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*Marine and Freshwater Research*

### **Supplementary Material**

#### **Watering of wetlands on Indigenous Country in the Murray–Darling Basin, Australia**

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**Figure S1.** Names of Indigenous jurisdictions included in the analyses (excluding areas smaller than 400 km<sup>2</sup>).

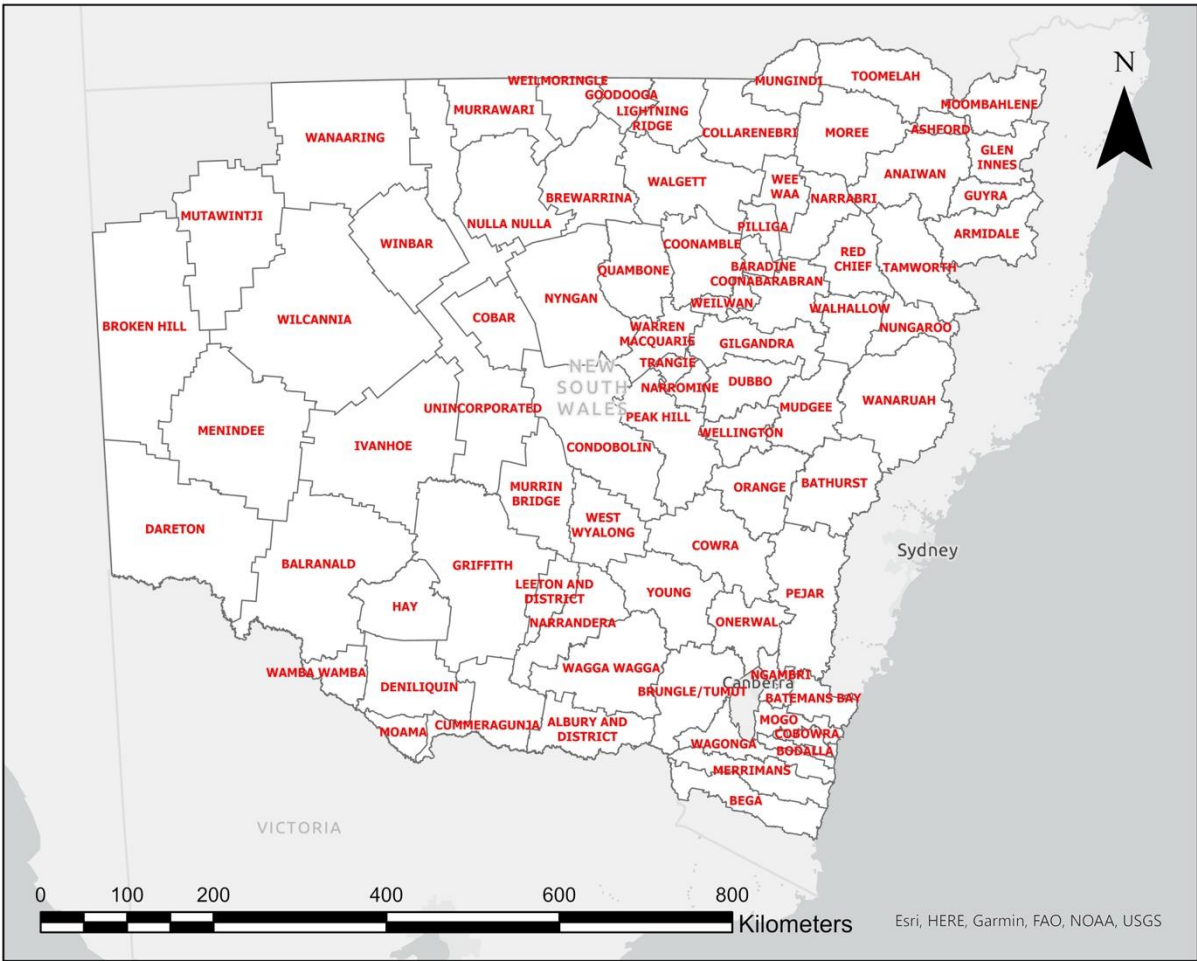


Figure S2. Names of NSW Aboriginal Land Councils included in the analyses.

**Table S1. Estimated distribution of wetlands within each Indigenous boundary (2 d.p.).**

Wetland site	Original boundary	Boundary 1	Boundary 2	Boundary 3	Boundary 4	Boundary 5	Boundary 6	Boundary 7
River Murray Channel (Traditional Owners)	Yorta Yorta	Yorta Yorta 14.1%	Barkandji (Combined) 9.87%	First Peoples of the Millewa–Mallee Claim 8.55%				
River Murray Channel (ALCs)	Cummeragunja	Balranald 11.51%	Cummeragunja 10.53%	Dareton 9.87%	Moama 6.25%	Albany and District 5.92%	Wamba Wamba 5.26%	Deniliquin 0.66%
Mid-Murrumbidgee Wetlands	Griffith	Griffith 65%	Leeton and District 25%	Narrandera 10%				
Gwydir Wetlands	Collarenebri	Mungindee 70%	Collarenebri 20%	Moree 10%				
Narran Lakes	Walgett	Walgett 66%	Brewarrina 33%					
Western Floodplain (Toorale)	Nulla Nulla	Unincorporated 100%						
Great Cumbung Swamp	Hay	Balranald 75%	Hay 25%					
Nimmie–Caira	Balranald	Balranald 90%	Hay 10%					
Barmah–Millewa Forest	N/A	Cummeragunja 60%						

**Table S2. The estimated percentage of the managed floodplain and ANAE-derived floodplain that was flooded to a depth of 0.5 m between 2015–15 and 2018–19 in each Indigenous organisation’s boundary**

Indigenous organisation	ANAE-derived floodplain area (ha)	Maximum area inundated (ha)	Percentage of ANAE-derived floodplain flooded	Volume (ML) from Chen <i>et al.</i> (2021, Table S3)				
				2014–15	2015–16	2016–17	2017–18	2018–19
Yorta Yorta (combined)	170,100	21,751.03	12.79	250	127214.27	39170	44806.79	44182.74
Ngemba, Ngiyampaa, Wangaaypuwan and Wayilwan native title determination application	872,025	9,684.2	1.11	10000	14239	24289	48421	45052
Gomerioi People	824,450	9,510	1.15	39667	4836	16496	4000	47550
First Peoples of the River Murray & Mallee Region	71,350	1,236.6	1.73	5605	12690	2597	10624	12092
First Peoples of the Millewa–Mallee Claim	61,875	1,804.90	2.92	4901	15567.93	0	25184.79	3420.63
Barkandji People (combined)	905,975	1,423.37	0.16	0	18177.62	0	30943.11	4005.42
Ngarrindjeri and Others Native Title Claim	42,275	100	0.24	136	79	0	0	500
Ngadjuri Nation #2	8,250	2.6	0.03	0	0	0	4	13
Dja Dja Wurrung Clans Aboriginal Corporation	22,550	0	0	0	0	0	0	0
Eastern Maar Aboriginal Corporation	700	0	0	0	0	0	0	0
Taungurung Clans Aboriginal Corporation <sup>A</sup>	>25,050	0	0	0	0	0	0	0
Barengi Gadjin Land Council Aboriginal Corporation <sup>A</sup>	>41,025	0	0	0	0	0	0	0
Gunggari Native Title Aboriginal Corporation RNTBC	23,175	0	0	0	0	0	0	0
Kooma Aboriginal Corporation RNTBC	191,825	0	0	0	0	0	0	0
Budjiti People	45,925	0	0	0	0	0	0	0
Bigambul People Part A	4,175	0	0	0	0	0	0	0
Mandandanji People	38,175	0	0	0	0	0	0	0
Mardigan People	25,550	0	0	0	0	0	0	0
Warrabinga Wiradjuri #6	450	0	0	0	0	0	0	0
Kunja People	44,350	0	0	0	0	0	0	0
Yuwaalaraay–Euahlayi People and State of Queensland	70,675	0	0	0	0	0	0	0
Gamilaraay People	20,725	0	0	0	0	0	0	0
Iman People #4	3,600	0	0	0	0	0	0	0
Toni-Ann Maree Prow	4,250	0	0	0	0	0	0	0
Wilyakali	4,875	0	0	0	0	0	0	0
First Nations of the South East #2	2,700	0	0	0	0	0	0	0
<b>Total, First Nations Jurisdictions</b>	<b>3,526,075</b>	<b>103,333</b>	<b>2.93<sup>B</sup></b>	<b>60,559</b>	<b>192,804</b>	<b>82,552</b>	<b>163,984</b>	<b>156,816</b>
<b>Not included</b>	<b>3,499,275</b>	<b>105,122</b>	<b>3<sup>B</sup></b>	<b>187,645</b>	<b>243,741</b>	<b>100,133</b>	<b>405,448</b>	<b>93,188</b>
<b>Basin Total</b>	<b>7,025,350</b>	<b>208,455</b>	<b>2.97</b>	<b>248,204</b>	<b>436,545</b>	<b>182,685</b>	<b>569,432</b>	<b>250,004</b>

<sup>A</sup> The area of land recognised by the government as belonging to these organisations has increased since this study’s mapping. Therefore, although the map of Indigenous organisations is up to date, these organisations are likely to have a greater ANAE-derived floodplain area than was calculated based on their previous boundaries.

<sup>B</sup> Average.

**Table S3. The estimated percentage of the managed floodplain and ANAE-derived floodplain that was flooded to a depth of 0.5 m between 2015–15 and 2018–19 in each Aboriginal Land Council area**

Aboriginal Land Council	ANAE-derived floodplain area	Maximum area flooded (ha)	Percentage of ANAE-derived floodplain flooded	Volume (ML) from Chen <i>et al.</i> (2021, Table S3)				
				2014–15	2015–16	2016–17	2017–18	2018–19
Leeton & District	10,700	8,801.75	82.26	0	0	0	41,320.75	3,288
Cummeragunja	86,900	17,440.81	20.07	2,460	101,311.42	23,502	32,491.24	27,325.04
Balranald	480,000	54,247.16	11.30	148,698	110,672.2	55,747	45,279.8	60,661.42
Narrandera	35,700	3,309.66	9.27	0	0	0	16,548.3	0
Griffith	278,700	22,158.99	7.95	1,150	3,978	1,324	106,213.95	2,584
Quambone	202,550	9,684.2	4.78	10,000	14,239	24,289	48,421	45,052
Mungindi	95,550	4,200	4.40	21,000	945	6,300	2,800	21,000
Collarenebri	271,925	9,510	3.50	39,667	4,836	16,496	4,000	47,550
Albury & District	13,125	456.9	3.48	0	10,219.74	0	17,147.72	2,367.47
Moama	41,400	905.25	2.19	0	10902.5	0	18202.38	4499
Moree	33,575	600	1.79	3,000	135	900	400	3,000
Hay	151,125	2,432.4	1.61	0	8,747.5	10,360	1,500	1,885
Unincorporated	128,900	1,940.4	1.51	0	0	9,702	0	0
Deniliquin	140,050	1050.76	0.75	0	1,135.53	5,000	1,905.30	263.05
Walgett	332,350	2400.00	0.72	0	0	12,000	0	0
Dareton	196,775	1,423.25	0.72	0	18,175	0	30,939	4,005
Wamba Wamba	70,675	406.1	0.57	0	9,084.21	0	15,242.42	2,104.42
Wagga Wagga	22,675	80	0.35	250	105	0	400	0
Brewarrina	390,150	1,200	0.31	0	0	6,000	0	0
Condobolin	40,525	82.4	0.20	0	0	0	0	412
Nulla Nulla	191,425	0	0	0	0	0	0	0
Wilcannia	323,550	0	0	0	0	0	0	0
Menindee	246,750	0	0	0	0	0	0	0
Lightning Ridge	227,975	0	0	0	0	0	0	0
Ivanhoe	211,800	0	0	0	0	0	0	0
Murrawari	188,450	0	0	0	0	0	0	0
Wanaaring	163,425	0	0	0	0	0	0	0
Weilmoringle	136,650	0	0	0	0	0	0	0
Winbar	126,750	0	0	0	0	0	0	0
Nyngan	106,450	0	0	0	0	0	0	0
Goodooga	92,025	0	0	0	0	0	0	0
Wee Waa	51,950	0	0	0	0	0	0	0
Coonamble	50,050	0	0	0	0	0	0	0
Warren Macquarie	33,925	0	0	0	0	0	0	0
Toomelah	24,350	0	0	0	0	0	0	0
Murrin Bridge	23,825	0	0	0	0	0	0	0
West Wyalong	19,975	0	0	0	0	0	0	0
Broken Hill	14,500	0	0	0	0	0	0	0
Peak Hill	11,275	0	0	0	0	0	0	0
Walhallow	9,250	0	0	0	0	0	0	0
Narrabri	6,800	0	0	0	0	0	0	0
Cobar	6,675	0	0	0	0	0	0	0
Pilliga	5,950	0	0	0	0	0	0	0
Gilgandra	4,475	0	0	0	0	0	0	0
Brungle–Tumut	3,750	0	0	0	0	0	0	0
Tamworth	3,625	0	0	0	0	0	0	0
Moombahlene	3,075	0	0	0	0	0	0	0



**Reference**

Chen Y, Colloff MJ, Lukasiewicz A, Pittock J (2021) A trickle, not a flood: environmental watering in the Murray–Darling Basin, Australia. *Marine and Freshwater Research* 72, 601–619. doi:[10.1071/MF20172](https://doi.org/10.1071/MF20172)