Former McClellan Air Force Base (AFB)
Restoration Advisory Board (RAB) Meeting Minutes – DRAFT FINAL
December 14, 2016 -- McClellan, California

Time: 6:30 PM
Place: North Highlands Recreation Center
North Highlands, California

RAB Member Attendees

NAME	AFFILIATION
CHARNJIT BHULLAR	U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)
STEVE MAYER	AIR FORCE CIVIL ENGINEER CENTER; CO-CHAIR
STEPHEN PAY	CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCE CONTROL
JAMES TAYLOR	CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD
CAROLYN GARDNER	MCCLELLAN PARK RESIDENT
KATHY GALLINO	LOCAL REUSE AUTHORITY
PAUL PLUMMER	LOCAL BUSINESS COMMUNITY
PAUL GREEN	EDUCATION COMMUNITY
TINA SUAREZ-MURIAS	ENVIRONMENTAL COMMUNITY

I. Welcome, Introductions and Agenda

Mr. Bill Davis welcomed everyone to the meeting and introduced himself as the meeting facilitator and went over the meeting agenda (Attachment 1). Attendees signed-in and picked up available handouts. Mr. Davis then invited RAB members to introduce themselves and the groups/organizations they represent. Mr. Davis asked for approval of the September 2016 RAB minutes. They were approved.

II. Air Force Cleanup Update

Mr. Mayer provided an explanation of the current Air Force Cleanup Field Activities, including the Follow-on Strategic Sites, Old Magpie Creek Channel, AOC 314, and Hexavalent Chromium, as well as an update on Property Transfer (see Attachment 2). Mr. Mayer invited attendees to ask any questions they might have regarding the information.

RAB Discussion

Mr. Mayer was asked for explanation of what the Hexavalent Chromium background level means. He responded that Chromium is a naturally occurring material. Background is the

presence of the material at those naturally occurring levels. At McClellan, the Air Force, in agreement with the regulators, had to determine what the natural occurring level is in areas not influenced by some industrial process. At the base there are some localized areas where electro-plating was done and used Chromium. There are localized plumes associated with that industrial process. Those areas are being cleaned up. Other portions of the base were studied where there wasn't any influence from industrial processes to determine background levels.

A community member asked what the cleanup level of the plumes would be. Mr. Mayer said the cleanup up level is 14 micrograms per liter. A community member asked what date the background cleanup level was set. Mr. Mayer said the cleanup levels were set last summer. Prior to that the level was 50.

Ms. Gardner asked if rainfall affects the levels that are being discussed. Mr. Mayer explained that it does not and the groundwater level around the base is about 100 feet below the surface, so it takes the water quite awhile to get down there.

Mr. Mayer was asked what the difference is between treating the base as whole and the two hot spots. He said the industry standard for treatment is an ion exchange system; similar to a water softening system found in a home with resins designed to pull the material out. Within the overall groundwater treatment plant itself there is a separate treatment process for ion exchange to remove the chromium from the groundwater.

A community member asked what the imminent health threat is regarding not doing the very expensive procedure at AOC 314 because these projects cost a lot of money. They suggested that if there is no imminent health threat, the Air Force should give a break to the hardworking taxpayer. Mr. Mayer responded the issue is that the property couldn't be transferred as long as the contamination is in place. So the only option would be for the Air Force to retain that property if cleanup were not completed, and under the congressional mandate of BRAC, the Air Force is required to transfer the property.

III. Regulatory Update
Mr. Dirscherl announced that Mr. Fitzgerald would be retiring in January.

IV. Privatized Cleanup Update
Mrs. Dana Hachigian provided a Privatized Cleanup Update (Attachment 3). Only information not presented in the attachment is summarized in these minutes.

Ms. Suarez-Murias asked what was being pulled from each of the privatization sites that were excavated last summer. Ms. Hachigian responded that depending on which site there was TPHG, TPHD, lead and PCBs, all of which are gasoline.

Ms. Suarez-Murias asked how it is known that the chemicals haven't migrated further. Mr. Dirscherl responded that confirmation samples are taken from the bottom and sidewalls of the excavation site to make sure that clean soil has been found.

A community member asked how much tax money was transferred to Tetra Tech for this work, and how much tax money has been spent on this. Mr. Mayer responded that the money doesn't

transfer to anybody until specific milestones are met and it's the same with each subsequent FOSET.

Ms. Suarez-Murias commented that ultimately because this land has been cleaned up and can be reused by private industry, which will generate income and that would in essence reimburse over a certain amount of time taxes for the County. She said that in a way it's very lucky because Sacramento County is getting the benefit because businesses are able to go forward at these locations because it's clean, so Sacramento County gets the benefit of the entire country's investment.

V. Public Comment Period

Mr. Frank Miller: There is nothing noble about taking a billions dollars and putting it into the dirt.

VI. RAB Member Comments

Ms. Gardner said there is a responsibility to take care of the people who are working there. You have to spend the money to make sure the job is done well and done responsibly. The most important thing is to not do any harm. Sometimes you have to go out of your way and spend a little more money, but the most important thing is to get the job done and to do it safely for the people who are going to be involved in it.

Ms. Gallino said it has been a very productive and positive field season and we're creating jobs at McClellan, generating revenue and bringing good things to our community.

VII. Next Meeting and Meeting Adjournment

The next McClellan RAB meeting was tentatively announced as being April 19, 2017.

The meeting adjourned to the poster board session at 7:50 p.m.

McClellan
Restoration Advisory Board

September 15, 2016

RAB Purpose

The McClellan Restoration Advisory Board provides a forum through which the local community, regulatory agencies, and the Air Force can share information on the current and future environmental cleanup programs and reuse at the former base. RABs offer members the opportunity to influence cleanup decisions through discussion and to provide input to the installation decision makers.

RAB members are volunteers representing their communities. Environmental restoration experience is not required for RAB membership. Rather, RAB membership criteria emphasizes the diversity an individual will bring to the RAB and the individual's commitment toward achieving the RAB's goals.

RAB Meeting Agenda

Welcome, Introductions and Purpose	**Facilitator**
Agenda	**Facilitator**
Air Force Cleanup Update	**Air Force**
Privatized Cleanup Status	**Tetra Tech**
Open House Poster Session	

Air Force Cleanup Update

Steve Mayer
McClellan BRAC Environmental Coordinator

Follow-On Strategic Sites Update

CS043 – Excavation has been completed.
Sampling activities will continue.
No further excavation is planned this season.

Project Background

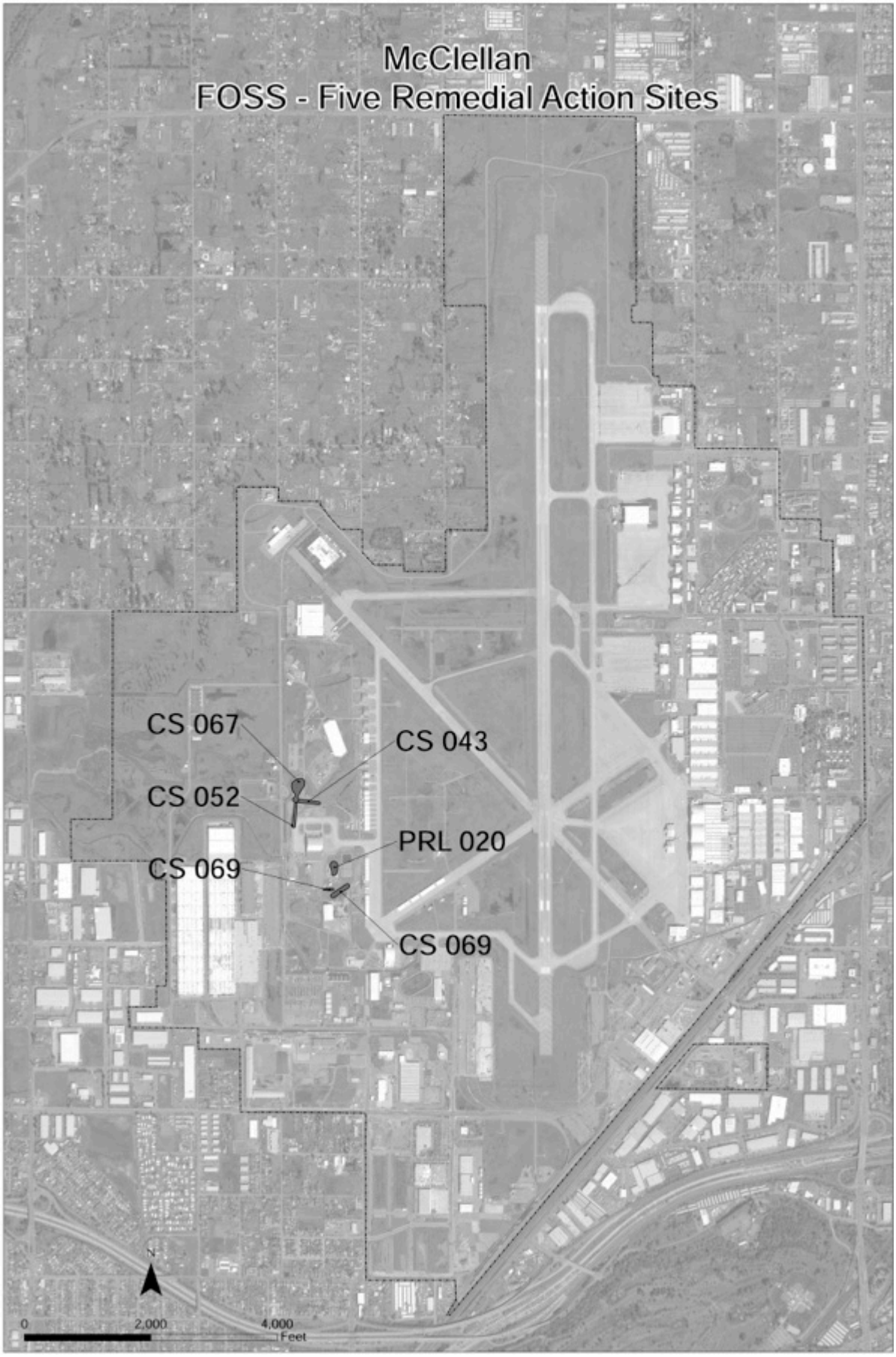
- **Record of Decision was signed in 2014**
- **34 action sites**
- **Follow-on Strategic Sites include:**
  - **28 Privatized sites**
  - **6 Air Force sites –** 5 landfills sites and 1 bio-vent site
- **Objectives:**
  - Excavate and dispose of contaminated soil and waste at the Consolidation Unit, or if contaminated soil characteristics do not permit disposal at the Consolidation Unit, at a U.S. EPA approved waste management facility.
  - Backfill and compact the excavated areas with clean soil, meeting industrial use standards.
- **Project will take approximately two years to complete**

CS067 – Excavation was halted due to elevated RAD detections.
Initial sample had elevated Radium Thorium and Uranium.
Additional sampling will be done.

CS069 – Excavation will begin next field season.

CS052 – Excavation will begin next field season.

PRL020 – Initial excavation has been completed, confirmation testing is underway. Additional excavation is required for contamination extending into groundwater treatment plant.


McClellan
FOSS - Five Remedial Action Sites
CS 067
CS 043
CS 052
PRL 020
CS 069
CS 069
N
0
2,000
4,000
Feet

IC 29 Groundwater Optimization Update

The Air Force conducted a remedial process optimization project at Investigative Cluster (IC) 29 in Operable Unit A.

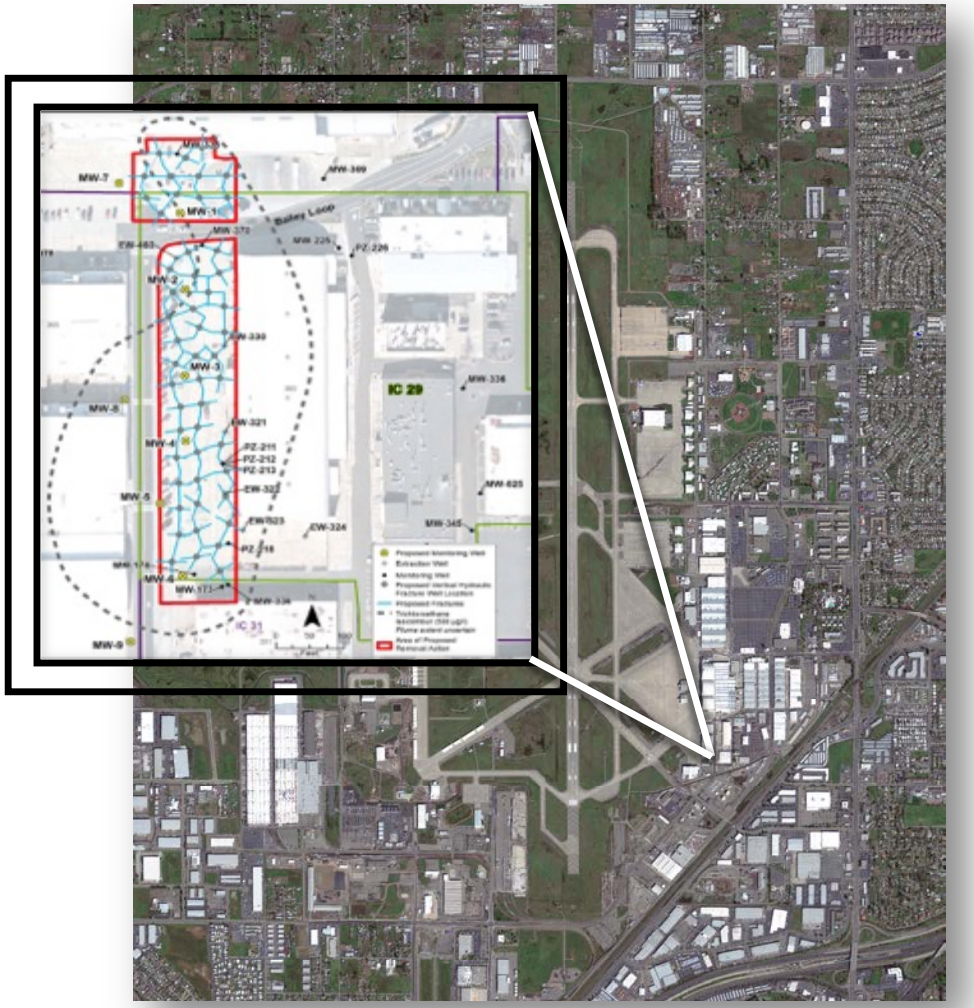
Once considered to be the plume with the longest cleanup time, the cleanup of IC 29 could now be reduced by as much as 17 years.

What was done –

In 2013, the Air Force installed 52 permeability enhancement wells 30 feet apart. Permeability pathways were created between 110 and 130 feet below ground surface.

Results –

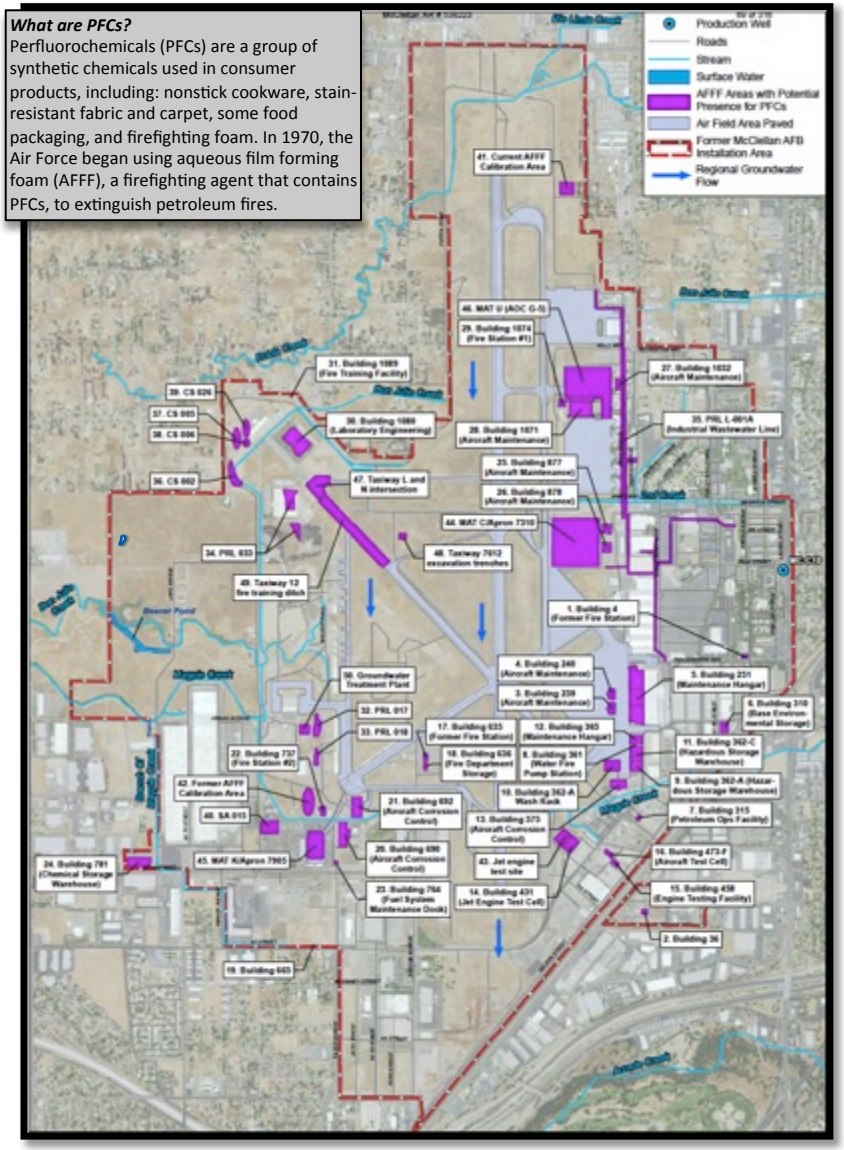
- Results show groundwater extraction flow from the treatment area has increased by approximately 29 percent.
- Average TCE concentrations in the wells within the treatment area has decreased by 45 percent.
- Average TCE concentrations at extraction wells within the treatment area have decreased by 53 percent.



McClellan PFC Update

- The Perfluorinated Compounds (PFC) Preliminary Assessment (PA) was finalized in August.
- Aqueous Film Forming Foam (AFFF) containing PFCs were used at McClellan for extinguishing petroleum fires and firefighting training activities, as well as in aircraft hanger fire suppression systems.
- The document provides findings from research conducted to determine whether and where aqueous film forming foam (AFFF), containing PFCs, was stored, handled, used or released at McClellan.
- Research was conducted on operations from 1970 (when the Air Force began using AFFF) through the installation closure in 2001.
- Since the fire training area (FTA) was known to have used AFFF it is already being investigated for PFCs at McClellan, this PA focuses on those areas outside the FTA.
- 51 AFFF areas were identified at McClellan and may potentially require further action.
- A sampling plan is being created to characterize other potential release locations. Once the plan is finalized field work will begin.

What are PFCs?
Perfluorochemicals (PFCs) are a group of synthetic chemicals used in consumer products, including: nonstick cookware, stain-resistant fabric and carpet, some food packaging, and firefighting foam. In 1970, the Air Force began using aqueous film forming foam (AFFF), a firefighting agent that contains PFCs, to extinguish petroleum fires.

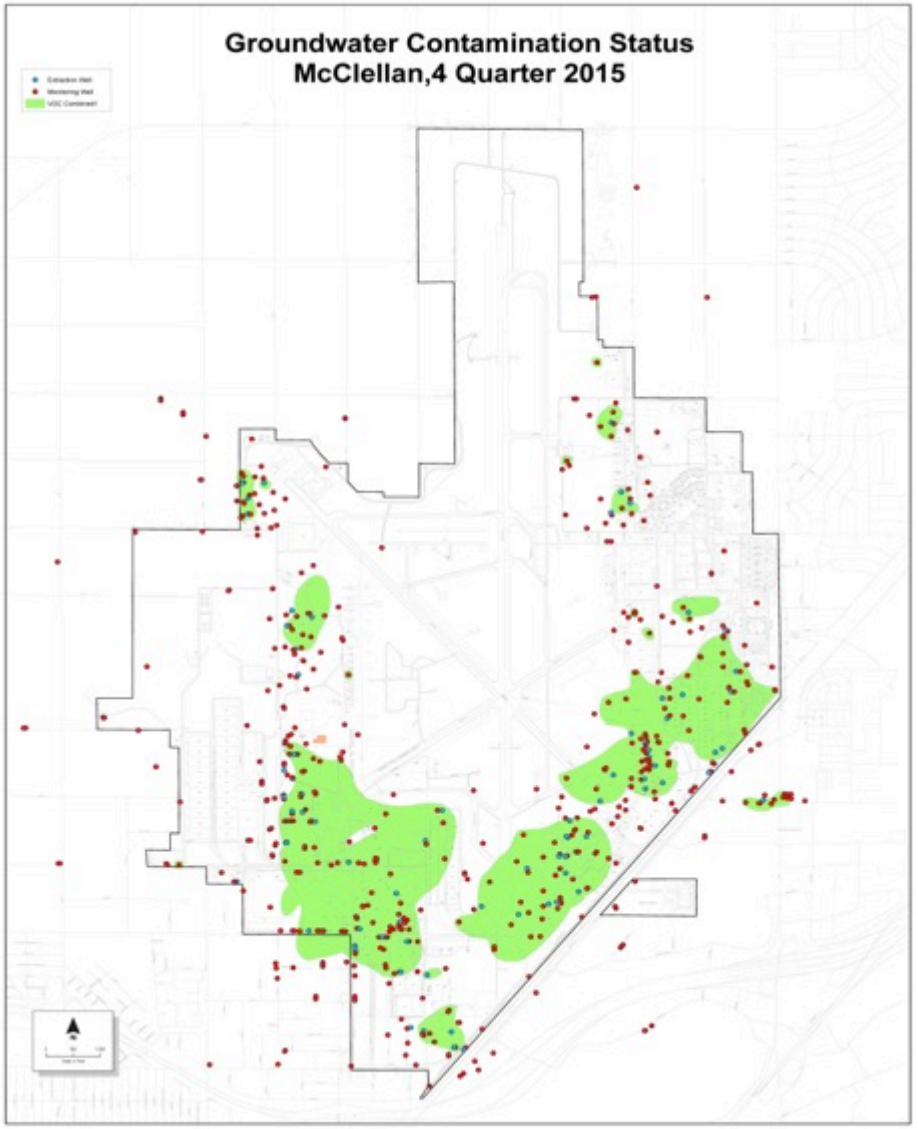


Hexavalent Chromium (Cr6) Update

- The Air Force has signed the final Explanation of Significant Difference (ESD) for Hexavalent Chromium in groundwater at McClellan.
- A public notice was published in the Sacramento Bee.
- A public comment period took place from July 22 to August 23.
- The ESD adds a site background cleanup level (14 micrograms per liter) to the Non-Volatile Organic Compound (Non-VOC) Amendment to the base wide VOC Groundwater Record of Decision.
- Extensive sampling confirmed that Hexavalent Chromium has not significantly migrated from McClellan.
- An on-base tenant is paying to hook up to the treatment plant discharge and use the water as a benefit for their operations.

Groundwater Cleanup Update

- Groundwater treatment plant is treating 1400 gallons per minute pulled from 80 extraction wells.
- Influent TCE concentration averages about 20 ppb.
- Removing about 0.4 lbs per day of TCE.
- Most contamination is shallower than 200 feet below surface (A and B Zones).



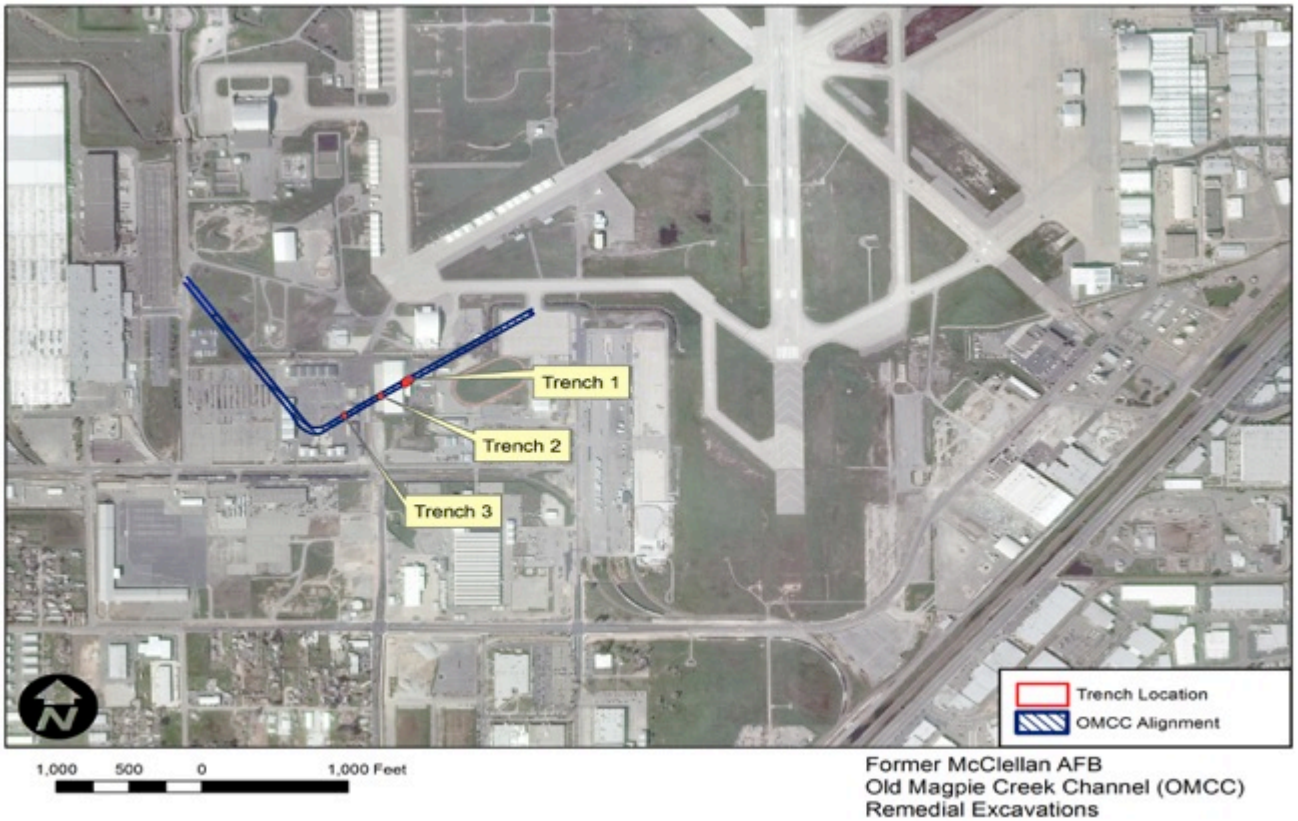
Old Magpie Creek Channel Update

Backfill and site restoration at Trench 1 has been completed.

Path forward:

- A contract will be awarded in early 2017 to address contamination under the building and further downstream.
- An engineering study will be done to determine the best way to address the contamination under the former hanger building.
- Field work will begin following revisions to the work plan.

Old Magpie Creek Channel



- The cleanup action is part of FOSET 3.
- To facilitate transfer of the property from the Air Force to Sacramento County, the removal action was designed to achieve unrestricted release of the site.
- Site restoration of Trenches 1, 2, and 3 completed in April 2016.

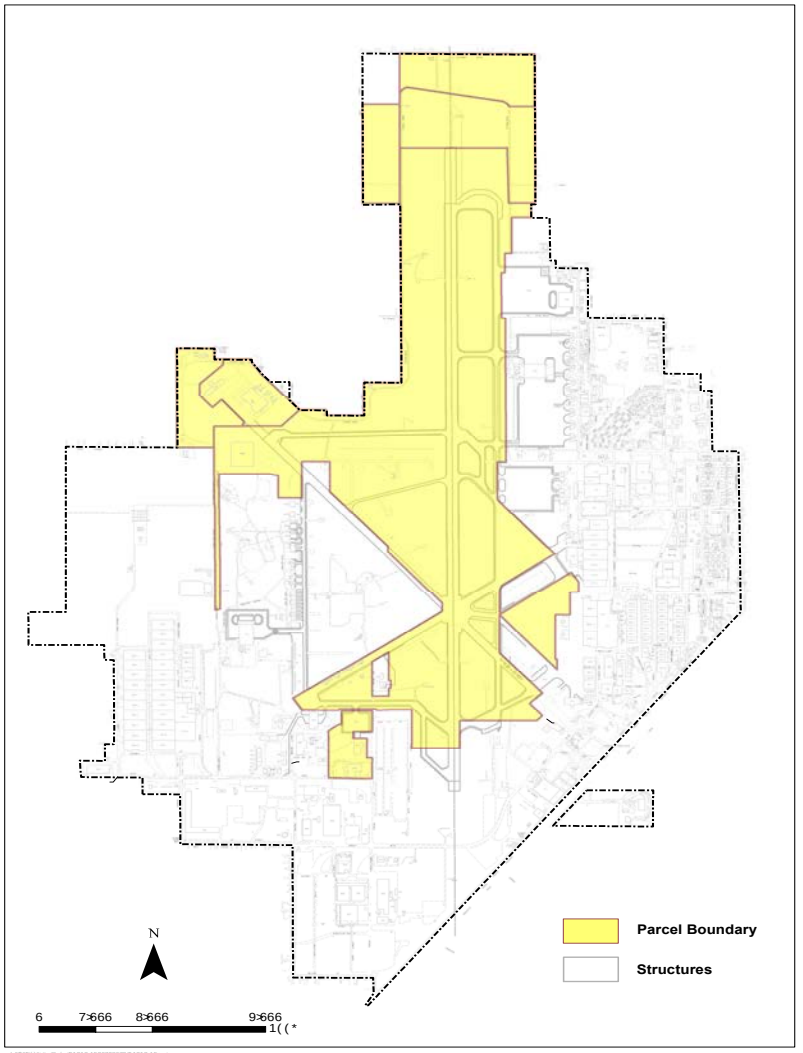
Area of Concern (AOC) 314

- AOC 314 is a non-time critical removal action.
- The third round of excavations has been completed.
- Excavated soil was placed in Consolidation Unit.
- Sample results indicate that cleanup levels have not been achieved in multiple locations.
- Additional funding is being obtained to complete this effort.
- The remaining excavation will take place in 2017 and 2018 if needed.
- 3,100 cubic yards of soil have been removed.

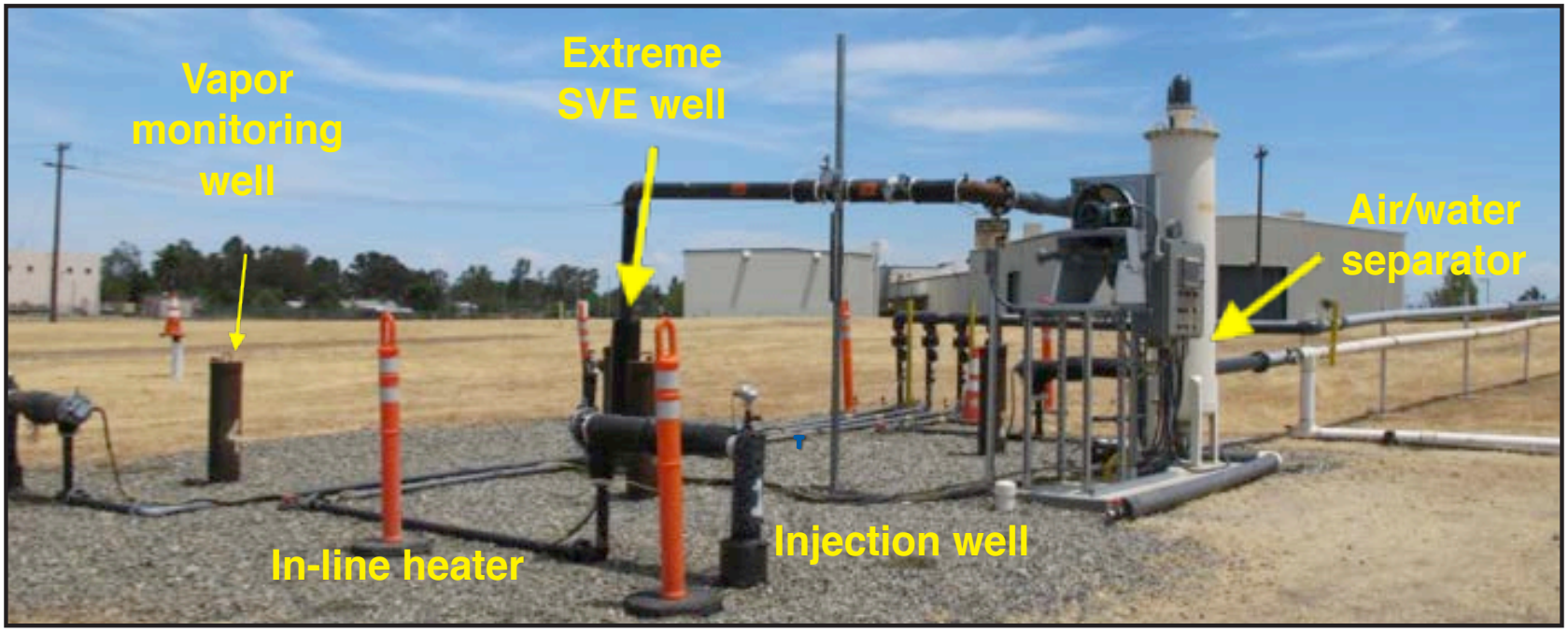
Property Transfer Update

- The Air Force is in the final stages of finalizing a Finding of Suitability to Transfer (FOST) document for 949 acres to be transferred to Sacramento County.
- The FOST is the Air Force's determination that the property is suitable for transfer and is based on an extensive review of the environmental condition of the property in consultation with federal and state environmental regulatory agencies.
- Parcels are primarily located within the airfield and general industrial subdistricts at the core avaition/industrial district.
- The anticipated use of these parcels includes aviation and industrial uses.
- To date, McClellan has transferred 2069 of 3,458 acres. The former base is now 60 percent transferred.

Airfield FOST Parcel Map
Former McClellan AFB



Base hosts innovative technology projects



The two projects focused on the cleanup of 1,4 dioxane and were conducted at no cost to the Air Force.
Both demonstration projects were conducted within Operable Unit (OU)D in the northwest portion of McClellan where eleven disposal pits were once located. McClellan was selected as a suitable site for these demonstrations based on the presence of 1,4-dioxane in soil and groundwater.

Project 1

Extreme Soil Vapor Extraction (XSVE) has increased the rate of removal of 1,4-dioxane from soil within the treatment zone by more than 95 percent. The XSVE technology study involves injecting hot air into vadose zone soils to warm and dry the soil and then extracting the heated soil gas to allow for increased removal of 1,4-dioxane through SVE.

Project 2

A study to evaluate biodegradation of 1,4-dioxane in groundwater was conducted in the same general area within OU D. This system injected propane and oxygen into the groundwater through an injection well that assisted with the biodegradation. Results suggest propane is a successful treatment and effectively reduced 1,4-dioxane concentrations in groundwater monitoring wells at the site by 99 percent.

McClellan Financial Update

- **Approximate Cost to Date = $533 million**

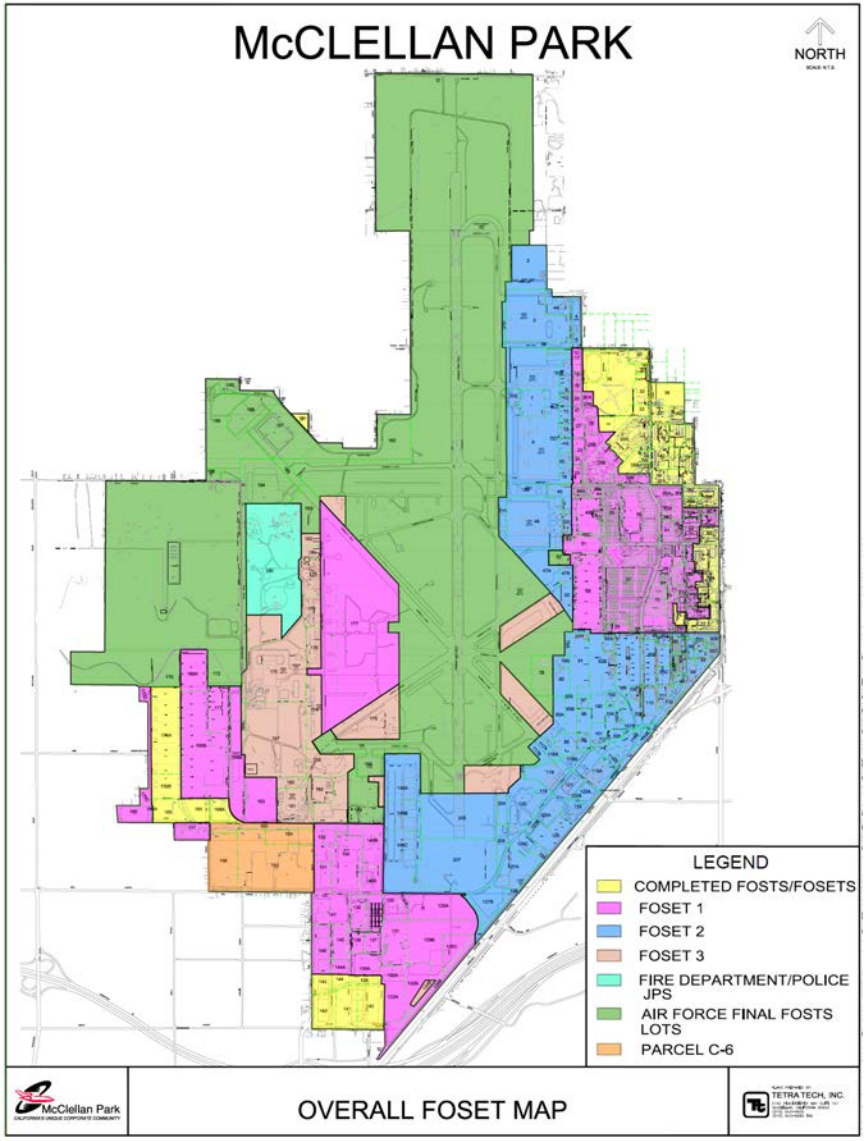
- **Estimated Cost to Complete = $51 million**

- Primarily includes:
  - Completion/Closure of Consolidation Unit
  - Final confirmation sampling and completion reporting for Ecological Sites
  - Completion of Old Magpie Creek Channel
  - Basewide Groundwater and SVE program Operation and Maintenance
  - Five-Year Reviews

McClellan RAB Presentation
Privatized Cleanup Progress

Former McClellan AFB, California
15 September 2016

Privatized Cleanup Summary



Parcel C-6 – Complete

FOSET 1 –

- Cleanup Complete (IP #2 Sites)
- Cleanup Complete (IP #3 Sites)
- Study in Progress (Group 4 Sites)

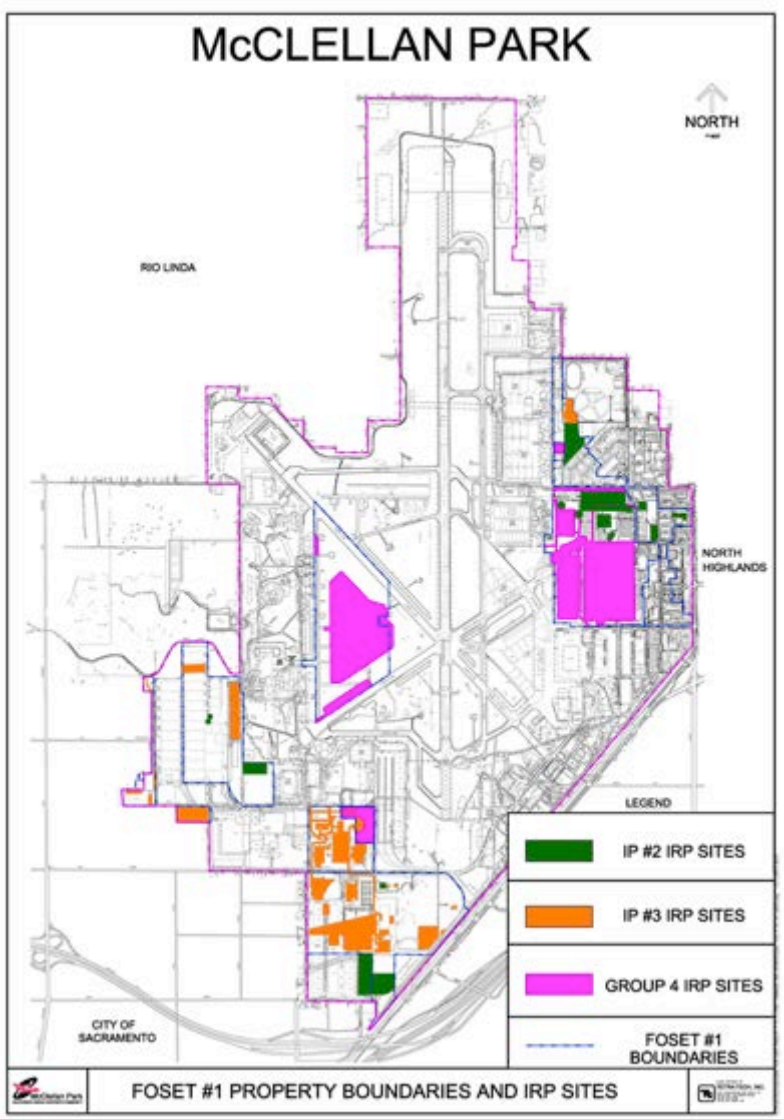
FOSET 2 –

- Cleanup Decisions (2 site groups complete, 1 in progress)
- Remedial Design / Remedial Action in progress (2 site groups)

FOSET 3 –

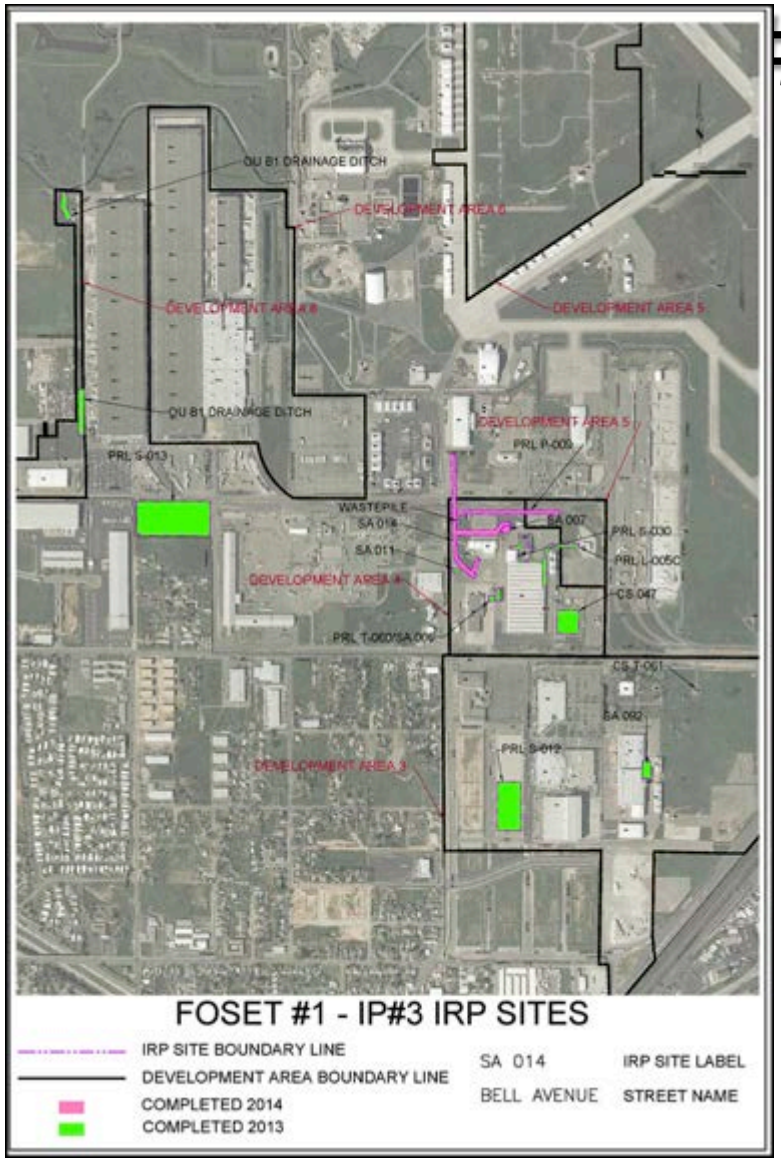
- Cleanup Work Plan in Progress

Finding of Suitability for Early Transfer (FOSET) #1



- **Initial Parcel #2 Sites** – Complete
- **Initial Parcel #3 Sites** –
  - Remedial Action complete
  - Completion Reports in progress
- **Group 4 Sites** – Remedial Investigation / Feasibility Study in progress

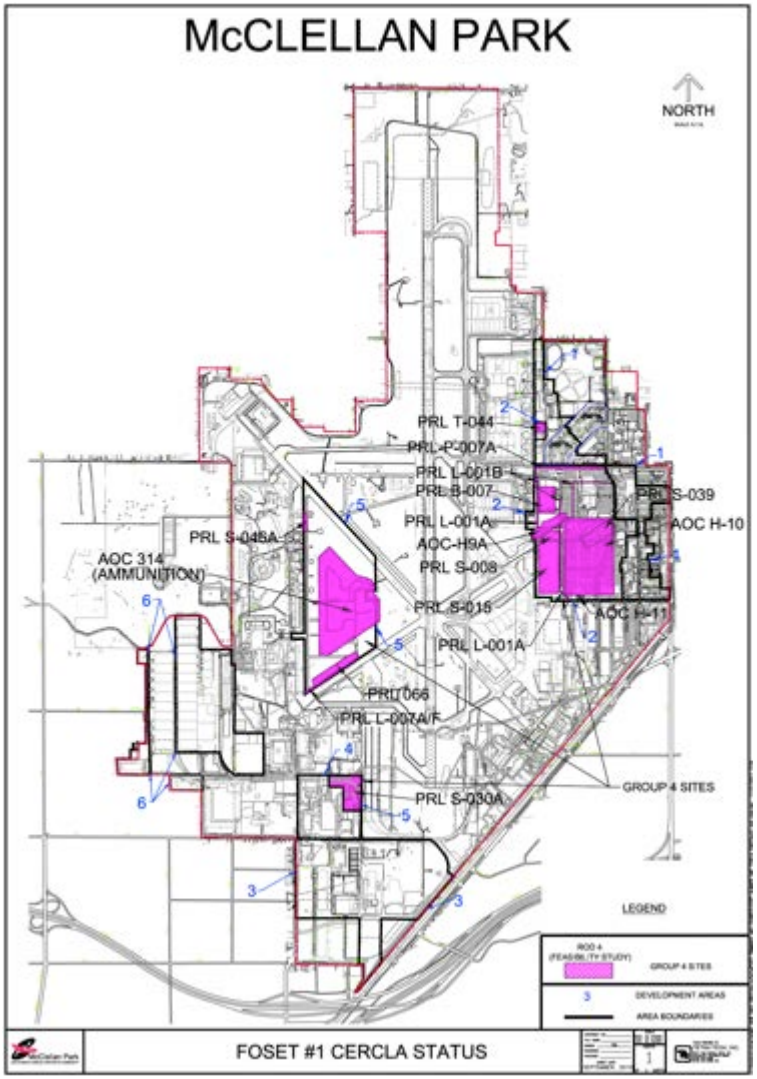
#1 (IP #3)



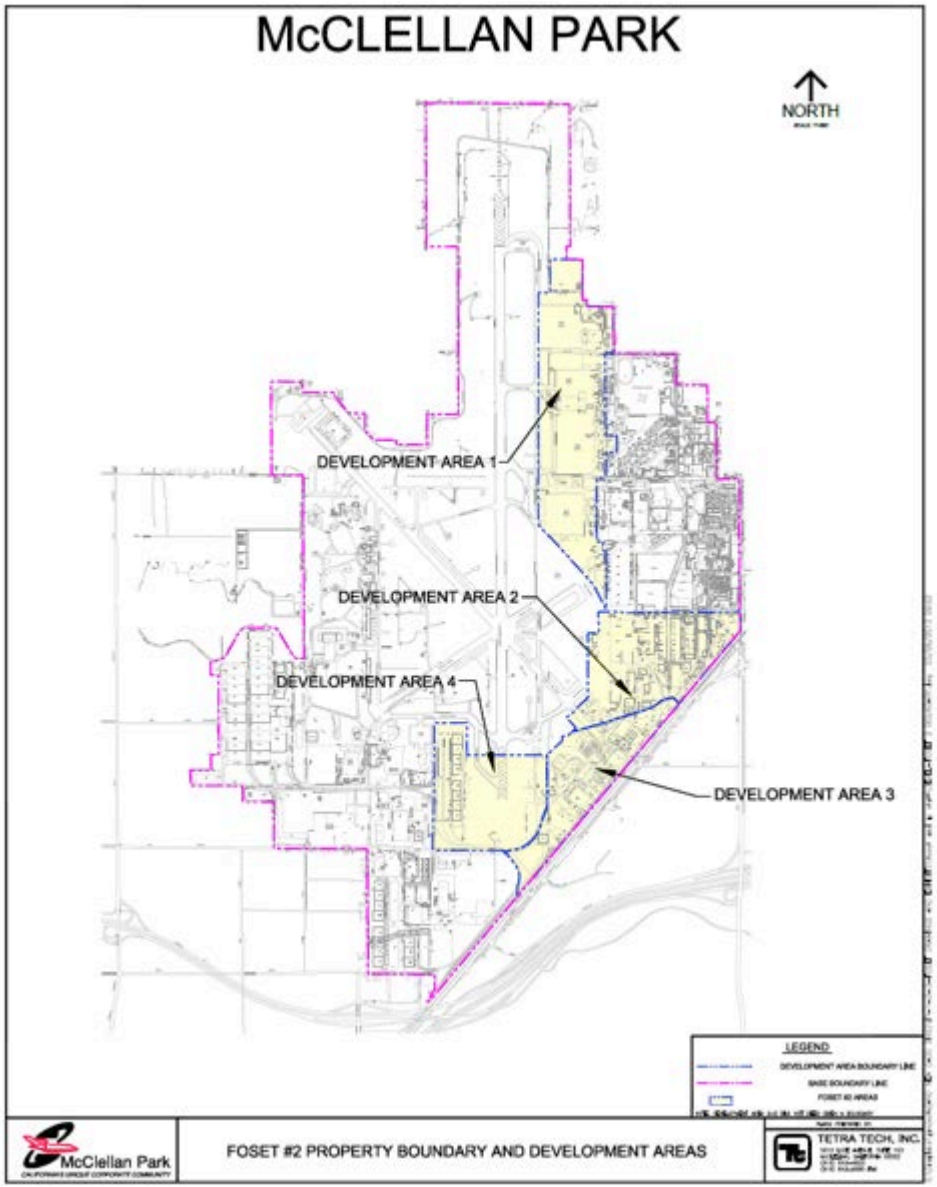
IP #3 Sites

- Field Cleanup Activities 100% completed
- One Completion Report pending
  - Development Area 3 – Complete
  - Development Area 4 – Complete
  - Development Area 6 – Draft Final

FOSET #1 (Group 4)



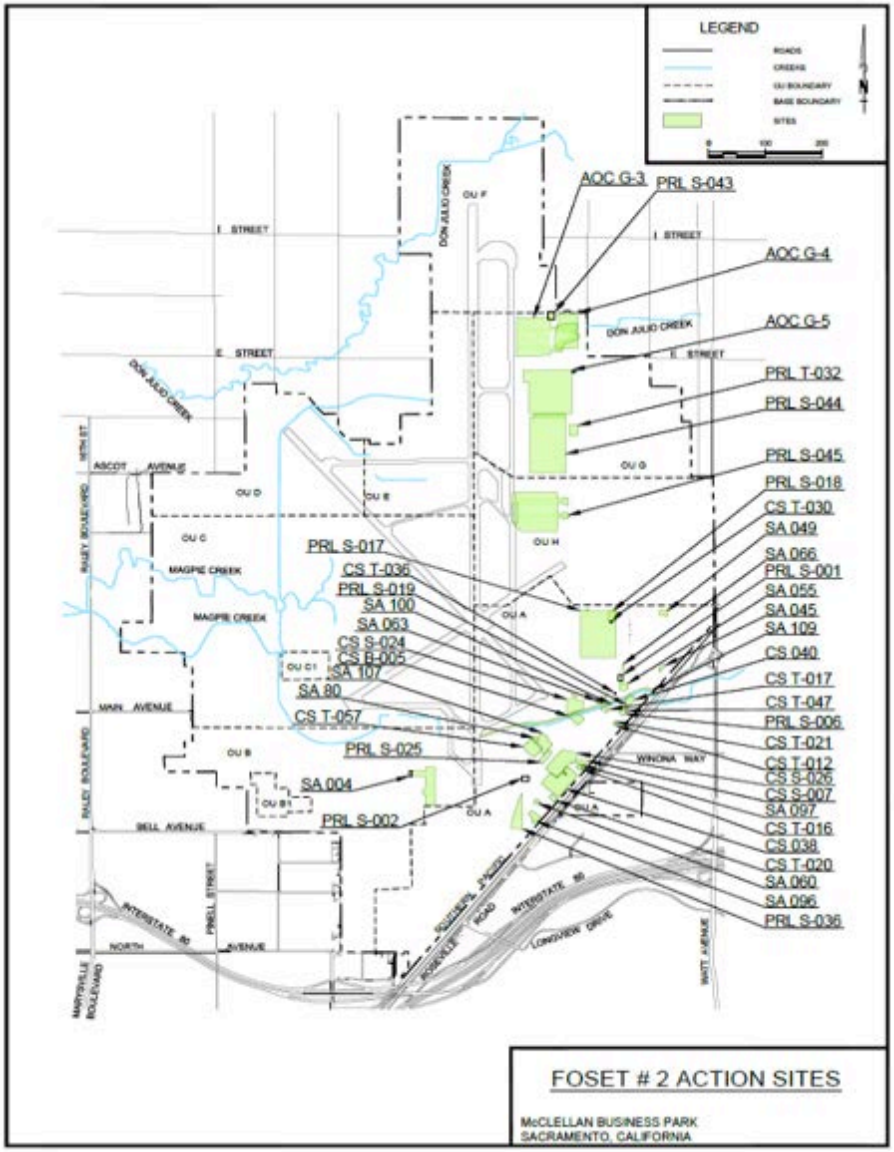
- Summer 2015
  - Completed data gap sampling
- Early 2017
  - Final RI/FS anticipated
- Late 2017
  - Proposed Plan approval
    - Public Meeting & Public Comment Period
- Late 2018
  - Record of Decision (ROD) – cleanup decision approval



FOSET #2

- Transfer Included:
  - 528 acres of former McClellan AFB
  - 133 sites (10 sites cleanup decisions included in completed Air Force RODs)
  - Three FOSET 2 Privatization RODs will include 123 sites
    - FOSET 2 Action Sites ROD (43 Sites) - completed
    - FOSET 2 No Further Action Sites ROD (35 Sites) - completed
    - FOSET 2 Group 2 Action Sites ROD (45 Sites) – proposed plan in progress

FOSET #2 (Action Sites)



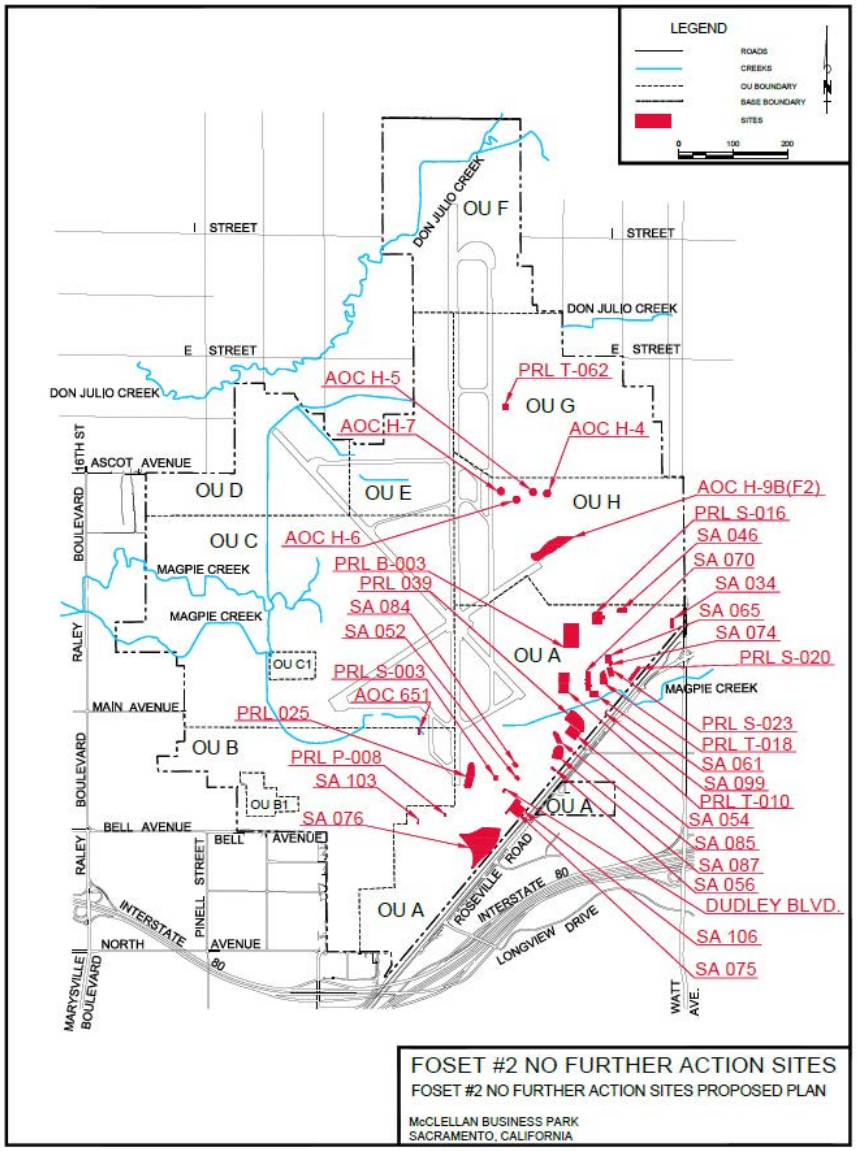
FOSET #2 Action Sites (43 Sites)

- Record of Decision signed by Environmental Protection Agency (EPA) on March 2, 2015
- Final Remedial Design/Remedial Action (RD/RA) Work Plan approved by regulatory agencies February 2016.
- Field work began in May 2016

FOSET #2 (No Further Action Sites)

No Further Action Sites (35 Sites)

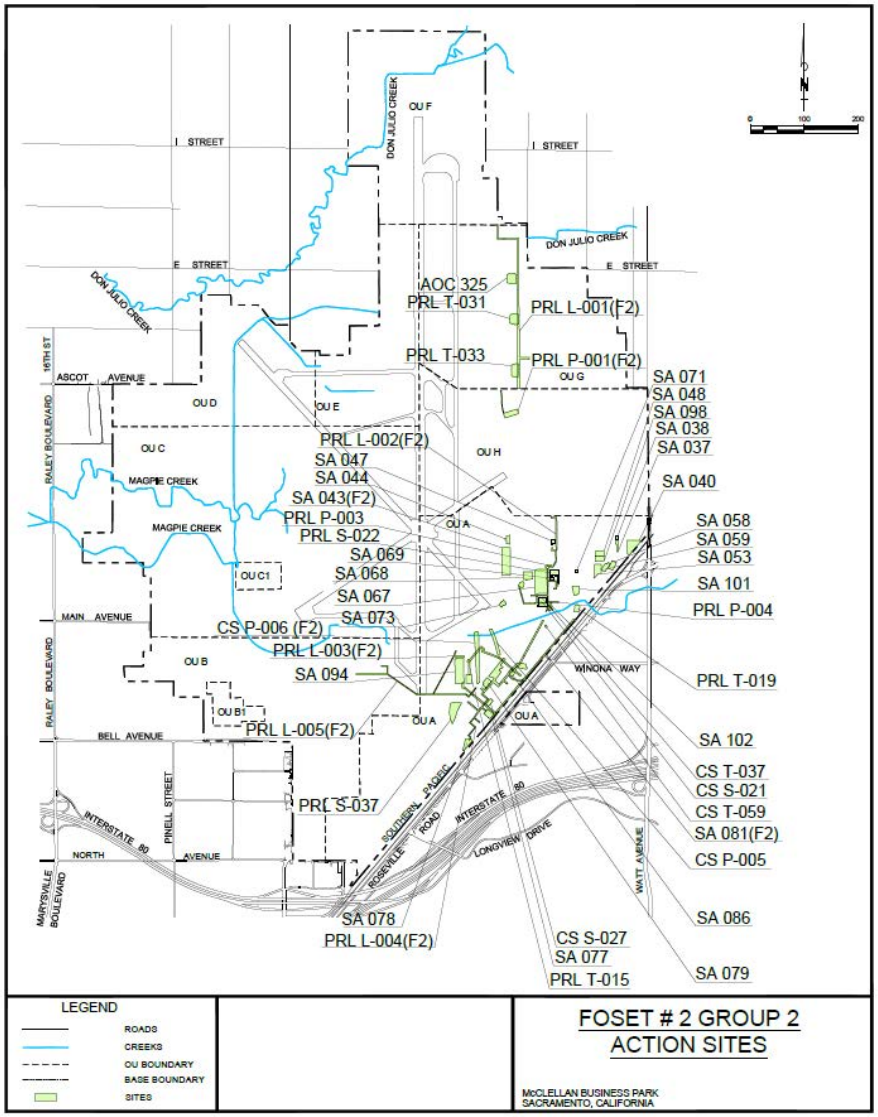
- Proposed Plan completed in August 2015
- Record of Decision signed by Environmental Protection Agency (EPA) July 2016
- No Cleanup Required (ready for reuse)



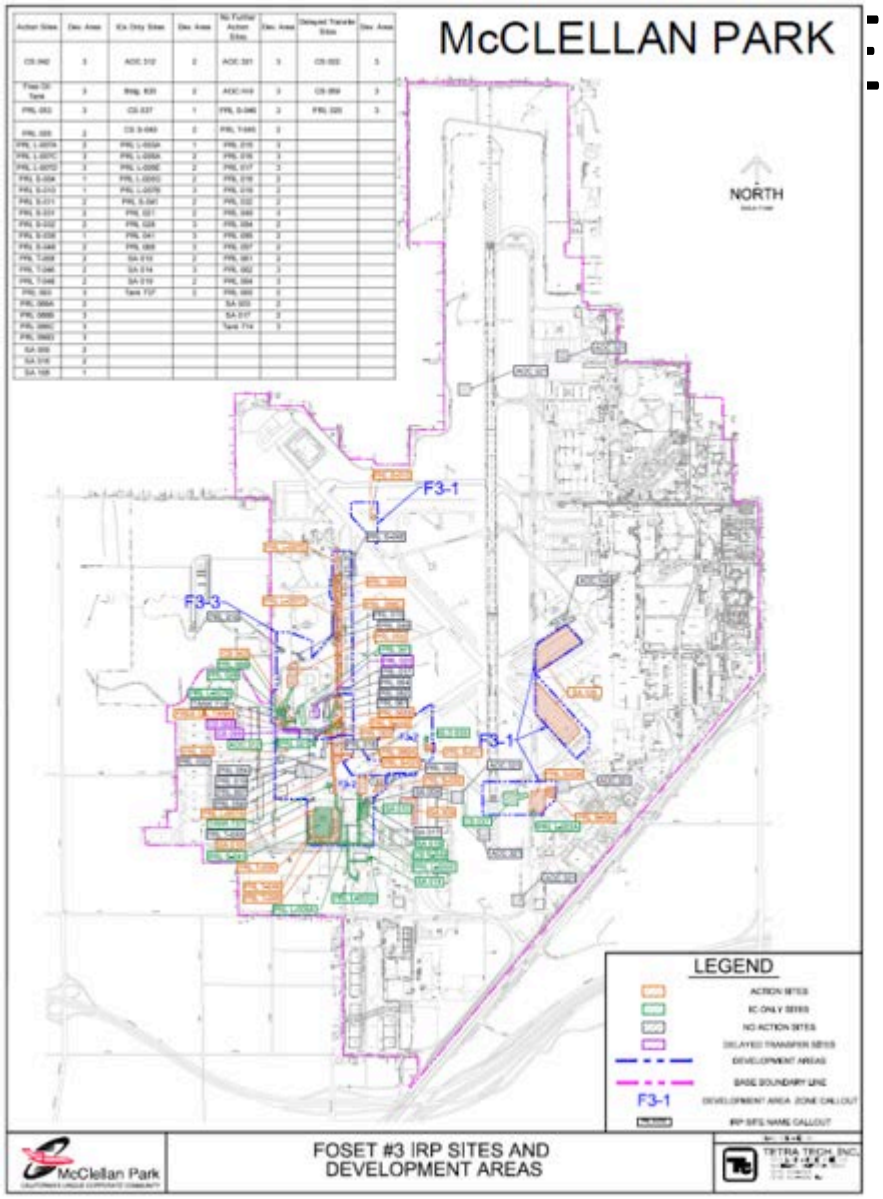
FOSET #2 (Group 2 Action Sites)

Group 2 Action Sites (45 Sites)

- 2016
  - Proposed Plan
  - Proposed Plan Fact Sheet
  - Public Meeting and Public Comment Period
- 2017
  - Record of Decision



ET #3



- Transferred 198.2 acres including 67 sites
- All 67 sites are included in signed AF RODs
  - 28 active cleanup sites
  - 18 institutional controls only sites
  - 21 no further action sites
- Comments on Draft Remedial Design/Remedial Action Work Plan received in May 2016; Draft Final to be issued soon

Questions?