Llangurig RQP

discharge	Llangruig		MASS BALANCE: Monte Carlo
river			Calculations: 08 May 2025 at 09:13
pollutant	Fe		

mean upstream river flow	3301	downstream target	1000	● calculate required discharge quality
the 95-percentile low flow	317	mean	M	○ calculate impact of input discharge quality
mean discharge flow	0.52			
standard deviation	0.17			

old data - WORD
old data - EXCEL
old data - NOTE

new discharge

calculate

sensitivity

mean u/s river quality	500	(241 - 759)
standard deviation	500	(319 - 669)
number of samples	12	

mean d/s river quality	1000	(533 - 1467)
standard deviation	901	(585 - 1216)
number of samples	12	

mean discharge quality	1000	(637 - 1363)
standard deviation	700	(455 - 945)
number of samples	12	
the 95-percentile	2315	(1602 - 4609)
the 99-percentile	3560	(2273 - 8724)
the 99.5-percentile	4167	(2575 - 11055)

required discharge mean	1196960	(767095 - 1626825)
standard deviation	829171	(538395 - 1119948)
number of samples	12	
the 95-percentile	2775920	(1933905 - 547455)
the 99-percentile	4306573	(2790526 - 103525)
the 99.5-percentile	4912959	(3039502 - 129612)

INT
NPD

Excel	Word	Note

menu **quit**

OUT

correlation: river and discharge flow	0.6000	
correlation: river flow and quality	0.0000	
correlation: discharge flow and quality	0.0000	