

Figure I-13 Existing mine plan— Closure Drawdown 1000 years

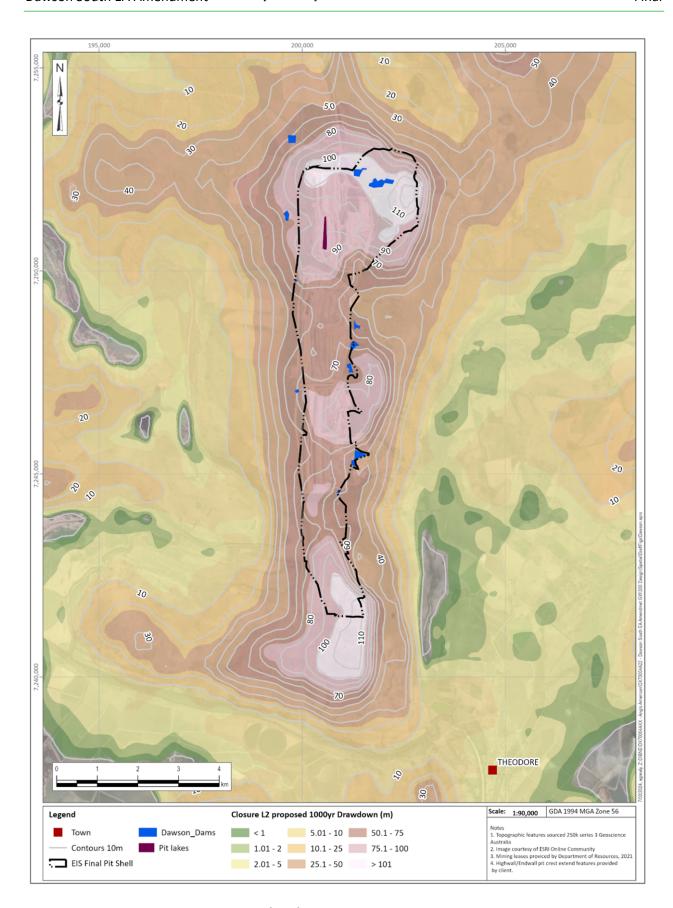


Figure I-14 Conservative Proposed – Closure L2 1000 years

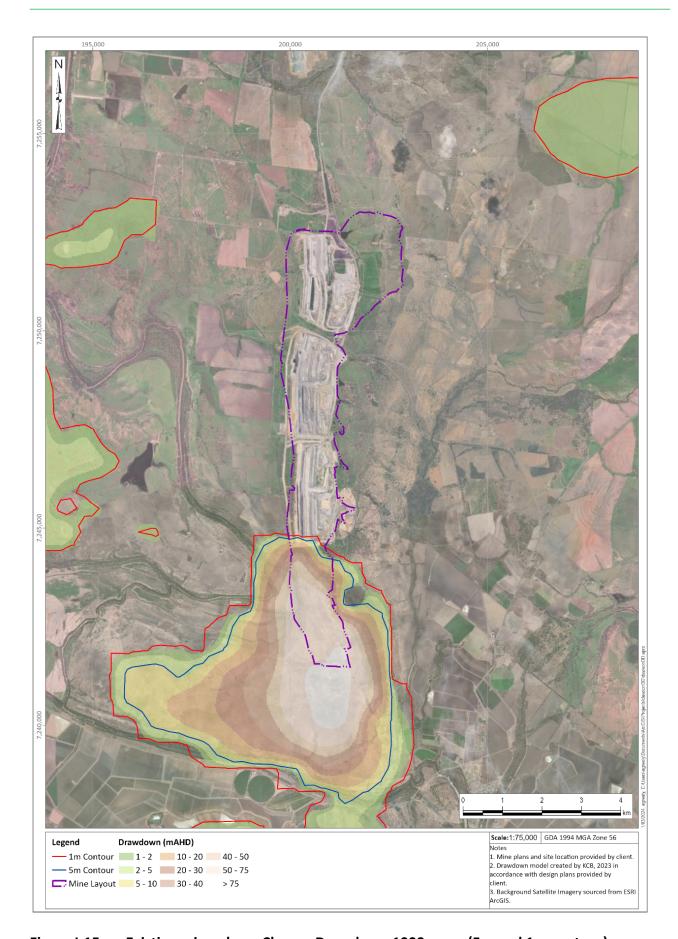


Figure I-15 Existing mine plan – Closure Drawdown 1000 years (5m and 1m contour)

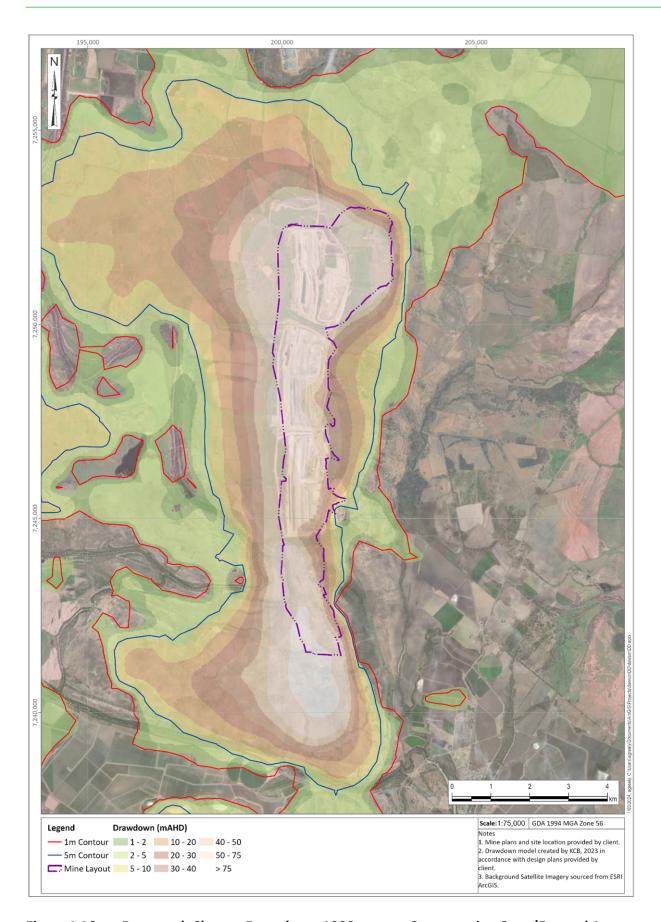


Figure I-16 Proposed Closure Drawdown 1000 years – Conservative Case (5m and 1m contour)

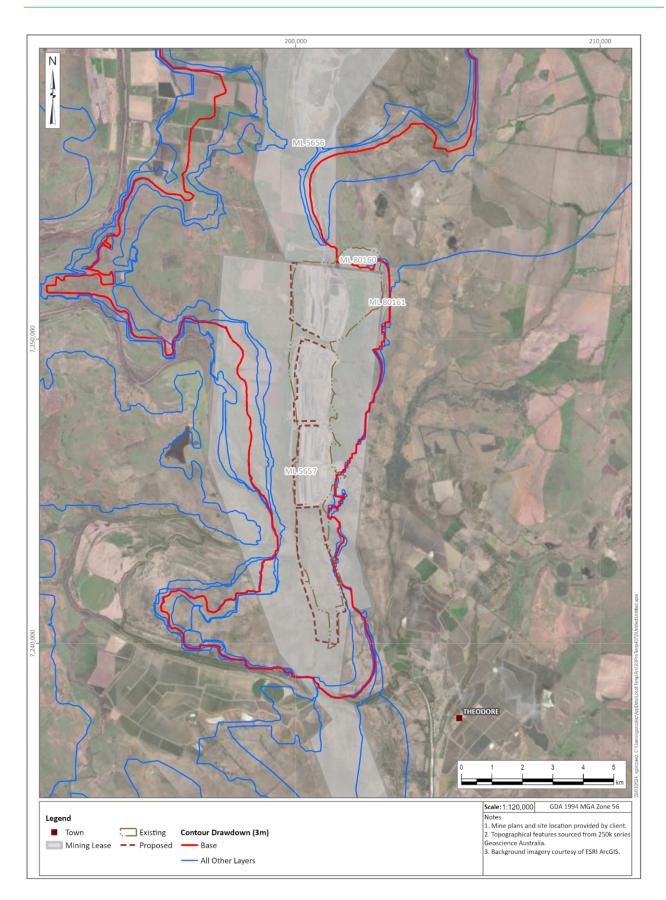


Figure I-17 Sensitivity of Drawdown (Layer 2; 3 m Drawdown used As Comparison; Proposed Case)

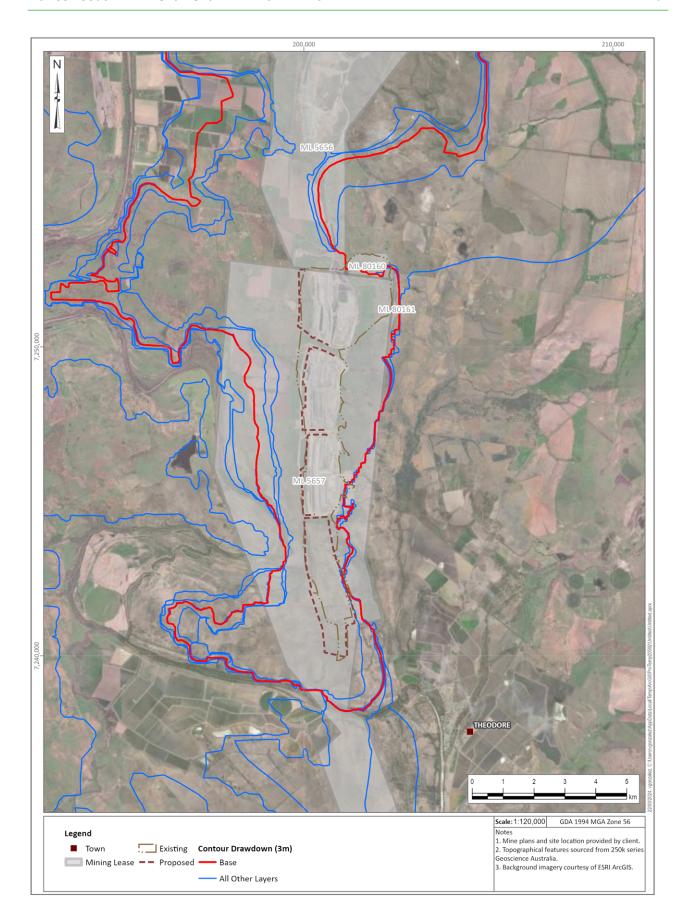


Figure I-18 Sensitivity of Drawdown (Layer 6; 3 m Drawdown used as Comparison; Proposed Case)



Figure I-19 Drawdown Sensitivity Layer 2

Base (red) and Sens ID 1 & 2 (cs Alluvium k /10 - blue, cs Alluvium k X10 - green)

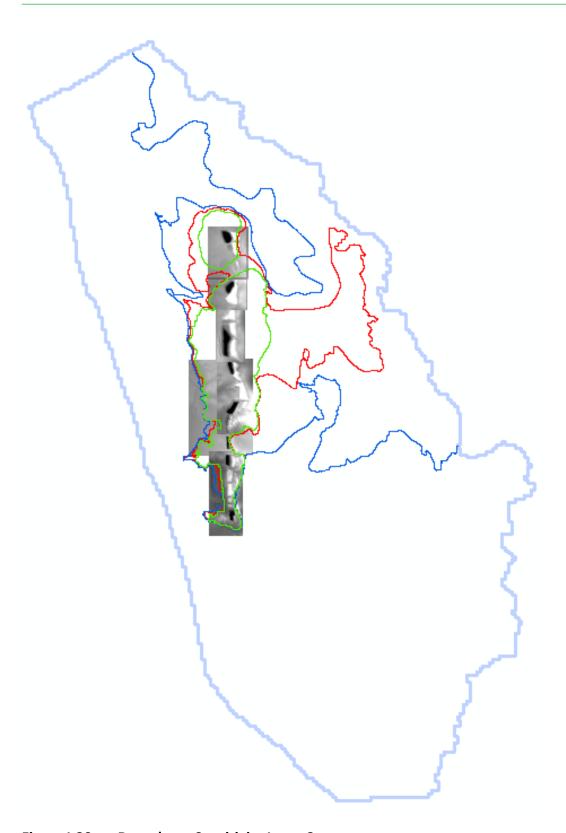


Figure I-20 Drawdown Sensitivity Layer 2

Base (red) and Sens ID 3 & 4 (recharge x 0.5 - blue, recharge x 1.5 - green)

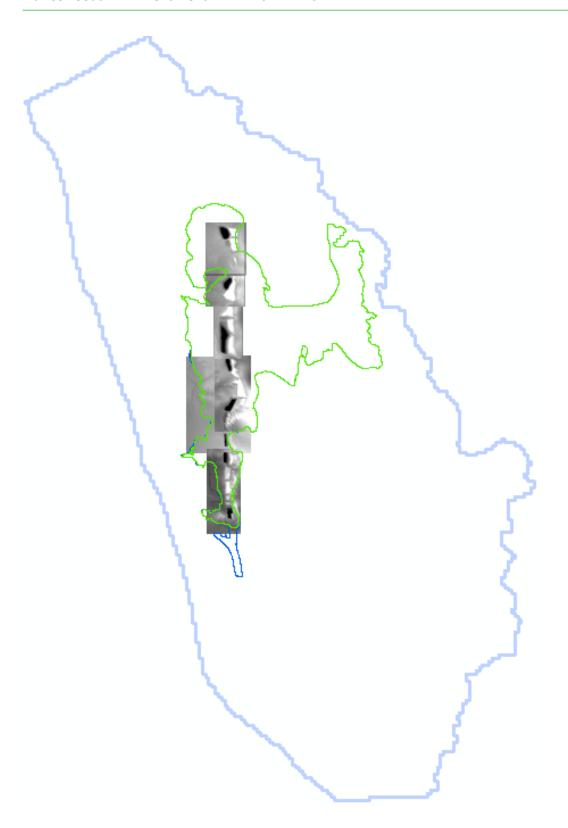


Figure I-21 Drawdown Sensitivity Layer 2

Base (red) and Sens ID 5 & 6 (River Conductance /10 - blue, River Conductance x10 - green)

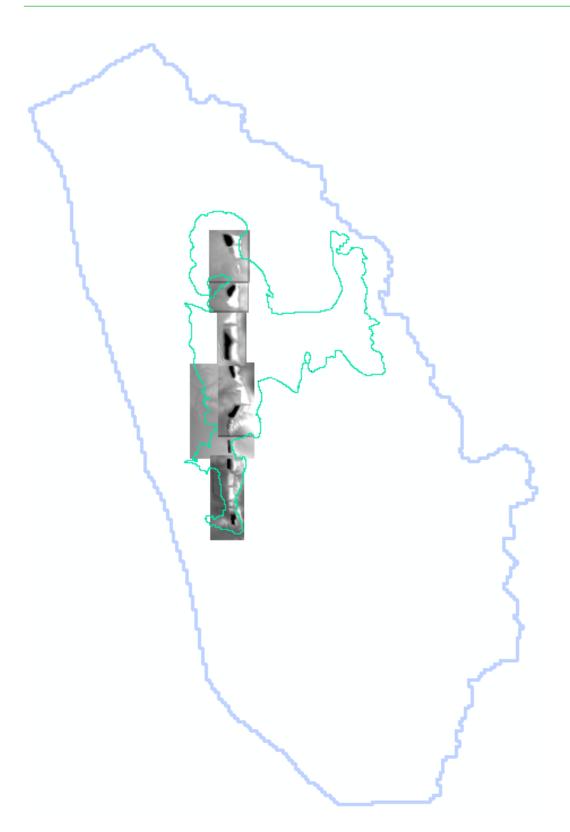


Figure I-22 Drawdown Sensitivity Layer 2

Base (red) and Sens ID 5 & 6 (Spoil Sy /2 - blue, Spoil Sy x2 - green)

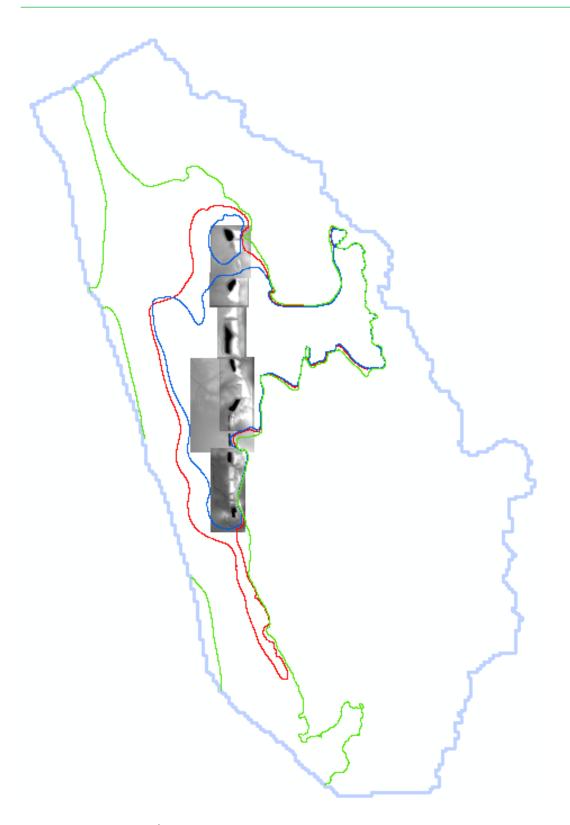


Figure I-23 Drawdown Sensitivity Layer 6

Base (red) and Sens ID 1 & 2 (cs Alluvium k /10 - blue, cs Alluvium k X10 - green)

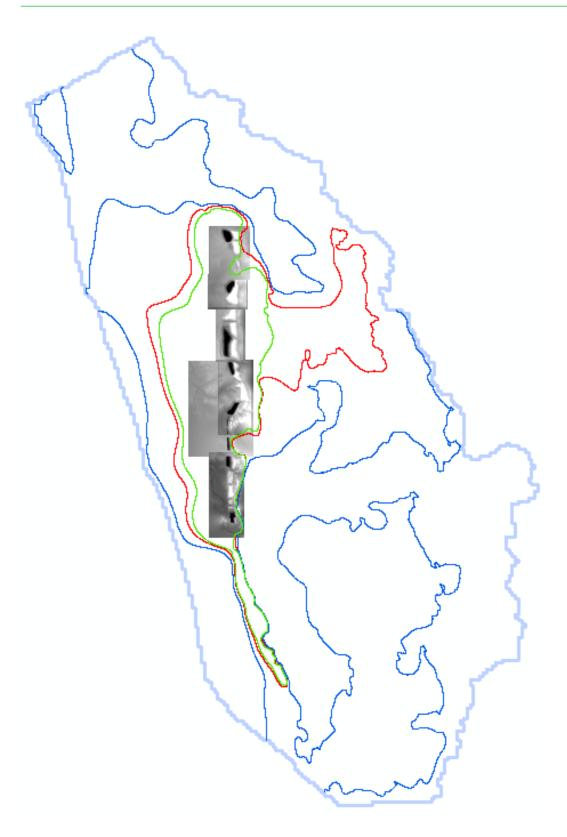


Figure I-24 Drawdown Sensitivity Layer 6

Base (red) and Sens ID 3 & 4 (recharge x 0.5 - blue, recharge x 2 - green)

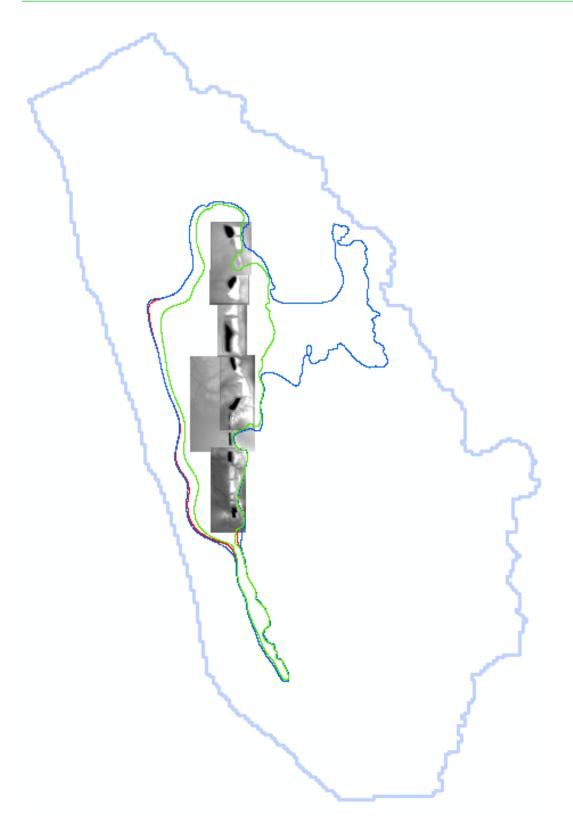


Figure I-25 Drawdown Sensitivity Layer 6

Base (red) and Sens ID 5 & 6 (River Conductance /10 - blue, River Conductance x10 - green)

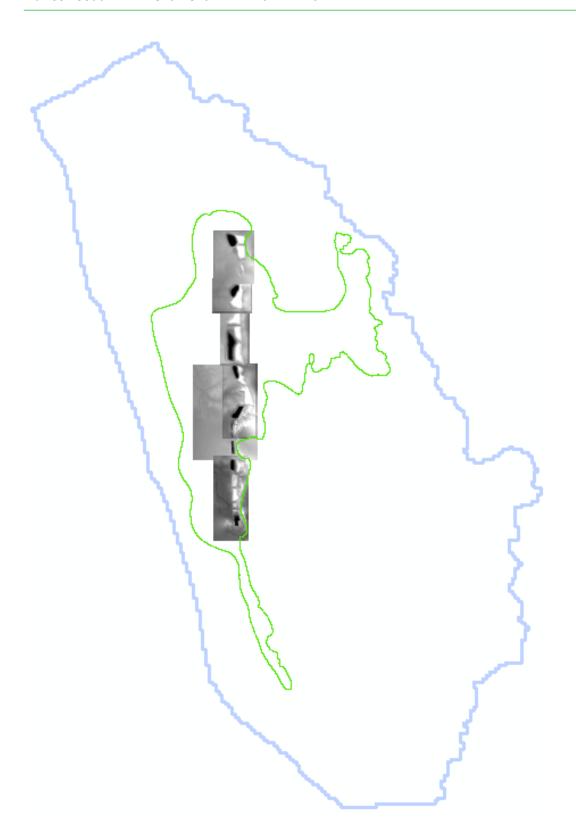


Figure I-26 Drawdown Sensitivity Layer 6

Base (red) and Sens ID 5 & 6 (Spoil Sy /2 - blue, Spoil Sy x2 - green)

## **MODEL APPENDIX II**

**Water Balances** 



1000 Year, Post Mine Closure

## 1. Existing mine plan case

For the last time step:

Layer	1
-------	---

In $(m^3/d)$		Out (m³/day)	
Flux		Flux	
	3400.754024		-4483.69
	3953.354434		0
	0		-3276.22
	0		-0.00031
	704.9819272		-347.722
	48.54440641		0
In		Out	
Flux		Flux	
1	0.022146171		-0.00264
	60.75982649		0
	15.35006392		-0.94374
	2.910982374		-1.09603
	4483.687078		-3400.75
	2218.09971		-3736.64
	5.17E-08		-0.00021
•	711.6759987		-353.073
1	0.000369264		0
in		out	
Flux		Flux	
	66.28280538		-0.20886
	230.7264877		-0.50532
	49.72493216		-56.3792
	113.6838763		-6.05231
	3953.354434		0
	0		-3276.22
	1.65E-05		-0.0066
	1416.657926		-700.796
1	0.052434474		0
	In Flux in Flux	Flux  3400.754024 3953.354434  0 0 704.9819272 48.54440641  In Flux  0.022146171 60.75982649 15.35006392 2.910982374 4483.687078 2218.09971 5.17E-08 711.6759987 0.000369264  in Flux  66.28280538 230.7264877 49.72493216 113.6838763 3953.354434 0	Flux  3400.754024 3953.354434  0 0 704.9819272 48.54440641  In Out Flux  0.022146171 60.75982649 15.35006392 2.910982374 4483.687078 2218.09971 5.17E-08 711.6759987 0.000369264  in out Flux  66.28280538 230.7264877 49.72493216 113.6838763 3953.354434 0 1.65E-05 1416.657926

## 2. Proposed case (Conservative Case)

Layer 1	in (m³/day)		out (m³/day)	
Category	Flux	2404 425425	Flux	4242.22
Bottom		2101.135125		-4212.23
Recharge ET		3430.122302		-1912.66
River		0		-1912.66 - <b>324.77</b>
Error		<b>731.5447045</b> 1.15E-05		- <b>324.</b> //
EITOI		1.136-03		U
Layer 2				
Category	Flux		Flux	
West		0.02009849		-0.000920704
East		59.20726712		0
North		14.28137883		-0.632766992
South		2.902723654		-1.075615736
Тор		4212.226179		-2101.135125
Bottom		1039.279824		-3633.756452
Storage		1.33E-06		-8.51E-06
River		738.4868303		-329.8034165
Error				
All layers	in		out	
Category	Flux		Flux	
West		68.05849024		-0.149062377
East		248.7737578		-0.507775884
North		175.4043853		-15.95396382
South		117.7048141		-6.390152996
Recharge		3430.122302		0
ET		0		-1912.658827
Storage		0.000215878		-0.004394841
River		1470.031535		-654.5737479
Drain		0		-3106.68019
GHB		186.8532171		0
Error		0.030602008		0

## 2. Proposed case

Layer 1	in (m³/day)	out (m³/day)
Category	Flux	Flux
Bottom	2178.085895	-4576.670487
Recharge	3855.000252	0
ET	0	-1984.986483
River	698.5551532	-336.6408597
Error	166.6565294	0
Layer 2		
Category	Flux	Flux
West	0.020321	-0.00069
East	59.12096	0
North	13.71801	-0.66954
South	2.91994	-1.10844
Тор	4576.67	-2178.09
Bottom	1094.426	-3930.43
Storage	0	-0.02597
River	705.2738	-341.829
Error	1.27E-06	0
All layers	in	out
Category	Flux	Flux
West	65.89266557	-0.13789
East	231.6525269	-0.51721
North	115.6396993	-95.0438
South	110.1772149	-6.11199
Recharge	3855.000252	0
ET	0	-1984.99
Storage	5.998727167	-16.6355
River	1403.82899	-678.47
Error	-0.002724853	0