Chapter 3

People and Lake Biwa

Chapter 3 Introduction

Near Water and Far Water

Keywords: World Lake Conference, Near water, Far water

1. The Occurrence of the Great East Japan Earthquake

A Massive magnitude 9.0 earthquake with its epicenter off the Sanriku coast in the Tohoku region struck at 14:46 on March 11, 2011.

This disaster also caused an accident that damaged the Fukushima Daiichi Nuclear Power Plant located in Fukushima Prefecture belonging to Tokyo Electric Power Company.

At the time of the accident, radioactive substances (radioiodine) over the provisional standard value were detected in some tap water in areas such as Tokyo and Chiba Prefecture and, for a time, warnings were issued regarding limits on amounts ingested by infants.

The tsunami produced by the earthquake destroyed lifelines such as waterworks and drainage systems; and the tap-water supply to as many as 1.6 million households was cut off. As a result, bottles of water were sold out at many stores across the country.

While water from sources such as wells, reservoirs, rivers and natural springs was referred to as "near water" by the Governor of Shiga Prefecture, Yukiko Kada, use of such water has been abandoned and systems including tap-water supply and drainage have been streamlined, renewing awareness of the vulnerability of our modern society that uses vast amounts of water.

2. "Near Water" and "the Culture of Water Reuse"

In the past, the lifestyle in Shiga Prefecture was closely tied to "near water."

The photograph above (Fig. 3-1) shows a morning scene at Okishima Island (Omihachiman City) in 1956, and water drawn directly from the lake was used for everyday life until the introduction of tap-water supply service in 1961. The islanders drew drinking water from the lake in the early hours of the morning while it was still available and also used this water to wash dishes and pans after breakfast. Water was drawn before lunch for laundering and again in the evening for bathing. In addition, drinking water was drawn from the end of a jetty where the current was rapid and particularly dirty items were washed by the sandy beach since the biological purification effect of sand helps to remove grime.

The local populace knew all this from experience rather than scientific theory, and this "near water" based lifestyle that incorporated elements such as the skillful allocation of time and place was the product of diverse knowledge and ideas based on experience that had been handed down through generations.

Fig. 3-1 Morning scene at Okishima Island (Omihachiman City) circa 1950s

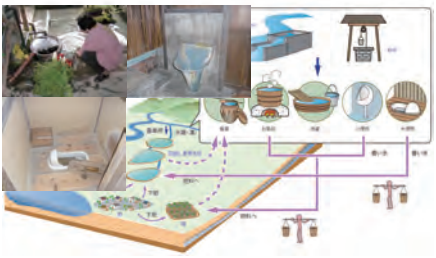

Fig. 3-2 Water usage circa 1950s
(Water from locations nearby was skillfully used and reused.)

3. "Far Water" and the Development of Resources

As described in Chapter 4-13, "Lake Biwa Comprehensive Development." there are growing demands for water in major downstream cities in the Kinki region and the need for measures to realize economic development and flood control and cope with environmental pollution. These demands and needs prompted the implementation of comprehensive development of Lake Biwa.

Water utilization projects have been implemented both to promote stable water supply to the downstream areas of Lake Biwa and improve tap-water supply in Shiga Prefecture in order to realize the effective use of the water resources of Lake Biwa. Improvements in agricultural water drainage facilities through measures such as farmland consolidation have enabled the realization of highly-productive farming. On the environmental conservation front, projects have been implemented to improve a sewerage system and prevent the eutrophication of Lake Biwa.

Flood control projects such as the construction of lakeshore levees have realized major reductions in damage caused by flooding around the lake. Projects such as these have significantly improved the living environment of residents in Shiga Prefecture and contributed to the economic development of the area.

Although the comprehensive development of Lake Biwa has produced a great many benefits, projects such as the construction of lakeshore levees and water purification have also had a major impact on the ecosystem of the lake by reducing habitats for flora and fauna such as reed beds around the lake and the natural lakeshore.

As described in Chapter 4-7, "New Challenges of Lake Biwa," new issues that threaten the ecosystem are now emerging such as diminishing fish populations and the thick growth of aquatic plants.

Moreover, improvements in tap-water supply and sewerage systems have resulted in the disappearance of "washing areas" in Lake Biwa due to the availability of tap-water supply, and has brought an end to the "near water" based lifestyle.

4. Lake Biwa Comprehensive Conservation and Initiatives in Shiga Prefecture to Restore "Near Water"

As described in Chapter 4-15, "Mother Lake 21 Plan," Shiga Prefectural Gorernment has formulated the "Mother Lake 21 Plan" with the aim of promoting the comprehensive conservation of Lake Biwa. With "Coexistence of Lake Biwa and People" as its core concept, the plan promotes comprehensive initiatives with the goal of realizing the conservation and restoration of Lake Biwa based on a vision of Lake Biwa as "a place where people can coexist with Lake Biwa as they pursue their activities with vigor. "

5. Proclamation by the Shiga Prefectural Government

The Great East Japan Earthquake can also be seen as a wake-up call for the lifestyle of modern society.

Not only "far water," but "far food," referring to foodstuffs produced in large quantities in distant areas and transported to our tables and "far energy," referring to energy transmitted from large-scale power stations over power lines spanning great distances – while inestimably convenient and efficient, all of these elements of the lifestyle of modern society are highly vulnerable in emergency situations arising from disasters such as earthquakes.

The Shiga Prefectural Government wishes to restore "near water," "near food" and "near energy" and spread the concept of conversion to a tenacious society capable of reverting to use of these "near" resources as alternatives in times of need.

(Excerpt from Proclamation by the Governor at the World Lake Conference (2011))

Fig. 3-3 World Lake Conference (Austin, Texas, U.S.A., 2011)