

GUIDELINES OF LAKE MANAGEMENT

Volume 3

Lake Shore Management

Editors:

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FOREWORD

S. Evteev

As a result of socio-economic development in the lake basins lakes and lakeshores are becoming more and more complex in their structural, spatial and temporal dimensions as such development proceeds.

Perception of the functions of freshwater bodies, lakes in particular, has changed during intensified development along their lakeshores. Nevertheless, the achievements are often based on trial and error approach and then developed negative impacts become costly to be resolved. Sometimes the effects are nearly irreversible.

As an example can be given uncontrolled industrial development along the lakeshores in many parts of the world, with a consequence of heavy pollution of the lake waters. Extensive agriculture along the lakeshores has developed the shrinkage of lakes and increased salinity of their waters. Therefore when exploiting the lake basins we have to bear in mind that lakes and lakeshores form an important part of the ecosystems and landscapes.

In contrast with current practices, which take into account only the lake function as a source of water, all functions should be considered simultaneously and all interactions between environmental conditions, human activities and lakeshores as part of the ecosystems need to be reviewed and solved in the basin-wide scale.

The guideline book "Lakeshore Management" prepared under a joint programme of UNEP and ILEC is focused on the above problems and their sustainable solution. It is hoped that both researchers and practitioners concerned with the lakeshore management will find the book useful in their everyday work.

FOREWORD

Tatuo Kira

The whole spectrum of lake management may be divided into three fields in the special context, though these are, of course, closely related to each other. The management of lake water itself comes in the first place, and the second concerns the management of the whole catchment land area. In addition, the lakeshore management is no less important than the others for several reasons.

As emphasized in the text of this volume, the shore or littoral zone has the highest biological activity and productivity in a lake ecosystem, thus contributing greatly to biological resources of the entire lake, particularly in shallow of small lakes. It is also an unstable transition zone between land and water, where erosion and deposition as well as submergence and drying-out alternate from time to time. The ecological importance of land-water ecotone or transitional zone and its fragility have been frequently stated in recent literature. On the other hand, human activities related to lakes tend to be concentrated on their shores with the result that littoral ecosystems are exposed to artificial disturbance or destruction. The careful management of the lakeshore is therefore a condition for the sustainable, environmentally sound utilization of our lake resources.

It may also be pointed out that the shore, when looked at from the lake in a way represents the face of the lake. Sailing along the shore in a boat one can easily imagine how the lake -- and even the entire catchment -- has been managed. Where the lake is managed in an environmentally sound way, the shore scenery is always *natural and beautiful* to the satisfaction of both the local residents and the sightseeing visitors.

These are the reasons why the International Lake Environment Committee (ILEC) has decided to allot one separate volume to the shore management. I take this opportunity to express my gratitude to the UNEP for their support and the ILEC-members, especially the two editors, for the efforts they have made, and it is my hope that the committee's intentions will be favourably accepted by the readers of this volume.

Otsu, Shiga, April 1990

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