#### Primary Sponsor: Shiga Prefecture

# **Reed Colonies and Lagoon Restoration**

#### Designation: Biwa-ko Quasi-

Biwa-ko Quasi-national Park Location: Nagahama and Kohoku, Shiga Prefecture Year Initiated: 2002

#### Council for Native Reed Colonies Restoration at Lake Biwa Northern Region

The Council focuses on restoration of notably diminished reed beds within the context of the shoreline landscape that integrates biological communities and their habitats.

### Hayazaki Lagoon Restoration Planning Committee

The Committee works on restoration of severely reduced lagoon habitats due to landuse development to recover various lagoon functions.

# Lake Biwa

Goal

**Restore the native reed and lagoon habitats that existed in the 1950s** 



Vast reed colonies along the shore and the former lagoons comprised the indigenous landscape of Lake Biwa. These landscape elements were also environmentally valuable, providing critical habitats to plants and animals and functions of erosion and water quality control to the coastal areas.

Growing human activity and changing lifestyle,

however, have accelerated land reclamation of the historical lagoons and declines in reed covers and riparian forests, degrading the amount and quality of the lakeshore ecosystem. Considering a comprehensive improvement of the shoreline landscape and wildlife habitat, restoration activities are in progress to leave the scenic Lake Biwa for future generations.

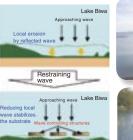
# Approaches

- Restore native reed colonies in the northern region  $\rightarrow$  ()
- Restore the Hayazaki Lagoon  $\rightarrow$  (2)

Native reed colonies in Lake Biwa can be sustained with a sensitive balance of the lake ecosystem. Sediment movement on the lakebed is one cause that declined the reed colonies. At Nagahama and Kohoku in the northern region, therefore, efforts to restore reed colonies have been made by assisting the natural recovery. In the former Hayazaki Lagoon, converted to a 89-ha upland in 1970, feasibility testing of reinundation has been carried out to restore the original lagoon habitats.

# **1** Preventing surface soil erosion

Pile piers made of wooden walls and jetties will be installed to stabilize the lakebed sediment.







A groin (above) and jetty (below)

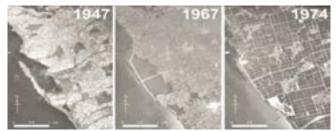
## ② Experimentally flooding the Hayazaki reclaimed land

To test the feasibility of the Lagoon restoration, 17 ha of the drained land has been experimentally flooded since November 2001, and the recovery of lagoon ecosystems has been monitored. Currently, the site shows a recovery of healthy habitats for plants and animals such as the whistling swan (*Cygnus columbianus*).





Hayazaki reclamation project in August 2003



Transformation of the Hayazaki Lagoon. Land reclamation occurred between 1963 and 1970

Municipal Governments 😋 Lake Biwa

Council for Native Reed Colonies Restoration at Lake Biwa Northern Region : http://www.pref.shiga.jp/kakuka/d/shizenhogo/yoshi\_kyougikai/