

Supplementary material

Table S1. Overview of different channel properties (length, fall, width), connection type (symmetric/asymmetric), basin depth of the source pool, the average number of overflow events per year, and the average number of dispersers over three observed overflow events.* indicates that connection was not established during the three monitored rainfall events.

channel	pools	length (m)	fall (m)	width (m)	connection type	basin depth (m)	# overflows/year	average number of dispersers
1	6–7	0.35	~0	0.4	sym	/	7.6	0*
2	13–14	0.55	0.04	0.05	asym	0.85	20.3	67
3	15–14	3	0.36	0.15	asym	0.10	12	9
4	16–14	0.18	0.05	0.21	asym	0.23	10.6	0*
5	17–18	0.32	0.035	0.2	asym	0.23	5.8	0*
6	18–19	0.45	0.1	0.5	asym	0.24	5.6	0*
7	19–28	11.4	0.36	0.1	asym	0.45	15.6	561
8	24–23	0.6	~0	0.4	sym	/	9.8	0*
9	27–28	1	~0	0.3	sym	/	11	0*
10	31–32	0.38	0.03	0.4	sym	0.26	12.5	0*
11	E12–31	0.3	0.05	0.2	asym	0.75	16	431
12	E4–29	0.65	0.1	0.2	asym	0.06	12	277