

## CONTENT

## Chapter

1 Mathematical Model of the Selective Enhancement of Blue-Green Algae by Nutrient Enrichment	1
2 A Plankton-Based Food Web Model for Lake Michigan	33
3 A Long-Term Phosphorus Model for Lakes: Application to Lake Washington	75
4 The Dispersion of Contaminants in the Near-Shore Region	93
5 An Evaluation of the Transport Characteristics of Saginaw Bay Using a Mathematical Model of Chloride	113
6 Seasonal Phytoplankton Succession as a Function of Species Competition for Phosphorus	
7 Boise River Modeling	171
8 Mathematical Modeling of Nutrient Cycling in Rivers	205
9 Combining Chemical Equilibrium and Phytoplankton Models-A General Methodology	233
10 Dynamics of an Algal-Protozoan Grazing Interaction	257
11 Application of a Model of Zooplankton Composition to Problems of Fish Introductions to the Great Lakes	281
12 Effects of a Chlorinated Hydrocarbon Pollutant on the Growth Kinetics of a Marine Diatom	305
13 A Steady-State Model of Light-, Temperature-, and Carbon Limited Growth of Phytoplankton	319
14 Simulation of Algal Growth and Competition in a Phosphate-Limited Cyclostat	337
15 Component Modeling: A Different Approach to Represent Biological Growth Dynamics	357
16 Formulating Predator Growth Rate Terms for Population Models	377