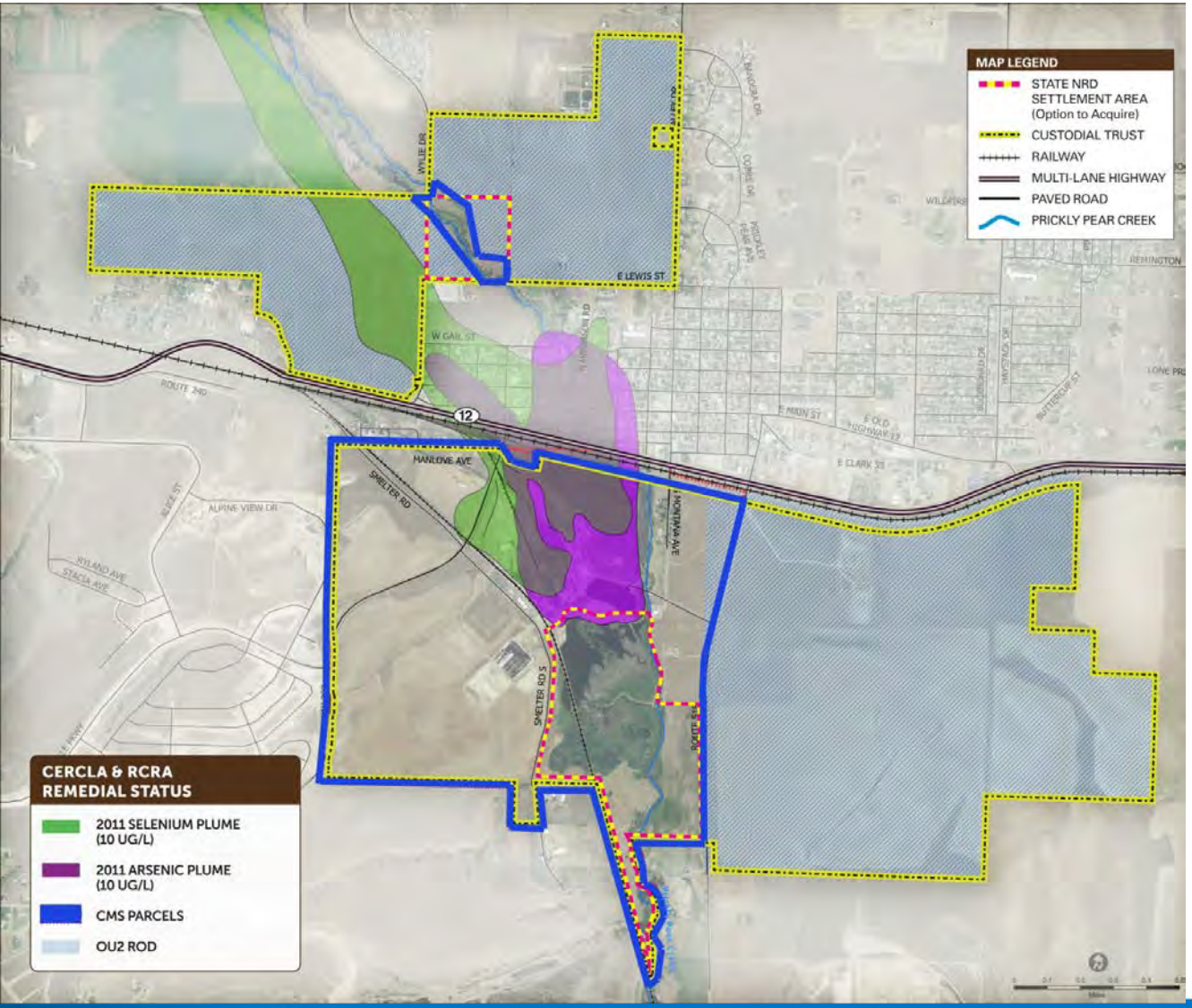
East Helena Public Meeting and Open House
June 20, 2012

- Welcome
- Purpose of Public Meeting
  - Review 2012 Interim Measures Work Plan
  - Receive Oral Public Comment
- Agenda
  - Overview of RCRA Corrective Action (Lauri Gorton)
  - 2012 Interim Measures Work Plan (Scott Dethloff)
  - Questions & Answers (Open To Public)
  - Remarks from Lewis & Clark County (Melanie Reynolds)
  - Oral Public Comment (Open to Public)
  - Open House

What's "RCRA"?

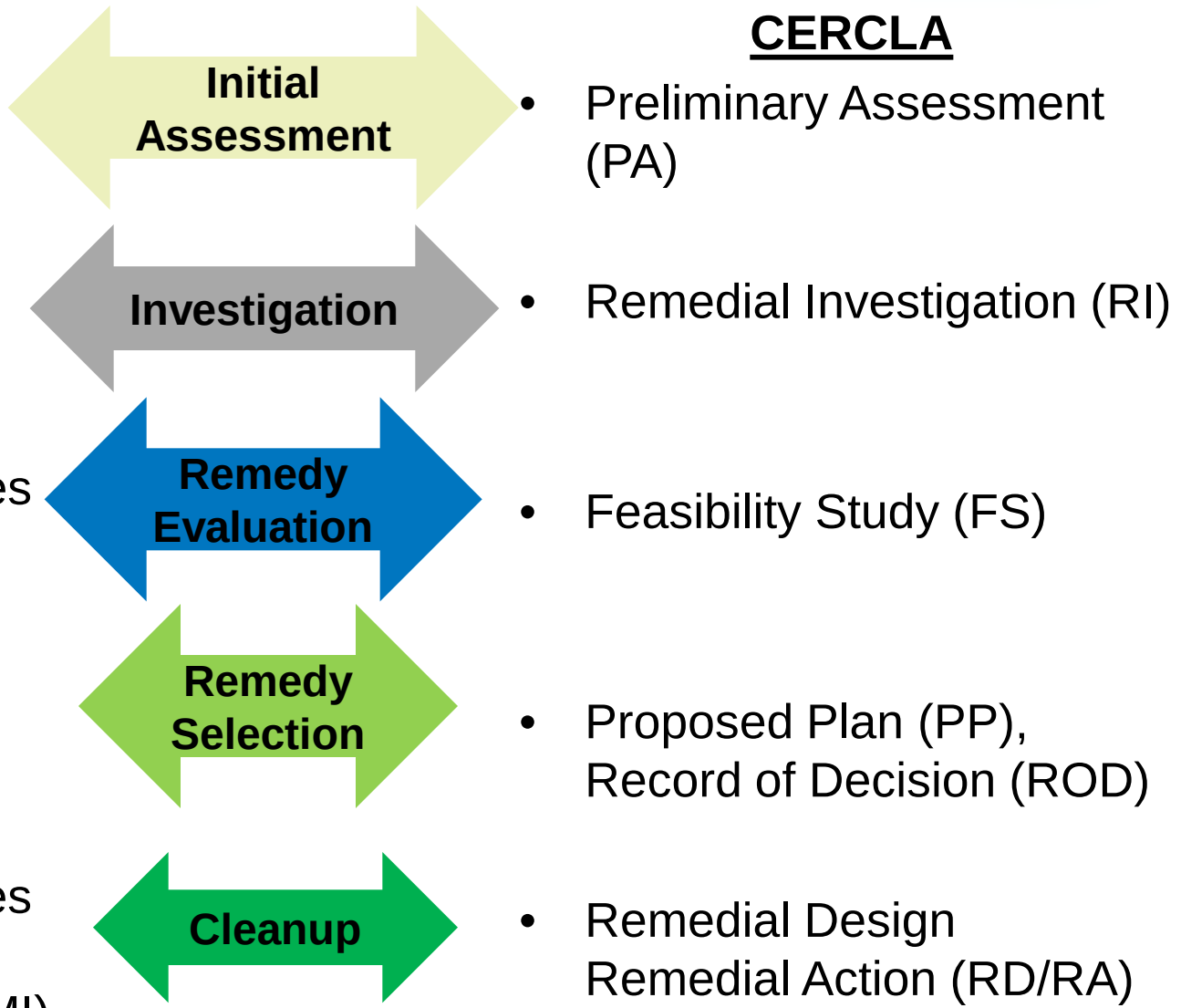
- Resource Conservation and Recovery Act (RCRA) – proper management of hazardous waste
- Corrective Action (CA) – cleanup of active and inactive facilities
- Basic Goals
  - Protect human health and the environment
  - Make properties available for new use
  - Provide meaningful public involvement

Areas Being Addressed Under RCRA



- CMS Properties – a Portion of Properties Owned by Trust
- Areas affected by migration of contaminated groundwater

RCRA Cleanup Steps Similar to CERCLA



What is an “Interim” Measure (IM)?

- Cleanup actions taken before final remedies are approved
- Intended to stabilize conditions
  - Address immediate concerns
  - ➢ **Prevent or minimize spread of contamination**
- ~~Implement obvious remedies~~
- May become part of final remedies
- ASARCO performed initial IMs in 1999
- Custodial Trust IMs planned for 2012-2015

Next RCRA Steps

- Corrective Measures Study (CMS) – identify, evaluate and propose final remedies
- Coordinate RCRA cleanup activities with ongoing site redevelopment studies

Public involvement will continue throughout the RCRA Process

Montana Environmental Trust Group
Trustee of the Montana Environmental Custodial Trust

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East Helena Smelter Site
Interim Measures Work Plan 2012

IM Work Plan 2012:
Public Comment Period

- Start – June 15, 2012
- End – July 16, 2012Site Preparation Projects
- Correction to IMWP 2012 page 8-2; Table 8-2.

Purpose of the Interim Measures Work Plan 2012

Information to support USEPA approval of:

- Interim Measures
  - South Plant Hydraulic Control (SPHC)
  - Evapotranspirative (ET) Cover System
  - Source Removal
- 2012 Site Preparation Projects
  - Demolition of buildings and infrastructure in the Lower Ore Storage Area (LOSA)
  - Construction of a prefabricated bridge structure over Smelter Dam
  - Relocation or abandonment of utilities located on the east tertiary bench

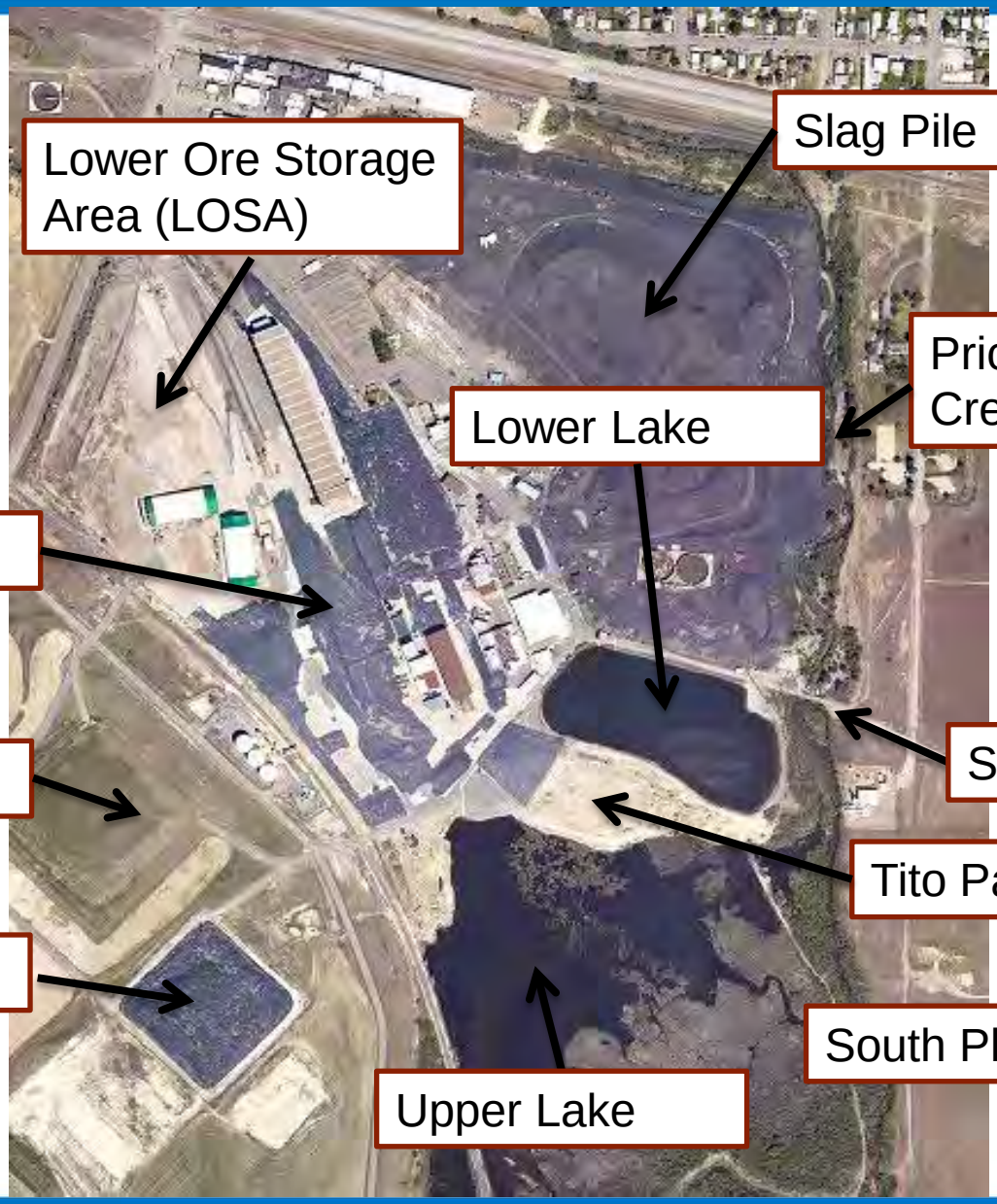
East Helena Smelter Site

Proposed Interim Measures:

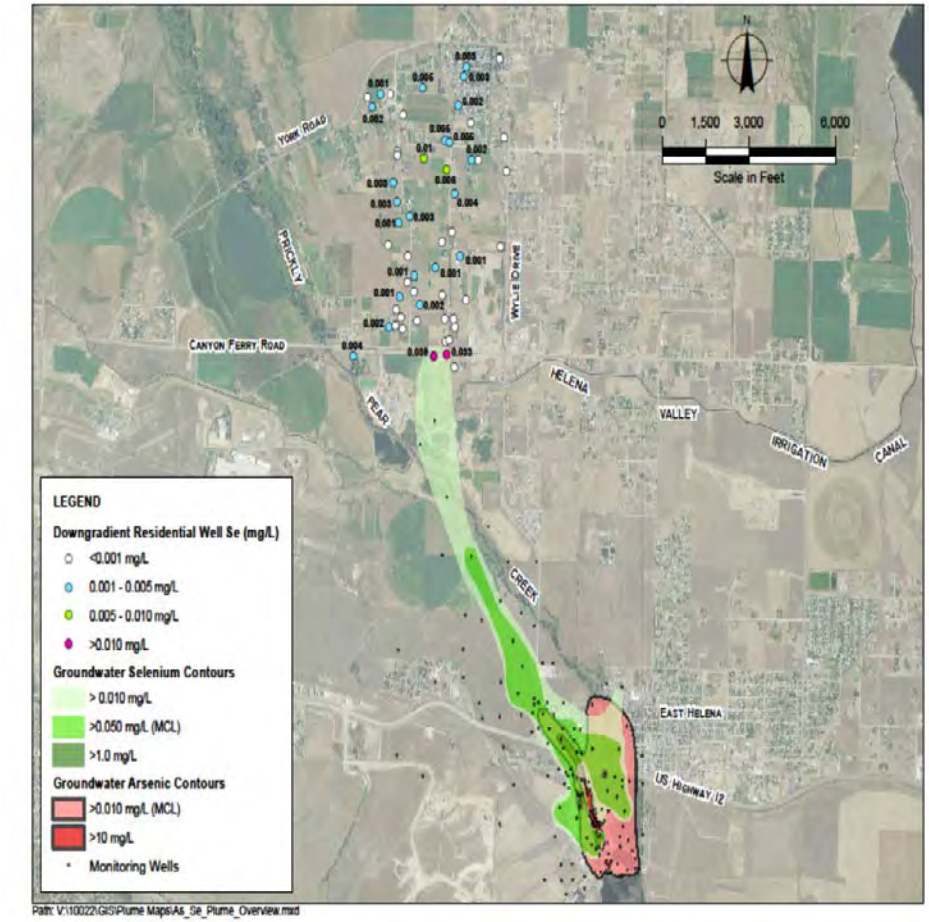
- South Plant Hydraulic Control (SPHC)
- Evapotranspirative (ET) Cover System
- Source Removal

IM Objectives	
Reduce contaminant mass migrating from the former Smelter Site via the groundwater pathway	Eliminate the potential for people and wildlife to have direct contact with groundwater and onsite surface soil containing high concentrations of inorganic contaminants

Site Orientation



GW Contamination: Selenium and Arsenic Plume as of 2011



SPHC Objectives

Eliminate standing water on the south side of the plant (Upper Lake and Lower Lake) which will result in:

- Reduced surface water recharge to groundwater
- Reduced hydraulic gradients across the site to decrease groundwater flow velocity and down gradient mass transport

SPHC Primary Benefits

1. Reduce the volume of groundwater in direct contact with contaminated soil
2. Reduce the transfer of inorganic contaminants from soil to groundwater

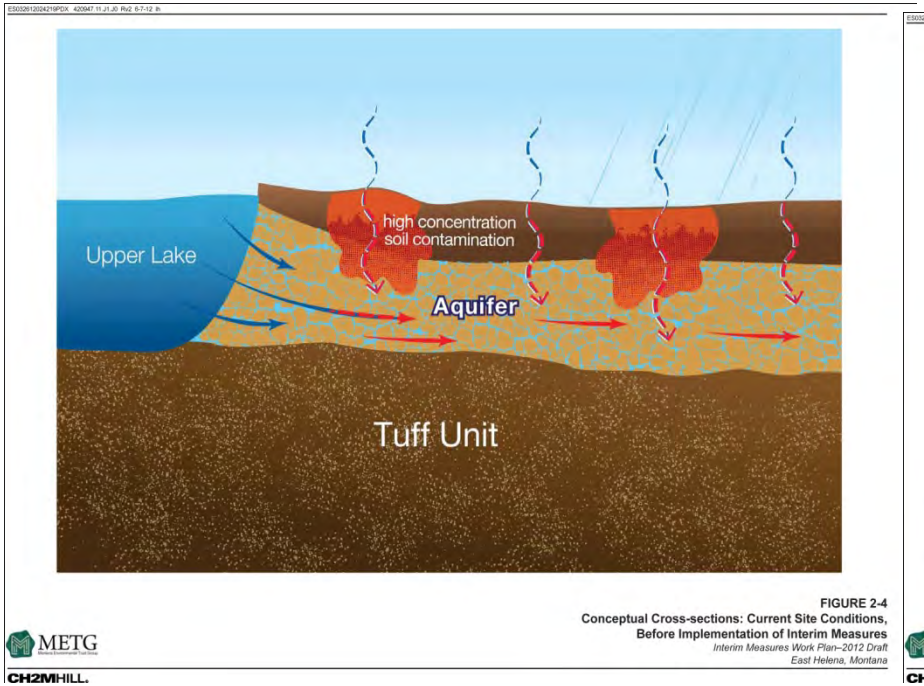


FIGURE 2-4
Conceptual Cross-sections: Current Site Conditions, Before Implementation of Interim Measures
Interim Measures Work Plan–2012 Draft
East Helena, Montana

METG
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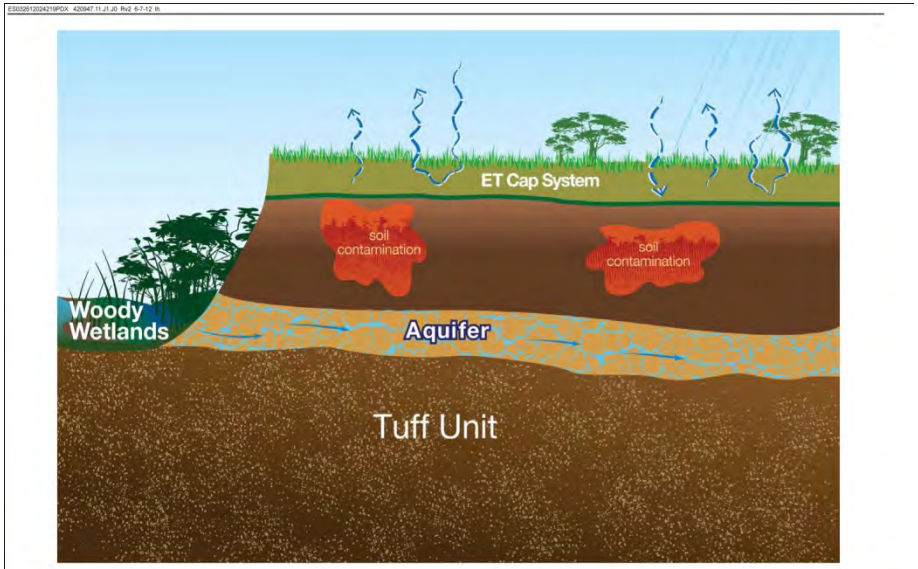

FIGURE 2-5
Conceptual Cross-sections: Proposed Site Conditions, After Implementation of Interim Measures
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SPHC Additional Benefits

1. PPC Flood Mitigation: Additional flood storage and riparian areas
2. Decreased PPC Sediment Load: by reducing slag pile erosion in PPC.
3. Natural Resources Improvements:
    - Smelter dam demolition removes major barrier to fish passage.
    - SPHC implementation results in increased wetland acreage (approx. 25 acres).

SPHC Work Description

Primary Components

1. Construct PPC Temporary Bypass (2013)
2. Construct PPC Realignment (2013 to 2014)
3. Remove Smelter Dam (2014)

Related Constructions

1. Decommission/Relocate East Bench Utililties (2012)
2. Construct prefabricated bridge structure on Smelter Dam (2012)

Conceptual Layout and Phasing of South Plant Hydraulic Control IM

LEGEND

- **Step 1: Construct Pre-fabricated Bridge Decking on Smelter** Dam (Proposed 2012 Project)
- **Step 2: PPC Temporary Bypass** (Allows Upper and Lower Lake to Drain)
- **Step 3: PPC Realignment, South** (Connection to PPC Temporary Bypass to Allow Demolition of Smelter Dam)
- **Step 4: Removal of Smelter Dam**
- **Step 5: PPC Realignment, South**
- **Final Step: Realignment South Phase** (With Removal of PPC Temporary Bypass)

N

Not to Scale

SPHC Permit Requirements

- Environmental Permits to be Obtained Prior to Construction:
  - Joint Application #1: for PPC Temporary Bypass implementation, inclusive for the following permits and agencies:
    - 404 Permit (US Army Corp of Engineers)
    - 310 Permit (Lewis and Clark County Conservations District)
    - 318 Authorization (Montana DEQ)
    - Floodplain Permit (City of East Helena/Federal Emergency Management Agency (FEMA)
  - Floodplain Permitting and Conditional Letter of Map Revision (CLOMR)

SPHC Permit Requirements

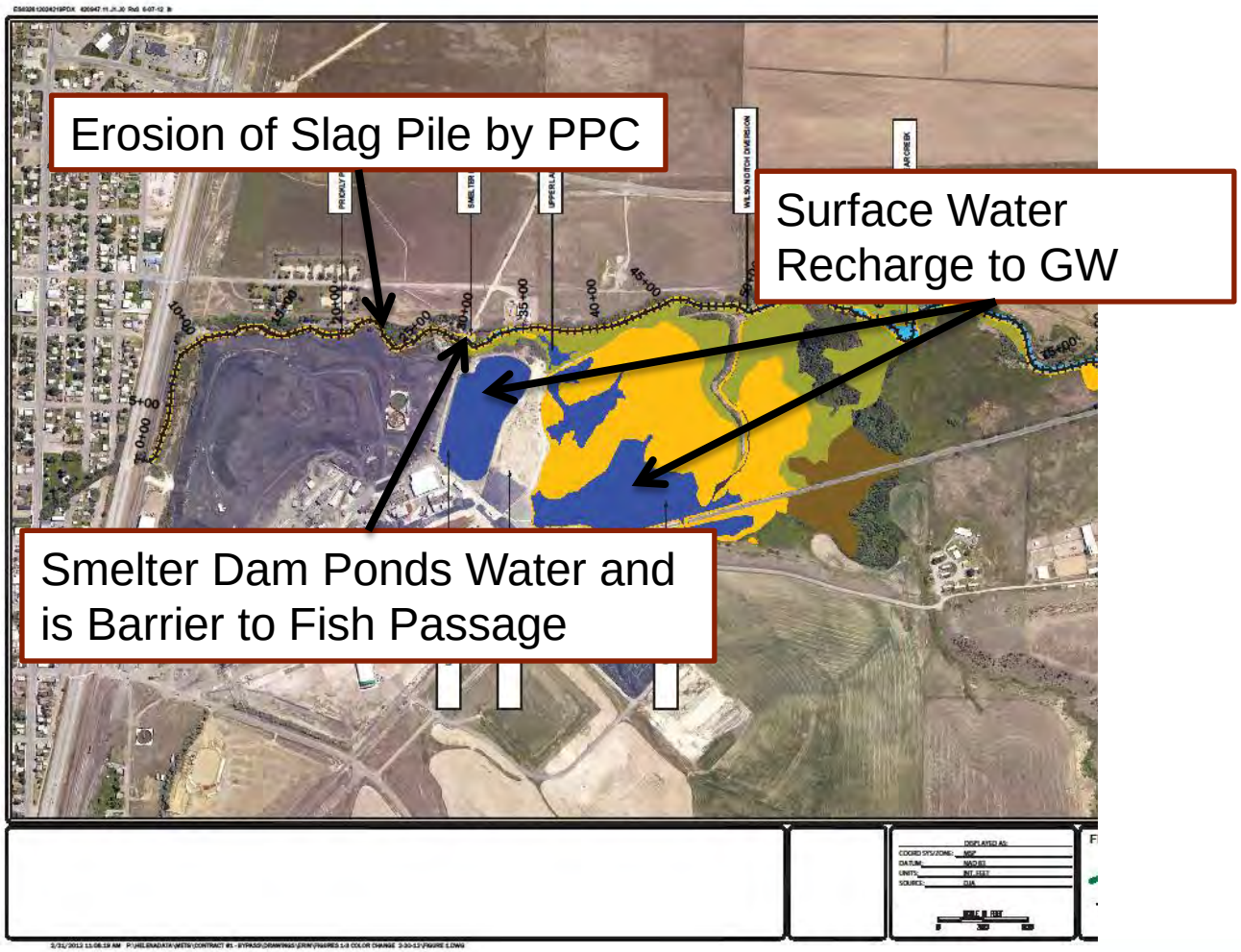
- Environmental Permits to be Obtained Prior to Construction:
  - Joint Application #2 – for PPC Realignment, requirements to be determined.
  - Montana DEQ MPDES Permitting: for revisions to the MPDES individual permit, general permit for industrial activities, construction dewatering, and stormwater.
  - DNRC Dam Safety Act: If required. Pending DNRC determination.

East Bench Utility Information

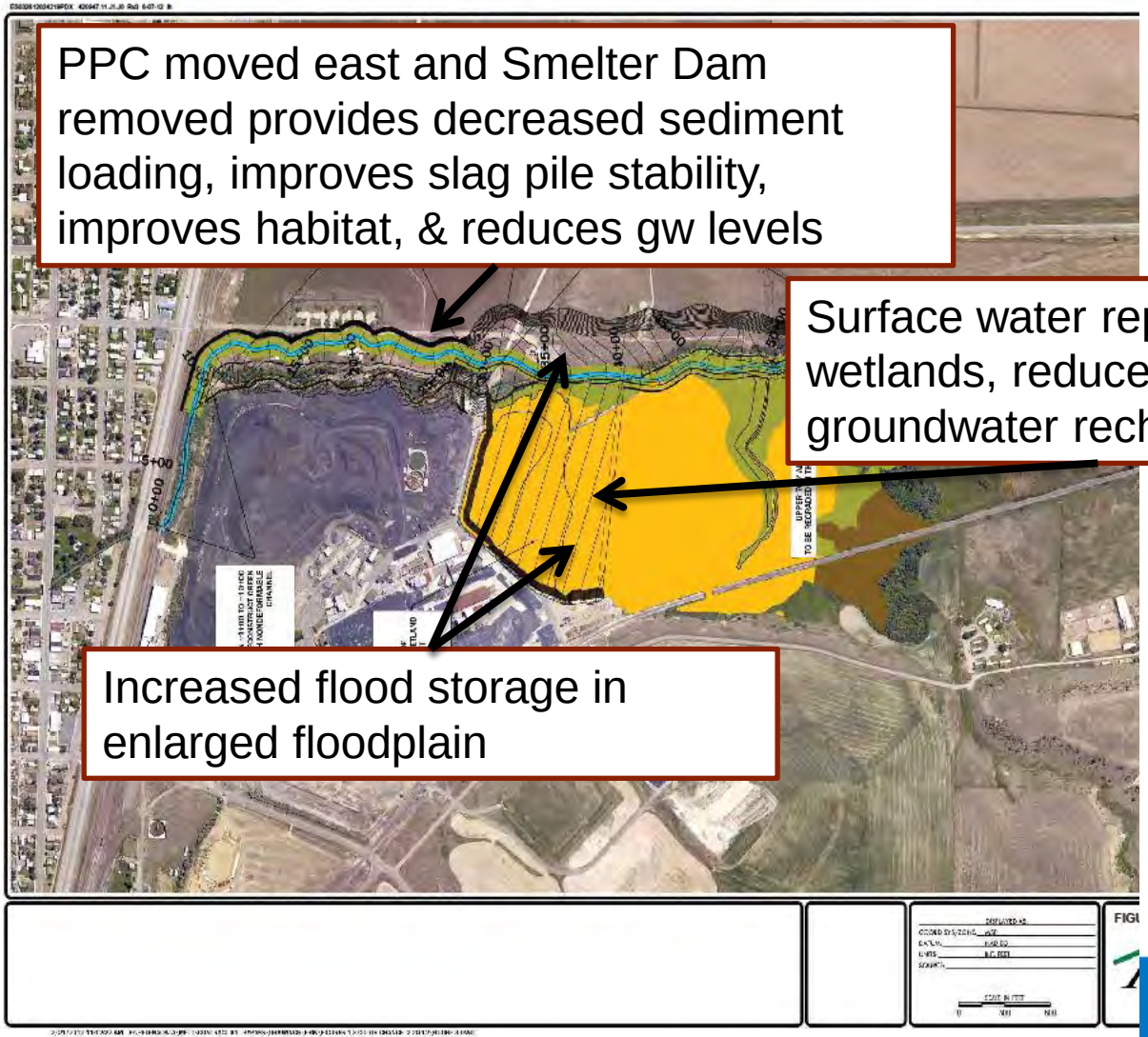
Highlights:

- Air Liquide – to be demolished by end of October 2012
- NW Energy – distribution and transmission lines to be relocated. Engineering underway
- City of East Helena – Water line to be relocated. Engineering is underway.

PPC Current Conditions



PPC Final Planned Condition



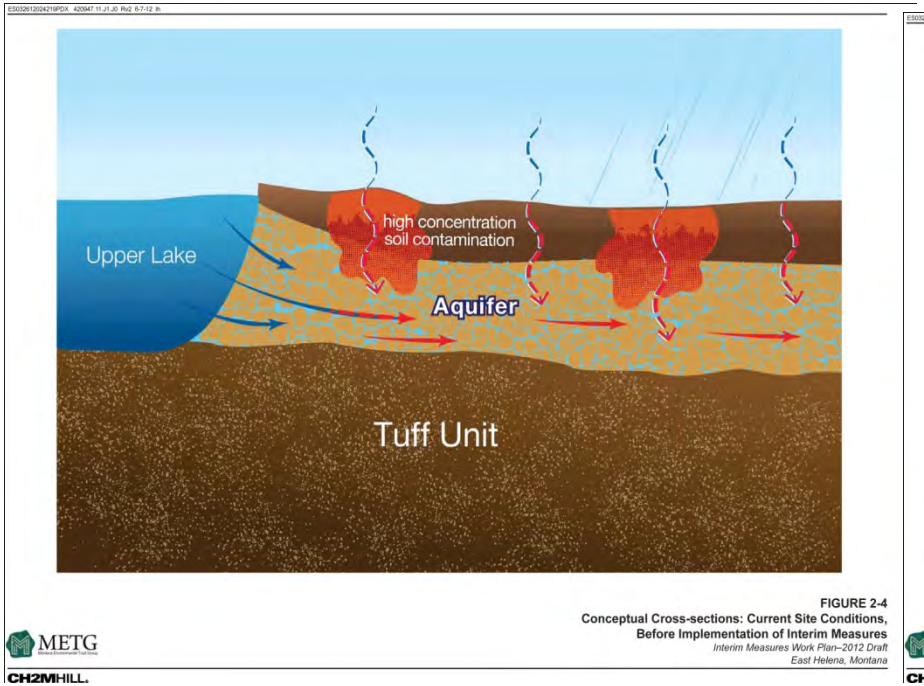
ET Cover Objectives

1. Reduce infiltration of precipitation and associated leaching of inorganic contaminants in surface soils to groundwater.
2. Replace the existing temporary cover system, which is deteriorating
3. Eliminate potential for human and wildlife contact with contaminated surface soil
4. Reduce the volume of contaminated stormwater that is being collected and treated in the onsite WTP.

ET Cover Benefits

Works in conjunction with SPHC to:

- Control moisture and infiltration into subsurface soil
- Manage surface water runoff, water and wind erosion
- Prevent direct contact with contaminated soil
- Meet aesthetic and potential passive recreational end uses



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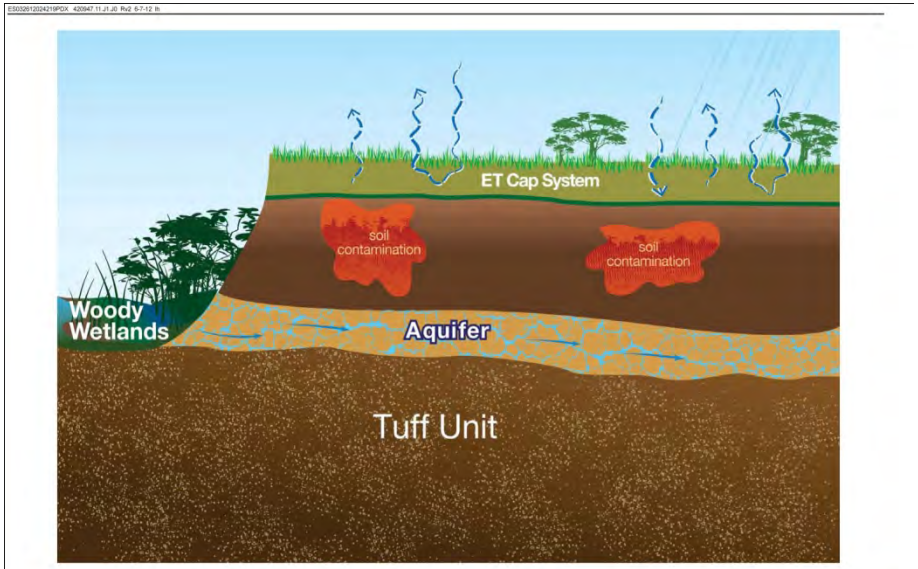

FIGURE 2-5
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East Helena, Montana

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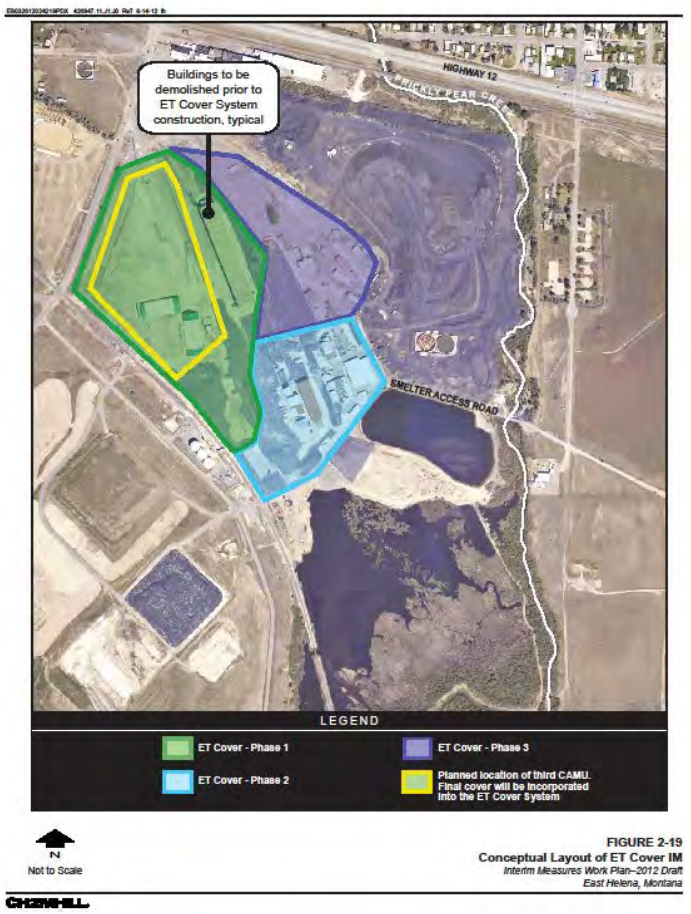
ET Cover Work Description

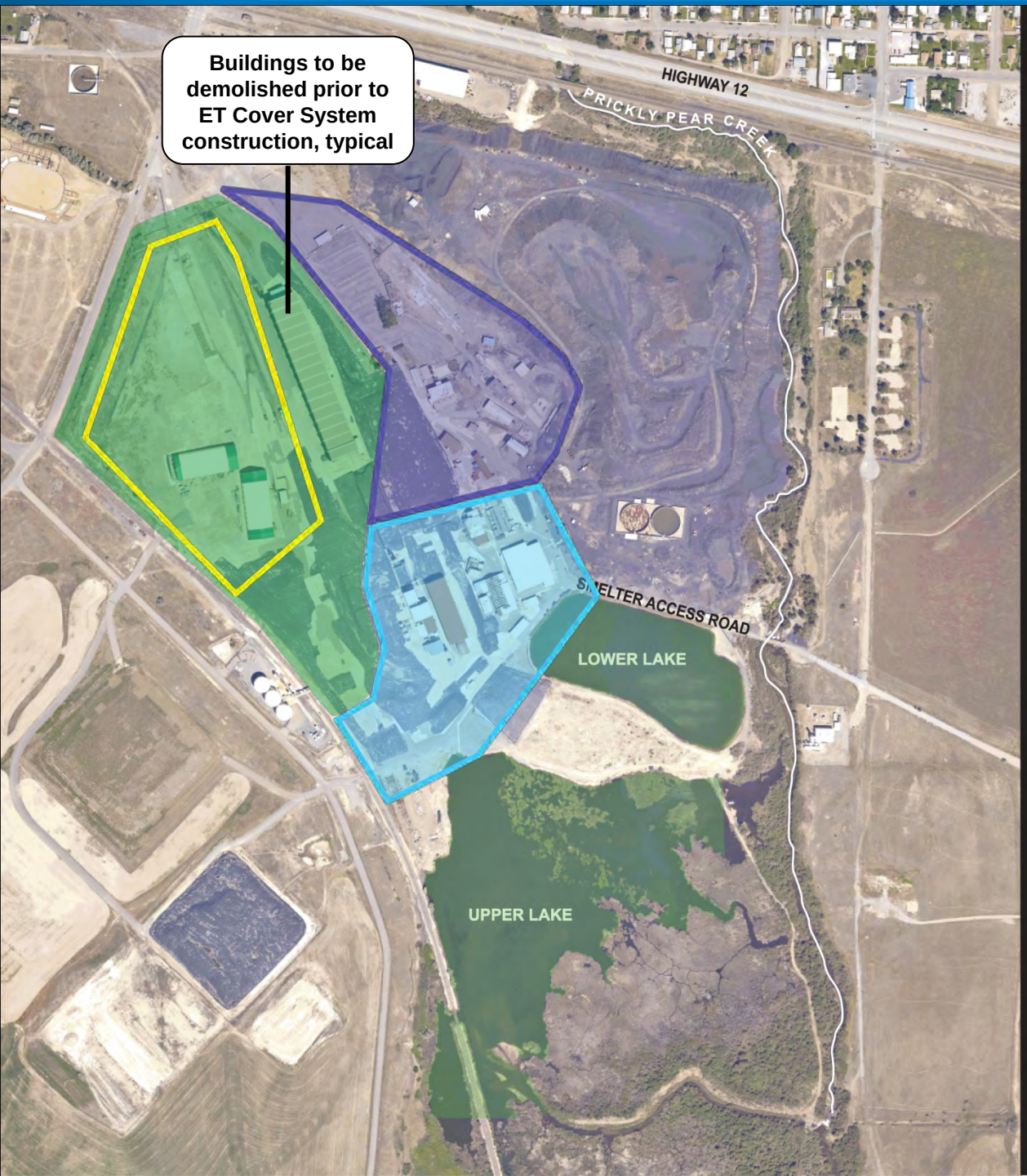
Primary Components

1. Phase 1 Construction – 30 acres
2. Phase 2 Construction – 15 acres
3. Phase 3 Construction – 15 acres

Related Constructions

1. Site Demolition Phase 1
2. Site Demolition Phase 2





Conceptual Layout of ET Cover IM

LEGEND

- ET Cover - Phase 1
- ET Cover - Phase 2
- ET Cover - Phase 3
- Planned location of third CAMU. Final cover will be incorporated into the ET Cover System

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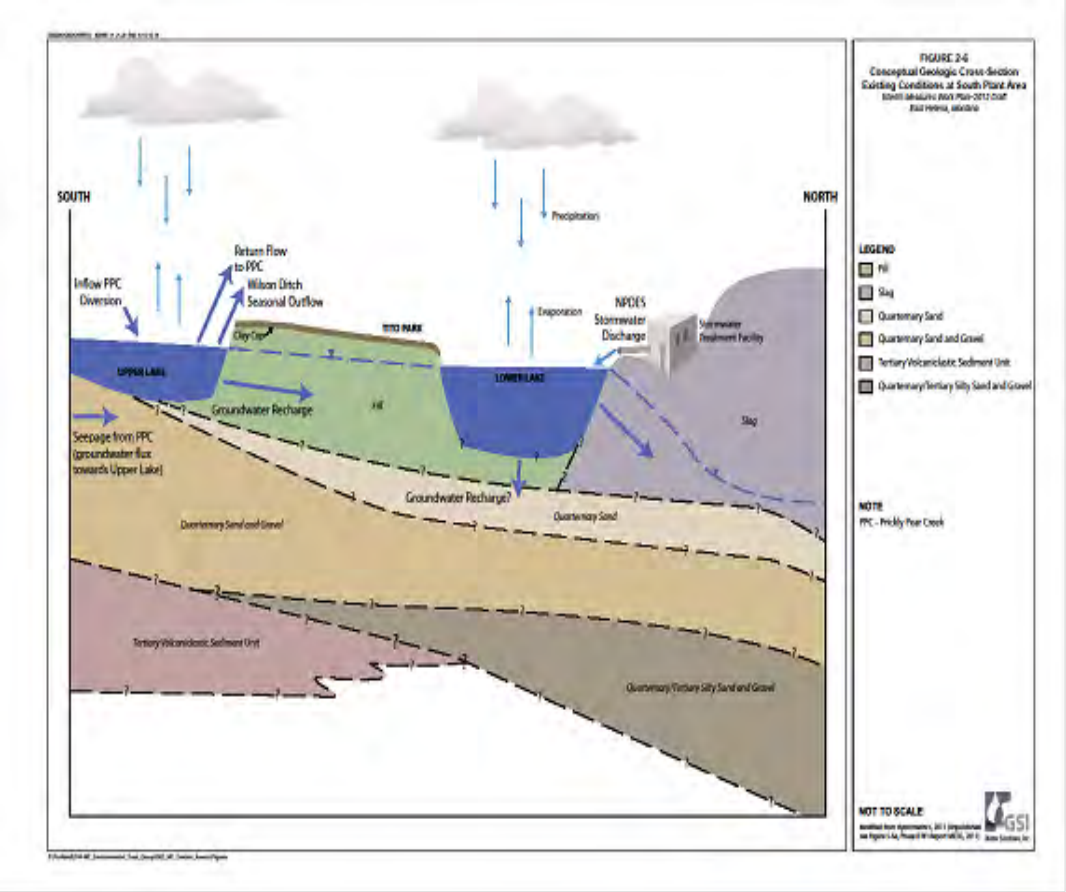
Not to Scale

Source Removal Objectives

1. Conduct selected, localized excavation of SPHC areas with highest concentrations of inorganic contaminants
2. Place excavated soil and sediment in lined Corrective Action Management Unit (CAMU)

Source Removal Benefits

1. Eliminate the potential for groundwater contact with contaminated soil and sediment
2. Eliminate human and ecological receptor contact with contaminated soil and sediment
3. Implements selected remedy for Lower Lake identified in the OU 1 ROD



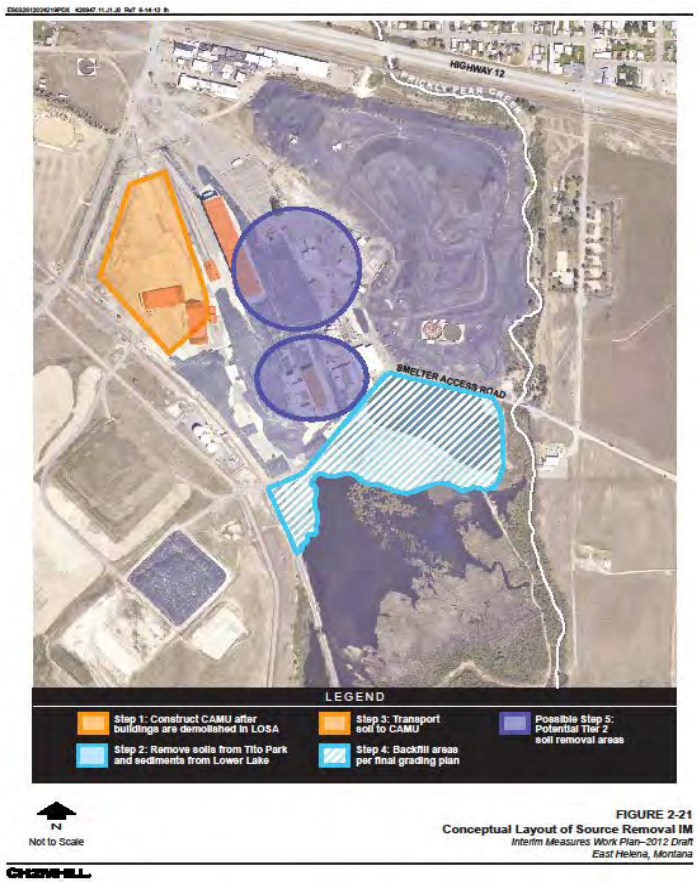
Source Removal Work Description

Primary Components

1. Construct third CAMU in LOSA
2. Excavate soil in Tito Park
3. Excavate sediment from Lower Lake

Related Constructions

1. Install low permeability fill layer on north edge of excavation
2. Evaluate removal of additional soil from Smelter Site, and if beneficial, excavate and place in CAMU
3. Close CAMU



Conceptual Layout of Source Removal IM

LEGEND

- Step 1: Construct CAMU after buildings are demolished in LOSA
- Step 2: Remove soils from Tito Park and sediments from Lower Lake
- Step 3: Transport soil to CAMU
- Step 4: Backfill areas per final grading plan
- Possible Step 5: Potential Tier 2 soil removal areas

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Not to Scale

Source Removal Quantities

CAMU 3 Size:

1. 11.5 acre footprint

Tito Park and LL Removal

1. 285,000 cubic yards

Slag Pile = approx 80 acres and
12,000,000 cubic yards

IM Construction Components By Year

South Plant Hydraulic Control IM

- Decommission/Relocate East Bench Utilities (2012)
- Construct Prefabricated Bridge Structure on Smelter Dam (2012)
- Construct PPC Temporary Bypass (2013)
- Begin PPC Realignment – North Section (2013)
- Remove Smelter Dam (2014)
- Complete PPC Realignment – South Section (2014)

Source Removal IM

- Construct 3rd CAMU in LOSA (2013)
- Excavate Tito Park Soil and Lower Lake Sediments (2014)
- Install low porosity barrier on north edge of Tito Park/Lower Lake (2014)
- Tier 2 Soil Removals (2014 or 2015)
- Close CAMU (2015 or later)

ET Cover System

- Phase 1 (2014)
- Phase 2 (2015 or later)
- Phase 3 (2015 or later)

IM Components Proposed for 2012

LEGEND

- ET Cover System IM – Phase 1 Building and Utility Demolition Area
- SPHC IM - East Tertiary Bench Area of Utilities to be Relocated
- SPHC IM - Construction of Prefabricated Bridge Decking on Smelter Dam

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Not to Scale

2013

East Helena
Montana

LEGEND

- PPC Temporary Bypass
- Construct CAMU
- Phase 2 Building Demolition
- PPC Realignment North Phase

N

Not to Scale

2014/2015

East Helena
Montana

LEGEND

- FINISH PPC Realignment, North Phase
- Smelter Dam Demolition
- Remove Soil from Tito Park and Lower Lake
- Transport Soil to CAMU
- Re-grade Tito Park and Lower Lake
- Low Permeability Fill
- Tier 2 Soil Removal Actions
- PPC Realignment South Phase
- Wetlands
- ET Cover – Phase 1

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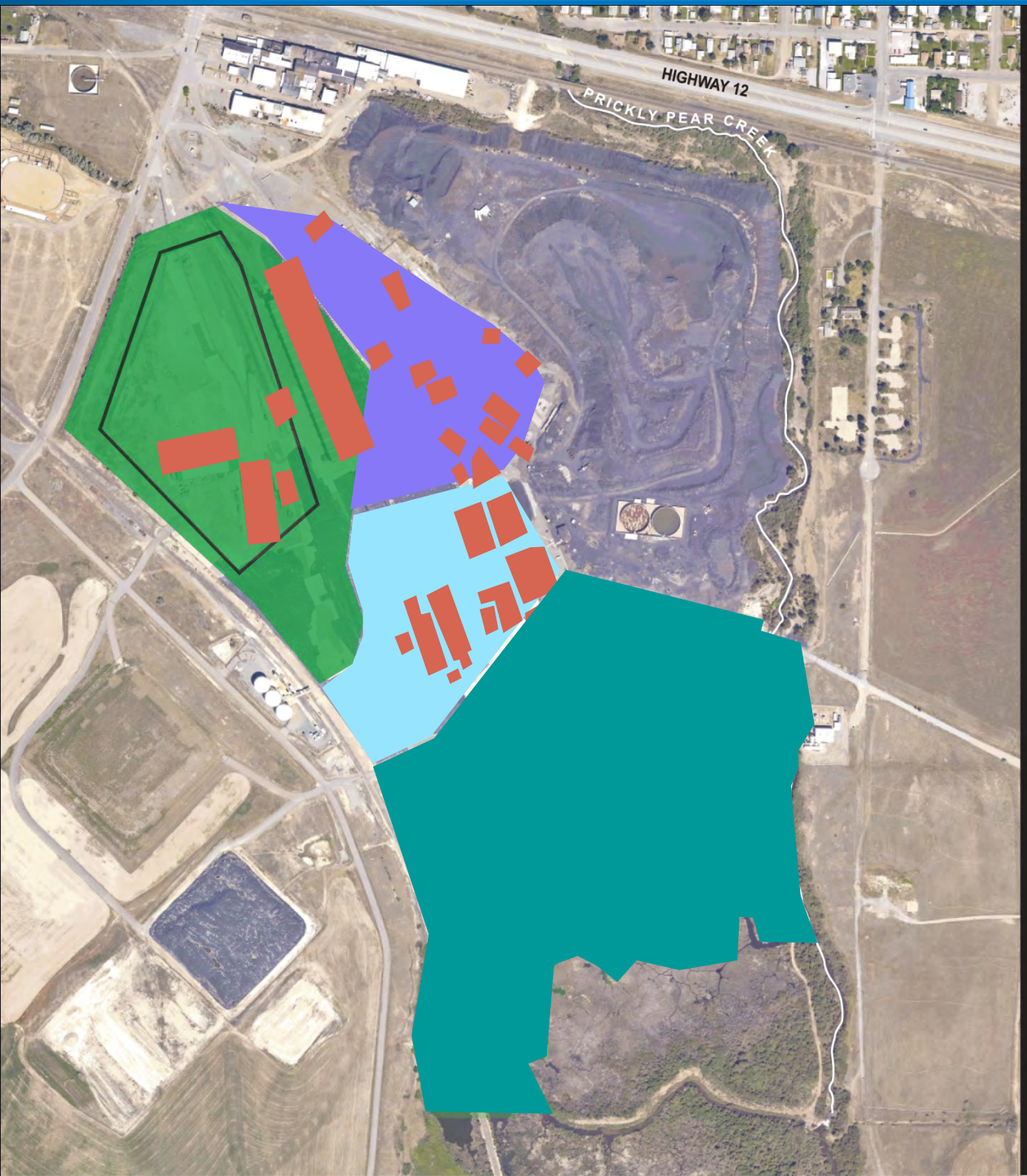

2015 or Later

East Helena
Montana

LEGEND

Cover and Close CAMU

ET Cover – Phase 2
2015 or later

ET Cover – Phase 3
2015 or later

N

Not to Scale

Closing Comments

- All three interim measures are interrelated
- The most efficient implementation approach is to construct these in sequence
- The effectiveness of the Interim Measures will be monitored throughout and following construction

- Questions and Answers

EPA Public Meeting on the Proposed 2012 Interim Measure Work Plan for the East Helena Smelter Site

The U.S. Environmental Protection Agency (EPA) is soliciting public comment on the proposed 2012 Interim Measures Work Plan (IM Plan) for the East Helena Smelter Site. The IM Plan was prepared by the Montana Environmental Custodial Trust (MECT) and is proposed to stabilize the release and migration of contaminated groundwater from the former smelter site and control exposure to soil contamination. The IM Plan is proposed pursuant to EPA corrective action guidance under the Resource Conservation & Recovery Act (RCRA).

The IM Plan will be available to the public for review and comment after June 15, 2012. Copies of the IM Plan can be viewed at:

- the East Helena Branch of the Lewis & Clark County Library (16 East Main Street, East Helena),
- the Lead Education and Abatement Program (LEAP) Office at City Hall (306 East Main Street, Room 201, East Helena), and
- the MECT website http://www.mtenvironmentaltrust.org/east-helena,

A public meeting will be held on June 20, 2012 to hear and record public comment.

East Valley Volunteer Fire Department

2694 Valley Drive, East Helena, MT 59635

June 20, 2012 from 6:30 pm to 8:30 pm

The public meeting will include a brief presentation on the IM Plan followed by oral public comment. Depending *on the number of people who wish to provide oral comments, the time for each comment may be limited to ensure that everyone has an opportunity to speak.* EPA will include a responsiveness summary addressing formal oral, electronic and written comments in the *Final Interim Measure Work Plan.*

Written comments may be given to EPA at the meeting, sent by US Mail or submitted electronically (by e-mail) to: Betsy Burns; EPA Region 8 Montana Office; 10 W. 15th Street, Suite 3200, Helena, MT 59626, or burns.betsy@epa.gov.

Written comments must be received by July 16, 2012.

For more information on the IM Plan, please call or e-mail Betsy Burns, EPA RCRA Project Officer, at 406-457-5013 or burns.betsy@epa.gov.

Instructions for Public Oral Comment

Please Use Microphone

Please State Your Name, Address & Affiliation

Please Speak Slowly & Clearly

Thank You!

2012 Interim Measures Work Plan
Public Review & Comment Process
June 15th to July 16th

- Written public comments may be provided:
  - By email (burns.betsy@epa.gov)
  - By mail to:

    Betsy Burns
    US Environmental Protection Agency (EPA)
    10 W 15th Street, Suite 3200
    Helena, MT 59601

- Public comments due to EPA by July 16, 2012

- EPA will provide written responses to comments when final 2012 Interim Measures Work Plan

Please Join Us For the East Helena Open House