



Report Form Water Quality of Streams and Lakes (Ages 9-11)



No. 20

Name: _____ County _____

Dates of observations: _____

Year working on project (circle one): 1st 2nd 3rd

Report on either (a) 2 streams or 2 lakes or (b) one stream, lake or pond at two different times of the year. Complete a separate report form for each stream or lake and for each observation. Hole punch and put your report form and any extra pages in a folder with brads or a 3-ring binder. This will prevent any pages from getting lost.

Safety: Always go with an adult to your stream. When testing a the stream or lake do not attempt to take any measurements unless it is safe to do so. Do not sample in fast moving or deep water. Wear the appropriate clothing for the site (old tennis shoes, long pants). If the stream or lake is on private property, be sure to get permission before going to the site.

Location of stream or lake, including a map (e.g., 4 miles east of Ada on Highway 1)

Take four photographs which show an overall picture, of the project area. One of these pictures should be an overall view of the stream, with the others showing major characteristics present along the stream. Include these photographs with your project and a brief statement explaining why you chose to photograph these areas. Label the pictures according to site and direction of view. Example: "View of vegetation along north shore" or "view of vegetation on west bank (facing downstream)"

Try to answer the following questions. Be as specific as possible. Add any other information that you think is important at the bottom of each section. Refer to fact sheet Lit # 19, **Water Quality of Streams and Lakes** for explanation and illustrations.

Bank/Shore

1. What is the slope of the bank? _____gradual _____steep _____undercut _____other (If other, please describe)

2. What is the soil type? (check the most appropriate one) _____sandy _____silty _____clay _____rocky
_____gravelly _____other (If other please describe) _____

3. Is the bank eroded? (check the most appropriate one) _____Heavily _____Somewhat _____Not much erosion

4. Is there vegetation growing on the shore or bank? ____yes ____no If yes, does it seem to hold the soil in place?
____yes _____no Describe the vegetation. (trees, flowers, grass, bushes) _____

5. Describe what is near the shore or bank? (houses, pastures, roads, gardens, cropland, woods, parking lot, shopping center, other) _____

6. Are there any wild or domestic animals living on or in the shore or bank? (If not sure, look for tracks) ____yes ____no
What kinds of animals? List the animals you can identify. _____

7. Is there any trash or evidence of some type of pollution? ____yes ____no If yes, what kind? _____

Stream and Lake Bottom

1. What is the soil type? ____sandy ____rocky ____gravel ____other (explain) _____

2. Are there any plants growing on the bottom? ____yes ____no If yes, are they ____submergent ____emergent
____floating Is there any algae? ____yes ____no Describe the plants you see. _____

3. Can you find any animals or insects living on the bottom? Hint: You may need to turn over some rocks to see if there are any living under them, or pass a small dipnet through areas of plants or over the surface of the mud on the bottom. Look carefully, some are very, very tiny. ____yes ____no Describe any animals you see and describe their habitat.

4. Is there any garbage or other material on the bottom that does not belong there? ____yes ____no Describe.

The Water and What Lives There

1. Is the water ____clear ____muddy? If this is a lake, what is the secchi depth (in feet and inches)? _____

2. Is there any garbage or pollution floating in the water? ____yes ____no
3. Is there any natural debris floating on the water? (logs, leaves) ____yes ____no Describe the debris. _____

4. Are there any fish or other animals living in the lake or stream? Describe them and tell how you were able to observe them. ____yes ____no

5. If this is a stream, what is the velocity of the current? (Distance/time) _____
6. What is the color of the water? ____green ____orange-red ____muddy/cloudy ____milky/white
 ____multi-colored (oily sheen) ____clear ____others (If other, please describe) _____

7. How is this stream being used by people now? (Drinking, washing clothes, waste disposal, transportation, watering livestock, recreation) _____

History

1. Interview an adult about the history of a stream or lake that they have lived by. On a separate sheet of paper, list the name of the person you interviewed, the length of time they have lived near the waterbody, and some the questions that gave you useful information and their answers. Also, write a short paragraph telling what you learned from the interview. (Limit to one page)
2. **(Optional)** Did you locate any old photos? If so, write a paragraph about what you learned from them. Include a hand drawn map or diagram, if it will help the reader understand the changes.

Fair Exhibits

Your fair exhibit must have two completed report forms.

Be sure to include:

- a map with location marked
- four photos of the stream
- history interview and optional photos

2nd and 3rd year projects

1. Write one or more paragraphs (not to exceed one page) comparing what you found this year with previous years and describing any changes. Include previous years reports in your folder or a 3-ring binder.