



December 2022 CAP Meeting - Lake Success

Tom Stilley, Corteva Remediation Group Leader

December 8, 2022

December 2022 Agenda

- Welcome and Instructions - Tom Stilley - Remediation Group Leader, Corteva Remediation Group
- Project Updates
 - Site Background Information
 - Wetland and Ecological Evaluation - Sitewide
 - Success Lake Remediation Update
 - Site Roads Remediation and Cap Area Management
 - Redevelopment Concept Plan
- Wrap Up/Questions

Webinar Instructions

- This meeting is being recorded.
- To reduce background noise, all attendees are muted
- To ask a question, type your question into the Q & A box
 - If your question deals with a covered topic, I will answer it during the presentation
 - If your question deals with anything else, I will answer it at the end of the meeting

Lake Success - Opening Thoughts

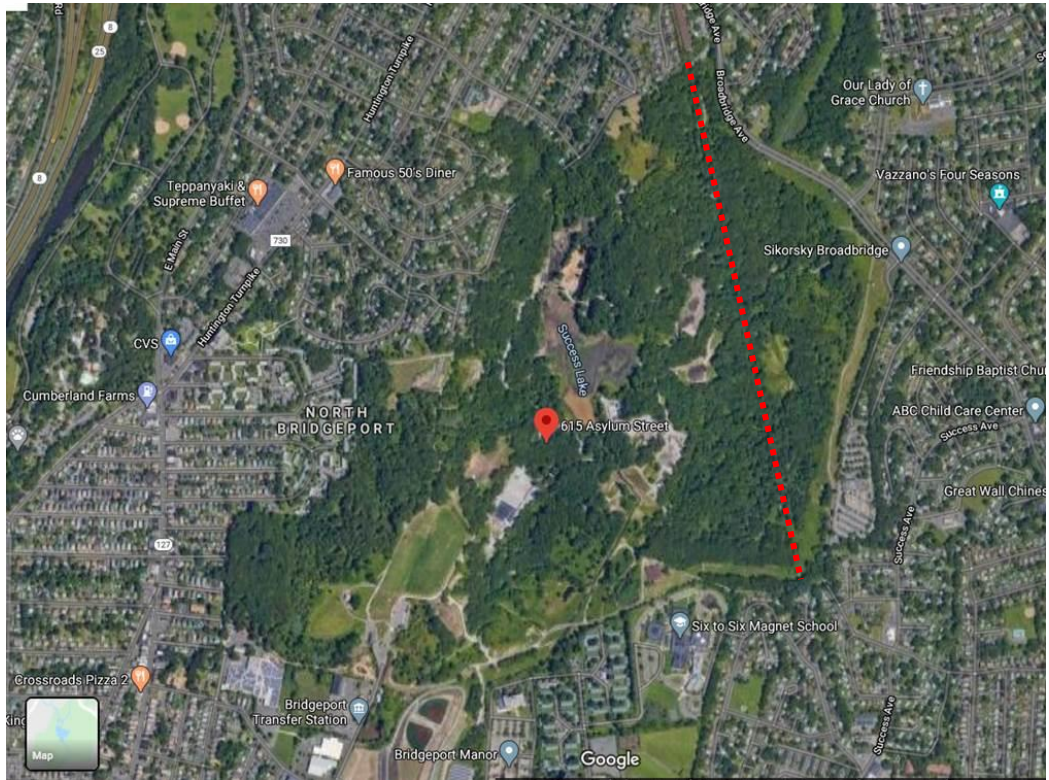
- We have continued with virtual meetings because we have experienced increased participation compared to in-person meetings
- We are proud to say that we have maintained steady progress on our cleanup program despite the extra challenges and burdens that everyone is experiencing related to global economic conditions
- We did not have a public site tour in 2022 because of the ongoing lake munitions work and site road excavation projects. We hope to schedule one in 2023 if/when conditions allow.

Definition of Terms

- AEC = Area of Environmental Concern, which is an area that is suspected of having impacts from historic site operations
- CAMU = Corrective Action Management Unit, a designated area on the site where we manage and cap our impacted soil
- ACO – Administrative Consent Order, the legal document that forms the basis for our cleanup obligations
- Sporting Goods Properties Inc. – a wholly-owned subsidiary of Corteva Agriscience
- Corteva – formed from the merger of the agricultural businesses of Dow and DuPont
- Stock ticker is CTVA, \$47B Market Capitalization

Lake Success Business Park (LSBP)

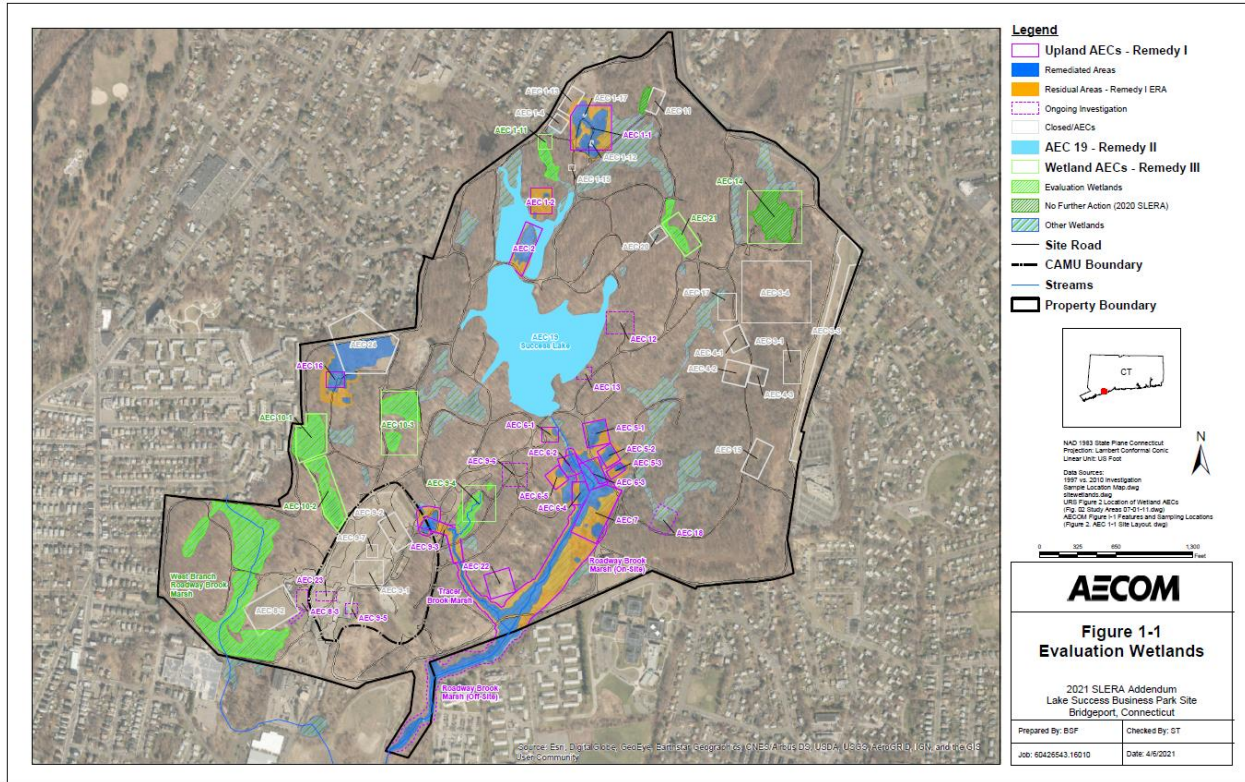
- Bridgeport/Stratford, CT
- 420 Acres
- Former Remington Arms manufacturing and testing site



LSBP Regulatory Program

- Work is governed by two consent orders with USEPA and CT DEEP
- Three primary remedy areas of focus:
 1. Upland soil – most site areas have been addressed, working on site interior roads
 2. Lake – remediation is completed, restoration work is being monitored and maintained
 3. Wetlands and Groundwater – sampling and investigation underway, with future remediation still to be determined

Wetland Study Areas (in green)

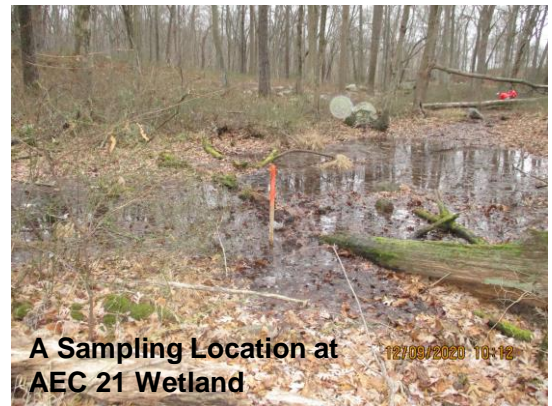
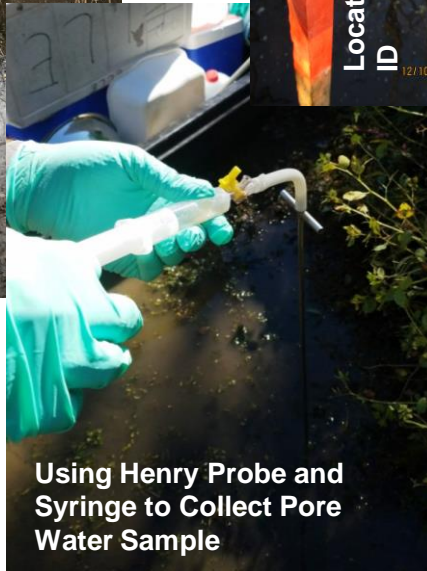
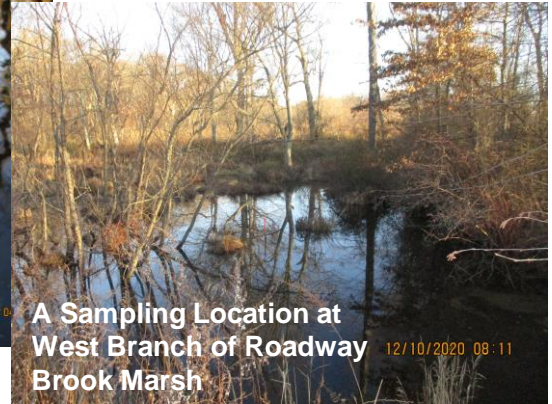


Path: S:\Projects\MIS\UPON\T\K3UCCESS\Projects\New Water Sampling Work Plan - 2021\Figure 1-1 - Evaluation Wetlands.mxd

Wetland Study Areas

- All wetland areas have been mapped, along with vernal pool areas
- Collected sediment and surface water samples at wetlands for evaluation and compared results to ecological benchmarks
- Collect pore water samples to determine if constituents are present in the water entrained in the sediment
- Evaluation could determine:
 1. No further action needed
 2. Additional study needed
 3. Remediation is needed

Pore Water Sampling in Wetlands



Wetlands – Next Steps

- Sporting Goods submitted the sampling results to EPA for review along with recommendations for additional sampling
- The plan's objective is to delineate any areas of concern from past industrial activities, and builds off previous sampling results
- We will complete the field sampling in December 2022, and the sampling schedule depends on water levels in the wetlands
- When we have the results, we will develop a plan to remediate and restore any needed areas and file for the required permits

Questions?

Success Lake Remediation



Lake Project Timeline - 2018 to 2022

- Site preparation and equipment mobilization – August 2018 to June 2019
- Sediment excavation from lake - 2019
- Munitions separation and management – From June 2019 to September 2022
- Restoration – Multiple phases, starting in Spring 2021 and completed in October 2022
- Maintenance of restored areas for the next 5 years
 - Normal attrition after first planting
 - Beaver damage in winter 2021-2022

Success Lake Remediation by the Numbers

- Over 92,000 cubic yards sediment dredged and processed
- Over 5,000 items of munitions recovered and managed safely
- 74,000 cubic yards sand and topsoil produced for on-site beneficial re-use (sustainable)
- 24,000 cy tailings processed and placed in CAMU (no trucks through neighborhoods)
- 6,400 ft shoreline restored
- Restoration plantings in 2021-2022
 - 25,000 aquatic plants
 - 1,500 trees and shrubs
 - 3,000 other plantings

Success Lake Remediation Over \$15 MM in Local Goods and Services

- Over 80,000 Hours of Craft Labor
- Professional Services
 - Engineering
 - Laboratory
- Equipment
 - Construction Equipment
 - Pumps and Generators
- Materials
 - Stone
 - Plantings
- Taxes and fees



*Morning Safety Briefing
with Social Distancing*

Sediment Processing and Munitions Separation

Screening plant for lake tailings



Installing armor to protect technicians



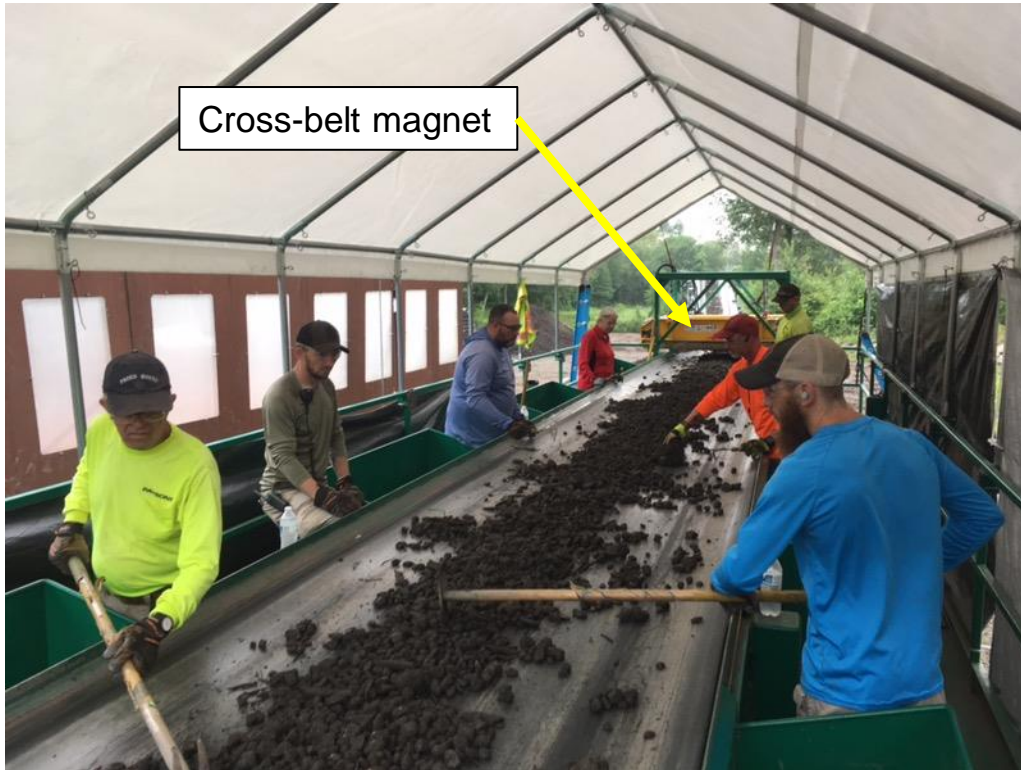
Picking Station manned by UXO technicians



Loading material into screening plant



Technicians removing munitions



Cross-belt magnet

Lake material after processing



Munitions Management

August 2018 Munitions Removal (near shoreline after lowering water level)



RECOVERED MUNITIONS IN MAGAZINE



Preparing munitions by attaching explosive charges



**Munitions
placed in
sand bed
and
connected
to
continuous
blasting
chord**



Blast beds covered by plywood prior to being covered with sand



Planned Detonation Video



Detonated Munitions



Lake - Shoreline Restoration

COMPLETED LAKE HABITAT BENCH



Littoral shelf plantings (plugs)



Installing plugs into gentle slope



Restored areas showing new growth



Lake - Upland Grass Restoration

Measuring grass seed before mixing



Hydroseeding operation for upland areas



Current growth



Lake - Forest Restoration

Staging woody shrubs and trees



Restoring former lake access ramp



Plantings after installation



New tree plantings protected by deer fence



Site Roads Remediation

This work started in late October 2022 and will continue in 2023-24.

Site Roads Excavation



Site Roads Excavation



Soil placement in future cap area



Site Roads Restoration



Site Road – fully restored



Cap Area Management

Cap Area Management

Area that will safely contain soil from other areas on site

- Roadway Brook
- Some lake material
- Some of the interior site roads
- Several remaining upland areas with soil containing lead exceedances

Sustainable approach that is protective while minimizing truck traffic and greenhouse gas generation

Spreading out soil in future cap area



Stabilizing soil so that it meets EPA and CT DEEP requirements



Placing soil in shallow lifts and compacting in place



2023 Planned Activities

2023 Activities

Continue groundwater monitoring and wetland investigations

Continue maintenance of restored areas

- Roadway Brook
- Lake

Continue excavation and restoration of interior site roads

Complete design for future cap installation

Site Redevelopment Options

Important to Remember

- We are at the concept planning stage, with about 2 to 3 years of remediation remaining still to complete
- Remediation schedule is subject to change based on a number of factors, including future sampling results and agency approvals
- Public input will be part of the redevelopment process

Redevelopment Concepts

- Significant Conservation Areas and Open Space
- Preserve sensitive ecological habitats
- The site has limited road access and has a long industrial history
- Concentrate redevelopment at previously-disturbed areas
- Recognize the effect of site constraints on redevelopment

Site Setting



70% +/- Preserved
30% +/- Developed

Active work areas



Disturbed Areas

Watercourses and Wetlands



Forestland and Rock Outcrops



Types of Uses Considered for Redevelopment

- Office/Research and Development
- Hotel and Conference Center
- Green and Low Impact Manufacturing
- Skilled Trades
- Active Recreation
- Nature Center



Pictures are not from site

Conservation Area

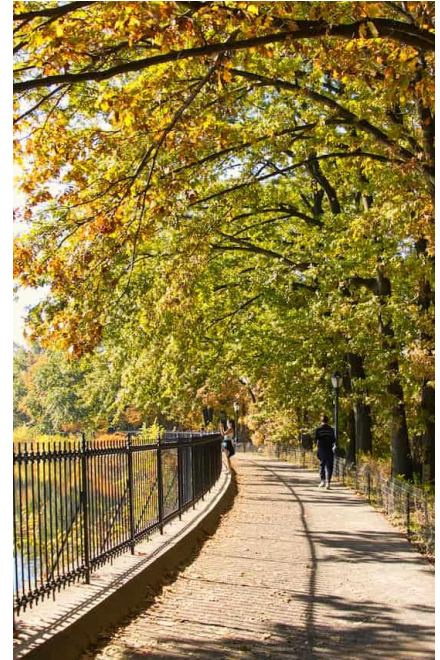
70% +/- of property would be open space

Approximately 300 Acres

Possible walking trails

Possible educational learning areas with signage

Controlled Access Around Lake



Pictures are not from site

Caring for the future of the site

Protecting a valuable but extensive forested area, requires significant financial resources to:

- Support staffing and programming
- Provide 24-hour security (we currently spend about \$200K per year)
- Repairs, maintenance and upkeep

Unlike most urban parks, the site is isolated, therefore some development is critical and necessary to provide eyes on the site to maintain and protect the natural features and habitat

We will work with organizations like land trusts and national/regional trustee groups to identify the best long-term stewardship approach



Pictures are not from site

Questions?