

Universal Oil Products Superfund Site

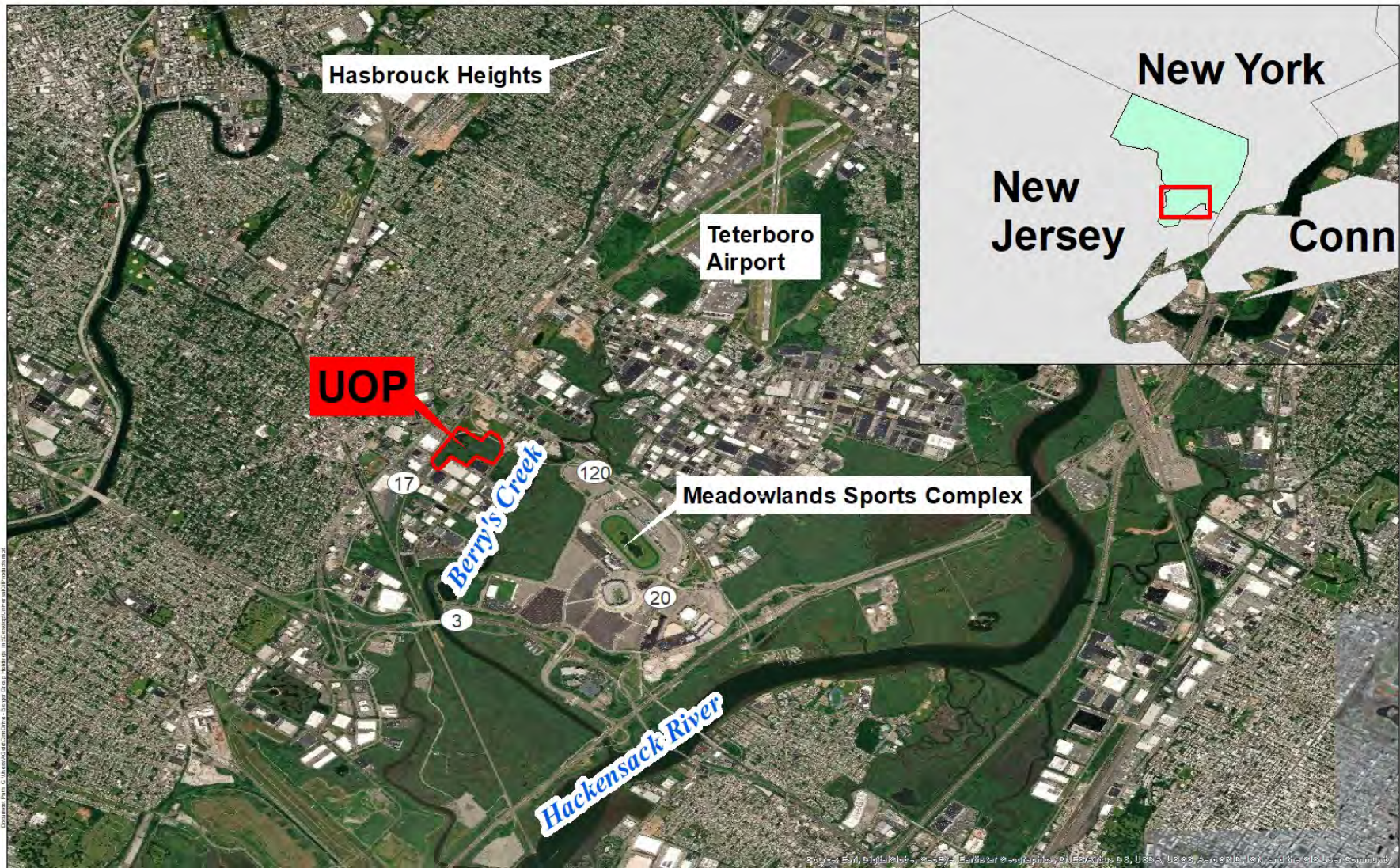
- 6:30** Informal Poster Session
- 7:00** Presentation of Interim Remedial Alternatives and EPA's Preferred Alternative
- 7:45** Questions and Answers
 - Respond to questions from public
 - Receive public comment (stenographer)
- 8:30** Adjourn

Written public comment accepted through March 22, 2019

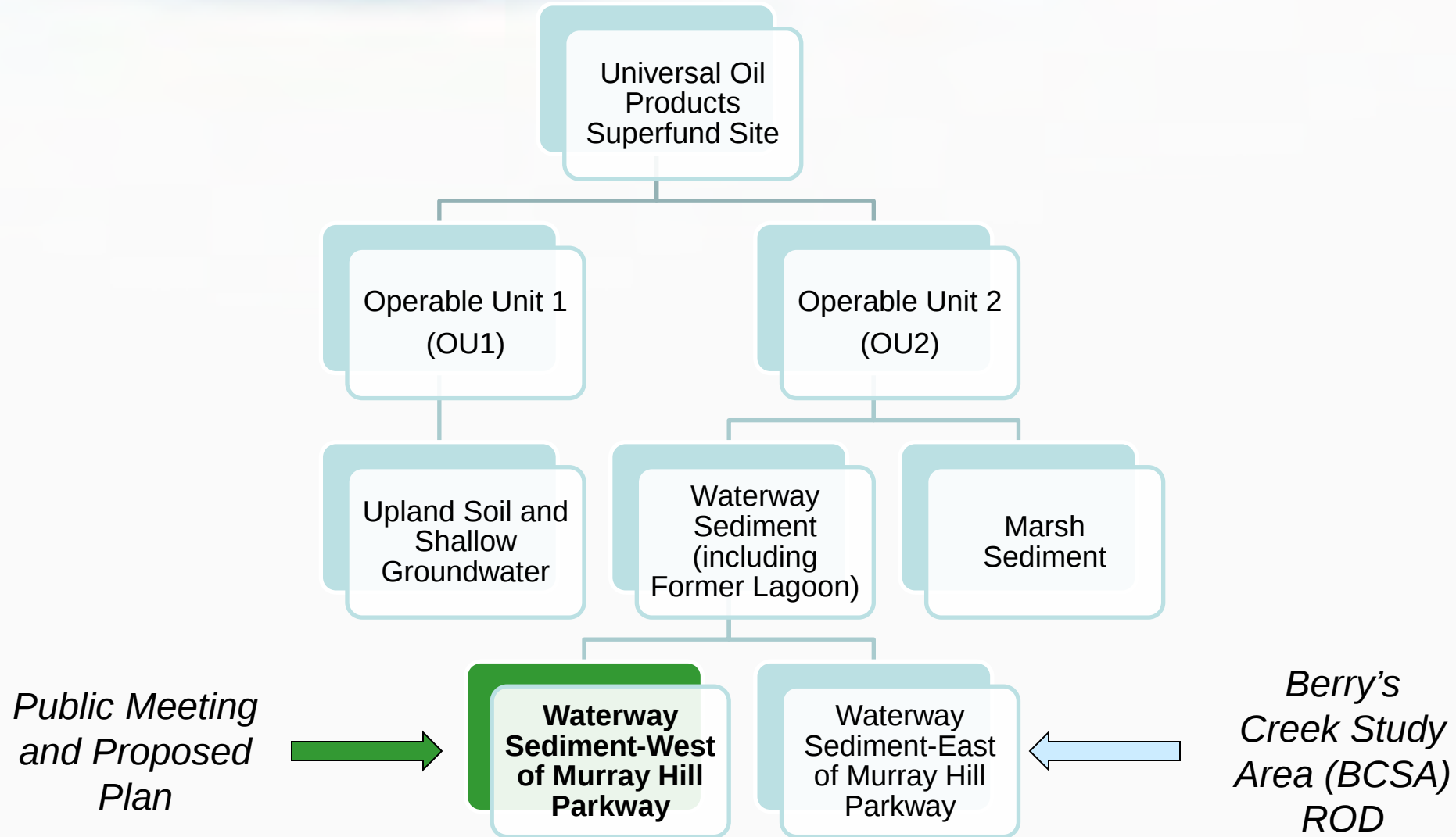
Universal Oil Products Superfund Site Proposed Plan Public Meeting March 6, 2019



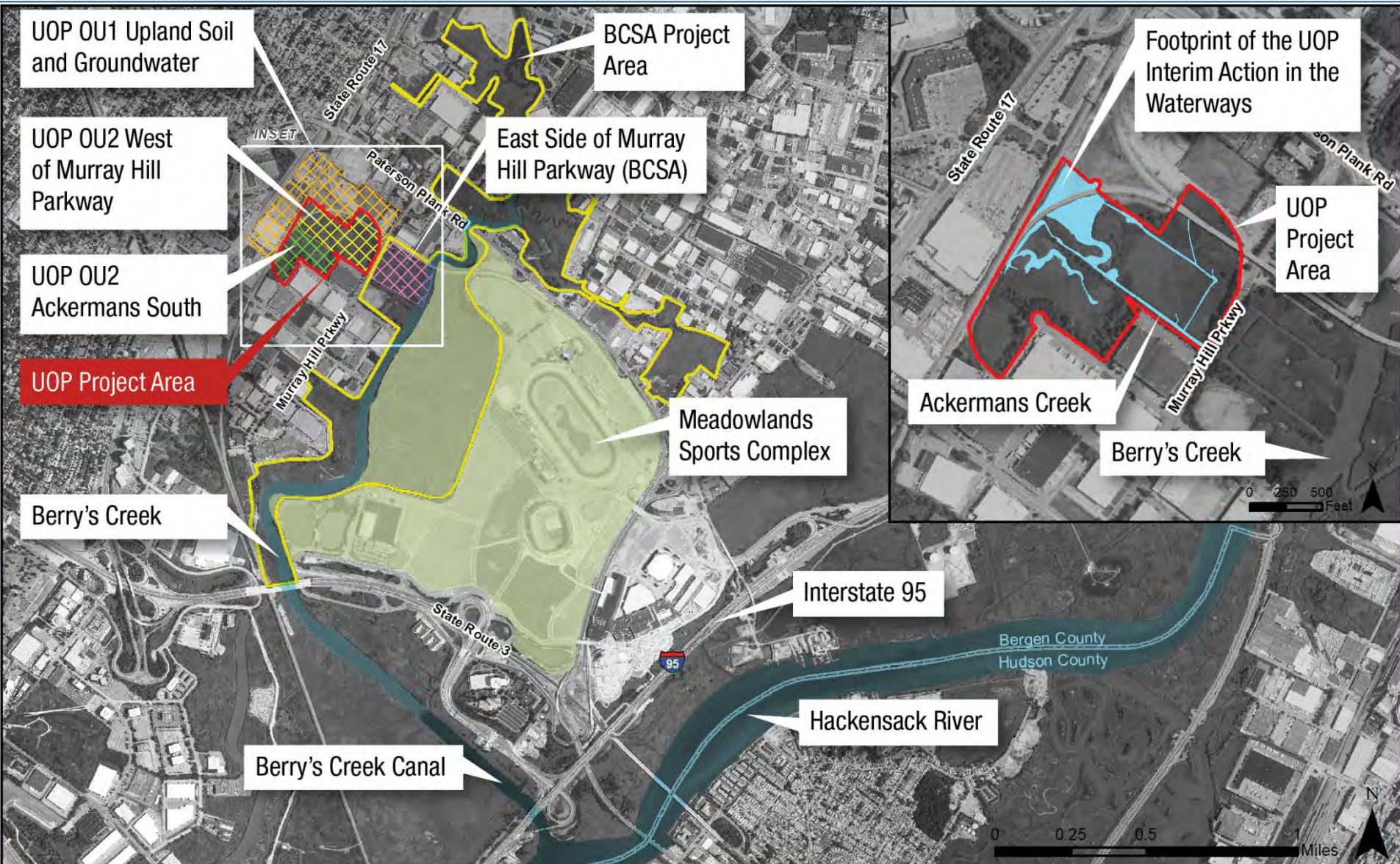
UOP: Site Map



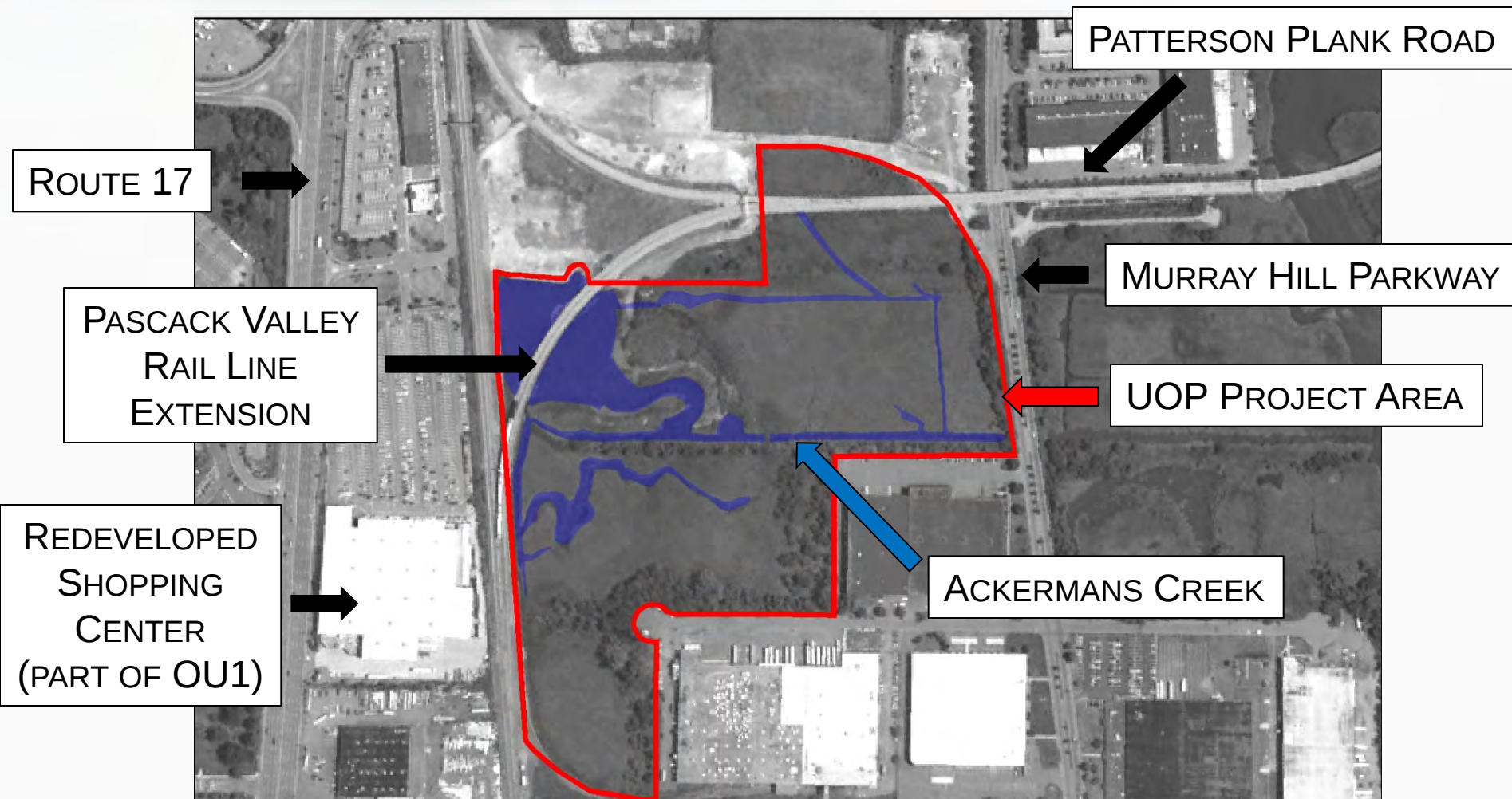
Universal Oil Products (UOP)



UOP: Site Map

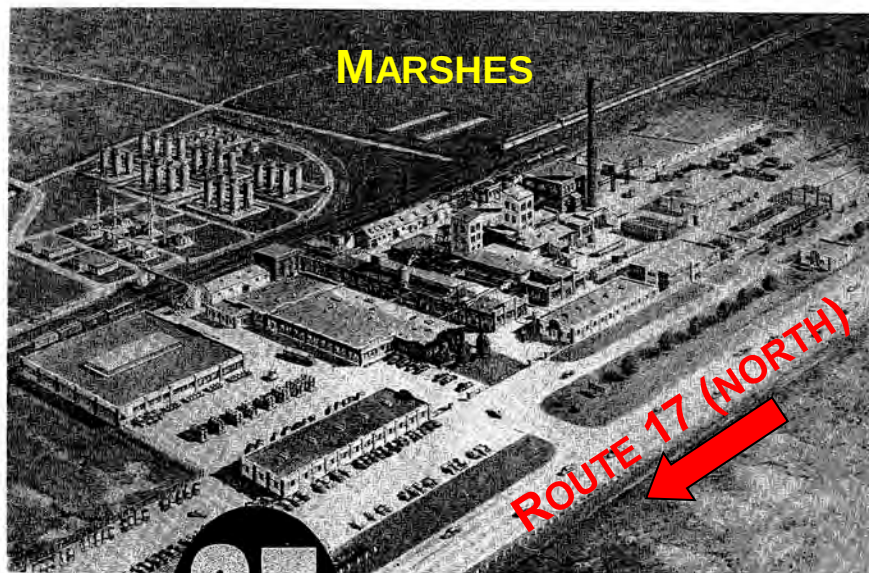


UOP: Site Map





1932 - 1957



Anniversary

TRUBEK LABORATORIES

Site History

1932: Trubek Labs began operating as a chemical manufacturing facility

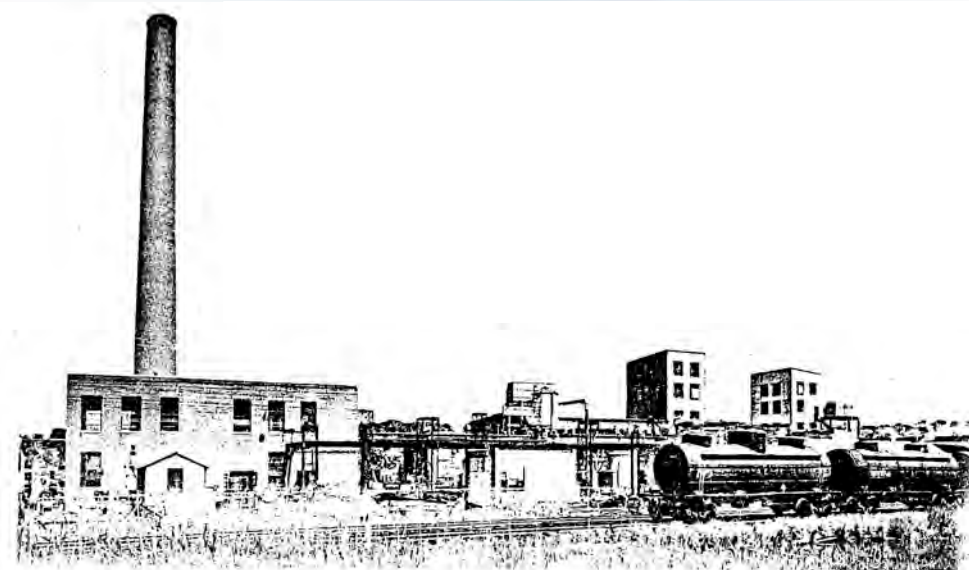
1955: Trubek Labs began operating a solvent recovery facility that processed waste chemicals

1956: Trubek Labs began operating a wastewater treatment plant

1963: Universal Oil Products Company (UOP) purchased the facility

1979: UOP operations at the facility ceased

UOP: Site History



THE TRUBEK LABORATORIES, INC.

EAST RUTHERFORD, NEW JERSEY

Site History

1956-1971: Seepage from the wastewater lagoons and routine handling of products and wastes resulted in chemical releases

1983: NJDEP issued an Order requiring UOP to conduct a study to investigate contamination

1983: UOP is listed on EPA's National Priorities List

1993-2005: OU1 Record of Decision (ROD) issued for upland soils, remediation, and redevelopment as a shopping center

2010-2018: OU2 study and risk assessment completed for the waterway and marshes, including removal of highly contaminated sediment from the former lagoons



VIEW FROM REDEVELOPED SHOPPING CENTER, LOOKING EAST

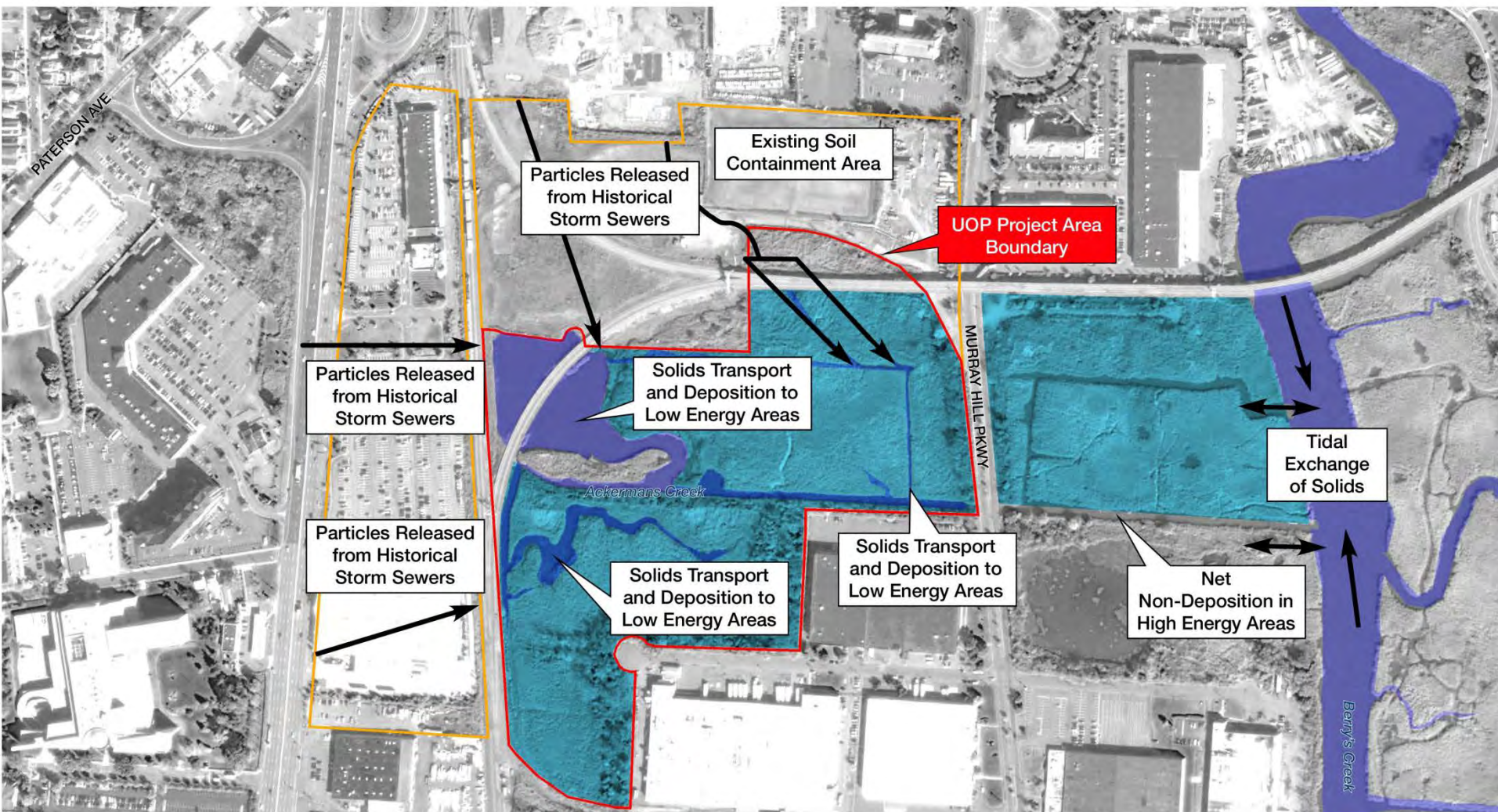




Conceptual Site Model

- 
- A series of five green chevrons pointing downwards, arranged vertically on the left side of the slide, serving as a visual indicator for the list items.
- Historical discharges from the former UOP operations and neighboring properties
 - Historical overflow and releases from the former lagoon system
 - Surface water drainage
 - Potential groundwater-to-surface water discharge
 - Tidal mixing and deposition of contaminated solids

Physical Site Characterization





2015 Surface Sediment (Median) Concentrations

Units = milligram of contaminant per kilogram of sediment (mg/kg)

Area	PCB	Mercury	Chromium
Waterway sediment in UOP OU2	6.3	7.6	320
Waterway sediment Reference Area (Mill Creek)	0.11	2.8	190

Mill Creek is a tributary of the Hackensack River.



Human Health Risk Assessment

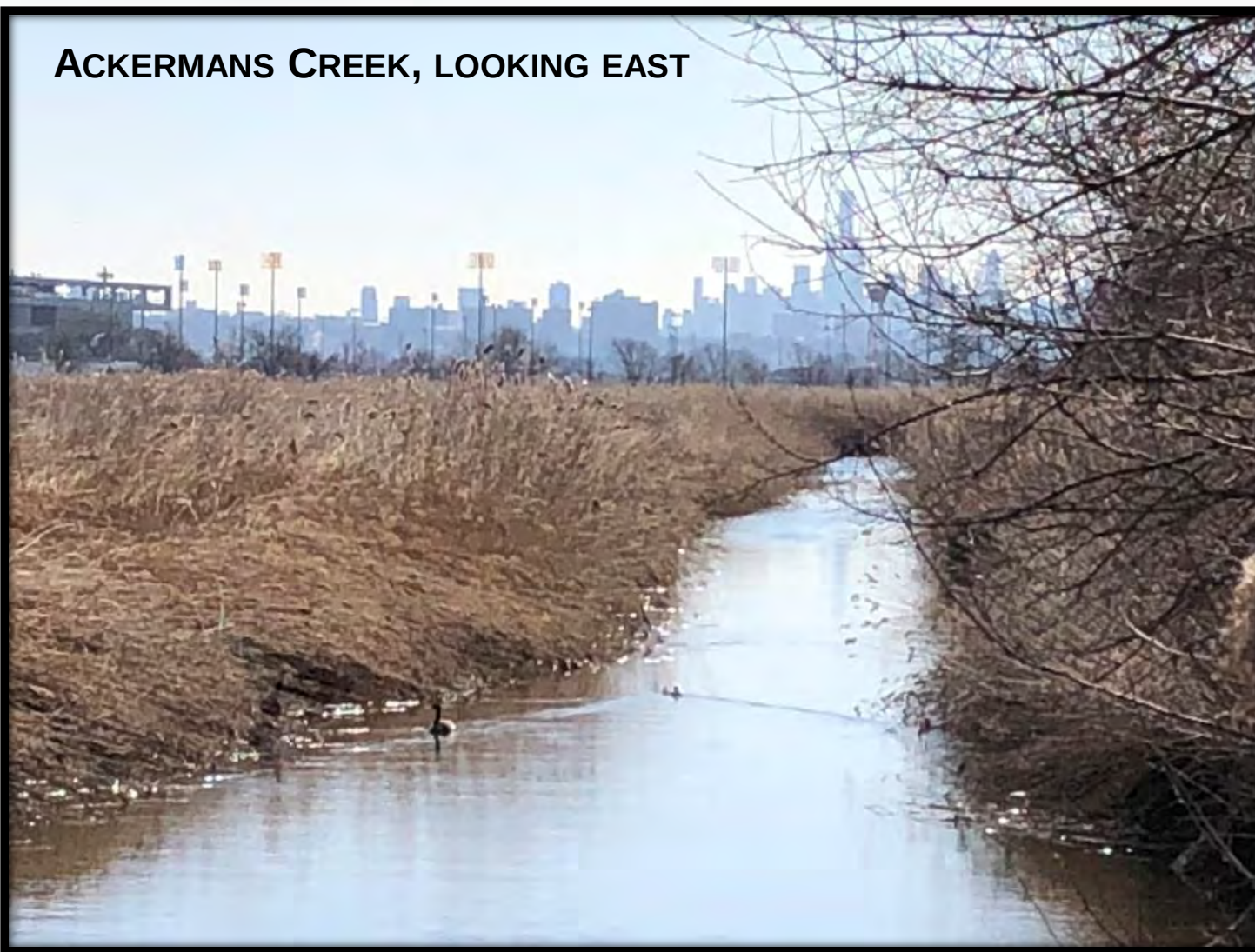
- PCBs were identified as Contaminants of Concern for sediment based on human exposure through consumption of white perch and potential direct exposure to sediment.

Baseline Ecological Risk Assessment

- PCBs were identified as Contaminants of Concern in marsh sediment and waterway sediment based on wildlife exposure.
- If investigations indicate that volatile organic compounds in discharging groundwater pose an unacceptable risk to benthic macro-invertebrates, an appropriate response will be selected in the future.



ACKERMANS CREEK, LOOKING EAST





Remedial Action Objectives

- Control sources of COCs by replacing the current biologically active zone (upper layer of sediments where plants and organisms are living) in waterway soft sediment, thereby reducing exposure of human and ecological receptors to COCs in the waterway.
- Control sources of COCs by replacing the current biologically active zone in waterway soft sediment, thereby reducing resuspension of COCs into the water column and transport into adjacent marshes and downstream areas.



Interim Remedy

Reasons for taking an interim action could include the need to institute temporary measures to stabilize the site or operable unit and/or to prevent further migration of contaminants or further environmental degradation.

EPA generally shall consider the following general principle of program management during the remedial process: Operable units, including interim actions, should not be inconsistent with nor preclude implementation of the expected final remedy.

An interim action must be followed by a final ROD, which must provide long-term protection of human health and the environment.



Basis for Interim Source Control Remedial Action

- 
- Remedial investigation found highest level of PCBs in waterway sediment and unacceptable human health and ecological risk, which provides basis for action
- 
- EPA evaluated remedial alternatives for an interim source control remedy
- 
- Bank-to-bank remediation in waterway sediment in UOP OU2 (west of Murray Hill Parkway), which is consistent with BCSA ROD
- 
- The remediated area will have a clean surface upon completion of construction (placement of backfill)
- 
- Following a period of monitoring to determine how the system is responding, EPA will select final risk-based remedial goals when the final remedy is selected



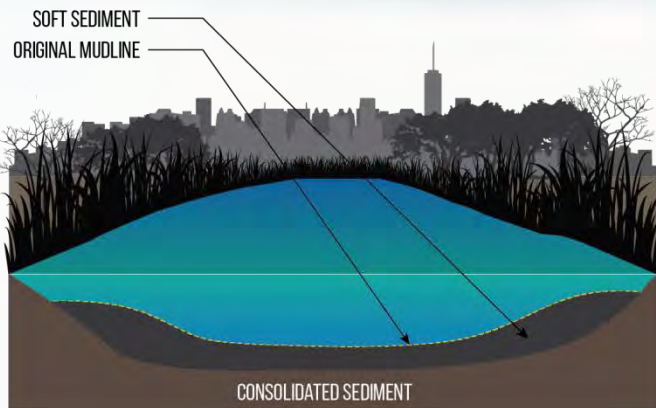
Interim Remedial Alternatives

Alternative	Description	Volume of Sediment	Estimated Present Value	Estimated Construction Time
Alternative 1	No Action	None	Not applicable	Not applicable
Alternative 2	1-foot Removal	12,200 cubic yards	\$14.6 million	8.5 months
Alternative 3	2-feet Removal	16,300 cubic yards	\$18.2 million	11.5 months
Alternative 4	All soft sediment removed (about 3 feet)	19,600 cubic yards	\$21.6 million	14 months

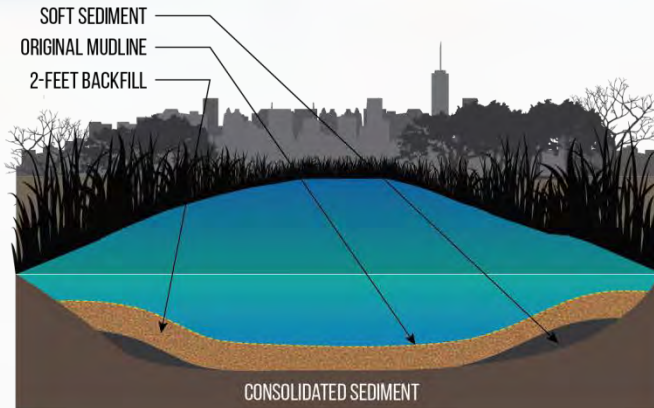
A 6-inch over-excavation allowance was included in the alternative design and cost estimate.



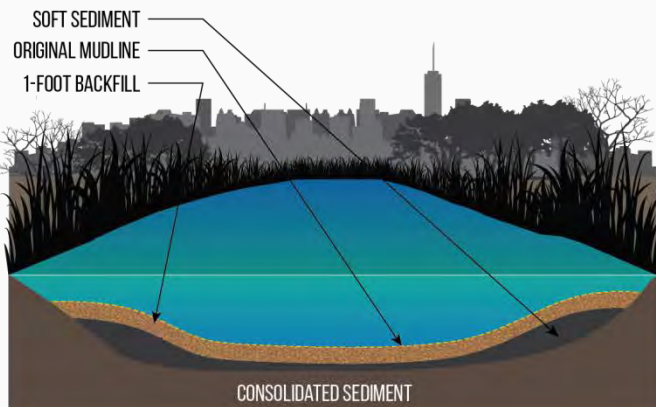
Interim Remedial Alternatives



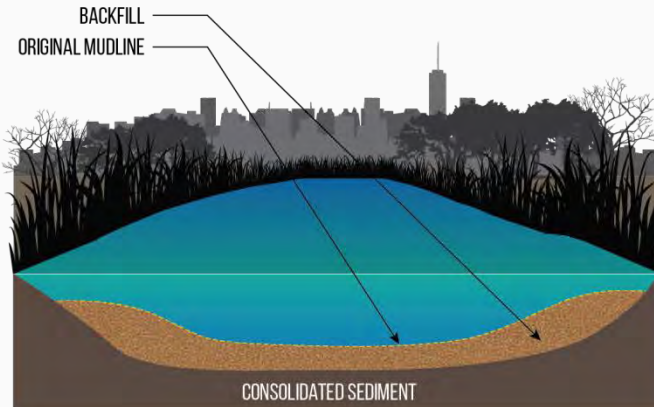
ALTERNATIVE 1: NO ACTION



ALTERNATIVE 3: 2-FOOT REMOVAL OF SEDIMENT AND BACKFILL

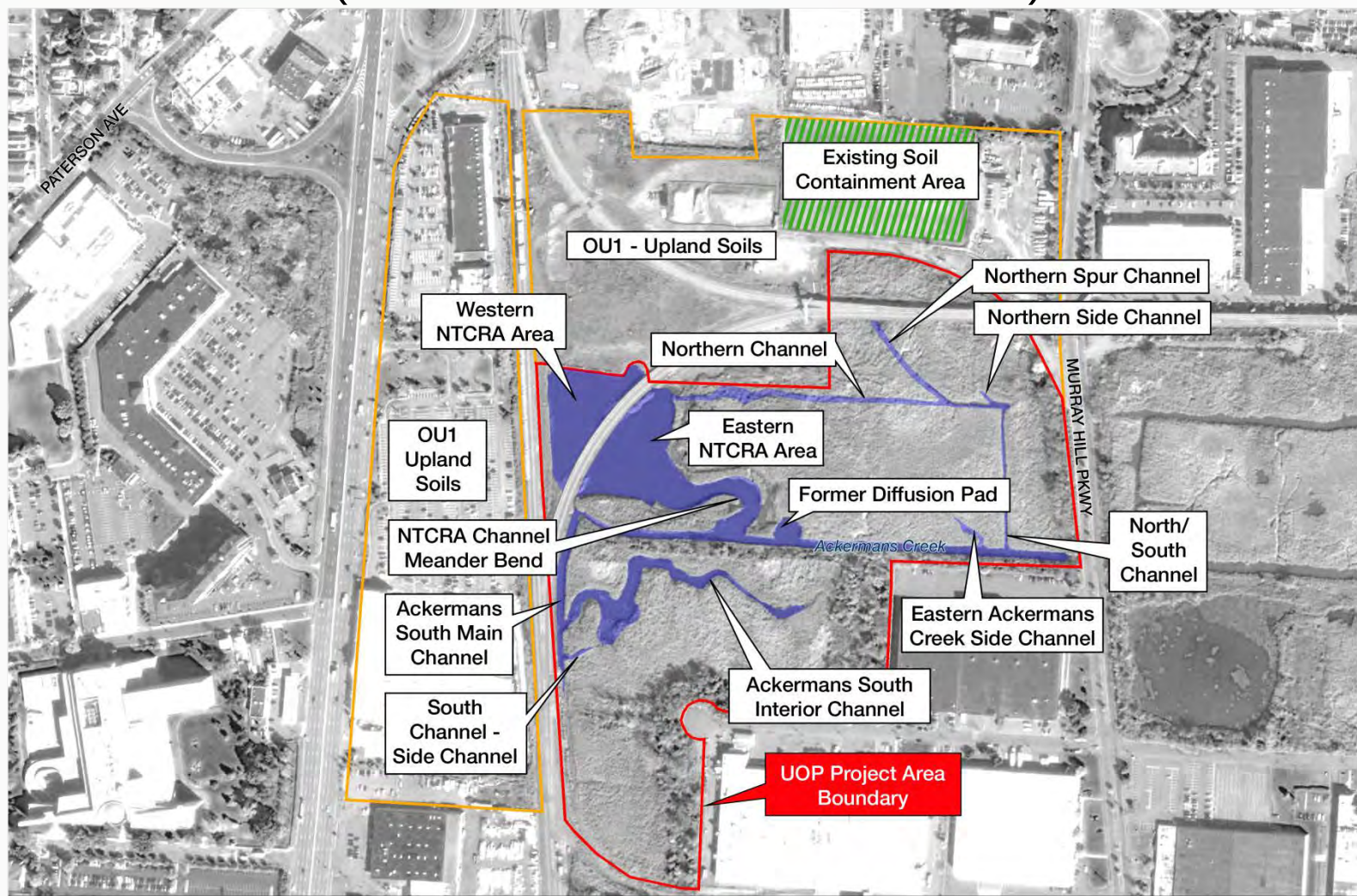


ALTERNATIVE 2: 1-FOOT REMOVAL OF SEDIMENT AND BACKFILL



ALTERNATIVE 4: ALL SOFT-SEDIMENT REMOVED (APPROXIMATELY 3 FEET) AND BACKFILL

Footprint of Proposed Interim Remedial Action (for all active remedial alternatives)





Common Elements among the Interim Remedial Alternatives

- Post-construction monitoring
- Continuation of NJDEP fish advisory and other institutional controls
- As needed, maintain integrity of backfill
- Monitoring of groundwater discharge during the remedial design to confirm that groundwater is not contributing to sediment contamination
- BCSA ROD (east of Murray Hill Parkway)



EPA's Nine Evaluation Criteria for Superfund Decisions

Nine Criteria for Remedial Alternatives Evaluation

1	Overall Protection of Human Health and the Environment
2	Compliance with Applicable or Relevant and Appropriate Requirements
3	Long-term Effectiveness and Permanence
4	Reduction of Toxicity, Mobility, or Volume of Contaminants through Treatment
5	Short-term Effectiveness
6	Implementability
7	Cost
8	State Acceptance
9	Community Acceptance

Among the active remedial alternatives, the major difference is depth of excavation.

Due to similarity of alternatives, comparative evaluation considered varying levels of risk reduction, construction impacts and duration, and cost.



EPA's Preferred Alternative is Alternative 3 (2-foot removal)

Bank-to-bank removal of 2 feet of waterway sediment and placement of backfill

Treatment and off-site disposal of approximately 16,300 cubic yards of sediment

Groundwater monitoring during remedial design

Institutional controls, such as the existing New Jersey fish advisories

Maintenance of backfill in waterway

Post-construction monitoring program



EPA's Preferred Alternative is Alternative 3 (2-foot removal)

- Provides source control through removal of top 2-feet of sediment and containment of remaining material
- If soft sediment is slighter greater than the dredge depth (and it makes sense to do so), all soft sediment will be removed
- Alternative 3 provides equivalent risk reduction to Alternative 4 at a lower cost and with fewer construction-related impacts
- UOP Proposed Plan is consistent with the BCSA ROD
- Proposed interim remedial action performance measure will be to remove sediment over more than 95 percent of the targeted project surface area.



Community Acceptance

- EPA encourages comments on all alternatives
- Public comment session tonight with stenographer
- Written comments by March 22, 2019

Eugenia Naranjo
Remedial Project Manager
290 Broadway, 19th floor
New York, NY 10007

Email: naranjo.eugenia@epa.gov



Information Repositories

Wood-Ridge Memorial Library
231 Hackensack Street
Wood-Ridge, NJ 07075

East Rutherford Memorial Library
143 Boiling Springs Avenue
East Rutherford, NJ 07073

EPA Records Center
290 Broadway, 18th Floor
New York, NY 10007

Website: <https://www.epa.gov/superfund/universal-oil>

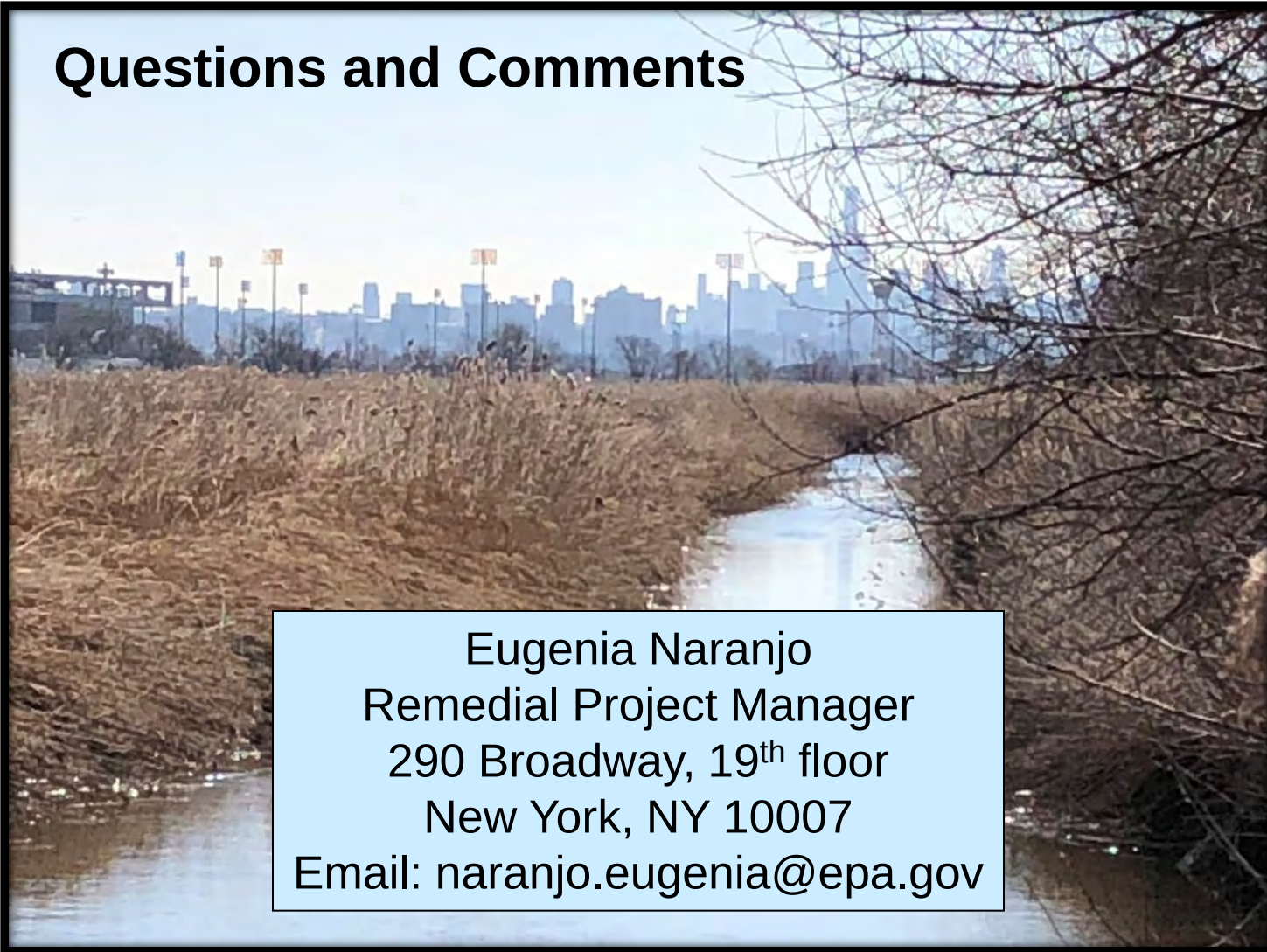


Schedule

Description	Anticipated Date
Proposed Plan Public Meeting	March 6, 2019
End of Public Comment Period	March 22, 2019
Record of Decision	Summer 2019
Design (in conjunction with BCSA)	2-3 years
Construction (11.5 months for UOP within BCSA overall duration)	3-4 years (entire BCSA project)
Evaluation of interim remedy	Every 5 years



Questions and Comments



Eugenia Naranjo
Remedial Project Manager
290 Broadway, 19th floor
New York, NY 10007
Email: naranjo.eugenia@epa.gov