



COMUNE DI SANTADI

PROVINCIA DEL SUD SARDEGNA

PROGETTO DEFINITIVO

**COMPLETAMENTO DELLA SISTEMAZIONE IDRAULICA
DEL RIO CRESIA**

Studio Tecnico Associato

Ing.ri Orgiana A. & Orrù G.

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Studio di compatibilità idraulica:
**RISULTATI DELLE ELABORAZIONI
NUMERICHE**

Allegato

C.11

DATA

Apr 2020

Il Sindaco:

Dott. Elio Sundas

Progettazione:

Studio Tecnico Associato
Ing.ri Orgiana A. & Orrù G.

Dott. Geol. Marco Pisano

Il Responsabile
del Servizio Tecnico
Geom. Carlo Acca

Il Coordinatore del Progetto
Dr. Ing. Giancarlo Orrù

RISULTATI DELLE ELABORAZIONI NUMERICHE

SITUAZIONE PRIMA DELL'INTERVENTO

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
riu cresia	10	TR50	57.00	130.31	131.08	131.97	135.04	0.080004	8.82	6.46	8.45	3.22
riu cresia	10	TR100	69.00	130.31	131.18	132.18	135.72	0.080004	9.45	7.31	8.45	3.24
riu cresia	10	TR200	81.00	130.31	131.27	132.27	136.36	0.080018	10.00	8.10	8.45	3.26
riu cresia	10	TR500	97.00	130.31	131.42	132.44	136.82	0.080130	10.29	9.42	9.35	3.27
riu cresia	9	TR50	57.00	130.25	131.28	132.20	134.38	0.050087	7.80	7.30	7.59	2.54
riu cresia	9	TR100	69.00	130.25	131.39	132.24	135.04	0.052608	8.47	8.15	7.59	2.61
riu cresia	9	TR200	81.00	130.25	131.49	132.25	135.67	0.054533	9.05	8.95	7.59	2.66
riu cresia	9	TR500	97.00	130.25	131.68	132.49	136.13	0.050097	9.34	10.38	7.59	2.55
riu cresia	8.9	TR50	57.00	130.08	131.22	131.76	133.06	0.027349	6.02	9.47	9.35	1.91
riu cresia	8.9	TR100	69.00	130.08	131.30	131.97	133.60	0.031184	6.72	10.27	9.35	2.05
riu cresia	8.9	TR200	81.00	130.08	131.38	132.08	134.12	0.034321	7.33	11.05	9.35	2.15
riu cresia	8.9	TR500	97.00	130.08	131.53	132.08	134.66	0.034857	7.84	12.37	9.35	2.18
riu cresia	8.8	TR50	57.00	128.89	129.77	130.55	132.91	0.056701	7.86	7.26	8.55	2.72
riu cresia	8.8	TR100	69.00	128.89	129.88	130.77	133.45	0.055931	8.37	8.24	8.55	2.72
riu cresia	8.8	TR200	81.00	128.89	132.06	130.97	132.11	0.000395	1.26	101.17	90.29	0.23
riu cresia	8.8	TR500	97.00	128.89	132.41	131.22	132.44	0.000268	1.11	134.06	97.42	0.19
riu cresia	8.7	TR50	57.00	128.94	131.36	130.57	131.69	0.002126	2.57	22.19	9.55	0.54
riu cresia	8.7	TR100	69.00	128.94	130.23	130.78	132.09	0.022705	6.04	11.42	9.55	1.76
riu cresia	8.7	TR200	81.00	128.94	131.31	130.97	132.02	0.004566	3.73	21.73	9.55	0.79
riu cresia	8.7	TR500	97.00	128.94	131.22	131.22	132.32	0.007327	4.64	20.90	9.55	1.00
riu cresia	8.5	TR50	57.00	128.77	131.37	131.37	131.65	0.002217	2.95	35.89	55.16	0.58
riu cresia	8.5	TR100	69.00	128.77	131.46	131.46	131.77	0.002416	3.15	41.09	57.86	0.61
riu cresia	8.5	TR200	81.00	128.77	131.54	131.54	131.87	0.002625	3.35	45.61	60.11	0.64
riu cresia	8.5	TR500	97.00	128.77	131.39	131.64	132.15	0.005986	4.88	37.08	55.79	0.96
riu cresia	8.1	TR50	57.00	128.58	130.94	131.15	131.55	0.003470	4.00	27.00	57.30	0.83
riu cresia	8.1	TR100	69.00	128.58	131.03	131.23	131.65	0.003659	4.22	32.23	58.90	0.86
riu cresia	8.1	TR200	81.00	128.58	131.10	131.31	131.75	0.003880	4.43	36.65	60.22	0.89
riu cresia	8.1	TR500	97.00	128.58	131.12	131.40	131.99	0.005235	5.17	37.72	60.53	1.04
riu cresia	8	TR50	57.00	128.47	130.56	130.82	131.46	0.006932	4.90	23.90	75.96	1.13
riu cresia	8	TR100	69.00	128.47	130.61	130.88	131.56	0.007666	5.25	27.98	78.17	1.20
riu cresia	8	TR200	81.00	128.47	130.66	130.94	131.65	0.008280	5.54	31.68	80.12	1.25
riu cresia	8	TR500	97.00	128.47	130.69	131.01	131.88	0.010177	6.21	34.14	81.38	1.39
riu cresia	7.9		Bridge									
riu cresia	7.8	TR50	57.00	128.39	130.89	130.47	130.90	0.000091	0.63	206.61	274.22	0.13
riu cresia	7.8	TR100	69.00	128.39	130.97	130.47	130.98	0.000100	0.68	228.52	281.54	0.14
riu cresia	7.8	TR200	81.00	128.39	131.04	130.47	131.05	0.000109	0.72	248.02	287.89	0.15
riu cresia	7.8	TR500	97.00	128.39	131.12	130.47	131.13	0.000121	0.77	271.16	295.25	0.15
riu cresia	7.7	TR50	57.00	127.95	130.65	130.68	130.88	0.001549	2.83	49.43	106.38	0.55
riu cresia	7.7	TR100	69.00	127.95	130.71	130.74	130.96	0.001769	3.06	55.81	111.06	0.59
riu cresia	7.7	TR200	81.00	127.95	130.78	130.81	131.03	0.001816	3.16	64.00	116.80	0.60
riu cresia	7.7	TR500	97.00	127.95	130.85	130.88	131.11	0.002003	3.37	71.69	120.19	0.63
riu cresia	7	TR50	57.00	127.71	129.71	129.71	129.89	0.002191	2.56	43.23	73.45	0.58
riu cresia	7	TR100	69.00	127.71	129.73	129.73	129.97	0.002981	3.01	44.52	73.82	0.68
riu cresia	7	TR200	81.00	127.71	129.79	129.79	130.05	0.003214	3.18	48.93	75.07	0.70
riu cresia	7	TR500	97.00	127.71	129.86	129.86	130.14	0.003467	3.38	54.49	76.63	0.74
riu cresia	6.5	TR50	57.00	127.27	129.46	129.28	129.51	0.000605	1.53	87.96	174.50	0.33
riu cresia	6.5	TR100	69.00	127.27	129.53	129.31	129.58	0.000633	1.60	101.02	182.04	0.34
riu cresia	6.5	TR200	81.00	127.27	129.53	129.36	129.60	0.000888	1.89	100.30	181.63	0.40
riu cresia	6.5	TR500	97.00	127.27	129.62	129.41	129.68	0.000869	1.92	116.96	190.84	0.40
riu cresia	6	TR50	57.00	126.92	128.72	128.59	129.41	0.005812	3.68	15.51	8.86	0.89
riu cresia	6	TR100	69.00	126.92	129.47	128.80	129.56	0.000829	1.72	79.42	147.22	0.35
riu cresia	6	TR200	81.00	126.92	129.30	129.30	129.55	0.002102	2.62	57.41	121.83	0.55
riu cresia	6	TR500	97.00	126.92	129.39	129.39	129.63	0.002177	2.73	68.59	135.32	0.56
riu cresia	5.5	TR50	57.00	126.65	128.29	128.29	129.07	0.007277	3.91	14.60	9.40	1.00
riu cresia	5.5	TR100	69.00	126.65	128.51	128.51	129.39	0.007258	4.16	16.60	9.40	1.00
riu cresia	5.5	TR200	81.00	126.65	128.66	128.66	128.75	0.001500	1.87	91.05	252.31	0.43
riu cresia	5.5	TR500	97.00	126.65	128.66	128.66	128.78	0.002151	2.24	91.05	252.31	0.52
riu cresia	5.4	TR50	57.00	125.67	126.92	127.74	128.94	0.043161	6.30	9.05	9.23	2.03
riu cresia	5.4	TR100	69.00	125.67	127.08	127.78	129.25	0.039467	6.52	10.59	9.47	1.97
riu cresia	5.4	TR200	81.00	125.67	127.53	127.81	128.64	0.016125	4.91	24.64	128.85	1.29
riu cresia	5.4	TR500	97.00	125.67	127.58	127.86	128.68	0.016897	5.12	31.32	129.85	1.33
riu cresia	5.3	TR50	57.00	125.74	126.73	127.16	128.35	0.038608	5.63	10.22	14.74	1.98
riu cresia	5.3	TR100	69.00	125.74	126.82	127.20	128.69	0.040772	6.08	11.70	17.52	2.05
riu cresia	5.3	TR200	81.00	125.74	126.98	127.23	128.36	0.028259	5.48	22.26	160.99	1.74
riu cresia	5.3	TR500	97.00	125.74	127.02	127.27	128.40	0.029635	5.73	28.60	166.69	1.79

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
riu cresia	5.2	TR50	57.00	125.04	126.12	126.38	127.46	0.043486	5.81	15.33	71.02	2.07
riu cresia	5.2	TR100	69.00	125.04	126.15	126.42	127.69	0.051392	6.40	17.38	77.77	2.26
riu cresia	5.2	TR200	81.00	125.04	126.19	126.47	127.62	0.049603	6.41	20.49	78.46	2.23
riu cresia	5.2	TR500	97.00	125.04	126.23	126.52	127.65	0.050135	6.57	23.71	78.77	2.25
riu cresia	5.1	TR50	57.00	124.69	125.67	125.82	126.24	0.036842	4.82	21.33	93.61	1.81
riu cresia	5.1	TR100	69.00	124.69	125.70	125.86	126.32	0.039623	5.07	23.76	93.75	1.89
riu cresia	5.1	TR200	81.00	124.69	125.74	125.89	126.33	0.036665	4.98	27.19	93.95	1.82
riu cresia	5.1	TR500	97.00	124.69	125.78	125.94	126.38	0.035124	4.98	31.07	94.17	1.79

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
riu cresia 2	5	TR50	61.00	123.58	124.11	124.17	124.36	0.025712	2.62	27.77	105.57	1.40
riu cresia 2	5	TR100	74.00	123.58	124.15	124.22	124.42	0.024411	2.70	32.20	109.87	1.38
riu cresia 2	5	TR200	87.00	123.58	124.18	124.26	124.49	0.025155	2.84	35.58	113.04	1.41
riu cresia 2	5	TR500	104.00	123.58	124.22	124.31	124.57	0.025405	2.98	40.05	117.11	1.43
riu cresia 2	4.9	TR50	61.00	122.61	123.69	123.17	123.71	0.000552	0.64	98.52	139.21	0.23
riu cresia 2	4.9	TR100	74.00	122.61	123.74	123.22	123.76	0.000644	0.71	105.71	139.47	0.24
riu cresia 2	4.9	TR200	87.00	122.61	123.79	123.27	123.82	0.000732	0.77	112.28	143.68	0.26
riu cresia 2	4.9	TR500	104.00	122.61	123.84	123.32	123.88	0.000846	0.85	120.10	149.86	0.28
riu cresia 2	4.8	TR50	61.00	121.84	123.69		123.70	0.000046	0.26	231.67	202.99	0.07
riu cresia 2	4.8	TR100	74.00	121.84	123.74		123.75	0.000059	0.30	242.42	206.08	0.08
riu cresia 2	4.8	TR200	87.00	121.84	123.79		123.80	0.000072	0.34	252.32	208.88	0.09
riu cresia 2	4.8	TR500	104.00	121.84	123.85		123.86	0.000091	0.39	263.85	212.09	0.10
riu cresia 2	4.7	TR50	61.00	121.24	123.69		123.69	0.000015	0.21	383.86	301.77	0.04
riu cresia 2	4.7	TR100	74.00	121.24	123.74		123.75	0.000020	0.24	399.88	306.54	0.05
riu cresia 2	4.7	TR200	87.00	121.24	123.79		123.79	0.000029	0.29	414.88	374.21	0.06
riu cresia 2	4.7	TR500	104.00	121.24	123.85		123.85	0.000041	0.35	440.13	498.91	0.07
riu cresia 2	4.6	TR50	61.00	120.95	123.69		123.69	0.000009	0.18	443.69	270.58	0.04
riu cresia 2	4.6	TR100	74.00	120.95	123.74		123.75	0.000011	0.21	458.00	273.15	0.04
riu cresia 2	4.6	TR200	87.00	120.95	123.79		123.79	0.000018	0.26	471.34	336.69	0.05
riu cresia 2	4.6	TR500	104.00	120.95	123.85		123.85	0.000031	0.35	496.47	542.38	0.07
riu cresia 2	4.5	TR50	61.00	120.30	123.69	122.20	123.69	0.000024	0.29	302.53	233.68	0.06
riu cresia 2	4.5	TR100	74.00	120.30	123.74	122.20	123.75	0.000032	0.34	314.92	241.96	0.07
riu cresia 2	4.5	TR200	87.00	120.30	123.79	122.20	123.79	0.000055	0.45	328.52	374.36	0.09
riu cresia 2	4.5	TR500	104.00	120.30	123.84	122.23	123.85	0.000079	0.55	352.75	522.64	0.10
riu cresia 2	4.4	TR50	61.00	120.05	123.69	122.92	123.69	0.000007	0.09	622.22	493.83	0.01
riu cresia 2	4.4	TR100	74.00	120.05	123.74	123.29	123.74	0.000009	0.10	648.33	502.88	0.02
riu cresia 2	4.4	TR200	87.00	120.05	123.79	123.29	123.79	0.000011	0.12	671.98	510.94	0.02
riu cresia 2	4.4	TR500	104.00	120.05	123.84	123.29	123.84	0.000014	0.13	699.65	520.21	0.02
riu cresia 2	2		Bridge									
riu cresia 2	1.5	TR50	61.00	119.98	123.53	123.53	123.65	0.003902	2.11	53.95	173.60	0.36
riu cresia 2	1.5	TR100	74.00	119.98	123.57	123.57	123.70	0.004345	2.24	61.67	186.26	0.38
riu cresia 2	1.5	TR200	87.00	119.98	123.61	123.61	123.75	0.004555	2.31	69.99	198.99	0.39
riu cresia 2	1.5	TR500	104.00	119.98	123.65	123.65	123.80	0.005186	2.49	77.39	209.66	0.41
riu cresia 2	1	TR50	61.00	119.98	120.31	120.53	123.22	0.916155	10.44	9.22	109.43	7.69
riu cresia 2	1	TR100	74.00	119.98	120.33	120.56	123.25	0.885302	10.54	10.94	119.94	7.61
riu cresia 2	1	TR200	87.00	119.98	120.34	120.57	123.29	0.859754	10.62	12.60	129.31	7.54
riu cresia 2	1	TR500	104.00	119.98	120.36	120.61	123.32	0.818989	10.65	14.80	140.74	7.41

RISULTATI DELLE ELABORAZIONI NUMERICHE

SITUAZIONE DOPO L'INTERVENTO

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
riu cresia	10	TR50	57.00	130.31	131.08	131.97	135.04	0.080004	8.82	6.46	8.45	3.22
riu cresia	10	TR100	69.00	130.31	131.18	132.18	135.72	0.080004	9.45	7.31	8.45	3.24
riu cresia	10	TR200	81.00	130.31	131.27	132.27	136.36	0.080018	10.00	8.10	8.45	3.26
riu cresia	10	TR500	97.00	130.31	131.42	132.44	136.82	0.080130	10.29	9.42	9.35	3.27
riu cresia	9	TR50	57.00	130.25	131.28	132.20	134.38	0.050087	7.80	7.30	7.59	2.54
riu cresia	9	TR100	69.00	130.25	131.39	132.24	135.04	0.052608	8.47	8.15	7.59	2.61
riu cresia	9	TR200	81.00	130.25	131.49	132.25	135.67	0.054533	9.05	8.95	7.59	2.66
riu cresia	9	TR500	97.00	130.25	131.68	132.49	136.13	0.050097	9.34	10.38	7.59	2.55
riu cresia	8.9	TR50	57.00	130.08	131.22	131.76	133.06	0.027349	6.02	9.47	9.35	1.91
riu cresia	8.9	TR100	69.00	130.08	131.30	131.97	133.60	0.031184	6.72	10.27	9.35	2.05
riu cresia	8.9	TR200	81.00	130.08	131.38	132.08	134.12	0.034321	7.33	11.05	9.35	2.15
riu cresia	8.9	TR500	97.00	130.08	131.53	132.08	134.66	0.034857	7.84	12.37	9.35	2.18
riu cresia	8.8	TR50	57.00	128.89	129.77	130.55	132.91	0.056701	7.86	7.26	8.55	2.72
riu cresia	8.8	TR100	69.00	128.89	129.88	130.77	133.45	0.055931	8.37	8.24	8.55	2.72
riu cresia	8.8	TR200	81.00	128.89	132.06	130.97	132.11	0.000395	1.26	101.17	90.29	0.23
riu cresia	8.8	TR500	97.00	128.89	132.41	131.22	132.44	0.000268	1.11	134.06	97.42	0.19
riu cresia	8.7	TR50	57.00	128.94	131.36	130.57	131.69	0.002126	2.57	22.19	9.55	0.54
riu cresia	8.7	TR100	69.00	128.94	130.23	130.78	132.09	0.022705	6.04	11.42	9.55	1.76
riu cresia	8.7	TR200	81.00	128.94	131.31	130.97	132.02	0.004566	3.73	21.73	9.55	0.79
riu cresia	8.7	TR500	97.00	128.94	131.22	131.22	132.32	0.007327	4.64	20.90	9.55	1.00
riu cresia	8.5	TR50	57.00	128.77	131.37	131.37	131.65	0.002217	2.95	35.89	55.16	0.58
riu cresia	8.5	TR100	69.00	128.77	131.46	131.46	131.77	0.002416	3.15	41.09	57.86	0.61
riu cresia	8.5	TR200	81.00	128.77	131.54	131.54	131.87	0.002625	3.35	45.61	60.11	0.64
riu cresia	8.5	TR500	97.00	128.77	131.39	131.64	132.15	0.005986	4.88	37.08	55.79	0.96
riu cresia	8.1	TR50	57.00	128.58	130.94	131.15	131.55	0.003470	4.00	27.00	57.30	0.83
riu cresia	8.1	TR100	69.00	128.58	131.03	131.23	131.65	0.003659	4.22	32.23	58.90	0.86
riu cresia	8.1	TR200	81.00	128.58	131.10	131.31	131.75	0.003880	4.43	36.65	60.22	0.89
riu cresia	8.1	TR500	97.00	128.58	131.12	131.40	131.99	0.005235	5.17	37.72	60.53	1.04
riu cresia	8	TR50	57.00	128.47	130.56	130.82	131.46	0.006932	4.90	23.90	75.96	1.13
riu cresia	8	TR100	69.00	128.47	130.61	130.88	131.56	0.007666	5.25	27.98	78.17	1.20
riu cresia	8	TR200	81.00	128.47	130.66	130.94	131.65	0.008280	5.54	31.68	80.12	1.25
riu cresia	8	TR500	97.00	128.47	130.69	131.01	131.88	0.010177	6.21	34.14	81.38	1.39
riu cresia	7.9		Bridge									
riu cresia	7.8	TR50	57.00	128.39	130.89	130.47	130.90	0.000091	0.63	206.61	274.22	0.13
riu cresia	7.8	TR100	69.00	128.39	130.97	130.47	130.98	0.000100	0.68	228.52	281.54	0.14
riu cresia	7.8	TR200	81.00	128.39	131.04	130.47	131.05	0.000109	0.72	248.02	287.89	0.15
riu cresia	7.8	TR500	97.00	128.39	131.12	130.47	131.13	0.000121	0.77	271.16	295.25	0.15
riu cresia	7.7	TR50	57.00	127.95	130.65	130.68	130.88	0.001549	2.83	49.43	106.38	0.55
riu cresia	7.7	TR100	69.00	127.95	130.71	130.74	130.96	0.001769	3.06	55.81	111.06	0.59
riu cresia	7.7	TR200	81.00	127.95	130.78	130.81	131.03	0.001816	3.16	64.00	116.80	0.60
riu cresia	7.7	TR500	97.00	127.95	130.85	130.88	131.11	0.002003	3.37	71.69	120.19	0.63
riu cresia	7	TR50	57.00	127.71	129.71	129.71	129.89	0.002191	2.56	43.23	73.45	0.58
riu cresia	7	TR100	69.00	127.71	129.73	129.73	129.97	0.002981	3.01	44.52	73.82	0.68
riu cresia	7	TR200	81.00	127.71	129.79	129.79	130.05	0.003214	3.18	48.93	75.07	0.70
riu cresia	7	TR500	97.00	127.71	129.86	129.86	130.14	0.003467	3.38	54.49	76.63	0.74
riu cresia	6.5	TR50	57.00	127.27	129.46	129.28	129.51	0.000605	1.53	87.96	174.50	0.33
riu cresia	6.5	TR100	69.00	127.27	129.53	129.31	129.58	0.000633	1.60	101.02	182.04	0.34
riu cresia	6.5	TR200	81.00	127.27	129.53	129.36	129.60	0.000888	1.89	100.30	181.63	0.40
riu cresia	6.5	TR500	97.00	127.27	129.62	129.41	129.68	0.000869	1.92	116.96	190.84	0.40
riu cresia	6	TR50	57.00	126.92	128.72	128.59	129.41	0.005812	3.68	15.51	8.86	0.89
riu cresia	6	TR100	69.00	126.92	129.47	128.80	129.56	0.000829	1.72	79.43	147.23	0.35
riu cresia	6	TR200	81.00	126.92	129.30	129.30	129.55	0.002102	2.62	57.41	121.83	0.55
riu cresia	6	TR500	97.00	126.92	129.39	129.39	129.63	0.002177	2.73	68.59	135.32	0.56
riu cresia	5.5	TR50	57.00	126.65	128.29	128.29	129.07	0.007277	3.91	14.60	9.40	1.00
riu cresia	5.5	TR100	69.00	126.65	128.51	128.51	129.39	0.007258	4.16	16.60	9.40	1.00
riu cresia	5.5	TR200	81.00	126.65	128.66	128.66	128.75	0.001500	1.87	91.05	252.31	0.43
riu cresia	5.5	TR500	97.00	126.65	128.66	128.66	128.78	0.002151	2.24	91.05	252.31	0.52
riu cresia	5.42	TR50	57.00	125.65	126.38	127.03	128.89	0.054490	7.02	8.12	12.00	2.72
riu cresia	5.42	TR100	69.00	125.65	126.49	127.20	129.19	0.048793	7.28	9.48	12.00	2.61
riu cresia	5.42	TR200	81.00	125.65	126.86	127.36	128.57	0.021743	5.80	13.96	13.00	1.79
riu cresia	5.42	TR500	97.00	125.65	127.18	127.56	128.64	0.013896	5.36	18.08	13.00	1.45
riu cresia	5.41	TR50	57.00	125.58	126.33	126.96	128.68	0.048913	6.78	8.40	12.00	2.59
riu cresia	5.41	TR100	69.00	125.58	126.44	127.13	129.01	0.045185	7.10	9.71	12.00	2.52
riu cresia	5.41	TR200	81.00	125.58	126.78	127.29	128.51	0.022017	5.83	13.90	13.00	1.80
riu cresia	5.41	TR500	97.00	125.58	127.09	127.49	128.59	0.014419	5.43	17.87	13.00	1.48

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
riu clesia	5.40	TR50	57.00	125.58	126.33	126.96	128.67	0.048744	6.78	8.41	12.00	2.58
riu clesia	5.40	TR100	69.00	125.58	126.44	127.13	129.01	0.045053	7.10	9.72	12.00	2.52
riu clesia	5.40	TR200	81.00	125.58	126.79	127.29	128.51	0.021962	5.82	13.92	13.00	1.80
riu clesia	5.40	TR500	97.00	125.58	127.09	127.49	128.59	0.014387	5.42	17.88	13.00	1.48
riu clesia	5.3	TR50	57.00	125.38	126.21	126.76	128.11	0.054370	6.10	9.35	12.00	2.20
riu clesia	5.3	TR100	69.00	125.38	126.32	126.93	128.47	0.053504	6.51	10.60	12.00	2.21
riu clesia	5.3	TR200	81.00	125.38	126.60	127.09	128.28	0.031938	5.75	14.10	13.00	1.76
riu clesia	5.3	TR500	97.00	125.38	126.86	127.29	128.43	0.023118	5.55	17.48	13.00	1.53
riu clesia	5.29	TR50	57.00	125.38	126.21	126.76	128.11	0.054343	6.10	9.35	12.00	2.20
riu clesia	5.29	TR100	69.00	125.38	126.32	126.93	128.47	0.053481	6.51	10.60	12.00	2.21
riu clesia	5.29	TR200	81.00	125.38	126.60	127.09	128.28	0.031926	5.75	14.10	13.00	1.76
riu clesia	5.29	TR500	97.00	125.38	126.86	127.29	128.43	0.023112	5.55	17.48	13.00	1.53
riu clesia	5.2	TR50	57.00	125.09	126.22	126.47	127.21	0.020795	4.40	12.94	13.00	1.41
riu clesia	5.2	TR100	69.00	125.09	126.30	126.64	127.53	0.023391	4.91	14.06	13.00	1.51
riu clesia	5.2	TR200	81.00	125.09	126.55	126.80	127.67	0.016790	4.69	17.26	13.00	1.30
riu clesia	5.2	TR500	97.00	125.09	126.77	127.00	127.95	0.014819	4.82	20.12	13.00	1.24
riu clesia	5.1	TR50	57.00	124.73	126.05	126.11	126.75	0.011856	3.69	15.43	13.00	1.08
riu clesia	5.1	TR100	69.00	124.73	126.18	126.28	127.01	0.012617	4.04	17.07	13.00	1.13
riu clesia	5.1	TR200	81.00	124.73	126.28	126.44	127.26	0.013642	4.40	18.43	13.00	1.18
riu clesia	5.1	TR500	97.00	124.73	126.41	126.64	127.59	0.014819	4.82	20.12	13.00	1.24
riu clesia	5.05	TR50	57.00	124.27	125.48	125.65	126.32	0.015937	4.05	14.06	13.00	1.24
riu clesia	5.05	TR100	69.00	124.27	125.63	125.82	126.58	0.015655	4.33	15.94	13.00	1.25
riu clesia	5.05	TR200	81.00	124.27	125.78	125.98	126.82	0.015042	4.53	17.87	13.00	1.23
riu clesia	5.05	TR500	97.00	124.27	125.93	126.18	127.14	0.015267	4.87	19.93	13.00	1.25
riu clesia	5.02	TR50	57.00	124.04	125.23	125.42	126.11	0.017082	4.14	13.76	13.00	1.28
riu clesia	5.02	TR100	69.00	124.04	125.37	125.59	126.37	0.016812	4.43	15.59	13.00	1.29
riu clesia	5.02	TR200	81.00	124.04	125.51	125.75	126.61	0.016245	4.65	17.44	13.00	1.28
riu clesia	5.02	TR500	97.00	124.04	125.67	125.95	126.93	0.016384	4.98	19.49	13.00	1.30

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
riu cresia 2	5	TR50	61.00	123.65	124.88	125.09	125.81	0.018061	4.28	14.25	13.00	1.31
riu cresia 2	5	TR100	74.00	123.65	125.04	125.27	126.09	0.017528	4.55	16.28	13.00	1.30
riu cresia 2	5	TR200	87.00	123.65	125.19	125.44	126.34	0.016770	4.75	18.32	13.00	1.28
riu cresia 2	5	TR500	104.00	123.65	125.38	125.65	126.66	0.016381	5.02	20.73	13.00	1.27
riu cresia 2	4.9	TR50	61.00	122.61	123.69	123.17	123.71	0.000552	0.64	98.52	139.21	0.23
riu cresia 2	4.9	TR100	74.00	122.61	123.74	123.22	123.76	0.000644	0.71	105.71	139.47	0.24
riu cresia 2	4.9	TR200	87.00	122.61	123.79	123.26	123.82	0.000732	0.77	112.28	143.68	0.26
riu cresia 2	4.9	TR500	104.00	122.61	123.84	123.32	123.88	0.000846	0.85	120.10	149.86	0.28
riu cresia 2	4.8	TR50	61.00	121.84	123.69		123.70	0.000046	0.26	231.67	202.99	0.07
riu cresia 2	4.8	TR100	74.00	121.84	123.74		123.75	0.000059	0.30	242.42	206.08	0.08
riu cresia 2	4.8	TR200	87.00	121.84	123.79		123.80	0.000072	0.34	252.32	208.88	0.09
riu cresia 2	4.8	TR500	104.00	121.84	123.85		123.86	0.000091	0.39	263.85	212.09	0.10
riu cresia 2	4.7	TR50	61.00	121.24	123.69		123.69	0.000015	0.21	383.86	301.77	0.04
riu cresia 2	4.7	TR100	74.00	121.24	123.74		123.75	0.000020	0.24	399.88	306.54	0.05
riu cresia 2	4.7	TR200	87.00	121.24	123.79		123.79	0.000029	0.29	414.88	374.21	0.06
riu cresia 2	4.7	TR500	104.00	121.24	123.85		123.85	0.000041	0.35	440.13	498.91	0.07
riu cresia 2	4.6	TR50	61.00	120.95	123.69		123.69	0.000009	0.18	443.69	270.58	0.04
riu cresia 2	4.6	TR100	74.00	120.95	123.74		123.75	0.000011	0.21	458.00	273.15	0.04
riu cresia 2	4.6	TR200	87.00	120.95	123.79		123.79	0.000018	0.26	471.34	336.69	0.05
riu cresia 2	4.6	TR500	104.00	120.95	123.85		123.85	0.000031	0.35	496.47	542.38	0.07
riu cresia 2	4.5	TR50	61.00	120.30	123.69	122.20	123.69	0.000024	0.29	302.53	233.68	0.06
riu cresia 2	4.5	TR100	74.00	120.30	123.74	122.20	123.75	0.000032	0.34	314.92	241.96	0.07
riu cresia 2	4.5	TR200	87.00	120.30	123.79	122.20	123.79	0.000055	0.45	328.52	374.36	0.09
riu cresia 2	4.5	TR500	104.00	120.30	123.84	122.23	123.85	0.000079	0.55	352.75	522.64	0.10
riu cresia 2	4.4	TR50	61.00	120.05	123.69	122.92	123.69	0.000007	0.09	622.22	493.83	0.01
riu cresia 2	4.4	TR100	74.00	120.05	123.74	123.29	123.74	0.000009	0.10	648.33	502.88	0.02
riu cresia 2	4.4	TR200	87.00	120.05	123.79	123.29	123.79	0.000011	0.12	671.98	510.94	0.02
riu cresia 2	4.4	TR500	104.00	120.05	123.84	123.29	123.84	0.000014	0.13	699.65	520.21	0.02
riu cresia 2	2		Bridge									
riu cresia 2	1.5	TR50	61.00	119.98	123.53	123.53	123.65	0.003902	2.11	53.95	173.60	0.36
riu cresia 2	1.5	TR100	74.00	119.98	123.57	123.57	123.70	0.004345	2.24	61.67	186.26	0.38
riu cresia 2	1.5	TR200	87.00	119.98	123.61	123.61	123.75	0.004555	2.31	69.99	198.99	0.39
riu cresia 2	1.5	TR500	104.00	119.98	123.65	123.65	123.80	0.005186	2.49	77.39	209.66	0.41
riu cresia 2	1	TR50	61.00	119.98	120.31	120.53	123.22	0.916155	10.44	9.22	109.43	7.69
riu cresia 2	1	TR100	74.00	119.98	120.33	120.56	123.25	0.885302	10.54	10.94	119.94	7.61
riu cresia 2	1	TR200	87.00	119.98	120.34	120.57	123.29	0.859754	10.62	12.60	129.31	7.54
riu cresia 2	1	TR500	104.00	119.98	120.36	120.61	123.32	0.818989	10.65	14.80	140.74	7.41