

**The Mechanism of Salty Tide Intrusion in Pearl River Estuary
and the Sustainable Use of Water Resources in Pearl River Delta**

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Abstract: Pearl River Delta is often intruded by strong salty tide and the safe drinking water of residents is continuously threatened in recent years, so Pearl River Water Resources Commission of the Ministry of Water Resources transfers fresh water to resist salty water for many times since the year 2005. According to the characteristics of salty tide activity in recent several years, such as more active movement, longer duration, wider upstream scope, more serious intensity, etc, the paper analyzes the mechanism of salty tide intrusion in Pearl River Estuary from such perspectives as the change of upland water, the change of river channel topography, the change of sea level, wind power, wind direction, etc. On the basis of the research on salty tide in recent years, the paper puts forward the methods to defend salty tide intrusion from such perspectives as the safety of water supply, the sustainable use of water resources, etc, for ensuring the sustainable development of water resources.

Key Words: Salty Tide Intrusion; Pearl River Estuary; Pearl River Delta; Water Resources

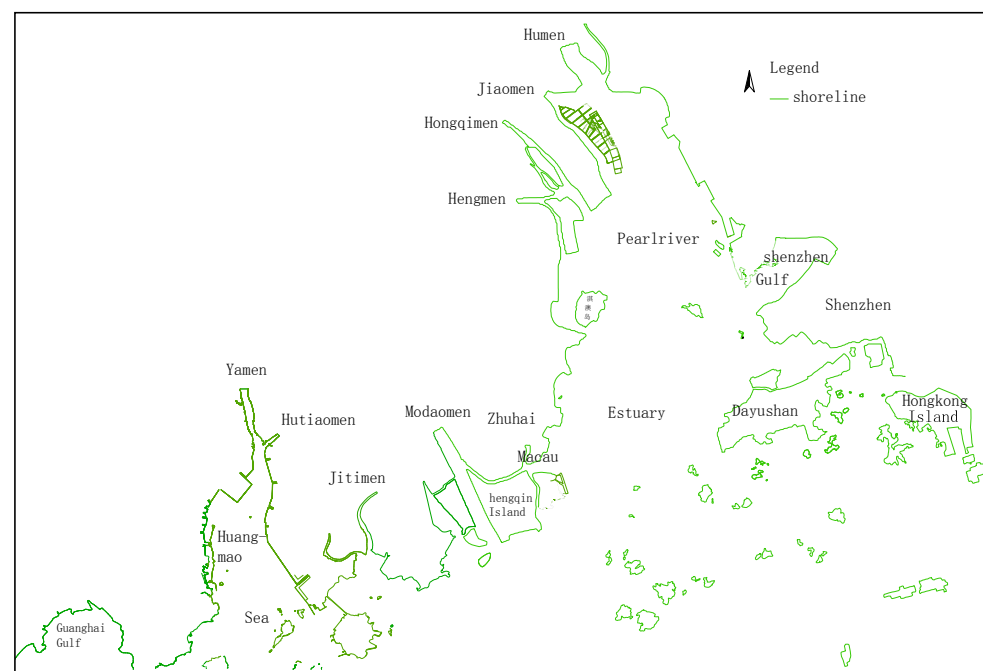


Fig1 Pearl River Estuary Sketch

