

Practice and Experience of Basin Governance in China Under Climate Change

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■ 1. Impact of Climate Change

- Under the multiple influences of intensified global climate change and human activities, extreme weather events that disrupt traditional understanding are occurring frequently.
- The extremity, abnormality, complexity, and uncertainty of water and drought disasters have significantly increased, posing a major water management challenge faced by the entire world.



Loire River Drought in France

(2022)



Severe Rainstorm in Beijing (2023.07.23)

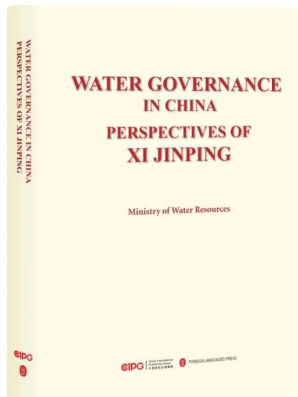
2. Water and Basin Governance Principles

Chinese President Xi put forward the principles on March 14, 2014



- Prioritizing water conservation
- Balancing spatial distribution
- Taking systematic approaches
- Promoting government-market

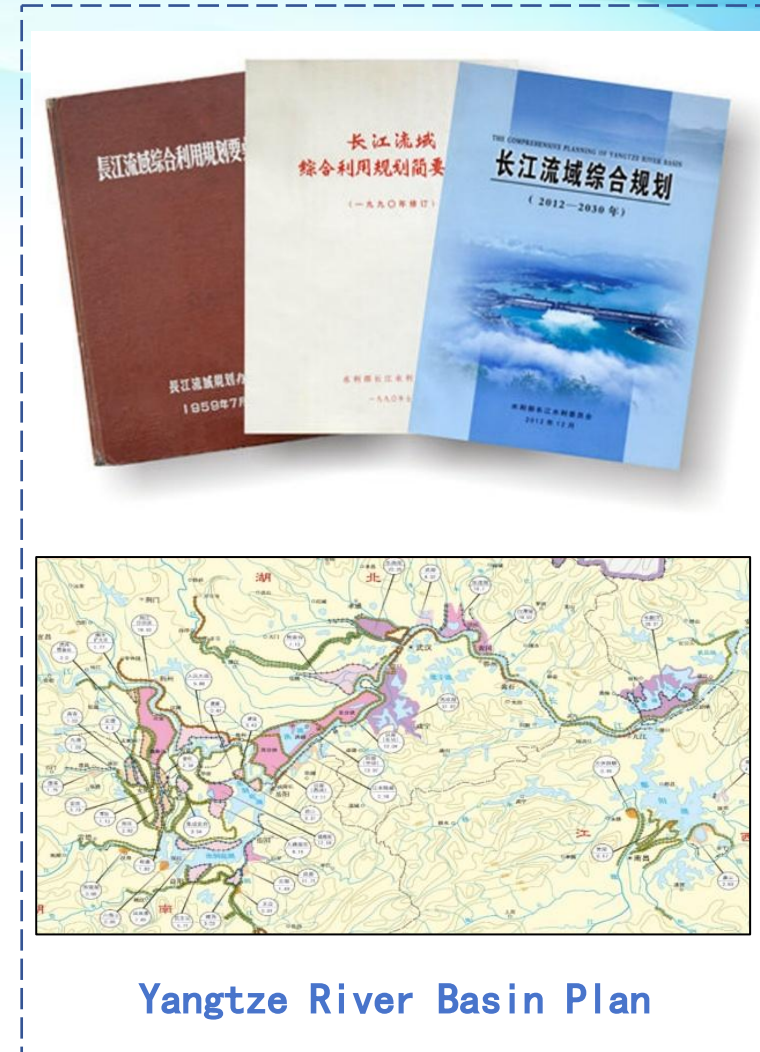
- Coordinating efforts between basins and regions, upstream and downstream areas, right and left riverbanks, trunk and tributary stream, and surface and groundwater.
- Unified **planning**, **governance**, **scheduling**, and **management** of river basin.



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■ 3.1 Unified Planning

- Plan with the whole river basin or region. **Regional planning** within a particular river basin must **comply with basin-wide planning**, while specialized planning has to conform to comprehensive planning.
- Make timely improvements to the comprehensive planning of the basin based on changing situations.
- Improve the capability to coordinate the allocation of water resources, ensure an adequate water supply, and retain strategic reserves.
- Ensure flood prevention, river stability, a secure water supply, and the eco-environment.



Yangtze River Basin Plan

3.2 Unified Governance

- Promote synergy in protection and management.
- Territory must comply with basin.
- Individual project design and assessment has to take into account its impact upon the whole basin.
- Setting the overall development of river basins, place greater emphasis on the interrelations and interdependence of different water projects.



Yangtze River
Protection Law



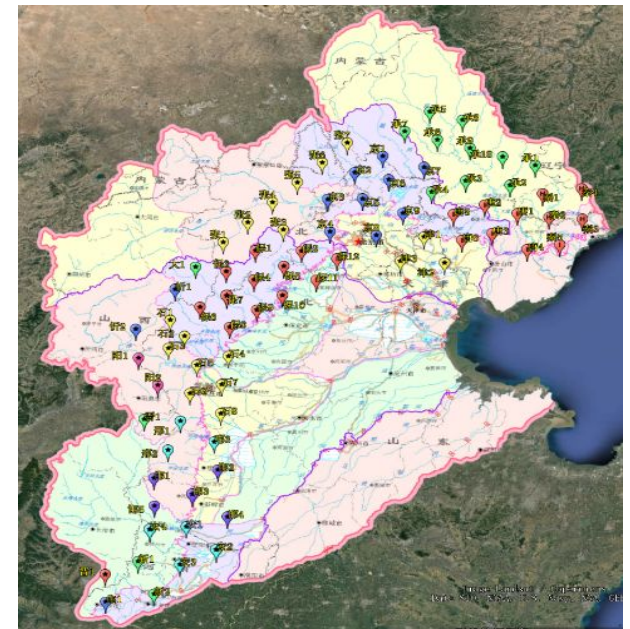
Yellow River
Protection Law



Reconstruction
after disaster

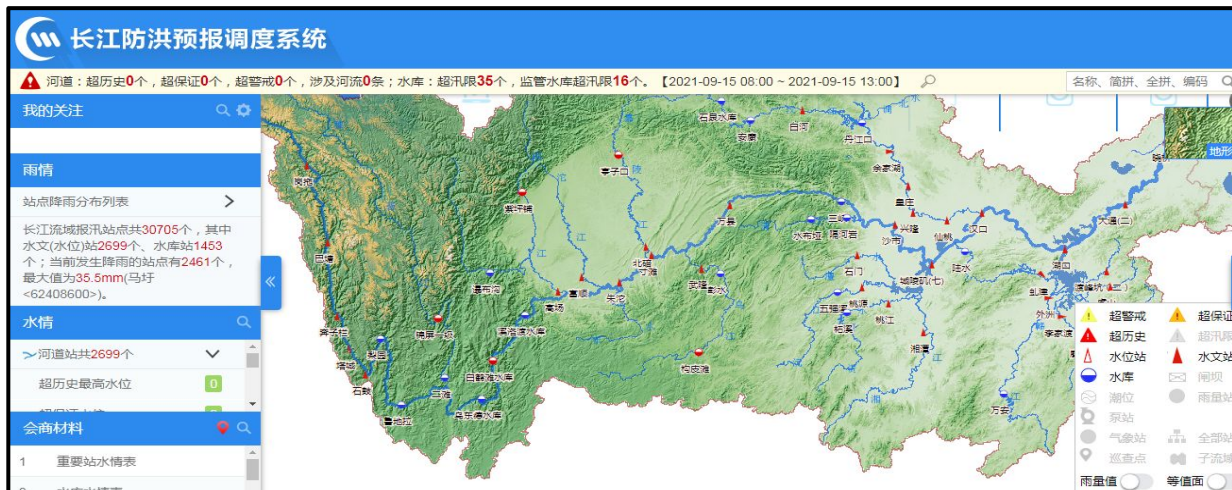


Planning of rain radar
in Haihe River basin



3.3 Unified Scheduling

- Establish robust institutions and mechanisms that effectively balance and harmonize the interests of all parties involved and ensure water security.
- Build a basin-wide water resource scheduling and management system, implement unified water resource scheduling in river basins.
- Take into account the actual needs of different protection targets, address basin-wide floods with systematic scheduling and dispatching.



In 2024, **53** controlling reservoirs included in the unified flood scheduling with total regulatory capacity of **117 billion m³**.

In 2022, **75** large- and middle-sized reservoirs were unifi-regulated to release **6.1 billion m³** water for extreme drought in the downstream of the Yangtze river basin.

3.4 Unified Management

- Build basin-wide coordination, regional collaboration, and cross-departmental interaction.
- Fully leverage the role of the river and lake chiefs.
- Make rational decisions concerning the designated ecological flow volume for each river and lake (4,000 small dams removed, 20,000 renovated in the nation).
- Properly handle the initial allocation of water rights.
- Unified supervision of water resources within a river basin.



Before dam removed

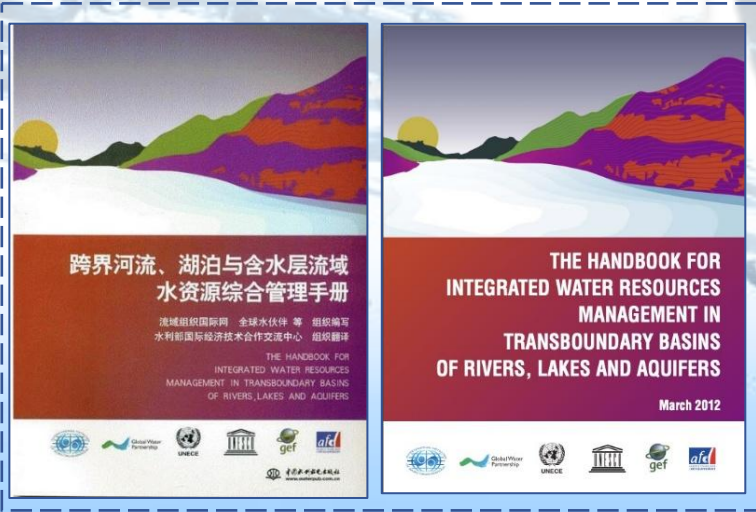


After dam removed



Thank you

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