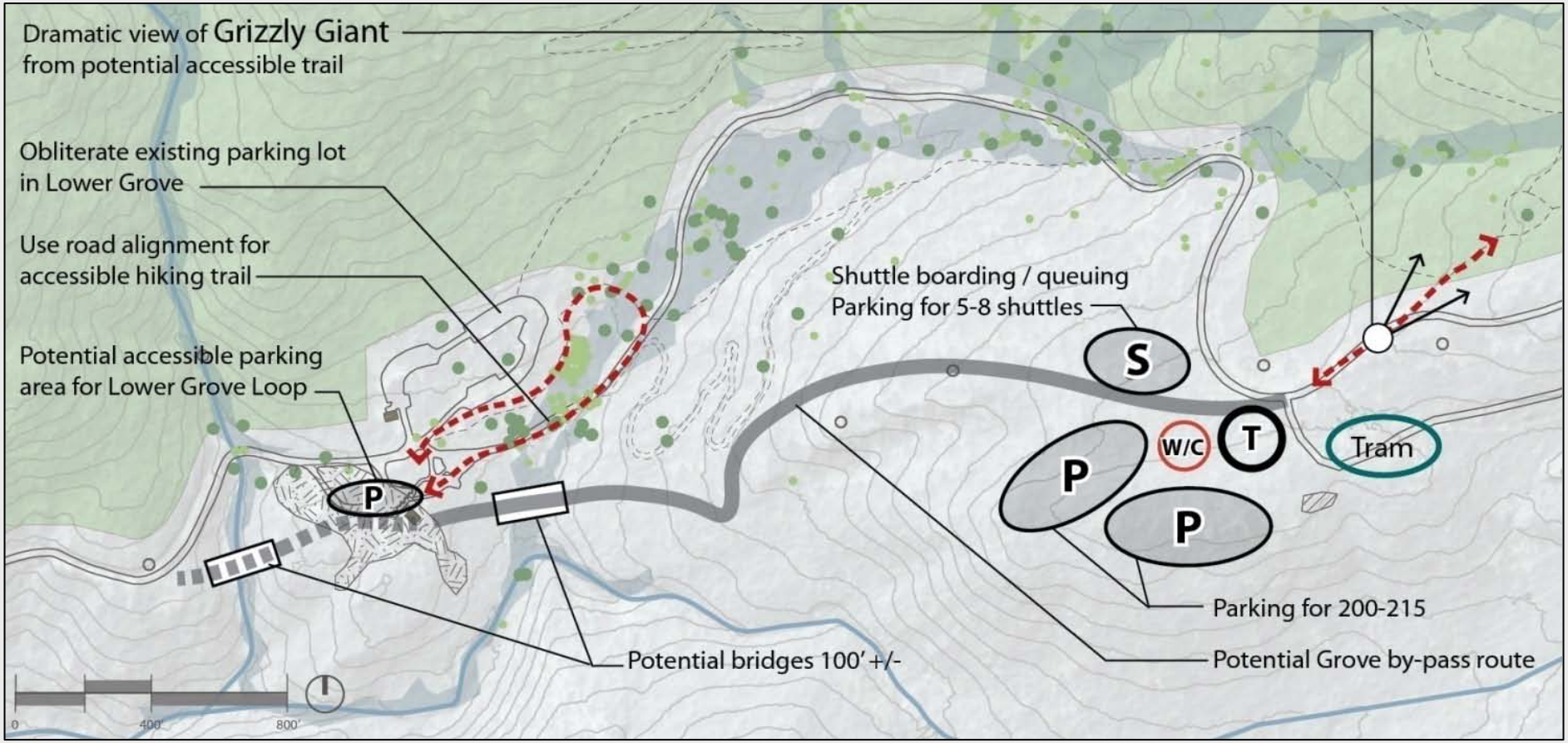
-Shuttles and more efficient parking locations equals fewer miles and reduced carbon emissions



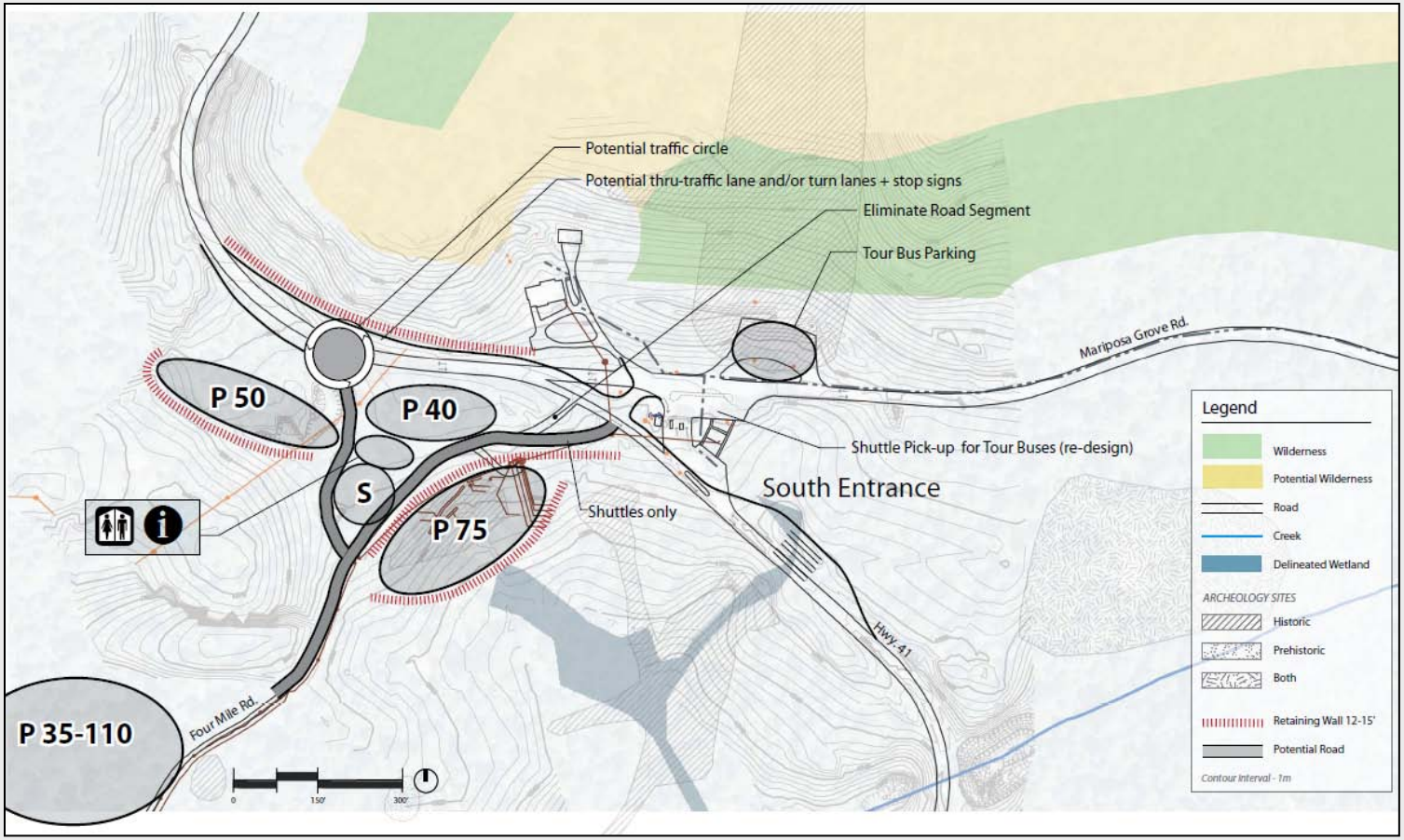
Parking Assessment



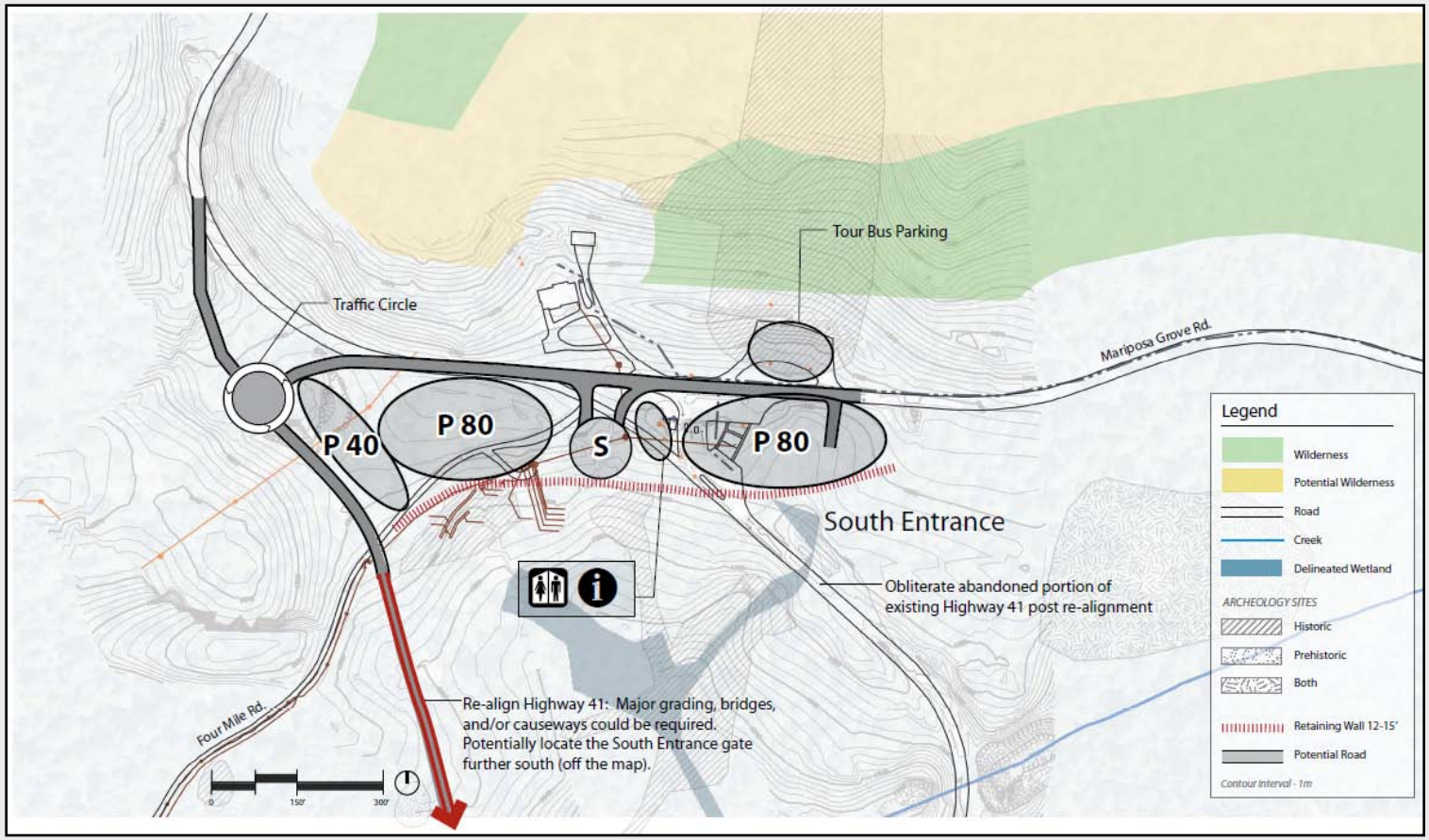
Exploring Site Design Options: Road Access



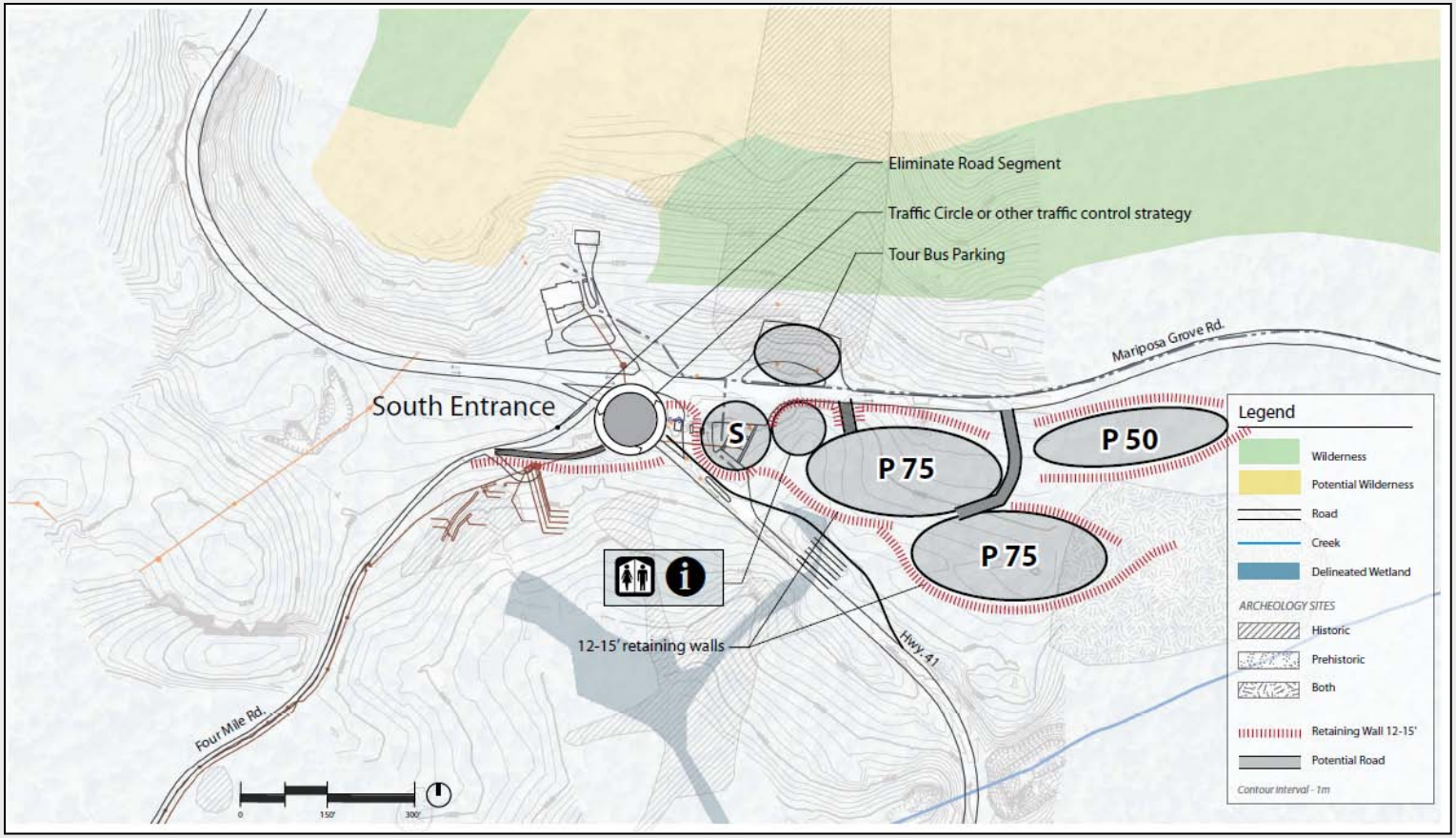
Site Test-Fits: Parking for the Grizzly Giant



South Entrance Site Design Concept #1



South Entrance Site Design Concept #2



South Entrance Site Design Concept #3

Evaluate Draft Design Concepts

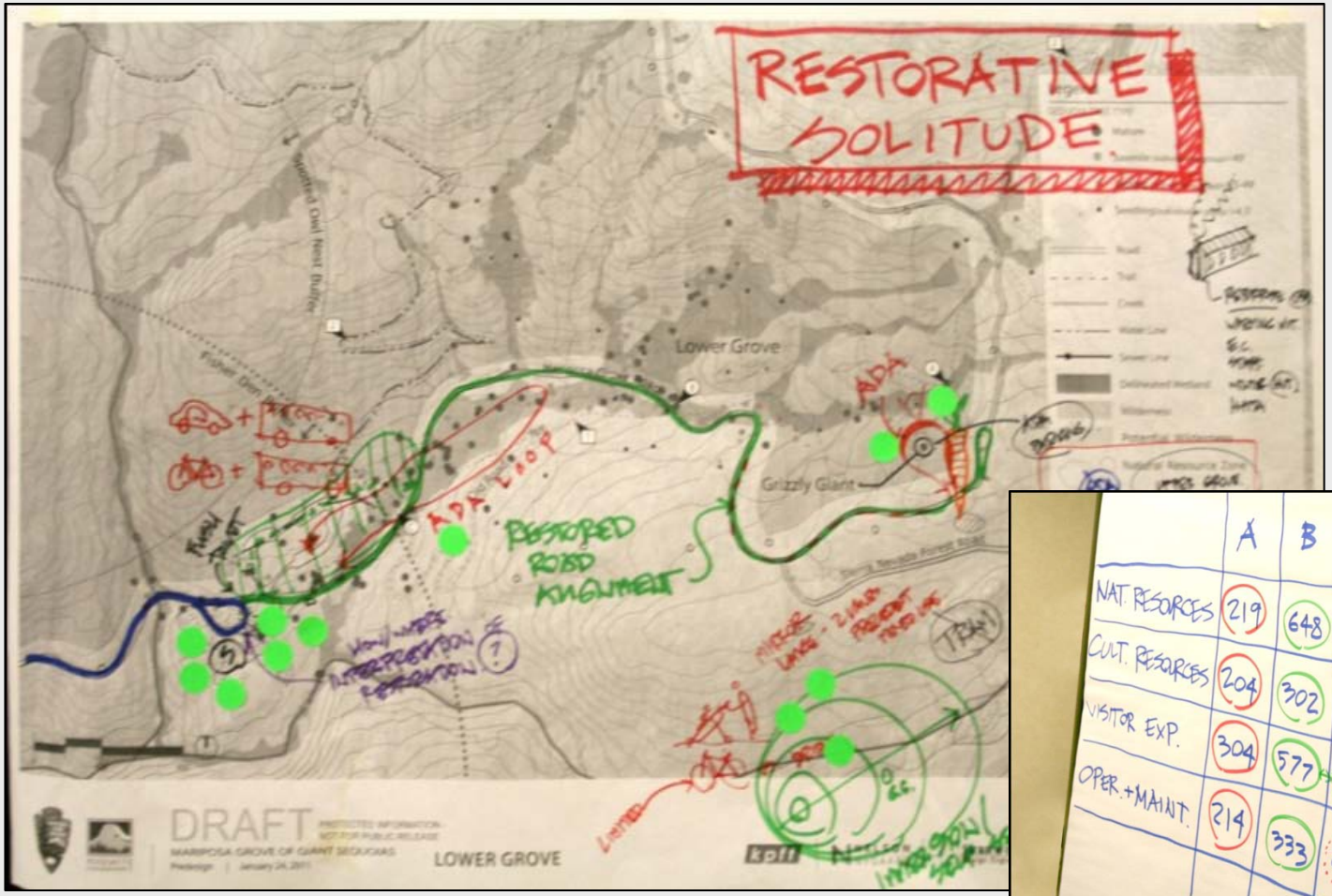
Identifying Commonalities

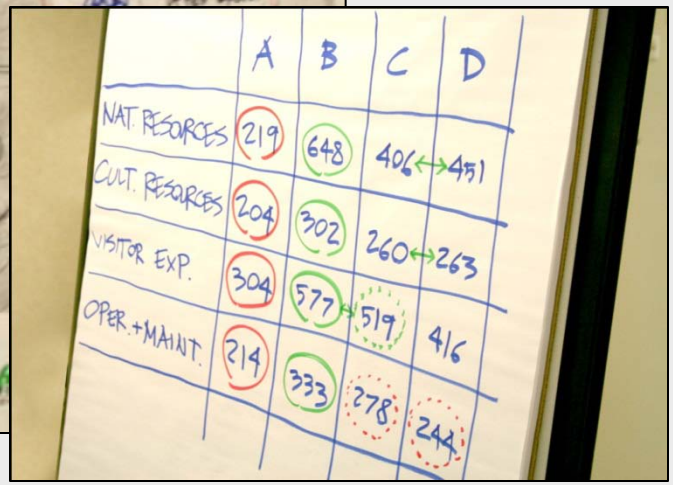
- Improve signage and wayfinding
- Rehabilitate Wawona Point
- Engineered hydrology improvements
- Fix tight curve at MG entry sign
- Move museum function (some)
- View management
- Trail reconfiguration & consolidation
- Improve visitor education
- Interpret prehistoric archeology

Generate ideas for further design, development, and evaluation as the project progresses

Restoration of the Mariposa Grove Of Giant Sequoias
Yosemite National Park

National Park Service
U.S. Department of the Interior





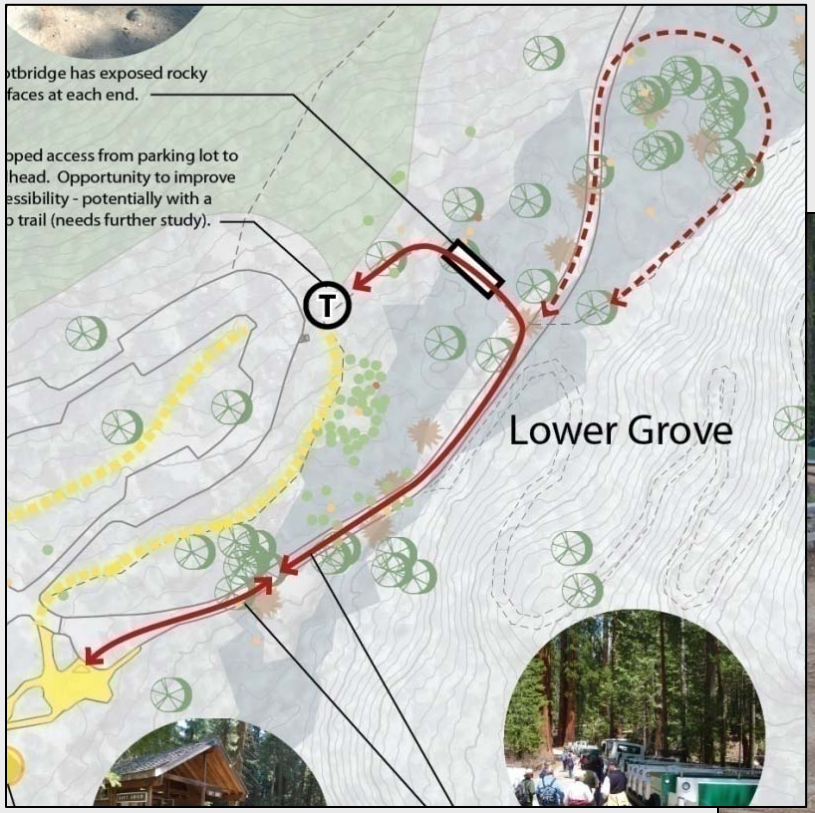
Next Steps: Developing Alternatives

-Improve Shuttle Experience

Next Steps: Developing Alternatives

-Looking at ways to improve accessibility in the Grove

-



Next Steps: Developing Alternatives

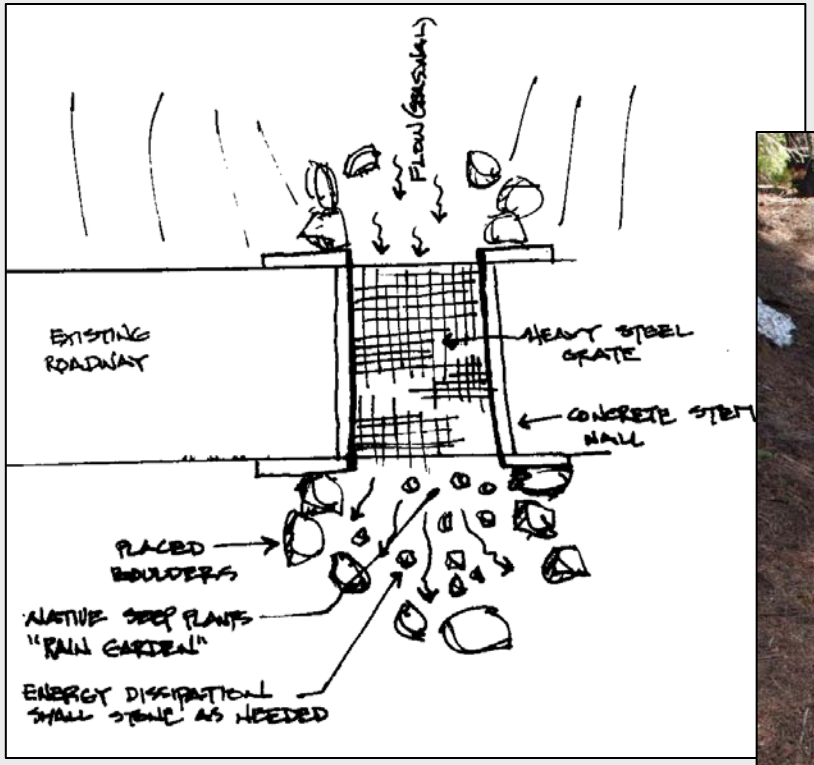
-Protecting the Trees

Next Steps: Developing Alternatives

-Reducing Paving within the Grove

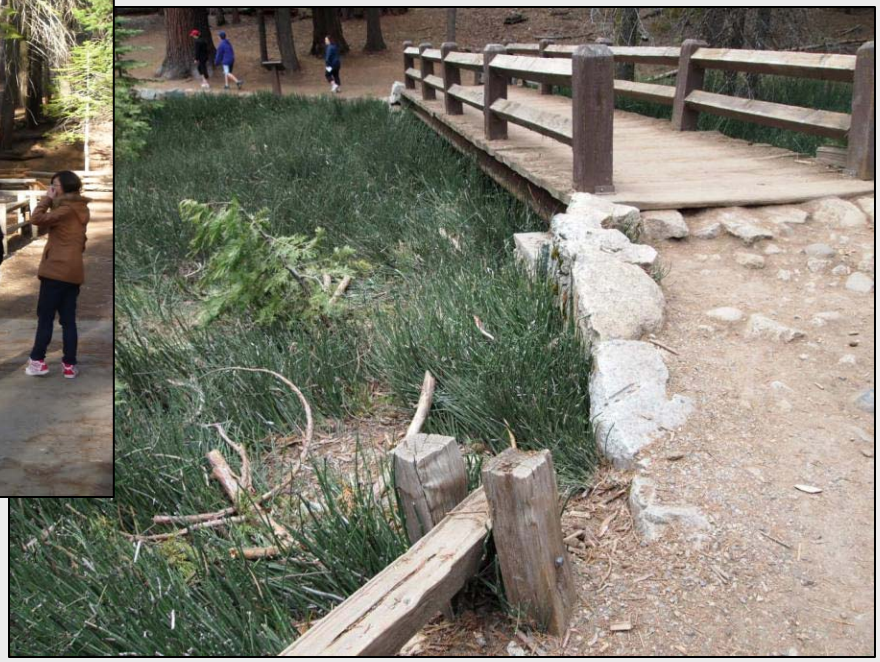
Next Steps: Developing Alternatives

-Improving Ground Water Retention



Next Steps: Developing Alternatives

-Relocating Trails Away from Sensitive Resources



Restoration of the Mariposa Grove Of Giant Sequoias

Yosemite National Park

National Park Service
U.S. Department of the Interior

Restoration of the Mariposa Grove Of Giant Sequoias

Yosemite National Park

National Park Service
U.S. Department of the Interior

Restoration of the Mariposa Grove Of Giant Sequoias

Yosemite National Park

National Park Service
U.S. Department of the Interior

Restoration of the Mariposa Grove Of Giant Sequoias

Yosemite National Park

National Park Service
U.S. Department of the Interior

Restoration of the Mariposa Grove Of Giant Sequoias

Yosemite National Park

National Park Service
U.S. Department of the Interior

Restoration of the Mariposa Grove Of Giant Sequoias

Yosemite National Park

National Park Service
U.S. Department of the Interior

Project Milestones

2011

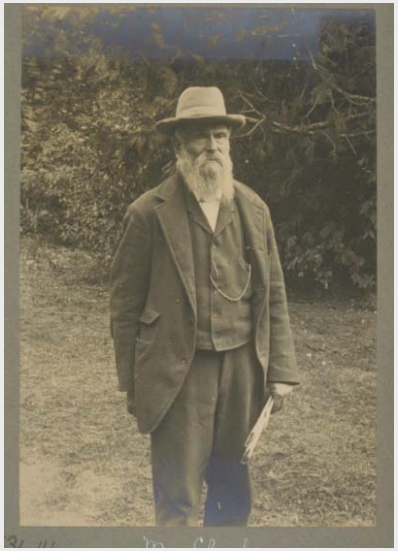
May 27	Internal Scoping Kick-off/Site Visit
August 15	Initiate Consultation w/ Agencies and Tribes
August 30	**Public Scoping- Open House/Webinar**
October 14	**Public Site Visit**
December 3	Federal Register Notice of Intent to Prepare an EIS

2012

January 5	Consultation with Tribes
January 24	Design Charette # 1
January 25	**Public Open House**
February 3	End Public Scoping
March 13	Design Charette # 2

Project Milestones

April 25, 2012	**Public Open House –Update on Design Charettes/Draft Concepts**
May 2	Design Charette # 3
May (TBD)	Consultation site visit with Tribes
May 30	**Public Open House**
June 5/6	Choosing by Advantages (CBA) Workshop (Identify Preferred Alternative)
June 27	**Public Open House**
August	**Public Review DEIS (60 days) (Public Open House, Site Visit)**
December	Comment Analysis and EIS Revision
2013	
February 2013	**Final EIS published (anticipated)**
March	Record of Decision (anticipated)



Project Milestones

Restoration of the Mariposa Grove Of Giant Sequoias

Yosemite National Park

National Park Service
U.S. Department of the Interior