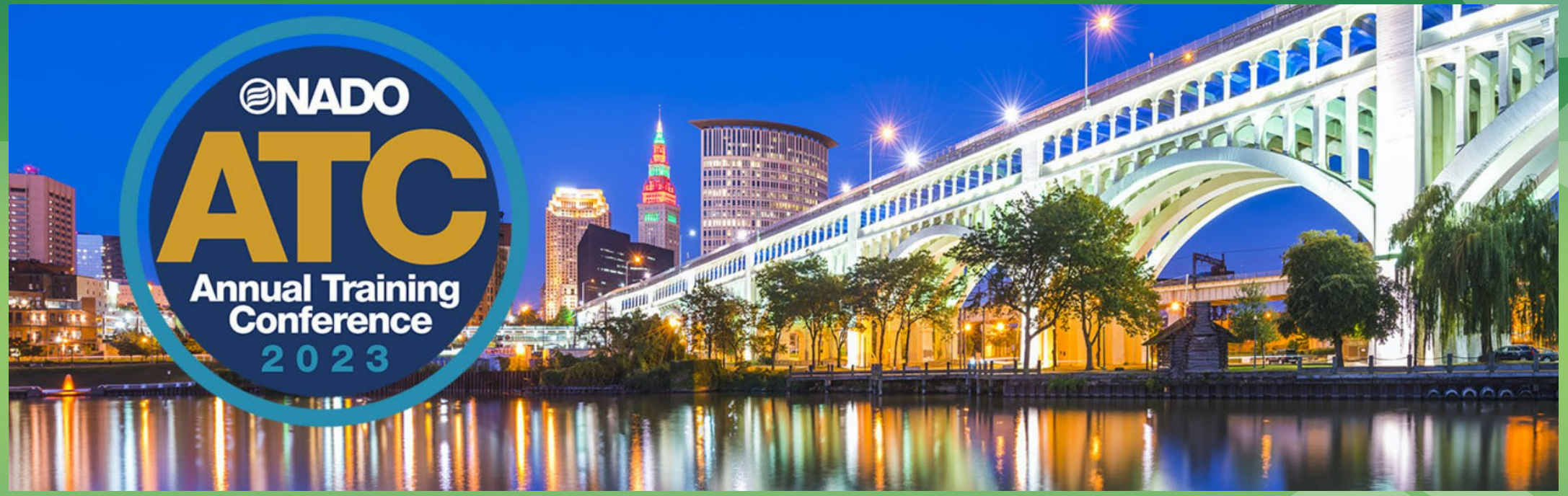
TAB
Technical Assistance to Brownfields

KANSAS STATE UNIVERSITY



Tackling Community Revitalization through Brownfields Redevelopment

ksutab.org

Speakers

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TODAY'S AGENDA

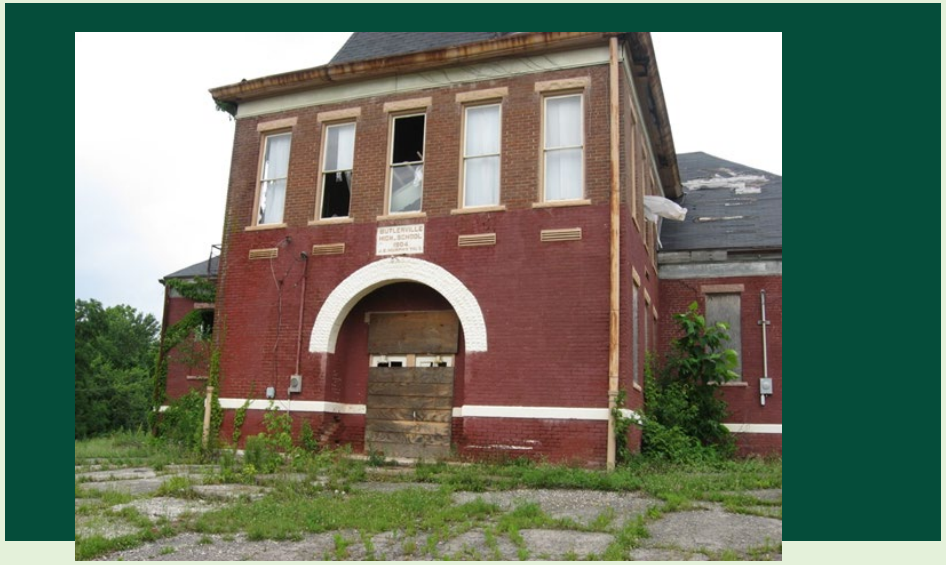
- **Brownfields 101 Overview and TAB Services**
  Beth Grigsby, KSU TAB Regional Manager
- **Brightfields 101: How "Brightfields" Can Reuse Brownfields and Reenergize Your Community**
  Matt Popkin, RMI
- **Coal Plant Redevelopment**
  Bill Schleizer, Delta Institute
- **Brownfields Tour Overview**
  Amy Yersavich, KSU TAB POC for Ohio

Brownfields 101, TAB Services and Regional Approaches

WHAT IS BROWNFIELD?

A brownfield is a property that is difficult to develop because it is contaminated or believed to be contaminated

A site with low to moderate levels of contamination
Including: hazardous, petroleum, asbestos, lead paint, meth- lab contaminants, and mine-scarred lands



LEGAL DEFINITION OF A BROWNFIELD "...real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant."*

*(Public Law 107-118 (H.R. 2869) - "Small Business Liability Relief and Brownfields Revitalization Act", signed into law January 11, 2002).

Brownfields-Many Property Types

- Churches, Schools
- Gas stations
- Shopping Malls
- Machine shops
- Hospitals, Medical Facilities
- Main Street Buildings
- Apartment Buildings
- Dry cleaners
- Printing shops
- Paint shops
- Auto repair shops
- Shooting ranges
- Marinas
- Agricultural suppliers
- Landfills
- Asphalt plants
- Former coal yards
- Manufactured gas plants
- Scrap yards
- Lumber yards
- Manufacturing facilities
- Tool and die shops
- Oil/fuel terminals
- Mining Operations
- Railyards


Hotel Marion


MARSH
the Marketplace
Image courtesy of Google


HUFF


GRAVE YARD
AUTO SALES
STOP


MARIA


PARTS •
ACCESSORIES

BROWNFIELDS: PERCEPTION OF CONTAMINATION CREATES A “STIGMA”

Often it is the PERCEPTION of contamination that keeps properties from being redeveloped, not the actual presence of contamination.

Once the “stigma” is gone, properties can be returned to productive use.

WHY REDEVELOP BROWNFIELDS?

- Preserve community character and history
- Mitigate blight
- Desirable locations that encourage a mix of land uses to provide services that may be lacking
- Increase local tax base and facilitate job growth
- Mitigate public health and safety concerns
- Promote infill and vacant property reclamation
- Reduce the need to develop “greenfields”

CERCLA LIABILITY

BUYER BEWARE!

- Under CERCLA, persons may be held strictly liable for **cleaning up hazardous substances at properties that they either currently own or operate, or owned or operated in the past.**
- Strict liability under CERCLA means that liability for environmental contamination may be assigned based solely on property ownership.

DEVELOPERS, FUTURE OWNERS: WEIGHING BENEFITS VERSUS RISKS

OPPORTUNITIES

- PRIME LOCATION
- REDUCED PRICE
- EXISTING INFRASTRUCTURE

RISKS

- LIABILITY
- CLEANUP COSTS
- CLEANUP TIME
- FINANCING
- WEAK DEMAND

BROWNFIELDS LAWS AND INCENTIVES:
ADDRESS ENVIRONMENTAL ISSUES FOR PROPERTY TRANSACTIONS AND EXPANSIONS

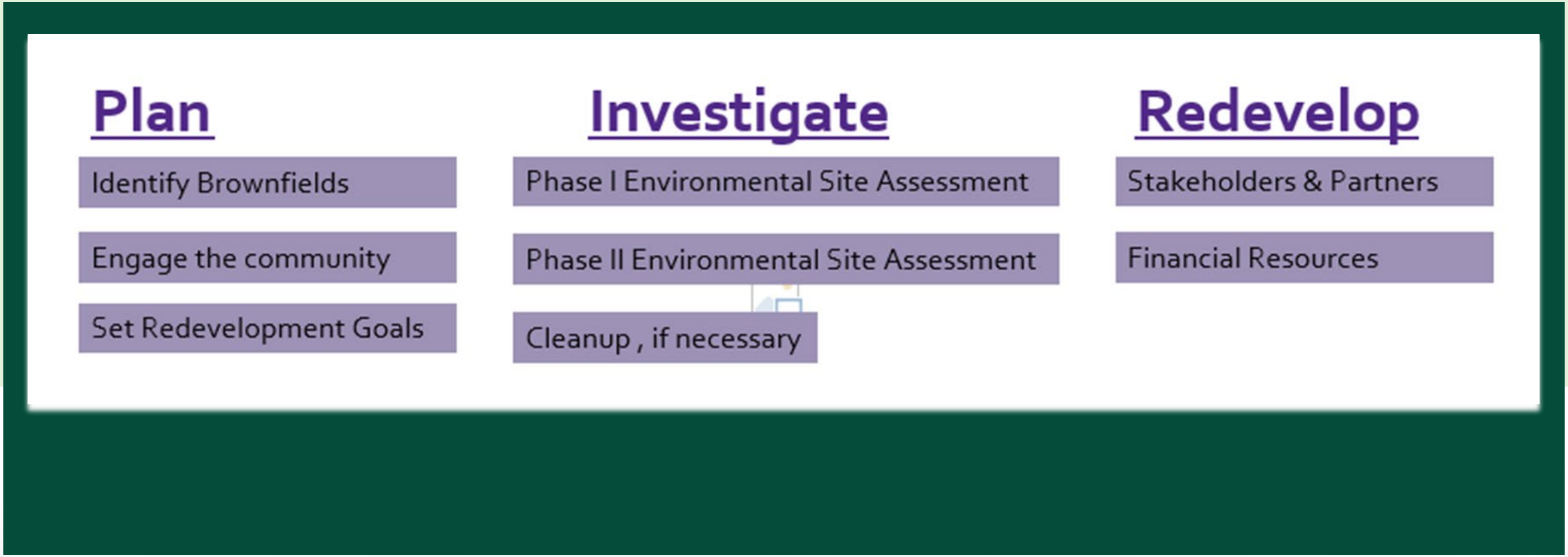
Liability protection

- For prospective purchaser, contiguous landowners, and others
- Perform due diligence (environmental assessments) before purchase and cooperate in addressing environmental issues

Funding for eligible sites and entities include:

- Assessment, cleanup
- Redevelopment (primarily non-EPA sources)

THE BROWNFIELDS REDEVELOPMENT PROCESS



WHO IDENTIFIES PROPERTIES AS BROWNFIELDS?

EPA?

The State Brownfields Program?

Brownfields Identification begins in your community!

IDENTIFY YOUR PARTNERS AND TEAM

Local/State leadership – Funds to tap into:
DEED, MPCA, BIL, CDBG,EDA funds, Housing Tax Credits, Historic Preservation Tax Credits, Tax Increment Financing

Public Works, Transportation, Public Safety, Parks, Natural Resources

Private/Local/County Foundations

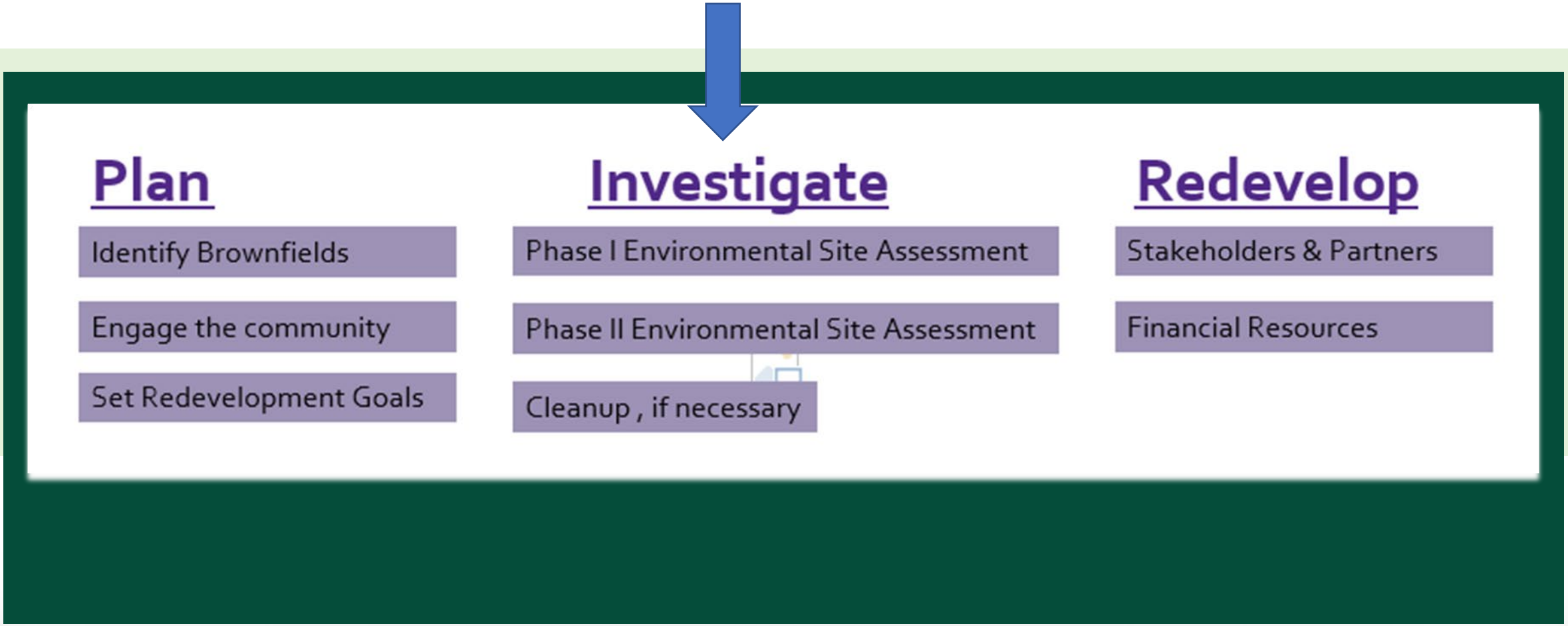
Regional Planning Commissions

Economic Development interests

Health Department

State and EPA Brownfields Resources

THE BROWNFIELDS REDEVELOPMENT PROCESS



ALL APPROPRIATE INQUIRY: YOUR LIABILITY PROTECTION

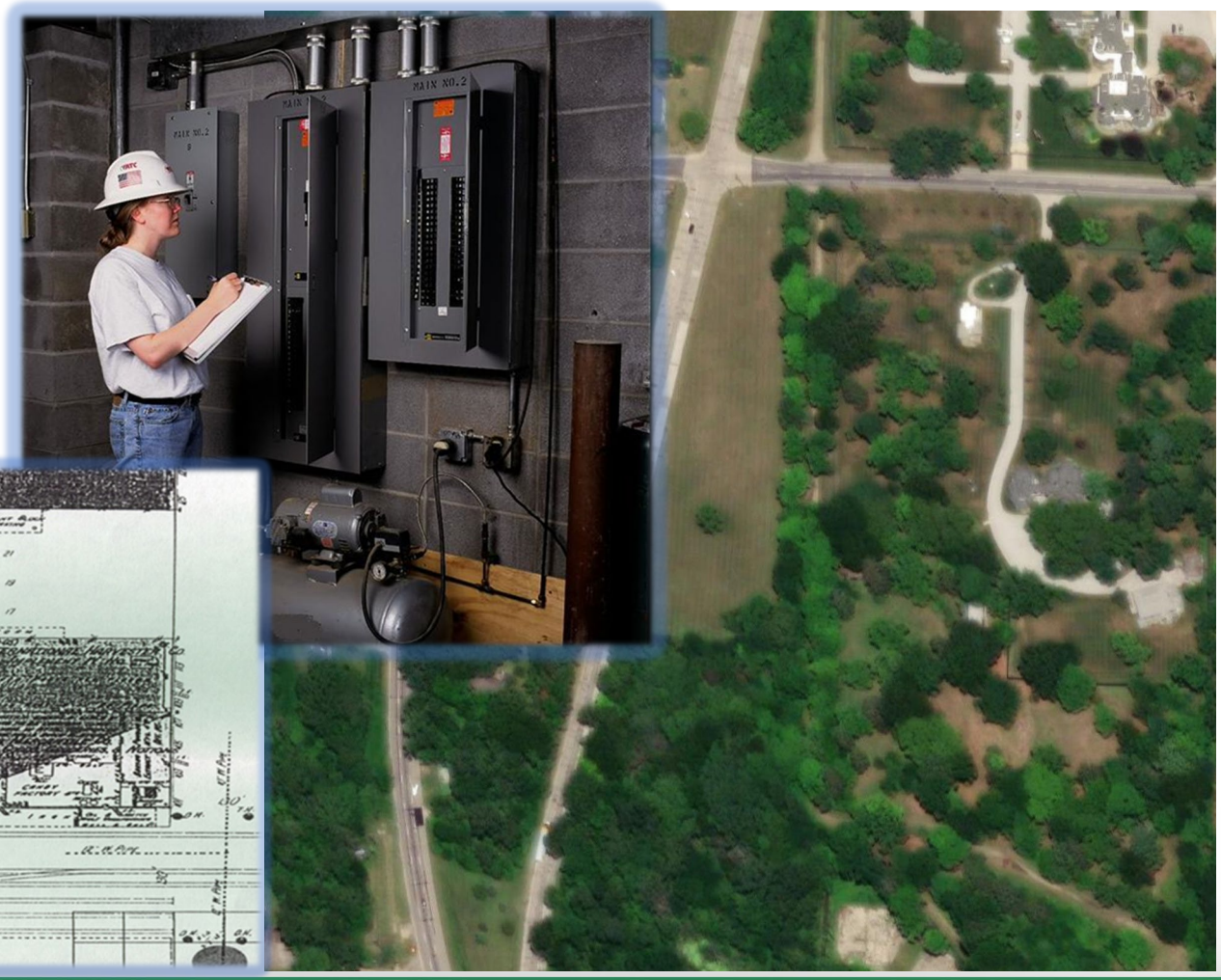
EPA Liability protection

- For prospective purchaser, contiguous landowners, and others
- Perform due diligence (environmental assessments) before purchase and cooperate in addressing environmental issues

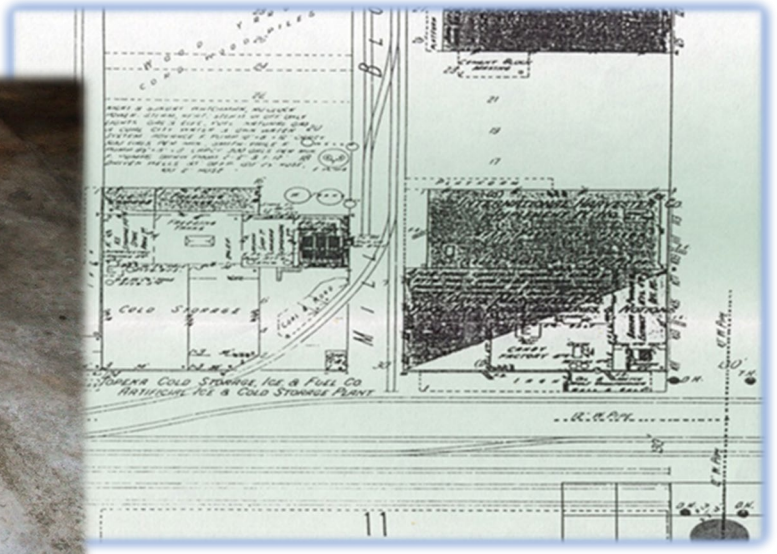
- AAI is the Process Of Evaluating a Property's Environmental Conditions and Assessing the Likelihood of any Contamination

PHASE I ENVIRONMENTAL SITE ASSESSMENT

- Review of federal, state, local records
- Visual Inspection of site
- Interviews with current/past owners
- Roadmap for Future Investigations:
- Identifies Recognized Environmental Conditions
- Non-Intrusive
- No sampling or tests



PHASE II ASSESSMENTS



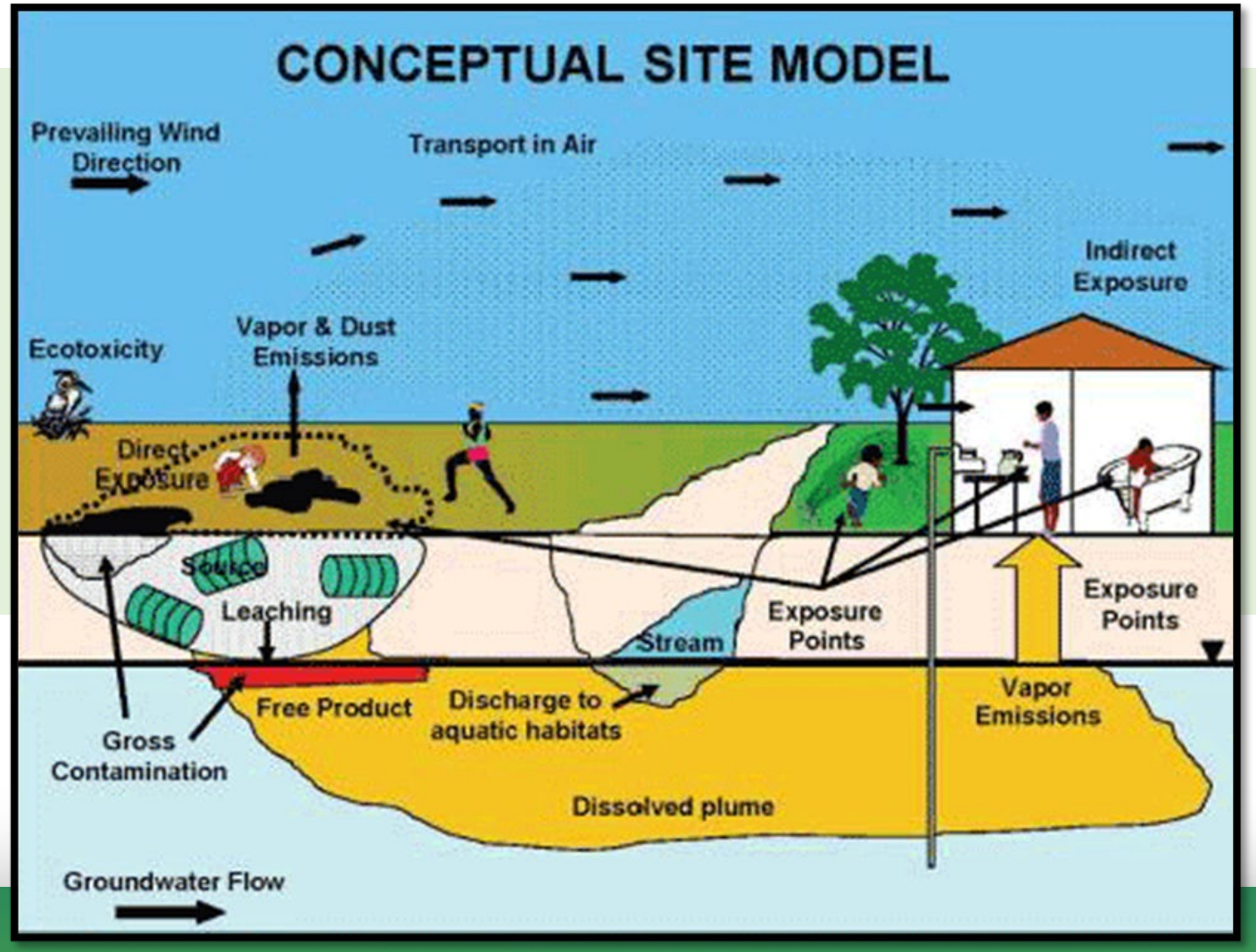
Phase II ESA

- What Are Your Recognized Environmental Conditions (REC)s?
- Presence/Absence
- What ‘s There?
- If It’s There—Where?

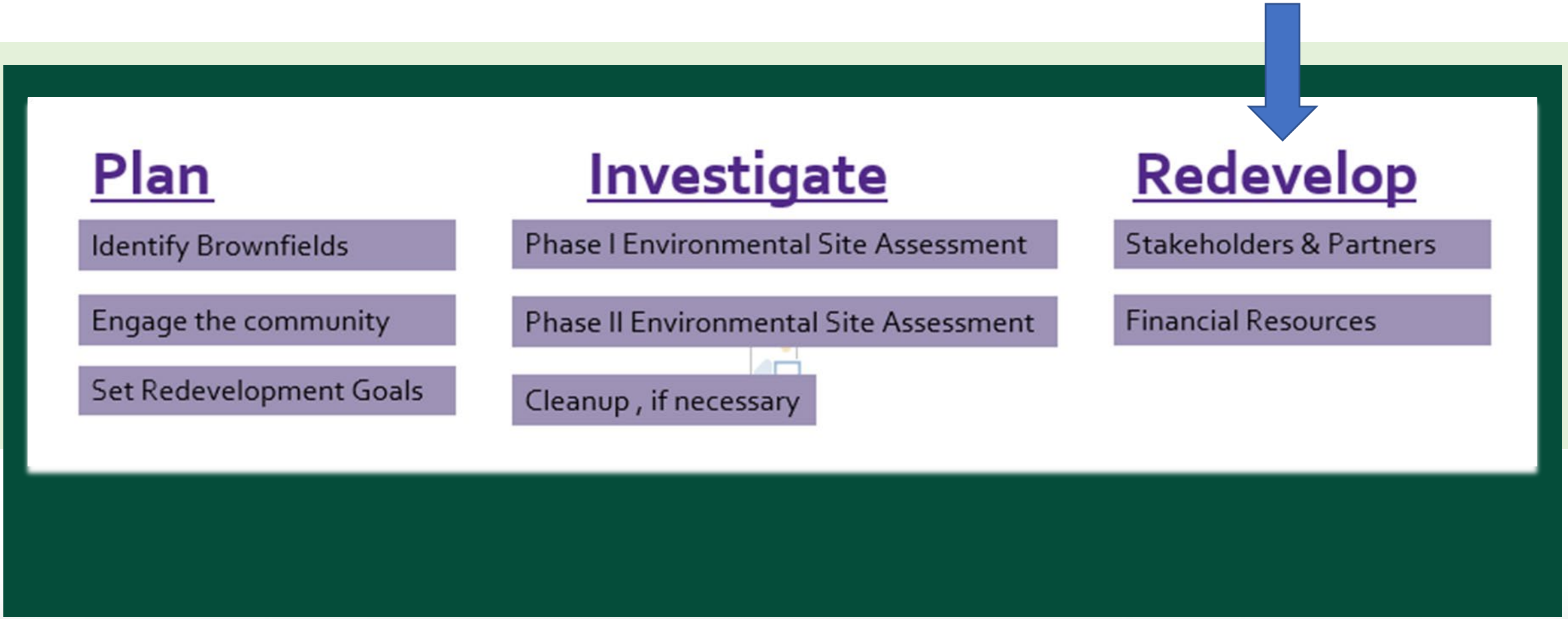
Phase II Characterization

- If It’s There-How Much?
- Extent/Delineation/ Quantification
- Feasibility Studies
- Cleanup Plan

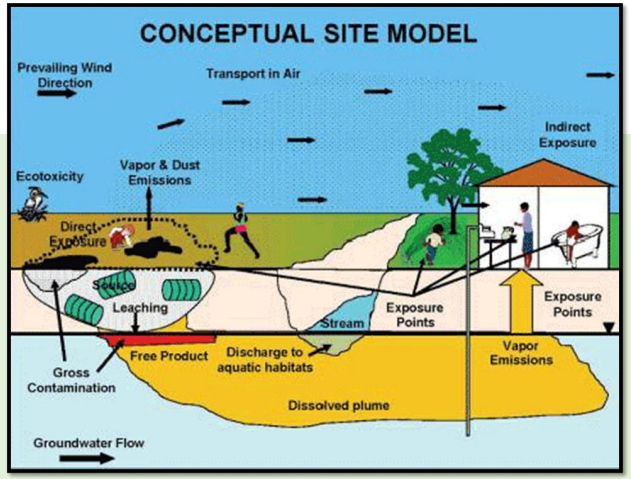
CONCEPTUAL SITE MODEL



THE BROWNFIELDS REDEVELOPMENT PROCESS



NEXT STEPS: CLEANUP OR REDEVELOPMENT



Is cleanup required?

- Understanding of contaminant pathways
- What is the future land use?
- Waste in place vs clean closure
  - Continuing obligations necessary
  - Long-term monitoring and management
  - Implement land-use restrictions; institutional/environmental use controls; restrictive covenants or other restrictions as applicable
- Work with cleanup authorities (***typically the State***, not the EPA-except with tribal cleanups)
  - What is required to receive a Cleanup Certificate or No Further Action (NFA)?

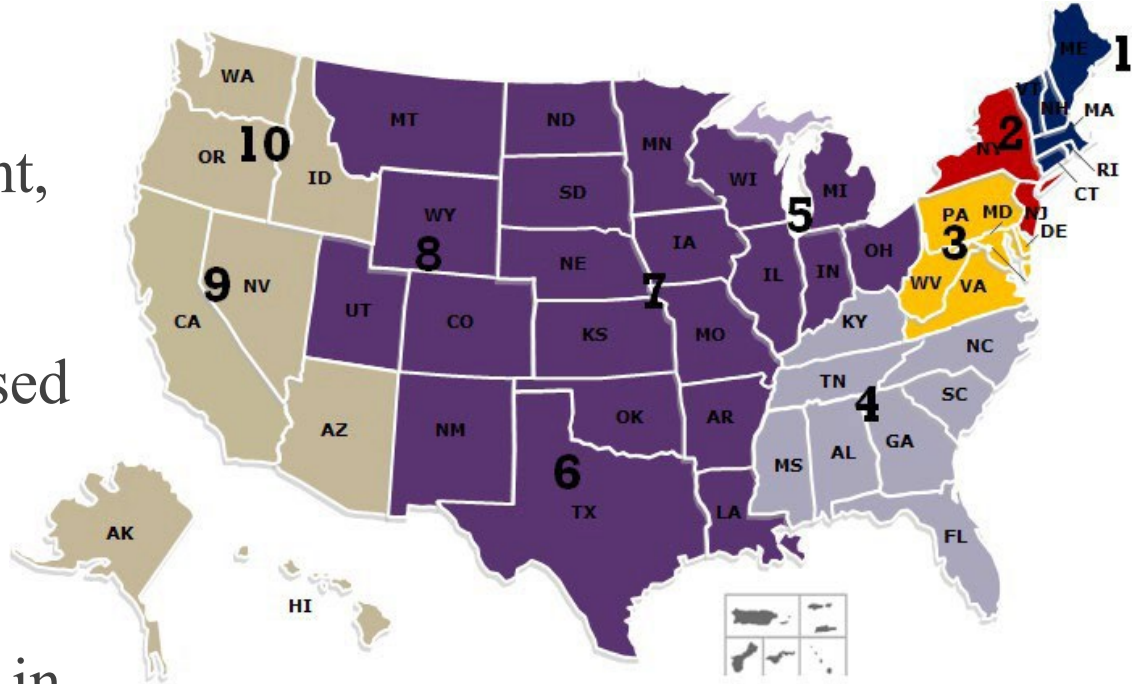
KSU Technical Assistance to Brownfields (TAB)

Direct technical assistance on full range of brownfields topics -- community involvement, health impacts, finance, liability, redevelopment, and grant writing

Assistance includes: workshops and webinars, one -on-one assistance, case studies, web -based tools

Services provided are FREEand tailored to specific needs

Kansas State University assists communities in EPA Regions 5, 6, 7 & 8



KSU TAB Services Supports

- Help identifying, developing inventory and prioritization of brownfields: *Develop Story Maps*
- Strategic planning and redevelopment visioning: *Engaging the Community, Setting Redevelopment Goals, Identification of Resources, Vision Renderings*
- Economic feasibility and sustainability analysis: *Market studies, Infrastructure evaluation, Economic Impact Analysis, Clean Energy Technical Assistance*
- Educational workshops: *Retrofitted to your community leaders, residents, stakeholders, developers, real estate interests*
- Community outreach and input: *Develop approaches towards community involvement, assist with outreach materials, facilitate education methods and approaches, assist with identification of stakeholders/partners/financial resources*

KSU TAB Services Supports

- Help identifying funding sources: *Resource Roadmaps, EPA Resources, EPA Brownfields Grants, IBP Resources*
- Review of grant applications: *Assist with grant strategies and grant reviews*
- Review of plans and technical reports: *Environmental Assessment reports, laboratory data, assistance with RFPQs, EPA Workplans, EPA Procurement Guidelines*
- Fact sheets and information: *Assist Communities with development of relaying brownfields information to various audiences on various topics*
- E-tools: *TAB EZ grantwriting tool, PEER: Platform for Exploring Environmental Records, and*

BiT Brownfield Inventory Tool

KSU TAB and Partners Resources

Brownfield Resource Roundtables

Redevelopment Strategies

Site Design

Clean Energy Strategy

Public/Private Partnerships

Economic Impact Analysis

Market Studies

Real Estate Finance

Tribal Brownfields funding Solid and Hazardous Waste Infrastructure and Transportation

Community Engagement

Area Wide Planning

Public Housing

Historic Preservation

EJ Outreach and Involvement

Indigenous Planning

Sustainability

Resilience

Community Gardens

Healthfields

Database Management

Why Rural and Urban Communities Benefit from Regional Brownfields Programs…Program Support

- Regional Planning Councils have the ability to grow internal expertise, maintain data, and keep projects on track for communities with little or no capacity
- Rural communities identify their targeted areas and remain engaged with their residents and developers while the planning council ensures funding and technical assistance

RMI
ENERGY. TRANSFORMED.

How "Brightfields" Can Reuse Brownfields and Reenergize Your Community"

November 2023

Rocky Mountain Institute (RMI) is an independent, non-partisan, nonprofit organization dedicated to accelerating a prosperous, clean energy future for all

What We Do:

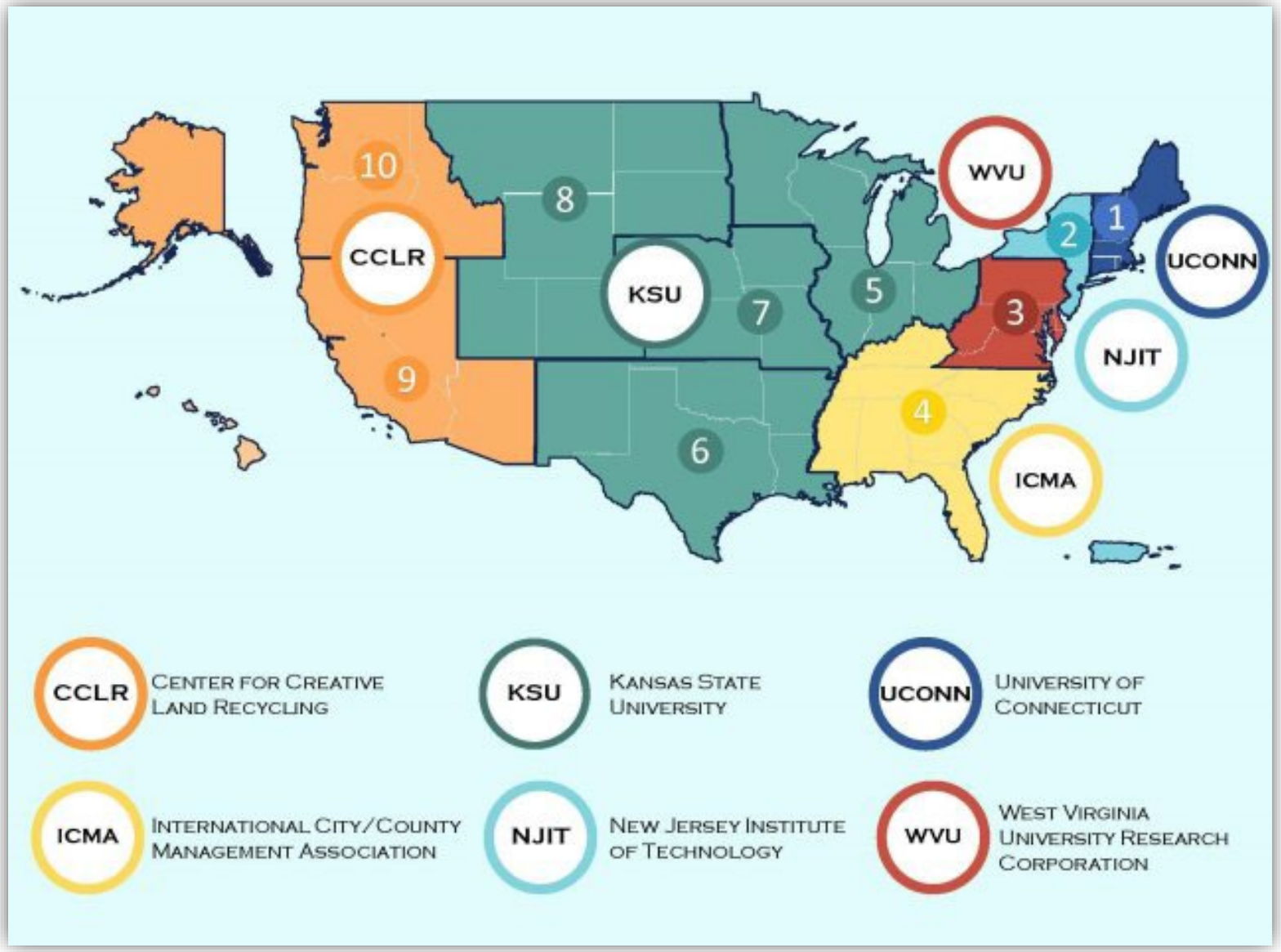
- *Founded in 1982, RMI combines research, whole-systems thinking, and unconventional partnerships to support strategies that makes sense for communities to advance sustainable energy systems*

RMI – Energy. Transformed.

EPA's Technical Assistance to Brownfields program can help communities address brownfields challenges

TAB Guidance & Services:

- Inclusive community visioning
- Acquiring, assessing, cleaning up and redeveloping brownfield properties;
- Health impacts of brownfield sites
- How to comply with voluntary cleanup requirements
- Funding and financing strategies, including EPA brownfields grant application support
- And more…



Source: US EPA

RMI is partnering with KSU TAB to help communities across America advance transformational brightfield projects.

Our goals are…

To ***educate communities and site owners*** about brownfields reuse options that include clean energy

To ***provide pre-development site evaluation and analysis*** to communities considering "brightfields"

To ***provide other technical assistance and tools*** to help with reuse planning, funding, financing, and clean energy procurement

Today's Objectives

1

What?

Establish baseline knowledge about what brightfields are and the potential opportunity that may exist

2

Why?

Understand the potential opportunity that exists with brightfields

3

How?

Outline how your community can start to move forward with a project

“Brightfields” repurpose previously disturbed, often-contaminated land with renewables to support a more local and equitable energy transition

Brownfield:

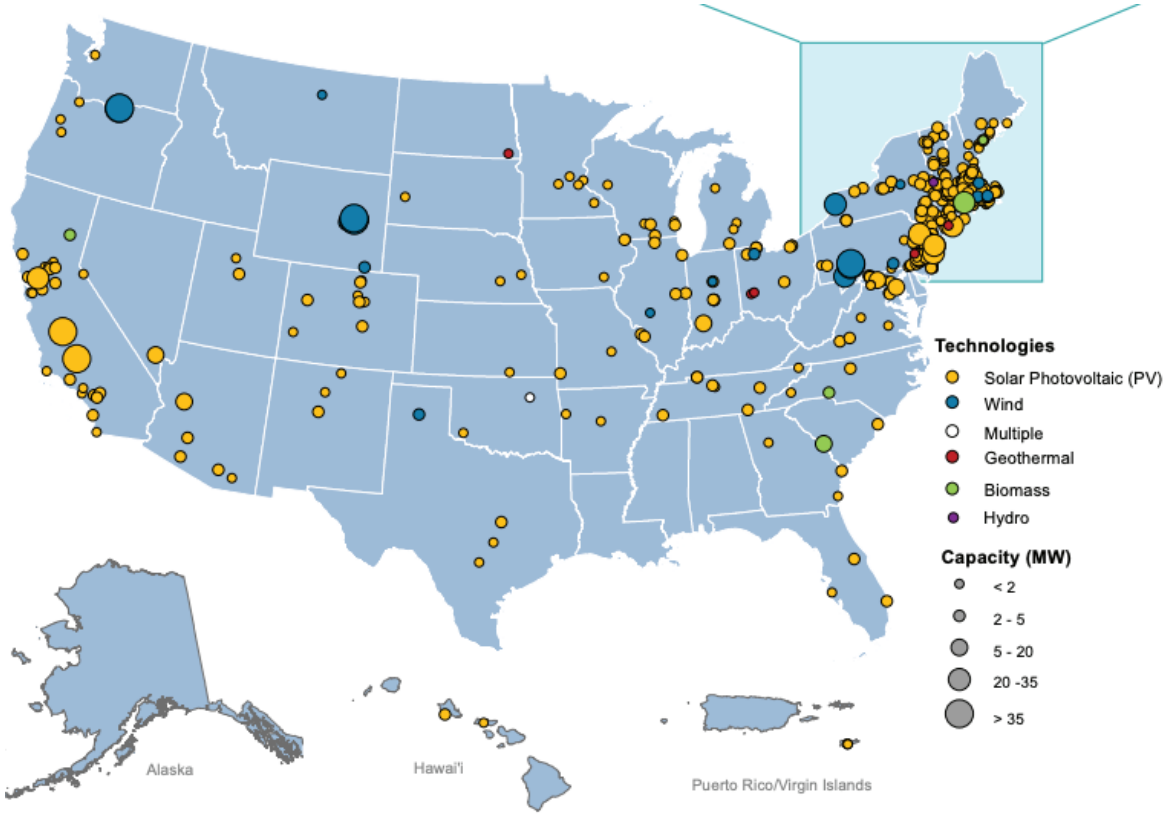
- A property where the expansion, redevelopment, or reuse may be complicated by the *presence or potential presence of a hazardous substance, pollutant, or contaminant*
- Common brownfields include former industrial sites, inactive landfills/dumps, old factories, abandoned mines, and closed power plants

Brightfield:

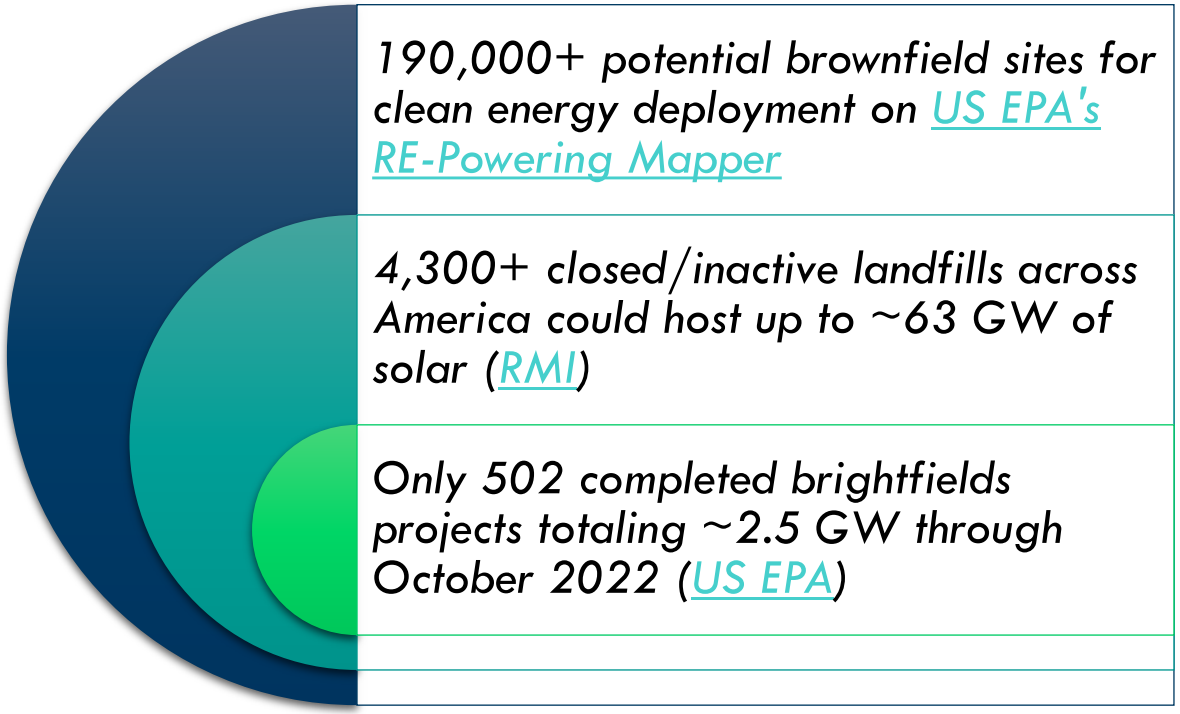
- A type of redevelopment where clean energy is built on a former brownfield or Superfund site.

Brightfields offer a large (yet largely untapped) potential market – especially with new federal incentives

Brightfields Deployed Across US by Technology



Source: US EPA Re-Powering America's Land Tracking Matrix 2022

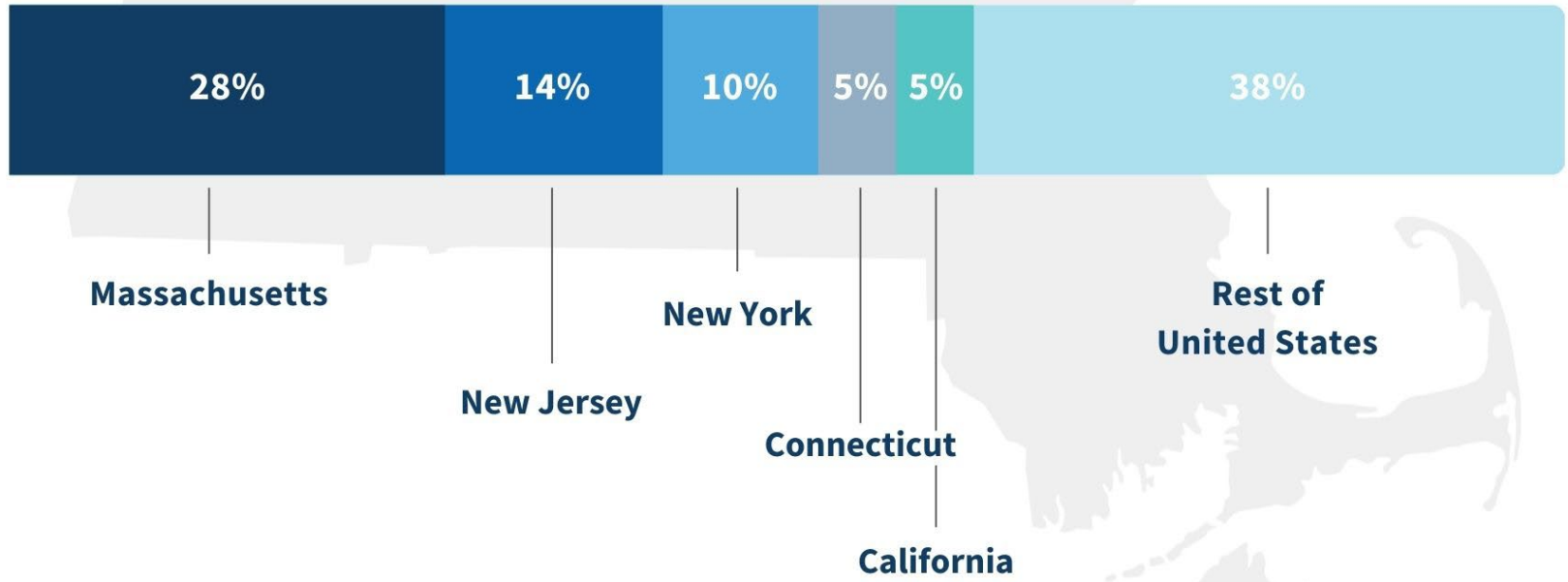


Just 1% of potential brightfields sites could support ~6 GW of clean energy and 60,000+ jobs.

Brightfields come in all shapes and sizes

Brightfields are growing across the country, yet 62% of the progress has been in just 5 states

Geographic Concentration of Installed Brightfield Projects



Source: EPA's RE-Powering America's Lands Initiative: Project Tracking Matrix, October 2021

Brightfields are increasingly becoming part of the clean energy economy across America

Pittsburgh, PA

- 2 MW of solar installed on old steel mill in Hazelwood Green

Weirton, WV

- 30 MW of solar planned for ~200 acres of Brown's Island

Martin County, KY

- 200 MW of solar planned on shuttered Martiki mine land

Franklin County, OH

- 50 MW of solar planned on closed landfill

Houston, TX

- 52 MW of solar and community solar planned on 240-acre closed urban landfill
- Project is spurring federal, local, and private investments in solar and STEM workforce training for 175+ residents

Communities can leverage brightfields to deliver wide ranging local benefits

Sustainable land reuse

Using existing infrastructure

Local jobs & site revitalization

Environmental justice

Generate local revenue from innovative reuse

Hedge against rising utility bill

Closed landfills are particularly promising sites for hosting solar energy

Conducive Site Conditions	Landfills typically have good sun exposure and other characteristics that support solar energy installation.
Limited Reuse Options	Closed landfills have few, if any, competing redevelopment options, and using landfills avoids land-use conflict with other revitalization priorities.
Environmental Justice	Landfill solar offers a sustainable, non-hazardous reuse of sites that were often prior areas of environmental injustice .
Potential for Scale	Landfill solar is highly scalable. There are thousands of active landfills in the US, and many thousands more that are already closed and inactive.

Houston's "flagship" landfill solar project highlights the potential that brightfields have as catalysts for change

Project Impact:

- 52 MW on 240 acre-closed landfill, including 2 MW of community solar
- World's largest landfill solar farm planned and permitted for low-income and historically marginalized black neighborhood
- Project is spurring federal, local, and private investments in solar and STEM workforce training for 175+ Houston residents

By understanding what is possible, communities and site owners can plan to repurpose their closed landfills and other brownfield sites with clean energy – and how this can be a part of broader community revitalization.

I want to…

- Incorporate clean energy as a reuse into my brownfields assessment grants
- Understand how I can leverage closed landfills or brownfields in my community to generate clean energy locally
- Help my community repurpose aging power plant infrastructure with new, cost-effective clean energy
- Reduce what my local government or residents may have to pay in utility bills
- Find a productive reuse of a brownfield in my community that doesn't have a near-term option for economic development or conflict with other redevelopment plans

Our technical assistance is designed to support your project from idea to implementation

Identifying Your Most Promising Brightfields Opportunities

- Site pre-screening
- Strategic reuse planning
- Utility engagement

Funding & Financing Guidance

- Unpacking brightfields-related incentives and funding strategy
- Assistance with brownfields grant applications

Accelerating Brightfields Procurement

- Clean energy procurement support
- Insights from the brightfields market

Today's Objectives

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2

Why?

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How?

Outline how your community can start to move forward with a project

Questions & Feedback?

Matthew Popkin
Brightfields Accelerator
mpopkin@rmi.org

Coal Plant Redevelopment

Bill Schleizer, Delta Institute-KSU TAB Point of Contact for Illinois and Wisconsin

Coal Plant Redevelopment Roadmap

Tackling Community Revitalization through Brownfield Redevelopment

National Association of Development Organizations

November 7, 2023

delta institute

MISSION & VISION

Delta Institute collaborates with communities to solve complex environmental challenges throughout the Midwest. We address Midwestern environmental, economic, and climate challenges today, so that our home and region are more resilient, equitable, and innovative tomorrow.

Photo courtesy of Steve Gadomski.

Celebrating our 25th Anniversary!

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WHY WE EXIST

Delta Institute exists because environmental, economic, and climate issues hit communities—urban and rural—through disinvestment, systemic inequity, and policy decisions. We collaborate at the community level to solve our home region's new and legacy issues, by focusing on the self-defined goals and needs of our partners.

Our work takes us to population centers like Chicago, St. Louis, and Detroit; to mid-sized cities such as Gary and South Bend, Indiana; to Great Lakes coastal towns like Michigan City, Indiana and Muskegon, Michigan; and to rural communities and watersheds with tens of thousands of acres of farmland and waterways across our region. It's quite likely that you—or someone you know—lives, works, or passes through a community that Delta Institute has helped since our founding in 1998. Delta Institute is proud to serve as the EPA's Environmental Finance Center for Water Infrastructure for the next five years, which means that we may be supporting a community near you right now. We are a trusted 501(c)(3) nonprofit organization with a Platinum Seal of Transparency from Candid/GuideStar, a recognition received by fewer than 1% of all 1.5 million registered nonprofits in the United States.

Acting now is not only a pressing climate change issue, but also an issue of equity and environmental justice.

RESILIENT AGRICULTURE

Delta Institute supports **1,000 farmers** as they transition to sustainable and regenerative practices, thus improving the environment, mitigating the impacts of climate change, and strengthening a farmer's bottom line. We forecast that by 2025, **one million Midwestern agricultural acres** will successfully transition to conservation-focused farming practices, so our region's primary economic driver can be more environmentally and financially sound.

NATURE-BASED CLIMATE SOLUTIONS

Delta Institute assists municipalities by integrating natural climate solutions and Green Infrastructure (GI) to reduce climate change impacts by capturing **100 million stormwater gallons** and leveraging **$100 million in municipal GI investment**. We focus on communities that are disproportionately affected by flooding and climate change, to collaboratively improve their environmental indicators, mitigate local impacts of climate change, and strengthen their neighborhoods' resilience.

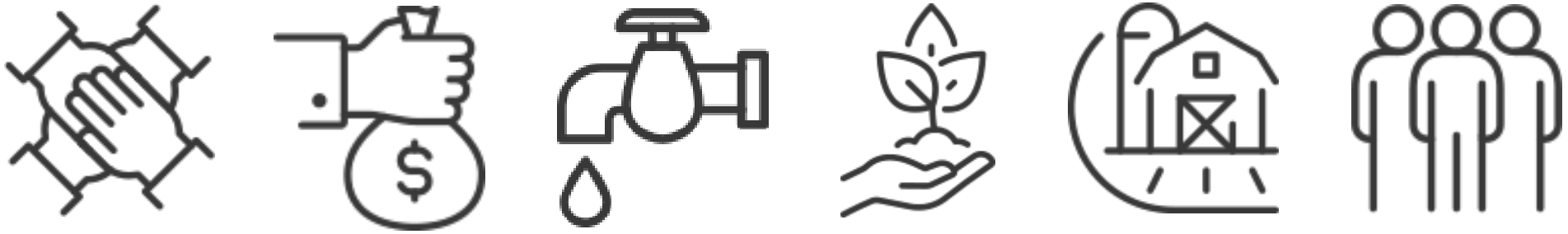
SUSTAINABILITY AND SUPPORT SERVICES

Our Sustainability and Support Services are designed to respond to invitations to participate in community-led plans, which include a wide array of sectors in which Delta Institute has sizable experience. We forecast that by 2025, Delta Institute will work with more than 250 partner communities while securing **$40 million in external investment** and creating **100 practical tools, resources, strategies, and municipal-, county-, and state-level plans**.

IMPACT STATEMENT

Through our work, Delta Institute benefits more than five million Midwesterners by transitioning one million acres to conservation-focused practices, and by improving water quality and reducing flooding by capturing 100 million stormwater gallons. By 2025 we will achieve these goals through our agriculture, climate, water, and community development projects.

This is what a more resilient, equitable, and innovative Midwest looks like.



250 Partner Communities

$100M Invested

100M Gallons

1M Acres

1,000 Farmers

5M Midwesterners

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Let's jump into talking about Coal Plants!

**A coal plant is just a brownfield, with some extra stuff.*

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OUR COAL PLANT WORK HIGHLIGHTS

- City of Chicago Coal Plant Redevelopment Agreement
  - Mediated an agreement for the reuse of two urban coal plant sites in EJ communities between the city, utility, and community groups.
- Little Village Coal Plant and Brownfield Redevelopment Strategy
  - Inventoried 260+ sites and created redevelopment plans for top 10.
- Shenango Coal Plan Redevelopment Planning
  - Facilitated scenario planning for coal plan redevelopment in Pennsylvania.
- Just Transition Fund Coal Plant Analysis and Roadmap
  - Consulted with multiple communities
  - Created tools to assist in planning.

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City of Chicago Coal Plants

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FISK AND CRAWFORD COAL PLANTS

Fisk Coal Plant, Pilsen, 1903

Output = 236 MW (381k households)

26 acres for development

Multiple buildings

Crawford Coal Plant, Little Village, 1925

Output = 542 MW (638k households)

72 acres for development

One building

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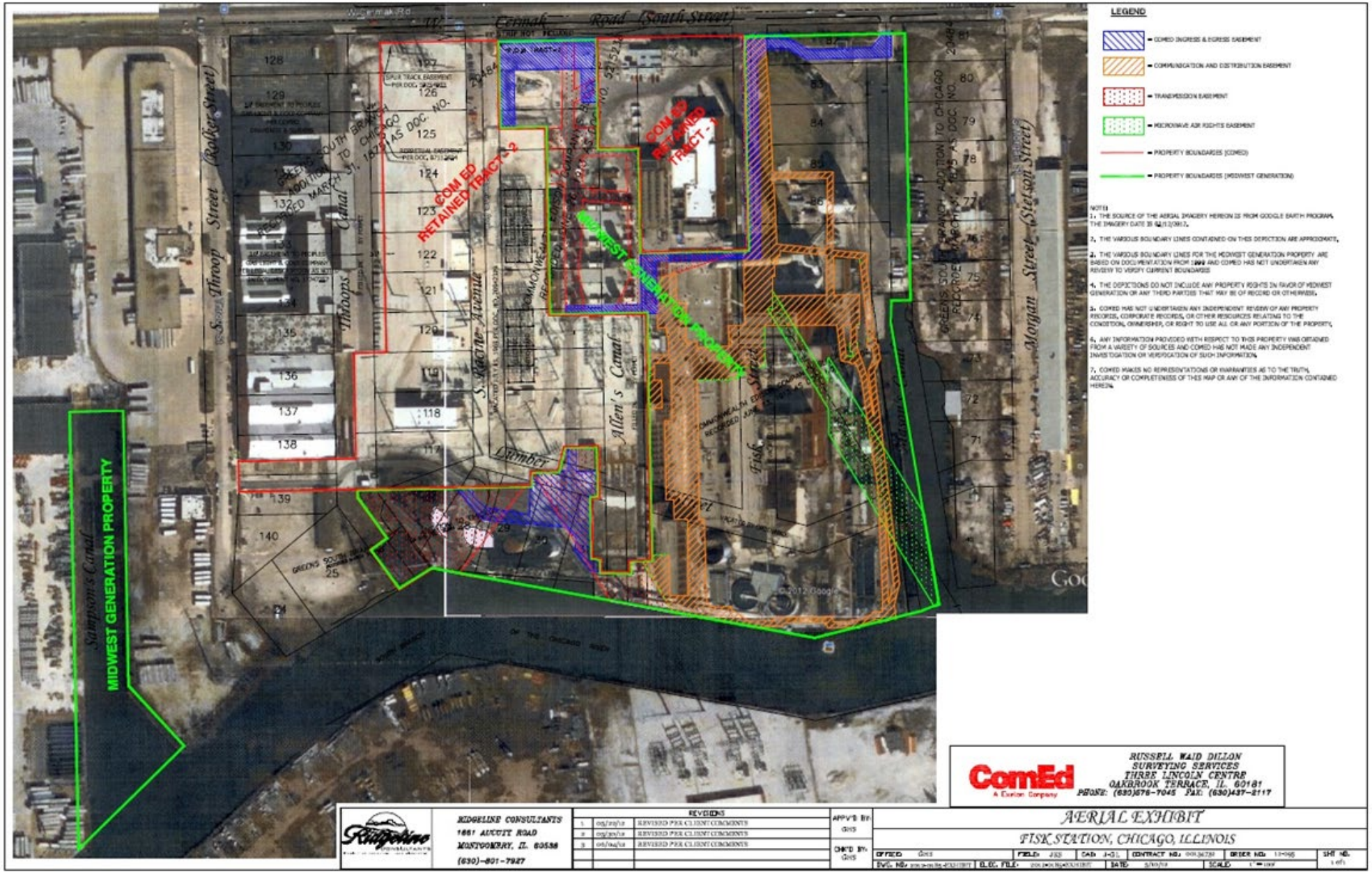
FISK AND CRAWFORD COAL PLANTS

- Pilsen and Little Village are both Mexican-American communities with high unemployment
- Both plants situated in an industrial corridor in the middle of a dense residential area
- 14 years of community organizing to close plants
- Close proximity to downtown and great bandwidth
- Transportation advantage
- Located on Sanitary and Shipping Canal with barge access
- Ready access to expressways (I 55)
- Rail access on site or adjacent to site

FISK PLANT AREAL VIEW



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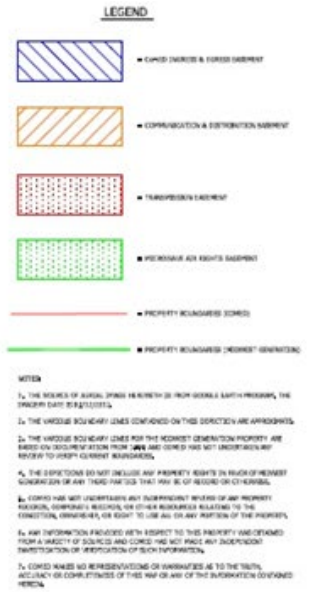
CRAWFORD PLANT AREAL VIEW



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REDEVELOPMENT GUIDING PRINCIPLES

- The Fisk and Crawford sites provide opportunities as useful community assets that can enhance the ability of local residents and businesses to live, work and play in a healthy environment.
- Broad-based stakeholder input on the redevelopment of the sites should be encouraged, building upon existing forums and agreements, but including new parties as the project evolves. Such collaboration is likely to lead to the best outcome for all involved.
- As sites are redeveloped and used in the future, pollution and waste should be minimized, with an emphasis on sustainability.
- Located in industrial corridors with ongoing operation of grid infrastructure at both locations and a peaking plant at Fisk, the sites are not suitable for residential development.

REDEVELOPMENT GUIDING PRINCIPLES

- Redevelopment provides an opportunity to create quality, living wage jobs for residents of these communities.
- Redevelopment of each site may include parceling the sites for more than one use, owner or occupant.
- Neither site is intended to be used entirely as a park or open space; however, where feasible there should be public access to the river and canal.
- Potential sources of public and private resources for reclamation and redevelopment should be identified early and actively pursued.
- Parties involved in future redevelopment should be aware that the communities prefer clean, advanced light manufacturing, and not large scale retail, for the sites.

WHAT HAPPENED?

- Change in administration
- Property sold to developer who began marketing site for logistics/transportation property
- Limited, traditional community engagement
- Significant community push back and continued advocacy

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WHAT HAPPENED?

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Little Village Brownfields Redevelopment

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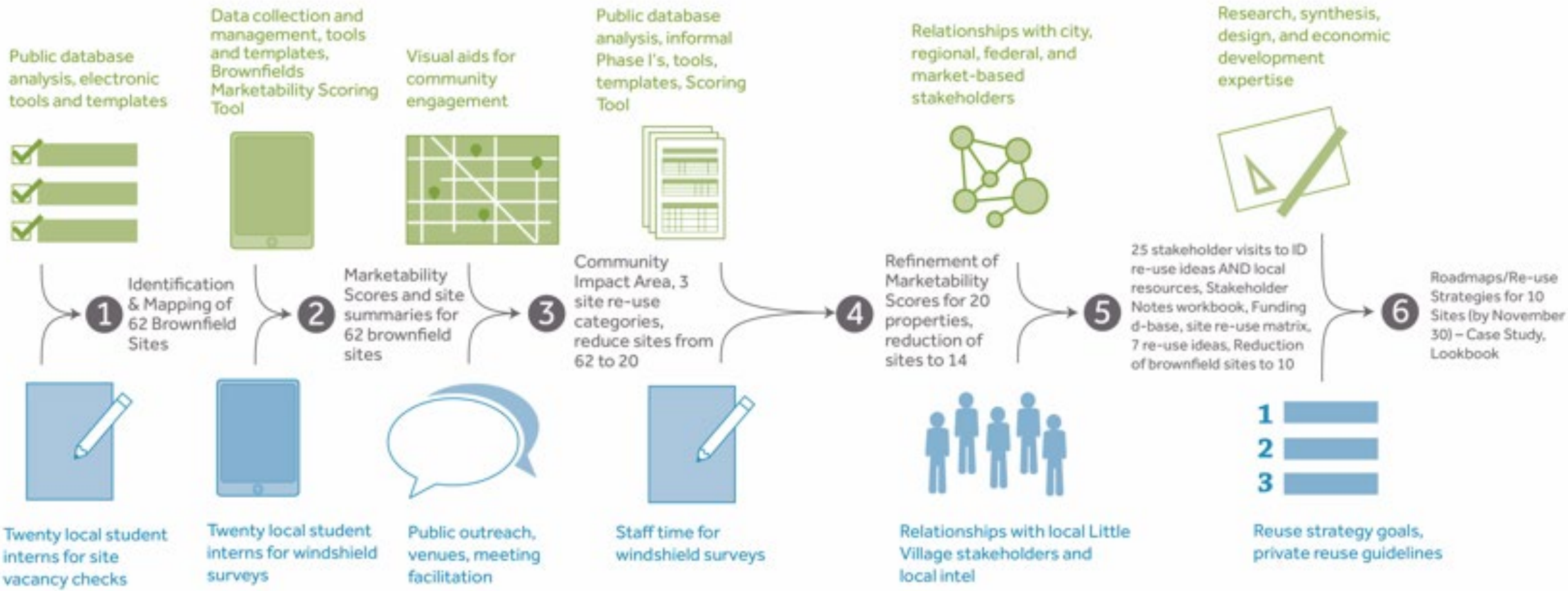
LITTLE VILLAGE BROWNFIELDS REDEVELOPMENT

- The coal plant was just one of over 250+ vacant, polluted, and underutilized sites.
- After the guidelines were developed and before the logistics development occurred, Delta partnered with the community to assess other sites around the neighborhood to evaluate brownfield redevelopment opportunities.
- Evaluated all parcels in the neighborhood
- Trained community members to lead the evaluation
- Prioritized sites based on a number of community priorities
- Created 10 lookbooks for top sites with 8 reuse strategies
  - Used by the community to proactively engagement developers

PROJECT PROCESS

Delta Role



LVEJO Role

WHAT HAPPENED?

- One of the top sites identified was submitted to be redeveloped as entry to the inaugural Chicago Prize.
- Fire Station to serve as a community center, hub for food cart vendors, commercial kitchen, and training space.
- Project was a finalist, but didn't win the big prize; however, elements of the project have been successfully implemented.

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Shenango Coal Plant Redevelopment

delta institute

- 50 acre site - Neville Island in Neville Township, PA
- Closed in 2017 - Economic and air quality issues
- Large tax reductions especially for School District
- Community concerns - Reuse will reactivate air quality issues, water quality issues, not maximize property tax generation or job


3 mi
N
RMU Island
Sports Center
Paradise Island Bowl
Fairfield Inn & Suites
Neville Roller Dome
Neville Township
Emsworth
Ben Avon
Avalon
Shenango Coke Plant Site
Kennedy Township
Bellevue
Stowe Township
Ohio River
Google Earth
© 2020 Google

SHENANGO

- Worked with community to create an advisory and engagement structure that worked for the various stakeholders
- Created guiding principles
  - Economics & Jobs
  - Collaboration
  - Environmental Impact & Cleanup
  - No Fracking
  - Sustainable/Green
- Developed and prioritized 20 reuse scenarios based on principles and market assessment
- Created visualizations of the future site reuses

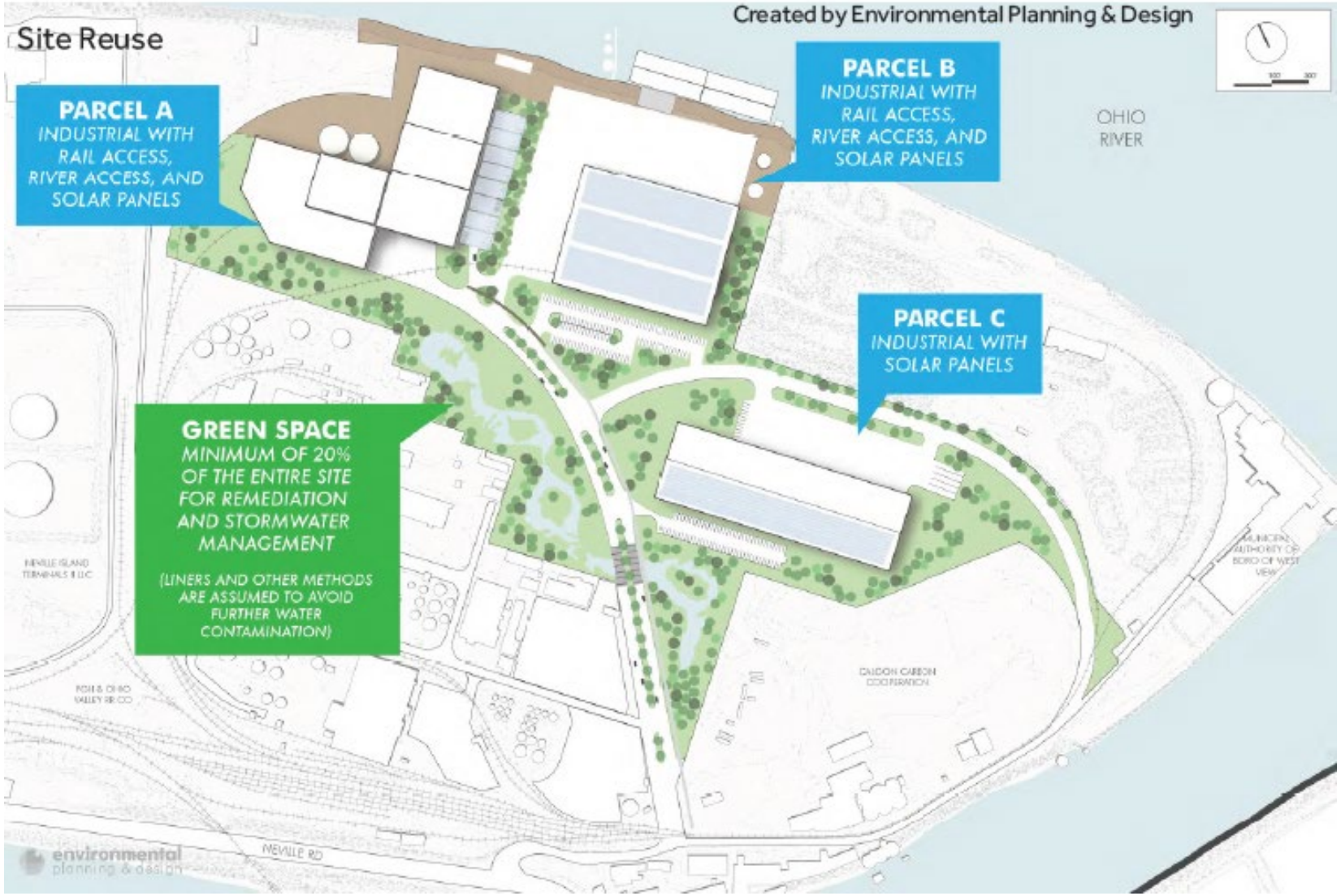
*20 RECOMMENDED SITE REUSE BASED ON MARKET RESEARCH, GUIDING PRINCIPLES & POTENTIAL ENVIROMNETAL IMPACT**

Light Industrial	Heavy Industrial	Speciality Industrial
Commercial Bakery - LOW	Plastics - Heat Related Extrusion - MEDIUM	Additive Product Manufacturing (3-D printing) - MEDIUM
Electronics Assembly - MEDIUM	Plastics Assembly - LOW	Aquaponics - LOW
Equipment Assembly - MEDIUM	Sheet Metal Fabrication - MEDIUM	Autonomous Technology - LOW
Metal Fabrication - MEDIUM		Brewery - LOW
Recycling (paper, plastics, electronics) - LOW		Commercial/Industrial Use Robotics Manufacturing - LOW
Truck Service - MEDIUM unless using a green fleet i.e. electric lifts/cranes/low emission diesel		Medical Marijuana - LOW
		Medical Technology Manufacturing Assembly - LOW
		Pharmaceutical Packaging - LOW
		Self-driving Vehicles - MEDIUM
		Specialty Powder Coating Manufacturing - MEDIUM
		Specialty Metal Products - MEDIUM

*Note: For uses with a MEDIUM potential environmental impact, per Guiding Principle #3, only those uses which are low emitting (low air emissions) with minimal water, ground and noise pollution are acceptable to the community.

Developed by Newmark Knight Frank, DJS Ventures, and the Shenango Reimagined Advisory Council.

SITE CONCEPTS



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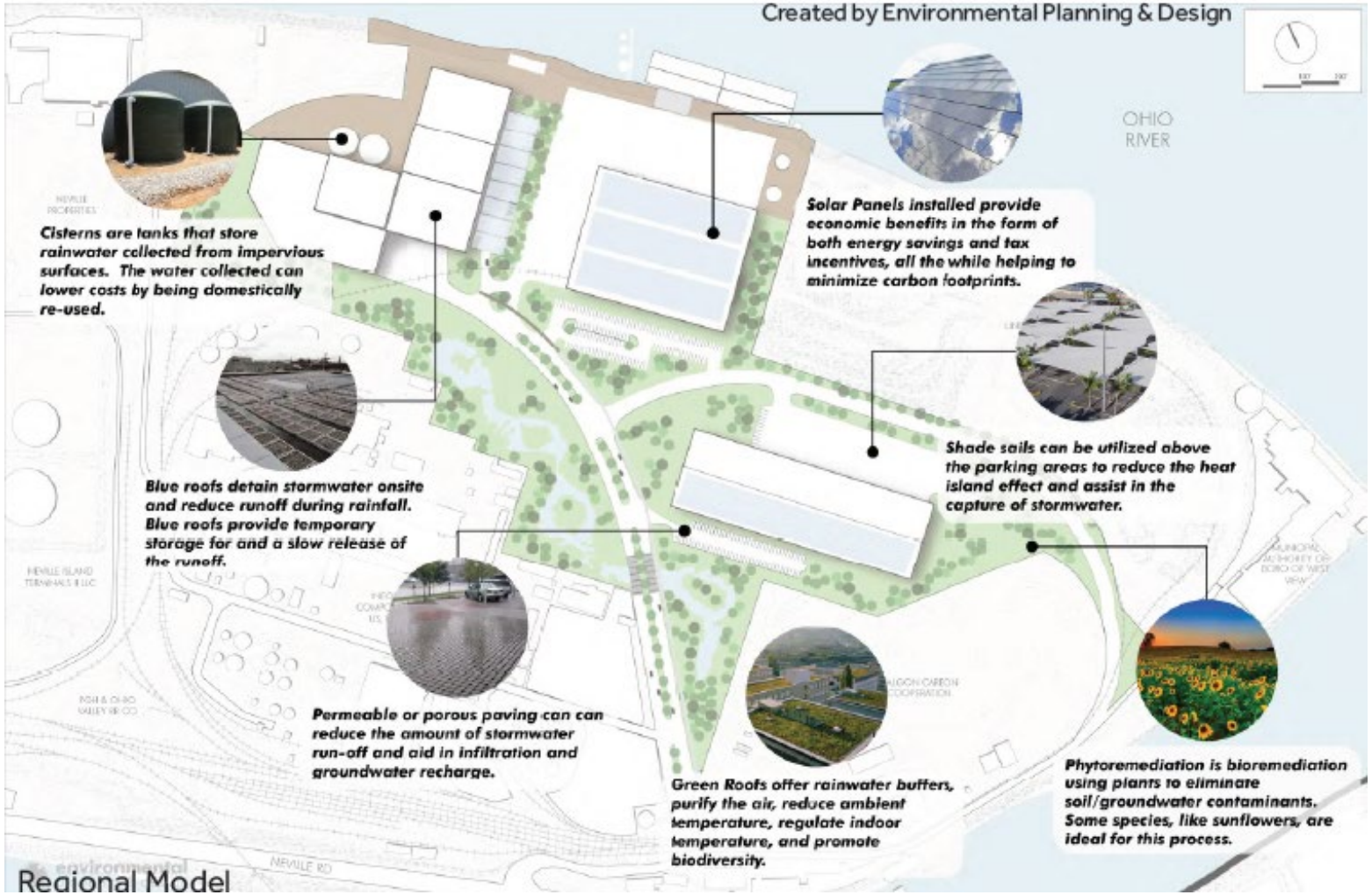
SITE CONCEPTS



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Coal Plant Redevelopment Roadmap

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COAL PLANT REDEVELOPMENT ROADMAP

- From our previous brownfields and coal plant work, we created a guide to help navigate the long process for coal plant redevelopment.
- Available at: https://delta-institute.org/wp-content/uploads/2018/05/Coal-Redevelopment-Roadmap-5-2-18.pdf

- Broken into five modules:
  - Building the team
  - Assessing economic and environmental impacts
  - Determining site challenges and opportunities
  - Planning an engagement strategy
  - Developing reuse ideas from a shared community vision

COAL PLANT REDEVELOPMENT ROADMAP

- Building the team:
  - Skills and Knowledge Areas
  - Identified Potential Internal Resources within a Community
  - Resources that can be leveraged
    - Federal Departments and Programs
    - State
    - Regional and Local
    - Private Sources
    - Nonprofit and Philanthropy

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COAL PLANT REDEVELOPMENT ROADMAP

- Assessing Economic and Environmental Impacts
  - Guiding Questions
    - Employment
    - Tax Base
    - Environment and Energy
  - Potential Sources of Information and examples
- Determining Site Challenges and Opportunities
  - Ownership
  - Site History
  - Infrastructure
  - Land Use
  - Financing
  - Site Assessment and Remediation

COAL PLANT REDEVELOPMENT ROADMAP

- Planning an Engagement Strategy
  - Developing Principles for Engagement
  - Stakeholder Lists and their potential transition interests
  - Examples of engagement strategies and guidance
    - Neutral 3rd party, advisory groups, event, information sharing, meetings
- Developing Reuse Ideas From a Shared Community Vision
  - Reviewing Existing Plans
  - Quantifying Incentives
  - Assessing Community Assets
  - Types of Visioning Engagement and sample agendas

CONNECT WITH US

Social Media

- LinkedIn: /delta-institute
- Instagram: deltainstitute
- Facebook: @DeltaGreatLakes
- YouTube: deltainstitute
- Threads: deltainstitute
- BlueSky: deltainstitute

Website

- Bookmark us: delta-institute.org
- Keep posted on our events: delta-institute.org/events
- Subscribe to our newsletter: delta-institute.org/get-involved
- Contact us: delta-institute.org/contact

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Brownfields Tour Overview

Amy Yersavich, KSU TAB Point of Contact for Ohio

Cleveland Brownfield Bus Tour

NADO 2023 Annual Training Conference

Amy Yersavich, TAB Partner, KSU TAB

TAB
Technical Assistance to Brownfields

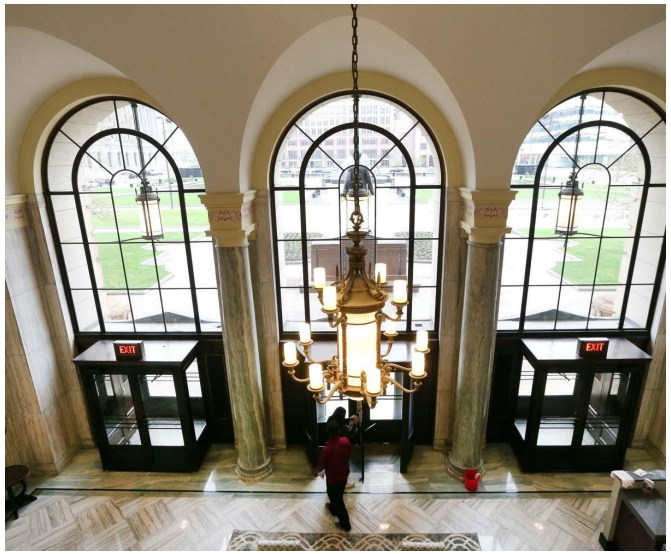
The Cleveland Lakefront Nature Preserve

- This area was originally known as Gordon Park. The park opened to the public in 1893 and quickly became a recreational destination for Clevelanders living on the east side.
- A large bathhouse catered to Clevelanders who crowded onto the park's Lake Erie beach. The city provided facilities for boaters, fishermen, and picnickers at the park.
- After WWII the park went into decline as water pollution affected many of Lake Erie's beaches. By the 1960s, construction of Interstate 90 made access to Lake Erie, including Gordon Park difficult if not impossible.
- The area became a landfill in the 1960s.

The Cleveland Lakefront Nature Preserve

- After the landfill operations ceased, the area became an 88-acre confined disposal facility or CDF, known as Dike 14, which the Army Core of Engineers constructed to contain sediments dredged from Cleveland Harbor and the Cuyahoga River. Dredging and placement in Dike 14 occurred from 1979 to 1999.
- After sediment disposal ended, the area was fenced off to deter access.
- While fenced off from access, vegetation grew and flourished attracting migratory birds and other wildlife.
- Using a Brownfield Assessment Grant, the Cuyahoga Co. Soil and Water Conservation sampled the site and determined no cleanup was necessary for the majority of the site. A five-acre portion of the site had PAHs, PCBs, Arsenic and Lead levels above standards. Clean sediments from a nearby CDF were used to place a four-foot cover over the 5-acre area.
- The Nature Preserve opened to the public in February 2012.

Cleveland Downtown Drury Inn & Suites (Former Cleveland Board of Education Building)



- The Cleveland Board of Education Building opened in 1931 in downtown Cleveland. The Board of Education operated out of this building until 2013 when the School District moved their offices a couple of blocks away.
- The property has a history that goes back to 1896 when stores, a meat shop, stables, several saloons and Stroh Brewing Company bottling works were present on the northern portion of the site.
- Shortly after the School District vacated the building in 2013, the property was purchased by the St. Louis based Drury chain of hotels. Cleanup activities were conducted by Drury's consultant TRC, to address soils impacted from the historic machine shop operations.
- Drury renovated the building utilizing federal and state historic tax credits. As a result, many of the historic features such as marble columns, oak bookcases, Depression-era murals and lighting fixtures were retained resulting in a truly unique and beautiful hotel.

The Flats East Bank

- The Cleveland Flats was first developed as an industrial center as a result of the building of the Ohio and Erie Canal in 1832 and then railroads during the Civil War era.
- The Flats allowed companies such as John D. Rockefeller's Standard Oil Co. and Cyrus Eaton and William G. Mather's Republic Steel Corp. to thrive.
- These companies' successes were at the expense of the environment as the river, tinged red in the early 1930s by iron ore dust and covered with oil slicks, commonly caught fire — most famously in 1969, when that particular fire was featured on the cover of Time Magazine.

The Flats East Bank

- As industries along The Flats shuttered in the 1980s, dozens of old warehouses on the west and east banks were turned into bars, night clubs and restaurants that drew thousands of people on weekends.
- Although The Flats started out as a success with a popular music scene, it ultimately failed due largely to the renegade bar owners, whose beer prices and lack of security fueled uncontrollable crowds.
- During the cleanup of The Flats in 2008, 2,500 tons of hazardous waste, 15,000 tons of contaminated solid waste, and 100,000 gallons of contaminated water were removed using a 1.5 M RLF Loan.
- Today, the East Bank of the Cuyahoga River is being transformed from an area blighted with closed bars and warehouses into a green redevelopment with businesses, restaurants, parks and housing.

TAB
Technical Assistance to Brownfields

Thank you for your Time!

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Thank You!

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