

ACTIVITY 3: CREATE A EUTROPHICATION MODEL

The purpose of this activity is for students to create a model that will communicate how algal blooms (and harmful algal blooms) happen in a lake.

First, inform students that they will be working with their groups to create a eutrophication model that explains how algal blooms and harmful algal blooms occur. Elicit student suggestions about what makes for a good model (e.g., a visual representation that explains how something works) and what sorts of aspects of eutrophication should be included in the model.

Then, provide students with chart paper and markers, or large dry-erase boards and whiteboard markers, to construct their models with their groups. Monitor group activity as students work.

Next, have students display all of their models next to each other along a wall space so that everyone can see all of the models. Provide students time to do a gallery walk and examine each group's model.

Last, engage students in a whole-group discussion about the models, getting them to compare, and make connections between, all of the models and decide if the model would adequately explain Lake Superior.

Try to arrive at what an ideal eutrophication model of algal blooms would look like based on the best features of all the boards. When finished, have students sketch the ideal model in their notebooks.

Figure 1: an example model of eutrophication

How Do We Get Harmful Algal Blooms (HABs)?

Harmful algal blooms are the results of a process called eutrophication — which occurs when the environment becomes enriched with nutrients, increasing the amount of plant and algae growth to lake waters.

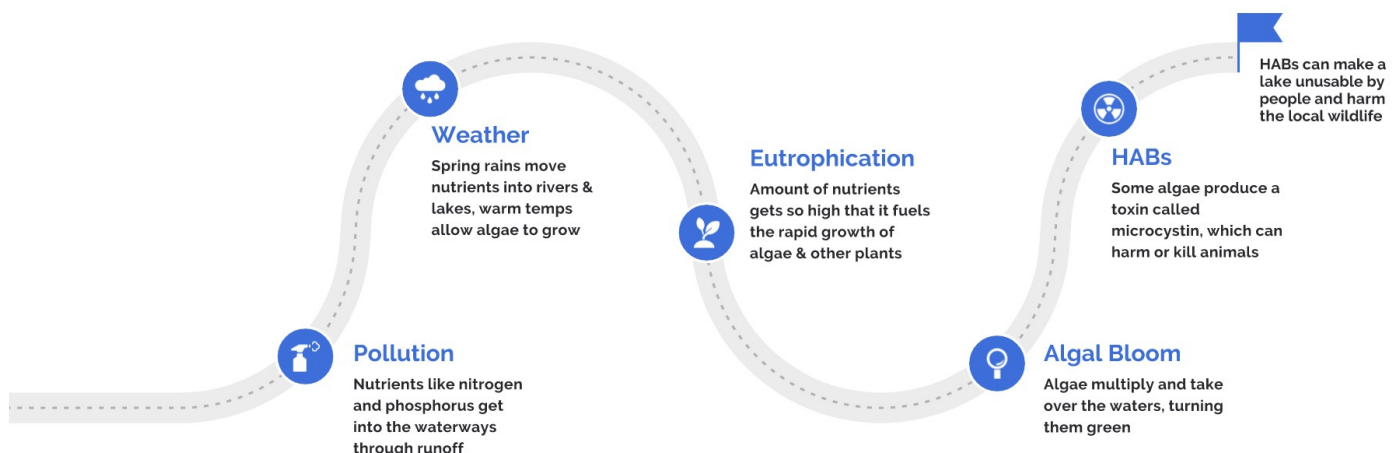


Image Credit: Gary Abud, Jr.