

9.2 Area 2 – Brown’s Rocks to near Dunethin Rock

Area 2 of the Maroochy River is the section of the river downstream from Brown’s Rocks to a small unnamed creek immediately downstream of Dunethin Rock at the suburb called Maroochy River, and includes Ashton’s Wharf, Lake Dunethin and two very small creeks called Rocky Creek and Boggy Creek. The distance from Brown’s Rocks to the small unnamed creek is approximately 4.2 kilometres.

Land uses along the banks of Area 2 are predominantly agriculture and grazing, with a small amount of commercial industrial development and rural residential development – there are less than 10 dwelling houses within 100 metres of the river’s banks. Except for narrow strips of less than 10 metres in width, most riparian vegetation has been cleared from the river’s banks. However, there are two areas of approximately 200 metres in length along the river’s banks near Dunethin Rock and Ashton’s Wharf where small forests of riparian vegetation still remain.

Many sections of the river’s banks in Area 2 are suffering from erosion and instability, some of it severe. Most bank instability is probably attributable to vegetation clearance, stock damage, wave action and rainwater runoff. The banks are also quite steep, which means they may not absorb wash energy from wash generating activities, like wake boarding.

The Department of Environment and Resource Management has previously received a development application for tidal works in Area 2, as part of the integrated development assessment system process under former integrated planning legislation. The department’s policy is to maintain the amenity of Area 2, as best as possible. The development application was refused at the resource entitlement stage of the process.

The waters of Area 2 are navigable for small powered ships up to seven metres in length, like dinghies, speed boats, motor boats and personal watercraft; and passive craft, like canoes and kayaks. The depth of navigable water varies from about one metre to six metres at lowest astronomical tide. The width of navigable water varies according to the state of the tide from:

- approximately 50 to 75 metres upstream of Ashton’s Wharf
- more than 110 metres upstream and downstream of Dunethin Rock
- approximately 80 metres at the small unnamed creek.

The waters of Rocky Creek, Boggy Creek and the small unnamed creek immediately downstream of Lake Dunethin are very narrow and shallow. Lake Dunethin is also very shallow, often less than 0.5 metres at lowest astronomical tide. All of these waterways are navigable by only the smallest of ships, such as dinghies, kayaks and canoes.

Submerged rocks near the middle of the river near Dunethin Rock represent a significant hazard to navigation. There are a number of overhead cables near Dunethin Rock that represent a hazard to navigation as well. There is also an underwater gravel shelf just upstream of Ashton’s Wharf that sometimes moves according to current and tide. This shelf presents as a potential hazard to the navigation of power driven ships, in terms of propeller strike.

Water skiing activities are currently permitted on Area 2 from a point approximately 100 metres upstream of Ashton's Wharf to Brown's Rocks, a distance of approximately 2.3 kilometres. The width of navigable water on this section of the river varies from 55 to 75 metres. There is a 90° bend in the river approximately 700 metres upstream of Ashton's Wharf. The width of navigable water at the bend is less than 55 metres.

There is a public boat ramp for Area 2 at the end of Lake Dunethin Road near the confluence of Lake Dunethin with the river, which is regularly used to launch speed boats used for water skiing. Sunshine Coast Regional Council has also established a public pontoon and viewing platform near the entrance to Lake Dunethin as part of its Maroochy River canoe trail project.

There are no aids to navigation in Area 2, but there are warning signs, water skiing signs and speed signs near Dunethin Rock and the small unnamed creek, and a number of overhead cable signs. The Reference Group believes that an additional water skiing sign near the public boat ramp would help to highlight the water skiing prohibition.

Maritime Safety Queensland does not conduct regular hydrographic surveys of Area 2. The most recent survey was conducted during February 2001.

9.2.1 Waterway users and issues

The user density for Area 2 ranges from very low to low, even during weekends, public holidays and school holidays.

The waterway users of Area 2 are predominantly:

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

The Reference Group identified a number of waterway issues in Area 2:

- wake boarding – particular types of wake boarding boats are designed to generate large wash, which may contribute to shoreline damage and bank erosion
- contraventions of operational speed limits by recreational personal watercraft
- excessive speed by speed boats and personal watercraft in confined waters near Dunethin Rock
- conflict between shore fishers and high-speed operations of recreational speed boats and personal watercraft near Dunethin Rock
- contraventions of water skiing prohibitions.

Information from the Maroochy River Water Ski Association suggests that water skiing activities are much less prevalent in Area 2 than further downstream.

Maritime Safety Queensland has received one report of a marine incident in Area 2 since July 2000 – a recreational motor boat collided with a submerged object in August 2000.

9.2.2 Existing legislative requirements

A general smooth water speed limit of 40 knots applies to all ships on most of Area 2 (including the waterways and creeks 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.

A speed limit of 6 knots applies to all ships on waters approximately 150 metres upstream and downstream of submerged rocks (marked by a speed sign) located approximately 250 metres downstream of Lake Dunethin. This speed limit was also fixed by gazette notice on 21 May 2004.

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 Area 2 from the small unnamed creek immediately downstream of Dunethin Rock to a point approximately 100 metres upstream of Ashton's Wharf are stated by gazette notice as waters where water skiing is an activity that endangers marine safety. The gazette notice was published on 4 December 1998.

The waters of all watercourses and canals flowing into Area 2 (including Rocky Creek, Lake Dunethin and Boggy Creek) are also 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 2, since at least January 2007.

9.2.3 Recommendations

Area 2 of the Maroochy River is a relatively narrow waterway subject to low levels of ship traffic, even on weekends, public holidays and school holidays. The submerged rocks near Dunethin Rock represent a significant hazard to navigation.

The Reference Group believes the existing water skiing prohibitions achieve an acceptable level of marine safety and should be maintained.

However, the Reference Group believes that high-speed ship operations on waters near the entrance to Lake Dunethin and Dunethin Rock endanger marine safety, because of the nature of these features. The group contends that a ship's master navigating these waters at high speed is unable to comply fully with the operational speed limits of the *Transport Operations (Marine Safety) Regulation 2004* and rules 6, 8 and 9 of the Collision Regulations.

Importantly, the Reference Group acknowledges that a contravention of any one of these legislative requirements may cause a marine incident, which in turn, may be evidence of a contravention of 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 the waterways and creeks flowing into Area 2 are unsafe.

Consequently, the Reference Group believes that the existing regulatory regime for Area 2 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

14 – Maroochy River (Area 2) – 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 Brown's Rocks to 50 metres upstream of Lake Dunethin.

15 – Maroochy River (Area 2) – new speed limit of 6 knots

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 50 metres upstream of Lake Dunethin to 400 metres downstream of Lake Dunethin.

16 – Maroochy River (Area 2) – existing water skiing prohibition

That the General Manager should maintain the existing water skiing prohibition for waters of Maroochy River from 100 metres upstream of Ashton's Wharf to the river's confluence with the small unnamed creek immediately downstream of Dunethin Rock.

17 – Maroochy River (Area 2) – 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 400 metres downstream of Lake

Dunethin to 50 metres upstream of the cane train bridge at the suburb of Maroochy River.

The Reference Group identified some unresolved issues in Area 2:

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

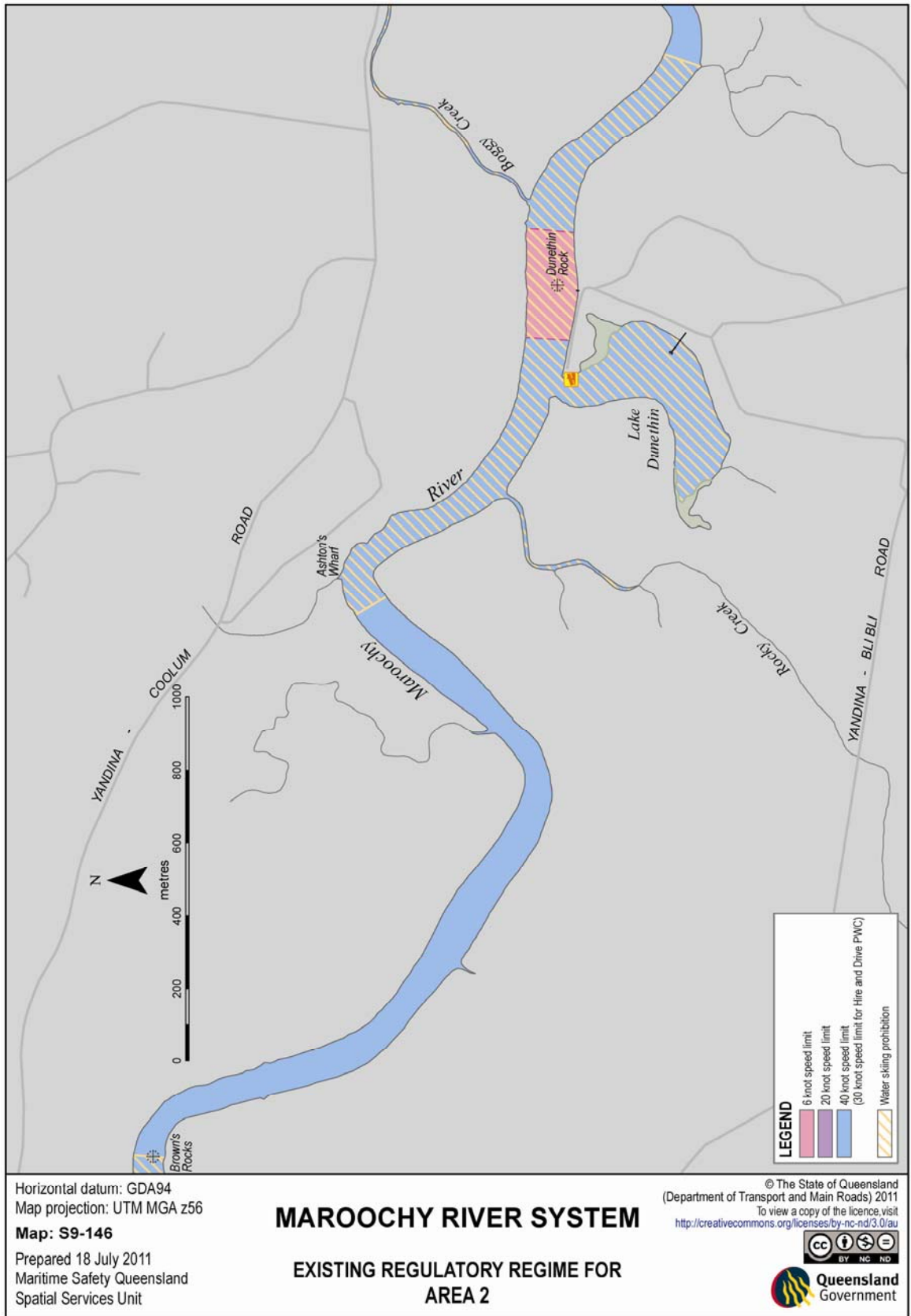
The Maroochy River Water Ski Association presented a document to the Reference Group that mentioned speed boats more than 6.1 metres in length, which are specifically designed for wash enhancement during wake boarding activities. The Reference Group acknowledges that a ship's wash is directly related 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:

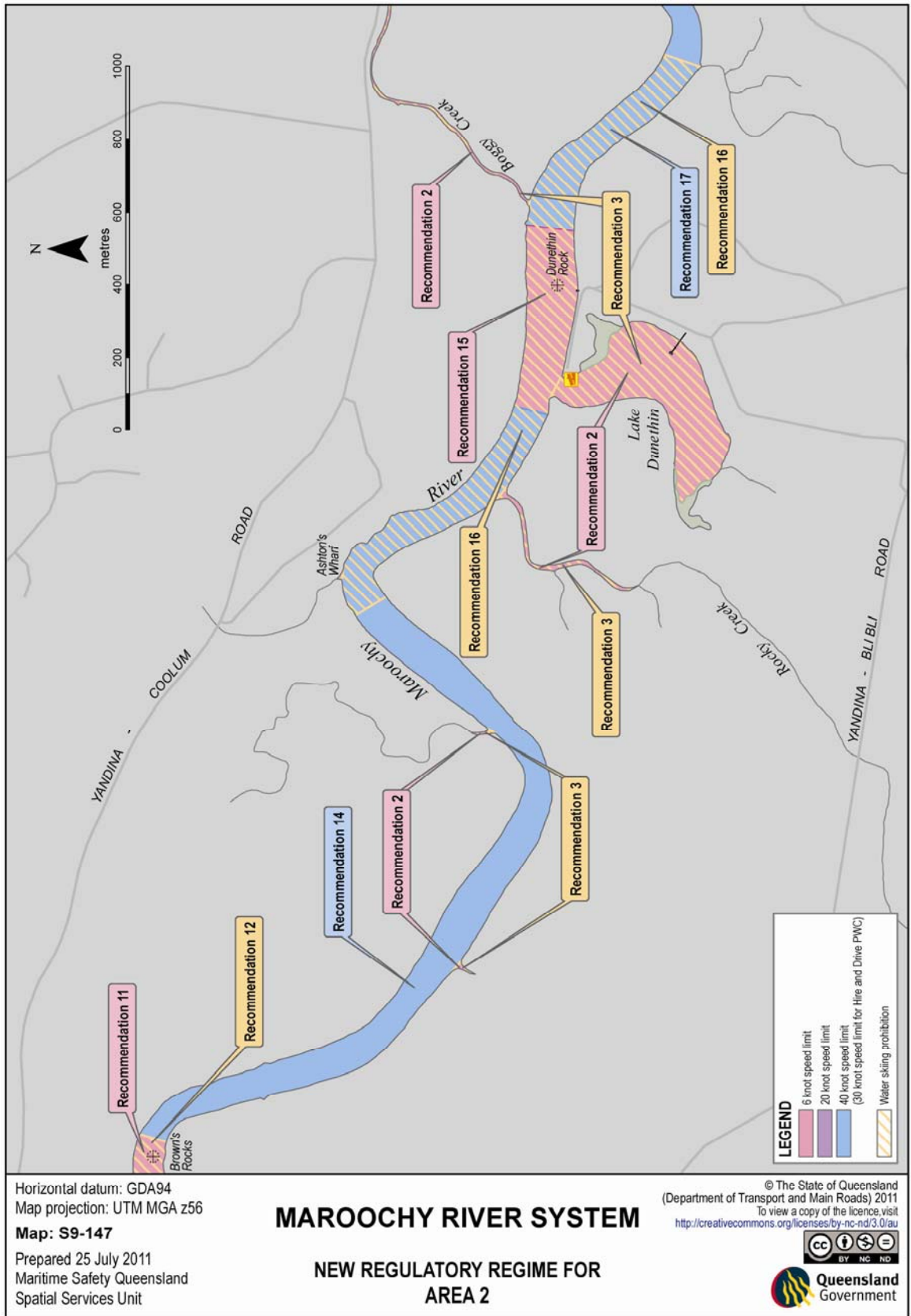
8 – Maroochy River system – proposal for a marine zone

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 36 and 37.



Map S9-146 – Existing regulatory regime for Area 2



Map S9-147 – New regulatory regime for Area 2