



SECTION
4

Environmental Activism

MAIN IDEA

During the 1970s, Americans strengthened their efforts to address the nation's environmental problems.

WHY IT MATTERS NOW

The nation today continues to struggle to balance environmental concerns with industrial growth.

Terms & Names

- Rachel Carson
- Earth Day
- environmentalist
- Environmental Protection Agency (EPA)
- Three Mile Island

CALIFORNIA STANDARDS

11.5.6 Trace the growth and effects of radio and movies and their role in the worldwide diffusion of popular culture.

11.8.6 Discuss the diverse environmental regions of North America, their relationship to local economies, and the origins and prospects of environmental problems in those regions.

11.8.7 Describe the effects on society and the economy of technological developments since 1945, including the computer revolution, changes in communication, advances in medicine, and improvements in agricultural technology.

11.11.5 Trace the impact of, need for, and controversies associated with environmental conservation, expansion of the national park system, and the development of environmental protection laws, with particular attention to the interaction between environmental protection advocates and property rights advocates.

REP 4 Students construct and test hypotheses; collect, evaluate, and employ information from multiple primary and secondary sources; and apply it in oral and written presentations.

HI 2 Students recognize the complexity of historical causes and effects, including the limitations on determining cause and effect.

HI 3 Students interpret past events and issues within the context in which an event unfolded rather than solely in terms of present-day norms and values.

One American's Story

In 1972, Lois Gibbs and her family moved to Niagara Falls, New York. Underneath this quiet town, however, was a disaster in the making. In the 1890s, the Love Canal had been built to provide hydroelectric power for the Niagara Falls area. Chemical companies were dumping hazardous waste into the canal. In 1953, bulldozers filled in the canal. Shortly thereafter, a school and rows of homes were built nearby.

In 1977, when Lois Gibbs's son fell sick, she decided to investigate. She eventually uncovered the existence of the toxic waste and mobilized the community to demand government action. In 1980, President Carter authorized funds for many Niagara Falls families to move to safety. Years later, Lois Gibbs wrote a book detailing her efforts.



A PERSONAL VOICE LOIS GIBBS

“I want to tell you our story—my story—because I believe that ordinary citizens—using the tools of dignity, self-respect, common sense, and perseverance—can influence solutions to important problems in our society. . . . In solving any difficult problem, you have to be prepared to fight long and hard, sometimes at great personal cost; but it can be done. It must be done if we are to survive . . . at all.”

—*Love Canal: MyStory*

VIDEO

POISONED PLAYGROUND
Lois Gibbs and the Crisis at Love Canal

Lois Gibbs's concerns about environmental hazards were shared by many Americans in the 1970s. Through the energy crisis, Americans learned that their natural resources were limited; they could no longer take the environment for granted. Americans—from grassroots organizations to the government—began to focus on conservation of the environment and new forms of energy.

The Roots of Environmentalism

The widespread realization that pollution and overconsumption were damaging the environment began in the 1960s. One book in particular had awakened

America's concerns about the environment and helped lay the groundwork for the activism of the early seventies.

RACHEL CARSON AND SILENT SPRING In 1962, **Rachel Carson**, a marine biologist, published a book entitled *Silent Spring*. In it, she warned against the growing use of pesticides—chemicals used to kill insects and rodents. Carson argued that pesticides poisoned the very food they were intended to protect and as a result killed many birds and fish.

Carson cautioned that America faced a “silent spring,” in which birds killed off by pesticides would no longer fill the air with song. She added that of all the weapons used in “man’s war against nature,” pesticides were some of the most harmful.

A PERSONAL VOICE RACHEL CARSON

“ These sprays, dusts, and aerosols . . . have the power to kill every insect, the ‘good’ and the ‘bad,’ to still the song of birds and the leaping of fish in the streams, to coat the leaves with a deadly film, and to linger on in soil—all this though the intended target may be only a few weeds or insects. Can anyone believe it is possible to lay down such a barrage of poisons on the surface of the earth without making it unfit for all life? ”

—*Silent Spring*

Within six months of its publication, *Silent Spring* sold nearly half a million copies. Many chemical companies called the book inaccurate and threatened legal action. However, for a majority of Americans, Carson’s book was an early warning about the danger that human activity posed to the environment. Shortly after the book’s publication, President Kennedy established an advisory committee to investigate the situation.

With Rachel Carson’s prodding, the nation slowly began to focus more on environmental issues. Although Carson would not live to see the U.S. government outlaw DDT in 1972, her work helped many Americans realize that their everyday behavior, as well as the nation’s industrial growth, had a damaging effect on the environment. **A**

MAIN IDEA

Analyzing Effects

A What effects did Rachel Carson’s book have on the nation as a whole?

KEY PLAYER



RACHEL CARSON
1907–1964

The marine biologist Rachel Carson was born far from the sea, in the small town of Springdale, Pennsylvania.

Carson was a sickly child who often had to remain at home, where her mother tutored her. Throughout her youth and into her college years, Carson was a studious, but quiet and aloof, person.

Carson entered college intent on becoming a writer. During her sophomore year, she took a biology class to fulfill her science requirement and quickly fell in love with the study of nature. By the next year Carson switched her major from English to zoology—the study of animals.

A flag celebrating the first Earth Day in 1970.

Environmental Concerns in the 1970s

During the 1970s, the administrations of Richard Nixon and Jimmy Carter confronted such environmental issues as conservation, pollution, and the growth of nuclear energy.

THE FIRST EARTH DAY The United States ushered in the 1970s—a decade in which it would actively address its environmental issues—fittingly enough with the first **Earth Day** celebration. On that day, April 22, 1970, nearly every community



in the nation and more than 10,000 schools and 2,000 colleges hosted some type of environmental-awareness activity and spotlighted such problems as pollution, the growth of toxic waste, and the earth's dwindling resources. The Earth Day celebration continues today. Each year on April 22, millions of people around the world gather to heighten public awareness of environmental problems.

THE GOVERNMENT TAKES ACTION Although President Nixon was not considered an **environmentalist**, or someone who takes an active role in the protection of the environment, he recognized the nation's growing concern about the environment. In an effort to "make our peace with nature," President Nixon set out on a course that led to the passage of several landmark measures. In 1970, he consolidated 15 existing federal pollution programs into the **Environmental Protection Agency (EPA)**. The new agency was given the power to set and enforce pollution standards, to conduct environmental research, and to assist state and local governments in pollution control. Today, the EPA remains the federal government's main instrument for dealing with environmental issues.

In 1970 Nixon signed a new Clean Air Act that added several amendments to the Clean Air Act of 1963. The new act gave the government the authority to set air standards. Following the 1970 Clean Air Act, Congress also passed the Endangered Species Act, in addition to laws that limited pesticide use and curbed strip mining—the practice of mining for ore and coal by digging gaping holes in the land. Some 35 environmental laws took effect during the decade, addressing every aspect of conservation and clean-up, from protecting endangered animals to regulating auto emissions. **B**

BALANCING PROGRESS AND CONSERVATION IN ALASKA During the 1970s, the federal government took steps to ensure the continued well-being of Alaska, the largest state in the nation and one of its most ecologically sensitive.

The discovery of oil there in 1968, and the subsequent construction of a massive pipeline to transport it, created many new jobs and greatly increased state revenues. However, the influx of new development also raised concerns about Alaska's wildlife, as well as the rights of its native peoples. In 1971, Nixon signed the Alaska Native Claims Settlement Act, which turned over millions of acres of land to the state's native tribes for conservation and tribal use. In 1978, President Carter enhanced this conservation effort by setting aside an additional 56 million acres in Alaska as national monuments. In 1980, Congress added another 104 million acres as protected areas.

THE DEBATE OVER NUCLEAR ENERGY As the 1970s came to a close, Americans became acutely aware of the dangers that nuclear power plants posed to both humans and the environment. During the 1970s, as America realized the drawbacks to its heavy dependence on foreign oil for energy, nuclear power seemed to many to be an attractive alternative.

Opponents of nuclear energy warned the public against the industry's growth. They contended that nuclear plants, and the wastes they produced, were potentially dangerous to humans and their environment.

THREE MILE ISLAND In the early hours of March 28, 1979, the concerns of nuclear energy opponents were validated. That morning, one of the nuclear reactors at a plant on **Three Mile Island** near Harrisburg, Pennsylvania, malfunctioned. The reactor overheated after its cooling system failed, and fear quickly arose that radiation might escape and spread over the region. Two days later,

Vocabulary
toxic: capable of causing injury or death, especially by chemical means; poisonous

MAIN IDEA

Summarizing

B What were the environmental actions taken during the Nixon administration?

The Trans-Alaska Pipeline, stretching across hundreds of miles of tundra, was completed in 1977.

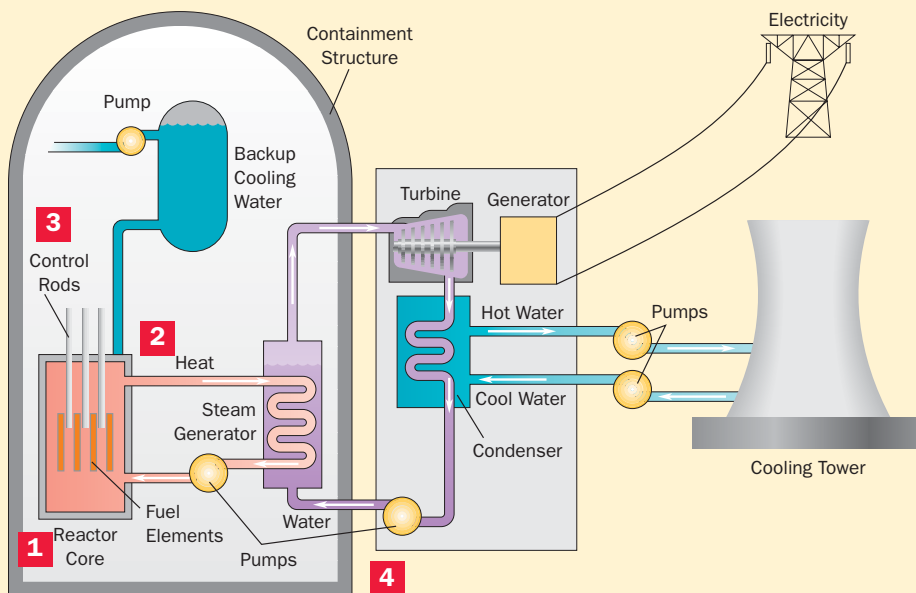


THE ACCIDENT AT THREE MILE ISLAND

A series of human and mechanical errors that caused the partial meltdown of the reactor core brought the Three Mile Island nuclear power plant to the brink of disaster. The accident at Three Mile Island caused widespread concern about nuclear power throughout the American public.

11.8.7 Describe the effects on society and the economy of technological developments since 1945, including the computer revolution, changes in communication, advances in medicine, and improvements in agricultural technology.

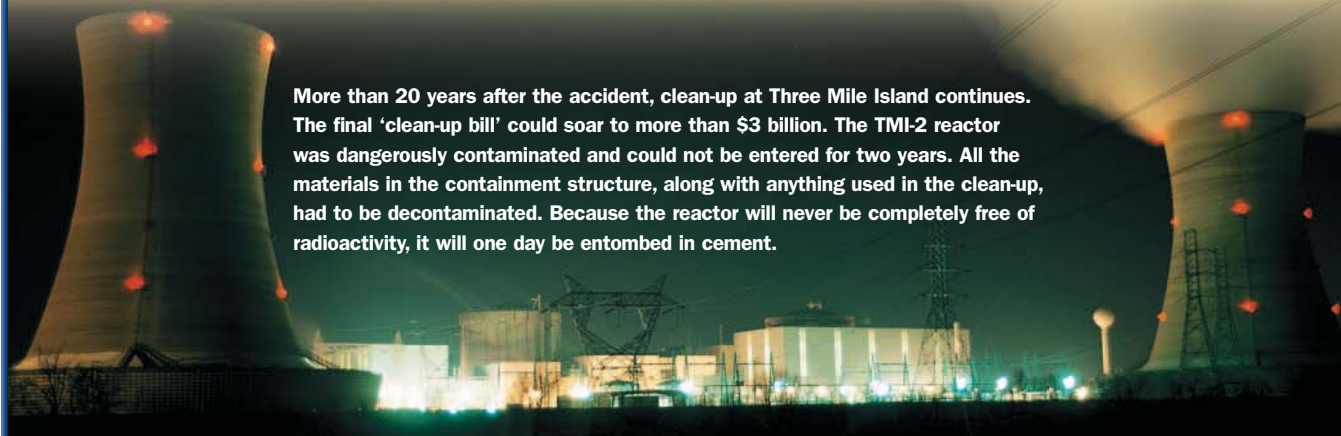
CST 1 Students compare the present with the past, evaluating the consequences of past events and decisions and determining the lessons that were learned.



REACTOR MELTDOWN

- 1** The radioactive reactor core generates heat as its atoms split during a controlled chain reaction.
- 2** An inoperative valve releases thousands of gallons of coolant from the reactor core.
- 3** Half of the 36,816 exposed fuel rods melt in temperatures above five thousand degrees.
- 4** The melted material burns through the lining of the reactor chamber and spills to the floor of the containment structure.

More than 20 years after the accident, clean-up at Three Mile Island continues. The final 'clean-up bill' could soar to more than \$3 billion. The TMI-2 reactor was dangerously contaminated and could not be entered for two years. All the materials in the containment structure, along with anything used in the clean-up, had to be decontaminated. Because the reactor will never be completely free of radioactivity, it will one day be entombed in cement.



low-level radiation actually did escape from the crippled reactor. Officials evacuated some residents, while others fled on their own. One homemaker who lived near the plant recalled her desperate attempt to find safety.

★ A PERSONAL VOICE

“On Friday, a very frightening thing occurred in our area. A state policeman went door-to-door telling residents to stay indoors, close all windows, and turn all air conditioners off. I was alone, as were many other homemakers, and my thoughts were focused on how long I would remain a prisoner in my own home. . . . Suddenly, I was scared, real scared. I decided to get out of there, while I could. I ran to the car not knowing if I should breathe the air or not, and I threw the suitcases in the trunk and was on my way within one hour. If anything dreadful happened, I thought that I’d at least be with my girls. Although it was very hot in the car, I didn’t trust myself to turn the air conditioner on. It felt good as my tense muscles relaxed the farther I drove.”

—an anonymous homemaker quoted in *Accident at Three Mile Island: The Human Dimensions*

In all, more than 100,000 residents were evacuated from the surrounding area. On April 9, the Nuclear Regulatory Commission, the federal agency that monitors the nuclear power industry, announced that the immediate danger was over.

The events at Three Mile Island rekindled the debate over nuclear power. Supporters of nuclear power pointed out that no one had been killed or seriously injured. Opponents countered by saying that chance alone had averted a tragedy.

Background

The U.S. government does not expect to have a permanent burial site for nuclear waste until 2010. A proposed site is beneath the Yucca Mountains in southern Nevada about 100 miles northwest of Las Vegas.

History Through

Film

HOLLYWOOD AND NUCLEAR FEARS

At the end of the 1970s and in the early 1980s, Hollywood responded to Americans’ concerns over nuclear power by making pointed social-awareness films exposing dangers in the nuclear industry. These films alerted the public to the importance of regulations in the relatively new field of atomic energy.

In 1979, *The China Syndrome*, starring Jane Fonda and Jack Lemmon, became the movie everyone was talking about. Only 12 days after the film’s release, a serious accident similar to the one portrayed in the movie occurred at the Three Mile Island nuclear power plant. ▶



◀ In 1983, on her way to meet with a reporter from the *New York Times*, Karen Silkwood, a worker at a nuclear power facility, was hit and died in a car crash. In the film dramatization, *Silkwood* (1983), Meryl Streep played Karen, and Kurt Russell and Cher, her co-workers.

SKILLBUILDER Interpreting Visual Sources

1. Why do you think movies based on real events are popular with the general public?
2. How do you think these films influenced present-day nuclear energy policy?



SEE SKILLBUILDER HANDBOOK, PAGE R23.

MAIN IDEA

Analyzing Effects

C How did the Three Mile Island incident affect the use of nuclear power in America?

They demanded that the government call a halt to the construction of new power plants and gradually shut down existing nuclear facilities.

While the government did not do away with nuclear power, federal officials did recognize nuclear energy's potential danger to both humans and the environment. As a result of the accident at Three Mile Island, the Nuclear Regulatory Commission strengthened its safety standards and improved its inspection procedures. **C**

A Continuing Movement

Although the environmental movement of the 1970s gained popular support, opponents of the movement also made their voices heard. In Tennessee, for example, where a federal dam project was halted because it threatened a species of fish, local developers took out ads asking residents to "tell the government that the size of your wallet is more important than some two-inch-long minnow." When confronted with environmental concerns, one unemployed steelworker spoke for others when he remarked, "Why worry about the long run, when you're out of work right now?"

The environmental movement that blossomed in the 1970s became in the 1980s and 1990s a struggle to balance environmental concerns with jobs and progress. In the years since the first Earth Day, however, environmental issues have gained increasing attention and support.

HISTORICAL

SPOTLIGHT

PRIVATE CONSERVATION GROUPS

As concerns about pollution and the depletion of nonrenewable resources grew, so did membership in private, nonprofit organizations dedicated to the preservation of wilderness and endangered species. Many of these groups lobbied government for protective legislation. Some filed lawsuits to block projects such as road or dam construction or logging that would threaten habitats. The Environmental Defense Fund (today Environmental Defense) brought lawsuits that led to the bans on DDT and on leaded gasoline.

Radical groups also emerged. Members of Greenpeace risked their lives at sea to escort whales and protect them from commercial hunters.

SECTION 4

ASSESSMENT

1. TERMS & NAMES For each term or name, write a sentence explaining its significance.

- Rachel Carson
- environmentalist
- Three Mile Island
- Earth Day
- Environmental Protection Agency (EPA)

MAIN IDEA

2. TAKING NOTES (11.11.5)

Re-create the web below on your paper and fill in events that illustrate the main idea in the center.



CRITICAL THINKING

3. ANALYZING CAUSES (11.8.7)

How much should the United States rely on nuclear power as a source of energy? Explain your view.

Think About:

- the safety of nuclear power
- the alternatives to nuclear power
- U.S. energy demands

4. ANALYZING VISUAL SOURCES (11.11.5)

What message does this 1969 poster from the Environmental Protection Agency give about the government's role in pollution?

