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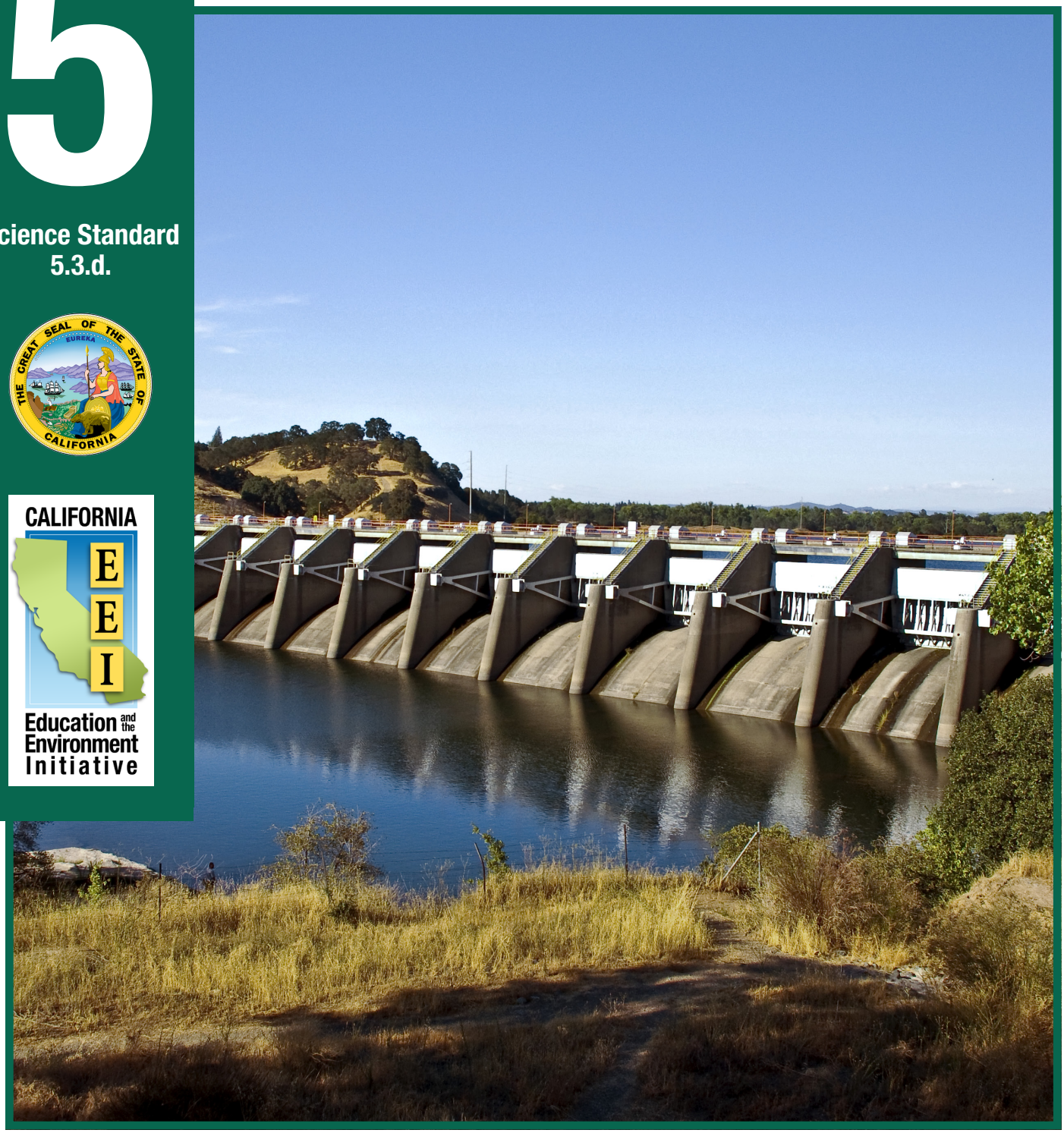
Science Standard
5.3.d.

Student Workbook

California Education and the Environment Initiative



Our Water: Sources and Uses

California Education and the Environment Initiative

Approved by the California State Board of Education, 2010

The Education and the Environment Curriculum is a cooperative endeavor of the following entities:

California Environmental Protection Agency
California Natural Resources Agency
Office of the Secretary of Education
California State Board of Education
California Department of Education
California Integrated Waste Management Board

Key Leadership for the Education and Environment Initiative:

Linda Adams, Secretary, California Environmental Protection Agency
Patty Zwarts, Deputy Secretary for Policy and Legislation, California Environmental Protection Agency
Andrea Lewis, Assistant Secretary for Education and Quality Programs, California Environmental Protection Agency
Mark Leary, Executive Director, California Integrated Waste Management Board
Mindy Fox, Director, Office of Education and the Environment, California Integrated Waste Management Board

Key Partners:

Special thanks to **Heal the Bay,** sponsor of the EEI law, for their partnership and participation in reviewing portions of the EEI curriculum.

Valuable assistance with maps, photos, videos and design was provided by the **National Geographic Society** under a contract with the State of California.

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Name: _____

Instructions: Use information from this lesson and the **Water for Life** wall map to answer the following questions.

1. Identify at least five sources of fresh water found in natural systems in California. (5 points)

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_____

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2. List at least three places water may travel after being stored in a freshwater reservoir. (3 points)

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Name: _____

Instructions: Complete the chart below by following these steps:

1. In the first column, list 10 ways people use water. Choose from things you notice in your after-school activities, at home, on the television, or going back and forth to school.
2. In the second column, for each use of water, write the category the water use fits in (personal, community, agricultural, or industrial).
3. In the third column, tell whether each use requires water that is potable or non-potable.

Human Use 1 point each	Category 1 point each	Water Quality Needed 1 point each

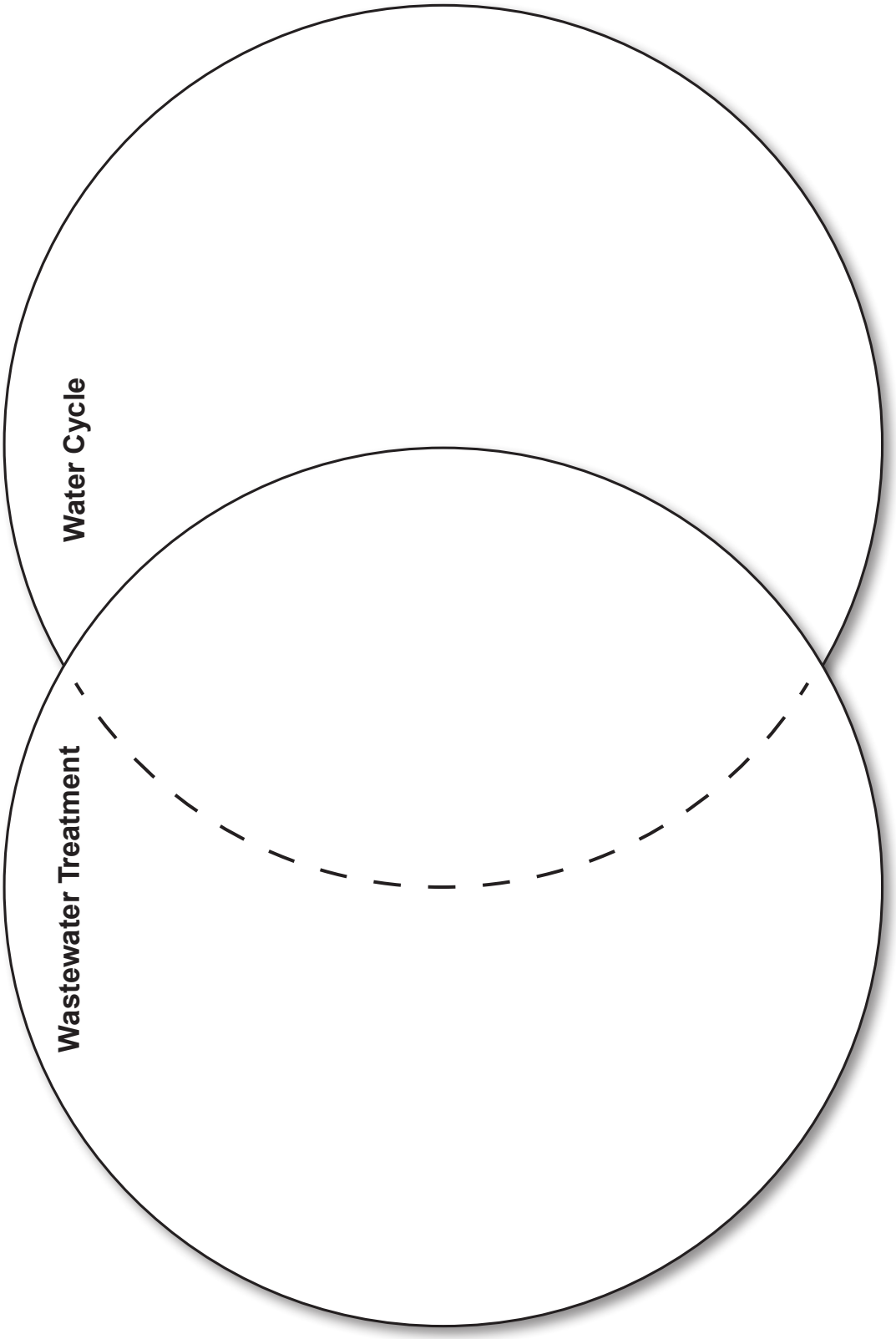
Name: _____

Human Use 1 point each	Category 1 point each	Water Quality Needed 1 point each

Name: _____

Part 1

Instructions: Think about how the natural water cycle and wastewater treatment plants make water clean. If both systems have something in common, list it in the area where the circles overlap. If only one system has a feature, list it in the outer part of the correct circle.



Name: _____

Part 2

Instructions: Complete the tasks below in the spaces provided.

1. Write one paragraph that explains and gives at least two reasons why fresh water is a limited resource. (2 points)

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2. Describe the primary, secondary, and advanced methods used in wastewater treatment systems. (3 points)

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Name: _____

3. Describe how wastewater treatment methods are similar to some ways natural systems clean water. (3 points)

Name: _____

Instructions: Complete the chart on the following page as you read the **Water Conservation Case Studies.**

- In the first column, describe how water is being conserved in each case study.
- Under "Who Uses Them?" put an "X" under the person or group of persons most likely to do the activity. You may choose more than one answer.
- Under the "Effect on Water Conservation" column, put an "X" under how much you think the activity could help conserve water. "Could add up" means the action is one that one person or business might take, but the effect would become greater if many took the same action. You may choose more than one answer.

Name: _____

Case Study	Water Conservation Activities	Who Uses Them				Effect on Water Conservation		
		Person or Household	Group of People	Community	State	Small	Large	Could Add Up
Case Study #1								
Case Study #2								
Case Study #3								
Case Study #4								
Case Study #5								
Case Study #6								

Name: _____

Instructions: Choose one person to talk to about the ways in which water is being conserved in different parts off California. After talking to that person, fill out the survey below.

Who did you talk to about water conservation? (2 points)

_____

What four examples of water conservation activities did you talk about? (2 points each)

_____

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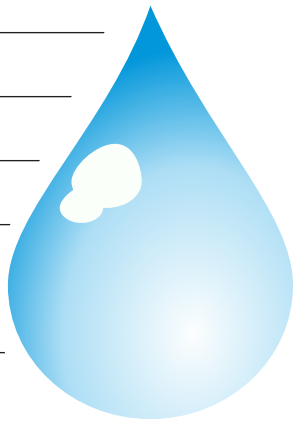

Name: _____

Instructions: Complete the following about your **Watershed Scenario**.

Describe at least two possible consequences of the change in the water situation on the ecosystems in the watershed.

Describe at least two possible consequences of the change in the water situation on the human communities in the watershed.

Name: _____

Instructions: Your group will give a five-minute presentation to the class on what is happening in the watershed your group has been assigned. Your presentation needs to:

- Tell the class what happened in your scenario. Use your own words. Do not repeat what is on the card.
- Show the class where your watershed is on the **Water for Life** wall map. Describe the features of your watershed. This could include things like mountains or rivers.
- Use your visual aid to describe the consequences of the change in your watershed for ecosystems and for people and their communities.
- Tell the class why you think those consequences might occur. Explain why they are important.

Name: _____

Instructions: Use the space on this page to take notes on the watershed presentations.

Name: _____

Instructions: Use information from this lesson to answer the following questions. (6 points each)

1. How can changes to water influence ecosystems? Include three examples.

2. How can changes to water influence people and their communities? Include three examples.

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