IRCTS

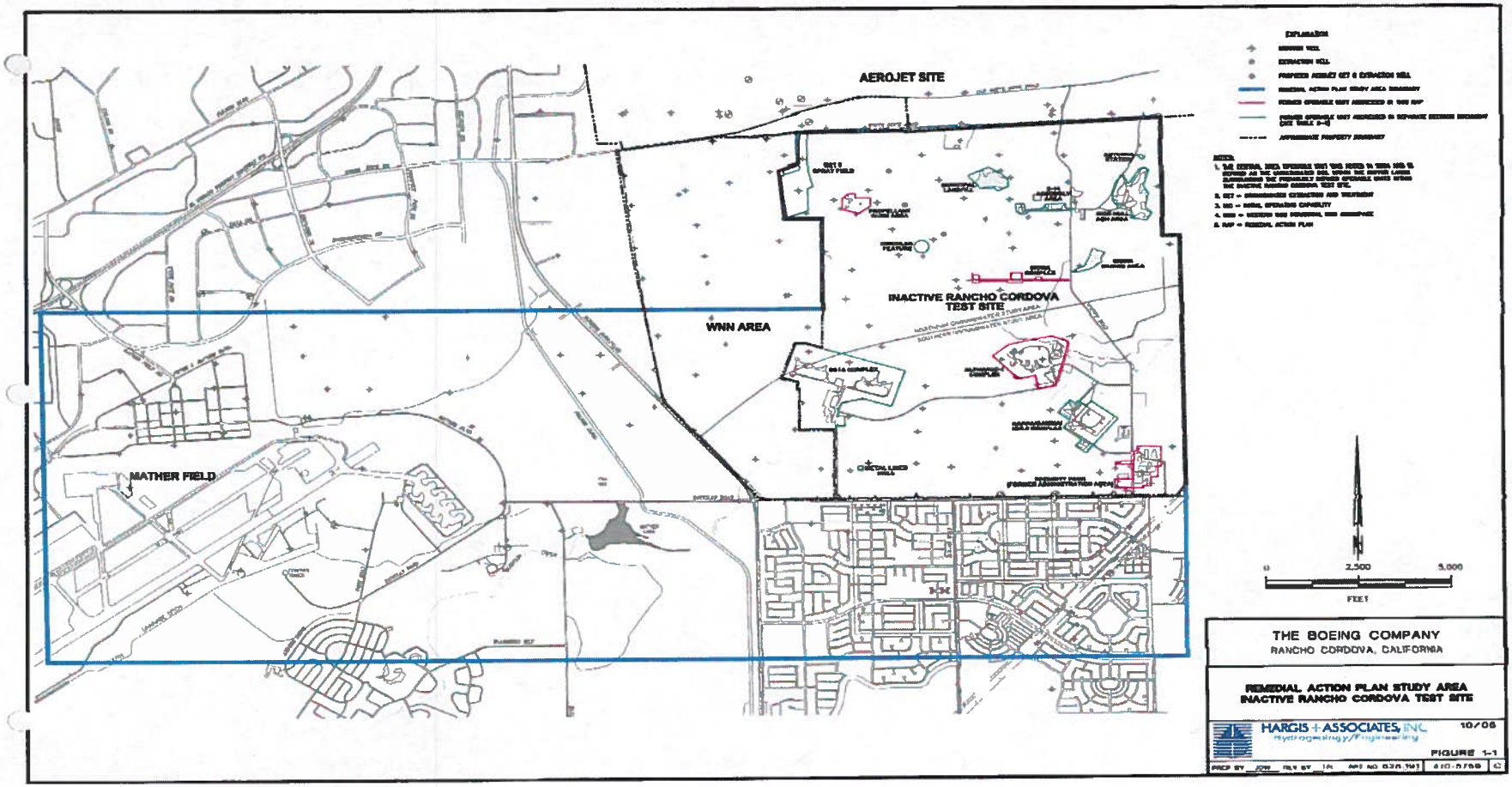
Inactive Rancho Cordova Test Site

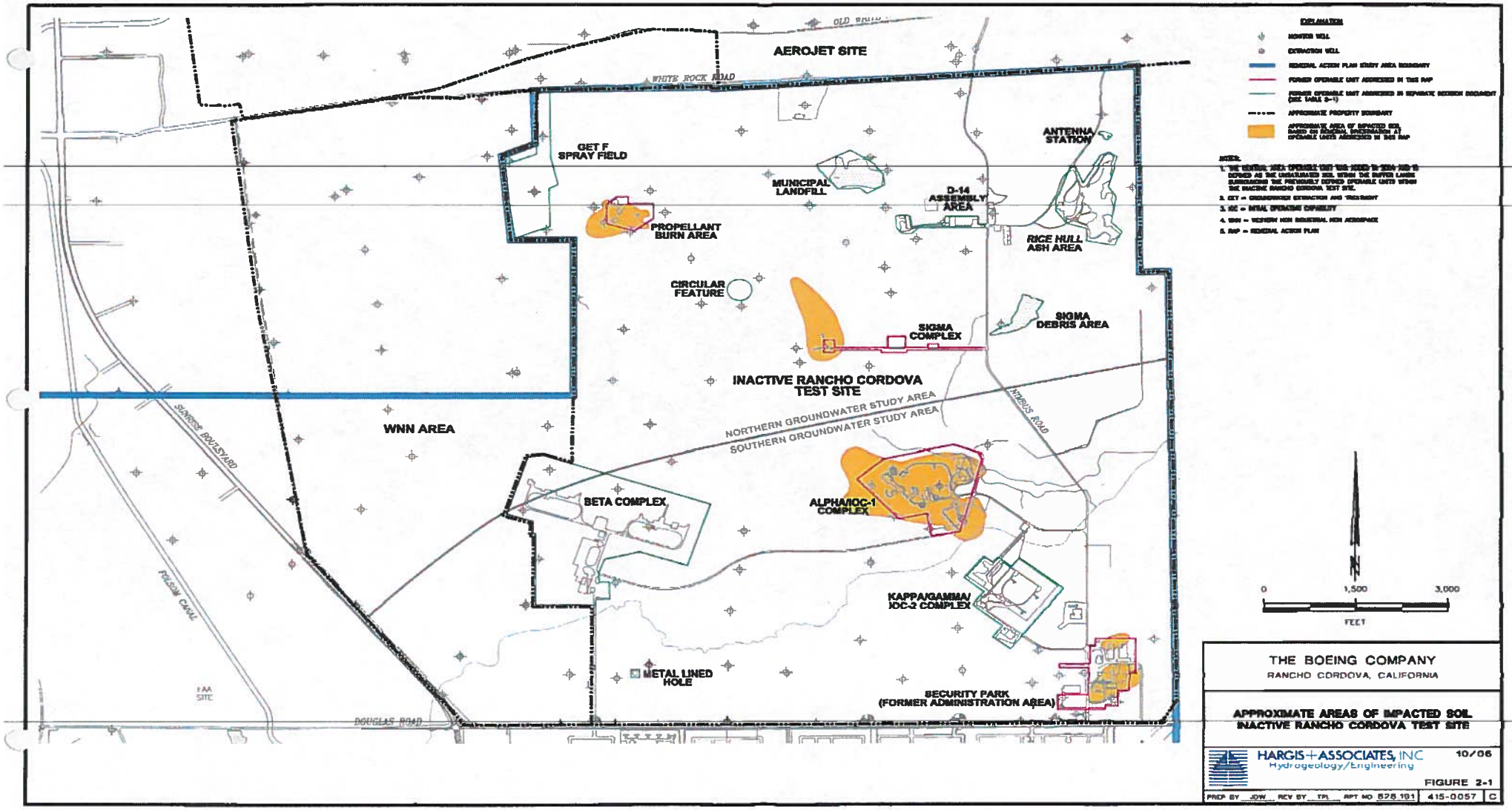
Overview of Ongoing Activities at IRCTS

by

Peter MacNicholl, P.E. - DTSC Project Manager

IRCTS Site Map





THE BOEING COMPANY
RANCHO CORDOVA, CALIFORNIA

APPROXIMATE AREAS OF IMPACTED SOIL INACTIVE RANCHO CORDOVA TEST SITE

HARGIS+ASSOCIATES, INC
Hydrogeology/Engineering

10/06

FIGURE 2-1

PREP BY JDW REV BY TPL RPT NO 526.181 415-0057 C

Overview of Presentation

- Brief Site History
- Five Year Review Report
- Alpha Complex
- Sigma Complex
- GET F Sprayfield
- Production Well Monitoring
- Rio Del Oro Development
- Closing Comments

Site History

- IRCTS used for agriculture, gold mining, and rocket testing from the late 1800s through the early 1970s.
- Rocket testing occurred from mid 1950s to the early 1970s.
- Most rocket testing facilities have been partially dismantled
- IRCTS land a mixture of open grassland (grazing) & dredge tailings.
- Predominant COCs are Perchlorate and TCE.

Five Year Review Report

- Five Year Review of the 2008 RAP for Soil and Groundwater.
- 5-Yr Review Report evaluates of the remedy's effectiveness in achieving the Remedial Action Objectives.
- Report will be submitted prior to Thanksgiving.

Alpha Complex

- ~45 acres located in SE portion of IRCTS.
- Site COCs are mainly TCE.
- Liquid fuel missle testing, static rocket engine firing, component checks between 1956 and 1969.
- 1000 scfm SVE system with 22 extraction wells operated from 2002 to 2012.
- Removed ~5795+ lbs. of Site VOCs.
- System shutdown in 2012 after diminishing return of VOCs.
- VOCs remain above the cleanup standards at a couple small areas that will require LUCs.

Sigma Complex

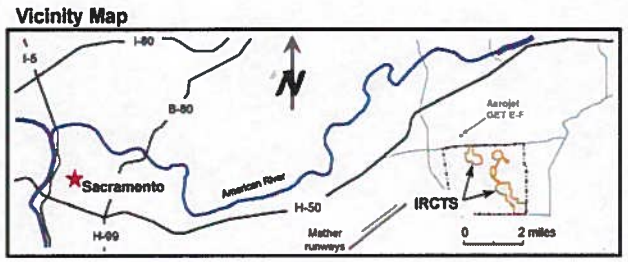
- ~25 Acres located in the east central portion of IRCTS
- Site COCs - Perchlorate (4100 µg/L) and low levels of TCE (10 µg/L).
- Former location of solid rocket motor testing and cleaning operations.
- Selected Remedy identified In-Situ Bioremediaton (bacteria + food source).
- Bioremediation system implemented per design plans & WDR permit.
- System completed shutdown after reducing mass substantially.
- Site under long-term monitoring with groundwater sampling and analysis.

IRCTS – Vicinity Map

Bottom Figure:

GET F Sprayfield

& Propellant Burn Area



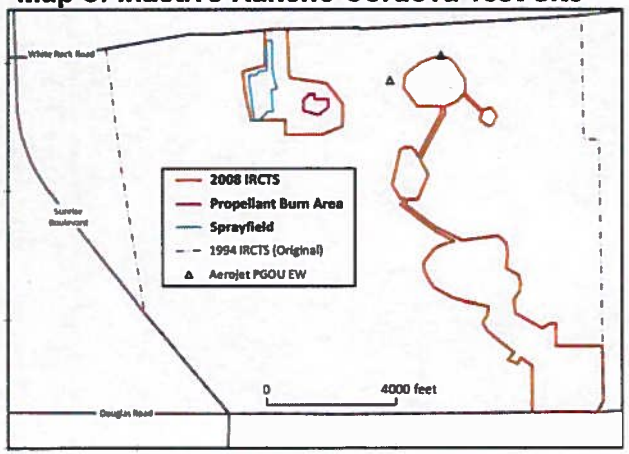


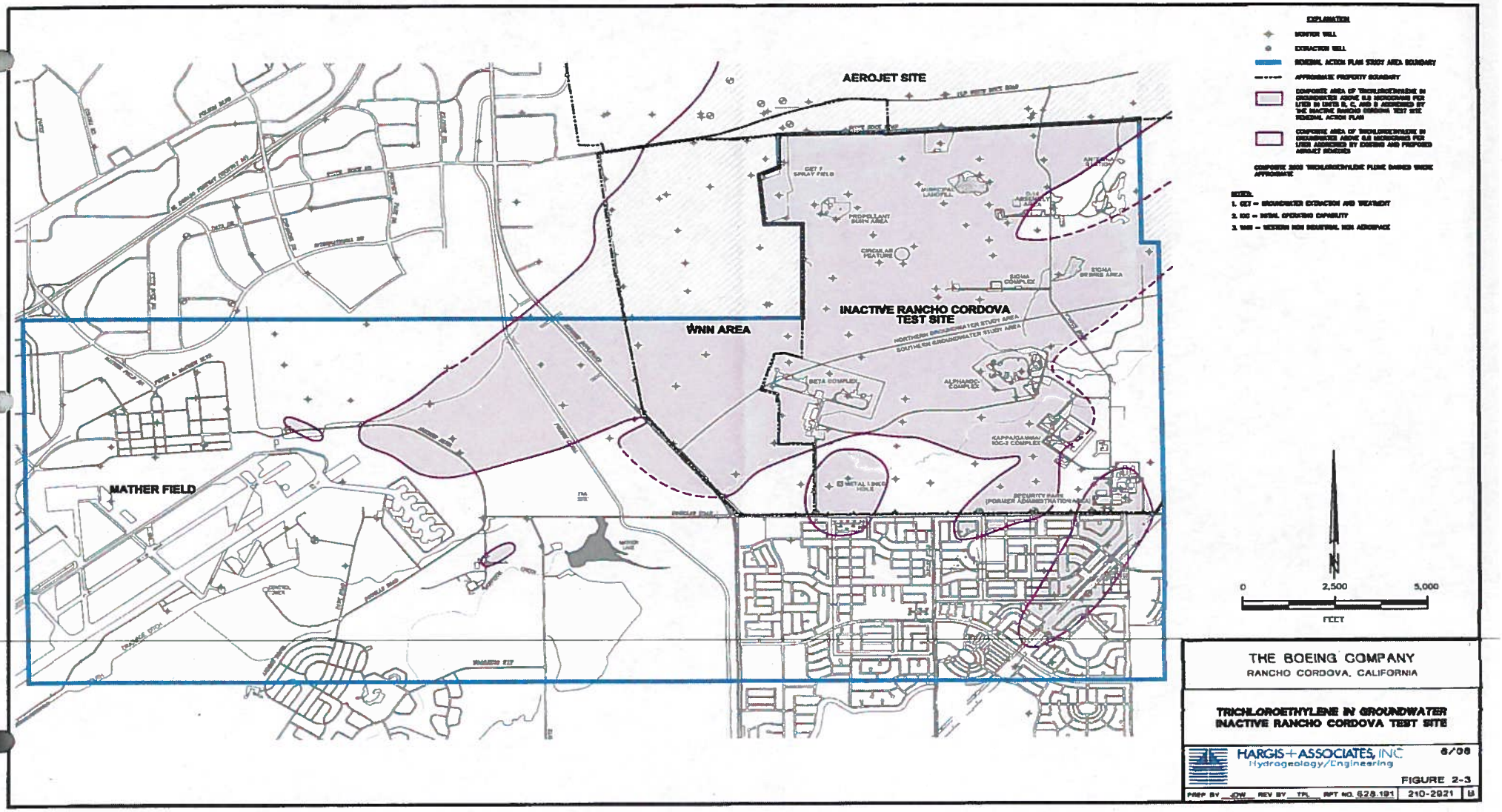
Figure 1. Location Map

GET F Sprayfield

- ~ 30 acres located in NW portion of IRCTS.
- Setting is rugged dredge tailing piles of cobbles and gravel.
- Dredge tailings were created during the 1950s by gold mining operations.
- Used by Aerojet from 1984 to 1990 to discharge 1.7 billion gallons of water.
- Effluent treated for VOCs but not for perchlorate.
- Median perchlorate values estimated at ~ 17,000 µg/L.
- Proposed to be incorporated into RAP through ESD process in Spring 2014.

Production Well Monitoring

- Resource protection from contaminant plumes.
- GW Plumes are generally moving towards the production wells.
- Cal Am and County Production Wells are monitored quarterly for Site COCs (perchlorate & VOCs).
- Water Board and DTSC receive quarterly water quality reports.
- To date site COCs are below method reporting limits at both the CalAm and County wells.



THE BOEING COMPANY
RANCHO CORDOVA, CALIFORNIA

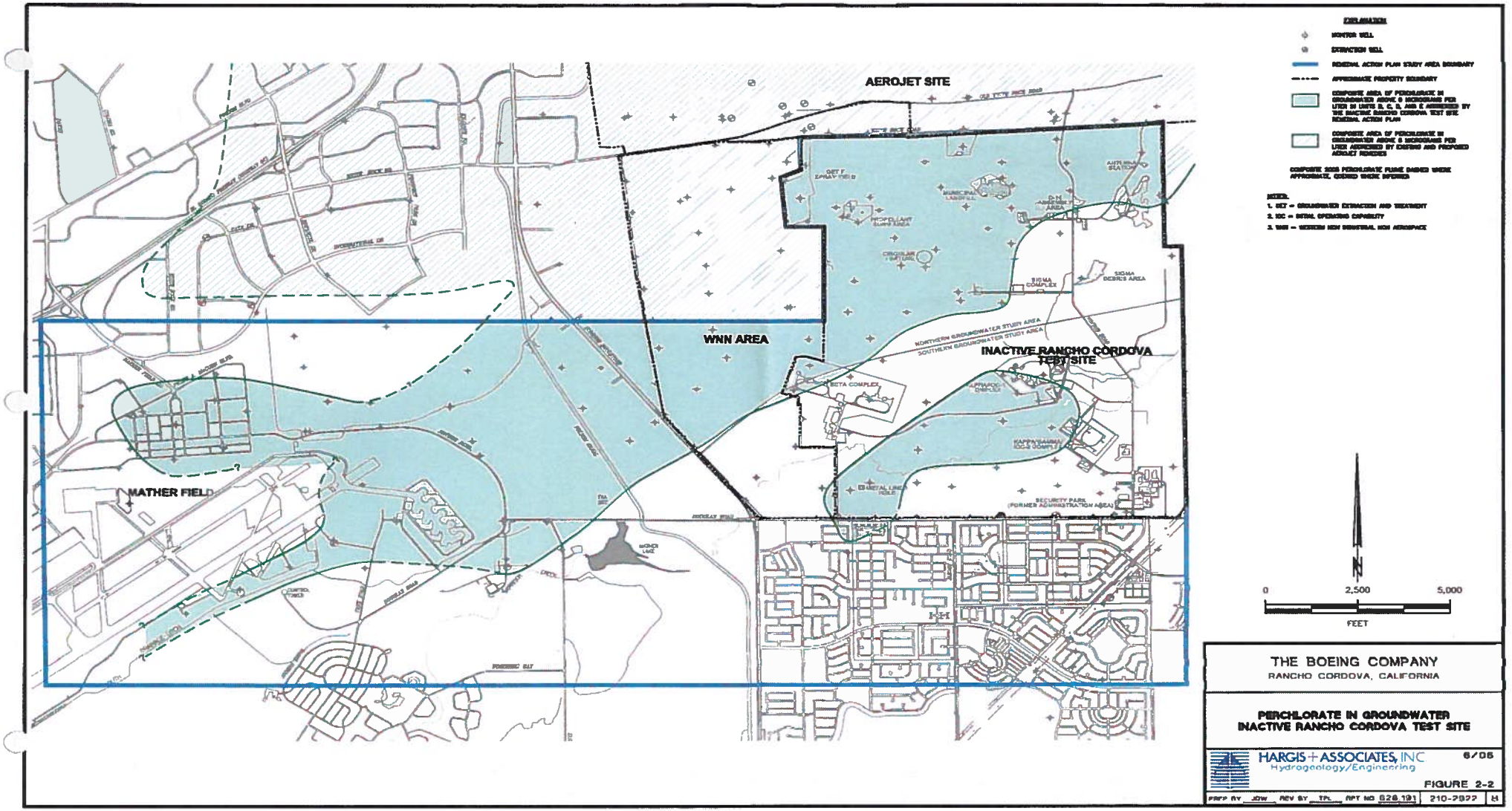
TRICHLOROETHYLENE IN GROUNDWATER
INACTIVE RANCHO CORDOVA TEST SITE

HARGIS + ASSOCIATES, INC
Hydrogeology/Engineering

6/98

FIGURE 2-3

PREP BY CW REV BY TPL RPT NO. 528.191 210-2021 B



THE BOEING COMPANY
RANCHO CORDOVA, CALIFORNIA

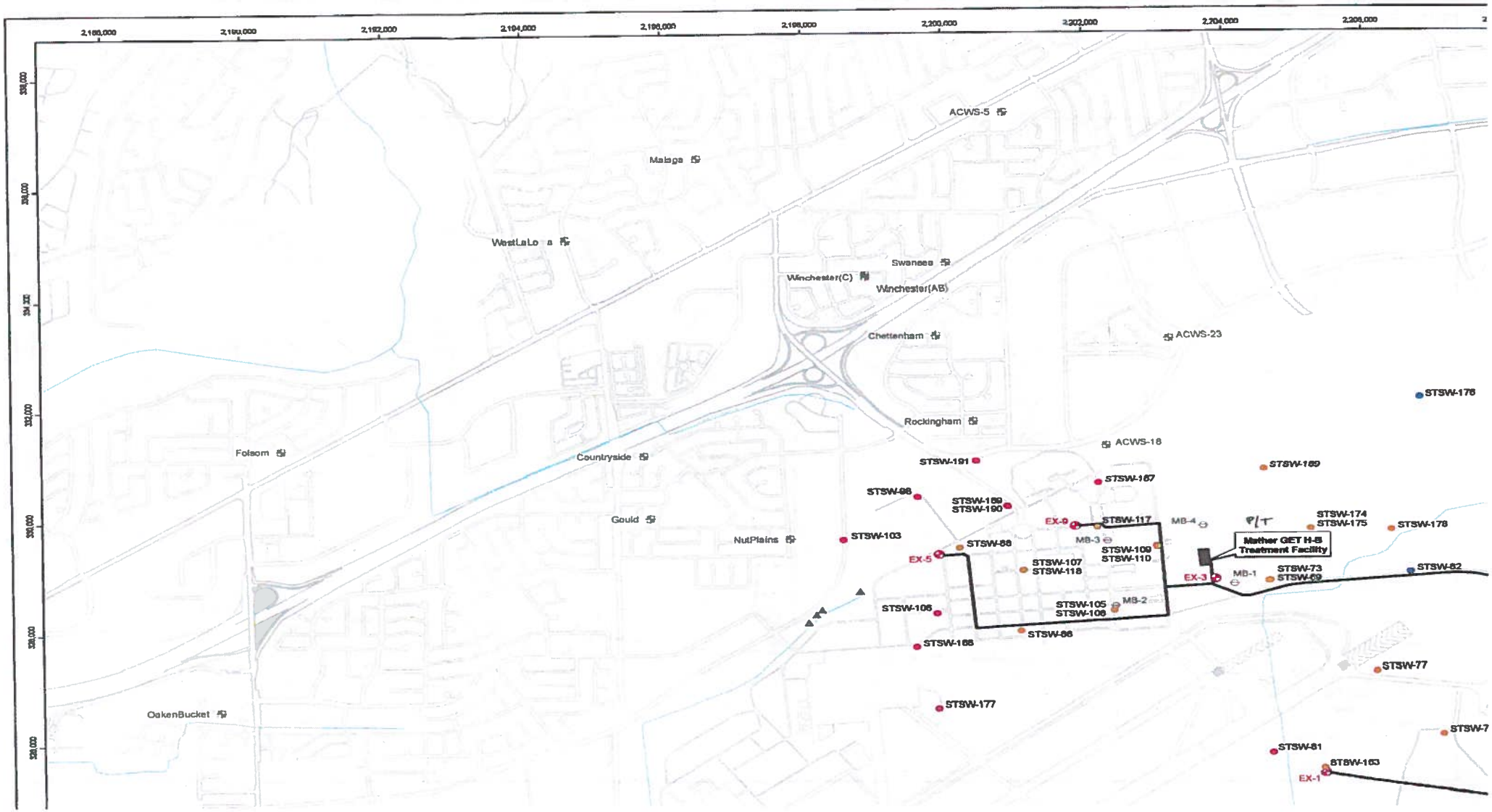
PERCHLORATE IN GROUNDWATER
INACTIVE RANCHO CORDOVA TEST SITE

HARGIS + ASSOCIATES, INC
Hydrogeology/Engineering

6/06

FIGURE 2-2

PREP BY JDW REV BY TPL RPT NO 528.191 210-2922 H

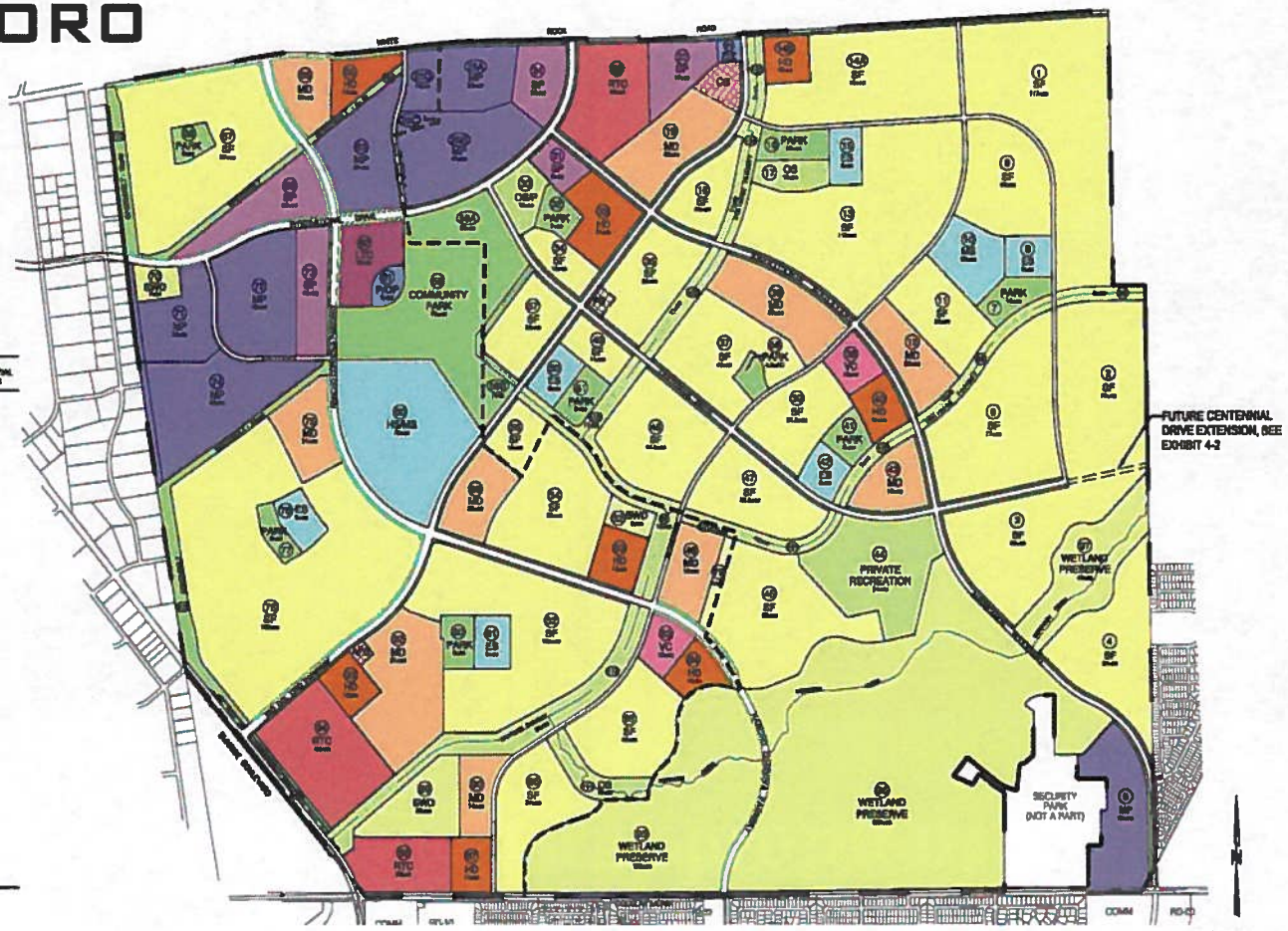

2,190,000
2,192,000
2,194,000
2,196,000
2,198,000
2,200,000
2,202,000
2,204,000
2,206,000
ACWS-5
Malaga
WestLaLo a
Swansea
Winchester(C)
Winchester(AB)
Chettenham
ACWS-23
STSW-176
Rockingham
ACWS-18
Folsom
Countryside
STSW-191
STSW-169
STSW-167
STSW-98
STSW-189
STSW-190
Gould
EX-9
STSW-117
MB-4
STSW-174
STSW-175
STSW-178
NutPlains
STSW-103
STSW-88
MB-3
STSW-109
STSW-110
Mather GET H-B
Treatment Facility
EX-5
STSW-107
STSW-118
EX-3
MB-1
STSW-73
STSW-82
STSW-106
STSW-105
STSW-108
MB-2
STSW-86
STSW-166
STSW-77
STSW-177
OakenBucket
STSW-7
STSW-81
STSW-163
EX-1

Rio Del Oro Development

- Rio Del Oro is the future planned real estate development of IRCTS land.
- Land will be redeveloped for residential , commercial, and open space or park land.
- Redevelopment activities will require the mining of dredge tailing piles by Granite Construction.
- Expect mining to continue for several years before most areas can start construction for reuse.

LAND USE PLAN

RIO DEL ORO



LAND USE SUMMARY

LAND USE	ACRES	DENSITY RANGE	FIXED COUNT	UNITS/UNIT %	% OF RESIDENTIAL ACRES
SINGLE FAMILY RESIDENTIAL	1,016.5	2.1 - 6.0	5 DU/AC	7,359	65%	91.5%
MEDIUM DENSITY RESIDENTIAL	200	6.1 - 10.0	5 DU/AC	2,045	18%	13.5%
HIGH DENSITY RESIDENTIAL	80	10.1 - 40.0	20 DU/AC	1,585	17%	5.1%
VILLAGE DOWNTOWN	20					
LOCAL TOWN CENTER	20					
REGIONAL TOWN CENTER	110					
BUSINESS PARK	80					
INDUSTRIAL PARK	300					
PUBLIC / QUASI PUBLIC	7.5					
FIRE STATION	-					
ALTERNATIVE FIRE STATION	-					
CONSTRUCTION SCHOOL	-					
SCHOOL CAMPUS	70					
MIDDLE SCHOOL	20					
ELEMENTARY SCHOOL	24					
COMMUNITY PARK	107					
NEIGHBORHOOD PARKS	67.5					
STORM WATER DETENTION	20					
WETLAND PRESERVE	540					
DRAINAGE PARKWAY	135					
PRIVATE RECREATION	24					
OPEN SPACE	22					
OPEN SPACE PRESERVE	12					
LANDSCAPE CORRIDORS	30					
GREENBELTS	24					
ROADWAYS	120					
TOTALS:	3020.0			11,091	100%	

*UNDERLYING ZONING SHALL REMAIN

Exhibit 3-2
Land Use Plan

Closing Comments

- Active remediation at IRCTS has been completed in many cases.
- Ongoing groundwater restorations projects will continue for decades until COCs in GW meet the cleanup standards.
- Five Year Review reports will continue to examine and evaluate the protectiveness and performance of the selected remedies.
- Questions from CAG?