

花蓮海岸之保護工程研究

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摘 要 由於近年來花蓮沿海之地形變化趨勢大致上為北淤南侵，並且美崙溪河口長期有淤積之現象，本研究針對不同的保護花蓮沿岸之工程佈設方案，以數值水理模式進行分析。結果發現：若將美崙溪河口束縮，河口水位會略為增加；若於河口興建導流堤，對於海岸漂砂有阻攔之效果，並且不致引起河川水位大幅增加。且就攔阻漂砂及整體流況而言，興建長導流堤之效果較佳。至於沿海一帶，若佈設突堤群後，將能防止海岸侵蝕，阻擋由南而北之漂砂，並可減少美崙溪口導流堤攔砂之負擔，建議吉安溪以北之海岸保護及漂砂防制方案，以現有之離岸堤再加上突堤群之配置較佳，興建之順序建議與美崙溪口導流堤配合，由北逐次往南。

關鍵詞：導流堤、突堤、離岸堤。

COASTAL PROTECTION ENGINEERING OF HUA-LIEN

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ABSTRACT Since the topographical variation tends to deposition in north part and scouring in south part on the coastal zone of Hua-lien these years and the deposition of sand drift around the estuary of Mei-luan Creek is apt to happen in the long term, this work is aimed to simulate the flow under different cases of coastal protection. It is found that the constriction of the river mouth would raise the water level. Instead, if a long jetty is constructed, it can prevent the sand drift efficiently, and won't result in raising the water level. As far as the drifting prevention and flow condition are concerned, the long jetty is a better choice. On the coast, if a series of groins are set up, the coast will be protected from erosion and the northward sand drift. The study suggests that the better coastal protection engineering of the north part of Chian Creek should be constructing a series of groins with the present offshore breakwater, and the construction order be from north to south by matching the construction of the long jetty at the estuary of Mei-luan Creek.

Key Words: jetty, groin, offshore breakwater.