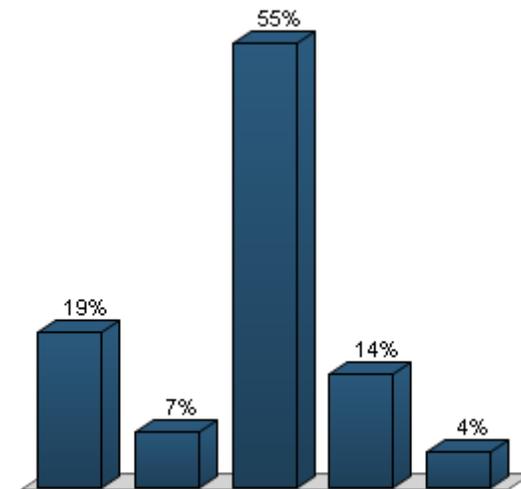


Spokane River Forum March 27 2013 Clicker session
Allyson Beall, Washington State University
WISDM

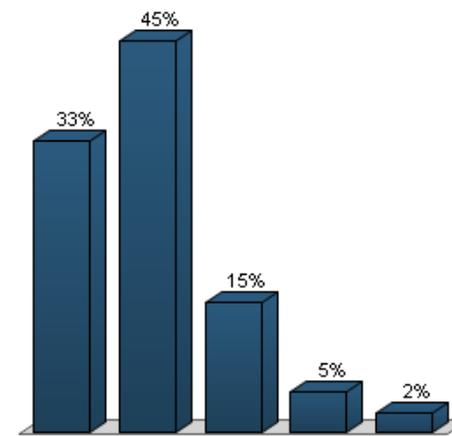
1.) 1. Which of these professional categories are you primarily associated with? (Multiple Choice)

	Responses	
	Percent	Count
a. Academic / Science	19.3%	22
b. Non-governmental Organization	7.02%	8
c. Government (including Tribal)/ Public Sector	55.26%	63
d. Industry / Commercial (forestry, agriculture, engineering, etc.)	14.04%	16
e. Other/Interested Citizen	4.39%	5
Totals	100%	114



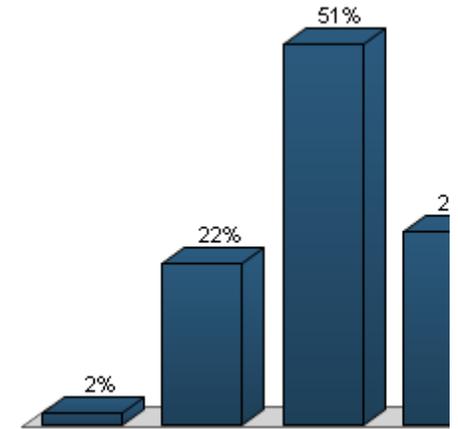
2.) 2. How relevant do you think academic research is to solving problems in this basin? (Multiple Choice)

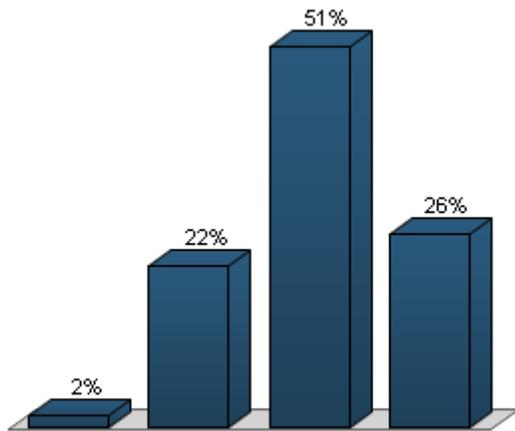
	Responses	
	Percent	Count
Very	33.33%	29
Relevant	44.83%	39
Not particularly	14.94%	13
Irrelevant	4.6%	4
Don't know	2.3%	2
Totals	100%	87



3.) 3. How well do you think researchers in academia communicate their findings to stakeholders? (Multiple Choice)

	Responses	
	Percent	Count
a. Exceptionally well, academic researchers consistently communicate relevant information to stakeholders	1.72%	2
b. Well, researchers communicate with stakeholders but it's not always relevant or accessible to the appropriate audience	21.55%	25
c. Fair, efforts to communicate are made, but could be improved	50.86%	59
d. Poor, little to no effort is made to reach stakeholders and share relevant work	25.86%	30
Totals	100%	116

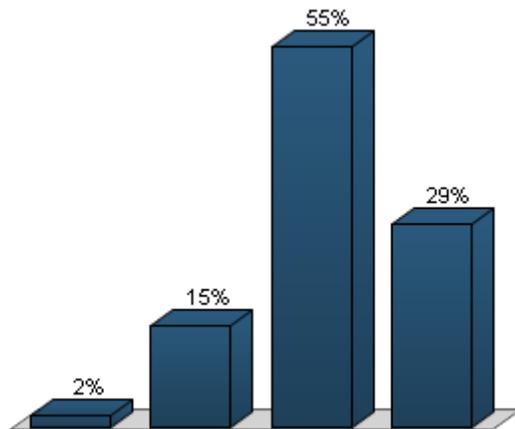




4.) 4. How well do you think researchers in academia communicate with each other? (Multiple Choice)

	Responses	
	Percent	Count
a. Exceptionally well, scientists engage in work that is mutually supportive and consistently coordinate research efforts	1.71%	2
b. Well, coordination efforts are made, but there are some gaps and	14.53%	17

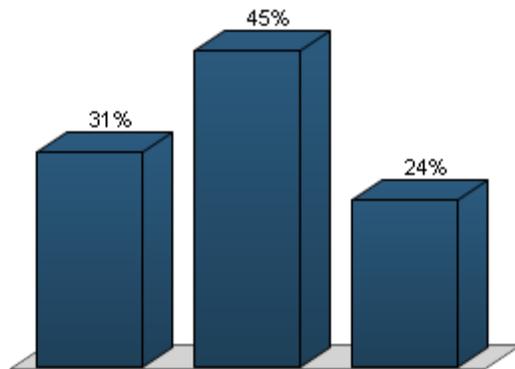
overlap		
c. Fair, Some coordination between research efforts is apparent, but there are significant gaps and overlap	54.7%	64
d. Poor, there appears to be little to no communication among academic researchers working in the Spokane River Basin	29.06%	34
Totals	100%	117



5.) 5. Which best characterizes your thoughts on the value of academic research in your decision-making processes? (Multiple Choice)

	Responses	
	Percent	Count
a. High importance, academic research is highly influential in my decision-making	30.77%	36
b. Moderate value,	45.3%	53

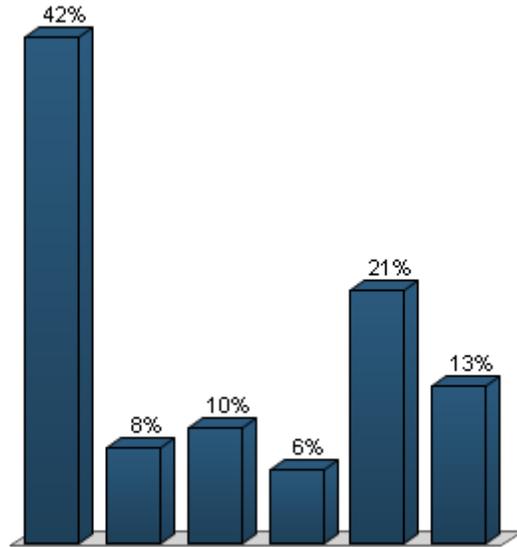
academic research has some influence in my decision-making		
c. Low value, academic research is generally not influential in my decision-making	23.93%	28
Totals	100%	117



6.) 6. Where do you generally learn about academic research and scientific information? (Multiple Choice)

	Responses	
	Percent	Count
a. Reviewing internet-based information	42.11%	48
b. Talking to experts at a university	7.89%	9
c. Talking to experts at non-university research institution	9.65%	11
d. Talking to extension service professionals	6.14%	7
e. Reading research published in print	21.05%	24
f. Conducting my own research and direct observation	13.16%	15

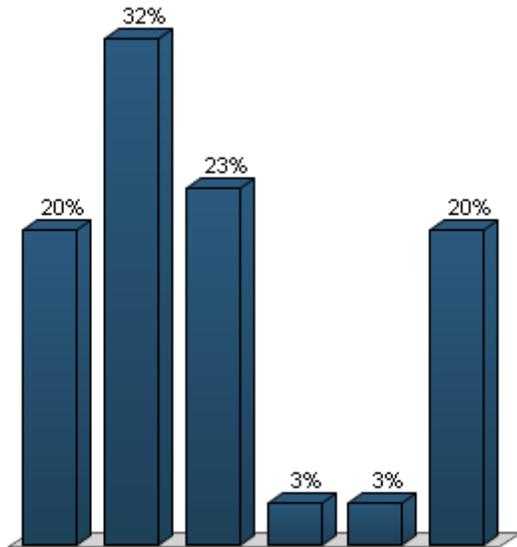
Totals	100%	114
---------------	-------------	------------



7.) 7. How could academic researchers at WSU and UI who are working in the Spokane River Basin best communicate with you? (Multiple Choice)

	Responses	
	Percent	Count
a. Email any time there	20%	23

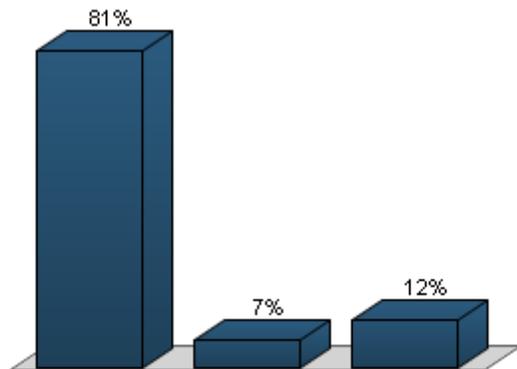
is a new project announced or results of research available		
b. Quarterly/ Semi-annual email updates explaining current research efforts	32.17%	37
c. Public meetings and presentations	22.61%	26
d. Individual in-person meetings	2.61%	3
e. Printed materials	2.61%	3
f. Online resources, websites	20%	23
Totals	100%	115



8.) 9. Are you interested in learning more about bi-state water management agreements used in the US? (Multiple Choice)

	Responses	
	Percent	Count
a. Yes, I would like to learn more about this	81.03%	94
b. No, other bi-state	6.9%	8

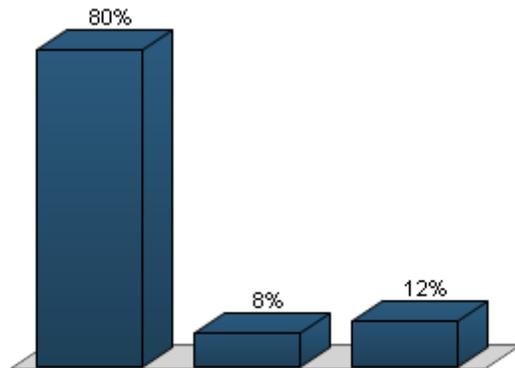
water management agreements are not relevant to our region		
c. Not sure	12.07%	14
Totals	100%	116



9.) 10. Are you interested in learning more about PCB and or toxics clean-up plans used in other parts of the US? (Multiple Choice)

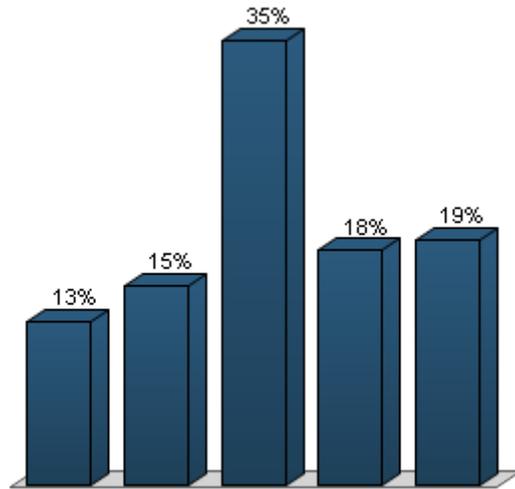
	Responses	
	Percent	Count

a. Yes, I would like to learn more about this research	79.83%	95
b. No, other PCB clean-up plans are not relevant to our region	8.4%	10
c. Not sure	11.76%	14
Totals	100%	119



10.) 8. Where should future research efforts in the Spokane River Basin be focused? (Multiple Choice)

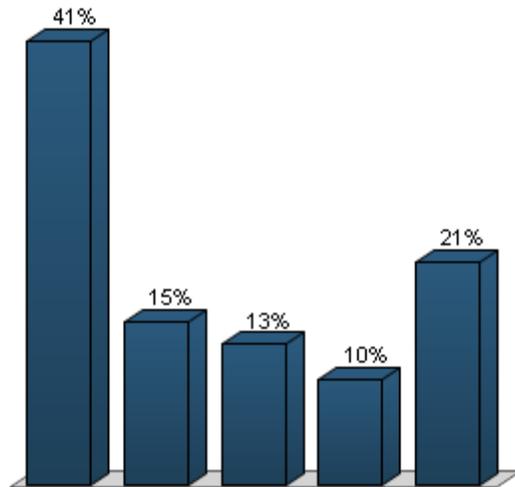
	Responses	
	Percent	Count
a. Flow studies	12.73%	14
b. PCB studies	15.45%	17
c. Fish contamination studies	34.55%	38
d. Phosphorous studies	18.18%	20
e. Other	19.09%	21
Totals	100%	110



11.) 1. How much are you paying for 1000 gallons of water? (Multiple Choice)

	Responses	
	Percent	Count
a. \$1	41.3%	38
b. \$2	15.22%	14
c. \$3	13.04%	12

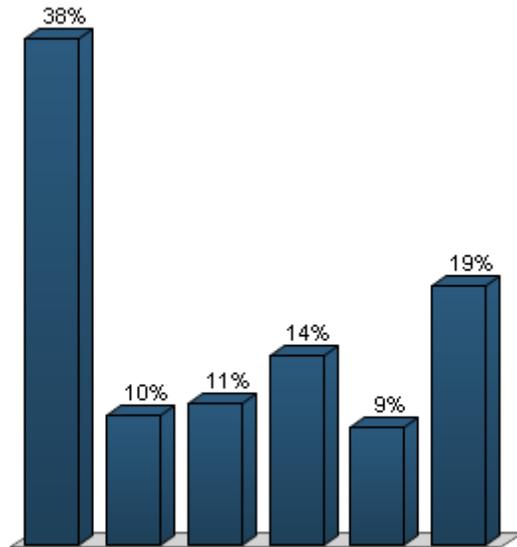
d. \$5	9.78%	9
e. \$10	20.65%	19
Totals	100%	92



12.) 2. When do you predict there will be a surface water availability crisis in the Spokane River Basin? (Multiple Choice)

	Responses	
	Percent	Count

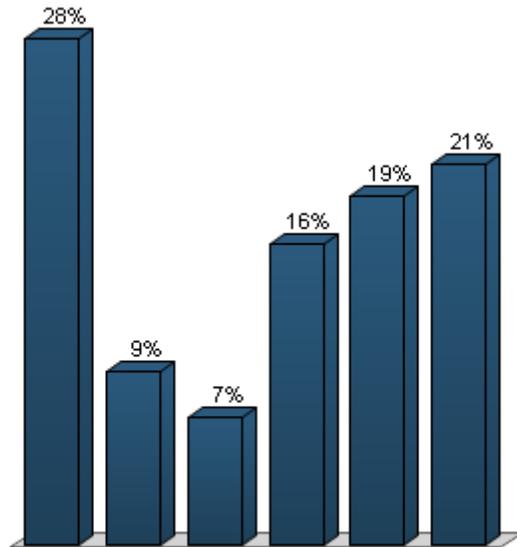
a. there is currently a water crisis	37.72%	43
b. within 5 years	9.65%	11
c. within 10 years	10.53%	12
d. within 20 years	14.04%	16
e. within 50 years	8.77%	10
f. No reason to think that there will be a water supply crisis in the future	19.3%	22
Totals	100%	114



13.) 3. When do you predict there will be a ground water availability crisis in the Spokane River Basin? (Multiple Choice)

	Responses	
	Percent	Count
a. there is currently a water crisis	27.59%	32
b. within 5 years	9.48%	11

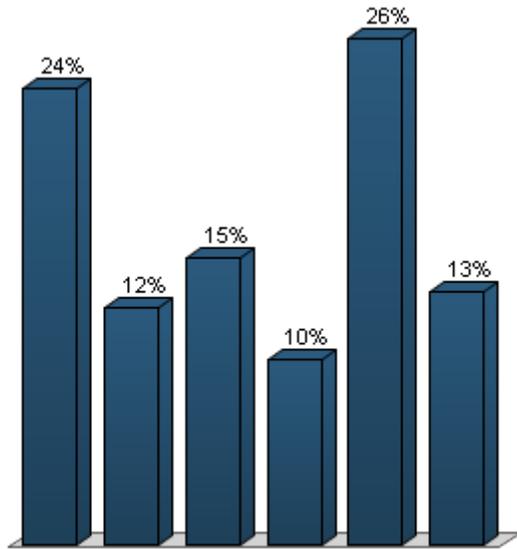
c. within 10 years	6.9%	8
d. within 20 years	16.38%	19
e. within 50 years	18.97%	22
f. No reason to think that there will be a water supply crisis in the future	20.69%	24
Totals	100%	116



14.) 4. If a water supply crisis is imminent, which of these infrastructure measures should we take to address it? (Multiple Choice)

	Responses	
	Percent	Count
a. invest in secondary use infrastructure such as purple pipes	23.68%	27

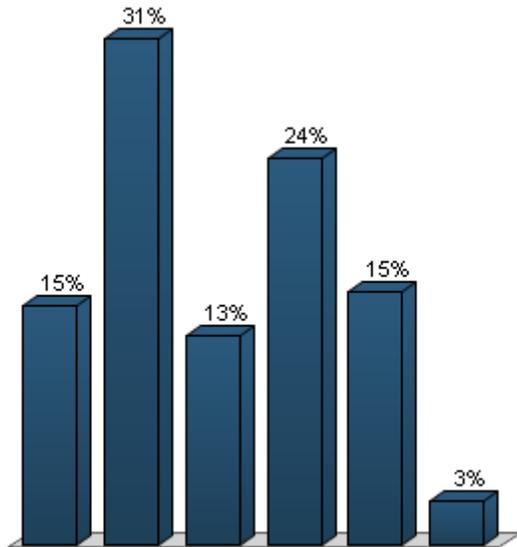
b. invest in tertiary treatment so that water can be reused for both irrigation and domestic purposes	12.28%	14
c. aquifer storage and recovery (ASR)	14.91%	17
d. invest in wetland restoration	9.65%	11
e. invest in storm water swales, pervious concrete, low impact development and other methods to increase recharge	26.32%	30
f. other	13.16%	15
Totals	100%	114



15.) 5. If a water supply crisis is imminent, which of these behavior measures should we take to address it? (Multiple Choice)

	Responses	
	Percent	Count
a. implement mandatory water restrictions	14.55%	16

b. education for voluntary restrictions	30.91%	34
c. xeriscaping	12.73%	14
d. increasing water rates	23.64%	26
e. growth restrictions	15.45%	17
f. other	2.73%	3
Totals	100%	110

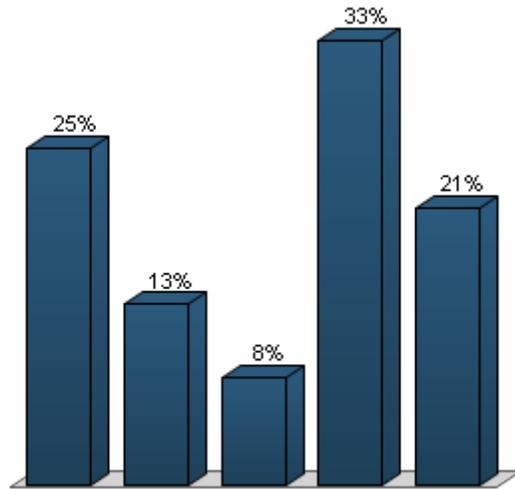


16.) 6. What is your biggest concern about augmenting the SVRP aquifer with ground water from the Pend Oreille system?

(Multiple Choice)

	Responses	
	Percent	Count
a. no concern	25%	28
b. diminished water	13.39%	15

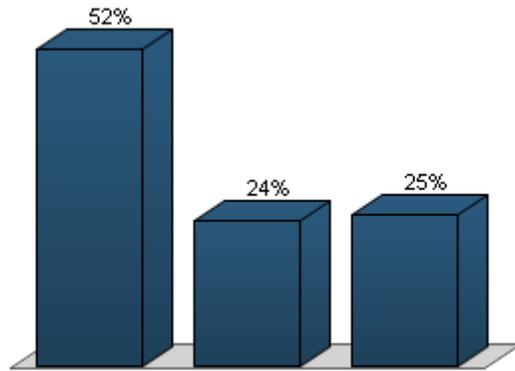
quality due to potential contaminants		
c. diminished water quality due to potential redox reactions	8.04%	9
d. setting precedent to deliver water across state boundaries	33.04%	37
e. other	20.54%	23
Totals	100%	112



17.) 7. As laws currently stand, can ID do anything to help WA deal with low flows? (Multiple Choice)

	Responses	
	Percent	Count
a. Yes	51.75%	59
b. No	23.68%	27
c. Not sure / haven't thought about it	24.56%	28

Totals	100%	114
---------------	-------------	------------

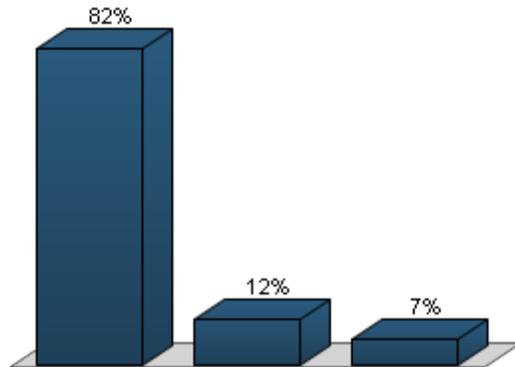


18.) 8. Idaho is adjudicating to better define current users and to manage future resources. Should Washington do the same?

(Multiple Choice)

	Responses	
	Percent	Count
a. Yes	81.51%	97
b. No	11.76%	14
c. Not sure/ haven't	6.72%	8

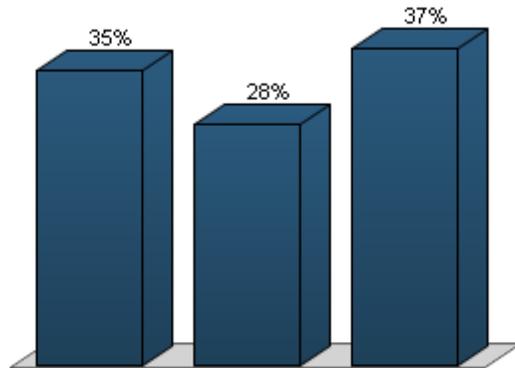
thought about it		
Totals	100%	119



19.) 9. Do you think that during the period when leaking irrigation ditches were in heavy use (prior to their removal in the 1960s) Spokane River in-stream flows were artificially high? (Multiple Choice)

	Responses	
	Percent	Count
a. Yes	34.51%	39
b. No	28.32%	32

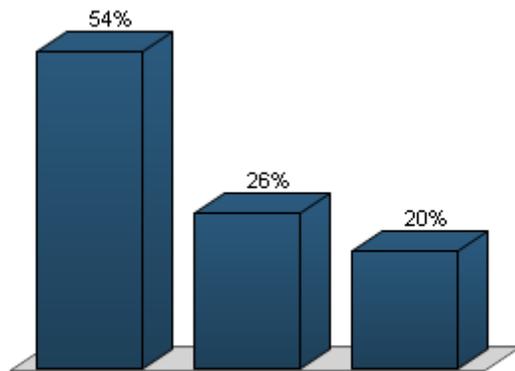
c. Not sure/ haven't thought about it	37.17%	42
Totals	100%	113



20.) 10. If flows at Post Falls Dam were increased during summer low-flow periods, what would the result be? (Multiple Choice)

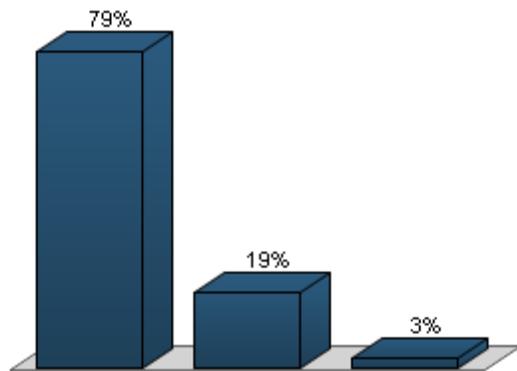
	Responses	
	Percent	Count
a. Water would stay in the river and solve the	53.64%	59

low flow issues downstream		
b. Water would go to the aquifer and not impact the low-flow problem	26.36%	29
c. Not sure/ haven't thought about it	20%	22
Totals	100%	110



21.) 11. Are wells in Spokane contributing to low flow problems in the Spokane River? (Multiple Choice)

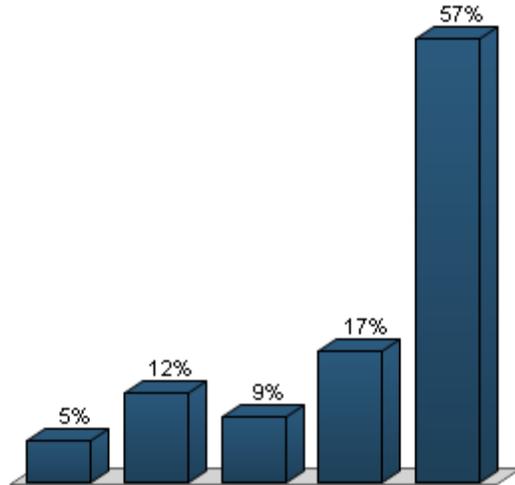
	Responses	
	Percent	Count
a. Yes	78.76%	89
b. No	18.58%	21
c. Not sure/ haven't thought about it	2.65%	3
Totals	100%	113



22.) 12. How far from the river would wells in Spokane need to be moved to re-time impacts on in-stream flows? (Multiple Choice)

	Responses	
	Percent	Count
a. 1 mile	5.32%	5
b. 5 miles	11.7%	11
c. 10 miles	8.51%	8
d. 20+ miles	17.02%	16
e. moving the wells is a moot point because the if all well water withdrawals were curtailed the amount would not be enough to satisfy the instream flow levels that have	57.45%	54

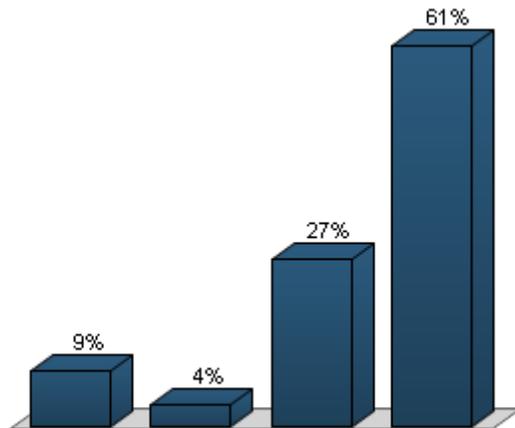
been proposed.		
Totals	100%	94



23.) 13. Which do you value most? (Multiple Choice)

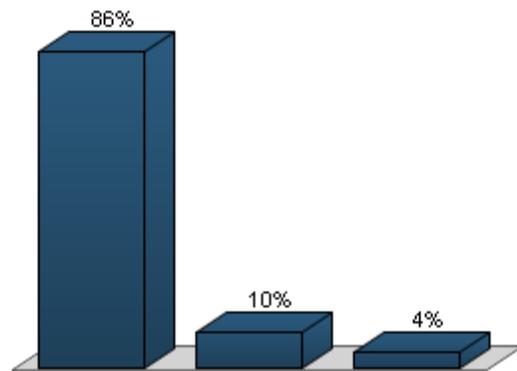
	Responses	
	Percent	Count
a. River quality above all	8.93%	10

b. River flows must be maintained	3.57%	4
c. Groundwater quality is the greatest priority	26.79%	30
d. Groundwater and river water are equal priorities	60.71%	68
Totals	100%	112



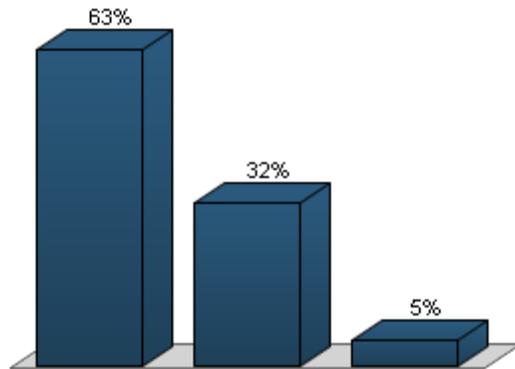
24.) 14. Is maintaining flows in the Spokane River a value to the basin at large? (Multiple Choice)

	Responses	
	Percent	Count
a. Yes	85.71%	96
b. No	9.82%	11
c. Not sure/ haven't thought about it	4.46%	5
Totals	100%	112



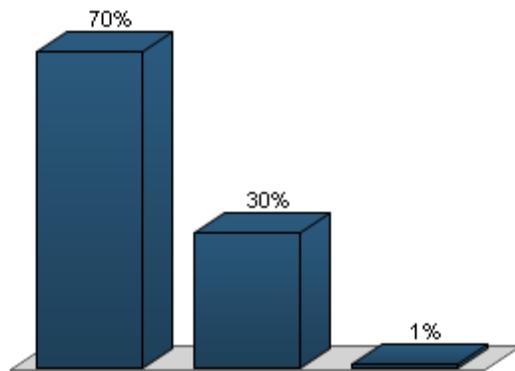
25.) 15. Are maintaining lake levels in the region's lakes a value to the basin at large? (Multiple Choice)

	Responses	
	Percent	Count
a. Yes	62.61%	72
b. No	32.17%	37
c. not sure/haven't thought about it	5.22%	6
Totals	100%	115



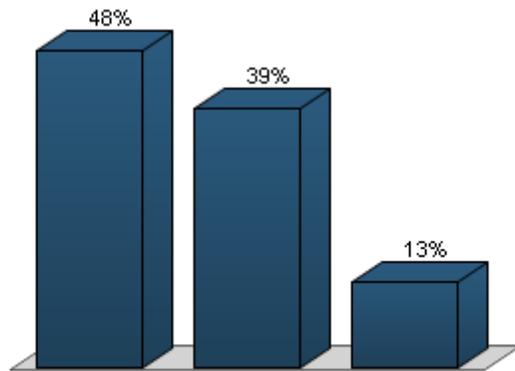
26.) 16. Is the possibility of an extended drought of concern? (Multiple Choice)

	Responses	
	Percent	Count
a. Yes	69.57%	80
b. No	29.57%	34
c. Not sure/ haven't thought about it	0.87%	1
Totals	100%	115



27.) 17. Is there is sufficient information to predict the effect on water supply of an extended drought in the region? (Multiple Choice)

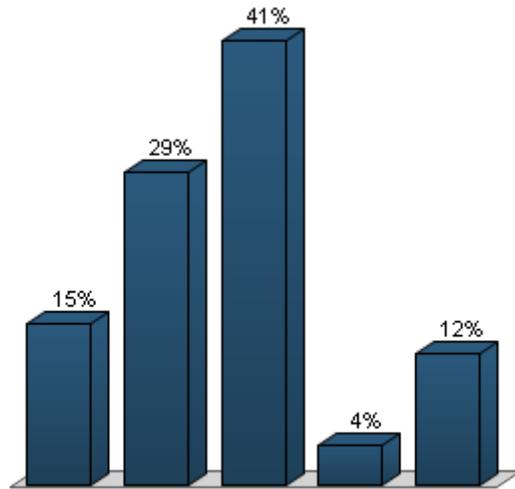
	Responses	
	Percent	Count
a. Yes	47.83%	55
b. No	39.13%	45
c. Not sure/ haven't thought about it	13.04%	15
Totals	100%	115



28.) 1. Where should funding for water treatment efforts be focused? (Multiple Choice)

	Responses	
	Percent	Count
a. Technology for P removal at waste water discharge	14.81%	16
b. Storm water treatment	28.7%	31
c. Eliminating	40.74%	44

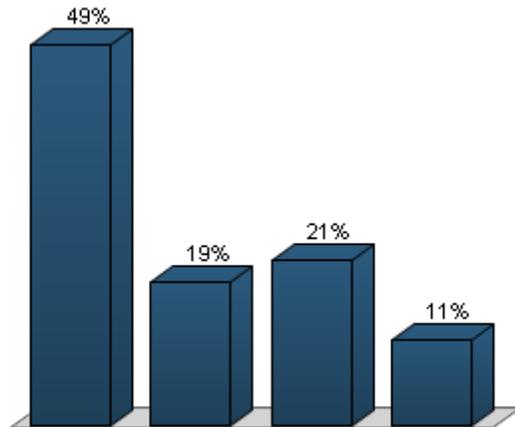
discharge into the river, such as reuse or land application.		
d. Other system for treatment	3.7%	4
e. Invest in other public goods not related to P in water	12.04%	13
Totals	100%	108



29.) 2. Will the upgrades required for P discharge reduction reduce other toxics? (Multiple Choice)

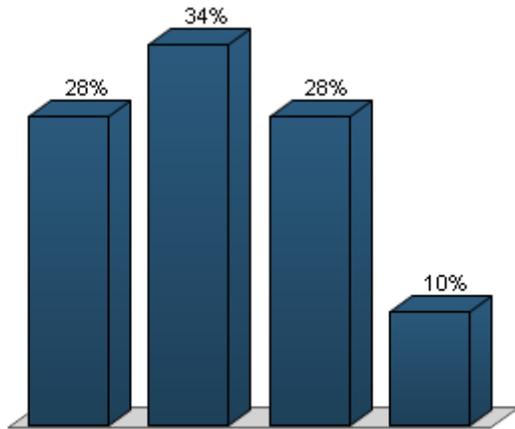
	Responses	
	Percent	Count
a. yes	49.07%	53
b. maybe	18.52%	20
c. additional upgrades will be necessary for	21.3%	23

significant reduction of other toxics		
d. Not sure/ haven't thought about it	11.11%	12
Totals	100%	108



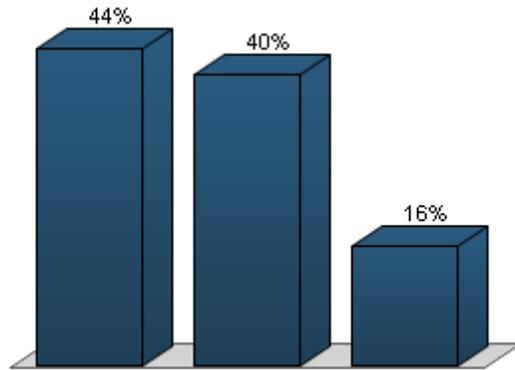
30.) 3. If it is more cost effective for waste water treatment plants to “land apply” waste water for golf courses park and other places than to discharge how concerned are you about keeping toxics and phosphorous in the system that compliance to any standard could never be met because of these new nonpoint sources? (Multiple Choice)

	Responses	
	Percent	Count
a. very it goes into my drinking water	27.78%	30
b. somewhat	34.26%	37
c. no	27.78%	30
d. I'm not sure	10.19%	11
Totals	100%	108



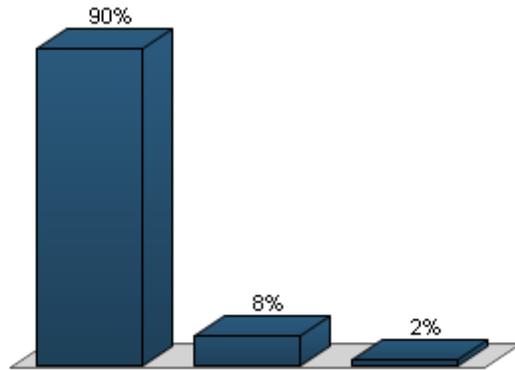
31.) 1. Where do you see management of water resources in the Spokane River Basin in 2063 (50 years)? (Multiple Choice)

	Responses	
	Percent	Count
a. Managed as a basin	43.64%	48
b. Increased conflict	40%	44
c. Business-as-usual	16.36%	18
Totals	100%	110



32.) 2. Should establishing a plan for basin-wide water resources management be a priority in the SVRP? (Multiple Choice)

	Responses	
	Percent	Count
a. Yes	89.83%	106
b. No	8.47%	10
c. Not sure/ haven't thought about it	1.69%	2
Totals	100%	118



33.) 3. If you answered yes to the previous question, indicating that basin-wide management should be a priority, how soon do you think that those management plans could be established? (Multiple Choice)

	Responses	
	Percent	Count
a. within 2 years	3.57%	4
b. within 5 years	14.29%	16
c. within 10 years	22.32%	25
d. within 20 years	28.57%	32

e. greater than 20 years	25.89%	29
f. Never/ it's not possible	5.36%	6
Totals	100%	112

