

Flow comparison

Plan	Water course	Minimum flow site location	7dMALF (L/s)	Current minimum flow (L/s)	Ecological minimum flow recommendation (L/s)	% difference from current minimum flow	Whanau flow preference (L/s)	% difference from current minimum flow
Northern tributaries of the Waimakariri River	North Brook	Marsh Road	622 ¹	530	530	0%	590	11%
	Middle Brook	Marsh Road	31 ¹	60	30	-50%	60	0%
	Greigs Drain	Greigs Drain Road	60 ²	150	230	53%	230	53%
	No. 7 Drain	Main Drain Road Culvert	67 ¹	60	60	0%	60	0%
	Ohoka Stream	Kaiapoi River confluence	505 ²	300	365	22%	420	40%
	Cam River	Youngs Road (Cultural site – Cam River at Bramleys Rd – has minimal gauging data so following discussion with ECan personnel Cam River at Youngs Rd was chosen as most appropriate)	1,010	1000	890	-11%	1200	20%
	South Brook	Marsh Road	171 ¹	140	120-140	-14%	170	21%
	Kaiapoi River / Silverstream	Neeves Road	1,350 ²	600	1000	67%	1200	100%
	Cust River	Rangiora-Oxford Road	300	20	120	500%	-	-
	Cust Main Drain	Threlkelds Road	492	230	230	0%	400	74%
	Courtenay Stream	Main North Road	332 ¹	260	350	35%	400	54%
	Kaiapoi River / Silverstream	Skewbridge Road	1350	-	-	-	600	-
Ashley River/Rakahuri catchment	Little Ashley Creek	Ashley River/Rakahuri at SH1	-	50 L/s 30 L/s for 4 days each month	-	-	50	0% 67%
	Waikuku Stream	Waikuku Stream, Waikuku Beach Road	355	100 L/s Mon-Fri 150 L/s Sat-Sun	-	-	600	500% 300%
	Saltwater Creek	Saltwater Creek, Toppings Rd	-	100	-	-	Flows that are sufficient to sustain the full range of native fish species	-
	Taranaki Creek (Preeces)	Taranaki Creek, Kaipohia monument	174 ²	120	-	-	120	0%
	Ashley River/ Rakahuri Gorge	Ashley at Gorge	2040	2500 L/s Jan-Jul 4000 L/s Aug-Nov 3000 L/s Dec	-	-	Visible connected flow (with variability)	-
	Ashley River/ Rakahuri SH1	-	102	-	-	-	Visible connected flow (with variability)	-
	Okuku River	Fox Creek	446	543	-	-	650	20%
	Garry River	Birch Hill Road Bridge	102	-	-	-	100	-

7dMALF = 7 day Mean Average Low Flow. 7dMALF is a flow statistic calculated from the 7 consecutive days of lowest flow in each year, averaged over the number of years of flow record. 7dMALF is a useful statistic to inform the setting of a minimum flow.

¹ Value from Golder (2009)

² Estimate from regression analysis of lowland/spring-fed sites