

Project: **Swansea Channel 2014 – Major Dredging Program**

Principal: *NSW Public Works*

Location: *Swansea Channel, NSW*

Contract Value: *\$1,500,000*

Completion Date: *January 2015*



Swansea Channel is the marine gateway to Lake Macquarie on the NSW Central Coast. Creating and maintaining a more reliable boating access to the lake was considered desirable for social and economic reasons. Neumann Contractors was selected by NSW Crown Lands to undertake a larger scale “once off” maintenance dredging campaign to achieve this, with smaller subsequent campaigns for ongoing maintenance.

Scope of Work

The aim of the dredging campaign was to create a stable navigation channel to reduce the frequency of periodic follow-up dredging. All sand dredged from the channel was pumped to a designated area at Blacksmiths Beach where it was de-watered & spread as part of beach nourishment & dune rehabilitation works.

- Dredging a 60m wide channel 3.5m deep
- Transfer of approximately 80,000m³ of sand up to 3.5km to Blacksmiths Beach

Challenges

- Presence of sensitive environmental ecosystems
- Involvement of numerous stakeholders and interest groups;
- Proximity to local residents;
- limited time frame to complete the dredging
- Installing 3,500m of pipeline from the Channel to the beach including an 80m section through an existing box culvert
- Pumping the material up to 3,500m through a series of booster pumps
- Spreading the material evenly along the beach at the nourishment
- Maintaining safe navigational access for all boating traffic in this very popular and busy recreational waterway.



Dredge **Nu-Compact – Cutter Suction Dredge**
 Length **26.8 m** Gross Weight **75 tonnes**
 Pipe Dia. **300 mm** Digging Depth **2.0 – 8.0m**

