

## NBS Good Practices from Chinese government

May 2019

### Flood Control Dispatch of Changjiang Reservoir Group in Response to Climate Change

#### 1. Background

Influenced by the super-strong El Nino event, the Yangtze River Basin experienced heavy rainfall and severe floods during the Meiyu period in 2016. The most serious floods occurred in the middle and lower reaches of the Yangtze River since 1998. The whole line below Jianli of the main stream was over-warned, and some tributaries suffered extraordinary floods.

#### 2. Implementation time

Early and mid of July 2016.

#### 3. Implementation stage

Flood control operation of reservoir group in flood season.

#### 4. Case implementation related parties

It involves the Ministry of Water Resources of China, Yangtze River Water Conservancy Commission, and Chain Three Gorges Corporation, etc.

#### 5. Beneficiary

Citizens and Their Properties in Hubei, Hunan and Jiangxi Provinces.

#### 6. Project level

National Level.

#### 7. Mitigation and adaptation to the effects of climate change

During the great flood of the middle and lower reaches of the Yangtze River in 2016, flood control dispatching instructions were issued through joint dispatching. The Three Gorges Reservoir and the upper and middle reaches reservoir groups were scientifically and meticulously dispatched, and the flood peak was reduced jointly. A total of 22.7 billion cubic meters of flood was retained, which guaranteed safety of the flood control in the important areas of the middle and lower reaches and greatly reduced the flood losses.

#### 8. Social, economic and environmental impacts

The water levels of Jingjiang reach, Chenglingji vicinity and lower reaches of Wuhan are reduced by 0.8-1.7 m, 0.7-1.3 m and 0.2-0.4 m respectively, and the length of super-police dyke section is reduced by 250 km. Achievements are obvious. The flood control pressure in Chenglingji reach and Dongting Lake area in the middle reaches of the Yangtze River is effectively reduced,. The flood diversion in Jingjiang reach and Chenglingji area is avoided. The goal of not exceeding the guaranteed water level in Lianhuatang is realized, avoiding more than 500,000 mu of arable land being flooded and transferring more than 380,000 people. Besides, it ensures not only the

safety of people's lives but also the safety of important embankments and facilities, making it possible to properly cope with the impact of extreme climate phenomena.