

inonmental Resource Guide 2002 Point Sourion Prevention





ENVIRONMENTAL RESOURCE GUIDE

NONPOINT SOURCE POLLUTION PREVENTION

A series of classroom activities for Grades K-2

TENNESSEE VALLEY AUTHORITY
Environmental Education Section

Technical direction provided by AIR & WASTE MANAGEMENT ASSOCIATION Education Council

In Cooperation With

U.S. DEPARTMENT OF AGRICULTURE Soil Conservation Service

U.S. DEPARTMENT OF INTERIOR Bureau of Reclamation

U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Wetlands, Oceans, and Watersheds Assessment and Watershed Protection Division

U.S. ENVIRONMENTAL PROTECTION AGENCY - REGION V
Wetlands and Watershed Section

August 1993

FOREWORD

The members of the Air & Waste Management Association believe one of the best ways to achieve the goal of a clean and healthy environment is to improve the environmental literacy of our youth. As a result, the Association has established a public education program so that teachers, school children, and the public can get information they need to make responsible decisions every day about environmental issues.

As a part of this continuing program, the Association proudly presents to the educational community the second component of its Environmental Resource Guide (ERG) program - "Nonpoint Source Pollution Prevention." As with the first ERG volume on "Air Quality," this volume was developed in partnership with the Tennessee Valley Authority's (TVA's) Environmental Education Section. Using its university-based network of environmental educators, TVA identified teachers to write the activities and field test them in class settings.

Today, many pollution prevention programs focus on reducing pollutants and wastes at their source. For example, efforts are being made to install air cleaners on factories, power plants, cars, and wood stoves to trap pollutants before they get into the air and are eventually transported into water. By using such an approach to head off a problem at its earliest stage, the progression of pollution is significantly reduced.

However, because of its nature, nonpoint source pollution presents its own set of challenges. By definition, nonpoint source pollution cannot be traced to a specific point, but rather to many individual places. Agriculture, forestry, mining, construction, and urban activities all contribute to nonpoint source pollution.

So what can be done to prevent pollution that cannot be traced to one source? The first step is to become better educated on the subject of nonpoint source pollution—what it is, where it comes from, and what we, as individuals, can do about it.

The Environmental Resource Guide - Nonpoint Source Pollution Prevention presents basic information on the relationships between land use and water quality—specifically nonpoint source water pollution—in a series of 10 factsheets and 8 activities. This Guide provides kindergarten and primary school teachers with a concise introduction to nonpoint source pollution issues so they can present this basic information to their students. The material is "teacher friendly" and can easily be integrated into existing science, social studies, and language arts curricula.

We hope you will find the volume helpful, and we welcome your comments to improve future editions.

Education Council Air & Waste Management Association

TABLE OF CONTENTS

Introduction	1
Activities (Part 1)	
What Goes Around Comes Around	5
A Hiking We Will Go	11
Don't Runoff	27
Pond Scum	41
Get the Dirt Out!	47
Down With Pollutants!	51
Can It!	59
Pollution Solutions	67
Glossary (Part 2)	92
Glossary (rart 2)	
Fact Sheets (Part 3)	
Water	91
Water Pollution	93
Land Use and Water Quality	95
Sediment Water Pollution	99
Nutrient Water Pollution	101
Bacterial Water Pollution	103
Toxic Water Pollution	105
Other Water Quality Factors	107
Best Management Practices	109
Individual Actions	113
About the Air & Waste Management Association	115
About the Environmental Education Program, Tenno	