

Appendix D: Rein in the Runoff Water Quality Surveys

1. Water Quality Survey (Version 1)
2. Water Quality Survey (Version 2)
3. Water Quality Survey Cover Page



REIN IN THE RUNOFF Water Quality Survey

1. Based on your current knowledge and opinion, please rate the overall water quality of Spring Lake: ___
Excellent ___ Good ___ Fair ___ Poor ___ No Opinion
2. If you have a lawn and mow your grass, what do you do with the grass clippings?
 - a. ___ Leave them in the yard
 - b. ___ Collect them and throw them in the garbage
 - c. ___ Rake or blow them into a storm drain or nearby ditch
 - d. ___ Mulch or compost them
 - e. ___ Other: _____
 - f. ___ I don't have a grassed lawn
3. Do you put fertilizer on your lawn? ___ Yes ___ No
4. How often do you put fertilizer on your lawn?
 - a. ___ More than once a month (Which months? _____)
 - b. ___ Monthly (Which months? _____)
 - c. 2-3 times a year
 - d. ___ Once a year or less
5. Does anyone ever test the soil on your lawn to determine how much fertilizer is needed? ___ Yes ___ No
6. Do you use a Phosphorus-free fertilizer? ___ Yes ___ No ___ Unsure
7. Where do you wash your personal vehicle(s)?
 - a. ___ At home
 - b. ___ At a commercial car wash
 - c. ___ Both at home and at a commercial car wash
 - d. ___ Other: _____
8. If you wash your car at home, where does the soapy water flow (check all that apply)?
 - a. ___ Into the grass, dirt or gravel
 - b. ___ Into the street or driveway
 - c. ___ Directly into a drain
9. Do you change your own oil? ___ Yes ___ No
10. If yes, how do you dispose of the used oil?
 - a. ___ In a designated lawn area
 - b. ___ With other garbage (dumpster, trash bags, etc)
 - c. ___ Pour it down a storm drain
 - d. ___ Take it to a recycling center
11. Do you walk your pet? ___ Yes ___ No ___ Do not have pet
12. How often do you pick up you pet waste (either during your walk or in your yard?)

a. ___ Always	d. ___ Rarely
b. ___ Often	e. ___ Never
c. ___ Sometimes	f. ___ Do not have pet
13. Do construction sites in your community lose silt or mud from on-site during rain events? ___ Yes ___ No ___ Unsure
14. Does runoff from your neighborhood enter a storm drain? ___ Yes ___ No ___ Unsure
15. Does runoff from the storm drain enter into a nearby creek, lake or detention pond? ___ Yes ___ No ___ Unsure



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16. Is your home connected to a ___ community sewer line or ___ septic tank?
17. If septic tank, how often do you have it pumped out?
 y. ___ Every 1-3 years b. ___ Every 3-5 years c. ___ More than every 5 years
18. How would you rate each of the following items as a potential source of water pollution to Spring Lake (1 = Significant, 2 = Somewhat Significant, 3 = Neutral, 4 = Somewhat Insignificant, 5 = Insignificant)
- z. ___ Wastewater discharges from manufacturing plants
 - aa. ___ Wastewater discharges from sewage treatment plants
 - bb. ___ Pollutants that are deposited from the atmosphere, like acid rain
 - cc. ___ Rainfall runoff from parking lots, streets, and other vehicular traffic areas
 - dd. ___ Rainfall runoff from farms and agricultural operations
 - ee. ___ Rainfall runoff from forested or undeveloped land areas
 - ff. ___ Rainfall runoff from developed residential land areas
 - gg. ___ Rainfall runoff from commercial and industrial land areas
 - hh. ___ Soil eroding from construction sites or disturbed land areas
 - ii. ___ Soil eroding from unstable streambanks
 - jj. ___ Oil, grease, household chemicals, and other wastes intentionally discarded
 - kk. ___ Accidental spills of industrial and/or commercial chemicals
 - ll. ___ Discharges from failing or inadequate septic tanks or septic systems
 - mm. ___ Discharges from failing or inadequate sanitary sewer pipes or systems
 - nn. ___ Trash that gets dumped by boaters and other recreational users
 - oo. ___ Natural waste matter from by wildlife
19. Of all the possible sources of water pollution listed in Question 18, please select (by letter) and rank those which you think are the five largest sources of pollution in Spring Lake.
4. _____ 4. _____
 5. _____ 5. _____
 6. _____
20. Do you spend time on the water for recreation? ___ Yes ___ No
21. Spring Lake continues to have high levels of phosphorus, which can lead to algae blooms, dead fish, and bad odors. Historically, Spring Lake has seen phosphorus levels of 150 ppb (parts per billion), but that has dropped to levels of 30 ppb since the application of the alum treatment by GVSU. A healthy lake has levels of 20 ppb or less.
- Would you be willing to pay \$50 per year if the phosphorus levels in Spring Lake could be reduced to less than 20 ppb? ___ Yes ___ No
22. If you answered yes to Question 21, would you be willing to pay \$100 per year? ___ Yes ___ No
23. If you answered no to Questions 21, would you be willing to pay \$25 per year? ___ Yes ___ No
24. What is your zip code? _____
25. What is your annual household income?
- pp. ___ Less than \$20,000 d. More than \$60,000
 - qq. ___ \$20,000 - \$40,000 e. I'd rather not say
 - rr. ___ \$40,001 - \$60,000
26. Are you ___ Male or ___ Female?
27. Are you ___ less than 18 ___ 18-35 ___ 35-55 ___ over 55 years old?



REIN IN THE RUNOFF Water Quality Survey

You are being asked to voluntarily provide specific information on this water quality survey. The information you provide will be used to help the Annis Water Resources Institute (AWRI) and the Rein in the Runoff Project Team understand the general level of knowledge held by survey respondents about the connections between stormwater runoff, human activities, and water quality. AWRI and the Project Team will use this information to target its stormwater educational efforts in the communities surrounding Spring Lake and Norris Creek. The information provided in this survey will also help AWRI and the Project Team determine the amount that residents might be willing to pay for improved water quality in Spring Lake, the Grand River and Lake Michigan.

AWRI and the Project Team estimate that this survey will take approximately 10-15 minutes to complete. All individual responses will remain confidential and anonymous; only summary statistics will be reported. If you have any questions about this water quality survey or the Rein in the Runoff Project, please contact Alan Steinman or Elaine Sterrett Isely at the AWRI: (616) 331-3749

Please also visit the Rein in the Runoff website: <http://www.gvsu.edu/wri/reintherunoff>