

ROY'S REDWOODS OPEN SPACE PRESERVE SITE ANALYSIS TECHNICAL MEMO DRAFT NOVEMBER 9, 2018



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1.0 BACKGROUND AND OBJECTIVES

Roy's Redwoods Open Space Preserve (Preserve) is a 293-acre Marin County Open Space Preserve located within the San Geronimo Creek Watershed, a tributary to Lagunitas Creek that flows in Tomales Bay. The Preserve supports an abundance of wildlife and plant species, including the federally endangered northern spotted owl. The upper Larsen Creek alluvial valley, on the west side of the Preserve, is home to an old growth redwood forest with dozens of individual trees boasting diameters between 95 and 145 inches. The Preserve also provides easy access for families, hikers, and other visitors to experience the wonders of the redwood forest up close. As a result of unmanaged visitor use within the terrace redwood grove, a sprawling network of social trails has developed through the alluvial valley of Roy's Redwoods and has resulted in habitat degradation and impaired hydrologic function. The Marin County Parks (MCP) seeks to protect the diverse biological resources that the area offers, improve hydrologic function, preserve the rich history of the landscape, and provide sustainable infrastructure for visitors to enjoy the Roy's Redwoods into the future.

In 2014 a Memorandum of Understanding was signed by the four land management agencies charged with stewarding Mt. Tamalpais. In partnership with the Golden Gate National Parks Conservancy (Parks Conservancy), these agencies created the innovative Tamalpais Lands Collaborative (TLC). In 2016, planning and design for resource enhancement and protection as well as a sustainable visitor experience at the Preserve was identified as a priority project for the TLC work plan, thereby creating a multiagency team charged with investigating opportunities for the site. In the Spring of 2017, the Parks Conservancy and MCP began work on a site inventory and visitor use survey to support future planning and design efforts.

This Site Analysis Technical Memo is intended to support future planning and design efforts at the Preserve, and it documents the work undertaken from May 2017 through May 2018; key site analysis findings; and recommendations for further study and planning. The analysis included a visitor use survey, a literature review, a series of technical workshops, site inventory and mapping, and community engagement.

A plan is needed to protect the diverse biological resources that the area offers, improve hydrologic function, preserve the rich history of the landscape, and provide access and amenities for visitors to enjoy the Roy's Redwoods into the future. A critical element to this plan is the design of a landscape and trail circulation system that achieves multiple benefits of habitat restoration, hydrologic restoration, and an immersive and sustainable visitor experience.

2.0 WORKSHOPS SUMMARY

2.1 WORKSHOP 1: SUBJECT MATTER EXPERTS

This first workshop (Tuesday, May 9, 10a.m. – 2p.m. at the Fairfax Community Church) brought MCP Parks and Parks Conservancy staff together with subject matter experts to develop an initial site inventory, identify opportunities and constraints, and to provide guidance to the project team on areas to focus further study. Workshop participants consisted of representatives from:

• Marin County Parks

• Marin Resource Conservation District

- Parks Conservancy
- San Geronimo Valley Planning Group
- Point Blue Conservation Science
- CA Department of Fish and Wildlife
- Wildlife Ecology and Consulting
- A consulting botanist

- US Geologic Survey
- Save the Redwoods League
- SF Regional Water Quality Control Board
- National Park Service
- Kamman Hydrology

The workshop was organized into small focus groups that shared their local knowledge and expertise about the Preserve and surrounding areas regarding the sites hydrology, biological resources, history, public access and visitor use. The focus groups resulted in guiding questions and suggestions to lead the refinement of the site inventory and analysis, potential data gaps to research, as well as data sources identified for additional information. The workshop established that the appropriate area of focus was the meadow, the redwood grove and alluvial valley area of Larsen Creek. It is also important to consider this area of focus in the larger context of the San Geronimo Creek and Lagunitas Creek watersheds. A critical need identified early on was a study of the hydrology of upper Larsen Creek, its relationship to important habitat downstream, and opportunities for hydrologic restoration. It was also identified that a better assessment of the species and habitat composition, particularly within the redwood grove and the meadow, would help inform resource protection and restoration priorities. Another critical area of further study was identified as understanding visitor use patterns, points of interest, and types of visitor experiences. The Workshop 1 notes are provided in the appendix and provide a complete list of attendees, site inventory notes, and opportunities and constraints.

2.2 WORKSHOP 2: STAKEHOLDERS

This second workshop (Wednesday, August 2, 4p.m. – 7p.m. on-site and at the Lagunitas School) brought MCP and Parks Conservancy staff together with community stakeholders to introduce the project and goals, share work completed to-date, and gather additional knowledge of the site. Workshop participants consisted of representatives from:

- Marin County Parks
- Marin County Board of Supervisors
- Marin Audubon Society
- Dougherty Ranch
- Marin Conservation League
- Prunuske Chatham, Inc.
- SPAWN/Turtle Island Restoration Network
- Foot People

- Parks Conservancy
- Sierra Club Marin Group
- San Geronimo Valley Planning Group
- California Native Plant Society
- Lagunitas School District
- Marin Horse Council
- Environmental Action Committee of West Marin
- Local residents

The workshop was organized into an on-site field visit to walk the project area, introduce the project, and informally hear about participant's site-based knowledge. After the site visit, the workshop reconvened for a presentation of work to-date then participants were asked to contribute knowledge and ideas regarding biological resources, visitor circulation, visitor experience, and visitor uses. This workshop confirmed that resource protection, habitat restoration, and an improved visitor experience was desired by stakeholders. Along with identifying key visitor destinations, the workshop established that the lack of a formal trail system is understood to be detrimental to biological resources but also degrades the visitor experience. It is important to provide a visitor experience that preserves a sense of

discovery and exploration, is universally accessible, and does not impact sensitive resources. The importance of retaining access to Roy's Redwoods for local school and environmental education programs was also emphasized.

3.0 COMMUNITY ENGAGEMENT SUMMARY

The following is a summary of the various public events that One Tam hosted as part of a community engagement strategy to gather community input and build community support specifically for a project at Roy's Redwoods and more generally for projects throughout the TLC managed lands.

3.1 BIOBLITZ

On March 25, 2017, 23 volunteers of all ages came to the Preserve for the first Marin County Parks/One Tam Bioblitz of 2017. Along with staff and interns from MCP, One Tam, the Parks Conservancy, and the Marin Municipal Water District, the group divided into teams to survey four areas of the preserve, including grasslands, meadow, redwood forest, and mixed evergreen forest. Using a smartphone app called iNaturalist, the group took photos of plants, animals, lichen, and fungi, with the goal of documenting every living species in sight. In the afternoon, volunteers and staff reconvened at the San Geronimo Community Center for lunch, and to share photos and work on identifications. Novices and experts alike sat together and consulted field guides and the internet. Over the next few weeks, the iNaturalist community also contributed identifications.

<u>79 research grade observations</u> were made, which means that the iNaturalist community agrees on an identification. Among these were four plant species that were not on the California Native Plant Society list for the Preserve, nor on Calfora, the statewide plant database:

- Fairy slipper orchid (Calypso bulbosa): https://www.inaturalist.org/observations/5456937
- Sand pygmyweed (*Crassula connata*): <u>https://www.inaturalist.org/observations/5456825</u>
- Giant trillium (Trillium chloropetalum): https://www.inaturalist.org/observations/5465383
- Broadleaf glandweed (Parentucellia latifolia): https://www.inaturalist.org/observations/5458588

The species observations made during the Bioblitz have been added to the Preserve species list available in the appendix.

3.2 ROY'S REDWOODS WALK & TALK WITH JEAN BERENSMEIER

On November 4, 2017, staff from MCP and the Parks Conservancy teamed up with Jean Berensmeier to lead a site visit and short hike in the Preserve. On cold and drizzly morning, a dozen community members turned out for the event. The project team introduced the effort to study restoration and visitor experience improvement opportunities at Roy's Redwoods. Jean's talk focused on her environmental education work, the unique history of this old growth redwood forest, and the grass-roots conservationist movement she led which resulted in establishing Roy's Redwoods as the first Marin County Open Space Preserve.

3.3 ROY'S REDWOODS FIELD DAY

On May 12, 2018, staff from MCP and the Parks Conservancy hosted an on-site workshop which was advertised to the community. Approximately 30 community members attended the event. The project team discussed the project, presented the findings of the visitor use survey and site-analysis to date, and engaged the attendees in conversation about the project, knowledge of the site, and ideas for enhancement. The hydrologist from Prunuske Chatham, Inc. (PCI) also presented preliminary findings of the hydrology study and impacts to the hydrologic function from visitor use. Finally, an NPS interpretive ranger and naturalist led the group on a walk through a portion of the redwood grove identifying natural resources present and discussed challenges with balancing resource protection and visitor experience of the redwoods.

Feedback was solicited informally from the attendees by the project team throughout the day. A consensus was heard with support for a project that restored the hydrologic function of the site, improved protection of the biological resources of the Preserve, and enhanced the visitor experience of the redwood forest while minimizing visitor impacts.

4.0 VISITOR USE SURVEY

The Roy's Redwoods visitor use survey was developed in consultation with Dr. Patrick Tierney, of San Francisco State University, who conducted the 2017 Marin County Parks Visitors Study which was much more focused on visitor use levels and the characteristics of those visitors throughout Marin County Parks and Open Space Preserves. In addition, the purpose of the Roy's Redwoods survey was to gather data on user patterns, values, interests, expectations and experiences. This data set is intended to develop and understanding of how and why the Preserve is used and to inform considerations for restoration and visitor experience improvements.

Between May 2017 and March 2018 a total of 15 onsite survey days were conducted across a range of days, times, and weather conditions. Surveyors engaged visitors during 5 weekend days, a holiday weekend day, 9 week days, and 2 days with flowing water in Larsen Creek. A total of 117 individual surveys were completed. The survey days were scheduled with the goal of capturing the breadth of users across various seasons and conditions.

Nearly half (46%) of visitors had come to the Preserve for the first time and that the majority (76%) had visited less than four times in the past year. A relatively small percentage of visitors use the Preserve on a more regular daily or weekly basis. People come to Roy's Redwoods primarily to experience the redwood trees and be in nature, typically with a hike through the terrace redwood grove and/or hiking on the Roy's Loop Trail which goes all the way around the Preserve. The Meadow Trail is also well used but only a small number of users indicated that being in and around the meadow was a reason for visiting Roy's Redwoods. Additional activities at the Preserve include walking the dog, picnicking, wildlife viewing, and botanizing. When asked about the health of the natural systems (habitat, plants, creek, etc.), most visitors perceive Roy's Redwoods to be in a good condition with some recognizing issues with erosion, visitor use impacts, invasive species, and water quality. When asked about how the redwood grove was accessed, visitors indicated that there was a preference (42%) for wandering through the grove without a formal trail versus a formal trail (31%) and some users (27%) did not have a preference. In review of some of the written feedback on the experience of Roy's Redwoods and

suggestions for improvement, it is clear that the Preserve is well loved by regulars and by new users in its existing condition, though there was a common thread for improved wayfinding.

The visitor survey results demonstrate that the primary attraction of Roy's Redwoods is the experience of the redwoods. Many users are discovering the social trail network and wandering through the grove which provides an immersive and exploratory experience. However, the impacts from this informal use, including the denuded vegetative understory, eroding creek channels, and highly compacted soils are not typically recognized as contributing negatively to the health of the ecosystem. A key finding of the survey is that most visitors are not regular users and that nearly half are there for the first time. This suggests that circulation patterns are not based on widely recognized routes. This provides an opportunity to develop a new visitor experience of the terrace redwoods that has a lighter footprint on ecosystem health by guiding users through less sensitive areas.

5.0 SITE INVENTORY

The site inventory incorporated research on the entire Preserve and its context in the watershed but the main area of focus for the project and of this report is the alluvial valley area of Roy's Redwoods (see San Geronimo Valley Watershed and Location map). The alluvial valley was previously referred to as the terrace redwood stand in the 1989 Land Management Plan (LMP). The terrace is relatively flat and accessible via the Meadow Trail, the Roy's Loop Trail, and the spider-web of social trails all of which connect to the Nicasio Valley Road trailhead. The terrace is home to several charismatic old growth redwood trees and as indicated by the social trail development and visitor use survey, it is the primary area of interest at Roy's Redwoods (see Area of Focus map). Subsequently, it is also the most heavily impacted area within the Preserve.

The area of focus is approximately 8 acres and contains the meadow and the terrace redwood stand. It is bounded by Nicasio Valley Road on the west and to the east by the steep slope redwood stand that follows the alluvial valley from the point where the Roy's Loop Trail bridges Larsen Creek to the head of the valley in the northeast. California bay woodland slopes border the site on the north.

The site analysis section incorporates research gathered through a literature review of all known existing data, studies, reports, plans, and other sources pertaining to the Preserve and areas adjacent to the area of focus. The analysis also integrates staff knowledge and original studies conducted by staff and consultants including the visitor use survey, hydrology survey, and plant survey. The focus of the analysis is guided by the project goal and in part by guidance from the technical workshops and includes sitebased study of the geologic setting, hydrology, biological resources, historical context and cultural resources, recreation and public access.

5.1 GEOLOGIC SETTING

<u>Overview</u>

The 293-acre Preserve is located in the central portion of the Northern Coast Range of California. This region is geologically active and the Preserve approximately five miles to the northeast of the San Andreas Fault Zone. The underlain bedrock of Franciscan Mélange forms steep ridges with slopes of 30% to 70% interspersed with gently sloped alluvial valleys. The area of focus is mapped as Dipsea-Barnabe very gravelly loams in the area covered with redwood forest and Blucher-Cole Complex in the meadow.

The slopes surrounding the area of focus are very steep and soils are mapped as Tocaloma-Saurin Association (see Soils map).

Additional Resources

Best, Timothy. 2014. DRAFT *Engineering Geologic and Geotechnical Review: Upgrade and Improvement of the Roy's Redwood Loop Trail.* Prepared for Marin County Parks. San Rafael, CA. This report provides a detailed summary of the geographic and regional geologic setting of the Preserve. It also provides a geologic and geotechnical analysis of the Roy's Redwoods Loop Trail improvements which were subsequently constructed in 2016-2017 with Measure A funds. This report discusses upgrades to segments of the Loop Trail located primarily to the south of the Grove but does include geologic and geotechnical review for two wet-water crossings installed near the Roy's Redwoods trailhead.

Best, Timothy. 2016. DRAFT *Roy's Redwood Fire Road Erosion and Drainage Assessment*. Prepared for Marin County Parks. San Rafael, CA.

Prepared to evaluate the condition of the Dickson Fire Road located within the Preserve and to develop recommendations for improved access and to reduce the risk for future erosion. Review of the road focuses on measures/upgrades that can be immediately implemented to improve road conditions and reduce the risk for road related erosion and associated impacts to water quality. These measures are primarily associated with controlling drainage along the existing road alignment. Implementing these measures would help control erosion on the road but would not address part of the underlying problem with the road; the very steep gradient of the existing alignment, which would result in the need for comparatively frequent maintenance and repair. Included in this report and accompanying plan sheets are short to intermediate term recommendations to improve the road and drainage.

5.2 HYDROLOGY

<u>Overview</u>

The Preserve is located within the San Geronimo Creek Watershed, a tributary to Lagunitas Creek that flows in Tomales Bay. Larsen Creek is the predominant watercourse in the Preserve. The headwaters to Larsen Creek generally follow the bounds of the Dickson Ridge Fire Road on the north, the Dave Hansen Trail on the east, and the along the ridgeline to the west from the peak of the Dave Hansen Trail. Several tributaries intermittently drain these ridgelines and combine into a depositional alluvial fan in the valley. This type of alluvial valley with redwood dominated vegetation was historically common in the San Geronimo Valley but now is locally rare due to development. A braided stream network through the terrace redwood stand gradually forms into Larsen Creek which is captured by a culvert under Nicasio Valley Road and feeds the ponds at the adjacent golf course.

For a detailed discussion of hydrology, please refer to the "Roy's Redwoods Hydrology Study, 2018" which was conducted by Prununske Chatham, Inc. concurrently with the site analysis in 2017/2018. The study focuses on the terrace and provides the most detailed and complete analysis of the hydrology of Roy's Redwoods and Larsen Creek. This study provides the hydrologic setting within the San Geronimo Creek watershed and describes the stream channel network and geomorphology. The report also contextualizes the channel form and ecosystem value, sediment issues, fisheries resources, and redwood forest ecology as related to upper Larsen Creek. Finally, the study details current hydrologic conditions and identifies opportunities for ecological restoration.

Additional Resources

Brian Wittenkeller & Associates. 1989. *Land Management Plan for Roy's Redwoods and Maurice Thorner Memorial Open Space Preserves*. Prepared for Marin County Open Space District. San Rafael, California.

The Management Plan describes Larsen Creek as an intermittent stream system that forms a braided channel network in the alluvial area under the redwood canopy before flowing through a culvert under Nicasio Valley Road and into the San Geronimo Golf Course storage ponds. The Plan shows Larsen Creek being piped from the storage ponds, under the golf course and then daylighted before reaching the confluence with San Geronimo Creek. The report notes the presence of one spring in the Preserve.

Stetson Engineering. 2002. San Geronimo Creek Watershed Sediment Source Sites Assessment and Evaluation. Prepared for Marin Municipal Water District, Corte Madera, CA.

The Stetson report examines all sediment sources impacting San Geronimo Creek. It does not list any significant sources of sediment coming from the Preserve. There is one sediment source noted along the Dickson Fire Road that is not considered a priority sediment source.

Stillwater Sciences. 2007. *Middle Lagunitas Creek watershed sediment delivery analysis.* Prepared for the Department of Public Works, Marin County, CA.

This sediment study was completed five years after the Stetson (2002) study and notes six hillslope sediment source sites on Larsen Creek and its tributaries within the Preserve. The sediment sources are due to the steepness (over 30%) and erosive soils (Franciscan Mélange) that comprise the Preserve. One of these sediment source sites is at the head of the alluvial valley and the remaining five are concentrated in one drainage in the northeastern corner of the Preserve far upstream of the Loop Trail.

5.3 BIOLOGICAL RESOURCES

5.3.1 Flora

The Preserve is made up of redwood forest, grassland, California bay and oak woodlands, mixed evergreen and coastal brush (see Vegetation Preserve Level map). The alluvial valley area of focus consists primarily of redwood / California bay forest (*Sequoia sempervirens* Alliance), which is adjacent to a meadow to the west and borders California bay (pure) forest to the north. On the east side of the terrace redwood stand is a steep forested slope, referred to as the slope redwood stand in the LMP, which is composed predominately of old growth redwood and Douglas fir. The northwest end of the terrace was the epicenter of a wildfire in 2014 which burned approximately 3.7 acres of the slope redwood stand and was put out by Marin County Fire just east of the Dave Hansen Trail at the ridgeline (see Wildlife Sightings & Potential Habitat map). The meadow is located just west of the terrace stand and is dominated by annual grassland but also contains a wetland (*Juncus phaeocephalus* Association) and a shrubland (*Rubus ursinus* Association) (see Project Area Vegetation map).

A species list was compiled for Roy's Redwoods based on a 2016 botanical survey of the meadow, review of iNaturalist.org data, and previous work done by Wilma Follette and Doreen Smith of Marin CNPS. Roy's Redwoods is home to at least 365 native plant species. Except for Shelly Benson's 2016 survey of the meadow area, detailed botanical surveys have not been completed for the entire Preserve. There is an extensive list of special status plant species likely to occur in the various habitat conditions at Preserve, though there no confirmed observations of any special status species other than historical observations of *Leptosiphon aciularis* and *Lessingia hololeuca*. See Benson's report for a detailed

discussion of historical records and special status species likely to occur. There are also approximately 60 non-native plant species present at Roy's Redwoods. However, native plants comprise the dominant vegetation communities except for in the meadow. Of the MCP high priority invasive plant species, eight species are known to occur at the Preserve scale and lands immediately adjacent.

The area of focus spans a Legacy Zone and a Sustainable Natural Systems Zone per the MCP Vegetation and Biodiversity Management Plan (see San Geronimo Valley Vegetation Zones map). Per the plan, these zones should be proactively managed to restore high-value habitat and prevent the spread of invasive species. Undertaking a detailed mapping effort for these local detection invasive species should be considered for integration into the MCP vegetation management plan. The MCP Vegetation and Biodiversity Management 2017-2018 Workplan currently has targeted broom species and harding grass for control with hand pulling. Of concern for the area of focus are populations of Himalayan blackberry that occur in the wetland area of the meadow and along sections of Larsen Creek. This species has the ability to spread rapidly and push-out native species. Additionally, though not a MCP high priority or Group 1 invasive species, velvet grass (*Holcus lanatus*) is growing in several areas of the meadow and can form dense monotypic stands.

Restoration of native grassland habitat in the meadow was one of the early considerations for a project goal. Benson's grassland assessment of the meadow notes that restoration efforts could be focused on improving the remnant California oat grass (*Danthonia californica*) grassland community but approximately 60% of the meadow is currently non-native grasses. Further discussion with subject matter experts suggests that if grassland restoration was to be undertaken at Roy's Redwoods, efforts should focus on the higher value resource areas such as the upland grasslands where rare species are more likely to occur and with less non-native species competition. With the absence of any rare species in the meadow and feedback from stakeholders, restoration of the meadow to a native grassland is no longer considered a high priority. Eradication of high priority invasive species in the meadow should be considered.

Rare, Threatened, and Endangered Species

- Old growth redwood forest is rare but does not have protective status.
- No special status plant species were observed in the Meadow. There are 74 special status plant species likely to occur in this meadow habitat based on habitat requirements found in coastal prairie, meadow/seep, valley and foothill grassland, and wetlands. Three rare vegetation communities exist in the meadow:
 - Juncus phaeocephalus Association (G3? S3?)
 - o Rubus ursinus Association (G4 S3)
 - Sequoia sempervirens Alliance (G3 S3)
- bristly linanthus (*Leptosiphon acicularis*; CNPS 4.2)
- wooly headed lessingia (Lessingia hololeuca; CNPS 3)

High Priority Invasive Plant Species

- yellow star thistle (Centaurea solstitialis)
- tocalote (Centaurea melitensis)
- Scotch broom (*Cytisus scoparius*)
- blue gum eucalyptus (*Eucalyptus* globulus)
- fennel (*Foeniculum vulgare*)
- French broom (*Genista monspessulana*)

- harding grass (*Phalaris aquatica*)
- Himalayan blackberry (*Rubus armeniacus*)

Opportunities for further study

- Study the impacts of the fire on the redwood forest could provide valuable insights to restoration projects and wildlife management.
- A detailed analysis of the old growth forest has not been conducted to inventory the composition, age, structure, coverage of woody debris, tree cavities, and nesting structures. Documentation of the complexity of species composition and stand structure of the forest provides a metric of forest health. This documentation would also provide opportunities for comparative analysis with other old growth forests in the region.
- Opportunity for research and restoration of meadow with prescribed fire and/or mowing.
- Monitoring for climate change trends.
- Determine impact from the cessation of mowing in 2011 at the Meadow. How has it impacted the foraging habitat for raptors or terrestrial mammals or are there wildlife benefits?

Vegetation Mapping

- Completed
 - October 14, 2014 Fire extent. This fire occurred at Roy's Redwoods which burned approximately 3.7 acres before it was contained. The fire was reportedly human caused and started near the toe of slope at northeast head of alluvial valley and burned upslope to the David Hansen Trail.
 - Location and DBH of redwood trees larger than 12" DBH in the terrace redwood stand. The slope redwood stand has not been mapped.
 - Large downed redwood trees in valley floor.
- Data Gaps
 - Mapping of snags, fire scars, tree cavities, stand complexity & structure, nesting structures.
 - Mapping of Douglas Fir composition.
 - Sudden Oak Death has been documented on California bay trees on-site, but the extent of its presence has not been mapped.
 - Priority invasive species extents at Roy's and adjacent properties.

Additional Resources

Voets, Stan. 1979. *Field Notes: Redwood Tree Heights*. Prepared for Marin County Department of Public Works. Corte Madera, CA.

The handwritten forestry report documents the largest redwoods trees in the Preserve. The largest trees are located along the edge of the meadow with heights estimated at 190', 210', 224', 232' and 243'.

May & Associates. April 2015. *Vegetation and Biodiversity Management Plan*. Prepared for Marin County Parks. San Rafael, CA.

This management plan categorizes the Preserve as a high priority site for invasive plant mapping due to its percentage of legacy plant zones. The plan lists the conversion of the disturbed grassland habitat to native grassland as a potential restoration project for Roy's Redwoods. The following locally rare species are listed: *Leptosiphon acicularis* (bristly linanthus) and *Lessingia hololeuca* (wooly headed lessingia). The plan notes *Centaurea solstitialis* (yellow starthistle) and *Phalaris aquatica* (Harding grass) as important invasive plants to address.

Benson, Shelly. 2016. *Roy's Meadow Grassland Community Assessment*. Prepared for Marin County Parks. San Rafael, CA.

Field surveys of the meadow were conducted in May, July, and August 2016. The four vegetation communities observed were native shrubland, native wetland, non-native Avena spp.-Bromus spp dominated grassland, and non-native Alliance and *Cynosurus echinatus-Arrhenatherum elatius/Dichelostemma capitatum* Association grassland. The assessment estimated 60% of the meadow was non-native grasses. The survey noted the presence of the native perennial bunchgrass (*Danthonia californica*) as an indicator of the meadow's natural composition before land use disturbance.

McBride, Joe and Jacobs, Diana. 1978. *Muir Woods: The History of the Vegetation of Muir Woods National Monument.* University of California. Berkeley, CA.

Evans, W.A. January 17, 1984. Death of a tree. Daily Independent Journal. San Rafael, CA.

Marin California Native Plants Society. 2015. *Roy's Redwoods and Maurice Thorner Preserves: A Plant Species Checklist.* Prepared for Marin County Parks. California Native Plant Society unpublished report.

5.3.2 Fauna

San Geronimo Valley has maintained a protected network of open space and undeveloped rangelands through careful planning efforts that were adopted in the 1978 Community Plan and subsequent 1997 Community Plan. This network of protected lands includes the adjacent Maurice Thorner, Gary Giacomini, and French Ranch Open Space Preserves which provide nearly contiguous wildlife habitat within the San Geronimo Creek watershed (see San Geronimo Valley Watershed and Location map). Observations from the Wildlife Picture Index (WPI), a review of ebird.org, iNaturalist.org, staff observations, and citizen science has provided documentation of 14 mammals, 2 gastropods, 5 reptiles, 3 amphibians, 15 insects, and 67 bird species being sighted at Roy's Redwoods since 2011. A complete species list is provided in the appendix.

Coastal redwood forest dependent bird species

Of the 30 bird species historically present in the coastal redwood forest communities in Marin County, according to the Marin County Breeding Bird Atlas, 20 species have been recently sighted at Roy's Redwoods. The absence of the three heron and egret species typical of redwoods is not unusual given the inland location of the Preserve far away from coastal marshes. The presence of all but seven bird species dependent on redwood forest habitat at the Preserve is a positive indicator of the quality of the foraging and nesting habitat at Roy's Redwoods. Although the habitat provided at Roy's Redwoods is potentially suitable and within the range of the marbled murrelet (*Brachyramphus marmoratus*; G3G4 S1, Federally Endangered), it is not historically known to be present at Roy's Redwoods and is not documented in the Breeding Bird Atlas.

Scientific Name	Common Name	Special	Observed	Redwood
		Status	at Roy's	Forest Habitat
				Use
Accipiter striatus	sharp-shinned hawk	G5 S3, WL	No	Tertiary (N)
Aegolius acadicus	northern saw-whet owl	None	Yes	Primary
Ardea alba	great egret	G5 S4	No	Tertiary (N)
Ardea herodias	great blue heron	G5 S4	No	Tertiary (N)
Cardellina pusilla	wilson's warbler	None	Yes	Primary
Cathartes aura	turkey vulture	None	Yes	Tertiary (N)
Catharus guttatus	hermit thrush	None	Yes	Primary
Certhia americana	brown creeper	None	Yes	Primary
Chaetura vauxi	Vaux's swift	G5 S2S3, SSP	No	Secondary (N)
Contopus cooperi	olive-sided flycatcher	G4 S4, SSC	Yes	Secondary
Cyanocitta stelleri	Steller's jay	None	Yes	Primary
Dryocopus pileatus	Pileated woodpecker	None	Yes	Primary
Egretta thula	Snowy egret	G5 S4	No	Tertiary (N)
Empidonax difficilis	Pacific-slope flycather	None	Yes	Primary
Haemorhous purpureus	purple finch	None	Yes	Primary
Junco hyemalis	dark-eyed junco	None	Yes	Primary
Leuconotopicus villosus	hairy woodpecker	None	Yes	Primary
Loxia curvirostra	red crossbill	None	No	Tertiary (N)
Pandion haliaetus	osprey	G5 S4, WL	Yes	Tertiary (N)
Patagioenas fasciata	band-tailed pigeon	None	Yes	Secondary
Poecile rufescens	chestnut-backed chickadee	None	Yes	Primary
Regulus satrapa	golden-crowned kinglet	None	Yes	Primary
Selasphorus sasin	Allen's hummingbird	None	Yes	Primary
Setophaga occidentalis	hermit warbler	None	No	Tertiary (N)
Sitta canadensis	red-breasted nuthatch	None	No	Primary
Sitta pygmaea	pygmy nuthatch	None	Yes	Tertiary (N)
Spinus pinus	pine siskin	None	Yes	Primary
Strix occidentalis	northern spotted owl	G4T4 S3S4,	Yes	Primary
caurina		ST, FT		
Troglodytes hiemalis	winter wren	None	No	Primary
Turdus migratorius	American robin	None	Yes	Secondary

(N) indicates that this habitat type is used only for nesting and not for foraging.

(CNDDB Special Animals List rankings. G = Global Rank, S = State Rank, T = subspecies T-rank. https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals)

FT = Federally Listed - Threatened

ST = State Listed - Threatened

WL = CDFW Watch List

SCC = CDFW Species of Special Concern

Rare, Threatened, and Endangered Species

- northern spotted owls (*Strix occidentalis caurina*; G3T3 S2S3, State and Federally Threatened).
 - Nesting behavior of northern spotted owls has been documented in the Coastal Redwood Forest at Roy's Redwoods for the past 14 years by Point Blue (formerly the Point Reyes Bird Observatory). Non-nesting pairs were observed between 2011 and 2015 and a successful nesting pair was observed in 2016. The old growth forest at Roy's Redwoods continues to be a viable and important nesting as well as foraging habitat. Field observations have noted the location of several woodrat nests, an important prey species, in the general vicinity of the redwood forest edge where it meets grasslands at the Loop Trail and David Hansen Trail junction.
- olive-sided flycatcher (*Contopus cooperi*; G4 S4 CDFW: Species of Special Concern). Documented onsite through ebird.org as recently as July 2017.
- oak titmouse (*Baeolophus inornatus*; G4 S4). Documented onsite through ebird.org 2017.
- osprey (*Pandion haliaetus*; G5 S4, CDFW Watch List) Documented onsite through ebird.org 2017.
- California giant salamander (*Dicamptodon ensatus*; G3 S2S3 CDFW: Species of Special Concern)
 - Anecdotal evidence suggests the species utilizes the area around the spring box. CA Roadkill Index has verified records of species killed during winter rainy day along Nicasio Valley Road north of Roy's Redwoods.
- American badger (*Taxidea taxus*; CDFW: Species of Special Concern). Documented by the WPI on adjacent public lands. Species is presumed to be present at Roy's Redwoods.
- pallid bat (Antrozous pallidus; G5 S3 CDFW: Species of Special Concern).

Rare, Threatened, and Endangered Species on the adjacent properties and Preserves

- coho salmon (Oncorhynchus kisutch; G4T2Q S2?, State and Federally Endangered)
- steelhead trout (Oncorhynchus mykiss; G5T2T3Q S2S3, Federally Threatened)
- California freshwater shrimp (*Syncaris pacifica*; G2 S2, State and Federally Endangered)
- western pond turtle (*Emys marmorata*; G2G4 S3 CDFW: Species of Special Concern)
 - Anecdotally documented at golf course ponds across Nicasio Valley Road from Roy's Redwoods.
- California red-legged frog (*Rana draytonii*; G2G3 S2S3, Federally Threatened)
 - Suitable habitat?
 - No observation of species on site.
- Foothill yellow-legged frog (*Rana boylii*; G3 S3, State Candidate for Listing)
 - Suitable habitat?
 - No observation of species on site.
- Other aquatic species.
 - Many other species comprise the Lagunitas Creek aquatic community including native species such as the California roach, Sacramento sucker, Pacific lamprey, three-spine stickleback, prickly sculpin, riffle sculpin and Coast Range sculpin.
 - Presence in San Geronimo and Larsen Creek is unknown.

Invasive Species

- Domestic cats, 4 detections from WPI.
- Bullfrogs in adjacent golf course ponds.
- Barred owls have not been documented at Roy's Redwoods.
- Wild turkey, 64 WPI detections (Not necessarily considered invasive).

The abundance of documented wildlife observations at Roy's Redwoods are indicative of the quality and diversity of habitat provided by the mix of grassland, woodland, old growth redwood forest, and aquatic environs protected at the Preserve. Though important to the aquatic species further down the watershed, the hydrologic study has confirmed that Preserve does not provide suitable habitat for fish species because freshwater flows of upper Larsen Creek are ephemeral in nature. Documentation of road kills along Nicasio Valley Road near the Preserve indicate that it is used by the California giant salamander.

The hydrologic study by PCI provides several recommendations for hydrologic restoration in the terrace redwood stand. These opportunities to improve the hydrologic function of the alluvial valley could potentially benefit aquatic species by slowing flow in the rainy season, improving groundwater recharge, and extending ephemeral flows longer into the dry season. Another recommendation to allow woody debris to accumulate naturally in the terrace redwood stand, without human disturbance, would also reduce erosion and create more complex habitat for wildlife. Restoration of the understory vegetation in the terrace would also have the multi-benefit of improving hydrologic function while providing more wildlife habitat complexity and diversity under the redwood canopy.

The wildlife habitat value of the meadow is still not well understood; however, it is not likely to be used by the northern spotted owl as foraging habitat (personal communication with Point Blue staff). Historically, the meadow was grazed by cattle and then designated a high visitor use area for activities such as weddings and social gatherings. The meadow was mowed to reduce the risk of wildfire and accommodate the high level of use in the meadow. This activity has all but ceased since MCP stopped mowing it in 2011.

Opportunities for further study

- The hydrological benefits of realignment and/or decommission of the Meadow Trail.
- Study opportunities for wildlife passage across Nicasio Valley Road and Sir Francis Drake Blvd.
- Does the meadow provide an important wildlife habitat and/or food source? Could restoration improve habitat value?
- Is there suitable habitat for red-legged or yellow-legged frogs?

Wildlife Mapping

- Completed
 - Several dusky-footed wood rat nests were documented when near trails in the Preserve.
 A comprehensive survey has not been completed.
- Data Sources
 - Point Blue / Point Reyes Bird Observatory northern spotted owl monitoring reports
 - o E-bird https://ebird.org/hotspot/L1153821
 - o WPI
 - o iNaturalist
 - CA Roadkill Index

Reference Documents

Cormier, R.L. 2004 - 2016. Northern Spotted Owl monitoring on Marin County Open Space District and Marin Municipal Water District Land in Marin County. Prepared for Marin County Open Space District. San Rafael, California. 2005 to 2016 season summaries. Point Blue Bird Observatory unpublished reports.

Point Blue Bird Observatory has conducted annual monitoring for Northern Spotted Owls at the Preserve since 2004. Nesting pairs have been documented as successfully fledging at least one young in 2005, 2006, 2009, 2010, 2011 and 2016. Northern Spotted Owls that were considered non-nesting or their nesting status was unknown were observed in the remaining seven years the survey was conducted between 2004 and 2016.

Marin Wildlife Picture Index Project. September 2014 to present. *Wildlife Picture Index: Roy's Redwoods and French Ranch.* Prepared for One Tam Initiative. Petaluma, CA. Retrieved on April 21, 2017 from: <u>http://www.marincountyparks.org/depts/pk/our-work/os-main-projects/marin-wildlife</u> One Tam installed eighteen cameras at the Roy's Redwoods and French Ranch Open Space Preserves. The species documented on the two Preserves between September 2014 and December 2015 included: coyote, bobcat, badger, black-tailed hare, Sonoma chipmunk, brush rabbit, striped skunk, grey fox, and many smaller rodents.

iNaturalist. March 25, 2017. *One Tam Bioblitz on Roy's Redwoods*. Retrieved from http://www.inaturalist.org/projects/one-tam-roy-s-redwoods-bioblitz

One Tam and Marin County Parks hosted Roy's Redwoods' first Bioblitz in March 2017. There were 25 volunteer participants and over 150 species observed.

May & Associates. April 2015. *Vegetation and Biodiversity Management Plan*. Prepared for Marin County Parks. San Rafael, CA.

Marin County Vegetation Management Plan cited wildlife surveys that observed the following specialstatus species found on the Preserve: northern spotted owl, olive-sided flycatcher, Cooper's hawk, pallid bat, and American badger.

Note: The following literature resources pertain to Larsen Creek and the San Geronimo Creek Watershed and generally focus on fisheries issues downstream of the upper Larsen Creek reach in Roy's Redwoods.

The Watershed Stewards Project/AmeriCorp. 2005. *Stream Inventory Report: Larsen Creek.* Prepared for Marin Municipal Water District. Corte Madera, CA.

Stillwater Sciences. 2009. *San Geronimo Valley Existing Conditions Report*. Prepared for Marin County Department of Public Works, San Rafael, CA.

Ettlinger, E. L., et al. 2008. *Lagunitas Creek salmon spawner survey report 2006-2007.* Prepared for Marin Municipal Water District. Corte Madera, CA.

Prunuske Chatham, Inc., et al. February 9, 2010. *San Geronimo Valley Salmon Enhancement Plan: A Guidance Document.* **Prepared for Marin County Department of Public Works. San Rafael, CA.** This document details a plan to maintain and improve salmonid habitat throughout the San Geronimo Valley. The plan provides recommendations for the lower reaches of Larsen Creek but nothing specific to upper Larsen Creek in Roy's Redwoods.

Love, Michael. December 4, 2013. *Technical Memo: Basis of Design for Fish Passage Improvements at Larsen Creek Culvert, San Geronimo, CA.* Prepared for Marin County. San Rafael, CA.

Agha, Laith. July 29, 2014. *Habitat restoration at San Geronimo golf course to aid salmon.* Marin Independent Journal. Novato, CA.

5.4 HISTORICAL CONTEXT AND CULTURAL RESOURCES

The first people of the San Geronimo Valley were speakers of the Coast Miwok language and were present until the arrival of Europeans in the late 18th century. The Preserve and the area of focus contains environmental features, such as foothill/valley interfaces and ephemeral creeks, that are commonly associated with prehistoric cultural resources. A small portion of Roy's Redwoods, on the south side of the Preserve, has been formally surveyed for archaeological resources and a prehistoric archaeological site has been identified. Areas with any potential visitor improvements planned, particularly those involving ground disturbing activity, should be subject to archaeological archival review and site survey.

Roy's Redwoods is named after the brothers James and Thomas Roy, who in 1877 owned the property that became the Preserve. The redwood grove in the Preserve was selectively logged in the late nineteenth century and several old-growth redwoods were left standing that are estimated to be around 500 years old. The property, as with the rest of the San Geronimo Valley, was primarily used for agricultural grazing from the time Europeans arrived in the mid-1850's until the mid-1950's. Cattle grazing was continued at the Preserve until 1978. In the 1960s this property was planned for development with single-family residences, and it was part of the vision for 20,000 new residents in the San Geronimo Valley according to the 1961 Master Plan. In reaction to the potential for greatly increased urban and commercial development in the valley, an ad hoc community group organized to develop the San Geronimo Valley Community Plan which was ultimately adopted in 1978. The Community Plan established the preservation of open space in the valley as a key element to the plan which led to the acquisition of Roy's Redwoods in 1977 and it's founding as the first County Open Space Preserve in the San Geronimo Valley.

In conversations with Jean Berensmeier, who played a major role the Preserve status, within months of opening to the public the redwood understory was trampled due to the Preserves popularity and lack of formal trails. The Open Space District was also forced to provide trash receptacles and a toilet on-site. Though it is not clear if attributable to historical cattle grazing or to visitor use, the LMP for Roy's Redwoods, notes that within the terrace stand stream banks had been degraded, loss of native vegetation had occurred, and soils had been compacted. The LMP also focuses on the large impact of permitted and unpermitted use of the meadow area especially with issues of compaction and litter.

Opportunities

• Consider how to interpret the history of Roy's Redwoods, particularly the story of protecting Roy's Redwoods as the first open space preserve in the San Geronimo Valley.

Reference Documents

San Geronimo Valley Board of Supervisors and Planning Committee. 1961. *San Geronimo Valley Master Plan.* Prepared for Marin County Planning Department, San Rafael, California.

The 1961 Master Plan was adopted while the Roy's property was owned by the Lagunitas Development Company. The Plan anticipated a building boom in the Valley. It proposed protecting the redwood forest while developing the remaining property with single-family homes. The golf course was built on a portion of the Roy's property right before this plan was adopted.

San Geronimo Valley Planning Group. 1978. *San Geronimo Valley Community Plan*. Prepared for Marin County Planning Department, San Rafael, California.

The San Geronimo Planning Group was developed in response to the 1961 Master Plan. The new Community Plan that was adopted in 1978 would significantly decrease the amount of residential and commercial development proposed in 1961. The approval of this plan resulted in the County's acquisition of the Roy's Redwoods property in 1977. It was the first open space property protected in San Geronimo Valley.

Brian Wittenkeller & Associates. 1989. *Land Management Plan for Roy's Redwoods and Maurice Thorner Memorial Open Space Preserves.* Prepared for Marin County Open Space District. San Rafael, California.

This management plan is a very important reference document for a baseline understanding of the Preserve early in its years as a public open space. The management plan articulates some of the early visitor use and ecosystem management issues, many of which are still present. Many of the plans recommendations were implemented and have resulted in the existing visitor use framework that exists today.

San Geronimo Valley Planning Group. 1997. *San Geronimo Valley Community Plan.* Prepared for Marin County Planning Department, San Rafael, California.

The 1997 Community Plan describes two trail easements on the Spirit Rock property for a ridge trail connection to Loma Alta Open Space as well as a trail connection to Dickson Ranch. The trail and tunnel connection under Sir Francis Drake Blvd to Dickson Ranch has been constructed. The ridge trail connection to Loma Alta has not been completed because an easement has not been acquired across one of the three necessary properties.

Marin County Community Development Agency. Adopted 2007. *Marin Countywide Plan*. San Rafael, California.

The Marin Countywide Plan establishes a framework for the management of Marin County's Natural Systems, which includes biological resources, water resources, open space, and trails, as well as the County's Socioeconomics, which includes historic and archaeological resources in addition to parks and recreation. Resource management decisions at Roy's Redwoods must be consistent with the Countywide Plan.

Dodd, Brian and Berensmeier, Jean. Retrieved on June 28, 2017. *History of the San Geronimo Valley*. Retrieved from <u>http://www.sgvcc.org/resources/valley-history/</u>

Describes the rich history of the San Geronimo Valley and Roy's Redwoods. Provides the framework for how the San Geronimo Planning Group aligned the Community and County for the protection and funding of Roy's Redwoods and the three other Open Space Preserves in the Valley (Maurice Thorner OSP, Giacomini OSP and French Ranch OSP).

5.5 RECREATION AND PUBLIC ACCESS

The multi-use trail network on the Preserve connects to and across Maurice Thorner Open Space, French Ranch Open Space, Spirit Rock Retreat Center, Dickson Horse Ranch, and San Geronimo Golf Course (see Preserve map). There are approximately 3.8 miles of formal trails in the Preserve, of which 3.2 miles are open to equestrian use, and the 0.9 mile fire road portion is open to bicyclists. The trails allow on-leash dogs and allow off-leash while under strict voice command on the fire road. Existing trails consist of; Roy's Redwoods Loop Trail, Dickson Fire Road, David Hansen Trail, Meadow Trail and an unofficial series braided social trails through the terrace redwood stand and to other destinations of interest. Informal parking along Nicasio Valley Road serves as a trailhead which has existing wayfinding signage, a screened portable toilet, and trash receptacles.

Existing Trails

The Roy's Redwoods Loop Trail was originally cut by Open Space District trail crew in the 1980's with a trail machine nicknamed "Freddy" (Roy's Redwood Stories, David Hansen). This trail is for hikers, equestrians and dogs on leash. The 2.3 mile trail loops around the southern half of the Preserve and users experience all of the different habitat types. The trail has moderate climbs with approximately 540 feet of elevation gains. The trail connects to all of the other trails in the Preserve as well as to adjacent open spaces via the Spirit Rock Trail, the Thorner Ridge Trail, and the Barnabe Mountain Fire Road. The visitor use survey and online descriptions of trails at Roy's Redwoods indicate that the loop is the most popular designated trail in the Preserve. Improvements to the to a large segment of this trail, primarily along the southern boundary of the Preserve, were implemented in 2016 with the Roy's Loop Trail Upgrade Project. The upgrade project included several wet-water crossings and tread treatments designed to improve visitor safety and reduce the potential for sediment loading to the San Geronimo Creek watershed.

The Meadow Trail is a quarter mile hiker only trail that begins at the Nicasio Valley Road trailhead and connects with the Roy's Redwoods Loop Trail just beyond the northeastern extent of the terrace slope stand. The Meadow Trail goes through the open meadow and offers views of old growth redwoods and leads to the popular "fairy ring" destination within the redwood and bay forest. This trail is typically at least 4 feet wide and has a gradual slope. The meadow was historically a popular destination but is now typically used as a route to the redwoods. The view of the redwood forest from the meadow gives a unique perspective of the full height of the redwoods.

The David Hansen Trail, named for the Open Space District planner who negotiated the purchase of Roy's Redwoods, is a short out-and-back trail that begins at the ridgeline saddle junction with the Roy's Redwoods Loop Trail. The 0.4 mile trail is hiker only and has elevation gains of approximately 280 feet. This trail goes through important habitat provided by old growth redwood forest and Douglas fir dominated forest and it roughly follows the eastern extent of the slope redwood stand. There are two well used spur social trails that originate near the David Hansen / Loop Trail junction. One leads uphill to a destination viewpoint and to the spring which feeds the main tributary to Larsen Creek. The other cuts off a forested segment of the Loop Trail with an open grassland shortcut.

The Dickson Ridge Fire Road, also called Dixon Ridge, is the only route open to bicyclists in the Preserve. It begins at a gated trailhead along Nicasio Valley Road near the Barnabe Mountain Fire Road. The fire-road has sustained grades up to 30% and an average grade of 22% over the 0.9 miles to the ridgeline where it meets the Preserve boundary. The 2016 Draft Roy's Redwood Fire Road Erosion and Drainage

Assessment by Timothy Best evaluates the current erosion and drainage conditions of the fire road. The study identifies two segments of the fire road. Segment 1, which extends 1,700 feet along the fall-line from Nicasio Valley Road to the ridge top, has concentrated runoff and a rutted surface. According to Timothy Best and the work of the PCI, many portions of this segment have eroded to bedrock and is not currently a source of sediment delivery to the watershed. However, maintaining this segment is likely unsustainable and Marin County Fire is amiable to abandoning this segment and utilizing the much more sustainable existing fire road through the adjoining private property. Decommission of Segment 1 and conversion to multi-use trail could provide a recreational benefit as well as prevent future potential erosion. Segment 2 of the fire road extents along the ridgeline for approximately 3,000 feet and is generally sustainable but requires drainage improvements and some slight alignment rerouting.

Within the terrace redwood stand there are at least 1300 feet of undesignated trails that form a braided network through grove (see Social Trail & Creek Crossings map). The social trail network connects to the Meadow and Loop Trails at approximately 10 distinct locations. In addition to these well-worn linear paths there are large areas of heavy compaction and denuded understory where visitors tend to gather. Many of these trails and large areas of disturbance are associated with key destinations or features such as the fairy ring trees, large or charismatic trees, or large downed trees. One prominent route generally follows the south side of braided alluvial floodplain of Larsen Creek along the hillside from the trailhead area to the northeast edge of the terrace stand. A second prominent unofficial trail follows the main tributary of Larsen Creek from the northeastern part of the terrace stand up to the Loop Trail, near its junction with the David Hansen Trail, and then continues on to the spring.

Circulation and Key Destinations

Besides the redwoods grove in general, within the terrace redwood stand there are several key destinations that were pointed out during the workshops and are indicated by visitor use patterns. These destinations include the two very large downed redwood, the two fairy, a grove of very charismatic redwoods along the hillside, and the redwoods that were burned by the 2014 fire (see Area of Focus map). Nearly all of these key destinations are located within the alluvial flood plain and braided channel system of Larsen Creek. There are at least 20 informal locations where visitors are crossing creek channels within the alluvial floodplain (see Social Trails & Creek Crossings map). Typically, any of the large diameter redwoods in the terrace stand have compacted soils and denuded vegetation surrounding them, the only exception being many of the very large redwoods bordering the meadow which are protected by dense poison oak. Visitor feedback from the workshops and survey indicate a strong preference for loop trail experiences. Potential visitor circulation improvements should consider opportunities to provide access to a range of the key destinations and experiences while limiting trail redundancies and protecting sensitive resources.

Inclusive Access

Providing universal access to an immersive experience of the old growth redwood trees is a fundamental goal of the visitor experience improvements under study at the Preserve. Existing barriers include eroded trails, downed logs, and a lack of clearly delineated trails all of which have a major impact on access for those with limited mobility. Any visitor experience or trail improvements should consider upgrading the meadow trail or a similar trail experience to meet outdoor accessibility standards. The MCP Inclusive Access Plan identified the Meadow Trail to be upgraded to an Access and Discovery Trail.

"The Access and Discovery Trail system is an experience-based network of trails that will provide varied and immersive user experiences broadly representative of the array of outdoor settings available within the MCOSD preserves. These trails will meet or exceed the technical standards for accessible recreational trails and incorporate the principles of Universal Design to accommodate the needs of users" (Marin County Parks, Inclusive Access Plan, July 2016)

The MCP Access and Discovery Trail Improvement Plan identifies the fairy ring as an opportunity to interpret the ability of redwoods to regenerate from the established root system of a dead or logged parent tree. Several portions of the Meadow Trail are currently in poor condition with rilling and uneven surfaces caused by the erosive force of concentrated flows on the tread. The Trail Improvement Plan was written with the understanding that a future meadow restoration project was being considered and it leaves the possibility of an alternate alignment of the Access and Discovery Trail at the Preserve. The Trail Improvement Plan also proposed additional improvements to make the trailhead parking area and entry gate consistent with accessible recreational trail standards. These trailhead improvements were implemented during the Roy's Loop Trail Upgrade Project in 2016.

Nature Play

The experience of exploring the redwoods is also commonly sought by adult and young visitors alike. The Preserve is an easy hike from the San Geronimo Valley schools and the opportunities for education and play provided by the redwood grove are important to the children and educators. School groups are supervised by a teacher and/or teacher aid when visiting. Establishing a structured or guided experience that provides opportunity to play and explore while in balance with preserving habitat would be appreciated by the school district.

Woody debris is an important component of quality understory habitat and hydrologic function. The use of fallen branches for fort building and other play is very common in the terrace stand and is impactful to habitat. Areas of concentrated visitor play are also resulting in compaction and denuded vegetation. A potentially more appropriate or resilient play environment might be within the California Bay understory as the allelopathic nature of the bay duff makes the understory naturally less dense. The Fairy Ring Tree is adjacent to a bay dominated area and is a key trail and visitor destination which might warrant consideration a tolerated play area. Visitor experience improvements should consider a structured or guided experience that provides opportunity to play and explore while in balance with preserving habitat.

Trailhead Parking

The current road shoulder along Nicasio Valley Road is approximately 10-12 feet wide and is used as informal parking at the trailhead. This informal parking can accommodate dozens of vehicles. The speed that cars travel and lack of passible space for visitors along Nicasio Valley Road is a safety concern. The noise generated by traffic is also disruptive to the experience of the redwood grove.

Amenities

The trailhead at the Preserve is outfitted with a portable toilet as well as trash receptacles. A wayfinding and interpretive kiosk sign was installed at the trailhead in 2018. To accommodate equestrian use, hitching posts are installed at the trailhead as well as at the northwest corner of the meadow next to a stock water tank. The stock water tank was developed as a recommendation of the 1989 Land Management Plan and is fed by water piped from the spring on Larsen Creek.

Opportunities for further study

- Study traffic calming measures and trailhead safety improvements along Nicasio Valley Road.
- Visitor use impacts to wildlife in sensitive habitat areas.

Reference Documents

Brian Wittenkeller & Associates. 1989. *Land Management Plan for Roy's Redwoods and Maurice Thorner Memorial Open Space Preserves.* Prepared for Marin County Open Space District. San Rafael, California.

The Plan calls for five priority trail system improvements at the Preserve. All the improvements have been constructed except for the fire road trail connection to Loma Alta Open Space along the ridgeline. Trail easements have not been acquired for the length of the connection.

Environmental Planning Partners, et al. 2014. *Marin County Open Space District Road and Trail Management Plan*. Prepared for Marin County Parks. San Rafael, CA.

The Management Plan describes potential hydrologic issues on Roy's Redwoods trail and road system because of the steep terrain, erosive soils and numerous stream crossings. The Plan calls out gullying on Roy's Loop Trail and Dickson Fire Road.

Best, Timothy. 2014. DRAFT *Engineering Geologic and Geotechnical Review: Upgrade and Improvement of the Roy's Redwood Loop Trail.* Prepared for Marin County Parks. San Rafael, CA. The Roy's Redwoods Loop trail was upgraded according to this plan in 2016-2017 with Measure A funds.

Best, Timothy. 2016. DRAFT *Roy's Redwood Fire Road Erosion and Drainage Assessment*. Prepared for Marin County Parks. San Rafael, CA.

Prepared to evaluate the condition of the Dickson Fire Road located within the Preserve and to develop recommendations for improved access and to reduce the risk for future erosion. Review of the fire road focuses on measures/upgrades that can be immediately implemented to improve road conditions and reduce the risk for road related erosion and associated impacts to water quality. Included in this report and accompanying plan sheets are short to intermediate term recommendations to improve the road (both the road bed and drainage).

MIG. 2016. Inclusive Access Plan. Prepared for Marin County Parks. San Rafael, CA.

The Marin County Inclusive Access Plan and the Access and Discovery Trail Improvement Plan calls for the Meadow Trail to be upgraded to outdoor accessible from the parking area to the fairy ring of oldgrowth redwoods. The parking area and trail connection would need to be upgraded to meet accessibility guidelines.

Dodd, Brian and Berensmeier, Jean. Retreived on June 28, 2017. *History of the San Geronimo Valley*. Retrieved from <u>http://www.sgvcc.org/resources/valley-history/</u>

This historical description notes the old-growth redwood grove and adjacent meadow have been used for weddings, memorial services, picnics, summer camps, school groups, as well as commune encampments.

ROY'S REDWOODS OPEN SPACE PRESERVE SITE ANALYSIS TECHNICAL MEMO -APPENDICES

DRAFT NOVEMBER 9, 2018



APPENDICES

- 6.0 VISITOR USE SURVEY
- 7.0 ROY'S REDWOODS SPECIES LIST

8.0 MAP ATLAS

- 8.1 MARIN COUNTY & NEARBY REDWOOD GROVES
- 8.2 SAN GERONIMO VALLEY WATERSHED AND LOCATION MAP
- 8.3 PRESERVE MAP
- 8.4 WILDLIFE SIGHTINGS & POTENTIAL HABITAT
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- 8.10 SOCIAL TRAILS & CREEK CROSSINGS
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ROY'S REDWOODS OPEN SPACE PRESERVE

VISITOR USE SURVEY FINAL REPORT

June 12, 2018

SURVEY INTENT

The purpose of this survey was to gather data to enrich the Project Team's understanding of current users of Roy's Redwoods Open Space Preserve, including user patterns, values, interests, expectations and experiences. This information will be considered when developing future site enhancements, to ensure subsequent actions maintain or improve quality of both visitor experience and of the Preserve's natural resources.

SURVEYS COMPLETED

- Between May 2017 and March 2018 a total of 15 onsite survey days were conducted across a range of days, times, and weather conditions. Surveyors engaged visitors during 5 weekend days, a holiday weekend day, 9 week days, and 2 days with flowing water in Larsen Creek.
- 117 individual surveys were completed.

RESULTS SUMMARY

- 76% of visitors had visited Roy's Redwoods four times or less in the past year and 46% had come for the first time. There is a very small number of visitors that visit on a more daily or weekly basis.
- When asked what brings you to Roy's Redwoods Open Space Preserve today "Be in Nature" and "The Redwoods" were the top two responses with 72% and 71% respectively. However, when asked what the <u>primary</u> reason for visiting was, 38% of people come to Roy's Redwoods primarily for "the redwoods; being in and around the big redwood trees", while 18% of visitors come primarily to "be in nature".
- Typically, people experience the redwoods by hiking through the redwood grove;
 - 42% would prefer to hike without a formal trail;
 - 31% would prefer a formal trail; and
 - 27% have no preference.
- People have a very positive and safe experience while visiting Roy's Redwoods.
- The health of the natural systems at Roy's Redwoods is <u>perceived</u> as good (36%) or very good (43%). (Note: there are significant issues with the health of the ecosystem in the project area particularly with a denuded vegetative understory, eroding creek channels, and highly compacted soils. Many of these issues are directly associated with the lack of a formal trail network)

REPORT CONTENTS

- Survey Methodology
- Roy's Redwoods Visitor Use Survey Results
- Surveyor Exit Data
- Roving Surveyor Observations Maps

PURPOSE STATEMENT

The purpose of this survey is to gather data to enrich our understanding of current users of Roy's Redwoods Open Space Preserve, including user patterns, values, interests, expectations and experiences. This information will be considered when developing future site enhancements, to ensure subsequent actions maintain or improve quality of both visitor experience and of the Preserve's natural resources.

RESEARCH OBJECTIVES

- Collect data during a total of 25 survey days between May and October 2017, using a mix of holidays (2), weekends and weekdays. Surveys will be conducted during a mix of morning and afternoon and evening hours.
- Data will be collected using both responses from a visitor intercept exit survey and passive observations of visitors made by surveyors.
- After the collection period, data will be aggregated, analyzed and subsequently compiled into a summary report.

INTERCEPT SURVEY KEY DATA POINTS

- Prior visitation; frequency
- Length of visit
- Trip characteristics
- Activities undertaken in the Preserve
- Destination(s) within the Preserve
- Primary reason for visit
- Trails used
- What respondents like most about the site (Overall quality of the experience)
- What respondents like least about the site (Reasons felt unsafe or dissatisfied)
- Suggestions on how the Preserve can be improved to enhance visitor experience or improve health of natural resources
- Enhance understanding of visitor valuation of site ecological health
- Respondent residence/zip code

PASSIVE OBSERVATION KEY DATA POINTS

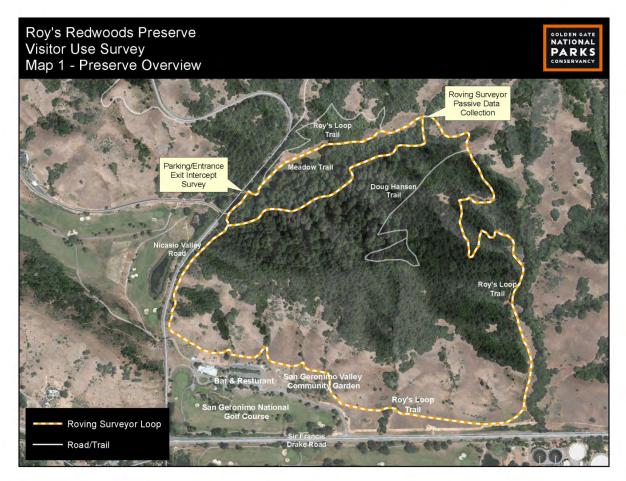
- Date, time of contact
- Weather conditions and impacts on use
- Group size, approximate age, gender
- Group activity walk, dog-walk (on or off leash), horseback or jog
- Areas accessed by visitors, including the Meadow and Redwood Grove, and trails used (both designated and/or non-designated)

DATA COLLECTION SITES¹

¹ See Map 1 – Preserve Overview

Roy's Redwoods Open Space Preserve is located in the San Geronimo Valley in Marin County. The Preserve is primarily accessed from an entrance along Nicasio Valley road, approximately ½ mile north of the intersection with Sir Frances Drake road, where limited roadside parking currently exists.

- One visitor intercept exit surveyor will be placed at the Preserve entrance on Nicasio Valley road
- One roving observer will circulate the network of designated and non-designated trails in and around the Meadow, Redwood Grove and, twice daily, walk the Roy's Loop Trail to collect observational data on areas accessed, trails used, visitor characteristics, etc.



OVERALL DESIGN

The visitor use survey design for Roy's Redwoods Open Space Preserve is based on previous efforts undertaken by Marin County Parks² and the Golden Gate National Recreation Area³. This survey is

³"Summer-Fall 2008 Phase 1 Visitor Survey and Counts, At Chrissy Field, Presidio and Ocean Beach Sites; Golden Gate National Recreation Area", Patrick Tierney Ph.D., November 2009

²"Marin County Parks Visitors Study Report Part I", Patrick Tierney Ph.D., San Francisco State University, March 2016

designed to balance the need for data specific only to the Preserve, while maintaining some level of formal scientific survey methods and procedures.

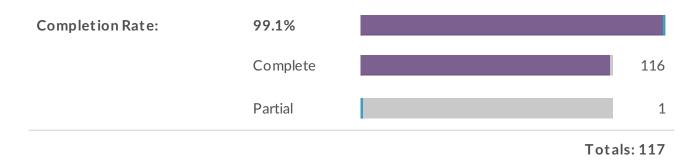
Because Roy's Redwoods Open Space Preserve is thought to be a site with comparatively low visitation numbers, every group to pass the survey location upon *exiting* the Preserve will be contacted by a trained surveyor. Visitors are surveyed upon exiting the Preserve to ensure that the information obtained by the survey relates to their present experience. The surveyor will read from a prepared script and ask for survey participation – visitors will be offered a free one-day Marin County Parks pass as incentive for participation. For each contact made the surveyor will complete an entry into a survey log. Even if the visitor declines to take the survey, the surveyor will complete an exit survey data sheet for each contact (see attached).

On select days a roving surveyor will also be used to collect passive observational data on areas accessed by Preserve visitors. The "rover" will circulate the network of designated and non-designated trails in and around the area of interest, which includes the Meadow and several adjacent redwood groves, and complete a data sheet (attached) for each visitor or group of visitors observed. The rover will also annotate a map accompanying the data sheet, indicating areas accessed and trails used. This information will be used to better understand the circulation patterns and preferred routes of access for various user groups of the Preserve.

Surveys days will alternate between morning-afternoon (7:30am – 4:00pm) and afternoon-evening (10:30am – 6:30pm) shifts. This will ensure that visitor use data collected does not bias towards one set of users over another. Data will be collected for a minimum of 25 survey days, including 2 holidays, over the survey period from May through October 2017, with the goal of obtaining approximately 300 unique exit surveys completed. Survey days will include an equal number of weekend and weekday surveys to eliminate sampling bias. A roving surveyor will be present to collect data on select survey days, alternating between morning-afternoon and afternoon-evening shifts. Roving survey shifts will be scheduled to ensure that an equal number of survey periods are conducted for both weekends and weekdays. Weekends are defined as beginning with the afternoon-evening collection period on Friday and ending with the afternoon-evening collection period on Sunday. As the rainy season begins, a minimum of 3 survey shifts will be scheduled on forecasted rain days to gather data on how weather may impact visitor use. Once surveying has begun and initial responses are collected, adaptations to the overall survey design and/or survey methodology may be undertaken in response to any difficulties or issues.

Roy's Redwoods Visitor Use Survey Results June 12, 2018

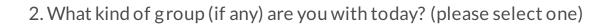
Response Counts

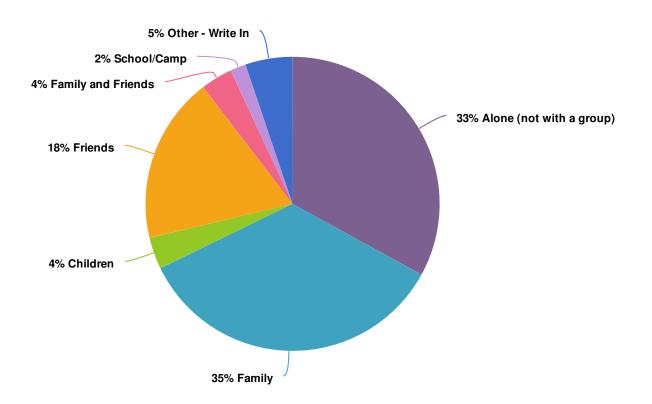


1. Including today, approximately how many times have you visited Roy's Redwoods in the past 12 months?

Response	Count
1	48
2	12
3	12
4	7
5	6
6	3

Response	Count
8	1
10	2
12	3
13	1
15	1
16	1
24	1
30	1
40	1
45	1
50	1
100	1





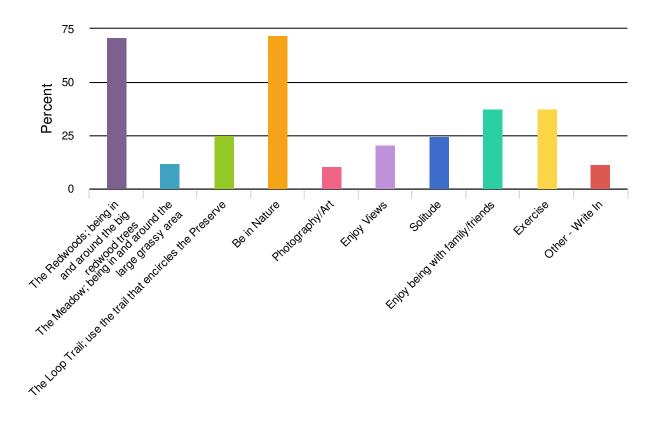
Value	Percent	Responses
Alone (not with a group)	33.0%	38
Family	34.8%	40
Children	3.5%	4
Friends	18.3%	21
Family and Friends	3.5%	4
School/Camp	1.7%	2
Other - Write In	5.2%	6

Totals: 115

Other - Write In

Dog hike	1
Gf	1
I bring a special needs client here, and come here by myself or with friends	1
Jen Berensmeier sponsored group	1
Spirit Rock Teen Group	1
organized group	1
Totals	6

3. What brings you to Roy's Redwoods Open Space Preserve today? (mark all that apply)

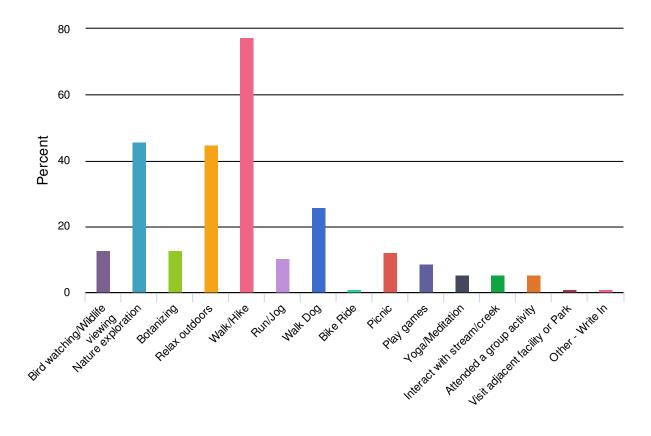


Value	Percent	Responses
The Redwoods; being in and around the big redwood trees	71.3%	82
The Meadow; being in and around the large grassy area	12.2%	14
The Loop Trail; use the trail that encircles the Preserve	25.2%	29
Be in Nature	72.2%	83
Photography/Art	10.4%	12
Enjoy Views	20.9%	24
Solitude	24.3%	28
Enjoy being with family/friends	37.4%	43
Exercise	37.4%	43
Other - Write In	11.3%	13

Other - Write In

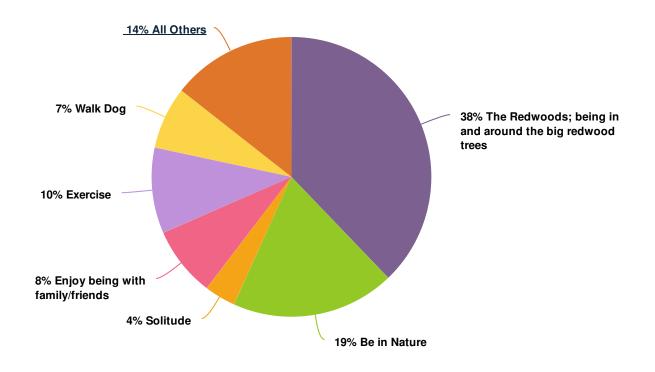
Dog walk	2
Bike ride	1
Dog	1
Dog friendly	1
Nature is a teacher in the Thai Forest Buddhist tradition. So we bring the teens to not only to engage in relational mindfulness practices, but also to imbue themselves in the peace, solitude, steadiness, and quiet of the redwoods and the land.	1
School decided I don't know why	1
Test out new umbrellas	1
hear Jean's talk	1
learn about history of Roy's Redwoods	1
therapy	1
yoga and meditation	1
Totals	12

4. What kinds of activities did you participate in today at Roy's Redwoods? (mark all that apply)



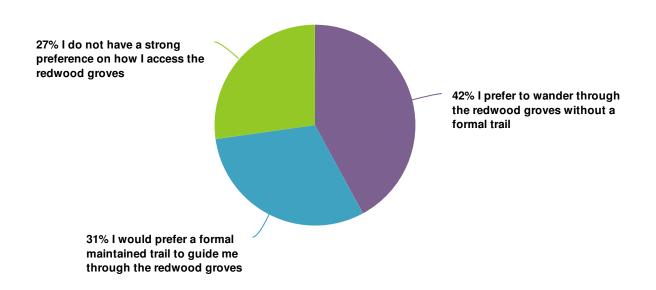
Value		Percent	Responses
Bird watching/Wildlife viewing		12.9%	15
Nature exploration		45.7%	53
Botanizing		12.9%	15
Relaxoutdoors		44.8%	52
Walk/Hike		77.6%	90
Run/Jog		10.3%	12
Walk Dog		25.9%	30
Bike Ride		0.9%	1
Picnic		12.1%	14
Play games		8.6%	10
Yoga/Meditation		5.2%	6
Interact with stream/creek		5.2%	6
Attended a group activity		5.2%	6
Visit adjacent facility or Park		0.9%	1
Other - Write In		0.9%	1
Other - Write In			Count
Traditional mindfulness practices and mind	dful relational prac	tices	1
Totals			1

5. Which ONE activity of those you marked in questions 3 and 4 above would you say was your primary reason for visiting Roy's Redwoods today? (please select only one)

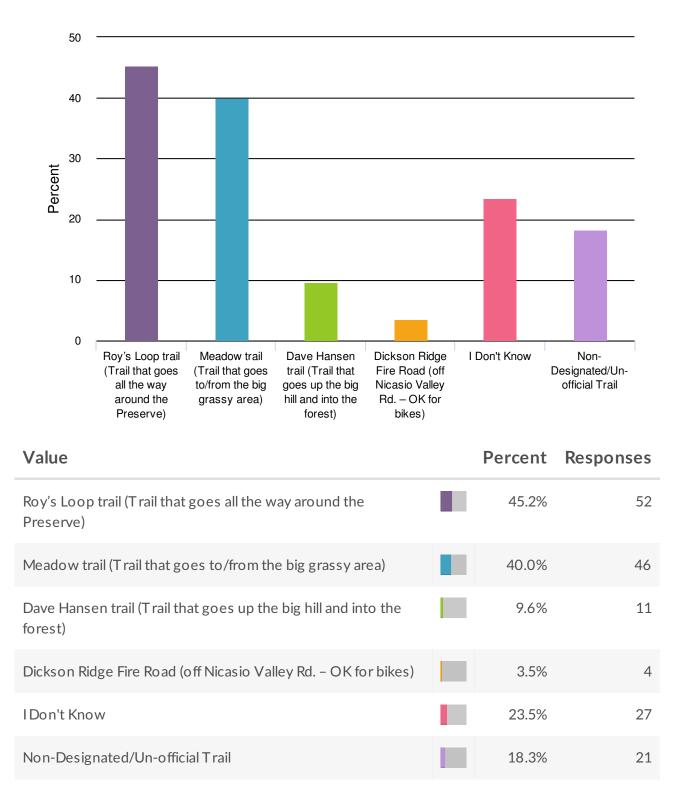


Value	Percent	Responses
The Redwoods; being in and around the big redwood trees	37.8%	42
Be in Nature	18.9%	21
Solitude	3.6%	4
Enjoy being with family/friends	8.1%	9
Exercise	9.9%	11
Walk Dog	7.2%	8
The Loop Trail; use the trail that encircles the Preserve	1.8%	2
Photography/Art	0.9%	1
Enjoy Views	1.8%	2
Nature exploration	0.9%	1
Relaxoutdoors	1.8%	2
Walk/Hike	1.8%	2
Run/Jog	0.9%	1
Picnic	0.9%	1
Yoga/Meditation	0.9%	1
Interact with stream/creek	0.9%	1
Attended a group activity	0.9%	1
Other (wrote-in on question 3 or 4)	0.9%	1

6. Tell us your preference for accessing the redwood trees in Roy's Redwoods Open Space Preserve by selecting one of the following statements:

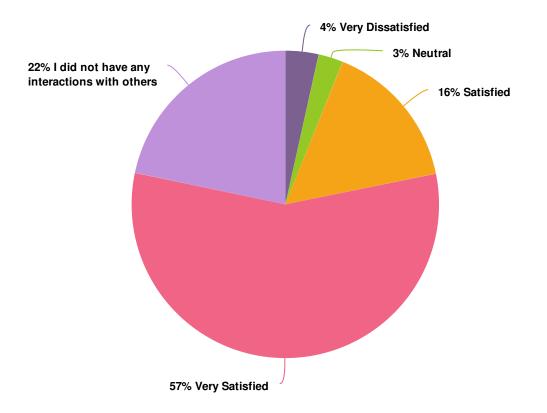


Value		Percent	Responses
I prefer to wander through the redwood groves without a formal trail	1	42.1%	48
I would prefer a formal maintained trail to guide me through the redwood groves		30.7%	35
I do not have a strong preference on how I access the redwood groves		27.2%	31



7. What trails did you hike today at Roy's Redwoods?

8. Please rate your satisfaction with the interactions you had with other visitors at Roy's Redwoods today. (Please mark only one):



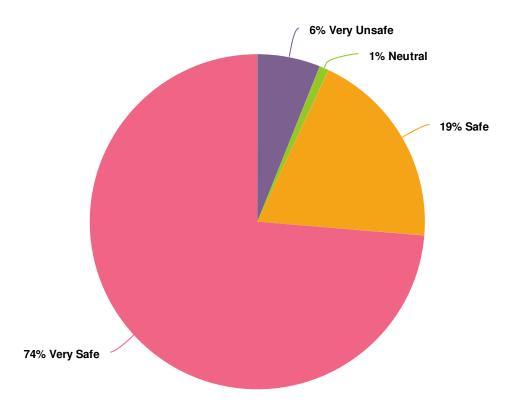
Value	Percent	Responses
Very Dissatisfied	3.5%	4
Neutral	2.6%	3
Satisfied	15.7%	18
Very Satisfied	56.5%	65
I did not have any interactions with others	21.7%	25

9. If you felt very dissatisfied or dissatisfied with the interactions you had with other visitors today, please take a moment to describe what caused you to feel that way:

horse beautful didnt redwoods time family annoying picnicing denmark coming dont peraon dissatisfied poop impossible woods

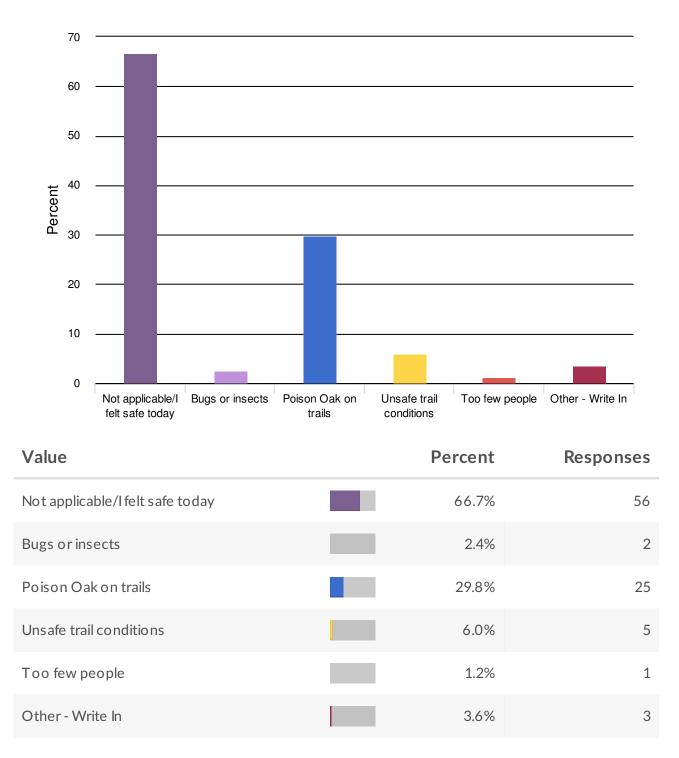
ResponseID	Response
1	Horse poop is annoying
21	Once in a while there's a homeless peraon
27	Great time, looking forward to coming back!
50	Did not feel dissatisfied
55	Great so beautful Came to show my family from denmark the redwoods and muir woods is impossible
81	Dont like how its getting so crowded here.
84	Didnt see anyone except the large group picnicing

10. Please indicate how personally safe you felt at Roy's Redwoods today on a scale of Very Unsafe to Very Safe. (Please mark only one):



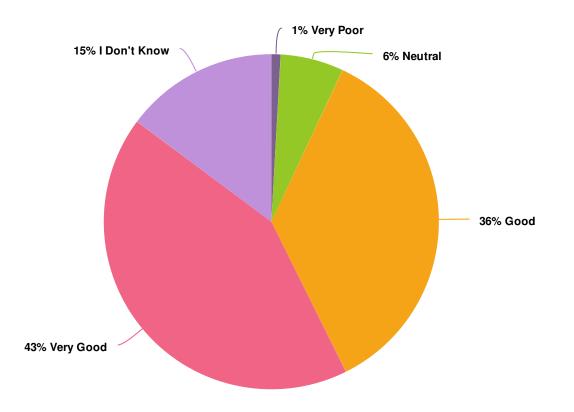
Value	Percent	Responses
Very Unsafe	6.1%	7
Neutral	0.9%	1
Safe	19.3%	22
Very Safe	73.7%	84

11. Please let us know if any of the conditions below made you feel unsafe today (mark all that apply)



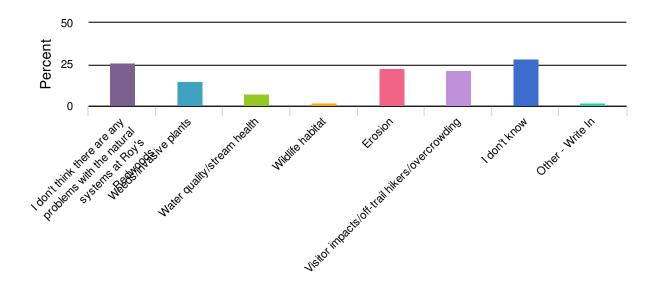
Other - Write In	Count
Allgood	1
No clear guides identifying the trails	1
Totals	2

12. How would you rate the health of the natural systems (habitat, plants, creek, etc.) at Roy's Redwoods?



Value	Percent	Responses
Very Poor	0.9%	1
Neutral	6.1%	7
Good	35.7%	41
Very Good	42.6%	49
I Don't Know	14.8%	17

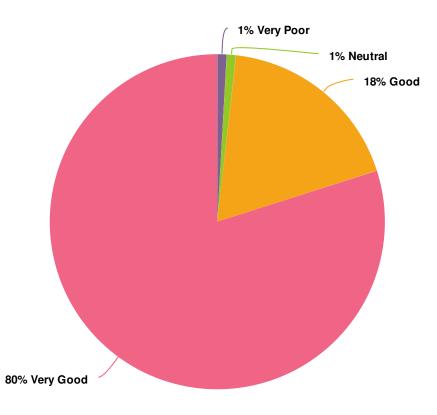
13. Do you consider any of the following to be an issue for health of natural systems Roy's Redwoods? (Mark all that apply)



Value	Percent	Responses
I don't think there are any problems with the natural systems at Roy's Redwoods	25.9%	28
Weeds/invasive plants	14.8%	16
Water quality/stream health	7.4%	8
Wildlife habitat	1.9%	2
Erosion	23.1%	25
Visitor impacts/off-trail hikers/overcrowding	21.3%	23
I don't know	28.7%	31
Other - Write In	1.9%	2

Other - Write In	Count
Poison oak!	1
Ticks	1
Totals	2

14. Overall, how would you rate the quality of your experience at Roy's Redwoods during this visit? (Please mark only one):



Value	Percent	Responses
Very Poor	0.9%	1
Neutral	0.9%	1
Good	18.3%	21
Very Good	80.0%	92

15. Please use the space below to provide general feedback regarding your experience at Roy's Redwoods today:



ResponseID	Response
1	This is a great park, im lucky to livehere
2	Great, uncrowded nature area
4	Too much poison oak. Had to turn back. Trail marking couldhave been better.
5	Come here 5 days a week, this place is special, keep it that way!
12	Brother took us on steep side trail that should have been marked as steep and dangerous. A sign could be there indicating 'Descend at own risk' as a warning.
19	Better markings on trails
23	The loop trail needs better signage. Thanks!
25	It was an awesome experience
26	The cars go by very fast and the noise is very loud which is disruptive to the peaceful nature. Speed limit should be 20-25 mph

27	Some trails seemed unmarked but space is small enough to nevigate.
29	All visits to protect this special place
32	Great time!
34	Get rid of POISON OAK
37	One of my favorite
38	First visit beautiful area we plan to return soon
39	lts a neighborhood gift
48	Better signage and maps. Forexample, name trait, distNce, nd difficulty level
50	Looking forward to comig back!
52	We love Roys! I am so thankful that Open Space is keeping this amazing s Place safe and healthy.
53	Sign not too clear, nice to be in the shade. Would be nice if there was easy access picnic table area.
55	Rebecca was very kind and helpful
56	Dont over sterilize it.
57	Been coming here since i was a kid v special place wanted to show my friend visiting the area!
60	We love it
63	Its nice to bring a stroller on the trail
64	Please do not change a thing!
72	We love the hike up to the view

78	We love Roy's Redwoods. It was been an integral part of how the our Family Retreat teen group return to what they inherently value, connect with how they're truly feeling, drop into a simpler, slower life pace, and connect with each other face to face (i.e free of digital devices and media).	h
79	I love coming here to run when i can! I enjoy the quiet solitude here.	
81	Surveyor took notes on feedback	
84	Surveyor recorded notes	
87	Our son loves to play within the redwood trees.	
89	lenjoy coming here to wander in the redwoods. The cars that druve by are rea loud and fast and can be disrupting	lly
90	On our way to pt reyes. We heard about roys as a great spot to see redwoods but avoid the crowds at muir woods	
93	Roys was a great place to come to to picnic and be with family! We loved how open the forest felt.	
95	We are so happy we discovered roys as a peaceful place to enjoy the redwood	ls.
98	Signage could be better on the larger loop because i always get lost. The midd area with the meadow and redwoods should be left alone.	le
101	I like how its not crowded here.	
106	The redwoods were great for our kids to run around.	
107	lapprciate how quiet and open it is here.	
109	Loved it!	
110	loved it! Love Jean and Paul!	
114	This place is beautiful	
116	What's really great is how few people come here!	
117	Love this place! A little Haven away from busy life	
11/09/2018	Roy's Redwoods Site Analysis Technical Memo 52 of 1	30

26

122	Love the awesomeness!!!!
123	Fun
124	Great to be away from crowds

16. Do you have any suggestions on how your experience at Roy's Redwoods could be improved? Please describe:



3	Water.	
4	Trail signage. Goat clearing poison oak.	
10	Pkease Out clear markings	
12	Level of strain of frequently used side trails. DIFFICULT, VERY DIFFICULT, MODERATE, EASY	
22	It was magical	
26	Confusing where horses are allowed - better signage needed	
27	Signs for the city folks!	
32	Not atthis time.	
37	N/a	
42	Clear the poison oak off the trails	
11/09/2018	Roy's Redwoods Site Analysis Technical Memo	54 of 130

50	It would be great to havecwatervat the trail head
52	Not at the moment!
62	Very pleasant!
72	Maybe put up clearer signs
78	No. T hank you so much for offering such a safe and peaceful space for our youth!
89	I suppose if the cars could slow down when driving past.
91	I dont think any changes need to be made at Roys. I like it how it is and wouldnt want it to become overcrowded with tourists.
93	No.
94	Because we biked here it wiuld be nice to have drinking water here. Other than that we love it!
95	The cars are a bit disruptive.
96	No
103	The trails sometimes grt overgrown with poison oak.
107	Better signage at the entrance
109	More group activities? For families and schoolgroups?
110	Couldn't be better. let's have walks with Jean and Paul more often!
117	Habitat restoration
122	Remove the road

Date	Time of Preserve Entrance	Time of Presever	Exit Survey #	Weather Conditions	Group Size	Approx. Age and Gender of Each Group Member	Group Activity	Notes	Went off trail? Take Survey?	Surveyor Shift	Survey Notes
								He comes here 5 days a week to			
5/26/1	7 17	:40	1:40	15. Partly Cloudy		1 60/70 M	log / Rup	run! Always calls if there's a tree	Yes	7:30 AM - 3:30 PM	Survey number not entered in
				15 Partly Cloudy			Jog / Run	down, yellow jacket hive, etc.			online survey Survey number not entered in
5/26/1	7 9	:40	10:20	3 Overcast, cool		1 50s, M	Walk		No	7:30 AM - 3:30 PM	online survey Survey number not entered in
5/26/1	7 2	:40 Unknown	I	20 Partly Cloudy		1 20s, M	Dog Walk - On Leash		No	7:30 AM - 3:30 PM	online survey
5/26/1	7 2	:45 Unknown	I	21 Partly Cloudy		1 50s, F	Walk		No	7:30 AM - 3:30 PM	Survey number not entered in online survey
5/26/1	7 12	:15 Unknown	1	12 Partly Cloudy		2 30s, F & 5 month baby	Walk		No	7:30 AM - 3:30 PM	Survey number not entered in online survey
5/26/1		:00 Unknown		19 Partly Cloudy		2 30s, 2M	Walk		No	7:30 AM - 3:30 PM	Survey number not entered in online survey
											Survey number not entered in
5/26/1	7 1	:05	2:00	16 Partly Cloudy		1 20s, F	Walk		Yes	7:30 AM - 3:30 PM	online survey
						18 6th graders, 4 instructors / chaperones in			Yes - 2 6th graders filled		Survey number not entered in
5/26/1	7 10	:15	2:00	4 Partly Cloudy		22 their 20s	Picnic / School / Camp			7:30 AM - 3:30 PM	online survey
5/26/1	7 12	::25	1:45	14 Partly Cloudy		3 30s, 2F, 1M	Dog Walk - On Leash		Yes	7:30 AM - 3:30 PM	Survey number not entered in online survey
5/26/1	7 11	:55	12:25	11 Partly Cloudy		1 20s, M	Walk	Had some sort of recording device?	No	7:30 AM - 3:30 PM	Survey number not entered in online survey
								Her first time here - didn't want to			Survey number not entered in
5/26/1	7 11	:30	12:30	9 Partly Cloudy		1 50s, F	Walk	go to Samuel P Taylor	Yes	7:30 AM - 3:30 PM	online survey Survey number not entered in
5/26/1	7 11	:45	12:25	10 Partly Cloudy		2 50s, M & F	Dog Walk - On Leash		Yes	7:30 AM - 3:30 PM	online survey Survey number not entered in
5/26/1	7 10	:40	12:30	6 Partly Cloudy		2 20s / 30s, M & F	Walk		Yes	7:30 AM - 3:30 PM	online survey
5/26/1	7 10	:50	11:20	7 Partly Cloudy		1 30s, F	Dog Walk - On Leash		No	7:30 AM - 3:30 PM	Survey number not entered in online survey
5/26/1 5/26/1 5/26/1 5/26/1	7 11 7 <u>9</u>		9:30 11:40 10:30 1:55	1 Overcast, cool 8 Overcast, cool 2 Overcast, cool 13 Overcast, cool		2 40s, 2F 1 40s, F 40s, M & F, 3 young boys 5 about 5-7 yrs old 6 30s, 2F, & 4 kids 3-4 yrs old		These women live right across the street - Roy's is their backyard and they come here almost every day. They seem pretty protective over it and don't want it to change. They are scared that making improvements will bring too many people. They also told me Spirit Rock uses Roy's for silent retreats Travelling, from Ohio, googled where to see Redwoods and came to Roys. Kids played in creek behind bathroom, first time at Roys	Yes Yes Yes No	7:30 AM - 3:30 PM 7:30 AM - 3:30 PM 7:30 AM - 3:30 PM 7:30 AM - 3:30 PM	Survey number not entered in online survey Survey number not entered in online survey Survey number not entered in online survey Survey number not entered in online survey
5/26/1	7 1	:20	1:45	17 Partly Cloudy		1 30s, F	Other: Collecting ticks for her job		No	7:30 AM - 3:30 PM	Survey number not entered in online survey
						30s, M, & 2 boys age 6-7 &					Survey number not entered in
5/26/1		:25	1:45	18 Partly Cloudy		4 1 girl age 7	Walk		No	7:30 AM - 3:30 PM	online survey Survey number not entered in
5/26/1	7 3	:20 Unknown	1	21 Partly Cloudy Mostly Sunny,		1 30s, F	Dog Walk - On Leash		Yes	7:30 AM - 3:30 PM	online survey
5/27/1	7 10	:50	12:10	50-60 degrees		1 60s, M	Dog Walk - On Leash		Yes	10:30 AM - 6:30 PM	Survey number not entered in
5/2//1	/ 10	1:50	12:10	Mostly Sunny,		1 605, M	Dog waik - On Leasn		tes	10:30 AM - 6:30 PM	online survey
5/27/1	7 10	:40	3:50	50-60 degrees 2 F		4 All F, 2 in 20s, 2 in 50s	Dog Walk - On Leash		No	10:30 AM - 6:30 PM	Survey number not entered in online survey
. ,				Mostly Sunny,			-	First time here, they came b/c "these are the tallest redwoods in			Survey number not entered in
5/27/1	7 11	:20	1:10	50-60 degrees 3 F		4 50s, 2M & 2F	Walk	the county"	No	10:30 AM - 6:30 PM	online survey

			Mostly Sunny, 50-60 degrees						Survey number not entered in
5/27/17	11:00	12:40	4 F Mostly Sunny,	1 60s, F	Dog Walk - On Leash		Yes	10:30 AM - 6:30 PM	online survey
5/27/17 Unki	nown	11:10	50-60 degrees 5 F	2 30s, F	Walk		Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	11:20	11:30	Mostly Sunny, 50-60 degrees 6 F	2 20s, 2F	Walk	Just wanted to look at redwoods for a second then leave	No	10:30 AM - 6:30 PM	Survey number not entered in online survey
			Mostly Sunny, 50-60 degrees	30s, 2M & 2F, 3 kids a	ges 4- Dog Walk - On Leash, Cree	k			Survey number not entered in
5/27/17	11:40	1:10	9 F Mostly Sunny,	7 6	Play, Picnic	Brought towels, food, etc	No	10:30 AM - 6:30 PM	online survey
5/27/17	11:30	12:30	50-60 degrees 7 F	3 50s, 2M & F	Walk		Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
			Mostly Sunny, 50-60 degrees	40s, M & 1 boy age 6,	1 girl				Survey number not entered in
5/27/17	11:30	1:30	8 F Mostly Sunny,	3 age 7	Walk		Yes	10:30 AM - 6:30 PM	online survey
5/27/17 Unki	nown	11:40	50-60 degrees 10 F	40s, M&F, 2 boys age 5 1 baby	6-7, Walk, Creek Play		Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	11:45	12:40	Mostly Sunny, 50-60 degrees 11 F	2 30s, M&F	Walk		Yes	10:30 AM - 6:30 PM	Survey number not entered in
5/2//1/	11.45	12.40	Mostly Sunny, 50-60 degrees	2 505, MAP	Walk		Tes	10.50 AIVI - 0.50 PIVI	online survey Survey number not entered in
5/27/17	11:55 Unkn	own	12 F Mostly Sunny,	2 20s, M&F	Dog Walk - On Leash		No	10:30 AM - 6:30 PM	online survey
5/27/17	2:35	4:30	50-60 degrees 13 F	1 30s, F	Dog Walk - On Leash		No	10:30 AM - 6:30 PM	Survey number not entered in online survey
			Mostly Sunny, 50-60 degrees		Ū				Survey number not entered in
5/27/17	12:15 Unkn	own	14 F	1 60s, M	Walk		No	10:30 AM - 6:30 PM	online survey
			Mostly Sunny,						
5/27/17	12:10	3:40	50-60 degrees 15 F	2 60s, M&F	Walk	Hiked several connecting trails to Roys	Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
			50-60 degrees 15 F Mostly Sunny, 50-60 degrees			Roys			online survey Survey number not entered in
5/27/17 5/27/17	12:10 12:45	3:40 1:30	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny,	2 60s, M&F 1 20s, F	Walk Exercise	-	Yes	10:30 AM - 6:30 PM 10:30 AM - 6:30 PM	online survey Survey number not entered in online survey
			50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees 17 F			Roys			online survey Survey number not entered in
5/27/17	12:45	1:30	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees	1 205, F	Exercise	Roys	No	10:30 AM - 6:30 PM	online survey Survey number not entered in online survey Survey number not entered in
5/27/17 5/27/17 5/27/17	12:45 12:50 12:40	1:30 1:15 1:00	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees 18 F Mostly Sunny, 50-60 degrees	1 20s, F 2 20s, F 1 20s, M	Exercise Walk Horseback Riding	Roys Completed survey on 6/2	No No No	10:30 AM - 6:30 PM 10:30 AM - 6:30 PM 10:30 AM - 6:30 PM	online survey Survey number not entered in online survey Survey number not entered in online survey Survey number not entered in online survey Survey number not entered in
5/27/17 5/27/17	12:45 12:50	1:30 1:15	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees 17 F Mostly Sunny, 50-60 degrees 18 F Mostly Sunny, 50-60 degrees 19 F Mostly Sunny,	1 20s, F 2 20s, F	Exercise Walk	Roys Completed survey on 6/2	No	10:30 AM - 6:30 PM 10:30 AM - 6:30 PM	online survey Survey number not entered in online survey
5/27/17 5/27/17 5/27/17	12:45 12:50 12:40	1:30 1:15 1:00	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees 17 F Mostly Sunny, 50-60 degrees 18 F Mostly Sunny, 50-60 degrees 19 F Mostly Sunny, 50-60 degrees 20 F	1 20s, F 2 20s, F 1 20s, M	Exercise Walk Horseback Riding	Roys Completed survey on 6/2	No No No	10:30 AM - 6:30 PM 10:30 AM - 6:30 PM 10:30 AM - 6:30 PM	online survey Survey number not entered in online survey Survey number not entered in online survey Survey number not entered in online survey Survey number not entered in
5/27/17 5/27/17 5/27/17 5/27/17 5/27/17	12:45 12:50 12:40 1:00 1:15	1:30 1:15 1:00 1:50 2:25	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees 17 F Mostly Sunny, 50-60 degrees 18 F Mostly Sunny, 50-60 degrees 20 F Mostly Sunny, 50-60 degrees	1 20s, F 2 20s, F 1 20s, M 1 50s, M 3 20s, M	Exercise Walk Horseback Riding Walk Walk	Roys Completed survey on 6/2	No No Yes Yes	10:30 AM - 6:30 PM 10:30 AM - 6:30 PM 10:30 AM - 6:30 PM 10:30 AM - 6:30 PM 10:30 AM - 6:30 PM	online survey Survey number not entered in online survey Survey number not entered in
5/27/17 5/27/17 5/27/17 5/27/17	12:45 12:50 12:40 1:00	1:30 1:15 1:00 1:50	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees 17 F Mostly Sunny, 50-60 degrees 19 F Mostly Sunny, 50-60 degrees 20 F Mostly Sunny,	1 20s, F 2 20s, F 1 20s, M 1 50s, M	Exercise Walk Horseback Riding Walk	Roys Completed survey on 6/2	No No Yes	10:30 AM - 6:30 PM 10:30 AM - 6:30 PM 10:30 AM - 6:30 PM 10:30 AM - 6:30 PM	online survey Survey number not entered in online survey
5/27/17 5/27/17 5/27/17 5/27/17 5/27/17	12:45 12:50 12:40 1:00 1:15	1:30 1:15 1:00 1:50 2:25	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees 18 F Mostly Sunny, 50-60 degrees 19 F Mostly Sunny, 50-60 degrees 20 F Mostly Sunny, 50-60 degrees 21 F Mostly Sunny, 50-60 degrees	1 20s, F 2 20s, F 1 20s, M 1 50s, M 3 20s, M	Exercise Walk Horseback Riding Walk Walk	Roys Completed survey on 6/2	No No Yes Yes	10:30 AM - 6:30 PM 10:30 AM - 6:30 PM 10:30 AM - 6:30 PM 10:30 AM - 6:30 PM 10:30 AM - 6:30 PM	online survey Survey number not entered in online survey Survey number not entered in
5/27/17 5/27/17 5/27/17 5/27/17 5/27/17 5/27/17	12:45 12:50 12:40 1:00 1:15 1:25	1:30 1:15 1:00 1:50 2:25 2:40	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees 17 F Mostly Sunny, 50-60 degrees 19 F Mostly Sunny, 50-60 degrees 20 F Mostly Sunny, 50-60 degrees 21 F Mostly Sunny, 50-60 degrees 22 F Mostly Sunny, 50-60 degrees 22 F Mostly Sunny, 50-60 degrees 23 F	1 20s, F 2 20s, F 1 20s, M 1 50s, M 3 20s, M 3 20s, 2m & F	Exercise Walk Horseback Riding Walk Walk Dog Walk - On Leash	Roys Completed survey on 6/2	No No Yes Yes	10:30 AM - 6:30 PM 10:30 AM - 6:30 PM	online survey Survey number not entered in online survey Survey number not entered in
5/27/17 5/27/17 5/27/17 5/27/17 5/27/17 5/27/17 5/27/17	12:45 12:50 12:40 1:00 1:15 1:25 1:25	1:30 1:15 1:00 1:50 2:25 2:40 2:00	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees 17 F Mostly Sunny, 50-60 degrees 18 F Mostly Sunny, 50-60 degrees 20 F Mostly Sunny, 50-60 degrees 21 F Mostly Sunny, 50-60 degrees 22 F Mostly Sunny, 50-60 degrees	1 20s, F 2 20s, F 1 20s, M 1 50s, M 3 20s, M 3 20s, 2m & F 2 20s, M&F	Exercise Walk Horseback Riding Walk Walk Dog Walk - On Leash Walk	Roys Completed survey on 6/2	No No Yes Yes Yes	10:30 AM - 6:30 PM 10:30 AM - 6:30 PM	online survey Survey number not entered in online survey

			Mostly Sunny, 50-60 degrees			Not sure if his survey response was saved properly - He's been coming to Roys for years, at least once a week either for exercise or to be in the Redwood Grove for "spiritual			Survey number not entered in
5/27/17	2:15	3:25	25 F Mostly Sunny,	1 60s, M	Walk	reasons".		10:30 AM - 6:30 PM	online survey
5/27/17	2:20	3:45	50-60 degrees 26 F Mostly Sunny,	2 60s, M & teen F	Dog Walk - On Leash	Man was married at Roys	Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	2:25	2:45	50-60 degrees 27 F Mostly Sunny,	2 20s, M&F	Walk		Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	2:25	2:50	50-60 degrees 28 F	1 30s, M	Walk, Photography		Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	2:35	3:05	Mostly Sunny, 50-60 degrees 29 F	2 30s, 2M	Dog Walk - On Leash		No	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	2:35	3:05	Mostly Sunny, 50-60 degrees 30 F	1 50s, F	Walk	Took survey on 5/26	No	10:30 AM - 6:30 PM	Survey number not entered in online survey
		5.05	Mostly Sunny, 50-60 degrees			Dressed in suits, gathered in	NO		Survey number not entered in
5/27/17	2:35	2:50	31 F Mostly Sunny, 50-60 degrees	3 30s, M	Walk	Redwoods and chatted then left	No	10:30 AM - 6:30 PM	online survey Survey number not entered in
5/27/17	3:00 Unk	nown	32 F Mostly Sunny,	2 40s, M&F	Dog Walk - On Leash		No	10:30 AM - 6:30 PM	online survey
5/27/17	3:25	5:00	50-60 degrees 33 F Mostly Sunny,	4 40s, M&F, Girl - 10, Boy -	8 Dog Walk - On Leash		Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	3:50	5:40	50-60 degrees 34 F Mostly Sunny,	2 40s, M&F	Dog Walk - On Leash		No	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	3:50	5:15	50-60 degrees 35 F	4 20s, 2M & 2F	Walk		Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	4:05 Unki	nown	Mostly Sunny, 50-60 degrees 36 F	4 60s, M&F, 20s, M&F	Walk		No	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	4:25	4:40	Mostly Sunny, 50-60 degrees 37 F	2 20s, M&F	Walk		Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
			Mostly Sunny, 50-60 degrees				res		Survey number not entered in
5/27/17	4:55 Unki	nown	38 F Mostly Sunny, 50-60 degrees	4 50, M&F, 2 boys around 1	0 Walk		No	10:30 AM - 6:30 PM	online survey Survey number not entered in
5/27/17	4:55	5:30	39 F Mostly Sunny,	1 20s, M	Walk		No	10:30 AM - 6:30 PM	online survey
5/27/17	4:55	6:15	50-60 degrees 40 F Mostly Sunny,	60s, F, 30s, M&F, 3 girls 6 age 2,6,9	Walk		No	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	5:40 Unk	nown	50-60 degrees 41 F Mostly Sunny,	1 50s, F	Walk		No	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	6:15 Unki	nown	50-60 degrees 42 F	3 30s, M&F, baby	Walk		No	10:30 AM - 6:30 PM	Survey number not entered in online survey
6/1/17	8:00	9:15	Clear Skies, 1 cool	50s, F, 20s, F and little 3 baby	Walk	Woman in her 50s took survey on 5/26. The other woman said she comes about once a week and usually walks her dog there off - leash.	No	7:30 AM - 3:30 PM	Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/1/17	9:30	10:30	Clear Skies, 2 cool	3 30s, F	Dog Walk - On Leash	Carrying nice camera for photography	Walked along social trail in Redwoods parallel to meadow trail Yes	7:30 AM - 3:30 PM	Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail

6/1/17	9:55 Unknov	vn	Clear Skies, 3 cool	1 30s, F	Running	Seemed like she came from a different side of the park		No	7:30 AM - 3:30 PM	Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/1/17	10:35	11:00	Clear Skies, 4 cool	1 20s, M	Dog Walk - Off Leash	2 dogs off leash	Walked along social trail in Redwoods parallel to meadow trail	Yes	7:30 AM - 3:30 PM	Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/1/17	11:00	12:20	Clear Skies, 5 cool	2 70s, F	Picnic	Had camping chairs & other supplies - both live in Fairfax, first time at Roys	Sat in Redwood Grove with camping chairs at the end of Meadow Trail		7:30 AM - 3:30 PM	Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail Walked around Redwood
6/1/17	11:50	12:15	Clear Skies, 6 cool	2 50s, F, 20s M	Dog Walk - On Leash	Lives in the area	Yes	No	7:30 AM - 3:30 PM	Grove about every hour, noted on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/1/17	11:55	1:00	Clear Skies, 7 cool	2 60s, M&F	Dog Walk - On Leash	Lives in the area		Yes	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/1/17	12:20 Unknov	vn	Clear Skies, 8 cool	1 60s, M	Walk		Yes Redwood	No	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/1/17	12:35	1:10	Clear Skies, 9 cool	2 20s, M&F	Walk	Her father is superintendient of Marin County Parks	Loop Socail Trail	Yes	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/1/17	1:35	1:45	Clear Skies, 10 cool	2 60s, M&F	Walk	Left b/c she didn't have proper shoes for poison oak	Yes	No	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/1/17	2:55 Unknov	vn	Clear Skies, 11 cool	1 40s, M	Running			No	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail
6/2/17	1:00	1:20	Clear, 70s, 1 Warm	2 40s, M&F	Walk	Were confused where the trail started		No	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:00
6/2/17	1:20	2:05	Clear, 70s, 2 Warm	1 30s, F	Dog Walk - On Leash	She said she has seen spotted owls here. Came before and already tool survey		No	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:01
6/2/17	1:30	1:50	Clear, 70s, 3 Warm	1 30s, M	Running w/ Dog on Leash	Loves this place except for Poison Oak		Yes	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:02
6/2/17	1:40	2:05	Clear, 70s, 4 Warm	2 20s, M&F	Dog Walk - On Leash			No	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:03
6/2/17	3:10 Unknov	vn	Clear, 70s, 5 Warm	2 20s, M&F	Walk	Had A LOT of supplies with them - easle, art supplies	Yes redwood grove	No	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:04
6/2/17	3:10 Unknov	vn	Clear, 70s, 6 Warm	2 20s, M&F			Yes - creek behind restrooms	No	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:05

6/2/17	3:30 Unknow	n	Clear, 70s, 7 Warm	2 30s, 2M	Walk, Photography			No	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:06
6/2/17 Unknowr	1	3:30	Clear, 70s, 8 Warm	1 30s, M	Passed by mountain biking			No	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:07
6/2/17	3:50	4:35	Clear, 70s, 9 Warm	1 20s, F	Exercise	Came last week also but didn't take survey		Yes	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:08
6/2/17	4:15 Unknow	n	Clear, 70s, 10 Warm	1 60s, M	Horseback Riding	Obseved passing by entrance		No	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:09
6/2/17	4:30 Unknow	n	Clear, 70s, 11 Warm	2 50s, F & 20s, F	Dog Walk - On Leash	Lives nearby, comes pretty often, used to have bday parties for her kids in the Redwood Grove		No	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:10 Walked around Redwood
6/16/17	7:40 Unknow	n	1 Sunny, 60s	1 30s, M	Running	Observed running past entrance		No	7:30 AM - 3:30 PM	Grove about every hour, noted on exit survey sheet if groups were off trail Walked around Redwood
6/16/17	9:10	12:45	2 Sunny, 60s	2 30s, 2F	Collecting Ticks - from Marin Sonoma Mosquito Vector Center?			No	7:30 AM - 3:30 PM	Grove about every hour, noted on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/16/17	9:30	10:00	3 Sunny, 60s	3 60s, 2F, M	Walk	Came down Meadow trail, turned	No	Yes	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/16/17	10:45 Unknow	n	4 Sunny, 70s	2 30s, F	Horseback Riding	around at entrance and went back down meadow trail		No	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/16/17	11:00	11:35	5 Sunny, 70s	1 50s, F	Walk		No	No	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood
6/16/17	11:15	11:35	6 Sunny, 70s	1 60s, F	Walk			Yes	7:30 AM - 3:30 PM	Grove about every hour, noted on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/16/17	11:15	12:45	7 Sunny, 70s	4 70s, 2M, 2F	Walk		No	Yes	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/16/17	11:30 Unknow	n	8 Sunny, 70s	2 20s, M&F	Walk	Ran around redwoods and in creek behind bathroom	Yes	No	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/16/17	11:30	11:45	9 Sunny, 70s	1 30s, F	Dog Walk - On Leash	Thinks that having drinking water would be nice		Yes	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood
6/16/17	12:55	1:35	10 Sunny, 70s	2 50s, M & teen, M	Walk / picnic		Yes - redwood grove	Yes	7:30 AM - 3:30 PM	Grove about every hour, noted on exit survey sheet if groups were off trail Walked around Redwood
6/16/17	12:55	1:10	11 Sunny, 70s	1 30s, M	Dog Walk - On Leash		Yes Redwood Loop Socail Trail	No	7:30 AM - 3:30 PM	Grove about every hour, noted on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/16/17	12:55 Unknow	n	12 Sunny, 70s	1 20s, F	Horseback Riding	Observed riding past entrance	No	No	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail

6/16/17 6/16/17	1:15 Unkn 1:40 Unkn		13 Sunny, 70s 14 Sunny, 70s	2 20s, M&F 2 60s, M&F	Walk Walk		Yes - redwood grove No	No	7:30 AM - 3:30 PM 7:30 AM - 3:30 PM	Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/16/17	2:15 Unkn	own	15 Sunny, 70s	1 60s, M	Dog Walk - On Leash			No	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail
6/22/17 Unk	nown	10:35	Really warm - 1 80s	2 F, 60s	Walk	Didn't have time to take the survey but one woman lives here, comes here all the time with her family and used to horseback ride here - really appreciates all the trail improvements that have already been made - bridges over stream, more accessibility, appreciates water source		Νο	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
6/22/17		't write 1 - survey Id say	Really warm - 2 80s	2 40s, M&F	Dog Walk - On Leash	First time here, read about Roys in the SF chronicle - chronicle said Roys is a good picnic spot. They came with picnic supplies and picniced in redwood grove close to bay trees at end of meadow trail.	Yes - creek behind restrooms	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
6/22/17	11:40	12:10	Really warm - 3 80s	1 20s, F	Dog Walk - On Leash		Yes - Redwood loop connecting to meadow trail	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
6/22/17	12:00	12:20	Really warm - 4 80s	1 20s, M	Walk	First time at Roys, works at spirit rock	Yes - redwood loop	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
	nown	12:10	Really warm - 5 80s Really warm -	1 70s, M	Running Art class / camp posted behind Redwoods near bathroom and loop trail	Man who calls in about problems and runs here every day		Already took survey Woman who runs camp already took	 10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail 10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey 	
6/22/17 (bef 6/22/17	1:20	1:15 2:35	6 80s Really warm - 7 80s	10 8 kids, 2 F 40s 2 40, F	bridge Walk		Yes Yes - redwood loop	survey No	sheet if groups were off trail 10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
6/22/17	1:40	1:50	Really warm - 8 80s	1 60s, M	Dog walk - on leash	No time for survey - comes often to let the dog run	Yes - creek behind restrooms	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
6/22/17	2:10	2:35	Really warm - 9 80s	2 70s, F	Walk	Came here instead of Muir Woods	Yes	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
6/22/17	3:00	3:49	Really warm - 10 80s	4 40s -2M, 70s M, 60s F	Walk	Seemed unsure where to go	Yes - redwood grove	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
6/22/17	4:00	4:30	Really warm - 11 80s	1 60s, M	Run			No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	

6/22/17	4:50 Unknow	n	Really warm - 12 80s	2 205, M&F	Dog Walk - On Leash	First time at Roys	Yes - wandered through redwood grove and up and around bay trees	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17 Unknow	n	1:45	Partly Cloudy, 1 60s	12 1 F, 50s, 11 kids	Summer Camp program / Forest Preschool. Tendertracks.com. Hiking off trail in redwoods, each kid had walking stick, they build a bridge across dry river and walked acoss it.		Yes	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	11:15	12:00	Partly Cloudy, 2 60s	2 40s, M, daughter 10	Dog Walk - On Leash			Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17 Unknow	'n	11:15	Partly Cloudy, 3 60s	1 40s, F	Dog Walk - On Leash			Already took survey	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17 Unknow	'n	11:20	Partly Cloudy, 4 60s	2 Teens, F	Walk		Yes	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17 Unknow	'n	11:50	Partly Cloudy, 5 60s	1 50s, M		Came to Roy's to take photos of a wooden watch for an advertisement	Yes	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	12:10	1:35	Partly Cloudy, 6 60s	30s, F	Dog Walk - On Leash		Yes - full loop around Redwoods and meadow trai	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	1:35	2:40	Partly Cloudy, 7 60s	2 60s, F	Walk		Yes	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	1:45	3:30	Partly Cloudy, 8 60s	4 60s, 2m & 2F	Picnic		Yes	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	1:45	2:20	9 Sunny, 60s	4 2M, 40s, 2 boys	Walk		Yes	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	2:15	3:10	10 Sunny, 60s	2 M/F Teens	Picnic		Yes	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	2:45	4:45	11 Sunny, 60s	5 30s, 2F & 2 girls, baby	Dog Walk - On Leash	Rolled stroller on trail		Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	2:55 ?		12 Sunny, 60s	2 60s, M&F	Walk	First time at Roys Used to come here as a camp		Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	4:20	5:00	13 Sunny, 60s	2 30, M & 60s M	Dog Walk - On Leash	counselor - would play capture the flag with kids throughout the Redwoods		Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	4:25	4:50	14 Sunny, 60s	1 30s, M	Running	Grew up in Marin and used to come to Roys all the time		Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail

6/27/2	17	5:00	6:15	15 Sunny, 60s	1 40s, F	Walk		Yes	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/2	17	6:05 Unknowr	n	16 Sunny, 60s	1 30s, M	Dog Walk - On Leash		Yes	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/	17 Unknown		3:30	1 Sunny, 70s	12 20s, M&F, 10 kids	Summer Camp	Group set up mats and lunches in redwood grove behind bathrooms, left stuff and went on hike on social trails in redwoods and then the Redwood loop trail.	Yes	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
11201			5.50	2 Samij, 785	12 200, Mar, 10 Mas			105		10:30 AM - 6:30 PM, Walked around Redwood
7/18/2	17 1	10:40	12:00	2 Sunny, 70s	1 M 70s	Run	Man who runs here every day	No	Already took survey	Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/2	17 Unknown		11:30	3 Sunny, 70s	4 Baby, 2 girls, F 30s	Walk	Collecting blackberries In redwoods / bay trees where meadow trail goes through -	No	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/:	17 1	11:30	12:30	4 Sunny, 70s	20s, M 2 kids (middle 3 school)	Walk / picnic	covered themselves in charcoal from burnt trees, one of the kids came to Roys as part of a summer camp and built fort	Yes	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/2	17 1	12:00	12:50	5 Sunny, 70s	1 80s, F	Walk			Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/2	17 1	12:10	12:40	6 Sunny, 70s	3 20s, F	Dog Walk - On Leash			Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/2	17 1	12:30 Unknown	n	7 Sunny, 70s	1 40s, M	Horseback Riding	passing through entrance area	Yes - set up	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/:	17	1:00	2:00	8 Sunny, 70s	4 40s M&F, 2 kids	Walk / picnic	She was on a spirit rock retreat -	picnic in Redwoods across from meadow trail	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/2	17 1	12:50	2:10	9 Sunny, 70s	1 40s, F	Walk	also said she is a painter and wants to paint huge canvases of redwood trees	No	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/2	17	3:20	4:30	10 Sunny, 70s	2 20s, M&F	walk		Yes - full loop around Redwoods and meadow trai		10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/2	17	4:45	5:10	11 Sunny, 70s	3 30s M&F	Dog Walk - On Leash		Yes -	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/2	17	5:50	6:25	12 Sunny, 70s	2 20s, M			wandered in redwoods behind bathroom	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/:	17	6:10 Unknowr	n	13 Sunny, 70s	2 30s M&F	Walk			No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail

7/22/17 Unknowr	n	7:40	1 Sunny, 60s	1 30s, F	Run			Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17 Unknowr	n	7:55	2 Sunny, 60s	1 50s, M	Run		No	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	9:00	9:40	3 Sunny, 60s	1 40s, M	Dog Walk - On Leash		Yes - full loop around Redwoods and meadow trai		7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	9:20	9:30	4 Sunny, 60s	3 30s, M&F, baby	Walk	wandered around redwoods behind bathroom then leeft	yes	No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	9:30 Unknow	n	5 Sunny, 60s	10 male and femals 30s - 50s	Spiritual retreat?	Very eclectic group of people whereing costumes (capes), had instruments, yoga mats, they started with a prayer circle in the parking lot	Yes - I didn't see them gathered in the redwood grove - must have gone up the trails and spent the day elswhere.	Νο	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	9:30	10:00	6 Sunny, 60s	1 50s, F	Dog Walk - Off Leash	Comes here all the time and loves Roys		No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	9:30	10:50	7 Sunny, 60s	2 60s, M&F	Walk			Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	9:35	10:50	8 Sunny, 60s	1 30s, M	Dog Walk - On Leash			Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	8:30	9:30	9 Sunny, 60s	1 60s, M	Run	Ran to viewpoint and down - VERY ANGRY about how popular trails in Marin are getting including Roys. Lived in Marin his whole life, doesn't support any new signs, road improvements, trail improvements, anything that brings more people here and makes the outdoor spaces feel less open and wild. He said whoever is promoting Roys and trying to bring more people here should stop.		Yes - didn't want to type his answers so he narrated and I filled in.	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
						Founder of Marin LINK - would like more access for disadvantaged groups and seniors - likes wandering through the redwoods without a trail. Would like interprative signage about plants,		Yes - also didn't want to	7:30 AM - 3:30 PM, Walked around Redwood
7/22/17	10:00	10:55	10 Sunny, 60s	1 80s, F	Walk	trees, history. She also recently donated to the GGNRA.	Yes -		Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	10:50	12:00	11 Sunny, 60s	5 50s, 2F, M 2 kids	Dog Walk - On Leash	Family walk - were dissapointed the trail was so sunny and not in the Redwoods	Redwoods behind bathroom	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail

7/22/17	11:10		12 Sunny, 60s	2 30s, F	Horseback Riding	Used the meadow trail - passed by entrance		No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	11:10	12:30	13 Sunny, 60s	3 30s, M&F, baby	Walk	Come here a lot and love Roys (especially compared to Muir Woods)	Yes - redwood loop	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	11:20	11:50	14 Sunny, 60s	2 30s, M&F	Walk			Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	11:20	12:00	15 Sunny, 60s	2 20s, M	Walk			Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	11:50	12:40	16 Sunny, 60s	2 40s, M	Walk			Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	2:15	3:20	17 Sunny, 60s	3 30s M&F, girl	Dog Walk - On Leash		Yes- redwood loop to meadow trail	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	3:10 Unknow	'n	18 Sunny, 60s	4 20s, 2M&2F	Walk / Picnic		Wandered in redwoods behind bathroom	No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	7:40	9:30	Breezy Sunny 1 60s	1 50s, M	Walk	Comes here to meditate		Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	7:45 9:40AM		Breezy Sunny 2 60s	2 30s, F	Walk	Comes here a lot	Yes loop	Already took survey	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	9:00	11:00	Breezy Sunny 3 60s	2 40s, M&F	Dog walk -on leash			No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	9:10	10:35	Breezy Sunny 4 60s	2 30s, M&F	Walk			Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	11:00	12:30	Breezy Sunny 5 60s	1 70s, M	Dog Walk - on leash	Came as an alternative to muir woo	ds	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	11:20	1:00	Breezy Sunny 6 60s	1 30s, F	Walk	Brought yoga mat & art supplies	Yes - loop and hung out in bay tree area	No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	12:00	12:50	Breezy Sunny 7 60s	4 30s, M&F, two boys	Picnic supplies, through a ball around	First time at Roys	Area behind bathroom	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	1:15	2:30	Breezy Sunny 8 60s	2 40s, 2M	biked to Roys, then hiked around / ate		Yes	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	1:25	3:15	Breezy Sunny 9 60s	2 40s, M, 10 yr old	walk	has come to roys before`		Already took	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	2:00	3:20	Breezy Sunny 10 60s	1 50s, F	Dog walk on leash	Also has been to roys before	Yes - loop	Already took	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
									·····

						She didn't have time to take the survey but said her preschool is 3x a week, she comes to Roys when it's not too cold, or she goes to			
			Clear skies, 60s / 70s,	5 preschoolers, 2 female		lagunitas lake. She said feel free to email her the website is	throughout off trail redwood		10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey
9/26/17 Unkr	nown	2:30	1 breezy	7 instructors	Preschool	tendertracks.com	area.	No	sheet if groups were off trail
			Clear skies,						10:30 AM - 6:30 PM, Walked around Redwood
			60s / 70s,						Grove about every hour, noted on exit survey
9/26/17 Unkr	nown	11:15	2 breezy	1 50s, M	Walk				sheet if groups were off trail
			Clear skies,						10:30 AM - 6:30 PM, Walked around Redwood
0/05/47	10.20	44.20	60s / 70s,	2 60 1495			M	M	Grove about every hour, noted on exit survey
9/26/17	10:30	11:30	3 breezy	2 60s, M&F	Walk		Yes - loop	Yes	sheet if groups were off trail
			Clear skies,						10:30 AM - 6:30 PM, Walked around Redwood
			60s / 70s,						Grove about every hour, noted on exit survey
9/26/17 Unkr	nown	11:45	4 breezy	2 60s, M&F	Walk	Claire Mooney's parents!		Yes	sheet if groups were off trail
			Clear skies,						10:30 AM - 6:30 PM, Walked around Redwood
			60s / 70s,						Grove about every hour, noted on exit survey
9/26/17	11:45	1:00	5 breezy	2 30s, M&F	Walk	Noted in person they deployment -		No	sheet if groups were off trail
			Clear skies,			Noted in person they don't want a formal trail built through			10:30 AM - 6:30 PM, Walked around Redwood
			60s / 70s,			Redwoods, appreciate how clean			Grove about every hour, noted on exit survey
9/26/17 Unkr	nown	12:10	6 breezy	2 20s, M&F	Dog walk on leash	the porta potty is	Yes	Yes	sheet if groups were off trail
			Clear skies,			They want better signage once you're out of the Redwoods, but			10:30 AM - 6:30 PM, Walked around Redwood
			60s / 70s,			don't want more signage in the			10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey
9/26/17	10:35	12:25	7 breezy	2 20s, F	Dog walk on leash	redwood grove	Yes	Yes	sheet if groups were off trail
			Clear skies, 60s / 70s,			lives in fairfax, has been here 4 times just this week, does the entire loop. Loves coming here for the	2		10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey
9/26/17 Unkr	nown	12:36	8 breezy	1 50s, M	Walk	solitude and rejuvination	Yes (loop)	Yes	sheet if groups were off trail
			Clear skies,						10:30 AM - 6:30 PM, Walked around Redwood
0/20/17	12.45	1.15	60s / 70s,	1 20- 5	Dee wells an least	has been here before - ive seen her		Already took	Grove about every hour, noted on exit survey
9/26/17	12:45	1:15	9 breezy	1 30s, F	Dog walk on leash	several times	Yes (loop)	survey	sheet if groups were off trail
			Clear skies,						10:30 AM - 6:30 PM, Walked around Redwood
a /a a / · -			60s / 70s,	a aa					Grove about every hour, noted on exit survey
9/26/17	1:30	2:50	10 breezy	2 60s, M&F	Dog Walk on leash		Yes - loop	Yes	sheet if groups were off trail
			Clear skies,						10:30 AM - 6:30 PM, Walked around Redwood
			60s / 70s,			Wandered around redwoods / bay			Grove about every hour, noted on exit survey
9/26/17	3:00	4:15	11 breezy	3 20s, 2M&F		grove			sheet if groups were off trail
			Clear skies,					Almond 1.1	10:30 AM - 6:30 PM, Walked around Redwood
9/26/17	3:00	4:10	60s / 70s, 12 breezy	1 60s, M	Running	Comes almost every day		Already took survey	Grove about every hour, noted on exit survey sheet if groups were off trail
51 201 21	5.00			2 000,					
			Clear skies, 60s / 70s,						10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey
9/26/17	4:15 Unk	nown	13 breezy	2 30s, F	Walk		No	No	sheet if groups were off trail
			Clear skies, 60s / 70s,						10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey
9/26/17	4:20	5:15	breezy	1 50s, M	Dog walk on leash		Redwood loop	Yes	sheet if groups were off trail
9/27/17 Unkr	nown	7:40	1 Sunny, 60s/70s	1 30s, M	Dog walk on leash	comes here to run		Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
			,,,.						

9/27/17 Unknow	n	7:50	2 Sunny, 60s/70s	1 60s, F	Walk			No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17 Unknow	n	8:10	3 Sunny, 60s/70s	2 40s, F	Dog Walk on leash		Yes - loop	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
					Walking for exercise - they were continuing onto trail or the other side of the street - didn't want to stop for the				7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey	
9/27/17 Unknow	n	9:05	4 Sunny, 60s/70s	2 30s, F	survey		No	No	sheet if groups were off trail	
9/27/17	8:40		5 Sunny, 60s/70s	2 40s, M	Horsebackriding	Rode past entrance at 8:40		No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17	9:00	10:40	6 Sunny, 60s/70s	1 30s, M	Walking and photography	carried a big camera with him, took a lot of photos	Yes	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17	9:15	10:20	7 Sunny, 60s/70s	1 20s, F	Running			No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17	9:30	2:30	8 Sunny, 60s/70s	5 preschoolers, 2 female 5 instructors	Preschool	Forest preschool again	Yes	No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17	10:15	11:35	9 Sunny, 60s/70s	3 F, 40s, 2 kids	Walk / picnic	sat in redwood grove behind bathroom to eat		Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17	10:30	10:50	10 Sunny, 60s/70s	1 M, 40s	Walk	Wandered around redwoods then left	Yes - loop	No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17	11:00	11:30	11 Sunny, 60s/70s	2 F, 20s	Dog walk on leash		Yes loop	No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17	12:20	1:10	12 Sunny, 60s/70s	1 M, 60s	Dog Walk on leash		Yes loop	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17	1:00	3:00	13 Sunny, 60s/70s	1 F, 40s	Picnic	sat in redwood grove behind bathroom - ate and read	Yes	No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17	1:00 Unknow	'n	14 Sunny, 60s/70s	1 M, 50s	Horsebackriding			No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
									7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey	
9/27/17 11/7/17 No Note		2:30	15 Sunny, 60s/70s	4 30s, M&F, 2 toddlers	Walk and picnic		Yes	Yes	sheet if groups were off trail	
3/3/18	9:36		Rainy	1 40s	walk	meadow trail - bay tree area				Very few visitors were
3/3/18	9:42		Rainy	2 20s	walk	meadow trail - fairy ring grove - north meadow grove				observed crossing the creek channel. It appeared that visitors were deterred from crossing the creek by high water.

Parents and young children visited specifically to play in the creek. This group stayed in and around the section of creek near the bathroom area.

						in and around
3/3/18	10:14	Rainy	5 3 <18 2 in 40s	interact w/ creek	in creek/bathroom area	creek near the area.
-,-, -						
3/3/18	11:06	Rainy	3 1<18, 2 in 50s	walk	meadow trail - fairy ring grove	
3/3/18	11:53	Rainy	1 50s	walk	exit via meadow trail	
					meadow trail - fairy ring grove -	
3/3/18	12:08	Rainy	1 60s	walk	bay tree - meadow trail out	
					meadow trail - fairy ring grove -	
					north meadow grove - bay tree	
3/3/18	12:21	Rainy	4 3 <18, 1 in 40s	dog walk off leash & walk		
					bay tree area - burnt grove - waterfall - hillside grove - stoner	
3/3/18	12:50	Rainy	1 20s	photography	grove	
5/5/10	12.50	Rany	1 203	photoBraphy	Flore	
3/3/18	13:02	Rainy	3 1<18, 1 in 30s	walk	meadow trail - fairy ring grove	
					meadow trail - fairy ring grove -	
3/3/18	13:47	Rainy	1 50s	walk	north meadow grove	
3/3/18	14:12	Rainy	2 20s	walk	fairy ring grove - upper meadow grove - stoner grove	
5/5/10	14.12	Kalliy	2 205	waik	meadow trail - bay tree area -	
3/3/18	14:33	Rainy	1 50s	dog walk on leash	north meadow grove	
3/3/18	14:51	Rainy	2 40s	walk	meadow trail - fairy ring grove	
					meadow trail - fary ring grove -	
					bay tree area - burnt grove - upper meadow grove - stoner	
3/3/18	15:00	Rainy	1 30s	walk	grove	
-,-, -					meadow trail -north meadow	
3/3/18	15:39	Rainy	2 60s	walk	grove	
		Light morning				
3/10/18	11:16	rain	1 40s	walk	fairy ring grove - meadow trail	
3/10/18	11:57	Light morning rain	2 30s	dog walk on leash	fairy ring - north meadow grove - meadow trail	
5/10/10	11.57	Light morning	2 303	dog waik on least		
3/10/18	12:12	rain	4 2<18, 2 in 40s	walk	fairy ring - meadow trail	
- / /		Light morning				
3/10/18	14:00	rain Light morning	4 2<18, 2 in 50s	walk	meadow trail	
3/10/18	14:30	rain	1 50s	dog walk on leash	meadow trail - bay tree area	
				Ū	stoner grove - upper meadow	
		Light morning			grove - fairy ring grove - meadow	
3/10/18	14:39	rain	2 20s	walk	trail	
		Linkt maning			meadow trail - north meadow grove - bay tree area - fairy ring	
3/10/18	15:14	Light morning rain	2 20s	walk	grove	
3/10/10	10111	Light morning	2 200		meadow trail - north meadow	
3/10/18	15:33	rain	1 50s	dog walk on leash	grove	
					meadow trail - fairy ring grove -	
2/40/40	16.05	Light morning	2 20-		upper meadow grove - stoner	
3/10/18	16:05	rain	3 30s	walk	grove meadow trail - fairy ring grove -	
3/10/18	16:22	Light morning rain	1 60s	walk	bay tree area	
-,,	-	Light morning		-		
3/10/18	16:47	rain	1 40s	walk	meadow trail	

Roy's Redwoods Visitor Use Survey: Roving Surveyor Observations Map, "dry weather" survey days

Roving in the Area of Interest occured **80 times** over the course of the surveys between 5/26/2017 - 9/27/2017. This survey period occured during "dry weather". Observations on what social trails were used and where visitors stopped were recorded each time.

Nicasio Valley

Bathroom

Area

Roy's Loop

Cave Tree Grove

Par

Dickson idge Fire **North Meadow** Grove dow Trail **Bay Tree Area Fairy Ring Burnt Grove** Grove Upper Meadow Grove Visitor Use - Redwood **Groves and Popular Areas** \bigcirc 0 Observations Hillside 3 Observations Grove

5 Observations

16 Observations

Visitor Use - Social Trail

43 Observations

Other Features

Social Trails

Road/Trail

Roy's Redwoods Site Analysis Technical Memo

Roy's Loop

Trail

Roy's Redwoods Visitor Use Survey: Roving Surveyor Observations Map, "Wet weather" suvery days

Roving in the Area of Interest occured over the course of two survey days on 3/3/2018 & 3/10/2018. This survey period occured during "wet weather". Observations on what social trails were used and where visitors stopped were recorded each time.

Nicasio Valley

Bathroom Area

Meadow Grove Bay Tree Area Fairy Ring Grove Upper Meadow Grove Upper Meadow Grove Visitor Use - Redwood Groves and Popular Areas

North

0 Observations
 3 Observations
 5 Observations
 16 Observations

Visitor Use - Social Trail

14 Observations

Doug Hansen Trail

70 of 130

Hillside

Grove

Dickson

Roy's Loop

Cave Tree

Grove

Roy's Loop

Trail

Date	Time of Preserve Entrance	Time of Presever	Exit Survey #	Weather Conditions	Group Size	Approx. Age and Gender of Each Group Member	Group Activity	Notes	Went off trail? Take Survey?	Surveyor Shift	Survey Notes
								He comes here 5 days a week to			
5/26/1	7 17	:40	1:40	15. Partly Cloudy		1 60/70 M	log / Rup	run! Always calls if there's a tree	Yes	7:30 AM - 3:30 PM	Survey number not entered in
				15 Partly Cloudy			Jog / Run	down, yellow jacket hive, etc.			online survey Survey number not entered in
5/26/1	7 9	:40	10:20	3 Overcast, cool		1 50s, M	Walk		No	7:30 AM - 3:30 PM	online survey Survey number not entered in
5/26/1	7 2	:40 Unknown	I	20 Partly Cloudy		1 20s, M	Dog Walk - On Leash		No	7:30 AM - 3:30 PM	online survey
5/26/1	7 2	:45 Unknown	I	21 Partly Cloudy		1 50s, F	Walk		No	7:30 AM - 3:30 PM	Survey number not entered in online survey
5/26/1	7 12	:15 Unknown	1	12 Partly Cloudy		2 30s, F & 5 month baby	Walk		No	7:30 AM - 3:30 PM	Survey number not entered in online survey
5/26/1		:00 Unknown		19 Partly Cloudy		2 30s, 2M	Walk		No	7:30 AM - 3:30 PM	Survey number not entered in online survey
											Survey number not entered in
5/26/1	7 1	:05	2:00	16 Partly Cloudy		1 20s, F	Walk		Yes	7:30 AM - 3:30 PM	online survey
						18 6th graders, 4 instructors / chaperones in			Yes - 2 6th graders filled		Survey number not entered in
5/26/1	7 10	:15	2:00	4 Partly Cloudy		22 their 20s	Picnic / School / Camp			7:30 AM - 3:30 PM	online survey
5/26/1	7 12	::25	1:45	14 Partly Cloudy		3 30s, 2F, 1M	Dog Walk - On Leash		Yes	7:30 AM - 3:30 PM	Survey number not entered in online survey
5/26/1	7 11	:55	12:25	11 Partly Cloudy		1 20s, M	Walk	Had some sort of recording device?	No	7:30 AM - 3:30 PM	Survey number not entered in online survey
								Her first time here - didn't want to			Survey number not entered in
5/26/1	7 11	:30	12:30	9 Partly Cloudy		1 50s, F	Walk	go to Samuel P Taylor	Yes	7:30 AM - 3:30 PM	online survey Survey number not entered in
5/26/1	7 11	:45	12:25	10 Partly Cloudy		2 50s, M & F	Dog Walk - On Leash		Yes	7:30 AM - 3:30 PM	online survey Survey number not entered in
5/26/1	7 10	:40	12:30	6 Partly Cloudy		2 20s / 30s, M & F	Walk		Yes	7:30 AM - 3:30 PM	online survey
5/26/1	7 10	:50	11:20	7 Partly Cloudy		1 30s, F	Dog Walk - On Leash		No	7:30 AM - 3:30 PM	Survey number not entered in online survey
5/26/1 5/26/1 5/26/1 5/26/1	7 11 7 <u>9</u>		9:30 11:40 10:30 1:55	1 Overcast, cool 8 Overcast, cool 2 Overcast, cool 13 Overcast, cool		2 40s, 2F 1 40s, F 40s, M & F, 3 young boys 5 about 5-7 yrs old 6 30s, 2F, & 4 kids 3-4 yrs old		These women live right across the street - Roy's is their backyard and they come here almost every day. They seem pretty protective over it and don't want it to change. They are scared that making improvements will bring too many people. They also told me Spirit Rock uses Roy's for silent retreats Travelling, from Ohio, googled where to see Redwoods and came to Roys. Kids played in creek behind bathroom, first time at Roys	Yes Yes Yes No	7:30 AM - 3:30 PM 7:30 AM - 3:30 PM 7:30 AM - 3:30 PM 7:30 AM - 3:30 PM	Survey number not entered in online survey Survey number not entered in online survey Survey number not entered in online survey Survey number not entered in online survey
5/26/1	7 1	:20	1:45	17 Partly Cloudy		1 30s, F	Other: Collecting ticks for her job		No	7:30 AM - 3:30 PM	Survey number not entered in online survey
						30s, M, & 2 boys age 6-7 &					Survey number not entered in
5/26/1		:25	1:45	18 Partly Cloudy		4 1 girl age 7	Walk		No	7:30 AM - 3:30 PM	online survey Survey number not entered in
5/26/1	7 3	:20 Unknown	1	21 Partly Cloudy Mostly Sunny,		1 30s, F	Dog Walk - On Leash		Yes	7:30 AM - 3:30 PM	online survey
5/27/1	7 10	:50	12:10	50-60 degrees		1 60s, M	Dog Walk - On Leash		Yes	10:30 AM - 6:30 PM	Survey number not entered in
5/2//1	/ 10	1:50	12:10	Mostly Sunny,		1 605, M	Dog waik - On Leasn		tes	10:30 AIVI - 0:30 PIVI	online survey
5/27/1	7 10	:40	3:50	50-60 degrees 2 F		4 All F, 2 in 20s, 2 in 50s	Dog Walk - On Leash		No	10:30 AM - 6:30 PM	Survey number not entered in online survey
. ,				Mostly Sunny,			-	First time here, they came b/c "these are the tallest redwoods in			Survey number not entered in
5/27/1	7 11	:20	1:10	50-60 degrees 3 F		4 50s, 2M & 2F	Walk	the county"	No	10:30 AM - 6:30 PM	Survey number not entered in online survey

			Mostly Sunny,						
5/27/17	11:00	12:40	50-60 degrees 4 F Mostly Sunny,	1 60s, F	Dog Walk - On Leash		Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17 Unkr	nown	11:10	50-60 degrees 5 F	2 30s, F	Walk		Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	11:20	11:30	Mostly Sunny, 50-60 degrees 6 F	2 20s, 2F	Walk	Just wanted to look at redwoods for a second then leave	No	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/2//1/	11120	11.50	Mostly Sunny, 50-60 degrees		ges 4- Dog Walk - On Leash, Cree		110	10.007.007.0007.00	Survey number not entered in
5/27/17	11:40	1:10	9 F Mostly Sunny,	7 6	Play, Picnic	Brought towels, food, etc	No	10:30 AM - 6:30 PM	online survey
5/27/17	11:30	12:30	50-60 degrees 7 F	3 50s, 2M & F	Walk		Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
			Mostly Sunny, 50-60 degrees	40s, M & 1 boy age 6,	1 girl				Survey number not entered in
5/27/17	11:30	1:30	8 F Mostly Sunny,	3 age 7	Walk		Yes	10:30 AM - 6:30 PM	online survey
5/27/17 Unkr	nown	11:40	50-60 degrees 10 F Mostly Sunny,	40s, M&F, 2 boys age 5 1 baby	6-7, Walk, Creek Play		Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	11:45	12:40	50-60 degrees 11 F	2 30s, M&F	Walk		Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	11:55 Unkn	own	Mostly Sunny, 50-60 degrees 12 F	2 20s, M&F	Dog Walk - On Leash		No	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/2//1/	11.55 0.000		Mostly Sunny, 50-60 degrees	2 205, mai				10.507.00 0.507.00	Survey number not entered in
5/27/17	2:35	4:30	13 F Mostly Sunny,	1 30s, F	Dog Walk - On Leash		No	10:30 AM - 6:30 PM	online survey
5/27/17	12:15 Unkn	own	50-60 degrees 14 F	1 60s, M	Walk		No	10:30 AM - 6:30 PM	Survey number not entered in online survey
			Mostly Sunny,						
5/27/17	12:10	3:40	Mostly Sunny, 50-60 degrees 15 F	2 60s, M&F	Walk	Hiked several connecting trails to Roys	Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
			50-60 degrees 15 F Mostly Sunny, 50-60 degrees		Walk	Roys			online survey Survey number not entered in
5/27/17 5/27/17	12:10 12:45	3:40 1:30	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny,	2 60s, M&F 1 20s, F			Yes No	10:30 AM - 6:30 PM 10:30 AM - 6:30 PM	online survey Survey number not entered in online survey
			50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees 17 F Mostly Sunny,		Walk	Roys			online survey Survey number not entered in online survey Survey number not entered in online survey
5/27/17	12:45	1:30	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees 17 F Mostly Sunny, 50-60 degrees 18 F	1 20s, F	Walk Exercise	Roys	No	10:30 AM - 6:30 PM	online survey Survey number not entered in online survey Survey number not entered in
5/27/17 5/27/17	12:45 12:50	1:30 1:15	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees 17 F Mostly Sunny, 50-60 degrees	1 20s, F 2 20s, F	Walk Exercise Walk	Roys Completed survey on 6/2	No	10:30 AM - 6:30 PM 10:30 AM - 6:30 PM	online survey Survey number not entered in online survey Survey number not entered in online survey Survey number not entered in
5/27/17 5/27/17 5/27/17 5/27/17	12:45 12:50 12:40 1:00	1:30 1:15 1:00 1:50	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees 17 F Mostly Sunny, 50-60 degrees 18 F Mostly Sunny, 50-60 degrees 19 F Mostly Sunny, 50-60 degrees	1 205, F 2 205, F 1 205, M 1 505, M	Walk Exercise Walk Horseback Riding Walk	Roys Completed survey on 6/2	No No Yes	10:30 AM - 6:30 PM 10:30 AM - 6:30 PM 10:30 AM - 6:30 PM 10:30 AM - 6:30 PM	online survey Survey number not entered in online survey
5/27/17 5/27/17 5/27/17	12:45 12:50 12:40	1:30 1:15 1:00	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees 18 F Mostly Sunny, 50-60 degrees 19 F Mostly Sunny, 50-60 degrees 20 F Mostly Sunny,	1 20s, F 2 20s, F 1 20s, M	Walk Exercise Walk Horseback Riding	Roys Completed survey on 6/2	No No	10:30 AM - 6:30 PM 10:30 AM - 6:30 PM 10:30 AM - 6:30 PM	online survey Survey number not entered in online survey
5/27/17 5/27/17 5/27/17 5/27/17	12:45 12:50 12:40 1:00	1:30 1:15 1:00 1:50	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees 18 F Mostly Sunny, 50-60 degrees 19 F Mostly Sunny, 50-60 degrees 20 F Mostly Sunny, 50-60 degrees 21 F Mostly Sunny, 50-60 degrees	1 205, F 2 205, F 1 205, M 1 505, M	Walk Exercise Walk Horseback Riding Walk	Roys Completed survey on 6/2	No No Yes	10:30 AM - 6:30 PM 10:30 AM - 6:30 PM 10:30 AM - 6:30 PM 10:30 AM - 6:30 PM	online survey Survey number not entered in online survey
5/27/17 5/27/17 5/27/17 5/27/17 5/27/17	12:45 12:50 12:40 1:00 1:15	1:30 1:15 1:00 1:50 2:25	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees 17 F Mostly Sunny, 50-60 degrees 19 F Mostly Sunny, 50-60 degrees 20 F Mostly Sunny, 50-60 degrees 21 F Mostly Sunny, 50-60 degrees 22 F	1 20s, F 2 20s, F 1 20s, M 1 50s, M 3 20s, M	Walk Exercise Walk Horseback Riding Walk Walk	Roys Completed survey on 6/2	No No Yes Yes	10:30 AM - 6:30 PM 10:30 AM - 6:30 PM 10:30 AM - 6:30 PM 10:30 AM - 6:30 PM 10:30 AM - 6:30 PM	online survey Survey number not entered in online survey
5/27/17 5/27/17 5/27/17 5/27/17 5/27/17 5/27/17	12:45 12:50 12:40 1:00 1:15 1:25	1:30 1:15 1:00 1:50 2:25 2:40	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees 17 F Mostly Sunny, 50-60 degrees 18 F Mostly Sunny, 50-60 degrees 20 F Mostly Sunny, 50-60 degrees 21 F Mostly Sunny, 50-60 degrees 22 F Mostly Sunny, 50-60 degrees 22 F Mostly Sunny, 50-60 degrees 23 F	1 20s, F 2 20s, F 1 20s, M 1 50s, M 3 20s, M 3 20s, 2m & F	Walk Exercise Walk Horseback Riding Walk Walk Dog Walk - On Leash	Roys Completed survey on 6/2	No No Yes Yes	10:30 AM - 6:30 PM 10:30 AM - 6:30 PM	online survey Survey number not entered in online survey Survey number not entered in
5/27/17 5/27/17 5/27/17 5/27/17 5/27/17 5/27/17 5/27/17	12:45 12:50 12:40 1:00 1:15 1:25 1:25	1:30 1:15 1:00 1:50 2:25 2:40 2:00	50-60 degrees 15 F Mostly Sunny, 50-60 degrees 16 F Mostly Sunny, 50-60 degrees 17 F Mostly Sunny, 50-60 degrees 18 F Mostly Sunny, 50-60 degrees 20 F Mostly Sunny, 50-60 degrees 21 F Mostly Sunny, 50-60 degrees 22 F Mostly Sunny, 50-60 degrees	1 20s, F 2 20s, F 1 20s, M 1 50s, M 3 20s, M 3 20s, 2m & F 2 20s, M&F	Walk Exercise Walk Horseback Riding Walk Walk Dog Walk - On Leash Walk	Roys Completed survey on 6/2	No No Yes Yes Yes	10:30 AM - 6:30 PM 10:30 AM - 6:30 PM	online survey Survey number not entered in online survey Survey number not entered in

			Mostly Sunny, 50-60 degrees			Not sure if his survey response was saved properly - He's been coming to Roys for years, at least once a week either for exercise or to be in the Redwood Grove for "spiritual			Survey number not entered in
5/27/17	2:15	3:25	25 F Mostly Sunny,	1 60s, M	Walk	reasons".		10:30 AM - 6:30 PM	online survey
5/27/17	2:20	3:45	50-60 degrees 26 F Mostly Sunny,	2 60s, M & teen F	Dog Walk - On Leash	Man was married at Roys	Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	2:25	2:45	50-60 degrees 27 F Mostly Sunny,	2 20s, M&F	Walk		Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	2:25	2:50	50-60 degrees 28 F	1 30s, M	Walk, Photography		Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	2:35	3:05	Mostly Sunny, 50-60 degrees 29 F	2 30s, 2M	Dog Walk - On Leash		No	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	2:35	3:05	Mostly Sunny, 50-60 degrees 30 F	1 50s, F	Walk	Took survey on 5/26	No	10:30 AM - 6:30 PM	Survey number not entered in online survey
		5.05	Mostly Sunny, 50-60 degrees			Dressed in suits, gathered in	NO		Survey number not entered in
5/27/17	2:35	2:50	31 F Mostly Sunny, 50-60 degrees	3 30s, M	Walk	Redwoods and chatted then left	No	10:30 AM - 6:30 PM	online survey Survey number not entered in
5/27/17	3:00 Unk	nown	32 F Mostly Sunny,	2 40s, M&F	Dog Walk - On Leash		No	10:30 AM - 6:30 PM	online survey
5/27/17	3:25	5:00	50-60 degrees 33 F Mostly Sunny,	4 40s, M&F, Girl - 10, Boy -	8 Dog Walk - On Leash		Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	3:50	5:40	50-60 degrees 34 F Mostly Sunny,	2 40s, M&F	Dog Walk - On Leash		No	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	3:50	5:15	50-60 degrees 35 F	4 20s, 2M & 2F	Walk		Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	4:05 Unki	nown	Mostly Sunny, 50-60 degrees 36 F	4 60s, M&F, 20s, M&F	Walk		No	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	4:25	4:40	Mostly Sunny, 50-60 degrees 37 F	2 20s, M&F	Walk		Yes	10:30 AM - 6:30 PM	Survey number not entered in online survey
			Mostly Sunny, 50-60 degrees				res		Survey number not entered in
5/27/17	4:55 Unki	nown	38 F Mostly Sunny, 50-60 degrees	4 50, M&F, 2 boys around 1	0 Walk		No	10:30 AM - 6:30 PM	online survey Survey number not entered in
5/27/17	4:55	5:30	39 F Mostly Sunny,	1 20s, M	Walk		No	10:30 AM - 6:30 PM	online survey
5/27/17	4:55	6:15	50-60 degrees 40 F Mostly Sunny,	60s, F, 30s, M&F, 3 girls 6 age 2,6,9	Walk		No	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	5:40 Unk	nown	50-60 degrees 41 F Mostly Sunny,	1 50s, F	Walk		No	10:30 AM - 6:30 PM	Survey number not entered in online survey
5/27/17	6:15 Unki	nown	50-60 degrees 42 F	3 30s, M&F, baby	Walk		No	10:30 AM - 6:30 PM	Survey number not entered in online survey
6/1/17	8:00	9:15	Clear Skies, 1 cool	50s, F, 20s, F and little 3 baby	Walk	Woman in her 50s took survey on 5/26. The other woman said she comes about once a week and usually walks her dog there off - leash.	No	7:30 AM - 3:30 PM	Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/1/17	9:30	10:30	Clear Skies, 2 cool	3 30s, F	Dog Walk - On Leash	Carrying nice camera for photography	Walked along social trail in Redwoods parallel to meadow trail Yes	7:30 AM - 3:30 PM	Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail

6/1/17	9:55 Unknov	vn	Clear Skies, 3 cool	1 30s, F	Running	Seemed like she came from a different side of the park		No	7:30 AM - 3:30 PM	Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/1/17	10:35	11:00	Clear Skies, 4 cool	1 20s, M	Dog Walk - Off Leash	2 dogs off leash	Walked along social trail in Redwoods parallel to meadow trail	Yes	7:30 AM - 3:30 PM	Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/1/17	11:00	12:20	Clear Skies, 5 cool	2 70s, F	Picnic	Had camping chairs & other supplies - both live in Fairfax, first time at Roys	Sat in Redwood Grove with camping chairs at the end of Meadow Trail		7:30 AM - 3:30 PM	Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail Walked around Redwood
6/1/17	11:50	12:15	Clear Skies, 6 cool	2 50s, F, 20s M	Dog Walk - On Leash	Lives in the area	Yes	No	7:30 AM - 3:30 PM	Grove about every hour, noted on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/1/17	11:55	1:00	Clear Skies, 7 cool	2 60s, M&F	Dog Walk - On Leash	Lives in the area		Yes	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/1/17	12:20 Unknov	vn	Clear Skies, 8 cool	1 60s, M	Walk		Yes Redwood	No	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/1/17	12:35	1:10	Clear Skies, 9 cool	2 20s, M&F	Walk	Her father is superintendient of Marin County Parks	Loop Socail Trail	Yes	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/1/17	1:35	1:45	Clear Skies, 10 cool	2 60s, M&F	Walk	Left b/c she didn't have proper shoes for poison oak	Yes	No	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/1/17	2:55 Unknov	vn	Clear Skies, 11 cool	1 40s, M	Running			No	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail
6/2/17	1:00	1:20	Clear, 70s, 1 Warm	2 40s, M&F	Walk	Were confused where the trail started		No	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:00
6/2/17	1:20	2:05	Clear, 70s, 2 Warm	1 30s, F	Dog Walk - On Leash	She said she has seen spotted owls here. Came before and already tool survey		No	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:01
6/2/17	1:30	1:50	Clear, 70s, 3 Warm	1 30s, M	Running w/ Dog on Leash	Loves this place except for Poison Oak		Yes	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:02
6/2/17	1:40	2:05	Clear, 70s, 4 Warm	2 20s, M&F	Dog Walk - On Leash			No	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:03
6/2/17	3:10 Unknov	vn	Clear, 70s, 5 Warm	2 20s, M&F	Walk	Had A LOT of supplies with them - easle, art supplies	Yes redwood grove	No	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:04
6/2/17	3:10 Unknov	vn	Clear, 70s, 6 Warm	2 20s, M&F			Yes - creek behind restrooms	No	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:05

6/2/17	3:30 Unknow	n	Clear, 70s, 7 Warm	2 30s, 2M	Walk, Photography			No	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:06
6/2/17 Unknowr	1	3:30	Clear, 70s, 8 Warm	1 30s, M	Passed by mountain biking			No	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:07
6/2/17	3:50	4:35	Clear, 70s, 9 Warm	1 20s, F	Exercise	Came last week also but didn't take survey		Yes	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:08
6/2/17	4:15 Unknow	n	Clear, 70s, 10 Warm	1 60s, M	Horseback Riding	Obseved passing by entrance		No	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:09
6/2/17	4:30 Unknow	n	Clear, 70s, 11 Warm	2 50s, F & 20s, F	Dog Walk - On Leash	Lives nearby, comes pretty often, used to have bday parties for her kids in the Redwood Grove		No	10:30 AM - 6:30 PM	Roving between 10:30 - 1:00 and 5:00 - 6:30, Surveying between 1:00 and 5:10 Walked around Redwood
6/16/17	7:40 Unknow	n	1 Sunny, 60s	1 30s, M	Running	Observed running past entrance		No	7:30 AM - 3:30 PM	Grove about every hour, noted on exit survey sheet if groups were off trail Walked around Redwood
6/16/17	9:10	12:45	2 Sunny, 60s	2 30s, 2F	Collecting Ticks - from Marin Sonoma Mosquito Vector Center?			No	7:30 AM - 3:30 PM	Grove about every hour, noted on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/16/17	9:30	10:00	3 Sunny, 60s	3 60s, 2F, M	Walk	Came down Meadow trail, turned	No	Yes	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/16/17	10:45 Unknow	n	4 Sunny, 70s	2 30s, F	Horseback Riding	around at entrance and went back down meadow trail		No	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/16/17	11:00	11:35	5 Sunny, 70s	1 50s, F	Walk		No	No	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood
6/16/17	11:15	11:35	6 Sunny, 70s	1 60s, F	Walk			Yes	7:30 AM - 3:30 PM	Grove about every hour, noted on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/16/17	11:15	12:45	7 Sunny, 70s	4 70s, 2M, 2F	Walk		No	Yes	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/16/17	11:30 Unknow	n	8 Sunny, 70s	2 20s, M&F	Walk	Ran around redwoods and in creek behind bathroom	Yes	No	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/16/17	11:30	11:45	9 Sunny, 70s	1 30s, F	Dog Walk - On Leash	Thinks that having drinking water would be nice		Yes	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail Walked around Redwood
6/16/17	12:55	1:35	10 Sunny, 70s	2 50s, M & teen, M	Walk / picnic		Yes - redwood grove	Yes	7:30 AM - 3:30 PM	Grove about every hour, noted on exit survey sheet if groups were off trail Walked around Redwood
6/16/17	12:55	1:10	11 Sunny, 70s	1 30s, M	Dog Walk - On Leash		Yes Redwood Loop Socail Trail	No	7:30 AM - 3:30 PM	Grove about every hour, noted on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/16/17	12:55 Unknow	n	12 Sunny, 70s	1 20s, F	Horseback Riding	Observed riding past entrance	No	No	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail

6/16/17 6/16/17	1:15 Unkn 1:40 Unkn		13 Sunny, 70s 14 Sunny, 70s	2 20s, M&F 2 60s, M&F	Walk Walk		Yes - redwood grove No	No	7:30 AM - 3:30 PM 7:30 AM - 3:30 PM	Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail Walked around Redwood Grove about every hour, noted
6/16/17	2:15 Unkn	own	15 Sunny, 70s	1 60s, M	Dog Walk - On Leash			No	7:30 AM - 3:30 PM	on exit survey sheet if groups were off trail
6/22/17 Unk	nown	10:35	Really warm - 1 80s	2 F, 60s	Walk	Didn't have time to take the survey but one woman lives here, comes here all the time with her family and used to horseback ride here - really appreciates all the trail improvements that have already been made - bridges over stream, more accessibility, appreciates water source		Νο	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
6/22/17		't write 1 - survey Id say	Really warm - 2 80s	2 40s, M&F	Dog Walk - On Leash	First time here, read about Roys in the SF chronicle - chronicle said Roys is a good picnic spot. They came with picnic supplies and picniced in redwood grove close to bay trees at end of meadow trail.	Yes - creek behind restrooms	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
6/22/17	11:40	12:10	Really warm - 3 80s	1 20s, F	Dog Walk - On Leash		Yes - Redwood loop connecting to meadow trail	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
6/22/17	12:00	12:20	Really warm - 4 80s	1 20s, M	Walk	First time at Roys, works at spirit rock	Yes - redwood loop	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
	nown	12:10	Really warm - 5 80s Really warm -	1 70s, M	Running Art class / camp posted behind Redwoods near bathroom and loop trail	Man who calls in about problems and runs here every day		Already took survey Woman who runs camp already took	 10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail 10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey 	
6/22/17 (bef 6/22/17	1:20	1:15 2:35	6 80s Really warm - 7 80s	10 8 kids, 2 F 40s 2 40, F	bridge Walk		Yes Yes - redwood loop	survey No	sheet if groups were off trail 10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
6/22/17	1:40	1:50	Really warm - 8 80s	1 60s, M	Dog walk - on leash	No time for survey - comes often to let the dog run	Yes - creek behind restrooms	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
6/22/17	2:10	2:35	Really warm - 9 80s	2 70s, F	Walk	Came here instead of Muir Woods	Yes	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
6/22/17	3:00	3:49	Really warm - 10 80s	4 40s -2M, 70s M, 60s F	Walk	Seemed unsure where to go	Yes - redwood grove	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
6/22/17	4:00	4:30	Really warm - 11 80s	1 60s, M	Run			No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	

6/22/17	4:50 Unknow	n	Really warm - 12 80s	2 205, M&F	Dog Walk - On Leash	First time at Roys	Yes - wandered through redwood grove and up and around bay trees	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17 Unknow	n	1:45	Partly Cloudy, 1 60s	12 1 F, 50s, 11 kids	Summer Camp program / Forest Preschool. Tendertracks.com. Hiking off trail in redwoods, each kid had walking stick, they build a bridge across dry river and walked acoss it.		Yes	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	11:15	12:00	Partly Cloudy, 2 60s	2 40s, M, daughter 10	Dog Walk - On Leash			Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17 Unknow	'n	11:15	Partly Cloudy, 3 60s	1 40s, F	Dog Walk - On Leash			Already took survey	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17 Unknow	'n	11:20	Partly Cloudy, 4 60s	2 Teens, F	Walk		Yes	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17 Unknow	'n	11:50	Partly Cloudy, 5 60s	1 50s, M		Came to Roy's to take photos of a wooden watch for an advertisement	Yes	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	12:10	1:35	Partly Cloudy, 6 60s	30s, F	Dog Walk - On Leash		Yes - full loop around Redwoods and meadow trai	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	1:35	2:40	Partly Cloudy, 7 60s	2 60s, F	Walk		Yes	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	1:45	3:30	Partly Cloudy, 8 60s	4 60s, 2m & 2F	Picnic		Yes	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	1:45	2:20	9 Sunny, 60s	4 2M, 40s, 2 boys	Walk		Yes	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	2:15	3:10	10 Sunny, 60s	2 M/F Teens	Picnic		Yes	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	2:45	4:45	11 Sunny, 60s	5 30s, 2F & 2 girls, baby	Dog Walk - On Leash	Rolled stroller on trail		Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	2:55 ?		12 Sunny, 60s	2 60s, M&F	Walk	First time at Roys Used to come here as a camp		Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	4:20	5:00	13 Sunny, 60s	2 30, M & 60s M	Dog Walk - On Leash	counselor - would play capture the flag with kids throughout the Redwoods		Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	4:25	4:50	14 Sunny, 60s	1 30s, M	Running	Grew up in Marin and used to come to Roys all the time		Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail

6/27/17	5:00	6:15	15 Sunny, 60s	1 40s, F	Walk		Yes	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
6/27/17	6:05 Unkno	wn	16 Sunny, 60s	1 30s, M	Dog Walk - On Leash		Yes	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/17 Unki	nown	3:30	1 Sunny, 70s	12 20s, M&F, 10 kids	Summer Camp	Group set up mats and lunches in redwood grove behind bathrooms, left stuff and went on hike on social trails in redwoods and then the Redwood loop trail.	Yes	Νο	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
1/10/17 0114		5.50	1 501117,705	12 200, mar, 20 mas					10:30 AM - 6:30 PM, Walked around Redwood
7/18/17	10:40	12:00	2 Sunny, 70s	1 M 70s	Run	Man who runs here every day	No	Already took survey	Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/17 Unkı	nown	11:30	3 Sunny, 70s	4 Baby, 2 girls, F 30s	Walk	Collecting blackberries In redwoods / bay trees where meadow trail goes through -	No	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/17	11:30	12:30	4 Sunny, 70s	20s, M 2 kids (middle 3 school)	Walk / picnic	covered themselves in charcoal from burnt trees, one of the kids came to Roys as part of a summer camp and built fort	Yes	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/17	12:00	12:50	5 Sunny, 70s	1 80s, F	Walk			Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/17	12:10	12:40	6 Sunny, 70s	3 20s, F	Dog Walk - On Leash			Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/17	12:30 Unkno	wn	7 Sunny, 70s	1 40s, M	Horseback Riding	passing through entrance area	Yes - set up	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/17	1:00	2:00	8 Sunny, 70s	4 40s M&F, 2 kids	Walk / picnic	She was on a spirit rock retreat -	picnic in Redwoods across from meadow trail	No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/17	12:50	2:10	9 Sunny, 70s	1 40s, F	Walk	also said she is a painter and wants to paint huge canvases of redwood trees	No	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/17	3:20	4:30	10 Sunny, 70s	2 20s, M&F	walk		Yes - full loop around Redwoods and meadow trai		10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/17	4:45	5:10	11 Sunny, 70s	3 30s M&F	Dog Walk - On Leash		Yes -	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/17	5:50	6:25	12 Sunny, 70s	2 20s, M			wandered in redwoods behind bathroom	Yes	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/18/17	6:10 Unkno	wn	13 Sunny, 70s	2 30s M&F	Walk			No	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail

7/22/17 Unknow	n	7:40	1 Sunny, 60s	1 30s, F	Run			Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17 Unknow	n	7:55	2 Sunny, 60s	1 50s, M	Run		No	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	9:00	9:40	3 Sunny, 60s	1 40s, M	Dog Walk - On Leash		Yes - full loop around Redwoods and meadow trai		7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	9:20	9:30	4 Sunny, 60s	3 30s, M&F, baby	Walk	wandered around redwoods behind bathroom then leeft	yes	No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	9:30 Unknow	0	5 Sunny, 60s	10 male and femals 30s - 50s	Sniritual retreat?	Very eclectic group of people whereing costumes (capes) , had instruments, yoga mats, they started with a prayer circle in the parking lot	Yes - I didn't see them gathered in the redwood grove - must have gone up the trails and spent the day elswhere.	No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	9:30	10:00	6 Sunny, 60s	1 50s, F	Dog Walk - Off Leash	Comes here all the time and loves Roys	eiswiiere.	No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	9:30	10:50	7 Sunny, 60s	2 60s, M&F	Walk			Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	9:35	10:50	8 Sunny, 60s	1 30s, M	Dog Walk - On Leash			Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	8:30	9:30	9 Sunny, 60s	1 60s, M	Run	Ran to viewpoint and down - VERY ANGRY about how popular trails in Marin are getting including Roys. Lived in Marin his whole life, doesn't support any new signs, road improvements, trail improvements, anything that brings more people here and makes the outdoor spaces feel less open and wild. He said whoever is promoting Roys and trying to bring more people here should stop.		he narrated	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
						Founder of Marin LINK - would like more access for disadvantaged groups and seniors - likes wandering through the redwoods without a trail. Would like interprative signage about plants,		Yes - also didn't want to	7:30 AM - 3:30 PM, Walked around Redwood
7/22/17	10:00	10:55	10 Sunny, 60s	1 80s, F	Walk	trees, history. She also recently donated to the GGNRA.	Yes -	type so I filled it in for her.	Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	10:50	12:00	11 Sunny, 60s	5 50s, 2F, M 2 kids	Dog Walk - On Leash	Family walk - were dissapointed the trail was so sunny and not in the Redwoods	Redwoods behind bathroom	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail

7/22/17	11:10		12 Sunny, 60s	2 30s, F	Horseback Riding	Used the meadow trail - passed by entrance		No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	11:10	12:30	13 Sunny, 60s	3 30s, M&F, baby	Walk	Come here a lot and love Roys (especially compared to Muir Woods)	Yes - redwood loop	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	11:20	11:50	14 Sunny, 60s	2 30s, M&F	Walk			Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	11:20	12:00	15 Sunny, 60s	2 20s, M	Walk			Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	11:50	12:40	16 Sunny, 60s	2 40s, M	Walk			Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	2:15	3:20	17 Sunny, 60s	3 30s M&F, girl	Dog Walk - On Leash		Yes- redwood loop to meadow trail	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
7/22/17	3:10 Unknow	'n	18 Sunny, 60s	4 20s, 2M&2F	Walk / Picnic		Wandered in redwoods behind bathroom	No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	7:40	9:30	Breezy Sunny 1 60s	1 50s, M	Walk	Comes here to meditate		Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	7:45 9:40AM		Breezy Sunny 2 60s	2 30s, F	Walk	Comes here a lot	Yes loop	Already took survey	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	9:00	11:00	Breezy Sunny 3 60s	2 40s, M&F	Dog walk -on leash			No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	9:10	10:35	Breezy Sunny 4 60s	2 30s, M&F	Walk			Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	11:00	12:30	Breezy Sunny 5 60s	1 70s, M	Dog Walk - on leash	Came as an alternative to muir woo	ds	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	11:20	1:00	Breezy Sunny 6 60s	1 30s, F	Walk	Brought yoga mat & art supplies	Yes - loop and hung out in bay tree area	No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	12:00	12:50	Breezy Sunny 7 60s	4 30s, M&F, two boys	Picnic supplies, through a ball around	First time at Roys	Area behind bathroom	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	1:15	2:30	Breezy Sunny 8 60s	2 40s, 2M	biked to Roys, then hiked around / ate		Yes	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	1:25	3:15	Breezy Sunny 9 60s	2 40s, M, 10 yr old	walk	has come to roys before`		Already took	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
8/13/17	2:00	3:20	Breezy Sunny 10 60s	1 50s, F	Dog walk on leash	Also has been to roys before	Yes - loop	Already took	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail
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						She didn't have time to take the survey but said her preschool is 3x a week, she comes to Roys when it's not too cold, or she goes to			
			Clear skies, 60s / 70s,	5 preschoolers, 2 female		lagunitas lake. She said feel free to email her the website is	throughout off trail redwood		10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey
9/26/17 Unkr	nown	2:30	1 breezy	7 instructors	Preschool	tendertracks.com	area.	No	sheet if groups were off trail
			Clear skies, 60s / 70s,						10:30 AM - 6:30 PM, Walked around Redwood
9/26/17 Unkr	nown	11:15	2 breezy	1 50s, M	Walk				Grove about every hour, noted on exit survey sheet if groups were off trail
			Clear skies,						10:30 AM - 6:30 PM, Walked around Redwood
9/26/17	10:30	11:30	60s / 70s, 3 breezy	2 60s, M&F	Walk		Yes - loop	Yes	Grove about every hour, noted on exit survey sheet if groups were off trail
			Clear skies, 60s / 70s,						10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey
9/26/17 Unkr	nown	11:45	4 breezy	2 60s, M&F	Walk	Claire Mooney's parents!		Yes	sheet if groups were off trail
			Clear skies,						10:30 AM - 6:30 PM, Walked around Redwood
9/26/17	11:45	1:00	60s / 70s, 5 breezy	2 30s, M&F	Walk			No	Grove about every hour, noted on exit survey sheet if groups were off trail
			Clear skies,			Noted in person they don't want a formal trail built through			10:30 AM - 6:30 PM, Walked around Redwood
9/26/17 Unkr	nown	12:10	60s / 70s, 6 breezy	2 20s, M&F	Dog walk on leash	Redwoods, appreciate how clean the porta potty is	Yes	Yes	Grove about every hour, noted on exit survey sheet if groups were off trail
<i>5/20/17</i> UNKI	nown	12.10		2 203, WICE	Dog waik Ull IEdsil	They want better signage once	103	103	
			Clear skies, 60s / 70s,			you're out of the Redwoods, but don't want more signage in the			10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey
9/26/17	10:35	12:25	7 breezy	2 20s, F	Dog walk on leash	redwood grove	Yes	Yes	sheet if groups were off trail
			Clear skies,			lives in fairfax, has been here 4 times just this week, does the entire	2		10:30 AM - 6:30 PM, Walked around Redwood
			60s / 70s,			loop. Loves coming here for the			Grove about every hour, noted on exit survey
9/26/17 Unkr	nown	12:36	8 breezy	1 50s, M	Walk	solitude and rejuvination	Yes (loop)	Yes	sheet if groups were off trail
			Clear skies, 60s / 70s,			has been here before - ive seen her		Already took	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey
9/26/17	12:45	1:15	9 breezy	1 30s, F	Dog walk on leash	several times	Yes (loop)	survey	sheet if groups were off trail
			Clear skies,						10:30 AM - 6:30 PM, Walked around Redwood
9/26/17	1:30	2:50	60s / 70s, 10 breezy	2 60s, M&F	Dog Walk on leash		Yes - loop	Yes	Grove about every hour, noted on exit survey sheet if groups were off trail
			Clear skies,						10:30 AM - 6:30 PM, Walked around Redwood
9/26/17	3:00	4:15	60s / 70s, 11 breezy	3 20s, 2M&F		Wandered around redwoods / bay grove			Grove about every hour, noted on exit survey sheet if groups were off trail
5/20/17	3.00	4.15		5 205, 219101		BIONC			
			Clear skies, 60s / 70s,					Already took	10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey
9/26/17	3:00	4:10	12 breezy	1 60s, M	Running	Comes almost every day		survey	sheet if groups were off trail
			Clear skies, 60s / 70s,						10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey
9/26/17	4:15 Unkr	nown	13 breezy	2 30s, F	Walk		No	No	sheet if groups were off trail
			Clear skies, 60s / 70s,						10:30 AM - 6:30 PM, Walked around Redwood Grove about every hour, noted on exit survey
9/26/17	4:20	5:15	breezy	1 50s, M	Dog walk on leash		Redwood loop	Yes	sheet if groups were off trail
									7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey
9/27/17 Unkr	nown	7:40	1 Sunny, 60s/70s	1 30s, M	Dog walk on leash	comes here to run		Yes	sheet if groups were off trail

9/27/17 Unknow	'n	7:50	2 Sunny, 60s/70s	1 60s, F	Walk			No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17 Unknow	'n	8:10	3 Sunny, 60s/70s	2 40s, F	Dog Walk on leash		Yes - loop	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
					Walking for exercise - they were continuing onto trail on the other side of the street - didn't want to stop for the				7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey	
9/27/17 Unknow	'n	9:05	4 Sunny, 60s/70s	2 30s, F	survey		No	No	sheet if groups were off trail	
9/27/17	8:40		5 Sunny, 60s/70s	2 40s, M	Horsebackriding	Rode past entrance at 8:40		No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17	9:00	10:40	6 Sunny, 60s/70s	1 30s, M	Walking and photography	carried a big camera with him, took a lot of photos	Yes	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17	9:15	10:20	7 Sunny, 60s/70s	1 20s, F	Running			No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17	9:30	2:30	8 Sunny, 60s/70s	5 preschoolers, 2 female 5 instructors	Preschool	Forest preschool again	Yes	No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17	10:15	11:35	9 Sunny, 60s/70s	3 F, 40s, 2 kids	Walk / picnic	sat in redwood grove behind bathroom to eat		Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17	10:30	10:50	10 Sunny, 60s/70s	1 M, 40s	Walk	Wandered around redwoods then left	Yes - loop	No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17	11:00	11:30	11 Sunny, 60s/70s	2 F, 20s	Dog walk on leash		Yes loop	No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17	12:20	1:10	12 Sunny, 60s/70s	1 M, 60s	Dog Walk on leash		Yes loop	Yes	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17	1:00	3:00	13 Sunny, 60s/70s	1 F, 40s	Picnic	sat in redwood grove behind bathroom - ate and read	Yes	No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
9/27/17	1:00 Unknow	'n	14 Sunny, 60s/70s	1 M, 50s	Horsebackriding			No	7:30 AM - 3:30 PM, Walked around Redwood Grove about every hour, noted on exit survey sheet if groups were off trail	
									7:30 AM - 3:30 PM, Walked around Redwood	
9/27/17 11/7/17 No Note	1:30	2:30	15 Sunny, 60s/70s	4 30s, M&F, 2 toddlers	Walk and picnic		Yes	Yes	Grove about every hour, noted on exit survey sheet if groups were off trail	
3/3/18	9:36		Rainy	1 40s	walk	meadow trail - bay tree area				Very few visitors were
						meadow trail - fairy ring grove -				observed crossing the creek channel. It appeared that visitors were deterred from crossing the creek by high
3/3/18	9:42		Rainy	2 20s	walk	north meadow grove				water.

Parents and young children visited specifically to play in the creek. This group stayed in and around the section of creek near the bathroom area.

						in and around
3/3/18	10:14	Rainy	5 3 <18 2 in 40s	interact w/ creek	in creek/bathroom area	creek near the area.
5/5/10	10.14	Nanty	5 5 410 2 111 405	interact w/ creek	in creek bach oon area	area.
3/3/18	11:06	Rainy	3 1<18, 2 in 50s	walk	meadow trail - fairy ring grove	
3/3/18	11:53	Rainy	1 50s	walk	exit via meadow trail	
					meadow trail - fairy ring grove -	
3/3/18	12:08	Rainy	1 60s	walk	bay tree - meadow trail out	
					meadow trail - fairy ring grove -	
3/3/18	12:21	Rainy	4 3 <18, 1 in 40s	dog walk off leash & walk	north meadow grove - bay tree area	
5/5/10	12.21	Nanty	4 5 10, 1 11 405	dog waik on least & waik	bay tree area - burnt grove -	
					waterfall - hillside grove - stoner	
3/3/18	12:50	Rainy	1 20s	photography	grove	
3/3/18	13:02	Rainy	3 1<18, 1 in 30s	walk	meadow trail - fairy ring grove	
2/2/40			4 50		meadow trail - fairy ring grove -	
3/3/18	13:47	Rainy	1 50s	walk	north meadow grove fairy ring grove - upper meadow	
3/3/18	14:12	Rainy	2 20s	walk	grove - stoner grove	
3/3/10	14.12	hanny	2 203	Walk	meadow trail - bay tree area -	
3/3/18	14:33	Rainy	1 50s	dog walk on leash	north meadow grove	
3/3/18	14:51	Rainy	2 40s	walk	meadow trail - fairy ring grove	
					meadow trail - fary ring grove -	
					bay tree area - burnt grove -	
3/3/18	15:00	Rainy	1 30s	walk	upper meadow grove - stoner grove	
5/5/10	10100		1 505		meadow trail -north meadow	
3/3/18	15:39	Rainy	2 60s	walk	grove	
		Light morning				
3/10/18	11:16	rain	1 40s	walk	fairy ring grove - meadow trail	
		Light morning			fairy ring - north meadow grove -	
3/10/18	11:57	rain Light morning	2 30s	dog walk on leash	meadow trail	
3/10/18	12:12	rain	4 2<18, 2 in 40s	walk	fairy ring - meadow trail	
-, -, -		Light morning	-,			
3/10/18	14:00	rain	4 2<18, 2 in 50s	walk	meadow trail	
		Light morning				
3/10/18	14:30	rain	1 50s	dog walk on leash	meadow trail - bay tree area	
		Light morning			stoner grove - upper meadow grove - fairy ring grove - meadow	
3/10/18	14:39	rain	2 20s	walk	trail	
-,,					meadow trail - north meadow	
		Light morning			grove - bay tree area - fairy ring	
3/10/18	15:14	rain	2 20s	walk	grove	
24242	45.00	Light morning	4 50		meadow trail - north meadow	
3/10/18	15:33	rain	1 50s	dog walk on leash	grove meadow trail - fairy ring grove -	
		Light morning			meadow trail - fairy ring grove - upper meadow grove - stoner	
3/10/18	16:05	rain	3 30s	walk	grove	
-, -, -		Light morning			meadow trail - fairy ring grove -	
3/10/18	16:22	rain	1 60s	walk	bay tree area	
-		Light morning				
3/10/18	16:47	rain	1 40s	walk	meadow trail	

Roy's Redwoods Visitor Use Survey: Roving Surveyor Observations Map, "dry weather" survey days

Roving in the Area of Interest occured **80 times** over the course of the surveys between 5/26/2017 - 9/27/2017. This survey period occured during "dry weather". Observations on what social trails were used and where visitors stopped were recorded each time.

Nicasio Valley

Bathroom

Area

North Meadow Grove Meadow Trail Bay Tree Area Fairy Ring Grove Upper Meadow Grove

> Visitor Use - Redwood Groves and Popular Areas

> > 0 Observations3 Observations

5 Observations

16 Observations

Visitor Use - Social Trail

43 Observations

Other Features

🔨 🖉 Social Trails

Road/Trail

Roy's Redwoods Site Analysis Technical Memo

Hillside

Grove

Dickson

idge Fire

Roy's Loop

Cave Tree Grove

Par

Roy's Loop

Trail

Roy's Redwoods Visitor Use Survey: Roving Surveyor Observations Map, "Wet weather" suvery days

Roving in the Area of Interest occured over the course of two survey days on 3/3/2018 & 3/10/2018. This survey period occured during "wet weather". Observations on what social trails were used and where visitors stopped were recorded each time.

Nicasio Valley

Bathroom Area

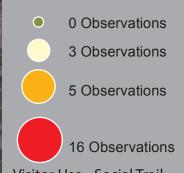
Roy's Loop

Cave Tree

Grove

Dickson Fire Fire Bay Tree Area Meadow Trail Meadow Trail Grove Upper Meadow Grove

North



Visitor Use - Social Trail 14 Observations

> Doug Hansen Trail

> > 35 of 130

Hillside

Grove

Roy's Loop

Trail

	А	В	С	D	E	F	G	Т
							Coast	T
						Observed at	Redwood	
1	Family (Scientific)	Scientific Name	Single Common Name	Non-Native	Special Status	Roy's	Dependant	
2	PLANTS							
	Rosaceae	Acaena pinnatifida var. californica	California sheepburr	Native	None	Yes		_
	Aceraceae	Acer macrophyllum	big-leaf maple	Native	None	Yes		_
	Asteraceae	Achillea millefolium	common yarrow	Native	None	Yes		_
	Fabaceae	Acmispon americanus	pink lotus-pea	Native	None	Yes		_
	Fabaceae	Acmispon brachycarpus	short-pod hill lotus-pea	Native	None	Yes		_
	Fabaceae	Acmispon glaber var. glaber	deerweed	Native	None	Yes		_
9	Fabaceae	Acmispon parviflorus	tiny-flowered lotus-pea	Native	None	Yes		_
	Fabaceae	Acmispon wrangelianus	yellow lotus-pea	Native	None	Yes		-
	Asteraceae	Adenocaulon bicolor	trail plant	Native	None	Yes		_
	Rosaceae	Adenostoma fasciculatum	chamise	Native	None	Yes		_
	Pteridaceae	Adiantum jordanii	California maiden-hair fern	Native	None	Yes		_
14	Hippocastanaceae	Aesculus californica	California buckeye	Native	None	Yes		+
4.5	. .	Agoseris apargioides var.						
	Asteraceae	eastwoodiae	coast dandelion	Native	None	Yes		+
	Asteraceae	Agoseris grandiflora	California dandelion	Native	None	Yes		_
	Asteraceae	Agoseris heterophylla	annual mountain dandelion	Native	None	Yes Yes		+
	Asteraceae	Agoseris hirsuta	grassland dandelion	Native	None	Yes		_
	Poaceae Poaceae	Agrostis sp.	bentgrass	Invasive	None None	Yes		+
20	Poaceae	Aira caryophyllea	silver European hairgrass	Invasive	None	165		+
21	Boraginaceae	Amsinckia menziesii var. intermedia	common fiddleneck	Native	None	Yes		
	Boraginaceae	Amsinckia intermedia	common fiddleneck	Native	None	Yes		+
	Primulaceae	Anagallis arvensis	scarlet pimpernel	Non-Native	None	Yes		+
	Asteraceae	Anaphalis margaritacea	pearly everlasting	Native	None	Yes		+
	Apiaceae	Angelica tomentosa	woolly angelica	Native	None	Yes		+
	Apiaceae	Angelica californica	woodland angelica	Native	None	Yes		+
	Asteraceae	Anisocarpus madioides	forest/woodland tarweed	Native	None	Yes		+
	Asteraceae	Anthemis cotula	dog fennel	Invasive	None	Yes		-
	Poaceae	Anthoxanthum occidentale	California sweet grass	Native	None	Yes		+
	Rosaceae	Aphanes occidentalis	Western lady's mantel	Native	None	Yes		+
	Ranunculaceae	Aquilegia formosa	crimson columbine	Native	None	Yes		t
	Ericaceae	Arbutus menziesii	Pacific madrone	Native	None	Yes		t
	Ericaceae	Arctostaphylos glandulosa	eastwood manzanita	Native	None	Yes		t
		Arctostaphylos glandulosa ssp.						t
34	Ericaceae	Glandulosa	eastwood manzanita	Native	None	Yes		
35	Aristolochiaceae	Aristolochia californica	California pipevine	Native	None	Yes]
36	Asteraceae	Artemisia californica	California sagebrush	Native	None	Yes		
	Asteraceae	Artemisia douglasiana	mugwort	Native	None	Yes		
	Pteridaceae	Aspidotis californica	California lace fern	Native	None	Yes		
39	Pteridaceae	Aspidotis densa	serpentine fern	Native	None	Yes		
40	Fabaceae	Astragalus gambelianus var. elmeri	dwarf loco weed	Native	None	Yes		
		Astragalus gambelianus var.						
41	Fabaceae	gambelianus	dwarf loco weed	Native	None	Yes		

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ant	Observation Note	Source
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	А	В	С	D	E	F	G
42	Brassicaceae	Athysanus pusillus	dwarf athysanus	Native	None	Yes	
	Poaceae	Avena barbata	slender wild oat	Invasive	None	Yes	
	Poaceae	Avena fatua	wild oat	Invasive	None	Yes	
	Poaceae	Avena sativa	cultivated oat	Invasive	None	Yes	
46	Asteraceae	Baccharis pilularis	coyote brush	Native	None	Yes	
47	Asteraceae	Bellis perennis	english daisy	Invasive	None	Yes	
_	Boraginaceae	Borago officinalis	borage	Invasive	None	Yes	
	Poaceae	Brachypodium distachyon	silica grass	Invasive	None	Yes	
	Brassicaceae	Brassica rapa	common mustard	Invasive	None	Yes	
	Poaceae	Briza maxima	rattlesnake grass	Invasive	None	Yes	
52	Poaceae	Briza minor	little rattlesnake grass	Non-Native	None	Yes	
53	Liliaceae	Brodiaea elegans ssp. elegans	harvest/elegant brodiaea	Native	None	Yes	
	Poaceae	Bromus carinatus var. carinatus	California/mountain brome	Native	None	Yes	
	Poaceae	Bromus diandrus	ripgut grass	Invasive	None	Yes	
	Poaceae	Bromus hordeaceus	soft brome, soft chess	Invasive	None	Yes	
	Poaceae	Bromus madritensis ssp. rubens	foxtail brome, foxtail chess	Invasive	None	Yes	
	Montiaceae	Calandrinia ciliata	redmaids	Native	None	Yes	
59	Liliaceae	Calochortus luteus	yellow mariposa lily	Native	None	Yes	
	Asteraceae	Calycadenia multiglandulosa	sticky rosin weed	Native	None	Yes	
	Orchidaceae	Calypso bulbosa	fairy slipper orchid	Native	None	Yes	
_	Convolvulaceae	Calystegia purpurata	smooth western morning glory	Native	None	Yes	
_							
63	Convolvulaceae	Calystegia purpurata ssp. purpurata	western/chapparal morning glory	Native	None	Yes	
		Calystegia subacaulis ssp.					
64	Convolvulaceae	Subacaulis	Cambria morning glory	Native	None	Yes	
	Onagraceae	Camissonia ovata	sun cup	Native	None	Yes	
	Brassicaceae	Cardamine californica	milk maids	Native	None	Yes	
67	Brassicaceae	Cardamine oligosperma	bitter/few-seeded cress	Native	None	Yes	
68	Asteraceae	Carduus pycnocephalus	Italian thistle	Invasive	None	Yes	
69	Asteraceae	Carduss tenuiflorus	slender-spine thistle	Invasive	None	Yes	
70	Cyperaceae	Carex densa	dense sedge	Native	None	Yes	
71	Cyperaceae	Carex globosa	roundfruit sedge	Native	None	Yes	
72	Cyperaceae	Carex utriculata	woodland sedge	Native	None	Yes	
	Cyperaceae	Carex tumulicola	foothill sedge	Native	None	Yes	
74	Orobanchaceae	Castilleja densiflora spp. Densiflora	common owl's clover	Native	None	Yes	
75	Orobanchaceae	Castilleja foliolosa	woolly Indian paintbrush	Native	None	Yes	
		Castilleja subinclusa ssp.					
76	Orobanchaceae	franciscana	Franciscan painbrush	Native	None	Yes	
77	Rhamnaceae	Ceanothus cuneatus var. cuneatus	buch brush	Native	None	Yes	
78	Rhamnaceae	Ceanothus thryrsiflorus	blueblossom	Native	None	Yes	
79	Asteraceae	Centaurea melitensis	Napa/Tocalote thistle	Invasive	None	Yes	
80	Asteraceae	Centaurea solstitialis	yellow star thistle	Invasive	None	Yes	
81	Gentianaceae	Centaurium tenuiflorum	European slender centaury	Non-Native	None	Yes	
82	Caryophyllaceae	Cerastium glomeratum	mouse-ear chickweed	Non-Native	None	Yes	
		Chlorogalum pomeridianum var.					
83	Liliaceae	pomeridianum	soap plant var. pomeridianum	Native	None	Yes	

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84	Onagraceae	Circaea alpina ssp. pacifica	enchanter's nightshade	Native	None	Yes	0
0-	Onagraceae			INALIVE		103	
85	Asteraceae	Cirsium occidentale var. occidentale	cobweb thistle	Native	None	Yes	
	Asteraceae	Cirsium occidentale var. venustum	Coulter's thistle	Native	None	Yes	
	Asteraceae	Cirsium remotifolium	few-leaved thistle	Native	None	Yes	
	Asteraceae	Cirsium vulgare	bull thistle	Invasive	None	Yes	
	Onagraceae	Clarkia amoena	farewell-to-sprin	Native	None	Yes	
	Onagraceae	Clarkia gracilis ssp. gracilis	summer's-darling clarkia	Native	None	Yes	
	Onagraceae	Clarkia purpurea ssp. Purpurea	purple clarkia	Native	None	Yes	
	Chagraceae			INC		100	
	Onagraceae	Clarkia purpurea ssp. quadrivulnera	winecup/four-spot clarki	Native	None	Yes	
	Onagraceae	Clarkia purpurea ssp. Viminea	large godetia	Native	None	Yes	
94	Portulacaceae	Claytonia perfoliata ssp. perfoliata	miner's lettuce ssp. perfoliata	Native	None	Yes	
95	Lamiaceae	Clinopodium douglasii	yerba buena	Native	None	Yes	
96	Liliaceae	Clintonia andrewsiana	Andrews' clintonia	Native	None	Yes	
		Collinsia heterophylla var.					
97	Plantaginaceae	heterophylla	Chinese houses	Native	None	Yes	
98	Plantaginaceae	Collinsia sparsiflora var. collina	hillside/blue-eyed Mary collinsia	Native	None	Yes	
99	Polemoniaceae	Collomia heterophylla	variableleaf collomia	Native	None	Yes	
100	Apiaceae	Conium maculatum	poison hemlock	Invasive	None	Yes	
101	Convolvulaceae	Convolvulus arvensis	field bindweed	Invasive	None	Yes	
102	Orchidaceae	Corallorhiza maculata	summer coral root	Native	None	Yes	
103	Orchidaceae	Corallorhiza striata	California/wood strawberry	Native	None	Yes	
104	Betulaceae	Corylus cornuta var. californica	California hazelnut	Native	None	Yes	
105	Rosaceae	Cotoneaster sp.	cotoneaster sp.	Invasive	None	Yes	
106	Crassulaceae	Crassula connata	sand pygmyweed	Native	None	Yes	
107	Euphorbiaceae	Croton setiger	turkey mullein	Native	None	Yes	
108	Boraginaceae	Cynoglossum grande	Pacific/Western hound's tongue	Native	None	Yes	
109	Poaceae	Cynosurus echinatus	hedgehog dogtail grass	Invasive	None	Yes	
110	Cyperaceae	Cyperus eragrostis	tall nutsedge/cyperus	Native	None	Yes	
111	Fabaceae	Cytisus scoparius	scotch broom	Invasive	None	Yes	
112	Poaceae	Danthonia californica var. californica	California oatgrass	Native	None	Yes	
113	Apiaceae	Daucus pusillus	American wild carrot	Native	None	Yes	
		Delphinium hesperium ssp.					
114	Ranunculaceae	hesperium	Western/coast/foothill larkspur	Native	None	Yes	
115	Ranunculaceae	Delphinium patens ssp. Patens	woodland larkspur	Native	None	Yes	
		Dichelostemma capitatum ssp.					
116	Liliaceae	capitatum	blue dicks	Native	None	Yes	
117	Liliaceae	Dichelostemma congestum	ookow	Native	None	Yes	
		Diplacus aurantiacus ssp.					
	Phrymaceae	Aurantiacus	orange bush monkeyflower	Native	None	Yes	
	Dipsacaceae	Dipsacus fullonum	wild teasel	Invasive	None	Yes	
	Dipsacaceae	Dipsacus sativus	white-flowered teasel	Invasive	None	Yes	
121	Primulaceae	Dodecatheon hendersonii	shooting star/mosquito bills	Native	None	Yes	
		Drymocallis glandulosa var.					
	Rosaceae	wrangeliana	sticky cinquefoil	Native	None	Yes	
123	Dryopteridaceae	Dryopteris arguta	California/coastal wood fern	Native	None	Yes	

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124	Crassulaceae	Dudleya cymosa	rock lettuce	Native	None	Yes	<u> </u>
	Crassulaceae	Dudleya cymosa ssp. cymosa	canyon/spreading dudleya	Native	None	Yes	
	Poaceae	Elymus glaucus x E. multisetus	hybrid squirreltail grass	Native	None	Yes	
	Poaceae	Elymus glaucus	blue wildrye	Native	None		
	Poaceae	Elymus multisetus	big squirreltail grass	Native	None	Yes	
	Onagraceae	Epilobium brachycarpum	tall annual willowherb	Native	None	Yes	
	Onagraceae	Epilobium canum ssp. Canum	California fuchsia	Native	None	Yes	
	Onagraceae	Epilobium cilatum	common willowherb	Native	None	Yes	
	Onagraceae	Epilobium densiflorum	boisduvalia	Native	None	Yes	
	Asteraceae	Erechtites minima	Australian fireweed	Invasive	None	Yes	
134	Onagraceae	Epilobium minutum	minute willowherb	Native	None	Yes	
	Boraginaceae	Eriodictyon californicum	yerba santa	Native	None	Yes	
136	Polygonaceae	Eriogonum nudum var. nudum	nude buckwheat	Native	None	Yes	
	Asteraceae	Erigeron reductus var. angustatus	pine erigeron	Native	None	Yes	
		Eriophyllum confertiflorum var.					
138	Asteraceae	confertiflorum	golden yarrow	Native	None	Yes	
		Eriophyllum lanatum var.					
139	Asteraceae	arachnoideum	common woolly sunflower	Native	None	Yes	
140	Geraniaceae	Erodium botrys	long-beaked storksbill/filaree	Non-Native	None	Yes	
141	Geraniaceae	Erodium brachycarpum	white-stemmed filaree	Invasive	None	Yes	
142	Geraniaceae	Erodium cicutarium	red-stemmed filaree	Invasive	None	Yes	
143	Phrymaceae	Erythranthe guttata	perennial yellow monkeyflower	Native	None	Yes	
144	Papaveraceae	Eschscholzia californica	California poppy	Native	None	Yes	
145	Myrtaceae	Eucalyptus globulus	blue gum eucalyptus	Invasive	None	Yes	
146	Euphorbiaceae	Euphorbia oblongata	egglea spurge	Invasive	None	Yes	
147	Euphorbiaceae	Euphorbia spathulata	spoon-leaved spurge	Native	None	Yes	
148	Asteraceae	Eurybia radulina	rough-leaved aster	Native	None	Yes	
149	Poaceae	Festuca bromoides	brome-like annual fescue	Invasive	None	Yes	
	Poaceae	Festuca californica	California fescue	Native	None	Yes	
151	Poaceae	Festuca idahoensis	Idaho/blue fescue	Native	None	Yes	
	Poaceae	Festuca microstachys	native annual "semaphore" fescue	Native	None	Yes	
153	Poaceae	Festuca myuros	mouse-tail fescue	Invasive	None	Yes	
	Poaceae	Festuca perennis	annual and perennial ryegrass	Invasive	None	Yes	
155	Poaceae	Festuca rubra	red fescue	Native	None	Yes	
156	Apiaceae	Foeniculum vulgare	fennel	Invasive	None	Yes	
157	Rosaceae	Fragaria vesca	California/wood strawberry	Native	None	Yes	
	Rhamnaceae	Frangula californica spp. Californica	coffeeberry	Native	None	Yes	
	Oleaceae	Fraxinus latifolia	Oregon ash	Native	None	Yes	
	Liliaceae	Fritillaria affinis var. affinis	checker lily	Native	None	Yes	
161	Rubiaceae	Galium aparine	common bedstraw	Native	None	Yes	
		Galium californicum ssp.					
	Rubiaceae	californicum	California bedstraw	Native	None	Yes	
	Rubiaceae	Galium murale	tiny bedstraw	Non-Native	None	Yes	
	Rubiaceae	Galium parisiense	wall bedstraw	Invasive	None	Yes	
	Rubiaceae	Galium porrigens var. porrigens	climbing/graceful bedstraw	Native	None	Yes	
	Rubiaceae	Galium triflorum	redwood vanilla-scented bedstraw	Native	None	Yes	
167	Asteraceae	Gamochaeta ustulata	silver-leaf cudweed	Native	None	Yes	

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168	Poaceae	Gastridium phleoides	nitgrass	Non-Native	None	Yes	0
	Ericaceae	Gaultheria shallon	salal	Native	None	Yes	
	Fabaceae	Genista monspessulana	french broom	Invasive	None	Yes	
	Geraniaceae	Geranium dissectum	cut-leaved geranium	Invasive	None	Yes	
	Polemoniaceae	Gilia capitata ssp. Capitata	blue field gilia	Native	None	Yes	
	Geraniaceae	Geranium molle	crane's bill/dove's-foot geranium	Invasive	None	Yes	
	Asteraceae	Gnaphalium californicum	California cudweed	Native	None	Yes	
	Asteraceae	Gnaphalium palustre	lowland cudweed	Native	None	Yes	
	Asteraceae	Gnaphalium purpureum	purple cudweed	Native	None	Yes	
	Asteraceae	Grindelia camporum	gumweed	Native	None	Yes	
	Asteraceae	Grindelia hirsutula var. hirsutula	hairy gumweed	Native	None	Yes	
	Asteraceae	Helenium puberulum	sneezeweed	Native	None	Yes	
	Cistaceae	Helianthemum scoparium	broom rose	Native	None	Yes	
	Asteraceae	Helminthotheca echioides	Bristly Ox-tongue	Invasive	None	Yes	
192	Asteraceae	Hemizonia congesta ssp. congesta	yellow hayfield tarweed	Native	CNPS 1B.2	No	
102	ASICIALEAE	Tierinzonia congesta ssp. congesta		INALIVE	CNF3 ID.2	INU	
183	Asteraceae	Hemizonia congesta ssp. Lutescens	yellow hayfield tarweed	Native	None	Yes	
	Apiaceae	Heracleum lanatum	cowparsnip	Native	None	Yes	
	Apiaceae	Heracleum maximum	cowparsnip	Native	None	Yes	
105	Аріасеае	Hesperevax sparsiflora var.		INALIVE		103	
186	Asteraceae	sparsiflora	erect/few-flowered evax	Native	None	Yes	
	Linaceae	Hesperolinon micranthum	small flower western flax	Native	None	103	
	Rosaceae	Heteromeles arbutifolia	toyon	Native	None	Yes	
100	10380686	Heterotheca sessiliflora ssp.		INALIVE		103	
189	Asteraceae	bolanderi	bolander's goldenaster	Native	None	Yes	
		Heuchera micrantha	crevice alumroot	Native	None	Yes	
	Asteraceae	Hieracium albiflorum	white-flowered hawkweed	Native	None	Yes	
	Poaceae	Hierochloe occidentalis	California vanilla grass	Native	None	Yes	
	Brassicaceae	Hirschfeldia incana	mustard	Invasive	None	Yes	
	Poaceae	Holcus lanatus	common velvet grass	Invasive	None	Yes	
	Rosaceae	Holodiscus discolor	oceanspray	Native	None	Yes	
	Poaceae	Hordeum brachyantherum	meadow barley	Native	None	Yes	
		Hordeum marinum ssp.					
197	Poaceae	gussoneanum	mediterranean barley	Non-Native	None	Yes	
	Poaceae	Hordeum murinum ssp. leporinum	farmer's/mouse barley/foxtail	Non-Native	None	Yes	
	Rosaceae	Horkelia californica var. elata	California woodland horkelia	Native	None	Yes	
	Asteraceae	Hypochaeris glabra	smooth cat's-ear	Invasive	None	Yes	
		Hypochaeris radicata	rough/hairy cat's-ear	Invasive	None	Yes	
	Iridaceae	Iris douglasiana	Douglas' iris	Native	None	Yes	
	Iridaceae	Iris macrosiphon	ground/bowltube iris	Native	None	Yes	
	Juncaceae	Juncus bufonius var. bufonius	toad rush	Native	None	Yes	
	Juncaceae	Juncus effusus var. pacificus	Pacific common/bog rush	Native	None	Yes	
	Juncaceae	Juncus patens	spreading/common rush	Native	None	Yes	
	Juncaceae	Juncus occidentalis	western grass-leaved rush	Native	None	Yes	
	Juncaceae	Juncus xiphioides	iris-leaved rush	Native	None	Yes	
	Poaceae	Koeleria macrantha	june/prarie grass	Native	None	Yes	

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and San Geronimo	
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210	Asteraceae	Lactuca saligna	willow lettuce	Non-Native	None	1	0
_	Asteraceae	Lactuca serriola	wild bristly lettuce	Invasive	None	Yes	
	Fabaceae	Lathyrus angulatus	angled pea vine	Non-Native	None	Yes	
	Fabaceae	Lathyrus jepsonii	Jepson's pead	Native	None	Yes	
	Fabaceae	Lathyrus latifolius	sweet pea	Non-Native	None	Yes	
	Fabaceae	Lathyrus torreyi	hillside pea	Native	None	Yes	
	Fabaceae	Lathyrus tingitanus	Tangier Pea	Non-Native	None	100	
	Fabaceae	Lathyrus vestitus var. vestitus	hillside/common Pacific pea	Native	None	Yes	
	Asteraceae	Layia gaillardiodies	yellow woodland layia	Native	None	Yes	
	Lamiaceae	Lepechinia calycina	pircher sage	Native	None	Yes	
	Polemoniaceae	Leptosiphon acicularis	bristly linanthus	Native	CNPS 4.2	Not Confirmed	
		Leptosiphon androsaceus	common/showy linanthus	Native		Yes	
	Asteraceae	Lessingia hololeuca	woolly pink lessingia	Native	CNPS 3	Not Confirmed	
		Lessingia micradenia var.					
223	Asteraceae	micradenia	Tamalpais lessingia	Native	CNPS 1B.2	No	
	Linaceae	Linum bienne	narrow-leaved/small-flowered/pale flax	Non-Native	None	Yes	
	2	Lithocarpus densiflorus var.					
225	Fagaceae	densiflorus	tan oak	Native	None	Yes	
		Lithophragma affine	woodland/common star	Native	None	Yes	
	Saxifragaceae	Lithophragma heterophyllum	hillside star	Native	None	Yes	
_	Asteraceae	Logfia gallica	narrow-leaved filago/cottonrose	Invasive	None	Yes	
	Poaceae	Lolium multiflorum	Italian ryegrass	Invasive	None	Yes	
	Poaceae	Lolium perenne	perennial ryegrass	Invasive	None	Yes	
	Apiaceae	Lomatium californicum	tall hog fennel	Native	None	Yes	
		Lomatium dasycarpum ssp.					
232	Apiaceae	dasycarpum	hairy-petal hog fennel	Native	None	Yes	
	Apiaceae	Lomatium utriculatum	spring gold parsley	Native	None	Yes	
	Caprifoliaceae	Lonicera hispidula var. vacillans	California/hairy honeysuckle	Native	None	Yes	
	Fabaceae	Lotus humistratus	short-podded/hill trefoil/lotus	Native	None	Yes	
	Fabaceae	Lotus micranthus	small-flowered/hill trefoil/lotus	Native	None	Yes	
	Fabaceae	Lotus purshianus var. purshianus	Spanish lotus/clover	Native	None	Yes	
	Fabaceae	Lotus wrangelianus	Chile trefoil/lotus	Native	None	Yes	
	Fabaceae	Lupinus albifrons var. collinus	silver/hilly bush lupine	Native	None	Yes	
	Fabaceae	Lupinus bicolor	annual/bicolored/miniature lupine	Native	None	Yes	
	Fabaceae	Lupinus formosus var. formosus	summer/western lupine	Native	None	Yes	
242	Fabaceae	Lupinus microcarpus var. densiflorus	chick lupine	Native	None	Yes	
	Fabaceae	Lupinus nanus	sky lupine	Native	None	Yes	
_	Juncaceae	Luzula comosa	common/pacific/hairy wood rush	Native	None	Yes	
_	Myrsinaceae	Lysimachia arvensis	scarlet pimpernel	Non-Native	None	Yes	
	Primulaceae	Lysimachia latifolia	Western star flower	Native	None	Yes	
	Lythraceae	Lythrum hyssopifolia	hyssop loosestrife	Invasive	None	Yes	
	Asteraceae	Madia elegans	common madia/tarweed	Native	None	Yes	
	Asteraceae	Madia exigua	threadstem/small madia/tarweed	Native	None	Yes	
	Asteraceae	Madia gracilis	gumweed/slender madia/tarweed	Native	None	Yes	
	Asteraceae	Madia sativa	sticky ill-scented madia/tarweed	Native	None	Yes	
	Ruscaceae	Maianthemum racemosum	false Solomon's seal	Native	None	Yes	
	Ruscaceae	Maianthemum stellatum	star-flowered lily-of-the-valley	Native	None	Yes	

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254	Cucurbitaceae	Marah fabacea	California man-root	Native	None	Yes	0
	Cucurbitaceae	Marah oregana	coast man-root	Native	None	Yes	
	Asteraceae	Matricaria discoidea	Pineapple weed	Native	None	Yes	
	Fabaceae	Medicago polymorpha	California burclover	Invasive	None	Yes	
	Poaceae	Melica californica	California melic	Native	None	Yes	
	Poaceae	Melica torreyana	Torrey's melic	Native	None	Yes	
	Fabaceae	Melilotus indicus	annual yellow sweetclover	Non-Native	None	103	
	Lamiaceae	Mellissa officinalis	lemon balm	Invasive	None	Yes	
	Lamiaceae	Mentha pulegium	pennyroyal	Invasive	None	Yes	
	Saxifragaceae	Micranthes californica	California saxifrage	Native	None	Yes	
205	Saxinagaceae	Micropus californicus var.		INALIVE	None	163	
264	Asteraceae	californicus	slender/hairy Cottonweed	Native	None	Yes	
	Asteraceae	Microseris douglasii ssp. douglasii	Douglas's microseris	Native	None	Yes	
	Phrymaceae	Microsens douglasii ssp. douglasii Mimulus aurantiacus	sticky/bush/island monkeyflower	Native	None	Yes	
	Phrymaceae	Mimulus congdonii	Congdon's monkeyflower	Native	None	165	
	Phrymaceae	Mimulus guttatus	large/yellow/seep monkeyflower	Native	None	Yes	
	Caryophyllaceae	Minuartia douglasii	Douglas' sandwort	Native	None	165	
	Lamiaceae		Siskiyou monardella	Native	None	Yes	
	Lamiaceae	Monardella purpurea Monardella villosa		Native	None	Yes	
	Lamiaceae	Monardella villosa ssp. villosa	coyote-mint		None	Yes	
		Montia fontana	coyote-mint water chickweed	Native	None	Yes	
	Portulacaceae			Native	None	Yes	
	Boraginaceae	Myosotis latifolia	forget-me not	Invasive	None	Yes	
	Poaceae Poaceae	Nassella lepida	foothill needlegrass	Native			
		Nassella pulchra	purple needlegrass	Native	None	Yes	
	Brassicaceae	Nasturtium officinale	water cress	Native	None	Yes	
	Polemoniaceae	Navarretia heterodoxa	Calistoga navarretia	Native	None	N/	
279	Polemoniaceae	Navarretia squarrosa	skunkweed	Native	None	Yes	
280	Hydrophyllaceae	Nemophila heterophylla	canyon/white/variable-leaved nemophila	Native	None	Yes	
	Hydrophyllaceae	Nemophila menziesii var. menziesii	baby blue-eyes	Native	None	Yes	
282	Hydrophyllaceae	Nemophila parviflora var. parviflora	woodland nemophila	Native	None	Yes	
283	Fagaceae	Notholithocarpus densiflorus var. densiflorus	tanbark oak	Native	None	Yes	
	Apiaceae	Oenanthe sarmentosa	water parsley	Native	None	Yes	
	Apiaceae	Osmorhiza berteroi	wood sweet cicely	Native	None	Yes	
	Oxalidaceae	Oxalis pes-caprae	Bermuda buttercup	Invasive	None	Yes	
	Oxalidaceae	Oxalis oregana	redwood-sorrel	Native	None	Yes	
	Scrophulariaceae	Parentucellia latifolia	broadleaf glandweed	Invasive	None	Yes	
	Orobanchaceae	Pedicularis densiflora	Indian warrior	Native	None	Yes	
	Pteridaceae	Pellaea andromedifolia	coffee fern	Native	None	Yes	
_	Pteridaceae	Pellaea mucronata var. muronata	bird's foot fern	Native	None	Yes	
	Pteridaceae	Pentagramma triangularis	gold-back fern	Native	None	Yes	
_	Apiaceae	Perideridia kelloggii	Kellogg's yampah	Native	None	Yes	
	Hydrophyllaceae	Phacelia distans	common phacelia	Native	None	Yes	
	Hydrophyllaceae	Phacelia imbricata ssp. imbricata	imbricate phacelia	Native	None	Yes	
	Poaceae	Phalaris aquatica	Harding grass	Invasive	None	Yes	
	Asteraceae	Picris echioides	bristly ox-tongue	Invasive	None	Yes	
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298	Pinaceae	Pinus radiata	Monterey pine	Invasive	None	Yes	0
	Orchidaceae	Piperia elongata	long-spur rein orchid	Native	None	Yes	
		Piperia transversa	transverse-spur rein orchid	Native	None	Yes	
		Plagiobothrys nothofulvus	popcornflower	Native	None	Yes	
	Plantaginaceae	Plantago erecta	California plantain	Native	None	Yes	
	Plantaginaceae	Plantago lanceolata	English plantain	Invasive	None	Yes	
	Papaveraceae	Platystemon californicus	cream cups	Native	None	Yes	
	Valerianaceae	Plectritis macrocera	white/long-horn plectritis	Native	None	Yes	
	Poaceae	Poa annua	annual bluegrass	Invasive	None	Yes	
	Poaceae	Poa secunda ssp. secunda	one-sided bluegrass	Native	None	Yes	
308	Caryophyllaceae	Polycarpon tetraphyllum	allseed	Invasive	None	Yes	
	Polygalaceae	Polygala californica	California milkwort	Native	None	Yes	
	Polygonaceae	Polygonum aviculare	knotweed	Invasive	None	Yes	
	Polypodiaceae	Polypodium calirhiza	California polypody fern	Native	None	Yes	
	Poaceae	Polypogon monspeliensis	annual/rabbitfoot beard grass	Invasive	None	Yes	
313	Dryopteridaceae	Polystichum munitum	western sword fern	Native	None	Yes	
314	Rosaceae	Potentilla glandulosa ssp. glandulosa	sticky cinquefoil	Native	None	Yes	
315	Liliaceae	Prosartes hookeri	Hooker's fairy bell	Native	None	Yes	
316	Primulaceae	Primula hendersonii	Henderson's shooting star	Native	None	Yes	
317	Asteraceae	Pseudognaphalium californicum	California everlasting	Native	None	Yes	
318	Asteraceae	Pseudognaphalium luteoalbum	weedy cudweed	Invasive	None	Yes	
319	Pinaceae	Pseudotsuga menziesii	douglas fir	Native	None	Yes	
		Pseudotsuga menziesii var.					
320	Pinaceae	menziesii	douglas fir	Native	None	Yes	
321	Asteraceae	Psilocarphus tenellus var. tenellus	slender woolly-heads/marbles	Native	None	Yes	
		Pteridium aquilinum var. pubescens	bracken fern	Native	None	Yes	
323	Fagaceae	Quercus agrifolia	coast live oak	Native	None	Yes	
	Fagaceae	Quercus agrifolia var. agrifolia	coast live oak	Native	None	Yes	
	Fagaceae	Quercus garryana var. garryana	Oregon oak	Native	None	Yes	
	Fagaceae	Quercus kelloggii	California black oak	Native	None	Yes	
	Fagaceae	Quercus lobata	valley oak	Native	None	Yes	
	Fagaceae	Quercus wislizeni var. frutescens	interior live oak	Native	None	Yes	
329	Fagaceae	Quercus x chasei	black live hybrid oak	Native	None	Yes	
		Ranunculus californicus var.					
330	Ranunculaceae	californicus	California buttercup	Native	None	Yes	
		Ranunculus californicus var.					
	Ranunculaceae	cuneatus	Common buttercup	Native	None	Yes	
332	Ranunculaceae	Ranunculus muricatus	picklefruit buttercup	Invasive	None	Yes	
		Ranunculus orthorhynchus var.					
		bloomeri	big marsh buttercup	Native	None	Yes	
334	Brassicaceae	Raphanus raphanistrum	jointed charlock	Non-Native	None	Yes	
335	Rhamnaceae	Rhamnus californica ssp. californica	California coffeeberry	Native	None	Yes	
	Grossulariaceae	Ribes californicum var. californicum	hillside gooseberry	Native	None	Yes	
337	Grossulariaceae	Ribes menziesii	canyon gooseberry	Native	None	Yes	

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338	Rosaceae	Rosa californica	California rose	Native	None	Yes	
339	Rosaceae	Rosa gymnocarpa var. gymnocarpa	woodland rose	Native	None	Yes	
	Rosaceae	Rosa spithamea	Sonoma rose	Native	None	Yes	
	Rosaceae	Rubus armeniacus	Himalayan blackberry	Invasive	None	Yes	
	Rosaceae	Rubus laciniatus	cut-leaf blackberry	Invasive	None	Yes	
	Rosaceae	Rubus parviflorus	western thimbleberry	Native	None	Yes	
	Rosaceae	Rubus ursinus	California blackberry	Native	None	Yes	
345	Polygonaceae	Rumex acetosella	common sheep sorrel	Invasive	None	Yes	
		Rumex conglomeratus	branching dock	Invasive	None	Yes	
	Polygonaceae	Rumex crispus	curly dock	Invasive	None	Yes	
	Polygonaceae	Rumex pulcher	fiddle dock	Non-Native	None	Yes	
349	Polygonaceae	Rumex salicifolius	willow-leaved dock	Native	None	Yes	
350	Fabaceae	Rupertia physodes	California tea	Native	None	Yes	
351	Salicaceae	Salix lasiolepis	arroyo willow	Native	None	Yes	
352	Caprifoliaceae	Sambucus mexicana	blue elderberry	Native	None	Yes	
353	Caprifoliaceae	Sambucus nigra ssp. caerulea	blue elderberry	Native	None	Yes	
354	Apiaceae	Sanicula bipinnatifida	purple sanicle	Native	None	Yes	
355	Apiaceae	Sanicula crassicaulis	Pacific/snake-root sanicle	Native	None	Yes	
356	Apiaceae	Sanicula laciniata	coast sanicle	Native	None	Yes	
357	Lamiaceae	Satureja douglasii	yerba buena	Native	None	Yes	
358	Saxifragaceae	Saxifraga californica	California saxifrage	Native	None	Yes	
359	Caryophyllaceae	Scleranthus annuus ssp. annuus	German knotgrass	Non-Native	None		
360	Liliaceae	Scoliopus bigelovii	fetid adder's tongue	Native	None	Yes	
		Scrophularia californica ssp.					
361	Scrophulariaceae	californica	California bee-plant	Native	None	Yes	
362	Selaginellaceae	Selaginella wallacei	Wallace's spike moss	Native	None	Yes	
	Asteraceae	Senecio minimus	Australian fireweed	Invasive	None	Yes	
	Asteraceae	Senecio vulgaris	common groundsel/old man of spring	Invasive	None	Yes	L
	Taxodiaceae	Sequoia sempervirens	coast redwood	Native	None	Yes	L
	Rubiaceae	Sherardia arvensis	blue field madder	Invasive	None	Yes	
	Malvaceae	Sidalcea malviflora ssp. malviflora	checker mallow	Native	None	Yes	
	Malvaceae	Sidalcea malviflora ssp. Laciniata	upright checkerbloom	Native	None	Yes	
	Caryophyllaceae	Silene gallica	windmill pink	Non-Native	None	Yes	
	Asteraceae	Silybum marianum	milk thistle	Invasive	None	Yes	
	Iridaceae	Sisyrinchium bellum	blue-eyed grass	Native	None	Yes	
	Liliaceae	Smilacina racemosa	false/fat/branched Solomon's seal	Native	None	Yes	
	Liliaceae	Smilacina stellata	false/slim Solomon's seal	Native	None	Yes	
	Solanaceae	Solanum americanum	white nightshade	Native	None	Yes	
	Asteraceae	Solidago velutina ssp. californica	California goldenrodd	Native	None	Yes	
	Asteraceae	Soliva sessilis	common solvia	Non-Native	None	Yes	
	Asteraceae	Sonchus asper ssp. asper	prickly sow thistle	Invasive	None	Yes	
	Asteraceae	Sonchus oleraceus	common sow thistle	Non-Native	None	Yes	
		Spergularia rubra	purple sand-sourrey	Non-Native	None	Yes	
	Lamiaceae	Stachys ajugoides var. rigida	rigid hedge nettle	Native	None	Yes	
	Lamiaceae	Stachys rigida ar. Quercetorum	woodland hedge nettle	Native	None	Yes	
	Caryophyllaceae	Stellaria media	common chickweed	Invasive	None	Yes	
383	Caryophyllaceae	Stellaria nitens	shining chickweed	Native	None	Yes	

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384	Poaceae	Stipa lepida	slender needlegrass	Native	None	Yes	
385	Poaceae	Stipa pulchra	purple needlegrass	Native	None	Yes	
		Streptanthus glandulosus ssp.					
386	Brassicaceae	secundus	one sided jewelflower	Native	None		
		Symphoricarpos albus var.					
387	Caprifoliaceae	laevigatus	common/upright snowberry	Native	None	Yes	
388	Asteraceae	Taraxacum officinale	common dandelioin	Invasive	None	Yes	
389	Onagraceae	Taraxia ovata	sun cup	Native	None	Yes	
390	Ranunculaceae	Thalictrum fendleri var. polycarpum	Fendler's meadow-rue	Native	None	Yes	
391	Apiaceae	Torilis arvensis	field/spreading hedge parsley	Invasive	None	Yes	
392	Apiaceae	Torilis nodosa	knotted hedge parsley	Non-Native	None	Yes	
393	Anacardiaceae	Toxicodendron diversilobum	western poison oak	Native	None	Yes	
			·				Forest Knolls
394	Melanthiaceae	Toxicoscordion fontanum	marsh zigadenus	Native	CNPS 4.2	No	observation
							South of Sir
							Francis Drake
							along E
							Sylverstris Fire
395	Melanthiaceae	Toxicoscordion fremontii	Fremont's star lily	Native	None	No	Rd
396	Asteraceae	Tragopogon porrifolius	salsify	Non-Native	None	Yes	
397	Primulaceae	Trientalis latifolia	Pacific/western star lily	Native	None	Yes	
398	Lamiaceae	Trichostema lanceolatum	blue curls	Native	None	Yes	
		Trifolium albopurpureum var.					
399	Fabaceae	albopurpureum	common Indian clover	Native	None	Yes	
400	Fabaceae	Trifolium bifidum var. bifidum	Pinole clover	Native	None	Yes	
		Trifolium depauperatum var.					
401	Fabaceae	amplectens	fusedbract/pale sack clover	Native	None	Yes	
402	Fabaceae	Trifolium dubium	Ittle hop/shamrock clover	Non-Native	None	Yes	
403	Fabaceae	Trifolium fucatum	blul clover	Native	None		
404	Fabaceae	Trifolium glomeratum	clustered clover	Non-Native	None		
405	Fabaceae	Trifolium hirtum	rose clover	Invasive	None	Yes	
406	Fabaceae	Trifolium incarnatum	crimson clover	Non-Native	None		
	Fabaceae	Trifolium microcephalum	small-headed/hairy/maiden clover	Native	None	Yes	
	Fabaceae	Trifoium repens	white clover	Non-Native	None	Yes	
	Fabaceae	Trifolium subterraneum	subterranean clover	Non-Native	None	Yes	
	Fabaceae	Trifolium willdenovii	tomcat clover	Native	None	Yes	
	Liliaceae	Trillium chloropetalum	giant trillium	Native	None	Yes	
	Liliaceae	Trillium ovatum ssp. ovatum	western/white trillium	Native	None	Yes	
	Orobanchaceae	Triphysaria pusilla	dwarf/little owl's clover	Native	None	Yes	
	Liliaceae	Triteleia hyacinthina	white brodiaea	Native	None	Yes	
	Liliaceae	Triteleia laxa	Ithuriel's spear	Native	None	Yes	
	Lauraceae	Umbellularia californica	California bay	Native	None	Yes	
	Asteraceae	Uropappus lindleyi	silver puffs	Native	None	Yes	
	Urticaceae	Urtica dioica ssp. Gracilis	slender stinging nettle	Native	None	Yes	
		· · ·		1100170			
-		Verbena lasiostachys var.					

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		Veronica serphyllifolia ssp.							
420	Plantaginaceae	Serpyllifolia	lawn speedwell	Native	None	Yes			
	Fabaceae	Vicia americana var. americana	American vetch	Invasive	None	Yes			
	Fabaceae	Vicia sativa ssp. nigra	narrow-leaved vetch	Non-Native	None	Yes			
	Fabaceae	Vicia villosa ssp. varia	thick-fruited vetch	Invasive	None	Yes			
	Apocynaceae	Vinca major	vinca	Invasive	None	Yes			
	Violaceae	Viola adunca	blue violet	Native	None	Yes			
	Violaceae	Viola glabella	stream violet	Invasive	None	Yes			iNaturalist
	Poaceae	Vulpia bromoides	European foxtail/six-weeks fescue	Invasive	None	Yes			
	Poaceae	Vulpia myuros var. myuros	false foxtail/rattail fescue	Invasive	None	Yes			
	Philadelphaceae	Whipplea modesta	modesty/yerba de selva	Native	None	Yes			
	Asteraceae	Wyethia angustifolia	narrow-leaved mule ears	Native	None	Yes			iNaturalist
	Asteraceae	Wyethia glabra	coast range/smooth mule ears	Native	None	Yes			
432		Bryopsida sp.	true moss	Native	None	Yes			
433									
434									
	INSECTS								
	Armadillididae	Armadillidium vulgare	common pill-bug	Non-native	None	Yes			iNaturalist
	Bombyliidae	Bombylius major	greater bee fly	Native	None	Yes			iNaturalist
	Cercopoidea	Cercopoidea sp.	spittlebug		None	Yes			iNaturalist
	Acrididae	Chimarocephala sp.	grasshopper sp.		None	Yes			iNaturalist
	Coccinellidae	Coccinella septempunctata	seven-spotted ladybird	Native	None	Yes			iNaturalist
	Nymphalidae	Coenonympha tullia	common ringlet	Native	None	Yes			iNaturalist
	Ixodida	Dermacentor occidentalis	Pacific coast tick	Native	None	Yes			iNaturalist
	Lycaenidae	Glaucopsyche lygdamus	silvery blue	Native	None	Yes			iNaturalist
	Lycaenidae	Icaricia acmon	acmon blue	Native	None	Yes			iNaturalist
	Coenagrionidae	Ischnura cervula	Pacific forktail	Native	None	Yes			iNaturalist
	Nymphalidae	Junonia coenia	common buckeye	Native	None	Yes			iNaturalist
	Nymphalidae	Phyciodes mylitta	mylitta crescent	Native	None	Yes			iNaturalist
	Crambidae	Pyrausta volupialis	volupial pyrausta moth	Native	None	Yes			iNaturalist
449	Noctuidae	Schinia pulchripennis	common flower moth	Native	None	Yes			iNaturalist
	Stenopelmatidae	Stenopelmatidae sp.	Jerusalem cricket		None	Yes			iNaturalist
451									
452									
	FUNGI								
	Parmeliaceae	Usnea sp.	beard lichen		None	Yes			iNaturalist
	Stereaceae	Stereum hirsutum	false turky-tail / hairy curtain crust		None	Yes			iNaturalist
	Cladoniaceae	Cladonia sp.	pixie cup lichen		None	Yes			iNaturalist
_	Fomitopsidaceae	Fomitopsis pinicola	red-banded polypore		None	Yes			iNaturalist
	Physaraceae	Fuligo septica	dog vomit slime mold		None	Yes			iNaturalist
	Strophariaceae	Hypholoma fasciculare	sulpher tuft		None	Yes			iNaturalist
460	-	Letharia sp.	wolf lichens		None	Yes			iNaturalist
	Mycenaceae	Mycena sp.	bonnets		None	Yes			iNaturalist
	Parmeliaceae	Parmelia sp.	shield lichens		None	Yes			iNaturalist
	Physciaceae	Physcia sp.	rosette lichens		None	Yes			iNaturalist
	Tremellaceae	Tremella mesenterica	witch's butter		None	Yes			iNaturalist
	Teloschistales	Xanthoria sp.	sunburst lichens		None	Yes			iNaturalist
466									

	А	В	С	D	Е	F	G	Н	I
467	MAMMALS								
	Canidae	Canis latrans	coyote	Native	None	Yes			WPI
	Didelphidae	Didelphis virginiana	opossum	Native	None	Yes			WPI
	, Felidae	Felis catus	domestic cat	Invasive	None	Yes			WPI
	Felidae	Lynx rufus	bobcat	Native	None	Yes			WPI
	Mephitidae	Mephitis mephitis	striped skunk	Native	None	Yes			WPI
	Cricetidae	Neotoma fuscipes	dusky-footed woodrat	Native	None	Yes		primary NSO prey	WPI
	Cervidae	Odocoileus hemionus	California mule deer	Native	None	Yes			WPI
	Procyonid	Procyon lotor	raccoon	Native	None	Yes			WPI
	Sciuridae	Sciurus griseus	western gray squirrel	Native	None	Yes			WPI
477	Leporidae	Sylvilagus bachmani	brush rabbit	Native	None	Yes			WPI
478	Leporidae	Lepus californicus	black tailed hare	Native	None	Yes			WPI
479	Mustelidae	Taxidea taxus	American badger	Native	SSC	Yes			WPI
480	Canidae	Urocyon cinereoargenteus	gray fox	Native	None	Yes			WPI
	Mustelidae	Pekania pennanti	fisher	Native	None	NO			
482	Mustelidae	Martes americana	American marten	Native	None	NO			
483	Mustelidae	Mustela erminea	stoat	Native	None	NO			
484	Mustelidae	Mustela frenata	long-tailed weasel	Native	None	NO			
485	Procyonidae	Bassariscus astutus	ringtail	Native	None	NO			
	Ursidae	Ursus americanus	black bear	Native	None	NO			
487	Sciuridae	Glaucomys sabrinus	northern flying squirrel	Native	None	NO			
488	Vespertilionidae	Myotis evotis	long-eared myotis	Native	G5 S3	NO			
489	Vespertilionidae	Myotis lucifugus	little brown bat	Native	None	NO			
490	Vespertilionidae	Myotis thysanodes	fringed myotis	Native	None	NO			
491	Vespertilionidae	Eptesicus fuscus	big brown bat	Native	None	NO			
492	Vespertilionidae	Myotis californicus	California myotis	Native	None	NO			
493	Vespertilionidae	Myotis volans	long-legged myotis	Native	None	NO			
								barred owl and pacific giant salamander	
	Soricidae	Sorex trowbridgii	Trowbridge's shrew	Native	None	NO		prey	
	Soricidae	Sorex sonomae	fog shrew	Native	None	NO			
	Talpidae	Neurotrichus gibbsii	American shrew mole	Native	None	NO			
	Sciuridae	Tamias ochrogenys	redwood chipmunk	Native	None	NO			
	Cricetidae	Peromyscus maniculatus	deer mouse	Native	None	NO			
	Cricetidae	Clethrionomys californicus	western red-backed vole	Native	None	NO			
	Cricetidae	Arborimus pomo	Sonoma vole	Native	None	NO			
	Sciuridae	Tamiasciurus douglasii	Douglas' squirrel	Native	None	NO			
	Mephitidae	Mephitis gracilis	spotted skunk	Native	None	NO			
	Sciuridae	Tamias sonomae	Sonoma chipmonk	Native	None	Yes			WPI
	Vespertilionidae	Antrozous pallidus	pallid bat	Native	G5 S3, SSC	Yes			
505									
_	GASTROPODS								
	Ariolimacidae	Ariolimax sp.	banana slug	Native		Yes			iNaturalist
508		Helicoidea sp.	helicoed terrestrial snail	Native		Yes			iNaturalist
509									
	REPTILES								
	Anguidae	Elgaria	western alligator lizard	Native	None	Yes	No		iNaturalist
	Scincidae	Plestiodon skiltonianus	western skink	Native	None	Yes	No		iNaturalist
513	Iguanidae	Sceloporus occidentalis	western fence lizard	Native	None	Yes	No		iNaturalist

	А	В	С	D	F	F	G	Н	I
514	Iguanidae	Sceloporus occidentalis bocourtii	Coast Range fence lizard	Native	None	Yes	J		iNaturalist
	Colubridae	Lampropeltis getula	common king snake	Native	None	Yes	No		iNaturalist
516	Coldonade					100			
	AMPHIBIANS								
517									CA Roadkill
518	Dicamptodontidae	Dicamptodon ensatus	California giant salamander	Native	G3 S2S3, SSC	Yes	Yes		Observation
	Emydidae	Emys marmorata	western pond turtle	Native	G2G4 S3, SSC	Anecdotally	No		
	Plethodontidae	Batrachoseps attenuatus	California slender salamander	Native	None	Yes	No		iNaturalist
	Plethodontidae	Ensatina eschscholtzii	ensatina	Native	None	Yes	No		iNaturalist
522	Tiothodontidae					100			
	BIRDS								
	Picidae	Melanerpes formicivorus	acorn woodpecker	Native	None	Yes			eBird
521	Tiolduc					100	Primary		
525	Trochilidae	Selasphorus sasin	Allen's hummingbird	Native	None	Yes	Member		eBird
	Corvidae	Corvus brachyrhynchos	American crow	Native	None	Yes			eBird
	Fringillidae	Spinus tristis	American goldfinch	Native	None	Yes			eBird
	Falconidae	Falco sparverius	American kestrel	Native	None	Yes			eBird
520	1 4100111440					100	Secondary		
529	Turdidae	Turdus migratorius	American robin	Native	None	Yes	Member		WPI, eBird
	Trochilidae	Calypte anna	Anna's hummingbird	Native	None	Yes			eBird
	Tyrannidae	Myiarchus cinerascens	ash-throated flycatcher	Native	None	Yes			eBird
551	Tyranniado						Secondary		
532	Columbidae	Patagioenas fasciata	band-tailed pigeon	Native	None	Yes	Member		eBird
	Tytonidae	Tyto alba	barn owl	Native	None	Yes			eBird
	Hirundinidae	Hirundo rustica	barn swallow	Native	None	Yes			eBird
	Troglodytidae	Thryomanes bewickii	Bewick's wren	Native	None	Yes			eBird
536	Anatidae	Sayornis nigricans	black phoebe	Native	None	Yes			eBird
550	7 1100000						Primary		
537	Certhiidae	Certhia americana	brown creeper	Native	None	Yes	Member		eBird
	Anatidae	Bucephala albeola	bufflehead	Native	None	Yes			eBird
	Aegithalidae	Psaltriparus minimus	bushtit	Native	None	Yes			eBird
	Odotophoridae	Callipepla californica	California quail	Native	None	Yes			WPI, eBird
541			California scrub-jay			Yes			eBird
	Emberizidae	Melozone crissalis	California towhee	Native	None	Yes			eBird
	Anatidae	Branta canadensis	Canada goose	Native	None	Yes			eBird
			5				Primary		
544	Paridae	Poecile rufescens	chestnut-backed chickadee	Native	None	Yes	Member		eBird
	Passerellidae	Spizella passerina	chipping sparrow	Native	None	Yes			eBird
	Hirundinidae	Petrochelidon sp.	cliff swallow	Native	None	Yes			eBird
	Anatidae	Mergus merganser	common merganser	Native	None	Yes			eBird
	Corvidae	Vorvus corax	common raven	Native	None	Yes			eBird
							Primary		
549	Emberizidae	Junco hyemalis	dark-eyed junco	Native	None	Yes	Member		eBird
	Phalacrocoracidae	Phalacrocorax auritus	double-crested cormorant	Native	None	Yes			eBird
	Picidae	Dryobates pubescens	downy woodpecker	Native	None	Yes			eBird
	Sturnidae	Sturnus vulgaris	European starling	Non-Native	None	Yes			eBird
	Emberizidae	Passerella iliaca	fox sparrow	Native	None	Yes			eBird
555				T TALIVG		100			

A	В	С	D	E	F	G	Н	I
						Primary		
554 Emberizidae	Regulus satrapa	golden-crowned kinglet	Native	None	Yes	Member		eBird
555 Emberizidae	Zonotrichia atricapilla	golden-crowned sparrow	Native	None	Yes			eBird
						Tertiary		
556 Ardeidae	Ardea herodias	great blue heron	Native	None	NO	Members (N)		
						Tertiary		
557 Ardeidae	Ardea alba	great egret	Native	None	NO	Members (N)		
						Primary		
558 Picidae	Leuconotopicus villosus	hairy woodpecker	Native	None	Yes	Member		eBird
						Primary		
559 Hirundinidae	Catharus guttatus	hermit thrush	Native	None	Yes	Member		eBird
						Tertiary		
560 Aegithalidae	Setophaga occidentalis	hermit warbler	Native	None	NO	Member (N)		
561 Anatidae	Lophodytes cucullatus	hooded merganser	Native	None	Yes			eBird
562 Fringillidae	Haemorhous mexicanus	house finch	Native	None	Yes			eBird
563 Vireonidae	Vireo huttoni	Hutton's vireo	Native	None	Yes			eBird
564 Charadriidae	e Charadrius vociferus	killdeer	Native	None	Yes			eBird
565 Fringillidae	Spinus psaltria	lesser goldfinch	Native	None	Yes			eBird
566 Alcidae	Brachyramphus marmoratus	marbled murrelet	Native	G3G4 S1, ST, FT	NO	Yes		
567 Columbidae	Zenaida macroura	mourning dove	Native	None	Yes			eBird
568 Certhiidae	Colaptes auratus	northern flicker	Native	None	Yes			WPI, eBird
						Primary		
569 Strigidae	Aegolius acadicus	northern saw-whet owl	Native	None	Yes	Member		eBird
						Primary		
570 Strigidae	Strix occidentalis caurina	northern spotted owl	Native	G3T3 S2S3, ST, FT	Yes	Member		Point Blue
571 Picidae	Dryobates nuttallii	Nuttall's woodpecker	Native	None	Yes			eBird
572 Paridae	Baeolophus inornatus	oak titmouse	Native	G4 S4	Yes			eBird
						Secondary	Special Status Species\32_BSSC_Olive-	
573 Tryannidae	Contopus cooperi	olive-sided flycatcher	Native	G4 S4, SSC	Yes	Member	sided Flycatcher.pdf	eBird
574 Parulidae	Oreothlypis celata	orange-crowned warbler	Native	None	Yes			eBird
						Tertiary		
575 Accipitridae	Pandion haliaetus	osprey	Native	G5 S4, WL	Yes	Member (N)		eBird
576 Troglodytidae	e Troglodytes pacificus	pacific wren	Native	None	Yes			eBird
						Primary		
577 Tyrannidae	Empidonax difficilis	Pacific-slope flycather	Native	None	Yes	Member		eBird
578 Falconidae	Falco peregrinus	peregrine falcon	Native	G4T4 S3S4, FDR, SDR	NO			
						Primary		
579 Picidae	Dryocopus pileatus	pileated woodpecker	Native	None	Yes	Member		eBird
						Primary		
580 Fringillidae	Spinus pinus	pine siskin	Native	None	Yes	Member		eBird
						Primary		
581 Fringillidae	Haemorhous purpureus	purple finch	Native	None	Yes	Member		eBird
						Tertiary		
582 Sittidae	Sitta pygmaea	pygmy nuthatch	Native	None	Yes	Members (N)		eBird
						Tertiary		
583 Fringillidae	Loxia curvirostra	red crossbill	Native	None	NO	Members (N)		

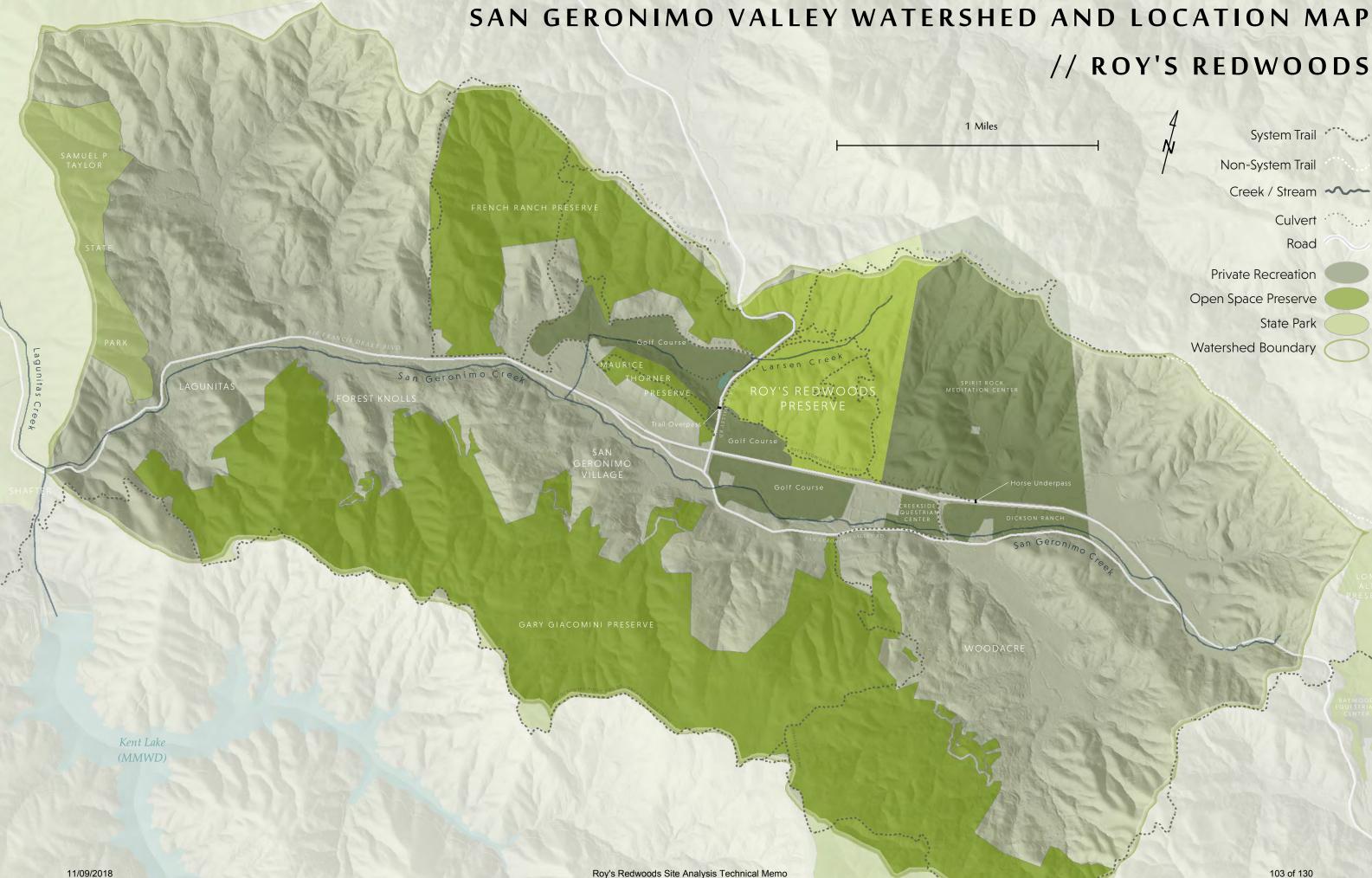
	Α	В	C	D	E	F	G	Н	I
							Primary		
584	Sittidae	Sitta canadensis	red-breasted nuthatch	Native	None	NO	Member		
	Accipitridae	Buteo lineatus	red-shouldered hawk	Native	None	Yes			eBird
	Accipitridae	Buteo jamaicensis	red-tailed hawk	Native	None	Yes			eBird
	Icteridae	Agelaius pheniceus	red-winged blackbird			Yes			eBird
	Regulidae	Regulus calendula	ruby-crowned kinglet	Native	None	Yes			eBird
	Emberizidae	Passerculus sandwichensis	savannah sparrow	Native	None	Yes			eBird
	Accipitridae	Accipiter striatus	sharp-shinned hawk	Native	G5 S3, WL	NO	Tertiary Member (N)		
	Ardeidae	Egretta thula	snowy egret	Native	None	NO	Tertiary Members (N)		
	Emberizidae	Melospiza melodia	song sparrow	Native	None	Yes			eBird
593	Emberizidae	Pipilo maculatus	spotted towhee	Native	None	Yes			eBird
							Primary		
	Corvidae	Cyanocitta stelleri	Steller's jay	Native	None	Yes	Member		eBird
	Hirundinidae	Catharus ustulatus	Swainson's thrush	Native	None	Yes			eBird
596	Parulidae	Setophaga townsendi	Townsend's warbler	Native	None	Yes			eBird
597	Hirundinidae	Tachycineta bicolor	tree swallow	Native	None	Yes			eBird
							Tertiary		
598	Catharidae	Cathartes aura	turkey vulture	Native	None	Yes	Member (N)		WPI, eBird
599	Odotophoridae	Ixoreus naevius	varied thrush	Native	None	Yes			WPI, eBird
600	Apodidae	Chaetura vauxi	Vaux's swift	Native	G5 S2S3, SSC	NO	Secondary Member (N)		
601	Hirundinidae	Tachycineta thalassina	violet-green swallow	Native	None	Yes			eBird
602	Vireonidae	Vireo gilvus	warbling vireo	Native	None	Yes			eBird
	Pandionidae	Sialia mexicana	western bluebird	Native	None	Yes			eBird
604	Strigidae	Megascops kennicottii	western screech owl	Native	None	Yes			eBird
605	Corvidae	Aphelocoma californica	western scrub jay	Native	None	Yes			WPI
606	Sittidae	Sitta carolinensis	white-breasted nuthatch	Native	None	Yes			eBird
607	Emberizidae	Zonotrichia leucophrys	white-crowned sparrow	Native	None	Yes			eBird
608	Phasianidae	Meleagris gallopavo	wild turkey	Yes/No	None	Yes			WPI
							Primary		
609	Parulidae	Cardellina pusilla	wilson's warbler	Native	None	Yes	Member		eBird
							Primary		
610	Troglodytidae	Troglodytes hiemalis	winter wren	Native	None	NO	Member		
611	Sylviidae	Chamaea fasciata	wrentit	Native	None	Yes			eBird
612	Parulidae	Setophaga coronata	yellow-rumped warbler	Native	None	Yes			eBird
613									
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623									

	А	В	С	D	F	F	G	Н	I
624		_			Special Status Species Key				
_									
625					FE = Federally Listed - Endangered				
626					FT = Federally Listed - Threatened				
626 627					SE = State Listed - Endangered				
628					ST = State Listed - Threatened				
					FDR = Federally Delisted -				
629					Recovered				
630					SDR = State Delisted - Recovered				
					SCC = CDFW Species of Special				
631					Concern				
632					WL = CDFW Watch List				
					CNPS 1A = Plants presumed				
					extirpated in California and either				
633					rare or extinct elsewhere				
					CNPS 1B = Plants rare, threatened,				
					or endangered in California and				
634					elsewhere				
					CNPS 2A = Plants presumed				
					extirpated in California but common				
635					elsewhere				
					CNPS 2B = Plants rare, threatened,				
					or endangered in California but				
636					more common elsewhere				
					CNPS 3 = Review List: Plants				
					about which more information is				
637					needed				
					CNPS 4 = Watch List: Plants of				
638					limited distribution				
					CNPS 0.1 = Seriously threatened in				
639					California				
					CNPS 0.2 = Moderately threatened				
640					in California				
					CNPS 0.1 = Not very threatened in				
641					California				
						https://www.wildli			
					CNDDB Special Animals List	fe.ca.gov/Data/C			
						NDDB/Plants-			
642					State Rank, T = subspecies T-rank	and-Animals			

MARIN COUNTY

& NEARBY REDWOOD GROVES



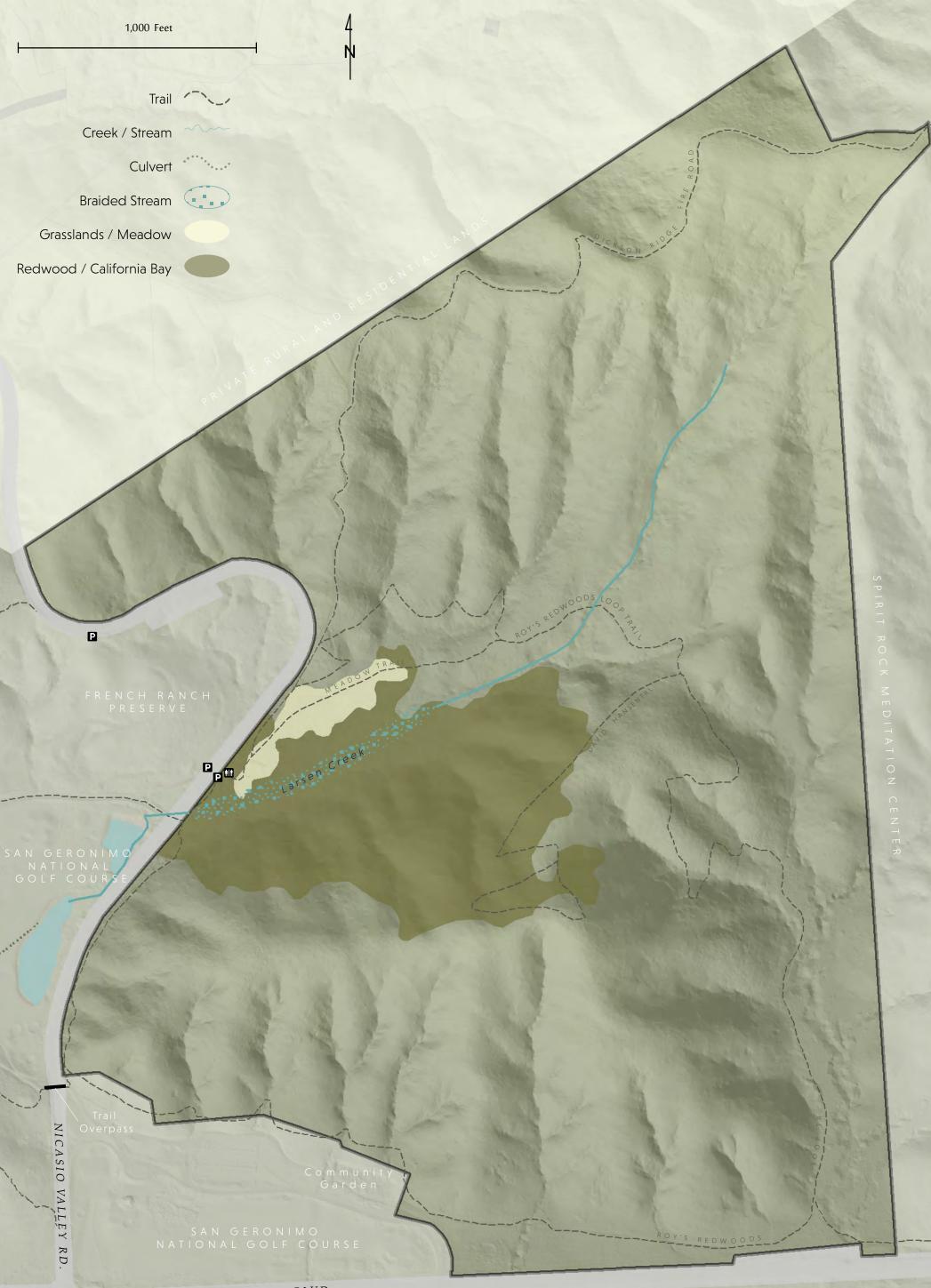


// ROY'S REDWOODS

System Trail Non-System Trail Creek / Stream ~~~ Culvert Road Private Recreation Open Space Preserve State Park Watershed Boundary

A North

PRESERVE MAP // ROY'S REDWOODS



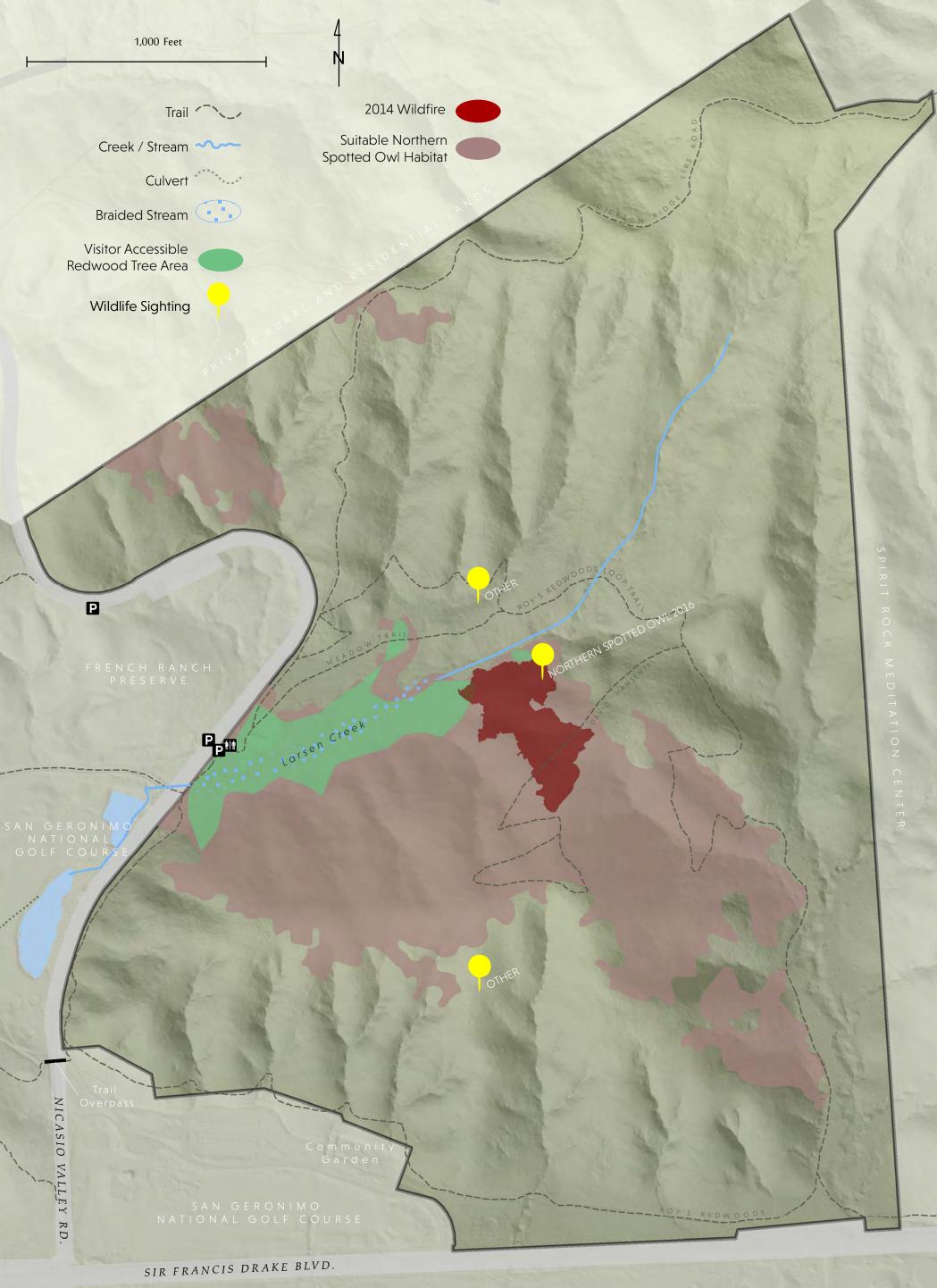
SIR FRANCIS DRAKE BLVD.

11/09/2018

SAN GERONIMO NATIONA **Roy's Redwoods Site Analysis Technical Memo**

104 of 130

WILDLIFE SIGHTINGS & POTENTIAL HABITAT // ROY'S REDWOODS

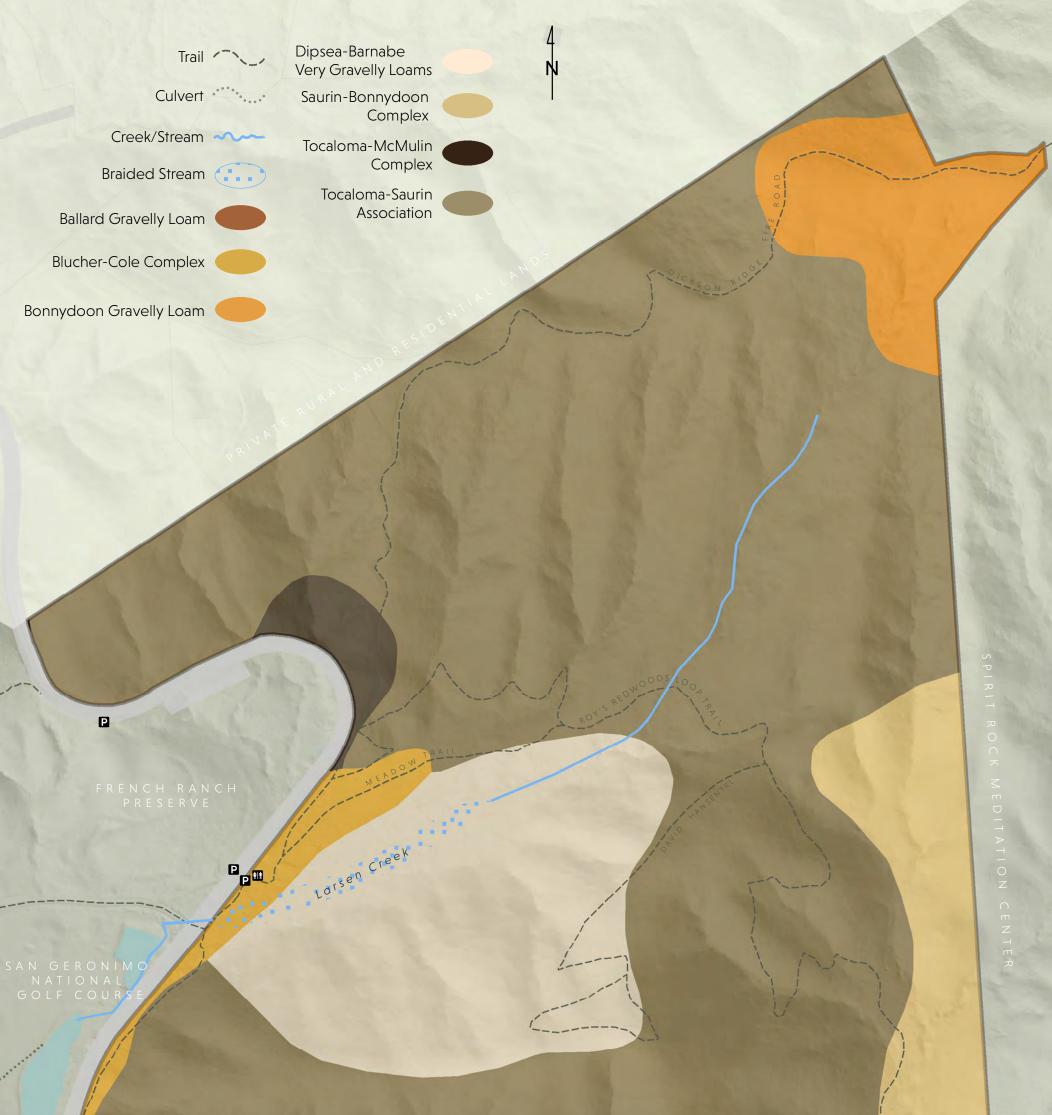


11/09/2018

S A N G E R O N I M O N A T I O N A Roy's Redwoods Site Analysis Technical Memo

105 of 130

SOILS // ROY'S REDWOODS



1,000 Feet

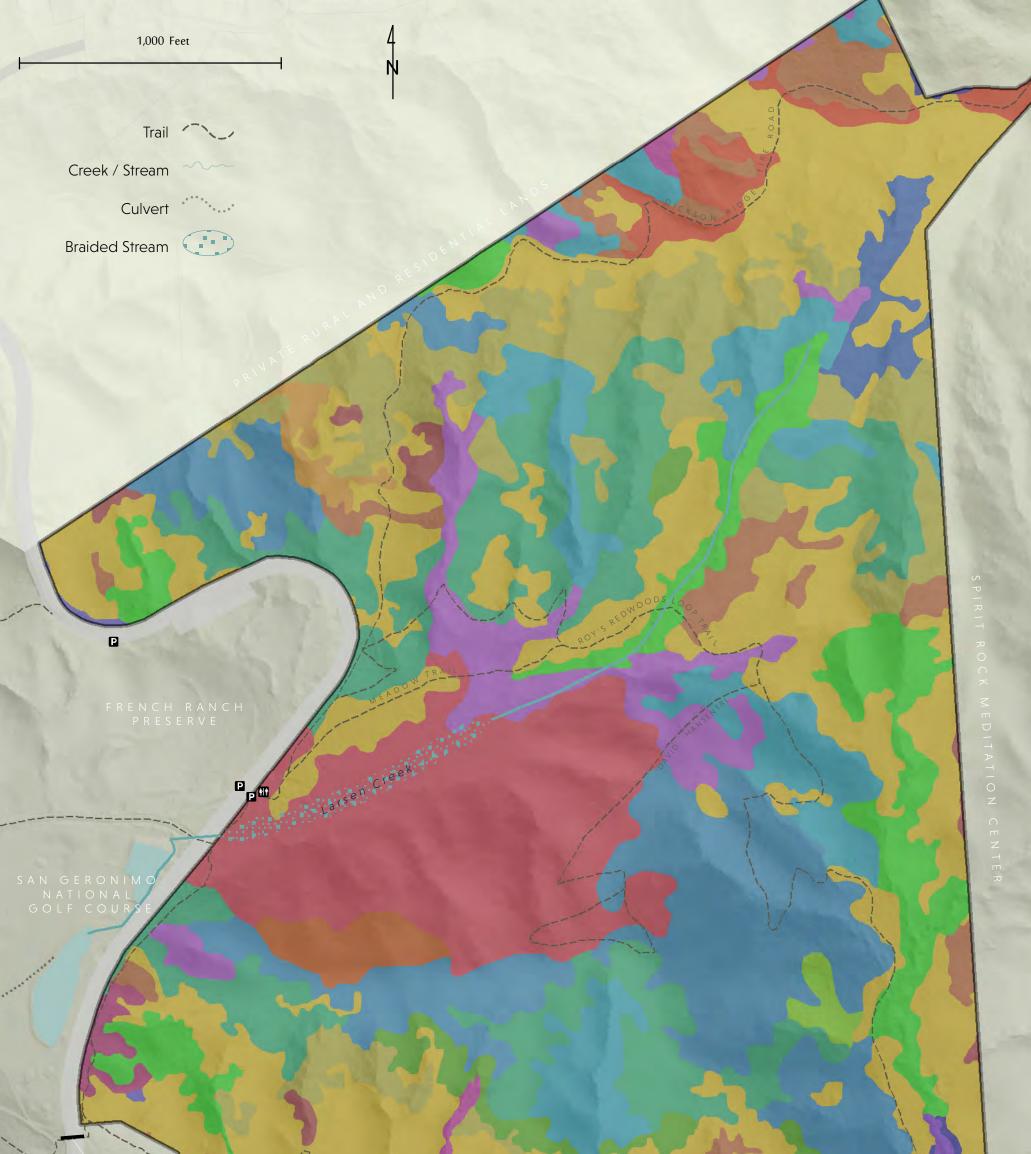


11/09/2018

S A N G E R O N I M O N A T I O N A **Roy's Redwoods Site Analysis Technical Memo**

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VEGETATION // PRESERVE LEVEL // ROY'S REDWOODS



NICASIO VALLEY RD.

Overpass

Community Garden

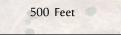
SAN GERONIMO NATIONAL GOLF COURSE

SIR FRANCIS DRAKE BLVD.

California Annual Grasslands Alliance	Harding Grass	Coast Live Oak	Grasslands on poorly developed soils	Teasal Alliance (Dipsacus
Cliffs – Rock Outcrops	(French) Broom Alliance (May include	Coyote Brush / Annual or Perennial	Grasslands on well-developed soils	Temperate Broadleaf Cold Season
Coast Live Oak – Douglas-fir (A small component of conifer cover [< or =	California Bay (pure)	Coyote Brush – California Sagebrush –	Madrone – California Bay – Tanoak	Valley Oak – Coast Live Oak Mapping
Douglas-fir - Mixed Hardwoods in upland drier settings (Coast Live Oak,	California Bay – Coast Live Oak	Coyote Brush - Mixed Shrub / Grass (May include Poison Oak or California Blackberry with mixture of grass	Mixed Willow Mapping Unit (Arroyo Willow, Red Willow, and Yellow Willow	
Douglas-fir	Chamise (Stands with a co-dominance of chamise with other shrub species such as Sticky Monkey-flower or	Douglas-fir Mixed Hardwoods in upland forest settings (California Bay,	Redwood / California Bay	
Grasslands with a fern of \$1,409/2018	Coast Live Oak / (Grass-Poison Oak)	Roy's Redwoods Site Analysis Technical Memo Douglas-fir - California Bay Mapping Unit (May include Coast Live Oak as an	0 Redwood - Douglas-fir - (Mixed	107 of 130
and the state of the second states		onin (way include coasi live oak as an	Seasonally or Temporarily Flooded	a state of the sta

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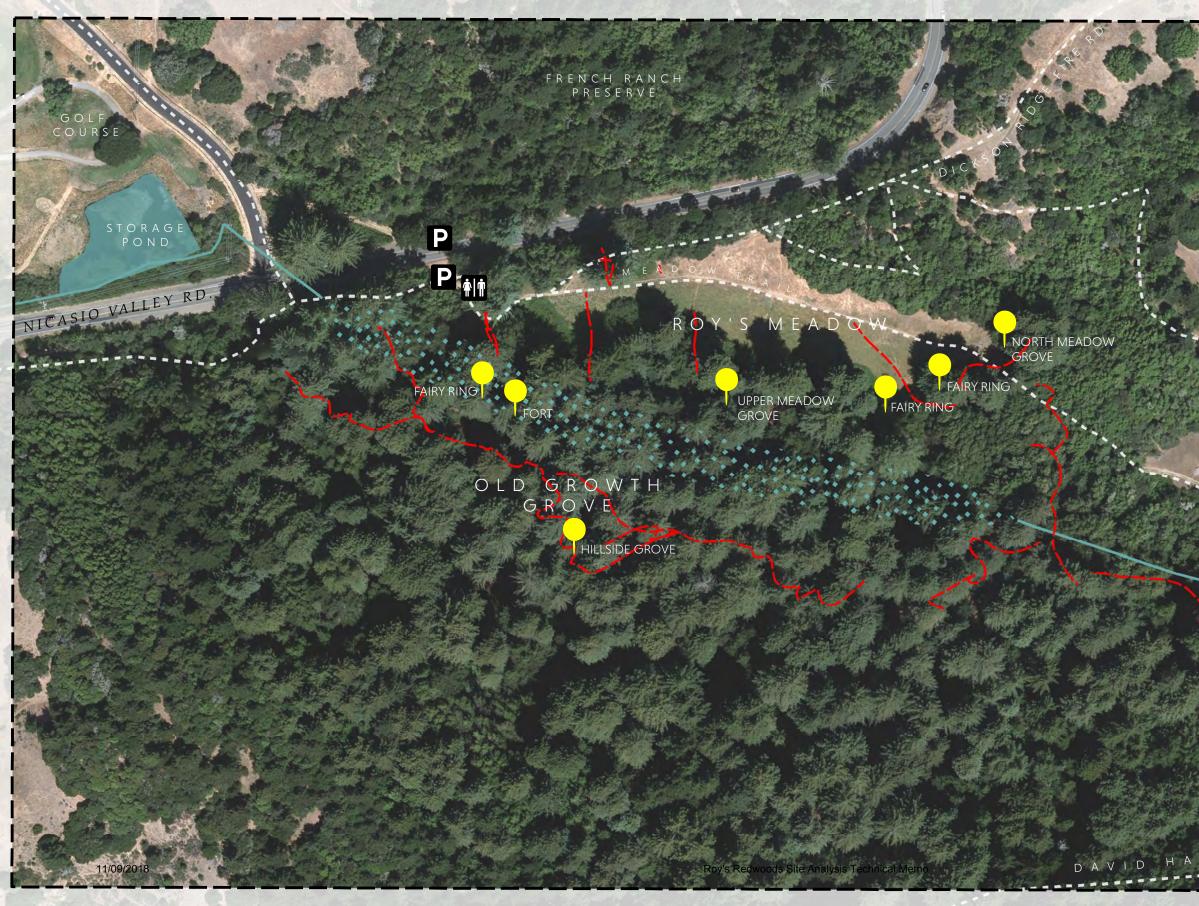
AREA OF FOCUS // ROY'S REDWOODS



Trail

Social Trail Braided Stream

Creek / Stream Point of Interest





PROJECT AREA VEGETATION // ROY'S REDWOODS

500 Feet

Trail Creek / Stream Braided Stream

Avena spp-Bromus spp Cynosurus echinatus-Arrhenatherum elatius/ Dichelostemma capitatum

Sequoia sempervirens-Umbellularia californica

Juncus phaeocephalus

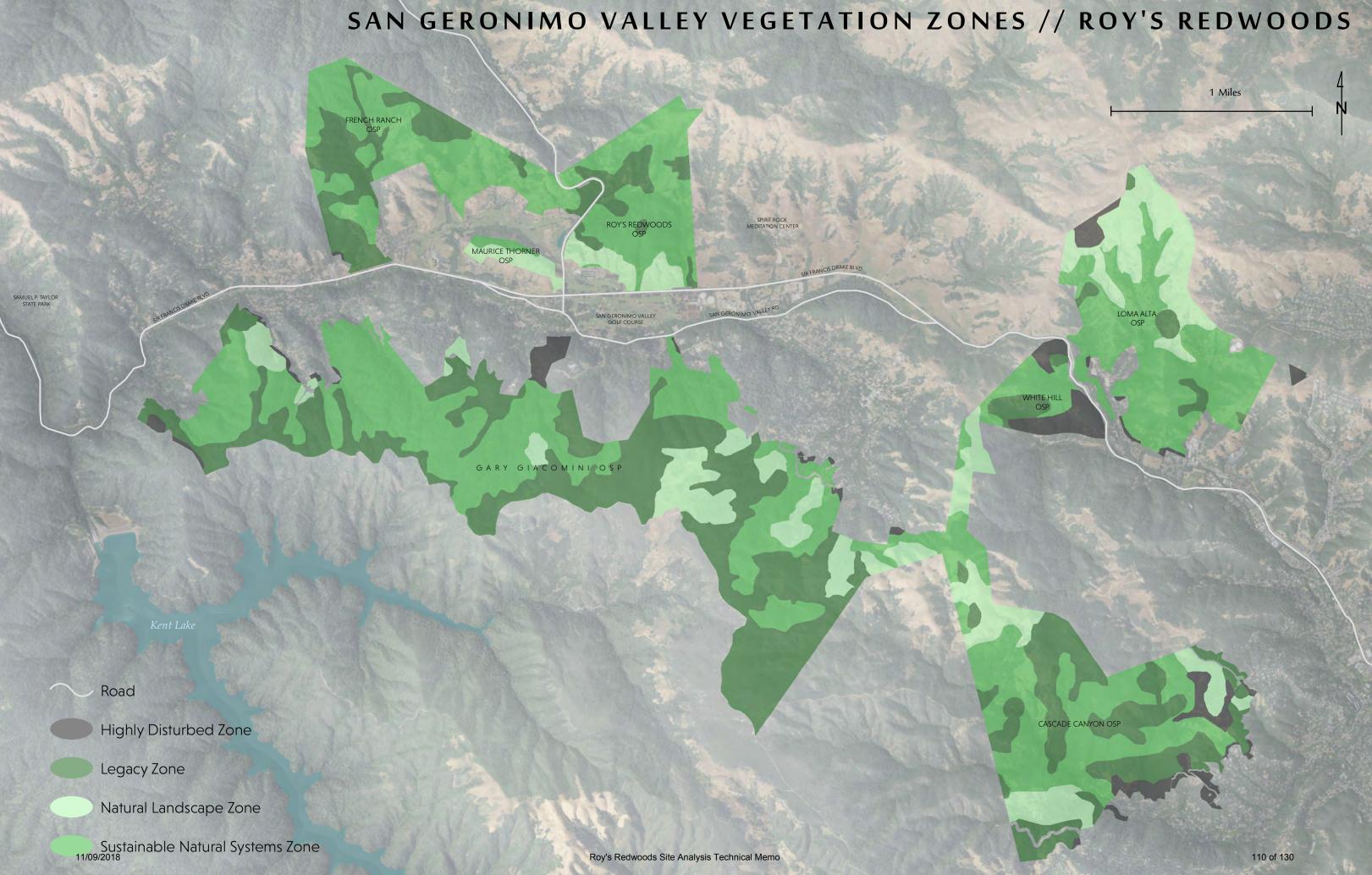


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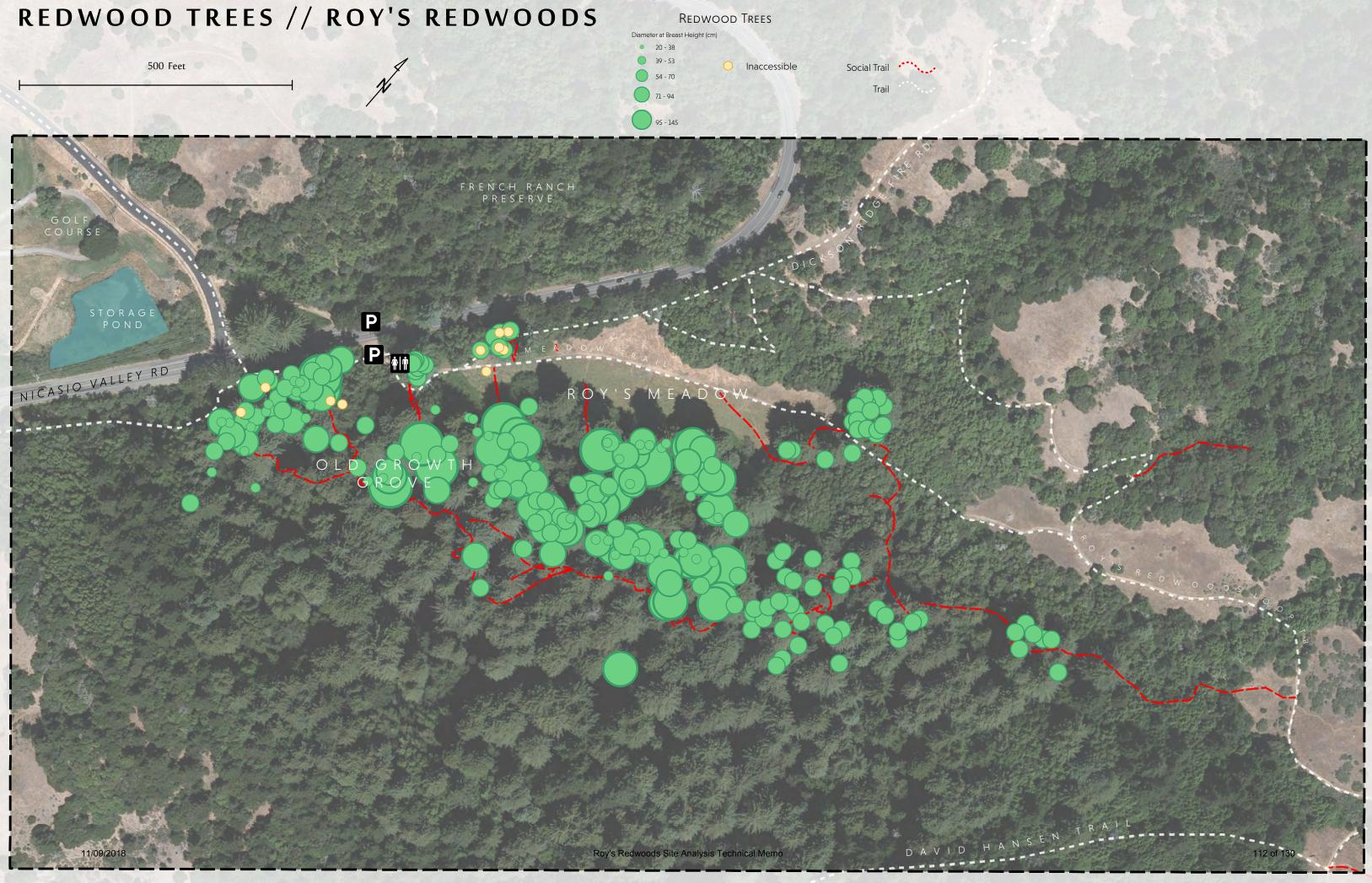
Rubus ursinus

Vegetation Data Source: Roy's Meadow Grassland Community Assessment, Benson , 2016.



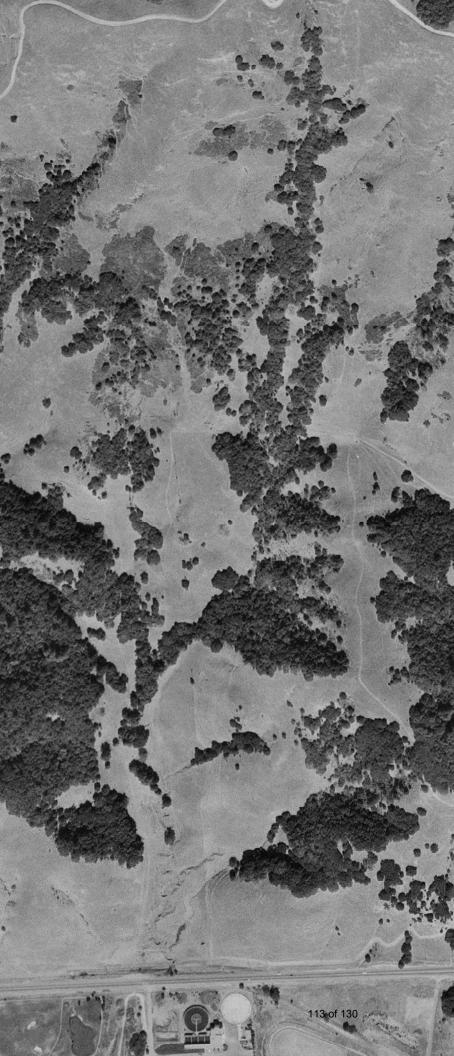






1971 AERIAL PHOTO // ROY'S REDWOODS

1,000 Feet



1954 COLOR INFRARED AERIAL PHOTO // ROY'S REDWOODS

- Star

(TEC)

Roy's Redwoods Site Analysis Technical Memo



1952 AERIAL PHOTO // ROY'S REDWOODS

1,000 Feet



Workshop Agenda

- 10:00 Welcome (Tori)
 - Welcome workshop participants
 - Introduce Tori and Claire
 - Describe impetus for the project
- 10:10 Project Goals & Timeline (Claire)
 - Review Workshop Goals
 - Review Workshop Agenda
 - Project Schedule & Goals
 - First of three workshops
 - All three workshops will generate a site inventory & analysis to guide site and restoration planning
 - Focus of analysis will be the opportunities, constraints, and implications for planning
 - Hydrology consultant
- 10:15 Visitor Survey Overview (Danny)
 - Copy of draft methodology and questions are on each table
- 10:20 Introductions
- 10:40 Roy's Redwoods Site Inventory & Analysis to Date
- 11:00 What background information and data is missing? (Breakout Groups)
 - First part of the day will focus on inventory; plan to shift to analysis after lunch
 - Additional reports or work done we should review
 - Observations or site experience we should capture/correct
 - What site residence and users, human and otherwise, do we need to consider? What spatial patterns and ecological process and human use do we need to understand? For example, what site factors influence spotted owl presence and nesting? What might we need to understand about their food chain, like woodrats, to make best decisions?
- 12:00 Lunch

12:30 Opportunities & Constraints (Breakout Groups)

- What is the interplay between site conditions? What are the primary drivers?
- How do changes in vegetation relate to other site factors? Wildlife?
 Hydrology? How? What vegetation types do we want to conserve and steward? What areas need to be actively managed?
- How is current hydrology impacting site conditions? What do we need to know? What changes could we consider to improve water quality and reduce sediment?

- To what degree are social trails impacting hydro? Hydro impacting social? What goals associated with the creek might dramatically impact visitor circulation? To what degree has Larsen created circulation verses the other way around?
- What conditions are needed to preserve and foster special species habitat? Other habitat types or species we should consider? What current or proposed would impact positive/negative?
- What types of visitor experiences should Roy's offer? How can we best support those considering the above? What management actions would be needed?
- What sort of visitor infrastructure could we consider that preserves the immersive canopy experience while better protecting sensitive root systems and allowing for understory regeneration?
- What level of trail development appropriate for site conditions? For visitor experience?
- What educational opportunities does the site offer? What infrastructure is needed to best support? What impact might that have? Is Roys the right place? Why/why not?
- Are there conditions adjacent to the site we need to consider? Should planning efforts include a broader scope of analysis?

1:45 Next Steps

- What data is needed to further this investigation?
- Is there information we can gain from the visitor use study that is critical?
- What are important questions to pose in the second workshop?
- What is the best format for the third workshop pubic verses reconvene?
- 2:00 Workshop Ends

If time allows, draft goals and vision for an improved Roy's Redwoods.

- What are your primary concerns given the information?
- What goals and objectives would you urge the MCP to consider?
- What should the vision for Roy's include? What should it not include?

Roy's Redwoods Site Inventory and Analysis Workshop: Breakout Sessions' Meeting Notes

Tuesday, May 9th, 10:00 a.m. – 2:00 p.m. Fairfax Community Church at 2398 Sir Francis Drake Blvd. Fairfax, CA 94930

Table 1: Danny Franco, Facilitator, Associate Project Manager, Golden Gate National Parks Conservancy (Conservancy) David Herlocker, Naturalist, Marin County Parks Jean Berensmeier, Chairperson, San Geronimo Valley Planning Group Sarah Phillips, Urban Streams Coordinator, Marin RCD Shannon Burke, Naturalist, Marin County Parks

Table 2: Zac Stanley, Facilitator, GIS Specialist, Conservancy Renée Cormier, Avian Ecologist, Point Blue Conservation Science Mischon Martin, Chief of Natural Resources, Marin County Parks Karen Weiss, Senior Environmental Scientist, CA Department of Fish and Wildlife Mia Bianchi, Scientific Aid, CA Department of Fish and Wildlife

Table 3: Tori Bohlen, Facilitator, Resource Specialist, Marin County Parks Lisa Michl, Resource Specialist, Marin County Parks Sharon Farrell, VP Stewardship and Conservation, Conservancy Gabe Reyes, Bat Ecologist, USGS Caroline Christman, Senior Project Manager, Conservancy Deborah Zierten, Education and Interpretive Program Manager, Save the Redwoods League

Table 4: Liz Westbrook, Facilitator, Project Manager Consultant Christina Tom, Senior Environmental Scientist, SF Water Quality Control Board Mia Monroe, Marin Community Liaison, NPS Sue Townsend, Wildlife Ecologist, Wildlife Ecology and Consulting Ryan Watanabe, Marine Biologist, CA Department of Fish and Wildlife

Table 5: Jon Campo, Facilitator, Senior Natural Resource Planner, Marin County Parks Bill Merkle, Wildlife Ecologist, NPS James Hansen, Environmental Scientist, CA Department of Fish and Wildlife Rachel Kamman, Hydrologist, Kamman Hydrology Shelly Benson, Botanist, Biological Consultant

Site Inventory: What are we missing?

Site History and Background

Find other historic aerials to identify the historic extent of the redwood grove, grazing, and alignment of Larsen Creek

Jean Berensmeier's memories of the site:

- The redwood understory at Roy's was "intact" during the cattle/grazing period (before 1980)
- Within 2 months of Roy's being opened to the public in 1977 the understory of the redwood grove was trampled and County Parks was forced to put in a toilet and trashcans to reduce litter on the Preserve
- The locals simply love visiting Roy's
- The weeds and invasive plant populations exploded in the meadow when the mowing began

Wildlife

Most tables discussed the need for increased understanding and analysis of wildlife on the site, in addition to Northern Spotted Owl. The following captures guiding questions developed to lead the refinement of the site inventory and analysis, as well as data sources identified for additional information.

What other raptor and old-growth dependent bird data is available for Roy's and adjacent properties?

- Data sets to review: NSO monitoring, E-bird, breeding bird survey, Christmas bird count
- NPS list of old-growth dependent bird species for indicator species
- Monitoring the dusty-footed wood rat as prey for other indicator species

What amphibian and reptile survey data is available?

- Data sources: anecdotal information from community, iNaturalist, other?
- Potential threatened species: yellow-legged frog, red-legged frog, giant salamander
- Would additional survey(s) be necessary?
- Map Spring box on Roy's where there are Giant CA Salamanders located up the hill from the watering trough

What invertebrate survey data is available?

• Data source: iNaturalist

What other fish species exist on the adjacent properties and Preserves?

• Data sources: San Geronimo and Larsen Creek inventories, EIR from Larsen Creek and San Geronimo Creek projects

What is the impact from the cessation of mowing in 2011 at the Meadow?

- How has it impacted the foraging habitat for the Northern Spotted Owl, other raptors, or terrestrial mammals?
- What are the social and wildlife benefits to resuming mowing of the meadow?
- What are habitat benefits of the unmowed meadow?
- What species use the meadow to hunt?

Clarification of Northern Spotted Owl Habitat and Foraging (Renée Cormier, Point Blue)

- There has been a documented pair of spotted owls nesting in Roy's for at least 10 years
- Meadow is not used by NSOs for hunting they typically hunt in nesting areas and habitat gap zones
- NSO's stopped nesting at Roy's between 2011 and 2016, successful nesting pair were observed again in 2016

Additional Wildlife Data to Include and Review to understand what role Roy's plays in the broader regional context

- o Review analysis of the Wildlife Picture Index
- Review species found in open grassland versus the redwood forest (e.g. American Badger seen in redwood forest)
- Review Conservation Lands Network Critical Wildlife Linkages map
- Review Road kill data from the California Roadkill Observation System
- Anecdotal western pond turtle crossing of Nicasio Valley Road and Sir Francis Drake Blvd from Christina Tom

Vegetation

Consider updating vegetation maps with the following information:

- Map location of large downed redwood trees and standing snags play a significant role in circulation and wildlife value
- Map fire history (e.g. 2013 fire) and fire scars on redwoods (scars provide good habitat value)
- Map locations of other redwood groves in San Geronimo Valley Roy's is the only old growth in the Valley
- Map Douglas Fir composition on-site

Consider an updated assessment of the redwood grove (previous assessment was conducted in 1979)

- Provide an updated documentation of tree height, diameter and age of trees
- Describe the density, logging history, structure, impact of grassland near forest, composition and health of the forest
- Assessment to determine what factors impact understory vegetation? Lots of nightshade and violet

Consider mapping or listing invasive species on golf course and adjacent properties

Review the Save the Redwoods League climate data and climate change models from Samuel P. Taylor redwood forest (within a couple miles of the site)

Hydrology

Review water rights along Larsen Creek (e.g. golf course storage pond for irrigation)

Consider adding the following information to hydrology map(s):

- Larsen Creek alignment from the 1952 aerial
- Springs, seeps, and spring box location
- Roy's Pools and SPAWN restoration projects on the lower portions of Larsen Creek
- Fish passage barriers lower Larsen Creek

Hydrologic report should describe:

- Headwaters to Larsen Creek
 - o Underground
 - o Wildlife refuge
 - Some social trails but it is very steep and thick with poison oak (natural barrier to public access)
- Distance to groundwater
- Sediment deposits on hillside and in the valley

Public Access

- Update public access maps with the following information:
 - Map trail conditions as it related to erosion (see Fire Road Study and Roy's Loop Study)
- Check County Records for traffic, bike and pedestrian incidents on Nicasio Valley Road
- Review MCP Group Permits for Roy's Redwoods (obtained from Jon Campo)

Visitor Survey

Items to consider:

- What other redwood parks do they visit?
- Do they want better connections to adjacent Preserves?
- Has visitor use increased now that Muir Woods visitor accessibility has decreased?
- Document unpermitted commercial use/summer camps at Roy's

What is the right area of focus?

• The meadow, redwood grove and alluvial area of Larsen Creek is the appropriate area of focus but it needs to be set into the larger context of the San Geronimo Creek and Lagunitas Creek watersheds

Workshop 2 and 3

- The Workshop should include an overview of land use history as well as the hydrologic, wildlife, and vegetative significance of Roy's Redwoods
- It would be helpful to have more of the visitor and hydrologic data available by the third workshop
- Way to frame workshop:
 - What would you do if your priority was ONLY restoration?
 - What would you do if your priority was ONLY visitor access?
 - What would you do if your priority was to best accommodate both?

TOPIC AREA	OPPORTUNITY	CONSTRAINT	IMPLICATIONS, QUESTIONS, NOTES, ETC
Meadow Trail and Restoration	Trail through meadow offers opportunities for visitors to view the grove	Creates a challenge to restoration, as the trail bisects the meadow	NPS is moving away from constructing trails that pass through meadows
	Boardwalk construction for public access	Boardwalks are intensive and costly for the number of visitors, boardwalks reduce light to vegetation underneath	
	Native grassland restoration of the meadow area	Replacing the non-native grasses in the meadow would be a long-term undertaking, due to pressure from adjacent non-natives and high visitor traffic	Is this the right area to invest in grassland restoration? Are there other areas of higher resource value?
	Mowing or burning of the meadow to improve small mammal habitat		
Redwood Grove	Restore and protect understory vegetation to preserve the health of the old-growth forest		
	Restore and protect the most sensitive area of the old-growth redwoods		
	Consider existing California Bay understory as more appropriate/tolerant play area for the public use	Find a way to protect the fallen branches and trees that are currently used for fort building, which impacts their habitat value	The allelopathic nature of the Bay duff makes the understory naturally less dense

Site Opportunities and Constraints

TOPIC AREA	OPPORTUNITY	CONSTRAINT	IMPLICATIONS, QUESTIONS, NOTES, ETC
	Identify favorite areas within the grove; ensure access to these and prioritize restoration elsewhere		Note that the "fairy ring" area is adjacent to a Bay-dominated area.
	Herlocker's Redwood Loop Trail: Create spur trail at the new bridge over the creek at Roy's Loop just south of the trash/toilets. The existing bridge already gets people on the south side of the creek. New trail could extend north thru the understory at the toe of slope. A second, channel spanning bridge, would get people back over the creek at the Fairy Ring area.	There is no designated trail to access the redwoods grove, likely creating the existing web of social trails	
Larsen Creek	Restoration projects that reduce sediment delivery and improve groundwater recharge		
	Flood bank restoration with vegetation could stabilize alluvial sediment		
	Construct system of elevated boardwalk and bridges through the braided channel area of the creek	The concept of an elevated trail/boardwalk in the redwood understory should consider the permitting implications of putting piers in "waters of the US"	Bridges should be channeling spanning to reduce impact on the creek
		This would be a dramatic change in visitor experience from current condition.	
		High construction and O&M cost from existing	
	Allowing creek play in a designated area to foster next generation of conservationist	What precedent does this set?	
		How to buttress the channel with stone or other methods to prevent degradation?	
		Would allowing creek play invite further channel exploration and degradation in the more sensitive areas?	

TOPIC AREA	OPPORTUNITY	CONSTRAINT	IMPLICATIONS, QUESTIONS, NOTES, ETC
	Improve Larsen Creek for fish habitat and spawning	Restoration for fish would require the creek to be daylighted through the golf course and fish barriers removed from storage ponds	
	Potential for the golf course to be a partner (already a partner with SPAWN on a Larsen Creek restoration project)	Herbicide, pesticide and rodenticide used by the golf course create water quality challenges	
		The presence of bull frogs in the golf course storage ponds could impact CA red-legged frog restoration projects on Roy's	
Public Access	Reduce the amount of social trails and trail redundancies, including the removal of the social trail that goes near NSO nesting sites or other sensitive wildlife hot spots	How to more evenly distribute public access?	
	All future trail work should address current trail erosion issues of sediment moving down the system and its potential to negatively impact stream health/fish habitat.		This could be accomplished by means of rolling dips, mulch/surfacing improvements and improved trail maintenance
	Create designated nature play area	How would nature play and creek play be regulated?	Examples of regional nature play: Joaquin Miller Park, Roberts Park, Henry Cowell Park, Berkeley's adventure playground
	Construct fencing as opposed to an elevated platform/boardwalk because it is a more "immersive" trail type	MCP has never designated or signed part of an open space/preserve as "OK to trample", wondering if the precedent would "raise eyebrows"	
	Closing areas to public access is an opportunity to educate the youth and the broader public about the value of the resource.	Embrace the teaching/learning opportunities provided by Roy's because children respond to "rules and role models", i.e. there is simply a need for clear boundaries	

	On-going visitor use monitoring at Roy's	How can MCP leverage ongoing programmatic/volunteer programs as the means to achieve the monitoring?	
	Opportunity for ADA compliant trails through the meadow and redwood understory		
	Opportunity for trails/ropes course through the canopy		
		Nicasio Valley Road is a connectivity barrier for pedestrian due to current parking configuration and speed that cars travel along that stretch of roadway	
	Design for the current demographics of Marin County: Older, exploring site with grandchildren, trails easily accessible to parking, educational waysides		
Wildlife	Increased wildlife monitoring beyond camera program, particularly for non-raptor species of bird, bats – focusing on specific indicator species, old-growth dependent species, terrestrial connections, collar data collection (eg culvert and roadway monitoring)	Nicasio Valley Road is a connectivity barrier for pedestrian and terrestrial wildlife	
		Presence of bullfrogs in ponds would hinder any effort at trying to restore CRLF population	

DRAFT AGENDA – ROY'S REDWOODS WORKSHOP 2 Wednesday August 2nd, 2017, 4-7 PM

4-5:00 PM - Roy's Redwoods Preserve Site Walk Trailhead gate at Nicasio Valley Rd. (approximately 0.5 miles on right from Sir Francis Drake Blvd)

5:15-7 PM - Lagunitas School Multi-Purpose Room (h'ourdevers provided) 1 Lagunitas School Road, San Geronimo, CA 94963

4:00 - Project Overview, Workshop Agenda & Goals

- Introductions
- Introduce Project
- Brief on Workshop Agenda & Goals

4:10 - Site Walk

5- 5:15 - Break to reconvene at Lagunitas School and serve h'ourdevers (approximate 5 minute drive)

- 5:15 Sign In
- 5:30 Site Inventory & Analysis to Date
 - Brief on Site Inventory & Analysis to Date
 - o Technical Workshop
 - Site History & Literature Review
 - Public Access & Visitor Experience Study
 - Site Hydrology
 - Vegetation and Wildlife Inventory
- 5:40 Stakeholder Site Knowledge
 - Station 8 What words describe Roy's to you?
 - Introduce stations and goals
 - Station 1 Destination redwood groves in Marin
 - Where do you go to see and/or take people to see redwood trees in Marin?
 - o Is there a particular redwood grove visited for 'old growth' trees?
 - o Is Roy's Redwoods a destination redwood grove?

Station 2 - Place-names and Points of Interest

- What parts of Roy's do you visit and what do you call them?
- How do you access these points of interest?

Station 3 - Visitor experience at Roy's

• What do you do at Roy's?

• What do you enjoy or experience?

• What improvements would you like to see?

- Station 4 Wildlife
 - o Do you have additional wildlife observations?
 - Are these common or rare wildlife sightings?
 - Does the meadow provide habitat for NSO prey?

Station 5 - Vegetation

- Is restoration of the meadow important?
- Do you know of additional rare species at Roy's?

Station 6 – Historic Aerial Photos

- How has Roy's changed over time?"
- 6:35 Recap and Open Discussion

7:00 – Workshop End

Notes from Roy's Redwoods Workshop 2

Wednesday August 2nd, 2017, 4-7 PM

4-5:00 PM - Roy's Redwoods Preserve Site Walk, 5:15-7 PM - Lagunitas School Multi-Purpose Room

Name	Organization	
Audrey Fusco	SPAWN/Turtle Island Restoration Network	
Barbara Salzman	Marin Audubon Society	
Claire Mooney	Golden Gate National Parks Conservancy	
Dan McKenna	SGVPG	
Danny Franco	Golden Gate National Parks Conservancy	
David Herlocker	Marin County Parks	
Denis Rodoni	Marin County Board of Supervisors	
Diana Dougherty	Dougherty Ranch	
Eva Buxton	California Native Plant Society	
Greg Zitney	Marin Conservation League	
Jean Berensmeier,	San Geronimo Valley Planning Group	
Jon Campo	Marin County Parks	
Laura Shain	Lagunitas School District	
Lauren Hammack	Prunuske Chatham, Inc.	
Linda Nave, Jane Seyer	San Geronimo Valley Planning Group	
Linda Novy	Marin Horse Council & Marin Conservation League	
Lisa Michl	Marin County Parks	
Maryrose Kulick	Golden Gate National Parks Conservancy	
Mickey Allison	Sierra Club Marin Group	
Mischon Martin	Marin County Parks	
Morgan Patton	EAC	
Paul Berensmeier & Tina Whyte	Local residents and son of Jean	
Rhanda Kutler	Marin County Board of Supervisors	
Rob LaPorte	Golden Gate National Parks Conservancy	
Robert Eichstaedt	Foot People	
Sharon Farrell	Golden Gate National Parks Conservancy	

Circulation

- Loop trails are desired.
- Key destinations:
 - o Fairy ring at the end of the meadow trail
 - o View over Spirit Rock
 - o The spring
 - o The redwood grove
- Jean noted that since the new trail has been established at the trailhead she has observed its influence on the circulation pattern to direct visitors more through the redwoods rather than to the meadow trail.

- Equestrians use the loop and peripheral trails.
- Some illegal bike use occurs on preserve trails.

Biological Resources:

- Common wildlife sightings: bobcat, coyote, deer, great horned owl, red-tailed hawk, wilson's warbler, ravens, turkey vultures, yellow-jackets, northern spotted owl, fence lizard, newt, butterfly.
- Native habitat restoration is a priority however should be achieved in balance with visitor experience and opportunities to play and discover. Restoration should be focused on the most biologically important areas.

Visitor Experience:

- What one word best describes Roy's Redwoods?: Calm; Majestic; Sanctuary; Not crowded; Quiet; Ancient; Giants; Beauty; Scale; Magical; Nature's Playground; Peaceful; Meandering; Sanctuary; Cool Breeze; Peace!; Native; So Impressive; Roy's bottomland feels: Safe.
- Information kiosk at trailhead is desired. Signage within preserve should be limited to minimal wayfinding. Potential interpretive themes:
 - History of Roy's Redwoods. Particularly the story of protecting Roy's Redwoods as the first public open space preserve in the San Geronimo Valley.
 - Redwood trees.
- Balancing visitor impacts to biological resources with a sense of discovery and exploration is important.
- Speed of travel and lack of space along Nicasio Road is a safety concern at trailhead and the noise generated by traffic is disruptive to the experience.
- Universal access to the redwood grove is an important goal.
- Roy's is an easy hike from the schools and its use for children is a priority. School groups are
 always supervised by teacher and/or teacher aid when coming to Roy's. Roy's is a very valuable
 experience for the school children especially with the opportunity to explore. Establishing a
 structured or guided experience that provides opportunity to play and explore while in balance
 with preserving habitat would be appreciated.
- Eroded trails, downed logs, as well as lack of clear trails are primary concerns which have a major impact on access for those with limited mobility.
- Feedback suggests a blend between a Sensitive Resource Area and a Conservation Area experience is desired.
 - Sensitive Resource Area: "Visitors perceive and experience a relatively undisturbed, minimally developed natural environment, with few encounters with others, opportunities for solitude, and wildlife viewing" (RTMP).
 - Conservation Area: "Visitors experience easy access to a primarily natural landscape and good views. Opportunities for solitude and wildlife viewing may be more frequent in proximity to the Sensitive Resource Areas: but encounters with other visitors may be

frequent, and wildfire viewing may be compromised in proximate to Impacted Areas" (RTMP).

Visitor Purpose:

- Exercise: running and hiking.
- Recreation: hiking, dog walking, and horseback riding.
- Experience nature: wildlife viewing, discovery, education, relaxation, nature play, and meditation.
- Socialize: birthdays, storytelling, weddings, celebrations of life, and playing music.