



25 May 2011

Mather Restoration Advisory Board Meeting

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Agenda Topics

- **RAB Adjournment Process and Feedback**
 - Mather Cleanup Program Overview
 - Community Outreach
 - Adjournment Process
 - RAB or Public Comments and Questions
- **Updates on Environmental Cleanup Program**
- **Updates on property transfer**
- **Topics and Date for Future RAB Meeting**
- **Regulatory update**
- **Opportunity for public comments**

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Community Outreach

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- Updated website (www.safie.hq.af.mil/afropa/legacybrac/mather/index.asp) with cleanup summary, facts, maps, frequently asked questions (FAQs) with answers, and updated contact information
- Prepared article from interview with Mayor Bob McGarvey, Grapevine Independent used as Op/Ed piece, Feb 25
- Outreach briefings
 - Cordova Community Council, April 15
 - Sacramento Central Groundwater Authority, May 11
 - Rancho Cordova City Council, May 16
- Updated and expanded mailing list (from 850 to 3500)
 - March Newsletter
 - April Newsletter
 - Letter from AFRPA WREC Senior Rep
 - RAB notification flyer (with web site magnet)

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RAB Adjournment



May 25, 2011
Linda Geissinger
Air Force Real Property Agency Regional
Public Affairs Officer

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Purpose and Function of the Mather RAB

- **The Mather RAB is an advisory group of government and community stakeholders, organized to:**
 - **Promote community awareness and obtain constructive community review and comment on environmental restoration actions**
 - **Share information about the cleanup program**
 - **Ensure opinions about the environmental restoration reflect diverse interests within the community**
 - **Serves in an advisory capacity to**
 - United States Department of Defense
 - United States Environmental Protection Agency
 - State and local governments

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History of the Mather RAB

- **In 1989, the Air Force, US EPA, and State of California signed a Federal Facility Agreement to coordinate environmental cleanup at Mather.**
- **In 1994, Mather Restoration Advisory Board formed and has been meeting over the past 17 years.**
- **Mather RAB is chaired jointly by the Air Force *Base Environmental Coordinator* and a community member.**
- **Currently, community representation is down. Since last Record Of Decision was signed in 2006, attendance has been very low.**

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History of the Mather RAB

- **RAB has been instrumental in community relations activities, including sharing information with:**
 - **Local neighborhoods**
 - **City Council**
 - **Local news**
 - **Tour groups**
 - **Community events**
- **Also helped investigate sites based on historical knowledge and research.**

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Mather Cleanup Activities

- **Since 1984, six Operable Units have been identified.**
- **Five Records of Decision have been signed.**
- **75 of 89 IRP Sites closed.**
- **Achieved *Last Remedy in Place* in FY2006.**
- **3 Landfills**
- **4 Plumes**
- **4 Soil Vapor Extraction Systems**
- **Several Five-Year Reviews have been completed.**
 - **These address the effectiveness of the remedies.**
 - **The Air Force will continue to conduct five-year reviews to ensure protection of human health and the environment.**

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RAB Adjournment

- **Adjourn a RAB if:**
 - **Lack of community interest**
 - **Record of Decisions are signed**
 - **“Response complete” at all sites**
 - **All remedies are in place**
 - **Achieved RAB goals**
 - **Land transferred to a non-DoD entity**
 - **No longer sufficient and sustained community interest**

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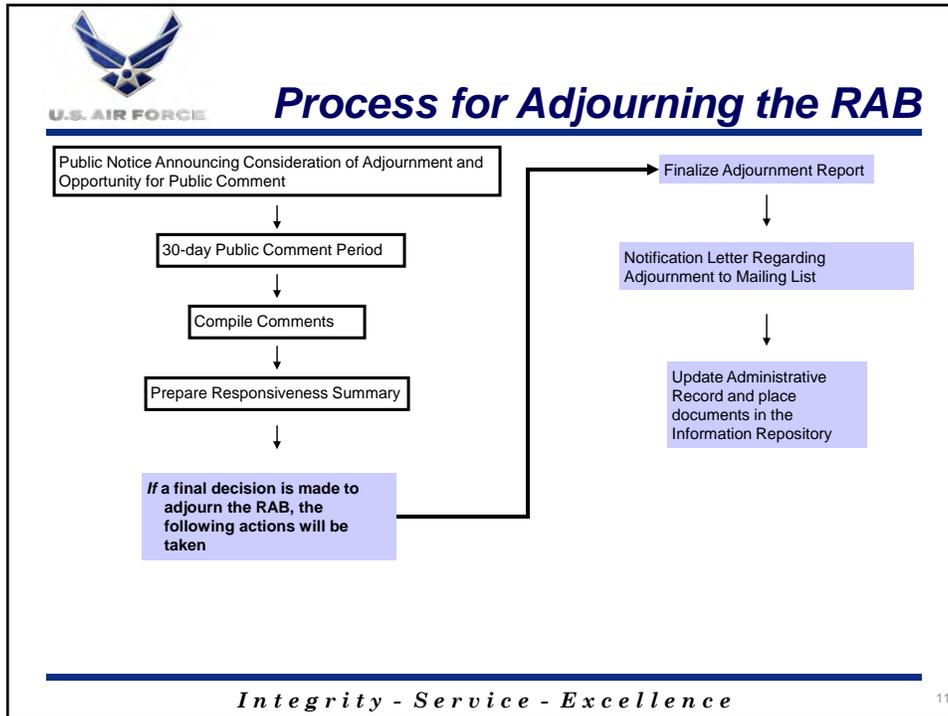


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RAB Adjournment

- **Air Force Senior Representative must consult with and consider all comments provided by:**
 - **Community members**
 - **RAB Members**
 - **EPA**
 - **State and Local Government**
- **Notify RAB members and the public of the decision through writing and publication in a local newspaper.**
- **Describe other ongoing public involvement opportunities.**
- **Document rationale for adjournment in a memorandum for inclusion in the Administrative Record.**

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- ## Intensified Outreach
- Updated website with cleanup summary, maps, FAQs, and contacts
 - *Grapevine* editorial message from Mayor Bob McGarvey (Feb 25)
 - Expanded mailing list. Information sent to 3,500 homes:
 - Newsletter (March)
 - FAQ Flyer (May)
 - Personal Letter from Senior Representative (Apr 11)
 - Website Magnet and Meeting Postcard (early May)
 - Gave presentation on Mather cleanup to:
 - Rancho Cordova City Council on May 16, 2011, televised, re-broadcast, also webcast
 - Cordova Community Council, April 15, 2011.
 - Sacramento Central Groundwater Authority, May 11, 2011.
 - Designed posters showing:
 - (1) current groundwater plumes
 - (2) current soil areas
 - (3) property transfers – past and pending
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Discussion

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Mather Environmental Cleanup Update

For the Mather Restoration Advisory Board (RAB)

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Updates on Cleanup Program

- **Field activities since last RAB meeting and upcoming activities**
- **Groundwater monitoring and cleanup update**
- **Determinations of proper and successful operation**
- **MMRP update**
- **Key documents**

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Updates – Field Activities

- **Field activities since last RAB meeting**
 - **Completed 1st quarter 2011 monitoring of groundwater, soil vapor, and landfills, and initiated 2nd quarter 2011 monitoring**
- **Upcoming field activities**
 - **MMRP clearance of XE-404 (OT-69) to be resumed in July 2011 with report completed in 2012**
 - **Excavation of soil at former above-ground tank site (facilities 10402, 10403) to start 31 May 2012**
 - **Installation of 3 groundwater monitoring wells**

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Update – Groundwater Cleanup

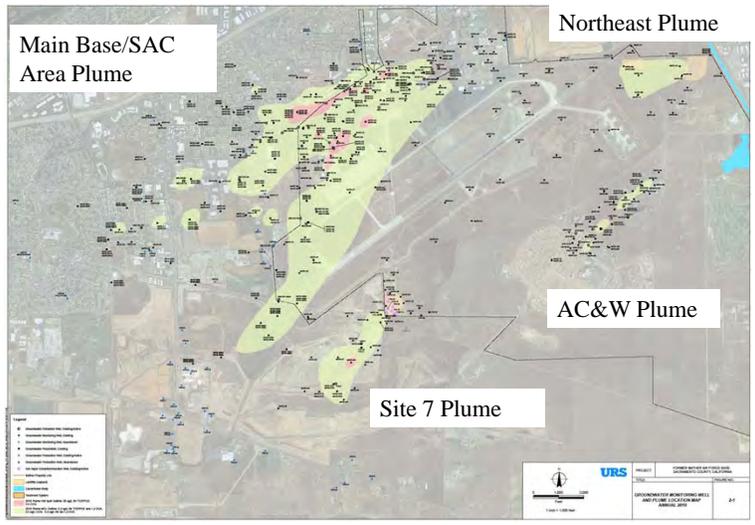
- **Groundwater cleanup update**
 - Three plumes are undergoing cleanup by AFRPA; all systems operating without major problems
 - Wellhead treatment system continues to operate at County water system serving Branch Center complex
 - Yearly sampling of off-base private wells will occur in June

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Groundwater Plume Map Fourth quarter 2010



The map displays four distinct groundwater plume areas: the Main Base/SAC Area Plume (large central area), the Northeast Plume (top right), the AC&W Plume (bottom right), and the Site 7 Plume (bottom center). A legend in the bottom left corner provides details on plume types and monitoring wells. A scale bar and URS logo are located in the bottom right corner.

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**Groundwater Remedies –
Determinations of OPS (previously briefed)**

- A determination that a remedy is operating properly and successfully (OPS) is a milestone for property transfer, signifying that all action needed to protect human health and the environment has been taken
- Properly refers to the remedy being established according to the approved design
- Successfully refers to the remedy operating with results consistent with achieving the intended cleanup and protectiveness

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**Groundwater Remedies –
Determinations of OPS (cont'd)**

- **Northeast Plume – Determination of OPS**
 - The remedy for the Northeast Plume is long-term monitoring and assessment, with institutional controls to prevent compromising the remedy
 - The sources for the Northeast Plume are landfills LF-03 and LF-04, which were capped in 1996 so that rainwater would no longer percolate through the waste and carry contaminants to the groundwater
 - The monitoring system was completed with the installation of MAFB- 438 defining the extent of the plume to the north; monitoring data is evaluated in each annual report
 - The area of the plume with concentrations above aquifer cleanup levels has decreased since the landfills were capped
 - Concentration trends suggest the plume may attain aquifer cleanup levels in about 2025

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Groundwater Remedies – Determinations of OPS (cont'd)

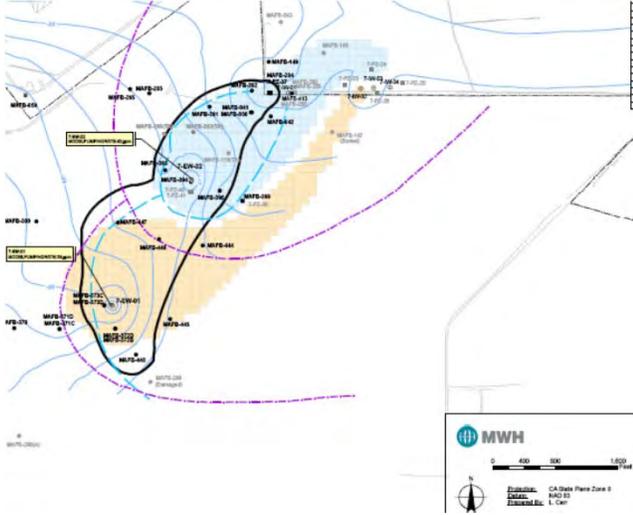
- **Site 7 Plume – Determination of OPS**
 - Site 7 cleanup by pumping and treating resumed in 2006 after 3-year interruption for mining and reclamation to occur south of Mather. The creation of wetlands adjacent to the plume is occurring as part of reclamation
 - The Site 7 Plume cleanup occurs with two extraction wells which control most if not all of the plume
 - Institutional controls are in place on Mather
 - The source area (Landfill WP-07) was capped in 1998 to prevent rainfall from flushing contaminants from the soil
 - AFRPA has committed to install one additional monitoring well to confirm the extent of the plume
 - The remedy is predicted to require at least 30 more years to attain the aquifer cleanup levels

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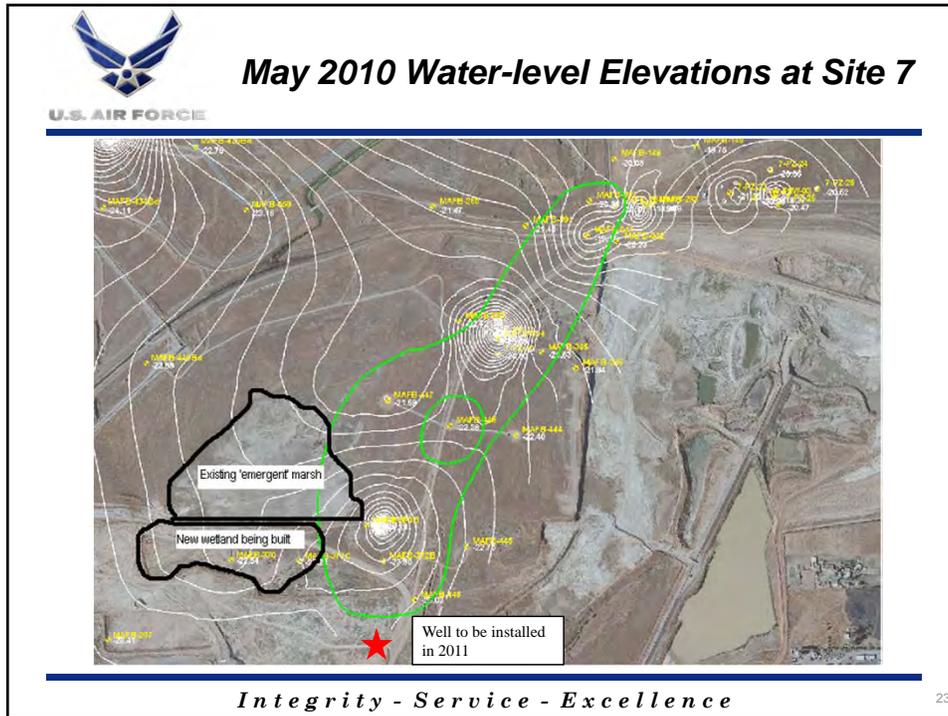
Draft Site 7 CZA Interpretation (2009)



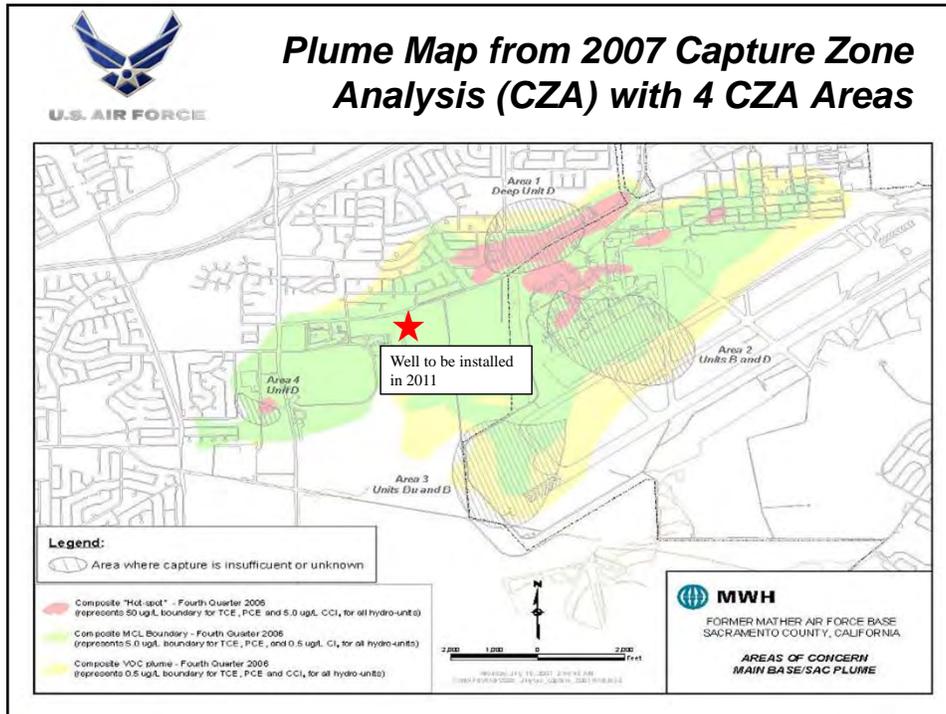
The map displays the Site 7 plume area with various monitoring wells (MWTS-001 through MWTS-018) and extraction wells (MWTS-019 and MWTS-020). A yellow shaded region indicates the plume boundary, and a purple dashed line shows the CZA interpretation. A scale bar (0 to 1,000 feet) and a north arrow are provided. The MWH logo is also present.

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- Groundwater Remedies – Determinations of OPS (cont'd)**
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- **Main Base/SAC Area Plume– Determination of OPS**
 - MBSA Plume remediation by pumping and treating began in 1998 with more extraction wells added in 2000, 2002, 2005 and 2008
 - The MBSA Plume cleanup uses 26 extraction wells which control most of the plume
 - Institutional controls are in place on Mather
 - The source areas have been or are being addressed by soil vapor extraction or bioventing to reduce contamination in the soil that otherwise could migrate to groundwater
 - AFRPA will install one additional monitoring well to confirm the extent of the Southwest Lobe of the MBSA Plume, and one well pair in Unit D horizon to confirm extent (map, next page)
 - The remedy is predicted to require at least 60 more years to attain the aquifer cleanup levels
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OPS focus: CZA Area 1

- The deepest wells in Area 1 have concentrations of contaminants up to about three times the aquifer cleanup levels for PCE
- Gradient indicates vertical component of groundwater flow near these wells alternates seasonally, upward and downward
- RPMs have coordinated on a plan to install an additional groundwater monitoring well pair west of MAFB-181 to provide additional information on plume extent

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**OPS Focus: CZA Area 3 – Southwest Lobe**

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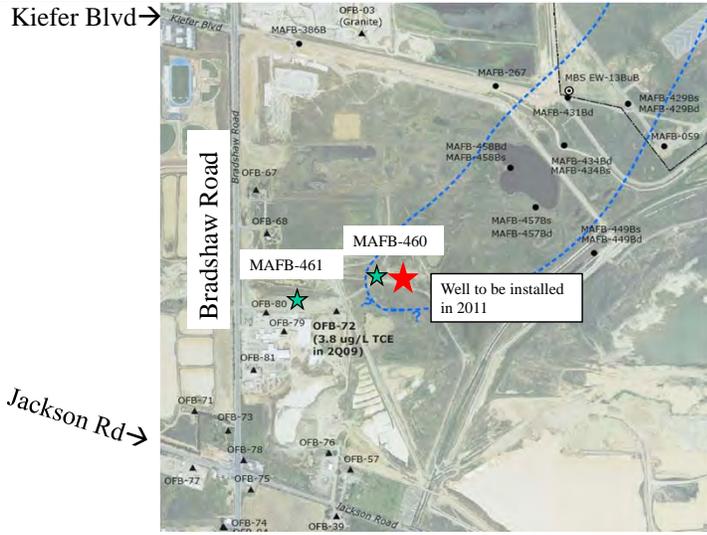
- Two monitoring well pairs were installed near the toe of the Southwest Lobe and sampled in November 2009. At one location (MAFB-460), samples from both well screens had detections below cleanup levels. At the other location (MAFB-461), samples from both screens had no detections.
- These wells have been sampled in first three quarters of 2010, with similar results, and one trace detection of TCE in MAFB-461Bs in the first quarter.
- OFB-72 (dust control well) and OFB-80 (drinking water well) have been sampled quarterly; the former has had detections below cleanup levels, and the latter none.
- AFRPA plans to place a deeper monitoring well adjacent to MAFB-460

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**Prior Interpretation of Southwest Lobe (MBSA CZA Area 3) with Nov 09 wells**

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Kiefer Blvd →

Bradshaw Road

Jackson Rd →

Well to be installed in 2011

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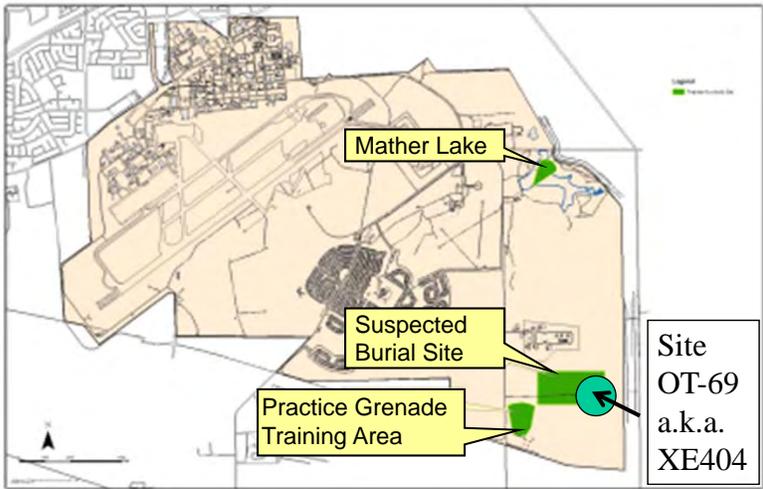
Update - Military Munitions Response Program (MMRP)

- The environmental, health and safety issues related to ordnance are managed under the MMRP
- Clearance has occurred at 3 Major MMRP Sites at Mather
 - Mather Lake: completed in 2009 for part of eastern shoreline currently being cleared; no ordnance found; final report to be issued Nov 2010
 - Practice Grenade Launcher Training Area clearance completed; report finalized in Nov 2009
 - Suspected Burial Site AOC-601 clearance completed; final report to be issued Nov 2010. Additional area remains to be cleared in 2011 related to IRP Site OT-69 (Site XE-404 for MMRP), where buried, burned material and debris 'kicked out' have been found

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Map of 4 MMRP Sites



The map displays the layout of Mather Air Force Base with four specific sites highlighted in green. Callout boxes identify each site: Mather Lake (top right), Suspected Burial Site (center), Practice Grenade Training Area (bottom center), and Site OT-69 a.k.a. XE404 (bottom right). A legend in the top right corner shows a green square next to the text 'MMRP Site'. A north arrow and a scale bar are located in the bottom left corner.

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Update - Military Munitions Response Program (MMRP)

- **The remainder of the former ordnance burning/ ordnance detonation site now identified as XE-404 will be cleared in 2011 (the same location as IRP Site OT-69, with the addition of a 'kick-out' buffer zone)**
- **Geophysical surveying and partial verification occurred in 2009, but additional funding was required to complete the clearance, which is scheduled to occur from July through September of 2011**

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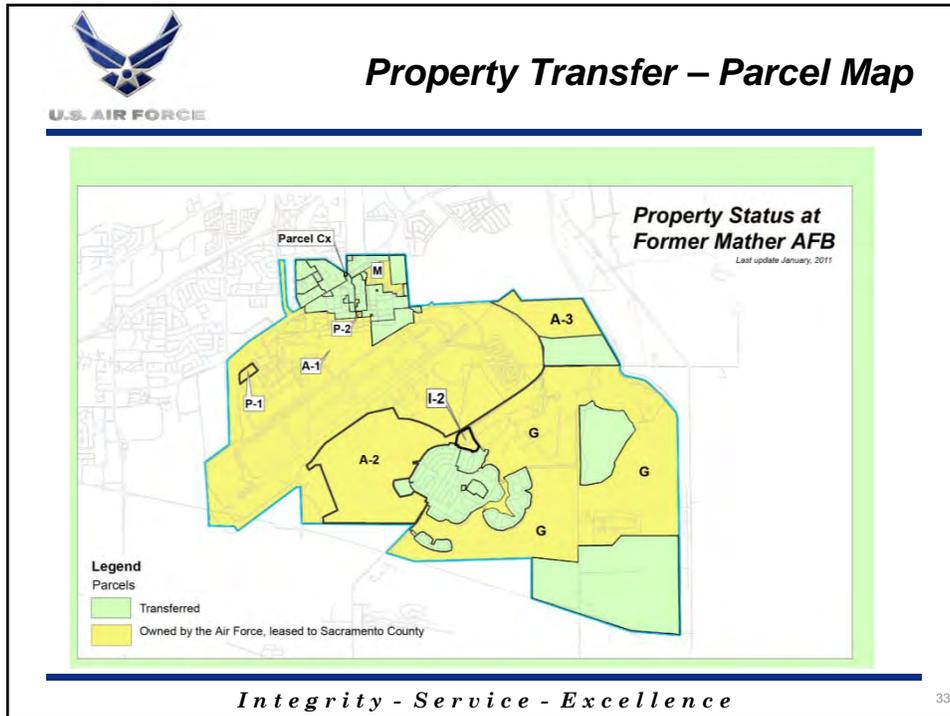
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Updates – Property Transfer

- **Property transfer status**
 - **Parcels Cx deed transferred in 2011 (small parcel near front entrance)**
 - **AFRPA has prepared documentation to support transfer of I-2 (chapel in housing area); and M (Mather community campus)**
 - **Findings of Suitability for Transfer (FOSTs) have been prepared for airport parcels A-2 and A-3.**
 - **AFRPA is preparing documentation to support transfer by deed of the other airport parcel (A-1) and the parks parcel G; the draft FOST for A-1 was issued for regulatory review in May 2011**

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- Key document update**
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- Documents issued or finalized since February 2011 RAB meeting
 - Draft 2010 groundwater monitoring report
 - 2010 soil vapor extraction/bioventing report
 - 2010 landfill report
 - 2011 groundwater sampling plan
 - 1Q11 groundwater monitoring report (fact sheet)
 - Final Site 20 Remedial Action Report (documenting results of groundwater monitoring to complete site closure requirements)
 - Work plan for three groundwater monitoring wells
 - Draft report proposing to terminate soil vapor extraction and active bioventing at Site 7/11
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Key document update (cont'd)

- **Documents in review since February 2011 RAB meeting**
 - **Draft 2010 groundwater monitoring report (comments due 17 June)**
 - **Draft report proposing to terminate soil vapor extraction and active bioventing at Site 7/11 (comments were due 16 April)**
 - **Revised Draft Construction Work Plan for Groundwater Monitoring Well Installation (comments were due 8 April)**

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Key document update (cont'd)

- **Upcoming documents of interest**
 - **Closure report for Site SD-57 source area (2011)**
 - **Clearance report for XE-404 (2012)**
 - **Routine groundwater, landfill, and SVE/bioventing reports**

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Regulatory Update

- **Remedial Project Managers (RPMs)**
- **U.S. EPA RPM: John Lucey**
 - Community Involvement: Viola Cooper
- **CA DTSC RPM: Franklin Mark**
 - Public Participation: Nathan Schumacher
- **CA RWQCB RPM: Marcus Pierce**
 - Public Participation support: Conny Mitterhofer

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Action Item Update

1. **Keep the RAB informed of the Site 7 groundwater remediation and any concerns related to planned construction of an emergent marsh wetlands per the reclamation plan for the gravel pit**
Status: ongoing
2. **Provide information when property with land-use restrictions is to be transferred**
Status: Ongoing; dates are not yet know for future transfer of additional property with land-use restrictions. Parcels A-1 and G will have land-use restrictions

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Action Item Update (continued)

- 3. Provide RAB members minutes in a timely fashion**
Status: Ongoing
- 4. Post the Community Relations Plan on the website**
Status: completed
- 5. Post contact information on the website where the public may ask questions or express concerns**
Status: completed

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RAB Topics and Future Meeting Dates

- **Topics for future RAB meetings**
 - ?
 - ?
- **Future RAB Meeting Date(s)**
 - August 31 proposed

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Round the Table

- **Opportunity for public comments**

- **Meeting adjournment**

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