

Fort Ord Prescribed Burn Program

2013

July 16, 2013

Presentation by:

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Prescribed Burn Manager**

**Chenega Global Services for :
Fort Ord BRAC Office and Presidio of Monterey Fire Department**

Fort Ord History

- Fort Ord was in operation from 1917-1994
- National Priorities List site (EPA Superfund) - 1990
- Identified for Base Closure - 1991
- Began Munitions Investigation - 1993
- Prescribed Burning Began – 1994
- Munitions Response Remedial Investigation/Feasibility Study (MR RI/FS) process began 1998

Background

Impact Area Remedial Action CERCLA Cleanup Process:

- Habitat Management Plan / Biological Opinions
- Remedial Investigation / Feasibility Study (RI/FS):
 - What is required for clean up and a review of all viable methods
 - Vegetation clearance methods studied as part of cleanup process
- 2008 Track 3 Impact Area Record of Decision (ROD)
 - Clean up process selected including vegetation clearance method
- Remedial Design / Remedial Action Work Plan (RD/RAWP)
 - Clean up strategy: Approx 10 years, transfer to BLM for public use

Why We Burn

- Part of the selected remedy in the CERCLA ROD
- To clear vegetation so that ordnance removal can be conducted safely, remove ordnance for safe reuse of property.
- Burning promotes healthy Central Maritime Chaparral habitat which is home to many rare, threatened and endangered species. (Cutting is detrimental to chaparral recovery.)
- Required for Army predisposal actions by Biological Opinions issued by U.S. Fish and Wildlife Service in accordance with the Endangered Species Act and for mitigation measures within Critical Habitat for Monterey Spineflower.

Why We Burn

Monterey Peninsula Herald

MONTEREY, CALIFORNIA, MONDAY, APRIL 18, 1949.

Children Apparently Took Grenades In Restricted Area

A spent grenade cartridge that blew up and injured two nine-year-old children Monday afternoon was apparently taken by them from a restricted area on the post sometime last week, the Fort Ord Information Office reported today.

East Monterey Boy Loses Legs in Shell Explosion at Ord

MONTEREY PENINSULA HERALD, MONTEREY, CALIFORNIA, MONDAY, APRIL 25, 1

"Dud" Kills Boy of 13

"Dud" Shell Kills Boy Thirteen

11-Year-Old Brother Critically Injured

Visit to Fort Ord Artillery Range Ends in Death, Injury

An excursion to the "forbidden zone" of a Fort Ord artillery range cost the life of a 13 year old Seaside boy and left his 11 year old brother fighting an apparently losing battle for life in a military hospital here today.

Boy, Girl, 9, Wounded By Exploding Grenade

Two nine-year-old children are hospitalized with shrapnel wounds today following an accidental explosion yesterday afternoon at Fort Ord, the Fort Ord Information Office reported.

Seaside Boys Awarded \$185,000 by Federal Court for Loss of Limbs in Ord Accident





Monterey Spineflower



California Tiger Salamander



Monterey Ceanothus



Monterey (Toro) Manzanita



Sand Gilia



Hooker's Manzanita



Black Legless Lizard



Coast Wallflower



Seaside Bird's Beak



Eastwood's Ericameria



Sandmat Manzanita



Dusky-footed Woodrat Nest



Coast Horned Lizard

Maritime Chaparral

Rare, Threatened and Endangered Species

Burn Goals

Goal 1: Complete prescribed burn operations with no injuries.

Goal 2: Hold the burn within the established containment lines located around the burn units.

Goal 3: Minimize smoke impacts.

Goal 4: Clear vegetation to facilitate a safe MEC remedial action.

Goal 5: Minimize damage and promote conservation of rare, threatened, and endangered species.

When Do We Burn?

1. Burn Season: July through December
 2. Specific Weather Conditions (Burn Prescription)
 3. Availability of Local Emergency Services
 4. Availability of Contract Resources
- *No Burn Days:*
 - *Certain Community Events* (Black Out Days)
 - *Red Flag Days* (drought + very low relative humidity + high/erratic winds)

Burn Prescription

ENVIRONMENTAL VARIABLES	CONSUMPTION RANGE	
Relative Humidity %	20	80
Temperature (F)	90	45
Live Fuel Moisture %	60	100
Projected Plume Height	1,500 ft	
Surface Wind Speed	7 mph – gusts NTE 12 mph	0 - <5 mph
Surface Wind Direction	Preferred: <i>otherwise:</i>	Light and Variable SE thru N to W
Transport Wind Direction	Preferred: <i>otherwise:</i>	Light and Variable SE thru N to W

On-Site Meteorological Equipment

Weather Stations

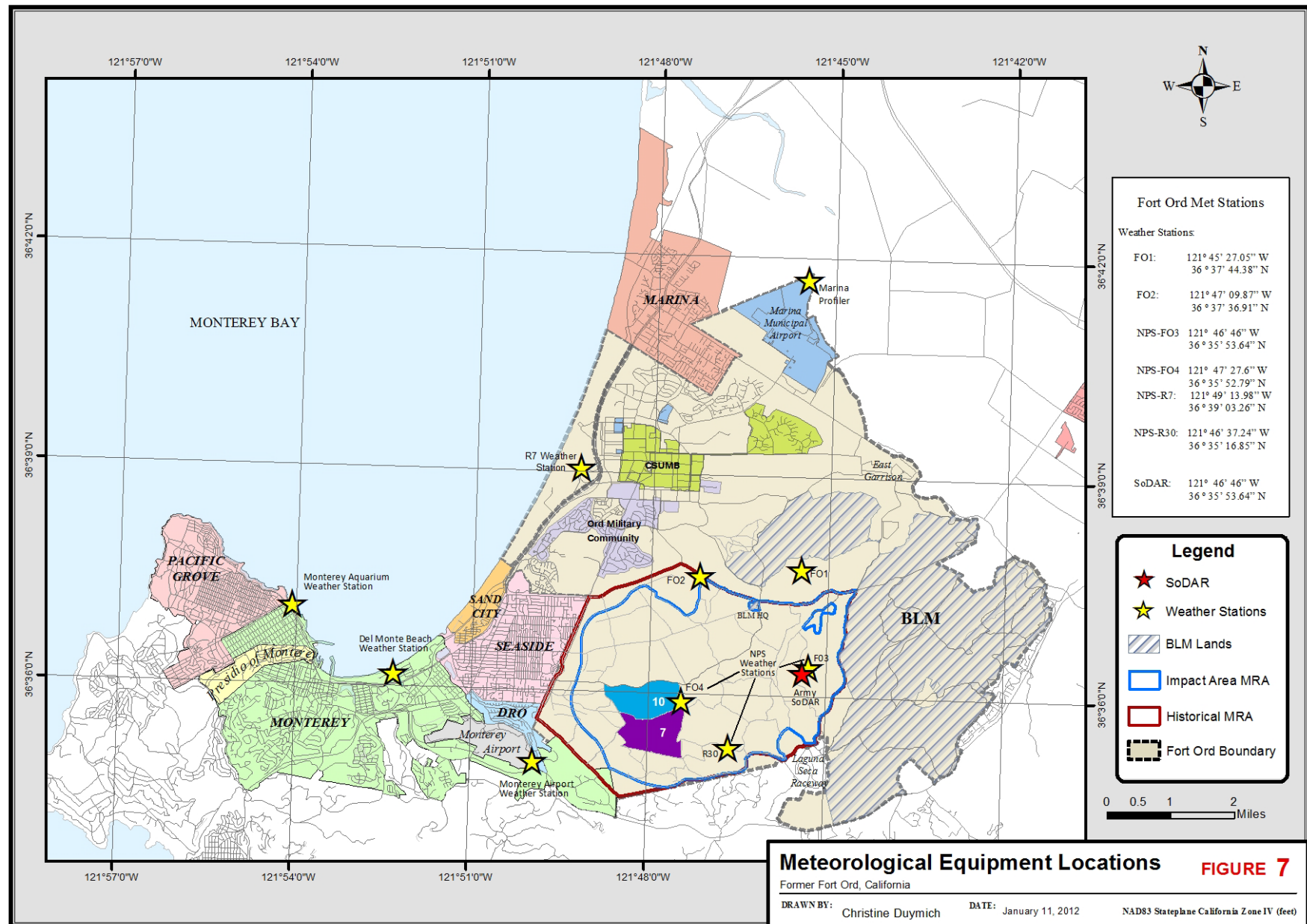


SoDAR

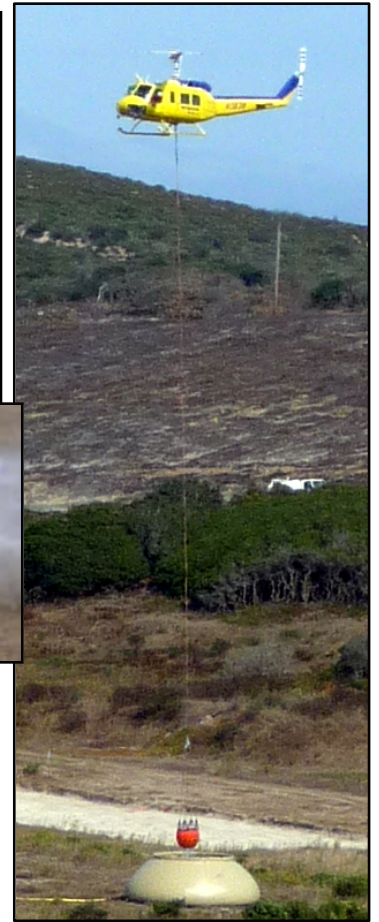
(Sonic Detection and Ranging system)



On-Site Meteorological Equipment



Water Resources



Helipad / Helitorch



Aerial Operations



Smoke Behavior

Plume Height:

Plume form with smoke rising vertically and convective inflow all around plume base sweeping smoke up into the column.



Smoke Behavior



These pictures, from 2010 burns, show a clear layer of air underneath the intact base of the plume.

These are ideal plume forms in that the plumes are aloft over population with the well defined base remaining intact.

The smoke plumes in 2010 got over 2,000 feet above the ground.

Smoke Behavior - Smoldering

Without the heat of the active ignition and/or active fire the residual smoke from the burn does not have the power to drive the smoke up into a vertical column structure and instead wafts into low lying valleys.

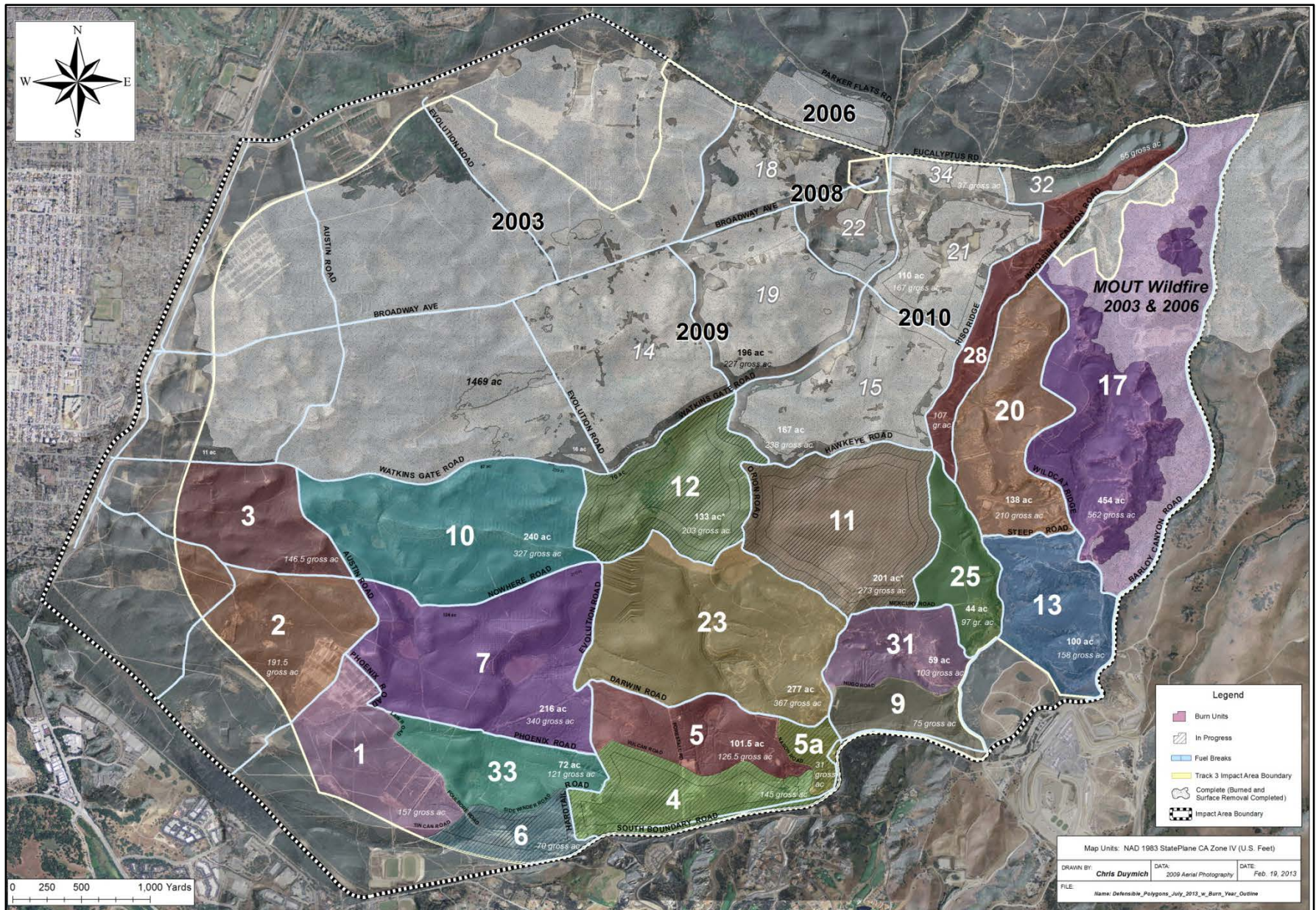


Plume Effects

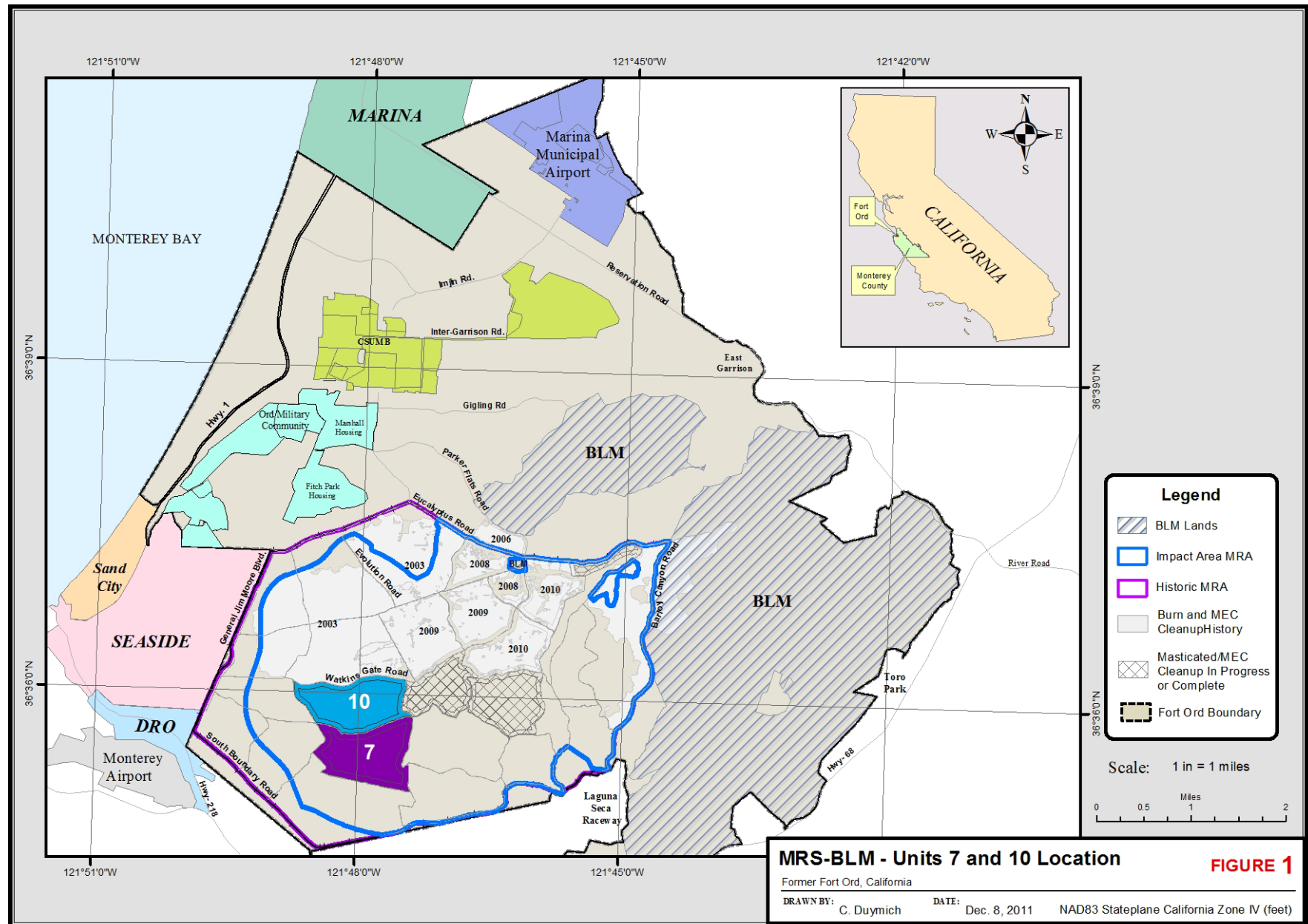
The two most common questions received on the Fort Ord Cleanup Hotline were regarding ash and the sun being temporarily obscured.



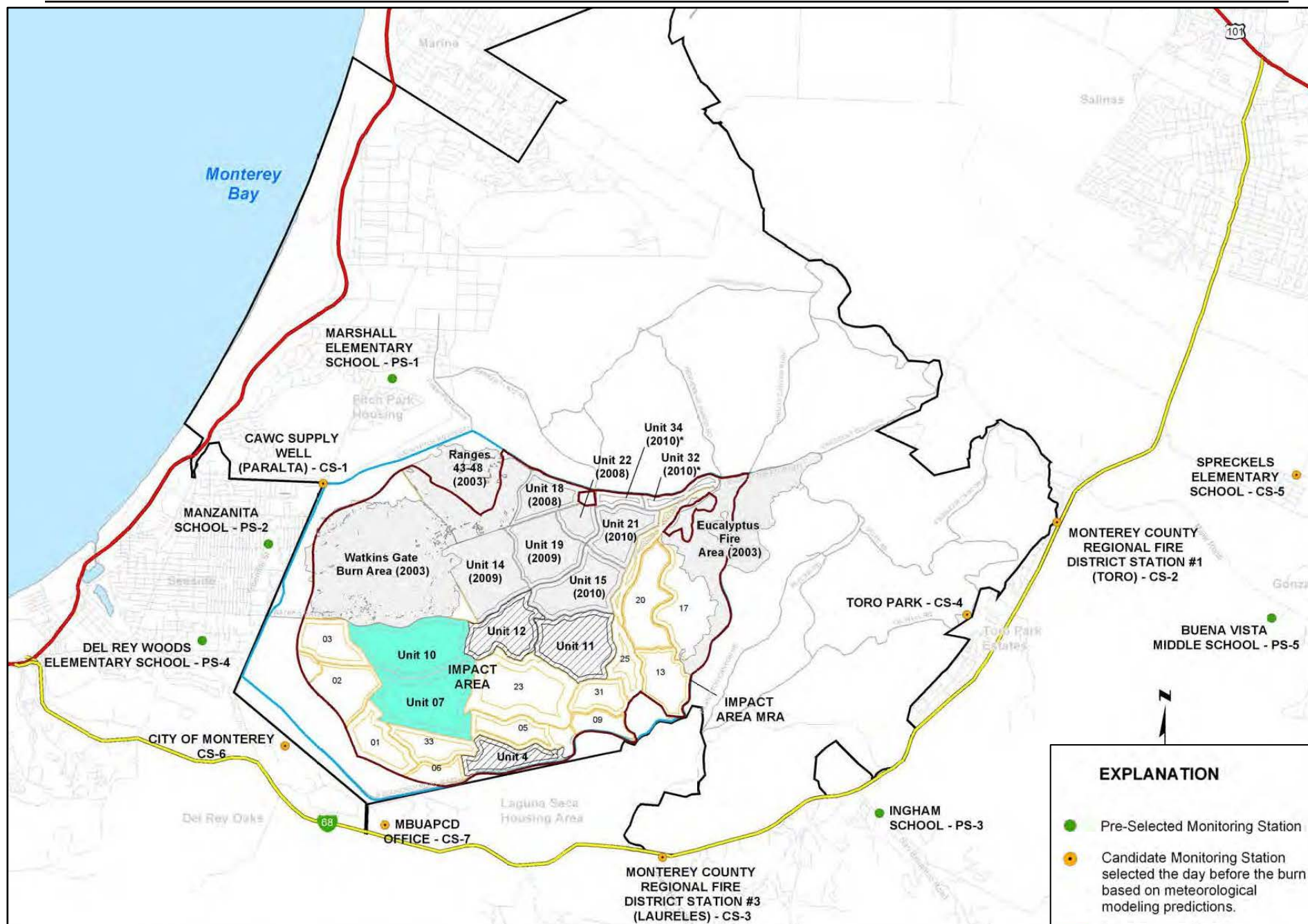
Burn Units



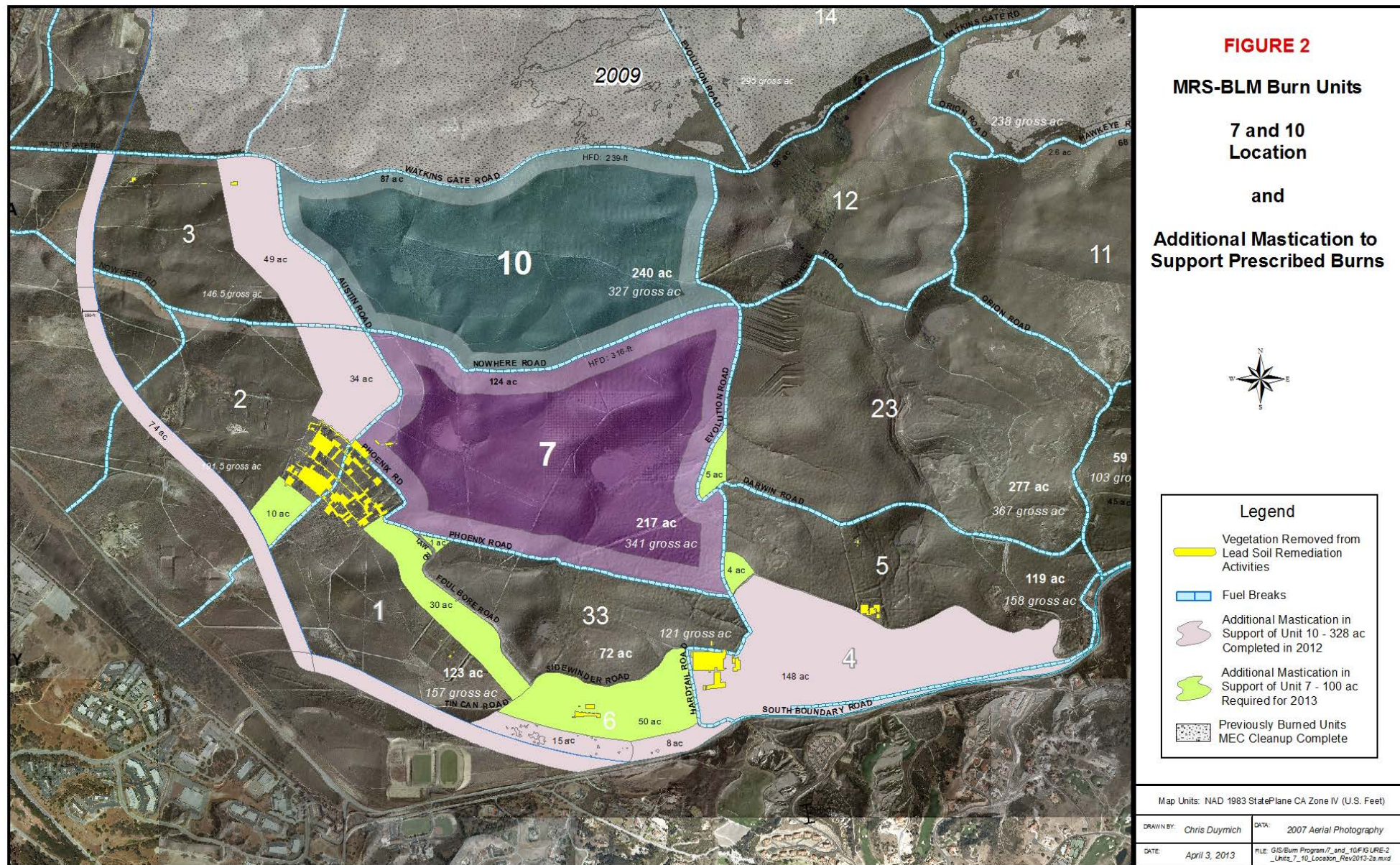
2013 Burn Unit Locations



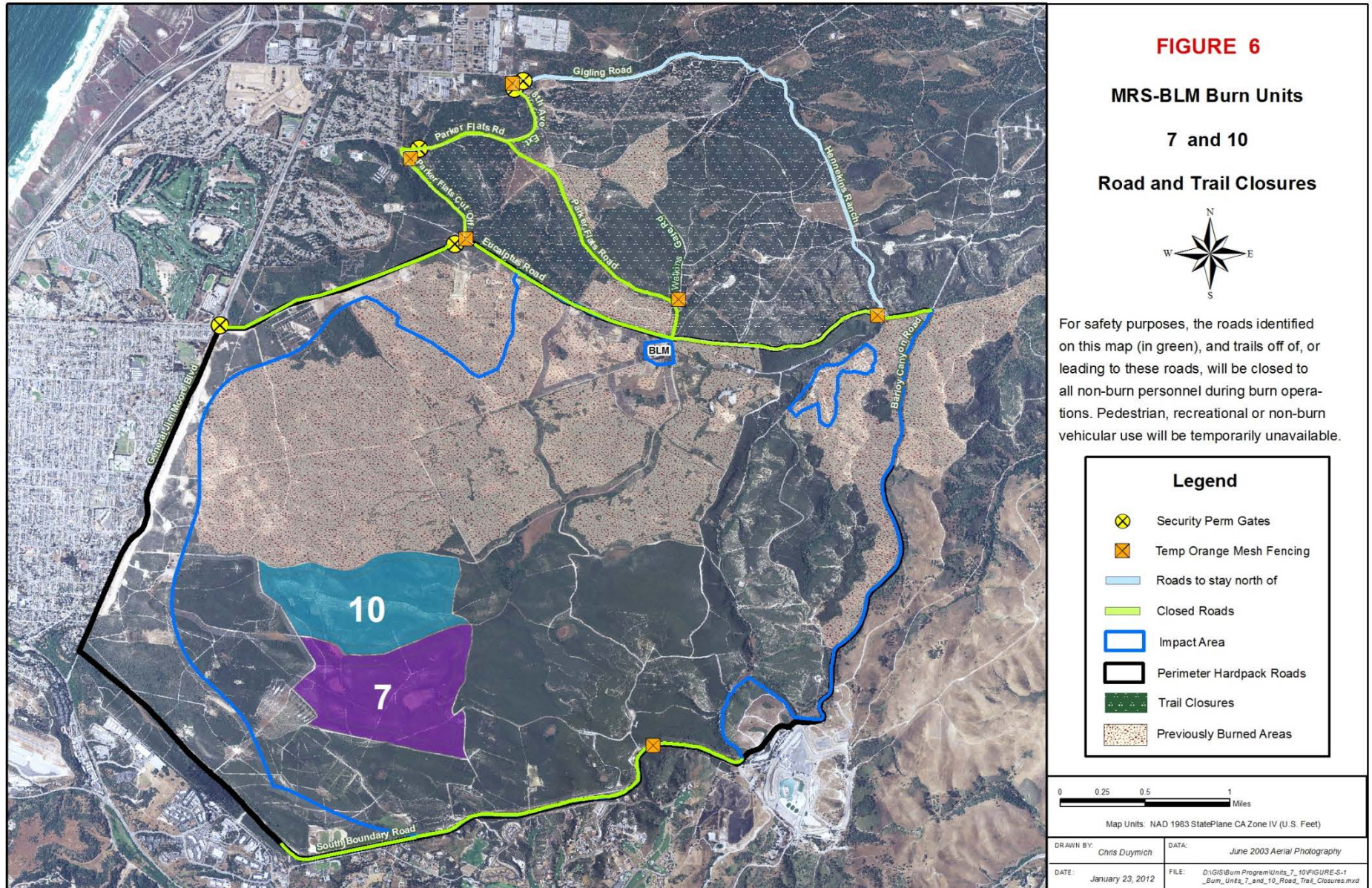
2013 Air Monitoring Locations



2013 Burn Unit Locations



Units 7 and 10 - Road and Trail Closures



Vegetation Cutting

Before



After



Related Documents

- **MRS-BLM Units 7 and 10 Prescribed Burn Plan**
 - Final (Revised) Issued April 2013 (OE-0764C)
- **Prescribed Burn Air Sampling and Analysis Plan, MRS-BLM Burn Units 7 and 10**
 - Final Issued July 2012 (OE-0764A – Attachment F)
- **Site Specific Work Plan, Munitions and Explosives of Concern Remedial Action, MRS-BLM Units 6, 7 and 10**
 - Final Issued July 2012 (OE-0765B)

Prescribed Burn Outreach

- Direct Notification Program
 - Participants receive personal notification at burn mobilization, ignition, and completion
 - Participants can receive notices via phone calls, texts , or e-mails, or all three, if that's their choice
- Other Community Outreach
 - Hotline operators and web updates
 - Press releases
 - Newspaper ads: Herald, Californian, and El Sol (in Spanish)
 - Work with RCI/Parks, Monterey County Health Department , and other community organizations
 - Phone calls to key individuals and agencies potentially affected by the burn operations

Updates available at www.FortOrdCleanup.com and **1-800-852-9699**

Former Fort Ord Environmental Cleanup

Search Using Google

Home ▪ News ▪ Event Calendar ▪ Prescribed Burns ▪ Property Transfer ▪ Document Review ▪ Administrative Record
Community Involvement ▪ Cleanup Programs ▪ Maps ▪ Fort Ord Primer ▪ Links ▪ Contact ▪ About

Thursday, July 11, 2013

Contact

Call [800-852-9699](tel:800-852-9699) for updates on the Army's cleanup activities. [Report suspected military munitions](#). Sign-up for [Military Munitions Recognition and Safety Training](#).

Event Calendar

Summary of upcoming events as posted in "[What Happens Next](#)"

Document Review



Access [Recent Documents](#) posted for public review or view [Reference Documents](#).

Administrative Record

The [Administrative Record](#) contains all the documents related the cleanup at the former Fort Ord. [Search](#) the Administrative Record or read more about the [Administrative Record repositories](#).

Fort Ord Primer

Read more about [general information and background history](#), including location,

This website is hosted by the U.S. Army to inform the community of environmental cleanup activities and the status of transfer of property at the former Fort Ord.



Detonation Update

Posted 7/11/2013

[Click here to read about Detonations](#).

There are no Army detonations scheduled for today (7/11/2013). For more information, call 1-800-852-9699.

For ESCA detonation updates, please visit www.fora-esca-rp.com or call 831-883-3506.

Community Involvement Workshop/Guided Bus Tours of Cleanup Sites: Postponed

Posted 7/1/2013

This has been prepared to notify you that our July 13, 2013, Fort Ord Cleanup Community Involvement Mobile Workshop has been postponed due to directed furlough.

We will reschedule this event sometime after September 30, 2013 or as soon as the furlough ends. If you are attending the Monterey County Fair on August 30, please stop by our information booth.

Prescribed Burns and Direct Notification Program

Posted 6/13/2013

The Fort Ord prescribed burn season begins July 1, 2013;

Prescribed Burns

Read the latest information about the [prescribed burn program](#) and [Direct Notification](#).

Property Transfer and ESCA



Information, [property parcels search](#), [ESCA link](#), and [Reuse Maps](#)

related to the closure and reuse of federal real estate at the former Fort Ord.

Community Involvement

See how you can get involved! Learn more about [public surveys](#), [meetings](#), attending tours, reading the Community Relations Plan and [factsheets](#), and [more...](#)

Cleanup Programs



Read about the various on-going cleanup programs,

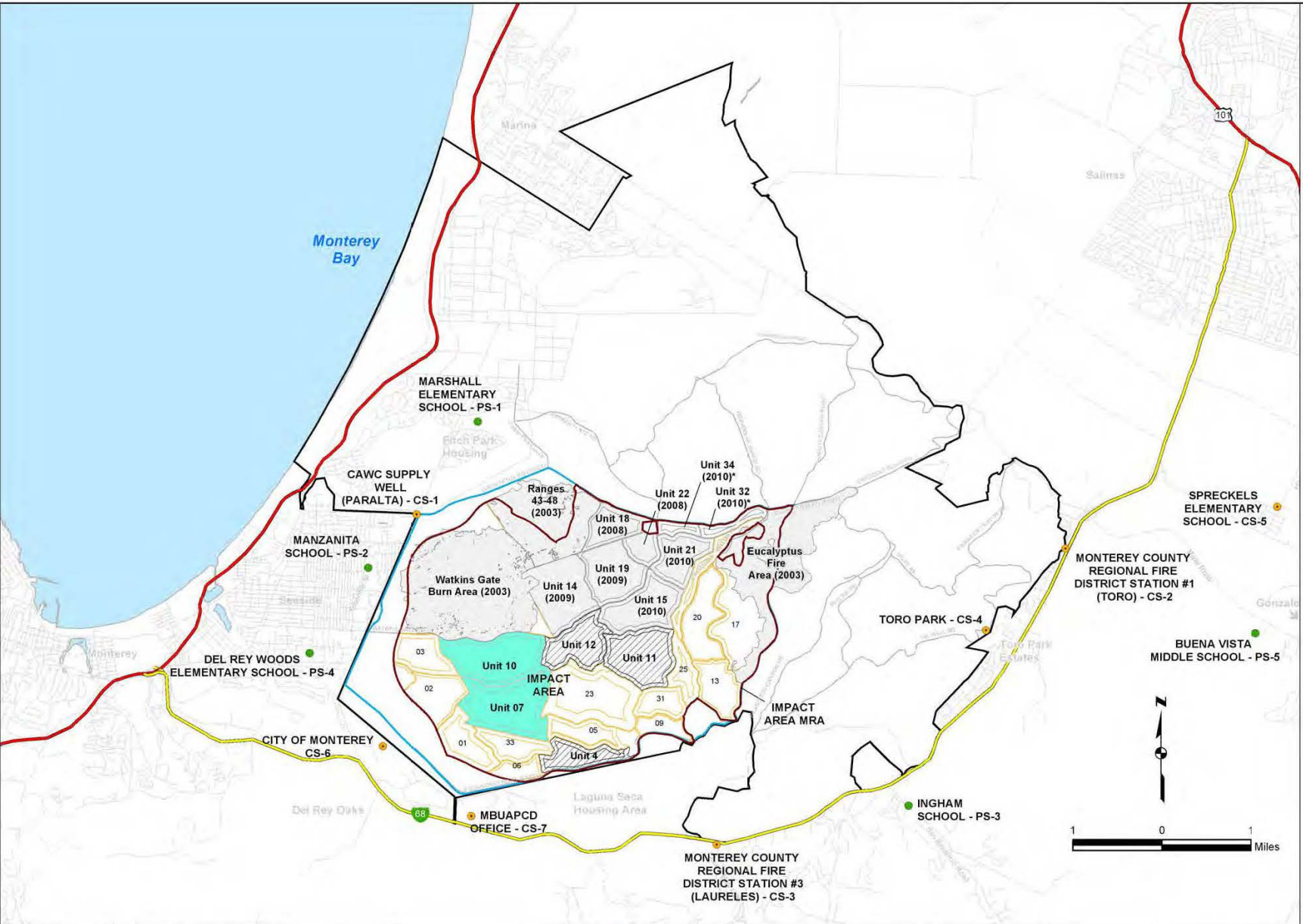
including the [Military Munitions Response Program](#) and the various [Superfund Actions](#).

QUESTIONS?

EXPLANATION

- Pre-Selected Monitoring Station
- Candidate Monitoring Station selected the day before the burn based on meteorological modeling predictions.
- 2012 Prescribed Burn Program Units
- Areas Previously Burned (Year)
- ▨ Areas in Progress
- Historic Impact Area
- Impact Area MRA
- Fort Ord Boundary
- Road Classification
 - Limited Access Highway
 - Highway
 - Roads

*Vegetation in these units was cut and then strategically burned as appropriate as part of the fuel break for Unit 21.



DRAWN: TJH	PROJECT NO: OD12162250.01.01
ENGINEER:	SCALE: AS SHOWN
CHECKED:	APPROVED:
DATE: 1/2012	DATE:



Prescribed Burn Air Monitoring SAP
MRS-BLM Units 7 and 10
Former Fort Ord, California

Air Monitoring Network
Units 7 and 10

PLATE

1