



no impact project

Lesson Plan 1 of 5 Consumption

Created with the assistance of 

THE PROJECT

This lesson plan features the film and book from the project, *No Impact Man*, which follows a family in New York City as they examine how they live, exchange old habits for more environmentally-friendly ones, and discover in the process that such changes actually make them happier and healthier. The lesson also incorporates Web site resources that build on themes that emerge from the family's experiences. Educators can use this lesson to help students examine their consumption habits and consider strategies for acquiring necessities in ways that do less harm to the environment.

OBJECTIVES

By the end of this lesson, students will:

- Use viewing skills and strategies to understand and interpret a video clip that introduces issues related to consumption.
- Use listening skills and strategies to understand informational text.
- Discuss the prevalence of advertising and society's constant push to buy.
- Identify strategies for environmentally-responsible consumption.
- Create an alternative gift registry with ideas for presents that are non-material, secondhand, homemade, service-oriented (such as "fix my bike"), experiential (such as "take me to a concert"), or that come from companies that are socially and environmentally responsible.

GRADE LEVELS

6-12

RELATED SUBJECT AREAS

Geography, Current Events, Consumer Sciences, Language Arts

MATERIALS

- Equipment for showing the entire class an online video clip and resources
- Book excerpt begins on p. 70 with, "We're getting rid of the TV..." and ends on p. 72 with, "lifted up our forty-six-inch television and carried it away." To access this book passage please find the link to it in the e-mail

<http://www.noimpactproject.org>

- you received when you registered. If you have lost this e-mail please go [here to register](#) again.
- Alternative Gift Registry (please scroll down to page 9)

ESTIMATED TIME NEEDED

One 50-minute class period

FEATURED VIDEO CLIP

“Intro to the Project” (length 4:30)

The clip begins at 2:12 with a scene of traffic in New York City and ends at 6:58 when the TV is being loaded on to a truck. To access this video clip, please find the link to it in the e-mail you received when you registered.

ACTIVITY

1. Ask students to journal for a few minutes on what brings them the most happiness during celebrations like birthdays, holidays, etc.
2. Invite a few students to share what they've written. Lead a brief discussion that seeks to determine whether the students' happiness at these times comes from receiving gifts (acquiring “stuff”) or to some other factor like time with loved ones, etc. What brings us the greatest happiness?
3. Tell students that you are going to show them a brief video clip that will introduce them to the Beavan family of New York City, who set out on a radical experiment they called *No Impact Man*, where they exchanged old habits for more environmentally-friendly ones over the course of a year. Focus student viewing by having them take notes on the types of lifestyle changes the family decided to make. Then show the video.
4. Explain that getting rid of the TV was Michelle's idea. Then, read the book excerpt to the class.
5. Discuss:
 - What problems did Michelle and Colin think the TV caused for them?
 - Do students think that TV causes similar problems in their own lives? Why or why not?
 - What role does advertising play in our society?
 - The combined marketing budget of companies who advertise to kids is \$17 billion. Where have students already encountered advertising today before coming to class? (Possible answers might include ads on TV, radio, Internet, buses, vending machines at school, logo T-shirts on other students, sponsored textbook covers, etc.) Emphasize the prevalence of advertising and the consistent message to spend money on products that may or may not be needed.
6. Explain that as part of the *No Impact* experiment, Colin and Michelle committed themselves to not buying anything new throughout the year, except for food. The idea was that by reducing their consumption of goods, they wouldn't be asking industry to tap environmental resources and cause pollution to create

<http://www.noimpactproject.org>

and transport something they didn't really need. Colin and Michelle allowed themselves to buy used or recycled items from local sources, from [Craigslist](#) or thrift shops, or to get necessities for free using services like [Freecycle](#). Putting secondhand items to good use also helped the environment because they were then diverted from the landfill. The Beavans' purpose wasn't to deny themselves things that they needed, but rather to avoid being wasteful and consuming things unnecessarily, just because advertisements told them that they should. The result was that they found they had more money, more time to have fun with family and friends, and a greater sense of gratitude for what they already had.

7. Discuss:

- What benefits did the Beavans' redesigned shopping habits bring to themselves and the environment?
- Do students think they could go for a week without buying anything new? What about for a month, or a whole year like the Beavans? If not, why not?
- How do students feel about using secondhand items?

8. Point out to students that when they buy something new, it is better for the environment to purchase products from companies that use resources responsibly. Such businesses often label their products as "green," but such labeling can often be confusing because the business practices of many so-called "green" companies don't fully support the values associated with that description. To help people make more informed purchasing decisions, organizations like Center for a New American Dream have carefully screened many companies for particular social and environmental attributes. They then feature products from the companies that meet their standards in the [Conscious Consumer Marketplace](#). Shoppers who use this resource can also find tips on how to reduce, reuse, and recycle items to meet their needs.

9. Ask students if they've ever received a gift that they didn't really want or need. Gift giving is a wonderful tradition, but it can also lead to excessive spending, waste, and harm to the environment. To prevent this from happening in the future, and to help students demonstrate what they have learned about environmentally-friendly consumption habits, have each student create an "alternative gift registry" using the Alternative Registry Gift.

10. To complete the alternative gift registry, students should first determine the event for the gift registry, such as a birthday, a holiday, to help get ready for college, etc. They should then get ideas for the types of items they might include in their registries by reviewing the entries in the sample registries at the [New American Dream Alternative Gift Registry site](#). Students should recognize that in an alternative gift registry, the idea is to encourage people to give presents that are non-material, secondhand, homemade, service-oriented (such as "fix my bike"), experiential (such as "take me to a concert"), or that come from companies that are socially and environmentally responsible. The description entry for each item should include detail about the item and where to find it (if applicable), and also explain why it is an environmentally-friendly gift based on

what the students have learned in this lesson. Each registry should include ten items.

11. Students should finish their registries outside of class by a date of your choosing.

ASSESSMENT SUGGESTIONS

Students can be assessed on:

- Participation in class discussions.
- Creating an alternative gift registry based on the requirements of the assignment.

EXTENSIONS & ADAPTATIONS

- Take action to address the waste associated with consumption. Have students review [10 Little and Big Things You Can Do](#) and develop a personal action plan to do one or more of the activities listed. Students should then write summaries of their experiences and the ways in which they hope these activities will make a positive impact.
- Document the ways that students are exposed to advertisements at school. Have students walk around the school with digital cameras and take pictures of ads found in yearbooks, newsletters, team uniforms, sports fields, school buses, vending machines, on posters, in curriculum, on textbook covers, on school computers, on student clothing, etc. Compile these images in an online slideshow presentation and review it as a class. Discuss how students feel about having these advertisements at school. Do they feel that the ads are harmful or affect their behavior in any way? Should schools be completely free of commercialism? Do students believe that some advertising is justified if it brings money to the school or reduces school expenses? Consider inviting the school principal to sit in on the discussion and respond to questions from students about commercialism at your school.
- Study advertising strategies commonly used to market to teens. The Media Awareness Network provides a [summary](#) of these techniques. Review them as a class, and then have students find an example of advertisements that use these strategies. In a public area, display the ads with student explanations of the marketing tricks being used.
- Explore how advertising can create artificial needs and get us to spend money unnecessarily. Using the \$15 billion bottled water industry as a case study, poll students to find out how many bottles of water they purchase in a given week. Ask for a student volunteer to multiply his or her weekly total by 52 and plug that number into the [Bottled Water Cost Calculator](#) to find out the economic and environmental effects of their bottled water purchases. Ask students why they pay for water when the water from their tap is less expensive. Are they loyal to specific brands of bottled water? If so, why? Then conduct a blind taste test in class that includes tap water and several brands of bottled water available locally. Have students rate the taste of each kind of water and then post the results. Could students recognize the taste of tap water when they didn't know what they were drinking? Ask the class to analyze what role

advertising plays in their water consumption. Then, review the [Top Five Reasons to Give Up Bottled Water](#) and challenge students to [Pledge to Break the Bottled Water Habit](#).

RESOURCES

[Advertising to Teens: Why and How Marketers Target Kids](#)

This article provides a succinct overview of issues related to commercialism that targets teens.

[Campaign for a Commercial-Free Childhood](#)

This organization focuses on limiting the impact of commercial culture on children. Site resources include information, articles, and PowerPoint presentations on school commercialism, materialistic values and family stress, and other related topics.

[Center for the New American Dream](#)

This organization provides resources and sponsors campaigns that help Americans consume responsibly to protect the environment, enhance quality of life, and promote social justice.

[Consumption and Waste Pathway -- Eco-Schools USA](#) This resource from the National Wildlife Federation provides a brief explanation for how consumption and waste impact the environment.

[Craigslis](#)

This online marketplace includes everything from used items for sale to information on jobs and housing.

[In a Landfill. How Long Does Stuff Really Last?](#)

This article details estimated decomposition rates for a number of throwaway items that can be recycled.

[The Story of Stuff](#)

This 20-minute video provides an informative and engaging overview to U.S. production and consumption.

STANDARDS

These standards are drawn from "[Content Knowledge](#)," a compilation of content standards and benchmarks for K-12 curriculum by McRel (Mid-continent Research for Education and Learning).

Behavioral Studies, Standard 1: Understands that group and cultural influences contribute to human development, identity and behavior.

Family/Consumer Sciences, Standard 4: Understand how knowledge and skills related to consumer and resources management affect the well-being of individuals, families, and society.

Geography, Standard 14: Understands how human actions modify the physical environment.

Geography, Standard 15: Understands how physical systems affect human systems.

Language Arts, Standard 1: Uses the general skills and strategies of the writing process.

Language Arts, Standard 4: Gathers and uses information for research purposes.

Language Arts, Standard 7: Uses reading skills and strategies to understand and interpret a variety of informational texts.

<http://www.noimpactproject.org>

Language Arts, Standard 9: Uses viewing skills and strategies to understand and interpret visual media.

Language Arts, Standard 10: Understands the characteristics and components of the media.

ABOUT THE AUTHOR

Cari Ladd, M.Ed., is an educational writer with a background in secondary education and media development. Previously, she served as PBS Interactive's Director of Education, overseeing the development of curricular resources tied to PBS programs, the PBS TeacherSource Web site (now PBS Teachers), and online teacher professional development services. She has also taught in Maryland and Northern Virginia.

ABOUT *NO IMPACT MAN*

This lesson is inspired by the work of Colin Beavan (aka “No Impact Man”), who got tired of listening to himself complain about the world without ever actually doing anything about it. So in November 2006, he launched his year-long “No Impact Man” experiment in which he, his wife, his two-year-old daughter and their dog attempted to live in the middle of New York City with as little environmental impact as possible. They tried to adopt new everyday habits that would be less harmful to the planet, and discovered in the process that such changes also make them happier and healthier. Along the way, Beavan [blogged](#) about his adventures and attracted broad public attention to environmental issues, including those related food, consumption, water, energy, and transportation. Beavan's experiment in lifestyle redesign is the subject of his *No Impact Man* [book](#) and a Sundance-selected [documentary](#) by independent film producers Laura Gabbert and Eden Wurmfeld.

ABOUT CENTER FOR A NEW AMERICAN DREAM

For over twelve years, New Dream has been helping Americans consume responsibly. New Dream works with individuals, institutions, communities, and businesses to conserve natural resources, counter the commercialization of our culture, and promote positive changes in the way goods are produced and consumed. New Dream is dedicated to helping support and nurture an American dream that upholds the spirit of the traditional dream—but with a new emphasis on sustainability and a celebration of non-material values.

Alternative Gift Registry

Name:

Event:

	Item	Description
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		



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Lesson Plan 2 of 5 Energy



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THE PROJECT

This lesson plan features the film and book from the project, *No Impact Man*, which follows a family in New York City as they examine how they live, exchange old habits for more environmentally-friendly ones, and discover in the process that such changes actually make them happier and healthier. The lesson also incorporates Web site resources that build on themes that emerge from the family's experiences. Educators can use this lesson to help students explore how they can reduce their daily energy consumption and speak out on the need to have long-term, sustainable energy solutions.

OBJECTIVES

By the end of this lesson, students will:

- Use viewing skills and strategies to understand and interpret film clips.
- Use listening skills and strategies to understand informational text.
- Discuss our culture's dependency on electricity and the fossil fuels used to produce it.
- Develop a "Top 10" list of ways they will personally reduce their energy consumption OR write a letter to the editor explaining their views on needed changes to our energy system.

GRADE LEVELS

6-12

RELATED SUBJECT AREAS

Civics, Geography, Current Events, Language Arts

MATERIALS

- Equipment for showing the entire class online video clips and resources
- Book excerpt begins on p. 167 with, "When we started, when I first came up with the whole No Impact scheme..." and ends on p. 168 with, "...collective action was also completely necessary." To access this book passage please find the link to it in the e-mail you received when you registered. If you have lost this e-mail please go [here to register](#) again.

<http://www.noimpactproject.org>

ESTIMATED TIME NEEDED

One 50-minute class period

FEATURED VIDEO CLIPS

To access these video clips, please find the links in the e-mail you received when you registered.

“Lights Out” (length 3:37)

The clip begins at 43:16 with a shot of the Farmer’s Market and ends at 46:53 with Michelle reading a book in bed by candlelight.

“Solar Panel” (length 1:00)

The clips starts at 1:02:01 with a shot of the city and ends at 1:03:01 when Colin says, “...in a way that doesn’t harm the planet.”

ACTIVITY

1. Display the image of the Beavan family at: <http://www.oscilloscope.net/films/film/16/No-Impact-Man>. Explain that for one year, this New York City family tried out different changes in their lifestyle habits that they hoped would minimize their negative impact on the environment. They called this year of experimentation the “No Impact” project. Colin came up with the idea for the project, and he blogged about it and took the lead on making each change. His wife Michelle and daughter Isabella were good sports and went along for the adventure. As part of the No Impact project, they ate only seasonally, locally-produced food, produced no trash, used primarily “active transportation” like walking and biking, didn’t buy anything new (besides food), conserved water, used natural cleaning products, and reduced their consumption of electricity. They found that these lifestyle changes and others actually made them healthier and happier. Then, they reached the phase where they wanted to try using no electricity at all. To kick off this phase of the project, they had some friends over for a party, dramatically shut off the electricity in their apartment, and then lived without power for the rest of the project.

2. Play the first clip for this lesson. Then, discuss:

- The Beavan's goal with their experiment was to live without causing any impact on the planet. How does electricity affect the environment? (Note: For this part of the discussion, you may find it helpful to refer to the information and pie chart at [Electricity in the U.S.](#) on the U.S. Department of Energy Web site.)
- What strategies were the Beavans trying in order to meet their needs without electricity?
- What modern conveniences would you miss the most if you didn’t have electricity? Point out that the Beavans were experimenting with not using any electricity to see what they could and couldn’t live without. They found that their apartment was cluttered with electricity-sucking devices that they didn’t miss at all. Going without TV helped them focus on their relationships with each other and head outdoors for entertainment. They loved that part of the experiment. But they really missed the washing

machine and the refrigerator, especially since they weren't able to make the "pot in a pot" device seen in the video work.

3. Tell the class that Colin was able to figure out how he could use solar energy to power his laptop and Internet connection so he could work from home. Then, show the second clip.

4. Explain that the solar energy panel worked to power his computer in the summertime, but it provided less energy in the winter months. Colin's trial and error to meet his and his family's needs without electricity led to an interesting discovery. Then, read the book excerpt.

5. Discuss:

- Why couldn't the Beavans find a renewable source of power that could meet 100% of their energy needs? What makes it especially hard for people in cities to live "no impact" when it comes to electricity?
- What has to happen before power plants provide electricity to homes using renewable energy sources like solar and wind power?
- What are the benefits of renewable energy?

6. Point out that since our current energy system is dependent on using fossil fuels to produce electricity, the main ways we can make a difference in the environment on this issue are to:

- Buy "green power" whenever possible. (Find out which organizations in your state offer [renewable energy sources of power](#))
- Reduce personal energy consumption.
- Speak out about the need to change our energy system so that it uses renewable energy sources that don't pollute. Doing so can connect you with like-minded citizens who can work collectively to bring about positive change.

7. Ask students to help the environment by either researching and creating a "Top 10" list of ways they will reduce their personal energy consumption, or by writing a letter to the editor explaining their views on needed changes to our energy system. [Tips for writing a letter to the editor](#) are provided in the high school organizing guide from 1Sky.org, an advocacy network striving to stop climate change and help the U.S. move to a clean energy economy.

ASSESSMENT SUGGESTIONS

Students can be assessed on:

- Participation in class discussions.
- The relevancy of strategies on their "Top 10" lists OR the quality of ideas expressed in their letters to the editor.

EXTENSIONS & ADAPTATIONS

- **Start an environmental club at your high school.** The [high school organizing guide](#) from 1Sky.org includes strategies for getting started, recruiting new members, gathering signatures for a petition, conducting

- phone outreach, creating a photo/video campaign, and meeting with your member of Congress.
- **Take a closer look at current energy policy terms and strategies.** Create a table that lists concepts like “cap and trade,” “Renewable Electricity Standard,” “emissions allowances,” “offsets,” “carbon capture and storage,” and “clean energy.” Have small student groups research a definition for each term, and describe the pros and cons of each. Resources for this assignment could include a FRONTLINE report with expert analysis on “[cap and trade](#)” and a SourceWatch.org article that describes the [concerns](#) from a variety of stakeholders.
 - **Examine the outcome of the Climate Change Convention.** Have students research what happened during the convention, and the pros and cons of agreeing to strict limits on greenhouse gas emissions. Discuss why developed countries and developing countries view climate change differently. How was the convention different than the last? Do students think that the United States should have done more or less than it did at the convention? Students should justify their opinions in a persuasive essay.
 - **Write letters to companies about their efforts to fight global warming.** Students can review [company scorecards](#) that measure a business’s commitment to fighting climate change. Each student should choose a company and then draft a letter that provides feedback on the company’s performance on this issue. Do students think the company is doing a good job? Why or why not? How does the selected company compare to its competitors on its efforts to fight global warming? Will the company’s commitment to climate change affect the student’s consumer behavior? If so, how?

RESOURCES

[Clean Energy Economy Fact Sheets](#)

This collection of fact sheets from the Pew Charitable Trusts describes the status of the clean energy economy in each state in the U.S.

[Energy Calculator](#)

This National Wildlife Federation resource measures personal carbon dioxide emissions and provides [home energy conservation tips](#) to help you reduce emissions and lower energy costs.

[Energy Glossary](#)

This glossary from the U.S. Department of Energy is written in simple, non-technical terms.

[Far Fewer Americans Believe in Global Warming](#)

<http://www.noimpactproject.org>

This report by Gallup focuses on their recent poll that says the number of Americans who believe there is strong scientific evidence of global warming is declining.

[Energy Kids: Game & Activities](#)

This site from the U.S. Department of Energy provides basics about energy and energy sources, conservation information, riddles, puzzles, and more.

[Make Every Day Earth Day](#)

This animation from the U.S. Department of Energy shows how the choices we make everyday can save energy and improve the environment.

[Nigerian Zeer Pot](#)

Find out more about the “pot in the pot” device shown in the video that the Beavans tried to use as a refrigerator.

[World Without Oil](#)

This alternate reality game from 2007 simulated what conditions would be like during a global oil shortage. Resources include blog entries, videos, and other messages that help drive the simulation, plus a large collection of related lesson plans.

STANDARDS

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Behavioral Studies, Standard 1: Understands that group and cultural influences contribute to human development, identity and behavior.

Civics, Standard 19: Understands what is meant by "the public agenda," how it is set, and how it is influenced by public opinion and the media.

Geography, Standard 14: Understands how human actions modify the physical environment.

Geography, Standard 15: Understands how physical systems affect human systems.

Language Arts, Standard 1: Uses the general skills and strategies of the writing process.

Language Arts, Standard 4: Gathers and uses information for research purposes.

Language Arts, Standard 9: Uses viewing skills and strategies to understand and interpret visual media.

ABOUT THE AUTHOR

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<http://www.noimpactproject.org>

Impact Man” experiment in which he, his wife, his two-year-old daughter and their dog attempted to live in the middle of New York City with as little environmental impact as possible. They tried to adopt new everyday habits that would be less harmful to the planet, and discovered in the process that such changes also make them happier and healthier. Along the way, Beavan [blogged](#) about his adventures and attracted broad public attention to environmental issues, including those related food, consumption, water, energy, and transportation. Beavan’s experiment in lifestyle redesign is the subject of his *No Impact Man* [book](#) and a Sundance-selected [documentary](#) by independent film producers Laura Gabbert and Eden Wurmfeld.

ABOUT 1SKY

1Sky's goal is to build a diverse, society-wide mobilization that will convince our federal government to take bold action by 2010. To identify the steps that our leaders need to take in order to shift our nation away from [global warming](#) and toward the prosperity of a green economy, we've engaged a network of [leading scientists and economists](#) to create the 1Sky Solutions. As of spring 2011 1Sky merged with 350.org, an organization whose main thesis is to build a worldwide movement for solving the current climate crisis. Under 350.org, Sky1 is reaching new heights in expanding their influence to a larger audience.



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Lesson Plan 3 of 5 Food



Created with the assistance of

THE PROJECT

This lesson plan features the film and book from the project, *No Impact Man*, which follows a family in New York City as they examine how they live, exchange old habits for more environmentally-friendly ones, and discover in the process that such changes actually make them happier and healthier. The lesson also incorporates Web site resources that build on themes that emerge from the family's experiences. Educators can use this lesson to help students explore how their food choices affect the environment and our quality of life.

OBJECTIVES

By the end of this lesson, students will:

- Assess their last meal based on freshness, nutritional value, and how the food was packaged.
- Develop a list of strategies for reducing food-related trash.
- Use viewing skills and strategies to understand and interpret a video clip.
- Identify the benefits of eating seasonally and locally.
- Create and reflect on a plan for one meal that includes only food that is seasonal, local, and unpackaged.

GRADE LEVELS

6-12

RELATED SUBJECT AREAS

Geography, Economics, Humanities, Current Events, Language Arts, Health

MATERIALS

- Equipment for showing the entire class an online video clip
- Student access to the Internet
- Book excerpt begins on p. 128 with, "And so, in those first cold January..." and ends on p. 130 with, "What were we thinking all this time?" To access this book passage please find the link to it in the e-mail you received when

<http://www.noimpactproject.org>

- you registered. If you have lost this e-mail please go [here to register](#) again.
- Meal Plan (scroll down to page 22)

ESTIMATED TIME NEEDED

One 50-minute class period

FEATURED VIDEO CLIP

“Eliminating Trash” (length: 2:06)

The clip begins at 20:07 with the Beavan family walking out of a building and ends at 22:13 when Colin says, “This is our combined trash for a week.” To access this video clip, please find the link to it in the e-mail you received when you registered.

ACTIVITY

1. Display the following instructions and have students complete the exercise as a warm-up activity:

Write down everything you ate and drank at your last meal. Circle the foods that have been processed in some way. Next to each item, list details about the packaging it came in. What value did the packaging add? Is that packaging recyclable? What do you think will happen to the packaging that was thrown away?

2. Invite some of the students to share what they’ve written. Discuss:

- Did members of the class eat more processed food or food made from fresh ingredients?
- How healthy do students think the meal was?
- Why did students choose to eat the food that they did? (Possible answers: Needed something fast and easy, my mother made it for me, I love salads, etc.)
- How do our systems for obtaining food affect our choices about what we eat?
- What types of food had the most packaging?
- What happened to the packaging when the meal was over?

3. Explain that in 2006, food packaging in the U.S. was responsible for about 50 million tons of garbage. That’s 20 percent of all our trash! (Source: Environmental Protection Agency) Often, our food-related trash comes from take out containers that are only used for a few minutes before being thrown away. How can our choices about what we eat both increase our health and reduce the amount of trash we generate at each meal? Brainstorm a class list of possible strategies.

4. Tell students that a man named Colin Beavan and his family in New York City decided that they were going to figure out as many ways as they could to reduce the trash that they generate – including minimizing the amount of packaging in their food. Colin blogged about what his family learned. Show the video clip for this lesson and ask students to listen carefully for food-related trash-reduction strategies that are not on their class list. Then, update the class list with any new ideas that were identified.

<http://www.noimpactproject.org>

5. Explain that the Beavans also learned that the average distance that food travels to an American's plate is 1,500 miles (Source: John Hendrickson, "Energy use in the U.S. Food System: A Summary of existing research and analysis"). That means food has to be picked long before its peak ripeness, so it isn't as fresh and flavorful. Also, all that transporting of food uses fossil fuels and creates pollution. They also learned that buying foods grown locally helps the local economy. So they eat only seasonal foods that were grown within 250 miles of their home. For them, this meant shopping at the local Farmer's Market, changing their eating habits, and learning new ways to prepare food. Then, read the brief book excerpt for this lesson.

6. Discuss:

- In what ways could the Beavan's choice to eat locally and seasonally help the environment, the local economy, and their health?
- What other benefits did they experience?
- What were the negative aspects of the experience?
- What do students find the most appealing and/or unappealing about the idea of eating locally and seasonally?
- Is shipping food long distances a necessity of modern life? Why or why not?
- How can the Beavans have a greater variety of foods next winter and still keep their commitment to eating locally and seasonally? (Preserve food, etc.)

7. Challenge students to create a plan for one meal that includes only food that is seasonal, local, and unpackaged. The provided Meal Plan Organizer walks students through this process and lists helpful Web sites, such as the [Eat Well Guide](#) -- a free online directory of where to find fresh, locally-grown, and sustainable food. Students can complete this assignment for homework.

ASSESSMENT SUGGESTIONS

Students can be assessed on:

- Completion of the warm-up activity.
- Participation in class discussions.
- Quality of detail and reflection in the meal plans.

EXTENSIONS & ADAPTATIONS

- **Organize a waste-free lunch day at your school.** The U.S. Environmental Protection Agency provides [step-by-step instructions](#) for how to organize and publicize the event, as well as [tips for what to pack in a waste-free lunch](#), sample letters to parents, and more.
- **Model seasonal and local eating.** During this lesson, provide a delicious snack for students made exclusively from local and seasonal ingredients. Explain where all the ingredients were produced and purchased and, if applicable, provide a recipe for how to prepare the snack. As an alternative, engage parent volunteers to each provide a local and seasonal snack for a class buffet. Have parents take turns explaining the details of the snacks.

- **Invite a local farmer to come speak to the class** about his or her farming practices and where and how items produced on the farm are sold. Prepare for this visit by asking students to develop questions for the farmer and submit them to you. Select questions that best address your curriculum objectives and send them to the farmer in advance to help focus his or her remarks. Or pose the questions to the farmer during class in an interview format so you can better control time and the topics addressed. Have students send the farmer a thank you note after the visit.
- **Challenge the class to identify the food product with the most unnecessary packaging.** To identify candidates, students could save their trash from an already-purchased item or take pictures of products with excessive packaging to share with the class. (Instruct students not to buy products with excessive packaging for the purpose of this assignment!) Have students share the products in small groups and then choose a group “winner” for product with the most unnecessary packaging. Product “finalists” from each group can be put to a class vote to determine which has the most unnecessary packaging. Have students write letters to the company that produced this product to encourage more eco-friendly packaging practices.
- **Help others make more eco-friendly food choices.** Have students develop a multimedia outreach campaign that shares information from some of these guides with members of the school and/or community:
 - [Eat Well Guide](#)
 - [Sustainable Table](#)
 - [Smart Seafood Guide](#) from Food & Water Watch
 - [How to Read Meat Labels](#)
 - [How to Read Produce Labels](#)
 - [Ten Ways to Eat Local, Seasonal Food All Year](#)
- **Plant a class garden.** Before getting started, work with your principal and parents association to locate an appropriate location. If one isn’t available, some alternatives are planting a windowsill garden or planting herbs, tomatoes, or peas in pots outside (using reusable cages for support). Class gardens lend themselves to lessons on weather, plant science, economics, mathematics, history, art, and writing. For ideas, see the classroom activities provided by [The Edible Schoolyard](#), including suggestions on growing corn, making a Neolithic fruit salad, and the mathematics of rhubarb jam.
- **Teach students the art of composting.** Have the class first research the benefits of composting. Then, set up a compost bin near your classroom or provide extra credit for students who set one up at home and blog or journal about their experience. The University of Nebraska provides [instructions for composting](#). Alternatively, [build and maintain a worm compost bin](#) like students saw the Beavans do in the video clip. Wisconsin State University [explains how](#).

RESOURCES

[Home Economics – Fast food vs. homemade](#)

<http://www.noimpactproject.org>

This Mayo Clinic article compares the nutrition and price of a fast food burger and a homemade one, and explores various factors that influence our food choices.

[Reasons to Buy Locally-grown Food](#)

This succinct list outlines the benefits of eating locally-grown food.

[Slow Food in Schools Projects](#)

Read examples of what schools are doing around the country to teach children how food choices can affect the health of a community, environment, and economy. This site also explains how to apply for funding to begin a similar program at your school.

[Sustainable Table: Spread the Word Handouts and Presentation Kits](#)

Sustainable Table is a program that works to educate consumers and increase demand for sustainable, local food through awareness campaigns, promotional events and by offering viable solutions to the factory farm problem. This comprehensive section provides handouts and free presentation kits on many of the issues associated with our food system, including hormones, additives, organic farming, reasons to buy sustainable, animal welfare, food safety, pesticides and more.

[Ten Ways to Eat Local. Seasonal Food All Year](#)

This article provides helpful information and resources that make it easier to eat seasonally and locally.

[Unhappy Meals](#)

This Michael Pollan essay spells out healthy eating in these words: Eat food. Not too much. Mostly plants. Pollan also describes what's wrong with America's eating culture, and how we can eat foods with greater nutrition.

STANDARDS

These standards are drawn from "[Content Knowledge](#)," a compilation of content standards and benchmarks for K-12 curriculum by McRel (Mid-continent Research for Education and Learning).

Agricultural Education, Standard 1: Understands the connections between agriculture and society.

Behavioral Studies, Standard 1: Understands that group and cultural influences contribute to human development, identity and behavior.

Family/Consumer Sciences, Standard 12: Understand how knowledge and skills related to nutrition and food affect the well-being of individuals, families, and society.

Health, Standard 2: Knows environmental and external factors that affect individual and community health.

Health, Standard 6: Understands essential concepts about nutrition and diet.

Historical Understanding, Standard 2: Understands the historical perspective.

Language Arts, Standard 1: Uses the general skills and strategies of the writing process.

Language Arts, Standard 4: Gathers and uses information for research purposes.

Language Arts, Standard 7: Uses reading skills and strategies to understand and interpret a variety of informational texts.

Language Arts, Standard 9: Uses viewing skills and strategies to understand and interpret visual media.

<http://www.noimpactproject.org>

Language Arts, Standard 10: Understands the characteristics and components of the media.

ABOUT THE AUTHOR

Cari Ladd, M.Ed., is an educational writer with a background in secondary education and media development. Previously, she served as PBS Interactive's Director of Education, overseeing the development of curricular resources tied to PBS programs, the PBS TeacherSource Web site (now PBS Teachers), and online teacher professional development services. She has also taught in Maryland and Northern Virginia.

ABOUT *NO IMPACT MAN*

This lesson is inspired by the work of Colin Beavan (aka “No Impact Man”), who got tired of listening to himself complain about the world without ever actually doing anything about it. So in November 2006, he launched his year-long “No Impact Man” experiment in which he, his wife, his two-year-old daughter and their dog attempted to live in the middle of New York City with as little environmental impact as possible. They tried to adopt new everyday habits that would be less harmful to the planet, and discovered in the process that such changes also make them happier and healthier. Along the way, Beavan [blogged](#) about his adventures and attracted broad public attention to environmental issues, including those related food, consumption, water, energy, and transportation. Beavan’s experiment in lifestyle redesign is the subject of his *No Impact Man* [book](#) and a Sundance-selected [documentary](#) by independent film producers Laura Gabbert and Eden Wurmfeld.

ABOUT EAT WELL GUIDE

The Eat Well Guide® is a free online directory for anyone in search of fresh, locally grown and sustainably produced food in the United States and Canada. Eat Well’s thousands of listings include family farms, restaurants, farmers' markets, grocery stores, Community Supported Agriculture (CSA) programs, U-pick orchards and more. Users can search by location, keyword, category or product to find good food, download customized guides, or plan a trip with the innovative mapping tool, Eat Well Everywhere. Eat Well is also home to [The Green Fork blog](#) and the free educational booklet [Cultivating the Web: High Tech Tools for the Sustainable Food Movement](#). Together with the enterprising spirits of independent farmers, locally owned businesses and partner organizations, the Eat Well Guide’s collaborative technology harnesses the power of the web to effect social, environmental and economic change, and maps the route to a more sustainable food system.

Meal Plan Organizer

Name: _____

The Challenge: Use this organizer to create a meal plan that only includes food that is *seasonal, local, and unpackaged*.

Helpful Web sites:

- [Eat Well Guide](#): A free online directory of where to find fresh, locally-grown, and sustainable food, such as those found in local farmer's markets. The site also provides information on [what is in season](#).
- [Sustainable Table](#): collection of recipes calling for healthy, fresh food.
- [RecipeZaar](#): This site features a searchable database of recipes that require five ingredients or less.

List what food will be needed for this meal:

Where can this food be purchased?

What items need to be taken shopping (reusable bags, etc.) so that you can avoid packaging?

Instructions for how to prepare the meal:

Reflect

1. What challenges did you encounter in developing a meal plan with food that is seasonal, grown locally, and unpackaged?

2. How did you overcome these challenges?

3. Do you think you could eat like this for every meal, like the Beavan family? Why or why not?



no impact project

Lesson Plan 4 of 5 Transportation

Created with the assistance of 

This lesson plan features themes introduced by the film and book from the project, *No Impact Man*, which follows a family in New York City as they examine how they live, exchange old habits for more environmentally-friendly ones, and discover in the process that such changes actually make them happier and healthier. Educators can use this lesson to help students explore how improved street design could encourage more of their classmates to use active forms of transportation to get to school.

OBJECTIVES

By the end of this lesson, students will:

- Contribute to a class table or graph that shows methods of transportation used to get to school.
- Analyze data in the class table or graph.
- Discuss the term, “active transportation.”
- Use listening skills and strategies to understand informational text.
- Use viewing skills and strategies to make observations and interpret video clips.
- Examine the roads near their school and recommend changes that would both improve safety for cyclists and encourage more students to use active transportation to get to school.

GRADE LEVELS

6-12

RELATED SUBJECT AREAS

Civics, Geography, Language Arts

MATERIALS

- Equipment for showing the entire class online video clips and resources
- Book excerpt on pages 92-93 (just the bullet points). To access this book passage please find the link to it in the e-mail you received when you registered. If you have lost this e-mail please go [here to register](#) again.

<http://www.noimpactproject.org>

ESTIMATED TIME NEEDED

One 50-minute class period

FEATURED VIDEO CLIP

“Bike Ride to the Beach” (length: 1:17)

The clip begins at 1:03:35 with Michelle and Colin riding their bikes through the city. It ends at 1:04:52 when Colin says, “We’re still in New York City.” To access this video clip, please find the link to it in the e-mail you received when you registered.

ACTIVITY

1. Take a class poll to determine what form of transportation each student used to get to school today. (Likely answers will include via car, bus, bike, walking, etc.) Help students organize the class data in a simple table or bar graph. (If time permits, students could instead present this data in a pie chart with percentages.)

2. Discuss:

- Which form of transportation is most popular among members of the class? Why?
- Is the most commonly-used form of transportation also the one that is best for the environment? Why or why not?

3. Point out that the best forms of transportation for the environment and for human health are powered by humans rather than fossil fuels, and don’t pollute the air. These forms are called, “active transportation” and include activities like biking, walking, rollerblading, riding scooters, skateboarding, etc. In addition to helping the environment, active transportation is good exercise, reduces traffic congestion, is typically less stressful than driving, and is significantly cheaper and more fun. When active transportation isn’t possible, the next best methods of transportation are to use mass transit or to carpool. These options also reduce traffic congestion, and they have a lower environmental impact than driving alone. Given our existing transportation infrastructure, most Americans use cars and trucks to get around, and this has a major impact on the environment. In fact, the U.S. Environmental Protection Agency says driving a private vehicle is one of our most polluting daily activities. (Source: [EPA](#))

4. Environmental writer Colin Beavan wonders if our cars make us happy. In his book, *No Impact Man*, he assembled some statistics that show what he calls the “true cost” of our cars. Display the book excerpt and review each bullet point.

Discuss:

- Why do students think that people are willing to spend so much time and money working to pay for their cars?
- What impact would using active transportation have on our health, wallets, quality of life, and the environment?
- What barriers prevent more people – including students – from using active transportation, mass transit, or carpooling?

5. Point out that streets in the U.S. have been built to favor cars, rather than pedestrians, cyclists, and others who use active transportation. To illustrate this

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point, tell the class that they are going to watch a video clip (length 1:17) that shows Beavan and his wife in New York City on a bike excursion to the beach. Focus student viewing by having them evaluate how well the streets along their route are designed to serve cars, cyclists, and pedestrians. You may need to watch the clip a couple of times to notice fine details. (Note: To help students better understand the dialogue in the clip, you might want to remind students that the man in the video writes about environmental issues.)

6. Discuss:

- What method of transportation did the streets shown in the video favor? Use evidence to support your answer (ex: street markings, presence or lack of designated bike lanes).
- Which parts of the couple's journey seemed the safest for cyclists? Which seemed the most dangerous? Why?
- How was the couple rewarded for using their bikes for transportation?

7. Explain that New York City and a number of cities around the country are taking a close look at the design of their streets in order to make them more walkable, bike-friendly, and transit-oriented. For example, to improve safety for cyclists and encourage more people to ride their bikes, New York City has installed 200 miles of bike routes. As a result, commuter cycling has increased 66% in the past two years.

8. Tell students that they are going to do some street design of their own by looking at the roads near your school and recommending changes that would both improve safety and encourage more students to use active transportation like cycling to get to school.

9. Display an aerial view of your school and the surrounding roads. (Choose the best image of your school in advance from services like Mapquest.com, Maps.Google.com, or National Geographic's [Map Machine](http://Map.Machine).)

10. Ask students to take turns pointing out specific areas around the school where safety could be improved for cyclists. List these "areas of concern" on the board and number them for easier reference. Then show them the Streetfilms video, "[NYC DOT Explains Bike Lanes in the Big Apple](#)" (length 5:39) and ask them to take notes on the different street design strategies shown for improving bicycle safety.

11. For homework, have students each choose one "area of concern" listed on the board and determine which bike lane or other street design strategy would best improve safety in that location so more students would be encouraged to use active transportation to get to school. Students should describe the current safety concerns in writing and explain how their proposed strategy would improve the situation. Students should also provide a "before" and "after" sketch to illustrate the safer conditions their recommendation would bring.

ASSESSMENT SUGGESTIONS

Students can be assessed on:

<http://www.noimpactproject.org>

- Participation in the class poll and discussions.
- Clarity and appropriateness of ideas and details included in their homework assignment.

EXTENSIONS & ADAPTATIONS

- **Identify additional ways to make active transportation methods safer and more convenient to use.** Review, [“What’s Wrong With This Picture?”](#) to identify issues related to sidewalks, bike racks, and crosswalks. Do similar situations exist at your school? How might these issues discourage students from using active transportation? Also, research how [Education](#) and [Enforcement](#) work along with street design and other [Engineering](#) strategies to create a safe environment for active transportation. Finally, follow the recommended [steps](#) to building a community coalition to implement the necessary changes.
- **Create “particulate matter boards” to see if the air around your school is dirty.** Livable Streets provides [step-by-step instructions](#) for the experiment. Also, research how particulate pollution can affect your [health](#). Finally, show students how they can monitor the [Air Quality Index](#) on an ongoing basis, and consider reporting the air quality forecast each day in class.
- **Discover more lesson plans related to transportation issues and urban livability.** [Livable Streets Education](#) provides curricula for teachers of preschool, elementary, and middle school grades, which explore issues like traffic calming, environmental improvements, alternative transportation, and safe routes for school. Livable Streets Education also provides an extensive in-school program for students in New York City.
- **Write a news story on the public policy agenda to promote cycling in the United States.** Review the bicycling agenda on the [Livable Streets Web site](#). Choose a specific initiative and find out more about it. Write a story on it in simple terms, and determine what it could mean for your local community. Interview public officials and members of the community to add quotes to your story that represent various perspectives. When your story is complete, publish it in your school paper and share it with local media outlets.
- **Create a map showing bike- and pedestrian-friendly routes** between key points in your neighborhood or city. [Community Walk](#) provides free mapping tools to help with this assignment. Invite students to share their maps with local bike shops and restaurants.
- **Design public service announcements** that encourage people to reduce air pollution by choosing to bike, walk, carpool, use public transportation, and not let their car’s engine run when it is standing or parked. Get the message out during morning announcements, by posting signs in pick up and drop off areas, by texting and tweeting, or by developing a short video that friends can share on blogs and Facebook.

RESOURCES

[American Public Transportation Association](#)

Learn about efforts of public transit to integrate and balance the economic, environmental, and social needs of communities

[Ride for the Environment](#)

The League of American Bicyclists shares interesting statistics that make the case for biking over traveling by car. For example, 82 percent of trips five miles or less are made by personal motor vehicle. Such car trips are more polluting on a per-mile basis than longer trips.

[Some Facts on Automobiles and the Environment](#)

This page provides a brief summary of statistics related to the impact of automobiles on the environment.

[Streetfilms](#)

These short video clips from the Livable Streets Initiative address urban planning and transportation issues to help design streets for people and places, not cars and traffic.

[The Top Ten Facts on Bicycling and Walking in the United States](#) (PDF file)

This list provides interesting statistics related to active transportation issues.

[Where Can I Find Car Sharing?](#)

Find out where you can participate in a car sharing program – access to a network of cars on a pay-per-use basis.

STANDARDS

These standards are drawn from "[Content Knowledge](#)," a compilation of content standards and benchmarks for K-12 curriculum by McRel (Mid-continent Research for Education and Learning)

Behavioral Studies, Standard 1: Understands that group and cultural influences contribute to human development, identity and behavior.

Civics, Standard 14: Understands issues concerning the disparities between ideals and reality in American political and social life.

Civics, Standard 23: Understands the impact of significant political and nonpolitical developments on the United States and other nations.

Civics, Standard 28: Understands how participation in civic and political life can help citizens attain individual and public goals.

Geography, Standard 1: Understands the characteristics and uses of maps, globes, and other geographic tools and technologies.

Geography, Standard 3: Understands the characteristics and uses of spatial organization of Earth's surface.

Geography, Standard 14: Understands how human actions modify the physical environment.

Geography, Standard 15: Understands how physical systems affect human systems.

Language Arts, Standard 1: Uses the general skills and strategies of the writing process.

Language Arts, Standard 4: Gathers and uses information for research purposes.

Language Arts, Standard 7: Uses reading skills and strategies to understand and interpret a variety of informational texts.

Language Arts, Standard 9: Uses viewing skills and strategies to understand and interpret visual media.

Working With Others, Standard 1: Contributes to the overall effort of a group.

ABOUT THE AUTHOR

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ABOUT LIVABLE STREETS

Livable Streets Education (LSE) inspires students and families to make the change they want to see on their streets and in their neighborhoods. Our learning units are designed to weave pertinent ideas about urban livability and sustainability with school day learning standards. We also work with schools, city agencies, and community-based organizations to do specialized programming. For more information about our program visit www.streetseducation.org



no impact project

Lesson Plan 5 of 5 Water



Created with the assistance of

This lesson plan features the film and book from the project, *No Impact Man*, which follows a family in New York City as they examine how they live, exchange old habits for more environmentally-friendly ones, and discover in the process that such changes actually make them happier and healthier. The lesson also incorporates Web site resources that build on themes that emerge from the family's experiences. Educators can use this lesson to help students learn how to save water and keep harmful chemicals out of drains.

OBJECTIVES

By the end of this lesson, students will:

- Evaluate the pros and cons of tap water v. bottled water.
- Use listening skills and strategies to understand informational text.
- Use viewing skills and strategies to understand and interpret a film clip.
- Discuss the dangers of chemicals in personal care and cleaning products.
- Try minimizing their water consumption for one day.
- Make one homemade, all-natural cleaning or personal care product.
- Journal about their experiences.

GRADE LEVELS

6-12

RELATED SUBJECT AREAS

Civics, Current Events, Geography, Language Arts, Life Science

MATERIALS

- Equipment for showing the entire class an online video clip and resources
- Book excerpt begins on p. 195 with, "In 2008, the United States Geologic Survey released study results..." and ends on p. 196 with, "...won't be exposed to them, either." To access this book passage please find the link to it in the e-mail you received when you registered. If you have lost this e-mail please go [here to register](#) again.

ESTIMATED TIME NEEDED

<http://www.noimpactproject.org>

One 50-minute class period, plus time outside of class to implement water conservation strategies, try an all-natural cleaning product, and journal about their experiences.

FEATURED VIDEO CLIP

“All-Natural Cleaning” (length: 4:18)

The clip begins at 38:10 with Colin collecting the bottles of cleaning products in his home. It ends at 42:28 when Colin and Michelle kiss. To access this video clip, please find the link to it in the e-mail you received when you registered.

ACTIVITY

1. By a show of hands, ask students to vote for which they think is better – tap water or bottled water.

2. Explain that tap water is better. It is less expensive, and the federal government requires far more rigorous testing and monitoring of tap water. Bottled water causes pollution and uses nonrenewable fossil fuels when the bottles are created, filled, and transported to stores. Empty plastic water bottles often end up in landfills. And bottled water costs hundreds or thousands of times more than tap water. (Compare \$0.002 per gallon for most tap water to a range of \$0.89 to \$8.26 per gallon for bottled waters.) Plus, as much as 40 percent of bottled water is bottled tap water anyway, so we might as well get it from the tap and eliminate the extra expense and pollution! [Click here](#) to stream a fun and informative short film, "The Story of Bottled Water."

3. Tell students that there are other ways that we can manage our water resources in a way that limits pollution. One way is to minimize the amount of chemicals that we put in our drains from cleaning and personal care products. These items often contain chemicals that:

- Are not regulated by the Environmental Protection Agency.
- Have caused mutations in fish.
- Are still present in “finished” drinking water that has already been treated.
- Do not have sufficient data on them for scientists to determine how much of the chemical is “safe” for human exposure.

(Source: [FRONTLINE: Poisoned Waters](#))

4. Colin Beavan, an environmental writer who lives in New York City, researched some of the other ways that chemicals linger in the environment. Read the book excerpt.

5. Explain that the No Impact project was a year-long experiment by Beavan and his family where they examined their lives, exchanged old habits for more environmentally-friendly ones, and discovered in the process that such changes actually made them happier and healthier. Tell the class that you are going to play a short video clip that shows Beavan at the point in the No Impact project where he is trying out different ways to keep chemicals out of water and conserve energy. Then, show the clip.

6. Discuss:

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- What were Beavan's concerns about the cleaning supplies he already had? (Possible answers: They came in single use disposable plastic bottles; he didn't know exactly what was in them so they could be polluting the waterways; he could create his own natural cleaning products for less money)
- How would using homemade cleaning supplies help keep water clean?
- What kinds of cleaning products do the families of your students use at home?

7. Tell students that according to the World Health Organization, an estimated 1.7 billion people in the world still lack access to clean water. The privilege of being able to turn on your tap and have drinkable water come out is one that we should be thankful for and protect. Point out that we can take care of our water by not wasting it and by keeping harmful chemicals out of our drains. Challenge students to try two experiments of their own that will help them conserve water and decrease the chemicals that they put in the water supply.

8. For the first one, have students choose one day sometime over the next week when they will reduce their water consumption to the bare minimum. To prepare, students should think about how they currently use water and research strategies to help them reduce, such as:

- Brush your teeth using a cup of water to wet and rinse your toothbrush, rather than letting the faucet run.
- Reuse the same glass all day instead of dirtying up several.
- Play music while you are in the shower and try to finish in one song or less.
- Skip the shower altogether and instead sponge-bathe with a washcloth.
- Only flush when you must. "If it's yellow, let it mellow." (Hint: Put down the lid.)
- Scrape dirty dishes instead of rinsing them.
- Etc.

Students should carefully document in a journal how they both saved and used water throughout the day, and then reflect on which strategies were the easiest and most difficult to do.

9. For the second experiment, students will need to make and try one homemade, all-natural cleaning or personal care product and journal on the experience. Students can consult the [recipes for all-natural products](#) that Beavan provides on his No Impact Man blog, or they could simply brush their teeth or wash their hair using baking soda.

10. At the end of the week, collect the journal entries and debrief about the assignment. What strategies do students think they will continue moving forward?

ASSESSMENT SUGGESTIONS

Students can be assessed on:

- Participation in class discussions.

<http://www.noimpactproject.org>

- Completing the two experiments.
- Thoughtful reflections in their journal entries.

EXTENSIONS & ADAPTATIONS

- **Discover the dangers threatening our local water supplies** due to gaps in the funding needed to address our country's aging water infrastructure. Food and Water Watch explains these dangers and makes the case for a Clean Water Trust Fund to fix these problems in the fact sheet: [Protecting America's Waters: Clean and Safe Water Needs a Trust Fund](#). Fact sheets on the [specific issues in your state](#) are also available. The U.S. Government Accountability Office (GAO) provides additional analysis in the May 2009 report, ["Clean Water Infrastructure: A Variety of Issues Need to Be Considered When Designing a Clean Water Trust Fund"](#) (PDF file) Have students use these three documents to determine 1) What might happen if water pipes and treatment systems continue to age and deteriorate without needed repairs? 2) What specific dangers does your state face? 3) Who favors the establishment of a Clean Water Trust Fund? 4) Why do some oppose such a fund? 5) What options are being proposed to raise money for a clean water trust fund? Have students discuss these issues in pairs, develop a position on the establishment of a Clean Water Trust Fund, and then create a list of "message points" to use with elected leaders when communicating about this issue. Students should then write letters or call their members of Congress to share their message points and advocate for specific change.
- **Develop a profile and map of your watershed.** Using the guide, ["Getting to Know Your Local Watershed,"](#) divide up the categories in the section, "Understanding Your Watershed" for different students to research. Organize their findings in a written profile and have students create maps of the watershed that show its boundaries, key features, ways the land is used throughout the watershed, and the location of water treatment facilities. Discuss what factors in the watershed influence water quality. Have students consider who lives, works, and plays in the watershed and then make a list of stakeholders who would need to be involved in watershed management issues. What role should students play in watershed management?
- **Convince local restaurants that serving tap water is better for the environment.** Have students prepare a PowerPoint presentation with facts and quotes from [A Restaurant Owner's Guide to Serving Tap Water](#). Then, invite a number of local restaurant managers and owners to attend class and listen to the presentation. To show good hospitality and underscore their message, students can serve appetizers and pour their guests tap water from glass carafes or water pitchers. At the end of the presentation, the class should challenge the managers and owners to always serve tap water in their restaurants.
- **Teach students how to read a Water Quality Report.** By law, community water systems issue these reports by July 1 of each year, often as an insert in your utility bill. They are often [posted online](#) and are

- typically made available on request. The reports tell you the source of your drinking water, what contaminants, if any, are in your drinking water, and how these materials could affect your health. Save or obtain a copy of your local water quality report. Then, review with students the fact sheet, "[How to Read Your Water Quality Report](#)" from Food and Water Watch, especially the last page that explains each section of the report. Use this reference to analyze your local report and discuss the findings.
- **Have students do their own local water quality testing.** Obtain water samples from different points along your [local watershed](#). Using water test kits available from an education supplier, students should test these samples for contaminants. They should also test for pH and make observations about water clarity, presence of organisms, etc. Ask students to compare and contrast their data for each water sample. Does the water quality differ when it is sampled close to human settlements? What are some potential sources of pollution along the watershed? How do student findings compare with the annual water quality report provided by your community water utility?
 - **Explore issues related to water privatization** using the city of Milwaukee, Wisconsin as a case study. Have student groups of four break into teams of two and debate the question, "Is water privatization a sound solution for Milwaukee's budget deficit?" Helpful resources to use when preparing for the debate include "[Comptroller Floats Idea of Privatizing Milwaukee Water Utility](#)" and "[Mortgaging Milwaukee's Future: Why Leasing the Water System Is a Bad Deal for Consumers.](#)"
 - **Learn more about initiatives that are helping the 1.7 billion people in the world who don't have access to clean drinking water.** One example is the Play Pump. Show students the brief [FRONTLINE/World video](#) showing how play pumps use the play of children to provide communities in Africa with access to clean drinking water. Another is [Thewaterproject.org](#), an organization that works with partners to drill fresh water wells in Africa and India. They have a [Schools Helping Schools program](#) where your class could raise funds to provide fresh drinking water for a school in Africa. Work with students to support these or other programs that make fresh drinking water available to those in developing countries.

RESOURCES

[A Grape Stomper's Laundry Day](#)

Find out how Colin Beavan got the idea to do the laundry in the bathtub (as shown in the video clip), and what laundry soap mixture he used to keep toxins out of the drain.

[Drugs Found in Drinking Water](#)

A vast array of pharmaceuticals — including antibiotics, anti-convulsants, mood stabilizers and sex hormones — have been found in the drinking water supplies of at least 41 million Americans, an Associated Press investigation shows.

[LV GRN: Make Your Own Household Cleaners and Avoid Health Risks](#)

Colin Beavan provides recipes for all-natural household cleaners.

[Poisoned Waters](#)

This FRONTLINE report takes an in-depth look at the pollutants and toxins from modern everyday life that are increasing the hazards to human health and the ecosystem.

[Triclosan: What the Research Shows](#)

Find out the dangers of this common chemical used in products labeled “antibacterial.”

[Water Saving Tips](#)

This collection of tips can help you save water inside and outside the home.

STANDARDS

These standards are drawn from "[Content Knowledge](#)," a compilation of content standards and benchmarks for K-12 curriculum by McRel (Mid-continent Research for Education and Learning).

Behavioral Studies, Standard 1: Understands that group and cultural influences contribute to human development, identity and behavior.

Geography, Standard 14: Understands how human actions modify the physical environment.

Geography, Standard 15: Understands how physical systems affect human systems.

Language Arts, Standard 1: Uses the general skills and strategies of the writing process.

Language Arts, Standard 4: Gathers and uses information for research purposes.

Language Arts, Standard 8: Uses listening and speaking strategies for different purposes.

Language Arts, Standard 9: Uses viewing skills and strategies to understand and interpret visual media.

Science, Standard 12: Understands the nature of scientific inquiry.

ABOUT THE AUTHOR

Cari Ladd, M.Ed., is an educational writer with a background in secondary education and media development. Previously, she served as PBS Interactive's Director of Education, overseeing the development of curricular resources tied to PBS programs, the PBS TeacherSource Web site (now PBS Teachers), and online teacher professional development services. She has also taught in Maryland and Northern Virginia.

ABOUT NO IMPACT MAN

This lesson is inspired by the work of Colin Beavan (aka “No Impact Man”), who got tired of listening to himself complain about the world without ever actually doing anything about it. So in November 2006, he launched his year-long “No Impact Man” experiment in which he, his wife, his two-year-old daughter and their dog attempted to live in the middle of New York City with as little environmental impact as possible. They tried to adopt new everyday habits that would be less harmful to the planet, and discovered in the process that such changes also make them happier and healthier. Along the way, Beavan [blogged](#) about his adventures and attracted broad public attention to environmental issues, including those related food, consumption, water, energy, and transportation. Beavan’s experiment in lifestyle redesign is the subject of his *No Impact Man*

<http://www.noimpactproject.org>

[book](#) and a Sundance-selected [documentary](#) by independent film producers Laura Gabbert and Eden Wurmfeld.

ABOUT FOOD & WATER WATCH

[Food & Water Watch](#) protects our essential resources by transforming the public consciousness about what we eat and drink and by helping people to take action to make a difference. Food & Water Watch is a non-profit organization working with grassroots organizations around the world to create an economically and environmentally viable future.

Through research, public and policymaker education, media, and lobbying, we advocate policies that guarantee safe, wholesome food produced in a humane and sustainable manner and public, rather than private, control of water resources including oceans, rivers, and groundwater.