

ASSESSMENT OF SOIL LEACHING LOSS FOR HWP

1. Updated assumptions for soil leaching between Mandamus and SH1, based on amended land areas, new look-up tables and some extra leaching under spray irrigation

Land Area Categories	HWP Stage 2			AIC shareholders outside HWP ³	NTP (Balmoral)	Other Irrigable Land	Non-Irrigable Land	Total Soil Leaching Contribution to SH1
	AIC Shareholders within HWP ³	Other HWP	Total HWP					
Modelled Area (ha) contributing to load ¹	7,622	27,591	35,214	9,714	8,545	2,292	92,500	148,265
Average leaching (kg/ha/yr) ²	48.5	21.3	27.2	50.4	8.5	31.0	3.0	12.6
Total load (t/yr)	370	589	959	490	73	71	278	1870
<i>Note 1</i> : The areas listed above exclude areas identified as 'water' and 'roads'. Leaching from these landuses is set to 0.								
<i>Note 2</i> : Average leaching rates derived from updated Ecan look-up Tables (Ecan report R14/19) with the exception of Non-irrigable land where a rate of 3.0 kg/ha/yr was								
<i>Note 3</i> : AIC Command Area overlaps with 'Other HWP' and 'Other Irrigable Land'								

2. Total soil leaching contributing to SH1

Soil leaching from Mandamus to SH1 (t/yr)	1,870
Soil leaching above Mandamus (based on in river load of 39 t/yr at Mandamus)	78
Total leaching load above SH1 (t/yr)	1,948
18.5 % of total leaching load (t/yr)	360

3. Allocation to HWP

Current HWP loss (t/yr)	959
16% of total leaching contribution to SH1 (t/yr)	311
Total Allocation to HWP (t/yr)	1,270
Portion of 25% allowable increase	16%