

*A Great Lakes of the World
International Symposium*

GLOW VI

Great Lakes of the World

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

**August 2-4, 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 ecosystems, especially Africa, Russia and South America. Lake Tahoe is an outstanding example of linking ecosystem science to management with many 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 of 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 other's 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 held at the Tahoe Center for Environmental Sciences (TCES) located on the campus of Sierra Nevada College, 291 Country Club Drive, Incline Village, Nevada. TCES is a state-of-the-art green building completed in 2006, and is home to the University of California-Davis, Tahoe Environmental Research Center. The center is dedicated to research and education activities at Lake Tahoe.

Conference participants can fly to Reno (45 minute drive), Sacramento (2.5 hour drive) or San Francisco (4 hour drive). Public transportation is available from the Reno airport (www.northlaketahoeexpress.com), Sacramento airport (www.yolobus.com/), and San Francisco airport (www.flysfo.com/web/page/tofrom/transp-serv/pubtrans/ and www.amtrak.com). However, rental cars are strongly recommended if you plan to travel to Tahoe from Sacramento or San Francisco. Rental cars are available at all airports: Reno (<http://renoairport.com/to-from-airport/rental-cars-reno-tahoe-international-airport/>), Sacramento (<http://www.sacairports.org/int/terminal/rental.htm>), and San Francisco (<http://www.flysfo.com/web/page/tofrom/rental-cars/rc-agencies/>). For getting around Lake Tahoe there is public transportation available on the north shore (<http://www.laketahoetransit.com/home>), though service is limited in the evenings.

Please see the attached file "GLOW VI – maps.doc" for some maps of the area.

Accommodation

Participants are responsible for their own accommodation. The list below provides information on several hotels located near the conference venue.

Incline Village

Hyatt Regency Lake Tahoe

Located at 111 Country Club Drive (walking distance to TCES), Incline Village, NV. Call 775-832-1234. Rates range from \$275 - \$400/night. <http://laketahoe.hyatt.com/hyatt/hotels/index.jsp>

The logo for GLOW VI is displayed in large, bold, blue-outlined letters. The letters are set against a background of stylized, wavy blue and white shapes that resemble water or a lake. The overall design is clean and modern, with a focus on the event's name.

*Special Group Room Rates can be arranged through Sales if at least 10 rooms are reserved. Call ahead for more information.

Parkside Inn at Incline

Located at 1003 Tahoe Blvd (walking distance to TCES), Incline Village, NV. Call 1-800-824-6391. Rates range from \$150 - \$200/night. <http://www.innatincline.com/>

Crystal Bay

CalNeva

Located at 2 Stateline Rd, Crystal Bay, NV (requires transportation to TCES). Call 1-800-225-6382. Rates range from \$100 - \$130/night. <http://www.calnevaresort.com/accommodations.php>

Kings Beach

Ferrari's Crown

Located at 8200 N. Lake Blvd, Kings Beach, CA (requires transportation to TCES). Call 530-546-3388. Rates range from \$75 - \$175/night. <http://www.tahocrown.com/lake-front-lodging>

*Offers special rate for attendees at TCES events. Indicate you will be attending a conference at TCES for this discounted rate.

Transportation Options to TCES from Lodging

Public Transportation

The Tahoe Area Regional Transit (TART) is the bus system for the north shore. The bus stops across the street from TCES. <http://www.placer.ca.gov/Departments/Works/Transit/TART.aspx>

Taxi

North Tahoe Checker: 775-833-0707

Alpine Taxi: 530-546-3232

Or visit www.laketahoetransit.com for more North Lake Tahoe transportation information.

Scenic Lake Tahoe Tour

An optional 3-4 hour bus tour around the 120 km perimeter of Lake Tahoe will also be available Wednesday afternoon, following the conference closing remarks. Participants will be able to visit the lake at special designated points of interest, drive through the natural forested landscape, stop at scenic Emerald Bay, tour stream sampling locations in the watershed, observe erosion control projects and tour facilities designed to treat urban runoff. The tour will start and stop at the TCES facility in Incline Village and lunch will be provided en route. Scientists working at Lake Tahoe will be accompanying the tour.

If you are interested in taking the scenic bus tour please fill out the attached Tour form so that we have an accurate number of who wants to join. The cost for the tour is \$35.00 USD per person, which can be paid with registration.

Registration

Registration will include attendance at all sessions, a conference package with the program book, lunches, and coffee/tea breaks.



GLOW VI

Please fill out the attached Registration form and return it to the conference secretariat at jennifer.lorimer@dfo-mpo.gc.ca. The deadline for registration is **June 30th, 2010**. Late registration will be subject to a \$50.00 late fee.

	Registration fee (USD)
Regular:	\$ 400.00
Student:	\$ 200.00

AEHMS Publication Plans

Aquatic Ecosystem Health and Management is an ISI rated international primary journal published by Taylor & Francis, Philadelphia. Presenters are encouraged to submit manuscripts to the *AEHM* for consideration for publication subject to the AEHMS instructions to authors and guidelines (www.aehms.org). Due to limited space, 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

- J. Reuter (Co-chair, USA, jereuter@ucdavis.edu)
- M. Munawar (Co-chair, Canada, mohi.munawar@dfo-mpo.gc.ca)
- F. Roest (Netherlands)
- C. Goldman (USA)
- J. Atkinson (USA)

Scientific Committee

- M. van der Knaap (Co-chair, Netherlands, martin.vanderknaap@hotmail.com)
- G. Schladow (Co-chair, USA, gschladow@ucdavis.edu)
- T. Nalepa (USA)
- S. Chandra (USA)
- R. Heath (USA)
- V. Langenberg (Netherlands)

Local Organizing Committee

- Jill Falman
- Heather Segale
- George Malyj
- Brant Allen
- Dan Nover
- Stephen Andrews
- Kristin Reardon

Secretariat

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

Deadlines

Registration Fee: June 30th, 2010

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