

**Kerr-McGee Chemical Corp.
Navassa, North Carolina
Superfund Site**

**Public Meeting
January 14, 2020**

**U.S. Environmental Protection Agency
N.C. Department of Environmental Quality
Greenfield Environmental Multistate Trust LLC,
Trustee of the Multistate Environmental Response Trust**



Public Meeting Agenda

- ✓ **Introductions**
- ✓ **NCDEQ Activities and Update on Navassa Trustee Council**
- ✓ **NCEERC Update**
- ✓ **EPA Site Strategy Update**
- ✓ **Work Completed in 2019**
- ✓ **2020 Work Plans**
- ✓ **Questions and Discussion**



Introductions

Tonya Spencer-Harvey, EPA



Introductions

- ✓ **Navassa Superfund Site Cleanup Team**
 - ✓ U.S. Environmental Protection Agency (EPA)
 - ✓ N.C. Department of Environmental Quality (NCDEQ)
 - ✓ Multistate Environmental Response Trust (Multistate Trust)
- ✓ **Navassa Town Council**
- ✓ **Navassa Community Environmental and Economic - Redevelopment Corporation (NCEERC)**
- ✓ **Navassa Trustee Council – Natural Resource Damage (NRD) Restoration**
- ✓ **Other Partners**
 - ✓ N.C. Department of Health and Human Services/N.C. Division of Public Health (N.C. DPH) – Health education and outreach
 - ✓ University of North Carolina – Wilmington (UNCW) – College / Underserved Community Partnership Program (CUPP)



EPA Information Repository

- ✓ Navassa Community Center
 - ✓ Leland Public Library
- ✓ EPA Region 4, Superfund Records Center, Atlanta, GA
 - ✓ Online

Public Meetings Every Quarter

Next Meeting **April 21, 2020??**



NCDEQ Activities and Update on Navassa Trustee Council

David Mattison, NC DEQ



Navassa Community Economic and Environmental-Redevelopment Corporation (NCEERC) Update

Chris Graham, NCEERC



EPA Site Strategy Update

Erik Spalvins, EPA



EPA 2020 Site Strategy

Eastern Upland

Not part of Superfund Site. No restrictions.

OU1: Areas 1A, 1B, and 2

2019 Proposed Plan, comments under review

OU2: Areas 1C and 1D

Additional ecological sampling of invertebrates.

OU3: Southern Marsh Sediments

Additional ecological sampling of marsh sediments.

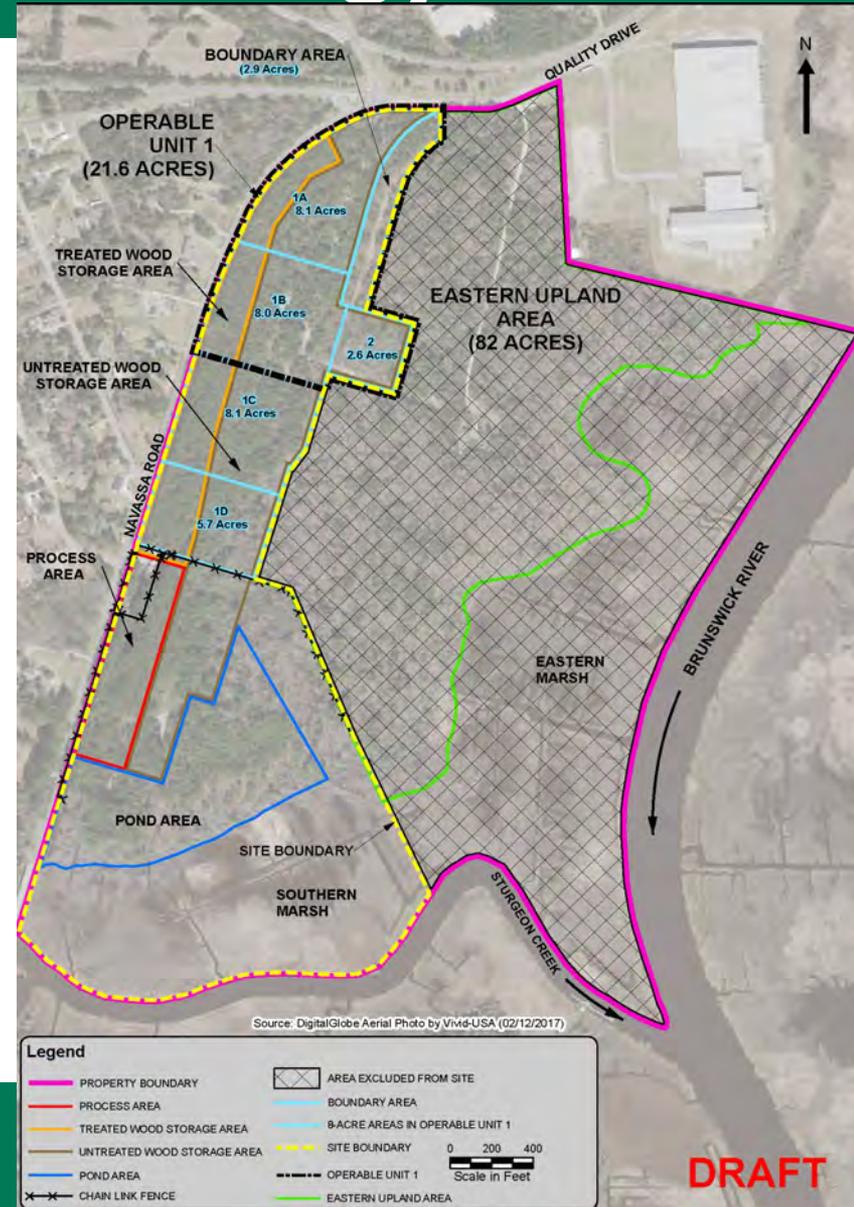
OU4: Pond Area and Process Area

Additional soil sampling. Creosote extraction pilot.

OU5: Groundwater DNAPL and Dissolved Plume

Additional NAPL and groundwater investigation.

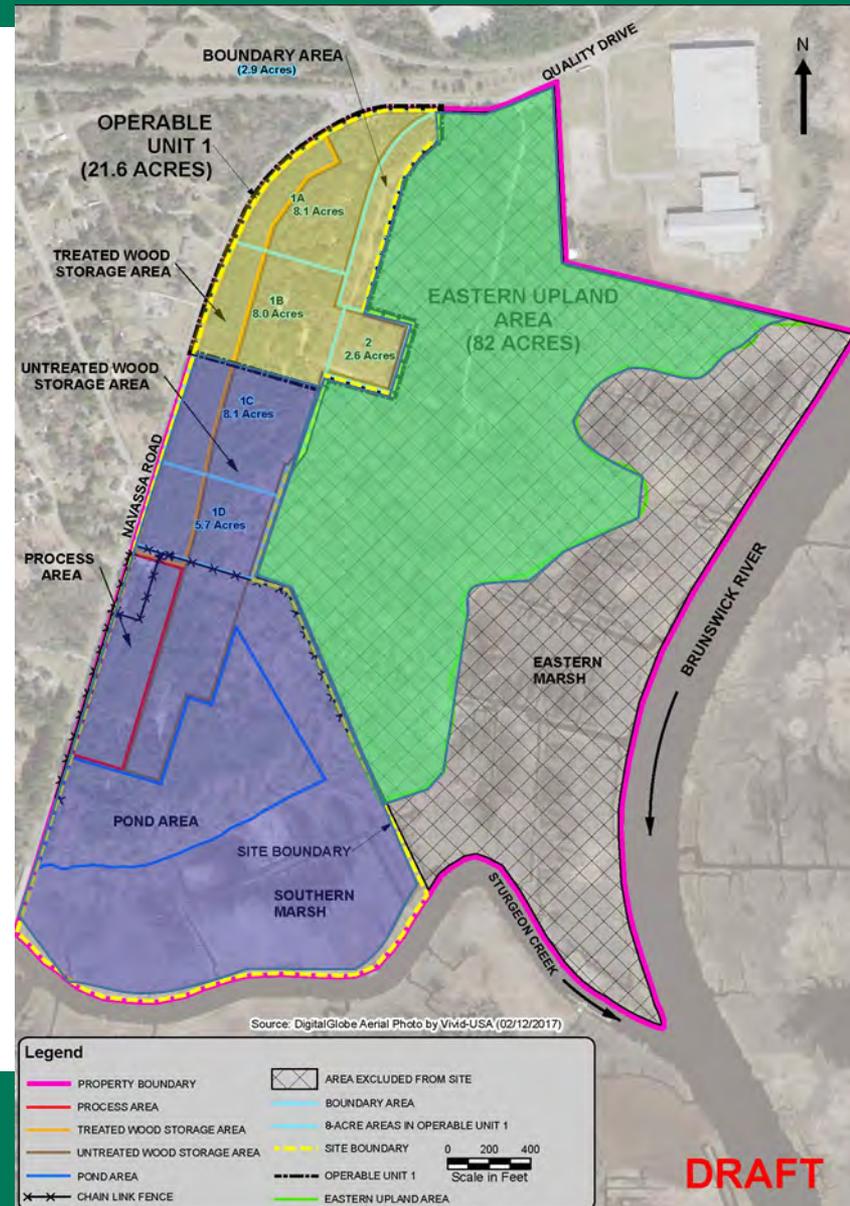
Does groundwater impact ecological receptors?



OU1 Update

Proposed Plan

- ✓ Comment period was from October 9th – December 9th
- ✓ EPA received numerous comments about changing anticipated land use to residential
- ✓ EPA is working with local government, which makes land use decisions
- ✓ Will residential uses be allowed under the Navassa land use plan or zoning?



Navassa Future Land Use Map

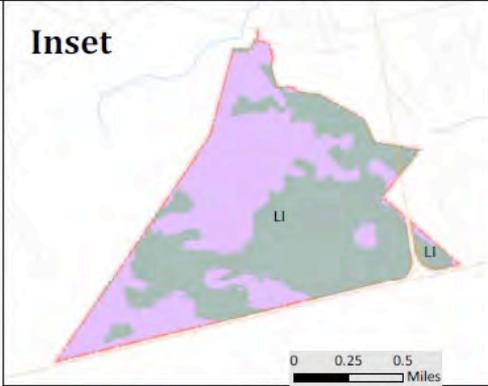
Town of Navassa



**Future Land Use Plan
2011-2030**

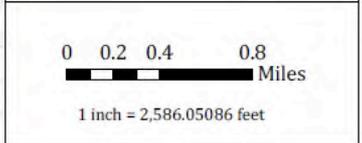
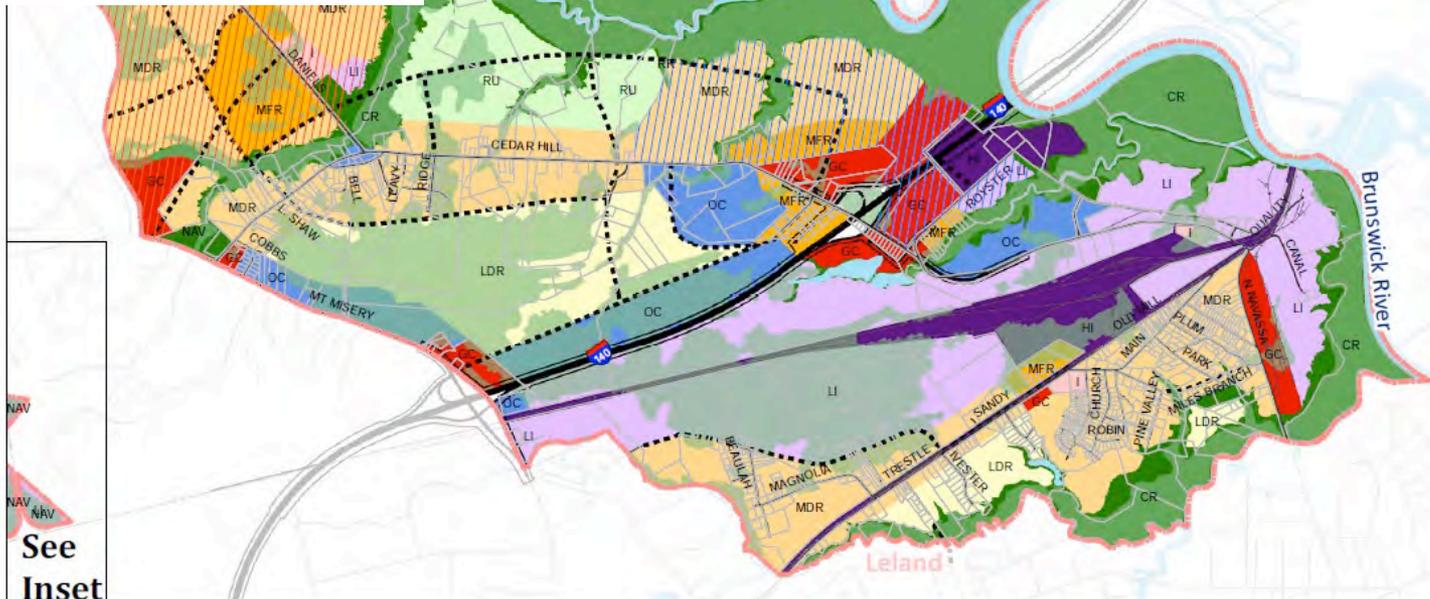
Draft for Planning Board Review

Town of Navassa Future Land Use Plan



**Map 6-3
Future Land Use**

- Future Land Use**
- Conservation
 - Rural Residential
 - Low Density Residential
 - Medium Density Residential
 - Multi Family Residential
 - Institutional
 - Office/Commercial
 - General Commercial
 - Light Industrial
 - Heavy Industrial
 - Wetland Conservation
 - Indian Creek PUD
 - River Bend PUD
 - Proposed Roadways

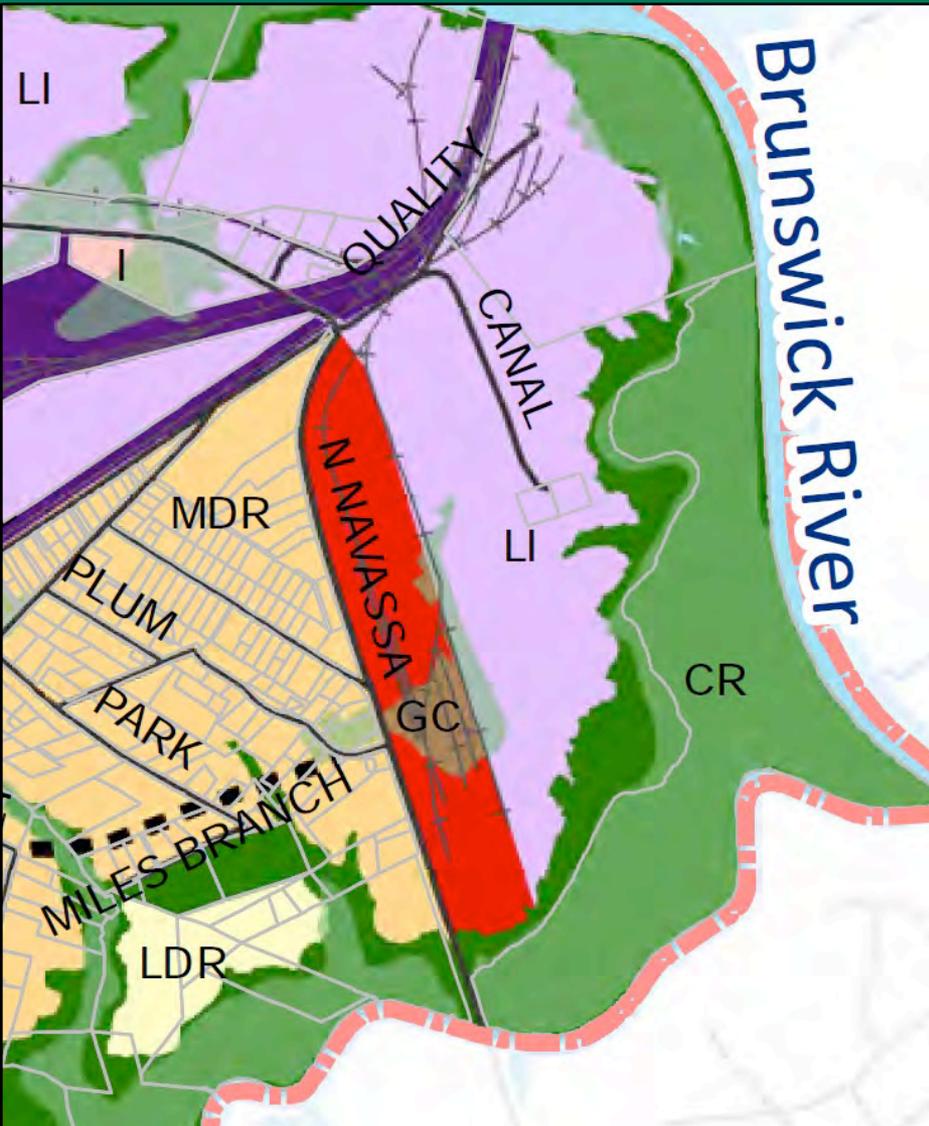


**Town of Navassa
Future Land Use Plan
2011-2030**

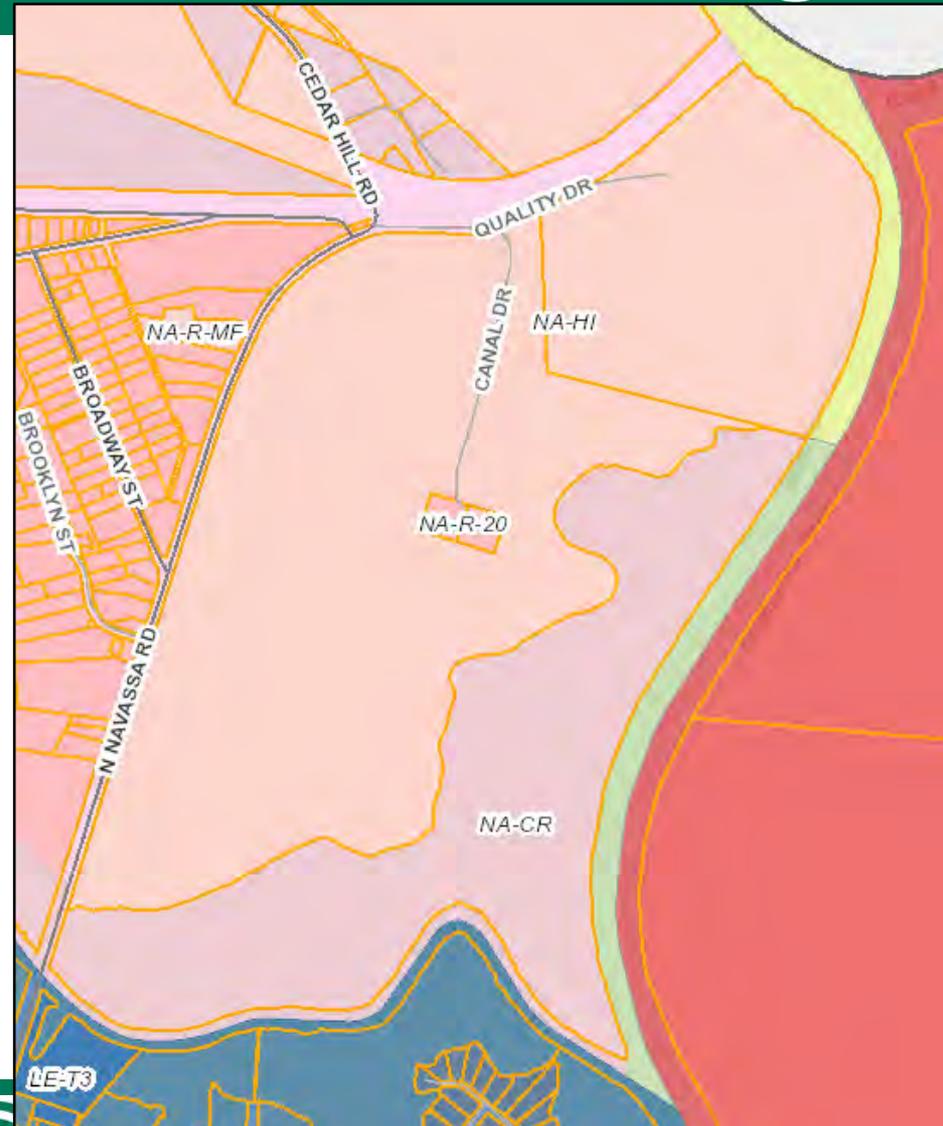
Data Source: Town of Navassa
Map prepared: Town of Navassa
Date prepared: 4-3-12

See
Inset

Land Use Plan



Current Zoning

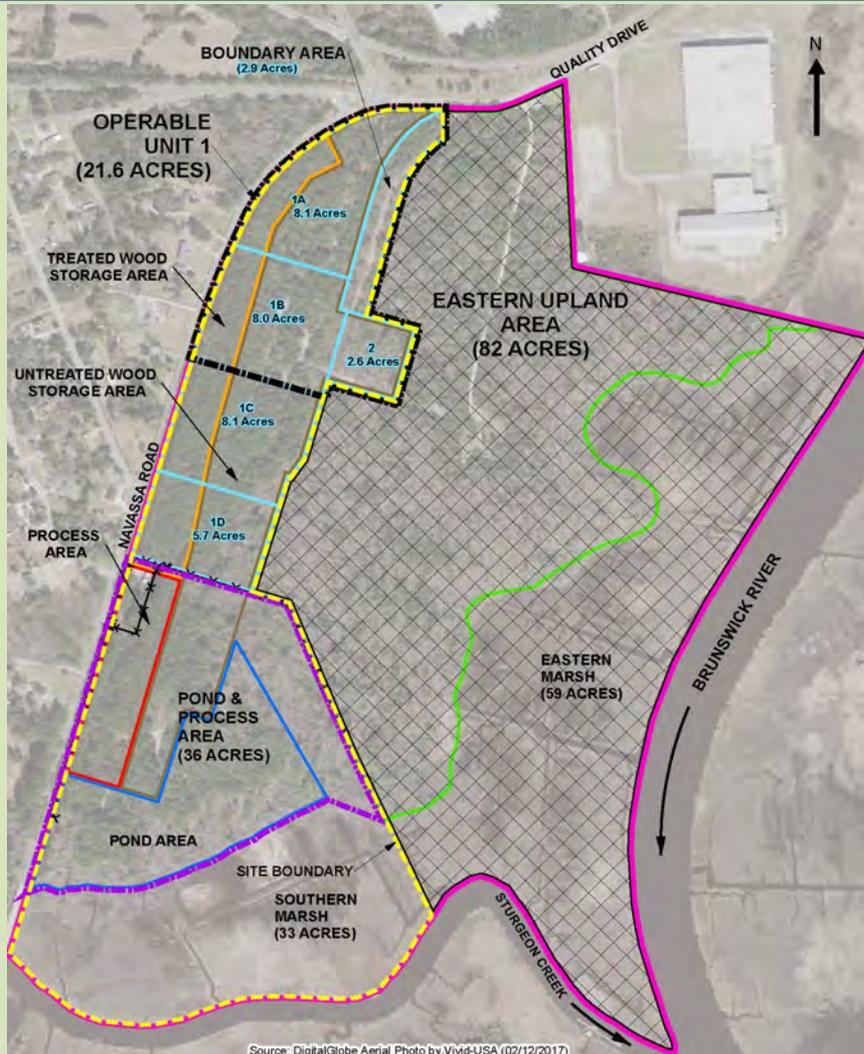


Remediation Investigations Highlights and Plans

Richard Elliott, Multistate Trust



Site Areas



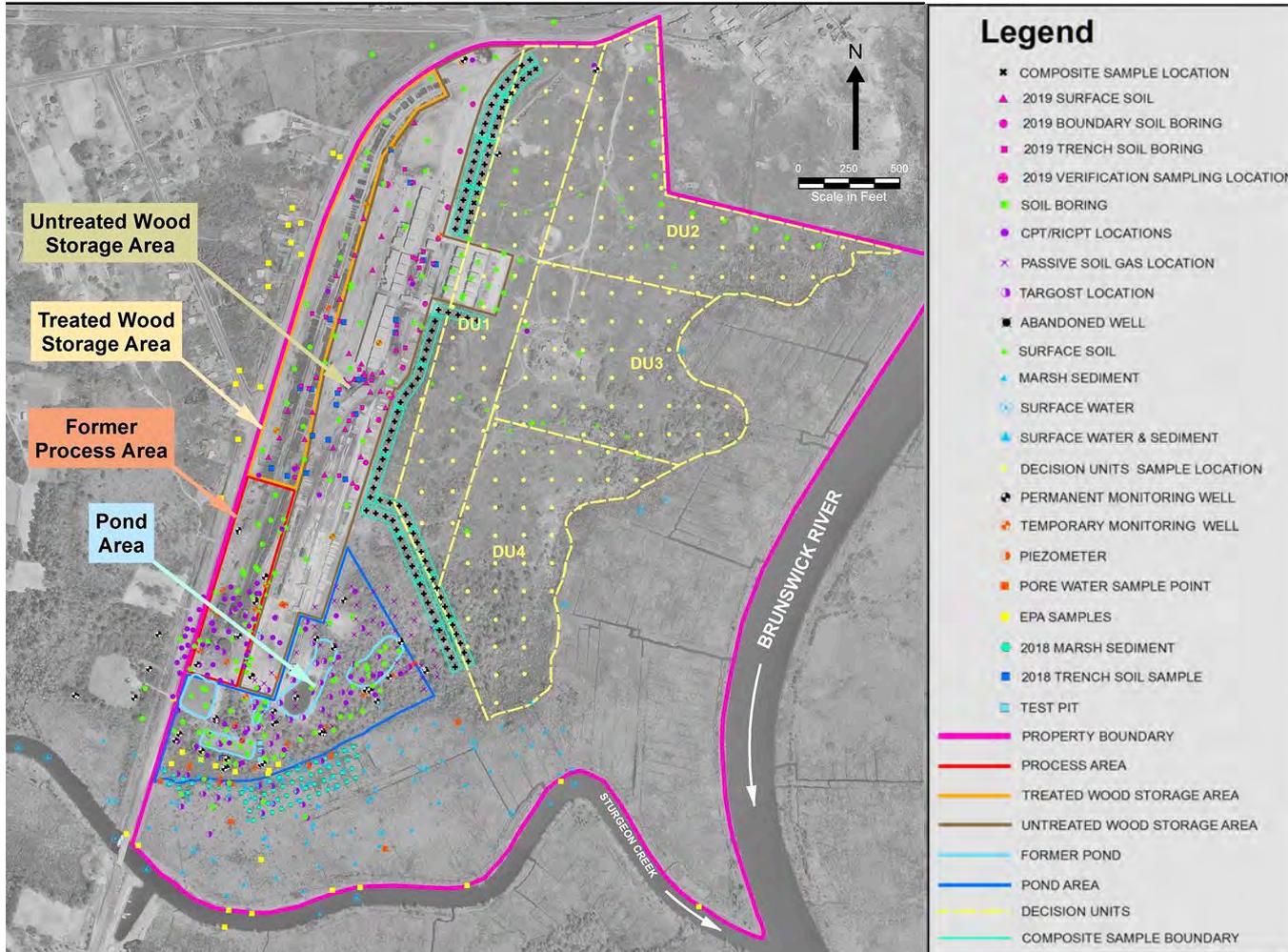
Source: DigitalGlobe Aerial Photo by Vivid-USA (02/12/2017)

- OU1 - Address Proposed Plan Comments
- OU2 - Understand Ecological Risk
 - Determine Remediation for Future Land Use
- OU3 - Understand Ecological Risk
 - Determine Remediation Alternatives
- OU4 - Define Extent of NAPL
 - Test Creosote Recovery
 - Determine Remediation for Future Land Use
- OU5 - Understand the Southern Extent of the Contaminated Groundwater Plume
 - Monitor Extent of Contaminated Groundwater Plume

Legend

	PROPERTY BOUNDARY		POND AND PROCESS AREA
	PROCESS AREA		AREA EXCLUDED FROM SITE
	TREATED WOOD STORAGE AREA		BOUNDARY AREA
	UNTREATED WOOD STORAGE AREA		8-ACRE AREAS IN OPERABLE UNIT 1
	POND AREA		SITE BOUNDARY
	OPERABLE UNIT 1		0 200 400 Scale in Feet
	CHAIN LINK FENCE		OPERABLE UNIT 1
			EASTERN UPLAND AREA

Site Sampling



- **500 soil samples**
 - 336 locations
 - 306 surface soil samples (0" to 12" below ground surface [BGS])
 - 194 subsurface samples (greater than 12" BGS)
- **225 sediment samples**
 - 175 locations
- **20 surface water samples**
 - Sturgeon Creek and the tidal marsh areas
- **603 groundwater samples**
 - 53 on-site groundwater wells,
 - 6 off-site groundwater wells
 - 37 temporary on-site groundwater wells
 - depths up to 95 feet BGS

Key Activities 2019 Progress

✓ Completed Reports

✓ RI Report

- ✓ Approved by EPA
- ✓ Available to the Public

✓ HHRA

- ✓ Approved by EPA
- ✓ HHRA Addendum Approved by EPA
- ✓ Available to the Public

✓ BERA

- ✓ Approved by EPA
- ✓ Available to the Public



Key Activities 2019 Progress

- ✓ **Operable Unit 1 (OU1)**
 - Completed Additional Sampling Activities in July
 - Completed Addendum to HHRA
 - EPA Finalized and Issued Proposed Plan

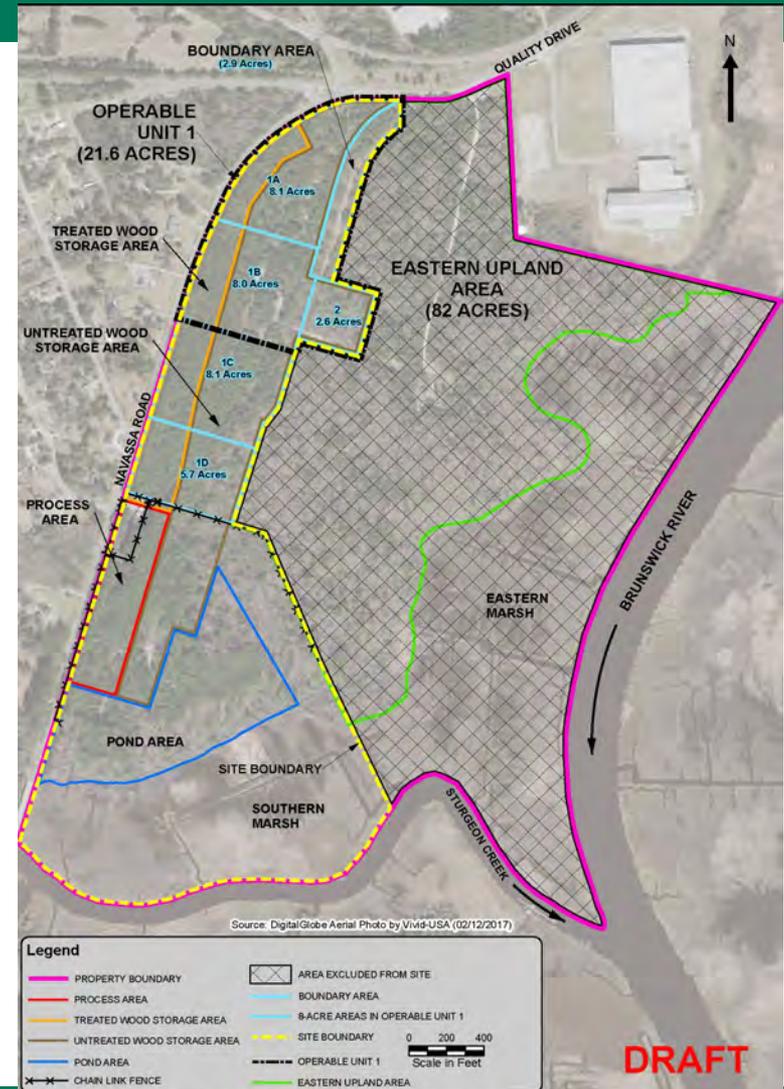
- ✓ **Marsh/Pond and Process Area/Groundwater**
 - Complete Marsh Sampling DQO Tables
 - Initiated Feasibility Study of Pond and Process Area
 - Completed Two Groundwater Sampling Events (April and October)
 - Conducted Groundwater Plume Studies, Draft Report Under Review

- ✓ **Site Property Management Activities**
 - Met with Coastal Land Trust
 - Participated in Town of Navassa Restoration Stakeholder Meeting



Key Activities 2020 Plan

- Oversight of Brunswick County WWTP Force Main Installation on Site
 - Soil Management Plan
 - Worker HAZWOPER Awareness/Training
 - On-Site Oversight
- Work to Take Place in Early 2020
- Directional Drill Southern Section of the Line
- Trench Northern Section of the Line



Key Activities 2020 Plan (Continued)

- ✓ **Operable Unit 1 (OU1)**
 - Activities to Address Proposed Plan Comments
- ✓ **Southern Portion of Treated and Untreated Wood Storage Area (OU2)**
 - Sampling and Invertebrate Study, BERA Addendum
 - Feasibility Study
 - Proposed Plan Activities
- ✓ **Southern Marsh (OU3)**
 - Drone Based Thermal Imaging
 - Sampling and Toxicity Testing, BERA Addendum
 - Initiate Feasibility Study



Key Activities 2020 Plan (Continued)

✓ Pond and Process Area (OU4)

- Soil Sampling Program
- Creosote Recovery Test Pilot
- Feasibility Study

✓ Groundwater (OU5)

- Install Additional Groundwater Monitoring Wells
- Complete Two Groundwater Sampling Events
- Issue Groundwater Plume Studies Report

Key Activities 2020 Plan (Continued)

✓ Site Property Management Activities

- Make Progress with Conveyance of Public Use Property
- Support Town Council in Rezoning the Property (if Required)
- Sub-divide the Property
- Upgrade the Signage on the Property
- Market the Property



Questions and Discussion



Contact Information

- ✓ Erik Spalvins, EPA Remedial Project Manager
 - (404) 562-8938, spalvins.erik@epa.gov
- ✓ Tonya Spencer, EPA Community Involvement Coordinator
 - (404) 562-8463, spencer.latonya@epa.gov
- ✓ David Mattison, NCDEQ Superfund Section Project Manager
 - (919) 707-8336, david.mattison@ncdenr.gov
- ✓ Cindy Brooks, Multistate Trust Managing Principal
 - (617) 448-9762, cb@g-etg.com
- ✓ Richard Elliott, Multistate Trust Project Manager
 - (617) 953-1154, re@g-etg.com

