

# » Shaws Bay Precinct dredging feasibility study



April 2018



**Ballina Shire Council has embarked on a series of actions from the Coastal Zone Management Plan to improve the Shaws Bay precinct.**

## » Introduction

Shaws Bay is a popular recreational area for the local community and visitors. The Bay provides a sheltered waterway which is ideal for a range of recreational activities. The Bay is used year-round and its popularity is expected to increase as the shire grows, especially during peak holidays periods.

Shaws Bay also has significant environmental factors and there are numerous competing challenges for this waterway. To ensure a healthy environment at Shaws Bay Council needs to ensure the water quality is maintained, public amenity and carrying capacity are optimised whilst protecting the important ecological areas of the Bay.

## » History to Study

The shallowing of Shaws Bay due to sediment build up is leading to reduced water movement and is a key cause of many issues for its long-term management.

Siltation and shoaling is considered as one of the highest priority issues within Shaws Bay. As part of the community consultation for the Coastal Zone Management Plan (CZMP) 78% of survey responses indicated that siltation/shoaling was either a “very important” or an “important” issue for management within Shaws Bay.

Further, when asked about priority for funds allocation, respondents raised numerous preferences with water quality improvement ranking highest. Dredging of the main section of Shaws Bay was listed as the second highest priority improvement action in the Shaws Bay CZMP.

## » History of dredging at Shaws Bay

Dredging of the Bay was carried out in the 1960s to provide fill for the construction of Compton Drive, which now borders the Bay to the north.

In the mid-1970s targeted dredging of the Bay was completed which involved pumping dredged sand onto the foreshore to form beaches. In the 1980s a similar method was used and involved the removal of material to a depth of 3 - 4 metres within the Bay and then utilised as beach nourishment. This dredging program predominately targeted the northwest corner of the Bay.

Following this dredging, wind generated waves gradually transported sand from the nourished beaches back into the deeper sections of the Bay in a northerly direction. In the 1990s a long-reach excavator was used to again pull sand back onto the beach areas. Since then, the shoreline has become relatively stable although localised erosion and sediment inputs continue to contribute to infilling of the Bay.



## » Objectives

The Shaws Bay CZMP recommends a suite of actions working towards protecting and maximising the future value of the Bay. As part of the implementation of this CZMP, Hydrosphere Consulting is undertaking an investigation into the feasibility of dredging Shaws Bay on behalf of Council with the primary aims of:

- Reducing siltation;
- Improving tidal flushing and reducing water quality risks;
- Maintaining foreshore access to deep water; and
- Improving foreshore beaches.

In doing this, there are several significant anticipated benefits and it is important that any future dredging is undertaken in a way that maximises these benefits, whilst balancing numerous technical, ecological, legislative and financial factors.

## » Planning considerations

Numerous dredging scenarios were considered, taking into account community views expressed during the drafting of the CZMP. The areas to be dredged were determined to provide the best balance between environmental protection and achieving the long-term objectives of dredging.

Sediment coring has been undertaken and the sediments have been tested for all the common domestic, agricultural and industrial chemical pollutants, and were found to be completely uncontaminated.

The cores revealed that the sediments are on average 99.9% marine sands with some areas of silt.

A key component of the project is to create enhanced sandy beaches for public recreation. Therefore, it is proposed to screen the dredged sand to remove silt, large shell and other organic matter, leaving sand ideal for creating beach nourishment.

## » Other Shaws Bay works

### **Action 1: Control bank erosion and siltation into the bay**

**Objective: Improve the water quality of the bay and the recreational amenity of the reserve. Improve access from the reserves to the bay.**

The erosion control works, bank stabilisation and creation of sandy beaches within the east arm have been completed. Council is also finalising the design plans to continue the walkway through the reserve to improve public access. The plans will also include the installation of recreational facilities such as picnic shelters and seating. These works are due to commence early to mid May 2018.

### **Action 3: Improve Compton Drive**

#### **Foreshore**

**Objective: Enhance safety and recreational amenity of the foreshore and improve stormwater systems and treatments.**

These works are to be completed shortly with the final stages currently being installed.

## » More information

To read the full Dredging Feasibility Report or further information about Shaws Bay Precinct works visit [ballina.nsw.gov.au](http://ballina.nsw.gov.au) and search Shaws Bay. Or telephone Ballina Shire Council's Public and Environmental Health Group on 1300 864 444.



» ***If you have any questions please contact:***

**Ballina Shire Council, Development and Environmental Health Group ph 6686 1210  
View the Shaws Bay Coastal Zone Management Plan (CZMP) on Council's website  
[ballina.nsw.gov.au](http://ballina.nsw.gov.au) (search Shaws Bay)**

# Shaws Bay Precinct dredging target areas



