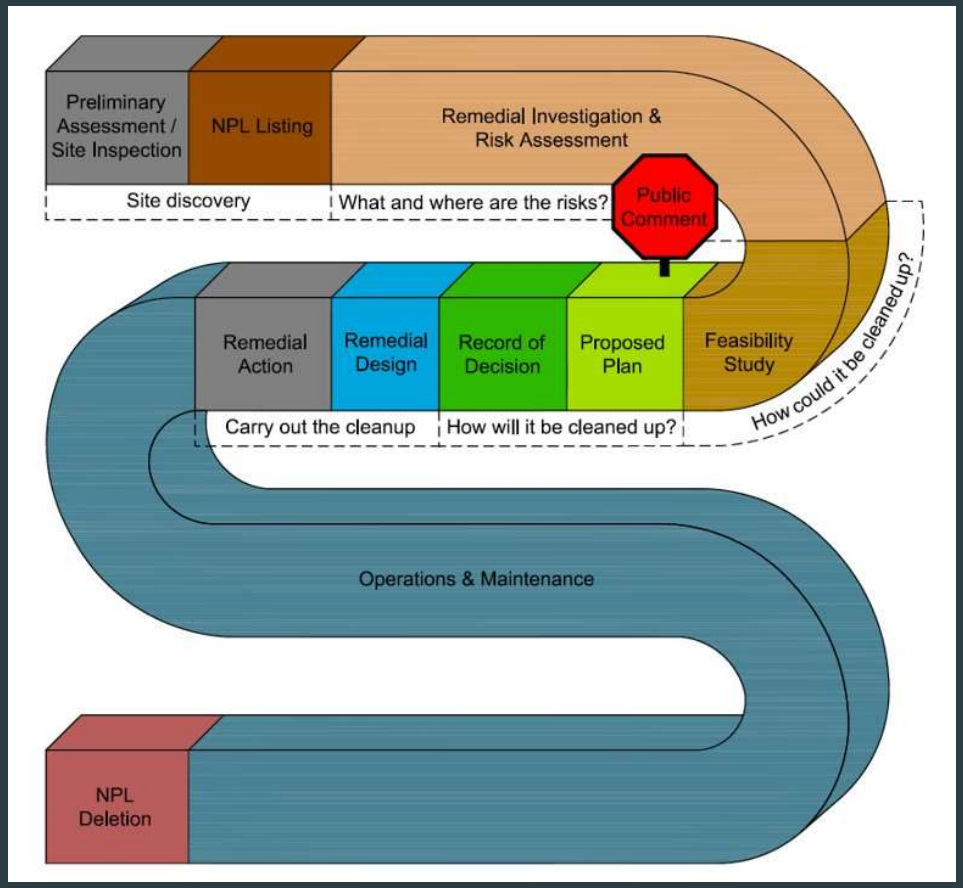
Smurfit-Stone Mill Frenchtown Proposed Superfund Site: EPA Overview
November 13, 2023

Agenda

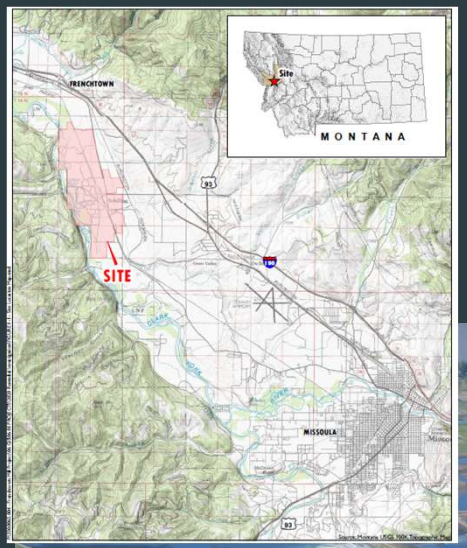
- Introductions
- Superfund Process
- Smurfit Operational History
- Site timeline
- Sampling and risk conclusions to-date
- Next Steps
- Climate Vulnerability Assessment
- Questions



Superfund Process

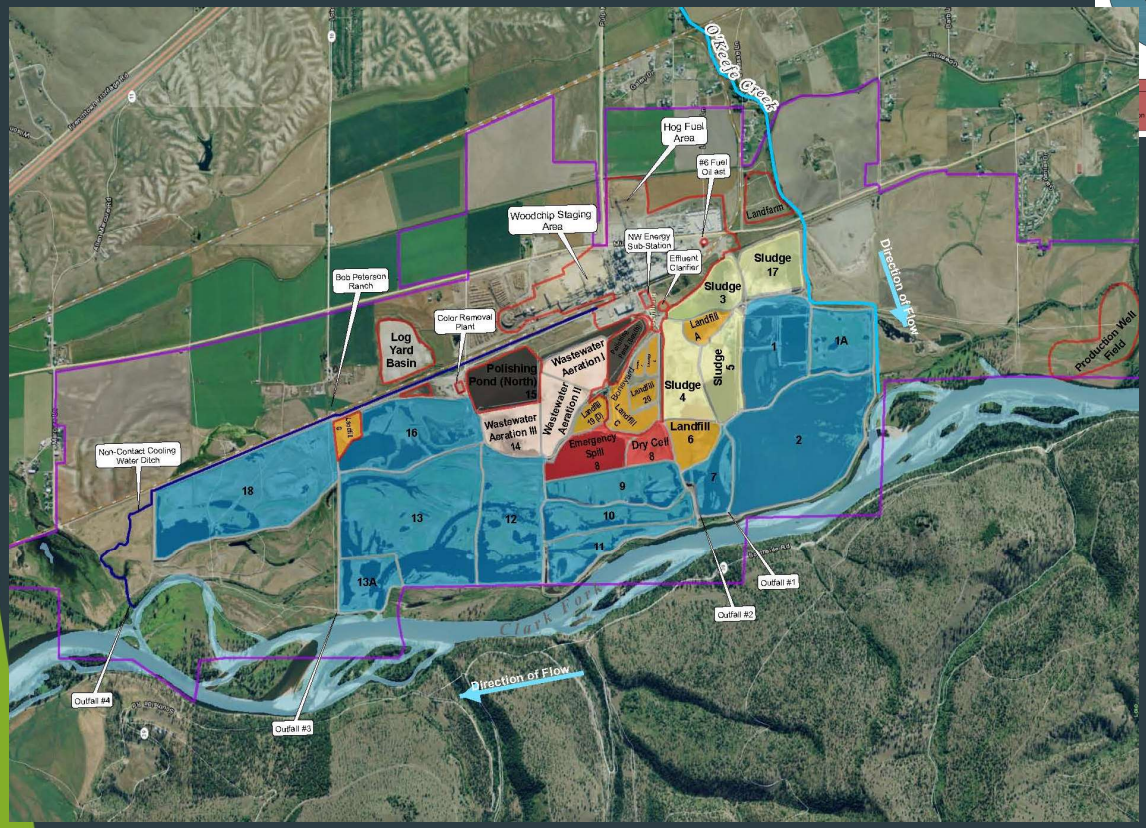
Smurfit-Stone Mill Site (Pre 2011)

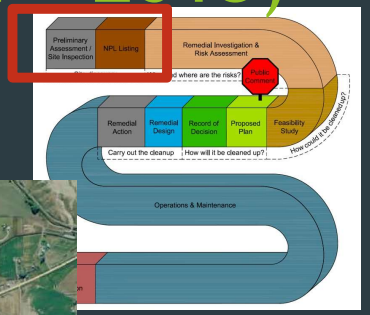
- Mill operated from 1957 to 2010
- Mill produced linerboard and pulp products
- From 1960 to 1999, bleached pulp produced (approx. 6% of total pulp)
- The wastewater treatment system at the time of Mill closure treated approximately 15 million gallons of wastewater per day.



Smurfit-Stone Mill Site (2011 – 2015)

Preliminary Assessment - 2011

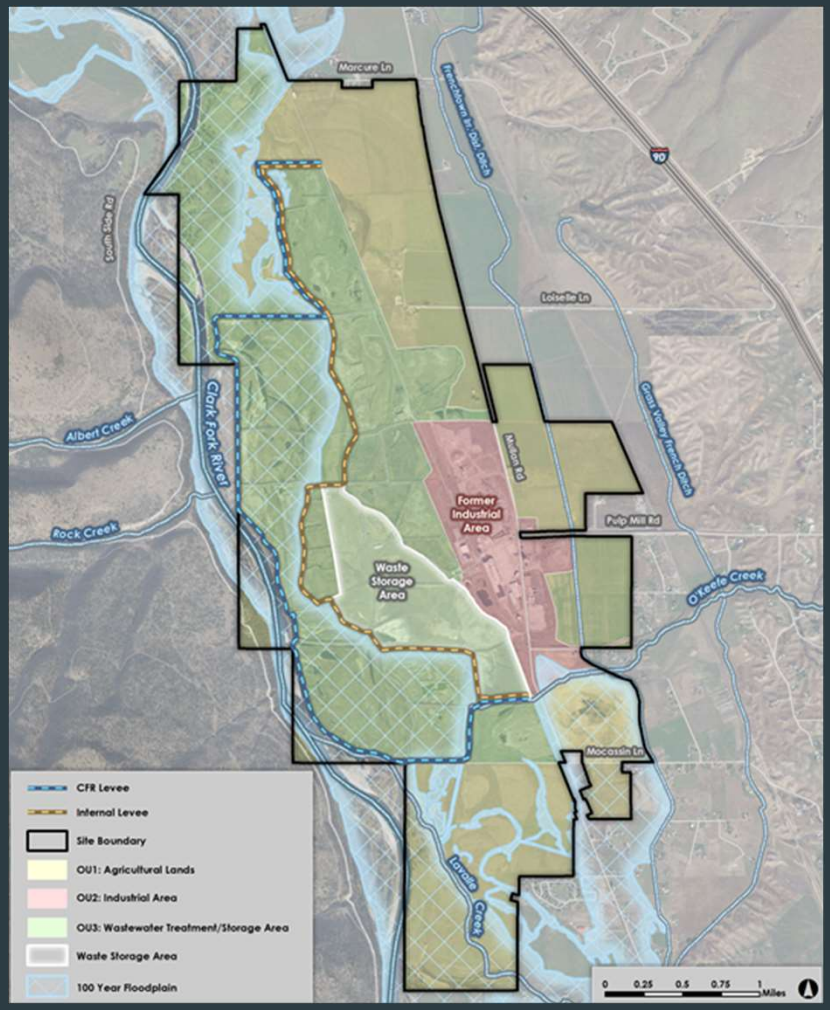


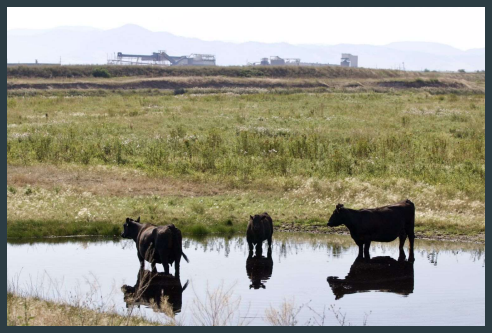


Potentially Responsible Parties

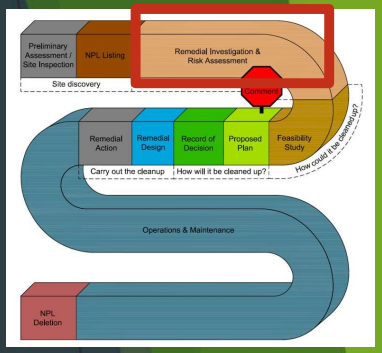
- International Paper Company
- WestRock CP, LLC
- M2Green Redevelopment LLC

Smurfit-Stone Mill Site (2015 - current)





Operable Unit 1

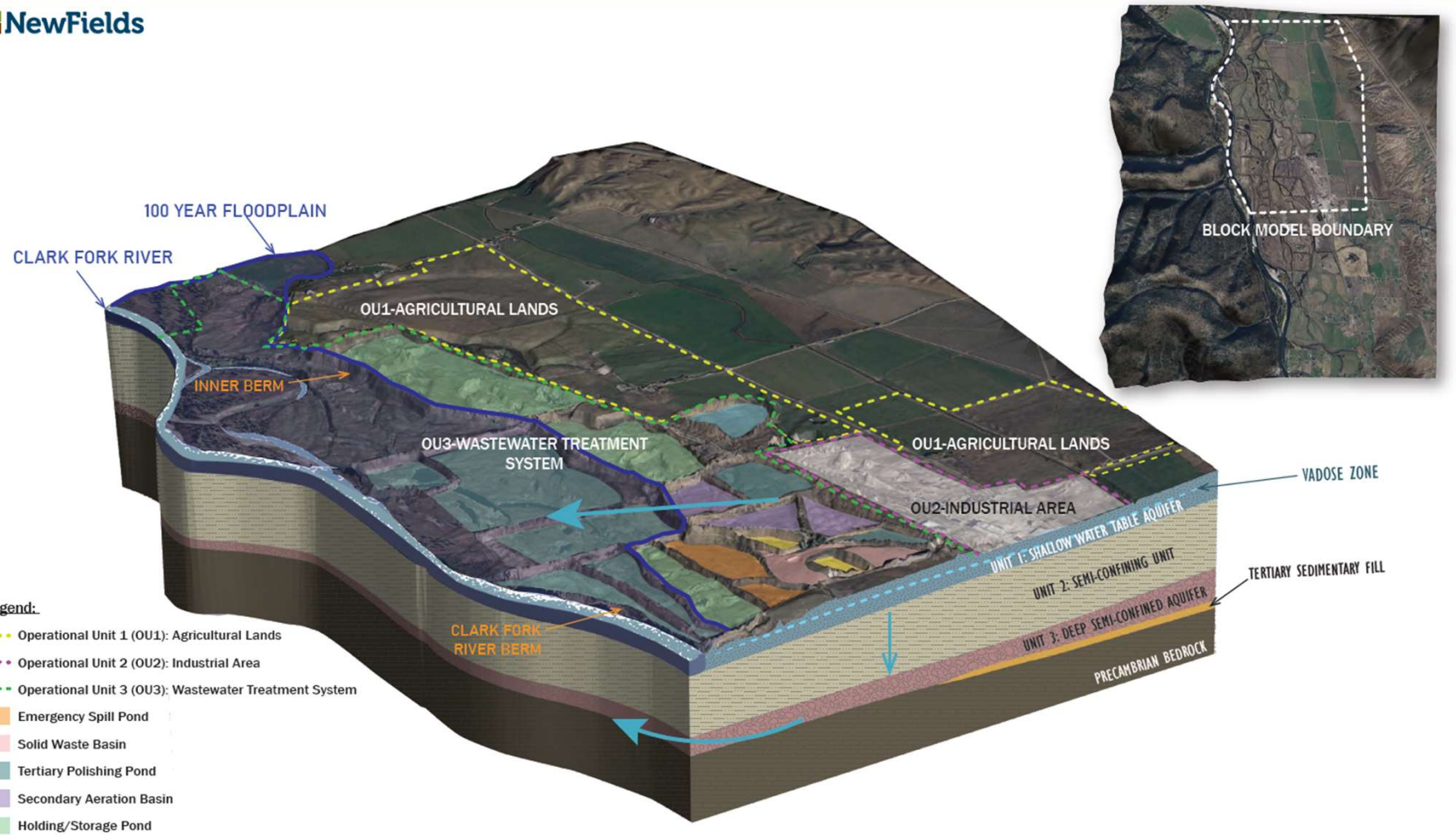


Operable Unit 2

Operable Unit 3

Sampling Date	Sample Type	Reference
April 2014	Soil and groundwater	RIWP (NewFields 2015)
November/December 2015	Soil, groundwater, sediment and surface water	RIWP (NewFields 2015, 2016a)
May/June 2016	Groundwater	RIWP Addendum 1 (NewFields 2016b)
August 2016	Soil for PCBs at the HDPT foundation and TSB foundation areas	RIWP Addendum 2 (NewFields 2016c)
January and March 2017	Groundwater	RIWP Addendum 3 (NewFields 2017a)
June, July, December 2017 and January 2018	Groundwater	RIWP Addendum 4 (NewFields 2017b)
October 2017	Soil	RIWP Addendum 7 (NewFields 2017c)
July 2018	Fish	USEPA (2018a)
August 2018	Sediment, surface water, biotic tissue	RIWP Addendum 9 (NewFields 2018b)
June 2019	Fish	USEPA (2019)
June 2019 and September, October 2019	Groundwater	RIWP Addendum 8 (NewFields 2018a)
June and September 2020	Groundwater	RIWP Addendum 10 (NewFields 2020a)
June and September 2021-2023	Groundwater	RIWP Addendum 11 (NewFields 2021a)

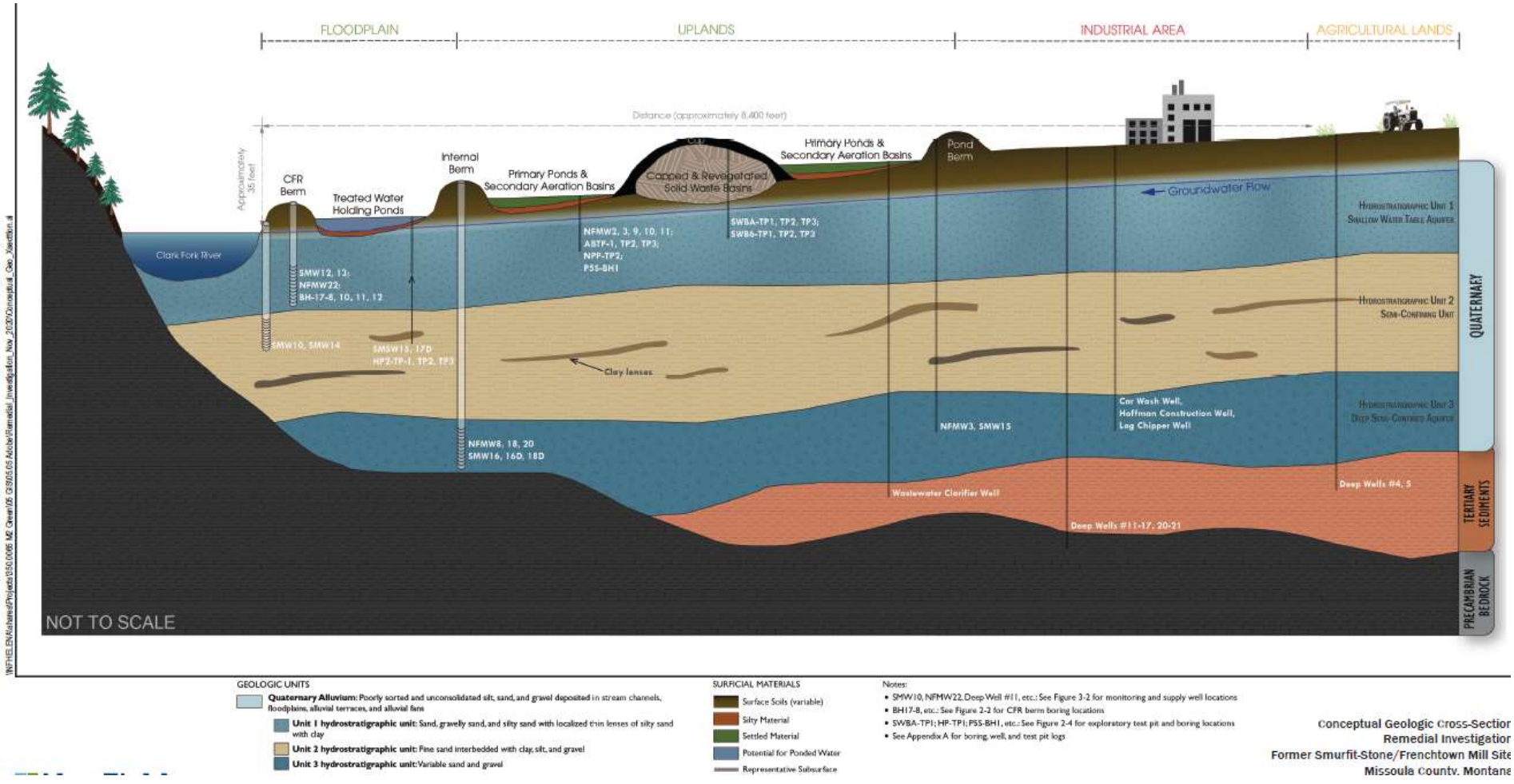
NewFields



Legend:

- Operational Unit 1 (OU1): Agricultural Lands
- Operational Unit 2 (OU2): Industrial Area
- Operational Unit 3 (OU3): Wastewater Treatment System
- Emergency Spill Pond
- Solid Waste Basin
- Tertiary Polishing Pond
- Secondary Aeration Basin
- Holding/Storage Pond
- Spoils Basin
- Rapid Infiltration Pond
- Approximate Groundwater Flow Direction
- 100 Year Floodplain

Groundwater Site Conceptual Block Model
Smurfit-Stone/Frenchtown Mill Site
Missoula County, Montana
FIGURE ES-1



GEOLOGIC UNITS

Quaternary Alluvium: Poorly sorted and unconsolidated silt, sand, and gravel deposited in stream channels, floodplains, alluvial terraces, and alluvial fans

- **Unit 1 hydrostratigraphic unit:** Sand, gravelly sand, and silty sand with localized thin lenses of silty sand with clay
- **Unit 2 hydrostratigraphic unit:** Fine sand interbedded with clay, silt, and gravel
- **Unit 3 hydrostratigraphic unit:** Variable sand and gravel

SURFICIAL MATERIALS

- Surface Soils (variable)
- Silty Material
- Settled Material
- Potential for Ponded Water
- Representative Subsurface

Notes:

- SMW10, NFMW22, Deep Well #11, etc.: See Figure 3-2 for monitoring and supply well locations
- BH17-8, etc.: See Figure 2-2 for CFR berm boring locations
- SWBA-TP1; HP-TP1; PSS-BH1, etc.: See Figure 2-4 for exploratory test pit and boring locations
- See Appendix A for boring, well, and test pit logs

Conceptual Geologic Cross-Sectior
Remedial Investigatior
Former Smurfit-Stone/Frenchtown Mill Site
Missoula County, Montana

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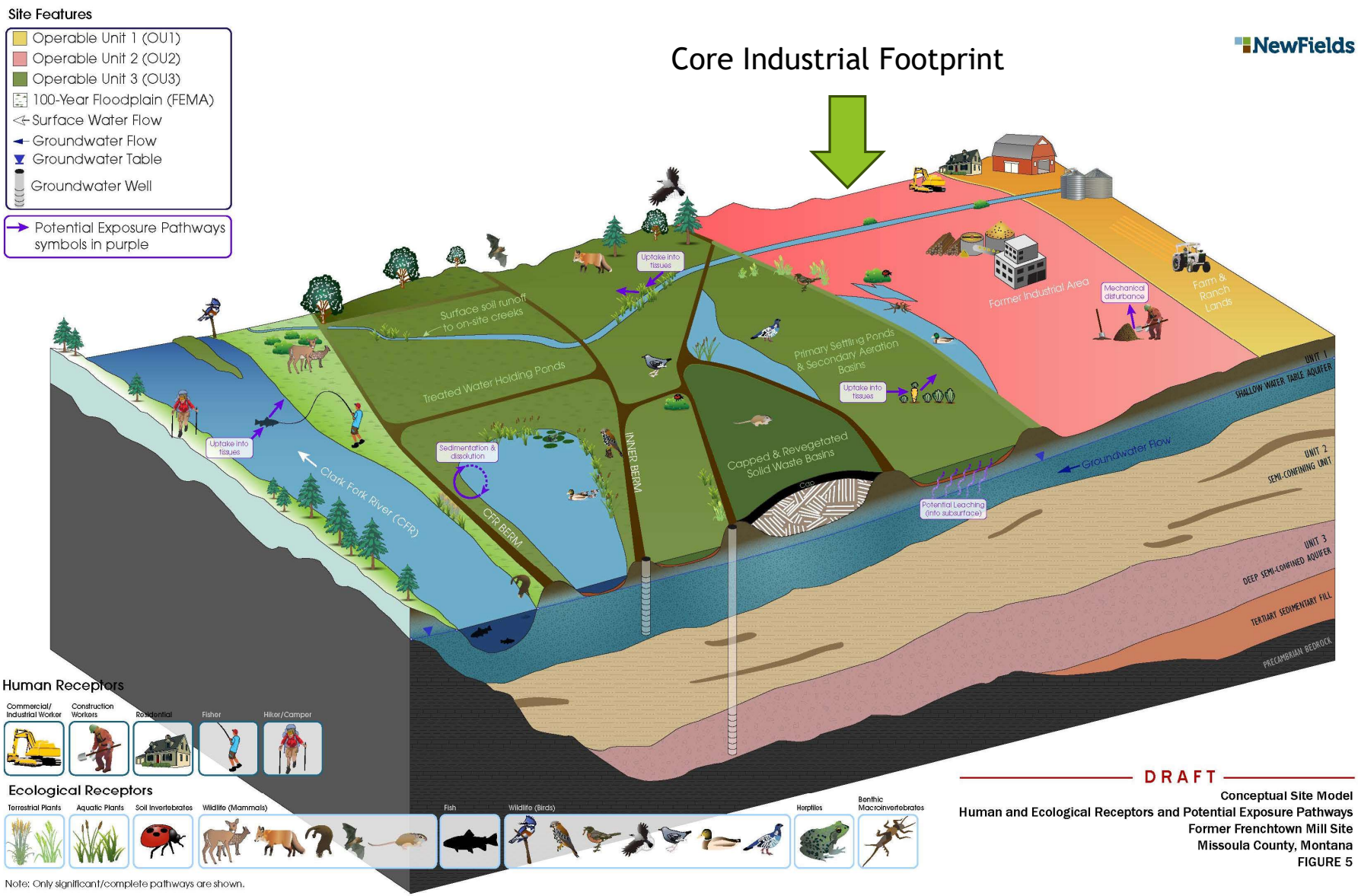
Conceptual Site Model
Human and Ecological Receptors and Potential Exposure Pathways
Former Frenchtown Mill Site
Missoula County, Montana
FIGURE 5

Operable Unit 3 – Waste Treatment Areas

Media Sampled	Contaminants Analyzed For	Risk Conclusions
• Upland and Floodplain Soils • Groundwater • Sediment • Surface Water • Fish Tissue	• Dioxins/Furans • Polychlorinated Biphenyls (PCBs) • Metals • Volatile organics • Semi-volatile organics • Mercury and Selenium (fish)	Soil •Possible risk from certain metals and dioxins/furans to future residents in localized areas. •Possible risk from certain metals to ecological receptors. Groundwater •Possible risk from certain metals to future residents. Surface Water/Sediment (Clark Fork River) •No unacceptable risk to recreational visitors and tribal fishers. •Possible risk from manganese to fish. Fish Consumption (from Clark Fork River) •Possible risk from dioxins/furans and PCBs in fish to recreational visitors and tribal fishers.

EPA couples risk assessments with fate & transport studies to determine if the risks identified are related to the Site, or non-Site sources.



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Conceptual Site Model
Human and Ecological Receptors and Potential Exposure Pathways
Former Frenchtown Mill Site
Missoula County, Montana
FIGURE 5

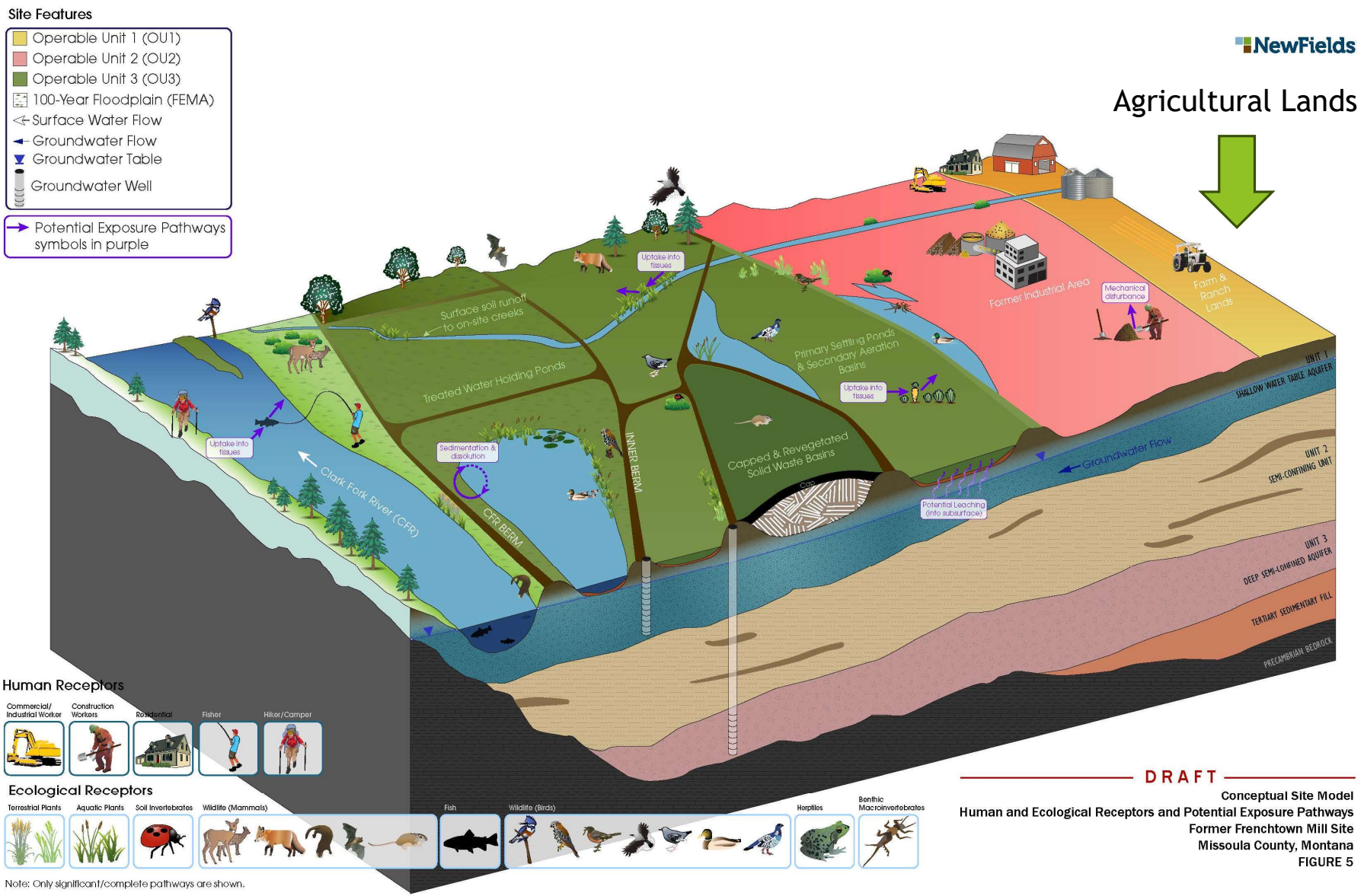
Operable Unit 2 – Core Industrial Footprint

Media Sampled	Contaminants Analyzed For	Risk Conclusions To Date
• Soil • Groundwater • Surface Water	• Dioxins/Furans • PCBs • Metals • Volatile organics • Semi-volatile organics	Soil • No unacceptable risk to future residents, except hexavalent chromium. • Possible risk from certain metals to ecological receptor. Groundwater • Possible risk from certain metals future residents.

EPA couples risk assessments with fate & transport studies to determine if the risks identified are related to the Site, or non-Site sources.

NewFields

Agricultural Lands



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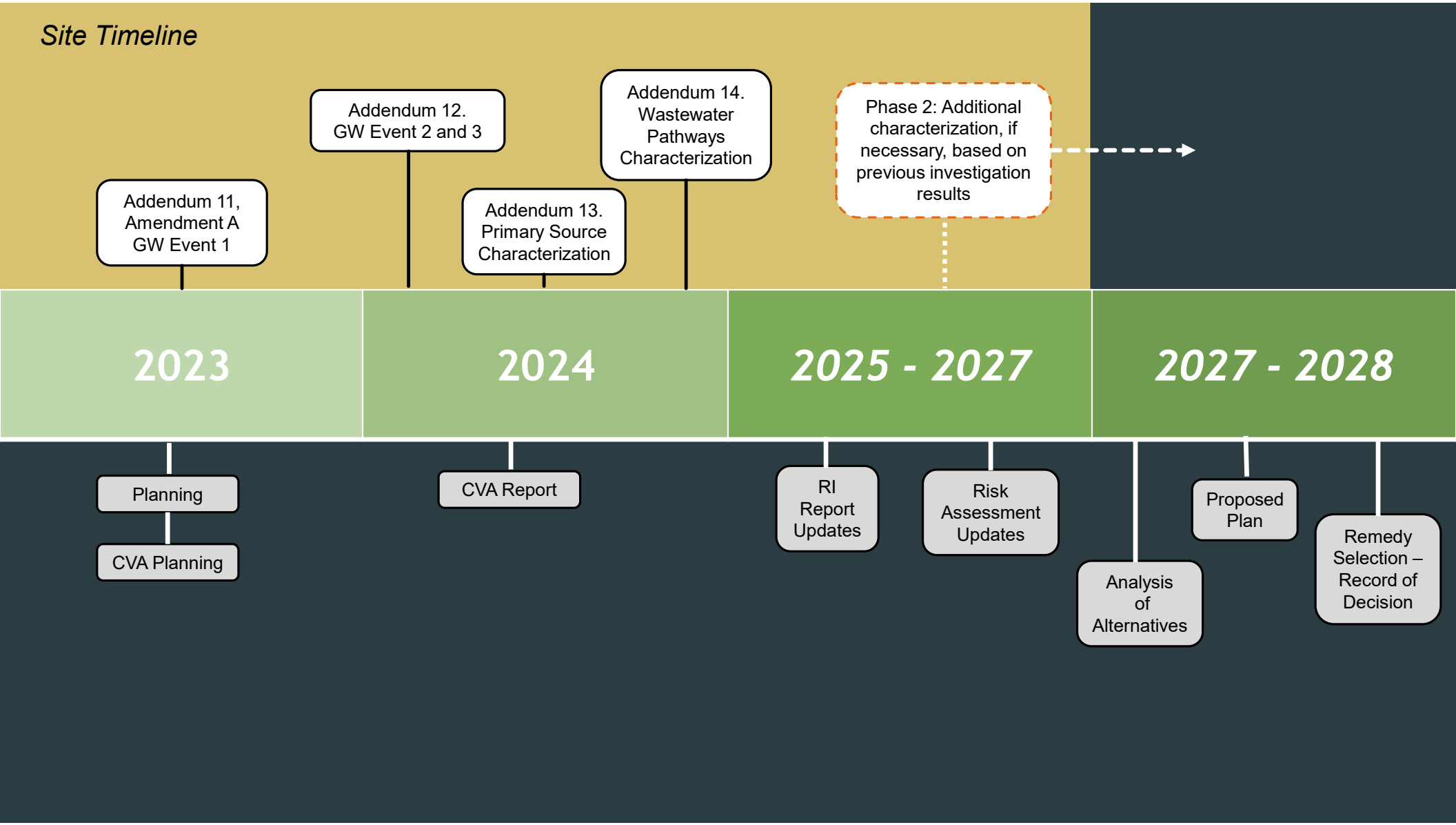
Conceptual Site Model
Human and Ecological Receptors and Potential Exposure Pathways
Former Frenchtown Mill Site
Missoula County, Montana
FIGURE 5

Operable Unit 1 – Agricultural Lands

Media Sampled	Contaminants Analyzed For	Risk Conclusions To Date
• Soil • Groundwater	• Dioxins/Furans • PCBs • Metals • Volatile organics • Semi-volatile organics	Soil • No unacceptable risk to future residents. • Possible low risk from select metals to ecological receptors. Groundwater • Possible risk from manganese in two wells to future residents.

EPA couples risk assessments with fate & transport studies to determine if the risks identified are related to the Site, or non-Site sources.


Site Timeline
Addendum 11, Amendment A GW Event 1
Addendum 12. GW Event 2 and 3
Addendum 13. Primary Source Characterization
Addendum 14. Wastewater Pathways Characterization
Phase 2: Additional characterization, if necessary, based on previous investigation results
2023
2024
2025 - 2027
2027 - 2028
Planning
CVA Planning
CVA Report
RI Report Updates
Risk Assessment Updates
Analysis of Alternatives
Proposed Plan
Remedy Selection – Record of Decision

SMURFIT CLIMATE VULNERABILITY ASSESSMENT

- Regional EPA Team attending December CAG meeting
- CVAs provide:
  - access to climate science expertise
  - Identification of potential site infrastructure vulnerabilities to climate change
  - forward-looking understanding of project climate impacts

Questions

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