

DTSC Project Update Santa Susana Field Laboratory Activities

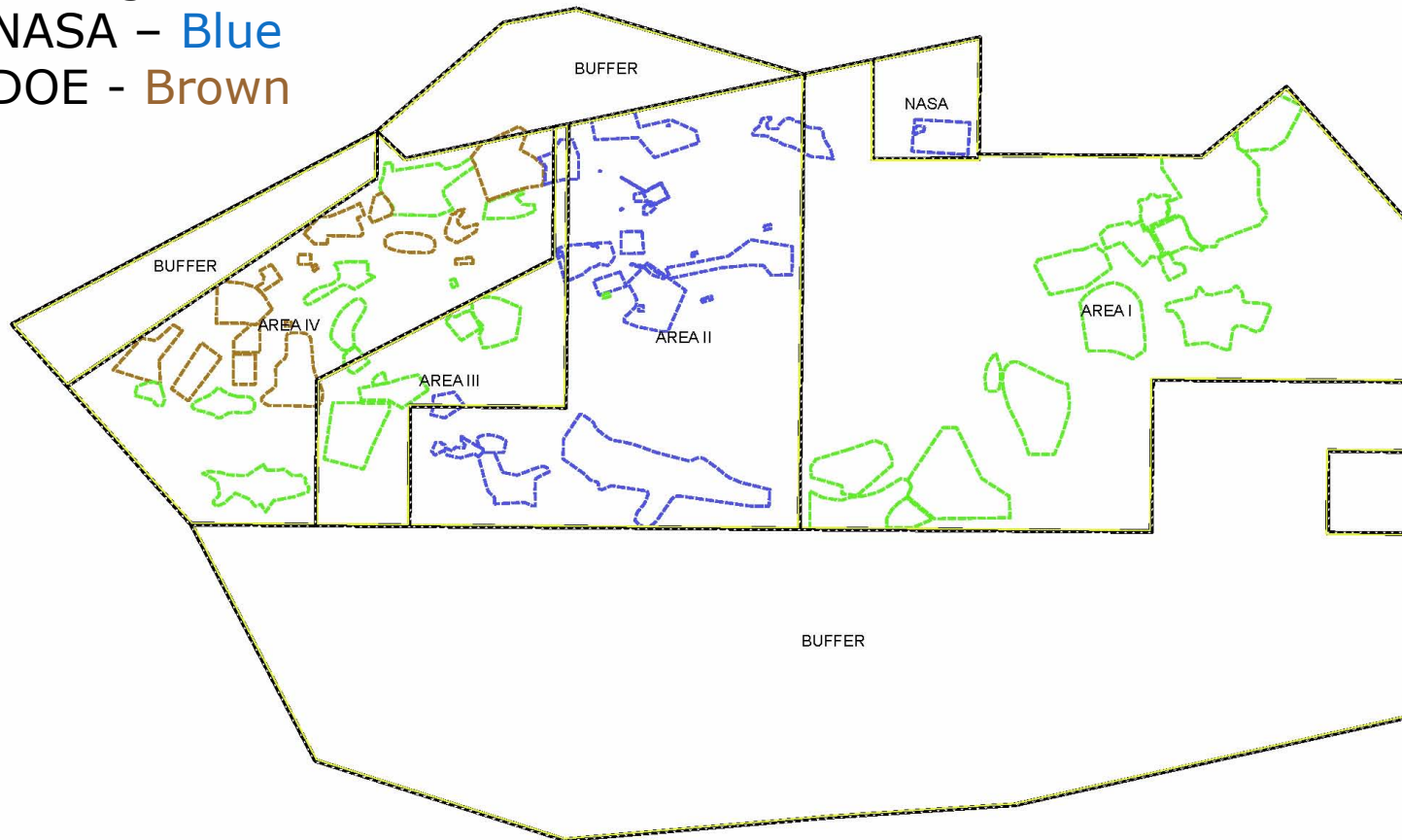
March 1, 2012

SSFL Areas & Sites

Boeing – Green

NASA – Blue

DOE – Brown



DTSC-SSFL Regulatory History

- 1991-2008 Site under DTSC RCRA Corrective Action Process
- Consent Order (Aug 2007)
 - Boeing/DOE/NASA
 - Soil and Groundwater
 - Clean-up to acceptable risk levels

DTSC-SSFL Regulatory History

- 2007 SB990 – Cleanup to Rural Agricultural
 - Applied to Boeing/DOE/NASA
 - Boeing Challenged in Court (Nov 2009)
 - District Court ruled in Boeings favor (April 2011)
 - DTSC appealed court ruling

DTSC-SSFL Regulatory History

- Administrative Orders on Consent (Dec 2010)
 - Separate AOCs for DOE and NASA
 - Requires soil cleanup to background or reporting limit levels
- Groundwater is responsibility of all three responsible parties
 - Covered under 2007 Consent Order

SSFL Site-wide Issue Background Studies

Radiological – US EPA

- Completed radiological background study (Oct. 2011)
 - Off-site background location

Chemical - DTSC

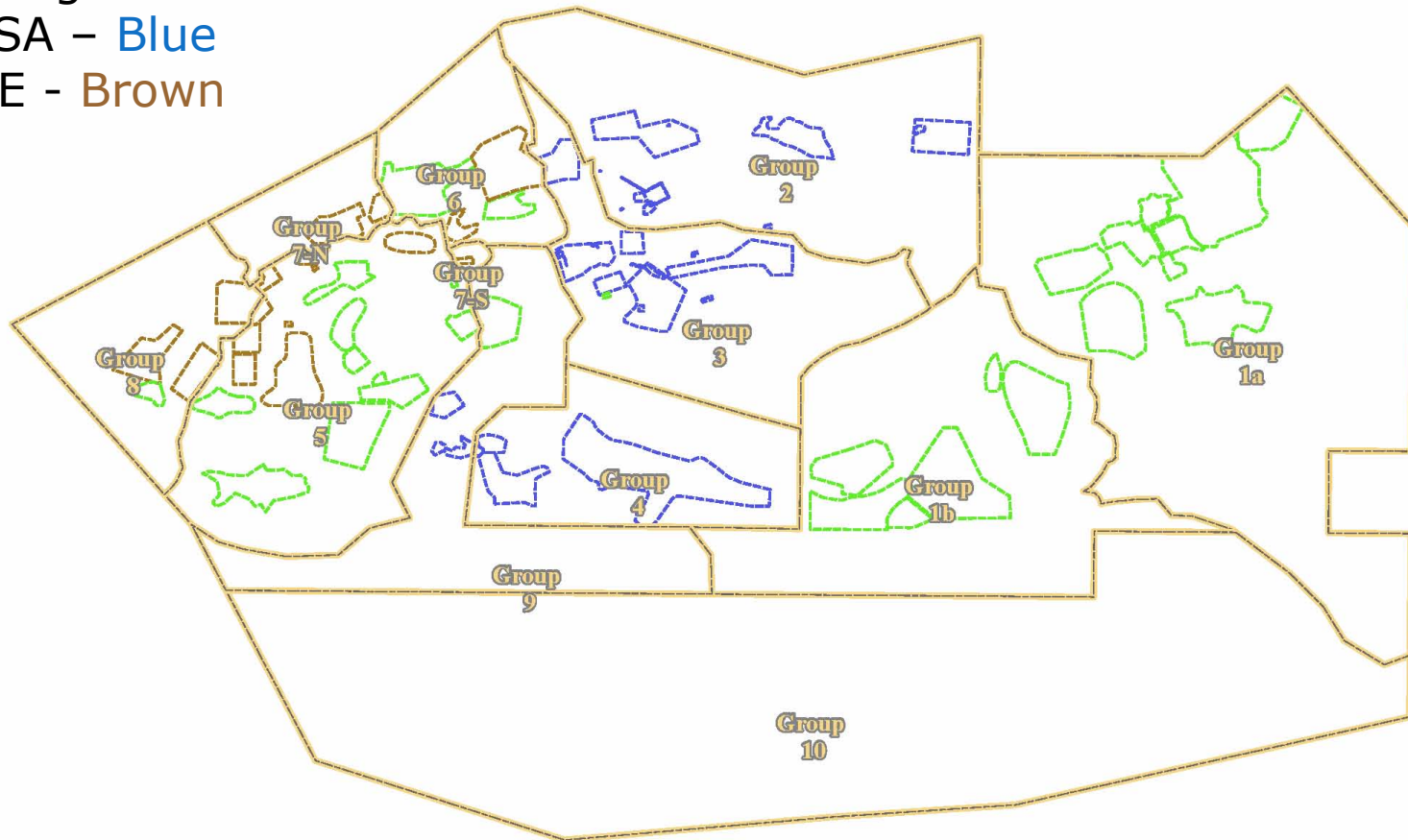
- Off-site background locations
- Field work complete in November 2011
- Validated analytical results coming in
- Anticipate data available in March 2012
- Anticipate draft report May 2012

SSFL Groups

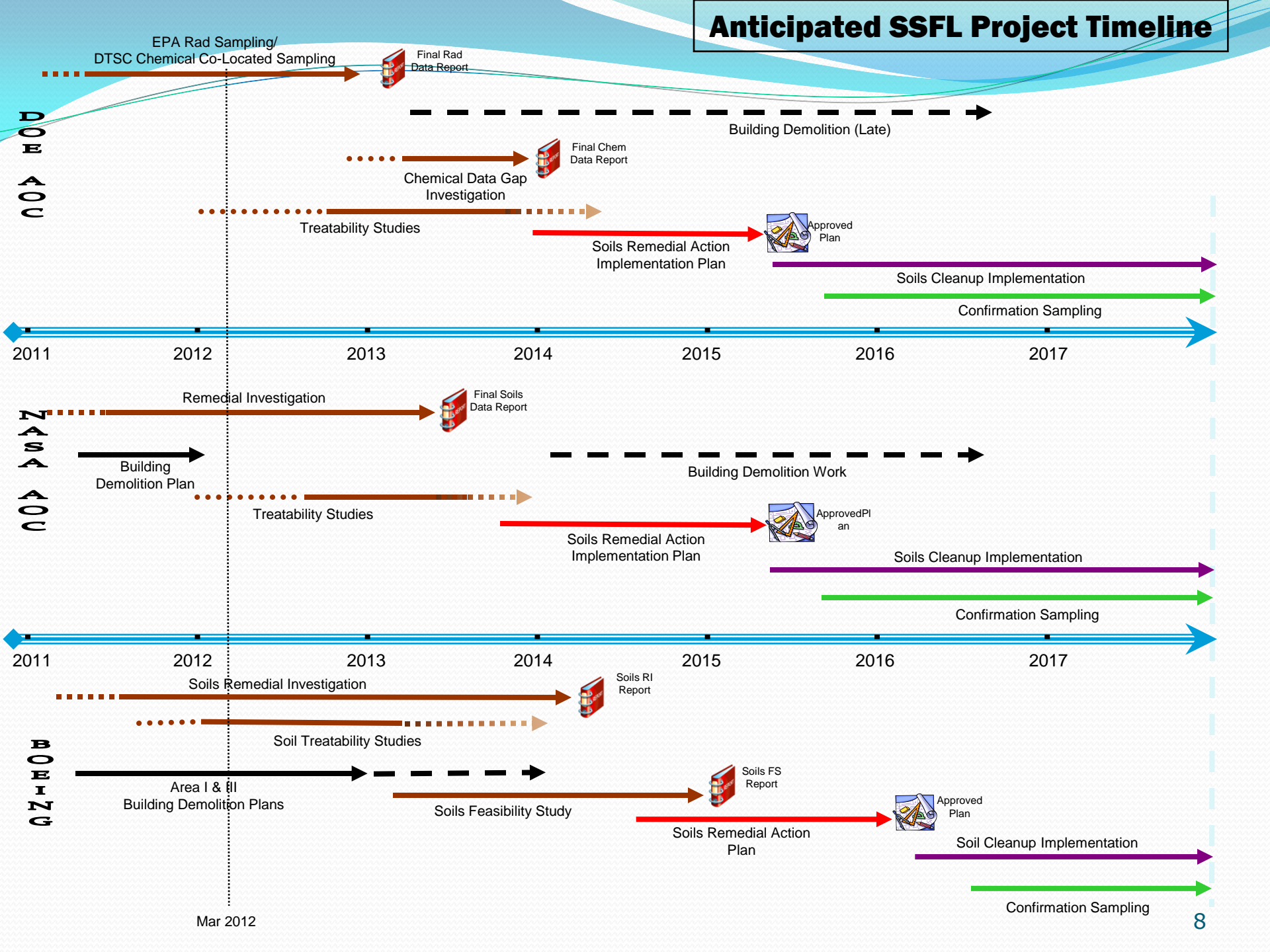
Boeing – Green

NASA – Blue

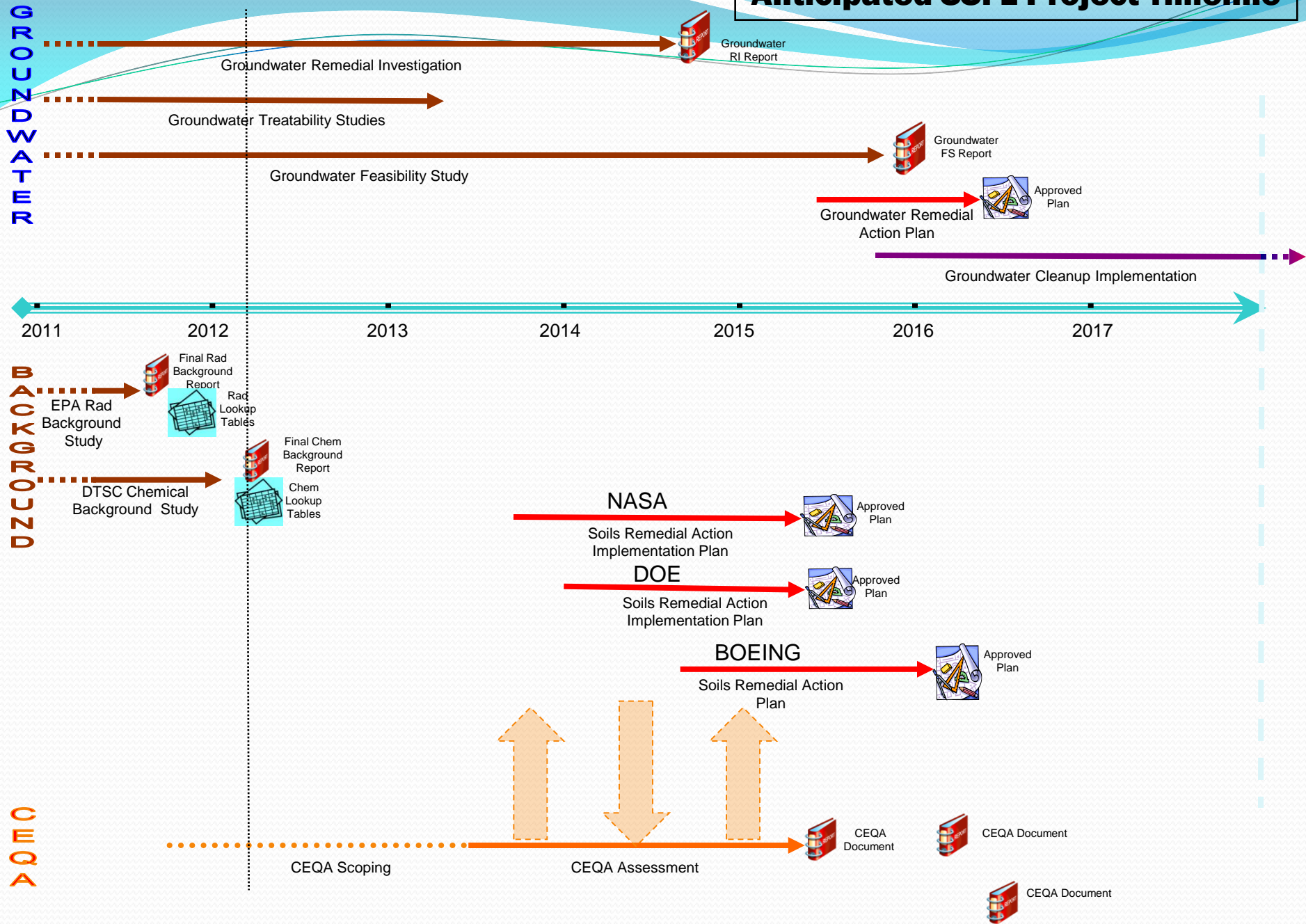
DOE – Brown



Anticipated SSFL Project Timeline



Anticipated SSFL Project Timeline



Mar 2012

DOE

Groups 5, 6, 7 & 8

- DOE conducting chemical sampling
- US EPA conducting radiological sampling
 - Area IV & Northern Buffer Zone
 - Completed Phase 1 field work sampling at Area IV DOE sites
 - All Phase 1 locations were co-located (radiological & chemical samples) with community stakeholder input
 - Results being presented at community meetings
- Preparing to conduct step-out sampling to define extent
 - Radiological and Chemical on separate tracks

DOE

- All US EPA radiological characterization sampling complete and report out at end of 2012
- EPA will do radiological confirmation sampling during cleanup
- DOE chemical characterization complete early 2014

NASA Activities

Groups 2, 3, 4 and 9

- NASA sites broken into 6 manageable portions
- Field sampling for chemicals started 2011
 - Soil and soil gas samples
- Field Sampling Plans (FSPs) and sampling locations discussed w/ community stakeholders at meetings

NASA Activities

Field Sampling Plans

- FSP1 & 2 field work complete – awaiting data
- FSP-3 field work underway
- FSP-4 being finalized
- FSP-5 being developed
- FSP-6 will be to fill data gaps

Complete characterization completed in 2013

Boeing Activities

Groups 1A, 1B, 5, 6, 8, 9 & 10

- Investigation Field Sampling Plans
 - Start Late Spring 2012
- Treatability Study Workplan
 - DTSC approved starting laboratory studies
 - Chemical Oxidation
 - Thermal heating rock core
 - Bio-stimulation
 - Microbial studies of rock core and porewater
 - Proposed Field Tests
 - Bedrock vapor extraction
 - In-situ chemical oxidation (groundwater)

Boeing Activities

- Demolition Activities
 - Completed
 - Component Test Lab (CTL) -V (Group 1B)
 - Canyon Test Area (Group 1A)
 - Erosion controls installed at
 - CTL-III (Group 1B)
 - Groundwater Treatment Systems, Areas I, II and III

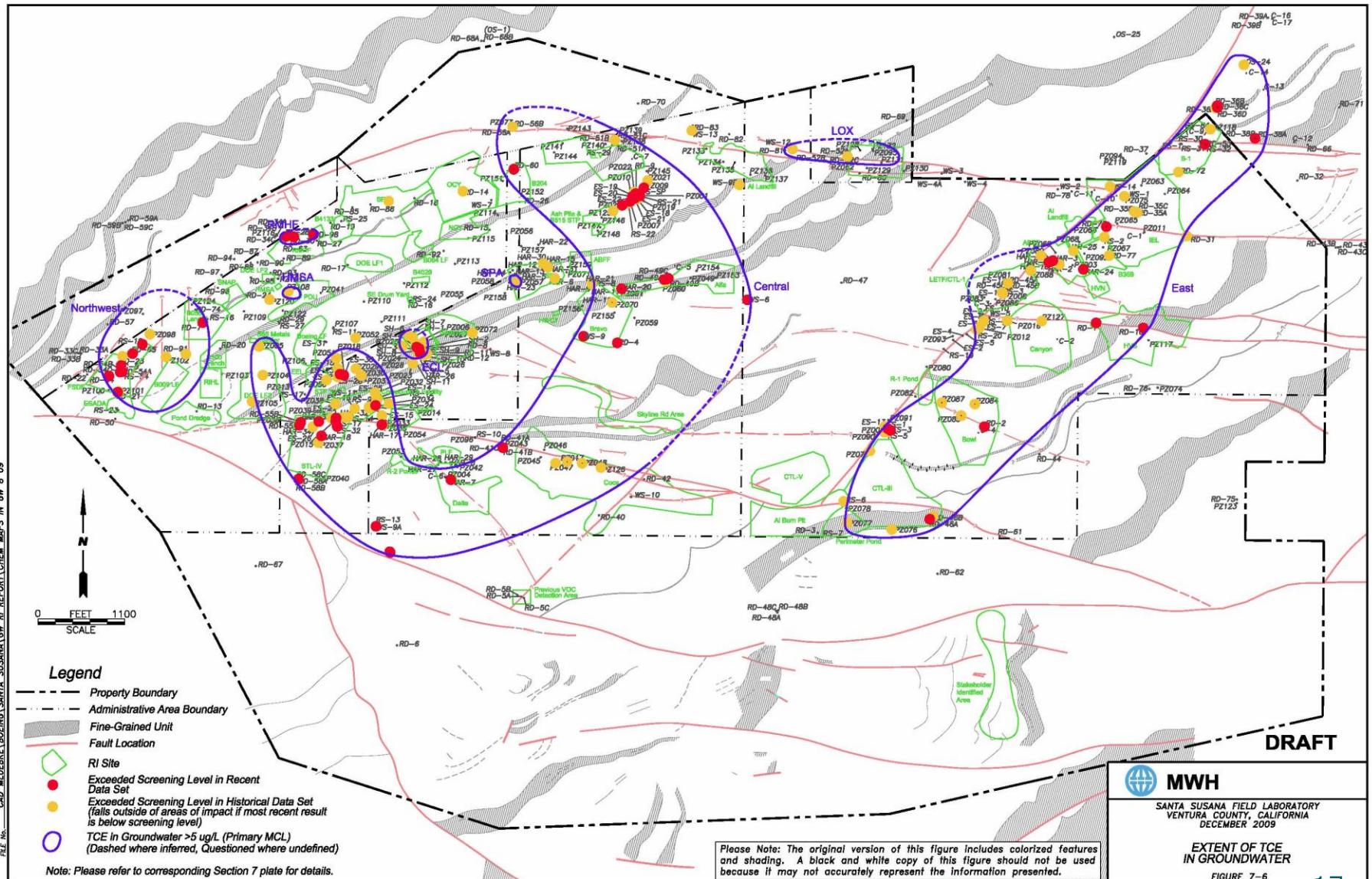
SSFL Site-wide Issues

Groundwater

- Remedial Investigation Report
 - DTSC issued comments
 - Meeting with Responsible Parties in March to discuss responses
- Groundwater Interim Measures
 - Operate wells from source areas
 - DTSC working on CEQA documentation
- Seep & spring sampling
- Quarterly groundwater sampling



SSFL TCE Contaminated Groundwater



SSFL Site-wide Issues

Look-up Tables

- Required in AOC's and would be cleanup levels
- Based on Background Threshold Level or Reporting Limit (chemicals)/Minimum Detection Concentration (radionuclides)
- EPA will provide draft radiological Look-up Table
- DTSC will develop chemical Look-up Table

SSFL Site-wide Issues

CEQA

Working with DOE and NASA to integrate the federal NEPA (National Environmental Protections Act) and state CEQA (California Environmental Quality Act) processes and documents

Interagency Coordination

- DTSC participates in bi-weekly ISRA (Interim Source Removal Actions) coordination calls
- Nov 2011, DTSC & LA RWQCB joint letter approving the Expendable Launch Vehicle - Interim Source Removal Actions



Questions

Mark Malinowski
DTSC-SSFL Branch Chief
916.255.3717
Mmalinow@dtsc.ca.gov