

Project: **Lake Illawarra Channel Entrance Dredging**

Principal:
NSW Department of Commerce

Location:
Lake Illawarra, New South Wales

Contract Value:
\$1,820,000

Completion Date:
October 2007



The Lake Illawarra project involved the dredging of the channel entrance to create a 1050m long x 100m wide channel. Sand dredged from the entrance was used for beach nourishment at the southern end of Warilla beach, approx. 1.5 kms away. Additionally, a sand island was to be created as a roosting area for local and migratory bird life.

The aim of the entrance expansion was to help address and resolve issues of poor water quality within the lake. The quality of water had diminished due to a combination of development, introduction of nutrients and the overall constrictive nature of the entrance channel. Creating a larger entrance, which could be maintained, would allow increased and more constant flushing of the lake.

Scope of work:

- ◆ Dredging of a 1050m long by 100m wide channel.
- ◆ Formation of a sand island within the entrance providing a compensatory bird roosting habitat.
- ◆ Use of 200,000m³ of dredged sand for Warilla Beach nourishment.
- ◆ Completion of all survey activities associated with the works including set out, calibration and compliance surveys.

Challenges:

- ◆ Ensuring all works were carried out in an environmentally sensitive manner.
- ◆ Guaranteeing that the many flora and fauna in the lake Illawarra area were protected
- ◆ Working in highly visible public areas and ensuring the community's needs were met.
- ◆ Working in the high current area of the lakes entrance channel.



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

