

Foreword

This book is about wetlands in their broadest sense—as places of water on land, and where water shapes the land. And it is about health in its richest sense—the well-being of people, beyond ill-health or the absence of disease. In some parts of the world these two domains of human thought and existence tend to be separated, into ‘environment’ and ‘health’ disciplines and sectors. They only come together when the environment impinges on humans, like an infectious disease, requiring that the environment be manipulated to avoid such possibilities.

We can’t continue to see the world, and our relationships with it, like that. In this book we adopt an ecosystem approach to human health, which starts from the premise that Earth systems are foundational for human societies and the well-being of people; the two are interdependent. This is much more like an Indigenous world-view where people, the land and the water are together.

To do this we bring together two concepts—from health promotion we recognise the valuable ‘settings’ approach, first enunciated in the Ottawa Charter (WHO 1986). The ecological and systems-based perspectives in this approach can be drawn upon to be much more explicit about the ecosystem, in this case the wetland, as the ‘setting’ in which people “take care of each other, our communities and our natural environment” (see Parkes and Horwitz 2009). The setting includes the institutional and governmental aspects required to deliver health services, to address health inequalities, and to intervene for public health.

From ecological economics we have recognised the ‘ecosystem services’ approach, which starts from the assumptions that main stream market economics externalises the environment, that we take it for granted, and that we do so at our peril. The ultimate ecosystem service is the availability of water, a chemical compound essential for life. Draining a wetland to avoid mosquito breeding and the transmission of disease, or damming a river to avoid the miserable effects of flooding, at best makes the calculated trade-off to deliver a net benefit; at worst it deprives local people of essential ecosystem services. Either way, the consequences may be more severe than the original problem conceived.

Examining ecosystem services provides analysts with a more effective way to communicate with decision-makers, with the potential for enhancing planning, implementation and assessment efforts for integrated land and water management

(UNU-IHDP 2014). Ecosystem services can also be more clearly linked to aspects of human well-being like health, security, good social relations and basic materials for good life (see Millennium Ecosystem Assessment 2005).

The book draws from the examples given in the Ramsar Convention on Wetlands' technical report *Healthy Wetlands Healthy People* (Horwitz, Finlayson and Weinstein 2012), and goes beyond; the organisation of chapters is more clearly related to the ways in which wetlands as settings contribute to human health. Chapters 3–8 deal with wetlands as playing a critical role in food security and provision of medicinal products, wetlands as sites of exposure to infectious diseases or their vectors and toxic materials, and wetlands as places for livelihood and lifestyle contributions to human well-being. Chapter 9 demonstrates how a wetland can become the setting in which natural disasters are concentrated and their consequences for human well-being are addressed by societal responses and preventative actions. Chapters 10 and 11 follow, firstly by examining the ways in which the public sector in general, and the health sector in particular, might intervene to enhance human well-being by addressing the erosion of ecosystem services in wetlands, and secondly by arguing for specific human health guidance for wetland managers.

References

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Preface

Wetlands provide a wonderful wealth of ecosystem services and benefits to people, of which many are linked to human health and well-being, including water provision and its purification, resilience to climate change, storm protection, erosion prevention and food provisioning, among others. Wetlands are also crucial to the livelihoods and subsistence of communities, as they are central to the provision of food and water security. For example, wetlands can serve as nurseries for fish, provide crops, such as rice and timber, and recharge groundwater supplies. They can also be sources of spiritual renewal, leisure, tourism and recreation. As a result, degradation of the quality or ecological character of wetlands is often linked to a decrease in these benefits and services to people, and in turn the well-being and health of those who depend upon them.

Wise use of wetlands, which is their maintenance through the implementation of ecosystem approaches, supports sustainable development and is central to the health of wetlands and the health of people. “Healthy people, Healthy wetlands” should be a mantra for our modern world.

Recognizing this important relationship, the Conference of the Contracting Parties of the Ramsar Convention has adopted a number of Resolutions relating to wetlands and human health, such as Resolution X. 13, *the Changwon Declaration on human well-being and wetlands*. The Declaration calls for including the inter-linkages between wetlands and human health as key components of national and international policies, plans and strategies in light of the significant health benefits that wetlands provide to people.

The most recently adopted Resolution on this matter is Resolution XI. 12, *Wetlands and health: taking an ecosystem approach*, builds on Ramsar Technical Report No. 6 on *Healthy wetlands, healthy people: A review of wetlands and human health interactions*, and calls for the promotion and delivery of an ecosystem approach to healthy wetlands and their catchments with proposals for integrated methodologies and actions across relevant sectors.

In this light, this book explores the complexities of the relationships between wetlands and humans, through a general treatment of ecology-health issues for the

wetlands and public health sectors. Furthermore, this book seeks to further build on the strong message that degrading or converting wetlands, thus stopping them from delivering their services, can have serious adverse effects on human health.

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