## Exploring Great & Large Lake

Threats, Risks, & Management

## Ecosystems

★To give presentations at the this symposium, during the SIL Congress in Cape Town, August 15-20,

2010.

★To contribute a paper to a peer reviewed publication on Great & Large Lakes.

## Introduction

The large lakes of the world have traditionally been defined as having a surface area exceeding 500km2 whereas the Great Lakes of the World surpass 10 000 km2. Together, the total volume of these lakes make up 93% of the global freshwater reserves. The large lakes have unique features due to their size, morphology, physical, geochemical and biological characteristics. All large lake ecosystems are vulnerable to anthropogenic stressors including eutrophication, toxic chemicals, invasive species, overfishing, as well as climate change. Ecosystem-based management demands proper scientific understanding of structure and functioning as well as the risks posed to these ecosystems and the important services they provide. Consequently, comparison of different lake environments and management systems will be an effective tool in providing insights into the common ecosystem health problems and dealing with important topics such as biodiversity, food web dynamics, invasive species, modelling, and application of new technologies. Such comparisons will provide a better understanding for the conservation of the ecological integrity of large lake ecosystems. The African continent, harboring its immense and ancient Great Lakes, provides another interesting facet to the study of lake ecosystems.

## Invitation

Historically, SIL and AEHMS have been active and instrumental in convening conferences and publishing proceedings on great/large ecosystems and their issues, problems and solutions. Therefore it is an excellent opportunity to convene this symposium during the SIL Congress in Cape Town, South Africa and to gather scientists and discuss the state of ecosystem health of the great and large lakes of the world. This will permit broad range discussions and exchange of ideas and approaches facilitating the formulation of appropriate, practical and integrated management measures to mitigate the different threats. All large lakes researchers are invited to this challenging, interesting and exciting symposium.

