Water quality objectives to protect the aquatic ecosystem environmental values for Sediments overlying the GAB groundwater aquifer zones in the Queensland Murray-Darling Basin.

Notes:
1. The ANZECC Guidelines (ANZECC/ARMCANZ, 2000) recommend that the highest level of protection should be provided to underground aquatic ecosystems, given their high conservation value. The management intent is to maintain the existing water quality distribution (20th, 50th and 80th percentiles).
2. ID: Insufficient data.
3. 'Near stream' refers to a 1.5km buffered area around the stream.

Zone	Percentile	Na		Ca		Mg		HCO_3		Cl		SO_4		NO_3		Electrical Conductivity (µS/cm)	Hardness (mg/L)	pH	Alkalinity (mg/L)	SiO_2 (mg/L)	F (mg/L)	Fe (mg/L)	Mn (mg/L)	Zn (mg/L)	Cu (mg/L)	SAR (meq/L)	Total Nitrogen mg/L	Total Phosphorous mg/L
		mg/L	%	mg/L	%	mg/L	%	mg/L	%	mg/L	%	mg/L	%	mg/L	%													
s3. Sediments overlying the GAB																												
1. Weathered Alluvium	20th	168	67	13	5	8	7	73	1	144	47	36.3	6	0.00	0	624	71	7.0	78.6	45.0	0.13	0.000	0.000	0.008	0.000	8.10	0.000	0.000
	50th	666	76	82	10	73	13	197	10	982	77	281.7	12	2.40	0	2690	569	7.6	199.7	57.0	0.40	0.000	0.010	0.050	0.015	19.45	0.011	0.000
	80th	4418	87	592	15	550	19	384	40	8590	86	1600.0	16	12.50	0	22710	3706	7.9	333.3	80.0	0.80	0.120	0.184	0.190	0.035	30.10	2.717	0.000
1. Weathered Alluvium near stream	20th	104	63	7	4	4	2	156	5	75	33	15.1	5	0.00	0	525	27	7.2	134.6	18.3	0.15	0.000	0.000	0.017	0.000	4.65	0.130	ID
	50th	289	74	24	10	10	13	256	49	180	40	76.0	11	2.40	0	1269	102	7.7	210.0	70.0	0.30	0.000	0.010	0.040	0.015	11.50	1.930	ID
	80th	1368	92	170	22	149	20	388	58	2398	83	504.5	15	7.20	1	6400	1000	8.3	321.0	86.0	0.52	0.044	0.043	0.210	0.017	28.32	0.000	ID
2. Sand dunes	Insufficient data																											
3. Tertiary Sediments	20th	395	81	3	1	0	0	0	4	195	34	0.0	0	ID	ID	0	9	ID	136.1	ID	ID	ID	ID	ID	ID	ID	ID	ID
	50th	432	97	15	2	4	2	212	26	520	74	1.8	0	ID	ID	1575	58	ID	207.5	ID	ID	ID	ID	ID	ID	ID	ID	ID
	80th	3058	99	50	8	6	11	682	63	4712	96	34.9	5	ID	ID	2180	203	ID	609.0	ID	ID	ID	ID	ID	ID	ID	ID	ID

References:

McNeil, V.H., Raymond, M.A.A., Bennett, L. & McGregor, G.B. (2018), *Regional groundwater chemistry zones: Queensland Murray-Darling Basin,* Department of Environment and Science, Queensland Government.