



Jurisdictional Land Use Control Implementation Training

Hosted by Fort Ord Reuse Authority (FORA)

Presented by FORA ESCA Team

March 13, 2018

Presented to Monterey Peninsula College



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Introduction and Overview

Seminar Purpose:

- Provide Land Use Control (LUC) implementation information, tools and methods
- This seminar will provide:
 - Overview of Final LUCs Remedy
 - Overview of LUCs/Institutional Controls
 - LUCs Operations and Maintenance Requirements

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ESCA Overview

- Army and FORA entered ESCA – 2007
- ESCA mechanism allows the US government to provide funding to FORA for munitions removal
- FORA ESCA Remediation Program addresses residual safety issues from former US Army munitions training on future economic development parcels
- FORA ESCA Responsibilities:
 - Abide by state and federal Superfund regulations
 - Meet the same munitions remediation standards as the Army
 - Maintain a community outreach program
 - Monthly programmatic reporting to EPA

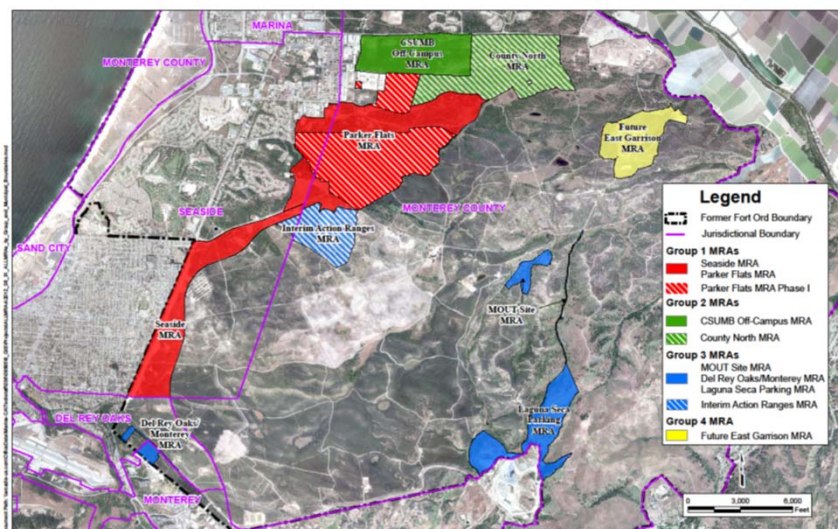
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ESCA Munitions Response Areas by Group



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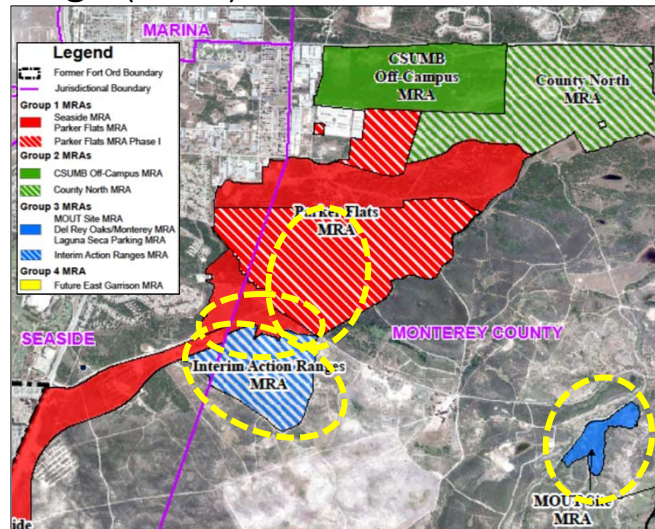


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ESCA Munitions Response Areas Monterey Peninsula College (MPC)

- Parker Flats MRA
 - Parker Flats MRA Phase I
 - Track 2 Parker Flats (Aug 2008)
 - Explanation of Significant Differences No. 1 (May 2018)
 - Parker Flats MRA Phase II
 - Group 1 ROD (Sept 2018)
- Interim Action Range MRA
 - Interim Action Range MRA ROD (Dec 2016)
- MOUT Site MRA
 - Group 3 ROD (Oct 2014)



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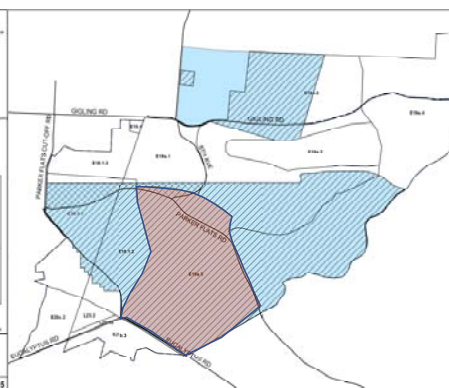
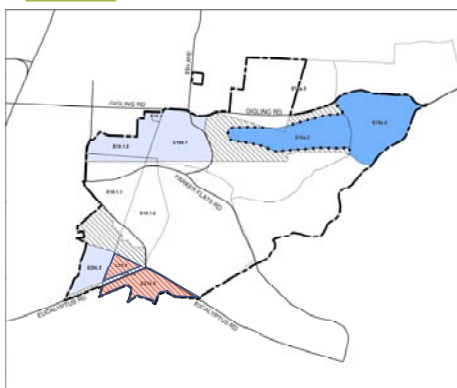
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ESCA Property Transfer Parcels Monterey Peninsula College (MPC)



Parker Flats MRA Phase II

- Parcel L23.2 (Non-residential Development)
- Parcel E21b.3 (Non-residential Development)

Parker Flats MRA Phase I

- Parcel E19a.5 (Non-residential Development)

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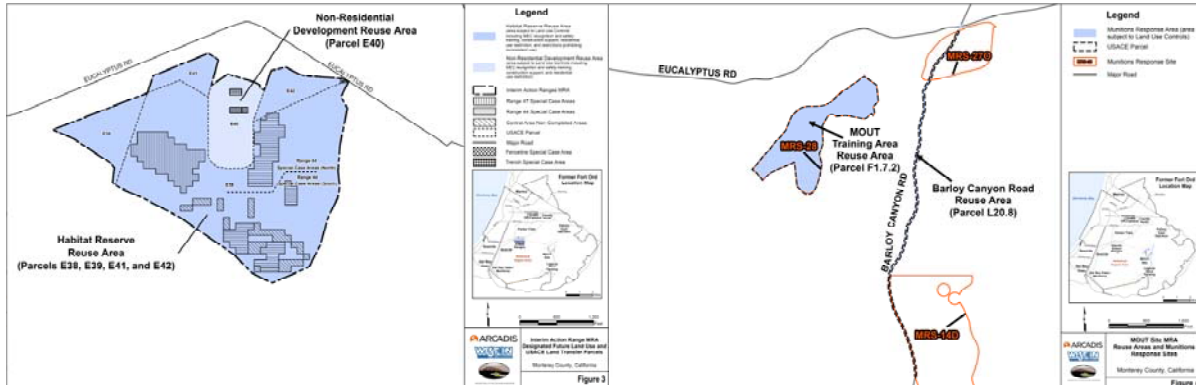
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ESCA Property Transfer Areas Monterey Peninsula College (MPC)



Interim Action Range MRA

- Parcel E40 (Non-residential Development)
- Parcels E38, E39, E41, E42 (Habitat Reserve)

MOUT Site MRA

- Parcel F1.7.2 (MOUT Training Area)

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LUC Final Remedy Description

- LUCs selected as final remedy in RODs
- The LUCs remedy:
 - Munitions recognition and safety training
 - Construction support by UXO-qualified personnel⁽¹⁾
 - Restrictions prohibiting residential use in the non-residential development and habitat reserve areas⁽²⁾
 - Access management measures in areas designated for habitat reserve⁽³⁾
 - Restrictions against inconsistent uses in areas designated for habitat reserve⁽⁴⁾
- Long-Term Management Measures (LTMM) will also be implemented including:
 - Existing land use restrictions
 - Annual monitoring and reporting
 - Five-year review reporting

Notes:

- (1) Construction monitoring applicable to Parker Flats MRA Phase I under Track 2 ROD
- (2) Residential use restriction modified by Track 2 Parker Flats MRA ESD No. 1
- (3) Access management measures applicable to Group 1 and Group 4 MRAs
- (4) Restrictions against inconsistent use applicable to Group 1, Group 4, and IAR MRAs



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Land Use Controls - Purpose

- ESCA munitions cleanup completed:
 - All detected munitions removed
 - Though not expected, munitions may remain present
- LUCs remedy selected to address remaining MEC human health and environmental risks
- LUCs implementation
 - Property owners obligated to maintain LUCs
 - Per federal regulations, LUCs must be implemented
- Non-compliance liability

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LUCIP/OMP Roles and Responsibilities

Organization	Roles & Responsibilities	Authority
Army BRAC	<ul style="list-style-type: none"> • Ensure protectiveness of remedy • Army Obligations per ESCA 	<ul style="list-style-type: none"> • FFA • ESCA
EPA Region 9	<ul style="list-style-type: none"> • Lead regulatory agency 	<ul style="list-style-type: none"> • FFA / AOC
DTSC	<ul style="list-style-type: none"> • Regulatory concurrence • CRUP enforcement 	<ul style="list-style-type: none"> • FFA / AOC • CRUP • MOA w/DTSC
FORA	<ul style="list-style-type: none"> • LUC remedy implementation • Annual LUC status reporting 	<ul style="list-style-type: none"> • AOC • ESCA • MOA w/DTSC
County & Cities	<ul style="list-style-type: none"> • Enforce Digging & Excavation Ordinance • Maintain and enforce deed restrictions • Maintain LUC remedy • Annual LUC monitoring and reporting 	<ul style="list-style-type: none"> • Municipal Code • MOA w/DTSC
MPC & CSUMB	<ul style="list-style-type: none"> • Maintain and enforce deed restrictions • Maintain LUC remedy • Annual LUC monitoring and reporting 	<ul style="list-style-type: none"> • MOA w/DTSC
Property Owners	<ul style="list-style-type: none"> • Comply with LUCs, deed restrictions, CRUP 	<ul style="list-style-type: none"> • Property Deed • CRUP
FFA = Federal Facility Agreement AOC = Administrative Order on Consent MOA = Memorandum of Agreement ESCA = Environmental Services Cooperative Agreement CRUP = Covenant to Restrict Use of Property LUC = Land Use Control		

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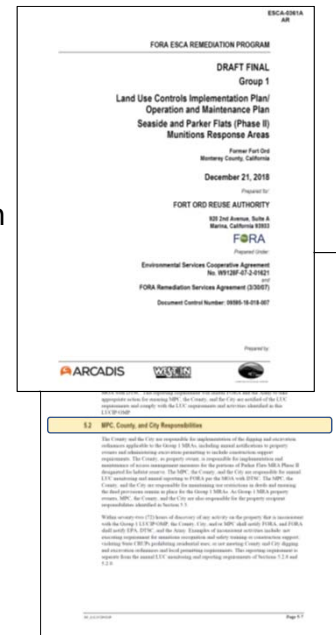
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LUC Operation and Maintenance (LUC O&M)

LUCIP/OMP Section 5: LUC Operation & Maintenance

- Presents responsibilities for actions to facilitate long-term compliance with LUC remedy objectives
- Responsibilities include implementing, monitoring, inspection and reporting, and enforcement
- Identifies specific LUC implementation responsibilities by organization
 - FORA responsibilities
 - County, Cities, MPC and CSUMB responsibilities
 - Property recipient responsibilities (property owners)
 - Army responsibilities



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ESCA LUCIP/OMPs Monterey Peninsula College Property

Munitions Response Area	MPC Parcels	Record of Decision	LUCIP/OMP
Parker Flats MRA Phase I	E19a.5	Track 2 Parker Flats MRA ROD (OE-0661); EDS No.1, Track 2 Parker Flats MRA ROD (ESCA-0356)	RD/RA, LUCIP/OMP, Parker Flats MRA Phase I (ESCA-0166)
Parker Flats MRA Phase II	E23.2, E21b.3	Group 1 ROD (ESCA-0359)	Group 1 LUCIP/OMP, Seaside and Parker Flats (Phase II) MRAs
Interim Action Ranges MRA	E38, E39, E40, E41, E42	IAR ROD (ESCA-0331)	Interim Action Ranges MRA LUCIP/OMP (ESCA-0337B)
MOUT Site MRA	F1.7.2	Group 3 ROD (ESCA-0293)	Group 3 LUCIP/OMP, Del Rey Oaks / Monterey, Laguna Seca Parking, and MOUT Site MRAs (ESCA-0301B)

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LUC O&M Responsibilities: Cities, County, MPC and CSUMB

- ESCA property comes with obligation to maintain LUCs
- Land use decisions are made by jurisdictions
 - Base Reuse Plan lays out the template for reuse
 - Jurisdictions make final reuse decisions
- Jurisdiction responsibilities in implementing LUCs
 - Annual and on-going monitoring and reporting requirements
 - Property transfer requirements
 - Project and activity specific requirements (construction support, use restrictions)
 - Suspect munitions item finds responsibilities
- Property owner responsibilities in implementing LUCs
 - Jurisdictions, as property recipients, must comply with landowner responsibilities

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LUC O&M Requirements: Cities, County, MPC, and CSUMB

- MEC Recognition and Safety Training (County and Cities)
 - Annual property owner notification of training requirements
- Construction Support (County and Cities)
 - Monitor and enforce excavation permit requirements under the digging and excavation ordinance
 - Consultation with Army, EPA and DTSC on construction support requirements prior to issuing excavation permits
 - Ensure Construction Support After Action reporting
 - Annual monitoring and reporting of construction support activities
- Use Restrictions: Residential & Habitat Reserve
 - Maintain use restrictions in property deeds & monitor compliance
- Annual LUC Monitoring and Reporting
 - Conduct annual LUC inspections and status reporting

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LUC O&M Requirements: Property Recipient

- MEC Recognition and Safety Training
 - Ensure property users are aware of and comply with training requirements
 - Annually deliver copy of MEC 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, when required
- Use Restrictions: Residential & Habitat Reserve
 - Comply with use restrictions during use of the property
 - Maintain use restrictions through future property transfers
- Annual LUC Monitoring and Reporting
 - Cooperate with County and Cities in conducting annual inspections of property to verify compliance with LUCs, deed restrictions, and CRUP

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LUC O&M Activities: Cities, County, MPC, and CSUMB

- Yearly & Ongoing Requirements
 - Annual Landowner Notifications (Cities, County)
 - Annual LUC Compliance Monitoring and Reporting
 - Site worker Munitions Safety Training Requirements
 - Maintain Property Use Restrictions
- Property Transfer Requirements
 - Maintain Use Restrictions in Deeds
- Project and Activity Specific Requirements
 - Construction Support Requirements (Decision Tree)
 - Construction Support Templates (On Call Construction Support Plan)
- Suspect Munitions Item Finds Responsibilities
 - Response to Suspect Munitions Finds

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LUC Operation and Maintenance

Yearly and Ongoing Requirements

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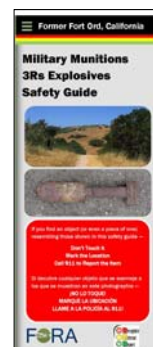


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Yearly Activities: Notifications and Munitions Safety Training

- Annual Notifications to Property Owners
 - **County and Cities** required to notify **property owners** of requirements of Digging and Excavation Ordinance, including munitions recognition and safety training
- Annual Munitions Safety Training Requirements
 - **Property owners** required to deliver a copy of MEC Safety Guide and Army's MEC Safety Alert to all personnel conducting ground-disturbing or intrusive activities
- Annual Reporting
 - **MPC, CSUMB, County and Cities** required to monitor training compliance and report annually



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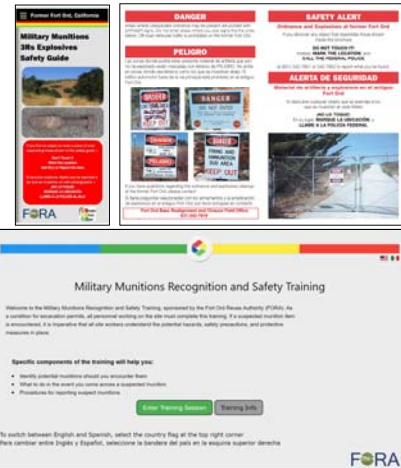


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Ongoing Activities: Worker Munitions Safety Training

- MEC Safety Guide & Army's MEC Safety Alert pamphlet
 - Required to be provided annually to all workers conducting ground-disturbing or intrusive activities
- Web-based Munitions Recognition and Safety Training (www.fortordsafety.com)
 - Required for workers involved in projects requiring construction support
 - Available in English and Spanish
 - Available (and recommended) for all workers
- Construction Support Site-Specific Worker Training
 - Required for workers involved in projects under a construction support plan



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Yearly Activities: Annual Land Use Compliance Monitoring

- Annual Review of Property Filings
 - **MPC, CSUMB, County and Cities** required to review deeds, deed amendments and other property filings to ensure use restrictions, LUCs and State CRUP restrictions maintained and report annually
- Annual Property Inspections
 - **MPC, CSUMB, County and Cities** required to perform annual physical property inspections to ensure use restrictions, LUCs and State CRUP restrictions maintained
- Annual LUC Reporting
 - **MPC, CSUMB, County and Cities** required to report annually as component of Fort Ord Land Use Covenant Annual Monitoring Report

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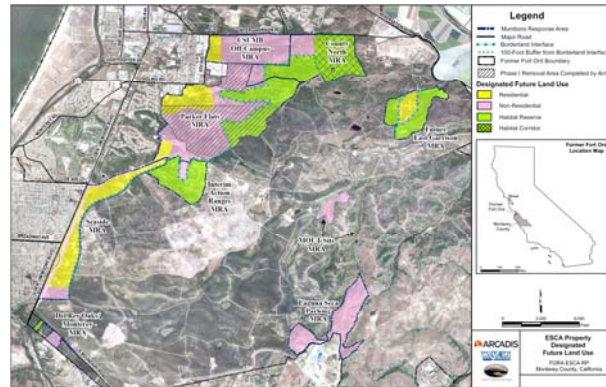


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Ongoing Activities: Maintain Use Restrictions

- Maintain Residential Use Restriction
 - **Property owners (including MPC, CSUMB, County and Cities)** will comply with residential use restrictions during use of the property
- Maintain Habitat Reserve Area Use Restriction
 - **Property owners (including MPC, CSUMB, County and Cities)** will comply with restrictions against inconsistent uses (applicable to habitat reserve areas) during use of the property
- Access management measures
 - **Property owners (including County)** will maintain access management measures (applicable to Group 1 and Group 4 habitat reserve areas)



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LUC Operation and Maintenance

Property Transfer Responsibilities

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Property Transfer Responsibilities

- FORA Planned Property Conveyance
 - FORA notification to Army, EPA and DTSC of intended transfer
 - Notice to describe how LUCs will continue to be implemented
 - FORA to ensure use restrictions, LUCs and State CRUP restrictions maintained in deeds
- Jurisdiction and Future Property Conveyances
 - **Property owner (including MPC, CSUMB, County and Cities)** notification to recipient of the property use restrictions and LUCs and State CRUP compliance requirements
 - **County and Cities** monitor property transfers to ensure use restrictions, LUCs and State CRUP restrictions maintained in future deeds
 - **MPC, CSUMB, County and Cities** annual notification to Army, EPA and DTSC of property transfers as component of Fort Ord Land Use Covenant Annual Monitoring Report



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LUC Operation and Maintenance

Project & Activity Specific Responsibilities

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Project & Activity Specific Requirements

- Use Restrictions: Residential & Habitat Reserve
 - **Property owner (including MPC, CSUMB, County and Cities)** ensure planned project is in compliance with applicable residential and habitat reserve area use restrictions
- Digging and Excavation Ordinance
 - **Property owner (including MPC, CSUMB, County and Cities)** comply with excavation permitting requirements for all projects and activities
- Construction Support
 - **Property owner and/or land user** retains UXO contractor to provide construction support services

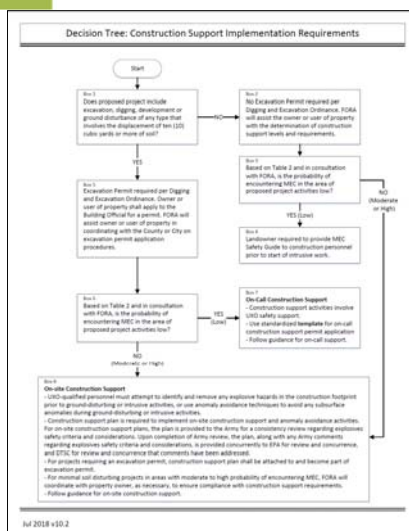
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Construction Support Implementation Requirements Decision Tree



Source: Group 1 LUCIP/OMP Appendix H

Main Considerations:

- How big is the project?
- Where (jurisdiction) is project located?
- What is the probability of encountering MEC at the site?

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Parker Flats Phase II MRA Location

- Jurisdictions - Seaside, Monterey County, and MPC
- Land Use
 - Non-residential development
 - Habitat reserve
 - Future residential
- 475 acres

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Parker Flats Phase II MRA Designated Future Land Use

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MEC Construction Support Levels Parker Flats MRA Phase II MRA – MPC Parcels

- **Low** probability of encountering MEC
 - Non-residential Development Areas (Parcels E21b.3, L23.2)

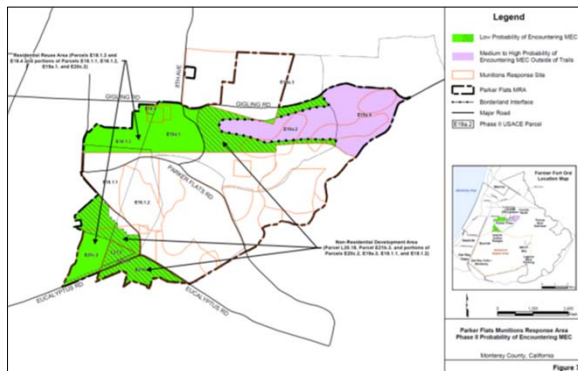


Table 2
Current Probability of Encountering MEC by Parcel

Transfer Parcel No.	MRS Site number	Planned Reuse ²	Approx. Acreage ¹	MRS Site Name	Past Use	Investigation Status ³	Probability of Encountering MEC ⁴
E21b.3	MRS-15 MOCO.2	MPC Non-residential Development	32	North-central portion of Historical Impact Area	Training maneuvers; practice hand grenade training; projectile training (training occurred over a short period of time or area was not the intended target area)	Subsurface MEC removal completed across site.	Low
L20.18	MRS-44 PBC	Roadway	5	PBC Area abutting north-central portion of Historical Impact Area	Training maneuvers; practice hand grenade training; projectile training (training occurred over a short period of time or area was not the intended target area)	Subsurface MEC removal completed across site.	Low
L23.2	MRS-44 PBC	MPC Non-residential Development	11	PBC Area abutting north-central portion of Historical Impact Area	Training maneuvers; practice hand grenade training; projectile training (training occurred over a short period of time or area was not the intended target area)	Subsurface MEC removal completed across site.	Low

Source: Group 1 LUCIP/OMP Table 2 & Figure 7

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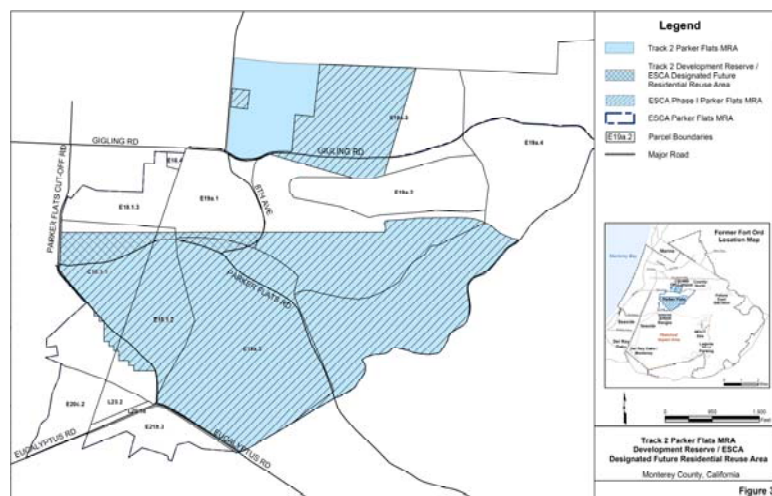


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MEC Construction Support Levels Parker Flats MRA Phase I

- Jurisdiction
 - Monterey County
 - City of Seaside
- Land Use
 - Future residential
 - Non-residential development
 - Habitat Reserve
- **Construction Support Level**
 - “Construction Monitoring”



Source: Parker Flats Phase I LUCIP (ESCA-0166) Figure 3

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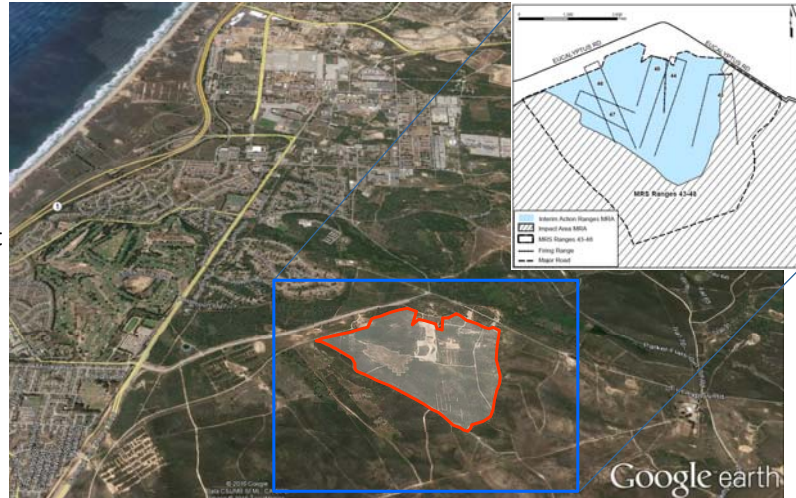


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Interim Action Ranges MRA Location

- Jurisdiction
 - Monterey County
 - City of Seaside (Parcel E38)
- 227 acres
- Land Use
 - Non-residential development
 - Habitat Reserve



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MEC Construction Support Levels Interim Action Ranges MRA

- Moderate to high probability of encountering MEC
 - Range 44 Special Case Area (SCA)
 - Central Area Non-completed Areas
 - Fence line Special Case Area
 - Trench Special Case Area
- Low probability of encountering MEC
 - Area outside of designated SCA and NCA.

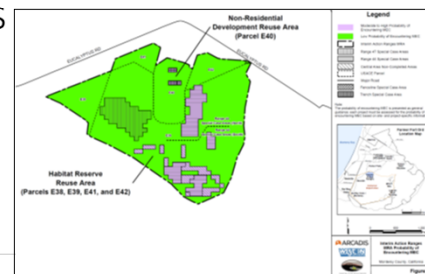


Table 2
Current Probability of Encountering MEC by Parcel

MRS Site Number	Past MRS Use	Planned Reuse ¹	Transfer Parcel No.	Approx. Acreage ²	MRS Site Investigation Status ³	Probability of Encountering MEC ⁴
MRS Ranges 43-48	Mortar training and subsequently platoon live fire course at the time of base closure (Range 43)	MPC Non-residential Development	E40	23.8	MEC removal to depth of detection completed.	Low
				1.2	MEC removal to 2 feet bgs completed.	Moderate to High
			E38	18	MEC removal to depth of detection completed.	Low
				134	MEC removal to depth of detection completed.	Low
	Antitank weapons range at the time of base closure (Range 44)	Habitat Reserve	E39	28	Surface MEC removal completed. MEC removal to depth of detection for sensitively-fuzed munitions completed in Range 44 SCA (North) and transients in Range 44 SCA (South) and Central Area NCAs.	Moderate to High
				9	MEC removal to depth of detection completed.	Low
			E41	12.7	MEC removal to depth of detection completed.	Low
				0.1	MEC removal to depth of detection for sensitively-fuzed munitions completed in Range 44 SCA (North).	Moderate to High
MRS Ranges 45-46	Small arms range from the late 1950s to the time of base closure (Range 46)	Habitat Reserve	E42	12.7	MEC removal to depth of detection completed.	Low
				0.1	MEC removal to depth of detection for sensitively-fuzed munitions completed in Range 44 SCA (North).	Moderate to High

Source: Interim Action Ranges LUCIP/OMP Table 2 & Figure 4

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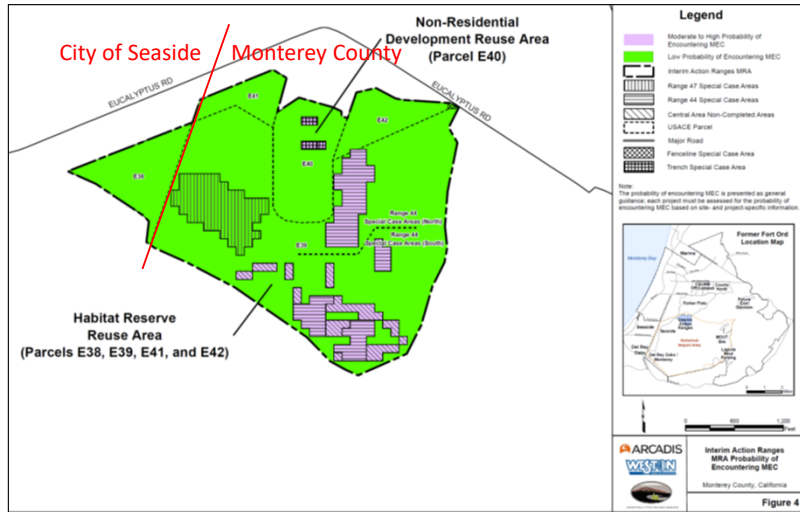
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MEC Construction Support Levels Interim Action Ranges MRA

- Moderate to high probability of encountering MEC
 - Range 44 Special Case Area
 - Central Area Non-completed Areas
 - Fence line Special Case Area
 - Trench Special Case Area
- Low probability of encountering MEC
 - Area outside of designated SCA and NCA.



Source: Interim Action Ranges LUCIP/OMP Figure 4

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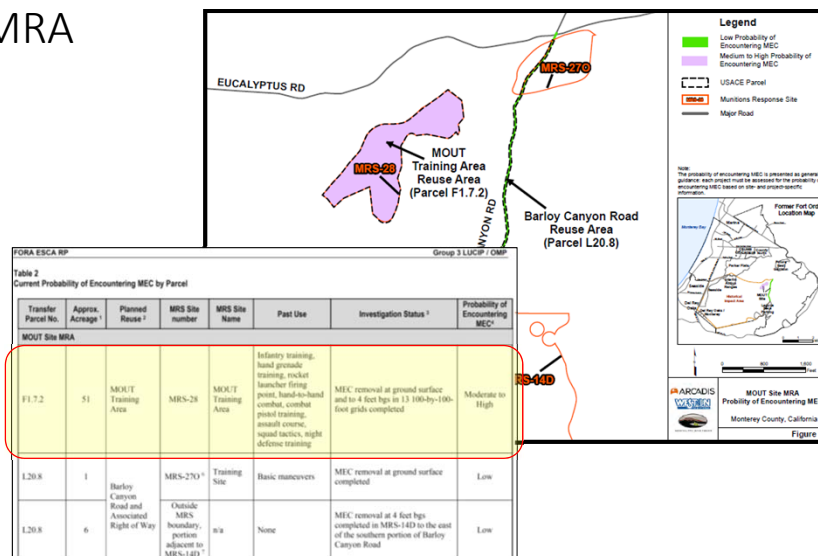
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MEC Construction Support Levels MOUT Site MRA

- Jurisdiction
 - Monterey County
- Land Use
 - MOUT Training Area
- Moderate to high probability of encountering MEC



Source: Group 3 LUCIP/OMP Table 2 & Figure 7

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MEC Construction Support: Minimal Soil Disturbing Activities

Minimal soil disturbing activities in areas with low probability of encountering MEC ⁽¹⁾



1. Provide site workers with MEC Safety Guide
2. Contact local law enforcement (911) in the unlikely event a suspect munitions item is encountered
3. Local law enforcement may request military EOD response to address suspect munitions items



Note: (1) Area with a moderate to high probability of encountering MEC require On-site Construction Support or Anomaly Avoidance.

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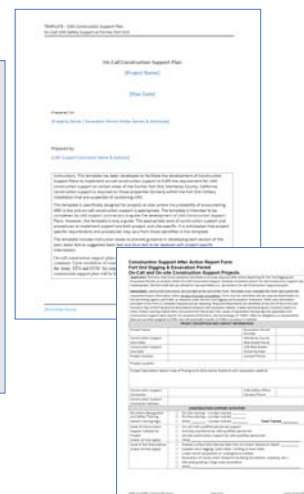


MEC Construction Support: On-Call Construction Support Requirements

On-Call Construction Support⁽¹⁾



1. Excavation Permit
2. On-Call Construction Support Plan
3. Worker munitions safety training
4. UXO support contractor on stand-by to assist if suspect munitions item is encountered
5. Local law enforcement responds and may request military EOD response to MEC or suspect MEC items



Note: (1) More than 10 cu/yds soil disturbance in areas with a low probability of encountering MEC.

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MEC Construction Support: Anomaly Avoidance Support Requirements

Anomaly Avoidance Support⁽¹⁾



Notes:

- (1) Any soil disturbance in areas with a moderate to high probability of encountering MEC.
(2) Excavation Permit not required for projects with minimal soil disturbance (<10 cy)

1. Excavation Permit⁽²⁾
2. Anomaly Avoidance Plan (abbreviated On-Site Construction Support Plan)
3. Worker munitions safety training
4. UXO support contractor uses anomaly avoidance techniques to avoid any subsurface anomalies during ground-disturbing or intrusive activities
5. In unlikely event MEC or suspect MEC items encountered, local law enforcement responds and may request military EOD response

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MEC Construction Support: On-site Construction Support Activities

On-site Construction Support⁽¹⁾



Notes:

- (1) Any soil disturbance in areas with a moderate to high probability of encountering MEC.
(2) Excavation Permit not required for projects with minimal soil disturbance

1. Excavation Permit⁽²⁾
2. On-Site Construction Support Plan
3. Worker munitions safety training
4. UXO support contractor attempts to identify and remove any explosive hazards in construction footprint prior to ground-disturbing activities
5. After explosive hazards removed, UXO support contractor on standby to assist if suspect munitions items encountered
6. UXO support contractor will address MEC items recovered

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LUC Operation and Maintenance

Response to Suspect Munitions Finds

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Response to Suspect Munitions Finds

- Three scenarios for response to suspect munitions items
- Standard procedure for encounters with suspected items
 - Stop work in vicinity of suspect munitions item
 - Immediately notify local law enforcement
 - Local law enforcement secures site and request DoD response
- On-call Construction Support
 - Stop work in work in area of suspect munitions item
 - Immediately notify UXO support contractor
 - UXO-qualified personnel inspect and assess suspect item
 - Confirmed MEC, all work stops at site, notify local law enforcement
 - Local law enforcement secures site and requests DoD response
- On-site Construction Support
 - Process to be included in On-site Construction Support Plan

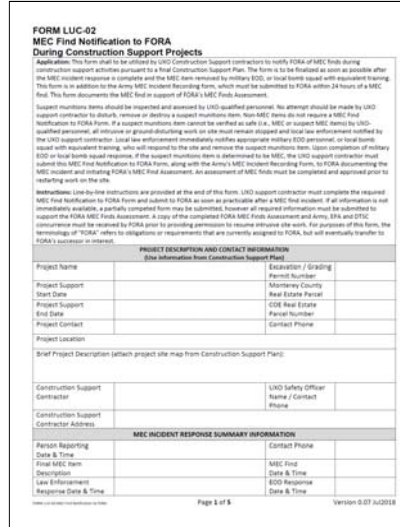


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On-Call Construction Support Response to Suspect Munitions Items



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On-Site Construction Support Response to Suspect Munitions Items

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Land Use Controls Operation and Maintenance

Questions?

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