

INTRODUCTION

USING THIS GUIDEBOOK TO BENEFIT YOUR COMMUNITY

How important is clean water to you and your community?

The values and benefits of clean water are many. Healthy waterways provide valuable fish and wildlife habitat, aesthetic resources, recreational opportunities, and safe drinking water supplies.

They are an integral part of our individual and community well-being.

WHAT IS NONPOINT SOURCE POLLUTION?

Nonpoint source (NPS) pollution results from land uses and development that:

- Discharge pollution (such as suspended solids, sediments, and nutrients) into surface water and groundwater in a diffuse manner

or

- Affect water quality by increasing temperature, changing pH, or reducing dissolved oxygen.

Most NPS pollution problems originate from water flowing past exposed pollutant sources and picking up soil or other chemicals. The pollution comes from many places and many activities, including farms, construction sites, lawns and gardens, timber-cutting areas, industrial plants, roads, streets, and highways. This is in contrast to point source pollution, which can be traced to a specific point of discharge, such as a wastewater treatment plant or factory.

NPS pollution may flow directly into surface waters, or may slowly infiltrate into the ground and later emerge in streams and lakes.

One of the unique problems of NPS pollution is that it results from the accumulation of many small actions. Each action has a small individual impact, but the combined cumulative effects are large.

Nonpoint source (NPS) pollution is affecting Oregon's waterways and threatening these beneficial water uses. The problems caused by NPS pollution result in unacceptable environmental, economic, and social costs to communities and their citizens. They are problems that state and local officials across the country will increasingly need to address in their daily decisions.

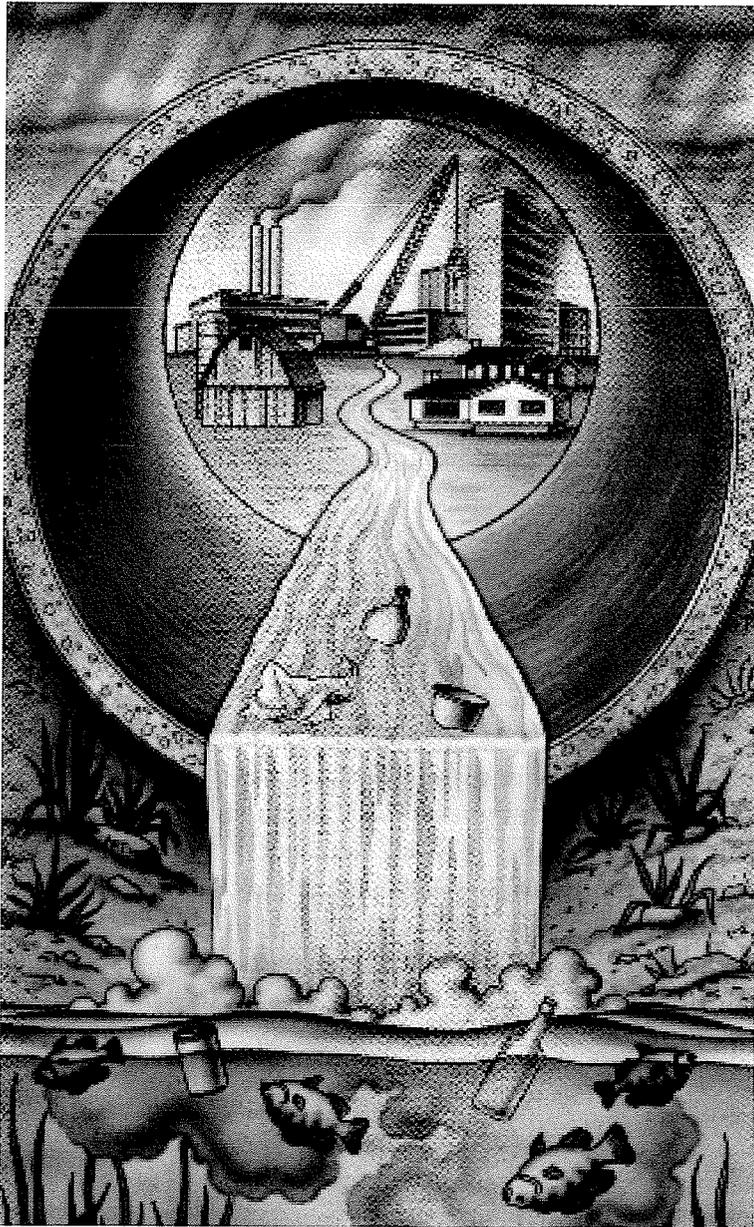
This guidebook is written for local planners, engineers, water quality specialists, elected officials, and interested citizens. It emphasizes the important role of local government in protecting water quality and tells how to find solutions appropriate for local problems. It also discusses how everyday activities contribute to NPS pollution and how citizens can be involved in recognizing and solving the problem.

Federal and state regulations and programs have been developed over the last 20 years to control nonpoint sources of pollution. Many of them can be implemented only at the local level. The effect of these regulations and programs has generally been limited, since many communities are not fully aware of what nonpoint sources are, much

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less how to control them. The incentives and requests for NPS pollution control programs at the local level are now evolving into federal mandates. Future amendments to the Federal Clean Water Act (FCWA) are expected to increase that pressure. The objectives are becoming increasingly clear, but many of the choices about how to reach them are still left primarily to local governments, where most land use and stormwater management decisions are made.

The Oregon Department of Environmental Quality (DEQ) and the Oregon Department of Land Conservation and Development (DLCD) are committed to communicating better with local governments and communities about NPS



pollution and providing specific information about what can be done. Fortunately, local governments can use many of their existing programs and resources to control NPS pollution. Planning, permitting, capital improvements, and other existing programs can be applied, without the need to create new organizations or processes. Special dedicated funding opportunities exist so that NPS programs do not need to compete with other local programs for funding.

Local governments are the primary public service providers to Oregonians. Their proven capabilities need to be combined with the strengths of Oregon's comprehensive planning process and public works programs and the technical expertise of state agencies. Working together at the state and local levels can achieve far greater environmental benefits than separate action.

The guidebook is intended to provide assistance, rather than to mandate a specific set of rules. Its goal is to show how the various levels of government can work together, and how communities can find solutions that are applicable, efficient, and cost-effective. Most important, it is intended to help local governments provide the leadership

and innovation necessary to control NPS pollution before control requirements become inflexible and mandated.

This guidebook is meant as a general introduction to NPS pollution and its control. More detailed information is available from the Oregon Departments of Environmental Quality and Land Conservation and Development.

ORGANIZATION OF THE GUIDEBOOK

Section I: Background, discusses the important role of local government in preventing and controlling NPS pollution. It describes the causes and sources of NPS pollution and identifies the environmental, social, and economic impacts that can result. It then provides an overview of possible control measures that local governments can use, and discusses the various approaches that can be taken to implement those measures.

Section II: Choosing the Right Approach, discusses how each community can choose the NPS pollution control options and approach that work best for it.

Section III: Nonpoint Source Pollution Control Measures - Local Government and Citizen Processes, describes the authorities and functions that allow various local government entities to address NPS pollution control. It then describes control measures that are classified as "management processes." These are existing processes (such as land use regulations, capital improvement programs, or design/construction standards) that can be adapted to incorporate NPS pollution control elements. Public involvement and stewardship opportunities are also discussed.

Section IV: Nonpoint Source Pollution Control Measures - Facilities and Practices, describes facilities (such as detention ponds or roof drains) and practices (such as logging methods) that can be used to control NPS pollution. It identifies the advantages, disadvantages, and requirements of each measure, so communities can select those that best meet their particular conditions.

Section V: Summary of Federal and State NPS Pollution Control Authorities, summarizes the various federal and state laws and regulations related to NPS pollution control.

The **Glossary** contains terms relevant to NPS pollution.

The **References** identify sources that can provide more detailed information about NPS pollution and control measures.

The **Appendices** contain material that supplements the information in the guidebook.

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This guidebook can be viewed as a “tool chest” of techniques, which communities can evaluate and incorporate as needed in their planning, regulatory, and capital improvements programs. No single approach is likely to be adequate; a combination of the various control measures will produce the best results.

In using the guidebook, it will be useful to follow a general four-step approach for planning and implementing NPS pollution control in your community. This approach is summarized here and discussed in more detail in Section II.



First: Educate and involve staff, local officials, and citizens in NPS pollution issues and solutions.



Second: Inventory and assess NPS pollution problems and the related environmental, political, and social conditions in your area.



Third: Develop alternatives for NPS pollution control (including funding) that are appropriate for your community, as part of the comprehensive planning and surface water management planning processes.



Fourth: Choose and implement the control measures that will efficiently solve the problems, fulfill state and federal water quality goals, and best fit your community's needs and conditions.