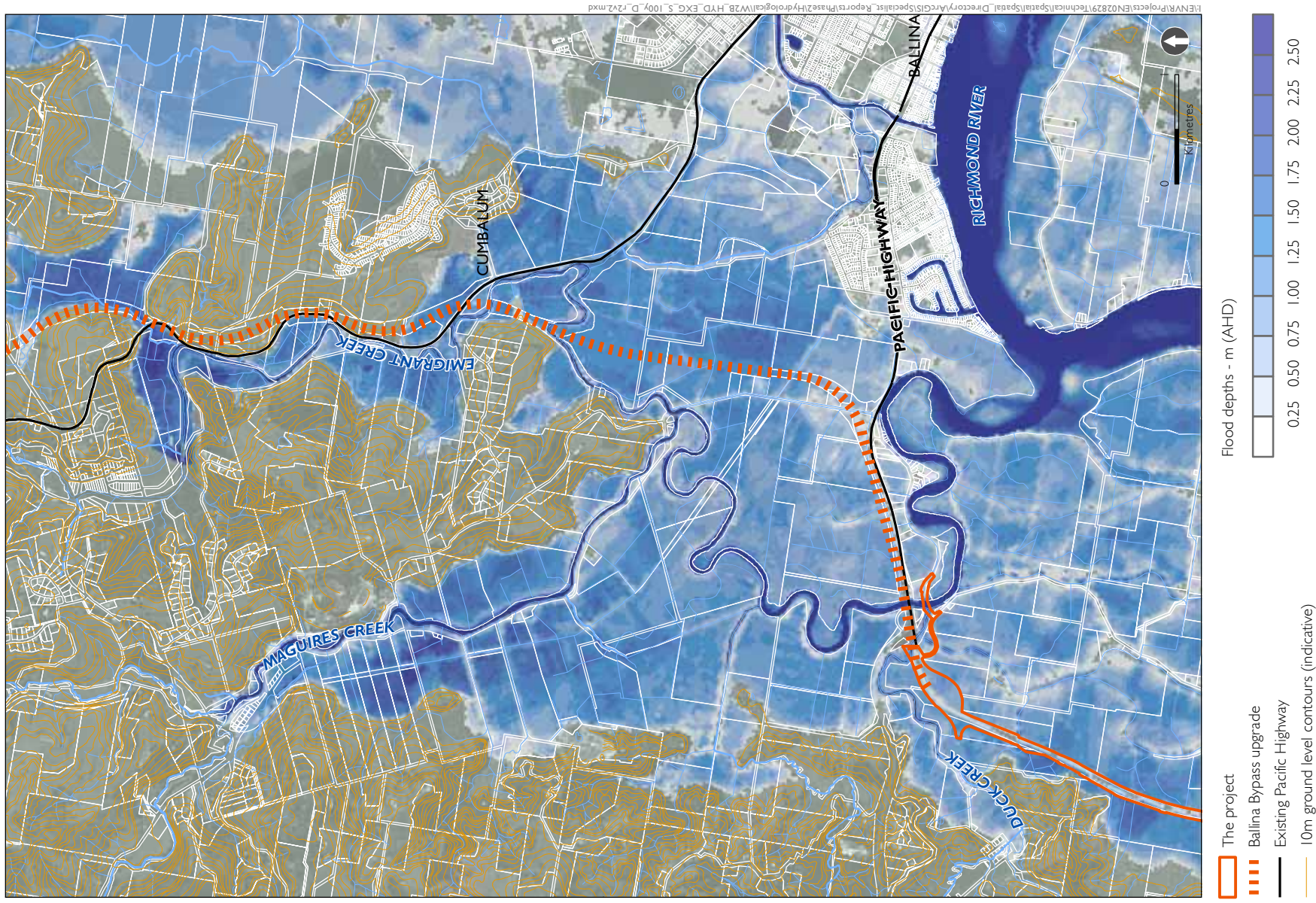


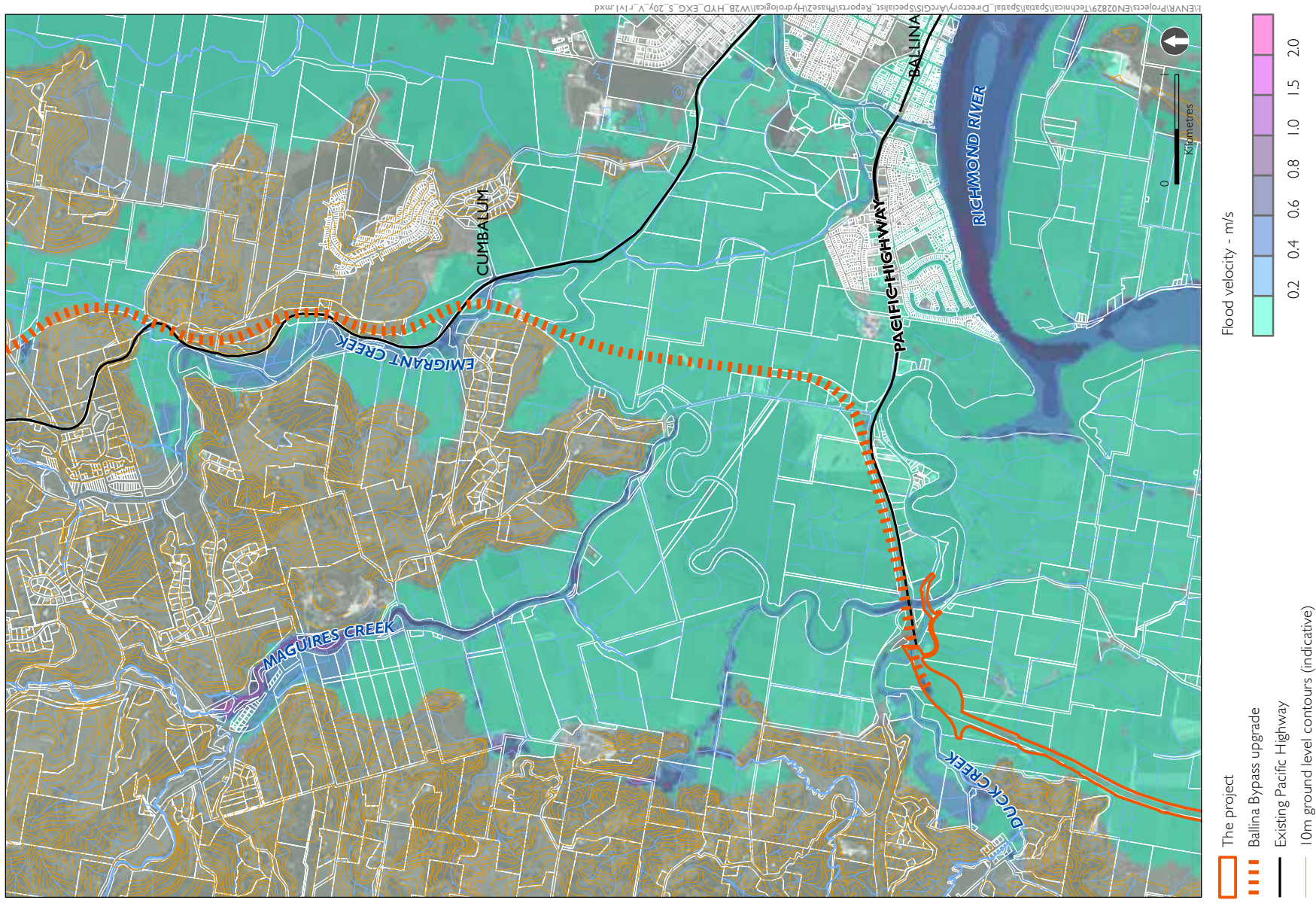
Upgrading the Pacific Highway - Woolgoolga to Ballina Upgrade

Figure 4-40 Peak 20 year ARI flood depths: Lower Richmond River and Ballina



Upgrading the Pacific Highway - Woolgoolga to Ballina Upgrade

Figure 4-41 Peak 20y ARI flood velocities: Lower Richmond River and Ballina



## 4.16. Solitary Islands Marine Park catchment

The Solitary Islands Marine Park (SIMP) stretches from Coffs Harbour to Sandon Bluffs off the coast of northern NSW. Two catchments crossed by the project run into SIMP – Arrawarra Gully and Corindi River.

The project would cross the Arrawarra Gully catchment, which drains into the Arrawarra Creek catchment. Both these catchments then discharge into the Solitary Islands Marine Park. The Arrawarra Gully catchment is about 9.3 square kilometres and the Arrawarra Creek catchment is about 21.7 square kilometres.

The project passes through the Corindi Creek catchment, crossing or passing near Corindi Creek, Blackadder Gully, Cassons Creek, Redbank Creek and Dirty Creek, which all drain into the Solitary Islands Marine Park. The Corindi River and its tributaries have a catchment area of about 155 square kilometres.

## 4.17. Wetland catchments

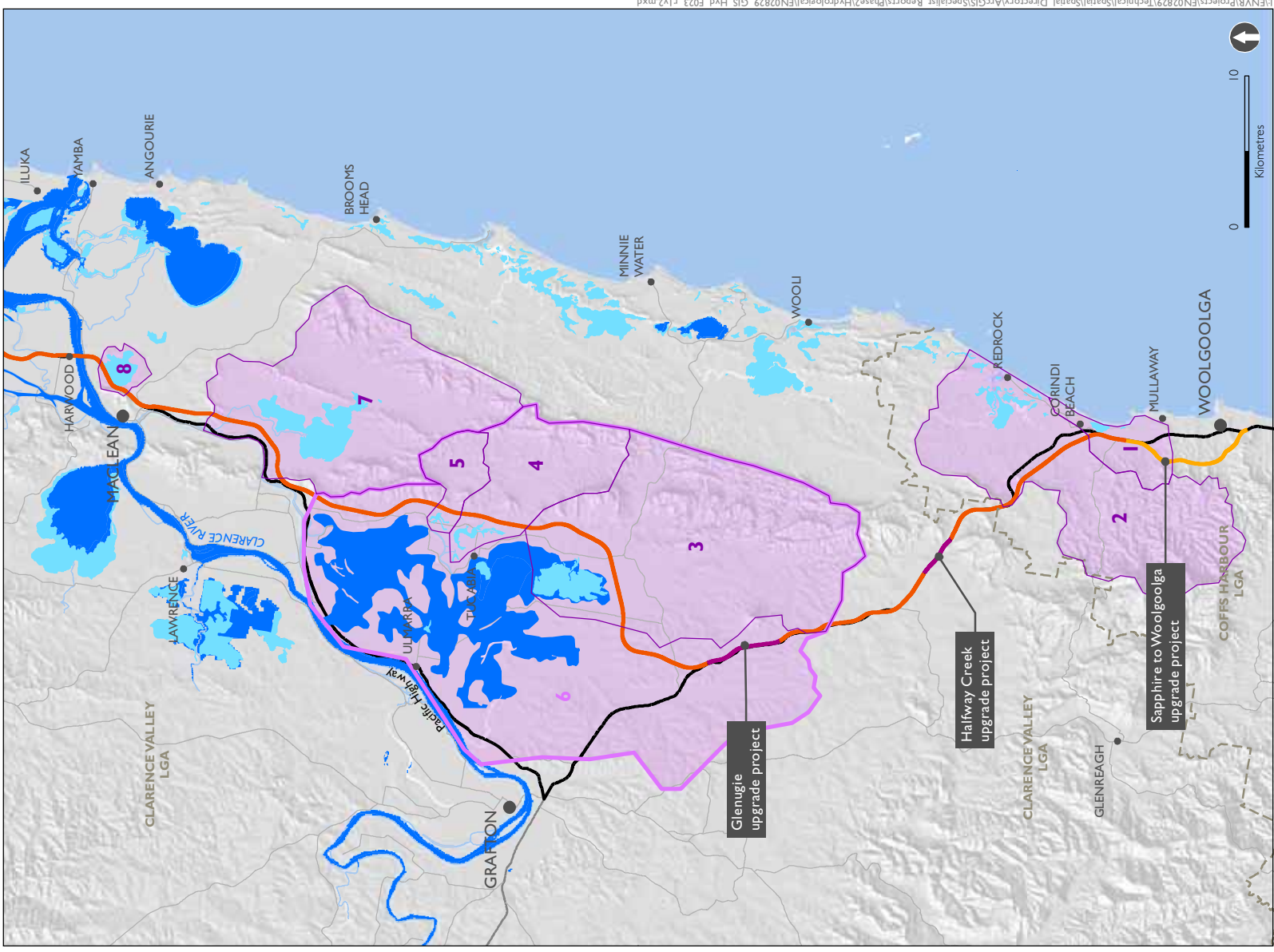
The *State Environmental Planning Policy No 14—Coastal Wetlands* (SEPP14) aims to protect coastal wetlands. The Department of Sustainability, Environment, Water, Population and Communities (SEWPAC) publish a Directory of Important Wetlands, which aims to identify nationally important wetlands. Wetlands identified by either the SEPP14 and by SEWPAC which are located between Woolgoolga and Ballina were assessed as part of the hydrology and flooding study. Where the project traverses the catchment area of wetlands, the wetland catchment area is presented in Table 4-9 and within Figure 4-42 and Figure 4-43.

**Table 4-9 Catchments of wetlands**

Wetland identification number	Wetland name (if applicable)	SEPP14 or SEWPAC wetland within catchment	Catchment area (km <sup>2</sup> )
1		SEPP14	21
2		SEPP14	150
3	Cold Stream Wetlands	SEPP14 and SEWPAC	216
4		SEPP14	62
5		SEPP14	19
6	Upper Coldstream	SEWPAC	629
7	Shark Creeek Wetlands	SEPP14	162
8	Yaegl Nature Reserve	SEPP14	8
9		SEPP14	37
10	Bundjalung National Park	SEPP14 and SEWPAC	339
11		SEPP14	8
12		SEPP14	111
13		SEPP14	7
14		SEPP14	32
15		SEPP14	24
16		SEPP14	142

Upgrading the Pacific Highway - Woolgoolga to Ballina Upgrade

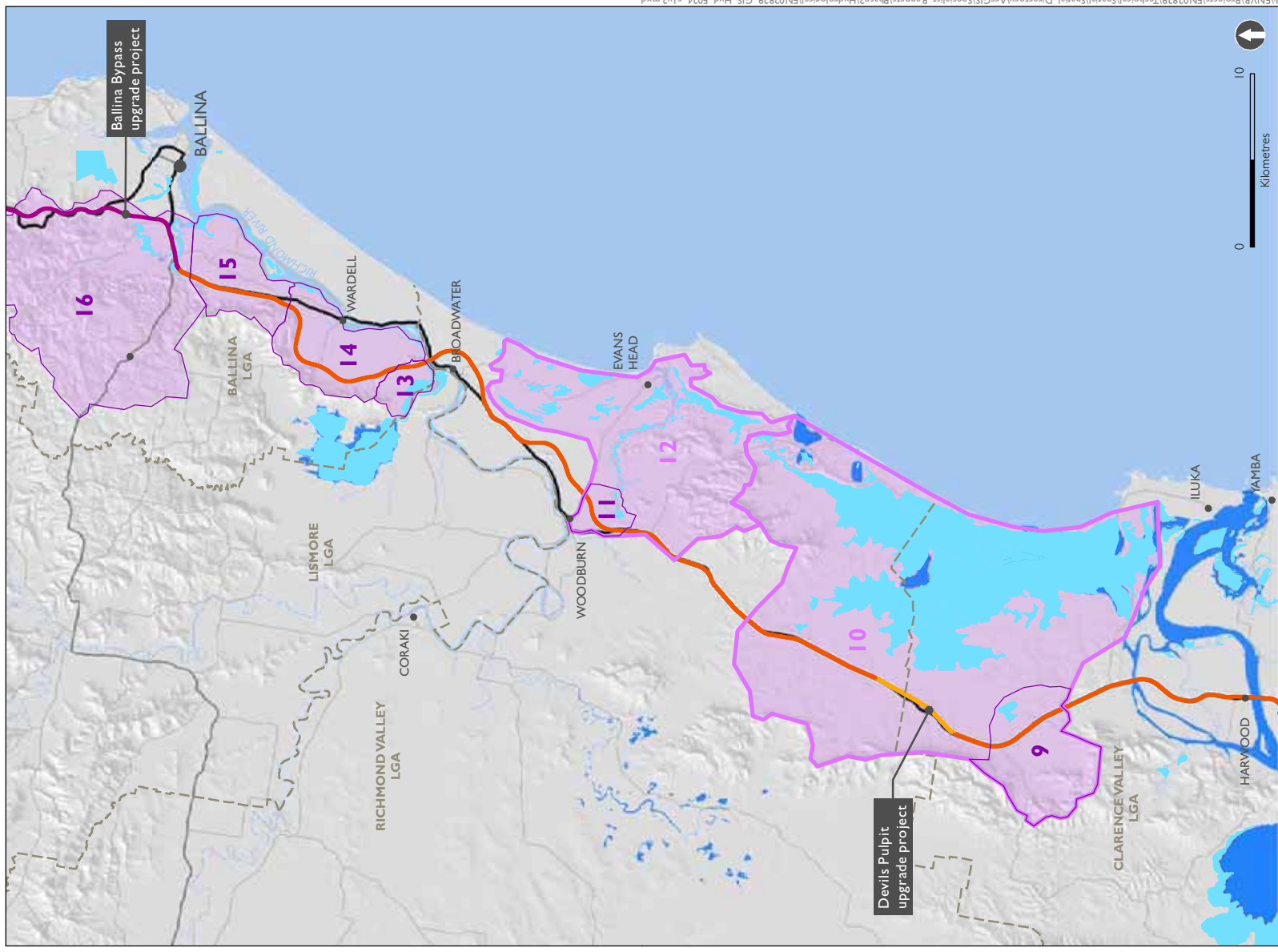
Figure 4-42 Catchments of wetlands: Woolgoolga to Harwood



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Upgrading the Pacific Highway - Woolgoolga to Ballina Upgrade

Figure 4-43 Catchments of wetlands: Harwood to Ballina



- The project
- Upgrade completed to dual carriageway
- Upgrade under construction
- Existing Pacific Highway
- Catchments of wetlands
- Nationally important wetland (Directory of Important Wetlands)
- SEPP 14 wetlands