

BEAR CREEK REDWOODS OPEN SPACE PRESERVE

preserve plan

FINAL SUMMARY REPORT
JANUARY 2017



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00. EXECUTIVE SUMMARY

The Bear Creek Redwoods Preserve Plan (Preserve Plan) is a long-term use and management plan for the 1,432-acre Bear Creek Redwoods Open Space Preserve (Preserve). Developed over the course of more than 10 years, the Preserve Plan synthesizes extensive technical data, comments received at nearly 20 public meetings, and thorough analysis by expert consultants and an interdisciplinary District project team, into specific actions to implement the Preserve vision.

Stewardship actions, including noxious weed abatement, erosion reduction, aquatic habitat enhancement, and cultural resources protection, are given the highest priority. The Preserve Plan also calls for improved visitor access facilities, including three new parking areas, new and reconstructed hiking and equestrian trails, and a multi-use trail connecting Lexington Basin to the Skyline-Summit Area to be implemented in three phases.

Phase I Actions during the first 1-3 years focus on stewardship and visitor access improvements to open the western Preserve zone (west of Bear Creek Road) to hiking and equestrian access. Major site repairs and improvements at Bear Creek Stables and initial rehabilitation of the former Alma College site are scheduled in Phase II, during years 4-10. Opening of the northeastern trails to general hiking and equestrian use, and the addition of a multi-use through trail are also targeted for completion in Phase II. Phase III focuses on completing trail connections and natural resource enhancements in the southeastern Preserve zone during years 11-20.





The Preserve Plan phasing is summarized below.

Phase I Key Actions (Years 1-3)

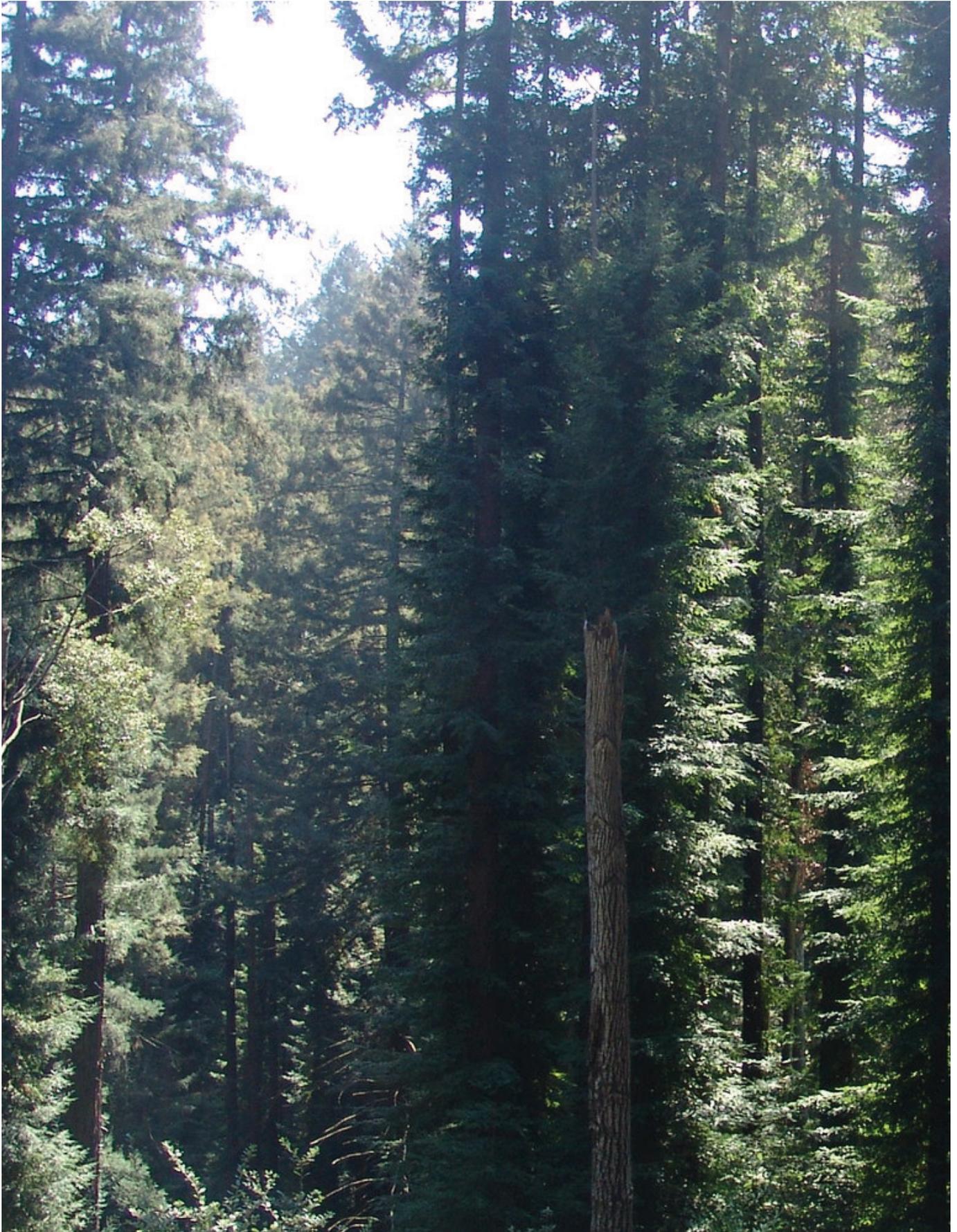
- Implement high priority resource management projects, including invasive species removal, drainage improvements to reduce erosion, and pond enhancements;
- Construct the Alma College Parking Area; formalize an at-grade pedestrian crossing of Bear Creek Road; and construct a new, 0.5-mile connector trail to the existing road network in the western Preserve;
- Open the western Preserve to hiking and equestrian use; treat invasive species, improve roads, and install gates and signage; construct one vehicle bridge and possibly one large retaining wall; and repair or replace the Webb Creek culvert under Bear Creek Road;
- Implement high priority improvements to Bear Creek Stables, including: construction of a livery stables and public arena; improvements to paddocks and shelters in the boarding area; hillside restoration; improvements to driveway, parking, and other critical facilities; new restroom; demolition of dilapidated structures; stabilization of old stables building; and construct water infrastructure and distribution system. Construction likely to continue into Phase II;
- At the former Alma College site: manage vegetation; demolish hazardous structures; stabilize chapel and library (dependent on County's permitting approval, to be completed in Phase II); or upgrade perimeter fencing as needed to restrict access to a closed area.

Phase II Key Actions (Year 4-10)

- In the eastern Preserve zone: install drainage improvements; reroute existing trail; construct stream crossings, including one vehicle bridge and up to two pedestrian bridges; and install gates, fencing, and signage as necessary to open eastern zone to general hiking and equestrian access;
- To create the northern segment of the new multi-use through trail: construct approximately 1.75 miles of new trail; formalize connections to Lexington County Park and the Skyline-Summit area; and open the multi-use through trail to hiking, equestrian, and bicycle use;
- Complete improvements to Bear Creek Stables, including: additional road and parking improvements (Stables public parking area); and replace hay barn and caretakers house;
- At the former Alma College site: complete structural stabilization of the northern retaining wall; install permanent safety barriers as needed; rehabilitate pathways, terracing, shrines, roman plunge, lily pond, Tevis mansion footprint, and other cultural landscape elements through minor construction and vegetation management; install interpretive signage (May be completed in Phase III).

Phase III Key Actions (Years 11-20)

- Construct approximately three (3) miles of new trail to complete a connection to Summit Road in the eastern Preserve zone;
- Construct north Parking area, if necessary.



01. INTRODUCTION

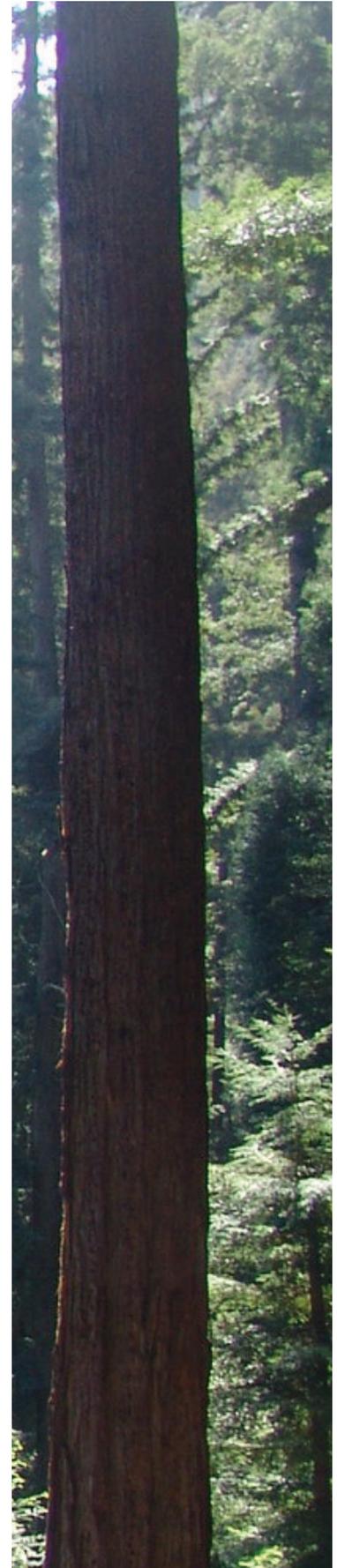
Bear Creek Redwoods Open Space Preserve (Bear Creek Redwoods, the Preserve) is an approximately 1,432-acre property located in the central western portion of Santa Clara County, on the eastern slope of the Santa Cruz Mountains. As its name suggests, Bear Creek Redwoods (Figure 1-1) comprises one of the County's best-preserved, second-growth redwood forests, as well as extensive areas of Douglas fir forest and oak woodland. The Preserve also protects the remnants of a rich cultural history, hosting a close-knit equestrian community at Bear Creek Stables, which has been boarding horses for nearly a century, and the former site of Alma College, the first Jesuit school of theology on the west coast. Midpeninsula Regional Open Space District (MROSD, Midpen, District) owns and manages the Preserve, a portion of which is currently open to hikers and equestrians by permit only. MROSD intends to expand this access over the next 20 years to eventually open over 20 miles of trail to the general public, while at the same time retaining the unique character and resources of this portion of the "last great wilderness of the Santa Cruz Mountains."

A. District Overview

Midpeninsula Regional Open Space District is a public agency formed by voter initiative in 1972. MROSD's purpose is to purchase and permanently protect a regional greenbelt of open space lands, preserve and restore wildlife habitat, watersheds, viewsheds, and fragile ecosystems, and provide opportunities for low-intensity recreation and environmental education. MROSD has protected more than 62,000 acres of land and currently manages 26 Open Space Preserves with more than 225 miles of low-intensity recreational trails, including segments of four regional trails. MROSD lands extend from San Carlos in San Mateo County in the north to the unincorporated Santa Clara County area located south of Los Gatos in the south and represent a wide spectrum of habitat communities, including bayside tidal wetlands, grasslands, oak woodlands, riparian corridors, coyote brush scrubland, and evergreen forests. MROSD's mission statement outlines the critical functions of the agency and how the land is managed, balancing the preservation of open space as with land restoration, and provision for low-intensity public recreation. Specifically, MROSD'S mission is:

"To acquire and preserve a regional greenbelt of open space in perpetuity; protect and restore the natural environment; and provide opportunities for ecologically sensitive public enjoyment and education."

This mission statement serves as the policy framework with which all Preserve Plan goals, objectives, and implementation actions must remain consistent.



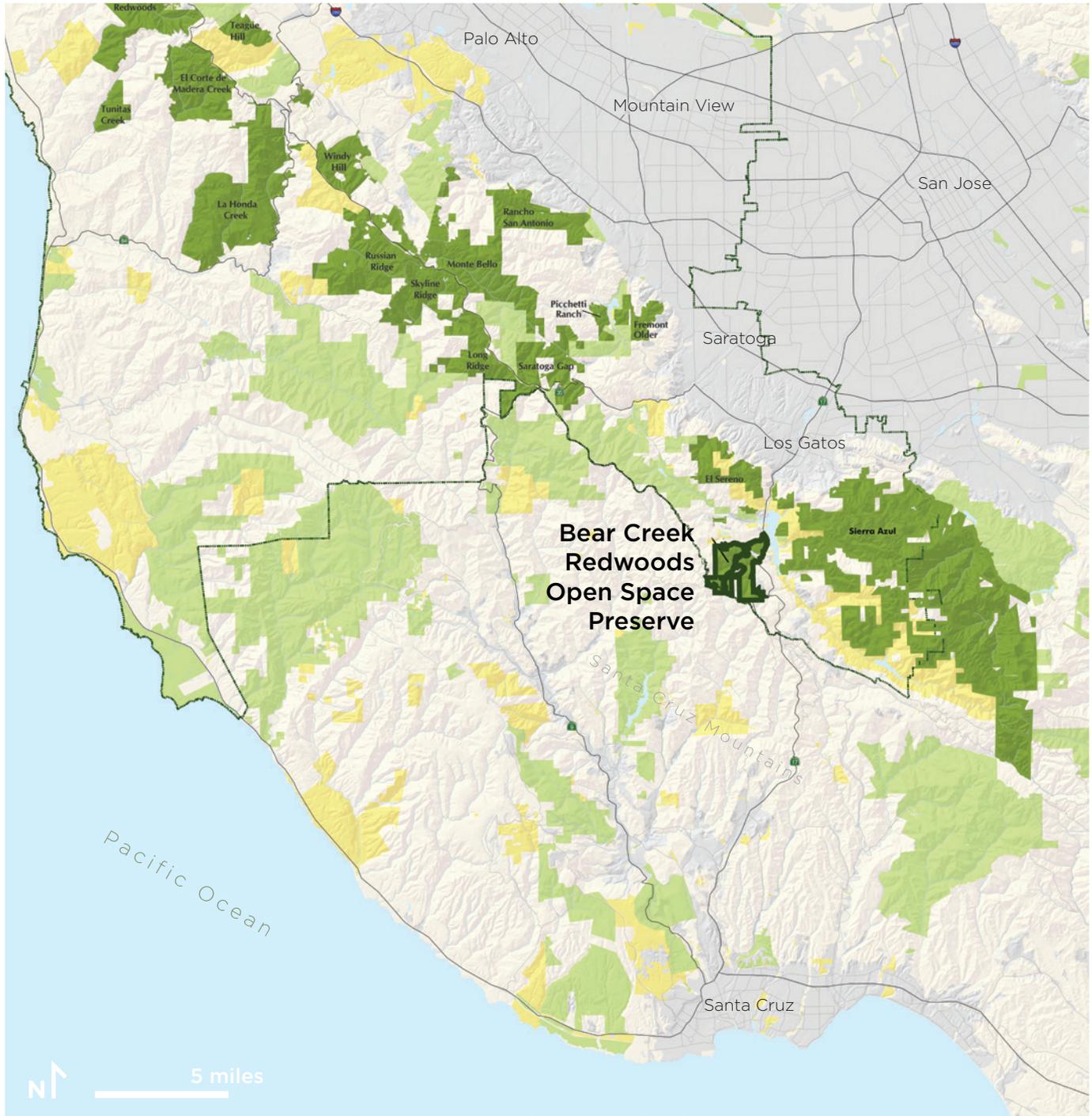


FIGURE 1-1 Regional Base Map

LEGEND

- Preserve Plan Study Area
- Urban
- MROSD preserves
- Privately owned
- MROSD boundary
- Private watershed, land trust, and academic lands
- Major city, county, and state parks, open space preserves, and publicly owned watershed lands

B. Purpose of the Preserve Plan

This Preserve Plan (Plan) represents the completion of a lengthy comprehensive planning effort for the Bear Creek Redwoods Open Space Preserve. The planning process resulted in Preserve-wide goals and objectives that will reinforce the preserve's identity, prioritize actions to manage, protect, and enhance its unique resources, and define the level and extent of allowable uses that are compatible with the land and the vision established for it. These goals and objectives are consistent with Midpen's mission to preserve, protect, and enhance open space and provide for low-intensity recreation.

Implementation of the Preserve Plan will provide the public with greater opportunities for recreation access, interpretation, and education, while protecting the natural, cultural, and historic resources of Bear Creek Redwoods. A series of implementation actions are included in the Plan which address access and regional trail connectivity, species and habitat protection, visitor safety, and maintenance issues. The Plan also provides conceptual-level site plans for new public access facilities, Bear Creek Stables improvements, and rehabilitation of the former Alma College site. The District has gained community consensus in these actions by involving the public throughout the process to identify ideas and interests and arrive at a Plan that directly benefits the resources and the community at large, while being fiscally sustainable over the long term.

i. Preserve Plan Planning Goals

The planning process seeks to achieve the following four overall goals:

Create a long-term vision to guide decisions and management

A key purpose of the Preserve Plan process is to provide a forum for the discussion of long-term decisions regarding the management and improvement of the Bear Creek Redwoods Open Space Preserve. The process focuses not only on current needs but reaches up to 20 years ahead to plan for long-term change and future needs. The process, therefore, is a way to collaboratively create a vision of how the BCR Preserve should ideally look and function over the next generation.

Catalog and prioritize future site improvement needs

Over time, a large and diverse Preserve will require the input of dozens of individuals and organizations with widely varying interests. The planning process provides a forum to research, discuss, and document these interests and needs, from maintenance to historic interpretation, in one central document that can be used as a guide, tool, and work plan. In addition, the process represents an overlay of community values, where priority-setting focuses energy and resources on the most important projects and outlines a logical sequence of future steps towards realization of the overall vision.



Redwood Trees at Bear Creek Redwoods Preserve



Moss on fallen tree

Involve the public and raise awareness of this valuable resource

With the public involvement tools available, a key goal of the planning process is to engage the community in a detailed discussion of the Preserve. To involve people with the Preserve, ask them to take a close, hard look to see the potential, and then to collectively record what they see, is not only a goal of the process, it is the process. Raising awareness carries a number of benefits, a few of which include:

- *Increasing positive, legitimate preserve use*
- *Increasing the pool of volunteer resources*
- *Increasing overall awareness of preserve and public land resources*
- *Inspiring public discussion of general preserve issues and how to approach them*
- *Inspiring donations or uncovering other funding opportunities through networking*
- *Building a stronger community by bringing diverse segments of the community together around a common theme*

Uncover issues and address them

In the course of engaging the public and assessing their values, current issues regarding the Preserve were uncovered. The planning process provides an opportunity to discuss these issues in detail, and affords a means to develop and adopt policies that can address them in the most sensitive and informed way. It creates opportunities for face-to-face discussions with stakeholder groups, and at the same time, allows for the meaningful incorporation of the opinions of the broader community.

C. Preserve Plan Planning Process

i. Previous Efforts and Current Process

The Preserve Plan builds on the extensive data collection and public outreach that was completed as part of the Sierra Azul/Bear Creek Redwoods Master Plan (Master Plan) process, which was put on hold in 2009. Using the vision statement and broad use and management prescriptions for Bear Creek Redwoods that were developed as part of the Master Plan, staff and the consultant team, secured to assist in the planning effort that was reactivated in early 2015, have completed a thorough yet expedient planning update looking both at the entire Preserve as a whole, and also preparing rehabilitation and improvement alternatives plans for Bear Creek Stables and Alma College-the two key areas within the Preserve.

The renewed impetus to complete the planning for the Preserve is due to the recent passing of Measure AA, a \$300 million general obligation bond approved in June 2014 by over two-thirds of Midpen voters. The Bear Creek Redwoods Open Space Preserve Plan supports Measure AA as one of the 25 key project portfolios. Identified as part of the priority actions of these key projects are portions of the Bear Creek Stables Site Plan, Alma College Landscape Rehabilitation Plan, and new facilities for the overall preserve, including trails and parking areas to open Bear Creek Redwoods Open Space Preserve to general public access.

The Preserve Plan represents a vision for the Preserve over the next 20 years. The objective is for this vision to be substantially realized within that time period. In a more pragmatic sense, the Plan will remain valid as long as its policies remain consistent with the needs and values of the public. As attitudes shift, certain aspects of the Plan may come to the forefront, and other aspects may become less important. In this process, the Preserve Plan will remain the framework or tool to make those decisions.

ii. Public Involvement Program

Public involvement is important in any planning process, but crucial for the preparation of this Preserve Plan, considering one of the Plan's main purposes is to study opportunities for opening the Preserve to public access. Part of this includes preserving and improving current uses, such as the activities of the existing Bear Creek Stables, located within the Preserve, and understanding opportunities to incorporate new uses, such as the potential inclusion of regional connections to bicycle routes.

To respond to stakeholders and current and future users aspirations, a detailed public outreach and involvement program was prepared as part of the Preserve Plan process. Similar to the preparation of the Preserve Plan itself, the public involvement program for the Plan was done in two stages: 1) the initial stage, developed between 2005 and 2009, collected stakeholder aspirations to set the overall vision, the Plan goals, and preliminary recommendations, and 2) the second and final stage, developed in 2015-16, secured public input to complete the Preserve Plan and to identify specific immediate, mid, and long-term actions.

Refer to Section 02 of this document for summary of input received. Specially during the final stage of planning, the public involvement program included focused outreach activities for the Bear Creek Stables stakeholders and to the community at-large regarding the former Alma College site. With these efforts the Plan not only recognizes them as key players but as partners for its implementation. All along the planning process has been informed by previously approved and current applicable policies and guidelines, as summarized in Appendix C: Planning Framework.

The initial stage of planning included outreach activities that consisted of sending newsletters, facilitating public workshops and focus groups discussions, and leading tours of the Preserve. The detailed communication plan prepared for this effort included a list of all organizations and entities that would be interested in providing insight and feedback. This became the basis for the preparation of a stakeholder database for mailing and notification of all correspondence related to the Plan and the CEQA environmental review process that served the initial planning process, which later became the basis for building the updated database in 2015. A total of 15 stakeholders were contacted individually via telephone and participated in a detailed interview (see Appendix A1). Additionally, a questionnaire was also prepared and placed on line for stakeholders to participate, responding to questions that would help to ascertain perceptions and desired uses at the Preserve (see Appendix A2).

The first widely distributed public communication regarding the Plan was a newsletter sent in March 2005, to over 3,000 neighbors, landowners, and stakeholders from various agencies, non-profit organizations, and constituents interested in the planning process. The first public workshop was held in April 2005, and approximately 100 people were in attendance. Following this workshop, three focus group meetings were held in July and August 2005, with a group of dog owners, the Bear Creek Stables and equestrian users, and Responsible Organized Mountain Pedalers (ROMP; now Silicon Valley Mountain Bikers).

All three focus groups discussed priorities with District Staff regarding participation in their respective activities. A second newsletter was released in the fall of 2005, followed by a second public workshop on November 10, 2005, with approximately 100 people in attendance. The meeting included presentations by District staff and consultants, the District's mission as the framework for the plan, the planning progress and timeline, Alma College historic research, a summary of stakeholder involvement to date, and an overview of the District's challenges and opportunities analysis. Stakeholders broke out into smaller groups and discussed sensitive resources, recreation opportunities, and use conflicts with sensitive resources by geographical area. A summary of the small group discussions was then presented to all workshop participants.

About one year after the second workshop, in the fall of 2006, a third newsletter was sent out with a brief overview of the project, an invitation to the next public workshop, and a list of ideas that would be presented at the workshop as part of the potential Preserve Plan alternatives. A CEQA-required Notice of Preparation (NOP) was also prepared and mailed at this time to all stakeholders and filed with the Governor's Office of Planning and Research, State Clearinghouse and Planning Unit.

The third public workshop and CEQA scoping meeting took place December 5, 2006, and was attended by approximately 125 people. As with the other two workshops, District staff and consultants gave presentations. The first presentation focused on an update of the planning process including key milestones achieved and how environmental review would be incorporated into the plan. The second presentation discussed the Draft Plan alternatives, the main factors used to develop them, and the key issues covered. Small groups of stakeholders then formed to provide more information about the alternatives and obtain feedback. The public had opportunities to verbalize concerns and issues that should be included in the Draft Environmental Impact Report (EIR) for the Plan, as well as provide written comments.

At this point, the planning process was interrupted due to the District's need, at the time, to focus its energy and limited resources into other pressing priorities. With the passage of Measure AA in 2014, as described above, the District was able to re-start the planning process for this unique natural preserve. Individual planning efforts for the Preserve continued in the period between 2009 and 2016, including additional analysis for the former Alma College site and Bear Creek Stables, completion of a Road and Trail Inventory, and implementation of an intensive invasive species control program.

The final stage of planning of the Preserve Plan included a number of additional public engagement activities, building on input received during the initial stage.

The fourth public workshop for the Preserve Plan was a week-long workshop held in March of 2015, which focused specifically on collecting input for the development of site design alternatives for the Bear Creek Stables (Stables) improvements. The multi-day workshop week started with a 3-hour public open house, held in Presentation Center, adjacent to the Preserve. Approximately 40 people participated in the open house, including the Stables' tenant and boarders, as well as representatives of all groups that currently use the Stables. Participants were presented with a number of exhibits outlining salient issues and opportunities for this key area of the Preserve. They also engaged in one-on-one conversations with District staff and consultants to share their understanding of issues, discuss their aspirations, identify priorities, and other planning criteria. With input and feedback collected during the open house, the Consultant team developed the three preliminary site planning concepts for the Stables area on the second day of the workshop week. These preliminary alternatives were presented to an audience of about 60 stakeholders that returned to the Presentation Center on day three. Participants provided additional feedback in a break-out session held during this meeting, which District staff and the consultants recorded and used to revise the proposed alternatives. The summary of workshop outcomes can be found in Appendix B1.



Bear Creek Stables Open House public workshop, March 2015

In late April 2015, the fifth community meeting was held in Los Gatos, CA. This meeting also took the form of an open house, lasting two hours, where District staff and consultants discussed with participants the goals and objectives of the four Preserve Plan elements, as included in the 2009 draft Plan, and confirmed their validity and relevance, by soliciting input regarding new or revised project aspirations.

More than 100 community members participated in the workshop, including general public, Preserve neighbors, bicycle advocates, hikers, stable tenant and boarders, and the Friends of Bear Creek Stables.

Participants shared their knowledge of the site and other relevant information. Each participant also filled a questionnaire to aid in providing input. Copies of the questionnaires and a summary of workshop results can be found in Appendix B2.

In addition to the public workshops, three Planning and Natural Resource Committee public meetings were held between April and June of 2015. During those meetings, the team of District staff and consultants provided updates on the planning process and collected input from Committee members and the public in attendance to advance the Preserve Plan. Additional input was also received via written communications to staff and the Board of Directors during this period.

In September, Preserve Plan Implementation Actions and Phasing were presented at the PNR committee. Finally, two study sessions were held in winter 2015-16 with the full Board of Directors to explore and confirm public access programming and potential funding scenarios for the Stables.

To confirm assumptions and preliminary recommendations regarding trail access within the Preserve, the consultant team met on May 13 of 2015 with the Preserve's Operations staff to discuss site access, management, and maintenance considerations. Their input was incorporated in the proposals and public access diagrams included in this Plan.

After these meetings and consultations, the Plan's team developed the Preserve Plan Project Description to initiate the environmental review process under CEQA, and released a new Notice of Preparation (NOP) in early June of 2015, indicating the District's intent to prepare an Environmental Impact Report (EIR).

TABLE 1-1 Stakeholder Outreach Chronology

March 2005	Newsletter 1
April 2005	Public Workshop 1
Spring 2005	Questionnaires/Surveys
July 2005	Bear Creek Stables Focus Group Meeting
August 2005	ROMP Focus Group Meeting
August 2005	Dog Owners Focus Group Meeting
Spring/Fall 2005	Land Tours (6)
Fall 2005	Newsletter No. 2
November 2005	Public Workshop 2
Fall 2006	Newsletter 3
November 2006	CEQA Notice of Preparation
December 2006	Public Workshop 3
Summer 2009	Newsletter 4
August 2009	CEQA Notice of Availability
August 2009	Public Workshop 4 / Hearing
August 2013	Stables Use and Management Committee Meeting
March 2015	Public Workshop 5
April 2015	Public Workshop 6
April 2015	Planning and Natural Resource Committee Public Mtg 1
June 2015	Planning and Natural Resource Committee Public Mtg 2
June 2015	Regular Board of Directors Meeting / CEQA Scoping Meeting
September 2015	Planning and Natural Resource Committee Public Mtg 3 / Preserve Plan Implementation Actions and Phasing
February 2016	Regular Board of Directors Meeting / Stables Site Design Alternatives
March 2016	Regular Board of Directors Meeting / Alma College Cultural Landscape Rehabilitation Plan Open House/Stables Site Design Alternatives
May 2016	Regular Board of Directors Meeting / Alma College Cultural Landscape Rehabilitation Plan Alternative Selection
July 2016	Regular Board of Directors Meeting / Stables Site Design Alternative Selection
September 2016	Regular Board of Directors Meeting / DEIR Hearing
January 2017	Regular Board of Directors Meeting / EIR Certification, Preserve Plan Approval

A new CEQA scoping meeting for the final stage of the project took place on June 24, 2015, as part of the District’s regular Board meeting. During this meeting, the public received a brief presentation of the draft Preserve Plan, including focus areas on public access, Bear Creek Stables, and Alma College Rehabilitation. The public then had an opportunity to provide comments on the Preserve Plan elements and the scope of environmental issues that needed to be addressed in the draft EIR.

With feedback and direction collected throughout the public involvement program, District staff and the consultant team prepared the updated draft Preserve Plan and Draft EIR (DEIR). The DEIR was circulated for public review during the fall of 2016. Using the input received, the EIR was certified, and the Preserve Plan approved, in early 2017.



Participants in Preserve Plan public workshops, 2015

D. Content of the Preserve Plan

The Preserve Plan provides the salient points and conclusions of the extensive planning process that took place between 2005 and 2015. As described below in detail, this Plan provides a summary of existing conditions, goals and objectives, and proposed recommendations and guidelines for improvements and management of land referred to as the Preserve, which is defined as land owned by the District and shown within the boundary portrayed on maps prepared as part of the Preserve Plan process.

The Preserve Plan also serves as the Project Description for purposes of environmental review under the California Environmental Quality Act (CEQA). The Environmental Impact Report (EIR) –not included in these documents— was prepared in concert with the Preserve Plan effort. This concurrent process allowed any potentially significant effects that may result from the implementation of the Preserve Plan projects to be avoided or reduced through the project design. Performing environmental analysis at this stage, early in the planning process, creates a Plan for the Preserve that minimizes impacts during the implementation phases. The EIR informs decision makers and the public of the environmental consequences associated with adoption of the Preserve Plan, consistent with the requirements of CEQA and associated CEQA Guidelines.

The Preserve Plan document is organized into the following chapters:

Chapter 1: Introduction

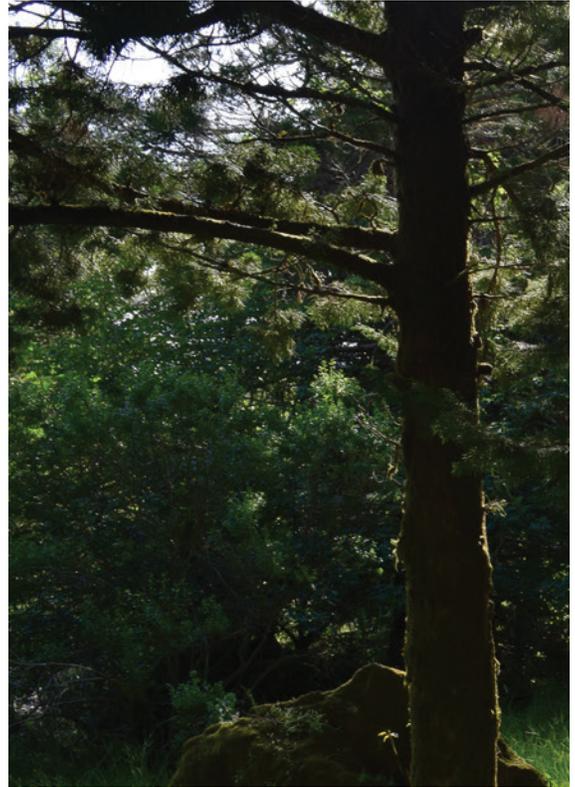
This chapter provides general background information, including a summary of the Midpeninsula Open Space District's planning process; and outline of the contents and organization of this document.

Chapter 2: Existing Conditions and Planning Analysis

The second chapter of this Plan provides a brief overview of the Preserve's current physical conditions and existing facilities. The Existing Conditions and Planning Analysis chapter also lists system wide and regional planning influences affecting the Preserve, and identified opportunities and constraints associated with each of the four Preserve Plan Elements: public use and facilities, natural resources, cultural resources, and maintenance and operations.

Chapter 3: Preserve Plan

The third chapter is organized into the four Preserve Plan elements. For each element, the document identifies the goals and objectives that will direct future management and operation of the Preserve. The Plan also includes specific design and/or rehabilitation recommendations for the Preserve's key areas, Bear Creek Stables and the former Alma College site.



Chapter 4 : Preserve Plan Actions and Implementation Plan

This key chapter provides a summary of implementation action(s) for each of the goals and objectives identified in the initial chapters of the document. It also includes a preliminary phasing plan outlining recommended priorities and actions to address immediate, mid, and long term goals. Capital and operational costs are also provided in Chapter 4.

The last portion of this document includes the references section, which contains a complete list of references, including the organizations and persons consulted during the preparation of this document.

Additionally, a Glossary of Terms and Acronyms included at the end of the document defines terms used in this document and identifies the full name or phrase represented by abbreviations.

The Appendix section of the Preserve Plan includes the Environmental Protection Guidelines for all Preserve Plan actions, records of the public engagement process, selected site studies and other relevant background information.



The Preserve's landscape character near the former Alma College site

E. How to Use this Document

Once adopted, the Preserve Plan will supersede all previous use and management planning decisions. The Preserve Plan is intended to serve a number of key functions, including:

- *Project Description for environmental impact report (Program EIR)*
- *Handbook for implementing an updated vision for the Preserve*
- *Work plan for the prioritized improvements*
- *Criteria for specific work plan projects*
- *Policy framework for decisions affecting the Preserve*
- *Resource management strategy*
- *Direction on funding sources*
- *Planning framework to pursue funding*
- *Tool to raise public awareness*



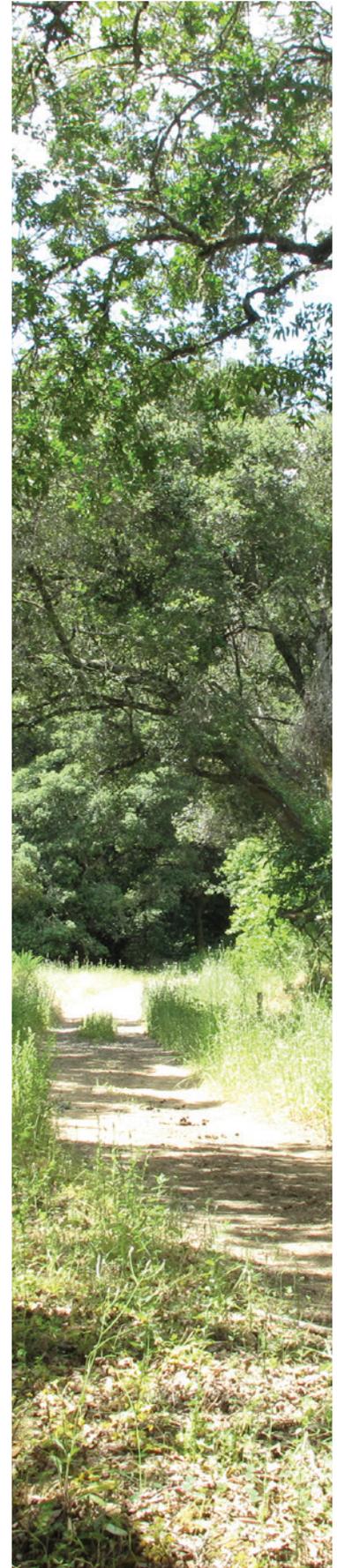
02. EXISTING CONDITIONS and PLANNING ANALYSIS

A. Preserve Overview

Bear Creek Redwoods was established as an open space preserve through a partnership with Peninsula Open Space Trust in 1999. The property has a long history of use and management, given its high resource and scenic values, combined with easy access from urban areas (Figure 1-1). Two major developed areas, Alma College and Bear Creek Stables, remain within the Preserve. The former Alma College site was originally developed as a sawmill in the mid- nineteenth century, later becoming a country estate and finally a Jesuit college with extensive manicured grounds and gardens. Bear Creek Stables, an equestrian boarding and arena facility under lease, has been in operation for over a century. Although the former Alma College site has been unused since District acquisition, Bear Creek Stables plays an important role in the local equestrian community and currently houses approximately 70 horses. The majority of the Preserve is otherwise heavily forested (Figure 2-1).

The approximately 1,432-acre Preserve is located about nine miles south of downtown Los Gatos, west of Lexington Reservoir, almost entirely on the eastern slope of the Santa Cruz Mountains within Santa Clara County. A small area at the extreme southern limits of the Preserve extends into Santa Cruz County. State Highway 17 abuts the northeast corner of the preserve, from which Bear Creek Road runs generally north-south, bisecting the Preserve to its southern boundary on Summit Road (Highway 35/Skyline Boulevard).

For the purposes of the Preserve Plan, the Preserve has been divided into three zones (Figure 2-2): the northeast zone where the former Alma College site and Bear Creek Stables are located; the southeast zone, steep and inaccessible; and the western zone, containing the Preserve's most impressive stands of redwood forest. Much of the Preserve consists of steep, rugged terrain, with benched topography consistent with deep-seated landslide processes. Terrain in the northeast zone is gently rolling between two prominent spur ridges. Elevations range from approximately 680 to 2,400 feet.



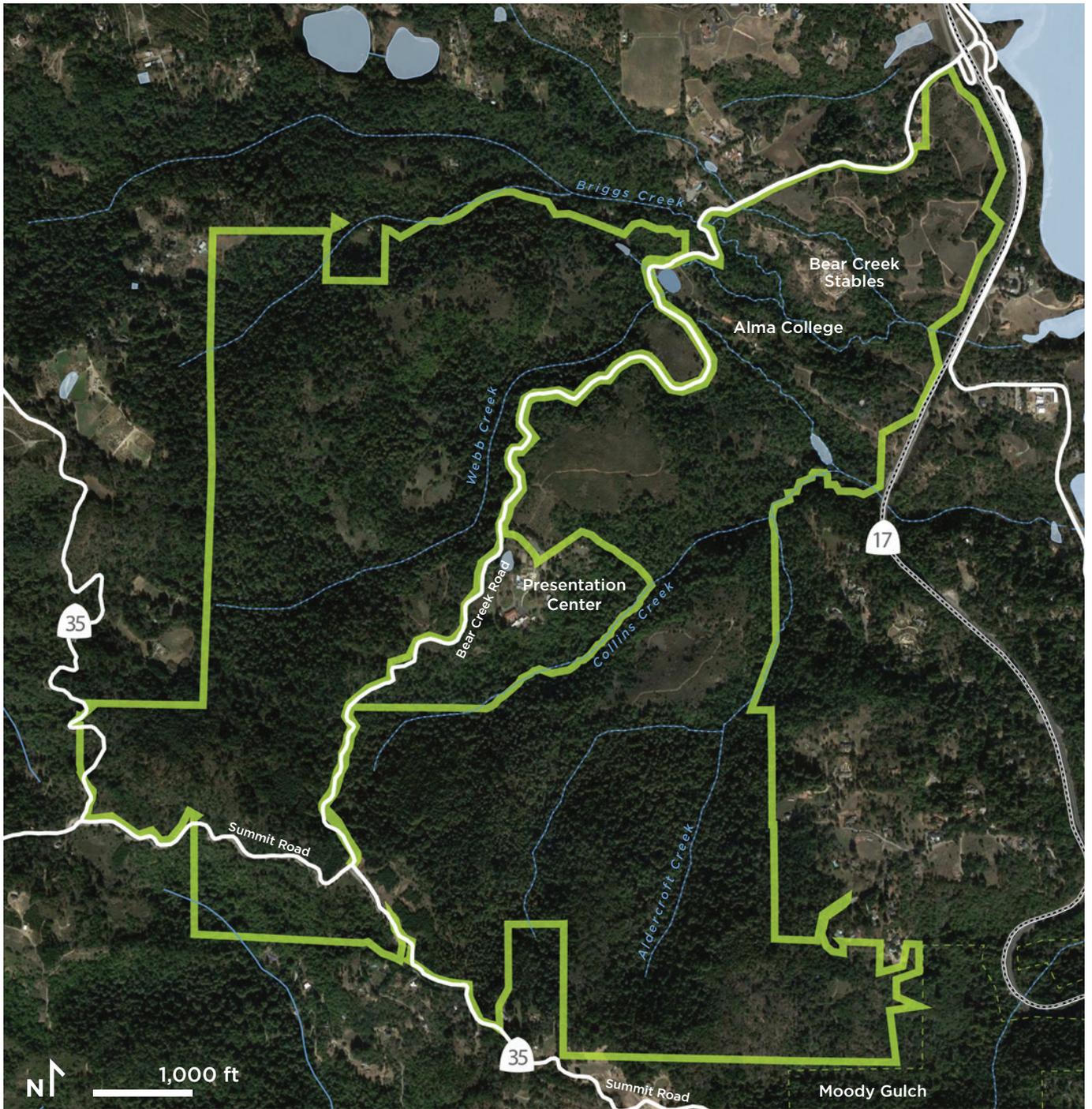


FIGURE 2-1 Aerial Base Map

LEGEND

	Highway
	Major roads
	Preserve Boundary
	Other Public Lands
	Perennial Water
	Intermittent stream

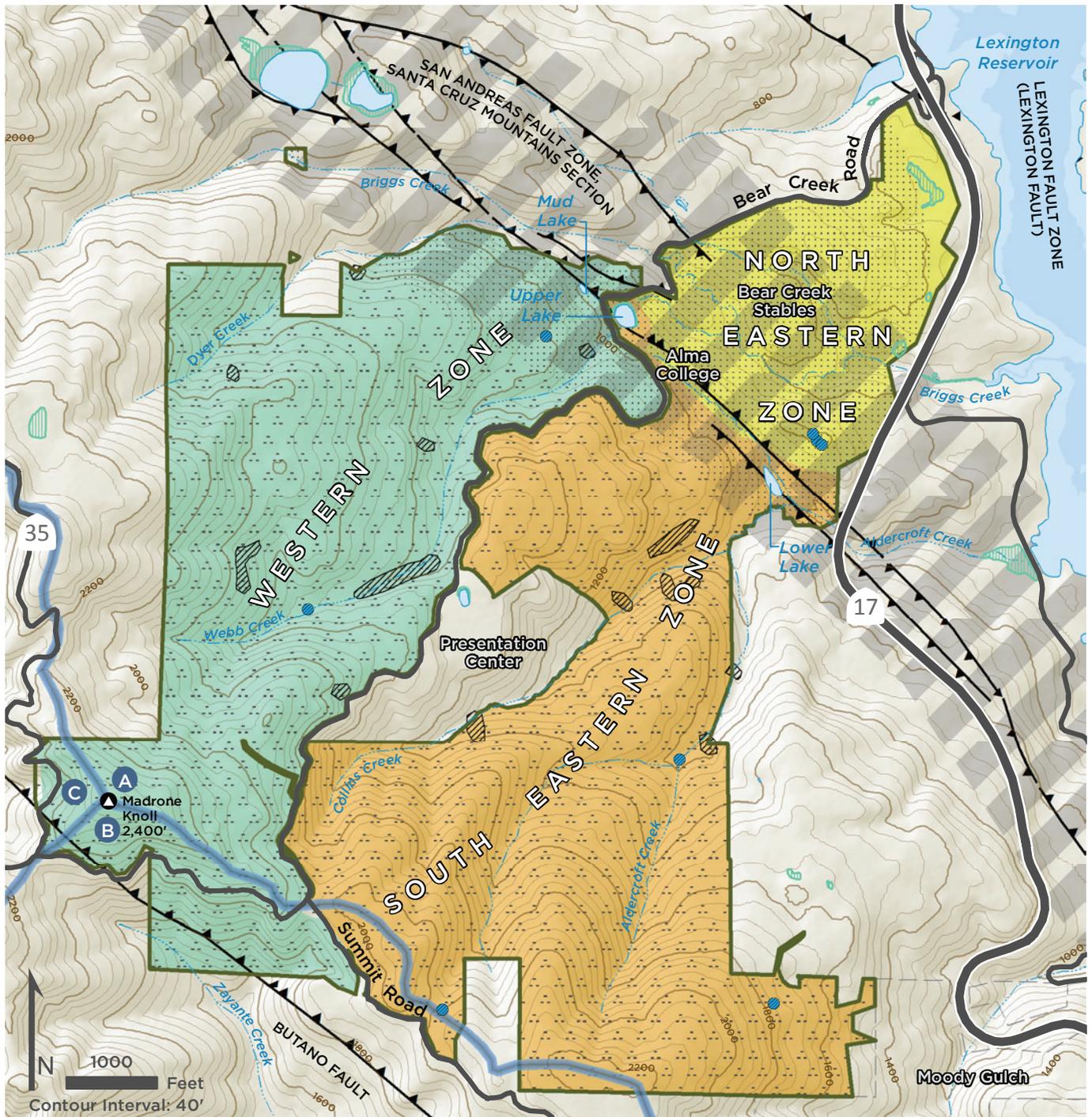


FIGURE 2-2 Hydrologic and Geologic Base Map & Preserve Zones

LEGEND

MAJOR WATERSHEDS

- A** Los Gatos Creek
- B** Zayante Creek-San Lorenzo River
- C** Bear Creek-San Lorenzo River

HYDROLOGIC FEATURES

- Lake/Pond
- Wetland*
- Creek
- Water System Structure

GEOLOGIC FEATURES

- Fault Line
- Fault Zone
- Landslides
- Sandstone
- Greenstone

PRESERVE ZONES

- North Eastern Zone
- South Eastern Zone
- Western Zone

*Potentially jurisdictional.

B. Natural Setting

Plant Communities

Vegetation within the Preserve is composed of a mosaic of redwood, douglas fir, and mixed evergreen forest, with oak woodland, non-native grassland, and coyote brush scrub also present in the northeastern zone (Figure 2-3). Dense, closed-canopy redwood and fir forest follows canyons on moist, relatively sheltered slopes, with redwoods concentrated along streams. Drier, exposed ridges within the Preserve support a more open, mixed-species forest of evergreen hardwoods, including California bay, coast live oak, tanoak, California black oak, canyon live oak, and madrone, as well as fir and redwood. Impressively large and ancient specimens of madrone can be found in the southernmost reaches of the Preserve near Summit Road, interspersed with regionally-uncommon stands of deciduous California black oak forest. Coast live oak woodland occurs primarily in the northeastern portion zone, along with areas of California annual grassland. Coyote brush scrub colonizes open areas throughout the Preserve.

Vegetation communities in the Preserve are not known to support special-status plants, with the exception of Hickman's popcorn-flower, an uncommon species occurring along a roadside south of Webb Creek (Ecosystems West 2008). Riparian and aquatic vegetation is restricted to scattered trees along the main channels of the perennial creeks, and narrow bands of emergent freshwater marsh vegetation around the perimeter of the three ponds. These three permanent ponds are Mud Lake, Upper (or Front) Lake and Lower (or Alma) Lake, which are described in greater detail under Aquatics Habitat.

Invasive Non-native Plants

Human disturbance has allowed a host of invasive plants to establish and spread into native plant communities on the Preserve, particularly grassland, coyote brush scrub, and openings within mixed evergreen forest, but even extending into closed-canopy coniferous forest that often resists invasion. Non-native trees, shrubs, groundcovers, and agricultural plantings form the dominant cover where past development has occurred on the property. This includes ornamental landscaping in the vicinity of the former Alma College complex, limited ornamental plantings and ruderal or weedy cover in the vicinity of Bear Creek Stables and within former vineyards, where a mix of coastal scrub and non-native, highly invasive French broom dominates. French broom is also densely dominant along the Preserve's many legacy roads and homestead sites, as are invasive sweet pea, English ivy, and periwinkle.

Non-native invasive plants were surveyed in 2016, with over 14 acres of dense populations of English ivy, and over 20 acres of sparse-to-dense French broom mapped. In addition, a small population of Cape ivy, which colonizes streambanks and can rapidly alter aquatic habitat within, was noted in the northeastern zone. An Integrated Pest Management Plan (MIG 2016) was also developed and is incorporated into the Preserve Plan. Actions to manage invasive plant populations are described in Chapter 3.



Madrone Trees (*Arbutus menziessii*)

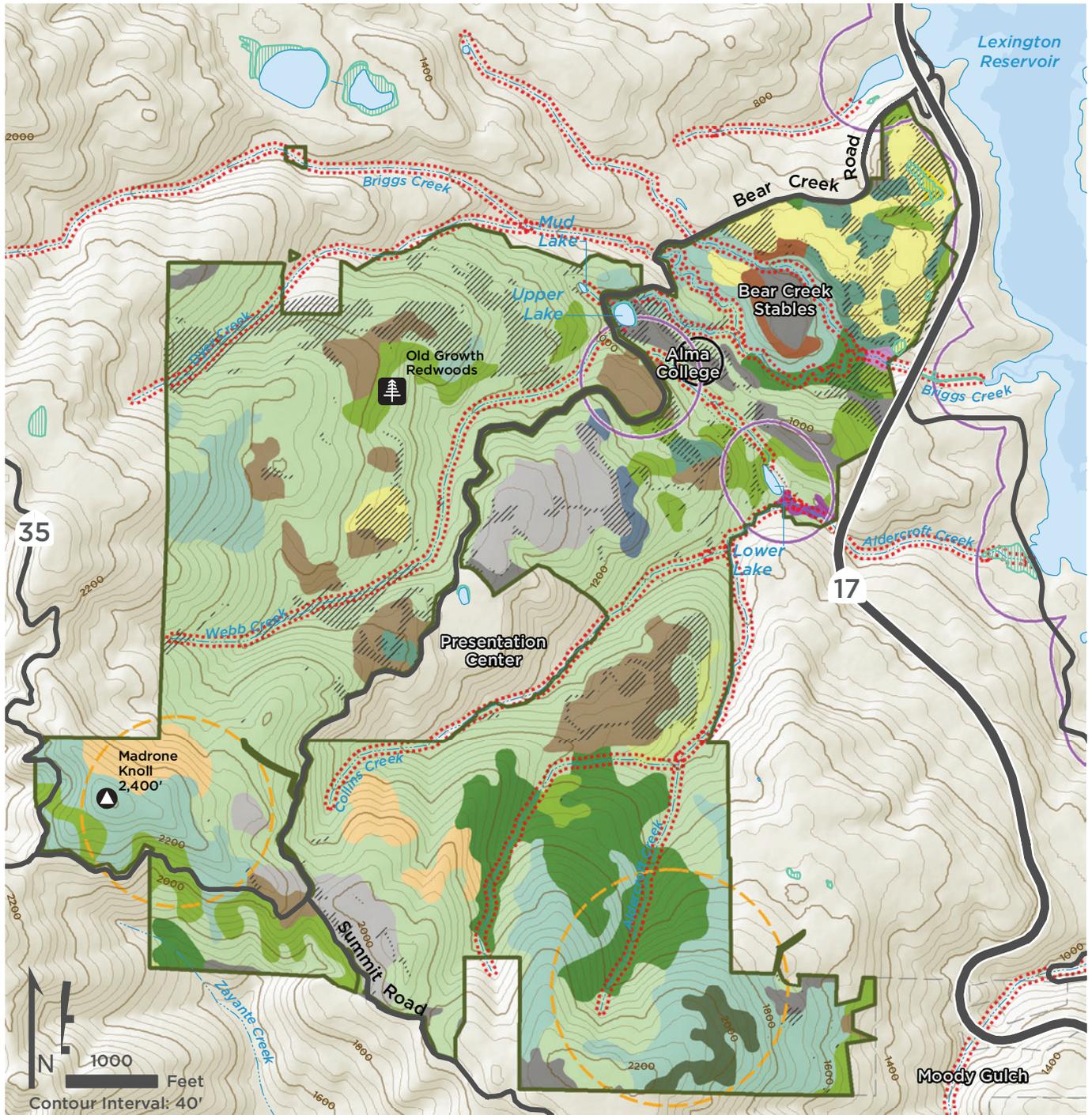


FIGURE 2-3 Natural Resources Map

LEGEND

- Redwood Forest
- Douglas Fir Forest
- Black Oak Forest
- Tanoak Forest
- Coyote Brush Scrub
- Coast Oak Woodland**
- California Bay
- Mixed Broadleaf Hardwoods
- Mixed Oak
- Blue Oak Woodland
- Coast Live Oak
- Valley Oak

- Valley Foothill Riparian**
- Big-leaf Maple
- White Alder
- Annual Grassland**
- Ca. Annual Grassland
- Juncus Meadow
- Disturbed/Ruderal**
- Built Up, unvegetated
- Agriculture

- Sudden Oak Death Impact Areas
- Invasive Plants (2015)
- Wetland*
- California Red-Legged Frog Habitat
- Western Pond Turtle Habitat
- Bat habitat

*Potentially jurisdictional.

Wildlife Communities

Despite the prevalence of non-native plants and other disturbed areas, the Preserve's mixed habitats host a wide variety of resident wildlife. The Preserve also borders a critical regional movement corridor for mountain lion and other mammals in search of food and mates. (Although the Preserve Plan does not address this wildlife corridor, specific actions to improve wildlife passage over SR17 are being developed as part of the Highway 17 Wildlife Passage and Bay Area Ridge Trail Crossing Project; see <http://www.openspace.org/our-work/projects/wildlife-crossing>).

Wildlife species of the redwood forest are easily observed in the southern reaches of the Preserve. Several species of amphibian thrive in the moist environment of the redwood forest floor and small creeks, including the Pacific giant salamander and California newt. Common birds found in this habitat on the preserve include the Western Screech-Owl, Steller's Jay, Common Raven, Chestnut-backed Chickadee, Brown Creeper, Winter Wren, and Pacific-slope Flycatcher. Sharp-shinned Hawks could nest here as well, and Peregrine Falcons have been reported to nest on a large rock outcrop near the Preserve's southern boundary. Redwood forests on the Preserve also provide habitat for banana slugs, and many species of arachnids and other invertebrates. The Santa Cruz black salamander, an uncommon species with an extremely restricted range, was observed in 2003 and more recently confirmed in the northeastern Preserve zone. The San Francisco dusky-footed woodrat, a Species of Special concern, is known from many areas on the Preserve.

Bear Creek Redwoods also supports a regionally-notable community of bats, which find highly suitable roosting habitat in the Alma College chapel, classroom, and other abandoned buildings, and forage on insects attracted to the nearby ponds. Both rare and common bats species are found here, including the special-status species Townsend's big-eared bat, several species of *Myotis* (mouse-eared bats), and a colony of Mexican free-tailed bats that numbers in the thousands. Actions to protect this important community of bats are described in Chapter 3. Further information about Preserve habitats, as well as common and special-status wildlife they support, can be found in the Bear Creek Redwoods Biotic Assessment (H.T. Harvey & Associates 2009) and Alma College Bat Relocation Report (H.T. Harvey & Associates 2016). Wildlife dependent on ponds and streams are discussed below.

Aquatic Habitat

Four major streams flow generally northeast across the Preserve into Lexington Reservoir, which drains into Los Gatos Creek and the San Francisco Bay. The southwest tip of the Preserve drains to the San Lorenzo River and the Pacific Ocean via Zayante Creek. Locations of perennial creeks and tributary channels are indicated in Figure 2-2.

Webb Creek drains the majority of the western Preserve zone, flowing under Bear Creek Road and the western portion of the former Alma College site, then south of the ridge to join Aldercroft Creek. The hydrology of Webb Creek was extensively altered to support historic land uses (see Aquatic Habitats and Water Resources section, below), and now feeds three permanent ponds: Mud Lake, a small marshy basin located just west of Bear Creek Road on a side tributary Webb Creek; Upper (or Front) Lake, a nearly 1-acre open water basin just west of the road near Alma College; and Lower (or Alma) Lake, an open 0.8-acre reservoir perched above Webb Creek near the Preserve's boundary with HWY 17. Aldercroft Creek and its tributary Collins Creek drain the southeastern Preserve zone. Briggs Creek and an unnamed tributary flow southeast across the northeastern zone, forming the northern and southern boundaries of the Bear Creek Stables area. Dyer Creek drains the extreme northwest corner of the Preserve, with its deep, shaded canyons supporting well-developed redwood forest.

Due to the major barrier of Lexington Dam, Preserve creeks do not support anadromous fish (which require annual passage to ocean waters), and are both steeply incised and heavily shaded, reducing the extent of associated riparian vegetation and in-stream deepwater pools, limiting suitable habitat for aquatic wildlife. Despite these limitations, Preserve creeks are critical water sources for wildlife, contribute to groundwater aquifer recharge for the Santa Clara Valley, and are scenic and educational resources for the public. Furthermore, Aldercroft Creek currently provides water to Bear Creek Stables, while Webb Creek fills the three Preserve ponds.

Preserve ponds provide valuable habitat for wildlife, particularly the large community of bats that inhabits the remaining Alma College structures, as well as the special-status species Western pond turtle, which has been observed to breed in upland areas around Upper Lake. However, habitat quality in the ponds for native

amphibians is compromised by the presence of non-native fish and crayfish, which prey on larval and young frogs and salamanders. Species such as the threatened California red-legged frog are unable to successfully breed in the ponds, although individual frogs have been observed occasionally during targeted surveys of the Preserve. The Bear Creek Redwoods Ponds Assessment and Management Plan (Balance Hydrologics 2016) provided recommendations to enhance and improve aquatic habitat within the ponds and are summarized in Chapter 3.

Habitat values and water quality within Preserve creeks are also negatively impacted by past land uses. Numerous legacy logging roads and other cleared, graded areas alter natural drainage patterns, concentrate flows, and contribute to chronic sediment delivery to streams, as

well as frequent landslide events. In 2010, a Road and Trail Inventory (Inventory) was completed for the Preserve (which did not then include the former Holmes Property). The 2010 Inventory prescribed a number of treatments to reduce road-related sources of erosion and sedimentation. In 2016 the District updated this Inventory (Best 2010) for the western Preserve zone (Waterways 2016). Additional updates will be needed for the northeastern and southeastern zones as general public access to these zones is phased in over time, and use of existing roads increases. Chapter 3 contains detailed actions to improve drainage and reduce sedimentation. Water quality in Preserve creeks is also impacted by sediment and organic runoff from local point sources, including, sporadically, from Bear Creek Stables. The Preserve Plan also includes actions to address erosion and runoff from the Stables.



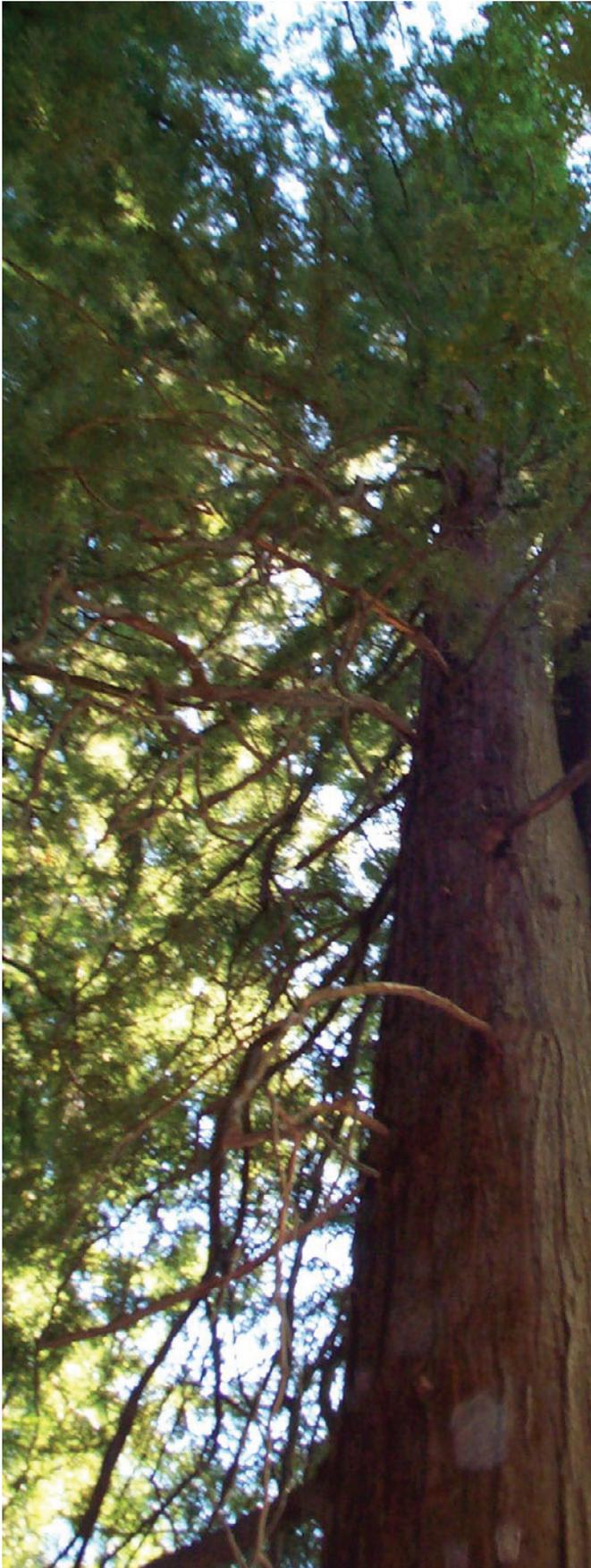
Townsend's Big-Eared Bat, special-status species found at BCR



Western Pond Turtle, special-status species



Two banana slugs (*Ariolimax sp.*) in a dry seasonal stream



Redwood (*Sequoia sempervirens*), remnants of old-growth forest

Forest Health

Preserve conifer forests were nearly completely harvested for timber during the milling period of the late 19th century. Selective harvest of the main Preserve properties continued through 2000, when Big Creek Lumber exercised its final timber rights in the southern Preserve area. In 2010, the 86-acre Holmes Lumber Company property, abutting the Preserve's southern boundary, was incorporated into the Preserve, providing the potential for an important regional trail connection to the Skyline/Summit Road area. This property was harvested in 2007. Primary forest is absent within Preserve boundaries; although several individual old-growth trees remain in the western zone. Nevertheless, overall health of the second-growth forest is considered to be good, largely owed to the relatively recent preserved status of the property and modern, responsible timber practices. However, extensive dieback of understory tanoak forest due to Sudden Oak Death is prevalent at higher elevations in the southern portion of the Preserve. A Sudden Oak Death management plan will be prepared to address this issue, as described in Chapter 3.

Geology

Bear Creek Redwoods is almost entirely underlain by sedimentary rocks of Tertiary age. The most extensive sedimentary substrates, occupying a broad area extending from northwest to southeast across the central portion of the Preserve, are Vaqueros Sandstone and San Lorenzo Formation. Extensive aquifers occur within Vaqueros Sandstone. A narrow band of unnamed Tertiary sedimentary rocks crosses the northeast portion of the area. A small area in the southwest is underlain by Butano Sandstone. Detailed geological information about the Preserve can be found in the Bear Creek Redwoods Road and Trail Inventory (Best 2010).

The northern portion of the Preserve is transected by the active San Andreas Fault zone, which extends through the former Alma College site. Movement along the fault has formed a series of classic linear valleys, pressure ridges, and sag ponds, and the lower reaches of Aldercroft and Briggs Creeks are offset by fault movement. As part of earlier development proposals for Preserve properties, a number of subsidiary fault traces have also been identified in the northeastern zone. The Alquist-Priollo Fault Zone Act precludes new development within fifty (50) feet of active fault traces, and occupation of existing structures within this buffer zone is also regulated. Additional trench studies will be completed as part of design development for rehabilitation of the Alma College cultural landscape and renovation of Bear Creek Stables, and plans will include measures to reduce hazards associated active earthquake faults.



Redwood (*Sequoia sempervirens*), second-growth areas



Grinding Rocks at the Preserve



C. Cultural Setting

Intensive human use of Preserve lands began in pre-historic times, with Ohlone habitation and resource management. Ohlone initially settled the region between 4,000 and 7,000 years before present (YBP), with villages and subsistence economies peaking between 4,000-1,500 YBP. The year 1769 marked the advent of Spanish explorations of the valley. The subsequent colonization of the region was accomplished through the introduction of the Hispanic mission system. Starting with Mission San Carlos and the Presidio of Monterey in 1770, several other missions were established over the next thirty years, each exerting their influence over the native people of the project area. The subjugation of the native people resulted in dramatic environmental changes after they could no longer influence the native landscape. While poor nutrition and repeated exposure to introduced European diseases and violence served to decimate the Ohlone. Ultimately, the people affiliated with the project area were dispersed among other tribesmen at Missions Santa Clara, San Juan Bautista, and Santa Cruz (Pacific Legacy 2016). Nonetheless, many survived and their descendants continue to live in the region, including members of the Amah Mutsen and Muwekma tribal bands.

In the late 19th century, massive development fueled by the Gold Rush created a demand for local timber, and the Santa Cruz Mountains provided a ready supply. Roads were cut through the forest, the fault-line sag ponds were dammed and expanded to power mills, and forests were rapidly harvested. Unlike many other District open space preserves, which have remained largely undeveloped following this initial land-use conversion, Bear Creek Redwoods has an extraordinarily rich modern cultural history (See Alma College Key Area Section, below). The property location and natural beauty led to the development of a series of country estates by wealthy forty-niner families and, eventually the property was converted into a college by the Jesuit Order, which was active until 1969. Several decades of intermittent lease followed. Bear Creek Stables, and associated equestrian trails east of Bear Creek Road, have been in continual use since the estate period.

Since 1970, more than 20 archaeological resource studies have been conducted over nearly 75% of the Preserve, recording many remaining features of the properties' cultural history. These include a number of historic features including the former Alma College buildings and associated shrines and other landscape elements; a radio tower, reportedly used to transmit the first broadcast of the Pearl Harbor attack; nearly 20 miles of roads, including portions of the historic road to Alma; a steel truss bridge, an important example of the obsolete Pratt-type steel and concrete automobile bridge; Bear Creek Stables, and various associated refuse scatters, water conveyance and retention infrastructure, mining features; agricultural remnants, and stone walls, hearths, and other early homesteading articles. Significant prehistoric resources are also found on the Preserve, including five bedrock mortars and a midden (or trash heap) which may indicate the presence of a former settlement site.

The majority of these cultural resources have not been evaluated for eligibility for the California Register of Historic Resources (CRHR). The former Alma College site and contributing and non-contributing resources have been recommended eligible as a cultural landscape, a type of historic district. This resource is also listed on the Santa Clara County Heritage Resource Inventory. The steel truss bridge also has been recommended eligible for the CRHR. The radio tower, garage and residence, and Bear Creek Stables have been recommended not eligible. The midden site is presumed to be eligible. Two of the recorded resources, Tevis dairy and the bridge over Webb Creek have been demolished. A detailed summary of the Preserve's cultural history and recorded resources can be found in the *Bear Creek Redwoods Cultural Resource Analysis* (Pacific Legacy 2016). Further information on specific resources, and associated Preserve Plan actions to preserve and protect these resources, can be found in Chapter 3.

D. Existing Land Use and Facilities

Bear Creek Redwoods Open Space Preserve is bordered by Lexington Reservoir County Park and Sierra Azul Open Space Preserve to the southeast, and is otherwise nearly entirely surrounded by private, rural residential properties. The Presentation Center, of the Sisters of the Presentation, a privately-owned 67-acre retreat, event, and conference center is located in the center of preserve lands. The District maintains a patrol and public access easement through the Presentation Center, which is not currently utilized except for occasional maintenance vehicle access. The Santa Clara County Moody Gulch property, slated for transfer to the District, abuts the southeastern corner of the Preserve. This future land transfer is the subject of a separate planning process and is therefore not included in the Preserve Plan. El Sereno Open Space Preserve and Sanborn-Skyline County Park lie approximately two miles south of the Preserve.

Given the location and history of the Preserve, a number of policies and previous and/or concurrent planning efforts in adjacent lands have influenced the preparation of this Plan. Appendix C provides a summary of the Plan's planning framework, describing all applicable District, Local and Regional policies.

Developed Water Resources

The three Preserve ponds and two large abandoned cisterns (one of which has been filled, the other extant and fenced off) were created during the Estate period to store surface flows and ground water from a substantial aquifer near the summit, surfaced via a number of developed springs, creek diversions, and "horizontal" wells. Lengthy segments of buried concrete and earthen pipeline connected the system, and minor distribution lines supplied water to the estate (and later, Alma College) gardens and vineyard.



This complex historic water supply system extends throughout the Preserve (see Bradley 2016), but no longer functions as a reliable water supply due to abandonment and degradation over time. Nevertheless, historic water system infrastructure continues to impact natural creek flows and water storage levels in the ponds in ways that are poorly documented and understood. The system taps into an extensive groundwater aquifer in the higher elevations of the Preserve, within bedrock of the Vaqueros sandstone and San Lorenzo formation. This aquifer also supplies a developed, productive but unused well near the summit on the former Holmes property.

Functional water systems on the Preserve include a diversion system on Aldercroft Creek, with a small concrete dam and in-stream diversion, PVC transmission line to a transfer tank, adjacent auxiliary tanks, and a transmission line to Bear Creek Stables; and the Alma System, consisting of a 500,000-gallon storage tank and transmission line from the San Jose Water Company (SJWC) main line (east of the Preserve) to the privately-owned Presentation Center property. The Alma System is under shared ownership with the Presentation Center but is not currently utilized or maintained by MROSD. With planned renovation and modernization of the Stables, as well as the potential re-use of the former Alma College site and installation of horse

troughs along the trail system, water demand is expected to increase to as much as 8,000 gallons per day. Due to unresolved legal considerations, it is uncertain whether the Aldercroft Creek diversion and Alma systems could be used to meet this increased demand. Moreover, water from the Aldercroft Creek source is not potable. New water supply alternatives are discussed in Chapter 3. Additional detailed information about Preserve water resources can be found in the *Bear Creek Redwoods Water Resource Inventory* (Balance Hydrologics 2016) and *Constructability Assessment and Cost Estimate* (MNS Engineers 2016).

Current Trails and Parking Areas

Currently, just over 10 miles of trails in the northeast and southeast Preserve zones are available for hiking and equestrian use on a permit-only basis. Limited parking for approximately 10 vehicles is provided in a small lot adjacent to Upper Lake at the former Alma College site, and two public horse trailer parking spaces are available along the Bear Creek Stables driveway. The western Preserve zone is closed to the public, due to the lack of level areas for parking and/or a safe, formalized pedestrian trail crossing of Bear Creek Road.

Panoramic views from the highlands of Bear Creek Redwoods Preserve of adjacent Sierra Azul Preserve





E. Key Areas Existing Conditions

i. Bear Creek Stables

Bear Creek Stables is located within the northeastern Preserve zone, off of Bear Creek Road and approximately 0.75-mile west of Highway 17 (Figure 2-4A). The approximately 26-acre site is located on a narrow ridge bounded by the steeply-incised Briggs Creek to the south, and an unnamed seasonal creek to the north (Figure 2-4B). The site is accessed via a 0.15 mile paved driveway. Several unpaved roads provide for circulation on the property, and two unimproved earthen trails connect the property to the greater Preserve area.

The site was first developed as part of Dr. Harry L. Tevis' Alma Stock Farm. The old Stables building was constructed in 1916, the original portion of the foreman's house (caretaker residence) in 1917, and various other original structures between 1917 and 1933. The stables were constructed by Tevis' contractor, Harley Hoerler, with design assistance from San Francisco architect George Kelham. Built of redwood and designed in a utilitarian mode with Craftsman detailing, the old Stables building and the foreman's house display some characteristics of their original design, including wood-frame construction with board and batten cladding. While the site provides a unique opportunity to experience a rustic stables operation, the site is not considered a historical resource due to extensive alterations to the buildings and site. A more detail assessment of the site's historical significance can be found in the *Historical Resource Assessments Summary Report: Beatty Property and Bear Creek Stables*, prepared by Knapp & VerPlanck Preservation Architects (2010).



Existing conditions, structures, typical horse shelter, and round pen at Bear Creek Stables

The Stables now contains a pasture area, two arenas, the former dressage arena, and paddocks for a maximum of 72 horses. Use of the Stables is currently defined and regulated through a letter of compliance with the County of Santa Clara (County), dated November of 2000. Existing structures include a caretaker's house, cottage, an old Stables building, hay barn, maintenance and storage shop, and an office. The majority of the structures do not meet the current building code standard, and renovation or replacement of these structures will require a Special Use Permit from the County. Programs at the Stables currently include horseback riding along trails located around the facility and extending throughout the eastern Preserve zones, educational programs for children (nature walks, caring for small farm animals in the Stables area) and occasional horse riding clinics. Two general public permit parking areas, each with space for one vehicle with a trailer, are located along the driveway.

Electricity is supplied to the Stables by Pacific Gas and Electric, but the site is otherwise not connected to public utilities systems. The main house and cottage utilize a septic tank and are supplied with bottled potable water. Non-potable water for horses and all other site uses, including fire suppression, is supplied by a historic-era diversion on Aldercroft Creek. Water is conveyed to the site by approximately 7,000 feet of plastic water line, which fills several storage tanks (totalling 15,000 gallons) and is then distributed on site. Manure is collected regularly, removed and disposed of off-site.

The Stables has been operating under on a month-to-month lease since District acquisition in 1999 and provides horse boarding. High-cost maintenance actions and site upgrades have been deferred during this time period, and long-term, continual use is evident throughout the site. Steep slopes formerly used as pastures are unvegetated and as such are subject to ongoing erosion and sedimentation to nearby creeks. Structures are in need of extensive upgrades to address maintenance, code compliance and safety issues. The Stables lessee and boarders have implemented corrective measures to begin to address these issues, but a more comprehensive restoration and maintenance plan is needed for the facility. The assessment of the site's structures, equestrian facilities and natural resources have led to the development of recommended improvements for the site and can be found in Chapter 3 of the Preserve Plan.



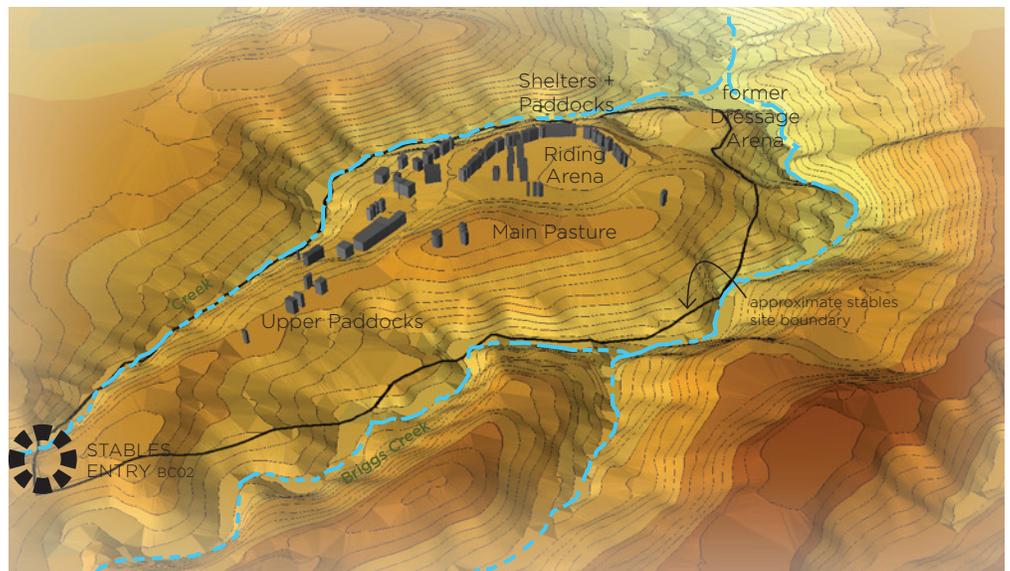
SOURCE: <https://bearcreekstables/gallery> (Erfert Fenton)



Existing conditions, Bear Creek Stables
(Lower Image: Old Stables Structure / George Kelman Barn)



FIGURE 2-4A Bear Creek Stables Existing Conditions



LEGEND

-  Main Access
-  Trailhead
-  Old Stables Structure

FIGURE 2-4B Bear Creek Stables Topography



While the Stables facilities require restoration and a more robust maintenance plan, the site's aesthetic - its rustic, relaxed atmosphere and tightly-knit community of equestrians, volunteers and nature stewards - help define the intrinsic value of Bear Creek Redwoods. Although primarily an equestrian boarding facility, the Stables also provides an immersive nature experience for the community through activities such as horseback riding on Preserve trails, nature walks, raising small farm animals, school programs, and day camps. The Preserve Plan will preserve and expand these community values, balanced with implementation of the necessary facility improvements and natural resource protection.

SOURCE: <https://bearcreekstables/gallery> (Erfert Fenton)

Multiple activities at Bear Creek Stables

The values reflected in Bear Creek, horses and nature, are crucial to our children.

"LESS IS MORE" FOR FUTURE CAPITAL IMPROVEMENTS

#1 CONCERN FOR BOARDERS
 LOVE THEIR HORSES -
 THEY WANT THE BEST FOR THEIR HORSES -
 - LOVE THE PADDOCKS (NOT MAKE HOTEL)

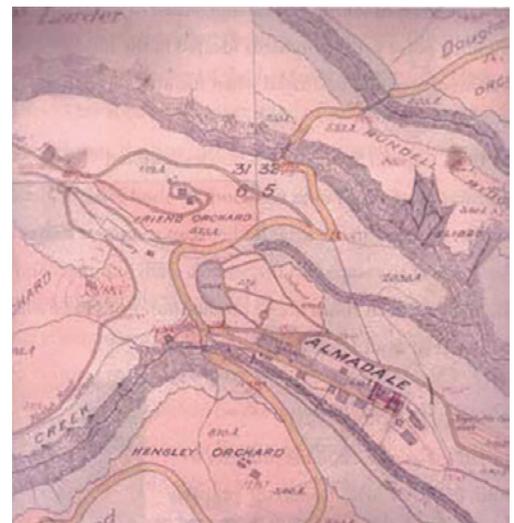
Comments provided by Bear Creek Stables boarders (Open House Workshop 1, March 2015)



FIGURE 2-5A Alma College Existing Conditions Diagram

LEGEND

-  Existing Buildings
-  Footprints of Former Buildings (now demolished)
-  Consider retention of structure/feature
-  Consider demolish & record structure/feature
-  Landscape Element
-  Shrine
-  Historic Retaining Walls
-  Trail
-  Public Paved Road (Bear Creek Road)



SOURCE: PAGE & TURNBULL, 2015 (page 6)

FIGURE 2-5B Site Plan of the Flood Estate

ii. Alma College

The Alma College Cultural Landscape is a multi-layered historic site, centered in the northeast Preserve zone, representing many successive eras of modern California history. Detailed information about the site's history can be found in the *Alma College Conditions Assessment Project Phase I: Assessment of Existing Conditions*, prepared by Knapp Architects (2010), *Alma College Historic Resource Study*, prepared by Page & Turnbull (2005), *Historical Resource Assessments Summary Report: Beatty Property and Bear Creek Stables*, prepared by Knapp & VerPlanck Preservation Architects (2010), and the *Alma College Site Cultural Landscape Rehabilitation Plan*, prepared by PGA Design (2015).

The main Alma College site occupies a prominent spur ridge bounded by the Webb Creek drainage (and San Andreas Fault) to the south and Briggs Creek to the north. The property was first developed for timber processing in the mid-1800's; "Upper Lake," a former mill pond prominent from Bear Creek Road, dates from this period. By 1887, however, the property's natural beauty and abundant water resources attracted real estate prospectors. Captain Stillman H. Knowles, of San Francisco Vigilante fame, was the first to develop the property as an estate, constructing a mansion to entertain wealthy friends, including James L. Flood the Bonanza King. Knowles named his creation Alma Dale (Figure 2-5B). Under Knowles, Alma Dale was expanded to include the entire watershed of "Alma Creek" (now Webb Creek), and the many natural streams and springs were developed to supply productive trout ponds – leading to the estate's local nickname, "Fish Ranch". Fish Ranch proved to be an unprofitable venture however, and Captain Harry sold Alma Dale to the Bonanza King in 1894. The Flood family began the development of the estate grounds into a complex and highly managed landscape of gardens, ponds, and vineyards.

In 1905, the property changed hands again, and well-known horticulturalist, Dr. Harry Tevis, spent the next 25 years transforming Alma Dale into a luxury estate with a bungalow-style mansion and village complex, manicured gardens supplied by a highly engineered water system, and a stables stock farm (now Bear Creek Stables). Tevis expanded the narrow ridge to accommodate his main estate grounds, constructing massive concrete retaining walls to the north and south, which are reportedly linked by thick ships chains, and remain extant today. In the following excerpt, the extent of the Tevis estate is summarized:

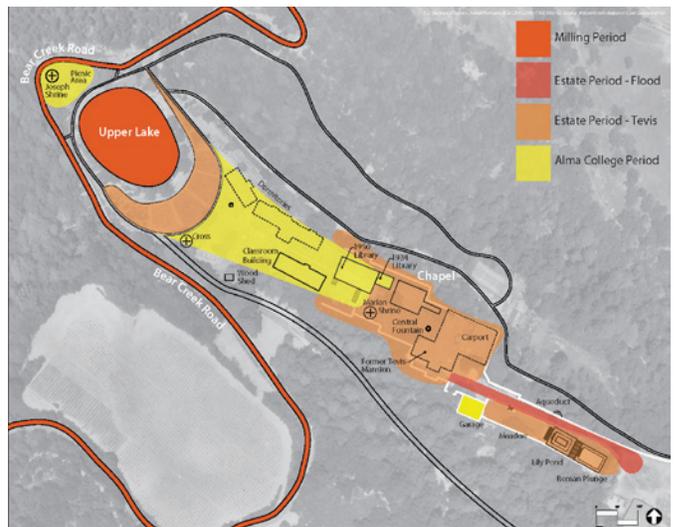


FIGURE 2-5C Alma College Historic Periods

SOURCE: PGA, Alma College Site Cultural Landscape Rehabilitation Plan, 2015 (Figure 11)



A permanent staff of from twenty-five to one hundred servants and ranch hands aided him in the maintenance of a huge experimental farm, renowned dahlia and rose gardens, and extensive stables where he made a study of horse breeding. Soon after he purchased the estate it was brought to the public eye when Dr. Tevis opened his doors to an entire grand opera company, refugees from the San Francisco earthquake and fire. Dr. Tevis died July 19, 1931, in San Francisco, leaving an estate valued at \$5,818,700, one of the largest ever probated in the Santa Clara County courts (Young 132-133).



After nearly 50 years as an estate, the former Alma Dale was purchased by the Jesuit Order in 1934 and was again transformed, becoming Alma College, the first Jesuit school of theology on the West Coast. New structures including dormitories, classrooms, and support structures for modern electric and heating infrastructure were added, and the former Tevis mansion and library were converted to housing and a chapel (Figure 2-5A). The Jesuit era ended 35 years later in 1969, when the Jesuits moved the college to Berkeley. Soon thereafter, the former Tevis mansion and several other buildings were destroyed by fire. The property was divided, with parcels acquired by property developers. After several failed attempts at development, during which time the Alma College complex was listed as a Heritage Resource by the County of Santa Clara, the District purchased the site and surrounding parcels.



The former Alma College site reflects patterns of settlement that parallel local and California history (Figure 2-5C). The site's significance is not rooted in a single event or time period (such as the Jesuit College era) or a single element (such as the chapel), but in a slow, gradual process of development and use that continues today. Relative to its history as a sawmill, country estate, and rural college campus, the site cannot be understood outside of its natural setting, which is now preserved in perpetuity as Bear Creek Redwoods Open Space Preserve.

Existing conditions, former Alma College Site



Structure connecting the 1934 Library and the Chapel, former Alma College Site



Briggs Creek Steel Truss Bridge

The cultural significance of the Alma College site has been thoroughly explored and documented. In 1995, Archives and Architecture concluded that site was eligible for listing on the California Register as a historic district. Santa Clara County added Alma College to its Heritage Resource Inventory at this time, indicating that any future use or alterations to the site (including all the extant structures) would be subject to County review and approval. However, Page and Turnbull concluded in 2005 that the site had at that point become ineligible due to a loss of integrity over time. The most recent assessment (Knapp 2010) concurs, but concludes that the integrity of the “cultural landscape” - Upper Lake, pathways, surviving vegetation, and other remnant landscape elements, including remaining structures - endures. The 2010 study also concludes that none of the remaining structures, including the chapel, are significant in and of themselves, but only as contributing elements of the cultural landscape.

Other elements of the cultural landscape outside of the immediate Alma College site, including the historic roads system, the Briggs Creek steel truss bridge, old flume and other water system elements, and other historic-era deposits, are distributed throughout the landscape and have not been evaluated for significance.

The *Alma College Site Rehabilitation Plan* (PGA Design, 2015) proposes a series of improvements to the site that will allow its history and significance to be interpreted and enjoyed by Preserve visitors. These improvements conform to the Secretary of Interior’s Standards for Rehabilitation and Guidelines for the Treatment of Cultural Landscapes and are summarized in Chapter 3 of the Preserve Plan.



Dramatic views from BCR Preserve

F. Summary of Public Input

Earlier Phases of Public Input

During the initial stage of the public engagement process, the emphasis was in collecting input regarding current and anticipated use of the Preserve. With an on-line questionnaire and one-on-one interviews, participants provided information that helped the planning team form an initial assessment of user preferences and potential issues.

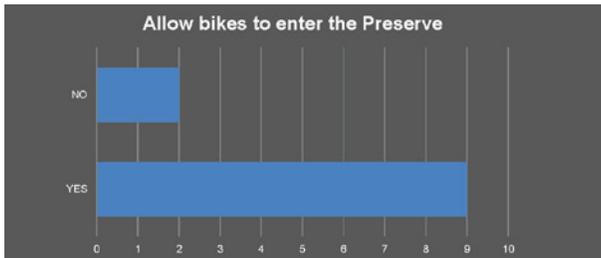
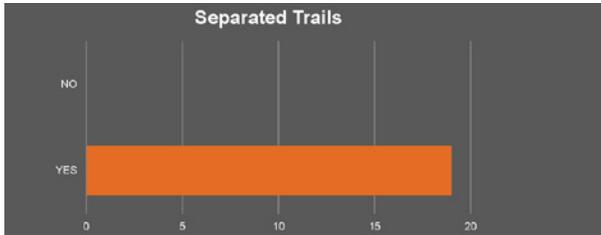
The following topics summarize the input received (see Appendix A1 and A2 for additional detail on stakeholder input) :

- *At the time of the interviews, the Bear Creek Redwoods Preserve was only used minimally;*
- *Most attendees at the public meetings were concerned with mountain bike use;*
- *The results indicated that magnificent views of the ridges and valleys, the contact with old growth trees and streams, and the effects of pleasant micro-climates in the Preserve were the most valued elements at the Preserve;*

- *Bikers requested access to the Preserve and the creation of a variety of trail types for different user skill levels, but favored the “unimproved” single-track trails over paved wide fire roads;*
- *Equestrian expressed a preference for the shaded, woody trails around the Bear Creek Stables, and requested horse water troughs;*
- *Equestrians expressed concern that the Stables might be demolished and they might need to share the trails with bicyclists in the future, which they saw as a safety concern;*

The answers on both interviews and questionnaires pointed to the need for more trails and extended access to broader parts of the Preserve. Some considered increasing trails as a way to reduce conflicts among different user groups.

A strong voice during this outreach effort was in favor of keeping the Preserve wild and to not “over-enhance” it.



Results from survey about the introduction of multi-use trails at Bear Creek Redwoods Preserve, April 2015

Preserve Plan Outreach Summary

Public input collected during the public outreach meetings informed the District's recommendations included in this Plan. During the April 2015 Open House, participants provided input through a questionnaire (see Appendix B1), one-on-one conversations with consultants and District staff, and interactive displays.

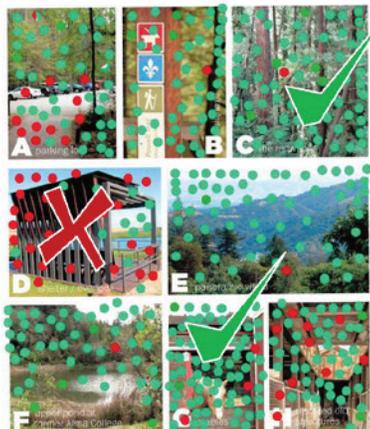
The results illustrated with the graphs to the left reflect participants' interest in desiring bicycles in the Preserve, but also recommended limiting the areas where bicyclists can circulate. The following comments extracted from the questionnaires summarize overall connectivity recommendations and concerns:

- "Create a multiuser area [west] of Bear Creek Road including full loops; limit multiuse on [east] side to minimum"
- "Full multiuse (hiking+bike+equestrian) is desirable - hopefully appropriate trail alignments can be identified"
- "[Concern about] mixing horses and bikes. [It is] too easy for bikes to skirt to an off-limits trail and encounter a horse. It takes only one bike not adhering to the rules to put our children (and ponies) in danger."
- Concern about location of staging areas, particularly the southern-most one; intersection of Summit and Bear Creek Road is too dangerous

The results boards below combine the user preferences survey outcomes collected in-situ (green and red dots) and through questionnaires (check marks). These illustrate recommendations for keeping the Preserve with a rugged and natural character, and to focus on trail and educational activities, keeping events or other high-density activities to a minimum.

SITE FEATURES survey USER PREFERENCES

Which of the following FEATURES are most and least appropriate for the Preserve?



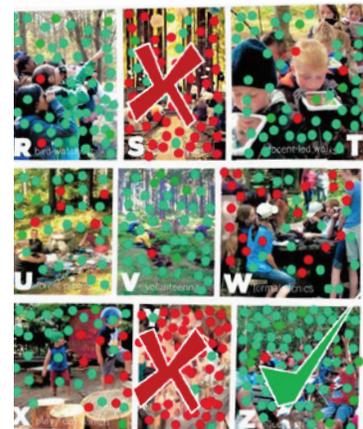
ACTIVE PROGRAMS survey USER PREFERENCES

Which of the following ACTIVE PROGRAMS are most and least appropriate for the Preserve?



PASSIVE PROGRAMS survey USER PREFERENCES

Which of the following PASSIVE PROGRAMS are most and least appropriate for the Preserve?



Results for user preference survey (questionnaires and at-workshop input combined), April 2015

Bear Creek Stables Outreach Summary

During the meetings with Stables boarders and stakeholders, the feedback received consistently recommended improving the facility without losing the character of the site and the emphasis on nature education.

The user preference survey summarized on the right reflects the desire to maintain programs for the entire family, and to improve the main equestrian facilities in the most cost-efficient way. In these questionnaires, participants mentioned the need to have facilities that require low maintenance and that are flexible to accommodate the diverse activities that take place at the Stables. The selected “least appropriate” images in the survey also confirm the recommendations of keeping the Stables simple and efficient, to focus on the horses and their health by keeping the boarding facilities mainly as paddocks, not boxes.

In a follow-up exercise to assess priorities (pie chart below), participants favored first and foremost the stables and equestrian facilities improvements (arenas and boarding facilities adding to 48% of the votes). Secondly, they supported educational programs (18%), preservation of the old structures (14%), and improving the environmental performance of the site (11%).

MOST appropriate

D

- Emphasize trail riding
- Trails connect to nature
- Families, friends, kids together

H

- Big area to run, but not fancy
- Open & well drained arena




LEAST appropriate

A

- Too costly
- Over-designed, high-end
- Too big, crowds

F

- No boxed horses
- Too small

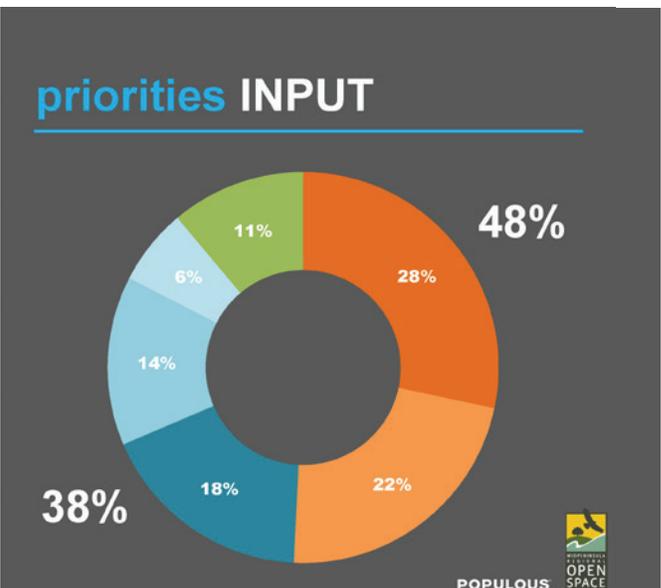



Results from user preference survey for Bear Creek Stables programs, activities and character, March 2015



Participants vote on user preferences for the Preserve

- ARENAS**
 - EQUESTRIAN FACILITIES**
 - Improve existing arenas
 - Reconfigure or create new arenas (potentially covered)
 - Other training facilities
- BOARDING FACILITIES**
 - STABLES + MAINTENANCE FACILITIES**
 - Improve, reconfigure or create new paddocks
 - Improve maintenance facilities (hay barn, manure management)
- EDUCATIONAL PROGRAMS**
 - COMMUNITY FACILITIES**
 - Visitor / Learning center
 - Other animal facilities
- ACCESS + PARKING**
 - VEHICULAR + EQUESTRIAN + PEDESTRIAN**
 - Improve access
 - Improve parking
- ENVIRONMENTAL PERFORMANCE**
 - SITE RESTORATION + SUSTAINABILITY**
 - Heal and prevent erosion
 - Water management
 - Improve site drainage
- OLD BUILDINGS**
 - BUILDING RESTORATION + REUSE**
 - Stabilize old structures
 - Restore and reconfigure for reuse



Results from prioritization exercise for Bear Creek Stables, June 2015

G. Planning Analysis

i. Preserve Plan Elements

Based on themes which emerged through the public planning process, four broad elements were identified to frame Preserve Plan goals, opportunities, challenges, and actions. Outside of these broad elements, the Plan highlights Bear Creek Stables and the former Alma College site, as described below.

The four Preserve Plan elements are:

Element 1- Public Use and Facilities

The Public Use and Facilities Element includes all actions related to access, connectivity, circulation and visitor activities in the Preserve. As part of this element, trail networks and trail types are defined; new parking and staging areas are developed; and educational and interpretive programs are implemented. As equestrian use is a particular focus in the Preserve Plan, Bear Creek Stables will be renovated and made more accessible to the general public.

Element 2- Natural Resources Management

Stewardship of the Preserve's natural environment and the wildlife it supports is central to the Preserve Plan, providing a framework through which all other actions are implemented. This element focuses on natural resources in the Preserve, from geology and soils, to hydrology, vegetation and wildlife habitats.

Element 3- Cultural Resources Management

Bear Creek Redwoods preserves evidence of a multi-layered history that must be both protected and interpreted as general public use is introduced. Management of the unique cultural features within the Preserve is the main focus of this element. Of particular importance is the rehabilitation of the former Alma College site, where historic structures will be stabilized for future re-use, and the landscape rejuvenated for interpretation and public enjoyment.

Element 4- Maintenance and Operations

The fourth element focuses on day to day operations, recognizing the necessity and importance of long-term maintenance planning for the successful conservation and management of the Preserve. Actions include repair and maintenance of trails and other facilities, reducing fire risk and controlling invasive species, and managing volunteer and docent programs.



Upper Pond



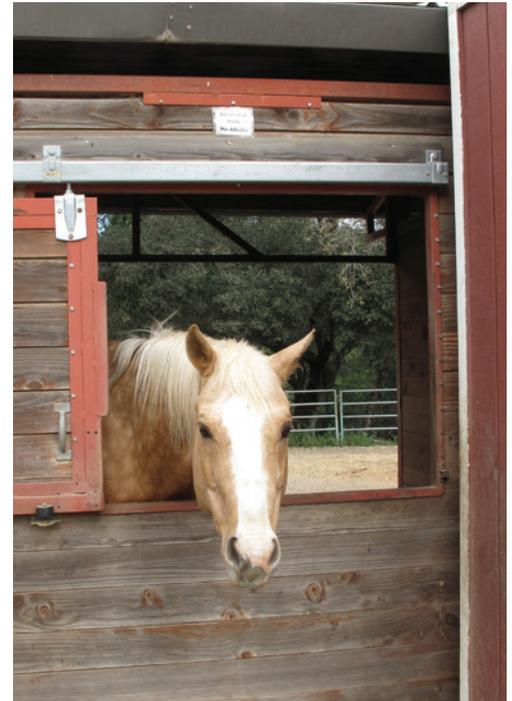
Shrine at former Alma College Site

The Preserve Plan key areas are:

Key Area 1- Bear Creek Stables

The Bear Creek Stables (Stables) key area refers to the 26-acre horse boarding facility located on the northeastern portion of the Preserve. The study area for the Stables includes the topographic ridge bounded by Briggs Creek to the south and east, Bear Creek road to the west (at BC02), and an unnamed seasonal creek to the north. The Stables site has been in continual use as a horse-boarding facility since 1916, and is currently managed under a month-to-month lease to house up to 72 horses. Following approval of the Preserve Plan, the District intends to enter into a long-term lease with a tenant who will maintain and manage the Stables facilities, continuing to provide this important resource to the local equestrian community, as well as equestrian education and other programming to the broader public. The long-range plan has been developed for the Stables to meet the following goals:

- 1 Emphasize the protection of the site's natural resources;*
- 2 Maximize public benefits by broadening public access and use of the facility, and;*
- 3 Develop a viable plan that is financially feasible for both a tenant and the District.*



Boarders at Bear Creek Stables

Key Area 2- Former Alma College Site

The Alma College study area encompasses the structures and landscape elements of the former Jesuit college, previous estates, and land-uses dating back to the redwood sawmill period. The study area, described as the former Alma College site in this Preserve Plan is roughly 25.4 acres in size, occupying a narrow ridge widened by substantial concrete retaining walls, also located in the northeastern portion of the Preserve. The area is bounded by two historic roads (currently used as patrol access roads, not open to the public) that run east-west on either side of the ridge, and Bear Creek Road that wraps around the site on its north and western edges. Focused planning data for the former Alma College Site is summarized in this chapter and provided in detail in the Alma College Site Rehabilitation Plan (PGA Design 2015), which will restore the site's key historical features for interpretive and educational purposes.



1950 Library, former Alma College Site

ii. Preserve Plan Opportunities and Challenges

Challenges and opportunities were identified for each of the Preserve Elements from the robust resource and site conditions inventory developed for the Preserve, summarized in Chapter 2. Additionally, this list of challenges and opportunities include input received from stakeholders, District staff and other planning process participants.

Table 2-1 Themes, Challenges and Opportunities

a. ELEMENT 1: Public Use and Facilities

Theme 1: Connectivity

The Preserve offers unique opportunities to hikers, equestrian and bikers to enjoy the multiple trails within it and to connect to other adjacent regional parks and regional trails

Challenges

- Balancing public access with the protection of natural and cultural resources
- Balancing different users (hikers, equestrians, bikers) within the steep topography presents safety and logistical challenges
- Connections with regional trails and routes are limited and/or unsafe

Opportunities

- Cool forest setting is ideal during summer months when visitation is highest; in contrast to hotter, drier conditions in nearby public lands
- Many existing internal roads –formerly for timber harvesting operations– may be suitable for trail (including multi-use) and patrol use
- Current system of trails and roads well-suited for equestrian use
- Formalize connections to the Bay Area Ridge Trail through Skyline-Summit Trail
- Facilitate regional trail connections between the west-side and east-side of the Highway 17 to Lexington Reservoir via Alma Bridge

Theme 2: Access

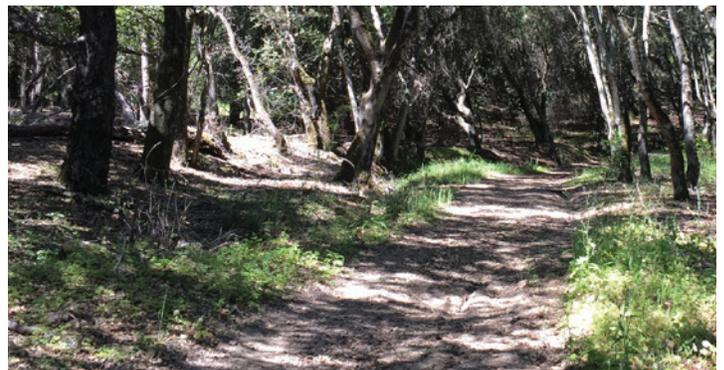
The Preserve has access limitations

Challenges

- Current parking is extremely limited within the Preserve; need to increase parking and capacity for vehicles and horse trailers
- Many surrounding roads are private, not public
- There are multiple informal access points from adjacent properties that allow for illegal access and frequent encroachment
- Bear Creek Road divides the Preserve into two areas and functions as a barrier to trail circulation
- Limited sight distance along Bear Creek Road to provide safe at-grade crossings

Opportunities

- The Preserve is located near a large urban center, easily accessible from Route 17
- Formerly disturbed sites can be used for new staging (parking) areas



There are many existing roads suitable for trail and patrol use

Theme 3: Programs

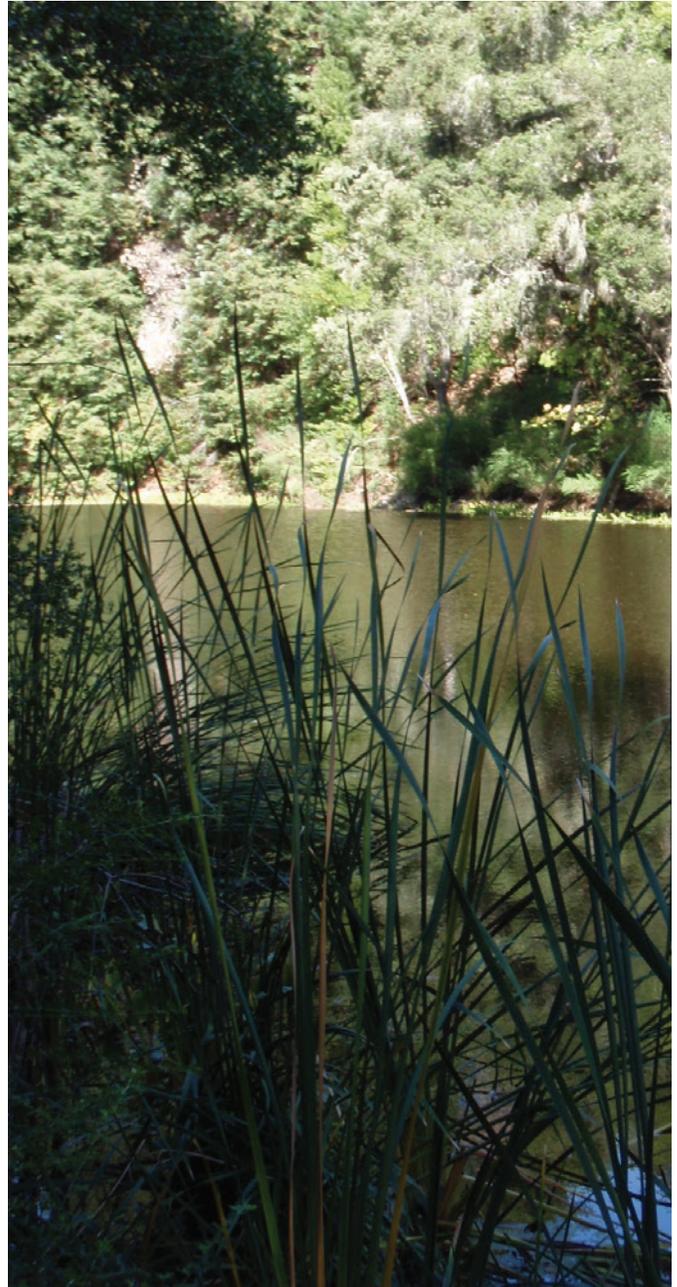
The Preserve offers great opportunities for recreational and educational programs

Challenges

- Current access to the Preserve is limited, thus programs are limited to permitted uses
- Balancing the needs and desires of various user groups

Opportunities

- There are multiple destination points on the west side of the Preserve (old-growth redwoods, Webb creek)
- There are numerous scenic vista points
- Stables operation provides affordable horse boarding and opportunities for outreach, fundraising and education
- Former Alma College site offers a potential venue for educational and cultural programs in the Preserve
- Diverse ecosystems offer educational opportunities



An improved trail network will allow for easy access to the Preserve's natural amenities, such as the Lower Lake shown herein

Table 2-1 CONT. Themes, Challenges and Opportunities

b. ELEMENT 2: Natural Resource Management

Theme 4: Habitat Protection

Unique habitats give the Preserve its character, but they require protection

Challenges

- Non-native wildlife in ponds impairs habitat for native amphibians
- Preventing further introduction/release of non-native wildlife (e.g. bullfrogs, non-native fish, turtles)
- With increased use, avoid user impacts to sensitive areas

Opportunities

- Mountain lion habitat
- Existing structures support special-status bats; potential to establish bat houses and relocate populations
- Dense, multi-aged redwood forest, including old-growth redwood specimens
- Potential restoration and enhancement of aquatic habitat



Black Salamander

Theme 5: Ecologically Damaged and Disturbed Areas

Active management of natural areas is needed

Challenges

- Sudden Oak Death is common in the southern area of the Preserve
- Invasive plant infestations dense and widespread in disturbed areas, former vineyards and building sites
- Eliminating non-native, invasive plant species that threaten biodiversity

Opportunities

- Disturbed areas provide potential sites for future public access facilities
- Implementation of Best Management Practices (BMP) and Integrated Pest Management Program (IPM)

Theme 6: Watersheds and Waterways

Excessive sedimentation in water resources within the Preserve affects downstream water quality

Challenges

- Past land uses and inherited road system cause ongoing erosion and sedimentation into streams
- Lack of water rights to ponds and creeks may impede restoration efforts

Opportunities

- Numerous riparian, pond, and wetland areas
- Multiple intermittent streams

Table 2-1 CONT. Themes, Challenges and Opportunities

c. ELEMENT 3: Cultural Resource Management

Theme 7: Protection/Preservation of Cultural Resources

Existing cultural resources are in disrepair and/or decaying

Challenges

- Former Alma College site is difficult to secure and patrol; vandalism is common
- Remaining Alma College structures and retaining walls are in deteriorated state
- Stables operation in need of infrastructure upgrades and vegetation management

Opportunities

- Older structures within the Stables lease area may be of historic interest

Theme 8: Resources Restoration

There is opportunity to restore and potentially re-use some of the old/historic structures in the Preserve

Challenges

- Remaining Alma College structures and retaining wall infrastructure very close to active faults
- Restoration of old structures is expensive and beyond the District's Mission

Opportunities

- Partnerships possible for reuse and shared rehabilitation and maintenance of the Alma College structures
- Grant funding possible for cultural landscape to leverage District's resources

Theme 9: Interpretation

The Preserve offers enormous opportunities for interpretation, both of natural and cultural resources

Challenges

- Information regarding cultural and historical sites is currently incomplete

Opportunities

- Interpretation of historic uses of the Preserve, including former logging, remnant structures and landscape features, history of habitation in the area, former land owners, and other potential interpretive themes
- Former Alma College site is a cultural landscape which represents multiple periods of local history (logging, estates, and educational campus) from 1850 to 1951
- Landscape features throughout the Preserve have interpretive potential and can be linked to the larger landscape



Dew-covered spider net

Table 2-1 CONT. Themes, Challenges and Opportunities

d. ELEMENT 4: Maintenance and Operations

Theme 10: Repair and Maintenance

With increased visitor quantities, repair and maintenance of trails become paramount

Challenges

- Protection of water rights, water sources, and water infrastructure
- Old logging roads require ongoing maintenance; some are poorly aligned and do not meet District trail standards
- Roads and trails affected by erosion

Opportunities

- Viable connection to San Jose Water Company municipal water line



Theme 11: Safety and Security

There are several natural threats and some unsafe conditions in the Preserve that need to be addressed prior to opening it to the public

Challenges

- High fuel load is present in some areas of the Preserve, due to dead and downed tanoak trees
- Alquist-Priolo Zone and San Andreas Fault run through center of Preserve
- Remote location; long travel times for patrol and maintenance staff
- Lack of local ranger station limits patrol and maintenance, thus reduces “presence”
- Minimal sight distance along Bear Creek road for vehicular ingress and egress, and lack of pedestrian at-grade crossing
- Vandalism and illegal access is frequent
- Remnant structures may pose safety hazards
- Existing condition of facilities for Bear Creek Stables would not facilitate safe public access

Opportunities

- Increasing visitorship may reduce vandalism by having “more eyes” on the Preserve
- Potential satellite field office may be located in the Southern District area; on or near the Preserve
- Potential partner at former Alma College site would provide additional on-site presence and maintenance

Theme 12: Volunteer Programs

Current and future users have strong connections to the Preserve and are interested in supporting it through long-term stewardship

Challenges

- Current Stables lease is month-to-month
- Current volunteer programs at Stables are not coordinated with District programs

Opportunities

- Work with existing and future partners and stewards to implement roadside fuels reduction projects
- Provide a long-term lease for Stables management and partner with lease-holder for on-site improvements/modifications
- Offer formalized and coordinated volunteer opportunities at the Preserve



Soil Erosion



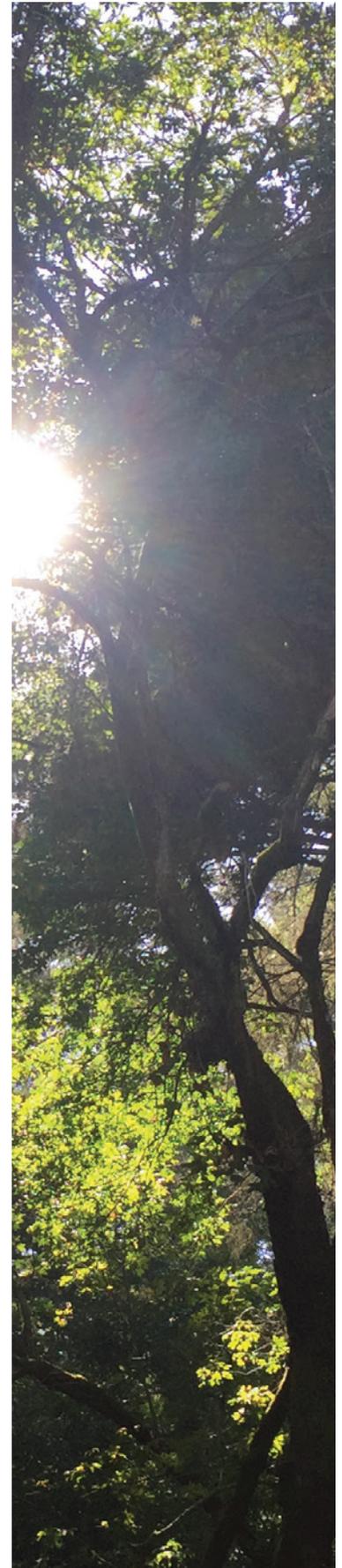
03. PRESERVE PLAN

Bear Creek Redwoods Open Space Preserve is an important new outdoor recreational resource for the South San Francisco Bay Area. The Preserve's wooded trail system and moderate grades can provide an invigorating or contemplative trail experience, while families will find easy-access trails, ponds, picnicking, and equestrian activities close to parking and facilities. Cultural resource sites will tell the story of the Santa Cruz Mountain region and provide unique visitor experiences. Visitor use of the Preserve is expected to be high.

The Preserve Plan consists of actions that allow for the phased opening of Bear Creek Redwoods over the next 20 years to hiking, equestrian, and limited bicycling use. Phasing, shown below, will ensure that land preservation, stewardship, and public enjoyment and education – the three equal parts of the District's mission – are balanced. Public access improvements include installing new parking areas, trail re-construction and new trail creation, and formalizing a trail crossing of Bear Creek Road to establish internal and regional connections. Natural Resource management under the Plan will protect and enhance wildlife habitat, treat invasive plants, restore degraded areas, and improve water quality in Preserve streams. Cultural Resources, including the Alma College Cultural Landscape, will be protected and interpreted. Major operational activities include reducing the risk of wildfire, maintaining roads for increased use, and expanding volunteer and docent programs. Finally, the Plan includes long-term management actions to ensure the sustainable, continued operation of Bear Creek Stables, with a focus on expanding opportunities at the Stables for general public use.

- Phase I – 2016-2018 (Preserve Opens – west side only)
- Phase II – 2019-2025 (Restoration and Expanded Access – east side)
- Phase II – 2026-2035 (Full Implementation)

The Bear Creek Stables community and other visitors with permits currently enjoy limited access to the Preserve. These current users, in partnering with the District in this planning process, have been instrumental in the development of the Preserve Plan.



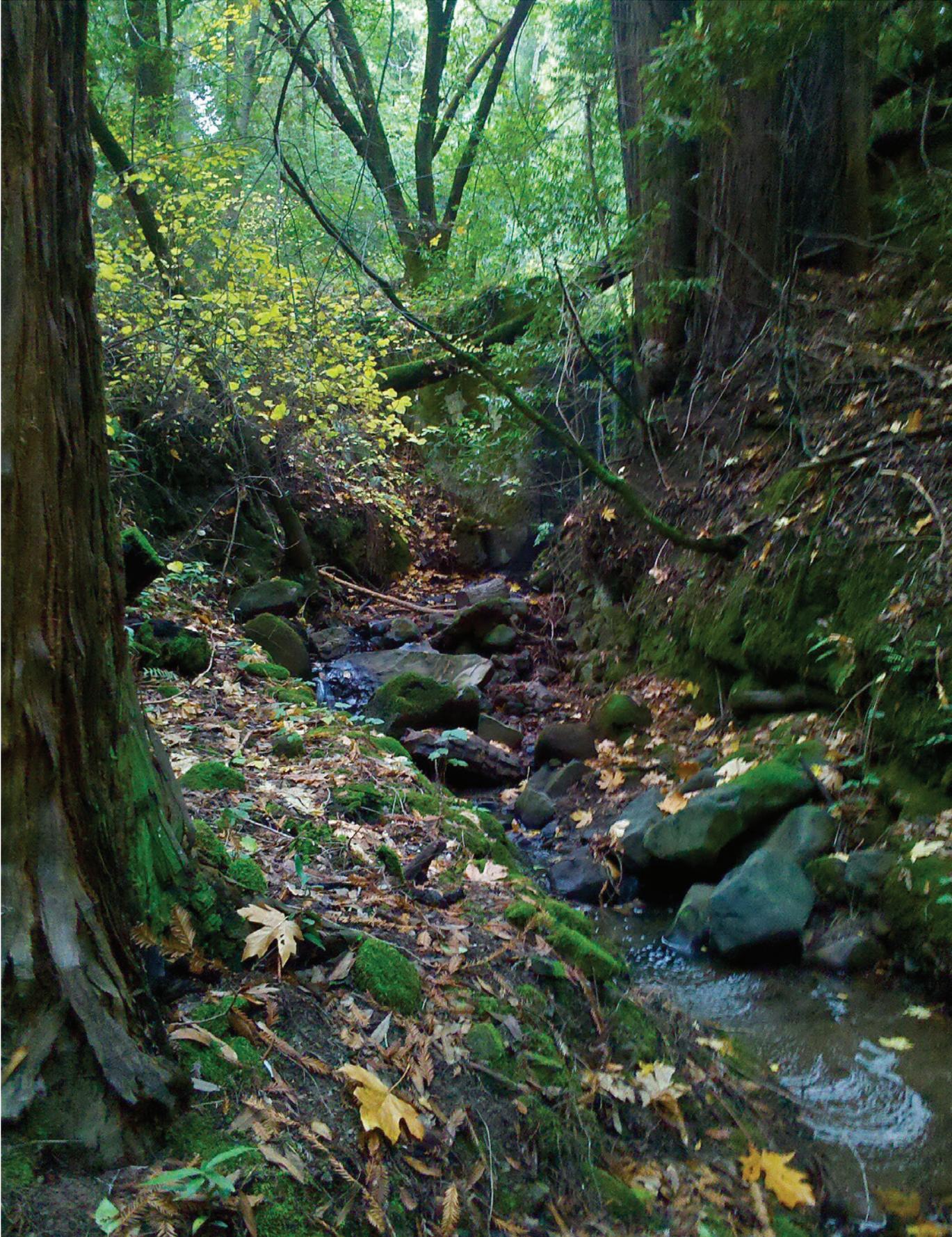
A. Preserve Vision

The Bear Creek Redwoods Open Space Preserve vision statement summarizes extensive input from the community, District staff, the Board of Directors, as well as the Board's Planning and Natural Resources Committee, and is consistent with the District's overall mission. Over the lengthy planning process, this vision has guided development of Preserve Plan goals and objectives. The actions included within each objective are tools to realize the vision.

Bear Creek Redwoods Open Space Preserve Vision

Hosting Santa Clara County's best preserved, second growth redwood forest, Bear Creek Redwoods Open Space Preserve contains a rich historical past that has served to influence and shape the surrounding landscape. The preserve shall provide the public with a South Peninsula opportunity for tranquil nature study and exploration in a cool, heavily forested environment. The stewardship of this public open space preserve shall be of highest priority, followed by an extended trail system with greater access. Focus will be placed on restoring native habitats; reducing erosion and sedimentation for improved water quality; interpreting the land's historical and cultural resources; providing new staging opportunities to allow for greater public access; and expanding the interior trail connections within the Preserve.





B. Preserve Plan Goals and Objectives

Developed during a thorough planning process, the Preserve Plan identifies goals and objectives for each of the Plan's Elements and key focus areas. Goals describe an expected or desired outcome of the Preserve Plan that reflects the larger vision for Bear Creek Redwoods Preserve. Where appropriate, the objectives define specific targets that are quantitatively or qualitatively measurable and necessary to accomplish in order to achieve the broader goal.

Table 3-1: Preserve Plan Goals and Objectives

i. ELEMENT 1: Public Use and Facilities

Goal PU1 – Allow general public access and enhance recreational opportunities in the Preserve

Obj PU-1.1	Follow appropriate steps to responsibly open the Preserve to the public for low intensity recreation and enjoyment
Obj PU-1.2	Expand and improve the Preserve trail system
Obj PU-1.3	Introduce a safe pedestrian crossing on Bear Creek Road to connect the Preserve's east and west sides
Obj PU-1.4	Where appropriate, allow bicycle use; consider a multi-use trail facility
Obj PU-1.5	Expand and improve Preserve parking capacity
Obj PU-1.6	Provide trail-related amenities

Goal PU2 – Provide low-impact, high-value site-sensitive interpretation and education activities

Obj PU-2.1	Ensure any new visitor access features are sited and designed to protect landscape visual character
Obj PU-2.2	Provide opportunities to learn about natural resources and foster public appreciation of open space values

Goal PU3 – Expand opportunities for people with diverse physical abilities to enjoy the Preserve

Obj PU-3.1	Expand and improve ADA parking
Obj PU-3.2	Provide loop trails and connection to parking areas and key destination sites, as well as those with a wide range of difficulty to reflect a diverse population

Goal PU4 – Provide regional and local trail connections

Obj PU-4.1	Strive to provide connections with key Preserve destinations and adjacent open spaces and parks
Obj PU-4.2	Seek to attain easements, where needed, to make key trail connections to adjacent open space
Obj PU-4.3	Provide an appropriate and safe pedestrian road crossing to enhance site and trail linkages

Goal PU5 – Actively involve the public in the use and management of the Preserve

Obj PU-5.1	Provide opportunities to learn about and support resource management activities through docent, volunteer, and other outreach programs
Obj PU-5.2	Encourage and engage the public and neighbors in future Plan amendments that affect the use and management of the Preserve



Ferns

ii. ELEMENT 2: Natural Resource Management

Goal NR1 – Increase the acreage of protected habitat and connectivity to wildlife corridors

- | | |
|------------|--|
| Obj NR-1.1 | Continue to purchase properties and conservation easements to expand and protect the Preserve's natural resources, aesthetic values, and connectivity |
| Obj NR-1.2 | Maintain working relationships with other land owners and stakeholders in the vicinity of the Preserve to coordinate efforts to identify and retain habitat linkages |

Goal NR2 – Protect habitats that support diverse biological resources, are unique, or are important for the conservation of rare, threatened and endangered species

- | | |
|------------|---|
| Obj NR-2.1 | Protect and enhance special-status species habitat and other sensitive biotic communities |
| Obj NR-2.2 | Protect and, where appropriate, enhance forest habitat |
| Obj NR-2.3 | Plan public access features to avoid adverse impacts and habitat fragmentation |
| Obj NR-2.4 | Identify wildlife movement corridors; work cooperatively with neighboring landowners and agencies to identify and preserve corridors and habitat linkages |
| Obj NR-2.5 | Restrict access to areas that require intensive resource management or support sensitive biotic resources |

Goal NR3 – Protect native wildlife

- | | |
|------------|--|
| Obj NR-3.1 | Identify, protect, and monitor special-status wildlife populations |
|------------|--|

Goal NR4 – Repair and monitor ecologically damaged and disturbed areas

- | | |
|------------|-------------------------------------|
| Obj NR-4.1 | Control key invasive plant species |
| Obj NR-4.2 | Manage Sudden Oak Death |
| Obj NR-4.3 | Restore degraded or disturbed areas |

Goal NR5 – Protect waterways and associated natural lands to maintain water quality, watershed function, and healthy aquatic habitat

- | | |
|------------|--|
| Obj NR-5.1 | Protect water quality and improve stream habitat |
| Obj NR-5.2 | Treat stormwater runoff and monitor potential sources of sediment and pollutants |
| Obj NR-5.3 | Identify and maintain existing springs, water infrastructure, and water rights |

iii. ELEMENT 3: Cultural Resource Management

Goal CR1 – Protect and interpret significant historical and cultural resources

- | | |
|------------|---|
| Obj CR-1.1 | Organize and increase the District’s knowledge of the Preserve’s cultural resources |
| Obj CR-1.2 | Implement cultural resource protection measures and protect historically significant structures |

Goal CR2 – Within the District’s basic mission, rehabilitate the former Alma College site so it can be integrated into the Preserve, while respecting the site’s history, character and cultural landscape

- | | |
|------------|--|
| Obj CR-2.1 | Restore and reuse the former Alma College site according to federal guidelines for the rehabilitation of cultural landscapes |
| Obj CR-2.2 | Preserve historic structures that retain integrity and significance to the cultural landscape |
| Obj CR-2.3 | Ensure the safety and security of visitors to the site |
| Obj CR-2.4 | Interpret the site’s history in a compelling and engaging manner |
| Obj CR-2.5 | Balance the District’s mission with potential improvements and programs |



iv. ELEMENT 4: Maintenance and Operations

Goal M01 – Maintain trails and facilities to protect the natural environment and provide for a quality visitor experience

- | | |
|------------|---|
| Obj MO-1.1 | Maintain a high quality, low maintenance, safe and enjoyable road and trail system |
| Obj MO-1.2 | Reduce potential user conflicts |
| Obj MO-1.3 | Reduce and control sources of road- and trail-related erosion and sedimentation |
| Obj MO-1.4 | Use Best Management Practices during facility construction and maintenance to control erosion |

Goal M02 – Address environmental hazards

- | | |
|------------|--|
| Obj MO-2.1 | Retrofit existing structures and site new trails and facilities to reduce seismic risk |
| Obj MO-2.2 | Remediate contaminated areas and other hazards associated with past landowners and former land use practices |

Goal M03 – Reduce wildfire risk

- | | |
|------------|--|
| Obj MO-3.1 | Manage wildland fuels and reduce fire hazards to natural resources, structures, and facilities |
| Obj MO-3.2 | Facilitate wildland fire response and suppression |
| Obj MO-3.3 | Develop fire response procedures and plans for lease areas |

Goal M04 – Ensure that all leases, easements, access agreements, and other legal arrangements are consistent with Preserve Plan goals and District’s mission

- | | |
|------------|---|
| Obj MO-4.1 | Work cooperatively with lessees to ensure lease facilities are maintained in working and safe condition as part of the Bear Creek Stables Site Plan |
| Obj MO-4.2 | Ensure conditions of easements and other access agreements with neighboring landowners are met |
| Obj MO-4.3 | Work cooperatively with lessees to improve facilities and provide educational opportunities |

v. KEY AREAS

1. Key Area 1: Bear Creek Stables

All applicable goals and objectives of the Bear Creek Redwoods Preserve Plan will guide the use and management of Bear Creek Stables, however, the following goals and objectives are called out as they provide specific guidance for the Stables as a key area.

Goal PU6 – Maximize public benefits of Bear Creek Stables by broadening public access and use of the facility, consistent with the lease agreement

Obj PU-6.1	Formalize and expand public access within the Stables lease area, while ensuring the safety of horses, equestrians, and the general public visiting the site
Obj PU-6.2	Design and construct new infrastructure for public programs and repair or replace needed infrastructure for at the boarding facility
Obj PU-6.3	Designate trail connections from the Stables to the rest of the Preserve

Goal NR6 – Emphasize the protection of the natural resources at Bear Creek Stables

Obj NR-6.1	Maintain and manage roads and Stables facilities to reduce erosion
Obj NR-6.2	Follow Design Guidelines and use Best Management Practices when implementing all Stables facilities improvements
Obj NR-6.3	Limit access to erosion-prone and sensitive habitat areas

Goal MO5 – Develop a viable plan that is financially feasible for both a tenant and the District

Obj MO-5.1	Establish a long-term lease
Obj MO-5.2	Balance the District’s mission with potential improvements and programs

2. KEY AREA 2: Alma College

Goal AC1 – Include protection of cultural resources, or mitigation for alteration and/or removal of such resources

Obj AC-1.1	Study alternatives for protecting key structures and features
Obj AC-1.2	Use Best Management Practices for preservation of all structures and cultural landscapes

Goal AC2 – Conform with National Park Service guidelines to rehabilitate cultural landscapes

Obj AC-2.1	Ensure that restore/reuse/remove alternatives retain the distinctive features and spatial relationships of the potentially historic district
Obj AC-2.2	Preserve the historic character of the property
Obj AC-2.3	Preserve historic structures that retain integrity and significance to the cultural landscape

Goal AC3 – Balance the District’s mission with potential improvements and programs

Obj AC-3.1	Explore alternative funding sources and partnership opportunities
Obj AC-3.2	Consider potential revenue-generating programs that are consistent with the District’s mission and could help support the improvements and long-term maintenance of the former Alma College site



C. Preserve Plan Actions

Many topics were presented, reviewed and discussed with the public, District staff, and organization stakeholders throughout the planning process. In response to the Plan goals and objectives, actions described below were selected for inclusion. To maintain some built-in flexibility for the Plan, many of the guidelines and recommendations herein remain broad and conceptual. Nonetheless, selected projects, which are anticipated to be necessary to be able to open the Preserve to the public in the initial phases, are developed in more detail. Implementation of Preserve Plan Actions is subject to Environmental Protection Guidelines, which are provided in Appendix D.

i. Element 1: Public Use and Facilities Actions

1. Connectivity

Proposed Trail Uses

The Bear Creek Redwoods planning process focused on removal of the existing permit system and opening of all trails east and west of Bear Creek Road to hikers and equestrians. Equestrian trail riding in particular is well established in the eastern Preserve zone. The Preserve Plan retains and expands this use to the western Preserve, while providing for the safe integration of hiking use throughout the Preserve.

In response to community interest, bicycle use was proposed for consideration by stakeholders and the Planning and Natural Resources (PNR) Committee. This element of the Plan elicited strong –and sometimes opposing– opinions. Two themes emerged: bicycle use should be permitted, but mixing bicyclists and equestrians on the same trails raised serious safety concerns, particularly for young or inexperienced horseback riders. In response, the Preserve Plan includes one multi-use “through” trail, with all other trails open to only hiking and equestrian use. The multi-use trail would be completed in Phase II and open to hiking, bicycling, and equestrian use. The multi-use trail traverses the entire Preserve, connecting the Lexington Basin with the Skyline area. The trail design minimizes intersections with hiking and equestrian-only trails and avoids the Stables area.

The Plan implements the following general trail uses, summarized in Figure 3-1:

Hiking/Equestrian Use

- In Phase I, install a safe at-grade and/or undercrossing of Bear Creek Road, and complete road and trail upgrades to open the western Preserve to hiking/equestrian use
- In Phase II, improve existing roads and construct new trails within the eastern Preserve zone and open to general hiking/equestrian use;
- In Phase III, construct new trail to connect the southeast and northeast Preserve zones.

Bicycle Use – Multiuse Trail

- In Phase II, after connections to Summit Road and Lexington Reservoir County Park have been formalized, and new trail segments have been constructed, designate one trail traversing the entire Preserve from north to south as multiuse (open to bicycling, hiking, and equestrian use). Avoid established equestrian trails as much as possible, and establish clear control points at trail crossings.

Regional Trail Connections

- Support the development of a new multi-use trail connection between Lexington Reservoir County Park and northern Bear Creek Redwoods utilizing the Highway 17 overpass, and on to the Skyline/Summit area via the west side of the Preserve;
- Establish a regional trail connection between eastern Bear Creek Redwoods and Summit Road.

Dog Access

Dogs will not be permitted on Preserve trails due to the high volume of visitation expected, the range of nearby parks and open space areas that offer opportunities for dog-walking, and the potential for conflicts with dogs and horses.



Existing points of access to the Preserve will be improved to facilitate the creation of a comprehensive trail network

Preserve Trails Plan

The Preserve Plan includes approximately 20 miles of trail (Figure 3-1, Table 3-2), which will be opened in phases as old roadbed is converted to trail, existing roads are improved for increased use, and new trail connections are designed and constructed. The Trails Plan re-organizes the historic road system, which was developed over time to support many different uses, into a unified whole.

Trails are organized around a central patrol access route extending from the northeast to the southwest, which will also function as the multi-use trail in Phase II. Individual trail alignments and improvements are based on the Bear Creek Redwoods Road and Trail Erosion Inventory (Best, 2010, Waterways 2016), field investigations with District Operations staff, and stakeholder input. However, detailed design and engineering will likely result in slight changes in the trail alignments shown in Figure 3-1. Temporary trail names are provided for organization and ease of reference. Trail names will be formally reviewed by the District's Legislative, Funding, and Public Affairs Committee and approved by the District's Board of Directors.

Westside Trails

The western Preserve zone was prioritized for public access due to its scenic redwood forest, existing road network of improved roads, and the relative lack of disturbed areas. At the end of the first phase of Preserve Plan implementation, approximately 5 miles of trails will open to hiking and equestrian use. These trails pass through dense, closed-canopy fir and redwood forest, which transitions to a more open woodland of oak, bay, and madrone at higher elevations. Extensive infestations of invasive French broom and English ivy will be treated in Phase I, prior to opening to the public, and a number of road improvements are necessary to support increased use.

The Westside Redwoods Loop Trail connects to the Alma College Parking Area and trailhead via a new, 0.5 mile connector trail, and the Bear Creek Road at-grade crossing. The new connection will switchback up a steep slope above and west of Bear Creek Road, and then join an existing, 8-10 foot wide roadbed. Several old-growth redwood trees occur in this first segment, which likely originated as a logging road in the mid 19th century. The road was improved and expanded during the property's estate era to access the numerous creeks and springs. Sweeping vistas of the Sierra Azul range are available from higher elevations along the Westside Redwoods Loop. The Madrone Knoll Trail branches off the loop at its southern apex. This trail climbs to an elevation of 2,400 feet, the Preserve's highest point, and provides glimpses of the coast between ancient madrones.

Along the Westside Loop, remnants of the historic water system are visible in the forest undergrowth, along with other historic-era debris, landscape plantings, rock walls, and graded pads. These features will be cleaned up or preserved/stabilized prior to Preserve opening.

Northeastern Zone Trails

Several new trails are proposed for the northeastern zone, along with removal of existing, poorly aligned or redundant roads. The Learn to Ride Loop Trail will provide a short, approximately 1.5 mile loop connecting the visitor area of Bear Creek Stables and the new north parking area (targeted for completion in Phase III) to a picnic and vista point, following the shaded alignment of a tributary to Briggs Creek, and gently contouring through grassland and scattered oak trees. The Briggs Creek Trail connects this loop to the central Preserve, crossing the creek and its tributaries and passing through scenic redwood/fir forest, then ascending to the flat-topped ridge supporting the Alma College site. From here, the Alma College Loop Trail brings the visitor to Upper Lake and the Alma College Parking Area via existing, historic roadway on either side of the ridge. Northeastern zone trails will be open to the public in Phase II of Preserve Plan Implementation.

Southeastern Zone Trails

Webb, Aldercroft, and Collins Creeks are the dominant natural features of the southeastern Preserve zone, where existing trails will be improved to provide year round visitor access. Lower Pond is a scenic destination for families in the southeastern zone, while long-distance hikes or rides are possible on the Aldercroft Creek Trail, particularly when it is extended to the summit area.

Terrain is particularly difficult in the southeastern Preserve zone. Ground movement along the San Andreas fault has caused massive, deep-seated landslides, creating steep, unstable slopes bisected by steeply-incised drainage channels. Existing roads in this zone require major improvements to improve stability of the roadbed. Some roads cannot be stabilized in the long term and will be closed entirely. Due to these challenges, it is not anticipated that trails in the upper southeastern zone (connecting the rest of the Preserve network to Summit Road east of Bear Creek Road) will be open to the public until Phase III of Preserve Plan implementation.

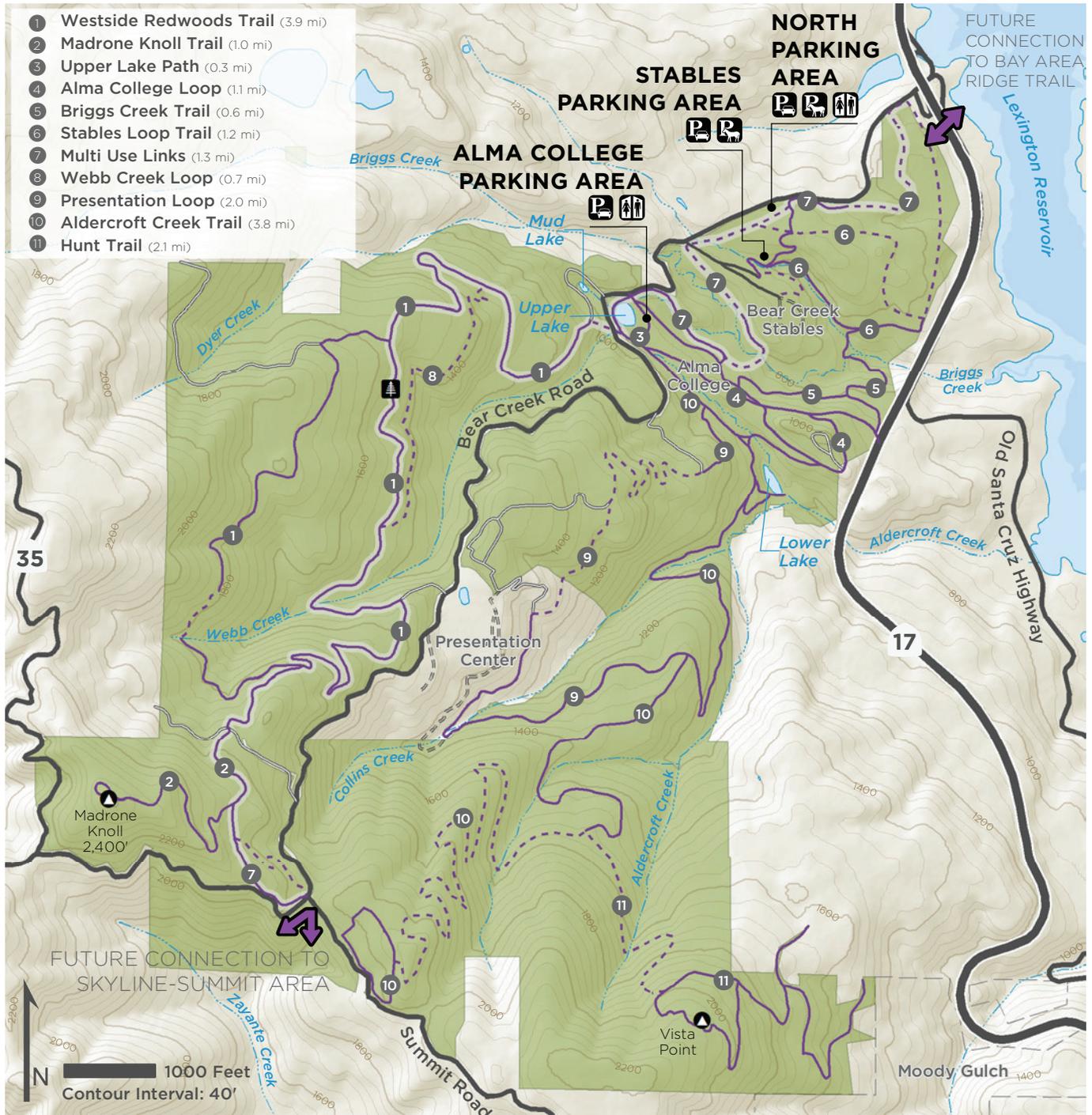


FIGURE 3-1 Public Access Plan

LEGEND

ROADS

- Highway
- Major
- Public
- Private
- Patrol Use Only

TRAILS

- Improve Existing Road/Trail for Increased Use
- Construct New Trail
- Multi-use

FEATURES

- Point of Interest
- Old Growth Redwoods
- Regional Connection

Multi-Use Trail

The preferred alignment for the multi-use trail contours approximately 5 miles across the Preserve from the Skyline/Summit area to Old Santa Cruz Highway/Alma Bridge Road (Figure 3-1). Safely connecting the trail to the Skyline area and the Lexington Basin is dependent on agreements with local and regional transportation agencies. The trail will be open to bicycle use once these connections are formalized, safety improvements completed, and all new segments have been constructed. These actions are anticipated to be completed in Phase II of Preserve Plan implementation, with the trail opening to hiking, equestrian, and bicycle use by 2025.

The northeastern segment of the multi-use trail, beginning at the intersection of Bear Creek Road and the HWY 17 interchange, will be designed and constructed to avoid established equestrian trails, neighboring properties, unstable geologic features, and other topographic constraints to the greatest extent possible. The conceptual alignment shown on Figure 3-1 is therefore subject to change during the design and engineering process. The remaining segments of the multi-use trail, extending from just east of Alma College to the intersection of Bear Creek Road and Summit Road, will traverse an existing roadbed. A number of improvements to this existing road, including rocking, installation of drainage dips, and upgrading stream crossings, will ensure that the trail is safe and accessible year-round for both patrol vehicles and trail users.

The preferred alignment for the multi-use trail was developed through an iterative process under guidance from the District Board of Directors and its Planning and Natural Resources Committee, and with significant feedback from Operations staff and community stakeholders. The Silicon Valley Mountain Bikers, a chapter of the International Mountain Bike Association, were instrumental in this collaborative process, as were members of the equestrian community, led by the non-profit organization Friends of Bear Creek Stables.

The alignment of the multi-use trail is subject to change as the design and permitting process continues, and will incorporate the following design guidelines:

- *Width and alignment should allow for safe and adequate visibility and safety for all users to the maximum extent possible, including horses and novice equestrians, and be accessible to patrol vehicles;*
- *Alignment minimizes intersections with other trails, particularly those in the immediate vicinity of the Stables or otherwise frequently used by equestrians;*



Bike and equestrian groups provided input for the development of the trail network during a public workshop, April 2015

- *Grade should be gentle (generally less than 10%) where possible to enable efficient drainage, or drainage improvements should be made to minimize erosion and allow year-round use;*
- *Trail should be sited to provide a connection from the Lexington Basin to the Skyline area.*

Trails Segments

Table 3.2 provides a description for each of the eleven (11) visitor trail segments proposed for the Preserve. There are three general types of trails: connector trails provide the primary connectivity between Preserve subzones, providing a lengthy out-and-back experience or a regional through-connection; loop trails typically provide a shorter experience of a specific Preserve area, bringing the user back to the trailhead without retracing the initial route; and extension trails link connectors and loops. Preliminary trail names are provided, pending a formal trail naming process under the guidance of the District's Legislative, Funding, and Public Affairs Committee, and the approval of the District's Board of Directors.

TABLE 3-2 Visitor Trail Description

Trail Name	Trail Code #	Length (miles)	Length EXIST. (miles)	Length NEW (miles)	Typical Width (feet)	Trail Description
Westside Redwoods Trail	1	3.94	3.72	0.22	~10	This loop traverses the densely wooded western zone of the Preserve, reaching some of the most remarkable old growth redwoods as well as vistas of Sierra Azul. The eastern (lower) segment will be designated as multi-use in Phase II.
Madrone Knoll Trail	2	1.04	1.04	0.00	6	Scenic trail extension off of the Westside Loop Trail, accessing the highest point in the Preserve, and providing access to coastal views shaded by oaks and madrones.
Upper Lake Path	3	0.27	0.27	0.00	10-12	Accessible promenade circling Upper Lake.
Alma College Loop	4	1.14	1.17	0.00	~10	This unique loop connects the Alma College Parking Area to the upper garden area and through the cultural site, and is the most significant opportunity to curate an interpretive route describing the many historic eras of occupation of the site. Connects to the Briggs Creek and Aldercroft Creek Trails.
Briggs Creek Trail	5	0.56	0.56	0.00	10-12	The Briggs Creek Trail follows existing road alignments that will be improved to support all-season use. This scenic trail crosses perennial creeks and brings the visitor through shady redwood groves.
Stables Loop Trail	6	1.16	0.64	0.52	~10	A relatively level, meandering trail through grassland and oak woodland in the Northeast area, linking to a potential picnic area and viewpoint. A shady, lush segment follows the banks of a seasonal creek. Connects to the Stables visitor area and boarders-only bypass trail, and will be served by the North Parking Area in Phase III if necessary.
					8-10	New construction will provide a boarders-only access road in the eastern portion of the Stables that provides access to the shelters, main arena, and operation facilities.
Multi-Use Trail Links	7	1.33	0.46	0.86	10-12	Construct new trail to connect the northeastern corner of the Preserve at Bear Creek Road and Alma Bridge Road, to the new trail crossing over Bear Creek Road near Alma College, to join the existing trail segment to summit road. New trail construction is necessary to avoid established equestrian trails and private property, and allow all-season access.
						New trail construction to link the Madrone Knoll Trail to Summit Road at Bear Creek Road, once safety improvements have been made to ensure safe egress onto the roadway.
Webb Creek Loop Trail	8	0.73	0.00	0.73	4-6	Slated for construction as staff and funding resources allow, this new narrow trail will follow a scenic, redwood-lined drainage.
Presentation Center Loop	9	2.01	1.14	0.87	~10	This longer loop traverses the central portion of the eastern Preserve, including the easement through Presentation Center, with a more significant elevation gain. Connects with Aldercroft Creek Trail.
Aldercroft Creek Trail	10	3.85	2.13	1.72	10-12	This trail and patrol road connects the former Alma College area with Summit Road, traversing dense forest and showcasing the Preserve's ponds, vista points, and cultural resource sites.
					6	A short link trail descends on a moderate gradient to provide access to the scenic Lower Pond. An old abandoned segment can be reopened for access along the creek bank.
					3	This short partial loop traverses the former tree farm near the Summit/Bear Creek Road intersection.
Hunt Trail	11	2.13	1.55	0.57	3-6	New trail to provide access to the southeast section of the Preserve near the Moody Gulch area, traversing the deep creek corridor and ascending to more open areas near Summit Road.
VISITOR TRAILS SUB TOTAL		18.16		5.49		

TABLE 3-3 Visitor Trail Segments Key Actions Required

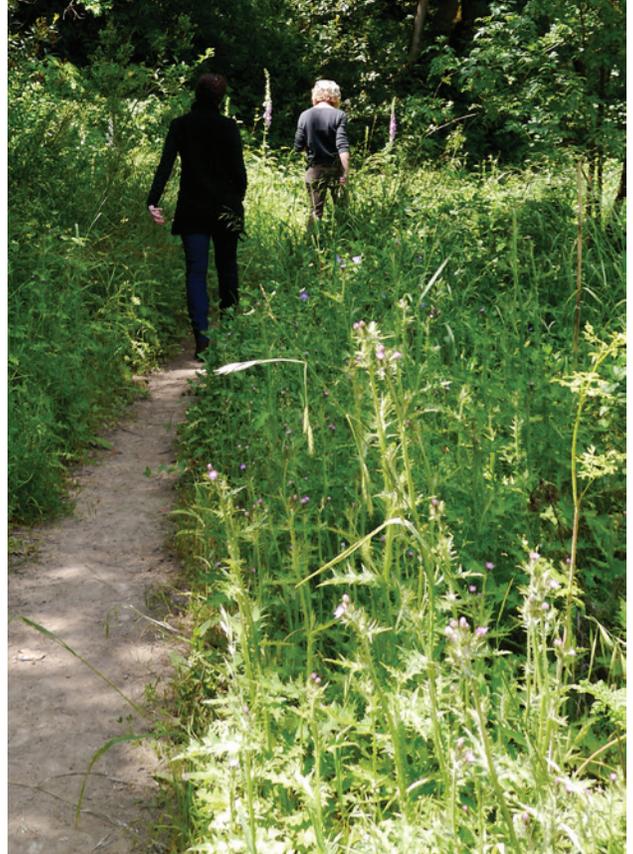
Trail Name	Trail Code #	Trail Key Actions Required
Westside Redwoods Trail	1	<ul style="list-style-type: none"> • Install rolling dips and rock road surface along entire length of existing patrol road (lower segment of loop; approximately 1.6 miles). • Replace vehicle bridge over Webb Creek to allow emergency vehicle access • Construct new connector trail to link lower and upper loop segments. • Reconstruct rock ford, install culverts, and install rolling dips on upper segment. • Restore native topography as feasible and revegetate disturbed areas at entrances to old roadbeds to discourage use.
Madrone Knoll Trail	2	<ul style="list-style-type: none"> • Install rolling dips along entire length of trail, rock muddy section as needed. • As part of SOD management plan, remove hazard trees affected by SOD as necessary. • Consider a minimally developed vista location at trail summit.
Upper Lake Path & Alma College Loop	3,4	<ul style="list-style-type: none"> • For trail segment north of Alma College ridge, install rolling dips, new ditch relief culverts and remove berm on outside edge of trail. • For trail segment through the Alma College site, designate use as hiking only, maintain vehicle accessibility for security and maintenance. Improve trail and install interpretive features per the Alma College Landscape Rehabilitation Plan. • For trail segments east of Alma College ridge, upgrade existing dips and rock segment through poorly drained soils. Install gate at entrance to radio hill/ water tank access and close to public access.
Briggs Creek Trail	5	<ul style="list-style-type: none"> • Re-route first 500 feet of trail to avoid steep grade, install rolling dips and rock to armor trail tread to support frequent equestrian use. Install rolling dips on remainder of trail. • Construct new vehicle bridge over Briggs Creek to east of Stables ridge, install rock ford over tributary drainage to allow year-round trail use.
Stable Loop	6	<ul style="list-style-type: none"> • In NE grassland/oak woodland area, reroute existing segments to avoid fall-line alignment and poorly drained soils. Restore old roadbed and unneeded disclines to discourage use. • Consider minimal picnic facilities at the former Tripp homestead site. • Close steep, poorly drained connector road SE of stables and restore natural topography. Provide new, boarder-only bypass trail NW of Stables to connect to Loop Trail. Pave Stables driveway for all-season use. • Replace culvert just north of Stables. Along Briggs Creek, install drainage dips rock seasonally wet segments and install retaining walls as needed to ensure long-term stability of the road surface.
Multi-Use Trail Links	7	<ul style="list-style-type: none"> • Construct new NE trail segment to avoid discline and neighboring properties. • Construct one new pedestrian bridge at Briggs Creek tributary near Bear Creek Road, and one new vehicle bridge over Briggs Creek downstream of historic truss bridge. • Obtain Santa Clara County and CalTrans encroachment permits, and install additional traffic control and pedestrian safety measures at intersections of Bear Creek Road and Alma Bridge Road (HWY 17 interchange) and Summit Road. Partner with these agencies to formalize NE trailhead. • Construct new SW trail segment to minimize grade and safely connect to Summit Road.

TABLE 3-3 (continues) Visitor Trail Segments Key Actions Required

Trail Name	Trail Code #	Trail Key Actions Required
Webb Creek Link Trail	8	<ul style="list-style-type: none"> • Design and construct approximately 0.8 mile of new, narrow trail.
Presentation Center Loop	9	<ul style="list-style-type: none"> • If feasible, reroute steep, fall-line trail segments in first section of trail. • Work with Presentation Center to develop a new hiking equestrian trail, accessible to vehicles, within the existing trail easement area. • Replace Collins Creek culvert or install vehicle bridge. • Install rolling dips and rock poorly-drained sections.
Aldercroft Creek Trail	10	<ul style="list-style-type: none"> • On existing trail segments, rock poorly drained sections, repair or upgrade culverts as needed, and install reverse grade dips to improve drainage. From Lower Lake south, trail traverses unstable slopes and will not be accessible to vehicles. Assess need to replace bridge at Collins Creek crossing. • As part of improvements to Lower Lake Dam, assess potential to improve access to Lower Lake, and install safety improvements at steep drop-off to SE. • In Phase III or as staffing and funding allow, construct new, vehicle-accessible trail to connect to summit area.
Hunt Trail	11	<ul style="list-style-type: none"> • Design and construct new trail to link to existing SE trail network. • Construct at grade creek crossings as needed. • Close/restore redundant trails in SE corner to simplify loop.

Table 3.3 includes a summary of required trail improvements recommended by the *Road and Trail Erosion Inventory* report (Best, 2010), and Updated by Waterways, Inc. 2016 for western zone trails. Subject to change during the design and engineering process.

Combined, the total length of trails and patrol roads in the Preserve is 18.16 miles (12.65 existing and rehabilitated, plus 5.49 miles of new trail and road constructed).



Existing Trail

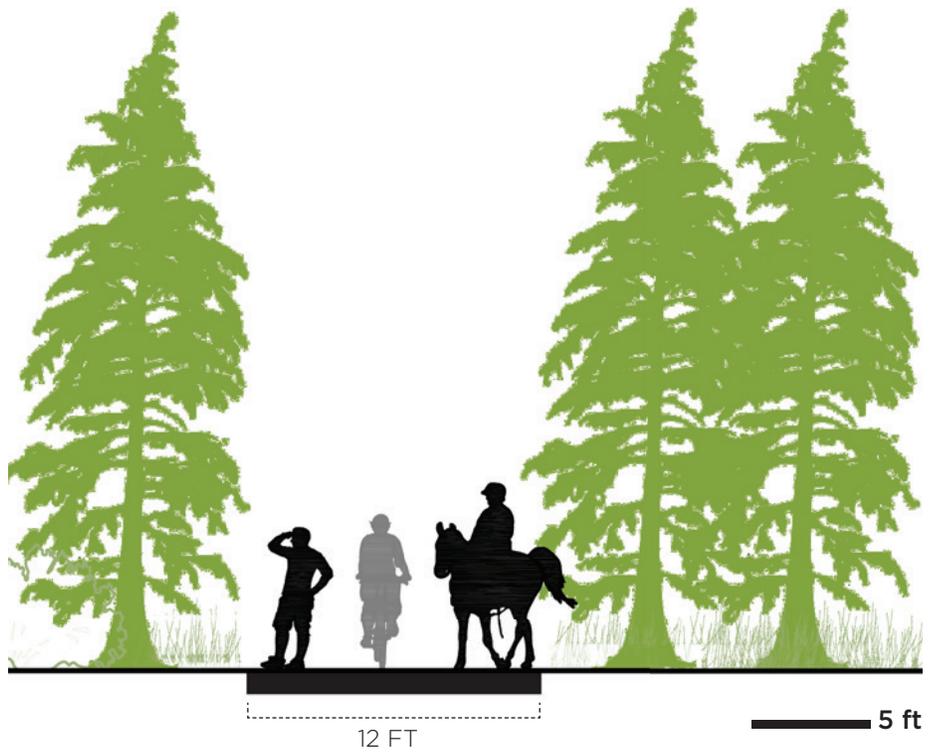


FIGURE 3-2A Trail Section 1: Multi-Use Trail



FIGURE 3-2B Trail Section 2: Typical Shared Trail (no bicycle use)

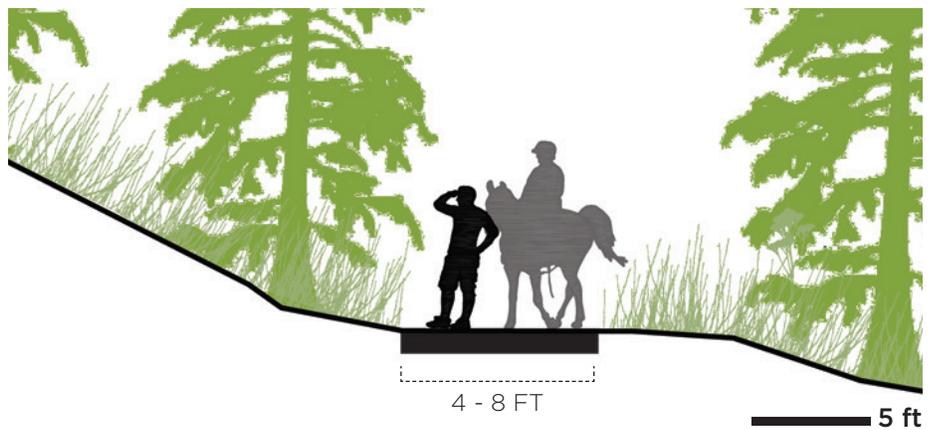


FIGURE 3-2C Trail Section 3: Typical Narrow Trail (no bicycle use)

Trail Maintenance and Construction

As described above, the Plan proposes to utilize existing roads and trails in the Preserve to create the new trail network. Significant new trail construction is also planned, according to the general alignments shown in Figure 3-1. It is anticipated that the Preliminary Trails plan will be reviewed and adapted as needed according to the District's Trail Construction and Maintenance Guidelines (Appendix E), with different types of trails maintained according to their intended use, as described below.

Multi-Use Trail

This connector trail will generally utilize the widest routes in the Preserve, which will also function as patrol access for much of its route. The proposed alignment follows existing patrol roads that will be used as a "central spine" for connectivity. Per District standards, the optimum width of these trails is 12 feet, but the final dimension will be determined by amount and intensity of trail use and specific field conditions, such as topography, vegetation, and sensitivity to environmental resources. Clearing widths of trails allowing bicycles should be developed to assure 100-foot sight lines whenever possible, and where it is not possible, the inclusion of safety signs and reduced speed limits should be considered. Vegetation should be cleared to a height of 10-12 feet.

Typical Shared Trails (no bicycle use)

These natural tread, dual user trails are recommended in most of the Preserve areas, to allow safe use by equestrians and hikers. District standards recommend an optimal width for this type of trail of 6 feet. Where treads are narrower than 6 feet, passing areas should be included.

Typical Narrow Trails (no bicycle use)

Given the typically steep terrain at BCR Preserve, it is assumed that some of the trails will be single-purpose narrow trails. These shall be no less than 4 feet wide.

Patrol-Use Only Roads

Some legacy roads are necessary to maintain patrol or other access to Preserve areas or neighboring properties, but are not intended for use as public trails. While the Plan does not propose to enforce restricted access to these trails, they will be indicated as "patrol road" on signs and brochures, and signage will be installed at key points to indicate that a closed area or private property is ahead.

Easy-Access Trails

Where feasible, the new trail design should recognize the intent of the Americans with Disabilities Act (ADA) to provide accessibility for everyone. Per District standards, trail alignments that have a gentle grade of no more than 5%, are readily accessible from staging areas, and have a smooth, sturdy surface are defined as easy access trails. In the Preserve, due to the existing rugged topography, there

are very limited areas where easy access trails are possible, nonetheless the Plan proposes to provide at least one easy access and interpretive loop in the Upper Lake/Alma College Area.

Other Existing Road Alignments

As described above, the Preserve Trails Plan would construct new trails, utilize existing roads, re-open several abandoned roads, and designate other roads as patrol-use only. Designated roads and trails will be regularly maintained to provide a safe, enjoyable user experience and minimize erosion. The Preserve also contains abandoned or legacy roads that are considered unsuitable for trail use or do not provide meaningful user or patrol access, and thus are not included in the Preserve Trails Plan. These legacy road alignments may be susceptible to invasive plant infestation or contribute to sedimentation into Preserve waterways, particularly if they become "informal" user trails. Trails that are not suitable/required will either be: 1) left in place and minimally treated to discourage use and eliminate erosion potential, or 2) recontoured with heavy equipment to provide proper drainage for long-term, permanent closure.

Trail Signage and Patrol

With the creation of new parking areas and regional trail connections, new trailheads will be designed to help different users find and follow the best route for their visit. Trailhead design and associated signage will incorporate federal accessibility guidelines for outdoor developed areas to ensure equal access for all users. Along trails, appropriate signage will be installed to ensure safety and security at intersections and trail control points, and to minimize unauthorized trail uses. Signs will be installed at trailheads and intersections to easily convey trail length and difficulty, and mileage counters shall be installed to aid in patrol of major trail loops. For trails connecting to parking areas, the District will consult with an ADA specialist and evaluate how to provide accessibility information such as general grade, width, tread, and potential obstacles.

Multi-Use Trail Control Points Trails will be managed to accommodate a range of users, including novice equestrians, families, those with limited mobility, and, in the case of the multi-use trail, mountain bicyclists. To ensure that trail use designations are clear and understandable, a system of markers or control points, coordinated with each trailhead in the Preserve should be developed. Trail etiquette guidelines will be displayed at key control points to minimize user conflicts. Compliance with speed and etiquette guidelines will be monitored by District patrol staff to determine the need for additional measures to ensure the safety and enjoyment of all trail users.

2. Access

Parking Areas

Public vehicular access at Bear Creek Redwoods will be limited to three new or expanded parking areas, all of which are directly accessible from Bear Creek Road. Two areas will provide public horse trailer parking. Preliminary layout and vehicle capacity for each parking area is described in Table 3-5, and shown in Figures 3-3, 3-4, and 3-5A&B. Given the anticipated high visitor use levels at the Preserve, the intent of these preliminary parking area studies is to identify the maximum capacity for each site, while minimizing grading and disturbance to natural and cultural resources. The final size and features of each parking lot will be determined during design development. All parking areas will include restroom facilities, solar-powered automatic gates to restrict access during closed hours, and trailhead and Preserve signage, and will be paved with asphalt concrete unless otherwise noted below. Driveway locations at each area were sited to meet line-of-sight and ingress/ egress requirements (Hexagon Transportation Consultants 2015).

Area 1: Alma College Parking Area

Two new areas, accommodating approximately 60 vehicles, will be constructed near the former Alma College site (Figure 3-3). The existing permit parking lot will be decommissioned. Anticipated to serve as the central trailhead for the Preserve, this area will offer an easy-access trail through the rehabilitated landscape, interpretive programming, picnic areas, and access to the west side of the Preserve via the new at-grade pedestrian crossing (see below). Preliminary plans for the area (PGA Design 2015), propose that parking be located in two separate lots that utilize existing relatively flat land on the southeast side of the lake and near the former Alma College classroom. The parking lots will be designed to integrate into and complement the rehabilitated cultural landscape, maintaining the spatial relationships and historic circulation patterns at the site, in compliance with the Secretary's Standards for the Rehabilitation of Cultural Landscapes. Limited tree removal and other vegetation management along Bear Creek Road will be required at the proposed driveway location to ensure adequate vehicle line of sight (Hexagon Transportation Consultants 2015).

Area 2: Bear Creek Stables Parking Area

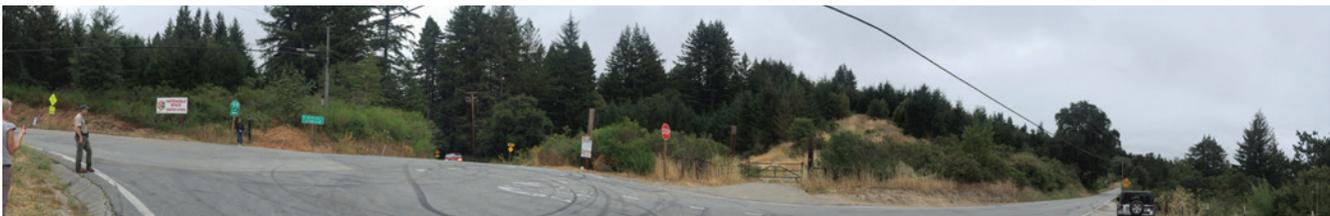
Existing informal public parking within the Bear Creek Stables lease area will be expanded to accommodate up to 30 vehicles. Additionally, the Plan proposes a separate horse trailer parking area with capacity for up to 10 trailers. Stables boarders will continue to be permitted to park in the private paddocks area provided adequate roadway width for emergency vehicle access can be maintained (Figure 3-4). Parking lot surfacing should be given special consideration at the Stables to accommodate equestrian use. Details will be defined during the design phase.

Area 3: North Parking Area

Located in the northeastern portion of the Preserve in close proximity to Hwy 17 (Figures 3-5A and 3-5B), the third parking lot will be constructed in Phase III if additional capacity is needed. The north lot will be an asphalt lot with capacity for approximately 50 vehicles, and includes 8 large reverse-parking spaces for horse trailers. This lot will serve users of the multi-use trail, provide overflow parking for visitors to the Stables. Construction of the driveway will require the removal of two existing large oak trees to guarantee safe sight lines.

Potential Area 4: Parking Area near Summit and Bear Creek Road (POTENTIAL)

The intersection of Summit and Bear Creek Roads is the southern entry to the Preserve (see picture below). Although it is a logical location to add a fourth staging area, the existing topography, road configuration, and sight lines, make it a very difficult location for a driveway and/or an at-grade crossing, which would be necessary to make the staging area functional. It is unlikely that a staging area will be possible here unless a stop sign or other improvements are provided for safe pedestrian crossing, nevertheless, the Plan reserves this location as a potential staging area, and recommends further study to identify specific need and feasibility of implementation and operation.



Road intersection at Bear Creek Road and Summit Road



FIGURE 3-3 Alma College Parking Area

TABLE 3-4 Summary of proposed Parking Areas

Name	Code #	Location	Vehicular Capacity	Horse Trailer Capacity	Facilities
Alma College Parking Area	1A	Alma College, near the Upper Lake gardens	30	0	Restrooms nearby in Alma College; benches, picnic tables, trash receptacles, and bike racks.
	1B	Alma College, behind the classroom building	30	0	
Bear Creek Stables Parking Area	2	Bear Creek Stables	29	10-20	Located near restrooms and other visitor facilities at the Stables.
North Parking Area	3	Between BCO1 and BCO2	51	8	Horse staging area with water trough, benches and trash receptacles; public restrooms.
TOTALS			140	18 - 28	

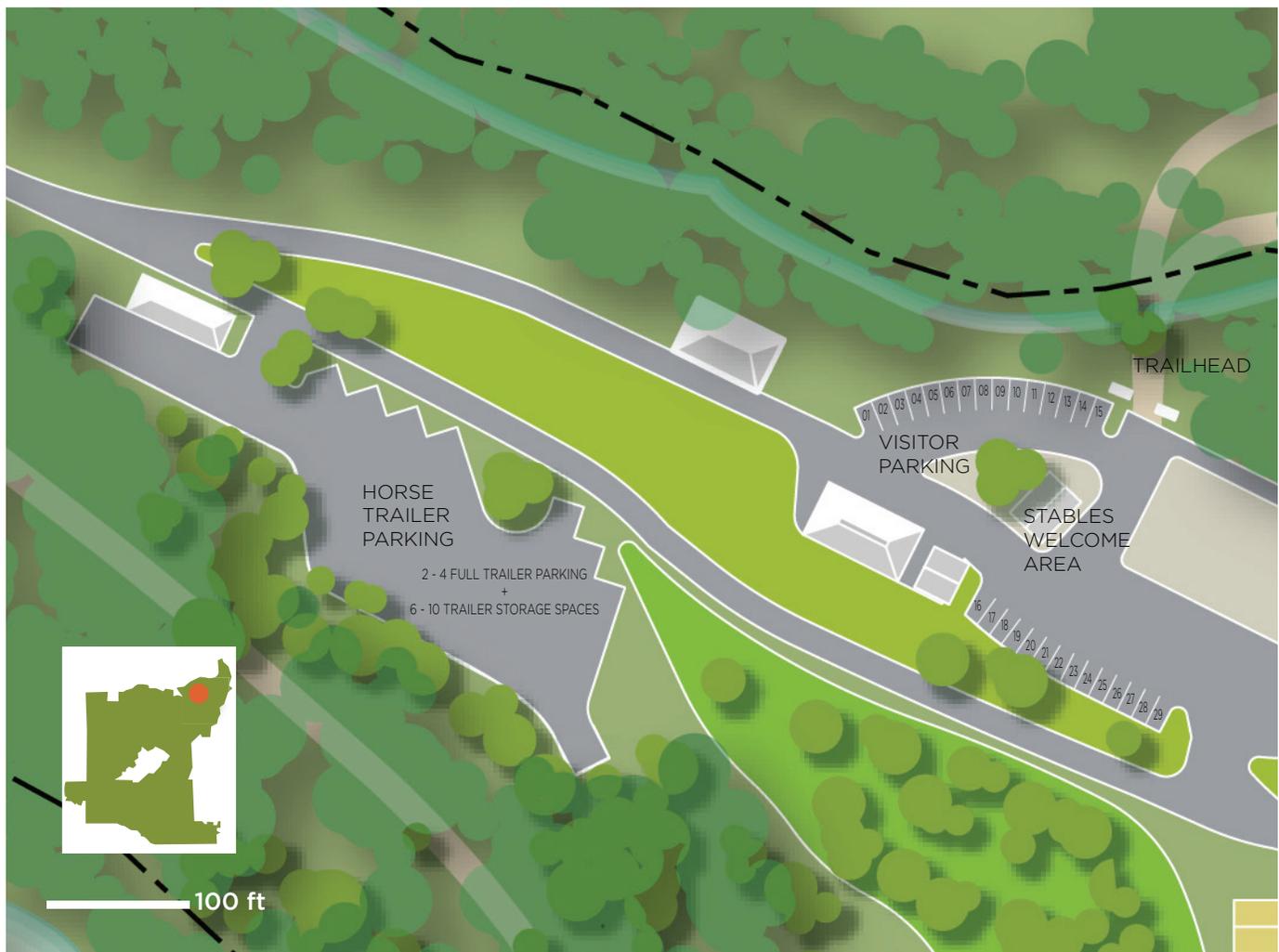


FIGURE 3-4 Bear Creek Stables Parking Area



FIGURE 3-5A North Parking Area Plan Diagram

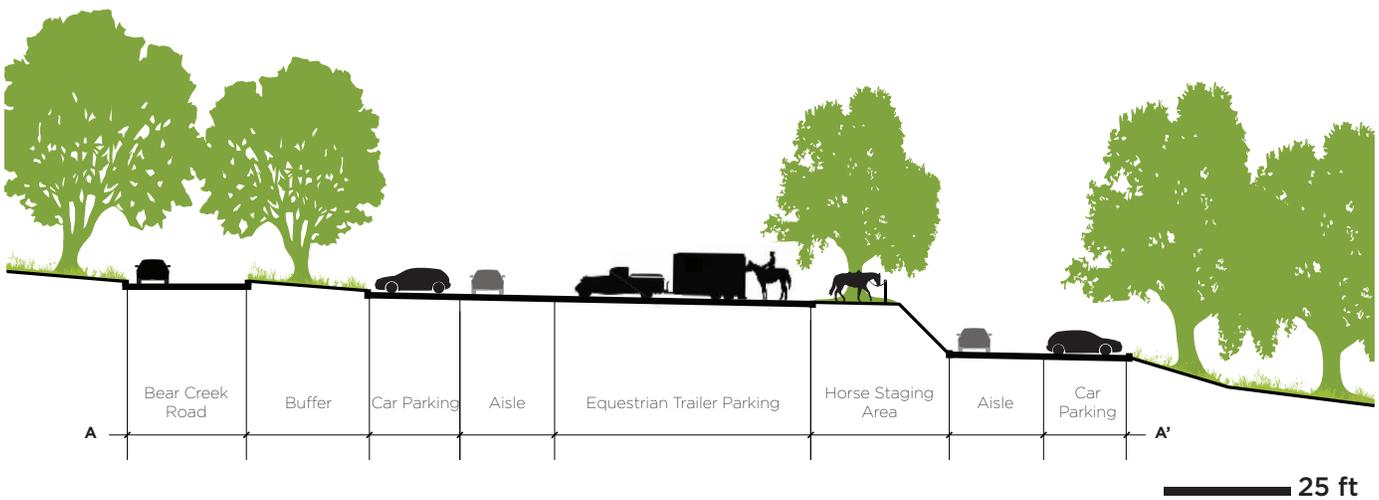


FIGURE 3-5B North Parking Area Section



Bear Creek Road

Bear Creek Road Trail Crossing

Providing a trail crossing of Bear Creek Road is the most important trail access improvement proposed in the Preserve Plan, and also the most challenging. Trails in the western Preserve zone are the highest priority for public use due to their access to scenic redwoods and vistas. However, no suitable site for parking and trailhead staging exists in the western zone. Unless future land acquisitions or easements allow construction of a parking area, visitor access to the entire western zone therefore requires a trail crossing of Bear Creek Road. A detailed analysis of potential crossing locations is included in the Bear Creek Redwoods Traffic Study (Hexagon Transportation Consultants 2015).

At-Grade Crossing Planning Criteria

Planning criteria used to identify the location of a potential at-grade crossing (crosswalk) included:

- Adequate line of sight (a straight line along which the driver and trail user have unobstructed views of each other);
- Open, level roadside sites for safe ingress and egress, including a landing of adequate size to accommodate equestrians and bicyclists;
- Ability to connect to the existing trail system;
- Proximity to sites suitable for parking.

A single location met the planning criteria. This site is located adjacent to Upper Lake at the former Alma College site (Figure 3-1). Figure 3-6 illustrates the potential configuration of the crosswalk. A number of safety elements will be incorporated into the final crossing design to ensure that hikers, bicyclists, and equestrians can cross Bear Creek Road without danger. Potential safety elements include:

- Installation of roadway striping, such as a “zebra” crossing, to establish a clearly delineated pedestrian right-of-way;
- Additional improvements to channelize user traffic through the crossing, such as a pedestrian chicanes, landings, fencing, and signage;
- Installation of pedestrian crossing signs uphill and downhill of the crossing location. Signs may incorporate flashing lights, at adequate distances to allow drivers to modify their speed, that are activated by trail users;
- Installation of traffic-calming measures to reduce vehicle speeds. This action will require working with Santa Clara County to post and enforce speed limits, monitor compliance with radar speed indicator signs, and educate commuters about new users.

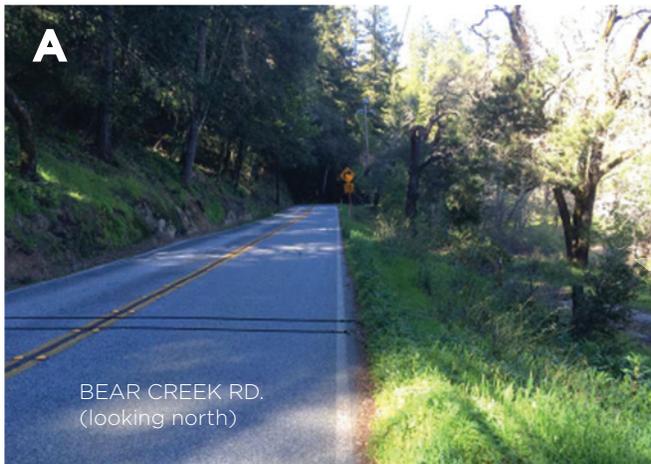
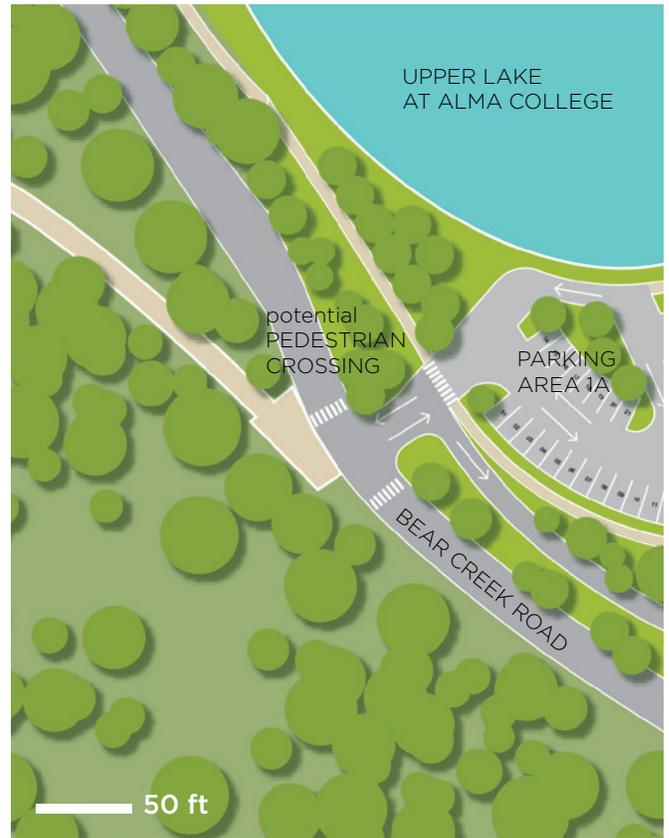
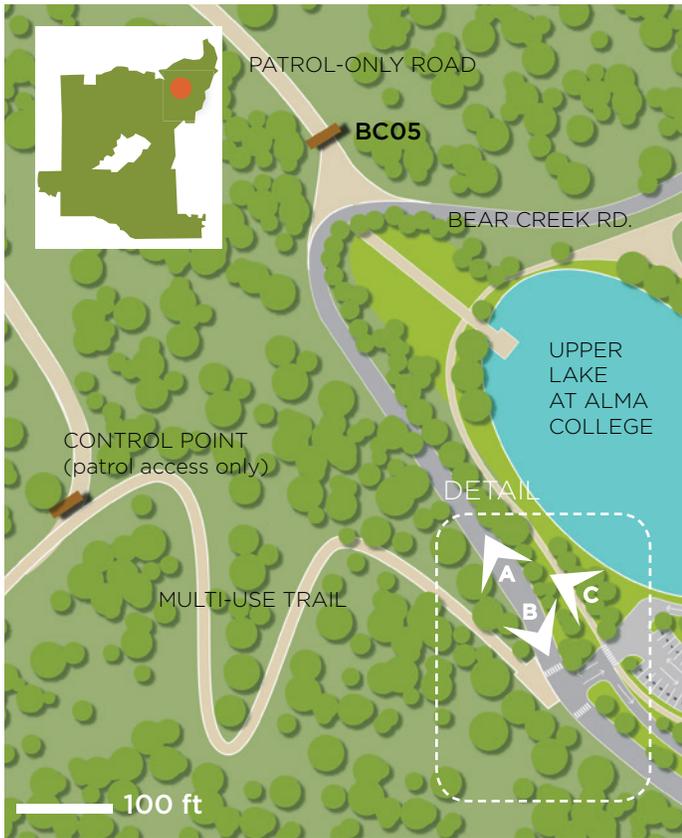


FIGURE 3-6 Potential Pedestrian Crossing at Bear Creek Road

A second pedestrian crossing location was studied at or near the intersection of Bear Creek Road and Summit Road. A safe crossing in this location would be required if parking/trailhead staging (potential parking area 4) would be provided near the intersection. Due to the road alignment and surrounding topography, a crosswalk would not be functional at this intersection unless a stop-sign, and potentially additional signage, were to be installed by Santa Clara County. These future actions are not proposed at this time, but would be analyzed and implemented as part of a separate access project should they become necessary.

Undercrossing

Bear Creek Road is a steep, winding, mountain roadway, a designated scenic route owned and maintained by Santa Clara County. Traffic is typically light, but during weekday commute hours, traffic increases to moderate-to-heavy levels, and average speeds exceed posted speed limits. (Hexagon Transportation Consultants 2015). Observational data confirm that despite severe curves and steep grades, drivers on Bear Creek Road consistently exceed speed limits. Further constraining the crossing is steep topography (lack of level areas west of the road for landings or trail approaches) and unstable geologic condition. Despite these constraints, the option for an undercrossing has been added to the Preserve Plan, either in place of, or in addition to the at-grade crossing. Construction of the undercrossing is contingent on the results of feasibility studies, design constraints, acquisition of any required permits from other agencies, securing of adequate funding through partnerships, grants, and/or other sources, and the anticipated timing for implementation.



Road intersection at Bear Creek Road and Summit Road



Trail undercrossing at Wilder Ranch State Park

Photo courtesy of Paul Rogers.



3. Programs

District Open Space Preserves are managed and maintained as close as possible to their natural state, with the goal of protecting or restoring ecological values. By basic policy, public access improvements are limited to those offering passive recreational opportunities for solitude, reflection, and nature study. Nevertheless, multiple opportunities exist to create engaging visitor programs at Bear Creek Redwoods, consistent with the District's mission.

In the various workshops and public input engagements that took place during the planning process, stakeholders provided suggestions and preferences regarding potential and appropriate programs for the Bear Creek Redwoods Preserve. A summary of recommended recreational and educational programs and uses are described below.

Recreational

The main amenity in the Preserve is its trail network. Hiking, horseback-riding and biking (in designated areas) are the recreational uses most desired by visitors and the most appropriate for the Preserve. Additionally, the Preserve lends itself to other passive recreation activities such as picnics, running, horse riding lessons, etc. A number of sites in the Preserve can provide room for these additional uses, but the main destinations within it, Bear Creek Stables and former Alma College site, are the ideal locations for them. In the discussion about the Preserve's key areas (see section v and vi below), these opportunities are further described.

Educational

The second most mentioned program during the community workshops of the Plan's planning process was education. The Preserve is already used by small groups of school children for outdoor educational purposes, mainly around the Bear Creek Stables area. The opportunity to expand this use is significant if the Preserve implements a formal interpretive program to highlight its many remarkable features. Interpretive programs are a great way to enhance the visitor's experience of the Preserve and to contribute to environmental and historical education in the Bay Area.

The rich Preserve resources can be highlighted individually as landmarks or featured along a trail. Interpretive information can be conveyed using sign displays and brochures and through self-guided hikes, docent led hikes, and school field trips. Additional research will be needed to develop interpretive materials.



The Preserve presents multiple opportunities for recreation and learning

The Bear Creek Redwoods Preserve Plan Vision places the natural environment and its ecological values – watershed function; habitat quality, diversity, and connectivity; regional biodiversity and climate change resilience; among many others - as the highest priority.

Actions to restore the Preserve environment are therefore central to the Plan, and environmental protection principles serve to guide implementation of all other actions. For example, planned improvements to the Preserve trail system are specifically focused on mitigating past and ongoing ecological damage.

New trails and facilities will be designed to minimize further damage, both by siting new development in previously-disturbed areas and by adhering to the District's road and trail construction methods, as listed in Appendix E.

Environmental Protection Guidelines are standard procedures adopted by the District to minimize environmental impacts associated with all new construction as well as ongoing operations and maintenance activities. These guidelines are provided in Appendix D.

ii. ELEMENT 2: Natural Resources Management Actions

The Natural Resources element of the Preserve Plan includes actions to protect and enhance sensitive species habitat, control invasive species that have colonized disturbed areas of the Preserve, and address high-priority sources of erosion that threaten water quality. Areas affected by Sudden Oak Death, located in the southern Preserve in the summit area will be monitored, and precautions will be taken to ensure that these areas do not present hazardous wildfire fuel conditions or other impacts to critical ecosystem function. Finally, forest regrowth will be monitored to ensure that optimum recovery from past logging operations is occurring. These actions are described below.

1. Habitat Protection

Open Space Preservation and Expansion

The District will continue to actively purchase and secure new properties, easements, and other land interests, focusing on strategic corridors within District boundaries to complete a protected open space greenbelt and create linkages with federal, state, county, and city park lands and watershed lands. As one example, the District will work with Santa Clara County Parks to preserve and protect the Moody Gulch area, and will study the feasibility of additional trail connections in the future. By expanding its total land acreage and securing important linkages, the District is protecting scenic view sheds, natural habitats, and watershed quality while enhancing opportunities for habitat and trail connectivity.

Sensitive Species

Several sensitive, special-status wildlife species are known or potentially occur at Bear Creek Redwoods. The Preserve Plan includes actions to protect and enhance habitat for these species, as described below. In addition, the District will work in partnership with the California Department of Fish and Wildlife, as well as other resource agencies as applicable, to cross-share existing sensitive species data, encourage and facilitate future studies to identify and enhance suitable habitat, and to monitor populations of sensitive species.



Wood Rat



Bats

As described in Chapter 2, dilapidated structures at the former Alma College site (and likely at Bear Creek Stables) provide suitable, regionally-limited roosting habitat for bats. One or more structures will be demolished as part of the Alma College Cultural Landscape Rehabilitation Plan, and others will be sealed and stabilized to protect their historic character. To protect the Preserve's bat populations, suitable alternative roosting habitat (bat boxes or houses) will be provided and/or some buildings or portions of buildings may be left in place and rehabilitated for use by bats.

Surveys of the Alma College buildings were conducted during Fall, Winter, and Summer 2015-16. Based on the results of the fall and summer surveys, the Alma College buildings support day-roosting and maternity roosting habitat for Yuma myotis and/or California myotis, Mexican free-tailed bat, pallid bat and/or big brown bat, and Townsend's big-eared bat, with the majority likely Yuma myotis. Pallid bat and Townsend's big eared bat are special status species. The chapel is the most important habitat, supporting a significant maternity colony of 500 or more bats. The structures appear to support breeding Townsend's big-eared bat, although surveys failed to get visual confirmation of a maternity colony (adult females and young). Although only a few pallid bat calls were detected in the summer, pallid bat individuals or a small maternity colony may be present as well. Day roosts are used throughout the spring and summer and maternity colony roosts can be active from early April until mid-October. Few bats inhabit buildings on site during winter, when bats disperse to other areas in the region with better thermal conditions to support hibernation (H.T. Harvey & Associates 2016).

The chapel building will be sealed and stabilized as part of the Preserve Plan, and may be used in the future for events or as a visitor center. The carport, classroom building and 1954 library are proposed to be removed, and the 1934 library will be partially demolished, retaining the roof structure. In addition, several large trees that could provide roosting habitat for special-status bats would be removed. These actions could result in direct impacts to special-status bats, or indirect impacts to the local populations due to loss of roosting habitat.

The Preserve Plan includes implementation of the Alma College Bat Exclusion & Roost Habitat Replacement project, currently under development. This project would humanely exclude and relocate bats currently inhabiting the Alma College buildings into appropriately-designed structures that will provide alternate roosting habitat for both common and special-status bats. Structures will be designed to suit to the special-status bat species and colony size(s) excluded from the original roosting site. A program addressing compensation, exclusion methods, and roost removal procedures will be developed in consultation with CDFW before implementation. Exclusion methods may include use of one-way doors at roost entrances (bats may leave but not reenter), or sealing roost entrances when the site can be confirmed to contain no bats. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young). Roosting habitat will be replaced in coordination with CDFW, and replacement structures will be monitored for successful colonization. This replacement will be implemented before bats are excluded from the original roost sites. Once confirmed that special-status bats are not present in the original roost site, the buildings may be removed or sealed.

In addition to replacement habitat structures, retention of the Tevis mansion carport, located near the eastern boundary of the Alma College site, is also recommended. The carport currently provides important night-roosting habitat for a mixed colony of over 500 bats, as well as limited day-roosting habitat. Daytime habitat can be enhanced at this structure through relatively minor modifications (H.T. Harvey & Associates 2016). If feasible, the carport structure will be retained and stabilized as bat habitat and for interpretive purposes.

A final report and roost habitat replacement plan has been prepared (H.T. Harvey & Associates, 2016), and will be implemented prior to demolition or sealing/stabilization of structures at Alma College. The plan will include regular monitoring to ensure that bats colonies remain viable, and that artificial roosts are functional in the long term.

Red-legged Frog and Western Pond Turtle

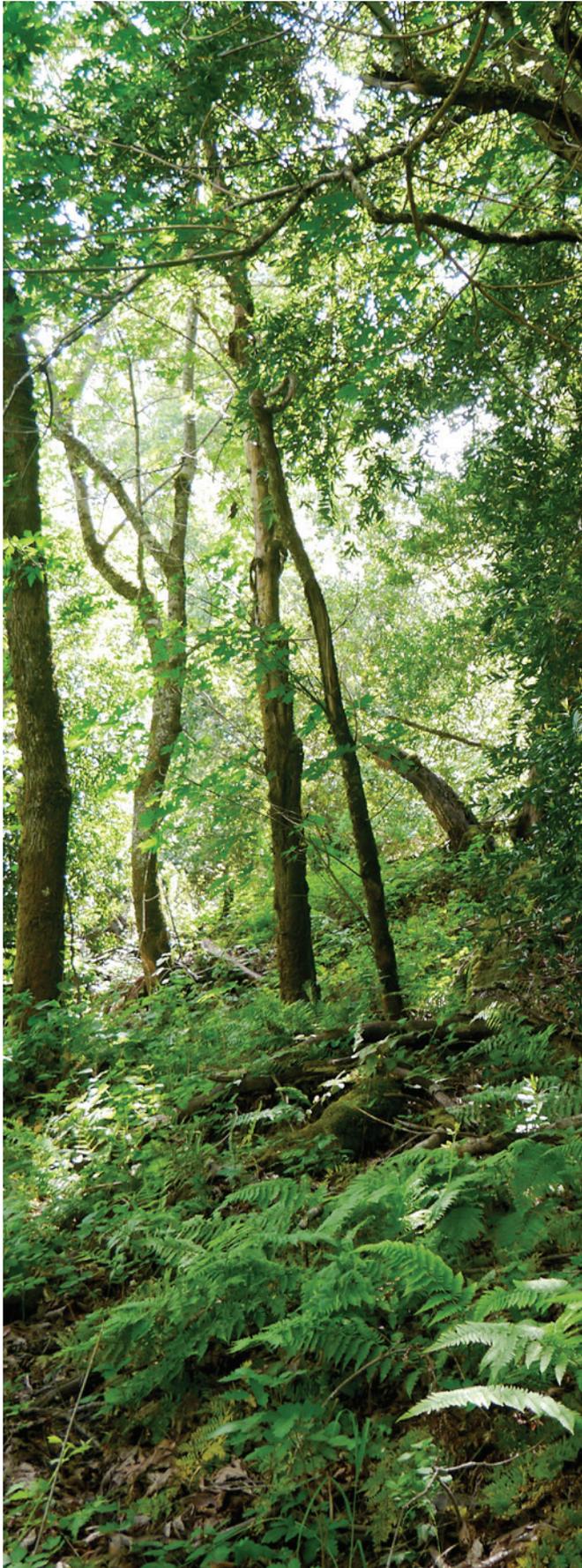
The many intermittent creeks and three permanent ponds located within the Preserve provide potential habitat for California Red-legged Frog (CRLF), a species federally listed as Threatened, and Western Pond Turtle (WPT), a California Species of Special Concern (Figure 2-3). The status of WPT is currently under review but the U.S. Fish and Wildlife Service to determine if listing under the Endangered Species Act is recommended.

Although previous surveys failed to detect CRLF, the presence of suitable conditions within the creek corridors suggests that this species moves through the Preserve to seek suitable permanent aquatic breeding habitat or during dispersal events. Ponds on the Preserve, although they are permanent and provide other required habitat elements, are colonized by non-native fish, bullfrogs, as well as crayfish, which are known to suppress CRLF populations. Crayfish are particularly difficult to eradicate completely once they have become established.

Structural and hydrologic analyses of the three ponds was initiated in spring 2016. Pond inputs, outlets, and current capacity will be documented. Geotechnical and engineering geology investigations will be completed for each of the three ponds. Recommendations to improve or maintain the pond basins and berm for down steam flood protection as well and wildlife habitat will be made. These recommendations will be reviewed by District staff for feasibility. If feasible, pond restoration recommendations will be specific to each pond and may involve inlet and/or outlet improvements, berm reconstruction, de-sedimentation, connection to existing water infrastructure, or installation of drainage features to reduce fish and bullfrog populations.

Western Pond Turtles have been observed basking in Preserve ponds, and grasslands surrounding Upper Lake provide suitable breeding habitat for this species. As described in the Public Access section, new facilities in the vicinity of Upper Lake will be designed to minimize loss of this habitat. Furthermore, remaining grasslands will be mown annually, and encroaching shrubs will be cleared, as part of rehabilitation of the Alma College cultural landscape. These actions will improve habitat suitability for breeding turtles. Finally, a qualified biologist will be consulted during design of the new parking area and other improvements, to incorporate design features (ie, signage) that will minimize impacts of visitor use on WPT.





2. Ecologically Damaged and Disturbed Areas

Management of Invasive Species

Invasive plant species, including French broom, English ivy, sweet pea, periwinkle, teasel, and various non-native thistles, are opportunistic colonizers of cleared, open areas of the Preserve, including roads, former developed and landscaped areas, abandoned vineyards, and open grasslands in the northeastern zone. French broom, a prolific flowering shrub with a persistent seedbank, is widespread and dense in some areas, and threatens native grass- and shrub-land species. English ivy colonizes shady moist areas in the Webb Creek drainage, advancing swiftly along the stream bank to engulf entire trees and dominate the understory. Sweet pea and periwinkle are showy perennial plants that follow historic development patterns in the Preserve, while teasel and thistles colonize open grassland areas in the northern reaches of the Preserve. Existing treatment programs to control invasives will be intensified as part of the Preserve Plan.

The Bear Creek Redwoods Integrated Pest Management Plan (BCRIPM Plan; MIG 2016) prescribes specific actions to address noxious weeds. Actions will be implemented based on phasing of public access. The western Preserve zone, which will open to the public at the end of Phase I, receives the highest priority. The majority of weed infestations are concentrated along existing roads and developed areas, although some infestations have spread into adjacent forest and woodland. Intensive treatment including herbicide application, mowing, and, in sensitive habitat areas, hand pulling, will be implemented in these areas. Pest Control Recommendations as prescribed in the BCRIPM Plan conform with the District's overall Integrated Pest Management Program and EIR (available at <http://www.openspace.org/our-work/projects/integrated-pest-management>).

Treatment of dense weed infestations will temporarily result in barren areas, which will be visible from Preserve trails. To inhibit re-colonization of disturbed areas, the District will use native vegetation and native seeds from local stock in revegetation efforts.

TABLE 3-5 Invasive Plant Control Prioritization and Recommended Budget for Bear Creek Redwoods Open Space Preserve

Priority	Plant Name	Site Name	Gross Area (or #)	% Cover in Polygons	Habitat Type	Project Budget Allocation		
						Year 1	Year 2	Year 3
1	Cape Ivy	Moss Lake	0.1 ac	30%	Urban / Developed	60 hrs Volunteers	60 hrs Volunteers	\$5,000 50 hrs Volunteers
1	English Ivy	Webb Creek	7.6 ac	70-90%	Redwood / Douglas Fir	\$25,000 80 hrs Volunteers	\$10,000 80 hrs Volunteers	\$5,000 50 hrs Volunteers
1	English Ivy; Periwinkle	Dyer Canyon (west)	6.6 ac	60-80%	Redwood / Douglas Fir	\$25,000 80 hrs Volunteers	\$10,000 80 hrs Volunteers	\$5,000 50 hrs Volunteers
1	English Ivy; Periwinkle	Dyer Canyon (east)	1.9 ac	Ivy 5-50%; Periwinkle 90%	Redwood / Douglas Fir	\$5,000 80 hrs Volunteers	\$5,000 80 hrs Volunteers	\$5,000 50 hrs Volunteers
1	French Broom	Summit Road	1.0 ac	5-40%	Roadside	\$2,500	\$2,500	\$2,500
1	French Scotch, Spanish Broom	Central Preserve - south of Bear Creek Road	4.4 ac	5-60%	Roadside	\$15,000	\$10,000	\$8,500
1	French & Scotch Broom	Central Preserve - north of Bear Creek Road	14.8 ac	2-60%	Roadside	\$12,500	\$11,500	\$10,000
2	Himalayan Blackberry	Dyer Canyon (west)	21 plants	-	Redwood / Douglas Fir	-	\$6,000	\$4,000
2	Egg-leaf Spurge	Collins Creek	0.3 ac	20%	Scrub	60 hrs Volunteers	40 hrs Volunteers	40 hrs Volunteers
2	French & Spanish Broom	Alma College	1.2 ac	10-40%	Roadside	-	\$10,000	\$5,000
3	Poison Hemlock	Preserve- wide	5.7 ac	10%	Various	-	Staff	Staff
3	Tree of Heaven	Summit Road	1 tree	-	Redwood / Douglas Fir	Staff	-	-
TOTAL BUDGET ALLOCATION PER YEAR						\$85,000	\$65,000	\$50,000
TOTAL VOLUNTEER HOURS PER YEAR						360 hrs.	340 hrs.	240 hrs.



Invasive Species Cape Ivy (*Delairea odorata*)

The BCRIPM Plan summarizes recommendations for site-specific treatment priorities for Phase I of Preserve Plan implementation. All invasive plant populations mapped were reviewed, and a subset was selected as a priority for treatment as listed in Table 3-5.

The following factors were considered in determining priorities: 1) the invasive species' potential to impact natural systems; 2) ability for the District to provide meaningful control in a 3-year period; 3) the capacity for the site to be restored to natural conditions; 4) assumed budget availability; 5) reasonable access; and 6) the feasibility of the use of volunteer labor. The availability of funding and volunteer labor was forecasted using past trends and key assumptions.

Later phases of weed treatment are also prescribed in the BCRIPM Plan. These actions will be reviewed and revised prior to implementation and are therefore not specifically identified in the Preserve Plan document.



Deceivingly beautiful but ecologically harmful French Broom *Genista monspessulana*

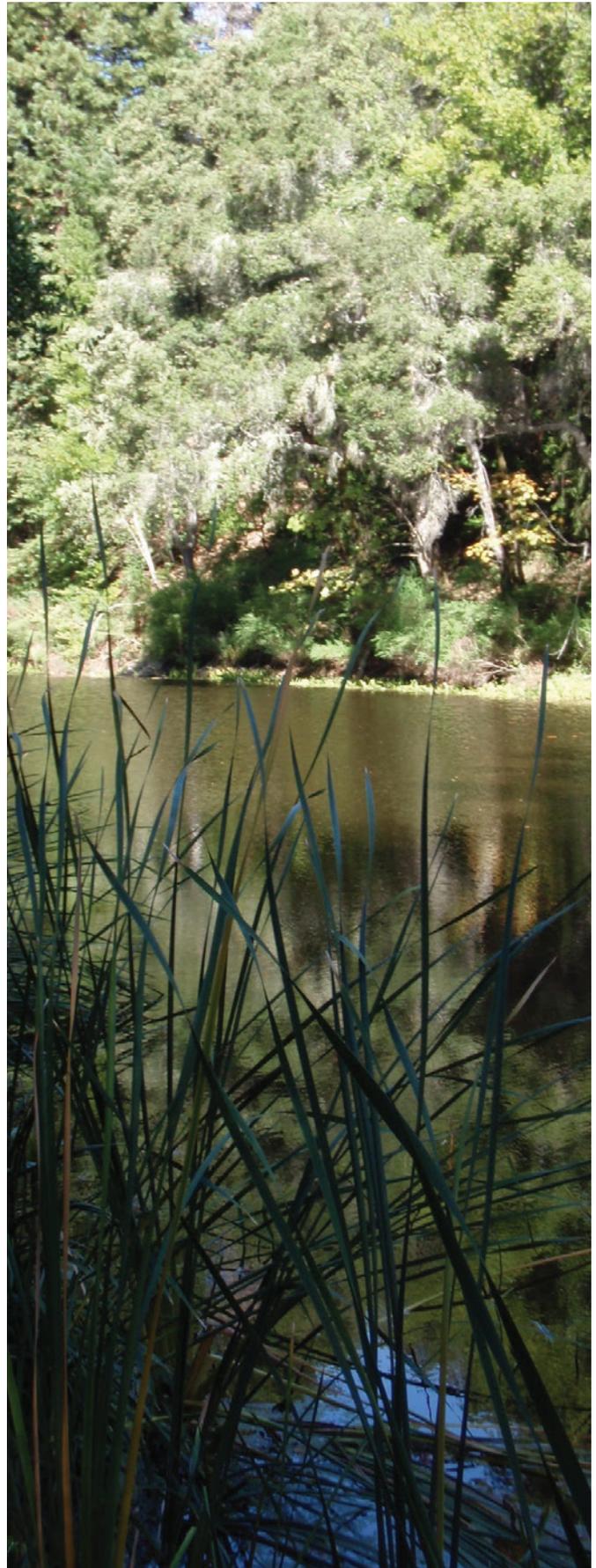
Sudden Oak Death Management

A known biological threat to local forest health is Sudden Oak Death (SOD), which is caused by the plant pathogen *Phytophthora ramorum*. Since the mid-1990s, this soil, water and wind-borne “water mold” has killed millions of tanoak trees and several oak tree species (coast live oak, California black oak, Shreve oak, and canyon live oak), and caused twig and foliar diseases in numerous other plant species, including California bay laurel, Douglas-fir, and coast redwood. (California Oak Mortality Task Force 2015). In Bear Creek Redwoods, SOD has significantly altered forest structure by causing widespread dieback of tanoak, a small to mid-size hardwood tree that previously dominated the understory of redwood-fir forest in the southern reaches of the Preserve.

In general, the District follows the following steps in managing Sudden Oak Death:

- *Track the effects of SOD disease (mapping dead oaks as staffing and budgeting permit), and share this information with the California Oak Mortality Task Force (www.suddenoakdeath.org) as staffing and funding allow.*
- *Removal of California bay trees or their branches within 15 feet of the trunks of high value oaks.*
- *For individual high value oaks such as very large mature oaks near picnic facilities, consider spot treatment of individual oaks with pest control sprays (e.g., Agri-Fos™) intended to reduce potential for SOD infection.*

The District is an active participant in the California Oak Mortality Task Force and supporter of Sudden Oak Death management and research, and plays a key role in developing regional strategies to reduce the impacts of SOD. Due to the extensive tanoak dieback at BCR, the Preserve was included in early studies of the disease sponsored by the U.S. Department of Agriculture, and other District sites have been experimentally treated with fungicide in partnership with academic institutions. The Preserve Plan includes actions to continue these partnerships, including potential participation in experimental treatments on SOD- impacted forest stands. Furthermore, the Preserve Plan would implement Best Management Practices for SOD as part of the District-wide Integrated Pest Management (IMP) Program.



Alma (Lower) Lake

3. Watershed and Waterways

Creeks and Water Quality

Webb, Aldercroft, Briggs, and Collins Creeks, as well as their smaller tributaries and other minor ephemeral creeks, drain the Preserve and flow into Lexington Reservoir and eventually into Los Gatos Creek and the San Francisco Bay. Due to the major barrier of Lexington Dam, Preserve creeks do not support anadromous fish (which require annual passage to ocean waters), and are both steeply incised and heavily shaded, reducing the extent of associated riparian vegetation and in-stream deepwater pools, limiting suitable habitat for aquatic wildlife. Despite these limitations, Preserve creeks are critical water sources for wildlife, contribute to groundwater aquifer recharge for the Santa Clara Valley, and are scenic and educational resources for the public. Furthermore, Aldercroft Creek currently provides water to Bear Creek Stables, while Webb Creek fills the three Preserve ponds.

Road and Trail Improvements

To protect creeks and water quality, the Plan includes a number of improvements to existing roads and trail to manage erosion (Figure 3-7). These improvements primarily focus on re-grading roads to shed water, rather than concentrate flows, which leads to erosion and sedimentation into creeks. Standard erosion-control treatments include installation of rolling dips and grade-reversals, crowning roads, rocking sections of roads that are too steep to allow these improvements or are otherwise poorly drained, stabilizing over-steep banks to prevent bank failure, and upsizing or installing new culverts or other stream crossing infrastructure so high creek flows are not impeded.

The Plan includes installation of up to six new road and trail bridges. Existing bridges, including the Webb Creek Bridge in the western Preserve zone and the Aldercroft/Collins Creek Bridge in the southeastern zone, are railroad flat cars founded on heavy timber beams which rest directly on the soil. These bridges were installed during relatively recent logging operations and are structurally sound; however, the unreinforced abutments are threatened by streambank failure or undercutting over time. Replacement of these bridges is necessary to ensure long-term vehicle use of the roads. Furthermore, both bridges are located at sharp turns and not accessible by emergency vehicles. Work to replace the Webb Creek Bridge will begin in Phase I. The Aldercroft Bridge may be replaced in Phase II. In addition to bridge replacements, new pedestrian and vehicle-width bridges will be installed in phases as trails are upgraded for increased use or new trail is constructed. Bridge locations are shown in the Preserve Maintenance and Operations Plan (Figure 3-7).

New trails and other facilities will be designed and sited to avoid impacting creeks, according to the District's Trail Construction Methods (Appendix E). As resources become available, poorly aligned, duplicate, or abandoned legacy roads on the Preserve will be decommissioned if they are contributing to sedimentation into creeks. As described in detail in the Bear Creek Stables section (section v.), filter strips, drainage basins, native revegetation, and other green infrastructure elements will be installed to ensure that site runoff is adequately treated prior to entering adjacent creeks. Finally, historic debris and concrete will be removed from creeks as resources permit.

iii. ELEMENT 3: Cultural Resources Management Actions

The land comprising Bear Creek Redwoods Open Space Preserve has long been recognized for its natural resource and scenic values, leading to a long history of settlement dating back to the pre-historic era. As described in Chapter 2, prehistoric and historic resources on the Preserve range from pre-historic food processing sites, remnants of the redwood logging and milling period, and the more recent development of the north-central portion of the Preserve into country estates and finally a Jesuit college. Through interpretation of remnants of prehistoric and historic human use and occupation, the Preserve will tell the story of broader California history.

1. Protection/Preservation of Resources

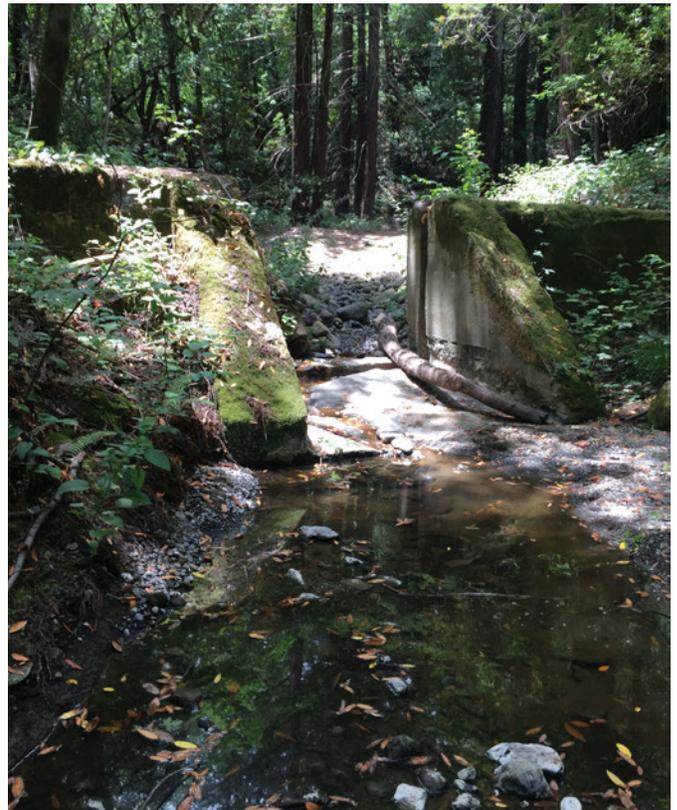
The District's mission is to preserve open space in perpetuity, with an emphasis on the protection and restoration of the natural environment for ecologically-sensitive public enjoyment and education. Nevertheless, recognizing the significance of the Alma College cultural landscape, the Preserve Plan includes actions to retain, rehabilitate, and interpret key site elements, including seeking partnerships or other funding sources to re-use the historic chapel building. These actions are described in detail in Section 5, Key Areas. Improvements at the stables site would retain the historic character of the site as much as possible, also described in the Key Area section.

The Preserve Plan will preserve and protect other known, significant cultural resources, such as the steel truss bridge, to the maximum extent feasible. However, many other cultural resources exist on the Preserve that have not been evaluated for significance. Significant cultural resources are those that meet criteria for listing in local, state, or federal historic registers. The District may also choose to preserve and protect resources that are not eligible for listing, for their contextual or interpretive value. In Phase I, evaluations of all known cultural resources, including both historic and pre-historic features, will be completed. For resources deemed to be significant, recommendations will be developed to ensure that facility construction or visitor use does not impact the integrity of the resource.

In 2016, a literature review of known resources recorded on and in the vicinity of the Preserve was conducted using data on file with the District, the Northwest Information Center (NWIC) of the California Historical Resources Information System, Sonoma State University, and Pacific Legacy, Inc. Actions are summarized below and in Section VI for the Alma College cultural landscape. Locations of resources are kept confidential to prevent disturbance.



Grinding Rock at Bear Creek Redwoods Preserve



Former dam on Briggs Creek



Former water feature at Alma College

Therefore, a map of known resources is not included in the Preserve Plan. However, the District maintains a Geographical Information Systems (GIS) database of known cultural resource locations, and this database will be expanded in the future to include resource information and documentation. By continuously updating the District's cultural resource inventory for Bear Creek Redwoods, the District will be able to refer to current information to guide implementation of necessary protection measures and avoid impacts through new facility construction. In addition, a Districtwide Curation Plan will be developed to catalogue and preserve recovered artifacts.

Pre-historic Sites

Prehistoric occupation of the Preserve is evidenced primarily through the presence of concentrations of flaked and ground stone artifacts and milling features. In addition, several large mortars occur on the Preserve. The midden containing chert and obsidian debitage and tools, located in the southeastern Preserve, is unevaluated but presumed to be a significant cultural resource. This site will be evaluated in Phase I of the Plan to ensure that construction or use of roads and trails in the vicinity do not impact the integrity of the resource.

To thoroughly document prehistoric resources on the site, the District will seek to involve local academic institutions, such as Foothill College and Stanford University, in field investigation and cataloging of the midden and other archaeological deposits.

According to the District's Resource Management Policy, to minimize disturbance to prehistoric resources, access to and interpretative of prehistoric sites would be limited to generalized information in interpretive materials. Documented tours may provide limited access to sensitive sites that would not otherwise be accessible.

Historic Resources

The Preserve Plan recognizes the potential of the Alma College cultural landscape for interpretation, education and even as a unique small venue for events in the context of the Preserve, and thus provides preliminary recommendations for the management and protection of existing relevant elements that are able to be preserved and rehabilitated. Structures at the Alma College site that cannot feasibly be rehabilitated or that have minor or no contribution to the cultural landscape are proposed for demolition (Section vi).

In addition to features contained within the former college site, extensive cultural landscape elements associated with the estate and/or Jesuit periods occur throughout the Preserve, including historic water system and road infrastructure. The concrete and steel truss bridge, spanning the Briggs Creek canyon downstream of the Bear Creek Road bridge, will be preserved and stabilized if necessary to prevent damage and ensure public safety. These improvements will be designed under the guidance of a registered archaeological professional to ensure that the historic integrity of the bridge is not impacted. Other historic resources on the Preserve include traces of early twentieth-century homesteads, including a brick fireplace and root cellar; remnants of the Iona School such as building pads, brick and mortar foundations, and landscape plantings; rock walls and bridge abutments; a wooden grape processing shed at the former Alma College vineyard; mine remains; and elements of the historic water system including a large, 430,000-gal concrete cistern, concrete and earthen pipes, pumphouses, and flumes. These remnants will be evaluated to determine their historic significance, and if improvements are required to protect the resource or provide for public safety.

2. Protection of Unknown Cultural Resources

Over 70% of the Preserve has been subject to systematic investigations for cultural resources. However, some areas that may be developed into trails or be disturbed by construction activities have not been previously surveyed. Furthermore, dense vegetation and heavy duff layers may have obscured resources during past surveys.

District Resource Management Policies include cultural resource management. Policies CR-2 and CR-3 require among other measures reconnaissance surveys; construction monitoring; preservation of cultural resources in situ; prohibiting vandalism, looting, and unauthorized removal of cultural resources; and implementing security measures (e.g. protective fencing and patrolling). MROSD's Resource Management Policy CR-3 also requires that MROSD staff receive training in the recognition of cultural resources. CR-3 provides for the identification, evaluations, assessment of effects, and mitigation of effects to previously documented, undocumented, and as of yet undiscovered cultural resources. In addition, CR-3 calls for the assessment of existing operations within areas of known archaeological sensitivity to protect and preserve cultural resources. These policies will be implemented for all Preserve Plan actions that cause ground disturbance and therefore could impact unknown cultural resources.

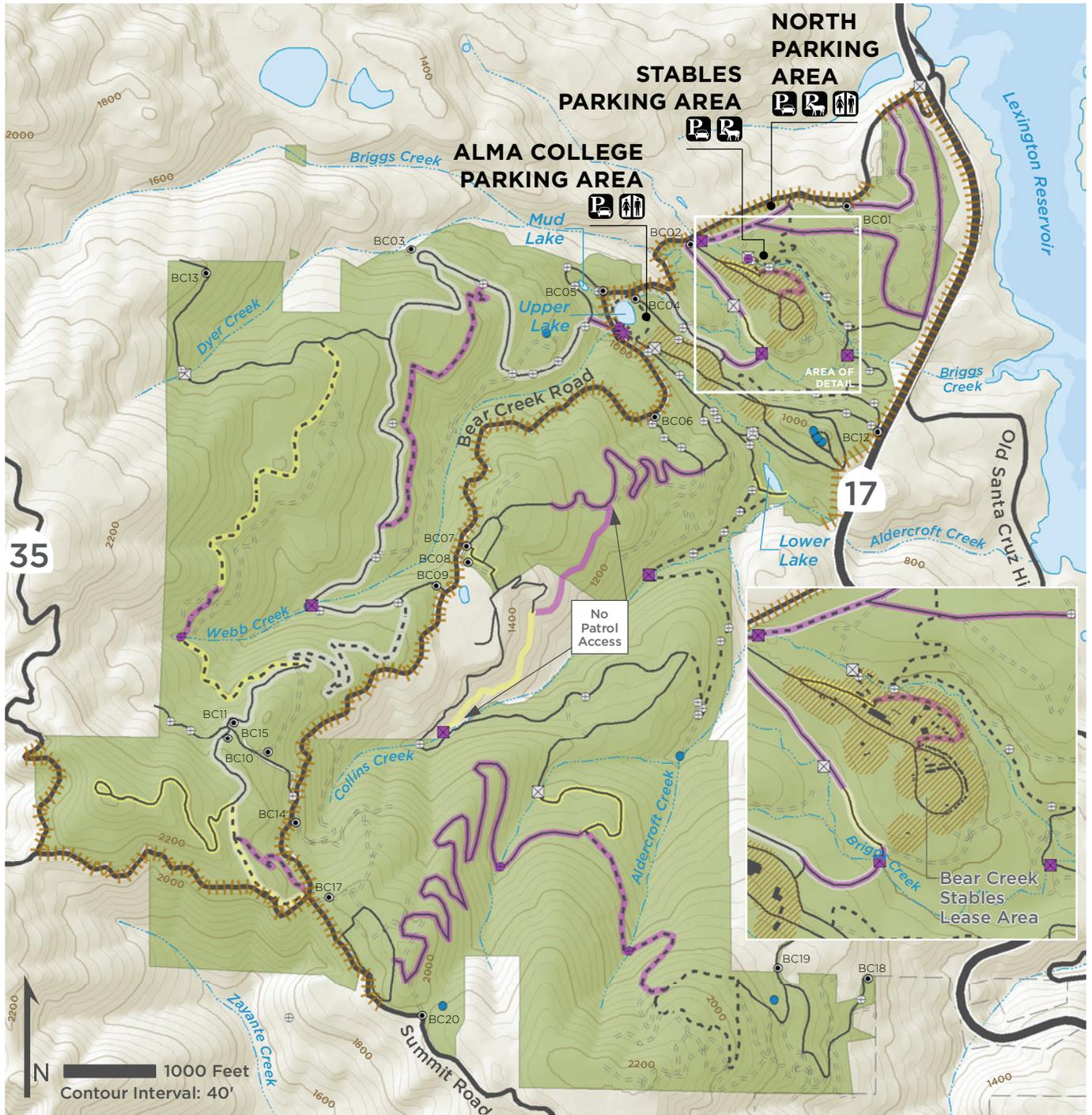


FIGURE 3-7 Maintenance & Operations Plan

LEGEND

ROADS

- Highway
- Major
- Primary Patrol Access
- - - - - ATV Patrol Access
- ==== Close to Public Access/Abandon
- Improve Existing Road for Increased Use
- Construct New Trail
- Multi-use

PATROL & TRAILS

FEATURES

- Gate
- ⊠ Existing Bridge
- ⊕ Existing Culvert
- ⊗ Construct New Bridge
- Replace Culvert
- ✱ Install Pedestrian Crossing
- Water System Structure
- ||||| Roadside Ignition Reduction
- ////// Defensible Space

iv. ELEMENT 4: Maintenance and Operations Actions

Operational activities on Midpen Preserves focus on creating and maintaining a safe, enjoyable trail system and other visitor facilities, maintaining rental and lease facilities, partnering with local agencies to manage wildfire risk and response, and providing for visitor safety and security through ranger patrol activities. Maintenance and Operations actions specific to Bear Creek Redwoods include upgrades to the Preserve water system, demolition of hazardous structures and stabilization of the historic features at Alma College, and implementing/monitoring facility maintenance and management guidelines at Bear Creek Stables.

1. Repair and Maintenance

Water Systems Upgrades

A variety of historical and extant water systems infrastructure exists on the Preserve. Archival research has determined that at one time approximately 6.5 million gallons of surface water was diverted, conveyed, and stored on the property: the middle and southern ponds held 2.5 million gallons and 2 million gallons, respectively, and multiple sources (springs and creek flow) were directed to the ponds to supplement storage. The middle pond may have been developed on a spring site as historical records indicate that it remained full even when water was being used. Currently the ponds are not used for any consumptive purposes and it is unknown if the historical conveyance facilities that were once used to fill the ponds are still operational.

Bear Creek Stables is currently served by a surface water diversion on a spring off Aldercroft Creek, in which flows are conveyed through approximately 7,000 feet of plastic pipe leading to a transfer tank and several storage tanks. Flows appear to be adequate at this time to support the stables operation and the on-site residence. However, recent drought conditions have called into question the long-term viability of this source.

It is anticipated that implementation of Preserve Plan elements, including renovation of Bear Creek Stables, potential partner-supported events and uses at the former Alma College site, and increased public equestrian use, will create a water demand that exceeds the current supply from the Aldercroft Creek diversion. A water resources inventory of the Preserve was conducted to identify potential options to augment or replace the current water supply (Balance Hydrologics 2016). These improvements ranged from refurbishing a historic diversion or horizontal well on the Webb Creek drainage, diverting or pumping water from Upper Lake and reconditioning an existing well near the summit. In addition to evaluating water

supply options within the Preserve, the potential to link directly to San Jose Water Company's municipal pipeline, located on Bear Creek Road, was also considered. All water supply alternatives included costly installation of pipeline conveyances and storage tanks.

Additionally, the District is part owner of the Alma Water System, consisting of a 500,000 gallon water tank supplied by San Jose Water Company and associated pipeline. The District does not currently utilize or maintain this system. Future use of the system would require obtaining easements over adjacent private property, as well as other legal negotiations. The cost and feasibility of future use of the Alma Water System could not be assessed.

The cost and feasibility of all other water supply alternatives were studied in depth (MNS Engineers 2016). A direct connection to the San Jose Water Company pipeline on Bear Creek Road was determined to be the least costly and most feasible alternative. The new pipeline and associated storage infrastructure will be designed and constructed in Phases I and II of the Preserve Plan. During this time, the Aldercroft Creek diversion source will continue to supply water to Bear Creek Stables. The Aldercroft source may continue to be used on a limited basis for non-potable needs. If this use continues, existing pipeline may require upgrades and/or undergrounding.

2. Leases, Easements, Access Agreements, and Other Legal Arrangements

Rental Structures and Facilities

Tenant or lease agreements will guide future operations at the Bear Creek Stables. As prescribed by District policy, the primary intent of such agreements is not typically revenue-making but instead to offset operational costs. Currently, the Stables are operated on a month-to-month lease. This temporary arrangement has hindered necessary, but costly, maintenance and upgrades to the site. The preliminary site design alternatives study determined the need for upgrades of the Stables facilities prior to the Preserve's opening to the public, described in Section 5, below. The plan includes the phased implementation of these upgrades to improve environmental quality; horse, boarder, and public safety and security; and increase public programming. Following approval of the Preserve Plan, the District will develop terms of a long-term lease for the Stables and issue a Request for Proposals to secure a tenant to operate and maintain the improved site. Phasing and funding of Stables improvements are discussed in the following chapter.

Alma College

The *Alma College Cultural Landscape Rehabilitation Plan* identified the historic chapel building as a potential candidate for rehabilitation and re-use, and recommended a series of stabilization and architectural restoration actions for the structure. Furthermore, the Plan recommends structural upgrades (installation of tie-backs) at the site's north retaining wall to improve seismic stability. Stabilization of the chapel and retaining wall, as well as other site rehabilitation actions, will be implemented by the District in order to allow the public to use and enjoy this important piece of local history.

Following implementation of these actions, described in more detail below, the District will issue a request for proposals to rehabilitate the chapel and reuse the site in such a way that is compatible with its historic status. If such a partner is identified, the District will enter into a lease to operate and maintain the site. Section 5, below, provides detailed stabilization and rehabilitation recommendations for the former Alma College site, and the following chapter includes funding and phasing information.

2. Safety and Security

Environmental Hazards

Site Containment and Remediation

A recent spill associated with an abandoned heating facility at the former Alma College site required environmental cleanup. Additional containment and remediation may be necessary as part of demolition and improvements at this site and at Bear Creek Stables. In addition, a historic-era dump site or landfill is located in the northeastern Preserve adjacent to the former Alma College "village". The landfill will be evaluated for cultural resource significance, and significant artifacts will be catalogued and preserved according to the District's cultural resource curation plan. The landfill will then be assessed for removal and the area restored to native habitat.

Dilapidated Structures and Debris

As part of the Alma College rehabilitation plan and the Bear Creek Stables site plan included below, a number of existing dilapidated structures are slated for demolition and removal. Most likely, these buildings will contain lead-based paint and asbestos materials. The District will adhere to state regulations concerning the demolition of buildings containing hazardous materials and clean up all sites and properly dispose of the materials as needed.

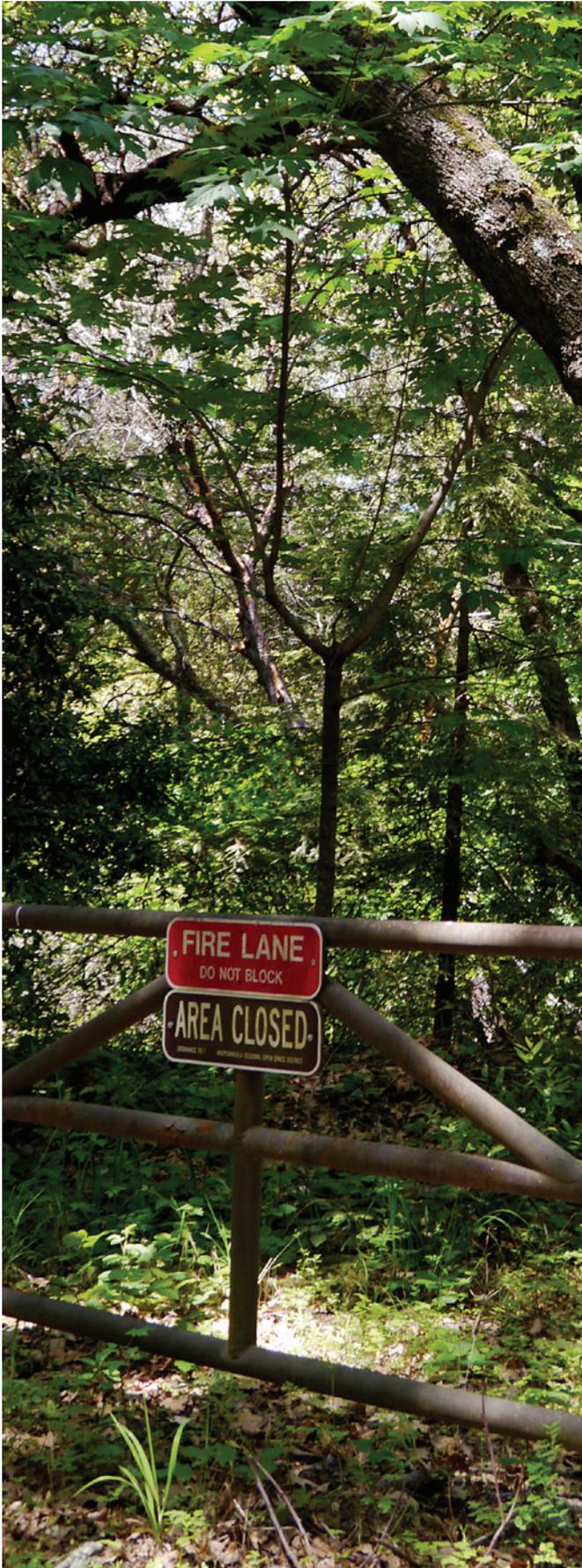
Fire and Fuels Management

The Preserve Plan will enhance the District's fire safe and fuel management practices to further reduce the risk and potential severity of a wildfire. In addition to the human-made facilities on the land, numerous natural resources are also at risk from a large fire event. Also of concern is the potential for a wildfire to move off the Preserve and impact neighboring residential development. Standard District fire management practices will continue to be implemented at the Preserve. These standard practices include maintenance of defensible space within 100 feet of structures, working cooperatively with the California Department of Forestry and Fire Projects (CalFire) to maintain fuelbreaks, vegetation management in high ignition risk areas (such as roadsides and parking areas), conducting regular staff training in fire response, and maintaining emergency access roads, turnarounds, and landing zones.

Although the California Department of Forestry and Fire Protection (CalFire) is the primary fire agency responsible for wildland fire suppression, the District maintains a fire program to assist with fire response. If a fire occurs on or is threatening District lands, District staff helps establish Incident Command if first on scene, evacuates or closes the Preserves for visitor safety, performs initial attack when safe and effective to do so, provides logistical assistance given staff knowledge of the property, monitors and attacks spot fires, and supplies additional water for primary agency engines.

Specific projects to reduce fire risk will also be implemented. The Lexington Hills Community Wildfire Protection Plan (CWPP) is the product of a communitywide effort that resulted in recommendations about specific actions that can be taken to reduce the threat of wildfire. Priorities for fuel management projects are determined by various objectives, such as reducing the ability of fires to cross boundaries and minimizing damage to developed areas and natural resources. Priorities are also based on regulatory requirements, which themselves are intended to increase access, facilitate fire suppression, and minimize resource damage. The recommendations include a landscape fuelbreak on the Preserve. A fuelbreak along the Highway 17 corridor will be created in Phase I of the Plan.

Additionally, as part of the Bear Creek Stables new long-term lease, the District will work with the tenant to develop a Fire Management and Emergency Evacuation and Protection Plan. This plan will meet guidelines currently



being developed in collaboration between the Santa Clara County Fire Marshal's office, Calfire, and the District's Visitor Services, Land and Facilities Services, and Natural Resources Departments. At a minimum it will address maintenance of defensible space, procedure for evacuating horses when a wildland fire is threatening the area, as well as procedures for protecting horses in a situation when time does not permit evacuation. The plan also will address measures necessary to protect individuals attempting to help evacuate and/or protect horses from fire. Water tanks will be appropriately sized and located according Santa Clara County standards to provide water sources for fire suppression.

Potential User Conflicts

Feedback received during public meetings indicated that equestrians were concerned that introduction of bicycles in the Preserve would result in the loss of the tranquil and safe riding experience they have enjoyed to date. Bicyclists are less concerned with this potential conflict, stating that most bikers are respectful of the rules while sharing trails, which give horses and hikers the right-of-way.

During the preparation of the Calero County Park Trails Master Plan (2013), the County of Santa Clara Parks and Recreation Department evaluated accident/incident reports from the last ten years for County Parks, the Santa Clara Valley Open Space Authority, and even MROSD and they found "little quantifiable evidence to substantiate the concern that shared use on trails resulted in a substantial increase in the frequency of accidents or injury. However, personal accounts of near encounters and ongoing conflicts were still an issue, and converting all trails to multi-use would limit the opportunities for trail riding for young or inexperienced equestrians." (County of Santa Clara Parks and Recreation Department, Calero County Park Trails Master Plan, 2013).

The Preserve Plan is presenting a comprehensive approach to addressing concerns regarding safety of users and to eliminate potential user conflicts by creating a hierarchy of trails, where the most appropriate trails are assigned to the most appropriate uses. Nevertheless, creating a safe environment requires also education, monitoring and enforcement. Additionally, as mentioned before, the District will monitor all existing and new trail uses (hiking, equestrian, bicycle) to determine if poor user compliance with District regulations merits additional, adaptive management.

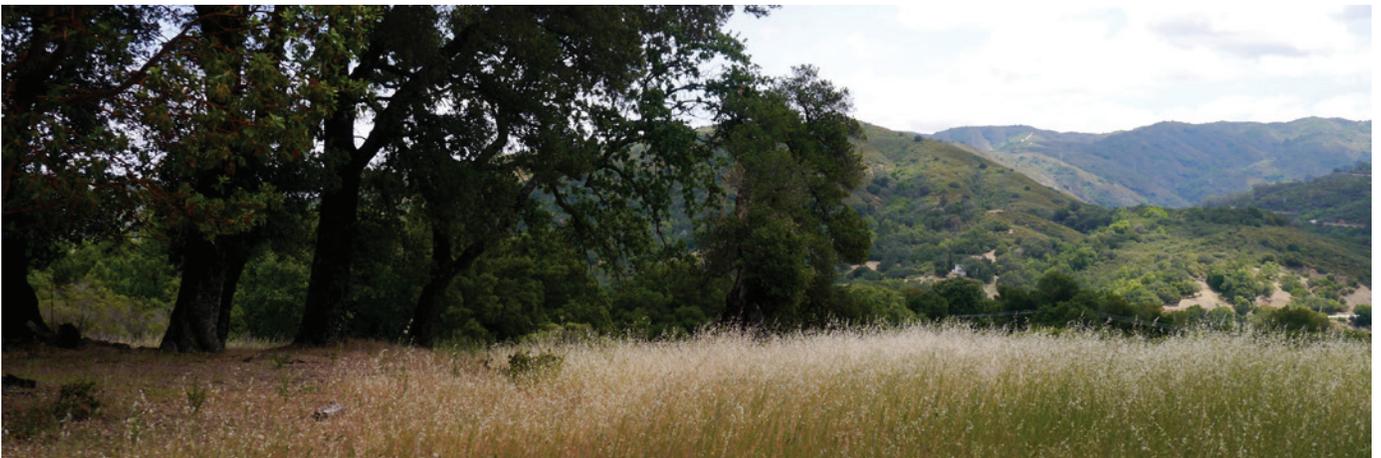


3. Volunteer Programs

Combined with the expertise and guidance of District field staff, volunteer groups could assist in the communication and education of visitors, to achieve a faster integration of new users into the Preserve. Additionally, with the appropriate training, volunteers can contribute significantly to many other aspects of the Preserve operations. Once trails are constructed, volunteers could participate in important programs such as the trails etiquette training events that will help ensure the success of the Plan and its recommendations. Volunteers will also have opportunities to lead trail maintenance events, help host special events, act as educational and interpretive docents, lead nature walks and guided rides, and fill many other positions. Student-led and Eagle Scout project opportunities also exist.



Docent and other volunteer programs



Surrounding Landscape and Oaks



v. KEY AREA 1: Recommendations and Guidelines for Bear Creek Stables

1. Preferred Site Design Alternative

After a thorough analysis of five site design alternatives, the Board selected, at the July 6, 2016 Board meeting, Alternative A2 as the Preferred Site Design Alternative for inclusion as part of the Bear Creek Redwoods Preserve Plan and analysis in the Environmental Impact Report (see Appendix B3: Bear Creek Stables Site Design Alternatives).

The Preferred Site Design Alternative will accommodate approximately 62 boarded horses and 10 public program horses, for a total of 72 horses. Public access improvements include a new visitor information kiosk/facility and trailhead signage, public program livery stable, public open air arena, farm animals barn, visitor restroom, and upgrades to the site's parking and roads. Existing pasture areas will be fully restored to natural landscapes and the paddock area will be rebuilt for improved drainage and equestrian health and safety. The boarder area will include a new large boarder arena, round pen and boarder restroom. Stables and administrative facilities will include a new caretaker residence/office in the existing location, an improved manure dump, a new hay barn and maintenance buildings, and a new trailer parking area for approximately 10-12 trailers.



The old stables structure and a large tree near the current parking area at Bear Creek Stables could become part of the new welcome visitor center at the facility



Boarder at Bear Creek Stables, (2015)

Phasing

Improvements at the site will be implemented in phases. High priority improvements focus on essential safety and environmental protection improvements to provide a safe environment for boarders, their horses and the public, and to protect the site’s natural resources. In addition, a livery stable will provide additional public access programming. These high priority improvements at the Stables will be implemented as part of the Preserve Plan’s Phase I Actions and will occur during the first three years following the Plan approval. Implementation of some high priority improvements may continue into the beginning of Phase II. Lower priority improvements will be recommended, pending funding, available capacity, and other priority needs, as part of the District’s annual Action Plan and programmed into tenant work plans. This will result in a phased budgeting and expenditures.

High priority improvements include removal of dilapidated structures, stabilization of the original stables building, restoration of pastures, installation of a public restroom, public livery stable and public open air arena. Limited improvements will be made to paddocks, shelters and boarder arena (maintaining the existing boarder area layout), parking, roads, hay barn and manure dump. Lower priority improvements include additional upgrades to roads and parking; replacement of the hay barn and caretaker house; construction of the new maintenance and storage building, and vehicle and trailer parking lot; and restoration of the original stables building for use as a visitor center and farm animals barn.

TABLE 3-6 Phased Implementation Plan for the Preferred Bear Creek Stables Site Design Alternative A2

Priority	Improvements	Phasing
HIGH	<ul style="list-style-type: none"> • Removal of dilapidated structures • Stabilize old stables building • Hillside restoration • New livery stables and public area arena • New public restroom • Limited improvements to roads, parking, hay barn, manure dump • Limited improvements to paddocks, shelters, boarder arena, maintaining the existing layout • New water system and fire suppression water tank 	Implementation of the high priority improvements will begin in Phase I . (Years 1-3) Implementation is expected to be completed early in Phase II . (Years 4-10)
LOWER	<ul style="list-style-type: none"> • Replacement of caretaker house/office • Additional road upgrades: asphalt roads and parking areas • Replacement of hay barn • New maintenance/storage building • New vehicle/horse trailer parking lot • Restore old stables building • Additional improvements to reconfigure boarder area; upgrade paddocks, shelters, boarder arena and round pen; and add restroom 	Phase To Be Determined (no sooner than Phase II): Pending funding, available capacity, and other priority needs, lower priority improvements will be recommended as part of the District’s annual Action Plan and programmed into tenant work plans.

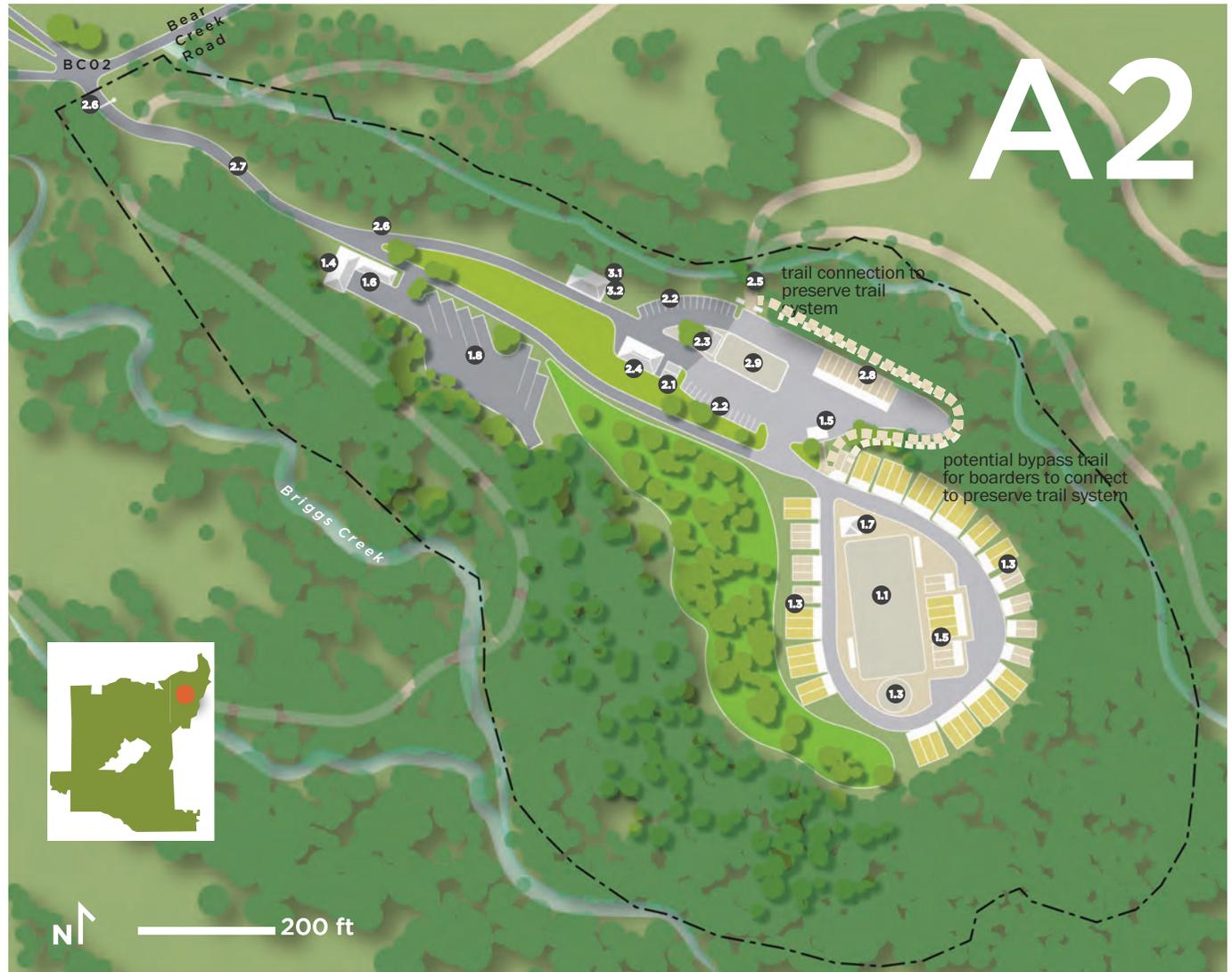


FIGURE 3-8A Bear Creek Stables Preferred Alternative (A2)

LEGEND

1. Horse Stables

- 1.1** Main Riding Arena
- 1.2** Round Pen
- 1.3** (22) Boarding Shelters + Paddocks (15x30ft)
- 1.3** (40) Boarding Shelters + Paddocks (15x40ft)
- 1.4** Hay Barn
- 1.5** Manure Dump
- 1.6** Maintenance & Storage
- 1.7** Restrooms at Arena
- 1.8** Trailer Parking (2 to 4 full trailer parking + 10 to 12 trailer storage spaces)

2. Public Access

- 2.1** Public Restrooms
- 2.2** Visitor Parking (25 to 40 spaces)
- 2.3** Visitor Facility (Welcome/Learning Center): shelter under existing tree
- 2.4** Farm Animals Barn (in older stables structure)
- 2.5** Horse/Pedestrian Trailhead
- 2.6** Directional/Informational Signage
- 2.7** Road Upgrades
- 2.8** Livery: (10) Stalls + Runs
- 2.9** 80x160-ft Outdoor Arena

3. Administration

- 3.1** Office (new building)
- 3.2** Groundskeeper House (new building)



Preferred Alternative A2 Phasing

High Priority

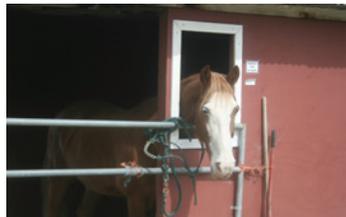
- a** Removal of dilapidated structures ●
- b** Stabilize old stables building
- c** Hillside restoration
- d** New livery stables
- e** New public area arena
- f** New water system and public restroom
- g** Limited improvements to roads, parking, hay barn, manure dump
- h** Limited improvements to paddocks, shelters, boarder arena, maintaining the existing layout



Lower Priority

- k** Replacement of caretaker house/office
- m** Additional road upgrades: asphalt roads and parking areas
- n** Replacement of hay barn
- o** New maintenance/storage building
- p** New vehicle and horse trailer parking area
- r** Restore old stables building
- s** Additional improvements to reconfigure boarder area; upgrade paddocks, shelters, boarder arena and round pen
- u** New restroom

FIGURE 3-8B Preferred Alternative Improvements Priorities Diagrams



Existing facilities at Bear Creek Stables considered for improvements

2. Stables Improvement Standards

The following stables improvement standards would be implemented to improve the resource management and water quality at the site:

- *Remove from use and restore pastures and hillsides to native landscape.*
- *Eliminate paddocks outside of “boarder area”.*
- *Maintain vegetative filter strips between and down slope of paddocks. These areas are not to be used for horse grazing.*
- *Require a roof for each paddock and ensure that the orientation of the roof directs water away from the enclosure or areas of bare soil and into the filter strip areas.*
- *Line each enclosure with base rock and geogrid matting for stabilization.*
- *Stabilize and/or restore existing stables building.*
- *Demolish, improve and/or construct structures in accordance with final approved site design and structure design guidelines.*
- *Provide minimal lighting required for safety and to allow evening tending of animals, while avoiding impacts beyond the site.*

These improvement standards will be finalized based on the site design alternative that the Board approves for the Stables.



Access road to Bear Creek Stables



SOURCE: <https://bearcreekstables/gallery> (Erfert Fenton)

3. Stables Management Guidelines

The following draft management guidelines will accompany a long-term lease for the stables to ensure a safe and healthy environment is provided for horses as well as a safe environment for equestrians and the general public visiting the site:

- *Maintain a horse capacity as close as possible to, but not exceeding, the 72 maximum allowed by the Santa Clara County Use Permit.*
- *Implement a manure management program that requires:*
 - *Paddocks be cleaned a minimum of once daily,*
 - *Manure must be stored in storage enclosures that will be covered during rain before off hauling, and drainage from storage enclosures must flow into vegetated filter strips.*
- *Develop, with tenant input, rules and regulations for maintaining a safe environment for visitors, riders and horses. Post the rules and regulations in prominent locations throughout the facility.*
- *Develop, with tenant input, rules and regulations for parking and/or storage of horse trailers and other mobile equipment related to the horse boarding operation.*
- *Require quarterly visual inspections and reporting of facilities and horses by a qualified animal husbandry practitioner to ensure safety and health of horses.*
- *Require tenant to establish emergency plans, including Emergency Animal Evacuation and Protection Plan, providing an emergency land line phone, and provision of basic medical first-aid provisions for humans and horses.*
- *Establish operating hours to be during daylight hours until adequate outdoor lighting is provided in riding arenas. In accordance to District ordinance, trail system will remain closed to users between dusk and dawn.*
- *Require tenants to provide a qualified on-site caretaker, subject to background checks and approval of the District.*
- *Require tenant to provide monthly reporting of activities, such as horse population, maintenance activities, incident occurrence, complaints, public access/education activities, etc.*
- *Require tenant to provide a public access plan, subject to District approval, outlining intent and planned methods of engaging the public in boarding, tours, education, clinics and other methods of public engagement.*

4. Public Access Programs and Improvements

To maximize public benefit of the site, a safe, welcoming and inclusive public access program will be implemented.

- *Designate public access areas as part of the Stables.*
- *Install a visitor kiosk or center with equestrian program brochures, interpretive information, and District standard signage, and offer public equestrian programs and horse boarding.*
- *Design and install monument signage at facility entry.*
- *Provide public restrooms and visitor parking.*
- *Designate a trail connection that would tie into the rest of the preserve's trail system as part of the Bear Creek Redwoods Open Space Preserve Plan.*
- *The District is considering permitting limited special events, such as group equestrian clinics, training events, small-scale equestrian demonstrations, and other equestrian-centric outdoor celebrations, to potentially facilitate partner funding for rehabilitation of the Bear Creek Stables site. The approval of events will be subject to compliance with the following limitations:*
 - *No amplified sound or music that could be heard beyond the boundaries of the event site would be permitted*
 - *A maximum of 250 attendees will be allowed per event.*

5. Maintenance and Operations Projects

Major maintenance and operations projects include the following:

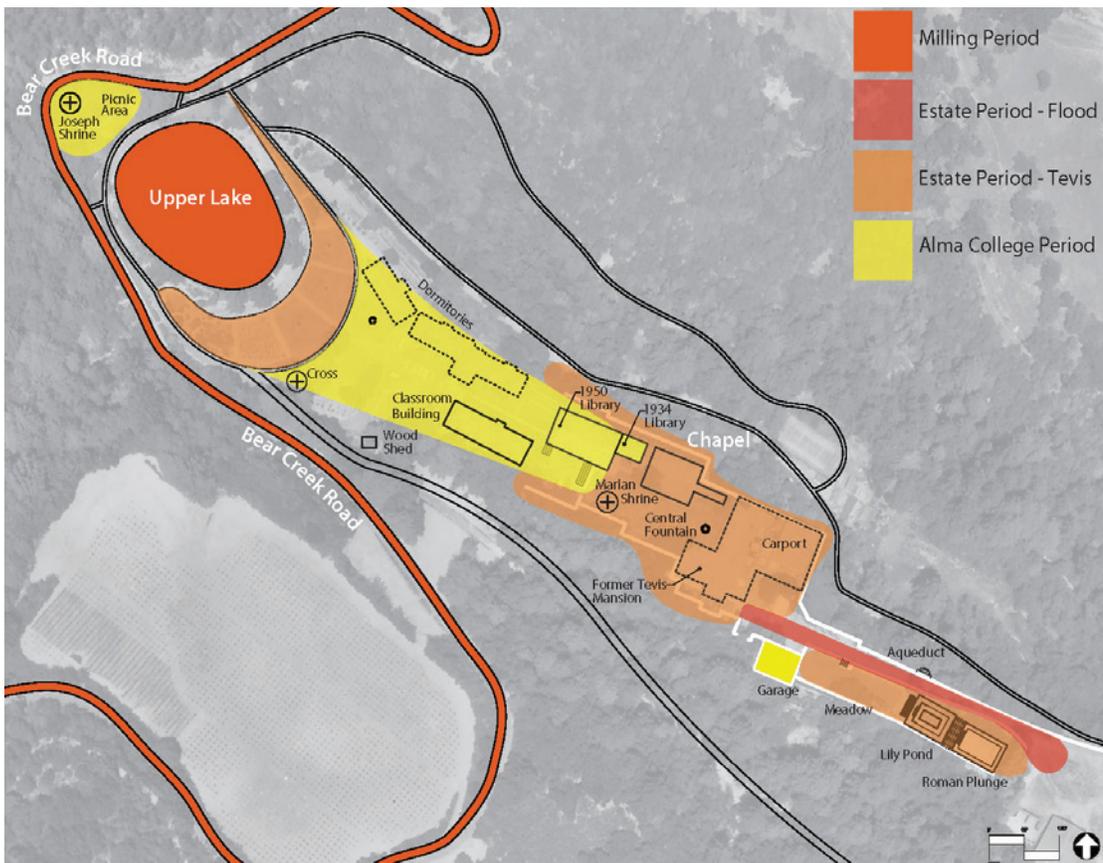
- *Upgrade access roads to improve safety and reduce erosion.*
- *Improve and maintain roads and trails in accordance with District Road and Trail Inventory.*
- *Upgrade water system to provide adequate, reliable water supply.*

vi. KEY AREA 2: Recommendations and Guidelines for Alma College Site

1. Alma College Cultural Landscape Rehabilitation Plan Process

The vision for the former Alma College site is to implement a fiscally-sustainable clean-up and rehabilitation plan that allows the site's cultural significance to be understood and safely enjoyed by the public, while remaining within the District's mission.

As part of initial planning efforts to open the property to public use, MROSD commissioned Knapp Architects' *Alma College Conditions Assessment Project: Phase 1: Assessment of Existing Conditions* (Knapp 2010). The report found that the Alma College site is significant as a cultural landscape under Criterion 1 of the California Register for its historical parallels with the broader events of California history (Figure 3-9A). The report defined the period of significant (POS) for the Alma College Cultural Landscape as circa 1850 to 1951 and stated that although integrity has been compromised due to the loss of several buildings and features, lack of maintenance, and vegetation overgrowth, the Alma College site retains sufficient integrity to express the layered periods of the site's history, including the Milling period (1850), Tevis Estate period (1906-1934), Alma College period (1934-1949), and the Later Alma College period (1950-1969). The extant structures and features, even those in ruin, still convey the cultural landscape's significance as remnants with interpretive value.



SOURCE: PGA, Alma College Site Cultural Landscape Rehabilitation Plan, 2015 (Figure 11)

FIGURE 3-9A Alma College Historic Periods



FIGURE 3-9B Alma College Cultural Landscape Rehabilitation Plan

SOURCE: Alma College Site Cultural Landscape Rehabilitation Plan (PGA, 2015)

LEGEND

- 1 St. Joseph Shrine: *rehabilitate for visitor seating/picnicking*
- 2 Upper Lake: *retain and stabilize as the central organizing element of the site*
- 3 New Entry from Bear Creek Road: *clear vegetation to improve line of sight; provide safe pedestrian crossing*
- 4 Historic Circulation Patterns: *reinstate pathways around lake as ADA trails*
- 5 Alma College Parking Area: *provide capacity for 60 vehicles (two lots), vault toilets, signage*
- 6 Buffer Planting: *extensive areas of native evergreen shrubs along south retaining wall as barrier; limit impacts*
- 7 Dormitories and Classrooms: *interpret Jesuit period through remaining foundations and clay-tile porch*
- 8 Pedestrian Paths: *retain and/or reinstate central path of former historic radial path system*
- 9 1950 Library: *remove 1950 library to reopen views; retain Tevis' terraces for picnic sites; rehabilitate historic stairs*
- 10 Marian Shrine: *rehabilitate Marian shrine*
- 11 1909 Chapel: *stabilize wooden chapel for rehabilitation and future partnering opportunity; close lower floor, rehabilitate patio*
- 12 1934 Library: *retain roof of wooden 1934 Library, remove walls and transform into weather shelter*
- 13 Former Tevis Mansion Footprint: *flexible-use picnic area; integrate interpretive elements*
- 14 North and South Retaining Walls: *structurally stabilize north wall; repair south wall and provide safety barriers*
- 15 Garage: *interpret garage site and provide an overlook to the lower floor*
- 16 Meadow, Lily Pond and Roman Plunge: *clear meadow of invasive species, rehabilitate hardscape and interpret elements*

Cultural Landscape Standards and Guidelines

The Secretary of the Interior's Standards for the Treatment of Historic Properties (Secretary's Standards) provide guidance for working with historic properties and include four sets of treatments: Preservation, Rehabilitation, Restoration, and Reconstruction:

- Preservation focuses on the maintenance and repair of existing historic materials and retention of a property's form as it has evolved over time.
- Rehabilitation acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character.
- Restoration depicts a property at a particular period of time in its history, while removing evidence of other periods.
- Reconstruction re-creates vanished or non-surviving portions of a property for interpretive purposes.

The former Alma College site represents multiple eras of history that evolved in a vernacular fashion, responding to the needs of the tenants. The site is now being adapted for re-use as public open space. Therefore, the Standards for Rehabilitation are applied.

During the planning process for the former Alma College site, two draft alternatives were reviewed by the Planning and Natural Resources Committee and the Board. At their June 24, 2015 meeting, the Board selected an alternative which does not include a large public facility, thereby limiting the intensity of use at the site. The Alma College Site Rehabilitation Plan (Rehabilitation Plan; Figure 3-9A) is based on this preferred alternative and summarized below. The planning and alternative selection process, as well as a description of all Rehabilitation Plan elements, is detailed in the Rehabilitation Plan document (PGA Design 2016), available at: <http://www.openspace.org/our-work/projects/bcr-plan>. The Rehabilitation Plan conforms to the Secretary's Standards for the Treatment of Historic Properties, and the Guidelines for Rehabilitation of Cultural Landscapes (see sidebar).

2. Rehabilitation Plan Elements

The Alma College Rehabilitation Plan retains and interprets character-defining features of the Alma College cultural landscape, including features from each historic period.

- *Milling Period: Upper Lake and Bear Creek Road.*
- *Estate Period: North and south retaining walls, pedestrian path system and terracing of the central spine, gardens, mansion site, 1909 library (now chapel), 1934 library and garage, landscape spaces at the meadow/lily pond/Roman Plunge.*
- *Jesuit Period: Gardens, St Joseph and Marion Shrines, at-grade foundations of 1950 library, dormitories, and classroom buildings.*

Structures and features that cannot feasibly be rehabilitated due to their proximity to fault traces, or those that do not contribute significantly to the cultural landscape, would be removed.



Historic meadow, lily pond and Roman plunge



Historic Alma College site aerial photo, ca. 1950s

Rehabilitation of character-defining features such as vegetation, circulation, buildings, structures, and objects, and water features would include:

- *Stabilizing and potentially rehabilitating the 1909 Chapel (through a future partnership); stabilizing the 1934 Library structure and roof;*
- *Establishing a vegetation management program that would retain contributing landscape vegetation, clear invasive plants, and install low-maintenance, drought-tolerant species to interpret the historic gardens;*
- *Rehabilitating the path systems, covered walkway, terracing, clay tile stairs, fountain basin, and the Lily Pond and Roman Plunge remains, and the St. Joseph and Marion shrines;*
- *Interpreting the Residence ruins with new partial walls and pavers;*
- *Closing the main road through the site to vehicle use and re-established it as the central pedestrian path;*
- *Strengthening and stabilizing retaining walls, where feasible (public access would otherwise be prevented in wall failure hazard zones);*
- *Rehabilitating the promenade around Upper Lake, and mimicking the radial pathways with native shrubs.*

The Rehabilitation Plan also would alter or remove some features of the cultural landscape, including:

- *Demolishing the Classroom, Garage, and 1950 Library buildings, potentially retaining their foundations where feasible.*



Alma College artifact near the former Tevis Mansion footprint

The Guidelines for the Treatment of Cultural Landscapes illustrate how to apply the four treatments detailed above to cultural landscapes in a way that meets the Secretary's Standards. Per the Guidelines, a successful Rehabilitation will see that the character-defining features and materials of a historic landscape are protected and maintained, but a determination is made prior to work that a greater amount of existing historic fabric has become damaged or deteriorated over time, and as a result repair and replacement will be required. The Rehabilitation treatment also allows for the use of substitute materials in the replacement of historic features, and for a new contemporary use through alterations to existing features and compatible new construction.

*For a property to be eligible for national, state or local designation under one of the significance criteria, **the essential physical features (or character-defining features)** that enable the property to convey its historic identity must be evident. The Guidelines state that cultural landscapes are composed of a collection of features that are organized in space. Both vegetation and buildings are able to convey the character of a cultural landscape. Other elements may include small-scale features such as individual fountains or statuary, or land patterns that define the spatial character. It is the arrangement and interrelationship of these character defining features as they existed during the Period of Significance that are most critical to consider prior to treatment.*

In addition, the Rehabilitation Plan would introduce new elements to the site to incorporate new visitor amenities and ensure public safety. These new elements would include:

- *Providing a new vehicular entry with adequate line-of-sight, and installing parking for up to 65 vehicles, potentially in two separate lots, near Upper Lake;*
- *Introducing buffer shrub plantings along the south retaining wall, which cannot be strengthened, to prevent access;*
- *Introducing new pedestrian circulation;*
- *Incorporating new visitor amenities such as restrooms, picnic tables, signage, and interpretive elements, and providing for site security.*

Interpretive Program

The interpretive program will be a vital component of the Alma College cultural landscape. Interpretative material will be integrated into all features of the site to amply illustrate the layers of history. The goal is to create an authentic experience that will convey a sense of what the site was like during the milling, estate and Jesuit periods, and why it was important. Equally important is the collection of layers and how they reflect the larger patterns of development of California.

The rehabilitation plan identifies specific places where interpretation of the site may occur. As the layered history lies at the core of understanding the development of the Alma College complex, it is key to ensure all layers are authentically represented and interpreted. Lying within the Bear Creek Redwoods Preserve, the Alma College site offers additional interpretive opportunities including:

- *Scientific:* *natural biodiversity, hydrology, fauna/habitat*
- *Geologic:* *this site as a living geomorphological text book*
- *Water systems:* *Tevis water system and Upper Lake*
- *Sustainable practices:* *efforts integrated into the rehabilitation that demonstrate practical applications of sustainable concepts*

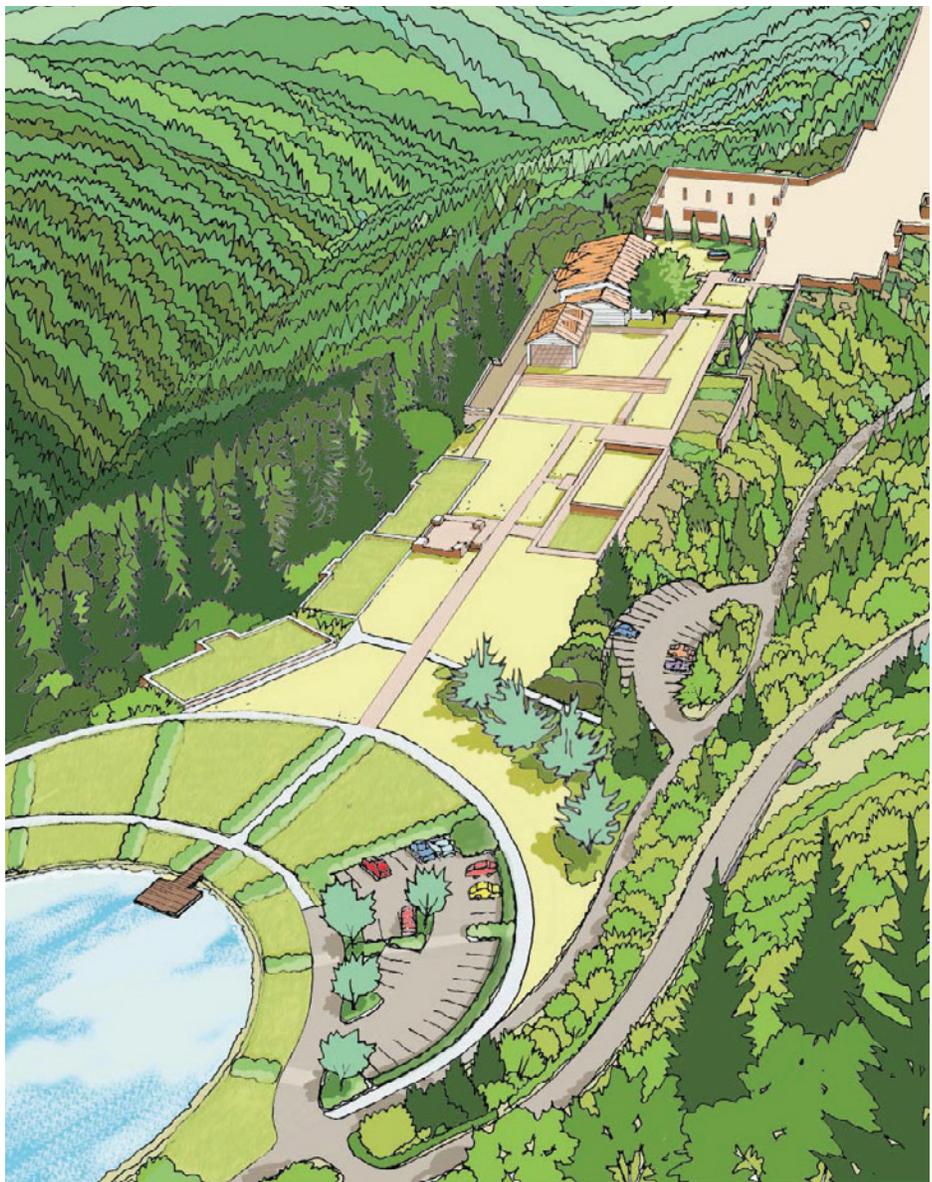


Walk deck adjacent to 1934 Library



Upper Pond at Alma College

Rehabilitated chapel / Tevis Library
shown in Alma College Site
Rehabilitation Plan by PGA, 2015



Alma College Site Rehabilitation Plan,
aerial view by PGA, 2015

The interpretive program might include signage depicting and describing each of the features. This may be integrated into site elements, such as railings where there are significant level changes at building foundations. The threshold and footprint of the mansion may be marked in the paving to identify its location, while perimeter walls marking wings of the building may serve double duty, offering informal seating areas.

Interpretive elements are intended to be engaging and subtle, yet informative. App-based or internet interpretation accessed by cell phone is one method that may supplement physical interpretive efforts. Digital presentations have the dual advantage of being relatively inexpensive to launch and easy to update over time. Additionally, this approach could provide significant detail and be less vulnerable to vandalism than physical interpretive elements. Visitors should be able to relate primarily with the site and context, rather than with interpretive elements.

3. Public Access Programs and Improvements

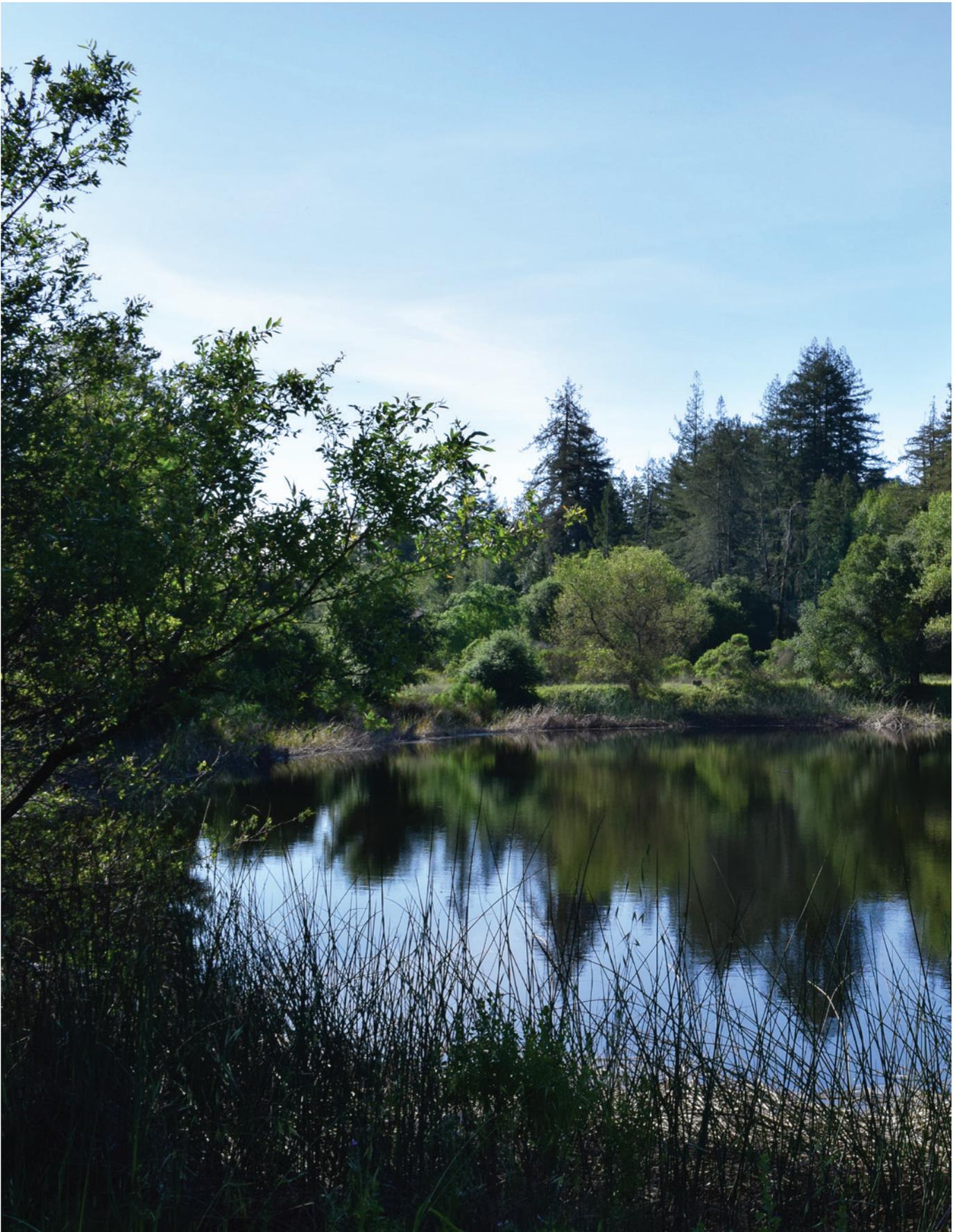
The District is considering permitting limited special events, such as weddings and other outdoor celebrations, to potentially facilitate partner funding for rehabilitation of the former Alma College site.

The approval of events will be subject to compliance with the following limitations:

- *No amplified sound or music that could be heard beyond the boundaries of the event site would be permitted*
- *A maximum of 250 attendees will be allowed per event.*



Retaining wall at former Alma College site

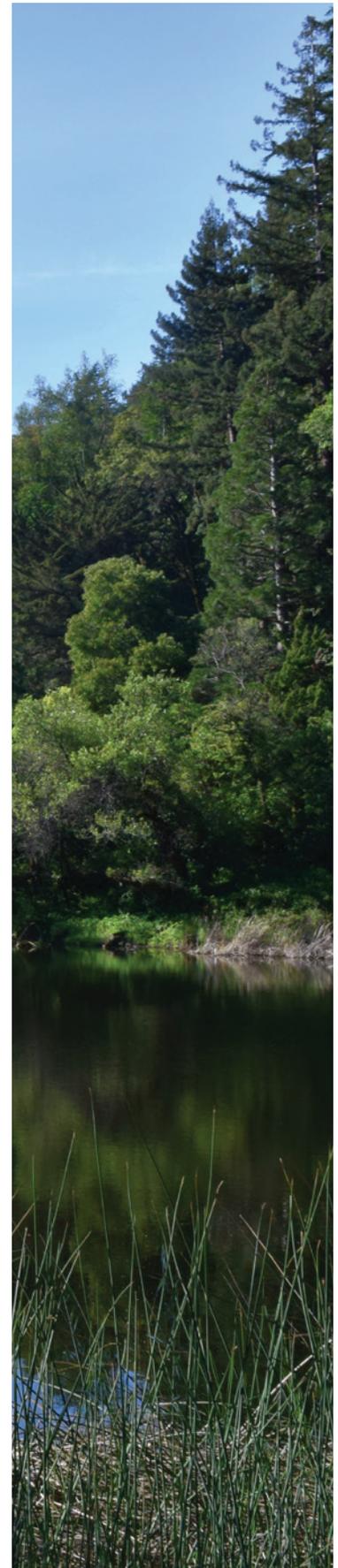


04. PRESERVE PLAN ACTIONS AND IMPLEMENTATION PLAN

A. Overview

Bear Creek Redwoods Open Space Preserve will be opened in phases to general public hiking, equestrian, and limited mountain bicycling use, as necessary infrastructure and stewardship actions are implemented, over the next twenty years. A series of discrete Preserve Plan implementation actions, including improvements at Bear Creek Stables and the former Alma College site, were identified to aid in scoping and scheduling required improvements at the Preserve. A description, cost estimate, phasing, and funding source for each action are summarized in the Preserve Plan Implementation Table (Table 4.1). Implementation actions related to Preserve opening and public access, including the multi-use trail, regional connections are illustrated in Figure 4-1.

The Preserve Plan Actions collectively fulfill the Plan’s goals and objectives. The Actions incorporate extensive direction from the District’s Board of Directors and Planning and Natural Resources Committee, as well as robust input from stakeholders, staff, and the general public. The Actions were shaped by both existing environmental conditions on the Preserve, as well as the environmental and regulatory compliance analysis that produced the Plan EIR. Despite this extensive development process, Preserve Plan Actions are subject to change as detailed design plans are developed for each, as is typical for a master planning and implementation process of this scale. This chapter therefore presents a current “snapshot” view of Preserve Plan implementation. Significant future changes to the plan may be subject to additional public and environmental review.



B. Preserve Plan Implementation Phasing

Preserve Plan actions would be implemented incrementally over the next 20 years. Phase I Actions would be implemented within the first 1-3 years following Plan approval, and are further categorized into high, moderate, and low priority projects. Phase II Actions would be implemented during years 4-10 and Phase III during years 11-20.

This proposed phasing schedule, which allows the Preserve to open as early as 2018, was determined to be the most expedient given the many on-the-ground actions that must be completed prior to opening to general public use. These actions include:

- *Design and construction of a new parking area and associated amenities near Upper Lake/Alma College, formalizing a safe pedestrian crossing of Bear Creek Road, and design and construction of a new connector trail to existing trails on the west side of the Preserve;*
- *Extensive invasive species management and restoration of large, trail-side weed infestation areas;*
- *Vegetation management and high priority improvements (erosion control and stream crossings), signage and visitor amenities along nearly 15 miles of existing trails;*
- *Major improvements to Bear Creek Stables, including redevelopment of public areas, installation of restrooms and other visitor infrastructure, roadway and parking improvements, and pasture restoration;*
- *Cleanup of the former Alma College site to address hazards and stabilize structures that may later be used by a partner.*

In general, Preserve Plan actions are phased to balance stewardship and access priorities. The western Preserve zone, which contains the best-preserved redwood stands, and an existing road network accessing the full extent of the property and view opportunities, received the highest priority for public access. The western zone also has somewhat fewer stewardship and road upgrade needs than the eastern Preserve, which has a more intensive land-use history. Therefore, Phase I actions focus on opening the western Preserve first, within the first three years following Plan approval. The eastern Preserve would remain closed to general public use in Phase I (although current Stables and other permit-only uses would continue).

Preserve Phase I Actions

High Priority

- *Complete road/trail infrastructure upgrades, install wayfinding and regulatory signage, and open western side of Preserve to hiking and equestrian use*
- *Design and implement at-grade trail crossing, and/or undercrossing of Bear Creek Road*
- *Initiate design and construction of water infrastructure and other high priority projects at Bear Creek Stables*
- *Finalize stables lease for long-term tenant*
- *Design and construct Alma College parking area*
- *Prepare/finalize cultural resource evaluation, stabilization and enhancement plan*
- *Prepare and begin implementing Ponds/Lakes Plan*
- *Survey and provide recommendations for management of bat populations*
- *Construct alternate bat habitat structures*
- *Develop long-term management plan for SOD*
- *Reinforce former Alma College site security*
- *Prepare road maintenance plan and begin control of high priority weed infestations*
- *Prepare hazardous materials plan*
- *Initiate Webb Creek Bridge replacement for enhanced emergency response access*

Moderate to Low Priority

- *Install wildlife-friendly horse water troughs*
- *Develop picnic sites near Alma College and the Stables*
- *Define regional trail connections*
- *Survey and monitor rare plant populations*
- *Implement Upper Lake improvements*

The eastern Preserve will open to general public use within Phase II, 4 to 10 years following Preserve Plan approval. Major capital improvement projects at Bear Creek Stables and to rehabilitated the Alma College cultural landscape should be substantially complete, and new northeastern zone trails must be constructed (and existing, degraded trails decommissioned), prior to opening. A number of resource management projects will address noxious weeds, cleanup and restore landfill and other degraded areas, and stabilize and enhance the ponds. A new public parking lot and other visitor amenities will facilitate greater public use of the Stables. Also in the northeastern zone, several major stream crossings will be installed to complete missing segments of the future multi-use trail, which is targeted for opening in Phase II. These and other Phase II actions are listed below.

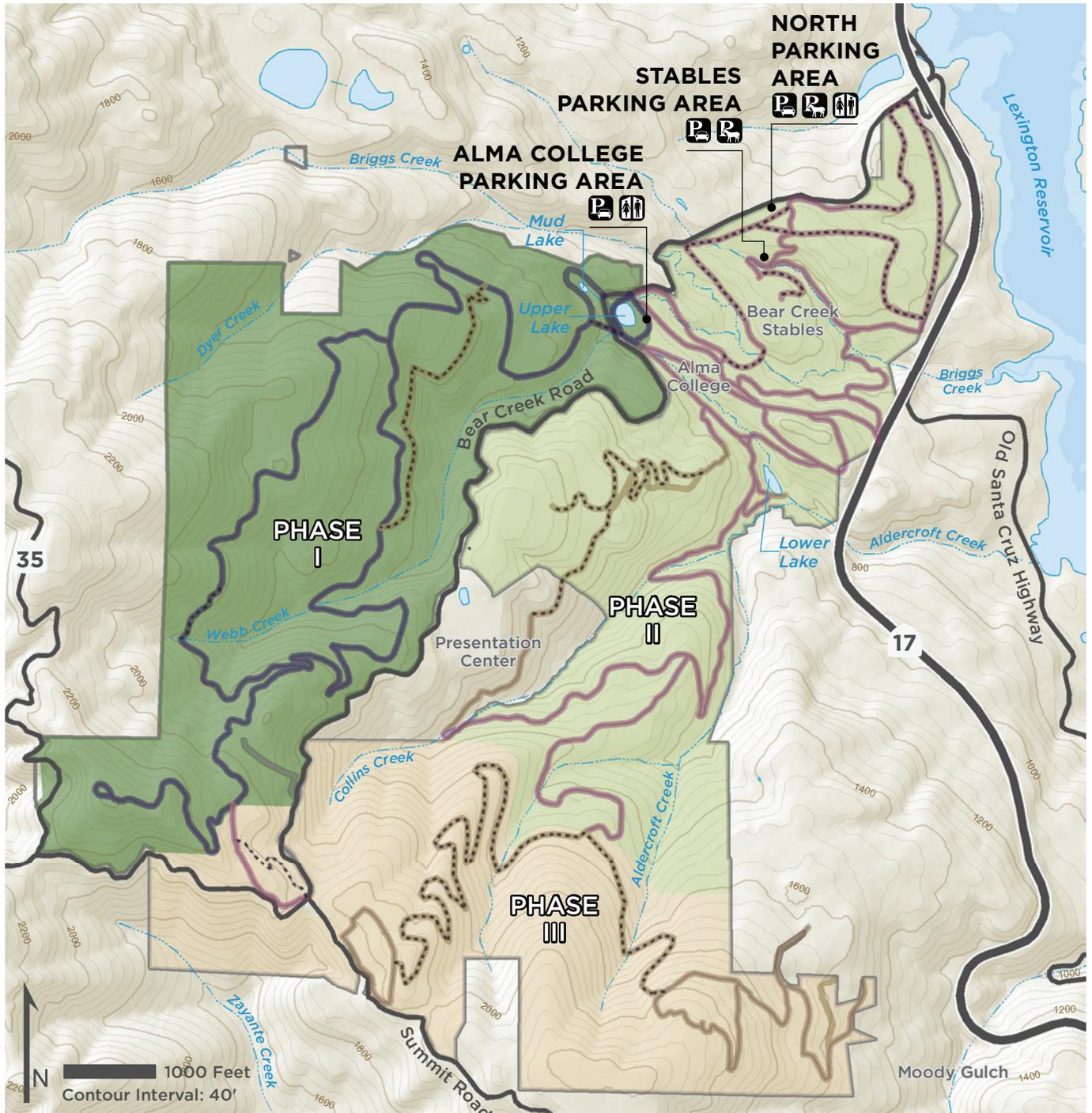


FIGURE 4-1 Phasing Plan

LEGEND

PUBLIC ACCESS PHASING

- Phase I, Years 1-3
- Phase II, Years 4-10
- Phase III, Years 11-20

PROJECT PHASING

- Trail Open in Phase I
- Trail Open in Phase II
- Trail Open in Phase III
- Construct New Trail

Preserve Phase II Actions

High Priority

- *Construct new trails and stream crossing infrastructure in the northeastern zone, including new segments of the multi-use trail*
- *Close redundant or oversteep trails to public access and restore if feasible*
- *Formalize regional trail connections, and open multi-use trail*
- *Open trails on eastern zone, including former Alma College site's interpretive trail and the Stables Loop*
- *Continue design and implementation of Stables boarder area improvements, public access and visitor facilities*
- *Treat invasive species and restore degraded areas*
- *Begin work of stabilization and interpretation at former Alma College site*

Moderate to Low Priority

- *Explore alternatives for funding sources and strategic partnerships*
- *Implement further lake management recommendations*
- *Work with partner agencies to develop wildlife linkages*

Phase III of Preserve Plan implementation focuses on completing trail connections in the eastern Preserve zone. Two new trail segments will link the high-use areas at the Stables and Alma College sites to the farther reaches of the summit area. These new trails must be constructed across steep, rugged terrain, and existing trails in this zone require re-contouring and, in some cases, decommissioning and re-routing. A new trail will be constructed in the western zone, contouring through the dense redwood forest in the Webb Creek drainage. Final improvements to the Stables and the Alma College Cultural Landscape will be completed in Phase III. Finally, if demand for additional Preserve parking requires, a third parking area near the Stables and Highway 17 (the lower parking area) will be constructed.

Preserve Phase III Actions

High Priority

- *Complete southeastern trails and Webb Creek trail*
- *Finalize Stables facilities*
- *Finalize Alma College improvements*

Moderate to Low Priority

- *Construct North parking area*
- *Study feasibility of potential future parking area 4*
- *Develop interpretive programs for rest of Preserve areas (outside of Alma College and Stables)*

Bear Creek Stables Site Plan

In July 2016, the Board reviewed the Bear Creek Stables site design alternatives and corresponding preliminary phasing scenarios and selected Phased Alternative A2 as the preferred alternative. This alternative includes necessary improvements for the existing Stables facilities and a new caretaker residence, and would accommodate 62 boarded horses. Public access improvements would include a livery stables (for public program horses) visitor information kiosk, visitor parking, restroom and a public open air riding arena. Pasture areas would be fully restored to natural landscape and the paddock area would be rebuilt for improved drainage and equestrian health and safety.

As described in Chapter 3, the improvements for Bear Creek Stables will be implemented in phases, subject to funding availability. High priority and lower priority components of the Stables plan are identified in Table O3-6 and in Figure O3-8B. Potential phasing of the selected alternative is provided below. However, the actions, phasing, and funding source are subject to change during the planning and permitting process.

Stables High Priority Improvements - \$4.5M (includes water system)

- *Demolition of structures and stabilization of old stables building*
- *Hillside restoration*
- *Public access area restroom*
- *New public access area livery stable and arena*
- *Limited improvements to roads (gravel), parking, hay barn, manure dump (public area)*
- *Interim improvements to existing boarder area (new fencing, shelters, footing, drainage improvements)*

Stables Lower Priority Improvements - \$3.4M

- *Replacement of caretaker house/office*
- *Additional road upgrades: asphalt roads and parking areas*
- *Replacement of hay barn*
- *New maintenance/storage building*
- *New vehicle/horse trailer parking lot*
- *Restore old stables building*
- *Additional improvements to reconfigure boarder area; upgrade paddocks, shelters, boarder arena and round pen; and add restroom*

Alma College Cultural Landscape Rehabilitation Plan Implementation Guidelines

Proposed rehabilitation actions for Alma College Cultural Landscape are shown in Figure 03-9B. In general, these proposed actions enhance the overall site for interpretive purposes. Some buildings are proposed for partial demolition (leaving foundations in place at grade), while other, more structurally-sound buildings would be retained, stabilized, and made available for potential re-use by a partner organization.

The proposed actions, phasing, and conceptual-level cost estimates are shown below. The site would be ready to open to public access following Phase IA, however, Phase I in its entirety (i.e. Phases IA, IB, and IC) is required for the full project to comply with the Secretary's Standards for Rehabilitation of Cultural Landscapes. In other words, full implementation of Phase I actions adequately balances cultural resource stewardship with the adverse impacts associated with building demolition and construction of a new parking lot within the Alma College complex. It is anticipated that compliance with the Secretary's Standards will, at a minimum, be required by the County of Santa Clara (County) as a condition of Phase IA permit issuance. However, this will not be known until the District begins to consult with the County and/or a permit application is submitted (note: the County Historical Heritage Commission would likely review a future permit application).

Alma College Phase IA: Clean Up - \$1.3M (Measure AA Funded)

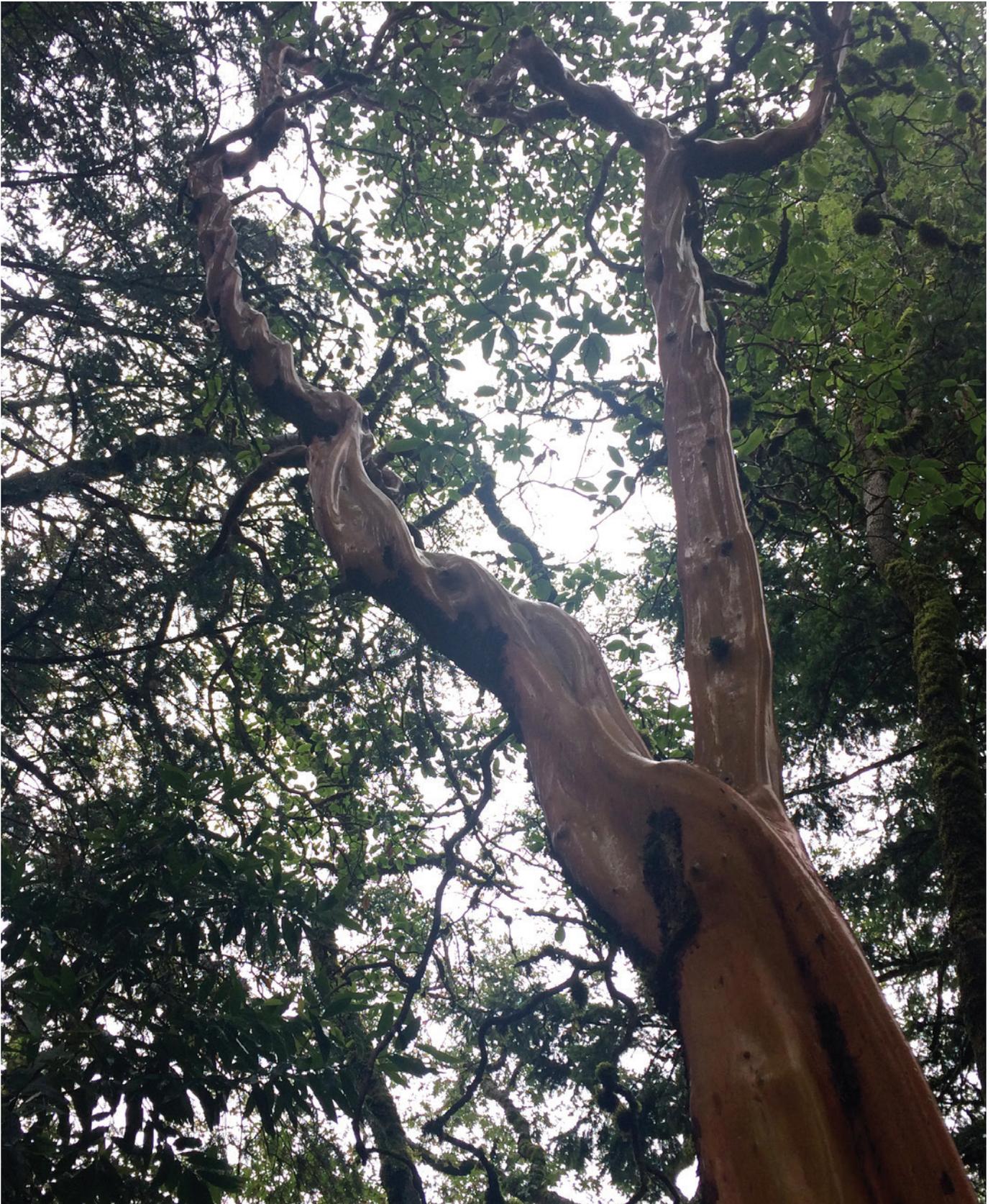
- *Demolition of garage, classroom, and 1950 library buildings; partial demolition of 1934 library*
- *Stabilization and security measures to retain carport structure for bat habitat*
- *Safety and security (includes fencing and limited structural stabilization)*
- *Hazardous materials remediation*
- *Vegetation management*

Alma College Phase IB: Minimal Stabilization and Rehabilitation (Measure AA Funded) - \$2.9M

- *Stabilization of chapel*
- *Rehabilitation of shrines, lily pond and Roman plunge hardscape*
- *Minimal native vegetation planting*
- *Interpretive elements*



Dense understory at the Preserve



Dramatic Madrone trunk at Bear Creek Redwoods Preserve

Alma College Phase IC: Minimal Stabilization and Rehabilitation (District General Fund or Grant Funded) - \$3.2M

- *Careful placement of native plantings to convey historic landscape*
- *Stabilization of 1934 library roof*
- *Stabilization of north retaining wall*
- *Fire suppression water (hydrant system utilizing Upper Lake as source)*

Alma College Phase II: Enhanced Public Access - \$4M (Partner and/or Grant Funded)

- *Rehabilitation of 1909 chapel for re-use, including utilities*
- *Modifications to 1934 library roof for use as an open air pavilion*
- *Restroom facility and related infrastructure*

Preservation Maintenance or Monitoring Plan

The compliance of the Alma College Site Cultural Landscape Rehabilitation Plan under the Secretary of the Interiors Standards for Rehabilitation heavily relies on ensuring that future individual projects identified in the Rehabilitation Plan also comply with the Standards. It is necessary to adopt a Preservation Maintenance or Monitoring Plan that will guide future work on the site.

The Preservation Maintenance or Monitoring Plan will have to outline specifications for removal, retention, stabilization, preservation, rehabilitation, and restoration of the site, and will have to be formulated by a team with a firm understanding of preservation maintenance techniques that would allow the property owner to address issues relating to building or landscape failure, stabilization, and rehabilitation without negatively impacting the property's existing character.

The Maintenance or Monitoring Plan should also include specifications for the treatment of unexpected discovery of archaeological evidence during the rehabilitation.

Qualified Professionals

In order to implement the Alma College Site Cultural Landscape Rehabilitation Plan in a manner that is compliant with the Standards, qualified professionals who meet or exceed the Standards outlined by the National Park Service should be retained at the individual project-level.

The preservation professional may lead the project, or work as a consultant to a larger team including experts in other fields. However, the preservation professional must be consulted in all aspects relating to the removal, retention, and rehabilitation of character-defining features at the former Alma College site. Furthermore, the preservation professional should be responsible for monitoring compliance with the above.

C. Implementation Actions Summary

The following Implementation Actions Summary included in Table 4-1 is a part of the Preserve Plan and contains a summary of the information needed to implement it. The Preserve Plan recommendations and guidelines were combined and/or summarized to create actions that correspond to the Plan's Goals and Objectives, included in the Preserve Plan chapter (Table 3-1). Actions are organized according to the four elements of Public Use and Facilities, Natural Resource Management, Cultural Resource Management, and Maintenance and Operations, and the Preserve's two key areas, the Bear Creek Stables and Alma College.

The Implementation Actions Summary is not intended as a commitment or approval to implement any specific recommendation or guideline, nor suggests or prescribes any specific partnership or funding. This table is for planning purposes only. It is not intended as a guide to public lands, trails, or facilities.



Table 4-1 contains the following information:

Goals and Objectives

The Goals and Objectives are overarching principles that apply Preserve-wide and serve as a framework for the creation of more specific Actions tailored to each Plan zone, as outlined in Table 3-1. Several Goals and Objectives do not appear in the Implementation Actions Summary because specific Actions have not yet been identified within them. The Preserve Plan is a living document, with actions being added as they are identified. Some new actions will require amendment and subsequent environmental review.

Action Description

Table 4-1 below briefly describes the scope of work for proposed action. When appropriate, actions are organized by geographic zones within the Preserve. Several Actions apply Preserve-wide and thus are not divided into the smaller zones. For additional information on each action, please refer to Chapter 3, Preserve Plan.

Priority

The Preserve Plan prioritizes each action based on its level of importance in fulfilling the Preserve's vision. Some actions are also prioritized depending on whether these actions are dependent on the implementation of previous actions. For example, the proposed Bear Creek Road crossing near Alma College is given priority over the implementation of the multi-use trail, because the crossing must first be in place before the multi-use trail can be opened to cyclists. The priorities are divided as follows:

- **High (H)** Highest priority action
- **Moderate (M)** Second highest priority action
- **Low (L)** Third highest priority action

Phase

The Plan is long-range with an approximate 15-year horizon. Three main phases have been identified as described below. If applicable, the "to be determined" phase accounts for those projects that are clearly beyond the District's control.

- **Phase I** Years 1 to 3
- **Phase II** Years 4 to 10
- **Phase III** Years 11 to 20
- **TBD** Outside factors will determine schedule

Cost

An approximation of the expected implementation cost for each action is also included when applicable. For capital improvement projects, the cost includes consultant fees to complete the design and prepare construction plans and technical specifications. Operational and long-term maintenance expenses are not included in the cost column. Based on the work required and anticipated high visitor use of the Preserve, it is anticipated that the following additional staff will be required to implement the Plan and operate the Preserve: three maintenance personnel (two Open Space Technicians and one Supervisor), two Ranger staff, one Natural Resources Department staff (Resource Specialist I), and one Capital Project Manager. Staffing will be phased, with the Supervisor, Resource Specialist, one Ranger, one OST, and the Capitol Project Manager added in Phase I. Annual costs for these new positions represent the operational cost of many ongoing Preserve management actions.

In Phase I, these operational costs total \$531,015 annually, increasing to \$740,137 annually in Phase II as the second OST and Ranger positions are added. These positions are included in the 40 new positions recommended by the Financial and Operational Sustainability Model (FOSM). Costs given are in 2016 dollars.

Long-term maintenance costs of major capital projects, such as new water system infrastructure, the renovated Bear Creek Stables site, and the rehabilitated chapel at Alma College, are also not included. The long-term cost of owning and operating a building or other infrastructure, also known as total cost of ownership, is determined through a life cycle cost analysis. This analysis assumes multiple project design options can meet programmatic needs and achieve acceptable performance, and that these options have differing initial costs, operating costs, maintenance costs, and possibly different life cycles. Therefore, life cycle cost analysis is performed during design development for capital projects and is part of the project decision-making process.

Table 4-0 summarizes estimated Preserve Plan costs per phase.

Funding

This column includes District funding, General Fund and Measure AA monies (MAA).



TABLE 4-0 Preserve Plan Costs per Phase, in Millions

Funding Source	PHASE I	PHASE II	PHASE III	Total Costs (escalated)
General Fund	\$2.30	\$5.10	\$1.87	\$9.27
Measure AA	\$4.26	\$11.94	\$3.54	\$19.74*
Tenant/Partner	\$0.00	\$1.80	\$4.31	\$6.11
TOTAL	\$6.56	\$18.84	\$9.72	\$35.12

* Does not include projected \$3M land acquisition costs.

Table 4-1: Implementation Actions

I. ELEMENT 1: Public Use and Facilities

Goals and Objectives		Key	Action Description			Priority	Phase	Cost	Funding
Goal PU1 - Allow general public access and enhance recreational opportunities in the Preserve									
Obj PU-1.1 Follow appropriate steps to responsibly open the Preserve to the public for low intensity recreation and enjoyment	Hiking and Equestrian Use		1.1a - Open the western side of the Preserve to general hiking and equestrian use. Keep existing east-side trails open to equestrian use by permit, removing permit system in Phase II when the east side opens to general public use. Allow off-trail hiking.	H	I		See PU 1.2, 1.3	MAA	
	Bicycle Use		1.1b - After connections to Lexington Reservoir County Park and Skyline/Summit area have been formalized, and connecting trail segments in the northeastern zone are complete, designate a multi-use through trail, open to bicycle use (see PU-1.4)	H	II/III		See PU-1.4	MAA	
	Improve existing roads network for increased use		1.1c - Implement priority treatments to improve drainage and upgrade roads for increased use and abandon/restore legacy roads as necessary (NR-5.1)	H	All		See NR-5.1	MAA	
			1.1d - Treat roadside weed infestations (NR-4.1)	H	All		See NR-4.1	General Fund	
Obj PU-1.2 Expand and improve the Preserve trail system (temporary names shown; trail names will be formally adopted prior to opening)	Westside Redwoods Loop Trail		1.1e - Install directional and interpretive signage, and provide trail wayfinding and etiquette brochures to promote trail user safety (PU-5.1)	H	All		See Pu-5.1	MAA General Fund	
			1.2a - On west side of Preserve, improve existing roadbed for improved drainage, construct retaining walls along steep, unstable road banks in switchback area, and replace the Webb Creek Bridge to allow equipment and emergency vehicle access.	H	I		\$1,600,000	MAA	
	Madrone Knoll Trail		1.2b - Re-open former roadbed, improve drainage, and construct new connector trail segment to create a new 4-mile loop trail for hikers and equestrians.	H	I		\$75,000	MAA	
			1.2c - Re-open former roadbed and improve drainage to provide a 1-mile out-and-back trail extension to the western corner of the Preserve	H	I		\$35,000	MAA	

Goals and Objectives	Key	Action Description	Priority	Phase	Cost	Funding
	Webb Creek Trail	1.2d - As staff resources allow, construct a new, 0.75 mile trail through the Webb Creek drainage to provide a shaded redwood forest loop.	M	III	\$75,000	MAA
	Upper Lake Circle	1.2e - Rehabilitate pedestrian pathway around Upper Lake as an ADA-accessible trail.	H	I	See PU-2.1	MAA
	Alma Interpretive Trail	1.2f - Designate existing road through the center of the former Alma College site as a pedestrian route (emergency and maintenance vehicle use only).	H	II	N/A	MAA
		1.2g - Maintain other existing roads north and south of the Alma College site as trails/patrol routes. Study feasibility of stabilizing fill-slope failure on northern road. Construct retaining wall to widen road as needed.	H	II	\$25,000 - \$200,000	MAA General Fund
	Presentation Loop Trail	1.2h - Re-route/improve existing segments of a moderately steep trail through redwood forest north and east of the Presentation Center, and designate existing easement route through Presentation Center as a hiking and equestrian trail. Install new vehicle crossing at Collins Creek.	M	III	\$675,000	MAA
	Stables/Learn to Ride Loops	1.2i - Re-route/improve existing trail to complete a relatively level, meandering 2.4-mile trail through grassland and oak woodland in the northeast area, with a vista point easily accessible from the Stables and northern parking area. Abandon and restore disc line and other informal trails.	H	II	\$200,000	MAA
	Briggs Creek Trail	1.2j - Improve drainage and upgrade existing trails east of the Stables to allow year-round use and connect the former Alma College site and Stables. Abandon and restore oversteep segment behind Stables. Construct new vehicle bridge over Briggs Creek and rock ford at unnamed tributary.	H	II	\$550,000	MAA
	Aldercroft Creek Trail/Extension	1.2k - Improve drainage and upgrade existing trail along lower Webb Creek and traversing the Aldercroft Creek drainage. Assess long-term needs and feasibility of maintaining bridge; replace if necessary.	M	III	\$150,000 - \$500,000	MAA General Fund
		1.2l - In Phase III, design and construct approximately 2 miles of new trail to link the northeastern portion of the Preserve to Summit Road; install up to three at-grade creek crossings (culvert or rock fords).	M	III	\$175,000	MAA

Goals and Objectives	Key	Action Description	Priority	Phase	Cost	Funding
Obj PU-1.3 Introduce a safe pedestrian crossing on Bear Creek Road to connect the Preserve's east and west sides	Hunt Trail	1.2m - Formalize trail system in the southeast section of Preserve. Design and construct approximately 1.5 miles of new trail to connect to Aldercroft Creek Trail. Abandon and restore duplicate trail segments of existing road network on the former Hunt property, and install up to two at-grade creek crossings on Aldercroft Creek	M	III	\$150,000	MAA
	Bear Creek Road Trail Crossing	1.3a - Following consultation and permitting with County traffic engineer, install at-grade trail crossing of Bear Creek Road, including appropriate safety measures, at Alma College Parking Area	H	I	\$160,000	MAA
		1.3b - If feasible, install trail undercrossing near crosswalk location	H	II	\$1,000,000	MAA
Obj PU-1.4 Designate a multi-use-through trail	Bear Creek Road/Summit Trail Crossing	1.3c Study the feasibility of a second pedestrian crossing of Bear Creek Road on the southern portion of the Preserve (near Summit Road), facilitating a future summit parking area. Implementation would require a separate Use and Management Plan amendment.	M	III	See PU-1.5	NA
		1.4a - Work with partner agencies to formalize a trail connection to Lexington Reservoir County Park. Partner with Santa Clara County and Caltrans to provide a safe pedestrian crossing (crosswalk and/or additional stop sign) of highway off-ramp and Bear Creek Road. Obtain Caltrans encroachment permit to improve safety and security (fencing, signage) and formalize trail entry at northeast corner of Preserve.	H	II	\$250,000 See PU-4.3	MAA/ Partner
	Regional Trail Connections	1.4b - Work with partner agencies to formalize a trail connection from the southwest corner of the Preserve to SR35. As necessary, install stop sign or other traffic control measures to ensure safe ingress/egress for trail users onto HWY 35 at the intersection with Bear Creek Road.	H	II	\$100,000	MAA/ Partner
		1.4c - Construct new trail segments in northeastern zone to link to existing Preserve trail system. New multi-use trail should be 10-12 feet wide when feasible, maintaining 100-ft sight lines and avoiding intersections with existing trails to the maximum extent feasible.	H	II	\$350,000	MAA

Goals and Objectives	Key	Action Description	Priority	Phase	Cost	Funding	
Obj PU-1.5 Expand and improve Preserve parking capacity	Trail Safety and Security	1.4d - Install signage, gates, and fencing as needed to control access to other trails, disc lines, and private property. Develop a system of markers or control points, and monitor trail use to promote user compliance (see MO-1.2).	H	II	\$60,000 Also see MO-1.2	MAA	
	Alma College Parking Area	1.5a - Alma College Parking Area- Construct new paved parking lot(s) with a total capacity of approximately 60 vehicles (no horse trailer parking) and a new driveway entrance near the Alma College/Upper Lake area. Install vault toilets, bicycle racks, and other visitor amenities.	H	I	\$1,200,000	MAA	
		1.5b - In consultation with qualified biologist, develop design for new Alma College Parking Area to minimize loss of upland breeding habitat for western pond turtle, and avoid use-related impacts to turtles to the maximum extent feasible (see NR-2.1).	H	I	\$10,000	General Fund	
	Stables Public Parking Area	Stables Public Parking Area	1.5b - Stables Public Parking Area- Construct new parking lots with a capacity of up to 30 vehicles and 2-4 horse trailers as part of the Bear Creek Stables Visitor Use Area. Provide unpaved routes of travel for equestrians if feasible.	H	I/II	See PU-6.2e	NA
			1.5c - North Parking Area- Construct new paved parking lot and visitor entrance driveway between BC01 and BC02, with a capacity for 40 to 50 vehicles and approximately 8 horse trailers. Install vault toilet, equestrian staging area, and bicycle rack(s).	M	III	\$1,200,000	MAA
			1.5d - Potential Future Parking Area - Study intersection of Summit/Bear Creek Road to determine feasibility of a potential fourth staging area, if needed. Future implementation would require a separate Use and Management Plan amendment.	M	III	\$50,000 to \$80,000 (study)	General Fund
Obj PU-1.6 Provide trail-related amenities	Horse Troughs	1.6a - Install wildlife-friendly horse water troughs where feasible and appropriate; preferably locate near staging areas, and on main trails	M	I	\$1,000 each	MAA	
	Picnic Tables	1.6b - Develop picnic sites with benches and/or tables in the vicinity of the Lower Parking Area (Tripp Cabin site), former Alma College site, and Bear Creek Stables areas.	M	I/II	\$10,000 each	MAA	

Goals and Objectives	Key	Action Description	Priority	Phase	Cost	Funding
	Bicycle Racks	1.6c - Install bicycle racks and tool station as appropriate along the multi-use trail	L	II	\$10,000 each	MAA
Goal PU2 – Provide low-impact, high-value site-sensitive interpretation and education activities						
Obj PU-2.1 Ensure any new visitor access features are sited and designed to protect landscape visual character	Design Guidelines	2.1a - Design public access improvements to integrate into the natural landscape. Protect, and feature where appropriate, the Preserve's biological resources such as lakes, other wildlife habitat, and redwood forest, and cultural resources such as historic-era roads, bridges, stone walls, and water system infrastructure.	H	ongoing	\$0	NA
		2.2a – Continue and expand current docent-led educational programming for children and small school groups at Bear Creek Stables	H	ongoing	\$0	NA
		2.2b - Continue and expand current docent-led activities to interpret Preserve natural and cultural history. Cost reflects additional focused training on Preserve topics of interest.	H	ongoing	\$75,000	General Fund
		2.2c - Collaborate with other environmental education providers and organizations to augment interpretive and educational programming, once public access facilities are available.	H	ongoing	\$10,0000	General Fund/ Partner
		2.2d - Develop interpretive material, including signage, brochures, embedded interpretation, and mobile phone applications, as part of the Alma College Cultural Landscape Rehabilitation Plan. Include the former Alma College site and associated features of the cultural landscape, including the historic truss bridge.	H	I/II	See CR-2.4	MAA
		2.2e – Develop an interpretive program for other natural and cultural resources, consistent with the District-wide Interpretive Plan. Cost includes funding for a detailed Interpretive Plan, and implementation of high-priority programming.	M	III	\$200,000	MAA
Obj PU-2.2 Provide opportunities to learn about natural resources and foster public appreciation of open space values	Environmental Education and Interpretation Program	2.2f – In seeking partnerships for rehabilitation of Alma College structures, prioritize environmental education as a potential future use.	M	II	See CR-2.2	NA
		Educational Facility				

Goals and Objectives	Key	Action Description	Priority	Phase	Cost	Funding
Goal PU3 – Expand opportunities for people of diverse physical abilities to enjoy the Preserve						
Obj PU-3.1 Expand and improve ADA parking	Accessible Parking Areas	3.1a - Provide sufficient ADA parking spaces at each new parking area. Ensure that all amenities associated with or easily accessible from new parking areas, including restrooms, signage, interpretive features, gates, and pathways, meet ADA requirements for path of travel and use.	H	ongoing	See PU-1.5	MAA
		3.2a - Where feasible, new trail construction or reroutes of existing trail should comply with outdoor accessibility guidelines.	H	ongoing	See PU-1.2	MAA
		3.2b – As feasible, design, and construct the Upper Lake Circle and the central path through the Alma College site (a portion of the Alma College Loop Trail) as an ADA trail. Ensure all associated amenities and interpretive features meet ADA requirements. Where feasible minimize paving/compaction in WPT nesting habitat.	H	II	See PU-1.2e,f	MAA
Obj PU-3.2 Provide loop trails and connection to parking areas and key destination sites, as well as those with a wide range of difficulty to reflect a diverse population	Accessible Trails	3.2c – Design and construct the trail connecting the new northern parking area to the vista point/picnic area at the former Tripp homestead to meet outdoor accessibility guidelines. Ensure all associated amenities meet ADA requirements.	M	III	See PU-1.5c	MAA
		3.2d – As a pilot project, consult with ADA specialist and evaluate how to provide information about the accessible characteristics of a trail on new trailhead information signs.	H	Ongoing		MAA
Goal PU4 – Promote regional and local trail connections						
Obj PU-4.1 Strive to provide connections with key Preserve destinations and adjacent open spaces and parks	Presentation Center Patrol Easement	4.1a - Confirm conditions and requirements for the designation/implementation of a formalized patrol route through the Presentation Center			\$0	NA
	Trail Connections	4.1b - Work with neighbors to establish access rights for new regional trail connections. Study the feasibility of an easement over private property to connect Madrone Knoll Trail to Summit Road.	M	I	TBD	NA

Goals and Objectives	Key	Action Description	Priority	Phase	Cost	Funding
		4.1c - Develop new multi-use trail connection between Lexington Reservoir County Park and northern portion of Preserve, and SR 35 and southern portion of Preserve, as part of creation of the multi-use through connection.	H	I/II	See PU.1.4a	General Fund
Goal PU5 – Actively involve the public in the use and management of the Preserve						
Obj PU-5.1 Provide opportunities to learn about and support resource management activities through docent, volunteer, and other outreach programs	Community Partnerships	5.1a - Partner with community groups, including Silicon Valley Mountain Bikers and Friends of Bear Creek Stables, to assist with the Preserve Plan implementation	H	ongoing	\$0	NA Partner
		5.2b - Engage docents and volunteers to assist in monitoring and education, to protect resources and integrate new users into the Preserve (see MO-1.2b)	H	ongoing	\$0	NA
		5.2c - Continue to support the work of volunteers in Preserve resource management, particularly the Advanced Resource Management Stewards	H	ongoing	\$0	NA
		5.2a - Maintain list of stakeholders and inform them of progress in the development of improvements at the Preserve	H	ongoing	\$0	NA
Obj PU-5.2 Encourage and engage the public and neighbors in future Plan amendments that affect the use and management of the Preserve	Public Outreach	5.2b - Post Preserve information on the District's website and periodically include in the District's newsletter	H	ongoing	\$0	NA
		5.2c - Develop new Preserve brochure and map as new Preserve areas, parking lots, and trails are opened to the public	H	ongoing	\$20,000 per phase	General Fund
Goal PU6 – Maximize public benefits of Bear Creek Stables by broadening public access and use of the facility, consistent with lease agreement (only Preferred Option Actions shown; subject to change based on design development)						
Obj PU-6.1 Formalize and expand public access within the Stables lease area, while ensuring the safety of horses, equestrians and the general public visiting the site	Public Access	6.1a - Prepare a Public Access Plan; develop with Stables tenant input, rules and regulations for public access (parking, programs, site use)	H	II	\$0	NA
		6.1b - Require tenant to outline intent and planned methods of engaging public in boarding, tours, education, clinics and other methods of public engagement; subject to District approval (see MO-4.1)	H	II	\$0	NA

Goals and Objectives	Key	Action Description	Priority	Phase	Cost	Funding
Obj PU-6.2 Design and construct new infrastructure for public programs and boarding facility	Cleanup and Restore	6.1c - Remove site debris, complete demolition and install erosion control	H	II	\$600,000	General Fund
		6.1d - Restore pastures, (127,000 sqft) grading, soil stabilization and hydroseeding	M	II	\$100,000	General Fund Grant
		6.1e - When designing and implementing improvements at the Stables, include green infrastructure improvements and water quality Best Management Practices at Bear Creek Stables (see NR-6.2)	M	II	Cost reflected under NR-6.2	General Fund
	Roads	6.2a- Upgrade all roads within the Stables to minimize erosion; limit asphalt to main entrance road and parking areas	H	II	\$900,000	MAA
		6.2b- Construct visitor facilities: Visitor kiosk or center, informational signage, and two public restrooms, to welcome Stables visitors, hold docent talks, trainings, etc.	H	II	\$900,000	MAA
	Stables Management Facilities	6.2c - Construct new stables management facilities: office, caretaker house, including upgrades to septic system	H	II	\$450,000	MAA
	Water System	6.2d - In accordance with County and State permitting requirements, install new connection to San Jose Water Company and implement other necessary upgrades to Stables water system, including installation of additional water storage and hydrants for fire suppression (see NR-5.3c)	H	II	\$1,000,000	MAA
	Stables Parking Area	6.2e - Design and construct new parking area(s) with capacity for approximately 30 vehicles, 2-4 public horse trailers and long-term storage for 12-20 boarder trailers. Consider alternate materials other than asphalt, and provide horse staging area with trough and public drinking water if feasible	H	II/III	\$1,200,000	MAA
	Boarding Stables	6.2f - Design and construct improved horse stabling facilities: site grading drainage, stormwater treatment basins, 62 boarding shelters and paddocks, round pen, two boarder restrooms	H	II/III	\$1,500,000	Tenant Partner Grant

Goals and Objectives	Key	Action Description	Priority	Phase	Cost	Funding
Obj PU-6.3 Designate trail connections from the Stables to the rest of the Preserve	Arenas	6.2g - Construct a Public Riding Arena (with cross-tie station) improving drainage, adding minimal lighting	H	II	\$100,000	MAA
		6.2h - Construct a Boarder Arena with proper drainage and footing and minimal lighting	M	II/III	\$150,000	Tenant Partner
	Livery Stables	6.2i - Design and construct a livery stable and runs for up to 10 public program horses	H	II	\$175,000	MAA
	Hay Barn	6.2j - Design and construct a new hay barn and maintenance facilities (manure dump, storage, maintenance)	H	II/III	\$400,000	General Fund MAA
	Small Animals Barn	6.2k - Allow for the development of a farm animals barn	L	TBD	\$60,000	Tenant Partner
	Trail Connections	6.3a - Abandon oversteep, eroded trail segment at eastern edge of boarder area; restore natural topography and drainage patterns	H	II	\$150,000	MAA
		6.3b - Construct new trail from boarder area, bypassing public/visitor area if feasible, to connect to Preserve trail system from the west side of the Stables area.	H	II	\$100,000	MAA General Fund

END OF ELEMENT 1

ii. ELEMENT 2: Natural Resource Management

Goals and Objectives		Key	Action Description			Priority	Phase	Cost	Funding
Goal NR1 – Increase the acreage of protected habitat and connectivity to wildlife corridors									
Obj NR-1.1 Continue to purchase properties and conservation easements to expand and protect the Preserve’s natural resources, aesthetic values, and connectivity	New land and easement acquisition	1.1a - Secure new properties, easements and other land interests to complete a protected open space greenbelt and create linkages with other protected lands	M	TBD	\$3,000,000	MAA			
Obj NR-1.2 Maintain working relationships with other land owners and stakeholders in the vicinity of the Preserve to coordinate efforts to identify and retain habitat linkages	Regional partnerships	1.2a - Pursue land purchase partnership with Santa Clara County Parks to protect the Moody Gulch watershed	L	TBD	\$50,000	MAA Partner			
Goal NR2 – Protect habitats that support diverse biological resources, are unique, or are important for the conservation of rare, threatened, and endangered species									
Obj NR-2.1 Protect and enhance special-status species habitat and other sensitive biotic communities	Lakes	2.1a - Complete a management & enhancement plan to improve lake habitat and ensure long-term dam stability	H	I	\$150,000	General Fund			
		2.1b – Design new public access improvements to avoid and minimize potential impacts to sensitive wildlife and plant habitats. (See PU-1.5.)	H	I	See PU-1.5	MAA			
		2.1c – Implement lake management recommendations as feasible, including inlet and/or outlet improvements, berm reconstruction, de-sedimentation, connection to existing water infrastructure, or installation of drainage features. Reduce non-native plant and animal populations through the District’s Integrated Pest Management Program.	M-H	I/II/III	\$125,000 per phase	General Fund			
Obj NR-2.2 Protect and, where appropriate, enhance forest habitat	Seasonal wetlands	2.1d - Identify, protect, and enhance seasonal wetland areas in northeast portion of Preserve	L	III	\$200,000	General Fund			
	Forest health	2.2a - Assess forest conditions and health, develop recommendations for long-term management	H	I	\$25,000	General Fund			

Goals and Objectives	Key	Action Description	Priority	Phase	Cost	Funding
Obj NR-2.3 Plan public access features to avoid adverse impacts and habitat fragmentation	Design Guidelines	2.3a - Design new trails and facilities to avoid sensitive species habitat, such as wetlands and dusky-footed woodrat nests	H	ongoing	\$0	NA
Obj NR-2.4 Identify wildlife movement corridors; work cooperatively with neighboring landowners and agencies to identify and preserve corridors and habitat linkages	Corridors	2.4a - As part of the regional wildlife passage and Ridge Trail crossing feasibility study project, work with partner agencies to develop wildlife and pedestrian linkages across SR 17	M	II	Separate Project	NA
Obj NR-2.5 Restrict access to areas that require intensive resource management or support sensitive biotic resources	Closed Areas	2.5a - As necessary, close areas to the public during intensive resource management actions or to protect sensitive resources	H	Ongoing	\$0	NA
Goal NR3 – Protect native wildlife						
Obj NR-3.1 Identify, protect, and monitor special-status wildlife populations	Preconstruction surveys and monitoring	3.1a - Survey habitat areas potentially supporting special-status wildlife that may be impacted by construction activities	H	Ongoing	\$10,000-50,000 per project	General Fund
		3.1b - Provide biological monitoring of construction activities in areas special-status species habitat	H	Ongoing	\$10,000-50,000 per project	General Fund
		3.1c - Avoid construction during migratory bird and raptor nesting season, or conduct nest surveys and implement measures to avoid nest disturbance	H	Ongoing	\$10,000 per survey	General Fund
	Aquatic species	3.1d - Conduct focused surveys for special status reptile and amphibians during Phase I, to guide design of improvements to existing roads and infrastructure, and construction of new public access facilities.	M	II	\$25,000	General Fund
		3.1e - Design and install signage as needed to reduce potential use-related impacts to special-status wildlife, such as western pond turtle at the Alma College Parking Area.	H	Ongoing	\$1,000 per sign	General Fund

Goals and Objectives	Key	Action Description	Priority	Phase	Cost	Funding
	Special status plants	3.1d - Survey, monitor, and enhance rare plant populations (Choris's popcorn-flower, native California black walnut trees)	M	I	\$10,000 every 5 years	General Fund
		3.1e - Survey and develop recommendations for long-term management of Alma College bat populations, to minimize impacts to all bat species from structure demolition/rehabilitation/potential re-use.	H	I	\$20,000	General Fund
	Bats	3.1f - Construct alternate habitat structures for special-status bat populations that will be displaced by rehabilitation of the Alma College chapel building. Where recommended, seal buildings and relocate bats prior to site work.	H	I	\$120,000	General Fund
		3.1g - Monitor bat populations, including use of bat houses, and implement additional enhancement measures if bat populations are declining.	H	ongoing	\$10,000 per year	General Fund
	Partnerships	3.1h - Work in partnership with resource agencies to share data and facilitate future enhancement projects	M	II	\$0	NA

Goal NR4 - Repair and monitor ecologically damaged and disturbed areas

Obj NR-4.1 Control key invasive plant species	Invasive Species	4.1a - Identify, map, and prioritize control of invasive plant populations according to the District's Integrated Pest Management Program	H	I	\$40,000	General Fund
		4.1b - Implement intensive control program for priority weed infestations	H	ongoing	\$100,000 annually for 5 years	General Fund
		4.1c - Use native seed and, where necessary, actively restore areas degraded by invasive plants	H	I/II	\$25,000 annually for 5 years	General Fund
Obj NR-4.2 Manage Sudden Oak Death	Sudden Oak Death (SOD)	4.2a - Partner with Sudden Oak Death Task Force member institutions, including university researchers, to develop a long-term management plan for SOD on the Preserve	H	I	\$25,000	General Fund
		4.2b - Continue to monitor SOD and follow SOD Best Management Practices to reduce spread. Install SOD cleaning stations and informational signage at parking areas and trailheads. Remove hazard trees or treat heavy dieback areas along trails to reduce wildfire risk, as needed. Identify and treat high priority oaks to prevent infection, if feasible.	H	ongoing	\$10,000 annually	NA

Goals and Objectives	Key	Action Description	Priority	Phase	Cost	Funding
		4.2c - Continue to support and encourage SOD research on Preserve lands	H	ongoing	\$15,000	General Fund
Obj NR-4.3 Restore degraded or disturbed areas	Restoration	4.3a - Throughout the Preserve, restore disturbed sites through landform restoration and revegetation, as staffing and funding resources allow	M	ongoing	Included in PU actions	MAA
Goal NR5 - Protect waterways and associated natural lands to maintain water quality, watershed function, and healthy aquatic habitat						
Obj NR-5.1 Protect water quality and improve stream habitat	Water Quality	5.1a - Identify and design priority road and trail treatments to reduce erosion and protect watershed resources and aquatic habitat. See PU-1.2 for implementation costs.	H	I/II/III	\$150,000 Per phase	MAA
		5.1b - Monitor channel bank erosion; treat with bioengineering as needed	H	ongoing	Up to \$5,000 annually	General Fund
		5.1c - Remove trash and historic debris from stream channels if degrading water quality or threatening streambank stability. Also see MO-2.2a.	H	II	Up to \$150,000	General Fund
Obj NR-5.2 Treat stormwater runoff and monitor potential sources of sediment and pollutants	Green Infrastructure	5.2a - Implement green infrastructure design at all new parking areas and rehabilitated Alma College site	L	III	See PU-1.5	NA
		5.2b - In the event a water quality issue is identified, develop and implement a response and restoration plan	H	ongoing	varied	NA
Obj NR-5.3 Identify and maintain existing springs, water infrastructure, and water rights	Water Rights and Infrastructure	5.3a - Complete baseline monitoring of water resources throughout the Preserve to characterize existing sources. Complete a Constructability and Cost Assessment of potential water supply options. Complete a water supply plan to utilize/augment existing sources.	H	underway	\$100,000	General Fund
		5.3b - Obtain rights to surface water where possible, if future use is desired.	H	I	\$50,000	General Fund
		5.3c - Design and install water infrastructure to convey, and store water where needed to support Preserve and Stables uses and fire suppression needs (see PU-6.2d)	H	I	See PU-6.2d	MAA
		5.3d - Assess structural and geotechnical stability and sizing of existing 700' Webb Creek culvert, work with County to support repair/replacement.	H	I	TBD	General Fund

Goals and Objectives	Key	Action Description	Priority	Phase	Cost	Funding
Goal NR6 – Emphasize the protection of the natural resources at Bear Creek Stables						
Obj NR-6.1 Maintain and manage roads and Stables facilities to reduce erosion	Roads	6.1a - Upgrade all roads within the Stables to minimize erosion; limit asphalt to main entrance road and parking areas	H	II	See PU-6.2	MAA
Obj NR-6.2 Follow Design Guidelines and use Best Management Practices when implementing all Stables facilities improvements	Stables Facilities	6.2a - When designing and implementing improvements at the Stables, implement green infrastructure improvements and water quality Best Management Practices at Bear Creek Stables	M	II/III	\$300,000	General Fund
Obj NR-6.3 Limit access to erosion-prone and sensitive habitat areas	Water Quality	6.3a - Restore pastures, (127,000 sqft) grading, soil stabilization and hydroseeding.	M	II	See PU-6.1d	General Fund Grant

END OF ELEMENT 2

iii ELEMENT 3: Cultural Resource Management

Goals and Objectives		Key	Action Description			Priority	Phase	Cost	Funding
Goal CR1 – Protect and interpret significant historical and cultural resources									
Obj CR-1.1 Organize and increase the District's knowledge of the Preserve's cultural resources	Cultural Resource Tracking	1.1a - Create a cultural resource database to record and track Districtwide cultural resources.	H	I	\$10,000		General Fund		
		1.1b - Prepare a curation plan for high priority found cultural artifacts, following Cultural Resource protection guidelines.	H	I	\$10,000		General Fund		
		1.1c - Promote involvement of local academic institutions (Foothill College, University of California) to investigate and document known and potential cultural resources	M	ongoing	\$25,000		General Fund		
Obj CR-1.2 Implement cultural resource protection measures and protect historically significant structures	Cultural Resource Evaluation	1.2a - Complete evaluations of known cultural resources, including both prehistoric and historic-era resources, and develop recommendations to avoid construction and visitor impacts to significant features	H	I	\$150,000		General Fund		
		1.2c - Design new trails and facilities to avoid impacting known cultural resources. Restrict access to resource areas if damage results from use of existing trails and facilities	H	ongoing	\$10,000 - \$20,000 per project		General Fund		
		1.2d - Prior to any ground-disturbing construction activity, survey for unknown cultural resources and provide monitoring during construction	H	ongoing	\$10,000 - \$20,000 per project		General Fund		
Obj CR-2.1 Restore and reuse the former Alma College site according to federal guidelines for the rehabilitation of cultural landscapes	Historic Structures	1.2e – Stabilize Chapel and 1934 Library roof at the former Alma College site.	M	II	See CR-2		NA		
		1.2f - Design new and updated facilities at the Bear Creek Stables in such a manner that they preserve the character of the Stables	H	II	See PU-6.2		NA		
Goal CR2 – Within the District's basic mission, rehabilitate the former Alma College site so it can be integrated into the Preserve, while respecting the site's history, character and cultural landscape									
Obj CR-2.1 Restore and reuse the former Alma College site according to federal guidelines for the rehabilitation of cultural landscapes	Upper Lake Area	2.1a - Provide a new vehicle entrance, parking, trail crossing of Bear Creek Road, restrooms, and other visitor amenities at Upper Lake (PU-1.5c)	H	I	See PU-1.5a		MAA		

Goals and Objectives	Key	Action Description	Priority	Phase	Cost	Funding
Obj CR-2.2 Preserve historic structures that retain integrity and significance to the cultural landscape	Main Alma College Site	2.1b – Restore open grassland areas through seeding with native species and periodic mowing to maintain grassland health. Remove historic asphalt paving that does not contribute to the cultural landscape	M	I	\$ 150,000	MAA
		2.1c – Restore former pedestrian circulation pathways around Upper Lake; or mimic with native shrub plantings. Manage vegetation around Upper Lake, retaining and rehabilitating key plantings that convey the historic landscape and garden design	M	I	\$200,000	MAA
		2.1d – Rehabilitate St. Joseph Shrine, re-align boulders to mimic historic landscape position	M	I	\$30,000	MAA
		2.1a - Rehabilitate key features of the main site: Manage vegetation, restore and stabilize the historic terracing, Marian shrine, pathways, and stairs to maintain the spatial relationships and layout of the main area. Establish native plants to convey historic landscape and garden patterns	H	II	\$2,000,000	MAA
		2.1b – Retain and stabilize the mansion carport ruins for interpretive purposes and as bat habitat. Install fence or railing to close area to public access.	H	I	\$200,000	General Fund
		2.1c - Rehabilitate and interpret the meadow, lily pond, and roman plunge area as a picnic/gathering spot.	L	II	\$75,000	MAA
		2.1e - Establish a vegetation management program to control invasive species and maintain new landscape elements.	H	ongoing	\$40,000 annually	General Fund and/or Partner
		2.2a - Stabilize the 1909 Chapel and the 1934 Library roof structure to preserve the structures for future rehabilitation and use by the District or partner.	H	II	\$800,000	MAA
		2.2b - Seek partnership to rehabilitate the historic architectural details of Chapel and Library roof structure	M	III	\$3,750,000	Partner
		2.2c - If partnership or other funding allows, provide public restrooms and other utilities supporting higher re-use of the site	M	III	unknown	Partner

Goals and Objectives	Key	Action Description	Priority	Phase	Cost	Funding
Obj CR-2.3 Ensure the safety and security of visitors to the site	Demolition and Cleanup	2.3a - Partially demolish structures that cannot feasibly be rehabilitated or re-used, or do not contribute to the character/integrity of the site (classroom, garage, and 1950 library)	H	II	\$860,000	General Fund
	Retaining Walls	2.3b - Structurally stabilize all or portions of the north retaining wall with tiebacks, restrict access to unstabilized sections	H	II	\$500,000-\$1,000,000	General Fund
		2.3c - Provide railings or otherwise block access to the south retaining wall and to unstabilized sections of the north wall to prevent hazards	H	II	\$250,000	General Fund
	Site Security	2.3d - Repair or replace perimeter security fencing, including, potentially, visual screening, to discourage trespass and vandalism.	H	I	\$50,000	General Fund
		2.3e - Ensure adequate security of structures prior to demolition	H	I	\$20,000	General Fund
	Fire Protection	2.3f - Provide and maintain fire protection water storage and distribution for occupied structures, if any.	H	III	unknown	Partner
Obj CR-2.4 Interpret the Preserve's history in a compelling and engaging manner	Interpretive Features	2.4a - Integrate interpretive materials into all features of the Alma College site to illustrate the layers of history of the site and their reflection of the larger patterns of development of California. Include interpretive material for prehistoric features as appropriate.	H	II	\$450,000	MAA
	Partnerships	2.5a - Explore alternative funding sources and partnership opportunities	M	ongoing	\$0	Partner
Obj CR-2.5 Balance the District's mission with potential improvements and programs		2.5b - Consider potential revenue-generating programs that are consistent with the District's mission and could help support the improvements and long-term maintenance of the former Alma College site.	L	ongoing	\$0	Partner

END OF ELEMENT 3

iv. ELEMENT 4: Maintenance and Operations

Goals and Objectives		Key	Action Description			Priority	Phase	Cost	Funding
Goal MO1 - Maintain trails and facilities to protect the natural environment and provide for a quality visitor experience			1.1a - Install regulatory and way-finding signage at parking areas, trailheads, and trail intersections, additional gates, and split-rail fencing as needed to regulate trail use			H	I	\$250,000	MAA
Obj MO-1.1 Maintain a high quality, low maintenance, safe, and enjoyable road and trail system	Road Maintenance Plan		1.1b - Prepare a road maintenance plan that identifies sites and includes repair history and maintenance schedule, including an automated database and tracking system (integrated into IT system)			H	I	\$50,000	General Fund
	Brush Trails and Road		1.1c - Brush all trail-width trail segments on yearly basis (approximately 6 miles) and brush all road-width trail segments (approximately 1.3 miles) as needed, according to District brushing guidelines			H	ongoing	See Staffing Cost Section	General Fund
	Control Infestations		1.1d - Control priority weed infestations along roads and trails to reduce spread			H	I		General Fund
Obj MO-1.2 Reduce potential user conflicts	Patrolling		1.2a - Provide sufficient patrol and enforcement of trail use guidelines and rules to promote user compliance.			H	ongoing		General Fund
	Volunteer Patrols		1.2b - Utilize volunteer trail patrol resources to communicate, educate, and monitor compliance			L	ongoing	\$0	NA
Obj MO-1.3 Reduce and control sources of road- and trail-related erosion and sedimentation	Reduce Erosion on Roads/Trails		1.3a - Implement high-priority road and trail treatments to reduce erosion, provide for reliable patrol access and visitor safety			H	ongoing	See PU-1.2	MAA
	Drainage Improvements		1.3b - Maintain and upgrade road and trail drainage improvements and structures as needed, (see NR-5.1a)			H	ongoing	\$10,000 annually, also see NR-5.1a	General Fund
	Erosion Monitoring		1.3c - Monitor main equestrian and other heavily-used trails for erosion and sedimentation; implement any necessary corrective measures such as rocking road surfaces and improving channel crossings			H	ongoing	\$10,000 annually	General Fund
	Seasonal Closures		1.3d - Implement seasonal trail closures as needed			H	ongoing	\$0	NA

Goals and Objectives	Key	Action Description	Priority	Phase	Cost	Funding
Obj MO-1.4 Use Best Management Practices during facility construction and maintenance to control erosion	BMPS for Trail Construction	1.4a - Site and construct new trails to minimize interference with water flows, avoid erosion, and protect water quality, according to District construction standards and guidelines	H	I/II	\$0	NA
	BMPS for Parking Areas	1.4b - Monitor, record, and maintain parking areas and other facility drainage systems annually as required by C-3 stormwater treatment requirements	H	ongoing	\$0	NA
Goal MO2 – Address environmental hazards						
Obj MO-2.1 Retrofit existing structures and site new trails and facilities to reduce seismic risk	Reinforce Retaining Walls	2.1a - As part of rehabilitation of the former Alma College Site, install tiebacks to reinforce sections of retaining wall and chapel, or within 20 feet of these structures.	M	II	See CR-2.3	NA
	New Structures Setbacks	2.1b - Site any new structure or facility that encourages concentrated use, or gathering places such as picnic areas and parking areas, at least 50 feet away from fault traces.	H	III	\$0	NA
	Geologic Hazards Study	2.1c - Conduct a geologic hazards study to determine the presence of subsidiary fault traces within 50 feet of any existing structure, if the structure is proposed for re-use and will be occupied.	H	I	\$100,000	MAA
	Safety Signage	2.1d - Provide informational signage about local geology and associated hazards	L	II	\$25,000	MAA
Obj MO-2.2 Remediate contaminated areas and other hazards associated with past landowners and former land use practices	Remediation Plan	2.2a - Assess potential sources of contamination, including the large dump site in northeastern zone and implement a remediation and response plan	H	I	\$250,000	General Fund
	Removal of Hazardous Materials	2.2b - Demolish hazardous, dilapidated structures and remove and properly dispose of debris throughout the Preserve, following Cultural Resource protection guidelines.	H	I	See CR-2.1	NA
Goal MO3 – Reduce wildfire risk						
Obj MO-3.1 Manage wildland fuels and reduce fire hazards to natural resources, structures, and facilities	Defensible Space	3.1a - Maintain defensible space within 100 feet of all structures according to CalFire guidelines	H	ongoing	See Staffing Cost Section	General Fund and Grants
	Vegetation Management	3.1b - Manage vegetation around high ignition risk areas such as parking areas and vehicle access roads on the Preserve to reduce fuel	H	ongoing		

Goals and Objectives	Key	Action Description	Priority	Phase	Cost	Funding
Obj MO-3.2 Facilitate wildland fire response and suppression	Fire Hazard Reduction	3.1c - Evaluate and maintain fire hazard reduction measures in grassland areas	H	ongoing		
	Roadside Vegetation Management	3.1d - Facilitate and encourage roadside vegetation management by Santa Clara County (Bear Creek Road) and Caltrans (Summit/Skyline Road, Hwy 17)	H	ongoing		
	Hwy 17 Fuel Break	3.1e - Increase the width and effectiveness of the Hwy 17 fuel break as needed and as feasible	H	I		
	Fire-resistant Plant Species	3.1f - Utilize fire-resistant plant species in revegetation and restoration projects	H	ongoing	\$0	NA
	Fire Suppression Water	3.2a - Provide and maintain sufficient storage and distribution of water for fire suppression at Bear Creek Stables and former Alma College sites, in accordance with Santa Clara County requirements (shared with Natural Resources Action 5.3c)	H	I	See Staffing Cost Section	General Fund
	Emergency Access Roads	3.2b - Identify and maintain emergency access roads to provide driveable, road-width routes	H	ongoing		
Obj MO-3.3 Develop fire response procedures and plans for lease areas	Fire Management and Response Plans	3.3a - As part of lease development, require a fire management and response plan and evacuation procedures for Bear Creek Stables tenant and, potentially, the Alma College chapel	H	ongoing	\$0	NA
Goal MO4 – Ensure that all leases, easements, access agreements, and other legal arrangements are consistent with Preserve Plan goals and District’s mission						
Obj MO-4.1 Work cooperatively with lessees to ensure lease facilities are maintained in working and safe condition as part of the Bear Creek Stables Site Plan	Maintenance and Operations Plan	4.1a - Prepare a Maintenance and Operations Plan; with input from Stables tenant, develop rules and regulations for maintenance (manure management, drainage, feed, facility upkeep), and safety	H	II		NA
	Visual Inspections	4.1b - Conduct quarterly visual inspections and reporting of facilities to ensure safety and health of horses and visitors	M	II	See Staffing Cost Section	NA
	Emergency Animal Evacuation and Protection Plan	4.1c - Establish plans, with tenant input, including Emergency Animal Evacuation and Protection Plan, providing an emergency land line phone, and provision of basic medical first-aid for human and horses	H	II		NA
	Operation Hours	4.1d - Establish operating hours to be during daylight hours until adequate outdoor lighting is provided in riding areas.	M	II		NA

Goals and Objectives	Key	Action Description	Priority	Phase	Cost	Funding
Obj MO-4.2 Ensure conditions of easements and other access agreements with neighboring landowners are met	Caretaker Qualifications	4.1e - Require tenant to provide a qualified on-site caretaker, subject to background checks and approval of the District	M	II		NA
	Monthly Reporting	4.1f - Require tenant to provide monthly reporting of activities, such as horse population, maintenance activities, incident occurrence, complaints, public access/education activities	H	II		NA
Obj MO-4.3 Work cooperatively with lessees to improve facilities and provide educational opportunities	Easements Agreements	4.2a - Ensure conditions of easements and other agreements with neighboring landowners are met	H	ongoing		NA
	Public Access Programs	4.3a - Ensure public access programs and visitor use amenities are available to the community, as required under the lease with tenant. See PU-6.	M	ongoing		NA
Goal M05 – Develop a viable plan that is financially feasible for both a tenant and the District						
Obj MO-5.1 Establish a long-term lease	Leases and agreements	5.1a - Develop and release RFP to solicit long-term tenant	H	II	\$0	NA
	Partnerships	5.2a - Explore alternative funding sources and partnership opportunities	M	II/III	\$0	NA
Obj MO-5.2 Balance the District's mission with potential improvements and programs	Revenue-generating programs	5.2b - Consider potential revenue-generating programs that are consistent with the District's mission and could help support the improvements and long-term maintenance of the Stables	M	II/III	\$0	NA

END OF ELEMENT 4

C. Conclusions and Next Steps

The Preserve Plan proposes additional, realigned and improved public access and trail opportunities, as well as new parking and restroom facilities, while protecting and improving native habitats, existing cultural resources, and building new partnerships with local stewards of this unique piece of land. At the heart of the Plan, is the goal of opening the Preserve to broader public use, removing the existing permit system and allowing access throughout the Preserve.

Many subsequent steps will follow the completion and approval of the Preserve Plan, including detailed planning and design, implementation, and operations. Completion of the Phase I projects that address critical resource management issues must occur before the District can open new areas to public recreation. Ongoing natural resource management and monitoring, along with periodic Preserve Plan reviews and updates, will ensure that Bear Creek Redwoods achieves the vision of balancing stewardship of the Preserve's unique ecological, cultural, and historical resources with public recreation.

Planning and design for Phase I trail and infrastructure improvements is underway. With approval of the Preserve Plan and certification of the EIR, on-the-ground construction can be initiated. Resource management projects prescribed by the Bear Creek Redwoods Integrated Pest Management (IPM) Plan conform to guidelines in the District-wide IPM Program and EIR, and are currently ongoing. A feasibility study and schematic designs for the Bear Creek Stables improvements will be initiated immediately following Preserve Plan approval. Finally, permitting consultation with Santa Clara County for the Alma College Landscape Rehabilitation Plan will formally begin following approval of the Plan. Development of each of these major projects will be guided by the Planning and Natural Resources Committee, and the full Board of Directors, in a public process.

Furthermore, the District develops, reviews, and approves detailed budgets for each fiscal year on a yearly basis. As such, budgets to support future Master Plan implementation will be developed by District staff and reviewed and approved by the District's Board of Directors each year.



Trail in the meadow



REFERENCES

- Balance Hydrologics, 2016. *Bear Creek Redwoods Ponds Assessment and Management Plan*.
- Balance Hydrologics, 2016. *Bear Creek Redwoods Water Resource Inventory*.
- Best, Tim, 2010. *Bear Creek Redwoods Road and Trail Erosion Inventory*.
- Bradley, 2016. *Water Supply System Study*.
- California Oak Mortality Task Force. [www.suddenoakdeath.org]
- County of Santa Clara, Environmental Resources Agency Planning Office, 2000. *Letter of Compliance: Status of Horse Boarding Operation at 19100 Bear Creek Road Memorandum*.
- County of Santa Clara Parks and Recreation Department, 2013. *Calero County Park Trails Master Plan*.
- H.T. Harvey & Associates, 2009. *Bear Creek Redwoods Biotic Assessment*.
- H.T. Harvey & Associates, 2016. *Alma College Bat Relocation Report*.
- Hexagon Transportation Consultants, 2015. *Bear Creek Redwoods Traffic Study*.
- Knapp Architects, 2010. *Alma College Conditions Assessment Project Phase I: Assessment of Existing Conditions*.
- Knapp Architects, VerPlanck Preservation Consulting, 2010. *Historical Resource Assessments Summary Report: Beatty Property and Bear Creek Stables*.
- Midpeninsula Regional Open Space District, 2016. *Integrated Pest Management Program (BCRIPM Plan) and EIR*.
[<http://www.openspace.org/our-work/projects/integrated-pest-management>]
- Midpeninsula Regional Open Space District, 2016. *Highway 17 Wildlife Passage and Bay Area Ridge Trail Crossing Project*.
[<http://www.openspace.org/our-work/projects/wildlife-crossing>]
- MIG, 2016. *The Bear Creek Redwoods Integrated Pest Management Plan (BCRIPM Plan)*
- MNS Engineers, 2016. *Bear Creek Redwoods Preserve Water Infrastructure Constructability Assessment and Cost Estimate*.
- Pacific Legacy, 2016. *Bear Creek Redwoods Cultural Resource Analysis*.
- Page & Turnbull, 2005. *Alma College Historic Resource Study*.
- PGA Design Landscape Architects, 2015. *Alma College Site Cultural Landscape Rehabilitation Plan*.
- Waterways, 2016. *Bear Creek Redwoods Road and Trail Erosion Inventory Update; Western Preserve Zone*.
- West, 2008. *Bear Creek Redwoods Preserve Ecosystems Study*.

GLOSSARY OF TERMS AND ACRONYMS

ABAG	Association of Bay Area Governments	GLO	General Land Office
ADA	Americans with Disabilities Act	km	kilometer
ADT	average daily traffic	mg/L	milligrams per liter
BAAQMD	Bay Area Air Quality Management District	MROSD	Midpeninsula Regional Open Space District
Basin Plan	RWQCB Water Quality Control Plan	msl	mean sea level
BCR Preserve	Bear Creek Redwoods Open Space Preserve	Mt.	Mount
BLM	U.S. Bureau of Land Management	NMFS	National Marine Fisheries Service
BP	before present	NOx	oxides of nitrogen
CARB	California Air Resources Board	NWIC	Northwest Information Center
CAL FIRE	California Department of Forestry and Fire	PG&E	Pacific Gas and Electric Company
CEQA	California Environmental Quality Act	PM10	particulate matter with a diameter of 10 micrometers or less
CESA	California Endangered Species Act	RMP	Resource Management Policy
cfs	cubic feet per second	RV	recreational vehicle
CHRIS System	California Historical Resources Information System	RWQCB	Regional Water Quality Control Board
CNDDB	California Natural Diversity Database	SA Preserve	Sierra Azul Open Space Preserve
CNEL	Community Noise Equivalent Level	SCVWD	Santa Clara Valley Water District
CNPS	California Native Plant Society	SFBAAB	San Francisco Bay Area Air Basin
CRHR	California Register of Historical Resources	SR	State Route
CWA	Clean Water Act	SWRCB	State Water Resources Control Board
dB	decibel	THP	Timber Harvesting Plan
CDFG	State of California, Department of Fish and Game	USFWS	U.S. Fish and Wildlife Service
District	Midpeninsula Regional Open Space District	USGS	U.S. Geological Survey
DWR	State of California, Department of Water Resources	VOC	Volatile organic compound
EIR	Environmental Impact Report	WQLS	Water Quality Limited Segments
ESA	federal Endangered Species Act		
FCR	fire cracked rock		
GIS	geographic information system		

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