

#### Introduction

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The wetlands included in this third edition of A Directory of Important Wetlands in Australia provide a biogeographically based Statewide sample of wetlands which meet the criteria for inclusion. The listings encompass the full range of diversity in natural wetland types occurring within Queensland (Qld) (Blackman et al. 1999). An additional 12 wetlands in the Mulga Lands bioregion and four sites on land owned or managed by the Commonwealth are included, bringing the current Qld listing to a total of 181 wetlands. Of these, 178 are terrestrial sites covering about 8.5 million ha, and three are eastern seaboard marine sites covering about 34.2 million hectares. The location of each of the sites is illustrated in Figure 6.

Wetland information contained in the Directory has been derived from Department of Environment and Heritage field surveys of wetlands in the Gulf Plains, western Cape York Peninsula, north-east and south-western Queensland as part of the Queensland Wetland Inventory Program; the Natural Resource Analysis Program of the Cape York Peninsula Land Use Strategy; published and unpublished information on wetlands; field data and descriptions solicited from others; and interpretation of satellite image data and aerial photography, supported by existing natural resource mapping (geology, soil, vegetation and land systems). The wetlands listed have been mapped as digital coverages in a geographic information system (GIS).

### The Queensland Environment

Nineteen bioregions are currently recognised for Queensland (Thackway and Cresswell 1995). Thirteen of these fall entirely or predominantly within the State, seven of these have coastal sections bordering tropical or subtropical marine environments.

Queensland has an area of approximately 1.7 million km $^2$ , with an additional 5,780 km $^2$  comprising 1,165 offshore islands. It has a total coastline of 5,700 km. Approximately 55% of the State and 4,600 km of shoreline lie north of the Tropic of Capricorn. The Great Barrier Reef extends along the northern and central sections of the eastern seaboard between latitudes approximately 10 $^{\circ}$  41 $^{\circ}$  S and 24 $^{\circ}$  30 $^{\circ}$  S.

Queensland falls within three broad climatic zones (Anon. 1989). North Queensland, above the Tropic of Capricorn, has a tropical climate characterised by a generally hot, humid summer with strongly seasonal rainfall, and a mild to warm, dry winter. Below the Tropic

of Capricorn, the south-eastern half of the State is subtropical with a similarly hot, humid summer and seasonal rainfall, but with some significant rainfall occurring during the mild winter. The remaining south-western portion of the State experiences an arid subtropical climate where summers can be extremely hot and dry, with variable rainfall, and winters are mild to warm and dry, with irregular light rain.

Accounts of Qld's wetlands (Stanton 1975, Arthington and Hegerl 1988, Blackman et al. 1993, Blackman et al. 1996, Blackman et al. 1999) have increasingly confirmed their outstanding biological richness, diversity, geographical extent, and importance as habitat for a similarly rich and diverse biota. Only two of the 40 classes of wetland types used in the Directory, class B3—Permanent inland deltas, and class B16—Alpine and tundra wetlands, do not occur in Qld. The present compilation of sites includes wetlands with representatives of 37 of the remaining 38 wetland types.

# **Queensland Wetland Policy and Programs**

The Environmental Protection Agency (EPA—formerly Department of Environment and Heritage) is the lead agency for wetlands in Qld. The EPA is implementing the Queensland Government's Strategy for the Conservation and Management of Queensland Wetlands (Environmental Protection Agency 1999) in cooperation with other relevant State agencies, local and Commonwealth governments, landholders, and the community. The Strategy provides the enabling framework through which all government departments exercising control in wetland areas can work towards managing the State's wetlands in accordance with the goal, core objectives and guiding principles set out in the National Strategy for Ecologically Sustainable Development (Commonwealth of Australia 1992). Wetlands, lakes and springs that are listed in A Directory of Important Wetlands in Australia and subsequent updates are designated as significant under both the State Policy for Vegetation Management on Freehold Land (Department of Natural Resources, 2000a), and the Broadscale Tree Clearing Policy for State Lands (Department of Natural Resources, 2000b).

A number of wetland programs aimed at supporting the above strategy are in progress. These include development of management plans for Ramsar sites, and ongoing Statewide assessment of wetlands (currently focussing on South East Queensland, Brigalow Belt North, Desert Uplands and Einasleigh Uplands) through the Queensland Wetland Inventory Program. Bioregions and their component provinces provide the framework for the program (Stanton and Morgan 1977; Blackman, Gardiner and Morgan, 1996; Sattler and Williams 1999), as well as the regionalisation for systematic classification and assessment of Queensland's wetlands and deepwater habitats (Blackman, Spain and Whiteley 1992).

# Range of wetlands incorporated

With the exception of several bioregions, wetlands listed in the first edition of the Directory were mostly chosen arbitrarily, based on available information. In the second edition, selection of new sites was much less arbitrary for the Cape York Peninsula, Channel Country, Gulf Plains and Wet Tropics bioregions, and for coastal areas of the two Brigalow Belt bioregions, because of new broadly based information becoming available for these. With regard to broad representation across the State, the number of bioregions with ten or more representative wetlands was increased from three to eight.

Taken overall, the criteria for importance and the wetland types (see Chapter 2) presented for each wetland are a minimum set. Absence of a criterion or a wetland type for a particular wetland does not imply that either are absent; each may simply have been omitted due to lack of information. The frequency in which criteria for inclusion in the Directory were recorded is shown in the summary Table 8.4. Nineteen sites, listed in Table 8.1 below, met all six criteria for importance.

Table 8.1 Old Sites meeting all six Criteria for inclusion

Site Name	Bioregion	No. of wetland types	Area (ha)
Burdekin—Townsville Coastal Aggregation	BBN	22	149,198
Burdekin Delta Aggregation	BBN	18	31,724
Moreton Bay	SEQ	17	300,177
Noosa River Wetlands	SEQ	15	9,945
Fraser Island	SEQ	14	163,294
Bowling Green Bay	BBN	14	32,541
Edmund Kennedy Wetlands	WT	14	11,084
Tully River—Murray River Floodplains	WT	12	39,154
Northern Holroyd Plain Aggregation	CYP	10	1,114,325
Southeast Karumba Plain Aggregation	GUP	10	336,234
Northeast Karumba Aggregation	CYP	10	182,149
Great Basalt Wall	EIU	10	100,254
Missionary Bay	WT	10	11,230
Great Sandy Strait	SEQ	9	93,160
Southern Gulf Aggregation	GUP	8	553,382
Great Barrier Reef Marine Park	GBR	8	3,250,000
Hinchinbrook Channel	WT	7	30,682
Lake Numalla Aggregation	ML	4	10,724
Lake Wyara	ML	4	6,021

The incidence of wetland types present at sites are: coastal wetland types (64 sites), inland wetland types (140 sites), and human-made wetland types (23 sites). Twenty seven sites each had 10 or more wetland types: South East Queensland (4 sites), Cape York Peninsula (5 sites), Wet Tropics (6 sites), Gulf Plains (4 sites), Brigalow Belt North (3 sites), Central Mackay Coast (5 sites), and Einasleigh Uplands (1 site). The largest number of wetland types recorded for any site was 26 at Herbert River Floodplain in the Wet Tropics bioregion.

The most commonly recorded wetland type was B2—Seasonal and irregular rivers and streams, appearing in 40% of the sites. Six other wetland types (A7, A9, B4, B6, B10, B14) appeared in more than 30% of sites. A further ten wetland types (A1, A2, A5, A6, A8, B1, B4, B5, B9, B13) appeared in more than 20% of sites; four wetland types appeared in more than 10% of sites (A4, A10, A11, A12); and seven wetland types (A3, B8, B12, B15, B17, C1, C2) appeared in more than 5% of sites. Finally, seven wetland types (B7, B11, B19, C3, C6, C7, C8) appeared in less than 5% of sites, and three wetland types (B18, C4, C5) were recorded at only one site each. Type C9—Canals, is the only class of human-made wetlands not included in any site.

In general, there is a positive relationship between the number of wetland types present and the area of sites, however, the number of criteria recorded is not necessarily related to either numbers of wetland types or the area of a site. Very large sites, eg Great Barrier Reef Marine Park and Northern Holroyd Plain, are not necessarily the most diverse; the most diverse sites, eg Herbert River Floodplain, are not necessarily the largest; and sites with high importance, eg Lake Numalla and Lake Wyara, may comprise few wetland types and be relatively small.

#### Caveats on Data

The listings added in the second edition, and subsequently, appreciably increased bioregional representation throughout the State. Nonetheless, the list is far from exhaustive and large areas are under-represented. Because of this it is not appropriate to rank the present sites in terms of their overall conservation importance until there has been a more even coverage of all areas of the State. Notwithstanding this, it is likely that the wetlands listed that meet all six criteria are amongst the most significant in Qld (refer to Table 8.1). It is notable that these include four of the State's Ramsar sites: Bowling Green Bay, Moreton Bay, Currawinya Lakes (Lake Numalla and Lake Wyara wetlands) and Great Sandy Strait (refer to Figure 6).

# Remaining Gaps

The current listings partially define the geographical distribution of both the major areas of wetland development across the State, as well as the strengths and weaknesses of current information on which to make assessments of wetlands. For example, the better representation of Channel Country, Cape York Peninsula, Gulf Plains, Mulga Lands and Wet Tropics bioregions reflects that these bioregions contain the most extensive areas of wetland development in Qld and are amongst the best known. Other bioregions are poorly represented because they are little known, particularly the Mitchell Grass Downs. The Simpson-Strzelecki Dunefields, Nandewar, New England Tableland, and New South Wales North Coast bioregions are not represented at all. With the exception of the Simpson-Strzelecki Dunefields, the latter bioregions have very small Qld extents. Although representation has been increased for the Einasleigh Uplands, Desert Uplands, and the two Brigalow Belt bioregions, these are still under-represented, and are known to contain a range of very significant wetlands (Blackman unpublished).

On a Statewide basis, coastal freshwater, estuarine and intertidal marine wetlands are now reasonably well represented, but other marine wetlands, notably coral reefs, are poorly represented as individual sites. Of the 178 terrestrial wetlands, 121 (totalling almost 6.6 million hectares) lie north of the Tropic of Capricorn; while 57 (totalling approximately 1.9 million hectares) lie south of this latitude. While this partially reflects real differences in the natural occurrence of wetlands, the southern areas are none-the-less clearly underrepresented.

The present work underscores the relative paucity of regional scale primary data derived from systematic field surveys, as well as the lack of overall comparative information throughout the State. Completion of the field surveys necessary to provide such data is a priority but also a considerable undertaking because of the huge areas involved. In this respect bioregions have proved to be a suitable framework for inventory of wetlands in Qld's

terrestrial environments, and this should now be extended to corresponding marine environments.

The major priority is regional scale identification and delineation of at least all major wetland aggregations to allow statewide assessment at the resolution of the present Directory. At the same time this will identify areas which require additional systematic field surveys to complete this assessment.

# Acknowledgments

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# Summary analysis

The Directory describes 181 nationally important wetlands in Queensland. The distribution of nationally important wetlands in Qld (including Ramsar wetlands) is shown in Figure 6. A list compiling data on bioregion, site area, wetland type and criteria for inclusion for each wetland is provided at the end of this chapter.

Generally speaking, the nationally important wetlands are well spread across the 19 bioregions that occur in Qld (refer to Table 8.2). Eleven bioregions are shared with New South Wales and the Northern Territory. The four bioregions that do not have nationally important wetlands listed are all shared and have minor extents in Qld, as are the bioregions where there are only one or two wetlands listed. Not surprisingly the Wet Tropics bioregion contains the most sites (n=29). An overview of the IBRA regionalisation and a map of IBRA regions is included in Appendix 2.

Table 8.2 Number and area of nationally important wetlands in Qld by IBRA region

IBRA Region	IBRA code	No. of Sites	Area (ha)
Brigalow Belt North	BBN	10	475,697
Brigalow Belt South	BBS	13	241,369
Channel Country	CHC	20	898,310
Central Mackay Coast	CMC	14	703,220
Cape York Peninsula	CYP	23	2,429,936
Desert Uplands	DEU	5	50,560
Darling Riverine Plains	DRP	1	24,000
Einasleigh Uplands	EIU	13	132,170
Gulf Fall and Uplands	GFU	1	1,133
Gulf Plains	GUP	15	2,221,612
Mitchell Grass Downs	MGD	2	69,795
Mount Isa Inlier	MII	4	329,204
Mulga Lands	ML	15	116,506
Nandewar	NAN	0	0
New England Tableland	NET	0	0
NSW North Coast	NNC	0	0
South Eastern Queensland	SEQ	13	667,130
Simpson-Strzelecki Dunefields	SSD	0	0
Wet Tropics	WT	29	163,079
Great Barrier Reef		3	34,251,468
Total	19	181	42,775,189

Thirty-seven of the 40 wetland types are exhibited by the nationally important wetlands in Qld, giving it the best representation of wetland types in any jurisdiction (refer to Table 8.3). Most numerous are B2—Seasonal and irregular rivers and streams (n=72), followed by B10—Seasonal/intermittent freshwater ponds (n=65) and A9—Intertidal forested wetlands (n=64). Queensland contains the only example of wetland type B18—Geothermal wetlands in Australia: Innot Hot Springs. The Wetland classification system and Criteria for inclusion in the Directory are explained in Chapter 2.

Table 8.3 Number of Old sites in each Wetland type

#### A-Marine and Coastal Zone wetlands

	Aı	A2	A3	A4.	A <sub>5</sub>	A6	A <sub>7</sub>	A8	A9	A10	A11	A12
Total	43	42	11	22	52	51	56	51	64	28	35	23

#### B-Inland wetlands

	Bı	B2	В3	B4.	<b>B</b> 5	B6	B <sub>7</sub>	B8	В9	B10	B11	B12	B13	B14	B15	B16	B17	B18	B19
Total	49	72	0	56	40	54	5	13	45	65	2	9	48	62	10	0	13	1	2

#### C-Human-made wetlands

	Cı	C2	C3	C4	C <sub>5</sub>	C6	$\mathbf{c}_7$	C8	C9
Total	15	9	2,	1	1	3	3	3	0

With the exception of RAAF Townsville, each wetland is listed because it is a good example of a wetland type occurring within its biogeographic region (Criterion 1, n=180). The next most important criterion for inclusion is Criterion 3—wetlands that provide a refuge or habitat for animal taxa at a vulnerable stage in their life cycles (n=135).

Table 8.4 Number of Old sites included under each Criterion

	1	2	3	4	5	6
Total	180	117	135	48	85	43

# List of nationally important wetlands in Queensland

Wetland name	Old Reference No.	New Reference No.	IBRA Region	Area (ha)	Wetland type(s)	Criteria for inclusion
Abbot Point—Caley Valley	BBNoo1QL	QLDoo1	BBN	5154	A1, A5, A6, A8, A9, A10, A11, C1	1, 2, 3, 4, 5
Bowling Green Bay	BBN002QL	QLD002	BBN	32541	A2, A4, A5, A6, A7, A8, A9, A10, A11, A12, B6, B10, C1, C2	1, 2, 3, 4, 5, 6
Broad Sound	BBN003QL	QLD003	BBN	212042	A1, A2, A5, A6, A7, A8, A9, A10, A11	1, 2, 3, 5
Burdekin Delta Aggregation	BBN004QL	QLD004	BBN	31723	A <sub>5</sub> , A <sub>6</sub> , A <sub>7</sub> , A <sub>8</sub> , A <sub>9</sub> , A <sub>10</sub> , A <sub>11</sub> , A <sub>12</sub> , B <sub>1</sub> , B <sub>4</sub> , B <sub>5</sub> , B <sub>6</sub> , B <sub>9</sub> , B <sub>10</sub> , B <sub>14</sub> , C <sub>1</sub> , C <sub>2</sub> , C <sub>3</sub>	1, 2, 3, 4, 5, 6
Burdekin—Townsville Coastal Aggregation	BBN005QL	QLD005	BBN	149197	A1, A2, A4, A5, A6, A7, A8, A9, A10, A11, A12, B1, B2, B4, B5, B6, B9, B10, B14, C1, C2, C3	1, 2, 3, 4, 5, 6
Lake Dalrymple	BBN006QL	QLD006	BBN	30570	Cı	1, 2, 3
Lake Elphinstone	BBN007QL	QLD007	BBN	300	B6, B10, B14	1, 2, 3
Ross River Reservoir	BBN008QL	QLD008	BBN	2781	Cı	1, 2, 3, 4
Southern Upstart Bay	BBN009QL	QLD009	BBN	11089	A2, A5, A6, A7, A8, A9, A10, A11, C1	1, 2, 3, 5
Boggomoss Springs	BBS001QL	QLDo10	BBS	400	В17	1, 3, 4
Fairbairn Dam	BBS002QL	QLD011	BBS	15397	C <sub>1</sub>	1, 3
Fitzroy River Delta	BBS003QL	QLD012	BBS	70254	A1, A2, A6, A <sub>7</sub> , A8, A9, A11, C <sub>4</sub>	1, 2, 3, 6
Fitzroy River Floodplain	BBS004QL	QLD013	BBN	19500	B <sub>4</sub> , B6, B9, B10, B14	1, 2, 3
Hedlow Wetlands	BBS005QL	QLD014	BBN	11101	B <sub>2</sub> , B <sub>4</sub> , B <sub>5</sub> , B <sub>6</sub> , B <sub>9</sub> , B <sub>10</sub> , B <sub>14</sub>	1, 3, 4
Lake Broadwater	BBS006QL	QLD015	BBS	215	B2, B5, B10, B14	1, 2, 3, 5
Lake Nuga Nuga	BBS008QL	QLD016	BBS	2069	B2, B6	1, 3
Northeast Curtis Island	BBS009QL	QLD017	BBN	9536	A1, A3, A4, A5, A6, A7, A8, A9, A11, A12	1, 2, 3, 5
Palm Tree and Robinson Creeks	BBS010QL	QLD018	BBS	50274	B2, B10	1, 5
Port Curtis	BBS011QL	QLD019	BBS	31264	A1, A2, A3, A4, A5, A6, A7, A8, A9	1, 2, 3, 4, 5, 6
The Gums Lagoon	BBS012QL	QLD020	BBS	343	B10, B14	1, 3
The Narrows	BBS013QL	QLD021	BBN	20906	A1, A2, A6, A7, A8, A9, A11	1, 2, 3, 6

Wetland name	Old Reference No.	New Reference No.	IBRA Region	Area (ha)	Wetland type(s)	Criteria for inclusion
Yeppoon—Keppel Sands Tidal Wetlands	BBS014QL	QLD022	BBN	10110	A1, A4, A5, A6, A7, A8, A9, A11, A12	1, 3, 5
Birdsville—Durrie Waterholes Aggregation	CHCoo1QL	QLD023	CHC	32656	B2, B4, B5, B6, B9, B13	1, 2, 3
Bulloo Lake	CHC002QL	QLDo24	CHC	83227	B2, B4, B6, B10, B13	1, 2, 3
Cooper Creek Overflow Swamps—Windorah	CHCoo5QL	QLD025	CHC	124853	B <sub>2</sub> , B <sub>4</sub> , B <sub>1</sub> 3	1
Cooper Creek Swamps —Nappa Merrie	CHCoo6QL	QLD026	CHC	106311	B2, B4, B9, B10, B13, B14	1, 2, 3
Cooper Creek—Wilson River Junction	CHC007QL	QLD027	CHC	63925	B2, B4, B9, B10, B13, B14	1, 2
Diamantina Lakes Area	CHC008QL	QLD028	CHC	393	$B_2, B_4, B_5, B_13$	1, 2, 3
Diamantina Overflow Swamp —Durrie Station	CHC009QL	QLD029	CHC	29196	B <sub>2</sub> , B <sub>4</sub> , B <sub>1</sub> 3	1, 2
Georgina River— King Creek Floodout	CHCo11QL	QLDo3o	CHC	138347	B <sub>2</sub> , B <sub>4</sub> , B <sub>9</sub> , B <sub>1</sub> 3	1, 2
Lake Bullawarra	CHC012QL	QLDo31	CHC	1287	B <sub>2</sub> , B <sub>4</sub> , B <sub>6</sub> , B <sub>1</sub> 3	1, 3
Lake Constance	CHCo13QL	QLDo32	CHC	1841	B <sub>2</sub> , B <sub>4</sub> , B <sub>6</sub> , B <sub>1</sub> 3	1, 2
Lake Cuddapan	CHCo14QL	QLDo33	CHC	1704	В6	1
Lake Mipia Area	CHC015QL	QLDo34	CHC	69691	$B_2, B_4, B6, B_9, B_13$	1, 2, 3
Lake Phillipi	CHCo16QL	QLDo35	CHC	16086	В6	1
Lake Torquinie Area	CHC017QL	QLDo36	CHC	15242	B2, B4, B8, B10	1, 2, 4
Lake Yamma Yamma	CHCo18QL	QLDo37	CHC	86548	B8, B13	1
Moonda Lake—Shallow Lake Aggregation	CHC019QL	QLDo38	CHC	14738	B6, B13	1
Mulligan River—Wheeler Creek Junction	CHC020QL	QLDo39	CHC	17014	B <sub>2</sub> , B <sub>4</sub> , B <sub>8</sub> , B <sub>9</sub> , B <sub>1</sub> 3	1, 2, 3
Muncoonie Lakes Area	CHC021QL	QLD040	CHC	88767	B2, B4, B8, B9, B10, B13	1,3
Nooyeah Downs Swamps Aggregation	CHC022QL	QLD041	CHC	6241	B <sub>2</sub> , B <sub>4</sub> , B <sub>1</sub> 3	1
Toko Gorge and Waterhole	CHCo25QL	QLD042	CHC	243	B <sub>2</sub> , B <sub>4</sub> , B <sub>9</sub> , B <sub>14</sub> , B <sub>17</sub>	1, 3, 6
Corio Bay Wetlands <sup>C</sup>	CMC001QL	QLD043	CMC	6909	A1, A2, A4, A5, A6, A7, A8, A9, A10, A11, B1, B2, B10, B14	1, 2, 3, 5
${\bf Dismal\ Swamp-Water\ Park\ Creek^C}$	CMC002QL	$QLDo_{44}$	CMC	1000	$A_{11},A_{12},B_{5},B_{15}$	1, 2, 3, 5
Edgecumbe Bay	CMC003QL	QLDo <sub>45</sub>	CMC	4593	A1, A2, A5, A7, A8, A9, A10, A11	1, 3, 5
Eungella Dam	CMCoo <sub>4</sub> QL	QLD046	CMC	797	$B_1, B_4, C_1$	1, 2, 3

Wetland name	Old Reference No.	New Reference No.	IBRA Region	Area (ha)	Wetland type(s)	Criteria for inclusion
Four Mile Beach	CMC005QL	QLDo47	CMC	7130	A1, A2, A5, A6, A7, A8, A10	1,3
Island Head Creek— Port Clinton Area	CMCoo6QL	QLD048	CMC	27042	A1, A2, A3, A4, A5, A6, A7, A8, A9, A11, A12	1, 2, 3, 5
Iwasaki Wetlands	CMC007QL	QLD049	CMC	646	$A_7, A_8, A_9, A_{11}, A_{12}$	1, 2, 3
Proserpine—Goorganga Plain	CMC008QL	QLD050	CMC	16851	A1, A5, A6, A7, A8, A9, A10, A11, B1, B4, B6, B10, B14	1, 2, 3, 4, 5
Sand Bay	CMC009QL	QLD051	CMC	10182	A1, A4, A5, A6, A7, A8, A9	1, 2, 3, 4, 5
Sandringham Bay— Bakers Creek Aggregation	CMC010QL	QLD052	CMC	7372	A1, A4, A5, A6, A7, A8, A9	1, 2, 3, 4, 5
Sarina Inlet—Ince Bay Aggregation	CMC011QL	QLD053	CMC	27945	A1, A2, A3, A4, A5, A6, A7, A9, A11, C1	1, 2, 3, 4, 5
Shoalwater Bay <sup>C</sup>	CMC012QL	QLDo54	CMC	122672	A1, A2, A4, A5, A6, A7, A8, A9, A10	1, 2, 3
St. Helens Bay Area	CMC013QL	QLD055	CMC	16081	A1, A2, A3, A4, A5, A6, A7, A9	1, 2, 3, 4, 5
Archer Bay Aggregation	CYP001QL	QLDo <sub>5</sub> 6	CYP	29911	A1, A2, A5, A6, A7, A8, A9, A10, A11, A12, B10, B13, B14	1, 2, 3, 5, 6
Archer River Aggregation	CYP002QL	QLD057	CYP	149761	B1, B2, B4, B5, B6, B10, B14	1, 2, 3, 5, 6
Bull Lake	CYP003QL	QLD058	CYP	26	B <sub>5</sub> , B <sub>14</sub>	1, 2, 3, 6
Cape Flattery Dune Lakes	CYP004QL	QLD059	CYP	44034	B <sub>5</sub> , B <sub>6</sub> , B <sub>17</sub>	1, 2, 3
Cape Grenville Area	CYP005QL	QLD060	CYP	7304	A1, A2, A5, A6, A9, B1, B2, B4, B5, B6, B7, B8, B10, B13, B14	1
Cape Melville—Bathurst Bay	CYP006QL	QLD061	CYP	5480	A8, A9, B2, B9, B10, B12	1, 5
Harmer River— Shelburne Bay Aggregation	CYP007QL	QLD062	CYP	31751	A9, B2, B5, B6, B9, B10	1, 3, 5
Jardine River Wetlands Aggregation	CYPoo8QL	QLDo63	СҮР	81740	A2, A5, A6, A7, A8, A9, A10, A11, B1, B2, B4, B5, B6, B9, B10, B14	1, 2, 6
Lloyd Bay	CYP009QL	QLDo64	CYP	15682	A1, A2, A5, A6, A7, A8, A9	1, 3, 5, 6
Marina Plains— Lakefield Aggregation	CYP010QL	QLD065	CYP	392333	B1, B2, B4, B6, B9, B10, B12, B13, B14	1, 2, 3, 5

Wetland name	Old Reference No.	New Reference No.	IBRA Region	Area (ha)	Wetland type(s)	Criteria for inclusion
Newcastle Bay—Escape River Estuarine Complex	CYPo11QL	QLD066	CYP	42307	A1, A2, A5, A6, A7, A8, A9, A10, B11, B12	1, 2, 3, 6
Northeast Karumba Plain Aggregation	CYP012QL	QLD067	CYP	182418	A1, A2, A5, A6, A7, A8, A9, A10, A11, A12	1, 2, 3, 4, 5, 6
Northern Holroyd Plain Aggregation	CYP013QL	QLD068	CYP	1114324	B1, B2, B4, B5, B6, B9, B10, B13, B14, C2	1, 2, 3, 4, 5, 6
Olive River	CYP014QL	QLD069	CYP	17609	A8, A9, B1, B2, B4, B9, B10, B13, B14	1, 2, 3, 5
Orford Bay—Sharp Point Dunefield Aggregation	CYP015QL	QLD070	CYP	17239	B <sub>5</sub> , B <sub>1</sub> 0, B <sub>1</sub> 3, B <sub>1</sub> 4	1, 5
Port Musgrave Aggregation	CYP016QL	QLD071	CYP	52685	A1, A2, A6, A7, A8, A9, A10, A11, A12	1, 3, 5
Princess Charlotte Bay Marine Area	CYP017QL	QLD072	CYP	87835	$A_{2}, A_{7}, A_{8}, A_{9}$	1, 2, 3, 5
Silver Plains— Nesbit River Aggregation	CYP018QL	QLD <sub>07</sub> 3	CYP	44834	A2, A7, A8, A9, A10, B2, B13, B14	1, 3, 5
Skardon River— Cotterell River Aggregation	CYP019QL	QLD074	CYP	63194	A <sub>7</sub> , A <sub>8</sub> , A <sub>9</sub> , B <sub>4</sub> , B <sub>9</sub> , B <sub>1</sub> 3, B <sub>1</sub> 4	1, 2, 3, 5
Somerset Dunefield Aggregation	CYPo20QL	$QLD \circ 75$	CYP	8095	B5, B10, B13, B14	1, 5
Temple Bay	CYPo21QL	QLD076	CYP	4424	$A_2,A_7,A_9,B_2$	1, 2, 3, 5
The Jack Lakes Aggregation	CYP022QL	QLD077	CYP	35054	B2, B5, B13, B14	1
Violet Vale	CYP023QL	QLD078	CYP	1896	B2, B5, B6, B9, B10	1
Aramac Springs	DEU001QL	QLD079	DEU	400	В17	1, 3
Cauckingburra Swamp	DEU002QL	QLD080	DEU	782	B2, B6, B10	1, 2, 3, 4, 5
Doongmabulla Springs	DEU003QL	QLD081	DEU	399	B17	1, 3
Lake Buchanan	DEU004QL	QLD082	DEU	23201	B8, B12	1, 2, 3, 4, 5
Lake Galilee	DEU005QL	QLD083	DEU	25778	B8, B10	1, 2, 3, 4, 5
Balonne River Floodplain	DRPoo1QL	QLDo84	DRP	24000	B1, B2, B4, B5, B10, B14	1, 2, 3
Blencoe Falls—Blencoe Creek	EIU001QL	QLDo85	EIU	87	B1, B9	1, 3
Great Basalt Wall	EIU002QL	QLDo86	EIU	100253	B1, B2, B4, B5, B6, B9, B10, B14, B17, C2	1, 2, 3, 4, 5, 6
Herbert River Gorge	EIU003QL	QLD087	EIU	21536	B1, B2	1, 2
Innot Hot Springs	EIU004QL	QLD088	EIU	78	B1, B18	1
Lake Lucy Wetlands	EIU005QL	QLDo89	EIU	1078	B2, B4, B6, B10, B14	1, 3
Laura Sandstone	EIU006QL	QLD090	EIU	1090	$B_5, B_6, B_{13}, B_{17}$	1
Minnamoolka Area	EIU007QL	QLD091	EIU	589	B2, B4, B6, B10	1, 2, 3
Poison Lake	EIU008QL	QLD092	EIU	7 <sup>8</sup> 5	В6	1
Spring Tower Complex	EIU009QL	QLD093	EIU	75	B2, B17, B19	1, 3
Undara Lava Tubes	EIU010QL	QLD094	EIU	1254	B19	1, 2, 3, 5, 6

Wetland name	Old Reference No.	New Reference No.	IBRA Region	Area (ha)	Wetland type(s)	Criteria for inclusion
Valley of Lagoons	EIU011QL	QLD095	EIU	3645	B1, B2, B6, B10, B14, B17	1, 2, 3, 4, 6
Wairuna Lake	EIU012QL	QLD096	EIU	152	B <sub>2</sub> , B <sub>4</sub> , B <sub>6</sub> , B <sub>10</sub> , C <sub>2</sub>	1, 3
Walters Plains Lake	EIU013QL	QLD097	EIU	1548	В6	1
Cairncross Reef Complex	GBR001QL	QLD098		238	A1, A3, A4, A5, A7, A9	1, 3, 4, 5
Clack Reef Complex	GBR002QL	QLD099		1230	A1, A2, A3, A4, A5, A7, A9, B13	1, 3, 5, 6
Great Barrier Reef Marine Park	GBR003QL	QLD100		34250000	A <sub>1</sub> , A <sub>2</sub> , A <sub>3</sub> , A <sub>4</sub> , A <sub>5</sub> , A <sub>6</sub> , A <sub>7</sub> , A <sub>9</sub>	1, 2, 3, 4, 5, 6
Lawn Hill Gorge	GFU001QL	QLD101	GFU	1133	Bı	1, 2, 3, 6
Bluebush Swamp	GUP001QL	QLD102	GUP	879	B10, B13	1, 2, 3
Buffalo Lake Aggregation	GUP002QL	QLD103	GUP	1909	В8	1, 2, 3
Dorunda Lakes Area	GUP003QL	QLD104	GUP	6801	B1, B2, B4, B6, B9, B10, B14	1, 2, 3
Forsyth Island Wetlands	GUP004QL	QLD105	GUP	6388	A1, A2, A3, A5, A7, A9	1, 3, 5, 6
Lignum Swamp	GUP005QL	QLD106	GUP	282	B2, B9, B10, B13	1, 2, 3
Macaroni Swamp	GUP006QL	QLD107	GUP	258	В6	1, 2, 3
Marless Lagoon Aggregation	GUP007QL	QLD108	GUP	167009	B6, B9, B10, B14	1, 2, 3
Mitchell River Fan Aggregation	GUP008QL	QLD109	GUP	714886	B1, B2, B4, B5, B6, B9, B10, B13, B14, C1	1, 2, 3, 4, 6
Musselbrook Creek Aggregation	GUP009QL	QLD110	GUP	45157	B <sub>2</sub> , B <sub>4</sub> , B <sub>1</sub> 0, B <sub>1</sub> 3, B <sub>1</sub> 4	1, 2, 3
Nicholson Delta Aggregation	GUP010QL	QLD111	GUP	63640	A6, A <sub>7</sub> , A8, A <sub>9</sub> , A <sub>10</sub> , A <sub>11</sub> , A <sub>12</sub> , B <sub>1</sub> , B <sub>2</sub> , B <sub>4</sub> , B <sub>5</sub> , B6, B <sub>9</sub> , B <sub>10</sub> , B <sub>14</sub> , C <sub>2</sub>	1, 2, 3
Smithburne— Gilbert Fan Aggregation	GUP011QL	QLD112	GUP	250320	B1, B2, B4, B5, B6, B10, B13, B14	1, 2, 3, 4
Southeast Karumba Plain Aggregation	GUP012QL	QLD113	GUP	336233	A1, A5, A6, A7, A8, A9, A10, A11, A12, C1	1, 2, 3, 4, 5, 6
Southern Gulf Aggregation	GUP013QL	QLD114.	GUP	545353	A1, A2, A5, A6, A7, A8, A9, A10	1, 2, 3, 4, 5, 6
Stranded Fish Lake	GUP014QL	QLD115	GUP	67	A10	1, 2
Wentworth Aggregation	GUP015QL	QLD116	GUP	82430	A <sub>5</sub> , A <sub>6</sub> , A <sub>7</sub> , A <sub>8</sub> , A <sub>9</sub> , A <sub>10</sub> , A <sub>11</sub> , B <sub>1</sub> , B <sub>2</sub> , B <sub>4</sub> , B <sub>5</sub> , B <sub>9</sub> , B <sub>10</sub> , B <sub>13</sub> , B <sub>14</sub>	1, 2, 3, 4
Austral Limestone Aggregation	MGDoo1QL	QLD117	MGD	69395	B <sub>2</sub> , B <sub>6</sub>	1
Elizabeth Springs	MGD003QL	QLD118	MGD	400	В17	1, 3
Gregory River	MII001QL	QLD119	MII	26639	B1	1, 2, 3, 4
Lake Julius	MII002QL	QLD120	MII	1935	C1	1, 2, 3
Lake Moondarra	MII003QL	QLD121	MII	1742	С1	1, 2, 3

Wetland name	Old Reference No.	New Reference No.	IBRA Region	Area (ha)	Wetland type(s)	Criteria for inclusion
Thorntonia Aggregation	MII004QL	QLD122	MII	298888	B1, B2	1, 2, 3, 6
Lake Numalla Aggregation	ML004QL ML002QL	QLD122 QLD123	ML	10724	B <sub>2</sub> , B <sub>5</sub> , B <sub>6</sub> , B <sub>8</sub>	1, 2, 3, 4, 5, 6
Lake Wyara	ML002QL ML003QL	QLD123 QLD124	ML	6020	B <sub>2</sub> , B <sub>7</sub> , B <sub>8</sub> , B <sub>12</sub>	1, 2, 3, 4, 5, 6
Lakes Bindegolly and Toomaroo	ML003QL ML004QL	QLD124 QLD125	ML	9677	B <sub>4</sub> , B <sub>5</sub> , B <sub>6</sub> , B <sub>12</sub>	1, 2, 3, 4, 5, 6
Burrum Coast	SEQ001QL	QLD126	SEQ	15128	A <sub>1</sub> , A <sub>2</sub> , A <sub>5</sub> , A <sub>6</sub> , A <sub>7</sub> , A <sub>8</sub> , A <sub>9</sub> , A <sub>11</sub> , A <sub>12</sub>	1, 2, 3
Bustard Bay Wetlands	SEQ002QL	QLD127	SEQ	21850	A <sub>1</sub> , A <sub>2</sub> , A <sub>3</sub> , A <sub>4</sub> , A <sub>5</sub> , A <sub>6</sub> , A <sub>7</sub> , A <sub>8</sub> , A <sub>9</sub> , A <sub>11</sub> , A <sub>12</sub>	1, 2, 3, 5, 6
Carbrook Wetlands Aggregation	SEQ003QL	QLD128	SEQ	329	B9, B13, B14	1, 2
Colosseum Inlet—Rodds Bay	SEQ004QL	QLD129	SEQ	24307	A <sub>1</sub> , A <sub>2</sub> , A <sub>4</sub> , A <sub>5</sub> , A <sub>6</sub> , A <sub>7</sub> , A <sub>8</sub> , A <sub>9</sub>	1, 2, 3, 4, 5
Conondale Range Aggregation	SEQ005QL	QLD130	SEQ	1983	Bı	1, 3, 4, 5
Fraser Island	SEQ006QL	QLD131	SEQ	163294	A4, A5, A6, A7, A8, A9, A11, B1, B5, B9, B13, B14, B15, B17	1, 2, 3, 4, 5, 6
Great Sandy Strait	SEQ007QL	QLD132	SEQ	93160	A1, A2, A5, A6, A7, A8, A9, A11, A12	1, 2, 3, 4, 5, 6
Lake Weyba	SEQ008QL	QLD133	SEQ	2860	A8, A10, A11, A12, B14, B15	1, 2, 3, 4, 5
Moreton Bay	SEQ009QL	QLD134	SEQ	300177	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, B1, B2, B4, B5, B7, B9	1, 2, 3, 4, 5, 6
Noosa River Wetlands	SEQ010QL	QLD135	SEQ	9945	A <sub>5</sub> , A <sub>6</sub> , A <sub>7</sub> , A <sub>8</sub> , A <sub>9</sub> , A <sub>11</sub> , A <sub>12</sub> , B <sub>1</sub> , B <sub>4</sub> , B <sub>5</sub> , B <sub>7</sub> , B <sub>9</sub> , B <sub>10</sub> , B <sub>14</sub> , B <sub>15</sub>	1, 2, 3, 4, 5, 6
Pumicestone Passage	SEQ011QL	QLD136	SEQ	9442	A1, A2, A5, A6, A7, A8, A9	1, 2, 4, 5
Alexandra Bay	WT001QL	QLD137	WT	841	$A_5, A_6, A_9, B_{14}$	1, 5
Alexandra Palm Forest	WT002QL	QLD138	WT	146	B1, B14	1, 2, 5
Bambaroo Coastal Aggregation	WT003QL	QLD139	WT	5360	A2, A5, A7, A9, A11, B1, B2	1, 3, 5
Birthday Creek	$WToo_4QL$	QLD140	WT	43	Bı	1
Bromfield Swamp	$WToo_5QL$	QLD141	WT	63	$B_5, B_{15}$	1, 3, 6
Cowley Area <sup>C</sup>	WT006QL	QLD142	WT	8344	A1, A2, A5, A6, A7, A9, A12, B1, B2, B9, B10, B14	1, 3, 5
Edmund Kennedy Wetlands	WT007QL	QLD <sub>14</sub> 3	WT	11083	A <sub>5</sub> , A <sub>6</sub> , A <sub>7</sub> , A <sub>8</sub> , A <sub>9</sub> , A <sub>10</sub> , A <sub>11</sub> , A <sub>12</sub> , B <sub>1</sub> , B <sub>2</sub> , B <sub>4</sub> , B <sub>9</sub> , B <sub>10</sub> , B <sub>14</sub>	1, 2, 3, 4, 5, 6

Wetland name	Old Reference No.	New Reference No.	IBRA Region	Area (ha)	Wetland type(s)	Criteria for inclusion
Ella Bay Swamp	WT008QL	QLD144	WT	1315	A <sub>5</sub> , A <sub>7</sub> , A <sub>8</sub> , A <sub>9</sub> , B <sub>1</sub> , B <sub>2</sub> , B <sub>14</sub>	1, 3, 5
Eubenangee—Alice River	WT009QL	QLD145	WT	1991	B1, B2, B4, B9, B10, B13, B14, B15	1, 3, 5
Herbert River Floodplain	WT010QL	QLD146	WT		A1, A2, A5, A6, A7, A8, A9, A10, A11, B1, B2, B4, B5, B6, B7, B8, B9, B10, B11, B12, B14, C2, C5, C6, C7, C8	1, 2, 3, 4, 5
Hilda Creek Headwater	WT011QL	QLD147	WT	5	B1, B10, B13, B17	1, 2, 4, 5
Hinchinbrook Channel	WT012QL	QLD148	WT	30382	A1, A2, A4, A5, A7, A8, A9	1, 2, 3, 4, 5, 6
Innisfail Area	WT013QL	QLD149	WT	1220	B1, B4, B9, B14, B15	1, 5
Kurrimine Area	WT014QL	QLD150	WT	754	A1, A4, A5, A6, A9, B14	1, 3
Lake Barrine	WT015QL	QLD151	WT	99	B <sub>5</sub>	1, 2, 6
Lake Eacham	WT016QL	QLD152	WT	43	B <sub>5</sub>	1, 6
Licuala Palm Forest	WT017QL	QLD153	WT	232	B2, B14	1, 2, 3, 4, 5
Lower Daintree River	WT018QL	QLD <sub>154</sub>	WT	5276	A6, A9, B1, B14	1, 2, 3, 5
Missionary Bay	WT019QL	QLD155	WΤ	1129	A1, A2, A5, A6, A7, A8, B1, B2, B10, B14	1, 2, 3, 5, 6
Nandroya Falls	WT020QL	QLD156	WT	19	Bı	1, 2, 5
Port of Cairns and Trinity Inlet	WT021QL	QLD157	WT	6389	A1, A2, A5, A6, A7, A8, A9, A10, A12, C6, C7, C8	1, 2, 3, 4
Russell River	WT022QL	QLD158	WT	2377	A5, A6, A9, A12, B1, B2, B14, B15	1, 5
Russell River Rapids	WT023QL	QLD159	WT	235	$B_1, B_4, B_9, B_{14}$	1, 2, 3, 5, 6
Sunday Creek, Broad-leaved Paperbark Site	WT024QL	QLD160	WT	39	B14	1, 2, 5
Tully River—Murray River Floodplains	WT025QL	QLD161	WT	39154	B <sub>1</sub> , B <sub>4</sub> , B <sub>5</sub> , B <sub>6</sub> , B <sub>9</sub> , B <sub>10</sub> , B <sub>14</sub> , B <sub>15</sub> , C <sub>2</sub> , C <sub>6</sub> , C <sub>7</sub> , C <sub>8</sub>	1, 2, 3, 4, 5, 6
West Mulgrave Falls	WT026QL	QLD162	WT	7	В1	1, 5
Wyvuri Swamp	WT027QL	QLD163	WT	1492	B9, B14	1
Yuccabine Creek	WT028QL	QLD164	WT	529	B1	1, 6
Zillie Falls	WT029QL	QLD165	WT	16	B1, B14	1, 3, 5
Wyandra—Cunnamulla Claypans Aggregation		QLD166	ML	30000	B6, B10, B13	1, 2, 3

Wetland name	Old Reference No.	New Reference No.	IBRA Region	Area (ha)	Wetland type(s)	Criteria for inclusion
Quilpie (Bulloo River Floodplain) Waterholes		QLD167	ML	30	B <sub>2</sub> , B <sub>4</sub> , B <sub>5</sub> , B <sub>6</sub> , B <sub>10</sub> , B <sub>1</sub> 3, B <sub>14</sub>	1, 2, 3
Lake Dartmouth Area		QLD168	ML	10000	B <sub>2</sub> , B <sub>4</sub> , B <sub>6</sub> , B <sub>9</sub> , B <sub>10</sub> , B <sub>1</sub> 3, B <sub>1</sub> 4	1, 2, 3
Warrego River Distributary System		QLD169	ML	12000	B <sub>2</sub> , B <sub>4</sub> , B <sub>5</sub> , B <sub>6</sub> , B <sub>9</sub> , B <sub>10</sub> , B <sub>1</sub> 3, B <sub>1</sub> 4, C <sub>1</sub>	1, 2, 3
Mitchell Swamp		QLD170	ML	5000	B6, B10, B13	1
Warrego River Waterholes (Charleville—Wyandra)		QLD171	ML	500	B2, B4, B5, B6, B9, B10	1, 2, 3
"Old Bando" Swamp		QLD172	ML	2000	B6, B10, B13	1
"Myola" —"Mulga Downs" Salt Lake and Claypans		QLD173	ML	8000	B8, B10, B12, B13	1
"Murrawondah" Lakes		QLD174	ML	2500	B6, B10, B13	1
Lake Wombah—Kungie Lake Group		QLD <sub>175</sub>	ML	20000	B2, B6, B8, B10, B12, B13	1, 2, 3, 5
Paroo River Waterholes ("Caiwarro" Area)		QLD <sub>17</sub> 6	ML	25	B <sub>2</sub> , B <sub>4</sub> , B <sub>5</sub> , B <sub>6</sub> , B <sub>9</sub> , B <sub>10</sub> , B <sub>1</sub> 3, B <sub>1</sub> 4	1, 2, 3, 6
Eulo Artesian Springs Supergroup		QLD177	ML	30	В17	1, 2, 3, 4, 5
Shoalwater Bay Training Area Overview <sup>C</sup>		QLD178	CMC	454000	A1, A2, A4, A6, A7, A8, A9, A10, A11, A12, B2, B5, B15	1, 2, 3, 5
Wide Bay Military Training Area $^{\mathbb{C}}$		QLD179	SEQ	19990	$A_2, A_5, A6, A9$	1, 2, 3, 4, 5
Greenbank Army Training Area $^{\rm C}$		QLD180	SEQ	4665	B1, B4	1, 5
RAAF Townsville $^{\rm C}$		QLD181	BBN	300	B2, B4, B9, B10	2, 3

 $C \qquad \textit{wetlands occurring in part on land owned or managed by the Commonwealth (eight sites)}.$ 

Note: area figures for the above tables are approximate only.