

14th World Lake Conference

3rd and Final Announcement



Lakes, Rivers, Groundwater and Coastal Areas: Understanding Linkages



AUSTIN 2011

October 31 – November 4, 2011

Austin Convention Center

Austin, Texas USA

Organizers:

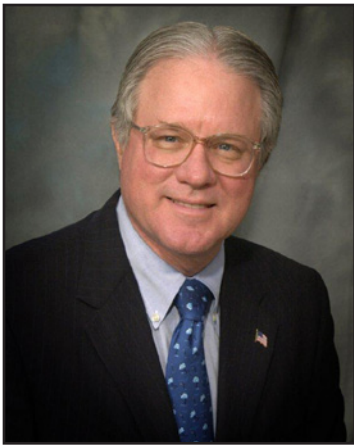
River Systems Institute, Texas State University

International Lake Environment Committee Foundation

Conference Website: <http://www.wlc14.org>



INVITATION LETTER



Ladies and Gentlemen,

The 14th World Lake Conference will be convened by the International Lake Environment Committee (ILEC), in cooperation with the River Systems Institute, Texas State University–San Marcos. It will be held at the Austin Convention Center in Austin, Texas, USA, during October

31 - November 4, 2011. The conference continues to play an important role in providing an interactive international forum for exchanging knowledge and experiences on important lake science, management and governance issues.

Exhibiting many appearances and sizes throughout the world, the importance of lakes, both natural and artificial, cannot be denied. One estimate is that there are more than 10 million lakes with a surface area of one hectare or greater. They contain more than 90% of the liquid freshwater on the surface of our planet at any given instant. We use them for more purposes than any other water system, including drinking and irrigation water supply, industrial needs, sports and commercial fisheries, recreation, hydropower generation, and human and commerce transportation. They provide a range of ecosystem goods and services to humanity. They also represent major habitats and natural ecosystems. They have religious or spiritual significance in many cultures. Finally, they represent some of the most picturesque features of our global landscape, having been described by some as being “pearls on a river string.”

Texas is a land of reservoirs. Virtually every lake in the state is artificial, usually used for multiple purposes. They are a major environmental and economic asset, crucial for Texas’ continuing economic development. Yet, they are being seriously stressed by one of the most severe droughts in the state’s history. Thus, managing them for sustainable use and maintenance of ecosystem health is a core objective for the state’s many river authorities

In spite of their obvious importance to humans and to nature, both in Texas and elsewhere throughout the world, we continue to degrade and exploit them at an alarming rate. Increasing population growth, urbanization, industrialization, and agricultural production, and attendant needs for increasing water resources, are contaminating and over-

exploiting these important water resources. Indeed, being located at the terminus of a drainage basin, lakes can be viewed as a ‘barometer’ of human activities in their surrounding watersheds. Eutrophication and pollution by heavy metals and organic materials is becoming a ubiquitous problem in lakes around the world. Thus, protecting and ensuring the sustainability of lakes has become an enormous challenge to governments, lakeshore communities and other water stakeholders both within and outside their basins. Their unique characteristics of a long water retention time, complex internal dynamics, and an integrating capacity for all their inputs make their assessment and management especially difficult.

The 14th World Lake Conference provides a unique opportunity for water stakeholders from around the world, including government officials, academicians, water professionals, water utilities, water users, and the general public to consider and discuss the serious problems facing lakes and their basins. This conference also adds a new dimension to the traditional conference focus by not considering lakes as isolated water systems. Rather, the conference takes a more comprehensive perspective by considering not only the lakes themselves (lentic waters), but also the upstream and downstream river systems (lotic waters) to which they are hydrologically linked, as well as the underlying groundwater aquifers. It also recognizes the linkages with the downstream coastal areas into which they ultimately drain. Considering the nature and implications of these linked water systems in an integrated manner is fundamental to assessing and managing them for sustainable use, while also protecting the integrity of the aquatic ecosystems they represent.

Conference participants also will be introduced to ILEC’s lentic–lotic linkage perspective as a water management approach within the context of its Integrated Lake Basin Management (ILBM) activities. ILBM advances progress made with the previously-developed Integrated River Basin Management (IRBM), Integrated Water Resources Management (IWRM), and Integrated Coastal Zone Management (ICZM) approaches by focusing on these lentic-lotic water linkages, and their implications for sustainable ecosystem services. It includes the important interrelations between aquatic ecosystem provisioning and regulating services. Many natural lentic water systems also have evolved uniquely cultural traditions and values, fostered over the course of the history of riparian human–nature relationships, partly because human settlements have existed longer around stationary lentic water systems. ILEC has promoted ILBM application in a number of countries,

including China, India, Japan, Kenya, Malaysia, Mexico, Nepal and Zimbabwe, and will continue working with individuals and agencies in these and other countries in developing and applying their individual ILBM programs. Conference participants will hear about ILEC's ongoing experiences in applying ILBM in the various case study lakes in which they have been involved.

Conference participants will include international, national and state agencies, non-governmental organizations, academic institutions, water industry professionals, private sector and other water stakeholders from developed and developing countries. In addition to ILBM, the conference includes a multitude of technical sessions, including water quantity and quality concerns, fisheries, climate change impacts, ecosystem services, saline lakes, industry and water, lake restoration and conservation, eutrophication, phytoplankton and cyanobacteria, urban water issues, water information and data venues, underwater archeology, aerial and in-lake water monitoring, water pollution, ecotourism, citizen and NGO concerns, monitoring, physical mixing and transport, and modeling and GIS techniques. The participation of local, national and international experts provides an exceptional possibility to exchange research and study results, information and data, and management experiences at the conference. It also allows for discussions on lake environment protection and resources management, including strategies and philosophies for protecting lakes, their resources and their basins for sustainable use to meet both human and ecosystem needs.

In the name of ILEC, Texas State University–San Marcos, and their partners and cooperators, I extend my sincere invitation to you, your colleagues and your organization to attend the 14th World Lake Conference. I also welcome you to the Lone Star State of Texas, and invite you to experience its warm spirit and hospitality. Your enthusiastic participation is both encouraged and appreciated.

Andrew Sansom



Director, River Systems Institute
Texas State University–San Marcos



CONFERENCE THEME AND OBJECTIVES

The 14th World Lake Conference will provide a traditional focus on lakes and reservoirs, including research and management challenges, and the implications of such issues for sustainable use of these important water systems. Manmade lakes (reservoirs) will be emphasized, noting that all lakes in Texas are reservoirs, used for multiple purposes to meet both human and ecosystem water needs. These water bodies are especially important because of the recurring and unpredictable droughts and floods that impact large portions of the state. They are subjected to a range of water quantity and quality stresses, and relevant governance challenges. The private sector and sustainable water resources also will be highlighted. Being in close proximity to the Mexican border, the 14th World Lake Conference also provides a major opportunity for individuals, agencies and organizations in Latin America to discuss regional lake, reservoir and associated water science and management issues.

In contrast to previous world lake conferences, however, the 14th World Lake Conference addresses a much wider range of technical and governance issues related to lakes and reservoirs and their basins. As highlighted in the conference title, *“Lakes, Rivers, Groundwater and Coastal Areas: Understanding Linkages,”* a major addition to the traditional focus on lake and reservoir systems and their lentic properties is a focus on their hydrological linkages to upstream and downstream river systems, both surface and underground. Upstream lotic linkages fundamentally influence the quantity, quality and sustainable use of lakes and reservoirs. Lake discharges, in turn, can significantly influence downstream ecosystems, water quality and water uses, extending even to coastal areas. Underlying groundwater systems also can impact, and be impacted by, these linkages. The structure and function of lake and reservoir



systems, therefore, including the sustainability of their ecosystem services, depends significantly on recognition and consideration of the lentic - lotic connections comprising these linkages. It also mandates a comprehensive, integrated approach for accurately assessing, understanding and managing lakes and reservoirs, and the water systems to which they are linked. This consideration is often overlooked in addressing the goals of sustainable water use. It also requires consideration not only of relevant scientific and technical issues, but also the socio-economic and governance elements influencing human use of these linked water systems. ILEC has been exploring these transmedia lentic-lotic linkages and interactions, and their management implications, over the past several years in a global-scale study, and will highlight their insightful findings at the 14th World Lake Conference.

CONFERENCE ACTIVITIES AND EVENTS

The 14th World Lake Conference will include the following major events and activities:

Plenary Keynote Addresses, Monday, October 31, 09:00 to 12:00.

Informative plenary addresses will be delivered by water scientists of global stature, including Dr. Jorg Imberger, a Stockholm Water Laureate, and Dr. Charles Goldman, who is internationally known for his comprehensive studies on Lake Tahoe.



Banquet, Monday, October 31, 19:00 to 22:00.

The banquet will include local “Tex-Mex” fare, characteristic of the region. The Ibaraki Prefecture will award the Kasumigaura Prize to two individuals from developing countries providing the most significant papers on lake management. The student with the poster judged to be the best among those on display will be awarded a prize. An interesting and informative address on management of the Panama Canal watershed will be delivered by Dr. Jorge Illueca, former Assistant Executive Director of the United Nations Environment Programme (UNEP), and former Executive Secretary, Panama National Commission on the Environment, and former Assistant Executive Director, United Nations Environment Programme (UNEP).

International Policy Forum, Tuesday, November 1, 09:00 to 12:00.

Government and agency leaders from a number of countries will discuss challenges being faced in addressing the sustainable use of water resources, as well as possible solutions to these challenges. Experiences and lessons learned from past and ongoing national/local government efforts will be shared at the Forum. Discussions on international and global collaboration beyond RIO+20 for Advancing ILBM (Integrated Lake Basin Management) to IL²BM (Integrated Lentic - Lotic Basin Management) will be made.

Regional Policy Forum, Thursday, November 3, 09:00 to 12:00.

Government and agency leaders from Texas and regional organizations will discuss the challenges faced in managing and utilizing water systems under conditions of extreme drought, including allocation of water between competing uses, as well as possible solutions to the associated problems.

Poster Session, Monday–Wednesday, October 31–November 2, 08:00 to 18:00.

Posters will be on display throughout the day during the noted dates. A “Meet the Authors” session also will be held from 17:00 – 18:00 on each of these days, where poster authors are encouraged to be present with their posters for questions. The student poster judged to be the best among those displayed will receive an award at the Conference Banquet.

Student Session, Wednesday, November 2, 09:00 to 12:00.

ILEC and the World Water Climate Network (WWCN) will co-host the 3rd World Lake Student Meeting jointly with the 14th World Lake Conference. Ten selected undergraduate/graduate students from around the world will give presentations on their individual study and outcomes of field research on Lake Tahoe, and discuss anticipated changes resulting from such factors as global climate change.

Industry Round Table, Wednesday, November 3, 09:00 to 12:00.

Industry officials and attorneys will discuss water challenges and solutions associated with industrial water needs, uses and regulations in a roundtable discussion session.

NGO/Citizen Session, Tuesday, November 1, 14:00 to 17:00.

An open NGO/Citizen session will provide citizens and organizations, both local and international, an opportunity to exchange information and experiences and to help broaden their network internationally.

Exhibition Hall, Monday – Wednesday, October 31 to November 2, 08:00 to 18:00.

Exhibitors, ranging from professional organizations, non-governmental organizations and governmental agencies, will be on display throughout the day during the noted dates. Participants will be able to visit these exhibits throughout the conference, and talk with those exhibiting their products and activities.

Field Trips, Friday, November 4, 09:00 to Afternoon

Field trips to (1) Highland Lakes and (2) Edwards Aquifer System and Aquifer storage and Retrieval Facility are planned. There is a nominal charge for the field trips, to cover transportation and lunch. Pre-registration is required to join the field trip, with attendance limited to 100 for the Highland Lakes, and 40 for the Aquifer trip.

PRE-CONFERENCE WORKSHOPS

Two technical workshops are offered for the weekend of October 29-30, 2011, immediately prior to the conference. Registration for the courses is open on the conference website (<http://www.wlc14.org>), and participants are requested to register as soon as possible so that we can determine space and equipment needs for the courses. Please note that online payments will only be accepted via credit card. Participants encountering difficulties with this mode of payment are requested to contact the conference secretariat (worldlakeconf14@txstate.edu) for other payment arrangements.

Taxonomy and Ecology of Freshwater Phytoplankton:

Stephen Porter, Research Associate, Edwards Aquifer Data and Research Center, October 29-30, 2011, Texas State University

This course provides an introduction and overview of the taxonomy, physiology, and ecology of common freshwater phytoplankton genera and species, emphasizing water-quality indicative properties of algal taxa. It includes instruction on collecting, preserving, and processing algal samples, identifying and enumerating phytoplankton, controlling nuisance algae, and using algae in environmental assessments. The course is designed for those with little or no experience with freshwater algae. Although not required, the recommended text is *Freshwater Algae of North America*, Wehr & Sheath (2003), Academic Press (available from Amazon.com for about US\$ 130). The cost for the course is US\$ 250 for participants from developed countries, US\$ 150 for participants from developing countries, and US\$ 100 for students with valid ID. Transportation between the Radisson Hotel and Texas State University will be provided.



Delineating Lake Basin Drainage Basins for Integrated Lake Basin Management (ILBM), Utilizing GIS Techniques: Dr. Thomas Ballatore, Visiting Researcher, ILEC, October 29-30, 2011, Radisson Hotel, Austin, Texas

An important preliminary step in applying ILBM is to determine the geographical extent of a given lake's drainage basin. This short course provides techniques needed to perform such delineations, including introduction to necessary data sources, and instruction on how these data can be used to produce a drainage basin map, including drainage basin area, slope, river networks, etc., within the ArcGIS software (although proprietary, trial versions are available). Participants will learn how to add thematic layers, including population, political boundaries, etc. via GIS, and how to perform management-relevant calculations with them. No experience with ArcGIS software is assumed. Participants using their own computers should install a copy of ArcGIS (trial versions available from website <http://www.esri.com>), or in tutorial books, at a cost of around US\$ 50, prior to course. The cost for the course is US\$ 200 for participants from developed countries, US\$ 125 for participants from developing countries, and US\$ 75 for students with valid ID.



CONFERENCE OVERVIEW

Date	Programme
Saturday - Sunday, October 29 -30, 2011	<ul style="list-style-type: none"> • Pre-Conference Technical Workshops, 09:00 – 17:00. 1. GIS and Spatial Techniques for Lake Basin Management (Dr. Thomas Ballatore; Radisson Hotel) 2. Algal Identification & Classification (Mr. Stephen Porter; Texas State University)
Sunday, October 30, 2011	<ul style="list-style-type: none"> • Registration, Conference Center, 14:00 – 17:00 • Exhibitor Set-up, Conference Center, 12:00 – 16:00 • Poster Display and Set-up, Conference Center, 14:00 – 17:00
Monday, October 31, 2011	<ul style="list-style-type: none"> • Opening Plenary Ceremony, including Welcoming Remarks & Key-note Addresses, Ballroom A, 09:00 – 12:00 • Technical Sessions, 14:00 – 17:00 • Banquet, including Keynote Address, and awarding of Ibaraki Kasumigaura Prize and Best Student Poster Prize, 19:00 – 22:00 • Exhibition Hall, 08:00 – 18:00
Tuesday, November 1, 2011	<ul style="list-style-type: none"> • International Policy Forum, 09:00 – 12:00 • Technical Sessions, 09:00 – 12:00 and 14:00 – 17:00 • Exhibition Hall, 08:00 – 18:00
Wednesday, November 2, 2011	<ul style="list-style-type: none"> • Technical Sessions, 09:00 – 12:00 and 14:00 – 17:00 • Exhibition Hall, 08:00 – 18:00
Thursday, November 3, 2011	<ul style="list-style-type: none"> • Regional Policy Forum, 09:00 – 12:00 • Technical Sessions, 09:00 – 12:00 • Closing Plenary Ceremony, including Austin Declaration, 14:00 – 17:00
Friday, November 4, 2011	<ul style="list-style-type: none"> • Conference Field Trips, 09:00 - Afternoon 1. Lower Colorado River Reservoir and Water System Operation and Management, Lower Colorado River Authority (LCRA), Austin. 2. Edwards Aquifer and Barton Springs System (Edwards Aquifer Authority & Barton Springs-Edwards Aquifer Conservation District) and Aquifer Storage and Retrieval Facility (San Antonio Water System)



CONFERENCE DAILY PROGRAM

SATURDAY & SUNDAY (29 - 30 OCTOBER, 2011)

Pre-Conference Workshops

- Delineating Lake Drainage Basin for Integrated Lake Basin Management, Utilizing GIS Techniques – Dr. Thomas Ballatore, Visiting Researcher, International Lake Environment Committee, Kusatsu, Shiga Prefecture, Japan. Course to be conducted at Raddison Hotel, Austin, Texas
- Taxonomy and Ecology of Freshwater Plankton – Dr. Stephen Porter, Research Associate, Edwards Aquifer Research and Data Center, Texas State University, San Marcos, Texas. Course to be conducted at Texas State University, San Marcos, Texas

SUNDAY, (30 OCTOBER, 2011)

14:00 – 17:00 *Conference Registration, Austin Convention Center*

MONDAY (31 OCTOBER, 2011)

08:00 – 17:00 *Conference Registration*

09:00 – 12:00 *Opening Plenary Session:*

- Welcoming addresses by Mr. Lee Leffingwell (Mayor, City of Austin), Ms. Yukiko Kada (Governor, Shiga Prefecture, Japan), Dr. Denise Trauth (President, Texas State University), Mr. Hironori Hamanaka (Director General, International Lake Environment Committee, Kusatsu, Japan), Mr. Andrew Sansom (Director, River Systems Institute, Texas State University)
- Plenary Keynote Address: “The Threat to Life in the Deep Lakes of the World from Global Warming and Increased Agricultural Activity” – Dr. Jorg Imberger, Professor of Environmental Engineering, University of Western Australia, and Stockholm Water Laureate
- Plenary Keynote Address: “Lake Tahoe and the World Water Crisis” - Dr. Charles Goldman, Distinguished Professor of Limnology Emeritus, University of California, Davis
- Cultural Event: Mexican Folk Music Performance by Texas State University Mariachi Band

14:00 – 17:00 *Technical Sessions:*

- Integrated Lake Basin Management (ILBM): Introduction and Overview
- Physical and Mixing Processes
- Lake, River and Stream Ecology
- Diving and Archeology
- Water Policy and Customs
- Lake/Reservoir Restoration and Conservation: Case Studies
- Government, NGOs, Citizens and Water Systems
- Fishery Issues
- Rio Grande/Rio Bravo Watershed Alliance
- Poster Presentations – “Meet the Authors” (17:00 – 18:00)

17:00 – 18:00 *Poster Presentations: “Meet the Authors”*

19:00 – 22:00 *Conference Banquet:*

- Presentation of Kasumigaura Award
- Presentation of Best Student Poster Award
- Keynote Address: “Managing the Panama Canal Watershed: It’s About Much More Than Water” -- Dr. Jorge Illueca, President, Latin American Consultants on Sustainable Development and Environmental Management; former Executive Secretary, Panama National Commission on Environment, and Assistant Executive Director, United Nations Environment Programme (UNEP)

CONFERENCE DAILY PROGRAM (CONTINUED)

TUESDAY (1 NOVEMBER, 2011)

08:00 – 17:00 *Conference Registration*

09:00 – 12:00 *Technical Sessions:*

- International Policy Forum
- Managing Stressed Water Systems
- Mapping, Modeling and GIS
- Cyanobacteria and Blue-green Algae
- Ecotourism, Recreation and Education
- Urban Areas and Water Resource Issues
- Lakes and Linkages
- Use of UAV for Remote Sensing of Surface Water Systems
- Rio Grande/Rio Bravo Watershed Alliance
- Poster Presentations

14:00 – 17:00 *Technical Sessions:*

- Lake Victoria Basin Management
- Mapping, Modeling and GIS
- Phytoplankton Dynamics
- NGO Activities: Public Session
- Urban Areas & Water Resource Issues
- Chemicals and Contaminants
- Saline Lakes & Small Seas
- Use of UAV for Remote Sensing of Surface Water Systems
- Rio Bravo/Rio Grande Watershed Alliance
- Poster Presentations - “Meet the Authors” (17:00 – 18:00)

20:00 – 24:00 *“Dia de los Muertos” Celebration – Informal Gathering and Networking (Speakeasy Lounge; snacks served; cash bar)*

WEDNESDAY (2 NOVEMBER, 2011)

08:00 – 17:00 *Conference Registration*

09:00 – 12:00 *Technical Sessions:*

- Industry Roundtable
- Integrated Lake Basin Management (ILBM): Case Studies
- Environmental Risks, Food Security & Health in Laguna Lake Watershed, Philippines
- Groundwater & Linkages
- Bio-monitoring
- Monitoring & Data Processing (Student Session)
- New Forms and Venues for Exchanging Water Information
- Lake-Oriented Community Stakeholder Participation
- Restoration of Lakes and Rivers
- Lake Assessment & Management Case Studies
- Poster Presentations

CONFERENCE DAILY PROGRAM (CONTINUED)

WEDNESDAY (2 NOVEMBER, 2011)

14:00 – 17:00 *Technical Sessions:*

- Assessment & Management of Lake Chapala- Lerma River Basin
- Pollution and Water Quality Monitoring
- Ecosystem Services & Related Economic Issues
- Lakes & Biodiversity
- Lake and River Conservation
- Global Climate Change and Hydrologic Linkages
- Integrated Lake Basin Management: South Asia Lakes
- Edwards Aquifer and Linkages
- Texas Reservoirs: History & Lessons Learned
- Industry and Water Resources
- Poster Presentations - “Meet the Authors” (17:00 – 18:00)

THURSDAY (3 NOVEMBER, 2011)

08:00 – 12:00 *Conference Registration*

09:00 – 12:00 *Technical Sessions:*

- Regional Policy Forum
- Global Programs and Strategies on Assessment and Management of Lakes and their Basins: UNEP-ILEC Collaboration
- Lake and River Water Quality
- Human Ecology and Water System Interactions
- Complex Systems in Hydrology
- Lakes & Biodiversity
- Global Climate Change and Hydrologic Linkages
- Lake Assessment & Management Case Studies
- Agriculture & Water Issues
- Gulf of Mexico and Linkages

14:00 – 17:00 *Closing Plenary Session:*

- Closing addresses by ILEC and Texas State University Officials
- Presentation and Approval of “Austin Declaration” on Integrated Lake Basin Management (ILBM)
- Presentation on 15th World Lake Conference Venue and Dates

FRIDAY (4 NOVEMBER, 2011)

09:00 - Afternoon Field Trips (nominal charge for transportation and food):

- Management and Operation of the Highland Lakes Cascade Reservoir System – Lower Colorado River Authority, Austin, Texas
- Edwards Aquifer and San Antonio Aquifer Storage and Retrieval System – Edwards Aquifer Authority and San Antonio Water System, San Antonio, Texas

FIELD TRIPS

Two field trips, at a nominal charge of US\$ 40 for transportation and lunch, are available for conference participants. The field trip to the Lower Colorado River System will be limited to the first 48 individuals signing up. The field trip to the Edwards Aquifer and San Antonio Storage and Retrieval Facility will be limited to the first 48 individuals signing up. Details for field trip registration are available on the conference website (<http://www.wlc14.org>).

Tour 1: Lower Colorado River System and Highland Lakes, Lower Colorado River Authority (LCRA), Austin

This field trip will be presented by the Lower Colorado River Authority. It will comprise presentations on (1) Water Quality, including an overview of the LCRA water quality program, regulatory requirements, water system monitoring, forecasting and modeling, and management of LCRA lakes, river and coastal bay from water quality perspective; (2) River Management and Operations – Overview of daily operation procedures, monitoring water system conditions, and management and utilization of LCRA water resources under drought and flood conditions; and (3) Water Supply -- Overview of how Lower Colorado River and Highland Lakes are managed for water supply purposes, including downstream water rights, water customers, water use and forecasting.

Tour 2: Edwards and Barton Springs Aquifer System, Edwards Aquifer Authority (EAA), and San Antonio Aquifer Storage and Retrieval System, San Antonio Water System (SAWS)

This field trip provides a site visit to a major recharge area for the underlying Edwards Aquifer, as well as a discussion of the Edwards Aquifer and its role in addressing water needs in Central Texas. This trip also includes a visit to the aquifer storage and retrieval facility operated by the San Antonio Water System as a freshwater storage source for the city of San Antonio. The operation of the facility also will be explained to field trip participants.

IBARAKI KASUMIGAURA PRIZE

The Ibaraki Kasumigaura Prize will be awarded to two groups/individuals from developing countries by the Ibaraki Prefecture, Japan, for the most outstanding paper on lake conservation. The awarding ceremony will be taken place at the Banquet on Monday, October 31.

EXHIBITORS

Representatives from the private sector, governmental agencies, non-governmental organizations, research institutions, and professional engineering/scientific consultants also are invited to exhibit at the conference. The exhibits will be housed at a location central to conference session activities. In view of the range of expected participants, the 14th World Lake Conference is an outstanding opportunity to highlight products and activities to an international audience. Exhibitors also will be identified and highlighted on conference materials. For more information about exhibitor registration, please go to the conference website (<http://www.wlc14.org/exhibitors/>).

VISA INFORMATION

Conference participants should check with the U.S. embassy or consulate in their home countries regarding visa requirements. The U.S. Department of State also provides visa information and applications on its website (http://travel.state.gov/visa/visa_1750.html). The conference secretariat will provide a formal Letter of Invitation for all conference participants requesting it for the purposes of securing a visa.

INSTRUCTIONS FOR PREPARING FULL PAPER

Participants who have received an abstract acceptance notice from the World Lake Conference secretariat should submit their completed conference paper to the website (<http://www.wlc14.org/paper/>). Instructions for preparing the paper are available under the title, “*14th World Lake Conference Guidelines for Preparing Conference Papers*”. The deadline to submit the paper is **October 15, 2011**. The best papers from each session, as determined by the session chair, will be considered for publication in the ILEC peer-reviewed journal, “Lakes and Reservoirs: Research and Management.”



INSTRUCTIONS FOR PREPARING POSTERS

Participants who have received a poster acceptance notice from the World Lake Conference secretariat should prepare their posters in accordance with the “Guidelines for Preparing Posters” available on the conference. Posters will be on display daily from 08:00 – 18:00, October 31 – November 2. A “Meet the Authors” session will be held each day from 17:00 – 18:00, wherein the poster authors will be available at their posters for discussion and questions. Participants can bring their posters to the Conference Registration desk at the Austin Convention Center on Sunday, October 30, 14:00 – 17:00.



CONFERENCE REGISTRATION

Registration is required to participate in the 14th World Lake Conference. The registration fee covers conference bag, conference program booklet, map of Austin and environs, information on local and regional attractions, etc. The online conference registration form and information on conference fees is available on the conference Registration webpage (<http://www.wlc14.org/registration/>). Prior to October 10, registration fees, payable in US Dollars (US\$) can be made via credit card, wire transfer, purchase order, or check. Only credit card payment will be accepted for online registration after October 10. Onsite registration must be made with credit card or US currency. **Please note that all conference participants should register as soon**

as possible, using the conference registration form, even if they intend to pay onsite. For planning purposes, please also note that registration fees received after October 17 will not entitle registrant to attend the conference banquet.

Upon arrival at the Austin Convention Center, participants are requested to please check-in and collect their conference package at the Registration Desk in front of Ballroom A (see floor plan). The Registration Desk will be open from 14:00 - 17:00 on Sunday (October 30), and 08:00 – 17:00 on Monday through Thursday (October 31 - November 3). Onsite registration is available at the Registration Desk, and can be paid either with credit card or US Currency.

Participant Registration Levels	Registration prior to October 17	After October 17 and On-Site Registration **
Developed Countries (including banquet)	\$500	\$500
Developing Countries (including banquet)	\$400	\$400
Students* (excluding banquet)	\$200	\$200
1-day Registration (excluding banquet)	\$125	\$125
Banquet only	\$75	No Banquet ticket available

* Requires proof of valid student identification at conference site.

** On-Site Registration and Registration fees after October 17 do not include Banquet ticket

CURRENCY EXCHANGE

Because the possibilities for currency exchange in Austin are limited, participants from outside the USA are encouraged to change at least a minimal amount of currency into US Dollars either prior to leaving their native countries, or at the entry airport upon entering the USA. United Heritage Credit Union (departure floor in Austin airport) also offers foreign currency exchange (Mexican Peso, Japanese Yen, British Pound and Euro only) during 07:30 – 17:30, Monday through Friday, and 09:00 – 15:00 on Saturday. It is closed on Sunday.

For those wishing to use their credit or debit cards to obtain US currency, the Bank of America has four Automatic Teller Machines (ATMs) in the airport terminal. Two are located within the airport gate area, one across from Gate 7 and one across from Gate 13. One is located in the baggage claim area near Carousel 4 and the Valet Return counter, and one is located on the departure floor between Fara's Cafe and the United Heritage Credit Union. There also are two Velocity Credit Union ATMs located within the Austin Convention Center, and at a number of banks close to the hotel and conference center.

HOTEL ACCOMMODATIONS

A limited number of hotel rooms have been reserved for conference participants at discounted rates. To ensure the discounted rate, conference participants are encouraged to reserve their rooms at the earliest opportunity. Reservations can be made via email or telephone. Please request the WLC14 rate when making room reservations. Conference rates are available three days prior to October 30, and three days after November 3, based on room availability.

Provision is made for the possibility that conference participants may wish to share a hotel room, which are relatively large and “double rooms” contain multiple beds, thereby reducing accommodation expenses. A Message Board is available on the conference website for interested individuals to communicate directly with each other regarding the possibility of sharing hotel rooms. It will be the responsibility of interested individuals to utilize the message board to introduce themselves and initiate dialogue with others who also are interested in this possibility.



MEETING LOCATION

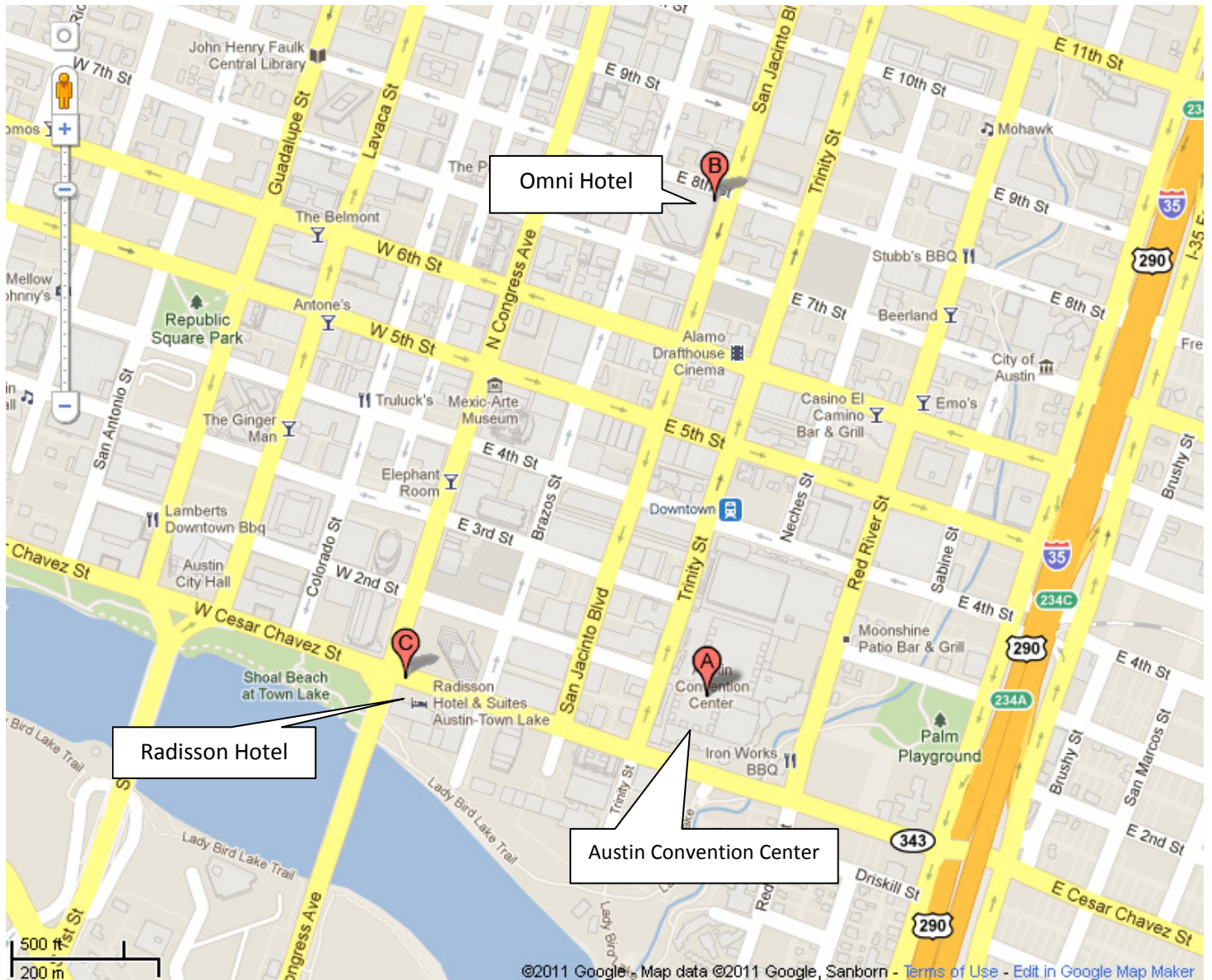
The 14th World Lake Conference is being convened at the Austin Convention Center, located in the center of downtown Austin, Texas, close to the State Capitol Building, the University of Texas, and the Lower Colorado River - Highland Lakes System.

Austin Convention Center (Point A on next page)
500 East Cesar Chavez Street
Austin, TX 78701



HOTELS	
<i>(When making room reservations, please request the WLC14 room rental rate)</i>	Single/ Double
Radisson Hotel & Suites Austin – Town Lake (Point C on next page) http://www.radisson.com/austin-hotel-tx-78701/txaustdt Tel: 1-800-395-7046 (US/Canada toll-free) Tel: +1-512-478-9611 (Outside US/Canada)	
The Radisson Hotel and Suites Austin Town Lake offers upscale accommodations in a unique downtown, lakeside setting just 3 blocks from the Austin Convention Center, site of the World Lake Conference.	\$135 (plus tax)
Omni Austin Hotel – Downtown (Point B on next page) http://www.omnihotels.com/FindAHotel/AustinDowntown/MeetingFacilities/WorldLakeConference14.aspx Tel: 1-800-843-6664 (US/Canada toll-free) Tel: +1-512-476-3700 (Outside US/Canada)	
The Omni Austin Hotel Downtown is a magnificently appointed luxury hotel located in the heart of downtown Austin just 6 blocks from the Austin Convention Center, site of the World Lake Conference.	\$175 (plus tax)

MAP OF AUSTIN CONVENTION CENTER AND HOTEL LOCATIONS



TRANSPORTATION

By Air: Participants arriving via airplane will arrive at the Austin-Bergstrom International Airport (<http://www.ci.austin.tx.us/austinairport/maps.htm>). Travel options from the airport to downtown hotels and the Austin Convention Center include the Capital Metro Bus System, Super Shuttle and taxi. As noted above, an ATM is available at the airport.

Super Shuttle: After claiming your luggage at baggage claim area, follow signs to the Super Shuttle ticket counter located near baggage carousel 1. Purchase a Super Shuttle ticket. The approximate cost from the Austin airport to downtown Austin is US\$ 14.00 per person (major credit cards are accepted). You may also make Super Shuttle reser-

ervations in advance by calling 1-800-258-3826 (US/Canada toll free), or online (<http://www.supershuttle.com/>).

Taxi: After claiming your luggage at baggage claim area, follow signs to Ground Transportation outside the airport terminal to taxi waiting area. The approximate cost for taxi from Austin airport to downtown Austin is US\$ 25 minimum charge plus tip (expected). This cost may be higher, depending on traffic, since the taxi charge is calculated on the basis of distance AND time of travel. Enquire about taxi fare with the driver prior to entering the taxi. Up to 4 persons may share a taxi to the same destination for one cost. All taxis accept major credit cards.

CONFERENCE VENUE – AUSTIN, TEXAS

The 14th World Lake Conference will be convened in the picturesque capital city of Austin, in the ‘Lone Star State’ of Texas. The city offers a range of interesting and exciting attractions for conference participants and accompanying persons. The state capitol building in Austin is an historic replica of the national capitol of the United States, except that it is nearly three meters higher than the latter. Austin is home to the Texas legislature, Bob Bullock Texas State History Museum, several art museums and galleries, major federal and state water agencies, civic organizations and binational authorities. It contains the home campus of the University of Texas, the largest university in the USA, with nationally-renowned water programs and research facilities. The university also is home to the largest national presidential library, housing papers and memorabilia of Lyndon Baines Johnson, 36th President of the USA. The city is known as the “Live Music Capitol of the World” because of its large number of live music venues, primarily housed in an historic downtown entertainment district along with many casual dining spots and night clubs. The nearby “Warehouse District” contains many restaurants, microbreweries, old fashioned pubs, and coffee houses. Another unique feature is the largest urban bat colony in North America, with an estimated 1.5 million Mexican free-tail bats living under the Congress Avenue Bridge spanning Town Lake in downtown Austin. As one of the most unusual and spectacular tourist attractions in Texas, the bats emerge nightly from under the bridge at dusk to blanket the sky as they forage for food.

As an added hydrological enticement, Austin is located along the six coupled Highland Lakes in central Texas, an impressive major cascade reservoir system that supplies Austin and surrounding communities with drinking water, recreational, fishing and boating opportunities, hydropower and other ecosystem services. An amazingly diverse myriad of linked freshwater systems, including rivers and springs also is located in the immediate proximity, including San Marcos Springs, which emerges on the nearby Texas State University campus as an outflow from the Edwards Aquifer, one of the most prolific artesian aquifers in North America. It flows into Spring Lake, the headwaters of the San Marcos River, both also originating on the Texas State University campus. This unique water system also contains seven endangered or threatened aquatic species, and provides an excellent example of the hydrologic linkages characterizing the theme and objectives of the 14th World Lake Conference.



Capital Metro Bus: After claiming your luggage at baggage claim area, take Bus Route 100 Inbound from outside airport terminal to Downtown Austin (about 30 minutes). The cost is approximately US\$ 1, and exact fare is required, since bus operator does not provide change. Bus transportation from the airport to downtown Austin is not available between 22:30 - 06:00. Persons using bus transportation can request the bus operator to stop at any of the following locations:

Convention Center – Exit Capital Metro bus at 6th and Red River. Walk to 500 Cesar Chavez Street.

Radisson Hotel and Suites Austin – Exit Capital Metro bus at 6th Street and Congress Avenue. Walk to 111 East Cesar Chavez Street.

Omni Austin Hotel – Exit Capital Metro bus at 6th Street and Brazos Street. Walk to 700 San Jacinto Boulevard.

The airport website (<http://www.ci.austin.tx.us/austinairport/transportation.htm>) provides details regarding ground transportation from the airport to downtown Austin, including airport locations for ground transportation, time schedules and costs.



INTERNATIONAL CONFERENCE ORGANIZING COMMITTEE

Current members of the International Organizing Committee include the following individuals:

- ALADIN, Nikolay, Professor, Zoological Institute, Russian Academy of Science, St. Petersburg, Russia
- AZEVEDO, Sandra, Professor, Biophysics Institute, Federal University of Rio de Janeiro, Brazil
- CARRERA, Eduardo, Chief Executive Officer, Ducks Unlimited of Mexico, A.C. Mexico
- DIOP, Salif, Head, Ecosystems Section, Division of Early Warning and Assessment, UNEP, Nairobi, Kenya
- HAMANAKA, Hironori, Director General, International Lake Environment Committee Foundation, Japan
- JIN, Xiangcan, Chinese Research Academy of Environmental Sciences, Beijing, China
- JUAREZ-AGUILAR, Alejandro, President, CORAZON de la TIERRA, Mexico
- MATSUI, Saburo, Emeritus Professor, Kyoto University, Japan
- MOLTZ, Heidi, Senior Water Scientist, Interstate Commission on Potomac River Basin, Maryland, USA
- NAKAMURA, Masahisa, Professor, Research Center for Sustainability and Environment, Shiga University, Japan, and Chair, ILEC Scientific Committee
- NASELLI-FLORES, Luigi, Professor, Department of Botanical Sciences, University of Palermo, Italy
- MAGADZA, Chris, Professor Emeritus, University of Zimbabwe, Harare, Zimbabwe
- OLAGO, Daniel, Senior Lecturer, Department of Geology, University of Nairobi, Kenya
- ROBERTS, Richard, Director, UNEP Global Environment Monitoring System (GEMS)/Water, Canada
- SANTOS-BORJA, Adelina, Chief, Research and Development, Laguna Lake Development Authority, Manila, Philippines
- THORNTON, Jeffrey, Environmental Planning, Southeast Wisconsin Regional Planning Commission, Wauke-
sha, Wisconsin, USA
- VIDAL, Omar, Executive Director, WWF-Mexico, Mexico City
- SKINNER, Juan, Vice-President, Lake Atitlan Environmental Protection Society, Guatemala
- WATANABE, Tsugihiko, Professor, Research Institute for Humanity and Nature, Japan

LOCAL CONFERENCE ORGANIZING COMMITTEE

Current members of the Local Organizing Committee include the following individuals:

- BLOUNT-MILLER, Meredith, Conservation Research Specialist, River Systems Institute, Texas State University
- BONDY, Karen, Director of Water Resources, Lower Colorado River Authority, Austin
- CARDENAS, Adele, Senior Policy Advisor, U.S. Environmental Protection Agency
- CHARLES, Joni, Associate Professor, Department of Finance and Economics, Texas State University
- HODGES, Ben, Assoc. Professor, Dept. of Civil, Architectural and Environmental Engineering, University of
Texas
- LIND, Owen, Professor, Department of Biology, Baylor University
- LOPES, Vincent, Professor, Environmental Studies, Texas State University
- MIX, Ken, Agricultural Technical Education, Department of Agriculture, Texas State University
- PULICH, Warren, Estuarine Scientist, River Systems Institute, Texas State University
- RAST, Walter, Professor, Aquatic Resources, Texas State University, and Vice-Chair, ILEC Scientific Committee
- ROBERTS, Susan, Groundwater Resources Scientist, River Systems Institute, Texas State University
- SANSOM, Andrew, Director, River Systems Institute, Texas State University
- SMITH, Chad, Asst. Professor, Sociology Department, Texas State University;
- VOTTELER, Todd, Director of Water Policy, Guadalupe-Blanco River Authority, Seguin, Texas
- WARREN, Emily, Associate Director, River Systems Institute, Texas State University

FURTHER CONFERENCE DETAILS

Conference participants are encouraged to regularly visit the conference website (<http://www.wlc14.org>). The site will be continuously updated as new information and conference details become available. Conference participants with specific questions also are encouraged to contact either of the individuals identified below at the conference websites.

CONTACT INFORMATION

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