



Environmental Impact Statement for Remediation of Area IV

S a n t a S u s a n a F i e l d L a b o r a t o r y

Energy Technology Engineering Center (ETEC)

Welcome

to Scoping Meetings

Environmental Impact Statement for Remediation of Area IV
at the Santa Susana Field Laboratory

Thursday, February 27, 2014

6:30 p.m. to 9:30 p.m.

Simi Valley City Council Chambers

Saturday, March 1, 2014

9:30 a.m. to 12:30 p.m.

Agoura Hills/Calabasas Community Center





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Wendy Lowe

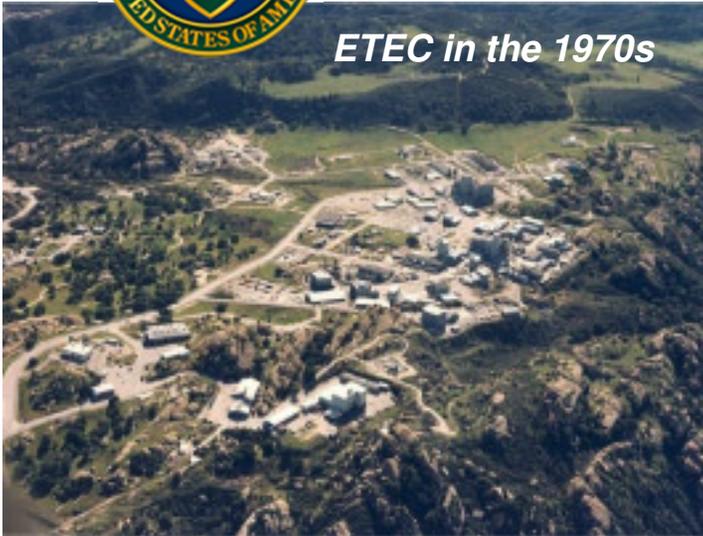
Moderator

Welcome and Introductions



Environmental Impact Statement for Remediation of Area IV

Santa Susana Field Laboratory



ETEC in the 1970s

John Jones

DOE Project Director



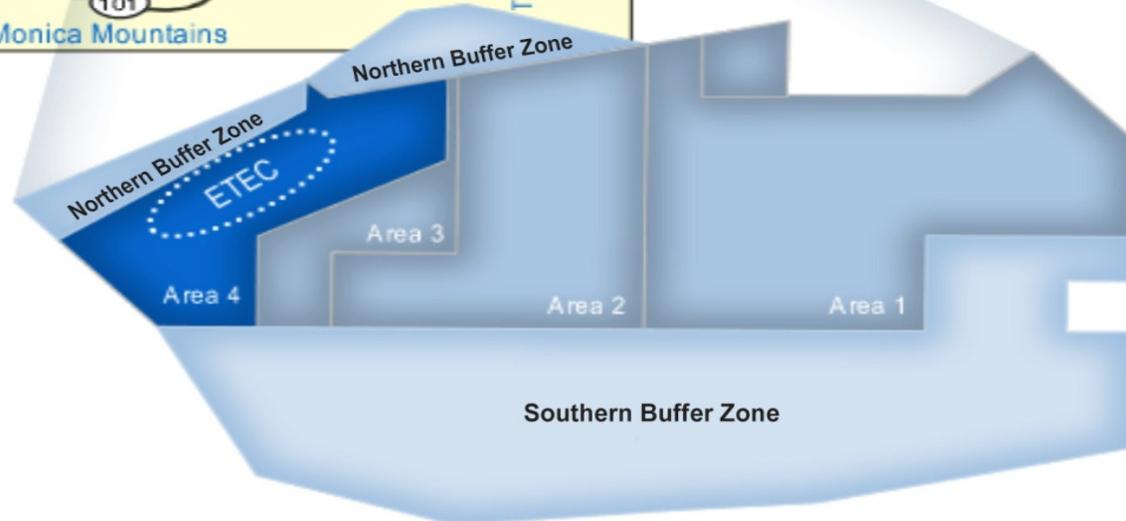
ETEC in 2005



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Santa Susana Field Laboratory

Santa Susana Field Laboratory (SSFL)



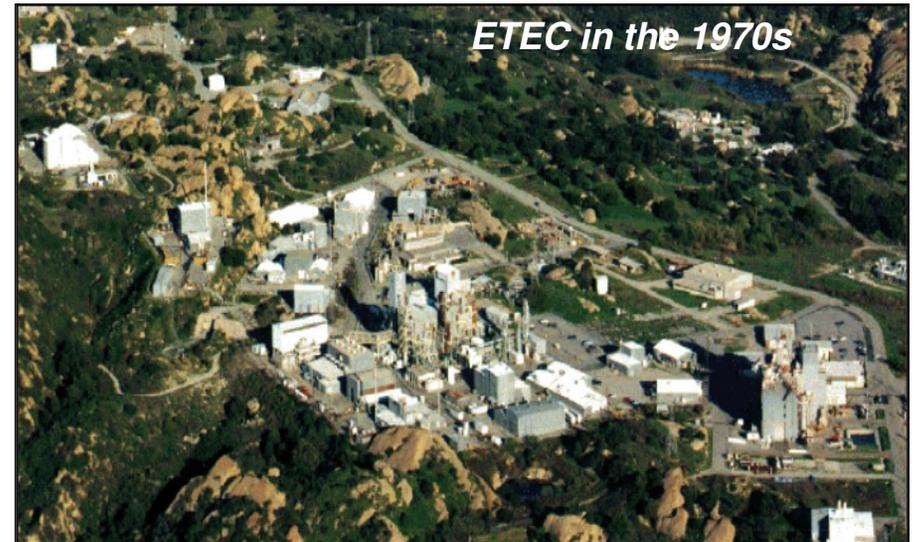


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Very Brief Site History

- The Atomic Energy Commission (AEC), a predecessor agency of DOE, funded nuclear energy development in Area IV starting in the mid-1950s
- ETEC was established in the early 1960s by the AEC, as a center of excellence for liquid metals technology
- Over the years there were 10 small research reactors, and several sodium component test labs
- Activities conducted at ETEC mostly involved:
 - Liquid metals research
 - Nuclear energy development
 - Waste Management
- Last nuclear operations ended in 1988 with all nuclear materials removed





Soil and Groundwater Characterization

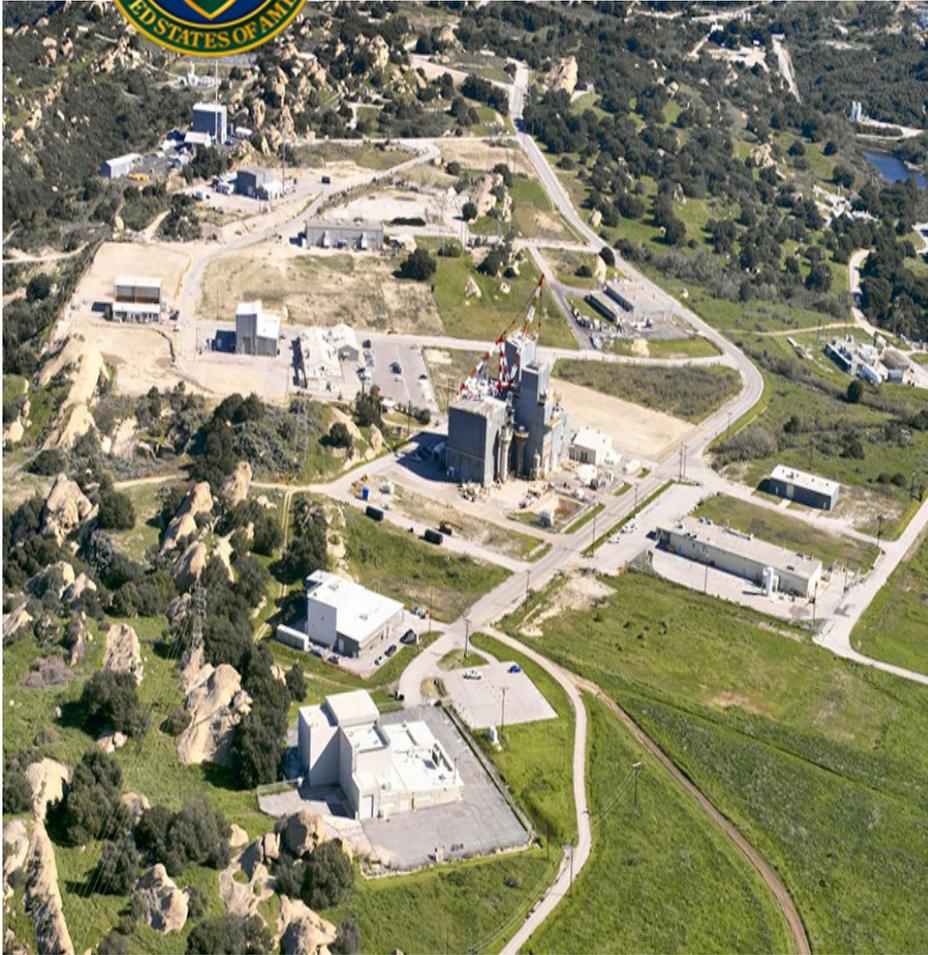
- US EPA completed radiological characterization survey, December 2012 — collecting more than 3,600 soil samples
- DOE/DTSC nearing completion of chemical characterization survey — collecting more than 6,000 samples
- DOE will be completing groundwater characterization — sampling performed on 90 wells in Area IV





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Stephie Jennings

DOE NEPA Document Manager
DOE Deputy Project Director

ETEC 2005



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An Environmental Impact Statement

- Tells the story of a proposed project
 - Designed for many different readers
 - Begins with the purpose and need that provides an explanation of why agency action is necessary
 - Describes a proposed action and alternatives ways to accomplish the purpose and need
 - Analyzes potential environmental impacts

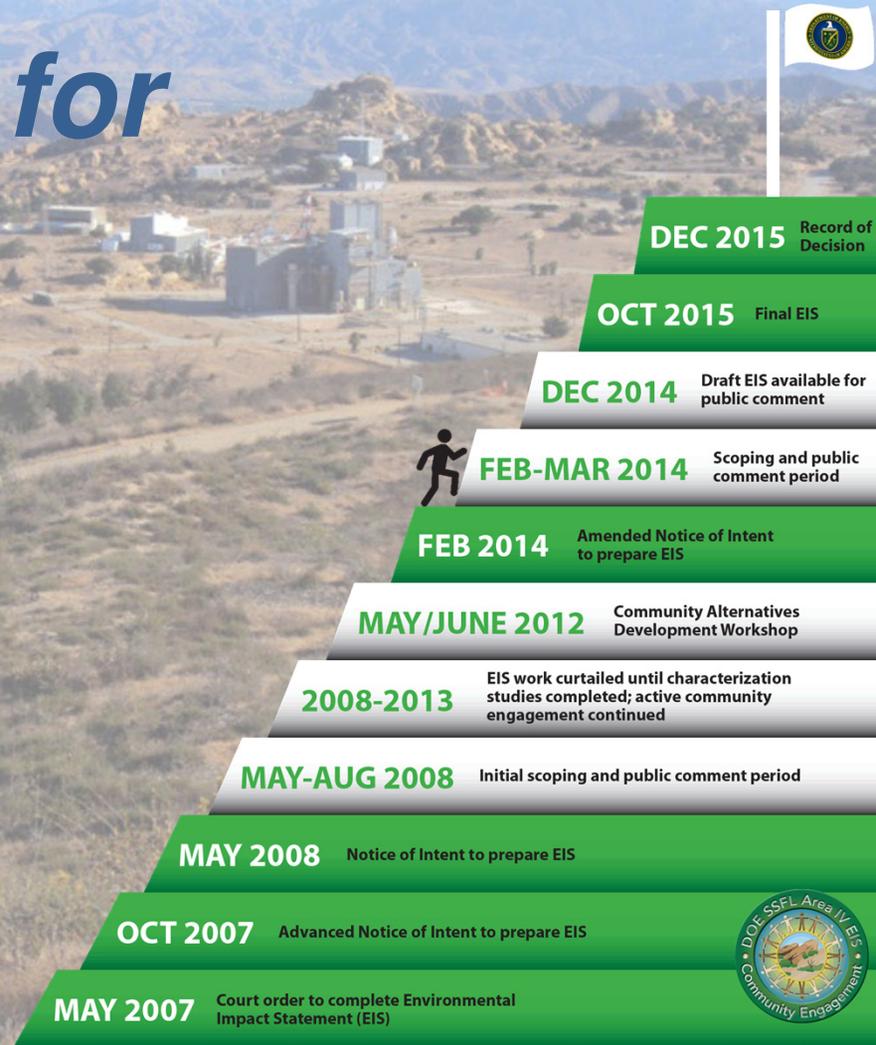




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EIS Timeline for Area IV





NEPA Scoping??

- Scoping is an early and open process for determining the breadth of issues to be addressed in the EIS and for identifying the significant issues to the public
- Through the scoping process the public has the opportunity to:
 - Provide input to help DOE frame the analysis for the EIS
 - Suggest alternatives that you would like to see evaluated in the EIS



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Why We Are Here

- DOE initially scoped the Area IV EIS in 2008
 - Based on community and agency comment, DOE agreed to complete site characterization prior to moving actively forward with the EIS analysis
- Six years later that characterization is nearing completion





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From 2008 to 2014

- In addition to site characterization, DOE has continued to perform EIS related activities including:
 - Biological surveys
 - Cultural resource surveys
 - Traffic and noise studies
 - Soil treatability studies
 - Native American interactions
 - Public interactions





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Six Years Later . . .

- Regulatory requirements have changed
 - DOE, DTSC signed Administrative Order on Consent (AOC) for soil cleanup, December 2010
 - Groundwater cleanup continues to be governed by the 2007 Consent Order
- Soil characterization
 - EPA completed radiological characterization
 - DOE has nearly completed chemical characterization
- Groundwater characterization
 - DOE will complete groundwater characterization by September 2014





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Purpose and Need

DOE needs to complete remediation of the Santa Susana Field Laboratory Area IV and the Northern Buffer Zone to comply with applicable requirements for radiological and hazardous contaminants. These requirements include regulations, orders, and agreements, including the 2007 Consent Order, as applicable, and the 2010 AOC.

To this end, DOE needs to remove the remaining DOE structures in Area IV of the Santa Susana Field Laboratory and clean up the affected environment in Area IV and the Northern Buffer Zone in a manner that is protective of the environment and the health and safety of the public and workers.



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Building 4024 – System for Nuclear Auxiliary Power (SNAP) Reactor Building

Proposed Action

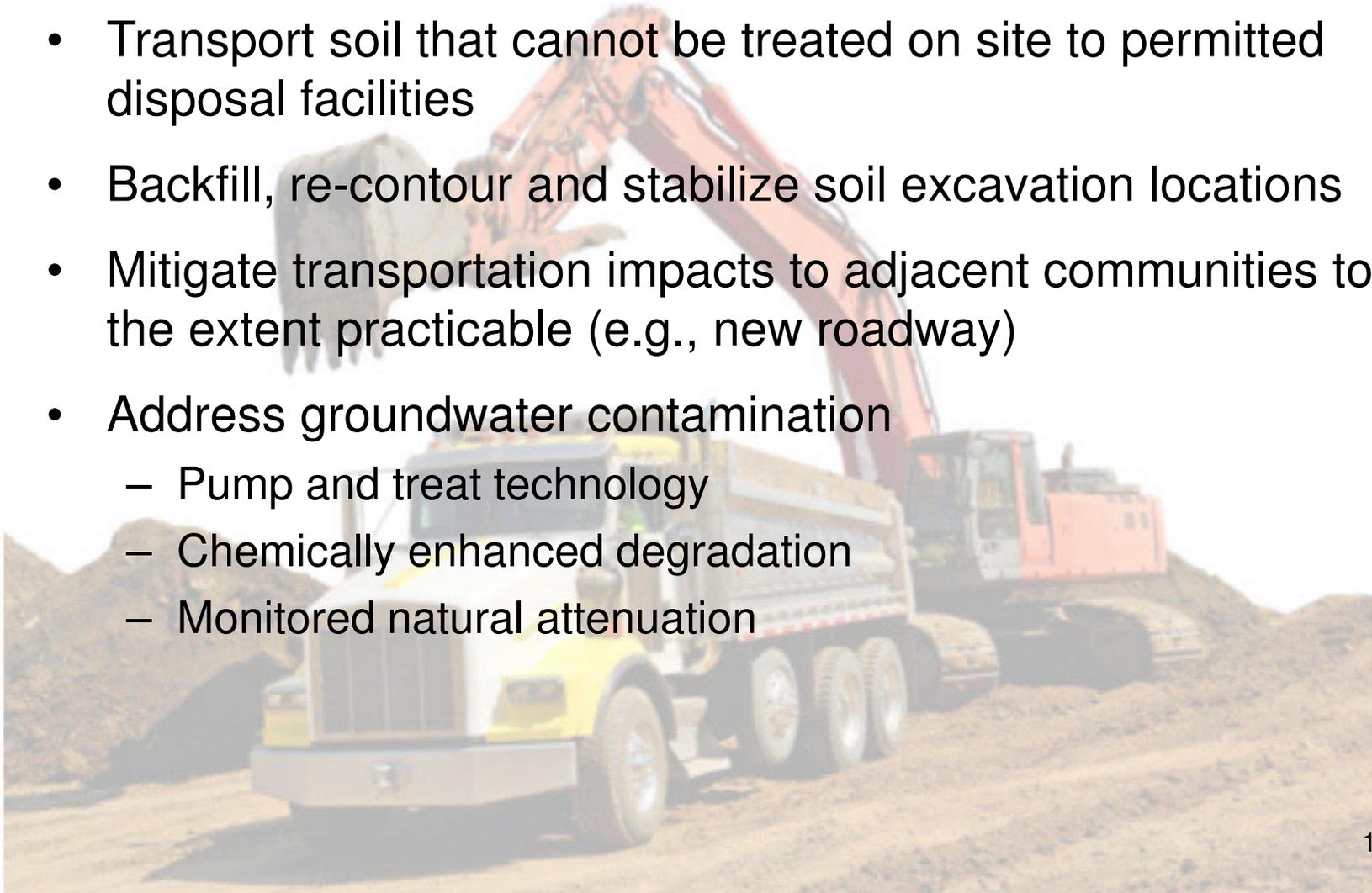
- Demolish remaining DOE-owned buildings and debris and dispose of waste off-site
- Clean up Area IV and Northern Buffer Zone soil
 - Look-Up Tables for chemicals and radionuclides govern soil cleanup
 - Where possible, DOE would use on-site treatment of contaminated soils and monitored natural attenuation to reduce volumes of contaminated soil
- Protect biological and cultural resources



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Proposed Action *(continued)*

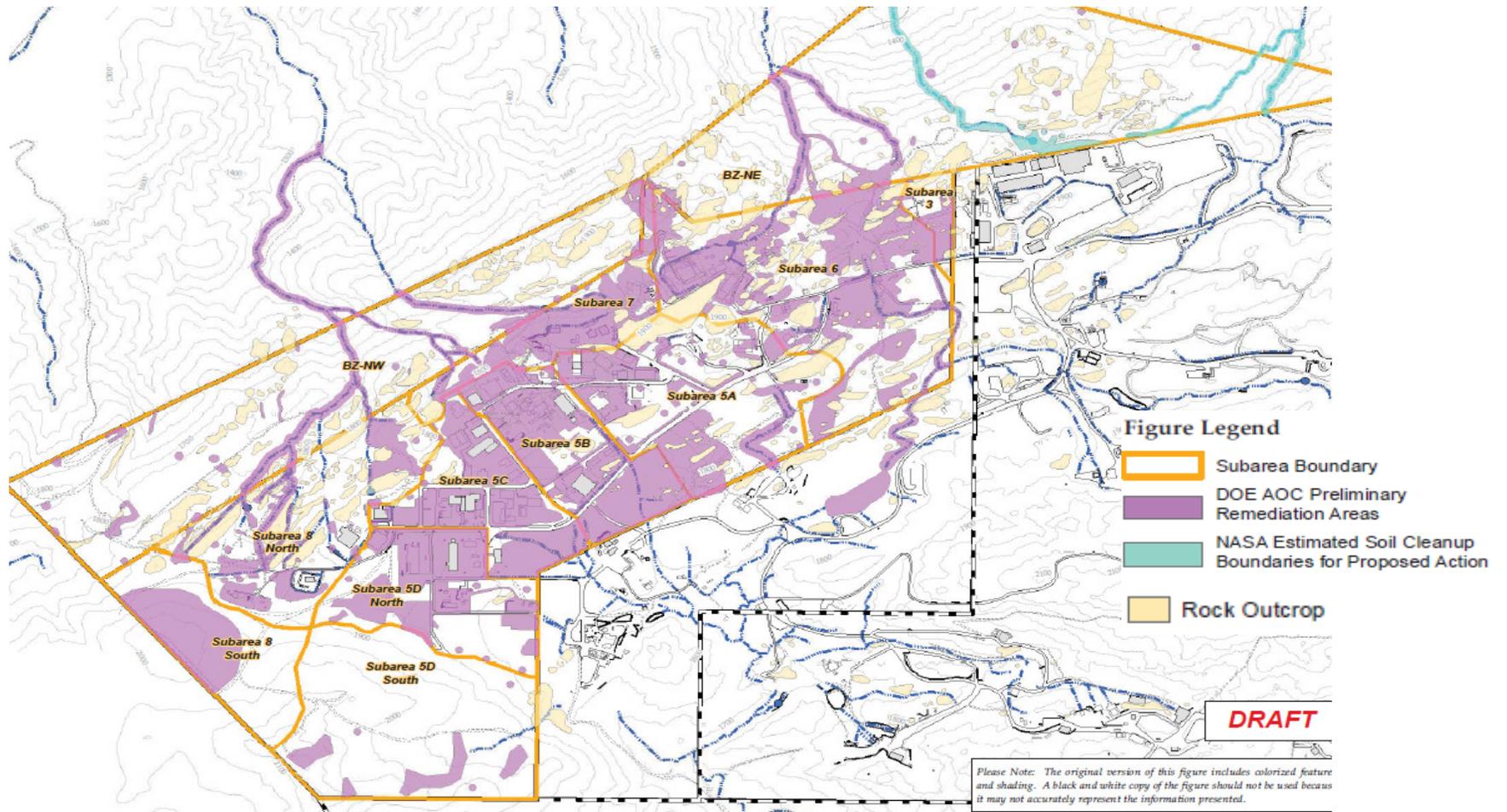
- Transport soil that cannot be treated on site to permitted disposal facilities
- Backfill, re-contour and stabilize soil excavation locations
- Mitigate transportation impacts to adjacent communities to the extent practicable (e.g., new roadway)
- Address groundwater contamination
 - Pump and treat technology
 - Chemically enhanced degradation
 - Monitored natural attenuation





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Preliminary Remediation Areas—Chemicals

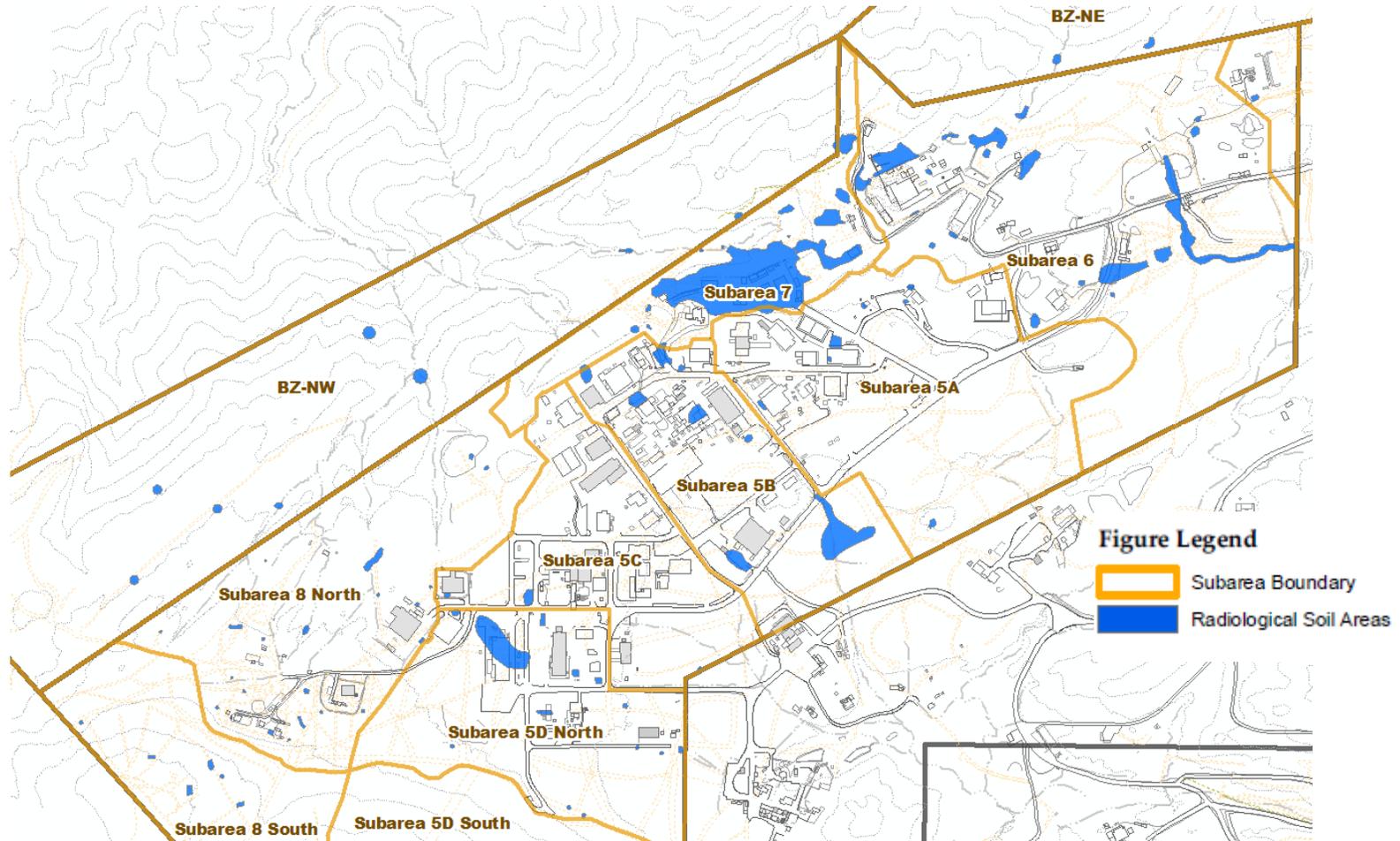




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Preliminary Remediation Areas—Radionuclides





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Community Developed Alternative Workshop Series

- DOE invited community members to build alternatives
- More than 100 community members participated in at least one of the three workshop sessions
- Participants contributed time, thought, discussion to alternatives to be considered
- Some concepts included suggestions for mitigations or best management practices that would apply across all alternatives





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Concept 1: Minimize Environmental Disturbance

- Approach cleanup of environment in a holistic manner by minimizing damage to the existing ecosystem
- Give preference to in-situ and on-site treatment, and to recycling





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Concept 2: Risk-based Prioritization

- Prioritize cleanup actions based on toxicity of contaminants to humans and biota and the efficacy of cleanup methods
- Cleanup should not be schedule driven
- A cost-benefit analysis may be conducted





Concept 3: Schedule-and Background-driven Cleanup

- Meet Administrative Order on Consent (AOC) requirements, including schedule
- Remove and dispose of all contaminated structures
- Remove uncontaminated foundations and pads if necessary to facilitate soil sampling after the buildings have been removed





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Concept 4: Green Cleanup

- Use green cleanup technologies whenever possible
- Select methods, activities, and components of each cleanup action by assigning points based on factors such as cost, efficacy, and degree of disturbance





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No Action Alternative

- The “No Action” Alternative is always required
 - Establishes baseline to compare impacts of all alternatives
 - DOE will analyze the risk of no further clean-up actions
- No further soil or groundwater cleanup or disposition of DOE buildings and structures would take place at Area IV and the NBZ
- Buildings and structures not owned by DOE may be removed
- Environmental monitoring, stormwater controls, and security at Area IV and the NBZ would continue



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Developing “Alternatives”

- Alternatives will be based on current requirements, site characterization, public workshops, and public and agency scoping comments
- DOE’s range of reasonable alternatives will be shared with public in late Spring to early Summer



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DOE invites you to comment

- Your ideas, thoughts, comments are vital and important
- Focus on what DOE should consider as it assesses the impacts of cleanup, what's important to you
- Make your comments solution oriented and provide specific examples
- Make suggestions for additional alternatives that you think we should consider
- Comments that contribute to developing alternatives that address the purpose and need for action are very effective



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Potential Areas for Analyses

Please share your thoughts about these or other issues

- Public and worker health and safety
- Waste and material transportation
- Waste management
- Potential accidents
- Intentional destructive acts
- Air resources
- Noise
- Water resources
- Geology and soils
- Land use and visual resources
- Biological resources
- Cultural, historic and paleontological resources
- Native American resources
- Socioeconomics
- Environmental justice
- Resource commitments
- Cumulative impacts



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Thank You for Your Participation

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(use “Scoping Comments” for the subject)

ETEC Website: www.etec.energy.gov

Fax: 855-658-8695

Please Note:

The comment period now ends April 2, 2014



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