

STUDENT NAME:

CLASS:

DATE:

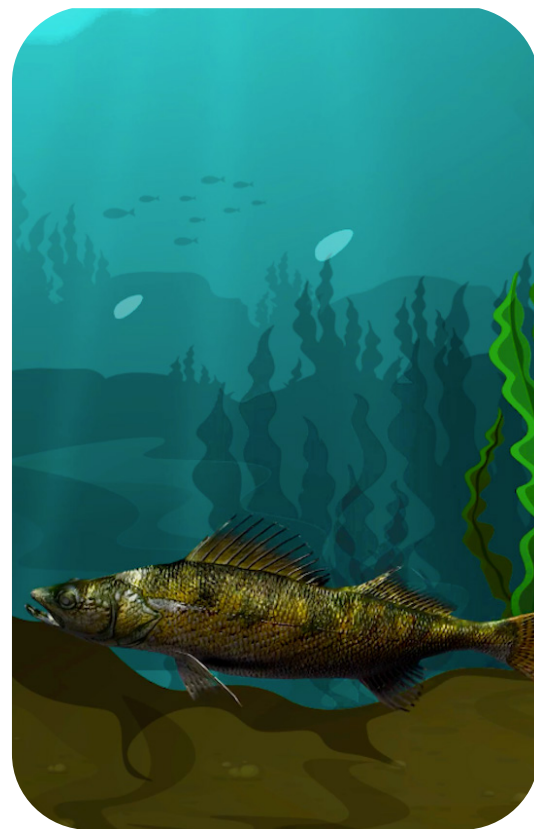
Howdy, Fisheries Biologist.

The Maple River is in dire need of your help. Due to heavy pressures from humans and their recreational activities, the river's ecosystem is changing drastically. Pollution, habitat degradation, and overfishing are just some of the problems you have seen in the area. Because you value all life, you want what is best for the entire ecosystem. The state wildlife agency plans to alter the river's habitat to improve river recreation. But you worry that if we do not prioritize the health of the ecosystem first, the entire biological community will be affected ... including humans.

The Natural Resources Board will be hearing the public's opinions before making a final decision on a management plan for the river. This is a prime time for you to voice your opinions and share your vision of how the river should be managed. You and other walleye anglers will create and present a poster that illustrates your beliefs on how the river should be managed and regulated. But plan with care ... for your presentation could save the future of your livelihoods!

Consider the following topics that you have identified as real concerns:

- Parks and residential areas have cleared debris, logs, and rocks from riverbeds and shorelines, which may not follow shoreline regulations. You understand that removing brush and trees from the shoreline can cause erosion, increase the number of pollutants entering the river, and remove habitat for fish and other organisms.
- Boaters have unintentionally introduced the invasive species called zebra mussels into the river, which has profound impacts on water quality and the food web. You believe the agency should take action in removing the invasive species. And you think there should be ways for the boaters to wash or inspect their boats for invasive species to prevent this from happening again.
- You believe the river needs more aquatic vegetation and weed beds because they are important for supplying oxygen to the water and providing cover for organisms.
- You think anglers are not following the size and bag limits for fishing, which is lowering the fish populations. You believe anglers should be supervised or reminded about this.
- You have seen plastic trash polluting the water and believe there should be more places for anglers and park users to throw away trash.
- Although removing the dam would decrease the water levels and recreational opportunities, it would restore the natural flow patterns that wildlife and plants are adapted to.



Analyze the map of the river handed out by your teacher.

How would you alter the map to address your concerns? With signs? Changes in rules? Or include additional buildings or resources? **Research and brainstorm with your teammates. Then illustrate your own map of the river on a poster board.** You will present your poster to the class with supporting research and reasoning for changes on the map. But make sure it is an eye-catcher. Let your creativity shine and use paints, markers, construction paper, or glue on natural resources like pebbles, grass, moss, sticks to recreate the river habitat and human developments. Now go make a great poster that will wow your audience.

