

# Intermediate Trails Program: Maintenance and Management

November 3-8, 2013

Training Syllabus



William Penn Mott Jr. Training Center



# Memorandum

**Date:** October 2, 2013  
**To:** Supervisor  
**From:** Theresa Bober, Department Training Officer  
Department of Parks and Recreation  
Training Section  
**Subject:** Employee Attendance at Formal Training

An employee from your office will soon be attending the formal training program described in the attached. Please insure 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 Coordinator.
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 and review the due date of the Post-Training Evaluation form.
3. Support the employee's use of the training at the work place.

### Prior to Three Months Following Training

1. Employee after discussion with the supervisor login to the Employee Training Management System (ETMS) to complete the Post-Training Evaluation form.
2. Supervisor evaluates the effectiveness of the training on the employee's job performance and login to the ETMS to complete the Training Effectiveness Assessment form.

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

Attachment

cc: Participant

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### ***Mission Statement Training Section***

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

### TRAINING SECTION STAFF

Theresa Bober ..... Department Training Officer  
Chuck Combs ..... Training Specialist  
Sara M. Skinner ..... Training Specialist  
Karyn Lombard ..... Training Specialist  
Dave Galanti ..... Training Specialist  
Matt Cardinet ..... Cadet Training Officer  
Pamela Yaeger ..... Assistant Program Coordinator  
Edith Alhambra ..... Assistant Program Coordinator  
Rogers Williams ..... Program Assistant

## 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

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Welcome to formal training, an essential component in your career development.

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.
3. **TRAVEL:** Arrange your travel to and from the training site 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 may claim reimbursement for incidental expenses incurred as outlined in DAM 0410.6.

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 10:00 a.m. on the date of departure. The Department provides your room and board expenses at the Marconi Conference Center only. No per diem allowance will be authorized for living off-grounds. This does not preclude living off-grounds at your own expense. 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 in the buildings unless registered beforehand at the front desk in the Marconi Conference Center Administration Building.
5. **ENROLLMENT OR HOUSING CANCELLATION POLICY:** 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, registration, 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.

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

6. MEALS: Meals will be provided from dinner on the date of arrival through lunch on the date of departure. Meals will be served at 7:00 a.m. for breakfast, 12:00 noon for lunch, and 6:00 p.m. for dinner. Hot or box lunches may be provided on some days. If you require a special diet, notify the Marconi Conference Center no later than one week before your scheduled arrival.
7. CLOTHING: Field uniforms as found in "Description of Required Field Uniforms", DOM Chapter 2300, Uniform Handbooks, not including optional items, will be worn daily by all uniformed employees during formal training sessions **unless otherwise specified in the Program Attendance Checklist**. Non-uniformed employees shall wear apparel normally worn on the job. Appropriate attire includes apparel suitable for professional office dress. It does not include such items as shorts, t-shirts, tank tops, or sandals.

Because we are on the conference grounds with many other groups, and the image we project as State Park employees is important not only during working hours but off duty hours as well, your informal sportswear should be appropriate.

8. **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.
9. **TRAINING SECTION STAFF:** Chuck Combs is your Training Specialist and has been assigned the responsibility for your training group. During the program, you may be asked to assist Training Section Staff in the logistics of your training program (organizing field trip transportation, supervising classroom breaks, etc.). Training Section Staff will do all within their power to make your training experience pleasant and meaningful.
10. **ATTENDANCE:** Regular attendance is a critical course requirement and your participation is important to the success of this training. All absences, except those of an emergency nature, must be approved in advance by the Training Specialist.
11. **TRAINING MATERIALS:** May be made available to you at both your unit and at the Marconi Conference Center. Handout materials issued at your unit should be brought to training for possible use. A conference binder or notebook will be issued to you at the training session for note taking and convenience in handling materials. Please bring your own pens and pencils.
12. **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.

Please remember that cell reception is poor at Marconi. There is a payphone which takes prepaid phone cards or coins. If you have a phone in your room you can also use a prepaid calling card. There is one computer available for checking email in the Administration Building. There is also wi-fi access, which requires a pre-established account or a fee for use which cannot be charged to your room.

13. **TELEPHONE:** Limit phone calls during classroom hours to urgent business or emergencies. Anyone wishing to contact you by telephone during working hours should call (415) 663-9020.
14. **POST-TRAINING ASSIGNMENTS:** In connection with formal training are to be completed under the direction of your supervisor.

15. SAFETY/COMFORT REMINDER: The Northern California Coastal Rainforest experiences an average of 70 inches of combined rain and fog annually. We will be training at the beginning of the wet season, so be prepared for adverse weather. Bring rain gear and layered work clothing that will allow you to stay comfortable while working/hiking in inclement conditions. There will be poison oak at this training.

**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.**

◆ **Marconi Conference Center**  
 ◆ **PLANNING INFORMATION**

*To make your visit as comfortable and satisfying as possible, please take a few moments to read the following.*

◆ **CHECK-IN/CHECK-OUT**

Please check in at the Front Desk. Follow the signs for Check-in.

Check-in: 3 p.m. to 11 p.m.  
 Check-out: 7 a.m. to 10 a.m.  
 (Bring your key)

Late check-out (after 10 a.m.) will incur an additional day's charge.

◆ **DINING**

Meals are served in Redwood Dining Hall.

Breakfast buffet: 7 a.m. to 9 a.m.  
 Lunch buffet: 11:30 a.m. to 1:30 p.m.  
 Full service dinner: 6 p.m. to 8 p.m.

◆ **LODGING**

You may wish to bring: shampoo, flashlight, comfortable shoes for hilly trails. Please note cooking and other appliances, candles and incense are not allowed, and food should not be kept in your room as it attracts insects.

◆ **PARKING**

Please park in designated parking spaces only and observe the law regarding spaces for the handicapped. Campers, recreational vehicles and motor homes are not permitted.

◆ **DRIVING**

Please drive slowly and carefully, yielding to pedestrians, bicyclists and animals. The speed limit is 15 mph, and all signs and barriers must be observed.

◆ **GAS STATIONS**

The closest gas station is located in Point Reyes Station, 15 minutes to the south.

◆ **TELEPHONES**

Your guestroom has a private telephone number which you can give callers after you check in, as well as a port for your modem. All outbound telephone and modem calls require a toll-free 800 number. Bring your calling card for phone calls; check with your ISP for 800-number access. Most cellular phones DO NOT work at Marconi Conference Center.

◆ **MESSAGES, FAXES, MAIL**

If your callers would like to leave a message, give them this number:

**Front Desk Telephone: (415) 663-9020**

You may also want to give them your lodging building, room number and name of conference, to expedite receiving emergency messages.

We post messages for guests on the message board. We'll also post a notice if you receive mail or a package. *Emergency messages will be delivered.*

If you wish to receive a fax, use this number:

**Front Desk Fax: (415) 663-1731**

We will post a notice on the message board when your fax arrives and collect the service charge when you pick it up.

If you wish to receive mail, use this address:

(your name), (conference name)  
 c/o Marconi Conference Center  
 P.O. Box 789, 18500 State Route 1  
 Marshall, CA 94940

We will post a notice on the message board and hold your mail at the Front Desk.

no charge. Our commissary sells snacks, cold drinks, personal hygiene items, flashlights/batteries, writing supplies, stamps. We have a selection of Marconi souvenirs such as shirts, hats, mugs and other items that make wonderful remembrances of your stay with us. Our Front Desk staff can also help you with local information.

◆ **BUSINESS CENTER**

The Business Center is located in the Pelican Building lounge and is open 7 am to 11 pm. For your convenience, we are pleased to provide **free of charge**, the following services:

- ◆ Internet / E-mail
- ◆ Computer with MS Office
- ◆ LaserJet Printer
- ◆ Photocopier

◆ **WALKING & EXPLORING**

Marconi Conference Center is a unit of the California State Park system and all natural elements such as branches, pine cones, mushrooms and flowers are protected by state law and may not be removed. Camping and

campfires are not permitted. We suggest walking on designated footpaths to avoid poison oak. The pine needles can be slippery—please use caution. We recommend flashlights at night.

◆ **SMOKING**

State law prohibits smoking in or within 50 feet of Marconi Conference Center buildings. Ashtrays are located at entrances, on decks and on patios. Smoke only in paved areas and please use extreme caution when smoking on the property.

◆ **PETS**

With the exception of guide dogs for the handicapped, *pets are not permitted* in Marconi

Conference Center buildings and cannot remain on the property overnight. Dogs must be on a leash at all times.

◆ **ENJOY!**

We hope that between highly productive meetings you'll have some time to appreciate the rich human and natural history that surrounds us here. Please let us know if there is anything we can do to enhance your stay.



*Marconi Conference Center's guestrooms overlook Tomales Bay*

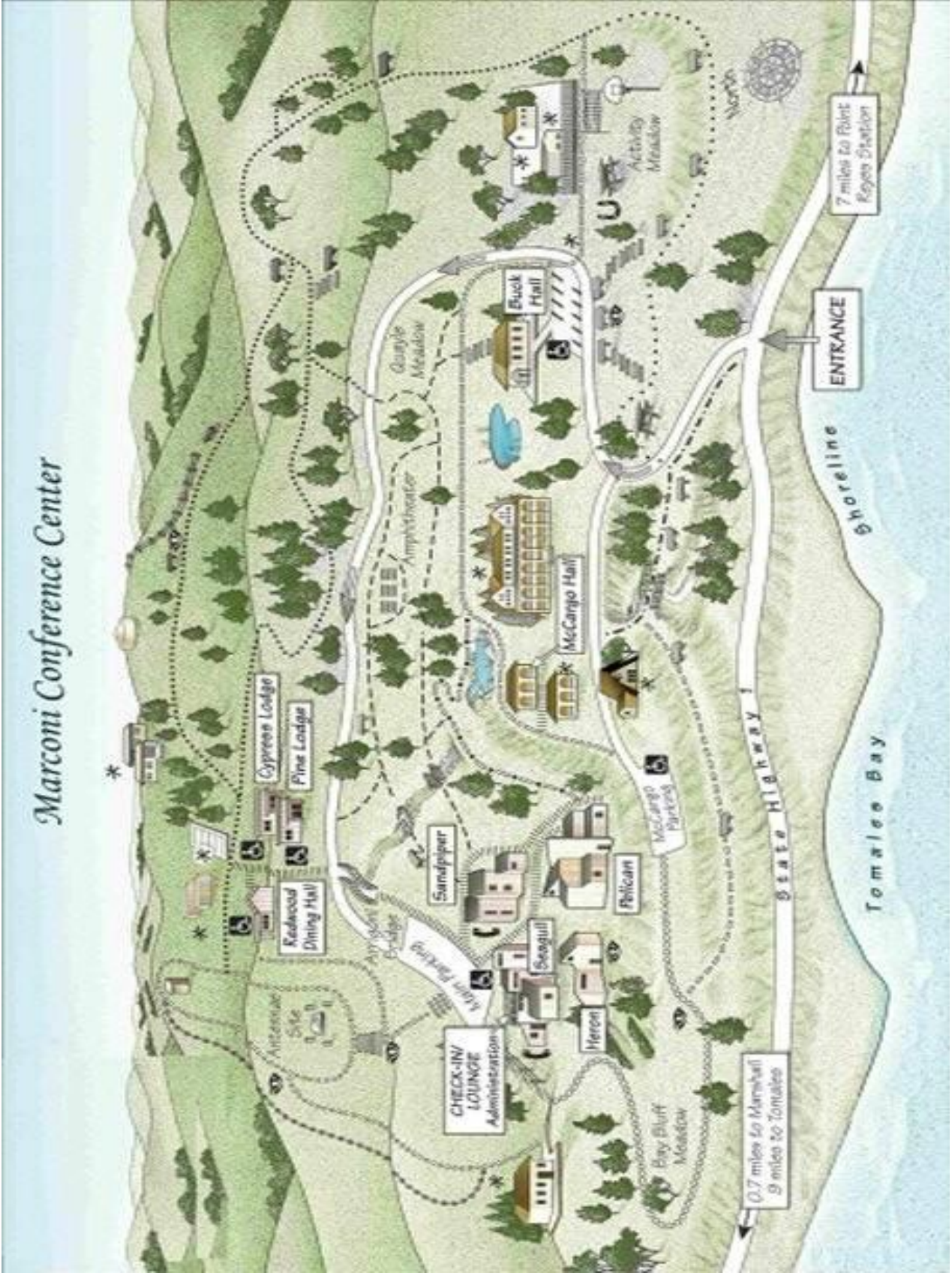
◆ **EMERGENCIES**

Between 11 p.m. and 7 a.m., the recorded message on (415) 663-9020 tells callers how to contact a guest or Marconi staff member in an emergency.

◆ **GUEST SERVICES**

In the front desk area we have games, reading material and a VCR with a selection of movie videos; volleyball, badminton and horseshoe equipment; ice, irons and ironing boards, all at





◆ **Marconi Conference Center**  
 ◆ **GETTING TO MARCONI**  
 ◆ **(415) 663-9020**



◆ **FROM SANTA ROSA**

Highway 101 South to Petaluma. Exit at East Washington Street. Turn right (west) on Washington Street, continue about 1.5 miles. Washington Street becomes Bodega Avenue. Continue on Bodega Avenue for about 7 miles. At Coast Guard sign, turn left (west) on Petaluma/Tomales Road. Continue on Petaluma/Tomales Road for about 7 miles to Highway 1 (Shoreline Highway). Turn left (south) on Highway 1, continue about 7-1/2 miles through Marshall until you see Marconi on the left.

◆ **FROM SACRAMENTO**

Take Interstate 80 West. Just before Vallejo, take Highway 37 west toward San Rafael. Continue west on Highway 37 over Highway 101 (stay to the right). Take South Novato Boulevard exit. Continue north on Novato Boulevard for about 8-1/2 miles through Novato. When Novato Boulevard ends turn right, continue about 1000 feet. Turn left (west) on Hicks Valley Road (sign indicates "To Marshall"). Continue on Hicks Valley/Wilson Hill Road about 2-1/2 miles until it ends. Turn left (south/west) on Marshall Petaluma Road. Continue for about 11 miles until it ends at Highway 1 (Shoreline Highway). Turn left on Highway 1 and continue about 1 mile to Marconi on the left.

◆ **FROM OAKLAND/EAST BAY:**

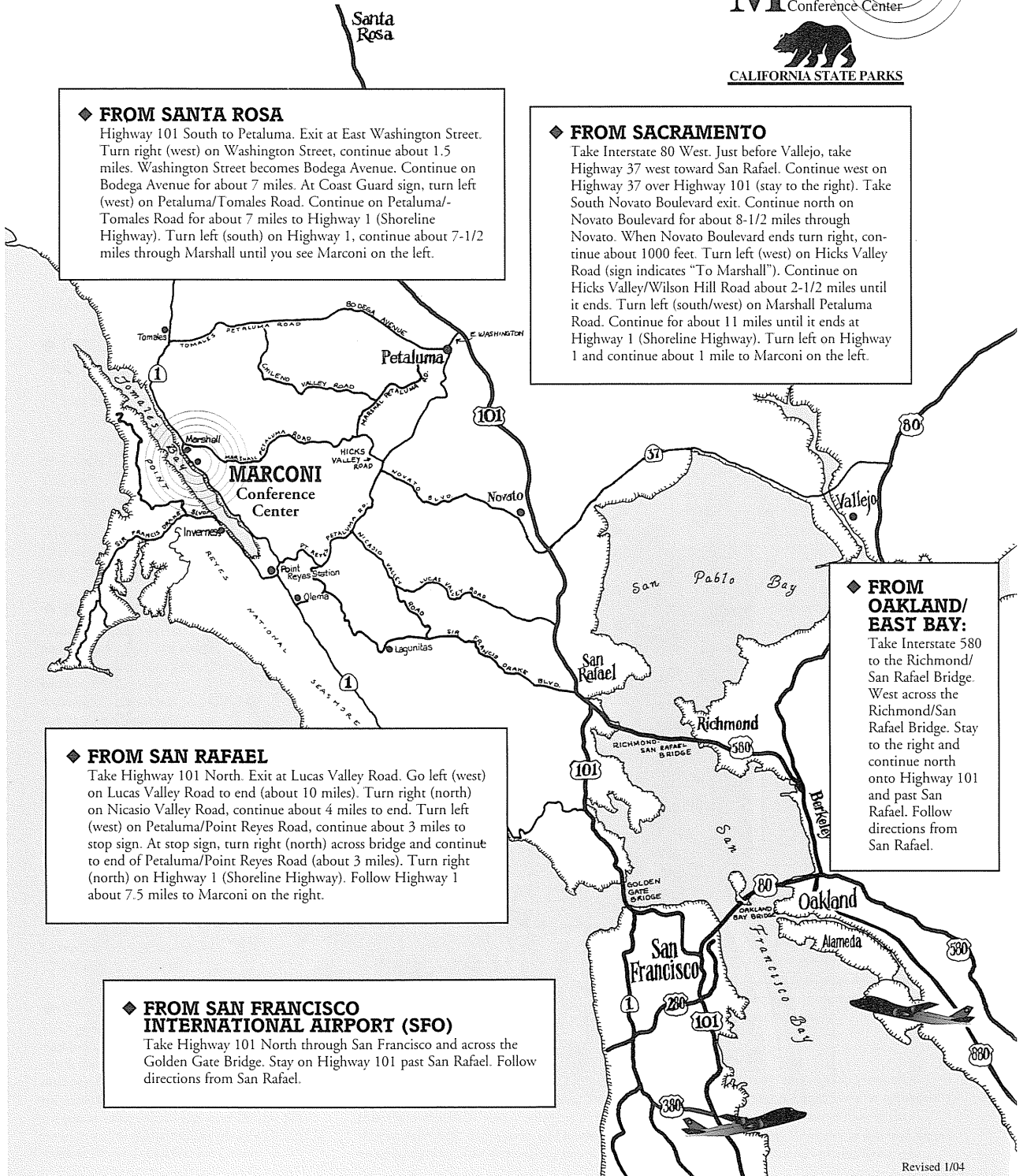
Take Interstate 580 to the Richmond/San Rafael Bridge. West across the Richmond/San Rafael Bridge. Stay to the right and continue north onto Highway 101 and past San Rafael. Follow directions from San Rafael.

◆ **FROM SAN RAFAEL**

Take Highway 101 North. Exit at Lucas Valley Road. Go left (west) on Lucas Valley Road to end (about 10 miles). Turn right (north) on Nicasio Valley Road, continue about 4 miles to end. Turn left (west) on Petaluma/Point Reyes Road, continue about 3 miles to stop sign. At stop sign, turn right (north) across bridge and continue to end of Petaluma/Point Reyes Road (about 3 miles). Turn right (north) on Highway 1 (Shoreline Highway). Follow Highway 1 about 7.5 miles to Marconi on the right.

◆ **FROM SAN FRANCISCO INTERNATIONAL AIRPORT (SFO)**

Take Highway 101 North through San Francisco and across the Golden Gate Bridge. Stay on Highway 101 past San Rafael. Follow directions from San Rafael.



Revised 1/04

## PROGRAM ATTENDANCE CHECKLIST

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

1. Read and understand the Intermediate Trails Program: Maintenance and Management Syllabi prior to your arrival at the Marconi Conference Center.
  - ✓ 5 SLIDE PROGRAM  
Class participants are requested to prepare a brief slide or PowerPoint presentation on trail projects undertaken within their district, park or geographic area of responsibility. Subject matter is limited to trail repair and maintenance activities i.e., trail construction/reconstruction, bridge construction, retaining wall construction, steps (MPO) construction, etc. Before and after shots are desirable. Presentations will be limited to a ***maximum of five minutes***. Please have your slides pre-arranged in on a USB memory stick, or CD-R to expedite the presentations.
  - ✓ Review the Post-Training Assignment. Discuss the projects you will be assigned in the next twelve months that will utilize the skills developed during the training program.
2. Remember to bring the following with you to training:
  - ✓ Program syllabus.
  - ✓ Personal safety equipment (eye, ear, hand protection and a hard hat).
  - ✓ Appropriate work clothing and rain gear with good work boots.
  - ✓ Day pack, Abney hand level and/or clinometer and water bottle/canteen.
  - ✓ Alarm clock, pens, pencils.
  - ✓ Poison Oak pre/post topical treatments as appropriate.

**THE FIELD LABS ON TUESDAY THROUGH THURSDAY WILL REQUIRE WEARING HARD HATS. STUDENTS WITHOUT A HARD HAT WILL NOT BE ALLOWED TO PARTICIPATE IN THE FIELD EXERCISE.**

3. **Do not** contact the Marconi Conference Center to make any personal arrangements. All special arrangements must be made via the Training Center Office. If you have questions or need help, contact the Program Coordinator Chuck Combs by telephone at (831) 649-7124 or via e-mail at [Chuck.Combs@parks.ca.gov](mailto:Chuck.Combs@parks.ca.gov).

**NOTE:** Completion of the pre-training assignments including the 5 SLIDE PROGRAM and bringing your Personal Protective Equipment is mandatory and will count for 20% of your program grade.

## **POST-TRAINING ASSIGNMENT**

Prior to ninety days after the completion of this program, the employee and his/her supervisor should sit down and discuss the impact and assess the effectiveness this program has had on the employee. Then both the supervisor and employee should login to the Employee Training Management System (ETMS) and complete the Post-Training Evaluation form (an email will be sent to both employee and supervisor notifying them that the evaluation needs to be completed).

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 training participant, supervisor, and Training Center in providing a return on the investment the Department has on training.

**INTERMEDIATE TRAILS PROGRAM: MAINTENANCE AND MANAGEMENT GROUP 9**  
**Agenda - November 3-8, 2013**

**Sunday**  
**November 3**

1500- **REGISTRATION:** *Check in at Marconi Administration Building* All

**Monday**  
**November 4**

0800-0830	Program Orientation	Combs
0830-0900	Beginning Class Review/Intermediate Class Overview	Knapp
0900-1000	Trail Structure Application Lecture	Turner
1000-1200	Trail Administration - CAT I Budgeting	Knapp
1200-1300	Lunch	All
1300-1330	Van Pool to Training Sites	All
1330-1500	Step Installation Lecture	Fisher
1500-1630	Trail Inventory Lab	All
1630-1800	Rock Breaking Lab	Allsop/Turner/ Hiles/Sylvia
1800-1830	Van Pool to Marconi	All
1900-2000	Dinner	All

**Tuesday**  
**November 5**

0800-0830	Van Pool to Training Sites	All
0830-1200	Morning Lab Assignments	
	Group 1 Causeway/Turnpike	Hiles/Nelson
	Group 2 Cellular/Geotextile Retaining Walls	Spann/Meyers
	Group 3 Rock Retaining Walls	Turner/Sylvia
	Group 4 Step Layout	Fisher
	Group 5 Cable Steps	Allsop
	Group 6 Wood Retaining Walls	Shannon
1200-1300	Box Lunch with Lab Group	All
1300-1700	Afternoon Lab Assignments	
	Group 3 Causeway/Turnpike	Hiles/Nelson
	Group 6 Cellular/Geotextile Retaining Walls	Spann/Meyers
	Group 2 Rock Retaining Walls	Turner/Sylvia
	Group 5 Step Layout	Fisher
	Group 4 Cable Steps	Allsop
	Group 1 Wood Retaining Walls	Shannon
1700-1730	Van Pool to Marconi	All
1800-1900	Dinner	All
1900-2200	Participant Slide Presentations	All

**INTERMEDIATE TRAILS PROGRAM: MAINTENANCE AND MANAGEMENT GROUP 9**  
**Agenda - November 3-8, 2013**

**Wednesday**  
**November 6**

0800-0830	Van Pool to Training Sites	All
0830-1200	Morning Lab Assignments	
	Group 2 Causeway/Turnpike	Hiles/Nelson
	Group 1 Cellular/Geotextile Retaining Walls	Spann/Meyers
	Group 5 Rock Retaining Walls	Turner/Sylvia
	Group 6 Step Layout	Fisher
	Group 3 Cable Steps	Allsop
	Group 4 Wood Retaining Walls	Shannon
1200-1300	Box Lunch with Lab Group	All
1300-1700	Afternoon Lab <i>Assignments</i>	
	Group 4 Causeway/Turnpike	Hiles/Nelson
	Group 5 Cellular/Geotextile Retaining Walls	Spann/Meyers
	Group 1 Rock Retaining Walls	Turner/Sylvia
	Group 3 Step Layout	Fisher
	Group 6 Cable Steps	Allsop
	Group 2 Wood Retaining Walls	Shannon
1700-1730	Van Pool to Marconi	All
1800-1900	Dinner	All
1900-2100	Participant Slide Presentations Groups	All

**Thursday**  
**November 7**

0800-0830	Van Pool to Training Sites	All
0830-1200	Morning Lab Assignments	
	Group 6 Causeway/Turnpike	Hiles/Nelson
	Group 3 Cellular/Geotextile Retaining Walls	Spann/Meyers
	Group 4 Rock Retaining Walls	Turner/Sylvia
	Group 2 Step Layout	Fisher
	Group 1 Cable Steps	Allsop
	Group 5 Wood Retaining Walls	Shannon
1200-1300	Box Lunch with Lab Group	All
1300-1700	Afternoon Lab Assignments	
	Group 5 Causeway/Turnpike	Hiles/Nelson
	Group 4 Cellular/Geotextile Retaining Walls	Spann/Meyers
	Group 6 Rock Retaining Walls	Turner/Sylvia
	Group 1 Step Layout	Fisher
	Group 2 Cable Steps	Allsop
	Group 3 Wood Retaining Walls	Shannon

**INTERMEDIATE TRAILS PROGRAM: MAINTENANCE AND MANAGEMENT GROUP 9**  
**Agenda - November 3-8, 2013**

**Thursday**  
**November 7**

1700-1730	Van Pool to Marconi	All
1800-1900	Dinner	All

**Friday**  
**November 8**

0800-1100	Environmental Review CEQA, Other Permits PRC 5024	Kerbavaz/Osanna Kerbavaz Osanna
1100-1200	Program Evaluation	Combs
1200-	Box Lunch "TO GO"	

**PROGRAM: INTERMEDIATE TRAILS PROGRAM:  
MAINTENANCE AND MANAGEMENT**

**40 HOURS**

PROGRAM OUTLINE

<u>PROGRAM ORIENTATION AND MPC REGISTRATION</u> .....	1.0
<u>TRAIL ADMINISTRATION</u> .....	6.0
Review and Use of Trail Inventories.....	
Budgeting .....	
GIS as a Planning Tool .....	
Environmental Review and Permitting.....	
<u>TRAIL LAYOUT AND DESIGN</u> .....	17.0
Rapid Grade Gain Structures .....	
Retaining Walls .....	
Installation Lab .....	
<u>DRAINAGE STRUCTURES</u> .....	10.0
Drainage Situations.....	
Causeways and Turnpikes .....	
Instillation Lab .....	
Participant Slide Presentations .....	4.0
<u>CLASS REVIEW AND TESTS</u> .....	1.0
<u>PROGRAM EVALUATIONS</u> .....	<u>1.0</u>
<b>TOTAL HOURS</b>	<b>40.0</b>



## **INTERMEDIATE TRAILS PROGRAM: MAINTENANCE AND MANAGEMENT**

### **PROGRAM ORIENTATION**

**Purpose:** Participants and Trainers will become reacquainted with each other and the Program Coordinator. The group will be given information on the logistics of the weeks training program at Marconi Conference Center and Marin Sector State Parks. Each participant will share how they have applied the knowledge gained in Basic Trails Program: Maintenance Management Group 9 at their district and what expectation they have for this program. In addition, the program content will be reviewed.

**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. Review Marconi Conference Center Guidelines.

### **TRAIL ADMINISTRATION**

**Purpose:** Provide participants with a review of the introduction to classification of individual trails with a park's trail system, the working vocabulary and glossary of trail terms, the ability to complete a trail log and the ability to assess a trail maintenance activity in relation to safety and resource damaging issues. Provide participants with the introduction to developing a cyclic yearly Category I Maintenance Budget for their District's trail system.

**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.

## TRAIL STEP LAYOUT AND DESIGN

Purpose: Provide participants with the ability to recognize when trail steps would be required, the most appropriate trail step to install and the basics of trail step lay out and installation techniques.

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

1. Be able to recognize different types of trail step construction.
2. Demonstrate the knowledge and understanding of what type and when to install trail steps.
3. Demonstrate the ability to design, layout, and install trail steps.

## RETAINING WALL CONSTRUCTION

Purpose: Develop the participants' knowledge of retaining wall construction and maintenance, techniques, and use of alternative technologies.

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

1. Identify the necessity and design of different designs of retaining walls on trail corridors.
2. Demonstrate the principles of retaining wall construction, i.e. foundations, key, and batter.
3. Construct wood, rock, cellular confinement, and geotextile fabric retaining walls.

## TRAIL REHABILITATION

Purpose: Provide the participants with the knowledge of techniques used in trail hardening in wet and saturated areas by the means of causeway, turnpike, and drainage lens.

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

1. Identify trail drainage situations of wet meadows and short-lived drainage seeps.
2. Demonstrate the ability to select the appropriate trail hardening techniques to mitigate damage to the trail surface during times of soil saturation.

3. Demonstrate the ability to design, layout, and construct causeway, turnpike and drainage lenses.

### ENVIRONMENTAL REVIEW

Purpose: Provide the participants the knowledge of interfacing Unit General Plans, lack of General Plans, CEQA, PRC 5024, local and regional agency permitting, and threatened and endangered species consultation with trail maintenance and development.

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

1. Use the Unit's General Plan in implementation of trail projects and know what to do if the unit does not have a General Plan.
2. Recognize the relationship and importance of local, regional, and state-wide issues of review and permits.
3. Identify the permits necessary for trail project implementation.
4. Implement the PRC 5024 process and utilize the services of Service Center Staff for historical and archeological review.