



Water data

Water data has been presented in accordance with the Minerals Council of Australia Water Accounting Framework and meets the ICMM disclosure requirements for water quality.

Water accounting overview

	Source/destination	Water quality					FY21 Total ⁽¹⁾	FY20 Total	FY19 Total	FY18 Total	FY17 Total
		Type 1	Type 2	Type 3	High	Low					
Inputs/withdrawal (megalitres per annum)	Surface water	21 261	9 406	19 461	30 667	19 461	50 128	47,980 ⁽²⁾	46 370	56 376	49 419
	Groundwater	4 398	5 019	18 832	9 417	18 832	28 249	34,524 ⁽²⁾	38 763	33 087	29 295
	Seawater	0	-	143	0	143	143	195	456	863	415
	Third party water	2 090	2 096	926	4 186	926	5 113	7,216 ⁽²⁾	3 704	4 746	13 107
	Total	27 749	16 522	39 361	44 271	39 361	83 632	89,916 ⁽²⁾	89 293	95 072	92 236
Outputs/discharge (megalitres per annum)	Surface water	5 076	6 923	2 937	11 999	2 937	14 936	11 463	12 828	13 581	15 163
	Groundwater	71	254	668	325	668	993	1 113	14 352	14 270	3 585
	Seawater	12	2 489	370	2 501	370	2 871	2 350	2 769	4 034	3 570
	Third party water	77	639	2 195	716	2 195	2 911	3,290 ⁽²⁾	3 260	2 382	11 505
	Other	43 777	407	11 338	44 184	11 338	55 522	54,644 ⁽²⁾	45 724	43 046	38 613
	Total	49 013	10 712	17 508	59 725	17 508	77 233	72,861 ⁽²⁾	78 932	77 313	72 436
Consumption (megalitres per annum)	Total	This is intentionally blank as this is not reported by type					55 522	54,644 ⁽²⁾	45 724	43 046	38 613
Efficiency – all South32 sites (percentage)	Total	This is intentionally blank as this is not reported by type					53	56	59	55	53
Recycling and reuse (megalitres per annum)	Total	This is intentionally blank as this is not reported by type					93 040	115,936 ⁽²⁾	129 653	117 516	102 264

The sum of the categories may vary to the total figure due to rounding.

- (1) Figures include SAEC from 1 July 2020 - 31 May 2021 and TEMCO from 1 July 2020 - 31 December 2020, as well as the Hermosa Project.
(2) Figure has been restated as a result of scheduled water accounting review for three of our operations during FY21. FY20 restatement was for Worsley only. No further restatement has occurred to FY17 - FY19 data.

Operations with water-related material risk

Megalitres per annum	Source / destination	Worsley Alumina Refinery	Mozal Aluminium	Hillside Aluminium	Illawarra Metallurgical Coal	Hotazel Manganese Mines ⁽¹⁾	FY21 Total
Inputs/Withdrawal	Surface water	10 731	430	3	487	265	11 916
	Groundwater	1 624	0	0	3 844	1 118	6 586
	Seawater	0	143	0	0	0	143
	Third party water	2 735	21	707	558	322	4 342
	Total	15 090	594	710	4 889	1 705	22 987
Output/Discharge	Surface water	0	320	0	2 922	0	3 242
	Groundwater	0	0	0	0	24	24
	Seawater	0	87	0	2 489	0	2 576
	Third party water	0	69	332	51	13	466
	Other	13 664	221	378	895	1 037	16 195
	Total	13 665	697	710	6 358	1 074	22 603
Consumption	Total	13 664	221	378	895	1 037	16 195
Efficiency – all South32 sites with a water-related material risk (percentage)		24	0	94	30	2	46
Recycling and reuse (megalitres per annum)		4 561	1	12 181	2 072	37	18 851

The sum of the categories may vary to the total figure due to rounding.

- (1) This is a cumulative figure of South32 mines in the region.

Operations in areas of baseline water stress

Megalitres per annum	Source / destination	Water quality					FY21 Total ⁽¹⁾	FY20 Total
		Type 1 ⁽³⁾	Type 2	Type 3	High	Low		
Input/Withdrawal	Surface water	3 995	658	7 307	4 653	7 307	11 960	37,071 ⁽²⁾
	Groundwater	55	3 314	3 314	3 369	3 314	6 683	31,098 ⁽²⁾
	Seawater	-	-	143	0	143	143	0
	Third party water	613	2 096	926	2 709	926	3 635	4,674 ⁽²⁾
	Total	4 662	6 068	11 690	10 731	11 690	22 421	72,843 ⁽²⁾
Output/Discharge	Surface water	644	0	2 600	644	2 600	3 244	6 534
	Groundwater	15	0	24	15	24	39	536
	Seawater	12	2 489	76	2 501	76	2 576	2 250
	Third party water	14	0	120	14	120	134	2,340 ⁽²⁾
	Other	10 819	0	5 141	10 819	5 141	15 960	46,551 ⁽²⁾
	Total	11 503	2 489	7 961	13 992	7 961	21 953	58,211 ⁽²⁾
Consumption	Total	This is intentionally blank as this is not reported by type					15,960 ⁽³⁾	46,551 ⁽²⁾
Efficiency – all South32 sites (percentage)	Total	This is intentionally blank as this is not reported by type					23	38 ⁽²⁾
Recycling and reuse (megalitres per annum)	Total	This is intentionally blank as this is not reported by type					6 670	44,673 ⁽²⁾

The sum of the categories may vary to the total figure due to rounding.

- (1) Areas of baseline water stress as per World Resources Institute (WRI) Aqueduct Tool available at <https://www.wri.org/initiatives/aqueduct> (accessed July 2021) and reviewed as per Technical Note available at: <https://www.wri.org/research/aqueduct-30-updated-decision-relevant-global-water-risk-indicators>. FY21 data includes the following operations: Worsley Refinery, IMC, Mozal, HMM; as well as the Hermosa Project, all of which contribute to South32 total water inputs and outputs. These figures exclude Cerro Matoso, Hillside, Metalloys, TEMCO (divested), SAEC (divested), Cannington, GEMCO, Worsley Alumina Mine and Materials operations, Bayside, Eagle Downs and Mine Closure NPI projects, and corporate offices.
(2) Figure has been restated as a result of scheduled water accounting review for three of our operations during FY21. FY20 restatement was for Worsley only. No further restatement has occurred to FY17-FY19 data.

- (3) Data reported for SASB Metals and Mining Sustainability Accounting Standard, 2018 metric EM-MM-140a.1 as follows: Total fresh water withdrawn and consumed is presented as Inputs (Withdrawals) Type 1 water (as per MCA WAF, 2014) and FY21 Total Consumption, respectively. To convert unit of measure from megalitres to m³ multiply data by 1,000. Of the total freshwater withdrawn from South32 operations, 16.8 per cent comes from regions with high or extremely high baseline water stress. Of the total water consumed by South32 operations, 28.75 per cent was consumed by operations in regions of high or extremely high baseline water stress.

Incidents of non-compliance associated with water quality permits, standards, and regulations

Number	FY21
Incidents of non-compliance associated with water quality permits, standards and regulations	1