

Mariposa Grove Restoration

Choosing By Advantages Workshop | June 5-6, 2012





Design Charette #2 Review
Concept Evaluation Exercise

CONCEPT EVALUATION RESULTS:

	A	B	C	D
NAT. RESOURCES	219	648	406 ↔ 451	
CULT. RESOURCES	204	302	260 ↔ 263	
VISITOR EXP.	304	577	519	416
OPER.+MAINT.	214	333	278	244

Red = lowest value per category
Green = highest value

The general scoring pattern indicated a relatively strong preference for Preliminary Draft Concept B: South Entrance Hub.

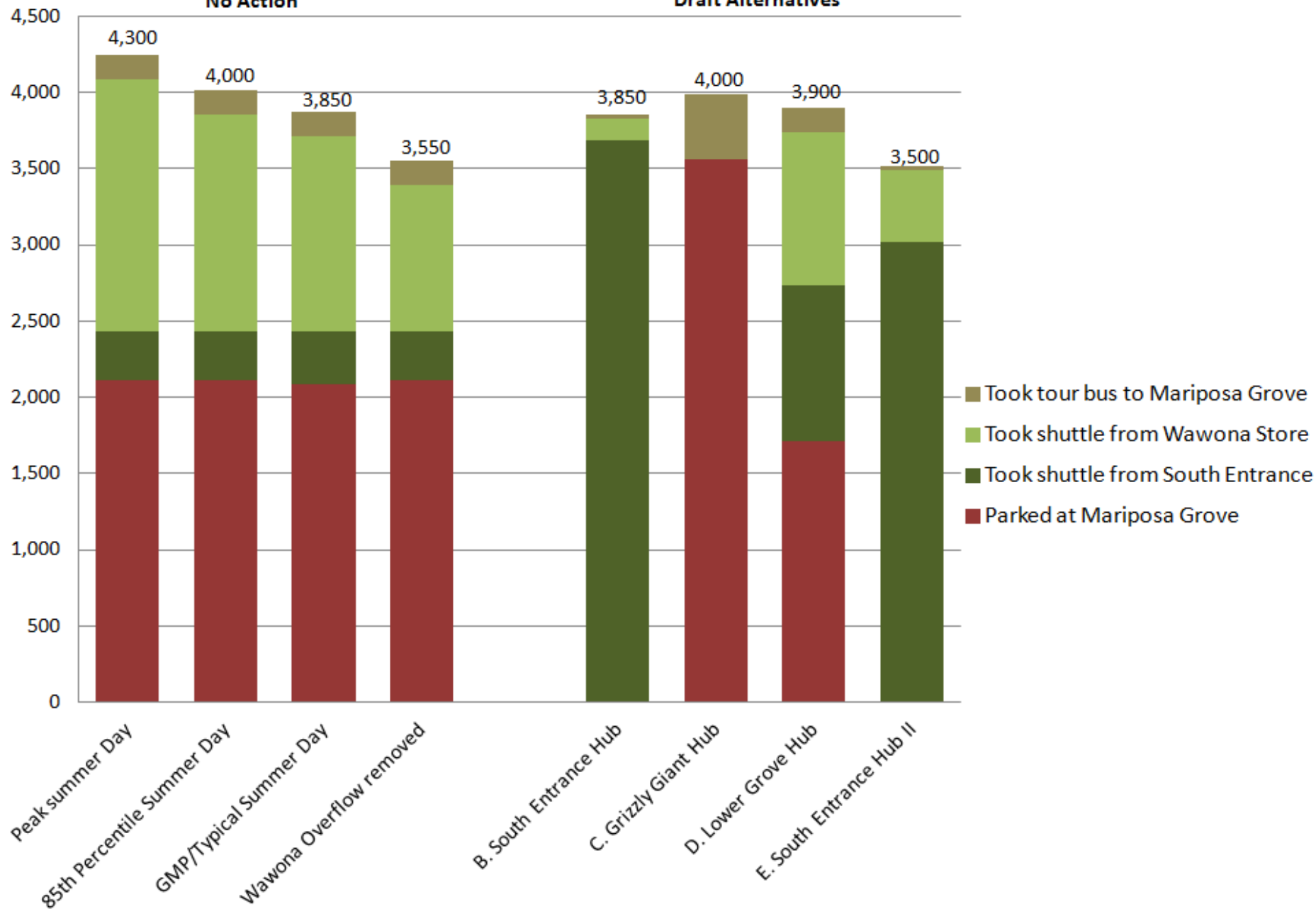
This result is consistent with previous and subsequent exercises.



Estimated Daily Visitors By Mode of Arrival

No Action

Draft Alternatives



Natural Resources

B

C

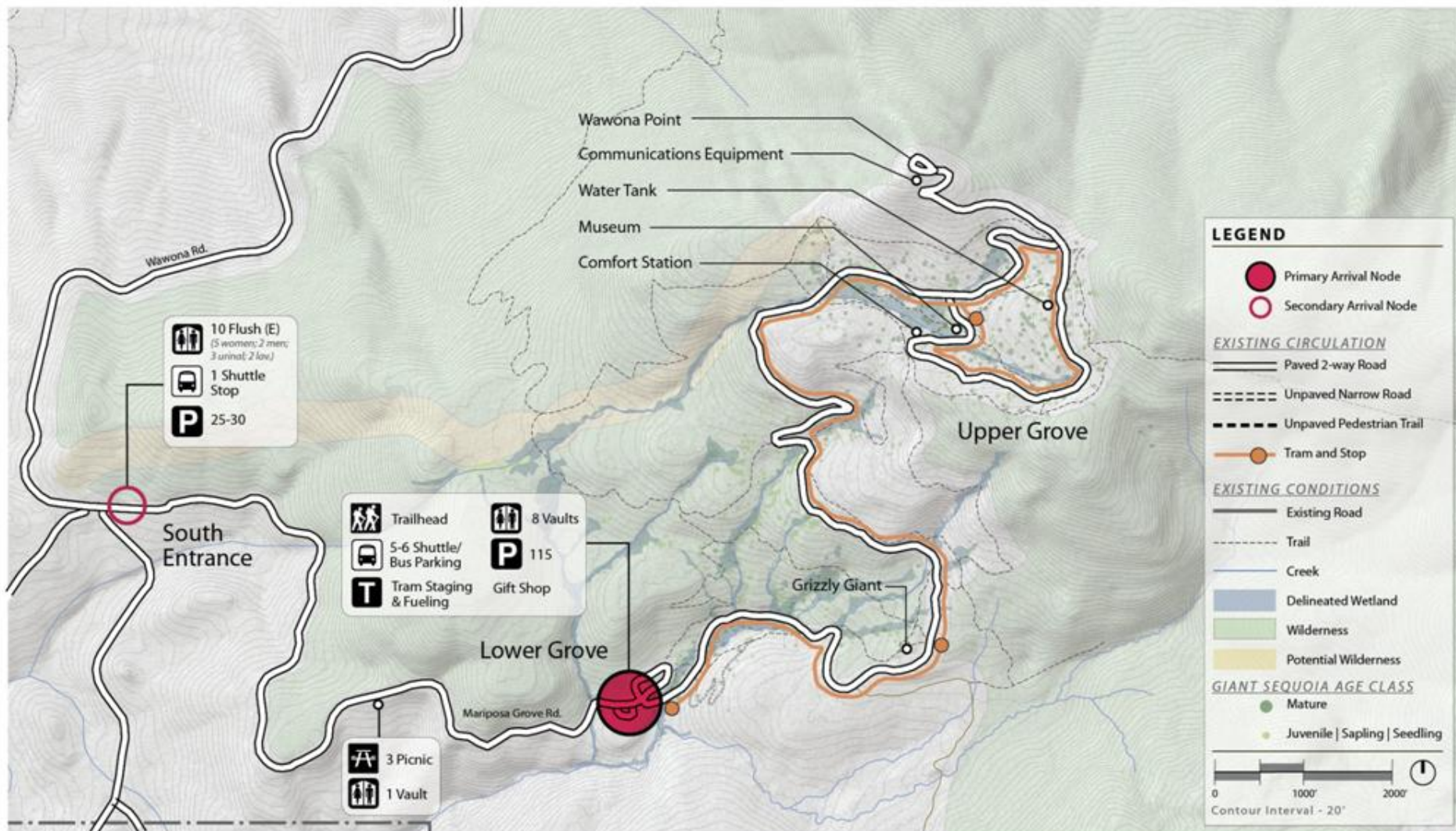
D

Restoration

	SOUTH ENTRANCE HUB	GRIZZLY GIANT HUB	LOWER GROVE HUB
1. Remove tram & rehabilitate along roadside?	<div>2</div>	<div></div>	<div></div>
2. Remove tram, road & create unpaved pedestrian trail? (No vehicular access)	Write-in comments		<div></div>
3. Obliterate trail and restore?	<div></div>	<div></div>	<div></div>
4. Remove parking area & restore?	<div></div>	<div></div>	Write-in comments
5. Remove tram from staging area & restore?	<div></div>	<div></div>	<div></div>
6. Remove tram from staging area and parking area & restore?			
7. Reduce parking area & restore?			



Mariposa Grove Restoration DRAFT ALTERNATIVES



A DRAFT ALTERNATIVE
NO ACTION

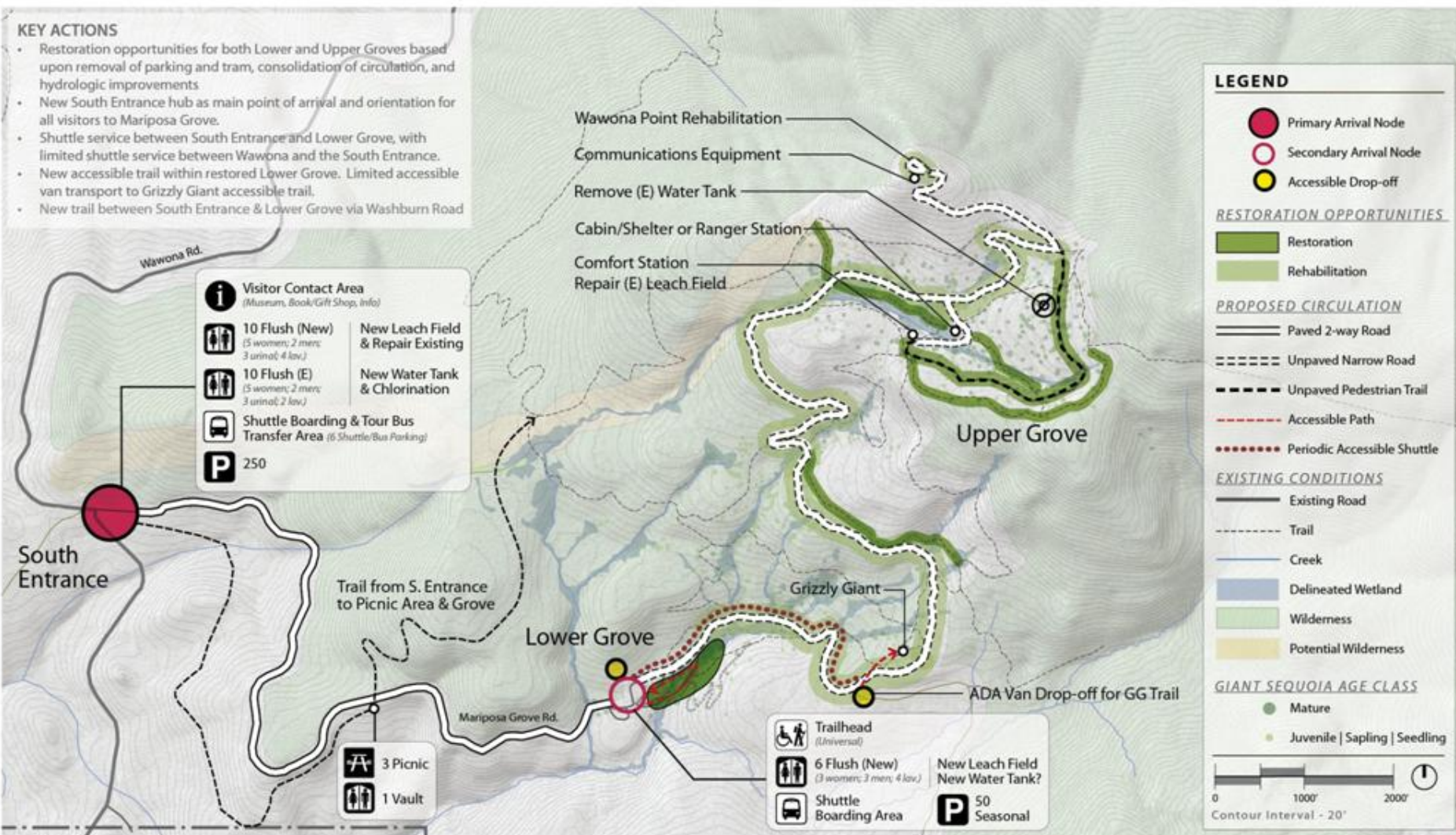
MARIPOSA GROVE RESTORATION
Schematic Design | June 2012

kplf **N NELSON NYGAARD** **SHERWOOD** **MITHÜN**



KEY ACTIONS

- Restoration opportunities for both Lower and Upper Groves based upon removal of parking and tram, consolidation of circulation, and hydrologic improvements.
- New South Entrance hub as main point of arrival and orientation for all visitors to Mariposa Grove.
- Shuttle service between South Entrance and Lower Grove, with limited shuttle service between Wawona and the South Entrance.
- New accessible trail within restored Lower Grove. Limited accessible van transport to Grizzly Giant accessible trail.
- New trail between South Entrance & Lower Grove via Washburn Road



DRAFT ALTERNATIVE B SOUTH ENTRANCE HUB

MARIPOSA GROVE RESTORATION
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Design Engineers

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MITHÜN

KEY ACTIONS

- Restoration opportunities for both Lower and Upper Groves based upon new Grove bypass road, removal of Lower Grove parking, relocation of tram staging and parking, consolidation of circulation, and hydrologic improvements
- New Grizzly Giant parking area as main point of arrival and orientation for all visitors to Mariposa Grove
- No shuttle service
- New accessible trail within restored Lower Grove.

Wawona Rd.

10 Flush (E)
(5 women; 2 men;
3 uninit; 2 low)
P 25-30
Seasonal

South Entrance

Wawona Point Rehabilitation

Communications Equipment

Water Tank

Museum

Comfort Station
Repair (E) Leach Field

Upper Grove

Trailhead
(Universal)
2 Vault
P 4 ADA

Lower Grove

Grizzly Giant

P 2 ADA

3 Picnic
1 Vault

Mariposa Grove Rd.

Vehicular
Bridges

Trailhead
2 Tour
Bus Pkg.
P 230
10 Vaults
T Tram Staging
(Fueling at Wawona)

LEGEND

- Primary Arrival Node
- Secondary Arrival Node
- Accessible Drop-off

RESTORATION OPPORTUNITIES

- Restoration
- Rehabilitation

PROPOSED CIRCULATION

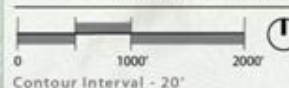
- Paved 2-way Road
- Unpaved Narrow Road
- Unpaved Pedestrian Trail
- Accessible Path
- Tram and Stop

EXISTING CONDITIONS

- Existing Road
- Trail
- Creek
- Delineated Wetland
- Wilderness
- Potential Wilderness

GIANT SEQUOIA AGE CLASS

- Mature
- Juvenile | Sapling | Seedling



DRAFT ALTERNATIVE
GRIZZLY GIANT HUB

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KEY ACTIONS

- Restoration opportunities for both Lower and Upper Groves based upon new Grove bypass road, removal of Lower Grove parking, relocation of tram staging and parking, consolidation of circulation, and hydrologic improvements
- New Grizzly Giant parking area as main point of arrival and orientation for all visitors to Mariposa Grove
- No shuttle service
- New accessible trail within restored Lower Grove.

Wawona Rd.

10 Flush (E)
(5 women; 2 men;
3 urinal; 2 lav.)
P 25-30
Seasonal

South Entrance

Trailhead
(Universal)
2 Vault
P 10 ADA

3 Picnic
1 Vault

Mariposa Grove Rd.

Vehicular
Bridges

Wawona Point Rehabilitation

Communications Equipment

Water Tank

Cabin/Shelter or Ranger Station

Comfort Station

Repair (E) Leach Field

Lower Grove

Grizzly Giant

Upper Grove

Trailhead
2 Tour
Bus Pkg.
Visitor Contact Area
(Museum, Info)
10 Vaults
P 230

LEGEND

- Primary Arrival Node
- Secondary Arrival Node
- Accessible Drop-off

RESTORATION OPPORTUNITIES

- Restoration
- Rehabilitation

PROPOSED CIRCULATION

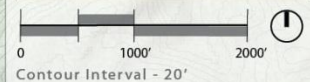
- Paved 2-way Road
- Unpaved Narrow Road
- Unpaved Pedestrian Trail
- Accessible Path
- Tram and Stop

EXISTING CONDITIONS

- Existing Road
- Trail
- Creek
- Delineated Wetland
- Wilderness
- Potential Wilderness

GIANT SEQUOIA AGE CLASS

- Mature
- Juvenile | Sapling | Seedling



DRAFT ALTERNATIVE
GRIZZLY GIANT HUB (rev.)

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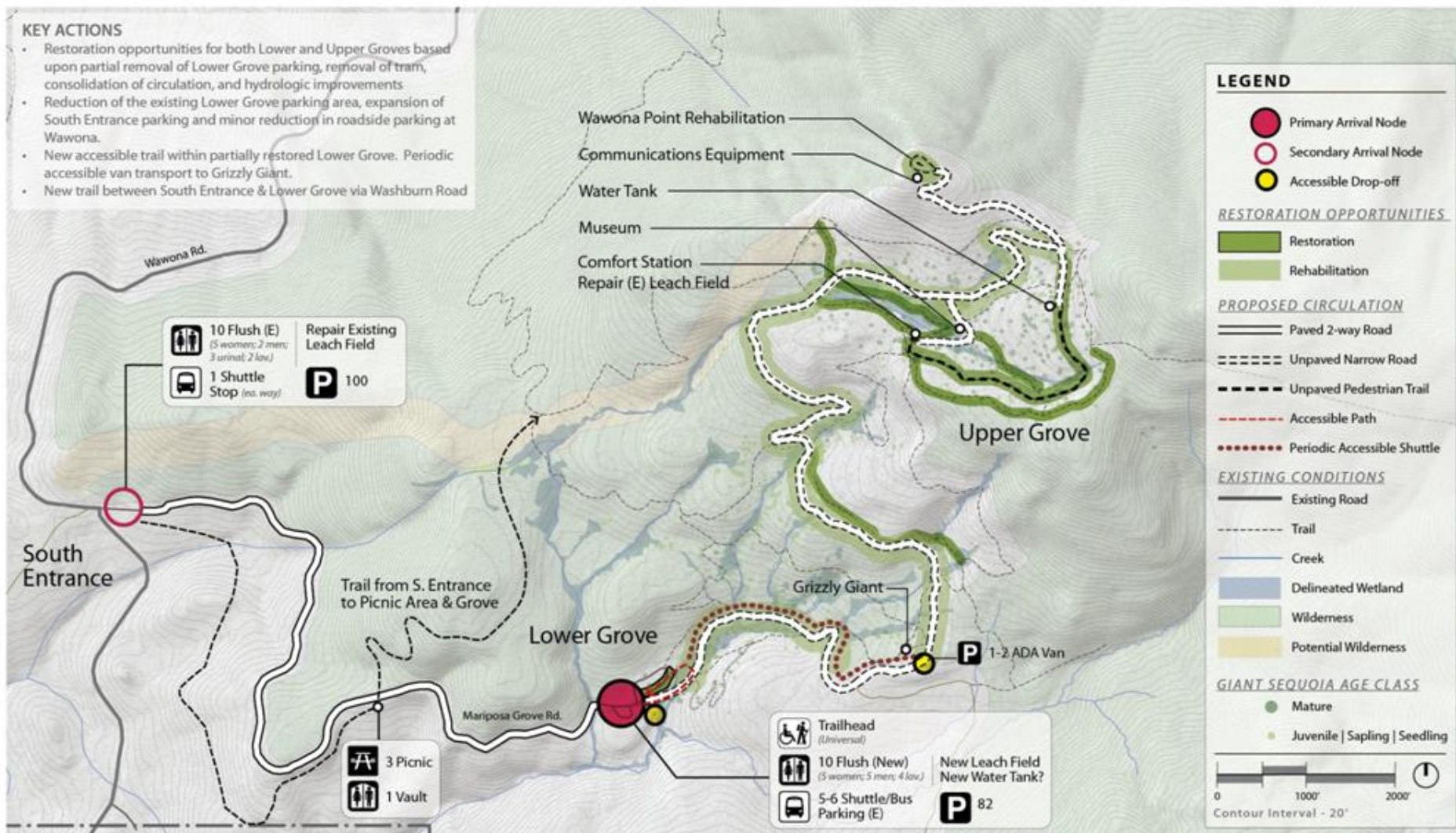
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KEY ACTIONS

- Restoration opportunities for both Lower and Upper Groves based upon partial removal of Lower Grove parking, removal of tram, consolidation of circulation, and hydrologic improvements.
- Reduction of the existing Lower Grove parking area, expansion of South Entrance parking and minor reduction in roadside parking at Wawona.
- New accessible trail within partially restored Lower Grove. Periodic accessible van transport to Grizzly Giant.
- New trail between South Entrance & Lower Grove via Washburn Road



DRAFT ALTERNATIVE D LOWER GROVE HUB

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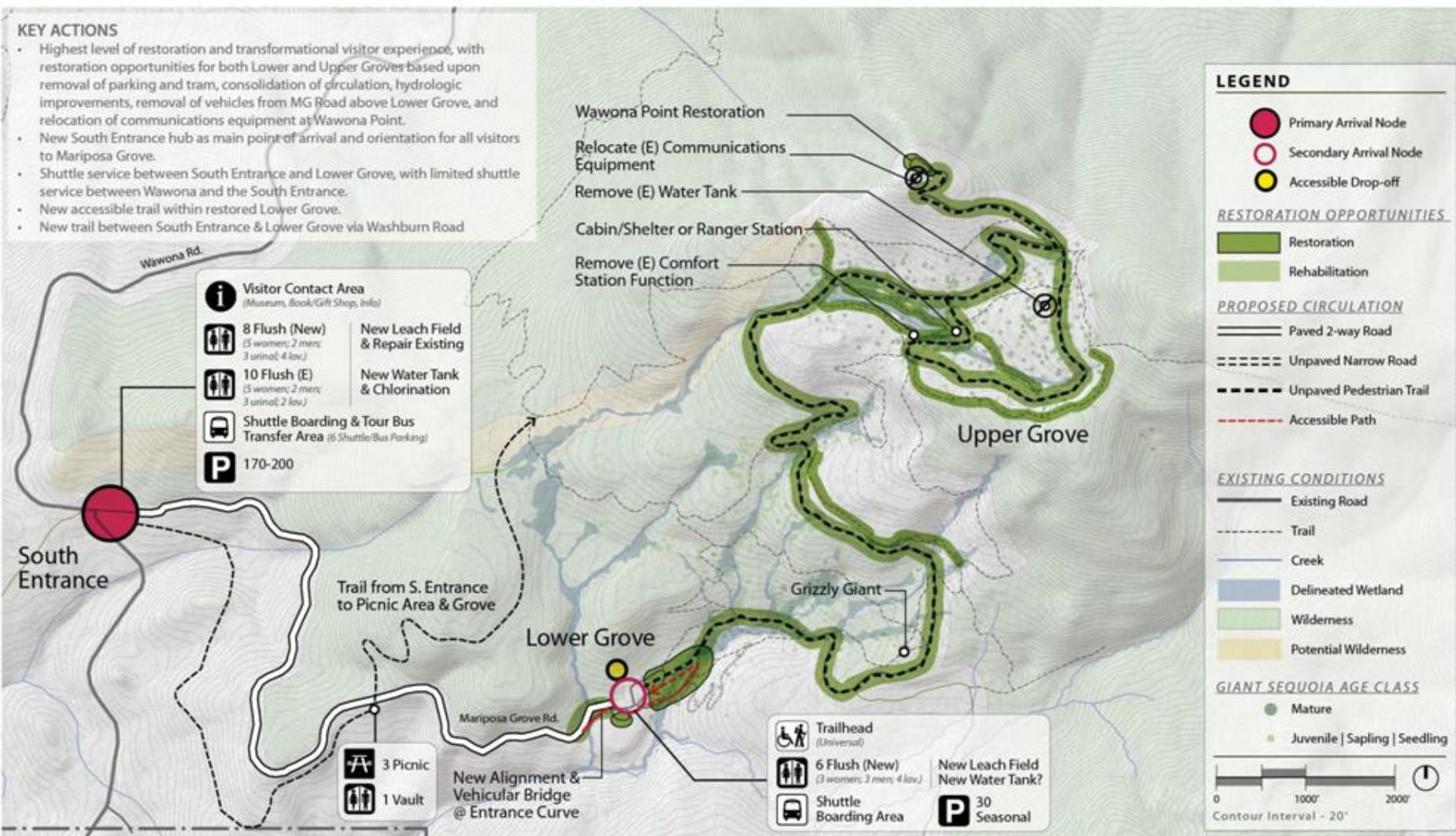


Pacific Fisher

Photo © Art Wolfe

KEY ACTIONS

- Highest level of restoration and transformational visitor experience, with restoration opportunities for both Lower and Upper Groves based upon removal of parking and tram, consolidation of circulation, hydrologic improvements, removal of vehicles from MG Road above Lower Grove, and relocation of communications equipment at Wawona Point.
- New South Entrance hub as main point of arrival and orientation for all visitors to Mariposa Grove.
- Shuttle service between South Entrance and Lower Grove, with limited shuttle service between Wawona and the South Entrance.
- New accessible trail within restored Lower Grove.
- New trail between South Entrance & Lower Grove via Washburn Road



DRAFT ALTERNATIVE E SOUTH ENTRANCE HUB II

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Design Engineers

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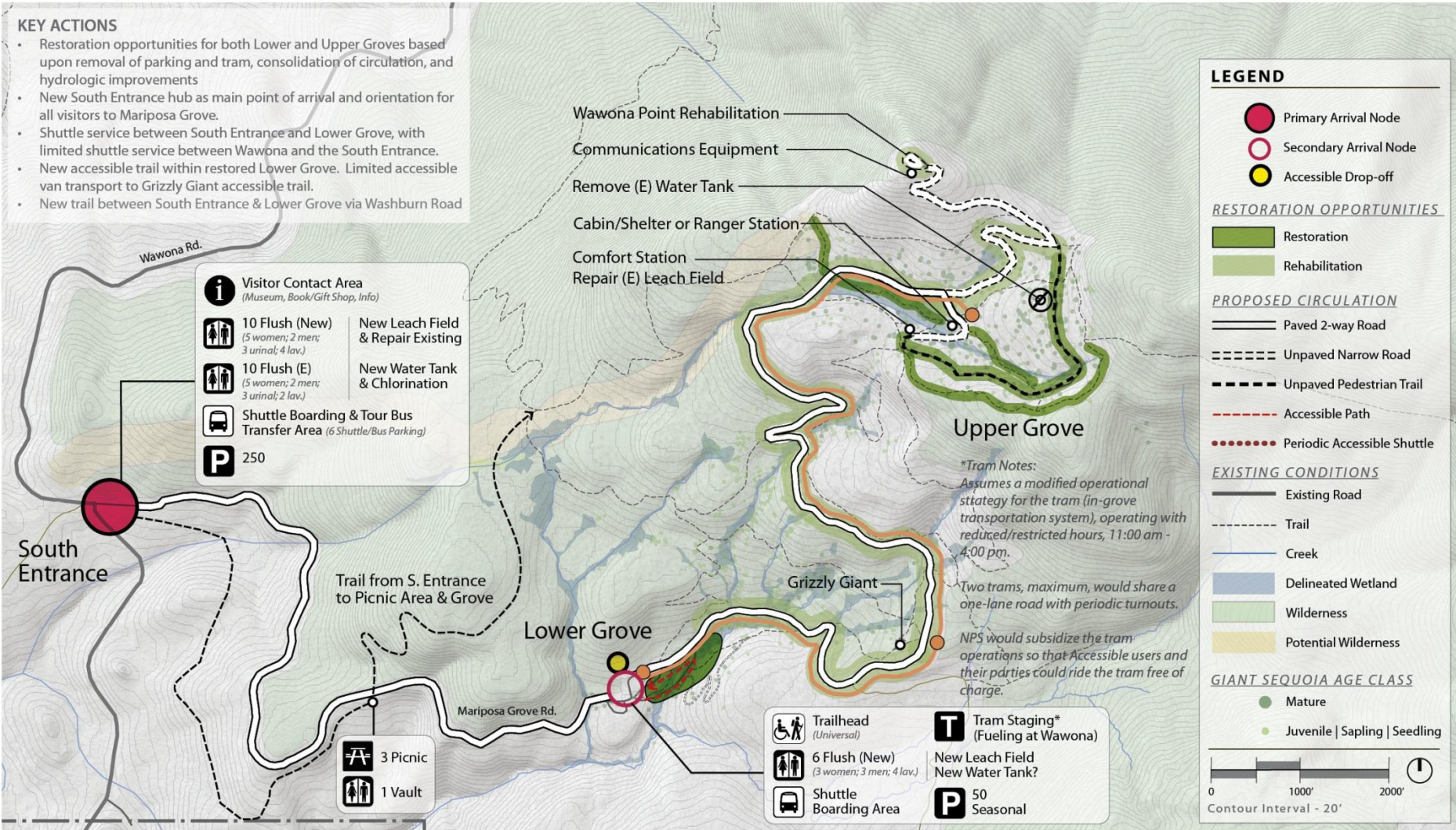


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KEY ACTIONS

- Restoration opportunities for both Lower and Upper Groves based upon removal of parking and tram, consolidation of circulation, and hydrologic improvements
- New South Entrance hub as main point of arrival and orientation for all visitors to Mariposa Grove.
- Shuttle service between South Entrance and Lower Grove, with limited shuttle service between Wawona and the South Entrance.
- New accessible trail within restored Lower Grove. Limited accessible van transport to Grizzly Giant accessible trail.
- New trail between South Entrance & Lower Grove via Washburn Road



DRAFT ALTERNATIVE SOUTH ENTRANCE HUB III

MARIPOSA GROVE RESTORATION
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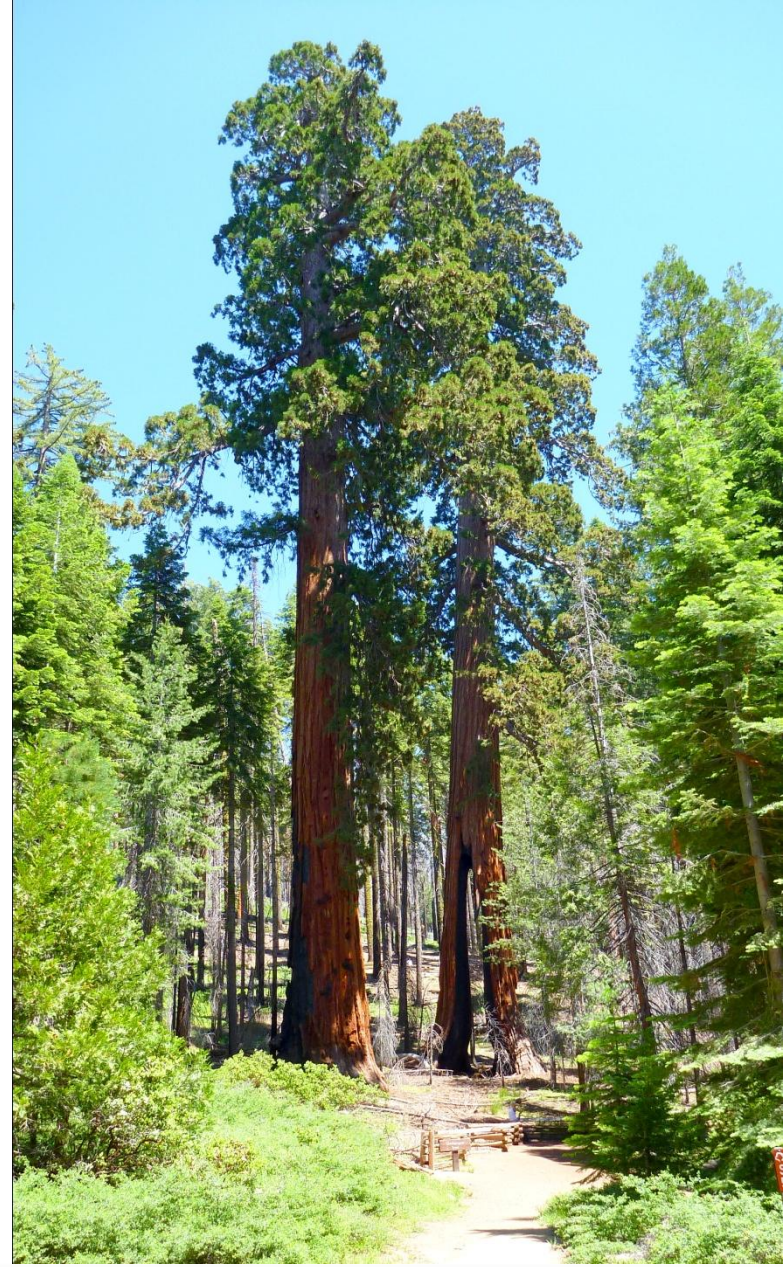
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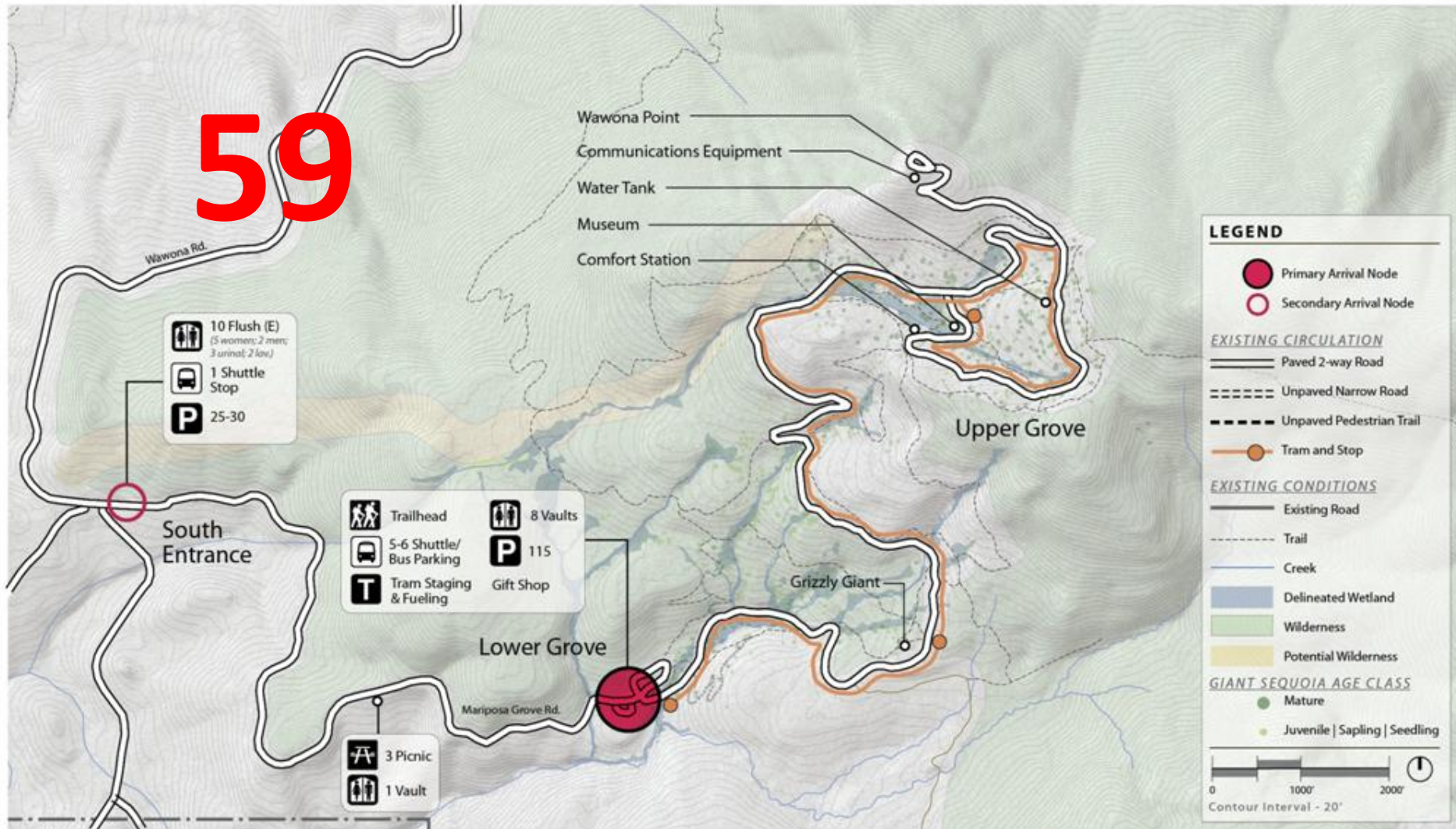
RESTORATION is paramount

Guided by the best available science
and information

Toward the development of a plan that
is feasible



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A DRAFT ALTERNATIVE
NO ACTION

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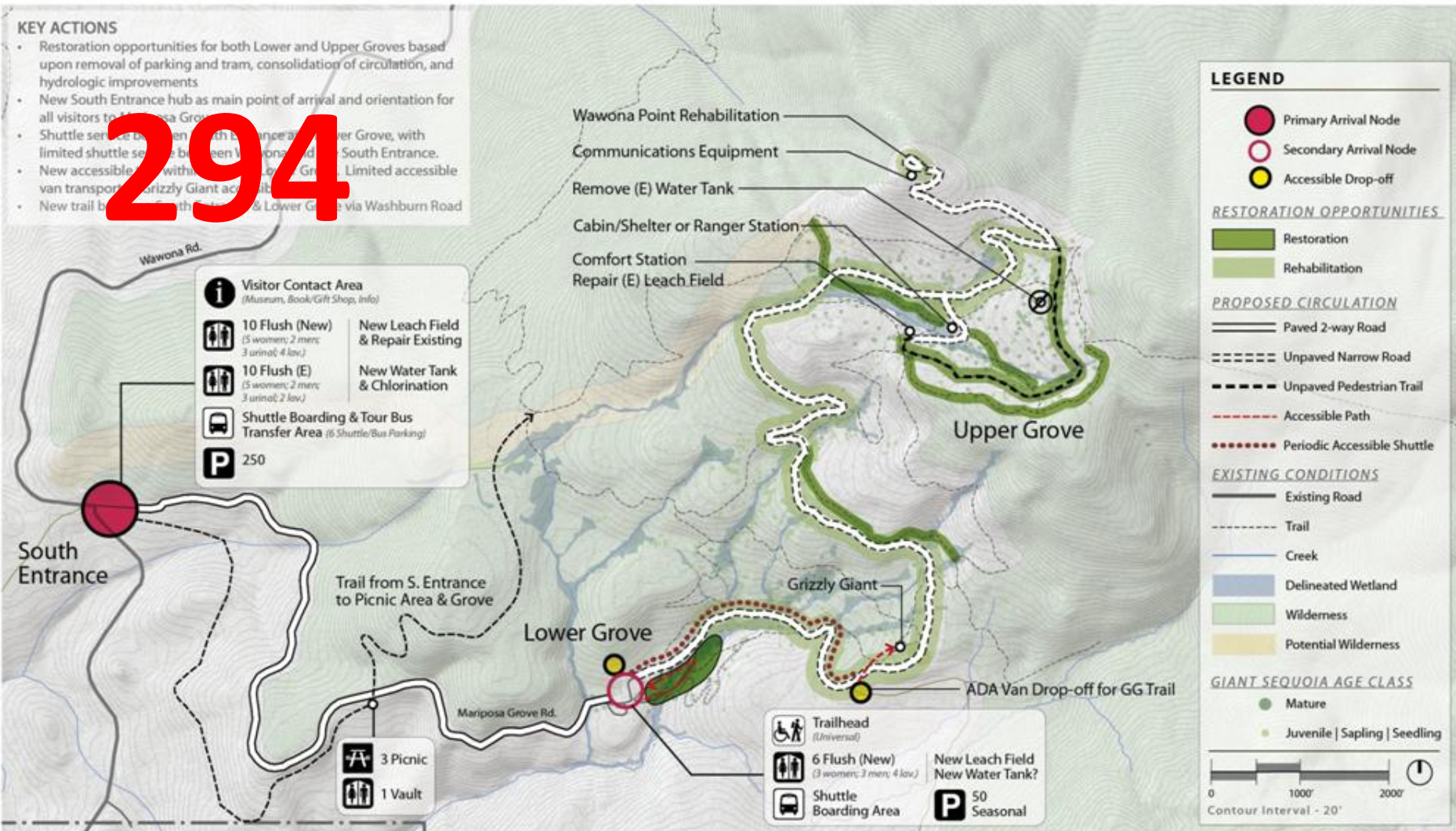


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KEY ACTIONS

- Restoration opportunities for both Lower and Upper Groves based upon removal of parking and tram, consolidation of circulation, and hydrologic improvements.
- New South Entrance hub as main point of arrival and orientation for all visitors to Mariposa Grove.
- Shuttle service between South Entrance and Lower Grove, with limited shuttle service between Lower Grove and South Entrance.
- New accessible trail within Lower Grove. Limited accessible van transport for Grizzly Giant accessible via Washburn Road.
- New trail between South Entrance and Lower Grove via Washburn Road.

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B DRAFT ALTERNATIVE
SOUTH ENTRANCE HUB

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KEY ACTIONS

- Restoration opportunities for both Lower and Upper Groves based upon new Grove bypass road, removal of Lower Grove parking, relocation of tram staging and parking, consolidation of circulation, and hydrologic improvements
- New Grizzly Giant parking at main point of arrival and orientation for all visitors
- No shuttle service
- New accessible trail with restoration of Lower Grove.

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Wawona Rd.

10 Flush (E)
(5 women; 2 men;
3 urinal; 2 lav.)
P 25-30
Seasonal

South Entrance

Wawona Point Rehabilitation

Communications Equipment

Water Tank

Cabin/Shelter or Ranger Station

Comfort Station

Repair (E) Leach Field

Upper Grove

Trailhead
(Universal)
2 Vault
P 10 ADA

Lower Grove

Grizzly Giant

Mariposa Grove Rd.

3 Picnic
1 Vault

Vehicular Bridges

Trailhead
2 Tour Bus Pkg.
Visitor Contact Area
(Museum, Info)
10 Vaults
P 230

LEGEND

- Primary Arrival Node
- Secondary Arrival Node
- Accessible Drop-off

RESTORATION OPPORTUNITIES

- Restoration
- Rehabilitation

PROPOSED CIRCULATION

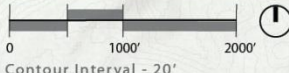
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- Unpaved Narrow Road
- Unpaved Pedestrian Trail
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- Tram and Stop

EXISTING CONDITIONS

- Existing Road
- Trail
- Creek
- Delineated Wetland
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- Potential Wilderness

GIANT SEQUOIA AGE CLASS

- Mature
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DRAFT ALTERNATIVE
GRIZZLY GIANT HUB (rev.)

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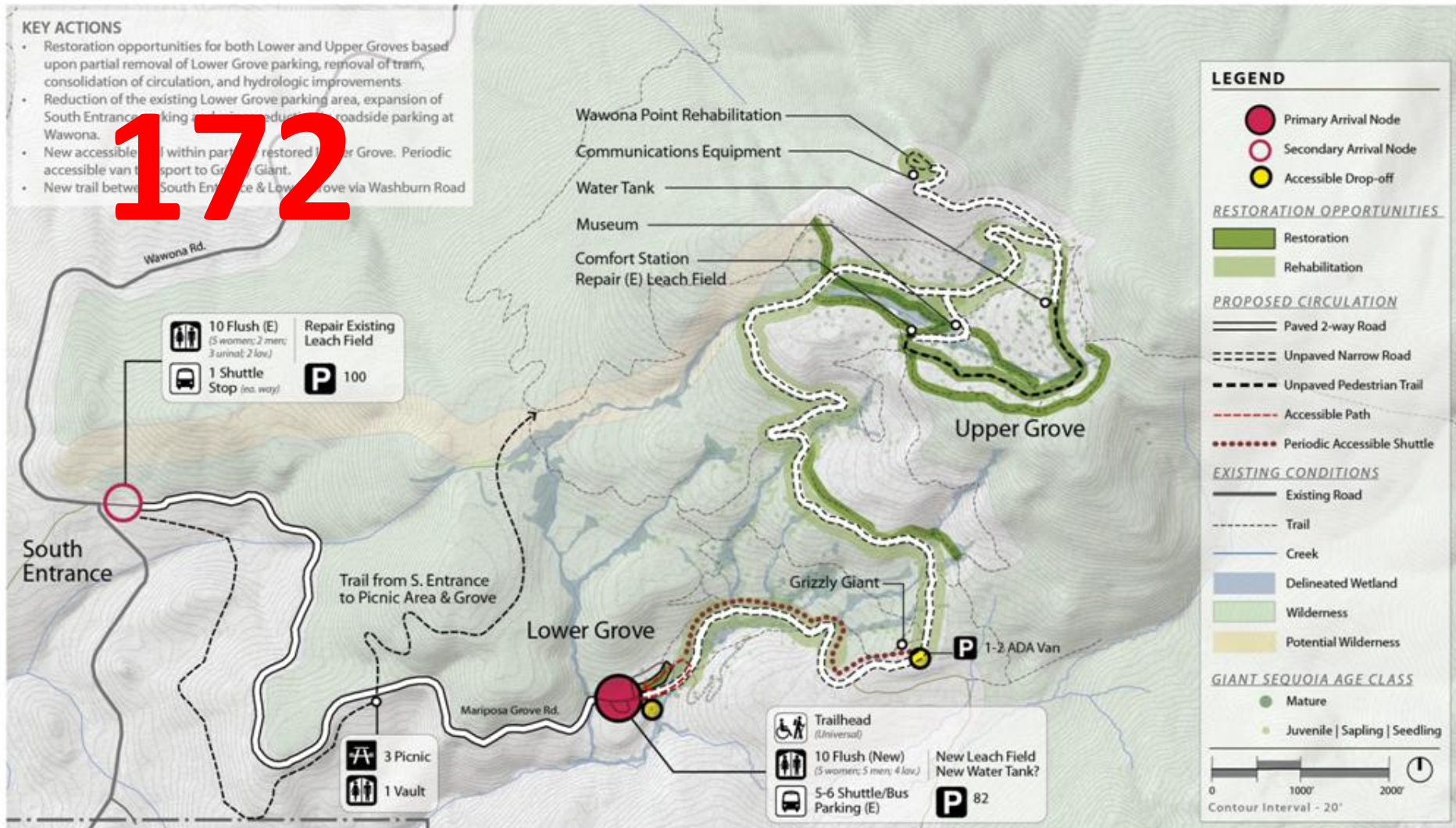


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- Reduction of the existing Lower Grove parking area, expansion of South Entrance parking and reduction of roadside parking at Wawona.
- New accessible trail within partially restored Lower Grove. Periodic accessible van transport to Grizzly Giant.
- New trail between South Entrance & Lower Grove via Washburn Road

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LOWER GROVE HUB

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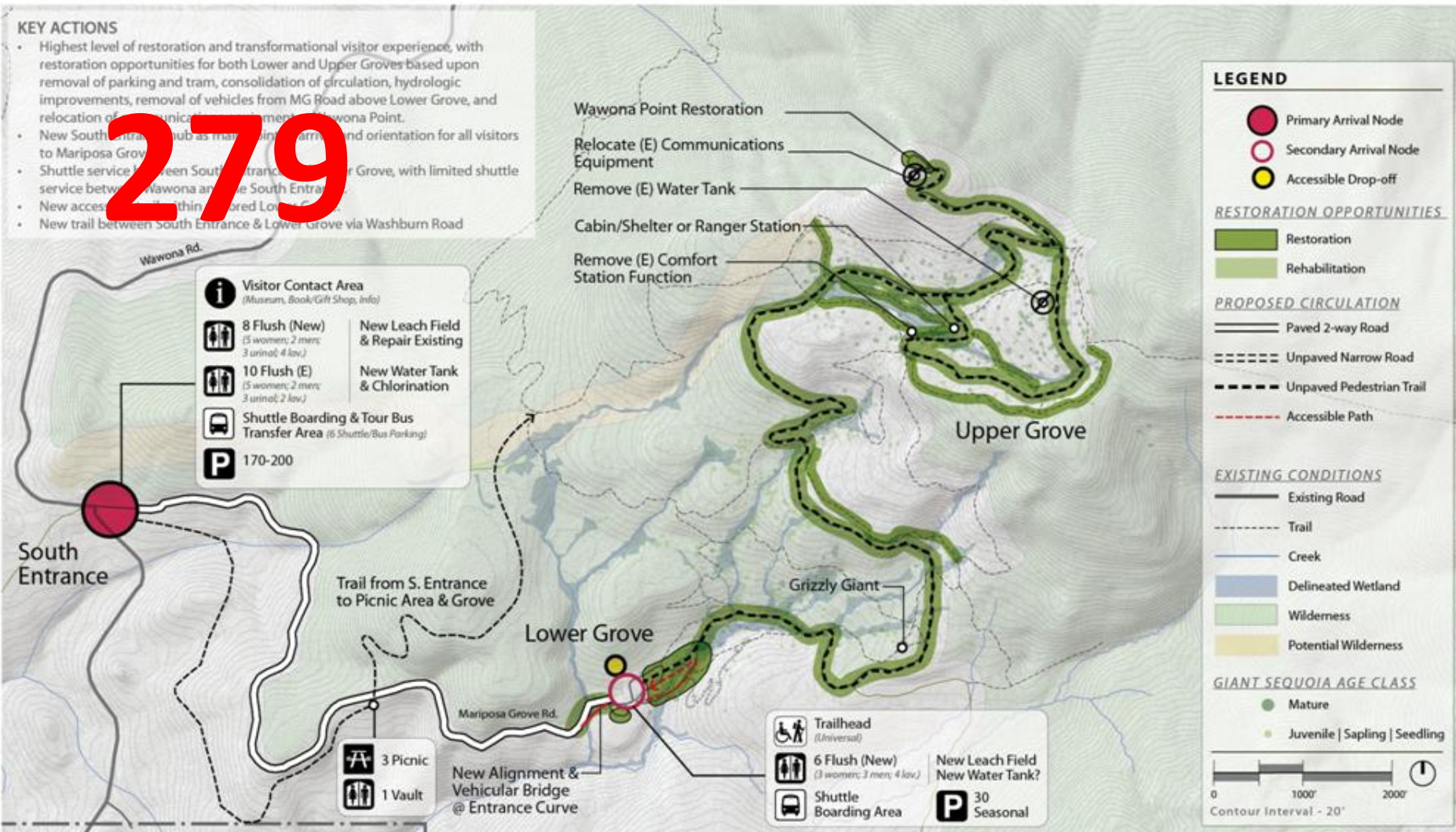
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- New South Entrance Hub as main arrival, parking, and orientation for all visitors to Mariposa Grove.
- Shuttle service between South Entrance and Lower Grove, with limited shuttle service between Wawona and the South Entrance.
- New access to the historic Lower Grove.
- New trail between South Entrance & Lower Grove via Washburn Road



DRAFT ALTERNATIVE
E SOUTH ENTRANCE HUB II

MARIPOSA GROVE RESTORATION
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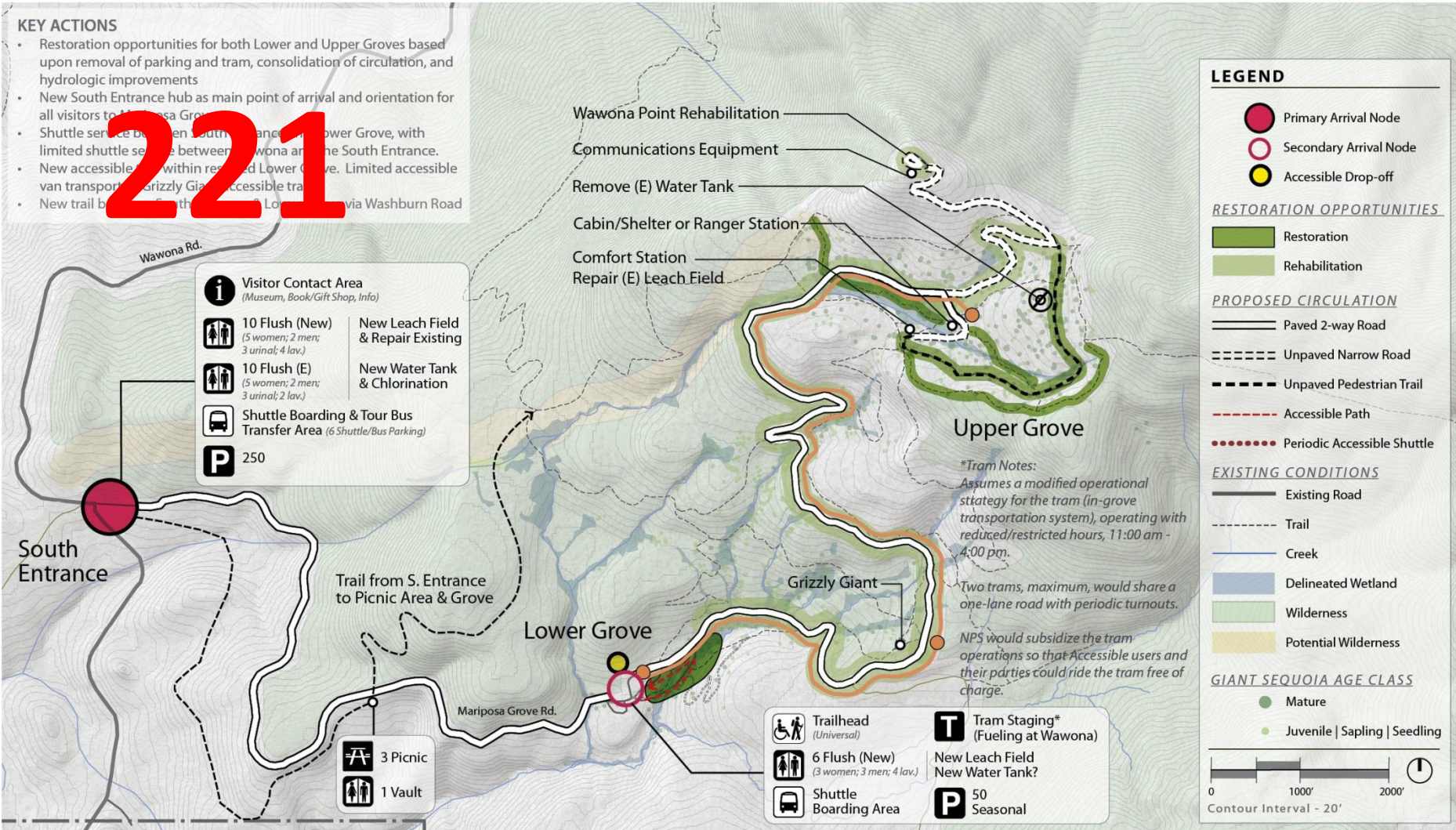


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- Shuttle service between South Entrance and Lower Grove, with limited shuttle service between Wawona and the South Entrance.
- New accessible trail within restored Lower Grove. Limited accessible van transport to Grizzly Giant accessible trail via Washburn Road
- New trail between South Entrance and Lower Grove via Washburn Road

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DRAFT COST ESTIMATING for Value Analysis

- Class C Cost Comparison
- Layered Contingency Factors
- Life Cycle Costs for Visitor Transportation Systems

Photograph by Josh Helling





We are here

