9.4 Area 4 – Cane train bridge to downstream of Coolum Creek

Area 4 of the Maroochy River is the section of the river from 50 metres downstream of the disused cane train bridge to approximately 1,500 metres downstream of the river's confluence with Coolum Creek at Marcoola, and includes Boggy Creek, Small Creek, a small unnamed creek and some drains. This section of the river is approximately 6.7 kilometres in length. It is very popular for passive pursuits, like recreational fishing, canoeing and kayaking, as well as high-speed activities, such as water skiing and wake boarding.

Land uses along the banks of Area 4 are predominantly native vegetation, agriculture and grazing, with only small areas of rural development – there are fewer than 10 dwelling houses within 100 metres of the river's banks. Most riparian vegetation has been cleared from the river's banks downstream of the cane train bridge to about 400 metres upstream of Coolum Creek, except for narrow strips of about five metres to 20 metres in width. Forests of native riparian vegetation still remain downstream of Coolum Creek. Area 4 forms part of the Maroochy fish habitat area under fisheries legislation.

Several sections of the river's banks in Area 4 are suffering from erosion and instability, some of it severe. The bank instability is probably due to vegetation clearance, stock damage, wave action and rainwater runoff. The Sunshine Coast Regional Council is concerned about the extent of bank instability just upstream of the river's confluence with Coolum Creek; it commenced a bank rehabilitation project in 2009.

The waters of Area 4 are navigable for small powered ships up to seven metres in length, mainly because of shallow waters further downstream. The depth of navigable water varies from about two metres to seven metres at lowest astronomical tide. The width of navigable water varies from:

- approximately 55 metres at a bend downstream of the cane train bridge
- approximately 80 metres near the river's confluence with Boggy Creek
- approximately 60 metres at the bend near Small Creek
- less than 55 metres at a bend approximately 630 metres downstream of Small Creek
- approximately 60 metres near the river's confluence with an unnamed drain immediately downstream of Coolum Creek.

The waters of Boggy Creek, Small Creek, the small unnamed creek immediately downstream of Small Creek and all of the drains flowing into Area 4 are very narrow and shallow. These waterways are navigable by only the smallest of ships, such as dinghies, kayaks and canoes.

Water skiing activities are currently permitted on waters of Area 4. The length of the water skiing area is approximately 6.7 kilometres. There are two bends of about 90° within this area:

- the bend approximately 700 metres downstream of the cane train bridge
- the bend approximately 630 metres downstream of Small Creek.

The width of navigable waters at both of these bends is approximately 55 metres, which results in reduced operating and passing distances for ship traffic. The Reference Group noted that the bend downstream of Small Creek obscures clear view of approaching ship traffic until the bend has been negotiated. This bend represents a significant hazard to navigation on confined waters.

A number of overhead cables cross the river in Area 4. These cables represent a hazard to navigation and are marked by signs.

There are no aids to navigation in Area 4, but there are water skiing signs near the cane train bridge and approximately 1,500 metres downstream of Coolum Creek. There are also a number of fish habitat signs.

There are no public boat ramps for Area 4.

Maritime Safety Queensland does not conduct regular hydrographic surveys of Area 4. The most recent survey was conducted during February 2001.

9.4.1 Waterway users and issues

The user density for Area 4 ranges from very low to medium during weekends, public holidays and school holidays, depending on the time of day.

The waterway users of Area 4 are predominantly:

- dinghies and speed boats engaged in recreational fishing
- slower moving motor boats
- fast moving speed boats and personal watercraft towing water skiers and wake boarders
- fast moving speed boats
- occasional fast moving personal watercraft
- slow moving passive craft, like kayaks and canoes.

The Reference Group identified a number of waterway issues in Area 4:

- interaction and congestion of different types of ships during weekends and holidays
- perception by some water skiers and wake boarders that the area is solely for water skiing activities
- anti-social behaviour by some water skiers and wake boarder towards anchored and slow moving craft – contraventions of operational speed limits
- frustration amongst waterway users due to the mixed nature activities within the area – recreational fishers, water skiers and wake boarders
- effects from wake boarding particular types of wake boarding boats are designed to generate large wash, which may contribute to shoreline damage and bank erosion.

Maritime Safety Queensland has not received any reports of marine incidents in Area 4, since July 2000. However, anecdotal information from paddlers suggests that speed boats towing wake boarders have caused wash which has swamped or capsized canoes and kayaks.³ These events would constitute marine incidents pursuant section 123 of the *Transport Operations (Marine Safety) Act 1994.*

9.4.2 Existing legislative requirements

A general smooth water speed limit of 40 knots applies to all ships on Area 4 (and all creeks and drains flowing into it) because no other speed limit has been fixed for this section of the Maroochy River. The general speed limit was fixed by gazette notice on 21 May 2004.

A speed limit of 30 knots or less applies to all personal watercraft used for hire and drive operations, following recommendations from a coronial report in March 2010. The speed limit was fixed by gazette notice on 27 May 2011.

The operational speed limits provided by sections 127, 127A and 128 of the *Transport Operations (Marine Safety) Regulation 2004* apply.

The freestyling restriction provided by section 127B of the *Transport Operations* (Marine Safety) Regulation 2004 may also apply.

The waters of all watercourses and canals flowing into Area 4 (including Boggy Creek, Small Creek and Coolum Creek) are stated by gazette notice as waters where water skiing is an activity that endangers marine safety. The gazette notice was published on 28 February 1997.

Maritime Safety Queensland has not received any complaints regarding contraventions of marine safety legislation in Area 4, since at least January 2007.

9.4.3 Recommendations

Area 4 of the Maroochy River is a relatively narrow waterway subject to medium levels of ship traffic on weekends, public holidays and school holidays. Except for Coolum Creek, the creeks and drains flowing into Area 4 are very narrow and shallow.

The Reference Group acknowledges the history and popularity of Area 4 for water skiing activities. Generally, the group's members believe the existing water skiing prohibition achieves an acceptable level of marine safety and should be maintained.

However, the Reference Group believes that water skiing activities and high-speed ship operations around the sharp bend approximately 630 metres downstream of Small Creek endanger marine safety, because of the nature of this hazard. The group contends that a ship's master towing a water skier at high speed on these waters is unable to satisfy the general safety obligation imposed by section 43 of the *Transport Operations (Marine Safety) Act 1994*.

The Reference Group also believes that high-speed ship operations on waters of the small creeks and drains flowing into Area 4 are unsafe.

³ Public comments during an information session for *Maroochy River Trail* at Maroochydore on 7 October 2008

Consequently, the Reference Group believes that the existing regulatory regime for Area 4 should be expanded to provide a better marine safety system, and therefore makes the following recommendations:

General recommendations

- 1 Enforcement presence
- 2 New speed limit of 6 knots for creeks and waterways flowing into Maroochy River
- 3 Existing water skiing prohibition for creeks and waterways flowing into Maroochy River
- 4 New speed signs
- 5 New water skiing signs
- 6 Update Beacon to Beacon
- 7 Review of new speed limits and water skiing prohibitions by December 2012

Specific recommendations

21 - Maroochy River (Area 4) - existing speed limit of 40 knots

That the General Manager should maintain the existing speed limit of 40 knots for all ships on waters of Maroochy River from 50 metres downstream of the cane train bridge at the suburb of Maroochy River to 450 metres downstream of the river's confluence with Small Creek.

22 - Maroochy River (Areas 4 and 5) - existing speed limit of 40 knots

That the General Manager should maintain the existing speed limit of 40 knots for all ships on waters of Maroochy River from 720 metres downstream of the river's confluence with Small Creek to 1,500 metres downstream of the river's confluence with Coolum Creek.

24 - Maroochy River (Area 4) - new warning signs

That Maritime Safety Queensland should erect two new warning signs at strategic locations in Area 4 for the sharp bend near Small Creek – SHARP BEND / KEEP STARBOARD (with an arrow).

The Reference Group expressed different views on the best way to ensure marine safety for the navigation hazard presented by the sharp bend approximately 630 metres downstream of Small Creek. Some members believe that a speed limit of 6 knots is appropriate, based on the principle of regulatory simplification, whilst others believe a speed limit of 20 knots in conjunction with a water skiing prohibition is more appropriate. The members supporting the latter position believe that good masters observing rules 6, 8 and 9 of the Collision Regulations can safely navigate the bend at 20 knots.

Consequently, the Reference Group puts forward the following recommendations as options:

23A – Maroochy River near Small Creek (Area 4) – new speed limit of 20 knots with new water skiing prohibition – Option 1

That the General Manager should fix by gazette notice a new speed limit of 20 knots for all ships on waters of Maroochy River from 450 metres downstream of the river's confluence with Small Creek to 720 metres downstream of the river's confluence with Small Creek; in conjunction with

That the General Manager should state by gazette notice a new water skiing prohibition for waters of Maroochy River from 450 metres downstream of the river's confluence with Small Creek to 720 metres downstream of the river's confluence with Small Creek; or alternatively

23B – Maroochy River near Small Creek (Area 4) – new speed limit of 6 knots – Option 2

That the General Manager should fix by gazette notice a new speed limit of 6 knots for all ships on waters of Maroochy River from 450 metres downstream of the river's confluence with Small Creek to 720 metres downstream of the river's confluence with Small Creek.

The Reference Group identified some unresolved issues in Area 4:

- extensive shoreline damage
- wash generation be certain types of speed boats used for wake boarding
- land management practices that contribute to bank erosion.

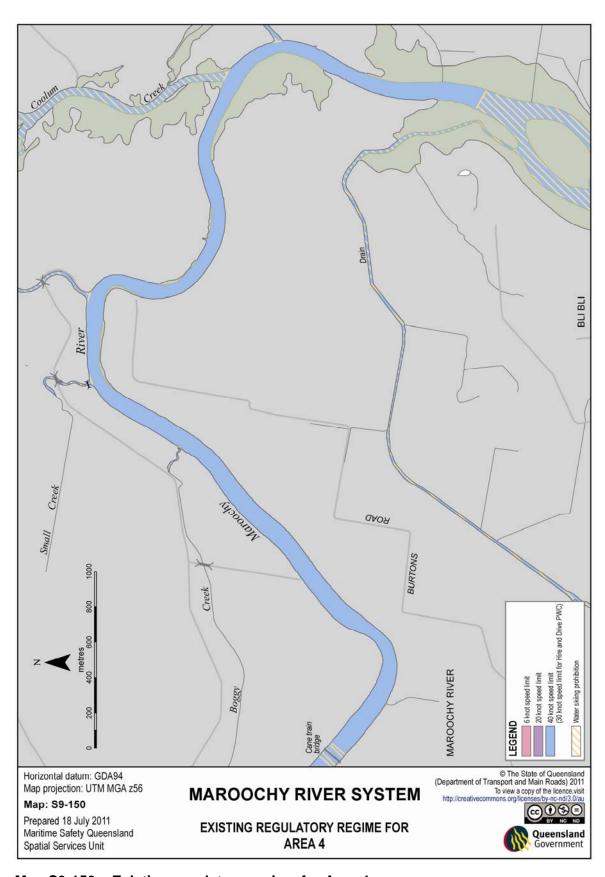
As mentioned in section 9.2.3, the Maroochy River Water Ski Association presented a document to the Reference Group that mentioned speed boats more than 6.1 metres in length, which are specifically designed for wash enhancement during wake boarding activities. The Reference Group acknowledges that a ship's wash is directly related to the ship's waterline length, and that wash is capable of causing damage to the shoreline.

Consequently, the Reference Group also makes the following recommendation:

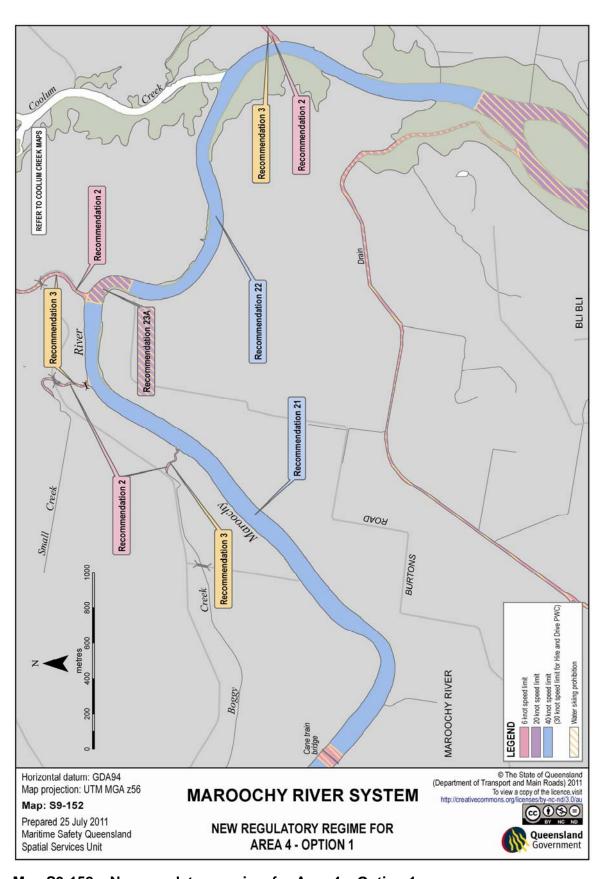
8 – Maroochy River system – proposal for a marine zone

That Sunshine Coast Regional Council should consider a proposal for a marine zone, as envisaged by part 9A of the Transport Operations (Marine Safety) Regulation 2004, to manage wash capable of causing damage to the shoreline by a requirement that a ship more than 6.1 metres in length must not be operated in the marine zone for wake boarding.

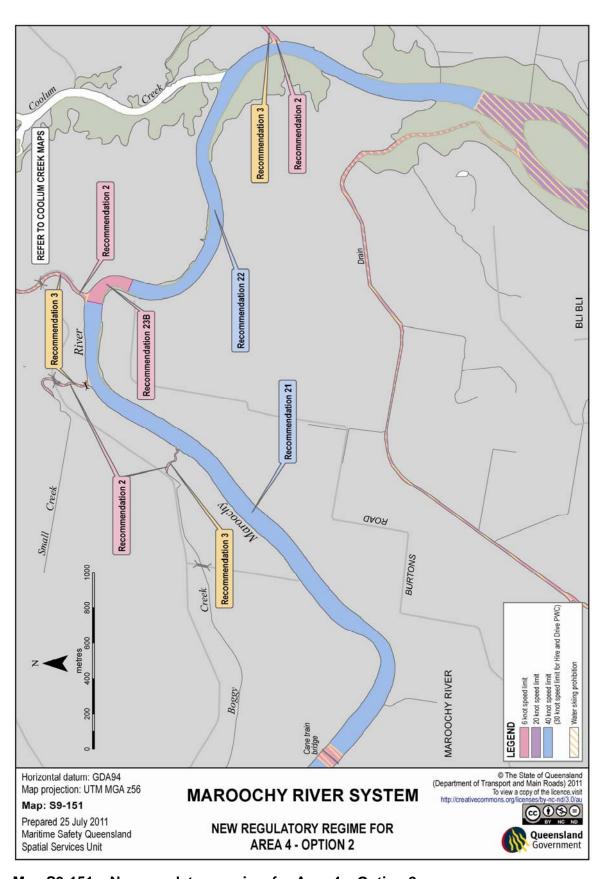
Maps that depict the existing regulatory regime and the new regime recommended by the Reference Group can be found on pages 49 to 51.



Map S9-150 – Existing regulatory regime for Area 4



Map S9-152 – New regulatory regime for Area 4 – Option 1



Map S9-151 – New regulatory regime for Area 4 – Option 2