

The collage consists of several environmental and social justice posters and book covers. At the top left is a poster titled "CONSUMERISM" featuring a heart-shaped globe and the quote "Earth provides enough for every man's need but not for every man's greed. - Mohandus Gandhi". To its right is the book cover for "THE BOTTOMLESS WELL" by Peter Huber & Mark Mills, which shows a gas pump nozzle pouring oil. Further right is the book cover for "dirt: The Erosion of Civilizations" by David R. Montgomery, depicting a desert landscape. Below the "CONSUMERISM" poster is a poster titled "NO PLACE LIKE HOME" from the Smithsonian, showing a globe with a face. In the center is a historical illustration titled "THE STUMP AND TRUNK OF THE MAMMOTH TREE OF CALIFORNIA" showing a large log being moved. At the bottom right is a poster for the film "THIRST" by Alan Smitow and Deborah Kaufman, showing a protest against water privatization.



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# Media Construction of the Environment: **RESOURCE DEPLETION**

by  
**Sox Sperry**



[www.projectlooksharp.org](http://www.projectlooksharp.org)

Providing materials, training and support to help teachers prepare students  
for life in today's media-saturated world.



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**[www.projectlooksharp.org](http://www.projectlooksharp.org)**

**Mission Statement**

Project Look Sharp is a not-for-profit, mission driven initiative committed to providing teachers with the training and materials they need to integrate media literacy, critical thinking and 21<sup>st</sup> century learning into the curriculum.

Project Look Sharp provides staff development workshops and consulting.

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All our curriculum kits are available **free** of charge on our web site. Please contact *Project Look Sharp* to make a donation.

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**About The Environment Kit Series**

The series includes:

***CHEMICALS IN THE ENVIRONMENT***  
***RESOURCE DEPLETION***  
***ENDANGERED SPECIES***

Each kit includes:

Introduction-Overview of the Kit, 5 lesson plans and teacher's guides, student worksheets, 40+ PowerPoint slides, 8 video clips, 8 print student readings, assessments and sources.

All materials can be accessed for free on our website and are also available through mobile non-Internet based versions viewed on a digital media device. Digital devices include a master PDF as well as all specified media within lesson folders purchased from the Ithaca College Bookstore.

Access the bookstore through our website.

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# Media Construction of the Environment

## **RESOURCE DEPLETION**

*By* **Sox Sperry**

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## **Introduction to Media Construction of the Environment:**

# **RESOURCE DEPLETION**

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## OVERVIEW OF THE KIT

# RESOURCE DEPLETION

## Overview, Objectives, Pedagogy, and Practice

### Overview

This kit provides teachers, college faculty and other educators with the materials needed to engage students in a dynamic and constructivist process of learning how resource depletion has been perceived by the people in the United States and how the U.S. media has constructed that public perception. The subject areas covered include agriculture, biology, ecology, earth and environmental sciences and history of science. The kit contains five lessons including a slide history and four case studies.

This is one of a series of four curriculum kits that collectively examine the way various media have represented human interactions with the natural world. One kit, *Media Construction of Global Warming*, explores media interpretation of the scientific basis for climate change. The other three, *Media Construction of the Environment: Chemicals in the Environment*, *Endangered Species*, and *Resource Depletion* explore the media interpretation of the social basis of these concerns.

### Objectives:

- To teach core information and vocabulary about the history of resource depletion.
- To teach students to understand historical and scientific perspective as communicated through various media.

- To train students in visual literacy and media literacy skills, especially the ability to identify persuasion in marketing ideas and consumption.
- To engage all students, but particularly those disengaged from traditional school work, in complex critical thinking and the development of reading, listening and visual decoding skills and attitudes that support life-long democratic citizenship.

### Learning Standards:

This kit addresses specific standards from the following:

### National Science Education Standards (NSES):

- *Science in Personal and Social Perspectives*: population growth, natural resources, environmental quality, natural and human-induced hazards, science and technology in local national and global challenges.
- *History and Nature of Science*: science as human endeavor, nature of scientific knowledge, historical perspectives.
- *Science as Inquiry*: Understandings about scientific inquiry.
- *Life Science*: Interdependence of organisms, behavior of organisms.
- *Science and Technology*: Understandings about science and technology.

### **National Council for the Social Studies (NCSS):**

- *Culture*: Knowing how belief systems, such as those related to human and environmental health, influence other parts of the culture.
- *Time, Continuity, and Change*: Knowing what things were like in the past and how things change and develop. Drawing on their knowledge of history to make informed choices and decisions in the present.
- *People, Places and Environments*: Knowing why things are located where they are. How places and environments change and what implications these changes have for people.
- *Individual Development and Identity*: Knowing how personal identity is shaped by one's culture, by groups, and by institutional influences.
- *Individuals, Groups, and Institutions*: Knowing how institutions are formed, what controls and influences them, how they control and influence individuals and culture, and how institutions can be maintained or changed.

### **National Council of Teachers of English (NCTE):**

- applying a wide range of strategies to comprehend, interpret, evaluate, and appreciate print and non-print texts.
- applying knowledge of media techniques, figurative language, and genre to critique and discuss print and non-print texts.

This kit also addresses many of the core learning skills that have been identified as essential skills for the **21st Century Literacy**, specifically:

- Information and media literacy skills: analyzing, accessing, managing, integrating, and evaluating information in a variety of forms and media.
- Critical thinking and systems thinking: exercising sound reasoning in understanding and making complex choices, understanding the connections, conflict and change among systems.

Finally, the activities foster group discussion skills, and can be easily linked to related lessons in other disciplines such as art, economics or multicultural studies.

### **Access Materials: Slides, Video and Print**

All materials for this kit are available for free at [www.projectlooksharp.org](http://www.projectlooksharp.org). This includes the PowerPoint slide show, video clips, and all print materials (PDF). Educators will need access to a computer and digital projector or large monitor so that the class can identify key details in each slide. Teachers may want to print and review the lesson and make copies of student histories and assessments prior to instruction.

Educators may purchase a mobile non-Internet based version of the curriculum kit on a digital media device from the Ithaca College Bookstore. Devices include the master PDF of the kit and all specified media within lesson folders. Check the Project Look Sharp website for more information.



## OVERVIEW OF THE KIT

# How to Use these Materials

## LESSON #1: HISTORY SLIDES

This lesson consists of 48 slides organized into three parts.

- a. The first section of 19 slides is arranged into thematic chapters overlapping in chronological order: **Before** (19th century and before), **Frontier** (18th-19th centuries), **Progress** (19th - early 20th century) and **Consequences** (mid 20th century - present).
- b. The second section, **Connections, Conflict, Change** includes 20 slides representing diverse perceptions about resource depletion. These slides, many from websites, present contemporary views on issues including water, soil, wood, oil, development and consumerism. The **Connections, Conflict, Change** chapter is designed to draw on information and understandings from the previous chapters in order to develop a more holistic and nuanced overview of contemporary media constructions of resource depletion in the 21st century.
- c. The last section of 8 slides includes sets of **Paired Image Comparisons** which provides an opportunity for teachers to explore divergent representations of concepts relating to resource depletion.

The lesson begins with the students reading the 4-page handout, **Student Reading – Resource Depletion**, that gives key knowledge and vocabulary for “decoding” the slides. It may be given for homework or read in class. Each slide presents one or two documents that range from oil paintings, magazine advertisements and book covers to DVD jackets, editorial cartoons and web

pages. The teacher introduces each slide/document with brief background information adapted to reflect the knowledge, level and subject area of the class. As each slide/document is projected the teacher asks document-based probe questions that require students to apply core knowledge while analyzing the scientific, historical and media context in which the document was created. The teacher follows the decoding by adding additional information on the topic or document and open-ended discussion questions.

This interactive decoding process is detailed in the **Teacher Guide** that includes a one-page lesson for each of the slides. Each slide lesson begins with **Background Information** that students may need in order to answer the probe questions and should be communicated to the class before decoding each slide. Probe **Questions** ask students to apply their knowledge of resources and media in each slide. **Possible Answers** are included as model evidence-based responses that address key historical and media visual literacy concepts and information. However, there is rarely one right answer to any of these interpretative questions, and the teacher should encourage multiple readings and a diversity of responses as long as students present evidence to back up their interpretations. It is important that students recognize that all people do not interpret media messages in the same way. It is also important to encourage students to begin to ask their own media literacy questions, especially as they become more familiar with this form of critical analysis.

**LESSON #1 CONT...**

The teacher's guide includes **Additional Information** that adds information from the source document, including text from websites that may be too small to read when projected or additional historical details that the teacher may choose to share during or after the decoding. **Further Questions** prompt students to move beyond text-based analysis to discuss issues, make personal connections, do follow-up research or take social action. **Connections** link each slide to related topics in this and other kits with abbreviated references to specific slides and lessons.

Presenter Notes in the Power Point View Menu allows the teacher to view the current, previous and subsequent slides and includes a timer. This view also shows the **Background Information, Questions** and **Further Questions** for each slide.

**LESSONS #2-5: CASE STUDIES**

This kit includes two video lessons, *Damming the Rivers* and *Exxon Valdez – Oil and Water*, each of which includes four short video clips for decoding. The video case study lessons, like the history slide lesson, have the teacher lead a whole class through decoding of each document. The two text-based article reviews, *Chuckchi Sea Oil Drilling* and *Cochabamba – Water For Sale*, ask students to analyze four 2-page articles. The text-based case studies have students work as individuals or in groups and report out to the whole class. These text-based lessons may work better with more independent students. Each case study lesson includes a one-page **Lesson Plan** and detailed **Teacher Guide**.

**ASSESSMENT**

The assessment asks each student to demonstrate his or her knowledge gained from the lesson and his or her critical thinking and media literacy skills through document-based analysis. The Media Construction of Resource Depletion kit assessment, "Changing Public Attitudes Toward Oil as a Resource," includes a student handout with images from six documents, a document-based essay question and a page of short-answer (scaffolding) questions. The teacher may choose to use only the short answer questions with the image handout, or only the essay question and images, or both.

**LEVEL, TIME AND COVERAGE**

Although the readings and questions were designed for upper-level high school and college classes, these materials can be used effectively with a wide range of students by editing the slides and questions and providing additional background information. The time it takes to deliver these lessons will vary depending upon the knowledge of the students, the experience of the teacher with this form and these materials, the amount of additional information delivered and further questions asked, and how many of the documents the teacher uses. Although teachers may need to edit the number of documents used, they should avoid the temptation to sacrifice student interaction for content coverage. The power of the lessons emerge when students actively apply their knowledge, identify evidence, articulate their interpretations, analyze authorship and point of view, and discuss meaningful issues. If a teacher does not have the time to do all of the lessons, he/she should edit the number of slides, videos or readings rather than cover all of the documents in a lecture format.

## OVERVIEW OF THE KIT

# Media Construction of the Environment Kit Series

The kits in this three-part series explore a wide variety of media in the United States with a broad chronological and topical sweep. Indigenous media forms prior to European contact with Native American peoples included petroglyphs, pottery and basketry. These media provided means for indigenous artisans to transmit ancestral knowledge and ritual forms concerning human interaction with their natural world relations – animals, plants and minerals.

In the early 19<sup>th</sup> century media forms included etchings and paintings created by painters and illustrators. These artists were often hired by wealthy patrons, often kings or presidents, to represent their interests in distant corners of their dominion. In the late 19<sup>th</sup> century, with the expansion of the market economy, the first public relations experts began to create posters and fliers to sell the wares of their sponsors. Advertisements for a new McCormick's reaper and Black Death insecticide and fertilizer were created in this way. In this same period social critics began to publish their own individual challenges to prevailing views regarding people and the environment. Henry David Thoreau's *Walden* and the *Harper's Weekly* cover, "Slaughtered for the Hide" are examples of such early environmental advocacy.

By the mid-20<sup>th</sup> century public relations firms were hired by multinational corporate clients to manage public perception and to help create new markets for their products. Magazine ads for DuPont, for example, heralded "Better Things For Better Living Through Chemistry" and encouraged

consumers to buy new products such as nylons and antifreeze that were not previously available and thus not necessities just a decade before. In a similar way large governmental projects such as Hoover Dam were advertised on government report covers as "modern engineering triumphs". By the end of the 20<sup>th</sup> century as global corporations became even larger, the capacity to spread their message grew accordingly. In-house corporate marketing departments in coordination with industry councils created multi-year advertising campaigns to increase market share, to self-define as "green" and to defend themselves against critics.

With the advent of the modern environmental movement in the 1970s new questions came from an awakened public as to the impact of scientific and technological progress. These questions were initially posed in writings by individuals such as Rachel Cason and Jacques Yves Cousteau and then brought to the wider public in such visual forms as posters, editorial cartoons and satirical spins on corporate advertising. By the 1980s environmentalism had such public approval that major corporations now use this popular environmental interest to sell their own products. Thus *Time* magazine's editors could prepare a cover story on the toxic poisoning of the nation while relying on advertising revenue from some of the very corporations that were polluting.

### Media Construction of the Environment Kit Series Cont...

In the 21<sup>st</sup> century new media had advanced to the point where individuals and small groups advanced their own point of view to attack or support corporate or government positions. The Internet and digital technologies allowed advocacy journalism to thrive in the blogosphere. Environmental activist groups like Students for Bhopal and Greenpeace created their own media forms as did their critics, groups like the American Chemistry Council and the Committee For a Constructive Tomorrow.

The proliferation of media forms and sources raises concurrent issues of concern: Can an advocate for a particular point of view also be objective? Is knowledge of the financial sponsorship of a group or individual essential in determining credibility of their media message? When corporations, the government and activist groups all use appeals to “planet stewardship” to further their disparate goals does the phrase itself lose its currency?

*“As we peer into society's future, we -- you and I, and our government -- must avoid the impulse to live only for today, plundering, for our own ease and convenience, the precious resources of tomorrow. We cannot mortgage the material assets of our grandchildren without risking the loss also of their political and spiritual heritage. We want democracy to survive for all generations to come, not to become the insolvent phantom of tomorrow.”*

– President Dwight Eisenhower  
Farewell Address



## OVERVIEW OF THE KIT

# Media Literacy and Democratic Citizenship

The founders of the United States articulated the need for a literate citizenship as core to the development of a deep and enduring democracy. We live in an age when the most influential messages about pressing social issues and events are delivered through mass media, such as television, magazines and the Internet. Most students use the Internet as their primary source of information, yet few have any formal training in assessing the credibility of information in Web sites. It is essential to the success of our democracy that young people consciously and consistently analyze and evaluate media messages. They need to be taught to seek out current, accurate, and credible sources of information; they need to understand the influence of media messages on their understanding of the world; and they need training in identifying and using various techniques for communicating messages in different media forms. Without these critical skills, we risk losing the diversity and freedom of thought that underpins a culture of true democracy.

## Collective Reading of Media Messages

This curriculum is based on the classroom practice of collective reading, in which the teacher leads the class through the process of decoding images, sounds and text as a way of developing a range of critical thinking skills while teaching core knowledge. This constructivist approach encourages the development of moral reasoning as students clarify their own interpretations, listen to the analysis of their peers, and discuss ethical issues. Decoding of the documents in this curriculum will help train students to distinguish fact from opinion,

analyze point of view and identify bias, interpret historical documents, and use evidence to back up a thesis. The classroom decoding process is particularly effective in involving students who rarely share their opinions about print-based material, including students with reading disabilities, visual learners, and students for whom English is a second language. The teacher should consider calling on students or going around the room to ensure participation by all students in the collective reading process.

## Encouraging Multiple Readings

Although the Teacher Guides for each lesson include possible answers to the probe questions, the teacher should encourage multiple readings and a diversity of responses for most of the questions posed in the teacher guide. It is important that students give evidence in the document to explain their conclusions. Occasionally a question has only one right answer (e.g., “who created this video?”), and students should learn to distinguish between objective and subjective questions. The suggested answers given in the scripts are intended to reflect typical responses that address key historical and media literacy concepts and information. However, it is important that students recognize that all people do not interpret media messages the same way. Depending upon each reader’s background, including life experience, age, gender, race, culture, or political views, he or she may have very different interpretations of a particular text. The collective reading experience provides the opportunity to explore these differences and discuss the important concept that readers interpret messages through their own lenses.

**Reading Bias**

A major theme of these materials is the recognition that all media messages come from a particular point of view and have a bias that reflects the intent and perspective of the producer and sponsor. With these materials, teachers can train students to recognize bias and point of view. The teacher should encourage students to ask critical questions about any media messages encountered inside or outside the classroom using the *Key Questions To Ask When Analyzing Media Messages* found at [www.projectlooksharp.org](http://www.projectlooksharp.org).

**Bias in this Curriculum and in the Classroom**

This series of lessons, like all media, also has a point of view and a bias. As teachers use the lessons, they may identify opinionated language, selective facts, missing information, and many other subjective decisions that went into constructing this view of history. The same questions the curriculum applies to other documents can be applied to this media construction: Who produced this curriculum for what purpose and what is its bias? Teachers and students could and should be asking critical questions about the editorial choices that went into constructing these lessons. For instance, why did we choose to focus on certain topics (e.g., environmental justice, green marketing and GMOs), but not others (e.g., risk/benefit analysis, the precautionary principle and chemical body burden)? And, what is your evidence for these conclusions? When using these materials teachers will make their own decisions of what to include and to edit, what questions to use and what issues to avoid. All of these decisions, both by the creators and users of the curriculum, will influence the view of history that students receive. Teachers should encourage students to thoughtfully analyze and discuss the stories, the perspectives, and the biases celebrated and criticized within our own classrooms. Those skills and practices are core to an educated democratic citizenship.

**Additional Resources**

For more information about media decoding download these documents from the project Look Sharp website:

- Key Questions to ask when analyzing media messages
- Tips for Media Decoding
- Core Principles for media literacy education

**Fair Use of Media Documents**

The classroom critique of political and cultural documents (e.g., paintings, TV news clips, excerpts from films, web pages) is essential to the development of core literacy skills in our media saturated democracy. To enable educators to fulfill the mission of teaching these core civic objectives, Project Look Sharp has created media literacy integration kits using a variety of different media documents for critical analysis in the classroom. The documents in this curriculum are presented for the purpose of direct critique and solely to be used in an educational setting.

For more information about fair use in Media Literacy Education, go to the Media Education Lab at Temple University at [www.mediaeducationlab.com](http://www.mediaeducationlab.com).

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## LESSON PLAN



PowerPoint Slide Show

# Slide Show: History of Resource Depletion

**Lesson Objectives:**

- Students will understand how U.S. views of natural resources, their use and their depletion, have changed over time.
- Students will apply knowledge about resource depletion to the decoding of diverse media representations.
- Students will learn critical thinking, information literacy and media literacy skills including understanding bias, point of view, sourcing, credibility, and key questions to ask when analyzing any media message.

**Vocabulary:**

**Before:** petroglyph, commodities, New World resources, fur trade

**Frontier:** treaties, Northwest Territory, settlement, exploration, Gold Rush, Redwoods

**Progress:** Enlightenment, property, plows, empire, Manifest Destiny, oil boom, Hoover Dam

**Consequence:** drought, over-plowing, FSA, medical waste, Jacques-Yves Cousteau, commercial fishing, water footprint, WWF, the American dream, resource wars

**Connections:** Earth Day, Thoreau, conservation ethic, property rights, National Park Service, Teddy Roosevelt, John Muir, megalopolis, consumption and disposal, Buy Nothing Day, consumerism, peak oil, alternative energy, Redwood Summer, Green Belt Movement, water privatization, sustainable agriculture, indigenous practices, renewable energy

**Media**

PowerPoint includes: petroglyph, engravings, paintings, lithograph, advertisements, stock certificate, poster, web pages, blog page, DVD jacket, brochure, and covers of magazines, books and a report

**Materials Needed:**

- PowerPoint slide show: *History of Resource Depletion* (access online or via Lesson 1 digital media folder)
- Four-page Student Reading: *Media Construction of Resource Depletion*
- Teacher's guide: Lesson 1: *History of Resource Depletion*

**Time**

50 Minutes to 2 hours depending upon how quickly the teacher moves through the slides.

**Lesson Procedures:**

1. Introduce the lesson: explain that the class will learn the history of how resource depletion has been presented in popular culture through analyzing media documents.
2. Distribute *Student Reading* to be done in class or for homework.
3. Project the slides and lead the student decoding. For each slide present *Background Information* followed by *Questions* from the *Teacher Guide*. The guide includes *Possible Answers* and *Evidence* to model student application of key knowledge through evidence-based analysis. Add *Additional Information* and *Further Questions* where appropriate. For more information on leading a decoding lesson see the *Kit Introduction*.
4. Use the *Final Assessment* to assess student learning.

## Media Construction of Resource Depletion

### Why Study Resource Depletion?

The world's natural ecosystems are core to life on earth. The forests provide countless known and unknown benefits, from the healing value of plants to their impact on climate. The oceans not only provide protein for millions of humans in the form of fish, but they also sequester a huge amount of natural and human-produced carbon dioxide. The earth's soils are the basis of agriculture; our rivers, lakes and glaciers provide the fresh water that all societies need, and we all depend on a livable atmosphere.



Who made these media documents and for what purposes?

What messages do each give about the use of our planet's natural resources?

We are interested in resource depletion for many reasons, including our own self-interest. Without a balance between the depletion of resources and the needs of natural ecosystems, humanity will not survive. In addition, many of the great faith traditions regard human stewardship of the earth as a core spiritual value. Much of human art and literature have celebrated the beauty, bounty and worth of the natural world. The modern environmental movement echoes all of these concerns. But civilization has been built on the exploitation of natural resources. What would our lives be like without the cutting of trees, the tilling of soils, or the drilling of oil?

### Media Literacy and Critical Thinking

We gain much of our knowledge and many impressions about the world from the media. As we search the Internet, watch TV, and read newspapers, magazines and textbooks, we take in information and ideas about natural resources. Some sources emphasize the many human benefits of resource use while other media messages focus on the negative impacts of resource depletion. How do we decide what and whom to believe?



This lesson will help you to answer these questions. Through careful analysis of media representations, you will gain a better understanding of conflicting views of the benefits and the risks of using our natural resources. You will develop critical thinking skills through asking key questions about all media messages. You will analyze contemporary media documents that present conflicting perspectives as well as historical documents and identify ways in which popular views about natural resources have changed over time. We will begin this study by exploring ancient messages about the use of our earth's resources.

1854	1858	1872	1891	1916
Thoreau's <i>Walden</i> published affirming preservation philosophy	Oil strike begins U.S. oil boom	Yellowstone becomes world's first national park	John D. Rockefeller's Standard Oil Co controls 70% of world's oil	National Park Service founded to protect wilderness preserves

### Before - Seeking Balance

The Anasazi or “ancient ones” of the desert southwest made choices about where to locate their cliff dwellings based on the life-giving capacity of the natural resources within which they lived. They were concerned with where the sun would fall on the summer and winter solstice and on the availability of wood, water and soil for planting. There may be 21<sup>st</sup> century lessons about sustainability hidden in the cultures of Native peoples



What messages does the Minnesota State seal give about land use by Native Americans and white settlers?

### Frontier: Boundless Resource

When Europeans first encountered the New World they were overwhelmed with the enormity of the frontier landscape. The first European reporters wrote of natural wonders like Niagara Falls and Mammoth Cave with such awe that these became the first tourist attractions for visiting Europeans. These early media reports encouraged the belief that the New World was limitless in its abundance of resources, especially in comparison with the well-worn landscape of 17<sup>th</sup> century Europe.

### Progress – Resource for Development

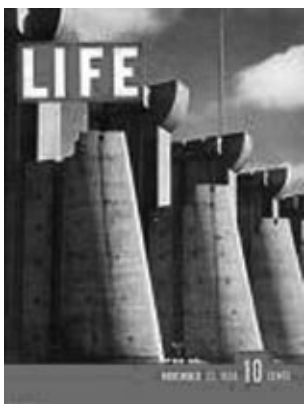
John Locke, English philosopher of the Enlightenment, provided the intellectual argument for property rights based on the “industrious and rational” improvement of the land. President Thomas Jefferson used Locke’s justification when he explained to a delegation of Shawnee Indians why their people were being exterminated: “When the white people first came to this land, they were few, and you were many; now we are many and you few; and why? Because, by cultivating the earth, we produce plenty to raise our children, while yours... suffer for want of food . . . are exposed to weather in your hunting camps, get diseases and die. Hence it is that your numbers lessen.” (Jefferson 207)

In the 19<sup>th</sup> century United States progress often meant the celebration and conquest of great natural wonders. One example of this was a giant sequoia known as the Big Tree, over 300 feet tall and more than 2,000 years old. Entrepreneurs removed the bark from the bottom thirty feet of the tree and transported the remnant to England where it was displayed as a giant room in the Crystal Palace. Following the death of the tree as a result of the girdling its parts were sold as souvenirs and its stump became a platform for dances. Although such destruction brought profit for the cutters, other criticized the “sacrilegious vandals” who had destroyed such a “noble monarch.” (Hutchings)

The use and destruction of seemingly limitless natural resources provided the basis for industrial development in the early United States. The media of the time celebrated this capacity of modern technology to tame “mother nature.” The J.M. Hutchings company sold prints of the “Stump and Trunk of the Mammoth Tree of Calaveras County” described above. The McCormick’s reaper company celebrated the triumph of the sodbusters

1923	1935	1947	1956	1968
Hetch Hetchy river dammed over opposition by early environmentalists	“Black Sunday” dust storms blow away Great Plains topsoil	Levittown, L.I. becomes first mass-produced suburban development	Shell Oil geophysicist Marion King Hubbert coins concept of “peak oil”	Discovery of Prudhoe Bay oil leads to Trans-Alaskan pipeline

of the Great Plains with a poster entitled "Westward the Course of Empire Takes Its Way." Newspaper stories saluted the entrepreneurial spirit of John D. Rockefeller as he turned his share of the Pennsylvania oil fields into the corporate giant Standard Oil. Government also played a role in taming and exploiting our nature resources such as federal dams building projects to control flooding and provide hydroelectric power.



Why might the editors have chosen this photograph of a New Deal dam for the first cover of *Life* magazine in 1936?

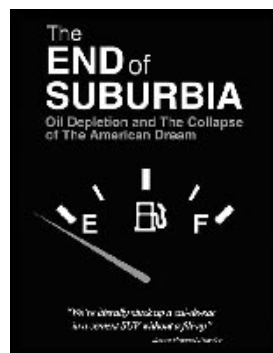
The conquering of natural resources has been celebrated in American media from the early stories of Paul Bunyan felling the forests through picture postcards glorifying the building of Boulder Dam to documentary films extolling the benefits of the Trans-Alaskan oil pipeline. These media constructions help establish popular attitudes about the use of natural resources for progress and prosperity.

### Consequence – Confronting Limits

By the mid-20<sup>th</sup> century some people were beginning to question the idea of limitless growth. In 1937 artist Ben Shahn was hired by the federal government's New Deal agencies to educate farmers about the dangers of plowing up hedgerows to maximize production, practices that contributed to the dust bowl conditions which

forced many refugees to leave Oklahoma farms for the promise of California. Speaking of his choice for poster subjects Shahn said, "You're not going to move anybody with (images of) this eroded soil - but the effect this eroded soil has on a kid who looks starved, this is going to move people." (Library of Congress)

In the 1960s, oceanographer Jacques Cousteau created compelling images of the threats to the ocean ecosystem for his made-for-television series "The Undersea World of Jacques Cousteau." These programs explored the wonders of the sea and the problems of using it as the "universal sewer" as he said to U.S. House Committee on Science and Astronautics in 1971. Cousteau's programs combined striking images of the Great Barrier Reef, blue whales and white sharks with equally striking images of the impacts of over fishing, medical waste dumping and industrial pollution.



What techniques does the designer of this DVD cover use to convey the message about peak oil?

In the first decade of the 21<sup>st</sup> century blogger and writer James Howard Kunstler has raised the question of how we will live during the "long emergency" posed by life after peak oil. On his blog and in his books Kunstler asks us to consider how to break our addictive relationship with fossil fuels which leads to suburbanization, a continual escalation in the price of oil and potentially catastrophic wars over control of what remains of this ancient resource.

1970	1988	1990	1992
first "Earth Day" heralds in the modern environmental movement	Wise Use Movement holds strategy conference supporting property rights	Redwood Summer opposes clear cutting of old growth redwoods	Adbusters Media Foundation organizes first "Buy Nothing Day" challenging consumerism

### Connections, Conflict, Change Nature Connects us All

One of the many points of contention regarding the use of resources has been the question of what to do with “the wilderness” - who gets to define what “use” might be best or most ethical? Should wilderness be preserved for its own sake as argued by John Muir in the 1890s and by Julia Butterfly Hill a century later in defense of Yosemite and the redwoods? Or should wilderness be preserved as investments for present and future use by humans as argued by Gifford Pinchot in the first decade of the 20<sup>th</sup> century and by his free-market environmentalist descendants on “The Commons” blog one hundred years later?



What is this cartoonists' perspective on environmental groups such as *Green Peace*?

For some the issue of resource use is seen as a simple conflict between “good” and “bad”. During “Redwood Summer” of 1990 logging interests in northern California clashed with environmentalists in a debate that the media sometimes caricatured as “jobs vs. owls” or “hardhats vs. tree-huggers.” In reality the issues were far more complex, requiring a thoughtful balance between economics and land ethics, and between human agency and complex natural systems.

“All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts. His instincts prompt him to compete for his place in the community, but his ethics prompt him also to co-operate (perhaps in order that there may be a place to compete for). The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land”

Aldo Leopold,  
1949 *A Sand County Almanac*

Today’s media both reflects and affects our conflicting and often contradictory attitudes about the depletion of natural resources. We are moved by well-crafted commercials from multinational oil companies that promote environmental concerns. Some activist groups use compelling imagery that seems to promote the needs of exotic animals over those of impoverished peoples in developing nations. These ironies suggest a series of critical questions:

- How can we address both environmental concerns and social justice?
- Is environmental consciousness promoted or co-opted by “green marketing”?
- Will our current rate of consumption require a dramatic change in our living standards or should we look to technology and the free market to create a sustainable future?
- What are the implications of China, India and other developing nations pursuing the U.S. approach to resource use?
- What role will resource depletion play in international conflict in the 21<sup>st</sup> century?
- What impact should climate change have on our lifestyle choices?

Answers to these complex questions of environmental sustainability can be found, in part, by looking back at how humans have used and viewed natural resources over the centuries.

1994	1999	2004	2008
Construction begins on China’s Three Gorges Dam, world’s largest hydro-electric project	Cochabamba, Bolivia’s water first privatized then returned to public ownership	Wangari Maathai wins Nobel Peace Prize for Green Belt reforestation	McCain/Palin lead chant “Drill Baby Drill” during U.S. presidential campaign

## TEACHER GUIDE

**SLIDE #2: *Ozette Rocks, petroglyph*****BACKGROUND INFORMATION**

This rock carving or petroglyph is located at the site of an ancient Makah Indian village near Ozette, Washington. It was probably created hundreds of years ago by artisans using bone and antler. In the 21st century, the word “media” is often used to describe forms of mass communication using high tech instruments produced by major corporations. It is important to remember that a petroglyph is a different yet equally valid form of media since it is a communication form that travels across time in its ability to convey meaning.

→ Project the document

QUESTION

**Who made this and for what purpose?**POSSIBLE  
ANSWER

This was made by artists whose names we don't know probably to convey their ideas about human relations with the natural world.

QUESTION

**What is the message about human relations with the natural world?  
Give evidence for your answer.**

POSSIBLE  
ANSWER

As with many media messages there is more than one possible interpretation. One such explanation might be that humans, other creatures, the sea, the rocks and the forest are all part of an interconnected whole.

EVIDENCE

The images of the faces and the whale are carved on a rock overlooking sea and forest thus creating a fluid connection between all the elements.

**SLIDE #2**

***Ozette Rocks  
petroglyph***

**FURTHER QUESTIONS**

**How does the choice of setting influence an interpretation of a media message? How might the meaning change if this image were projected onto a billboard, a cell phone or a television screen?**

**ADDITIONAL INFO**

According to the National Oceanic and Atmospheric Administration's Olympic Peninsula Web page:

The Olympic Coast has sustained human communities for at least 6,000 years and possibly much longer. Prehistoric archaeology sites have revealed human occupation along much of the shoreline. One site - Ozette Village - has given us a dramatic glimpse of Makah culture, which centered around whaling and other ocean-dependent hunting, gathering and fishing activities. Today's Makah, Quileute, Hoh and Quinault tribes carry their heritage forward balancing their roles as natural resource managers and stewards of traditional culture. (History)

David Nye writes of the role of stories as essential to understanding the human relationship with the environment in his essay "Technology, Nature, and American Origin Stories":

Every culture has a foundation narrative, but these are by no means the same. Amerindian and white stories of origin are fundamentally different...Most if not all Native Americans tell stories that express a sense of primeval oneness with the places they inhabit. While the specific stories vary, some parts of the world are almost invariably seen as sacred spaces. Anthropologists found that the Navajo had an average of one sacred place in every twenty-six square miles...These natural sites were not apprehended as isolated spots but rather integrated with the landscape through story telling.

**CONNECTIONS**

MCRD slides 2, 3, 4, 6, 7, 8, 9, 40, 41, 50 (indigenous perspectives)



## TEACHER GUIDE

**SLIDE #3: *Secota Village, 1598 engraving*****BACKGROUND INFORMATION**

This engraving was included in a book published in London entitled, "A Briefe and True Report of the New Found Land of Virginia" by Thomas Hariot. This engraving, by the publisher Theodor DeBry, was based on a watercolor by John White portraying a North Carolina coastal village. This image was one of the first representations of the New World as viewed by Europeans.

In his report, Hariot describes the uses for Virginia's "commodities": "A surplus of these can be provided by experienced men for trade and exchange with our own nation of England. It will enrich you, the providers, and those who will deal with you and will greatly profit our own countrymen by supplying them with many things which they have had to procure in the past either from strangers or from our enemies. These commodities, for distinction's sake, I call marketable."

→ Project the document

## QUESTION

**Which aspects of New World resources does the artist choose to emphasize and which to de-emphasize? Explain your conclusion.**

## POSSIBLE ANSWER

He chooses to emphasize the unlimited wealth of resources rather than the potential dangers or limits to acquiring those resources.

## EVIDENCE

The image shows bountiful and orderly fields and crops, suggesting plentiful food and resources. The image of the peaceful community without apparent weapons of fortification eliminates the prospect of conflict with those who already live on the land.

**SLIDE #3**

***Secota Village,  
1598 engraving***

**ADDITIONAL INFO**

In 1622, Native Americans attacked and killed several hundred Virginia colonists in an unsuccessful effort to drive the invaders from their lands. Edward Waterhouse, in his report to the Virginia Company, argued the massacre was actually a good thing for the colony:

Because our hands which before were tied with gentleness and fair usage, are now set at liberty by the treacherous violence of the Savages, no untying the knot, but cutting it: So that we, who hitherto have had possession of no more ground then their waste, and our purchase at a valuable consideration to their own contentment, gained; may now by right of War, and law of Nations, invade their Country, and destroy them who sought to destroy us; whereby we shall enjoy their cultivated places . . . and possessing the fruits of others labours. Now their cleared grounds in all their villages (which are situated in the fruit fullest places of the land) shall be inhabited by us, whereas heretofore the grubbing of woods was the greatest labour. Because those commodities, which the Indians enjoyed as much or rather more than we, shall now also be entirely possessed by us. The Deere and other beasts will be in safety, and infinitely increase. (How)

**FURTHER QUESTIONS**

**How might a Secotan villager and a citizen of London interpret this image differently in 1598?**

**Who might benefit and who might be harmed by the publication of this image?**

**CONNECTIONS**

MCRD slides 2, 3, 4, 6, 7, 8, 9, 40, 41, 50 (indigenous perspectives)

## TEACHER GUIDE

**SLIDE #4: *Prairie on Fire*, 1837 painting****BACKGROUND INFORMATION**

Alfred Jacob Miller was a young artist from New Orleans when he visited and sketched the 13th Green River Valley Rendezvous in the Wyoming territory. The Rendezvous was organized by the American Fur Company as a means to facilitate trade. The 1837 Rendezvous brought together more than 2,000 Indians, trappers and fur company agents. In his journal, Miller described this controlled burn as a way to clear ground and protect horses and encampments (Journal).

→ Project the document

QUESTION

**What information is included in this painting that identifies the event as one that happened after the first contact between the Native Americans and the Europeans? Explain your answer.**

POSSIBLE ANSWER

The presence of horses and wagons.

EVIDENCE

Horses and wheeled wagons replaced dogs and travois as primary means of transportation following early contact between Native Americans and Spanish conquistadors.

QUESTION

**How might eastern viewers who had never been to the Great Plains and knew nothing about controlled burns have interpreted this message?**

**SLIDE #4**

***Prairie on Fire*  
1837 painting**

**FURTHER QUESTIONS**

**Consider the competing themes of how to survive in a dangerous world, either by choosing to live with nature or by attempting to conquer it. Which of these themes would likely have been reinforced by the media of the time and why?**

**ADDITIONAL INFO**

Plains tribes like the Pawnee managed the prairie with fire to help provide good pasture for their horses. The process of burning the grass allowed direct sunlight to penetrate, speeding the growth of grass, particularly in the spring and summer. Non-native travelers realized that going out onto unburned prairie meant that their horses might not have sufficient feed (Steinberg 19).

From Miller's description of this drawing:

Towards the Fall the grass, which has attained the height of 3 or 4 feet, becomes parched and dry. It is then very inflammable and either by accident or design takes fire. The manner of its approach is insidious enough; at first a slight haze is seen near the horizon, but the experienced eye of the Trapper or Indian immediately detects the nature of the visitor, and all hands in the camp are immediately busy in setting fire to the long grass about them—not suffering it to make much headway, but beating it down with cloths & blankets. In this manner large spaces are cleared, horses, mules, and tents are secured on the burnt areas, which are enlarged as time permits, and escape from certain death is thus averted through a very simple process. The fire sweeps round with the speed of a racehorse, licking up every thing that it touches with its fiery tongue—leaving nothing in its train but a blackened heath (Journal).

**CONNECTIONS**

MCRD slides 2, 3, 4, 6, 7, 8, 9, 40, 41, 50 (indigenous perspectives)

## TEACHER GUIDE

**SLIDE #5: *Niagara Waterfall*, 1704 engraving****BACKGROUND INFORMATION**

This etching provided the first view of Niagara Falls for a European audience. It was drawn from a text description of the falls by Father Louis Hennepin, who was said to be the first European to see Niagara Falls in 1678. In his book, *A New Discovery of a Vast Country in America, Extending Above Four Thousand Miles, Between New France and New Mexico*, Hennepin described Niagara as “a vast and prodigious Cadence of Water which falls down after a surprising and astonishing manner, insomuch that the Universe does not afford its Parallel...The Waters which fall from this vast height, do foam and boil after the most hideous manner imaginable” (Mussulman).

→ Project the document

QUESTION

**What are the messages about the natural resources contained within the “new country in America” implicit in the engraving and Hennepin’s text? Give evidence to support your answer.**

POSSIBLE ANSWER

The country and its resources are enormous and awe inspiring.

EVIDENCE

Enormous is suggested by Hennepin’s use of the word “vast” in the title and text and in the image stretching endlessly toward the horizon. Awe is indicated by the words prodigious, without parallel, most..imaginable and by the upraised and outstretched arms of the men in the foreground of the print.

QUESTION

**Who might the target audience be for this book and image?**

**SLIDE #5**

***Niagara Waterfall*  
1704 engraving**

**FURTHER QUESTIONS**

**How credible are Hennepin's text and the engraving in describing Niagara Falls?**

**ADDITIONAL INFO**

Father Hennepin was a Franciscan missionary and an historian on French explorer LaSalle's expeditions of the upper Mississippi River. Hennepin's work was first published in 1697 and dedicated to William III of England. His reference to Niagara Falls began:

Tis true, Italy and Suedeland [Sweden] boast of some such Things; but we may well say they are but sorry Patterns, when compar'd to this of which we now speak. At the foot of this horrible Precipice, we meet with the River Niagara, which is not above a quarter of a League broad, but is wonderfully deep in some places. It is so rapid above this Descent, that it violently hurries down the wild Beasts while endeavouring to pass it to feed on the other side, they not being able to withstand the force of its Current, which inevitably casts them above Six hundred foot high...This wonderful Downfal, is compounded of two great Cross-streams of Water, and two Falls, with an Isle sloping along the middle of it. The Waters... making an outrageous Noise, more terrible than that of Thunder; for when the Wind blows out of the South, their dismal roaring may be heard more than Fifteen Leagues off...  
(Mussulman)

Niagara Falls and Mammoth Cave in Kentucky became the most popular tourist destinations of the early United States. Both showcased the vast nature of the natural resources of the new world (Mammoth).

**CONNECTIONS**

MCRD slides 5, 13, 15, 17, 37, 38, 45  
(water)

## TEACHER GUIDE

## SLIDE #6: *Indian Treaty of Greenville, 1795* painting

### BACKGROUND INFORMATION

One of President Washington's first tasks in office was to "secure the frontier" by waging war against two Native American tribal confederacies, one led by the Iroquois in New York and the other led by Chief Little Turtle of the Miami in Ohio and Indiana. This painting depicts the treaty negotiations following General Anthony Wayne's defeat of the Miami confederacy in northwest Ohio. The treaty ceded much of the Northwest Territory, now Ohio and Indiana, to the United States in exchange for a promise of peace and trade between the U.S. and the Indian nations. The anonymous artist may have been an aide to General Wayne.

→ Project the document

## QUESTION

**Who might have benefited from this message in 1795 and who might have been harmed by it? Explain your conclusion.**

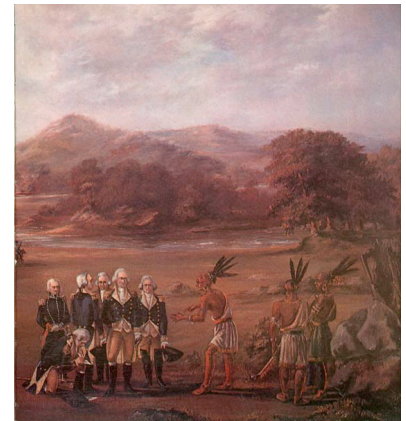
## POSSIBLE ANSWER

Those wanting increased settlement and trading opportunities in the Northwest Territory would benefit. The Native Americans would likely be harmed.

## EVIDENCE

The image shows a wide landscape of river, forest and mountains in the distance. The military presence in the center of the image suggests the army can maintain and extend the borders of the United States into this landscape. The portrayal of the Indian representatives as few in number and apparently pleading their case against stern faced officers suggests that the Indians are on the defensive and may lose more of their land. These messages would serve to encourage continued military action and expansion by the U.S.

## SLIDE #6



***Indian Treaty of  
Greenville  
1795 painting***

**FURTHER QUESTIONS**

**How might the portrayal of the soldiers and the Indians indicate how the artist viewed the competing interests of both groups?**

**What values about Manifest Destiny, land ownership and the use of land and resources are implied in this image?**

**ADDITIONAL INFO**

From the text of the treaty of Greenville:

ARTICLE V - To prevent any misunderstanding about the Indian lands relinquished by the United States in the fourth article, it is now explicitly declared, that the meaning of that relinquishment is this: the Indian tribes who have a right to those lands, are quietly to enjoy them, hunting, planting, and dwelling thereon, so long as they please, without any molestation from the United States but when those tribes, or any of them, shall be disposed to sell their lands, or any part of them, they are to be sold only to the United States; and until such sale, the United States will protect all the said Indian tribes in the quiet enjoyment of their lands against all citizens of the United States, and against all other white persons who intrude upon the same. And the said Indian tribes again acknowledge themselves to be under the protection of the said United States, and no other power whatever...ARTICLE VIII - Trade shall be opened with the said Indian tribes; and they do hereby respectively engage to afford protection to such persons, with their property (Treaty).

**CONNECTIONS**

MCRD slides 2, 3, 4, 6, 7, 8, 9, 40, 41, 50 (indigenous perspectives)



## TEACHER GUIDE

**SLIDE #7: *Wa-Ba-Sha Prairie*, 1855 print****BACKGROUND INFORMATION**

In the mid-19th century, travel books were popular among the elite in colonial cultures that sought to extend their reach. Such guides encouraged visits by the wealthy to newly “discovered” areas which could then become foundations for further settlement, industry and profit.

In the 1850s, Joseph Meyer and his son Herrmann published a popular German travel series called Meyer's Universum. An admirer of the United States, Joseph sent Herrmann to New York to open a publishing house. Herrmann's book, *The United States Illustrated*, included engravings of the American frontier, including this image from the upper reaches of the Mississippi River. Today, Wabasha proudly refers to itself as the oldest city in Minnesota.

→ Project the document

QUESTION

**What are the messages about the U.S. prairie in this image?**

POSSIBLE ANSWER

It is a vast and varied landscape, fertile and sparsely populated.

EVIDENCE

Vast is implied in the hills and clouds extending to the horizon. Varied in the river, grasslands and hills. Fertile in the trees, grasses and birdlife. Sparsely populated in the small canoe party and tiny village as pictured beneath the enormous sky.

QUESTION

**Given that a minority of people in the mid-19th century U.S. could read or had access to books, who might have been the target audience for this and other travel literature of the time?**

**SLIDE #7**

***Wa-Ba-Sha Prairie*  
1855 print**

**ADDITIONAL INFO**

Former President Thomas Jefferson explained his view of the civilizing effect of United States expansion in a letter to William Ludlow Monticello in 1824:

Let a philosophic observer commence a journey from the savages of the Rocky Mountains, eastwardly towards our sea-coast. These he would observe in the earliest stage of association living under no law but that of nature, subscribing and covering themselves with the flesh and skins of wild beasts. He would next find those on our frontiers in the pastoral state, raising domestic animals to supply the defects of hunting. Then succeed our own semi-barbarous citizens, the pioneers of the advance of civilization, and so in his progress he would meet the gradual shades of improving man until he would reach his, as yet, most improved state in our seaport towns. This, in fact, is equivalent to a survey, in time, of the progress of man from the infancy of creation to the present day. (Letters)

**FURTHER QUESTIONS**

The city of Wabasha's photo gallery Web page includes four views of downtown and one of a bridge. Discuss the different choices Meyer and the Web page designers made in choosing to portray the same place.

**CONNECTIONS**

MCRD slides 2, 3, 4, 6, 7, 8, 9, 40, 41, 50 (indigenous perspectives)

## TEACHER GUIDE

## SLIDE #8: *Giant Redwood Trees of California*, 1874 painting

### BACKGROUND INFORMATION

Albert Bierstadt was a well-known landscape painter who was particularly famous for the paintings he made while sketching in California's Yosemite and Sierra Nevada in the 1870s. According to art historian Margaret Stenz, "Bierstadt's spectacular scenes of glassy lakes and snow-capped peaks fed Americans' fascination with the West at a time when exploration and settlement were national obsessions."

California had been the scene of a great "Gold Rush" in 1849 when miners were lured by potential profit in the streams of the far west. At the same time, the Pomo people continued to live as they had for generations in the area north of San Francisco weaving intricate baskets from more than thirty types of native plant materials (Ballantine).

→ Project the document

QUESTION

**What is Bierstadt's message about the nature of the California redwood forest?**

POSSIBLE ANSWER

They are pristine sanctuaries for native peoples, sheltering them in an ancient and immense natural world.

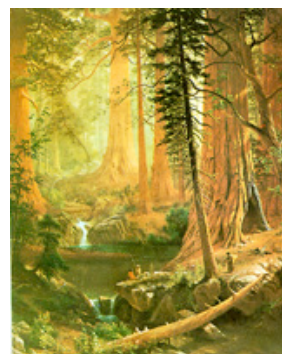
EVIDENCE

**What techniques does Bierstadt use to communicate his themes?**

QUESTION

He uses lighting effects to highlight the trees and people in a setting that in reality would most likely be dark and shaded. He accentuates the place of native peoples within the natural context by showing tiny humans next to giant trees. He uses the path of the stream to draw the eye along a walk from the upper left to the lower right. His soft colors and water flow suggest tranquility and sanctuary.

SLIDE #8



***Giant Redwood Trees of California***  
1874 painting

**ADDITIONAL INFO**

Historian Ronald Tatakai explained his view of the impact of U.S. civilization on Native Americans in his book, *A Different Mirror: A History of Multicultural America*:

To civilize Indians meant, for Jefferson, to take them from their hunting way of life and convert them into farmers. President Jefferson explained to the Shawnees why they had no choice but to accept civilization: 'When the white people first came to this land, they were few, and you were many; now we are many and you few; and why? Because, by cultivating the earth, we produce plenty to raise our children, while yours...suffer for want of food...are exposed to weather in your hunting camps, get diseases and die. Hence it is that your numbers lessen.' They were, in other words, victims of their own culture, not the decimation of their game to satisfy the voracious fur trade, the introduction of unfamiliar diseases, the appropriation of their lands, and the brutal warfare waged against them. (47)

**FURTHER QUESTIONS**

**Contrast the different views of Jefferson, Bierstadt and Tatakai regarding the use of natural resources and native peoples.**

**CONNECTIONS**

MCRD slides 2, 3, 4, 6, 7, 8, 9, 40, 41, 50 (indigenous perspectives) 8, 9, 10, 18, 34, 35, 36, 44 (forests) MCES slides 7, 17, 22, 23, 24, 26 (habitat destruction)

## TEACHER GUIDE

## SLIDE #9: *Plan of an American New Cleared Farm, 1791 engraving*

### BACKGROUND INFORMATION

John Locke was a 17th century English political theorist who was central to the development of Enlightenment thought. In the English colonies, his writings on property were influential on the founders, suggesting the obligation of property owners to improve the land. He wrote: "Thus, the grass my horse has bit, the turfs my servant has cut, and the ore I have digged in any place, where I have a right to them in common with others, become my property without the assignation or consent of anybody. The labour that was mine, removing them out of that common state they were in, hath fixed my property in them" (Locke 27).

This engraving is from Scottish author Patrick Campbell's, *Travels in the interior inhabited parts of North America*.

→ Project the document

QUESTION

**How is Locke's perspective about property communicated in this image?**

POSSIBLE ANSWER

The cleared fields, fences and outbuildings all suggest labor intensive "improvement" to the land which would support Locke's idea of property ownership as assigned by a man's labor or that of his servants.

QUESTION

**Who might the target audience be for this image? Give evidence to support your conclusions.**

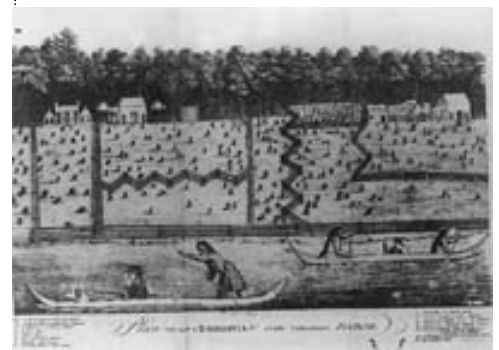
POSSIBLE ANSWER

Readers of Campbell's book and those who might seek to travel to or buy land in the Americas. This would be a relatively small group of privileged white men at the time.

EVIDENCE

This was published in a travel narrative. The image of the cleared fields and the European man being transported by the Indian canoeist suggest an opportunity for the good life in the new countries.

SLIDE #9



***Plan of an American New Cleared Farm  
1791 engraving***

**ADDITIONAL INFO**

From Locke's essay, "Of Property," in his 1690 work, *Second Treatise on Government*:

God gave the world to men in common, but since He gave it them for their benefit and the greatest conveniences of life they were capable to draw from it, it cannot be supposed He meant it should always remain common and uncultivated. He gave it to the use of the industrious and rational (and labour was to be his title to it); not to the fancy or covetousness of the quarrelsome and contentious... There cannot be a clearer demonstration of anything than several nations of the Americans are of this, who are rich in land and poor in all the comforts of life; whom Nature, having furnished as liberally as any other people with the materials of plenty- i.e., a fruitful soil, apt to produce in abundance what might serve for food, raiment, and delight; yet, for want of improving it by labour, have not one hundredth part of the conveniences we enjoy, and a king of a large and fruitful territory there feeds, lodges, and is clad worse than a day labourer in England. (33, 41)

**FURTHER QUESTIONS**

**How might this message have been interpreted differently by a Native American in 1791?**

**CONNECTIONS**

MCRD slides 2, 3, 4, 6, 7, 8, 9, 40, 41, 50 (indigenous perspectives) ) 8, 9, 10, 18, 34, 35, 36, 44 (forests) MCES slides 7, 17, 22, 23, 24, 26 (habitat destruction)

## TEACHER GUIDE

## SLIDE #10: *The Stump and Trunk of the Mammoth Tree of Calaveras*, 1862 lithograph print

### BACKGROUND INFORMATION

In 1852, Mr. A. T. Dowd, a hunter working for the Union Water Company of Calaveras County, California, came upon a grove of Giant Sequoia. The largest of these was dubbed the "Big Tree." According to James M. Hutchings in his 1888 book, *In the Heart of the Sierras*: "This tree was three hundred and two feet in height; and, at the ground, 96 feet in circumference, before it was disturbed...However incredible it may appear, on July 4, 1854, the writer formed one of a cotillion party of thirty-two persons, dancing upon this stump; in addition to which the musicians and onlookers numbered seventeen, making a total of forty-nine occupants of its surface at one time" (Hutchings).

→ Project the document

QUESTION

**What values concerning human relations with ancient trees are implied in this image? Give evidence to support your answer.**

POSSIBLE ANSWER

Large old trees are for humans to use for recreation and lumber.

EVIDENCE

The image of the people dancing on the stump and the surrounding crowd suggest that the mammoth tree is for recreation and the neatly sawed stump and trunk suggest that the rest of the tree was cut by people.

QUESTION

**How credible is this message and what makes you think that?**

SLIDE #10



*The Stump and Trunk of the Mammoth Tree of Calaveras*  
1862 lithograph print

**FURTHER QUESTIONS**

**What actions might an environmentalist of the 19th century take in response to this message and what actions might a 21st century environmentalist take?**

**ADDITIONAL INFO**

More from Hutchings' narrative:

This is the stump of the original Big Tree discovered by Mr. Dowd. We can see that it is perfectly smooth, sound, and level. Its diameter across the solid wood, after the bark was removed (and which was from fifteen to eighteen inches in thickness), is twenty-five feet; although the tree was cut off six feet above the ground... There is no more strikingly convincing proof, in any grove, of the immense size of the big trees, than this stump. Some sacrilegious vandals, from the motive of making its exposition "pay," removed the bark to the height of thirty feet; and afterwards transported it to England, where it was formed into a room; but was afterwards consumed by fire, with the celebrated Crystal Palace, at Kensington, England. This girdling of the tree very naturally brought death to it; but even then its majestic form must have perpetually taunted the belittled and sordid spirits that caused it... The next act in this botanical tragedy was the cutting down of the tree, in order to accommodate those who wished to carry home specimens of its wood, as souvenirs of their visit... Finally, the plan was adopted of boring it off with pump-augers... Thus this noble monarch of the forest was dethroned, after "braving the battle and the breeze" for nearly two thousand years. Verily, how little real veneration does the average man possess. (Hutchings)

**CONNECTIONS**

MCRD slides 8, 9, 10, 18, 34, 35, 36 44 (forests) MCES slides 7, 17, 22, 23, 24, 26 (habitat destruction)



## TEACHER GUIDE

## SLIDE #11: *McCormick Reaper Company, c. 1890 advertisement*

### BACKGROUND INFORMATION

This poster was an advertisement for the McCormick Reaper Company, which manufactured mechanical plows and harvesters in the mid-to-late-19th century. It is modeled on artist Emanuel Leutze's fresco, which is displayed in the U.S. Capitol. The catalog for the George Ritzlin Antique Maps and Prints Company which offers this poster for sale notes: "The phrase 'Westward the Course of Empire Takes Its Way' is from a 1752 poem by George Berkeley, Bishop of Cloyne (Ireland), titled 'On the Prospect of Planting Arts and Learning in America.' Both the phrase and the original image were well-known and embraced by 19th century Americans who no doubt linked them to the doctrine of Manifest Destiny" (Gallery).

→ Project the document

QUESTION

**Why might the McCormick Reaper Company have chosen to use this well-known phrase and image to sell its product?**

POSSIBLE ANSWER

To suggest that consumers can participate in empire building by purchasing a McCormick's reaper. To suggest that opportunity awaits those who use McCormick's reaper.

EVIDENCE

The message about empire building is explicit in the title and implicit in the upraised arms and westward gazes of the image subjects. Opportunity is suggested by the fertile crops of grain and well-maintained farms in the valley.

QUESTION

**What messages are implied about people's relationship to the land?**

POSSIBLE ANSWER

The land of the west unlimited and open is suggested by the farmland extending beyond the borders of the image. Mechanized farming is suggested by the images of the reapers and the invitation to bring McCormick in the van. The absence of buffalo or Indians suggest that the great plains have been cleared of obstacles to settlement as the empire makes its way west is unlimited and open for mechanized farming.

SLIDE #11



***McCormick Reaper Company  
c. 1890 advertisement***

**ADDITIONAL INFO**

From Emanuel Leutze's notes describing his painting "Westward the Course of Empire Takes Its Way":

Intention - To represent as near and truthfully as the artist was able the grand peaceful conquest of the great west...without a wish to date or localize, or to represent a particular event, it is intended to give in a condensed form a picture of western emigration, the conquest of the Pacific slope" (Emmanuel). Cyrus McCormick invented the mechanical reaper in 1831. In 1840, he sold two reapers for \$100 each. In 1849, he sold over 1,500 reapers for \$150 each. (Deering)

**FURTHER QUESTIONS**

What groups of immigrants traveled east or north rather than westward to come to the United States?

**CONNECTIONS**

MCRD slides 9, 11, 14, 39, 40, 46 (soil)

## TEACHER GUIDE

## SLIDE #12: *Gladys City Oil, c. 1900 stock certificate*

### BACKGROUND INFORMATION

The first major oil boom in the United States began with the discovery of the Titusville, PA oil field in 1858. John D Rockefeller subsequently turned his Standard Oil Company into a dominant U.S. export industry. By 1891, Rockefeller controlled 90% of U.S. kerosene exports and 70% of the world oil market (Zinn 301).

In 1901, Patillo Higgins noticed oil seeps while taking his Sunday school class on picnics near Beaumont Texas. His discovery of the Spindletop oil fields transformed South Texas, ushering in a new Texas oil boom. Higgins and several investors formed the Gladys City Oil, Gas, and Manufacturing Company whose stock certificate you see here (Oil).

→ Project the document

**QUESTION** In what decade was this certificate issued?  
How do you know?

**POSSIBLE ANSWER** In the decade from 1900-1910.

**EVIDENCE** The certificate date is left blank with the prefix 190\_.

**QUESTION** What message does this document give about oil and land as natural resources?

**POSSIBLE ANSWER** Oil is a valuable commodity. Land should be used for industrial production and profit.

**EVIDENCE** The fact that shares of stock in an oil company are offered for sale indicates oil is a profitable commodity. The image of the smoking oil refineries on the certificate suggests land is best used as a means to produce profit for industry.

SLIDE #12



***Gladys City Oil  
c. 1900 stock  
certificate***

**FURTHER QUESTIONS**

**What boom industries consume natural resources in the 21st century?**

**ADDITIONAL INFO**

From the article, "Oil in Southeast Texas" on the Gladys City Boomtown Museum Web site:

At the beginning of the twentieth century, Southeast Texas was something of a backwater. Its economy, like that of most of the South, was subsistence agriculture, but the lumber business was also important. Mills in Beaumont and Orange produced lumber for shipment to the rest of America and overseas. Southeast Texas had another resource - oil - but the amount underground remained a mystery. People knew of oil in the area for hundreds of years before any substantial production began. In 1543 the Spanish used the oil from seeps near Sabine Pass for caulking their ships, although local Indians certainly knew of oil much earlier. To the north, settlers near Nacogdoches used seeping oil for lubricants before 1800. In 1847 the settlers at Sour Lake noticed that oil was bubbling to the surface, and after the Civil War Dick Dowling tried unsuccessfully to drill a well near there. There were numerous discoveries in east and central Texas in the later years, especially at Corsicana in 1896. Wildcatters drilled at Spindletop in 1893 and 1896 and at Sour Lake in 1896. However, there was no significant oil production along the Gulf Coast until the gusher at Spindletop in 1901.

**CONNECTIONS**

MCRD slides 12, 19, 20, 32, 33, 47 (oil)  
case study lessons 3 & 4 (Alaska oil)

## TEACHER GUIDE

**SLIDE #13: *Boulder Dam*, c. 1934 report cover****BACKGROUND INFORMATION**

Hoover Dam, also known as Boulder Dam, was commissioned by Congress in 1928 and built in the early 1930s to span the upper Colorado River. Legislation directed the dam's purposes as river regulation, improvement of navigation, flood control, delivery of stored water for irrigation and power generation (General). It remains the highest and third largest dam in the U.S. standing more than 725 feet tall and containing 4 million, 400 thousand cubic yards of concrete (Hoover). This drawing of the dam is from the cover of a Bureau of Interior report of the mid-1930s entitled "Barrett Presents a Brief Picture-Story of a Noteworthy Engineering Achievement" (Boulder).

→ Project the document

QUESTION

**Who is the target audience for this message? How do you know?**

POSSIBLE ANSWER

The target audience is Congress and the U.S. public.

EVIDENCE

The fact this was a report cover for the Dept. of the Interior on a project commissioned by Congress.

QUESTION

**What is the message it offers about human use of river water as a natural resource? Explain your answer.**

POSSIBLE ANSWER

River water is to be used for human benefit.

EVIDENCE

The image of the enormous dam holding back the great river and the title "modern engineering triumph" suggests that human transformation of river ecosystems is a thing of pride and wonder.

**SLIDE #13**

***Boulder Dam*  
c. 1934 report cover**

**ADDITIONAL INFO**

During the New Deal era, images of factory smokestacks and mammoth dam projects portrayed consumption and technology as measures of human progress. From “The Boulder Canyon Project - Hoover Dam” by Wm. Joe Simonds:

“Throughout human history, mankind has built monuments to its ingenuity and skill. In Egypt it was the Pyramids. Rome, built the Colosseum. The Greeks built the Acropolis...In the modern era, it's buildings that reach near half a mile into the sky, bridges that stretch enormous distances in a single span, and machines that extend mankind's reach far into space. One monument that must surely be counted among the great achievements of mankind is Hoover Dam...The goal of the designers and builders of Hoover Dam was simple: To Convert a Natural Menace Into a National Resource. They succeeded beyond their wildest dreams...The lessons learned during the design and construction of the dam helped to ensure the success of large dam projects throughout the world; projects that have benefited thousands of people who have never heard of Hoover Dam” (Simonds).

**FURTHER QUESTIONS**

**According to the Bureau of Reclamation, approximately 100 workers were killed during the dam construction. What might a report cover on worker fatalities show?**

**CONNECTIONS**

MCRD slides 5, 13, 15, 17, 37, 38, 44 (water) case study lesson 2, 5 (dams and privatization)

## TEACHER GUIDE

**SLIDE #14: *Years of Dust*, 1937 poster****BACKGROUND INFORMATION**

In the early 1930s, parts of the U.S. south and Midwest were hit by a severe drought. Over-plowing and over-grazing in the farm belt added to the problems caused by the drought. The result was a series of dust storms that caused disastrous soil erosion. The Roosevelt administration created the Resettlement Administration, later the Farm Security Administration (FSA), as part of its New Deal programs. It provided poor farmers with education about soil conservation as well as relief in the forms of equipment and low-cost loans. Ben Shahn, the artist, was a photographer, painter and illustrator who created prints, posters, and photographs to highlight the efforts of the New Deal agencies.

→ Project the document

QUESTION

**What ideas are implied in this poster regarding the role of the government in soil conservation and farm relief?**

POSSIBLE ANSWER

The government's role is to actively support relief and conservation.

EVIDENCE

The title "Resettlement Administration Restores Land" makes the government's role clear.

QUESTION

**What techniques does the artist use to communicate the impact of drought and poor farming practices?**

POSSIBLE ANSWER

The expressions on the farmer and child's face show dejection and fear. The approaching dark cloud and the headline underscore the danger.

**SLIDE #14**

***Years of Dust*  
1937 poster**

**FURTHER QUESTIONS**

**What current government programs help to restore the health of the soil?**

**ADDITIONAL INFO**

The American Memory Project of the Library of Congress recorded some of Shahn's reflections on its Web site devoted to the photographs of the FSA:

Once, Shahn recalled in 1964, he had explained to (photographer Roy) Stryker that a certain photograph of soil erosion would not have a strong impact on viewers. "Look Roy," Shahn said, "you're not going to move anybody with this eroded soil-but the effect this eroded soil has on a kid who looks starved, this is going to move people. In a 1944 interview, Shahn described the Resettlement Administration and Farm Security Administration undertakings as 'helping the underprivileged' and as having 'only one purpose--a moral one. (Cotton)

In 1957, Shahn reflected on the lessons he had learned about the diversity of individuals and the complexity of regional differences:

I had then [in the late 1930s] crossed and recrossed many section of the country, and had come to know well so many people of all kinds of belief and temperament, which they maintained with a transcendent indifference to their lot in life. Theories had melted before such experience...There were the poor who were rich in spirit, and the rich who were also sometimes rich in spirit. There was the South and its storytelling art, stories of snakes and storms and haunted houses, enchanting; and yet such talent thriving in the same human shell with hopeless prejudices, bigotry, and ignorance. (Cotton)

**CONNECTIONS**

MCRD slides 9, 11,14, 39, 40, 46 (soil)



## TEACHER GUIDE

## SLIDE #15: *Our Filthy Seas*, 1988 magazine cover

### BACKGROUND INFORMATION

In the summer of 1988, medical waste and sewage washed up on the shores of New York and New Jersey, closing beaches and prompting widespread media coverage. *Time*'s cover story began with a quote from marine explorer Jacques-Yves Cousteau: "The very survival of the human species depends upon the maintenance of an ocean clean and alive, spreading all around the world. The ocean is our planet's life belt." The article continued, "This summer's pollution of Northeastern beaches and coastal waters is only the latest signal that the planet's life belt, as Cousteau calls the ocean, is rapidly unbuckling" (Toufexis).

→ Project the document

QUESTION

**Why was this made and who was the target audience?**

POSSIBLE ANSWER

The cover is an advertisement made to urge potential readers to purchase the magazine.

QUESTION

**What techniques does the designer use to communicate the message?**

POSSIBLE ANSWER

The right hand side suggests the economic and ecological dangers of ocean pollution by showing the distant fishing boat and the numerous species of marine life impacted in the foreground. The left hand side with the brown claws of pollution and the word "filthy" underscore the danger and spread of the problem.

SLIDE #15



***Our Filthy Seas***  
1988 magazine cover

**FURTHER QUESTIONS**

How might *Time* have reported similar spills in Mexico or Indonesia?

**CONNECTIONS**

MCRD slides 5, 13, 15, 17, 37, 38, 45 (water) MCC slides 13, 19, 29, 30, 31, 32 (toxic waste)

**ADDITIONAL INFO**

From the article text:

The blight is global, from the murky red tides that periodically afflict Japan's Inland Sea to the untreated sewage that befouls the fabled Mediterranean. Pollution threatens the rich, teeming life of the ocean and renders the waters off once famed beaches about as safe to bathe in as an unflushed toilet...In broadest terms, the problem for the U.S. stems from rampant development along the Atlantic and Pacific coasts and the Gulf of Mexico. Between 1940 and 1980, the number of Americans who live within 50 miles of a seashore increased from 42 million to 89 million -- and the total is still mounting. Coastal waters are getting perilously close to reaching their capacity to absorb civilization's wastes.

Today scientists have begun to shift the focus of research away from localized sources of pollution, like oil spills, which they now believe are manageable, short-term problems. Instead, they are concentrating on the less understood dynamics of chronic land-based pollution: the discharge of sewage and industrial waste and -- possibly an even greater menace -- the runoff from agricultural and urban areas. Conveyed to the oceans through rivers, drainage ditches and the water table, such pollutants include fertilizers and herbicides washed from farms and lawns, motor oil from highways and parking lots, animal droppings from city streets and other untreated garbage that backs up in sewer systems and spills into the seas. Says Biologist Albert Manville of Defenders of Wildlife, a Washington-based environmental group: "We're running out of time. We cannot continue to use the oceans as a giant garbage dump" (Toufexis).

## TEACHER GUIDE

SLIDE #16: *Still Waters*, 2008 web page

## BACKGROUND INFORMATION

In the latter half of the 20th century, large scale commercial fishing fleets made enormous profits harvesting and selling fish. This *National Geographic* article details some of the often invisible consequences of the global trade in marine life: “Cruel may seem a harsh indictment of the age-old profession of fishing—and certainly does not apply to all who practice the trade—but how else to portray the world’s shark fishermen, who kill tens of millions of sharks a year, large numbers finned alive for shark-fin soup and allowed to sink to the bottom to die? How else to characterize the incalculable number of fish and other sea creatures scooped up in nets, allowed to suffocate, and dumped overboard as useless bycatch? Or the longline fisheries, whose miles and miles of baited hooks attract—and drown—creatures such as the loggerhead turtle and wandering albatross?” (Montaigne).

→ Project the document

QUESTION

**What action steps does *National Geographic* offer to help deal with the global fish crisis?**

POSSIBLE ANSWER

On the top menu, it invites readers to subscribe to the magazine, to join an online forum and to search the archives for further information. On the side menu, it offers buttons to “learn more” and “how to help.”

QUESTION

**What techniques does the webpage designer employ to attract young viewers?**

POSSIBLE ANSWER

Primary space is devoted to a compelling image of a shark caught in a net. There are buttons for “Fun Stuff”, “Hip-Hop” and “Sights and Sounds” that might appeal to younger viewers.

## SLIDE #16



***Still Waters*  
2008 web page**

**ADDITIONAL INFO**

More from the article:

The decimation of giant bluefin is emblematic of everything wrong with global fisheries today: the vastly increased killing power of new fishing technology, the shadowy network of international companies making huge profits from the trade, negligent fisheries management and enforcement, and consumers' indifference to the fate of the fish they choose to buy. The world's oceans are a shadow of what they once were. With a few notable exceptions, such as well-managed fisheries in Alaska, Iceland, and New Zealand, the number of fish swimming the seas is a fraction of what it was a century ago. Marine biologists differ on the extent of the decline. Some argue that stocks of many large oceangoing fish have fallen by 80-90%, while others say the declines have been less steep. But all agree that, in most places, too many boats are chasing too few fish. (Montaigne)

**FURTHER QUESTIONS**

**Do televised nature programs like those on the National Geographic Channel encourage or discourage personal initiatives to participate in resource protection?**

**CONNECTIONS**

MCRD slides 16, 28, 29, 30, 31 48 (consumption) MCES 16 and MCRD case study L4 (fisheries)

## TEACHER GUIDE

## SLIDE #17: *When the Rivers Run Dry*, 2006 book cover

### BACKGROUND INFORMATION

By the year 2000, many predicted that access to fresh water would become a defining resource issue of the 21st century. In the western part of the United States, more than 70% of water supplies are devoted to agriculture (Libecap 3). This is true elsewhere in the world as this book's author makes clear in his first chapter: "The water 'footprint' of Western countries on the rest of the world deserves to become a serious issue. Whenever you buy a T-shirt made of Pakistani cotton, eat Thai rice, or drink coffee from Central America, you are influencing the hydrology of those regions-taking a share of the Indus River, the Mekong River, or the Costa Rican rains. You may be helping rivers run dry" (Pearce).

→ Project the document

QUESTION

**Is this message fact or opinion?**

POSSIBLE  
ANSWER

It is a mixture of both fact and opinion.

EVIDENCE

Some rivers are likely to run dry in the 21st century for various reasons, ranging from drought to overuse. The cover image and title were selected by the publisher to get people to buy the book and, thus, use the dramatic presentation to attract readers.

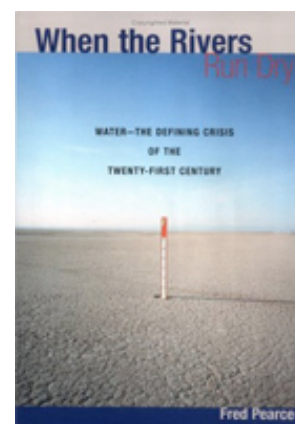
QUESTION

**How credible is this message? How do you know?**

POSSIBLE  
ANSWER

It is impossible to know without reading the book and then researching the sources of information cited by the author.

## SLIDE #17



***When the Rivers  
Run Dry*  
2006 book cover**

**FURTHER QUESTIONS**

**How might different people interpret this book cover differently?**

**ADDITIONAL INFO**

From the first chapter:

Economists call the water involved in the growing and manufacture of products traded around the world ‘virtual water.’ In this terminology, every ton of wheat arriving at a dockside carries with it in virtual form the thousand tons of water needed to grow it. The global virtual-water trade is estimated to be around 800 million acre-feet a year, or twenty Nile Rivers. Of that, two thirds is in a huge range of crops, from grains to vegetable oil, sugar to cotton; a quarter is in meat and dairy products; and just a tenth is in industrial products. That means that nearly a tenth of all the water used in raising crops goes into the international virtual-water trade. This trade ‘moves water in volumes and over distances beyond the wildest imaginings of water engineers’ says Tony Allan, of the School of Oriental and African Studies in London, who invented the term ‘virtual water.’

The biggest net exporter of virtual water is the United States. It exports around a third of all the water it withdraws from the natural environment. Much of that is in grains, either directly or via meat. The United States is emptying critical underground water reserves, such as those beneath the High Plains, to grow grain for export. It also exports an amazing 80 million acre-feet of virtual water in beef. Other major exporters of virtual water include Canada (grain), Australia (cotton and sugar), Argentina (beef), and Thailand (rice). (Pearce)

**CONNECTIONS**

MCRD slides 5, 13, 15, 17, 37, 38, 45  
(water) MCRD case study lesson 2, 5  
(dams and privatization)

## TEACHER GUIDE

**SLIDE #18: *Tarzan*, 2007 poster****BACKGROUND INFORMATION**

This advertisement for the World Wildlife Fund was created by the Danish Advertising Agency, Uncle Grey. The small text at the bottom right reads, "15 square kilometers of rain forest disappears every minute." According to its Web site, "WWF was founded on 11 September 1961 in the small picturesque Swiss town of Morges with the basic aim of preserving life on earth. Formed from a unique blend of business leaders, scientists and government leaders...WWF has grown over forty years to become the influential and independent global conservation organization that we know today" (Where).

→ Project the document

QUESTION

**Who paid for this poster and why was it made?**

POSSIBLE ANSWER

World Wildlife Fund paid an ad agency to design this poster to raise awareness about the destruction of the tropical rainforest.

EVIDENCE

The WWF symbol appears in the bottom right corner of the poster. The group's founding mission to preserve life and the image of the clear cut forest define the ad's purpose.

QUESTION

**What emotions do the designers appeal to? Explain your answer.**

POSSIBLE ANSWER

Humor, fear and shock.

EVIDENCE

Humor in the image of Tarzan swinging into space with nowhere to go. Fear and shock in the dark storm clouds and devastated landscape.

**SLIDE #18**

***Tarzan*  
2007 poster**

**ADDITIONAL INFO**

From the WWF forest Web pages:

Figures released by the Food and Agriculture Organisation (FAO) in November 2005 put the rate of natural forest loss at about 13 million hectares each year. That's 25 hectares every minute, or 36 football fields a minute. Beyond the tropics, there has been a significant loss of old-growth forests and the replacement of natural forests and woodlands with single-species plantations that provide few of the environmental, ecological and social benefits of native forests. The ceaseless spread of urban development, illegal logging, land conversion for agriculture or plantations of both trees and crops like soybean and palm oil, road building, mining, forest fires, and climate change, all contribute to deforestation. Once distributed over half the earth, forests - literally the 'lungs' of the world - now cover only a quarter of the planet's land surface. (Forest)

Conserving forests means conserving life. It's in our own best interest and it's vitally important to the health of the whole planet. Forests are the storehouse of biological diversity, home to two-thirds of all plants and animals. What is more, they supply many of our most basic needs: shelter, food, clean water, oxygen and medicines. Forests share their natural wealth and diversity for our livelihoods and lifestyles, prevent severe water run-off and regulate climate. (WWF's Global Forest Programme)

**FURTHER QUESTIONS**

**Discuss why the WWF chooses to use as a logo the panda, an animal only found in a small area of China.**

**CONNECTIONS**

MCRD slides 8, 9, 10, 18, 34, 35, 36, 44 (forests) MCES slides 7, 17, 22, 23, 24, 26 (habitat destruction)



## TEACHER GUIDE

**SLIDE #19: *The End of Suburbia*, 2006 blog page****BACKGROUND INFORMATION**

This image is from the Keetsa Mattress Company blog, which says it is “all about eco-friendly news.” “About Keetsa” suggests that “Keetsa brings a green orientation to the sleep business with little or no sacrifice in your sleep comfort.” The blog promotes the highlighted DVD as “a fantastic film that examines ‘the American Dream’ and what it means to be living it during this time when oil demand is becoming greater than the supply.”

→ Project the document

QUESTION

**Who paid for this image and why was it made?**

POSSIBLE ANSWER

Keetsa Mattress paid for this to promote its business.

EVIDENCE

As a blog for a profit-making company, this is an advertisement for Keetsa products. The Web page appears to sell advertising space to other companies as well.

QUESTION

**Why might the designer of this site have chosen to use a 1950s style image of a woman to make their point?**

**SLIDE #19**

***The End of Suburbia*  
2006 blog page**

### FURTHER QUESTIONS

**Discuss the contradictions of green marketing which encourages consumption (buying mattresses in this example), and makes the planet healthier while also expending more resources in producing the products.**

### CONNECTIONS

MCRD slides 12, 19, 20, 32, 33, 47 (oil)  
19, 26, 27, 33, 39, 49 (land use) MCRD  
case study lessons 3 & 4 (Alaska oil)

### ADDITIONAL INFO

From the Web site promoting the DVD *The End of Suburbia*:

Since World War II North Americans have invested much of their newfound wealth in suburbia. It has promised a sense of space, affordability, family life and upward mobility. As the population of suburban sprawl has exploded in the past 50 years, so too has the suburban way of life become embedded in the American consciousness. Suburbia, and all it promises, has become the American Dream. But as we enter the 21st century, serious questions are beginning to emerge about the sustainability of this way of life.

With brutal honesty and a touch of irony, *The End of Suburbia* explores the American Way of Life and its prospects as the planet approaches a critical era, as global demand for fossil fuels begins to outstrip supply. World Oil Peak and the inevitable decline of fossil fuels are upon us now, some scientists and policy makers argue in this documentary. The consequences of inaction in the face of this global crisis are enormous. What does Oil Peak mean for North America? As energy prices skyrocket in the coming years, how will the populations of suburbia react to the collapse of their dream? Are today's suburbs destined to become the slums of tomorrow? And what can be done NOW, individually and collectively, to avoid *The End of Suburbia*. (End)

From *The Myth of Green Marketing* by Toby Smith:

From an ecological point of view this obsession with growth fails to take into account the limiting factor of finite resources. Gross National Product, for example, from an ecological point of view is a measure of resource depletion...Within the market, the environmental and resource depletion costs are never accounted for. (77)

## TEACHER GUIDE

**SLIDE #20: *Resource Wars*, 2002 book cover****BACKGROUND INFORMATION**

In 1970, Princeton Professor Richard Falk warned that “the planet and mankind are in grave danger of irreversible catastrophe...There are four interconnected threats to the planet – wars of mass destruction, overpopulation, pollution and the depletion of resources. They have a cumulative effect. A problem in one area renders it more difficult to solve the problems in any other area. The basis of all four problems is the inadequacy of the sovereign states to manage the affairs of mankind in the twentieth century” (Bell 138).

Michael T. Klare is a Five Colleges professor of Peace and World Security Studies at Hampshire College.

→ Project the document

QUESTION

**What images might have appeared on the cover of a book of the same title following the Spanish American War 100 years prior?**

POSSIBLE ANSWER

Sugar cane plantations burning.

EVIDENCE

Access to the profitable sugar fields was a primary issue in the Spanish American War.

QUESTION

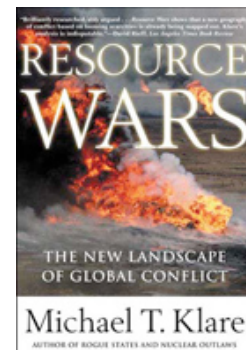
**Which of Professor Falk’s predicted planetary threats - wars of mass destruction, overpopulation, pollution and the depletion of resources - are illustrated on this book cover? Explain your answer.**

POSSIBLE ANSWER

War, pollution and resource depletion.

EVIDENCE

War is referenced in the title words “war” and “global conflict”. Pollution is apparent from the smoke rising from the burning oil fields. Resource depletion is implied in the title “Resource Wars.”

**SLIDE #20**

***Resource Wars*  
2002 book cover**

**ADDITIONAL INFO**

Michel Klare writes about post-Cold War military objectives in *Resource Wars*:

Among these objectives, none has so profoundly influenced American military policy as the determination to ensure U.S. access to overseas supplies of vital resources. As the American economy grows and U.S. industries come to rely more on imported supplies of critical materials, the protection of global resource flows is becoming the increasingly prominent feature of American security policy. (Klare 5)

As we move deeper into the twenty-first century, the global human community faces a momentous choice: we can either proceed down the path of intensified resource competition, which will lead to recurring outbreaks of conflict throughout the world; or we can choose to manage global resource stockpiles in a cooperative fashion. Selecting the latter path will not prove easy: many states and private interests will resist the establishment of a system which gives international agencies a degree of control over the allocation of valuable minerals in time of scarcity. But we must ask: would it not be better to share resources equitably in times of need? (Klare 225)

**FURTHER QUESTIONS**

Is this fact, opinion or something else?

**CONNECTIONS**

MCRD slides 12, 19, 20, 32, 33, 47 (oil)  
MCC case studies 4 & 5 (radiation and war)

## TEACHER GUIDE

## SLIDE #21: *No Place Like Home*, 1990 magazine cover

### BACKGROUND INFORMATION

The painting on the cover of *Smithsonian* magazine's 20th anniversary issue is entitled "Paradise." It is part of a series of paintings by artist Suzanne Duranceau's entitled "Trilogie de la Terre" or "Trilogy of the Earth." This issue of *Smithsonian* dealt exclusively with articles on the environment as part of the 20th anniversary of Earth Day, April 20, 1990. The *New York Times* reported that on that day, 200 million people around the world participated in the largest grassroots demonstration in history. In the United States, more than one million people gathered in Central Park to learn and to celebrate (Earth Day).

→ Project the document

QUESTION

**What is the message about the role that people play in the balance of nature?**

POSSIBLE ANSWER

People are part of a much larger interconnected whole system.

QUESTION

**What techniques does the artist use to illustrate this point?**

POSSIBLE ANSWER

The images relating to human life are very small buildings in the upper right portion of the image. They represent humanity as a small but integral part of a much wider circle of life.

## SLIDE #21



***No Place Like Home*  
1990 magazine cover**

**ADDITIONAL INFO**

In his essay, "Deep Ecology and Radical Environmentalism," Bill Devall notes the collective awareness of planetary consciousness at the dawn of the 1990s:

Time magazine, in 1989, had already declared Earth the 'Planet of the Year,' instead of naming their usual man or woman of the year...On Earth Day 1990 major industries such as the U.S. cattle industry and the oil and gas industry, as well as the timber and trade associations, took out full-page ads in newspapers proclaiming 'Every day is Earth Day for us'. (59)

Rowan Williams, the Archbishop of Canterbury, speaks to this awareness from a spiritual perspective in the BBC series Planet Earth:

I think that one of the things wilderness says to us is that nature is not just there for us to be comfortable in. There's an element of the world around us, a profound element, and an extensive element that is just there, it's there for its own sake, it is what it is. And in that sense I think wilderness always speaks to human beings about transcendence in the widest possible sense. It says, you as a human being are part of a system that's not just about your needs and your concerns. Like it or not you're a part of something immense and very mysterious. (Saving)

**FURTHER QUESTIONS**

**Why might *Smithsonian* magazine have chosen this image to celebrate its 20th anniversary?**

**CONNECTIONS**

MCRD slides 8, 9, 21, 22, 23, 24, 25, 50 (nature philosophy)

## TEACHER GUIDE

SLIDE #22: *Walden*, 1854 title page

## BACKGROUND INFORMATION

Considered one of the pioneers of the modern environmental movement, Henry David Thoreau was a foremost social critic of the 19th century United States. In 1845, he settled into a cabin on Walden pond near Concord, Massachusetts and kept a journal of his time there which became the classic work, *Walden*. His quote beneath the illustration reads: "I do not propose to write an ode to dejection, but to brag as lustily as chanticleer (rooster) in the morning, standing on his roost, if only to wake my neighbors up." Nineteenth century books typically did not have illustrated covers as we know them today. Title pages, such as this one, were the place where the author and editor tried to capture the essence of the book.

→ Project the document

QUESTION

**What values about human relations with the natural world are implied in this cover page?**

POSSIBLE ANSWER

Humans should wake up to the delight of a life surrounded by nature.

EVIDENCE

The idea of waking people up is embedded in the quotation "if only to wake my neighbors up." Delight is suggested by the phrase "to brag as lustily as chanticleer." Life surrounded by nature is illustrated by his subtitle "Life in the Woods," by the image of the cabin surrounded by trees and by reference to his book about life on the rivers.

QUESTION

**What is your interpretation of this and what do you learn about yourself from your interpretation?**

## SLIDE #22



***Walden*  
1854 title page**

**ADDITIONAL INFO**

From the book:

When I first paddled a boat on Walden, it was completely surrounded by thick and lofty pine and oak woods, and in some of its coves grape-vines had run over the trees next the water and formed bowers under which a boat could pass. The hills which form its shores are so steep, and the woods on them were then so high, that, as you looked down from the west end, it had the appearance of an amphitheatre for some land of sylvan spectacle. I have spent many an hour, when I was younger, floating over its surface as the zephyr willed, having paddled my boat to the middle, and lying on my back across the seats, in a summer forenoon, dreaming awake, until I was aroused by the boat touching the sand, and I arose to see what shore my fates had impelled me to; days when idleness was the most attractive and productive industry. Many a forenoon have I stolen away, preferring to spend thus the most valued part of the day; for I was rich, if not in money, in sunny hours and summer days, and spent them lavishly; nor do I regret that I did not waste more of them in the workshop or the teacher's desk. But since I left those shores the woodchoppers have still further laid them waste, and now for many a year there will be no more rambling through the aisles of the wood, with occasional vistas through which you see the water. My Muse may be excused if she is silent henceforth. How can you expect the birds to sing when their groves are cut down? (141).

**FURTHER QUESTIONS**

**Why does *Walden* remain popular with several editions in print 150 years after it was first published?**

**CONNECTIONS**

MCRD slides 8, 9, 21, 22, 23, 24, 25, 50 (nature philosophy)



## TEACHER GUIDE

**SLIDE #23: *Man and Nature*, 1867 title page****BACKGROUND INFORMATION**

Thoreau marked the early statement of a “preservation” philosophy with his statement “in wildness is the preservation of the world” (Thoreau 18). His contemporary, George P. Marsh, did much the same to define a “conservation” ethic in his seminal work, *Man and Nature*. According to the American Memory Project of the Library of Congress, “this work was the first systematic exploration of the extent and significance of the environmental changes wrought by man, and the first systematic exposition of the guiding principles and practices of conservationism; its influence on the subsequent development of American conservation thought and policy has been incalculable” (Evolution). The quote at the bottom of the title page is: “Not all the winds, and storms, and earthquakes, and seas, and seasons of the world have done so much to revolutionize the earth as Man, the power of an endless life, has done since the day he came forth upon it, and” (H. Bushnell).

→ Project the document

QUESTION

**What values about human relations with the natural world are implied in this cover page?**

POSSIBLE ANSWER

Man was given power over nature to transform the earth.

EVIDENCE

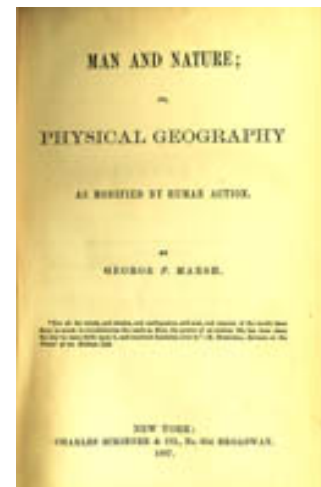
The belief that man was given power over nature is implicit in the phrase “(Man) received dominion over it (the earth).” Human ability to transform the natural world is expressed in the subtitle “as modified by human action” and in the selected quotation.

QUESTION

**Judging from this and the previous slide, what techniques were used by 19th century editors to communicate an author’s perspective on a title page?**

POSSIBLE ANSWER

Use of title, quotation and occasional illustration.

**SLIDE #23**

***Man and Nature*  
1867 title page**

**FURTHER QUESTIONS**

**How does Marsh's view compare with Thoreau's?**

**ADDITIONAL INFO**

From Marsh's conclusion:

The human operations (resulting in changes to the natural world)...do act in the ways ascribed to them, though our limited faculties are at present, perhaps forever, incapable of weighing their immediate, still more their ultimate consequences. But our inability to assign definite values to these causes of the disturbance of natural arrangements is not a reason for ignoring the existence of such causes in any general view of the relations between man and nature, and we are never justified in assuming a force to be insignificant because its measure is unknown, or even because no physical effect can now be traced to it as its origin. The collection of phenomena must precede the analysis of them, and every new fact, illustrative of the action and, reaction between humanity and the material world around it, is another step toward the determination of the great question, whether man is of nature or above her. (549)

**CONNECTIONS**

MCRD slides 8, 9, 21, 22, 23, 24, 25, 50 (nature philosophy)

## TEACHER GUIDE

SLIDE #24: *The Commons*, 2004 web page

## BACKGROUND INFORMATION

One of the manifestations of the conservation ethic in the 21st century is reflected in this blog page which reads in part: "The Commons Blog is a collaborative Web log dedicated to the principle of promoting environmental quality and human dignity and prosperity through markets and property rights. Put more simply, it's about free markets protecting the environment...The picture in the top left corner of the site is of the Natural Bridge of Virginia. Natural Bridge is one of the seven natural wonders of the world. Since the nation's founding it has also been protected and conserved through private ownership, not government regulation or public control. At one point, it was even owned by Thomas Jefferson."

→ Project the document

## QUESTION

**What values about human relations with the natural world are implied in this webpage?**

## POSSIBLE ANSWER

Human relations with nature are best mediated by the free market and private ownership.

## EVIDENCE

Free market values are communicated in the subtitle "Markets Protecting the Environment." Private property management is communicated by the image of the Natural Bridge, which the text says has always been under private ownership and management.

## QUESTION

**What techniques are used by 21st century Web page designers to communicate a blogger's perspective on a Web page?**

## POSSIBLE ANSWER

Title, text, image, links and menu selections.

## SLIDE #24



*The Commons*  
2004 web page

**FURTHER QUESTIONS**

Can you think of current examples where the free market protects the environment?

**ADDITIONAL INFO**

More from the text: "The blog is named after the famous 1968 Garrett Hardin essay, 'The Tragedy of the Commons,' where he established that common ownership of land and natural resources tended to lead to the degradation of those 'common' resources. The free market environmentalist movement exists to demonstrate that property rights have time and again proven the bulwark against such degradation."

From the blog's "Free Market Environmentalism" page:

There is something terribly wrong with the current regime of environmental regulations. Environmental statutes and regulations designed to protect environmental quality are failing. Even laws that produced environmental gains in the 1970s are no longer up to the task. The result is a costly regulatory regime that undermines the goal of environmental protection. The fundamental problem with existing environmental laws is that they embody a command-and-control, government-knows-best mentality. Conventional policy approaches proceed from the assumption that markets 'fail' to address environmental concerns...there is no end to the range of private activities, which generate environmental effects, and centralized regulatory agencies are ill-equipped to handle myriad ecological interactions triggered or impacted by private activity. As environmental analyst Richard Stewart noted, 'the system has grown to the point where it amounts to nothing less than a massive effort at Soviet-style planning of the economy to achieve environmental goals.'

**CONNECTIONS**

MCRD slides 8, 9, 21, 22, 23, 24, 25, 50 (nature philosophy)

## TEACHER GUIDE

**SLIDE #25: *Roosevelt and Muir*, 2000 web page****BACKGROUND INFORMATION**

This Web page celebrates the founding of the National Park Service by honoring two men who were instrumental in its creation. President Theodore Roosevelt was a utilitarian conservationist who believed that natural resources should be protected for human use from exploitation “by land grabbers and by the representatives of the great special interests, at the expense of the public interest” (Conservationist). John Muir was the founder of the Sierra Club and a preservationist who wrote “if people in general could be got into the woods, even for once, to hear the trees speak for themselves, all difficulties in the way of forest preservation would vanish” (Muir).

→ Project the document

QUESTION

**What message is the National Park Service sending to the participants?**

POSSIBLE ANSWER

The Park Service must be prepared to show leadership in mediating the competing needs of its diverse constituencies.

EVIDENCE

The text highlights the “meeting of the minds” of Progressive era conservationists (Roosevelt) and preservationists (Muir). Similar challenges existed within the environmental movement of the 21st century.

QUESTION

**What heritage and values might the conference planners have been trying to claim by selecting this image for their conference brochure?**

**SLIDE #25**

***Roosevelt and Muir*  
2000 web page**

**ADDITIONAL INFO**

This Web page was part of the National Park Service's 2000 National Conference Web site which stated:

At the dawn of the 21st century the National Park Service faces challenges never imagined by its founders. In addition to the spectacular scenery and outstanding natural and cultural resources entrusted to our care, we are now responsible for urban recreation areas, free-flowing rivers, long-distance trails, historic sites, and partnerships with other nations, agencies, tribes, States, and the private sector. (Discovery)

From the National Parks Service webpage on John Muir:

President Teddy Roosevelt was profoundly influenced by Muir and the conservation movement. In 1903, Roosevelt spent four days in Yosemite with Muir, camping with him and learning about the value of the untamed land. His visit with the naturalist had a tremendous impact on his political actions. During the course of his political term, Roosevelt set aside 148 million acres of forest reserves, created 50 regions for the protection of wildlife, founded 16 national monuments and established 5 new national parks. (Golden Gate)

**FURTHER QUESTIONS**

**Contrast the messages about government's role in conservation in this and the previous Web page.**

**CONNECTIONS**

MCRD slides 8, 9, 21, 22, 23, 24, 25, 50 (nature philosophy)

## TEACHER GUIDE

SLIDE #26: *An Ordinary Place*, 2005 web page

## BACKGROUND INFORMATION

While some parts of the United States landscape were turned into parks during the 20th century much of the land was used for residential and commercial purposes. Gifford Pinchot, whom Roosevelt appointed as the first chief of the Forest Service, wrote that public lands should be used for "the greatest good, for the greatest number, for the longest run" (Miller 155). For some this meant coal mines, for some factories and for others housing developments.

This Web page is part of a PBS Web site linked to the film *Los Angeles Now* by producer/director Phillip Rodriguez. From the film's homepage: "Once the whitest city in America, Los Angeles is now the most multicultural city in the history of the world. Once an empty, bucolic space, L.A. is now a disorienting megalopolis. *Los Angeles Now* looks beyond *Baywatch* and *Blade Runner* to create a fresh and candid portrait of America's second largest city" (Los Angeles).

→ Project the document

QUESTION

**What messages about suburban life are implied? Give evidence.**

POSSIBLE ANSWER

Suburban life is anonymous, ordinary and perhaps scary.

EVIDENCE

Anonymity is reinforced by the words "hardly distinguishable," by the image of the huge expanse of tract homes and by the mostly concealed face behind the curtain. Ordinary is reinforced by the title to the essay and the sameness of the houses in the aerial shot. Perhaps scary in the narrowed eyes and upturned palms of the woman in the window.

QUESTION

**What values about human relations with the natural world are implied?**

POSSIBLE ANSWER

People living in the suburbs are out of touch with the natural world.

EVIDENCE

The images are of a grid of streets, car and a woman looking out a window. The text is about houses, neighborhoods and suburbs. The natural world seems absent.

## SLIDE #26



***An Ordinary Place*  
2005 web page**

**ADDITIONAL INFO**

From the essay:

It's slightly more than fifty years since an idling road grader waited while the last harvesters worked in the fields before it dug into the empty ground. That was the start of a long line of machines that scraped the truck farms, chicken ranches, and orange groves of Los Angeles County into suburbia. Despite everything that was ignored or squandered in its making, I believe a kind of dignity was gained. More men than just my father have said to me that living in the suburbs gave them a life made whole and habits that did not make them feel ashamed. They knew what they found and lost. Mostly, they found enough space in suburbia to reinvent themselves, although some of them found that reinvention went badly, that in making their place they had left parts of their life unfinished.

**FURTHER QUESTIONS**

Contrast the author's view with Joni Mitchell's lyric, "You pave paradise to put up a parking lot."

**CONNECTIONS**

MCRD slides 19, 26, 27, 33, 39, 49  
(land use)



## TEACHER GUIDE

## SLIDE #27: *United Land Investments, 2007* web page

### BACKGROUND INFORMATION

From *The Nevada Travel Network Description and History of Pahrump* by David Toll: "Modern Pahrump is a rambunctious little city, one of the fastest-growing communities in the west. It attracts refugees from Las Vegas and Los Angeles, and much of it is still the modest pioneer amalgam of mobile home, cinder block and crackerbox. Lately, though, new urban features are conspicuous - there's a two-story bank building, three bright casinos now compete for attention along the highway...Critical mass is being achieved." (Toll)

→ Project the document

QUESTION

**Who made this and for what purpose?**

POSSIBLE ANSWER

The United Land Investments Company made this to make profit from land sales and development.

QUESTION

**What messages about rural land are implied? Give evidence.**

ANSWER

Rural land provides a great opportunity for growth investments.

EVIDENCE

The picture shows a rural landscape and the text says that "incredible growth" is making rural land "an excellent place to invest."

### SLIDE #27



***United Land Investments***  
**2007 web page**

### FURTHER QUESTIONS

**How might different people interpret this message?**

### CONNECTIONS

MCRD slides 19, 26, 27, 33, 39, 49  
(land use)

### ADDITIONAL INFO

On its About Us Web page United Land Investments describes itself:

We are a private investment company committed to providing anyone an opportunity to own a piece of this beautiful earth. We feel selling land is the easiest and most affordable way for our customers to invest.

The Wise Use movement of the 1980s challenged environmentalist views regarding land use. From Ron Arnold's essay "Overcoming Ideology" on Wise Use philosophy:

The emergent wise use movement held up a mirror to the embarrassing questions posed by the "competing paradigm" (environmentalism): Just who will limit our economic growth? Who will restrain America's science and technology? Who will decide what "delicate balance humans must observe"? The answer was clear: only environmental ideologists, and not those who create economic growth, science, technology or the market economy... Economics is not about money, it is about the allocation of scarce resources. The wise use movement bared the environmental movement's ambition to be resource allocator for the world. Environmentalism's efforts to turn America's pastoral ideal wild stood out in sharp contrast to the wise use movement's actual stewardship of the land, the water and the air. Wise users were not perfect, to be sure, but they were down to earth, real, and necessary. They created economic growth, employed science and technology, and drove the market economy... Environmentalism, like pastoral literature, was about those pastoral rural dwellers who produced dinner, dress and domicile for everyone, but was generated by the educated elite, not by those who lived the pastoral ideal. Environmentalism's ideology was promulgated for the ruling elite, not for the farmer or rancher or family forest owner or mineral prospector. (Arnold)

## TEACHER GUIDE

**SLIDE #28: *Consumer Guide*, 1899 catalog cover****BACKGROUND INFORMATION**

At the turn of the twentieth century newly electrified industry offered a vast new array of retail goods for consumers. From the 1897 Sears Catalog: "It is the policy of our house to supply the consumer everything on which we can save him money, goods that can be delivered at your door anywhere in the United States for less than they can be procured from your local dealer...Do not think that you live too far away... Our goods go into every city, town and hamlet in every state as well as to almost every other country on the globe. Distance cuts no figure...We aim to treat our customers in a manner calculated to secure their permanent patronage. The unprecedented growth of our business proves that we have succeeded in supplying the wants of the people in a satisfactory manner and at lower prices than they could possibly secure elsewhere." (Israel)

→ Project the document

## QUESTION

**What are Sears' messages about people's use of land and resources?  
Give evidence to support your conclusion.**

## POSSIBLE ANSWER

Land and resources are to be used to support production and consumption.

## EVIDENCE

Land and resources are illustrated in images of farm fields, roads and factories. Production is illustrated by the factory spewing smoke and the products spilling from the cornucopia. Consumption is illustrated by the title "Consumers Guide" and the woman holding a Sears's order form ready to be mailed.

## QUESTION

**How does Sears communicate its corporate strength on this cover?  
Image of the globe with the words**

## POSSIBLE ANSWER

Image of the globe with the words "cheapest supply house on earth – our trade reaches around the world" and by the references to supporting banks and capital and surplus dollar amount.

**SLIDE #28**

***Consumer Guide*  
1899 catalog cover**

**ADDITIONAL INFO**

From the 2008 Sears Holdings Corporation Welcome page:

Sears Holdings Corporation, the publicly traded parent of Kmart and Sears, Roebuck and Co., is the nation's fourth largest broadline retailer with over \$50 billion in annual revenues and approximately 3,800 full-line and specialty retail stores in the United States and Canada... Sears Holdings is committed to improving the lives of our customers by providing quality services, products and solutions that earn their trust and build lifetime relationships. In our associates we value teamwork, integrity and positive energy. Our culture is defined by a clear vision, mission and values."

(Welcome) From the "Sears Holdings Culture" Web page: "Our Mission: Build customer relationships, Make more money, Improve every day. Our Pace: Fast, Effective, Focused. Our Values - HOW WE LEAD: Focus on the customer, Build and align teams, Know how to make money. (Sears)

**FURTHER QUESTIONS**

What things do you use for "free" that are paid for by ads promoting consumerism?

**CONNECTIONS**

MCRD slides 16, 28, 29, 30, 31, 48 (consumption)

## TEACHER GUIDE

**SLIDE #29: *Joy to the Wallet, 2006* web page****BACKGROUND INFORMATION**

By the beginning of the 21st century, the advertising industry had created markets for an ever-increasing array of new products. The consumer spending that resulted has had a major impact on resource depletion. Increased consumer demand leads to increased goods and services which in turn require more water, soil, trees and oil to be used in production, consumption and disposal.

This Apple computer Web page refers to Black Friday, the day after Thanksgiving, said to be the biggest shopping day of the year.

→ Project the document

QUESTION

**What is the message about “Black Friday?”**

POSSIBLE ANSWER

Black Friday is a good day to buy Apple products.

QUESTION

**What visual techniques does the Web page designer use to entice potential consumers to buy?**

POSSIBLE ANSWER

The red rectangle draws the eyes to the shopping bag filled with a jigsaw puzzle of Apple products. The computer screens at the top of the page are colorful and filled with images to explore. The smiling face and sale tag in the upper left suggest potential savings.

**SLIDE #29**

***Joy to the Wallet*  
2006 web page**

**FURTHER QUESTIONS**

**Who might benefit and who might be harmed by this message?**

**CONNECTIONS**

MCRD slides 16, 28, 29, 30, 31, 48 (consumption)

**ADDITIONAL INFO**

More from the MacDailyNews site:

From iPods to Macs, Apple Store has the perfect gifts for everyone on your list. You'll find the Apple Stores are stocked to the brim so you can take home anything you like the same day. What's more, we've hand picked the top gifts for this holiday season to make your shopping experience even easier. If you have questions, just ask one of the Mac Specialists on hand to help you. They can recommend just the right gift for anyone on your list.

Economist Julian Simon argued that the steady growth of the consumer economy is a benchmark for national health. From his article, "The State of Humanity: Steadily Improving" published by the Cato Institute:

The data show unmistakably how the standard of living has increased in the world and in the United States through the recent centuries and decades, right up through the 1980s. Aggregate data always bring forth the question: But are not the gains mainly by the rich classes, and at the expense of the poor? For a portion of U.S. history, income distribution did widen (though this is hardly proof that the rich were exploiting the poor). But there has been little or no such tendency during, say, the 20th century. And a widening gap does not negate the fact of a rising absolute standard of living for the poor. Nor is there evidence that an increasing proportion of the population lives below some fixed absolute poverty line. There have been extraordinary gains by the poor in America in consumption during this century, as well as a high standard of living by any historical and cross- national standards.

## TEACHER GUIDE

**SLIDE #30: *Buy Nothing Day, 2007* poster****BACKGROUND INFORMATION**

This poster was created by the Media Foundation AdBusters which describes itself as “a global network of artists, activists, writers, pranksters, students, educators and entrepreneurs who want to advance the new social activist movement of the information age. Our aim is to topple existing power structures and forge a major shift in the way we will live in the 21st century” (About).

The Web page on which this image was posted begins: “STOP SHOPPING TO GO GREEN: This November, environmentalists, social activists and concerned citizens in as many as 65 countries will hit the streets for a 24-hour consumer fast in celebration of the 15th annual Buy Nothing Day, a global cultural phenomenon that originated in Vancouver, Canada.”

→ Project the document

QUESTION

**What visual techniques does the Web page designer use to discourage potential consumers from buying?**

POSSIBLE ANSWER

Humor is the primary technique, conveyed by making fun of the compulsive consumer chasing his fleeing Visa card past a sterile urban landscape with advertisements, discarded pop cans and litter with a jet flying overhead.

QUESTION

**Who might benefit and who might be harmed by this message?**

POSSIBLE ANSWER

AdBusters might benefit by drawing viewers to its Web site where it advertises its message. Those wishing to challenge consumerism might benefit. Those wishing to benefit from consumer sales on November 23 might be harmed should people heed this message.

**SLIDE #30**

***Buy Nothing Day*  
2007 poster**

**ADDITIONAL INFO**

The Web page continues:

The international event has been gaining mainstream momentum as the climate crisis drives average people to seek out greener alternatives to unrestrained consumption. Timed to coincide with one of the busiest shopping days on the US retail calendar, as well as the unofficial start of the international holiday-shopping season, Buy Nothing Day has taken many shapes, from relaxed family outings, to free, non-commercial street parties, to politically charged public protests. Anyone can take part provided they spend a day without spending. In past years, street activists have proven particularly imaginative in their celebrations, bringing zombie marches, credit-card cut-ups, and shopaholic clinics to malls and public squares in an effort to expose the environmental and social consequences of First World over-consumption.” Kalle Lasn is the co-founder of the Adbusters Media Foundation, the organization responsible for launching Buy Nothing Day as a yearly, global event. He explains, “Buy Nothing Day isn't just about changing your routine for one day. It's about starting a lasting lifestyle commitment. With over six billion people on the planet, it is the responsibility of the most affluent – the upper 20% that consumes 80% of the world's resources – to set out on a new path. (Buy Nothing)

**FURTHER QUESTIONS**

**When was the last time you went for a day without buying anything at all?**

**CONNECTIONS**

MCRD slides 16, 28, 29, 30, 31, 48 (consumption)



## TEACHER GUIDE

**SLIDE #31: *Consumerism*, 2005 web page****BACKGROUND INFORMATION**

From the GrumpyMen.com About Us page: "We're here to listen to people's frustrations and get some exposure for people's problems...Power belongs in the hands of the people and with a strong contingent of GrumpyMen (and women) think of the changes for the public good we can bring about. If you have a beef with the political system or the corporate world, we want to hear about it. By notifying us of a grave injustice, we can create a larger awareness and attempt to rock the boat."

Pat Trillo and Kevin O'Leary make up Grumpy Men.

→ Project the document

QUESTION

**What are GrumpyMen's messages about people's use of land and resources? Give evidence to support your conclusion.**

POSSIBLE ANSWER

Consumerism and automobile culture are destroying the planet, beginning with the global south.

EVIDENCE

Consumerism is indicated by the title and by Gandhi's quote. Automobile culture is represented by the tire tracks. The effect on the global south is shown by the tire tracks running across South America.

QUESTION

**What is your interpretation of this and what do you learn about yourself from your interpretation?**

**SLIDE #31**

***Consumerism*  
2005 web page**

**FURTHER QUESTIONS**

What Web sites do you know that deal with young people's responses to concerns about development and consumerism?

**CONNECTIONS**

MCRD slides 16, 28, 29, 30, 31, 48 (consumption)

**ADDITIONAL INFO**

From the United Nations 1998 Human Development Report entitled "Consumption for Human Development":

The 1998 Report investigates the 20th century's growth in consumption, unprecedented in its scale and diversity. The benefits of this consumption have spread far and wide. More people are better fed and housed than ever before. Living standards have risen to enable hundreds of millions to enjoy housing with hot water and cold, warmth and electricity, transport to and from work-with time for leisure and sports, vacations and other activities beyond anything imagined at the start of this century. Yet the Report states that the benefits of this consumption have been badly distributed, leaving a backlog of shortfalls and gaping inequalities. Furthermore, ever-expanding consumption puts strains on the environment - emissions and wastes that pollute the earth and destroy ecosystems, and growing depletion and degradation of renewable resources that undermines livelihoods. The world's dominant consumers are overwhelmingly concentrated among the well-off - but the environmental damage from the world's consumption falls most severely on the poor.

The Report demonstrates that: Rising pressures for conspicuous consumption can turn destructive, reinforcing exclusion, poverty and inequality; Globalization is integrating consumer markets around the world and opening opportunities. But it is also creating new inequalities and new challenges for protecting consumer rights and there is a need to think globally, and act locally, to build on the initiatives of people and foster synergies in the actions of civil society, the private sector and government. (Consumption)

## TEACHER GUIDE

## SLIDE #32: *The Bottomless Well*, 2005 book cover

### BACKGROUND INFORMATION

Near the end of the 20th century the idea of peak oil began to move into public consciousness. Peak oil is the point of maximum global oil production after which oil supplies move into a permanent decline. The authors of this book wrote a number of articles in 2005 about this idea including "It's The End Of Oil – Oil Is Here To Stay" in *Time*, "Getting Over Oil" in *Commentary*, "Gas? We'll Shrug It Off" in *Forbes*, "Running On Empty! You're Full Of It!" in the *Los Angeles Times*, "Why The Environmentalists Have It All Backward" in *The Star-Ledger* and "The Art Of Energy: The Future Will Not Be Painted In Oil" in *Slate.com*.

→ Project the document

QUESTION

**What's the message in this book cover regarding the potential depletion of oil reserves? Give evidence to support your conclusion.**

POSSIBLE ANSWER

We should not be concerned about running out of energy reserves.

EVIDENCE

The title and the image of the filling fuel tank and the subtitle "we will never run out of energy."

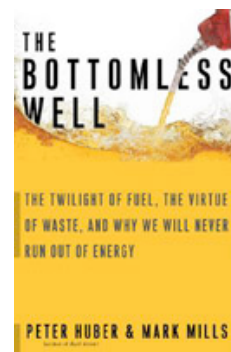
QUESTION

**What kinds of actions might a reader take in response to this message?**

POSSIBLE ANSWER

There are many possible answers to this. One might dismiss concerns about energy conservation. One might buy this book or research other opinions about the issue. One might work to counter a message that they thought was incorrect.

## SLIDE #32



***The Bottomless Well*  
2005 book cover**

**ADDITIONAL INFO**

From *The Bottomless Well*:

Living green plants still capture today's solar energy about six times faster than we humans are able to dig up yesterday's solar energy preserved in fossil fuels, but we'll overtake the rest of nature in due course. Perhaps some day we'll get to the point where we, too, can capture our energy directly from the sun. There's plenty of sunlight to spare – green plants currently capture only about one three-thousandths of the golden cascade of solar power that reaches the earth's surface. But whether we catch our solar energy live, dig it up in fossilized form, or mine uranium instead is really just a detail. The one certainty is that we will extract more energy from our environment, not less. Everything we think we know about "running out of energy" isn't just muddled and wrong; it's the exact opposite of the truth. The more energy we capture and use, the more readily we will capture still more. Energy isn't scarce and it doesn't cost anything. (5)

**FURTHER QUESTIONS**

**How could you further research the issue of oil depletion and energy consumption?**

**CONNECTIONS**

MCRD slides 12, 19, 20, 32, 33, 47  
(oil) MCRD case study lessons 3 & 4  
(Alaska oil)

## TEACHER GUIDE

**SLIDE #33: *A Crude Awakening*, 2006 DVD jacket****BACKGROUND INFORMATION**

From the film's Web site: "Oil Crash, produced and directed by award-winning European journalists and film makers Basil Gelpke and Ray McCormack, tells the story of how our civilization's addiction to oil puts it on a collision course with geology...You needn't be a conspiracy theorist to see a connection between America's current obsessions with the Middle East and national security, and the world's looming oil crisis. The frenzied search for alternative sources of energy now being pursued by the largest multinational energy corporations make it clear they also believe a crisis is fast approaching."

→ Project the document

QUESTION

**What's the message in this book cover regarding the potential depletion of oil reserves? Give evidence to support your conclusion.**

POSSIBLE ANSWER

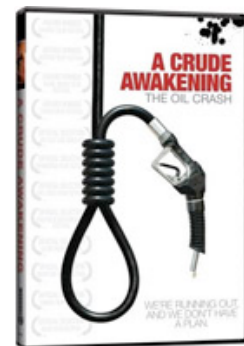
Oil reserve depletion will come as a dramatic shock to people.

EVIDENCE

The image of the gas hose in a hangman's noose and the words "crude awakening," "oil crash," "running out and we don't have a plan."

QUESTION

**This film is promoted as "award-winning" and the authors of the previous book have written many books and articles. Which of the conflicting views on oil use is more credible? Why do you think so?**

**SLIDE #33**

***A Crude Awakening*  
2006 DVD jacket**

**ADDITIONAL INFO**

Forests can be replanted and fisheries can in principle at least be rebuilt though in neither case will people be able to recreate the web of the original sustainable ecosystem. The major energy sources are different. There will be no more coal or oil no matter what we do. These came about through a particular set of circumstances that can never be repeated.

More from the film Web site:

Robert B. Semple, Jr., associate editor of the New York Times editorial board, writes in the paper's March 1, 2006, online edition: "The Age of Oil — 100-plus years of astonishing economic growth made possible by cheap, abundant oil — could be ending without our really being aware of it. Oil is a finite commodity. At some point even the vast reservoirs of Saudi Arabia will run dry. But before that happens there will come a day when oil production 'peaks,' when demand overtakes supply (and never looks back), resulting in large and possibly catastrophic price increases that could make today's \$60-a-barrel oil look like chump change. Unless, of course, we begin to develop substitutes for oil. Or begin to live more abstemiously. Or both. The concept of peak oil has not been widely written about. But people are talking about it now...These [are] not doomsday scenarios from conspiracy theorists, but hard scientific facts backed by serious research. (Film)

**FURTHER QUESTIONS**

**What kinds of actions might a reader take in response to this message?**

**CONNECTIONS**

MCRD slides 12, 19, 20, 32, 33, 47 (oil) MCRD case study lessons 3 & 4 (Alaska oil)

## TEACHER GUIDE

**SLIDE #34: *The Last Stand*, 1997 book cover****BACKGROUND INFORMATION**

From the publisher's description of the book: "For three generations, the Murphy family ran the Pacific Lumber Company (PLC) with a tradition of both sustainable forestry and a concern for employee well-being. Their Headwaters Forest in Northern California contained three-quarters of the world's old-growth redwoods in 1985, the year in which a Texas-based conglomerate engineered a hostile takeover of PLC. The new owners quickly increased the harvest of redwoods by 300%, gutted the employee pension plan, and began clear-cutting acre upon acre of virgin forest. Local environmentalists took up the fight to reverse the takeover and save the redwoods. The conflict between conservation efforts and fears of unemployment came to a head at the end of "Redwood Summer," when protesters from across the country came into town and were greeted by residents shouting insults and slinging eggs and tomatoes."

→ Project the document

**QUESTION**      **Who paid for this cover and why was it made?**

**POSSIBLE ANSWER**      The publisher, the Sierra Club, paid for this in order to sell its books and ideas.

**EVIDENCE**      The publisher is listed on the bottom right hand corner. As a publishing house, Sierra Club wants to sell books and as an environmentalist organization it wants to promote its views.

**QUESTION**      **What are the messages about people and forest resources? Give evidence.**

**POSSIBLE ANSWER**      There is a conflict between corporations and public opinion about how to use redwoods. Redwoods should be protected.

**EVIDENCE**      The subtitle suggests the conflict. The image of the majestic trees and the sponsorship by the Sierra Club suggest conserving the resource.

**SLIDE #34**

***The Last Stand*  
1997 book cover**

**ADDITIONAL INFO**

From the book:

Most of Pacific Lumber's timberland was redwood and a good portion of that was old-growth redwood – monster trees that yielded the best softwood in existence. Nobody else in the forest products business owned anything like it. Those holding's gave Pacific Lumber a virtual corner on the market in high-quality redwood boards, a commodity already rare enough to almost guarantee it would escalate in price...Pacific Lumber was a Ferrari that had been managed like a Model T. Cranked up to a competitive pace, it could generate two or three times its current cash flow. (27)

Redwood Summer seemed like a sure thing: hundreds, perhaps thousands, of committed students and activists flowing into Humboldt County, camping in the backwoods and organizing into shock troops to save the forest...Just as Mississippi Summer had broken the hold of racism in the south, Redwood Summer could end 'speciesism.' It was just as evil for one species, humans, to dictate life or death to all the others as it was to suppress a minority for reasons of color. (297)

**FURTHER QUESTIONS**

**Who might benefit from this and who might be harmed?**

**CONNECTIONS**

MCRD slides 8, 9, 10, 18, 34, 35, 36, 44 (forests) MCES slides 7, 17, 22, 23, 24, 26 (habitat destruction)



## TEACHER GUIDE

SLIDE #35: *GP in Action*, 2005 web page

## BACKGROUND INFORMATION

From the Company Overview Web page: "Georgia-Pacific (GP) is one of the world's leading manufacturers of tissue, pulp, paper, packaging, building products and related chemicals. We have approximately 300 manufacturing facilities across North America, South America and Europe, ranging from large pulp, paper and tissue operations to gypsum plants, box plants and building products complexes."

→ Project the document

## QUESTION

**Who paid for this Web page and why was it made?**

## POSSIBLE ANSWER

Georgia-Pacific paid for this to assure the public it is environmentally concerned.

## EVIDENCE

This is a Georgia Pacific Web page identified by its logo and name in several places. The Environment menu listing of "Product Stewardship" and "Awards" indicates Georgia Pacific's desire to be recognized as a steward of the environment, not simply as a manager of forests and producer of forest products.

## QUESTION

**What are the messages about people and forest resources? Give evidence.**

## POSSIBLE ANSWER

Georgia Pacific gives its property to help maintain parks and trails.

## EVIDENCE

"GP donates coastal property," "GP gave the...trail."

## SLIDE #35



***GP in Action***  
**2005 Web page**

**ADDITIONAL INFO**

More from the Web site:

The 413-acre sawmill property owned by GP contains about a third of the city of Fort Bragg's total area and almost all of its coastal waterfront. After more than 100 years of operation, Georgia-Pacific closed the mill in November 2002. Georgia-Pacific is working with the city, the Coastal Conservancy, regulatory agencies and the local community on the property's re-use. Fort Bragg Mayor Dave Turner noted that the parkland will provide public access to three miles of 'spectacular coastline that have been inaccessible for over a century. We expect the parkland to provide economic benefits to the city and to the entire coastal region.' (Environmental)

In a 2003 press release, the Rainforest Action Network included Georgia-Pacific as "among the "Dirty Dozen"...the top loggers of U.S. national forests, the largest importers and distributors of endangered, old growth forest products, the worst converters of native forests to monocultural plantations, and the leading manufacturers of non-recycled, virgin tree paper. 'Logging, distributing or selling endangered forests is a barbaric, outdated practice that has entered its endgame in the American marketplace. Any company that is still engaged in this practice is on the wrong side of history. It is baffling how, in the face of overwhelming scientific evidence, logging companies have ignored the handwriting on the wall this long. Although we prefer a collaborative approach, if these companies won't respond to the pleas of scientists and the demands of their customers, then we are prepared to take this debate to each company's board of directors, its shareholders, its customers, and the American people,' said Michael Brune, Executive Director of Rainforest Action Network" (RAN).

**FURTHER QUESTIONS**

**How can you research the conflicting claims of GP and RAN?**

**CONNECTIONS**

MCRD slides 8, 9, 10, 18, 34, 35, 36, 44 (forests) MCES slides 7, 17, 22, 23, 24, 26 (habitat)

## TEACHER GUIDE

**SLIDE #36: *Green Belt Movement*, 2007 web page****BACKGROUND INFORMATION**

From the Green Belt Movement site: “The Green Belt Movement (GBM) has two divisions...Green Belt Movement Kenya is a non-profit grassroots non-governmental organization based in Kenya. GBM Kenya focuses on six core programs: Environmental Conservation/Tree Planting, Civic & Environmental Education, Advocacy & Networking, Pan African Training Workshops, Green Belt Safaris (GBS) and Women for Change (Capacity Building). GBM International is a non-profit umbrella organization for GBM Kenya.”

→ Project the document

QUESTION

**What does this Web page suggest regarding the connections between reforestation and movements for social change?**

POSSIBLE ANSWER

Reforestation and social change go hand in hand

EVIDENCE

Green Belt’s self description as a movement with its founder a Nobel Peace Prize winner tie the work of reforestation to social change as do the links to pages on women’s rights and civic empowerment.

QUESTION

**What design choices did the Web site creator make in order to highlight the ability for individuals to make a difference in the world?**

POSSIBLE ANSWER

Photos of Wangari Maathai, a pair of individuals planting a tree and a single outstretched hand with seedling underscore this idea.

**SLIDE #36**

***Green Belt Movement*  
2007 web page**

**ADDITIONAL INFO**

From an article by Wangari Maathai posted on the Web site entitled “Many Wars Are for Control of Scarce Resources”:

Whatever it is called, if peace is to be found within national or regional borders, it has to be a system which respects human rights and the rule of law; includes diversity in the society and ensures that the minority have their say even though, in a democracy, the majority might have their way. There are hardly any wars fought today that are not over the need to expand borders, access and control water, minerals, grazing and agricultural land or access to forests or coastlines. If countries want peace and security, the leadership must work for justice and fairness for all. They must work for equity, human dignity and the rule of law.

One of the resources we should particularly care about is the forest. Not only because forests provide humanity with many services, but also because without them, the long-term life of the nation is undermined. But in Africa, many investors clear indigenous forests and replace them with commercial plantations of imported trees or crops. This is partly because forests are wetter, more fertile and investors can make quick profits in a short time. We justify the destruction by promising jobs and wealth. But at what cost? Countries must weigh the short-term benefits of quick profits and jobs against the long-term interests of the present and future generations. (Maathai)

**FURTHER QUESTIONS**

**How could you find out more about the Green Belt Movement?**

**CONNECTIONS**

MCRD slides 8, 9, 10, 18, 34, 35, 36, 44 (forests) MCES slides 7, 17, 22, 23, 24, 26 (habitat destruction)

## TEACHER GUIDE

SLIDE #37: *Thirst*, 2003 film poster

## BACKGROUND INFORMATION

From the synopsis of the film on its homepage: "Is water part of a shared 'commons,' a human right for all people? Or is it a commodity to be bought, sold, and traded in a global marketplace? *Thirst* tells the stories of communities in Bolivia, India, and the United States that are asking these fundamental questions. Over a billion people lack access to safe drinking water. Each year, millions of children die of diseases caused by unsafe water. The numbers are increasing...Politicians, international bankers, and corporate executives gather to decide who will control global fresh water supplies. Their consensus for large dams and privatized, corporate water systems is challenged by experts and activists who assert that water is a human right, not a commodity to be traded on the open market."

→ Project the document

QUESTION

**What techniques does the cover designer use to communicate the message of the DVD?**

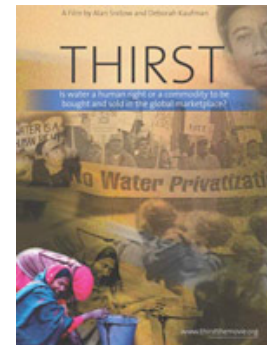
POSSIBLE ANSWER

They use the banners and signs of the protesters to articulate water access as a human right and to oppose water privatization. They use the images of the marchers and the women by the bucket to underscore people's efforts to protect public access to water and they use the images of the military to show government efforts to counter the popular movement.

QUESTION

**Given the values concerning human access to natural resources implied in this image do you think that this documentary would be likely to appear on commercial television? Why or why not?**

## SLIDE #37



*Thirst*  
2003 film poster

**ADDITIONAL INFO**

From the publisher's flap on the companion book *Thirst: Fighting the Corporate Theft of Our Water*:

Will (water) become the oil of the 21st century? Is it a source of profit for those in control, and a commodity available only to those who can afford to pay? Out of sight of most Americans, global corporations like Nestle, Suez, and Veolia are rapidly buying up our local water sources – lakes, streams, and springs – and taking control of public water services. In their drive to privatize and commodify water, they have manipulated and bought politicians, clinched back room deals, and subverted the democratic process by trying to deny citizens a voice in fundamental decisions about their most essential public resource...THIRST exposes the corporate attempts to take over municipally controlled water in communities around the country, to buy up rights to groundwater in the US and to create and corner the market on bottled water. It also shows how people in affected communities are fighting back to keep water affordable, accessible, sustainable and public by creating new methods to challenge the corporate juggernaut in an age of globalization. We are at the tipping point in the new, global water wars. The United States is ground zero. What happens in the next few years will determine the fate of water and our basic democratic rights. THIRST is a battlefield account of the conflict. (Snitow)

**FURTHER QUESTIONS**

**Who controls access to the public water sources in your community?**

**CONNECTIONS**

MCRD slides 5, 13, 15, 17, 37, 38, 45 (water) case study lesson 2, 5 (dams and privatization)

## TEACHER GUIDE

**SLIDE #38: *Euphoria*, 2006 promotional brochure****BACKGROUND INFORMATION**

Moonburn Graphics provides marketing services such as this promotional brochure. According to BevNET.com, "Euphoria Water Company is grounded in the principle of social responsibility and is committed to donating a minimum of 20% of its profits to charity. It is the only bottled water in the country to have exclusive co-branding rights with major national charities -- specifically March of Dimes, City of Hope, Special Olympics and the Make-A-Wish Foundation."

From the text of the brochure: "Euphoria water will utilize the most effective and innovative marketing tool to impact the bottled water industry. We are confident that in combining the principles of cause-related marketing with our great natural spring water Euphoria will attract consumers everywhere. With each purchase of Euphoria not only will the customers be satisfying their thirst, but will at the same time be quenching their desire to make a difference. Our water will leave you thirsting for that euphoric feeling."

→ Project the document

QUESTION

**Who is the target audience for this brochure? Give evidence.**

POSSIBLE ANSWER

Charitable organizations that might sell Euphoria water as a marketing technique.

EVIDENCE

The phrases "cause-related," "marketing tools" and "attract customers" suggests that Euphoria water is marketing to charity organizations as potential sellers of the product rather than to the general public.

QUESTION

**What techniques does the designer use to encourage the idea of selling bottled water to charitable organizations?**

POSSIBLE ANSWER

It associates bottled water with feelings of elation by providing backgrounds of mountain lakes and water reflections to the two euphoria water bottles using the definition of euphoria on either side border. It offers statistics reflecting consumers' desires to spend money to support social concerns.

**SLIDE #38**

***Euphoria*  
2006 promotional  
brochure**

**ADDITIONAL INFO**

From a 2007 New York Times article, "Buying Into the Green Movement":

Paul Hawken, an author and longtime environmental activist, said the current boom in earth-friendly products offers a false promise. 'Green consumerism is an oxymoronic phrase,' he said. He blamed the news media and marketers for turning environmentalism into fashion and distracting from serious issues. 'We turn toward the consumption part because that's where the money is... Fashion is the deliberate inculcation of obsolescence'. (Williams)

**FURTHER QUESTIONS**

What points of view are implied in this brochure regarding environmentalism and how might the product itself, a plastic bottle, impact resource depletion?

**CONNECTIONS**

MCRD slides 5, 13, 15, 17, 37, 38, 45 (water) MCRD case study lesson 2, 5 (dams and privatization)



## TEACHER GUIDE

SLIDE #39: *Dirt*, 2007 book cover

## BACKGROUND INFORMATION

From the book: “We can’t afford to lose any more farmland. Fifty years from now, every hectare of agricultural land will be crucial. Every farm that gets paved over today means that the world will support fewer people down the road. In India, where we would expect farmland to be sacred, farmers near cities are selling off topsoil to make bricks for the booming housing market.

“Developing nations simply cannot afford to sell off their future this way, just as the developed world cannot pave its way to sustainability. Agricultural land should be viewed — and treated — as a trust held by farmers today for farmers tomorrow. Still, farms should be owned by those who work them — by people who know their land and who have a stake in improving it” (*Dirt*)

→ Project the document

QUESTION

**What values about soil as a resource are implied in this book cover?**

POSSIBLE ANSWER

Soil is an essential resource in the maintenance of a healthy civilization.

EVIDENCE

The title “dirt” and the image of the ancient Egyptian plowing suggest this is about soil and farming practice. The dust bowl image and the subtitle “The Erosion of Civilizations” suggest soil maintenance is tied to survival.

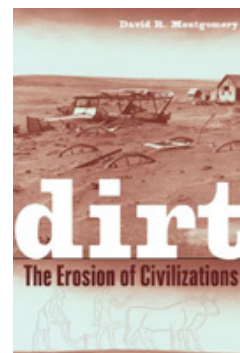
QUESTION

**What is left out of this message that might be helpful to know?**

POSSIBLE ANSWER

How have civilizations eroded soil as a resource? Is this happening to our civilization? If so, how might we prevent further loss of topsoil?

## SLIDE #39



***Dirt***  
**2007 book cover**

**ADDITIONAL INFO**

From *Dirt*:

As much as climate change, the demand for food will be a major driver of global environmental change throughout the coming decades...Whereas the effects of soil erosion can be temporarily offset with fertilizers and in some cases irrigation, the long-term productivity of the land cannot be maintained in the face of reduced soil organic matter, depleted soil biota and thinning soil that so far have characterized industrial agriculture. Many factors may contribute to ending a civilization, but an adequate supply of fertile soil is necessary to sustain one. Using up the soil and moving on to new land will not be a viable option for future generations. Will modern soil conservation efforts prove too little, too late — like those of ancient societies? Or will we relearn how to preserve agricultural soils as we use them even more intensively? Extending the life span of our civilization will require reshaping agriculture to respect the soil not as an input to an industrial process, but as the living foundation for material wealth. As odd as it may sound, civilization's survival depends on treating soil as an investment, as a valuable inheritance rather than a commodity — as something other than dirt. (*Dirt*)

**FURTHER QUESTIONS**

**Who is working on soil conservation in the area where you live?**

**CONNECTIONS**

MCRD slides 9, 11, 14, 39, 40, 46 (soil) 19, 26, 27, 33, 39, 49 (land use)

## TEACHER GUIDE

SLIDE #40: *Culture*, 1999 web page

## BACKGROUND INFORMATION

The Zuni Pueblo About Us Web page says, “the Zuni people have farmed the Zuni River Valley and many of its tributaries for thousands of years, raising primarily corn, squash, beans, and other vegetables. Many varieties of these plants are native to the Zuni Reservation.”

This photo shows a Zuni woman practicing a dry-farming technique known as waffle farming, which has been practiced by Native Americans in the desert southwest for centuries. This form of farming allows water to be held in the soil longer and retards evaporation thus increasing chances for crop success.

→ Project the document

QUESTION

**Who might benefit from this message?  
Explain your answer.**

POSSIBLE ANSWER

Zuni tourism and those seeking reliable dry-farming techniques.

EVIDENCE

Zuni tourism interest is indicated by the menu listings for tourism, tribal enterprise and local business. Dry-farming experience is indicated by the photo and the text which suggests that the Hopi have survived for thousands of years in this climate.

QUESTION

**How credible is this information and what makes you think that?**

POSSIBLE ANSWER

It is likely to be credible.

EVIDENCE

The fact that this is listed as “the official site of the Zuni tribe” with comprehensive contact information and what appears to be the tribal seal lends credibility that this information comes from Zuni people.

## SLIDE #40



*Culture*  
1999 web page

**ADDITIONAL INFO**

From Jay B. Norton and Jonathan A. Sandor's article, "Combating desertification with indigenous agricultural technology at Zuni Pueblo, New Mexico":

The Zuni Conservation Project (ZCP) has begun work toward sustainable natural resource development on the reservation. The approach combines local knowledge with scientific study of natural resources to fight desertification and to revitalize agriculture as an economic entity. The once important traditional practice of runoff agriculture holds promise for both endeavors: combating desertification through mitigation of erosion, sedimentation and flooding while improving crop and forage production by utilizing eroded soil and water resources. The Zuni Conservation Project has designed and installed many types of erosion control structures based on traditional methods and native material. They monitor the success of these structures and have found that they do very well. Conventional structures, on the other hand, have been found to be short-lived and often exacerbate erosion and sedimentation problems... Now, as Zuni farmers once again take charge of their own resources and reintroduce modernized versions of time-tested traditional technologies, they can reestablish the centuries-old balance with their dynamic environment.

**FURTHER QUESTIONS**

**What indigenous practices help to protect the natural resources of your bioregion?**

**CONNECTIONS**

MCRD slides 2, 3, 4, 6, 7, 8, 9, 40, 41, 50 (indigenous perspectives) 9, 11, 14, 39, 40, 46 (soil), MCC slides 39, 40, 41, 51

## TEACHER GUIDE

SLIDE #41: *Oren Lyons*, 2007 web page

## BACKGROUND INFORMATION

This Web page is from the Action Network site for the film, *11th Hour*: "We have created this action community that will help individuals and communities connect with each other to help find solutions that will reduce our dependence on fossil fuels, increase the use of renewable energy, and slow down consumption of natural resources...The 11th Hour is the last moment when change is possible. The film explores how we've arrived at this moment -- how we live, how we impact the earth's ecosystems, and what we can do to change our course."

→ Project the document

QUESTION

**Who was the target audience for this page and why was it made?**

POSSIBLE ANSWER

The target audience is people with concern for the environment, and it was made to draw attention to the film and to encourage education and action to protect the earth's resources.

EVIDENCE

The top and side menus focus on environmental action, as do the images of the wind farm and the earth with boot print. The top right and bottom left boxes promote the film.

QUESTION

**Would you say this message is one of hope or desperation?**

## SLIDE #41



***Oren Lyons*  
2007 web page**

**FURTHER QUESTIONS**

**What actions might you take in response to this message?**

**CONNECTIONS**

MCRD slides 2, 3, 4, 6, 7, 8, 9, 40, 41, 50 (indigenous perspectives)

**ADDITIONAL INFO**

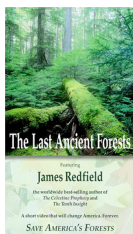
From a 1992 address Oren Lyons gave at the Citizen's Earth Summit in Rio de Janeiro, Brazil:

As we go through the world and we observe life, the western civilization of looking at life as resources, and as long as they use that term for life as resources you're never going to gain anything. When you recognize life for what it is: a tree as a spirit, a tree as a living being, a tree as a grandfather that we call; when you recognize that there is a reason for all of these beings and that these beings are interlocked, that we depend on one another; if we can change the definitions, if we can have people speak about life for what it is -- as life with equal value, as life is necessary for survival and not as commerce and not as resources then we may have a chance. But as long as we look at forests as resources, as long as we look at these things as board-feet of lumber or we look at the fish runs as resources for people, we're going to continue to use them without restraint and without guidance.

That's why it is important for the small voice of indigenous people at this point to come forward. Because I must say in our own defense that we have never given up that position. And I must say that during all the time of this glorious development process that took us through the Victorian era, that came with the Monroe Doctrine, that came with the great wars of one, two, and now maybe three, that during all of that development of human as they say, you lost the mystery, you lost the elegance, you lost the spirituality of the reality of the earth and of life itself. And when you lost that you lost direction. The only ones who have hung onto that over these periods of time have been the indigenous people wherever they were. They did hang on to that. I commend them for that. I would not be here if my grandfather and my grandmother did not say the same thing.

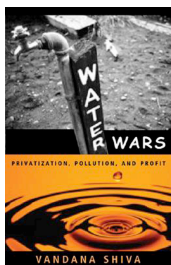
## Paired Image Comparisons

**Slide # 43 – *The Stump*, 1862 lithograph print, & *The Last Ancient Forests*, 1991 video jacket**



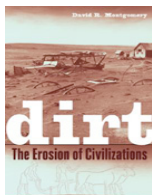
Compare visual techniques to communicate messages about trees as a natural resource.

**Slide # 44 – *Water Wars*, 2002 book cover, & *Bottled Water World*, 2006 magazine cover**



Compare implied values concerning the use of water as a natural resource.

**Slide # 45– *McCormick Reaper*, 1890 advertisement, & *Dirt*, 2007 book cover**



Compare the illustrators' techniques to communicate the effects of plowing on the Great Plains.

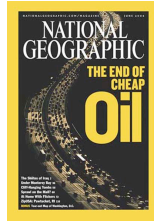
**Slide # 46 – *The High Cost*, 2006 magazine web page, & *American Coal*, 2006 magazine cover**



Discuss the choices for imagery in presenting opposing views about coal as a natural resource.



**Slide # 47 – Toyota, 2007 magazine advertisement, & The End of Cheap Oil, 2004 magazine cover**



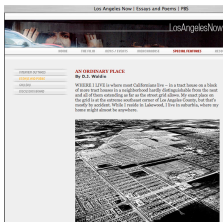
How does each message make you feel about the effects of driving?

**Slide # 48 – Sears, Roebuck, 1899 catalog cover, & High Tech Trash, 2006 book cover**



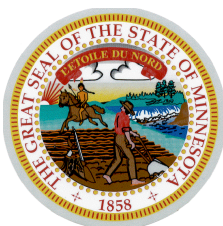
Discuss connections between advertising, consumption and resource depletion

**Slide # 49 – An Ordinary Place, 2005 web page, & California Cornucopia, 1885 book cover**



How does the time period in which each of these images was made impact the viewers' understanding of messages about development?

**Slide # 50 - L'Etoile du Nord, 1858 state seal, & Wilderness Conference, 1967 poster**



Who produced each image and why did they choose that image to convey a message about Native Americans and development?



# Lesson #2: Case Study— Damming the Rivers (Video Clips)

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Video Clips.....	
(Access online or via Lesson 2 digital media folder)	

*Valley of the Tennessee*  
*Hetch Hetchy, Yosemite's Lost Valley*  
*China's Mega Dam*  
*Manufactured Landscapes*



## LESSON PLAN



Video Clips

# Case Study: Damming the Rivers

## Lesson Objectives:

- Students will review perspectives on dam projects and water as a resource.
- Students will reflect on their own beliefs about human transformation of the landscape.
- Students will recognize the power of words, images and sound to influence a target audience.
- Students will analyze diverse storytelling techniques to convey messages.

## Vocabulary:

Megawatts, hydroelectric, kwh (kilowatt hours), Tennessee, Valley Authority, Tennessee River, Yosemite Valley, John Muir, Tuolumne River, Hetch Hetchy Valley, Three Gorges Dam, ship locks, Yangtze River

## Media



*Valley of the Tennessee*, Office of War Information, 1944 (3:07)



*Hetch Hetchy; Yosemite's Lost Valley*, Restore Hetch Hetchy, 2003 (8:01)



*China's MegaDam*, Discovery Channel, 2005 (3:48)



*Manufactured Landscapes*, 2006 (3:47)

## Materials Needed:

- Teacher's guide: *Damming the Rivers*
- Four video clips (access online or via Lesson 2 digital media folder)
- One-page Lesson #2 Case Study Student Worksheet

## Time

50 Minutes

## Lesson Procedures:

1. Present *Lesson Introduction* to the class.
2. Distribute *Student Worksheet* for logging the clips.
3. Play the video clips while students log their answers.
4. Lead students through a decoding of the video clips using the *Media Sample Questions & Answers Teacher Guide*.

## TEACHER GUIDE



Video Clips

## Case Study: Damming the Rivers

1. Organize and make copies for the class activities.
2. Introduce the lesson:

### Lesson Introduction

In the 20th century, giant dam projects became one of the measures of a country's power. When the United States completed work on the Hoover Dam in 1935, it became the largest dam in the world, producing over 2,000 megawatts (MGW) of electricity (USBR). Since then, other great dam projects have surpassed Hoover in their ability to generate electric power. The Grand Coulee Dam in the U.S. generates over 6,000 MGW, as do several dams in Russia. At the end of the 20th century, the Itaipu Dam on the border between Brazil and Paraguay was the largest hydroelectric energy producer in the world at 12,600 MGW. With the completion of China's Three Gorges Dam in 2009, the world's maximum hydroelectric capacity will rise to a projected 18,200 MGW, nearly 10 times what Hoover Dam produces. (BBC)

Governments and utilities have long supported mammoth dam projects for their capacity to control flooding and to generate hydroelectric power. In the United States during the Great Depression, President Franklin Roosevelt proposed the creation of a new agency, the Tennessee Valley Authority (TVA), as "a corporation clothed with the power of government but possessed of the flexibility and initiative of a private enterprise" (TVA). According to the TVA's history Web page, it "engaged in one of the largest hydropower construction programs ever undertaken in the United States. Early in 1942, when the effort reached its peak, 12 hydroelectric projects and a steam plant were under construction at the same time, and design and construction employment reached a total of 28,000" (TVA). But in addition to their benefits, dam projects have negative consequences as well, both to people and the environment. Entire cities are often flooded over to make room for these giant projects. Environmental concerns include riverbank erosion, degraded water quality and loss of wildlife habitat.

In the United States, an early battle over the damming of the Hetch Hetchy River in Yosemite National Park led to a conflict between the Sierra Club and those that wanted a secure water source for San Francisco. The Sierra Club lost that battle and the Hetch Hetchy was dammed to create a 459 square mile reservoir (SFPUC). After continued pressure to restore Hetch Hetchy, the Department of the Interior under Ronald Reagan agreed to study the possibility of dismantling the O'Shaughnessy Dam saying: "Restoration of Hetch Hetchy Valley to its natural state may be a dream, but it is our obligation as concerned Americans to discover if this dream can become a reality. It is for our generation to decide that this is an investment for future generations . . . If we succeed, America can once again boast its position as a world leader in the care, improvement, and restoration of our National Parks" (Restore).

3. Distribute student worksheets. Have students work individually or in pairs to log each film.
4. Read aloud the brief introductory excerpt before playing each film clip.
5. Play the film clip.
6. Have students write their answers on their worksheet after the showing of the clip.
7. Lead a discussion of the clips using the suggested teacher answers below as a guide.



## "Valley of the Tennessee" Office of the War Information, 1944

### Film 1 Introduction

This excerpt is from a 1944 film, Valley of the Tennessee, made by the Office of War Information and directed by Alexander Hammid. This documentary was part of a series of films called "The American Scene." It describes the origins and construction of the Tennessee Valley Authority (TVA) and its effects on the people of the Tennessee Valley.

## Media Sample Questions & Answers

1.) What messages are given concerning the reasons for building dams?

**Possible Answer:** Dams preserve water for times of drought, protect communities from floods and provide electrical power for industry, agriculture and consumer uses.

2.) What messages are given concerning the impact of dams on people and the environment?

**Possible Answer:** Dams empower people, raise living standards and reduce drudgery.

3.) What values are implied concerning the use of water as a resource? Give evidence.

**Possible Answer:** Water is an available resource for people's use and should be used to improve the human condition. People should take pride in the ability of their government to control the flow of rivers through such enormous construction projects.

**Evidence:** Water as an available resource is communicated in the scenes of the students reviewing the model dam with the voice over: "Children learn to use the things that were built for them." Pride is communicated in the authoritative voice and uplifting music accompanying the images of the many dam projects with phrases "symbols of a nation's constructive energy" and "built for and owned by the people of the United States."

4.) What is left out of this message that might be important to know?

**Possible Answer:** Are there any drawbacks to dam construction relating to population displacement, worker safety, ecological damage or dependence on large-scale government and utilities for empowerment?



## ***Hetch Hetchy; Yosemite's Lost Valley*** **Restore Hetch Hetchy, 2003**

### **Film 2 Introduction**

This excerpt is the trailer from the 2003 documentary film *Hetch Hetchy: Yosemite's Lost Valley*. The film was produced by the California not-for-profit group, Restore Hetch Hetchy, and was directed by Melissa Berman. Restore Hetch Hetchy seeks to restore and protect Yosemite National Park's Hetch Hetchy valley and its associated natural resources.

## **Media Sample Questions & Answers**

**1.) What messages are given concerning the reasons for building dams?**

**Possible Answer:** Dams provide for drinking water, crop irrigation and electrical power.

**2.) What messages are given concerning the impact of dams on people and the environment?**

**Possible Answer:** Dams displace Native Americans and wildlife and destroy pristine natural environments, Dams capture and incarcerate rivers and drown valleys.

**3.) What values are implied concerning the use of water as a resource? Give evidence.**

**Possible Answer:** Humans should preserve the natural waterways in their original state and find ways to maintain water resources without destroying the natural world.

**Evidence:** Preservation is implied by casting the river as the first person narrator coupled with images of wild rivers. The script contrasts the preservationist view within "I once careened gracefully through a majestic valley" and John Muir's words honoring the natural beauty of Hetch Hetchy Valley with the management view of "now I sit incarcerated...a captured river". Human water use coupled with wilderness maintenance is suggested by "I don't begrudge you my water" and "we can both survive" alongside images of people showering and the wild river flowing.

**4.) What is left out of this message that might be important to know?**

**Possible Answer:** How could the river be restored once the dam is in place? How can people use the water resource without building dams? What are the arguments for and against the Restore Hetch Hetchy initiative? What happened to the native peoples and wildlife that lived in Hetch Hetchy Valley?



### *China's MegaDam* Discovery Channel, 2005

#### Film 3 Introduction

This excerpt is from the 2005 documentary film, "China's MegaDam," shown on the Discovery Channel and described on their Web page: "The Three Gorges Dam on the Yangtze River in China is the largest public works project in the history of mankind...Join Discovery Channel cameras – granted exclusive access to the site – as they document the dramatic effect this massive construction project will have on the surrounding countryside...It's an insider's look at a true engineering marvel 10 years in the making – and the human and cultural ramifications that have some wondering if it's all worth it."

## Media Sample Questions & Answers

1.) What messages are given concerning the reasons for building dams?

**Possible Answer:** Three Gorges dam will provide for flood control on the Yangtze River.

2.) What messages are given concerning the impact of dams on people and the environment?

**Possible Answer:** The dam project provides work for tens of thousands of people and pumps tens of billions of dollars into the economy.

3.) What values are implied concerning the use of water as a resource? Give evidence.

**Possible Answer:** The building of the Three Gorges dam is a sign of greatness. Technology can tame wild nature.  
**Evidence:** Greatness is implied by the title "Mega Dam" and images of the immense project coupled with the words "the biggest and most powerful dam ever built" and "the world's largest construction project ever." Taming the dangerous river is suggested by images of the Yangtze flood and voice over about the numbers of people displaced and troops dispatched to help with rescue. The idea of technology winning over nature is conveyed in the scripting: "Humans have been battling with nature," "China is pitting modern technology against the mighty Yangtze river."

4.) What is left out of this message that might be important to know?

**Possible Answer:** What is the nature of the controversy over the dam's construction? What are the translations of the Chinese subtitles? Bigger dikes have been proposed as the solution to future flooding in New Orleans – could they work in China as well? Is recent flooding of the Yangtze related to global warming?



## Manufactured Landscapes, 2006

### Film 4 Introduction

This final excerpt is from the 2006 documentary film by independent filmmaker Jennifer Baichwell entitled “Manufactured Landscapes.” According to the promotional material, the film centers on the work of photographer Edward Burtynsky as he documents “quarries, recycling yards, factories, mines and dams—Burtynsky creates stunningly beautiful art from civilization’s materials and debris. The film follows him through China, as he shoots the evidence and effects of that country’s massive industrial revolution ...allowing us to meditate on our impact on the planet and witness both the epicenters of industrial endeavor and the dumping grounds of its waste.”

## Media Sample Questions & Answers

1.) What messages are given concerning the reasons for building dams?

**Possible Answer:** Three Gorges Dam will provide for flood control, electricity generation and improved transportation.

2.) What messages are given concerning the impact of dams on people and the environment?

**Possible Answer:** More than one million people have been displaced and 13 cities destroyed to make room for the dam and reservoir. People have been hired to dismantle their homes and cities.

3.) What values are implied concerning the use of water as a resource? Give evidence.

**Possible Answer:** Ordinary people have little say in decisions relating to major dam projects.

**Evidence:** In response to question about impact of forced relocation the tour guide answers “Don’t ask me this question. I’m not in charge of this” implying someone else makes these decisions. Images of passive people on the boat and of workers dismantling their homes reinforce lack of people’s agency in the decision to relocate population.

4.) What is left out of this message that might be important to know?

**Possible Answer:** How was the decision made to relocate so many people and cities? Was there agreement among the population about the necessity for this project? Was there resistance to the decision? How has the dismantling of the cities impacted wildlife in the area?



**FURTHER QUESTIONS**

- » **Who were the target audiences for each clip? How do you know?**
- » **Discuss the difference between an overt message and an implicit message.**
- » **Reflect on the choices for different persuasive techniques used in these films—black and white vs. color film, soundtrack and voice over selections, still photographs vs. moving images.**
- » **What kind of actions might you take in response to these film clips?**
- » **How might different people interpret these messages in very different ways?**
- » **Are these messages fact, opinion or something else?**
- » **How does the time period in which each film was made inform its content?**
- » **How do these sponsoring organizations impact the message—Office of War Information government agency, Restore Hetch Hetchy non-profit group, Discovery Channel Media Corporation, independent filmmaker?**

**CONNECTIONS**

See lesson 1 PowerPoint slides #5, 13, 17, 37, 38, 40, 45 (water as resource) and 3, 9, 26, 27, 32, 33, 39, 49 (land use) and Lesson 5, Cochabamba – Water For Sale writing case study





## Lesson #2 Case Study Student Worksheet

NAME \_\_\_\_\_ DATE \_\_\_\_\_

Read over the questions below before watching the short video clips. You may want to take notes as you view the clips. You will then be given time to write your answers after viewing the clips.

Title of Film: \_\_\_\_\_

1. What messages are given concerning the reasons for building dams?
  
  
  
  
  
  
  
  
  
  
2. What messages are given concerning the impact of dams on people and the environment?
  
  
  
  
  
  
  
  
  
  
3. What values are implied concerning the use of water as a resource? Give evidence.
  
  
  
  
  
  
  
  
  
  
4. What is left out of this message that might be important to know?



# **Lesson #3: Case Study— Chukchi Sea Oil (Print Documents)**

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## LESSON PLAN



Printed Document

## Case Study: Chukchi Sea Oil Drilling

**Lesson Objectives:**

- Students will analyze writings on Alaskan oil drilling from press releases by a coalition of community and environmental groups and an oil company and from articles in a local weekly newspaper and an international media corporation.
- Students will study and present different views on resource extraction as it impacts economic opportunity and Native community preservation.
- Students will evaluate and discuss how organizational mission informs reporting on resource issues.
- Students will evaluate and discuss the media representation of oil drilling in Alaska

**Vocabulary:**

**Arctic National Wildlife Refuge (ANWAR), Chukchi Sea, Department of the Interior (DOI), Minerals Management Service (MMS), Alaska Wilderness League, Point Hope, Inupiat Community of the Arctic Slope, North Slope, Pacific Environment, National Petroleum Reserve Alaska, Environmental Impact Statement (EIS), Royal Dutch Shell, Trans-Alaska Pipeline, Oil lease sale, On-ice seismic testing, Alyeska**

**Media**

Handouts with excerpts from four opinion/analysis articles from a joint press release from the Community of Point Hope, Pacific Environment and the Alaska Wilderness League, a press release from the oil company Royal Dutch Shell, an article from weekly newspaper *The Arctic Sounder* and an article from the international media company Reuters.

**Materials Needed:**

- Teacher's guide: Chukchi Sea Oil Drilling
- Two-page student reading #1: "Alaska Native Press Briefing"
- Two-page student reading #2: "Shell Expands Alaska Exploration Portfolio"
- Two-page student reading #3: "Norwegian Energy Company Places High Bid"
- Two-page student reading #4: "Shell Bullish on Chukchi Oil"
- One-page Lesson # 3 Case Study Student Worksheet

**Time**

50 Minutes

**Lesson Procedures:**

1. Present *Background Information* to the class
2. Divide the class into four groups and distribute the *Student Reading* handouts, one article per group
3. Use the *Teacher Answer Sheet Teacher's Guide* to help facilitate the four presentations
4. Help students to articulate and evaluate their own thinking about how decisions are made on oil drilling and how the mission statement of the sponsor organization may shape its reporting.

## TEACHER GUIDE



Printed Document

## Case Study: Chukchi Sea Oil Drilling

1. Organize and make copies for the class activities.
2. Provide background information.

### Background Information

Historic oil booms have occurred in different locations across the United States. In the 19th-early 20th century, such booms occurred in Pennsylvania, Louisiana, Texas and Oklahoma. In 1968, major oil reserves were discovered in Alaska's Prudhoe Bay region. According to Alyeska, the consortium of oil companies that extract Alaska's oil reserves, about 17% of U.S. production and 80% of Alaska's revenue comes from Alaskan oil production.

Advocates for continued oil exploration have pushed for exploratory drilling in the Arctic National Wildlife Refuge (ANWAR) arguing that high oil prices and peak oil require an aggressive search for new domestic oil supplies. Oil companies, unions and some local communities have supported this position. Others, including environmentalists and other local communities, argue the United States is better served by reducing demand for oil and reducing greenhouse emissions through conservation measures.

3. Introduce lesson.

### Lesson Information

This lesson explores oil drilling in Alaska's Chukchi Sea region as seen from a variety of perspectives. You will read excerpts from four different pieces on the subject from these sources: a joint press release from the Community of Point Hope, Pacific Environment and the Alaska Wilderness League, a press release from the oil company Royal Dutch Shell, an article from weekly newspaper *The Arctic Sounder* and an article from the international media company Reuters. Each excerpt is followed by a brief description of the mission and/or history of the organization(s) on whose Web site the article was published.

For this lesson, you will break into four groups, each with a different article to read. As your group reads the handout, look for the answers to four basic questions: 1) What is the author's point of view concerning oil and gas development in the Chukchi Sea? 2) What is the author's perspective on the impact of Chukchi Sea drilling on local communities? 3) What sources does the author cite? 4) In what way does the mission statement or history of the supporting organization shape its reporting?

4. Distribute among the four groups one student reading and one student worksheet per group.
5. Give students time to complete the assignment. Review the possible answers using the *Teacher Answer Sheet*.
6. Bring the class back together for the presentations.
7. Ask each group to report their author's analysis and conclusions, question by question – using excerpts from the text to illustrate their points.



# Teacher Answer Sheet

## Questions, Possible Answers & Evidence

### 1.) What is the author's point of view concerning oil and gas development in the Chukchi Sea?

#### Possible Answers

**Doc. 1** Point Hope, Pacific Environment and Alaska Wilderness League (PH) – Drilling is being supported by government and industry interests in violation of the interests of Alaskan Native communities.

**Doc. 2:** Royal Dutch Shell (RDS) – Royal Dutch Shell sees great economic opportunity for itself drilling in the Chukchi Sea.

**Doc. 3:** – The Artic Sounder (AS) – Alaskan Native communities and conservations groups oppose drilling in an area with potential oil deposits in opposition to Bush administration plans.

**Doc 4** Reuters (R) – Shell sees oil drilling in the Chukchi Sea as a major source for domestic energy needs.

#### Evidence

**Doc. 1:** PH – Steamrolling agenda, egged on by an overly-aggressive industry. DOI appears to be moving down the same industry-first path. Alaska Natives...gathered today to voice their opposition to oil and gas development.

**Doc. 2:** RDS - Our entry into the Chukchi Sea...further solidifies our position in Alaska, which has the potential to become a new heartland for Shell.

**Doc. 3:** AS - Unanimous opposition by Alaska Native leaders and conservation groups. Ocean grounds thought to be rich with crude oil and natural gas. The Bush administration is looking to sell our ocean off to the highest bidder.

**Doc 4:** R - Alaska's Chukchi Sea...is one of the "potentially most prolific oil fields" left in the world and could ultimately compare to the Gulf of Mexico as a source of domestic energy.

# Teacher Answer Sheet

## Questions, Possible Answers & Evidence

### 2.) What is the author's perspective on the impact of Chukchi Sea drilling on local communities?

#### Possible Answers

**Doc. 1:** PH – Drilling threatens the cultural and physical health of Native communities.

**Doc. 2** RDS – Drilling will create job opportunities for Native communities while respecting cultural traditions.

**Doc. 3:** AS – Native people are threatened by the drilling while others see economic benefits for local business.

**Doc 4:** – R – Shell will use exploration techniques designed to minimize potential disturbance to local communities.

#### Evidence

**Doc. 1** PH - We are concerned in Point Hope that as offshore seismic surveys continue, the animals we hunt and follow through the seasons are frightened and slowly disappearing from our shores, hurting my people's ability to survive and continue our subsistence traditions and our way of life. Human health effects from oil and gas development continue to rise with higher numbers of asthma-related illnesses. I want my children and grandchildren to have the same traditions now and for thousands of years more but oil and gas development threatens to take that away.

**Doc. 2:** RDS - We believe that success in the Alaska offshore also carries with it great potential for the state, including new job opportunities. The results of this sale underscore Shell's commitment to benefit local communities, while respecting their way of life.

**Doc. 3:** AS – "This is the first time I have been in something like this, and it's not good," George Edwardson said while taking a break from listening to the announcements calling out the various bids. With him were George Kingik and Earl Kingik, both of Point Hope. "I am an Inupiaq and I am an endangered species." Supporters of the lease say Alaska will see economic benefit in the form of new opportunities for local contractors and support businesses.

**Doc 4:** R - Shell has opted for on-ice seismic work rather than open-water testing, in response to concerns from North Slope villagers about potential disturbances to whales and other marine animals.

# Teacher Answer Sheet

## Questions, Possible Answers & Evidence

### 3.) What sources does the author cite?

#### Possible Answers

**Doc. 1:** PH – Three tribal council and local government officeholders and two representatives from conservation groups.

**Doc. 2** RDS – A Shell executive and the Security and Exchange Commission.

**Doc. 3** AS – Two representatives from conservation organizations, two Native leaders, an oil company public affairs manager and director of Game and Fish.

**Doc 4:** R – An oil company financial spokesman.

#### Evidence

**Doc. 1:** PH - Earl Kingik, subsistence user and representative for the Tribal Council of the Native Village of Point Hope. Rosemary Ahtuanguak, former Mayor of the City of Nuiqsut, community healthcare practitioner and board member of the Inupiat Community of Arctic Slope. Elijah Lane, a member of the Native Village of Point Hope and Director of its Parks and Wildlife Department. Rachel James from Pacific Environment's Alaska Office. Cindy Shogan, moderator and Executive Director of Alaska Wilderness League.

**Doc. 2** RDS - David Lawrence, Shell Executive Vice President Exploration. Available on the SEC website.

**Doc. 3:** AS - Rachel James of Pacific Environment Alaska. World Wildlife Fund Norway head Ingeborg Gj'e6rum. George Edwardson, resident of Point Hope and president of the Inupiat Communities of the Arctic Slope. George Kingik, Point Hope Council member and former Point Hope mayor. Kjersti Hornnes Torgersen, public affairs manager for Statoil's Texas office.

**Doc 4:** R - Rick Fox, Alaska assets manager for Shell.

## Teacher Answer Sheet

### Questions, Possible Answers & Evidence

#### 4.) In what way does the mission statement or history of the sponsoring organization(s) shape its reporting?

##### Possible Answers

**Doc. 1:** PH – Sponsorship by Native American and conservation organizations offers voices from those groups and a perspective in keeping with their interests.

**Doc. 2:** RDS – As an oil company Shell seeks to further its economic interest while presenting a public commitment to environmental and community values.

**Doc. 3:** AS – As a newspaper with a predominantly Native readership the Arctic Sounder presents news from the perspective of the Native communities it serves.

**Doc 4:** R – As a media company focused on the financial sector Reuters seeks out information representing corporate financial interests.

##### Evidence

**Doc. 1:** PH - Point Hope is a community with over 90% Alaska Native population, Pacific Environment protects the living environment by promoting grassroots activism and strengthening communities and the Alaska Wilderness League works to preserve Alaska's wilderness by engaging citizens.

**Doc. 2** RDS - Shell is a global group of energy and petrochemical companies. Our aim is to meet the energy needs of society, now and in future, in ways that are economically, socially and environmentally responsible."

**Doc. 3:** AS - The Arctic Sounder is a subsidiary of Calista Corp., one of the largest Alaska Native corporations in the state.

**Doc 4:** – R - Reuters is a global information company providing indispensable information tailored for professionals in the financial services, media and corporate markets. Some 370,000 financial market professionals working in the equities, fixed income, foreign exchange, money, commodities and energy markets around the world use Reuter's products.

- » After all four groups have presented lead a discussion about how perspectives on economic opportunity and Native community preservation have shaped arguments oil drilling in the Chukchi Sea.
- » Make sure that all students have an opportunity to express their agreement and disagreement with the reasoning of the various authors.

### FURTHER QUESTIONS

- » **Who are the target audiences for each source? Might those audiences steer the nature of the reporting?**
- » **How are the authors' impressions shaped by their trust in government and corporations?**
- » **How can you distinguish between fact and opinion in an article about Alaskan oil exploration?**
- » **Why might Royal Dutch Shell have included the lengthy disclaimer statement in its press release?**
- » **How can you select the widest range of information sources? Why might this be helpful as you discuss fossil fuel extraction with others?**

### CONNECTIONS

See lesson 1 PowerPoint slides #12, 19, 20, 26, 30, 31, 47 (oil) and lesson 4 Exxon Valdez Oil and Water case study



**"Alaska Native Press Briefing Calls on Congress to Protect Native Cultures from Impacts of Oil and Gas Development in Northern Alaska"**

Village of Point Hope, Pacific Environment and Alaska Wilderness League Press Release

**Document Excerpt #1**

WASHINGTON, DC - Alaska Natives from the Native Village of Point Hope and the community of Nuiqsut gathered today to voice their opposition to oil and gas development in key Native subsistence lands and waters in America's Arctic. Close to one year after the first BP oversight hearing in the Senate, this briefing reinforced the need for Congress to address this administration's headlong leasing of key Native subsistence lands for oil drilling, as well as new concerns regarding the compounding effects of climate change on the future of the Native subsistence cultures in Alaska.

"This briefing is to provide Alaska Native people with the opportunity to voice their concerns about the threats that oil and gas development pose to the future of their cultural traditions," said Cindy Shogan, moderator and Executive Director of Alaska Wilderness League. "Again, this presents Congress with a real opportunity to preserve what remains of the Alaskan Native cultures in northern Alaska. It is our hope that Congress will protect these cultures rather than let them remain at the mercy of this 'drill-it-all' administration."

"We are concerned in Point Hope that as offshore seismic surveys continue, the animals we hunt and follow through the seasons are frightened and slowly disappearing from our shores, hurting my people's ability to survive and continue our subsistence traditions and our way of life," said Earl Kingik, subsistence user and representative for the Tribal Council of the Native Village of Point Hope. "We have passed a resolution that opposes all oil and gas activities on and offshore."

"Human health effects from oil and gas development continue to rise with higher numbers of asthma-related illnesses in my village of Nuiqsut, where the Alpine oil fields are just 4 miles away," said Rosemary Ahtuanga-ruak, former Mayor of the City of Nuiqsut, community healthcare practitioner

and board member of the Inupiat Community of Arctic Slope (ICAS). "We are worried about these continuing health issues and the lack of help to address the long-term impacts they pose to our people. As we said last year, we say again, we oppose opening the Teshekpuk Lake area to oil and gas development. ICAS passed a resolution two weeks ago which states we oppose development in Teshekpuk Lake."

"As a member of the next generation of subsistence whalers and hunters, I'm seeing the effects of climate change in all I do," said Elijah Lane, a member of the Native Village of Point Hope and Director of its Parks and Wildlife Department. "I have seen the erosion and the disappearing ice in the Chukchi Sea. I have seen the changes in the migrations of animals on the land and in the water as a result of climate change in Alaska."

"Minerals Management Service has demonstrated to the public that they are an agency with a steamrolling agenda, egged on by an overly-aggressive industry," stated Rachel James from Pacific Environment's Alaska Office. "In the process of pushing the expansion of oil and gas industry at ground zero for global warming, they are threatening polar bears, whales, indigenous peoples, and ignoring the realities of climate change. They need to move beyond oil."

"As a subsistence hunter of the Native Village Point Hope, I continue to hear my community's concerns about oil and gas development," said Daisy Sage, council member of the City of Point Hope. "I want my children and grandchildren to have the same traditions now and for thousands of years more but oil and gas development threatens to take that away. I worry for this and all of the future generations."

In 2005, the Department of Interior (DOI) issued a plan to dramatically increase oil and gas development in the 4.6 million-acre management area of the National Petroleum Reserve Alaska (NPR-A) that includes

the Teshekpuk Lake Special Area, opening over 95 percent of the area to development. The following year, conservationists sued against the plan and an Alaska district court judge ruled that the DOI failed to properly consider the cumulative effects of other North Slope oil and gas activities as part of their original Environment Impact Statement (EIS) and ordered a new EIS. The DOI released their court-mandated supplemental EIS in August, which considered new information, but provided no new alternatives and cited no preferred alternative. Despite continued opposition from Native communities, scientists and conservationists to the plan, DOI appears to be moving down the same industry-first path when dealing with the ecologically significant wetlands of Teshekpuk Lake. There is currently a public comment period open for the EIS, closing on November 6. Over 3.8 million acres have already been leased to oil companies in the NPR-A.

Simultaneously, the DOI is moving forward with massive oil and gas leasing plans throughout the entire 72 million acre Arctic Ocean. This summer, the agency opened over 33 million acres in the Beaufort Sea, over 39 million acres in the Chukchi Sea, and 5.4 million acres in the Bering Sea as part of its new 2007-2012 five year oil and gas leasing program. At the same time, the DOI allowed Shell Oil to move forward with exploration plans in lease areas from the previous 5 year program, starting with exploration activities on lease tracts located offshore of the Arctic National Wildlife Refuge. Conservationists, the North Slope Borough, the Alaska Eskimo Whaling Commission, and the Inupiat Community of the Arctic Slope are challenging the DOI's approval of this exploration plan in the 9th Circuit Court of Appeals. In August, the 9th Circuit granted an injunction of Shell's exploration activities and established an expedited briefing schedule for its consideration of the merits of the case.

Alaska Native Press Briefing Calls on Congress to Protect Native Cultures from Impacts of Oil and Gas Development in Northern Alaska." Village of Point Hope, Pacific Environment and Alaska Wilderness League Press Release. 23 Oct. 2007 <  
[http://www.alaskawild.org/wp-content/files/Press\\_Releases/10-23AKNativepressrelease\\_FINAL.pdf](http://www.alaskawild.org/wp-content/files/Press_Releases/10-23AKNativepressrelease_FINAL.pdf)>

*"The Alaska Wilderness League "exists to lead the effort to preserve Alaska's wilderness by engaging citizens, sharing resources, collaborating with other organizations, educating the public, and providing a courageous, constant and victorious voice for Alaska in the nation's capital."*

<http://www.alaskawild.org/about-us/>

*According to the Alaska Community Database Community Information Summary, "Point Hope (Tikeraq) peninsula is one of the oldest continuously occupied Inupiat Eskimo areas in Alaska. Several settlements have existed on the peninsula over the past 2,500 years, including Old and New Tigara, Ipiutak, Jabbertown, and present Point Hope...A federally-recognized tribe is located in the community -- the Native Village of Point Hope. The population of the community consists of 90.6% Alaska Native or part Native. Point Hope residents (Tikeraqmuit Inupiat Eskimos) are dependent upon marine subsistence."*

[http://www.commerce.state.ak.us/dca/commdb/CIS.cfm?Comm\\_Boro\\_Name=Point%20Hope](http://www.commerce.state.ak.us/dca/commdb/CIS.cfm?Comm_Boro_Name=Point%20Hope)

*Pacific Environment "protects the living environment of the Pacific Rim by promoting grassroots activism, strengthening communities and reforming international policies."*

<http://www.pacificenvironment.org/article.php?id=58>



**"Shell expands Alaska Exploration Portfolio"**

Royal Dutch Press Release

**Document Excerpt #2**

Royal Dutch Shell is pleased to be the apparent high bidder on 275 lease blocks in the February 6th, 2008 US Outer Continental Shelf Lease Sale 193 in the Chukchi Sea, offshore northwest Alaska. Shell's high bids totaled \$2.1 billion USD.

David Lawrence, Shell Executive Vice President Exploration, said, "I am pleased with our results at Sale 193." Lawrence continued, "We are committed to exploration for new oil and gas in high potential basins. Our entry into the Chukchi Sea, combined with our lease holdings in the Beaufort Sea, further solidifies our position in Alaska, which has the potential to become a new heartland for Shell. These new positions come on top of our previously-announced plans for exploration investment in 2008."

He concluded, "We believe that success in the Alaska offshore also carries with it great potential for the state, including new job opportunities and new oil for the Trans-Alaska Pipeline. We will continue to apply our experience and technology to safe and responsible exploration in the Alaska offshore. The results of this sale underscore Shell's commitment to benefit local communities, while respecting their way of life. We can find common solutions to develop this important domestic resource."

Shell currently holds an equity position in 179 lease blocks in Alaska's Beaufort Sea. In 2006 and again in 2007, Shell completed seismic programs in both basins, including the first 3-D seismic ever conducted in the Beaufort and Chukchi.

Shell was a leader in the prior exploration activity in the Chukchi Sea in the late 1980s and early 1990s. Shell operated four of the five exploration wells drilled offshore in the area in that period.

Disclaimer statement: This document contains forward-looking statements concerning the financial

condition, results of operations and businesses of Royal Dutch Shell.

All statements other than statements of historical fact are, or may be deemed to be, forward-looking statements. Forward-looking statements are statements of future expectations that are based on management's current expectations and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in these statements. Forward-looking statements include, among other things, statements concerning the potential exposure of Royal Dutch Shell to market risks and statements expressing management's expectations, beliefs, estimates, forecasts, projections and assumptions. These forward-looking statements are identified by their use of terms and phrases such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "objectives," "outlook," "probably," "project," "will," "seek," "target," "risks," "goals," "should" and similar terms and phrases. There are a number of factors that could affect the future operations of Royal Dutch Shell and could cause those results to differ materially from those expressed in the forward-looking statements included in this Report, including (without limitation): (a) price fluctuations in crude oil and natural gas; (b) changes in demand for the Group's products; (c) currency fluctuations; (d) drilling and production results; (e) reserve estimates; (f) loss of market and industry competition; (g) environmental and physical risks; (h) risks associated with the identification of suitable potential acquisition properties and targets, and successful negotiation and completion of such transactions; (i) the risk of doing business in developing countries and countries subject to international sanctions; (j) legislative, fiscal and regulatory developments including potential litigation and regulatory effects arising from re-categorisation of reserves; (k) economic and financial market conditions in various countries and regions; (l) political risks, project delay or advancement, approvals and cost

estimates; and (m) changes in trading conditions. All forward-looking statements contained in this document are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. Readers should not place undue reliance on forward-looking statements. Each forward-looking statement speaks only as of the date of this presentation. Neither Royal Dutch Shell nor any of its subsidiaries undertake any obligation to publicly update or revise any forward-looking statement as a result of new information, future events or other information. In light of these risks, results could differ materially from those stated, implied or inferred from the forward-looking statements contained in this document.

The United States Securities and Exchange Commission (SEC) permits oil and gas companies, in their filings with the SEC, to disclose only proved reserves that a company has demonstrated by actual production or conclusive formation tests to be economically and legally producible under existing economic and operating conditions. We use certain terms in this presentation, such as "oil in place" that the SEC's guidelines strictly prohibit us from including in filings with the SEC. U.S. Investors are urged to consider closely the disclosure in our Form 20-F, File No 1-32575 and disclosure in our Forms 6-K file No, 1-32575, available on the SEC website [www.sec.gov](http://www.sec.gov) - opens in new window. You can also obtain these forms from the SEC by calling 1-800-SEC-0330.

"Shell expands Alaska exploration portfolio." Royal Dutch Shell Press Release. 7 Feb. 2008  
<[http://www.shell.com/home/PrintFramework?siteId=usen&FC3=/home/usen/html/iwgen/news\\_and\\_library/press\\_releases/2008/alaska\\_lease\\_020708.html](http://www.shell.com/home/PrintFramework?siteId=usen&FC3=/home/usen/html/iwgen/news_and_library/press_releases/2008/alaska_lease_020708.html)>

*From Royal Dutch Shell's Who We Are Web page:*  
*"Shell is a global group of energy and petrochemical companies. Our aim is to meet the energy needs of society, now and in future, in ways that are economically, socially and environmentally responsible."*  
[http://www.shell.com/home/content/aboutshell-en/who\\_we\\_are/dir\\_who\\_we\\_are\\_09112006.html](http://www.shell.com/home/content/aboutshell-en/who_we_are/dir_who_we_are_09112006.html)

## **"Norwegian Energy Company Places High Bid on Chukchi Sea"**

Tamar Ben-Yosef

*The Arctic Sounder*

### **Document Excerpt #3**

Unanimous opposition by Alaska Native leaders and conservation groups was not enough to prevent the Chukchi Sea lease sale from continuing successfully in Anchorage on Wednesday, Feb. 6. Seven oil companies bid a record sum of \$3.4 billion on 2.76 million acres of ocean grounds thought to be rich with crude oil and natural gas. Estimates by U.S. Minerals Management Services of 15 billion barrels of conventionally recoverable oil and 77 trillion cubic feet of conventionally recoverable natural gas in the lease area have more international companies drooling over a share of the wealth.

Bidding firms included Norway's StatoilHydro, Spain's Repsol E&P, Italy's Eni Petroleum US LLC, Iona Energy Co. and (U.S.) Limited and North American Civil Recoveries Arbitrage. The recent lease sale is only the beginning of a multi-year process of permitting, environmental assessments and exploration before drilling operations can begin. For some, the battle to oppose oil development in the area is only beginning. Objection to the sale continues to surface.

Perhaps the desire of Norway's leading oil company, StatoilHydro, to join the race for the Arctic should not come as a surprise, as the firm did declare its intentions to expand operations beyond Norway. But for Rachel James of Pacific Environment's Alaska office, its bid of nearly \$57 million in cooperation with Italy's ENI Petroleum was somewhat unexpected. Similar sentiments were expressed by George Edwardson, resident of Point Hope and president of the Inupiat Communities of the Arctic Slope.

Edwardson and James recently returned from the Arctic Frontiers conference in Tromsø, Norway, where they listened to Norwegian Minister of Petroleum and Energy 'c5slaug Hagagave declare Norway's strict policy of "placing the environment in the driver's seat" when it comes to development of the high

North. "I was surprised to see StatoilHydro at the Chukchi sale," James said in an e-mail interview, days after the sale. "At the Arctic Frontiers conference, I saw that Norway was really proud of their integrated management plan.

The government created 'no-go zones' and will not allow industry to drill in ice environments in the northern Barents Sea because industry has not proven that they can clean up oil in sea ice conditions," she said. All offshore drilling operations in the Barents Sea are done in areas not covered by ice, according to Kjersti Hornnes Torgersen, public affairs manager for Statoil's Texas office.

StatoilHydro was created in October with the merger of Statoil, the national oil company, and Norsk Hydro, a private company. Both companies' energy operations date back to the dawn of the Norwegian oil industry, with the discovery of North Sea oil in the late 1960s. Only last month, the company faced difficulties cleaning up about 25,000 barrels-worth of oil spilled into the Norwegian sector of the North Sea at the Statfjord oilfield. Rough weather conditions hindered the cleanup, according to reports by operator StatoilHydro and Norwegian energy officials.

It appears Alaskans aren't alone in their protest of the Norwegian company's involvement in the state. "This is completely unacceptable," World Wildlife Fund Norway head Ingeborg Gj'e6rum told Norwegian Business News Service E24. "It is very sad that Norway is participating in such environmentally damaging activities...This is extremely embarrassing for both Statoil and Norway," she said. The company claims to have a lot of experience from drilling off the Norwegian continental shelf, according to Torgersen. "We have a long tradition of dealing with these issues and we will work with local community and government," she said. Torgersen said StatoilHydro is currently in the early stages of getting to know Alaska.

"In September, representatives of the company attended the North Slope Borough Oil and Gas Forum at the invitation of Mayor Edward Itta. We have since invited the mayor to visit our installations in Norway and visit with local communities in which StatoilHydro has a strong presence," she said. "Now that we have participated in the lease sale, and are the apparent high bidder of several blocks, we will develop a more comprehensive approach to stakeholder engagement."

Local representation from the Alaska Native community was minimal at Wednesday's lease sale. "This is the first time I have been in something like this, and it's not good," George Edwardson said while taking a break from listening to the announcements calling out the various bids. With him were George Kingik and Earl Kingik, both of Point Hope. "I am an Inupiaq and I am an endangered species," said George Kingik, Point Hope Council member and former Point Hope mayor, in collaborative release put out by several environmental agencies. "The Bush administration is looking to sell our ocean off to the highest bidder, risking our culture and way of life," he said

All three expressed disappointment at the absence of fellow members of the Native community from places other than the North Slope. Altogether 667 bids were placed on the area for lease. The leases are on federal lands and are not subject to state taxes. Supporters of the lease say Alaska will see economic benefit in the form of new opportunities for local contractors and support businesses.

Ben-Yosef, Tamar. "Norwegian energy company places high bid on Chukchi Sea." *The Arctic Sounder*. 15 Feb 2008

<<http://www.thearcticsounder.com/news/show/1449>>

*The Arctic Sounder is a weekly newspaper serving the Northwest Arctic Borough and the North Slope Borough. It is published by Alaska Newspapers, Inc (ANI). According to its Website, ANI "is a subsidiary of Calista Corp., one of the largest Alaska Native corporations in the state. ANI publishes six weekly community newspapers, a statewide shopper, a statewide magazine and slate of special publications that supplement our products year-round. As newspaper groups go, our production and coverage area are unique in the world. More than 1,500 air miles separate our offices in Barrow and Unalaska. Of our six weekly papers, only one is on the road system. The rest are accessible by the Marine Ferry System or by air."*

<http://www.alaskanewspapers.com/about.asp>

**"Shell Bullish on Chukchi Oil and Gas Potential"**Yereth Rosen, *Reuters***Document Excerpt #4**

ANCHORAGE, Alaska, April 4 (Reuters) - Alaska's Chukchi Sea, the remote region separating North America's northwestern tip from northeastern Siberia, is one of the "potentially most prolific oil fields" left in the world and could ultimately compare to the Gulf of Mexico as a source of domestic energy, a Shell official said Friday.

"We estimate maybe 100 different (geologic) plays out there," Rick Fox, Alaska assets manager for Shell, said in a speech to the World Affairs Council of Alaska. But only a few of them attracted bids in a record lease sale in which Shell put up \$2.1 billion for exploration rights, he said. "Only about 14 of them got attention in the lease sale," he said. The U.S. Minerals Management Service estimates the Chukchi holds 15 billion barrels of recoverable oil and 76.7 trillion cubic feet of natural gas. The February lease sale held by the MMS, the first for the Chukchi since 1991, drew \$2.66 billion in high bids, the highest total for any Alaska lease sale. Along with Anglo-Dutch Royal Dutch Shell, ConocoPhillips, Repsol, Eni and StatoilHydro (STL.OL) were active bidders in the Feb. 6 lease sale.

Oil exploration is just in its infancy in the Chukchi, Fox said. While 50,000 wells have been drilled in the Gulf of Mexico, only five have been drilled in the comparably sized Chukchi, four of them by Shell in past decades, he said. "If we think of it as a potential replacement for the Gulf of Mexico as a source of oil and gas for the nation, we're just getting started," he said.

Shell was active in Alaska's offshore provinces until the 1990s, when it sold off its Alaska assets. But now the company expects Alaska to become a key part of its global operations, Fox said. "We rushed back into Alaska with the idea of Alaska as a possible heartland

for us," he said. By "heartland," the company means "a long-term investment, a major play, a big part of our business," he said. Shell hopes to do some exploratory drilling on leases in the Beaufort later this year, Fox said. Earlier plans to drill at the company's Sivulliq prospect were foiled by an environmental lawsuit and court order.

Fox said plans to conduct an on-ice seismic testing program this winter were dashed by poor ice conditions. Shell had planned on-ice seismic work from about February or March, a time when the pack ice was expected to be its thickest, Fox said. "The ice did not cooperate," he said. Ice is currently very sparse in the Beaufort, so much so that Inupiat Eskimo whalers have started their spring hunt early, he said. In the Chukchi, "There was no good flat spot where we needed it," he said.

To allow for seismic testing, sea ice has to be flat and thick enough to support work crews and camps, Fox said. But the Chukchi ice that formed was in parts jumbled by the wind and too rough to be safe, and in other places too thin to support such work, he said. Shell has opted for on-ice seismic work rather than open-water testing, in response to concerns from North Slope villagers about potential disturbances to whales and other marine animals, Fox said.

Rosen, Yereth. "Shell bullish on Chukchi oil and gas potential." Reuters.com. 4 April 2008  
<[http://today.reuters.com/news/articleinvesting.aspx?type=comktNews&storyID=2008-04-05T003257Z\\_01\\_N04432058\\_RTRIDST\\_0\\_SHELL-ALAS-KA.XML&pageNumber=1&imageid=&cap=&sz=13&WTModLoc=InvArt-C1-ArticlePage1](http://today.reuters.com/news/articleinvesting.aspx?type=comktNews&storyID=2008-04-05T003257Z_01_N04432058_RTRIDST_0_SHELL-ALAS-KA.XML&pageNumber=1&imageid=&cap=&sz=13&WTModLoc=InvArt-C1-ArticlePage1)>

*From the Reuters' company summary page:*

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<http://about.reuters.com/home/aboutus/ourcompany/index.aspx>



## Lesson # 3 Case Study Student Worksheet

NAME \_\_\_\_\_ DATE: \_\_\_\_\_

Read over the questions below before reading your article. For each question summarize in a sentence or two the perspective of that article's author. You may want to underline the sections of the article that are pertinent to each question in order to give examples from the text to back up your conclusion.

Title of Article: \_\_\_\_\_

- 1.) What is the author's point of view concerning oil and gas development in the Chukchi Sea?
  
  
  
  
  
  
  
  
  
  
- 2.) What is the author's perspective on the impact of Chukchi Sea drilling on local communities?
  
  
  
  
  
  
  
  
  
  
- 3.) What sources does the author cite?
  
  
  
  
  
  
  
  
  
  
- 4.) In what way does the mission statement or history of the sponsor organization(s) shape its reporting?





# Lesson #4:

## Case Study—Exxon Valdez, Oil and Water (Video Clips)

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Video Clips .....	
(Access online or via Lesson 4 digital media folder)	

*Scientists and the Alaska Oil Spill*  
*Alaska-Exxon Valdez*  
*When the Spill Hit Homer*  
*Dr. Riki Ott – Not One Drop*



## LESSON PLAN



Video Clip

## Case Study: Exxon Valdez, Oil and Water

### Lesson Objectives:

- Students will review related to oil spill responsibility and mitigation.
- Students will understand impacts on communities and wildlife resulting from oil spills.
- Students will recognize the power of words, images and sound to bias impressions.
- Students will analyze credibility, bias and truth in educational, corporate and citizen action film.

### Vocabulary:

**Exxon Valdez, Prince William Sound, Bligh Reef, lightering, Alyeska Group, contingency plans, Ship Escort/Response Vessel System (SERVS)**

### Media clips in the



*Scientists and the Alaska Oil Spill: The Wildlife, The Cleanup, The Outlook. Exxon, 1992 (3:25)*



*Alaska-Exxon Valdez, ABC Australia, 1993 (3:52)*



*When the Spill Hit Homer, Edith Becker, 1994 (3:07)*



*Dr. Riki Ott - Not One Drop, Chelsea Green TV, 2007 (3:05)*

### Materials Needed:

- Teacher's guide: *Exxon Valdez – Oil and Water*
- Four video clips (access online or via Lesson 4 digital media folder)
- One-page Lesson #4 Case Study Student Worksheet

### Time

50 minutes

### Lesson Procedures:

1. Present *Lesson Introduction* to the class.
2. Distribute *Student Worksheet* for logging the clips.
3. Play the video clips while students log their answers.
4. Lead students through a decoding of the video clips using the *Media Sample Questions & Answers Teacher Guide*.
5. Discuss funding sources and credibility in films using *Further Questions*.

## TEACHER GUIDE

## Case Study: Exxon Valdez, Oil and Water



Video Clips

1. Organize and make copies for the class activities.
2. Introduce the lesson:

### Lesson Introduction

The danger of major oil spills in the United States was made apparent in 1969 when an oil well platform off Santa Barbara, California experienced a blowout causing hundreds of thousands of gallons of crude oil to wash up on the tourist beaches of southern California. Twenty years later, a much larger oil spill occurred when a giant oil tanker, the Exxon Valdez, ran aground in Prince William Sound Alaska, spilling 11 million gallons of crude oil into a waterway that was home to a major fishing industry.

Oil had been discovered at Prudhoe Bay in Alaska's North Slope in 1968. A consortium of oil companies was subsequently formed to build a pipeline and to transport the oil to the Alaskan port of Valdez from which it could be transported to refineries in the continental U.S. The consortium was named Alyeska, the Aleut word for mainland. According to Alyeska's "About Us" Web page as of 2008 "more than 14 billion barrels (nearly 550 billion gallons) have moved through the Trans Alaska Pipeline System since start up in 1977. The volume of oil flowing through the pipeline has decreased from a peak of 2.1 million barrels per day (mbpd) in 1988 to about one mbpd in 2001. Alaska today supplies nearly 17 percent of the United States' domestic crude oil production. Revenues from oil production and transportation provide approximately eighty percent of funding for the state government" (Alyeska).

Following the Exxon Valdez spill, Alyeska created a Ship Escort/Response Vessel System (SERVS) to prepare for, respond to and prevent future spills. According to Alyeska, "each laden tanker is escorted through Prince William Sound to the Gulf of Alaska by response vessels capable of assisting a distressed tanker. Oil spill response equipment has been pre-stationed throughout the Sound for rapid response." Journalist Mark Dowie in his 1995 book, *Losing Ground: American Environmentalism at the Close of the Twentieth Century*, noted that "since the Exxon Valdez spill corporate contributions to environmental organizations have soared to over \$20 million a year (about six percent of all corporate philanthropy)" (Dowie 54).

3. Distribute student worksheets. Have students work individually or in pairs to log each film.
4. Read aloud the brief introductory excerpt before playing each film clip.
5. Play the film clip.
6. Have students write their answers on their worksheet after the showing of the clip.
7. Lead a discussion of the clips using the suggested teacher answers below as a guide.



***Scientists and the Alaska Oil Spill: The Wildlife,  
The Cleanup, The Outlook***  
**Exxon, 1992**

**Film 1 Introduction**

This excerpt is from a 1992 "Video for Students" produced by Exxon entitled *Scientists and the Alaska Oil Spill: The Wildlife, The Cleanup, The Outlook*. From the introductory statement by Exxon: "This video is presented in the hope of helping young people better understand the roles played by the hundreds of scientists who responded to the Valdez oil spill. Thanks to them this unfortunate and tragic accident has left a valuable legacy of learning."

## Media Sample Questions & Answers

**1.) How has the Exxon Valdez oil spill impacted marine wildlife and Alaskan communities in Prince William Sound?**

**Possible Answer:** Some beaches were covered with oil and some wildlife was "oiled." Local communities have benefited from scientific discoveries regarding post spill cleaning techniques.

**2.) What measures have been taken and by whom to deal with the impact of the spill?**

**Possible Answer:** Exxon, the state of Alaska and the federal government rushed scientists to the scene to help in the "unprecedented" cleanup and recovery efforts.

**3.) What techniques do the film makers use to persuade or inform? Consider choices in scripting, visuals, audio background and voice-over in your answer.**

**Possible Answer:** The film makers stress the success of the cleanup efforts by showing a helicopter landing on a clean beach during the title sequence, followed by images of whales and otters swimming in apparently clean waters. The voice over refers to "nature's powerful ability to recover from a spill." The scientists' successful efforts to mitigate the problems are underscored by showing them cleaning the beaches and tending to oiled otters.

**4.) Who made this and for what purpose? Explain your answer.**

**Possible Answer:** Exxon produced this video to demonstrate to students their corporation was quick to provide positive measures to deal with an unfortunate accident.

**Evidence:** Exxon's opening statement that the video is "presented in the hope of helping young people better understand the roles played by the hundreds of scientists who responded to the Valdez oil spill. Thanks to them this unfortunate and tragic accident has left a valuable legacy of learning." The video makes clear it was Exxon that led the efforts to rush scientists to the scene following the accident.



### ***Alaska-Exxon Valdez, ABC Australia, 1993***

#### **Film 2 Introduction**

This excerpt is from a 1993 ABC Australia production entitled *Alaska- Exxon Valdez*. It is distributed by Journeyman Pictures whose mission is described on their Web site: "The free flow of information is the elixir of healthy democratic life. As journalists the company has spent ten years at the forefront of the international current affairs agenda. We've helped uncover and shed light on some of the most dangerous international issues of the last decade. Cutting edge documentaries produced by our group have helped to change the world for the better."

## **Media Sample Questions & Answers**

**1.) How has the Exxon Valdez oil spill impacted marine wildlife and Alaskan communities in Prince William Sound?**

**Possible Answer:** Beaches were covered with oil. Plankton and jellyfish populations were reduced thus eliminating food sources for fish and negatively impacting local fisheries. Local boats and workers were hired for the clean up.

**2.) What measures have been taken and by whom to deal with the impact of the spill?**

**Possible Answer:** Contractors hired by Exxon cleaned rocks and hosed beaches with hot water.

**3.) What techniques do the film makers use to persuade or inform? Consider choices in scripting, visuals, audio background and voice-over in your answer.**

**Possible Answer:** An interview with an Exxon representative provides contrast to the views presented by a whistleblower and two local fishermen. On site films of the disastrous spill aftermath provides contrast to the serene views of the local harbor and scenery.

**4.) Who made this and for what purpose? Explain your answer.**

**Possible Answer:** This film was made by ABC Australia presumably to provide an entertaining and informative storyline for their network. It was distributed by Journeyman Pictures in keeping with their purpose to "uncover and shed light on some of the most dangerous international issues of the last decade" in order "to change the world for the better."



### ***When the Spill Hit Homer, Edith Becker, 1994***

#### **Film 3 Introduction**

This excerpt is from the 1994 documentary, *When the Spill Hit Homer*, produced by Edith Becker. The film's distributor, The Video Project, says that it "provides a first-hand account of the spill's devastating impact from the perspective of the residents of this secluded fishing port and nearby Alaskan Native villages, which rely on the sea for their subsistence. Residents tell their own sad and angry stories through interviews and home videos, which provide dramatic evidence of the spill's devastation and the local frustration with Exxon's botched clean up efforts. *When the Spill Hit Homer* is a unique view of this disaster's impact on a community still desperately trying to recover its way of life."

## **Media Sample Questions & Answers**

**1.) How has the Exxon Valdez oil spill impacted marine wildlife and Alaskan communities in Prince William Sound?**

**Possible Answer:** More than 2,000 miles of beaches were oiled. Many birds and otters were killed by the oil.

**2.) What measures have been taken and by whom to deal with the impact of the spill?**

**Possible Answer:** A woman created a database of available boats from Homer and workers picked up and burned dead animals to keep them from entering the food chain.

**3.) What techniques do the film makers use to persuade or inform? Consider choices in scripting, visuals, audio background and voice-over in your answer.**

**Possible Answer:** The damage done by the oil spill is underscored with images of dead birds and otters on oil filled beaches, scenes of dead animals being thrown onto bonfires and ominous music in the background along with comments by local observers. Exxon's responsibility for the spill is emphasized by the "Boycott Exxon" T-shirt worn by the main commentator.

**4.) Who made this and for what purpose? Explain your answer.**

**Possible Answer:** The film was made by an independent film maker to highlight the "spill's devastation and the local frustration with Exxon's botched clean up efforts," according to the film's distributor.



### Dr. Riki Ott – Not One Drop, Chelsea Green TV, 2007

#### Film 4 Introduction

This excerpt is from a 2007 Chelsea Green TV interview with Dr. Riki Ott publicizing her book *Not One Drop: Betrayal and Courage in the Wake of the Exxon Valdez Oil Spill*. Chelsea Green Publishing describes itself as “the preeminent publisher of books on sustainable living.” Their publicity material for the book begins “Spanning nearly 40 years, *Not One Drop* is an extraordinary tale of ordinary people who take on the world’s richest oil companies and most powerful politicians to protect Prince William Sound from oil accidents. Author Riki Ott, a rare combination of commercial salmon “fisherma'am” and PhD marine biologist, describes the firsthand impact of this broken promise when the Exxon Valdez oil spill decimated Cordova, Alaska, a small commercial fishing community set in 38,000 square miles of rugged Alaska wilderness.”

## Media Sample Questions & Answers

**1.) How has the Exxon Valdez oil spill impacted marine wildlife and Alaskan communities in Prince William Sound?**

**Possible Answer:** About 3,000 miles of coastline were oiled. Fisheries collapsed in the years after the spill. Oil had a long-term toxic effect on marine life in the Sound.

**2.) What measures have been taken and by whom to deal with the impact of the spill?**

**Possible Answer:** Dr. Ott flew over Prince William Sound immediately after the accident to review conditions and report to local fishermen. Dr. Ott and others blockaded the narrows to pressure scientists to initiate a comprehensive study the impact of the spill. Dr. Ott wrote several books about the spill.

**3.) What techniques do the film makers use to persuade or inform? Consider choices in scripting, visuals, audio background and voice-over in your answer.**

**Possible Answer:** The film makers chose one person’s story, that of scientist and fisher Dr. Riki Ott, to tell what happened to Prince William Sound communities. They intersperse an interview with Dr. Ott backed by fishing boats with images of the grounded tanker, a map of Alaska’s shoreline impacted by the spill, still photos of oiled coastline and cleanup crews.

**4.) Who made this and for what purpose? Explain your answer.**

**Possible Answer:** Chelsea Green TV made this to publicize its publication, *Not One Drop*, and to educate people about the impact of the Exxon Valdez spill. As the “the preeminent publisher of books on sustainable living” Chelsea Green has the dual intention to sell its products and market its ideology.



» After you have decoded the films, lead a discussion about the power of words, images, and sound to bias impressions and about credibility, bias and truth in various forms of documentary film and advertising.

### FURTHER QUESTIONS

- » **How do funding sources (corporate – Exxon and ABC Australia vs. citizen activist – film maker Edith Becker and scientist Dr. Riki Ott) impact the film makers' perspectives on the topic?**
- » **Who might benefit from each film and who might be harmed?**
- » **What important information is left out of these excerpts?**
- » **What kinds of actions might one take in response to each film?**
- » **How credible are these sources?**
- » **How could you find additional information about the ongoing effects of the Exxon Valdez spill today?**
- » **What is the source of the fuel that powers your primary transportation source?**
- » **What group do you know that is working to deal with issues relating to fossil fuel depletion and pollution?**

### CONNECTIONS

See lesson 1 PowerPoint slides #12, 19, 20, 26, 30, 31, 47 (oil) and 15, 16 (marine habitat) and lesson 3 Chukchi Sea oil drilling case study





# Lesson #4 Case Study Student Worksheet

NAME \_\_\_\_\_ DATE \_\_\_\_\_

Read over the questions below before watching the short video clips. You may want to take notes as you view the clips. You will then be given time to write your answers after viewing the clips.

**Title of Film:** \_\_\_\_\_

1. How has the Exxon Valdez oil spill impacted marine wildlife and Alaskan communities in Prince William Sound?
2. What measures have been taken and by whom to deal with the impact of the spill?
3. What techniques do the filmmakers use to persuade or inform? Consider choices in scripting, visuals, audio background and voice-over in your answer.
4. Who made this and for what purpose? Explain your answer.



# **Lesson #5: Case Study— Cochabamba, Water for Sale (Print Documents)**

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## LESSON PLAN



Printed Document

# Case Study: Cochabamba, Water For Sale

**Lesson Objectives:**

- Students will study and present different views on the control of water resources.
- Students will analyze articles on water privatization from corporate press releases and from articles published in newspaper, magazine and news service sources.
- Students will evaluate and discuss corporate and activist reporting on environmental decisions related to resource management.

**Vocabulary:**

**Free market, Privatization, Cochabamba, Aguas de Turnari, International Waters, Bechtel Corporation, La Coordinadora, Center For Democracy, International Monetary Fund, World Bank, International Centre for Settlement of Investment Disputes**

**Media**

Handouts with excerpts from four opinion/analysis articles from the San Francisco Chronicle, the Bechtel Corporation, *Reason* magazine and the *Environment News Service*.

**Materials Needed:**

- Teacher's guide: Cochabamba: Water For Sale
- Two-page student reading #1: "Cochabamba's Water Rebellion"
- Two-page student reading #2: "Bechtel Perspective"
- Two-page student reading #3: "Water Is a Human Right"
- Two-page student reading #4: "Bechtel Drops \$50 Million Claim"
- One-page Lesson#5 Student Worksheet

**Time**

50 Minutes

**Lesson Procedures:**

1. Present *Background Information* to the class.
2. Divide the class into four groups and distribute the *Student Reading* handouts, one article per group.
3. Use the *Teacher Answer Sheet* Teacher Guide to help facilitate the four presentations.
4. Help students to articulate and evaluate their own thinking about the roles that media, industry, government and citizens play in ensuring access to an essential resource such as water.

## TEACHER GUIDE



Printed Document

## Case Study: Cochabamba, Water for Sale

1. Organize and make copies for the class activities.
2. Provide background information.

### Background Information

In the 21st century, access to water is a central concern for many people, especially as climate change continues to impact local and regional weather conditions. The melting of glaciers and prolonged droughts may create conditions where nations will go to war with one another over the essential resource of fresh drinking water.

At the turn of the century in Bolivia, the issue had to do with who would control and who would benefit from the water supply. In September 1999, the government of Bolivia granted the control of local water resources in the city of Cochabamba to a consortium of international corporations named Aguas de Turnari. The consortium was to control the water supply for a concession period of 10 years. However, within a period of seven months, the Bolivian government terminated the contract and control of the water supply was returned to local control.

3. Introduce lesson.

### Lesson Information

For this lesson, you will break into four groups, each with a different reading from these sources: an article from the *San Francisco Chronicle*, a press release from Bechtel Corporation, an article from *Reason* magazine and an article from the Environment News Service. As your group reads the handout, look for the answers to four basic questions: 1) Why was water privatized in Cochabamba? 2) How did water privatization impact the people of Cochabamba? 3) What sources does the author cite? 4) In what way does the mission statement or history of the sponsor organization(s) shape its reporting? Each excerpt is followed by a brief description of the mission and/or history of the organization(s) on whose Web site the article was published.

Also, note any passages in the article that illustrate those points. You will then present your document to the entire class with each student sharing a different answer. After all four groups have presented we will discuss your reactions to the various perspectives presented.

4. Distribute among the four groups one student reading and one student worksheet per group.
5. Give students time to complete the assignment. Review the possible answers using the *Teacher Answer Sheet*.
6. Bring the class back together for the presentations.
7. Ask each group to report their author's analysis and conclusions, question by question – using excerpts from the text to illustrate their points.



# Teacher Answer Sheet

## Questions, Possible Answers & Evidence

### 1) Why was water privatized in Cochabamba?

#### Possible Answers

**Doc. 1** San Francisco Chronicle (SFC) – To provide water and sewage service for a municipal water service that was not functioning.

**Doc. 2:** Bechtel – To provide water service for a local utility that was financially struggling and unable to provide clean water for the entire population.

**Doc. 3:** Reason – To provide a reliable water supply for all citizens regardless of income.

**Doc 4:** Environment News Service (ENS) – In response to a mandate by the World Bank in order to receive aid for water development.

#### Evidence

**Doc. 1:** SFC - An estimated 40% of the population had no piped water or sewage services. The municipal water company was in disarray.

**Doc. 2:** Bechtel - The Bolivian government turned to the private sector in the late 1990s to operate the city's water and wastewater system because the local utility had rendered it a shambles. The utility's financial losses had led to mounting debts and declining service. Service was unavailable to 40% of the city's population. What water came out of the tap wasn't healthy - and typically wasn't available for much of the day.

**Doc. 3:** Reason - Between 1989 and 1999, the proportion of households connected to the public water system fell from 70% to 60%. Water was only sporadically available. In the wealthier neighborhoods 99% of households were receiving the subsidized water, while in some poorer suburbs less than 4% were connected.

**Doc 4:** ENS - In 1997, the World Bank made privatization of the public water system of Bolivia's third largest city, Cochabamba, a condition of the country receiving further aid for water development.

# Teacher Answer Sheet

## Questions, Possible Answers & Evidence

### 2) How did water privatization impact the people of Cochabamba?

#### Possible Answers

**Doc. 1:** SFC – Prices for water increased causing protests, a military response by the government and the death of a young protester.

**Doc. 2:** Bechtel – The government raised water prices to pay down water utility debt and to improve and expand the water system. Public pressure resulted in a reduction of water rates and an end to privatization.

**Doc. 3:** Reason – Water costs rose for some poor families while others would have paid less. Opposition to privatization was organized by middle class customers, industry, local water vendors and small farmers.

**Doc 4:** ENS – Significant increases in the price of water led to protest, a general strike, a state of emergency and a military response causing many injuries and one death.

#### Evidence

**Doc. 1:** SFC - An international consortium took over, raised prices precipitously and was thrown out by the people, who blockaded the city for days. Before the federal government gave up in April and canceled a 30-year concession, troops were sent in, bullets and tear gas were fired, and a young man was killed.

**Doc. 2:** Bechtel - The government raised water rates in Cochabamba by an average of 35%, effective in January 2000. Half the rate increase was necessitated by such government requirements as paying down more than \$30 million in debt accumulated by the public utility that had previously operated the system so poorly. Rate increases were also needed to finance proper maintenance and expansion of the water system...The higher rates didn't last long. Responding to public criticism, the government rolled back rates in February. Customers who had paid the higher rates were refunded the difference...In April, the Bolivian government rescinded its contract with Aguas del Tunari.

**Doc. 3:** Reason - While it is true that the lucky few of the poorest who were connected to municipal water supplies did see big increases in their water bills, the majority of the poor who stood to be connected for the first time would have paid much less than they were already paying to water vendors...the opposition to privatization was actually lead by middle class and industrial users who had been receiving subsidized water. Opponents also included local water vendors and small farmers who wrongly believed that they were forbidden to access well water.

**Doc 4:** ENS - Within weeks of taking over the city's water, Bechtel's Bolivian company, Aguas del Tunari, raised rates by more than 50% and in some cases even higher. The water price hikes were met with angry public protest. Cochabamba, a city of about 500,000 people, was shut down by general strikes three times. In an effort to protect the Bechtel contract, the Bolivian government declared a state of martial law and began arresting protest leaders at their homes in the middle of the night. An unarmed 17 year old boy was shot and killed by Bolivian Army personnel. At least 175 others were injured.

# Teacher Answer Sheet

## Questions, Possible Answers & Evidence

### 3) What sources does the author cite?

#### Possible Answers

**Doc. 1:** SFC – Industry spokespeople from Bechtel and International Waters and two spokespeople for citizens groups..

**Doc. 2:** Bechtel– Bechtel corporation exclusively.

**Doc. 3:** Reason – A UN Report, a summary of a conference organized by a “skeptical environmentalist” and a book by a Swedish free market supporter and analyst.

**Doc 4:** ENS – Bechtel, two grassroots activists from Cochabamba and two representatives from Washington, D.C. nonprofit groups.

#### Evidence

**Doc. 1:** SFC - Bechtel acknowledges...A fact sheet from International Waters (IW) insists...according to Michael Curtin, executive consultant to IW...Marcela Olivera of Cochabamba...(who) assists her brother Oscar, a labor leader who is a spokesman for the Coordinating Committee for the Defense of Water and Life...Center for Democracy...ally Tom Kruse says.

**Doc. 2:** Bechtel – This is a press release from Bechtel entitled “Bechtel Perspective...”

**Doc. 3:** Reason - In 2003, the U.N.'s World Water Development Report estimated... the summary of the Copenhagen Consensus paper on water adopted the conventional wisdom... In his excellent new monograph, *Water for Sale: How Business and the Market Can Resolve the World's Water Crisis*, Swedish analyst Fredrik Segerfeldt makes the case.

**Doc 4:** ENS - Bechtel said today in a statement...said Oscar Olivera, a leader in the Bolivian water revolt... said Jim Shultz, executive director of The Democracy Center in Cochabamba,...said attorney Martin Wagner of Earthjustice, a nonprofit, public interest law firm based in Washington, DC...Sarah Anderson, of the Washington, DC Institute for Policy Studies... said today.

## Teacher Answer Sheet

### Questions, Possible Answers & Evidence

#### 4) In what way does the mission statement or history of the sponsor organization(s) shape its reporting?

#### Possible Answers

**Doc. 1:** SFC – As a newspaper seeking readers, the Chronicle hopes to lure consumers with a provocative title and story of conflict. As part of a media conglomerate that includes holdings in business publishing, it will report on issues related to its wider interests in the corporate world.

**Doc. 2:** Bechtel – As an international construction company seeking future contracts, Bechtel wants to counter what it sees as bad publicity about its project and wants to underscore its efforts to help communities in need.

**Doc. 3:** Reason – As a magazine devoted to presenting “free minds and free markets,” Reason chooses to seek out sources which promote skeptical inquiry and which support free market ideas.

**Doc 4:** ENS – As a news service promoting itself as fair and balanced, ENS wants to quote from “both sides” of a conflict. As an organization interested in conflict relating to environmental issues it seeks to highlight perspectives which emphasize issues of contention.

#### Evidence

**Doc. 1:** SFC – “Cochabamba’s Water Rebellion – and Beyond”. Its major interests include magazine, newspaper and business publishing.

**Doc. 2:** Bechtel - Numerous news accounts and commentaries have mischaracterized the water concession in Cochabamba, Bolivia, held by Aguas del Tunari, 27.5% owned by Bechtel. Below are some of the most commonly misrepresented and underreported aspects of the Cochabamba water concession... To minimize the impact on the poor and improve efficiency, the consortium had convinced the government...

**Doc. 3** Reason - Reason is the monthly print magazine of “free minds and free markets.” In his excellent new monograph, “Water for Sale: How Business and the Market Can Resolve the World's Water Crisis”... as pointed out by the Copenhagen Consensus organized by skeptical environmentalist Bjorn Lomborg.

**Doc 4:** ENS – ENS exists to present late-breaking environmental news in a fair and balanced manner. ENS contributors around the world cover issues and events that affect the environment such as: lawsuits, international agreements, demonstrations.

- » After all four groups have presented lead a discussion about the roles that media, industry, government, universities and citizens play in ensuring environmental protection.
- » Make sure that all students have an opportunity to express their agreement and disagreement with the reasoning of the various authors.

### FURTHER QUESTIONS

- » **Who are the target audiences for each source? Might those audiences steer the nature of the reporting?**
- » **How are the authors' impressions shaped by their trust in government and industry? By their trust in free-thinking individuals and citizen action?**
- » **How can you distinguish between fact and opinion in an article about water privatization?**
- » **How can you select the widest range of information sources? Why might this be helpful as you discuss the issue with others?**
- » **Which of these articles might lead one to take action on the issue of water access? Why?**
- » **Discuss why an incident in South America might be of interest to a reader in the United States.**

### CONNECTIONS

See lesson 1 PowerPoint slides #13, 17, 20, 37, 38, 45 (fresh water) and lesson 2, Damming the Rivers video case study



**"Cochabamba's Water Rebellion – and Beyond"**Lewis Dollinsky, *San Francisco Chronicle***Document Excerpt #1**

Protesters celebrated in Cochabamba, Bolivia, last April after the government rescinded a contract with a private consortium to run the city's water system. Known for its artisan and farmers markets and the nearby coca fields, Cochabamba (population 500,000) is Bolivia's third-largest city. A successful insurrection there was one of last year's underreported stories: An estimated 40 percent of the population had no piped water or sewage services. The municipal water company was in disarray. It was privatized. An international consortium took over, raised prices precipitously and was thrown out by the people, who blockaded the city for days. Before the federal government gave up in April and canceled a 30-year concession, troops were sent in, bullets and tear gas were fired, and a young man was killed.

This saga has a Bay Area connection. The private water company, Aguas del Tunari, which had 20 percent Bolivian ownership, was a creation of International Waters. IW is a partnership between an Italian company, Edison SpA, and the giant Bechtel Corp. of San Francisco. If Bechtel, or its offshoot, can go to Cochabamba, then Marcela Olivera of Cochabamba can fly to San Francisco, get her first view of the ocean ("it is very large") and tell her side of this controversy. Olivera assists her brother Oscar, a labor leader who is a spokesman for the Coordinating Committee for the Defense of Water and Life, usually referred to as La Coordinadora. This umbrella group of workers, peasants, environmentalists and human rights advocates took over the water system when the consortium was forced out.

Marcela Olivera says her brother is in danger: "The government has taken many actions against many people since April - raided houses, wiretapped phones, death threats, most recently in October. Harassment is continual." The evidence is clear, she says, that the Bolivian investors in Aguas del Tunari have high connections in government. And are not good losers. Olivera is

concerned about what will happen, in weeks or months, after the Bolivian government settles its legal case with International Waters. She expects an attempt to take back the water. First, men with suits will come, saying: This just isn't working. Only if necessary, she says, men will come with guns.

For most in Cochabamba, this struggle is about money, not theory: When the water system was privatized, Bolivians making \$100 a month were suddenly paying \$20 of it for water. Some bills are said to have risen 200%, even 400%. Bechtel disputes such figures, saying rates typically rose 35%. That's still a lot. Bechtel acknowledges that the contract set a "goal" (not a guarantee) of a 16% return on investment for Aguas del Tunari. The company was also locked into building large projects, including a dam that even the World Bank says is ill-advised. Aguas del Tunari had inherited \$35 million in debt from the municipal utility and was expected to start paying it off.

The corporate version is that the private company started making improvements and raised prices as needed but structured increases to hit the big users. After February's protests, it rolled back prices and made refunds. Then in April, it was out. Not a happy experience. A fact sheet from International Waters insists that opposition came not primarily from ordinary people but from the affluent or those who had a vested interest in the old "informal water market." IW is sick of people saying that it bought the water system; it signed a legitimate contract to provide a service. It just happened to be the only bidder. And yes, Bechtel and IW are in business to make money. Under terms of a bilateral agreement between Bolivia and the Netherlands, where IW is incorporated, IW is entitled to out-of-pocket expenses plus unrealized profits projected over the life of the deal.

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Negotiations between International Waters and Bolivia are amicable, according to Michael Curtin, executive consultant to IW, and "We expect to get our money." He will not say how much. Bolivia has shallow pockets. If a settlement is ever made public, the government of Hugo Banzer may have to admit that it paid a multinational corporation big money to do nothing. Curtin doubts the government will try to retake the water system from La Coordinadora. He says four Bolivian regimes have failed to resolve Cochabamba's water problem; this one may say, "It's all yours." Olivera's fears may be exaggerated.

Down in Cochabamba, Jim Shultz, a San Franciscan, has plagued Bechtel with accusations and reports in his Center for Democracy e-mails. Shultz's ally Tom Kruse says the government might leave Cochabamba water in the control of La Coordinadora if this were not part of a larger struggle. At the urging of the International Monetary Fund and the World Bank, the Bolivian national airlines, oil and gas, telephone, rail lines - all have been sold off, or are being sold off, and often to foreign investors. Olivera was shepherded around the Bay Area by Antonia Juhasz of the International Forum on Globalization. Juhasz is warning in public meetings against a possible privatization of San Francisco water and take-over by Bechtel.

These are competing international conspiracies: Globalization and anti-globalization, privatization and the resistance to it. But what about Cochabamba's water? How does it taste? Is it getting to more people? Olivera says, "The water is sweet" now that it is controlled by the people, and there are new hookups in the hills where the poorer poor live. Kruse says that service may be slightly better but that this is still a struggling enterprise. Curtin says he hears of some pipe connections in the hills but does not know about sewage service. When asked for a prognosis, Curtin mentions that a prominent economist among the group that took over the water system was educated in Moscow and taught in Havana. So he is not very good?

Curtin says: No, he's fine. He has as good a chance as anybody of solving this problem.

Dolinsky, Lewis. "Cochabamba's Water Rebellion – and Beyond." San Francisco Chronicle. 11 Feb 2001 <<http://www.sfgate.com/cgi-bin/article.cgi?file=/chronicle/archive/2001/02/11/SC197565.DTL>>

*The San Francisco Chronicle, Northern California's largest circulation newspaper, was founded in 1865 and acquired by Hearst Corporation in 2000. The Hearst Corporation is defined on its website as "one of the nation's largest diversified media companies. Its major interests include magazine, newspaper and business publishing, cable networks, television and radio broadcasting, internet businesses, TV production and distribution, newspaper features distribution and real estate."*



## **“Bechtel Perspective on the Aguas del Tunari Water Concession in Cochabamba, Bolivia”**

Press Release

### **Document Excerpt #2**

Numerous news accounts and commentaries have mischaracterized the water concession in Cochabamba, Bolivia, held by Aguas del Tunari, 27.5% owned by Bechtel. \*

Below are some of the most commonly misrepresented and underreported aspects of the Cochabamba water concession, which was terminated in April 2000.

For a more detailed account of the Bechtel perspective, please access the Fact Sheet (PDF: 72 KB)

- The Bolivian government turned to the private sector in the late 1990s to operate the city's water and wastewater system because the local utility had rendered it a shambles. The utility's financial losses had led to mounting debts and declining service. Service was unavailable to 40% of the city's population. What water came out of the tap wasn't healthy--and typically wasn't available for much of the day.
- Most of those without connections resorted to buying unhealthful water from the operators of tanker-trucks at exorbitant rates - several times higher than what they'd pay if they could hook up to the system.
- Residents who had connections suffered an inequitable rate system. Low-volume, poorer users paid more per unit than high-volume, wealthier users. High-volume users had little incentive to conserve scarce water resources.
- Aguas del Tunari began operating the city's water and wastewater system November 1, 1999. The consortium did not buy and did not own Cochabamba's water utility or water resources.
- The government raised water rates in Cochabamba by an average of 35%, effective in January 2000. Half the rate increase was necessitated by such government requirements as paying down more than \$30 million in debt accumulated by the public utility that had previously operated the system so poorly. Rate increases were also needed to finance proper maintenance and expansion of the water system. Even these rates were comparable to those in other major Bolivian cities.
- To minimize the impact on the poor and improve efficiency, the consortium had convinced the government to adopt a rate structure that had most of the increase fell to larger, wealthier users.
- Aguas del Tunari only charged for water provided through the network it operated. It did not charge for water from private or cooperative wells. It did not lease or own the aquifer. The contract was for potable water supply and sewage within urban Cochabamba--not for agricultural areas.
- Aguas del Tunari managed to increase the availability of water by 30% in its short time managing the system. For billings in the month of January (2000), increased water usage amplified for many customers the effect of higher rates.
- The higher rates didn't last long. Responding to public criticism, the government rolled back rates in February. Customers who had paid the higher rates were refunded the difference.

- Subsequent unrest in Cochabamba was sparked by multiple causes, including unrelated national groundwater legislation that left even citizens outside the service area believing incorrectly that their water resources might be expropriated by a concessionaire. The unrest peaked in April, 2000, two months after rates had been rolled back to preconcession levels.
- In April, the Bolivian government rescinded its contract with Aguas del Tunari. For months afterward it was unwilling or unable to engage Aguas del Tunari in substantive discussions about resolving their contract dispute.
- Aguas del Tunari pursued arbitration through the International Centre for Settlement of Investment Disputes (ICSID) to seek compensation for the Bolivian government's having illegally terminated its contract and expropriating the concession.
- In January 2006, the international shareholders of Aguas del Tunari reached a satisfactory settlement with the Bolivian government.

\*Bechtel owns 50% of International Water, and International Water owns 55% of Aguas del Tunari; hence Bechtel's 27.5% interest in Aguas del Tunari.

"Bechtel Perspective on the Aguas del Tunari Water Concession in Cochabamba, Bolivia." Bechtel Corporation. 16 March 2005 <[http://www.bechtel.com/2005-03-16\\_38.html](http://www.bechtel.com/2005-03-16_38.html)>

*From Bechtel's home page: "Bechtel is the world's No. 1 choice for engineering, construction, and project management. Our diverse portfolio encompasses energy, transportation, communications, mining, oil and gas, and government services. We currently have projects in dozens of locations worldwide, from Alaska to Australia. No matter how challenging a project or how remote its location, chances are Bechtel can handle it. That's because we bring an unmatched combination of knowledge, skill, experience, and customer commitment to every job."*

*We have had record revenues for the past four years and in 2006 also posted a record for the value of new work that we booked. Engineering News-Record (ENR) has named Bechtel the top U.S. construction contractor for nine straight years. While we work for governments and commercial customers, our projects have helped grow local economies and improve the quality of life for communities and people around the world. Time and again our work has demonstrated that the only limits on human achievement are those that we place on ourselves. Privately owned with headquarters in San Francisco, we have offices around the world and 42,500 employees. In 2006, we had revenues of \$20.5 billion and booked new work valued at \$24.7 billion."*

## **"Water Is a Human Right - How Privatization Gets Water to the Poor"**

Ronald Bailey, *Reason* magazine

### **Document Excerpt #3**

Activists around the world chant the slogan that "water is a human right." Yet more than a billion poor people in the world today lack access to safe drinking water. Twelve million of them die each year from drinking disease-contaminated water. Among things that would most benefit the world, safe, clean drinking water is clearly a high priority, as pointed out by the Copenhagen Consensus organized by skeptical environmentalist Bjorn Lomborg in 2004.

In 2003 the U.N.'s World Water Development Report estimated an annual shortfall of \$110 billion to \$180 billion in investments needed to provide access to safe water to the poor in the developing world. The U.N.'s Millennium Development Project has a target of reducing by half the proportion of people without access to safe drinking water by 2015. The economic benefits of halving the number of people without access to safe water—in terms of disease avoided, lives lengthened, and time wasted fetching it—add up to \$300 billion to \$400 billion annually. Displaying a surprising lack of imagination, the summary of the Copenhagen Consensus paper on water adopted the conventional wisdom that "water service provision has generally been seen as a government responsibility. This is largely because water is regarded as a public good and its availability as a basic human right, best administered by the public sector." Given the fact that so many of the governments in developing countries have somehow failed to recognize their citizens' supposed right to water, perhaps there is a better way to go?

In his excellent new monograph, "Water for Sale: How Business and the Market Can Resolve the World's Water Crisis," Swedish analyst Fredrik Segerfeldt makes the case that water privatization can go a long way toward quenching the thirst of the poor. Segerfeldt points out that public water systems in developing countries generally supply politically connected wealthy and middle class people, whereas the poor are not hooked up to municipal water mains. Segerfeldt

cites one study of 15 countries that found that in the poorest quarters of their populations, 80% of the people were not hooked up to water mains. Of course, the poor don't just die of thirst; they just pay more—generally a lot more—for their water.

"Contractors often drive tankers to poor districts, selling water by the can, in which case the very poorest of the world's inhabitants are already exposed to market forces but on very unfair terms, because water obtained like this is on average twelve times more expensive than water from regular water mains, and often still more expensive than that," notes Segerfeldt. A survey of major cities in developing countries found that the poor in Lagos, Nigeria pay four to 10 times more for their water than people who are hooked up to water mains do; in Karachi, Pakistan they pay 28 to 83 times more; in Jakarta, Indonesia, four to 60 times; and in Lima, Peru, 17 times more. Essentially, the rich get cheap tap water while the poor pay the moral equivalent of Perrier prices.

So now some countries have turned to the private sector and multinational companies for help in providing their thirsty poor citizens with water. Privatization can mean selling entire water supply and treatment systems to private owners; long-term leases of water supply systems; or contracts to manage public water systems. In practical terms, the usual arrangement is a long-term lease. So far, only 3% of the poor in developing countries get their water from private-sector water systems. However, these initial projects have provoked an outcry by anti-privatization activists around the world against a "global water grab" by giant corporations.

Segerfeldt shows that even imperfect privatization efforts have already successfully connected millions of poor people to relatively inexpensive water where government-funded efforts have failed. For example, before privatization in 1989, only 20% of urban

dwellers the African nation of Guinea had access to safe drinking water; by 2001 70% did. The price of piped water increased from 15 cents per cubic meter to almost \$1, but as Segerfeldt correctly notes, "before privatization the majority of Guineans had no access to mains water at all. They do now. And for these people, the cost of water has fallen drastically. The moral issue, then, is whether it was worth raising the price for the minority of people already connected before privatization in order to reach the 70% connected today." In Cartagena, Colombia privatization boosted the number of people receiving piped water by 27%. Even the conflicted privatization in Buenos Aires saw the number of households connected to piped water rise by 3 million and 85% of the new customers lived in the poor suburbs of the city. Segerfeldt cites other successful privatizations in Gabon, Cambodia, Indonesia, and Morocco.

But given the often corrupt governments with which corporations must deal, it's not surprising that privatization can be done very badly. Probably the most spectacular case of privatization gone wrong occurred in Cochabamba, Bolivia. Cochabamba is to anti-privatization activists what the Alamo is to Texans. Between 1989 and 1999, the proportion of households connected to the public water system fell from 70% to 60%. Water was only sporadically available. In the wealthier neighborhoods 99% of households were receiving the subsidized water, while in some poorer suburbs less than 4% were connected.

The activist myth is that the poor rose up when the evil multinational Bechtel raised the price of water by 43% to 60%, depending on the customer's income. While it is true that the lucky few of the poorest who were connected to municipal water supplies did see big increases in their water bills, the majority of the poor who stood to be connected for the first time would have paid much less than they were already paying to water vendors. Segerfeldt calculates that piped water prices were already so low that this would mean the poorest 5% of the population would be spending 5.4% of their incomes on water. Segerfeldt reports that the opposition to privatization was actually led by middle class and industrial users who had been receiving subsidized water. Opponents also included local water vendors and small

farmers who wrongly believed that they were forbidden to access well water.

Under pressure, Bechtel pulled out and Cochabamba's water supply system is once again being run by the old public utility. Segerfeldt claims that water is now available only four hours per day and that no new households at all have been connected to the network since 2000. Meanwhile, the poor are paying 10 times more for their water than are the rich households connected to the system. This is a victory for the poor?

Privatization is not a panacea, but Segerfeldt shows that, when properly done, it can play a huge role in bringing safe clean drinking water to the hundreds of millions of people who still lack it. In the meantime, Segerfeldt wonders, "why anti-privatization activists do not expend as much energy on accusing governments of violating the rights of 1.1 billion people who do not have access to water as they do on trying to stop its commercialization?" Good question.

Ronald Bailey. "Water Is a Human Right - How privatization gets water to the poor." Reason. 17 Aug. 2005 <<http://www.reason.com/news/printer/34992.html>>

*From the About Reason Web page: "Reason is the monthly print magazine of 'free minds and free markets.' It covers politics, culture, and ideas through a provocative mix of news, analysis, commentary, and reviews. Reason provides a refreshing alternative to right-wing and left-wing opinion magazines by making a principled case for liberty and individual choice in all areas of human activity. Reason and Reason Online are editorially independent publications of the Reason Foundation, a national, non-profit research and educational organization."*

## **“Bechtel Drops \$50 Million Claim to Settle Bolivian Water Dispute”**

Environment News Service

### **Document Excerpt #4**

Bechtel, a global engineering and construction company based in San Francisco, today reached agreement with the government of Bolivia, dropping a legal demand for \$50 million after a revolt over privatizing water services in the city of Cochabamba forced the company out of Bolivia in April 2000. Bechtel and its chief co-investor, Abengoa of Spain, had been seeking \$25 million in damages and \$25 million in lost profits in a case filed before a World Bank trade court, the International Centre for Settlement of Investment Disputes (ICSID). Following four years of international public protest aimed at the companies, Bechtel and Abengoa agreed to abandon their case for a token payment.

“Multinational corporations want to turn everything into a market,” said Oscar Olivera, a leader in the Bolivian water revolt. “For indigenous people water is not a commodity, it is a common good. For Bolivia, this retreat by Bechtel means that the rights of the people are undeniable.” Bechtel said today in a statement that the corporations were held blameless in the dispute. “The government of Bolivia and the international shareholders of Aguas del Tunari declare that the concession was terminated only because of the civil unrest and the state of emergency in Cochabamba and not because of any act done or not done by the international shareholders of Aguas del Tunari, which include the Bechtel, Befesa, Abengoa of Spain, and Edison corporations,” the company said. The concession agreement dates from September 3, 1999, when the government of Bolivia approved Aguas del Tunari as the concessionaire to provide water services to the city of Cochabamba.

On April 10, 2000, the concession was terminated because of the civil unrest, giving rise to a dispute between Bolivia and Aguas del Tunari. In 1997, the World Bank made privatization of the public water system of Bolivia’s third largest city, Cochabamba, a condition of the country receiving further aid for water development.

That led, in September 1999, to a 40-year concession granted to a company led by Bechtel in a process with just one bidder. Within weeks of taking over the city’s water, Bechtel’s Bolivian company, Aguas del Tunari, raised rates by more than 50% and in some cases even higher.

The water price hikes were met with angry public protest. Cochabamba, a city of about 500,000 people, was shut down by general strikes three times. In an effort to protect the Bechtel contract, the Bolivian government declared a state of martial law and began arresting protest leaders at their homes in the middle of the night. An unarmed 17-year-old boy was shot and killed by Bolivian Army personnel. At least 175 others were injured. In April 2000, Bechtel was forced to leave the country and the water company was returned to public ownership.

In November 2001, Bechtel and its associates filed their case with ICSID at the World Bank. The ICSID process bars the public and media from being present at its proceedings or disclosing who testifies. The company filed the case with ICSID under a bilateral investment treaty between the Netherlands and Bolivia. Although Bechtel is a U.S. corporation, its subsidiary established a presence in the Netherlands in order to make use of the treaty. The rules in the Dutch-Bolivian treaty are similar to those in the North American Free Trade Agreement and the proposed Free Trade Area of the Americas.

For four years, citizen groups waged a global campaign to pressure Bechtel to drop the case. Protesters closed down Bechtel’s San Francisco’s headquarters twice. Company officials were bombarded by critical e-mails. Citizen groups from 43 nations endorsed a legal petition to the World Bank demanding that the case be opened to public participation. “This settlement demonstrates the power of public participation,” said attorney Martin Wagner of Earthjustice, a

nonprofit, public interest law firm based in Washington, DC. Wagner drafted the 2002 legal petition on behalf of Bolivian civil society leaders demanding public participation in the Bechtel case. "Unfortunately, hundreds of foreign investor challenges against developing countries remain pending and more will be filed as the United States and others continue to force governments to give foreign corporations special privileges," Wagner said. "We must continue to tear down the walls of secrecy and exclusivity in international commercial arbitrations like this one."

"This is the first time that a major corporation like Bechtel has had to back down from a major trade case as the result of global citizen pressure," said Jim Shultz, executive director of The Democracy Center in Cochabamba, and a leader of the global effort. "It should signal to corporations contemplating similar legal actions that they should be prepared to defend those actions in the court of global public opinion," Shultz said, "not just behind closed doors at the World Bank."

Sarah Anderson, of the Washington, DC Institute for Policy Studies, who helped coordinate U.S. civil society pressure on Bechtel to settle the lawsuit, has her eye on preventing similar confrontations in the future. "The challenge now," she said today, "is to build on this momentum to press for new trade and investment rules that promote democracy and sustainable development rather than the narrow interests of large corporations."

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*"ENS contributors around the world cover issues and events that affect the environment such as: legislation, politics, conferences, lawsuits, international agreements, demonstrations, science and technology, public health, air quality, drinking water, oceans and marine life, land use, wildlife, forests, natural disasters, the indoor environment, hazardous materials, toxics, nuclear issues, renewable energy, recycling, transportation, and environmental economics."*



# Lesson #5 Case Study Student Worksheet

NAME \_\_\_\_\_

DATE \_\_\_\_\_

Read over the questions below before reading your article. For each question summarize in a sentence or two the perspective of that article's author. You may want to underline the sections of the article that are pertinent to each question in order to give examples from the text to back up your conclusion.

Title of Article

1. Why was water privatized in Cochabamba?
2. How did water privatization impact the people of Cochabamba?
3. What sources does the author cite?
4. In what way does the mission statement or history of the sponsor organization(s) shape its reporting? Use the italicized information following the article to answer this question.





# Assessments

Document Based Question (DBQ)	
“Changing Public Attitudes Towards Oil as a Resource” .....	167
Short Answer Questions	
“Changing Public Attitudes Towards Oil” .....	169





## Document-Based Question: Changing Public Attitudes Toward Oil as a Resource

Write a well-organized essay that includes an introduction, several paragraphs, and a conclusion. Use evidence from at least three documents in your essay. Support your response with relevant facts, examples, and details. Include additional outside information.

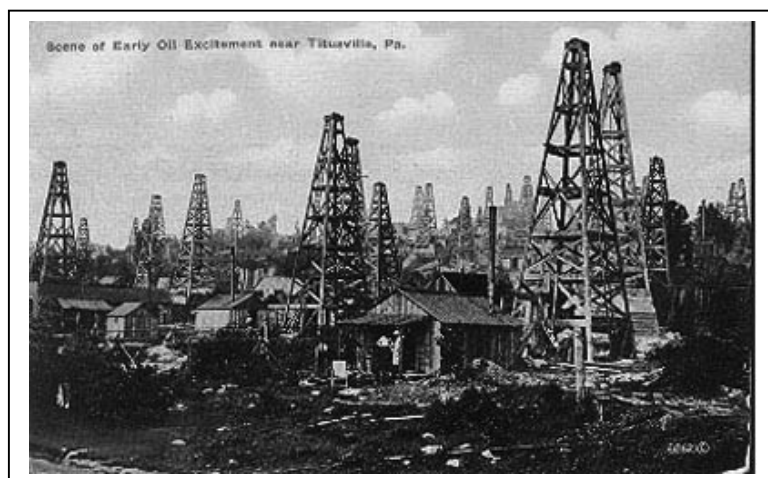
**Discuss how public knowledge and attitudes about oil have changed over time.**

### In your essay:

- Explain how public attitudes toward oil as a natural resource have changed over time.
- Reference public knowledge of the concepts of peak oil and global warming.
- Incorporate information from at least three of the documents.
- Explain how media reflects public attitudes and perspectives.
- Incorporate relevant outside information.
- Support the theme with relevant facts, examples and details.
- Use a logical and clear plan of organization that includes an introduction and conclusion that goes beyond a restatement of the theme.

### Document #1

Early 1900s  
Scene of Early Oil Excitement  
Near Titusville, PA, postcard

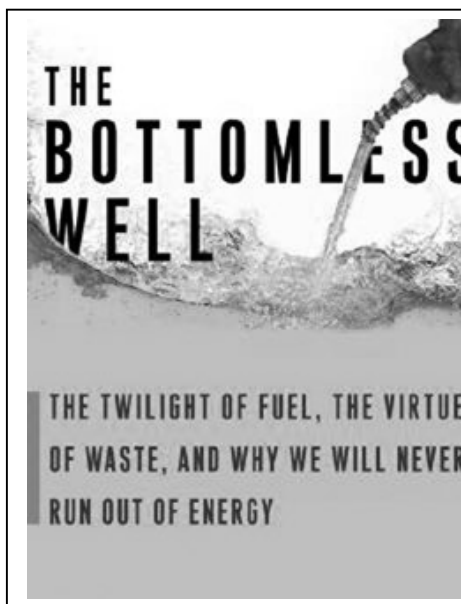


### Document #2

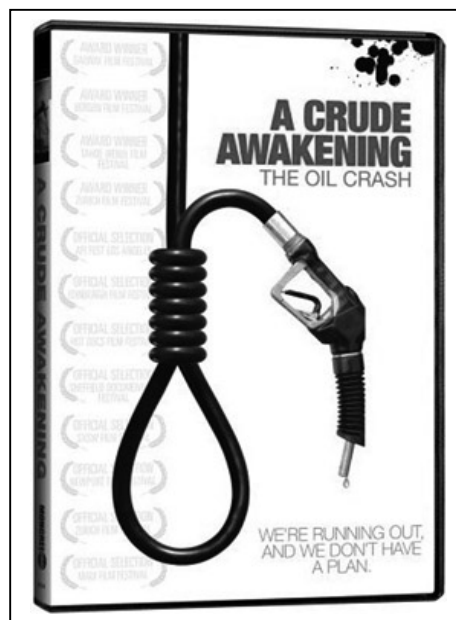
1986 *Time* magazine  
cover



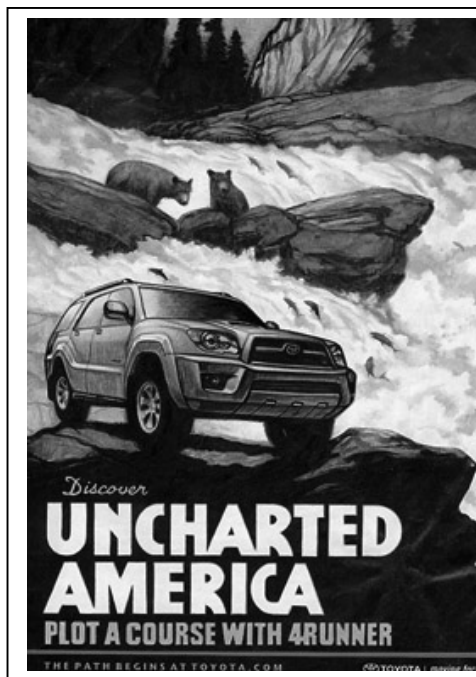
**Document #3**  
2005 book cover



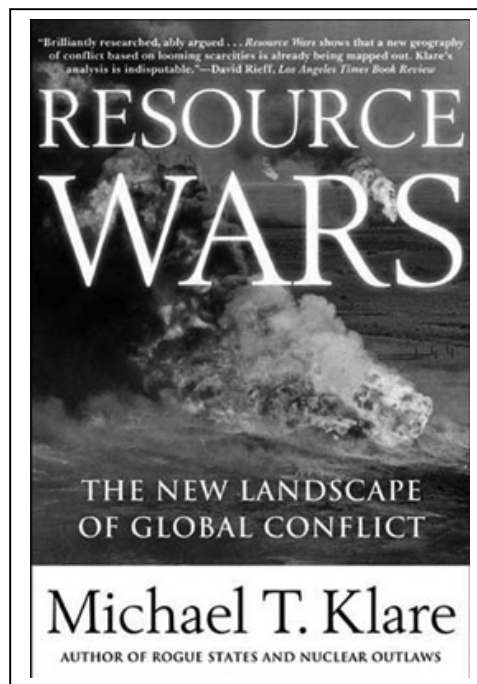
**Document #4**  
2006 DVD cover



**Document #5**  
2007 magazine advertisement



**Document #6**  
2002 book cover





## Short Answer Questions

### Changing Public Attitudes Towards Oil

NAME \_\_\_\_\_ DATE \_\_\_\_\_

1. Use Document #1 to describe how the photographer and postcard designer chose to represent the site of the first commercial oil fields in the U.S.
2. Using document #2, #5 and/or #6 as examples, describe how access to oil has posed both an opportunity and a challenge.
3. Using document #3 and #4 as examples, describe two different perspectives regarding the accessibility of oil as a resource in the 21st century.
4. Using documents #5 and #6 as examples, discuss how artists select story lines for advertisements and book covers in order to advance perspectives on driving habits.



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