

Henrietta Bridge Farm Brownfields Cleanup

A Story of Partnership



Neighborhood Challenges



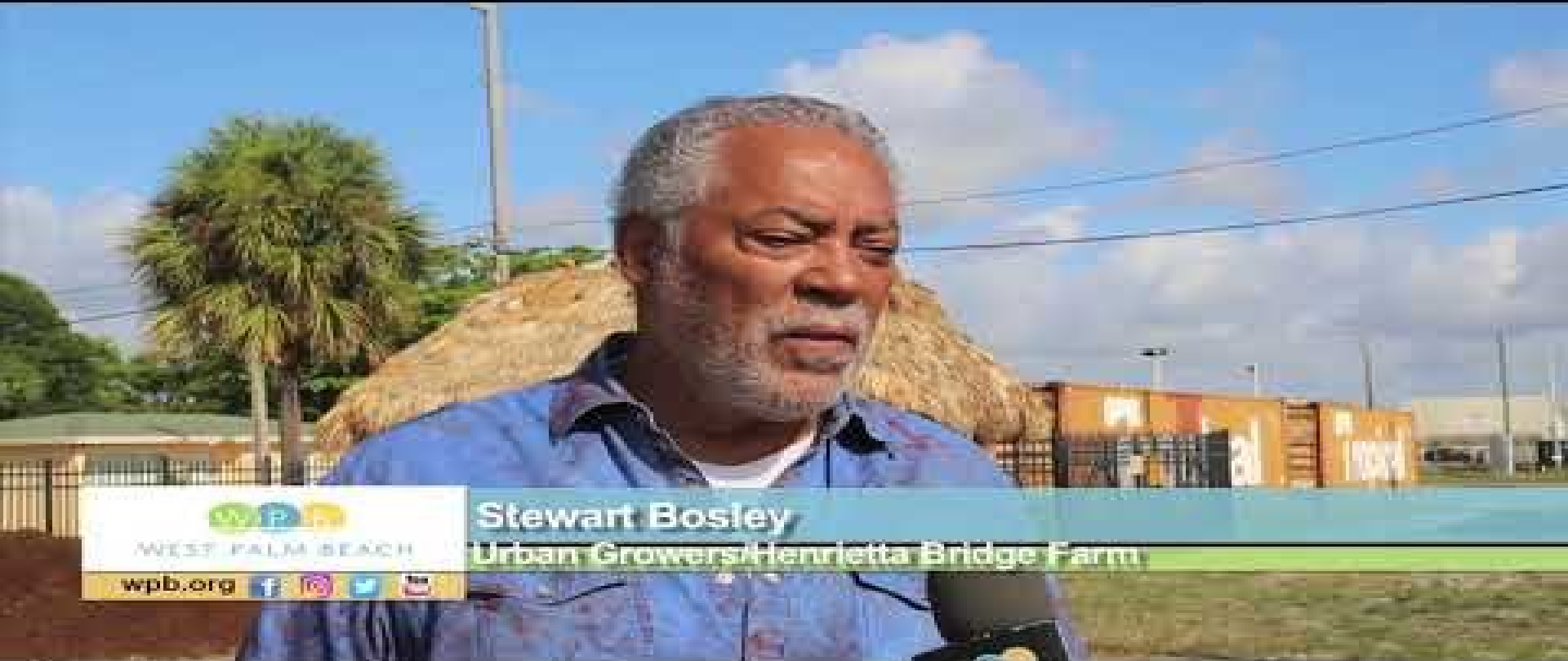
Neighborhood Outreach



Turning a Brownfield into an Urban Farm



WPB Launches Community 'Food Forest'



Stewart Bosley
Urban Growers/Henrietta Bridge Farm

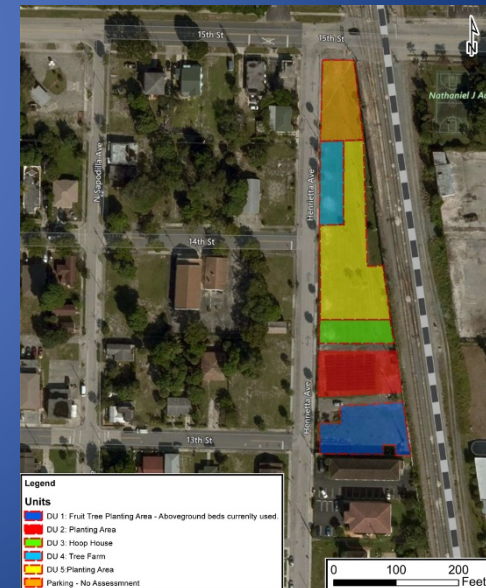
Benefits of Partnerships

Treasure Coast Regional Planning Council (TCRPC) partnered with Palm Beach County

- EPA Assessment Coalition Grant
 - Phase I & II ESA
 - Draft ABCA

West Palm Beach partnered with Palm Beach County

- Grant application
 - Experience with EPA grants & cleanup projects
- Optimizing cleanup funds for an Urban Farm
 - Project approach – Decision units



Benefits of Partnerships

EPA Assessment Coalition Funds

- TCRPC partnered with PBC
 - Additional site assessment
 - Update and finalize ABCA
 - Preparation of Source Removal Plan

EPA Cleanup Grant funds

- Site remediation
- Programmatic costs



Benefits of Partnerships

Palm Beach County contacted the **Solid Waste Authority**

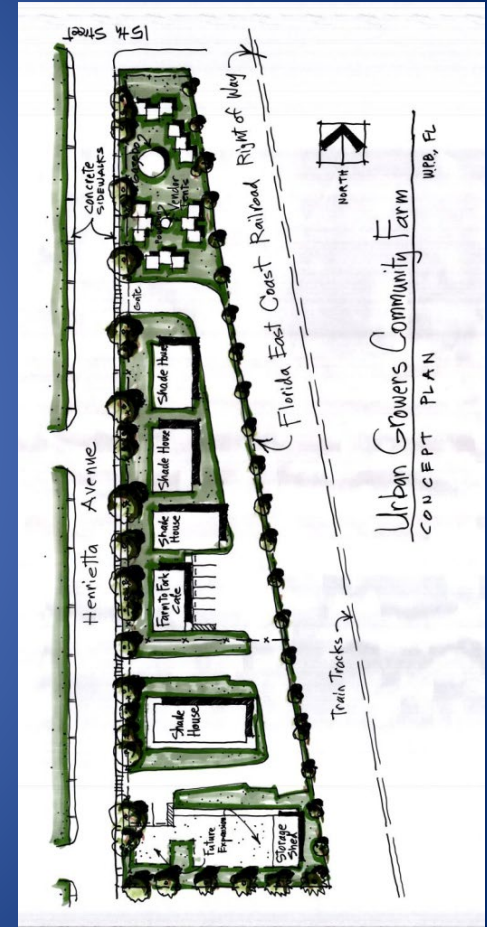
- Conveyed the importance of the project
 - Coleman Park neighborhood
- In-kind donation
 - Contaminated soil disposal



Background

Phase I ESA

- Phase I ESA funded by TRCRPC Grant in 2014.
- Historical activities occurred in the vicinity of the Site since the early 1900s. Several of those former land uses included activities that used, stored, or disposed of petroleum products or chemicals.
- While no records of contamination were identified, these operations occurred prior to the enactment and enforcement of current environmental regulations.
- City elected to conduct Phase II ESA as a conservative approach based on the proposed use of the site.



Background

Phase II ESA

- Phase II ESA funded by TRCRPC Grant in 2014.
- Incremental Sampling Methodology (ISM) soil sampling and groundwater sampling.
- ISM provides a “snapshot” of the Site. Full site treated as a Decision Unit.
- Analytical results revealed the presence of Benzo(a)Pyrene compounds (BaPs) above state cleanup target levels (CTLs) in surface soils.
- No obvious indication of discharges, spills or environmental incidents were identified during the Phase I ESA and Phase II ESA that would explain the presence of BaPs in the soil.
- BaPs impacts concluded to be anthropogenic.
- No groundwater impacts identified.



EPA Cleanup Grant - 2017

- EPA Cleanup Grant awarded to City of West Palm Beach partnered with Palm Beach County.
- \$200K award to achieve cleanup and closure of the Site.
- Assessment and Cleanup to be conducted under FDEP Chapter 62-780.
- Work completed in accordance with EPA grant requirements.

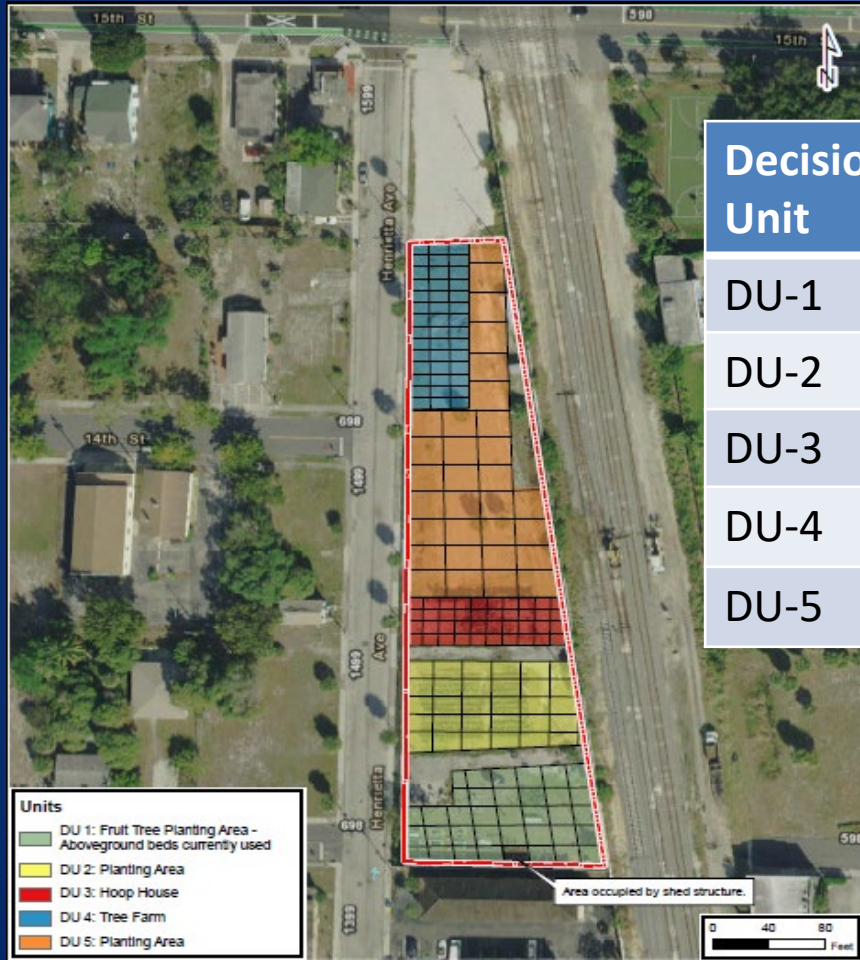


FDEP 62-780 Site Assessment Approach

- Use data collected during Phase II to guide assessment.
- Incremental Sampling Methodology
 - Known site use/history. Similar current and historic land use across the Site.
 - No point-source for the contaminant of concern has been identified.
 - Distribution of the contamination expected to be relatively uniform.
 - Limited variability of the soil characteristics across the Site.
 - Ability to define decision units based on the proposed use of the different areas.
- Alternative SCTL
 - Memorandum published by UF dated August 1, 2017 concluded that CTL values of 1 mg/Kg for residential scenario and 3.1 mg/Kg for commercial/industrial scenario reflect the most current toxicity values and assumptions.
- Assessment limited to site boundaries.
- The sampling depth extended down to 24 inches.
- Sampling Plan document dated July 20, 2017.



FDEP 62-780 Site Assessment Approach



Decision Unit	0-6 inches	6-24 inches
DU-1	BaP above Res. ACTL	BaP above Res. ACTL
DU-2	BaP above Res. ACTL	No impacts
DU-3	BaP above Res. ACTL	BaP above Res. ACTL
DU-4	BaP above Res. ACTL	No Impacts
DU-5	BaP above Res. ACTL	No Impacts

Site Assessment Report (SAR) dated November 13, 2018.

Clean up Goals

- ✓ Eliminate exposure to contaminants
- ✓ Maximize removal of impacted soil known to extend to a minimum of 2-ft within two DUs.
- ✓ Dispose of impacted soil at a landfill
- ✓ Replace with clean soil in select areas
- ✓ Work completed in accordance with EPA and state guidelines
- ✓ An Analysis of Brownfields Cleanup Alternatives (ABCA) was prepared as an initial step to cleanup planning based on the information contained in the SAR and the proposed activities at the Site.



FDEP 62-780 Clean-up



- The City and the County leveraged additional funds in order to complete the excavation of the delineated soil impacts.
- A total of 2,173.63 tons of soil were removed from the Site and disposed of at the Solid Waste Authority (SWA) Class I Landfill.
- Site was backfilled to uniform grade.
- To complete the vertical delineation in DU-1 and DU-4 excavated to 24-inches, confirmation bottom samples were collected and analyzed using ISM. Analytical results revealed the presence of BaPs below the ACTL.

Source Removal Report and No Further Action Proposal (SRR/NFAP) dated May 6, 2019

FDEP 62-780 Final Closure

- Review and technical guidance provided by FDEP Office of District and Business Support - Division of Waste Management
- Assessment and Source Removal deemed complete by FDEP.
- Based on the implementation of the ACTLs, the Site will need to be recorded into the Institutional Control Registry. (RMO III)
- This closure will allow the unrestricted use of the Site and the realization of the farm to its full potential





Prior to excavation-putting in perimeter controls



Looking North Before Excavation



Excavation and Stockpiling



Excavated Soil Cover Until Disposal



Truck Preparing to Leave the Site



Backfilling with Clean Soil



Questions/Comments



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