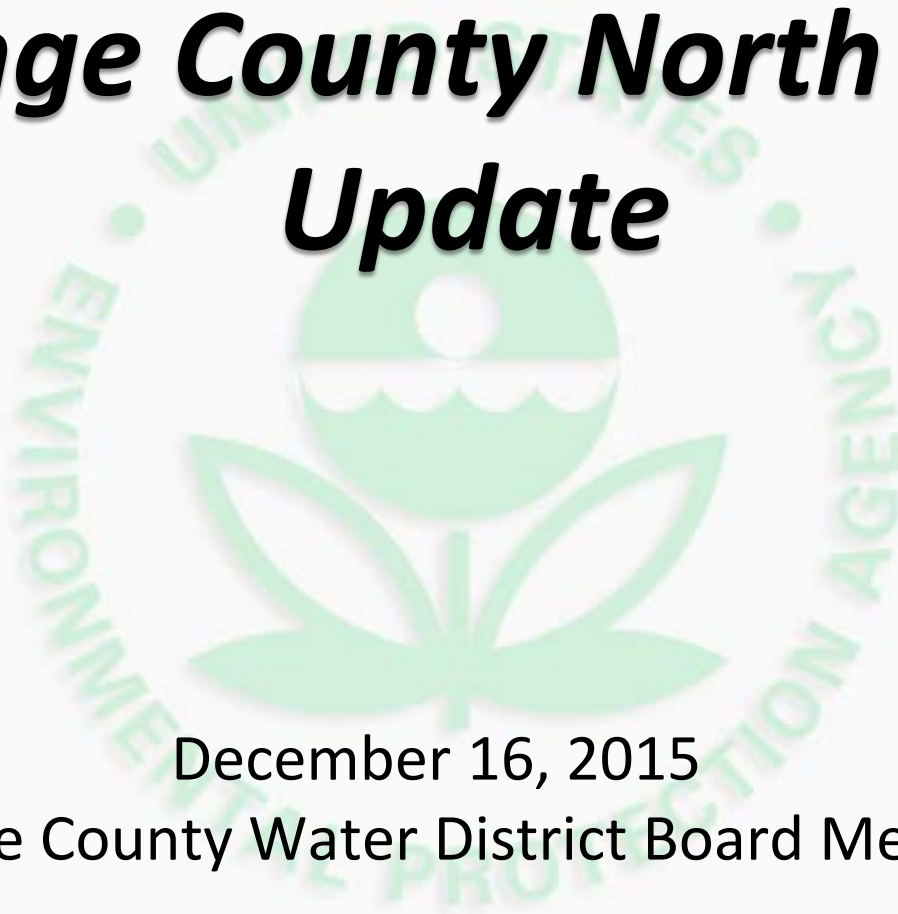


# ***Orange County North Basin Update***

December 16, 2015

Orange County Water District Board Meeting





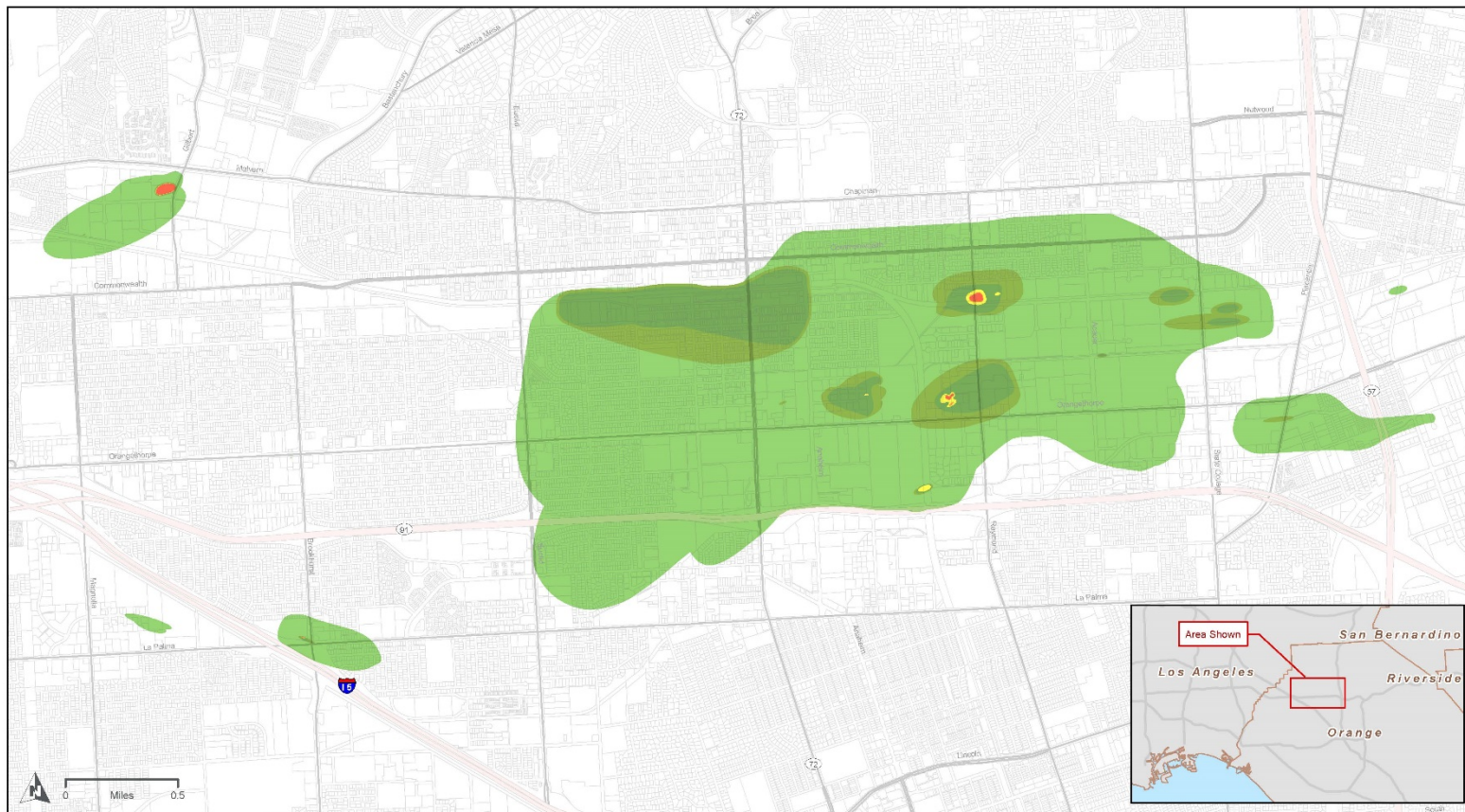
# Outline

- Remedial process
- Administrative Order on Consent
- Statement of Work
- Coordination with State agencies
- Site assessment process
- Next steps



### Magnitude and Extent of PCE, TCE, and 1,1-DCE in Groundwater

■ 1x-5x MCL   
 ■ 5x-10x MCL   
 ■ 10x-20x MCL   
 ■ 20x-100x MCL   
 ■ 100x-200x MCL   
 ■ > 200x MCL  
State / Federal MCL: PCE – 5 / 5 µg/L, TCE – 5 / 5 µg/L, 1,1-DCE – 6 / 7 µg/L | Shallow Aquifer Range: 0-200 ft bgs (including perched zone)  
 VOC Data: 2010 - 2014 | Parcel Data: 2014



ORANGE COUNTY NORTH BASIN - SHALLOW AQUIFER PLUME

\\FD-1\CONTRACTS\04\_PROJECTS\04\_ORANGE\04\_ORANGE\_NORTH\_BASIN\04\_ORANGE\_NORTH\_BASIN\_SAW\04\_ORANGE\_NORTH\_BASIN\_SAW\_04092010.dwg    USER: B4029230    DATE: 11/20/13



# Remedial Process

<b>Remedial Investigation (RI)</b>	<b>Feasibility Study (FS)</b>	<b>Public Comment Period</b>	<b>Record of Decision (ROD)</b>	<b>Remedial Design (RD)</b>	<b>Remedial Action (RA)</b>
Investigate the nature and extent of contamination	Identify and analyze alternatives for addressing site contamination	The public comments on alternatives, including the preferred alternative, during formal public comment period. Agency considers these comments & prepares a responsiveness summary.	Agency documents the selected remedy in the ROD. If ROD drafted by State Agency, EPA's concurrence is needed.	Oversee development of detailed designs for the selected remedy	Oversee construction and operation of the remedy until cleanup goals are achieved



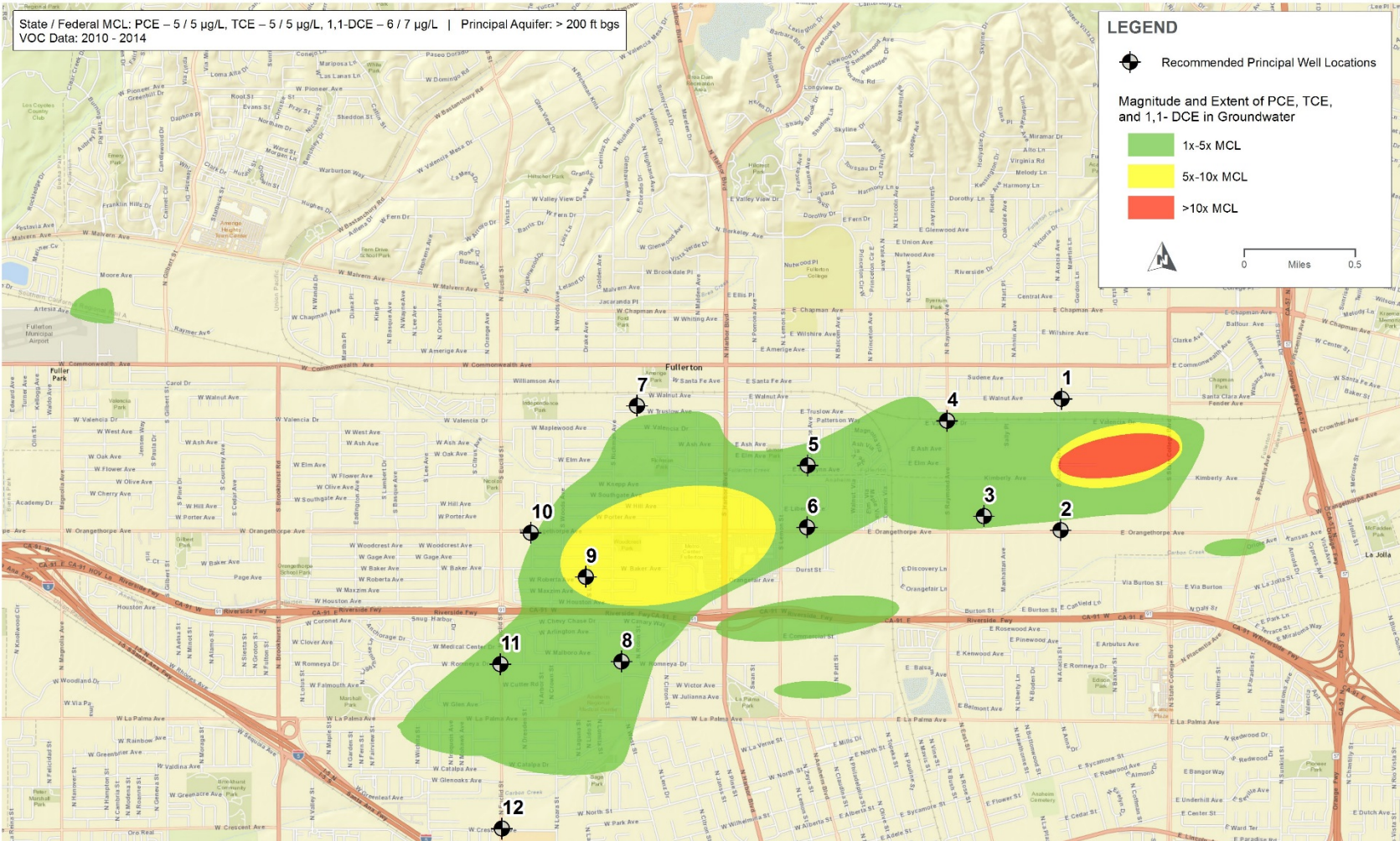
# Statement of Work

- Remedial Investigation: evaluate nature and extent of contamination
  - Contaminants of concern
  - Sources
  - Vertical and horizontal extent of contamination
  - Risk assessment



# Statement of Work

- Feasibility Study: identify and evaluate remedial alternatives
  - Contaminant fate and transport
  - Pilot testing/ treatability studies
  - Groundwater modeling
  - Community involvement





ORANGE COUNTY NORTH BASIN  
RECOMMENDED PRINCIPAL WELL LOCATIONS

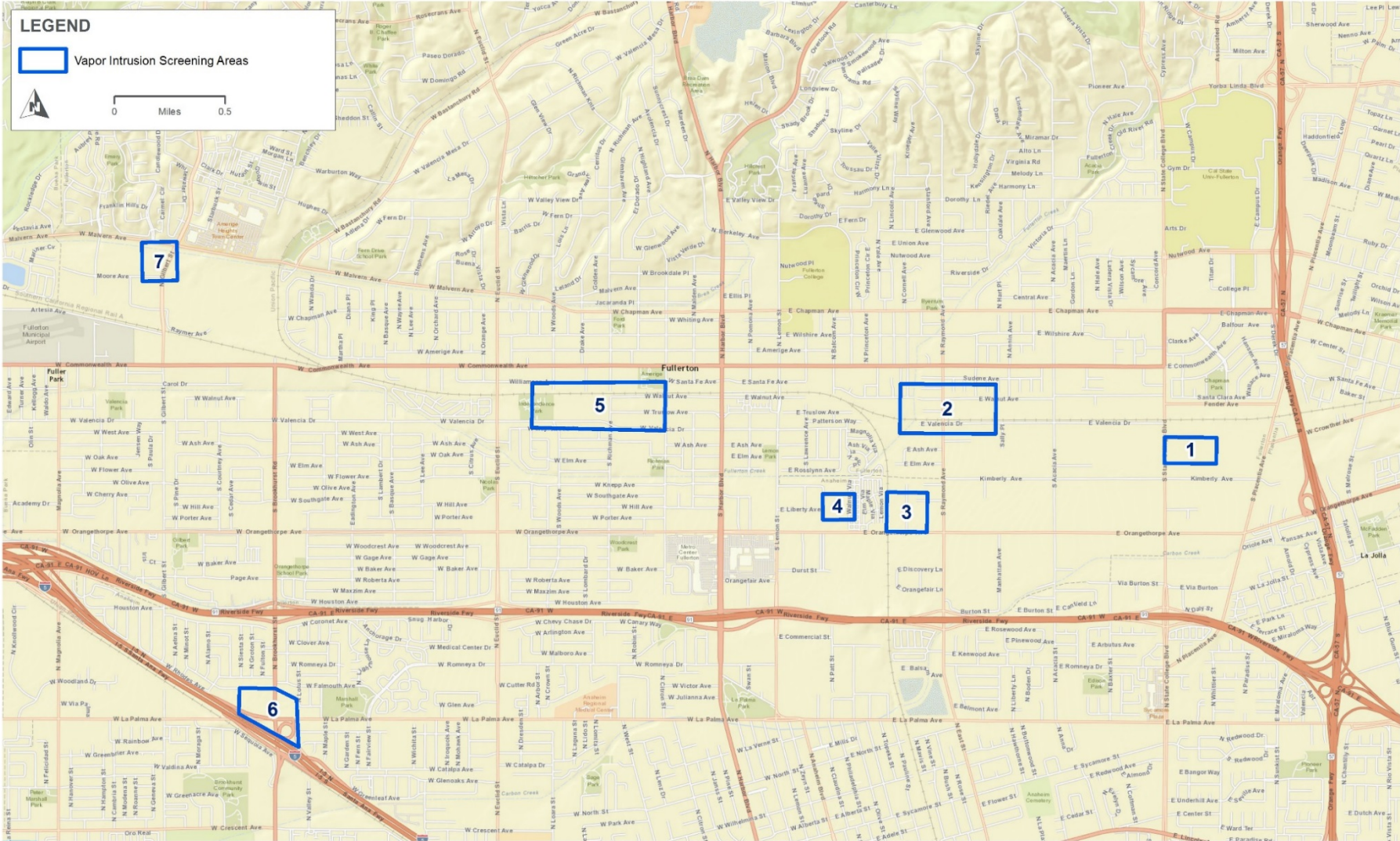
FIGURE 3



**LEGEND**

 Vapor Intrusion Screening Areas

 0 Miles 0.5



**ORANGE COUNTY NORTH BASIN**  
**AREAS RECOMMENDED FOR VAPOR INTRUSION ASSESSMENT**







# Administrative Order on Consent

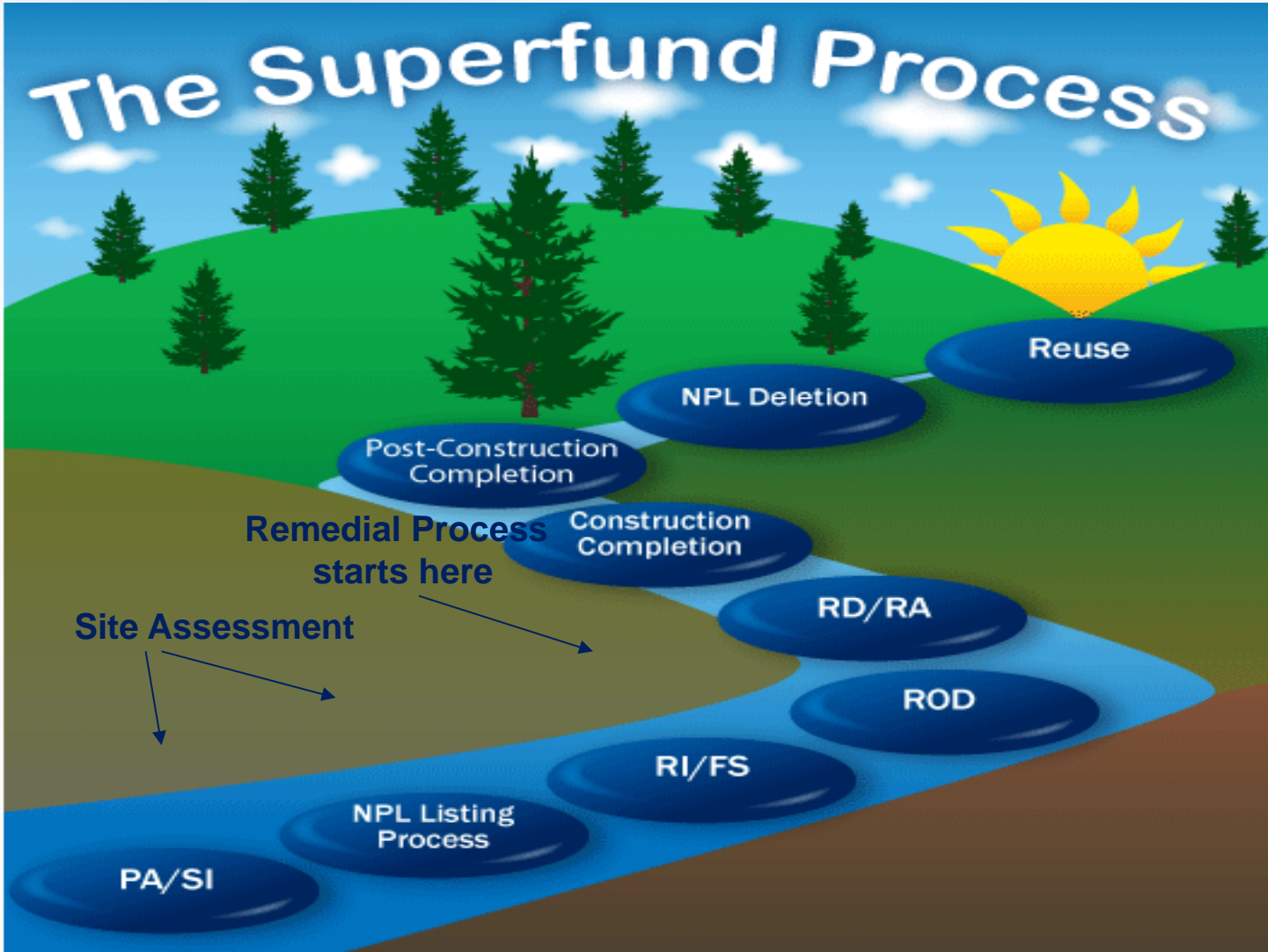
- Invitation to participate sent December 15
- Response required within 60 days
- Respondent(s) will conduct the Remedial Investigation and Feasibility Study under EPA oversight
- Respondent(s) will submit a Workplan outlining how they plan to fulfill the requirements of the Statement of Work



## Coordination with State Agencies

- EPA is working closely with DTSC and RWQCB
- Source investigation and remediation work under State oversight will continue
- DTSC and RWQCB will review major deliverables and may pursue separate agreements with respondent(s)

# The Superfund Process





# Preliminary Assessment (PA)

*"Desk-top Study"*

- Helps to distinguish between sites that pose little threat and those that warrant further investigation
- Low-cost compilation of readily available information about the site and its surroundings
- Includes information on:
  - Historical waste generation and disposal practices
  - Hazardous substances potentially associated with site
  - Potential sources of hazardous substances
  - Important migration pathways and affected media
  - Comprehensive survey of targets



## Site Inspection

- Conducted to determine whether potential threats identified in the Preliminary Assessment actually exist
- Includes Field Sampling Plan (FSP) and field activities to collect environmental and waste related samples to characterize releases at the site



# Superfund Process for North Basin

- **Concurrent Site Assessment and Remedial Activities**
  - NPL Listing Evaluation
    - Individual PA for 8 Sources and Plume
    - Combined SI for all “9 Sites” (8 Sources and Plume)
      - Combined Field Sampling Plan
      - Combined SI report
  - Remedial Activities
    - EPA conducts oversight of RI/FS under Administrative Order on Consent
- **Completion of NPL listing evaluation and RI/FS at the same time**
- **Federal funds are not available for cleanup unless a site is listed on the NPL**



## Next Steps

- Respondent(s) submit offer to EPA to conduct RI/FS- February 2016
- AOC/Workplan negotiations- early 2016
- Remedial Investigation- 2016/2017
- Feasibility Study- 2017/2018
- Stakeholder meetings throughout process



# Contact Information

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