Educating Young People About Water – Reviewed Curriculum

This data is provided for historical purposes. The information cannot be considered current. (August 2015)

There are 239 curricula listed below.

Curricula Name	Publication Date	Description	Contact Info
4-H Sportfishing Aquatic Resources Education Program (SAREP)	1989/1994	These activities are designed to help "hook" kids with a broader message about aquatic resources and the need to respect and conserve them. They were intended to be used as the basis for 4-H club meetings and activities. Activities published individually in 20 separate booklets include almost everything about fishing from "how to fish" in a variety of settings to "minimizing your intake of fish contaminants." Note explicit commitment to and focus upon affective learning. Binder contains all supplemental materials listed in Activity Booklets. Introductory chapters include teaching/leadership tips.	Cornell CES Cornell University Media Services Ithaca, NY 14850 607-255-2814
4-H Wetland Wonders	unknown	This interdisciplinary curriculum is designed for grades 4 and 5, and focuses on ecosystems in Oregon. It consists of eight units, in sequential order, to develop and reinforce water quality concepts through a combination of field, laboratory and classroom activities. Pre- and post-surveys help the educator evaluate student comprehension. The	Virginia Thompson, Education Specialist Oregon State University-Cooperative Extension 5390 4-H Road, NW

		curriculum is accompanied by a resource trunk available throught the 4-H Center.	Salem, OR 97304 503-371-7920
Acid Rain	1990	This GEMS Teacher's Guide presents detailed lesson plans for 8 class sessions that engage students in a variety of activities that lead to a broad understanding of acid rain. Science concepts of pH, effects of acids on various materials and systems; skills of observation, measurement, data collection, drawing conclusions and synthesis of information are developed. One particular strength of this unit is the empowerment it affords students as they combine personal and social perspectives working to explore alternative solutions. The range of activities--lab experimentation, discussions, reading and writing, simulations and role play, and a game--make the unit applicable to all learning styles. Excellent teacher preparation and background material provided. Science concepts of pH, effects of acids on various materials and systems; skills of observation, measurement, data collection, drawing conclusions and synthesis of information are developed.	Great Explorations in Math & Science Lawrence Hall of Science University of California--Berkeley Berkeley, CA 94720 510-642-7771
Acid Rain - Teacher's Guide, Grades 6-10	1994	No description available.	Great Explorations in Math and Science (GEMS) Program Lawrence Hall of Science University of California

			Berkeley, CA 94720 510-642-7771
Acid Rain: A Student's First Sourcebook	1994	This sourcebook offers students information about acidity and the pH scale; the role of air pollution in acid precipitation and dry deposition; and the effects of acid rain on forests, aquatic habitats, man-made materials and people. It outlines potential solutions, including continued research, alternative energy sources, restoration and conservation. Nine experiments are included which measure pH in a variety of substances and simulate acidic conditions to assess the impact on variety substances. This document has been combined with other materials, updated, expanded and reformatted to cover a broader range of topics. New version is available online at http://www.epa.gov/airmarkets/acidrain/index.html	US Environmental Protection Agency Office of Research and Development Clean Air Markets Division 1200 Pennsylvania Ave., NW Washington, DC 20460 202-343-9620
Acid Rain: A Student's First Sourcebook	1994	No description available.	Public Access Service, EPA Headquarters Ariel Rios Building 1200 Pennsylvania Ave, N.W. (3404T) Washington, DC 20460 202-566-0574
Active Watershed	1993	This material replaces The Pawcatuck Watershed	Southern Rhode Island

Education Curriculum Guide, It's AWEsome! (formerly The Pawcatuck Watershed Curriculum)		Curriculum. This guide takes a thematic approach to teaching about watersheds. Authors address several components of watersheds, including wetland ecology, soils, point and non-point source pollution, and cultural and historical land uses. Text includes pre and post tests for students. Curriculum is well-organized and provides thorough background information for educators. Also includes an Appendix that provides suggestions on how to adapt the program activities to other watersheds.	Conservation District 60 Quaker Lane, Suite 46 Warwick, RI 02886 401-822-8832
Activity Guide for Teachers, An: Everglades National Park	1991	This unit-based, multi-resource guide provides 4-6th grade teachers with the tools to teach about the varied Everglades ecosystem. The curriculum addresses many of South Florida's water issues, e.g., human population growth, water diversion from the Everglades, water quantity regulated to the Everglades, overharvesting of fish and shrimp, and disruption of the estuarian food chain. The five appendices include background information, supplemental classroom materials, songs, vocabulary, bibliograghy, and resource lists.	Everglades National Park 4001 State Road 9336 Homestead, FL 33034 305-242-7700
Adopt-A-Stream	1993	Written for grades 7-10, this curriculum places emphasis on land use within a watershed and less on water quality monitoring; activites encourage youth to apply observational skills when monitoring a stream and rely less on quantitative results from test equipment. Thorough background information for teachers and students. Packet includes the	Friends of Environmental Education Society of Alberta (FEESA) 10150 100th Street, 9th floor

		curriculum notebook plus an angler education program guide, aquatic plant guide, and macroinvertebrate guide and poster.	Edmonton, AB T5J 0P6 403-421-1497
Adopt-A-Stream. Teacher's Handbook	1987	No description available.	Delta Laboratories, Inc. 300 Linden Oaks, Suite 100 Rochester, NY 14625 585-899-1400
Adopt-a-Stream: Teacher's Handbook	1987	Adopt-a-Stream is a program that gives high school students the skills and information they need to "adopt" a waterway. Relying on community cosponsors, students employ field study with follow-up water quality testing and data analysis which culminates in a final presentation on the environmental health of the waterway to the public. The handbook gives detailed explanations of water quality indicators and the procedures for testing them.	Delta Laboratories 410 White Spruce Blvd. Rochester, NY 14625 585-739-8400
Adventures of Wally, the Water Molecule	unknown	A resource to aid in teaching about the chemistry of water. Materials are designed to provide active learning opportunities for grades K - 3. An accompanying video assists instructors in learning to use active learning strategies. Some concepts and vocabulary contained in the learning activities may be too abstract for young children (e.g, volume, mass	Chem Kids 25658 Ericson Dr. Moreno Valley, CA 92553

		and density).	
Alabama Water Quality Curriculum	unknown	This online resource, specific to the state of Alabama, has sections for upper elementary, middle- and high-school study. Units include background information, student fact sheets, worksheets, and activities, The material includes 18 Alabama Cooperative Extension System Fact Sheets on specific environmental issues. It was developed for nonformal group study, such as 4-H clubs, or enrichment material for regular classroom use.	Alabama Cooperative Extension System 109-D Duncan Hall Auburn University, AL 36849-5612 334-844-4444
All the Rivers Run	1997	Using a watershed approach, this curriculum guide is designed to create a holistic, theme-based on-site experience for a four-day residential program. The curriculum combines art, science, multiculturalism, global connection, and environmental responsibility in an artistically presented format.	Cuyahoga Valley Environmental Education Center 3765 Oak Hill Road Peninsula, OH 44264
Always a River: Supplemental Environmental Ed Curriculum on the Ohio River & Water	unknown	This curriculum includes four primary objectives: to demonstrate that the Ohio River is part of a total ecosystem; to introduce the science of water and its importance to living things; to explore human use and environmental impacts of human activity; and to examine the influence of the river on historical and modern culture. The "Careers on the River" activity is unique_authors suggest holding a "career day." Includes appendices on making aquaria, guidelines for interviewing people, and field ethics.	EPA Office of Research and Development 26 West Martin Luther King Drive Cincinnati, OH 45268 513-569-7562

Aquatic Ecosystems	1996	Aquatic Ecosystems is one of the middle school units of the K-12 Adopt-A-Watershed curriculum. This hands-on unit contains classroom study with extensive fieldwork to observe, define and monitor a wetland ecosystem. At the onset, the group develops class and individual rubrics for unit assessment. Ecosystem mapping guides students to identify components of an ecosystem as well as conceptualize relatedness among components through feedback loops. A class water quality improvement activity, either public education or a restoration project involves students with the community and its resources. Students graphically represent their observations in a variety of media throughout the unit. A Watershed Art Show featuring this visual snapshot of their study is the culmination of the unit.	Adopt-A-Watershed P.O. Box 1850 Hayfork, CA 96041 530-628-5334
Aquatic Environment Education: School Enrichment	1992	Primarily a guide rather than a curriculum. These materials support a university extension program. In addition to the curriculum guide, the program includes videos, an aquarium stocked with fish, and 12 fact sheets to support a fish culrure project. The program strategy offers a unique opportunity to connect youth with actual experience with a natural resource professional. Video content was not reviewed. Materials can be used independent of videos, but will require teachers to develop their own activities.	Langston University, Cooperative Extension Program P.O.Box 730 Langston, OK 73050 405-466-3836
Aquatic Habitats:	1998	Aquatic Habitats uses an inquiry-based approach to	GEMS: Great

Exploring Desktop Ponds		guide 2nd to 6th grade students to discover and understand the concepts of habitat, food webs, life cycles, adaptation, decomposition, interdependence, animal structures and behavior, biological control and environmental characteristics. Each idea develops as small groups of students assemble a desktop pond and introduce new biological elements, observe and make predictions. A culminating field trip to a pond includes field activities that deepen students' understanding; in-class investigations are offered as an alternative to the field experience.	Explorations in Math and Science Lawrence Hall of Science University of California at Berkeley Berkeley, CA 94720-5200 510-642-7771
Aquatic Wild	1992	This curriculum supplements Project WILD, an inter-disciplinary, supplementary environmental and conservation education program emphasizing wildlife. Activities in this guide emphasize water habitats that support wildlife. Research data links use of Aquatic Wild activities with learning outcome. Instructors must complete a training program in order to receive materials. Each activity is summarized according to student age, subjects, skills, duration, group size, setting, conceptual framework reference, and key vocabulary. The Background section addresses the main concepts to conduct the activity. Materials include suggestions for aquatic extensions of existing Project Wild instructional activities. Exceptional appendix materials, including: extensions to existing Project WILD activities, use of outdoors as a classroom, conceptual framework as a	Project Wild 5430 Grosvenor Lane Bethesda, MD 20814 301-493-5447

		basis for activities, activities cross referenced by grade, subject, skills & topic, activity length, indoor and outdoor activities	
Arid Lands, Sacred Waters	1992	Arid Lands, Sacred Waters is designed to augment the concepts presented in the New Mexico Museum of Natural History's exhibit on the importance of water; selected activities can also be used or adapted to other regions. Topics addressed include the hydrologic cycle; groundwater and surface water interactions; components and interrelationships within a riparian food web; importance of water quantity and quality to plants and animals; water treatment; household water cosumptions; influence of water availability on the location of different people in New Mexico from ancient times onward; and decision-making concerning water-related environmental and cultural issues. Arid Lands, Sacred Waters is one of the few curricula to address population growth as it relates to water consumption and the quantity of water available for human use now and in the future. Each activity includes an objective, time frame, grade level, materials list, directions, and brief background information. Additional resources are required in order to complete some of the activities. The curriculum is also available in Spanish.	New Mexico Museum of Natural History & Science 1801 Mountain Road NW Albuquerque, NM 87104-1375
Arkansas 4-H Aquatics. Lessons in	unknown	No description available.	C.A. Vines Arkansas 4-H Center

Water Quality			1 Four-H Way Little Rock, AR 72223 501-821-4444
Arkansas 4-H Aquatics: Lessons in Water Quality	unknown	Ten activities for three levels of 4-H involvement are collected in this curriculum. Designed for small group club activities, they focus on the science of water and water use, without addressing environmental education goals.	Cooperative Extension Service University of Arkansas 2301 South University Avenue Little Rock, AR 72204 501-671-2000
Be Water Wise	1988	The goals of this curriculum includes: helping users understand that water plays a critical role in our daily lives; understanding why water should be used wisely; and making users more conscientious about conserving water. Materials include a student activity book for ages 12 and above in addition to the instructor's guide. The resource was designed for flexibility either as a school supplement or as a resource for other groups interested in water conservation.	Virginia Water Resources Research Center 617 N. Main St., VA Tech Blacksburg, VA 24060-0444 703-231-8036
Captain Hydro and the Further Adventures of Capitan Hydro	unknown	Designed as a comic book for middle school students, Captain Hydro covers the water cycle-natural and built, water use, and water conservation and management. The Further Adventures of Captain	Innovative Communications Publications Information

		Hydro=, for grades 8-10, concentrates on world history and geography. Field experiences are provided as "homework". Two simulation exercises in Captain Hydro help develop community problem solving skills.	P.O. Box 24055 Oakland, CA 94623 510-944-0923
Caring for Our Lakes: A Curriculum on the Yahara Watershed	1990	A local resource that demonstrates how a curriculum can be designed to further educational goals about a local water resource, lakes. Yet, includes aspects that are applicable to any community with small lakes in its watershed. Goals for students to achieve include: understanding lakes as part of a larger ecosystem; ability to identify problems and issues concerning the Yahara lakes; familiarity with geography of the watershed; and recognition of human activities related to lake problems.	UW-Madison Water Resources Management Institute for Environmental Studies 550 N. Park Street, 15 Science Hall Madison, WI 53706 608-263-3064
Caring for Planet Earth	unknown	The six lessons in this packet focus on waste, water, air and energy. Developed at Oklahoma State University in conjunction with the EPA for the 4-H Youth Development Department, it serves as a school enrichment program.	Oklahoma Cooperative Extension Service State 4-H Office 205 Poultry Science Stillwater, OK 74078 405-744-5394
Caring for Planet Earth	unknown	No description available.	Oklahoma Cooperative Extension Service 139 Agriculture Hall Oklahoma State University

			Stillwater,, OK 74078 405-744-5398
Children's Festival Outreach Packet	1992	Designed to prepare 4-6th graders for the annual Nebraska Children's Groundwater Festival. Activities were adapted from other curricula and put into a framework suitable for Nebraska water education needs. Includes activities which emphasize the human effects on water resources, both above and below ground. On their own, these materials do not provide for a road understanding of groundwater; supplementary activities are necessary. Packet includes: "groundwater basics," an instructional packet and 2 video supplements which provide additional activities. Source of video tapes is not specified in packet. Viewing video tapes is not an essential precursor to the supplemental activities.	Nebraska Groundwater Foundation P.O. Box 22558 Lincoln, NE 68542-2558 402-434-2740
Child's Place in the Environment:Caring for Aquatic Systems, A	1997	A Child's Place in the Environment: Caring for Aquatic Ecosystems is an interdisciplinary, thematic curriculum requiring students to construct knowledge. Produced by the California Department of Education, the units are conceptually correlated to the Science Framework for California Public School: although materials are applicable in other areas of the country as well. 'Caring for Aquatic Ecosystems' is one module in the grade 1-6 series, A Child's Place in the Environment. The module is organized around four concepts: 1)water cycles through living and	California Department of Education Bureau of Publications, Sales Unit P.O. Box 271 Sacramento , CA 95812-0271 916-445-1260

		nonliving things; 2)water is essential to all living things; 3)the ways people acquire and use water affect living things, and; 4)people can choose to conserve water, maintain or improve its quality, and protect specific bodies of water. Numerous literature selections -not included in the evaluation- illustrate and link together the core concepts. Working in groups, students investigate the purification of water through evaporation in the water cycle; observe capillary action in a plant; interpret California maps and identify natural and built water systems, determine ways water can be conserved, and; critically analyze advertising brochures from environmental organizations.	
Cleaning Water	1996	Cleaning Water is part of the Foundations and Challenges to Encourage Technology-based Science (FACETS) program. Divided into 8 modules each for grades 6-8, Cleaning Water is a 3-week module divided into 6 activities for grade 7. In this module, students study the issue of clean drinking water from the standpoint of the home filter market. Activities include identification of contaminants in home water systems; investigation of the sources(s) of contamination through topographic map analysis; water quality testing, and; experimentation with contamination removal throught the use of different filtering devices. The module concludes as students design, build, and test a home water filter; each	Kendall/Hunt Publishing Company 4050 Westmark Drive P.O.Box 1840 Dubuque, IA 52004 800-722-9165

		group then creates a marketing plan for each other's filters.	
Clear Water, Streams & Fish:A Holistic View of Watersheds	unknown	Both curricula are written to help elementary (grades 6-9) and secondary (grades 9-12) youth understand watersheds, the effects of human activities within watersheds, the effects of human activities within watersheds, and how to minimize those effects. Week-long, interdisciplinary lesson plans focus on fish life focus on fich life cycles and habitat, stream dynamics, natural and human activities. Youth are then exposed to various controversies and issues that occur in the Pacific Northwest such as private and commercial fishing, Indian Treaty Rights, development and logging. The "Solutions" unit suggests ways to address problems within the watershed.	Washington State Office of Environmental Education 17011 Meridian Avenue,North, Room 16 Seattle, WA 98144 206-542-7671
Coastal Georgia Adopt-a-Wetland Curr. Guide for Grades 3-12	2007	The twenty lessons in this curriculum cover attributes of watersheds, estuaries and wetlands, impacts of natural and human activity on them, orienteering and geocaching. Activities include data collection and classification. The unit concludes with a Role Play for Wetland Resources. Also included are Fact Sheets on Invasive Species, Native Species, and Habitats, Processes & Legislation.	University of Georgia Marine Extension Service 20 Ocean Science Circle Savannah, GA 31411-110 912-598-2348
Coastal Issues: A Wave of Concern	1991	Activities written for high school students focus on decision- making skills as they relate to coastal	Sea Grant Extension Program

		development, recreation, tourism, and aesthetic concerns. Case studies represent real coastal community issues.	University of New Hampshire, Kingman Farm Durham, NH 03824 603-749-1565
Comprehensive Water Education Book (formerly Water Education), The	1985/1994	Activities for school setting seek to develop water literacy through active learning. Activities stress comprehension of water concepts, development of attitudes about water issues, and skills to solve water issue problems. Concepts/vocabulary may be difficult for K-6 graders (eg, porosity, saturation, volume, density).	International Office for Water Education UMC 82 Utah Water Research Laboratory Logan, UT 84322 800-922-4693
Comprehensive Water Education Book (K-6), The	1994	Activities for school setting seek to develop water literacy through active learning. Activities stress comprehension of water concepts, development of attitudes about water issues, and skills to solve water issue problems. Concepts/vocabulary may be difficult for K-6 graders (eg, porosity, saturation, volume, density).	International Office for Water Education UMC 82 Utah Water Research Laboratory Logan, UT 84322 800-922-4693
Connections to the Sea, A 4-H Guide to Marine Education	1990	Materials focus on ocean ecology, hydrology, and pollution sources through student field investigations. Unique activities cover mapping and map reading, and environmental sensitivity. An	University of Maine Cooperative Extension, Room 105 5741 Libby Hall

		extensive "related activities" section includes activities for the visual arts, sea food, impact of the ocean on people's lives, environmental issues, and plant collections. Also includes a small field guide to Maine Atlantic organisms in the booklet. Materials do not specify an age, but appear to be designed for middle school through high school youth.	Orono, MA 04469-5741 800-287-0274
Cool Classroom	unknown	The Cool Classroom is a series of Internet-based instructional modules that link middle and high school classrooms with active research investigations at the Rutgers Marine and Coastal Services COOLroom, a collaboration of oceanographers studying the coastal ocean. Five interdisciplinary projects, as well as two physics projects, a biology project, and an earth science project use real-time or near real-time data to support learning the science concepts.	Rutgers Institute Marine and Coastal Sciences 71 Dudley Road New Brunswick, NJ 08901 732-932-6555
Creek Watchers: Exploring the Worlds of Creeks and Streams	1993	This curriculum is one in a series of five by the California Aquatic Science Education Consortium (CASEC). Creek Watchers aims to encourage youth groups and leaders to explore creek and stream ecosystems. Youth get hands-on experience with stream habitat, inhabitants, and the effects from surrounding land use within a watershed. Activities are designed to help youth apply basic science concepts such as observing, comparing, inferring, and analyzing. Students receive "Task Cards" and "Lab Notebook" sheets to record their findings.	CASEC California Aquatic Science Education Consortium (DRAFT) Graduate School of Education University of California Santa Barbara, CA 93106 805-893-2739

		Authors provide ideas for stream action projects and list local California resources to contact for those projects.	
Curriculum Act. Guide to Wtr Polln & Env. Studies	1972	This two-volume guide offers cooperative, hands-on water quality investigations in four general themes: the hydrologic cycle, human activities, ecological perspectives, and social & political factors. Volume I presents lesson plans with suggestions for basic and advanced study. Volune II provides detailed appendices to facilitate performance and interpretations of the activities, along with reference materials, glossary and safety considerations.	Institute for Environmental Education 18554 Haskins Road Chagrin Falls, OH 44023-1823
Curriculum Act. Guide to Wtr Pollution & Env. Studies, A.	unknown	No description available.	US EPA Region 1 OPPT Of. of Prevention, Pestic. & Toxic Substances Boston, MA 888-372-7341
Curriculum Guide for Wetland Education, A	unknown	This K-8 curriculum guide was produced for school districts of Oswego County, NY. It consists of concepts related to ecology, plant and animal life in wetlands and an overview of conservation policies for the classroom teacher. Wetlands of Oswego County are identified and catagorized for field study sites. Fifteen hands-on activities (some drawn from	Centers for Nature Education, Inc. P.O. Box 133 4007 Bishop Hill Road Marcellus, NY 13108 315-673-1350

		other programs or publications) and nine lesson plans are the instructional materials of the unit. Extensive background information is presented.	
Decision-Making: The Chesapeake Bay	1985	The major goal of this curriculum is for students to identify and analyze conflicting interests, issues, and public policies concerning the Chesapeake Bay. Youth then determine their effects on people and their environment. Instructional time can range from 15 class sessions to an entire semester. Through the 5 educational components (introduction, videotape, simulation, reference source and application) educators may choose to use the materials independently or incorporated into existing instructional units. Instructor training is required.	Maryland Sea Grant Univ. of Maryland 0112 Skinner Hall College Park, MD 20742 301-405-6376
Discover a Watershed: The Everglades	1996	A comprehensive curriculum focusing on the Kissimmee-Lake Okeechobee-Everglades (K-O-E) ecosystem. 'Discover a Watershed: The Everglades' is divided into three sections: 1)The Natural Watershed: Pieces of a Puzzle - a thorough reference section on the natural and human history of the area. Natural history topics include the hydrology, geology, climate, animal and plant species, and communities comprising the K-O-E ecosystem. Discussion of the history of human occupation and change within this unique ecosystem begins with the early Native American groups and continues through the establishment of the Everglades National Park in 1947. 2)The Altered Watershed: Rearranged Pieces -	The Watercourse 201 Culbertson Hall Montana State University Bozeman, MT 59717-0057 406-994-5392

		a discussion of contemporary issues and problems resulting from the cultural and ecological demands/changes placed on the K-O-E ecosystem by a rapidly increasing population. 3)Investigations: Putting the Pieces Together - a collection of fifteen interdisciplinary activities correlated with chapters in the reference section. Designed to fit the needs of diverse educators; in its entirety, the curriculum provides a six-to-eight week course of study on the watershed. Individual activities and reference sections can also stand alone for use by formal and nonformal educators in various disciplines.	
Discover Wetlands	1988	These materials were developed to enhance the ability of the Washington State Department of Ecology in preserving and managing wetlands in Washington. Activities address the definition of a wetland, wetland field studies, wetland functions, and human effects on wetlands. The materials were designed as a unit or integrated into existing curricula. Materials are activity based and applicable to other regions of the country. An interesting aspect of this resource is that it focuses on the idea that both action and inaction affect the outcome of environmental issues.	Washington State Dept. of Ecology Wetlands Section Mail Stop PV-11 Olympia, WA 98504 206-438-7538
Drinking Water Education Program	1988	This document is a manual developed to guide county extension faculty in setting up a drinking water testing and education program. It has been revised and is available under a new title (A Guide to	Central Wisconsin Groundwater Center University of Wisconsin--Stevens

		Organizing a Community Drinking Water Testing and Educational Program) online at http://www.uwsp.edu/cnr/gndwater/info/.	Point College of Natural Resources 800 Reserve Street Stevens Point, WI 54481 715-346-4617
Drinking Water Education Programs: A Guide for Co. Faculty	1988	No description available.	Central Wisconsin Groundwater Center University of Wisconsin-Stevens Point College of Natural Resources, UWEX Stevens Point, WI 54481 715-346-4270
EARTH: The Water Planet	1992	A collection of water activities to encourage problem-solving and critical thinking skills for middle elementary students. Primarily indoors science activities. A "Guide to Activity" and detailed background "Readings" sections provided for each module. Overall curriculum theme is equity and scientific literacy for everyone.	National Science Teachers Association 1742 Connecticut Ave. NW Washington, DC 20009 202-328-5800
Ecological	unknown	This is one of nine units in the Eco-Cit urban	The Chicago Academy

Citizenship (EcoCit). 5th Grade. Precious Water		environmental education program written for grades K-8. "Precious Water" is designed for 5th graders. The multi-disciplinary, action-oriented curriculum involves students, parents, teachers and the community. Topics covered include the water cycle, human inputs, and ways to conserve water resources. Eco-Cit is based on a philosophy of constructivist and cooperative learning for ecological citizenship.	of Sciences 2001 North Clark Street Chicago, IL 60614
Energy, Economics and the Environment: Case Studies and Teaching Activities for Elementary School	1994	Designed to teach elementary students the interrelationships between economics and environmental issues, this unique curriculum provides students with a conceptual framework to help address human-induced environmental problems. Activities center on three areas: knowledge and concepts, effective decision-making skills, and action projects. There are four interdisciplinary teaching units that focus on basic economic principles, and forest, water and energy resources.	Indiana Department of Education, Center for School Improvement and Performance Room 229, State House Indianapolis, IN 46204-2798 317-232-9141
Env. Resource Guide: Nonpoint Source Pollution Prevention	1993	These units provide basic information on the relationships between land use and water quality--specifically nonpoint source water pollution. Four grade ranges address K-12 classrooms. Each level addresses pollution sources; point vs. nonpoint; sediment, nutrient, bacterial and toxic pollution; agricultural, urban, mining, forestry and industrial sources; as well as best management practices.	Air & Waste Management Association One Gateway Center, 3rd Floor 420 Fort Duquesne Blvd.

			Pittsburgh, PA 15222-1435 412-232-3444
Environmental Action, Water Conservation	1998	In 'Environmental Action, Water Conservation,' students use the school environment to investigate and analyze water conservation issues in a cooperative learning environment. Activities progress from a traditional teacher-directed classroom format to a student-directed environment with teacher as facilitator. In this curriculum, students explore the different uses of water and the ways in which it can be conserved; conduct a school water audit; research proposed conservation strategies, and; present recommendations to the school administration or environmental committee. Completion of the curriculum requires eighteen through twenty, 50-55 minute classroom sessions. 'Environmental Action, Water Conservation' is one of six environmental education modules within the E2: Environment & Education program-each designed to stand alone or in conjunction with one another.	Dale Seymour Publications 2725 Sand Hill Road Menlo Park, CA 94025 800-872-1100
Environmental Resource Guide. Grades K-2, 3-5, 9-12	1993	No description available.	Air & Waste Management Association P.O. Box 2961 Pittsburgh, PA 15230

			412-232-3444
Estuary-Net	1996	Estuary-Net focuses on point and non-point source pollution problems in estuaries and watersheds to highlight the value of long-term data collection and analysis, the scientific process and its contributions to problem-solving, and the importance of telecommunications as a valuable networking tool. The curriculum is organized into 3 levels: UNDERSTANDING WATER QUALITY introduces students to watershed variables and processes through hands-on classroom activities; WATER QUALITY MONITORING/DATA COLLECTING leads students to develop and implement a water sampling plan that is then applied to a local stream site; and USING AND IMPROVING MONITORING DATA incorporates development of quality assurance action plans. Throughout the unit, students employ telecommunications networking to collaborate with other agencies and school groups that are also collecting data in their problem-solving activities.	North Carolina National Estaurine Research Reserve 135 Duke Marine Lab Road Beaufort, NC 28516 252-728-2170
Estuary-Net. A Water Quality Monitoring Project	1997	No description available.	North Carolina National Estuarine Research Reserve 135 Duke Marine Lab Road Beaufort, NC 28516

			252-728-2170
Experiencing Water Resources: A Guide to Your River Basin	1992	A teaching package designed for use with 3rd-5th grade classes. It is specially tailored for teaching about the resources and issues in a specific river basin. Materials are provided for both teacher and students.	Washington State University Cooperative Extension Bulletin Office P.O. Box 645912 Pullman, WA 99164-5912 1-800-723-1763
Farming Louisiana's Water. A 4-H Aquaculture Project, Grades 7-9	1994	This student workbook focuses on aquaculture. Written for grades 7 through 9, the principles of aquaculture include: the history of aquaculture; job of fish farmers; aquacultural techniques regarding feeding, controlling predators and unwanted animals; and harvesting, processing and marketing. There are twelve activities for each grade level followed by a project to develop and maintaining an aquarium. Provides educators with extensive background information and instructions.	Louisiana State University Agricultural Center Cooperative Extension Service , LA
Fishy Science. A hands-on approach to learning about fish	1993	Middle school-aged youth learn about buoyancy, osmosis and respiration while studying fish physiology. Activities are classroom-based using an aquarium and goldfish (or other hardy species). Through observation and comparison of fish sensory perception, youth draw connections between human and fish. Youth receive activity sheets that encourage	Ohio State University Extension Columbus, OH 43210 614-292-1868

		investigation skills.	
Flood Teacher's Guide, Videocassette, and Student Edition: Event-Based Science Series	1996	An interdisciplinary module in the Event-Based Science series, 'Flood' tells the story of the Great Flood of 1993 through newspaper articles, video footage and personal interviews. Students study the cause and effects of floods through exploration of stream and river dynamics in 11 activities. Using additional resources and knowledge gained through activity completion, five member teams of students design a new national park along the St. Joe River in Idaho to demonstrate stream system dynamics. Profiles of professionals involved in park design- such as landscape architects, hydrologists, cartographers, geologists, and forest recreation technicians- are included in the curriculum. The module concludes with a presentation of park plans and advertising brochures to the entire class.	Innovative Learning Publications Addison-Wesley Publishing Company 4350 Equity Drive P.O. Box 2649 Columbus, OH 43216 800-848-9500
Florida 4-H Marine Science Program	1990	Curriculum objectives center on how to teach youth to use simple field gear and to understand the relationships between ecosystem components. Materials include: a leader's guide, a member's guide, a project guide, and a project record book. Leader and member guides provide instructions for conducting and evaluating field guides to 6 marine ecosystems. The member's guide provides background material on organisms found in ocean ecosystems. The project guide and record book complement the curriculum and are meant to be	University of Florida Rolfs Hall Gainesville, FL 32611 904-392-3261

		used while visiting an oceanarium. Authors do not specify a target audience, but seem designed for 6th grade and older. Activities are dependent on leader direction.	
Fragile Fringe, The: A Guide for Teaching about Coastal Wetlands	1995	Available on the world wide web, 'The Fragile Fringe' uses activities and background information to provide a framework for the study of coastal wetlands. The curriculum is divided into six modules -each identifying activities for different grade levels: Where Are the Wetlands?; The Mississippi River: Draining a Majority of the United States; Beneficial Functions of the Wetlands; Barrier Islands as Part of and Protection for the Wetlands; Loss of Wetlands: Subsidence; and Wetland Loss: Digging of Canals. Options for student activities include visiting a wetland and collecting plant specimens; constructing a model watershed; simulating predator/prey dynamics; investigating run-off, and; demonstrating subsidence.	U.S. Geological Survey, National Wetlands Research Center 700 Cajundome Blvd Lafayette, LA 70506 337-266-8500
Freshwater Guardians: Defending Our Precious Supply Freshwater Guardians: Defending Our Precious Supply	1991	Developed for 10-15 year olds, this CASEC guide is one of five in a series. Activities help youth understand the sources and effects of freshwater pollution. "Task Cards" and "Lab Notebook" sheets are provided for students to record their results. The overall activity objective is that students learn science by doing. (Spanish version available) Students are encouraged to make predictions and explore alternate perpectives to addressing	California Aquatic Science Education Consortium (CASEC) Graduate School of Education University of California Santa Barbara, CA 93106

		problems, issues and questions.	805-893-2739
From Ridges to Rivers: Watershed Explorations	1999	No description available.	San Luis Obispo County 4-H Youth Development Program 4-H Center University of California-Davis,University of California-Davis Davis, CA 95616-8599 916-752-8824
From Ridges to Rivers: Watershed Explorations	1993	Written for youth, ages 9-12, this curriculum begins with the overall watershed concept by helping students develop a "sense of place" within their watershed. The activities then quickly move to a close-up view of soils. Authors stress the responsibility soils play in capturing and storing water within a watershed. The activities are sequential and primarily written for indoors with some adaptability to the outdoors.	4-H Youth Development Program 2156 Sierra Way, Suite C San Luis Obispo, CA 93401 805-781-5944
From Ridges to Rivers: Watershed Explorations. Stage Two: Ages 12-15	1996	In this guide, adult leaders learn to work with teens, ages 12-15, in non-formal educational settings. There are three goals: to help learners understand their watershed; to develop scientific inquiry and critical thinking skills; and to encourage active, intelligent care of the earth's natural resources. Activities use	Tess Harback & Judy A. Neuhauser 4-H Youth Development Program

		watershed models to encourage hands on learning and to realize conflicting viewpoints on environmental issues.	San Luis Obispo County, CA
Gee-Wow! Adventures in Water Education	1991	This curriculum was developed as part of the Groundwater Education in Michigan (GEM) Program. The goal is to enable teaching of concepts related to water, groundwater, and pollution prevention. It includes 28 activities and a video, It's Found Underground: Groundwater Our Buried Treasure. Lessons may be taught as a unit or used separately to supplement other classroom activities. Includes an index cross-referenced by title, grade, subject area and activity type.	Ecology Center 417 Detroit St. Ann Arbor, MI 48104 313-761-3186
Getting to Know Your Stream. Vols. 1-4	1992, 1993	No description available.	Dane County WaterWatchers Dane County Extension 1 Fen Oak Court, Rm 138 Attn.: Melinda Habecker Madison, WI 53718-8812 608-224-3700
Give Water A Hand. Youth Action Guide and Leader Guide	1995	Youth can make a difference through watershed-based, community action projects. Using the service-learning approach to environmental issues, youth, age 9-14, gain experience to in addressing water-	Environmental Resources Center University of Wisconsin-Madison

		related problems. The Youth Action Guide feature a series of activities that walk youth through investigation, choosing a project, planning for action, taking action and evaluation (65 pages). In the Leader Guide, adults will find tips on skill development, background information for each activity, and how to use experts as project collaborators (33 pages).	216 Agricultural Hall 1450 Linden Drive Madison, WI 53706 800-WATER20
Great Lakes In My World, The	unknown	Activities are designed to increase awareness and appreciation for the Great Lakes by including them in regular curriculum units for all disciplines. Activities cover cultural issues, current management concerns, and natural processes. Manual includes an index listing appropriate grade and subject area in which to include Great Lakes material.	Lake Michigan Federation 59 E. Van Buren, Suite 2215 Chicago, IL 60605 312-939-0838
GREAT-Groundwater Resources and Educational Activities for Teaching	1989	Material is arranged in six units with the first one covering the basics of groundwater and hydrogeology in Iowa. The other five units cover Iowa's groundwater issues in priority as agreed upon by Iowa groundwater interest groups. The priorities are: fertilizers and pesticides, abandoned waste sites and landfills, leaking underground storage tanks and hazardous materials management, point source groundwater pollution, and land-applied wastes and sewage treatment. Curriculum should be accompanied by a set of six groundwater posters and a one-foot plexiglass groundwater model which costs	Conservation Education Center R.R. 1, Box 53 Guthrie Center, IA 50115 515-747-8383

		extra.	
Ground Water Education for Secondary Students	unknown	A booklet containing background information and activities designed to teach students about aquifers, and the interrelationship between ground and surface waters. The importance of water conservation, pollution prevention, and water resource management issues are also addressed. The curriculum incorporates lectures, laboratory activities, games, demonstrations, and assessment activities.	Water Education Foundation 717 K. Street, Suite 517 Sacramento, CA 95814 916-444-6240
Groundwater Adventure, The	1989	This curriculum is part of the Water Environment Federation's package designed to educate the public about important water quality issues. Topic materials are provided in a "building block" approach to allow flexibility in fitting the materials into an existing school curriculum. Each set includes a video and student activity guide. Activities in this set address how to clean up groundwater contamination in more detail than other curricula.	Water Environment Federation (formerly WPCF) Public Education Dept. 601 Wythe St. Alexandria, VA 22314-1994 703-684-2400
Groundwater Education Program, Parts 1,2 & 3	1984	The purpose of developing these materials was to enhance groundwater quality through implementation of action-oriented groundwater programs at the local level. This is a curriculum designed for use as an in-school science unit, but was developed with the help of a 4-H extension specialist. Contents of this kit are comprehensive, including for each of the 3 parts: a teacher's guide; booklet with	East Michigan Environmental Action Council 21220 W. Fourteen Mile Rd. Birmingham, MI 48010

		information and suggested activities; an Arlegan County 4-H Resources catalog; equipment needed for classroom activities; additional resources including other curricula; fact sheets; and informational tests. Materials need to be adapted for younger end of suggested grade range.	615-632-2101
Groundwater Protection Curriculum Guide and "Groundwater - The Hidden Resource" videotape	1989	Information, video, and activity ideas designed to familiarize students with the source of their drinking water, the management of waste water, how groundwater becomes polluted, and how groundwater pollution can be prevented. Information materials provide in-depth background about Missouri hydrogeology.	Missouri Dept. of Natural Resources Technical Assistance Program P.O. Box 176 Jefferson City, MO 65102 314-751-3131
Groundwater Study Guide-DNR	1991	Resource packet and activity ideas. Activities focus on: the water cycle and hydrogeology, groundwater contamination, water and waste water treatment, water conservation, and groundwater use rights. Written materials may be challenging for 6th graders, the younger end of suggested grade range.	Wisconsin Agency Document Sales Box 7840 202 S Thornton Ave Madison, WI 53707 608-266-3358
Groundwater: A Vital Resource	1986	A series of 23 activities on four topics: the water cycle, water distribution in soils, water quality, and community impacts on groundwater. Each topic includes activities for a range of ages. Strong technical/science orientation. Limited integration	Tennessee Valley Authority Office of Natural Resources and Economic Development

		with daily life of the youth.	Environmental/Energy Education Program Knoxville, TN 37902 615-751-7338
H2O Below: An Activity Guide for Groundwater Study	1997	Developed as part of the Illinois Middle School Groundwater Project, this curriculum focuses on the interdisciplinary study of the geology/hydrology dynamics of groundwater movement and quality. Students observe a groundwater flow model, study the porosity and permeability of different soils, construct a water filtration device, analyze home water use and conservation practices, participate in a decision-making simulation involving a hazardous waste disposal site, and develop a survey instrument to identify -and take action on- a local groundwater issue. Chapters include Water and Why it is Important; How Water Moves Through the Ground; How Water Becomes Polluted, Clean Water Through Filtration; Protecting and Conserving Groundwater; Testing Groundwater; and Groundwater Issues. Activities within each chapter are correlated with Illinois State Goals, in addition to including objectives, background information, materials lists, vocabulaty, procedures, students worksheets, evaluation suggestions, and extensions.	Rivers Project Southern Illinois University Box 2222 Edwardsville, IL 62026-2222
Hands-On Save our Streams-The Save	1994	Written for grades 1-12, the manual uses a watershed concept to teach about land use effects on	Izaak Walton League of America

Our Streams Teachers' Manual for Grades 1-12.		stream quality. Highlights include human activities such as agriculture, mining, commercial/industrial, forestry, and construction. Activities are written for the entire 1st-12th grade audience and left to the educator to adapt to the appropriate age. Combines the SOS monitoring program techniques into field activities. Appendiced include SOS Stream Survey forms, sampling instructions and a useful Volunteer Water Monitoring Bibliography.	Save Our Streams Program 707 Conservation Lane Gaithersburg, MD 20878 800-BUG-IWLA
Health Environment-Healthy Me:Exploring Water Pollution, 4th grade	1991	Part of a series of environmental and occupational health curricula designed to supplement school curricula in grades K-6. The series provides a different topic for each grade. This topic is presented in 15,45-to 60- minute units. Many units focus on wastewater treatment. Describes how water becomes polluted and how to to prevent pollution, but does not emphasize how drinking water is treated before use.	Resource Center of Environmental and Occupational Health Sciences Institute Public Education and Risk Communication Division 681 Frelinghuysen Rd. P.O. Box 1179 Piscataway, NJ 08855-1179 909-932-0110
Hidden Treasure. Instructional Materials for Groundwater Resource Protection, A	1992	Designed as a supplement for the school curriculum, these materials focus on the relationship between agriculture and groundwater. Includes unique sections on "Best Management Practices," groundwater protection in urban settings, managing underground storage tanks and water testing. Students design management plan for proper lawn	National FFA Organization District Services 5632 Mt. Vernon Memorial Hwy Alexandria, VA 22309

		care. Covers both rural and urban issues.	703-360-3600
Hoover Dam. Teacher/Student Learning Packet	unknown	No description available.	Hoover Dam LCD-140 Visitor Services-Education POB 60400 Boulder City, NV 89006
Hoover Dam: Teacher/Student Learning Packet	unknown	This curriculum, developed by the Bureau of Reclamation, strives to meet the goals of the Dept. of the Interior by "helping students understand how the decisions of the past helped shape their lives and future." It is divided into four areas of study: history, wildlife, water resources and hydroelectricity. Each section offers information and suggests activities to address 2 to 5 main concepts. This curriculum narrowly focuses on the Colorado River.	Bureau of Reclamation Lower Colorado Regional Office P.O. Box 61470 Boulder City, NV 89006 702-293-8000
How Well is Your Water? Protecting Your Home Groundwater	1995	Written for grades 7-9, this activity booklet guides independent investigation, assessment, analysis and action on well and groundwater contamination. Activities may be adapted to other regions and suitable for formal, informal and nonformal educational settings.	John Nowatzki Extension Service North Dakota State University Fargo, ND 58105 701-231-7881
Indoor River Book, The	1997	This book is part of the COMMON ROOTS GUIDEBOOKS series. In collaboration with adult facilitators, students build an indoor river system	Kendall/Hunt Publishing Company 4050 Westmark Drive

		modeled on a local river. The design and assembly stage require two school mornings with the assistance of an experience carpenter. A materials list, diagrams, and photographs of completed products are included. Activities included in 'The Indoor River' integrated the sciences, math, social studies, design technology, language and creative arts.	P.O. Box 1840 Dubuque, IA 52004 800-772-9165
Instructor's Guide to Water Education Activities	1986	Intended as a general water curriculum. Materials and activities integrate water science concepts with water use applications and impacts.	Commonwealth of Pennsylvania Dept. of Environmental Resources Water Conservation/Technical Assistance Program P.O.Box 8761 Harrisburg, PA 19105-8761
Investigating Groundwater: The Fruitvale Story	1991	Designed for middle to high school youth, this module closely resembles steps taken in a real water contamination situation, e.g., identify the problem, research, community involvement, decision-making and action. Requires the use of a chemistry kit. Activities build on each other; this curriculum represents one module.	Chemical Education for Public Understanding Lawrence Hall of Science University of California Berkeley, CA 94720 510-642-8718

Investigating Streams and Rivers	1992	Recommended for use with "Field Manual for Water Quality Monitoring" by Mark K. Mitchell and Wm. B. Stapp. However, only activities 4 and 5 require use of manual. Unique in that activities provide a mechanism for learning some fundamentals of political action (e.g., making contacts, group concerns about problem/issue of process, interview and phone skills, developing action plans). Excellent guidance in developing, implementing and evaluating action plan. Activities can be complemented by participation in the Global Rivers Environmental Education Network (GREEN)-sponsored computer conferences. Materials contain suggestions for using computer network to enhance student understanding. Manual includes user evaluation/feedback form.	Global Rivers Education Network 721 E. Huron Street Ann Arbor, MI 48104 313-761-8142
Investigation H2O	1993	A good review of basic principles on water science, the water cycle, groundwater, wetlands, water quality and quantity issues, and water conservation actions for grades 5 and 6. Contains lesson plans, worksheets and activities to complement an accompanying video. Uses examples specific to Georgia.	Cooperative Extension Service The University of Georgia College of Agriculture and Environmental Sciences Athens, GA
Jason XIV: From Shore to Sea	2002	The Jason Project publishes a yearly science expedition linked to actual research by scientists in	Jason Foundation for Education

		the field. Each program combines an inquiry-based print curriculum, video supplement, live telepresence during a 2-week live expedition broadcast and a gated online community of Jason Project participants. The research project associated with From Shore to Sea was completed in the spring of 2002, however a videotape of highlights of the research is available to replace the live telepresence if someone chooses to use the print curriculum as a stand-alone. Online gated community feature would not correspond chronologically to your study if it were taught at a later date. Detailed correlation to state and national standards in science, geography, math, English and technology along with performance-based assessment options for measuring progress make the program usable for a wide audience. From Shore to Sea, the 2002-2003 project, uses California's Channel Islands as a base to explore geologic and cultural history, the management of coastal ecosystems, and natural resources conservation.	11 Second Avenue Needham Heights, MA 02494-2808 781-444-8858
Kids In Creeks: A Creek Exploration and Restoration Program	1993	This program guide, created for grades 3-12 in the San Francisco Bay area, provides teachers with the relevant information to conduct a creek study program. Many options and details have already been explored by authors, e.g., a pre-arranged list of organizations willing to participate in the program, materials in the lending library, and list of creeks in	San Francisco Estuary Institute 180 Richmond Field Station 1301 South 46th Street, #180

		the region that may be easily accessed by classes. There are "Action Projects" at the end of each activity for students to further get involved in their community.	Richmond, CA 94804 510-231-9539
Kids Network - What's in Our Water?	1992	Curriculum package includes Teacher's Guide, Kid's Handbook, Software Manual, and software for Apple IIGS. Computer and modem are required. National Geographic Kids Network is a telecommunications-based science curriculum. The water unit emphasizes watershed studies. It is recommended for students in grades 4_6, but would also interest older students. Some units require relatively sophisticated skills which would seem more appropriate for seventh grade and up. Unit support materials include access to Hot Line staff and a "unit scientist," a professional who communicates to the class via electronic mail. Planned sessions require a minimum 15 hours of class time during a six-week scheduled communications calendar. An unusual perspective of this curriculum is the idea that geographical and cultural qualities can influence water use. Extension activities provide opportunities for community studies and enable high quality experiential learning activities on many of the water topics emphasized in the classroom activities. This is also one of few curriculum to provide background for student understanding risk decisions by providing an activity which evaluates the text and concentration of	National Geographic Society Educational Services PO Box 98018 Washington, DC 20090-8018 800-368-2728

		pollutants.	
Lake Erie: The Great Lakes Project	1994	This K-12 curriculum is one component of the Great Lakes Project--Lake Erie, developed to improve environmental education in the Lake Erie watershed. Activities were contributed by teachers involved in the project as well as drawn from other resources, such as Project WILD and Project Learning Tree. K-6 lessons offer hands-on experience with concepts including habitat, the water cycle, watersheds, plants, soil, food webs, populations and community, and ecosystems. 7-12 curriculum covers limnology, chemistry, topography, and biology as well as a broad examination of environmental action skills.	Glinado Center 6270 East Lake Road Erie, PA 16511-1533 814-899-4584
Land and Water	1995	'Land and Water' is a sequential curriculum consisting of 16 hands-on activities. Working in pairs or cooperative groups, students investigate the interactions between land and water by constructing and operating a simple stream table. During the course of the unit, students explore the components and properties of soils in relationship to soil and water movement; create and label "aerial" maps; investigate the role of ground cover and landscape topography, and; design and build dams. Concepts such as the water cycle, erosion, runoff, deposition, glacier formation and movement, and stream flow dynamics are discussed and/or explored. The curriculum concludes with an embedded assessment as students design and build a model landscape.	Carolina Biological Supply Company 2700 York Road Burlington, NC 27215 800-334-5551

		Numerous activity extensions incorporating other disciplines both expand and diversify the curriculum.	
Leap Into Lakes. The Teacher's Manual for A Hands-on Exhibit About Lakes and Water Quality	1994	This teachers' manual focuses on Wisconsin water features, e.g., glaciers, groundwater, lakes, and wetlands. It accompanies a hands-on exhibit on lakes and water quality issues located at the Madison's Children's Museum. The ten sections cover primarily science activities and include background information and answers to common questions.	Madison Children's Museum 100 State Street Madison, WI 53703 608-256-6445
Learning to be Water Wise & Energy Efficient: An Education Program	1995	Designed for upper elementary and middle school students, the activities help teach water and energy conservation. Students are asked to conduct several activities at home with their families. The complete teaching packet includes the teacher's guide, an orientation video, conservation supply kits, four posters, progress charts and checkup sheets. (Includes an 18-minute video designed for Grades 4-8. The conservation supply kit:a showerhead, aerators, compact fluorescent bulb, etc.)	National Energy Foundation 5225 Wiley Post Way, Suite 170 Salt Lake City, UT 84116 800-722-7778
Learning to Live with Caves and Karst	1994	No description available.	American Cave Conservation Association P.O. Box 409 Attn: Debra Heavers Associate Director Horse Cave, KY 42749 270-786-1466

Learning to Live with Caves and Karst	1994	Nine subjects are addressed in this curriculum guide to caves and karst groundwater resources. Each is covered with background information, narratives and student activities and investigations.	American Cave Conservation Association, Inc. 119 East Main Street Post Office Box 409 Horse Cave, KY 42749 270-786-1466
Liquid Explorations	1986	Written for first through third graders, this activity guide centers on science processes skills: observation, description, comparison, classification, and written and drawn conclusions. There are five activities in all - each with a "modifications for kindergarten." For a quick reference, authors provide a step-by-step, Summary Outline for each activity. The "Hands-on Science in the Classroom" section offers tips to engage the science learning process.	Great Explorations in Math and Science (GEMS) Lawrence Hall of Science University of California Berkeley, CA 94720 510-642-7771
Living in Water: An Aquatic Science Curriculum	1987	Activities focus on a scientific study of water, aquatic environments and the plants and animals that live in water. The curriculum covers both marine and freshwater habitats. The emphasis of the materials is on process rather than content. Unique aspects include answer keys that are provided in language students would likely use, and activities which teach students about describing something they can't see by measuring it and correlating their data. Many appendix materials are provided to facilitate ease of teacher preparation/presentation (over 100 pages).	National Aquarium in Baltimore Dept. of Education and Interpretation Pier 3, 501 E. Pratt St. Baltimore, MD 21202 410-576-3870

Local Watershed Problem Studies - Elementary School Curriculum	1982	A collection of lessons written by teachers with a variety of backgrounds. Lessons vary in degree of detail. Focus is on interface between land use and water pollution. Includes instructions on how to build water testing equipment. Provides many stories and folklore examples to enhance student enjoyment of a particular topic and to support language arts education goals. Offers teaching suggestions for use with both lower and upper elementary age students. The appendix includes suggestions for citizen and government action in controlling non-point source pollution in urban areas and rural areas, and a discussion on role of values in environmental education.	University of Wisconsin Water Resources Center 1975 Willow Dr. Madison, WI 53706 608-262-3577
Local Watershed Problem Studies - Middle and High School	1982	A collection of lessons written by teachers with a variety of backgrounds. Lessons vary in degree of detail. Focus is on interface between land use and water quality. Contains unique attitude survey form. Though developed for Wisconsin, simulation activities could be adapted for other locales. Lessons typically take from several days to several weeks of class meetings. Some units are not directly related to water issues.	University of Wisconsin Water Resources Center 1975 Willow Dr. Madison, WI 53706 608-262-3577
Los Marineros	1994	While providing basic education about marine science, activities focus on the local resource, the Santa Barbara Channel. Units include physical characteristics of the channel, flora and fauna of the channel, human history of the channel, and marine	National Oceanic and Atmospheric Administration Under Secretary for Oceans and

		policy. Materials were developed for a program predominantly reaching low-income minority students who have limited access to special programs. Activities are designed to increase self-esteem and increase career awareness. Materials include an interesting "invitation" activity that encourages development of group identity and arouses student excitement. Activities provide a good interface between school and nonformal settings. Appendices include suggestions for marine careers, marine educational resources, teaching sheltered English, and starting a marine education program. Materials include extensive material on marine flora and fauna.	Atmosphere, Rm. 5128 14th & Constitution Washington, DC 20230 202-482-3436
Mapping Fish Habitats. Teacher's Guide. Grades 6-10	1992	Written for grades 6-10, students design an aquarium to draw conclusions using basic scientific concepts: predicting, observing, recording, experimenting, analyzing and interpreting. Students also learn fundamental ecological concepts such as ecosystem, habitat, home range, and territory. Through daily observations and experiments, students draw conclusions about fish in their natural environment. Experiments include changing one component of fish habitat and mapping the fish's behavior based on the change.	Great Explorations in Math and Science (GEMS) Lawrence Hall of Science University of California Berkeley, CA 94720 510-642-7771
My World, My Water and Me! A Teachers Guide to	unknown	Curriculum emphasizes how water gets polluted and the impacts of pollutants on living things. It uses the arts extensively to convey human uses and impacts.	Association of Environmental Authority

Water Pollution Control		Activity directions do not always make the connection between the specific activity and the overall objective of the curriculum. However, background information is supplied to enable the teacher to make the connections. Extension activities sometimes have a significant role in developing understanding for a particular concept. Materials use a unique strategy to tie all the activity concepts together. Students write a story, in sections, as the unit proceeds. The teacher or leader provides the story outline, a trip through the waste water system by students shrunk to one one-thousandth of their size. The students provide details and adventures for each step. Materials do not indicate which activities relate to which part of the story. Teachers will need to select activities most relevant to the aspects of the water pollution story they wish to emphasize.	2333 Whitehorse-Mercerville Rd,#4 Mercerville, NJ 08619
Nature of Water Power, The	1995	The Nature of Water Power is an curriculum for middle grades, guiding students to explore the scientific and social links between hydroelectric power and the environment. Developed by the Foundation for Water and Energy Education, it is intended for use in the northwestern United States. Through the study of properties of water, the water cycle, the physics of moving water, and electricity generation, students gain skills to explore the environmental impact of damming rivers for power production and to compare costs and benefits of	Foundation for Water and Energy Education 2206 South Sherman Street Spokane, WA 99203 509-535-7084

		hydropower to other energy sources. Activities utilize teamwork and employ journaling and other assessment techniques.	
Naturescope: Diving Into Oceans	1989	Instruction in these materials is provided in a unique layout that, in several cases, could be used independently by the student. Activity descriptions are clearly explained and illustrated. Topics include the physical ocean, life in the ocean, life along the coastline, and human impacts. Each topic includes an activity for primary, intermediate, and advanced age ranges. Activities are not dependent on each other. Materials include some beautiful drawings of sea life. Excellent supplementary resource list.	National Wildlife Federation 1400 16th Street NW Washington, DC 20036-2266 800-822-9919
Naturescope: Wading Into Wetlands	1989	Instruction in these materials is provided in a unique layout that, in several cases, could be used independently by the student. Activity explanations are clearly explained and illustrated. Topics include: what makes a wetland, saltwater wetlands, freshwater wetlands, wetlands and people. Each topic includes an activity for primary, intermediate, and advanced age ranges. Activities are not dependent on each other. Excellent supplementary resource list.	National Wildlife Federation 1400 16th Street NW Washignton, DC 20036-2266 800-822-9919
New Jersey 4-H Marine science Project. Leaders Guide	1989	Set in a club or in the classroom, this leaders' guide helps teach about the New Jersey marine environment. It is divided into five sections: habitats, organisms, career exploration, community	Betty Jean Jesuncosky New Jersey Marine Sciences Consortium

		involvement, and general. Each section consists of a set of activities. Construction of an aquarium is one of the main projects. An annotated bibliography of additional resources is included. Also includes pre- and post-evaluation tests for learners.	,
North Dakota State University Extension Service - Water Activities Packet	1988	Youth activities are provided in a fact sheet format which provides background information and related activities on single water topics. Units include Water is Important, Water Conservation, What is Water? Instructor materials provide more information about the topic and further studies ideas. Activities are provided as illustrations or examples of discussion topics.	ND State Univ. Extension Service Fargo, ND 58105 701-231-8118
Oklahoma Aqua Time Teacher's Guide	unknown	No description available.	Oklahoma Cooperative Extension Service; OSU 4-H and Youth Development Programs 205 Poultry Building Oklahoma State University Stillwater, OK 74078-0330
Oklahoma Aqua Times	unknown	A 4-H project, this unit utilizes three components to further water conservation--a teacher's guide with activities, 4- to 8-page student newspapers (one for each of five units), and a video of young reporters interviewing water resources professionals. Topics	Oklahoma Cooperative Extension Service 4-H & Youth Development Programs Oklahoma State

		include the hydrologic cycle, groundwater, water use, pollution and conservation. A culminating project is a student-produced newspaper communicating conservation concepts gained.	University 205 Poultry Building Stillwater, OK 74078-0330 405-744-5653
Operation Water Drop	unknown	This online resource for the study of drinking water quality "encourages students to develop critical thinking skills which will empower them to become actively involved in issues such as ensuring safe drinking water within their community, and on a global scale." Elementary teachers demonstrate tests on their community drinking water for alkalinity, color, chlorine, hetrotropic plate count, pH, ammonium and sulfate. High school students work in small groups to perform the above tests and also test for manganese, iron, nitrates, residual chlorine, total hardness and arsenic. Local water supply is compared to urban, rural and untreated water; and also with Canadian, US and European drinking water guidelines.	Safe Drinking Water Foundation 912 Idylwyld Drive Saskatoon, SK S7L 0Z6 306-934-0389
Operation Water Flow	unknown	Operation Water Flow gives teachers lessons in math, chemistry, biology, social studies and science in order to give students a more thorough understanding of issues surrounding drinking water, such as establishing the true cost of water, the social responsibilities of providing safe drinking water, the need for regulation, and the need for water conservation and source protection.	Safe Drinking Water Foundation 912 Idylwyld Drive Saskatoon, SK S7L 0Z6 306-934-0389

Oregon Children's Groundwater Festival: 1996 Teachers' Guide	1996	Authors suggest conducting activities in this guide before visiting the Oregon Children's Groundwater Festival, and as a follow-up to reinforce concepts. It is adaptable to all grade levels. The focus is interdisciplinary, but with a strong emphasis on science of water principles, through activities that use models and experiments. Other topics addressed include the hydrological cycle, and water quality and quantity issues.	Portland State University Center for Science Education P.O. Box 751 Portland, OR 97207-0751 503-725-8288
Our Great Lakes Connection	1985	These materials were designed to enable the teacher to integrate activities about the Great Lakes into a regular classroom program. Ideas for the activities were provided by teachers and Great Lakes specialists. Materials emphasize use and development of a variety of learning skills. Activities focus on the historical/cultural role of Great Lakes in people's lives. History, geography and economics form the basis of the content, but materials include some emphasis on pollution impacts and lake effects on weather and climate.	UW-Extension Environmental Resources Center 216 Agriculture Hall, 1450 Linden Dr. UW-Madison Madison, WI 53706 608-262-0020
Our Groundwater	1992	One of 3 packets designed as a supplement to the classroom. The others are "Our Surface Water" and "The Water Around Us." Uses demonstrations to convey four main ideas about groundwater.	CTR: Publications Agricultural Engineering Building University of Vermont Burlington, VT 05405-0004 802-656-3258

Our Surface Water	1992	One of 3 packets designed as a supplement to the classroom. The others are "Our Groundwater" and "The Water Around Us". Provides directions for a pond and a stream field trip and instructions on how to conduct a water quality survey.	CTR: Publications Agricultural Engineering Building University of Vermont Burlington, VT 05405-0004 802-656-3258
Paddle-to-the-Sea: Supplemental Curriculum Activities (Holling Clancy Holling's Paddle-to-the-Sea)	1991	Developed for use in 3-6th grades, this interdisciplinary curriculum is designed to reinforce the concepts introduced in the story, Paddle-to-the-Sea. Activities center around topics pertinent to the Great Lakes region such as surrounding land use, historical uses of the Lakes, and ecology of the Great Lakes. Most activities are pencil/paper and seatwork-oriented.	Ohio Sea Grant College Program Ohio State University 1314 Kinnear Rd. Columbus, OH 43212-1194 614-292-8949
Pawcatuck Watershed Curriculum, The	1993	This guide takes a thematic approach to teaching about watersheds. Authors address several components of watersheds, including wetland ecology, soils, point and non-point source pollution, and cultural and historical land uses. Text includes pre and post tests for students. Curriculum is well-organized and provides thorough background information for educators. Also includes an Appendix that provides suggestions on how to adapt the program activities to other watersheds.	Southern Rhode Island Conservation District 60 Quaker Lane, Suite 46 Warwick, RI 02886 401-822-8832
Physical	1995	This descriptive curriculum presents activities	Project Earth Science

Oceanography		designed for Earth Science teachers for middle school-aged youth. Activities center around three key concepts: the investigation of water and its properties; the forces that affect water's movement on the earth; and the human impact on the ocean; with emphasis on the physical and chemical properties of water, and little on ecology and environmental concepts and issues. Each activity has a student's section and a teacher's guide with background information, procedure and questions. A set of readings follow each activity that used to enhance teacher preparation, or as further resources for students.	National Science Teachers Association 1840 Wilson Blvd. Arlington, VA 22201-3000
Plastic Eliminators: Protecting California Shorelines	unknown	One in a series of five, this activity guide aims at increasing awareness of plastic marine debris in 10-15 year old youth. The first portion of the guide focuses on awareness, while the remaining activities deal with taking action in the youth's community. Activities culminate into an Adopt-A-Beach and Cleanup, but after youth have learned how plastics can effect marine animal life and actions youth can do to reduce plastic consumption.	California Aquatic Science Education Consortium Graduate School of Education University of California Santa Barbara, CA 93106 805-893-2739
Pondwater Tour, The	1994	Students are encouraged to practice science investigation skills, i.e., discover, examine, and experiment with chemical properties of water. The Tour includes a test kit and worksheets for the hands-on investigation of a water sample collected	LaMotte Company P.O. Box 329 Chestertown, MD

		from a pond, lake, stream or river.	21620 800-344-3100
POW! The Planning of Wetlands: An Educator's Guide	2000	POW! The Planning of Wetlands is a two-part guide to creating a schoolyard wetland. Part I, Background Information, is a mini-course in wetlands construction, offering detailed information on water supply, permits, design, grading, specifications, construction, maintainance, cost estimates and a botanical guide to 40 native wetland plants. Part II contains 25 activities that involve students in grades 5 to 12 in the process of wetland development. Some modifications are offered for K-4 students.	Environmental Concern, Inc. P.O. Box P 201 Boundary Lane St. Michaels, MD 21663 410-475-9620
Project W.U.L.P. (Wetland Understanding Leading to Protection)	1994	This multidisciplinary wetland unit is designed for middle school- aged students. Activities begin with general knowledge of wetland functions and human impacts, then proceed to comprehensive, well-thoughout field activities for students. Some activities are specific to Wisconsin wetlands. Authors attempt to pull together a complete wetland unit to be taught entirely in the classroom or classroom and field experiences. Unit includes an extensive, multimedia wetland resource list.	Outdoor Skills Center P.O. Box 84 Plymouth, WI 53073 414-893-5210
Project Water Works	1990	Requires classroom setting and computer. Extensive preparation by instructor needed. Emphasis on water science and water management. Water management section of software emphasizes importance of values in decision-making, yet	American Water Works Association 6666 W. Quincy Ave.

		identifies "right and wrong" answers to simulated water management scenarios.	Denver, CO 80235 800-926-7337
Project WET Curriculum & Activity Guide	1995	A compilation of over 80 water-related activities, 'Project WET' is organized into seven units: 1)Water has unique physical and chemical characteristics, 2)Water is essential for all life to exist, 3)Water connects all Earth systems, 4)Water is a natural resource, 5)Water resources are managed, 6)Water resources exist within social constructs, and 7)Water resources exist within cultural constructs. Within each unit, activities are designed to accommodate different learning styles and multiple intelligences, in addition to incorporating many disciplines -art, science, math, language arts, social studies, and music. Activity format includes a suggested grade level, teaser introductory question, summanry, objectives, materials lists, making connections-describing the relevance and rationale for the activity, background information, procedure, assessment strategies, extensions, and resource list. Students explore and expand their knowledge, feelings and values related to water as they compare past and present water user; explore issues of water availability in different cultures; classify wetland soil types; interpret maps to assess changes in a watershed; investigate the source of groundwater pollution; monitor personal water use; develop strategies to clean wastewater, and; discuss/debate	The Watercourse 201 Culbertson Hall Montana State University Bozeman, MT 59717-0057 406-994-5392

		management strategies.	
Protecting Our Watersheds	2001	"Protecting Our Watersheds," a middle school science and civics unit, results in cooperative community action. Students evaluate their local watershed through observation, and data collection to identitfy water quality issues. Detailed, process-focused lessons lead students to research policy and practices impacting these issues, to select a problem, and develop an action plan to effect long-term improvement. Cooperative Experiential activities are centered with "reflection questions" at the conclusion of each lesson. "To increase youth Voice" offers leadership opportunities in each lesson. Includes Facilitators guide, activity notebook, tip cards, 4 posters, totebag. Additional resources available such as CD-roms examining Upper Mississippi watershed and introducing water monitoring, field manual and kits for water monitoring, booklet of water quality issues for debate, sourcebook, case study, etc.	Global Rivers Environmental Education Network 1908 Mount Vernon Avenue Second Floor Alexandria, VA 22301 703-519-6877
Pure Tap: Adventures in Water	2002	Pure Tap: Adventures in Water is a publication of the Louisville Water Co. It presents multi-disciplinary activities for 3rd to 5th grades on the water cycle, water use, treatment and delivery of drinking water. Most lessons are specific to the Louisville vicinity and system.	Louisville Water Company 550 South Third Street Louisville, KY 40202 502-583-6610

Radio Expeditions: Water: Thirsting for Tomorrow	1993	No description available.	National Public Radio see web page Madison, WI
Radio Expeditions--Water: Thirsting for Tomorrow	1993	Audio cassette of a program broadcast in 1993 and classroom activities that address groundwater, rivers, flooding and drought, pollution, water quality, and conservation. No longer published or available.	National Public Radio 635 Massachusetts Ave., NW Washington, DC 20001 202-513-2000
River Cutters	1999	This update of a 1989 GEMS (Great Explortions in Math and Science) curriculum has been been revised to emphasize key environmental issues, to align activities with National Science Education Standards, and to lead to unified concepts in Earth and Environmental Science--both in the scale of geologic time and the impact of humans and technology on natural resources. Using river models of diatomaceous earth (the new version offers alternatives to this medium) and a dripper system, students explore rivers as earth shapers, simulate geologic timelines, and experience how human activities (dams and toxic waste dumps) impact natural systems. The unit offers multiple assessment suggestions, literature connections, and excellent detailed directions to help instructors maximize the	GEMS - Great Explorations in Math and Science University of California - Berkeley Lawrence Hall of Science, #5200 Berkeley, CA 94720-5200 510-642-7771

		value of the lessons.	
River Cutters	1992	Written for grades 6-9, River Cutters is an earth science unit in the GEMS series that addresses today's river issues. For a broad understanding of water issues, educators may want integrate this unit with other water curricula. A diatomaceous earth model is used throughout the unit to simulate geological time. Materials for the model is easily created in the classroom or at home. Activities include investigations of potential impact of toxic waste dumps and dams or rivers.	GEMS-Lawrence Hall of Science University of California Berkely, CA 94720 510-642-7771
River Cutters - Teacher's Guide	1999	No description available.	Great Explorations in Math and Science (GEMS) University of California-Berkeley Lawrence Hall of Science #5200 Berkeley, CA 94720-5200 510-642-7771
River, The: Humanities	1995	This unit is the humanities strand of a 3-part curriculum about the Rio Grande. The other two strands, dealing with science and social studies, are profiled individually in this database. The curriculum is no longer in print, but the New Mexico Culture Net	Project Crossroads c/o Anne Valley Fox 2007 Kiva Road Santa Fe, NM 87505

		makes it available to download at their website: www.nmculturenet.org/riverproject. Through exhibits and activities, students express their personal experience of the river, investigate physical characteristics of the river, glean an understanding from legends and oral histories of the people and cultures of the Rio Grande, and view and respond to the work of visual artists inspired by it.	505-982-0375
River, The: Science	1994	This unit is the science component of The River: A Middle School Multi-disciplinary Curriculum for the Rio Grande. Used in conjunction with the social science and humanities strands, the curriculum's goal is to prepare students to understand the consequences of their actions and to participate in community decision-making. The science strand covers the distribution and use of water, river systems, ecosystems and explores problems confronting the Rio Grande and issues of sustainability.	Project Crossroads c/o Anne Valley Fox 2007 Kiva Road Santa Fe, NM 87505 505-982-0375
River: Social Studies, The	1994	The River: Social Studies', 144, 'The social studies component of "The River: Inter-Disciplinary Curriculum for The Rio Grande" challenges students to analyze data, explore their personal values, and evaluate the ecological health and uses of the Rio Grade in relationship to the socio-cultural history and dynamics of the area. Less familiar concepts addressed include: 1)Historical use of water, 2)New Mexico Water Law, and 3)the importance of the	Project Crossroads 110 Vuelta Montuoso Santa Fe, NM 87501 505-983-5428

		"bosquee" (riparian area). An in-depth concluding component of the curriculum is "The River Simulation" as students identigy personal and community interest in the River, analyze interest groups, explore regulations of river usage, and identify problems and develop an action plan to foster sustainability. Slides of the river/watershed are included with the curriculum booklet.	
Rivers and Ponds	1997	Rivers and Ponds is a whole language thematic unit incorporating four children's literature selections: All Eyes on the Ponds; Frog and Toad Together; Look Closer: Pond Life; and Look Closer: River Life. Included in the curriculum are interdisciplinary activity extensions for teacher facilitation of each book and accompanying lessons. Working cooperatively, students: Collect and study the macro-invertebrates in a pond; Investigate the water cycle and surface tension; Construct a classroom pond, underwater pond scope, pond chain mobile, and props and costumes for the performance of Pond Readers' Theater; Write a frog and toad mini-book, a recipe for friendship, and water poetry. Measure the distance a frog travels, graph their favorite pond animal, and calculate pond problems.	Teacher Created Materials 6421 Industry Way Westminster, CA 92683
Rivers Online	unknown	No description available.	Sponsored by various institutions check web site no information

			available ,
Rivers Online	unknown	This resource offers a short series of simulation activities that bring the issue of water quality to a personal level. It asks students to evaluate mining, lumbering and landfill options from the perspective of residents of a fictional town. It has applicability as an assessment tool for applying concepts to real-life situations.	The Battelle Endowment for Technology and Human Affairs Office of Academic Affairs 203 Bricker Hall 190 North Oval Mall Columbus, OH 43210
Rivers Project. Language Arts. Grades 6-9	unknown	No description available.	The Rivers Curriculum Project Box 2222 Southern Illinois University Edwardsville, IL 62026 618-692-3788
Rivers: Biology	1998	Rivers: Biology is one component of the 6-unit Rivers Project, the others addressing chemistry, earth science, geography, language arts and math. Useful as a free-standing unit or in conjunction with the other subject areas, this curriculum helps high school students understand the biological factors that indicate or are influenced by water quality in rivers.	Globe Fearon/Pearson Learning P.O. Box 2500 Lebanon, IN 46052 800-321-3106

		Students collect and test water, observe biological diversity in the field, and simluate the activities of a project development team and a government review team over proposed changes to the river studied.	
Rivers: Chemistry	1997	Rivers: Chemistry is one component of the 6-unit Rivers Project, the others addressing biology, earth science, geography, language arts and math. Workable as a unit of study for high school chemistry, this guide is an effective component of a cross-curricular thematic river study. The activities lead students to discover what variables comprise and determine water quality by field sampling and analyzing test results to determine overall water quality.	Globe Fearon/Pearson Learning P.O. Box 2500 Lebanon, IN 46052 800-321-3106
Rivers: Earth Science	1998	Rivers: Earth Science is one component of the 6-unit Rivers Project, the other units address chemistry, biology, geography, mathematics and language arts. This unit is built upon hydrological assessment of river or stream ecosystems. Students learn how climate, geology, and society affect water quality. Students build earth science knowledge and field skills while using cartography, meteorology, and geology to investigate natural and human influences on rivers.	Rivers Project Southern Illinois University Box 2222 Alumni Hall Edwardsville, IL 62026-2222 618-650-3788
Rivers: Geography	1997	Rivers: Geography is one unit of the 6-volume Rivers Project. The other units are Chemistry, Biology, Earth Science, Mathematics and Language Arts. This	Rivers Project Southern Illinois University

		curriculum will help students understand the relationships among people, places, and environments and the interactions that occur on local, regional and global scales. Students explore a historical perspective of both the physical geography and the human development of an area river. Role play of environmental decision-making is a strong culminating activity.	Box 2222 Alumni Hall Edwardsville, IL 62026-2222 618-650-3788
Rivers: Language Arts	2001	Rivers: Language Arts in one component of a 6-unit River Project, the others dealing with chemistry, biology, earth science, geography and mathematics. This unit is particularly useful in conjunction with any of the others as it focuses on important communication skills for high school students studying the environment. Students develop skills in journalistic, expressive and scientific technical writing, they make oral presentations, practice interviewing and historical research techniques and write political letters. The Rivers Project maintains a website at www.siue.edu/OSME/river where water quality data collected in other units is entered for use of others, student writing is shared and other materials are available.	Rivers Project Southern Illinois University Box 2222 Alumni Hall Edwardsville, IL 62026-2222 618-650-3788
Rivers: Mathematics	1998	Rivers: Mathematics is a part of the Rivers Project, which also includes Chemistry, Biology, Earth Science, Geography and Language Arts. This unit achieves the goal of the National Council of Teachers of Mathematics that "instruction should be	Dale Seymour Productions Pearson Learning Group P.O. Box 2500

		developed for problem-solving situations' using actual stream study. Skills needed to perform tests, make observations, analyze and present data are emphasized. Pre- and post-tests are included in each lesson. The mathematical concepts are reviewed and practiced within the context of stream study, then applied to real life data collected by students in field situations. They monitor changes in river levels, explore water use and estimate quantities, clean a river or stream area and analyze debris data, and test water quality and use statistics to infer impact on overall stream health.	Lebanon, IN 46052 800-526-9907
Sea Sampler: Aquatic Activities for the Field and Classroom	1986	Elementary, Grades K-6. Curriculum addresses a variety of science and ecological topics, e.g., salt water characteristics, osmosis, food web, niche and communities. There are 7 field and 14 classroom activities. Detailed background information is not provided for teacher or student; sources are listed where to find the necessary information. Secondary, Grades 7-12 (separate edition). Similar activities as the elementary edition addressing similar topics relating to coastal/salt water living. This curriculum deals with more integrated skills and concepts, e.g.,taxonomy, food web/energy flow.	South Carolina Sea Grant Consortium 287 Meeting Street Charleston, SC 29401 803-727-2078
Sense of Water, A - Elementary edition	1984	Materials provide a set of short activities which can be integrated into a variety of disciplines and grade levels. Activities are organized according to sections, including: dependency of life on water, the science of	Southern Arizona Water Resources Association 48 N. Tuscon Blvd,

		water including water ecology, climate, water distribution and use, pollution potential of water, and the role of water in culture. Each lesson is indexed by chapter reference, grade, subject, length of activity, concept, key vocabulary and credits. Includes suggestions for evaluation, subject and topic index. A unique perspective includes activities which address the concept that water of varying degrees of contamination may have uses other than drinking.	Suite 106 Tuscon, AZ 85716 602-881-3939
Sensing the Sea - (K-1) & (2-3) (2 Booklets)	1978	Activities center around set-up and care of saltwater aquarium. Focuses on process skills of investigation (especially observation and hypothesis). Unique aspects include use of the skill of questioning (unusual), mostly through teacher example and the use of divergent questions for which student proposes possible solutions rather than decidedly "correct" answers. Book 2 teaches difference between observation and inference.	Marine Education Center VA Institute of Marine Science Gloucester Point, VA 23062 804-642-7000
Significance of Soil	1992	Significance of Soil is a primary component of the Adopt-A-Watershed K-12 science curriculum. Activity-based lessons present concepts, which are observed and/or applied in field situations; and culminate in a soil conservation action project and the creation of an informative brochure. Masters for Student Soil Saver Booklets and transparencies are included. Detailed Materials/Equipment sections and Advanced Preparation checklists make complex lessons manageable.	Adopt-A-Watershed Program P.O. Box 1850 Hayfork, CA 96041 530-628-5334

Sourcebook for Watershed Education	1996	Activities revolve around two areas: watershed and water quality monitoring, and understanding changes and trends withing the whole watershed. The manual is divided into two parts: 1) the first provides a framework and strategy for coordinators developing a watershed program network. It includes topics such as budget construction, program goals and identification, and community participation and networking; 2) the second part focuses on educators and includes a section on educational philosophies, examples of curriculum matrices and models for interdisciplinary education, and examples of units, lessons, and activities designed by GREEN participants across the United States.	Cole-Misch, Sally, Larry Price and David Schmidt Global Rivers Environmental Education (GREEN) 721 E.Huron Street Ann Arbor, MI 48104 313-761-8142
Spirit of the Last Great Places	1996	This curriculum was developed jointly by the Oklahoma chapter of the Nature Conservancy and Oklahoma State University around topics defined in a public television program of the same name. Ten topics each offer two activities with correlation to specific Oklahoma Nature Conservancy Preserves. A video, with footage form the program was produced to complement the curriculum. Areas covered include: ecosystems, habitat, water, soil, tallgrass prairie, food chains, bison/extinction, prairie ecology, migratory birds of Oklahoma, and making environmental decisions.	Nature Conservancy -- Oklahoma Chapter Center for Environmental Education-OSU ,
Spirit of the Last	1994	No description available.	Oklahoma's Nature

Great Places. A Teacher's Guide			Conservancy 2727 East 21st Street, Suite 102 Tulsa, OK 74114 918-585-1117
SPLASH Stormwater Pollution: Learn and Share	2001	This K-8 curriculum was developed by the City of Eugene Public Works Stormwater Management Program to build a community of responsible water users with emphasis on their untreated stormwater. Primary lessons highlight the water cycle, city water systems, personal water use, and the impact of pollution on plant and animal life. Intermediate sections focus on local ecosystems and community issues. The middle school curriculum examines the role of human use in stormwater, wetlands and the Eugene area watershed. The curriculum is available online, but relies on an accompanying kit from the Stormwater Management Program with student materials and worksheets.	City of Eugene Stormwater Management Program City of Eugene Public Works Administration 858 Pearl Street Eugene, OR 97401 541-682-2739
Splash. Stormwater Pollution: Learn and Share. Grades 3-5	1995	No description available.	Stormwater Management Program City of Eugene, Public Works 858 Pearl St. Eugene, OR 97401-

			2727 503-465-2739
Splash. Stormwater Pollution: Learn and Share. Grades K-2	1995	No description available.	Stormwater Management Program City of Eugene, Public Works 858 Pearl St. Eugene, OR 97401-2727 503-465-2739
Splash. Water Resource Education	unknown	No description available.	South Florida Water Management District 2379 Broad Street Brooksville, FL 34609 352-796-7211 x4
Splash: Water Resource Education	1999	SPLASH is a set of resources and activities for middle school classrooms that promote protection of water resources. Originally produced as a packet of activities and fact sheets by the Southwest Florida Water Management District, the materials are available online or in print format. Activities range from building hydrologic cycle and wetland models, and constructing a solar-powered desalination plant to brainstorming potential future sources for	Southwest Florida Water Management District 2379 Broad Street Brooksville, FL 34604-6899 352-796-7211

		drinking water and designing a SW Florida seaside community.	
Stop, Look and Learn About Our Natural World Vol. 1	1991	Only lessons specifically related to water resources are included in this survey; thus it covers only Unit 2 of Volume 1 (27 of 216 pages). Other units cover soil, plant, tree, and wildlife conservation. Materials were developed with a resource conservation orientation. Worksheet instructions may be too advanced to be read independently by some K-2 students. Many activities combine content and study skills. Includes guide that references activities according to subject area, skill, page number, and topic.	Nebraska Natural Resources Commission Stop, Look and Learn Box 94876 Box 94876 Box 94876 Lincoln, NE 68509 402-471-2081
Stop, Look and Learn About Our Natural World Vol. 2	1991	This survey reviewed only material in Water Conservation Unit (49 pages). Other units in this 244-page booklet include soil, plant, tree and wildlife conservation. Materials were developed with a resource conservation orientation. Worksheet language may be too advanced to be read independently by some 3rd and 4th graders. Additionally, some 3rd and 4th graders may not have the math skills to complete or understand computations included in the materials. Many activities combine content and study skills. Includes guide that references activities according to subject area, skill, page number, and topic.	Nebraska Natural Resources Commission Stop, Look and Learn Box 94876 Lincoln, NE 68509 402-471-2081
Stop, Look and Learn About Our	1991	Reviewed unit on water conservation. Forty-four of book's 215 pages devoted specifically to water	Nebraska Natural Resources Commission

Natural World Vol. 3		conservation. See comments about Volumes 1 and 2.	Stop, Look and Learn Box 94876 Lincoln, NE 68509 402-471-2081
Story of Drinking Water, The	1991	Comic book about a variety of water issues is provided in English, Spanish and French. The Teacher's Guide includes 19 activities to provide hands-on experiences with topics mentioned in the comic book. Intended for classroom application. Excellent focus on plight of third world countries, i.e., water supply.	American Water Works Assoc. 6666 W. Quincy Ave. Denver, CO 80235 303-347-6206
Stream Scene: Watersheds, Wildlife and People, The	1990	One of few curriculum, if any, focusing on riparian areas and intermittent streams. Only curriculum reviewed that studies the effect of stream flow (water quantity) on plant communities. One of few to approach populations with strong mathematical orientation. Includes appendices on making field equipment; a description of the salmon-trout enhancement program; general stream survey terms; water resource agencies. Includes science background for instructors and activities for students on any particular topic. Material likely too advanced for middle school students without modification.	Oregon Dept. of Fish and Wildlife P.O. Box 59 Portland, OR 97207 503-229-5403
Stream Study and Water Quality	1991	Written for grades 5-8, this curriculum focuses on stream ecology, e.g., physical, biological and chemical	New Hampshire Fish and Game Department

Assessment Curriculum		monitoring. Curriculum also addresses urban sources of water pollution and watershed concepts. An "Outline of Advanced Concepts and Activities for Stream Ecology and Monitoring" included, although, the material provided in this guide may not sufficient for educator to carry out. Instructor may have to refer to the supplemental sources for detailed background information. The supplemental materials available: Interpreting Results of Water Quality Tests in Streams and Rivers. 1991. Frank Mitchell and Jeffery Schloss; and A Study Guide to New England's Freshwater Wetlands. 1991.	2 Hazen Drive Concord, NH 03301 603-271-3211
STREAMS	1996	STREAMS--Science Teams in Rural Environments for Aquatic Management Studies, is an online curriculum for rural middle schools focusing on water resources and environmental stewardship. Using the Muddy Run Watershed of Huntingdon, PA for field study, this guide offers lesson outlines for collecting, analyzing and interpreting data along with identifying and formulating solutions to problems. Lessons present student objectives, procedures specific to the local area and assessment options. Handouts, worksheets and assessment tools are suggested from other water curricula, such as Aquatic Project WILD and Project WET, or must be teacher developed.	Penn State University/College of Earth and MIneral Sciences and Huntingdon Area Middle Schools 2500 Cassady Ave Huntingdon, PA 16652 814-643-2900
STREAMS	1996	STREAMS: Science Teams in Rural Environments for Aquatic Management Studies is an online curriculum	Pennsylvania State University/College of

		outline for rural middle schools focusing on water resources and environmental stewardship. Using the Muddy Run Watershed of Huntington, PA for field study, this guide offers lesson outlines for collecting, analyzing and interpreting data along with identifying and formulating solutions to problems. Lessons present student objectives, procedures specific to the local area, and assessment options. Handouts, worksheets and assessments are suggested from other water curricula, such as Aquatic Project WILD and Project WET; or are described but must be teacher developed.	Earth and Mineral Sciences College of Earth and Mineral Sciences ,
Streamside Community, The	1992	'The Streamside Community' is one of the few curriculum evaluated focusing on the identification and study of a riparian zone. During the course of this interdisciplinary curriculum, students observe, investigate, and inventory the plants and animals in a riparian ecosystem; learn about seed dispersal adaptations; and initiate a long-term amphibian population study and restoration project. (It is suggested that the teacher seeks assistance from a natural resource professional or botanist for plant identification.) The curriculum identifies and explores ecological concepts such as species, niche, indicator species, food webs, communities, and ecosystems. Throughout the curriculum, the concepts of interactions and interdependence within a community are emphasized. This evaluation	Adopt-A-Watershed Program P.O. Box 356 Hayfork, CA 96041 916-628-5334

		includes the teacher's guide only; additional materials and resources are available through purchase of the classroom kit.	
Streets to Streams: Youth Investigations into Water Quality	1995	The purpose is to educate 5-9th grade youth on surface water and ways to protect it. Suggested activities include a water festival and storm drain stenciling projects. The guide lacks pictures and graphics to illustrate key points. Also available, a 12-minute video on storm drain stenciling, "Dump No Waste, Drains to Stream."	Household Hazardous Waste Project 1031 E. Battlefield, Suite 214 Springfield, MO 65807 417-889-5000
Summary for Teacher's Guide to World Resources Watershed Pollution	1994	The Watershed Pollution guide is part of a series that contains a lesson plan, student handouts, overheads, and student enrichment activities. Authors suggest how to integrate global environmental education into high school curricula through the national Goals 2000: Draft National Performance Standards. Activities focus on events that happen in a watershed. The guide presents perspectives of developing and developed countries in water use, water, pollution and watershed dynamics. Authors included a chart for ideas referencing lesson plans and enrichment activities across geopgraphy, math, science, civics, government, and history. To get the most out of Oceans and Coasts, students should have an introduction to ocean ecology and uses; discussions require background for both teacher and student. Other units in the series include: Watershed	World Resources Institute Publications P.O. Box 4852 Hampden Station Baltimore, MD 21211 800-822-0504

		Pollution; Oceans and Coasts; Biodiversity; Sustainable Development; Natural Resource Economics; Population, Poverty, and Land Degradation; Energy, Atmosphere, and Climate; and Citizen Action.	
Surface Water	1988	Teacher's Guide provides background information and activities to complement the student video. Student Guide provides additional information about the water cycle, sources of water pollution, wastewater treatment, and citizen action. Materials address the concept of natural pollution, which is rather unique.	Water Education Federation 601 Wythe St. Alexandria, VA 22314-1994 703-684-2400
Tapwater Tour, The	1989	Activities enable students to test tap water and evaluate the water quality. Highly directive teacher materials, script provided.	LaMotte Co. P.O.Box 329 Chestertown, MD 21620 800-344-3100
Teacher's Guide to World Resources: Oceans and Coasts	1994	Oceans and Coasts encourages high school students explore the sources and effects of marine pollution, and steps taken to minimize these effects. Subtopics include role of oceans, pollution types, and fisheries. The unit format encourages teachers and students to engage in thoughtful discussion of oceans. Students receive fact sheets, maps, graphs and articles.	World Resources Institute Publications P.O. Box 4852 Hampden Station Baltimore, MD 21211

		Enrichment activities suggest that students map ocean pollution, examine aquaculture, investigate bioremediation and examine land use issues. The Audiovisual Resource list and Further Reading list provide additional background and better understanding of ocean and coastal issues. To get the most out of this unit, students should have an introduction to ocean ecology and uses; discussions require background for both teacher and student. Others in the series include: Watershed Pollution; Oceans and Coasts; Biodiversity; Sustainable Development; Natural Resource Economics; Population, Poverty, and Land Degradation; Energy, Atmosphere, and Climate; and Citizen Action.	800-822-0504
Teaching Aquifer Protection: ("TAP notebook"): A Curriculum Supplement	1990	Provides activities designed as a curriculum supplement. Focuses on water quality protection and water conservation. Learning objectives are referenced to state basic science skills for easy interface with school curriculum. Written for South Carolina audience, but more broadly applicable.	Clemson University Bulletin Room, #82 P & A Building Clemson, SC 29634 803-656-3261
That Magnificent Ground Water Connection: A Resource Book for Grades 6-8	1998	Two complete groundwater resource books are now available for teachers: one for grades K-6 and the other for grades 7-12. Both editions include selected groundwater-related activities adapted from available curricula. Incorporating the groundwater theme into science, stories, songs, math, social studies, art, and writing makes the resource books applicable over a range of subjects. The activities	New England Interstate Water Pollution Control Commission Boott Mills South 100 Foot of John St Lowell, MA 01852-1124

		focus on groundwater issues in New England. Presenting the information with a New England spin teaches students about the region's geologic and hydrologic idiosyncrasies and how groundwater and the water cycle function locally. Recognizing today's children as tomorrow's leaders, the curricula challenges students to think, sort out facts, brainstorm, experiment, and learn.	978-323-7929
That Magnificent Ground Water Connection: A Resource Book for Grades K-6	1996	Written for grades K-6 in the New England region, the curriculum deals with groundwater issues through interdisciplinary activities on water properties, the water cycle, groundwater, water distribution and treatment, and water stewardship. It encourages students to apply their learning toward citizen involvement and action. Authors provide thorough background information and detailed activity instructions. The curriculum contains examples specific to this region, but the core information and activities are general and are broadly applicable.	New England Interstate Water Pollution Control Commission 255 Ballardvale St. Wilmington, MA 01887-1013 508-658-0500
Through the Looking Glass. Teachers' Guide.	1991	Curriculum focuses on marine awareness for elementary and high school students through a field trip to the Nature Center at Odiorne State Park, Rye, NH. Pre and post field trip activities compliment and expand the concepts experienced during the trip. Strong emphasis to incorporate activities into the standard curriculum. Little to no background provided for teachers or students on follow-up	University of New Hampshire & University of Maine Sea Grant Advisory Program Kingman Farm, University of New Hampshire

		activities; only suggestions to integrate marine awareness into the curriculum.	Durham, NH 03824
Wade into Watersheds	2002	Wade into Watersheds is an intermediate component of the Adopt-A-Watershed K-12 science curriculum. Activity-based lessons present concepts, which are observed and/or applied in field situations; and culminate in a water quality action project. Many lessons refer to projects in 6 resource books, which are included in the curriculum purchase. [NOT ALL RESOURCE BOOKLETS WERE REVIEWED.] Detailed Materials/Equipment sections and Advanced Preparation checklists are helpful.	Adopt-A-Watershed P.O. Box 1850 Hayfork, CA 96041 530-628-5334
Water Action Volunteers (WAV): Introductory, hands-on stream and river action projects for Wisconsin	1995	WAV is a collection of activities for youth leaders to select hands-on, action-oriented projects for volunteer groups and classrooms. All activities are adaptable to different age levels. The eight projects teach about stream and river resources in Wisconsin, focusing especially on community collaborative efforts to address pollution issues.	Environmental Resources Center University of Wisconsin-Extension 216 Agriculture Hall 1450 Linden Drive Madison, WI 53706-1562 608-262-0020
Water Activities Teaching Env. Resposibilities-Teacher Res.	1996	No description available.	Miami Soil and Water Conservation District 1330 N. County Rd 25A, Suite C

			Troy, OH 45373 937-335-7645
Water Activities: Teaching Environmental Responsibility	1996	This publication of the Miami (Ohio) Soil and Water Conservation District is a compilation of activities adapted from other sources and narrative background information. Materials address water, pollution and wetlands. A number of simulation games are included. It lacks organization for age level and consistency of format.	Miami Soil and Water Conservation District 1330 N. County Road 25A Suite C Troy, OH 45373 937-335-7645
Water Around Us, The	1990	One of 3 packets designed as a supplement to the classroom. The others are "Our Groundwater" and "The Water Around Us". Provides directions for demonstrations and activities about the water cycle and water conservation.	CTR Publications Morrill Hall University of Vermont Burlington, VT 05405-0106 802-56-3024,x6
Water Conservation In-School Curriculum	1990	Water education activities designed for easy integration into class activities. Binder separates materials by grade. Each unit contains list of activities and materials needed, separated by day. When conducting activities, teacher borrows box of equipment from the Cooperative Extension office. Goals and objectives not stated for each activity specifically, but for the nit overall. Many of same concepts presented at each grade level (especially	Univ. of Nevada CES Carson City, NV 775-887-2252

		grades 1 and 2). Grade 4 examines climate effects_not usual part of most water curriculum. Grade 5 curriculum emphasizes soil and erosion. Includes suggestion for activities for science fairs and an environmental education packet from the Garden Club of America. Reading level and concepts may be too advanced for suggested grade levels.	
Water Conservation: Environmental Action	1998	Water Conservation: Environment Action--Analyze, Consider options, Take action, In Our Neighborhoods is one component of a 6-module curriculum developed by E2: Environment & Education, that develops issue investigation and action skills as a prerequisite to environmentally responsible citizenship. In this module, students study hydrologic principles, pollution, water treatment, and water uses. They evaluate water quality and consumption at their school, analyze and interpret their data, develop alternate conservation plans, which they then critique through a cost/benefit anaylsis. They present a proposal on conservation to school authorities for consideration. In 'Environmental Action, Water Conservation,' students use the school environment to investigate and analyze water conservation issues in a cooperative learning environment. Activities progress from a traditional teacher-directed classroom format to a student-directed environment with teacher as facilitator. In this curriculum, students explore the different uses	Dale Seymour Publications 2725 Sandhill Road Menlo Park, CA 94025 800-872-1100

		of water and the ways in which it can be conserved; conduct a school water audit; research proposed conservation strategies, and; present recommendations to the school administration or environmental committee. Completion of the curriculum requires eighteen through twenty, 50-55 minute classroom sessions. 'Environmental Action, Water Conservation' is one of six environmental education modules within the E2: Environment & Education program-each designed to stand alone or in conjunction with one another.	
Water in Your Hands	1991	Curriculum consists of a comic book-style story about water with 4 accompanying activities. Relies on "learning cycle strategy: exploration, concept development, and application." Suggests unique educational strategy of using journals for notes, reflections, and sharing them as parts of activities. Includes resource list for both students and teachers.	Soil and Water Conservation Society 7515 NE Ankeny Road Ankeny, IA 50021-9764 800-THE-SOIL
Water Inspectors: Examining H2O	unknown	One of five CASEC guides written for 10-15-year-olds. This activity booklet focuses on the physical characteristics of water;e.g., salinity, temperature, taste, hardness and clarity. Activities are designed to engage students in scientific testing methods, including making predictions and manipulating variables one at a time to determine which variables cause changes	California Aquatic Science Education Consortium (CASEC) Graduate School of Education University of California Santa Barbara, CA 93106 805-893-2739

Water Magic/Splash!	1991 Magic/1990 Splash	Water Magic can be used separately or as a complement to Splash! Activity Book. The 23 activities cover a range of water science, water issues, and water topics in our culture. Activities are varied and age appropriate. Most are appropriate for both the classroom and nonformal settings. Some activities do not relate well to stated objective. Illustrations and activity about groundwater may lead to a misunderstanding of groundwater and aquifer concepts.	American Water Works Assoc. 6666 W. Quincy Ave. Denver, CO 80235 303-347-6206
Water Politics: A Water Education Program for High Schools	1994	Designed for 9-12 grade youth, this curriculum emphasizes water use and water conflict issues. Covers such issues as conlficts among urban, agricultural and environmental interests; water conservation vs. developing new supplies, including the public participation component. Uses case studies on water rights, canal building, landfill development, protecting reservoir quality, risks and water quality; water transfer, and the affect of the media on public opinion, use of the Colorado River, and saving endangered species. Some case studies seem biased in favor of development; do not present the ecological impact of decisions on either side. Sways students and teachers towards certain conclusions. Includes a map of California aquaducts, "California Water Resources," and the California Water Story, a video. Teacher background materials are excellent.	Metropolitan Water District of Southern California, Education Programs P.O. Box 54153 Los Angeles, CA 90054 213-217-6739

Water Precious Water, Book A	1988	One of several publications from, Activities to Integrate Math and Science (AIMS) in the grades 2 - 6 series. Limited duplication rights are granted with purchase of materials. Math activities often rely on an understanding of multiplication, division and percentages. Some activities are provided in both a low math (visual) and high math (multiplication/division) format. Water activities are related to other curriculum areas through "curriculum coordinates" which provide suggested activities for language arts, social studies, and the arts. Predicting, measuring, calculating, estimating and data collection and analysis skills are emphasized.	AIMS Education Foundation PO Box 8120 Fresno, CA 93747 209-255-4094
Water Quality	1995	Water Quality is a high school component of the Adopt-A-Watershed K-12 science curriculum. The student-directed learning in this unit of study commences with a field trip during which students make observations and initiate inquiry about water quality. They engage in a simulation that reveals the complexity of water quality issues and encourages them to consider multiple perspectives of water and land use, as they clarify their personal beliefs. They research the water quality issue they identified, then collect data about the field site in preparation for a water quality improvement project. These student-directed research lessons are correlated to the 6-part Rivers Project curriculum as instructional guides for	Adopt-A-Watershed Program P.O. Box 356 Hayfork, CA 96041 916-628-5334

		chemistry, biology, earth science, geography, math, and language arts. The unit culminates with a school-wide Watershed Fair.	
Water Quality. Critical Issues/Critical Thinking	1995	No description available.	On Common Ground National 4-H Council 7100 Connecticut Avenue Chevy Chase, MD 20815 301-961-2800
Water Quality: Critical Issues/Critical Thinking Experience	1995	This 4-H Leader Guide presents four activities that promote awareness of water quality and utilize problem-solving techniques to address water quality issues. Simulations, an art activity, and discussion focus on how conflicting human interests impact water quality, supply, land use decisions and protection issues.	National Land Use Collaboration National 4-H Council "On Common Ground" 7100 Connecticut Avenue Chevy Chase, MD 20815 301-961-2800
Water Quality: A Water Education Program	1990	Focuses on water quality as it applies to a public water supply system. Includes text plus two activities.	Metropolitan Water District of Southern California P.O. Box 54153

			Los Angeles, CA 90054-0153 310-376-0611
Water Quality; Water Highways; Water Trade-offs	1990	Water education activities designed for easy integration into class activities. Binder seperates material by grade. Each unit contains lists of activities and materials needed, seperated by day. When conducting activities, the teacher borrows box of equipment from the Cooperative Extension Office. Goals and objectives not stated for each activity specifically, but for the unit overall. Many of same concepts presented at each grade level (especially grades 1 and 2). Grade 4 examines climate effects-not usual part of most water curriculum. Grade 5 curriculum emphasizes soil and erosion. Includes suggestion for activities for science fairs and an environmental education packet from the Garden Club of America. Reading level and concepts may be too advanced for suggested grade levels.	Univ. of Nevada CES Carson City, NV 775-887-2252
Water Res. Professional's Outreach Notebk-Ground Wtr. Gr 6-8	1994	No description available.	UNH Cooperative Extension, Grafton Co. Water Resources 3785 Dartmouth College Highway, Box 8 Attn.: Ginny DiFrancesco, Prog. Associate North Haverhill, NH

			03774-4936 603-787-6944
Water Res. Professional's Outreach Notebook: Ground Water	1994	This publication was developed for educational outreach. It provides a mechanism whereby an individual employed in a scientific fields associated with water resources assists an instructor (school teacher or youth group leader) in presenting information on selected groundwater topics. The materials require an instructor and water resources professional to work together. It is divided into two sections, one for an instructor and one for the water resources professional. Five lessons are included: aquifer, porosity, permeability, wells and calculations. The document is currently only available online, not as hard copy.	U.S. Geological Survey US Dept. of the Interior, Earth Science Education Program Box 25046, MS414 Denver Federal Center Denver, CO 80225 888-275-8747
Water Resource Education: Water You Can Make A Difference (K-3)	unknown	Binder contains K - 3 kit and materials for grades 4 - 6. It is not immediately clear which materials are for teachers and which for students. K - 3 activities cover the significance of water, the water cycle, information about the New York water supply, and hazardous household products. Materials for grades 4 - 6 include importance of water, the water cycle, water supply, water contamination, and water conservation.	Cornell Cooperative Extension of Nassau County 1425 Old Country Rd., Bldg. J Plainview, NY 11803 516-454-0900
Water Resource Education: Youth Education Curricula	1992	See notes for K - 3 version. This set contains some materials first developed for WET (North Dakota). The curriculum correlates with NY state syllabus-	Cornell Cooperative Extension of Nassau County

		elementary science level III, Ecosystems. Reading level may be too advanced for 4-6 graders.	1425 Old Country Rd., Bldg. J Plainview, NY 11803 516-454-0900
Water Riches	1993	Nebraska's is reviewed since the Nebraska materials pioneered this approach. Unique approach includes videos that introduce each of 5 units and an accompanying "newspaper" with more information and activities for youth. Teacher packet provides guidance on how to use the material. Other unusual aspects include suggestions for review activities and activities to teach interviewing skills. Incorporates study skills. Indiana and Missouri also have a Water Riches curriculum	Cooperative Extension Service University of Nebraska-Lincoln university of Nebraska-Lincoln Institute of Agriculture and Natural Resources Lincoln, NE 68583-0771 402-472-2824
Water Sourcebook. A series of Clasroom Activities, G. 9-12	1997	No description available.	Water Environment Federation 601 Wythe St. Alexandria, VA 22314-1994 800-666-0206
Water Sourcebook: Classroom	1997	Developed by Auburn University at Montgomery and Troy State University, this curriculum features	Water Environment Federation

Activities for Grades 9-12		hands-on activities which build knowledge and skills to assess water quality and the factors which influence it. The scope of topics is broad and student-focused investigations successfully address riparian ownership and water rights, mining and forestry practices, risk assessment, international water disputes, and the financial aspects of our environmental infrastructure along with many other issues.	601 Wythe Street Alexandria, VA 22314-1994 800-666-0206
Water Sourcebook: A Series of Classroom Activities	1998	Developed as a supplement to a school water education unit, each Water Sourcebook is divided into six chapters: Introduction to Water, Drinking Water and Wastewater Treatment, Groundwater Resources, Surface Water Resources, and Wetlands/Coastal. Chapters are correlated with math, science, language arts, social studies and related arts curriculum goals. Each activity within a chapter includes (1)background information, (2)objectives, (3)subject(s), (4)time allotment, (5)materials list, (6)advance preparation, (7)procedure, and (8)resources. A resource section, fact sheets, and a glossary are included at the end of each sourcebook.	Water Environment Federation 601 Wythe St Alexandria, VA 22314-1994 800-666-0206
Water Sourcebook: A Series of Classroom Activities for Grades 3-5	1994	Written by Tennessee Vally Authority, this curriculum set serves as a supplement to a school water education unit. Water Sourcebooks are available in a scope and sequence format: K-2, 3-5, 6-8, and 9-12. Each Sourcebook provides the same 6	Water Environment Federation 601 Wythe Street

		chapters: Introduction; Drinking Water and Waste Water Treatment;Groundwater, Surface Water; Wetlands; and Coastal Waters. Chapters are correlated with math, science, language arts, social studies, and related arts curriculum goals. An important resource provided by this curriculum is a set of brief background act sheets on 29 water-related topics.	Alexandria, VA 22314-1944 205-271-7938
Water Sourcebook: A Series of Classroom Activities for Grades K-2	1998	Developmentally appropriate activities introduce primary students to the science of water, the importance of clean drinking water, environmental impacts on surface water, groundwater and contamination, and the importance of wetlands in this curriculum guide developed by the Water Environment Federation in conjunction with EPA. Classroom teachers will appreciate the skills that students acquire in the lessons, such as estimation, measurement, graphing, prediction, and reporting data. Of particular note is the effective use of children's literature in many lessons.	Water Environment Federation 601 Wythe Street Alexandria, VA 22314-1994 800-666-0206
Water Watcher. Official Resource Manual, K-3	1992	No description available.	Southwest Florida Water Management District 2379 Broad Street Brooksville, FL 34609-6899

			904-796-7211
Water Watcher: Official Resource Manual	1992	This primary curriculum is built on the Purdue three-stage enrichment model, teaching basic material and presenting group activities that promote the concepts of protection and management of Florida water supplies. It does not offer suggestions for independent projects, the third component of the model. Music is used throughout the unit to present and reinforce concepts. Topics addressed include Florida geography, water sources, salinity, aquatic wildlife, the hydrologic cycle, erosion, acid rain, water treatment, conservation and water-related careers.	Southwest Florida Water Management District 2379 Broad Street Brooksville, FL 34609-6899 352-796-7211
Water Watchers	1986	Curriculum aims to improve understanding of personal water conservation practices which will improve water conservation. Uses water science kit and videos to complement written materials. Instructor materials do not include a separate listing of what materials will be needed when or what is included in the science kit. Provides a science and social studies alternative for most lessons. "Water Wizards" is the companion curriculum for grades 3-4.	Massachusetts Water Resources Authority Charleston Navy Yard 100 First Ave. Boston, MA 02129 617-242-6000
Water Watchers: Conserving Water at Your School and Home	2005	No description available.	Team WET Schools Council for Environmental Education

			5555 Morningside Dr., Suite 212 Houston, TX 77005-3216
Water Watchers: Conserving Water at Your School and Home	2005	This water audit handbook was developed to support water stewardship projects of classrooms involved in the TEAM WET Schools Program. It offers all teachers hands-on water conservation investigations that foster personal responsibility and stewardship of the urban water environment. It presents activities to explore issues, analyze water use, consider conservation options, and take action to effect positive change both in the school and student home environments.	Council for Environmental Education 5555 Morningside Drive Suite 212 Houston, TX 77005 713-520-1936
Water Wisdom. A Curriculum for Grades 4-8	1990	No description available.	Alameda County Office of Education 313 West Winton Avenue Hayward, CA 94544-1198 510-887-0152
Water Wisdom: A Curriculum Guide for Grades 4	1990	This curriculum is a supplement to the California State Environmental Education Guide, consisting of three units: Water Nurturing Nature, Water Rights	Alameda County Office of Education 313 West Winton

through 8		and Responsibilities, and Water Symbolism. The units highlight science, social studies and language arts concepts. Lessons focus on the importance of water to all biological systems; examine "ownership" and responsibility regarding water use and distribution; and explore the thematic and symbolic role of water in myths and folklore of various cultures.	Avenue Hayward, CA 94544-1198 510-887-0152
Water Wise	1989, updated 1991	For use in 5-6th grade classrooms. Activities focus on the water cycle, the aquatic environment, and the causes, effects, and prevention of water pollution. Provides elementary science syllabus chart which correlates water activities with elementary science skills.	Cornell University The Resource Center PO Box 3884 Ithaca, NY 14852-3884 607-255-2080
Water Wizards	1986	Water delivery system and conservation emphasis. Excellent support material, instructions and diagrams for instructor. "Water Watchers" is the companion curriculum for grades 7-8.	Massachusetts Water Resources Authority Charleston Navy Yard 100 First Ave. Boston, MA 02129 617-242-7110
Water Worlds	1988	These materials were designed to be used in a 4-H club setting. The folder provides leader and member guides, activity fact sheets and record keeping sheets. Basic focus is to give youth opportunities to explore and observe aquatic environments. Collection/sampling section includes tips on minimal	Cornell Cooperative Extension The Resource Center PO Box 3884 Ithaca, NY 14852-3884

		impact sampling_a nice touch. Water careers is included as a suggestion to invite as guest lecturers people whose careers involve water. Reading material may be too advanced for the young end of the suggested age range.	607-255-2080
Water, Water Everywhere	1991	Includes teacher's guide to laboratory and field testing of water for a variety of parameters supplemented by a separate student text and teacher resource manual. One of few (if any) curricula to address radioactive waste. One of few curricula to address concept of how risk decisions are made in the water quality reference unit booklet. Includes homework activities.	Hach Company Box 389 Loveland, CO 80539 800-227-4224
Water, Water Everywhere, But.. Where's Everywhere?	1994-95	Although developed specifically for grades 5 through 9, activities can be adapted for K-12th grade students. The booklet is divided into three sections: a general lesson outline for each unit; background information in a series of short articles; and, 'criteria checklists' to guide and evaulate student learning. The five units are estimated to take from 5 to 10 days to complete. Activities are primarily instructor-led readings and discussions. The guide highlights international water issues in the United States and Africa; Tanzania, in particular.	Aleasha Dees. Peaceable Kingdom, Inc. ECO-Help P.O. Box 210 Hackett, AR 72937
Water: The Liquid of Life	1991	Water education materials for use in fifth grade classrooms. Materials emphasize text, with some supportive activities. The six modules include: earth	Illinois Environmental Protection Agency 2200 Churchill Road,

		as a closed system, the relationship of water to life, the hydrologic cycle, wastewater treatment, water protection, water testing and treatment, and lakes. Poster included.	Box 19276 Springfield, IL 62794-9276 217-782-3397
Watershed Connections	unknown	A 'Teacher's Guide' and 'Youth Activity Worksheets' publication designed to be used in conjunction with each counties 'Watershed Connections' publication in Indiana. Activities include: Watersheds of Indiana, River Discharge; Floods, Floodplains, and Flood Probabilities; Understanding Ground Water Flow; Your Drinking Water; Comparative Ground Water Vulnerability; Pollution Sources; Water Resource Terms; and Web Search.	Purdue University / Cooperative Extension Service 4-H Youth Department 1161 Agricultural Administration Building West Lafayette, IN 47907-1161 765-494-8443
Watershed Science for Educators	1999	Designed as a watershed monitoring resource packet, this curriculum can be incorporated into formal and non-formal education settings. Students will learn to: (1)read topographic maps, (2)interpret aerial photographs, (3)predict potential water quality impacts, (4)identify aquatic invertebrates, (5)calculate water quality indexes, (6)conduct water chemistry tests, (6) measure and record physical measurements of a waterway, and (7)organize and interpret data. The curriculum includes background information, activities, and assessments.	Cornell University The Resource Center PO Box 3884 Ithaca, NY 14852-3884 607-255-2080

Watershed to Bay: A Raindrop Journey. A Critical and Creative Thinking Approach to Understanding Coastal Watershed Systems.	1995	Written for 4th-8th grade youth living in watersheds along the Massachussets coast. Activities are designed to help learners develop critical thinking and investigation skills and an understand of basic science concepts about watersheds, estuaries and groundwater systems. This is accomplished through stories, models, experiments and observation. It also includes a teaching kit for $115.00 and includes the curriculum guide and a complete supplies kit.	University of Massachusetts-Cooperative Extension System 212 Stockbridge Hall University of Massachusetts Box 30099 Amherst, MA 01003-0099 413-545-4800
Ways of the Watersheds, The: An Educator's Guide to the Env. & Cultural Dynamics of NY City's Water Supplies	1995	A curriculum guide exploring the environmental and cultural dynamics surrounding New York City's watersheds. Units cover the hydrology, geology, and ecology of watersheds; pollution; development; technology; and conservation within the watershed.	The Frost Valley YMCA 2000 Frost Valley Road Claryville, NY 12725-9600 914-985-2291
We Depend of Illinois (formerly Water: The Liquid of Life)	1991	Water education materials for use in fifth grade classrooms. Materials emphasize text, with some supportive activities. The six modules include: earth as a closed system, the relationship of water to life, the hydrologic cycle, wastewater treatment, water protection, water testing and treatment, and lakes. Poster included.	Illinois Environmental Protection Agency 2200 Churchill Road, Box 19276 Springfield, IL 62794-9276 217-782-3397

Wet and Wild Water	unknown	Written for a broad audience (K-12), activities range from simple counting to writing resumes and filling out job applications. The "Core Knowledge" (background info.) consists of a list of facts. All activities are written for the indoors. There is only one specific unit that adresses water but from the viewpoint of manufacturing, marketing, accounting and sales of aquariums. A unique approach to water education.	Indiana Department of Education Office of School Assistance Room 229 State House Indianapolis, IN 46204-2798 317-232-9141
Wet and Wild. A Multidisciplinary Marine Ed. Teacher Guide	1983	No description available.	USC Sea Grant Program University of Southern California University Park Los Angeles, CA 90089-0373 213-740-1961
WET in the City: Water Education for Teachers	2002	WET in the City is a compendium of activities that focus on water resources for urban classrooms, K-12. The activities are organized to address the following concepts: water has unique physical and chemical characteristics, water is essential for all life to exist, water connects to all Earth systems, water is a natural resource, water resources are managed, water resources exist within social constructs, and water resources exist within cultural constructs. The curriculum is only available as part of a workshop and requires the partnership of city government. As	Council for Environmental Education 5555 Morningside Drive Siote 212 Houston, TX 77005-3216 713-520-1936

		of 6/16/03 Washington DC, Los Angeles, Tulsa and Houston were the only cities participating. Check with Project WET about local participation. 713-520-1936.	
WET- Water Education for Teachers (KS)	1988	This curriculum is not a version of the Montana and North Dakota WET materials. Materials cover: the water cycle, the water supply, wastewater treatment/water treatment, water conservation, and water pollution. Contains activities for elementary, junior and senior high students. Doesn't delineate by grades. Appendix includes additional educational materials, Kansas specific information, and a bibliography of resources.	State 4-H Office 201 Umberger Hall Manhattan, KS 66506 913-532-5800
WET- Water Education for Teachers (MT)	1991	Modified for the Montana region based on original materials developed by North Dakota State Water Commission. Project WET Montana is a companion project of a regional water education program, The Western Watercourse. Provides activities which aid in understanding the impact of geography on human culture, an uncommon feature of water curricula. Activities seem appropriate for middle to high school age students. Some activities will have to be adapted for middle school students. This curriculum provides multidisciplinary activity choices related to a variety of water issues and the role of water in people's lives. Currently, Project WET is involved in a complete revamping of curriculum through nation-wide efforts.	Montana Water Resources Research Institute 122 Gaines Hall Montana State University Bozeman, MT 59717 406-994-5392

Wetland Ecosystems I	unknown	This curriculum developed by Ducks Unlimited Canada is subtitled Habitats, Communities and the Diversity of Life. Nine lessons lead students through an exploration of wetlands. They gather information related to organisms that live in, on, or near water in wetlands, discovering interactions and interdependencies. Experiments highlight the impact of human activity in wetland ecosystems.	Ducks Unlimited Canada P.O. Box 1160 Stonewell, MB R0C 2Z0 204-467-3000
Wetland Ecosystems II	unknown	Subtitled Interactions and Ecosystems, this unit focuses on wetland types, energy pyramids, abiotic factors, feeding adaptations and organism relationships, population effects, and human interventions. It includes a field trip to a local wetland, building on the lessons and teaching students about sampling techniques, observation, teamwork, safety procedures, and data analysis.	Ducks Unlimited Canada P.O. Box 1160 Stonewell, MB R0C 2Z0 204-467-3000
Wetland Ecosystems III	unknown	Subtitled Evolution, Diversity and the Sustainability of Life, this unit's goal is "to help students enhance their understanding of the environmental, technological, and social aspects of science." It examines environmental impact assessment, socio-political considerations in environmental solutions, biodiversity, sustainable development, adaptations, natural selection, wetland types, pollution and taxonomy. A wetland field trip involves students in collection, measurement of water flow and water clarity, identification of plant and animal specimens, and markers of adaptation.	Ducks Unlimited Canada P.O. Box 1160 Stonewell, MB R0C 2Z0 204-467-3000

Wetlands and Wildlife: Alaska Wildlife Curriculum Teacher Information Manuals and Guides	1992	Materials provide information and teaching activities about Alaska's wetland habitats and animals for three different grade levels: K-3, 4-6, and junior/senior high school. Included are wetlands awareness, wetland ecology, human ecology, human impacts on wetlands, and migratory birds. The lower grade levels emphasixe ecology while the activities for higher levels stress investigation and action skills. Field trip materials provide significant support for issues investigation activities.	U.S. Fish and Wildlife Service 1011 E. Tudor Road Anchorage, AK 99503 907-786-3351
Wetlands: A Major North America Issue. An Environmental Case Study for Grades 6-9.	1992	This study guide applies wetland study to four Environmental Education Goals: (1) science foundations; (2) issue awareness; (3) issue investigation, and; (4) citizenship action. The author uses Dr. Seuss's, The Lorax, as the sample case study at each Goal Level. Students are introduced to several human values and beliefs toward wetlands, as well as the affects of human presence on wetlands in a "Wetland Issues Web." Students then collect and analyze opinionnaires and questionnaires of the community's perception of wetlands. This summarized data leads to the next Goal Level, Citizenship Action, where students suggest solutions to the identified problems. The author provides a section on Types of Issue Action Methods to assist students and adults with citizenship actions necessary to solve community issues.	Jerry Culen Florida State Extension Service , 904-846-0996
What is Water?: A	1993	Materials cover the four topics listed in the title.	4-H Marine Education

Stream Becomes an Ocean.		Designed as school curriculum or school enrichment. Includes leader and member guides.	4-H Marine Education Virginia Cooperative Extension, c/o Barry Fox Box 9081 Virginia State University Petersburg, VA 23803 804-524-5848
Wild Louisiana	unknown	This curriculum is divided into three modules: Vanishing Wetlands; Gata Data: and Louisiana Redfish. Each unit includes a background information unit plan and a video unit plan (the video accompanies the curriculum). The curriculum is not clearly organized between the unit plans and the video unit plans. All units strongly emphasize the ecological and economical value of wetlands, redfish, and alligators. All units incorporate ecological concepts including niche, habitat, eurotophication, ecosystem, biotic and abiotic factors.	Louisiana State University and Louisiana Sea Grant College Program Communications Office Baton Rouge, LA 70803-7507 504-388-6448
Wise Water Ways	1990	Three units designed for third through fifth grades. Emphasizes water conservation in a desert environment.	University of Nevada Cooperative Extension Service Reno, NV 702-731-3130

Wonderful World of Water. A Curriculum Guide for Elementary Schools.	unknown	Designed for the K-5 audience, the activities are divided into 4 units: the water cycle, water properties, water ecosystem, and water use by humans. A few activities draw relationships between water transport and human physiological functions, e.g., nutrient transport per blood. Some activities may be too advanced for primary grades and will have to be adapted. Authors include a list of "Interdisciplinary Ideas" for the educator.	Westchester County Department of Parks, Recreation, & Conservation 19 Bradhurst Avenue Hawthorne, NY 10532 914-593-2650
World of Fresh Water	1997	World of Fresh Water: A Resource for Studying Issues of Freshwater Research was designed to promote understanding and appreciation of freshwater systems as plant and animal habitat for students in grades 4-6, but is adaptable for older students. The sixteen activities in this EPA-developed curriculum address water use, ecosystems, food chains, and pollution of fresh water. Students create and monitor pond models. They perform experiments that demonstrate the efficacy of dilution and bioremediation, the impact of pollutants on aquatic organisms, and bioaccumulation in life forms.	US Environmental Protection Agency National Health & Environmental Effects Research Lab Mid-Continent Ecology Division--Duluth 6201 Congdon Blvd. Duluth, MN 55804 218-720-5708
World of Fresh Water	1997	No description available.	EPA-Office of Research and Development check web page ,

WOW! The Wonders of Wetlands	1995	This is an educator's guide to providing activities to help kids understand wetlands, the wetland community, and wetland issues. Information is presented in a dense, but lively and attractive format. One of a few curriculum that talks about "natural pollution," and the effect of weather upon water quality. Excellent use of kinesthetic games to demonstrate water-related dynamics. Unique inset for some lessons called "Nature In Your Neighborhood." Includes suggestions to modify activities for younger and more advanced students. Materials include restoration and action guides. Includes suggestion for community action projects at end.	Environmental Concerns, Inc. P.O. Box P, Education Department St. Michaels, MD 21663 301-745-9620
Your Impact on Salmon/Fish	unknown	No description available.	Washington Department of Fish and Wildlife Natural Resources Building 600 Capitol Way N. Olympia, WA 98501-1091 360 902-2200
Your Impact on Salmon/Fish: A Self-Assessment	unknown	This self-assessment tool for older students and adults queries personal behaviors that affect salmon habitat. Categories of assessment include water use, lawn care and landscaping, electricity consumption,	Washington Department of Fish and Wildlife 600 Capitol Way N

	septic system maintenance, storm drains, vehicles, stewardship, chemicals and hazardous waste, volunteerism and active involvement in policy-making.	Olympia, WA 98501-1091 360-902-2200