



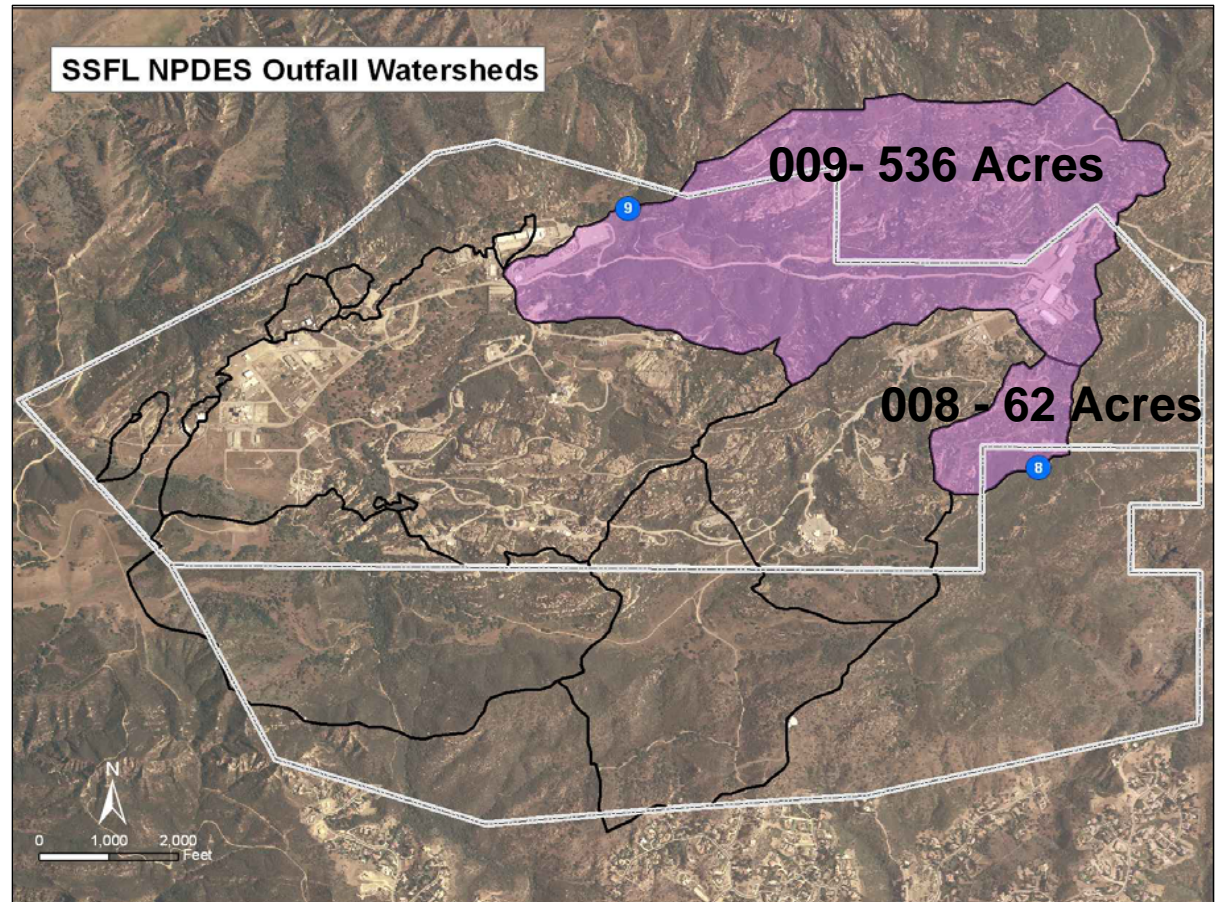
# Boeing Santa Susana

Update on Interim Source Removal Actions  
(ISRA)

December 2009

# Project Background

- **Objective:** identify and remove sources that may be contributing to NPDES exceedances in two watersheds.
- **Location:** Outfall 008 and 009 watersheds.



# Project Milestones

**Dec 3, 2008** -Clean-up & Abatement Order Issued

**Feb 13, 2009** - Preliminary ISRA Work Plan Submitted

**May 1, 2009** - Final ISRA Work Plan Submitted

**Jul 7, 2009** - ISRA Work Plan Approved

**Aug 20, 2009** – All Supporting Plans and Permits Approved  
& Work Began

**Dec 22, 2009** – Planned Work for 2009 To Be Completed on  
Schedule

# Agency & Community Involvement

- **Weekly planning meetings with DTSC, LARWQCB, Ventura County, NASA and Expert Panel**
- **32 Site inspections by LARWQCB/DTSC/Ventura (about 50% of the field work)**
- **Site tour of Outfall 008 by members of the public (Sep 23)**
- **Internet posting of all major documents and status reports –**

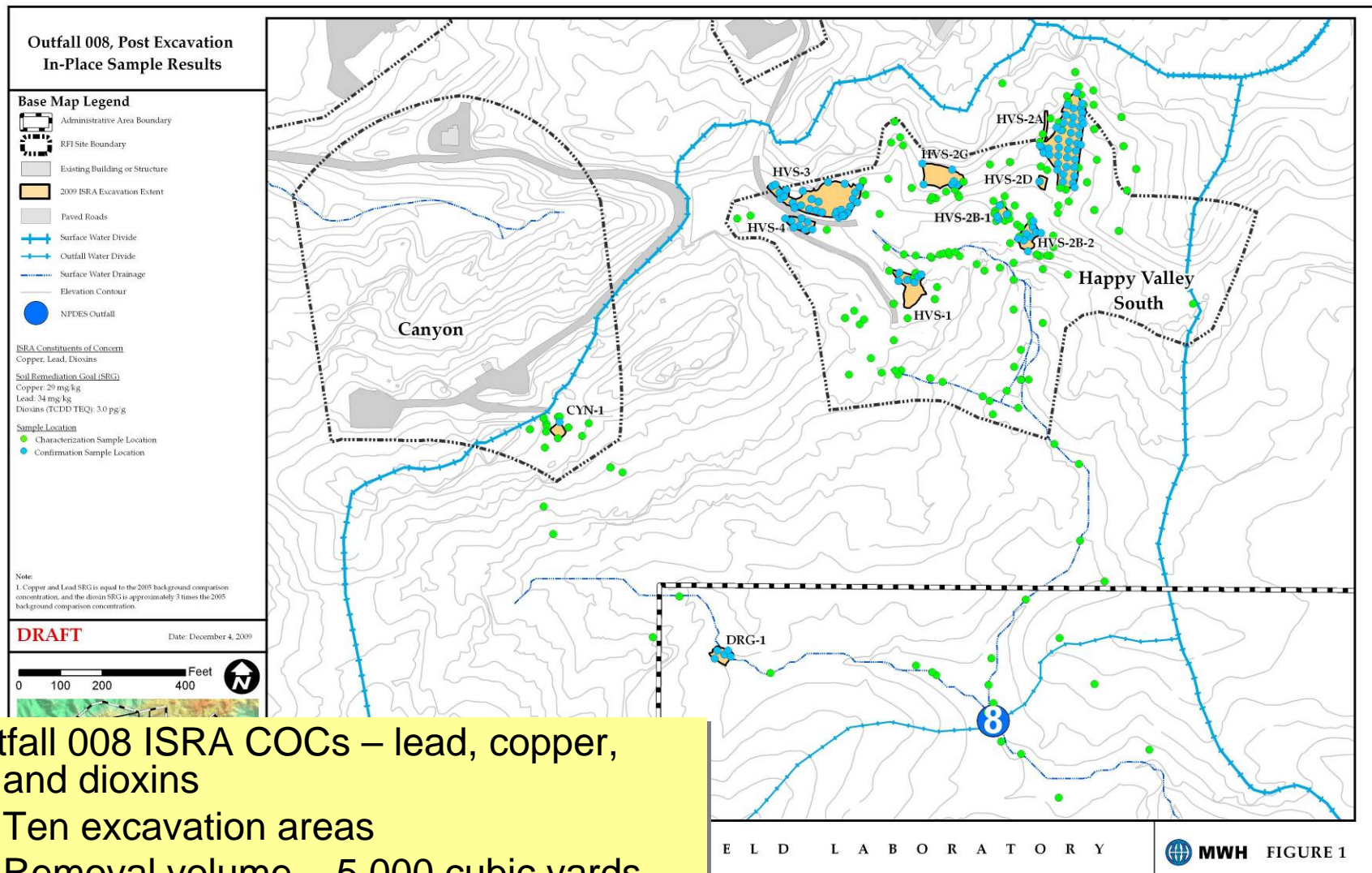
[http://www.boeing.com/aboutus/environment/santa\\_susana/isra.html](http://www.boeing.com/aboutus/environment/santa_susana/isra.html)

# Expert Panel Involvement

- **Provided input into planning documents**
- **Conducted field visits prior to and during work**
- **Supported restoration activities - prepared containerized planting plan and supervised implementation**
- **Providing input for performance monitoring plan**



# Accomplishments to Date – Outfall 008 – Post Excavation



- Outfall 008 ISRA COCs – lead, copper, and dioxins
- Ten excavation areas
  - Removal volume ~ 5,000 cubic yards

# Outfall 008 ISRA Pre-Field Work



**RWQCB participating in job walk**



**Slope and Flat Work**



**Drainage work**



**Oak Tree and Santa Susana Tar Plant**



# Outfall 008 – Field Work in Progress



**Water used to suppress dust during removal**



# Outfall 008 – Unanticipated Feature Septic Tank Removal



Agency cooperation and timely direction avoided  
schedule impact.

# Outfall 008 – Transportation & Disposal



Soil wrapped and trucks tarped to prevent dust.





# Outfall 008 – Pre-Rain Measures



HVS-1



HVS- 2A



# Outfall 008 – Post Excavation

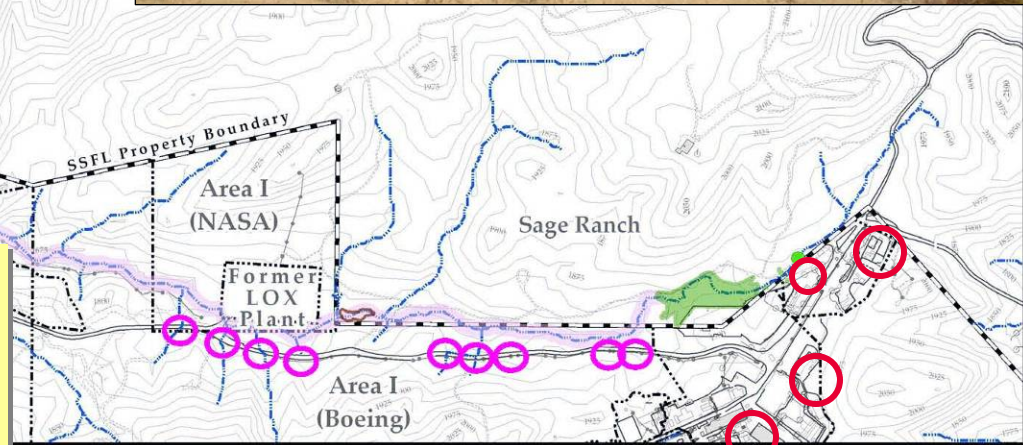
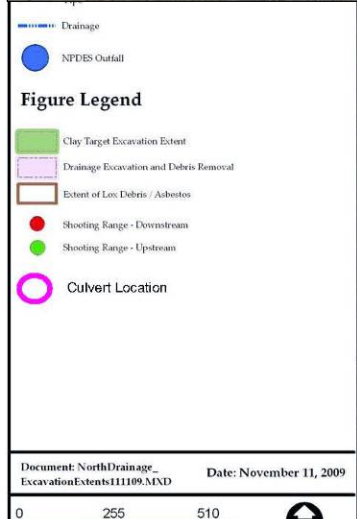


Outfall 008 ISRA Areas – Re-contoured and Hydroseeded



# Accomplishments to Date

## Outfall 009 – Northern Drainage



### Other Boeing Actions in Outfall 009

- Ongoing cleanup in Northern Drainage under DTSC oversight
- Storm water culverts upgraded to promote sediment settling

# Next Steps Forward

- **Continue restoration effort to promote soil stabilization and minimize sediment migration during vegetation recovery period over the next few years**
- **Implement a performance monitoring plan to verify progress made by ISRA activities**
- **Prepare 2010 ISRA Work Plan Addendum for continued efforts in Outfall 009**
- **Continue ISRA actions per approved plan and conduct performance monitoring through 2012**