

ALLEGATO 1
ANALISI IDROLOGICA
DELLE PORTATE DI PIENA DEL FIUME SESIA

CAMPIONE1

PERIMETRAZIONE DELLE AREE INONDABILI con il codice di calcolo FRESCURE

Nome del campione 1:

Serie delle portate storiche del Sesia

Numero di dati

27

n°	Q (m ³ /s)	Anno
1	1490	1925
2	2560	1926
3	760	1927
4	1830	1928
5	1100	1929
6	1344	1932
7	936	1933
8	2970	1934
9	2340	1951
10	2340	1952
11	1470	1953
12	1830	1954
13	1070	1955
14	2800	1956
15	1620	1957
16	690	1958
17	1870	1959
18	2490	1960
19	1020	1961
20	2130	1962
21	2190	1963
22	1290	1964
23	1800	1965
24	2080	1966
25	440	1967
26	3900	1968
27	1550	1969

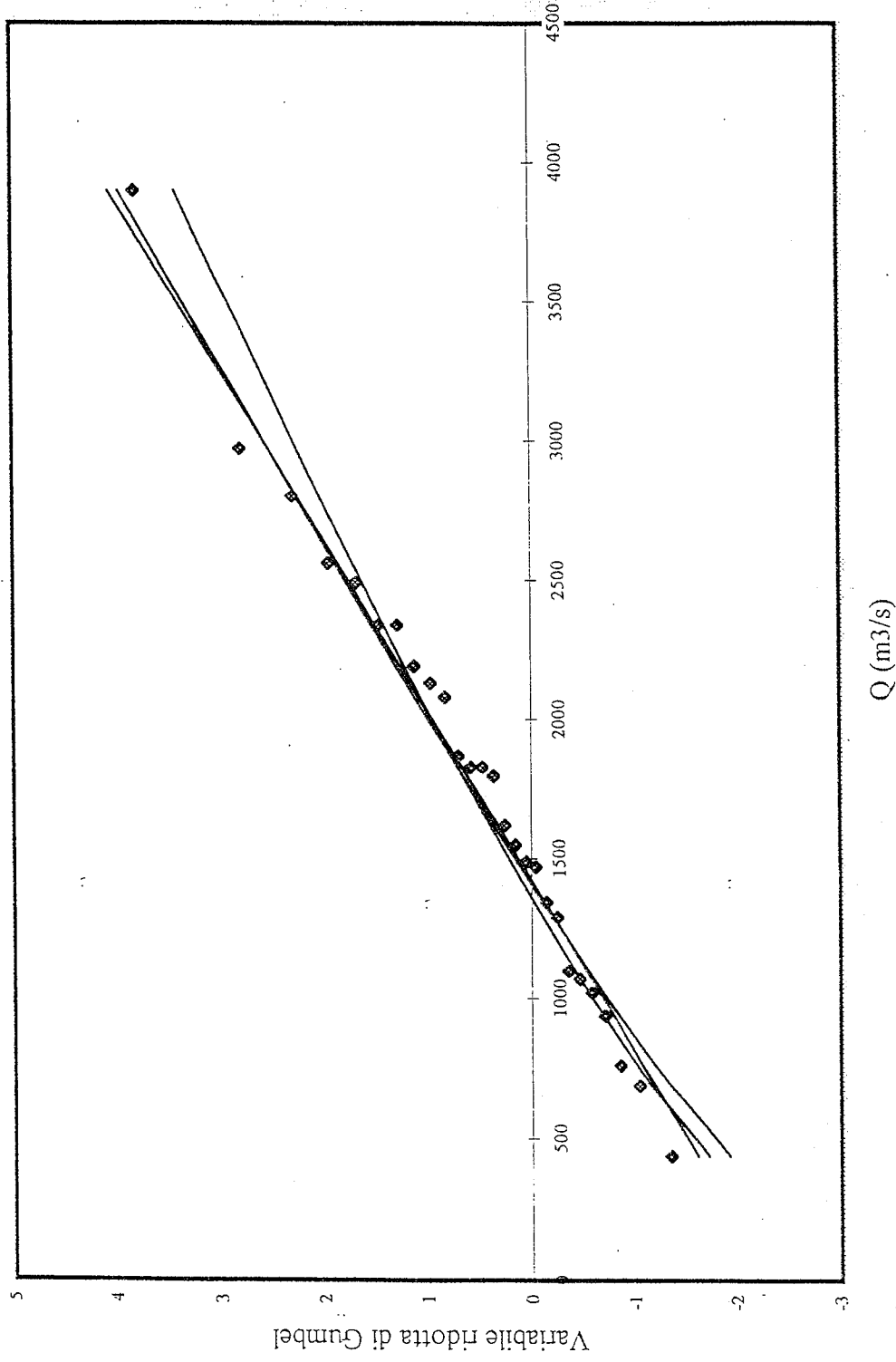
Serie delle portate storiche del Sesia

NUMERO D'ORDINE	VALORI ORDINATI Q_i (m ³ /s)	FREQUENZA F	PROBABILITA'		
			LN-Z-MOM	LN-Z-MV	EYI-MOM
1	440	0.022059	0.001022	0.003885	0.007031
2	690	0.058824	0.021662	0.041578	0.037013
3	760	0.095588	0.036548	0.062627	0.052835
4	936	0.132353	0.096804	0.135041	0.110100
5	1020	0.169118	0.136346	0.177387	0.146067
6	1070	0.205882	0.162609	0.204252	0.169833
7	1100	0.242647	0.179193	0.220823	0.184848
8	1290	0.279412	0.293939	0.329847	0.289939
9	1344	0.316176	0.328159	0.361056	0.321862
10	1470	0.352941	0.407790	0.432287	0.397361
11	1490	0.389706	0.420233	0.443286	0.409315
12	1550	0.426471	0.456997	0.475638	0.444885
13	1620	0.463235	0.498557	0.512017	0.485540
14	1800	0.500000	0.596915	0.597831	0.583582
15	1830	0.536765	0.611960	0.610981	0.598795
16	1830	0.573529	0.611960	0.610981	0.598795
17	1870	0.610294	0.631387	0.627991	0.618521
18	2080	0.647059	0.721413	0.707589	0.711051

Serie delle portate storiche del Sesia

NUMERO D'ORDINE	VALORI ORDINATI	FREQUENZA	PROBABILITA'		
			LNI-MOM	LNI-MV	EVI-MOM
n°	Q (m ³ /s)	T			
1	440	0.022059	0.001022	0.003885	0.007031
2	690	0.058824	0.021662	0.041578	0.037013
3	760	0.095588	0.036548	0.062627	0.052835
4	936	0.132353	0.096804	0.135041	0.110100
5	1020	0.169118	0.136346	0.177387	0.146067
6	1070	0.205882	0.162609	0.204252	0.169833
7	1100	0.242647	0.179193	0.220823	0.184848
8	1290	0.279412	0.293939	0.329847	0.289939
9	1344	0.316176	0.328159	0.361056	0.321862
10	1470	0.352941	0.407790	0.432287	0.397361
11	1490	0.389706	0.420233	0.443286	0.409315
12	1550	0.426471	0.456997	0.475638	0.444885
13	1620	0.463235	0.498557	0.512017	0.485540
14	1800	0.500000	0.596915	0.597831	0.583582
15	1830	0.536765	0.611960	0.610981	0.598795
16	1830	0.573529	0.611960	0.610981	0.598795
17	1870	0.610294	0.631387	0.627991	0.618521
18	2080	0.647059	0.721413	0.707589	0.711051
19	2130	0.683824	0.739946	0.724217	0.730309
20	2190	0.720588	0.760784	0.743055	0.752038
21	2340	0.757353	0.806587	0.785126	0.800046
22	2340	0.794118	0.806587	0.785126	0.800046
23	2490	0.830882	0.844283	0.820677	0.839759
24	2560	0.867647	0.859424	0.835272	0.855743
25	2800	0.904412	0.901389	0.877036	0.900059
26	2970	0.941176	0.923469	0.900085	0.923318
27	3900	0.977941	0.980894	0.967458	0.982666

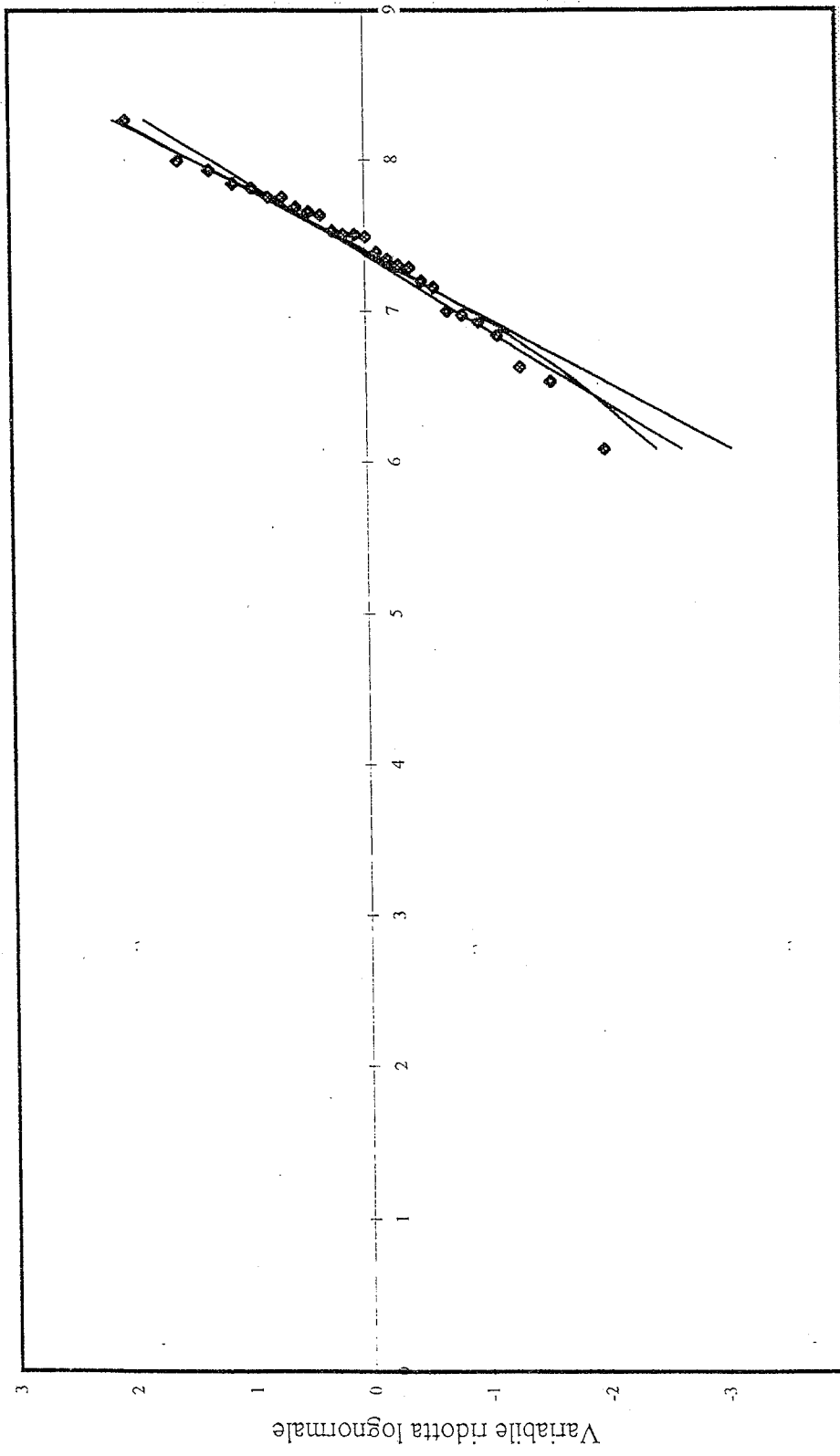
CARTA PROBABILISTICA DI GUMBEL



Tracciamento delle Pdf sulla carta probabilistica Lognormale

ln(Q)	Y(F)	Y(LN2-MOM)	Y(LN2-MY)	Y(EVI-MOM)
6.086775	-2.012966	-3.083842	-2.661909	-2.455708
6.536692	-1.564727	-2.020570	-1.732660	-1.786457
6.633318	-1.307108	-1.792223	-1.533090	-1.617964
6.841615	-1.115338	-1.299982	-1.102876	-1.225999
6.927558	-0.957657	-1.096882	-0.925370	-1.053454
6.975414	-0.820792	-0.983789	-0.826528	-0.954826
7.003065	-0.697812	-0.918444	-0.769419	-0.897041
7.162397	-0.584589	-0.541913	-0.440335	-0.553562
7.203406	-0.478417	-0.445003	-0.355637	-0.462499
7.293018	-0.377393	-0.233233	-0.170553	-0.260184
7.306531	-0.280086	-0.201297	-0.142643	-0.229306
7.346010	-0.185366	-0.108001	-0.061103	-0.138594
7.390181	-0.092286	-0.003616	0.030127	-0.036252
7.495542	0.000000	0.245370	0.247738	0.211064
7.512071	0.092286	0.284432	0.281877	0.250230
7.512071	0.185366	0.284432	0.281877	0.250230
7.533694	0.280086	0.335531	0.326536	0.301600
7.640123	0.377393	0.587042	0.546354	0.556457
7.663877	0.478417	0.643179	0.595417	0.613747
7.691657	0.584589	0.708826	0.652792	0.680916
7.757906	0.697812	0.865386	0.789623	0.841787
7.757906	0.820792	0.865386	0.789623	0.841787
7.820038	0.957657	1.012215	0.917948	0.993466
7.847763	1.115338	1.077733	0.975210	1.061385
7.937375	1.307108	1.289504	1.160295	1.281890
7.996317	1.564727	1.428798	1.282033	1.427748
8.268732	2.012966	2.072566	1.844674	2.112220

CARTA PROBABILISTICA LOGNORMALE



◆ Y(F)
— Y(LN2-MOM)
- - Y(LN2-MV)
... Y(EV1-MOM)

TEST DI PEARSON

α	k	f	χ^2	N	P_i	$N \cdot P_i$
0.12	6	2	9.676	27	0.209	5.4

Classe	LN2-MOM			LN2-MY			EVI-MOM		
	P_{tar}	Q_{tar}	N_i	Q_{tar}	N_i	$(N_i \cdot N \cdot P_i)^2$	Q_{tar}	N_i	$(N_i \cdot N \cdot P_i)^2$
1	0.000	0	7	0	5	0.1600	0	7	2.5600
2	0.200	1136.346566	2	1062.209767	4	1.9600	1129.279757	3	5.7600
3	0.400	1457.541361	5	1412.239114	5	0.1600	1474.409914	6	0.3600
4	0.600	1806.085541	6	1804.894445	8	6.7600	1832.405779	4	1.9600
5	0.800	2316.585851	7	2399.660229	5	0.1600	2339.840448	7	2.5600
Tot.			27		27			Tot.	27

Serie delle portate storiche del Sesia

PARAMETRI DEL CAMPIONE

N° dati	27
media	1774.444
s.q.m.	785.77
C_v	0.4426
γ	0.6096

PARAMETRI DELLE LEGGI

LN2-MV	LN2-MOM	EVI-MOM
μ	μ	μ
7.3756	7.3917	1420.8479
σ	σ	σ
0.4842	0.4232	0.00163
γ	γ	γ
1.6777	1.4153	1.1398

CALCOLO DELLA PORTATA CON ASSEGNATO TEMPO DI RITORNO

(Inserire il valore del tempo di ritorno in anni)

Q (m3/s)

T_r (anni)	LN2-MOM	LN2-MV	EVI-MOM
50	3869.07	4315.45	3811.51

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 11.3 Profile: Q200 (Continued)

Q Total (m3/s)	4900.00	Flow (m3/s)	722.98	3547.22	629.80
Top Width (m)	1805.87	Top Width (m)	694.42	403.91	707.54
Vel Total (m/s)	0.83	Avg. Vel. (m/s)	0.39	1.53	0.37
Max Chl Dpth (m)	8.34	Hydr. Depth (m)	2.65	5.75	2.41
Conv. Total (m3/s)	239161.1	Conv. (m3/s)	35287.4	173134.0	30739.7
Length Wtd. (m)	106.46	Wetted Per. (m)	695.01	405.43	707.85
Min Ch El (m)	112.47	Shear (N/m2)	10.91	23.60	9.94
Alpha	2.48	Stream Power (N/m s)	4.28	36.02	3.66
Frctn Loss (m)	0.05	Cum Volume (1000 m3)	9024.39	12081.45	7418.55
C & E Loss (m)	0.00	Cum SA (1000 m2)	2889.74	2295.80	2594.35

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 11.3 Profile: Q500

E.G. Elev (m)	121.00	Element	Left OB	Channel	Right OB
Vel Head (m)	0.11	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	120.89	Reach Len. (m)	252.68	89.30	20.00
Crit W.S. (m)	117.72	Flow Area (m2)	1897.81	2356.49	1764.97
E.G. Slope (m/m)	0.000497	Area (m2)	1897.81	2356.49	1764.97
Q Total (m3/s)	5500.00	Flow (m3/s)	826.55	3950.11	723.34
Top Width (m)	1806.43	Top Width (m)	694.58	403.91	707.94
Vel Total (m/s)	0.91	Avg. Vel. (m/s)	0.44	1.68	0.41
Max Chl Dpth (m)	8.42	Hydr. Depth (m)	2.73	5.83	2.49
Conv. Total (m3/s)	246669.5	Conv. (m3/s)	37069.9	177158.4	32441.3
Length Wtd. (m)	106.70	Wetted Per. (m)	695.18	405.43	708.26
Min Ch El (m)	112.47	Shear (N/m2)	13.31	28.34	12.15
Alpha	2.48	Stream Power (N/m s)	5.80	47.50	4.98
Frctn Loss (m)	0.06	Cum Volume (1000 m3)	10004.67	12889.27	10266.89
C & E Loss (m)	0.00	Cum SA (1000 m2)	2939.44	2295.80	3120.94

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 11 Profile: Q200

E.G. Elev (m)	120.85	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	120.77	Reach Len. (m)	929.24	994.34	963.34
Crit W.S. (m)	117.67	Flow Area (m2)	1778.24	2729.38	972.77
E.G. Slope (m/m)	0.000451	Area (m2)	1778.24	2729.38	972.77
Q Total (m3/s)	4900.00	Flow (m3/s)	712.40	3859.94	327.65
Top Width (m)	1723.72	Top Width (m)	683.81	554.61	485.30
Vel Total (m/s)	0.89	Avg. Vel. (m/s)	0.40	1.41	0.34
Max Chl Dpth (m)	9.58	Hydr. Depth (m)	2.60	4.92	2.00
Conv. Total (m3/s)	230781.8	Conv. (m3/s)	33553.0	181796.8	15432.0
Length Wtd. (m)	973.22	Wetted Per. (m)	686.09	563.09	486.84
Min Ch El (m)	111.19	Shear (N/m2)	11.46	21.43	8.83
Alpha	2.01	Stream Power (N/m s)	4.59	30.30	2.98
Frctn Loss (m)	0.62	Cum Volume (1000 m3)	8566.97	11855.81	7391.74
C & E Loss (m)	0.01	Cum SA (1000 m2)	2715.61	2253.00	2582.42

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 11 Profile: Q500

E.G. Elev (m)	120.94	Element	Left OB	Channel	Right OB
Vel Head (m)	0.10	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	120.84	Reach Len. (m)	929.24	994.34	963.34
Crit W.S. (m)	117.90	Flow Area (m2)	1827.22	2769.10	1007.52
E.G. Slope (m/m)	0.000535	Area (m2)	1827.22	2769.10	1007.52
Q Total (m3/s)	5500.00	Flow (m3/s)	812.24	4309.23	378.53
Top Width (m)	1723.99	Top Width (m)	683.95	554.61	485.43
Vel Total (m/s)	0.98	Avg. Vel. (m/s)	0.44	1.56	0.38
Max Chl Dpth (m)	9.65	Hydr. Depth (m)	2.67	4.99	2.08
Conv. Total (m3/s)	237687.7	Conv. (m3/s)	35101.8	186227.3	16358.6
Length Wtd. (m)	972.76	Wetted Per. (m)	686.25	563.09	486.99
Min Ch El (m)	111.19	Shear (N/m2)	13.98	25.82	10.86
Alpha	2.01	Stream Power (N/m s)	6.21	40.18	4.08
Frctn Loss (m)	0.52	Cum Volume (1000 m3)	9534.05	12660.41	10239.17
C & E Loss (m)	0.01	Cum SA (1000 m2)	2765.28	2253.00	3109.01

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 10 Profile: Q200

E.G. Elev (m)	120.23	Element	Left OB	Channel	Right OB
Vel Head (m)	0.18	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	120.05	Reach Len. (m)	558.46	426.66	396.80
Crit W.S. (m)	117.33	Flow Area (m2)	3056.89	995.96	233.49
E.G. Slope (m/m)	0.000968	Area (m2)	3056.89	995.96	233.49
Q Total (m3/s)	4900.00	Flow (m3/s)	2237.37	2509.00	153.63
Top Width (m)	1069.39	Top Width (m)	843.05	151.36	74.98
Vel Total (m/s)	1.14	Avg. Vel. (m/s)	0.73	2.52	0.66
Max Chl Dpth (m)	9.01	Hydr. Depth (m)	3.63	6.58	3.11
Conv. Total (m3/s)	157488.8	Conv. (m3/s)	71910.4	80640.7	4937.7
Length Wtd. (m)	463.09	Wetted Per. (m)	847.25	153.31	75.92
Min Ch El (m)	111.04	Shear (N/m2)	34.25	61.67	29.19
Alpha	2.68	Stream Power (N/m s)	25.07	155.36	19.21
Frctn Loss (m)	0.46	Cum Volume (1000 m3)	6320.47	10003.68	6810.72
C & E Loss (m)	0.01	Cum SA (1000 m2)	2006.21	1902.02	2312.55

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 10 Profile: Q500

E.G. Elev (m)	120.42	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	120.34	Reach Len. (m)	558.46	426.66	396.80
Crit W.S. (m)	117.96	Flow Area (m2)	3299.54	1039.50	2959.59
E.G. Slope (m/m)	0.000539	Area (m2)	3299.54	1039.50	2959.59
Q Total (m3/s)	5500.00	Flow (m3/s)	1894.05	2009.66	1596.29
Top Width (m)	1815.15	Top Width (m)	843.83	151.36	819.96
Vel Total (m/s)	0.75	Avg. Vel. (m/s)	0.57	1.93	0.54
Max Chl Dpth (m)	9.30	Hydr. Depth (m)	3.91	6.87	3.61
Conv. Total (m3/s)	237011.4	Conv. (m3/s)	81620.1	86602.2	68789.0
Length Wtd. (m)	452.38	Wetted Per. (m)	848.08	153.31	835.22
Min Ch El (m)	111.04	Shear (N/m2)	20.55	35.81	18.71
Alpha	2.75	Stream Power (N/m s)	11.79	69.22	10.09
Frctn Loss (m)	0.33	Cum Volume (1000 m3)	7152.06	10766.89	8328.32
C & E Loss (m)	0.02	Cum SA (1000 m2)	2055.44	1902.02	2480.24

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 9 Profile: Q200

E.G. Elev (m)	119.76	Element	Left OB	Channel	Right OB
Vel Head (m)	0.24	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	119.52	Reach Len. (m)	377.96	1086.08	1634.26
Crit W.S. (m)	116.90	Flow Area (m2)	985.07	1619.71	579.94
E.G. Slope (m/m)	0.001007	Area (m2)	985.07	1619.71	579.94
Q Total (m3/s)	4900.00	Flow (m3/s)	594.97	3911.88	393.15
Top Width (m)	829.96	Top Width (m)	374.29	270.79	184.88
Vel Total (m/s)	1.54	Avg. Vel. (m/s)	0.60	2.42	0.68
Max Chl Dpth (m)	8.99	Hydr. Depth (m)	2.63	5.98	3.14
Conv. Total (m3/s)	154436.2	Conv. (m3/s)	18751.9	123293.0	12391.3
Length Wtd. (m)	945.79	Wetted Per. (m)	375.06	273.52	185.69
Min Ch El (m)	110.53	Shear (N/m2)	25.93	58.46	30.83
Alpha	2.00	Stream Power (N/m s)	15.66	141.19	20.90
Frctn Loss (m)	1.30	Cum Volume (1000 m3)	5191.83	9445.68	6649.34
C & E Loss (m)	0.00	Cum SA (1000 m2)	1666.29	1811.96	2260.99

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 9 Profile: Q500

E.G. Elev (m)	120.07	Element	Left OB	Channel	Right OB
Vel Head (m)	0.26	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	119.80	Reach Len. (m)	377.96	1086.08	1634.26
Crit W.S. (m)	117.24	Flow Area (m2)	1089.51	1695.21	631.56
E.G. Slope (m/m)	0.001054	Area (m2)	1089.51	1695.21	631.56
Q Total (m3/s)	5500.00	Flow (m3/s)	719.25	4318.04	462.71
Top Width (m)	831.01	Top Width (m)	374.84	270.79	185.38
Vel Total (m/s)	1.61	Avg. Vel. (m/s)	0.66	2.55	0.73
Max Chl Dpth (m)	9.27	Hydr. Depth (m)	2.91	6.26	3.41
Conv. Total (m3/s)	169431.2	Conv. (m3/s)	22157.1	133020.1	14254.0
Length Wtd. (m)	937.12	Wetted Per. (m)	375.67	273.52	186.26

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 9 Profile: Q500 (Continued)

Min Ch El (m)	110.53	Shear (N/m ²)	29.97	64.05	35.04
Alpha	2.00	Stream Power (N/m s)	19.78	163.14	25.67
Frctn Loss (m)	1.29	Cum Volume (1000 m ³)	5926.50	10183.49	7615.84
C & E Loss (m)	0.00	Cum SA (1000 m ²)	1715.15	1811.96	2280.78

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 7 Profile: Q200

E.G. Elev (m)	118.46	Element	Left OB	Channel	Right OB
Vel Head (m)	0.28	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	118.18	Reach Len. (m)	863.22	609.30	325.90
Crit W.S. (m)	116.95	Flow Area (m ²)	2223.29	957.63	285.48
E.G. Slope (m/m)	0.001984	Area (m ²)	2223.29	957.63	285.48
Q Total (m ³ /s)	4900.00	Flow (m ³ /s)	1819.26	2863.27	217.47
Top Width (m)	1210.37	Top Width (m)	891.46	192.08	126.83
Vel Total (m/s)	1.41	Avg. Vel. (m/s)	0.82	2.99	0.76
Max Chl Dpth (m)	11.71	Hydr. Depth (m)	2.49	4.99	2.25
Conv. Total (m ³ /s)	110002.5	Conv. (m ³ /s)	40841.5	64279.0	4882.0
Length Wtd. (m)	648.68	Wetted Per. (m)	892.97	195.29	127.65
Min Ch El (m)	106.47	Shear (N/m ²)	48.45	95.41	43.52
Alpha	2.75	Stream Power (N/m s)	39.64	285.28	33.15
Frctn Loss (m)	0.62	Cum Volume (1000 m ³)	4585.51	8046.08	5942.18
C & E Loss (m)	0.06	Cum SA (1000 m ²)	1427.09	1560.60	2006.29

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 7 Profile: Q500

E.G. Elev (m)	118.77	Element	Left OB	Channel	Right OB
Vel Head (m)	0.28	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	118.50	Reach Len. (m)	863.22	609.30	325.90
Crit W.S. (m)	117.18	Flow Area (m ²)	2506.18	1018.56	325.81
E.G. Slope (m/m)	0.001871	Area (m ²)	2506.18	1018.56	325.81
Q Total (m ³ /s)	5500.00	Flow (m ³ /s)	2156.05	3081.63	262.32
Top Width (m)	1211.46	Top Width (m)	891.98	192.08	127.40
Vel Total (m/s)	1.43	Avg. Vel. (m/s)	0.86	3.03	0.81
Max Chl Dpth (m)	12.03	Hydr. Depth (m)	2.81	5.30	2.56
Conv. Total (m ³ /s)	127146.4	Conv. (m ³ /s)	49842.5	71239.6	6064.2
Length Wtd. (m)	649.12	Wetted Per. (m)	893.58	195.29	128.30
Min Ch El (m)	106.47	Shear (N/m ²)	51.46	95.70	46.60
Alpha	2.67	Stream Power (N/m s)	44.27	289.55	37.52
Frctn Loss (m)	0.60	Cum Volume (1000 m ³)	5246.99	8709.80	6833.55
C & E Loss (m)	0.05	Cum SA (1000 m ²)	1475.75	1560.60	2025.20

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 6 Profile: Q200

E.G. Elev (m)	117.78	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	117.69	Reach Len. (m)	507.58	556.62	252.36
Crit W.S. (m)	115.02	Flow Area (m ²)	1451.27	2060.97	1821.69
E.G. Slope (m/m)	0.000564	Area (m ²)	1451.27	2060.97	1821.69
Q Total (m ³ /s)	4900.00	Flow (m ³ /s)	811.37	3310.93	777.70
Top Width (m)	1563.29	Top Width (m)	396.40	412.96	753.93
Vel Total (m/s)	0.92	Avg. Vel. (m/s)	0.56	1.61	0.43
Max Chl Dpth (m)	9.26	Hydr. Depth (m)	3.66	4.99	2.42
Conv. Total (m ³ /s)	206414.8	Conv. (m ³ /s)	34179.4	139474.3	32761.1
Length Wtd. (m)	490.18	Wetted Per. (m)	401.54	415.18	755.36
Min Ch El (m)	108.43	Shear (N/m ²)	19.97	27.43	13.33
Alpha	2.16	Stream Power (N/m s)	11.17	44.07	5.69
Frctn Loss (m)	0.34	Cum Volume (1000 m ³)	2999.54	7126.47	5598.81
C & E Loss (m)	0.00	Cum SA (1000 m ²)	871.23	1376.28	1862.77

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 6 Profile: Q500

E.G. Elev (m)	118.12	Element	Left OB	Channel	Right OB
Vel Head (m)	0.10	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	118.03	Reach Len. (m)	507.58	556.62	252.36
Crit W.S. (m)	115.17	Flow Area (m ²)	1586.34	2201.59	2078.41
E.G. Slope (m/m)	0.000543	Area (m ²)	1586.34	2201.59	2078.41

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 6 Profile: Q500 (Continued)

Q Total (m3/s)	5500.00	Flow (m3/s)	922.52	3627.01	950.46
Top Width (m)	1563.87	Top Width (m)	396.98	412.96	753.93
Vel Total (m/s)	0.94	Avg. Vel. (m/s)	0.58	1.65	0.46
Max Chl Dpth (m)	9.60	Hydr. Depth (m)	4.00	5.33	2.76
Conv. Total (m3/s)	236091.3	Conv. (m3/s)	39599.9	155692.0	40799.3
Length Wtd. (m)	483.61	Wetted Per. (m)	402.21	415.18	755.70
Min Ch El (m)	108.43	Shear (N/m2)	20.99	28.22	14.64
Alpha	2.14	Stream Power (N/m s)	12.21	46.49	6.69
Frctn Loss (m)	0.31	Cum Volume (1000 m3)	3480.61	7728.78	6441.78
C & E Loss (m)	0.00	Cum SA (1000 m2)	919.43	1376.28	1881.59

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 5 Profile: Q200

E.G. Elev (m)	117.44	Element	Left OB	Channel	Right OB
Vel Head (m)	0.13	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	117.31	Reach Len. (m)	941.80	689.84	135.90
Crit W.S. (m)	115.40	Flow Area (m2)	533.94	1798.25	2197.25
E.G. Slope (m/m)	0.000863	Area (m2)	533.94	1798.25	2197.25
Q Total (m3/s)	4900.00	Flow (m3/s)	320.33	3399.84	1179.83
Top Width (m)	1452.42	Top Width (m)	182.08	388.46	881.87
Vel Total (m/s)	1.08	Avg. Vel. (m/s)	0.60	1.89	0.54
Max Chl Dpth (m)	8.19	Hydr. Depth (m)	2.93	4.63	2.49
Conv. Total (m3/s)	166796.4	Conv. (m3/s)	10904.2	115730.8	40161.4
Length Wtd. (m)	602.04	Wetted Per. (m)	182.96	390.61	889.17
Min Ch El (m)	109.12	Shear (N/m2)	24.70	38.96	20.91
Alpha	2.20	Stream Power (N/m s)	14.82	73.66	11.23
Frctn Loss (m)	0.40	Cum Volume (1000 m3)	2495.71	6052.41	5091.70
C & E Loss (m)	0.01	Cum SA (1000 m2)	724.42	1153.23	1656.36

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 5 Profile: Q500

E.G. Elev (m)	117.81	Element	Left OB	Channel	Right OB
Vel Head (m)	0.12	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	117.69	Reach Len. (m)	941.80	689.84	135.90
Crit W.S. (m)	115.51	Flow Area (m2)	603.22	1945.73	2682.00
E.G. Slope (m/m)	0.000765	Area (m2)	603.22	1945.73	2682.00
Q Total (m3/s)	5500.00	Flow (m3/s)	368.46	3650.59	1480.94
Top Width (m)	1506.74	Top Width (m)	182.86	388.46	935.42
Vel Total (m/s)	1.05	Avg. Vel. (m/s)	0.61	1.88	0.55
Max Chl Dpth (m)	8.57	Hydr. Depth (m)	3.30	5.01	2.87
Conv. Total (m3/s)	198839.3	Conv. (m3/s)	13320.9	131978.5	53540.0
Length Wtd. (m)	589.11	Wetted Per. (m)	183.82	390.61	950.89
Min Ch El (m)	109.12	Shear (N/m2)	24.62	37.37	21.16
Alpha	2.21	Stream Power (N/m s)	15.04	70.12	11.69
Frctn Loss (m)	0.35	Cum Volume (1000 m3)	2924.93	6574.54	5841.11
C & E Loss (m)	0.01	Cum SA (1000 m2)	772.27	1153.23	1668.43

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 4 Profile: Q200

E.G. Elev (m)	117.03	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	116.94	Reach Len. (m)	390.76	692.30	1093.18
Crit W.S. (m)	114.20	Flow Area (m2)	1950.09	1578.45	2449.22
E.G. Slope (m/m)	0.000528	Area (m2)	1950.09	1578.45	2449.22
Q Total (m3/s)	4900.00	Flow (m3/s)	1141.33	2720.42	1038.26
Top Width (m)	1719.19	Top Width (m)	477.81	268.94	972.44
Vel Total (m/s)	0.82	Avg. Vel. (m/s)	0.59	1.72	0.42
Max Chl Dpth (m)	7.45	Hydr. Depth (m)	4.08	5.87	2.52
Conv. Total (m3/s)	213249.4	Conv. (m3/s)	49670.8	118393.4	45185.2
Length Wtd. (m)	743.47	Wetted Per. (m)	479.72	272.51	977.41
Min Ch El (m)	109.49	Shear (N/m2)	21.05	29.99	12.97
Alpha	2.63	Stream Power (N/m s)	12.32	51.69	5.50
Frctn Loss (m)	0.29	Cum Volume (1000 m3)	1325.98	4887.72	4775.98
C & E Loss (m)	0.01	Cum SA (1000 m2)	413.68	926.48	1530.36

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 4 Profile: Q500

E.G. Elev (m)	117.45	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	117.36	Reach Len. (m)	390.76	692.30	1093.18
Crit W.S. (m)	114.40	Flow Area (m2)	2220.94	1692.27	2869.25
E.G. Slope (m/m)	0.000484	Area (m2)	2220.94	1692.27	2869.25
Q Total (m3/s)	5500.00	Flow (m3/s)	1297.13	2925.86	1277.01
Top Width (m)	1763.02	Top Width (m)	507.93	268.94	986.15
Vel Total (m/s)	0.81	Avg. Vel. (m/s)	0.58	1.73	0.45
Max Chl Dpth (m)	7.87	Hydr. Depth (m)	4.37	6.29	2.91
Conv. Total (m3/s)	249939.3	Conv. (m3/s)	58945.9	132961.5	58031.8
Length Wtd. (m)	747.21	Wetted Per. (m)	513.64	272.51	997.52
Min Ch El (m)	109.49	Shear (N/m2)	20.53	29.49	13.66
Alpha	2.61	Stream Power (N/m s)	11.99	50.99	6.08
Frctn Loss (m)	0.27	Cum Volume (1000 m3)	1595.03	5319.73	5463.91
C & E Loss (m)	0.01	Cum SA (1000 m2)	446.98	926.48	1537.86

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 3 Profile: Q200

E.G. Elev (m)	116.72	Element	Left OB	Channel	Right OB
Vel Head (m)	0.06	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	116.67	Reach Len. (m)	703.00	632.06	500.98
Crit W.S. (m)	113.53	Flow Area (m2)	324.31	3111.56	2855.64
E.G. Slope (m/m)	0.000307	Area (m2)	324.31	3111.56	2855.64
Q Total (m3/s)	4900.00	Flow (m3/s)	90.20	3670.75	1139.05
Top Width (m)	1605.68	Top Width (m)	158.59	625.71	821.38
Vel Total (m/s)	0.78	Avg. Vel. (m/s)	0.28	1.18	0.40
Max Chl Dpth (m)	9.32	Hydr. Depth (m)	2.04	4.97	3.48
Conv. Total (m3/s)	279713.4	Conv. (m3/s)	5148.9	209542.5	65022.0
Length Wtd. (m)	600.12	Wetted Per. (m)	162.12	631.44	831.13
Min Ch El (m)	107.35	Shear (N/m2)	6.02	14.83	10.34
Alpha	1.78	Stream Power (N/m s)	1.67	17.49	4.12
Frctn Loss (m)	0.21	Cum Volume (1000 m3)	881.60	3264.27	1876.39
C & E Loss (m)	0.00	Cum SA (1000 m2)	289.34	616.80	549.88

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 3 Profile: Q500

E.G. Elev (m)	117.17	Element	Left OB	Channel	Right OB
Vel Head (m)	0.05	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	117.11	Reach Len. (m)	703.00	632.06	500.98
Crit W.S. (m)	113.64	Flow Area (m2)	519.33	3391.56	3223.20
E.G. Slope (m/m)	0.000276	Area (m2)	519.33	3391.56	3223.20
Q Total (m3/s)	5500.00	Flow (m3/s)	155.54	4022.09	1322.38
Top Width (m)	1654.88	Top Width (m)	207.79	625.71	821.38
Vel Total (m/s)	0.77	Avg. Vel. (m/s)	0.30	1.19	0.41
Max Chl Dpth (m)	9.76	Hydr. Depth (m)	2.50	5.42	3.92
Conv. Total (m3/s)	330790.7	Conv. (m3/s)	9354.7	241903.4	79532.6
Length Wtd. (m)	599.18	Wetted Per. (m)	214.81	631.44	831.57
Min Ch El (m)	107.35	Shear (N/m2)	6.55	14.56	10.51
Alpha	1.80	Stream Power (N/m s)	1.96	17.27	4.31
Frctn Loss (m)	0.19	Cum Volume (1000 m3)	1059.64	3559.96	2133.83
C & E Loss (m)	0.00	Cum SA (1000 m2)	307.14	616.80	549.88

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 2 Profile: Q200

E.G. Elev (m)	116.51	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	116.43	Reach Len. (m)	1083.56	894.08	121.44
Crit W.S. (m)	113.39	Flow Area (m2)	857.25	1986.74	3207.38
E.G. Slope (m/m)	0.000417	Area (m2)	857.25	1986.74	3207.38
Q Total (m3/s)	4900.00	Flow (m3/s)	381.51	3014.23	1504.26
Top Width (m)	1512.56	Top Width (m)	259.41	345.55	907.60
Vel Total (m/s)	0.81	Avg. Vel. (m/s)	0.45	1.52	0.47
Max Chl Dpth (m)	8.62	Hydr. Depth (m)	3.30	5.75	3.53
Conv. Total (m3/s)	239906.5	Conv. (m3/s)	18679.0	147578.3	73649.2
Length Wtd. (m)	664.07	Wetted Per. (m)	266.52	348.03	921.78

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 2 Profile: Q200 (Continued)

Min Ch El (m)	107.81	Shear (N/m ²)	13.16	23.35	14.23
Alpha	2.29	Stream Power (N/m s)	5.86	35.43	6.68
Frctn Loss (m)	0.39	Cum Volume (1000 m ³)	466.29	1653.06	357.67
C & E Loss (m)	0.01	Cum SA (1000 m ²)	142.41	309.85	116.79

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 2 Profile: Q500

E.G. Elev (m)	116.97	Element	Left OB	Channel	Right OB
Vel Head (m)	0.08	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	116.90	Reach Len. (m)	1083.56	894.08	121.44
Crit W.S. (m)	113.54	Flow Area (m ²)	978.53	2148.30	3631.71
E.G. Slope (m/m)	0.000381	Area (m ²)	978.53	2148.30	3631.71
Q Total (m ³ /s)	5500.00	Flow (m ³ /s)	453.76	3279.55	1766.69
Top Width (m)	1512.56	Top Width (m)	259.41	345.55	907.60
Vel Total (m/s)	0.81	Avg. Vel. (m/s)	0.46	1.53	0.49
Max Chl Dpth (m)	9.09	Hydr. Depth (m)	3.77	6.22	4.00
Conv. Total (m ³ /s)	281940.9	Conv. (m ³ /s)	23260.8	168116.3	90563.9
Length Wtd. (m)	647.54	Wetted Per. (m)	266.99	348.03	922.24
Min Ch El (m)	107.81	Shear (N/m ²)	13.68	23.04	14.70
Alpha	2.24	Stream Power (N/m s)	6.34	35.17	7.15
Frctn Loss (m)	0.33	Cum Volume (1000 m ³)	533.14	1809.20	416.74
C & E Loss (m)	0.01	Cum SA (1000 m ²)	142.92	309.85	116.79

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 1 Profile: Q200

E.G. Elev (m)	116.11	Element	Left OB	Channel	Right OB
Vel Head (m)	0.14	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	115.97	Reach Len. (m)			
Crit W.S. (m)	113.69	Flow Area (m ²)	3.41	1711.04	2683.04
E.G. Slope (m/m)	0.000876	Area (m ²)	3.41	1711.04	2683.04
Q Total (m ³ /s)	4900.00	Flow (m ³ /s)	0.91	3392.13	1506.96
Top Width (m)	1366.78	Top Width (m)	3.45	347.57	1015.76
Vel Total (m/s)	1.11	Avg. Vel. (m/s)	0.27	1.98	0.56
Max Chl Dpth (m)	5.17	Hydr. Depth (m)	0.99	4.92	2.64
Conv. Total (m ³ /s)	165510.5	Conv. (m ³ /s)	30.8	114578.1	50901.6
Length Wtd. (m)		Wetted Per. (m)	3.97	350.18	1026.76
Min Ch El (m)	110.80	Shear (N/m ²)	7.38	42.00	22.46
Alpha	2.27	Stream Power (N/m s)	1.97	83.26	12.61
Frctn Loss (m)		Cum Volume (1000 m ³)			
C & E Loss (m)		Cum SA (1000 m ²)			

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 1 Profile: Q500

E.G. Elev (m)	116.64	Element	Left OB	Channel	Right OB
Vel Head (m)	0.13	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	116.51	Reach Len. (m)			
Crit W.S. (m)	113.93	Flow Area (m ²)	5.53	1898.76	3231.66
E.G. Slope (m/m)	0.000715	Area (m ²)	5.53	1898.76	3231.66
Q Total (m ³ /s)	5500.00	Flow (m ³ /s)	1.57	3643.56	1854.88
Top Width (m)	1367.72	Top Width (m)	4.39	347.57	1015.76
Vel Total (m/s)	1.07	Avg. Vel. (m/s)	0.28	1.92	0.57
Max Chl Dpth (m)	5.71	Hydr. Depth (m)	1.26	5.46	3.18
Conv. Total (m ³ /s)	205726.7	Conv. (m ³ /s)	58.6	136286.7	69381.4
Length Wtd. (m)		Wetted Per. (m)	5.06	350.18	1027.30
Min Ch El (m)	110.80	Shear (N/m ²)	7.66	38.00	22.05
Alpha	2.22	Stream Power (N/m s)	2.17	72.93	12.66
Frctn Loss (m)		Cum Volume (1000 m ³)			
C & E Loss (m)		Cum SA (1000 m ²)			

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ALLEGATO 2 INDAGINE DELLE CONDIZIONI AL CONTORNO E TARATURA DEL MODELLO	
ALLEGATO 3 SIMULAZIONE FIUME SESIA: PROFILO, SEZIONI TRASVERSALI E RELATIVI TABULATI DEL MODELLO DI SIMULAZIONE	

TABELLA RIASSUNTIVA RISULTATI TEST DI PEARSON

(test soddisfatto se $D2 < \chi^2$)

$\chi^2 = 9.575$

TEST	LN2-MOM	LN2-MV	EVI-MOM
D2	3.19	1.70	2.44

supera il test

SI

SI

SI

TEST DI KOLMOGOROV-SMIRNOV

Livello di significatività α

● 0,05 ○ 0,1

	0,05	0,1	0,2	0,5	1,0	2,0	5,0	10,0	20,0	50,0	100,0
1	0,037037	0,001021902	0,036015135	0,003884911	0,033152126	0,007030617	0,03000642				
2	0,0740741	0,021661889	0,052412185	0,041577855	0,032496219	0,037012829	0,037061246				
3	0,1111111	0,036546315	0,074562796	0,06262689	0,048484222	0,052834973	0,058276138				
4	0,1481481	0,056803795	0,051344353	0,135040744	0,013107404	0,110099767	0,038048381				
5	0,1851852	0,136346332	0,048838853	0,177386594	0,007798591	0,146066561	0,039118624				
6	0,2222222	0,162609363	0,059612859	0,204251946	0,017970276	0,169833043	0,052389179				
7	0,2592593	0,179193122	0,080066137	0,222082257	0,038436703	0,184848438	0,074410821				
8	0,2962963	0,293939303	0,002356893	0,329847233	0,033550937	0,289939454	0,006356842				
9	0,3333333	0,328158821	0,065174512	0,36105607	0,027722737	0,321861678	0,011471655				
10	0,3703704	0,407790453	0,037420083	0,432287436	0,061917066	0,397361162	0,026990792				
11	0,4074074	0,420233158	0,012825751	0,443286285	0,035878878	0,409315338	0,00190793				
12	0,4444444	0,456897306	0,012552862	0,475638424	0,031193979	0,444885243	0,000440788				
13	0,4814815	0,498557294	0,017075813	0,51201739	0,030535909	0,485540254	0,004058773				
14	0,5185185	0,596915145	0,078396626	0,597831429	0,079312911	0,583581511	0,065062892				
15	0,5555556	0,611960384	0,056404828	0,610981244	0,055425688	0,598795358	0,043239802				
16	0,5925926	0,611960384	0,019367791	0,610981244	0,018388651	0,598795358	0,006202765				
17	0,6296296	0,631387375	0,001757746	0,627990656	0,001638974	0,61852121	0,011108419				
18	0,6666667	0,721412682	0,054746015	0,707588975	0,040922308	0,71105086	0,044384193				
19	0,7037037	0,739945933	0,036242229	0,724217401	0,020513698	0,730309114	0,02660541				
20	0,7407407	0,760784114	0,020043373	0,743054824	0,002314083	0,752037994	0,011297263				
21	0,7777778	0,806586745	0,028808967	0,785125981	0,007348203	0,800046483	0,022268705				
22	0,8148148	0,806586745	0,00822807	0,785125981	0,029688834	0,800046483	0,014768332				
23	0,8518519	0,84428254	0,007569312	0,820677249	0,031174603	0,839756601	0,012093251				
24	0,8888889	0,859423748	0,02946514	0,835272207	0,053616682	0,855742688	0,033146201				
25	0,9259259	0,901388562	0,024637364	0,877035603	0,048890323	0,900059272	0,025866654				
26	0,9629623	0,923468638	0,039494325	0,900084647	0,062878316	0,923317746	0,039645217				
27	1	0,980893624	0,019106376	0,967457778	0,032542222	0,982666172	0,017333828				

TABELLA RIASSUNTIVA RISULTATI TEST K-S (test soddisfitto se $D2 < C$)

W	C	N
0,05	0,257	27

FDI	INSIOMI	ENI	ENI	ENI	ENI	ENI
134	0,98008	0,070313	0,070313	0,070313	0,070313	0,070313

supera il test SI SI SI

Serie delle portate storiche del Sesia

PARAMETRI DEL CAMPIONE

N° dati	27
media	1774.444
s.q.m.	785.77
C_v	0.4426
γ	0.6096

PARAMETRI DELLE LEGGI

LN2-MV	LN2-MOM	EVI-MOM
HL	HL	H
7.3756	7.3917	1429.8479
GL	GL	G
0.4842	0.4232	0.00163
γ	γ	γ
1.6777	1.4153	1.1396

CALCOLO DELLA PORTATA CON ASSEGNATO TEMPO DI RITORNO

(inserire il valore del tempo di ritorno in anni)

Q (m³/s)

T_r (anni)	LN2-MOM	LN2-MV	EVI-MOM
20	3254.33	3540.36	3240.65

Serie delle portate storiche del Sesia

PARAMETRI DEL CAMPIONE

N° dati	27
media	1773.444
s.q.m.	785.77
C_v	0.4428
γ	0.6096

PARAMETRI DELLE LEGGI

LN2-MV	LN2-MOM	EYE-MOM
μL	μL	μ
7.3796	7.3917	1420.8479
σL	σL	σ
0.4842	0.4732	0.00163
γ	γ	γ
1.6777	1.4153	1.1396

CALCOLO DELLA PORTATA CON ASSEGNATO TEMPO DI RITORNO

(inserire il valore del tempo di ritorno in anni)

Q (m3/s)

T_R (anni)	LN2-MOM	LN2-MV	EYE-MOM
100	4342.13	4924.61	4239.49

Serie delle portate storiche del Sesia

PARAMETRI DEL CAMPIONE

N° dati	21
media	1774.444
s.q.m.	765.77
C_v	0.4426
γ	0.6096

PARAMETRI DELLE LEGGI

LN2-MV	LN2-MOM	EVI-MOM
EL	EL	u
7.3756	7.3817	1420.6479
σL	σL	σ
0.4842	0.4232	0.00163
γ	γ	γ
1.6777	1.4153	1.1396

CALCOLO DELLA PORTATA CON ASSEGNATO TEMPO DI RITORNO

(inserire il valore del tempo di ritorno in anni)

Q (m³/s)

T_r (anni)	LN2-MOM	LN2-MV	EVI-MOM
200	4825.62	5596.57	4665.52

Serie delle portate storiche del Sesia

PARAMETRI DEL CAMPIONE

N° dati	27
media	1774.444
s.q.m.	785.77
C_v	0.4428
γ	0.6096

PARAMETRI DELLE LEGGI

LN2-MV	LN2-MOM	EVI-MOM
βL	βL	β
7.3756	7.3917	1420.8479
αL	αL	α
0.4842	0.4232	0.00163
γ	γ	γ
1.6777	1.4153	1.1398

CALCOLO DELLA PORTATA CON ASSEGNATO TEMPO DI RITORNO

(Inserire il valore del tempo di ritorno in anni)

Q (m3/s)

T_R (anni)	LN2-MOM	LN2-MV	EVI-MOM
500	5484.17	6432.44	5727.84

ALLEGATO 2
INDAGINE DELLE CONDIZIONI AL CONTORNO
E TARATURA DEL MODELLO

IDROMETRO DI PALESTRO (PV) SUL FIUME SESIA

Quota zero idrometrico:

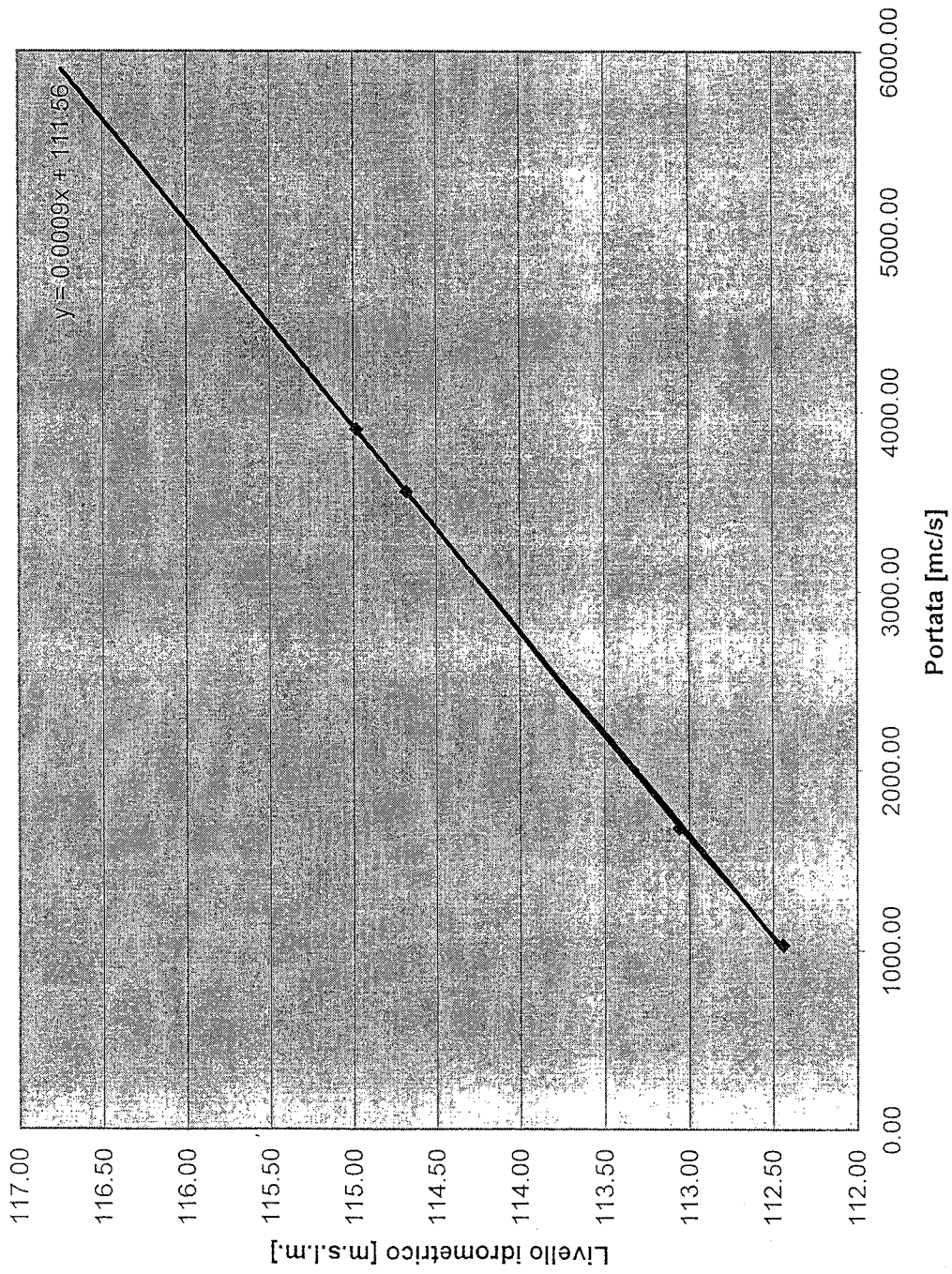
109.05 [m.s.l.m.]

Livello Idrometrico (m.s.l.m.)	Portata (mc/s)
112.44	1028.72
113.06	1674.45
114.68	3550.00
114.98	3900.00

IDROMETRO DI PALESTRO (PV) SUL FIUME SESIA SCALA DI DEFLUSSO RICOSTRUITA

Livello Idrometrico (m.s.l.m.)	Portata (mc/s)
114.53	3300.00
115.07	3900.00
115.52	4400.00
115.97	4900.00
116.51	5500.00

Extrapolazione scala di deflusso per ricerca condizioni al contorno
della simulazione numerica

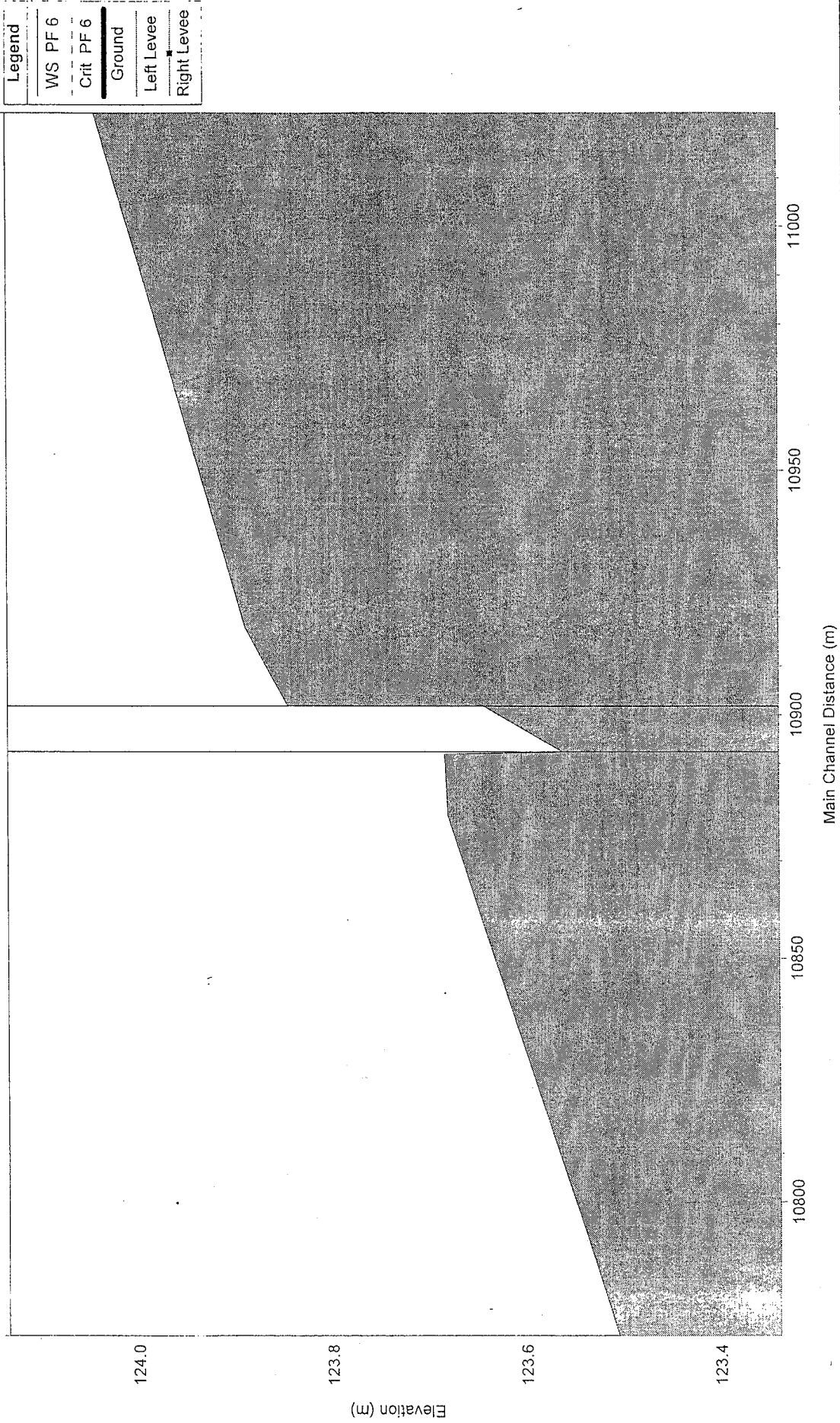


- ◆ Livello Idrometrico (m.s.l.m.)
- Lineare (Livello Idrometrico (m.s.l.m.))

Modello Sesia 2002

Taratura al Ponte della S.S. 11 con l'evento del 14/15 ottobre 2000, Q=3550 mc/s

Fiume Sesia



ALLEGATO 3

SIMULAZIONE FIUME SESIA: PROFILO, SEZIONI TRASVERSALI E RELATIVI TABULATI DEL MODELLO DI SIMULAZIONE

LEGENDA:

PROFILO

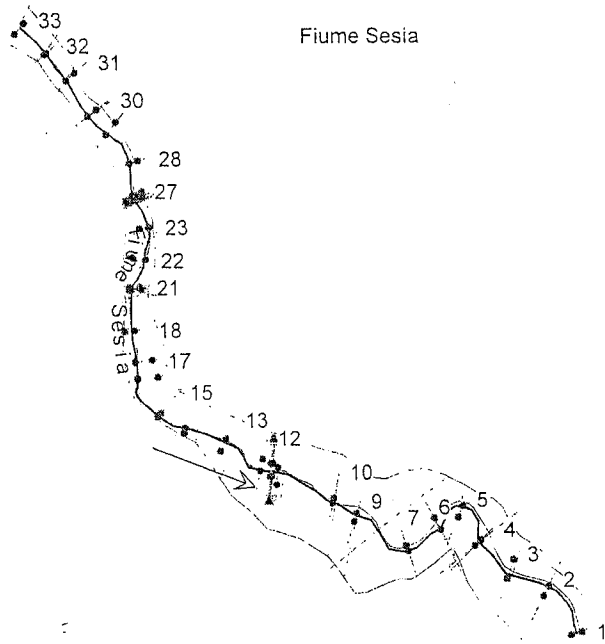
Reach	: nome corso d'acqua
River Sta	: n° sezione trasversale
Q Total	: portata defluente
Min Ch El	: quota più bassa del fondo del canale di deflusso principale
W S El	: quota del pelo libero
Crit W S	: quota dell'altezza critica
E G Elev	: quota del piano dei carichi totali
E G Slope	: pendenza della linea dei carichi totali
Vel Chnl	: velocità media nel canale di deflusso principale
Flow Area	: area liquida di deflusso
Top Width	: larghezza del pelo libero in sommità
Froude # XS	: numero di Froude medio della corrente dell'intera sezione
Froude # Chnl	: numero di Froude medio della corrente del solo canale principale

SEZIONI

N.B. Alcune grandezze sono visualizzate anche separate, relative cioè a golena di sinistra, canale principale e golena di destra

Profile	: tipo di portata defluente (es. Q500 = cinquecentenaria ecc.)
Vel Head	: altezza cinetica della corrente
Vel total	: velocità dell'acqua media nella sezione trasversale
Max Chl Dpth	: profondità massima dell'acqua nella sezione
Conv Total	: indice di resistenza idraulica
Lenght Wtd	: lunghezza pesata del canale principale e delle golene laterali
Alpha	: coefficiente α moltiplicativo dell'altezza cinetica
Frctn Loss	: perdite di carico distribuite parziali
C & E Loss	: perdite parziali dovute a contrazione ed espansione della corrente
Wt n-val	: coefficiente n di manning medio
Reach Len	: distanza parziale tra 2 sezioni consecutive
Flow	: portata transitante nelle golene laterali e nel canale principale
Avg. Vel	: velocità media della corrente
Hydr Depth	: profondità della corrente
Wetted Per	: perimetro bagnato
Shear	: forza di taglio dovuta alla pressione idrostatica
Stream power	: potenza della corrente
Cum Volume	: volume cumulato di acqua nella direzione del flusso
Cum SA	: superficie d'acqua cumulata

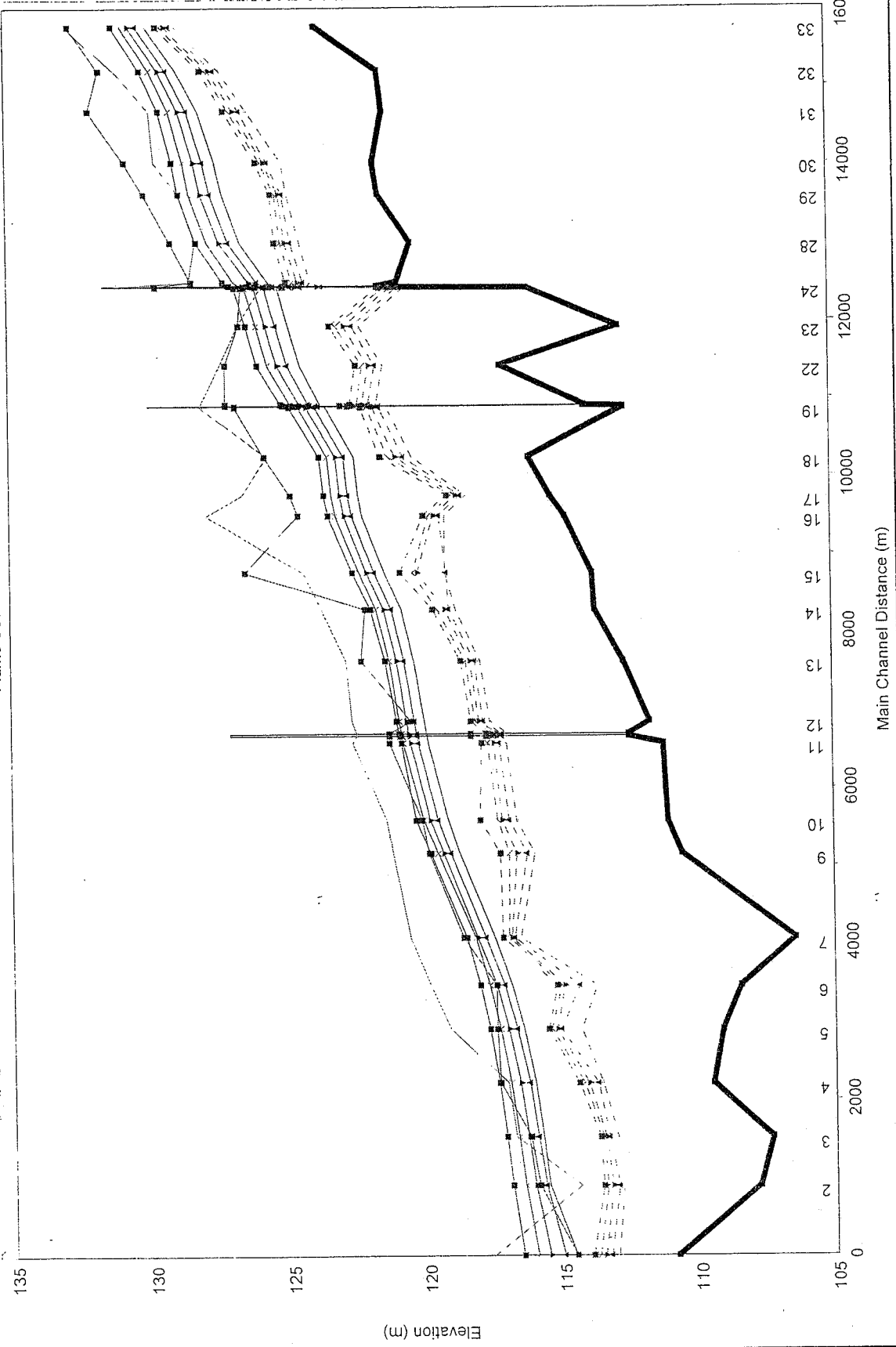
Fiume Sesia



Modello Sesia 2002

Fiume Sesia

Legend	
—■—	WS Q500
—x—	WS Q200
—▲—	WS Q100
—□—	WS Q50
—○—	WS Q20
—■—	Crit Q500
—x—	Crit Q200
—▲—	Crit Q100
—□—	Crit Q50
—○—	Crit Q20
—	Ground
—	Left Levee
—	Right Levee



Modello Sesia 2002

Fiume Sesia

Legend	
WS Q500	—
WS Q200	—
WS Q100	—
WS Q50	—
WS Q20	—
Crit Q500	—
Crit Q200	—
Crit Q100	—
Crit Q50	—
Crit Q20	—
Ground	—
Left Levee	—
Right Levee	—



130

125

120

115

19

21

22

23

24
26.5
27

12500

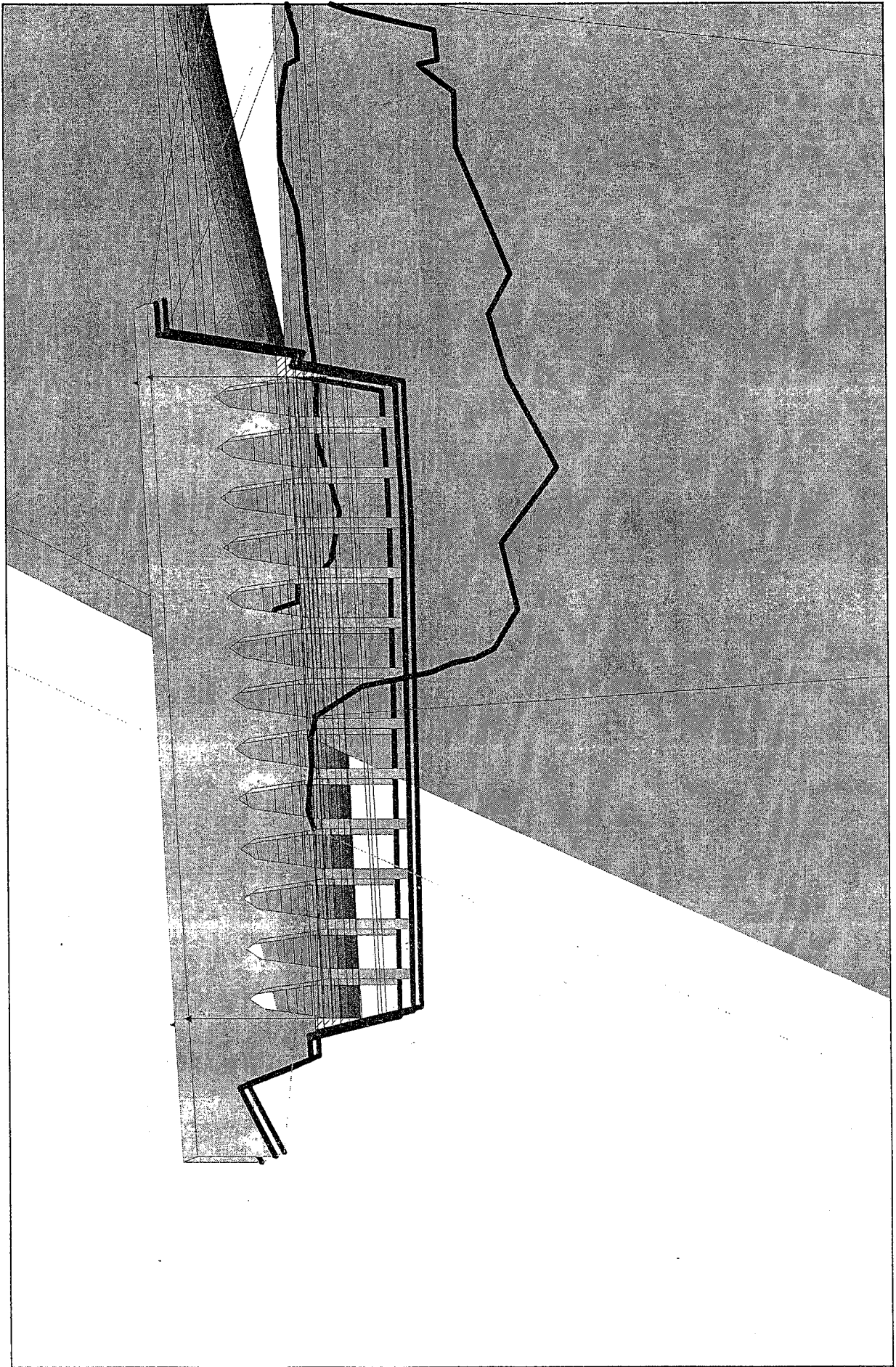
12000

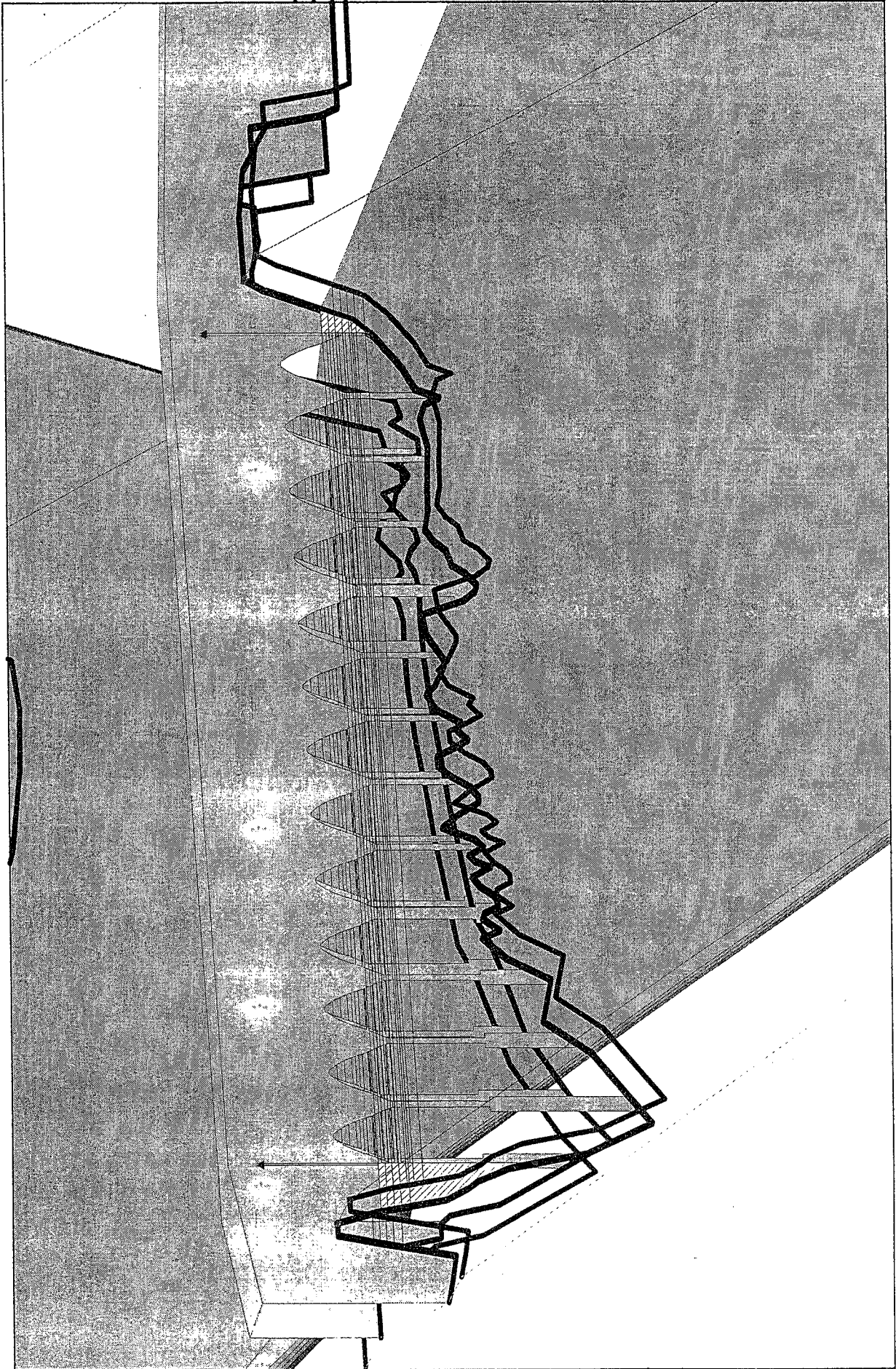
11500

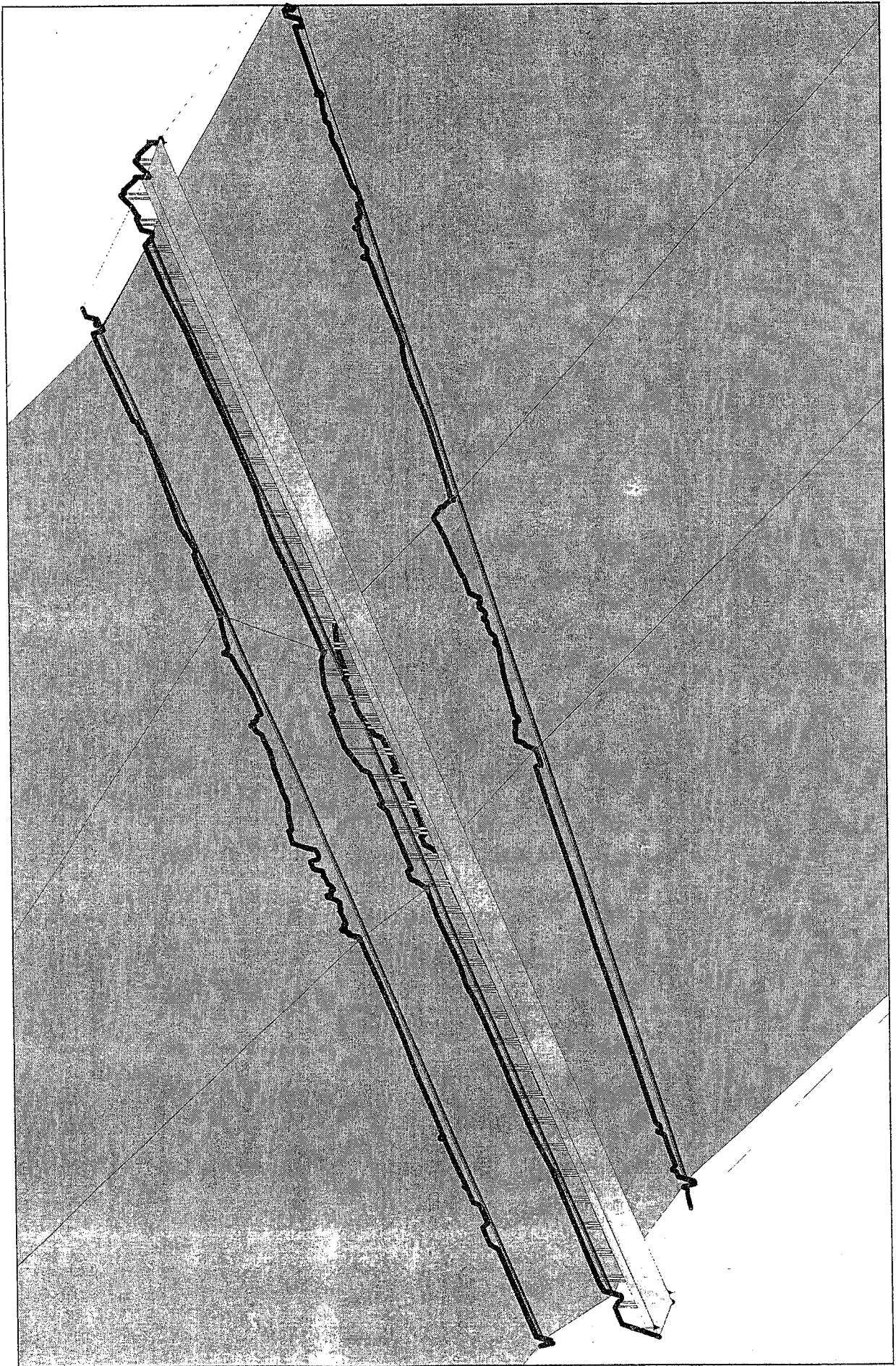
11000

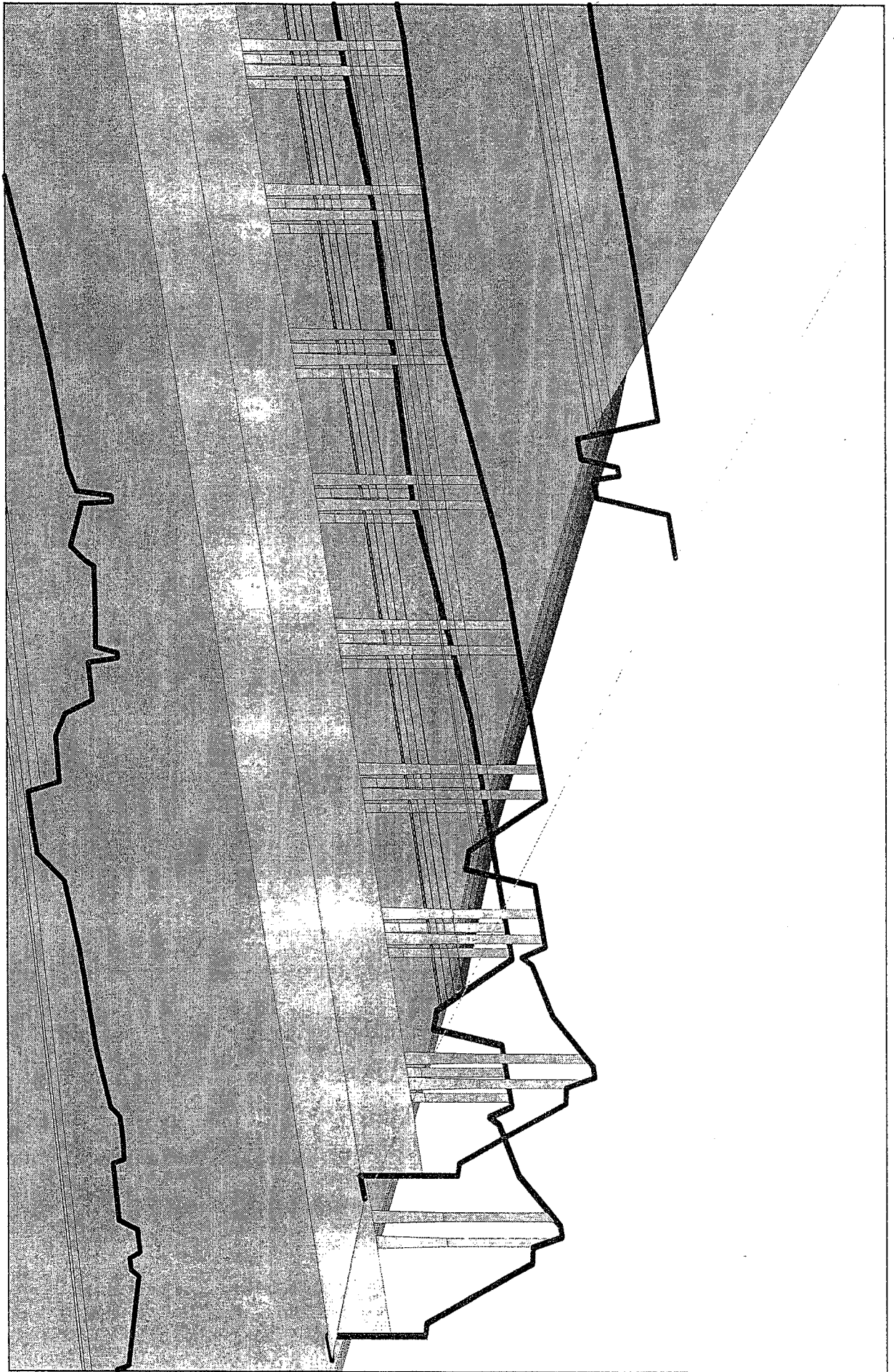
Main Channel Distance (m)

Elevation (m)

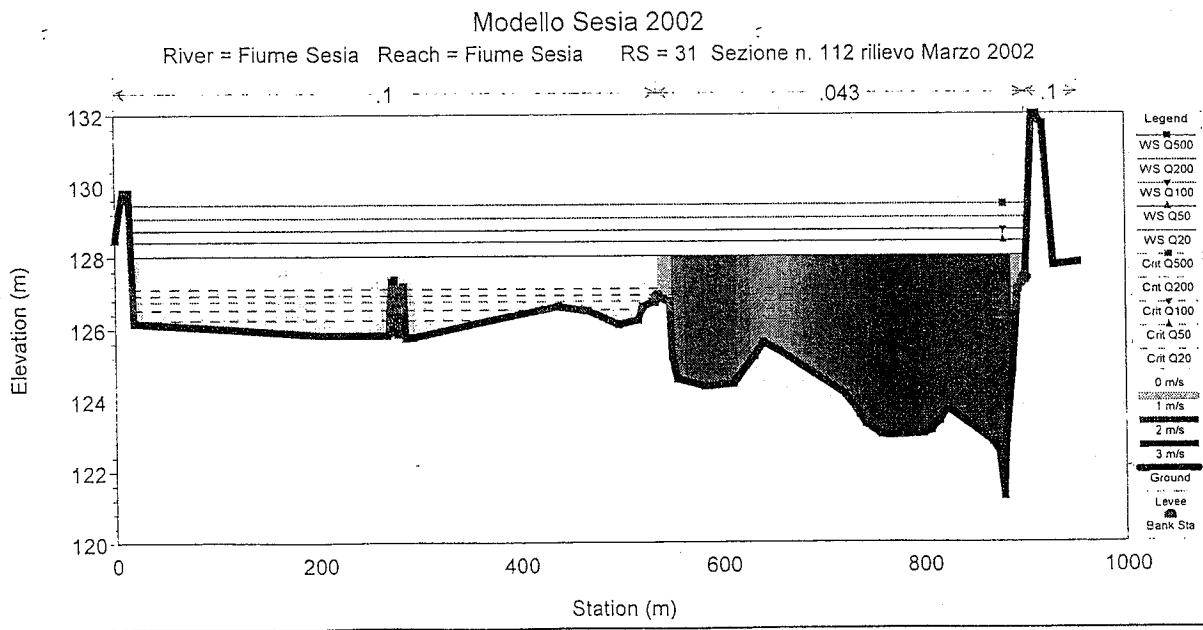
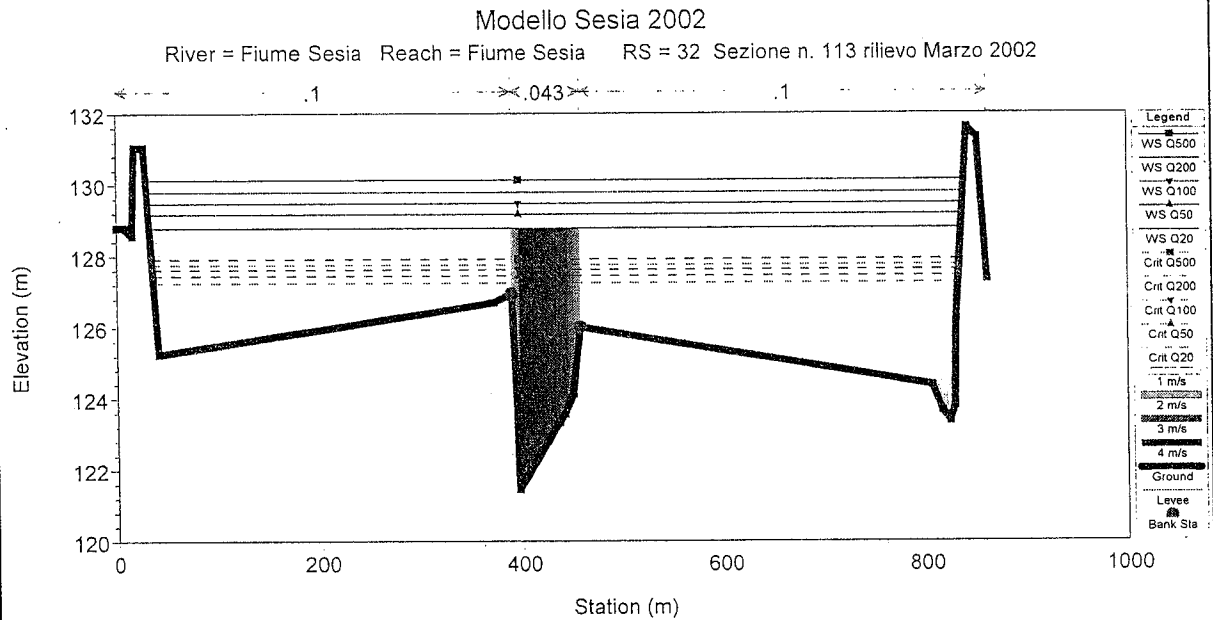
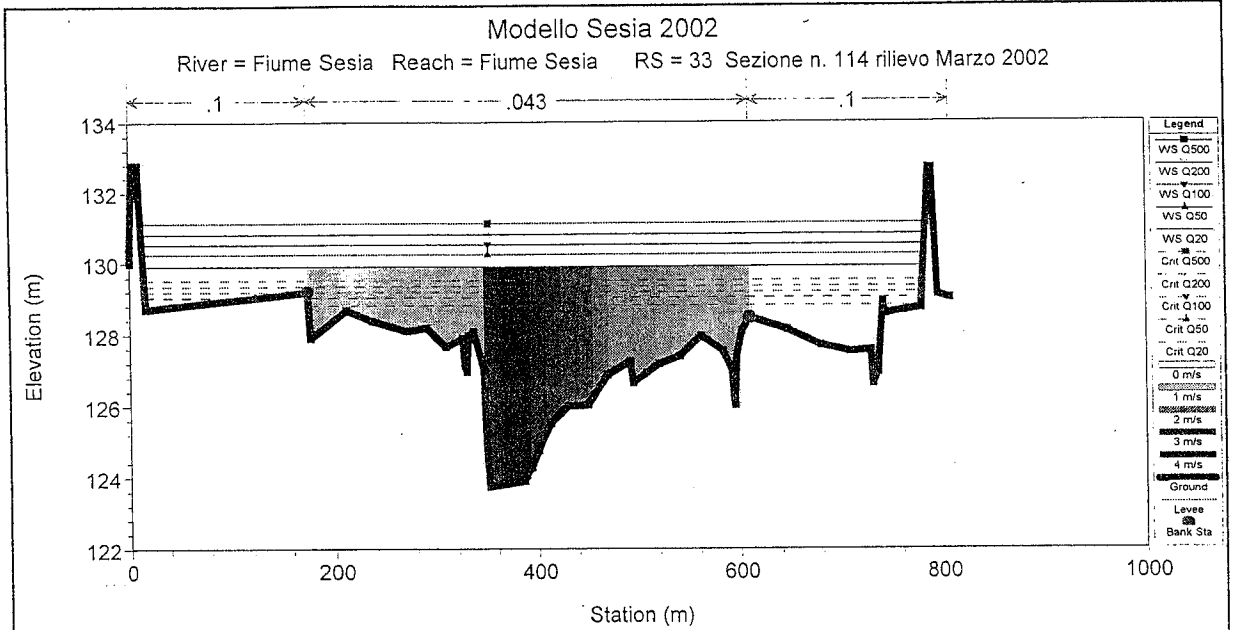


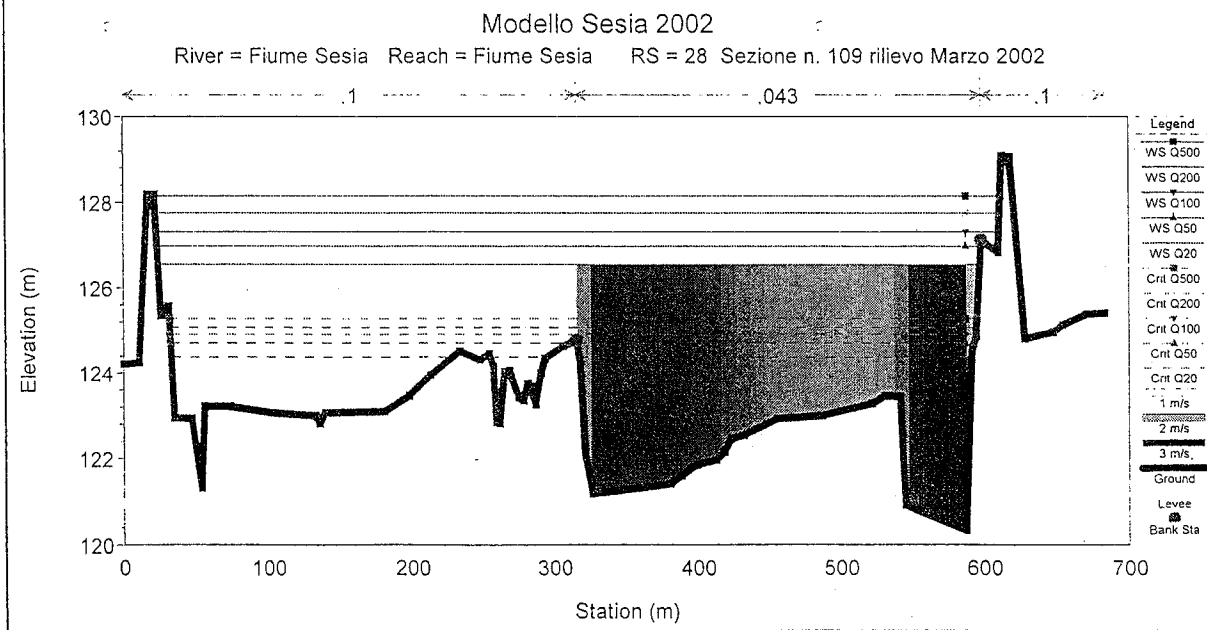
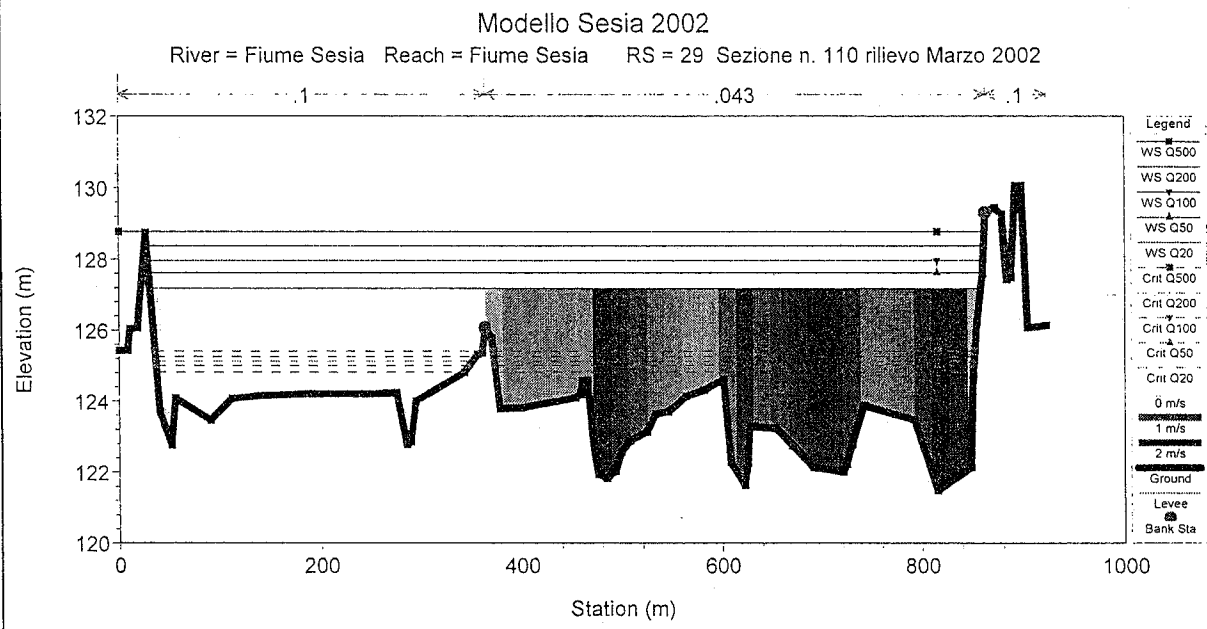
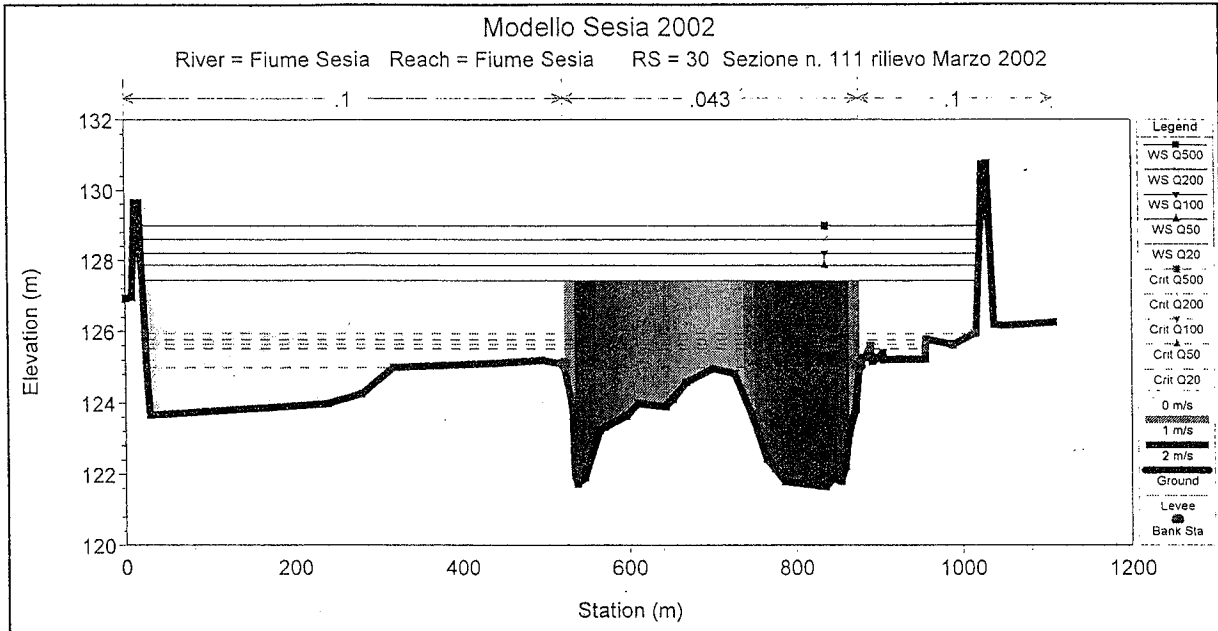


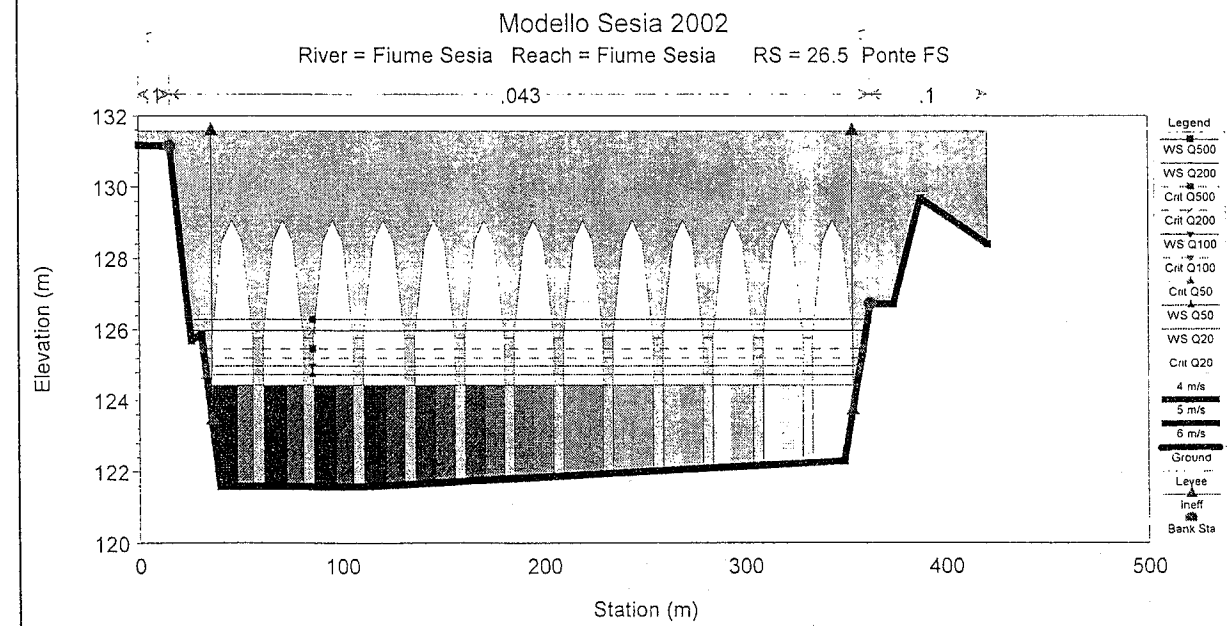
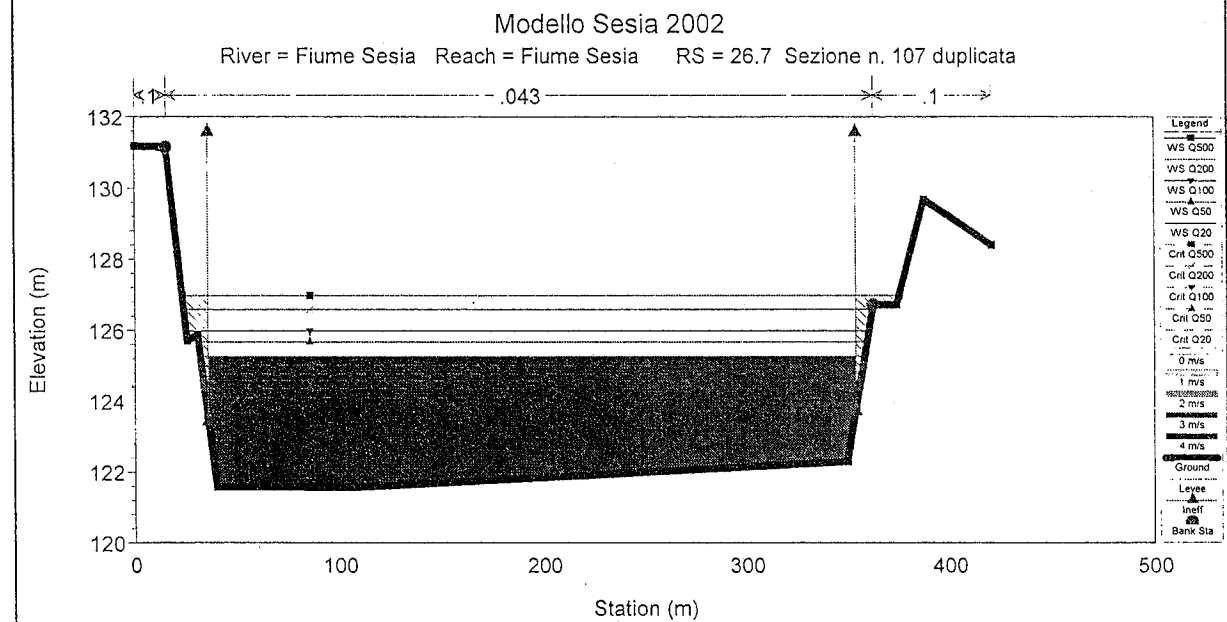
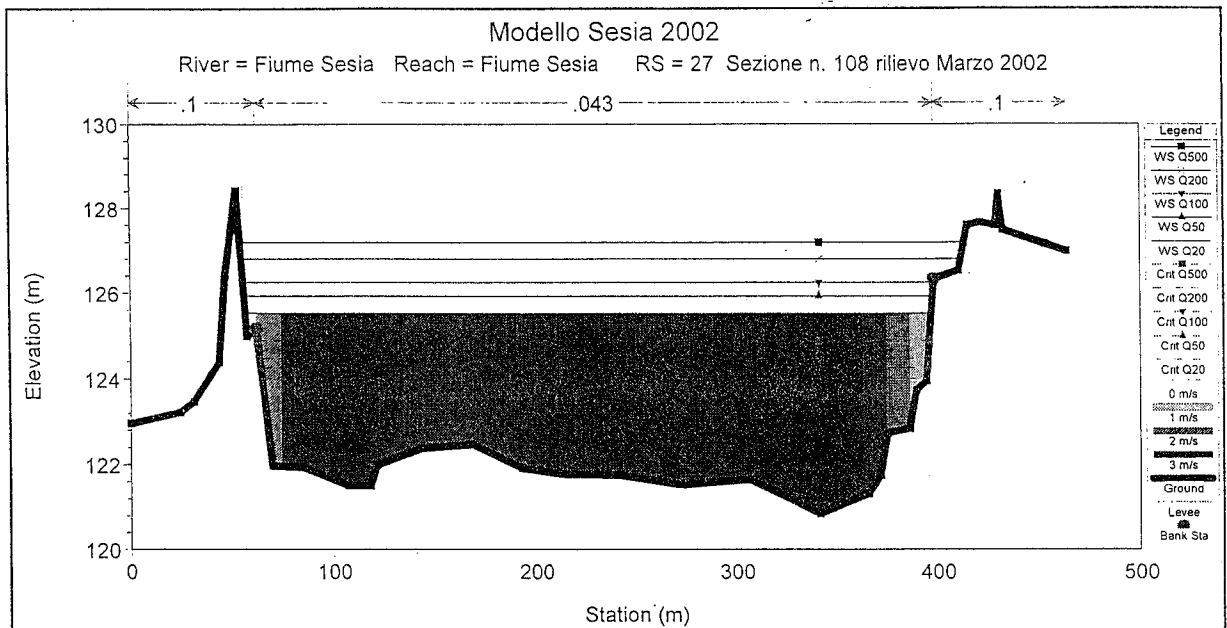


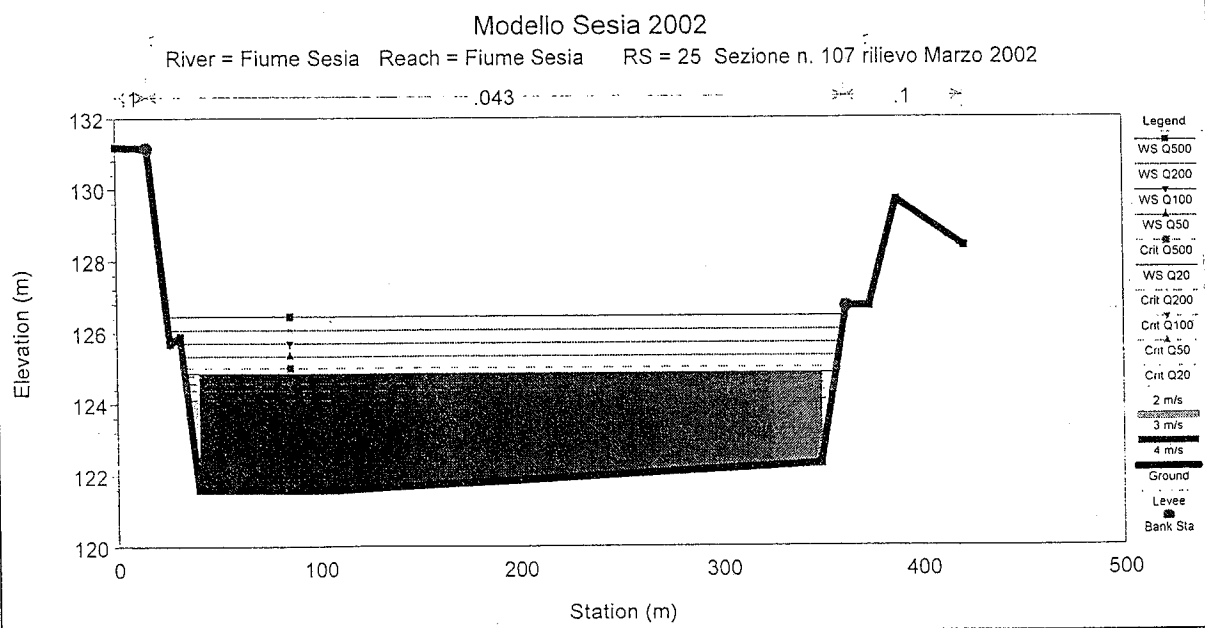
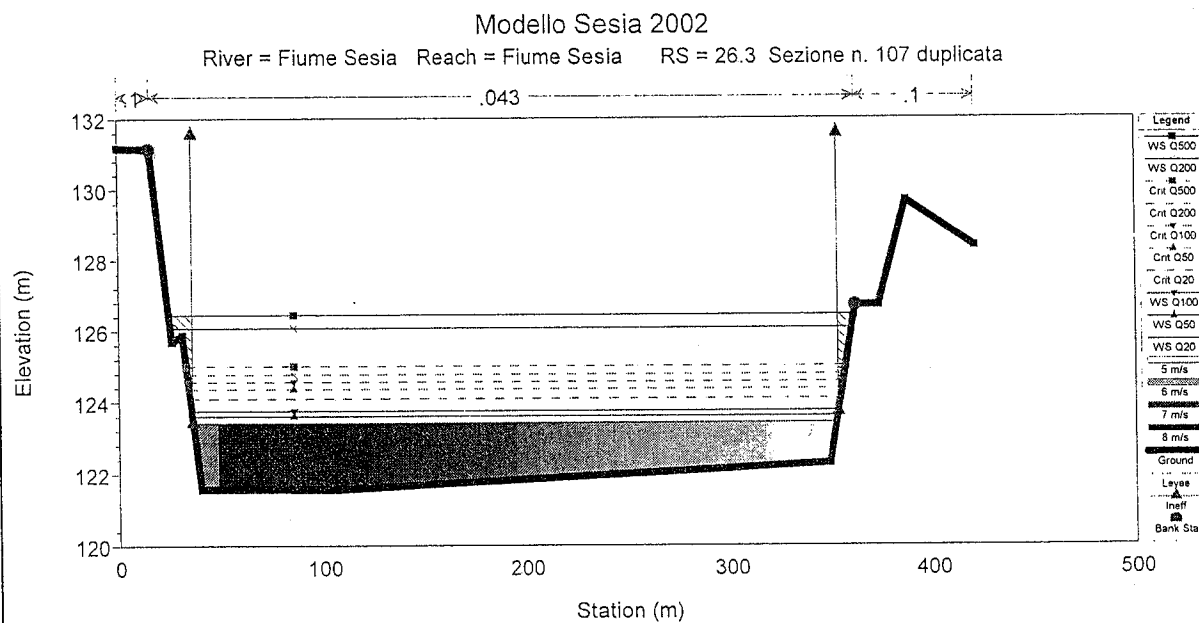
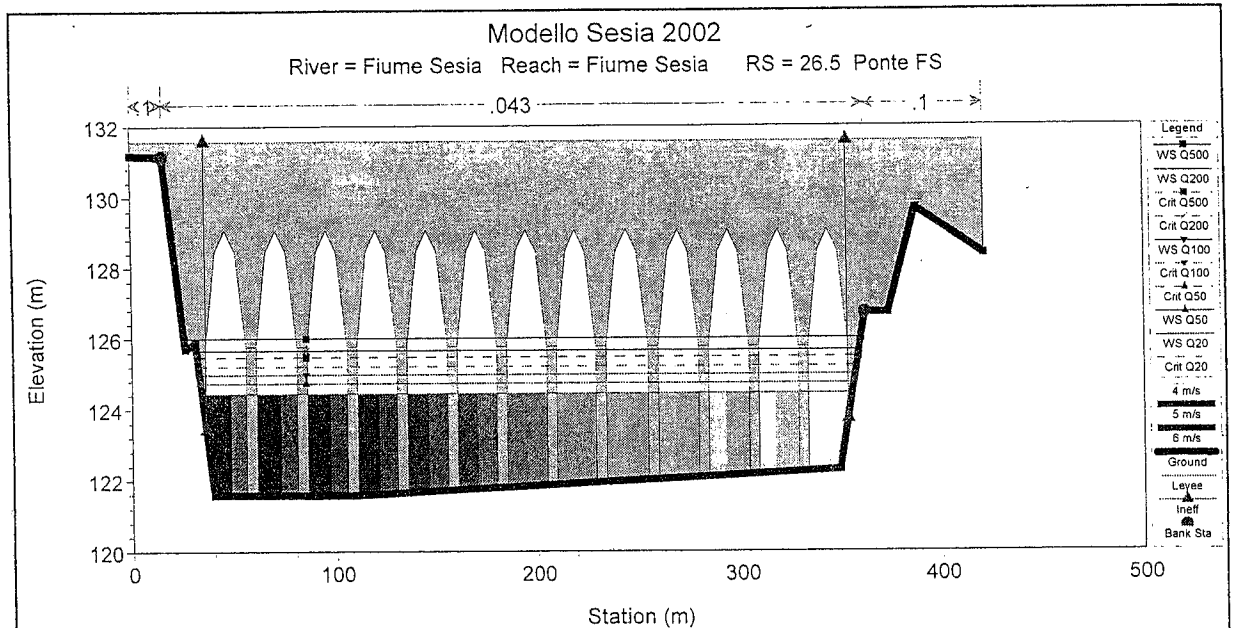


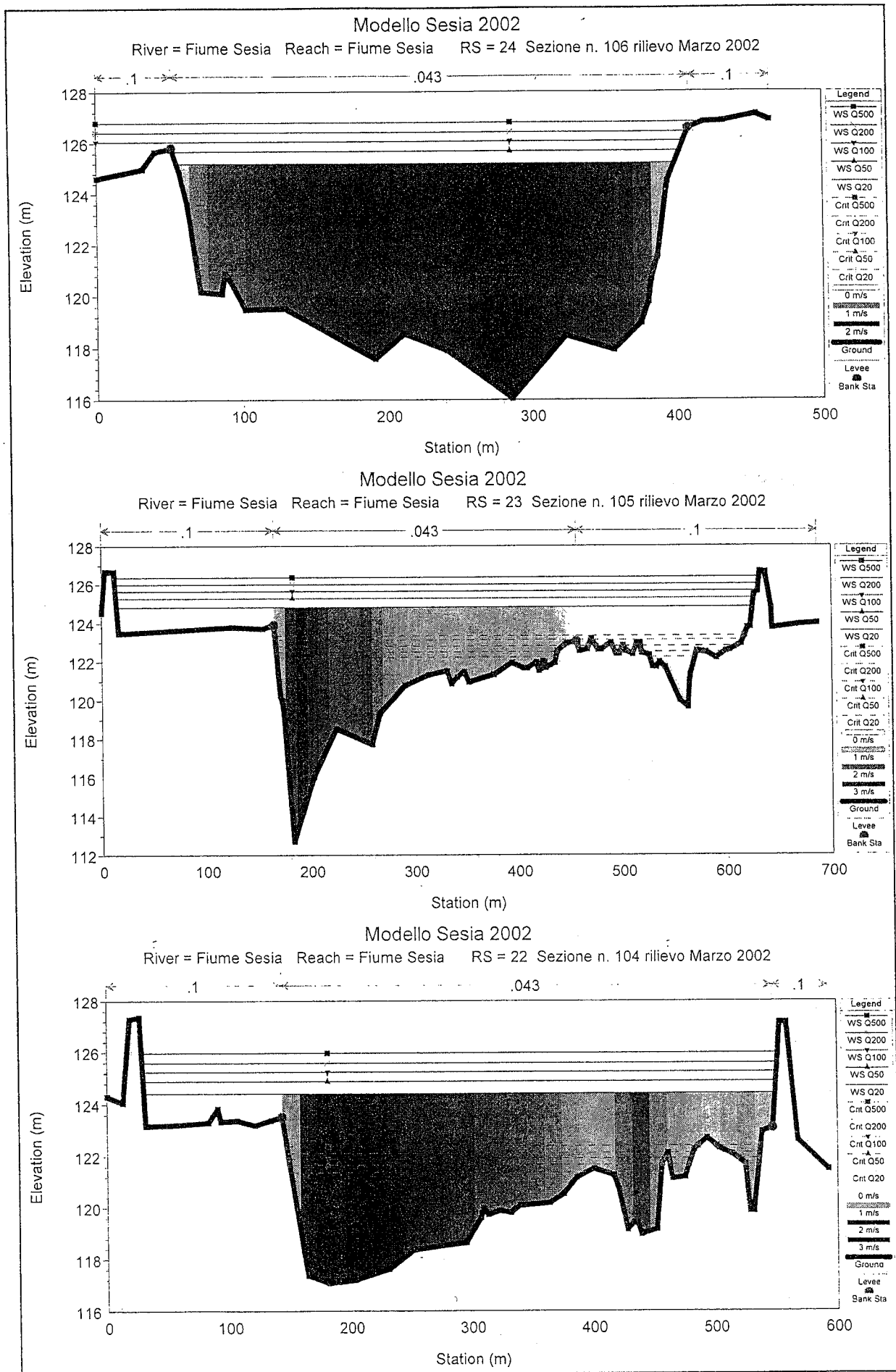
Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Ch	Froude # XS
Fiume Sesia	6	Q100	4400.00	108.43	117.43	114.89	117.57	0.000765	1.81	3408.26	894.42	0.27	0.21
Fiume Sesia	6	Q200	4900.00	108.43	117.69	115.02	117.78	0.000564	1.61	5333.94	1563.29	0.23	0.16
Fiume Sesia	6	Q500	5500.00	108.43	118.03	115.17	118.12	0.000543	1.65	5866.34	1563.87	0.23	0.15
Fiume Sesia	5	Q20	3300.00	109.12	116.43	114.28	116.55	0.000950	1.72	3254.51	1449.36	0.28	0.22
Fiume Sesia	5	Q50	3900.00	109.12	116.69	115.04	116.82	0.000997	1.85	3631.45	1450.26	0.29	0.22
Fiume Sesia	5	Q100	4400.00	109.12	117.00	115.19	117.13	0.000927	1.87	4082.06	1451.34	0.29	0.21
Fiume Sesia	5	Q200	4900.00	109.12	117.31	115.40	117.44	0.000863	1.89	4529.44	1452.42	0.28	0.20
Fiume Sesia	5	Q500	5500.00	109.12	117.69	115.51	117.81	0.000765	1.88	5230.95	1506.74	0.27	0.18
Fiume Sesia	4	Q20	3300.00	109.49	116.01	113.53	116.09	0.000535	1.55	4390.87	1716.33	0.22	0.15
Fiume Sesia	4	Q50	3900.00	109.49	116.24	113.70	116.33	0.000605	1.70	4777.57	1717.03	0.24	0.16
Fiume Sesia	4	Q100	4400.00	109.49	116.59	114.03	116.68	0.000563	1.71	5386.12	1718.12	0.23	0.15
Fiume Sesia	4	Q200	4900.00	109.49	116.94	114.20	117.03	0.000528	1.72	5977.76	1719.19	0.23	0.14
Fiume Sesia	4	Q500	5500.00	109.49	117.36	114.40	117.45	0.000484	1.73	6782.46	1763.02	0.22	0.13
Fiume Sesia	3	Q20	3300.00	107.35	115.75	113.01	115.80	0.000302	1.02	4744.35	1547.47	0.16	0.13
Fiume Sesia	3	Q50	3900.00	107.35	115.93	113.31	115.98	0.000359	1.15	5021.26	1548.10	0.18	0.14
Fiume Sesia	3	Q100	4400.00	107.35	116.31	113.44	116.36	0.000328	1.16	5712.80	1604.93	0.17	0.13
Fiume Sesia	3	Q200	4900.00	107.35	116.67	113.53	116.72	0.000307	1.18	6291.51	1605.88	0.17	0.13
Fiume Sesia	3	Q500	5500.00	107.35	117.11	113.64	117.17	0.000276	1.19	7134.10	1654.88	0.16	0.12
Fiume Sesia	2	Q20	3300.00	107.81	115.53	112.81	115.59	0.000391	1.31	4638.22	1477.63	0.19	0.13
Fiume Sesia	2	Q50	3900.00	107.81	115.66	112.98	115.73	0.000489	1.49	4827.30	1477.67	0.21	0.14
Fiume Sesia	2	Q100	4400.00	107.81	116.06	113.21	116.13	0.000447	1.50	5482.18	1512.56	0.21	0.13
Fiume Sesia	2	Q200	4900.00	107.81	116.43	113.39	116.51	0.000417	1.52	6051.38	1512.56	0.20	0.13
Fiume Sesia	2	Q500	5500.00	107.81	116.90	113.54	116.97	0.000381	1.53	6758.53	1512.56	0.20	0.12
Fiume Sesia	1	Q20	3300.00	110.80	114.53	113.02	114.91	0.002628	2.73	1210.83	348.57	0.47	0.47
Fiume Sesia	1	Q50	3900.00	110.80	114.98	113.28	115.17	0.001447	2.19	3053.07	1354.61	0.35	0.27
Fiume Sesia	1	Q100	4400.00	110.80	115.52	113.49	115.68	0.001056	2.04	3785.41	1357.24	0.31	0.22
Fiume Sesia	1	Q200	4900.00	110.80	115.97	113.69	116.11	0.000876	1.98	4397.49	1366.78	0.29	0.20
Fiume Sesia	1	Q500	5500.00	110.80	116.51	113.93	116.64	0.000715	1.92	5135.95	1367.72	0.26	0.18

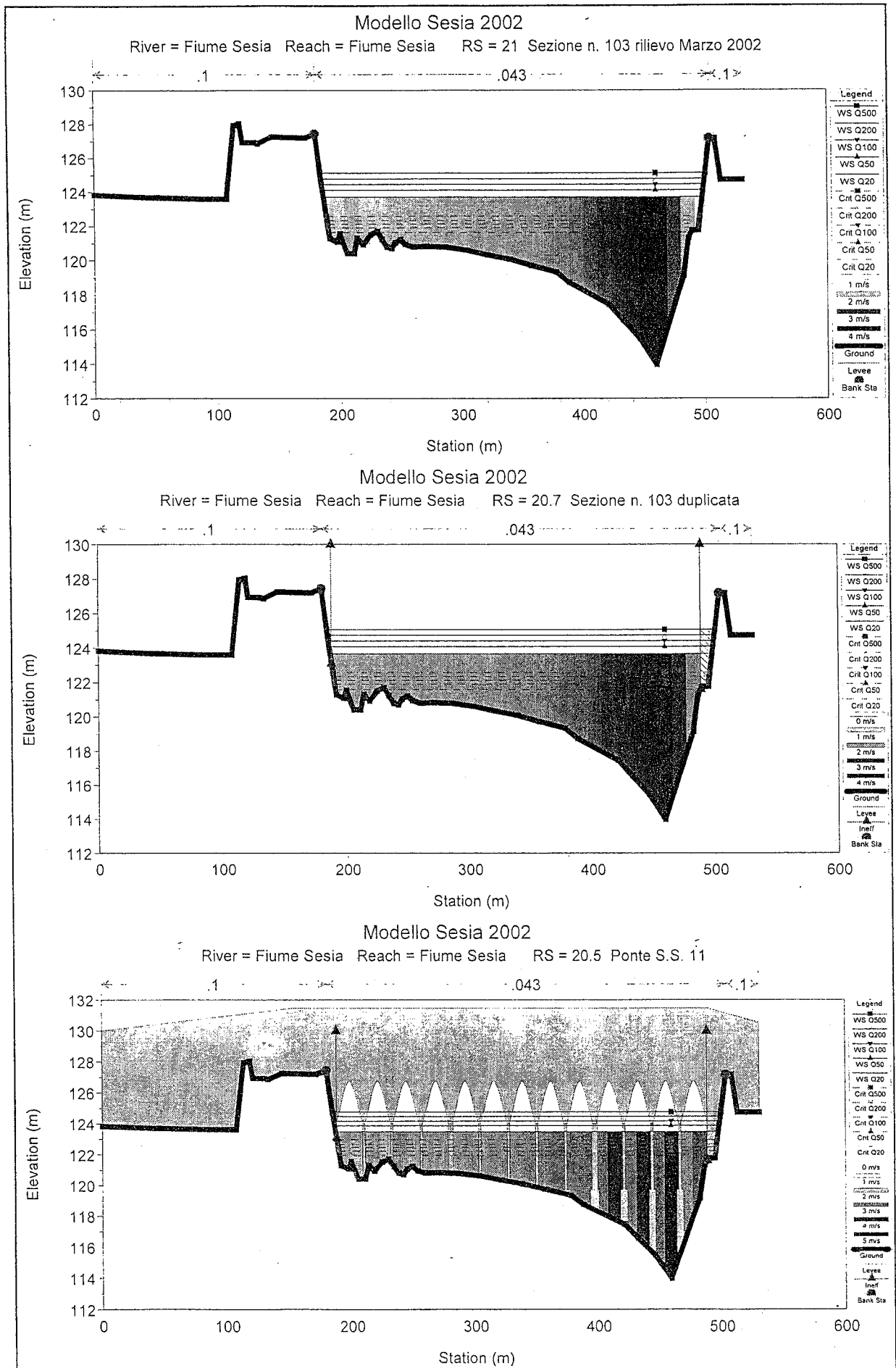


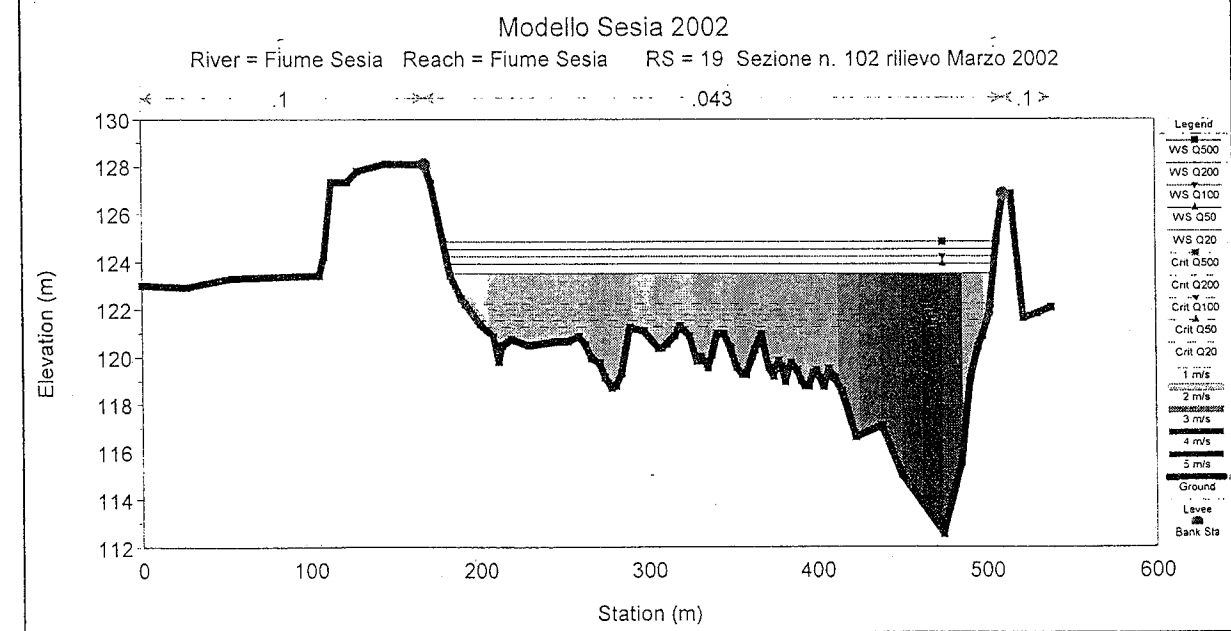
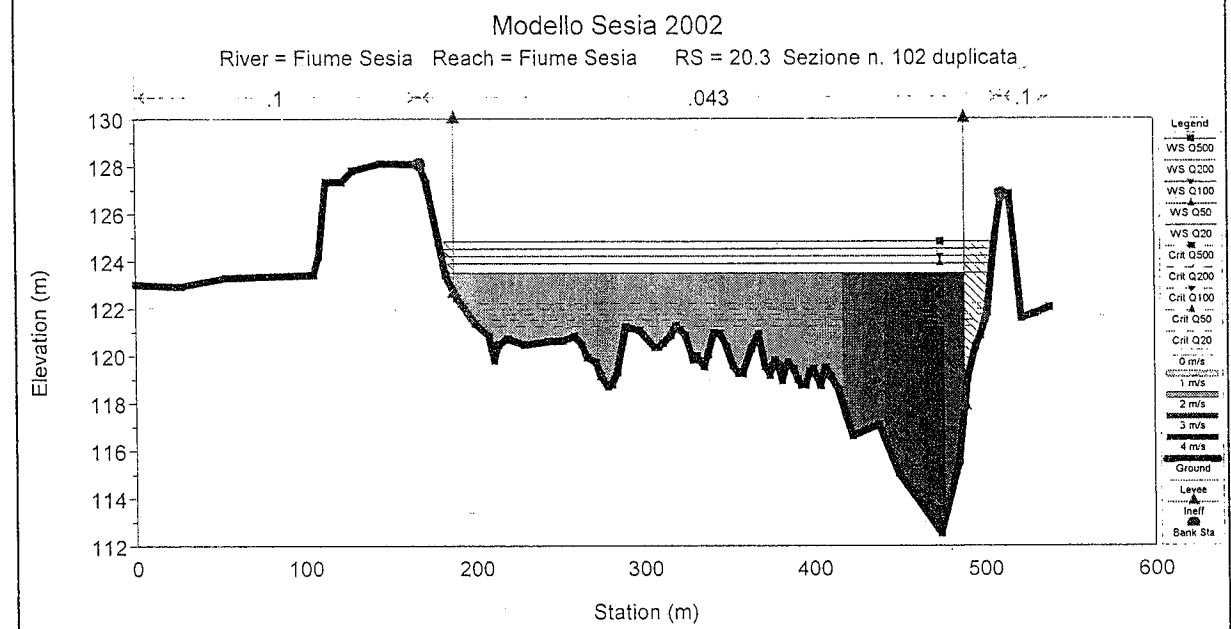
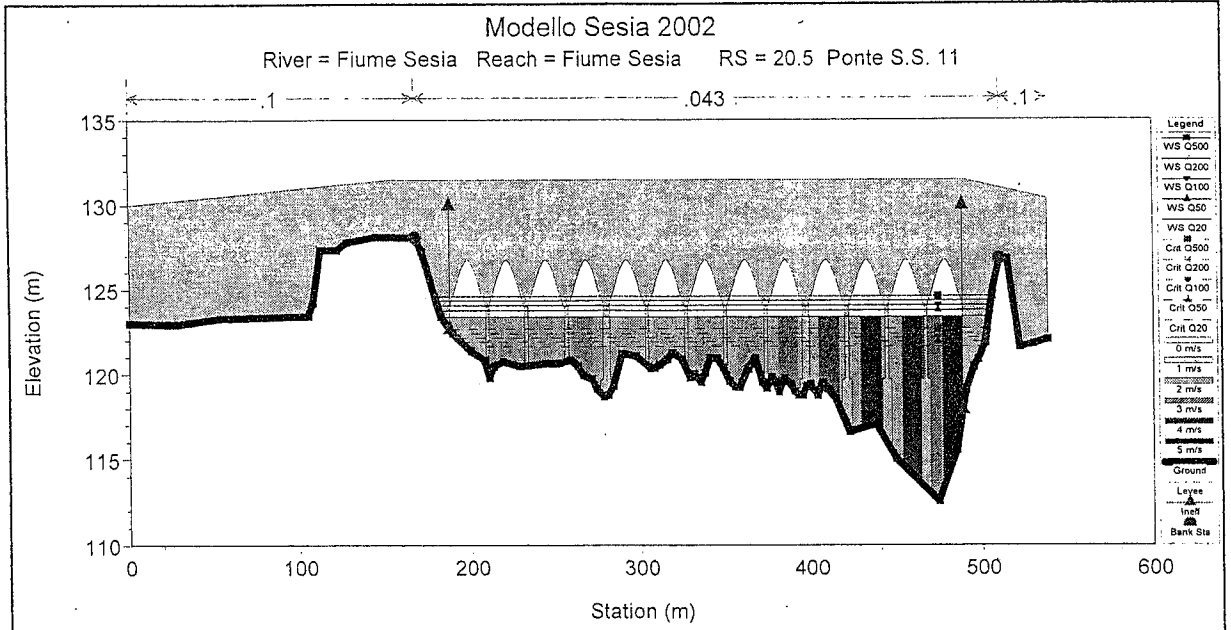


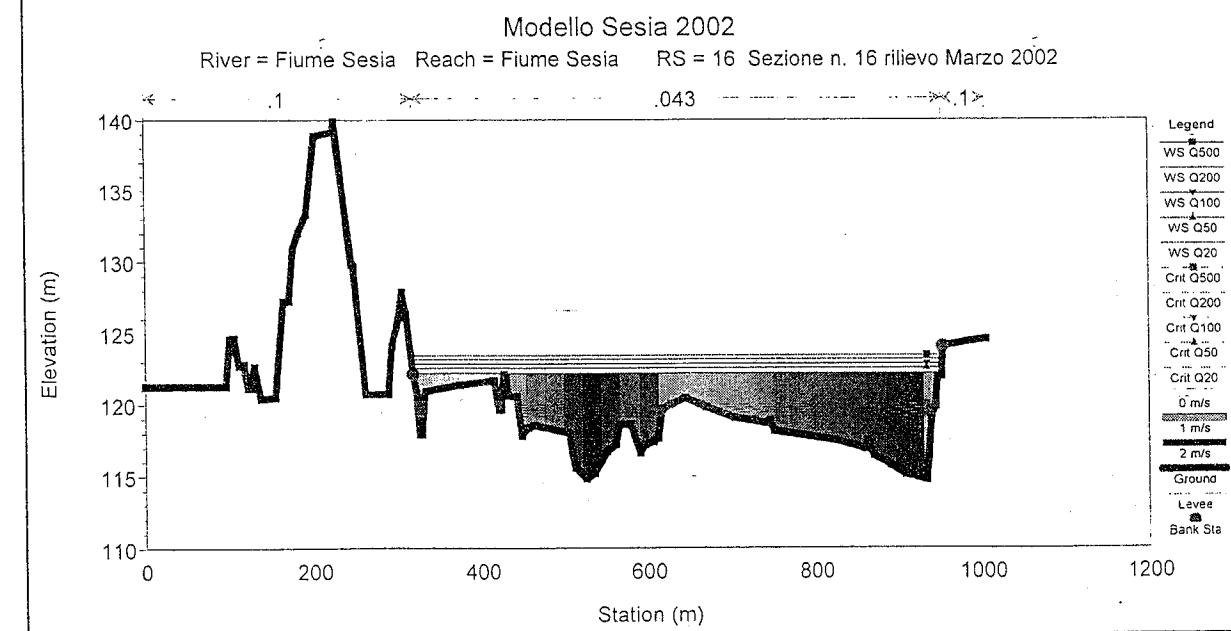
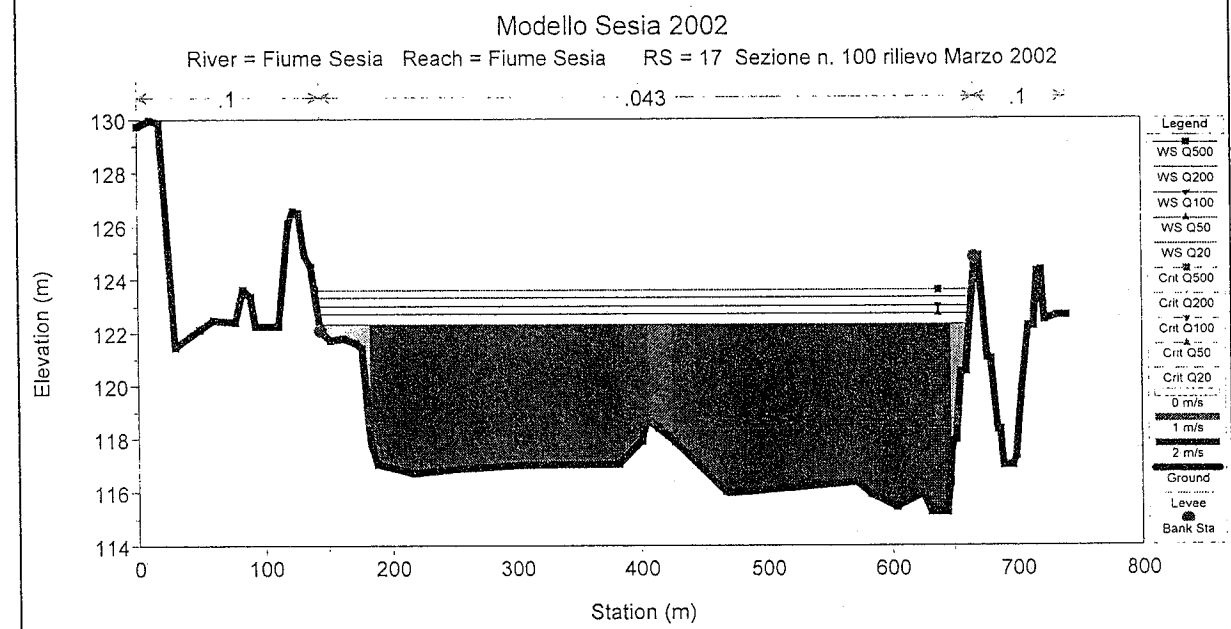
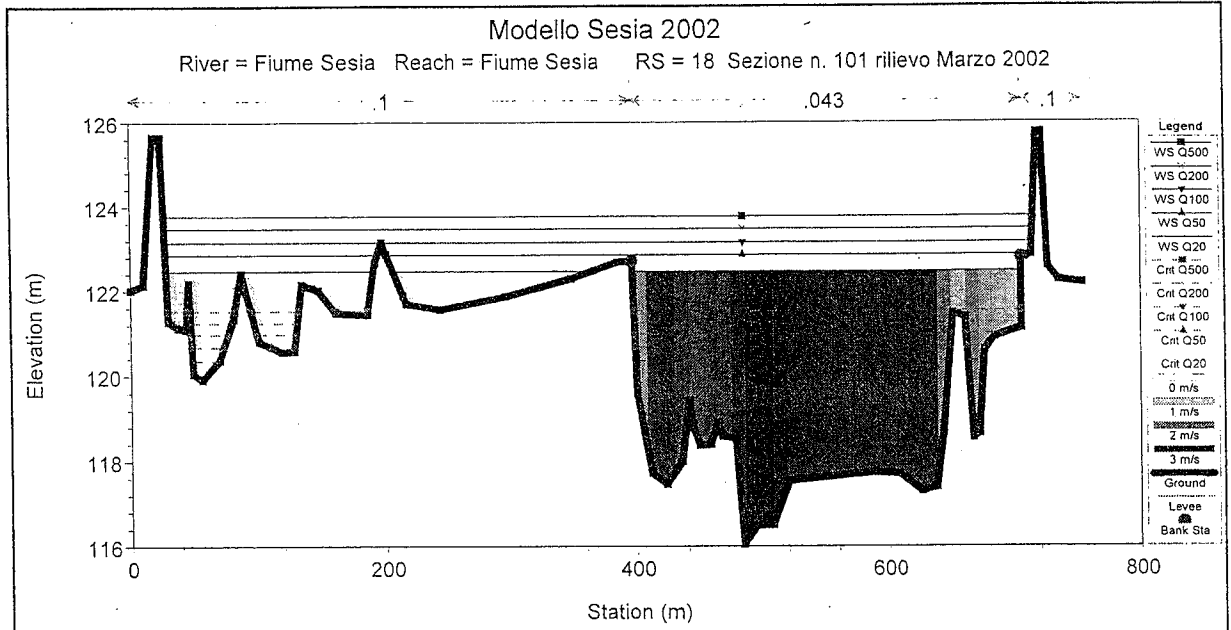


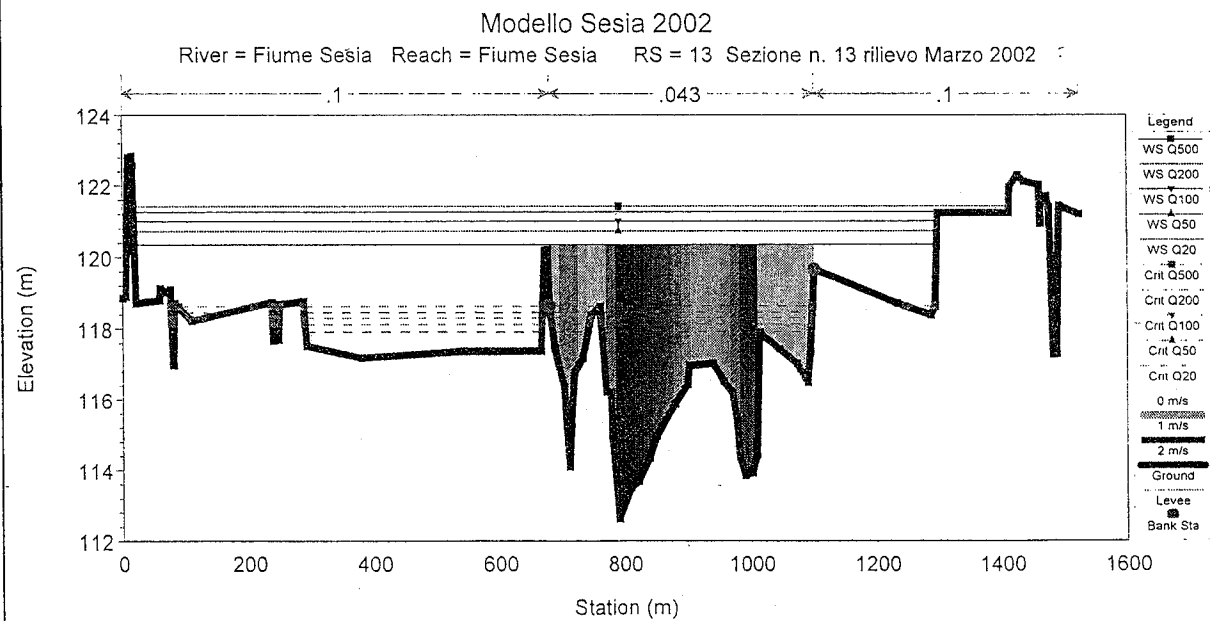
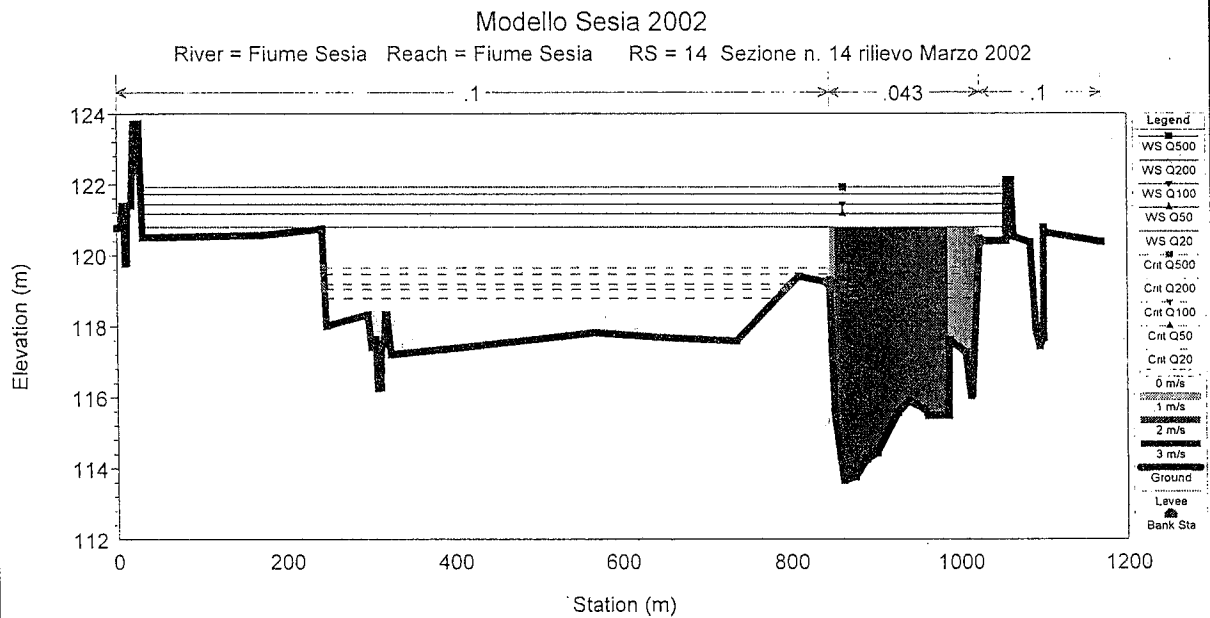
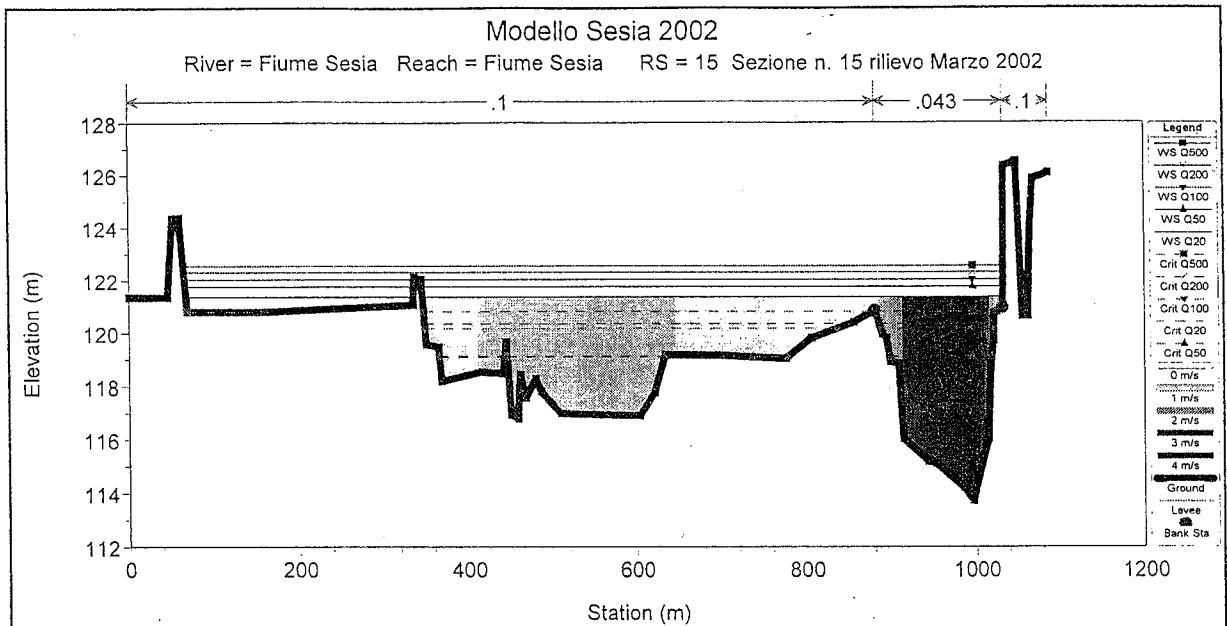


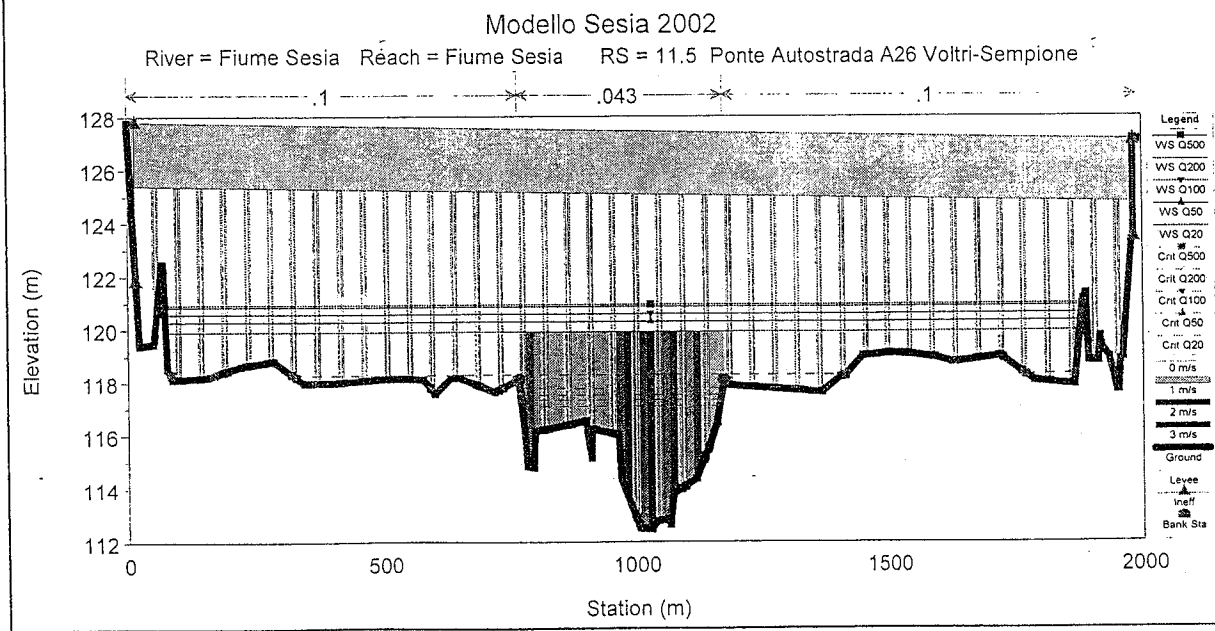
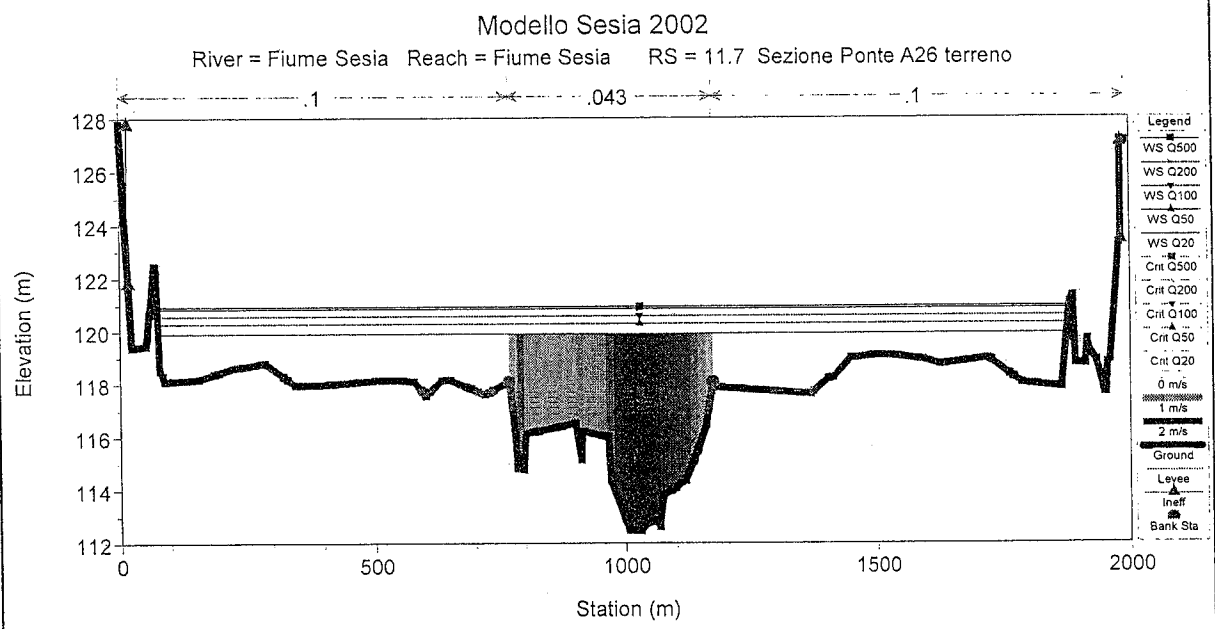
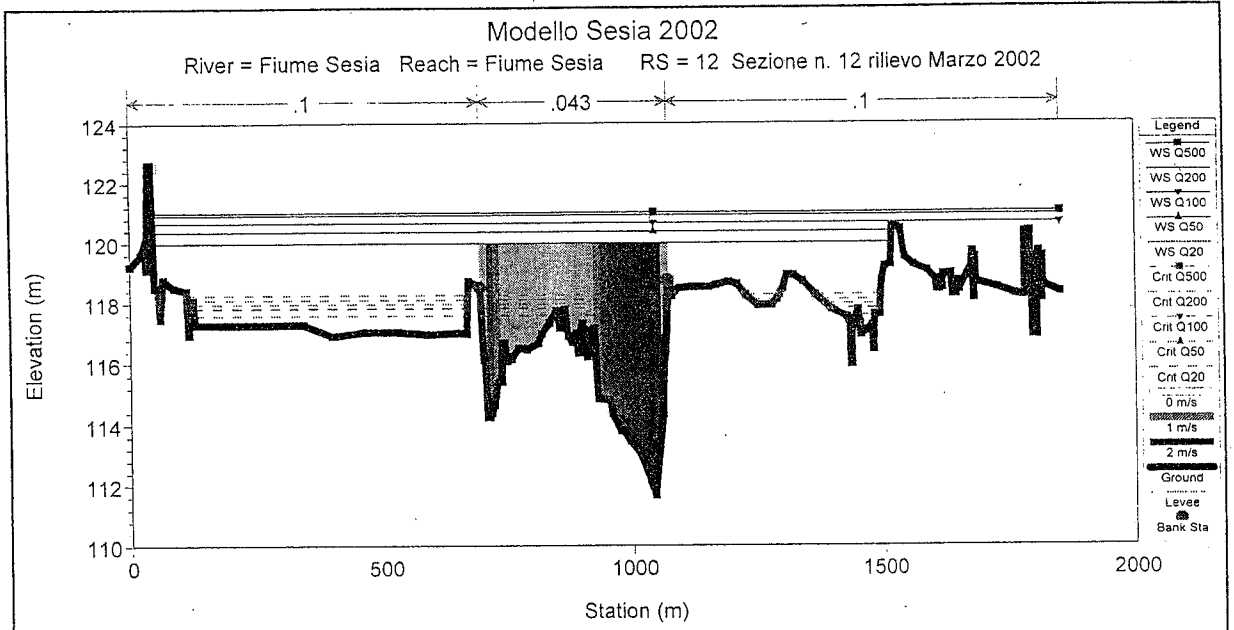


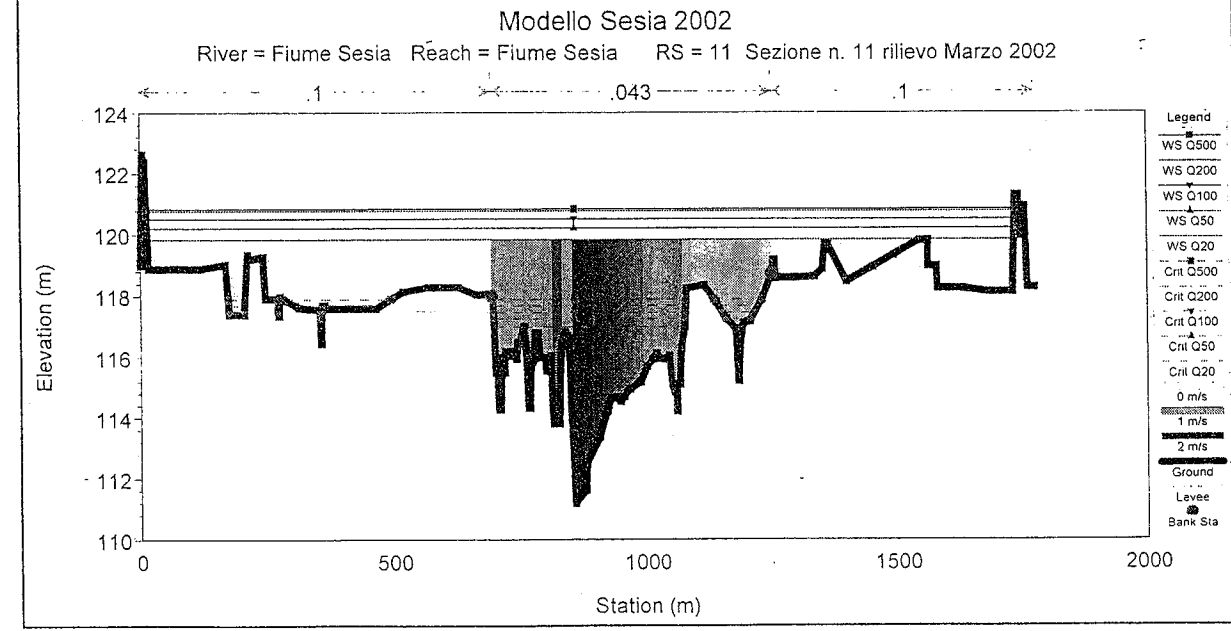
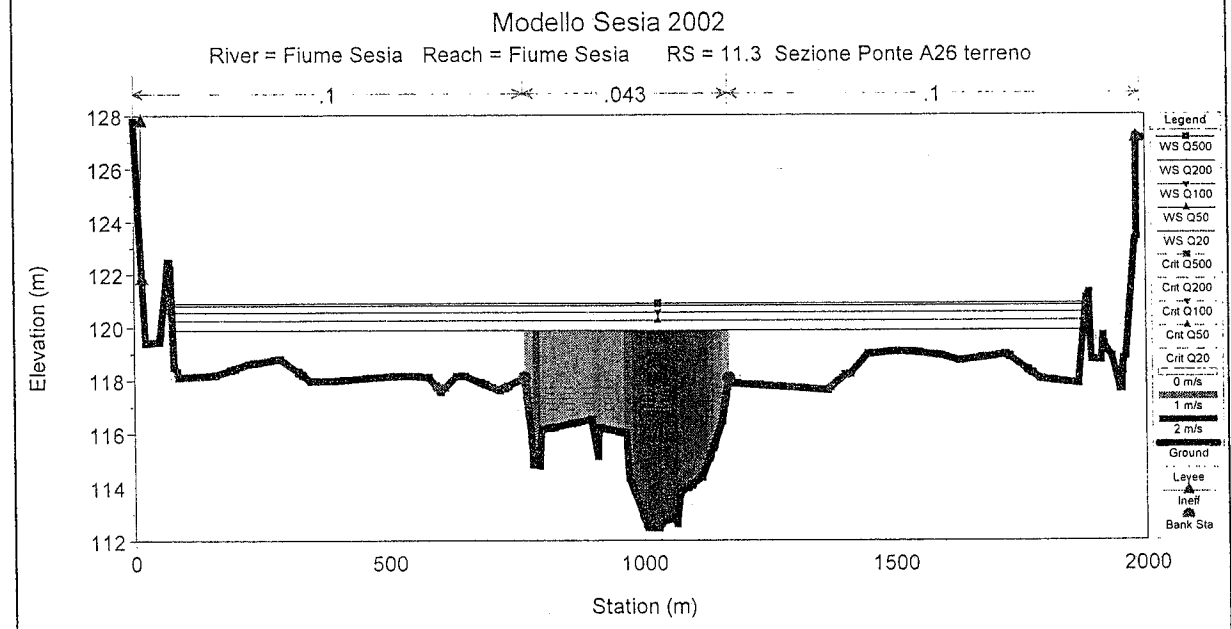
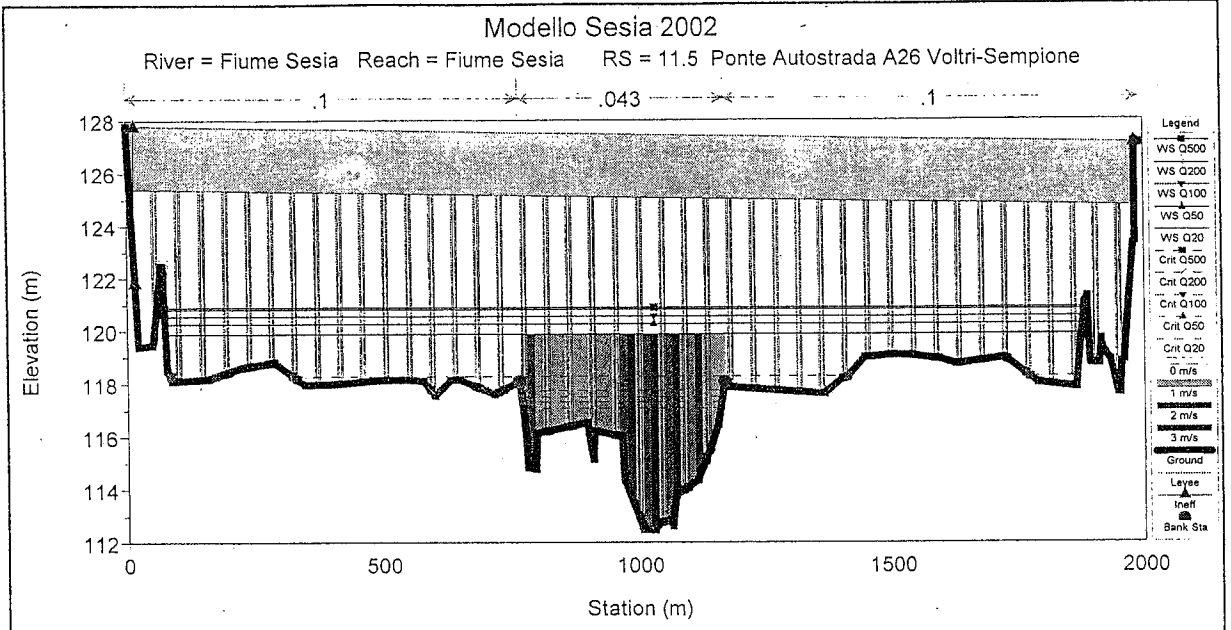


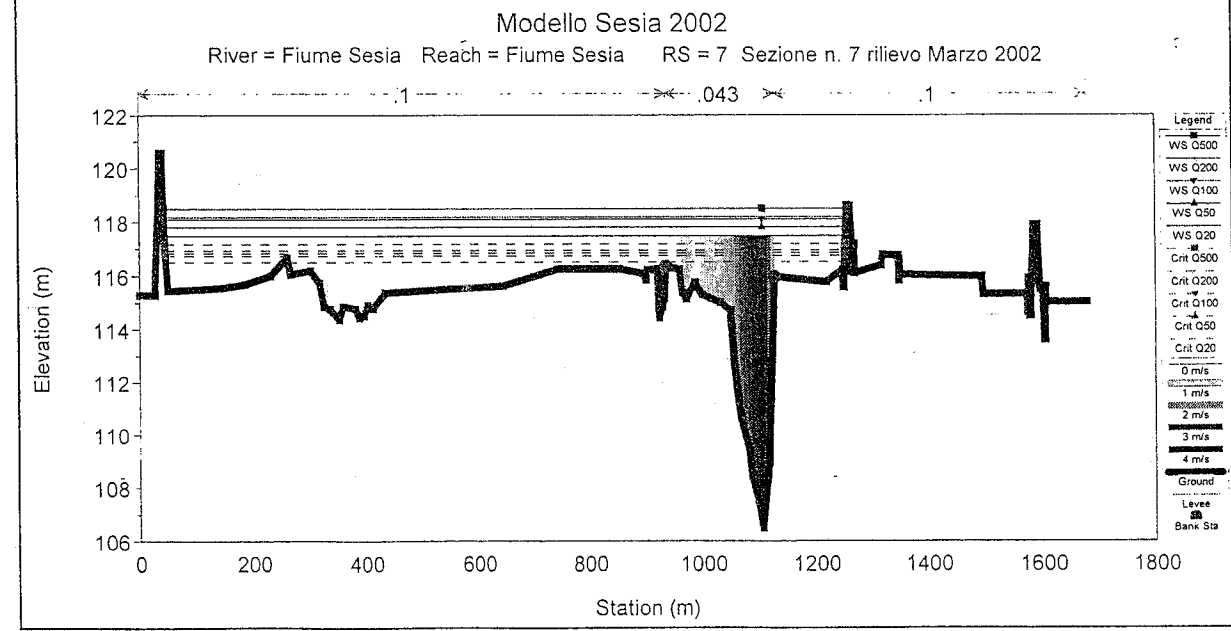
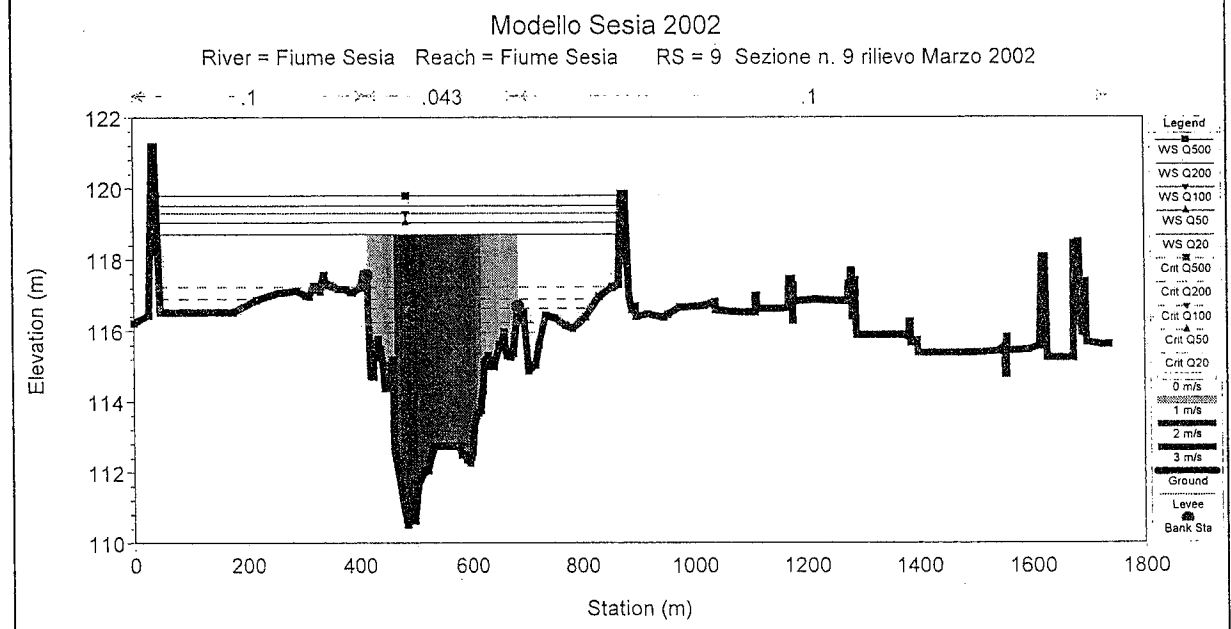
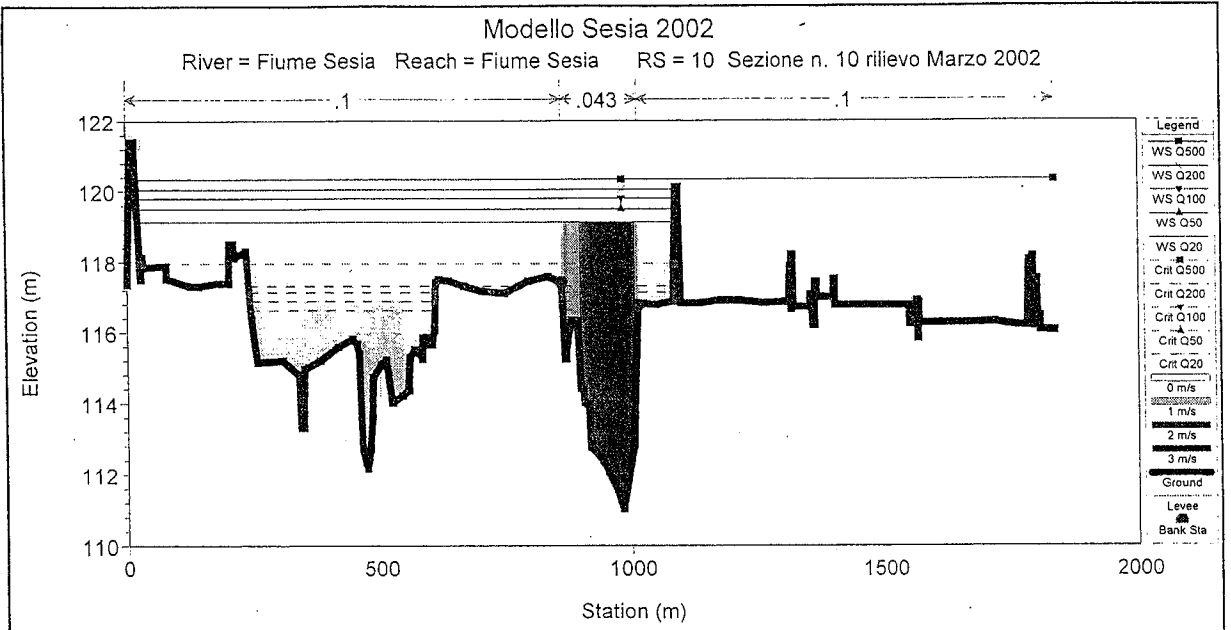


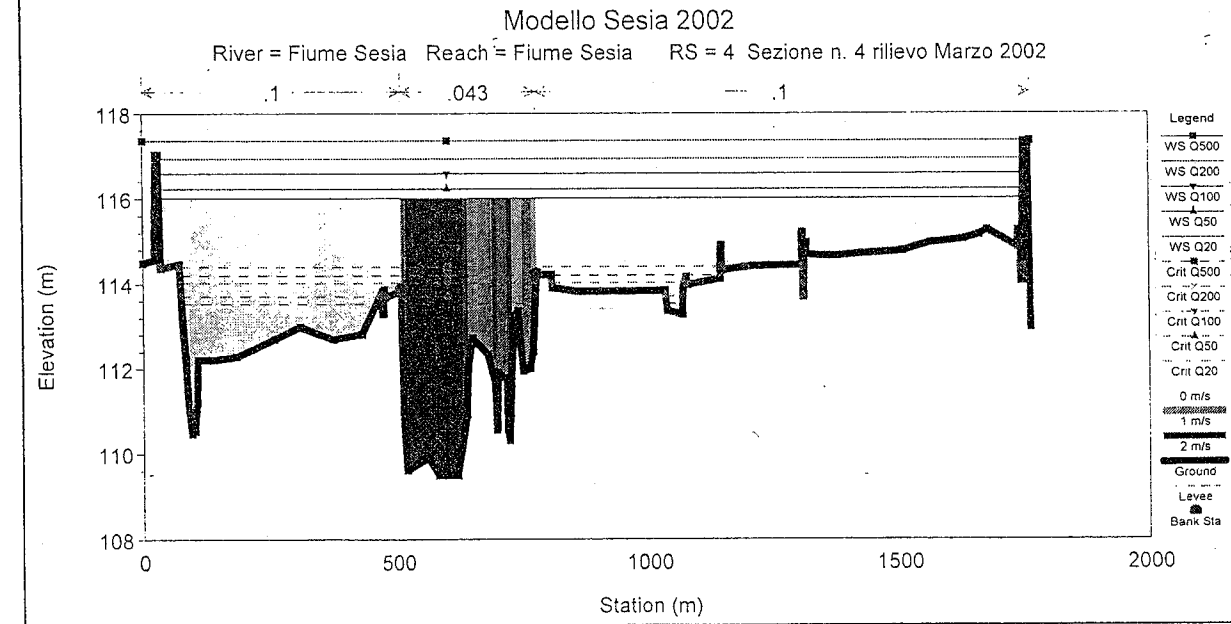
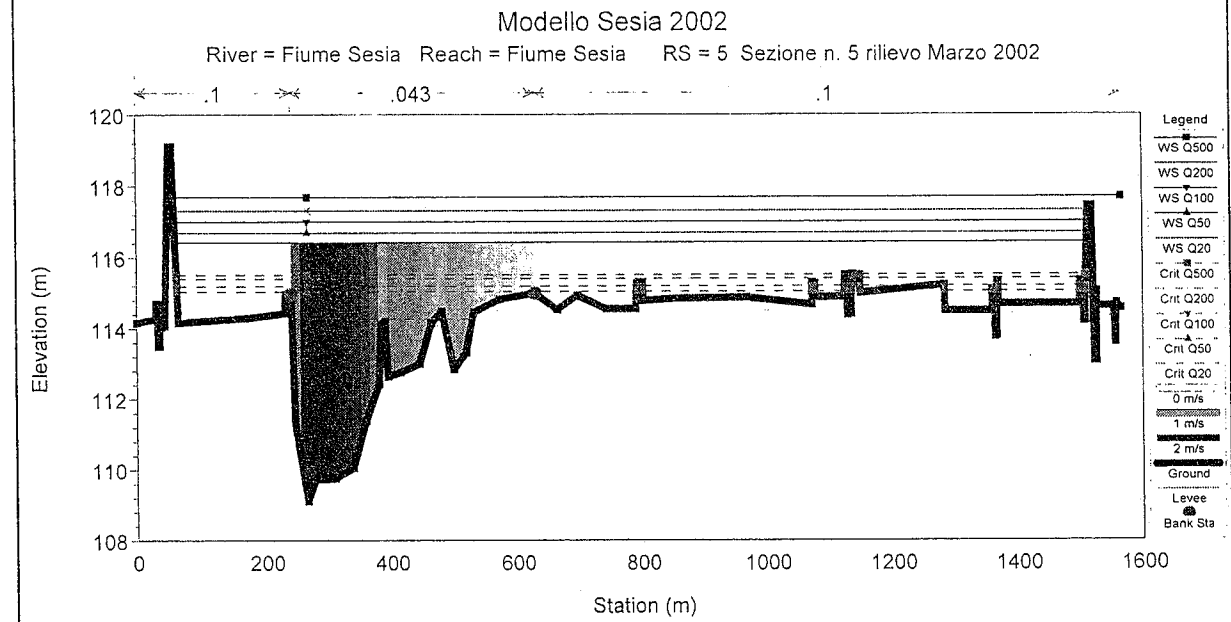
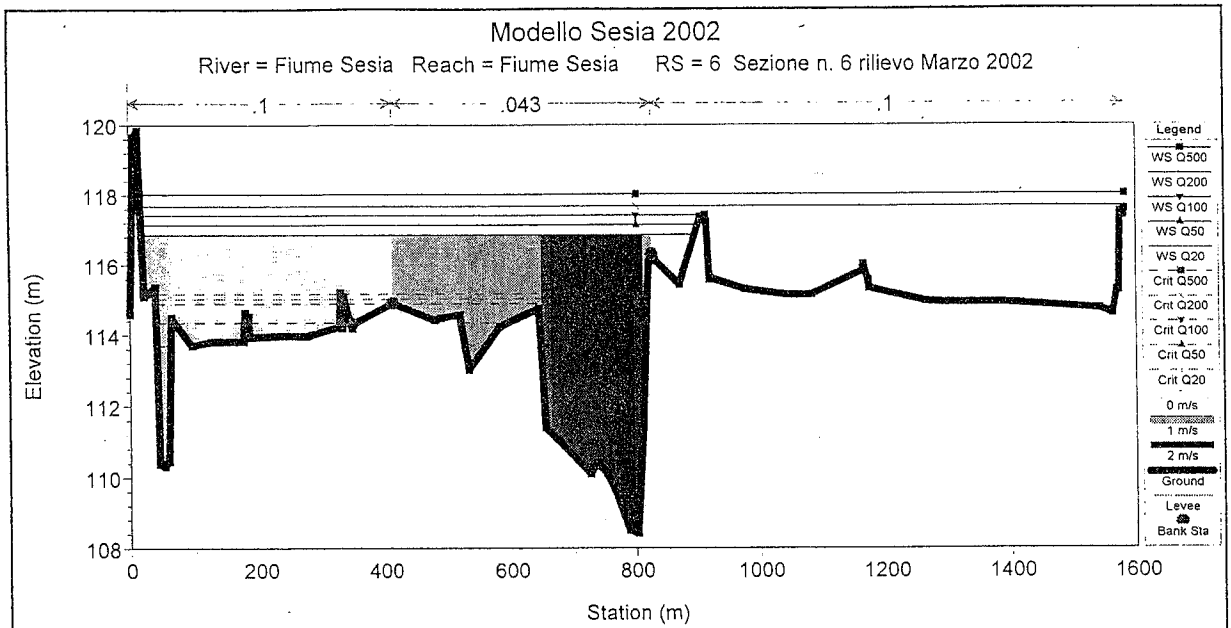


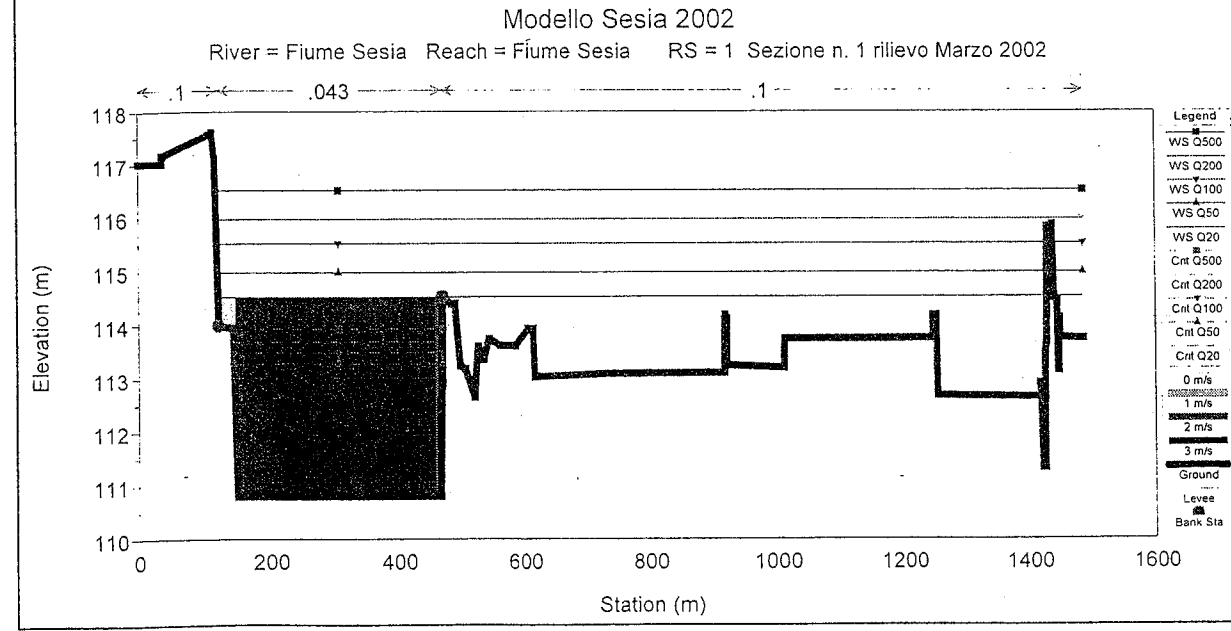
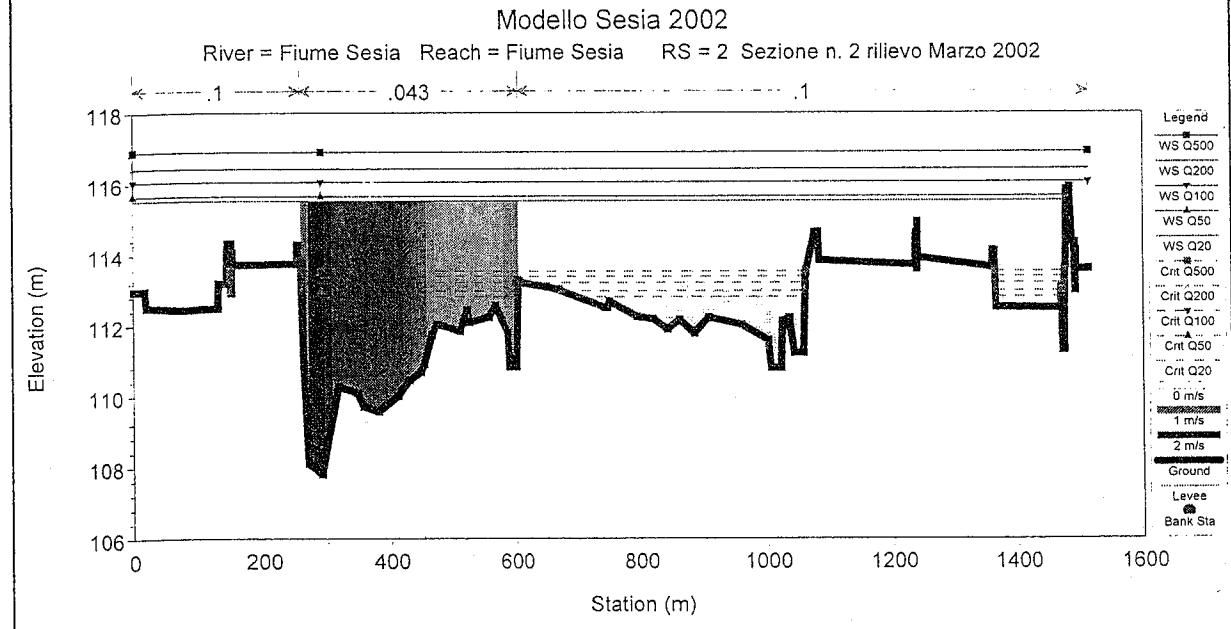
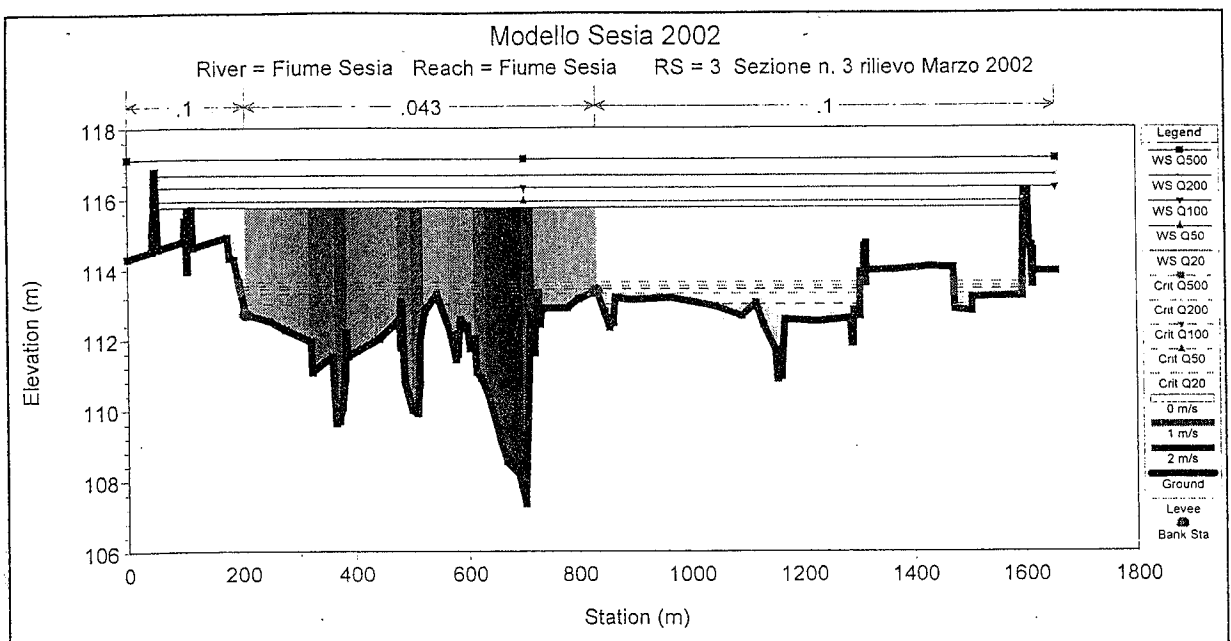












Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 33 Profile: Q200

E.G. Elev (m)	131.12	Element	Left OB	Channel	Right OB
Vel Head (m)	0.30	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	130.81	Reach Len. (m)	627.00	563.84	513.68
Crit W.S. (m)	129.35	Flow Area (m2)	301.52	1646.76	473.69
E.G. Slope (m/m)	0.002119	Area (m2)	301.52	1646.76	473.69
Q Total (m3/s)	4900.00	Flow (m3/s)	208.31	4267.31	424.38
Top Width (m)	771.24	Top Width (m)	163.41	434.44	173.39
Vel Total (m/s)	2.02	Avg. Vel. (m/s)	0.69	2.59	0.90
Max Chl Dpth (m)	7.06	Hydr. Depth (m)	1.85	3.79	2.73
Conv. Total (m3/s)	106450.9	Conv. (m3/s)	4525.4	92705.9	9219.6
Length Wtd. (m)	561.26	Wetted Per. (m)	163.98	437.23	174.45
Min Ch El (m)	123.75	Shear (N/m2)	38.20	78.26	56.42
Alpha	1.45	Stream Power (N/m s)	26.39	202.79	50.55
Frctn Loss (m)	1.08	Cum Volume (1000 m3)	18614.22	28766.07	10786.98
C & E Loss (m)	0.02	Cum SA (1000 m2)	5842.01	5405.15	3862.94

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 33 Profile: Q500

E.G. Elev (m)	131.45	Element	Left OB	Channel	Right OB
Vel Head (m)	0.32	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	131.13	Reach Len. (m)	627.00	563.84	513.68
Crit W.S. (m)	129.52	Flow Area (m2)	353.48	1784.66	528.84
E.G. Slope (m/m)	0.002002	Area (m2)	353.48	1784.66	528.84
Q Total (m3/s)	5500.00	Flow (m3/s)	263.22	4742.59	494.19
Top Width (m)	772.46	Top Width (m)	163.96	434.44	174.06
Vel Total (m/s)	2.06	Avg. Vel. (m/s)	0.74	2.66	0.93
Max Chl Dpth (m)	7.38	Hydr. Depth (m)	2.16	4.11	3.04
Conv. Total (m3/s)	122931.4	Conv. (m3/s)	5883.3	106002.5	11045.7
Length Wtd. (m)	561.58	Wetted Per. (m)	164.62	437.23	175.19
Min Ch El (m)	123.75	Shear (N/m2)	42.15	80.12	59.25
Alpha	1.46	Stream Power (N/m s)	31.39	212.92	55.37
Frctn Loss (m)	1.05	Cum Volume (1000 m3)	20450.16	30521.82	13888.30
C & E Loss (m)	0.03	Cum SA (1000 m2)	5908.33	5406.50	4396.03

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 32 Profile: Q200

E.G. Elev (m)	130.01	Element	Left OB	Channel	Right OB
Vel Head (m)	0.22	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	129.79	Reach Len. (m)	529.54	526.28	541.42
Crit W.S. (m)	127.76	Flow Area (m2)	1338.23	450.08	1757.40
E.G. Slope (m/m)	0.001762	Area (m2)	1338.23	450.08	1757.40
Q Total (m3/s)	4900.00	Flow (m3/s)	1347.87	1512.16	2039.97
Top Width (m)	807.27	Top Width (m)	359.19	68.18	379.90
Vel Total (m/s)	1.38	Avg. Vel. (m/s)	1.01	3.36	1.16
Max Chl Dpth (m)	8.33	Hydr. Depth (m)	3.73	6.60	4.63
Conv. Total (m3/s)	116729.9	Conv. (m3/s)	32109.5	36023.4	48597.0
Length Wtd. (m)	530.22	Wetted Per. (m)	360.06	70.49	382.18
Min Ch El (m)	121.46	Shear (N/m2)	64.22	110.33	79.46
Alpha	2.26	Stream Power (N/m s)	64.69	370.67	92.24
Frctn Loss (m)	0.71	Cum Volume (1000 m3)	18100.16	28174.93	10213.94
C & E Loss (m)	0.01	Cum SA (1000 m2)	5678.17	5263.45	3720.84

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 32 Profile: Q500

E.G. Elev (m)	130.37	Element	Left OB	Channel	Right OB
Vel Head (m)	0.23	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	130.14	Reach Len. (m)	529.54	526.28	541.42
Crit W.S. (m)	127.92	Flow Area (m2)	1463.96	473.92	1890.35
E.G. Slope (m/m)	0.001755	Area (m2)	1463.96	473.92	1890.35
Q Total (m3/s)	5500.00	Flow (m3/s)	1559.60	1644.69	2295.71
Top Width (m)	808.90	Top Width (m)	360.07	68.18	380.64
Vel Total (m/s)	1.44	Avg. Vel. (m/s)	1.07	3.47	1.21
Max Chl Dpth (m)	8.68	Hydr. Depth (m)	4.07	6.95	4.97
Conv. Total (m3/s)	131285.9	Conv. (m3/s)	37227.9	39259.0	54798.9
Length Wtd. (m)	530.27	Wetted Per. (m)	361.01	70.49	383.00

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 32 Profile: Q500 (Continued)

Min Ch El (m)	121.46	Shear (N/m2)	69.79	115.71	84.95
Alpha	2.20	Stream Power (N/m s)	74.35	401.55	103.16
Frctn Loss (m)	0.69	Cum Volume (1000 m3)	19880.39	29885.09	13266.95
C & E Loss (m)	0.01	Cum SA (1000 m2)	5744.05	5264.80	4253.56

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 31 Profile: Q200

E.G. Elev (m)	129.29	Element	Left OB	Channel	Right OB
Vel Head (m)	0.19	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	129.09	Reach Len. (m)	764.64	661.16	595.64
Crit W.S. (m)	126.92	Flow Area (m2)	1540.72	1781.22	2.51
E.G. Slope (m/m)	0.001058	Area (m2)	1540.72	1781.22	2.51
Q Total (m3/s)	4900.00	Flow (m3/s)	1027.97	3871.36	0.67
Top Width (m)	888.09	Top Width (m)	521.65	363.53	2.91
Vel Total (m/s)	1.47	Avg. Vel. (m/s)	0.67	2.17	0.27
Max Chl Dpth (m)	7.79	Hydr. Depth (m)	2.95	4.90	0.86
Conv. Total (m3/s)	150666.5	Conv. (m3/s)	31608.2	119037.8	20.5
Length Wtd. (m)	684.71	Wetted Per. (m)	524.33	365.65	3.38
Min Ch El (m)	121.30	Shear (N/m2)	30.48	50.53	7.69
Alpha	1.76	Stream Power (N/m s)	20.33	109.82	2.05
Frctn Loss (m)	0.55	Cum Volume (1000 m3)	17337.90	27587.78	9737.52
C & E Loss (m)	0.02	Cum SA (1000 m2)	5444.95	5149.85	3617.21

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 31 Profile: Q500

E.G. Elev (m)	129.67	Element	Left OB	Channel	Right OB
Vel Head (m)	0.20	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	129.46	Reach Len. (m)	764.64	661.16	595.64
Crit W.S. (m)	127.11	Flow Area (m2)	1734.09	1915.92	3.70
E.G. Slope (m/m)	0.001012	Area (m2)	1734.09	1915.92	3.70
Q Total (m3/s)	5500.00	Flow (m3/s)	1223.47	4275.43	1.10
Top Width (m)	889.15	Top Width (m)	522.09	363.53	3.53
Vel Total (m/s)	1.51	Avg. Vel. (m/s)	0.71	2.23	0.30
Max Chl Dpth (m)	8.16	Hydr. Depth (m)	3.32	5.27	1.05
Conv. Total (m3/s)	172915.2	Conv. (m3/s)	38464.8	134415.8	34.5
Length Wtd. (m)	685.52	Wetted Per. (m)	524.91	365.65	4.11
Min Ch El (m)	121.30	Shear (N/m2)	32.78	51.99	8.94
Alpha	1.76	Stream Power (N/m s)	23.13	116.01	2.65
Frctn Loss (m)	0.53	Cum Volume (1000 m3)	19033.64	29256.22	12754.21
C & E Loss (m)	0.02	Cum SA (1000 m2)	5510.48	5151.20	4149.56

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 30 Profile: Q200

E.G. Elev (m)	128.71	Element	Left OB	Channel	Right OB
Vel Head (m)	0.12	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	128.60	Reach Len. (m)	322.06	406.72	494.34
Crit W.S. (m)	125.76	Flow Area (m2)	2083.94	1866.33	443.07
E.G. Slope (m/m)	0.000637	Area (m2)	2083.94	1866.33	443.07
Q Total (m3/s)	4900.00	Flow (m3/s)	1351.80	3312.82	235.38
Top Width (m)	1002.58	Top Width (m)	504.67	353.82	144.09
Vel Total (m/s)	1.12	Avg. Vel. (m/s)	0.65	1.78	0.53
Max Chl Dpth (m)	6.94	Hydr. Depth (m)	4.13	5.27	3.07
Conv. Total (m3/s)	194142.0	Conv. (m3/s)	53559.2	131256.7	9326.1
Length Wtd. (m)	389.79	Wetted Per. (m)	505.78	354.89	145.08
Min Ch El (m)	121.66	Shear (N/m2)	25.74	32.85	19.08
Alpha	1.82	Stream Power (N/m s)	16.70	58.31	10.14
Frctn Loss (m)	0.23	Cum Volume (1000 m3)	15952.12	26381.97	9604.82
C & E Loss (m)	0.00	Cum SA (1000 m2)	5052.57	4912.71	3573.43

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 30 Profile: Q500

E.G. Elev (m)	129.11	Element	Left OB	Channel	Right OB
Vel Head (m)	0.12	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	128.99	Reach Len. (m)	322.06	406.72	494.34
Crit W.S. (m)	125.93	Flow Area (m2)	2281.59	2004.80	499.58
E.G. Slope (m/m)	0.000617	Area (m2)	2281.59	2004.80	499.58

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 30 Profile: Q500 (Continued)

Q Total (m3/s)	5500.00	Flow (m3/s)	1545.28	3672.76	281.95
Top Width (m)	1003.95	Top Width (m)	505.41	353.82	144.72
Vel Total (m/s)	1.15	Avg. Vel. (m/s)	0.68	1.83	0.56
Max Chl Dpth (m)	7.33	Hydr. Depth (m)	4.51	5.67	3.45
Conv. Total (m3/s)	221460.0	Conv. (m3/s)	62221.6	147885.4	11353.0
Length Wtd. (m)	389.49	Wetted Per. (m)	506.62	354.89	145.83
Min Ch El (m)	121.66	Shear (N/m2)	27.24	34.17	20.72
Alpha	1.81	Stream Power (N/m s)	18.45	62.60	11.69
Frctn Loss (m)	0.22	Cum Volume (1000 m3)	17498.37	27960.11	12604.33
C & E Loss (m)	0.00	Cum SA (1000 m2)	5117.65	4914.06	4105.41

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 29 Profile: Q200

E.G. Elev (m)	128.48	Element	Left OB	Channel	Right OB
Vel Head (m)	0.11	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	128.37	Reach Len. (m)	649.68	610.76	446.94
Crit W.S. (m)	125.26	Flow Area (m2)	1407.46	2527.55	5.48
E.G. Slope (m/m)	0.000547	Area (m2)	1407.46	2527.55	5.48
Q Total (m3/s)	4900.00	Flow (m3/s)	852.15	4046.88	0.96
Top Width (m)	841.98	Top Width (m)	336.63	497.36	8.00
Vel Total (m/s)	1.24	Avg. Vel. (m/s)	0.61	1.60	0.18
Max Chl Dpth (m)	6.88	Hydr. Depth (m)	4.18	5.08	0.69
Conv. Total (m3/s)	209434.3	Conv. (m3/s)	36422.5	172970.5	41.2
Length Wtd. (m)	618.31	Wetted Per. (m)	338.09	500.71	8.41
Min Ch El (m)	121.49	Shear (N/m2)	22.35	27.10	3.50
Alpha	1.41	Stream Power (N/m s)	13.53	43.39	0.62
Frctn Loss (m)	0.47	Cum Volume (1000 m3)	15389.90	25488.43	9493.95
C & E Loss (m)	0.01	Cum SA (1000 m2)	4917.10	4739.62	3535.84

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 29 Profile: Q500

E.G. Elev (m)	128.89	Element	Left OB	Channel	Right OB
Vel Head (m)	0.12	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	128.77	Reach Len. (m)	649.68	610.76	446.94
Crit W.S. (m)	125.41	Flow Area (m2)	1607.56	2725.93	9.01
E.G. Slope (m/m)	0.000530	Area (m2)	1607.56	2725.93	9.01
Q Total (m3/s)	5500.00	Flow (m3/s)	986.67	4511.43	1.90
Top Width (m)	871.73	Top Width (m)	363.91	498.10	9.73
Vel Total (m/s)	1.27	Avg. Vel. (m/s)	0.61	1.66	0.21
Max Chl Dpth (m)	7.28	Hydr. Depth (m)	4.42	5.47	0.93
Conv. Total (m3/s)	238906.7	Conv. (m3/s)	42858.7	195965.7	82.4
Length Wtd. (m)	618.49	Wetted Per. (m)	369.28	501.55	10.32
Min Ch El (m)	121.49	Shear (N/m2)	22.63	28.25	4.54
Alpha	1.44	Stream Power (N/m s)	13.89	46.75	0.96
Frctn Loss (m)	0.46	Cum Volume (1000 m3)	16872.10	26998.07	12478.62
C & E Loss (m)	0.01	Cum SA (1000 m2)	4977.66	4740.81	4067.23

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 28 Profile: Q200

E.G. Elev (m)	128.00	Element	Left OB	Channel	Right OB
Vel Head (m)	0.24	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	127.76	Reach Len. (m)	486.94	500.54	512.82
Crit W.S. (m)	125.07	Flow Area (m2)	1230.56	1577.87	9.35
E.G. Slope (m/m)	0.001123	Area (m2)	1230.56	1577.87	9.35
Q Total (m3/s)	4900.00	Flow (m3/s)	1064.19	3833.28	2.54
Top Width (m)	588.81	Top Width (m)	293.59	282.70	12.51
Vel Total (m/s)	1.74	Avg. Vel. (m/s)	0.86	2.43	0.27
Max Chl Dpth (m)	7.43	Hydr. Depth (m)	4.19	5.58	0.75
Conv. Total (m3/s)	146214.6	Conv. (m3/s)	31755.0	114383.8	75.7
Length Wtd. (m)	499.06	Wetted Per. (m)	296.85	286.70	12.84
Min Ch El (m)	120.33	Shear (N/m2)	45.66	60.61	8.02
Alpha	1.58	Stream Power (N/m s)	39.48	147.25	2.18
Frctn Loss (m)	0.73	Cum Volume (1000 m3)	14532.97	24234.72	9490.64
C & E Loss (m)	0.02	Cum SA (1000 m2)	4712.37	4501.40	3531.25

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 28 Profile: Q500

E.G. Elev (m)	128.42	Element	Left OB	Channel	Right OB
Vel Head (m)	0.26	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	128.15	Reach Len. (m)	486.94	500.54	512.82
Crit W.S. (m)	125.28	Flow Area (m2)	1347.37	1690.23	14.43
E.G. Slope (m/m)	0.001107	Area (m2)	1347.37	1690.23	14.43
Q Total (m3/s)	5500.00	Flow (m3/s)	1226.93	4268.05	5.02
Top Width (m)	589.91	Top Width (m)	294.20	282.70	13.01
Vel Total (m/s)	1.80	Avg. Vel. (m/s)	0.91	2.53	0.35
Max Chl Dpth (m)	7.82	Hydr. Depth (m)	4.58	5.98	1.11
Conv. Total (m3/s)	165306.1	Conv. (m3/s)	36876.2	128279.0	150.9
Length Wtd. (m)	499.02	Wetted Per. (m)	297.58	286.70	13.48
Min Ch El (m)	120.33	Shear (N/m2)	49.15	64.00	11.62
Alpha	1.58	Stream Power (N/m s)	44.76	161.61	4.04
Frctn Loss (m)	0.71	Cum Volume (1000 m3)	15912.22	25649.46	12473.38
C & E Loss (m)	0.02	Cum SA (1000 m2)	4763.88	4502.37	4062.15

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 27 Profile: Q200

E.G. Elev (m)	127.25	Element	Left OB	Channel	Right OB
Vel Head (m)	0.45	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	126.81	Reach Len. (m)	48.70	47.86	48.66
Crit W.S. (m)	124.67	Flow Area (m2)	10.35	1649.53	4.67
E.G. Slope (m/m)	0.001967	Area (m2)	10.35	1649.53	4.67
Q Total (m3/s)	4900.00	Flow (m3/s)	5.54	4893.43	1.03
Top Width (m)	357.04	Top Width (m)	7.23	336.51	13.30
Vel Total (m/s)	2.94	Avg. Vel. (m/s)	0.54	2.97	0.22
Max Chl Dpth (m)	5.96	Hydr. Depth (m)	1.43	4.90	0.35
Conv. Total (m3/s)	110482.3	Conv. (m3/s)	124.8	110334.2	23.2
Length Wtd. (m)	47.86	Wetted Per. (m)	7.80	338.17	13.33
Min Ch El (m)	120.85	Shear (N/m2)	25.57	94.09	6.76
Alpha	1.01	Stream Power (N/m s)	13.69	279.13	1.49
Frctn Loss (m)	0.11	Cum Volume (1000 m3)	14230.85	23427.00	9487.04
C & E Loss (m)	0.01	Cum SA (1000 m2)	4639.13	4346.43	3524.64

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 27 Profile: Q500

E.G. Elev (m)	127.68	Element	Left OB	Channel	Right OB
Vel Head (m)	0.48	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	127.20	Reach Len. (m)	48.70	47.86	48.66
Crit W.S. (m)	124.89	Flow Area (m2)	13.30	1781.90	10.22
E.G. Slope (m/m)	0.001913	Area (m2)	13.30	1781.90	10.22
Q Total (m3/s)	5500.00	Flow (m3/s)	7.85	5488.69	3.46
Top Width (m)	359.24	Top Width (m)	7.80	336.51	14.93
Vel Total (m/s)	3.05	Avg. Vel. (m/s)	0.59	3.08	0.34
Max Chl Dpth (m)	6.35	Hydr. Depth (m)	1.71	5.30	0.68
Conv. Total (m3/s)	125741.1	Conv. (m3/s)	179.4	125482.6	79.1
Length Wtd. (m)	47.86	Wetted Per. (m)	8.49	338.17	15.01
Min Ch El (m)	120.85	Shear (N/m2)	29.39	98.86	12.78
Alpha	1.02	Stream Power (N/m s)	17.33	304.52	4.33
Frctn Loss (m)	0.10	Cum Volume (1000 m3)	15580.94	24780.48	12467.06
C & E Loss (m)	0.01	Cum SA (1000 m2)	4690.35	4347.40	4054.99

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 26.7 Profile: Q200

E.G. Elev (m)	127.14	Element	Left OB	Channel	Right OB
Vel Head (m)	0.55	Wt. n-Val.		0.043	
W.S. Elev (m)	126.59	Reach Len. (m)	0.15	0.15	0.15
Crit W.S. (m)	124.77	Flow Area (m2)		1494.40	
E.G. Slope (m/m)	0.002526	Area (m2)		1520.81	
Q Total (m3/s)	4900.00	Flow (m3/s)		4900.00	
Top Width (m)	337.54	Top Width (m)		337.54	
Vel Total (m/s)	3.28	Avg. Vel. (m/s)		3.28	
Max Chl Dpth (m)	5.02	Hydr. Depth (m)		4.71	
Conv. Total (m3/s)	97491.2	Conv. (m3/s)		97491.2	
Length Wtd. (m)	0.15	Wetted Per. (m)		318.07	

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 26.7 Profile: Q200 (Continued)

Min Ch El (m)	121.57	Shear (N/m2)		116.39	
Alpha	1.00	Stream Power (N/m s)		381.64	
Frctn Loss (m)	0.00	Cum Volume (1000 m3)	14230.59	23351.13	9486.93
C & E Loss (m)	0.06	Cum SA (1000 m2)	4638.96	4330.30	3524.31

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 26.7 Profile: Q500

E.G. Elev (m)	127.57	Element	Left OB	Channel	Right OB
Vel Head (m)	0.59	Wt. n-Val.		0.043	
W.S. Elev (m)	126.98	Reach Len. (m)	0.15	0.15	0.15
Crit W.S. (m)	125.01	Flow Area (m2)		1618.11	
E.G. Slope (m/m)	0.002442	Area (m2)		1652.63	3.16
Q Total (m3/s)	5500.00	Flow (m3/s)		5500.00	
Top Width (m)	351.46	Top Width (m)		338.66	12.79
Vel Total (m/s)	3.40	Avg. Vel. (m/s)		3.40	
Max Chl Dpth (m)	5.41	Hydr. Depth (m)		5.10	
Conv. Total (m3/s)	111309.7	Conv. (m3/s)		111309.7	
Length Wtd. (m)	0.15	Wetted Per. (m)		318.07	
Min Ch El (m)	121.57	Shear (N/m2)		121.80	
Alpha	1.00	Stream Power (N/m s)		414.02	
Frctn Loss (m)	0.00	Cum Volume (1000 m3)	15580.62	24698.30	12466.74
C & E Loss (m)	0.06	Cum SA (1000 m2)	4690.16	4331.25	4054.31

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 26.5 BR U Profile: Q200

E.G. Elev (m)	127.08	Element	Left OB	Channel	Right OB
Vel Head (m)	1.11	Wt. n-Val.		0.043	
W.S. Elev (m)	125.97	Reach Len. (m)	9.60	9.60	9.60
Crit W.S. (m)	125.21	Flow Area (m2)		1050.91	
E.G. Slope (m/m)	0.009906	Area (m2)		1050.91	
Q Total (m3/s)	4900.00	Flow (m3/s)		4900.00	
Top Width (m)	247.58	Top Width (m)		247.58	
Vel Total (m/s)	4.66	Avg. Vel. (m/s)		4.66	
Max Chl Dpth (m)	4.40	Hydr. Depth (m)		4.24	
Conv. Total (m3/s)	49233.1	Conv. (m3/s)		49233.1	
Length Wtd. (m)	9.60	Wetted Per. (m)		367.56	
Min Ch El (m)	121.57	Shear (N/m2)		277.74	
Alpha	1.00	Stream Power (N/m s)		1294.98	
Frctn Loss (m)	0.11	Cum Volume (1000 m3)	14230.59	23350.94	9486.93
C & E Loss (m)	0.02	Cum SA (1000 m2)	4638.96	4330.26	3524.31

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 26.5 BR U Profile: Q500

E.G. Elev (m)	127.51	Element	Left OB	Channel	Right OB
Vel Head (m)	1.21	Wt. n-Val.		0.043	
W.S. Elev (m)	126.29	Reach Len. (m)	9.60	9.60	9.60
Crit W.S. (m)	125.47	Flow Area (m2)		1127.22	
E.G. Slope (m/m)	0.010508	Area (m2)		1127.22	
Q Total (m3/s)	5500.00	Flow (m3/s)		5500.00	
Top Width (m)	232.27	Top Width (m)		232.27	
Vel Total (m/s)	4.88	Avg. Vel. (m/s)		4.88	
Max Chl Dpth (m)	4.72	Hydr. Depth (m)		4.85	
Conv. Total (m3/s)	53655.2	Conv. (m3/s)		53655.2	
Length Wtd. (m)	9.60	Wetted Per. (m)		384.95	
Min Ch El (m)	121.57	Shear (N/m2)		301.73	
Alpha	1.00	Stream Power (N/m s)		1472.22	
Frctn Loss (m)	0.11	Cum Volume (1000 m3)	15580.62	24698.09	12466.74
C & E Loss (m)	0.02	Cum SA (1000 m2)	4690.16	4331.20	4054.31

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 26.5 BR D Profile: Q200

E.G. Elev (m)	126.96	Element	Left OB	Channel	Right OB
Vel Head (m)	1.30	Wt. n-Val.		0.043	
W.S. Elev (m)	125.66	Reach Len. (m)	0.25	0.25	0.25
Crit W.S. (m)	125.21	Flow Area (m2)		971.36	
E.G. Slope (m/m)	0.012228	Area (m2)		971.36	

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 26.5 BR D Profile: Q200 (Continued)

Q Total (m3/s)	4900.00	Flow (m3/s)		4900.00
Top Width (m)	257.40	Top Width (m)		257.40
Vel Total (m/s)	5.04	Avg. Vel. (m/s)		5.04
Max Chl Dpth (m)	4.09	Hydr. Depth (m)		3.77
Conv. Total (m3/s)	44312.0	Conv. (m3/s)		44312.0
Length Wtd. (m)	0.25	Wetted Per. (m)		353.56
Min Ch El (m)	121.57	Shear (N/m2)		329.44
Alpha	1.00	Stream Power (N/m s)		1661.85
Frctn Loss (m)	0.00	Cum Volume (1000 m3)	14230.59	23341.23 9486.93
C & E Loss (m)	0.18	Cum SA (1000 m2)	4638.96	4327.83 3524.31

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 26.5 BR D Profile: Q500

E.G. Elev (m)	127.38	Element	Left OB	Channel	Right OB
Vel Head (m)	1.37	Wt. n-Val.		0.043	
W.S. Elev (m)	126.01	Reach Len. (m)	0.25	0.25	0.25
Crit W.S. (m)	125.47	Flow Area (m2)		1060.15	
E.G. Slope (m/m)	0.012211	Area (m2)		1060.15	
Q Total (m3/s)	5500.00	Flow (m3/s)		5500.00	
Top Width (m)	245.78	Top Width (m)		245.78	
Vel Total (m/s)	5.19	Avg. Vel. (m/s)		5.19	
Max Chl Dpth (m)	4.44	Hydr. Depth (m)		4.31	
Conv. Total (m3/s)	49771.8	Conv. (m3/s)		49771.8	
Length Wtd. (m)	0.25	Wetted Per. (m)		369.61	
Min Ch El (m)	121.57	Shear (N/m2)		343.48	
Alpha	1.00	Stream Power (N/m s)		1781.95	
Frctn Loss (m)	0.00	Cum Volume (1000 m3)	15580.62	24687.59	12466.74
C & E Loss (m)	0.19	Cum SA (1000 m2)	4690.16	4328.91	4054.31

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 26.3 Profile: Q200

E.G. Elev (m)	126.77	Element	Left OB	Channel	Right OB
Vel Head (m)	0.69	Wt. n-Val.		0.043	
W.S. Elev (m)	126.08	Reach Len. (m)	6.00	6.00	6.00
Crit W.S. (m)	124.77	Flow Area (m2)		1334.15	
E.G. Slope (m/m)	0.003687	Area (m2)		1350.99	
Q Total (m3/s)	4900.00	Flow (m3/s)		4900.00	
Top Width (m)	335.12	Top Width (m)		335.12	
Vel Total (m/s)	3.67	Avg. Vel. (m/s)		3.67	
Max Chl Dpth (m)	4.51	Hydr. Depth (m)		4.20	
Conv. Total (m3/s)	80697.1	Conv. (m3/s)		80697.1	
Length Wtd. (m)	6.00	Wetted Per. (m)		318.07	
Min Ch El (m)	121.57	Shear (N/m2)		151.66	
Alpha	1.00	Stream Power (N/m s)		557.02	
Frctn Loss (m)	0.02	Cum Volume (1000 m3)	14230.59	23340.94	9486.93
C & E Loss (m)	0.00	Cum SA (1000 m2)	4638.96	4327.76	3524.31

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 26.3 Profile: Q500

E.G. Elev (m)	127.19	Element	Left OB	Channel	Right OB
Vel Head (m)	0.73	Wt. n-Val.		0.043	
W.S. Elev (m)	126.46	Reach Len. (m)	6.00	6.00	6.00
Crit W.S. (m)	125.01	Flow Area (m2)		1452.47	
E.G. Slope (m/m)	0.003499	Area (m2)		1476.25	
Q Total (m3/s)	5500.00	Flow (m3/s)		5500.00	
Top Width (m)	336.91	Top Width (m)		336.91	
Vel Total (m/s)	3.79	Avg. Vel. (m/s)		3.79	
Max Chl Dpth (m)	4.89	Hydr. Depth (m)		4.58	
Conv. Total (m3/s)	92974.1	Conv. (m3/s)		92974.1	
Length Wtd. (m)	6.00	Wetted Per. (m)		318.07	
Min Ch El (m)	121.57	Shear (N/m2)		156.71	
Alpha	1.00	Stream Power (N/m s)		593.42	
Frctn Loss (m)	0.02	Cum Volume (1000 m3)	15580.62	24687.27	12466.74
C & E Loss (m)	0.01	Cum SA (1000 m2)	4690.16	4328.84	4054.31

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 25 Profile: Q200

E.G. Elev (m)	126.75	Element	Left OB	Channel	Right OB
Vel Head (m)	0.67	Wt. n-Val.		0.043	
W.S. Elev (m)	126.07	Reach Len. (m)	9.58	10.44	9.52
Crit W.S. (m)	124.78	Flow Area (m2)		1346.31	
E.G. Slope (m/m)	0.003860	Area (m2)		1346.31	
Q Total (m3/s)	4900.00	Flow (m3/s)		4900.00	
Top Width (m)	335.05	Top Width (m)		335.05	
Vel Total (m/s)	3.64	Avg. Vel. (m/s)		3.64	
Max Chl Dpth (m)	4.50	Hydr. Depth (m)		4.02	
Conv. Total (m3/s)	78865.9	Conv. (m3/s)		78865.9	
Length Wtd. (m)	10.44	Wetted Per. (m)		336.76	
Min Ch El (m)	121.57	Shear (N/m2)		151.34	
Alpha	1.00	Stream Power (N/m s)		550.81	
Frctn Loss (m)	0.01	Cum Volume (1000 m3)	14230.59	23332.85	9486.93
C & E Loss (m)	0.15	Cum SA (1000 m2)	4638.96	4325.75	3524.31

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 25 Profile: Q500

E.G. Elev (m)	127.16	Element	Left OB	Channel	Right OB
Vel Head (m)	0.71	Wt. n-Val.		0.043	
W.S. Elev (m)	126.45	Reach Len. (m)	9.58	10.44	9.52
Crit W.S. (m)	125.02	Flow Area (m2)		1475.06	
E.G. Slope (m/m)	0.003615	Area (m2)		1475.06	
Q Total (m3/s)	5500.00	Flow (m3/s)		5500.00	
Top Width (m)	336.89	Top Width (m)		336.89	
Vel Total (m/s)	3.73	Avg. Vel. (m/s)		3.73	
Max Chl Dpth (m)	4.88	Hydr. Depth (m)		4.38	
Conv. Total (m3/s)	91472.2	Conv. (m3/s)		91472.2	
Length Wtd. (m)	10.44	Wetted Per. (m)		338.76	
Min Ch El (m)	121.57	Shear (N/m2)		154.38	
Alpha	1.00	Stream Power (N/m s)		575.62	
Frctn Loss (m)	0.01	Cum Volume (1000 m3)	15580.62	24678.42	12466.74
C & E Loss (m)	0.15	Cum SA (1000 m2)	4690.16	4326.81	4054.31

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 24 Profile: Q200

E.G. Elev (m)	126.58	Element	Left OB	Channel	Right OB
Vel Head (m)	0.18	Wt. n-Val.	0.100	0.043	
W.S. Elev (m)	126.41	Reach Len. (m)	491.76	489.84	394.90
Crit W.S. (m)	121.28	Flow Area (m2)	67.10	2627.25	
E.G. Slope (m/m)	0.000449	Area (m2)	67.10	2627.25	
Q Total (m3/s)	4900.00	Flow (m3/s)	16.64	4883.37	
Top Width (m)	407.30	Top Width (m)	51.18	356.12	
Vel Total (m/s)	1.82	Avg. Vel. (m/s)	0.25	1.86	
Max Chl Dpth (m)	10.36	Hydr. Depth (m)	1.31	7.38	
Conv. Total (m3/s)	231326.8	Conv. (m3/s)	785.3	230541.5	
Length Wtd. (m)	485.33	Wetted Per. (m)	53.00	358.45	
Min Ch El (m)	116.05	Shear (N/m2)	5.57	32.25	
Alpha	1.04	Stream Power (N/m s)	1.38	59.94	
Frctn Loss (m)	0.31	Cum Volume (1000 m3)	14230.27	23312.11	9486.93
C & E Loss (m)	0.01	Cum SA (1000 m2)	4638.71	4322.14	3524.31

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 24 Profile: Q500

E.G. Elev (m)	127.00	Element	Left OB	Channel	Right OB
Vel Head (m)	0.20	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	126.80	Reach Len. (m)	491.76	489.84	394.90
Crit W.S. (m)	121.52	Flow Area (m2)	87.15	2767.07	1.30
E.G. Slope (m/m)	0.000476	Area (m2)	87.15	2767.07	1.30
Q Total (m3/s)	5500.00	Flow (m3/s)	26.36	5473.57	0.07
Top Width (m)	418.79	Top Width (m)	51.18	357.15	10.46
Vel Total (m/s)	1.93	Avg. Vel. (m/s)	0.30	1.98	0.05
Max Chl Dpth (m)	10.75	Hydr. Depth (m)	1.70	7.75	0.12
Conv. Total (m3/s)	252076.1	Conv. (m3/s)	1208.2	250864.6	3.2
Length Wtd. (m)	485.11	Wetted Per. (m)	53.39	359.49	10.47

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 24 Profile: Q500 (Continued)

Min Ch El (m)	116.05	Shear (N/m ²)	7.62	35.93	0.58
Alpha	1.05	Stream Power (N/m s)	2.31	71.08	0.03
Frctn Loss (m)	0.33	Cum Volume (1000 m ³)	15580.20	24656.27	12466.73
C & E Loss (m)	0.01	Cum SA (1000 m ²)	4689.92	4323.19	4054.26

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 23 Profile: Q200

E.G. Elev (m)	126.26	Element	Left OB	Channel	Right OB
Vel Head (m)	0.26	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	126.00	Reach Len. (m)	477.54	509.60	479.94
Crit W.S. (m)	123.12	Flow Area (m ²)	352.06	1745.30	629.19
E.G. Slope (m/m)	0.001019	Area (m ²)	352.06	1745.30	629.19
Q Total (m ³ /s)	4900.00	Flow (m ³ /s)	195.54	4234.51	469.95
Top Width (m)	617.52	Top Width (m)	152.52	290.94	174.06
Vel Total (m/s)	1.80	Avg. Vel. (m/s)	0.56	2.43	0.75
Max Chl Dpth (m)	13.29	Hydr. Depth (m)	2.31	6.00	3.61
Conv. Total (m ³ /s)	153512.5	Conv. (m ³ /s)	6126.0	132663.3	14723.2
Length Wtd. (m)	507.13	Wetted Per. (m)	153.39	295.36	175.77
Min Ch El (m)	112.71	Shear (N/m ²)	22.93	59.04	35.76
Alpha	1.60	Stream Power (N/m s)	12.74	143.24	26.71
Frctn Loss (m)	0.44	Cum Volume (1000 m ³)	14127.21	22241.18	9362.69
C & E Loss (m)	0.02	Cum SA (1000 m ²)	4588.63	4163.66	3489.94

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 23 Profile: Q500

E.G. Elev (m)	126.66	Element	Left OB	Channel	Right OB
Vel Head (m)	0.28	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	126.38	Reach Len. (m)	477.54	509.60	479.94
Crit W.S. (m)	123.33	Flow Area (m ²)	410.83	1857.22	696.32
E.G. Slope (m/m)	0.001018	Area (m ²)	410.83	1857.22	696.32
Q Total (m ³ /s)	5500.00	Flow (m ³ /s)	252.07	4693.81	554.12
Top Width (m)	618.89	Top Width (m)	153.02	290.94	174.93
Vel Total (m/s)	1.86	Avg. Vel. (m/s)	0.61	2.53	0.80
Max Chl Dpth (m)	13.67	Hydr. Depth (m)	2.68	6.38	3.98
Conv. Total (m ³ /s)	172416.0	Conv. (m ³ /s)	7901.9	147143.3	17370.7
Length Wtd. (m)	506.90	Wetted Per. (m)	154.01	295.36	176.72
Min Ch El (m)	112.71	Shear (N/m ²)	26.62	62.75	39.32
Alpha	1.61	Stream Power (N/m s)	16.33	158.59	31.29
Frctn Loss (m)	0.44	Cum Volume (1000 m ³)	15457.75	23523.69	12328.99
C & E Loss (m)	0.02	Cum SA (1000 m ²)	4639.71	4164.46	4017.66

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 22 Profile: Q200

E.G. Elev (m)	125.80	Element	Left OB	Channel	Right OB
Vel Head (m)	0.21	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	125.59	Reach Len. (m)	417.14	501.86	411.80
Crit W.S. (m)	122.12	Flow Area (m ²)	262.01	2334.20	4.78
E.G. Slope (m/m)	0.000752	Area (m ²)	262.01	2334.20	4.78
Q Total (m ³ /s)	4900.00	Flow (m ³ /s)	123.30	4775.35	1.35
Top Width (m)	522.50	Top Width (m)	115.60	403.10	3.80
Vel Total (m/s)	1.88	Avg. Vel. (m/s)	0.47	2.05	0.28
Max Chl Dpth (m)	8.51	Hydr. Depth (m)	2.27	5.79	1.26
Conv. Total (m ³ /s)	178632.4	Conv. (m ³ /s)	4494.9	174088.1	49.3
Length Wtd. (m)	500.78	Wetted Per. (m)	116.60	406.43	4.56
Min Ch El (m)	117.08	Shear (N/m ²)	16.58	42.38	7.74
Alpha	1.15	Stream Power (N/m s)	7.80	86.70	2.19
Frctn Loss (m)	0.55	Cum Volume (1000 m ³)	13980.59	21201.72	9210.56
C & E Loss (m)	0.02	Cum SA (1000 m ²)	4524.61	3986.82	3447.26

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 22 Profile: Q500

E.G. Elev (m)	126.20	Element	Left OB	Channel	Right OB
Vel Head (m)	0.23	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	125.98	Reach Len. (m)	417.14	501.86	411.80
Crit W.S. (m)	122.38	Flow Area (m ²)	306.34	2488.49	6.34
E.G. Slope (m/m)	0.000759	Area (m ²)	306.34	2488.49	6.34

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 22 Profile: Q500 (Continued)

Q Total (m3/s)	5500.00	Flow (m3/s)	160.22	5337.80	1.98
Top Width (m)	523.50	Top Width (m)	116.02	403.10	4.38
Vel Total (m/s)	1.96	Avg. Vel. (m/s)	0.52	2.14	0.31
Max Chl Dpth (m)	8.90	Hydr. Depth (m)	2.64	6.17	1.45
Conv. Total (m3/s)	199572.9	Conv. (m3/s)	5813.7	193687.3	72.0
Length Wtd. (m)	500.61	Wetted Per. (m)	117.18	406.43	5.25
Min Ch El (m)	117.08	Shear (N/m2)	19.47	45.60	9.00
Alpha	1.16	Stream Power (N/m s)	10.18	97.82	2.81
Frctn Loss (m)	0.56	Cum Volume (1000 m3)	15286.52	22416.40	12160.37
C & E Loss (m)	0.03	Cum SA (1000 m2)	4575.47	3987.62	3974.63

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 21 Profile: Q200

E.G. Elev (m)	125.23	Element	Left OB	Channel	Right OB
Vel Head (m)	0.44	Wt. n-Val.		0.043	
W.S. Elev (m)	124.79	Reach Len. (m)	15.70	16.04	15.68
Crit W.S. (m)	122.34	Flow Area (m2)		1666.05	
E.G. Slope (m/m)	0.001764	Area (m2)		1666.05	
Q Total (m3/s)	4900.00	Flow (m3/s)		4900.00	
Top Width (m)	315.34	Top Width (m)		315.34	
Vel Total (m/s)	2.94	Avg. Vel. (m/s)		2.94	
Max Chl Dpth (m)	10.81	Hydr. Depth (m)		5.28	
Conv. Total (m3/s)	116670.2	Conv. (m3/s)		116670.2	
Length Wtd. (m)	16.04	Wetted Per. (m)		318.84	
Min Ch El (m)	113.98	Shear (N/m2)		90.39	
Alpha	1.00	Stream Power (N/m s)		265.83	
Frctn Loss (m)	0.03	Cum Volume (1000 m3)	13925.94	20197.94	9209.58
C & E Loss (m)	0.00	Cum SA (1000 m2)	4500.50	3806.54	3446.48

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 21 Profile: Q500

E.G. Elev (m)	125.62	Element	Left OB	Channel	Right OB
Vel Head (m)	0.49	Wt. n-Val.		0.043	
W.S. Elev (m)	125.13	Reach Len. (m)	15.70	16.04	15.68
Crit W.S. (m)	122.59	Flow Area (m2)		1773.92	
E.G. Slope (m/m)	0.001813	Area (m2)		1773.92	
Q Total (m3/s)	5500.00	Flow (m3/s)		5500.00	
Top Width (m)	316.49	Top Width (m)		316.49	
Vel Total (m/s)	3.10	Avg. Vel. (m/s)		3.10	
Max Chl Dpth (m)	11.15	Hydr. Depth (m)		5.61	
Conv. Total (m3/s)	129169.8	Conv. (m3/s)		129169.8	
Length Wtd. (m)	16.04	Wetted Per. (m)		320.18	
Min Ch El (m)	113.98	Shear (N/m2)		98.51	
Alpha	1.00	Stream Power (N/m s)		305.42	
Frctn Loss (m)	0.03	Cum Volume (1000 m3)	15222.62	21346.84	12159.06
C & E Loss (m)	0.00	Cum SA (1000 m2)	4551.27	3807.05	3973.72

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 20.7 Profile: Q200

E.G. Elev (m)	125.20	Element	Left OB	Channel	Right OB
Vel Head (m)	0.47	Wt. n-Val.		0.043	
W.S. Elev (m)	124.73	Reach Len. (m)	0.15	0.15	0.15
Crit W.S. (m)	122.34	Flow Area (m2)		1619.96	
E.G. Slope (m/m)	0.001811	Area (m2)		1648.01	
Q Total (m3/s)	4900.00	Flow (m3/s)		4900.00	
Top Width (m)	315.15	Top Width (m)		315.15	
Vel Total (m/s)	3.02	Avg. Vel. (m/s)		3.02	
Max Chl Dpth (m)	10.75	Hydr. Depth (m)		5.38	
Conv. Total (m3/s)	115128.5	Conv. (m3/s)		115128.5	
Length Wtd. (m)	0.15	Wetted Per. (m)		303.24	
Min Ch El (m)	113.98	Shear (N/m2)		94.90	
Alpha	1.00	Stream Power (N/m s)		287.04	
Frctn Loss (m)		Cum Volume (1000 m3)	13925.94	20171.37	9209.58
C & E Loss (m)		Cum SA (1000 m2)	4500.50	3801.49	3446.48

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 20.7 Profile: Q500

E.G. Elev (m)	125.59	Element	Left OB	Channel	Right OB
Vel Head (m)	0.52	Wt. n-Val.		0.043	
W.S. Elev (m)	125.07	Reach Len. (m)	0.15	0.15	0.15
Crit W.S. (m)	122.58	Flow Area (m2)		1720.61	
E.G. Slope (m/m)	0.001867	Area (m2)		1753.57	
Q Total (m3/s)	5500.00	Flow (m3/s)		5500.00	
Top Width (m)	316.27	Top Width (m)		316.27	
Vel Total (m/s)	3.20	Avg. Vel. (m/s)		3.20	
Max Chl Dpth (m)	11.09	Hydr. Depth (m)		5.72	
Conv. Total (m3/s)	127294.5	Conv. (m3/s)		127294.5	
Length Wtd. (m)	0.15	Wetted Per. (m)		303.24	
Min Ch El (m)	113.98	Shear (N/m2)		103.88	
Alpha	1.00	Stream Power (N/m s)		332.04	
Frctn Loss (m)		Cum Volume (1000 m3)	15222.62	21318.54	12159.06
C & E Loss (m)		Cum SA (1000 m2)	4551.27	3801.98	3973.72

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 20.5 BR U Profile: Q200

E.G. Elev (m)	125.14	Element	Left OB	Channel	Right OB
Vel Head (m)	0.68	Wt. n-Val.		0.043	
W.S. Elev (m)	124.47	Reach Len. (m)	9.36	9.36	9.36
Crit W.S. (m)	122.67	Flow Area (m2)		1344.40	
E.G. Slope (m/m)	0.005363	Area (m2)		1344.40	
Q Total (m3/s)	4900.00	Flow (m3/s)		4900.00	
Top Width (m)	235.79	Top Width (m)		235.79	
Vel Total (m/s)	3.64	Avg. Vel. (m/s)		3.64	
Max Chl Dpth (m)	10.49	Hydr. Depth (m)		5.70	
Conv. Total (m3/s)	66909.1	Conv. (m3/s)		66909.1	
Length Wtd. (m)	9.36	Wetted Per. (m)		429.43	
Min Ch El (m)	113.98	Shear (N/m2)		164.65	
Alpha	1.00	Stream Power (N/m s)		600.12	
Frctn Loss (m)		Cum Volume (1000 m3)	13925.94	20171.14	9209.58
C & E Loss (m)		Cum SA (1000 m2)	4500.50	3801.45	3446.48

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 20.5 BR U Profile: Q500

E.G. Elev (m)	125.53	Element	Left OB	Channel	Right OB
Vel Head (m)	0.78	Wt. n-Val.		0.043	
W.S. Elev (m)	124.76	Reach Len. (m)	9.36	9.36	9.36
Crit W.S. (m)	122.96	Flow Area (m2)		1409.18	
E.G. Slope (m/m)	0.006250	Area (m2)		1409.18	
Q Total (m3/s)	5500.00	Flow (m3/s)		5500.00	
Top Width (m)	210.72	Top Width (m)		210.72	
Vel Total (m/s)	3.90	Avg. Vel. (m/s)		3.90	
Max Chl Dpth (m)	10.78	Hydr. Depth (m)		6.69	
Conv. Total (m3/s)	69568.5	Conv. (m3/s)		69568.5	
Length Wtd. (m)	9.36	Wetted Per. (m)		455.61	
Min Ch El (m)	113.98	Shear (N/m2)		189.58	
Alpha	1.00	Stream Power (N/m s)		739.91	
Frctn Loss (m)		Cum Volume (1000 m3)	15222.62	21318.31	12159.06
C & E Loss (m)		Cum SA (1000 m2)	4551.27	3801.94	3973.72

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 20.5 BR D Profile: Q200

E.G. Elev (m)	124.98	Element	Left OB	Channel	Right OB
Vel Head (m)	0.63	Wt. n-Val.		0.043	
W.S. Elev (m)	124.35	Reach Len. (m)	0.49	0.49	0.49
Crit W.S. (m)	122.43	Flow Area (m2)		1389.75	
E.G. Slope (m/m)	0.004805	Area (m2)		1389.77	
Q Total (m3/s)	4900.00	Flow (m3/s)		4900.00	
Top Width (m)	245.01	Top Width (m)		245.01	
Vel Total (m/s)	3.53	Avg. Vel. (m/s)		3.53	
Max Chl Dpth (m)	11.80	Hydr. Depth (m)		5.67	
Conv. Total (m3/s)	70692.1	Conv. (m3/s)		70692.1	
Length Wtd. (m)	0.49	Wetted Per. (m)		429.62	

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 20.5 BR D Profile: Q200 (Continued)

Min Ch El (m)	112.55	Shear (N/m ²)		152.41	
Alpha	1.00	Stream Power (N/m s)		537.37	
Frctn Loss (m)		Cum Volume (1000 m ³)	13925.94	20158.35	9209.58
C & E Loss (m)		Cum SA (1000 m ²)	4500.50	3799.20	3446.48

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 20.5 BR D Profile: Q500

E.G. Elev (m)	125.36	Element	Left OB	Channel	Right OB
Vel Head (m)	0.73	Wt. n-Val.		0.043	
W.S. Elev (m)	124.63	Reach Len. (m)	0.49	0.49	0.49
Crit W.S. (m)	122.69	Flow Area (m ²)		1455.11	
E.G. Slope (m/m)	0.005588	Area (m ²)		1455.12	
Q Total (m ³ /s)	5500.00	Flow (m ³ /s)		5500.00	
Top Width (m)	221.90	Top Width (m)		221.90	
Vel Total (m/s)	3.78	Avg. Vel. (m/s)		3.78	
Max Chl Dpth (m)	12.08	Hydr. Depth (m)		6.56	
Conv. Total (m ³ /s)	73577.9	Conv. (m ³ /s)		73577.9	
Length Wtd. (m)	0.49	Wetted Per. (m)		453.85	
Min Ch El (m)	112.55	Shear (N/m ²)		175.68	
Alpha	1.00	Stream Power (N/m s)		664.04	
Frctn Loss (m)		Cum Volume (1000 m ³)	15222.62	21304.90	12159.06
C & E Loss (m)		Cum SA (1000 m ²)	4551.27	3799.92	3973.72

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 20.3 Profile: Q200

E.G. Elev (m)	124.97	Element	Left OB	Channel	Right OB
Vel Head (m)	0.45	Wt. n-Val.		0.043	
W.S. Elev (m)	124.52	Reach Len. (m)	12.50	12.50	12.50
Crit W.S. (m)	121.98	Flow Area (m ²)		1649.68	
E.G. Slope (m/m)	0.001719	Area (m ²)		1719.94	
Q Total (m ³ /s)	4900.00	Flow (m ³ /s)		4900.00	
Top Width (m)	326.14	Top Width (m)		326.14	
Vel Total (m/s)	2.97	Avg. Vel. (m/s)		2.97	
Max Chl Dpth (m)	11.97	Hydr. Depth (m)		5.48	
Conv. Total (m ³ /s)	118172.5	Conv. (m ³ /s)		118172.5	
Length Wtd. (m)	12.50	Wetted Per. (m)		305.16	
Min Ch El (m)	112.55	Shear (N/m ²)		91.15	
Alpha	1.00	Stream Power (N/m s)		270.74	
Frctn Loss (m)	0.02	Cum Volume (1000 m ³)	13925.94	20157.58	9209.58
C & E Loss (m)	0.01	Cum SA (1000 m ²)	4500.50	3799.06	3446.48

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 20.3 Profile: Q500

E.G. Elev (m)	125.34	Element	Left OB	Channel	Right OB
Vel Head (m)	0.51	Wt. n-Val.		0.043	
W.S. Elev (m)	124.83	Reach Len. (m)	12.50	12.50	12.50
Crit W.S. (m)	122.21	Flow Area (m ²)		1743.94	
E.G. Slope (m/m)	0.001800	Area (m ²)		1822.28	
Q Total (m ³ /s)	5500.00	Flow (m ³ /s)		5500.00	
Top Width (m)	327.47	Top Width (m)		327.47	
Vel Total (m/s)	3.15	Avg. Vel. (m/s)		3.15	
Max Chl Dpth (m)	12.28	Hydr. Depth (m)		5.79	
Conv. Total (m ³ /s)	129639.0	Conv. (m ³ /s)		129639.0	
Length Wtd. (m)	12.50	Wetted Per. (m)		305.16	
Min Ch El (m)	112.55	Shear (N/m ²)		100.87	
Alpha	1.00	Stream Power (N/m s)		318.13	
Frctn Loss (m)	0.02	Cum Volume (1000 m ³)	15222.62	21304.10	12159.06
C & E Loss (m)	0.01	Cum SA (1000 m ²)	4551.27	3799.78	3973.72

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 19 Profile: Q200

E.G. Elev (m)	124.93	Element	Left OB	Channel	Right OB
Vel Head (m)	0.41	Wt. n-Val.		0.043	
W.S. Elev (m)	124.52	Reach Len. (m)	695.76	636.20	639.14
Crit W.S. (m)	121.98	Flow Area (m ²)		1720.85	
E.G. Slope (m/m)	0.001672	Area (m ²)		1720.85	

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 19 Profile: Q200 (Continued)

Q Total (m3/s)	4900.00	Flow (m3/s)		4900.00	
Top Width (m)	326.15	Top Width (m)		326.15	
Vel Total (m/s)	2.85	Avg. Vel. (m/s)		2.85	
Max Chl Dpth (m)	11.97	Hydr. Depth (m)		5.28	
Conv. Total (m3/s)	119838.0	Conv. (m3/s)		119838.0	
Length Wtd. (m)	638.60	Wetted Per. (m)		332.10	
Min Ch El (m)	112.55	Shear (N/m2)		84.96	
Alpha	1.00	Stream Power (N/m s)		241.91	
Frctn Loss (m)	1.07	Cum Volume (1000 m3)	13925.94	20136.08	9209.58
C & E Loss (m)	0.01	Cum SA (1000 m2)	4500.50	3794.98	3446.48

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 19 Profile: Q500

E.G. Elev (m)	125.30	Element	Left OB	Channel	Right OB
Vel Head (m)	0.46	Wt. n-Val.		0.043	
W.S. Elev (m)	124.84	Reach Len. (m)	695.76	636.20	639.14
Crit W.S. (m)	122.21	Flow Area (m2)		1824.05	
E.G. Slope (m/m)	0.001745	Area (m2)		1824.05	
Q Total (m3/s)	5500.00	Flow (m3/s)		5500.00	
Top Width (m)	327.49	Top Width (m)		327.49	
Vel Total (m/s)	3.02	Avg. Vel. (m/s)		3.02	
Max Chl Dpth (m)	12.29	Hydr. Depth (m)		5.57	
Conv. Total (m3/s)	131658.6	Conv. (m3/s)		131658.6	
Length Wtd. (m)	638.99	Wetted Per. (m)		333.59	
Min Ch El (m)	112.55	Shear (N/m2)		93.58	
Alpha	1.00	Stream Power (N/m s)		282.16	
Frctn Loss (m)	1.10	Cum Volume (1000 m3)	15222.62	21281.31	12159.06
C & E Loss (m)	0.02	Cum SA (1000 m2)	4551.27	3795.69	3973.72

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 18 Profile: Q200

E.G. Elev (m)	123.85	Element	Left OB	Channel	Right OB
Vel Head (m)	0.37	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	123.48	Reach Len. (m)	330.54	494.08	522.76
Crit W.S. (m)	121.24	Flow Area (m2)	658.64	1596.59	5.60
E.G. Slope (m/m)	0.001681	Area (m2)	658.64	1596.59	5.60
Q Total (m3/s)	4900.00	Flow (m3/s)	395.03	4503.31	1.65
Top Width (m)	687.26	Top Width (m)	369.97	308.32	8.97
Vel Total (m/s)	2.17	Avg. Vel. (m/s)	0.60	2.82	0.30
Max Chl Dpth (m)	7.43	Hydr. Depth (m)	1.78	5.18	0.62
Conv. Total (m3/s)	119501.7	Conv. (m3/s)	9634.1	109827.2	40.3
Length Wtd. (m)	487.49	Wetted Per. (m)	372.31	313.84	9.15
Min Ch El (m)	116.05	Shear (N/m2)	29.17	83.88	10.08
Alpha	1.56	Stream Power (N/m s)	17.49	236.58	2.98
Frctn Loss (m)	0.34	Cum Volume (1000 m3)	13696.81	19080.80	9207.79
C & E Loss (m)	0.08	Cum SA (1000 m2)	4371.79	3593.15	3443.61

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 18 Profile: Q500

E.G. Elev (m)	124.18	Element	Left OB	Channel	Right OB
Vel Head (m)	0.40	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	123.78	Reach Len. (m)	330.54	494.08	522.76
Crit W.S. (m)	121.52	Flow Area (m2)	768.28	1687.92	8.32
E.G. Slope (m/m)	0.001710	Area (m2)	768.28	1687.92	8.32
Q Total (m3/s)	5500.00	Flow (m3/s)	514.48	4982.41	3.11
Top Width (m)	688.08	Top Width (m)	370.33	308.32	9.43
Vel Total (m/s)	2.23	Avg. Vel. (m/s)	0.67	2.95	0.37
Max Chl Dpth (m)	7.73	Hydr. Depth (m)	2.07	5.47	0.88
Conv. Total (m3/s)	133013.8	Conv. (m3/s)	12442.3	120496.3	75.2
Length Wtd. (m)	486.43	Wetted Per. (m)	372.78	313.84	9.70
Min Ch El (m)	116.05	Shear (N/m2)	34.56	90.17	14.39
Alpha	1.59	Stream Power (N/m s)	23.14	266.18	5.37
Frctn Loss (m)	0.36	Cum Volume (1000 m3)	14955.35	20164.16	12156.40
C & E Loss (m)	0.08	Cum SA (1000 m2)	4422.44	3593.44	3970.71

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 17 Profile: Q200

E.G. Elev (m)	123.44	Element	Left OB	Channel	Right OB
Vel Head (m)	0.12	Wt. n-Val.	0.100	0.043	
W.S. Elev (m)	123.32	Reach Len. (m)	80.68	257.94	242.08
Crit W.S. (m)	118.90	Flow Area (m2)	2.37	3224.48	
E.G. Slope (m/m)	0.000378	Area (m2)	2.37	3224.48	
Q Total (m3/s)	4900.00	Flow (m3/s)	0.32	4899.68	
Top Width (m)	523.21	Top Width (m)	3.82	519.39	
Vel Total (m/s)	1.52	Avg. Vel. (m/s)	0.14	1.52	
Max Chl Dpth (m)	8.06	Hydr. Depth (m)	0.62	6.21	
Conv. Total (m3/s)	252186.7	Conv. (m3/s)	16.7	252170.0	
Length Wtd. (m)	257.93	Wetted Per. (m)	4.02	522.89	
Min Ch El (m)	115.26	Shear (N/m2)	2.18	22.83	
Alpha	1.00	Stream Power (N/m s)	0.30	34.69	
Frctn Loss (m)	0.12	Cum Volume (1000 m3)	13587.57	17889.81	9206.32
C & E Loss (m)	0.00	Cum SA (1000 m2)	4310.02	3388.68	3441.27

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 17 Profile: Q500

E.G. Elev (m)	123.74	Element	Left OB	Channel	Right OB
Vel Head (m)	0.14	Wt. n-Val.	0.100	0.043	
W.S. Elev (m)	123.60	Reach Len. (m)	80.68	257.94	242.08
Crit W.S. (m)	119.08	Flow Area (m2)	3.58	3372.15	
E.G. Slope (m/m)	0.000410	Area (m2)	3.58	3372.15	
Q Total (m3/s)	5500.00	Flow (m3/s)	0.59	5499.42	
Top Width (m)	524.56	Top Width (m)	4.70	519.86	
Vel Total (m/s)	1.63	Avg. Vel. (m/s)	0.16	1.63	
Max Chl Dpth (m)	8.34	Hydr. Depth (m)	0.76	6.49	
Conv. Total (m3/s)	271547.3	Conv. (m3/s)	28.9	271518.3	
Length Wtd. (m)	257.93	Wetted Per. (m)	4.94	523.44	
Min Ch El (m)	115.26	Shear (N/m2)	2.92	25.92	
Alpha	1.00	Stream Power (N/m s)	0.48	42.27	
Frctn Loss (m)	0.13	Cum Volume (1000 m3)	14827.78	18914.12	12154.23
C & E Loss (m)	0.00	Cum SA (1000 m2)	4360.46	3388.84	3968.24

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 16 Profile: Q200

E.G. Elev (m)	123.31	Element	Left OB	Channel	Right OB
Vel Head (m)	0.14	Wt. n-Val.	0.100	0.043	
W.S. Elev (m)	123.18	Reach Len. (m)	359.50	727.54	753.02
Crit W.S. (m)	119.76	Flow Area (m2)	1.06	3009.73	
E.G. Slope (m/m)	0.000628	Area (m2)	1.06	3009.73	
Q Total (m3/s)	4900.00	Flow (m3/s)	0.16	4899.84	
Top Width (m)	637.64	Top Width (m)	2.06	635.58	
Vel Total (m/s)	1.63	Avg. Vel. (m/s)	0.15	1.63	
Max Chl Dpth (m)	8.46	Hydr. Depth (m)	0.51	4.74	
Conv. Total (m3/s)	195523.2	Conv. (m3/s)	6.3	195516.9	
Length Wtd. (m)	649.74	Wetted Per. (m)	2.30	644.67	
Min Ch El (m)	114.72	Shear (N/m2)	2.83	28.75	
Alpha	1.00	Stream Power (N/m s)	0.42	46.81	
Frctn Loss (m)	0.65	Cum Volume (1000 m3)	13587.43	17085.78	9206.32
C & E Loss (m)	0.02	Cum SA (1000 m2)	4309.78	3239.72	3441.27

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 16 Profile: Q500

E.G. Elev (m)	123.61	Element	Left OB	Channel	Right OB
Vel Head (m)	0.15	Wt. n-Val.	0.100	0.043	
W.S. Elev (m)	123.45	Reach Len. (m)	359.50	727.54	753.02
Crit W.S. (m)	119.97	Flow Area (m2)	1.71	3185.81	
E.G. Slope (m/m)	0.000655	Area (m2)	1.71	3185.81	
Q Total (m3/s)	5500.00	Flow (m3/s)	0.31	5499.70	
Top Width (m)	638.41	Top Width (m)	2.62	635.79	
Vel Total (m/s)	1.73	Avg. Vel. (m/s)	0.18	1.73	
Max Chl Dpth (m)	8.73	Hydr. Depth (m)	0.65	5.01	
Conv. Total (m3/s)	214885.4	Conv. (m3/s)	11.9	214873.5	
Length Wtd. (m)	646.74	Wetted Per. (m)	2.93	645.02	

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 16 Profile: Q500 (Continued)

Min Ch El (m)	114.72	Shear (N/m ²)	3.75	31.73	
Alpha	1.00	Stream Power (N/m s)	0.67	54.78	
Frctn Loss (m)	0.67	Cum Volume (1000 m ³)	14827.57	18068.34	12154.23
C & E Loss (m)	0.02	Cum SA (1000 m ²)	4360.16	3239.80	3968.24

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 15 Profile: Q200

E.G. Elev (m)	122.64	Element	Left OB	Channel	Right OB
Vel Head (m)	0.32	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	122.33	Reach Len. (m)	411.32	471.30	485.62
Crit W.S. (m)	120.37	Flow Area (m ²)	2370.43	883.73	0.28
E.G. Slope (m/m)	0.001850	Area (m ²)	2370.43	883.73	0.28
Q Total (m ³ /s)	4900.00	Flow (m ³ /s)	2071.34	2828.62	0.04
Top Width (m)	967.60	Top Width (m)	815.61	151.57	0.42
Vel Total (m/s)	1.51	Avg. Vel. (m/s)	0.87	3.20	0.15
Max Chl Dpth (m)	8.60	Hydr. Depth (m)	2.91	5.83	0.67
Conv. Total (m ³ /s)	113917.6	Conv. (m ³ /s)	48155.5	65761.2	1.0
Length Wtd. (m)	446.92	Wetted Per. (m)	818.65	154.40	1.40
Min Ch El (m)	113.73	Shear (N/m ²)	52.54	103.85	3.64
Alpha	2.75	Stream Power (N/m s)	45.91	332.40	0.54
Frctn Loss (m)	0.66	Cum Volume (1000 m ³)	13161.15	15669.46	9206.22
C & E Loss (m)	0.03	Cum SA (1000 m ²)	4162.80	2953.38	3441.11

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 15 Profile: Q500

E.G. Elev (m)	122.91	Element	Left OB	Channel	Right OB
Vel Head (m)	0.34	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	122.57	Reach Len. (m)	411.32	471.30	485.62
Crit W.S. (m)	120.84	Flow Area (m ²)	2572.28	921.23	0.39
E.G. Slope (m/m)	0.001917	Area (m ²)	2572.28	921.23	0.39
Q Total (m ³ /s)	5500.00	Flow (m ³ /s)	2414.53	3085.40	0.07
Top Width (m)	968.28	Top Width (m)	816.21	151.57	0.50
Vel Total (m/s)	1.57	Avg. Vel. (m/s)	0.94	3.35	0.17
Max Chl Dpth (m)	8.84	Hydr. Depth (m)	3.15	6.08	0.79
Conv. Total (m ³ /s)	125632.0	Conv. (m ³ /s)	55153.2	70477.3	1.5
Length Wtd. (m)	446.08	Wetted Per. (m)	819.30	154.40	1.66
Min Ch El (m)	113.73	Shear (N/m ²)	59.01	112.14	4.46
Alpha	2.70	Stream Power (N/m s)	55.39	375.59	0.75
Frctn Loss (m)	0.70	Cum Volume (1000 m ³)	14364.90	16574.32	12154.08
C & E Loss (m)	0.02	Cum SA (1000 m ²)	4212.98	2953.38	3968.06

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 14 Profile: Q200

E.G. Elev (m)	121.96	Element	Left OB	Channel	Right OB
Vel Head (m)	0.23	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	121.72	Reach Len. (m)	742.56	659.96	670.32
Crit W.S. (m)	119.47	Flow Area (m ²)	2571.86	1105.46	42.13
E.G. Slope (m/m)	0.001208	Area (m ²)	2571.86	1105.46	42.13
Q Total (m ³ /s)	4900.00	Flow (m ³ /s)	1916.37	2966.47	17.16
Top Width (m)	1027.58	Top Width (m)	816.29	178.88	32.42
Vel Total (m/s)	1.32	Avg. Vel. (m/s)	0.75	2.68	0.41
Max Chl Dpth (m)	8.06	Hydr. Depth (m)	3.15	6.18	1.30
Conv. Total (m ³ /s)	141005.8	Conv. (m ³ /s)	55146.8	85365.2	493.7
Length Wtd. (m)	686.38	Wetted Per. (m)	819.10	182.70	33.21
Min Ch El (m)	113.66	Shear (N/m ²)	37.18	71.65	15.02
Alpha	2.64	Stream Power (N/m s)	27.71	192.28	6.12
Frctn Loss (m)	0.55	Cum Volume (1000 m ³)	12144.72	15200.70	9195.92
C & E Loss (m)	0.04	Cum SA (1000 m ²)	3827.19	2875.51	3433.14

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 14 Profile: Q500

E.G. Elev (m)	122.19	Element	Left OB	Channel	Right OB
Vel Head (m)	0.26	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	121.93	Reach Len. (m)	742.56	659.96	670.32
Crit W.S. (m)	119.65	Flow Area (m ²)	2738.46	1141.96	48.76
E.G. Slope (m/m)	0.001310	Area (m ²)	2738.46	1141.96	48.76

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 14 Profile: Q500 (Continued)

Q Total (m3/s)	5500.00	Flow (m3/s)	2215.55	3261.76	22.69
Top Width (m)	1027.98	Top Width (m)	816.58	178.88	32.52
Vel Total (m/s)	1.40	Avg. Vel. (m/s)	0.81	2.86	0.47
Max Chl Dpth (m)	8.27	Hydr. Depth (m)	3.35	6.38	1.50
Conv. Total (m3/s)	151951.8	Conv. (m3/s)	61210.4	90114.5	626.9
Length Wtd. (m)	687.04	Wetted Per. (m)	819.46	182.70	33.44
Min Ch El (m)	113.66	Shear (N/m2)	42.93	80.31	18.73
Alpha	2.60	Stream Power (N/m s)	34.74	229.37	8.72
Frctn Loss (m)	0.61	Cum Volume (1000 m3)	13272.69	16088.13	12142.14
C & E Loss (m)	0.04	Cum SA (1000 m2)	3877.18	2875.51	3960.04

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 13 Profile: Q200

E.G. Elev (m)	121.37	Element	Left OB	Channel	Right OB
Vel Head (m)	0.10	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	121.27	Reach Len. (m)	549.16	768.80	995.16
Crit W.S. (m)	118.45	Flow Area (m2)	2243.09	2173.17	448.09
E.G. Slope (m/m)	0.000566	Area (m2)	2243.09	2173.17	448.09
Q Total (m3/s)	4900.00	Flow (m3/s)	1199.13	3564.86	136.02
Top Width (m)	1393.73	Top Width (m)	661.86	421.82	310.06
Vel Total (m/s)	1.01	Avg. Vel. (m/s)	0.53	1.64	0.30
Max Chl Dpth (m)	8.63	Hydr. Depth (m)	3.39	5.15	1.45
Conv. Total (m3/s)	206008.1	Conv. (m3/s)	50414.2	149875.4	5718.5
Length Wtd. (m)	736.24	Wetted Per. (m)	665.71	425.53	310.80
Min Ch El (m)	112.64	Shear (N/m2)	18.69	28.33	8.00
Alpha	2.00	Stream Power (N/m s)	9.99	46.48	2.43
Frctn Loss (m)	0.37	Cum Volume (1000 m3)	10357.03	14118.82	9031.62
C & E Loss (m)	0.01	Cum SA (1000 m2)	3278.38	2677.29	3318.35

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 13 Profile: Q500

E.G. Elev (m)	121.54	Element	Left OB	Channel	Right OB
Vel Head (m)	0.12	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	121.42	Reach Len. (m)	549.16	768.80	995.16
Crit W.S. (m)	118.62	Flow Area (m2)	2344.22	2237.61	495.48
E.G. Slope (m/m)	0.000634	Area (m2)	2344.22	2237.61	495.48
Q Total (m3/s)	5500.00	Flow (m3/s)	1366.33	3963.47	170.20
Top Width (m)	1394.20	Top Width (m)	662.06	421.82	310.32
Vel Total (m/s)	1.08	Avg. Vel. (m/s)	0.58	1.77	0.34
Max Chl Dpth (m)	8.78	Hydr. Depth (m)	3.54	5.30	1.60
Conv. Total (m3/s)	218358.0	Conv. (m3/s)	54245.2	157355.5	6757.3
Length Wtd. (m)	736.50	Wetted Per. (m)	665.97	425.53	311.10
Min Ch El (m)	112.64	Shear (N/m2)	21.90	32.72	9.91
Alpha	2.00	Stream Power (N/m s)	12.76	57.95	3.40
Frctn Loss (m)	0.42	Cum Volume (1000 m3)	11385.59	14972.94	11959.74
C & E Loss (m)	0.01	Cum SA (1000 m2)	3328.19	2677.29	3845.13

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 12 Profile: Q200

E.G. Elev (m)	121.00	Element	Left OB	Channel	Right OB
Vel Head (m)	0.07	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	120.92	Reach Len. (m)	16.00	164.00	218.20
Crit W.S. (m)	118.12	Flow Area (m2)	2316.98	2039.38	1908.59
E.G. Slope (m/m)	0.000441	Area (m2)	2316.98	2039.38	1908.59
Q Total (m3/s)	4900.00	Flow (m3/s)	1133.44	3048.83	717.73
Top Width (m)	1809.37	Top Width (m)	649.86	377.27	782.24
Vel Total (m/s)	0.78	Avg. Vel. (m/s)	0.49	1.49	0.38
Max Chl Dpth (m)	9.24	Hydr. Depth (m)	3.57	5.41	2.44
Conv. Total (m3/s)	233286.0	Conv. (m3/s)	53962.3	145153.1	34170.6
Length Wtd. (m)	143.37	Wetted Per. (m)	651.89	380.89	796.71
Min Ch El (m)	111.68	Shear (N/m2)	15.38	23.16	10.36
Alpha	2.40	Stream Power (N/m s)	7.52	34.63	3.90
Frctn Loss (m)	0.06	Cum Volume (1000 m3)	9104.92	12499.52	7858.98
C & E Loss (m)	0.00	Cum SA (1000 m2)	2918.21	2370.12	2774.84

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 12 Profile: Q500

E.G. Elev (m)	121.11	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	121.02	Reach Len. (m)	16.00	164.00	218.20
Crit W.S. (m)	118.28	Flow Area (m2)	2382.64	2077.50	1987.62
E.G. Slope (m/m)	0.000513	Area (m2)	2382.64	2077.50	1987.62
Q Total (m3/s)	5500.00	Flow (m3/s)	1280.49	3391.34	828.18
Top Width (m)	1809.53	Top Width (m)	650.02	377.27	782.24
Vel Total (m/s)	0.85	Avg. Vel. (m/s)	0.54	1.63	0.42
Max Chl Dpth (m)	9.34	Hydr. Depth (m)	3.67	5.51	2.54
Conv. Total (m3/s)	242784.6	Conv. (m3/s)	56524.0	149702.5	36558.0
Length Wtd. (m)	143.24	Wetted Per. (m)	652.08	380.89	796.82
Min Ch El (m)	111.68	Shear (N/m2)	18.39	27.45	12.55
Alpha	2.39	Stream Power (N/m s)	9.88	44.81	5.23
Frctn Loss (m)	0.07	Cum Volume (1000 m3)	10087.69	13314.21	10724.20
C & E Loss (m)	0.00	Cum SA (1000 m2)	2967.92	2370.12	3301.49

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 11.7 Profile: Q200

E.G. Elev (m)	120.93	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	120.85	Reach Len. (m)	0.30	0.30	0.30
Crit W.S. (m)	117.49	Flow Area (m2)	1864.82	2337.31	1731.35
E.G. Slope (m/m)	0.000409	Area (m2)	1864.82	2337.31	1731.35
Q Total (m3/s)	4900.00	Flow (m3/s)	728.47	3535.75	635.79
Top Width (m)	1806.10	Top Width (m)	694.48	403.91	707.70
Vel Total (m/s)	0.83	Avg. Vel. (m/s)	0.39	1.51	0.37
Max Chl Dpth (m)	8.38	Hydr. Depth (m)	2.69	5.79	2.45
Conv. Total (m3/s)	242192.2	Conv. (m3/s)	36005.8	174761.2	31425.2
Length Wtd. (m)	0.30	Wetted Per. (m)	695.08	405.43	708.02
Min Ch El (m)	112.47	Shear (N/m2)	10.77	23.14	9.82
Alpha	2.48	Stream Power (N/m s)	4.21	35.01	3.60
Frctn Loss (m)	0.00	Cum Volume (1000 m3)	9071.47	12140.63	7461.87
C & E Loss (m)	0.00	Cum SA (1000 m2)	2907.46	2306.06	2612.29

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 11.7 Profile: Q500

E.G. Elev (m)	121.04	Element	Left OB	Channel	Right OB
Vel Head (m)	0.10	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	120.93	Reach Len. (m)	0.30	0.30	0.30
Crit W.S. (m)	117.72	Flow Area (m2)	1925.60	2372.65	1793.29
E.G. Slope (m/m)	0.000482	Area (m2)	1925.60	2372.65	1793.29
Q Total (m3/s)	5500.00	Flow (m3/s)	833.90	3934.72	731.38
Top Width (m)	1806.71	Top Width (m)	694.65	403.91	708.14
Vel Total (m/s)	0.90	Avg. Vel. (m/s)	0.43	1.66	0.41
Max Chl Dpth (m)	8.46	Hydr. Depth (m)	2.77	5.87	2.53
Conv. Total (m3/s)	250470.7	Conv. (m3/s)	37975.8	179187.7	33307.2
Length Wtd. (m)	0.30	Wetted Per. (m)	695.27	405.43	708.47
Min Ch El (m)	112.47	Shear (N/m2)	13.10	27.67	11.97
Alpha	2.48	Stream Power (N/m s)	5.67	45.89	4.88
Frctn Loss (m)		Cum Volume (1000 m3)	10053.23	12949.30	10311.70
C & E Loss (m)		Cum SA (1000 m2)	2957.16	2306.06	3138.89

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 11.5 BR U Profile: Q200

E.G. Elev (m)	120.93	Element	Left OB	Channel	Right OB
Vel Head (m)	0.10	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	120.83	Reach Len. (m)	28.60	28.60	28.60
Crit W.S. (m)	117.76	Flow Area (m2)	1630.10	2043.48	1500.56
E.G. Slope (m/m)	0.000890	Area (m2)	1630.10	2043.48	1500.56
Q Total (m3/s)	4900.00	Flow (m3/s)	821.27	3355.17	723.55
Top Width (m)	1581.99	Top Width (m)	610.45	353.51	618.03
Vel Total (m/s)	0.95	Avg. Vel. (m/s)	0.50	1.64	0.48
Max Chl Dpth (m)	8.36	Hydr. Depth (m)	2.67	5.78	2.43
Conv. Total (m3/s)	164233.5	Conv. (m3/s)	27526.7	112455.4	24251.4
Length Wtd. (m)	28.60	Wetted Per. (m)	772.18	561.38	776.07

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 11.5 BR U Profile: Q200 (Continued)

Min Ch El (m)	112.47	Shear (N/m ²)	18.43	31.78	16.88
Alpha	2.14	Stream Power (N/m s)	9.28	52.17	8.14
Frctn Loss (m)	0.03	Cum Volume (1000 m ³)	9070.94	12139.97	7461.38
C & E Loss (m)	0.00	Cum SA (1000 m ²)	2907.26	2305.95	2612.09

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 11.5 BR U Profile: Q500

E.G. Elev (m)	121.04	Element	Left OB	Channel	Right OB
Vel Head (m)	0.12	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	120.92	Reach Len. (m)	28.60	28.60	28.60
Crit W.S. (m)	118.28	Flow Area (m ²)	1682.58	2073.86	1553.69
E.G. Slope (m/m)	0.001056	Area (m ²)	1682.58	2073.86	1553.69
Q Total (m ³ /s)	5500.00	Flow (m ³ /s)	939.45	3729.03	831.52
Top Width (m)	1582.59	Top Width (m)	610.62	353.51	618.46
Vel Total (m/s)	1.04	Avg. Vel. (m/s)	0.56	1.80	0.54
Max Chl Dpth (m)	8.45	Hydr. Depth (m)	2.76	5.87	2.51
Conv. Total (m ³ /s)	169242.3	Conv. (m ³ /s)	28908.3	114747.1	25587.0
Length Wtd. (m)	28.60	Wetted Per. (m)	777.51	565.11	780.62
Min Ch El (m)	112.47	Shear (N/m ²)	22.41	38.01	20.61
Alpha	2.13	Stream Power (N/m s)	12.51	68.34	11.03
Frctn Loss (m)		Cum Volume (1000 m ³)	10052.69	12948.63	10311.20
C & E Loss (m)		Cum SA (1000 m ²)	2956.97	2305.95	3138.70

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 11.5 BR D Profile: Q200

E.G. Elev (m)	120.91	Element	Left OB	Channel	Right OB
Vel Head (m)	0.10	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	120.81	Reach Len. (m)	0.10	0.10	0.10
Crit W.S. (m)	117.76	Flow Area (m ²)	1613.34	2033.77	1483.59
E.G. Slope (m/m)	0.000908	Area (m ²)	1613.34	2033.77	1483.59
Q Total (m ³ /s)	4900.00	Flow (m ³ /s)	816.44	3364.99	718.57
Top Width (m)	1581.80	Top Width (m)	610.40	353.51	617.89
Vel Total (m/s)	0.96	Avg. Vel. (m/s)	0.51	1.65	0.48
Max Chl Dpth (m)	8.34	Hydr. Depth (m)	2.64	5.75	2.40
Conv. Total (m ³ /s)	162648.9	Conv. (m ³ /s)	27100.6	111696.4	23851.8
Length Wtd. (m)	0.10	Wetted Per. (m)	770.03	560.40	773.37
Min Ch El (m)	112.47	Shear (N/m ²)	18.65	32.30	17.07
Alpha	2.15	Stream Power (N/m s)	9.44	53.44	8.27
Frctn Loss (m)	0.00	Cum Volume (1000 m ³)	9024.56	12081.67	7418.71
C & E Loss (m)	0.00	Cum SA (1000 m ²)	2889.80	2295.84	2594.42

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 11.5 BR D Profile: Q500

E.G. Elev (m)	121.01	Element	Left OB	Channel	Right OB
Vel Head (m)	0.12	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	120.89	Reach Len. (m)	0.10	0.10	0.10
Crit W.S. (m)	118.28	Flow Area (m ²)	1662.52	2062.25	1533.38
E.G. Slope (m/m)	0.001080	Area (m ²)	1662.52	2062.25	1533.38
Q Total (m ³ /s)	5500.00	Flow (m ³ /s)	932.62	3743.32	824.06
Top Width (m)	1582.36	Top Width (m)	610.55	353.51	618.30
Vel Total (m/s)	1.05	Avg. Vel. (m/s)	0.56	1.82	0.54
Max Chl Dpth (m)	8.42	Hydr. Depth (m)	2.72	5.83	2.48
Conv. Total (m ³ /s)	167321.5	Conv. (m ³ /s)	28372.3	113879.7	25069.6
Length Wtd. (m)	0.10	Wetted Per. (m)	775.78	563.62	779.24
Min Ch El (m)	112.47	Shear (N/m ²)	22.71	38.77	20.85
Alpha	2.14	Stream Power (N/m s)	12.74	70.37	11.21
Frctn Loss (m)		Cum Volume (1000 m ³)	10004.85	12889.49	10267.05
C & E Loss (m)		Cum SA (1000 m ²)	2939.51	2295.84	3121.01

Plan: Plan 01 River: Fiume Sesia Reach:Fiume Sesia Riv Sta: 11.3 Profile: Q200

E.G. Elev (m)	120.90	Element	Left OB	Channel	Right OB
Vel Head (m)	0.09	Wt. n-Val.	0.100	0.043	0.100
W.S. Elev (m)	120.81	Reach Len. (m)	252.68	89.30	20.00
Crit W.S. (m)	117.49	Flow Area (m ²)	1842.33	2324.23	1708.43
E.G. Slope (m/m)	0.000420	Area (m ²)	1842.33	2324.23	1708.43