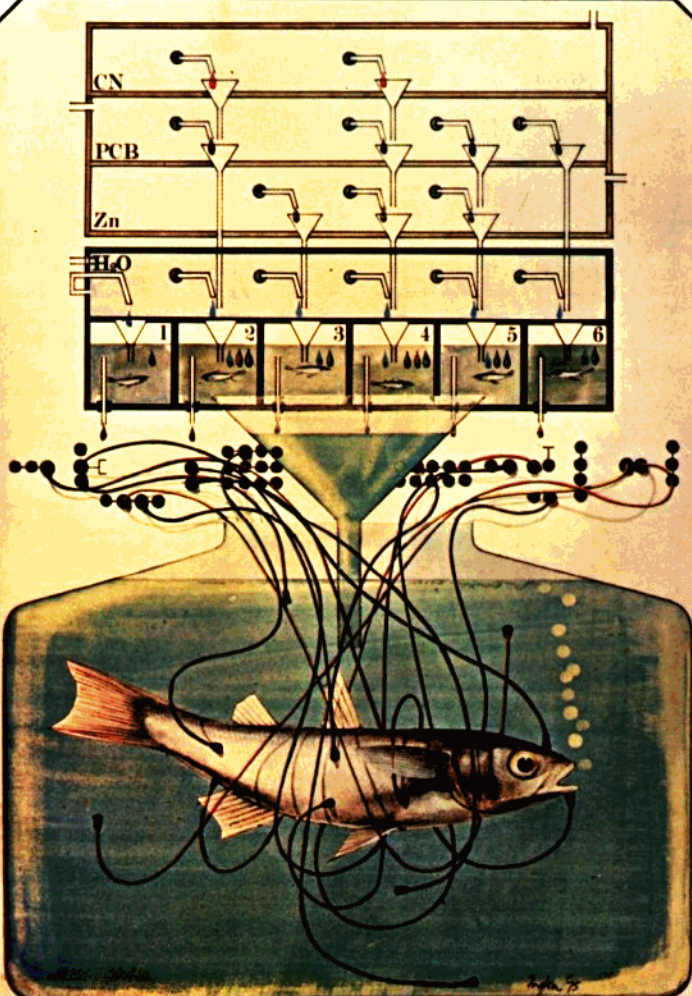


Water Pollution

D.W. Connell Second Edition



Water Pollution

**Causes and Effects in Australia
and New Zealand**

SECOND EDITION

D. W. CONNELL



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Dedicated to
the memory of
William Eugene Connell,
father and friend

Preface

Conservation and pollution are among the most dominant issues of our time. The pollution of lakes, rivers, and the sea is now a matter for popular concern in Australia and other parts of the industrialized world. Many books are available on the topic, but none has dealt specifically with the basic chemical and biological processes as related to the Australian situation.

This book aims to provide an understanding of the pollution of water in terms of the resultant chemical and biological changes which occur.

The world scientific literature on water pollution is large and growing. New research journals dealing with the subject appear each year. This book does not attempt to review, or even list, the references involved in this abundance of information. Only major sources of information are provided in the reference list. However, the references are fairly comprehensive regarding water pollution in Australia and include, in most cases, the publications which have appeared in readily available scientific source material.

Since the first edition of this book appeared in 1974 the amount of information on water pollution in Australia has increased substantially. This is particularly apparent in investigations of eutrophication, heavy metals and, to a lesser extent, pollution ecology. This new information has been incorporated into this edition. In addition the geographical scope has been broadened to include New Zealand. This country has a long history of well conducted investigations into water pollution and a substantial body of scientific information is available.

Ideas and encouragement from well-known aquatic conservationist Eddie Hegerl greatly assisted in the initiation of this book. My colleagues Angela Arthington and Greg Miller provided helpful critical comment and Greg Miller assisted in writing the Chapter on "Petrochemicals". Brian Bycroft provided valuable assistance in the collection of reference material; Marie Ford patiently and compe-

tently typed the manuscript; and Aubrey Chandica drew the diagrams with considerable skill and care. Ian Campbell of the Caulfield Institute of Technology, formerly from Monash University, prepared Table 46 for the First Edition and this has been reproduced in this edition.

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Finally I would like to thank my wife, Patricia, for her encouragement and active assistance at all times.

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