



Clean-Up Information

Contaminated Site

Welcome to the CLU-IN Internet Seminar

Superfund Redevelopment Program Webinar Series – Optimizing Renewable Energy Reuse on Superfund sites

Sponsored by: U.S. EPA, Office of Land and Emergency Management (OLEM), Superfund Redevelopment Program

Delivered: Thursday, May 6, 2021, 1:00 PM-2:30 PM EDT (17:00-18:30 GMT)

Instructors:

- Frank Avisato, EPA Superfund Redevelopment (avisato.frank@epa.gov)
- Casey Lockett Snyder, EPA Superfund Redevelopment Program/EPA Region 6 (lockett.casey@epa.gov)
- Cheryn Robles, Environmental Affairs Administrator, City of New Orleans (crobles@nola.gov)
- Lora Strine, EPA RE-Powering America's Land (strine.lora@epa.gov)
- Tom Bloom, EPA Region 5 (bloom.thomas@epa.gov)

Moderator:

- Jean Balent, EPA Office of Superfund Remediation and Technology Innovation (balent.jean@epa.gov)

Visit the Clean Up Information Network online at www.cluin.org

Seminar Homepage

The screenshot shows the EPA Clean-Up Information website. At the top, there is a navigation bar with categories: Technologies, Contaminants, Issues, Strategies & Initiatives, Vendors & Developers, Training & Events, and Additional Resources. The main heading is "Clean-Up Information" with a sub-heading "Contaminated Site". Below this, there is a search bar and a navigation menu. The main content area features a webinar announcement: "Passive Treatment of Mining-Influenced Water: From Bench Scale to O&M", sponsored by the U.S. EPA Technology Innovation and Field Services Division. The webinar is scheduled for Monday, November 14, 2016, from 1:00 PM to 3:00 PM EST. There are two buttons: "Join Webinar" and "Register". Below the buttons is a tabbed interface with tabs for "Description", "Presenters", "Webinar Slides", "Related Links", "Feedback Form", and "Tips". The "Description" tab is active, showing text about passive treatment processes. On the right side, there is a "Staying Connected" sidebar with social media icons (Facebook, Twitter, LinkedIn) and a "Feedback" box. At the bottom right, there are links for "Contact Us", "Site Map", and "Site Tour".

United States Environmental Protection Agency
Technology Innovation and Field Services Division
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Clean-Up Information

Technologies | Contaminants | Issues | Strategies & Initiatives | Vendors & Developers | Training & Events | Additional Resources

CLU-IN | Training & Events | [Passive Treatment of Mining-Influenced Water: From Bench Scale to O&M](#)

Passive Treatment of Mining-Influenced Water: From Bench Scale to O&M

Sponsored by: U.S. EPA Technology Innovation and Field Services Division

Live Webinar: Monday, November 14, 2016, 1:00 PM-3:00 PM EST (18:00-20:00 GMT)

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Passive treatment refers to processes that do not require frequent human intervention, operation, or maintenance, and typically employ natural construction materials, natural treatment media, and growth of natural vegetation. Biochemical reactors (BCRs) are a type of passive treatment system that uses microorganisms to remove contaminants from mining-influenced water (MIW). BCRs and other passive treatment systems provide cost-effective and lower-maintenance treatment options for mine site cleanups. These systems offer opportunities to reduce the environmental footprint associated with treatment of MIW.

In recent years, development and implementation of passive systems has increased. However, there's still plenty to learn about their effectiveness. Pilot studies are good ways to study passive treatment and their application scenarios. In this webinar, two case studies will be presented that document design and implementation of BCRs to passively treat MIW – from bench-scale tests to full-scale operation and maintenance, including recovery of iron oxide byproducts for sale.

Case Study 1: Passive Treatment of Metal Mine Drainage at an Abandoned Mine near Lake Shasta

Staying Connected

Podcasts

Live Events

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[Site Map](#)
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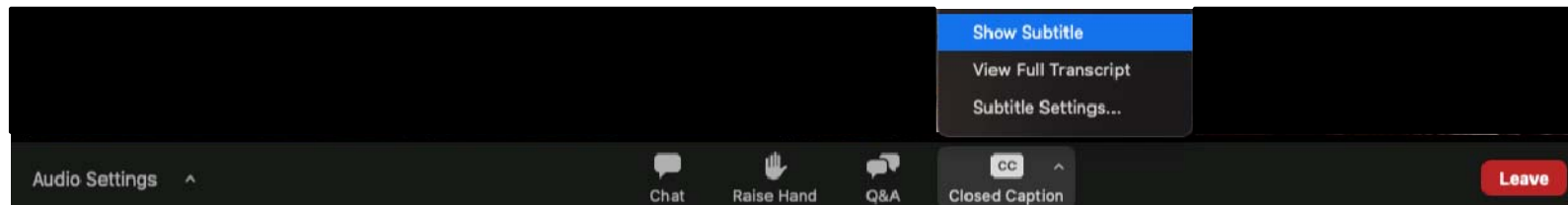
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Housekeeping

- Join us live via Zoom (use Zoom app or browser)
 - *Some materials may be available to download in advance, you are **recommended to participate live via the online broadcast***
- Audio is available online with your device or by telephone
 - All participants are muted
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- Q&A – use the Q&A pod to privately submit comments, questions and report technical problems
 - You may request to verbally share thoughts with device mic (raise hand) or telephone (*9)



- This event is being recorded and shared via email shortly after live delivery
- Important reminders will be covered at the end

The image shows a Zoom webinar interface for a presentation titled "Clean-Up Information" by CLU-IN. The main content area displays a slide with the text "View presentation live online here". Below the slide, there is a URL: "Visit the Clean Up Information Network online at www.cluin.org".

Callout boxes and arrows point to various features:

- Enlarge presentation:** Points to the top right corner of the Zoom window.
- Control audio:** Points to the "Audio Settings" icon in the bottom left corner.
- Live Closed Captioning:** Points to the "Live Transcript" icon in the bottom center.
- Raise hand for verbal comments or questions:** Points to the "Raise Hand" icon in the bottom center.
- Submit private messages or report technical problems:** Points to the "Chat" icon in the bottom center.
- Information and video of Organizers and Presenters:** Points to a sidebar panel on the right side of the screen.
- Question and Answer:** Points to a "Question and Answer" window on the right side, which includes a text input field and a "Send anonymously" checkbox.

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Your

 **Disclaimer**



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Visit the Clean Up Information Network online at www.cluin.org



Optimizing Renewable Energy Reuse on Superfund Sites

Thursday, May 6th, 2021;
1:00 PM – 2:30 PM EDT



Overview

- **Introduction to Superfund Redevelopment**
Casey Luckett Snyder, EPA Superfund Redevelopment Program/EPA Region 6
- **RE-Powering America's Land - Tools and Resources for Renewable Energy Reuse**
Lora Strine, EPA RE-Powering America's Land
- **Planning Renewable Energy Reuse - Agriculture Street Landfill Superfund site, New Orleans, LA**
Casey Luckett Snyder, EPA Superfund Redevelopment Program/EPA Region 6
Cheryn Robles, Environmental Affairs Administrator, City of New Orleans
- **Utilizing EPA Resources - Continental Steel Corp. Superfund site in Kokomo, Indiana**
Tom Bloom, EPA Region 5
- **Wrap Up: Resources and Contacts**
- **Question and Answer Session**

Superfund Redevelopment Program

Supports EPA staff and works with communities and other partners in considering future use opportunities and integrating appropriate reuse options into the cleanup process.



Solar System of Contaminated Properties

6,400 RCRA Sites

53% of the U.S. population lives within 3 miles of one of these sites.

100,000 – 200,000
Underground Storage
Tanks (abandoned)

40,000 Superfund sites
(removal & remedial)
RCRA Sites

450,000 – 600,000
Brownfields

Benefits of Reuse at Superfund sites



For every acre of contaminated property that gets redeveloped, 4.5 acres of greenfields are preserved.

- George Washington University study



Benefit to Community:

Brings jobs; increases the tax-base; revitalizes neighborhoods and restores a sense of community by bringing housing, retail, recreation or ecosystem services.

Benefit to EPA:

Brings certainty to anticipated land use with a new owner who is obligated to be cooperative and provide access, who will be a good steward of the site, and who may be willing to take on part or enhance the cleanup.

Examples of Successful Superfund Redevelopment



Tulsa Fuel and Manufacturing Superfund site in Collinsville, Oklahoma



Commencement Bay, Nearshore/Tide Flats Superfund site in Tacoma, Washington

Sites Can and Are Redeveloped at Any Stage of Cleanup



EPA benefits from reuse information at any stage of the cleanup process because EPA continues to ensure sites meet protectiveness standards.

Types of Renewable Energy on Superfund Sites

Biofuel Sites



**Rose Township Superfund site in
Rose Township, Michigan**



**Martin-Marietta, Sodyeco, Inc. Superfund site in
Charlotte, North Carolina**

Geothermal Sites



Lawrence Aviation Industries, Inc. Superfund site in
Port Jefferson Station, New York



Arsenic Trioxide Superfund site in
southeastern North Dakota

Methane Gas to Energy Sites



Lowry Landfill Superfund site in Aurora, Colorado



Southside Sanitary Landfill Superfund site in Indianapolis, Indiana

Solar Sites



Tucson International Airport Area Superfund site in Tucson, Arizona



Brick Township Landfill Superfund site in Brick Township, New Jersey

Wind Sites



**Pantex Plant (USDOE) Superfund site in
Carson County, Texas**



**Bethlehem Steel Corp/Lackawanna Plant site in
Lackawanna, New York**

Tools and Resources for Superfund Site Redevelopment

Regional Seed Resources & Reuse Planning

- **Situation Assessment** – Initial information gathering to identify stakeholders and potential options for reuse support.
- **Reuse Assessment** – Determines broad land uses to inform cleanup activities.
- **Reuse Plan** – Outlines land uses on specific parcels based on stakeholder discussion and analysis of the site and surrounding context.
- **Community Engagement** – Engages stakeholders to identify reuse goals, evaluate scenarios, build relationships and shape a shared understanding of future options for the site; includes EJ and equitable development technical assistance.



EPA Guidance, Handbooks & Fact Sheets

- Top Ten Questions to Ask When Buying a Superfund Site
- EPA site-specific reuse fact sheets
- Case studies/economic reports
- Opportunity Zones and Superfund sites

MAY 2008
EPA-330-F-08-001



Top 10 Questions to Ask When Buying a Superfund Site

Office of Enforcement and Compliance Assurance
Office of Site Remediation Enforcement

Office of Solid Waste and Emergency Response
Office of Superfund Remediation and Technology Innovation

The purpose of this document is to provide answers to some of the questions that a prospective purchaser may have when considering whether to purchase property at a privately owned Superfund site.

The U.S. Environmental Protection Agency (EPA) supports the reuse of Superfund sites and believes this document may be useful in clarifying some of the opportunities and issues associated with their reuse. For purposes of this document, a Superfund site is defined as any property on EPA's National Priorities List (NPL) where a hazardous substance has been released into the environment or has come to be located on or under. Thus, even if a property is not the source of the release of the contamination, it can be part of a Superfund site.¹



Information for Prospective Purchasers of Federally-Owned Superfund Sites

This document does not address the unique considerations associated with the purchase and transfer of real property on federally-owned Superfund sites (also known as federal facilities). While many of the questions and answers in this document are a useful starting point for prospective purchasers of property on federal facilities, Superfund cleanups at federal facilities are governed by CERCLA § 120 which has requirements specific to these facilities. For example, federal facility agreements between EPA and the current federal owner are required to address the clean up of these properties. A number of landowner liability issues unique to federal facilities are raised in the context of transfers of federal property and have been addressed by EPA guidance. While they warrant additional considerations, federal facilities are continuing to be cleaned up and purchased by local governments and developers and put back into reuse. Additional information on EPA's efforts to clean up federal facilities and make them available for reuse is available at <http://www.epa.gov/overfln/>.

¹ The Superfund program and the authority to clean up Superfund sites was created by the federal Superfund law which is officially known as the *Comprehensive Environmental Response, Compensation, and Liability Act* ("CERCLA"), 42 U.S.C. § 9601, *et seq.*

Disclaimer: This document is provided solely as general information to highlight certain aspects of a more comprehensive program. It does not provide legal advice, have any legally binding effect, or expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits for any person. This document is not intended as a substitute for reading the statute or the guidance documents described above. It is the prospective purchaser's sole responsibility to ensure that its proposed use does not interfere with or impede the site's cleanup or protection. EPA does not offer any guarantees or warranties as to the compatibility of a proposed use with the cleanup. It is also the purchaser's sole responsibility to maintain liability protection status as a bona fide prospective purchaser.

Contact

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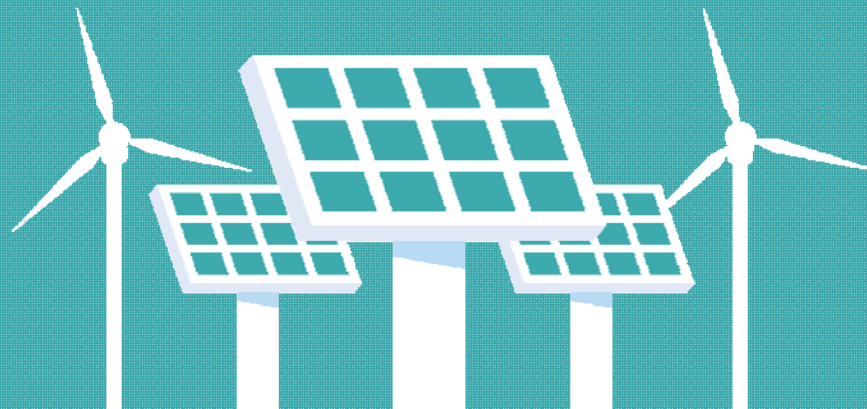


RE-Powering America's Land

Lora Strine

*Presentation - Superfund Redevelopment Program Webinar Series –
Optimizing Renewable Energy Reuse on Superfund Sites*

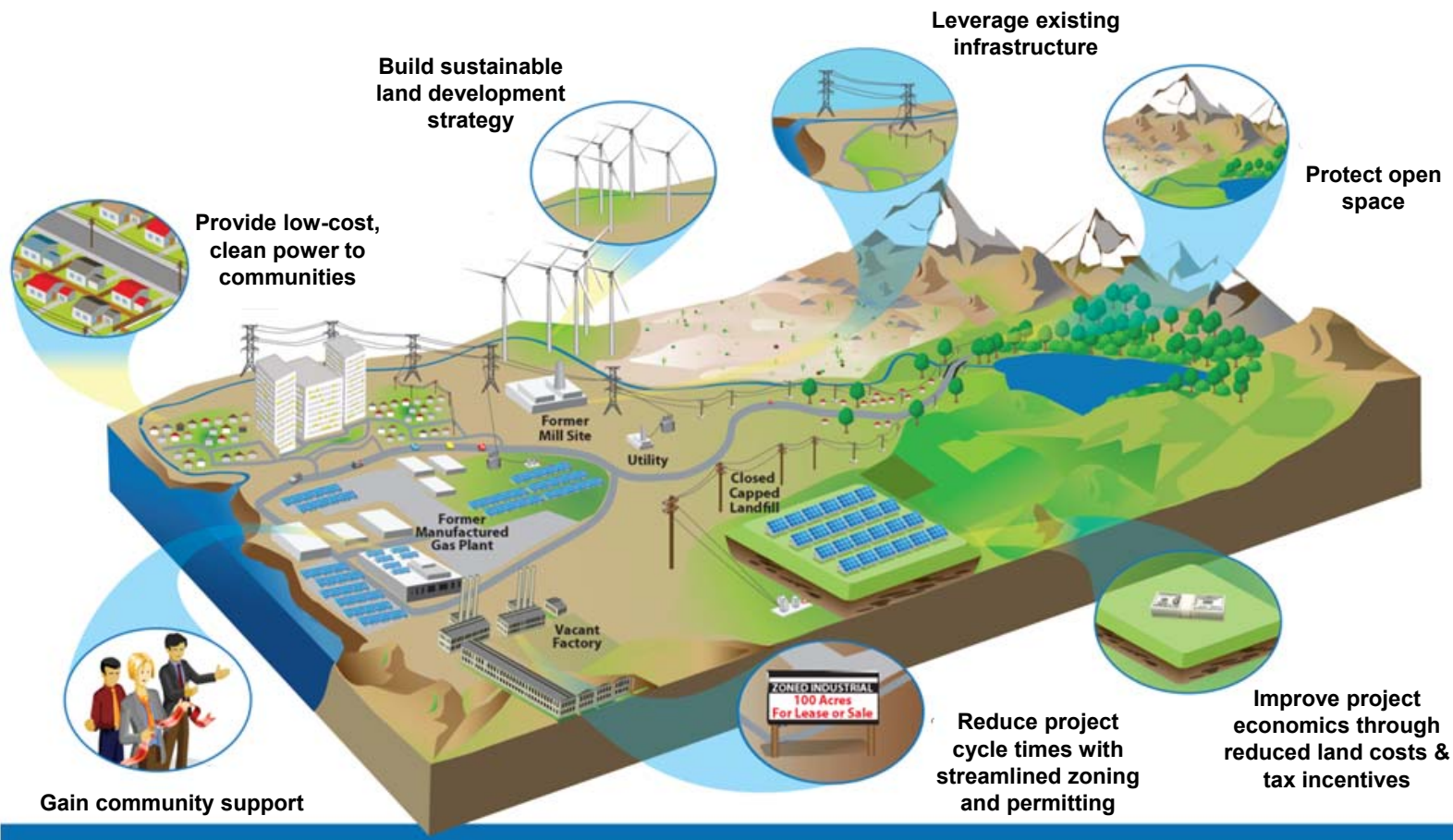
May 6, 2021



Today's Presentation

- 1** Introduction
- 2** Tools and Training
- 3** Benefits and Trends
- 4** Policy Impacts
- 5** Project Examples

Why Renewables on Potentially Contaminated Lands?



RE-Powering America's Land Initiative

- Encourages the reuse of formerly contaminated lands, landfills and mine sites for renewable energy development, when such development is aligned with the community's vision for the site.
 - Raises awareness, creates connections and outreach
 - Disseminates success stories and best practices
 - Develops mapping and screening tools to identify contaminated properties and renewable energy potential
 - Provides technical and programmatic assistance
 - Liability questions
 - Renewable energy feasibility studies with NREL – National Renewable Energy Lab
 - Financing
 - Articulates benefits – environmental, economic and community

Partnership Opportunities

Solar economic feasibility studies

- Becker County Landfill in Minnesota
- Advisor/technical assistance Minnesota Solar on Landfill Study
- Colorado Brightfields Initiative – State Mapping Tool

Outreach & engagement with

- *Power and Pollinators Webinar* – July 2020 – Virginia DEQ & DCR Pollinator Smart Program
- TAB – Technical Assistance for Brownfields



Today's Presentation

1

Introduction

2

Tools and Training

3

Benefits and Trends

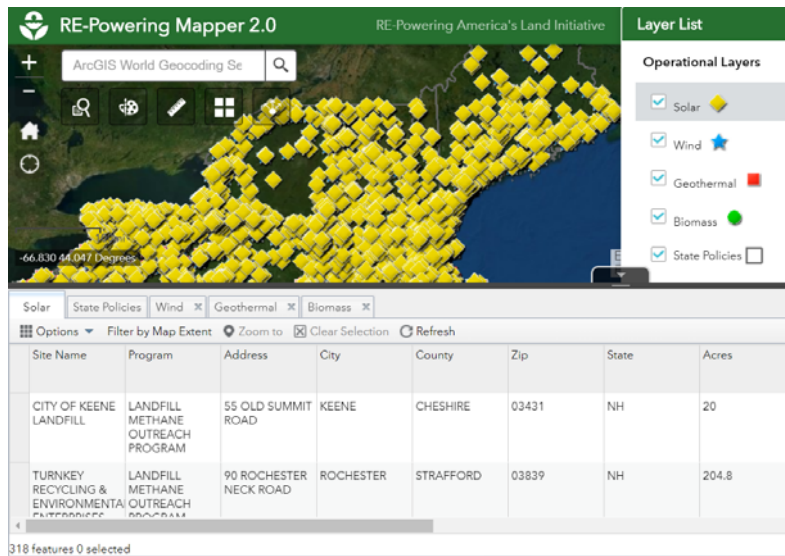
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Policy Impacts

5

Project Examples

RE-Powering Mapper



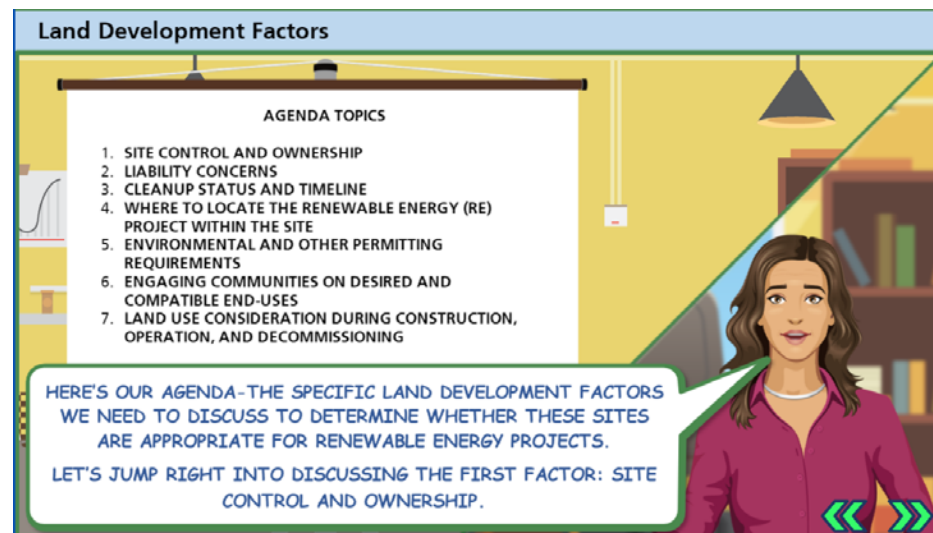
<https://www.epa.gov/re-powering/re-powering-mapper>

Mapped inventory of 130,000+ EPA and select state tracked sites (over 44 million acres of land)

- Incorporates data from:
 - EPA Cleanup and Landfill Programs
 - National Renewable Energy Lab
 - Wind, Solar, and Biomass Resources
 - Southern Methodist University
 - Geothermal
 - Department of Homeland Security
 - U.S. Highways
 - Railroads
 - Transmission Lines
 - Substations
 - 17 State Agencies: CA, CO, CT, FL, HI, IL, MA, MD, MN, MO, NJ, NY, OR, PA, TX, VA, and WV
 - **Look for an update later in 2021!**

RE-Powering Training

- Land Use Considerations - great overview of site development
- Interconnection and Electricity Sales – identify and assess interconnection and electricity sales options



<https://www.epa.gov/re-powering/re-powering-mapping-and-screening-tools#tab-4>

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RE-Powering Reports

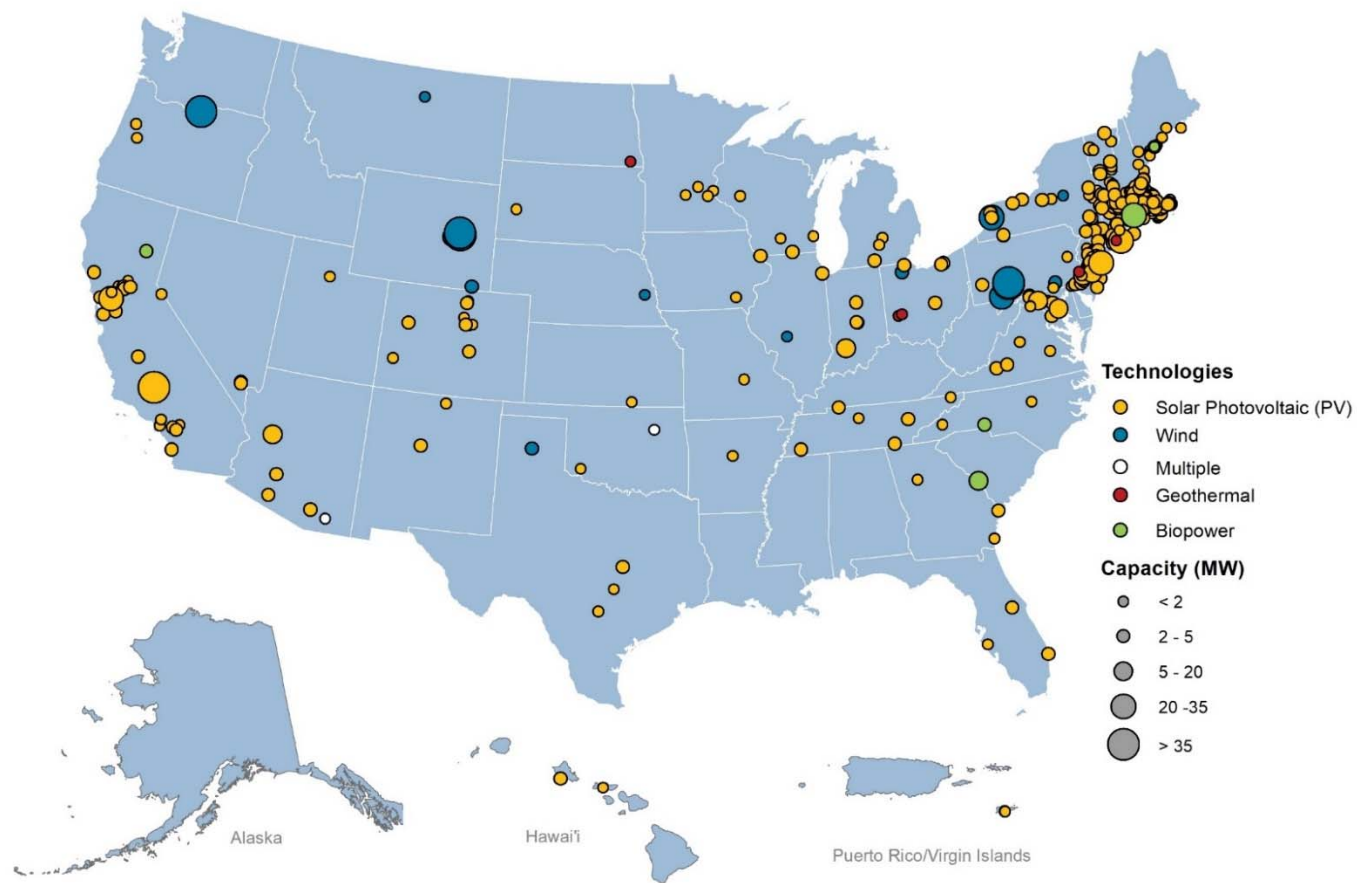


<https://www.epa.gov/re-powering>

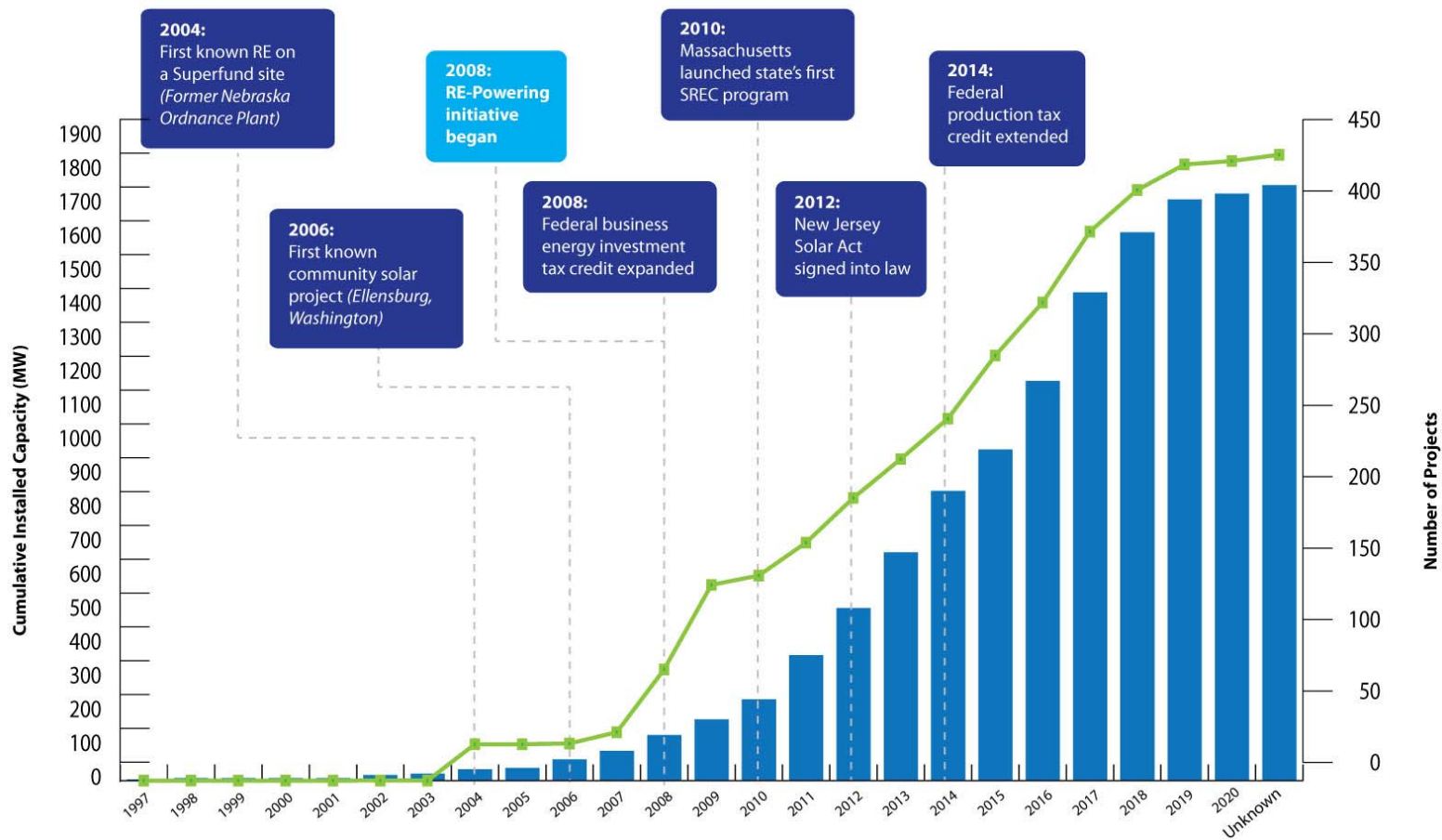
- Tracking Matrix
- Benefits Matrix
- Feasibility Studies
- Case Studies
- Critical Infrastructure
- Interconnection
- Coming soon! Update: Best Practices for Solar on Landfills

Completed Projects

417 Renewable Energy Projects, Over 1.8 Gigawatt Installed Capacity



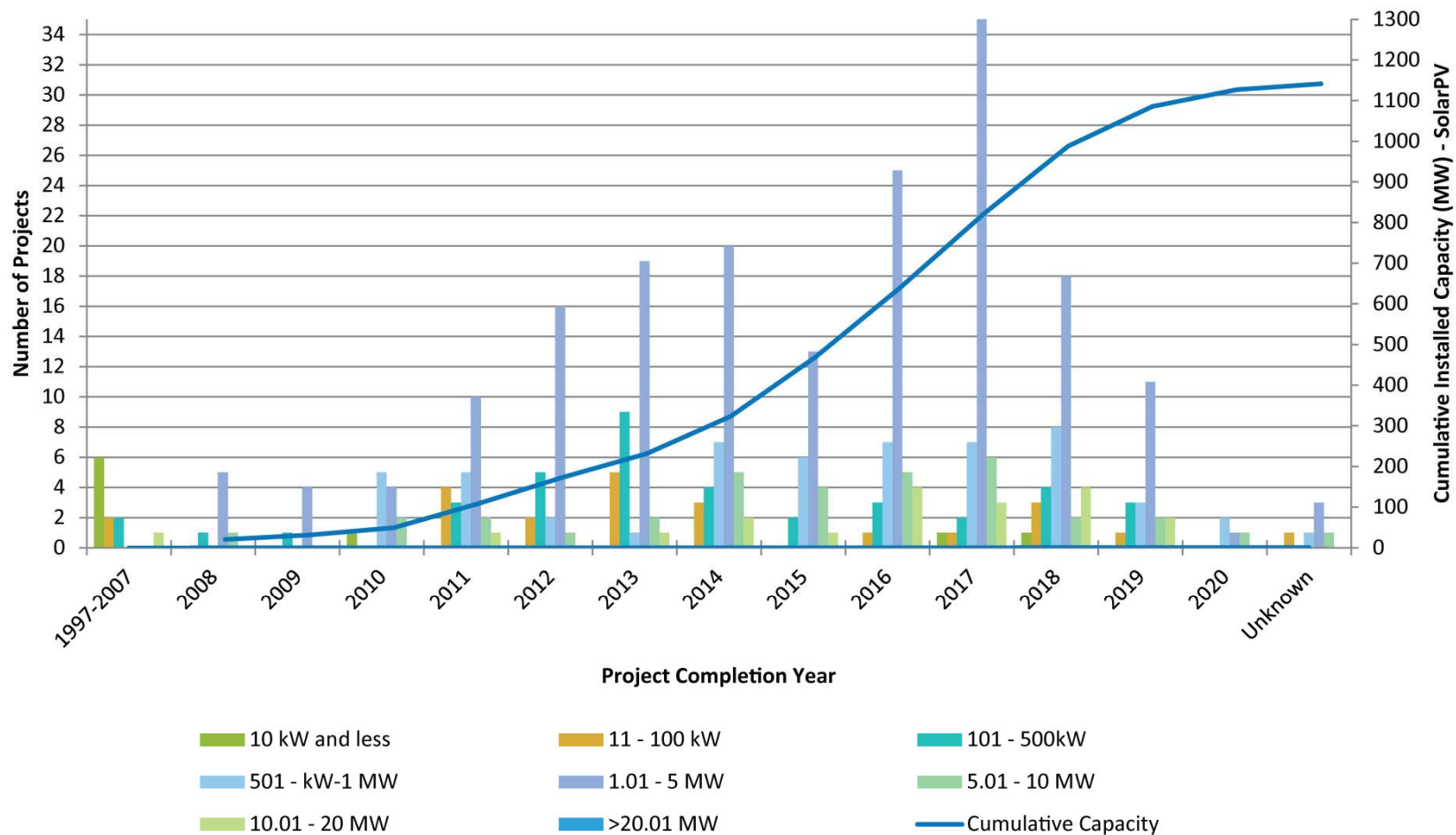
Installed Capacity



Note: The growth curve for both the number of sites and cumulative installed capacity may differ from previous versions of the Tracking Matrix, as the RE-Powering team learns about additional renewable energy projects installed on contaminated lands in previous years.

There are six installations for which the completion date is unknown.

Solar Trends



Resources on Grid Interconnection

Connecting projects to the electric transmission and distribution system is a critical step

- RE-Powering has developed tools and resources to assist:
 - Interconnection and Electricity Sales Training Module
 - Interconnection: Plugging RE-Powering Sites Into the Electric Grid
 - The Value of Existing Infrastructure for Renewable Energy Development
- Explore:
 - What is interconnection
 - Different types of interconnection
 - Steps and timing
 - Typical cost ranges
 - Tips for navigating interconnection the process



BUILD Act

2018 BUILD Act Provisions for Brownfields Grant Applications

- Energy efficiency
- Renewable energy

<https://www.epa.gov/brownfields/summary-2018-build-act-provisions>



RE-POWERING
AMERICA'S
LAND INITIATIVE

Brownfields Utilization, Investment, and Local Development Act (BUILD Act) Bill Summary

Overview

In March 2018, Congress passed the BUILD Act, which amends the Brownfields provisions of CERCLA, as part of the FY 2018 Omnibus Bill. In this factsheet, we explain the major changes to the Brownfields Amendments. The BUILD Act reauthorized the Brownfields Provisions through 2022.

More Redevelopment Certainty for Governmental Entities

Local or state governments that take control of a contaminated site no longer has to be an "involuntary" acquisition.

Alaska Native Village and Native Corporation Liability Relief

Provides liability relief for Alaska Native Villages and Native Corporations for a facility received under the Alaska Native Claims Act, as long as the entity did not cause or contribute to the release of a hazardous substance from the facility.

Petroleum Brownfield Enhancement

Removed the language and requirement that petroleum brownfield sites be "of relative low risk" in order to be eligible for funding.

Prospective Purchasers and Lessees

Bona Fide Prospective Purchaser definition was amended to include language related to those who have tenancy or leasehold interests in the facility.

Expanded Eligibility for Non-Profit Organizations

Non-profits (including L.L.C.s and community development entities that are non-profit) can now apply for assessment and RLF grants.

Certain Publicly Owned Brownfield Sites

Publicly owned sites acquired prior to January 11, 2002 can apply for assessment and remediation (RLF and cleanup) grants as long as the entity is not responsible for the contamination.

Increased Funding for Remediation Grants

Increased the cleanup grant funding amount to \$500,000 per site; eligible entities can also request a waiver to \$650,000 per site, based on the anticipated level of contamination, size, or ownership status of the site.

Multipurpose Brownfields Grants

Grant authority for multi-purpose grants (assessment and cleanup combination) was increased up to \$1,000,000. No more than 15% of the total appropriation can be awarded to multi-purpose grants.

Allowing Administrative Costs for Grant Recipients

Entities are now able to use up to 5% of grant awards on administrative costs.

Grant Applications

New ranking criteria focusing on renewable energy or energy efficiency projects and waterfront developments.

Small Community Technical Assistance Grants

Authorized a new grant program for states and tribes to provide training, technical assistance, or research for small communities (populations of 15,000 or less), Indian tribes, rural areas, and disadvantaged areas. Maximum of \$20,000 per community.



June 2018

EPA 560-F-18-170

Addressing Liability

2018 BUILD Act Provisions Address New Category of Local Government Acquisition

- CERCLA § 101(20)(D) now exempts from potential owner or operator liability, a “unit of state or local government which acquired ownership or control through seizure or otherwise in connection with law enforcement activity, or through bankruptcy, tax delinquency, abandonment or other circumstances in which the government acquires title by virtue of its function as sovereign.”

Learn more in the 2020 Revitalization Handbook: *Revitalizing Contaminated Lands: Addressing Liability Concerns*

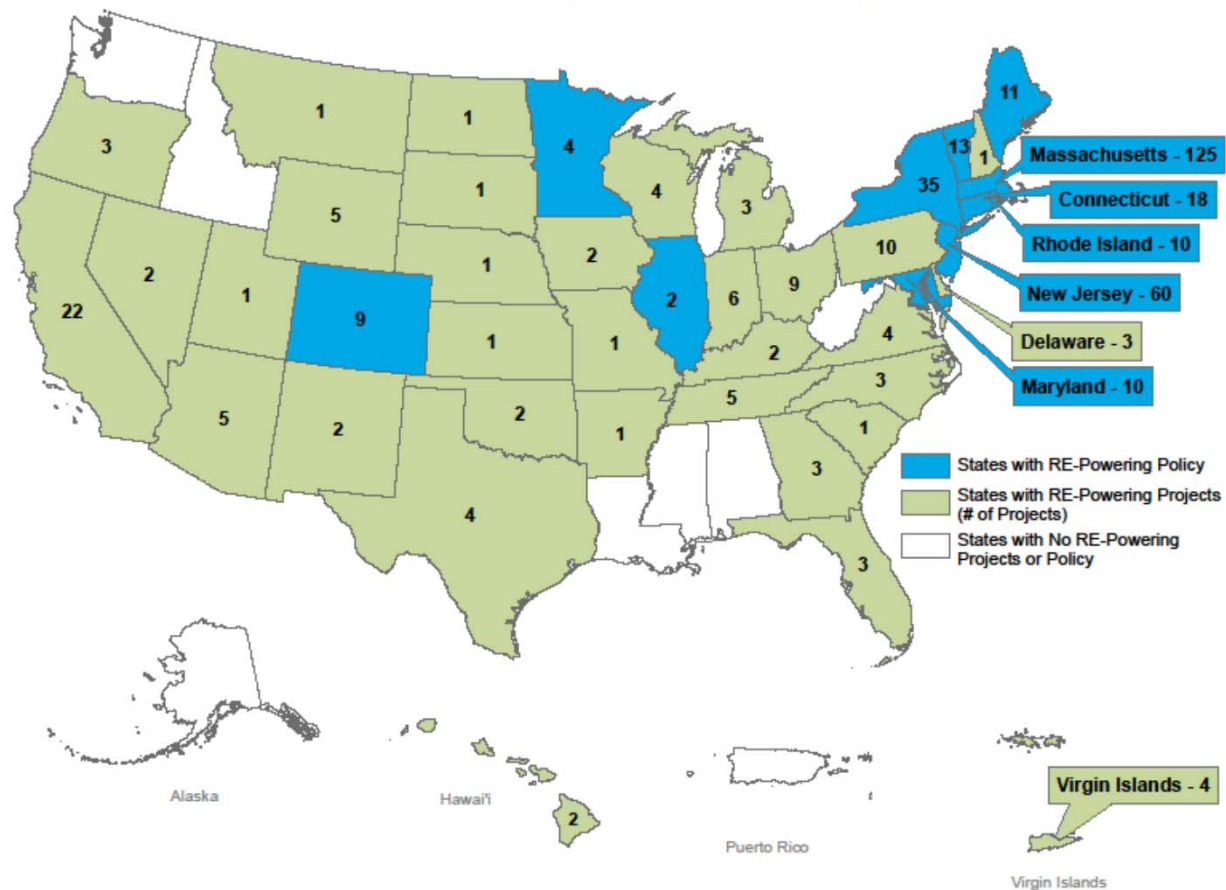
<https://www.epa.gov/sites/production/files/2020-06/documents/revitalization-handbook-final-2020.pdf>

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State Policy Matters

Number of RE-Powering Projects by State and Territory as of October 2020



Policy Analysis and Stakeholder Interviews

- RE-Powering conducted interviews with state agencies and developers in Massachusetts and New York to identify key concepts for cultivating renewable energy on contaminated lands
 - Identified common features and program elements
 - Used to assist other states, such as Minnesota Brightfields Initiative

Stakeholder Interviews

Permitting is more streamlined and more “bundled” in New York than elsewhere.

BQ Energy

Landfill sites, in particular, were developed due to their size and the Commonwealth’s net metering policy.

Mass DOER

The success was a result of, and was fundamentally spurred by, overarching legislative and executive action in Massachusetts.

Mass DEP

Build-Ready seeks to 1) identify and assess those sites, 2) work through site development issues, 3) develop the sites to the point they can be auctioned to the private market for completion.

NYSERDA



Successful State Policy Programs

Common features of state programs:

- **Impactful** - Programs are associated with, and credited for, high levels of RE-Powering site development in MA & NY.
- **Multi-Pronged and Long-Lived** - Success requires multiple programs and a 5+ year commitment.
- **Tailored** - Successful program structures reflect state specifics (e.g., land resources, municipal organization, agency staffing).
- **Sponsored** - These efforts have consistent leadership from governors, agency leads, and legislatures.

Elements of a Successful State Program



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Project Examples

- RE-Powering tracks and publishes economic and environmental benefits at completed projects.
- Using publicly available information, RE-Powering maintains a list of completed renewable energy installations on contaminated sites and landfills.
- Common benefits of renewable energy projects include job creation, reduced greenhouse gas emissions, electricity cost savings associated with the reduced need to purchase power from the grid, and revenues from land leases and taxes.

Site Types

- Landfills are frequently developed with solar installations
- Brownfield sites are the second most developed site type (this includes state brownfield sites)
- Many areas have landfills or other under-utilized areas that could be productive again by siting renewable energy

NUMBER OF INSTALLATIONS BY SITE TYPE	
Solar and wind projects on Landfills	245
Renewable energy projects on brownfield sites	100
Renewable energy projects on Superfund sites	71
Renewable energy projects on current/former federal facilities	27
Renewable energy projects on RCRA corrective action sites	21
Renewable energy project on mine sites	13

<https://www.epa.gov/re-powering/re-powering-tracking-matrix>

Environmental Justice – Region 8 Example

Norwood Landfill Community Solar

- Community solar array in Norwood, Colorado
- 200-kilowatt project on former landfill completed in 2016
- Collaboration of San Miguel Power Association (SMPA), GRID Alternatives Colorado, and the Colorado Energy Office
- Helps lower the electric bills of qualified low-income residents
- Part of statewide initiative to reduce energy costs for customers with highest need
- Provided solar job training to volunteers and installers



Installation of the San Miguel community solar array in Norwood, Colorado.

RE-Powering America's Land - Webinar

Register today!

**USEPA's RE-Powering America's Land Initiative - Interconnection:
Plugging RE-Powering Sites into the Electric Grid**

May 13 from 1-2pm ET - [REGISTER HERE](#)





RE-Powering Website and Contacts

Thank you!

Home page:

<https://www.epa.gov/re-powering>



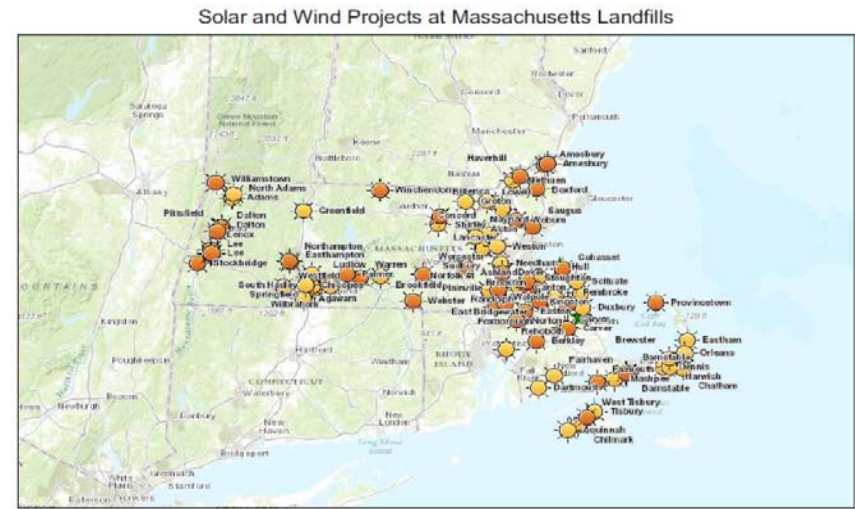
Appendix

- Additional Resources

Solar Program Example: Massachusetts

Clean Energy Results Program (CERP)

- Launched 2011
- Specific initiative to “advance environmental protection through renewable energy and energy efficiency projects” including development of solar PV on Landfills and Contaminated Land
- Close collaboration by environmental protection and energy resources departments
- Permitting process and regulations revised to facilitate solar PV on landfills and brownfields



March 17, 2017

1:2,511,463

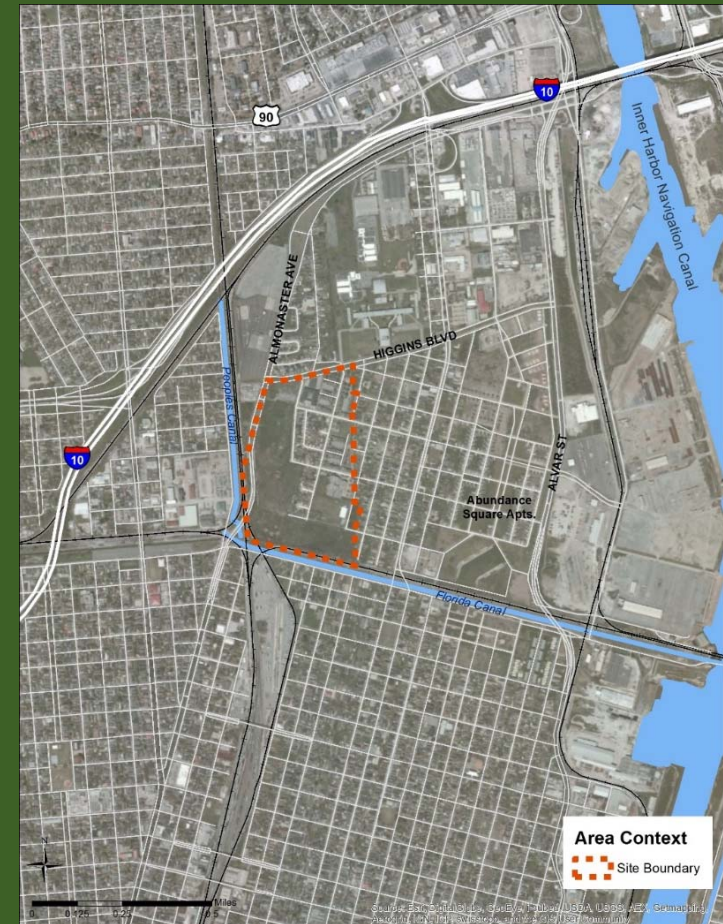
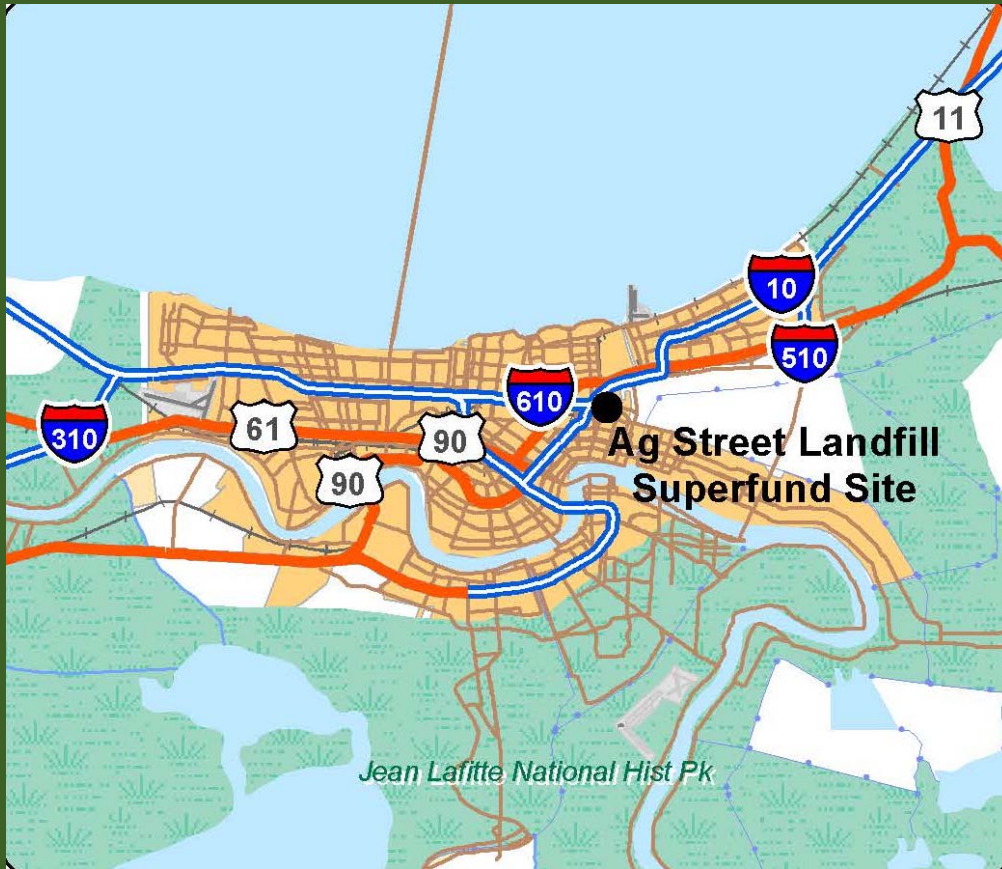
Installed & Proposed Capacity To Date:
240 MW on landfills
140 MW on brownfields
Total: 380 MW

Planning Renewable Energy Reuse - Agriculture Street Landfill Superfund site, New Orleans, Louisiana

Casey Lockett Snyder, EPA Superfund Redevelopment Program/EPA Region 6

Cheryn Robles, City of New Orleans

Site Location



Site History



Site History cont.



Current Site Status



Regional Seed Technical Assistance



Site Collaborative Planning

Solar Suitability and Property Analysis

- SRP

Renewable Energy Feasibility Study

- Re-Power

Resilience Strategy

- City of New Orleans



Benefits of Partnership



Meeting the City's Resilience Efforts

- A solar park (renewable energy) is an element of New Orleans' greater commitment to implementing resilience strategies
- National Disaster Resilience Competition Grant projects maximize water retention to reduce the need for pumping
- Living With Water strategy calls for ongoing updates to infrastructure practices including elevating houses, reducing pumping and energy needs, permeable streets



View the City's Resilient New Orleans vide here:

<https://www.youtube.com/watch?v=-B30BrSAIM4&t=36s>

Benefits of Redevelopment

- Resolve the grievances of the Gordon Plaza residents, providing a legitimate project reason to offer buy outs;
- Establish a backup power source for the Sewerage and Water Board of New Orleans pumping station;
- Minimize greenhouse gas emissions/carbon footprint;
- Return the former Superfund site to productive use;
- Potentially generate revenue/create a contributing City asset



Recommendations from New Orleans

- Cultivate your relationship with your EPA counterpart.
- EPA staff is smart and friendly, they want to be helpful and are excellent resources.
- The City's initial estimates to fund Feasibility Study were not funded. EPA's technical assistance is providing the same service at no cost to the City.
- Don't be afraid to ask for technical assistance and guidance.

Contacts

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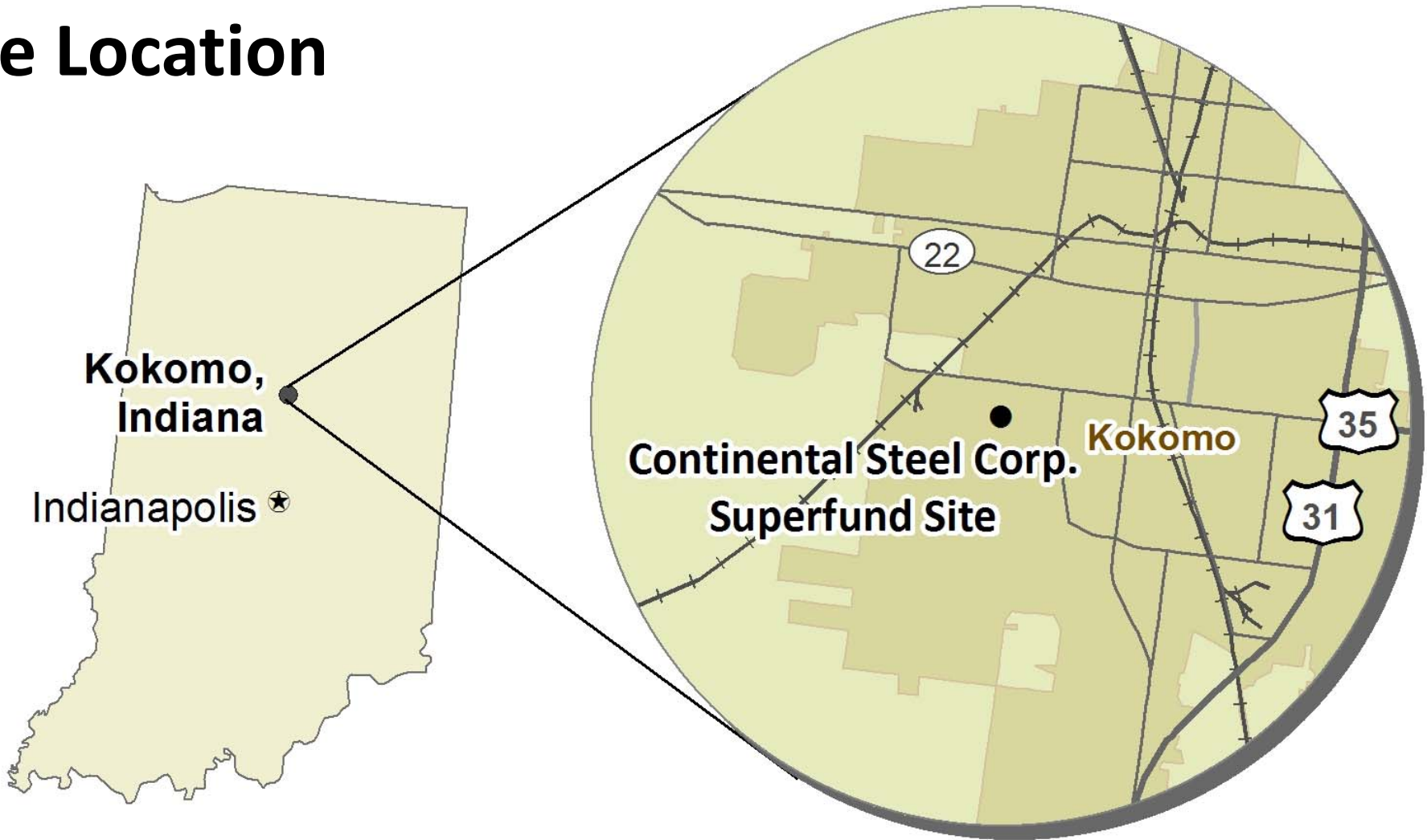
Continental Steel Corp. Superfund Site

Tom Bloom, EPA Region 5

Overview

- Site Location and History
- Cleanup Summary
- Coordinating Reuse and Remediation Considerations
- Site Reuse Outcomes and Milestones
- Lessons Learned

Site Location



Sources: Esri, DeLorme, AND, Tele Atlas, First American, UNEP-WCMC and USGS.

Site History

- 1896 – Kokomo Fence Machine Company operates facilities on site
- 1901 – Kokomo Steel & Wire operates facilities on site
- 1914 - 1986 – Continental Steel operates facilities on site
- 1984 - 1986 – IDEM identifies soil and groundwater contamination at the site
- 1986 – Continental Steel declares bankruptcy
- March 1989 – EPA places the site on the National Priorities List









1/16/2017⁷³

Cleanup Summary

- February 1990 – EPA completes removal actions to address immediate risks
- 1993 – EPA begins remedial investigations at the site
- 1998 – EPA selects site cleanup plan
- 2011 – EPA completes cleanup activities at the site

Coordinating Reuse and Remediation Considerations

- In 2001, EPA gave the City of Kokomo a \$100,000 Superfund Redevelopment Pilot
- Wildcat Creek Soccer Complex

WILDCAT CREEK SOCCER COMPLEX



LEGEND:

- | | | |
|---|--|---------------------------|
| a. Practice Area/Overflow Parking | f. Internal Paths (1,950 LF Approximately) | k. Championship Field U |
| b. Parking Lot "A" (200 Spaces, 6 ADA Spaces) | g. ADA Ramp along Hillside | l. Championship Field U |
| c. Parking Lot "B" (200 Spaces, 6 ADA Spaces) | h. Well Monitoring Station | m. 6 U-6 Fields (or 5 U-8 |
| d. Drop Off Zone | i. Concession Stand with Drive Access | n. 4 U-13+ Fields (or 4 U |
| e. Perimeter Path (1.25 Miles Approximately) | j. Storage Barn | o. 12 U-10 Fields (or 7 U |
| | | p. 6 U-8 Fields (or 9 U-6 |

Site Reuse Outcomes

- The City of Kokomo is now leasing this once highly contaminated property to the solar company and generating revenue
- Completed installation of 21,000 solar panels on 26-acres of the Main Plant
- This \$10 million energy project is expected to produce about 9,000 megawatts of electricity, enough to power 1,000 homes
- One of the largest photovoltaic arrays in the State of Indiana
- This renewable energy project cuts greenhouse emissions and air pollution and helps diversify Indiana's energy supply







Site Reuse Success Milestones

- October 2015 – Kokomo Soccer Club hosts its first youth soccer match at the Wildcat Creek Soccer Complex
- June 2016 – Kokomo Plan Commission approves construction of 25-acre, \$9 million solar facility
- December 2016 – Solar array begins operating on site
- April 2017 – EPA Region 5 presents its RENEW Award to site redevelopment partners



Lessons Learned

- Reuse outcomes at the site were highly successful due to great cooperation, coordination, and execution between all of the parties
- Start reuse planning early in the remedial process!
- Stay the course
- Consider reuse and remedy protectiveness
- Address liability concerns

Thank You

- Nabil Fayoumi – EPA Region 5, Site RPM
- Tom Krueger – EPA ORC
- Jessica Fliss – IDEM
- The City of Kokomo
- Inovateus Solar
- Alterra Power
- Heartland Energy
- 1st Source Bank
- Green Alternatives



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Wrap Up

Casey Lockett Snyder, EPA Superfund Redevelopment
Program/EPA Region 6

Superfund Redevelopment Resources & Tools

- Regional Seed Resources & Reuse Planning
- EPA Guidance, Handbooks & Fact Sheets
- Prospective Purchaser Inquiry (PPI) calls
- Comfort Letters
- EPA Agreements

MAY 2006
EPA-330-F-06-001



Top 10 Questions to Ask When Buying a Superfund Site

Office of Enforcement and Compliance Assurance Office of Solid Waste and Emergency Response
Office of Site Remediation Enforcement Office of Superfund Remediation and Technology Innovation

The purpose of this document is to provide answers to some of the questions that a prospective purchaser may have when considering whether to purchase property at a privately owned Superfund site.



SUPERFUND SITE REDEVELOPMENT USING OPPORTUNITY ZONE TAX INCENTIVES

WHAT ARE OPPORTUNITY ZONES?

Opportunity Zones (OZs) attract long-term private investors and stimulate economic growth. They were created by the 2017 Tax Cuts and Jobs Act. About 8,756 OZs were established in all 50 states, the District of Columbia and the five U.S. territories. For communities, OZs can help revitalize contaminated and formerly contaminated properties, including Superfund sites. They attract private investment and strengthen the financial viability of redevelopment projects.

Opportunity Zones are a powerful way to encourage revitalization in economically distressed communities. Redevelopment of current or former Superfund sites may qualify for Opportunity Zone tax benefits.



Map of OZs and links to state OZ websites:
<https://opportunityzones.hud.gov/resources/map>

Owned Superfund Sites

purchase and transfer of real property on of the questions and answers in this document sites. Superfund cleanups at federal facilities ties. For example, federal facility agreements of these properties. A number of landowner federal property and have been addressed by we continuing to be cleaned up and purchased nation on EPA's efforts to clean up federal merfit).

is created by the federal Superfund law which operation, and Liability Act ("CERCLA"), 42

tain aspects of a more comprehensive program. It ily create, expand, or limit any legal rights. is not intended as a substitute for reading the statute sponsibility to ensure that its proposed use does not r guarantees or warranties as to the compatibility of a an liability protection status as a bona fide

SUPERFUND REDEVELOPMENT PROGRAM
SEPTEMBER 2020

Superfund Redevelopment Coordinators by Region

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www.epa.gov/superfund-redevelopment-initiative/regional-redevelopment-contacts

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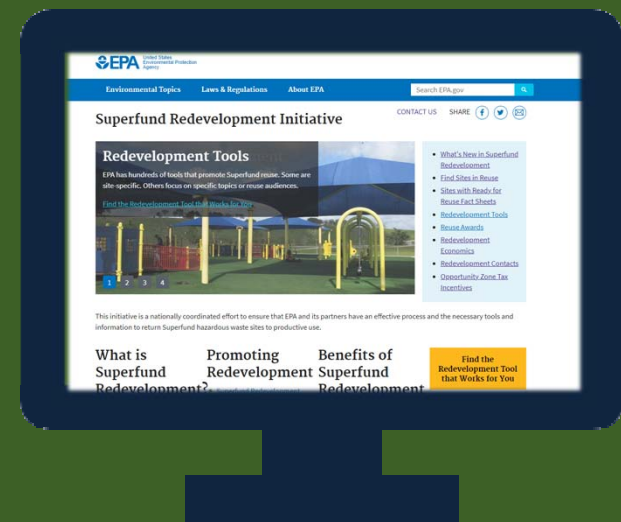
Lavar Thomas

OSRTI Community Involvement & Program

Initiatives Branch

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**Superfund Redevelopment
Program Website:**

www.epa.gov/superfund-redevelopment-initiative

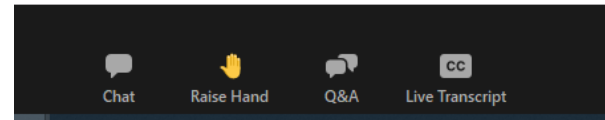
Questions?

Casey Luckett Snyder, Cheryn Robles,
Lora Strine and Tom Bloom

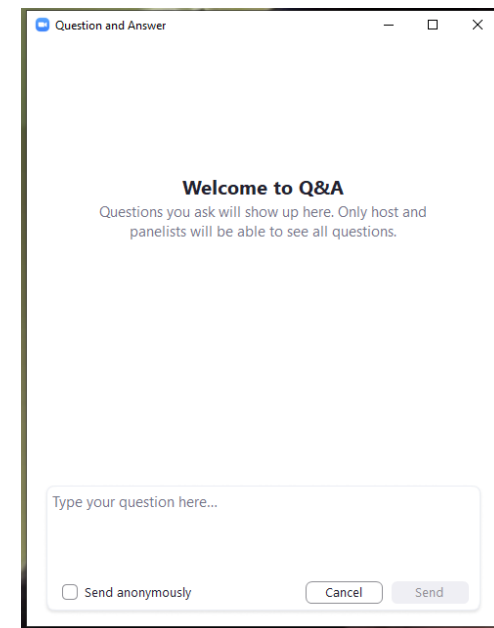


Q&A

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 - Unmute when your name is called and you are prompted



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