

Raccoon River Basin Water Quality Master Plan Ag BMP Expert Panel Meeting

June 6th - 10th, 2010

Stakeholder Survey Results

In April of 2010, Agren distributed a short, Internet-based survey to Raccoon River Basin stakeholders via email. Various means were used to identify email addresses, and respondents were encouraged to forward the survey to their peers.

The purpose of this survey was three-fold.

1. To give motivated stakeholders a means to provide input at the start of the planning process;
2. To begin to gain a better understanding of the knowledge and opinions of residents regarding water quality in the Raccoon River; and
3. To begin to gain a better understanding of farmers' and landowners' interest in relevant ag best management practices.

The pages that follow summarize the responses from nearly 500 residents in the Raccoon River Basin. The analysis presented here compares the responses of those who farm or own agricultural land in the watershed, and those who do not.

These survey results should not be assumed to be representative of all watershed stakeholders. The methodology used was not meant to be scientific, nor statistically significant. This information should be considered mostly anecdotal, and as a means to initiate further, more meaningful discussion with stakeholders.

Raccoon River Watershed Stakeholder Survey

1. What is your primary occupation (or if you are retired, what was it previously)?					
	Do you farm or own agricultural land in the Raccoon River Watershed?				
	Yes, I farm AND own agricultural land in the watershed.	Yes, I farm in the watershed.	Yes, I own agricultural land in the watershed.	No, I do not farm or own agricultural land in the watershed.	Response Totals
Construction or maintenance	3.3% (2)	0.0% (0)	6.4% (3)	3.5% (10)	3.7% (15)
Education	4.9% (3)	9.1% (1)	6.4% (3)	10.8% (31)	9.3% (38)
Farming, ranching, or forestry	60.7% (37)	45.5% (5)	14.9% (7)	5.6% (16)	16.0% (65)
Healthcare	3.3% (2)	9.1% (1)	8.5% (4)	5.6% (16)	5.7% (23)
Homemaker	0.0% (0)	0.0% (0)	4.3% (2)	2.8% (8)	2.5% (10)
Manufacturing or transportation	0.0% (0)	0.0% (0)	10.6% (5)	2.1% (6)	2.7% (11)
Personal services or food	0.0% (0)	0.0% (0)	0.0% (0)	1.4% (4)	1.0% (4)
Professional or managerial	19.7% (12)	18.2% (2)	44.7% (21)	58.0% (167)	49.6% (202)
Sales or office support	8.2% (5)	18.2% (2)	4.3% (2)	8.7% (25)	8.4% (34)
Student	0.0% (0)	0.0% (0)	0.0% (0)	1.7% (5)	1.2% (5)
Other (please specify)	6 replies	0 replies	6 replies	67 replies	79
<i>answered question</i>	61	11	47	288	407
<i>skipped question</i>					90

2. How would you rate your support of the following?						
		Do you farm or own agricultural land in the Raccoon River Watershed?				
		Yes, I farm AND own agricultural land in the watershed.	Yes, I farm in the watershed.	Yes, I own agricultural land in the watershed.	No, I do not farm or own agricultural land in the watershed.	Response Totals
Iowa agriculture	Actively oppose	0.0% (0)	0.0% (0)	0.0% (0)	1.5% (5)	
	Not sympathetic	7.6% (5)	0.0% (0)	5.8% (3)	15.7% (54)	
	Neutral	7.6% (5)	0.0% (0)	15.4% (8)	17.2% (59)	
	Sympathetic, but not active	10.6% (7)	0.0% (0)	34.6% (18)	38.8% (133)	
	Actively support	74.2% (49)	100.0% (11)	44.2% (23)	26.8% (92)	
		66	11	52	343	472
Water quality improvement efforts in Iowa	Actively oppose	0.0% (0)	0.0% (0)	2.0% (1)	0.6% (2)	
	Not sympathetic	1.6% (1)	0.0% (0)	0.0% (0)	0.0% (0)	
	Neutral	11.3% (7)	10.0% (1)	4.0% (2)	3.9% (13)	
	Sympathetic, but not active	14.5% (9)	40.0% (4)	34.0% (17)	31.3% (105)	
	Actively support	72.6% (45)	50.0% (5)	60.0% (30)	64.3% (216)	
		62	10	50	336	458
<i>answered question</i>		66	11	52	347	476
<i>skipped question</i>						21

3. Following is a list of the counties with a significant portion of land in the Raccoon River Watershed. In what county do you reside?

	Do you farm or own agricultural land in the Raccoon River Watershed?				
	Yes, I farm AND own agricultural land in the watershed.	Yes, I farm in the watershed.	Yes, I own agricultural land in the watershed.	No, I do not farm or own agricultural land in the watershed.	Response Totals
Buena Vista	3.0% (2)	0.0% (0)	1.9% (1)	1.5% (5)	1.7% (8)
Calhoun	25.8% (17)	27.3% (3)	5.8% (3)	6.7% (23)	9.8% (46)
Carroll	18.2% (12)	9.1% (1)	19.2% (10)	13.8% (47)	14.9% (70)
Dallas	4.5% (3)	0.0% (0)	19.2% (10)	13.8% (47)	12.8% (60)
Greene	13.6% (9)	0.0% (0)	17.3% (9)	3.5% (12)	6.4% (30)
Guthrie	12.1% (8)	0.0% (0)	1.9% (1)	3.8% (13)	4.7% (22)
Pocahontas	3.0% (2)	9.1% (1)	1.9% (1)	0.6% (2)	1.3% (6)
Polk	9.1% (6)	27.3% (3)	9.6% (5)	40.8% (139)	32.6% (153)
Sac	10.6% (7)	0.0% (0)	17.3% (9)	4.1% (14)	6.4% (30)
Webster	0.0% (0)	27.3% (3)	0.0% (0)	1.8% (6)	1.9% (9)
Other/none of the above	0.0% (0)	0.0% (0)	5.8% (3)	9.7% (33)	7.7% (36)
Other (please explain your role as a watershed stakeholder)	9 replies	2 replies	13 replies	63 replies	87
answered question	66	11	52	341	470
skipped question					27

4. Are you aware the Raccoon River has the highest average nitrate concentration of any of the 42 largest tributaries in the Mississippi River Basin?					
	Do you farm or own agricultural land in the Raccoon River Watershed?				
	Yes, I farm AND own agricultural land in the watershed.	Yes, I farm in the watershed.	Yes, I own agricultural land in the watershed.	No, I do not farm or own agricultural land in the watershed.	Response Totals
Yes, I am aware of the specific water quality issues within the Raccoon River.	36.9% (24)	27.3% (3)	34.0% (17)	47.7% (164)	44.3% (208)
I am generally aware of water quality issues within the Raccoon River, but was not aware of this specific finding.	52.3% (34)	54.5% (6)	40.0% (20)	39.5% (136)	41.7% (196)
No, I was not aware of the water quality issues within the Raccoon River Watershed.	10.8% (7)	18.2% (2)	26.0% (13)	12.8% (44)	14.0% (66)
<i>answered question</i>	65	11	50	344	470
<i>skipped question</i>					27

5. Thinking generally about the water quality within the Raccoon River Watershed, to what extent do you agree or disagree with the following statements?

		Do you farm or own agricultural land in the Raccoon River Watershed?				
		Yes, I farm AND own agricultural land in the watershed.	Yes, I farm in the watershed.	Yes, I own agricultural land in the watershed.	No, I do not farm or own agricultural land in the watershed.	Response Totals
Farming activities are causing water quality problems.	Strongly Disagree	3.0% (2)	0.0% (0)	0.0% (0)	0.3% (1)	
	Disagree	13.6% (9)	9.1% (1)	3.8% (2)	2.9% (10)	
	Uncertain	25.8% (17)	36.4% (4)	15.4% (8)	7.2% (25)	
	Agree	30.3% (20)	36.4% (4)	50.0% (26)	41.7% (144)	
	Strongly Agree	27.3% (18)	18.2% (2)	30.8% (16)	47.8% (165)	
		66	11	52	345	474
Non-farm sources are causing water quality problems.	Strongly Disagree	0.0% (0)	0.0% (0)	1.9% (1)	1.8% (6)	
	Disagree	3.0% (2)	0.0% (0)	1.9% (1)	4.7% (16)	
	Uncertain	18.2% (12)	45.5% (5)	23.1% (12)	15.8% (54)	
	Agree	59.1% (39)	36.4% (4)	51.9% (27)	57.9% (198)	
	Strongly Agree	19.7% (13)	18.2% (2)	21.2% (11)	19.9% (68)	
		66	11	52	342	471
Water quality in the Raccoon River and its tributaries is just fine.	Strongly Disagree	29.2% (19)	27.3% (3)	34.6% (18)	52.2% (179)	
	Disagree	29.2% (19)	27.3% (3)	59.6% (31)	36.2% (124)	

	Uncertain	33.8% (22)	45.5% (5)	3.8% (2)	9.9% (34)	
	Agree	7.7% (5)	0.0% (0)	1.9% (1)	0.9% (3)	
	Strongly Agree	0.0% (0)	0.0% (0)	0.0% (0)	0.9% (3)	
		65	11	52	343	471
I am concerned about agriculture's impact on water quality.	Strongly Disagree	1.5% (1)	0.0% (0)	2.0% (1)	0.3% (1)	
	Disagree	7.6% (5)	9.1% (1)	3.9% (2)	2.6% (9)	
	Uncertain	12.1% (8)	18.2% (2)	3.9% (2)	5.8% (20)	
	Agree	47.0% (31)	36.4% (4)	58.8% (30)	42.6% (147)	
	Strongly Agree	31.8% (21)	36.4% (4)	31.4% (16)	48.7% (168)	
		66	11	51	345	473
Tile drainage is causing water quality problems.	Strongly Disagree	6.2% (4)	0.0% (0)	2.0% (1)	0.9% (3)	
	Disagree	23.1% (15)	18.2% (2)	5.9% (3)	4.9% (17)	
	Uncertain	33.8% (22)	54.5% (6)	31.4% (16)	22.4% (77)	
	Agree	20.0% (13)	27.3% (3)	43.1% (22)	40.4% (139)	
	Strongly Agree	16.9% (11)	0.0% (0)	17.6% (9)	31.4% (108)	
		65	11	51	344	471
Landowners/farmers need more help to improve the environmental performance of their farms.	Strongly Disagree	3.0% (2)	0.0% (0)	0.0% (0)	1.7% (6)	
	Disagree	10.6% (7)	0.0% (0)	5.8% (3)	6.4% (22)	

	Uncertain	22.7% (15)	45.5% (5)	11.5% (6)	14.0% (48)	
	Agree	37.9% (25)	27.3% (3)	57.7% (30)	46.4% (159)	
	Strongly Agree	25.8% (17)	27.3% (3)	25.0% (13)	31.5% (108)	
		66	11	52	343	472
More data needs to be collected to identify the major causes of water quality problems in the Raccoon River.	Strongly Disagree	1.5% (1)	0.0% (0)	1.9% (1)	5.3% (18)	
	Disagree	6.1% (4)	0.0% (0)	7.7% (4)	14.9% (51)	
	Uncertain	18.2% (12)	9.1% (1)	9.6% (5)	17.5% (60)	
	Agree	43.9% (29)	54.5% (6)	55.8% (29)	41.5% (142)	
	Strongly Agree	30.3% (20)	36.4% (4)	25.0% (13)	20.8% (71)	
		66	11	52	342	471
I am involved in watershed management activities.	Strongly Disagree	1.5% (1)	0.0% (0)	4.0% (2)	7.7% (26)	
	Disagree	12.1% (8)	45.5% (5)	24.0% (12)	28.9% (98)	
	Uncertain	18.2% (12)	9.1% (1)	26.0% (13)	18.3% (62)	
	Agree	42.4% (28)	45.5% (5)	32.0% (16)	33.3% (113)	
	Strongly Agree	25.8% (17)	0.0% (0)	14.0% (7)	11.8% (40)	
		66	11	50	339	466
I would be willing to get more involved in watershed management efforts.	Strongly Disagree	1.5% (1)	0.0% (0)	2.0% (1)	1.8% (6)	
	Disagree	6.1% (4)	18.2% (2)	2.0% (1)	6.8% (23)	
	Uncertain	45.5% (30)	18.2% (2)	51.0% (26)	36.8% (125)	

	Agree	28.8% (19)	63.6% (7)	35.3% (18)	39.7% (135)	
	Strongly Agree	18.2% (12)	0.0% (0)	9.8% (5)	15.0% (51)	
		66	11	51	340	468
	answered question	66	11	52	345	474
		skipped question				23

6. Do you farm or own agricultural land in the Raccoon River Watershed?					
	Do you farm or own agricultural land in the Raccoon River Watershed?				
	Yes, I farm AND own agricultural land in the watershed.	Yes, I farm in the watershed.	Yes, I own agricultural land in the watershed.	No, I do not farm or own agricultural land in the watershed.	Response Totals
Yes, I farm AND own agricultural land in the watershed.	100.0% (69)	0.0% (0)	0.0% (0)	0.0% (0)	13.9% (69)
Yes, I farm in the watershed.	0.0% (0)	100.0% (15)	0.0% (0)	0.0% (0)	3.0% (15)
Yes, I own agricultural land in the watershed.	0.0% (0)	0.0% (0)	100.0% (55)	0.0% (0)	11.1% (55)
No, I do not farm or own agricultural land in the watershed.	0.0% (0)	0.0% (0)	0.0% (0)	100.0% (358)	72.0% (358)
answered question	69	15	55	358	497
	skipped question				0

7. Decisions regarding farmland management are influenced by many factors. Please rate the extent to which the following factors influence your management decisions about your Iowa farmland.

		Do you farm or own agricultural land in the Raccoon River Watershed?				
		Yes, I farm AND own agricultural land in the watershed.	Yes, I farm in the watershed.	Yes, I own agricultural land in the watershed.	No, I do not farm or own agricultural land in the watershed.	Response Totals
Need for income	No Influence	3.2% (2)	0.0% (0)	14.3% (7)	0.0% (0)	
	Small Influence	6.3% (4)	25.0% (2)	22.4% (11)	0.0% (0)	
	Moderate Influence	23.8% (15)	0.0% (0)	34.7% (17)	0.0% (0)	
	High Influence	46.0% (29)	37.5% (3)	12.2% (6)	0.0% (0)	
	Very High Influence	20.6% (13)	37.5% (3)	16.3% (8)	0.0% (0)	
		63	8	49	0	120
Concern for the environment/water quality	No Influence	0.0% (0)	0.0% (0)	2.1% (1)	0.0% (0)	
	Small Influence	3.2% (2)	0.0% (0)	6.4% (3)	0.0% (0)	
	Moderate Influence	28.6% (18)	55.6% (5)	25.5% (12)	0.0% (0)	
	High Influence	49.2% (31)	33.3% (3)	48.9% (23)	0.0% (0)	
	Very High Influence	19.0% (12)	11.1% (1)	17.0% (8)	0.0% (0)	
		63	9	47	0	119
The way things have traditionally been done	No Influence	24.2% (15)	11.1% (1)	34.7% (17)	0.0% (0)	
	Small Influence	30.6% (19)	11.1% (1)	36.7% (18)	0.0% (0)	

	Moderate Influence	30.6% (19)	77.8% (7)	22.4% (11)	0.0% (0)	
	High Influence	12.9% (8)	0.0% (0)	4.1% (2)	0.0% (0)	
	Very High Influence	1.6% (1)	0.0% (0)	2.0% (1)	0.0% (0)	
		62	9	49	0	120
Recreational considerations	No Influence	11.1% (7)	22.2% (2)	20.8% (10)	0.0% (0)	
	Small Influence	25.4% (16)	22.2% (2)	18.8% (9)	0.0% (0)	
	Moderate Influence	38.1% (24)	44.4% (4)	14.6% (7)	0.0% (0)	
	High Influence	12.7% (8)	11.1% (1)	39.6% (19)	0.0% (0)	
	Very High Influence	12.7% (8)	0.0% (0)	6.3% (3)	0.0% (0)	
		63	9	48	0	120
Wildlife considerations	No Influence	6.3% (4)	11.1% (1)	8.2% (4)	0.0% (0)	
	Small Influence	9.5% (6)	33.3% (3)	16.3% (8)	0.0% (0)	
	Moderate Influence	41.3% (26)	44.4% (4)	16.3% (8)	0.0% (0)	
	High Influence	20.6% (13)	11.1% (1)	34.7% (17)	0.0% (0)	
	Very High Influence	22.2% (14)	0.0% (0)	24.5% (12)	0.0% (0)	
		63	9	49	0	121
Concern for the way things look (aesthetics)	No Influence	4.8% (3)	0.0% (0)	4.1% (2)	0.0% (0)	
	Small Influence	20.6% (13)	11.1% (1)	24.5% (12)	0.0% (0)	

	Moderate Influence	44.4% (28)	55.6% (5)	32.7% (16)	0.0% (0)	
	High Influence	22.2% (14)	33.3% (3)	26.5% (13)	0.0% (0)	
	Very High Influence	7.9% (5)	0.0% (0)	12.2% (6)	0.0% (0)	
		63	9	49	0	121
Opinions of co-owners or other family	No Influence	12.7% (8)	0.0% (0)	12.2% (6)	0.0% (0)	
	Small Influence	17.5% (11)	11.1% (1)	24.5% (12)	0.0% (0)	
	Moderate Influence	36.5% (23)	22.2% (2)	30.6% (15)	0.0% (0)	
	High Influence	25.4% (16)	66.7% (6)	16.3% (8)	0.0% (0)	
	Very High Influence	7.9% (5)	0.0% (0)	16.3% (8)	0.0% (0)	
		63	9	49	0	121
answered question		63	9	49	0	121
skipped question						376

8. Some water quality advocates in Iowa have taken the position that the voluntary adoption of conservation practices by farmers and landowners has not adequately protected water quality. Why do you think more farmers aren't implementing more conservation practices? (Mark all that apply.)

	Do you farm or own agricultural land in the Raccoon River Watershed?				
	Yes, I farm AND own agricultural land in the watershed.	Yes, I farm in the watershed.	Yes, I own agricultural land in the watershed.	No, I do not farm or own agricultural land in the watershed.	Response Totals
Farmers don't fully understand the need for these practices or the potential impact on water quality.	55.4% (31)	12.5% (1)	69.4% (34)	0.0% (0)	58.4% (66)
Many conservation practices decrease production or are not economically feasible.	67.9% (38)	75.0% (6)	65.3% (32)	0.0% (0)	67.3% (76)
There isn't enough technical assistance available to help locate and design practices.	33.9% (19)	62.5% (5)	44.9% (22)	0.0% (0)	40.7% (46)
Many farmers don't care about water quality.	23.2% (13)	12.5% (1)	34.7% (17)	0.0% (0)	27.4% (31)
I don't know.	16.1% (9)	0.0% (0)	12.2% (6)	0.0% (0)	13.3% (15)
Other (please specify)	12 replies	1 reply	6 replies	0 replies	19
<i>answered question</i>	56	8	49	0	113
<i>skipped question</i>					384

9. Installing and maintaining various agricultural conservation practices are important ways farmers and landowners can have a positive impact on water quality. Please rate your interest in the following conservation practices on your land ...

		Do you farm or own agricultural land in the Raccoon River Watershed?				
		Yes, I farm AND own agricultural land in the watershed.	Yes, I farm in the watershed.	Yes, I own agricultural land in the watershed.	No, I do not farm or own agricultural land in the watershed.	Response Totals
WOODCHIP BIOREACTORS remove nitrates from tile drainage water through an underground trench filled with wood chips. Cropland is not taken out of production.	Extremely Interested	19.0% (11)	0.0% (0)	11.4% (5)	0.0% (0)	
	Somewhat Interested	53.4% (31)	37.5% (3)	59.1% (26)	0.0% (0)	
	Not Interested	15.5% (9)	37.5% (3)	18.2% (8)	0.0% (0)	
	Don't Know	12.1% (7)	25.0% (2)	11.4% (5)	0.0% (0)	
		58	8	44	0	110
NITRATE REMOVAL WETLANDS are relatively large wetlands (up to 10 ac wetland and 40 ac buffer) that intercept tile drainage and reduce nitrate loads.	Extremely Interested	32.8% (19)	0.0% (0)	29.5% (13)	0.0% (0)	
	Somewhat Interested	36.2% (21)	25.0% (2)	50.0% (22)	0.0% (0)	
	Not Interested	22.4% (13)	50.0% (4)	13.6% (6)	0.0% (0)	
	Don't Know	8.6% (5)	25.0% (2)	6.8% (3)	0.0% (0)	
		58	8	44	0	110
BUFFER STRIPS OR FILTER STRIPS are small areas or strips of land in permanent vegetation (grass, trees, etc.) along water bodies or other environmentally sensitive areas that intercept pollutants.	Extremely Interested	63.8% (37)	37.5% (3)	57.8% (26)	0.0% (0)	
	Somewhat Interested	32.8% (19)	25.0% (2)	37.8% (17)	0.0% (0)	
	Not Interested	0.0% (0)	25.0% (2)	0.0% (0)	0.0% (0)	
	Don't Know	3.4% (2)	12.5% (1)	4.4% (2)	0.0% (0)	

	Know	(2)	(1)	(2)	(0)	
		58	8	45	0	111
PRECISION FERTILIZER APPLICATION includes crop sensing and precision application technologies to improve the delivery of fertilizer or manure to crops while minimizing off site transfers of nutrients.	Extremely Interested	50.9% (29)	25.0% (2)	38.6% (17)	0.0% (0)	
	Somewhat Interested	36.8% (21)	37.5% (3)	43.2% (19)	0.0% (0)	
	Not Interested	3.5% (2)	25.0% (2)	13.6% (6)	0.0% (0)	
	Don't Know	8.8% (5)	12.5% (1)	4.5% (2)	0.0% (0)	
		57	8	44	0	109
NITROGEN STABILIZERS applied with fertilizer reduce nitrate leaching and loss.	Extremely Interested	34.5% (20)	50.0% (4)	25.6% (11)	0.0% (0)	
	Somewhat Interested	50.0% (29)	12.5% (1)	51.2% (22)	0.0% (0)	
	Not Interested	5.2% (3)	12.5% (1)	11.6% (5)	0.0% (0)	
	Don't Know	10.3% (6)	25.0% (2)	11.6% (5)	0.0% (0)	
		58	8	43	0	109
LIMITING FALL NITROGEN APPLICATION reduces nitrate leaching and loss due to spring warming and rains.	Extremely Interested	38.6% (22)	12.5% (1)	43.2% (19)	0.0% (0)	
	Somewhat Interested	36.8% (21)	12.5% (1)	36.4% (16)	0.0% (0)	
	Not Interested	14.0% (8)	62.5% (5)	13.6% (6)	0.0% (0)	
	Don't Know	10.5% (6)	12.5% (1)	6.8% (3)	0.0% (0)	
		57	8	44	0	109
NUTRIENT/MANURE MANAGEMENT PLANNING helps producers manage and account for all nutrient inputs to ensure nutrients are available to meet crop needs while reducing nutrient	Extremely Interested	40.4% (23)	37.5% (3)	40.9% (18)	0.0% (0)	
	Somewhat Interested	38.6% (22)	25.0% (2)	43.2% (19)	0.0% (0)	

movement off fields.	Not Interested	12.3% (7)	25.0% (2)	11.4% (5)	0.0% (0)	
	Don't Know	8.8% (5)	12.5% (1)	4.5% (2)	0.0% (0)	
		57	8	44	0	109
EXCLUSION OF LIVESTOCK FROM SURFACE WATER BODIES minimizes the water quality impacts of pasture grazing by protecting streambanks and reducing manure in the streambed.	Extremely Interested	29.8% (17)	0.0% (0)	34.1% (15)	0.0% (0)	
	Somewhat Interested	42.1% (24)	50.0% (4)	43.2% (19)	0.0% (0)	
	Not Interested	14.0% (8)	37.5% (3)	18.2% (8)	0.0% (0)	
	Don't Know	14.0% (8)	12.5% (1)	4.5% (2)	0.0% (0)	
		57	8	44	0	109
LIMITING MANURE APPLICATION ON FROZEN OR SNOW-COVERED GROUND prevents excessive runoff and surface water contamination during spring thaw.	Extremely Interested	36.8% (21)	12.5% (1)	53.3% (24)	0.0% (0)	
	Somewhat Interested	29.8% (17)	37.5% (3)	33.3% (15)	0.0% (0)	
	Not Interested	15.8% (9)	50.0% (4)	11.1% (5)	0.0% (0)	
	Don't Know	17.5% (10)	0.0% (0)	2.2% (1)	0.0% (0)	
		57	8	45	0	110
COVER CROPS are planted as part of a rotation between regularly planted crops to reduce weed pressure, control erosion, and improve soil quality before the main crop emerges.	Extremely Interested	29.3% (17)	0.0% (0)	40.9% (18)	0.0% (0)	
	Somewhat Interested	37.9% (22)	25.0% (2)	38.6% (17)	0.0% (0)	
	Not Interested	17.2% (10)	50.0% (4)	15.9% (7)	0.0% (0)	
	Don't Know	15.5% (9)	25.0% (2)	4.5% (2)	0.0% (0)	
		58	8	44	0	110
REDUCED TILLAGE OR NO-TILL results in less soil disturbance than traditional	Extremely Interested	44.8% (26)	12.5% (1)	55.6% (25)	0.0% (0)	

cultivation, reducing soil loss and energy use and improving soil quality.	Somewhat Interested	44.8% (26)	37.5% (3)	35.6% (16)	0.0% (0)	
	Not Interested	6.9% (4)	37.5% (3)	6.7% (3)	0.0% (0)	
	Don't Know	3.4% (2)	12.5% (1)	2.2% (1)	0.0% (0)	
		58	8	45	0	111
FEEDLOT RUNOFF CONTROLS such as settling basins and vegetated filter treatments filter contaminants from feedlot runoff before it reaches a stream or river.	Extremely Interested	45.5% (25)	12.5% (1)	57.8% (26)	0.0% (0)	
	Somewhat Interested	34.5% (19)	50.0% (4)	28.9% (13)	0.0% (0)	
	Not Interested	7.3% (4)	12.5% (1)	11.1% (5)	0.0% (0)	
	Don't Know	12.7% (7)	25.0% (2)	2.2% (1)	0.0% (0)	
		55	8	45	0	108
RESERVOIRS/FARM PONDS trap water, sediment, and other contaminants in runoff before it reaches a stream or river.	Extremely Interested	41.4% (24)	12.5% (1)	54.5% (24)	0.0% (0)	
	Somewhat Interested	44.8% (26)	50.0% (4)	36.4% (16)	0.0% (0)	
	Not Interested	5.2% (3)	12.5% (1)	4.5% (2)	0.0% (0)	
	Don't Know	8.6% (5)	25.0% (2)	4.5% (2)	0.0% (0)	
		58	8	44	0	110
answered question		58	8	45	0	111
skipped question						386

10. If you indicated you were **not interested** in a specific practice, explain why next to each practice. **PLEASE**, don't stop here! If you are not interested in a practice, it is very important that decision makers for this plan begin to understand why you are not interested.

	Do you farm or own agricultural land in the Raccoon River Watershed?				
	Yes, I farm AND own agricultural land in the watershed.	Yes, I farm in the watershed.	Yes, I own agricultural land in the watershed.	No, I do not farm or own agricultural land in the watershed.	Response Totals
Woodchip bioreactors	11 replies (42.3%)	2 replies (50.0%)	6 replies (40.0%)	0 replies (0.0%)	42.2% (19)
Nitrate removal wetlands	10 replies (38.5%)	3 replies (75.0%)	2 replies (13.3%)	0 replies (0.0%)	33.3% (15)
Buffer strips/filter strips	2 replies (7.7%)	1 reply (25.0%)	0 replies (0.0%)	0 replies (0.0%)	6.7% (3)
Precision fertilizer application	4 replies (15.4%)	2 replies (50.0%)	4 replies (26.7%)	0 replies (0.0%)	22.2% (10)
Nitrogen stabilizers	8 replies (30.8%)	1 reply (25.0%)	3 replies (20.0%)	0 replies (0.0%)	26.7% (12)
Limiting fall nitrogen application	8 replies (30.8%)	4 replies (100.0%)	4 replies (26.7%)	0 replies (0.0%)	35.6% (16)
Nutrient/manure management planning	8 replies (30.8%)	1 reply (25.0%)	3 replies (20.0%)	0 replies (0.0%)	26.7% (12)
Exclusion of livestock from surface water bodies	8 replies (30.8%)	1 reply (25.0%)	5 replies (33.3%)	0 replies (0.0%)	31.1% (14)
Limiting manure application on frozen or snow-covered ground	6 replies (23.1%)	2 replies (50.0%)	1 reply (6.7%)	0 replies (0.0%)	20.0% (9)
Cover crops	8 replies (30.8%)	3 replies (75.0%)	4 replies (26.7%)	0 replies (0.0%)	33.3% (15)
Reduced tillage or no-till	8 replies (30.8%)	2 replies (50.0%)	2 replies (13.3%)	0 replies (0.0%)	26.7% (12)
Feedlot runoff controls (such as settling basins and vegetated filter treatments)	6 replies (23.1%)	1 reply (25.0%)	2 replies (13.3%)	0 replies (0.0%)	20.0% (9)
Reservoirs/farm ponds	4 replies (15.4%)	1 reply (25.0%)	1 reply (6.7%)	0 replies (0.0%)	13.3% (6)

<i>answered question</i>	26	4	15	0	45
<i>skipped question</i>					452

11. Please share any other ideas or concerns that you feel are important considerations with regards to a water quality plan for the Raccoon River Watershed.

	Do you farm or own agricultural land in the Raccoon River Watershed?				
	Yes, I farm AND own agricultural land in the watershed.	Yes, I farm in the watershed.	Yes, I own agricultural land in the watershed.	No, I do not farm or own agricultural land in the watershed.	Response Count
	26 replies	1 reply	13 replies	106 replies	146
<i>answered question</i>	26	1	13	106	146
<i>skipped question</i>					351

12. Name and contact information (optional)					
	Do you farm or own agricultural land in the Raccoon River Watershed?				
	Yes, I farm AND own agricultural land in the watershed.	Yes, I farm in the watershed.	Yes, I own agricultural land in the watershed.	No, I do not farm or own agricultural land in the watershed.	Response Totals
Name:	24 replies (72.7%)	2 replies (100.0%)	16 replies (80.0%)	111 replies (92.5%)	87.4% (153)
Company:	8 replies (24.2%)	0 replies (0.0%)	6 replies (30.0%)	63 replies (52.5%)	44.0% (77)
Address:	23 replies (69.7%)	2 replies (100.0%)	15 replies (75.0%)	97 replies (80.8%)	78.3% (137)
Address 2:	4 replies (12.1%)	0 replies (0.0%)	1 reply (5.0%)	15 replies (12.5%)	11.4% (20)
City/Town:	27 replies (81.8%)	2 replies (100.0%)	18 replies (90.0%)	110 replies (91.7%)	89.7% (157)
State:	33 replies (100.0%)	2 replies (100.0%)	20 replies (100.0%)	117 replies (97.5%)	98.3% (172)
ZIP:	27 replies (81.8%)	1 reply (50.0%)	18 replies (90.0%)	106 replies (88.3%)	86.9% (152)
Email Address:	20 replies (60.6%)	1 reply (50.0%)	11 replies (55.0%)	105 replies (87.5%)	78.3% (137)
Phone Number:	17 replies (51.5%)	1 reply (50.0%)	10 replies (50.0%)	83 replies (69.2%)	63.4% (111)
<i>answered question</i>	33	2	20	120	175
<i>skipped question</i>					322

Please share any other ideas or concerns that you feel are important considerations with regards to a water quality plan for the Raccoon River Watershed.

Key words assigned for sorting responses

Key words assigned for sorting responses	Open Ended Response
BMPs	Needs- Grass Waterways, Barrier Strips, Wetlands Expansion, Tech Improvments to make ag chems "stick" to where applied, Sewage Treatment Improvements, Water Quality Rules Enforcement, Better Inspection & Designs for animal waste storage systems, other but can't think of 'em right now.
BMPs	BMP's are most readily adopted by farmers if they are educated and incentified to implement.
Buffers	I think that bufferstrips should be a required practice in order to receive farm program payments just as compliance for highly erodible farmland.
Buffers	One concern I have is on contour strip width. The required width has been narrowed to a point where I question their effectiveness. When trying to re-signup a couple contour strips recently I was required to narrow them up to 30' or so. Did not make sense to me...
Buffers	I have been involved with Pheasants Forever and love what filter strips have done for water quality and habitat, i think there should be at least 60 ft buffer strip on every watershed, mandatory.
Buffers	Work needs to be done to address options for livestock producers to keep their animals out of streams and stream corridors. Greene County Farm Bureau still reports their water monitoring efforts as showing no impact from Agriculture. The effort needs to be planned and shared with residents before work begins. I would suggest having local individuals (not those seen as radicals) who want responsible action to promote and inform other residents (mothers and children, respected community leaders, people who have replaced their septic tanks, individuals with planned grazing systems, public health, etc.). Make it appear that the IDNR is not leading the charge, but we are a suporter. The communities still operate with the "good ole boy" philosophy.
Buffers	need buffer zones between streams and agricultural/developed lands.
Buffers	grass filter strips along streams, rivers, ponds, etc. would help filter the water before it enters these bodies of water.
Buffers	buffer strips to reduce soil erosion and runoff
Buffers	Plant buffer strips along waterways; don't farm up to the edge
Buffers	More buffer zones.
Buffers	More buffer zones. Big ag has way too much influence.

Policy

Buffers	Tiling	Regulation	We know that non point sources are the majority of the problem with regards to water quality. Buffers along all the small tributaries which dump into the Raccoon rivers would greatly help reduce nutrient levels in the river. Also a restriction on tile drainage pipes dumping directly into the tributaries would also help reduce nutrient levels. The state knows what the problem is and knows the ways in which to fix it. However, farmers and cities often don't have the money to make the changes themselves and have to rely on federal aid or state aid to implement the procedures. People within the watershed need to be willing the help the farmers/cities pay for these procedures which will benefit everyone within the watershed and also downstream.
Buffers			I have a 4 acre cropfield next to the coon river and am having difficulty getting it enrolled in a conservation program. I would like to see crop ground next to rivers have priority in conservation practices. Thanks
Cost/Funding			I feel it is essential that a plan be developed -- and that cost considerations should not impede the effort. Perhaps if a program were implemented to help farmers improve practices on their land to mitigate tainted water runoff similar to the Topeka shiner oxbow restoration project -- where the full cost is borne by collaborating agencies, rather than expecting growers to voluntarily sacrifice yield or front the costs of installing new technologies, etc -- it would get more widespread participation or traction.
Cost/Funding			I believe that our water is cleaner than it was 20 years ago. How clean does it need to be? It will never be like it was when Lewis and Clark explored the area. How clean is clean enough? You could put everybody out of business if your goal is 100% pristene.
Cost/Funding			We are, and always have been interested in water quality and how our practices affect such. But our primary income is not from farming, and if it was and farming income was going to be limited, and we were trying to provide for a family, there would have to be pretty substantial reasoning to get most people to sacrifice family income for any of the previous practices. I hate to say it, but it really does all come down to money for many people, even at the risk of personal or others' well being. Good luck with your efforts!
Cost/Funding	Economics		Need to be reasonable and econ. fiesable. who pays???
Cost/Funding			Funding for priority projects.Reasonable time frames.
Cost/Funding	Policy		Federal and state funding for conservation programs needs to be maintained or increased. This applies especially to the Conservation Stewardship Program and the Environmental Quality Incentives Program.

Cost/Funding	Policy		I believe that if a farmer is getting goverment support (payments) I believe thay should be required to be more involved in conservation practices.Also city people should more informed about the proper use of fertilizer on their lawns and how much goes down into the water system.We all need to get more involved.
Cost	Policy	Economics	The people at the bottom of the watershed bear the costs (treatment and health concerns) of the pollution that happens further up in the watershed. The actual polluter is not held responsible from an economic perspective. This needs to change.
Cost/Funding	Policy	Economics	There has to be a mechanism for conservation implementation costs to be passed on to consumers of farm products. Increased taxes are NOT a solution. Market prices need to reflect actual costs. To compete with other states Iowa needs to be consistant with and mirror their policies. Also, as a country, we must be able to compete on the world market.
Cost/finances	Nitrate		I think we can reduce the nitrate loas in the Racoon River without hurting earnings of the farm.
Cost/finances			Most producers are interested in water & soil conservation but they will need to see that the conservation practices will not significantly impact their net income.
Cost/incentives			Paying more for CRP and other conservation programs would draw more farmers into these programs. It's hard to not raise crops when the money is double what you get from conservation programs
Cost/incentives			The statement "Landowners/farmers need more help to improve the environmental performance of their farms"; I feel that some farmers will not improve the environmental performance of their farms unless it is to their financial advantage to do so, or financially a disadvantage not to do so (penalties). Other farmers are very environmentally consciosus. I think a lot of educational and service help is offered and utilized. I think we need more champions in the legislature and in agriculture to help move the mindset from one of fierce independence to responsibility for our future natural resources.
Drainage			Landowners have for a long time solved their own drainage problems (individually or collectively) with no regard whatsoever for the people downstream or the water quality they are sending. It was all about "Me" and what is good for farming more acres and making more money.

Education		It needs to be a non-bias study to make this water quality plan work. You need to approach the local farmers with respect and education them on the issues at had. Do not talk down to them or other land owners. Do not hide any of your finds of facts. Stay away from the emotional part of water quality. I have done several watershed plans in the Midwest and here in Alaska.
Education		I don't believe that people that live in town have any clue that they also affect the quality of water and wish there was some kind of psa's or a way to let them know.
Education		I only have 15 acres along the river and don't row crop but have 15 cows. Access to information is a stumbling block.
Education		If there are things the general public can do to improve water quality, they need to be made aware of the problems & solutions.
Education		It is up to us to pass on to our children, and grandchildren a better environment. If we don't educate everyone about this, it will not get done. I am a past president of a county conservation group and am now an active member of the state committee. It all begins with education for everyone. I realize that from a landowner/farmer standpoint, the almighty dollar does speak loudly, but I feel there is a happy medium. It is time for the federal and state govt. to step in and subsidize these programs and educate as well.
Education		Water quality needs to be managed at the source rather than when it reaches the stream or river. From personal experience (53 instances), I have found that property owners are always willing to help if you work with them to develop site specific systems, rather than regulate them in to submission
Education		I thin in general the public is unaware of the water quality issues here in Iowa and in particular in the Raccoon Valley Watershed.
Education		Public need to be better educated. Too politically motivated.
Education	Cost	I am an owner of farmland, but the managers and tenants have significant influence too. They need to learn about these things. But there will be LITTLE interest unless government subsidies help pay for them, or it is shown they pay for themselves in the long run, or there is a penalty for not doing them. ECOLOGIC sustainability benefits everyone in the long run, but the farmer needs to see immediate ECONOMIC sustainability!
Education	Enforcement	I am sure there is already a lot of information out there. Education and enforcement of existing policy are critical.
Education	Financial Assistance	We are younger farmers and more proactive than older farmers.Education, financial assistance, and labor are all necessary to achieve these goals.Not all farmers have these accessible to them.

Erosion		my problem is in the panora area at my property there. would like to have some one look at it, loosing ground to the river, and hyw.
Erosion	Manure	Promote perennial type of agricultural plants to protect and keep soil where it belongs. I also am completely opposed to spreading manure on frozen ground. This practice has to stop now. Jamie
Erosion Erosion/stream	Water flow	Erosion and rate of water delivery to rivers and streams. The river & creek banks erode into the main stream even when protected with sod. This occures naturally so there is always soil getting into the water ways. If there were no agriculture the water still would't be silt free.
Fertilizer		It is unfortunate that our Farmers have to use fertilizers to improve their crops. The more they grow, either by the # of acres of crop or the amount of livestock, the more nitrates become available in the Raccoon River. My question is, of those Farmers who have crops and livestock, do they consider using all of the natural fertilizer the livestock leave behind. If they did, then this would help reduce the spreading of other fertilizers on their crops. If a crop Farmer only, maybe programs could be available where Farmers who have livestock only can sell their livestock's waste and crop Farmers could buy it. This would of course have to be finacially benefical to both the seller and buyer. Especially to the buyer so that he/she would be more eager to purchase livestock fertilizer.
Fertilizer/Commercial		Most if not all fertilizer dealers are making proactive recommendations and making timely applications of fertilizer that is environmentally friendly. I know we can not control the weather but taking all into consideration what is best for the enviroment, customers and consumers. Thank You.
Floodplain Management		legislation to encourage barrier strips and to prevent further development of the floodplain and offer incentives etc. to remove floodplain housing & businesses.
Funding		Water is a public resource most often flowing off, through or by private land. Landowners need public funding to help safegaurd it; they should not be held responsible for most of the expense. Also, there are huge amounts of naturally produced 'pollutants' (nitrates, phosphates) that provide elevated background conditions. River bank erosion is also a considerable source of sediment.
Health Ecosystem		preserving and/or restoring healthy ecosystems--woodlands, prairies, wetlands
Livestock		I feel livestock in Carroll County is a intregal part of the equation in the county and needs to be considered as a partof this study

Manure			Surface, especially cold season, application of liquid animal waste needs to be examined more finitely to determine its contribution to pollution. Also, commercial fertilizer and herbicide application timing should be more carefully examined. Discharges from municipal wastewater treatment facilities appear to be minor contributors, but also deserve a statistical review.
Manure			No manure spreading on frozen or snow-covered ground - NRCS should be able to enforce this as part of conservation compliance. Nitrates in tile drainage are major part of the existing water quality problem. Only gets worse each year as more & more tile is put in - last fall & this spring I have seen several new fields with tile installed. Need riparian buffer along entire river and tributaries. King Corn and Food Inc should be mandatory viewing for Iowans!
Manure			When I watch the announcements of fish kills throughout the state, I am struck by the fact that many of them are due to insufficient manure storage or poor application. I think aiding farmers to improve these two areas could improve a good deal of the water quality issues. However, we should also encourage buffer strips along agricultural-bordering waterways.
Manure	Cyano-bacteria	Crypto-sporidium	Winter land application of manure. Cyanobacteria blooms. Crytosporidium. Pharmaceuticals
Monitoring Nitrogen			stream should be tested by farm lots along the raccoon river This survey is focused too much on only ag impacts. Our analysis shows N concentrations have been coming down in the RR since the early 1990s. More watershed data needs to be analyzed regarding how much of the impact is due to seasonal/flow issues, relative to placement, rate and timing issues. Then, what effect, if any, do various BMPS have on N levels.
Nitrogen	Other		I think farmers are getting a bad wrap for the nitrate problems. What about the natural causes like decaying trees?
Nitrogen			in the last set of questions you are making the assumption that limiting fall N application will reduce N in the river due to spring warming and leaching. I am not willing to say that that is any different than application in the spring with warm rains and leaching.
Nitrogen	Other		Are nitrates an issue only because of the DSM drinking water plant? Do they cause any of issues like toxicity or algae blooms? If yes, do they cause these problems in the Raccoon River? If they don't cause these problems in the Raccoon River, why should I care if there is high nitrate when it doesn't cause any problems except for Des Moines drinking water plant? Or, in other words, if we reduce the nutrients in the Raccoon River, what changes in water quality and the environment could we

expect with our efforts?

Nitrogen
Phosphorous

Regulation

a need to get the nitrogen loading under control

Use of phosphorus fertilizer should be banned on residential properties in Iowa and particularly in the Raccoon River watershed. Also, farmers should be required to comply with a minimum set of criteria in how they manage their land and their farming operation to ensure a minimum level of environmental protection. If they fail to provide this minimum level of effort they should be denied farm subsidies. Some basic requirements should include keeping cattle out of streams, establishing and maintaining predefined minimum riparian buffer areas adjacent to all intermittent and perennial streams, using cover crops or no-till farming practices on all tillable land, controlling all drainage water on-site during seasons where nitrate pollutant loading is most likely to occur in surface and subsurface drainage systems, take full credit for the nutrient content of manure applied to row-crop fields and require ag-chem dealers/applicators to monitor and report violations, require diversion of stormwater around all open feedlots regardless of size.

Policy

Corporate food companies are the problem with water, food, and agriculture. Until that is addressed, other efforts are small bandaids. Watch the speech from the Iowa Food Prize and get involved in the politics of food to change this for Iowa and the world.

Policy

The dam idiots in Washington and Des Moines that have ben elected should get off their dead ass's and take the polution problem seriously and start doing something about it. The dam JERKS.

Policy

Create a special district for the watershed with a highly visible board of elected officials

Policy

There is suffient evidence (water quality data) to proceed with a carrot and stick approach to solve water quality problems. Our legislative bodies have done an extremely poor job of addressing water quality problems and my representatives (Watt and Behen) are on the leading edge of incompetence. The federal EPA under Bush/Cheney has a dismal record of environmental performance. Farm programs at both the federal and state levels should focus on correcting environmental neglect by switching funding that has been fostering commodity production to the detriment of natual resources over to protection of natural areas and water. This is especially applicable to the Raccoon River Watershed.

Policy		Planners should investigate holding farmers and other direct participants in agriculture (commodity groups, seed companies, etc.) legally liable for poor water quality. Various theories should be investigated, including common law claims, such as tort law and nuisance, and specific environmental laws, such as Clean Water Act and NEPA. If the agents of industrial agriculture are directly causing harm to the waterway and its beneficiaries (anyone who drinks water from the waterway, recreational users, wildlife), then they should be held liable and required to change behavior or pay damages. Otherwise, a plan that holds harmless the bad actors will be unworkable.
Policy	Regulation	Enough time and money has been spent on point source pollution - we need to get serious about addressing non-point source pollution. If it can't be done on a voluntary basis, we need to implement regulations to cover non-point sources.
Policy	Planning	Building consensus with groups within the watershed and executing a comprehensive plan
Policy	Incentives	Policies are needed that reward good practices on working land and those who are responsible for significant contributions need to be pointed out - this can be done with GIS; Also and subsidies for agriculture need to provide WQ and other ecosystem benefits back to the tax payers, rather than tax payers subsidizing practices that reduce environmental quality and quality of life
Policy		Agricultural interests MUST do more than lipservice. Cities are being required to clean up. If agriculture continues to pollute, we will need more laws to clean up. Today, NOT tomorrow. Seriously!
Policy	Cost	If Sustainable Funding for Conservation passes this November that as a state we allocate 5 million a year to increase our CREP agenda in the state. With that done we will be able to finally address Iowa's water quality issues on a scale that is needed to obtain results. Keep that in mind. 5 million a year for 15 to 20 years, under the USDA CREP PROGRAM our contribution is matched 4 to 1. There is only one way to address our state water quality issues and that is through a strong CREP supported program. All states around Iowa have a 100 million dollar plus CREP program / agenda. Remember that. Anything less is wasting tax payer revenues on measures that will yield very little results and yet still perpetuate our poor water quality issues.

Policy	Ag Regulation		All too often you hear that rules and regulations when it pertains to agriculture should be "voluntary". The time has come to stop giving landowners a choice in protecting the soil and the environment. Every day as I drive to work I see erosion in a waterway that gets worse every year. The only reason this exists is for profits from the crops that may or may not grow in this waterway. Lets finally do something and stop talking about what we need to do, we know, lets do it.
Policy	Ag Regulation		The GREATEST source of pollution (i.e., nitrates and possibly bacteria) in the Raccoon River comes from agricultural land (i.e., non-point sources). Non-point source solution is the 800 pound gorilla in the room that nobody wants to talk about. The onus is on the backs of the land owners in the watershed and most will not do the right thing unless there is something in it for them.
Policy	Regulation		There are already many programs that farmers are able to take advantage of to help improve water quality which in most cases they receive a payment or some type of cost-share. The fact is many do not and will not implement such practices. Until we mandate practices or impose water quality based limits on their runoff, improving water quality in the watershed is going to be an uphill battle.
Policy			lack of good regulations for CAFOs and other non-point source pollution; Farm Bureau, Pork Producers, etc. oppose any efforts to improve water quality through regulation; the average citizen in large metro areas is not "connected" to their source of water and their voice is needed to enact change
Policy	Regulation	Urban Regulation	We need to plan on a watershed basis. The Raccoon is a MAJOR problem, nationally. It will call for a significant effort to begin solving it. Farmers are going to have to give a little. Significant, measurable progress on water and soil quality must be tied to federal payments to a land owner or farmer. Cities need to impose smart growth restrictions to halt any harmful development in the watershed.
Policy			More wetland restoration is needed, less tillage, more perennial cover through CRP or other means, water quality problems in the Raccoon River cannot be fixed by simply throwing more \$ at producers. A true environmental ethic needs to be developed. The strategy cannot be that the people of Des Moines drink this water. What does a farmer care about that. You need to hit them at home with what matters to them and it's not people that live in Des Moines.

Policy		It is superb that this planning is happening for the entire watershed together. Engaging key stakeholders at the outset is critical, and to keep them involved throughout. Water quality plan should also address suburban and urban land use and property owner practices, including fertilizer use. I'm an advocate of regional planning, statewide building codes, and zoning requirements. Construction in a floodplain should be restricted.
Policy		It needs to include a strong policy arm to compliment the practices. Without Local Control of factory farms and stronger regulations on factory farms, we will not make great progress on water quality in the watershed.
Policy/food		As interest and consumption of organic food increases perhaps corp. ag will collapse and bring back small farms.
Ponds		More ponds build to hold water and sentiment back from run off.
Rec-reation		Numerous people swim, fish and just over all try to enjoy the Raccoon River Watershed as a place to get away. If this is taken away due to poor water quality etc. then the Raccoon River Valley residents and Iowa in general will loose an important part of life as we know it.
Recreation		A natural rock riffle in Rainbow park would be a great addition to the watershed program. Calhoun county doesnt have a riffle on the river anywhere and it would be a great thing for sport fish habitat also
Regulation		Need to regulate agriculture. Also need to take the CREP program from IDALS so that something actually gets done.
Regulation		I think that the farmers need to be under the same water shed protection as cities and business. Each farmer is responsible for their land management and should be able to correct it through the DOT.
Regulation		No more hog facilities. These are a large cause of waterway polution. They need to be highly regulated and owners of existing facilities need to absorb the cost of the polution they are causing. Mandatory air filtration for existing facilities needs to be implemented effective immediately.
Regulation		We have some plans and data. What we need are practices implemented that are effective. Incentives aren't enough; there also needs to be compliance.
Regulation		Everyone, including agriculture and cities, should be expected to protect water quality to a minimum standard with appropriate BMPs or management practices.
Regulation	Policy	CAFOs must be better regulated. We need a governor who responds to these needs!

Runoff		Should limit application of manure, fertilizer and pesticides over ground with alluvial aquifers.
Runoff		Farmers need to step up and take responsibility for where their soil, nutrients, and animal fecal matter go when it leaves their land. Applying manure and fertilizers in fields that are highly susceptible to run-off and farming within a few feet of stream banks is irresponsible and disrespectful, not only to people downstream, but the natural resources and the fish and wildlife inhabiting the environments that are impacted by agricultural practices.
Runoff		I believe better flood controls also need to be implemented in the Raccoon River Watershed to control what ends up in the river. Also better monitoring of runoff that gets dumped directly into Walnut Creek from Wal-Mart in Windsor Heights and other commercial areas upstream.
Safety/Health		needs to be safe water
Safety/Health		I didn't know this was a problem before taking this survey, but I have great concern for our families, especially our children, and their future health due to the many chemicals and treatments that are put on our crops and into the soil, eventually leading to our water supply. It could be devastating to many and I believe has already affected people in our communities in a negative way. We purchase pelhams drinking water for our home, but I know that using our water in cooking, bathing, brushing our teeth, etc... are ways that toxins can get into our bodies and cause grave effects on us. I really hope and pray something is done to help make our water safer. Lives depend on it. I am very interested in assisting with something regarding this program. Please feel free to contact me. I don't have a lot of resources or knowledge in this area, but my passion for creating healthier lives for our families is very great. Thank you.
Safety/Health		I am concerned about health issues for the people that use the recreation area on the Raccoon in West Des Moines.
Safety/Health		As a person who canoes, kayak, bikes and hikes in the area, I would like to know that I am safe in the water and I enjoy clean water, fish, ect.
Safety/Health	Tourism	Tourism must also be addressed. Also, public health considerations related to recreational use. I want my children and tourists to be able to get in the river w/o fear of rashes. I want to be able to fish. I don't want nitrates in my well water!
Sewage/Onsite		Septic tank drainage is a big problem

Sewage	Manure		Unsewered communities and purposeful limits on animal confinement sizes to avoid NPDES regulations are two concerns, as is air-to-surface transfer of ag-related pollutants such as ammonia.
Sewage/Municipal			Sewage disposal from Sac City, Storm Lake, Auburn and other towns should be monitored, I float and fish the Northern Part of the Raccoon, yes some ag producers are not doing their part but when you see human waste and here about the dumping from cities and no fines are issued something needs to be done. Also this survey is very bias against ag, from past experience I know lawns in town that get 10 times the rate of Nitrogen needed, run-off from this practice goes directly into storm drains and into contributories of the Coon. From recent studies done by East Sac Com School very little N was found where tiles from fields dumped into the river.
Sewage/Municipal	Livestock	Buffers	Drainage ditches should be seeded down at least a 100' on each side. Up grade sewage systems in small towns and farms and private developments. Address livestock problems along rivers and small streams and address farm siltation by encouraging buffer strips and farmable wetlands program.
Sewage/Municipal	Tiling		I am also concerned regarding the overflow of city sewer systems into the Raccoon during heavy rain events, due to inadequate treatment facilities. I do feel, however, that non-point sources (ag-tiles) are a much larger problem to the watershed.
Sewage/Onsite			Changes to farming practices along with changes to the hydrology of the land need to be an integral part of the plan. However, point source pollution must also be addressed such as old sewer/septic systems that are no longer functional, or things like meat packing plants that discharge nitrates directly into tribs. of the Raccoon
Taxes			A tax on the manufacture of field tile needs to be assessed, similar to the Dingel/Johnson tax on fishing equipment. This money should support water quality improvements.
Technology			Anaerobic digestion of manure has not been economically viable in the past, however, as carbon trading develops or energy prices increase, it will become a more attractive option for providing energy to individual farms or businesses or communities and should be considered given its potential to reduce odor and the impacts of manure on water quality. There are currently no incentives for commercial fertilizer salespeople to advocate lower application rates. Changes to the current regulations and incentives for commercial fertilizer sales may be needed to ensure better nutrient management.

wood chip bioreactors.

Tillage You seem to want to lump all agriculture together. As a producer in the watershed, I see on a daily basis that many producers have adopted many of the solutions you had listed in the survey, however there are a few who still have the fence row to fence row mentality, and to change their practice of farming it seems like some would rather take all agriculture and over regulate it which would be worse in my opinion.

Urban practices Why don't you guys go after Chemlawn and all those other lawn fertilizer companies that apply the chemicals to all those lawns in the urban residential area even during a rainstorm and immediately run off into the storm drains to the watershed area. Oh, by the way from my own research, the answer is that the label on the chemicals they use says nothing except watch for wind drift and nothing about rain.

Urban practices We need be concerned about all of the chemicals being applied to lawns also.

Urban practices look at towns and the nitrates coming off individual's lawns, wetlands for town runoff. more info to the land owners

Urban practices I never hear about the pollution caused by cities. Every body is worried about the water upstream but they don't care down stream. Show me a sample of water cleaner below a city than above it!

Urban practices Storm water run-off, associated with development, is also an ongoing issue, lacking adequate resources.

Urban practices I think homeowners use of chemicals on their lawns, household cleaners and many products people use daily contain toxins that all wash into our rivers. It would be great to have more people become aware of what is actually in the products they use daily and to start using alternatives that are safe for us and for the environment.

Urban practices Education Storm water management in towns and cities, better sewage treatment before release in creeks, more policing of spreading of liquid manure , more education about how much Nitrogen actually is taken up by the crop - the Iowa Soybean people do this very graphically - more such field days!

Urban practices Upstream from me is Rembrandt Enterprises, Inc. and it would be good to know their water treatment activity (1/4 mile from Raccoon River Watershed) is complying with all laws and regulations. OR AT LEAST BEING CHECKED!!!

Water flow Slowing the water down at the gully level. I am high up in the watershed and believe work done at this level impacts the floods downstream as well as water quality.

Water flow			Not just the quality of river water, but ground water and decreasing flooding are of concern to me
Water flow			Working with each individual landowner and then also identifying major tile line flows (slow the flush effect) can make a difference.
Water flow			Water Velocity is the major culprit. Keeping rain where it falls is the key to keeping nutrients where they are applied/generated. Floodplain management and constructed wetlands, treating drainage districts as source points are the keys to improved water quality.
Water flow			The last few years we have had some large rain events (5 to 7 inch rains) that are nearly impossible to prepare for.
Wetlands			Natural wetland areas need to be restored in order to accommodate the natural flooding process each year. Native plants have a beneficial effect on water quality, soil quality and air quality. Deep roots of native plants also prevent erosion. A band of land on each side of each waterway re-planted to native prairie wetland would help absorb ag field drainage and also help absorb floodwaters.
Wetlands	Ponds		I would like to see more wetlands or ponds constructed on the down stream side of tributaries to lesson soil erosion and to improve water conditions prior to that water entering larger bodies of water. I would also like to see more riffles constructed on the larger rivers to reduce scouring and improve fishing.
Wetlands	Taxes		Need for more water filters (wetlands) Tax on drainage tile to help fund water quality improvements. need for Filter strips.
Wetlands	Tiling	Water Flow	Our state needs to work to restore some wetlands and to create buffers to all surface water run off. Work to improve tiling practices and soil nutrient supplementation management also needs to be done. Looking 25 to 50 years out we need to develop a more sustainable form of raising crops than row crop farming.
Wetlands	Tiling	Water Flow	Have we drained too many wetlands and tilled too many lowlands? Water now moves so fast that the excess nutrients no longer are filtered naturally.
Wetlands	Floodplain Management		1. Inspection & repair of dams along the Raccoon River to help control flooding would also help control water quality. 2. Reintroduction of wetlands along the Raccoon & it's tributaries. Wetlands are natural filters & have been shown to filter out even the most harmful nitrates & nitrites.
Other			Many who cannot SEE the river (from their farm) think that they could not possibly have an impact ... and figure "what does that townie know anyway" ...many livestock people on the defensive that they CAN'T

