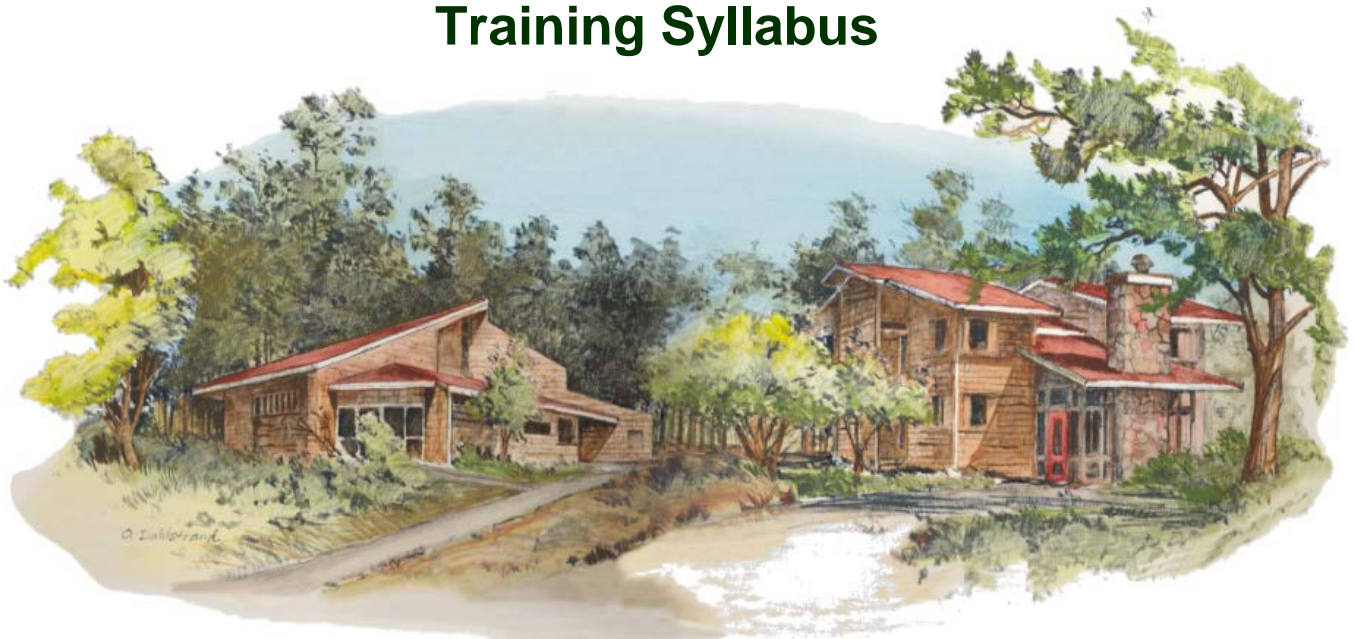


# BASIC TRAILS PROGRAM MAINTENANCE AND MANAGEMENT

**April 2-7, 2017**

**Training Syllabus**



**William Penn Mott Jr. Training Center**



# Memorandum

**Date:** March 21, 2017

**To:** Supervisor

**From:** Debbie L. Fredricks, Chief  
Training Section  
California State Parks

**Subject:** Employee Attendance at Formal Training  
Basic Trails Program Maintenance and Management Group 11

An employee from your office will soon be attending the formal training program described in the attachment. Please ensure that the employee is fully prepared to attend the session and that the groundwork is laid for the employee's implementation of the training upon returning to work. You can assist with capturing the full value of the training by taking the following steps:

### Prior to Training

1. Make sure that **specific** employee needs are identified and, if necessary, called immediately to the attention of the Training Specialist.
2. Review with the employee the reason for the employee's attendance.
3. Review objectives and agenda with the employee.
4. Discuss objectives and performance expected after the training.

### Immediately Following Attendance

1. Discuss what was learned and intended uses of the training.
2. Review the employee's assessment of the training program for its impact at the workplace.
3. Support the employee's use of the training at the work place.

### Three Months Following Training

1. Supervisor evaluates the effectiveness of the training on the employee's job performance and meets with employee to discuss the evaluation.

Thank you for your assistance in seeing that the full benefit of training is realized.



Debbie L. Fredericks  
Training Section Chief

Attachment  
cc: Participant

## TABLE OF CONTENTS

Formal Training Guidelines .....	1
Program Attendance Checklist/Pre-Training Assignment .....	5
Post-Training Assignment .....	6
Agenda.....	7
Program Outline .....	9
Program Objectives.....	11
Location Maps.....	15

***Mission Statement  
Training Section***

***The mission of the Training Section is to improve  
organizational and individual performance and  
productivity through consulting and collaboration,  
training and human resources development.***

## TRAINING SECTION STAFF

Debbie L. Fredricks.....	Training Section Chief
Ann D. Slaughter .....	Mott Training Center Manager
Jack Futoran .....	EMS and LFG Training Coordinator
Jeff Beach.....	Training Consultant
Dave Galanti .....	Training Consultant
Karyn Lombard .....	Training Consultant
Sara M. Skinner .....	Training Consultant
Jason Smith .....	Academy Coordinator
Jeremy Alling .....	Cadet Training Officer
Matt Cardinet .....	Cadet Training Officer
Raymund Nanadiego .....	Cadet Training Officer
Lisa Anthony .....	Program Coordinator
Edith Alhambra .....	Assistant Program Coordinator
Alex Franck.....	Assistant Program Coordinator
Jessica Kohls.....	Assistant Program Coordinator
Pamela Yaeger .....	Assistant Program Coordinator

## THE MISSION

*of the California Department of Parks and Recreation is to provide for the health, inspiration and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high quality outdoor recreation.*



## **FORMAL TRAINING GUIDELINES**

Since 1969, our Department has been providing a continuously changing number of diverse training programs at its main training facility, the William Penn Mott Jr. Training Center, and other locations including Marconi Conference Center. The Department strives to enhance your learning and job performance with formal training of the highest quality.

Our Department's dedication to training is only one aspect of its commitment to you and to the public. This commitment is costly and represents an important investment in you and your career. You and the Department realize a return on that investment by your positive participation in formal training itself and post training follow-through.

The program you will be participating in is described in this training syllabus, which outlines what you can expect from this training and what is expected of you. This syllabus details what you should do before you leave for training; what to do when you arrive; what you will be doing while in training; and, importantly, what you should be able to do when you return to your work site. Specifically:

1. **SYLLABUS:** Your copy of this syllabus is an important part of your training experience and should be brought with you to training. Read it before you arrive and review it following the program along with material you received at training.
2. **PRE-TRAINING ASSIGNMENTS:** Your completion of pre-training assignments is essential to the success of your training. You are responsible for all reading assignments in preparation for classroom sessions. Time will be provided during working hours to accomplish any assignments which involve either individual or group efforts and resources. (Pre-training assignments are listed in the "Program Attendance Checklist" section.)
3. **TRAVEL:** Arrange your travel to and from Santa Cruz, CA through your District or Office. (No reimbursement for travel expense - including per diem costs - will be approved for travel not specifically authorized in advance by the District Superintendent.) Individuals are entitled to claim the Incidental Allowance as

outlined in DAM 0410.5. There will be a vanpool to take you from Quality Inn, Ben Lomond, and Sunset Inn, Santa Cruz to the training sites.

4. HOUSING: Housing will be assigned to you on a shared-room basis and will be available from 3:00 p.m. on the date of arrival to 12:00 noon on the date of departure. Housing will be provided for **DPR PARTICIPANTS** from outside the Santa Cruz area at the **Quality Inn, 9733 Hwy 9, Ben Lomond, 95005, (831) 336-2292** no per diem allowance will be authorized for other arrangements. Please advise Jeff Beach no later than one week before your scheduled arrival if you plan to make other arrangements at your own expense. No animals are permitted in housing. In the event of an emergency, staff must know your room assignment, therefore, you may not switch rooms without staff approval. Overnight guests are not allowed. Quiet hours are 10:00 p.m. to 8:00 a.m.

**OUTSIDE AGENCY PARTICIPANTS:** We have reserved a block of rooms at the State rate of \$90.00 plus tax per night, and a DPR van will provide transportations to and from **SUNSET INN, 2424 Mission Street, Santa Cruz, 95060, phone (831) 423-7500**. **You or your agency will be required to reserve, and pay for your lodging. For logistic purposes, please consider this as your best choice for lodging, if you are coming from outside the area.**

**Please Note:** You may be asked to present a valid credit or debit card while checking in to your room. Many motels require a credit card to cover charges incurred such as telephone calls, damages to rooms and/or furnishings, fees to clean rooms that have been smoked in that are not designed as smoking rooms, etc. Please be prepared to handle this appropriately.

5. ENROLLMENT OR HOUSING CANCELLATION POLICY: For **DPR participants** to cancel participation in a course, the participant must have their District Superintendent or Section/Office Manager send an email to the Training Specialist assigned to the course requesting to remove the participant. If you do not need lodging or must change or cancel your reservation for lodging, you must contact the Mott Training Center or Training Specialist assigned to the course at least 72 hours prior to your date of arrival. Lodging, requisition and associated fees will be charged to the employee's District or Section/Office if a training cancellation is received with less than 72 hours notice.

For **outside agency participants** to cancel without cost, you must cancel more than two weeks before the check in date for the class. Otherwise you will be invoiced one half (\$500) the class tuition as a cancellation fee.

The Mott Training Center is committed to ensuring that the reservation that has been made for you is accurate and needed.

6. MEALS: Participants will be required to provide for their own meals. **DPR participants** can file a travel expense claim provided they live 50 miles from Santa

Cruz (class location). **OUTSIDE AGENCY participants must work out meal expenses with their agency. All participants must bring a sack lunch Monday through Thursday.**

**NOTE: Your travel and incidentals are to be charged to your district.**

7. **CLOTHING: Uniforms are not required for this program.** Special clothing requirements for your program are described in "Training Attendance Requirements" section. Your informal sportswear should be appropriate during off-duty hours.
9. **REGISTRATION: DPR PARTICIPANTS:** When you arrive at the Quality Inn, Ben Lomond, go directly to the registration desk for check-in and your room assignment. Rooms at the Quality Inn, Ben Lomond, are equipped with telephones which you may have to secure with a personal charge card for payment. **OUTSIDE AGENCY PARTICIPANTS: When you arrive at the Sunset Inn, Santa Cruz, go directly to the registration desk for check-in and your room assignment.**
10. **COURSE LEADERS:** The formal training you will attend is developed, and for the most part, conducted by experienced State Park employees in field and staff positions. Some courses will be conducted by qualified instructors from other agencies and educational institutions. Your course leaders have proven their ability and knowledge in their profession, and provide a level of expertise difficult to match.
11. **TRAINING CENTER STAFF:** A Training Center staff member has been assigned responsibility for your training group as well as for your training program. That staff member usually serves as a Course Leader as well as a Coordinator. During the program, you may be asked to assist Training Center staff in the logistics of your training program (organizing field trip transportation, supervising classroom breaks, etc.). Center staff will do all within their power to make your training experience pleasant and meaningful.
12. **TRAINING MATERIALS:** The Department of Parks and Recreation Trails Handbook will be provided on the first day of the program.
13. **TRAINING LOCATIONS:** Training will be conducted at the Zayante Fire Station, 770 E Zayante Road, Felton, 95018, and at Henry Cowell and Big Basin Redwoods State Parks.
14. **SAFETY/COMFORT REMINDER:** Bring sun screen, extra water bottles, breathable clothing, layered clothing (the mornings may be cool up on the mountain). In addition to your hard hat, you may want to bring a hat to shade your head for those field exercises that do not require a hard hat.

15. CELL PHONES: As a courtesy to your fellow participants and course leaders ensure that your cell phone is turned off during classes. Participants should not be receiving or making cell phone calls during class time. Please limit those calls to your breaks. Also note – due to remote, rural location most cell phones only work marginally, if at all in this area. Be prepared with calling cards or alternate means to make telephone calls.

## **PROGRAM ATTENDANCE CHECKLIST/PRE-TRAINING ASSIGNMENT**

To assist you in your preparation for formal training the following list is provided:

- 1. Read and understand the Basic Trails Program Maintenance and Management Syllabus prior to your arrival for training.

### **PRE-TRAINING ASSIGNMENTS:**

- Review the Post-Training Assignment in this syllabus with your supervisor. Discuss the projects you will be assigned in the next twelve months that will utilize the skills developed during the training program.

**NOTE:** Completion of the pre-training assignments and bringing your Personal Protective Equipment is mandatory and will count for 20% of your program grade.

- 2. Remember to bring the following with you to training:

- Program syllabus
- P.P.E. - safety equipment (eye, ear, hand protection and a hard hat)
- Appropriate work clothing and rain gear with good work boots
- Day pack, clinometer and water bottle/canteen
- Alarm clock, pens, pencils

**NOTE:** If you are unable to locate or bring these items contact Jeff Beach ASAP before the class and we will attempt to find gear to loan you during the class. Jeff Beach may be reached by telephone at (831) 901-5864 or via e-mail at [Jeffrey.Beach@parks.ca.gov](mailto:Jeffrey.Beach@parks.ca.gov).

**Warning** – Poison oak, which many people find highly irritating to the skin, is prevalent in this area. Persons who may have sensitivities are advised to take care to not come in contact with this plant while hiking and working, and should take any other preventative measures as may be appropriate.



## **POST-TRAINING ASSIGNMENT**

Prior to ninety days after the completion of this program, the employee and his/her supervisor should discuss the impact and assess the effectiveness this program has had on the employee.

The post-training evaluation process is intended to provide a bridge between classroom instruction and the on-the-job application of training. The information obtained through this process will assist the employee, supervisor, and Training Section in providing a return on the training investment to the Department.

**BASIC TRAILS PROGRAM: MAINTENANCE AND MANAGEMENT GROUP 11**  
**A G E N D A – April 2-7, 2017**

**Classroom sessions will be held at the Zayante Fire Station, 7700 E Zayante Road, Felton, CA 95018. Field sessions will be held at Henry Cowell and Big Basin Redwoods State Park. Vans will transport you to and from the class room and field sessions and will leave the Quality Inn Hotel in Ben Lomond, or the Sunset Inn, Santa Cruz promptly at 0700 daily and return by 1700 on the field day.**

**Sunday**  
**April 2**

1500- REGISTRATION: *Quality Inn-Ben Lomond for State Parks staff.*  
*Outside agency participants with lodging, Sunset Inn-Santa Cruz*

**Monday**  
**April 3**

0700-0800	Van pool from Quality Inn/Sunset Inn to Zayante Fire Station	
0800-0900	Program Orientation/MPC Registration/Expectations	Beach/Knapp
0900-1000	Trail Planning	Shannon
1000-1100	Trail Design Concepts	Allsop
1100-1200	Trail Layout Concepts	Turner
1200-1300	Lunch	
1300-1400	Trail Program Management	Knapp
1400-1430	Terms and Definitions	Sylvia
1430-1530	Trail Tools and Materials	Hiles
1530-1630	Trail Drainage and Tread Structures	Spann
1630-1730	Trail Maintenance Principles and Priorities	Shannon

**Tuesday**  
**April 4**

0700-0800	Van pool from Quality Inn/Sunset Inn to Zayante Fire Station	
0800-1130	Split Team - Accessible Trails Accessible Trail Lecture, Abney/Clinometer Training, Layout Exercise	Spann/Turner/ Hiles/Sylvia
0800-1130	Split Team - Layout Exercise <b>Van Pool to Layout Site</b> Abney/Clinometer Training, Layout Exercise	Allsop/Pereira/ Meyers/Shannon Knapp/Nelson
1200-1300	Lunch and Switch Layout Site Groups	All
1300-1630	Split Team - Accessible Trails Accessible Trail Lecture, Abney/Clinometer Training, Layout Exercise	
1300-1630	Split Team - Layout Exercise <b>Van Pool to Layout Site</b>	

**BASIC TRAILS PROGRAM: MAINTENANCE AND MANAGEMENT GROUP 11**  
**AGENDA – April 2-7,2017**

**Wednesday**

**April 5**

0700-0800	Van pool from Quality Inn/Sunset Inn to Big Basin Old Lodge	
0800-0845	Trail Construction/Reconstruction Techniques	Allsop
0845-1200	Rotating Labs on Trail Construction and Trail Reconstruction with Two Work Groups	All
1200-1300	Box Lunch	All
1230-1630	Rotating Labs on Trail Construction and Trail Reconstruction with Two Work Groups	All

**Thursday**

**April 6**

0700-0800	Van pool from Quality Inn/Sunset Inn to Big Basin Old Lodge	
0800-0845	Trail Rehabilitation/Obliteration	Pereira
0845-0915	<b>Van Pool to Field Exercise Sites</b>	All
0915-0945	Stretching and Conditioning, Task Hazard Analysis, Resource Hazard Analysis	
0945-1200	Rotating Labs on Trail Construction and Trail Reconstruction with Two Work Groups	All
1200-1300	Box Lunch	All
1230-1630	Rotating Labs on Trail Construction and Trail Reconstruction with Two Work Groups	All

**Friday**

**April 7**

0700-0800	Van pool from Quality Inn/Sunset Inn to class site	
0800-0930	Introduction to Trail Program Administration	Allsop
0930-1030	Aggressive Trail Users Management Strategies	Meyer
1030-1115	State Park Trails Policy and Changes-In-Use	Spann
1115-1130	Class Review	Turner
1130-1200	Program Evaluation and Wrap Up	Beach
1200-	<i>Departure</i>	All

**PROGRAM: BASIC TRAILS PROGRAM: MAINTENANCE AND  
MANAGEMENT TRAINING**

**36 HOURS**

PROGRAM OUTLINE

Total  
Hours

PROGRAM ORIENTATION AND INTRODUCTION ..... 1.0

TRAIL ADMINISTRATION ..... 5.5

Trail Planning .....

Trail Maintenance Criteria .....

Terms and Definitions .....

Introduction to Trail Logs.....

Safety - Task Hazard Analysis .....

Resource Hazard Analysis .....

INTRODUCTION TO TRAIL LAYOUT DESIGN ..... 11.0

Identify User Types, Season-Multi-Uses .....

Identify Construction Design Criteria.....

Control Points-Destinations.....

Literature Review .....

Trail Corridor Identification .....

Major Control Points.....

Visual Assessment.....

Reconnaissance.....

Trail Lay-Out Concepts .....

Lab on Trail Layout/Design .....

BASIC TOOLS AND MATERIALS ..... 2.5

Basic Tools.....

Basic Materials.....

Lab on Trail Layout/Design/Construction/Reconstruction .....

CLEARING AND BRUSHING ..... 2.5

Definition .....

Maintenance.....

Lab on Trail Layout/Design/Construction/Reconstruction .....

TREAD AND DRAINAGE MAINTENANCE ..... 5.0

Tread.....

Drainage.....

PROGRAM OUTLINE (CONTINUED)

Total  
Hours

<u>TRAIL REHABILITATION/OBLITERATION</u> .....	3.5
Soil Aeration.....	
Re-Contouring.....	
Re-Vegetation .....	
Barriers/Signs.....	
Lab on Trail Layout/Design/Construction/Reconstruction .....	
<u>TRAIL FLAGGING EXERCISE</u> .....	2.0
Instrument .....	
Trail Flagging .....	
<u>INTRODUCTION TO ADA</u> .....	2.0
Philosophical Background to the ADA.....	
How Does ADA Apply to Trails.....	
Field Exercises on ADA Layout.....	
<u>PROGRAM EVALUATION</u> .....	1.0
<b>Total Hours.....</b>	<b>36.0</b>

## **BASIC TRAILS PROGRAM: MAINTENANCE AND MANAGEMENT TRAINING**

### **PURPOSE AND PERFORMANCE OBJECTIVES**

#### **PROGRAM ORIENTATION**

Purpose: Participants will meet one another and the program coordinator and facilitator. The group will share expectations for the training program. Travel arrangements for field days will be discussed.

Performance Objectives: By the close of the session the participant will

1. Review program content, procedure, and evaluation processes.
2. Share and record expectations with group members.
3. Understand daily travel arrangements to and from lab sites on field days.

#### **TRAIL ADMINISTRATION**

Purpose: Participants will receive an introduction to classification of individual trails within a park's trail system, a working vocabulary and glossary of trail terms, the ability to complete a trail log, the ability to assess a trail maintenance activity in relation to safety and resource damaging issues.

Performance Objectives: By the close of the session the participant will

1. Demonstrate the knowledge and understanding of different levels of trail classifications according to visitor use characteristics, park features, topography and sensitive resources.
2. Identify specific trail features and record them in a trail log inventory of an individual trail.
3. Complete a Safety Task Hazard Analysis and a Resource Hazard Analysis.

#### **INTRODUCTION TO TRAIL LAYOUT AND DESIGN**

Purpose: Participants will gain a working knowledge of new trail development including identification of control points and reconnaissance, the ability to use curvilinear alignment for topographic layout and drainage techniques.

Performance Objectives: By the close of the session the participant will

1. Demonstrate the understanding of trail layout and design techniques needed to put in a new trail.
2. Recognize and identify major and minor control points related to new trail alignment.
3. Use topography and curvilinear alignment for appropriate drainage design and stream crossing.

### **BASIC TOOLS AND MATERIALS**

Purpose: Provide the participants an introduction to basic tools and materials used for trail maintenance and construction.

Performance Objectives: By the close of the session the participant will

1. Recognize basic tools used to implement trail work.
2. Identify native and non-native materials used in trail maintenance and construction.

### **CLEARING AND BRUSHING**

Purpose: Participants will acquire the ability to recognize the difference between clearing and brushing, disposal techniques and cyclic clearing and brushing maintenance.

Performance Objectives: By the close of the session the participant will

1. Demonstrate the knowledge and understanding of vegetation types including desirable, threatened and endangered species, large fallen trees, and vista management.
2. Recognize the difference between cyclic and trio brushing procedures.

### **TREAD AND DRAINAGE MAINTENANCE**

Purpose: Develop the participant's knowledge of trail tread in relation to construction and maintenance, construction of drainage structures and drainage maintenance techniques.

Performance Objectives: By the close of the session the participant will

1. Identify types of trail tread construction techniques i.e., full vs. partial bench, deficiencies of trail and special trail tread construction such as turnpike and switchbacks.
2. List in descending order of drainage methods related to water flow and trail tread design.
3. Demonstrate the ability to perform drainage maintenance activities to existing drainage structures on the trail tread.

### **TRAIL REHABILITATION/OBLITERATION**

Purpose: Provide the participants with the knowledge of techniques used in trail obliteration and land form restoration of abandoned trail routes.

Performance Objectives: By the close of the session the participant will

1. Identify the principles of soil aeration, re-contouring, re-vegetation, and the use of barriers and signs.

### **TRAIL FLAGGING EXERCISE**

Purpose: Participants will learn to use Abney hand levels and clinometer to layout a trail grade and apply trail flagging principles.

Performance Objectives: By the close of the session the participant will

1. Shoot grades with an Abney hand level or clinometer.
2. Identify trail grade, cutback and fill slope with trail flagging.
3. Use topographic features to enhance trail layout and installation of drainage structures.

### **INTRODUCTION TO AMERICANS WITH DISABILITIES ACT (ADA)**

Purpose: Participants will be introduced to the philosophy of Americans with Disabilities Act (ADA) in relationship to trail maintenance and construction. In addition, participants will understand the concept of varying levels of accessibility.

Performance Objectives: By the close of the session the participant will

1. Understand the US Access Board guidelines for accessible trails.



2. Perform basic trail evaluation for modifications required to convert a non-accessible trail to accessible specifications.

### **TRAIL CONSTRUCTION/RECONSTRUCTION LABS**

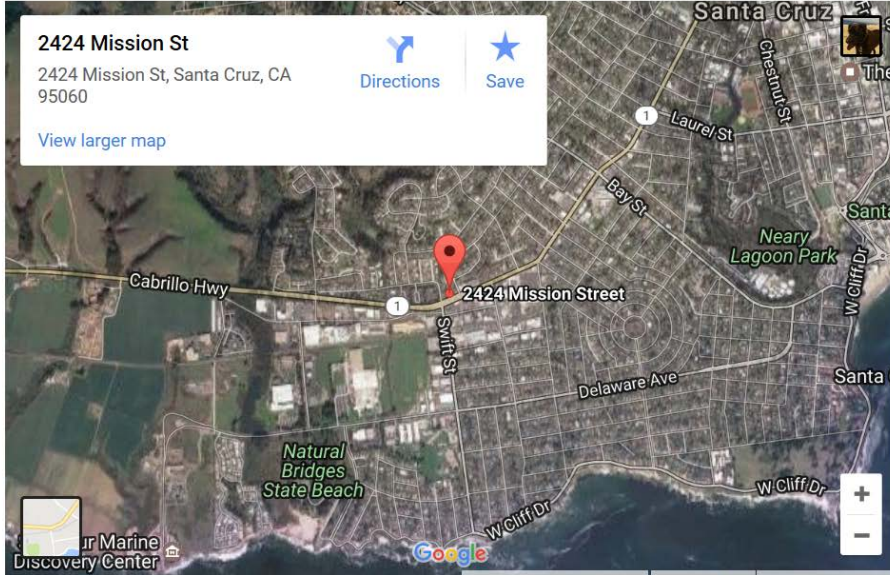
Purpose: Participants will share in the construction of a new trail and reconstruction of improper trail design.

Performance Objectives: By the close of the session the participant will

1. Properly construct a new trail with appropriate drainage structures.
2. Demonstrate their understanding of full and partial bench trail construction, the appropriate back and fill slope construction, and proper brushing needed for trail construction.
3. Recognize and correct improper trail tread problems such as slough and berm, entrenched trail, slides, and uprooted trees and improper drainage.

## Location Maps

### Location



### The Sunset Inn

2424 Mission Street  
Santa Cruz, CA 95060  
(831) 423-7500  
Fax (831) 423-7595

### Navigation

- Home
- Location
- Rooms & Suites
- Amenities & Services
- Area Attraction
- Reservations
- Virtual Tour

### Hotel Discounts



## Quality Inn and Suites 9733 Highway 9 Ben Lomond, CA 95005

