## ***Survey of Agricultural Producers in the Watershed***

### Rating of Water Quality

*Overall, how would you rate the quality of water in your area?*

| | Poor (1) | Okay (2) | ood (3) | Don't Know (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|
| **1. For canoeing / kayaking / other boating** | 23.9 | 29.6 | 32.4 | 14.1 | 2.1 (0.81) | 61 / 71 |
| **2. For picnicking and family activities** | 18.3 | 38 | 33.8 | 9.9 | 2.17 (0.75) | 64 / 71 |
| **3. For fish habitat** | 21.1 | 38 | 26.8 | 14.1 | 2.07 (0.75) | 61 / 71 |
| **4. For scenic beauty** | 11.3 | 33.8 | 49.3 | 5.6 | 2.4 (0.7) | 67 / 71 |

### Your Water Resources

1. Of these activities, which is the most important to you? **(Responses: 65)**

**12.3%** For canoeing / kayaking / other boating

**10.8%** For eating locally caught fish

**0%** For swimming

**7.7%** For picnicking and family activities

**23.1%** For fish habitat

**46.2%** For scenic beauty

2. Do you know where the rain water goes when it runs off of your property? **(Responses: 69)**

**20.3%** No

**79.7%** Yes

**Your Opinions**

*Please indicate your level of agreement or disagreement with the statements below.*

| | Strongly Disagree (1) | Disagree (2) | Neither Agree nor Disagree (3) | Agree (4) | Strongly Agree (5) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **1. Using recommended management practices on farms improves water quality.** | 1.5 | 0 | 11.8 | 57.4 | 29.4 | 4.13 (0.73) | 68 / 68 |
| **2. It is my personal responsibility to help protect water quality.** | 0 | 2.8 | 2.8 | 60.6 | 33.8 | 4.25 (0.65) | 71 / 71 |
| **3. It is important to protect water quality even if it slows economic development.** | 0 | 4.3 | 14.3 | 54.3 | 27.1 | 4.04 (0.77) | 70 / 70 |
| **4. My actions have an impact on water quality.** | 0 | 4.2 | 14.1 | 54.9 | 26.8 | 4.04 (0.76) | 71 / 71 |
| **5. I would be willing to pay more to improve water quality (for example: though local taxes or fees)** | 15.9 | 15.9 | 37.7 | 21.7 | 8.7 | 2.91 (1.17) | 69 / 69 |
| **6. I would be willing to change management practices to improve water quality.** | 5.7 | 5.7 | 34.3 | 37.1 | 17.1 | 3.54 (1.03) | 70 / 70 |

**Water Impairments**

*Below is a list of water pollutants and conditions that are generally present in water bodies to some extent. The pollutants and conditions become a problem when present in excessive amounts. In your opinion, how much of a problem are the following water impairments in your area?*

| | Not a Problem (1) | Slight Problem (2) | Moderate Problem (3) | Severe Problem (4) | Don't Know (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **1. Sedimentation (dirt and soil) in the water** | 6.9 | 23.6 | 40.3 | 15.3 | 13.9 | 2.74 (0.85) | 62 / 72 |
| **2. Nitrogen** | 11.3 | 21.1 | 23.9 | 5.6 | 38 | 2.39 (0.89) | 44 / 71 |
| **3. Phosphorus** | 11.9 | 23.9 | 20.9 | 3 | 40.3 | 2.25 (0.84) | 40 / 67 |
| **4. Bacteria and viruses in the water (such as *E.coli* / coliform)** | 7 | 22.5 | 32.4 | 7 | 31 | 2.57 (0.82) | 49 / 71 |
| **5. Trash or debris in the water** | 4.2 | 25 | 45.8 | 12.5 | 12.5 | 2.76 (0.76) | 63 / 72 |
| **6. Toxic materials in the water** | 13.9 | 31.9 | 15.3 | 4.2 | 34.7 | 2.15 (0.83) | 47 / 72 |
| **7. Flow Alteration** | 14.1 | 25.4 | 23.9 | 9.9 | 26.8 | 2.4 (0.96) | 52 / 71 |
| **8. Habitat alteration harming local fish** | 16.9 | 26.8 | 14.1 | 5.6 | 36.6 | 2.13 (0.92) | 45 / 71 |
| **9. Pesticides** | 15.3 | 29.2 | 19.4 | 6.9 | 29.2 | 2.25 (0.91) | 51 / 72 |

**Sources of Water Pollution**

*The items listed below are sources of water quality pollution across the country. In your opinion, how much of a problem are the following sources in your area?*

| | Not a Problem (1) | Slight Problem (2) | Moderate Problem (3) | Severe Problem (4) | Don't Know (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **1. Discharges from industry into streams and lakes** | 16.7 | 25 | 26.4 | 11.1 | 20.8 | 2.4 (0.98) | 57 / 72 |
| **2. Discharges from sewage treatment plants** | 22.2 | 18.1 | 26.4 | 13.9 | 19.4 | 2.4 (1.08) | 58 / 72 |
| **3. Soil erosion from construction sites** | 30.6 | 37.5 | 12.5 | 2.8 | 16.7 | 1.85 (0.8) | 60 / 72 |
| **4. Soil erosion from farm fields** | 5.6 | 38.9 | 33.3 | 9.7 | 12.5 | 2.54 (0.78) | 63 / 72 |
| **5. Soil erosion from shorelines and/or streambanks** | 8.3 | 40.3 | 27.8 | 4.2 | 19.4 | 2.34 (0.74) | 58 / 72 |
| **6. Improperly maintained septic systems** | 11.3 | 25.4 | 23.9 | 11.3 | 28.2 | 2.49 (0.95) | 51 / 71 |
| **7. Manure from farm animals** | 23.9 | 33.8 | 16.9 | 4.2 | 21.1 | 2.02 (0.86) | 56 / 71 |
| **8. Littering/illegal dumping of trash** | 6.9 | 30.6 | 38.9 | 18.1 | 5.6 | 2.72 (0.86) | 68 / 72 |
| **9. Excessive use of fertilizers for crop production** | 27.8 | 37.5 | 13.9 | 1.4 | 19.4 | 1.86 (0.76) | 58 / 72 |
| **10. Animal feeding operations** | 29.2 | 37.5 | 6.9 | 1.4 | 25 | 1.74 (0.71) | 54 / 72 |
| **11. Urban stormwater runoff** | 19.4 | 26.4 | 20.8 | 8.3 | 25 | 2.24 (0.97) | 54 / 72 |
| **12. Landfill(s)** | 19.7 | 23.9 | 23.9 | 9.9 | 22.5 | 2.31 (1) | 55 / 71 |
| **13. Channelization of streams** | 9.7 | 36.1 | 12.5 | 4.2 | 37.5 | 2.18 (0.78) | 45 / 72 |
| **14. Removal of riparian vegetation** | 19.4 | 27.8 | 12.5 | 2.8 | 37.5 | 1.98 (0.84) | 45 / 72 |
| **15. Natural sources** | 23.6 | 33.3 | 12.5 | 0 | 30.6 | 1.84 (0.71) | 50 / 72 |

**Consequences of Poor Water Quality**

*Poor water quality can lead to a variety of consequences for communities. In your opinion, how much of a problem are the following issues in your area?*

| | Not a Problem (1) | Slight Problem (2) | Moderate Problem (3) | Severe Problem (4) | Don't Know (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **1. Contaminated drinking water** | 45.8 | 20.8 | 12.5 | 2.8 | 18.1 | 1.66 (0.86) | 59 / 72 |
| **2. Contaminated fish** | 22.2 | 23.6 | 15.3 | 9.7 | 29.2 | 2.18 (1.03) | 51 / 72 |
| **3. High drinking water treatment costs** | 33.8 | 18.3 | 8.5 | 4.2 | 35.2 | 1.74 (0.93) | 46 / 71 |
| **4. Loss of desirable fish species** | 23.9 | 11.3 | 14.1 | 8.5 | 42.3 | 2.12 (1.12) | 41 / 71 |
| **5. Reduced beauty of lakes or streams** | 28.2 | 26.8 | 26.8 | 5.6 | 12.7 | 2.11 (0.94) | 62 / 71 |
| **6. Reduced quality of water recreation activities** | 26.4 | 27.8 | 23.6 | 2.8 | 19.4 | 2.03 (0.88) | 58 / 72 |
| **7. Excessive aquatic plants or algae** | 21.1 | 23.9 | 22.5 | 2.8 | 29.6 | 2.1 (0.89) | 50 / 71 |
| **8. Odor** | 32.4 | 29.6 | 11.3 | 2.8 | 23.9 | 1.8 (0.83) | 54 / 71 |
| **9. Lower property values** | 36.1 | 22.2 | 11.1 | 2.8 | 27.8 | 1.73 (0.87) | 52 / 72 |

**Practices to Improve Water Quality**

*Please indicate which statement most accurately describes your level of experience with each practice listed below.*

| | Not relevant for my property (9) | Never heard of it (1) | Somewhat familiar with it (2) | Know how to use it; not using it (3) | Currently use it (4) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **1. Regular servicing of septic system** | 21.4 | 4.3 | 17.1 | 5.7 | 51.4 | 3.33 (1) | 55 / 70 |
| **2. Follow university recommendations for fertilization rates** | 10.1 | 8.7 | 23.2 | 2.9 | 55.1 | 3.16 (1.12) | 62 / 69 |
| **3. Use field records of crops, pests and pesticide use to help develop pest control strategies** | 10.4 | 4.5 | 19.4 | 13.4 | 52.2 | 3.27 (0.97) | 60 / 67 |
| **4. Use heavy use area protection for waste management** | 56.9 | 20 | 9.2 | 9.2 | 4.6 | 1.96 (1.07) | 28 / 65 |
| **5. Compost manure prior to land application** | 61.8 | 4.4 | 13.2 | 13.2 | 7.4 | 2.62 (0.94) | 26 / 68 |
| **6. Retain crop residue on soil surface to reduce erosion** | 8.8 | 0 | 11.8 | 2.9 | 76.5 | 3.71 (0.69) | 62 / 68 |
| **7. Follow an approved grazing plan to maintain grass quality and reduce erosion** | 66.2 | 2.9 | 2.9 | 14.7 | 13.2 | 3.13 (0.92) | 23 / 68 |
| **8. Regulate the water level in tile lines** | 35.8 | 20.9 | 22.4 | 14.9 | 6 | 2.09 (0.97) | 43 / 67 |
| **9. Manage manure according to an approved nutrient management plan** | 72.1 | 8.8 | 5.9 | 5.9 | 7.4 | 2.42 (1.22) | 19 / 68 |
| **10. Restore/enhance wetland** | 61.8 | 4.4 | 8.8 | 11.8 | 13.2 | 2.88 (1.03) | 26 / 68 |
| **11. Maintain riparian buffer** | 23.9 | 11.9 | 14.9 | 11.9 | 37.3 | 2.98 (1.16) | 51 / 67 |

**Specific Constraints of Practices**

***Variable Rate Fertilizer Application:*** *Use variable rate application management units to minimize fertilizer waste and achieve more precise crop production.*

1. How familiar are you with this practice? **(Responses: 69)**

**14.5%** Not relevant

**5.8%** Never heard of it

**8.7%** Somewhat familiar with it

**10.1%** Know how to use it; not using it

**60.9%** Currently use it

2. Are you willing to try this practice? **(Responses: 50)**

**68%** Yes or already do

**20%** Maybe

**12%** No

*How much do the following factors limit your ability to implement this practice?*

| | Not at all (4) | A little (3) | Some (2) | A lot (1) | Don't Know (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **3. Don't know how to do it** | 56.9 | 13.7 | 7.8 | 3.9 | 17.6 | 3.5 (0.86) | 42 / 51 |
| **4. Time required** | 52.9 | 13.7 | 11.8 | 3.9 | 17.6 | 3.4 (0.91) | 42 / 51 |
| **5. Cost** | 38 | 20 | 8 | 16 | 18 | 2.98 (1.17) | 41 / 50 |
| **6. The features of my property make it difficult** | 50 | 15.4 | 13.5 | 1.9 | 19.2 | 3.4 (0.86) | 42 / 52 |
| **7. Insufficient proof of water quality benefit** | 46.2 | 23.1 | 7.7 | 1.9 | 21.2 | 3.44 (0.78) | 41 / 52 |
| **8. Desire to keep things the way they are** | 51.9 | 7.7 | 17.3 | 9.6 | 13.5 | 3.18 (1.11) | 45 / 52 |
| **9. Hard to use with my farming system** | 52.8 | 15.1 | 13.2 | 3.8 | 15.1 | 3.38 (0.91) | 45 / 53 |
| **10. Lack of equipment** | 37.3 | 15.7 | 15.7 | 17.6 | 13.7 | 2.84 (1.2) | 44 / 51 |

***Cover Crops:*** *Planting cover crops for erosion protection and soil improvement.*

11. How familiar are you with this practice? **(Responses: 70)**

**14.3%** Not relevant

**1.4%** Never heard of it

**27.1%** Somewhat familiar with it

**31.4%** Know how to use it; not using it

**25.7%** Currently use it

12. Are you willing to try this practice? **(Responses: 62)**

**48.4%** Yes or already do

**37.1%** Maybe

**14.5%** No

*How much do the following factors limit your ability to implement this practice?*

| | Not at all (4) | A little (3) | Some (2) | A lot (1) | Don't Know (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **13. Don't know how to do it** | 46.3 | 24.1 | 11.1 | 1.9 | 16.7 | 3.38 (0.81) | 45 / 54 |
| **14. Time required** | 25 | 21.4 | 23.2 | 12.5 | 17.9 | 2.72 (1.07) | 46 / 56 |
| **15. Cost** | 20 | 20 | 23.6 | 18.2 | 18.2 | 2.51 (1.1) | 45 / 55 |
| **16. The features of my property make it difficult** | 50 | 17.9 | 10.7 | 1.8 | 19.6 | 3.44 (0.81) | 45 / 56 |
| **17. Insufficient proof of water quality benefit** | 37.5 | 23.2 | 14.3 | 3.6 | 21.4 | 3.2 (0.9) | 44 / 56 |
| **18. Desire to keep things the way they are** | 50 | 15.5 | 6.9 | 12.1 | 15.5 | 3.22 (1.1) | 49 / 58 |
| **19. Hard to use with my farming system** | 44.8 | 12.1 | 10.3 | 8.6 | 24.1 | 3.23 (1.08) | 44 / 58 |
| **20. Lack of equipment** | 26.3 | 21.1 | 19.3 | 15.8 | 17.5 | 2.7 (1.12) | 47 / 57 |

***Riparian Fencing:*** *Fencing that excludes animals from critical riparian areas.*

21. How familiar are you with this practice? **(Responses: 73)**

**57.5%** Not relevant

**12.3%** Never heard of it

**15.1%** Somewhat familiar with it

**9.6%** Know how to use it; not using it

**5.5%** Currently use it

22. Are you willing to try this practice? **(Responses: 34)**

**17.6%** Yes or already do

**35.3%** Maybe

**47.1%** No

*How much do the following factors limit your ability to implement this practice?*

| | Not at all (4) | A little (3) | Some (2) | A lot (1) | Don't Know (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **23. Don't know how to do it** | 32.4 | 13.5 | 8.1 | 18.9 | 27 | 2.81 (1.27) | 27 / 37 |
| **24. Time required** | 21.1 | 7.9 | 21.1 | 21.1 | 28.9 | 2.41 (1.22) | 27 / 38 |
| **25. Cost** | 16.2 | 8.1 | 21.6 | 21.6 | 32.4 | 2.28 (1.17) | 25 / 37 |
| **26. The features of my property make it difficult** | 34.2 | 5.3 | 13.2 | 15.8 | 31.6 | 2.85 (1.29) | 26 / 38 |
| **27. Insufficient proof of water quality benefit** | 34.2 | 5.3 | 13.2 | 13.2 | 34.2 | 2.92 (1.26) | 25 / 38 |
| **28. Desire to keep things the way they are** | 30.8 | 7.7 | 10.3 | 20.5 | 30.8 | 2.7 (1.32) | 27 / 39 |
| **29. Hard to use with my farming system** | 28.2 | 10.3 | 10.3 | 20.5 | 30.8 | 2.67 (1.3) | 27 / 39 |
| **30. Lack of equipment** | 13.5 | 13.5 | 18.9 | 24.3 | 29.7 | 2.23 (1.14) | 26 / 37 |

***Conservation Tillage:*** *Establishing crops in the previous crop residues, which are purposely left on the soil surface.*

31. How familiar are you with this practice? **(Responses: 72)**

**9.7%** Not relevant

**5.6%** Never heard of it

**11.1%** Somewhat familiar with it

**6.9%** Know how to use it; not using it

**66.7%** Currently use it

32. Are you willing to try this practice? **(Responses: 48)**

**75%** Yes or already do

**16.7%** Maybe

**8.3%** No

*How much do the following factors limit your ability to implement this practice?*

| | Not at all (4) | A little (3) | Some (2) | A lot (1) | Don't Know (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **33. Don't know how to do it** | 69.6 | 6.5 | 6.5 | 2.2 | 15.2 | 3.69 (0.73) | 39 / 46 |
| **34. Time required** | 70.2 | 6.4 | 6.4 | 2.1 | 14.9 | 3.7 (0.72) | 40 / 47 |
| **35. Cost** | 53.2 | 10.6 | 12.8 | 8.5 | 14.9 | 3.28 (1.06) | 40 / 47 |
| **36. The features of my property make it difficult** | 66 | 4.3 | 14.9 | 0 | 14.9 | 3.6 (0.78) | 40 / 47 |
| **37. Insufficient proof of water quality benefit** | 60.4 | 8.3 | 8.3 | 4.2 | 18.8 | 3.54 (0.88) | 39 / 48 |
| **38. Desire to keep things the way they are** | 64.6 | 2.1 | 10.4 | 12.5 | 10.4 | 3.33 (1.15) | 43 / 48 |
| **39. Hard to use with my farming system** | 68.1 | 6.4 | 6.4 | 6.4 | 12.8 | 3.56 (0.92) | 41 / 47 |
| **40. Lack of equipment** | 58.7 | 6.5 | 15.2 | 10.9 | 8.7 | 3.24 (1.12) | 42 / 46 |

**Making Decisions for my Property**

*In general, how much does each issue limit your ability to change your agricultural management practices?*

| | Not at all (4) | A little (3) | Some (2) | A lot (1) | Don't Know (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **1. Personal out-of-pocket expense** | 10.4 | 17.9 | 32.8 | 25.4 | 13.4 | 2.16 (0.99) | 58 / 67 |
| **2. Lack of government funds for cost share** | 21.9 | 15.6 | 31.2 | 17.2 | 14.1 | 2.49 (1.09) | 55 / 64 |
| **3. Not having access to the equipment that I need** | 18.2 | 15.2 | 30.3 | 21.2 | 15.2 | 2.36 (1.09) | 56 / 66 |
| **4. Lack of available information about a practice** | 28.4 | 17.9 | 26.9 | 6 | 20.9 | 2.87 (1) | 53 / 67 |
| **5. No one else I know is implementing the practice** | 41.5 | 6.2 | 15.4 | 6.2 | 30.8 | 3.2 (1.08) | 45 / 65 |
| **6. Concerns about reduced yields** | 26.2 | 16.9 | 24.6 | 20 | 12.3 | 2.56 (1.15) | 57 / 65 |
| **7. Approval of my neighbors** | 53.7 | 4.5 | 19.4 | 3 | 19.4 | 3.35 (0.97) | 54 / 67 |
| **8. Don't want to participate in government programs** | 46.9 | 14.1 | 20.3 | 6.2 | 12.5 | 3.16 (1.02) | 56 / 64 |
| **9. Requirements or restrictions of government programs** | 26.2 | 16.9 | 27.7 | 16.9 | 12.3 | 2.6 (1.12) | 57 / 65 |
| **10. Possible interference with my flexibility to change land use practices as conditions warrant** | 30.8 | 16.9 | 21.5 | 13.8 | 16.9 | 2.78 (1.13) | 54 / 65 |
| **11. Environmental damage caused by practice** | 32.3 | 7.7 | 21.5 | 9.2 | 29.2 | 2.89 (1.14) | 46 / 65 |
| **12. I do not own the property** | 63.9 | 8.2 | 14.8 | 6.6 | 6.6 | 3.39 (1) | 57 / 61 |
| **13. Not being able to see a demonstration of the practice before I decide** | 36.4 | 16.7 | 18.2 | 7.6 | 21.2 | 3.04 (1.05) | 52 / 66 |

## About Your Farm Operation

1. Please select the option that best describes who generally makes management decisions for your operation. **(Responses: 72)**

**36.1%** Me alone or with my spouse

**25%** Me with my family partners (siblings, parents, children)

**5.6%** Me with the landowner

**23.6%** Me with my tenant

**6.9%** Me and my business partners

**2.8%** Someone else makes the decision for the operation

**0%** Other

2. Please estimate the total tillable acreage (owned and/or rented) of your farming operation this year. (Mean=463.62; SD = 695.93; Min = 0; Max = 4000; Range = 4000; n = 68)

3. This year, how many acres of conservation set aside / CRP do you manage? If none, please enter a zero. (Mean=3.2; SD = 7.97; Min = 0; Max = 46; Range = 46; n = 69)

4. This year, how many acres of forest / woodland do you manage? If none, please enter a zero. (Mean=10.68; SD = 37.7; Min = 0; Max = 300; Range = 300; n = 68)

5. How many years have you been farming? (Please enter years). (Mean=35.24; SD = 19.71; Min = 0; Max = 66; Range = 66; n = 63)

6. How many other livestock are part of your farming operation? If none, please enter a zero. (Mean=31.46; SD = 242.44; Min = 0; Max = 2000; Range = 2000; n = 68)

7. Does the property you manage touch a stream, river, lake, or wetland? (Responses: 71)

**69%** Yes

**31%** No

8. Five years from now, which statement will best describe your farm operation? (Responses: 70)

**58.6%** It will be about the same as it is today

**15.7%** It will be larger

**2.9%** It will be smaller

**22.9%** I don't know

9. Do you have a nutrient management plan for your farm operation? (Responses: 67)

**49.3%** No

**50.7%** Yes

10. Who developed your current nutrient management plan? (Responses: 53)

**5.7%** My land Conservation District / Department, University Extension, or NRCS office

**47.2%** A private-sector agronomist or crop consultant

**18.9%** I created my own plan

**13.2%** I don't know

**15.1%** Other

## About You

1. What is your gender? **(Responses: 72)**

**83.3%** Male

**16.7%** Female

2. What is your age? (Mean=64.72; SD = 14.58; Min = 27; Max = 92; Range = 65; n = 72)

3. What is the highest grade in school you have completed? **(Responses: 70)**

**1.4%** Some formal schooling

**30%** High school diploma/GED

**28.6%** Some college

**2.9%** 2 year college degree

**27.1%** 4 year college degree

**10%** Post-graduate degree

4. How long have you lived at your current residence (years)? (Mean=33.21; SD = 19.71; Min = 1.5; Max = 75; Range = 73.5; n = 71)

5. Which of the following best describes where you live? **(Responses: 72)**

**12.5%** In a town, village, or city

**8.3%** In an isolated, rural, non-farm residence

**6.9%** Rural subdivision or development

**72.2%** On a farm

6. Where are you likely to seek information about soil and water conservation issues? (Check all that apply) **(Responses: 71)**

**74.6%** Newsletters/brochure/factsheet

**46.5%** Internet

**12.7%** Radio

**43.7%** Workshops/demonstrations/meetings

**52.1%** Conversations with others

**43.7%** Trade publications/magazines

**7%** None of the above

7. Do you regularly read a local newspaper? **(Responses: 72)**

**86.1%** Yes

**13.9%** No

### Information Sources

*People get information about water quality from a number of different sources. To what extent do you trust those listed below as a source of information about soil and water?*

| | Not at all (1) | Slightly (2) | Moderately (3) | Very much (4) | Am not familiar (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **1. Soil and Water Conservation District** | 1.4 | 12.7 | 35.2 | 49.3 | 1.4 | 3.34 (0.76) | 70 / 71 |
| **2. Natural Resources Conservation Service** | 1.5 | 14.9 | 40.3 | 40.3 | 3 | 3.23 (0.77) | 65 / 67 |
| **3. University Extension** | 2.8 | 14.1 | 36.6 | 39.4 | 7 | 3.21 (0.81) | 66 / 71 |
| **4. State agricultural agency** | 5.6 | 15.5 | 46.5 | 21.1 | 11.3 | 2.94 (0.82) | 63 / 71 |
| **5. Environmental groups** | 28.8 | 34.2 | 23.3 | 6.8 | 6.8 | 2.09 (0.93) | 68 / 73 |
| **6. Crop consultants** | 8.8 | 14.7 | 48.5 | 20.6 | 7.4 | 2.87 (0.87) | 63 / 68 |
| **7. Other landowners / friends** | 6.9 | 19.4 | 47.2 | 23.6 | 2.8 | 2.9 (0.85) | 70 / 72 |
| **8. State natural resources agency** | 7 | 23.9 | 38 | 22.5 | 8.5 | 2.83 (0.89) | 65 / 71 |
| **9. County Health department** | 4.3 | 29 | 37.7 | 23.2 | 5.8 | 2.85 (0.85) | 65 / 69 |

## ***Survey of Non-Agricultural Residents in the Watershed***

### Rating of Water Quality

*Overall, how would you rate the quality of the water in your area?*

| | Poor (1) | Okay (2) | Good (3) | Don't Know (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|
| **1. For canoeing / kayaking / other boating** | 19.4 | 27.7 | 12.6 | 40.3 | 1.89 (0.73) | 114 / 191 |
| **2. For picnicking and family activities** | 21.8 | 28.2 | 19.7 | 30.3 | 1.97 (0.77) | 131 / 188 |
| **3. For fish habitat** | 19.7 | 28.2 | 13.8 | 38.3 | 1.91 (0.73) | 116 / 188 |
| **4. For scenic beauty** | 16.9 | 32.8 | 31.7 | 18.5 | 2.18 (0.75) | 154 / 189 |

### Your Water Resources

1. Of these activities, which is the most important to you? **(Responses: 172)**

**4.7%** For canoeing / kayaking / other boating

**15.7%** For eating locally caught fish

**5.2%** For swimming

**11.6%** For picnicking and family activities

**22.7%** For fish habitat

**40.1%** For scenic beauty

2. Do you know where the rain water goes when it runs off of your property? **(Responses: 183)**

**48.6%** No

**51.4%** Yes

**Your Opinions**

*Please indicate your level of agreement or disagreement with the statements below.*

| | Strongly Disagree (1) | Disagree (2) | Neither Agree nor Disagree (3) | Agree (4) | Strongly Agree (5) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **1. The way that I care for my lawn and yard can influence water quality in local streams and lakes.** | 1.6 | 5.2 | 21.5 | 51.3 | 20.4 | 3.84 (0.86) | 191 / 191 |
| **2. It is my personal responsibility to help protect water quality.** | 0 | 3.7 | 14.8 | 55.6 | 25.9 | 4.04 (0.75) | 189 / 189 |
| **3. It is important to protect water quality even if it slows economic development.** | 0 | 4.3 | 22.3 | 51.1 | 22.3 | 3.91 (0.78) | 188 / 188 |
| **4. My actions have an impact on water quality.** | 2.7 | 3.7 | 18.6 | 53.7 | 21.3 | 3.87 (0.88) | 188 / 188 |
| **5. I would be willing to pay more to improve water quality (for example: though local taxes or fees)** | 16.4 | 24.3 | 33.3 | 17.5 | 8.5 | 2.77 (1.17) | 189 / 189 |
| **6. I would be willing to change the way I care for my lawn and yard to improve water quality.** | 2.2 | 10.8 | 34.4 | 37.6 | 15.1 | 3.53 (0.95) | 186 / 186 |
| **7. The quality of life in my community depends on good water quality in local streams, rivers and lakes.** | 1.6 | 7.3 | 20.9 | 49.7 | 20.4 | 3.8 (0.9) | 191 / 191 |

***Water Impairments***

*Below is a list of water pollutants and conditions that are generally present in water bodies to some extent. The pollutants and conditions become a problem when present in excessive amounts. In your opinion, how much of a problem are the following water impairments in your area?*

| | Not a Problem (1) | Slight Problem (2) | Moderate Problem (3) | Severe Problem (4) | Don't Know (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **1. Sedimentation (dirt and soil) in the water** | 13.6 | 16.2 | 24.1 | 9.4 | 36.6 | 2.46 (0.99) | 121 / 191 |
| **2. Nitrogen** | 7.8 | 5.7 | 11.9 | 6.7 | 67.9 | 2.55 (1.08) | 62 / 193 |
| **3. Phosphorus** | 6.8 | 7.4 | 10.5 | 6.3 | 68.9 | 2.53 (1.06) | 59 / 190 |
| **4. Bacteria and viruses in the water (such as *E.coli* / coliform)** | 6.8 | 8.4 | 13.1 | 14.7 | 57.1 | 2.83 (1.08) | 82 / 191 |
| **5. Trash or debris in the water** | 11.4 | 13 | 24.9 | 22.3 | 28.5 | 2.81 (1.05) | 138 / 193 |
| **6. Toxic materials in the water** | 7.3 | 12 | 12.5 | 13.5 | 54.7 | 2.71 (1.07) | 87 / 192 |
| **7. Flow Alteration** | 14.7 | 12.1 | 13.7 | 4.7 | 54.7 | 2.19 (1.01) | 86 / 190 |
| **8. Habitat alteration harming local fish** | 8.8 | 11.9 | 14.5 | 12.4 | 52.3 | 2.64 (1.06) | 92 / 193 |
| **9. Pesticides** | 5.2 | 12.5 | 17.7 | 17.2 | 47.4 | 2.89 (0.98) | 101 / 192 |

**Sources of Water Pollution**

*The items listed below are sources of water quality pollution across the country. In your opinion, how much of a problem are the following sources in your area?*

| | Not a Problem (1) | Slight Problem (2) | Moderate Problem (3) | Severe Problem (4) | Don't Know (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **1. Discharges from industry into streams and lakes** | 17.2 | 15.7 | 12.6 | 11.1 | 43.4 | 2.31 (1.11) | 112 / 198 |
| **2. Discharges from sewage treatment plants** | 17.3 | 16.2 | 11.2 | 9.1 | 46.2 | 2.23 (1.08) | 106 / 197 |
| **3. Soil erosion from construction sites** | 21.1 | 15.5 | 12.4 | 8.2 | 42.8 | 2.14 (1.07) | 111 / 194 |
| **4. Soil erosion from farm fields** | 7.1 | 20.4 | 23.5 | 13.3 | 35.7 | 2.67 (0.93) | 126 / 196 |
| **5. Soil erosion from shorelines and/or streambanks** | 14.9 | 18.6 | 13.4 | 8.8 | 44.3 | 2.29 (1.03) | 108 / 194 |
| **6. Improperly maintained septic systems** | 13.7 | 11.7 | 16.8 | 12.7 | 45.2 | 2.52 (1.11) | 108 / 197 |
| **7. Manure from farm animals** | 12.8 | 17.3 | 19.4 | 13.3 | 37.2 | 2.53 (1.04) | 123 / 196 |
| **8. Littering/illegal dumping of trash** | 8.7 | 21.9 | 24 | 21.4 | 24 | 2.77 (0.99) | 149 / 196 |
| **9. Excessive use of fertilizers for crop production** | 7.1 | 12.6 | 21.2 | 18.7 | 40.4 | 2.86 (0.99) | 118 / 198 |
| **10. Animal feeding operations** | 16 | 11.3 | 16.5 | 8.2 | 47.9 | 2.33 (1.08) | 101 / 194 |
| **11. Urban stormwater runoff** | 11.8 | 18.5 | 16.9 | 6.2 | 46.7 | 2.33 (0.95) | 104 / 195 |
| **12. Landfill(s)** | 13.3 | 15.3 | 16.3 | 17.3 | 37.8 | 2.61 (1.11) | 122 / 196 |
| **13. Channelization of streams** | 14.9 | 9.2 | 11.8 | 3.1 | 61 | 2.08 (1) | 76 / 195 |
| **14. Removal of riparian vegetation** | 13.8 | 6.6 | 13.8 | 7.7 | 58.2 | 2.37 (1.13) | 82 / 196 |
| **15. Natural sources** | 21.2 | 13.5 | 7.8 | 0.5 | 57 | 1.71 (0.8) | 83 / 193 |

**Consequences of Poor Water Quality**

*Poor water quality can lead to a variety of consequences for communities. In your opinion, how much of a problem are the following issues in your area?*

| | Not a Problem (1) | Slight Problem (2) | Moderate Problem (3) | Severe Problem (4) | Don't Know (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **1. Contaminated drinking water** | 38.3 | 14 | 9.8 | 9.8 | 28 | 1.88 (1.1) | 139 / 193 |
| **2. Contaminated fish** | 14.5 | 17.1 | 16.1 | 15 | 37.3 | 2.5 (1.1) | 121 / 193 |
| **3. High drinking water treatment costs** | 22.4 | 16.7 | 13 | 12 | 35.9 | 2.23 (1.12) | 123 / 192 |
| **4. Loss of desirable fish species** | 15.5 | 11.9 | 8.8 | 15 | 48.7 | 2.45 (1.21) | 99 / 193 |
| **5. Reduced beauty of lakes or streams** | 18.7 | 24.9 | 19.2 | 10.4 | 26.9 | 2.29 (1) | 141 / 193 |
| **6. Reduced quality of water recreation activities** | 20.1 | 13.9 | 17.5 | 8.2 | 40.2 | 2.23 (1.07) | 116 / 194 |
| **7. Excessive aquatic plants or algae** | 17 | 10.3 | 17 | 10.3 | 45.4 | 2.38 (1.12) | 106 / 194 |
| **8. Odor** | 26.9 | 22.3 | 10.4 | 9.3 | 31.1 | 2.03 (1.04) | 133 / 193 |
| **9. Lower property values** | 25.4 | 17.6 | 9.3 | 9.8 | 37.8 | 2.06 (1.09) | 120 / 193 |

**Practices to Improve Water Quality**

*Please indicate which statement most accurately describes your level of experience with each practice listed below.*

| | Not relevant for my property (9) | Never heard of it (1) | Somewhat familiar with it (2) | Know how to use it; not using it (3) | Currently use it (4) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **1. Following the manufacturer's instructions when fertilizing lawn or garden** | 26.9 | 3.6 | 6.2 | 24.4 | 38.9 | 3.35 (0.84) | 141 / 193 |
| **2. Keep grass clippings and leaves out of the roads, ditches, and gutters** | 16.5 | 4.1 | 12.9 | 11.9 | 54.6 | 3.4 (0.92) | 162 / 194 |
| **3. Use phosphate free fertilizer** | 33.7 | 17.1 | 14.4 | 16.6 | 18.2 | 2.54 (1.15) | 124 / 187 |
| **4. Properly dispose of household waste (chemicals, batteries, florescent light bulbs, etc.)** | 9.3 | 3.1 | 14.5 | 11.9 | 61.1 | 3.45 (0.88) | 175 / 193 |
| **5. Plant vegetation in critical erosion areas** | 47.7 | 8.8 | 13 | 10.9 | 19.7 | 2.79 (1.13) | 101 / 193 |
| **6. Restore native plant communities** | 44.3 | 17 | 17.5 | 9.8 | 11.3 | 2.28 (1.11) | 108 / 194 |
| **7. Maintain riparian buffer** | 42 | 33.2 | 7.8 | 7.8 | 9.3 | 1.88 (1.16) | 112 / 193 |
| **8. Plug well / Cap well** | 53.1 | 22.4 | 8.3 | 4.2 | 12 | 2.12 (1.26) | 90 / 192 |

**Specific Constraints of Practices**

***Rain Garden :*** *A garden that uses native plants to absorb and filter stormwater collected off a roof, parking lot, sidewalk, or driveway.*

1. How familiar are you with this practice? **(Responses: 203)**

**15.3%** Not relevant

**40.9%** Never heard of it

**26.6%** Somewhat familiar with it

**11.3%** Know how to use it; not using it

**5.9%** Currently use it

2. Are you willing to try this practice? **(Responses: 186)**

**27.4%** Yes or already do

**50%** Maybe

**22.6%** No

*How much do the following factors limit your ability to implement this practice?*

| | Not at all (4) | A little (3) | Some (2) | A lot (1) | Don't Know (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **3. Don't know how to do it** | 26.1 | 12.5 | 19.3 | 22.2 | 19.9 | 2.53 (1.21) | 141 / 176 |
| **4. Time required** | 18.2 | 14.2 | 21.6 | 18.8 | 27.3 | 2.44 (1.13) | 128 / 176 |
| **5. Cost** | 10.2 | 9.7 | 18.2 | 29.5 | 32.4 | 2.01 (1.09) | 119 / 176 |
| **6. The features of my property make it difficult** | 19.7 | 10.1 | 10.1 | 21.3 | 38.8 | 2.46 (1.27) | 109 / 178 |
| **7. Insufficient proof of water quality benefit** | 20.9 | 4.1 | 16.9 | 10.5 | 47.7 | 2.68 (1.2) | 90 / 172 |
| **8. Desire to keep things the way they are** | 28.8 | 15.3 | 19.8 | 14.7 | 21.5 | 2.74 (1.14) | 139 / 177 |
| **9. Physical or health limitations** | 40.4 | 9.6 | 15.2 | 14.6 | 20.2 | 2.95 (1.2) | 142 / 178 |
| **10. Hard to use with my farming system** | 41.3 | 0.6 | 6.6 | 1.8 | 49.7 | 3.62 (0.85) | 84 / 167 |
| **11. Lack of equipment** | 19.5 | 8.6 | 14.4 | 19 | 38.5 | 2.47 (1.23) | 107 / 174 |

***Regular Septic System Servicing:*** *Having septic system thoroughly cleaned every 3-5 years to remove all the sludge, effluent and scum from the tank.*

12. How familiar are you with this practice? **(Responses: 202)**

**48.5%** Not relevant

**10.4%** Never heard of it

**13.4%** Somewhat familiar with it

**8.9%** Know how to use it; not using it

**18.8%** Currently use it

13. Are you willing to try this practice? **(Responses: 122)**

**41%** Yes or already do

**29.5%** Maybe

**29.5%** No

*How much do the following factors limit your ability to implement this practice?*

| | Not at all (4) | A little (3) | Some (2) | A lot (1) | Don't Know (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **14. Don't know how to do it** | 47.3 | 7.1 | 10.7 | 7.1 | 27.7 | 3.31 (1.06) | 81 / 112 |
| **15. Time required** | 36.9 | 15.3 | 17.1 | 2.7 | 27.9 | 3.2 (0.93) | 80 / 111 |
| **16. Cost** | 24.3 | 9.9 | 17.1 | 22.5 | 26.1 | 2.49 (1.24) | 82 / 111 |
| **17. The features of my property make it difficult** | 48.7 | 5.3 | 4.4 | 8 | 33.6 | 3.43 (1.05) | 75 / 113 |
| **18. Insufficient proof of water quality benefit** | 38.7 | 4.5 | 10.8 | 5.4 | 40.5 | 3.29 (1.06) | 66 / 111 |
| **19. Desire to keep things the way they are** | 45.5 | 11.6 | 6.2 | 9.8 | 26.8 | 3.27 (1.09) | 82 / 112 |
| **20. Physical or health limitations** | 55.5 | 6.4 | 7.3 | 7.3 | 23.6 | 3.44 (1.01) | 84 / 110 |
| **21. Hard to use with my farming system** | 56.9 | 2.8 | 2.8 | 0 | 37.6 | 3.87 (0.45) | 68 / 109 |
| **22. Lack of equipment** | 41.8 | 3.6 | 4.5 | 17.3 | 32.7 | 3.04 (1.32) | 74 / 110 |

***Rain Barrels :*** *Devices designed to collect stormwater from roofs and gutters that can later be used to water a garden, lawn, or house plants.*

23. How familiar are you with this practice? **(Responses: 199)**

**9.5%** Not relevant

**13.1%** Never heard of it

**29.6%** Somewhat familiar with it

**40.7%** Know how to use it; not using it

**7%** Currently use it

24. Are you willing to try this practice? **(Responses: 175)**

**38.3%** Yes or already do

**33.1%** Maybe

**28.6%** No

*How much do the following factors limit your ability to implement this practice?*

| | Not at all (4) | A little (3) | Some (2) | A lot (1) | Don't Know (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **25. Don't know how to do it** | 45.7 | 11 | 19.1 | 8.1 | 16.2 | 3.12 (1.07) | 145 / 173 |
| **26. Time required** | 32.2 | 16.1 | 22.4 | 13.2 | 16.1 | 2.8 (1.12) | 146 / 174 |
| **27. Cost** | 28.5 | 12.8 | 19.8 | 18 | 20.9 | 2.65 (1.19) | 136 / 172 |
| **28. The features of my property make it difficult** | 34.5 | 14.6 | 14.6 | 9.4 | 26.9 | 3.02 (1.09) | 125 / 171 |
| **29. Insufficient proof of water quality benefit** | 38.2 | 7.6 | 14.7 | 7.6 | 31.8 | 3.12 (1.1) | 116 / 170 |
| **30. Desire to keep things the way they are** | 40.1 | 14 | 14.5 | 14.5 | 16.9 | 2.96 (1.17) | 143 / 172 |
| **31. Physical or health limitations** | 47.7 | 9.1 | 13.6 | 13.1 | 16.5 | 3.1 (1.17) | 147 / 176 |
| **32. Hard to use with my farming system** | 56 | 2.4 | 2.4 | 3.6 | 35.7 | 3.72 (0.78) | 108 / 168 |
| **33. Lack of equipment** | 28.7 | 8.2 | 13.5 | 24.6 | 25.1 | 2.55 (1.3) | 128 / 171 |

***Filter Strips:*** *Gently sloping, vegetated areas adjacent to impervious surfaces intended to reduce impacts of sheet flow and velocity of stormwater and help improve its water quality.*

34. How familiar are you with this practice? **(Responses: 194)**

**20.1%** Not relevant

**42.3%** Never heard of it

**18%** Somewhat familiar with it

**8.2%** Know how to use it; not using it

**11.3%** Currently use it

35. Are you willing to try this practice? **(Responses: 162)**

**30.9%** Yes or already do

**32.1%** Maybe

**37%** No

*How much do the following factors limit your ability to implement this practice?*

| | Not at all (4) | A little (3) | Some (2) | A lot (1) | Don't Know (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **36. Don't know how to do it** | 28.9 | 11.2 | 5.9 | 21.7 | 32.2 | 2.7 (1.31) | 103 / 152 |
| **37. Time required** | 24.3 | 11.2 | 15.8 | 11.2 | 37.5 | 2.78 (1.15) | 95 / 152 |
| **38. Cost** | 21.7 | 7.9 | 13.2 | 21.1 | 36.2 | 2.47 (1.27) | 97 / 152 |
| **39. The features of my property make it difficult** | 24.7 | 7.1 | 10.4 | 14.9 | 42.9 | 2.73 (1.27) | 88 / 154 |
| **40. Insufficient proof of water quality benefit** | 32 | 4.7 | 12.7 | 4 | 46.7 | 3.21 (1.05) | 80 / 150 |
| **41. Desire to keep things the way they are** | 35.9 | 5.9 | 11.1 | 16.3 | 30.7 | 2.89 (1.27) | 106 / 153 |
| **42. Physical or health limitations** | 41 | 5.8 | 10.3 | 13.5 | 29.5 | 3.05 (1.23) | 110 / 156 |

**Making Decisions for my Property**

*In general, how much does each issue limit your ability to change your agricultural management practices?*

| | Not at all (4) | A little (3) | Some (2) | A lot (1) | Don't Know (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **1. Personal out-of-pocket expense** | 8.2 | 6.5 | 25 | 48.4 | 12 | 1.71 (0.96) | 162 / 184 |
| **2. My own physical abilities** | 34.6 | 11.2 | 17.6 | 26.6 | 10.1 | 2.6 (1.27) | 169 / 188 |
| **3. Not having access to the equipment that I need** | 13.5 | 11.4 | 18.9 | 38.9 | 17.3 | 1.99 (1.13) | 153 / 185 |
| **4. Lack of available information about a practice** | 16 | 14.4 | 22.7 | 27.1 | 19.9 | 2.24 (1.13) | 145 / 181 |
| **5. No one else I know is implementing the practice** | 24.3 | 8.3 | 17.7 | 17.7 | 32 | 2.58 (1.22) | 123 / 181 |
| **6. Approval of my neighbors** | 38.7 | 8.3 | 9.9 | 10.5 | 32.6 | 3.11 (1.16) | 122 / 181 |
| **7. Don't know where to get information and/or assistance about those practices** | 23.7 | 11.3 | 16.9 | 20.3 | 27.7 | 2.53 (1.22) | 128 / 177 |
| **8. Environmental damage caused by practice** | 29.4 | 6.7 | 14.4 | 6.1 | 43.3 | 3.05 (1.1) | 102 / 180 |
| **9. Legal restrictions on my property** | 30 | 7.2 | 10.6 | 8.3 | 43.9 | 3.05 (1.15) | 101 / 180 |
| **10. Concerns about resale value** | 30.1 | 9.3 | 13.1 | 13.7 | 33.9 | 2.84 (1.21) | 121 / 183 |
| **11. Not being able to see a demonstration of the practice before I decide** | 24.9 | 12.2 | 18.8 | 16 | 28.2 | 2.64 (1.17) | 130 / 181 |
| **12. The need to learn new skills or techniques** | 28.7 | 12.2 | 18.2 | 14.9 | 26 | 2.74 (1.18) | 134 / 181 |

## About You

1. Do you make the home and lawn care decisions in your household? **(Responses: 204)**

**86.8%** Yes

**13.2%** No

2. What is your gender? **(Responses: 205)**

**65.9%** Male

**34.1%** Female

3. What is your age? (Mean=59.4; SD = 15.35; Min = 23; Max = 89; Range = 66; n = 196)

4. What is the highest grade in school you have completed? **(Responses: 200)**

**6%** Some formal schooling

**42%** High school diploma/GED

**18.5%** Some college

**5%** 2 year college degree

**15.5%** 4 year college degree

**13%** Post-graduate degree

5. What is the approximate size of your residential lot? **(Responses: 200)**

**45%** 1/4 acre or less

**21%** More than 1/4 acre but less than 1 acre

**27.5%** 1 acre to less than 5 acres

**6.5%** 5 acres or more

6. Do you own or rent your home? **(Responses: 188)**

**86.7%** Own

**13.3%** Rent

7. How long have you lived at your current residence (years)? (Mean=17.26; SD = 14.43; Min = 0.167; Max = 76; Range = 75.833; n = 193)

8. Which of the following best describes where you live? **(Responses: 204)**

**60.8%** In a town, village, or city

**17.2%** In an isolated, rural, non-farm residence

**14.2%** Rural subdivision or development

**7.8%** On a farm

9. In addition to your residence, which of the following do you own or manage? (check all that apply) **(Responses: 201)**

**9%** An agricultural operation
**5.5%** Forested land
**1%** Rural recreational property
**88.1%** None of these

10. Do you use a professional lawn care service? **(Responses: 203)**

**3.4%** Yes, just for mowing
**3.4%** Yes, for mowing and fertilizing
**19.2%** Yes, just for fertilizing and pest control
**4.9%** Yes, for mowing, fertilizing, and pest control
**69%** No

11. Where are you likely to seek information about water quality issues? **(Responses: 203)**

**35%** Newsletters/brochure/fact sheet
**33%** Internet
**5.4%** Radio
**30.5%** Newspapers/magazines
**8.4%** Workshops/demonstrations/meetings
**27.1%** Conversations with others
**22.2%** None of the above

### Information Sources

*People get information about water quality from a number of different sources. To what extent do you trust those listed below as a source of information about soil and water?*

| | Not at all (1) | Slightly (2) | Moderately (3) | Very much (4) | Am not familiar (9) | Mean (SD) | Valid Responses / Total Responses |
|---|---|---|---|---|---|---|---|
| **1. Local watershed project** | 10.7 | 9.1 | 27.3 | 17.6 | 35.3 | 2.8 (1.02) | 121 / 187 |
| **2. Local government** | 20 | 26.3 | 23.7 | 12.1 | 17.9 | 2.34 (1.01) | 156 / 190 |
| **3. University Extension** | 8.5 | 13.8 | 25 | 30.9 | 21.8 | 3 (1.01) | 147 / 188 |
| **4. State environmental agency** | 14.4 | 17.6 | 29.4 | 17.6 | 20.9 | 2.64 (1.02) | 148 / 187 |
| **5. Environmental groups** | 16.5 | 23.9 | 25.5 | 12.8 | 21.3 | 2.44 (1) | 148 / 188 |

| *Information Sources cont.* | | | | | | | |
|---|---|---|---|---|---|---|---|
| **6. Neighbors / friends** | 15 | 27.8 | 28.9 | 12.3 | 16 | 2.46 (0.95) | 157 / 187 |
| **7. County Health department** | 11.6 | 21.1 | 28.9 | 20.5 | 17.9 | 2.71 (1) | 156 / 190 |

### Septic Systems

*Please use the space below for any additional comments about this survey or water resources in your community.*

1. Do you have a septic system? **(Responses: 199)**

**54.8%** No

**6.5%** Don't Know

**38.7%** Yes

2. If you answered 'yes' to the previous question, in what year was it installed? (Mean=1988.78; SD = 16.49; Min = 1952; Max = 2011; Range = 59; n = 41)

3. Within the last five years, have you had any of the following problems? (Check all that apply)- **(Responses: 118)**

**22.9%** Slow drains

**7.6%** Sewage backup in house

**4.2%** Bad smells near tank or drain field

**0.8%** Sewage on the surface

**0.8%** Sewage flowing to ditch

**1.7%** Frozen septic

**5.1%** Other

**61.9%** None

**11%** Don't know

4. In the future, would you like a reminder from your local health department regarding inspection/maintenance of your septic system? **(Responses: 115)**

**16.5%** Yes

**68.7%** No

**14.8%** Don't know

5. Do you have a garbage disposal? **(Responses: 185)**

**27%** Yes, I use it daily

**27%** Yes, I use it occasionally

**3.8%** Yes, but I don't use it

**42.2%** No

6. Does your septic system have an absorption field ( finger system )? **(Responses: 106)**

**52.8%** Yes

**22.6%** No

**24.5%** Don't know

7. Is your septic system designed to treat sewage or get rid of waste? **(Responses: 105)**

**4.8%** Treat sewage

**12.4%** Get rid of waste

**18.1%** Both

**9.5%** Neither

**55.2%** Don't know