Winter Roads

Land Affects the Water.

What happens on land affects the water.

Reintroduce Dr. Sujay Kaushal's story with the following quote from the video: "Water is the reflection of all the bad water quality things we do on land."

Discussion

Key Idea: What happens on land affects the water.

Question: What does this statement mean?

Answer: This quote means that whatever happens on land ends up affecting the water, because everything eventually ends up running off into the water.

Question: Looking at your local surroundings, what do you think the water quality is like in your neighborhood?

Answer: Probably not very high. New York City is very densely populated with lots of asphalt, trucks, and cars, all of which affect nearby water quality.

Relate the quote to why Dr. Kaushal tested streams in forested areas.

Discussion

Key Idea: Dr. Sujay Kaushal chose to compare urban, suburban, and forested streams to gauge human impact on streams.

Question: So if Dr. Kaushal wanted to determine what we were doing on land by testing the water, why does he bother to test forested areas where people do not even live?

Answer: Dr. Kaushal tested both areas because he was interested in comparing water in areas with high levels of human disturbance to areas with low human impact.

Question: Would his research design have been strong if he had only tested the urban stream water? Why or why not?

Answer: If Dr. Kaushal had only studied the urban stream, he would be unable to gauge human impact because he would not know the salt level normally found in Baltimore streams that are undisturbed by people. By studying urban and forested areas, he was able to compare and give meaning to his data.