

# Appendix B. State Survey and State Survey Results

In the fall of 2019, the SRR team conducted a state survey. The survey asked for information on green and sustainable regulations, policies, guidance; and activities; extreme weather and fire events; and information on what resources would be helpful to the state. The team received 52 responses to the survey. The survey instrument is presented in [section B.1](#) and the results are presented [section B.2](#).

## B.1 State Survey

### GSR & Resiliency State Priorities Survey

The ITRC Green and Sustainable Remediation with Resiliency to Extreme Weather Event and Wildfires Team (GSR/R) has just begun updating the 2011 GSR guidance to support sustainable, resilient remediation and redevelopment of contaminated sites.

States' needs are foremost and your response to this survey will guide how we develop resources for you.

For further background please review the Team Page and the associated fact sheet, both found [HERE](#).

GSR is the site-specific employment of products, processes, technologies, and procedures that mitigate contaminant risk to receptors while making decisions that are cognizant of balancing community goals, economic impacts, and environmental effects.

Extreme weather events (such as heat waves, droughts, tornadoes, and hurricanes) are defined as lying in the outermost ("most unusual") 10 percent of a place's history. Analyses are available at the national and regional levels.

Resilience is the capacity of a community, business, or natural environment to prevent, withstand, respond to, and recover from a disruption.

SURVEY PERIOD: October 8, 2019 through November 6, 2019

If you have any questions, please contact the Team's Program Advisor, Barbara Maco (barbara.maco@sustainableremediation.org)

1. Please provide your contact information:

Name:	<input type="text"/>
State and Department:	<input type="text"/>
Job Title:	<input type="text"/>
Email Address:	<input type="text"/>
Phone Number:	<input type="text"/>

2. Does your state have any existing GSR regulation, policy, or guidance? (See GSR definition above)

- Yes
- No
- Unsure / Do Not Know

If YES, please provide the reference/link:

3. Check all of the following extreme weather/climate or wildfire events that have or might impact your state. Please note any related impact such as increased/decreased stormwater runoff in the comment box.

<input type="checkbox"/> Sustained changes in average temperature	<input type="checkbox"/> Increased flood risk
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<input type="checkbox"/> Increased extreme temperatures	<input type="checkbox"/> Decreased permafrost
<input type="checkbox"/> Decreased precipitation days, increasing drought intensity	<input type="checkbox"/> Sea level rise
<input type="checkbox"/> Increased heavy precipitation events	<input type="checkbox"/> Increased frequency and/or intensity of wildfires
<input type="checkbox"/> Increased intensity of hurricanes	
<input type="checkbox"/> Other (please specify)	
<input type="text"/>	

4. At which stages is your state planning for resiliency to address extreme weather events and wildfires? If you have NONE, please put NA in the category box. If YES, please provide a reference and/or web link.

Assessment / Identification:

State-Managed Climate Change Information Clearinghouse or Data Resource:

State Agency or Department Lead:

Comprehensive Plan:

Executive Order:

Regulation / Statue:

Other (please specify):

5. Does your state have any policy, strategy, regulatory framework, requirements, or guidance for addressing the impacts of extreme weather events and wildfires at remediation sites, both active and closed?

- Yes
- No
- Unsure / Do Not Know

If YES, please provide a reference/link. If NO, is your state planning on this in the future?

6. Does your state have an emergency response plan for extreme weather events and wildfire impacts at contaminated sites?

- Yes
- No
- Unsure / Do Not Know

7. Has your state seen GSR applied in any of the following site cleanup programs? Provide key information in comment section.

- State lead
- CERCLA NPL
- RCRA

- Time critical removal
- Brownfields

Please note key elements of implementation here.

8. What are the GSR implementation barriers for your state? Please note what they are in the comment box below.

- Regulatory barriers
- Technical barriers
- Lack of information
- Cost

List the barriers

9. Rate the following items that might lead to a more sustainable resilient remediation and redevelopment in your state.

	Rating
State or Federal legislation/regulatory mandate	<input type="text"/> ▼
State or Federal grant incentives	<input type="text"/> ▼
Local permits, regulations, or ordinances	<input type="text"/> ▼
Private certification (e.g. LEED, Envision)	<input type="text"/> ▼
Land use/institutional controls	<input type="text"/> ▼

10. Metrics provide a basis for evaluating actions being considered throughout the site cleanup and redevelopment process and can apply to more than one component of GSR... environmental, economic and or social. Please indicate if these metrics have been used at cleanup projects in your state or their potential value for future cleanups.

	Rating
Environmental metrics (greenhouse gas emissions created or energy consumed)	<input type="text"/> ▼
Economic metrics (such as job creation/preservation)	<input type="text"/> ▼
Social metrics (parkland or open space created)	<input type="text"/> ▼

11. Does your state recommend/encourage GSR best management practices (BMPs) at contaminated site cleanup and redevelopment.

- Yes
- No
- Unsure / Do Not Know

12. What types of BMP resources would your state like to see in the ITRC GSR/R guidance?

Remedial technology/approach evaluation (such as a feasibility study)

- Remedial technology/approach optimization
- Remedial technology/approach implementation

- Risk management
- Long-term monitoring
- stakeholder engagement
- Other (please specify):

13. Would a sustainable remediation guidance/framework that also addresses extreme weather events and wildfire impacts at contaminated sites be useful for your state?

- Yes
- No
- Unsure / Do Not Know

14. Rate each case study topic based on its usefulness to support sustainable resilient remediation and redevelopment implementation in your state.

	Rating
technology/approach evaluation (such as a feasibility study)	<input type="text"/> ▼
technology/approach optimization	<input type="text"/> ▼
technology/approach implementation	<input type="text"/> ▼
Return on investment, including cost of externalities (e.g. social cost of carbon, ecosystem services)	<input type="text"/> ▼
Regulator collaboration and/or support	<input type="text"/> ▼
Community engagement with the impacted public	<input type="text"/> ▼
Stakeholder engagement to define sustainability metrics and tools	<input type="text"/> ▼
Risk management	<input type="text"/> ▼
Water conservation and reuse	<input type="text"/> ▼
Materials use/management	<input type="text"/> ▼
Circular economy	<input type="text"/> ▼

Other (please specify):

15. Does your state have any case studies/site examples that could be included in the ITRC GSR/Resiliency guidance?

- Yes
- No
- Unsure / Do Not Know

16. Do you have any additional feedback that you would like to provide to help the ITRC GSR/R Team develop its guidance and other resources?

GSRR-team-state-survey.pdf

B.2 State Survey Results

Q1 Please provide your contact

Answered: 52,

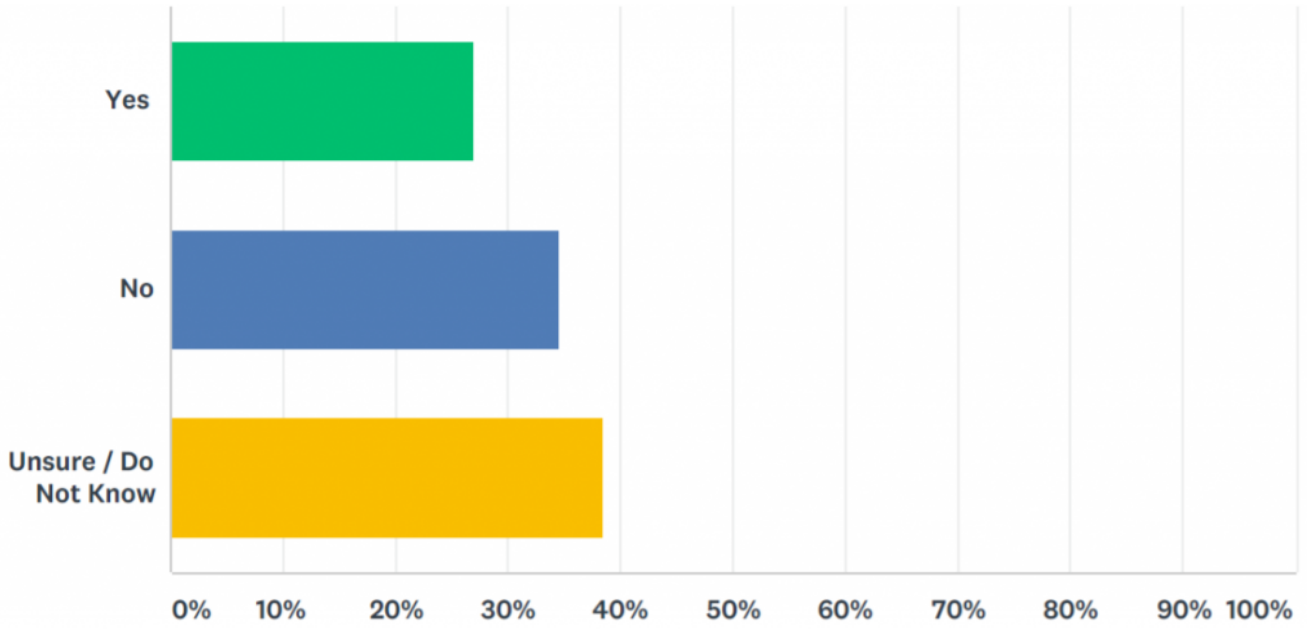
Skipped: 0

All Responses	
N= 100.00%	52
S= 100.00%	52
D= 92.31%	48
E= 100.00%	52
P= 98.08%	51


Q2 Does your state have any existing

Answered: 52

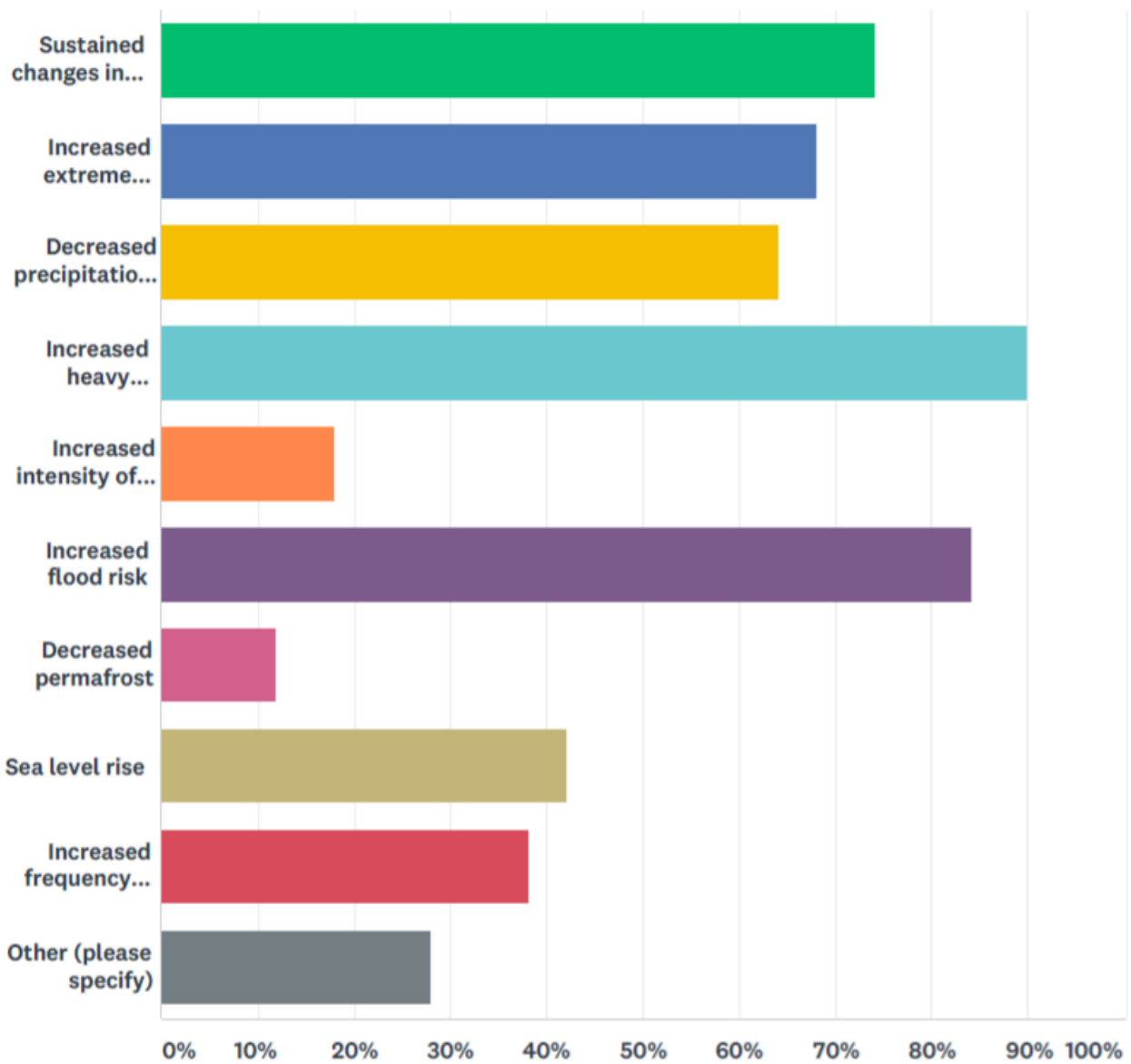
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All RESPONSES	
Yes 26.92%	14
No 34.6%	18
Do 38.4%	20
TOTAL	52


Q3 Check all of the following extreme

Answered: 50		Skipped: 2
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Category	Percentage	Count
Sustained changes in...	74.00%	37
Increased extreme...	68.00%	34
Decreased precipitatio...	64.00%	32
Increased heavy...	90.00%	45
Increased intensity of...	18.00%	9
Increased flood risk	84.00%	42
Decreased permafrost	12.00%	6

S	42.00%	21
I	38.00%	19
D	28.00%	14
Total Respondents:		50


Q4 At which stages is your state

Answered: 50		Skipped: 2
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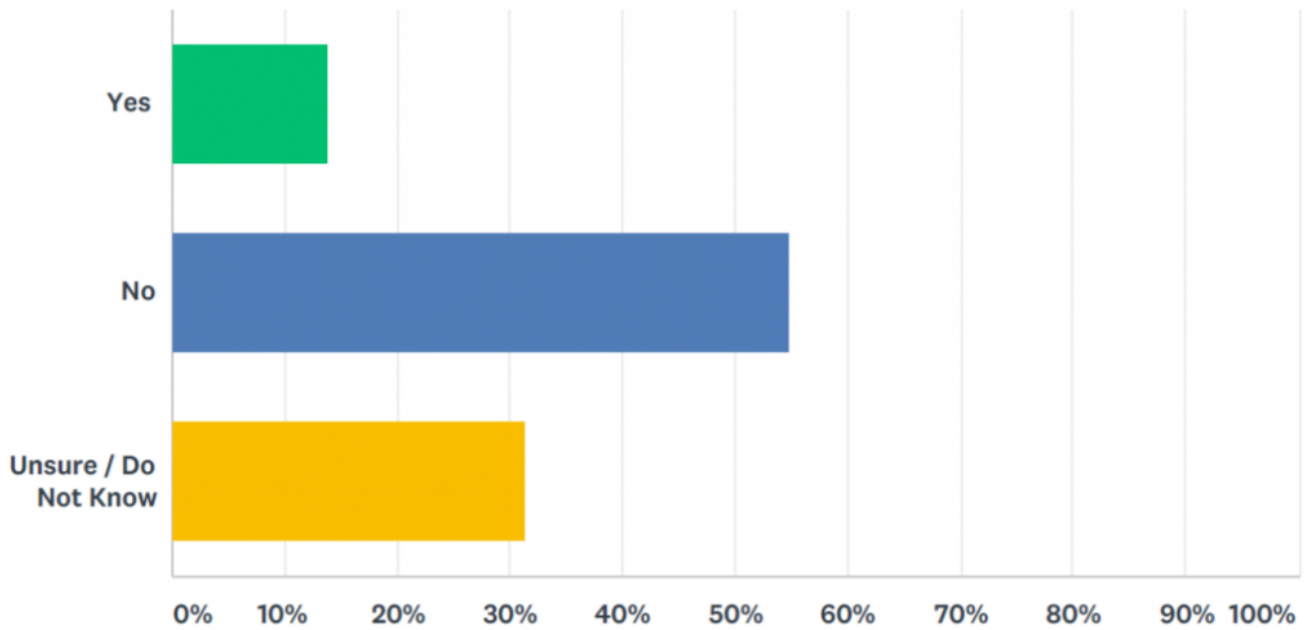
All RESPONSES		
A	84.00%	42
S	76.00%	38
S	66.00%	33
C	62.00%	31
E	62.00%	31
R	56.00%	28
D	32.00%	16


Q5 Does your state have any policy,

Answered: 51

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Skipped: 1

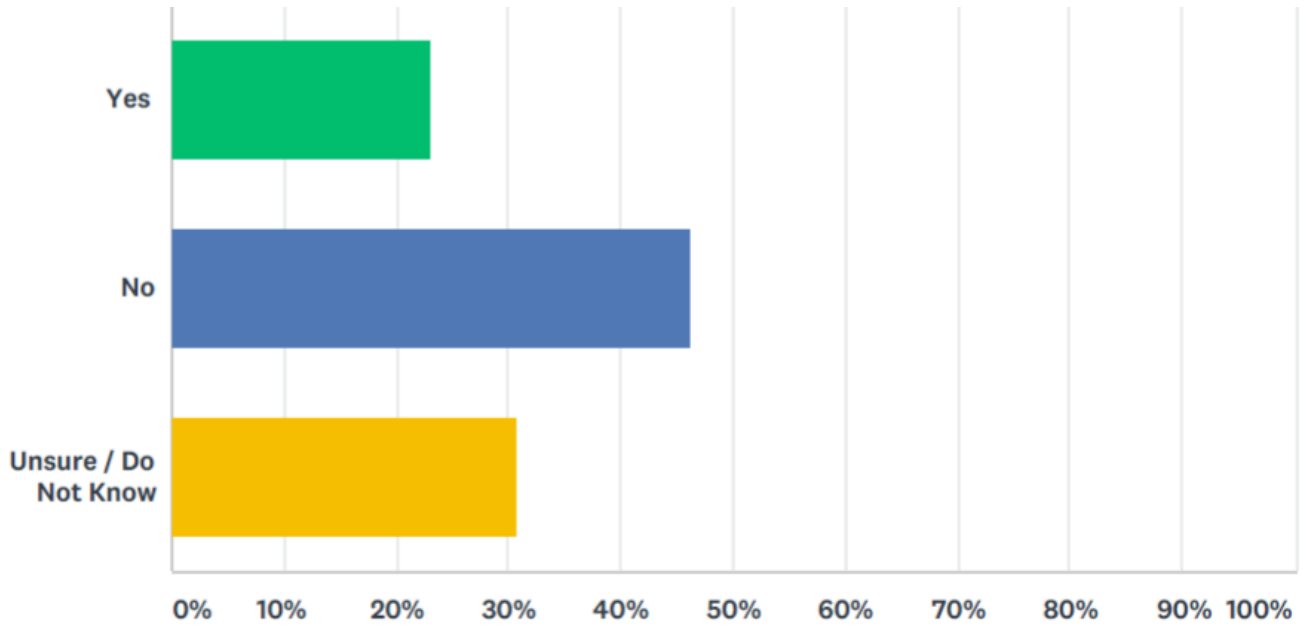


All RESPONSES	
Yes 13.73%	7
No 54.90%	28
Unsure / Do Not Know 31.37%	16
TOTAL	51


Q6 Does your state have an emergency

Answered: 52

Skipped: 0

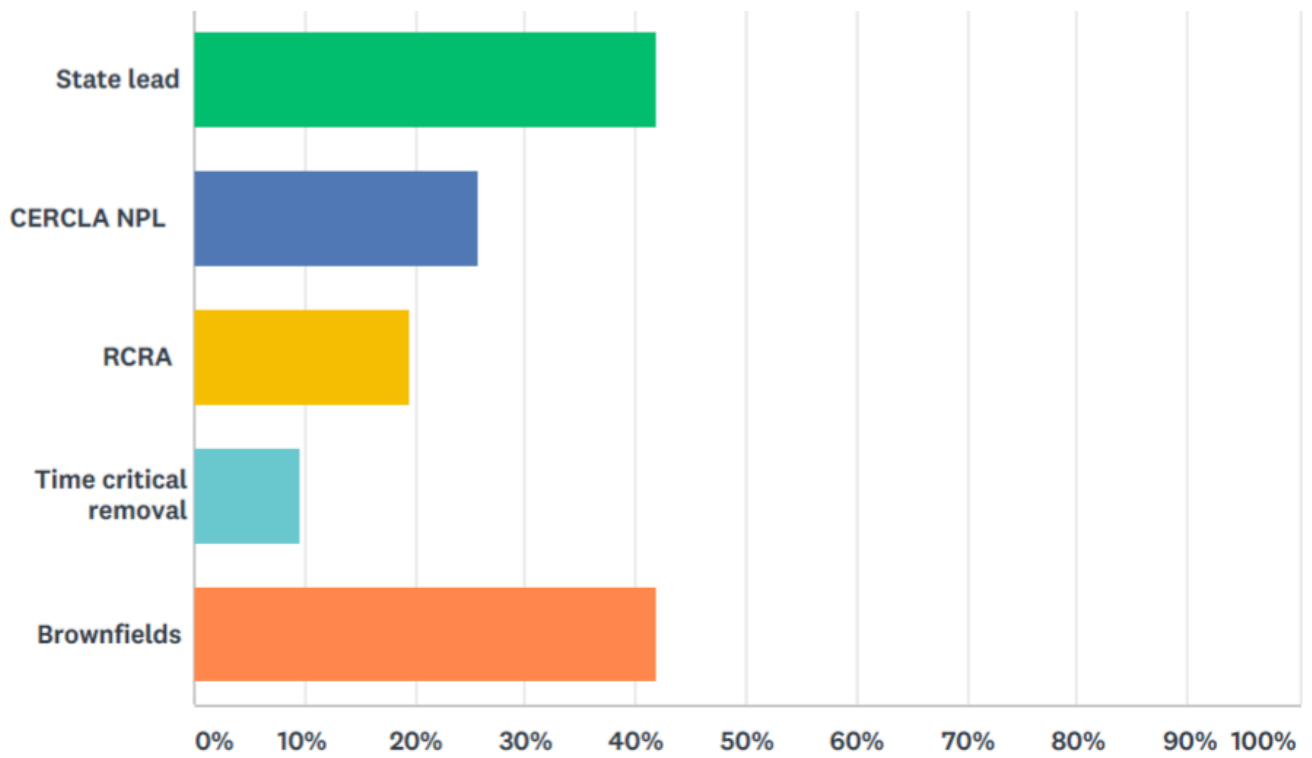


ALL RESPONSES	
Yes 23.08%	12
No 46.15%	24
Unsure / Do Not Know 30.77%	16
TOTAL	52

Q7 Has your state seen GSR applied in

Answered: 31

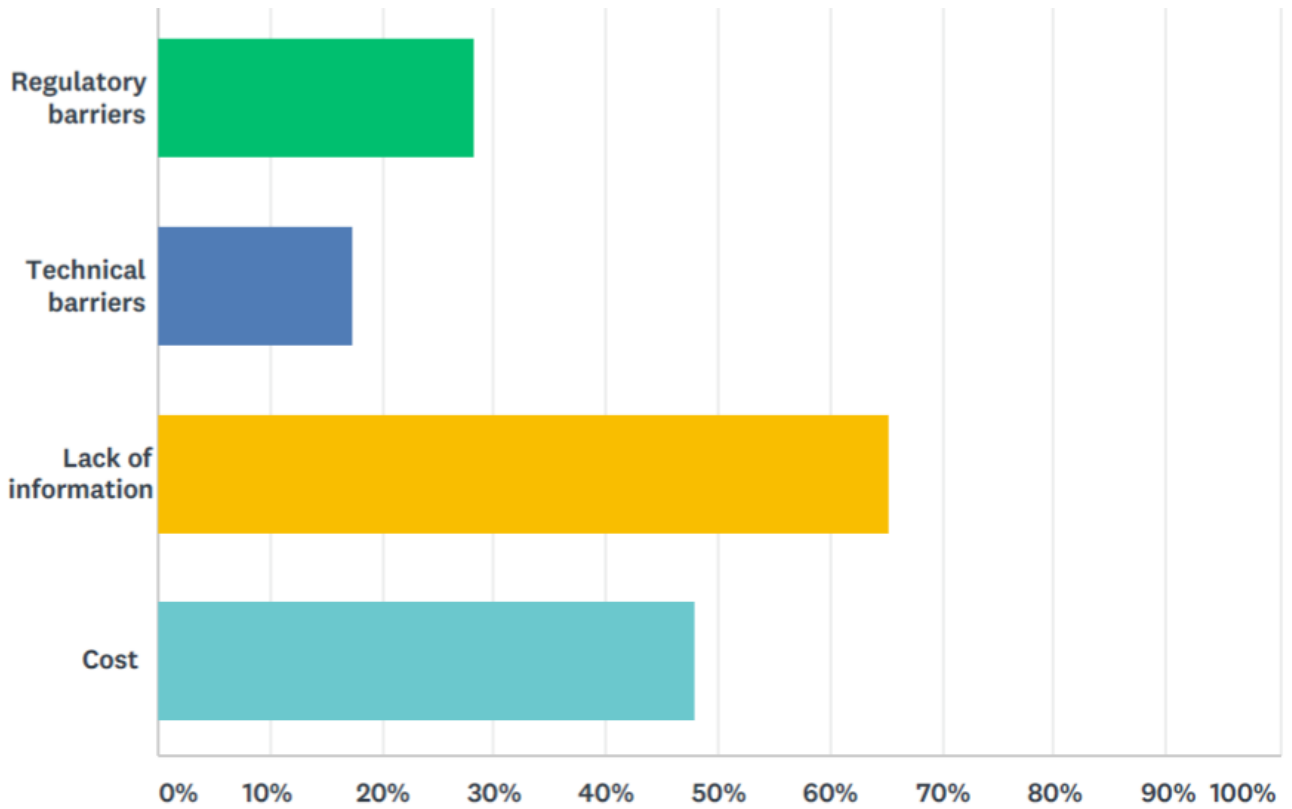
Skipped: 21



Category	Percentage	Count
State lead	41.94%	13
CERCLA NPL	25.81%	8
RCRA	19.35%	6
Time critical removal	9.68%	3
Brownfields	41.94%	13
Total Respondents:		31


Q8 What are the GSR implementation

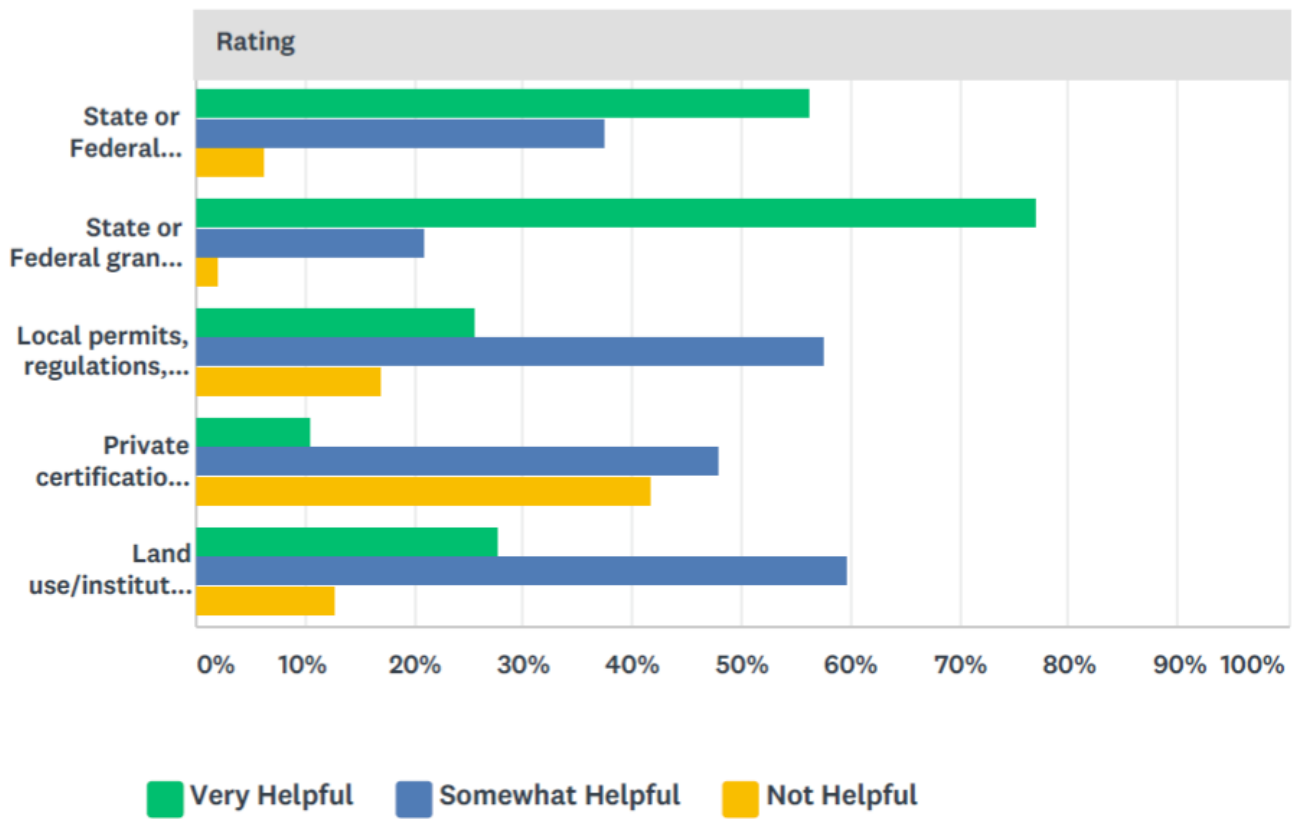
Answered: 46      Skipped: 6



All RESPONSES	
Regulatory barriers	13
Technical barriers	8
Lack of information	30
Cost	22
Total Respondents:	46


Q9 Rate the following items that

Answered: 48		Skipped: 4
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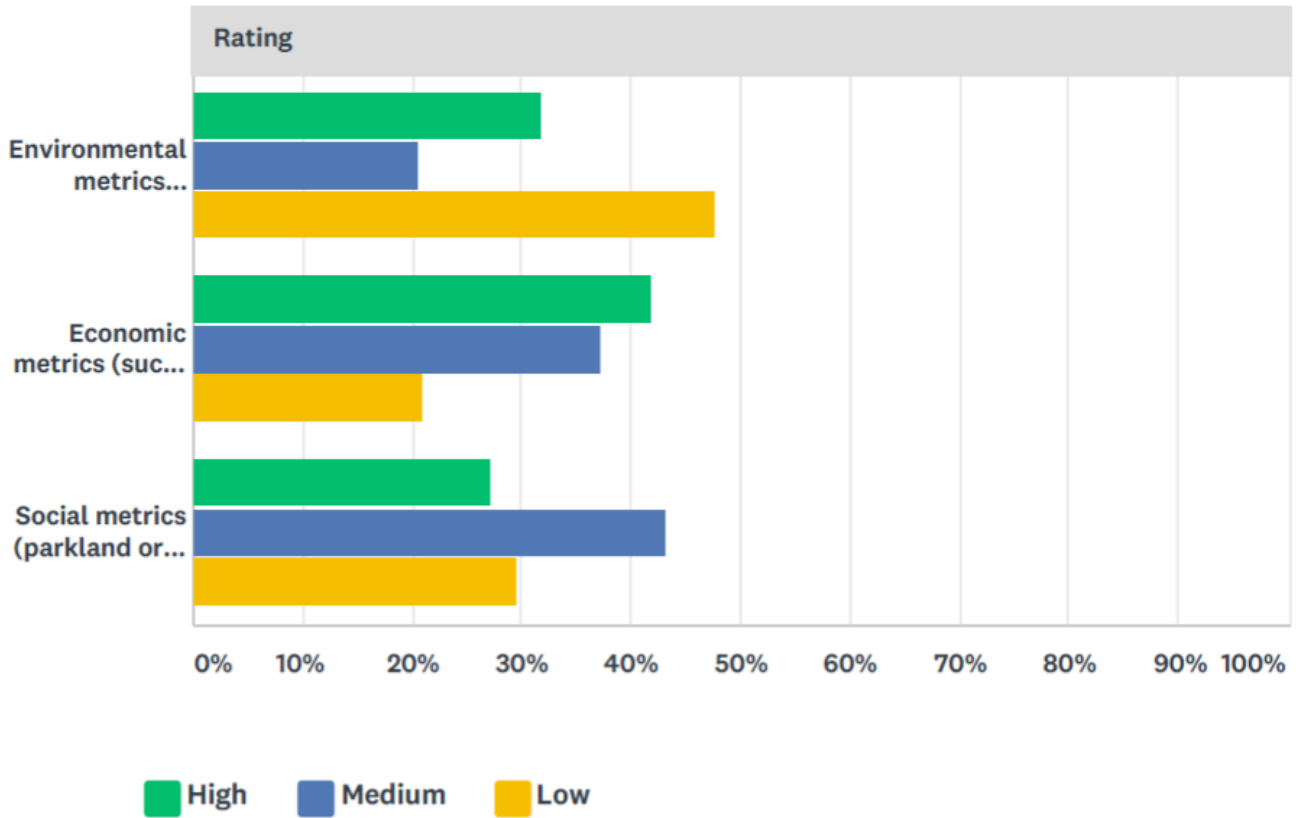
Rating	VERY HELPFUL	SOMEWHAT HELPFUL	NOT HELPFUL	TOTAL
State or Federal legislation/regulation	56.25% 27	37.50% 18	6.25% 3	48
State or Federal grant incentives	77.08% 37	20.83% 10	2.08% 1	48
Local permits, regulations, or other requirements	25.53% 12	57.45% 27	17.02% 8	47
Private certification (e.g. LEED, WELL, etc.)	10.42% 5	47.92% 23	41.67% 20	48
Land use/institutional	27.66% 13	59.57% 28	12.77% 6	47



Q10 Metrics provide a basis for

Answered: 45

Skipped: 7

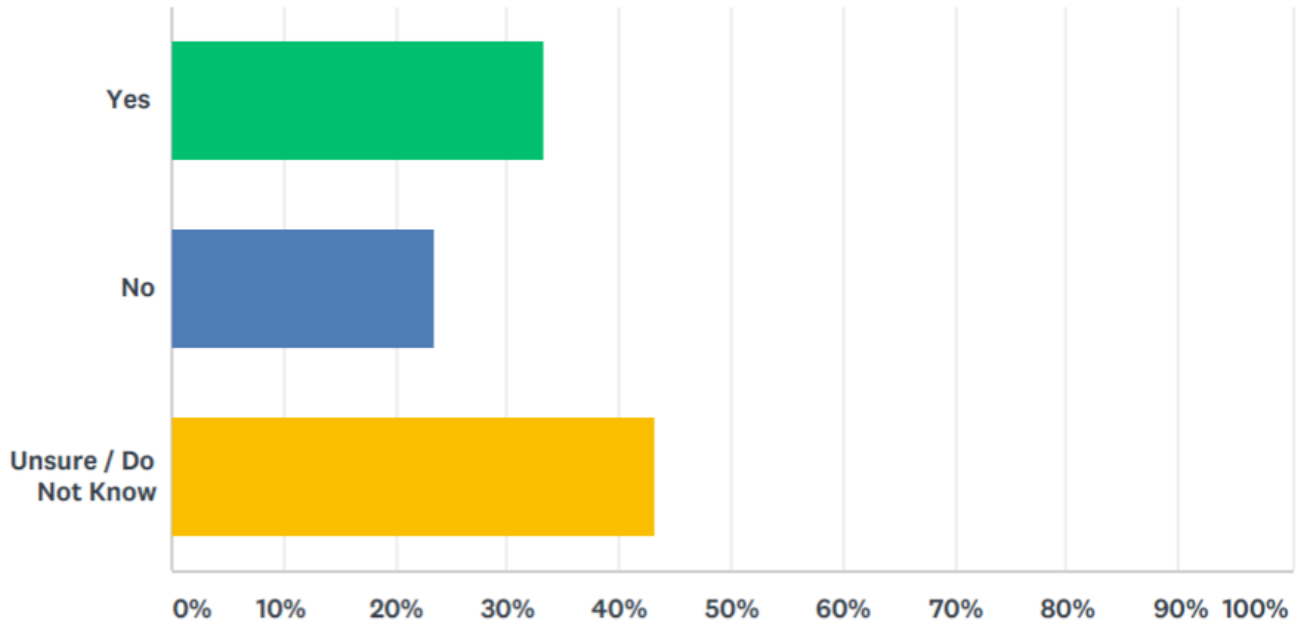


Rating	High	Medium	Low	Total
Environmental metrics (greenhouse)	31.82% 14	20.45% 9	47.73% 21	44
Economic metrics (such as job)	41.86% 18	37.21% 16	20.93% 9	43
Social metrics (parkland or open)	27.27% 12	43.18% 19	29.55% 13	44

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Q11 Does your state recommend/encourage

Answered: 51 Skipped: 1

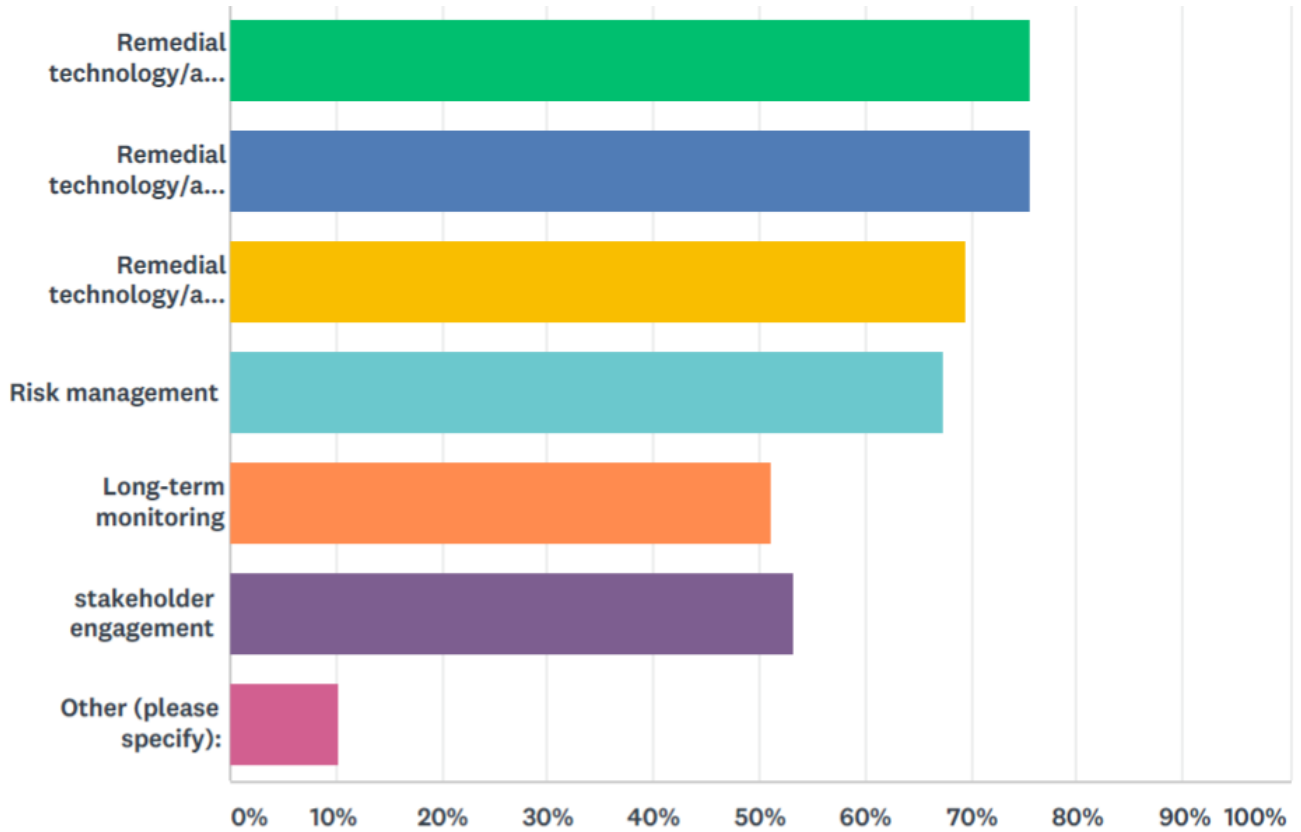


All RESPONSES	
Yes 33.33%	17
No 23.53%	12
Unsure / Do Not Know 43.14%	22
TOTAL	51


Q12 What types of BMP resources would

Answered: 49

Skipped: 3

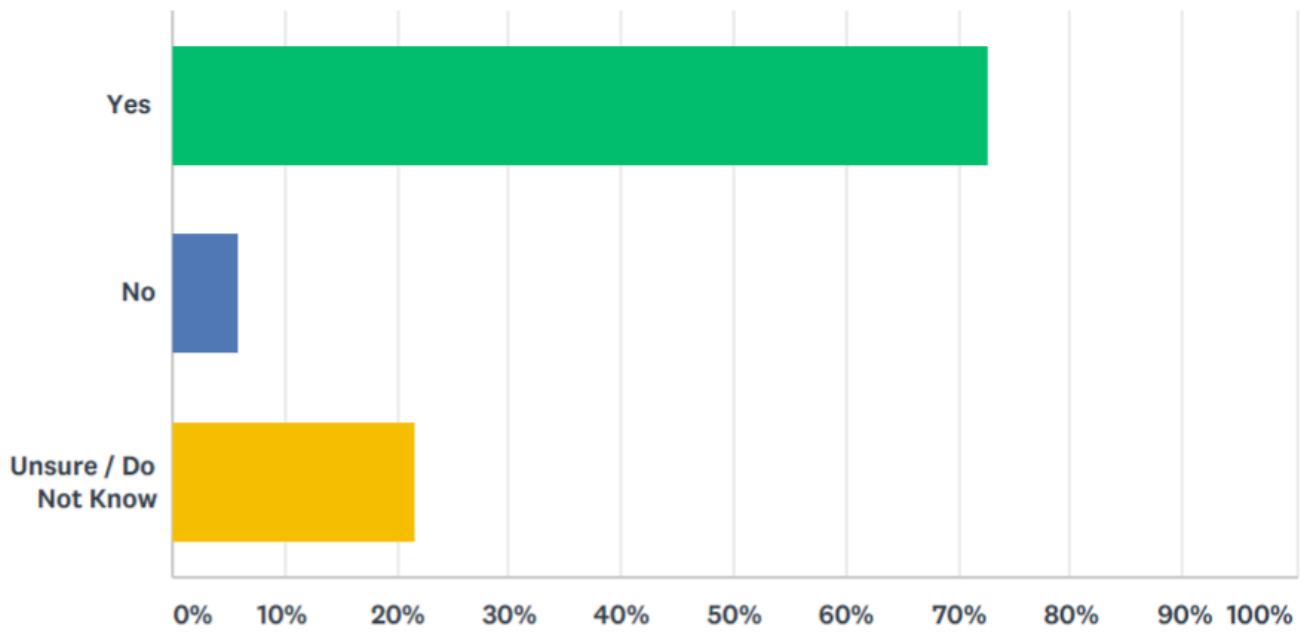


ALL RESPONSES	
Remedial technology/a...	75.51% 37
Remedial technology/a...	75.51% 37
Remedial technology/a...	69.39% 34
Risk management	67.35% 33
Long-term monitoring	51.02% 25
stakeholder engagement	53.06% 26
Other (please specify):	10.20% 5
Total Respondents:	49

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Q13 Would a sustainable

Answered: 51 Skipped: 1

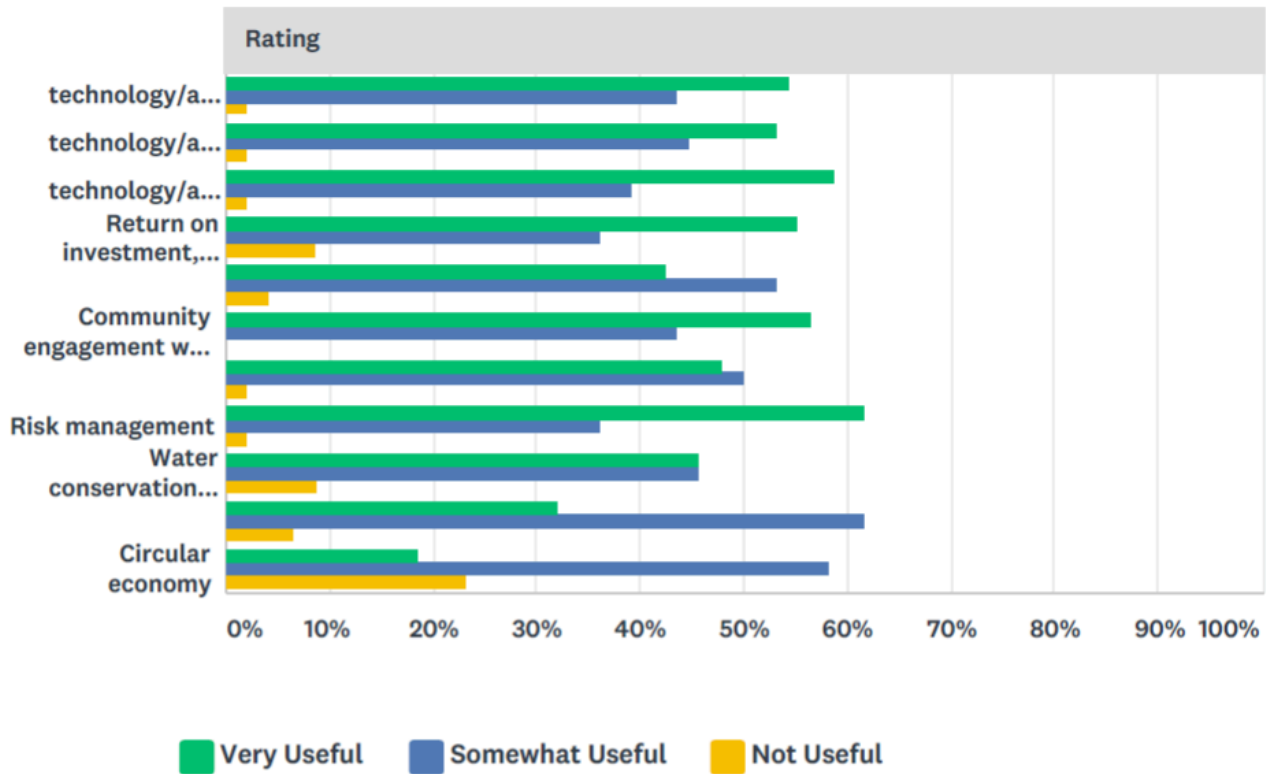


All RESPONSES	
Yes 72.55%	37
No 5.88%	3
Unsure / Do Not Know 21.57%	11
TOTAL	51


Q14 Rate each case study topic based on

Answered: 48

Skipped: 4



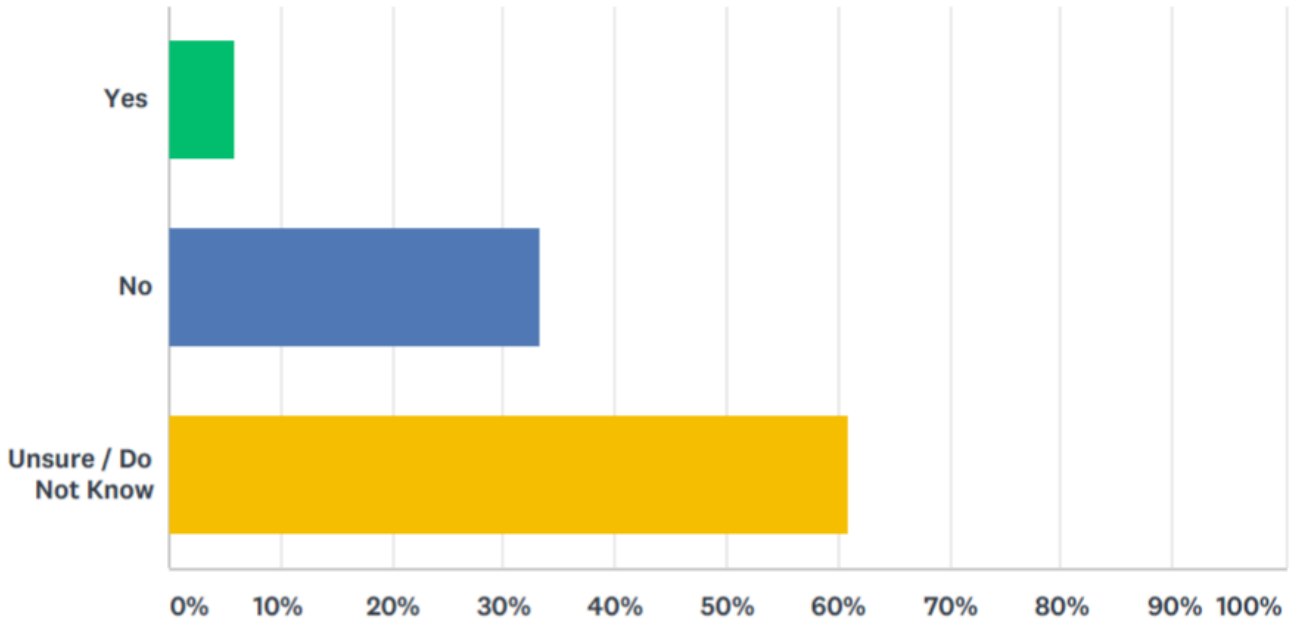
Rating	Very Useful	Somewhat Useful	Not Useful	Total
technology/approach evaluation (such as	54.35% 25	43.48% 20	2.17% 1	46
technology/approach optimization	53.19% 25	44.68% 21	2.13% 1	47
technology/approach implementation	58.70% 27	39.13% 18	2.17% 1	46
Return on investment,	55.32% 26	36.17% 17	8.51% 4	47
Regulator collaboration and/or	42.55% 20	53.19% 25	4.26% 2	47



Q15 Does your state have any case

Answered: 51

Skipped: 1



ALL RESPONSES	
Yes 5.88%	3
No 33.33%	17
Unsure / Do Not Know 60.78%	3
TOTAL	51


Q16 Do you have any additional feedback

Answered: 20

Skipped: 32

GSR2-state-survey-results.pdf