

Fort Ord: Challenges, Successes and Lessons for Communities

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Common Environmental Problems at Military Installations

- Unexploded Ordnance (UXO)
- At older sites, chemical agents may also be a problem
- Soil and groundwater contamination from munitions
- Improper disposal of industrial compounds such as PCBs

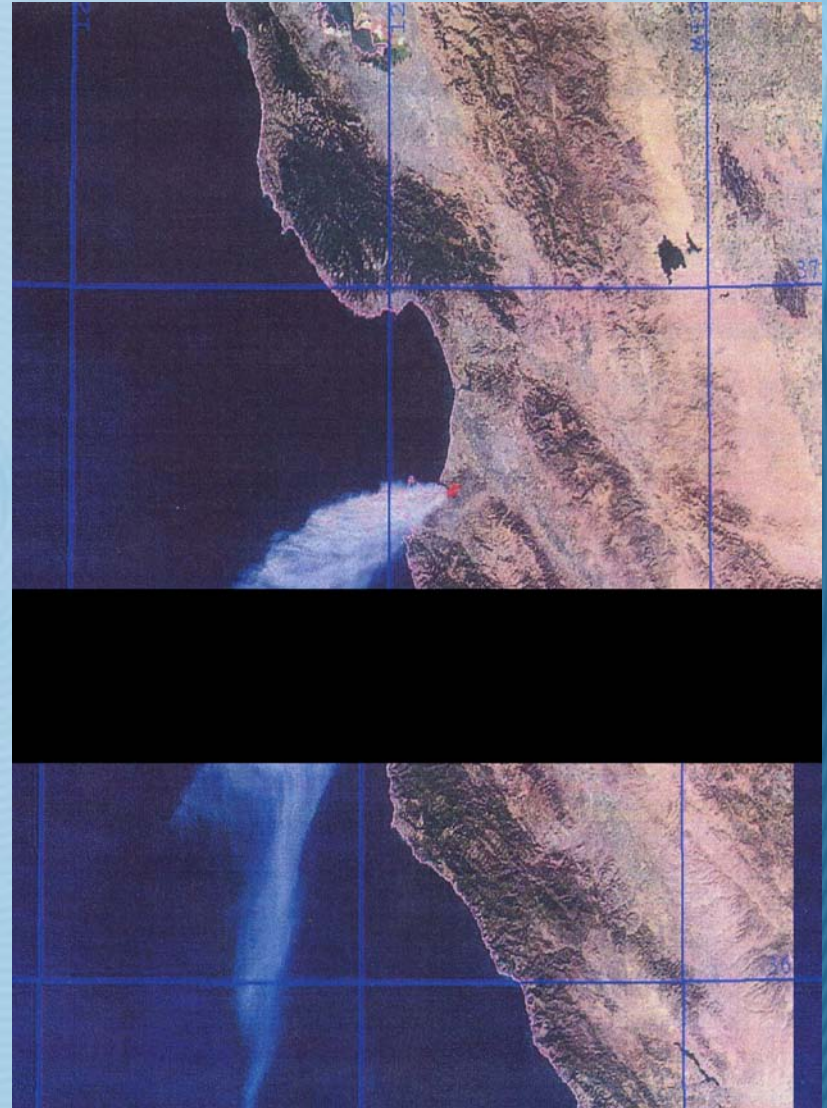


Fort Ord Specific Issues

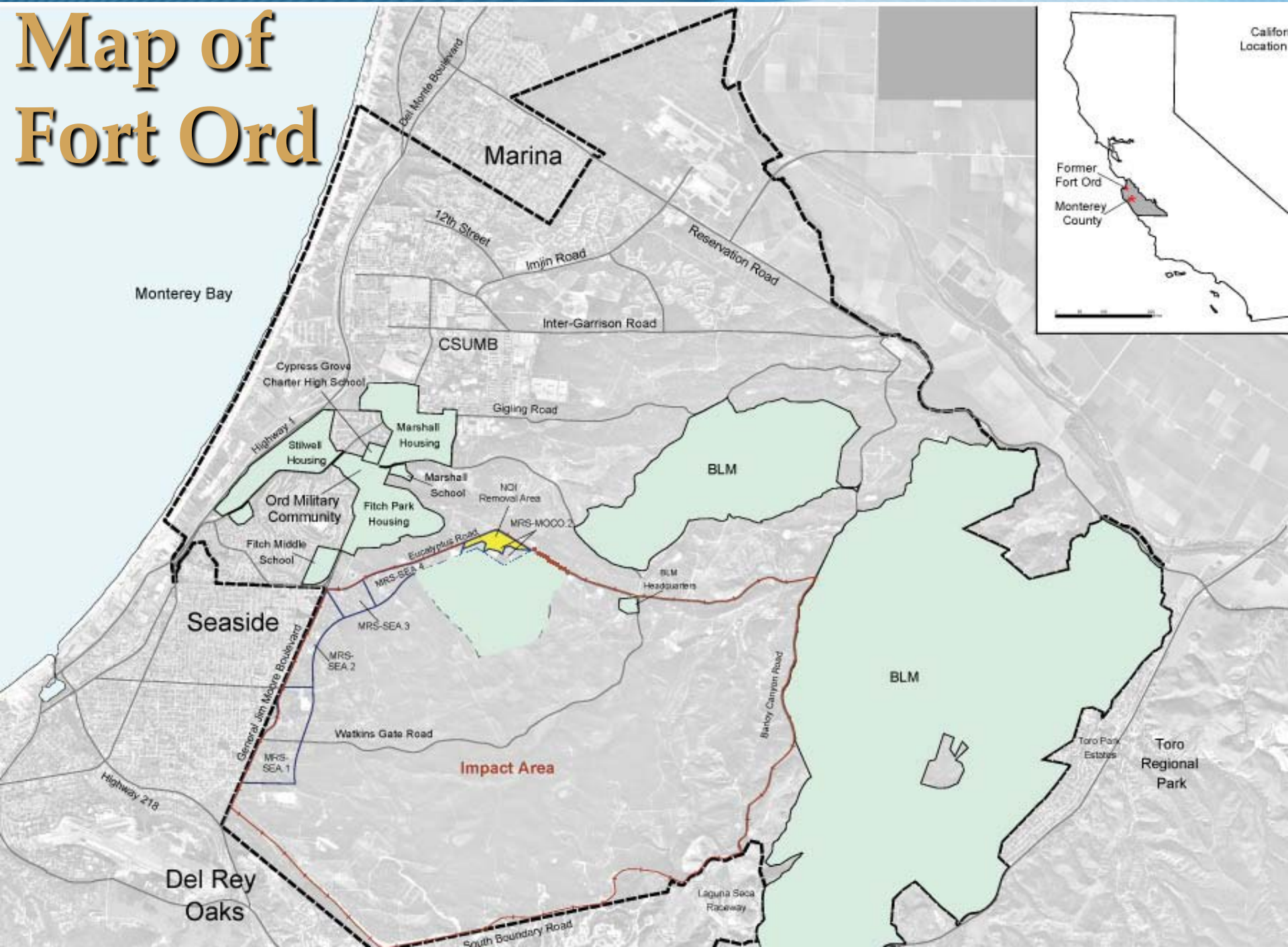
- Landfill and training activities at the former installation caused widespread groundwater contamination
- The use and improper disposal of large quantities of carbon tetrachloride resulted in groundwater contamination of three separate aquifers
- Training with live ammunition has littered the site with unexploded rockets, mortars, grenades, and other ordnance. These hazards prevent redevelopment at several locations on the base
- Live fire training with small arms has contaminated soil in several areas of the site with metals from expended ammunition

Fort Ord Specific Issues

- Health concerns and the desire for an environmental justice health center and clinic
- Economic recovery
- The Army still plans prescribed burns in close proximity to local communities
- Site Security
- Groundwater Contamination
- Landfills



Map of Fort Ord



Organizational Challenges at Fort Ord and Other Military Cleanup Sites



- Lack of a RAB hampers communication
- The Army's complex procedures and bureaucracy decrease efficiency, particularly for small organizations
- Public meetings have been called with short notice, making it difficult to organize effective responses
- Low citizen participation

Information Related Challenges

- At Fort Ord, there are 3 operable units and many firing ranges undergoing remediation plus economic revitalization
- The site produces nearly 100 technical reports a year
- Poor record keeping has resulted in uncertainties regarding the location of contamination and unexploded ordnance



Cultural Problems

- Executive Order 12898 (Clinton) regarding environmental justice is not being adequately observed in the cleanup process
- The Army, local officials, and communities all have differing values and visions of economic redevelopment for the base
- The Army has not involved the community, the EPA, or state agencies in all decision making processes.

Restoration Advisory Boards (RABs)

- Composed of representatives from all stakeholders including regulatory agencies, the military, local officials, and citizens
- Meets regularly to discuss cleanup issues
- Gives advice regarding the course of the cleanup
- Allows for all voices to be heard in the decision making process in a statutory framework



The Restoration Advisory Board at Fort Ord

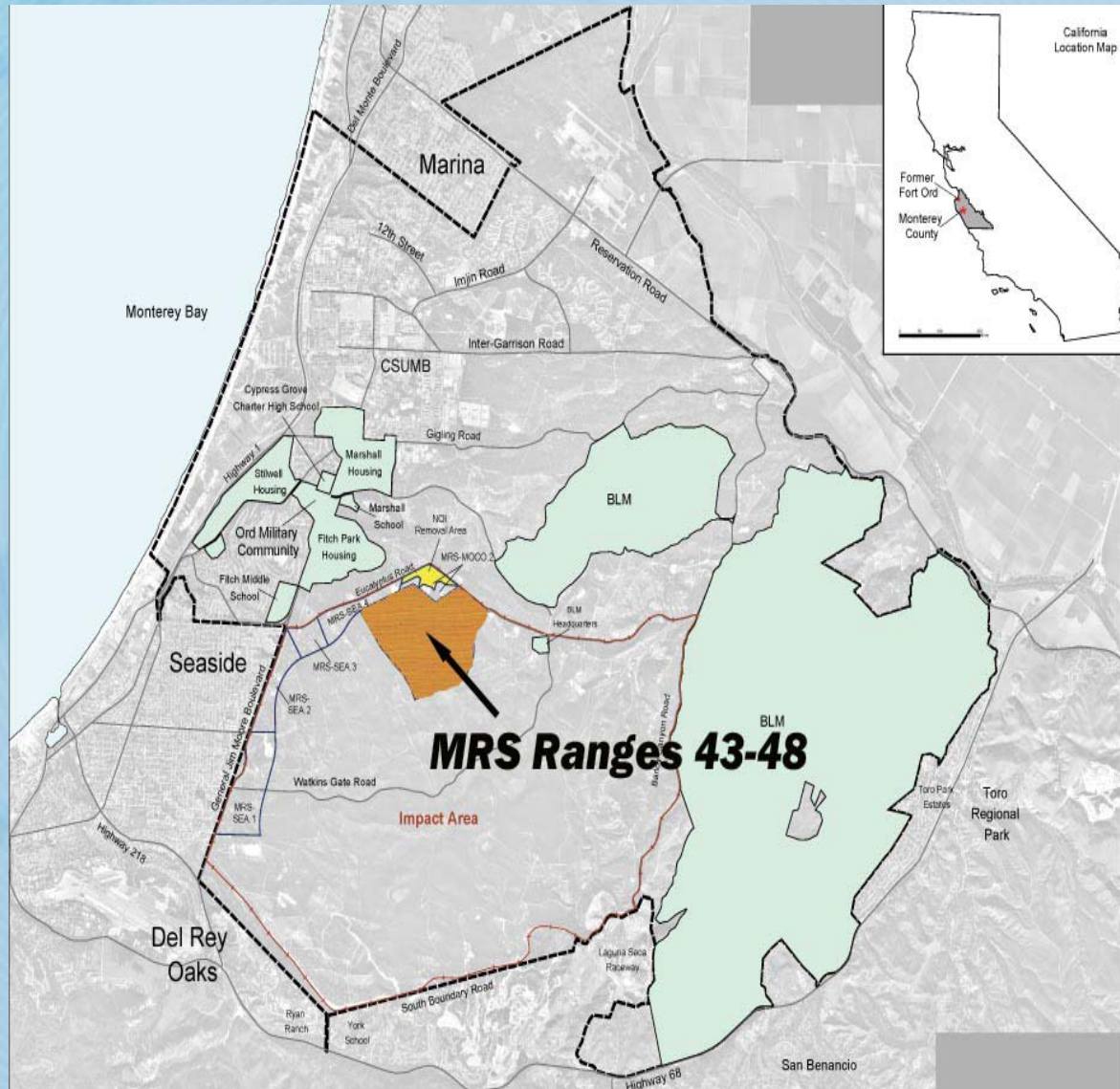
- Originally established in 1994
- Was contentious and eventually disbanded in 1997
- Community involvement workshops are a poor substitute and have a different mission
- Important to reestablish to regain public participation and confidence in the process
- A petition is all that is required to re-establish the RAB

The 2003 Prescribed Burn: The Rationale

- Decades of training left large numbers of unexploded mortars, rockets, and other explosives at Fort Ord
- Vegetation needed to be cleared to find UXOs
- Army decided controlled burning to be the best option with USFWS input



Location of the 2003 Prescribed Burn



The Voluntary Relocation Program

- Residents in nearby areas could contact the Army and request to stay at a hotel away from the smoke impacts
- Over 765 families registered in 2003
- Army proposed and failed to have the program discontinued in 2006



Health Risks From Smoke Exposure

- Burning can release compounds like formaldehyde, acrolein, particulate matter, dioxins, and other compounds
- All respiratory irritants- can make breathing difficult and increase risks of heart attack and stroke
- Asthmatics, children, the elderly, and those with a history of heart or lung problems most at risk

Sequence of Events During the Burn

- Oct 23: Pre-burn air monitoring
- Oct 24: Weather conditions determined to be acceptable for burn, fire started at 9:00am
- First spot fires found at 9:30, escape declared at 11:00am
- Fires continued to burn through 9:00pm
- Additional burns and mop-up operations continued through Oct 31

The Burn



Courtesy www.dmimaging.com



Courtesy BulbMedia.net



Seaside

*Fort Ord
10-26-03
0730*

Actual Burn

**Planned
Burn**

*Outline of 2003
prescribed burn*

Problems with the 2003 Burn

- Escaped control of the Army and contractors
- Burned approximately three times the intended area
- Smoke blew over and covered nearby residential areas
- Smoke put residents at risk



Public Response to 2003 Burn

- The Army and MBUAPCD received over 100 formal complaints during the burn
- The Army received almost 50 additional complaints during a meeting held later in the year
- FOEJN also received complaints about the burn from much of the community
- There was some success with the voluntary relocation program- BUT

FOEJN heard from citizens

- People who had signed up were not called
- A number of people could not get out due to physical abilities
- Requested a community response plan
- Phone calls for days afterward across the peninsula
- Continue to hear from citizens

The Army After-Action Report

- Determined that weather prediction was not adequate, and should account for upper level winds
- The western fuel break was not adequate, but the burn was still started based on the belief that other controls could prevent the fire from escaping



The Army After-Action Report



- The community needed more opportunities to stay informed about the progress of the burn
- Claimed that the relocation program was a success
- Suggested ATSDR performed a health consultation regarding the burn

The ATSDR Health Consultation



- Concluded that there was no health risk to residents from the burn
- Flawed in many ways, including but not limited to insufficient research, faulty assumptions, and not considering sensitive populations
- FOEJN and ESC did not agree with the conclusions and found the report inadequate

2003 Burn Issues

- Lack of failure analysis- design, implementation, or both?
- Local decision making was overridden
- Not most efficient option- still had to cut vegetation
- Not less expensive than other options
- ATSDR report lacked true health investigation and discounted long-term effects

Burns in 2006

- Army has proposed another prescribed burn at Fort Ord in 2006
- Tried and failed to discontinue the relocation program
- Trying to abandon the program resulted in delays
- To date, another burn has not been conducted at Fort Ord

Track 3 Sites

- Located primarily in the impact area of Fort Ord
- Areas where MEC have been identified as a risk to the public and haven't been remediated
- Army recommends a combination of prescribed burns, surface removals, and removals to depth



Problems with the Track 3 Plan

- Still uses prescribed burns for vegetation clearance
- Site security is still an issue
- Emphasizes the need for MEC Safety and Recognition training for all workers performing intrusive activities at the base

The TAG Grant to Date

Major Foci:

- ❑ Landfills and associated groundwater contamination
- ❑ The carbon tetrachloride groundwater plume
- ❑ Site Security
- ❑ Economic Recovery
- ❑ Cleanup of UXO including:
 - Stopping prescribed burns
 - Maintaining vigilance for chemical warfare agents

The TAG Grant to Date

- **Document Review**
 - Received 176 documents since early 2004
 - Provided comments on 46 of above
- **Site Visits**
 - Attended 7 CIWs
 - Attended and presented at 5 additional public meetings on behalf of FOEJN
 - 1 additional visit to meet with EPA
- **Conferences**
 - 2005 EPA National CIC in Buffalo, NY
 - Poster presentation at 2006 EPA CIC in Milwaukee, WI
- **Correspondence with FOEJN, Army, EPA, and other regulatory agencies**

Recent Successes

- Renewal of the Technical Assistance Grant
- Retention of the voluntary relocation program during prescribed burns
- Expansion of groundwater treatment systems



Future Goals

- Obtaining greater impact in determining the course of economic development at Fort Ord
- Elimination of prescribed burns to clear vegetation
- Reestablishment of the RAB
- Continuing to insure that remediation efforts are protective of public health
- Creation of an environmental justice clinic

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Questions?