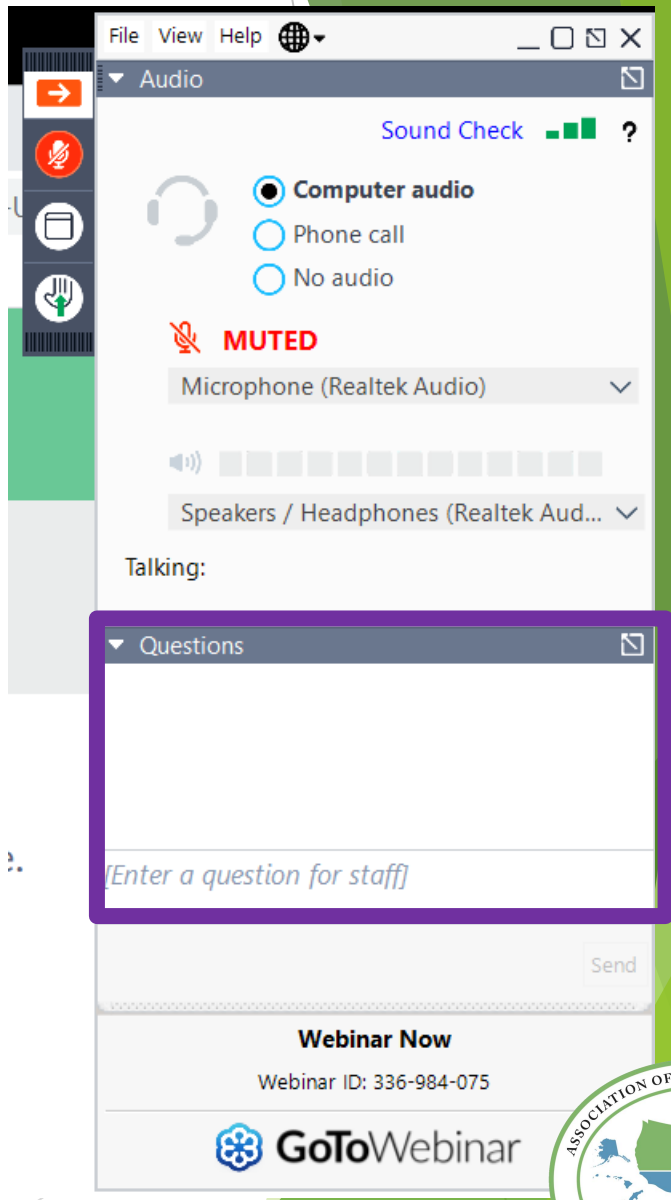
2021 ASTSWMO Annual Meeting

ASTSWMO CERCLA and Brownfields Subcommittee:

Project Presentations from the ASTSWMO CERCLA Post Construction Focus Group, and the ASTSWMO Brownfields Focus Group

Before We Start

- All attendees will be muted throughout the webinar.
- If you cannot hear us speaking right now or hear an echo, make sure your audio settings are configured correctly
- **Questions:** Use the **Questions Panel** in the dashboard to send questions to the speakers during the webinar.
- **Note who the question is directed to in your submittal.**
- You can also "Raise Your Hand" so that we can unmute your microphone to ask any questions as well.
- Questions will be answered once presentations have concluded.
- The webinar is being recorded and will be made available on the ASTSWMO website.



Institutional Controls Strategy for Improved Success

ASTSWMO CERCLA Post Construction Focus Group Project

Overview

1. Introduction - What are ICs (summary)
2. IC Data Evaluation
3. Regulatory Tools
4. Successful Use of Existing Tools
5. When and What to Think About

What are ICs?

Institutional Controls (ICs) -
"ICs are generally administrative and legal tools that do not involve construction or physically changing the site."
"…ICs help reduce the possibility that people will come in contact with contamination and may also protect expensive cleanup equipment from damage".
"…part of a balance, practical approach to site cleanup that relies on both engineering an non-engineering remedies." (EPA, 2005)

From: EPA, 2005. Institutional controls: a citizen's guide to understanding institutional controls at superfund, brownfields, federal facilities, underground storage tank, an resource conservation and recovery act cleanups. OSWER 9255.0-98. Mar. 1. 9 p..
https://www.epa.gov/sites/default/files/documents/ic_ctzns_guide.pdf

Types of ICs?

- **Government Controls**: local laws or permits (e.g., zoning, building permits)
- **Proprietary Controls:** Property use restrictions (e.g., easements an covenants) (In Arizona declaration of environmental use restriction)
- **Enforcement Tools**: documents that require individuals or companies to conduct or prohibit specific actions (e.g., consent decrees, unilateral orders, or permits)
- **Informational Controls:** deed notices or public advisories that alert and educate people about the site (e.g., public outreach/education, State registries, fish advisories, access restrictions)

From: EPA, 2005. Institutional controls: a citizen's guide to understanding institutional controls at superfund, brownfields, federal facilities, underground storage tank, an resource conservation and recovery act cleanups. OSWER 9255.0-98. Mar. 1. 9 p.. https://www.epa.gov/sites/default/files/documents/ic_ctzns_guide.pdf

Institutional Controls

This instrument prepared by:
Holly Taylor Cauley
Florida Department of Environmental Protection
3900 Commonwealth Blvd MS 35
Tallahassee, FL 32399-3200

DECLARATION OF RESTRICTIVE COVENANT

THIS DECLARATION OF RESTRICTIVE COVENANT (hereinafter "Declaration") is made this _____ day of _____, 2007, by Backyard Properties, LLC, a corporation authorized to conduct business in the State of Florida, (hereinafter GRANTOR) and the Florida Department of Environmental Protection (hereinafter "FDEP").

RECITALS

A. GRANTOR is the fee simple owner of that certain real property situated in the County of Dade, State of Florida, more particularly described in Exhibit "A" attached hereto and made a part thereof (hereinafter the "Property");

B. The FDEP Facility Identification Number for the Property is FDEP# 084. The facility name at the time of this Declaration is Standard Auto Bumper Superfund Site;

C. The Property is part of the Standard Auto Bumper Superfund Site, which the U.S. Environmental Protection Agency ("EPA"), pursuant to Section 105 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. 9605, proposed for the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B, by publication in the Federal Register in October, 1989. A chromium and nickel plating facility owned by Standard Auto Bumper Corporation began operations in 1959. Operations continued through 1992. In early 1993, Standard Auto Bumper ceased operations and abandoned the facility leaving tanks with processing water and drums on-site. The Superfund Streamlined Remedial Investigation and Focused Feasibility Study confirmed that soil was

§ 14-2-106 MANDATORY WATER AND SEWER HOOKUP.

(A) *Waste Water.*

(1) *Development Accessible to City Sewer Lines.* All new residential subdivisions as well as multiple family and non-residential development within the city which are served by existing or planned future expansions to the city wastewater collection arid disposal system shall be required to connect to the public wastewater system pursuant to Chapter 29 of the Code.

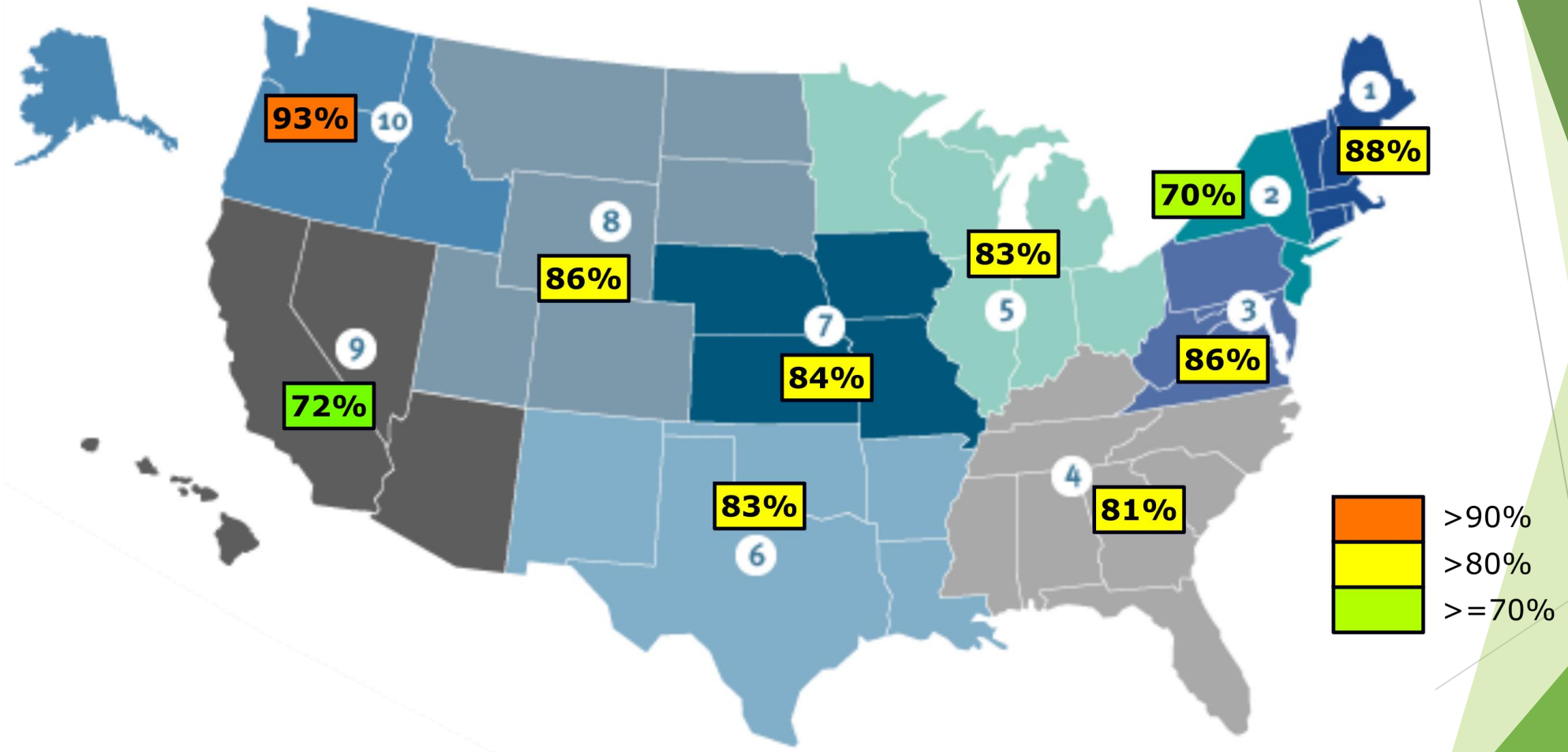
(2) *Development Not Accessible to City Sewers:* In areas where development cannot be connected to the public sewer, private wastewater disposal systems are acceptable as an interim measure for single family detached houses only, providing such facilities are approved by the City Director of Water Resources, and the Osceola County Environmental Health Unit. However, all private wastewater collection disposal systems shall be designed to facilitate mandatory hookups to the public wastewater system when the public system becomes available. See also § 29-135 of the code.

(B) *Potable Water.* All new development, defined as initial construction of a principal building, shall connect to city water supply lines.

(Ord. 2038, passed 12-20-94)

IC Data Evaluation

How prevalent are ICs used as a part of the remedy?



Percent of Non-Federal Facility Superfund Sites with ICs as part of remedy

Data source:
https://cumulis.epa.gov/supercpad/Cursites/srchsites.cfm

IC Data Evaluation

Review of the Data

- EPA provided data on IC issues identified during the FYR process
- Non-federal NPL sites only
- Data from 2016 – 2020
- Some of the sites included multiple IC issues associated each OU
- ~ 702 “issues” identified with OUs

Is there a problem?

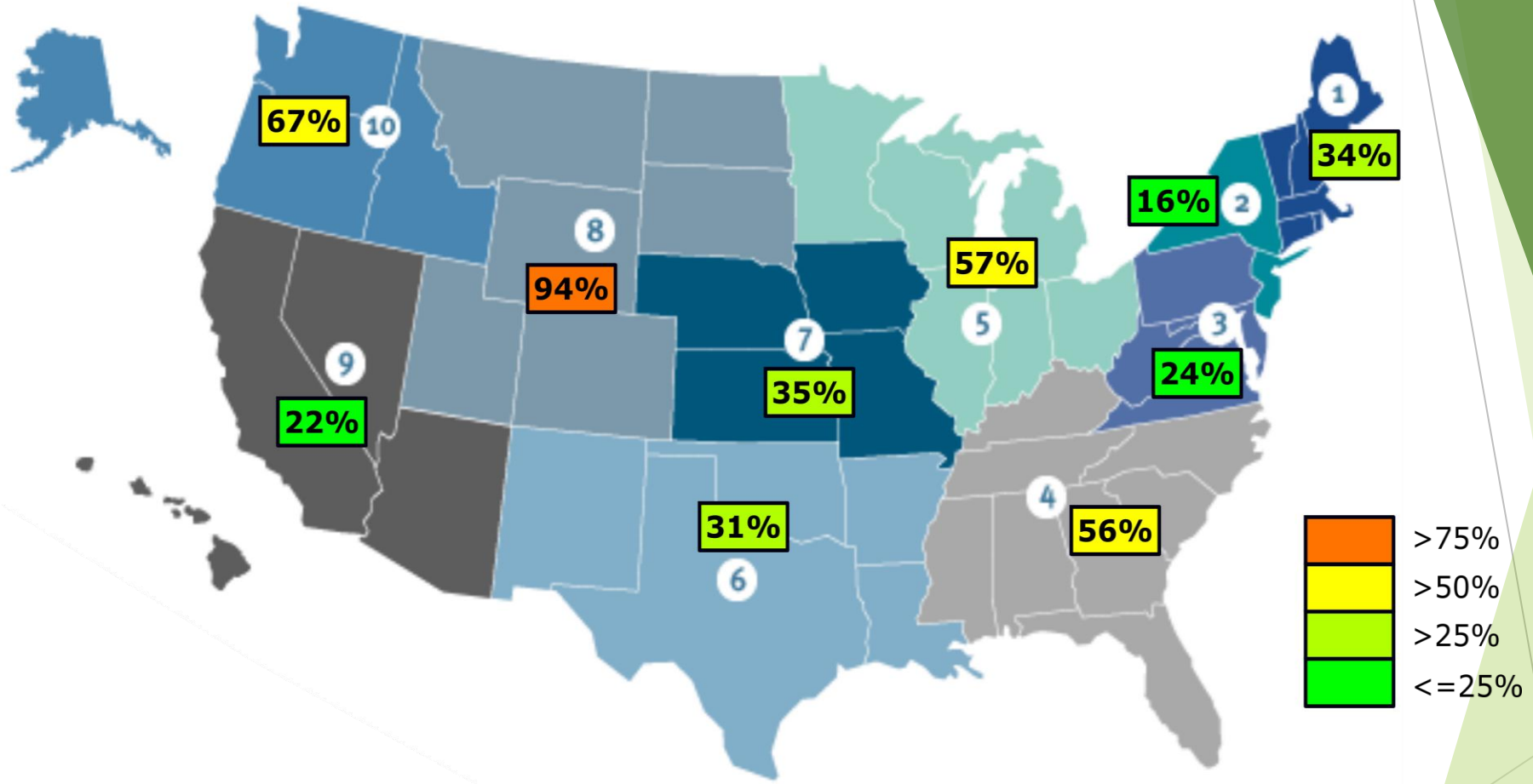
Region by Region:

Looked at the total number of non-federal Superfund Sites with complete and the number of issues identified for each region. on complete and the number of issues identified for each region.

EPA Region	Superfund Sites (non-federal) w Remedy	Number of Issues Identified in 5YR
R1	76	34
R2	193	41
R3	133	38
R4	**175**	**111**
R5	**252**	**353**
R6	96	37
R7	53	32
R8	32	63
R9	62	20
R10	51	29

Data source:
https://cumulis.epa.gov/supercpad/Cursites/srchsites.cfm

IC Data Evaluation



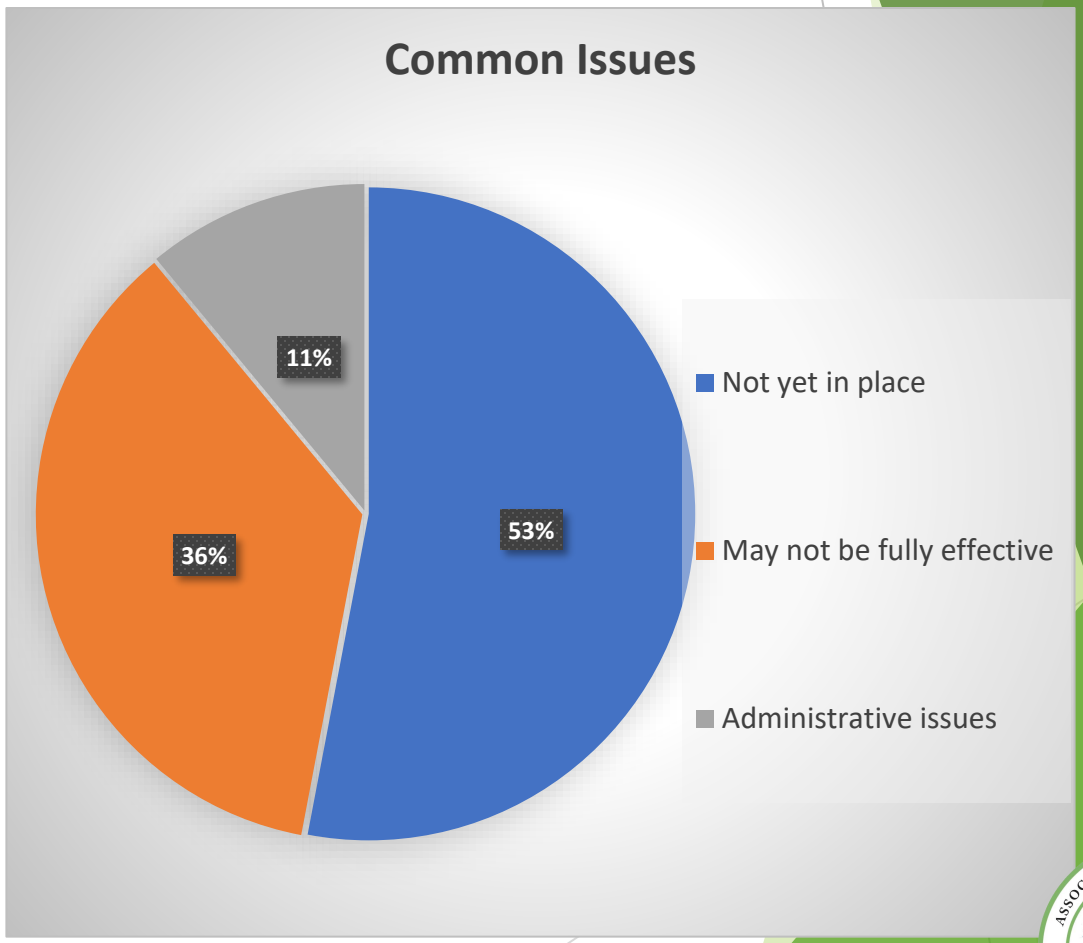
Percent of Non-Federal Facility Superfund Sites with IC issues noted in Five-Year Review, per EPA Region

Data source:
https://cumulis.epa.gov/supercpad/Cursites/srchsites.cfm

IC Data Evaluation

Evaluated the "**Common Issues**" and prioritized them based on 3 broad categories:

- **ICs not yet in place** - ICs are required but not yet in place or additional ICs are needed.
- **ICs may not be fully effective -** IC not working as intended or only partially implemented.
  - Procedure/Compliance Issues
  - Additional Evaluation Needed
- **Administrative issues** - IC information is not provided in decision document or incorrectly recorded.



Examples of Common Issues
(identified in recommendations in Five-Year Review document)

ICs not yet in place	ICs may not be fully effective	Administrative issues
▶ All ICs have not been Implemented ▶ Deed restriction needed ▶ Easements and/or restrictive covenants needed ▶ Effective ICs must be implemented	• Long term stewardship (LTS) plan is needed • An Institutional Control Implementation and Assurance Plan (ICAP)is needed • Effective ICs must be maintained, monitored, and enforced • Additional Assessment needed	• Decision documents do not require ICs for all areas needing ICs. • ICs are not in a decision document. • Lack of a decision document requiring ICs.

Regulatory Tools – Findings, Considerations Recommendations

Regulatory Tools - Findings

Ability of States to implement ICs varies

- Some State regulations provide the ability to…
  - Implement an IC (UECA)
  - Require property owner to implement IC
  - Require other responsible party to implement ICs

Regulatory Tools – Findings (cont.)

- Uniform Environmental Covenants Act
  - UECA allows creation of State-law property interest, which attaches to the land
  - Often includes restrictions on use and monitoring requirements
  - Recorded in land records
  - As of May 2021, there were 27 States that had adopted UECA
- Responsible party required to get property owner to implement IC (if property owner is not the RP)
- State programs that require ICs for “less” cleanup based on present/future property use

Regulatory Tools - Considerations

States may use Regulatory Discretion

- "Innocent" property owners - liability relief in exchange for implementation of IC on property
- "Inability to Pay" settlements for small parties - include cash payment and implementation of ICs

Recommendations – non-regulatory

Fund Lead Sites

- Make sure any agreements between EPA and State (SSC) contains language specifically addressing ICs and who is responsible to implement and enforce

PRP Lead Sites

- State as a party to Consent Decrees with EPA and PRP to ensure implementation/enforcement of ICs are included

Tools for Local Authorities

Ability of municipalities to place controls on private wells

- Moratoriums on installation of private wells
- Ordinances containing requirements when installing a new well
- Special Well Casing Area (WI)

Successful Tools For IC Implementation

Existing Tools

IC DATABASES

PUBLIC OUTREACH

IC LAYERING

IC Databases

- Several States have IC databases to keep track of IC's placed
- Databases range from simple spreadsheets to robust GIS maps
- Can be internal or public
- Maintaining a database helps organizing filed IC's, and inspecting IC's easier

Spreadsheet Database Examples

Remediation Institutional Controls:

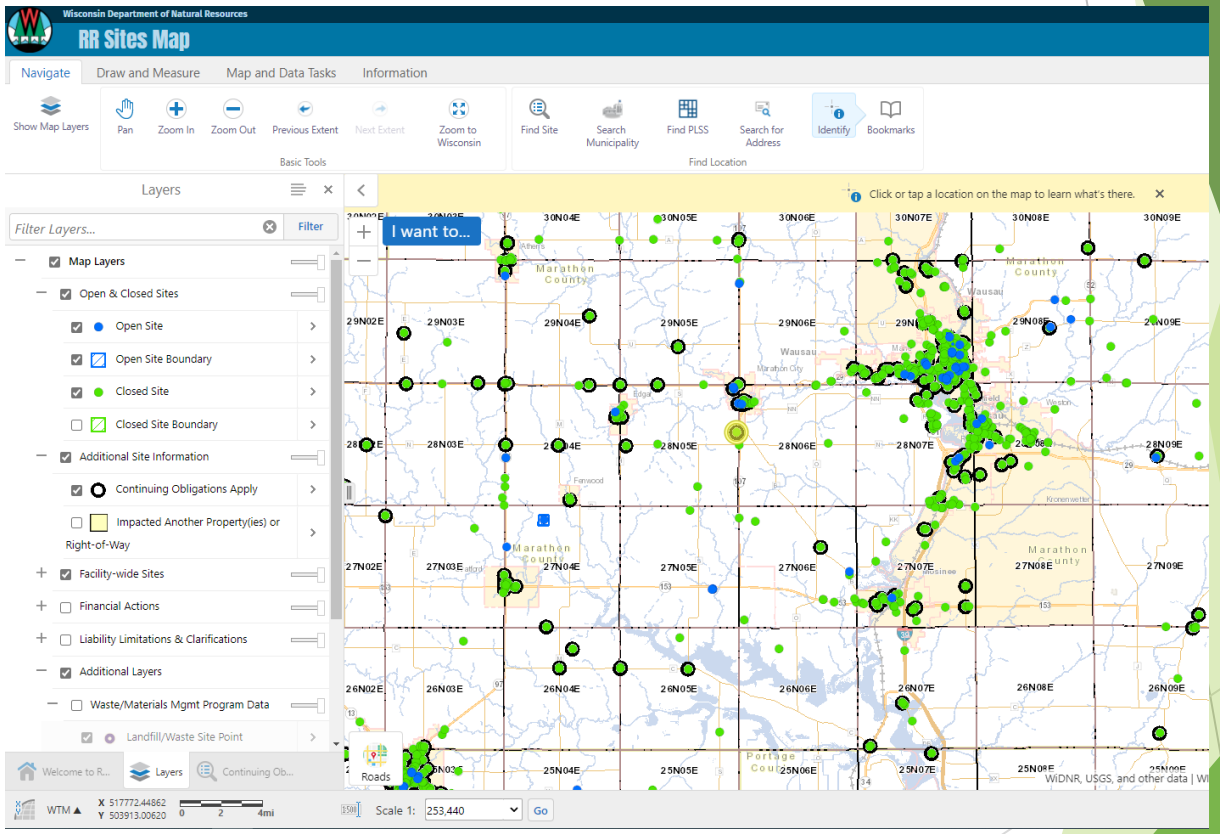
LPD Site ID	100078
Pages	1227
Program	SCAP
County	Oklahoma
Facility Name	44th Street Armory
Date Filed	9/27/2012
Book Number	12043
Document Number	3
Link to Document	View

Source: OK Dept. of Environmental Quality

- Spreadsheets are a low-cost option to maintain IC information
- Can link to institutional control file
- Record institutional control file information

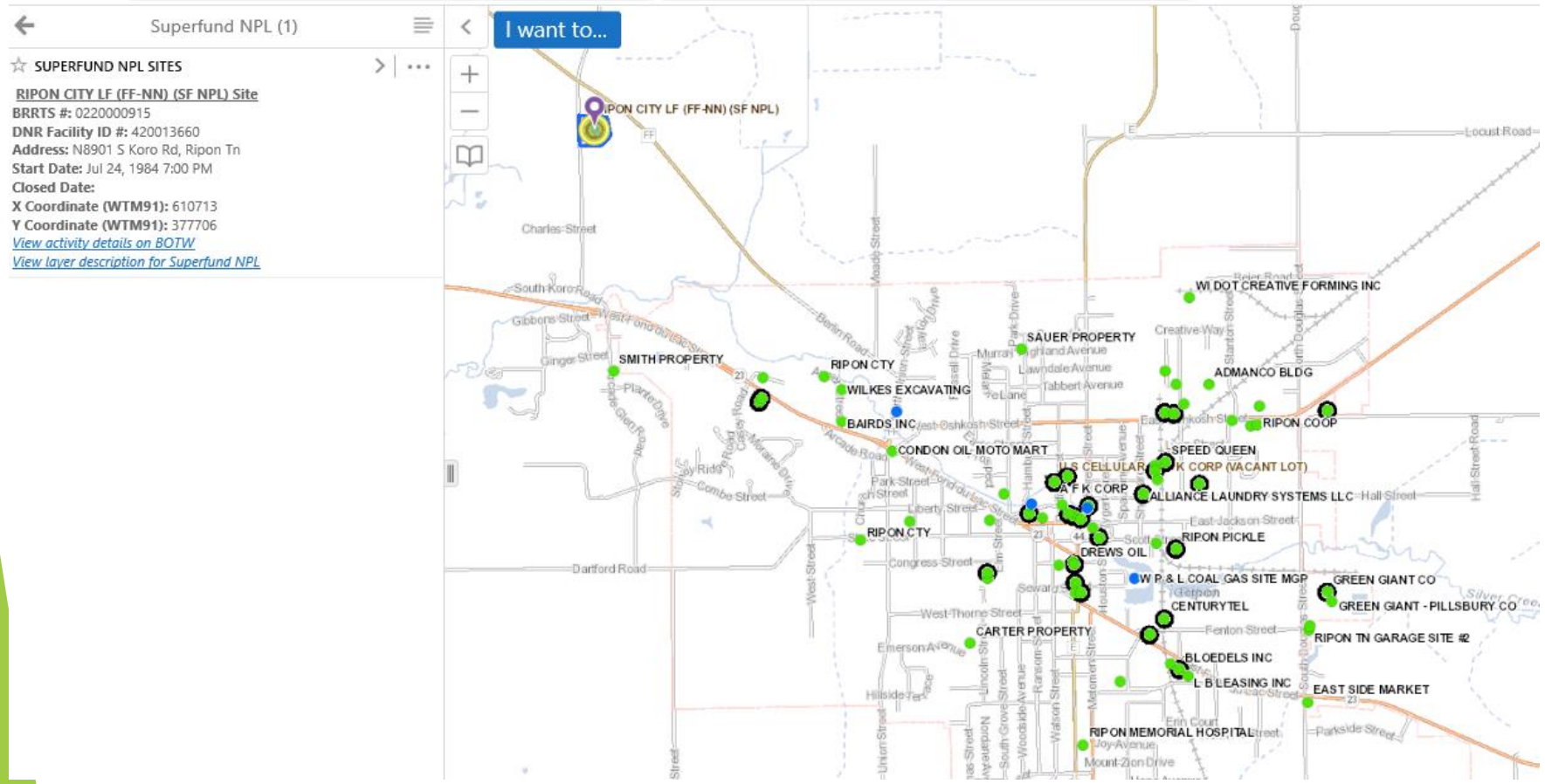
GIS Database Examples

- Simple user interface to find sites with Institutional Controls



Source: Wisconsin Department of Natural Resources

GIS Database Examples

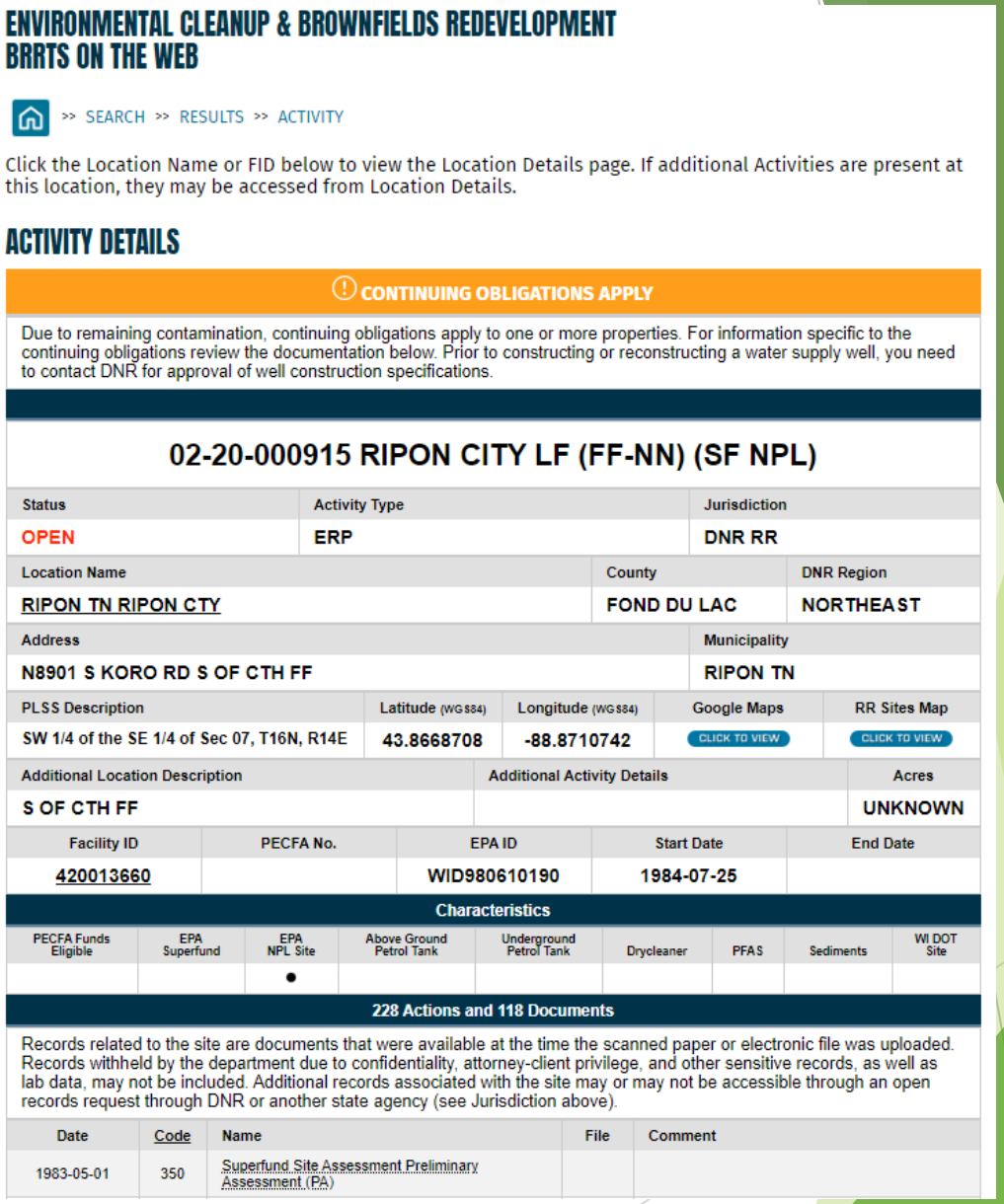


- Clicking on a site brings up general information and link for more information

Source: Wisconsin Department of Natural Resources

GIS Database Example

- Link leads to site database showing information about the property, the Institutional Control in place, and more



ENVIRONMENTAL CLEANUP & BROWNFIELDS REDEVELOPMENT
BRRTS ON THE WEB

>> SEARCH >> RESULTS >> ACTIVITY

Click the Location Name or FID below to view the Location Details page. If additional Activities are present at this location, they may be accessed from Location Details.

ACTIVITY DETAILS

CONTINUING OBLIGATIONS APPLY

Due to remaining contamination, continuing obligations apply to one or more properties. For information specific to the continuing obligations review the documentation below. Prior to constructing or reconstructing a water supply well, you need to contact DNR for approval of well construction specifications.

02-20-000915 RIPON CITY LF (FF-NN) (SF NPL)

Status	Activity Type	Jurisdiction
OPEN	ERP	DNR RR

Location Name	County	DNR Region
RIPON TN RIPON CTY	FOND DU LAC	NORTHEAST

Address	Municipality
N8901 S KORO RD S OF CTH FF	RIPON TN

PLSS Description	Latitude (WGS84)	Longitude (WGS84)	Google Maps	RR Sites Map
SW 1/4 of the SE 1/4 of Sec 07, T16N, R14E	43.8668708	-88.8710742	CLICK TO VIEW	CLICK TO VIEW

Additional Location Description	Additional Activity Details	Acres
S OF CTH FF		UNKNOWN

Facility ID	PECFA No.	EPA ID	Start Date	End Date
420013660		WID980610190	1984-07-25	

Characteristics

PECFA Funds Eligible	EPA Superfund	EPA NPL Site	Above Ground Petrol Tank	Underground Petrol Tank	Drycleaner	PFAS	Sediments	WI DOT Site
		•						

228 Actions and 118 Documents

Records related to the site are documents that were available at the time the scanned paper or electronic file was uploaded. Records withheld by the department due to confidentiality, attorney-client privilege, and other sensitive records, as well as lab data, may not be included. Additional records associated with the site may or may not be accessible through an open records request through DNR or another state agency (see Jurisdiction above).

Date	Code	Name	File	Comment
1983-05-01	350	Superfund Site Assessment Preliminary Assessment (PA)		

Source: Wisconsin Department of Natural Resources

GIS Database Example

- Publicly available database includes online access to site files, information about the contaminants of concern and agency contact information for additional information

2020-07-06	43	Site Activity Status Update Received	PDF	EPA NOTIFICATION TO BEGIN FIVE YEAR REVIEW
2020-08-17	130	DNR Regulatory Reminder Sent	PDF	EMERGING CONTAMINANTS REMINDER LETTER
2021-01-27	43	Site Activity Status Update Received	PDF	2020 2ND QUARTER STATUS REPORT
2021-02-03	43	Site Activity Status Update Received	PDF	PROGRESS RPT Q3 2020; SEE UPDATES ON 2/23/2021
2021-02-23	43	Site Activity Status Update Received	PDF	UPDATES - Q3 STATUS REPORT
2021-03-03	43	Site Activity Status Update Received	PDF	2020 4TH QUARTER STATUS REPORT
2021-04-06	130	DNR Regulatory Reminder Sent	PDF	VAPOR INTRUSION AND TCE REMINDER LETTER

Financial

Grants, Loans, DERF Expenditures, State-Funded and Spill Response

The information listed below does not necessarily represent a complete or current list of all financial data that may be present for this Activity. Categories have been consolidated to simplify searching and display. For more information, please contact the Project Manager listed in the Who section below.

Category	Fiscal Year	Amount
Abandoned Container:Cost Recovery	2006	$6,591

Substances

Substance	Type	Amt Released	Units
Volatile Organic Compounds	VOC		
Chlorinated Solvents (vinyl chloride)	VOC		
Trichloroethylene	VOC		

Who

Role	Name/Address
Project Manager	B J LEROY bruce.leroy@wisconsin.gov

Source: Wisconsin Department of Natural Resources

Public Outreach

Periodic Site Information Mailers

Meeting with local realtor's associations

Making databases publicly available

Participate as a speaker for various technician training (e.g. Well Driller Training)

Mining Tax Records to identify new ownership

IC Layering

The layering of different methods to ensure the intent of the institutional control is met.

This includes the use of various Statutes and Rules.

IC Layering Examples

- Deed Notices/Restrictions
- Well Drilling Requirements
- Beneficial Use Designations
- City Ordinances
- Real Estate Disclosure Laws

Considerations to prevent IC failure

- Property Description
  - Your IC should always include a legal description
    - Tax parcels are not a durable description. They change during subdivision and boundary line adjustment.
    - Your specific restriction area may not be accurately defined by a tax parcel.
    - A legal description will always define the same area, regardless of boundary and ownership changes.
    - A legal description can define a specific area within a parcel where IC restrictions are necessary.
- Property ownership
  - Always run a title search prior to implementing an IC
  - Are there easements or ROWs that will be impacted?
    - These may require a subordination agreement if you want your IC to be enforceable to other right-holders
- Transfer of property
  - Maker sure there is a notification requirement prior to property transfers
  - Identify the party responsible for notifications

Considerations to Prevent IC failure

- Clearly identify who will conduct inspections or five-year reviews
  - If inspections will be conducted by a private party, clearly identify inspection requirements.
- Clearly identify who has enforcement authority
  - This may be determined by your State rule
  - An IC is useless if it can't be effectively enforced
- Verify accuracy of Covenant and Agreement content before signing
  - "Cut and paste" carryover errors are common

Considerations to prevent IC failure

- IC failure is often a result of conditions not anticipated in the ROD. How can this be prevented and/or resolved?
  - Planning during ROD Development –
    - Consider a contingency approach. If you know that your remedy might not be completely successful and contamination may have to be left in-place, include a contingency plan for ICs in the ROD.
  - ROD Amendment/ESD –
    - Be prepared for an ESD to amend the ROD if there is a possibility of remedy failure. If you haven't built a contingency into the ROD, amendment may be the only option to implement unanticipated ICs.

Considerations to prevent IC failure

State-specific tools – What unique tools does your State statute give you to address a failed IC or failed remedy?

- Washington – enforcement tool is rescinding site decision (NFA) if RP is not responsive. If initial remedy fails, periodic review process identifies failures and is mechanism to require change.
- Utah – Law allows civil action for relief for violating an environmental covenant. Relief may be sought by: a party to the covenant; the agency; person to whom the covenant grants power to enforce; person whose interest in the real property or whose collateral or liability may be affected by the violation; or a municipality or other unit of local government
- California – Site-specific covenant and agreement is in-place that provides mechanisms for implementation, verification and enforcement of ICs

Analysis of State Brownfield Programs

ASTSWMO Brownfields Focus Group Project

State Brownfield Programs

Gathering the Data

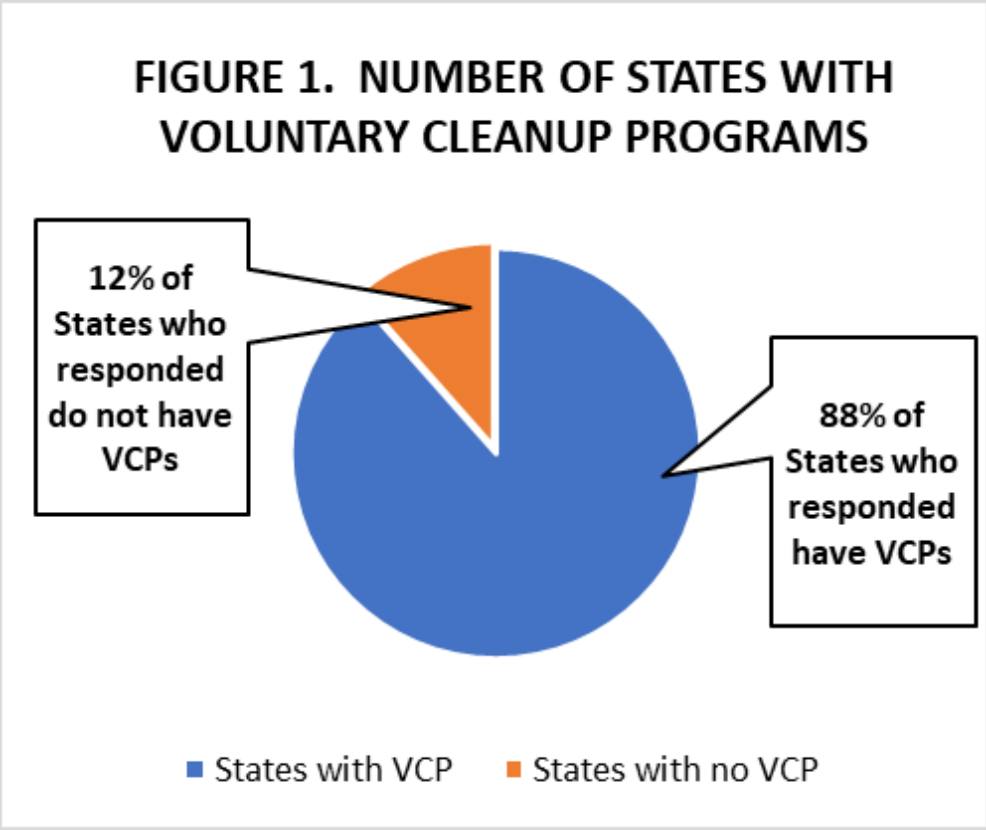
- **Developed 31 questions**
  - Fell within 10 general categories

- **52 States and Territories (States) participated**

The Categories

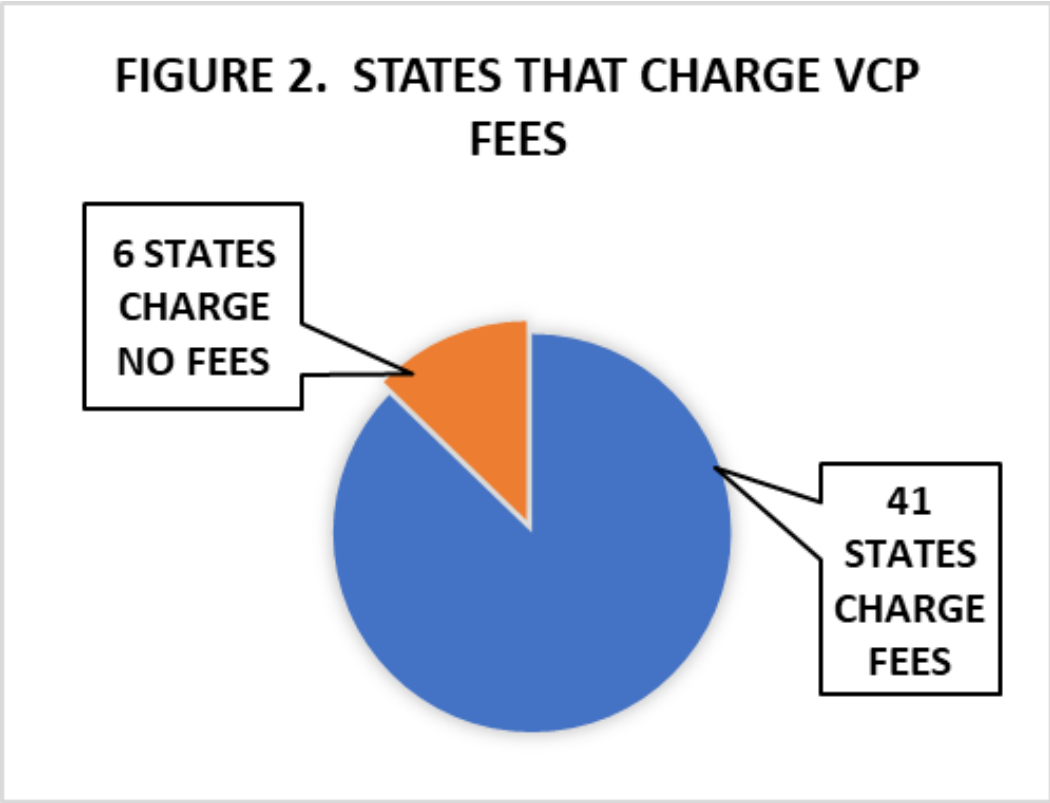
State Voluntary Cleanup Programs (VCPs)	Cleanup Criteria
Institutional Controls (ICs)	Brownfield Staffing
Comfort Letters	State Program Functions
Beneficial Reuse of Contaminated Fill	State Non-Financial Incentives
Tracking Land-Use Following Development	State Financial Incentives

Voluntary Cleanup Programs (VCPs)



TAKEAWAY:
The majority of States have developed a VCP to facilitate timely and cost-effective cleanups.

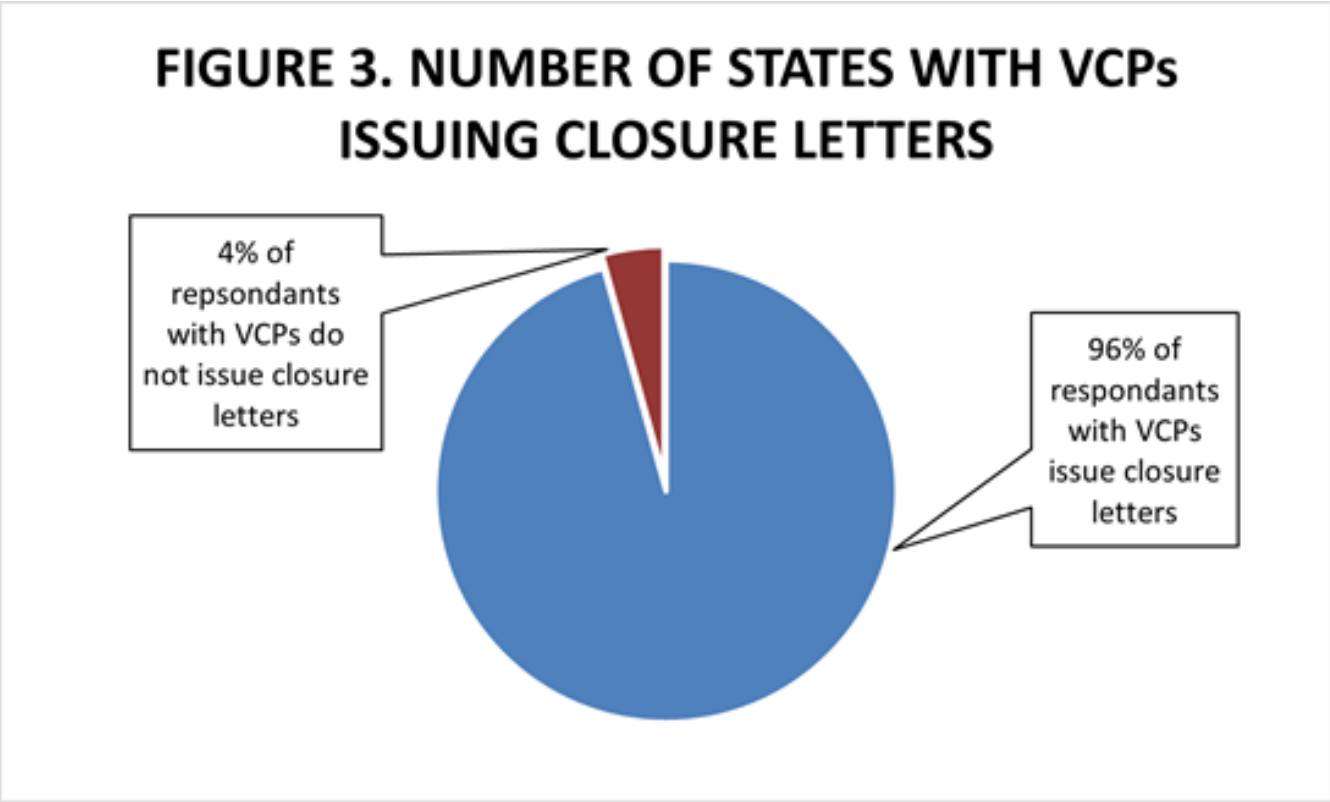
VCPs - Fees



- Hourly rates
- Application and Oversight fees
- Flat Fees- $105 to $30k

TAKEAWAY:
There is a cost to participate in a VCP.

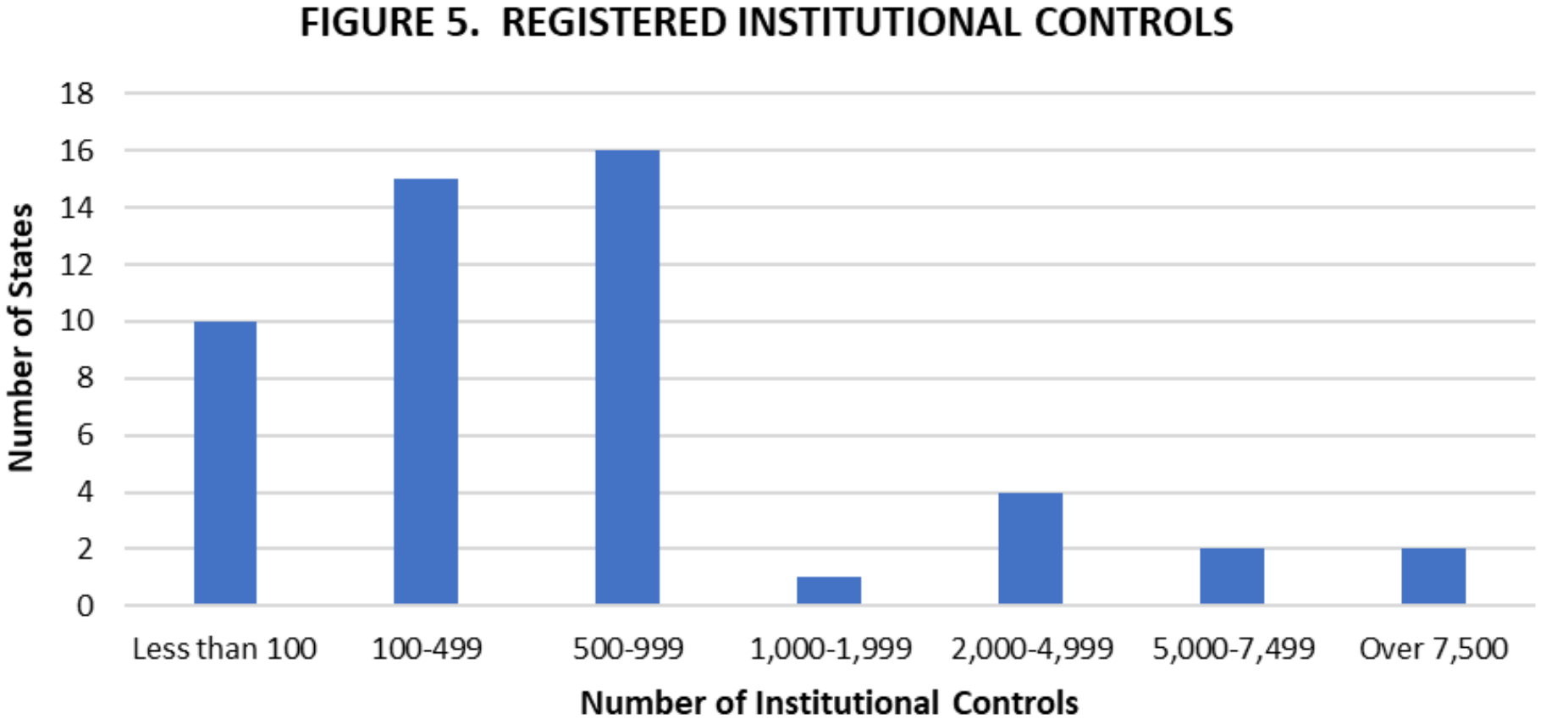
VCPs – Closure Letters



TAKEAWAY:

VCP Enrollees want acknowledgement from the State that they are done.

Institutional Controls (ICs)



TAKEAWAY:

- Roughly eighty-two percent (82%) of all States have less than 1,000 ICs

ICs - Inspections

INSPECTION FREQUENCY:

- 40% inspect ICs every one to five years
- 20% do not perform regular inspections

WHO DOES IT?

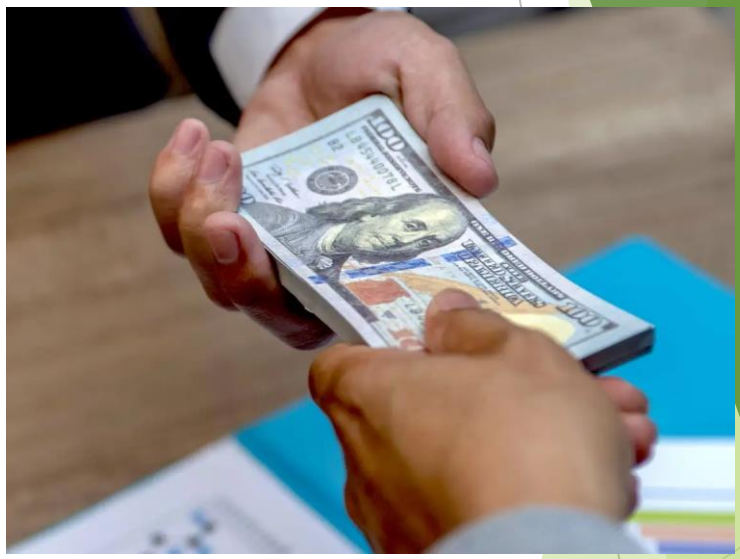
- Performed by owners, responsible parties, etc.
- Performed by the States

TAKEAWAY:

- Roughly forty percent (40%) of States inspect their ICs every 1 to 5 years.

ICs – Funding Inspections

- 128(a) Grant (50%)
- State revenue (21%)
- Environmental fee when covenant is filed (11%)
- Cost recovery funds
- Bill the responsible party/applicant annually



TAKEAWAY:
Most States use 128(a) funds for inspection and monitoring ICs.

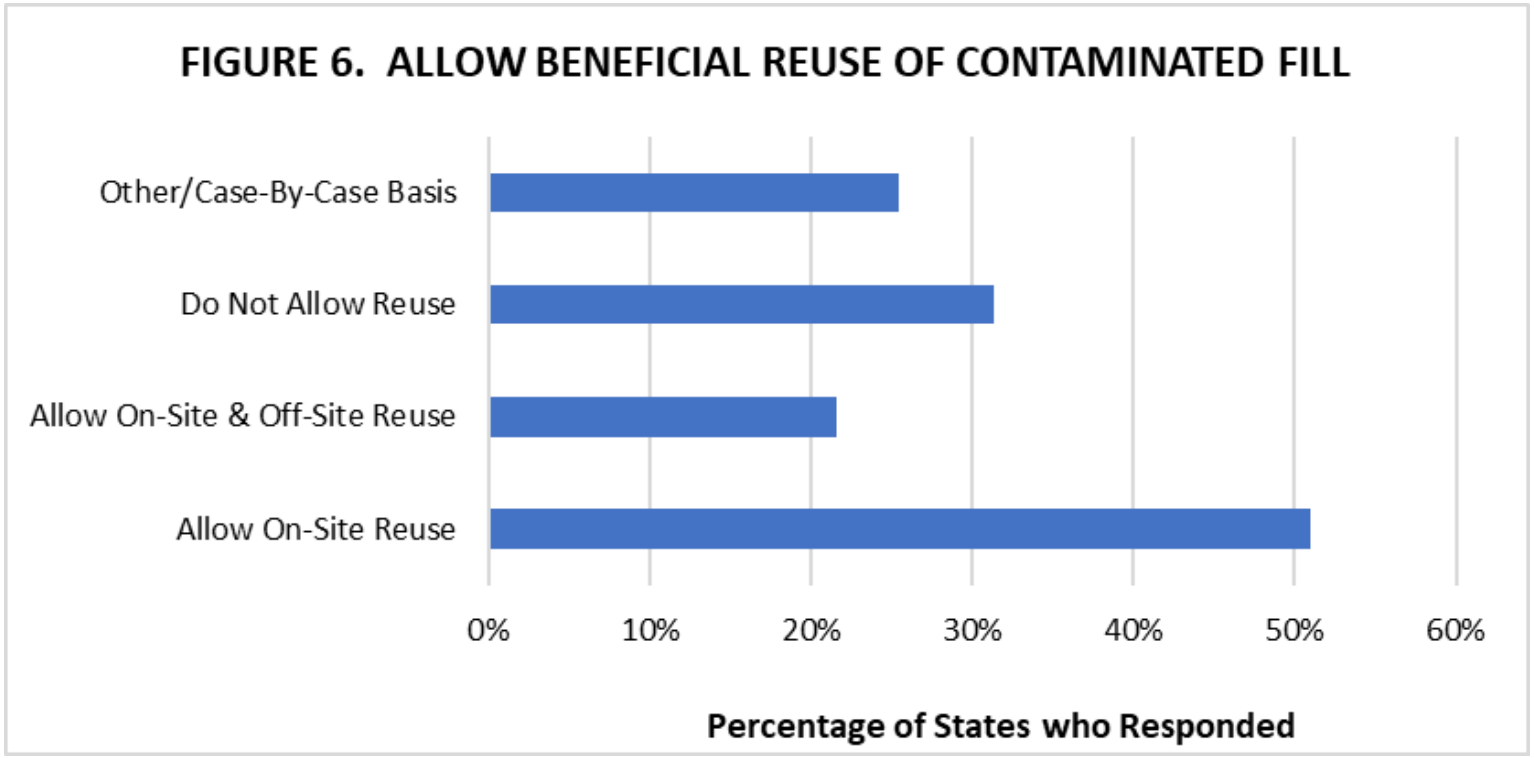
Comfort Letters

TAKEAWAY:

- Nearly 50% of States provide comfort letters to provide liability protection to a property owner.

- Comfort letters are most often provided to assist with property transactions.

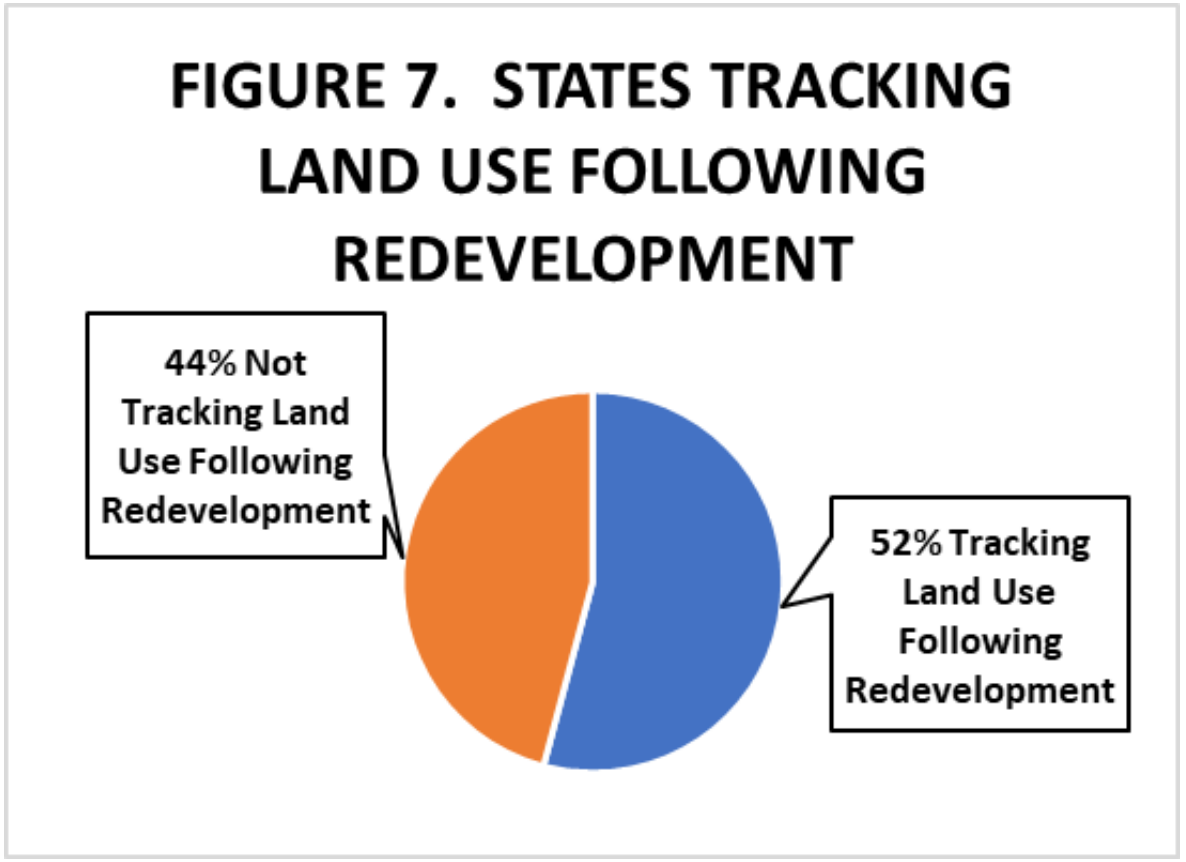
Beneficial Reuse of Contaminated Fill



TAKEAWAY:

- Majority of States allow for the on-site reuse of contaminated fill material
- Off-site for reuse of contaminated fill (on another property) is not as widely accepted.

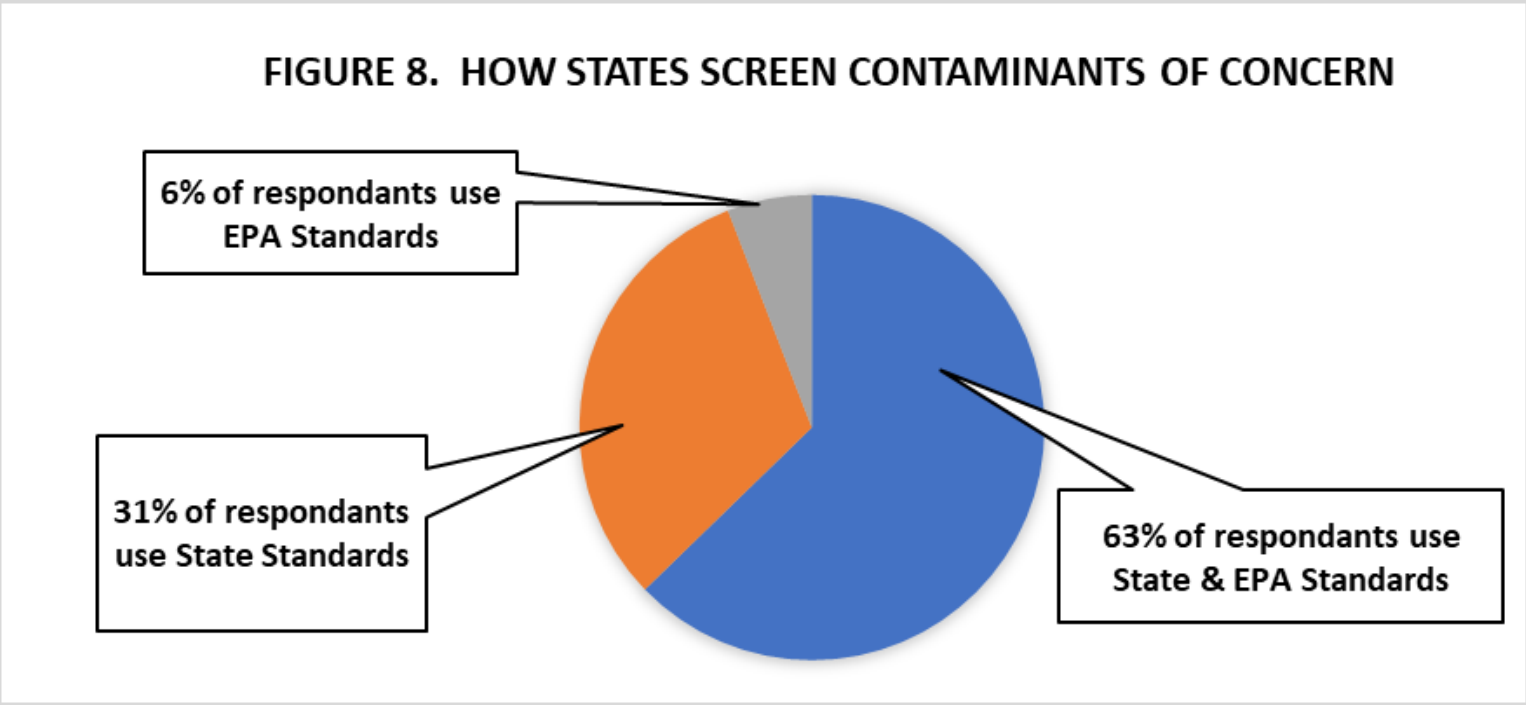
Tracking Post Development Land-Use



TAKEAWAY:

- ACRES database is used for EPA funded projects
- Most States do not track beyond ACRES

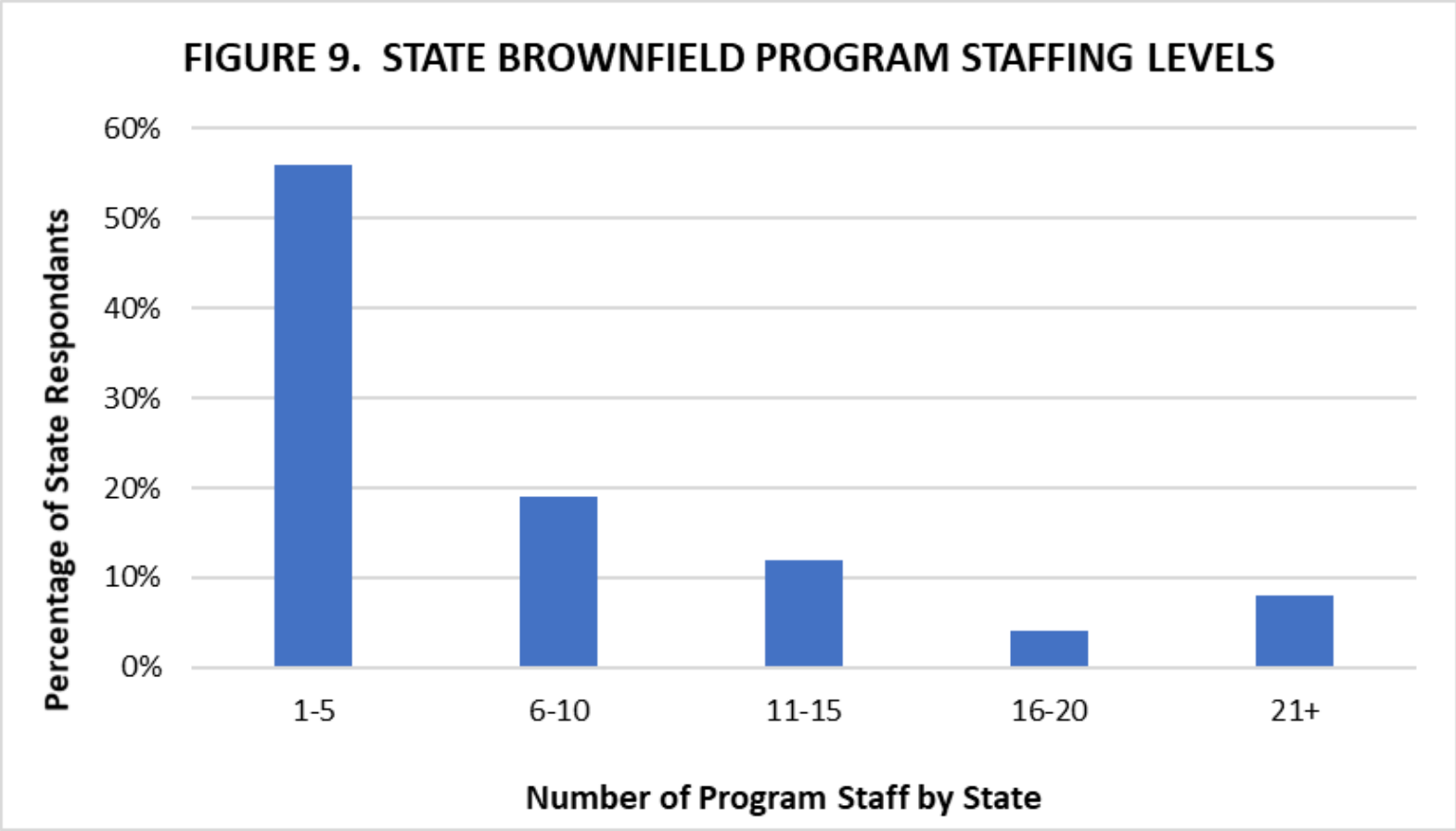
Cleanup Criteria



TAKEAWAY:

- Most States have some form of State derived cleanup levels/criteria.
- It would be helpful for States that are developing or updating criteria to have easy access to how other States have navigated this issue

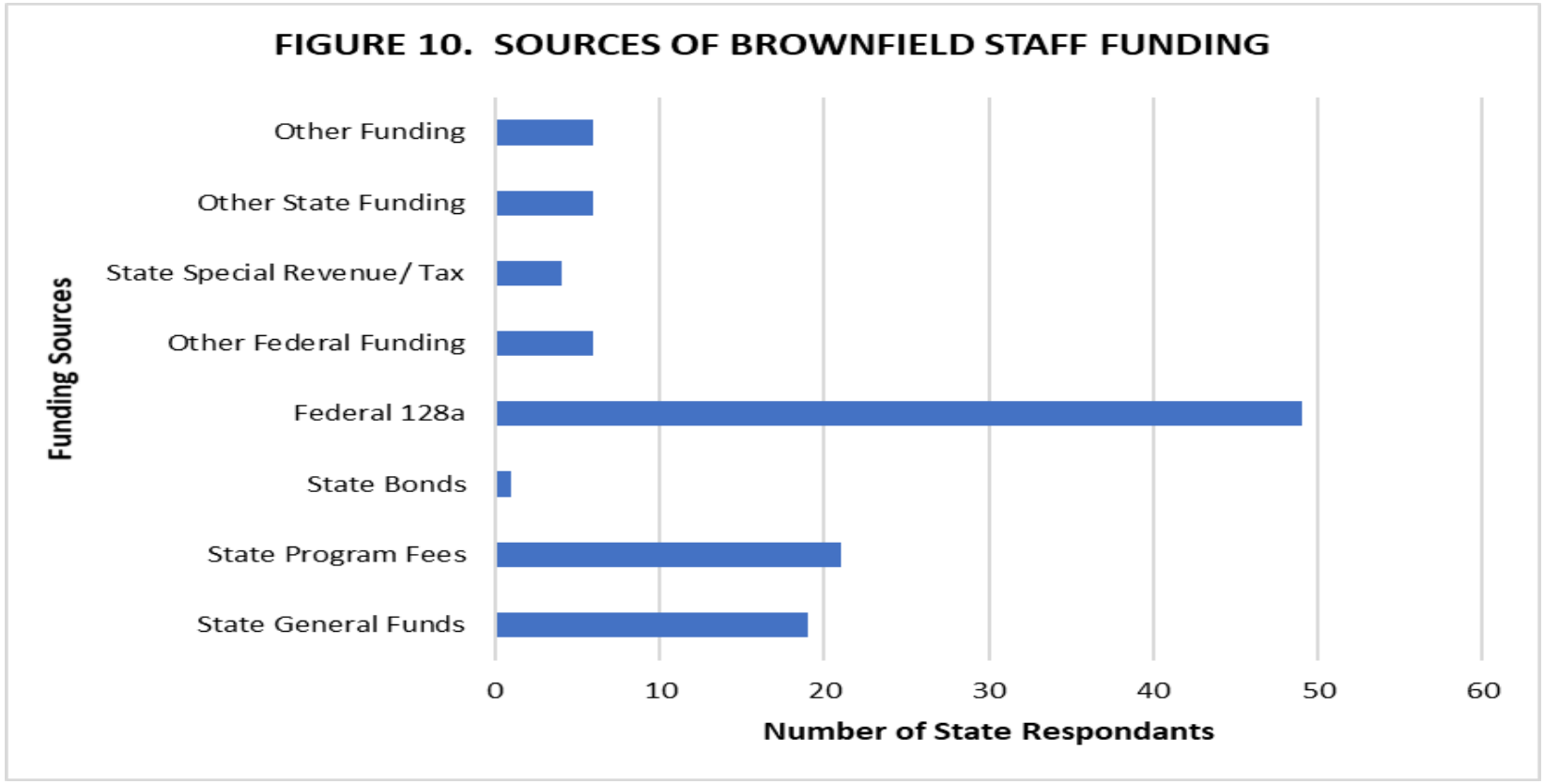
Brownfield Staffing



TAKEAWAY:

- The majority (57%) of State brownfield programs have less than 5 staff.

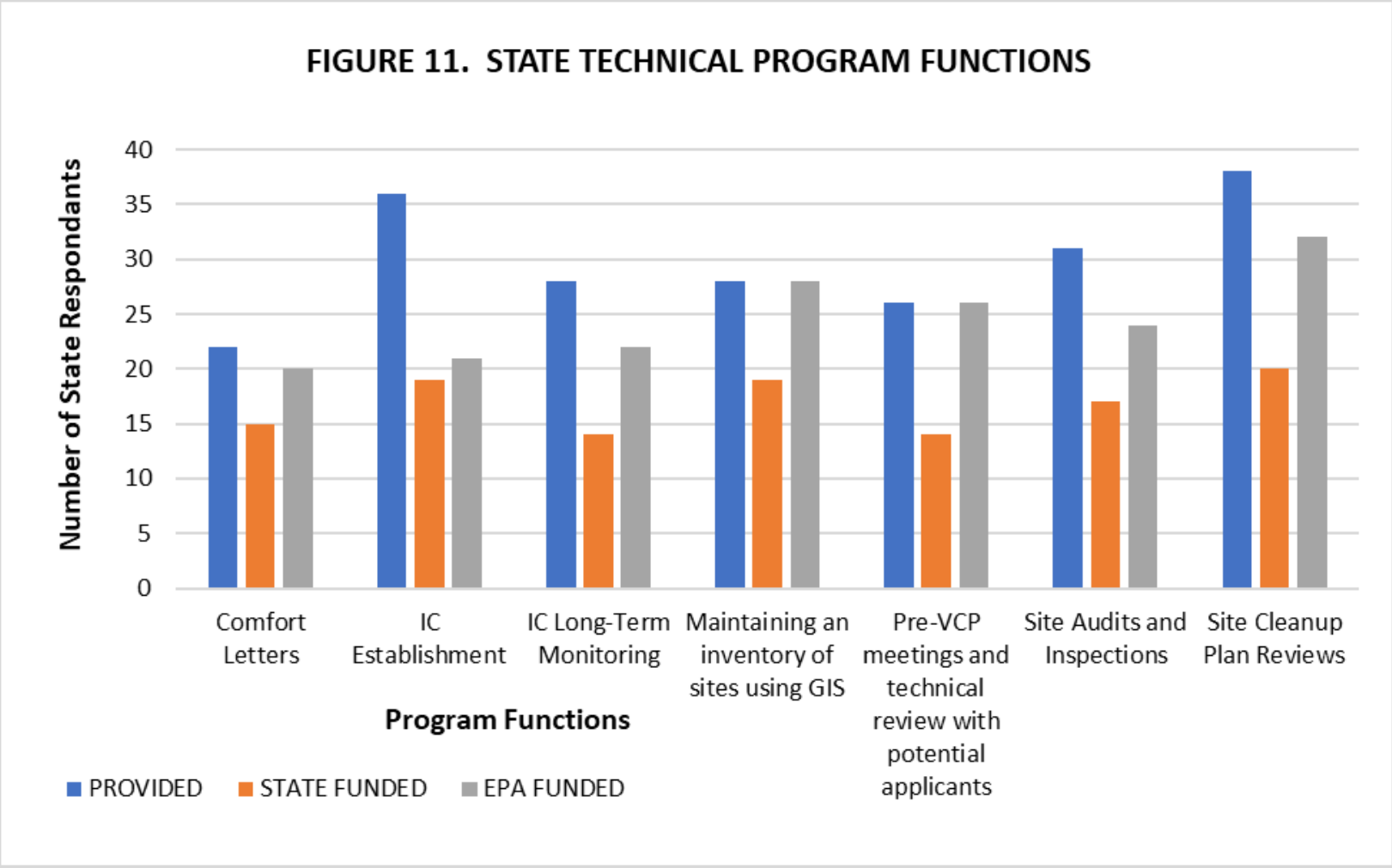
Brownfield Staffing - Funding



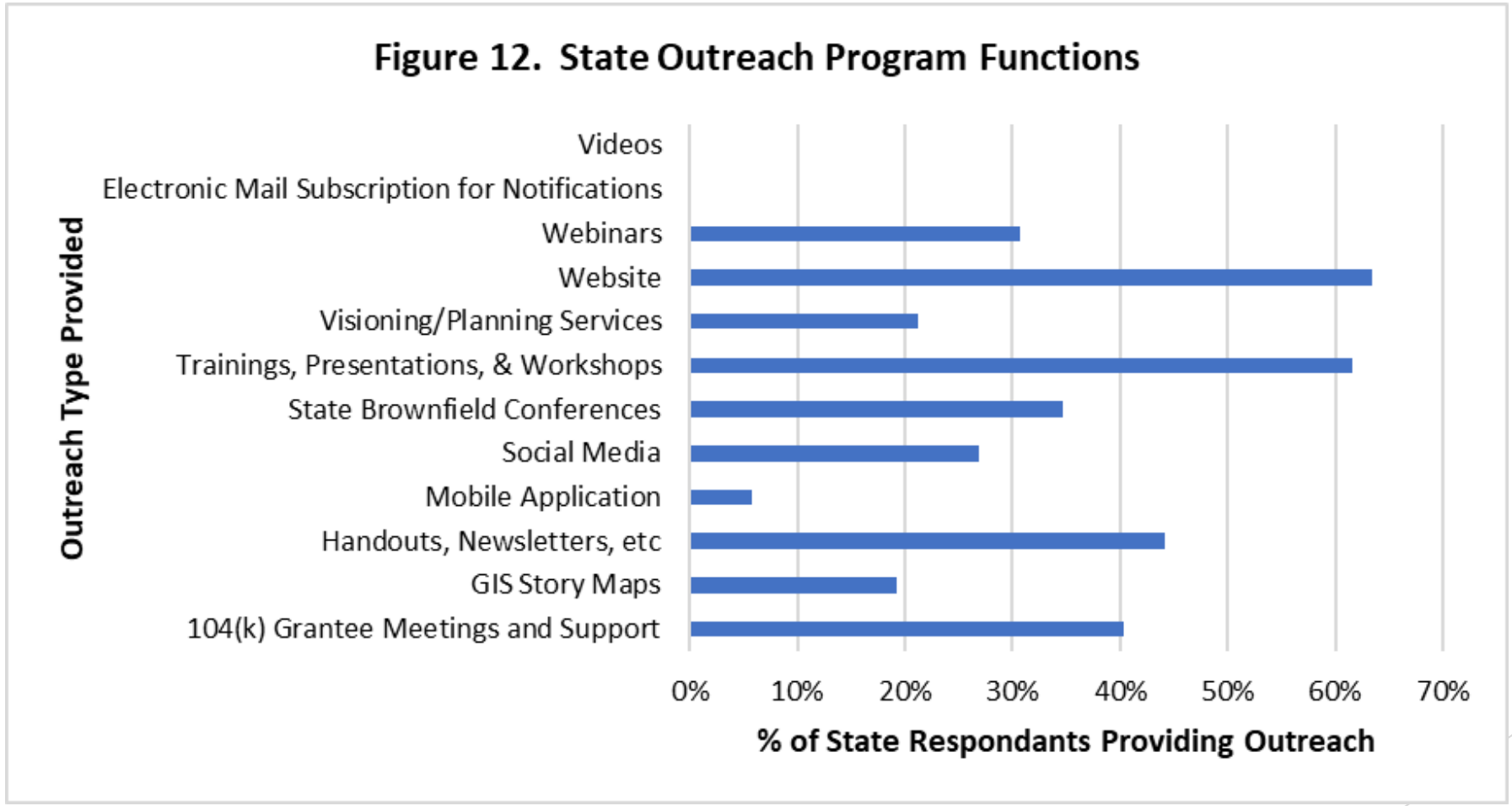
TAKEAWAY:

- Nearly all States support their staff with 128(a) funding.

State Program Functions - Technical



State Program Functions - Outreach

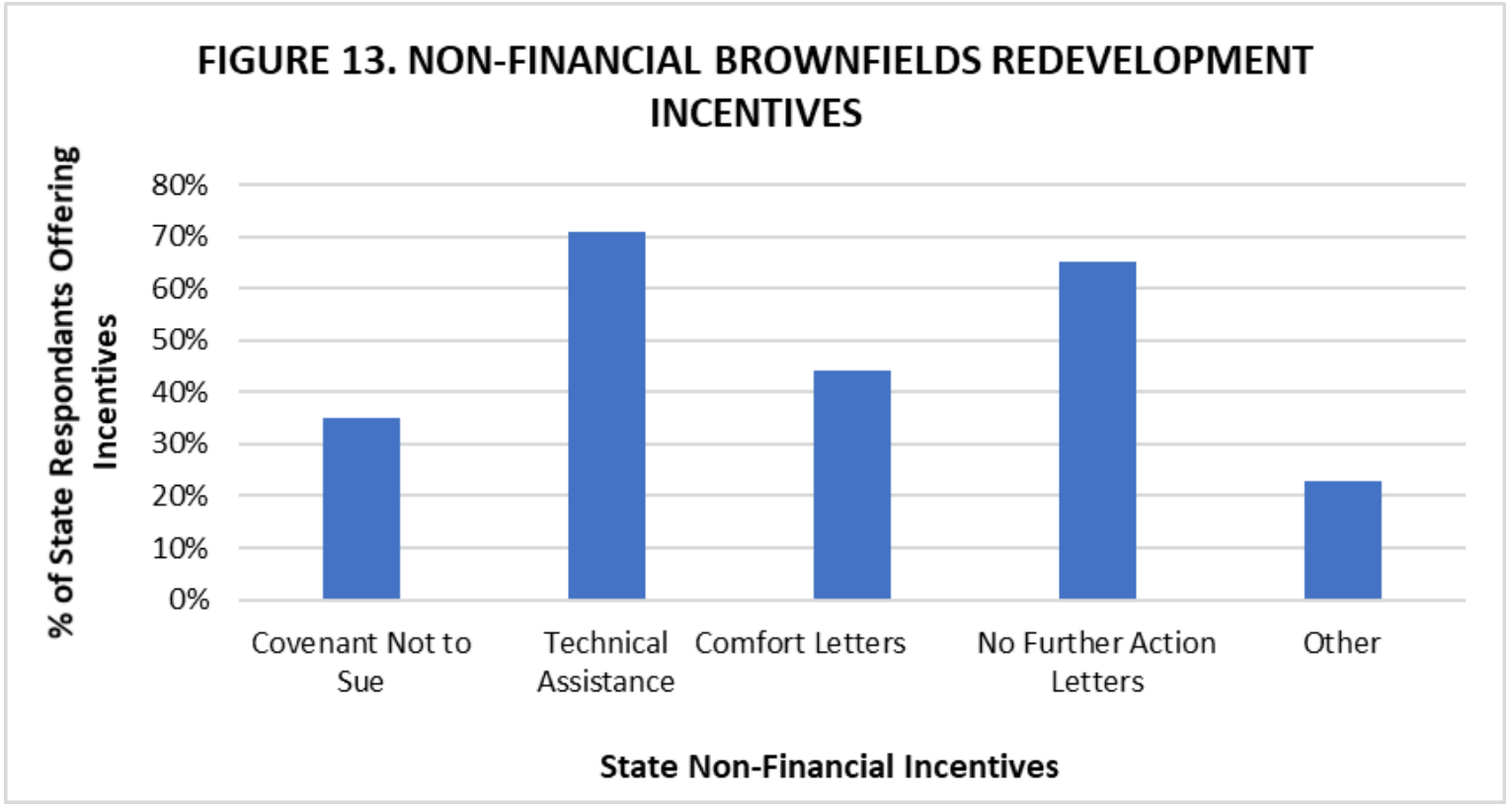


State Program Functions

TAKEAWAYS:

- EPA funding is heavily relied upon for both the technical and outreach aspects of State brownfield programs.
- State program technical functions do not vary much between States
- State program outreach functions are more variable, and States are finding creative ways to reach out

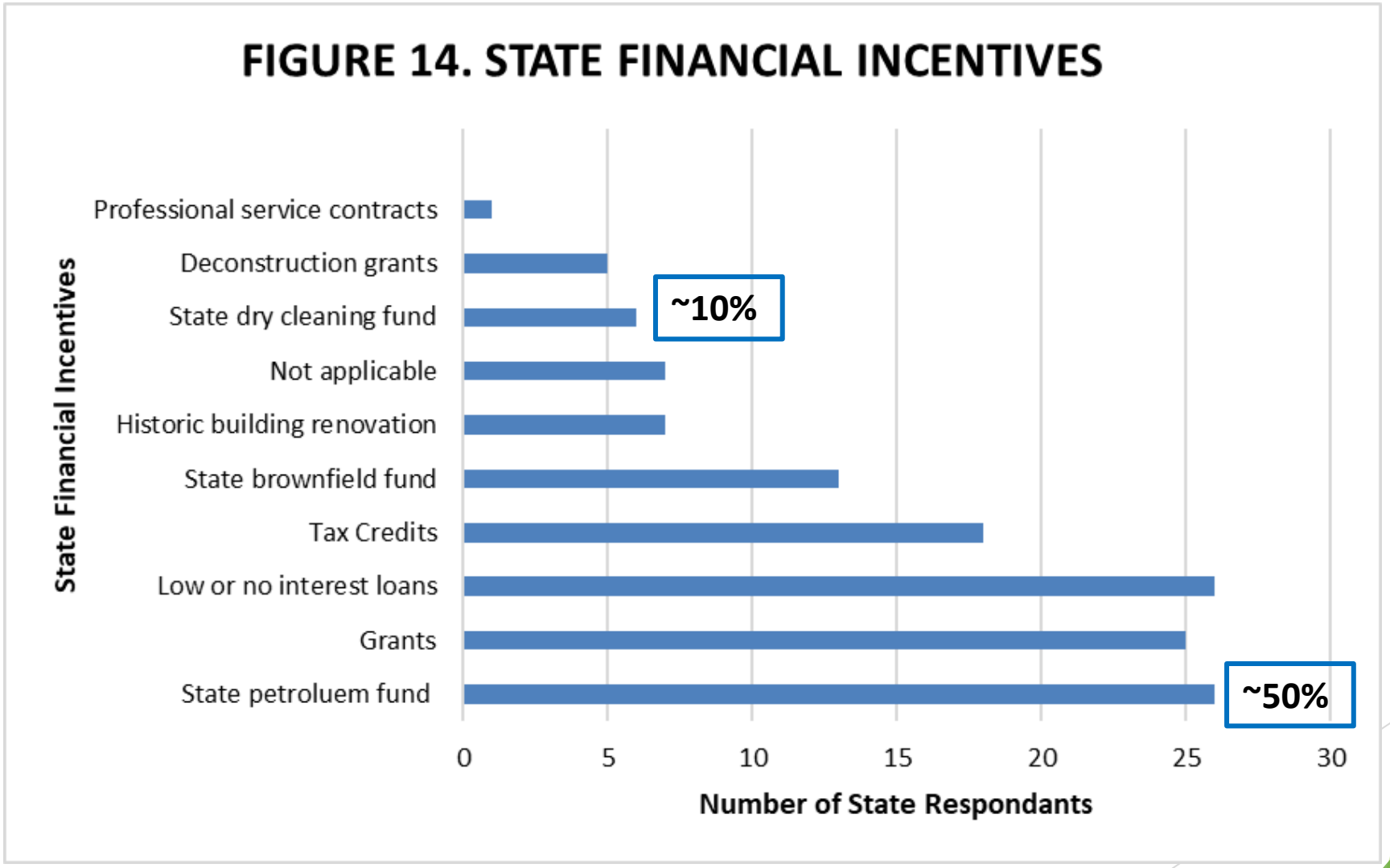
State Non-Financial Incentives



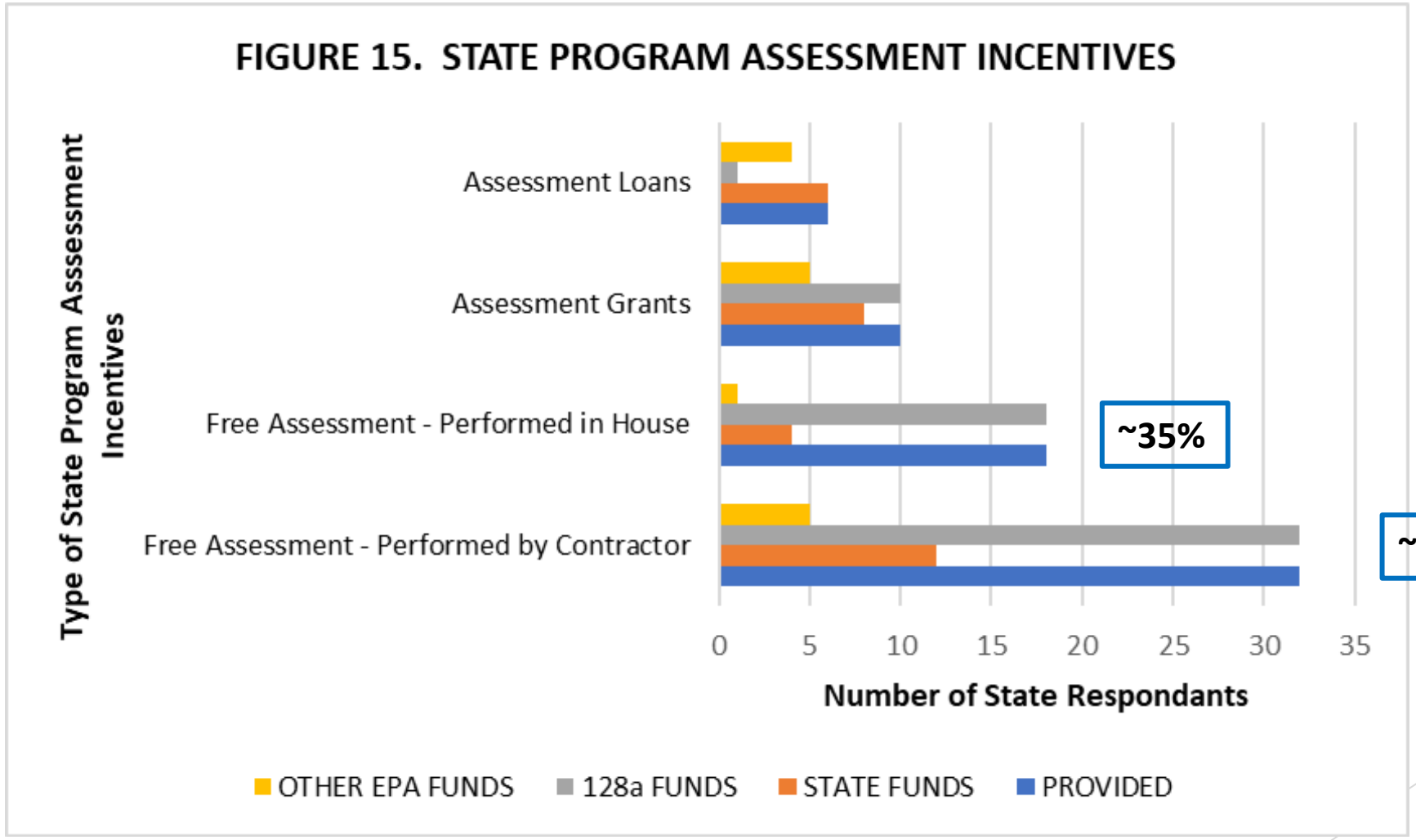
TAKEAWAYS:

- Technical Assistance and NFA Letters are offered by majority of States
- Comfort letters offered by less than half of the States

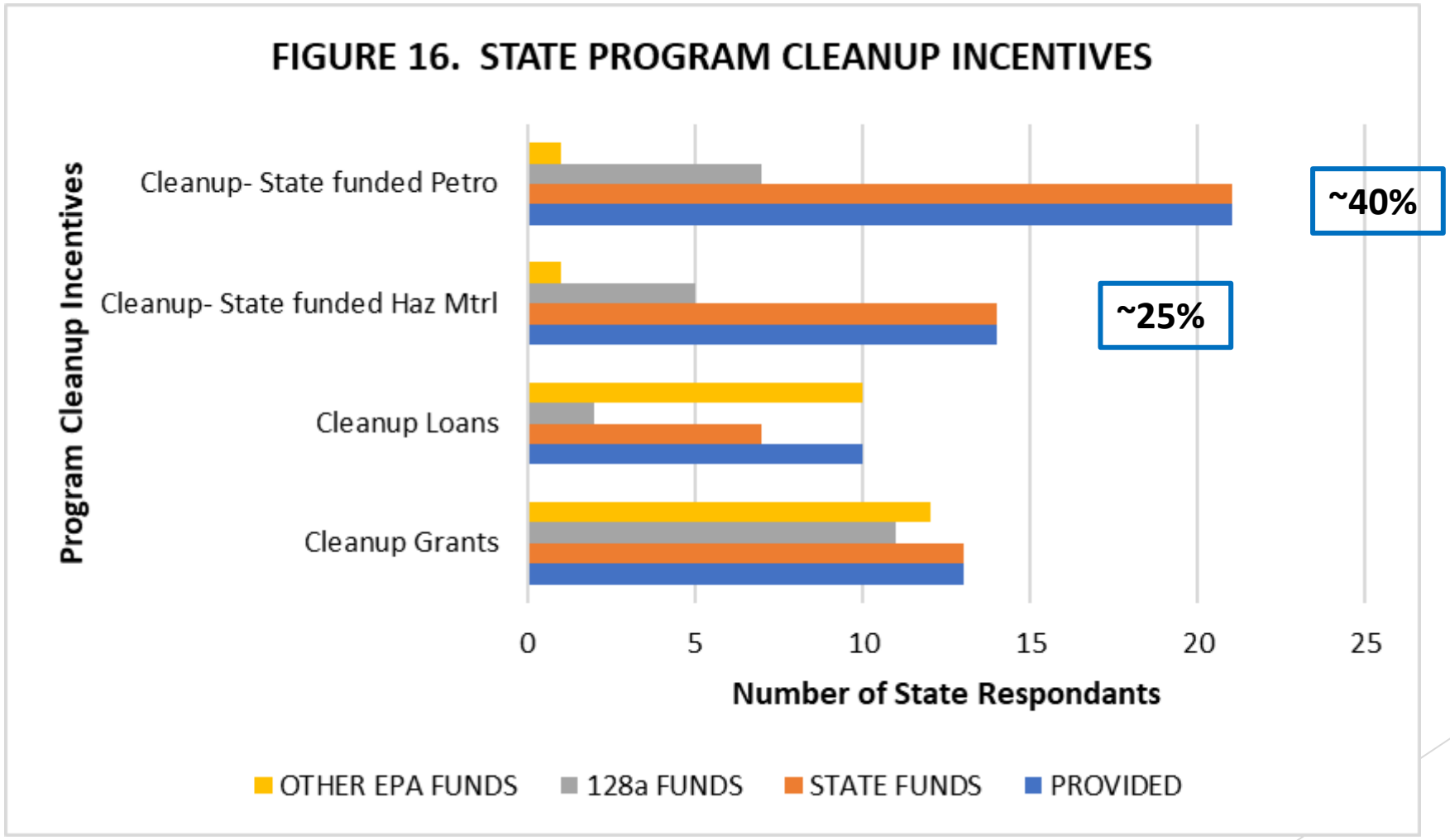
State Financial Incentives



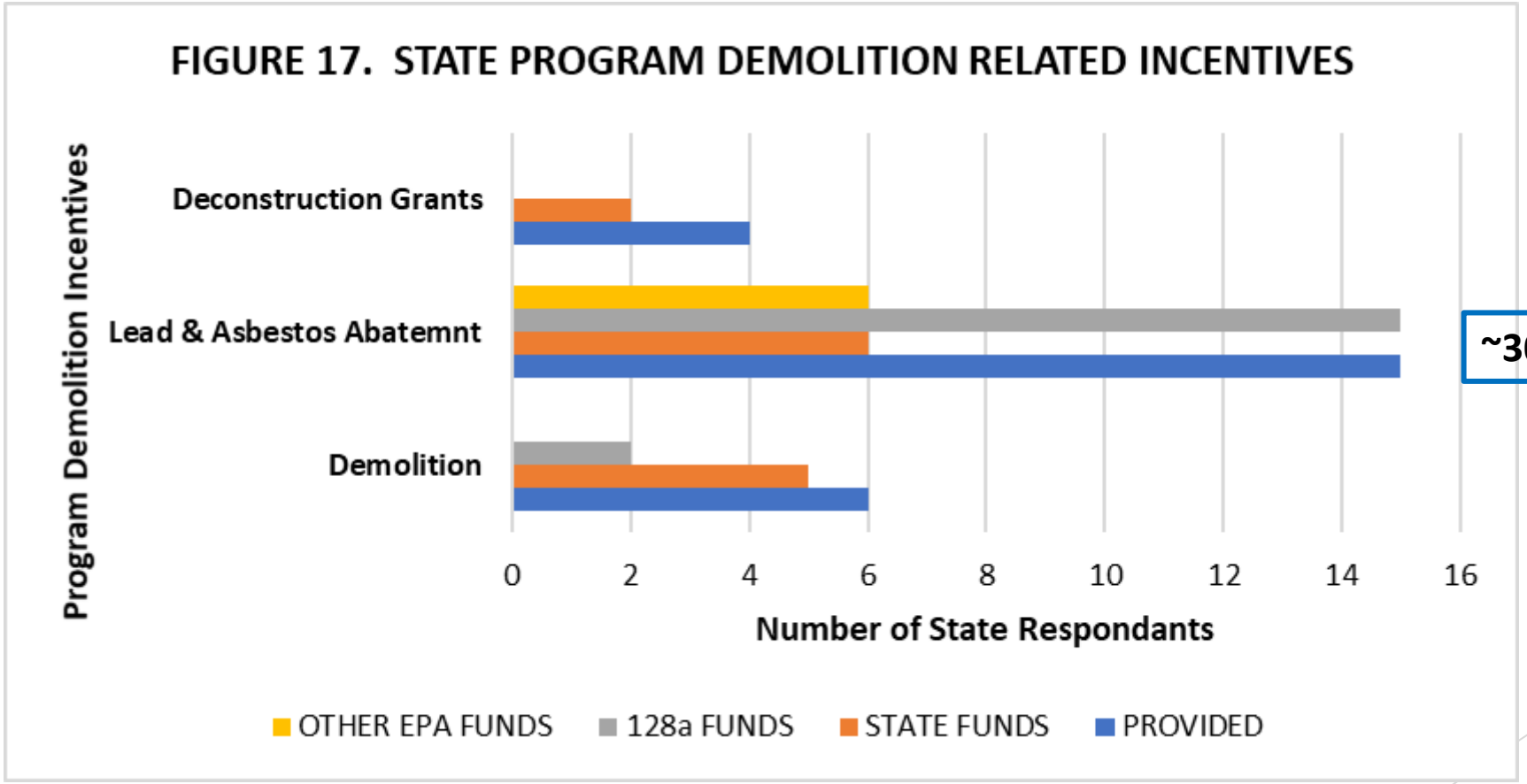
State Financial Incentives - Assessment



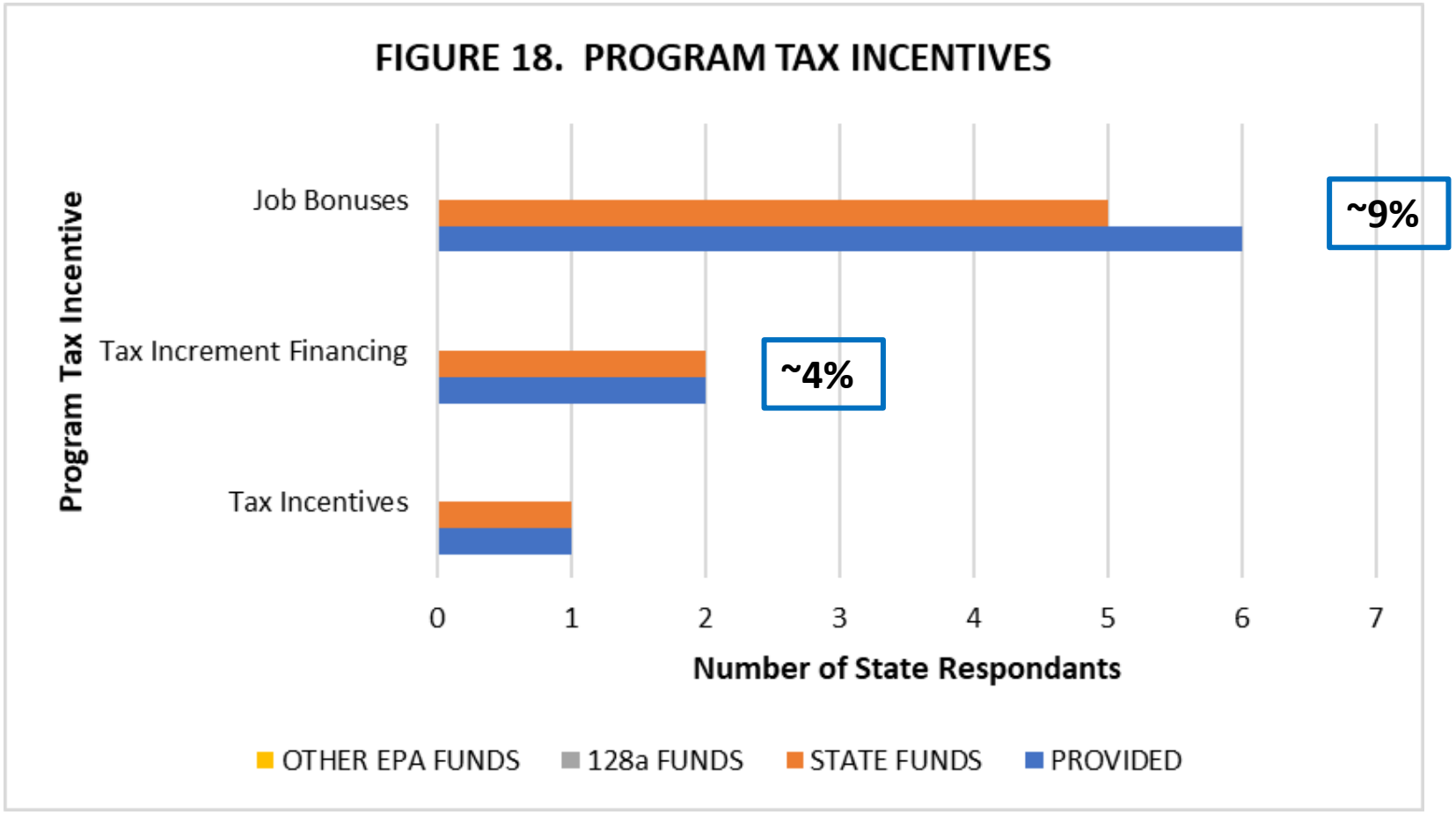
State Financial Incentives - Cleanup



State Financial Incentives - Demo



State Financial Incentives – Tax Breaks



State Financial Incentives

FINANCIAL INCENTIVE TAKEAWAYS:

- Most States offer some form of financial BF incentives
- The most common incentive is petroleum/UST specific.
- Nearly all States offer incentives for assessment and cleanup.
- 128a Funds could be leveraged more for lead and asbestos abatement
- State Tax Breaks / Incentives are not commonly utilized

The Results

Brownfields Focus Group
2020 STATE BROWNFIELD PROGRAM HIGHLIGHTS
PROGRAM ACCOMPLISHMENTS
Since 2006 State Brownfield Programs have facilitated
130,149 total acres ready for reuse
166,209 Jobs Leveraged
$32 Billion in site reinvestments
People and Funding
100% of State programs rely on 128(a) funding
56% have 5 or less staff
76% have less than 10 staff
Research Tool
27 questions asked in 2019 about State program functions
Responses from 52 State and territorial programs
VOLUNTARY CLEANUP
88% have a voluntary cleanup program
79% charge a VCP fee
State Programs By the Numbers
61% provide ready for redevelopment/comfort letters
54% offer Pre-VCP Meetings
25% provide State Brownfield Funds
25
35
35% provide Tax Incentives
Untapped Opportunities for States and Territories
60% of programs have an RLF Grant
54% use GPS to track sites
19% create Storymaps
Only 1 State reported producing brownfield videos
6% use mobile apps
Find out more about our research tool at the link below
Land Use Tracking
VACANT
Contaminated Fill
51% of respondents allow onsite reuse
30% don't allow use at all
20% allow onsite AND offsite reuse
CLEANUP STANDARDS
61% use State and EPA standards
31% use State standards only
6% use EPA standards only
UTIONAL CONTROLS
mber of ICs by State
5,000+ 14.8%
Less than 100 18.5%
100-499 27.8%
500-999 29.6%
IC Inspection Frequency
40% of respondents surveyed inspected ICs every 1-5 years
20% did not perform regular inspections
Some perform inspections only when they have adequate time and staff
Interesting State Brownfield Program Statistics
13% Offer Historic Building Renovation Programs
21% Provide Planning Assistance
63% Provide Free Brownfields Assessments
27% Use Social Media

Questions and Further Discussion

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