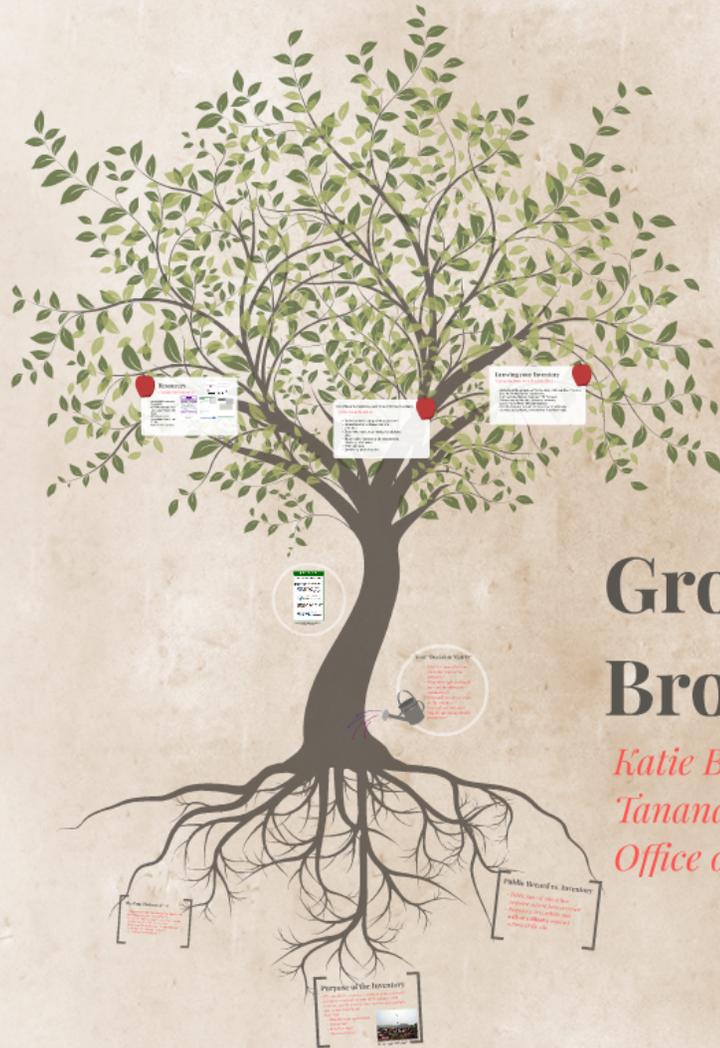


# Growing your Brownfields Inventory

*Katie Bante  
Tanana Chiefs Conference  
Office of Environmental Health*



# Growing your Brownfields Inventory

*Katie Bante*  
*Tanana Chiefs Conference*  
*Office of Environmental Health*

# The Four Elements (+ 1)

- *Timely survey and inventory of brownfields sites*
- *Oversight and enforcement authorities*
- *Mechanisms and resources to provide meaningful opportunities for public participation*
- *Mechanisms for approval of a cleanup plan and verification that cleanup is complete*
- *The Public Record requirement*

# Purpose of the Inventory

- *EPA: establish or enhance a system or process that will provide a reasonable estimate of the number, likely locations, and the general characteristics of brownfields sites in your tribal lands*
- *Your TRP:*
  - *Meet the grant requirement*
  - *Categorize?*
  - *Prioritize sites?*
  - *Raise awareness?*



A helicopter transports a six-passenger vehicle on Tanaga Island, the site of a \$20 million FUDS cleanup. PHOTOS COURTESY OF US ARMY CORPS OF ENGINEERS-ALASKA DISTRICT via <http://www.akbizmag.com/Alaska-Business-Monthly/August-2014/Mitigating-Contamination-on-Alaska-Native-Lands/>

# Public Record vs. Inventory

- *Public Record: sites where response actions have occurred*
- *Inventory: brownfields sites with or without completed actions at the site*

# *Response Actions*

- Phase I & Phase II Environmental Site Assessment
- Cleanup Planning
- Clean up
- Reuse Planning
- Redevelopment
- **Check DEC Contaminated Sites database!**



Drill rig taking soil samples in Glennallen  
Photo courtesy DEC Contaminated Sites web page

# Public Record vs. Inventory

- *Public Record: sites where response actions have occurred*
- *Inventory: brownfields sites with or without completed actions at the site*

# *Brownfields Inventory*

- Catalog of site-specific information about brownfields
  - Abandoned or underused property
  - Known or perceived contamination
  - Desire or plan to reuse this property
- Can be detailed or a summary
- Helps you meet your TRP's objectives
- May include sites from your Public Record



# Your "Decision Matrix"

- *What is a brownfield and when does it go on the inventory?*
- *What other information do you want to capture for stakeholders?*
- *When will you survey a site for the inventory?*
- *How will you find sites?*
- *How do you manage public perceptions?*



## PLANNING AN INVENTORY CHECKLIST OF QUESTIONS

Below is a simple checklist of questions that you should consider before launching an inventory effort. Consider outlining answers to each question to help guide you during the inventory development stage.

- What is the purpose of this inventory?
- Who is the intended audience?
- What information is required to meet the purpose of the inventory and the needs of the audience?
- How many resources do I have to devote to this effort?
- What is the geographic area to be covered?
- What funding sources are available to assist in this effort?
- What platform (e.g., hard copy, electronic) is most appropriate for meeting the needs of the audience?
- Are there critical project partners/stakeholders that need to be engaged up front in the inventory development process?
- What sources will be used to collect data to populate the inventory?
- How will this inventory be updated?

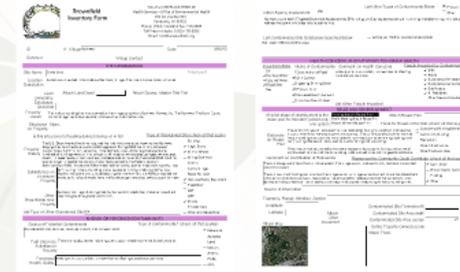
EPA. (2009). *Petroleum Brownfields: Developing Inventories*. Retrieved from <http://www2.epa.gov/sites/production/files/2014-03/documents/pbfdevelopinventories.pdf>



# Resources

## *Creating the Inventory*

- Brownfield Inventory Tool (BIT)
- ATSDR's Brownfields and Land Reuse Site Tool
- EPA Resources
- Templates from other TRPs
- Build it from scratch






### Brownfields Site Inventory Tool

#### What is BIT?

The Brownfield Inventory Tool (BIT) is a free, web-based, comprehensive site inventory and brownfields program management tool. BIT was designed especially for users working under an Environmental Protection Agency (EPA) cooperative agreement requiring the submission of a Property Profile Form, but any entity pursuing an establishing a site inventory database will find BIT very helpful. Cities, regional coalitions, and Tribes can also use BIT to consolidate environmental and administrative information from sites in multiple programs.

Users may enter detailed site data, upload documents and data, and generate and export a variety of reports, including the Property Profile Form. BIT can also be used as a collaborative tool where specific inventory data can be accessed by multiple users. If permission by the primary user is granted, all information entered into BIT is user name/password protected to ensure privacy.

BIT is very user friendly and instructions can be found on every page of the program.

BIT was developed by the TAB (Technical Assistance to Brownfields communities) program at Kansas State University with funding from the U.S. Environmental Protection Agency (EPA) under Cooperative Agreement T602334601.

#### BIT Advantages

- Help meet EPA site inventory, public record and notice, and reporting requirements
- All site data available to your own password protected database
- Multiple entities may work together to create the database
- All information entered into BIT is password protected to prevent unauthorized use
- Data can easily be imported or exported for individual or multiple sites
- A mapping feature allows viewing of site or sample locations
- Instructions available on every page of BIT
- Customized additional brownfields-related resources

Contact Information:  
Blaise Laven  
TAB Program at Kansas State University  
Phone: 785-532-0780

BIT WEBSITE: <http://tab-bit.org>

### ATSDR Brownfield and Land Reuse Site Tool

#### Environmental Health

#### What is the ATSDR Brownfield and Land Reuse Site Tool?

The tool is a computerized covering and multiple chemical exposure dose calculation tool that allows users to assess sites for potential human exposure to chemicals, assess populations, and support in remedial construction.

#### Why was the Brownfield and Land Reuse Site Tool Developed?

A variety of local health departments indicated a need for a system to:

- Provide a summary of sites
- Store records for public inquiry of sites
- Respond to requests
- Catalog environmental records, health concerns, incidents, spills, contaminants, and emergency response events related to the program
- Provide a "how-to" guide to conduct a site visit
- Reduce exposure by identifying exposure routes and sub-groups, multiple exposure pathways, and specific exposure data for population groups or sub-groups
- Calculate doses using ranges of exposure parameters, US EPA Upper Confidence Limits, generic masses, and other estimated parameters
- Test the data for levels of Log Normal distributions, import and parse laboratory data (1000 data points per health department)
- Verify calculations
- Provide a user interface
- Set up quality assurance or quality control programs
- Conduct research and development

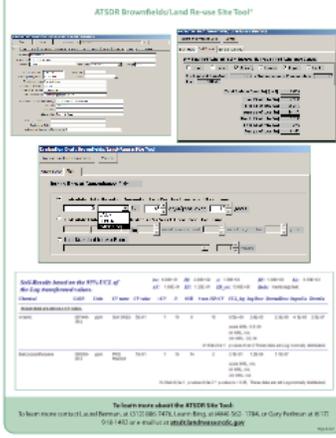
#### What entities are using the ATSDR BP and LR Site Tool?

- Health Departments (from local to state level)
- Development Community
- Regulatory Agencies
- Industry
- Environmental/Health Advocates

Agency for Toxic Substances and Hazardous Waste Investigation  
Division of Community Health Investigations



### ATSDR Brownfield/Land Re-use Site Tool



To learn more about the ATSDR Site Tool,  
visit our website at [www.atsdr.cdc.gov](http://www.atsdr.cdc.gov) or contact us at 1-800-458-5231 or email [atsdr@cdc.gov](mailto:atsdr@cdc.gov)



## Brownfields Site Inventory Tool

### What Is BIT?

The **Brownfield Inventory Tool (BIT)** is a **Free**, web-based, comprehensive site inventory and brownfields program management tool. BIT was designed especially for users working under an Environmental Protection Agency (EPA) cooperative agreement requiring the submittal of a Property Profile Form, but any entity working on establishing a site inventory database will find BIT very helpful. Cities, regional coalitions, and Tribes can also use BIT to consolidate environmental and administrative information from sites in multiple programs.

Users may enter detailed site data, upload documents and data, and generate and export a variety of reports, including the Property Profile Form. BIT can also be used as a collaborative tool where specific inventory data can be accessed by multiple users **IF** permission by the primary user is granted. All information entered into BIT is username/password protected to ensure privacy.

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A **desktop edition of BIT** that allows users to **store data on their individual computers** (instead of on a web-based server) is now available for free download at the BIT website.

### BIT Advantages

- *Help meet EPA site inventory, public record and notice, and reporting requirements*
- *All site data available in your own password protected database*
- *Multiple entities may work together to create/use the database*
- *All information/data entered into BIT is password protected to prevent unauthorized use*
- *Data can easily be imported or exported for individual or multiple sites*
- *A mapping feature allows viewing of site or sample locations*
- *Instructions available on every page in BIT*
- *Contains additional brownfields-related resources*

Contact Information:  
Blase Leven

TAB Program at Kansas State University  
Phone: 785-532-0780

BIT WEBSITE: <http://tab-bit.org>

## ATSDR Brownfield and Land

### Environmental Health

#### What is the ATSDR Brownfield and Land

This tool is a rapid site screening and multiple chemical exposure calculating tool that allows users to assess sites by environmental controls, sensitive populations, and suspected or

#### Why was the Brownfield and Land Re Developed?

A survey of local health departments indicated a

- Provide inventory of sites.
- Store records for public inquiry of sites.
- Respond to inquiries.
- Catalogue institutional controls, health concerns related to the property.
- Provide a "How To" guide to conduct a site visit.
- Evaluate exposures by defining exposed population and ingestion rates for population groups or use of land.
- Calculate doses using ranges of exposure parameters and statistical parameters.
- Test the data for Normal/Log Normal distribution (minute throughout).
- Verify calibrations.
- Troubleshoot analytical problems.
- Set up quality-assurance or quality-control procedures.
- Conduct research and development.

#### What entities are using the ATSDR

- Health Departments (from local to state level)
- Development Community
- Regulatory Agencies
- Planners
- Environmental Health Professionals

Agency for Toxic Substances and Disease  
Division of Community Health Investigation





# Brownfield Inventory Form

TANANA CHIEFS CONFERENCE  
 Health Services – Office of Environmental Health  
 201 1st Ave Ste 300  
 Fairbanks, AK 99701  
 Phone: (907) 452-8251 Fax: 459-3989  
 Toll Free in Alaska 1-800-478-6822  
 Email: trp@tananchiefs.org

ID 3 Village Northway Date 9/9/2015

Surveyor \_\_\_\_\_ Village Contact \_\_\_\_\_

### SITE INFORMATION

Site Name Skate Lake Tribal Land? \_\_\_\_\_

Location Description Skate Lake is located in the middle of Northway Village. The lake is approximately 20 acres.

Land Ownership Databases Searched Attach Land Deed \_\_\_\_\_ Attach Survey, Master Title Plat \_\_\_\_\_

Property Owner The land surrounding the lake is owned by the village corporation, Northway Natives, Inc. The Northway Traditional Council maintains legal permission to enter and be on the land and the lake.

Structures on Property None.

Is this site prone to flooding during breakup or in fall Type of Abandoned Site (check all that apply)

Property History The U.S. Department of the Army acquired the land that came to be known as the Northway Staging Area from the Bureau of Land Management. During WWII the military stationed approximately 4,500 military personnel in the Northway area. At the height of operations, hundreds of buildings were built including aircraft hangars, warehouses, garages, warehouses, sawmill, a powerhouse, a machine shop, and dozens of barracks. By the end of WWII the Army was no longer in need of the site which was mostly owned by the Federal Aviation Administration (FAA). In 1966 the FAA transferred the right to use the lands and airport facilities Berry picking in the surrounding areas. Access to hunting lands around the lake. Recently the community pursued stocking the lake with fish, but ADF&G reported the lake to be full of solid waste items and found oxygen levels too low to support fish now.

Subsistence on or around Property Northway has illegal dumping sites, former contaminated sites, and other brownfield sites throughout the greater community.

Other Brownfields near Property \_\_\_\_\_

- Building
- Illegal Dump
- Military Waste
- Mining Operation
- Airstrip
- Camp, Village
- Road, Railroad
- Vehicles Heavy Equipment
- Flood Debris
- AST
- UST
- Drums
- Transformers
- Other Abandoned Site

List Type of Other Abandoned Site N/A

### KNOWN OR PERCEIVED CONTAMINANTS

Source of Potential Contaminants Type of Contaminants? (check all that applies)

Abandoned drums, vehicles, heavy equipment, and unknown items.

- Petroleum
- Asbestos
- Lead
- Mercury
- Arsenic
- PCBs
- CFC

Past Clean Up Activities on Property There are no documents indicating clean ups or remediation at the Skate Lake site.

Perceived Health, Safety water quality; public safety; unknown toxins affecting subsistence use areas

List Other Types of Contaminants Below  Physical Hz  Other

Other Agency Involvement N/A

Northway submitted a Targeted Brownfield Assessment to EPA in Aug. 2015 to request assistance in planning and determining initial steps to address the community's desire to reuse the lake.

List Contaminated Site Databases Searched Below \_\_\_\_\_ is this an ADEC Contaminated Site

Not listed in DEC's CS Database

### HEALTH CONCERNS AND PATHWAYS TO HUMAN HEALTH

Impacted Media	Intake of Contaminants	Comment On Health Concerns	People Impacted by Contaminants
<input type="checkbox"/> Air	<input type="checkbox"/> Consumption of Food	water quality; public safety; unknown toxins affecting subsistence use areas	<input checked="" type="checkbox"/> Kids
<input checked="" type="checkbox"/> Surface Water	<input checked="" type="checkbox"/> Skin Contact		<input checked="" type="checkbox"/> Adults
<input checked="" type="checkbox"/> Ground Water	<input type="checkbox"/> Ingesting Drinking Water		<input checked="" type="checkbox"/> Subsistence Harvesters
<input checked="" type="checkbox"/> Food Web	<input checked="" type="checkbox"/> Physical Injury		<input checked="" type="checkbox"/> Subsistence Consumers
<input type="checkbox"/> Soil	<input checked="" type="checkbox"/> Perceived Health Concern		<input checked="" type="checkbox"/> Site Visitors
	<input type="checkbox"/> Inhalation Toxic Fumes		<input checked="" type="checkbox"/> All Residents
			<input type="checkbox"/> Other People Impacted

List Other People Impacted \_\_\_\_\_

### REUSE AND REDEVELOPMENT

At what stage of development is the reuse plan for this site? (select only one option) Thinking About a Reuse Plan Attach Reuse Plan \_\_\_\_\_

Elaborate on Reuse Plan The community would like to see this lake restored to its original condition and become a public amenity for the whole community to enjoy. The current condition of the lake and the surrounding area prohibits many potential activities such as swimming, boating, and berry picking. We would like to use the lake for fishing and ice skating.

If the lake cannot be cleaned to the levels necessary to support a fish population, we still want to see this area and the surrounding lands cleaned up to retain a good subsistence

Plans for Reuse of the Site (check all that apply)

- Subsistence Hunting/Gathering
- Community Building
- Recreation
- Other Infrastructure
- Other Traditional Use

Comment on Contribution of Resources Resources the Community Could Contribute (check all that apply)

There is strong commitment from all stakeholders. The village council and community members are excited about this project.

There is no current funding available from the village council or village corporation to finance the assessment and cleanup at Skate Lake. Local resources will be employed for redevelopment of the recreational area; donations and volunteers will be utilized to build a dock and provide landscaping at the surrounding area.

- Local Labor
- Environmental Sampling
- Funding
- Other

Source of Information \_\_\_\_\_

Township, Range, Meridian, Section \_\_\_\_\_

Longitude \_\_\_\_\_

Latitude \_\_\_\_\_

Attach Other Document \_\_\_\_\_

Contaminated Site Perimeter (ft) \_\_\_\_\_

Contaminated Site Area (sqft) \_\_\_\_\_

Contaminated Site Area (acres) 20

Entire Property Owned (acres) \_\_\_\_\_

Attach Photo \_\_\_\_\_

Attach Map

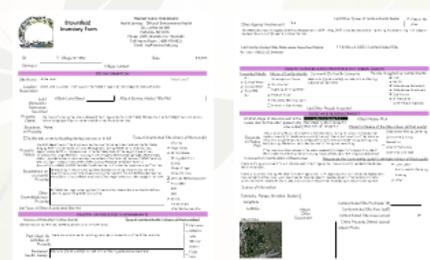




# Resources

## *Creating the Inventory*

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- EPA Resources
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**BIT**  
Brownfields Site Inventory Tool

**What is BIT?**

The Brownfield Inventory Tool (BIT) is a free, web-based, comprehensive site inventory and remediation program management tool. BIT was designed especially for users working under an Environmental Protection Agency (EPA) cooperative agreement regarding the remediation of a Property Profile Form, but any entity working on establishing a site inventory database will find BIT very helpful. Cities, regional coalitions, and Tribes can also use BIT to consolidate environmental and administrative information from sites in multiple programs.

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**BIT Advantages**

- Help avoid EPA site inventory, public notice and notice and response requirements
- All site data available in your own personal, password-protected database
- Multiple entities may work together in a database
- All information entered into BIT is password-protected to prevent unauthorized use
- Data can easily be imported or exported in multiple or multiple sites
- A mapping feature allows viewing of site or sample locations
- Instructions available on every page in BIT
- Complete additional brownfields related resources

Contact Information:  
Bryan LeVine  
TAB Program at Kansas State University  
Phone: 785-532-0700  
BIT WEBSITE: <http://tab-bit.org>

**ATSDR Brownfield and Land Reuse Site Tool**

**Environmental Health**

**What is the ATSDR Brownfield and Land Reuse Site Tool?**  
The tool is a rapid site screening and analysis tool that provides data on chemical exposure risks, calculating risk and allowing users to assess site parameters and environmental conditions, and report on remedial construction.

**Why use the ATSDR Brownfield and Land Reuse Site Tool?**

**Developed!**  
A survey of local health departments indicated a need for a program to:

- Provide inventory of sites.
- Store records for public inquiry of files.
- Respond to inquiries.
- Calculate and generate critical health concerns, violations, spills, contamination, and emergency response needs related to the program.
- Provide a "flex" to guide in conducting a site visit.
- Evaluate responses by dividing environmental data into sub-groups, multiple exposure pathways, user specific inquiries for population groups or use districts.
- Calculate dose and compare to exposure parameters, EPA Upper Confidence Limits, generic cancer, and other critical exposure estimates.
- Set the data for linking to external databases, import and export laboratory data (EPA 8160) to support risk management decisions.
- Verify calculations.
- The detection and/or problems.
- Use up quality resources in quality control programs.
- Conduct research and development.

**What entities are using the ATSDR BIT and LR Site Tool?**

- Health Departments from local to state level
- Developed Community
- Regulatory Agencies
- Tribes
- Environmental Health Professionals

ATSDR: U.S. Department of Health and Human Services  
Division of Community Health Investigation

**ATSDR Brownfield/Land Re-use Site Tool**

The screenshot shows a software interface with a data entry form on the left and a map view on the right. The map view displays a geographical area with various site locations marked and color-coded. The data entry form includes fields for site name, address, and other site-specific information.

# Benefits of Completing your Brownfields Inventory

*(and what to do with it!)*

- Better understanding of what you have
- Understand who these sites are affecting
- Determine resources needed to address sites
- Better utilize resources for assessment, clean up, and reuse
- Prioritize sites
- Develop a plan of action



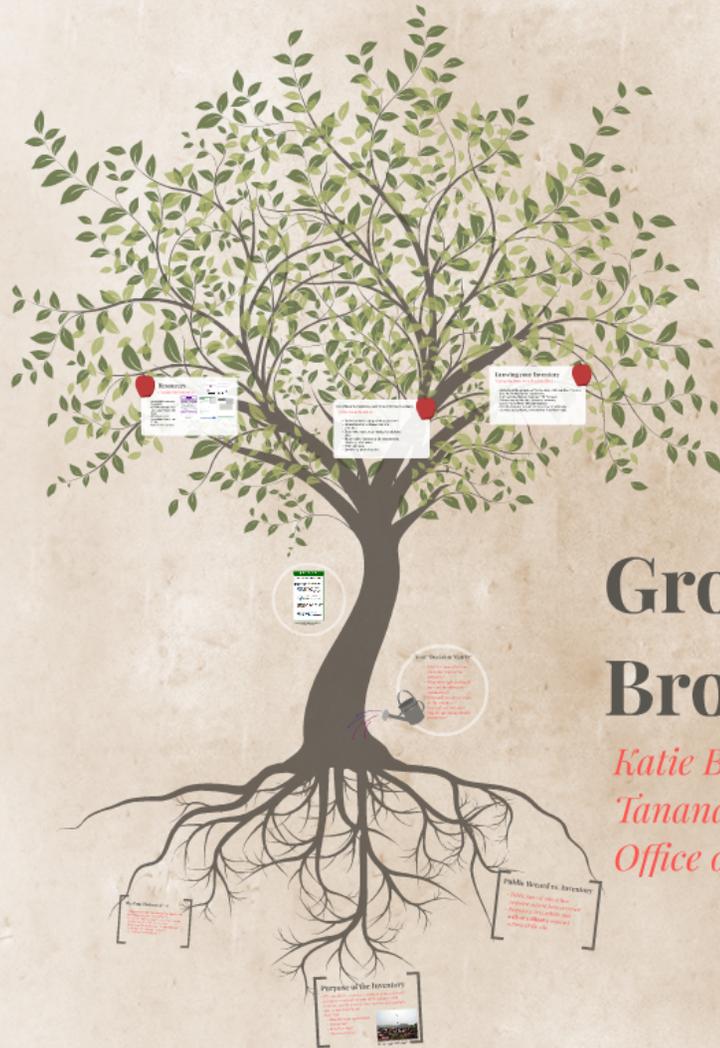
# Growing your Inventory

## *Sowing the Seeds for a Fruitful Effort*

- Understand the purpose of the inventory and know the difference from the Public Record requirement
- Plan your inventory to meet your TRP's needs
- Choose appropriate tools to create inventory
- Share the inventory with stakeholders
- Use the inventory to prioritize sites in your community
- Continue adjusting your inventory to meet your needs

"Discover the past.  
Understand the present.  
Change the future."

-Kathryn Erskine



# Growing your Brownfields Inventory

*Katie Bante  
Tanana Chiefs Conference  
Office of Environmental Health*