Outline of the Lake Biwa-Yodo River Water Quality Preservation Organization

# Uniting Efforts for the Future of Lake Biwa-Yodo River Basin

## **Imparting Abundant Blessings from** Lake Biwa-Yodo River Basin to **Future Generations**

Lake Biwa and the Yodo River, both gifted with beautiful nature and the bounty of water, have brought us healing and enriched our lives through the ages, and together they continue to give us immeasurable benefits as a fountain of life, as well as the source of business activities.

However, due to rapid social development and alteration of lifestyles, the quality of water has deteriorated, causing many different problems in providing drinking water and in the natural environment.

What we can do now is improve the hydrological environment of Lake Biwa and the Yodo River, to ensure the health of this valuable asset and leave it to future generations.

As the only organization in the basin tackling the water quality preservation issues of the Lake Biwa-Yodo River system by joining hands with local residents and governments, the Lake Biwa-Yodo River Water Quality Preservation Organization plays a central role in fostering a vibrant society in the basin.

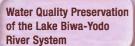
#### About the Lake Biwa-Yodo River Water Quality Preservation Organization (BYQ)

#### **Purpose of Establishment**

The Lake Biwa-Yodo River Water Quality Preservation Organization is a nonprofit foundation formed in 1993 under the authority of the Ministry of Construction for the purpose of allowing the local governments of the areas that make use of the water from Lake Biwa and the Yodo River to work together to take consistent measures to maintain water quality. Supported by funds from 124 private companies and the governments of six prefectures and three ordinancedesignated cities around the lake and river, and by supporting membership fees, the organization carries out numerous activities to ensure that the waters are kept clean.

#### Purpose

The organization's goal is to support water purifying activities and such research and development as water purification technology for the waters of the streams, lakes, and marshes connected to the Yodo River system. By doing this, it can help maintain the quality of the waters and thus contribute to a better society for the region and a higher quality of life for its residents.



**Research and Development in** Water Quality Preservation

Promotion of BYQ Network Three tools to help promote cooperation \*To Connect \*To Support \*To Inform

## Research and Development in Water Quality Preservation

**Research and Development in Water Purification Technology** In July 1997, the Ministry of Land, Infrastructure and Transport's Kinki Regional Development Bureau, Shiga Prefecture, Japan Water Agency's Kansai Branch, and Lake Biwa-Yodo River Water Quality Preservation Organization together set up the Joint Experiment Center for Water Purification on Lake Biwa-Yodo River (Biyo Center) at the mouth of the Hayama River, which flows into Lake Biwa. This Biyo Center, on its very large premises of about 25,000 square meters, is conducting experiments for the development of water purification technology, especially the technology for purifying waters of rivers, lakes and marshes, and for creation of a creature-friendly environment. So far, with "vegetation purification" and "soil purification" as the two main pillars for its experimental activities, the center has conducted a wide range of experiments, including experiments on application of new technologies and new materials for water purification. Furthermore, the center has been inviting public participation since 1999, in an effort to obtain ideas from a broad spectrum of businesses and universities for experiments on water purification technologies and for promoting improvement of the hydrological environment of the Lake Biwa-Yodo River system.



#### **Research concerning Conservation of Hydrological Environment**

The BYQ's Science Committee takes the initiative in investigating and reviewing timely subjects related to the hydrological environment of Lake Biwa and the Yodo River, and the results are published to allow universal access to all. <Major Research Products So Far>

- Environmental impact assessment of 1994 drought on Lake **Biwa-Yodo River**
- Lake Biwa comprehensive conservation planning study
- Survey on measures to reduce plane source load of Lake **Biwa-Yodo River**
- Survey on measures against eutrophication of Lake **Biwa-Yodo River**
- History of water quality improvement of the Lake Biwa-Yodo River system in the 20th Century - Formulating new strategies for water preservation in the 21st Century
- Current status and measures against trace toxic substances
- and pathogenic microorganisms in Lake Biwa-Yodo River

#### Lectures and Symposiums on **Aquatic Conservation**

The BYQ gives lectures and holds symposiums on aquatic conservation covering such topics as water purification technologies used in the Yodo River system.



Technical research presentation

**Main Operations Activities** 

#### International Information/Technology Exchange

The BYQ is placing emphasis on interchange in the fields of water quality purification measures research, and technology used in foreign countries. Four investigative missions have been sent to Europe, America and Canada so far, to study the aquatic improvement measures and water purification technologies used in each country. After these investigative missions, realizing the importance of continuous exchanges, the BYQ signed agreements concerning research and technical interchange on water quality preservation with the following organizations. The BYQ and these organizations have also been jointly holding international symposiums. International Commission for the Protection of the Rhine Balaton Association in Hungary

Ohio River Valley Water Sanitation Commission



BYQ participated in the 100th Anniversary of the Balaton Association.

## Development of BYQ Network

Enhancement of Partnership between Diversified Entities



To improve the water environment of the Lake Biwa-Yodo River system, it is necessary for the local residents, NPOs, and other organizations to act together. To assist smooth information exchanges between people, such as local residents, groups of local residents, schools, research organizations, and firms, who are involved in aquatic conservation of the Lake Biwa-Yodo River basin, in 2004 the BYQ set up the "BYQ Network" to link people by providing them with useful information, with the intention of supporting people's voluntary activities, enlivening their exchanges, and fostering partnership among them.

In the framework of the BYQ Network, the BYQ has been promoting and giving financial support to the following activities. To "connect," the "BY Stamp Rally" triggers participation by residents in aquatic conservation activities; to "inform," informative magazines and a website provide information regard-

ing the water environment in the basin; and to "support," the "Exciting WAQU<sup>2</sup> Expedition" offers local residents opportunities to conduct water quality surveys in their neighborhood rivers and streams, the "Junior River School" gives children hands-on learning experiences, and the "Clean-up Campaign by 10,000" boosts the beautifying of lakes and rivers by the residents.

In addition, aiming at closer exchanges and cooperation by people involved in local aquatic conservation, the BYQ has

been sponsoring "BYQ Networking Events" since 2004. A considerable number of people take part in them, for activity reports and exchanges of information and ideas.



BYQ Networking in 2006

## "BY Stamp Rally" Connecting Sponsors and Local Residents

In the "BY Stamp Rally," stamps are collected by taking part in the water environment improvement activities organized by the NPOs and other local residents groups in the Lake Biwa-Yodo River basin. This stamp rally has motivated local residents to participate in the aquatic improvement activities, as well as to interact with other individuals and organizations.



# (as of February 28, 2006)



## To Inform **Providing Information on the Water Environment**

The Lake Biwa-Yodo River Water Quality Preservation Organization (BYQ)'s website makes data and information on the basin's water environment and the activities of the BY Stamp Rally sponsors available 24 hours a day. In addition, the BYQ has periodicals such as the "BYQ Water Environment Report," a compilation of the Lake Biwa-Yodo River basin's water quality data, and "BY BLUE," which discusses the water environment in everyday language.

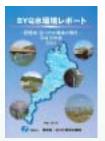




#### **BY Stamp Rally Procedure**

Stamps are given to those who take part in the activities organized by BYQ supporting groups and NPOs, and to those who visit water-related facilities operated by BYQ sponsoring organizations. When enough stamps are collected, they may be sent to BYQ by post to win an attractive gift. The participants in this stamp rally can advance from the beginner level to the intermediate and advanced grades, based on the number of awards received.

http://www.byq.or.jp/







### **Financial Assistance and Projects Supporting Water Environment Improvement Activities**

#### Financial Assistance for Water Environment Improvement Financial Assistance for Water Environment Improvement Projects in the Lake Biwa-Yodo River System

The Lake Biwa-Yodo River Water Quality Preservation Organization (BYQ) gives financial assistance for various projects which are deemed to contribute to enhancement of the effect and to higher efficiency of the projects, when coupled with the national and local government-sponsored water environment improvement projects in the Lake Biwa-Yodo River system. With the aim of promoting water environment improvement in the Lake Biwa-Yodo River system, the BYQ also gives grants to water purification projects and research carried out by public-interest corporations, universities and research organizations in the Lake Biwa-Yodo River basin.

10 organizations received grants between FY1999 and FY2006.

#### Financial Assistance for Lake Biwa-Yodo River Waterfront Protection

With the aim of promoting improvement in the water environment of the Lake Biwa-Yodo River system, the BYQ financially supports "river purification and protection activities" as well as "activities to enhance understanding of the water environment" carried out by local residents and residents' groups in the Lake Biwa-Yodo River basin. O 36 organizations received grants between FY1999 and FY2006.

#### **Exciting WAQU<sup>2</sup> Expedition**

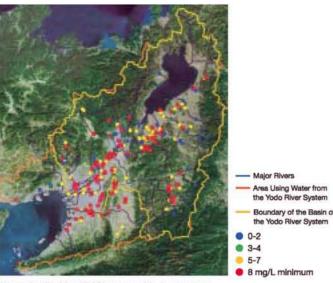
In hopes of increasing people's interest in their local rivers, the "Exciting WAQU<sup>2</sup> Expedition," since its formation in 2004, has been offering local residents opportunities to turn their eyes to their local rivers and spend time thinking about the water environment.

- O Using a pack-test kit which enables them to easily measure the level of contamination, all members of the Expedition test the water quality of their nearby rivers together on the same day.
- O There are 5 items in the water quality test: COD, ammonia nitrogen, nitrite-nitrogen, nitrate-nitrogen, and phosphoric acid.
- The tests are conducted 4 times a year: spring, summer, autumn, and winter.
- A water quality map and other related documents are prepared using the results of the survey conducted by the members of Expedition.

Members of Expedition: 278 Test Spots: 399 (a. o. December 2006)



"Exciting WAQU<sup>2</sup> Expedition" member in action



Water Quality Map (COD) surveyed in August 2006

#### **Nature Watching**

The Joint Experiment Center for Water Purification on Lake Biwa-Yodo River (Biyo Center) has a "biotope" developed by combining water channels simulating many aspects of nature, and a Lake-Biwa-type pond, both built by connecting to Lake Biwa and the Hayama River. At the Biyo Center, which is conveniently situated on the Lake Biwa waterfront, numerous kinds of fauna and flora can be seen, with the changes of the four seasons. As an extension of this, the Biyo Center holds an annual Nature Watching event, designed around the on-

site observation of its fauna and flora. A considerable number of people, young and old alike, have participated in the event so far, to learn about Lake Biwa and the water environment in general, and to exchange ideas and opinions.



Nature Watching Event at the Biyo Center

#### "Junior River School" In an attempt to familiarize children with Lake Biwa and the Yodo River, and further to encourage them to think about the importance of lakes and rivers, the "Junior River School" provides pupils (4th to 6th graders in elementary school), potential future-generation leaders, a hands-on, outdoor

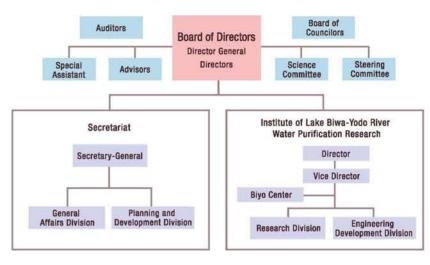


Lake Biwa Course



Yodo River Course

### Organization of Lake Biwa-Yodo River Water Quality Preservation Organization



#### **Organization Fund**

3 billion yen, including 2 billion yen from the following governments: Prefectures of Mie, Shiga, Kyoto, Osaka, Hyogo and Nara, as well as the cities of Kyoto, Osaka and Kobe, and the remaining one billion yen from the private sector (124 companies).

#### **Board of Directors and Auditors**

Director General	Shosuke Mori	President and Director, the Kansai Electric Power Co., Inc.	
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Director	Yukiko Kada	Governor, Shiga Prefecure	
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Director	Isao Somiya	Professor, Ryukoku University Professor Emeritus, Kyoto University	
Director	Haruo Aoki	Secretary-General, Lake Biwa-Yodo River Water Quality Preservation Organization	
Auditor	Shigeru Otsuki	Acting Controller General (Director, Bureau of Treasury Management), Kyoto Prefecture	
Auditor	Kazuyoshi Ohsumi	Deputy Director-General, Policy and Planning, Osaka Prefecture	

#### **Board of Councilors**

Chairman of the Board of Councilors	Yasunori Okai	Chairman, Kinki Regional Association of Chairpersons of Town and Village Assemblies
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Councilor	Tamio Shimogami	President, Kinki Construction Association
Councilor	Atsushi Yamanaka	Chairman, Hanshin Water Supply Authority

#### **Science Committee**

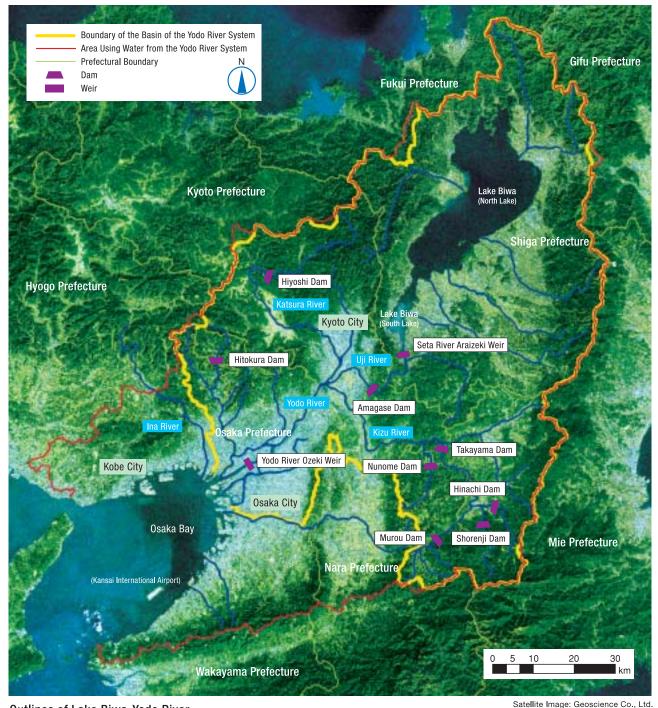
Isao Somiya	Professor, Ryukoku University Professor Emeritus, Kyoto University
Shuichi Ikebuchi	Professor, Disaster Prevention Research Institute, Kyoto University
Kazuya Inoue	Professor Emeritus, Kyoto University
Yasuro Kadono	Professor, Faculty of Science, Kobe University
Masashi Kawasaki	Associate Professor, Graduate School of Engineering, Kyoto University
Yasuhiro Takemon	Associate Professor, Water Resources Research Center, Disaster Prevention Research Institute, Kyoto Univeristy
Hiroshi Tsuno	Professor, Graduate School of Engineering, Kyoto University
Masahisa Nakamura	Professor, Research Center for Sustainability and Environment, Shiga University
Machiko Nishino	Research Planning Officer, Lake Biwa Environment Research Institute
	Shulchi Ikebuchi Kazuya Inoue Yasuro Kadono Masashi Kawasaki Yasuhiro Takemon Hiroshi Tsuno Masahisa Nakamura

#### **Description of Operations**

The Lake Biwa-Yodo River Water Quality Preservation Organization (BYQ) carries out the following operations to attain the organization's objectives:

- (1) Research and development concerning water purification technology and related technologies in the Yodo River system
- (2) Support of water purification projects in the Yodo River system
- (3) Collection, treatment, processing and provision of information on water quality in the Yodo River system
- (4) Support of river purification and protection activities by local residents and residents' groups in the Yodo River system
- (5) Public enlightenment on water purification in the Yodo River system
- (6) Collection and provision of information on water purification technologies in the Yodo River system and hosting of seminars and workshops
- (7) Commissioning of activities in regard to projects listed in (1) and (3)
- (8) Other operations necessary to attain the objectives of the organization

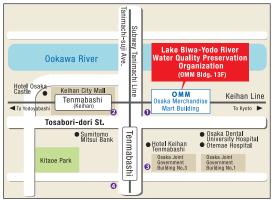
#### Map of Lake Biwa-Yodo River Basin



#### Outlines of Lake Biwa-Yodo River

- O Basin Area : 8,240km<sup>2</sup>
- Basin Population : 11,955,000 (2005)

C Lake Biwa Area : 647km<sup>2</sup> Major Axis : 63km
Storage Capacity : 27.5 billion m<sup>3</sup>
C Length of River Artery : 75km



Subway Tanimachi Line "Tenmabashi" Station Exit No. 0
Keihan Electric Railway "Tenmabashi" Station East Exit
Both connect to B2 Floor of OMM Building.



# Lake Biwa-Yodo River Water Quality Preservation Organization

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