

Brownfields and Economic Development and TAB Resources

Sabine E. Martin, Ph.D., P.G.

Center for Hazardous Substance Research

Kansas State University

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What is 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.”*

Practical implication: Brownfields are everywhere!


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

Brownfields in the U.S.

- Estimated 450,000 to 1 Million sites
- 5 million acres of abandoned industrial sites in U.S. cities – roughly the same amount of land occupied by 60 of the largest U.S. cities

U.S. Department of Housing and Urban Development

Brownfield Examples

- Abandoned gas stations
 - Abandoned grain elevators
 - Former manufacturing facilities
 - Abandoned properties next to rail lines
 - Former school buildings
 - Abandoned residential properties next to industrial facilities
 - Vacant residential lots
- 

Typical Brownfield



Abandoned Service Station

Typical Brownfield



Abandoned Service Station

Typical Brownfield



Grain Storage Facilities/Coops found throughout rural areas

Brownfield?



Brownfield?



Brownfields on Main Street?



Brownfield?



Abandoned Residential Lot

Brownfield?



Former Drive-In

Brownfield?



Abandoned School Building

Industrial Blight



UCSF Mission Bay



Why Redevelop Brownfields?

- Desirable locations
- Increases local tax base
- Facilitates job growth
- Improves community image
- Preserves neighborhoods
- Mitigates blight
- Mitigates public health and safety concerns
- Reduce the need to develop greenfields
- Uses existing infrastructure (cost savings)



Kansas City Terminal Railway



Kansas City Terminal Railway





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Atchison, KS (pop.16,481)





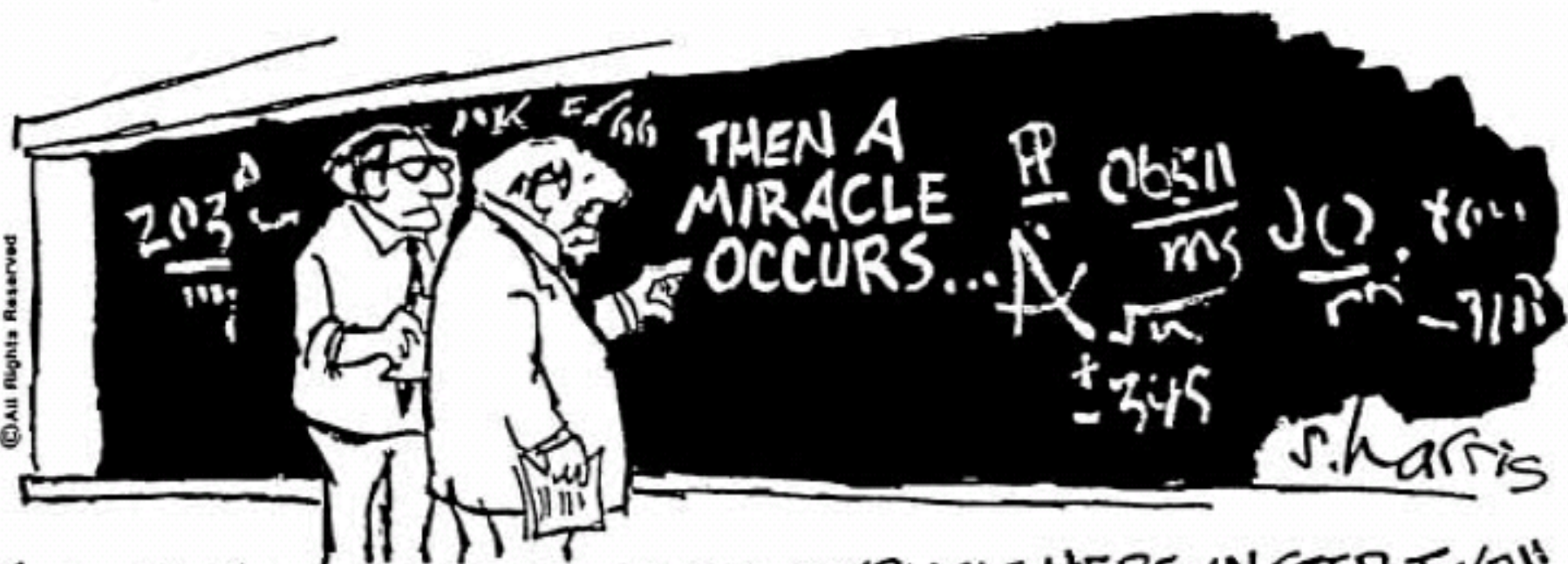
Atchison Funding Breakdown

- Federal DOT Congressional Earmark, through KDOT: \$1M
- KDOT Transportation Enhancement Program: \$604,821
- Economic Development Administration: \$409,100
- KS Department of Wildlife and Parks: \$300,00
- HUD EDI Special Project Congressional Earmark: \$281,657
- EPA Brownfields Assessment grant: \$200,000
- KDHE BTAs (3): \$40,000
- Kansas Water Office: \$50,000
- **Total Federal and State: \$2.8 M**

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.



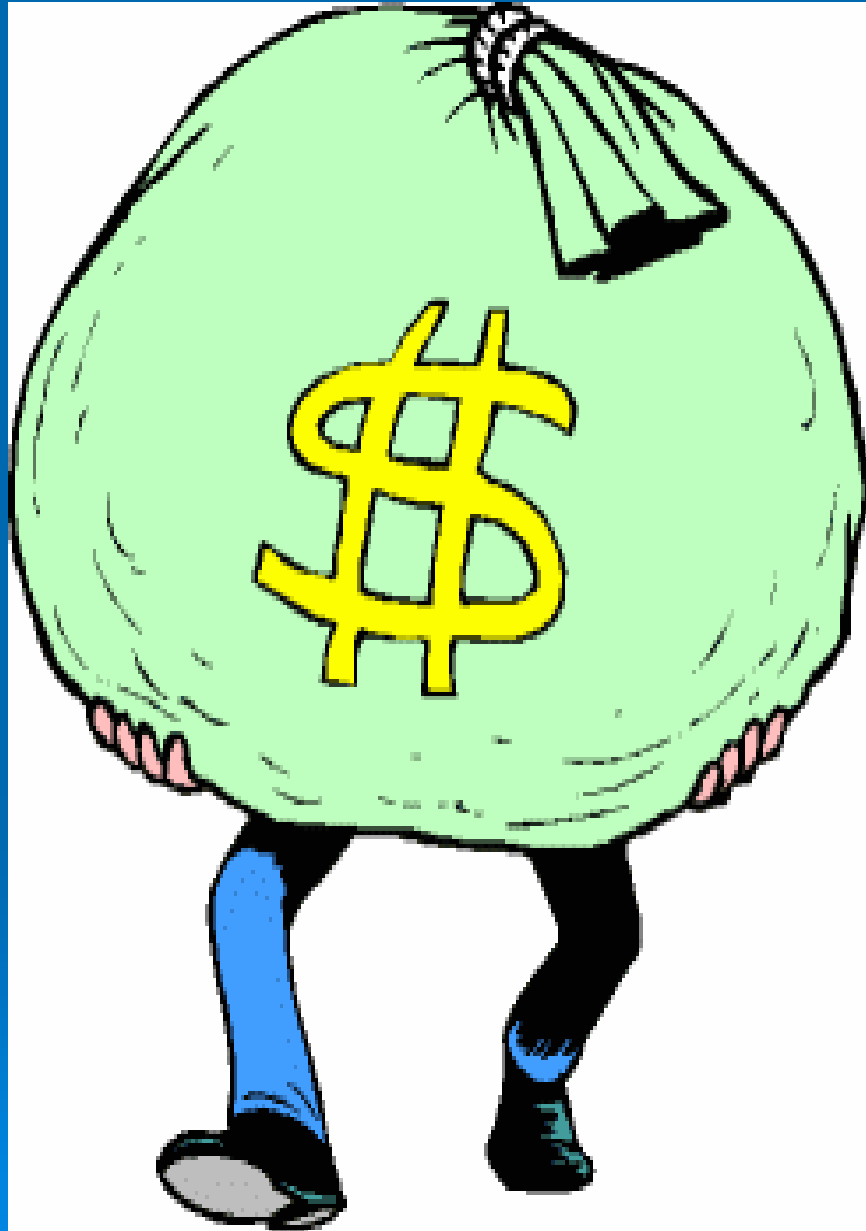


"I THINK YOU SHOULD BE MORE EXPLICIT HERE IN STEP TWO."

BF Process

- **Identify** the Brownfield
 - **Investigate** – Phase I/II site assessments
 - **Clean-up**, if necessary
 - **Redevelop**
- 







Purpose of Site Assessments

Identification of Environmental Risk

- avoid taking ownership of contaminated property
- avoid responsibility for cleanup under CERCLA as an “innocent landowner”
- evaluate whether environmental risks are worth accepting in a case where contamination is discovered

Acronym Alert !!!

ESA

stands for

Environmental Site Assessment

The background of the slide features several concentric, light blue circular ripples that resemble water droplets hitting a surface, scattered across the lower half of the page.

Types of ESA's

Phase I ESA – non-intrusive

Phase II ESA – intrusive

**Phase III ESA – intrusive
or Site Characterization**



Phase I ESA

(non-intrusive)

Identifies **potential** environmental concerns

Also called **recognized environmental conditions**

- Research on historical and current uses and activities of the site and surrounding area
 - Records review
 - Site reconnaissance
 - Interviews

Records Review

- Surrounding area of subject site
 - Search radius varies: between 1/8 mile and 1 mile
- Site specific

Phase I Env. Site Assessment



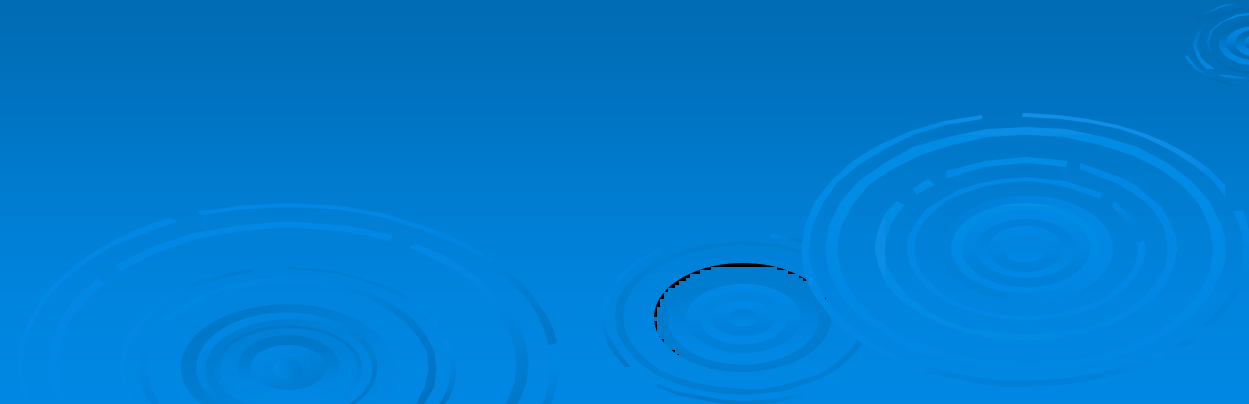
All Appropriate Inquiry

All Appropriate Inquiry

What's that?

- Federal standard for conducting environmental site assessments
- Refers to the requirements for assessing environmental conditions of a property **prior to** its acquisition

AAI Compliance

- AAI final rule standards (effective as of 11-01-06)
 - **Or** follow the standards set forth in ASTM E1527-05 Phase I Env. Site Assessment Process
- 
- The background of the slide features several concentric, light blue circular ripples that resemble water droplets hitting a surface, positioned in the lower right and bottom center areas.

AAI Requirements

- Inquiry to be conducted by an “Environmental Professional”
- Interviews with past and present owners, operators, occupants of the facility/site
- Review of historical records since the property was first developed
- Searches for recorded env. clean-up liens against the facility/site filed under federal, tribal, state, or local law

AAI Requirements, cont.

- Reviews of federal, tribal, state, or local government records
- Review of waste disposal records; UST records; haz. waste handling, generation, treatment, disposal records; spill records
- Visual inspection of site plus adjoining properties
- Interview adjoining property owners **mandatory** if subject property is abandoned

AAI Requirements, cont.

- AAI applicable to commercial real estate, residential used for commercial purposes, residential under gov. ownership
- Identify releases or threatened releases of hazardous substances on subject property
- AAI report **valid for 1 year**, after that it becomes invalid
- AAI must be conducted within 1 year prior to purchase of the property **with certain aspects conducted or updated within 180 days of purchase date** (i.e. site inspection, interviews, local records search, EPs declaration).

AAI Requirements, cont.

- Extensive documentation of **data gaps**; describe efforts to resolve them, EP is required to issue an opinion about the impact of the data gaps on his/her ability to identify conditions indicative of releases or threatened releases of hazardous substances at the subject site
- Places extensive reliance on the EPs professional judgment

Phase II ESA

evaluates the recognized environmental conditions identified in the Phase I *ESA*



Phase II ESA cont.

(intrusive)

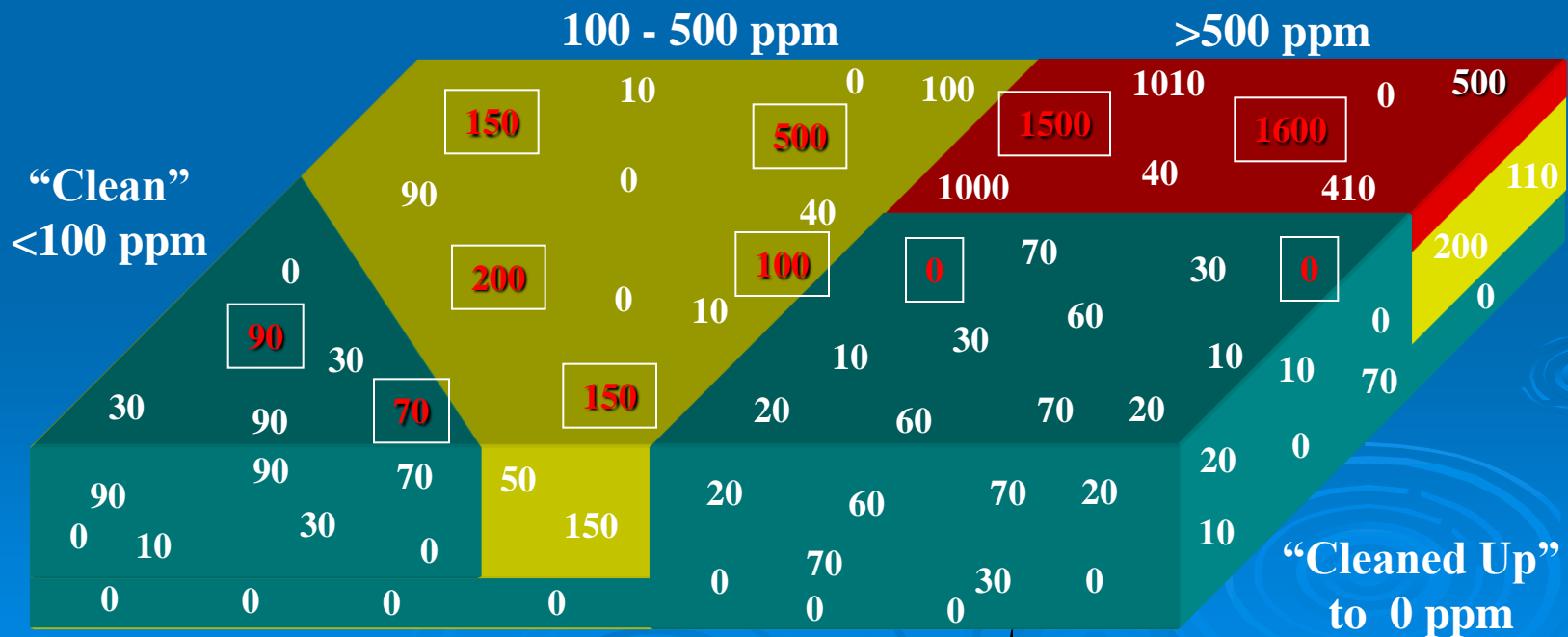
Components:

Sampling and chemical analyses of impacted media (i.e. soil, groundwater, surface water, air, etc.)

Identification of horizontal and vertical extent of contamination – if present

Contaminants are rarely distributed evenly

- Neither horizontally, nor vertically
- Assessment estimates between available sample points



Phase II ESA cont.

Stepwise Approach:

- Development of scope of work
- Assessment activities
- Interpretation of results
- Presentation of findings and conclusions



Phase II ESA Results

- Identified contaminants
- Identified lateral and vertical distribution
- Identified concentrations of contaminants present
- Identified potential receptors
- Identified potential for off-site migration
- Produced detailed report, incl. detailed maps
- Recommendations for further action, i.e. is remediation necessary

Phase II ESA Results

Results may show:

- Hazardous substances have not been disposed or released
- Environmental condition does exist and information can assist the user in making informed business decisions

Phase III ESA

Also known as “Site Characterization”

- Obtain more and detailed data regarding the contaminants and the impacted media
- More sampling
- Pump tests/slug tests
- Detailed geologic cross sections

Phase III ESA Results

- Identification of source(s) of contaminants
- Identification of migration pattern
- Identification of receptors
- Identification of **full** extent of contamination
- Identification of subsurface conditions
- Recommendation of suitable remedial options
- Detailed report

Assessment Activities

- Field screening/field analytical methods
- Environmental media sampling (soil, water, air)

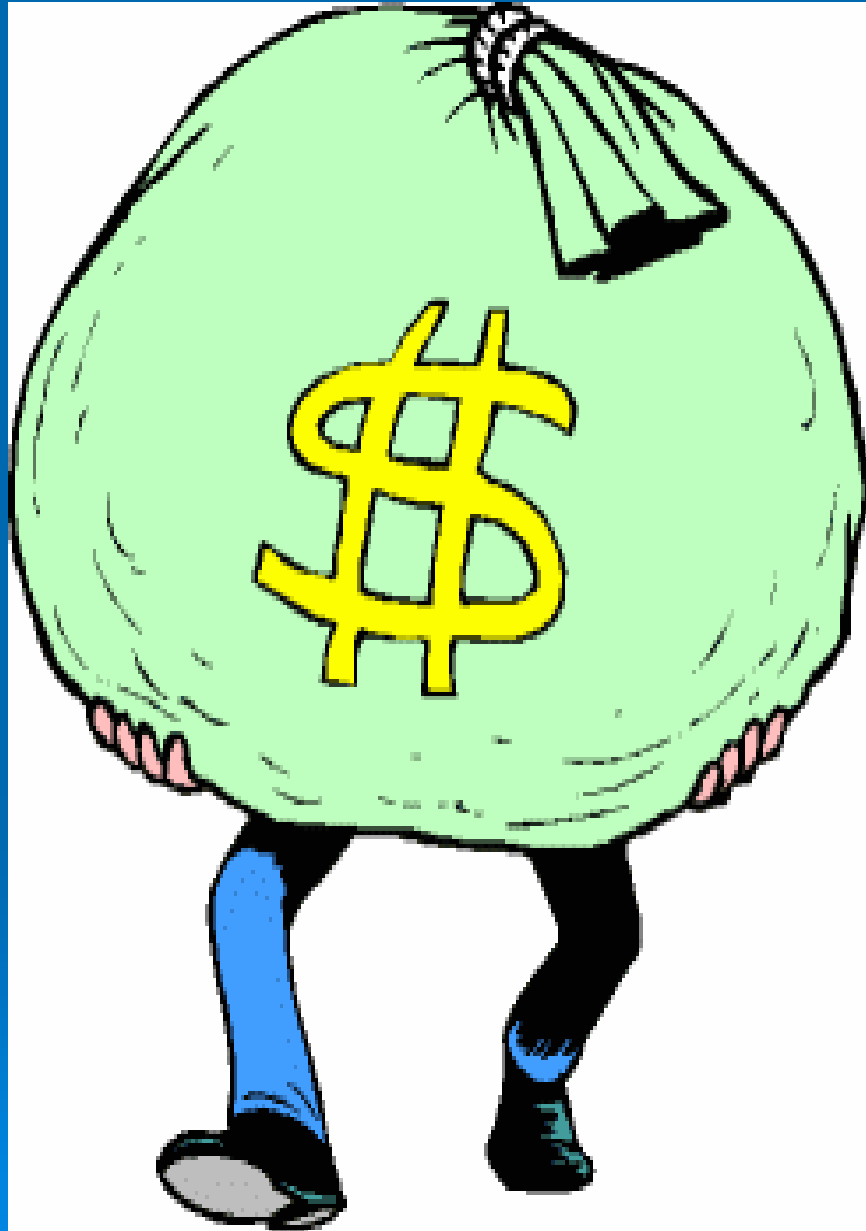












Financing Programs: A Federal "Laundry List"

What's Been Used in Brownfield Reuse Financing Packages?

Loans

- EDA capital for local revolving loan funds
- HUD funds for locally determined CDBG loans and "floats"
- EPA capitalized revolving loan funds
- SBA's microloans
- SBA's Section 504 development company debentures
- EPA capitalized clean water revolving loan funds (priorities set/ programs run by each state)
- HUD's Section 108 loan guarantees
- SBA's Section 7(a) and Low-Doc programs
- USDA business, intermediary, development loans

Grants

- HUD's Brownfield Economic Development Initiative (BEDI)
- HUD's Community Development Block Grants (for projects locally determined)
- EPA assessment, cleanup grants
- EDA public works and economic adjustment

Grants (*continued*)

- DOT (various system construction, preservation, rehabilitation programs)
- Army Corps of Engineers (cost-shared services)
- USDA community facility, business and industry grants

Equity capital

- SBA Small Business Investment Cos.

Tax incentives and tax-exempt financing

- Targeted expensing of cleanup costs
- Historic rehabilitation tax credits
- Low-income housing tax credits
- Industrial development bonds
- Energy efficiency construction credits

Tax-advantaged zones

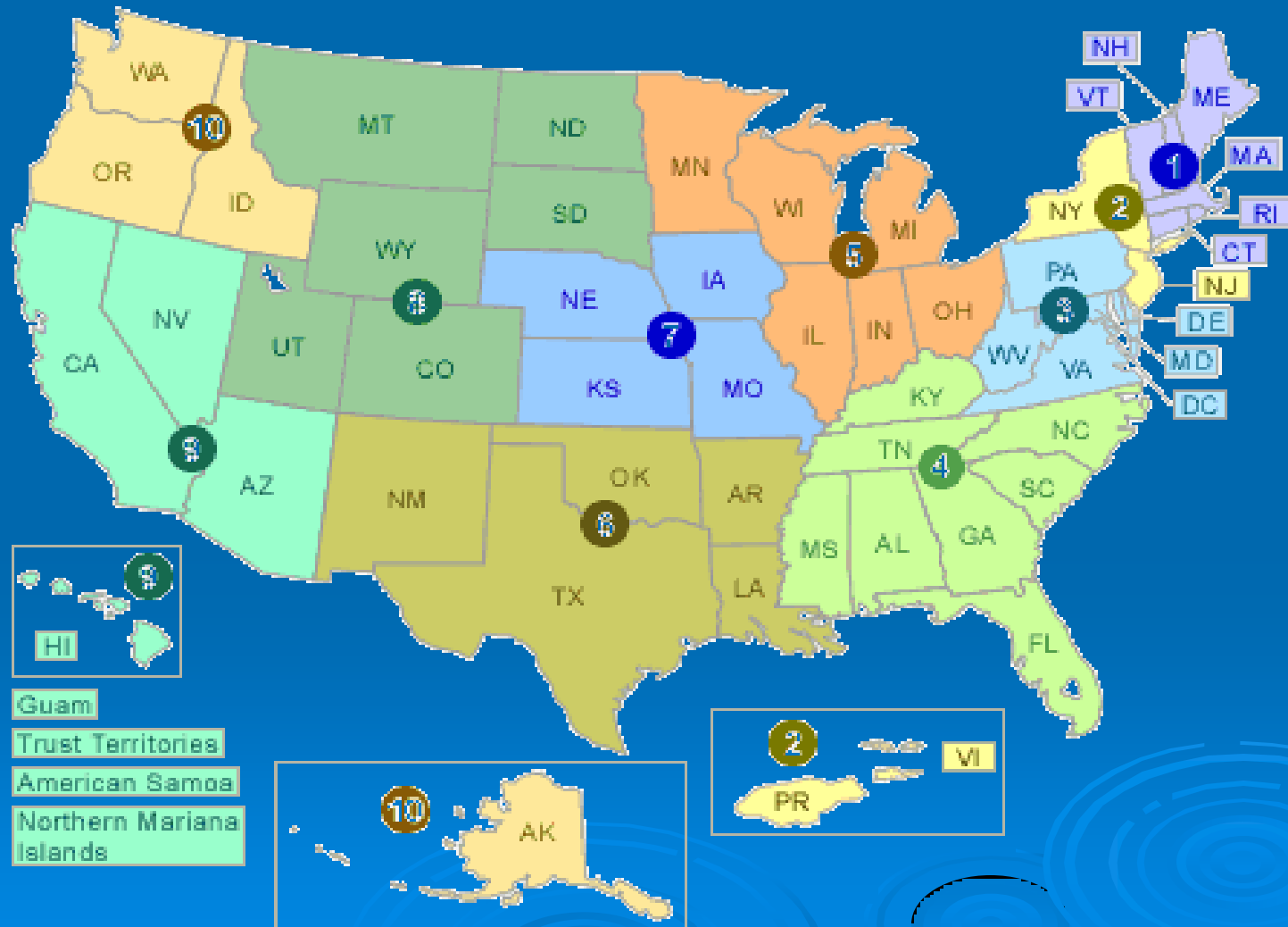
- HUD/USDA Empowerment Zones
- HUD/USDA Enterprise Communities

Technical Assistance to Brownfield (TAB) Communities

- A national program
- Funded by EPA
headquarters via grants to 4
different entities
- **Free** to communities
- K-State assists communities
in EPA Regions 5 and 7



EPA Regions



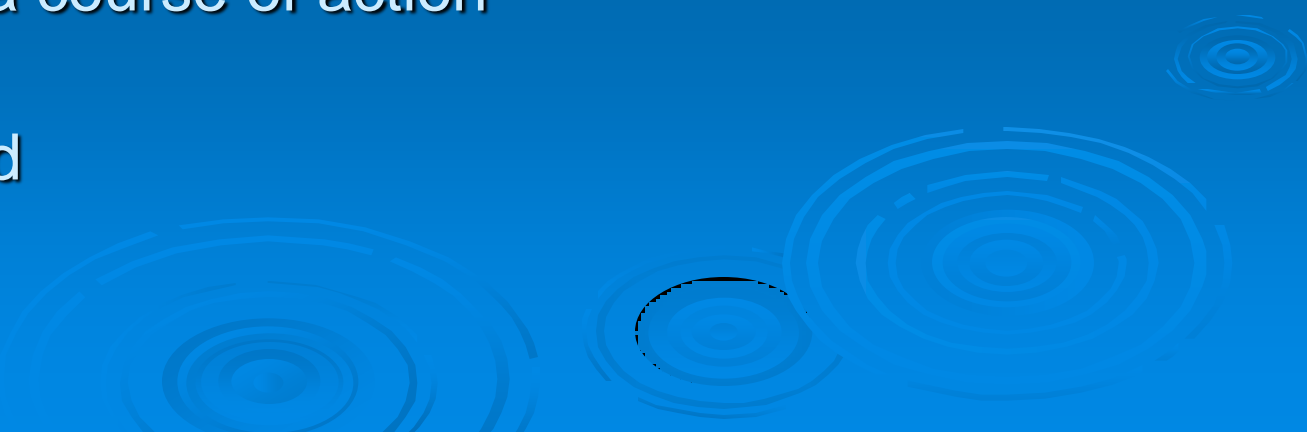
TAB Assistance to Communities

- Tailored to specific community needs
- Typically coordinated through the city, tribal or non-profit brownfields project manager

May include:

- Help identifying funding sources for revitalization projects
- Review of EPA and other grant applications
- Help finding a consulting firm
- Review of project plans, technical reports
- Assistance with community outreach/involvement
- Educational workshops and redevelopment visioning
- Other assistance, as needed and agreed upon
- Communities accepted on a 'first come' basis
- Depends on staff/funding availability

The Application Process

- Contact us
 - We'll set up a meeting to discuss assistance needs
 - Review needs and TAB capability
 - Agree on a course of action
 - Get started
- 

Community Involvement Tools

Workshops/Training Sessions

- Tailored to the information needs of the community
- Keep audience awake and engaged
- Relaxed atmosphere
- Time for networking
- Variety of presenters
- Hands-on segments
- Very effective !



Community Outreach

Redevelopment Planning

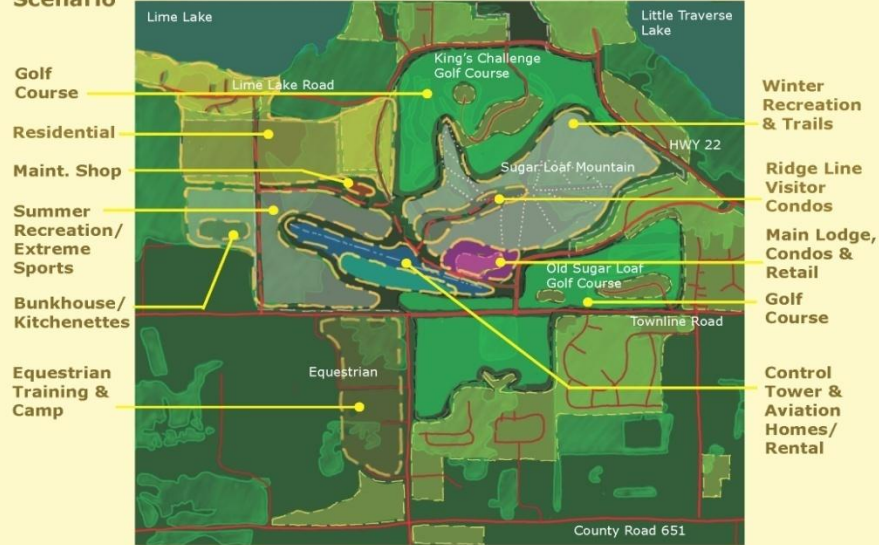


Redevelopment Planning



Potential Redevelopment Scenario #1: Leelanau County Resort Center

County-wide focused redevelopment.



The scenario plan and concept sketches are based on public input, are intended to be flexible, and provide a tool for continued dialog.

Main Lodge & Condos



Retail & Spa Center

Bunkhouse/Kitchenettes



Control Tower & Air Strip

recreation four seasons jobs agricultural heritage green construction local economy
 Technical Assistance to Brownfields Communities Program at Kansas State University. Summary of Leelanau County Visioning Sessions August 2009

Technical Presentations

Community Meetings



Community Involvement

- Who is the Community?
- Why do it?
- Successful Involvement Techniques



Community Involvement Tools

Fact Sheets, Citizen Briefs

- clear
- concise
- in layman's terms
- basic information
- provide contact info and additional resources

Note: NOT a stand-alone tool



KSU TAB Citizen Briefs

Explore

- [Outreach](#)
- [TAB](#)
- [TOSC](#)
- [TOSNAC](#)
- [Resources](#)
- [Contact](#)

Search

Search

Outreach Resources

Publications

Environmental Science and Technology Briefs for Citizens

Brownfields Resources

- [Brownfields Basics \(PDF\)](#)
What is a Brownfield?
- [Institutional Controls \(PDF\)](#)
- [Asbestos: What Is It? Where Is It? \(PDF\)](#)
- [Lead-Based Paint: What Is It? Where Is It? \(PDF\)](#)
- [Phase I Environmental Site Assessments \(PDF\)](#) property owners, investors, borrowers, and lenders.
- [Phytoremediation at Brownfields \(PDF\)](#)
What is it and how does it work?
- [Planning for Community Involvement \(PDF\)](#)
How to develop and implement a community outreach plan.
- [Steps in Choosing an Environmental Consultant \(PDF\)](#)
What to look for before starting your important projects.
- [What are Quality Assurance Project Plans \(PDF\)](#)
How to write and develop a quality assurance project plan.
- [Writing a Request for Proposal \(PDF\)](#)
Communities that receive a Brownfields Pilot Grant typically need to hire a contractor to do an environmental assessment of the property to be redeveloped. This 12-page publication provides guidance for soliciting proposals from contractors.
- [Grant Writing Tips \(PDF\)](#)

<http://www.engg.ksu.edu/CHSR/outreach/resources/>

Community Involvement Tools

Community Outreach

- Community Day/Fair
- Bus Tours
- Walking Tours
- Workshops/Seminars
- Public Meetings



If you feed them, they will come



Special Projects

Web - based software: TAB EZ

www.tabez.org



The screenshot shows the TAB EZ website interface. At the top left is the TAB EZ logo, which consists of a stylized tree icon and the text "TAB EZ". To the right of the logo are navigation links: "Login", "Register", and "Contact Us / Feedback". Below the logo is a horizontal navigation bar with the following items: "HOME", "GRANT APPLICATIONS", "RESOURCES", "SEARCH", and "HELP".

The main content area is divided into two columns. The left column contains two sections: "In This Section:" with links for "Home Page" and "About TAB EZ"; and "Quick Links:" with links for "Sample Grant Applications", "Tutorial", "Definitions", and "Acronyms".

The right column is the main content area, titled "Home". It features a "Welcome to TAB EZ" message and a description of the software as a "Technical Assistance to Brownfields communities (TAB) easy brownfields grant application (EZ) software program". It explains that TAB EZ is a grant writing tool for EPA brownfields grant proposals, currently addressing assessment and cleanup grants. It lists what the tool can and cannot do, and provides instructions on how to use it, including a note that it is not a substitute for reading the grant guidelines. A prominent announcement states: "!!!The deadline to submit your FY2011 grant proposal is October 15, 2010!!!". Below this, it mentions that EPA amended the guidelines on September 24 and provides links for quick reference to the assessment and cleanup grant amendment documents.

At the bottom of the page, there are two icons: one for "GRANT APPLICATIONS HOME" (a house icon) and one for "TAB EZ TUTORIAL" (a chalkboard icon).

Special Projects

Web - based software: TAB-BIT
www.tab-bit.org

The screenshot shows the BIT website interface. At the top left is the BIT logo, which features a green maple leaf inside a circular sunburst, with the text "BiT Brownfield Inventory Tool" below it. To the right of the logo are three links: "Login", "Register", and "Contact Us/Feedback". Below the logo is a navigation bar with the following items: "HOME", "BIT TOOLBOX", "ABOUT", "RESOURCES", "SEARCH", and "HELP".

The main content area is divided into two columns. The left column has two sections: "In This Section:" with a link to "BIT Home", and "Quick Links:" with links to "BIT Tutorial" and "Help".

The right column contains the main content. It starts with the heading "BIT Home" and a sub-link "BIT Home". Below this is the heading "Welcome to BIT" followed by a paragraph: "The Brownfield Inventory Tool (BIT) is a comprehensive brownfield program management tool. You may enter detailed site data, upload documents and data, and generate and export a variety of reports, including a Property Profile Form. BIT users are asked to create a user name and password for privacy protection. BIT can also be used as a collaborative tool, i.e. specific inventory data can be accessed by multiple users, if permission by the primary user is granted."

Next is another paragraph: "Every page within BIT comes with detailed instructions. PLEASE READ THE INSTRUCTIONS CAREFULLY! In addition, a tutorial is available by selecting the BIT Tutorial icon below."

Then, a section for "First Time Users" states: "Please register by clicking on Register in the upper right hand corner of this page and create your username and password. To get started with BIT, select the Site Inventory Data icon below."

Below that, it says: "A prototype of BIT was developed by EPA Region 8 and BIT is the updated version of this prototype."

The "Announcements:" section states: "BIT was released January 29, 2010. If you have any comments and/or suggestions for improvement, please let us know by providing feedback."

At the bottom, there are three icons with labels: a red toolbox icon labeled "BIT Toolbox", a grid icon labeled "Site Inventory Data", and a chalkboard icon labeled "BIT Tutorial".

TAB Contacts

Dr. Sabine Martin (Program Director)

785-532-6519

smartin1@k-state.edu

Dr. Frank Beck

309-438-7090

fdbeck@ilstu.edu

Web site: <http://www.engg.ksu.edu/chsr/outreach>

