



IMPACT OF BUILDING A TIDAL GATE ON THE YONGJIANG RIVER IN CHINA

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Abstract

A tidal gate has been proposed on the downstream portion of Yongjiang River to bring social and economic benefits by blocking sea water and storing fresh water. However, problems such as sediment accumulation, water eutrophication, and a reduction in aquatic organisms will likely occur as the result of such a project. The impacts of sediment accumulation on flood control and water draining, marine navigation and currently available ports are of particular concern. Additionally, construction of the tidal gate will make it difficult to handle the peak drainage of 3823m³/s (occur once every 20 years) and 4146m³/s (occur once every 50 years) of Zhenhai Estuary. These impacts, as well as the expected advance of the coastal line, ground subsidence and increased sea levels suggest that it is better not to build a tidal gate on the Yongjiang River.

Key words: environmental impact, sediment silting, tidal gate, Yongjiang River

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