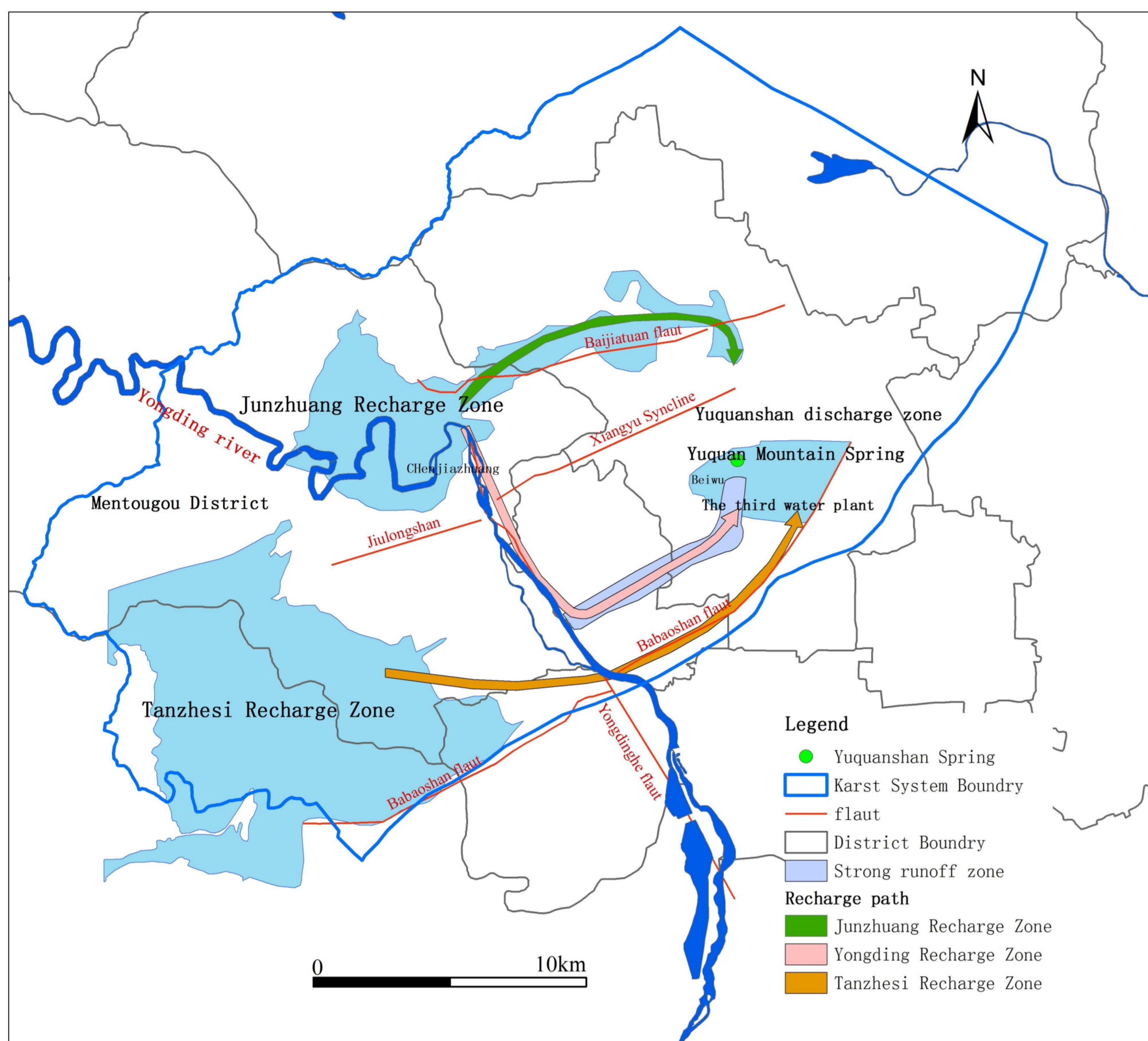


Key technology and program formulation of typical spring recovery

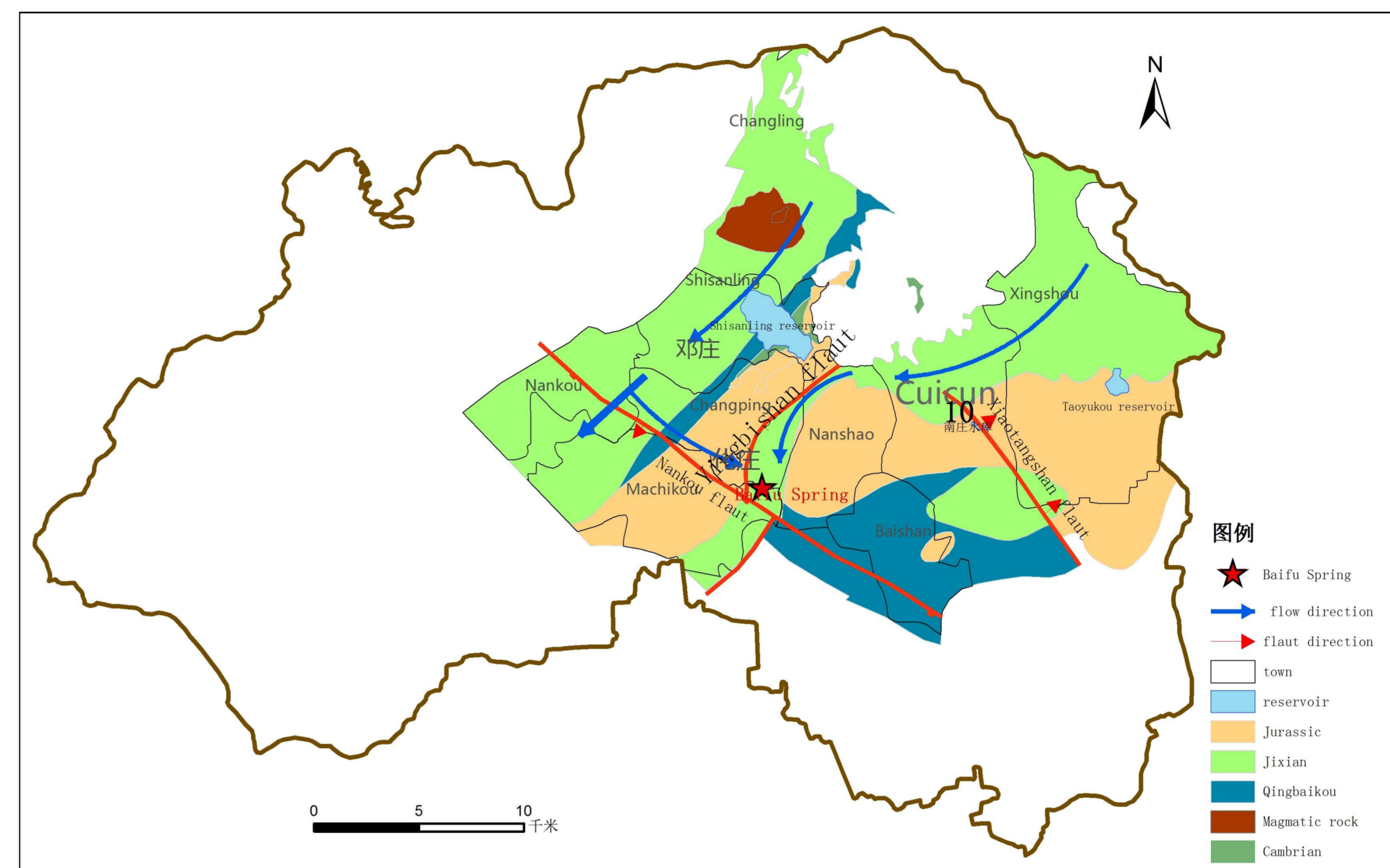
Yong Yang¹, Yao Guang Duan¹, Shuai Yu¹, Li Min Guo¹, Fei Yan Feng², Jiao Yu Suo³

1. Beijing Water Science and Technology Institute, Beijing 100048, China; 2 Chinese university of geosciences (Beijing), Beijing, 100083, China; 3 Hohai University, Nanjing, 210098, China.

The Boundary and groundwater path of Yuquan Mountain and Baifu springs have been determined by drilling, geophysical exploration, isotope and hydrochemical techniques. A new groundwater path from Shijingshan to Yuquan Mountain spring along the Yongding river fault has been identified.

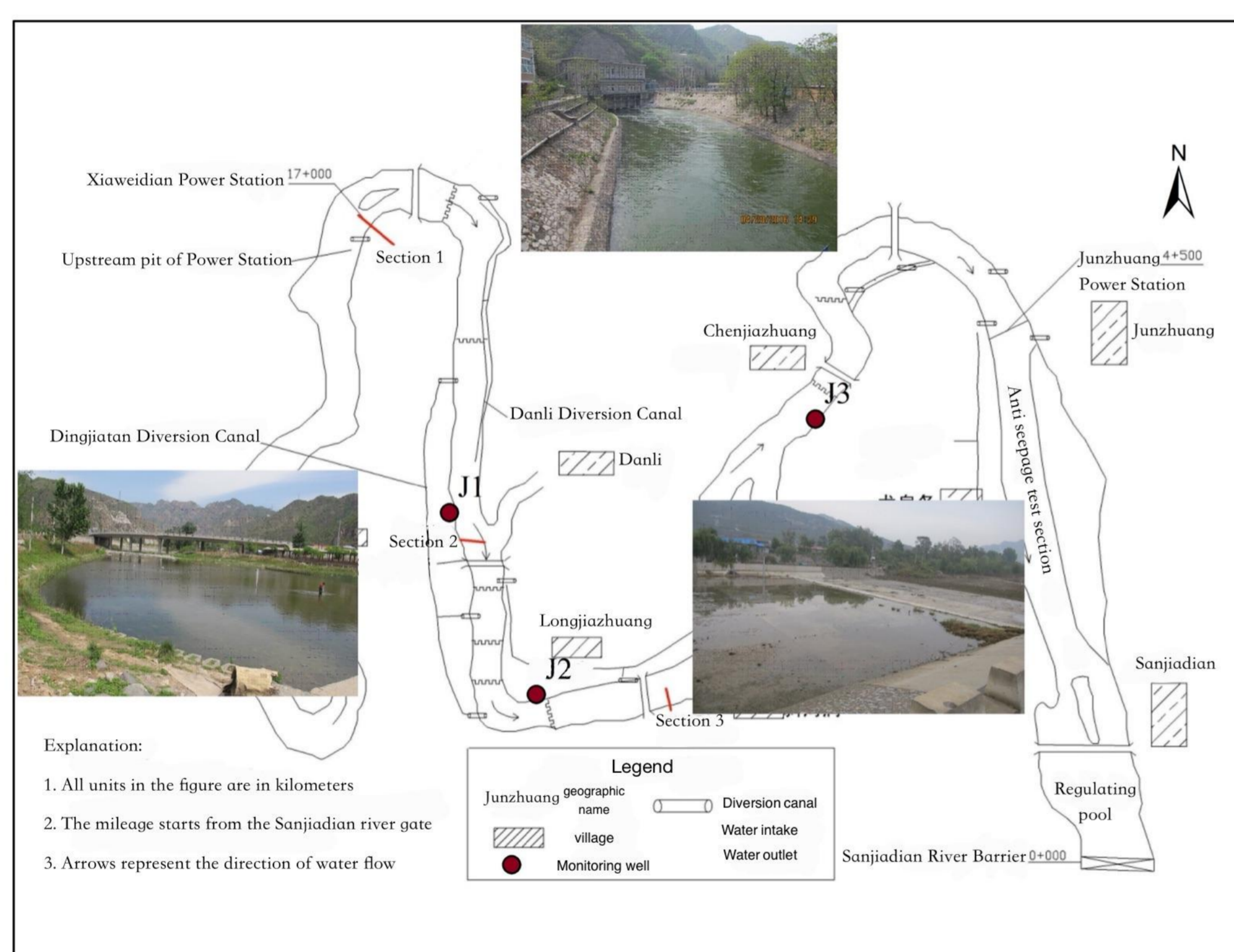


The boundary of Yuquan mountain spring

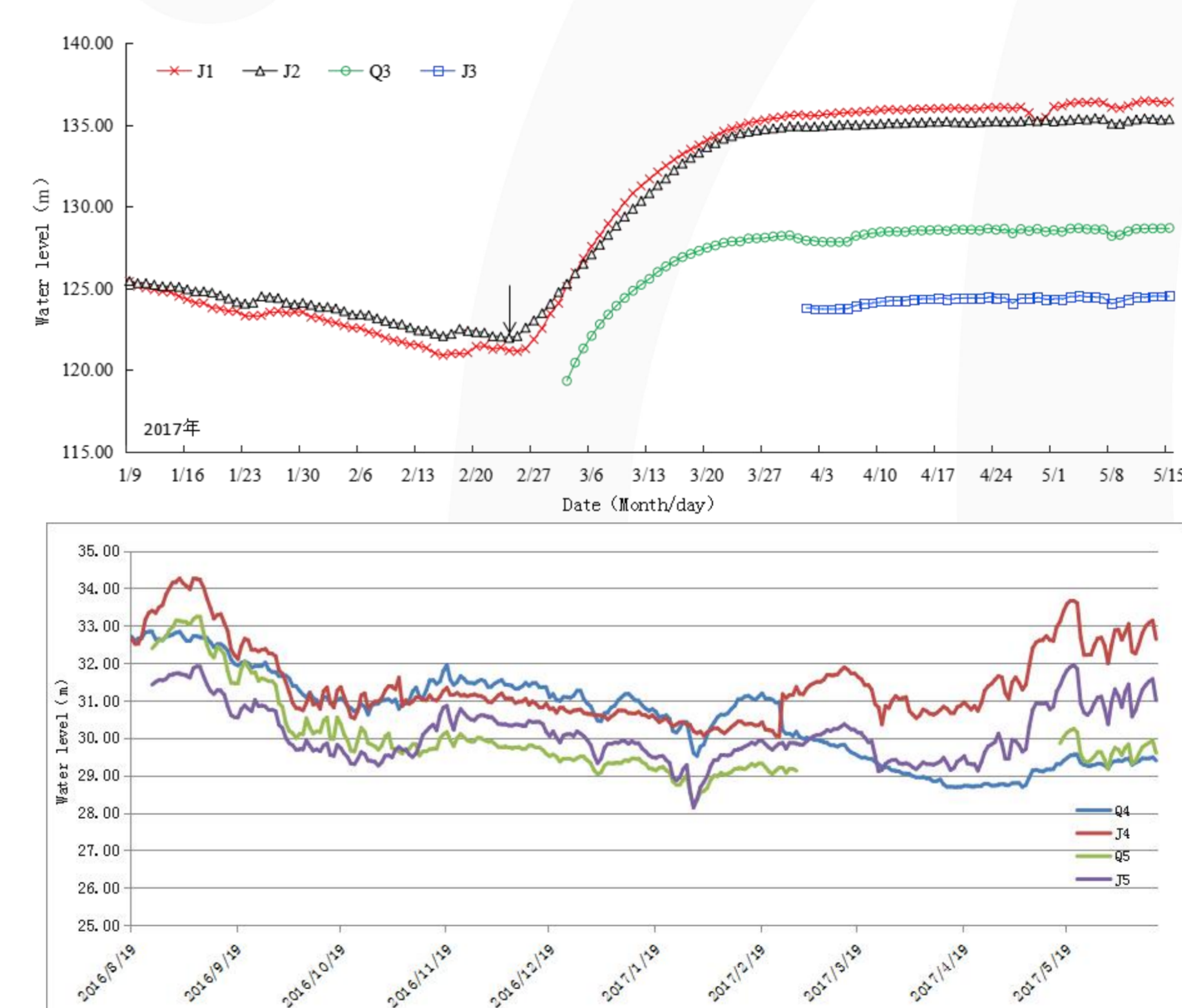


The boundary of Baifu spring

Developing a spring restoration technology system that includes increasing surface infiltration recharge, expanding the scope of centralized surface water supply, limiting groundwater exploitation, exploring groundwater recharge directly by wells, and controlling geological and environmental disasters.



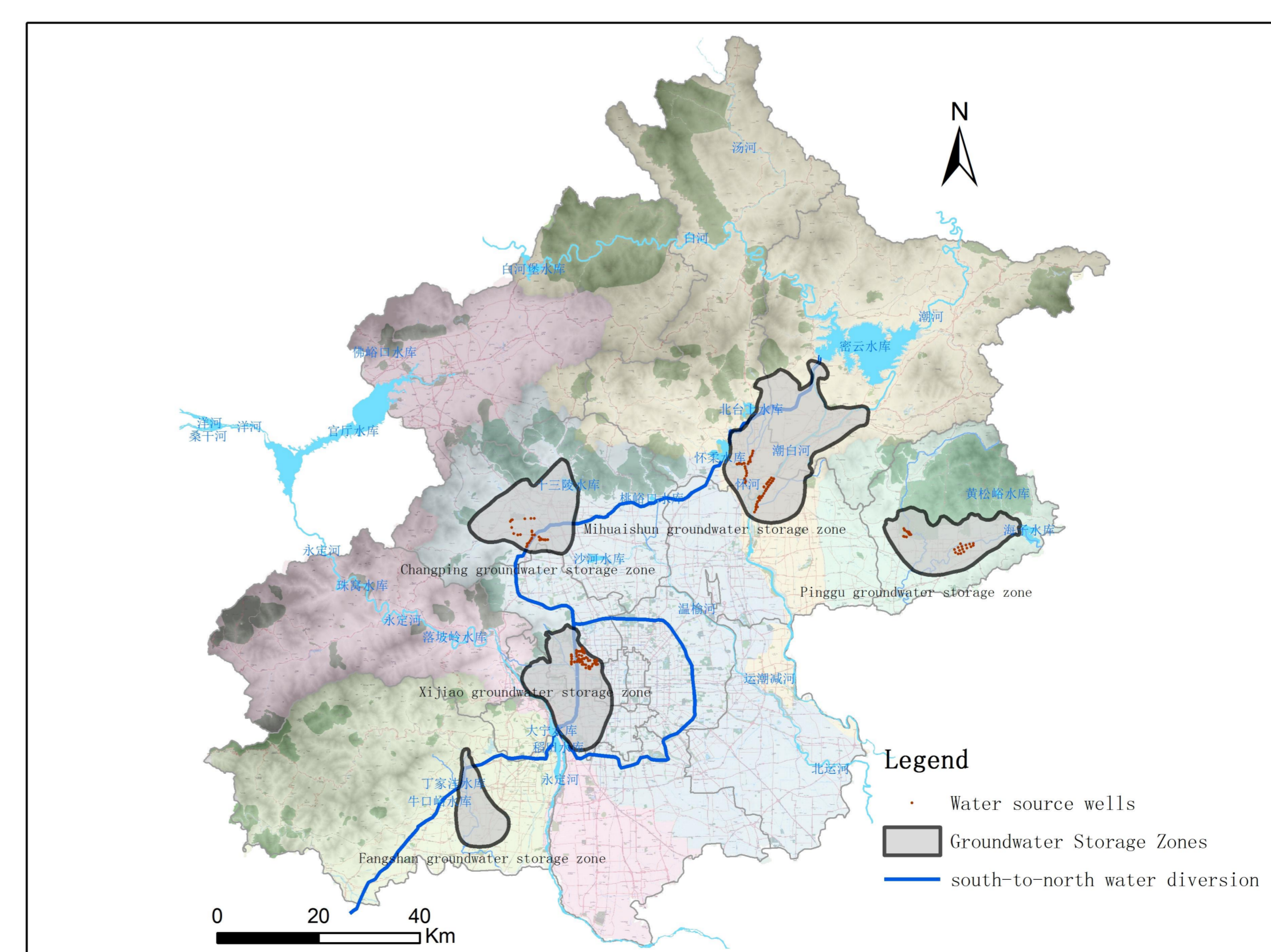
Yongding river discharge test



The groundwater level change

Proposing a strategic groundwater reserve pattern of "one line, two sources, and five zones"

- One line: Jingmi Diversion Canal;
- Two sources: the South to North Water Diversion Water and the Miyun Reservoir Water;
- Five zones: Miaohuashun, Xijiao, Changping, Pinggu, and Fangshan groundwater storage areas, with a total area of about 1300 square kilometers and a total storage capacity of about 4 billion cubic meters.



The groundwater storage areas