2011 Spokane River Forum PCB "clicker" questions

Allyson Beall, Washington State University

This project has been funded by the the National Science Foundation through the collaborativeWashington State University and University of Idaho Water, Sustainability and Climate Grant

The following document contains data from a facilitatied clicker session held on May 24, 2011. The questions were derived from a variety of interests in the Spokane Coeur D'Alene basin through interviews held in April May of 2011. Results from all questions from the session have been included in the same for, and order include all results as they were presented and answered at the Forum. For more information please contact Allyson Beall, WSU abeall@wsu.edu

Questions were arranged into the following categories: General questions, Numeric standards, Source identification, PCB zero community, Immobilization / restriction, End of pipe technology, Near Nature, Near Perfect, \$100 million question(s) and Regional. Total number of responses per question can be found on the final page.

General Questions

Question 1

no question

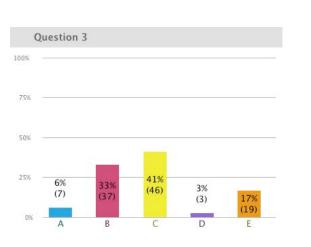
Question 2

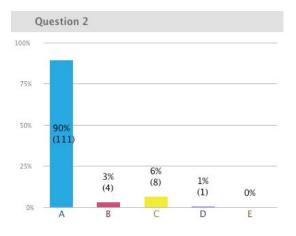
Do you have a clicker?

- 1. Yes
- 2. No
- 3. Is that what this is?

Who do you primarily represent?

- 1. Conservation interests
- 2. Regulator/Agency
- 3. Discharger (govt or industry)
- 4. Tribe
- 5. Business and Industry
- Community, there are only 5 buttone wo will count those not clicking in as comm 0:00

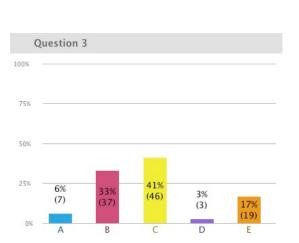




- 1. Yes
- 2. No
- 3. Is that what this is?



- 1. Conservation interests
- 2. Regulator/Agency
- 3. Discharger (govt or industry)
- 4. Tribe
- 5. Business and Industry
- Community, there are only 5 button wo will count those not clicking in as comm 0:00 124



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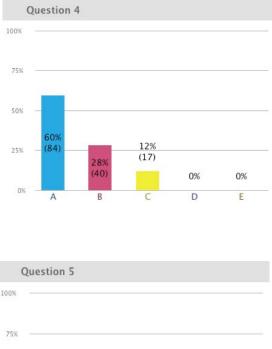
O DISPLAY

Ouestion 4

Is there enough scientific evidence to know if current level of PCB's in the Spokane River present harm to aquatic and human health?

- 1. Yes
- 2. No
- 3. I'm not sure

If you answered yes, do you think current efforts to address the issue are:





- 1. Yes
- 2. No
- 3. I'm not sure

If you answered yes, do you think current efforts to address the issue are:

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- 1. about right
- 2. too much
- 3. not enough

Question 6

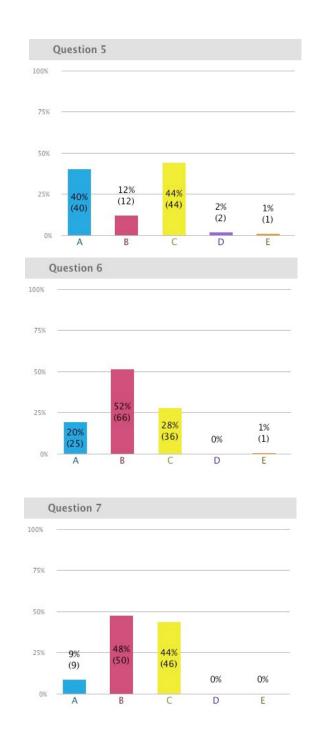
Is it safe to eat fish from the Spokane River?

- 1. Yes
- 2. In some places
- 3. No

How comfortable are you with the level of science/understanding we have about where and how PCBs are getting into the Spokane River?

- 1. Very comfortable
- 2. Somewhat comfortable
- 3. Not comfortable





- 1. Yes
- 2. In some places
- 3. No

How comfortable are you with the level of science/understanding we have about where and how PCBs are getting into the Spokane River?

- 1. Very comfortable
- 2. Somewhat comfortable
- 3. Not comfortable

Question 8

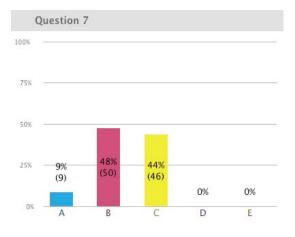
Do you consider PCBs in the Spokane River

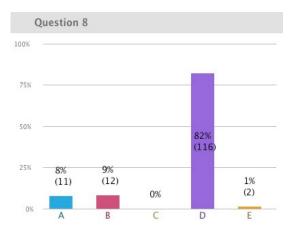
- 1. not an important issue
- 2. mostly a WA issue
- 3. mostly an ID issue
- 4. a bi-state issue

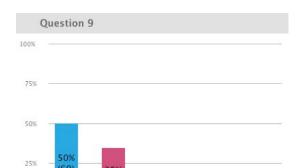
Is it necessary to have a strict numeric standard for PCBs in the Spokane River.

1. Yes

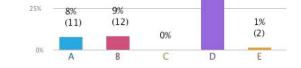








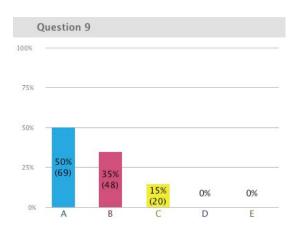
- mostly a wA issue
- 3. mostly an ID issue
- 4. a bi-state issue



Indard Questions







Question 10

3. I'm not sure

1. Yes

2. No

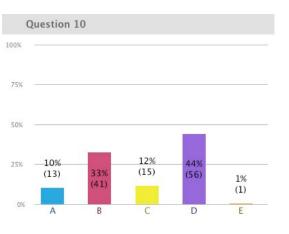
Is it more important for contributors of PCBs to the river system to:

Is it necessary to have a strict numeric

standard for PCBs in the Spokane River.

- 1. Meet a numeric standard they must comply with
- Collaboratively work toward a numeric standard
- Continue to work without a numeric standard
- 4. Set numeric standards that can be met with best available technology

Do you trust your government(s) to set a standard?





- standard
- 4. Set numeric standards that can be met with best available technology



Do you trust your government(s) to set a standard?

- 1. Yes
- 2. Somewhat
- 3. No
- 4. I'm not sure

Question 12

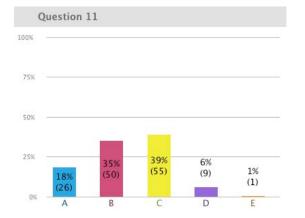
If Ecology started developing a PCB TMDL today, how long do you think it would take to complete

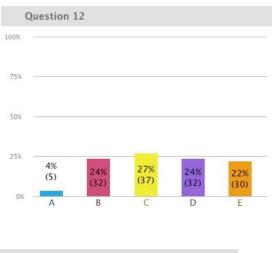
- 1. <5 years
- 2. 5-10 years
- 3. 10-15 years
- 4. 15 20 years
- 5. >20 years

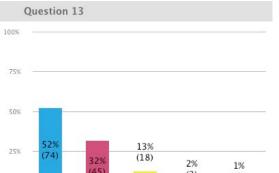
How important is it that all governments have the same standard, whether numeric or otherwise?

- 1. Very
- 2 Somewhat









- 3. 10-15 years
- 4. 15 20 years
- 5. >20 years

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How important is it that all governments have the same standard, whether numeric or otherwise?

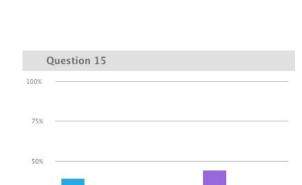
- 1. Very
- 2. Somewhat
- 3. Not at all
- 4. I'm not sure

Question 14

What kind of certainty would you expect from a standard? It would result in:

- 1. Meeting strict numeric limits
- 2. Significant reduction over 10 years
- 3. Significant reduction over 20 years
- 4. Be ineffective for the reduction of PCBs

What do you think is the largest contributing source of PCBs that occur in storm water and waste water which eventually ends up in the Spokane River?



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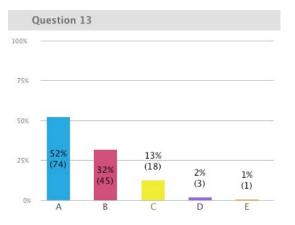
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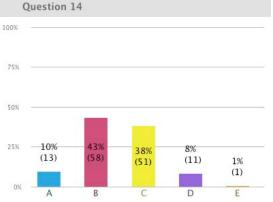
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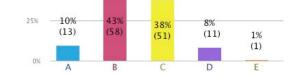
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- Significant reduction over 10 years
- 3. Significant reduction over 20 years
- 4. Be ineffective for the reduction of PCBs



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What do you think is the largest contributing source of PCBs that occur in storm water and waste water which eventually ends up in the Spokane River?

- 1. legacy from industry, navy yard, etc.
- foreign imports of inks, pigments, oils, caulks, sealants, other products etc,
- 3. air deposition
- 4. not clearly understood at this time store entry

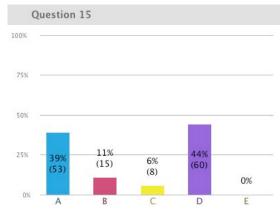
Question 16

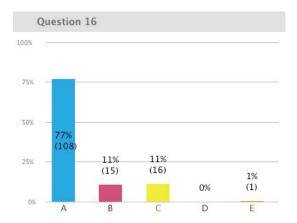
How important is it to better understand where PCBs are coming from and how they are migrating to the river?

- 1. Very, we should do more assessment
- 2. Somewhat
- Not that important, we should work on remediating what we currently know about
- 4. I'm not sure



PCB "free" product imports from foreign







- Somewhat
- 3. Not that important, we should work on remediating what we currently know about
- 4. I'm not sure



PCB "free" product imports from foreign countries contain PCBs?

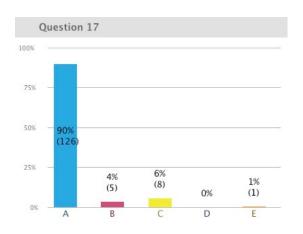
- 1. Yes
- 2. No
- 3. I'm not sure

Question 18

Would you be willing to support an effort to lobby EPA to change import regulations so that there are zero PCBs imported into this country?

- 1. Yes
- 2. No
- 3. I'm not sure

Since recycled paper inks are a source of PCBs, would you be in favor of having Inland Empire Paper stop using recycled newspaper and sending it to landfills to keep PCBs out of discharge pipes?



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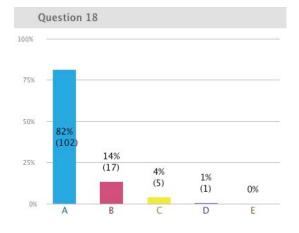
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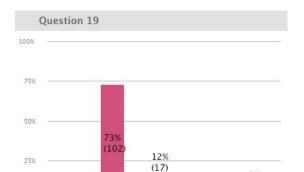
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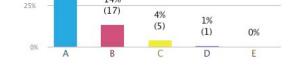
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- 1. Yes
- 2. No
- 3. I'm not sure



Since recycled paper inks are a source of PCBs, would you be in favor of having Inland Empire Paper stop using recycled newspaper and sending it to landfills to keep PCBs out of discharge pipes?

- 1. Yes
- 2. No
- 3. I'm not sure

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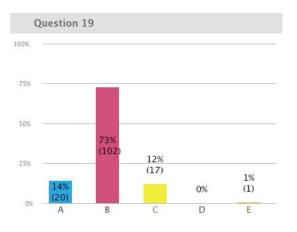
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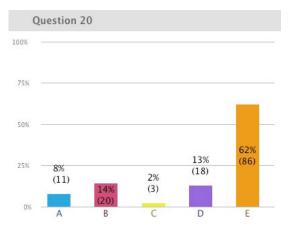
Question 20

If you had a list of PCBs containing products would you be willing to:

- 1. change products only if it cost the same
- 2. change products even if it cost more
- invest in product education within your community
- 4. 1 and 3
- 5. 2 and 3

Would it be a good investment to start a public/private collaboration to







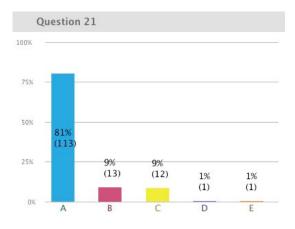
- community
- 4. 1 and 3
- 5. 2 and 3





Would it be a good investment to start a public/private collaboration to provide leadership towards the manufacture of zero PCB inks for paper and other products?

- 1. Yes
- 2. No
- 3. I'm not sure



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Immobilization /restriction Questions

Question 22

If Low Impact Development (LID) helps reduce PCB entering the river, is this an appropriate regulatory strategy to consider?

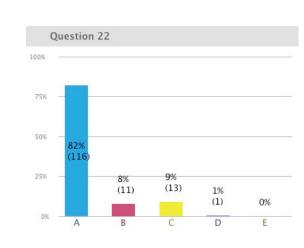
- 1. Yes
- 2. No

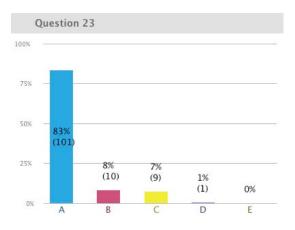
3. I'm not sure

Question 23

If redirecting storm water to catch basins, swayles, ponds, drywells and other locations where regulatory standards can be met and keeps PCBs out of the river, is this an appropriate strategy to consider?

- 1. Yes
- 2. No
- 3. I'm not sure





Would you answer question 2 the same

Question 24	

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- 2. No
- 3. I'm not sure





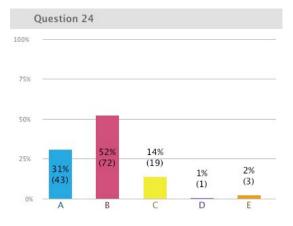
Would you answer question 2 the same way if redirecting stormwater has the potential to impact the Spokane-Rathdrum Prairie Aquifer?

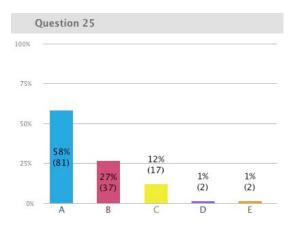
- 1. Yes
- 2. No
- 3. I'm not sure

Question 25

If immobilization/restriction is cheaper than removal through treatment technology at a wastewater plant, is this strategy preferred?

- 1. Yes
- 2. No
- 3. I'm not sure





Do you think it's possible with

Question	

- 1. 105
- 2. No
- 3. I'm not sure





End of Pipe Technology Questions

Do you think it's possible with technology to fully remove PCBs at wastewater treatment plants?

- 1. Yes
- 2. No
- 3. I'm not sure
- 4. It could be treated such that discharge meets a given standard

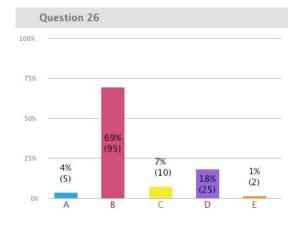


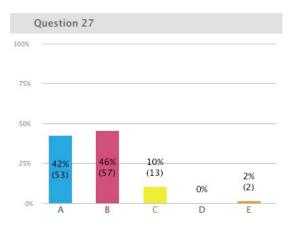
Question 27

If it's more cost effective for wastewater treatment plants to "land apply" wastewater to golf courses, parks and other places instead of meeting PCB numeric targets that would allow for discharge into the river, is this approach preferred?

- 1. Yes
- 2. No
- 3. I'm not sure







Question	28	

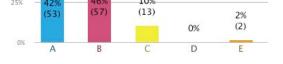
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Would you still prefer this type of

1. Yes

- 2. No
- 3. I'm not sure





Question 28

Would you still prefer this type of application if even if some PCBs would eventually migrate to the underlying aquifer?

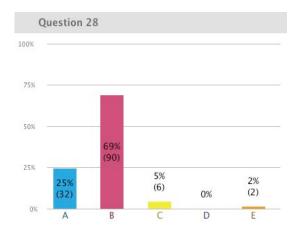
- 1. Yes
- 2. No
- 3. I'm not sure

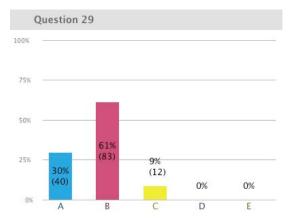
Do you think PCBs in the Spokane River and/or fish advisories make it harder to attract visitors, market our community, or recruit talent to move here?

- 1. Yes
- 2. No
- 3. I'm not sure



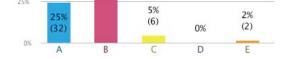
Do you think meeting the needs of tribal and other populations engaged





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75% —			

- 1. Yes
- 2. No
- 3. I'm not sure



Ir Nature Near Perfect Questions



Do you think PCBs in the Spokane River and/or fish advisories make it harder to attract visitors, market our community, or recruit talent to move here?

- 1. Yes
- 2. No
- 3. I'm not sure

Question 30

Do you think meeting the needs of tribal and other populations engaged in subsistence fishing are a high priority?

- 1. Yes
- 2. Somewhat
- 3. No
- 4. I'm not sure

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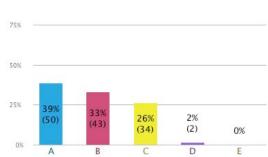
Question 29

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What do you think is most important to

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- 2. Somewhat
- 3. No
- 4. I'm not sure





What do you think is most important to tribal interests?

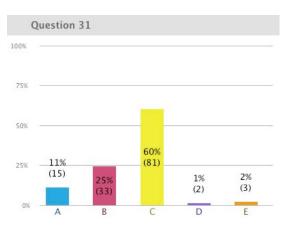
- 1. Create a PCB TMDL
- Demonstrate progress toward an agreed upon goal
- Be part of setting priorities and standards, and demonstrating progress toward that goal

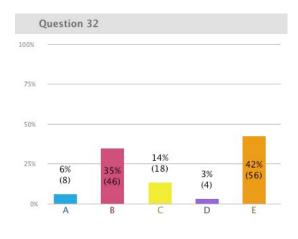
How much are you willing to pay for clean up?

- 1. nothing
- 10% increase in utility bills (or the equivalent in taxes or levies)
- 20% or more increase in utility bills (or the equivalent in taxes or levies)
- I would rather spend the money on moving out of the Spokane River drainage
- I would rather spend money on some other quality of life issue (schools, public safety, health care, libraries, streets, etc.)

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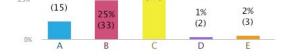
How much do you think was spent on the dissolved oxygen/ phosphorous TMDL? Include scientific data





	Question 33		
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75%			

- upon goal
- Be part of setting priorities and standards, and demonstrating progress toward that goal



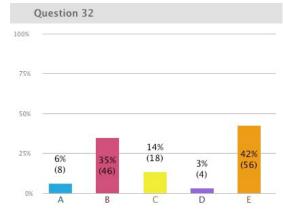


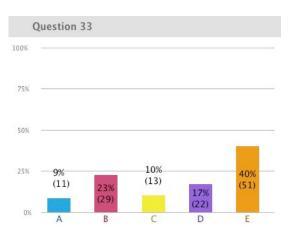
- 1. nothing
- 10% increase in utility bills (or the equivalent in taxes or levies)
- 20% or more increase in utility bills (or the equivalent in taxes or levies)
- 4. I would rather spend the money on moving out of the Spokane River drainage
- I would rather spend money on some other quality of life issue (schools, public safety, health care, libraries, streets, etc.)

How much do you think was spent on the dissolved oxygen/ phosphorous TMDL? Include scientific data collection, agency time, and legal costs.

- 1. <\$10 mil
- 2. \$10-20 mil
- 3. \$20-30 mil
- 4. \$30-40 mil
- 5. >\$40 mil







The question: If you had \$100 million

- 2. 910 20 mm
- 3. \$20-30 mil
- 4. \$30-40 mil
- 5. >\$40 mil





Question 33a, participants worked in 22 groups, the average all of the groups and how they would split percentages of \$100 million is presented in the chart below.

The question: *If you had \$100 million to spend over the next 10 years how would you spend it?*

numeric standard source ID community outreach and education lobby for regulatory change immobilization/restriction treatment plant technology

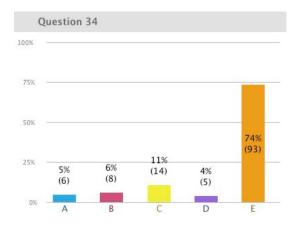
Question 34

How much do you think a PCB TMDL would cost?

- 1. <\$10 mil
- 2. \$10-20 mil
- 3. \$20-30 mil
- 4. \$30-40 mil
- 5. >\$40 mil

What is your comfort level with a regional board/task force deciding where PCB reduction and removal

	avg. of funds	range
Num. standard	3.70%	0-25%
Source ID	23.30%	0-60%
Outreach/ed	20.90%	0-30%
Lobby reg. cng.	5.30%	0=25%
lmm./restr.	21.90%	0-68%
treatment tech	31.10%	0-84%



Question 35		
100%		

- 3. \$20-30 mil
- 4. \$30-40 mil
- 5. >\$40 mil



C STOP

What is your comfort level with a regional board/task force deciding where PCB reduction and removal funding should be targeted?

- 1. Very comfortable
- 2. Somewhat comfortable
- 3. Not comfortable
- 4. I'm not sure

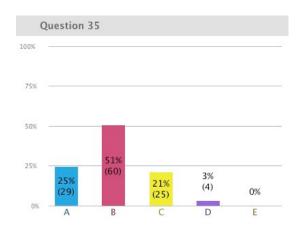
Question 36

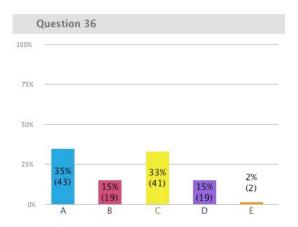
Imagine a regional board has been given a 10 year investment fund and completed their priority list of projects but agreed upon numeric standards/ goals were not achieved, should we:

- Create a second 10 year investment fund and priority list
- 2. Focus on creating a TMDL
- Switch to environmental investments with better results
- 4. Let nature complete remediation, call

Equal representation of all stakeholders:

Regional Questions





	Question 37	
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- 2. Focus on creating a TMDL
- Switch to environmental investments with better results
- 4. Let nature complete remediation, call



Equal representation of all stakeholders: conservation, government, industry, tribal, etc.

- 1. Very important
- 2. Somewhat important
- 3. Not important

Question 38

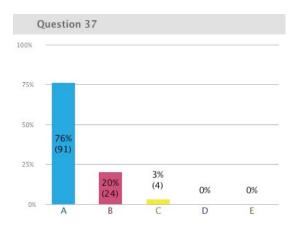
Flexible rather than set numeric standards

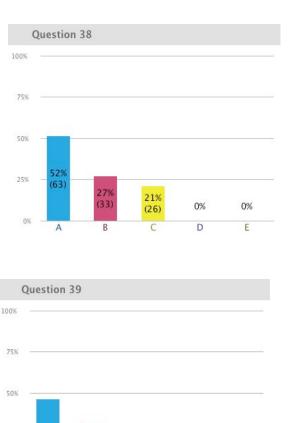
- 1. Very important
- 2. Somewhat important
- 3. Not important

Starting with clear, numeric limits

- 1. Very important
- 2. Somewhat important







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- 3. Not important





Starting with clear, numeric limits

- 1. Very important
- 2. Somewhat important
- 3. Not important

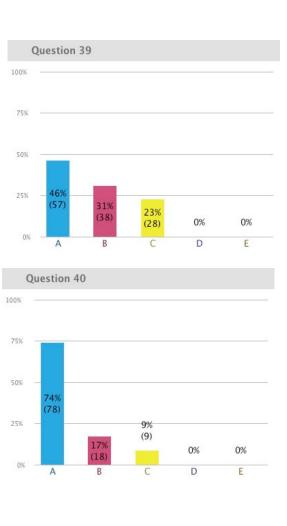
Question 40

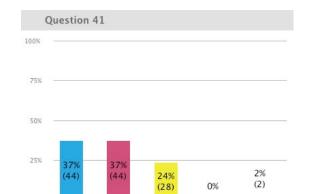
Set numeric limits that are technically achievable with current technology

- 1. Very important
- 2. Somewhat important
- 3. Not important

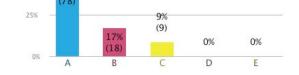
Contributions to a fund based on contribution to the problem

- 1. Very important
- 2. Somewhat important
- 3. Not important





- 2. Somewhat important
- 3. Not important



Contributions to a fund based on D:000123 contribution to the problem

- 1. Very important
- 2. Somewhat important
- 3. Not important

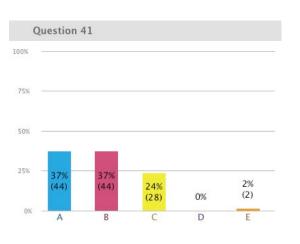
Question 42

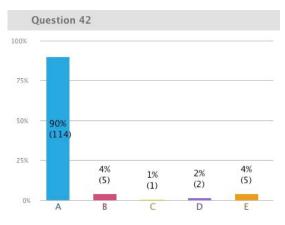
Transparent, clear communication

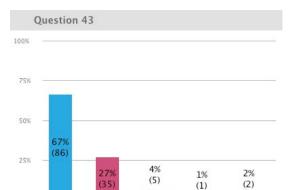
- 1. Very important
- 2. Somewhat important
- 3. Not important

Agreed upon science

- 1. Very important
- 2. Somewhat important
- 3. Not important







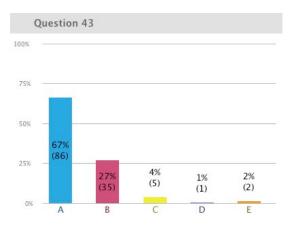
- a. somethice in portaine
- 3. Not important

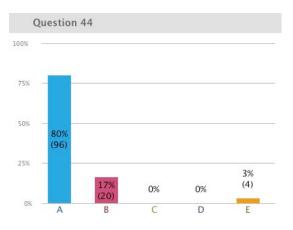


- 1. Very important
- 2. Somewhat important
- 3. Not important

Clear on the ground actions

- 1. Very important
- 2. Somewhat important
- 3. Not important





Question 45

100%

Agroomont to tomporarily abstain from



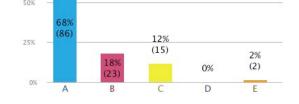
Agreement to temporarily abstain from litigation

- 1. Very important
- 2. Somewhat important
- 3. Not important

Q	uestion	45			
00%					
75%	-				
50%	_				
25%	68% (86)		12% (15)		2%
0%		18% (23)		0%	(2)
0/8	A	В	С	D	E

Question Title	Number of Responses
Question 26	137
Question 27	125
Question 28	130
Question 29	135
Question 30	129
Question 31	134
Question 32	132
Question 33	126
Question 34	126
Question 35	118
Question 36	124
Question 37	119
Question 38	122
Question 39	123
Question 40	105
Question 41	118
Question 42	127
Question 43	129

- 2. Somewhat important
- 3. Not important



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Question 2	124
Question 3	112
Question 4	141
Question 5	99
Question 6	128
Question 7	105
Question 8	141
Question 9	137
Question 10	126
Question 11	141
Question 12	136
Question 13	141
Question 14	134
Question 15	136
Question 16	140
Question 17	140
Question 18	125
Question 19	140
Question 20	138
Question 21	140
Question 22	141
Question 23	121
Question 24	138
Question 25	139

C STOP				
Question Title	Number of			
	Responses			
Question 26	137			
Question 27	125			
Question 28	130			
Question 29	135			
Question 30	129			
Question 31	134			
Question 32	132			
Question 33	126			
Question 34	126			
Question 35	118			
Question 36	124			
Question 37	119			
Question 38	122			
Question 39	123			
Question 40	105			
Question 41	118			
Question 42	127			
Question 43	129			
Question 44	120			
Question 45	126			