

LEARNING FROM NATURE

Canada — The Ecosystem Approach and Integrated Land Management

INTRODUCTION

This monograph describes an ecosystem approach to resource management and illustrates where it is being applied in Canada. It explains how decisions are made in an ecosystem context and shows how a multisectoral approach to planning and decision making calls for different information needs. In particular, the monograph features land use, a significant factor in ecosystem-based planning and management. Integrated land management acknowledges that land can be used for multiple purposes and that trade-offs or choices must be made with respect to the economic, social, and environmental benefits. As land use choices arise, decisions can be made to protect land and to conserve species and spaces at risk. Although terrestrial ecosystems are featured, it is hoped that this monograph will generate further examination and consideration of the ecosystem approach in managing both landscapes and seascapes.

Why is it so important to protect our ecosystems? Because we have a moral responsibility to do our part to preserve the earth's natural assets for present and future generations. Canada is extremely blessed in this regard — we are home to a wealth of natural resources and diverse ecosystems. Covering nearly 10 million square kilometres of land and freshwater, and more than 5 million square kilometres of territorial seas, Canada has nearly one quarter of the world's wetlands, 10 percent of forests, 9 percent of the renewable freshwater, and the longest coastline and the second largest continental shelf in the world. Stewardship of these abundant resources is a responsibility recognized by governments, communities, and individuals throughout the country.

In Canada, the ecosystem approach to resource management is considered to be one of the tools that contribute to sustainable development. The basis of the approach is that there are limits to the degree of stress that ecosystems can accommodate before they are irreversibly degraded or destroyed. An ecosystem approach requires an ecological context for decision making, integrating the ecosystem components of air, land, water, and biota. The approach reflects an evolution in the way we assess and manage the impact of human