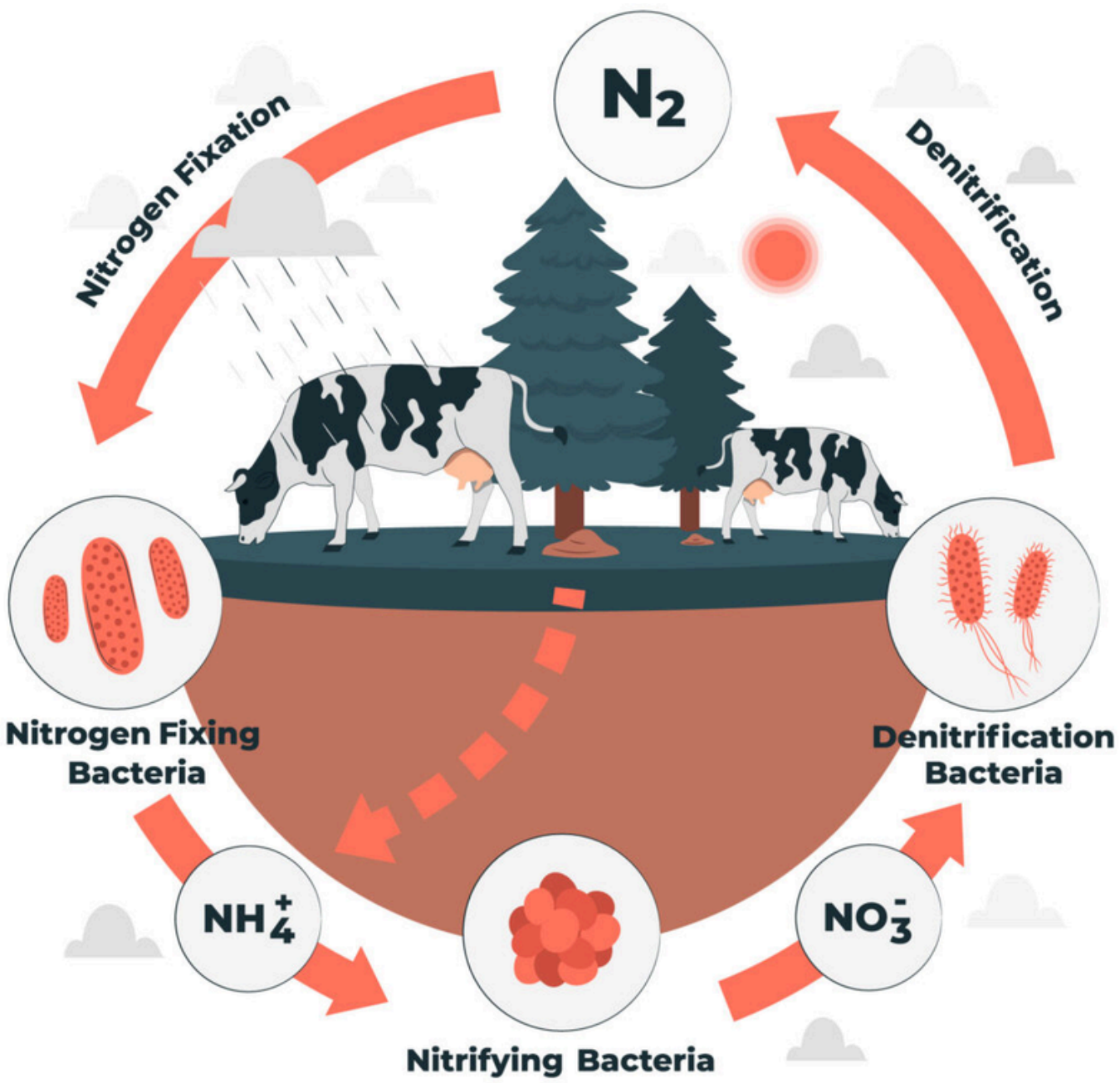
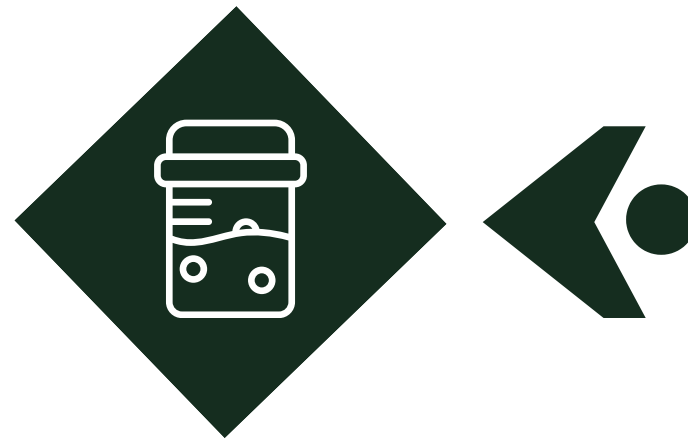


# NITROGEN

## A Key Nutrient in Monitoring Water Quality

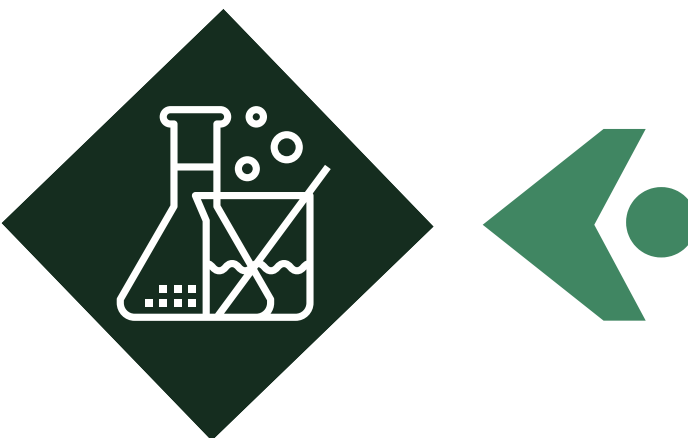


**Nitrogen, an essential nutrient, is vital for plant growth, but too much nitrogen can have harmful environmental effects.**



### COLLECT SAMPLES

Water and sediment samples are collected from streams and lakes



### INSTRUMENT ANALYSIS

Nitrogen concentrations are measured to determine if there is a threat to water quality

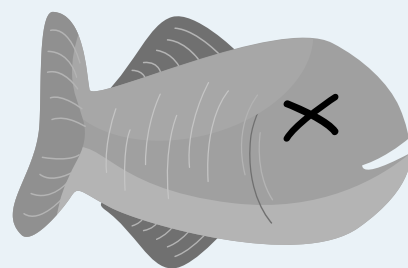
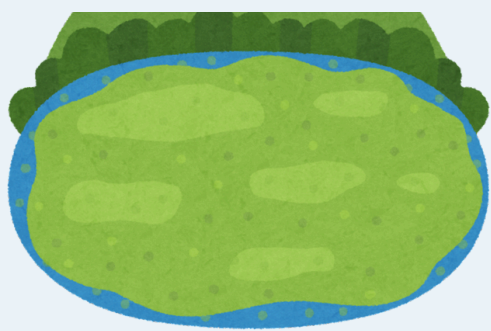
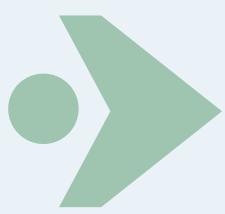


### REPORTING DATA

Data are analyzed for quality and reported to project partners

**Eutrophication** occurs when nutrients accumulate to high concentrations in the water. Algae take in nutrients like nitrogen to grow, and high amounts of nitrogen can form algal blooms.

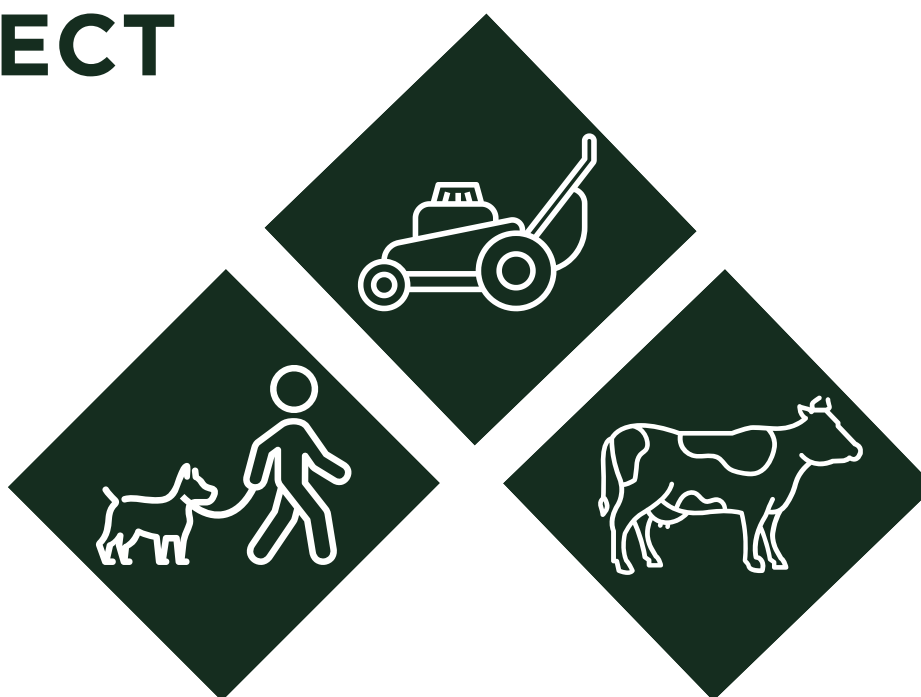
**Algal blooms** can block sunlight and use large amounts of oxygen in the water, which can cause serious problems, even death, for other aquatic organisms.



Nitrogen can get into water from many sources, usually when heavy rains generate runoff. Sources of nitrogen include chemical fertilizers, animal manure, and wastewater treatment facilities.

### PRACTICE MAKES PERFECT

- Limiting applications of lawn fertilizers.
- Taking proper care of animal wastes.
- Controlling the flow of manure and fertilizer being applied to farms and fields.



### Did you know?

Too much nitrogen in drinking water can restrict oxygen transport in the bloodstream. This can be harmful to infants under 4 months and young livestock.

Interested in learning more about nutrient monitoring projects in your community?

[www.otterlab.org/analytical](http://www.otterlab.org/analytical)