



NATIONAL
GEOGRAPHIC

GLOBAL ISSUES

Program Overview

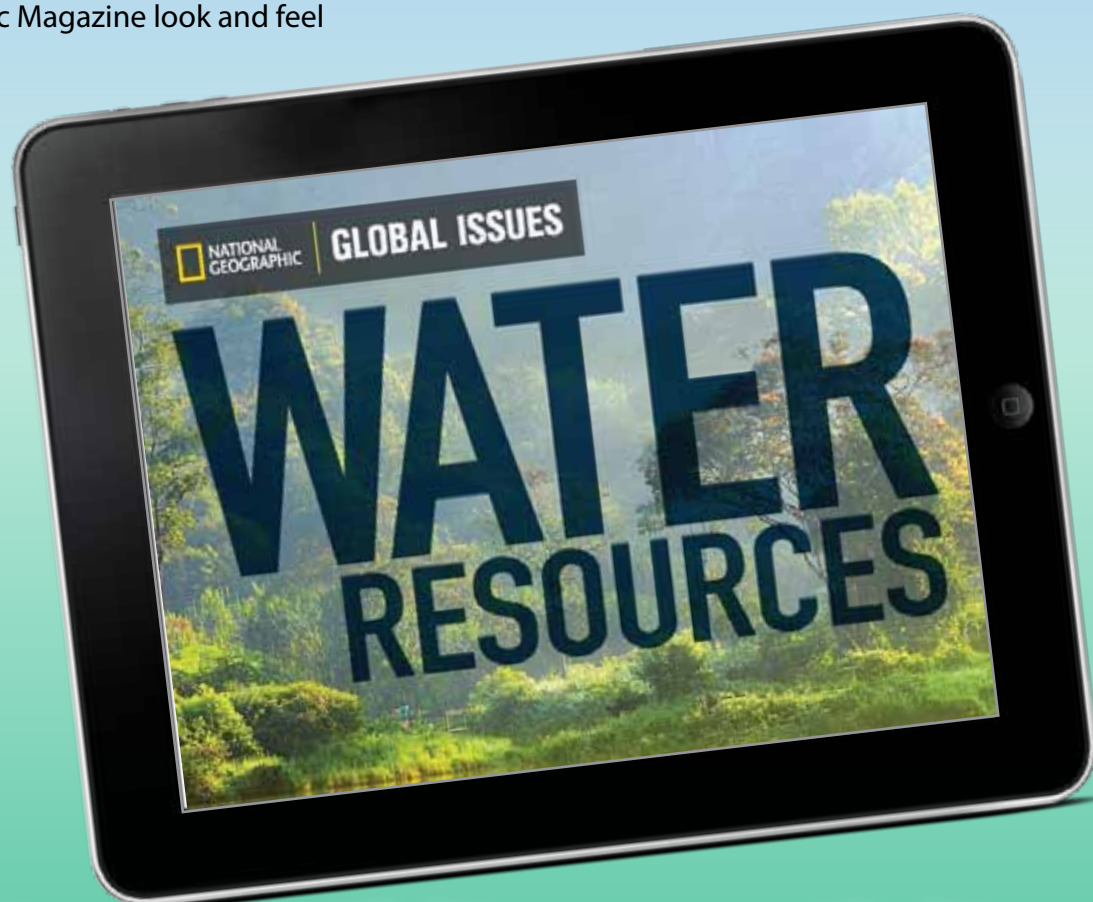
NATIONAL
GEOGRAPHIC
LEARNING

CENGAGE
Learning®

Bringing world issues into focus for all students

The Global Issues series consists of books at three reading levels covering the most important geographic and environmental issues of our time.

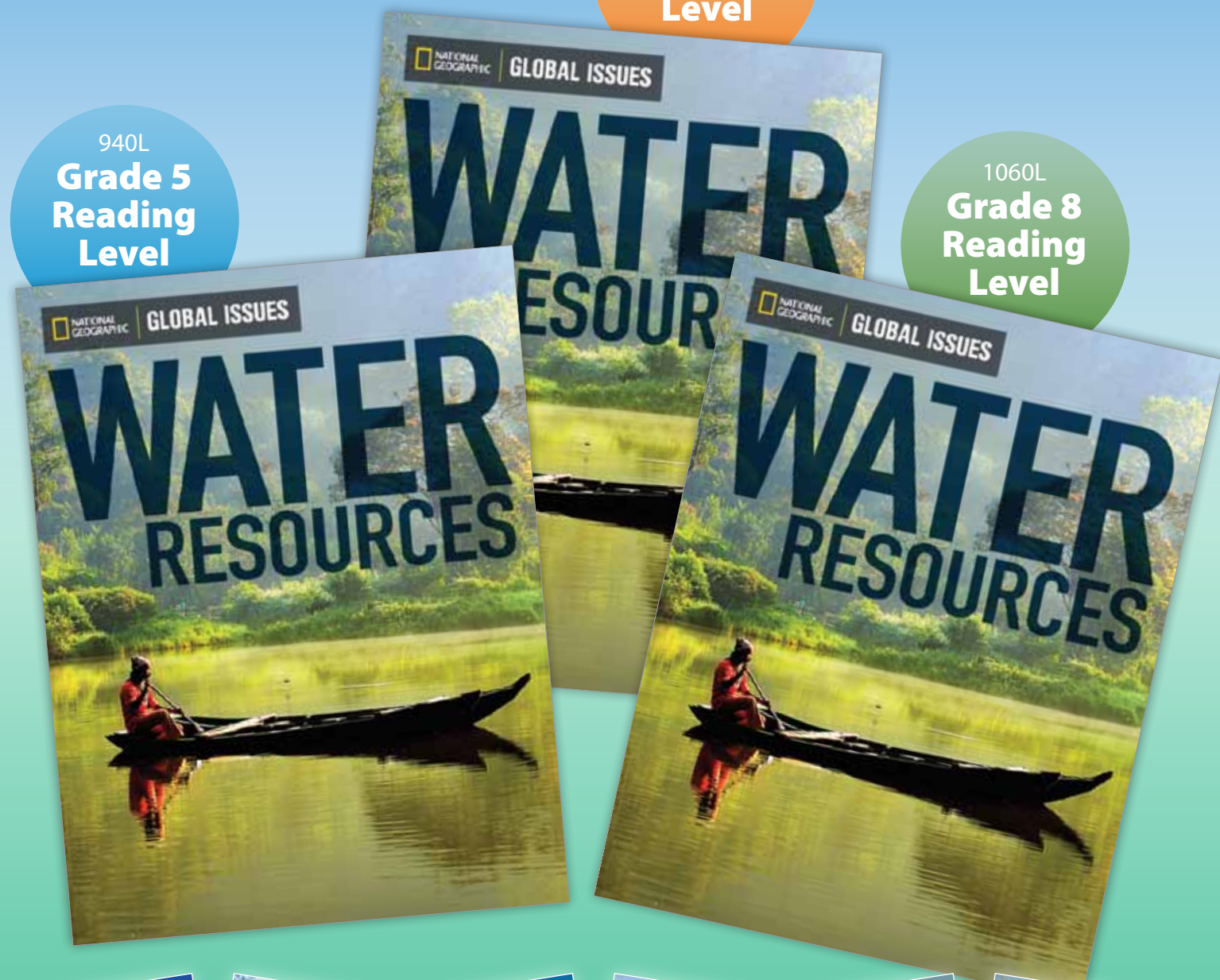
- Informational text for social studies and language arts
- Reinforces middle school writing modes:
 - » Explanatory, Argumentative, Narrative
- Interactive eBooks for tablets and smartphones
- National Geographic Magazine look and feel



940L
**Grade 5
Reading
Level**

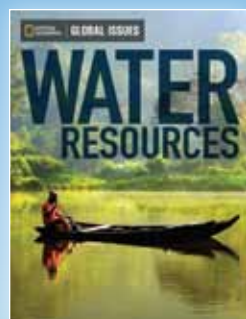
990L
**Grades 6–7
Reading
Level**

1060L
**Grade 8
Reading
Level**



Three reading levels (on level, below level, and above level) to reach every student.

Engage your students with issues that touch their lives



The student books feature dramatic photography, engaging writing, and a distinctive visual design to interest students in issues of global importance.

Introducing the Issue generates interest, explains an issue's global importance, and provides essential information.

An **Essential Question** gives students a focus and purpose for studying the issue.

Introducing the ISSUE

WATER WORLD

HOW IS POLLUTION THREATENING WATER QUALITY AROUND THE WORLD?

Since water covers two-thirds of Earth's surface, no one needs to worry about wasting it, right? Wrong! About 97 percent of the world's water is saline, or salty. That leaves only 3 percent for drinking and growing crops—and 2 percent of this freshwater is frozen in polar ice or trapped in underground rock layers called **aquifers**. Yet even freshwater isn't usable if it's polluted. If we want to preserve what little water we've got, we have to clean up our act.

WHERE WATER IS FOUND ON EARTH

Oceans 96.5%

Freshwater 3.5%

Source: U.S. Geological Survey

Water Resources Student Edition, pp. 4–5

Dramatic **photographs** in the tradition of National Geographic generate students' interest.

The **text** explains to students why the issue is so critical to the world—and to their futures.

Graphics and **diagrams** communicate important information and appeal to visual learners.

Each level has two case studies. **Case Study One** presents the issue in one area of the world. **Case Study Two** examines the same issue in a different region.

Key vocabulary terms appear in boldface type and are defined in context. All of the words appear in the **Visual Glossary** at the end of the book.

Case Study ONE

Protecting the AMAZON

A MIGHTY RIVER

The Amazon is the second longest river in the world. It starts high in the Andes Mountains, flows across Peru and Brazil, and empties into the Atlantic Ocean.

The Amazon River **basin** consists of the whole area drained by the river. The basin is enormous—more than 2.7 million square miles. It is also one of Earth's most diverse ecosystems. An **ecosystem** is a community of living organisms and their natural environment.

The Amazon River basin is home to approximately 10 million people and more than 30,000 plant species and 1,300 kinds of birds. It is also the world's pharmacy. Many medicines come from rare plants that grow only in the Amazon basin. We rely on the Amazon's vast rain forest to pump oxygen into the atmosphere—and freshen the planet's air.

AMAZON GOLD RUSH

Yet for years, the Amazon has faced several threats. For example, did you know that you can mine rivers for gold? Deep in the Amazon rain forest, miners scoop dirt from the riverbed. Then they treat the dirt with **mercury**, a highly toxic element that attaches to tiny gold flakes in the mud and makes the gold easier to collect.

After using the mercury, some of the mining companies dump it into the Amazon. The poisonous elements in mercury do not dissolve in water. When mercury flows downstream, it leaves destruction in its path.

Fish are the first to die. Tons of dead fish have washed up onto the banks of the Amazon. Then the animals that eat these fish are poisoned. Finally, people who drink polluted water or eat the poisoned fish and animals become sick. The mercury attacks people's brains and nervous systems and can injure unborn children.

This once fertile bank along the Amazon has been devastated by gold mining.

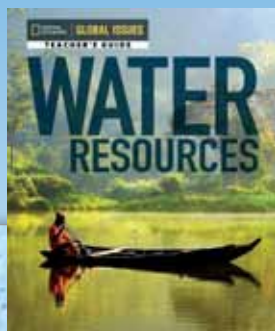
The Amazon River basin, the largest drainage basin in the world, covers about 40 percent of South America.

Water Resources Student Edition (on level), pp. 10–11

Spectacular **photographs** establish the geographical context and portray the visual dimension of an area.

Text clearly explains what's involved in the issue.

Streamlined but comprehensive teacher components create a dynamic classroom



One Teacher's Guide for each set of three student books gives teachers the resources to blend whole-class instruction with small-group activities.

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Each Teacher's Guide provides:

- Background information on the issue
- Pacing for 45-minute and 90-minute class periods
- Suggestions for differentiating instruction for five types of learners
- Blackline masters and rubrics for activities
- Assessments including tests at three levels and additional projects to measure comprehension



Introducing the ISSUE & WORLD HOT SPOTS

SE All Levels, pages 4-9

OBJECTIVE
To identify sources of water pollution and how some places around the world are affected by it

ESSENTIAL QUESTION
How is pollution threatening water quality around the world?

Introduce & Engage

Demonstrate Bring to class a clear pitcher, a clear glass, a mixing spoon, and small containers of the following items: cooking oil, dirt, red food dye, and small pieces of plastic. Fill the pitcher half full of water. Tell the class that the pitcher contains drinking water; then proceed to dump the oil, dirt, dye, and plastic into the water. Stir the mixture and pour some into the glass. Hold up the glass and ask, "Would anyone like a drink?" Ask students if they would like to use water like this to cook with, swim in, or wash their clothes. Tell them that water in this condition—and worse—is the only kind of water that some people have access to. Then explain that students will be reading about water pollution, an issue that is global because it affects people all over the world.

Preview Visuals and Headings Have students preview *Introducing the Issue* on pages 4-7 and *World Hot Spots* on pages 8-9 by looking at the visuals and skimming the headings. Note that some of the map captions in the three student books differ, reflecting the different case studies.

Industrial Water Pollution

World Hot Spots Map, pages 8-9

T20

Water Resources Teacher's Guide, pp. T20-T21

Guided Discussion provides questions intended to ensure student comprehension and stimulate class discussion.

GeoJournal directs students to write and reflect about how the issue affects them and their communities. The GeoJournal brings the issue home to the students.

Introducing the Issue and World Hot Spots

The lesson plan helps teachers use large-group instruction to engage students in the issue and motivate them to learn more.

Introduce & Engage provides teachers with an activity to capture students' attention and engage them in this global issue.

Differentiate includes strategies for differentiating instruction for striving readers, English learners, gifted and talented students, pre-AP, and inclusion students.

Teach

GUIDED DISCUSSION

- Analyze Data** If 2 percent of the freshwater on Earth is frozen in polar ice or trapped in underground rock layers, what percentage of the world's water does that leave for people to use? Why is this figure alarming? (*It leaves 1 to 1.5 percent available for human use. This figure is alarming because some of this water is polluted and need for water grows with higher population.*)
- Analyze Visuals** What kind of water pollution do the large photos on pages 4-6 show? How did this pollution probably occur? (*a car tire, a glove, tubing, a bike, and other trash; Someone probably dumped the trash in the water.*)
- Interpret Maps** Review the *World Hot Spots* map, pointing out the specific hot spots (affected regions). What do the regions of the world with the worst water pollution have in common? (*They are the most industrialized regions.*)

GEO JOURNAL
Direct students to keep a two-day record of all the ways they use water in their everyday lives. After two days, have students review their notes. What patterns do they notice about how they use water? Allow time to share this information in class.

Answers to Explore the Issue

SE page 7 All Levels

- rotting plant material, animal and human waste, chemicals, and fossil fuels
- It kills people, causes diseases, contaminates sea life, beaches, and birds, and contributes to hunger and poverty.

SE page 8

▲ BELOW-LEVEL

- North America and Asia
- agriculture, mining, manufacturing

● ON-LEVEL

- The regions with the most industrial pollutants are parts of Europe, northern Asia, North America; the regions with the least amounts are parts of Southeast Asia, and parts of Europe.
- agriculture, mining, manufacturing

■ ABOVE-LEVEL

- Industries dump a lot of chemicals into the water in these places.
- The people might soon lack a source of clean water to drink and be unable to eat any food that comes from these bodies of water.

Differentiate

STRIVING READERS

Outline Main Ideas
Have students work with a partner to outline the main ideas as they read pages 4-7. Provide students with the following three main headings for their outlines:
I. World supply of water
II. Sources of water pollution
III. Effects of water pollution

GIFTED & TALENTED

Investigate and Report
Ask students to investigate the meaning of the term *fossil fuels* and give a brief oral report to the class. Tell them to answer these two questions: Which fuels are fossil fuels? Why are they called that?

T21

Organized for whole-class and small-group instruction

Global Issues allows teachers to blend whole-class and small-group instruction and is organized to help students become experts on specific topics related to the issue.

- **Introducing the Issue** and **World Hot Spots** provide content in common across all three leveled books.
- **National Geographic at Work** provides content in common across all three leveled books.
- Three levels explore the issue in two regional **Case Studies**.

- **What Can I Do?** and **Research and Write** also provide shared content, allowing students to work together to act on what they have learned and express their opinions.
- **Visual Glossary** shows students the unique vocabulary they have learned in the book.

WORLD Hot Spots
Industrial Water Pollution
 Study the map below to learn about the industrial pollutants that are damaging water throughout the world.

Explore the Issue

- 1. Interpret Maps** Based on the map, what conclusions can you draw about industry in Russia and parts of Northern and Eastern Europe?
- 2. Analyze Effects** What impact might the pollution in Lake Maracaibo and the South China Sea have on the people who depend on the bodies of water?

Water Resources Student Edition, pp. 8–9

What Can I DO?
Rescue a River
 —and report your results

You don't have to be a marine scientist to fight for our water sources. You just have to care—and get involved. One way to help is to identify a polluted river, lake, pond, or stream in your community and clean it up. With a little bit of work, you can make a big difference.

Volunteers pick up trash along the Rahway River in New Jersey.

IDENTIFY	ORGANIZE	DOCUMENT	SHARE
<ul style="list-style-type: none"> • Find out about the quality of the water sources in your community. • Talk to experts at your local museum, university, or local water department to identify a body of water that needs help. • Ask what steps you can take to clean up the water or improve it in other ways. 	<ul style="list-style-type: none"> • Advertise in your school paper or place posters in your neighborhood to recruit volunteers. • Gather the supplies you'll need to clean up: gloves, garbage bags, shovels, and water-testing kits. • Identify an appropriate place to dispose of the garbage. 	<ul style="list-style-type: none"> • Take before-and-after photos of the site and perform before-and-after water tests to measure the results of your work. Have an adult help you take the tests and dispose of the water. • List the pollutants you find and the strategies you use to deal with them. • Videotape and interview the volunteers about their experiences. 	<ul style="list-style-type: none"> • Use your photos and videos to create a multimedia presentation of your cleanup effort and show it to your class. • Describe your efforts—and the difference you made—in an article for your school or community paper. • Inspire others to take up the battle by sharing your story and your ideas for reclaiming water sources in a talk at your local library.

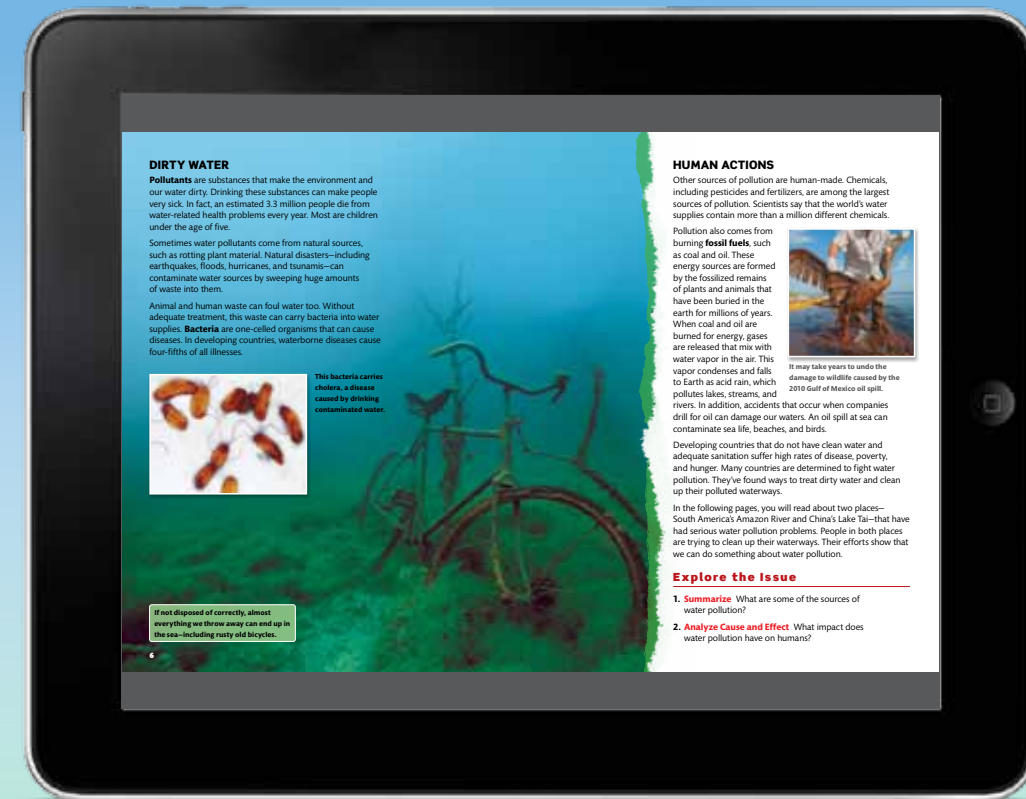
Water Resources Student Edition, pp. 26–27

eBooks visually take students into the region they are studying

- Students enter the environment of the issue being explored.
- Vocabulary is highlighted in yellow, and definitions appear when students scroll over the text.
- Infographics are interactive. As students scroll over them, important information appears.



Water Resources Student Edition, pp. 4–5



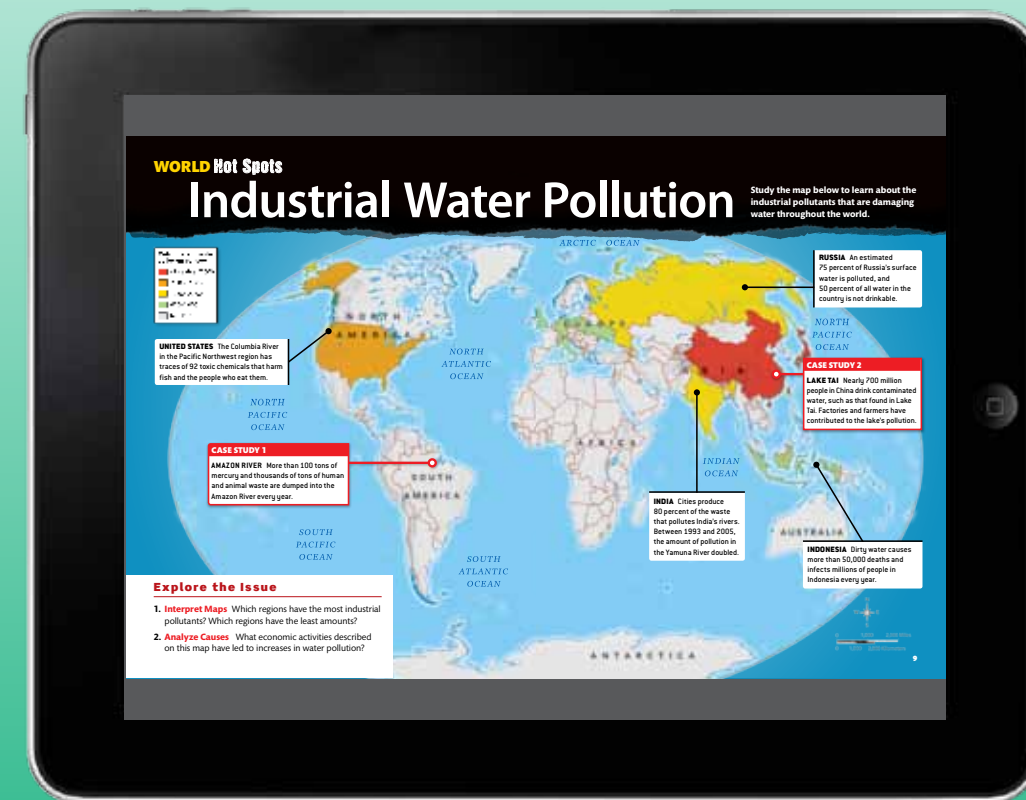
Water Resources Student Edition, pp. 6–7

- Videos provide more in-depth information for selected topics related to the issue.
- Students can scroll to view the images and text more clearly.

Print

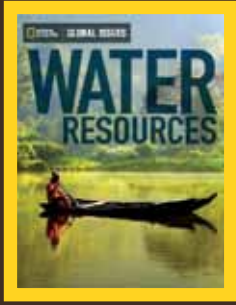


eBook

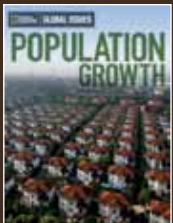
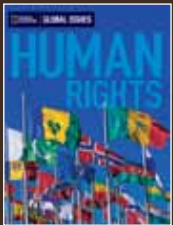
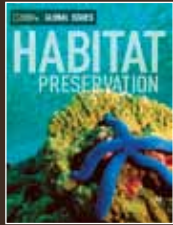
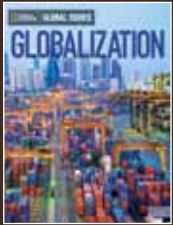
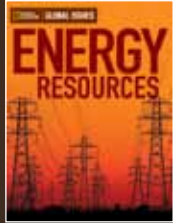


Water Resources Student Edition, pp. 8–9

- A World Map shows students more about each geographical location they are studying as they explore each Case Study.



THE
**GLOBAL
ISSUES**
SERIES



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