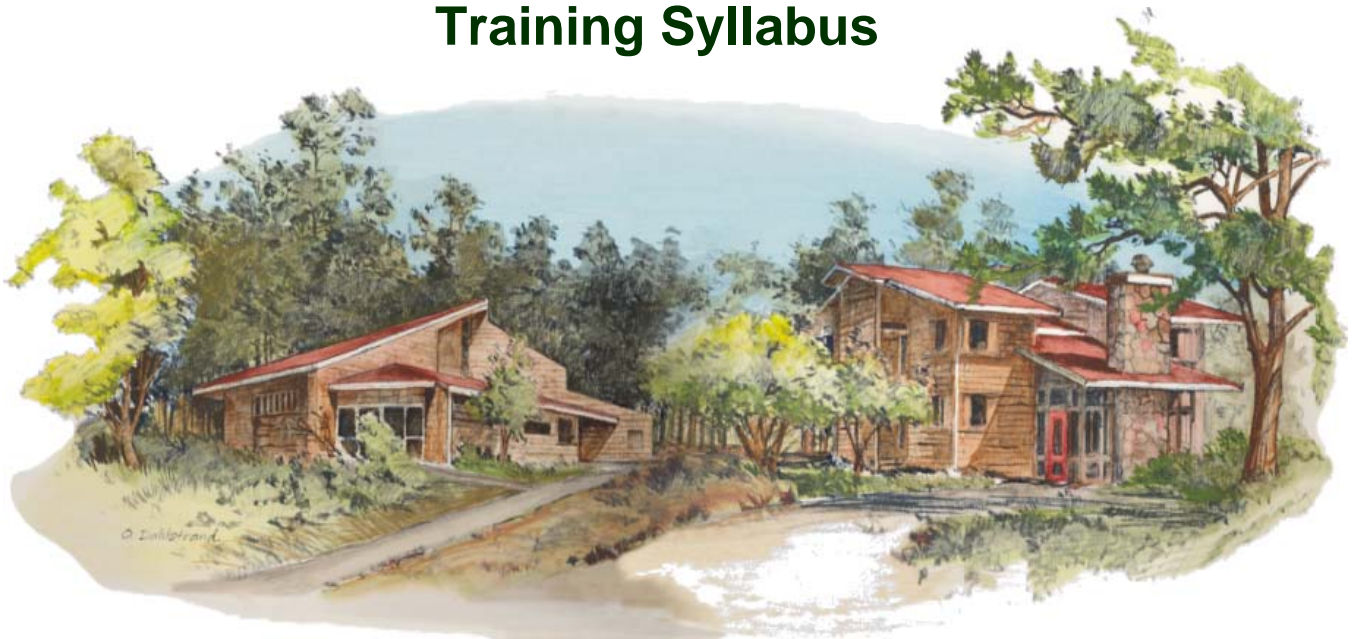


# BASIC TRAILS PROGRAM: MAINTENANCE AND MANAGEMENT

**June 2-7, 2013**

**Training Syllabus**



**William Penn Mott Jr. Training Center**



# Memorandum

**Date:** May 22, 2013

**To:** Supervisor

**From:** **Department of Parks and Recreation**  
William Penn Mott Jr. Training Center

**Subject:** Employee Attendance at Formal Training  
Basic Trails Program: Maintenance and Management Group 9

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.



Joanne Danielson  
Academy Director, Acting

Attachment

cc: Participant

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***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

Joanne Danielson .....Acting Department Training Officer  
Pat Bost ..... Office Manager  
Chuck Combs ..... Training Specialist  
Sara M. Skinner ..... Training Specialist  
Dave Galanti ..... Training Specialist  
Karyn Lombard ..... Training Specialist  
Matt Cardinet ..... Cadet Training Officer  
Dan Kraft..... Cadet Training Officer  
Pamela Yaeger ..... Assistant Program Coordinator  
Edith Alhambra ..... Assistant Program Coordinator  
Socorro Wallace ..... Program Assistant  
Joanne Ciccone ..... Program Assistant  
Ginger Henry ..... Program Assistant  
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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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 and, most recently, the Two Rivers Training Facility in Sacramento. 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 Palm Springs, 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 The Saguaro Palm Springs 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. The Department provides your room and board expenses at The Saguaro Palm Springs only. No per diem allowance will be authorized for living off-grounds. This does not preclude living off-grounds at your own expense. Please advise the Department Training Officer no later than one week before your scheduled arrival if you plan to live off-grounds. 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 11:00 p.m. to 8:00 a.m.

**Please Note:** You may be assigned a room at a motel while attending training. If so 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:** Meals will be provided as part of the accommodations 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. Box lunches will be provided on some days. If you require a special diet, notify the Program Coordinator no later than two weeks before your scheduled arrival.

7. PER DIEM: There will be no Per Diem offered for this training

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

8. 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: When you arrive at the Saguaro Palm Springs, go directly to the registration desk for check-in and your room assignment. Rooms at the Saguaro Palm Springs are equipped with telephones which you may have to secure with a personal charge card for payment.
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 used during this program; please bring your copy with you. No additional copies will be available during the program.
13. TRAINING LOCATION: Training will be conducted at The Saguaro Palm Springs in Palm Springs, CA and in Mount San Jacinto State Parks near Palm Springs, CA. Please refer to the location maps in this syllabus.
14. SAFETY/COMFORT REMINDER: Palm Springs is at sea level in the Lower Sonoran life zone and Mount San Jacinto is in the Upper Canadian. Conditions in Palm Springs will be hot and dry during the training period. It can vary between 30 to 50 degrees F in the two locations. Be prepared for these conditions. 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 at The Saguaro Palm Springs.

### 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, Abney hand level and/or clinometer and water bottle/canteen
- ✓ Alarm clock, pens, pencils

NOTE: If you are unable to locate or bring these items contact Chuck Combs at the Mott Training Center A.S.A.P. before the class and we will attempt to find gear to loan you during the class.

- 4. **Do not contact** *The Saguaro Palm Springs* 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) .



## **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.

**BASIC TRAILS PROGRAM: MAINTENANCE AND MANAGEMENT GROUP 9**  
**A G E N D A – June 2-7, 2013**

The first meeting and subsequent classroom sessions will take place in the Sage Room of The Saguaro Palm Springs. Field sessions will take place on Mount San Jacinto State Park and Wilderness. We will be vanpooling from The Saguaro Palm Springs to the Valley Tram Station and take the Palm Springs Aerial Tramway to the mountain top. The tram runs on a tight schedule and special trams have been scheduled for us. Your punctuality is required to successfully complete this class.

**If you are late you will be left behind!**

**Sunday**

**June 2**

1500-2100	<i>(DPR Participants Register for your accommodations at The Saguaro Palm Springs)</i>	All
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**Monday**

**June 3**

0630-0800	Breakfast in the Courtyard of The Saguaro	All
0800-0900	Program Orientation	Combs/Knapp
0900-1000	Trail Program Management	Knapp
1000-1100	Terms, Definitions, Tools and Materials	Hiles
1100-1200	Trail Drainage and Tread Structures	Turner
1200-1300	Lunch	
1300-1400	Trail Planning	Shannon
1400-1530	Trail Design Concepts	Allsop
1530-1700	Trail Layout Concepts	Fisher

**Tuesday**

**June 4**

0630-0730	Breakfast in the Courtyard of The Saguaro	All
0730-0830	Travel to Tram and Tram to Long Valley	All
0830-1200	Split Team – Accessible Trails Accessible Trail Lecture, Abney/Clinometer Training, Layout Exercise	Spann
0830-1200	Split Team – Layout Exercise Hike to Layout Site Abney/Clinometer Training, Layout Exercise	Fisher
1200-1300	<i>Box Lunch</i>	All
1300-1600	Split Team – Accessible Trails Accessible Trail Lecture, Abney/Clinometer Training, Layout Exercise	Spann
1300-1600	Split Team – Layout Exercise Hike to Layout Site Abney/Clinometer Training, Layout Exercise	Fisher
1600-1700	Travel to Tram and Back to Hotel	All
1700-1900	Dinner/Free Time	All
1900-2000	Trail Construction/Reconstruction Techniques	Allsop
2000-2100	Trail Rehabilitation/Obliteration	Spann

**BASIC TRAILS PROGRAM: MAINTENANCE AND MANAGEMENT GROUP 9**  
**A G E N D A – June 2-7, 2013**

The first meeting and subsequent classroom sessions will take place in the Sage Room of The Saguaro Palm Springs. Field sessions will take place on Mount San Jacinto State Park and Wilderness. We will be vanpooling from The Saguaro Palm Springs to the Valley Tram Station and take the Palm Springs Aerial Tramway to the mountain top. The tram runs on a tight schedule and special trams have been scheduled for us. Your punctuality is required to successfully complete this class.

**If you are late you will be left behind!**

**Wednesday**

**June 5**

0630-0730	Breakfast in the Courtyard of The Saguaro	All
0730-0830	Travel to Tram and Tram to Long Valley	All
0830-1200	Stretching and Conditioning, Task Hazard Analysis, Resource Hazard Analysis Rotating Labs on Trail Construction and Trail Reconstruction with Two Work Groups	All
1200-1230	<i>Box Lunch</i>	All
1230-1530	Rotating Labs on Trail Construction and Trail Reconstruction with Two Work Groups	All
1530-1630	Travel to Tram and Back to Hotel	All

**Thursday**

**June 6**

0630-0730	Breakfast in the Courtyard of The Saguaro	All
0730-0830	Travel to Tram and Tram to Long Valley	All
0830-1200	Stretching and Conditioning, Task Hazard Analysis, Resource Hazard Analysis Rotating Labs on Trail Construction and Trail Reconstruction with Two Work Groups	All
1200-1230	<i>Box Lunch</i>	All
1230-1530	Rotating Labs on Trail Construction and Trail Reconstruction with Two Work Groups	All
1530-1700	Travel to Tram and Back to Hotel	All

**Friday**

**June 7**

0630-0800	Breakfast in the Courtyard of The Saguaro	All
0800-0900	Trail Administration	Knapp
0900-1000	Aggressive Trail Users Management Strategies	Meyer
1000-1100	State Park Trails Policy and Changes-In-Use	Spann
1100-1130	Class Review	Hiles/Turner
1130-1200	Program Evaluation	Combs
1200-	<i>Lunch and Departure</i>	All

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

**38 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.....4.5

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 .....4.5

Tread.....

Drainage.....

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

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

**38 HOURS**

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> .....	2.5
Philosophical Background to the ADA.....	
How Does ADA Apply to Trails.....	
Field Exercises on ADA Layout.....	
<u>PROGRAM EVALUATION</u> .....	1.0

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

### **PROGRAM ORIENTATION**

Purpose: Participants will meet one another and the program coordinator and facilitator. The group will share expectations for the training program.

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.

### **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 ADA**

Purpose: Participants will be introduced to the philosophy of Americans with Disabilities Act 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.



