

*A Great Lakes of the World
International Symposium*

GLOW VI

Great Lakes of the World

First Circular

Linking Ecosystem-based Science to Management in the Great Lakes of the World

June 13-17, 2010

Incline Village, Lake Tahoe, USA

Co-sponsored by:



Co-chaired by:

G. Schladow, J. Reuter & M. Munawar

Great Lakes of the World (GLOW)

GLOW (Great Lakes of the World) is a continuing series of international symposia organized by AEHMS in order to promote interaction and communication between Great Lakes scientists and communities across the world. The GLOW VI conference deals with the concept of ecosystem approach in the Great Lakes of the World. This concept was developed by Dr. Jack Vallentyne in the management of the North American Great Lakes (Vallentyne & Beeton, 1988; Munawar, 1993)¹. Although the ecosystem approach has been the guiding force for the management of the North American Great Lakes, its application to other great/large lakes of the world has been limited. The usefulness and effectiveness of this approach is necessary in other large lake ecosystem, especially Africa, Russia and South America. Lake Tahoe is an outstanding example of linking ecosystem science to management with a lot of success stories and lessons to learn.

Lake Tahoe, USA, is located in the crest of the Sierra Nevada Mountains at an elevation of 1,897 m. With a maximum depth of 501 m, it is the world's 11th deepest lake and is ultra-oligotrophic by all classifications. Lake Tahoe is renowned for its clarity and cobalt-blue color, a condition that is naturally supported by its small watershed to lake surface area (1.6) and granitic geology. However, since continuous monitoring began in 1968, a full 10 m of clarity has been lost.

Increasing urbanization has become a new feature on the landscape. Today the Tahoe basin supports close to 70,000 permanent residents and nearly 3 million visitors annually, leading to the increasing impacts from human land-uses and urbanization on pollutant loading and habitat modification. In addition to the dramatic decline in clarity and the onset of cultural eutrophication, Lake Tahoe and its watershed also are affected by atmospheric deposition of pollutants, terrestrial and aquatic invasive species, air quality degradation, and loss of wetland habitat. The continuing pressure posed by these stressors requires the integration of science information and management strategies with the aim of ensuring equilibrium between the region's natural endowment and its human-developed environment.

Government agencies have responded to these stressors in a variety of ways, including the establishment of stringent water quality goals and associated watershed regulations. Local, state and federal agencies have strongly embraced research, monitoring and modeling in their resource management and restoration policies for many years. Based on over four decades of experience, Lake Tahoe provides an ideal setting for examining *science-based management of lake ecosystems*.

The focus of the GLOW VI meeting will be to provide attendees with a wide platform to discuss how their investigations have contributed to the decision-making process and environmental policy for great/large lakes around the world. Key agency staff and policy makers from the Tahoe basin will be invited to discuss the role science plays in their management actions. This is a great opportunity to exchange ideas and experience for researchers and managers of the large lakes of the world, and benefit from each others experiences. We cordially invite you to participate in this promising and exciting conference.

¹ Vallentyne, J.R., Beeton, A.M., 1988. The "ecosystem" approach to managing human uses and abuses of natural resources in the Great Lakes Basin. *Environ. Conserv.* 15(1): 58-62.
Munawar, M. (Ed.), 1993. *Journal of Aquatic Ecosystem Health*. 2(1).



GLOW VI

Themes & Topics

The Symposium plans to focus on a variety of timely topics and themes relevant to Great Lakes of the World in general. We invite active and interested participants to attend GLOW VI to present papers or posters on various aspects of Great Lakes/Large Lakes research as highlighted below:

- Understanding the effects of urbanization on lake water quality and the use of science in developing sound regulatory approaches.
- Using a monitoring approach to evaluate the success of restoration actions and policy goals.
- Exploring the current and future threats to lake ecology and water quality from climate change and aquatic invasive species.
- Management of resource exploitation in the watershed of the world's great lakes.
- Advances in the understanding of fundamental lake and watershed processes.
- Development and application of predictive modeling as a tool for lake and watershed management.
- Case studies that link science, policy decisions, and management strategies.
- The impact of multiple stressors on the structure and function of the lower and higher trophic levels of the food web.
- Emerging tools and techniques for ecosystem research and management.
- Freshwater fisheries and fish habitat.

Venue & Travel Information

The Conference venue will be the Tahoe Center for Environmental Sciences at Incline Village, NV. This state-of-the-art Green building was completed in 2006 and is the home of the UC Davis Tahoe Environmental Research Center. Symposium participants can fly to Reno (45 minute drive), Sacramento (2 hour drive) or San Francisco (3.5 hour drive). Public transportation is available from San Francisco and Sacramento.

Further travel information, together with information on local hotels will be supplied closer to the Symposium date.

Conference Tours

Field trips to local areas are being organized. More information will be available in the second circular.

Response Questionnaire

Please complete the enclosed Questionnaire and return by **December 1st, 2009** to Jennifer Lorimer (jennifer.lorimer@dfo-mpo.gc.ca). Conference/registration information will be sent to only those who complete and return the response questionnaire.

Abstracts

Abstracts must be submitted by email to: jennifer.lorimer@dfo-mpo.gc.ca, as a Word or text file. The abstract due date is **February 1st, 2010**. The author must indicate if he/she wishes to present the abstract orally or as a poster. Underline the presenting author and include affiliation, address and email of the presenting author only. Abstracts will be limited to 300 words in the following format: Text – single space Times New Roman 12 pt, Paper - letter size 21.6x28 cm (8.5x11”). An example abstract is available at www.aehms.org demonstrating abstract format. Any abstracts over the word limit will be returned to the author. Abstracts should synthesize from the objectives, methods, results, and conclusions of the paper.

The logo for GLOW VI is displayed in large, bold, blue-outlined letters. The letters are set against a background of stylized, flowing blue waves that create a sense of movement and depth. The overall design is clean and modern, with a focus on the event's name.

Receipt of the registration fee is essential for inclusion of your accepted presentation into the program. The book of abstracts will act as the proceedings of the conference.

AEHMS Publication Plans

The Publication and Production Committee of the AEHMS, chaired by Dr. M. Munawar, Chief Editor, will oversee the publication of selected manuscripts originating from the conference. The manuscripts will be considered for publication subject to peer review in the ISI rated journal: *Aquatic Ecosystem Health and Management* and/or in the *Ecovision World Monograph Series* depending on the quality and suitability of the manuscripts. Instructions to authors on the preparation of manuscripts can be found on the AEHMS website: www.aehms.org. Due to the large number of manuscripts expected the AEHMS has set page limit guidelines as follows: Keynote: 8; Oral & Poster: 5 printed pages including tables and figures (Text: Times New Roman 11 pt, Margins: 2.7 cm (1”), Paper: letter size 21.6x28 cm (8.5x11”). For more information please contact Dr. M. Munawar, Chief Editor (mohi.munawar@dfo-mpo.gc.ca).

Conference Organization

Conference Organizing Committee

- G. Schladow (Co-chair, USA)
- J. Reuter (Co-chair, USA)
- M. Munawar (Co-chair, Canada)
- M. van der Knaap (Netherlands)
- F. Roest (Netherlands)
- C. Goldman (USA)

Local Organizing Committee

- | | |
|------------------|-------------------|
| • Jill Falman | • Sudeep Chandra |
| • Heather Segale | • Dan Nover |
| • George Malyj | • Stephen Andrews |
| • Brant Allen | • Kristin Reardon |

Secretariat

- J. Lorimer (AEHMS, Canada, jennifer.lorimer@dfo-mpo.gc.ca)

Deadlines

Response Questionnaire Submission: December 1st, 2009
Abstracts Submission: February 15th, 2010

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