Outfall 009 **Potential BMP and Performance Monitoring Locations IEL Area**

Base Map Legend

Administrative Area
Boundary

Non Jurisdictional
Surface Water Pathway

/ Drainage

Figure Legend

Primary Downstream Performance Monitoring Location

O Upstream Performance Monitoring Location

Secondary Performance Monitoring Location

Discontinued Performance Monitoring Location

Potential BMP Subarea Monitoring Location

Discontinued Potential BMP Subarea △ Monitoring Location

ISRA Excavation Boundary

Planned ISRA Area Boundary

Performance Monitoring sample ID suffix and collection date

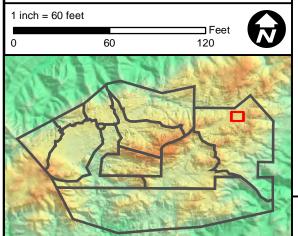
Potential BMP Subarea Monitoring sample ID suffix and collection date

Performance monitoring and potential BMP subarea monitoring inspections were performed at locations shown on this figure during daylight hours as soon as possible after the rain event began, and at 24 hour intervals during extended rain events. During inspections, if sufficient storm water runoff was observed at a sample location, a sample was collected. The dates on which samples were collected are shown on the Figure; locations with no dates have never been sampled.

- Aerial imagery from 2010 Sage Consulting.
 Topographic contours from 2010 Sage Consulting.
- 3. Rationale for discontinuing monitoring at previous sample locations can be found in the text and/or tables of the 2011/2012 Rainy Season Sampling and Analysis Plan.
- . Inspection/sampling at offsite monitoring locations subject to property owner approval.

Path: T:\projects\rock3\ISRA\Figures\PerfMon\IEL1.mxd

Date: 7/18/201







Outfall 009 Potential BMP and Performance Monitoring Locations A1LF Area

Base Map Legend

Administrative Area Boundary

Non Jurisdictional Surface Water Pathway

/ Drainage

Figure Legend

Primary Downstream Performance Monitoring Location

Upstream Performance Monitoring Location

Secondary Performance Monitoring Location

Discontinued Performance Monitoring Location

Potential BMP Subarea Monitoring Location

Discontinued Potential BMP Subarea Monitoring Location

ISRA Excavation Boundary

Planned ISRA Area Boundary

S001 12-7-09

Performance Monitoring sample ID suffix and collection date



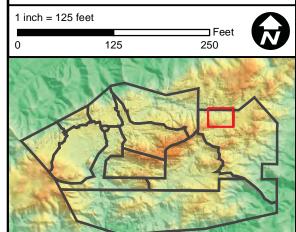
Potential BMP Subarea Monitoring sample ID suffix and collection date

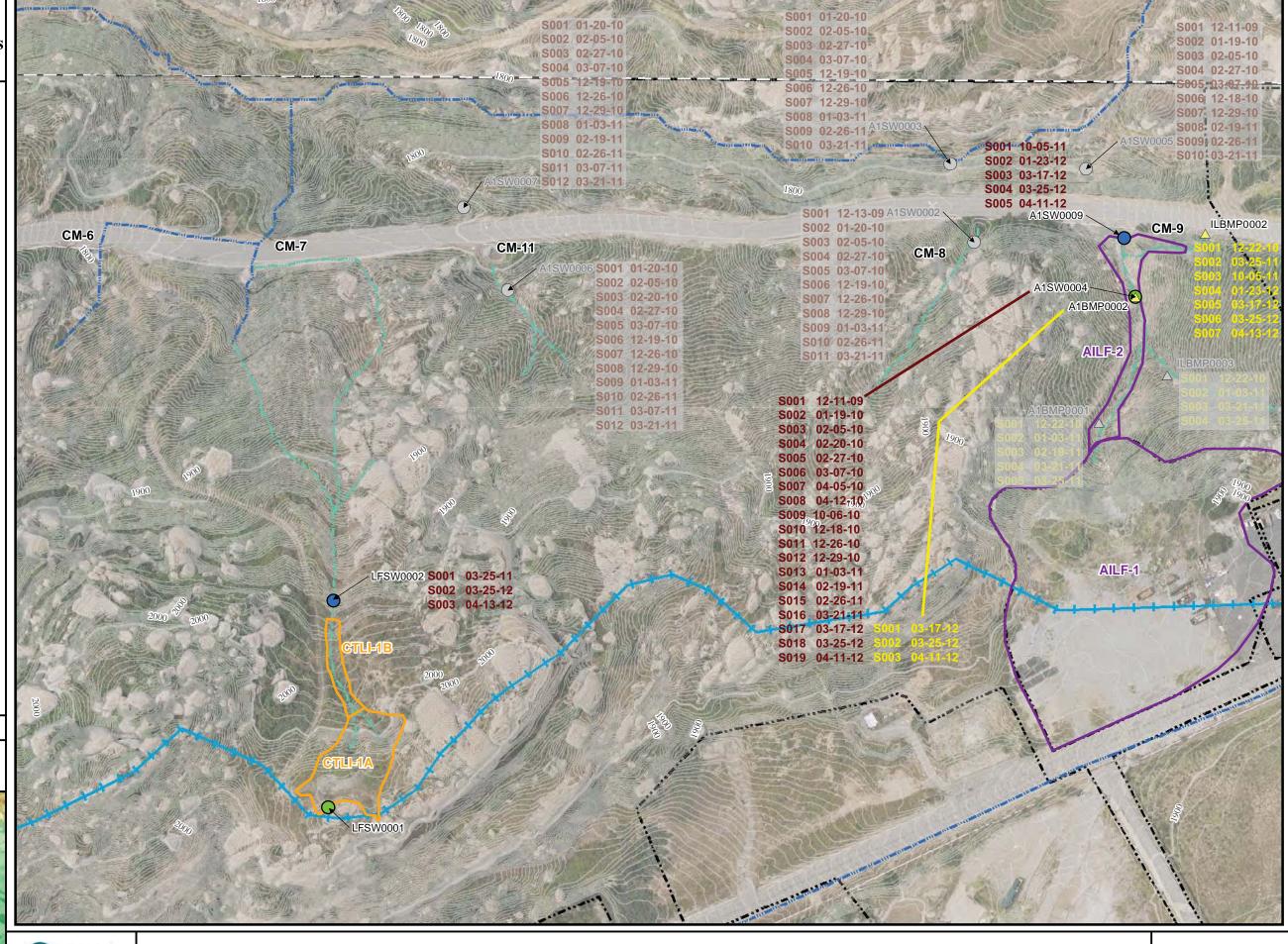
Performance monitoring and potential BMP subarea monitoring inspections were performed at locations shown on this figure during daylight hours as soon as possible after the rain event began, and at 24 hour intervals during extended rain events. During inspections, if sufficient storm water runoff was observed at a sample location, a sample was collected. The dates on which samples were collected are shown on the Figure; locations with no dates have never been sampled.

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- . Inspection/sampling at offsite monitoring locations subject to property owner approval.

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Date: 7/18/2012







Outfall 009 **Potential BMP and Performance Monitoring Locations LOX Area**

Base Map Legend

Administrative Area Boundary

Non Jurisdictional Non Jurisuictional
Surface Water Pathway

/ Drainage

Figure Legend

Primary Downstream Performance Monitoring Location

O Upstream Performance Monitoring Location

Proposed Secondary Performance Monitoring Location

Discontinued Performance Monitoring Location

Potential BMP Subarea Monitoring Location

Discontinued Potential BMP Subarea △ Monitoring Location

ISRA Excavation Boundary

Planned ISRA Area Boundary

S001 12-7-09 Performance Monitoring sample ID

suffix and collection date

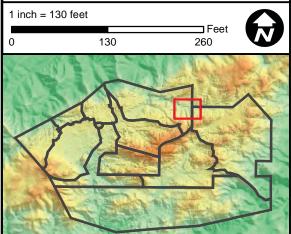
Potential BMP Subarea Monitoring sample ID suffix and collection date

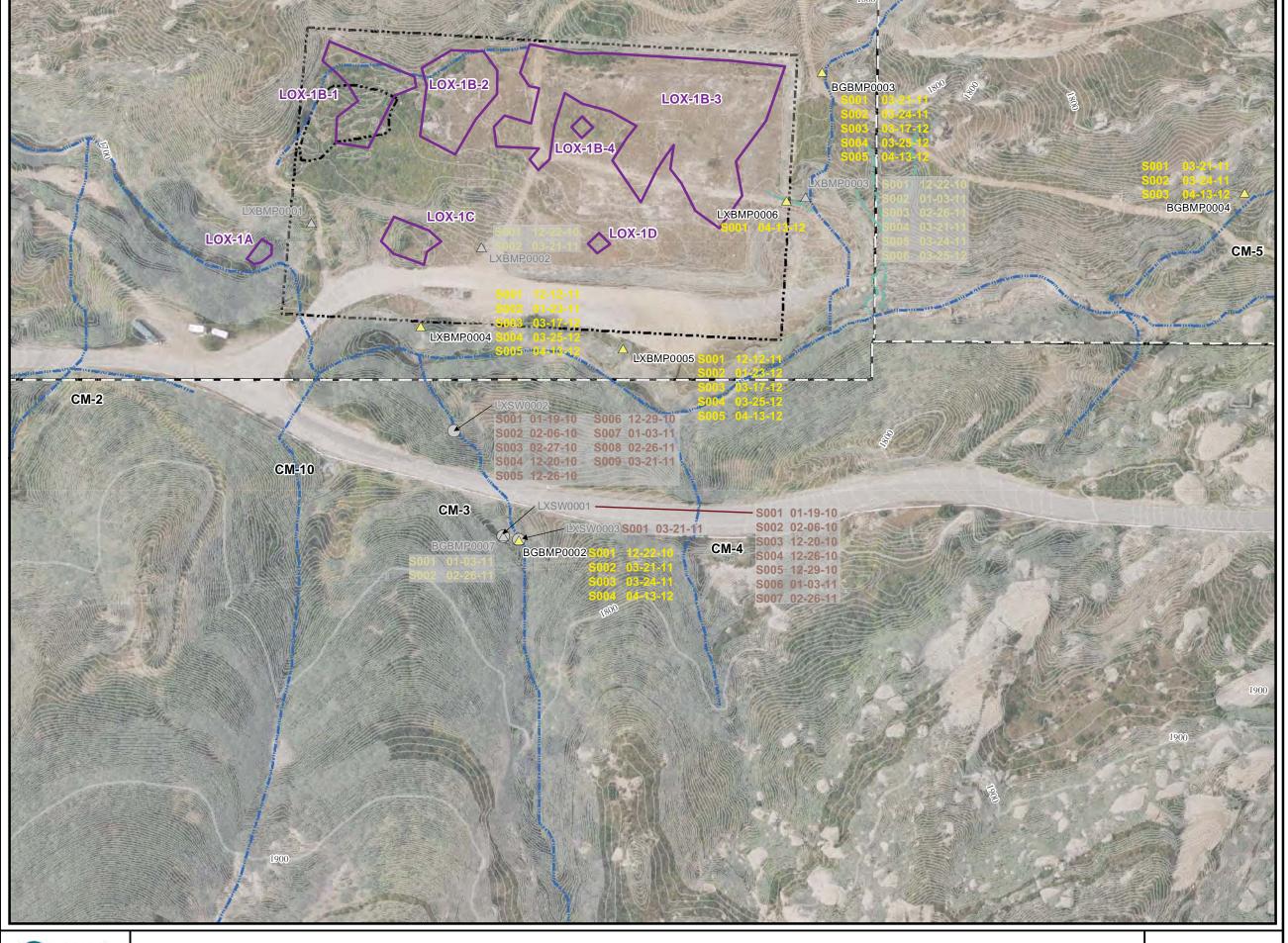
Performance monitoring and potential BMP subarea monitoring inspections were performed at locations shown on this figure during daylight hours as soon as possible after the rain event began, and at 24 hour intervals during extended rain events. During inspections, if sufficient storm water runoff was observed at a sample location, a sample was collected. The dates on which samples were collected are shown on the Figure; locations with no dates have never been sampled.

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 Topographic contours from 2010 Sage Consulting.
- 3. Rationale for discontinuing monitoring at previous sample locations can be found in the text and/or tables of the 2011/2012 Rainy Season Sampling and Analysis Plan.
- . Inspection/sampling at offsite monitoring locations subject to property owner approval.

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Date: 7/18/201







Outfall 009 Potential BMP and Performance Monitoring Locations A2LF and ELV Areas

Base Map Legend

Administrative Area

Boundary

Non Jurisdictional
Surface Water Pathway

Surface Water Divide

Figure Legend

Primary Downstream Performance Monitoring Location

O Upstream Performance Monitoring Location

Secondary Performance Monitoring Location

Discontinued Performance Monitoring Location

Potential BMP Subarea Monitoring Location

△ Discontinued Potential BMP Subarea Monitoring Location

ISRA Excavation Boundary

Planned ISRA Area Boundary

Performance Monitoring sample ID

suffix and collection date

Potential BMP Subarea Monitoring sample ID suffix and collection date

Note:

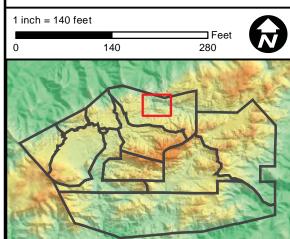
Performance monitoring and potential BMP subarea monitoring inspections were performed at locations shown on this figure during daylight hours as soon as possible after the rain event began, and at 24 hour intervals during extended rain events. During inspections, if sufficient storm water runoff was observed at a sample location, a sample was collected. The dates on which samples were collected are shown on the Figure; locations with no dates have never been sampled.

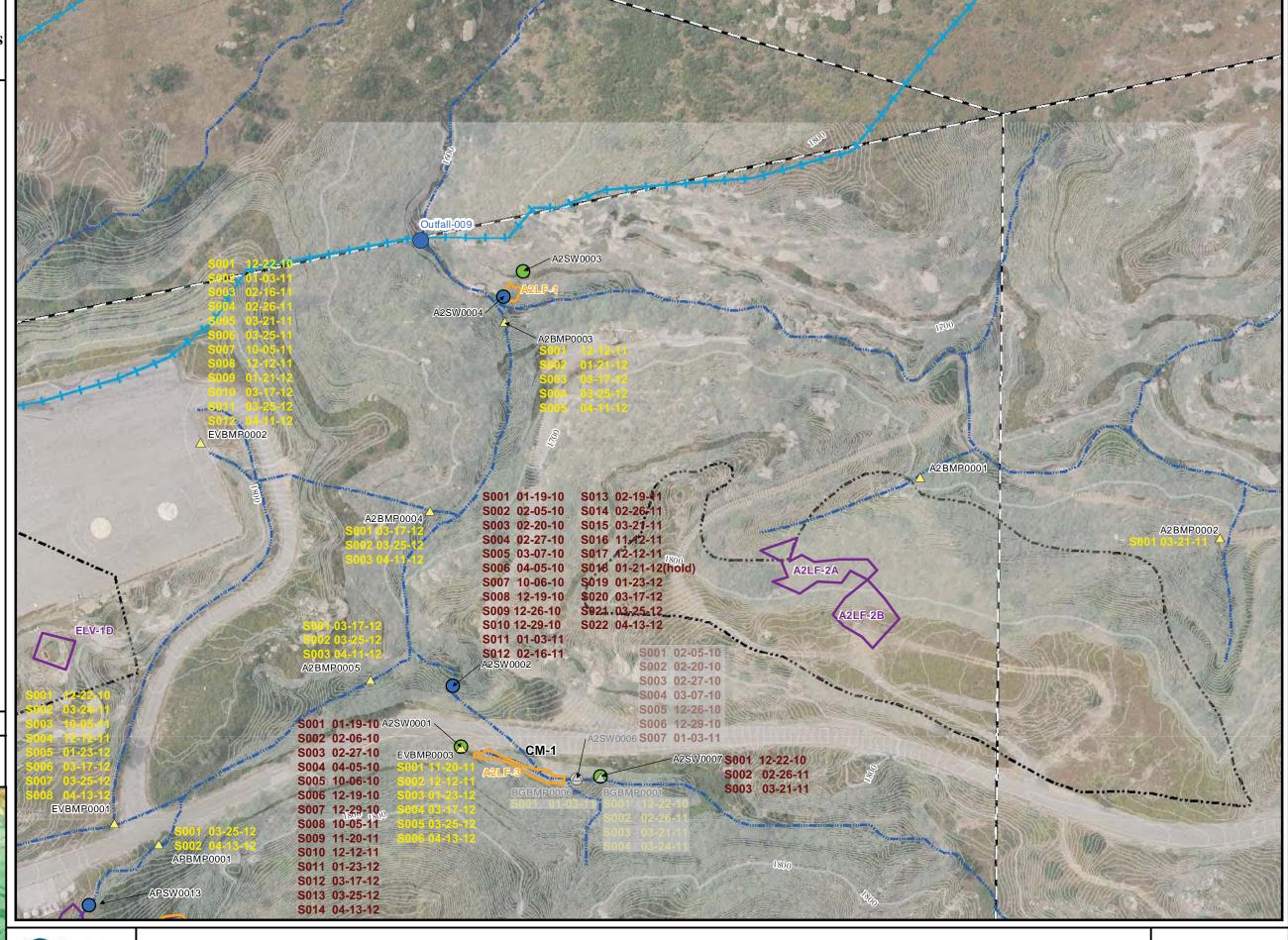
Note:

- 1. Aerial imagery from 2010 Sage Consulting.
- 2. Topographic contours from 2010 Sage Consulting.
- Rationale for discontinuing monitoring at previous sample locations can be found in the text and/or tables of the 2011/2012 Rainy Season Sampling and Analysis Plan.
- 4. Inspection/sampling at offsite monitoring locations subject to property owner approval.

Path: T:\projects\rock3\ISRA\Figures\PerfMon\A2LF.mxd

Date: 8/20/2012







Outfall 009 **Potential BMP and Performance Monitoring Locations AP/STP Area**

Base Map Legend

Administrative Area Non Jurisdictional Surface Water Pathway Boundary RFI Site Boundary Surface Water Divide

Figure Legend

Primary Downstream Performance Monitoring Location

O Upstream Performance Monitoring Location

Secondary Performance Monitoring Location

Discontinued Performance Monitoring Location

Potential BMP Subarea Monitoring Location

Discontinued Potential BMP Subarea △ Monitoring Location

ISRA Excavation Boundary

Planned ISRA Area Boundary

ISRA Areas with remediation in progress

S001 12-7-09 Performance Monitoring sample ID suffix and collection date

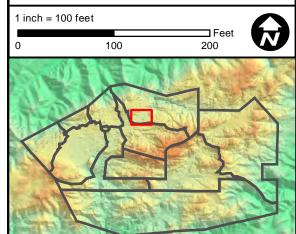
> Potential BMP Subarea Monitoring sample ID suffix and collection date

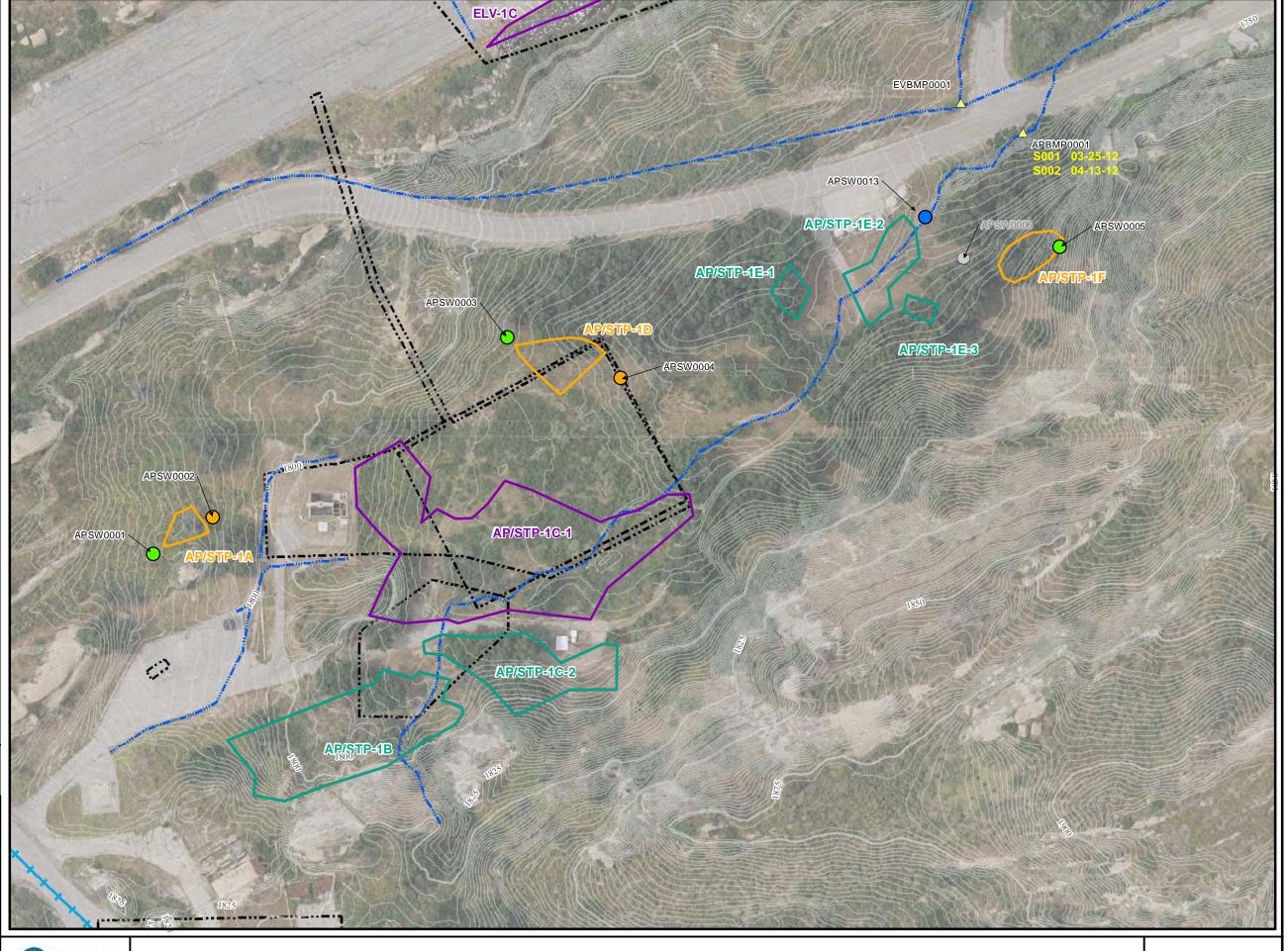
Note: Performance monitoring and potential BMP subarea monitoring nspections were performed at locations shown on this figure during daylight hours as soon as possible after the rain event began, and at 24 hour intervals during extended rain events. During inspections, if sufficient storm water runoff was observed at a sample location, a sample was collected. The dates on which samples were collected are shown on the Figure; locations with no dates have never been sampled.

- 1. Aerial imagery from 2010 Sage Consulting.
- 2. Topographic contours from 2010 Sage Consulting.
- 3. Rationale for discontinuing monitoring at previous sample locations can be found in the text and/or tables of the 2011/2012 Rainy Season Sampling and Analysis Plan.
- . Inspection/sampling at offsite monitoring locations subject to property owner approval.

Path: T:\projects\rock3\ISRA\Figures\PerfMon\APSTP.mxd

Date: 8/20/201





BMP Areas Based on Potential BMP Ranking Results Eastern Outfall 009 Watershed Base Map Legend _Administrative Area ✓ Drainage Boundary Surface Water Divide B-1 BMP RFI Site Boundary ∧ A/C Paving NPDES Outfall B-1 Media Filter ✓ Dirt Road Non Jurisdictional MRCA / Sage Ranch **Data Legend** B-1 Retention Basin and Discharge Pipe (Fall 2011) Actual ISRA Excavation Boundary ISRA Areas planned for future remediation Planned BMP Activities Lower Lot Biofilter, Sediment Basin, and Trench Drain/Cister /// Planting Area (Summer/Fall 2012) Hydroseed 2011/2012 Hydroseed 2010/2011 Road Abandonment and Restoration Road Erosion Control Measures **CM-9 BMP** Lower Lot Asphalt Removal Areas (Fall 2011) Retention/Sediment Basins Area Bio Filter CM12 Northern Drainage RMMP Areas (Summer/Fall 2012) Wooden Retaining Wall Maintenance and Repair (Winter 2012) Rock Placement ■ BMP Stormwater Conveyance Pipeline B-1 Area Stormwater Conveyance Pipelines (estimated subsurface trace) CM8 CM11 6-inch Concrete Curb CM7 Trench Drain/Cistern 24-inch Drain BMP Area (Planned) **Beneath Lower Lot BMP Area** Figure Notes: B1324 Parking Lot Asphalt A1LF 1. Topographic contours from 2010 Sage Consultants, Inc. 2. Hydroseed areas may also have additional sediment and BOEING PROPERTY erosion control BMPs installed within the area shown (can include fiber rolls, silt fencing, hay bales, or other controls). AREA I 3. Covered the weir boards at CM-1, CM-2, CM-3, CM-4, CM-6, CM-8, CM-9, and CM-10 with filter fabric to facilitate ponding behind the boards and increase flow through filter media beds (Fall 2011). B359 Outfall-014 Path: T:\projects\rock3\ISRA\Figures\Outfall-009\Figure 3-1.mxd Date: 8/30/2012 1 inch = 300 feet N HVN **MWH** SANTA SUSANA FIELD LABORATORY FIGURE 3-1

BMP Areas Based on Potential BMP Ranking Results Western Outfall 009 Watershed UNDEVELOPED Base Map Legend Administrative Area **✓** Surface Water Divide LAND Boundary ✓ A/C Paving RFI Site Boundary // Dirt Road NPDES Outfall Elevation Contour Outfall-00 NASA PROPERTY /// Drainage AREA I Helipad Area BMPs Non Jurisdictional (On-going) Surface Water Pathway LOX Area BMPs Data Legend (Fall 2011 through Fall 2012) Actual ISRA Excavation Boundary ISRA Areas planned for future remediation Rock Placement LOX-1B-2 ISRA Areas with remediation in progress //// Planting Area Hydroseed 2011/2012 ELV Area BMPs Hydroseed 2010/2011 (On-going) Road Abandonment and Restoration Rock Placement Area II Erosion Control Fabric Landfill Northern Drainage RMMP (Summer 2012) Sandbag Berm BMP Area (Planned) Area II UV Peroxidation __Unit Demolition (Fall 2011) Leach Field CM-1 BMP CM10 CM3 Area **B515 STP** NASA PROPERTY P/STP-1C-BOEING PROPERTY AREA II AP/STP-1C-2 Figure Notes: B212 1. Topographic contours from 2010 Sage Consultants, Inc. Leach Field 2. Hydroseed areas may also have additional sediment and erosion control BMPs installed within the area shown (can PA 2 include fiber rolls, silt fencing, hay bales, or other controls). undment ABFF 3. Covered the weir boards at CM-1, CM-2, CM-3, CM-4, CM-6, CM-8, CM-9, and CM-10 with filter fabric to facilitate ponding behind the boards and increase flow through filter **B208** Leach Field Soil Borrow Outfall-012 SPA Alfa Bravo Skim Pond Path: T:\projects\rock3\ISRA\Figures\Outfall-009\Figure 3-2.mxd Alfa 1 inch = 350 feet N **HWSA** Bravo B213 HWCT Outfall-013 Leach Field B217 Leach **MWH** S U S A N A F I E L D LABORATORY FIGURE 3-2