Water and Movement

Evaluate evidence about resources, hazards, and people

ENV.4.2 "Evaluate data and other information to explain how key natural resources (e.g., water sources, fertile soils, concentrations of minerals, and fossil fuels), natural hazards, and climate changes influence human activity (e.g...."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline changes in water or weather, circle effects on people's health or movement, and number two years in the table that help you compare water conditions with departures.

A Town Between Drought and Flood

1 Cedar Bend is a fictional farming town beside a river that supplies irrigation water. Its wells supply drinking water when the river runs low. Many families earn money from crops grown in fertile floodplain soil. Dry years leave less water for fields and wells. Town leaders kept the sample records below to look for changes over time.

2 The records show rainfall, reports of dry household wells, and households that left Cedar Bend in each listed year. These figures are an invented classroom dataset, not measurements from a real town. A household might leave because of farm income, water problems, a new job, or several reasons together. The table cannot show anyone's reason for leaving.

CEDAR BEND SAMPLE RECORDS

Year	Annual rainfall (mm)	Homes reporting dry wells	Households leaving town
2010	700	4	6
2020	540	18	20
2025	410	39	41

3 Without safe alternatives, dry wells can push families to use untreated water, which raises the risk of illness. In 2025, a severe storm flooded the only road to the clinic for two days, delaying care even though the storm added rain. If conditions grow hotter, increased evaporation could worsen water shortages.

2 ANSWER WITH EVIDENCE

Use the passage

1. Compare 2010 and 2025. What pattern in rainfall and departures suggests that water shortages may have influenced movement?

2. How could the change in dry-well reports affect people's health? Use the table and passage.

3. How did the 2025 storm create a health hazard despite adding rain?

4. Why can't the table establish that water shortages caused every departure?

3 YOUR TURN

Your own words

Write a brief recommendation to Cedar Bend's leaders. Propose one action to reduce water-related health risks and another to reduce pressure to leave, using at least two table values and the storm detail as evidence. Explain one limit of the records.

Water and Movement

PART 1 · READ AND MARK

Underline changes in water or weather, circle effects on people's health or movement, and number two years in the table that help you compare water conditions with departures. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Compare 2010 and 2025. What pattern in rainfall and departures suggests that water shortages may have influenced movement?	**Rainfall fell from 700 to 410 mm while departing households rose from 6 to 41. This pattern suggests a possible link but does not prove why families left.**
2	How could the change in dry-well reports affect people's health? Use the table and passage.	**Homes reporting dry wells rose from 4 in 2010 to 39 in 2025. Without safe alternatives, affected families might use untreated water and face a higher risk of illness.**
3	How did the 2025 storm create a health hazard despite adding rain?	**Flooding closed the only road to the clinic for two days, delaying care. Storm rainfall did not prevent that hazard.**
4	Why can't the table establish that water shortages caused every departure?	**The table records how many households left, not their reasons. Families could have left for jobs, farm income, water problems, or several reasons together.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Cedar Bend should offer safe drinking water and test wells when they run dry. Homes reporting dry wells increased from 4 in 2010 to 39 in 2025, so more families may need a safe alternative. Leaders should also help farms use less irrigation water to protect work in a dry year. They must plan a way to reach medical care when flooding closes the clinic road, as it did for two days in 2025. The records do not show why each household left, so these actions should be reviewed with residents.

Accept other feasible actions if students link them to the stated evidence and explain how they could affect health or decisions to leave. Students should not claim the table proves that drought caused departures.