

Appendix M: Water Quality Videos Available From The ACES Media Library

Nature's Way

11 minutes, color, 1989. Water Environment Federation

Narrated by a dinosaur, Nature's Way discusses water pollution and purification and how nature and wastewater treatment plants use natural processes to purify contaminated water. Student booklet and teacher's guide available. Grades 6-12.

H₂O—Saving Water, The Conservation Video

8 minutes, color, 1989. Water Environment Federation

Narrated by a dinosaur, H₂O—Saving Water emphasizes the importance of water conservation and how conservation relates to water cycling, water pollution, and pollution prevention. Student booklet and teacher's guide available. Grades 5-9.

H₂O—The Wastewater Treatment Video

12 minutes, color, 1989. Water Environment Federation

Narrated by a dinosaur, H₂O—Wastewater Treatment describes the water cycle, water movement, water pollution and how the wastewater treatment process works. Student booklet and teacher's guide available. Grades 5-9.

H₂O—The Surface Water Video

9 minutes, color, 1989. Water Environment Federation

Narrated by a dinosaur, H₂O—Surface Water describes the water cycle and how it interacts with surface waters, different types of point and nonpoint source pollution, and what can be done to prevent and clean up polluted water. Student booklet and teacher's guide available. Grades 5-9.

H₂O—The Groundwater Video

9 minutes, color, 1989. Water Environment Federation

Narrated by a dinosaur, H₂O—Groundwater defines groundwater and aquifers, discusses some major sources of groundwater pollution, and stresses the importance of protecting groundwater and methods to eliminate groundwater contamination. Student booklet and teacher's guide available. Grades 5-9.

The Biology Of Water (Lesson 1): Water—A Miraculous Substance

20 minutes, color, 1991. Chariot Productions

Lesson 1 describes the chemical properties of water and its importance to all life processes. It discusses its effects on cells and aquatic life, and the climatic effect of water. Teacher's guide available. Grades 7-12.

The Biology Of Water (Lesson 2): The Ocean Realm

20 minutes, color, 1991. Chariot Productions

Lesson 2 examines saltwater ecology. It describes the ecosystem contained in the ocean and the cycle of food production and consumption. It illustrates examples of different sea organisms and their role in the food chain. Teacher's guide available. Grades 7-12.

The Biology Of Water (Lesson 3): The River of Life

17 minutes, color, 1991. Chariot Productions

Lesson 3 describes the hydrologic cycle in which fresh water is derived from saltwater and stresses the importance of fresh water to life. It examines different sources of pollutants and their effects on the water supply, for example, industrial emissions and acid rain. Teacher's guide available. Grades 7-12.

The Biology Of Water (Lesson 4): Mud And Salt

17 minutes, color, 1991. Chariot Productions

Lesson 4 examines the estuary: an ecosystem consisting of a mixture of fresh and saltwater. Illustrates real examples of different types of estuaries and shows their rich biological diversity. Also stresses their susceptibility to pollutants, for example, Chesapeake Bay. Teacher's guide available. Grades 7-12.

Groundwater And Agricultural Chemicals: Understanding The Issues

17:40 minutes, color, 1988. American Soybean Association and National Corn Growers Association

Narrated by Hugh Downs, this video features farmers, researchers, and environmental experts discussing groundwater issues: how contaminants enter groundwater supplies; how you can take simple, inexpensive steps to assure a safe, uncontaminated water supply for the future.

Acid Rain: The Invisible Threat

20 minutes, color, 1992. Scott Resources

Acid Rain discusses the phenomenon of acid rain by emphasizing 3 basic areas: (1) its causes—fossil fuels and gasoline engine emissions; (2) its effects on the environment—dying forests and fish due to the toxicity of water; and (3) clearing the air—cleaner burning of coal and control of auto emissions. Teacher's guide available. Grades 7-12.

When The River Runs Dry

20 minutes, color, 1990. Freshwater Foundation

This video examines the effects of drought on the Mississippi River, particularly at its source in the state of Minnesota. The video is presented in a simulated TV news-documentary format and stresses the importance of the Mississippi River as a hydrologic system in having wide-ranging effects in such areas as transportation, power, agriculture, etc. Teacher's guide available. Grades 7-12.

What Do You Know About H₂O?

22 minutes, color, 1989. American Water Works Association

Narrated by Frank Field, this video discusses the amount of the world's water available for use as fresh water. It is presented in a question and answer format and quizzes the viewer about our daily use of water and stresses the hazards of pollution and the necessity for conservation. All ages.

Waterhog Haven

10 minutes, color, 1991. American Water Works Association

This is a visual representation of the ways in which we waste water. Presented with amusing characters in a mime format. Audience: young children.

Water: Gift Of Life

50 minutes, color, 1990. The Nature Company

Narrated by Gregory Peck, this video portrays the qualities of water using beautiful scenes from nature and spectacular cinematography. Booklet with colorful photographs available. All ages.

Down The Drain

30 minutes, color, 1991. Children's Television Workshop

A 3-2-1 Contact presentation about water as a valuable resource and the need to conserve it. Highlights the special attributes of water and presents the information in a manner understandable to younger children.

Big Fears, Little Risks

30 minutes, color, 1989. American Council on Science and Health

Narrated by Walter Cronkite, this video examines the effects of synthetic chemicals on the environment and our health. By interviewing leading scientists, this video presents the view that there are actually few risks associated with trace amounts of these chemicals and that risks of cancer and other diseases are attributable to many other lifestyle factors. Grades 8 to adults.

Private Wells: Protecting Your Water Quality

13 minutes, color, 1990. Environmental Management Services

A Central Minnesota Water Quality Project. This video shows the importance of wells and groundwater for water consumption in which they become contaminated. It demonstrates different types of wells, proper placement and construction, and testing for water quality. Grades 8 to adults.

Your Drinking Water: Is It Safe?

40 minutes, color, 1989. Ohio State University and the Ohio Cooperative Extension Service

Directed mainly to owners of private wells, this informative video describes ways in which water may become contaminated by bacteria, nitrates, lead, etc., and how soil types affect groundwater. It instructs the viewer on which tests should be performed for testing water quality, how to properly collect a water sample, where to get it tested, and what to do to handle contamination problems.

Always Pure, Never Runs Dry

17 minutes, color, 1981. National Television News

This video describes the amount of water consumption for various uses, where and how we obtain our water, and proper management of our water supply. All ages

NSF International

15 minutes, color. NSF International

The role of the National Sanitation Foundation in evaluating products for public health, safety, and environmental standards is explained. Adult consumers.

Nitrogen Efficiency: Benefiting The Crop And The Environment

9:07 minutes, color. Dow Elanco and Company

This video explains the use of nitrogen fertilizer and outlines the best management practices to increase nutrient utilization to benefit higher yields and the environment. Directed toward corn production, it promotes "N-Serve," a nitrification inhibitor, to reduce nitrate leaching into the groundwater.

Alabama's Wellhead Protection Program

23 minutes, color, 1991. Alabama Department of Environmental Management and The Geological Survey of Alabama

This video presents the program developed to protect wellheads in Alabama in an attempt to preserve high quality groundwater. The step-by-step actions and procedures that municipalities may follow in developing a local wellhead protection program are covered. Local officials

The Wealth In Wetlands

23 minutes, color, 1991. National Association of Conservation Districts

This video emphasizes the importance of wetlands and the need for their preservation. It includes a series of interviews with five different farmers and their recognition of the value of wetlands. It also illustrates methods to reclaim losses of previous wetland areas.

Clean Water, Clear Choices

15 minutes, color, 1991. National Association of Conservation Districts

This video looks at Nonpoint Source Pollution, which accounts for half of all water pollution. It explains how rainwater runoff carries pollutants to water sources and is a problem in both rural and urban areas. Clean Water, Clear Choices outlines programs, under the auspices of the EPA, underway to help solve nonpoint source pollution.

Gone With The Waste

16:32 minutes, color. Environmental Protection Agency's Department of Solid Waste

Targeted towards the southeastern states, this video looks at the problem of management of solid waste. The EPA recommends 4 steps towards solving this problem: (1) source reduction, (2) recycling, (3) incineration, and (4) landfills.

Running Water: From Rain To River To Ocean

20 minutes, color, 1988. Scott Resources

This video discusses the water cycle and the types of runoff: laminar flow, turbulent flow, jet-shooting flow, and the velocity of flow in these different types. It presents a geologic view of the various forces that shape and form our rivers. Teacher's guide available. Grades 6-12.

Your Septic System: A Guide For Homeowners

11 minutes, color, 1990. Northern Virginia Planning District Commission

This video describes a septic system: the septic tank, the distribution box, and the drain field trenches and the need to routinely pump the system. It lists ways to properly maintain a septic tank system.

Running Water: Erosion, Deposition, And Transportation

20 minutes, color, 1988. Scott Resources

This video illustrates how running water can carry eroded material and the effect of this load, and the composition of the underlying bedrock, on geologic features. It discusses erosion, floodplains, meandering streams, the formation of oxbow lakes and deltas, and the contribution of glaciers towards present-day river formation. Teacher's guide available. Grades 6-12.

Getting Out From Under

19:20 minutes, color, 1991. Lawrence Productions

This video presents underground storage tank alternatives for small towns. It discusses corrosion and leaks, particularly with aging tanks, and their effects on groundwater supplies. It also covers governmental regulations dealing with storage tank removal, replacement, and monitoring for leaks.

The Care And Feeding Of Your Septic Tank

16:13 minutes, color, 1991. Full Spectrum Video

This video discusses the design features for septic systems, a sewage disposal system for suburbs and rural areas—areas which do not have city sewer systems. It discusses the importance of soil evaluation for proper installation and the need to inspect and routinely pump septic tanks for prevention of groundwater contamination.

Drinking Water: Quality On Tap

27:24 minutes, color, 1991. Comet Communications with the League of Women Voter Education Fund

This production defines quality drinking water as: water that is pure enough to sustain life and health with the fewest harmful impurities possible. It discusses sources of fresh water—and potential contaminants of these sources, the treatment and delivery of water, and the importance of groups and individuals to take action to conserve and protect water supplies.

How To Fill And Seal A Well

20 minutes, color, 1991. Wisconsin Department of Natural Resources

This video looks at the importance of aquifers as a source of groundwater. The proper abandonment of wells no longer in use is one method that can help prevent groundwater contamination. Three types of wells: driven, dug, and drilled wells, are illustrated, along with the appropriate methods of filling and sealing each of them when abandoned.

Facing Facts II: Supporting A Growing System

12 minutes, color, 1991. IMC Fertilizer, Inc.

This video examines production agriculture. It discusses goals for yields and using commercial fertilizers efficiently to improve the quality and safety of food products. It also discusses how plants remove nutrients from the soil and how fertilizers help replenish these elements to insure desirable future crop production.

Production Agriculture: Feeding People, Protecting The Environment

15:26 minutes, color, 1991. Potash and Phosphate Institute and Foundation for Agronomic Research

This video discusses the decrease in farms, the increase in population, and the need for farmers to maximize food production. It also covers protecting the environment with proper soil management and judicious use of fertilizer and pesticides while achieving adequate food production.

Water Quality: The Challenge Is Crystal Clear

10 minutes, color, 1990. Extension System—USDA Water Quality Initiative Team

This video explains the focus of the Extension System in its aim to provide educational assistance for one of its national initiatives—water quality. Some of the projects underway in cooperation with the USDA and state cooperative extension programs are covered. The video explains why water is one of the nation's most valuable resources and how the Extension System plays a major role in protecting this resource by providing education, technical assistance, research, and database development.

Land And Water 201

18:57 minutes, color, 1989. Information Services, Division of Agriculture, Forestry and Veterinary Medicine, Mississippi State University

This video introduces Land and Water 201, a cooperative, multi-agency program formed in 1984, with the aim of assisting the people in the 201 counties of the Tennessee Valley region in appropriate soil and water conservation practices. The seven states in the Tennessee valley, the EPA, the USDA, and the TVA work together with the objectives of improving water quality, reducing soil erosion, and increasing farm income. Interviews with farmers, park administrators, etc., in the area are presented, along with practices implemented in conjunction with Land and Water 201, to help solve their particular problems.

Environmental Safeguards In Commercial Fertilizer Operations

21 minutes, color, 1990. University of Arizona, College of Agriculture

Synthetic pesticides and fertilizers have had a tremendous impact on agricultural production. This video, which is presented by the Tennessee Valley Authority's Environmental Program in cooperation with the California Fertilizer Association, is directed towards the commercial fertilizer industry with the intention of demonstrating appropriate design features of a typical fertilizer production facility. Topics discussed include: proper types of storage tanks, suitable loading and spill clean-up facilities, and fire control techniques.

Tennessee Nonpoint Source Pollution

9:20 minutes, color. The Tennessee Conservation League

This video looks at Tennessee's nonpoint source pollution which occurs when rainwater runoff carries pollutants from a variety of sources and which poses a threat to the environment and water quality. The viewer is made aware of the activities that contribute pollutants to the states' waters and the best management practices to prevent undesirable results.

Every Time It Rains (Kentucky Nonpoint Source Pollution)

15 minutes, color. Center for Mathematics, Science and Environmental Education, Western Kentucky University

This video looks at the water cycle and how water moves through watersheds. Focusing on the state of Kentucky, it discusses the many diverse features of watersheds and suggests best management practices for each of Kentucky's watersheds to help reduce possible pollutants.

Low-Pressure Pipe Septic System

10 minutes, color, 1993. University of Tennessee Extension Service.

This video addresses the need for wastewater treatment. It refers to city sewer systems, water contaminants, and the operation of municipal wastewater treatment plants, but most of the discussion is about single-household septic systems. The conventional septic system and the alternative low-pressure pipe system are covered in detail. It also discusses design features, inspection, and maintenance requirements for the alternative system.

Is The Water Safe To Drink? (The Good News About Drinking Water)

30 minutes, color, 1993. American Water Works Association.

Narrated by Linda Benzel, this video covers the primary concerns with drinking water in the U.S. and Canada. Topics discussed include water purity and pollution, water uses and treatment needs, treatment by-products, corrosion products such as lead, risks associated with chemicals and other pollutants, chlorination and disinfectant alternatives, EPA and water utility roles in providing safe drinking water, distribution systems, and individual activities to prevent contamination of drinking water.

Water Quality And Nonpoint Source Pollution

11 minutes, color, 1994. Alabama Cooperative Extension System.

This video details the importance of water and its quality to individuals from all walks of life around the nation and, especially, to Alabama residents. Nonpoint source pollution is explained in great detail. Various sources of nonpoint pollution are discussed with past, present, and future implications and regulations to decrease further pollution. Limited use of animation improves the usefulness of this video for applications with younger audiences. Youth to adult audience.