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Open check dams and large wood: head losses and release conditions

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Supplement

1 Images of LW mixtures

The following pictures illustrate some LW mixture elements.

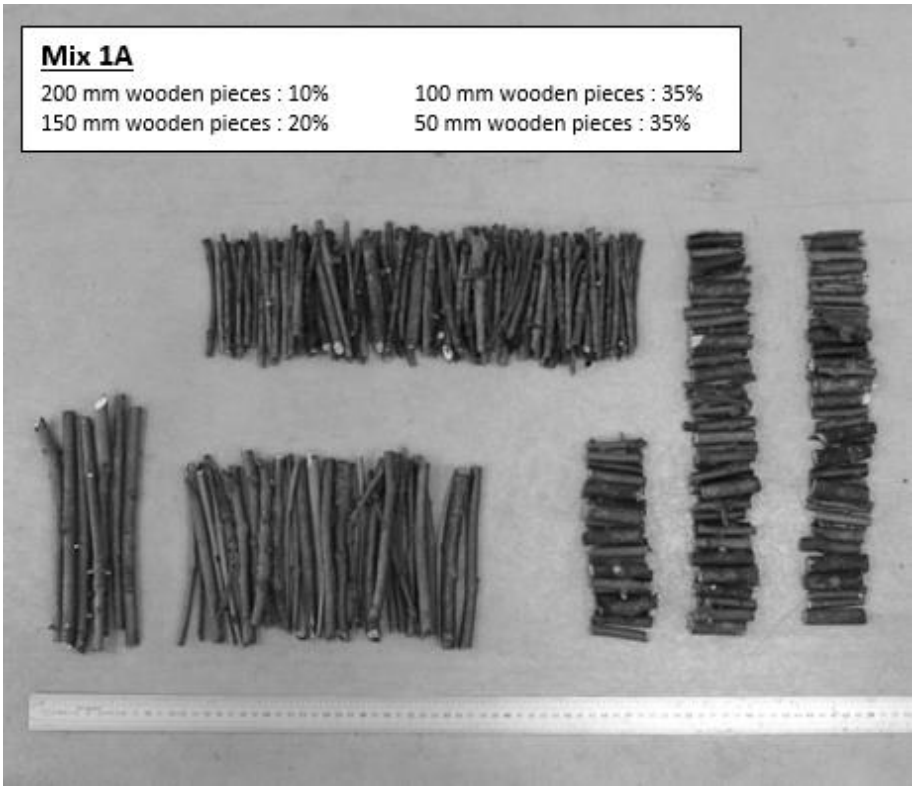

Fig. S 1: Mixture 1A

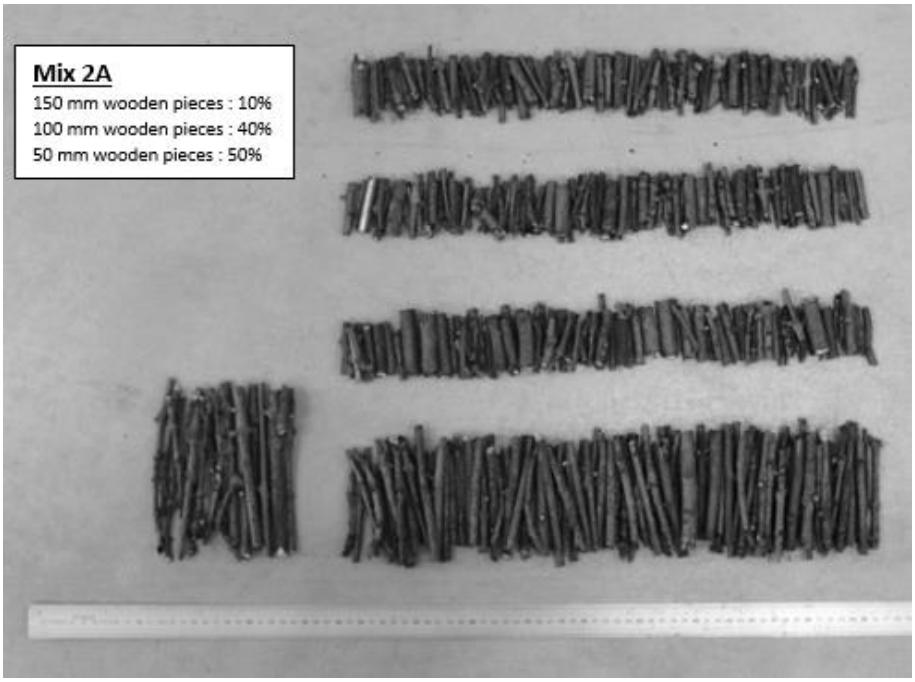

Fig. S 2: Mixture 2A

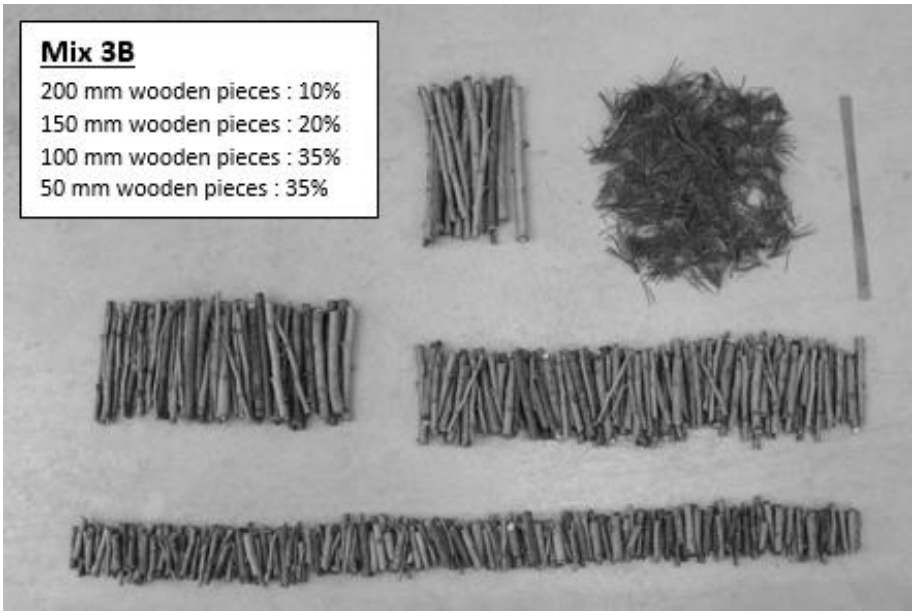

Fig. S 3: Mixture 3B

2 Sensitivity analysis on β_i coefficients

Two figures are provided for each dam, one where various values of β_1 are tested up to flow depths slightly overtopping the dam and one where various values of β_2 are tested for flow overtopping the dam, assuming the best adjusted values of β_1 (except for the closed dam where no β_1 is used).

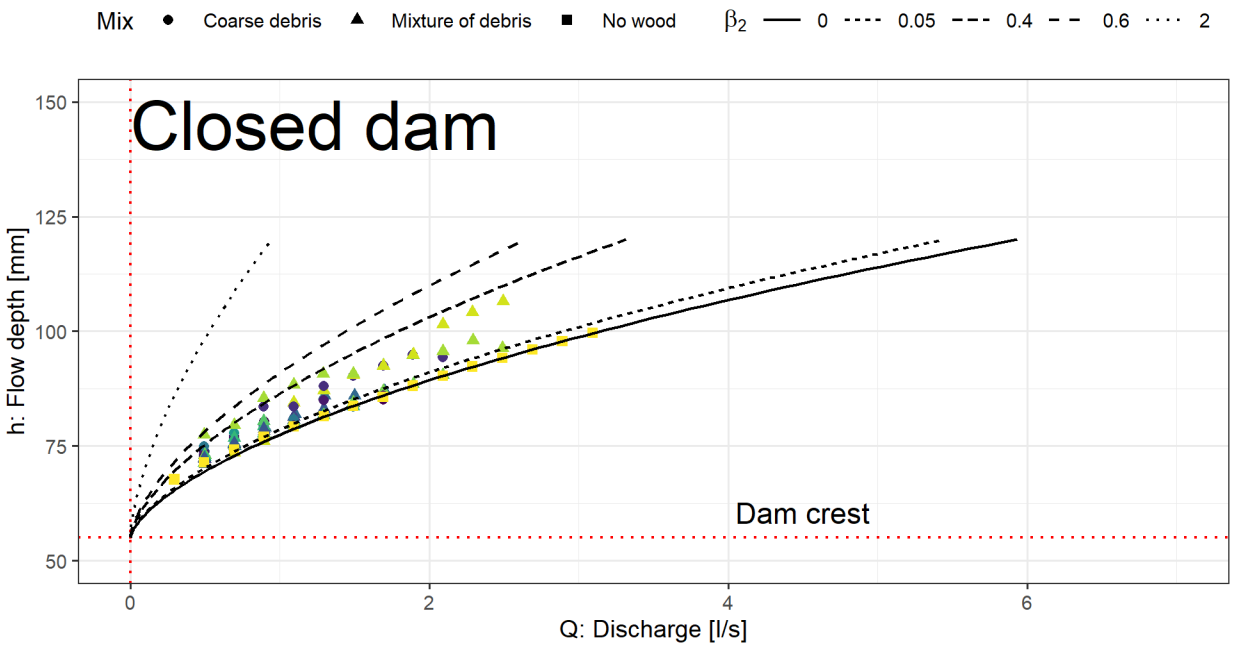

Fig. S 4: Graph flow depth against discharge on Closed dam, measurements and various values of β_2

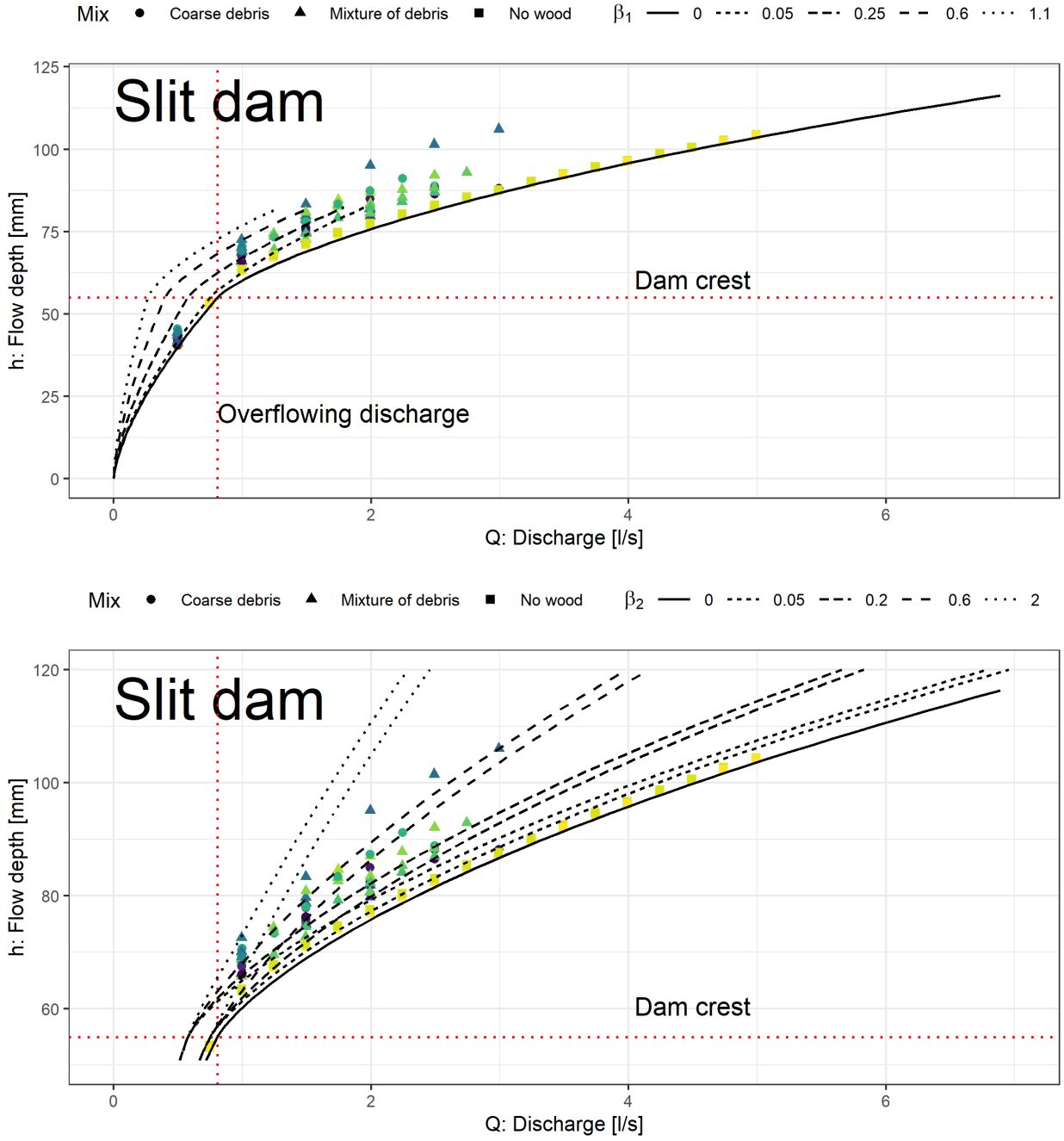

Fig. S 5: Graph flow depth against discharge on slit dam, measurements and various values of β_1 (upper panel) and β_2 (lower panel with zoom on overflowing measurements)

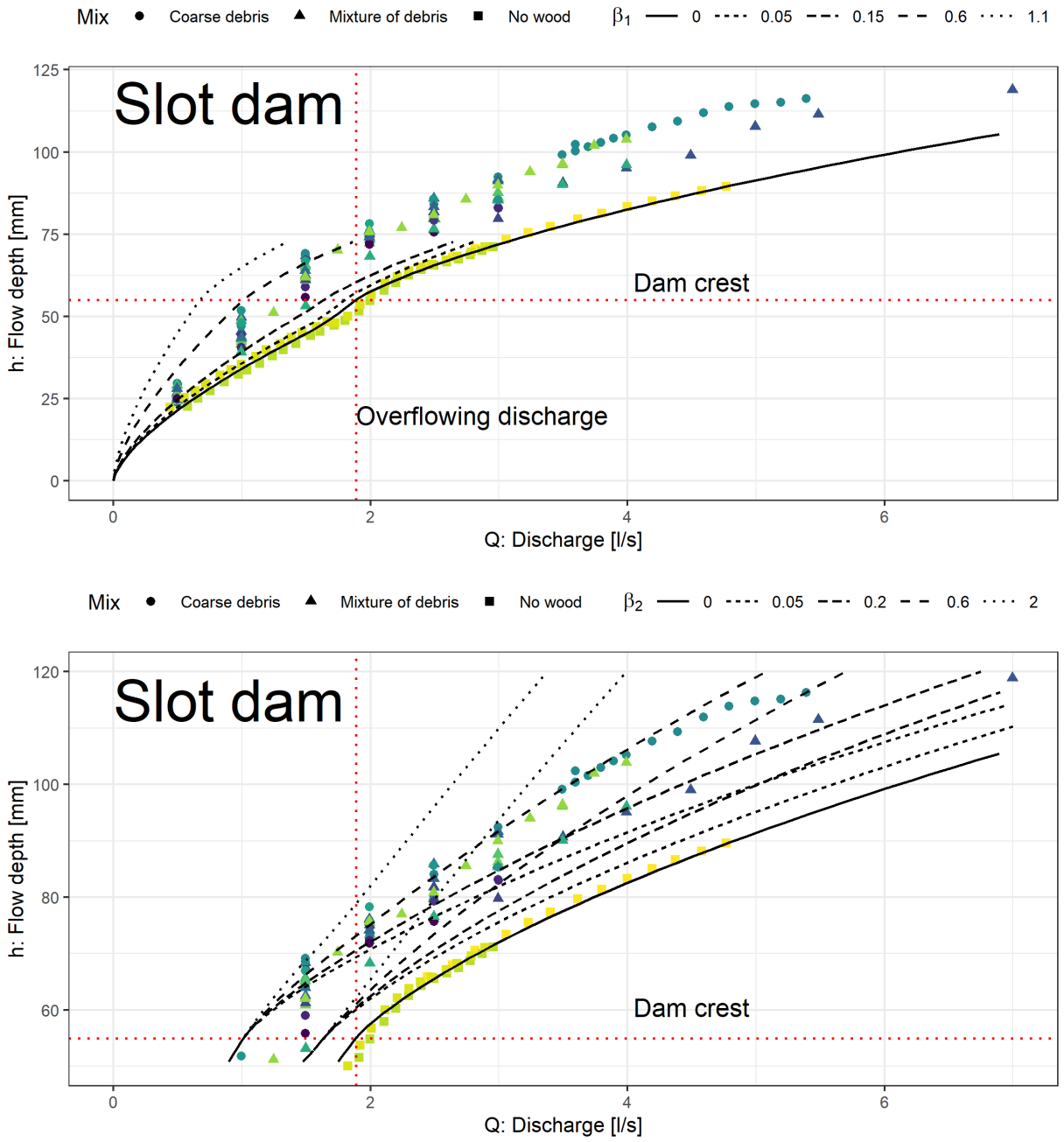

Fig. S 6: Graph flow depth against discharge on slot dam, measurements and various values of β_1 (upper panel) and β_2 (lower panel with zoom on overflowing measurements)

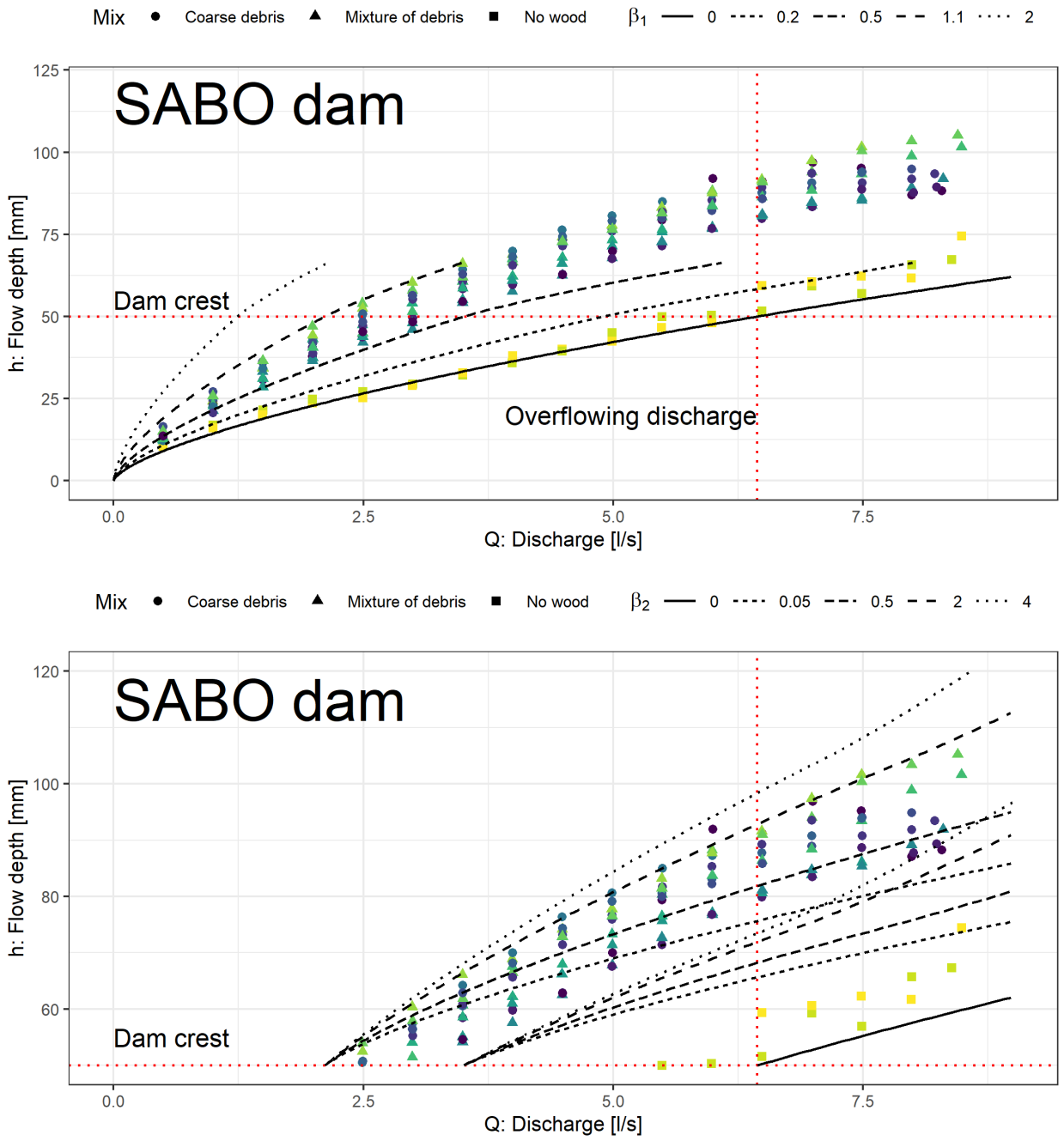

Fig. S 7: Graph flow depth against discharge on SABO dam, measurements and various values of β_1 (upper panel) and β_2 (lower panel with zoom on overflowing measurements)

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3 Experimental data

Table of data with, Dam (dam type), #Run (Mixture code and repetition number), Q (water discharge in l/s), h (measured water depth in mm), m_{LW} (mass of LW released in kg), h_0 (computed water depth without LW in mm) and R_{LW} (fraction of LW released).

Dam	#Run	Q	h	m_{LW}	h_0	R_{LW}
Closed	NoWood 1	0.3	68	NA	65	NA
Closed	NoWood 1	0.5	71	NA	69	NA
Closed	NoWood 1	0.7	74	NA	73	NA
Closed	NoWood 1	0.9	77	NA	76	NA
Closed	NoWood 1	1.1	79	NA	79	NA
Closed	NoWood 1	1.3	82	NA	81	NA
Closed	NoWood 1	1.5	84	NA	84	NA
Closed	NoWood 1	1.7	86	NA	86	NA
Closed	NoWood 1	1.9	88	NA	88	NA
Closed	NoWood 1	2.1	90	NA	90	NA
Closed	NoWood 1	2.3	92	NA	92	NA
Closed	NoWood 1	2.5	94	NA	94	NA
Closed	NoWood 1	2.7	96	NA	96	NA
Closed	NoWood 1	2.9	98	NA	98	NA
Closed	NoWood 1	3.1	100	NA	100	NA
Closed	Mix1A 1	0.5	73	34	69	0.04
Closed	Mix1A 1	0.7	77	62	73	0.08
Closed	Mix1A 1	0.9	80	22	76	0.03
Closed	Mix1A 1	1.1	79	148	79	0.19
Closed	Mix1A 1	1.3	82	154	81	0.19
Closed	Mix1A 1	1.5	84	222	84	0.28
Closed	Mix1A 1	1.7	85	118	86	0.15
Closed	Mix1A 2	0.5	74	6	69	0.01
Closed	Mix1A 2	0.7	77	8	73	0.01
Closed	Mix1A 2	0.9	80	88	76	0.11
Closed	Mix1A 2	1.1	80	36	79	0.04
Closed	Mix1A 2	1.3	85	62	81	0.08
Closed	Mix1A 2	1.5	84	102	84	0.12
Closed	Mix1A 2	1.7	86	482	86	0.59
Closed	Mix1A 3	0.5	73	30	69	0.04
Closed	Mix1A 3	0.7	75	2	73	0.00
Closed	Mix1A 3	0.9	84	46	76	0.06
Closed	Mix1A 3	1.1	84	0	79	-
Closed	Mix1A 3	1.3	88	6	81	0.01
Closed	Mix1A 3	1.5	90	18	84	0.02
Closed	Mix1A 3	1.7	93	8	86	0.01
Closed	Mix1A 3	1.9	95	162	88	0.19
Closed	Mix1A 3	2.1	94	534	90	0.64
Closed	Mix1B 1	0.5	72	66	69	0.07
Closed	Mix1B 1	0.7	75	0	73	-
Closed	Mix1B 1	0.9	78	0	76	-
Closed	Mix1B 1	1.1	81	550	79	0.60
Closed	Mix1B 1	1.3	83	210	81	0.23
Closed	Mix1B 2	0.5	72	20	69	0.02
Closed	Mix1B 2	0.7	76	26	73	0.03
Closed	Mix1B 2	0.9	79	0	76	-
Closed	Mix1B 2	1.1	81	176	79	0.19
Closed	Mix1B 2	1.3	83	10	81	0.01
Closed	Mix1B 2	1.5	84	638	84	0.69
Closed	Mix1B 3	0.5	71	12	70	0.01
Closed	Mix1B 3	0.7	75	108	73	0.12
Closed	Mix1B 3	0.9	79	4	76	0.00
Closed	Mix1B 3	1.1	82	54	79	0.06
Closed	Mix1B 3	1.3	86	18	81	0.02
Closed	Mix1B 3	1.5	86	0	84	-
Closed	Mix1B 3	1.7	87	716	86	0.78
Closed	Mix2A 1	0.5	75	40	69	0.04
Closed	Mix2A 1	0.7	76	132	73	0.14
Closed	Mix2A 1	0.9	79	6	76	0.01
Closed	Mix2A 1	1.1	81	22	79	0.02
Closed	Mix2A 1	1.3	82	4	81	0.00
Closed	Mix2A 1	1.5	84	660	84	0.72
Closed	Mix2A 2	0.5	74	66	69	0.07
Closed	Mix2A 2	0.7	74	74	73	0.08
Closed	Mix2A 2	0.9	77	190	76	0.20
Closed	Mix2A 2	1.1	80	542	79	0.58
Closed	Mix2A 3	0.5	74	20	69	0.02
Closed	Mix2A 3	0.7	78	60	73	0.06
Closed	Mix2A 3	0.9	77	830	76	0.88
Closed	Mix2B 1	0.5	73	8	69	0.01
Closed	Mix2B 1	0.7	76	16	73	0.02
Closed	Mix2B 1	0.9	78	16	76	0.02
Closed	Mix2B 1	1.1	80	92	79	0.12
Closed	Mix2B 1	1.3	82	0	81	-
Closed	Mix2B 1	1.5	84	604	84	0.81
Closed	Mix2B 2	0.5	73	158	69	0.21
Closed	Mix2B 2	0.7	77	0	73	-
Closed	Mix2B 2	0.9	79	2	76	0.00
Closed	Mix2B 2	1.1	80	598	79	0.78
Closed	Mix2B 3	0.5	71	26	69	0.03
Closed	Mix2B 3	0.7	76	234	73	0.30
Closed	Mix2B 3	0.9	80	496	76	0.63
Closed	Mix3B 1	0.5	73	8	69	0.00
Closed	Mix3B 1	0.7	75	158	73	0.07
Closed	Mix3B 1	0.9	78	0	76	-
Closed	Mix3B 1	1.1	80	0	79	-

Dam	#Run	Q	h	m_{LW}	h_0	R_{LW}
Closed	Mix3B 1	1.3	82	62	81	0.03
Closed	Mix3B 1	1.5	84	954	84	0.40
Closed	Mix3B 1	1.7	87	2	86	0.00
Closed	Mix3B 1	1.9	89	242	88	0.10
Closed	Mix3B 1	2.1	90	922	90	0.39
Closed	Mix3B 2	0.5	78	10	69	0.00
Closed	Mix3B 2	0.7	80	0	73	-
Closed	Mix3B 2	0.9	86	6	76	0.00
Closed	Mix3B 2	1.1	88	32	79	0.01
Closed	Mix3B 2	1.3	91	42	81	0.02
Closed	Mix3B 2	1.5	91	60	84	0.03
Closed	Mix3B 2	1.7	93	188	86	0.08
Closed	Mix3B 2	1.9	95	14	88	0.01
Closed	Mix3B 2	2.1	96	0	90	-
Closed	Mix3B 2	2.3	98	0	92	-
Closed	Mix3B 2	2.5	96	2056	94	0.85
Closed	Mix3B 3	0.5	72	22	69	0.01
Closed	Mix3B 3	0.7	74	0	73	-
Closed	Mix3B 3	0.9	76	0	76	-
Closed	Mix3B 3	1.1	84	38	79	0.02
Closed	Mix3B 3	1.3	87	0	81	-
Closed	Mix3B 3	1.5	90	2	84	0.00
Closed	Mix3B 3	1.7	92	2	86	0.00
Closed	Mix3B 3	1.9	95	26	88	0.01
Closed	Mix3B 3	2.1	102	2	90	0.00
Closed	Mix3B 3	2.3	104	2	92	0.00
Closed	Mix3B 3	2.5	107	2334	94	0.93
Slit	NoWood 1	0.5	41	NA	40	NA
Slit	NoWood 1	0.7	54	NA	52	NA
Slit	NoWood 1	1.0	64	NA	60	NA
Slit	NoWood 1	1.2	68	NA	65	NA
Slit	NoWood 1	1.5	71	NA	69	NA
Slit	NoWood 1	1.7	75	NA	72	NA
Slit	NoWood 1	2.0	78	NA	76	NA
Slit	NoWood 1	2.2	80	NA	79	NA
Slit	NoWood 1	2.5	83	NA	82	NA
Slit	NoWood 1	2.7	86	NA	84	NA
Slit	NoWood 1	3.0	88	NA	87	NA
Slit	NoWood 1	3.2	90	NA	89	NA
Slit	NoWood 1	3.5	93	NA	91	NA
Slit	NoWood 1	3.7	95	NA	94	NA
Slit	NoWood 1	4.0	97	NA	96	NA
Slit	NoWood 1	4.2	99	NA	98	NA
Slit	NoWood 1	4.5	101	NA	100	NA
Slit	NoWood 1	4.7	103	NA	102	NA
Slit	NoWood 1	5.0	104	NA	104	NA
Slit	NoWood 2	0.5	40	NA	40	NA
Slit	NoWood 2	0.7	53	NA	52	NA
Slit	NoWood 2	1.0	63	NA	60	NA
Slit	NoWood 2	1.2	67	NA	65	NA

Dam	#Run	Q	h	m_{LW}	h_0	R_{LW}
Slit	NoWood 2	1.5	71	NA	69	NA
Slit	NoWood 2	1.7	74	NA	72	NA
Slit	NoWood 2	2.0	77	NA	76	NA
Slit	NoWood 2	2.2	80	NA	79	NA
Slit	NoWood 2	2.5	83	NA	81	NA
Slit	NoWood 2	2.7	85	NA	84	NA
Slit	NoWood 2	3.0	87	NA	87	NA
Slit	NoWood 2	3.2	90	NA	89	NA
Slit	NoWood 2	3.5	92	NA	91	NA
Slit	NoWood 2	3.7	94	NA	94	NA
Slit	NoWood 2	4.0	96	NA	96	NA
Slit	NoWood 2	4.2	99	NA	98	NA
Slit	NoWood 2	4.5	101	NA	100	NA
Slit	NoWood 2	4.7	102	NA	102	NA
Slit	NoWood 2	5.0	104	NA	104	NA
Slit	Mix1A 1	0.5	43	0	40	-
Slit	Mix1A 1	1.0	66	0	60	-
Slit	Mix1A 1	1.5	76	30	69	0.03
Slit	Mix1A 1	2.0	80	174	76	0.20
Slit	Mix1A 1	2.5	87	16	82	0.02
Slit	Mix1A 1	3.0	88	606	87	0.70
Slit	Mix1A 2	0.5	41	0	40	-
Slit	Mix1A 2	1.0	68	6	60	0.01
Slit	Mix1A 2	1.5	78	76	69	0.09
Slit	Mix1A 2	2.0	85	24	76	0.03
Slit	Mix1A 3	0.5	42	0	40	-
Slit	Mix1A 3	1.0	68	6	60	0.01
Slit	Mix1A 3	1.5	76	30	69	0.03
Slit	Mix1A 3	2.0	83	88	76	0.10
Slit	Mix1A 3	2.5	88	64	82	0.07
Slit	Mix1A 4	0.5	43	0	40	-
Slit	Mix1A 4	1.0	69	0	60	-
Slit	Mix1A 4	1.5	76	66	69	0.07
Slit	Mix1A 4	2.0	82	314	76	0.35
Slit	Mix1B 1	0.5	41	0	40	-
Slit	Mix1B 1	1.0	66	0	60	-
Slit	Mix1B 1	1.5	75	36	69	0.04
Slit	Mix1B 1	2.0	80	420	76	0.43
Slit	Mix1B 2	0.5	44	0	40	-
Slit	Mix1B 2	1.0	69	0	60	-
Slit	Mix1B 2	1.5	79	60	69	0.06
Slit	Mix1B 2	2.0	82	196	76	0.20
Slit	Mix1B 3	0.5	43	0	40	-
Slit	Mix1B 3	1.0	70	6	60	0.01
Slit	Mix1B 3	1.5	83	0	69	-
Slit	Mix1B 3	2.0	95	0	76	-
Slit	Mix1B 3	2.5	102	82	81	0.08
Slit	Mix1B 3	3.0	106	156	87	0.16
Slit	Mix1B 4	0.5	44	0	40	-
Slit	Mix1B 4	1.0	73	0	60	-

Dam	#Run	Q	h	m_{LW}	h_0	R_{LW}
Slit	Mix1B 4	1.5	80	34	69	0.03
Slit	Mix2A 1	0.5	45	0	40	-
Slit	Mix2A 1	1.0	69	6	60	0.01
Slit	Mix2A 1	1.5	76	64	69	0.07
Slit	Mix2A 1	2.0	82	846	76	0.88
Slit	Mix2A 2	0.5	44	0	40	-
Slit	Mix2A 2	1.0	70	0	60	-
Slit	Mix2A 2	1.5	78	38	69	0.04
Slit	Mix2A 3	0.5	46	0	40	-
Slit	Mix2A 3	1.0	71	0	60	-
Slit	Mix2A 3	1.5	75	74	69	0.08
Slit	Mix2A 3	2.0	83	272	76	0.28
Slit	Mix2A 3	2.5	89	72	82	0.07
Slit	Mix2A 4	0.5	45	0	40	-
Slit	Mix2A 4	1.0	68	0	60	-
Slit	Mix2A 4	1.2	73	0	65	-
Slit	Mix2A 4	1.5	78	8	69	0.01
Slit	Mix2A 4	1.7	83	4	72	0.00
Slit	Mix2A 4	2.0	87	8	76	0.01
Slit	Mix2A 4	2.2	91	0	79	-
Slit	Mix2B 1	0.5	42	0	40	-
Slit	Mix2B 1	1.0	69	0	60	-
Slit	Mix2B 1	1.2	74	14	65	0.02
Slit	Mix2B 1	1.5	75	20	69	0.03
Slit	Mix2B 1	1.7	79	94	72	0.13
Slit	Mix2B 1	2.0	82	0	76	-
Slit	Mix2B 1	2.2	84	32	79	0.04
Slit	Mix2B 1	2.5	87	534	82	0.74
Slit	Mix2B 2	0.5	44	0	40	-
Slit	Mix2B 2	1.0	66	0	60	-
Slit	Mix2B 2	1.2	70	20	65	0.03
Slit	Mix2B 2	1.5	73	32	69	0.04
Slit	Mix2B 2	1.7	83	14	72	0.02
Slit	Mix2B 2	2.0	81	38	76	0.05
Slit	Mix2B 2	2.2	85	12	79	0.02
Slit	Mix2B 2	2.5	88	0	81	-
Slit	Mix2B 2	2.7	93	24	84	0.03
Slit	Mix2B 3	0.5	42	0	40	-
Slit	Mix2B 3	1.0	66	0	60	-
Slit	Mix2B 3	1.2	74	0	65	-
Slit	Mix2B 3	1.5	81	0	69	-
Slit	Mix2B 3	1.7	83	34	72	0.04
Slit	Mix2B 3	2.0	84	0	76	-
Slit	Mix2B 3	2.2	88	46	79	0.06
Slit	Mix2B 3	2.5	92	106	82	0.13
Slit	Mix2B 4	0.5	45	0	40	-
Slit	Mix2B 4	1.0	69	8	60	0.01
Slit	Mix2B 4	1.5	81	42	69	0.05
Slit	Mix2B 4	1.7	85	4	72	0.01
Slit	Mix2B 4	2.0	87	294	76	0.36

Dam	#Run	Q	h	m_{LW}	h_0	R_{LW}
Slot	NoWood 1	0.6	23	NA	24	NA
Slot	NoWood 1	0.7	25	NA	26	NA
Slot	NoWood 1	0.8	27	NA	28	NA
Slot	NoWood 1	0.9	30	NA	31	NA
Slot	NoWood 1	1.0	32	NA	33	NA
Slot	NoWood 1	1.0	34	NA	35	NA
Slot	NoWood 1	1.1	36	NA	37	NA
Slot	NoWood 1	1.2	38	NA	39	NA
Slot	NoWood 1	1.3	40	NA	41	NA
Slot	NoWood 1	1.4	42	NA	43	NA
Slot	NoWood 1	1.5	44	NA	45	NA
Slot	NoWood 1	1.6	46	NA	47	NA
Slot	NoWood 1	1.7	47	NA	50	NA
Slot	NoWood 1	1.8	49	NA	52	NA
Slot	NoWood 1	1.9	52	NA	56	NA
Slot	NoWood 1	2.0	55	NA	57	NA
Slot	NoWood 1	2.1	58	NA	60	NA
Slot	NoWood 1	2.2	60	NA	61	NA
Slot	NoWood 1	2.3	63	NA	63	NA
Slot	NoWood 1	2.4	64	NA	64	NA
Slot	NoWood 1	2.5	66	NA	66	NA
Slot	NoWood 1	2.6	67	NA	67	NA
Slot	NoWood 1	2.7	67	NA	68	NA
Slot	NoWood 1	2.8	69	NA	69	NA
Slot	NoWood 1	2.9	70	NA	70	NA
Slot	NoWood 1	3.0	71	NA	72	NA
Slot	NoWood 2	0.4	22	NA	20	NA
Slot	NoWood 2	0.6	25	NA	23	NA
Slot	NoWood 2	0.6	27	NA	25	NA
Slot	NoWood 2	0.7	30	NA	27	NA
Slot	NoWood 2	0.8	32	NA	30	NA
Slot	NoWood 2	0.9	34	NA	32	NA
Slot	NoWood 2	1.0	35	NA	34	NA
Slot	NoWood 2	1.1	38	NA	37	NA
Slot	NoWood 2	1.2	40	NA	38	NA
Slot	NoWood 2	1.3	42	NA	41	NA
Slot	NoWood 2	1.4	44	NA	42	NA
Slot	NoWood 2	1.5	45	NA	44	NA
Slot	NoWood 2	1.6	47	NA	46	NA
Slot	NoWood 2	1.7	48	NA	49	NA
Slot	NoWood 2	1.7	48	NA	50	NA
Slot	NoWood 2	1.8	50	NA	53	NA
Slot	NoWood 2	1.9	54	NA	56	NA
Slot	NoWood 2	2.0	57	NA	58	NA
Slot	NoWood 2	2.1	60	NA	60	NA
Slot	NoWood 2	2.2	62	NA	61	NA
Slot	NoWood 2	2.3	64	NA	63	NA
Slot	NoWood 2	2.4	65	NA	64	NA
Slot	NoWood 2	2.5	66	NA	65	NA
Slot	NoWood 2	2.6	67	NA	67	NA

Dam	#Run	Q	h	m_{LW}	h_0	R_{LW}
Slot	NoWood 2	2.7	68	NA	68	NA
Slot	NoWood 2	2.8	70	NA	69	NA
Slot	NoWood 2	2.9	71	NA	71	NA
Slot	NoWood 3	2.4	66	NA	65	NA
Slot	NoWood 3	2.6	68	NA	67	NA
Slot	NoWood 3	2.8	71	NA	70	NA
Slot	NoWood 3	3.1	73	NA	73	NA
Slot	NoWood 3	3.2	76	NA	75	NA
Slot	NoWood 3	3.4	77	NA	77	NA
Slot	NoWood 3	3.6	80	NA	79	NA
Slot	NoWood 3	3.8	81	NA	81	NA
Slot	NoWood 3	4.0	83	NA	83	NA
Slot	NoWood 3	4.2	85	NA	84	NA
Slot	NoWood 3	4.4	87	NA	86	NA
Slot	NoWood 3	4.6	88	NA	88	NA
Slot	NoWood 3	4.8	90	NA	89	NA
Slot	Mix1A 1	0.5	25	0	21	
Slot	Mix1A 1	1.0	40	0	34	-
Slot	Mix1A 1	1.5	56	0	45	-
Slot	Mix1A 1	2.0	72	16	57	0.02
Slot	Mix1A 1	2.5	76	392	66	0.44
Slot	Mix1A 2	0.5	25	0	21	-
Slot	Mix1A 2	1.0	48	16	34	0.02
Slot	Mix1A 2	1.5	65	0	45	-
Slot	Mix1A 2	2.0	73	76	57	0.08
Slot	Mix1A 2	2.5	80	252	65	0.27
Slot	Mix1A 3	0.5	25	0	21	-
Slot	Mix1A 3	1.0	41	0	34	-
Slot	Mix1A 3	1.5	59	0	45	-
Slot	Mix1A 3	2.0	72	10	57	0.01
Slot	Mix1A 3	2.5	79	400	66	0.42
Slot	Mix1A 3	3.0	83	454	72	0.48
Slot	Mix1A 4	0.5	25	0	21	-
Slot	Mix1A 4	1.0	44	0	34	-
Slot	Mix1A 4	1.5	67	0	45	-
Slot	Mix1A 4	2.0	75	96	57	0.10
Slot	Mix1A 4	2.5	79	226	66	0.24
Slot	Mix1A 4	3.0	83	586	72	0.61
Slot	Mix1B 1	0.5	27	0	21	-
Slot	Mix1B 1	1.0	44	0	34	-
Slot	Mix1B 1	1.5	61	0	45	-
Slot	Mix1B 1	2.0	75	0	57	-
Slot	Mix1B 1	2.5	82	34	66	0.03
Slot	Mix1B 1	3.0	80	924	72	0.94
Slot	Mix1B 2	0.5	25	0	21	-
Slot	Mix1B 2	1.0	50	16	34	0.02
Slot	Mix1B 2	1.5	68	20	45	0.02
Slot	Mix1B 2	2.0	76	62	57	0.06
Slot	Mix1B 2	2.5	80	138	65	0.14
Slot	Mix1B 2	3.0	86	26	72	0.03

Dam	#Run	Q	h	m_{LW}	h_0	R_{LW}
Slot	Mix1B 2	3.5	91	94	78	0.10
Slot	Mix1B 2	4.0	95	64	82	0.07
Slot	Mix1B 2	4.5	99	14	87	0.01
Slot	Mix1B 2	5.0	108	24	91	0.03
Slot	Mix1B 2	5.5	112	30	95	0.03
Slot	Mix1B 2	7.0	119	422	106	0.44
Slot	Mix1B 3	0.5	28	0	21	-
Slot	Mix1B 3	1.0	46	0	34	-
Slot	Mix1B 3	1.5	63	0	45	-
Slot	Mix1B 3	2.0	74	0	57	-
Slot	Mix1B 3	2.5	83	10	66	0.01
Slot	Mix1B 3	3.0	91	6	72	0.01
Slot	Mix1B 4	0.5	25	0	21	-
Slot	Mix1B 4	1.0	44	0	34	-
Slot	Mix1B 4	1.5	64	0	45	-
Slot	Mix1B 4	2.0	76	14	57	0.01
Slot	Mix1B 4	2.5	86	32	66	0.03
Slot	Mix1B 4	3.0	92	1004	72	0.95
Slot	Mix2A 1	0.5	30	0	21	-
Slot	Mix2A 1	1.0	48	0	34	-
Slot	Mix2A 1	1.5	64	0	45	-
Slot	Mix2A 1	2.0	74	38	57	0.04
Slot	Mix2A 1	2.5	81	34	66	0.04
Slot	Mix2A 2	0.5	24	0	21	-
Slot	Mix2A 2	1.0	47	0	34	-
Slot	Mix2A 2	1.5	69	0	45	-
Slot	Mix2A 2	2.0	76	24	57	0.02
Slot	Mix2A 2	2.5	84	22	66	0.02
Slot	Mix2A 2	3.0	93	210	72	0.21
Slot	Mix2A 2	3.5	99	98	77	0.10
Slot	Mix2A 2	3.6	100	NA	79	NA
Slot	Mix2A 2	3.6	102	202	79	0.20
Slot	Mix2A 2	3.7	102	0	80	-
Slot	Mix2A 2	3.8	103	14	81	0.01
Slot	Mix2A 2	3.9	104	30	82	0.03
Slot	Mix2A 2	4.0	105	4	82	0.00
Slot	Mix2A 2	4.2	108	18	84	0.02
Slot	Mix2A 2	4.4	109	8	86	0.01
Slot	Mix2A 2	4.6	112	20	88	0.02
Slot	Mix2A 2	4.8	114	60	90	0.06
Slot	Mix2A 2	5.0	115	8	91	0.01
Slot	Mix2A 2	5.2	115	16	93	0.02
Slot	Mix2A 2	5.4	116	208	95	0.21
Slot	Mix2A 3	0.5	25	18	21	0.02
Slot	Mix2A 3	1.0	52	14	34	0.01
Slot	Mix2A 3	1.5	69	6	45	0.01
Slot	Mix2A 3	2.0	75	36	57	0.04
Slot	Mix2A 3	2.5	86	2	65	0.00
Slot	Mix2A 3	3.0	85	724	72	0.70
Slot	Mix2A 4	0.5	30	0	21	-

Dam	#Run	Q	h	m_{LW}	h_0	R_{LW}
Slot	Mix2A 4	1.0	48	0	34	-
Slot	Mix2A 4	1.5	67	0	45	-
Slot	Mix2A 4	2.0	78	0	57	-
Slot	Mix2B 1	0.5	25	6	21	0.01
Slot	Mix2B 1	1.0	39	28	34	0.03
Slot	Mix2B 1	1.5	53	6	45	0.01
Slot	Mix2B 1	2.0	68	10	57	0.01
Slot	Mix2B 1	2.5	77	14	66	0.02
Slot	Mix2B 1	3.0	85	60	72	0.07
Slot	Mix2B 1	3.5	90	132	77	0.14
Slot	Mix2B 1	4.0	96	36	82	0.04
Slot	Mix2B 2	0.5	29	0	21	-
Slot	Mix2B 2	1.0	43	8	34	0.01
Slot	Mix2B 2	1.5	66	0	45	-
Slot	Mix2B 2	2.0	73	26	57	0.03
Slot	Mix2B 2	2.5	80	40	66	0.04
Slot	Mix2B 3	0.5	26	0	21	-
Slot	Mix2B 3	1.0	49	0	34	-
Slot	Mix2B 3	1.5	65	0	45	-
Slot	Mix2B 3	2.0	76	10	57	0.01
Slot	Mix2B 3	2.5	80	80	65	0.08
Slot	Mix2B 3	3.0	88	112	72	0.12
Slot	Mix2B 4	0.5	24	0	21	-
Slot	Mix2B 4	1.0	43	0	34	-
Slot	Mix2B 4	1.5	61	6	45	0.01
Slot	Mix2B 4	2.0	72	6	57	0.01
Slot	Mix2B 4	2.5	76	32	66	0.03
Slot	Mix2B 4	3.0	86	34	72	0.04
Slot	Mix2B 4	3.5	96	814	77	0.87
Slot	Mix3B 1	0.5	27	0	21	-
Slot	Mix3B 1	1.0	42	6	34	0.00
Slot	Mix3B 1	1.2	51	2	40	0.00
Slot	Mix3B 1	1.5	62	0	45	-
Slot	Mix3B 1	1.7	70	0	51	-
Slot	Mix3B 1	2.0	76	14	57	0.01
Slot	Mix3B 1	2.2	77	46	62	0.02
Slot	Mix3B 1	2.5	81	0	65	-
Slot	Mix3B 1	2.7	86	8	69	0.00
Slot	Mix3B 1	3.0	90	20	72	0.01
Slot	Mix3B 1	3.2	94	22	75	0.01
Slot	Mix3B 1	3.5	96	52	77	0.02
Slot	Mix3B 1	3.7	102	12	80	0.01
Slot	Mix3B 1	4.0	104	6	82	0.00
SABO	NoWood 1	0.5	12	NA	9	NA
SABO	NoWood 1	1.0	17	NA	14	NA
SABO	NoWood 1	1.5	22	NA	19	NA
SABO	NoWood 1	2.0	25	NA	23	NA
SABO	NoWood 1	2.5	27	NA	27	NA
SABO	NoWood 1	3.0	29	NA	30	NA
SABO	NoWood 1	3.5	32	NA	33	NA

Dam	#Run	Q	h	m_{LW}	h_0	R_{LW}
SABO	NoWood 1	4.0	36	NA	36	NA
SABO	NoWood 1	4.5	40	NA	39	NA
SABO	NoWood 1	5.0	45	NA	42	NA
SABO	NoWood 1	5.5	50	NA	45	NA
SABO	NoWood 1	6.0	50	NA	48	NA
SABO	NoWood 1	6.5	52	NA	50	NA
SABO	NoWood 1	7.0	59	NA	53	NA
SABO	NoWood 1	7.5	57	NA	55	NA
SABO	NoWood 1	8.0	66	NA	58	NA
SABO	NoWood 1	8.4	67	NA	59	NA
SABO	NoWood 2	0.5	10	NA	9	NA
SABO	NoWood 2	1.0	16	NA	14	NA
SABO	NoWood 2	1.5	20	NA	19	NA
SABO	NoWood 2	2.0	24	NA	23	NA
SABO	NoWood 2	2.5	25	NA	27	NA
SABO	NoWood 2	3.0	29	NA	30	NA
SABO	NoWood 2	3.5	33	NA	33	NA
SABO	NoWood 2	4.0	38	NA	36	NA
SABO	NoWood 2	4.5	40	NA	39	NA
SABO	NoWood 2	5.0	42	NA	42	NA
SABO	NoWood 2	5.5	47	NA	45	NA
SABO	NoWood 2	6.0	48	NA	48	NA
SABO	NoWood 2	6.5	59	NA	50	NA
SABO	NoWood 2	7.0	61	NA	53	NA
SABO	NoWood 2	7.5	62	NA	55	NA
SABO	NoWood 2	8.0	62	NA	58	NA
SABO	NoWood 2	8.5	74	NA	60	NA
SABO	Mix1A 1	0.5	14	0	9	-
SABO	Mix1A 1	1.0	24	12	14	0.01
SABO	Mix1A 1	1.5	34	6	19	0.01
SABO	Mix1A 1	2.0	38	0	23	-
SABO	Mix1A 1	2.5	45	2	27	0.00
SABO	Mix1A 1	3.0	48	2	30	0.00
SABO	Mix1A 1	3.5	55	4	33	0.01
SABO	Mix1A 1	4.0	60	4	36	0.01
SABO	Mix1A 1	4.5	63	38	39	0.04
SABO	Mix1A 1	5.0	70	16	42	0.02
SABO	Mix1A 1	5.5	79	8	45	0.01
SABO	Mix1A 1	6.0	92	12	48	0.01
SABO	Mix1A 1	6.5	91	22	50	0.03
SABO	Mix1A 1	7.0	97	10	53	0.01
SABO	Mix1A 1	7.5	95	146	55	0.17
SABO	Mix1A 1	8.0	87	62	58	0.07
SABO	Mix1A 1	8.3	88	18	59	0.02
SABO	Mix1A 2	0.5	14	0	9	-
SABO	Mix1A 2	1.0	23	14	14	0.02
SABO	Mix1A 2	1.5	31	4	19	0.01
SABO	Mix1A 2	2.0	41	28	23	0.03
SABO	Mix1A 2	2.5	44	0	27	-
SABO	Mix1A 2	3.0	50	6	30	0.01

Dam	#Run	Q	h	m_{LW}	h_0	R_{LW}
SABO	Mix1A 2	3.5	59	12	33	0.01
SABO	Mix1A 2	4.0	60	0	36	-
SABO	Mix1A 2	4.5	63	16	39	0.02
SABO	Mix1A 2	5.0	68	6	42	0.01
SABO	Mix1A 2	5.5	72	14	45	0.02
SABO	Mix1A 2	6.0	77	10	48	0.01
SABO	Mix1A 2	6.5	80	6	50	0.01
SABO	Mix1A 2	7.0	84	14	53	0.02
SABO	Mix1A 2	7.5	89	82	55	0.10
SABO	Mix1A 2	8.0	88	46	58	0.05
SABO	Mix1A 2	8.2	89	2	59	0.00
SABO	Mix1A 3	0.5	13	0	9	-
SABO	Mix1A 3	1.0	21	20	14	0.02
SABO	Mix1A 3	1.5	36	0	19	-
SABO	Mix1A 3	2.0	39	2	23	0.00
SABO	Mix1A 3	2.5	47	0	27	-
SABO	Mix1A 3	3.0	55	4	30	0.00
SABO	Mix1A 3	3.5	61	0	33	-
SABO	Mix1A 3	4.0	66	14	36	0.02
SABO	Mix1A 3	4.5	72	32	39	0.04
SABO	Mix1A 3	5.0	76	0	42	-
SABO	Mix1A 3	5.5	82	4	45	0.00
SABO	Mix1A 3	6.0	85	0	48	-
SABO	Mix1A 3	6.5	89	6	50	0.01
SABO	Mix1A 3	7.0	94	20	53	0.02
SABO	Mix1A 3	7.5	91	18	55	0.02
SABO	Mix1A 3	8.0	92	70	58	0.08
SABO	Mix1A 3	8.2	94	8	59	0.01
SABO	Mix2A 1	0.5	17	0	9	-
SABO	Mix2A 1	1.0	27	14	14	0.01
SABO	Mix2A 1	1.5	36	8	19	0.01
SABO	Mix2A 1	2.0	42	0	23	-
SABO	Mix2A 1	2.5	48	0	27	-
SABO	Mix2A 1	3.0	57	2	30	0.00
SABO	Mix2A 1	3.5	63	0	33	-
SABO	Mix2A 1	4.0	66	0	36	-
SABO	Mix2A 1	4.5	73	0	39	-
SABO	Mix2A 1	5.0	77	2	42	0.00
SABO	Mix2A 1	5.5	80	26	45	0.03
SABO	Mix2A 1	6.0	82	28	48	0.03
SABO	Mix2A 1	6.5	86	22	50	0.02
SABO	Mix2A 1	7.0	89	22	53	0.02
SABO	Mix2A 1	7.5	94	42	55	0.04
SABO	Mix2A 1	8.0	95	432	58	0.45
SABO	Mix2A 2	0.5	13	0	9	-
SABO	Mix2A 2	1.0	25	8	14	0.01
SABO	Mix2A 2	1.5	36	2	19	0.00
SABO	Mix2A 2	2.0	42	0	23	-
SABO	Mix2A 2	2.5	51	0	27	-
SABO	Mix2A 2	3.0	57	4	30	0.00

Dam	#Run	Q	h	m_{LW}	h_0	R_{LW}
SABO	Mix2A 2	3.5	61	0	33	-
SABO	Mix2A 2	4.0	68	2	36	0.00
SABO	Mix2A 2	4.5	74	10	39	0.01
SABO	Mix2A 2	5.0	79	56	42	0.06
SABO	Mix2A 2	5.5	81	52	45	0.05
SABO	Mix2A 2	6.0	83	16	48	0.02
SABO	Mix2A 2	6.5	88	16	50	0.02
SABO	Mix2A 2	7.0	91	36	53	0.04
SABO	Mix2A 2	7.5	94	10	55	0.01
SABO	Mix2A 3	0.5	12	0	9	-
SABO	Mix2A 3	1.0	23	0	14	-
SABO	Mix2A 3	1.5	34	0	19	-
SABO	Mix2A 3	2.0	43	0	23	-
SABO	Mix2A 3	2.5	51	6	27	0.01
SABO	Mix2A 3	3.0	57	2	30	0.00
SABO	Mix2A 3	3.5	64	2	33	0.00
SABO	Mix2A 3	4.0	70	14	36	0.01
SABO	Mix2A 3	4.5	76	8	39	0.01
SABO	Mix2A 3	5.0	81	8	42	0.01
SABO	Mix2A 3	5.5	85	48	45	0.05
SABO	Mix2A 3	6.0	87	30	48	0.03
SABO	Mix2B 1	0.5	13	0	9	-
SABO	Mix2B 1	1.0	21	8	14	0.01
SABO	Mix2B 1	1.5	33	2	19	0.00
SABO	Mix2B 1	2.0	37	0	23	-
SABO	Mix2B 1	2.5	42	0	27	-
SABO	Mix2B 1	3.0	46	4	30	0.01
SABO	Mix2B 1	3.5	54	4	33	0.01
SABO	Mix2B 1	4.0	58	0	36	-
SABO	Mix2B 1	4.5	63	2	39	0.00
SABO	Mix2B 1	5.0	68	6	42	0.01
SABO	Mix2B 1	5.5	73	4	45	0.01
SABO	Mix2B 1	6.0	77	4	48	0.01
SABO	Mix2B 1	6.5	81	6	50	0.01
SABO	Mix2B 1	7.0	85	2	53	0.00
SABO	Mix2B 1	7.5	85	48	55	0.06
SABO	Mix2B 1	8.0	89	2	58	0.00
SABO	Mix2B 1	8.3	92	4	59	0.01
SABO	Mix2B 2	0.5	13	0	9	-
SABO	Mix2B 2	1.0	21	0	14	-
SABO	Mix2B 2	1.5	29	0	19	-
SABO	Mix2B 2	2.0	37	0	23	-
SABO	Mix2B 2	2.5	44	0	27	-
SABO	Mix2B 2	3.0	48	0	30	-
SABO	Mix2B 2	3.5	55	0	33	-
SABO	Mix2B 2	4.0	61	0	36	-
SABO	Mix2B 2	4.5	66	0	39	-
SABO	Mix2B 2	5.0	71	0	42	-
SABO	Mix2B 2	5.5	76	0	45	-
SABO	Mix2B 2	6.0	77	16	48	0.02

Dam	#Run	Q	h	m_{LW}	h_0	R_{LW}
SABO	Mix2B 2	6.5	81	22	50	0.03
SABO	Mix2B 2	7.0	84	28	53	0.03
SABO	Mix2B 2	7.5	86	430	55	0.53
SABO	Mix2B 3	0.5	12	0	9	-
SABO	Mix2B 3	1.0	23	12	14	0.02
SABO	Mix2B 3	1.5	31	8	19	0.01
SABO	Mix2B 3	2.0	43	0	23	-
SABO	Mix2B 3	2.5	48	0	27	-
SABO	Mix2B 3	3.0	54	0	30	-
SABO	Mix2B 3	3.5	59	0	33	-
SABO	Mix2B 3	4.0	62	0	36	-
SABO	Mix2B 3	4.5	68	30	39	0.04
SABO	Mix2B 3	5.0	73	10	42	0.01
SABO	Mix2B 3	5.5	77	36	45	0.04
SABO	Mix3B 1	0.5	13	0	9	-
SABO	Mix3B 1	1.0	23	8	14	0.00
SABO	Mix3B 1	1.5	34	8	19	0.00
SABO	Mix3B 1	2.0	41	0	23	-
SABO	Mix3B 1	2.5	45	14	27	0.01
SABO	Mix3B 1	3.0	52	0	30	-
SABO	Mix3B 1	3.5	61	0	33	-
SABO	Mix3B 1	4.0	68	4	36	0.00
SABO	Mix3B 1	4.5	73	2	39	0.00
SABO	Mix3B 1	5.0	77	38	42	0.02
SABO	Mix3B 1	5.5	80	2	45	0.00
SABO	Mix3B 1	6.0	84	22	48	0.01
SABO	Mix3B 1	6.5	86	16	50	0.01
SABO	Mix3B 1	7.0	88	10	53	0.00
SABO	Mix3B 1	7.5	93	8	55	0.00
SABO	Mix3B 1	8.0	99	0	58	-
SABO	Mix3B 1	8.5	102	86	60	0.03
SABO	Mix3B 2	0.5	15	0	9	-
SABO	Mix3B 2	1.0	26	0	14	-
SABO	Mix3B 2	1.5	37	0	19	-
SABO	Mix3B 2	2.0	47	0	23	-
SABO	Mix3B 2	2.5	54	0	27	-
SABO	Mix3B 2	3.0	58	0	30	-
SABO	Mix3B 2	3.5	62	0	33	-
SABO	Mix3B 2	4.0	67	0	36	-
SABO	Mix3B 2	4.5	73	0	39	-
SABO	Mix3B 2	5.0	77	14	42	0.01
SABO	Mix3B 2	5.5	82	0	45	-
SABO	Mix3B 2	6.0	88	26	48	0.01
SABO	Mix3B 2	6.5	91	18	50	0.01
SABO	Mix3B 2	7.0	94	12	53	0.01
SABO	Mix3B 2	7.5	100	0	55	-
SABO	Mix3B 2	8.0	103	44	58	0.02
SABO	Mix3B 2	8.4	105	34	60	0.01
SABO	Mix3B 3	0.5	13	0	9	-
SABO	Mix3B 3	1.0	24	6	14	0.00
SABO	Mix3B 3	1.5	34	2	19	0.00
SABO	Mix3B 3	2.0	44	0	23	-
SABO	Mix3B 3	2.5	53	0	27	-
SABO	Mix3B 3	3.0	60	0	30	-
SABO	Mix3B 3	3.5	66	2	33	0.00
SABO	Mix3B 3	4.0	69	0	36	-
SABO	Mix3B 3	4.5	74	0	39	-
SABO	Mix3B 3	5.0	78	48	42	0.02
SABO	Mix3B 3	5.5	83	0	45	-
SABO	Mix3B 3	6.0	88	0	48	-
SABO	Mix3B 3	6.5	92	6	50	0.00
SABO	Mix3B 3	7.0	97	26	53	0.01
SABO	Mix3B 3	7.5	102	2	55	0.00