

“Where will our knowledge take you?”

## Specialist Dredging Services

### Sand Bypassing and Beach Renourishment



This can result in an imbalance in sediment distribution along the adjacent shorelines, leading to unnatural patterns of erosion and accretion. Sand bypassing simulates the natural longshore transport by redistributing sand from areas of accumulation to eroded sections of the coastline. This beach renourishment can be vital in preventing excessive beach erosion and preventing undermining of adjacent coastal infrastructure. Sand bypassing is

“ Sand bypassing is generally required in situations where the natural movement of sediment along the coast is interrupted by structures such as jetties and manmade channels. ”

also used to prevent infilling of navigation channels, which is important for maintaining useable channels, and keeping waterways open. BMT JFA is able to utilise extensive in-house experience and technical expertise, in order to complete sand bypassing studies and assessments which thoroughly address the anticipated project requirements and risks. BMT JFA also has extensive experience in the ongoing management of regular sand bypassing operations that transport approximately 200,000 m<sup>3</sup> of sand annually.

#### Key Capabilities

- Coastal process assessments
- Planning of sand bypassing works
- Project management and site supervision
- Tendering and contract management.

#### Related Projects

- Mandurah and Dawesville Sand Bypassing Projects
- Bandy Creek Boat Harbour Bypassing Requirements Study
- Lakes Entrance, Gippsland sand bypassing dredge study.

#### Services Offered

- Site investigations including identification of physical and environmental project

- constraints
- Coastal processes assessments to determine the project bypassing requirements including volume estimates
- Comprehensive assessment of various sand bypassing options including the determination of the project schedule and cost implications
- Identification and review of disposal site locations
- Tender preparation including drawings, appropriate general and special conditions of contract, specifications and payment schedules etc
- Evaluation of tenders and preparation of recommendation report
- Project management during the works including regular liaison with contractor and key project stakeholders, supervision of equipment testing and calibration procedures, onsite supervision and verification of contractor payment claims
- Progress tracking including volume production estimates
- Safety and environmental compliance auditing of all site operations
- Commissioning and review of pre and post works hydrographic surveys
- Contract closeout tasks including review of survey difference plots, supervision of demobilisation, final closeout reporting and certification of practical completion.