

# CONTENTS

<b>9</b>	<b>WATERWAYS ZONES .....</b>	<b>9-1</b>
9.1	BOAT RAMPS.....	9-1
9.2	MOORINGS.....	9-2
9.3	RETAINING WALLS.....	9-2
9.4	JETTIES, PONTOONS AND FLOATING WALKWAYS .....	9-4

## 9 WATERWAYS ZONES

This Chapter applies to development that is proposed in a waterways zone, including W1 Natural Waterways and W2 Recreational Waterways zones.

Where consent is required for development on land within a waterways zone, the development application will be assessed on its ability to meet:

- The zone objectives and provisions of the applicable LEP.
- Environmental Planning and Assessment Act, including the provisions of Section 79C.
- The provisions of the Murray Regional Environmental Plan No 2—Riverine Land.
- Any applicable State Environmental Planning Policies.
- Relevant objectives and controls in this DCP.
- Council policies (refer to Chapter 1 Section 1.8).
- Council's Development Manual.

**Note: When considering development on land in a waterways zone, it is recommended that the applicant seeks the advice of Council. Development within a waterways zone is generally classed as "integrated development" under the provisions of the Water Management Act 2000.**

**Note: It is important that development complies with all relevant Chapters of this DCP. Applicants should check each Chapter and address all relevant controls.**

### 9.1 BOAT RAMPS

#### *Objectives*

- a. Minimise the impact of boat ramps on the riparian environment.
- b. Ensure the number of boat ramps along the river are not excessive.

#### *Controls*

1. Soil and erosion management details must be submitted, to the satisfaction of Council, with a development application for a boat ramp. This plan must detail measures to be carried out that will reduce erosion and silt-laden runoff entering the river.
2. A Vegetation Plan must be submitted, to the satisfaction of Council, with a development application for a boat ramp. This plan must incorporate suitable native riparian vegetation that will soften the visual impact of the ramp and prevent soil erosion.
3. An engineering certificate must be submitted to Council with a development application for a boat ramp. The ramp is to be adequately tied into the bed and bank of the river.
4. The area immediately surrounding the boat ramp must be adequately drained by either a pipe or a lined channel to the low river water level.

5. The design of the boat ramp must not include steep slopes.
6. The ramp must be constructed on an angle to the river to minimise resistance to the flow of the river. The angle should be greater than 90 degrees to the downstream flow.
7. A work method statement is to be provided detailing how the work will be completed.

## 9.2 MOORINGS

### *Objectives*

- a. Protect the stability of the banks of all waterways and minimise the environmental impact of new moorings.
- b. Protect and enhance the visual amenity of all waterways.
- c. Ensure new structures do not create a river traffic safety issue.

### *Controls*

1. Only one mooring is permitted per land holding.
2. Where work involves soil or vegetation disturbance, soil and erosion management details must be submitted to the satisfaction of Council. This plan must detail measures to be carried out that will reduce erosion and silt-laden runoff entering the river.
3. Moorings must be situated in a safe location in consultation with relevant government agencies.
4. A work method statement is to be provided detailing how the work will be completed.

## 9.3 RETAINING WALLS

### *Objectives*

- a. Minimise the impact of retaining walls on the riparian environment.
- b. Allow retaining walls only where necessary.

### *Controls*

1. A development application must provide adequate justification that a retaining wall is necessary. Retaining walls will only be considered where it can be demonstrated that alternative bank stabilisation methods cannot be achieved.

2. An engineering certificate must be provided with a construction certificate application for a retaining wall greater than 600mm in height below or above existing ground level.
3. Retaining wall beams must be sunk to a minimum depth of two times greater than the wall height unless an engineering certificate is provided detailing that an alternative solution is adequate.
4. Only clean fill is to be used between the retaining wall and the river bank.
5. The retaining wall must be lined with geotextile material to restrict soil washing away into the river.
6. The retaining wall must be sunk into the river bed to minimise undercutting and adequately tied to the river bank.
7. Soil and erosion management details must be submitted, to the satisfaction of Council, with a development application for a retaining wall. This plan must detail measures to be carried out that will reduce erosion and silt-laden runoff entering the river.
8. The area immediately surrounding the retaining wall must be adequately drained by either a pipe or a lined channel to the low river water level.
9. Retaining walls shall be provided with agricultural drains behind the retaining wall to avoid the build-up of hydrostatic pressure. These drains are to be connected to a pipe or drain that drains stormwater back to the river.
10. The batters must not exceed a slope of 1 vertical unit to 3 horizontal units.
11. Batters are to be stabilised with suitable vegetation.
12. A Vegetation Plan must be submitted, to the satisfaction of Council, with a development application for a retaining wall. This plan must incorporate suitable native riparian vegetation that will soften the visual impact of the retaining wall and prevent soil erosion.
13. A work method statement is to be provided detailing how the work will be completed.

## **9.4 JETTIES, PONTOONS AND FLOATING WALKWAYS**

### **Objectives**

- a. Ensure new structures do not create a river traffic safety issue.
- b. Maintain the geomorphic and natural functions of the river.
- c. To protect the stability of any new structure.

### **Controls**

1. Floating structures that rise and fall with the river are the preferred option unless the application is for a replacement structure (like for like).
2. For fixed replacement structures (like for like) erosion controls around the toe of the structure are required. Erosion controls could include vegetation such as reeds and sedges or rock rip-rap.