

CHINA RESEARCH SPOTLIGHT

A new series from East View that highlights Chinese research and resources on key topics.

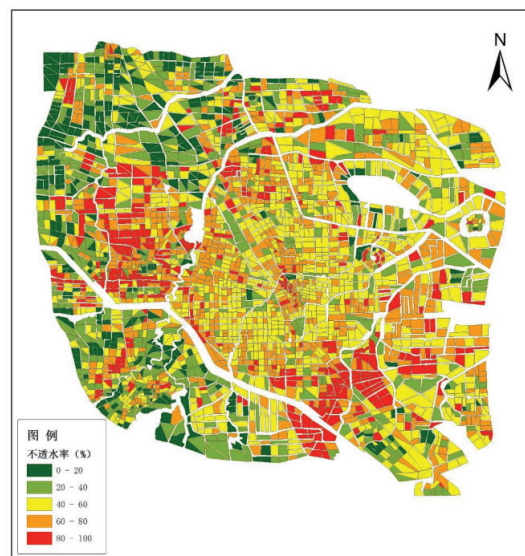
Following Flood Control Efforts in China

Engineers, policy makers, and people in every region of the world will be better prepared for the 21st century if they understand flood dynamics. Many of the world's most important experiments and lessons in flood control have come from China. In 2020 China experienced more than 20 major floods and in 2021 flooding in Henan Province in China made international news as over 14.5 million people were impacted.

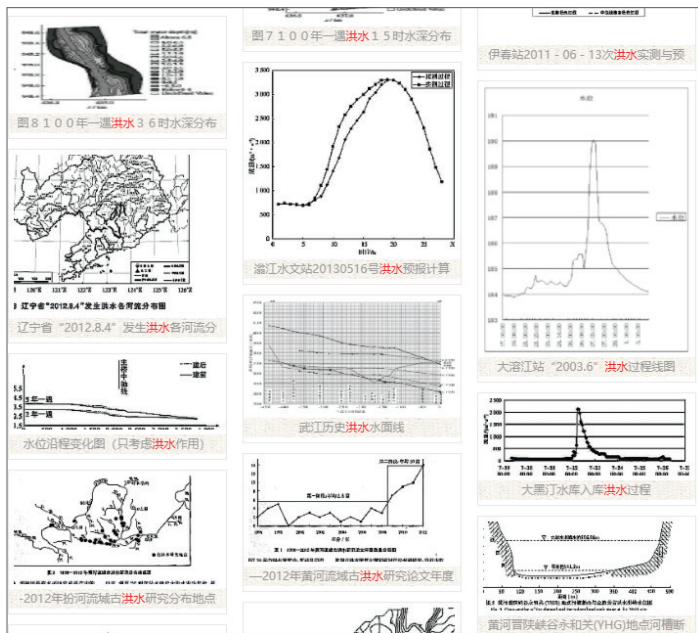
Using CNKI to Understand Chinese Flood Control Strategies

The China National Knowledge Infrastructure (CNKI), the largest and most comprehensive publisher of Chinese research output, provides extensive research findings into flood control in China. **CNKI's database China Academic Journals (CAJ) has over 3,900 articles on flood control.** During the last flood season in 2021, researchers published articles about flood control measures in Xiong'an New Area, the Xinfeng River Basin, and Nanhe and Jilong Rivers. Articles from the summer of 2021 also covered treatment of vegetable fields after a flood, management of flooding in urban commercial plazas, and supply chain and warehousing challenges for flood control materials. Whether seeking localized information about flood control projects in China or general surveys of findings to date, a researcher can source vital information from CNKI's resources.

China Core Newspapers (CCND), which collects content from core newspapers published in mainland China, is a good source for up-to-date responses to flooding in China. This past summer, newspapers published several flood control articles in response to flooding in Zhengzhou. For example, in 2021 *China Real Estate Business* published an article detailing a proposal for an early flood warning system using lessons from the flood in Zhengzhou. According to the visual analysis tools on the CNKI search platform, the newspaper publishing on flood control most frequently is *China Petroleum News*, which makes sense, as the most common discipline tag for flood control news is hydraulic and hydropower engineering. **Spanning numerous newspapers, CCND captures announcements of new water resource projects and key lessons from flood control initiatives.**



From China Master's Theses: A map of imper-meability in Zhengzhou. Li, Shihao. 2016. "Analysis Flood Risk and Study Waterlogging Simulation in Zhengzhou." Master's Thesis. Zhengzhou University.



A sample of Enhanced Publishing images related to floods.

Theses and Dissertations (CDMD) round out the research available in academic journals and newspapers. Seven master's theses that detail flood risk in Zhengzhou have been published on China Master's Theses (CDMD-CMFD). These theses evaluate different areas of Zhengzhou using flood disaster vulnerability indicators, the US EPA's Storm Water Management Model, NASA MODIS data, and Monte Carlo simulations. **Because of the volume of graduate students studying their immediate surroundings, theses and dissertations provide highly local flood control analysis.**

For those researchers who want to dive immediately into relevant maps and graphs on flood control, Enhanced Publishing allows researchers to browse and download images, tables, and charts from academic papers before digging into the source text.

Public policy experts, hydrologists, logistics professionals, and others would do well to make use of CNKI's ample resources on China's flood control initiatives.

See the below links for further reading on China's flood control initiatives and challenges.

- **How 2020 Exposed the Holes in China's Flood Controls - Sixth Tone**
<https://www.sixthtone.com/news/1006025/how-2020-exposed-the-holes-in-chinas-flood-controls>
- **Flood control and drought relief in China - Ministry of Water Resources, PRC**
<http://www.mwr.gov.cn/english/fcdrc.html>
- **How China's nature-based solutions help with extreme flooding - The World**
<https://www.pri.org/stories/2020-07-31/how-china-s-nature-based-solutions-help-extreme-flooding>
- **China floods: did Zhengzhou's 'smart' flood prevention system fail to prevent the disaster? - South China Morning Post**
<https://www.scmp.com/tech/big-tech/article/3142898/china-floods-smart-city-system-capabilities-called-question-after>
- **Flood control measures effective, authorities say - China Daily**
<https://www.chinadaily.com.cn/a/202009/23/WS5f6aa4e6a31024ad0ba7b2e3.html>
- **Controlling Yangtze River Floods: A New Approach - World Resources Report**
https://wriorg.s3.amazonaws.com/s3fs-public/uploads/wrr_case_study_controlling_yangtze_river_floods.pdf
- **Flood Control Law of the PRC - National People's Congress**
http://www.npc.gov.cn/zgrdw/englishnpc/Law/2007-12/11/content_1383581.htm