



The Great Yellow River's

**Ten Years Environmental Flow Management Program
and Impact Assessment
1998-2007**

**Yellow River Conservancy Commission
Brisbane, Sept 5. 2007**



The Yellow River Basin

- **length:** 5,400 km
- **catchment area:** 790,000 km²
- **Flow:** 500 m³/s (Huayuankou)
- **inhabitants in ca.:** ca. 115 Mio.
- **political structure:** 9 provinces
- **drinking water for:** 100 Mio inhab.
- **sediment load:** average 1.6 billions tons/yr; very high sediment
35 – 900 g /L SS
- **river is used for**
 - irrigation
 - Industrial
 - Hydropower
 - drinking water
 - waste water discharge



Yellow River Conservancy Commission (YRCC)



Integrated River Basin Management

- Flood Management
- Soil Erosion Control
- Water Pollution
- Environmental Flow



1998: Call for Environmental Flow Management Program

New Challenges: River Runs Dry since 1970s

- Water scarcity
- Climate Change
- Economic development
- Population growth
- Transboundary river

Political Decision and public consensus

- Laws and policy making
- Public participation

Demand of Environmental Flow Management

- river flow
- Ecological restoration
- Sediments transportation
- Water quality

Environmental Flow Management Program 1998-2007

Water allocation and Environmental Flow

- Legal measures, Public Consultation,
- Technical measures
 - ◆ Water Allocation Scheme 58 bcm=37+21 bcm (EF)
 - ◆ Remote control and Real time control
- Artificial Floods
 - Flushing river sediments
 - Flood plain and wetlands restoration
 - Improve river morphology and Reduce flood risk
- Ecological restoration



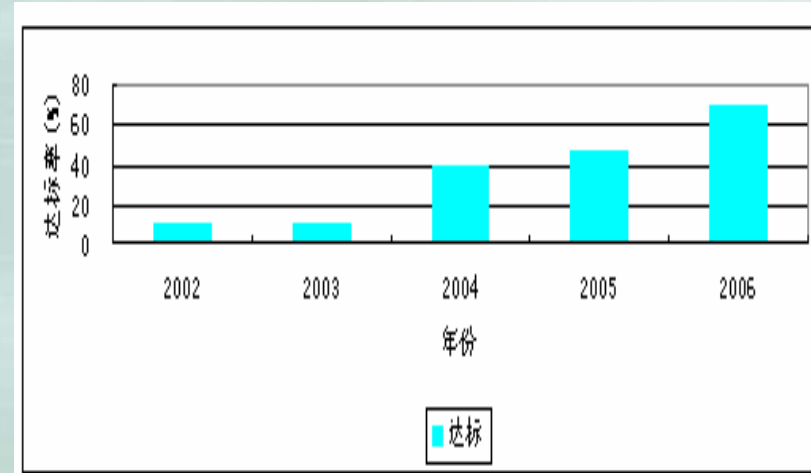
Water Quantity and Water Quality

■ Continuous river flow restored

- in 1997, river dried for 226 days
- since 1998, the river has flow continuously for 10 years

■ Water quality improved

- Legislation of water pollution control
- Pollution reduction and cleaner production Tech.
- Monitoring and supervision enhanced
- Water quality trends of mainstream of the Yellow River in 2002-2006



Riparian Wetlands

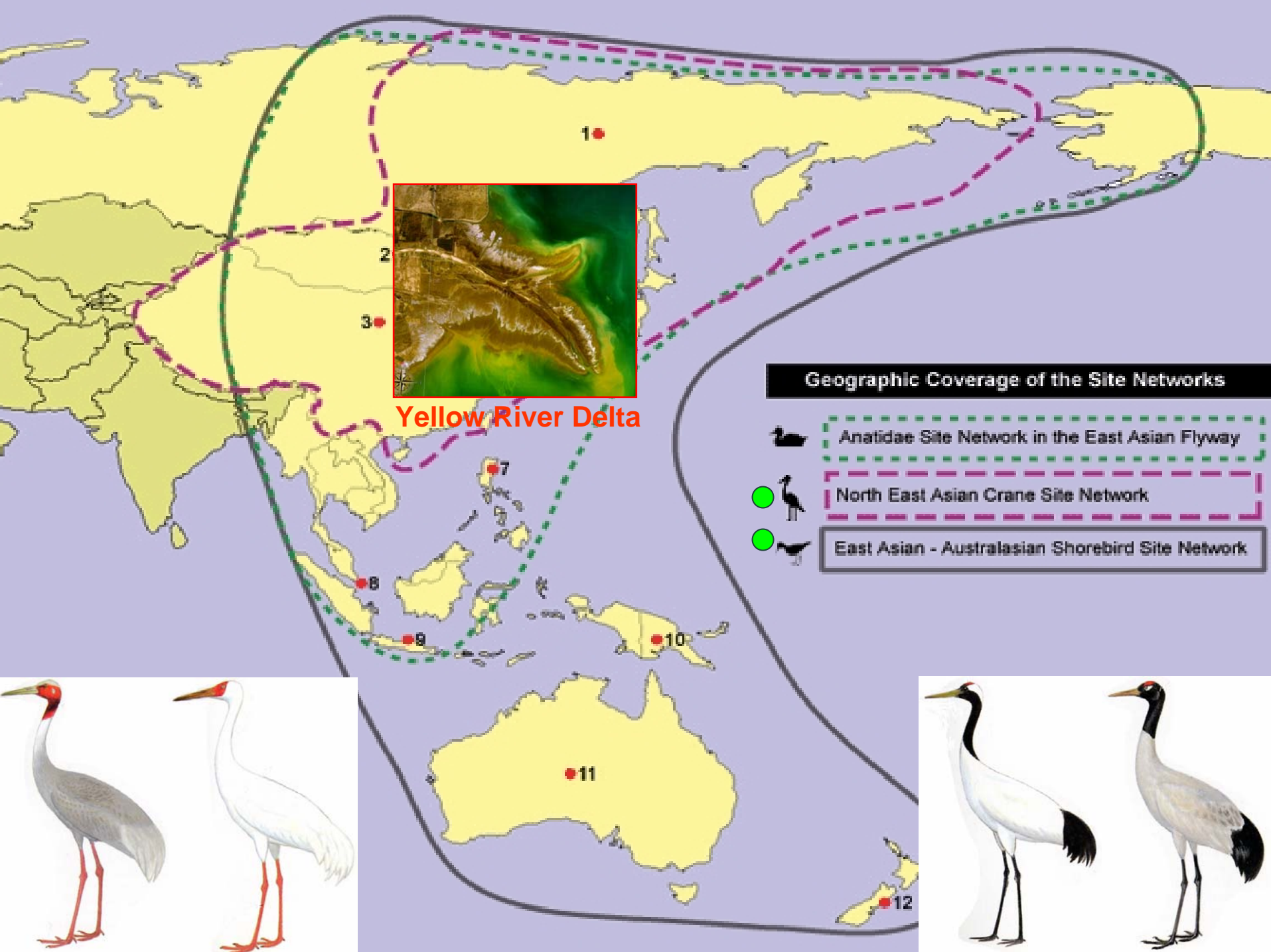
Wetlands

- Comprise of river channel, flood plain, retention basin, lakes, etc.
- The total area of the downstream floodplain about 3544 km²
- The ecological status of the wetlands depend on the fresh water supply

Wetlands eco-system

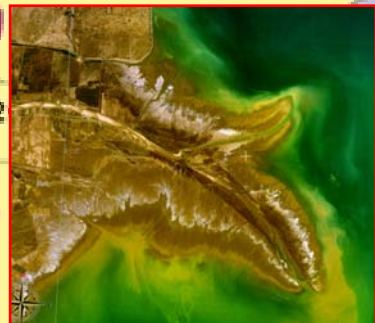
- habitat of the fishes and migration birds
- recovered from the dry up periods





Geographic Coverage of the Site Networks

-  Anatidae Site Network in the East Asian Flyway
-  North East Asian Crane Site Network
-  East Asian - Australasian Shorebird Site Network



Yellow River Delta



International Yellow River Forum

Oct. 16-18, 2007, Dongying ,China



黄河水利委员会

YELLOW RIVER CONSERVANCY COMMISSION

Keeping Healthy Life of the Rivers