## Book Explores Rich Heritage of CT's Life Arteries

The intricate relationship between Cape Town's rivers and wetlands and the historical development of South Africa's Mother City is the subject of a new publication by the Water Research Commission (WRC).

> dited by Cate Brown and Rembu Magoba, the ornately illustrated book, *Rivers and Wetlands of Cape Town, Caring for our Rich Aquatic Heritage*, provides a fresh perspective on rivers and river management in Cape Town, using the lenses of time and space. "We step back in time and track the changes that have occurred

and the reasons for those changes," say the authors. "We do this in the hope that lessons from the past, combined with insights from a society that has learnt much about its dependence on nature, will assist us not only in understanding where we are but, more importantly, in plotting a better path into the future."

Cape Town and Stellenbosch are richly blessed with rivers such as the Diep River, Liesbeek River, Hout Bay River, Eerste River and Lourens River. Added to this are the wealth of small, shallow lakes and wetlands, known collectively as vleis, situated mainly on the Cape Flats, and

available with additional funding from Ninham Shand (now part of the Aurecon group) and Southern Waters Ecological Research and Consulting. To order a copy of *Rivers and* Wetlands of Cape Town (WRC Report No: TT 376/08), contact Publications at Tel: (012) 330-0340 or e-mail: orders@wrc.org.za

Former mayor and leader of the Democratic Alliance, Helen Zille writes in the foreword: "Cape Town is blessed with remarkable environmental resources, grown from 80 000 people to 3,4 million

on natural resources and urban infrastructure. The information in this book is a valuable synthesis of unpublished documents and personal communications. We hope that preserving the past lessons, documented in this test will assist us in future with the conservation and sustainable management of our precious aquatic resources."

not the least of which include a rich freshwater heritage. But this city has in the past 50 years. "This has placed tremendous demands

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including Rondevlei, Zeekoevlei, Blouvlei, Paardevlei, and Wildevoëlvlei.

The waterways and water bodies have played a pivotal role in the history of the area. In common with many major cities around the world, the streams, rivers, wetlands and vleis of Cape Town have been shaped as much by the region's political and social history as by nature and technology.

Inevitably these aspects have had an effect on the ecological integrity and functioning of the city's water system. The provision of water supply, drainage and waste removal for a city is no mean feat, and past decisions and actions should be seen in the social, economic and technological context of their time.

"The development of Cape Town and Stellenbosch in the last three centuries is associated with astounding engineering progress, and littered with unsung engineering heroes. These men designed, dug and built in, around and on our rivers and vleis with the purpose of promoting the safety and convenience of the residents. Our duty is to learn from our predecessors, build on the good they have left behind, try to rectify the mistakes made and use their legacy of knowledge to do better in the future."

This WRC-funded project has drawn on a wealth of information in the libraries of the Cape Town City Council, the State Archives and the University of Cape Town. In addition much of the engineering information contained in the book was provided by an unpublished text by retired city council engineer and historian Tony Murray, entitled 'Much Water under Many Bridges'.

Of course, Cape Town's rivers and wetlands were originally shaped by forces that had nothing to do with humans, so the book begins with background information about the area's geology and geomorphological history, and the effect of long-term climate change and sea level oscillations, dating back to 250 million years ago.

The chapters of the book are arranged on the basis of the major river and vlei catchments in the area. While it was not possible to include every stream, the sections outline the known history of at least 15 sets of rivers, streams and wetlands from 250 million years ago to the present day.

There is also a section on the economics of the rehabilitation of rivers and wetlands. This chapter describes the services provided by rivers and wetlands, and summarises the way in which these have been impacted by urbanisation and related interventions. The costs of managing Cape Town's urban rivers and wetlands is outlined, while it is demonstated how the benefits have increased through investment in more holistic engineering solutions that make better use of the potential for provision of ecosystem services.

The book concludes with a chapter entitled: 'Looking to the future', offering some practical suggestions for improving river and wetland functioning while dealing with the challenges of flooding and waste disposal.

Seen at the launch of Rivers and Wetlands of Cape Town, Caring for our Rich Aquatic Heritage are Dr Cate Brown (co-editor, Southern Waters), Ms Connie September (former Chair of the Parliamentary Portfolio Committee on Water Affairs & Forestry), Mr Rembu Magoba (co-editor, Southern Waters) and Dr Rivka Kfir (CEO, WRC).

