

## Summary

ICM's involvement with various dredging projects over the years includes the design, analysis, approval application and construction supervision of navigational channels within the Gold Coast's Waterways.

ICM provide the technical assistance to the local dredging operators McQuade Marine on dredging projects (specifically those associated within the Gold Coast Waterways).

ICM have also worked with local contractors Neumann and Halls on various dredging contracts.

The following section describes the local contractor McQuade Marine and their experience with dredging in around the local waterways.

## **McQuade Marine**

The McQUADE MARINE GROUP has been associated with marine works including dredging, reclamation, construction, shipping and fishing throughout Australia and overseas for the past 30 years under the expert direction of Mr John McQuade. The main activities presently are:-

- Dredging
- Shipping

The group has two shallow draft hopper dredges to its fleet to allow it to fulfil the demand for the safe and economical maintenance dredging of harbours and access chanels within the increasing environmental constraints on dredgng operations. These additional dredges are:-

- "Port Frederick"; side trailing suction hopper dredger
- "Faucon"; hopper dredger with over bow suction

Some recent difficult dredging projects which McQuade Marine has successfully undertaken include:-

- dredging of navigation channel Fly River, PNG for Oktede Mining
- dredging of Jaramaya River (Irian Jaya), access chanel and berthing area , for Freeport International
- dredging of Cooktown entrance channel and berthing area for Department of Transport
- dredging of Tweed R entrance
- dredging of Pt Hacking channels

McQuade Marine has prepared environment management plans and has been issued an Environmental LIcence by the Department of Transport to carry out dredging operations throughout Queensland. To ensure that projects are planned and carried out effectively and efficiently, the extensive practical dredging expertise of the McQuade Marine Group, is complemented by specialist support provided by International Coastal Management and the Michel Survey Group.

The McQuade Group owns a range of dredging equipment which includes:-

- Trailing suction hopper dredge, Port Frederick
- Bow suction hopper dredge, Fuacon
- 12"/10" cutter suction dredges
- 8"/6" cutter suction dredges



- pipelines & booster pumps
- work boats & tenders

Over the last 30 years projects successfully undertaken include:-

- Yamba boat harbour development dredging
- Clarence River Channel dredging
- Submarine pipeline trench dredging across the Tweed River at Chindera
- Submarine pipeline across Terranora inlet trench
- Dredging Tweed City site eclamation from Tweed River 450,000cu metres
- Tredgen Estate reclamation from Tweed River 300,000cu metres
- Crystal Waters Estate reclamation from Terranora Inlet 450,000 cu metres
- Greenbank Island reclamation 250,000 cu metres
- Currumbin Creek Entrance flood mitigation and beach restoration annually over a period of 15 years
- Reclamation of Pacific Highway site over Currumbin Creek 130,000 m3
- Reclamation Cyprus gardens Estate 450,000 cu metres
- Surfers Paradise reclamation project 300,000 cu metres
- Dredging of Boobygan Creek
- Dredging of the Nerang upper reaches
- Maintenance dredging of Gold Coast Canals for Gold Coast City Council over 20 year period
- Dredging western Broadwater navigation channel from Biggera creek to Gold Coast bridge
- Dredging lower reaches of Coomera River
- Sewerage ocean outfall, Southport
- Dredging east west Grand channel
- Dredging Jacobs Well channel (several times)
- Dredging Runaway Bay Marina channel
- Dredging Marina Mirage Marina
- Dredging Fisherman's Wharf, Southport
- Dredging Southport Yacht Club approach channel
- Reclamation of Department of Transport site, Main Beach
- Reclamation of Marina Mirage site at the Spit, Southport



- Submarine pipeline trench, TSS to Spit, Southport
- Marina dredging at Evandale, Southport
- Maintenance dredging Oats Canal, Runaway Bay
- Maintenance dredging Biggera creek several times
- Broadwater beach restoration from Gold Coast bridge to Paradise Point
- Restoration of Seaworld beach eastern side of the Broadwater
- Main Beach beach restoration
- Maintenance dredging Seaway to Seaworld southern channel
- Temporary sewerage pipeline Lands End to Stradbroke Island
- Navigation channels between Southport and Moreton Bay
- Development dredging Horizon Shores Marina
- Development dredging Weiman Creek Marina and Entrance channel
- Development and maintenance dredging Manly boat Harbour
- Development dredging channel Victoria Point
- Development dredging various slipways Brisbane River