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**Asia Water Forum 2022**  
8–11 August 2022 • Online



Focus Area: Water as a sustainable resource

**Session Title: Governance and planning for water security**

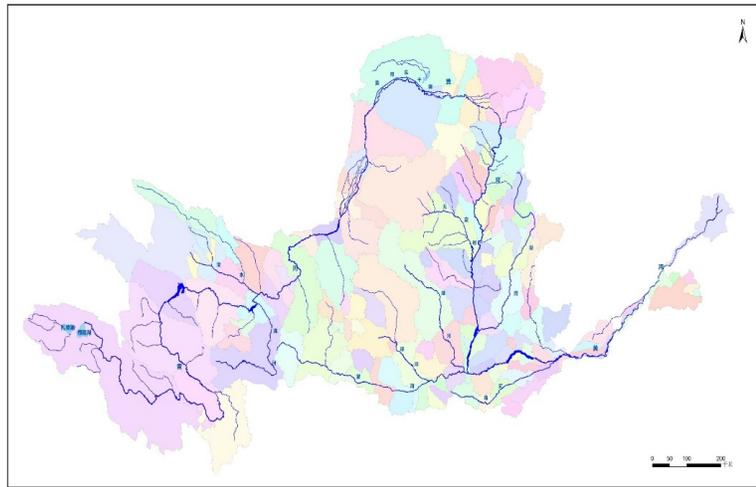
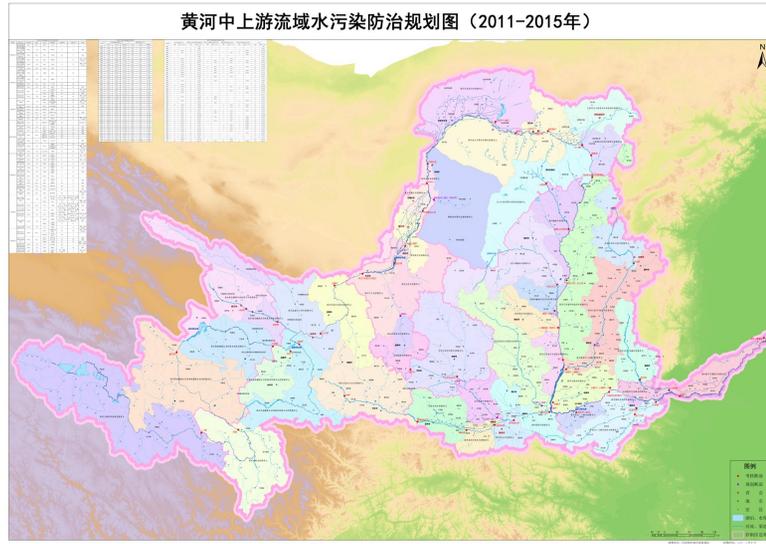
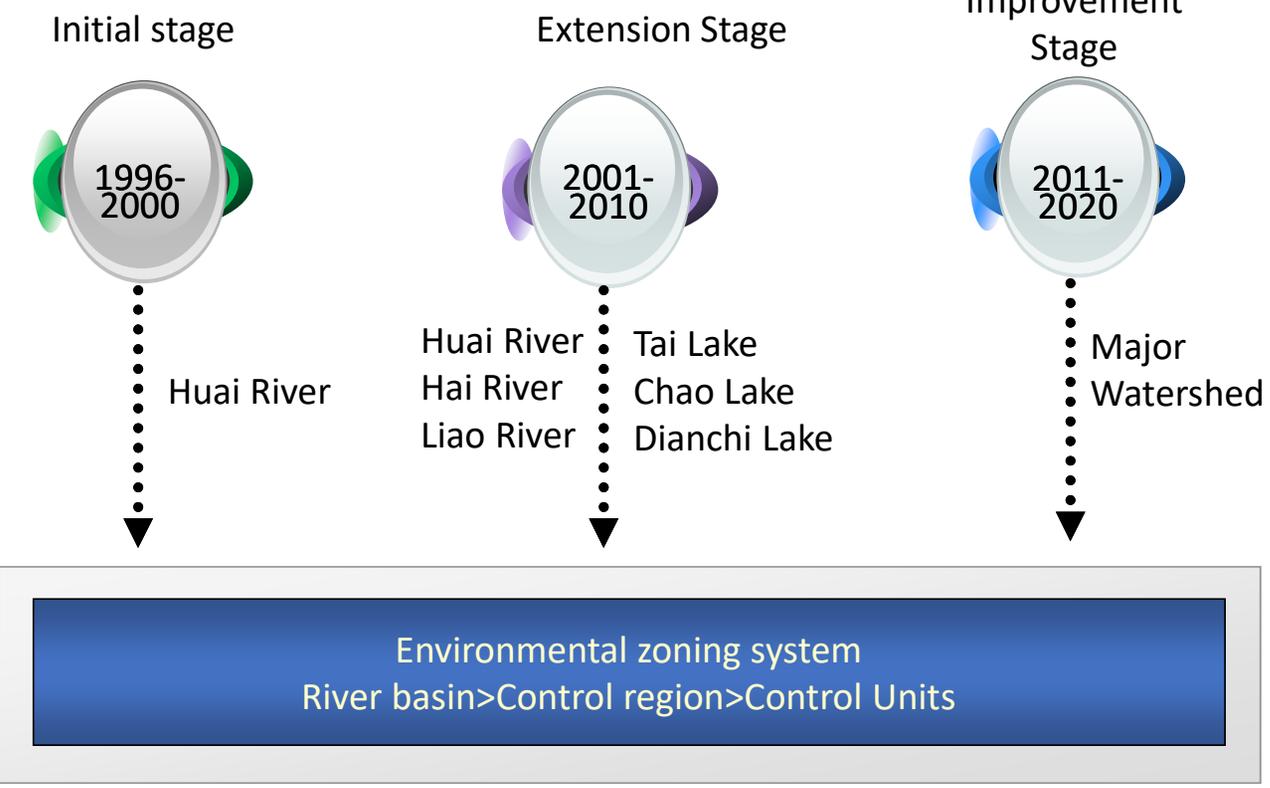
Schedule: [10 August 2022 (Wed) | 11:00 a.m. - 12:30 p.m. (GMT+08)]

Design and application of environmental zoning method  
in the Yellow River basin

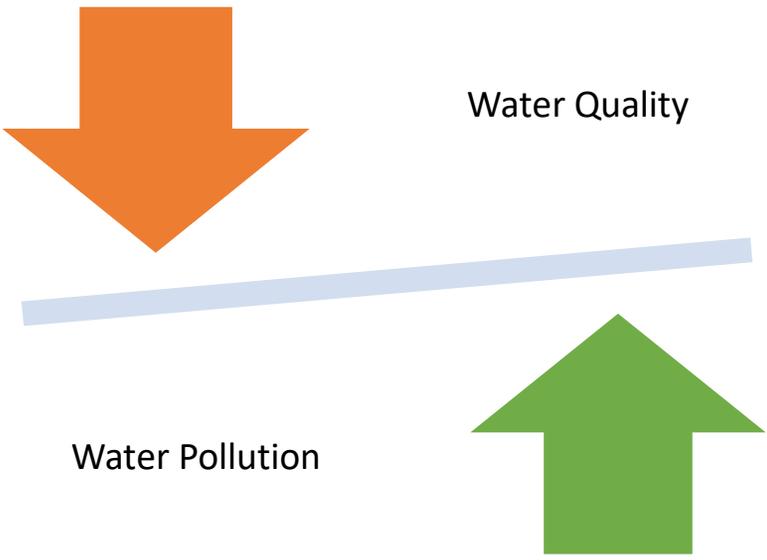
WEN Yuli  
Chinese Academy of Environmental Planning  
Aug 2022



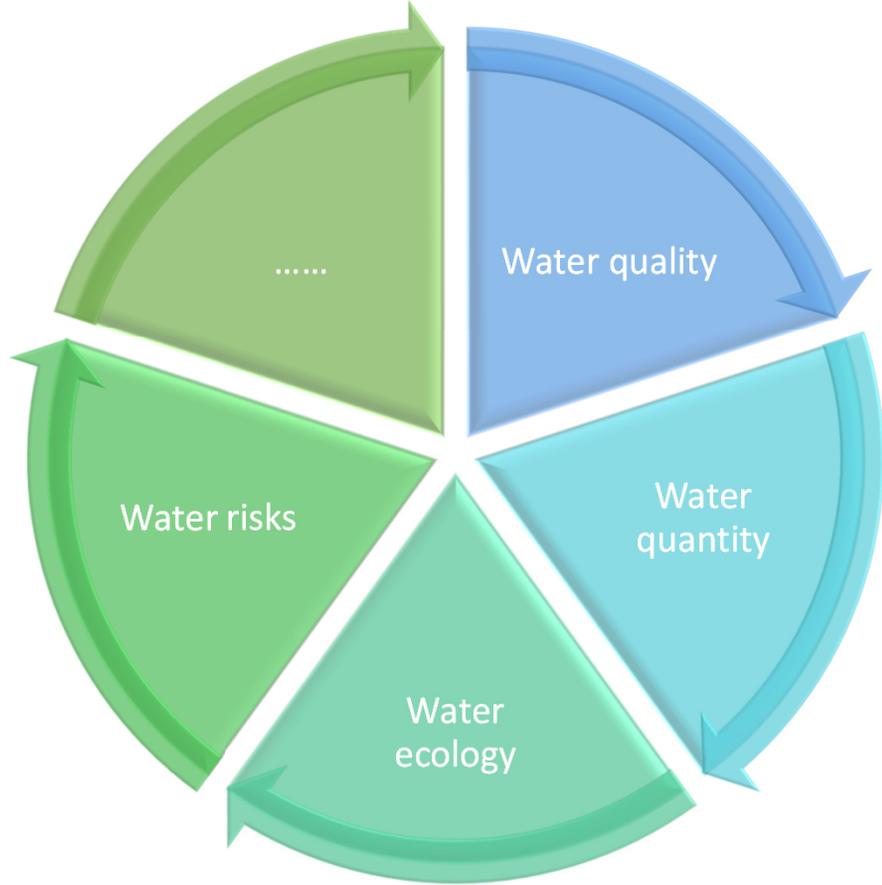
# History of environmental zoning for river basins



# Reforms in the new era



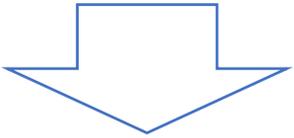
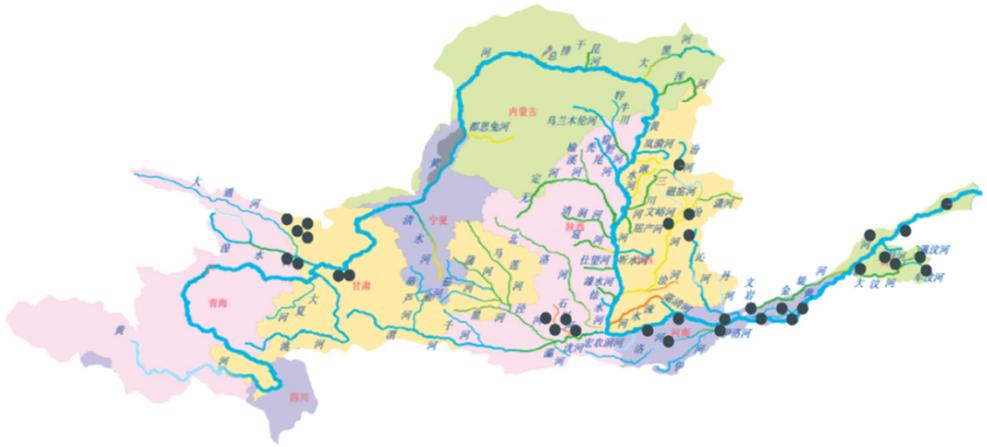
Fragmented management



Systematic management

# Reforms in the new era

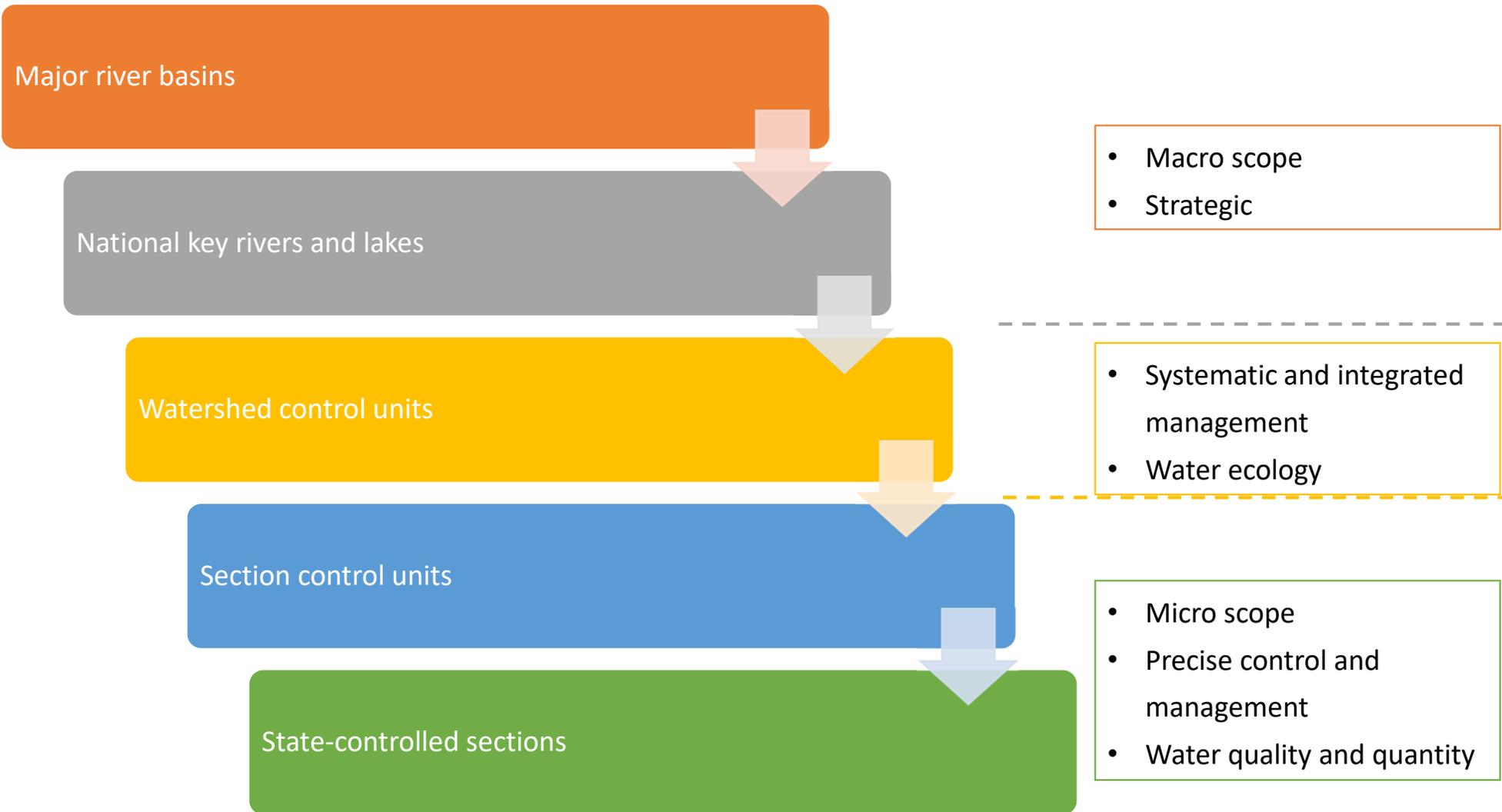
Fragmented management



Integrated/coordinated management

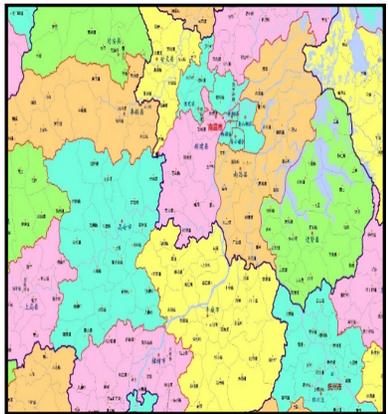
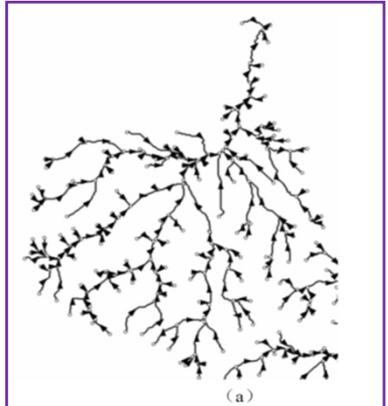


# Conditions of the Yellow River basin



# Construction of the data base

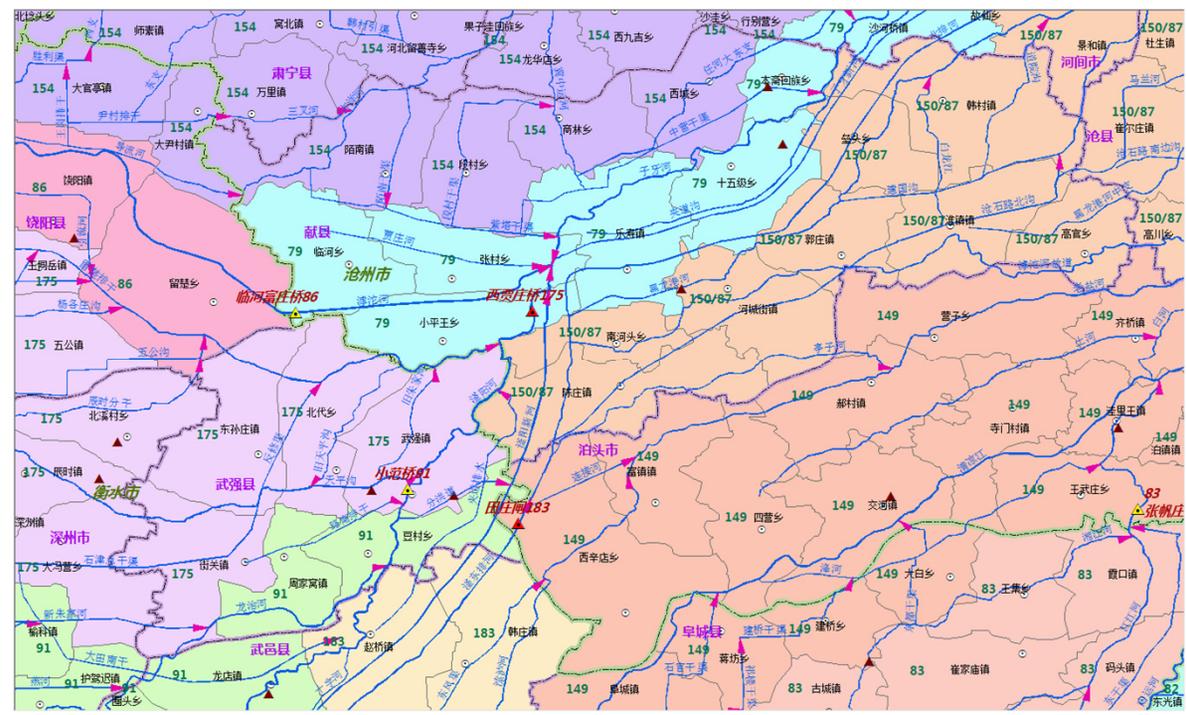
From DEM to water courses and directions



Administrative map at township level

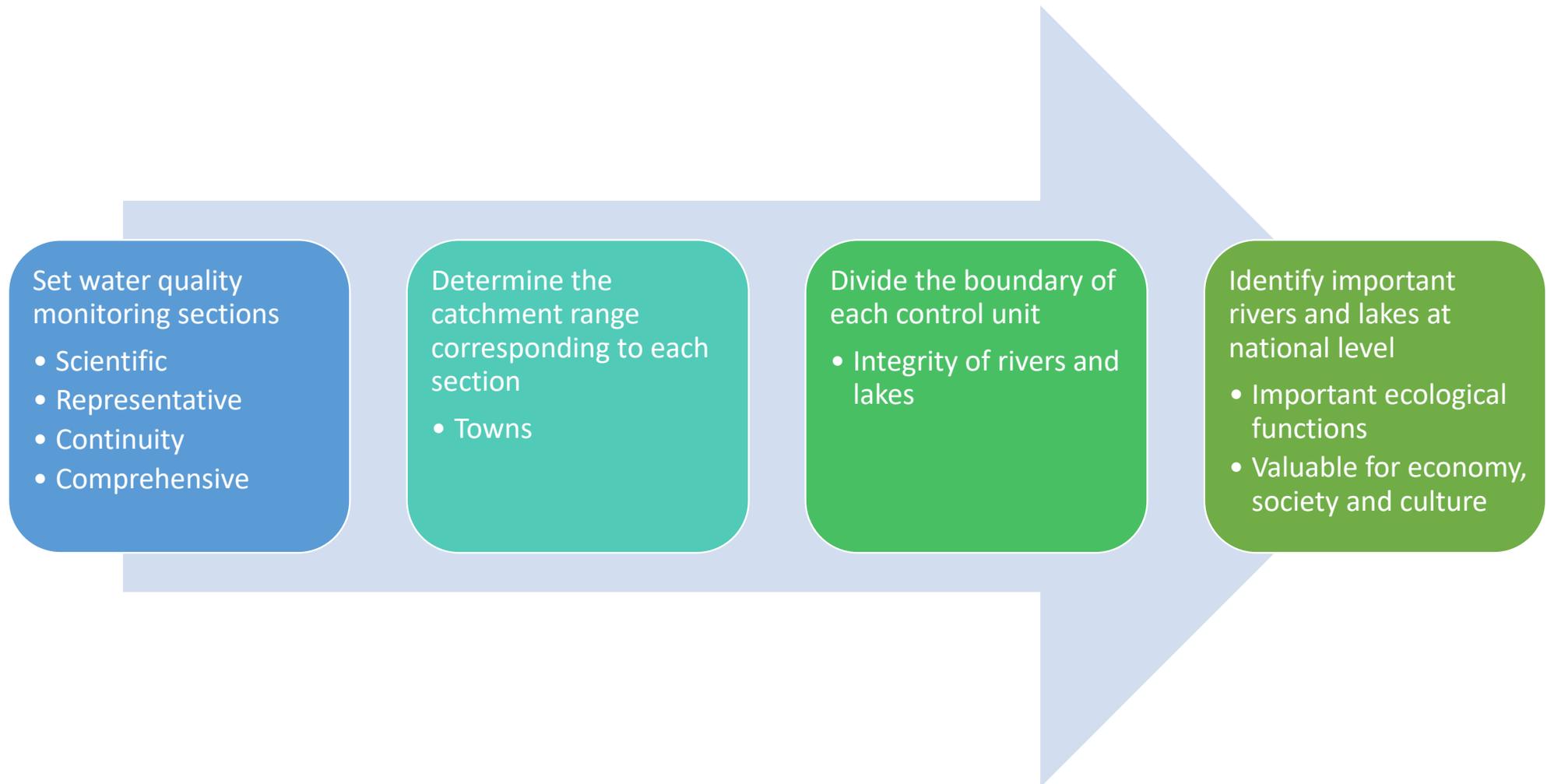


- 控制断面
- 新增断面来源
- 十三五
- 排污口
- 功能区
- 一级水功能区
- 二级水功能区
- 水文单元
- 水系
- 东南清河
- 浙闽\_水库
- 浙闽\_湖泊
- 浙闽\_河流
- Represe
- 1
- 2
- 3
- 4
- 5
- 6
- 长江
- 淮河

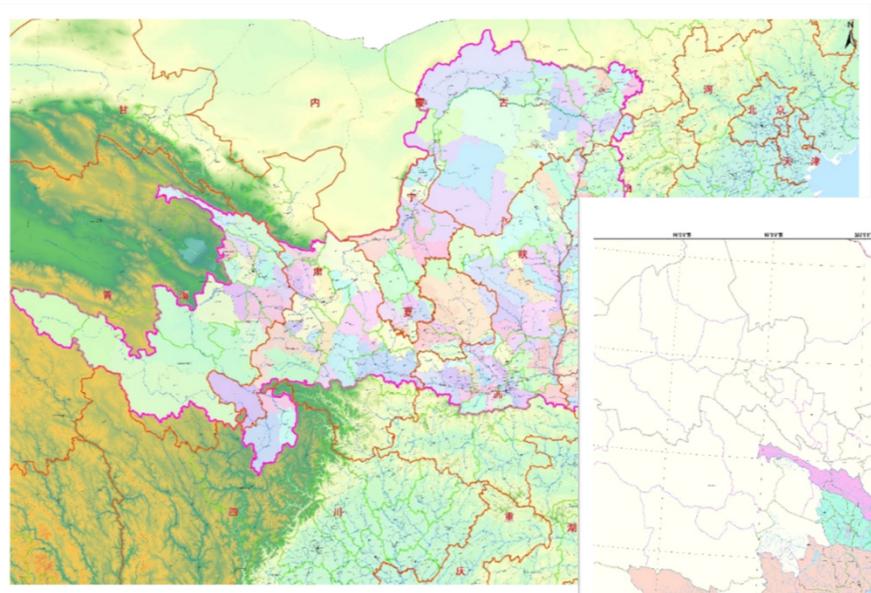


GIS data base

## The process of environmental zoning for the Yellow River basin

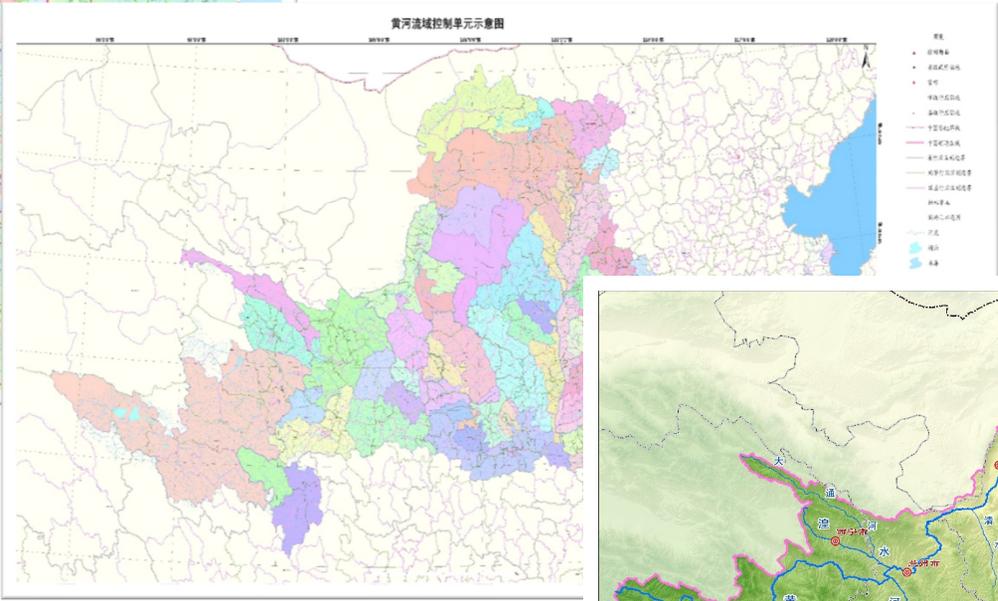


# The results of environmental zoning for the Yellow River basin

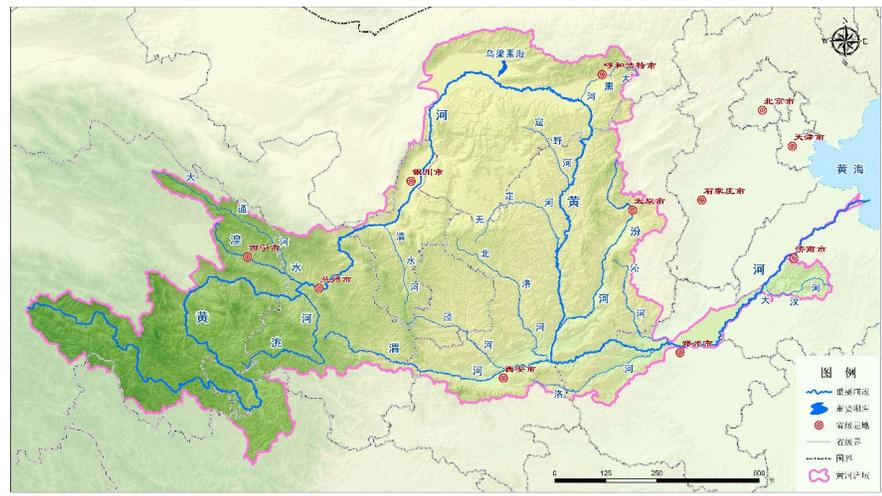


282 state-controlled sections  
281 section control units

58 watershed control units



18 national key rivers and lakes



## The applications of environmental zoning for the Yellow River basin

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Identify the strategies for different national key rivers and lakes

### Water ecology restoration

- The main stream of the Yellow River (upstream area and estuary area), Datong River, Tao River and Hongjiannao

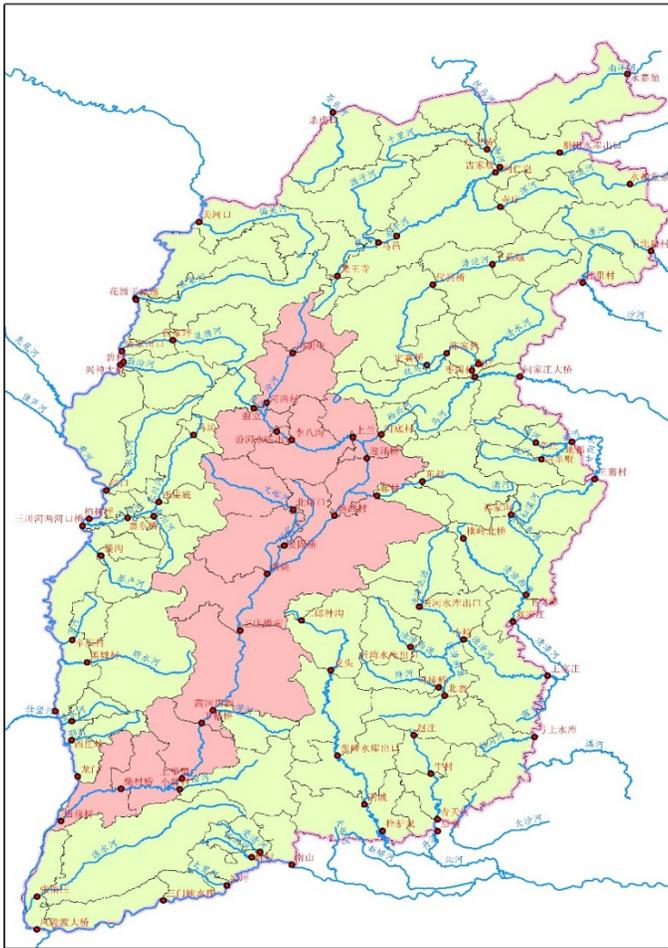
### Pollution reduction

- The main stream of the Yellow River (middle reaches), Huangshui River, Taohe River, Kuye River, Fenhe River, Weihe River, Yiluo River, Dawen River, Wuliangsu Lake and Dongping Lake

### Water conservation

- Qinhe River

# The applications of environmental zoning for the Yellow River basin



The layout of watershed control units of Fenhe River

Key points of protection for Fenhe River:

Deepen pollution control in Taiyuan urban agglomeration	Promote the comprehensive improvement of the rural environment	Strengthen the rigid constraint on the total amount of water use	Strengthen the protection and water conservation of river sources
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# The applications of environmental zoning for the Yellow River basin



The layout of section control units of Qinghai Province

