# Vol. 1 International Conference of Aquapolises Publisher: Harutaka Nabe Editor: Katsumi Kato With the cooperation of: Inter Group Corp.

### Responsible Creation of Aquapolises for the 21st Century

Under the theme "Creating Aquapolises for the 21st Century," the 2nd International Conference of Aquapolises was held in Shanghai, People's Republic of China, between November 17 and 19, 1993, with the participation of 28 cities from 22 nations, together with one international organization. The theme was of universal relevance to all international conferences.

The City of Shanghai is built on the delta of the Chanjiang River, the longest river in Asia. Throughout the entire 6,000 square kilometers of the City's area runs a mesh of rivers. Shanghai's population is just over 13 million but it is an exceedingly overcrowded city, with 7.8 million people living in the central city area of 610 square kilometers. The history of Shanghai is a history of constant struggle to achieve control over its water. Indeed, land reclamation from the sea dates back to the eighth century A.D. Toward the end of the 1970s, Shanghai commenced research in comprehensive urban planning. Shanghai City's General Planning Scheme was drawn up in the early 1980s.

In 1988, new targets for flood prevention were established, in readiness for massive flooding that may happen not once in a hundred years, but once in a thousand years. At the same time, a range of water quality protection measures have been implemented, including the treatment of industrial waste and livestock waste found in rivers. According to Shanghai's Mayor Huang Ju, the City has the aim of transforming itself into a world hub of economy, finance and trade in the next 20 years. The Mayor emphasized that, in order to build itself into such an aquapolis, it is necessary for Shanghai to step up its efforts toward conserving its water environment, and to fully recognize the importance of urban greenery so as to

maintain a well balanced ecological environment.

The 28 cities and one organization participating were the following:

Bangkok, Beijing, Belgrade, Casablanca, Dar es Salaam, Gdansk, Guang Zhou, Hamburg, Ho Chi Minh, Kuala Lumpur, Jakarta, Lagos, Madrid, Manila, Matsue, Melbourne, Montreal, Osaka, Piraeus, Pusan, Rotterdam, Sendai, Shanghai, Seoul, Singapore, Tianjin, Venice, Vienna, and the Advisory Committee on Protection of the Sea (ACOPS) from the U.K.

On the opening day of the conference, there was a keynote speech from the Mayor of Shanghai, followed by the Mayor's and Experts' Session. Presentations were made and discussions held on each city's efforts in tackling the issues of water, greenery, and the environment since 1990, and the outlook for the future. On the next day, November 18, and on November 19, Experts' Sessions were held, with reports made under four themes, including "Water Resource Protection and Delivery, New Technique and Sewage Treatment."

On the final day, the Plenary Session was convened in the afternoon, to sum up the Experts' and Mayor's Sessions. The Shanghai Declaration was then adopted, summarizing the discussions of the Conference into the following five points:

- 1. the protection and supply of water-the greatest resource of aquapolises-and new technologies in sewage treatment;
- new ideas, new concepts, and new measures in urban planning and harbor construction for 21st century aquapolises;
- 3. the crucial link between urban economic growth and environmental protection for the purpose of improv-

ing urban environmental efficiencies;

4. the expansion and development of urban greenbelts, greenery of cities, and beautification of surroundings, so as to achieve better ecological effects and improve ecological conditions;

and

5. prevention and protection against natural calamities; and technical control measures.

The Directorial Cities Meeting was held in the morning on the 18th, in parallel with the Experts' Session. The Meeting passed a statute clearly delineating the aims and purposes of the International Conference of Aquapolises (ICAP). In summary, the statute states as follows:

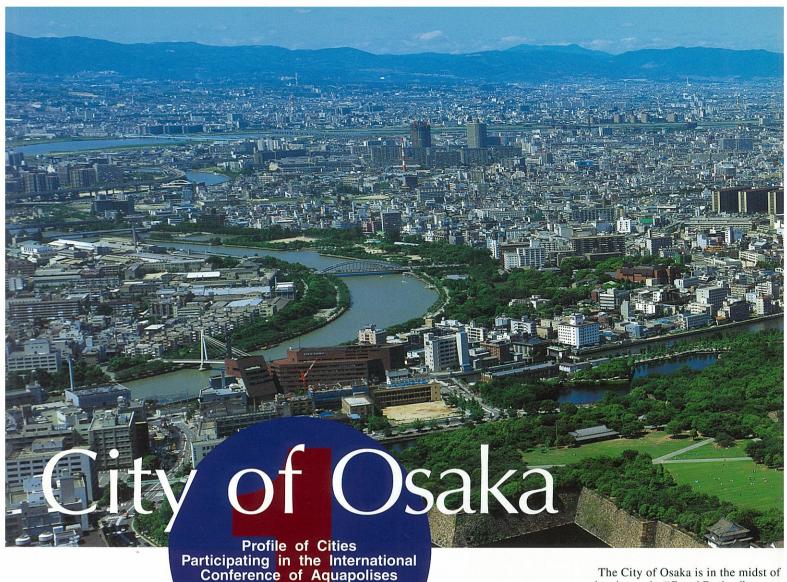
- 1. the mission of ICAP is for the aquapolises of the world to mutually comprehend their respective past, present and future conditions, and debate on the basic policies and roles of aquapolises in urban planning for the 21st century, thereby to assume leadership in forming a consensus of world opinion on preserving and improving the global environment;
- 2. ICAP shall meet approximately every three years;
- 3. the Directorial City Conference (DCC) shall be established in order to smoothly perform and achieve the purpose and mission of ICAP. The DCC shall consist of the host city and eleven other directorial cities; namely, Belgrade, Birmingham, Chicago, Hamburg, Melbourne, Montreal, Osaka, Sendai, Shanghai, Venice, and Vienna; furthermore, in order to execute the decisions made by the DCC and to liaise and coordinate activities with the respective cities, a secretariat shall be established in Osaka.



The City of Shanghai



Opening ceremony of '93 ICAP in Shanghai



Waterside, Our Everlasting Frontier The City of Osaka is in the midst of drawing up its "Grand Design," a master plan aimed at creating an ideal city for the 21st century. As mentioned on the previous page, the history of city building in Osaka, spanning well over a thousand years, has been a history of coexistence with water, involving also the City's struggles with water.

The Grand Design, incorporating the lessons of history, takes as its starting point the idea that water is a precious and invaluable asset, a divine gift for the City of Osaka. The ideal city Osaka aims to create is one that will be a fitting place for the peoples of the world to gather together in harmony.

The heavy concentration of population in cities, and urban sprawl, have given rise to environmental problems in urban areas. In this context, water is one ready form of nature to which city dwellers can easily have access. Water enriches urban life and brings relaxation and beauty to the urban scene. These positive effects of water are being rediscovered. Ten percent of the total area of the City of Osaka, 20 square kilometers, comprises river surfaces. The large flowing rivers that traverse the center of the City lead directly into Osaka Bay.

The City of Osaka has been shaped over the years through the natural accumulation of soil and the artificial efforts of land reclamation and soil removal.



The City of Osaka as "Aquapolis

In the process, technologies relating to reclamation, water management and bridge construction have been developed and reinforced. However, these technologies have meant citizens' isolation from water by tidal barriers built to protect life and property from flooding and storm surge.

Osaka, though, is situated between the seacoast and other parts of the Kinki District; because of this, an international port was built here, making the City a gateway of exchange with Asian nations, including Korea and China; the exchange became active from the late 4th century onwards. Gradually, Osaka became an international city where people from Continental Asia came to settle.



Tenjin Festival, Osaka's largest

Shifting our focus back to the present, the three major tasks faced by cities, as we are about to cross the threshold of the 21st century, can be listed as below:

- 1. harmonious coexistence with the environment;
- 2. improvement of amenities;
- 3. exchange among countries, regions and peoples.

The City of Osaka is seeking to use its historical assets of "water and water-front" as a means of coming to grips with these tasks.

In more concrete terms, this means that in order to achieve harmonious coexistence with the environment, Osaka will create a city that exploits its water resources. Its water resources will also be utilized to improve amenities, and "beautiful waterside landscapes" will be created. To these ends, water treatment technology will be developed and advanced. To promote the exchanges of countries, regions, and people, "international exchange activity through water," such as ICAP, will be strongly promoted.

Roughly speaking, the development of Osaka until modern times had centered upon an east-west axis along the rivers, that flow from east to west. Later, the development of roads and railways shifted urban activity onto a north-south axis. Consequently, the east-west axis remained in a relatively weakened state. Recently, however, the International Garden and Greenery Exposition was held along the east-west

axis. Also, a new business park has been built. Coastal areas are undergoing redevelopment. Thereby, the eastwest axis has now been strengthened. What is more, Kansai International Airport has opened and the Osaka Bay industrial areas are being redeveloped, giving the City a new coastal axis.

The City of Osaka, therefore, has divided its municipal area into three zones: inner city, coastal, and inland zones. Urban improvement is being undertaken with due consideration given the special features of water in each zone.

Inner City Zone: In this area are concentrated Osaka's main commercial, financial and cultural facilities. Osaka's image as a "City of Water" was formed mainly on the basis of activities in this area. As the zone symbolizing our "new" Osaka, this area will be improved as a waterside "Oasis Zone."

Coastal Zone: This area will have facilities necessary for a future city, as well as for sports, information, exhibition, and convention. The zone will be used for exchange activities among people. The City of Osaka is hoping to host the Olympic Games in the year 2008. The main stadium and sports facilities are planned for this zone.



Coastal Zone undergoing rapid development

Inland Zone: Small and medium sized rivers and ponds are situated here. Urban planning for a city safe against water damage is being undertaken; at the same time, the living environment is being enriched through appropriate use of rivers, ponds and streams.



Artificial brook in the Inland Zone

To underline the key theme, water is the everlasting frontier of Osaka, and will continue to be so in the future.



# **Background to the Holding of the 1st International Conference of Aquapolises**

The City of Osaka celebrated the centenary of its municipality in July 1990. As part of the special events commemorating the centenary, the International Garden and Greenery Exposition, Osaka 1990 was held under the theme "Harmonious Coexistence of Mankind and Nature." In the same year, Osaka played host to the 1st International Conference of Aquapolises. Osaka's long history as an "aquapolis" was a key element in the hosting of this conference. Osaka is located at the mouth of two large rivers, the Yodo River and the Yamato River. Moreover, as most of its urban area lies on coastal lowland, Osaka has frequently been subject to damage from flooding and storm surge. Therefore, the major pillar of Osaka's urban planning has been the theme of harmonious coexistence with water. Similarly, taking the world at large, it can be perceived that the development processes of many cities have deep associations with water and greenery. However, this process also entails environmental problems such as water pollution and diminishing green areas. Realizing the need among the world's cities for mutual exchange of their respective experience and wisdom concerning urban development and environmental protection, Osaka took the initiative of calling upon aquapolises in Japan and abroad to convene and discuss these topics.

The three basic concepts of the conference as stated by Osaka were as follows:

- 1. creation of a city where nature and humankind can coexist in harmony:
- 2. creation of a city where water and greenery are preserved and used to create a comfortable environment; and
- creation of a city where waterside and verdant spaces are restored or created to foster scenic beauty.

The 1st ICAP attracted 26 aquapolises from outside Japan and 6 cities from within Japan. The conference was held over three days beginning on July 25, 1990. Based on the discussions held, the Osaka Declaration was drawn up. The Osaka Declaration "renewed (the cities') recognition that the continued development of cities relies on the harmonious coexistence of nature and man" and frankly admitted that "with the diversification and expansion of human activities, however, it has become increasingly difficult to strike a balance between urban development

and environmental conservation." The following four paragraphs summarize the results of the discussion.

- 1. The strategies and means of dealing with the problems posed by water in "water-enriched cities" have been largely dictated by the natural and social conditions peculiar to each city. Nevertheless, there are various strategies and techniques which can be shared among cities to devise measures to cope more successfully with their respective problems.
- 2. The indispensable character of water, which is essential to all living things, the depletion of our water resources, and the deterioration of the water environment as a consequence of urbanization, combine to give rise to increasingly serious problems. In light of this, the participant cities can mutually benefit from sharing strategies and techniques they have developed for the efficient utilization and conservation of water.
- 3. We are becoming increasingly aware of the great potential of water-front areas, both as centerpieces of urban revitalization and as spaces for people to enjoy a more natural environment within the confines of the increasingly artificial environment of crowded cities. It is necessary to integrate each city's character and traditions into the development of its waterfront areas.
- 4. Greenery, along with water, is an essential natural element for all cities that seek to provide their inhabitants with restful surroundings and the resulting peace of mind, to enhance the cityscape, and to enhance their environments. The success of future city planning depends on the ability of cities to create the amenities resulting from the provision and active cultivation of extensive greenery.

The Declaration also expounds as follows on the responsibilities to be shouldered by urban activities. That is, "each participating city is dedicated to playing a leading role in forming a worldwide consensus for the conservation and improvement of the global environment, fully recognizing that urban activities, individually and collectively, will exert a great influence on global-scale environmental improvement."

Eight directorial cities were chosen; namely, Belgrade, Birmingham, Chicago, Melbourne, Osaka, Sendai, Shanghai, and Venice.

#### '90 ICAP in OSAKA



Opening ceremony



Plenary session

#### **Editor's Note**

We are delighted to forward to you the first issue of AQUAPOLIS.

Publication of this bulletin was decided on by the Directorial Cities Meeting. The Osaka Municipal Government, the Secretariat of ICAP, was assigned the task of planning and editing a newsletter to serve as a medium of information exchange among the aquapolises of the world.

As this is the inaugural issue, we have focused on '93 ICAP held in Shanghai, and on Osaka City's policies and measures relevant to the aquapolis.

We hope that this newsletter will be able to contribute to "Creating Aquapolises for the 21st Century" by offering a full and wide coverage, with information from all around the world.

To this end, we wish to call upon the aquapolises of the world to provide us with articles on those pioneering projects being undertaken by each city, so that they may be featured in this newsletter, starting with our next issue. All articles and enquiries should be addressed to:

**ICAP** Secretariat

c/o Osaka City Foundation for Urban Technology

4-6-18, Nishitenma, Kita-ku, Osaka 530, Japan

Phone: +81-6-312-7711 Fax: +81-6-363-7722