Appendix B: Forms

# San Mateo County Parks and Recreation Maintenance Unit **WORK REQUEST**

		I. DESCI	RIPTION OF W	VORK			
Unit #	Park Name		Priority: Emergen	ncy, Urgent, Rou	tine, As Possible	e, Estimate Only, Other	
Work Location						Target Date	
Detailed Work Description	1						
						Safety Hazard, or Att	achments
Availability of Park Resou	irces and Personnel						
Proposed Charging Inform	nation						
Organization #:	Account #:		Activity Code:		Option Code:	E.P.O.#:	
Contact Name(s)		Contact Tele	phone #	Supervisor A	pproval	Date Approve	d
		II. MANA	AGEMENT RE	EVIEW			
Reviewer	O.K.	Initials	Date		Cor	mments	
Park Superintendent							Cont.
Planning and Developmen	t						Cont.
Management Analyst							Cont.
Director of Parks							Cont.
Other:							Cont.
Other:							Cont.
	:	III MAIN	TENANCE RE	EVIEW			Cont.
Date Received	Pre-Work Conference		ince Estimate				
		Materials	s: \$	Staff Hours:	4	Other: \$	
Scope of Work							
					-	Cont.	
Maintenance Review Disp Schedule Priority (1-4):	osition Refer Back to N	Иgr.	Hold	Disposition/C	Comments		
			RK MANAGEN	MENT			
Primary Worker		Additional N	laintenance Staff				
Estimated Start Date		Estimated Co	ompletion Date		Park Contact A	Assigned	
Materials Needed		1		Ordered:	By:	Revd:	
Additional Park Unit Staff	Required				Scheduled:	By:	
Contractors/Rentals/Permi	ts/Other Needs				Arranged:	By:	
Changes to Original Scope	e of Work						
							Cont.
	1	ORK COM	IPLETION INF	FORMATION	1		
Completion Date	Work Accepted By	Date	Final Cost Materials: \$	Staff Hours:	4	Other: \$	
Comments/Misc							

Copies: Top - Maintenance Unit Final; Second - Unit Final; Third - Unit Planning; Fourth - Manager Review; Bottom - Unit Original

# **Suggested Ranking Criteria**

Rankings within each criteria category should be between 3 and 0 with 3 being the highest possible ranking.

3 - this project meets all the applicable criteria for this category

2 - this project meets most of the applicable criteria for this category

1 - this project meets a few of the applicable criteria for this category

0 - this project does not meet any of the criteria for this category

n/a - this project does not have any relevance to this criteria category (e.g. a polygon that includes invasive plant removal only, would receive an n/a for the trails criteria).

Protects And Enhances The Park's Most Sensitive Natural Areas         a. T&E, special status species, locally rare species         b. Wetlands         c. Special Ecological Area, rare or sensitive vegetation communities, and/or unique geologic feature         Sum         Controls And Reduces Threats To Natural Resources And/Or Cultural Resources And/Or Restores Nature Processes         a. Controls and/or removes targeted invasive plant material         b. Controls non-natural erosion & restores natural hydrology/drainage         Trail and Visitor Use Improvements         a. Trail and Visitor Use Improvements         b. Project reduces need for trail maintenance         c. Improves the integrity and circulation of the trail system         i. Clear logical main trail         ii. "Rib" connectors to destinations and communities         iiii. Trail heads and loops etc.         d. Removes non-designated social trails         e. Reduces sedimentation, erosion and resource trampling disturbance         f. Enhances visitor experience (destinations, circulation, linkages)         g. Improves Public Safety         Sum         Public Engagement and Support         a. Provides interpretive opportunities         b. Provides for increased volunteer/stewardship opportunities         c. Demonstrated or potential to garner significant public interest and support	Proposed Project	Ranking (0,1,2,3, N/A)	TOTAL
b. Wetlands	Protects And Enhances The Park's Most Sensitive Natural Areas		
c. Special Ecological Area, rare or sensitive vegetation communities, and/or unique geologic feature       Sum         Controls And Reduces Threats To Natural Resources And/Or Cultural Resources And/Or Restores Nature Processes       a. Controls and/or removes targeted invasive plant material         b. Controls non-natural erosion & restores natural hydrology/drainage       Sum         Trail and Visitor Use Improvements       Sum         a. Trail and Visitor Use Improvements       Description         i. Clear logical main trail       Description         ii. "Rib" connectors to destinations and communities       Description         iii. Trail heads and loops etc.       d.         d. Removes non-designated social trails       E.         e. Reduces sedimentation, erosion and resource trampling disturbance       F. Enhances visitor experience (destinations, circulation, linkages)         g. Improves Public Safety       Sum	a. T&E, special status species, locally rare species		
and/or unique geologic feature       Sum         Controls And Reduces Threats To Natural Resources And/Or Cultural Resources And/Or Restores Nature Processes       a. Controls and/or removes targeted invasive plant material         b. Controls non-natural erosion & restores natural hydrology/drainage       sum         Trail and Visitor Use Improvements       sum         a. Trail and Visitor Use Improvements       sum         c. Improves the integrity and circulation of the trail system       i. Clear logical main trail         ii. "Rib" connectors to destinations and communities       iii. Trail heads and loops etc.         d. Removes non-designated social trails       e. Reduces sedimentation, erosion and resource trampling disturbance         f. Enhances visitor experience (destinations, circulation, linkages)       g. Improves Public Safety         Public Engagement and Support       a. Provides interpretive opportunities         b. Provides for increased volunteer/stewardship opportunities       b. Provides for increased volunteer/stewardship opportunities	b. Wetlands		
Controls And Reduces Threats To Natural Resources And/Or Cultural Resources And/Or Restores Natur         Processes         a. Controls and/or removes targeted invasive plant material         b. Controls non-natural erosion & restores natural hydrology/drainage         Sum         Trail and Visitor Use Improvements         a. Trail and Visitor Use Improvements         b. Project reduces need for trail maintenance         c. Improves the integrity and circulation of the trail system         i. Clear logical main trail         ii. "Rib" connectors to destinations and communities         iiii. Trail heads and loops etc.         d. Removes non-designated social trails         e. Reduces sedimentation, erosion and resource trampling disturbance         f. Enhances visitor experience (destinations, circulation, linkages)         g. Improves Public Safety         Sum			
Processes         a. Controls and/or removes targeted invasive plant material         b. Controls non-natural erosion & restores natural hydrology/drainage         Sum         Trail and Visitor Use Improvements         a. Trail and Visitor Use Improvements         b. Project reduces need for trail maintenance         c. Improves the integrity and circulation of the trail system         i. Clear logical main trail         ii. "Rib" connectors to destinations and communities         iii. Trail heads and loops etc.         d. Removes non-designated social trails         e. Reduces sedimentation, erosion and resource trampling disturbance         f. Enhances visitor experience (destinations, circulation, linkages)         g. Improves Public Safety <b>Public Engagement and Support</b> a. Provides interpretive opportunities         b. Provides for increased volunteer/stewardship opportunities		Sum	
b. Controls non-natural erosion & restores natural hydrology/drainage Sum Trail and Visitor Use Improvements a. Trail and Visitor Use Improvements b. Project reduces need for trail maintenance c. Improves the integrity and circulation of the trail system i. Clear logical main trail ii. "Rib" connectors to destinations and communities iii. Trail heads and loops etc. d. Removes non-designated social trails e. Reduces sedimentation, erosion and resource trampling disturbance f. Enhances visitor experience (destinations, circulation, linkages) g. Improves Public Safety Sum Public Engagement and Support a. Provides interpretive opportunities b. Provides for increased volunteer/stewardship opportunities		ources And/Or	Restores Natural
Sum         Trail and Visitor Use Improvements         a. Trail and Visitor Use Improvements         b. Project reduces need for trail maintenance         c. Improves the integrity and circulation of the trail system         i. Clear logical main trail         ii. "Rib" connectors to destinations and communities         iii. Trail heads and loops etc.         d. Removes non-designated social trails         e. Reduces sedimentation, erosion and resource trampling disturbance         f. Enhances visitor experience (destinations, circulation, linkages)         g. Improves Public Safety         Sum         Public Engagement and Support         a. Provides interpretive opportunities         b. Provides for increased volunteer/stewardship opportunities	a. Controls and/or removes targeted invasive plant material		
Trail and Visitor Use Improvements         a. Trail and Visitor Use Improvements         b. Project reduces need for trail maintenance         c. Improves the integrity and circulation of the trail system         i. Clear logical main trail         ii. "Rib" connectors to destinations and communities         iii. Trail heads and loops etc.         d. Removes non-designated social trails         e. Reduces sedimentation, erosion and resource trampling disturbance         f. Enhances visitor experience (destinations, circulation, linkages)         g. Improves Public Safety         Sum         Public Engagement and Support         a. Provides for increased volunteer/stewardship opportunities	b. Controls non-natural erosion & restores natural hydrology/drainage		
a. Trail and Visitor Use Improvements         b. Project reduces need for trail maintenance         c. Improves the integrity and circulation of the trail system         i. Clear logical main trail         ii. "Rib" connectors to destinations and communities         iii. Trail heads and loops etc.         d. Removes non-designated social trails         e. Reduces sedimentation, erosion and resource trampling disturbance         f. Enhances visitor experience (destinations, circulation, linkages)         g. Improves Public Safety         Sum         Public Engagement and Support         a. Provides interpretive opportunities         b. Provides for increased volunteer/stewardship opportunities		Sum	
b. Project reduces need for trail maintenance	Trail and Visitor Use Improvements		
c. Improves the integrity and circulation of the trail system         i. Clear logical main trail         ii. "Rib" connectors to destinations and communities         iii. Trail heads and loops etc.         d. Removes non-designated social trails         e. Reduces sedimentation, erosion and resource trampling disturbance         f. Enhances visitor experience (destinations, circulation, linkages)         g. Improves Public Safety         Sum         Public Engagement and Support         a. Provides interpretive opportunities         b. Provides for increased volunteer/stewardship opportunities	a. Trail and Visitor Use Improvements		
i. Clear logical main trail       ii.         ii. "Rib" connectors to destinations and communities       iii.         iii. Trail heads and loops etc.       iii.         d. Removes non-designated social trails       iii.         e. Reduces sedimentation, erosion and resource trampling disturbance       iii.         f. Enhances visitor experience (destinations, circulation, linkages)       g.         g. Improves Public Safety       Sum         Public Engagement and Support         a. Provides interpretive opportunities       b. Provides for increased volunteer/stewardship opportunities	b. Project reduces need for trail maintenance		
ii. "Rib" connectors to destinations and communities         iii. Trail heads and loops etc.         d. Removes non-designated social trails         e. Reduces sedimentation, erosion and resource trampling disturbance         f. Enhances visitor experience (destinations, circulation, linkages)         g. Improves Public Safety         Sum         Public Engagement and Support         a. Provides interpretive opportunities         b. Provides for increased volunteer/stewardship opportunities	c. Improves the integrity and circulation of the trail system		
iii. Trail heads and loops etc.	i. Clear logical main trail		
d. Removes non-designated social trails	ii. "Rib" connectors to destinations and communities		
e. Reduces sedimentation, erosion and resource trampling disturbance         f. Enhances visitor experience (destinations, circulation, linkages)         g. Improves Public Safety         Sum         Public Engagement and Support         a. Provides interpretive opportunities         b. Provides for increased volunteer/stewardship opportunities	iii. Trail heads and loops etc.		
f. Enhances visitor experience (destinations, circulation, linkages)         g. Improves Public Safety         Sum         Public Engagement and Support         a. Provides interpretive opportunities         b. Provides for increased volunteer/stewardship opportunities			
g. Improves Public Safety       Sum       Public Engagement and Support       a. Provides interpretive opportunities       b. Provides for increased volunteer/stewardship opportunities			
Sum         Public Engagement and Support         a. Provides interpretive opportunities         b. Provides for increased volunteer/stewardship opportunities			
Public Engagement and Support         a. Provides interpretive opportunities         b. Provides for increased volunteer/stewardship opportunities	g. Improves Public Safety		
a. Provides interpretive opportunities         b. Provides for increased volunteer/stewardship opportunities		Sum	
b. Provides for increased volunteer/stewardship opportunities			
c. Demonstrated or potential to garner significant public interest and support			
d. Improves intrinsic visitor and recreational experiences			
e. Increases understanding and support for natural resource values of Park Sum	e. Increases understanding and support for natural resource values of Park	e	

Proposed Project	Ranking (0,1,2,3, N/A)	TOTAL
Potential for Funding		
a. Funding available (in part) through other programs/projects		
b. Funding potential		
c. Future leverage "quotient"		
	Sum	
Potential for Implementation Success, Project Feasibility		
a. Project can be accomplished within projected timeline Including permitting and CEQA ("project readiness")		
b. High level of outcome for resources expended		
	Sum	
Integrates With Existing Projects		
	0	
	Sum	
Consistency with Internal Programs and Staff Capacity		
a. Adds support to existing Park programs		
b. San Mateo County Park staff capacity/in line with Park values		
c. Reduces maintenance crises		
d. Compatible with internal organizational priorities		
	Sum	
TOTAL RANKING FOR PROPOSI		

# Suggested Ranking Criteria Example

Rankings within each criteria category should be between 3 and 0 with 3 being the highest possible ranking.

- 3 this project meets all the applicable criteria for this category
- 2 this project meets most of the applicable criteria for this category
- 1 this project meets a few of the applicable criteria for this category
- 0 this project does not meet any of the criteria for this category

n/a - this project does not have any relevance to this criteria category (e.g. a polygon that includes invasive plant removal only, would receive an n/a for the trails criteria).

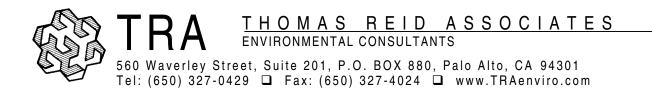
**Project example:** San Mateo County Parks department wants to update a bridge structure, remove encroaching non-native ivy and restore approximately 1-acre around the bridge to native vegetation. The bridge spans a creek that is a popular trail and California red-legged frog is known to be present near the project site.

Proposed Project	<b>Ranking</b> (0,1,2,3, n/a) (3 = highest)	TOTAL
Protects And Enhances The Park's Most Sensitive Natural Areas		
a. T&E, special status species, locally rare species	3	
b. Wetlands	3	
c. Special Ecological Area, rare or sensitive vegetation communities, and/or unique geologic feature	3	
	Sum	9
Controls And Reduces Threats To Natural Resources And/Or Cultural Res Processes	sources And/Or Rest	ores Natural
a. Controls and/or removes targeted invasive plant material	3	
b. Controls non-natural erosion & restores natural hydrology/drainage	2	
	Sum	5
Trail and Visitor Use Improvements		
a. Trail and Visitor Use Improvements	3	
b. Project reduces need for trail maintenance	3	
c. Improves the integrity and circulation of the trail system	3	
i. Clear logical main trail	3	
ii. "Rib" connectors to destinations and communities	0	
iii. Trail heads and loops etc.	0	
d. Removes non-designated social trails	n/a	
e. Reduces sedimentation, erosion and resource trampling disturbance	2	
f. Enhances visitor experience (destinations, circulation, linkages)	2	
g. Improves Public Safety	3	

Proposed Project	<b>Ranking</b> (0,1,2,3, n/a) (3 = highest)	TOTAL							
	Sum	19							
Public Engagement and Support	-								
a. Provides interpretive opportunities	3								
b. Provides for increased volunteer/stewardship opportunities	3								
c. Demonstrated or potential to garner significant public interest and support	1								
d. Improves intrinsic visitor and recreational experiences	3								
e. Increases understanding and support for natural resource values of Park	1								
Sum									
Potential for Funding									
a. Funding available (in part) through other programs/projects	2								
b. Funding potential	1								
c. Future leverage "quotient"	1								
Sum									
Potential for Implementation Success, Project Feasibility									
a. Project can be accomplished within projected timeline Including permitting and CEQA ("project readiness")	1								
b. High level of outcome for resources expended	2								
	Sum	3							
Integrates With Existing Projects									
Integrates with the goal of maintaining safe access to the public	3								
	Sum	3							
Consistency with Internal Programs and Staff Capacity									
a. Adds support to existing Park programs	1								
b. San Mateo County Park staff capacity/in line with Park values	2								
c. Reduces maintenance crises	2								
d. Compatible with internal organizational priorities	3								
	Sum	8							
TOTAL RANKING FOR PROP (highest rat	OSED PROJECT nking possible = 90)	62							

DIVISION OF P 455 County Center, 4th	Y OF SAN MATEO PARKS AND RECREATION Fl., Redwood City, CA 94063-1646 e: (650) 363-4020
Application For A	Scientific Collection Permit
	y when filling out this application.)
Date of Application:	Expires:
Name:	Driver's License No.
Address:	Apt. NoCity:
State:Zip:Telephone: Home (	)Fax ( )
	Work ( ) <u> </u>
State Permit No.	Permit No.
Start Date(s):	Time(s):
(Please attach an additional sheet(s), if more space is needed.)	
Project or Thesis Title:	
Park:Location	(s) where you wish to collect:
Approximate Date of Completion:	
COLLEGE AND HIGH SCHOOL STUDENTS, PLEASE	HAVE THE FOLLOWING COMPLETED:
	City:State:Zip:
Please Print Name:	Telephone: ( )

 $L: \verb|Officecommonfiles|Forms|Applicationforscientificcollectionpermit2004.Doc$ 



Dear Permit Applicant:

Attached is the application you requested for a San Bruno Mountain Site Activity Permit. Please fill it out and FAX to the following parties for approval:

Sam Herzberg at San Mateo County (650) 599-1721 Thomas Reid Associates (650) 327-4024

Do not limit yourself to the space provided. Although some projects are small and the application may be completed on the form, more detail is usually required than will fit on the application form. Each category should be answered in detail, including personnel used, job schedule, and protective measures intended to limit impacts. Job schedules and personnel used during different phases of work are best communicated in a table. Protective measures needed to avoid impacts may include erosion control, careful timing of work, education and avoidance of sensitive resorces, and limitations on the equipment and personnel used.

Approval of the San Bruno Mountain Site Activity Permit does not render unnecessary other permits that may be required for your project, from other agencies or governing bodies (i.e. US Army Corps of Engineers, California Department of Fish and Game, US Fish and Wildlife Service, California Regional Water Quality Control Board, California Department of Forestry, Bay Area Air Quality Management District). It is the applicant's responsibility to have all necessary permits in order before beginning the project.

Proof of the landowner's permission for the project or initiation of the project is also required, if the applicant and landowner are not the same.

Sincerely,

Patrick Kobernus San Bruno Mountain HCP activities coordinator **COUNTY OF SAN MATEO Parks and Recreation Division County Government Center Redwood City, CA 94061** 

### SAN BRUNO MOUNTAIN HABITAT CONSERVATION PLAN SITE ACTIVITY PERMIT

\*not a valid permit until approved below\*

PROJECT:	LEAD AGENCY:
PROPERTY OWNER:	DATE:
APPLICANT:	CONTACT PERSON:
ADDRESS:	
PHONE:	EMAIL:

HCP Administrative Parcel Number:\_\_\_\_\_

**Project Description** (include site maps - 1'' = 200 ft. - discuss access, parking, equipment storage, spoils disposal, etc.): Attach maps, and a separate sheet or report if necessary.

Equipment required:	
Personnel required:	
Onsite contact (name, telephone):	
Job schedule (daily):	
Scope of impact to habitat and proposed protective measured	res:
If applicant and property owner are not the same, attaproperty owner's concurrence with or permission for t contract or other signed statement.	
Applicant's Signature/Title:	
**************************************	**************************************
County Contact:	Phone:
Conditions of Approval: G Inform TRA and San Mateo C	
Signature/Title:	Date:
NOTE: Use Additional Pages for Further Description	TRA: (01/06/2002)
This nermit does not absolve applicant of responsibility to obtain all of	her applicable permits: this permit grants HCP Habitat Manager

This permit does not absolve applicant of responsibility to obtain all other applicable permits; this permit grants HCP Habitat Manager approval to projects within the San Bruno Mountain HCP. Other permits may be required.

#### SAN MATEO COUNTY MAINTENANCE NOTIFICATION (FORM RM-E01)

SECTION 1: TO B	E COMPLETED BY OPER	ATOR, SUPERVISOR	OR MANAGER	
REQUESTOR/TITLE		PHONE NUMBER		
DATE OF REQUEST	PROJECT START DATE	CATEGORY OF WORK	RM EO PRV	
LOCATION OF WORK (ROAD NAM	IE, ADDRESS OR MILE MARKER, DI	STANCE TO & NAME OF CRO	OSS STREET)	_
DESCRIPTION OF WORK (INCLUD APPLIED, ETC.)	ING EQUIPMENT USED/NEEDED, A	VOIDANCE MEASURES TAKE	EN, EROSION CONTROLS	
WORK SITE DIAGRAM				$\neg$
SECT	ION 2 – TO BE COMPL	ETED DV MANAC	FD	
PERMITS/NOTIFICATIONS REQUI		EIED DI MANAG		_
PERMITS/NOTIFICATIONS COMPL	ETED BY:			
NAME/TITLE			DATE	

Distribution: Supervisor Maintenance ManagerDivision Manager Office File

# EDGEWOOD PARK & PRESERVE MONITORING PROGRAM

By Ricardo Trejo

# **INTRODUCTION**

In compliance with County of San Mateo Agriculture Weed Abatement this monitoring program is intended to monitor the Exotic Plant Eradication and/or Habitat Restoration Programs. To initiate the monitoring program, the following outline intention is for collection and recording data needed in order to evaluate the effectiveness and impacted that the park's native plant will incur during the eradication process or progress in restoration projects. All individual areas are to be mapped and data pertaining to an area is to be logged in a logbook.

# **MONITORING GUIDLINE**

#### **INTRODUCTION:**

Description of the area that is to be studied/restored (marsh habitat, grassland etc.) and identified by placing boundary markers. Give information on the type of native plants to the area, and of the exotic plants to be eradicated.

#### **GOALS AND OBJECTIVES:**

Why and what is to be accomplished. Duration of study (start date and ending date, not to exceed one calendar year), so that the method and procedure can be evaluated and make adjustments if needed.

#### **PROCEDURE:**

- 1. Identify each area to be studied/restored and mark its boundary with stacks, give size of area.
- 2. In area to be studied, estimate the population of the different type of plants that exist (seasonal). Example; If area to be studied is 50 square feet, take two or three ten square feet readings of the different types of plants (native and exotic) that exist in the area by season.
- 3. How are exotic plants to be exterminated (hand pulled, chemicals, control burn etc.).
- 4. Assist nature in native plants restoration by planting seedlings (how many are planted and dated), by spreading native seeds (type and where were seeds collected), or by allowing native plants to restore naturally.
- 5. If seeds are collected from the park to grow seedlings in a control environment, record the weight of seeds collected and type.
- 6. What types of equipment/tools are to be used?

#### **PRO/CON:**

#### **Example:**

1. Given the procedures what can be expected.

Pro: Extermination of exotic plants allows native plants to dominate area. Con: Mass number of persons in study area may cause excessive packing of soil and plant stumping.

2. Time and weather factors (spring vs. fall etc.).

#### **DATA:**

- 1. How many and type of exotic plants were removed and date.
- 2. How many native plants seedling planted and date.
- 3. Record interval schedules for plant population readings (native and exotic plants).

3

4. List of factors that may be affecting the results in the study.

#### **CONCLUSION:**

Are the native plants population increasing or not. Exotic plants continue dominating areas. Should alternative measures take place, if so what.

# TRAIL RESOURCE TRAINING

#### OUTLINE

#### **BY RICARDO TREJO**

#### I. INTRODUCTION

- A. Pass Procedures
- B. Present View Point Awareness
- C. Communication

### **II. REGULATIONS**

- A. CEQA
- B. ADA
- C. Local, State, and Federal
- D. Resource/Habitat Sensitive
- E. Monitoring Program

## **III. TRAIL RESTORATION**

- A. Generic vs. Local on site Specification
- B. Repairs beyond trail tread
- C. Trail Inventory

# **IV. FINANCIAL SUPPORT**

- A. Monitoring cost factor
- B. Interpretive/Education Programs
- C. Public/Special interest support groups
- D. Grant information

PROJECT PRIORITIZATION SCORIN	IG SI	IEET	-												
<ul> <li>Ranking and Scoring Criteria: Rankings within ea</li> <li>This project meets all the applicable criteria for th</li> <li>This project meets most of the applicable criteria</li> <li>This project meets a few of the applicable criteria</li> <li>This project does not meet any of the criteria for</li> <li>N/A - This project does not have any relevance to this</li> </ul>	ach crit is catego for this for this this cate	teria ca ory category category gory	tegory						0			0		/safety crit	eria).
	С	onsist	ency v	vith Ve	getatior	n Ma	nageme	nt Objectiv	/es		Oth	er Object	tives		
Vegetation Management Actions and Projects*	Maintains Sensitive Species and Habitats	Maintains Diverse Recreational Uses of Park	Maitains Visitor Use, Safety	Achieves Sustained Control of Invasive Plants	Maintains Natural Plant Communities	Encourages Park Stewardship	Manages Forests/Improves Forest Heath, Reduces Fire Hazard	Protects Watersheds, Helps Reduce Eriosion/ Non-Point Source Pollutants	Consistent with Integrated Pest Management	Public Engagement and Support	Potential for Funding	Potential for Implementation Success, project Feasibility	Integrates with Existing Projects	Consistency with Internal Programs and Staff Capacity	TOTAL SCORE (3,2,1,0, N/A)
ALL PARKS				Ĩ			1	1	I						
Maintain fuel reduction along 100 foot property perimeter for fire protection															
Continue to reduce sedimentation and non-point source pollutants in all watersheds. Inspect culverts, road crossings, waterways. Restore streambanks with native vegetation															
Continue invasive control efforts															
Continue to manage forests for forest health and fuel load reduction.															
Monitor hazard trees, tree diseases. Treat accordingly (remove, contain, trim etc)															
Set mowing schedule based on sensitive biological resource constraints															
Continue to protect sensitive species, track populations and use adaptive management to improve habitat values. Monitor rates of habitat conversion and use active management to control (example grassland conversion to shrubland)															
Monitor roads and trails, remove unauthorized trails Continoe work with Volunteer groups, expand opportunities for site stewardship															

Crystal Springs								
Control spread of California Oak Mortality Disease (formerly								
known as Sudden Oak Death). (52)								
Continue Mowing.								
Hazardous trees detection and assessment, pruning, and								
removal along trail and road.								
Trail and road inspection (including culverts prior to rainy								
season).				 		 		
Fuel load/fire reduction in areas bordering the watershed.								
Other projects (Add here)								
Coyote Point								
Incorporate plants into landscaping that help hold soils to								
minimize erosion, prevent invasive weeds from encroaching								
into the activity areas, and emphasize the use of natives. (74)								
Ongoing invasive Spartina control (in partnership with the								
Spartina Project). (52)								
Manage for invasives, including cotoneaster, acacia, and								
others. Control poison oak								
Other projects (Add here)				 		 	 	

Edgewood								
Continue long-term monitoring of Bay checkerspot butterfly								
and its habitat. (77)								
Continue to perform existing experiments to evaluate								
effectiveness of mowing and grazing. (77)								
Reconsider the practical and political aspects of using fire as a								
habitat management technique and possibly implement new policies and techniques. (77)								
Continue to rely on other agencies to provide fire								
suppression. (77)								
Use seed farming and seeding of natives to improve bay checkerspot butterfly habitat. (77)								
Support volunteer resource protection programs. (26)								
Continue weed eradication efforts								
Develop a scheduled trail maintenance program for trimming of plants and trees after blooming of flowers and plants.								
Implement Cordilleras Creek restoration including invasives removal and planting of native species in conjunction with the construction of an interpretive center. (75)								
Maintain a fuel reduction area along 100 foot perimeter of property for fire protection.								
Other projects (Add here)								
Fitzgerald								
Continue invasive species removal near San Vicente Creek.								
Manage access to user groups of 10 or more.			1					
Other projects (Add here)	1							
Restore creeks, remove invasive species, control erosion by						 		
planting natives, stabilize trail at creek crossings								
Work with Airport, surrounding landowners to reduce non- point source pollutants								
Fuel management in cypress forest and house site- remove non-natives								

Flood								
Remove exotics where they threaten heritage trees.								
Assessment of all Heritage trees for hazardous conditions -								
Trim or remove as necessary.								
Maintain fuel reduction along 100 foot property perimeter for								
fire protection.								
Other projects (Add here)								
Huddart								
Reduce sedimentation arising from various sources including			1		1		 	
road and trail erosion and creek bank erosion.			1		1			
Maintain access roads, fire trails, equestrian trails and			1		1			
pedestrian trails on an annual basis. In addition, inspect major								
access roads and fire trails after every major storm event								
during the winter and spring months.								
Work with PG&E to maintain the right-of-way throughout								
the parks and develop guidelines for trailside trimming								
procedures that preserve habitat and aesthetics as well as fire								
safety.								
Continue to employ current methods and practices to reduce								
the risk of ignition of fire.								
Continue to work with volunteers to remove French broom,								
scotch broom, bull thistle.								
Ensure key onsite personnel, including park rangers,								
maintenance staff, caretakers and non-profit organization								
staffs are trained in basic fire prevention.								
Include information regarding fire ecology and prevention at								
entrance and trail staging area kiosks, and in interpretive and			1		1			
educational materials.								
Meet with neighboring homeowner associations to			1	_	1			
collaborate on fire safety projects.								
Survey annually for tree hazards and poison oak in high use			1		1			
areas (campgrounds/ picnic areas).								
Other projects (Add here)			-		-	 	 	 
		L						
		L						
		L						
		L						

Junipero Serra										
Gradually remove invasive plants especially the Monterey										
pine and blue gum Eucalyptus. Remove Eucalyptus near										
private residences on area boundary first, as they pose a										
liability problem. (35)										
Mow or green chop grasslands annually during the months of										
May-July for fire suppression. (35)										
Control invasive plants and problem species such as poison										
oak and Scotch broom. (35)										
Remove all invasive trees and shrubs from grassland										
including invasive native shrubbery (34). To be done every										
five years (35).										
Other projects (Add here)										
- / ` ` /										
			1	1	1		1			
		1		1	1		1			
		1		1	1		1			
			1	1	1		1			
Memorial										
			 1				1			
Provide a hazardous tree inspection in campgrounds, picnic										
areas, and trails.										
Remove invasive plants.										
Develop a scheduled mowing cycle for grass areas.								 		 
Implement the erosion control projects that were										
recommended and prioritized for the Pescadero/ Memorial/										
Sam McDonald County Park Complex. (79)										
Other projects (Add here)			 1				1			
Mirada Surf										
Control bristly ox-tongue infestations.(88) Develop a mowing										
schedule for bristly ox tongue in grass areas with times of the										
year to mow.										
Remove coyote brush from grasslands on Mirada Surf West					1					
to maintain open grassland habitat										
Continue to follow construction recommendations for work										
done in creek area and other sensitive habitats. (89).										
Other projects (Add here)										
								 _	 	
				1						
				1						
	l	1		1	1	l				

Pescadero Creek								
Stabilize banks by encouraging riparian growth. (55)								
Utilize burns and hand and mechanical clearing to reduce fire								
hazards. (55)								
Implement watershed monitoring program. (55)								
Remove weeds and restore the grasslands. (55)								
Other projects (Add here)		 						
F) ()		1			1			
	I				1			
Provide a hazardous tree inspection in campgrounds and picnic areas.								
Remove invasive plants. Develop a scheduled mowing cycle for grass areas.							 	 
Maintain a fuel reduction area along 100 foot of property								
perimeter for fire protection.								
Implement the erosion control projects that were recommended and prioritized for the Pescadero/Memorial/Sam McDonald County Park Complex. (79)								
Other projects (Add here)			L					
Control feral pig population							 	

San Bruno Mountain															
Actions managed by San Mateo County Parks															
Control exotic species infestations of gorse, Eucalyptus, and	-	1				1		1	1						
others. (81)															
Monitor sensitive habitats that may be impacted by visitor use															
and then implement trail and area closures as conditions															
warrant.															
Promote the use of integrated vegetation management to															
control non-native species. (78)															
Monitori and prevent over collection of seed and plant															
collection															
Remove or restore unneeded trails, service roads, and fire															
breaks by regrading and revegetating with native species (if															
necessary). (78)															
Conduct a detailed study of all existing trails, service roads,															
and fire breaks and make recommendations. Assess these															
areas for endangered species habitat before rebuilding any trails. (78)															
Remove remaining, mature gorse that is adjacent to the Gorse															
Removal Project area in the Saddle.															
Identify and implement activities within the HCP and															
adjacent areas that reduce hazardous fuel loads and prevent															
wildfires. (4)															
Address erosion, drainage, and public use issues caused by															
undesignated trails. (78)															
Actions managed by outside sources under the San Brune	o Moun	tain Ha	abitat C	onserva	ation Pla	ın (Th	omas Re	id & Associ	ates , We	est Coas	t Wildlar	nds, Shelte	rbelt Bu	ilders,Inc	c.etc.)
Control exotic species infestations of gorse, Eucalyptus, and															
others. (81)															
Monitor the (offsite) mitigation areas, endangered species															
populations, research and pilot study progress, and conserved															
habitat enhancement programs. (90) Continue to research and utilize various vegetation															
management techniques for the preservation and expansion															
of habitat for the endangered butterflies. (90)															
Restore grassland habitat for the federally endangered															
butterflies covered by the HCP while maintaining historic															
prairies, grasslands, and scrub communities. (4)															
Create management plans, which could include pile burning,															
chipping, or hauling, for biomass that is left following															
vegetation management practices such as herbicide spraying															
and hand-pulling.															
Restore and create habitat for the endangered mission blue,															
callipe silverspot, and San Bruno elfin butterflies. (81)															
Perform ongoing weed abatement on Park lands that are															
within 100 feet of homes or other structures.		L													
Continue to restore areas that were burned in September															
2002. (12) Create infrastructure that would allow for the															
introduction of rotational cattle grazing on the mountain.															

San Bruno Mountain (Continued)													
Current Restoration Projects							_	_			_		
Colma Creek Headwaters Restoration Project		1		1		· · · ·			1				
San Bruno Mountain Gorse Control and Revegetation		<u> </u>		<u> </u>									
Project													
Other projects (Add here)													
p-s) ()				1									
San Pedro													
Control poison oak. (7)													
Monitor and maintain existing areas of coastal scrub. (8)													
Maintain naturalized grasslands as open fields following the													
historical grassland boundaries and prevent the invasion of													
woody plants. (8)													
Maintain existing stands of manzanita. (8)													
Continue to implement erosion control of streambeds for enhanced steelhead habitat. (8)													
Monitor and patrol for unsanctioned access and elicit removal													
of fish by checking for social trails, trash, etc. (8)													
Conduct invasive species control with other alliances and													
continue to identify the status of these invasive species. (53)													
Utilize diversion ditch, seeding, and planting for erosion control. (7)													
Maintain fuel reduction at interface of property lines.	-	-								 		 	
Develop a hazardous trees inspection program.	-	-								 		 	
Remove Eucalyptus that is competing in the non-riparian													
areas and replant area with redwoods. (8)													
Other projects (Add here)													
Replace eucalyptus with Douglas fir, redwood	1	1		1				1	1				
replace cacatyptus with Douglas III, icuwoou	1												
								-	<u> </u>				
									<u> </u>				
Sanchez-Adobe		-				-			-	 		 	
Mow grass areas on schedule to reduce weeds													
Maintain native plant landscaping once installed													
Cut vegetation away from fences & overhanging branches													
near apartment building. Interact with property owners at													
common boundary.													
Other projects (Add here)		1		1		1			. <u> </u>				
Create and implement a creek restoration project				L		ļ							
Update landscape elements including native garden, creek over	look, et	c.		L					ļ	 		 	
		<u> </u>		L					ļ	 		 	

Wunderlich											
Utilize hand or mechanical removal of exotic species, and other methods to maintain the grasslands in the central meadow											
Control acacia and French broom invasive plant populations at Wunderlich											
Maintain access roads, fire trails, equestrian trails, and pedestrian trails on an annual basis. Inspect major access roads and fire trails after every major storm event during the winter and spring months.Conduct fuel reduction by cutting and chipping brush and trees and installing fuel breaks along service roads and trails.											
Clear service roads of understory, thin trees near service roads, especially in Wunderlich Park along the Loop, Alambique and the Meadows Trail.											
Mow grasslands along roads and selected boundaries (such as Bear Gulch Rd.) for a distance of 30 ft. where applicable											
Coordinate with Caltrans, County Department of Public Works, and Town of Woodside to ensure roadside management is conducted along Skyline Blvd., Kings Mountain Road, Woodside Road, and LaHonda Road.											
Work with PG&E to maintain the right-of-way throughout the parks and develop guidelines for trailside trimming procedures that preserve habitat and aesthetics as well as fire safety.											
Provide survivable space around each structure of 100 ft by mowing grass, pruning trees, and removing dead and flammable material from roofs, decks, grounds, propane tanks.											
Ensure the landscape plan minimizes wildland fire hazards and provides defensible space											
Install fire-resistant plants in a fire-safe design that consists of groupings isolated by hardscape or mowed grass.											
Remove invasive and exotic plants that pose a fire hazard Pursue habitat restoration with native plants in the disturbed areas with higher fire hazard											
Continue horse grazing in Wunderlich Park near stable where possible Maintain a fuel reduction interface at property lines.		 									
Other projects (Add here)	 L	 	I	<u> </u>	I	I	I				
									-		
	1			1			I				

Simultaneous Development Application (if any):

TRT # \_\_\_\_\_

San Mateo County I	Planning and Building	Division - 590 Har Californ	milton Street, Redwood City ia 94063 • 363-4161
Trim or Res Sections 11,000 et seq and Ordinance Code.	12,000 et seq of the San Mate		
Applicant: Address:	SIGNIFICANT TREE(S)	 	te of Application:
Telephone:		Fro	Day Period of Posted Notice m:
Address and/or parcel num	per where tree(s) located:		
Tree(s) Diameter or Circumference (at 4 1/2 ft height)	Kind of tree(s)	Health of tree(s)	Reason for Removal/Trimming

And the second sector of the second se	
REMOVAL	PLAN:

1. Method of removal:

2. Equipment to be used: \_\_\_\_\_

3. Method of tree(s) disposal:

The information contained in the application is accurate and true to the best of my knowledge. I understand that an approved permit may be conditional. Further, the decision on this application may be appealed to the n Mateo County Planning Comission. Authority to remove or trim a tree is effective only after the appeal riod has expired.



Applicant's Signature

	VEGE	ETATIO	N WOR	K REQUEST (Page 1)		
			I. DESCRIPTIO	ON OF WORK		
Unit #	Park Name		Priority (Emerg Other):	ency, Urgent, Routine, As Possible, Estimate Only,	Project Rankin	g (if available):
Work Location					Target Start Da	ate:
Project Title					Habitat type(s)	:
Availability of Park Resources	and Personnel			Species Benefitted (List):	1	
		II PRO	POSED CHAR(	GING INFORMATION		
Organization #:	Account #:		Activity Code:	Option Code:		E.P.O.#:
Contact Name(s)		Contact Telepho	one #	Supervisor Approval		Date Approved:
			III. MANAGEM	IENT REVIEW		
Reviewer	0.K.	Initials	Date	Comments	x.	
Park Superintendent		Intrials	Dute		,	Cont.
Planning and Development						Cont
Management Analyst						Cont
Director of Parks						
Other:						Cont
Other:						Cont.
	I		IV. STAFF	PEVIEW/		Cont
Date Received	Pre-Work Conference (date)	Summary Co				
		Materials: \$		Staff Hours: #	Other: \$	
		V. D	DETAILED WO	RK DESCRIPTION		
Description of Work:						Acres
			Page 1	l of 3		

		I	<b>EGET</b>	<b>TION</b>	<b>WORK H</b>	REQUES	ST (Page	2)		
				V.1 W	ork Needs Checkli	st (Circle)				
	Baseline data collection	Permits, Approvals, Agreements Public Notifications (List)	Plant Materials collection /propagation (Attach list)	Herbicide application (type)	Tree removal /Forestry Assessment	Mowing/ Mantenance Crew	Rare Plant,Wildlife Surveys	Other Specialty Services (list)	Signage, Fencing, Erosion Control (list)	Performance Monitoring (type, frequency)
Details (Specify)										
		1	V.	.2 Work Schedule,	Frequency (fill in f	for each type of pro	oject):			
Total duration										
Seasonal restrictions										
Optimal treatment timing										
Retreatment timing/frequency										
Proposed start date										
Projected completion date										
					3 Waste Disposal C	-				
Green Waste G	enerated (amt):		Type: (grass clippin	ngs, wood debris, in	vasive plants)	Disposal Method:			Recycle Works Notification/Assista	ance Y/N
Maintenance	Review Disposition	n				Disposition/Comm	lents			
Schedule Prie	ority (1-4):		Refer Back to Mgr		Hold					
					Page 2 of 3					

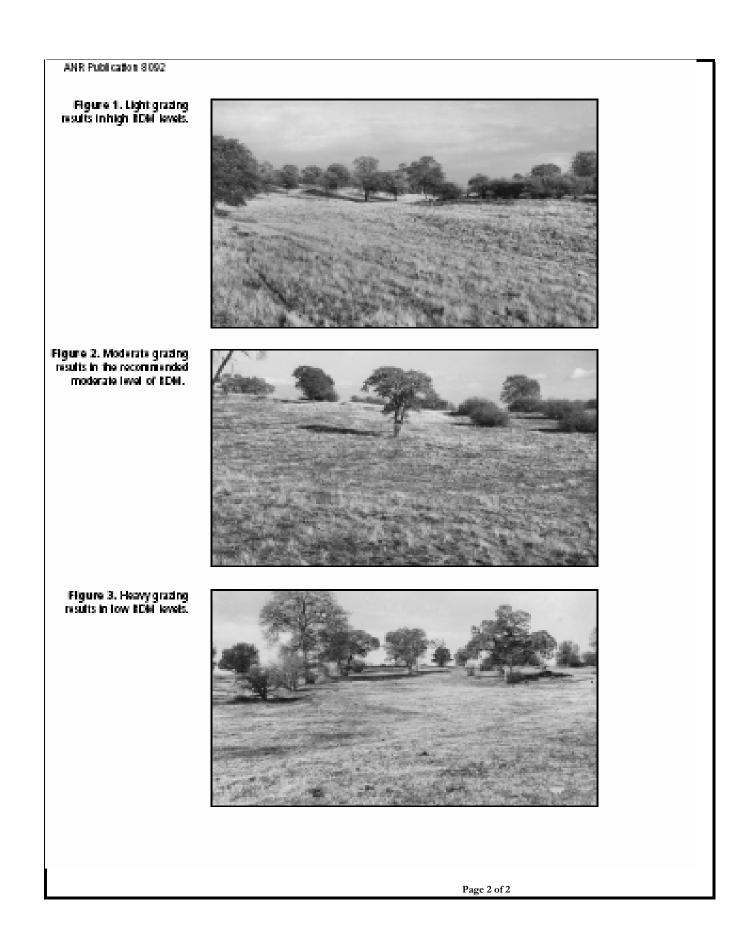
	NEQUES	I (I age	3)		
		· •			
Additional Maintenance Staff (Lis	Names):				
Estimated Completion Date		Park Contact Ass	igned		
	Ordered (Date):	By:		Rcvd:	
		Scheduled:		By:	
		Arranged:		By:	
		<u> </u>			Cont.
VII. WORK COMPLETION	INFORMATION				
Date:	Total Acres Tre	ated:	Species Benefi	itted:	
Final Cost Materials: \$	Other costs:		TOTAL COST	Γ:	
Dogo 2 of					
	VI. WORK MANA Additional Maintenance Staff (List Estimated Completion Date VII. WORK COMPLETION Date: Final Cost Materials: \$	VI. WORK MANAGEMENT Additional Maintenance Staff (List Names): Estimated Completion Date Ordered (Date): VII. WORK COMPLETION INFORMATION Date: Total Acres Tree	VI. WORK MANAGEMENT         Additional Maintenance Staff (List Names):         Estimated Completion Date       Park Contact Ass         Ordered (Date):       By:         Scheduled:       Arranged:         VII. WORK COMPLETION INFORMATION       Materials: \$         Date:       Total Acres Treated:         Final Cost Materials: \$       Other costs:	Additional Maintenance Staff (List Names): Estimated Completion Date Ordered (Date): By: Scheduled: Arranged: VII. WORK COMPLETION INFORMATION Date: Total Acres Treated: Species Benef Final Cost Materials: \$ Other costs: TOTAL COST	VI. WORK MANAGEMENT Additional Maintenance Staff (List Names): Estimated Completion Date Ordered (Date): By: Revd: Scheduled: By: Arranged: By: VII. WORK COMPLETION INFORMATION Date: Total Acres Treated: Species Benefitted: Final Cost Materials: \$ Other costs: TOTAL COST:

		R	evegetation Mor	nitoring: Project	Field Assessme	nt Form (PAGE	1)		
Date: Observer: Location (ATT	ГАСН МАР):				Project Name: Project Number: Park:		Project Manager:		
	/			Type of Proj	ect (Circle 1)				
Revegetation	Tree Removal/ Forest Improvement	Fuel Load Management Fire Management	Invasive Plant Control	Sensitive Species Habitat Enhancement	Erosion Control/ Non- point Source Pollution control	Mowing	Trail Maintenance	Winter Stormproofing /Culverts, Roads, Bridges	Other (Specify)
				Status O	of Project				
Monitoria	ng Year (CIRCLE ONE):	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Other	
	Γ		Active Resto	ration (Planting) Site	es- Plant Survivorshij	p Monitoring	I	1	
Parameter	Меаѕиге	Site 1	Site 2	Site 3	Site 4	Site 5	DEFINE Annual Performance Criteria (Fill in from monitoring report- example: XX % survival in Year XX)	monitoring report- example:	Target met? Y/N
							,	1 / /	
Trees	% Survival								
Shrubs	% Survival								
Groundcover/ Herbs	% Survival								
		Ac	tive Restoration (Pl	anting) Sites- Assess	ment of Growth, Veg	getation, Canopy Co	ver		
	Average height, stem width or dbh								
Trees	Vegetation or Canopy cover (Use Cover Class Estimates 1-5 on Page 3)								
	Evidence of new growth? Y/N?								
	Vegetation or Canopy cover (Use Cover Class Estimates 1-5 on Page 3)								
	Evidence of new growth? Y/N?								
Groundcover/	Vegetation or Canopy cover (Use Cover Class Estimates 1-5 on Page 3)								
Herbs	Evidence of new growth? Y/N?								

Revegetation Monitoring: Project Field Assessment Form (PAGE 2)						
Date:				Project Name:		
Observer:				Project Number:		
Location (ATTA	ACH MAP):			Park:	Project Manager:	
			G	round Condition		
Mulch installed d	enth (Inches):		Other Ground Condition damage, deer browse)	n Problems (DESCRIBE)-(e.g., watering, erosic	ın,	
inden mstaned u	epui (menes).		damage, deer browse)			
Line D V/N	0					
Litter? Y/N:	Quantity present:		-			
		% ground coverage of				
Thatch/Weeding	Needed? Y/N	thatch/weeds?	-			
Other concerns: (s	shading/crowding the					
plantings)						
			]	Invasive Plants		
	ve Plants Present ? If Describe Location and					
Population size.	Describe Location and					
Are Other Weedy						
(grasses, annual w species? Describe	veeds)? If so, what					
Population size.	Location and					
				Environment		
	Describe Extent/Problem			Describe possible		
Trampling	Here:			solution here:		
	Describe					
Herbivery/deer	Extent/Problem			Describe possible		
browse, rodents	Here:			solution here:		
	Describe					
	Extent/Problem			Describe possible		
Poor drainage	Here:			solution here:		
	Describe					
	Extent/Problem			Describe possible		
Overly dry soils	Here:			solution here:		
	Describe					
Plant breakage	Extent/Problem Here:			Describe possible solution here:		
Flaint breakage	Hele.			solution nere.		
	Describe					
Insect Damage	Extent/Severity Problem Here:			Describe possible solution here:		
	Identify					
Disease	Disease/Describe Severity/Problem			Describe possible		
damage/loss	Here:			solution here:		
	Describe					
	Extent/Problem			Describe possible		
Other concerns	Here:			solution here:		

			Revegetat	ion Monitoring: Pr	oject Field Asse	ssment Form (P	AGE 3)		
Date: Observer:					Project Name: Project Number:				
Location (ATTACH MAP):					Park:		Decident Managam		
Location (A	TTACH MAP):			Remediati	ion / Follow Up Act	ion	Project Manager:		
				Keniculati					1
Action 1:				Assigned to:		Completed by:		Target Completion	Actual Completion Date:
Describe:				Park Staff:		Name:		Date:	
				Volunteer:		Organization:			
				, onuncer.		organization			
				Contractor:					
Action 2:				Assigned to:		Completed by:			
Describe:				Park Staff:		Name:		Target Completion Date:	Actual Completion Date:
				Volunteer:		Organization:			
				Contractor:					
Action 3:				Assigned to:		Completed by:			
Describe:				Park Staff:		Name:		Target Completion Date:	Actual Completion Date:
				Volunteer:		Organization:			
				Contractor:	EFERENCES				
	Score	Cover class	Midpoint Value	Visual Estimate of Cov					
	1 =	0%-5%	3%						
	2 =	6%-25%	15.00%	_					
	$\frac{3}{4} =$	26% -50% 51%-75%	<u>38%</u> 63%	_					
$\frac{4-31767376}{5=76\%-100\%}$				-					
				Suppo	orting Project Data				
					0 /				
			(Δ	ttach Project Maps , Baseli	ing Data Photos and S	Success Criteria Hore)			
			$(\Lambda)$	trach i roject maps, basen	ine Data, i notos anu c	fuccess Gineria Hele)			

	Grazin	g Monitoring Form					
Date: Observer: Location:		Lessee Lease # Renewal Date:					
General Site Conditions (Describe overall condition of site, forage, brush, invasive plants, grass; fencing; number of animals present on day of survey, etc.)							
Observed issues, Problem	• Concerns (Describe any	thing of concern such as erosion caused	d by animals over utilization				
underutilization, damage to f			d by alminais, over administration,				
		<b>al RDM ESTIMATES</b> Map of Sampling Locations)					
Site No.	RDM	Visual Estimate (See attached sheet	for references)				
	High (3)	Moderate (2)	Low (1)				
1 2							
3							
4		++					
6							
7							
8		++					
10		++					
Subtotal							
		++					
TOTAL							
		l divide by the total number of sample sites)					
		l divide by the total number of sample sites)					
Average for Entire Site (Add	d up all RDM Estimate values and	d divide by the total number of sample sites)	units, discontinue grazing, change season,				
Average for Entire Site (Add	d up all RDM Estimate values and		units, discontinue grazing, change season,				
Average for Entire Site (Ade Remedial Actions Needed	d up all RDM Estimate values and		units, discontinue grazing, change season,				



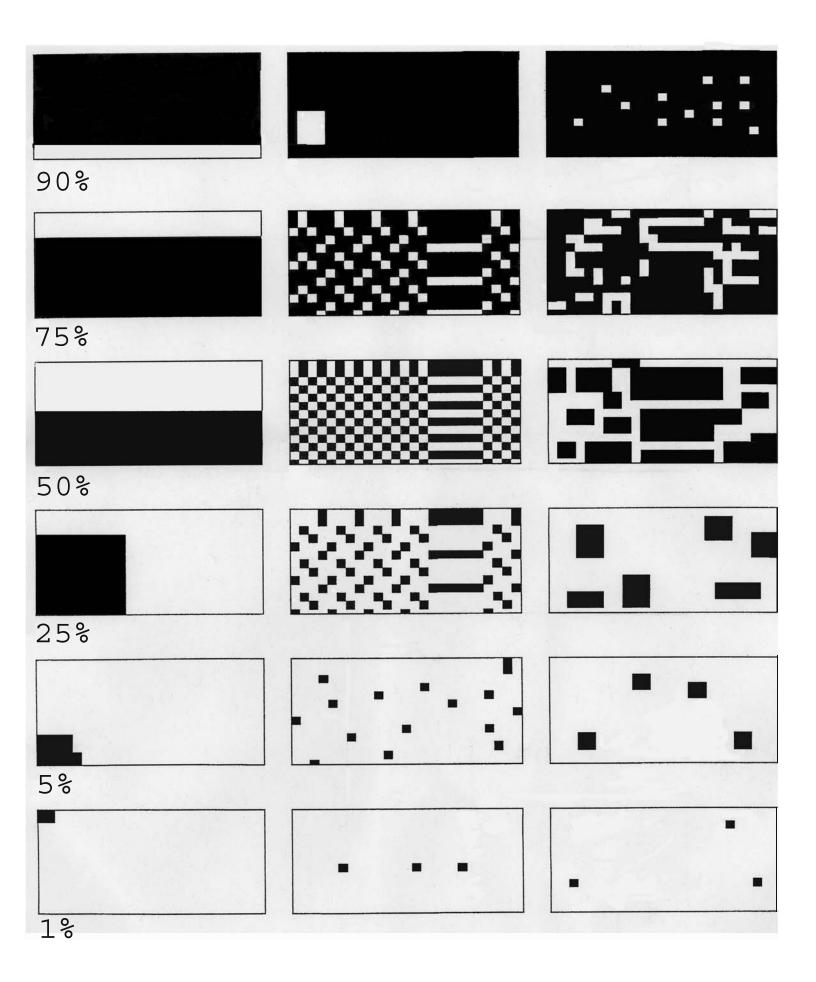
		I	Photo Monit	oring Form			
Date:			Park Name:				
Observer:			General comments:				
Project Name:							
Photo #     Date     Location - ATTACH       MAP (Record Permanent       Photopoint # or GPS data)		Photo Direction (compass bearing as degrees from North)	<b>Description of photo content</b> (i.e. what is subject, what species is in picture)				

	Photo Monitoring Form	
Date:	Park Name:	
Observer:	General comments:	
Project Name:		
	Attach Map of Photo Points here	
	Attach Map of 1 noto 1 onits here	

Date::         Park Name:           Observer:         Project Name:           Location:         Contact Person/Manager:           (Attach Map of Sampling Locations)         Transect/Quadrat Data           Transect/Quadrat Data           11         T2         T3         T4         T5           Habitat Type:         [grashard, send, finest, ec]	HABITAT MO	NITORING	Transect/Q	uadrat Monit	oring Form				
T1         T2         T3         T4         T5           Habitat Type: (grashind, sceal, forest, etc)	Date: Observer: Location:		Park Name: Project Name: Contact Person/Manager:						
Habitat Type:       (maximum constraints)         Q1       Q1         Q2       Q2         Q3       Q3         Q4       Q4         Q5       Q5         Sum       Q5         Sum       Q5         Cover Class       (divide by 5)         Cover Class Midpoint Value       Q1         Value (refer to chart below)       Q2         Reference:       Score Cover class         1       0%-57%         3       22%-59%         4       5         70% - 100%       88%	Transect/Quadrat Data								
grassland, smith, forest, etc)         Image: constraint of the second seco		T1	T2	Т3	T4	Т5			
grassland, senih, forest, etc)         Image: constraint of the second seco									
Q2         Image: Constraint of the system of the syst									
Q3	Q1								
Q4         Image: Constraint of the second seco	Q2								
Q5         Image: Cover Class           Sum         Image: Cover Class           Average Cover Class         Image: Cover Class           (divide by 5)         Image: Cover Class           Cover Class Midpoint         Image: Cover Class           Value (refer to chart below)         Image: Cover Class           Reference:         Score Cover class           Image: Cover Class         Midpoint Value           Image: Cover Class	Q3								
Sum         Average Cover Class           (divide by 5)         (divide by 5)           Cover Class Midpoint         Value (refer to chart below)           Reference:         Score Cover class           Midpoint Value         1 = 0%-5%           3 = 26%-55%         15.00%           3 = 26%-55%         38%           4 = 51%-75%         63%           5 = 76% - 100%         88%	Q4								
Average Cover Class (divide by 5)         Average Cover Class           Cover Class Midpoint Value (refer to chart below)         Image: Cover class           Reference:         Score         Cover class           1 =         0%-5%         3%           2 =         6%-25%         15.00%           3 =         26% -50%         38%           4 =         51%-75%         63%           5 =         76% - 100%         88%	Q5								
Average Cover Class (divide by 5)         Average Cover Class           Cover Class Midpoint Value (refer to chart below)         Image: Cover class           Reference:         Score         Cover class           1 =         0%-5%         3%           2 =         6%-25%         15.00%           3 =         26% -50%         38%           4 =         51%-75%         63%           5 =         76% - 100%         88%	Sum								
(divide by 5)       Image: Cover Class Midpoint Value (refer to chart below)       Image: Cover class Midpoint Value         Reference:       Score Cover class       Midpoint Value $1 = 0\%-5\%$ $3\%$ $2 = 6\%-25\%$ $15.00\%$ $3 = 26\%-50\%$ $38\%$ $4 = 51\%-75\%$ $63\%$ $5 = 76\% - 100\%$ $88\%$	Juli								
Value (refer to chart below)       Score       Cover class       Midpoint Value         Reference: $Score$ Cover class       Midpoint Value         1 =       0%-5%       3%         2 =       6%-25%       15.00%         3 =       26% -50%       38%         4 =       51%-75%       63%         5 =       76% - 100%       88%									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Value (refer to chart								
$\begin{array}{c ccccc} 1 & & & & & & & \\ \hline 1 & = & 0\%-5\% & & & 3\% \\ \hline 2 & = & 6\%-25\% & & & 15.00\% \\ \hline 3 & = & 26\%-50\% & & & 38\% \\ \hline 4 & = & 51\%-75\% & & & 63\% \\ \hline 5 & = & 76\%-100\% & & & 88\% \\ \hline \end{array}$	Deference	Score	Cover class	Mide che i Valer					
$\begin{array}{c ccccc} 2 = & 6\% - 25\% & 15.00\% \\ \hline 3 = & 26\% - 50\% & 38\% \\ \hline 4 = & 51\% - 75\% & 63\% \\ \hline 5 = & 76\% - 100\% & 88\% \end{array}$	Reference:				4				
$\frac{4}{5} = \frac{51\%-75\%}{76\%-100\%} \frac{63\%}{88\%}$									
5 = 76% - 100% 88%									
			51%-75%		_				
Page 1 of 3	l	5 –		88%0					

HABITAT MONI	TORING '	Transect/Q	uadrat Monit	oring Form		
<b>Date:</b> <b>Observer:</b> <b>Location:</b> (Attach Map of Sampling Le		Park Name: Project Name: Contact Person/ Photo No.		0		
Transect/Quadrat Data						
	T6	Τ7	Т8	Т9	T10	
Habitat Type: (grassland, scrub, forest, etc)						
Q1						
Q2						
Q3						
Q4						
Q5						
Sum						
Average Cover Class (divide by 5)						
Cover Class Midpoint Value (refer to chart on next page)						
Reference:	Score	Cover class	Midpoint Value			
	1 =	0%-5%	3%	1		
	2 =	6%-25%	15.00%	4		
	3 =	26% -50%	38%	4		
-	4 = 5 =	51%-75% 76% - 100%	63% 88%	4		
		Page 2 of 3	00/0	1		

HABITAT MONITORING Transect/Quadrat Monitoring Form					
Date: Observer: Location: (Attach Map of Sampling	Locations)	Park Name: Project Name: Contact Person/Manager: Photo No.			
DATA S	SUMMARY: Trans	sect/Quadrat Data	(ENTER Summary	Data (From Sheets	1 and 2)
Habitat Type: (enter type in boxes to right i.e. grassland, scrub, forest, etc)	Grassland	Shrubland	Forest	Other (Add)	Other (Add)
		(enter midpoint ran	ge for each transect in	appropriate habitat co	lumn)
T1					
T2					
T3					
T4					
T5					
T6					
Τ7					
T8					
T9					
T10					
Sum By Habitat Type					
<b>Average</b> <b>Habitat</b> (divide by sample number in each habitat type)					
Summary Habitat Cover Class Midpoint Value (refer to chart below)					
Reference:		Cover class	Midpoint Value		
	1 =	0%-5%	3%	4	
	2 = 3 =	6%-25% 26% -50%	15.00%	4	
ŀ	3 =	26% -50% 51%-75%	38% 63%	1	
F	5 =	76% - 100%	88%	1	
ᆝ		Page 3 of 1		4	



university of georgia cooperative extension service forest resources unit training form

## TREE RISK ASSESSMENT FORM

TREE NUMBER: DATE: ASSESSOR'S NAME:

TREE SPECIES: TREE DIAMETER: SPECIFIC TREE LOCATION:

OWNERSHIP:

OWNER'S NAME & PHONE:

BOUNDARY LINE TREE \_\_\_\_\_ SINGLE OWNER TREE \_\_\_\_\_ FEET FROM BOUNDARY (falling in / falling out):

RISK ASSESSMENT:

MAJOR STRUCTURAL FAULTS (describe type and location): FAULT #1 (ZONE= ):

):

FAULT #2 (ZONE=

FAULT #3 (ZONE= ):

**OTHER STRUCTURAL FAULTS:** 

MINOR RISKS:

TARGETING (people / property / resources over space and time):

RISK ACCEPTANCE GIVEN MANAGEMENT OBJECTIVES (hazard thresholds):

ACTIONS:

\_\_\_\_NO REMOVAL \_\_\_\_\_MANAGERIAL NOTICE OF RISKS \_\_\_\_\_MINOR FAULTS AND CORRECTIONS / RISK REDUCTION \_\_\_\_\_REMOVAL

\*\*\_\_\_\_PRIORITY REMOVAL \*\*

Dr. Kim D. Coder, 1991

# TREE RISK ASSESSMENT: SYSTEMATIC EVALUATION PROCESS

Dr. Kim D. Coder, University of Georgia 1990

ZONE 1: STEM / ROOT BASE (4 feet up and out) -- Bottom four feet of main stem and zone of rapid taper (ZRT) in roots stretching out four feet. NO COMPROMISE -- NO DOUBT

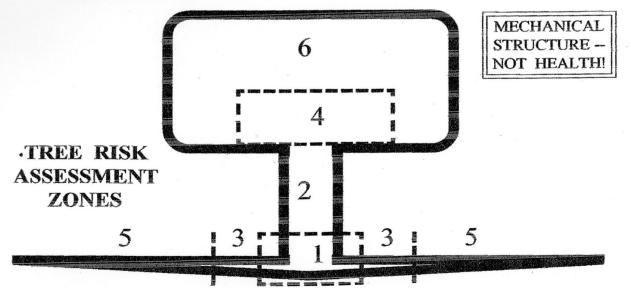
- ZONE 3: PRIMARY ROOT SUPPORT (out to 1/2 the drip line)
- ZONE 4: PRIMARY BRANCH SUPPORT (major branch base area plus the basal 1/3 of their length)

Faults in zones two, three, and four are correctable with large inputs of time, money, materials and technical maintenance. Corrective measures may represent a notification of problems.

ZONE 5:REMAINDER OF WOODY ROOTS (out to 1.5 times the dripline)ZONE 6:REMAINDER OF CROWN

Zones five and six are not of primary structural concern but any faults still represent significant risks

Criteria: When three significant simple faults that could lead to catastrophic loss are identified (in zone order), or one significant compound fault that could lead to catastrophic loss is identified, stop and assess targeting aspects of the area, and reexamine site management objectives to determine a hazard designation and removal priority. Examine tree from at least three sides.



## 4.1 CDFA Weed Observation and Monitoring Form

Bold line items (also asterisked) are required; other lines are optional.

	METADATA
Collection date (mm/dd/yyyy)*	
Observer name*	
	Address:
	City: State: Zip:
Observer contact information*	Phone: Email:
Source of the data*	Organization name or WMA Code:
Hand-annotated map ID	
	SITE DESCRIPTION
Site name or ID*	
Site address or other description	
State*	
County*	
National ownership*	
Local ownership	Landowner name:
Quad name	
HUC number	
Land use type	Ag Rangeland Rural Res. Urban Indust/Comm. Other
Invaded vegetation type	Forest Woodland Chap/Scrub Grass Herb Aquatic-Fr Aquatic-Sa Marine
Gross Area	Area: sq. ft. sq. m sq. mi. acres ha
Disturbances & impacts	
Associated species	
	WEED DESCRIPTION
Weed genus and species*	
Weed common name(s)	
Presence or Absence*	P A
Infested area*	Area: sq. ft. sq. meters sq. mi. acres ha
Canopy Cover*	Choose one: <1% 1-5% 5-25% 25-50% 50-75% 75-95% 95-100%
Appearance/phenology	Circle any: germ'g./early growth new growth flowering seeding senesc. dead
Distribution pattern	Circle any: clumpy scattered patchy scattered even linear
Photo documentation	(Use table on back to log photos)
	Weed Location
Geo Feature type*	Circle one: Point Polygon Line
	GPS waypoint or feature ID:
Geographic location*	Coords. (if point): X: Y:
Coordinate system*	UTM Zone: Lat/Long dec. degs Other (specify):
Datum*	WGS 84/NAD83 Other (specify):
Location offset	Distance: feet meters Bearing/direction:
Location data accuracy*	Choose one: <1m 1-5m 5-15m 15-100m 100m-1km 1km-10km >10km
Locality description	
Distance to water	Est'ed distance: Horiz or Vert? Units:

	Photo Log					
Photo #	GPS waypoint or feature #	X Coordinate	Y Coordinate	Bearing or Direction	Feature/Notes	

Notes

Attach this form to hand-drawn map and write the date, observer name, and the site and feature numbers on the map for easy cross-referencing.

# SECTION 2: SHARED DATA STANDARDS

**SECTION CONTENTS:** 

- 2.1 BACKGROUND ON SHARED DATA STANDARDS
- 2.2 CORE WEED INFORMATION TO COLLECT
- 2.3 FORMS FOR DATA COLLECTION
- 2.4 STORING DATA IN SPREADSHEETS, DATABASES, AND FILING CABINETS

## 2.1 Background on shared data standards

Data standards are necessary when data is being collected that may potentially be shared with others or combined with data collected at other times. A common format allows data collected by different organizations to fit together with a minimum of effort. In addition, established data standards help new data collection projects avoid many common mistakes.

In the overall effort to control weeds, there are some very compelling reasons for sharing data, from the regional level to the global level.

We know that weeds do not recognize property lines or jurisdictional boundaries. For regional weed managers to work effectively with different property owners and neighboring jurisdictions, it is important to be able to share inventory and mapping data.

By definition, invasion by alien species is a global problem. Ideally, invasive plant control would be supported by constantly updated information on the big-picture status of invasions. In order to gain full perspective on the movement and density of invasive species, we need a large number of surveyors and a means for rapidly combining their observations into a common database. With enough data and the ability to share it quickly, valuable new information services can be created, such as early alert systems and predictive modeling. These will enable better-informed weed management decisions, and also present political decision makers with a more clear idea of the threat posed by invasive plants.

There is widespread recognition among land management agencies that sharing invasive species data is of the utmost importance for stemming the tide of this environmental catastrophe. This consensus is evidenced by the recent proliferation of national and international declarations, groups, and efforts toward the goal of sharing and combining data. The Federal Interagency Committee for the Management of Noxious and Exotic Weeds (FICMNEW), the Global Invasive Species Programme (GISP), and the many regional Exotic Pest Plant Councils are just a few of the groups that have worked on standards and examples of data sharing.

Many of these programs have begun to develop online databases, and there is a concentrated effort to coordinate the rapid, open exchange of data on a global scale. Data standards are at the core of this work.

NAWMA, the North American Weed Management Association, has developed a weed mapping content standard called *The International Standards for Inventory, Monitoring, and Mapping of Invasive Plants.* The data standards presented in this section of the handbook for California weed mappers is based on the NAWMA standard with the addition of a data structure and the keywords and pick-lists that will be useful in California. The table in Section 4.2 ("A Comparison of the NAWMA and CDFA Data Standards") shows the two data standards side by side.

## 2.2 Core weed information to collect

The data for which we need a standard is straightforward and contains those elements everyone will want to collect: what weed was observed, how much of it there is, where it is, who owns the land, who saw it, when they saw it, and how accurately they mapped it. The role of a standard is to make this data collection consistent across observers and organizations.

The following describes the standard data content elements that we have developed for California weed managers. The first part of the list describes categories you will need to collect when in the field. The second part of the list describes categories that could be recorded in the office, whether before the field outing or upon returning. See also Section 4.3 "Summary of Minimum Requirements for Weed Mapping."

#### In the field

*Collection Date:* The full date on which the infestation was observed should be written on all paper forms in the format YYYYMMDD (or one you could convert to that format when it comes time to share the data). If you are using a GPS unit, the date will be automatically stored with each observation.

## KINDS OF DATA STANDARDS

These standards help different organizations combine datasets and analyze them together meaningfully.

#### Content standards

These give consistency to the names and definitions of data fields and the attributes assigned to them. They make it possible for different data collectors to "speak the same language."

#### Sampling protocol

These give guidance for collecting field data. which helps multiple observers create consistent datasets.

#### Data structure

This standard specifies the way data is organized in a database. It makes it easier to combine data from different kinds of databases into one database.

#### Data format

This is a standard for actual file type, which makes combining data much easier. The "Shapefile" format is a common example for ArcView GIS users. "XML" is a more generic format that is not associated with a particular software package. *Observer:* The full name of the person who observed the infestation should be written on all paper forms.

*Site Name or ID, any site description information:* Record a name for the site or an alphanumeric identifier and also put this on your hand-drawn map. Make any observations describing the site while there.

*Genus/species:* The scientific name for weeds should be used to avoid confusion. If you are using a mapping-grade GPS with a data dictionary, or digital form, you can create a menu to choose from. The Jepson manual, the CalFlora database (online at <www.calflora.org>), or the Integrated Taxonomic Information Systems (ITIS) can be used as sources of current scientific names. If you use a common name in the field you will need to translate it when you are back in the office.

*Presence/Absence:* This is implied as "presence" when there is information describing an infestation (such as cover class), but a simple absence report can be made for an area as well by stating the species and indicating the location, and saying it is "absent."

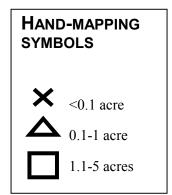
*Gross Area and Infested Area:* "Gross area" is an estimate of the size of the general region where the weeds occur and may be used when precision is either unnecessary or impractical (see further discussion of this in the Yellow starthistle case study, Section 4.8). An example of the use of gross area is the identification of a 40-acre property that has weeds in large patches, but also has un-infested areas. The fact that the observer put "40 acres" in the gross area field correctly conveys the fact that a detailed survey was not done. This associated with average cover density of the weed is a quick way to note the presence and severity of an infestation.

In contrast," infested area" is an estimate of the size of the *specific* region in which the weed occurs, mapped more carefully by thoroughly observing the site and estimating the area of the land covered by the weed (whether it's sparse or dense cover).

When hand mapping, we recommend the use of point symbols (shown at right) to mark infestations under five acres. For infestations five acres and larger, draw the areas onto the map (assuming you are using a map with 1:24,000 scale such as a USGS topo quad). Avoid drawing areas or lines if there are not clear reference features by which to judge location, as it may be misleading. If you use colors or abbreviations as codes (to indicate the type of weed, for example), be sure to write a key to the code on every document where the code is used.

If you are using a GPS unit to measure location, you should record the size of the infestation in acres.

*Canopy Cover:* Canopy cover is percent of the infested area covered by the weed being surveyed. One way to think of this is to visualize all of



the weeds pushed together until their canopies touch, and then estimate this area and the portion of the overall infested area that this represents. Classify the cover into one of the categories listed at right.

*National Ownership, Local Ownership:* Record the national ownership code, as listed in the table on the following page. State ownership codes may also be developed in the future. Local ownership can be recorded as the name and contact information of the party who owns the property for future reference.

*Geographic Location:* If you are hand-mapping, indicate on your map with the desired symbol and give the feature an identifying alphanumeric identifier. Put this feature ID into the form that contains the descriptive information for that location. If you are writing down coordinates from a GPS unit, be careful of transcription errors as small numerical mistakes can translate into big geographic errors. It's helpful to stick with one coordinate system displayed in a consistent format, know what those numbers should look like, and always mind your decimals.

If you are storing points in your recreation-grade GPS unit, or points, lines, and polygons in your mapping-grade GPS unit, your location data is stored digitally. GPS data is automatically stored by the unit in the pre-chosen format, the default of which is usually latitude and longitude in WGS84. Once this is downloaded to your computer, you can convert the data into any projection you need. If you are creating polygons or line features with a GPS, the data is more complex and will be handled entirely in its digital form.

*Coordinate System and Datum:* Record the coordinate system in which you are recording data. This includes the projection and datum—for instance, UTM Zone 10 NAD83. It's best to set this up in advance, whether by choosing the coordinate system that is displayed by the GPS unit, or decided how coordinates will be taken from a map.

*Location Accuracy:* Location accuracy refers to the closeness of the coordinates recorded to the real-world location (which can also thought of as the "fuzziness" of the data). High accuracy in location reporting is not always necessary or desired- the important thing for future data interpretation is to record it, whether it is high or low! Location accuracy takes both the accuracy of the mapping method and the intended exactness of the location data into account for a number that indicates how much error or fuzziness should be considered part of the data. Note: "precision" and "accuracy" are different- precision essentially refers to the number of decimal places, so a very high-precision GPS instrument can give you a high-precision location number with 6 decimal places, but still be inaccurate as far as its closeness to the real-world location you're trying to record. See the paragraph on accuracy in the GPS section (3.2) for information about factors that effect accuracy.

## **COVER CLASSES**

#### (BASED ON DAUBENMIRE)

Cover Class	Range of Coverage	Midpoint of Range
TRACE	<1%	
1	1- 5%	2.5%
2	5- 25%	15.0%
3	25 - 50%	37.5%
4	50 - 75%	62.5%
5	75 - 95%	85.0%
6	95 - 100%	97.5%

## NATIONAL OWNERSHIP CODES

Listed below are codes that are likely to be useful in California. For a full list, see Appendix C of the NAWMA guidelines at <u>www.nawma.org</u>. This webpage includes information on specific tribal codes for reservations.

ARS	Agricultural Research Svc.
ALOT	Native American Allotments
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Mgmt.
CGOV	County-owned lands
DOD	Department of Defense
NPS	National Park Service
NRCS	Natural Resources
PVLA STAT TNC TRIB UNIV USFS USFW USGS USOT	Conservation Svc. Privately-owned lands State-owned lands The Nature Conservancy Tribal lands University lands US Forest Service US Fish & Wildlife Service US Geological Survey US Government - Other

*Location Offset:* Location offset is the direction and distance to the target location. Sometimes you can't stand right on the clump of weeds, but you'd like to record which way and how far to look when you get to that waypoint.

*Weed Description Information:* The parts of the form that describe the weed infestation, appearance/phenology and distribution pattern, along with documenting photos, should of course be filled out while in the field. Use the pick-lists for descriptors as presented in the sample field form.

### Examples of error estimates

1) Joe Weedman observed some *Arundo donax* while driving to work. In the office, he made a report, assigning an approximate location for the infestation by taking coordinates from a quad map shown in TOPO! software. Joe decides to assign an error of a few hundred meters to the observation.

2) Joe returns to the infestation a week later with his Trimble Pro-XRS mapping-grade GPS receiver. He maps the single clump of plants by standing right in the clump. The GPS point is meant to indicate the exact location, and under perfect conditions this instrument can provide submeter accuracy, but Joe couldn't stay long to get the recommended 180 readings, and his PDOP was high. He decides that an error of about 10 meters is appropriate.

### In the office

Make sure to record the following information. It is not critical to record this information in the field—it can be done in the office (promptly) after the field work.

**Observer Contact Information:** This may be the same as the organization contact information, and so you won't probably need to write it on every form. The purpose of this information is to allow for contacting the observer should there be questions about the data later on. Keep contact information up to date.

*Source of Data:* Record the full name of the agency or organization responsible for collecting the data. If the agency has a national ownership code, that may be used. Again important mostly when you decide to send the data to someone outside the organization.

*County:* Record the county name, or the state code, or the six-digit FIPS (Federal Information Processing Standards) code for your county. A table listing these two systems of codes along with the county names can be found in Section 4.6.

## **ERROR ESTIMATES**

Use these broad classes:

<1m

1-5meters

5-15 meters

15-100 meters

100 meters-1 km

1 km-10 km

>10 km

The accuracy ranges from 1 km to more than 10 km are useful for indicating that a data point represents the center of a large area in which the weed is known to be present. *HUC Code (for aquatic weeds only):* Look up and record the Hydrologic Unit Code for the watershed in which the aquatic weed occurs. See the USGS HUC website at <a href="http://water.usgs.gov/GIS/huc.html">http://water.usgs.gov/GIS/huc.html</a>.

## 2.3 Forms for data collection

As mentioned above, we've included with this handbook a model form for collecting data in the field (found in Section 4.2). The form is designed for recording all of the above information. The form can be used "as-is" to collect this data together with hand-drawn maps or GPS data (or both). The form can also be used as a template for designing your own custom paper form, GPS data dictionary, or electronic form on a PDA.

# 2.4 Storing data in spreadsheets, databases, and filing cabinets

## Storing the data from the field forms

Even if you are doing your mapping entirely on paper, it is suggested that you enter your weed observation data into a simple spreadsheet, and when you do that to create the metadata that is so important for keeping track of it all. Taking this step *as soon after collecting the data as* possible is a good data management habit that will serve you well. On the disk at the back of the handbook, we've included an Excel workbook file containing a group of simple spreadsheets with the basic fields for recording data from the paper field forms. The fields match the standard as discussed above. Doing this will not only help you know what data you have, it will enable you to share your information with others.

The sheets in the Excel workbook are called: Observer Contact Information, Metadata and Site Description, Weed Observation, and Photo Log. All of these are sections in the standard, and could have been put into a single spreadsheet. The reason for creating separate sheets is to avoid having to enter data many times when it can be entered once and used multiple times by referencing its ID number- the basis for a relational database. Until a database application is developed with forms for data entry, it is up to you to use the keywords recommended in the model form. The workbook and its spreadsheets could form the template for such a database in software such as MS Access. ArcView can be set up to communicate with the Access database tables, allowing for the descriptive records to integrate with the geographic information display and analysis abilities of a GIS. Digital forms would help with mistakefree data entry (and auto-generation of the all-important IDs). These developments are likely to be done in the near future for all to use.

Mail to: California Natural Diversity Database Department of Fish and Game 1807 13 <sup>th</sup> Street, Suite 202 Sacramento, CA 95814 Fax: (916) 324-0475 email: WHDAB@dfg.ca.gov Date of Field Work mm/dd/yyyy: California Native	Elm Code EO Index No	For Office Use Only Quad Code Occ. No Map Index No	
Scientific Name:		<u> </u>	
Common Name:			
Species Found?          Yes       No         If not, why?         Total No. Individuals          Subsequent Visit?      yes         Is this an existing NDDB occurrence?          Collection? If yes:          Number       Museum / Herbarium	□no □unk. E-mail A	r: :: Address:	
Plant Information Anim	al Information		
	adults # juveniles	# larvae # egg masse	
Location Description (please attach map <u>AND</u>	<u>/OR</u> fill out your	choice of coordinates, b	pelow)
County: Quad Name: TR Sec, ¼ of ¼, Meridian: H TR Sec, ¼ of ¼, Meridian: H Datum: NAD27 NAD83 WGS8 Coordinate System: UTM Zone 10 UTM Zone 11 [ Coordinates: Easting/Longitude Habitat Description (plant communities, dominants, associates)	□ M□ S□ Source □ M□ S□ GPS Ma 4 □ Horizon ] OR Geographi Northing/L	Elevation: of Coordinates (GPS, topo. map & ake & Model tal Accuracy ic (Latitude & Longitude) 🔲 atitude	k type):
Other rare taxa seen at THIS site on THIS date:			
Site Information       Overall site quality:       Excellent         Current / surrounding land use:       Visible disturbances:         Threats:       Comments:	Good	∏Fair	Poor
Determination: (check one or more, and fill in blanks)         Keyed (cite reference):         Compared with specimen housed at:         Compared with photo / drawing in:         By another person (name):         Other:		Photographs: (check one or more) Plant / animal Habitat Diagnostic feature May we obtain duplicates at our expense?	Slide Print Digital

# California Natural Community Field Survey Form

Mail to:	<b></b>		-1
Natural Diversity Database	Source Code	For office use or	Quad Code
California Dept. of Fish and Game 1416 Ninth Street			
Sacramento, CA 95914	Community Code		Occ #
(916) 324-6857			000 #
(	Man Index #	Und	late Y N
Please provide as much of the following		000	
information as you can. Please attach a			
map (if possible, based on the USGS 7.5	minute series) showing the	e site's location and	boundaries. Use the back if
needed.	, C		
Community name:			
Reporter:	E-mail Address:		Phone
Af filiat ion and Address			
Date of field work:	County:		
Location (Please attach/submit ma	ap):		
Quad name:	TR	1/4 of 1/4 sec	Meridian
Quad name: UTM Zone Northing Landowner/Manager: Elevation:Aspect:	East in a		
Landowner/Manager:		F	Photographs: Slide Print
Elevation: Aspect:	Slope (indic	ate%or°)	Drainage:
Sit e ac reage:		<u></u>	Dramago
Evidence of disturbance or threats:			
Current land use:			
Substrate/Soils:			
General description of community:			
Any Special Plants or Animals present:			
Successional status/Evidence of regenera	ation of dominant taxa:		
Overall site quality: Excellent 🔲 Good 🗌	] Fair 🔲 Poor 🔲 Cor	nments (below):	
Basis for report: Remote image  Bino	cular/Telescopic survey 🔲	Windshield survey	🔲 Brief walk-thru 🔲
Detailed survey 🔲 Other 🗌			
Relevé: In the space below, indicate eac	ch species cover % within t	he follow ing grow th	form categories:
			e/Crominaida
Trees	<u>Shrubs</u>	Herb	<u>s/Graminoids</u>

Trees	<u>Shrubs</u>	<u>Herbs/Graminoids</u>



## General Instructions for Filling Out California Natural Diversity Database Field Survey Forms

The California Natural Diversity Database (CNDDB) is the largest, most comprehensive database of its type in the world. It presently contains almost 40,000 site specific records on California's rarest plants, animals, and natural communities. The majority of the data collection effort for this has been provided by an exceptional assemblage of biologists throughout the state and the west. The backbone of this effort is the field survey form.

Although the future lies in the digitally submissible field form and map, this system is not yet in place. Enclosed are copies of CNDDB paper field survey forms for species and natural communities. The CNDDB would appreciate your field observations on rare, threatened, endangered, or sensitive species and natural communities (elements) submitted to us on these forms.

To determine what species and natural communities are of concern to us, refer to our free publications for lists of which elements these include: *Special Vascular Plants, Bryophytes, and Lichens List, Special Animals List,* and *Natural Communities List.* Reports on multiple visits to sites that already exist in the CNDDB are as important as new site information as is it helps us track trends in population/stand size and condition. Naturally, new site information is also welcomed.

Enclosed is an example of a field survey form that includes the information we like to see. Note that you may <u>either</u> submit a copied portion of a USGS topographic quad map with the population/stand outlined or marked (see back of enclosed example), <u>or</u> provide a set of coordinates (GPS coordinates, TRS information, or other). You do not have to submit all of this information; just one will suffice, and generally the best choice is to submit a map. Furthermore, you do not have to fill out every box on the form; just fill out what seems relevant to your site visit. Remember that your name and telephone number and/or email are very important in case we have any questions about the form.

If you are concerned about the sensitivity of the site, remember that the CNDDB can label your element occurrence "Sensitive" in the database, thus restricting access to that information.

The CNDDB is only as good as the information in it, and we depend on people like you as the source of that information. Thank you for your help in improving the CNDDB.

Please see also, <u>Instructions for Collecting Information with Global</u> <u>Positioning Systems for the California Natural Diversity Database</u>.

Mail to: California Natural Diversity Database Department of Fish and Game		For Office Use Only				
1807 13 <sup>th</sup> Street, Suite 202 Sacramento, CA 95814		Quad Code				
Fax: (916) 324-0475		Occ. No				
Date of Field Work:8102000	EO Index No.	Map Index	No/			
Reset California Native	Species Field	Survey Form	Send Form			
Scientific Name: Lupinus padre-crowleyi						
Common Name: Father Crowley's lupine						
Species Found?		r: Your Name Here				
Total No. Individuals $\underline{*10}$ Subsequent Visit? $\Box$ yes		: Your Organization and Add	dress Here			
Is this an existing NDDB occurrence? 8 Yes, Occ. #		Sown, State     Zipcode Here       ddress:     youremail@here				
Collection? If yes: Museum / Herbarium		(000) 000-0000				
Number Museum / Herbanum						
Plant Information Anim	al Information					
Phenology: % 100 %%	adults # juveniles	# larvae # egg ma	asses # unknown			
	ding wintering b	urrow site rookery nest				
Location Description (please attach map AND	<u> </u>	•	0			
Along Shepherd Pass trail, between the first and second saddles ab	ove the main switchbacks	from Symmes Creek to the top of	-			
levels out and begins to drop down towards Shepherd Creek draina County: <u>Inyo</u>	-	ow. .: <u>USDA, Inyo National Fores</u>	t			
Quad Name: <u>Mount Williamson, CA</u>		Elevation:				
T 14S R 34E Sec 20 , NW 1/4 of NE 1/4, Meridian: H		of Coordinates (GPS, topo. ma				
TR      Sec, ¼ of¼, Meridian: H         Datum:       NAD27         VAD27       NAD83		take & Model <u>Garmin 12</u> data Accuracy <u>3-5 meters</u>				
Coordinate System: UTM Zone 10 UTM Zone 11	_	c (Latitude & Longitude)	meters/feet			
Coordinates: Easting/Longitude E383883.83		atitude <u>N4063216.65</u>				
Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):						
Moderately steep, east facing slope; sandy granitic soil; sagebrush scrub: Artenisia tridentata, Eriogonum umbellatum, Arctostaphylos patula, Symphoricarpos sp., Angelica lineariloba						
Other rare species? None seen.						
<b>Site Information</b> Overall site quality: Current / surrounding land use: Wilderness; hiker trail passes adjace	Good Good	Fair	Poor			
Visible disturbances: Trail work could potentially impact population; however, Inyo NF standards call for surveys prior to any ground disturbing activities.						
Threats:						
Comments: *Population was located late in the day; no count was conducted, but <10 plants were visible from the trail, Further survey work needed. **Going up the trail towards the pass, the plants are located above the trail, just before the 2 big Jeffrey pines below the trail						
<b>Determination:</b> (check one or more, and fill in blanks)		Photographs: (check one or mo				
		Plant / animal Habitat				
Compared with photo / drawing in:		Diagnostic feature				
By another person (name):		May we obtain duplicates at our expense?	✔yesno			

