

Water Quality

name: _____

date: _____

class: _____

Welcome to the Water Quality Student-Led Assignment, a webquest designed to help you become more aware of the science behind keeping water sources clean and able to be used by the populations surrounding them. Save a copy of this assignment to a cloud storage platform, flash drive or computer. Follow your teacher’s directions for submission of your assignment.

Before you begin this activity, you will need a computer with internet access and a writing utensil. Complete the assignment by visiting each of the linked items and answering the following questions. Record your answers in an electronic document or on notebook paper. Follow your teacher’s directions for assignment completion and submission.

Activity 1: Learn about careers in the industry

Students will explore the career opportunities by completing [this project \(grownextgen.org/workspace/uploads/files/natural-resources-careers.pdf\)](https://grownextgen.org/workspace/uploads/files/natural-resources-careers.pdf). Here is the rubric that will be used to grade your project:

	4	3	2	1
Required elements	The poster includes all required elements as well as additional information.	All required elements are included on the poster.	All but 1 of the required elements are included on the poster.	Several required elements were missing.
Labels	All items of importance on the poster are clearly labeled with labels that can be read from at least 3 ft. away.	Almost all items of importance on the poster are clearly labeled with labels that can be read from at least 3 ft. away.	Many items of importance on the poster are clearly labeled with labels that can be read from at least 3 ft. away.	Labels are too small to view <i>or</i> no important views were labeled.
Graphics: relevance	All graphics are related to the topic and make it easier to understand. All borrowed graphics have a source citation.	All graphics are related to the topic and most make it easier to understand.	All graphics relate to the topic. One or two borrowed graphics have a source citation.	Graphics do not relate to the topic <i>or</i> several borrowed graphics do not have a source citation.
Attractiveness	The poster is exceptionally attractive in terms of design, layout, and neatness.	The poster is attractive in terms of design, layout, and neatness.	The poster is acceptably attractive though it may be a bit messy.	The poster is distractingly messy or very poorly designed. It is not attractive.
Grammar	There are no grammatical/mechanical mistakes on the poster.	There are 1-2 grammatical/mechanical mistakes on the poster.	There are 3-4 grammatical/mechanical mistakes on the poster.	There are more than 4 grammatical/mechanical mistakes on the poster.

Activity 2: Explore the issue

Students can complete the [“Water Quality” e-learning course \(elearning.grownextgen.org\)](https://elearning.grownextgen.org) to gain background knowledge about this topic. In this course, you will describe the factors used to judge water quality, identify activities that might lead to harmful algal blooms, explain the process and effects of cultural eutrophication, and describe the methods farmers can use to reduce the risk of cultural eutrophication. You will also hear from a soybean farmer about the methods he uses to prevent runoff.

- Record five things you learned from the e-learning course:

- In what ways has the growing population of the world impacted water quality?

3. What would you tell a consumer about water quality after completing the e-learning course?
4. Did your opinion about water quality change after completing the e-learning course? Why or why not? Be specific.

Activity 3: Connect to your life

Research the area near your home. To do so, please enter your home address into **Google Maps** (maps.google.com). Then scroll through the map by zooming in, scanning left/right, and zooming out to examine the area near your home. Below, please identify landmarks or buildings that would cause non-point (source not easily identified) and point (source easily identified) pollution.

Address examined:

Sources of non-point pollution:

Sources of point pollution:

What were the biggest concerns in your community for pollution? Why?

Talk to your teacher about testing water quality in your watershed and how to improve/protect them.