

The **South-North Water Transfer Project**, a multi-decade infrastructure mega-project in the People's Republic of China, ultimately aims to channel 44,800 GL of fresh water annually from the Yangtze River in southern China to the more arid and industrialized north. Of the three channels, the Central Channel is gravitationally driven and similar in size and scope to the proposed Bradfield Scheme from North Queensland to the Murray-Darling Basin at St George.

The Central Route conveys 13,000 GL/year approximately 1,264 km from the Danjiangkou Reservoir on the Han river (a tributary of Yangtze River) at 170 m above the sea level to Beijing and Tianjin at around 50m (1:10,000 gradient). The canal route required the building of two tunnels under the Yellow River, to carry the canal's flow.

The Eastern Route follows the course of the Grand Canal, is 1,152 km long, and equipped with 23 pumping stations conveying 14,800 GL/year. The Western Route is planned to connect three tributaries of Yangtze River with huge dams and long tunnels under Tibetan Plateau and Western Yunnan Plateaus. This route is 500km long and designed for 3,800 GL/year.

**Mao Zedong** discussed the idea for a mass engineering project as an answer to China's water problems as early as 1952. He reportedly said, "there's plenty of water in the south, not much water in the north. If at all possible; borrowing some water would be good." By 2014, more than \$79 billion had been spent, making it one of the most expensive engineering projects in history.