

# WHAT'S HAPPENING TONIGHT



- Introductions and Agenda Review
- Groups 2 & 3 Land Use Controls Remedy Implementation
- Draft Group 4 RI/FS Future East Garrison Munitions Response Area (MRA)
- ESCA Program Update and Document Schedule
- ESCA Community Involvement Program
- Questions and Conclusion



GROUPS 2 & 3 MUNITIONS RESPONSE AREAS (MRAs)

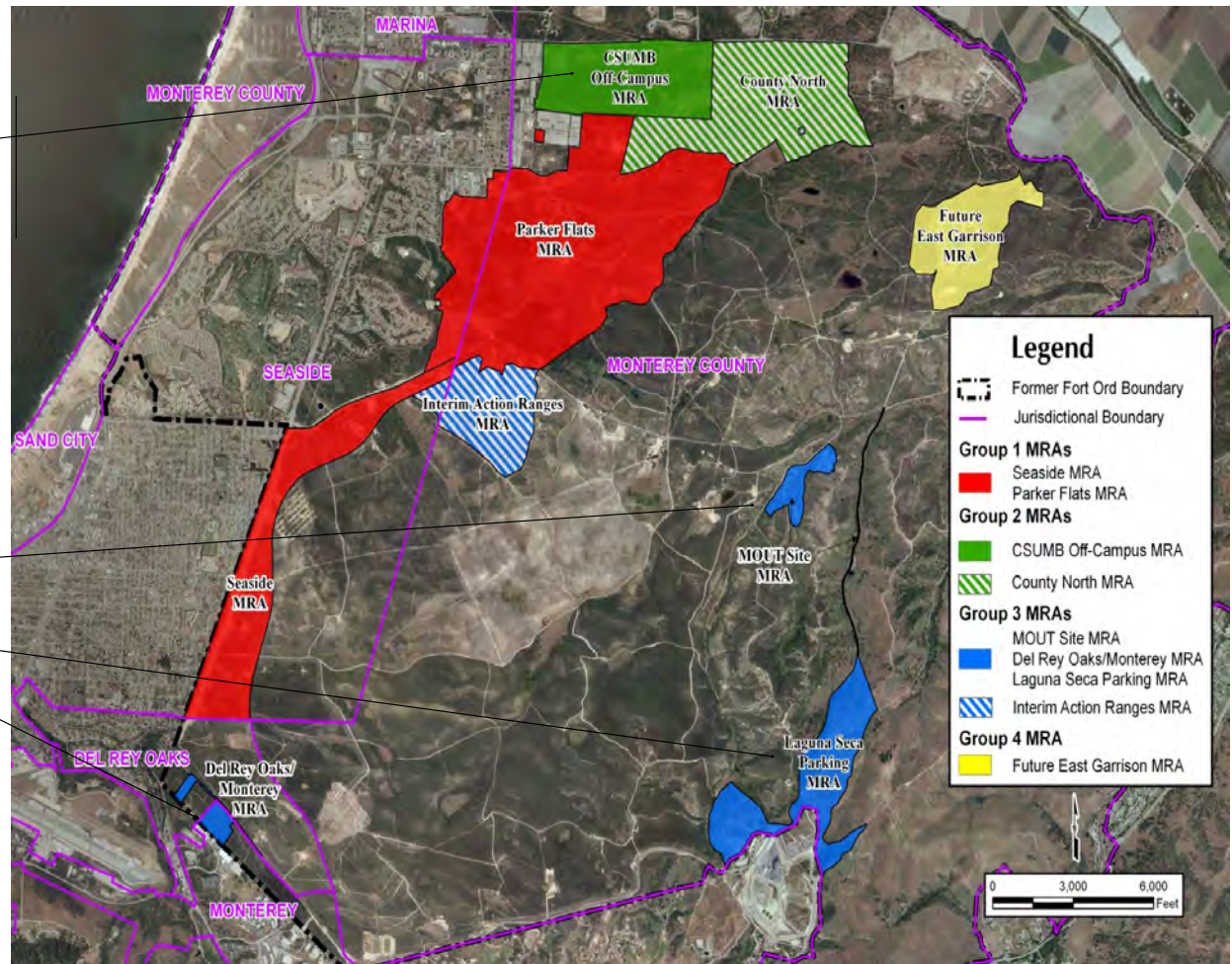
# ESCA PROPERTY ORIENTATION

## Group 2

- CSUMB Off-Campus MRA

## Group 3

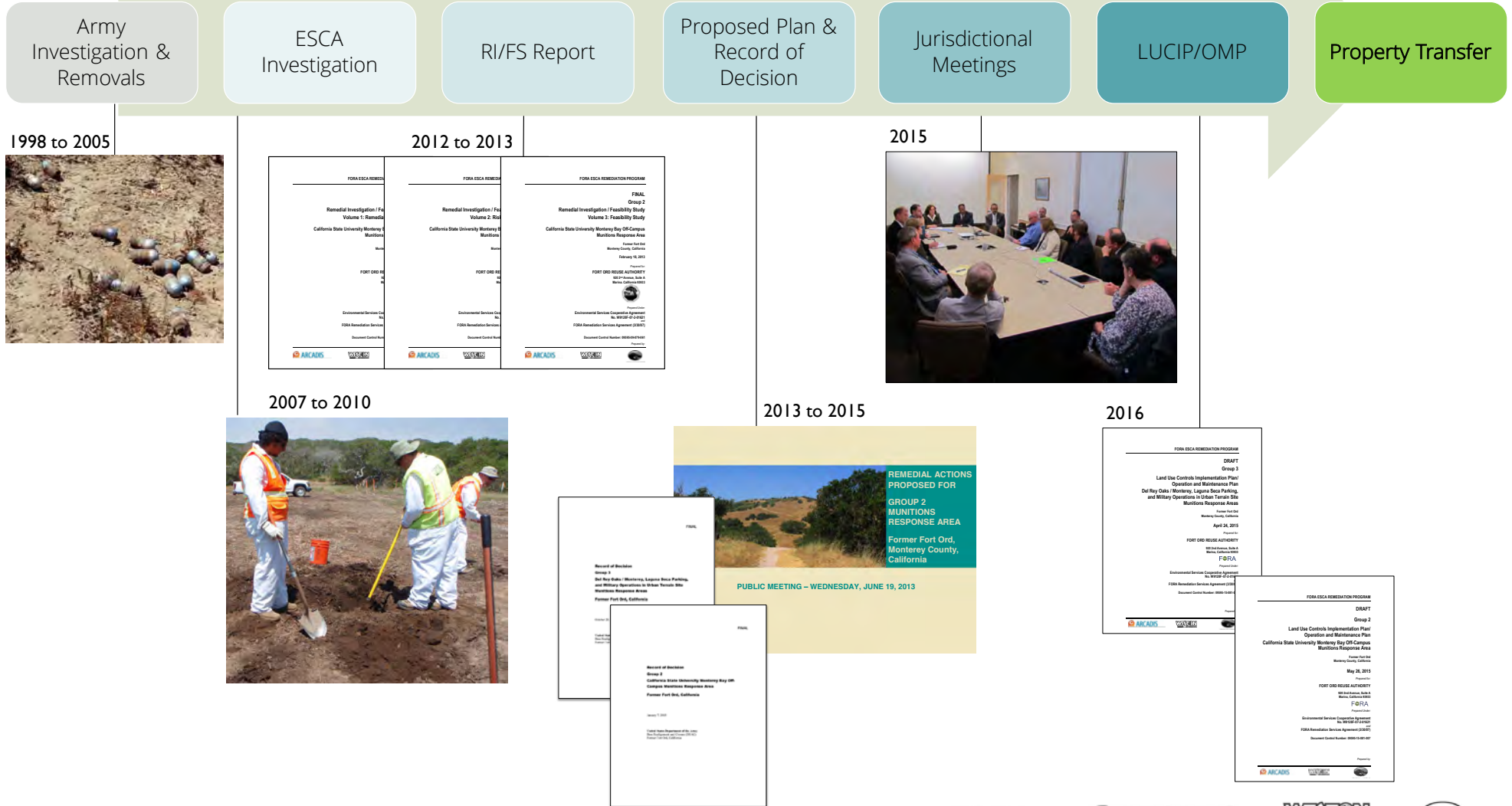
- MOUT Site MRA
- Laguna Seca Parking MRA
- Del Rey Oaks / Monterey MRA





## LAND USE CONTROLS REMEDY TIMELINE: GROUP 2 & GROUP 3

# PATHWAY TO PROPERTY TRANSFER

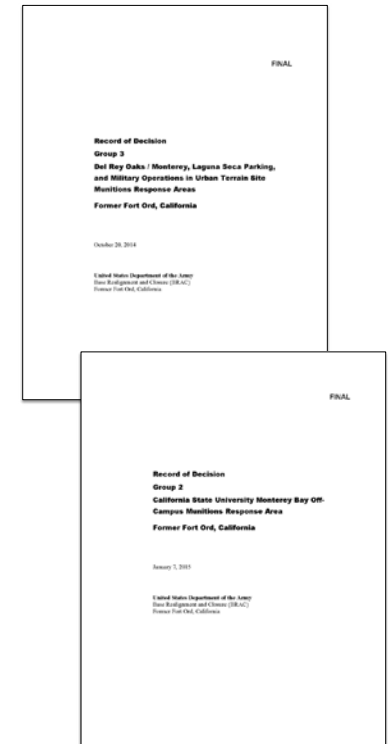




GROUPS 2 & 3 MRAs:

# LUC FINAL REMEDY DESCRIPTION

- LUCs selected as final remedy in Group 2 & 3 RODs
- The LUCs remedy:
  1. MEC recognition and safety training for those conducting ground-disturbing or intrusive activities on the property
  2. Construction support by UXO-qualified personnel for ground-disturbing or intrusive activities
  3. Restrictions prohibiting residential use in the proposed future non-residential reuse areas
- Long Term Management Measures (LTMM) will also be implemented including:
  - Existing land use restrictions
  - Annual monitoring and reporting
  - Five-year review reporting







LUC IMPLEMENTATION: GROUPS 2 & 3

# MEC RECOGNITION & SAFETY TRAINING

- Training Requirements
  - 3Rs Explosives Safety Guide and Army's Safety Alert required to be provided to anyone conducting ground-disturbing or intrusive activities
  - MEC Recognition & Safety Training required as part of construction support program for projects disturbing 10 cubic-yards or more soil
- Training Resources
  - Training emphasizes 3Rs – Recognize, Retreat, and Report
  - Fort Ord Military Munitions 3Rs Explosives Safety Guide
  - Army's MEC Safety Alert pamphlet
  - Web-based eLearning platform training resources





LUC IMPLEMENTATION: GROUPS 2 & 3

# LEVELS OF CONSTRUCTION SUPPORT

## On-call Construction Support

- UXO personnel placed on standby to assist if suspected munitions item encountered
- Can respond from offsite when called or be on location and available to provide required construction support
- Law enforcement responds to secure site and requests military EOD response to address any MEC items



## On-site Construction Support or Anomaly Avoidance

- UXO personnel conduct MEC clearances to remove explosive hazards in the construction footprint prior to ground disturbing or intrusive construction activities
- UXO contractor addresses MEC items encountered under approved Explosive Safety Submission (ESS)
- **Anomaly avoidance** may also be used to fulfill the requirements for on-site construction support, if included in an approved construction support plan.



LUC O&M RESPONSIBILITIES

## U.S. ARMY

- MEC Recognition and Safety Training
  - Monitor implementation of training to ensure FORA compliance with LUC remedy
- Construction Support
  - Monitor FORA and Jurisdictions implementation and enforcement of construction support requirements
  - Participate with DTSC in review and approval of construction support plans
  - Coordinate Army and DDESB review and approval of Explosive Safety Submittals
  - Participate, in consultation with EPA and DTSC, in MEC find assessments
- Residential Use Restriction (RUR)
  - Monitor compliance with the RUR
- Annual LUC Monitoring and Reporting
  - Review annual LUC monitoring reports to verify compliance with LUC remedy
- CERCLA Five-Year Review
  - Conduct five-year reviews to evaluate protectiveness of LUC remedy



LUC O&M RESPONSIBILITIES

# FORT ORD REUSE AUTHORITY

- MEC Recognition and Safety Training
  - Monitor implementation of training requirements
  - Maintain MEC recognition and safety training materials and website
- Construction Support
  - Monitor implementation of construction support
  - Notification of MEC finds to Army, EPA, DTSC
  - Assessment of MEC finds, including additional investigations or other actions necessary as a result of MEC finds
- RUR
  - Monitor compliance with RURs in federal deeds and CRUPs
  - Ensure RURs remain in property deeds
- Annual LUC Monitoring and Reporting
  - Compile annual LUC status reports and submit to Army, EPA, DTSC





LUC O&M RESPONSIBILITIES

## LOCAL JURISDICTIONS

- MEC Recognition and Safety Training
  - Annual notification to property owners of training requirements, including delivery of 3Rs Explosives Safety Guide to property owner of record
- Construction Support
  - Monitor and enforce construction support requirements for excavation permits as required under the digging and excavation ordinance
  - Consultation with Army, EPA, DTSC on construction support requirements prior to issuing excavation permits
  - Ensure Construction Support After Action Reports are completed and distributed to FORA, Army, EPA, DTSC
  - Annual monitoring and reporting of construction support activities
- RUR
  - Maintain RURs in property deeds & monitor compliance
- Annual LUC Monitoring and Reporting
  - Conduct annual LUC inspections and monitoring and submit to FORA



# PROPERTY RECEIPT / LAND OWNER

- **MEC Recognition and Safety Training**
  - Ensure property users are aware of and comply with training requirements
  - Annually deliver copy of 3Rs Explosives Safety Guide to site workers
  - Document and maintain records of compliance with training requirements
- **Construction Support**
  - Comply with excavation permitting and construction support requirements
  - Retain UXO contractor to provide construction support services
- **RUR**
  - Comply with RUR during use of the property
  - Maintain RUR through future property transfer deeds
- **Annual LUC Monitoring and Reporting**
  - Cooperate with County and Cities in conducting annual inspections of property to verify compliance with LUCs, deed restrictions, and CRUPs



## GROUP 4: Future East Garrison MRA

# RI/FS REPORT OVERVIEW

## Draft Group 4 Remedial Investigation/Feasibility Study Future East Garrison MRA

### Volume I Remedial Investigation

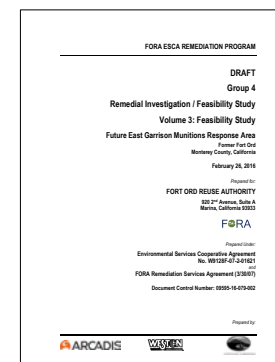
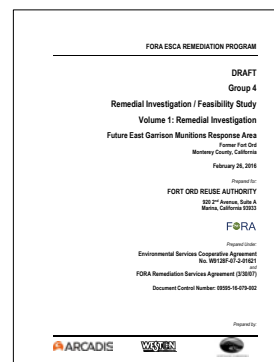
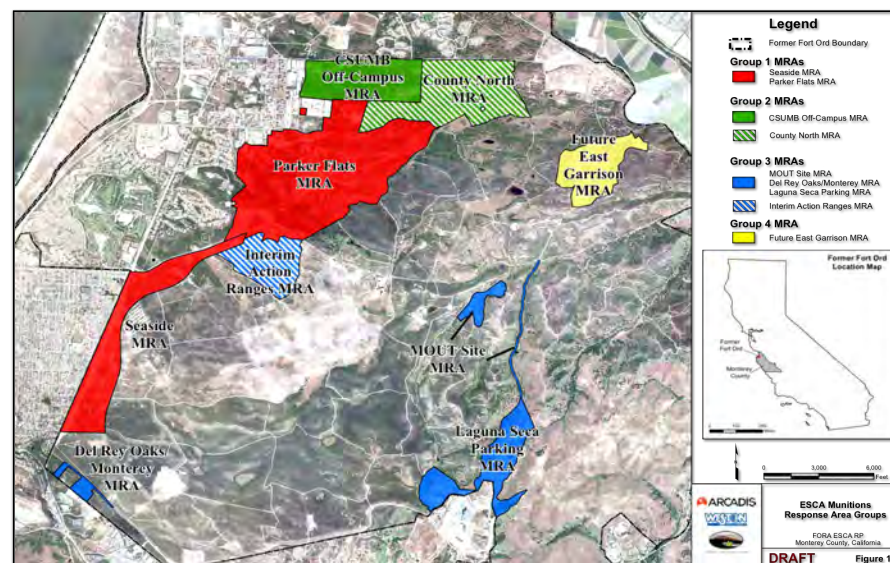
- Background information
- Results of remedial investigation
  - Evaluations of previous work
  - Nature and extent of military munitions
  - Conceptual Site Model

### Volume 2 Risk Assessment

- Uses Fort Ord Risk Assessment Protocol
- Assesses risk to future land users
  - Evaluates each reuse area
  - Considers multiple receptors for each reuse area
  - Overall risk score expressed in letters (A = lowest, E = highest)

### Volume 3 Feasibility Study

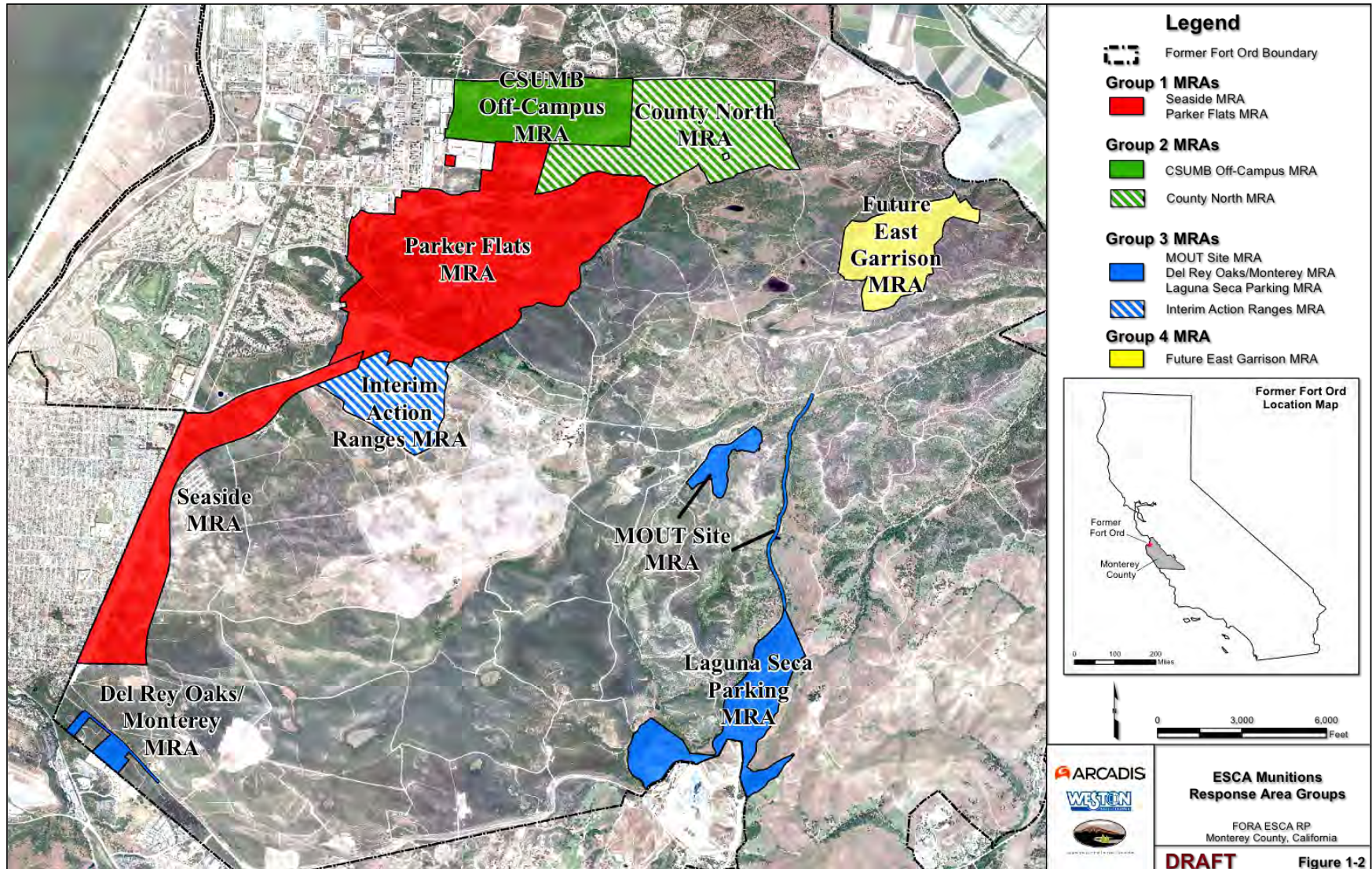
- Defines Remedial Action Objectives
- Develops remedial alternatives
- Evaluates and compares alternatives
- Identifies Army's preferred remedial alternative







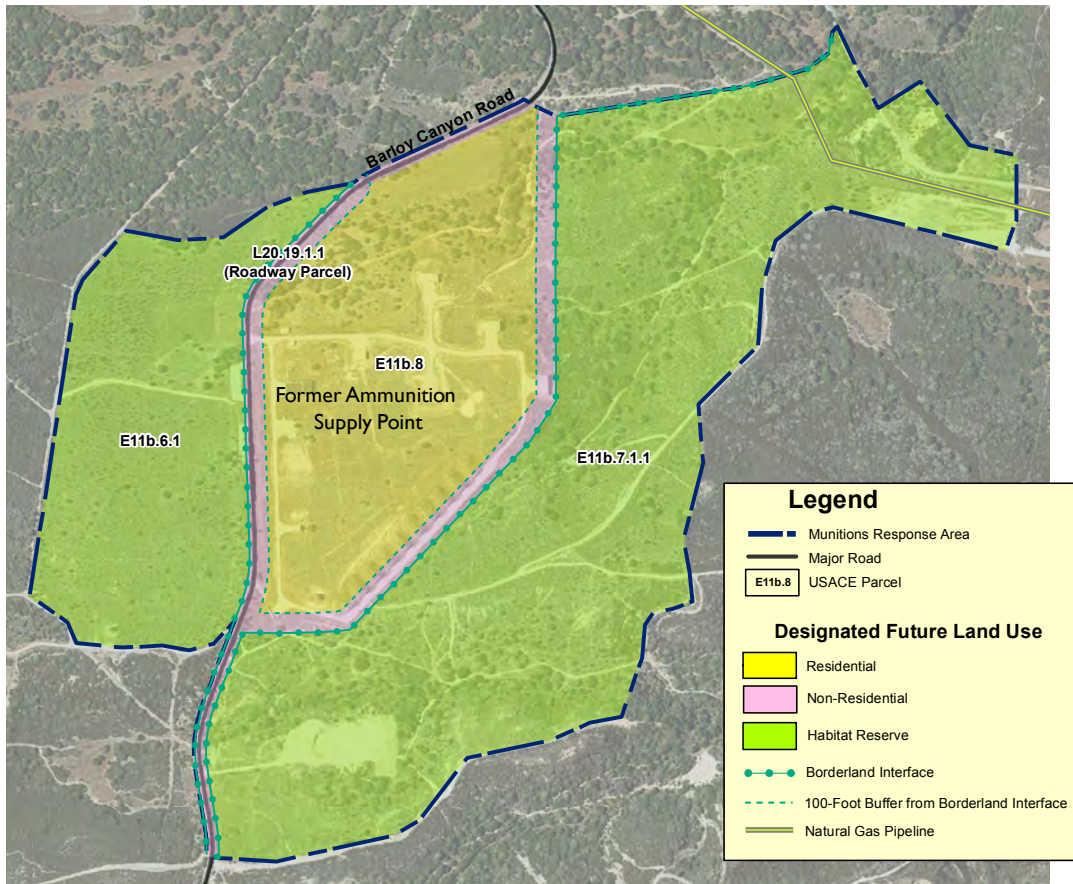
# GROUP 4 MUNITIONS RESPONSE AREA



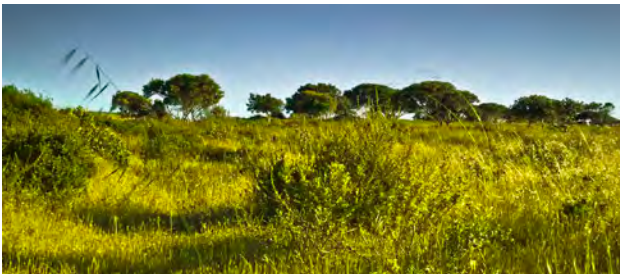




# SITE CHARACTERISTICS



- **Future East Garrison MRA Acreage**
  - 252 acres
- **Former Ammunition Supply Point**
- **Previous Military Training**
  - Pre-WWII training
  - Rifle grenade training
  - Hand grenade training
  - Troop training and maneuvers
  - Engineering and demolition operations training
- **Planned Reuses**
  - ☐ Future residential
  - ☐ Development (non-residential)
  - ☐ Habitat reserve

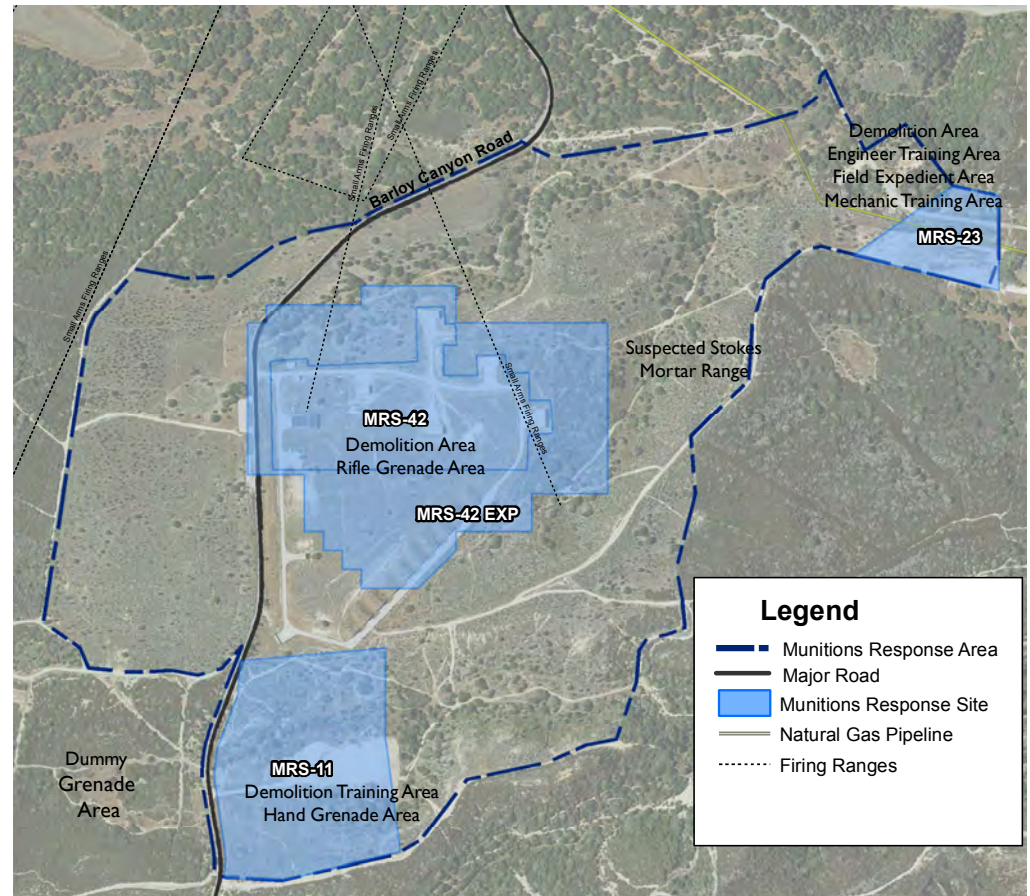






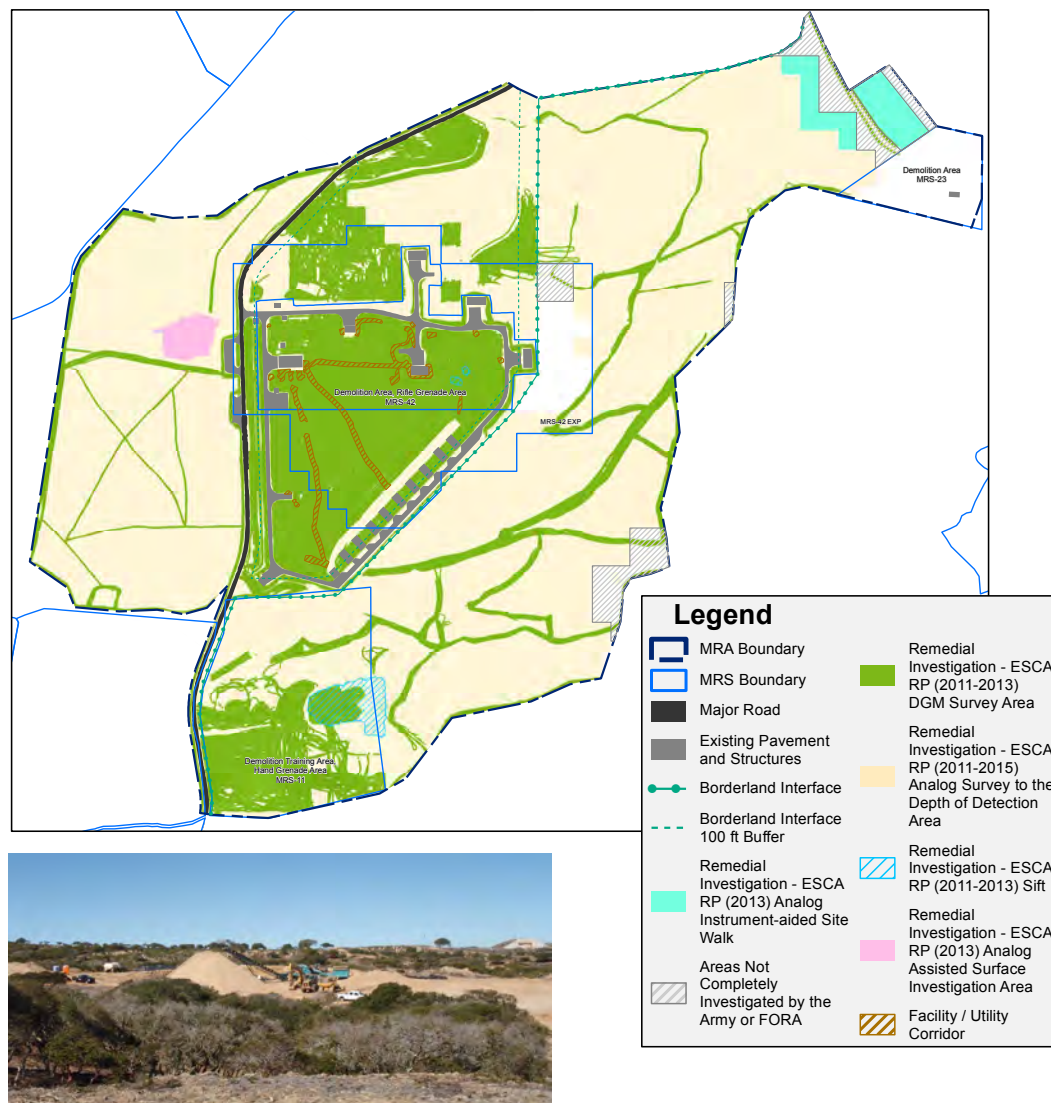
# MUNITIONS RESPONSE SITES

- **MRS-11**
  - Demolition operations and training area
  - Hand grenade training area
- **MRS-23**
  - Demolition operations and training area
  - Engineer training area
  - Field expedient area
  - Mechanic training area
- **MRS-42 and MRS-42 EXP**
  - Rifle grenade training area
  - Demolition operations and training area
- **General Vicinity**
  - Suspected Stokes mortar range in eastern portion of the MRA
  - Safety fans for small arms ranges from former East Garrison to the north
  - Dummy grenade training area to the west





# INVESTIGATION & REMOVAL ACTIONS



MEC = Munitions and explosives of concern

- **MEC investigations and removal actions conducted across entire MRA**

- **Residential and non-residential development areas**

- Removal actions to depth-of-detection completed for MRS-42 and MRS-42 EXP
- Investigations to depth-of-detection completed in remaining residential and non-residential development areas

- **Habitat Reserve Areas**

- Removal actions to depth-of-detection completed for MRS-11
- Removal action to four-foot depth completed MRS-23
- Investigation to depth-of-detection conducted in remaining habitat reserve areas

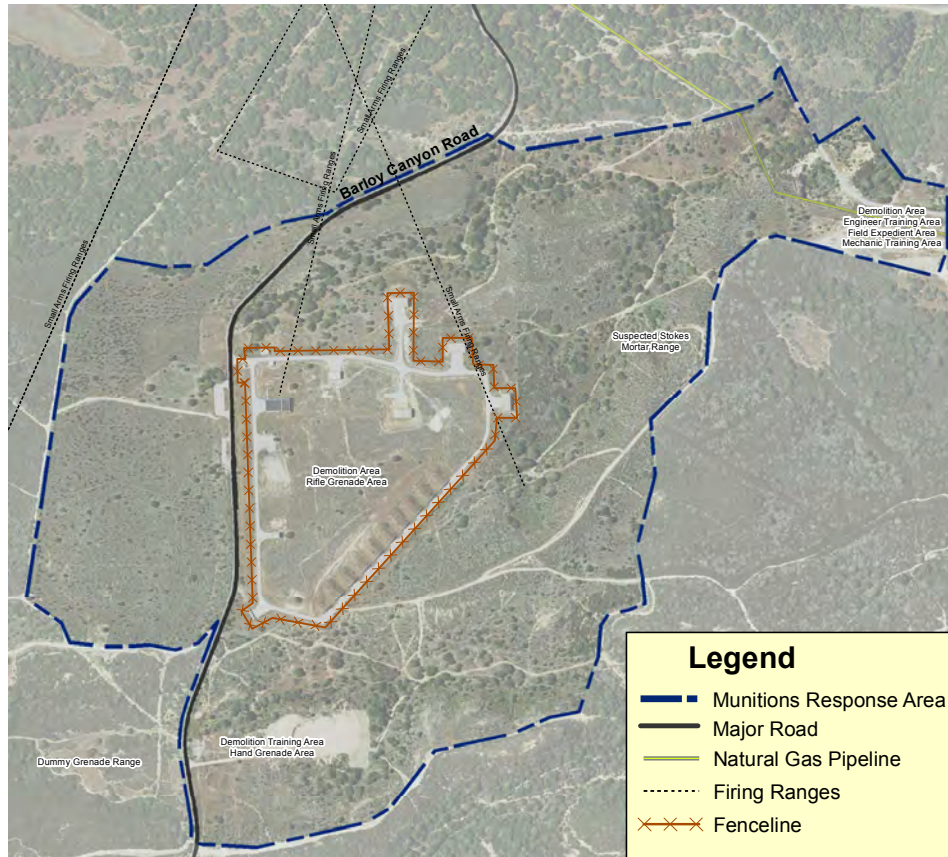
- **Residential Quality Assurance (RQA) Process**

- RQA process and DTSC residential protocol implemented across entire proposed future residential reuse area





# NATURE AND EXTENT OF MEC CONTAMINATION



HE = high explosive    LE = low explosive

- The majority of munitions items recovered are consistent with documented historical use
  - Pre-WWII Training
    - 3-inch practice and HE Stokes mortars
    - 37mm HE and LE projectiles
  - Rifle Grenade Training
    - Practice and HE rifle grenades
    - HE hand grenades with adapters
  - Hand Grenade Training
    - Practice and HE hand grenades
  - Troop Training and Maneuvers
    - Simulators, illumination and smoke producing signals, and flares
- Miscellaneous items not indicative of the known training were also recovered within the MRA
- Investigation and removal actions successfully detected, excavated, and recovered MEC items that may present an imminent safety hazard
- Residual MEC may remain undetected on the MRA, therefore a risk assessment and feasibility study were performed



# RISK ASSESSMENT RESULTS

Reuse Area	Receptor	Overall MEC Risk Score				
		A Lowest	B Low	C Medium	D High	E Highest
Residential Reuse Areas	Trespasser	✓				
	Recreational User	✓				
	Maintenance Worker	✓				
	Resident	✓				
	Construction Worker	✓				
Non-Residential Development Reuse Areas	Trespasser	✓				
	Recreational User	✓				
	Maintenance Worker	✓				
	Construction Worker	✓				
Habitat Reserve Reuse Areas	Trespasser	✓				
	Recreational User	✓				
	Maintenance Worker	✓				
	Habitat Monitor	✓				

Note: Overall MEC Risk is qualitative score related to MEC Hazard Type, Accessibility Factor, and Exposure Factor



## REMEDIAL ALTERNATIVES EVALUATED

Alternative 1	No Further Action
Alternative 2	Land Use Controls
Alternative 3	Additional MEC Remediation

### Notes:

- Long-Term Management Measures will also be instituted under each of the three remedial alternatives





# EPA's 9 CERCLA EVALUATION CRITERIA

## **Threshold Criteria**

1. Overall Protection of Human Health & the Environment
2. Compliance with Applicable or Relevant and Appropriate Requirements (ARAR)

## **Primary Balancing Criteria**

3. Long Term Effectiveness and Permanence
4. Reduction of Toxicity, Mobility, or Volume through Treatment
5. Short Term Effectiveness
6. Implementability
7. Cost

## **Modifying Criteria**

8. State Acceptance
9. Community Acceptance



# COMPARISON OF REMEDIAL ALTERNATIVES

	EPA's 9 CERCLA Evaluation Criteria	Remedial Alternatives		
		Alternative 1 No Further Action	Alternative 2 Land Use Controls	Alternative 3 Additional MEC Remediation
Threshold Criteria	Overall Protectiveness of Human Health and the Environment	○	●	◐
	Compliance with ARARs	N/A	N/A	●
Balancing Criteria	Short-Term Effectiveness	○	●	◐
	Long-Term Effectiveness	○	●	◐
	Reduction of Toxicity, Mobility, or Volume Through Treatment	○	○	◐
	Implementability	○	●	●
	Cost	\$	\$\$	\$\$\$
Modifying Criteria	State Acceptance	TBD	TBD	TBD
	Community Acceptance	TBD	TBD	TBD

● Has high ability to meet criteria; ◐ Has moderate ability to meet criteria; ○ Does not meet criteria

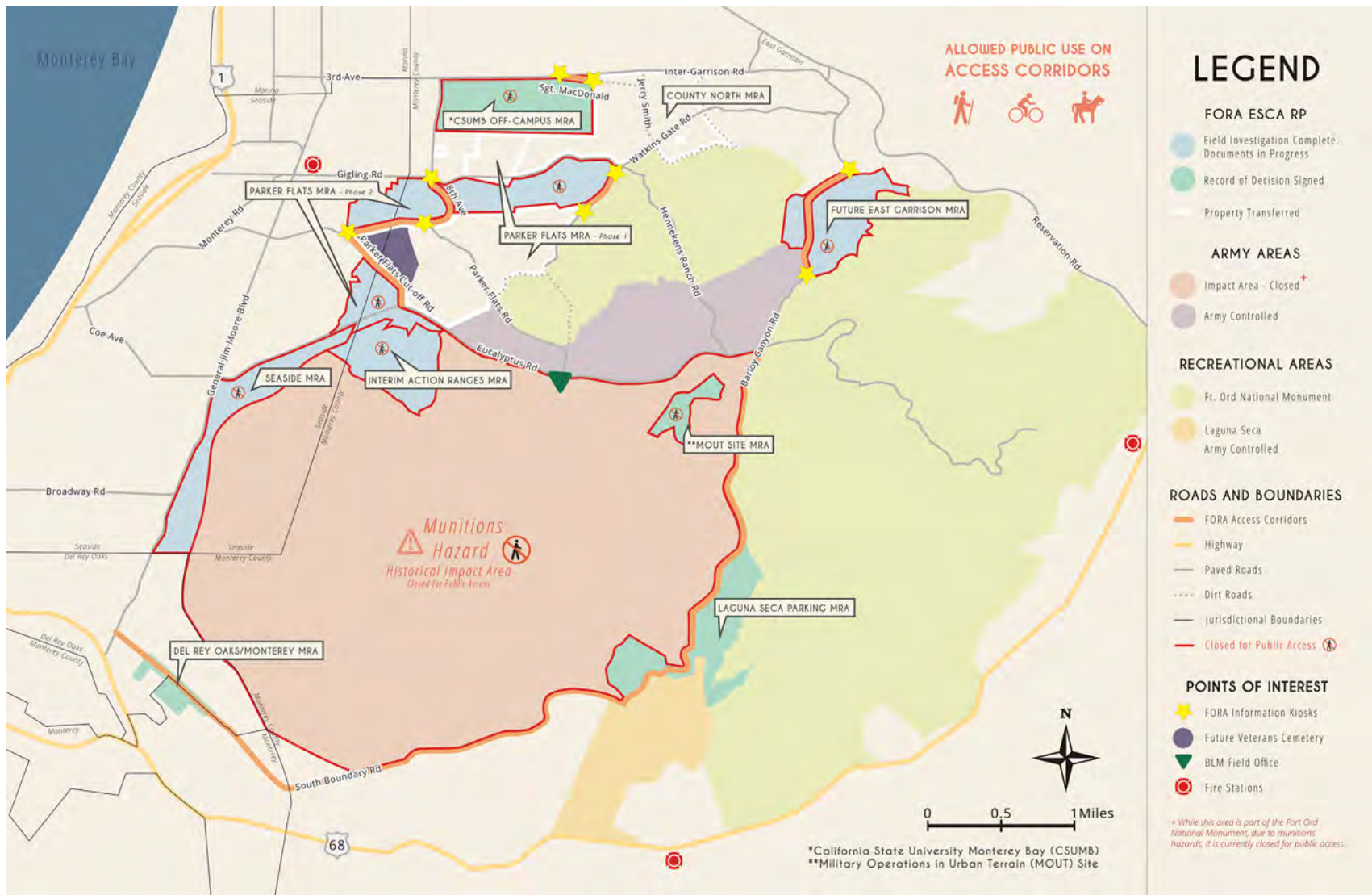
ARARs = Applicable or relevant and appropriate requirements

TBD = To Be Determined; N/A = Not Applicable



STATUS UPDATE:

# FORA ESCA RP ACCESS CORRIDORS



FORA

ARCADIS

WESTON

WESTCLIFFE ENGINEERS





Parker Flats MRA

# PARKER FLATS TRAIL ACCESS

- Parker Flats MRA remains closed to the public
- Parker Flats remains closed to the public pending regulatory approval and release for public access (as depicted)
- Always check to the FORA ESCA RP website before you go out hiking or biking in the former Fort Ord for the latest public access information on ESCA properties
- FORA is diligently working to gain regulatory approval for this area. Until then, please adhere to posted signs and stay on access corridors.
- For a larger version of this map, visit our website:  
<http://www.foraescarp.com/#!/parker-flats-trail-access/c22vv>





## STATUS UPDATE: ESCA REMEDIATION PROGRAM

### CURRENT DOCUMENT SCHEDULE: 2016 - 2017

DOCUMENT	ISSUE DATE	COMMENTS DUE
Group 1: Draft Final Draft Seaside MRA Residential Protocol Implementation Technical Report	SEP 2016	OCT 2016
Group 1: Draft Final Parker Flats MRA Residential Protocol Implementation Technical Report	OCT 2016	NOV 2016
Group 1: Draft Final Remedial Investigation /Feasibility Study Report, Seaside and Parker Flats (Phase II) MRAs	OCT 2016	NOV 2016
Group 3: Draft Final Land Use Controls Implementation / Operation and Maintenance Plan	SEP 2016	OCT 2016
Group 2: Draft Final Land Use Controls Implementation / Operation and Maintenance Plan, CSUMB Off-Campus MRA	OCT 2016	NOV 2016
Group 4: Draft Final Future East Garrison MRA Remedial Investigation / Feasibility Study Report	JAN 2017	FEB 2017
Group 4: Future East Garrison MRA Proposed Plan	SEP 2017	OCT 2017
Interim Action Ranges MRA: Record of Decision	FEB 2017	N/A

\* Note: dates subject to change







# OUTREACH EVENTS 2016 & 2017

Sep 16 <sup>th</sup>		Farmers Market – Monterey Peninsula College <i>Rekurs every 3<sup>rd</sup> Friday: March - October</i>
Oct 23 <sup>rd</sup>		National Public Lands Day
Nov 23 <sup>rd</sup>		Fort Ord Users Working Group <i>Rekurs every 4<sup>th</sup> Wednesday: May/Aug/Nov</i>
Feb 2017		Army Open House & Bus Tour
Mar 15 <sup>th</sup> 2017		ESCA RP Informal Community Workshop*
Apr 20-23 <sup>rd</sup> 2017		Sea Otter Classic
Jul 2017		Army Open House & Bus Tour

\*Date Tentative

