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Practicing the Strictest Water Resources Management System Progress and Achievement



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Background and Implication of the Strictest Water Resources Management System

1.1

Conditions of Water Resources in China

- Limited water resources per capita, and imbalance in supply and demand

China has total water resources of **2.8 trillion** cubic meters, accounting for **6%** of the world's total. And the available amount is **800 billion cubic meters**, and the water resources per capita is **2100 cubic meters**, only **1/4** of the world's average level.

1.1

Conditions of Water Resources in China

- Imbalance in soil and water distribution, and the distribution of water resources mismatches the layout of industries
- The population, arable land area and GDP of the north China account for **more than 40%** of the country, but only **19%** of the national water resources. Crop growing, energy, chemicals and many other industries of high water consumption are located in the north of China.

- **Policy documents:**
- **ZF[2011] No. 1** “Decision of the Central Committee of the Communist Party of China and the State Council on Speed-up of Reform and Development in the Water Resources Sector”;
- **GF [2012] No. 3** Opinions of the State Council on Implementation of the Strictest Water Resources Management System;
- **GBF [2013] No. 2** Circular of the General Office of the State Council on Release of the Rules on Assessment Related to the Strictest Water Resources Management System, providing policy safeguards for the implementation of the Strictest Water Resources Management System.

- **Water resources administration guidelines in the new era:** At the fifth session of the Central Finance and Economic Leadership Group in March 2014, Xi Jinping clearly noted the water resources administration guidelines “**water saving as a top priority, spatial balance, systematic administration, and two-way approach**” for the new era, and put forward new tasks and requirements for administration and utilization of water resources.

The CPC Central Committee and the State Council Attach Great Importance to Administration and Utilization of Water Resources

- The State Council deploys 172 major water supply and saving projects: Make water conservancy as an important method for stimulating domestic demand, to increase the water supply by 80 billion cubic meters and save water in agriculture by 26 billion cubic meters, and increase area of irrigation by over 78 million mu.

- **“Action Plan for Water Pollution Prevention And Control”** : April 2015, the State Council released the document numbered [2015]17 and titled “Action Plan for Water Pollution Prevention And Control”, also known as the **“Ten Principles of Water Resources”**, stating the new requirements for water saving and pollution control in the new era.

Implication of the Strictest Water Resources Management System

Implication

- Establish the red line for regulating development and utilization of water resources, to apply strict **total water use quantity control**;
- Establish the red line for regulating efficiency of water use, to strictly **control wasting of water**;
- Establish the red line for pollutant load control in water function zones, to strictly **control the total pollutants discharged into water bodies**.

Implication of the Strictest Water Resources Management System

- **Three Red Lines:** the red lines for water development and utilization control, for water use efficiency control, for pollutant load control in water function zones;
- **Four Regulations:** total water use quantity control, water use efficiency control, pollutant load control in water function zones, and accountability and performance assessment system for water resources management

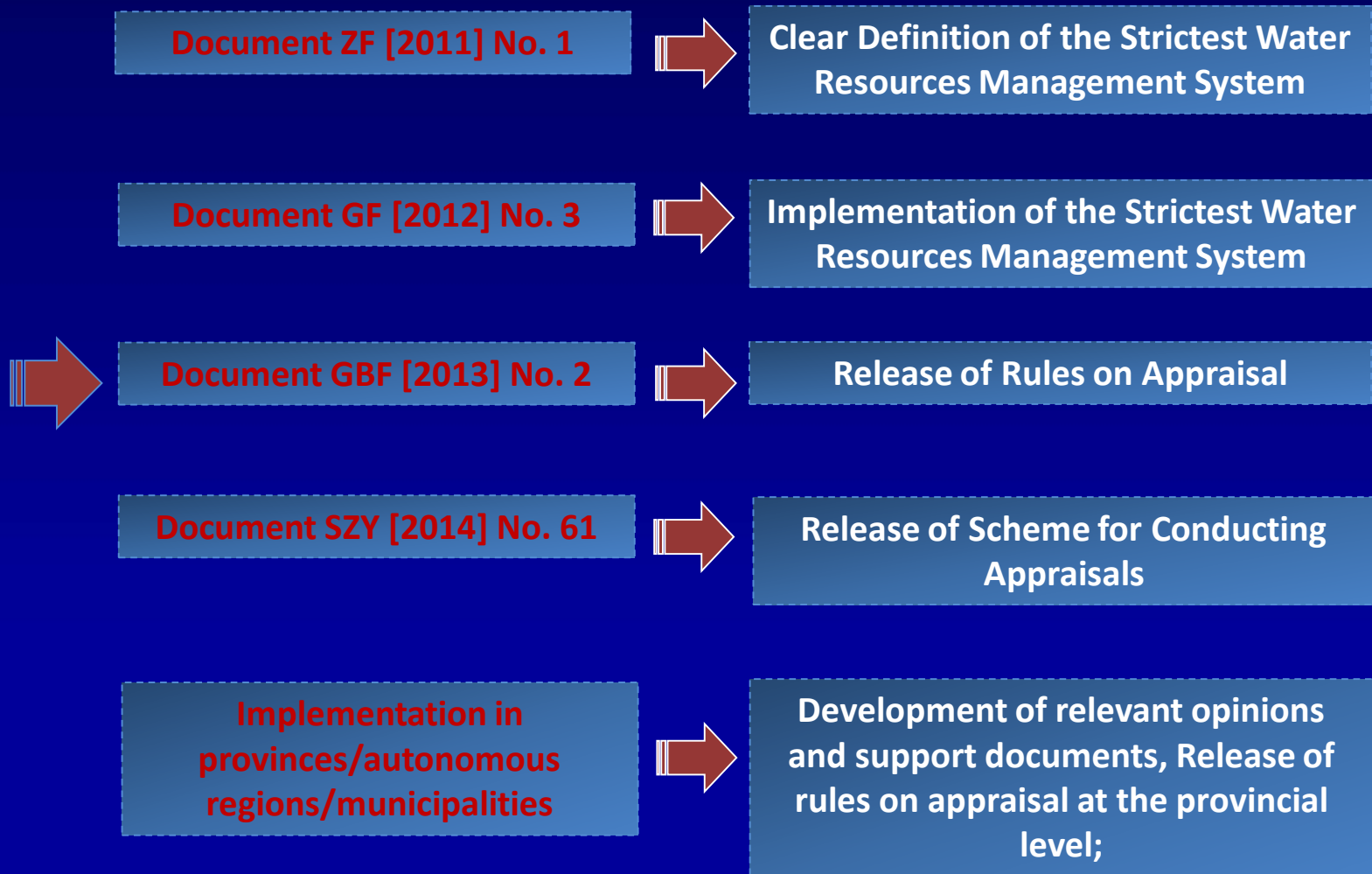


2

Progress in Implementation of the Strictest Water Resources Management System

Framework of the Strictest Water Resources Management System

Administration Appraisal
System for the Strictest
Water Resources
Management System



✓ **Administration Appraisal System Has Been Established in Principle for the Strictest Water Resources Management System.**

Accountability System for Strictest Water Resources Management System

- Each of the 31 provincial divisions has established an accountability system with the governor assuming the general responsibility and **administration appraisal mechanisms** participated in by relevant departments;
- Accountability systems on the provincial, prefecture and county levels have been established in principle for **water resources management**;
- **A range of control indicators** has been defined for the Strictest Regulation of water resources on the provincial, prefecture and county levels
- ✓ **An accountability system has been established in principle for the strictest water resources management system**

Progress of Appraisal Activities for the Strictest Water Resources Management

- The Ministry of Water Resources **has worked with** the National Development and Reform Commission, Ministry of Industry and IT, Ministry of Finance, Ministry of Land and Resources, Ministry of Housing and Urban-Rural Development, Ministry of Agriculture, National Audit Office, and National Bureau of Statistics **in setting up an appraisal work group**;
- The Ministry of Water Resources has set up a **leadership group**, for appraisal activities, which releases annual appraisal plans;
- Appraisal for 2013 and 2014 has been completed. The results of appraisal **have been submitted to the State Council and released to the public.**

(I) Definition of the control indicators, and establishment of the "Three Red Lines" in water resources management

- A range of control indicators has been defined in principle for the water resources management on the provincial, prefecture and county levels.
- Local governments have enriched the range of indicators, as Ningxia includes water-saving community development in the indicators, and Beijing includes wastewater treatment rate in the indicators.

(II) Enhance enforcement of the red lines for controlling development and utilization of water resources, to apply strict total consumption control of water use

Key plans like “the National Plan of Water Demand and Supply for the Middle- and Long-term” have been formulated. Plans for water allocation of key trans-provincial rivers have been developed . Intensify water resource-based verification, approval of water extraction licenses and implement approval limits by region; complete the adjustment of criteria for collection of water resources fees. Complete the evaluation of groundwater overexploitation areas around the country and map the areas where water extraction is prohibited or restricted.

(III) Enhance the enforcement of red lines for regulating efficiency of water use, to boost water-saving community building in an all-around manner

- Complete “the 12th Five-Year Plan for water-saving community building” and 100 pilots of water-saving community building around the country.
- 172 key water resources projects for water saving and supply has been commenced. Water saving technology for industries and water-saving appliances for home use have been promoted actively.

(III) Enhance the enforcement of red lines for regulating efficiency of water use, to boost water-saving community building in an all-around manner

- National standards have been released with respect to the water use quota in 29 high water consumption industries and service sectors, and 30 provincial divisions have released quota on water use for certain industries.
- The first national list of key organizations subject to monitoring has been released to strictly impose water use quota and water use planning.
- The national effective utilization rate of farmland irrigation water was 0.530 in 2014, and the water consumption per 10,000 industrial added value was decreased by 32% compared with 2010.

(IV) Enhance the enforcement of red lines for pollutant load control in water function zones, to strictly control the total pollutants discharged into water bodies

- The State Council has approved the water function zones plan for important rivers and lakes. We have verified the capacity of pollutant load of major water function zones, 80% of which are under monitoring.
- Strengthen regulation and supervisory monitoring of the pollutant discharges to rivers. Improve compliance of drinking water sources. 105 pilots for water ecological civilization have been taken as the carriers to further promote water ecological civilization in urban and rural areas. Rivers, lakes and other water bodies are being interconnected to improve the carrying capacity of the water ecosystem and environment.

(V) Establish water resource administration accountability and appraisal systems , and improve the water resource monitoring system

“ The National Water Resources Monitoring Capability Development Project (2012-2014)” has been successfully implemented, with the establishment of the information platform at the central government, the basin, and the provincial levels, and the establishment of monitoring systems at the water user, water function zone, and provincial border levels, for information sharing, interoperability and collaboration. Full launch of the national groundwater monitoring project.

(VI) Establish water saving standards and technology

Since the 10th Five-Year Plan period, the Ministry of Water Resources has organized the development of national standards on water use quota for **19** high water consumption industries, including thermal power, iron and steel making, petroleum refining, textile dyeing and finishing, and paper making, focusing on water use quota, water efficiency of products, water saving evaluation criteria, a mandatory national standards on water efficiency for 7 water saving appliances for home use, including flush toilets, faucets, and showers, as well as standards for evaluation of water-saving enterprises and water-saving communities, **39 in total**.

(V) Establish water saving standards and technology

Water-saving standards provide the basis for effective enforcement of water based verification and water extraction licensing, serving as a market entry in terms of water use control, promoting transfer of water resources to industries with higher efficiency and optimizing the structure of water use. At the same time, they provide an important basis for enterprises to promote water-saving technology upgrade and improve product quality supervision.

(VII) Establish and complete safeguards.

Encompassing the requirements in the Four Regulations, **over 100 support policies** have been released for implementation of the strictest water resources management system. For example, Shaanxi released rules on groundwater regulation; Chongqing released rules on water resources administration; Zhejiang has established the system of harmonized regulation of the five key waters. The Central Government and local governments at all levels are increasing financial support for water resources regulations. **12** pilots for implementation of the Strictest Water Resources Management System in Shanghai and other regions are speeding up to realize the “four pioneer” objectives.

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Policy Trends of the Strictest Water Resources Management System

Policy Trends of the Strictest Water Resources Management System

- **Forcefully drive the breakdown of indicators for appraisal of water resource administration in "13th Five-Year Plan" to lay the foundation for appraisal activities;**
- **Fully carry out allocation of water from rivers and waters and establish the initial allocation rules on water rights;**
- **Establish early warning mechanisms for carrying capacity of water resources, and impose control of both total amount and intensity of water resources consumption.**

Policy Trends of the Strictest Water Resources Management System

- **Innovate water saving mechanisms, and further boost the building of water-saving communitiess;**

Fully implement the guideline of "water saving as a top priority" to guide the general public to save water. Carry out the water efficiency leader action plan, and revise 50 national standards on water quota and water-saving standards to cover nearly all main crops, industrial products and life services.

Policy Trends of the Strictest Water Resources Management System

- **Underline the priority given to savings and protection, and fully implement the Action Plan for Water Pollution Prevention And Control;**

Enhance enforcement of the "Three Red Lines", and proactively execute ecological scheduling and ecological restoration, and protect water resources and water ecosystem.

- **Facilitate “the Water Resources Monitoring Capability Development Project (2016-2018)” to strengthen the foundation for water resources management.**

Policy Trends of the Strictest Water Resources Management System

- **Constantly improve the accountability system;**
- **Forcefully drive legislation in water resources to provide the legal basis for water resource administration;**
Facilitate the promulgation of Regulations on Water Savings and the Regulations of Groundwater Management.

Although China has made remarkable achievement in implementation of the strictest water management system, we have to be clearly aware that there are still many deficiencies. For example, it is necessary to further take advantage of the rigid restrictions imposed by the carrying capacity of water resources; we have to establish and complete the market mechanisms and social participation mechanisms for promoting water saving; further laws and regulations have yet to be released.

We would be glad to work with our peers from your country, to further strengthen communication, exchange and cooperation between us, and share the successful experience in the field of water resources management, and strive to solve issues related to water resources management in common interests.



THANK YOU!