

Changed Landscapes

Analyze how people change environments and the results of those changes.

5.8.B “analyze the positive and negative consequences of human modification of the environment in the United States.”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each action people take to change the environment. Circle each positive consequence and box each negative consequence so you can compare the results.

People Shape Places

- ① People in the United States change land and water to meet needs. In California’s Central Valley, farmers built canals to carry water from rivers to dry fields. The canals helped growers raise crops in places with little rain. However, taking large amounts of river water can leave less water for fish and wetlands. Some wetlands shrink when their water supply changes.
- ② Near many cities, people paved roads, parking lots, and neighborhoods over soil. These changes made travel and housing easier for many people. Yet hard surfaces do not soak up much rain. Storm water can rush into streams, carrying oil, trash, and soil. Fast runoff can also increase flooding. Cities can add rain gardens and porous pavement to slow and clean the water.
- ③ In the Pacific Northwest, dams changed several rivers. Dams store water, reduce some flood risks, and produce electricity without burning coal or gas. They can also block salmon from reaching places where they lay eggs. Fish ladders help salmon pass some dams, but they do not solve every problem. When people modify an environment, they must compare who benefits with what habitats or resources may be harmed.

2 ANSWER WITH EVIDENCE _____ Use the passage

- 1** How did canals in California help people, and what negative consequence could they have for the environment?

- 2** Explain how paving land can lead to both polluted streams and more flooding.

- 3** What is one positive consequence of dams and one negative consequence for salmon?

- 4** How do rain gardens, porous pavement, and fish ladders try to reduce negative consequences of human changes?

3 YOUR TURN _____ Your own words

Choose one change people could make to a local environment. Write three sentences that explain one benefit, one possible harm, and one way people could reduce the harm.

PART 1 • READ AND MARK

Underline each action people take to change the environment. Circle each positive consequence and box each negative consequence so you can compare the results. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	How did canals in California help people, and what negative consequence could they have for the environment?	Canals carried water to dry fields so farmers could grow crops. Taking river water can leave less water for fish and wetlands, causing wetlands to shrink.
2	Explain how paving land can lead to both polluted streams and more flooding.	Paved surfaces do not soak up much rain. Storm water rushes into streams carrying oil, trash, and soil, and the fast runoff can increase flooding.
3	What is one positive consequence of dams and one negative consequence for salmon?	Dams can store water, reduce some flood risks, or produce electricity without burning coal or gas. They can block salmon from reaching places where they lay eggs.
4	How do rain gardens, porous pavement, and fish ladders try to reduce negative consequences of human changes?	Rain gardens and porous pavement slow and clean storm water from paved areas. Fish ladders help salmon pass some dams so they can reach spawning areas.

PART 3 • YOUR TURN (SAMPLE ANSWER)

A town plans to build a bike path through an empty grassy area. The path could give people a safe place to ride, but construction could remove shelter for small animals. The town could leave a wide strip of native plants beside the path.

Accept any reasonable human modification with a clear benefit, a connected environmental harm, and a realistic way to reduce the harm. Students may choose different local places and solutions.