Fact Sheet

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Murray Mouth Sand Pumping Project

“ If the Mouth closes, it will have a major impact on the Coorong, Lower Lakes and Mouth environment. ”

Government of South Australia
Department of Water, Land and Biodiversity Conservation
The Murray Mouth remains in danger of closing while low flow conditions persist in the River Murray. River regulation and water diversions from the River Murray have dramatically reduced the amount of water flowing down the river to a point where the average flow out the Mouth has been reduced by three quarters. Historically, the Mouth experienced drought-like conditions one in every 20 years. It now experiences these conditions every two years.

The amount of water available to flow out of the river affects the size of the Mouth. At times of high flow, the mouth is clear and open, while at times of low flow, the mouth becomes restricted and in danger of closing.

During periods of high flow, there is enough water going out of the Mouth to prevent the build up of sand that enters the system with each incoming tide. Sand has been building up inside the Mouth over a long period of time as a result of the continuing decrease in river flows, however it reached a critical level in mid-2002 following the closure of the barrages. The Mouth would have closed if no action was taken.

What are we doing to keep the Mouth open?

The project involves two cutter suction dredges that are being used to create channels from the Mouth to the Coorong. One dredge is being used to maintain the channel between the Mouth and the Goolwa side of the Coorong, while the second dredge is digging a channel from the Tauwitchere side of the Coorong to the Mouth.

By the end of September 2003, 880 000 cubic meters of sand had been removed from the Murray Mouth and pumped onto the beaches of Sir Richard Peninsula and Younghusband Peninsula, at a cost of $4.1m.

Originally, the project aimed to keep the Mouth open and protect the health of the Coorong over the summer of 2002/03. However this has had to be extended as the dry conditions persist. The dredging program has been successful in meeting this objective, yet it should only be regarded as a temporary measure.

Increased environmental flows are the Murray’s only solution in the long term if we are to keep the mouth open and maintain the health of the Coorong.

Why do we need to keep the Mouth open?

If the Mouth closes, it will have a major impact on the Coorong, Lower Lakes and Mouth environment. The area contains a wide variety of habitats, both salt and freshwater, which provide important feeding and breeding grounds for a wide variety of plants and animals.

Apart from the essential task of keeping the Mouth open and allowing the flow of water from the Mouth to the sea, dredging also has several positive effects on the surrounding environment.

It helps to preserve the health of the ecosystem by allowing cool, fresh oxygenated seawater to enter the Coorong and it reintroduces tidal movement, exposing mudflats that are used by thousands of migratory wading birds each summer.
The Coorong and Lower Lakes provide habitat for 78 species of fish and the Mouth provides passage to a number of species that breed in the Coorong and Murray estuary. The region’s wetlands support over 85 species of waterbirds. Some are listed under the Japan-Australia and China-Australia Migratory Bird Agreements (CAMBA and JAMBA) which obligate Australia to protect migratory birds and their environment. The area has been designated as a Ramsar Wetland of International Significance, and forms part of the Coorong National Park.

If the Mouth closes, the plants and animals that live there will suffer. Our fishing, recreation and tourism industries will also be affected, which will have an impact on our state’s economy.

**Project partners**

The South Australian Government initiated the project, which is funded by the Murray Darling Basin Commission. It also receives equal contributions from the state governments of New South Wales, Victoria and South Australia. Project development is being managed by DWLBC, while SA Water is managing the dredging contract and other physical works.

The region holds invaluable cultural, spiritual and heritage importance to the Traditional Owners – the Ngarrindjeri People. Ngarrindjeri lore tells its people to value, respect, honour and care for all things that have been created.

**Murray Mouth Sand Pumping Project**

Goolwa Channel

Coorong Channel

Potential Overdredged, Batter and/or Maintenance

Discharge Location B

Discharge Location A

Channels to be Dredged

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What else are we doing to manage the Murray Mouth?

The Environmental Flows team at DWLBC, with assistance from the River Operations team, is undertaking a range of projects in the Murray Mouth region to better manage and improve the health of the river. These include:

- the development of a morphological model for the Murray Mouth;
- a management plan for the Murray Mouth;
- a barrage operating strategy;
- socio-economic study of the region; and
- a comprehensive monitoring program to assess ecological response to differing water quantities and patterns of delivery through the barrages.

More information on Murray Mouth management can be found by contacting:

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