AUTORITA' DI BACINO
DI RILIEVO REGIONALE

PROVINCIA
DI SAVONA

PIANO DI BACINO
QUILIANO

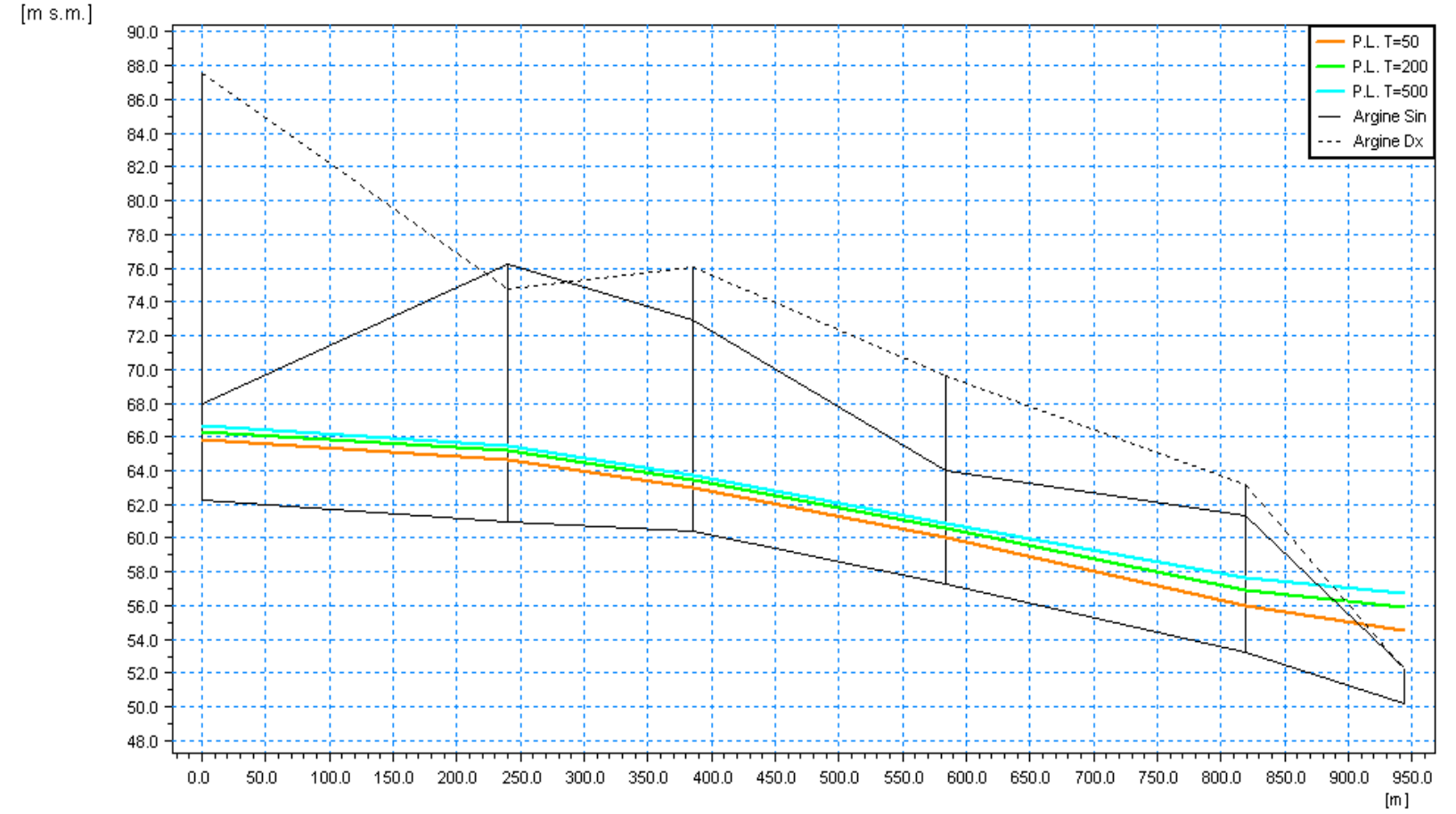
Piano stralcio per la tutela dal rischio idrogeologico
di cui all'art.1, comma 1 del D.L. 11/06/1998 n.180,
convertito in legge 03/08/1998 n.267 e s.m.

VERIFICHE IDRAULICHE

Approvato con D.C.P. n° 47 del 25/11/2003

PROFILI DI RIGURGITO IN CONDIZIONI DI MOTO PERMANENTE PER LE PORTATE T=50, 200, 500 ANNI

T. TREXENDA

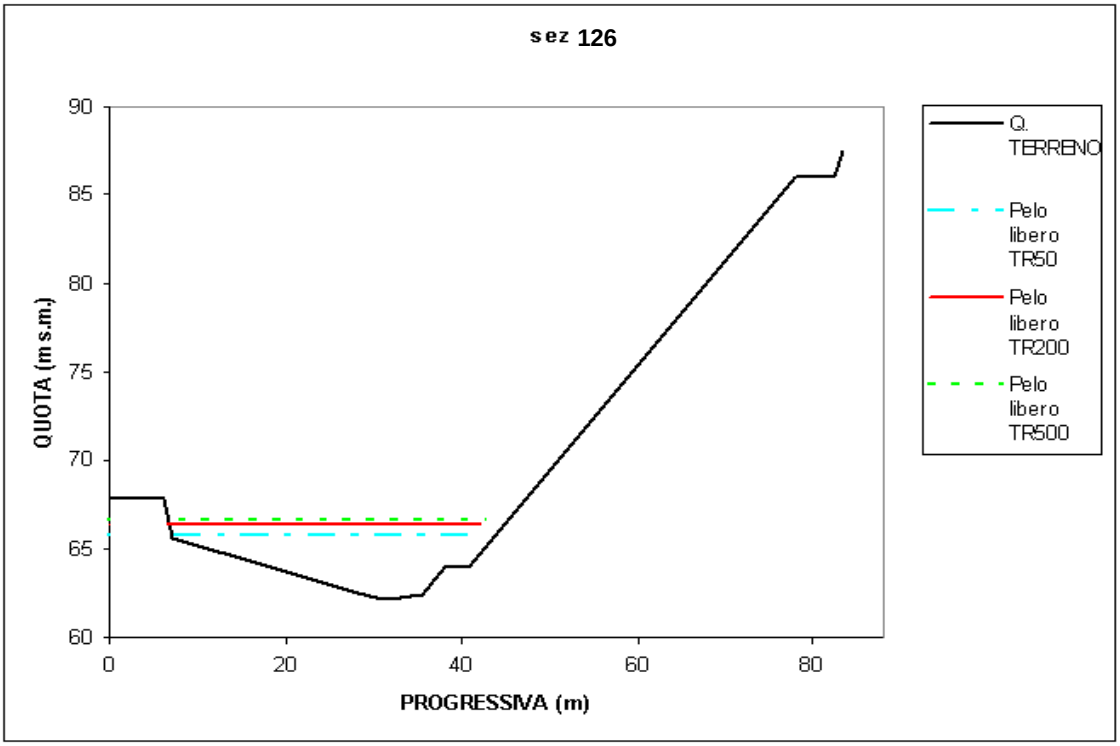


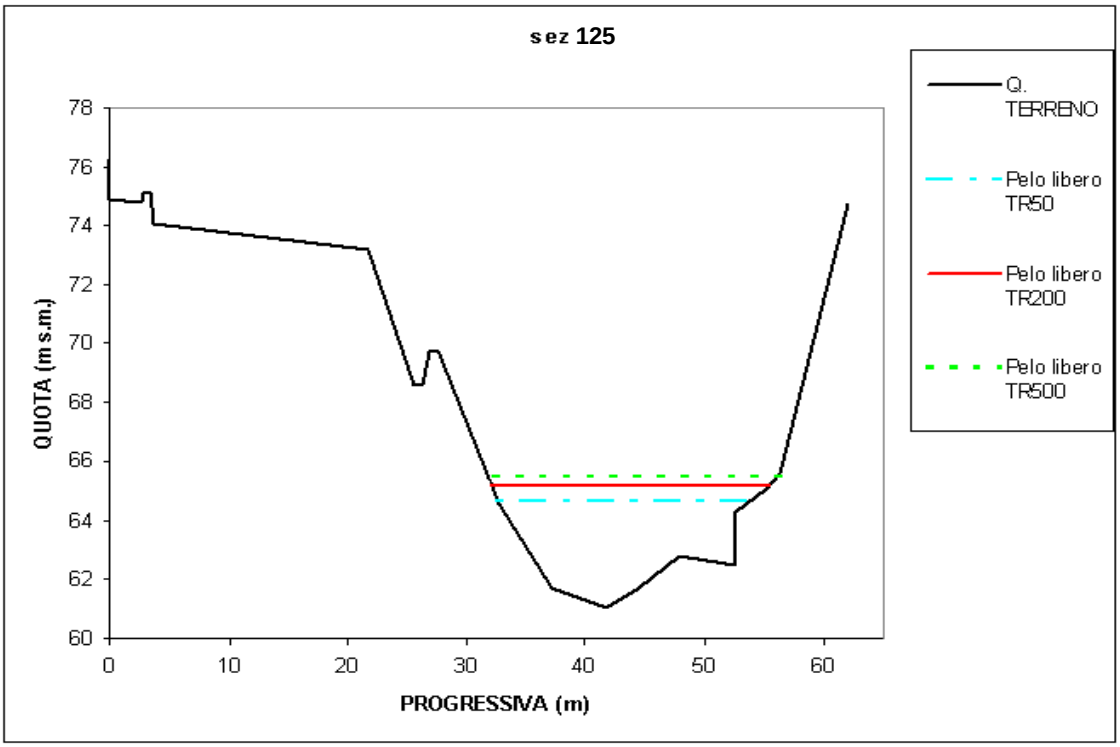
Progressiva	0.000	239.900	384.900	583.700	819.000	943.750
ID Sezione	**126**	**125**	**124**	**123**	**122**	**121**

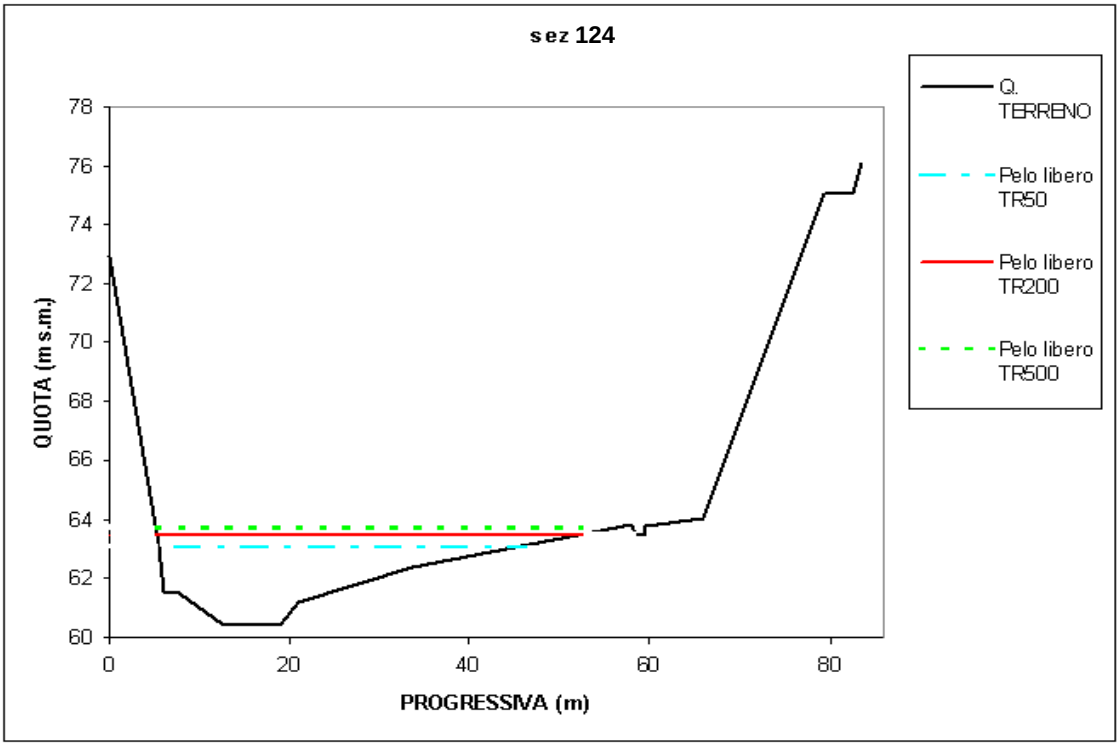
GEOMETRIA DELLE SEZIONI ED ALTEZZA DEL PELO LIBERO IN CONDIZIONI DI MOTO PERMANENTE
PER LE PORTATE T=50, 200, 500 ANNI

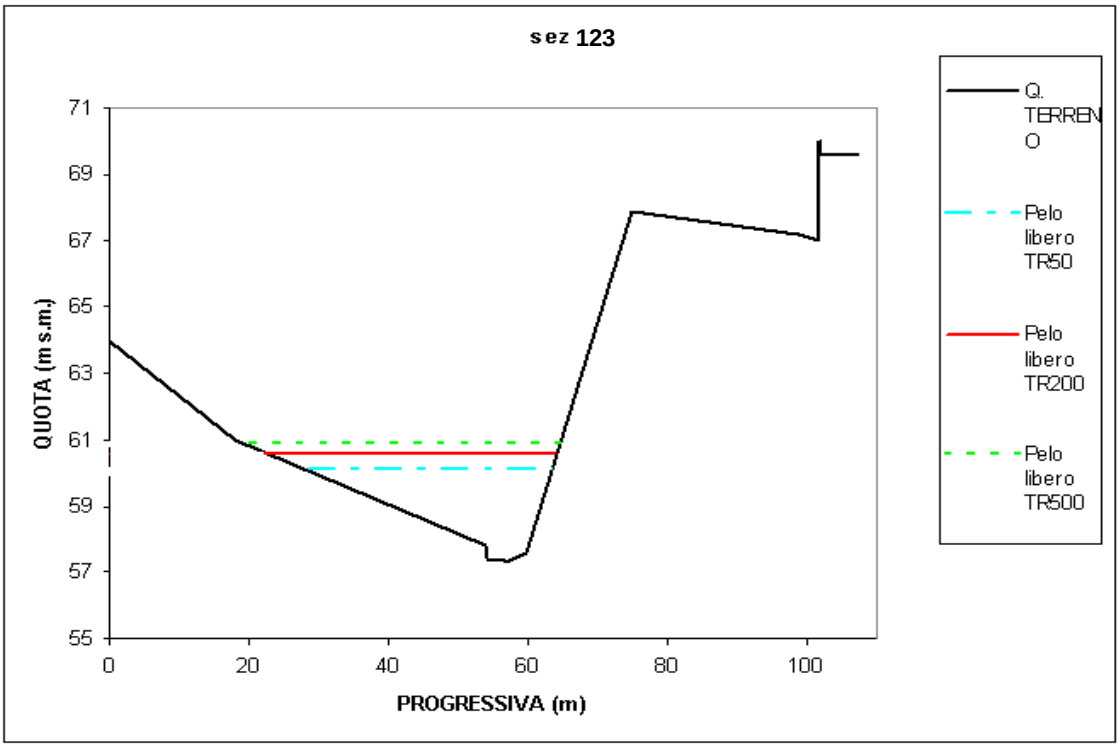
T. TREXENDA

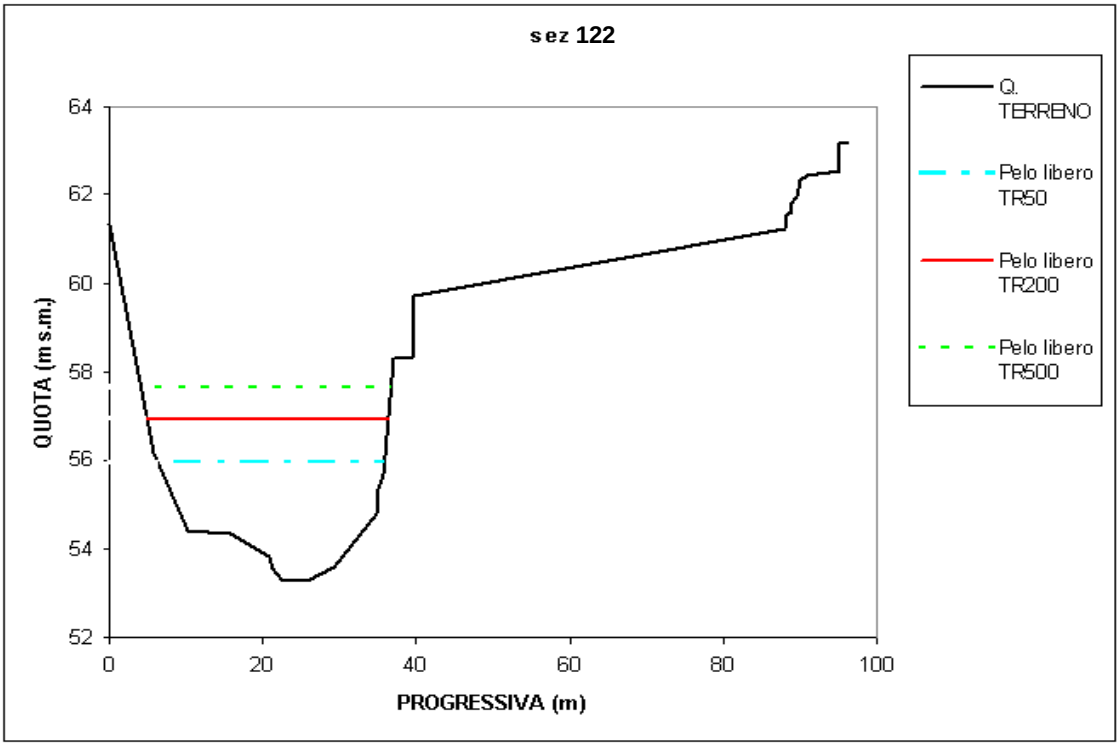
dalla sez. 126
alla sez. 121

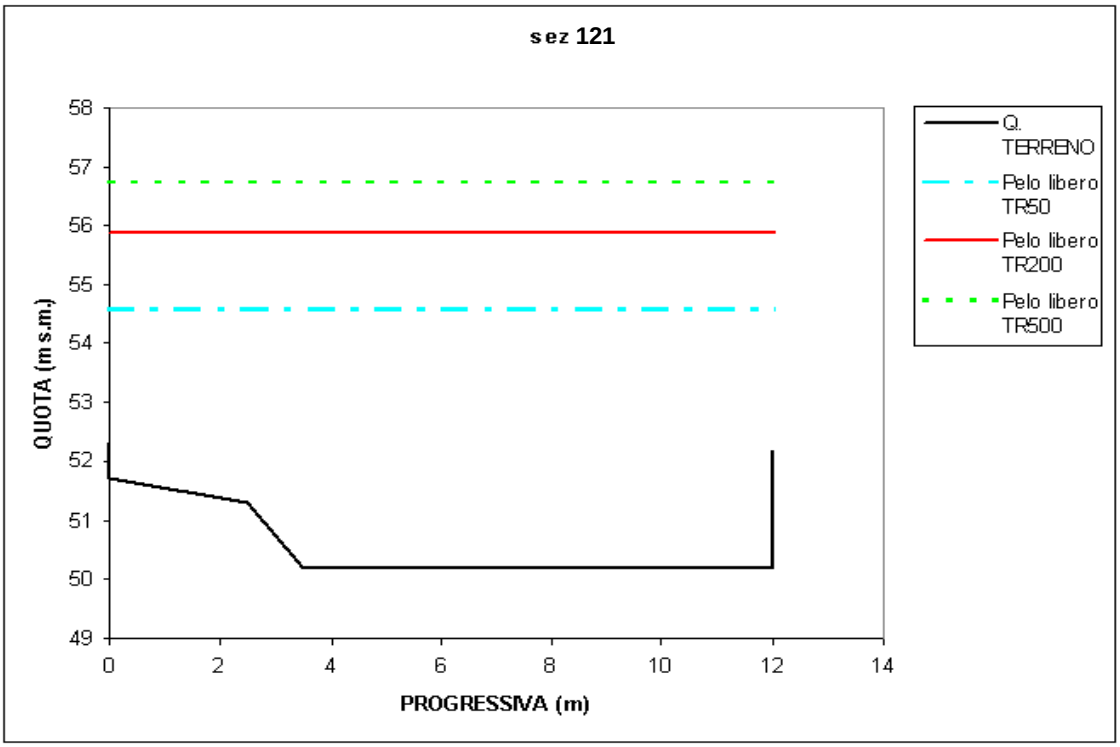

sez 126
90
85
80
75
70
65
60
QUOTA (m s.m.)
0
20
40
60
80
PROGRESSIVA (m)
Q. TERRENO
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500


sez 125
78
76
74
72
70
68
66
64
62
60
QUOTA (m s.m.)
0
10
20
30
40
50
60
PROGRESSIVA (m)
Q. TERRENO
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500


sez 124
78
76
74
72
70
68
66
64
62
60
QUOTA (m s.m.)
0
20
40
60
80
PROGRESSIVA (m)
Q. TERRENO
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500


sez 123
71
69
67
65
63
61
59
57
55
QUOTA (m s.m.)
0
20
40
60
80
100
PROGRESSIVA (m)
Q. TERRENO
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500


sez 122
64
62
60
58
56
54
52
QUOTA (m s.m.)
0
20
40
60
80
100
PROGRESSIVA (m)
Q. TERRENO
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500


sez 121
58
57
56
55
54
53
52
51
50
49
QUOTA (m s.m.)
0
2
4
6
8
10
12
14
PROGRESSIVA (m)
Q. TERRENO
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500

MODELLAZIONE IDRAULICA IN CONDIZIONI DI MOTO PERMANENTE:
TABELLE DELLE GRANDEZZE IDRAULICHE SIGNIFICATIVE PER LE PORTATE T=50, 200, 500 ANNI

T. TREXENDA

TORRENTE TREXENDA – PROFILO DI CORRENTE PER T= 50 ANNI							
ID Sez.	**Progr. (m)**	**Quota fondo (m s.m.)**	**P.L. (m s.m.)**	**A (m^2)**	**b (m)**	**v (m/s)**	**Fr (-)**
126	0.00	62.23	65.79	77.40	37.15	3.13	0.69
125	239.90	61.00	64.62	48.69	21.04	4.97	1.04
124	384.90	60.39	63.03	53.53	39.39	4.52	1.24
123	583.70	57.30	60.07	49.43	35.16	4.90	1.32
122	819.00	53.26	55.96	56.69	28.20	4.27	0.96
121	943.75	50.20	54.59	48.84	12.00	4.95	0.78

Torrente Trexenda - Risultati delle simulazioni idrauliche – T = 50 anni

TORRENTE TREXENDA – PROFILO DI CORRENTE PER T= 200 ANNI							
ID Sez.	**Progr. (m)**	**Quota fondo (m s.m.)**	**P.L. (m s.m.)**	**A (m^2)**	**b (m)**	**v (m/s)**	**Fr (-)**
126	0.00	62.23	66.33	98.13	37.15	3.57	0.71
125	239.90	61.00	65.18	60.97	21.04	5.74	1.13
124	384.90	60.39	63.47	71.83	39.39	4.87	1.26
123	583.70	57.30	60.56	68.50	35.16	5.11	1.27
122	819.00	53.26	56.92	85.62	28.20	4.09	0.78
121	943.75	50.20	55.88	64.32	12.00	5.44	0.75

Torrente Trexenda -Risultati delle simulazioni idrauliche – T = 200 anni

TORRENTE TREXENDA – PROFILO DI CORRENTE PER T= 500 ANNI							
ID Sez.	**Progr. (m)**	**Quota fondo (m s.m.)**	**P.L. (m s.m.)**	**A (m^2)**	**b (m)**	**v (m/s)**	**Fr (-)**
126	0.00	62.23	66.66	110.99	38.92	3.90	0.82
125	239.90	61.00	65.50	68.50	24.31	6.16	1.17
124	384.90	60.39	63.71	84.37	52.90	5.00	1.26
123	583.70	57.30	60.89	82.38	45.69	5.12	1.22
122	819.00	53.26	57.66	108.29	32.16	3.90	0.68
121	943.75	50.20	56.68	73.95	12.00	5.71	0.73

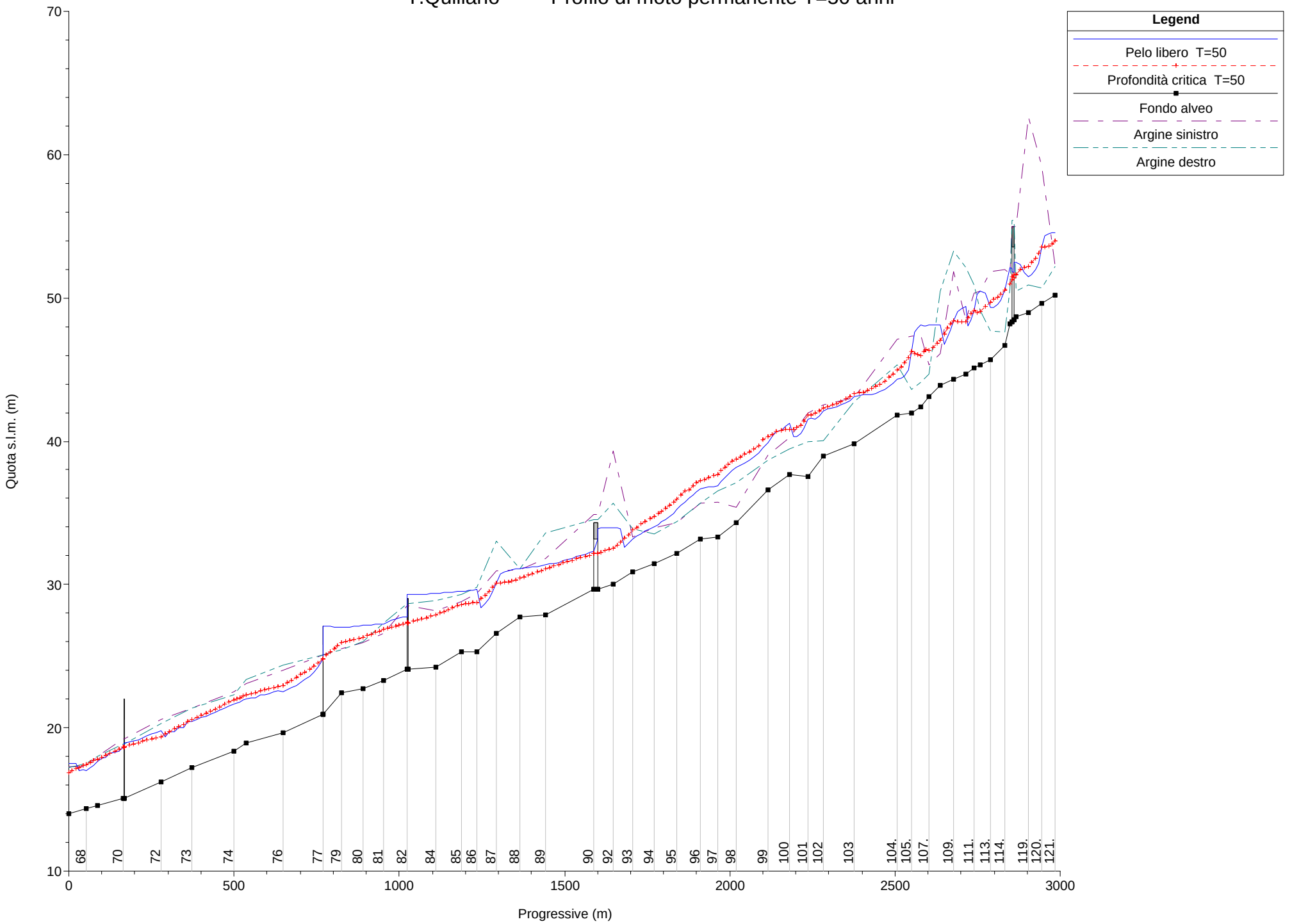
Torrente Trexenda -Risultati delle simulazioni idrauliche – T = 500 anni

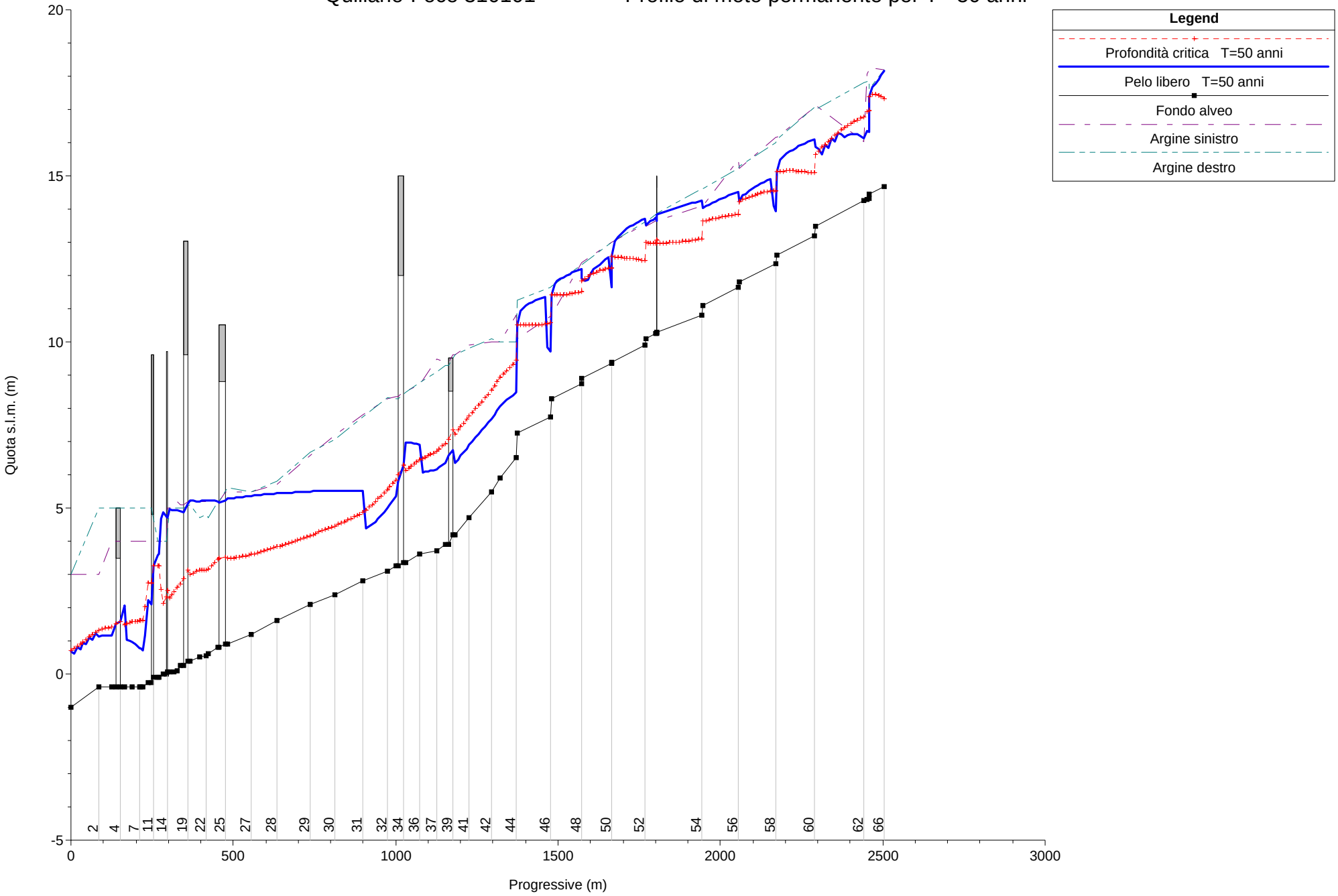
PROFILI DI RIGURGITO IN CONDIZIONI DI MOTO PERMANENTE PER LE PORTATE T=50, 200, 500 ANNI

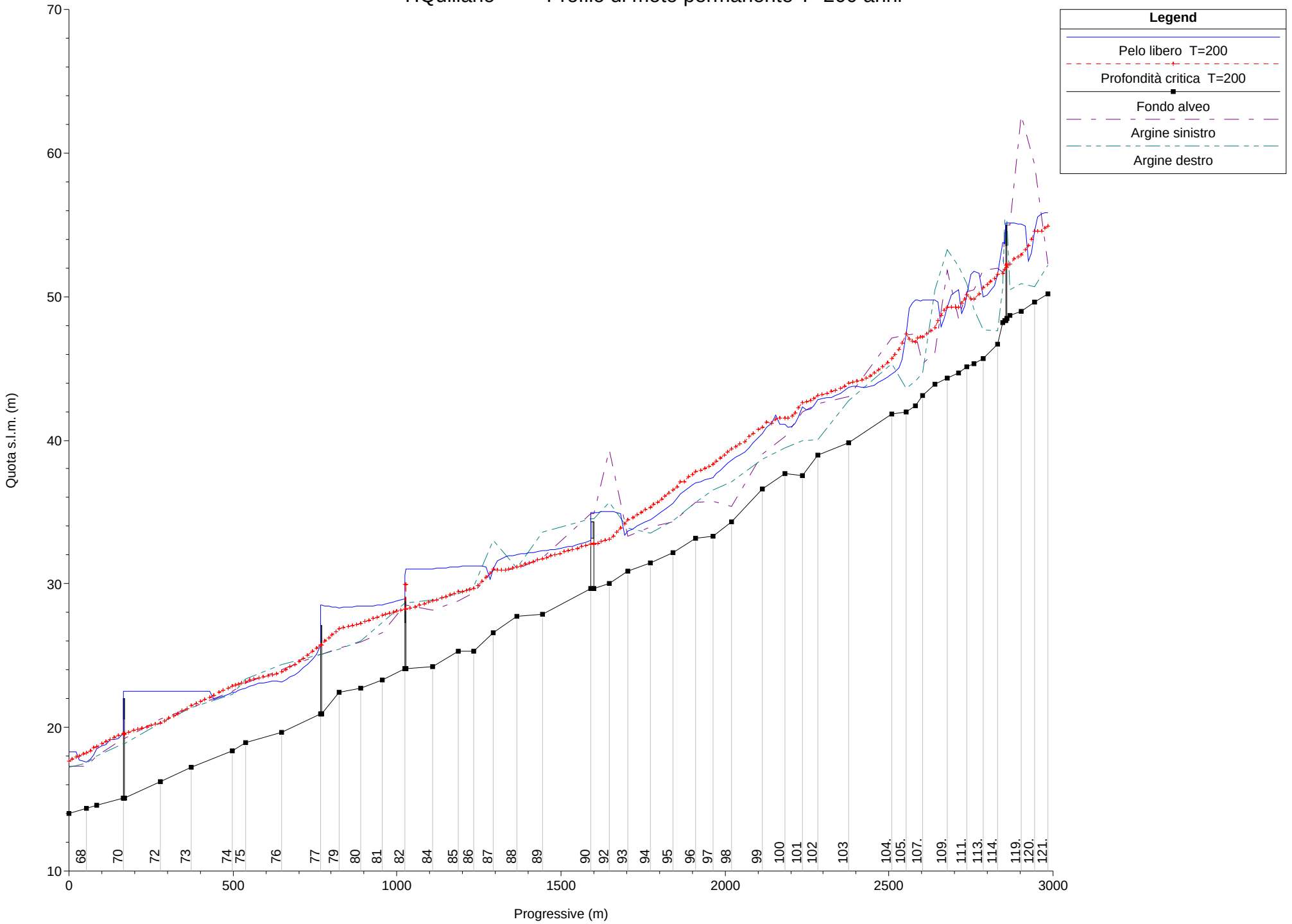
QUILIANO stato attuale al 31/01/01

- **Loc. Becchi**
- **T. Trexenda**
- **Quiliano monte**
- **Quiliano foce**

Dalle analisi effettuate con la configurazione dell'alveo allo stato attuale (31/01/01) è derivata la redazione delle Tavv. 9 (fasce di inondabilità), 11 (rischio idraulico) e 14 (aree inondabili).


T.Quiliano Profilo di moto permanente T=50 anni
Legend
Pelo libero T=50
Profondità critica T=50
Fondo alveo
Argine sinistro
Argine destro
Quota s.l.m. (m)
Progressive (m)
70
60
50
40
30
20
10
0
500
1000
1500
2000
2500
3000
68
70
72
73
74
76
77
79
80
81
82
84
85
86
87
88
89
90
92
93
94
95
96
97
98
99
100
101
102
103
104.
105.
107.
109.
111.
113.
114.
119.
120.
121.


Quiliano-Foce 310101
Profilo di moto permanente per T= 50 anni
Legend
Profondità critica T=50 anni
Pelo libero T=50 anni
Fondo alveo
Argine sinistro
Argine destro
Quota s.l.m. (m)
Progressive (m)
20
15
10
5
0
-5
0
500
1000
1500
2000
2500
3000
2
4
7
11
14
19
22
25
27
28
29
30
31
32
34
36
37
39
41
42
44
46
48
50
52
54
56
58
60
62
66


T.Quiliano Profilo di moto permanente T=200 anni
Legend
Pelo libero T=200
Profondità critica T=200
Fondo alveo
Argine sinistro
Argine destro
Quota s.l.m. (m)
Progressive (m)
70
60
50
40
30
20
10
0
500
1000
1500
2000
2500
3000
68
70
72
73
74
75
76
77
79
80
81
82
84
85
86
87
88
89
90
92
93
94
95
96
97
98
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100
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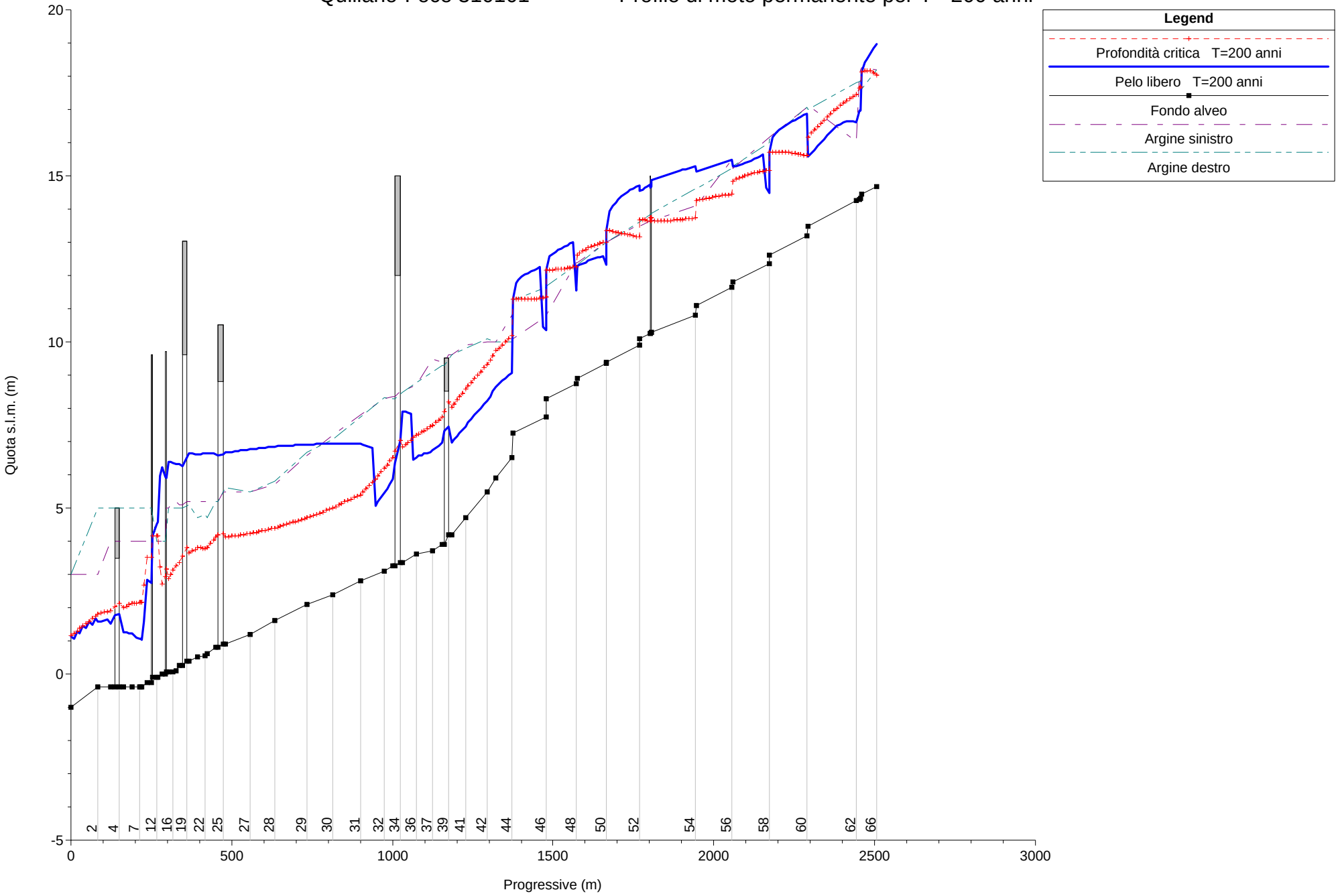
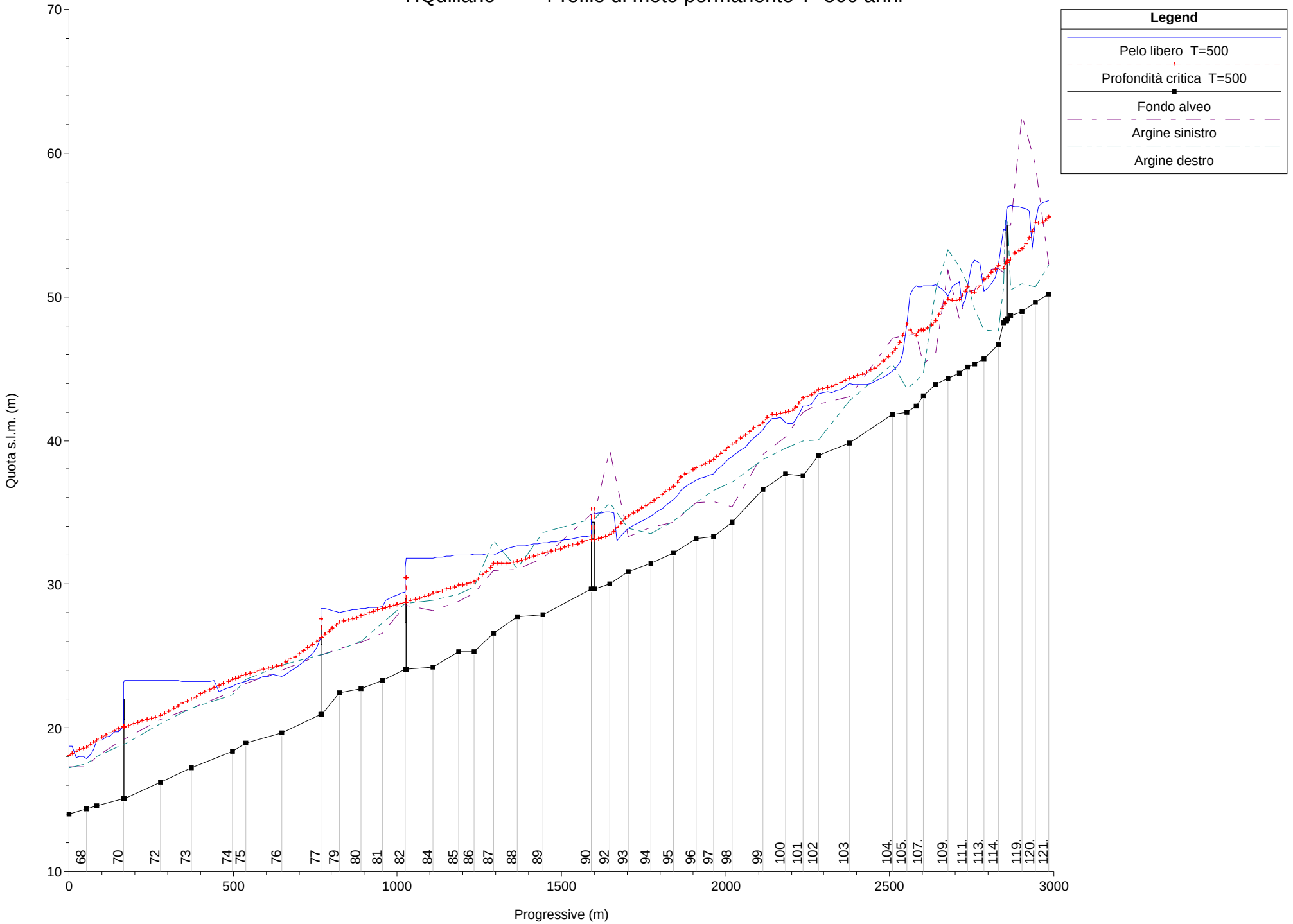
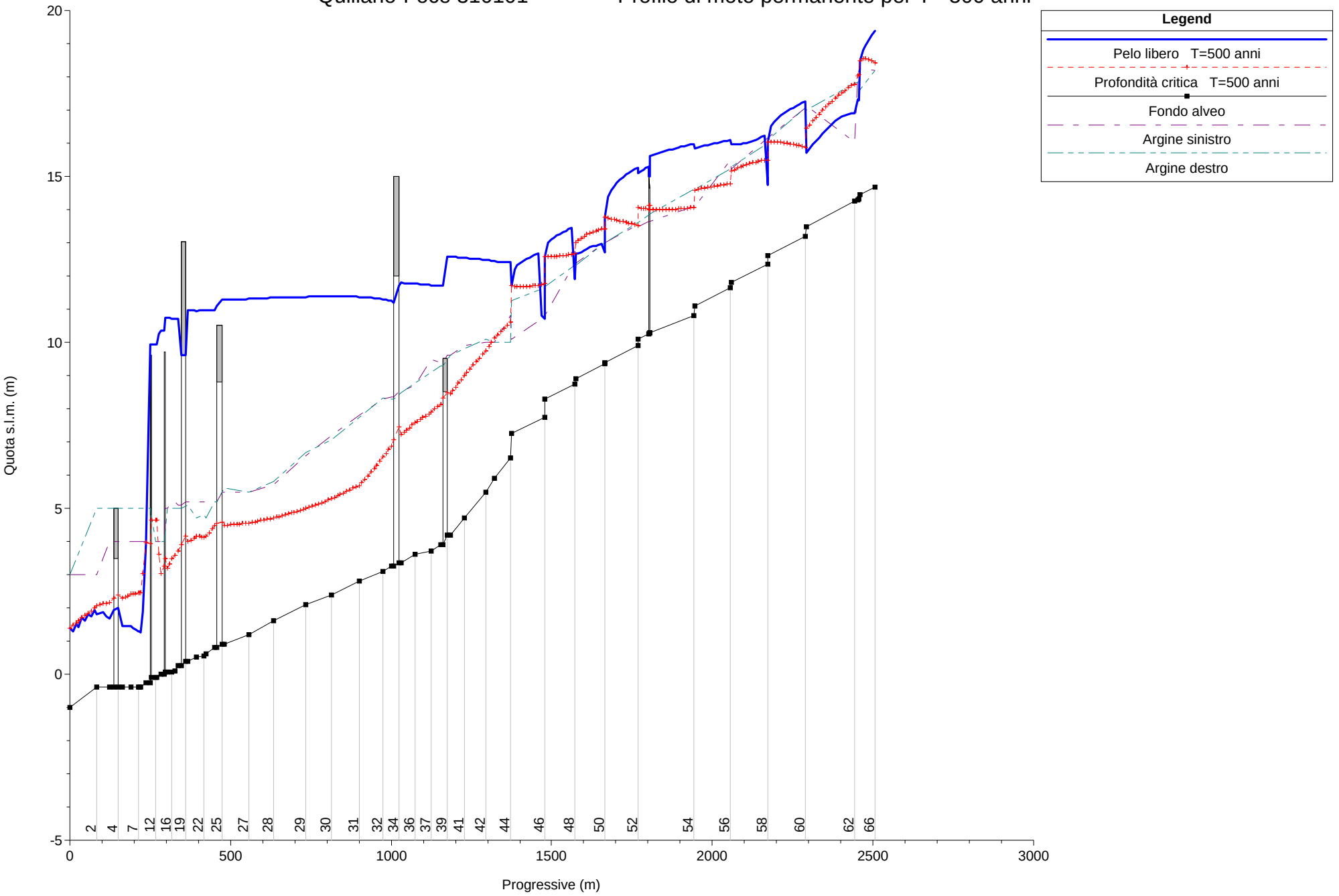
104.
105.
107.
109.
111.
113.
114.
119.
120.
121.


Quiliano-Foce 310101
Profilo di moto permanente per T= 200 anni
Legend
Profondità critica T=200 anni
Pelo libero T=200 anni
Fondo alveo
Argine sinistro
Argine destro
Quota s.l.m. (m)
Progressive (m)
20
15
10
5
0
-5
0
500
1000
1500
2000
2500
3000
2
4
7
12
16
19
22
25
27
28
29
30
31
32
34
36
37
39
41
42
44
46
48
50
52
54
56
58
60
62
66


T.Quiliano Profilo di moto permanente T=500 anni
Legend
Pelo libero T=500
Profondità critica T=500
Fondo alveo
Argine sinistro
Argine destro
Quota s.l.m. (m)
Progressive (m)
70
60
50
40
30
20
10
0
500
1000
1500
2000
2500
3000
68
70
72
73
74
75
76
77
79
80
81
82
84
85
86
87
88
89
90
92
93
94
95
96
97
98
99
100
101
102
103
104.
105.
107.
109.
111.
113.
114.
119.
120.
121.


Quiliano-Foce 310101
Profilo di moto permanente per T= 500 anni
Legend
Pelo libero T=500 anni
Profondità critica T=500 anni
Fondo alveo
Argine sinistro
Argine destro
Quota s.l.m. (m)
Progressive (m)
20
15
10
5
0
-5
0
500
1000
1500
2000
2500
3000
2
4
7
12
16
19
22
25
27
28
29
30
31
32
34
36
37
39
41
42
44
46
48
50
52
54
56
58
60
62
66

GEOMETRIA DELLE SEZIONI ED ALTEZZA DEL PELO LIBERO IN CONDIZIONI DI MOTO PERMANENTE
PER LE PORTATE T=50, 200, 500 ANNI

QUILIANO stato attuale al 31/01/01

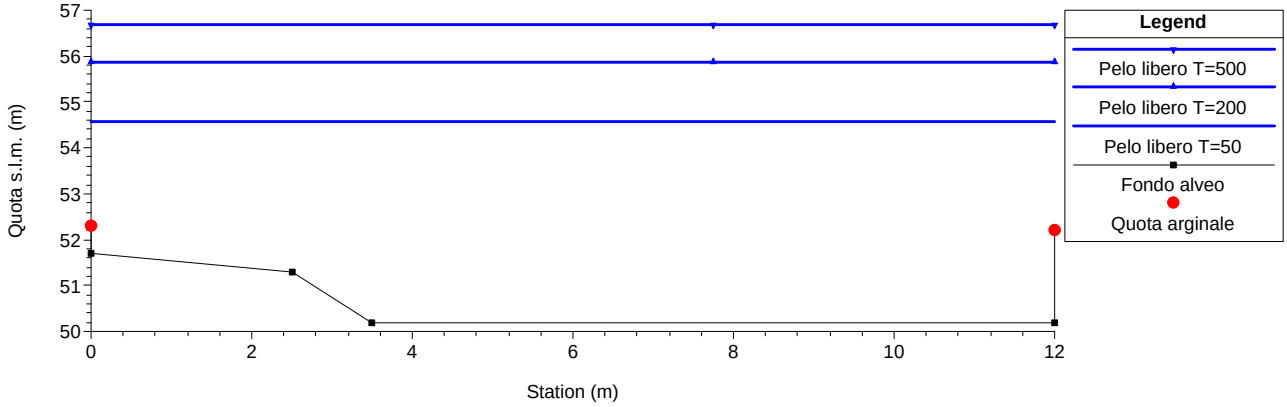
da sez. 121
a sez. 1

- **Loc. Becchi**
- **T. Trexenda**
- **Quiliano monte**
- **Quiliano foce**

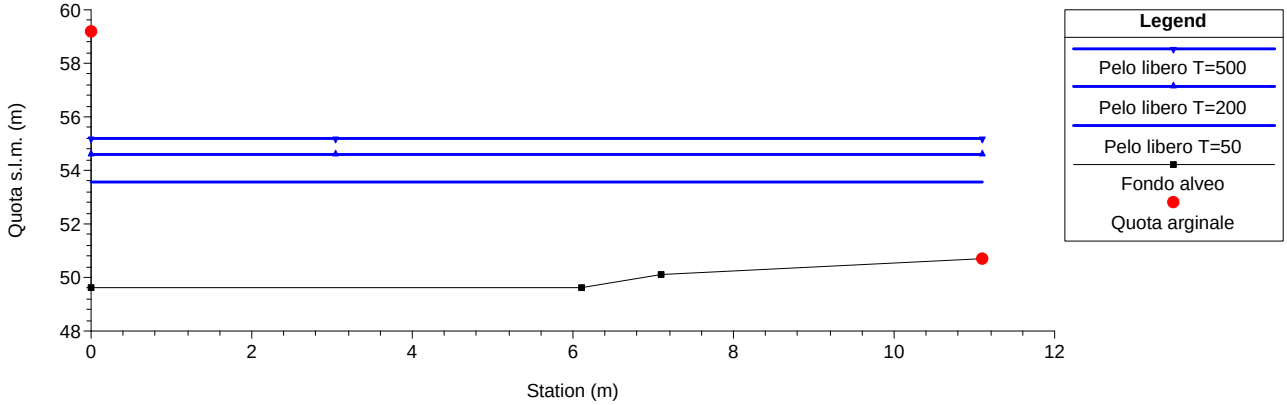
Dalle analisi effettuate con la configurazione dell'alveo allo stato attuale (31/01/01) è derivata la redazione delle Tavv. 9 (fasce di inondabilità), 11 (rischio idraulico) e 14 (aree inondabili).

QUILIANO – Sezioni trasversali

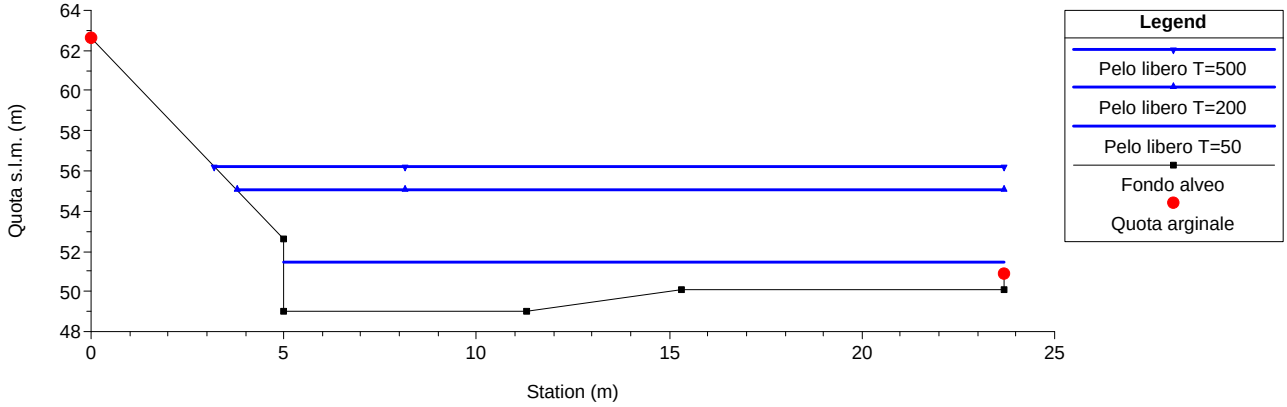
RS = 121.



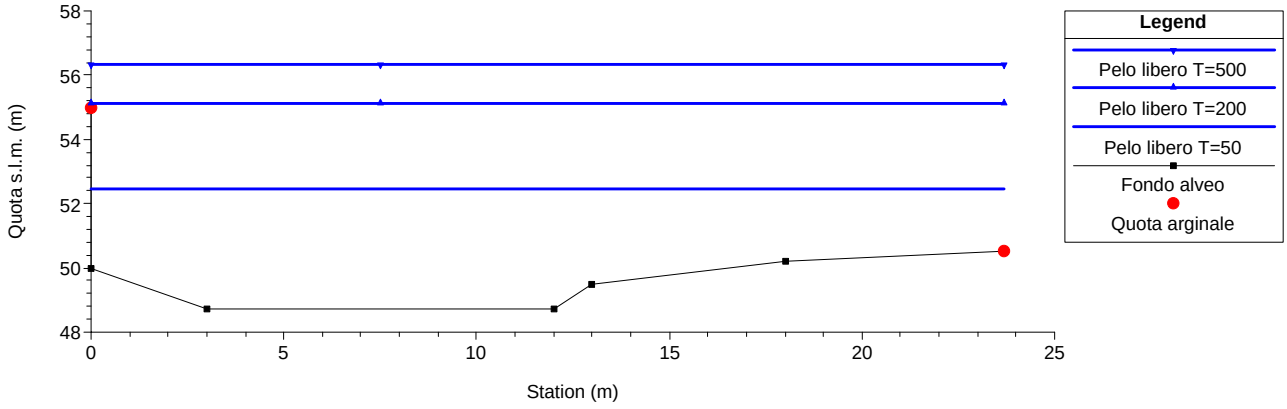
RS = 120.



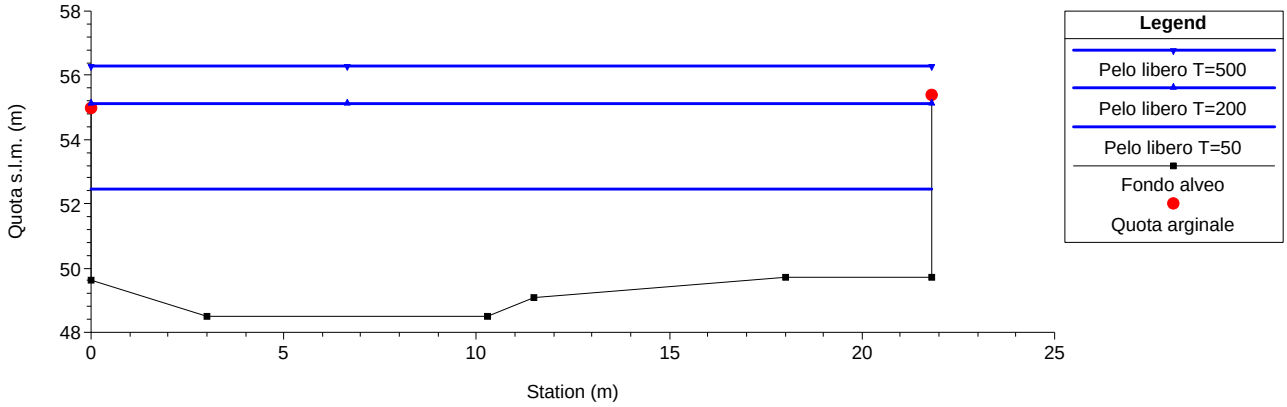
RS = 119.



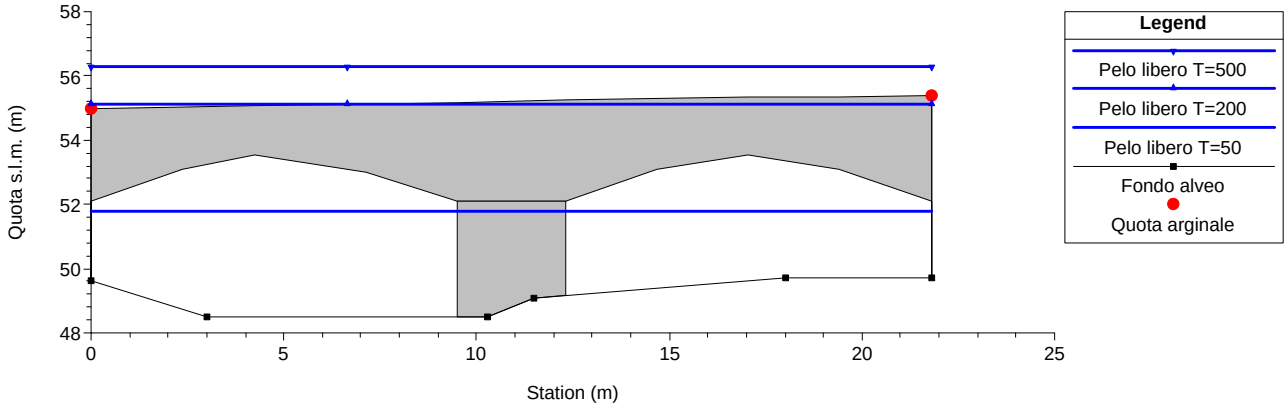
RS = 118.



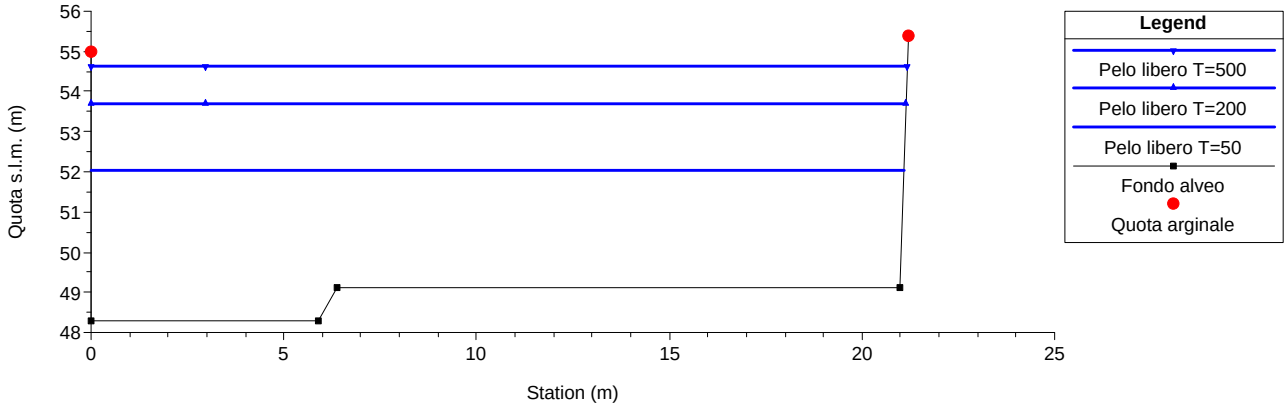
RS = 117.



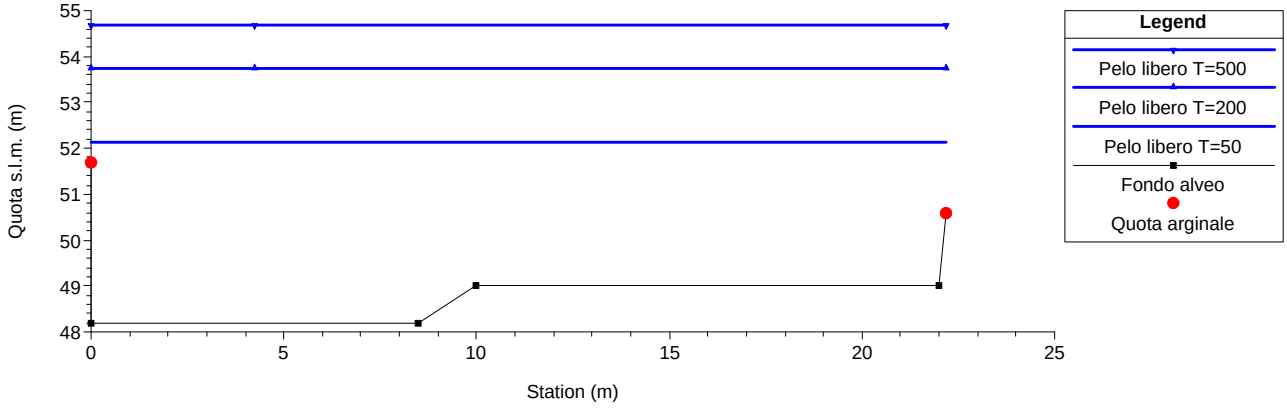
RS = 116.5 BR U



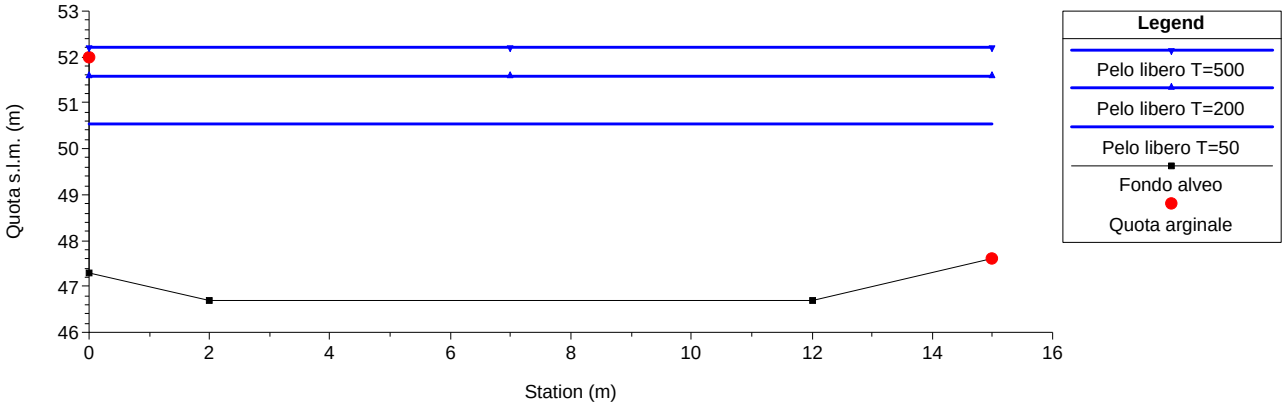
RS = 116.



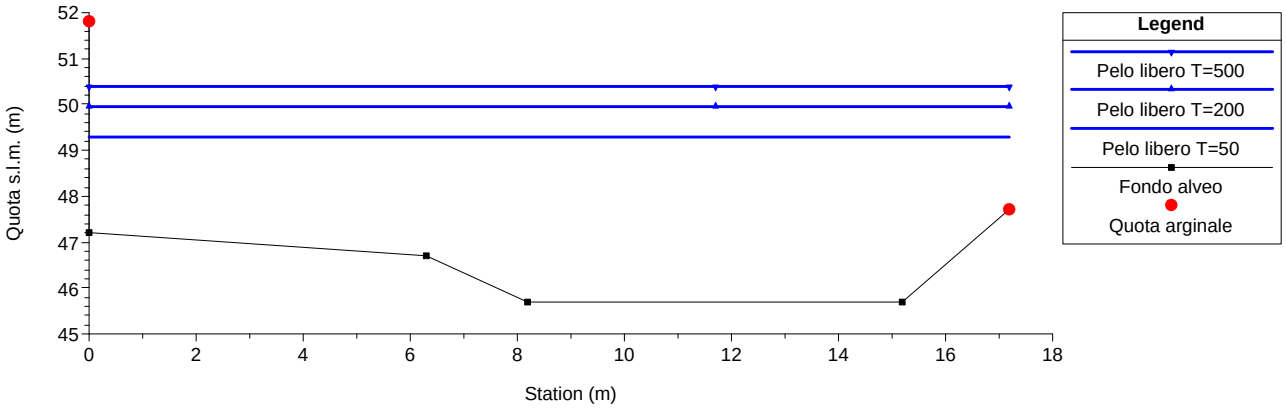
RS = 115.



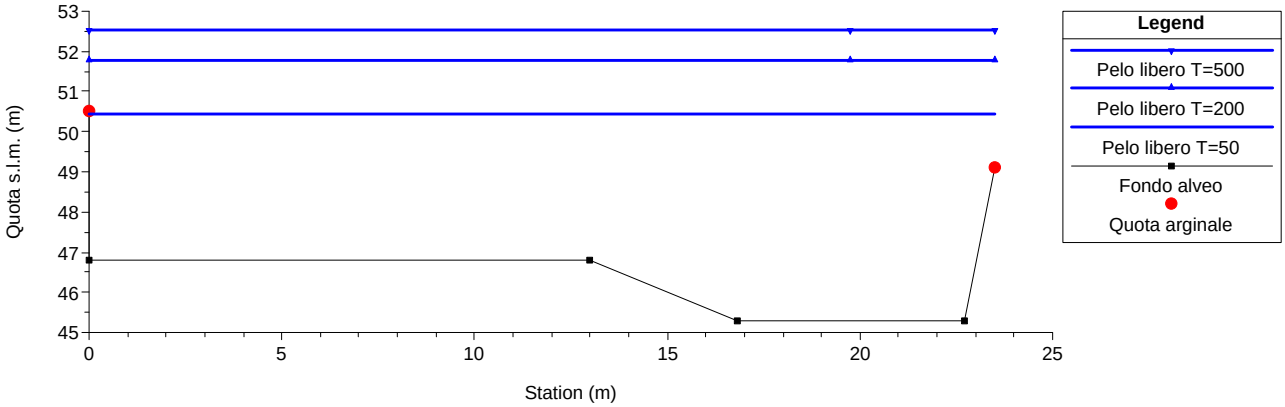
RS = 114.



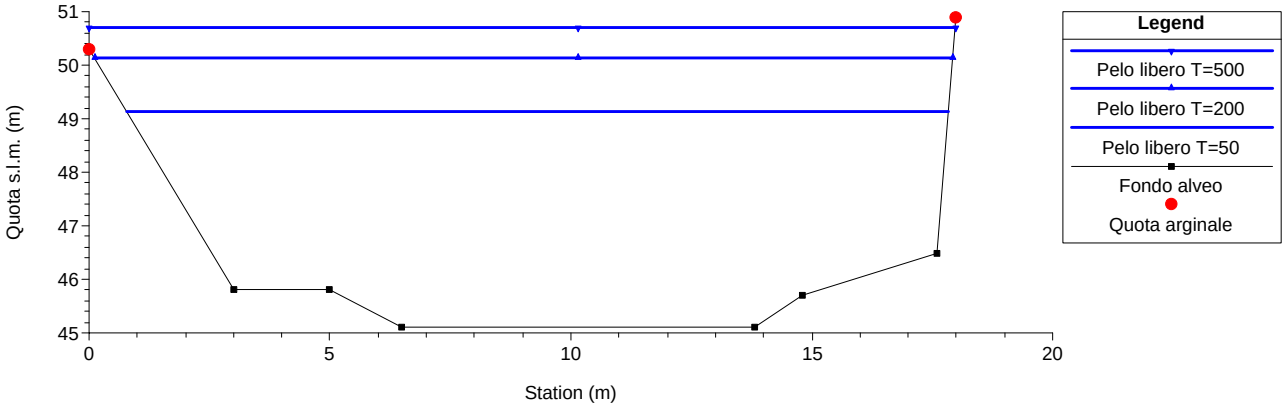
RS = 113.



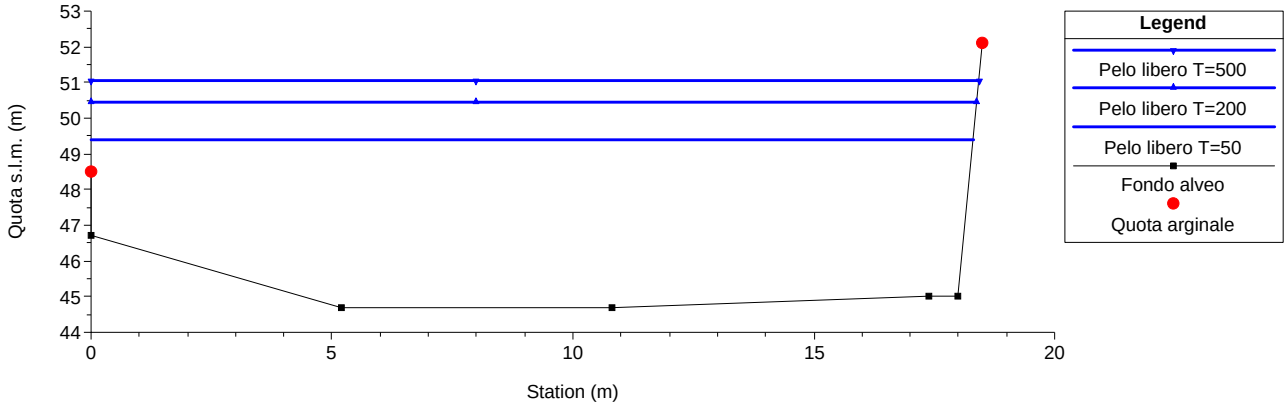
RS = 112.



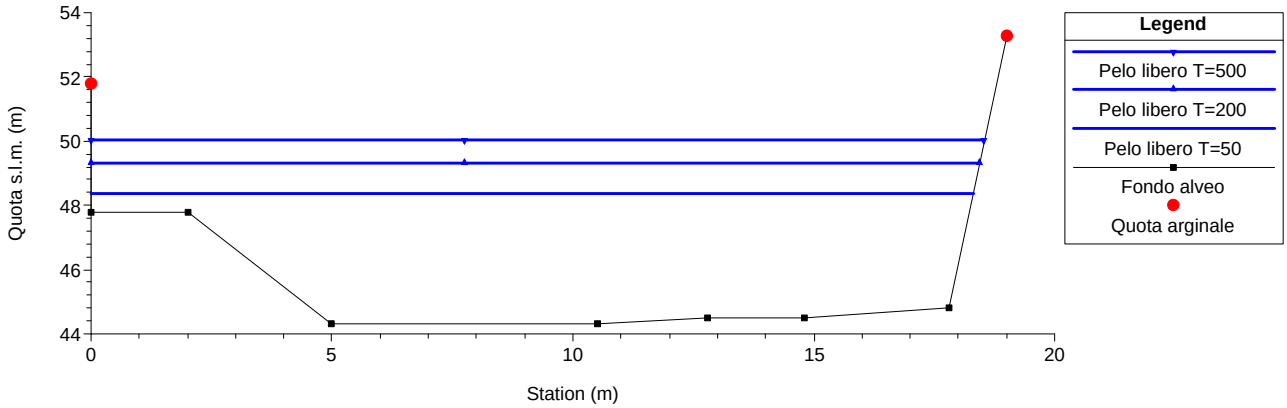
RS = 111.



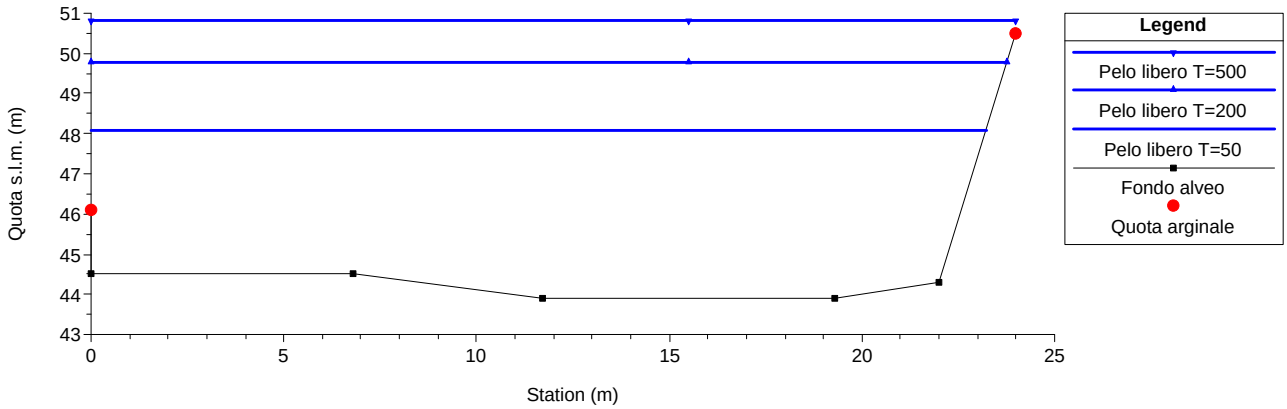
RS = 110.



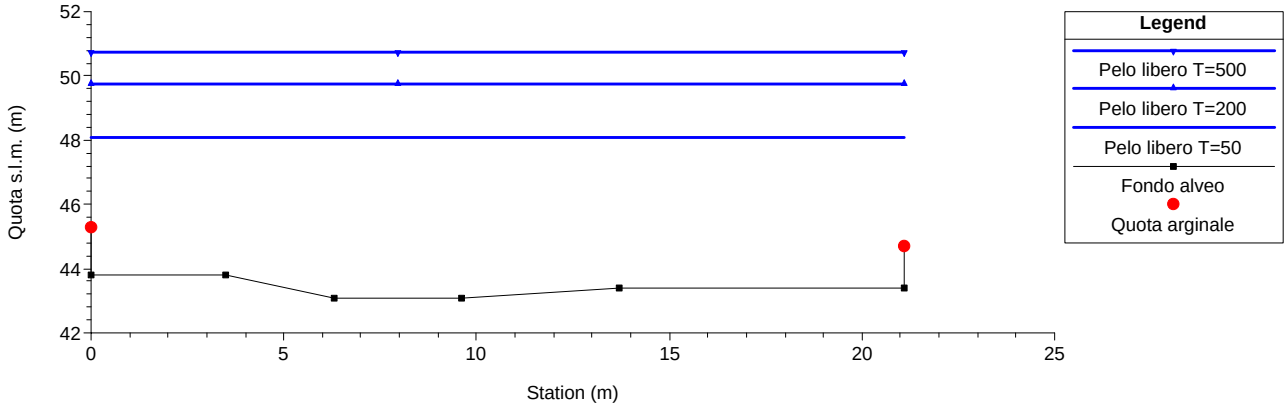
RS = 109.



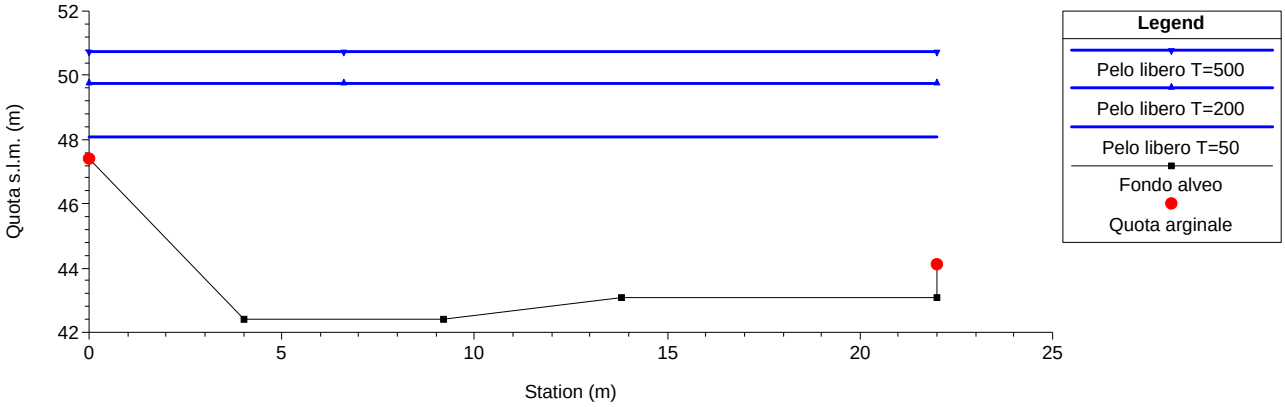
RS = 108.



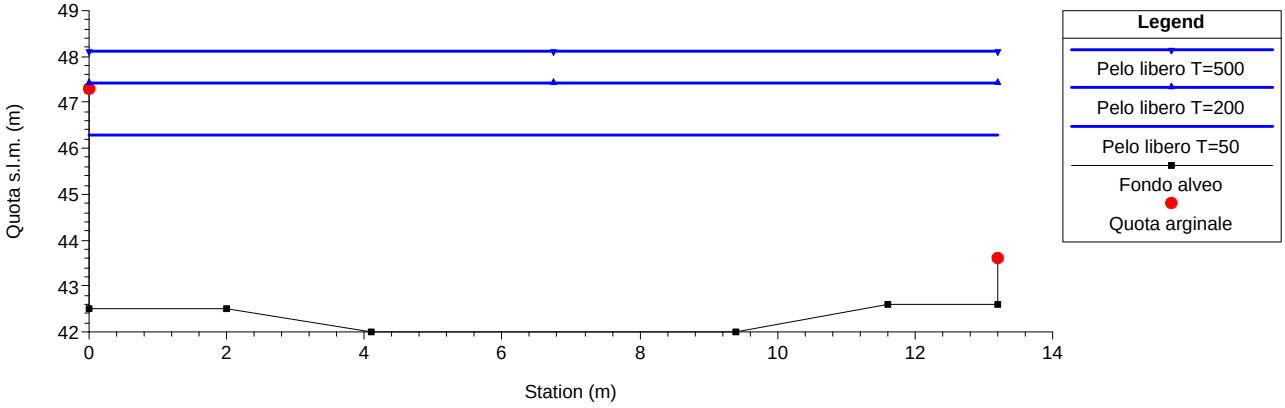
RS = 107.



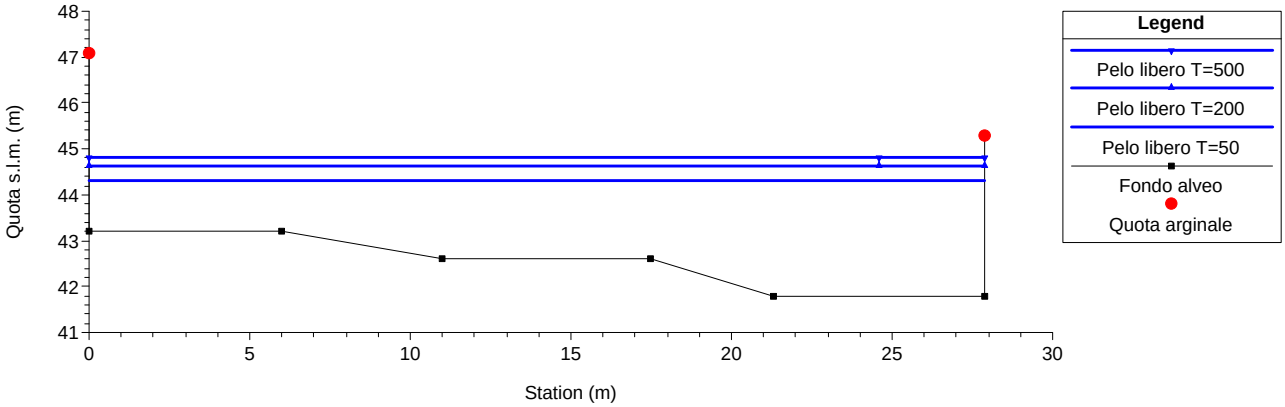
RS = 106.



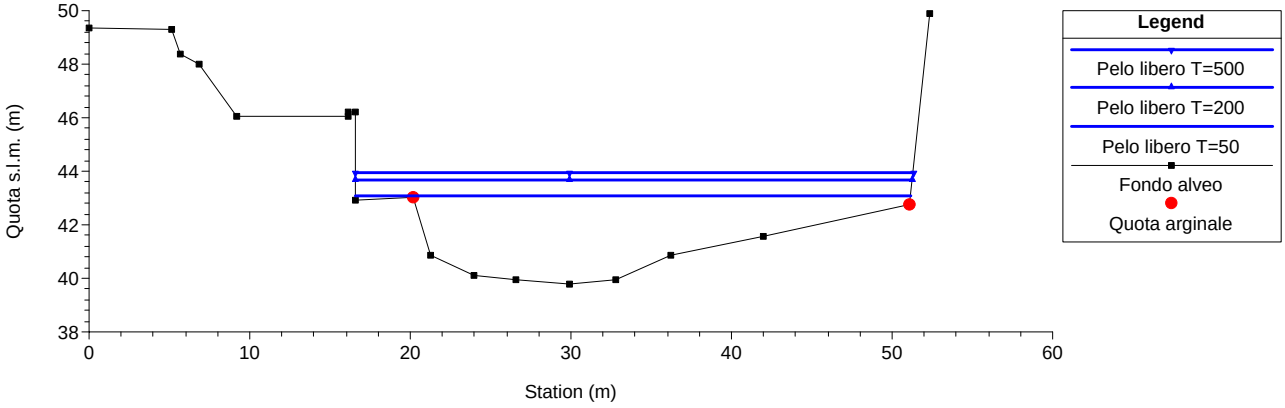
RS = 105.



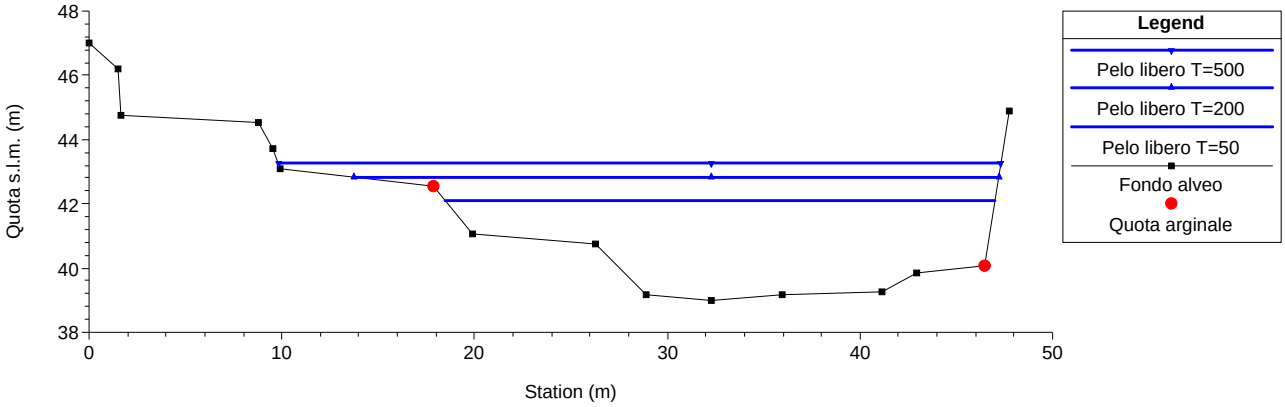
RS = 104.



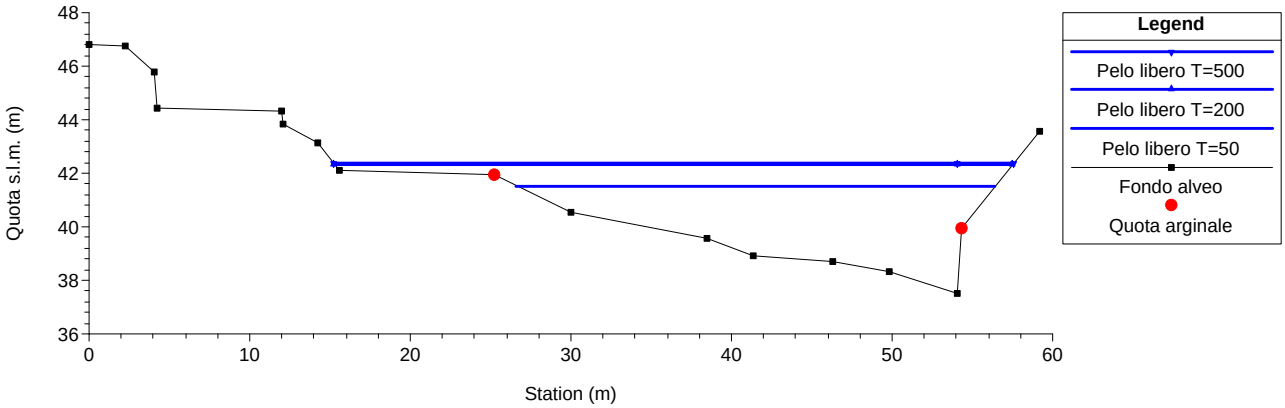
RS = 103



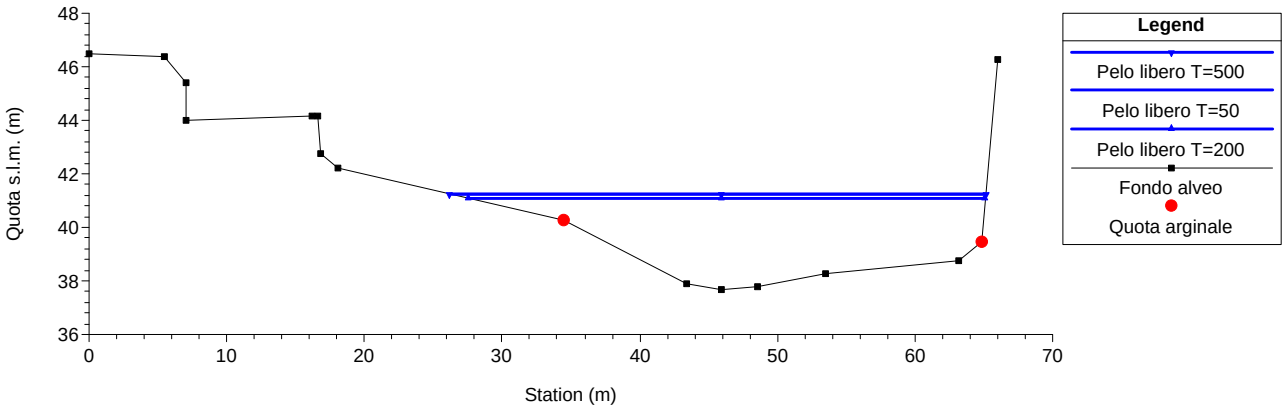
RS = 102



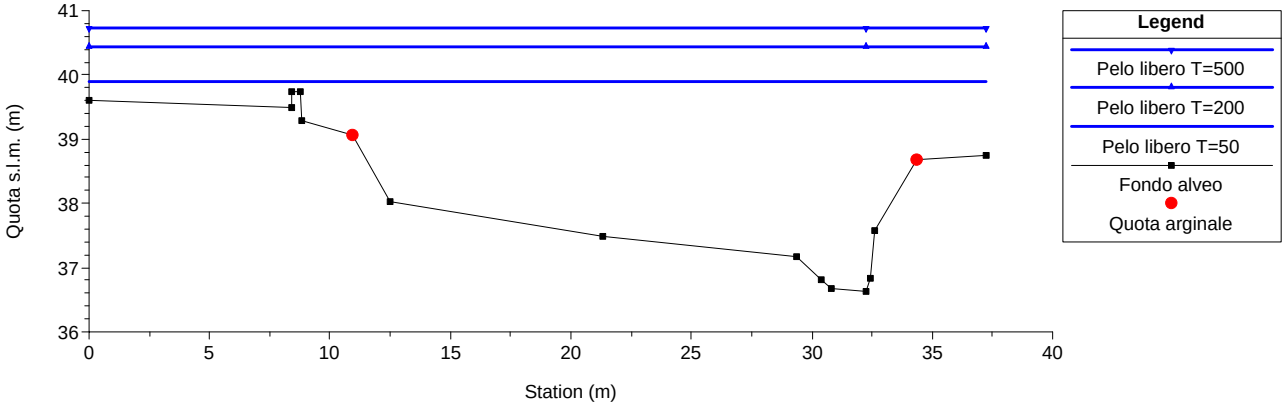
RS = 101



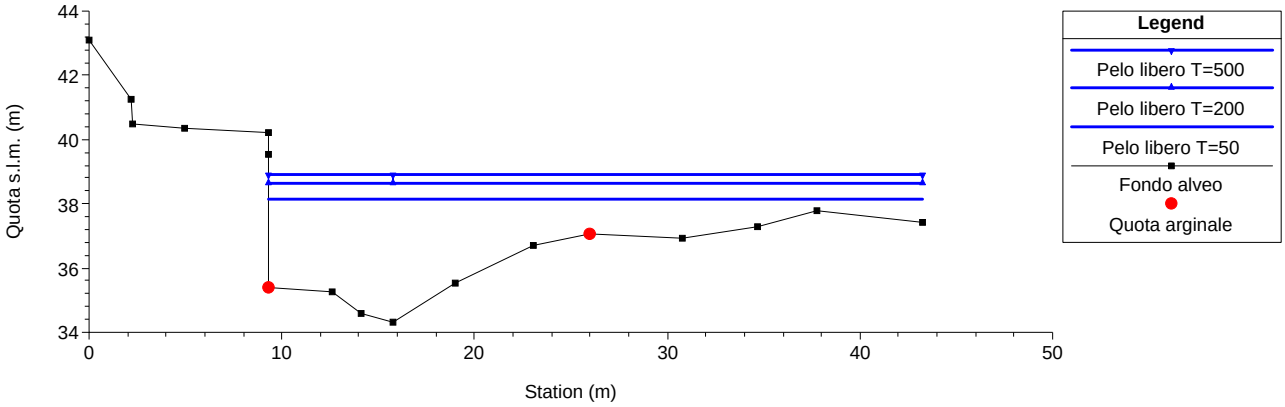
RS = 100



RS = 99



RS = 98



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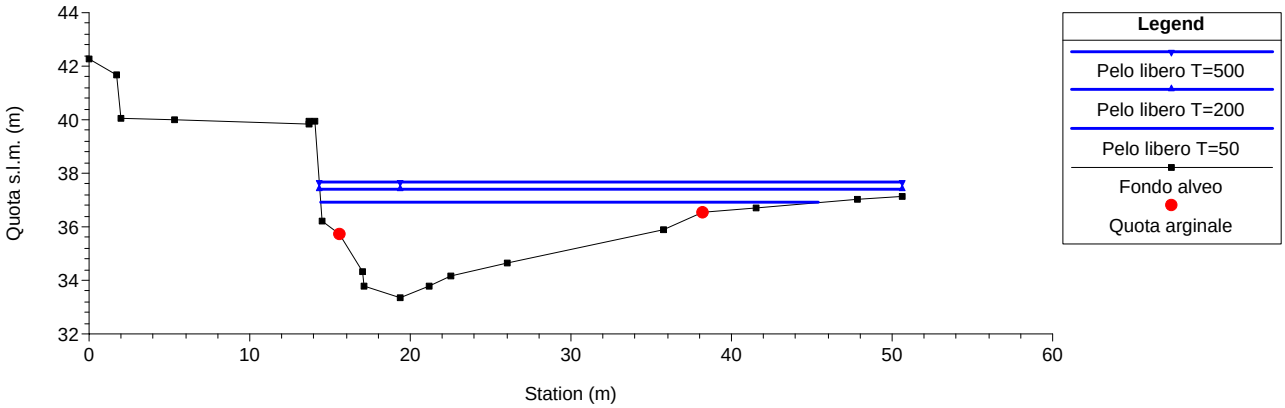
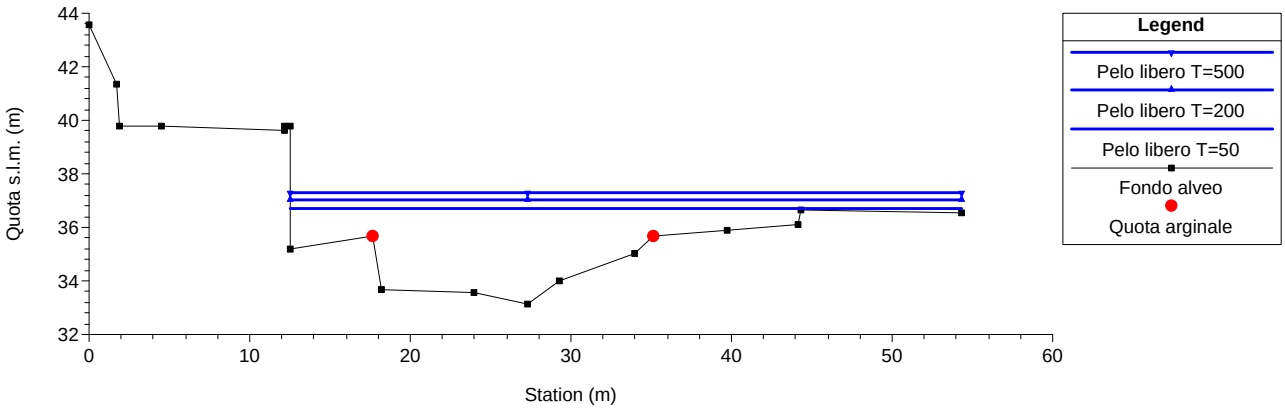
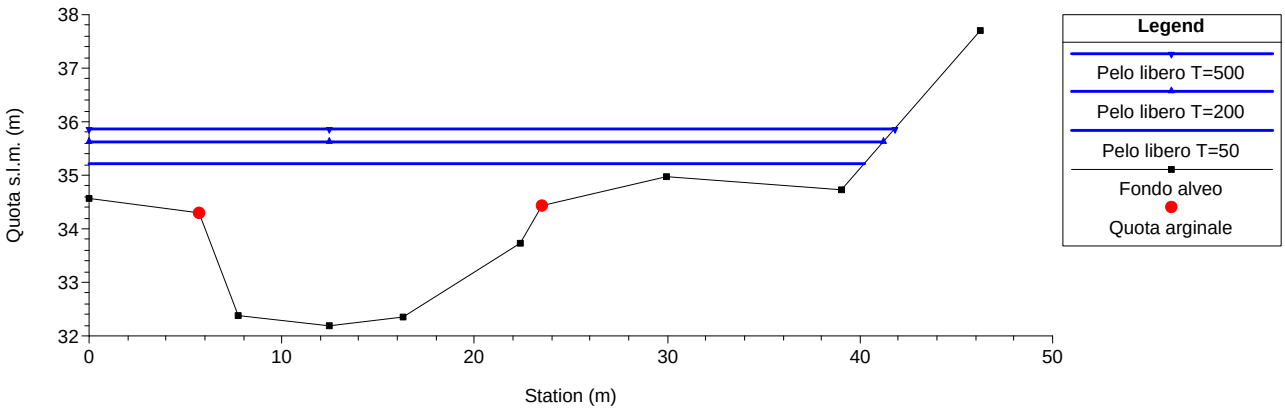


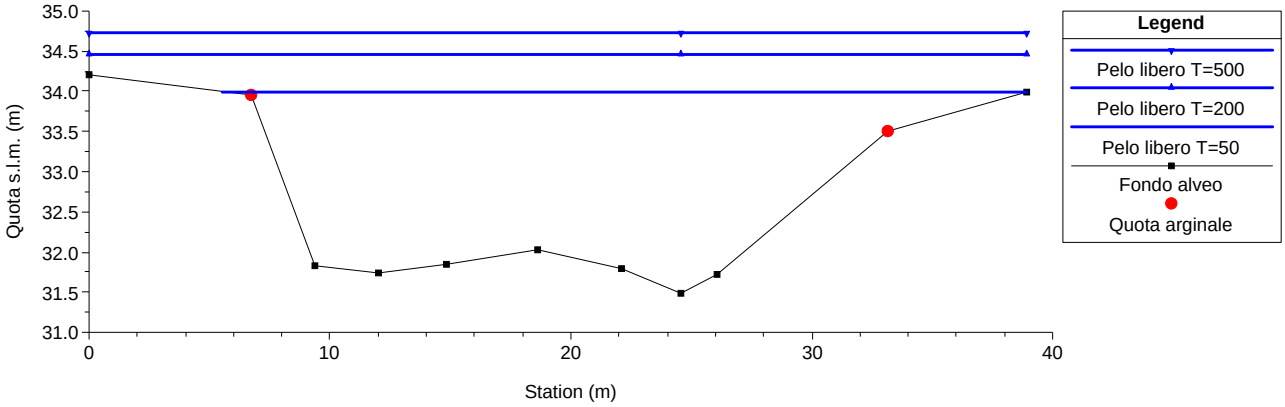
RS = 96



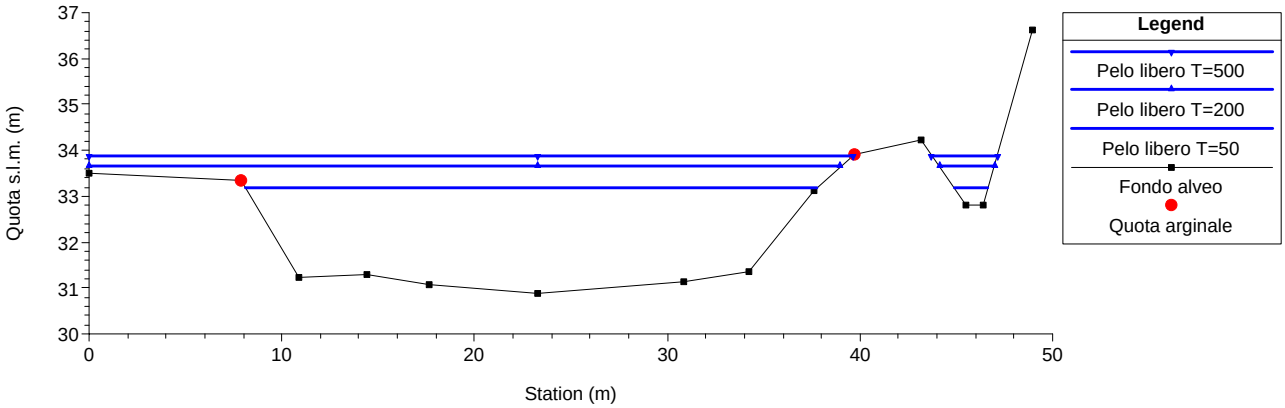
RS = 95



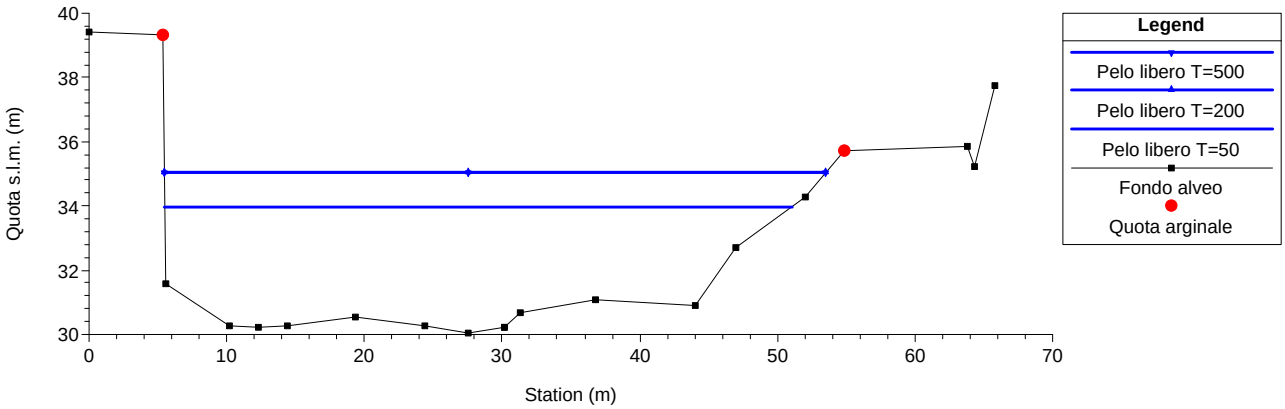
RS = 94



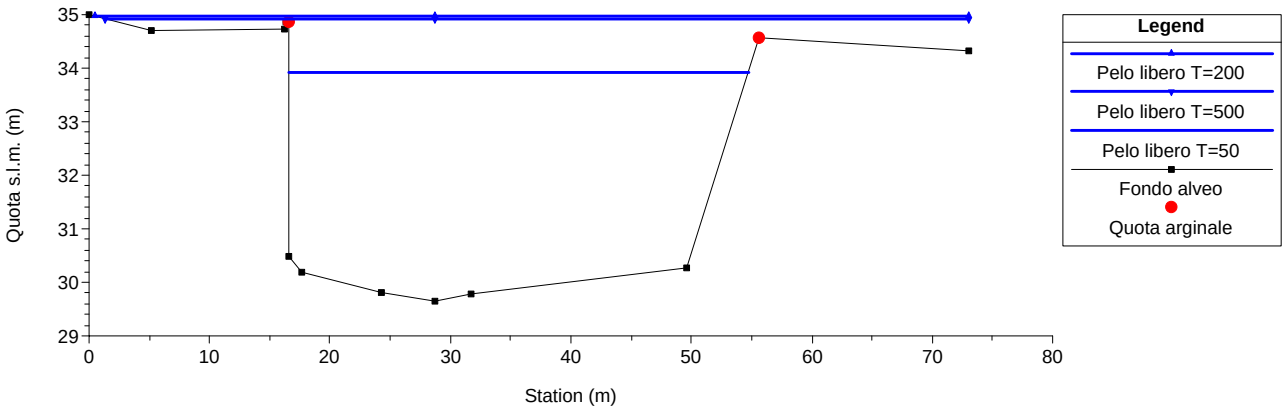
RS = 93



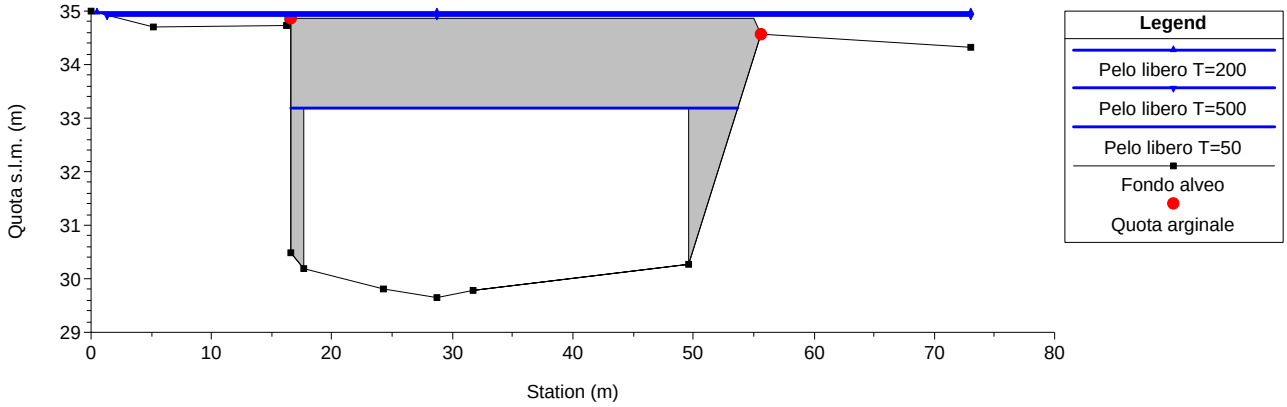
RS = 92



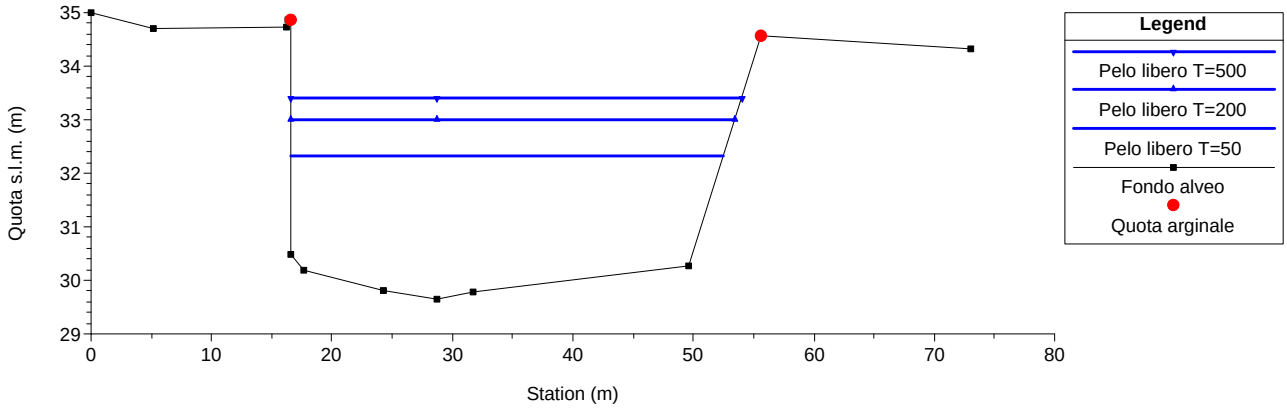
RS = 91



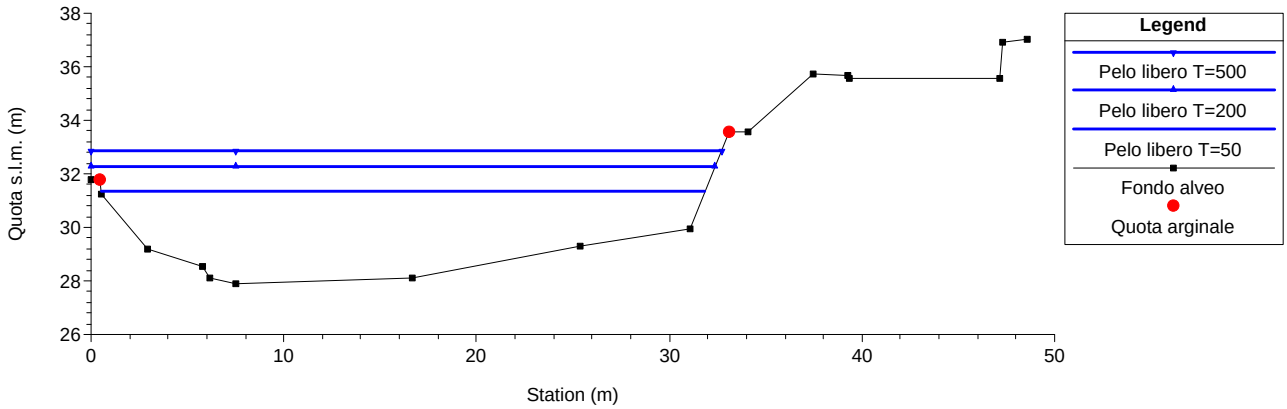
RS = 90.5 BR U



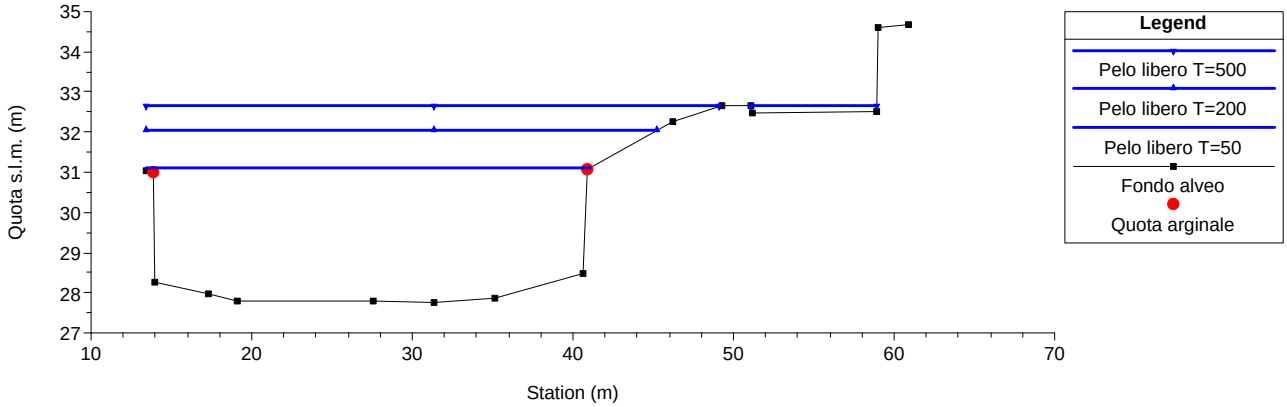
RS = 90



RS = 89



RS = 88



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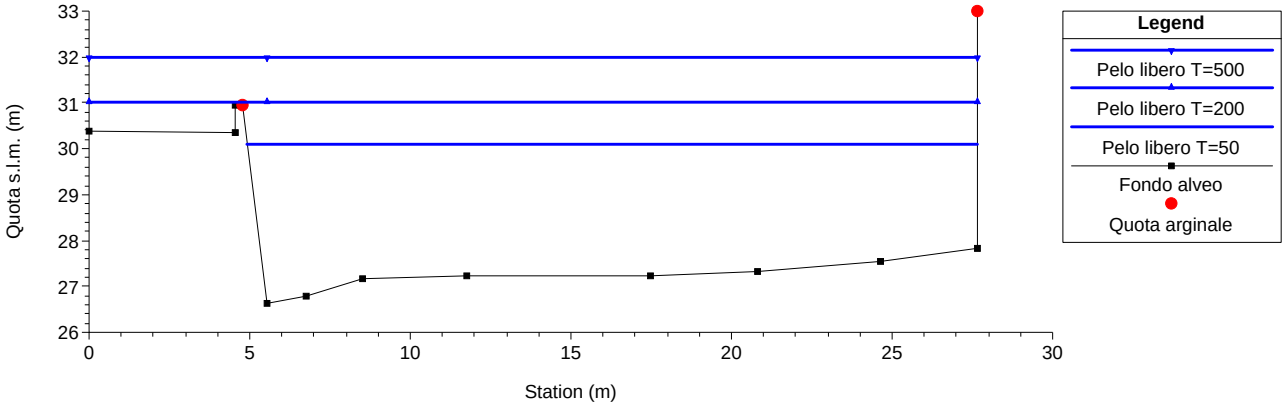
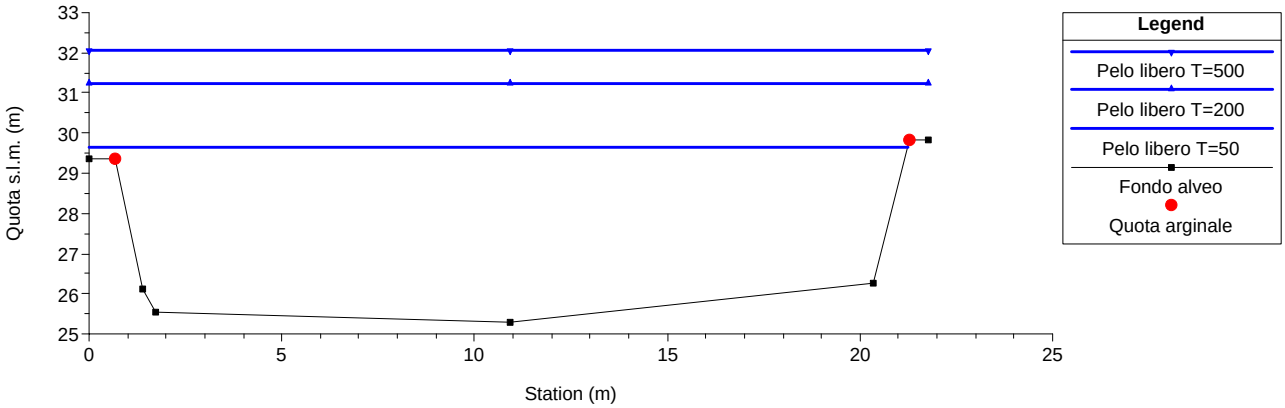


RS = 86



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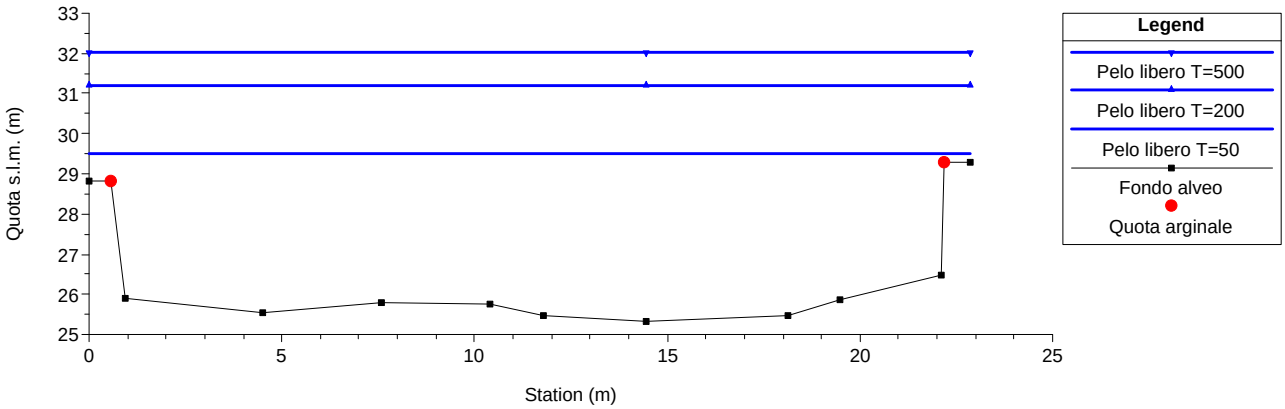
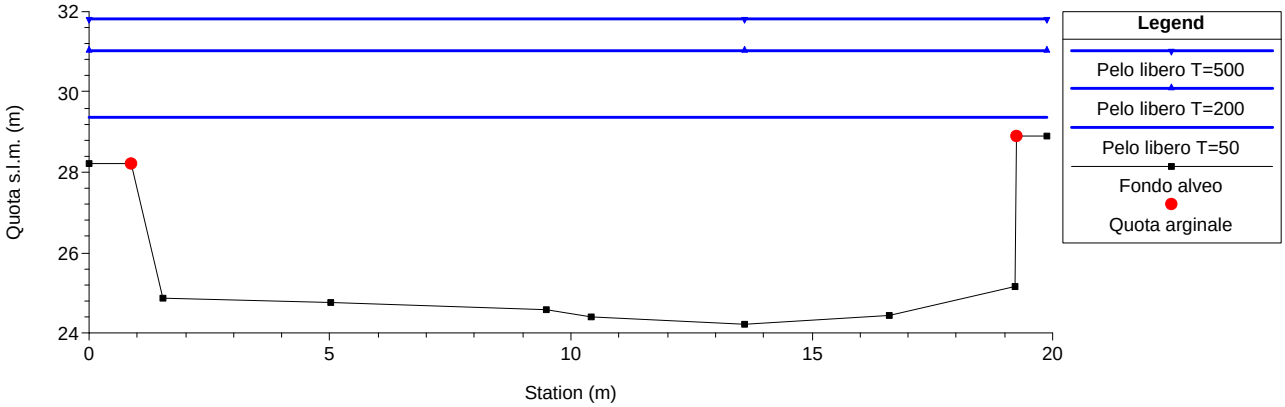
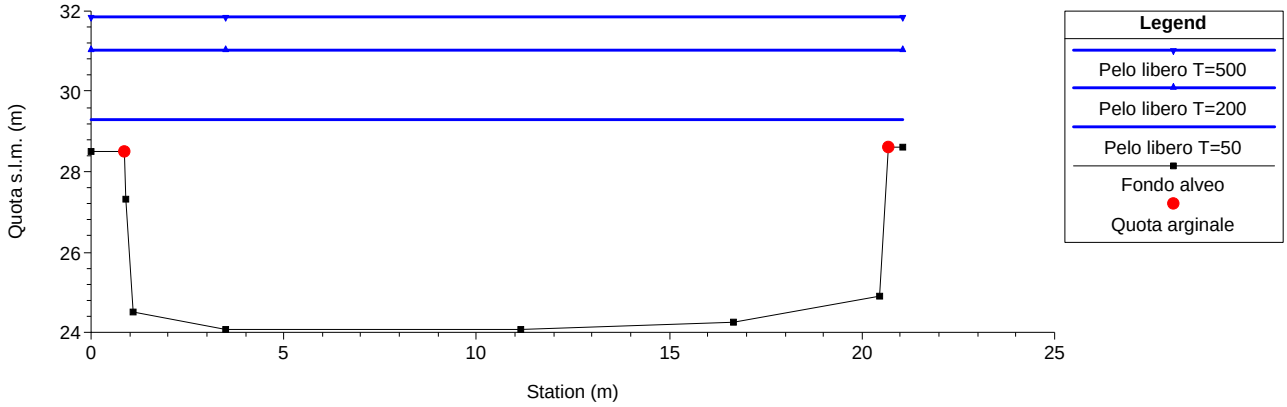


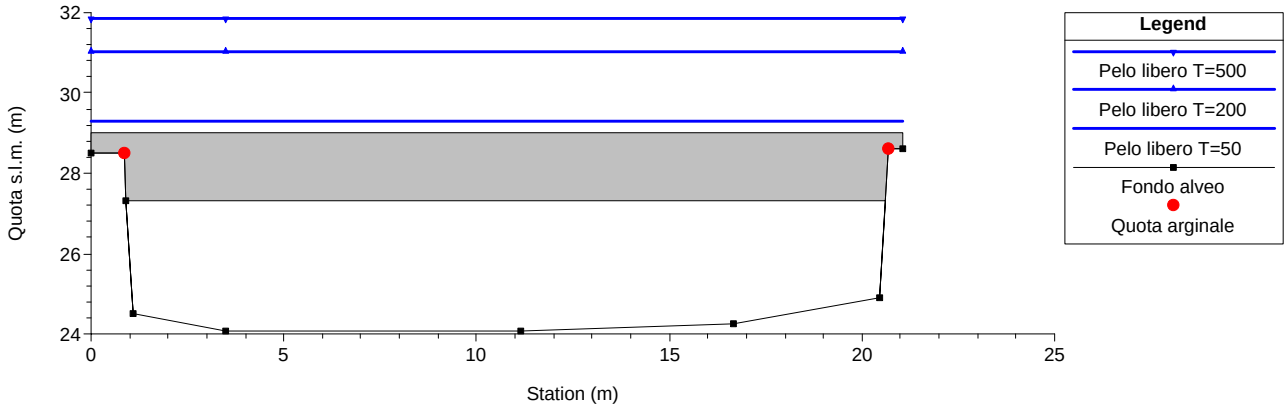
RS = 84



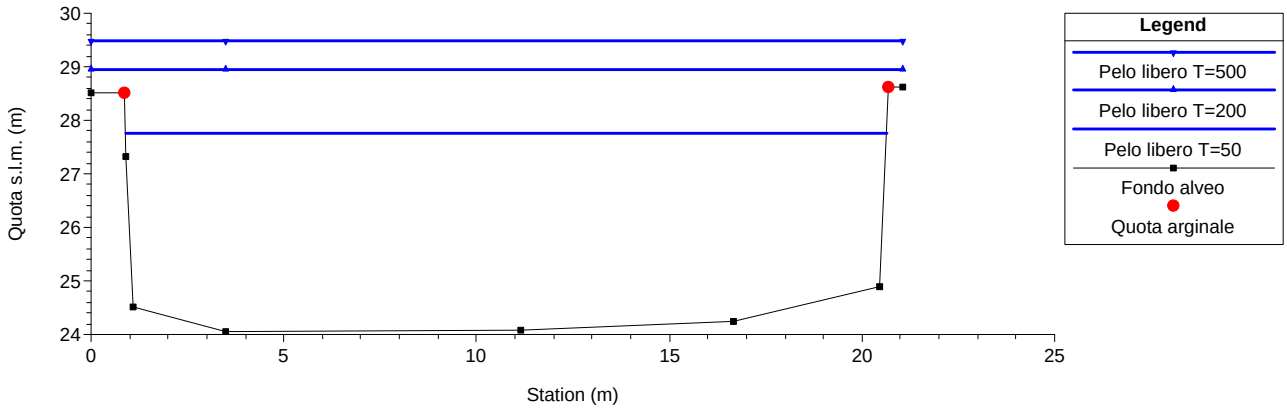
RS = 83



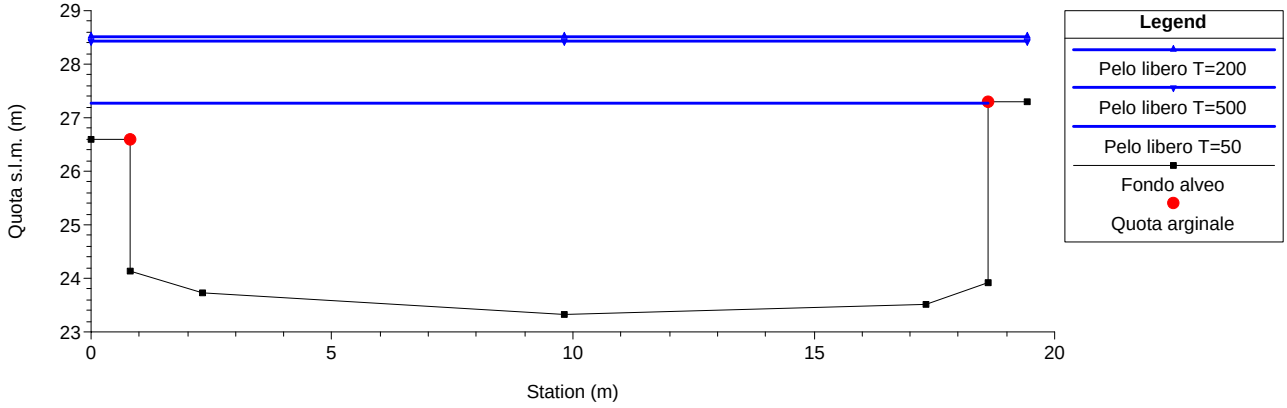
RS = 82.5 BR U



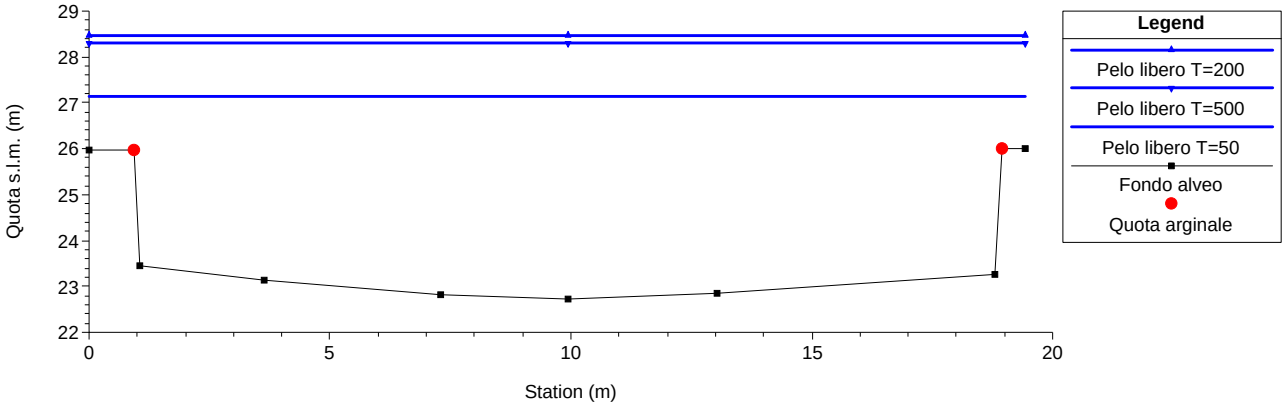
RS = 82



RS = 81



RS = 80



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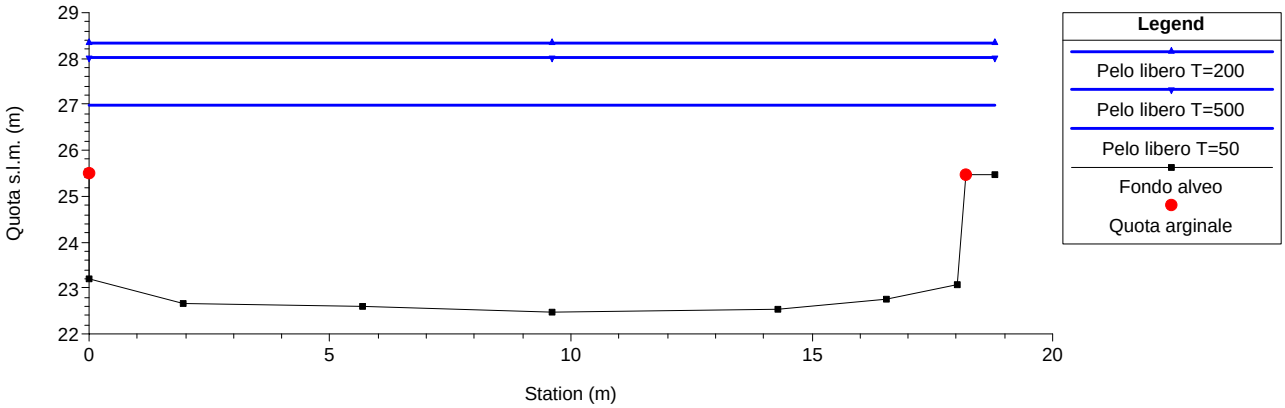
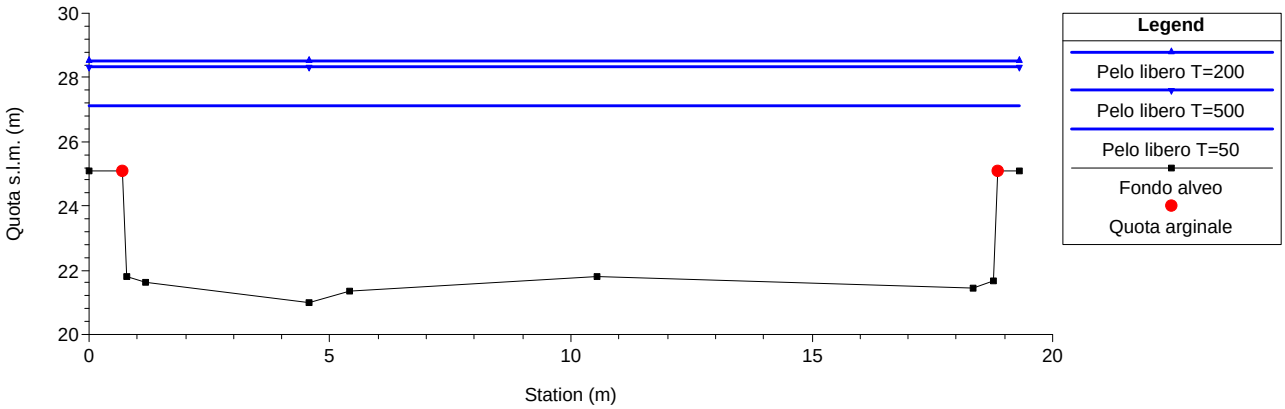
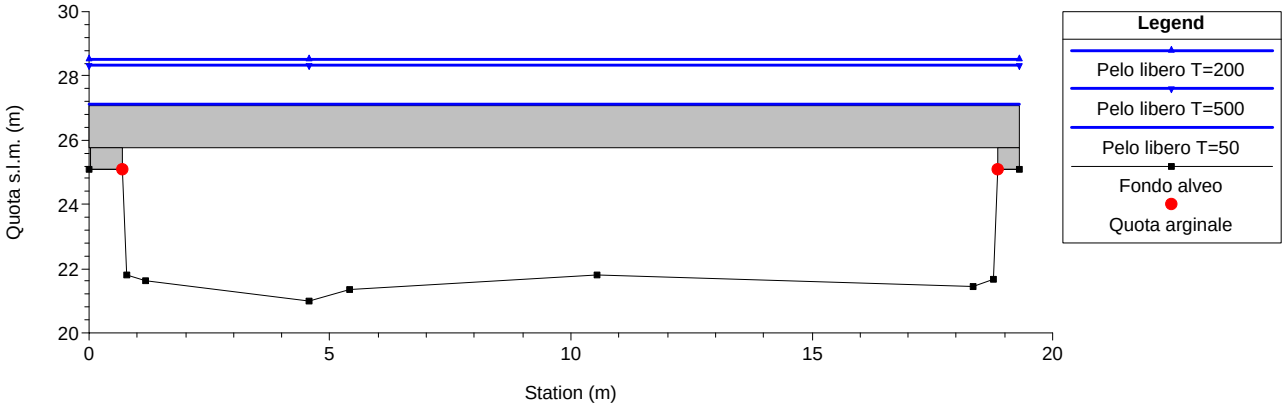


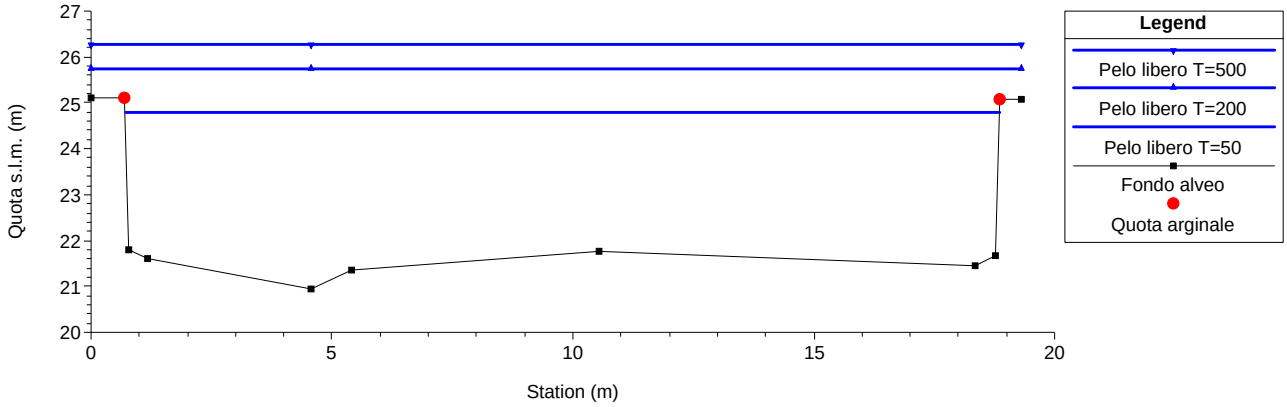
RS = 78



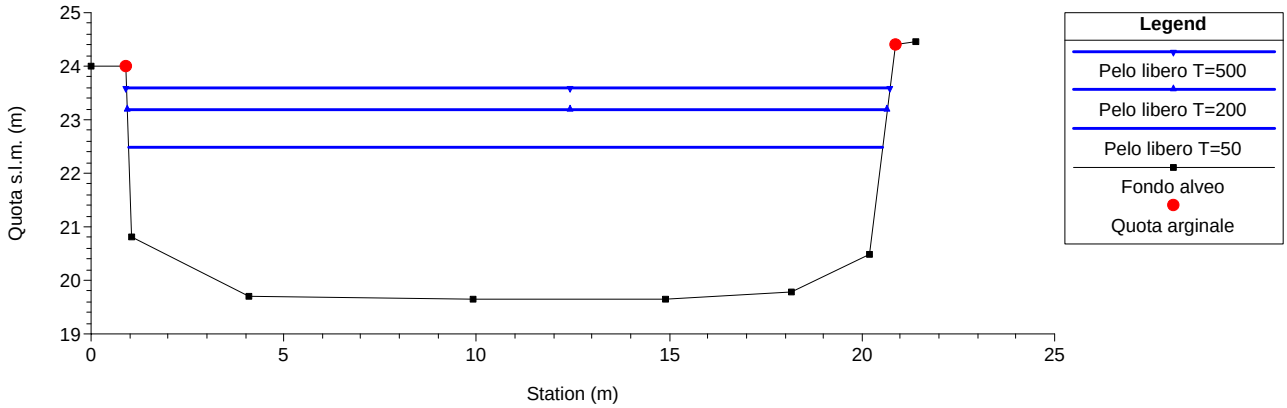
RS = 77.5 BR U



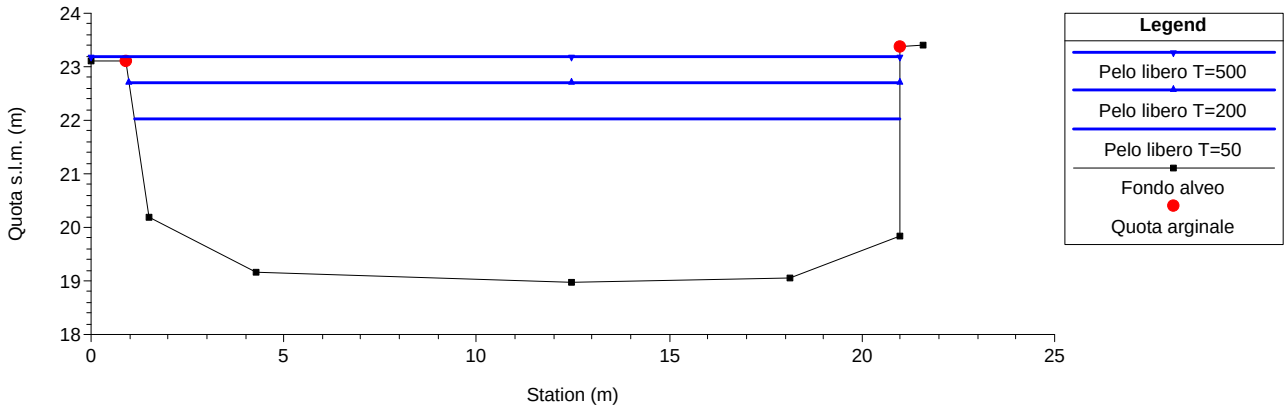
RS = 77



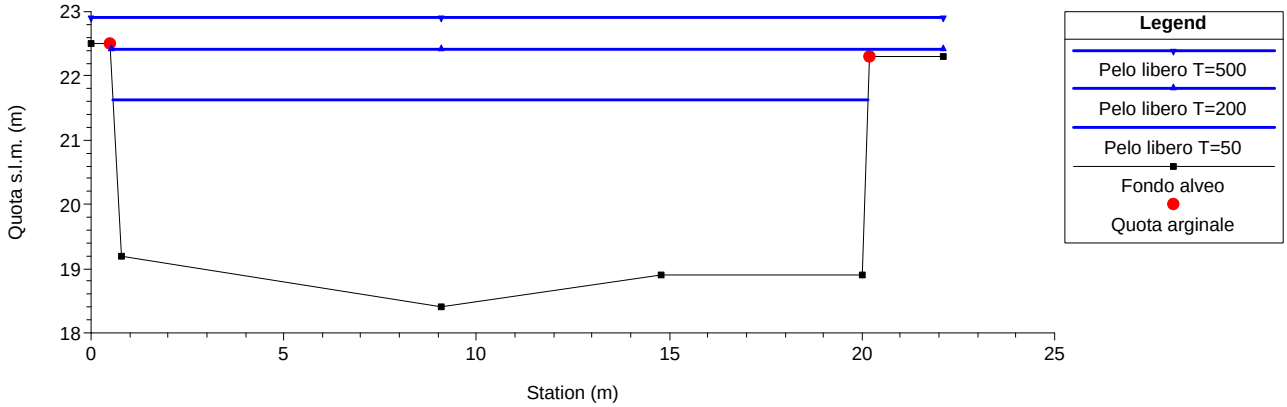
RS = 76



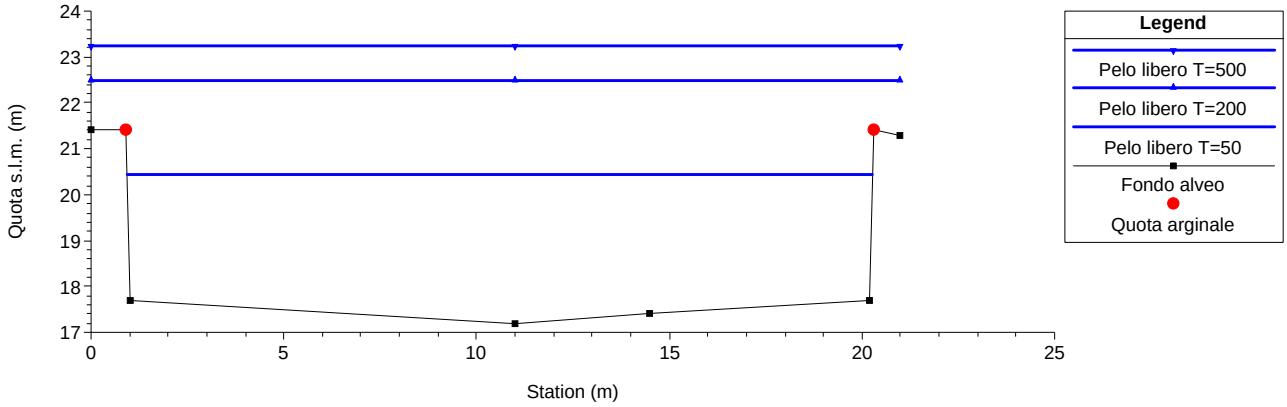
RS = 75



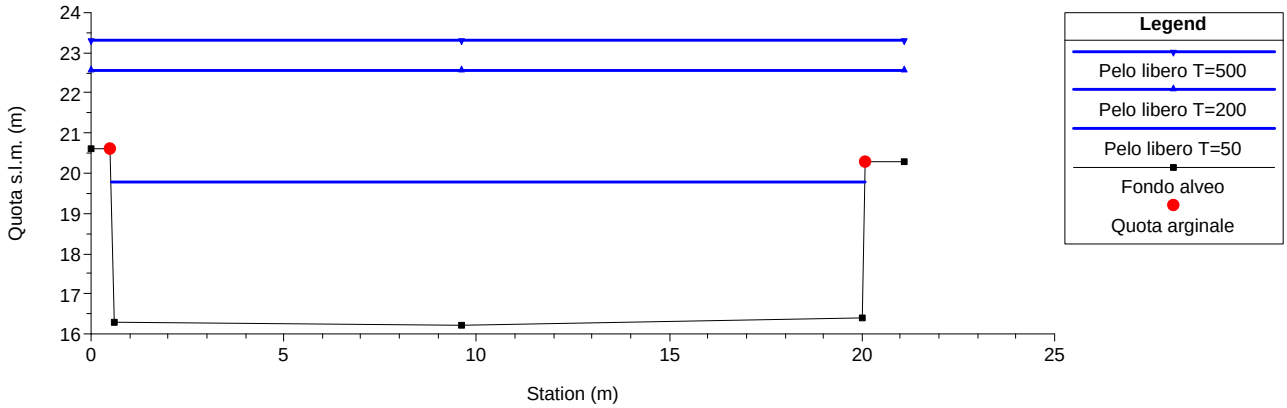
RS = 74



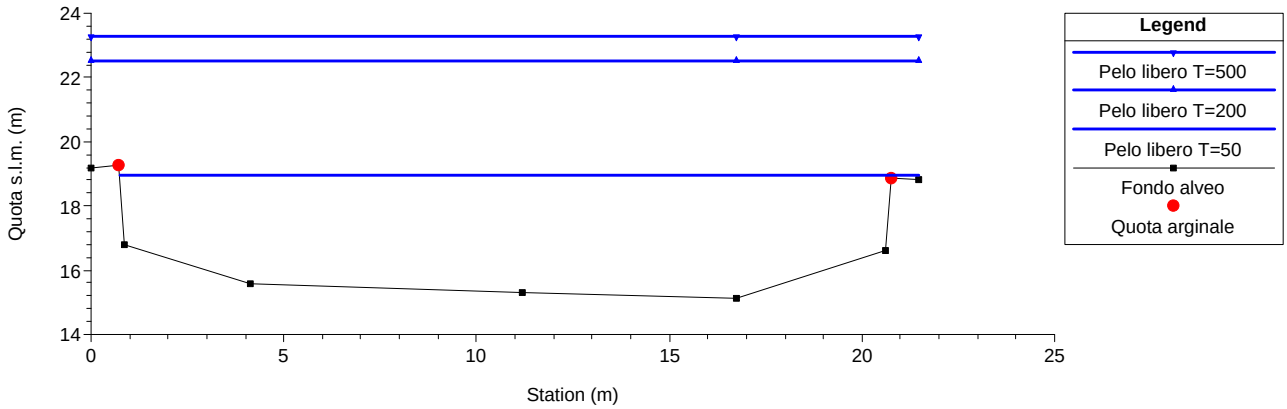
RS = 73



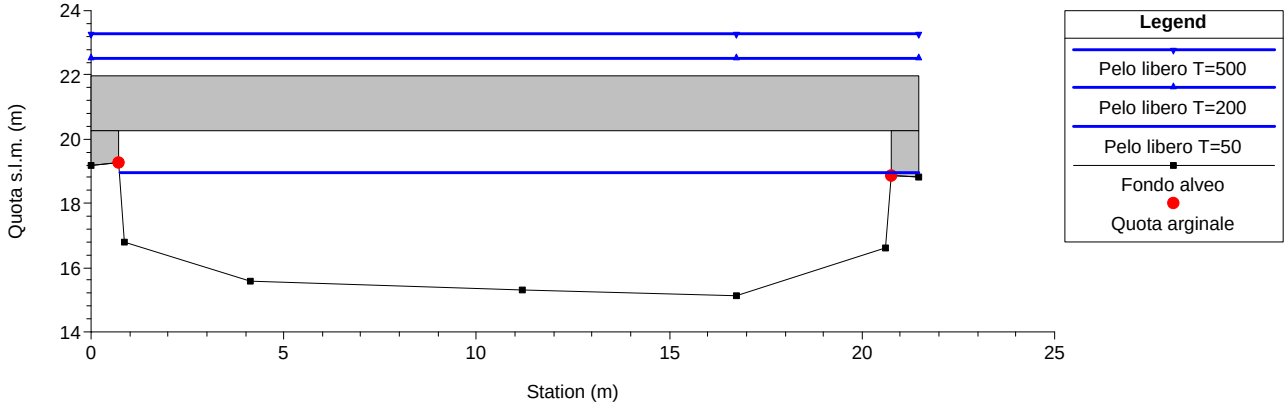
RS = 72



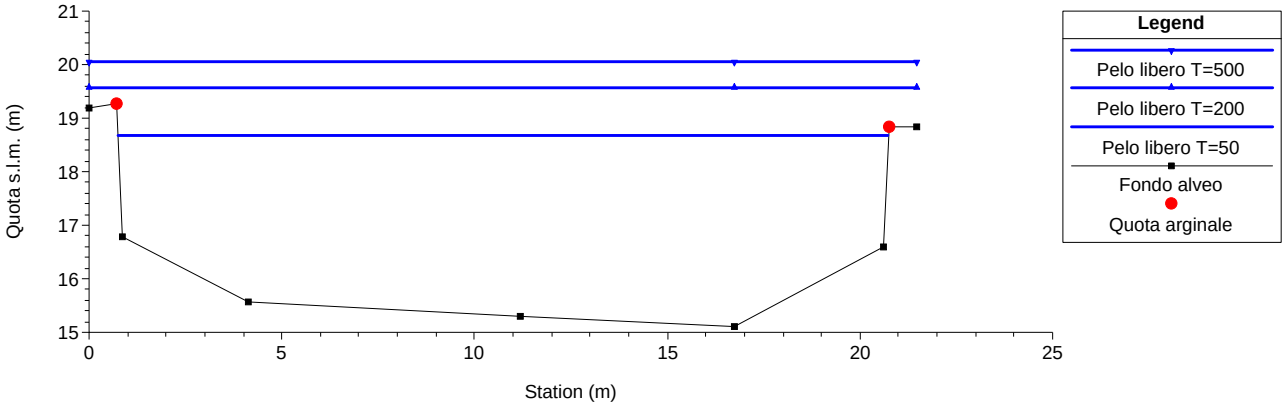
RS = 71



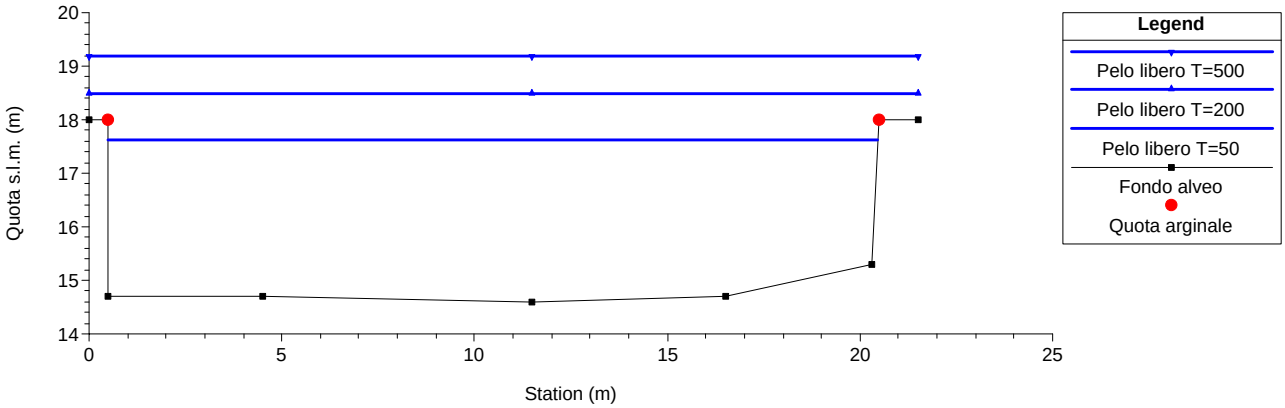
RS = 70.5 BR U



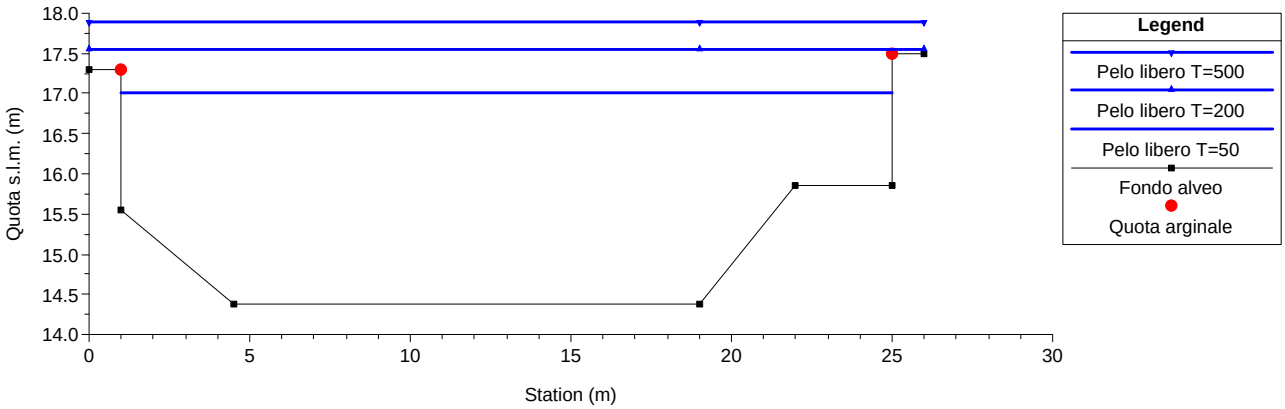
RS = 70



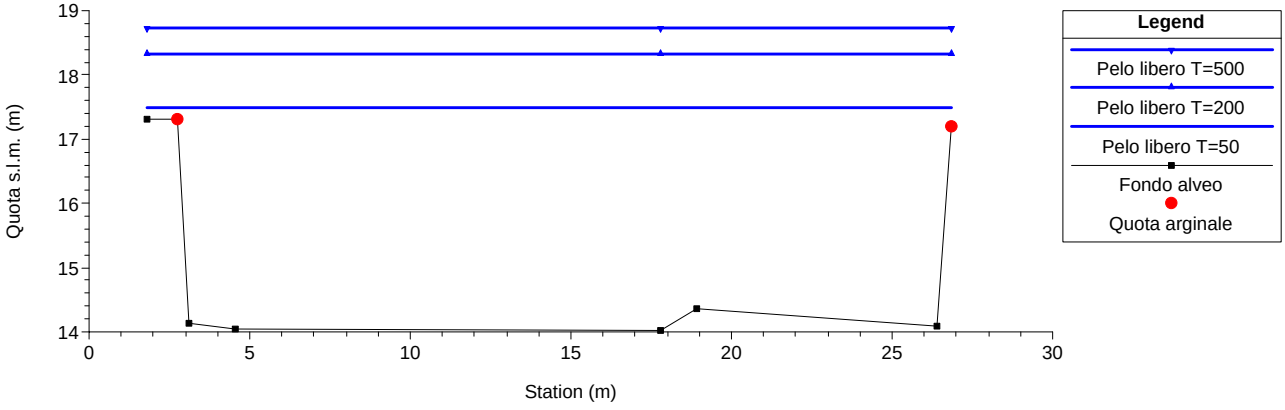
RS = 69



RS = 68

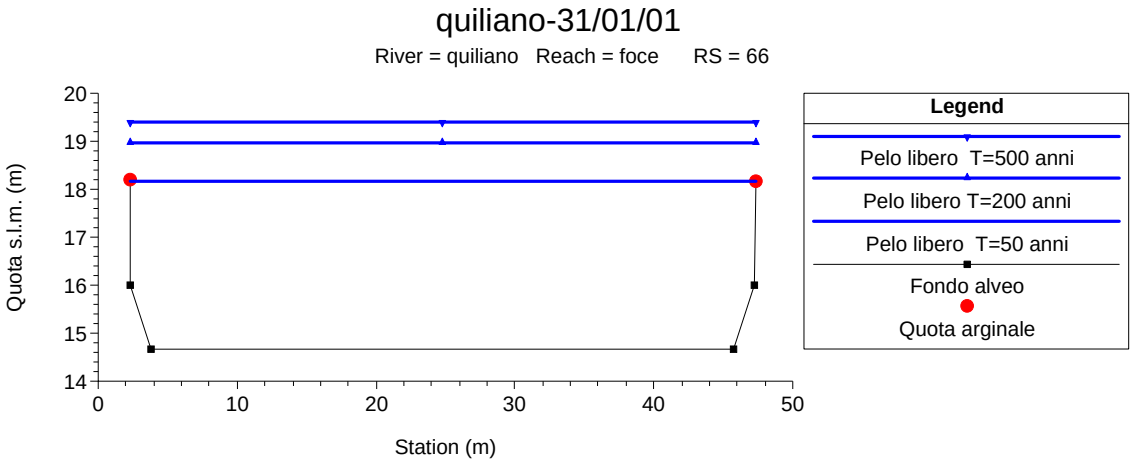


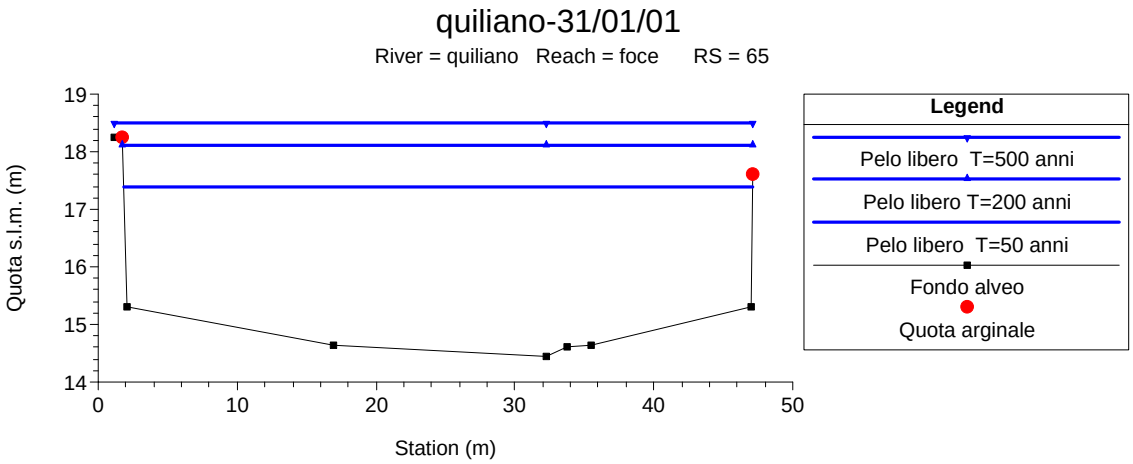
RS = 67

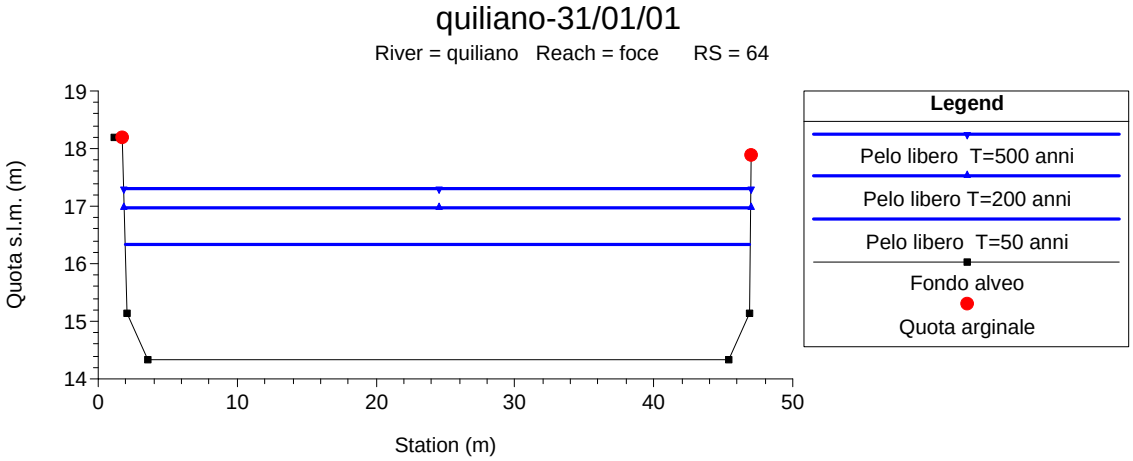


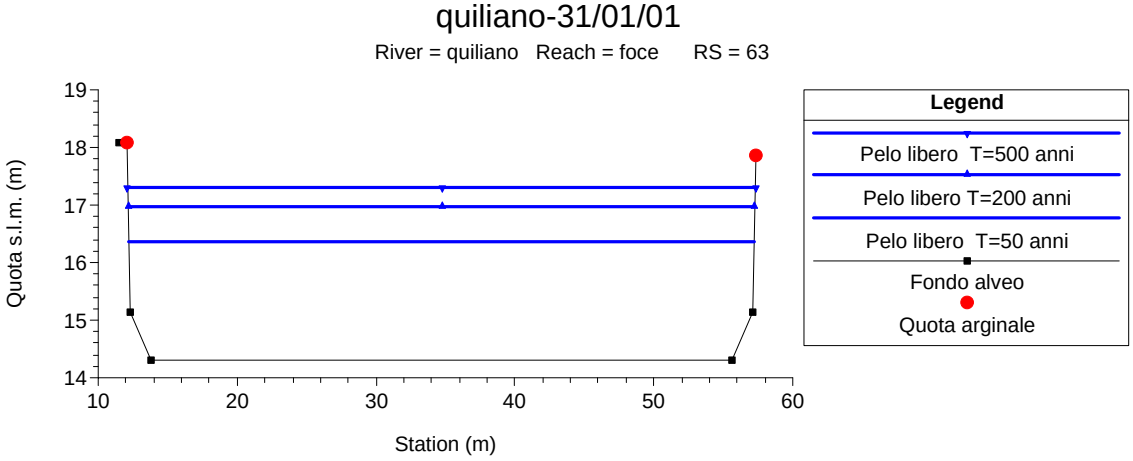
QUILIANO – Sezioni trasversali

QUILIANO 31/01/01



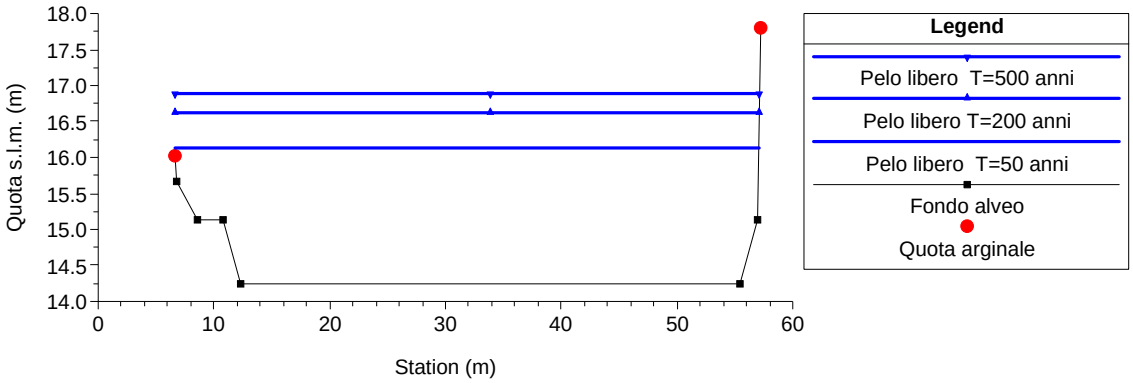






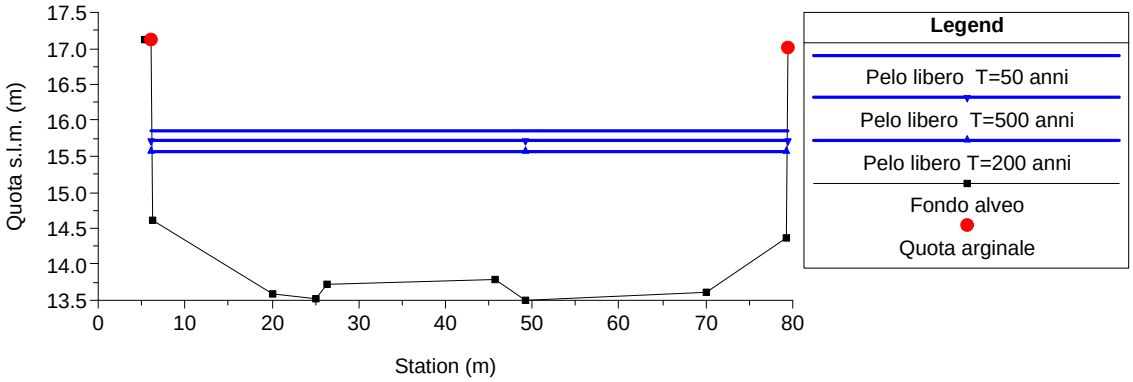
quiliano-31/01/01

River = quiliano Reach = foce RS = 62



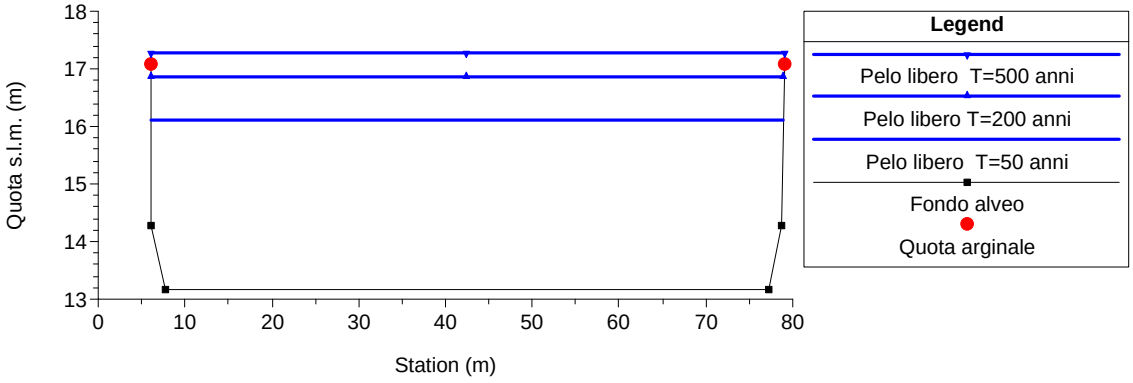
quiliano-31/01/01

River = quiliano Reach = foce RS = 61



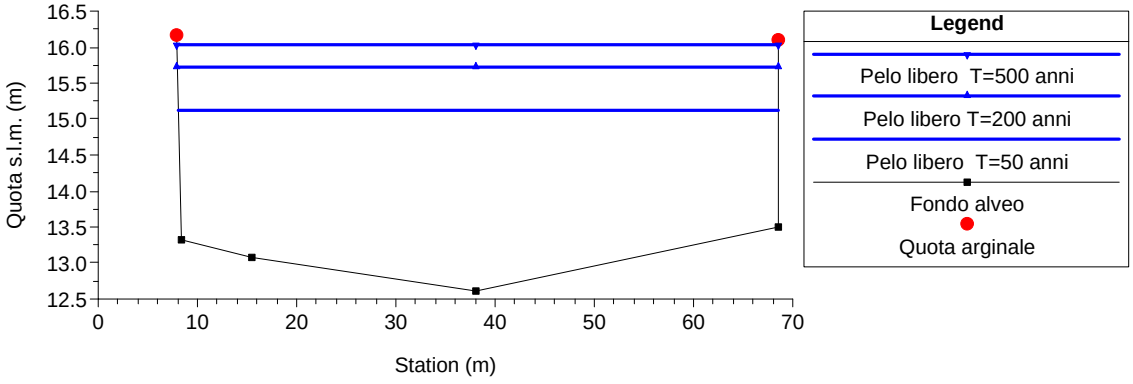
quiliano-31/01/01

River = quiliano Reach = foce RS = 60



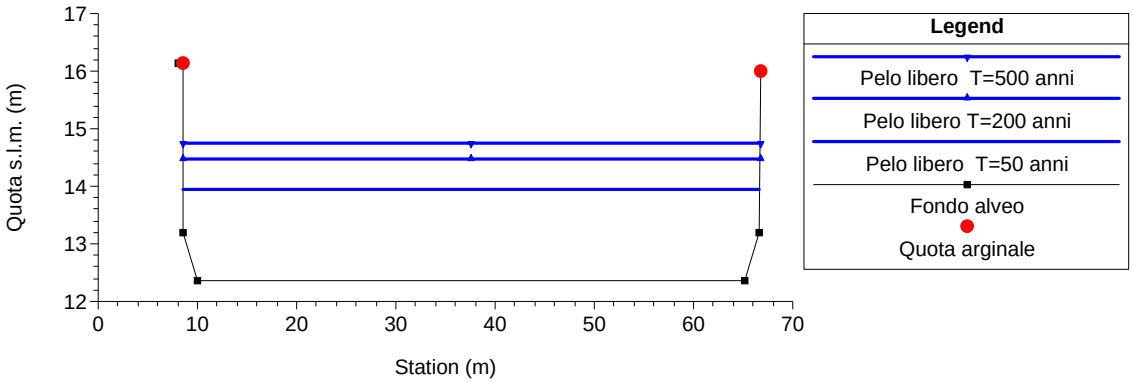
quiliano-31/01/01

River = quiliano Reach = foce RS = 59



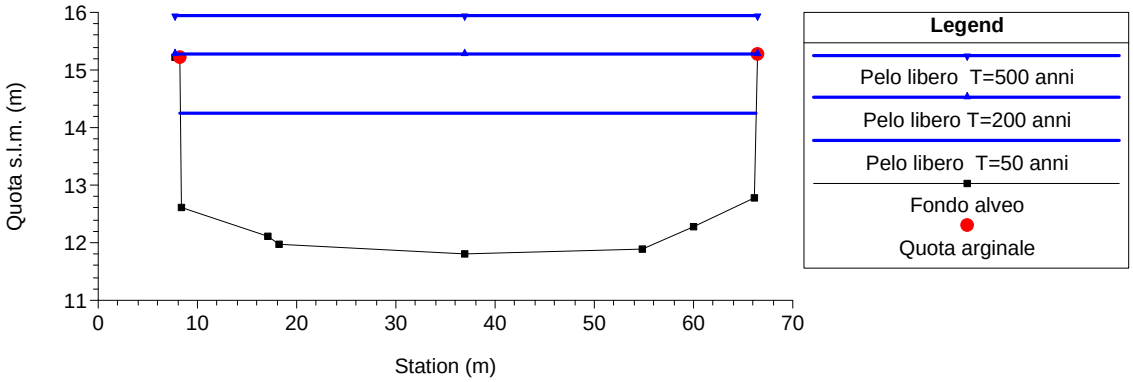
quiliano-31/01/01

River = quiliano Reach = foce RS = 58



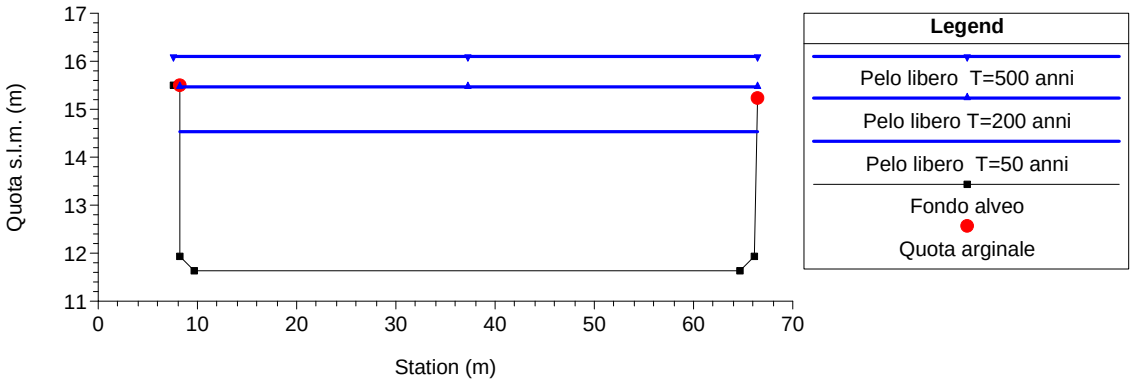
quiliano-31/01/01

River = quiliano Reach = foce RS = 57



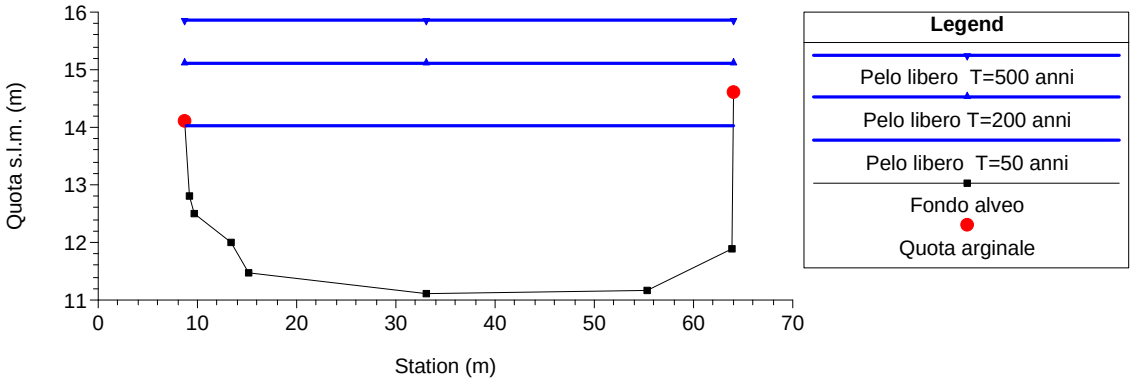
quiliano-31/01/01

River = quiliano Reach = foce RS = 56



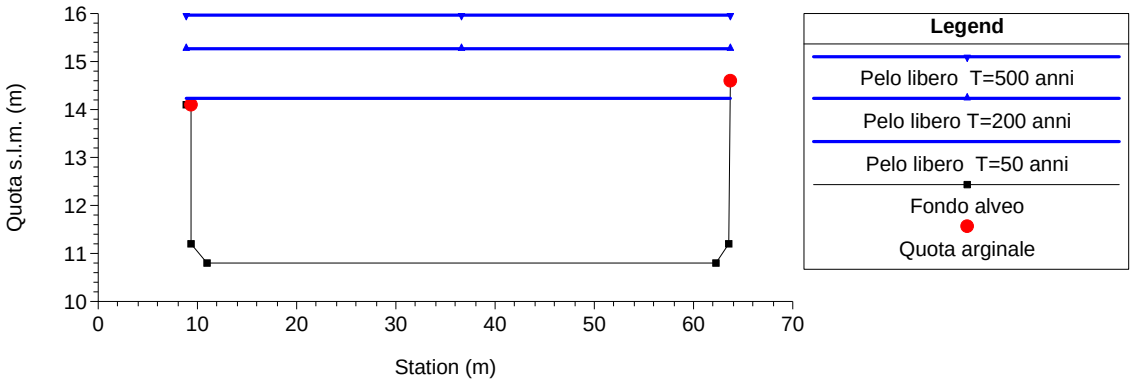
quiliano-31/01/01

River = quiliano Reach = foce RS = 55



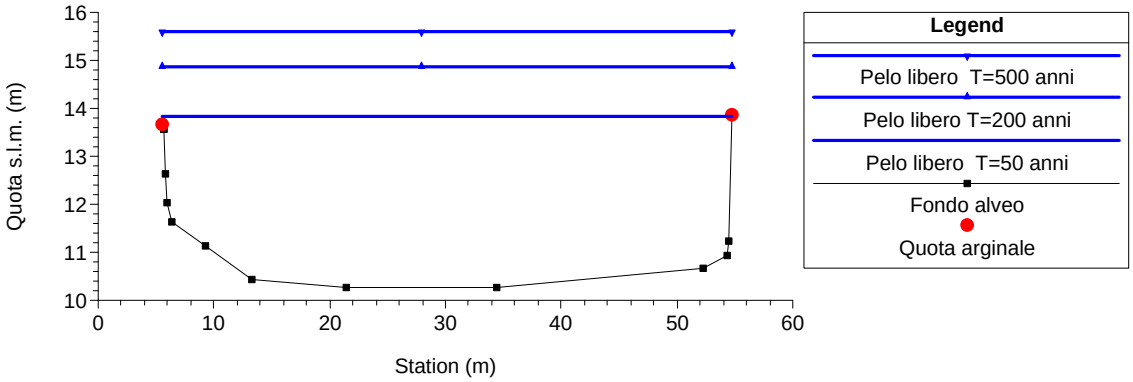
quiliano-31/01/01

River = quiliano Reach = foce RS = 54



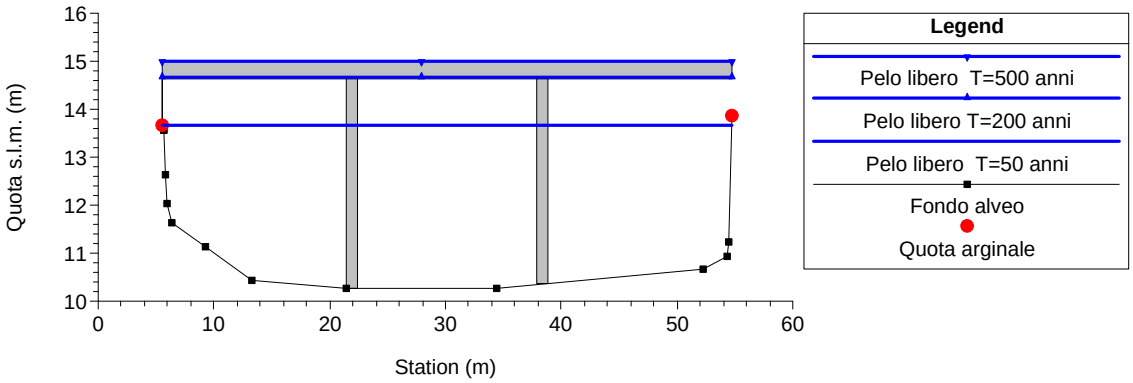
quiliano-31/01/01

River = quiliano Reach = foce RS = 53.6



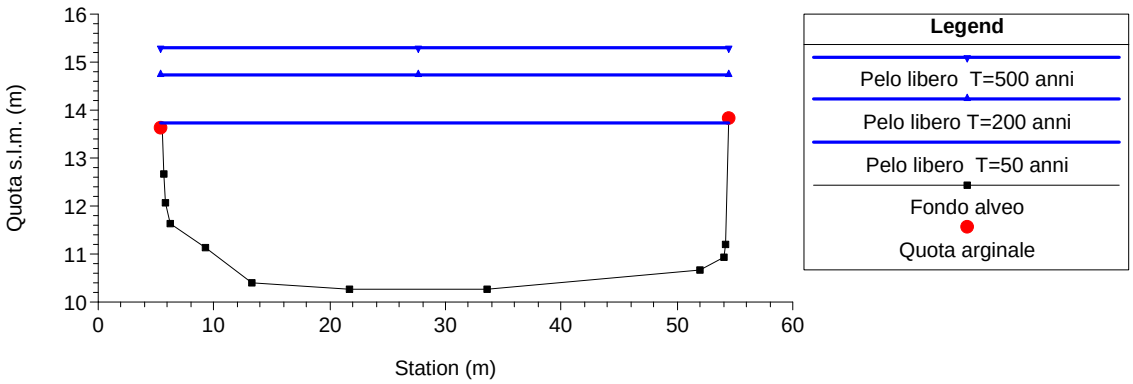
quiliano-31/01/01

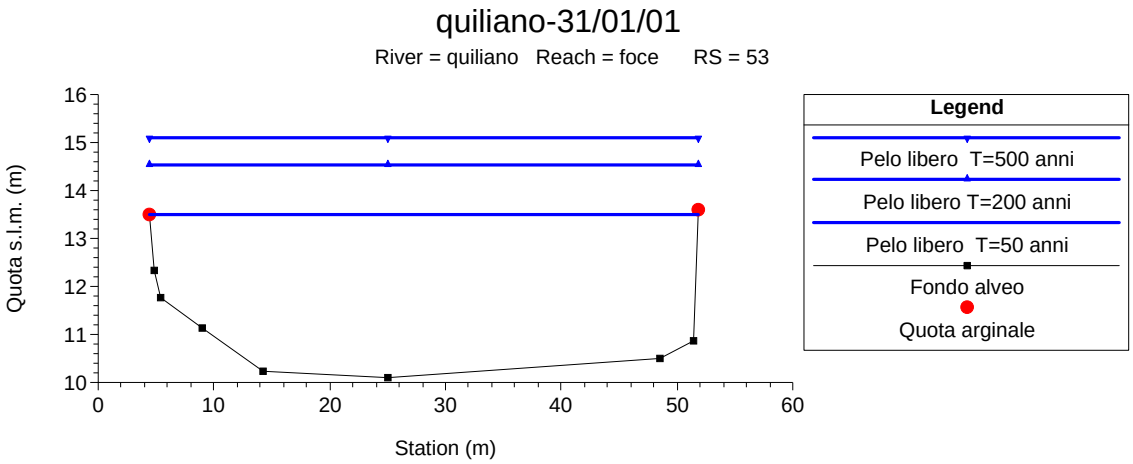
River = quiliano Reach = foce RS = 53.5 BR U

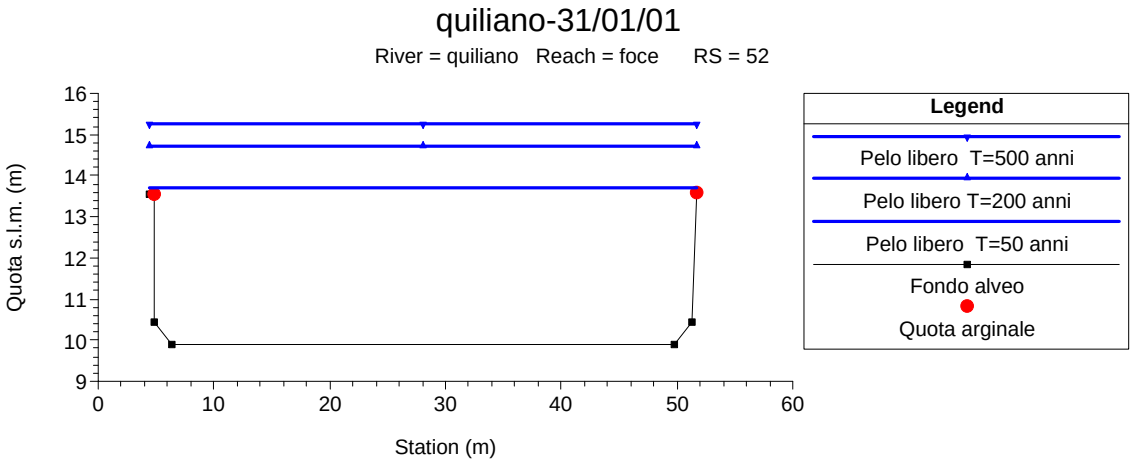


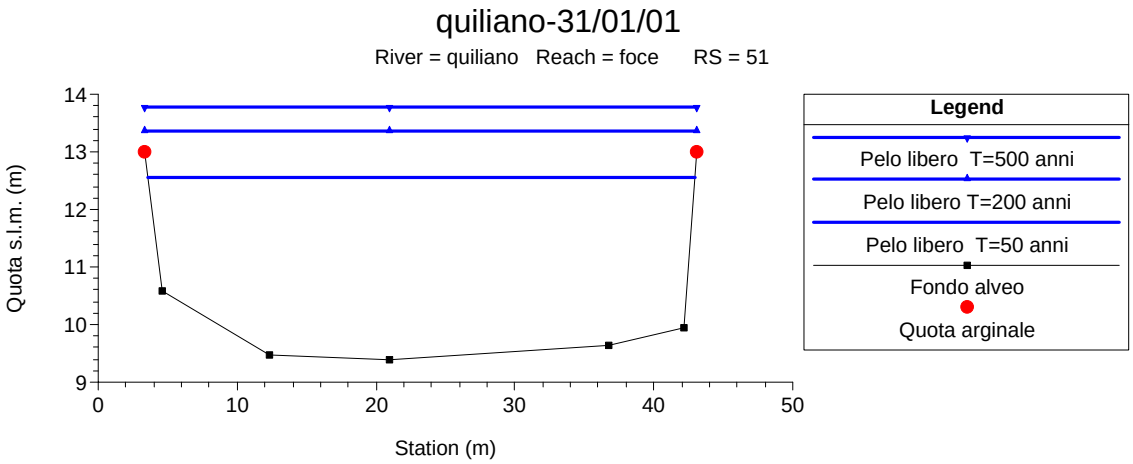
quiliano-31/01/01

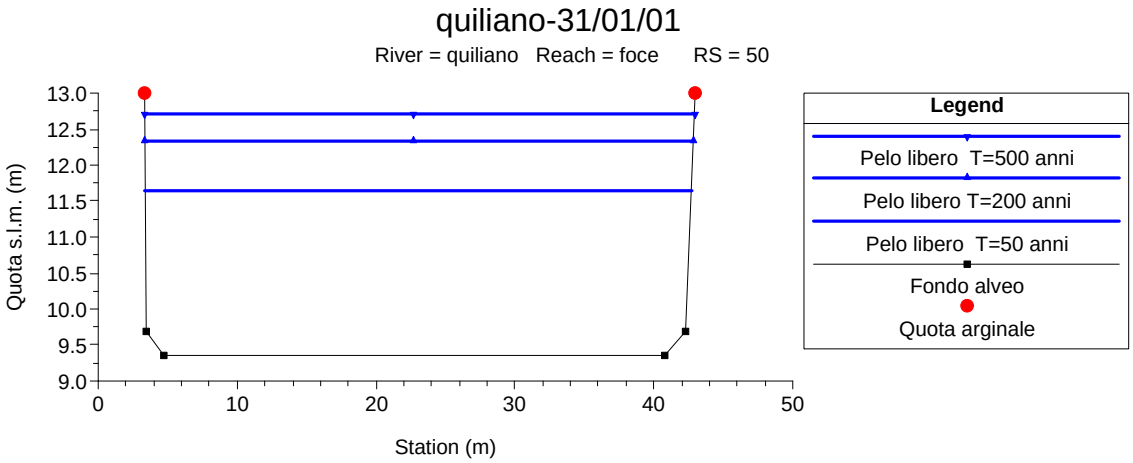
River = quiliano Reach = foce RS = 53.4




quiliano-31/01/01
River = quiliano Reach = foce RS = 53
Quota s.l.m. (m)
Station (m)
Legend
Pelo libero T=500 anni
Pelo libero T=200 anni
Pelo libero T=50 anni
Fondo alveo
Quota arginale

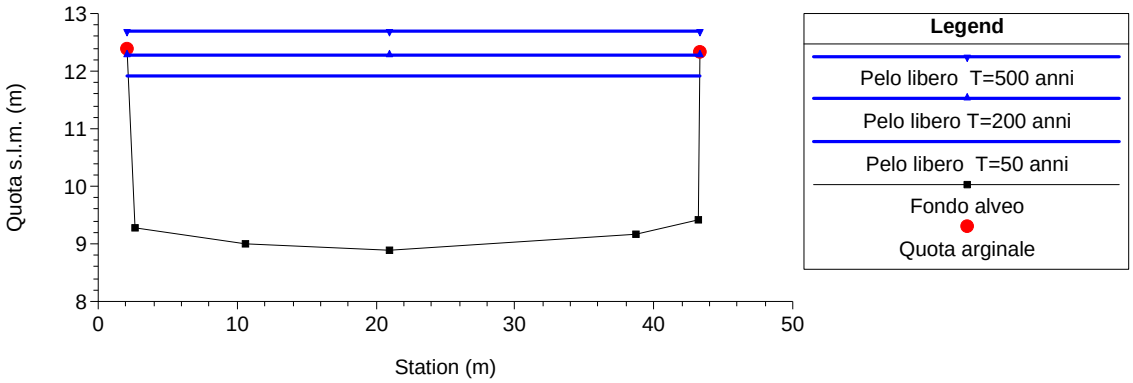

quiliano-31/01/01
River = quiliano Reach = foce RS = 52
Quota s.l.m. (m)
Station (m)
Legend
Pelo libero T=500 anni
Pelo libero T=200 anni
Pelo libero T=50 anni
Fondo alveo
Quota arginale


quiliano-31/01/01
River = quiliano Reach = foce RS = 51
Quota s.l.m. (m)
Station (m)
Legend
Pelo libero T=500 anni
Pelo libero T=200 anni
Pelo libero T=50 anni
Fondo alveo
Quota arginale


quiliano-31/01/01
River = quiliano Reach = foce RS = 50
Quota s.l.m. (m)
Station (m)
Legend
Pelo libero T=500 anni
Pelo libero T=200 anni
Pelo libero T=50 anni
Fondo alveo
Quota arginale

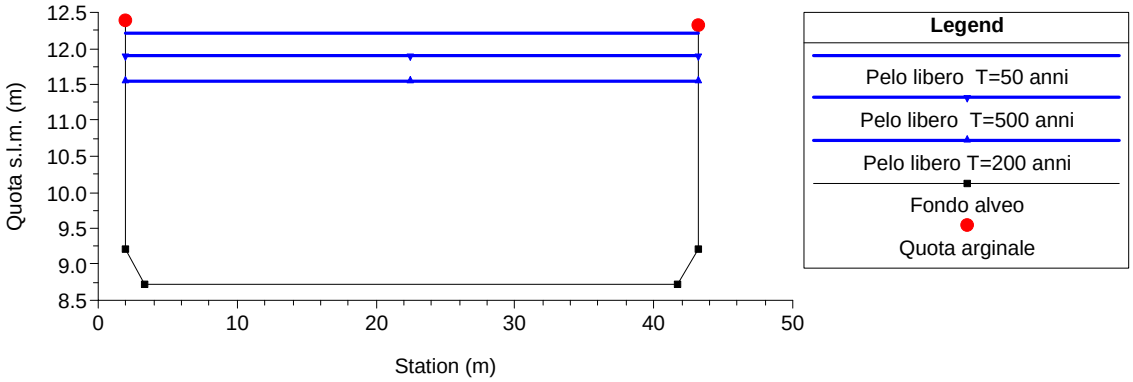
quiliano-31/01/01

River = quiliano Reach = foce RS = 49



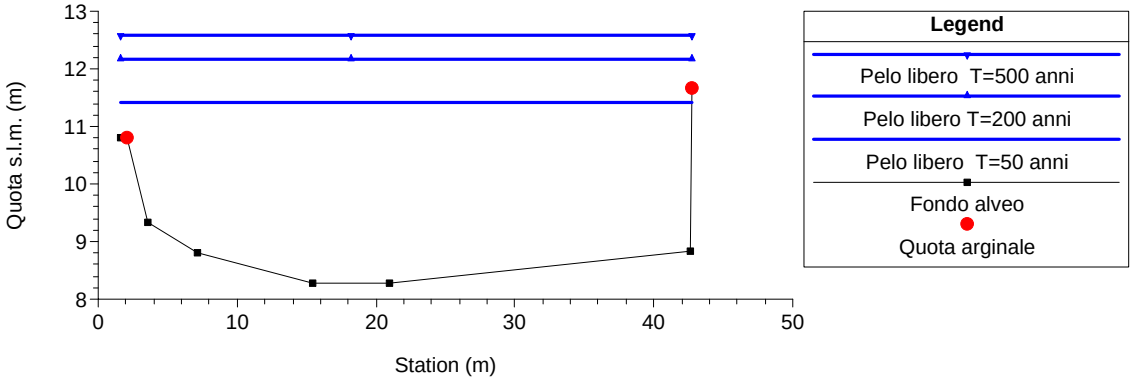
quiliano-31/01/01

River = quiliano Reach = foce RS = 48



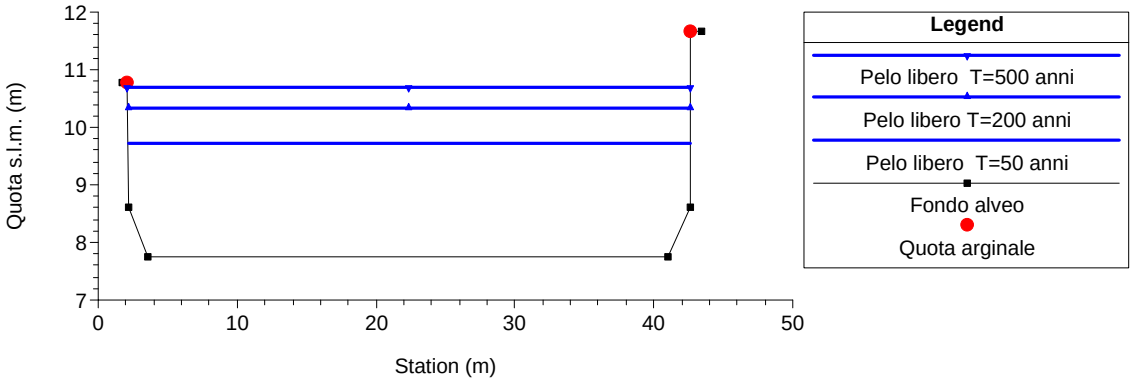
quiliano-31/01/01

River = quiliano Reach = foce RS = 47



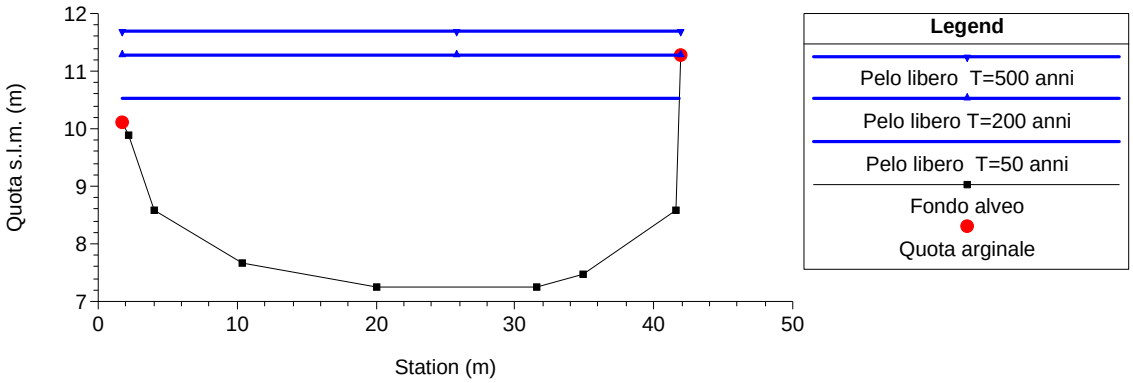
quiliano-31/01/01

River = quiliano Reach = foce RS = 46



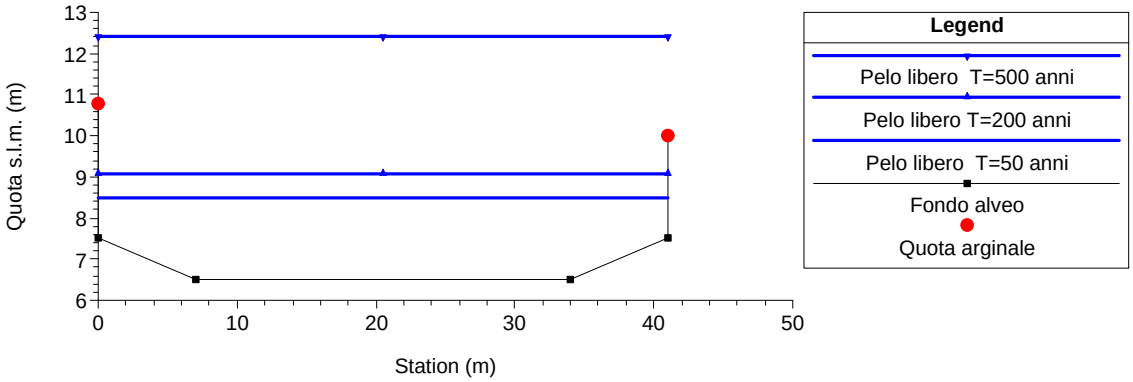
quiliano-31/01/01

River = quiliano Reach = foce RS = 45



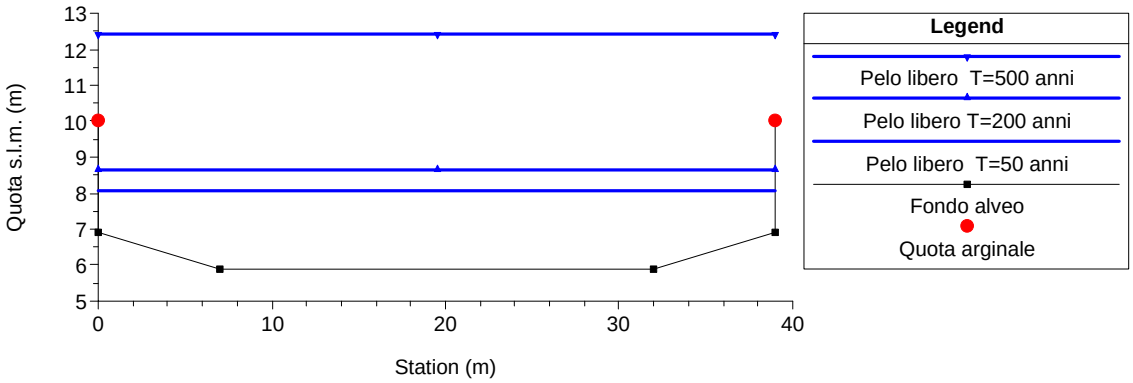
quiliano-31/01/01

River = quiliano Reach = foce RS = 44



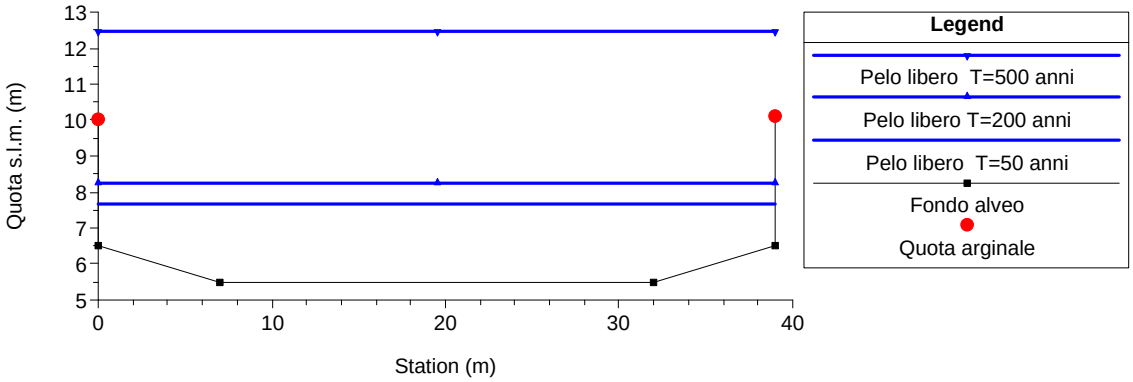
quiliano-31/01/01

River = quiliano Reach = foce RS = 43



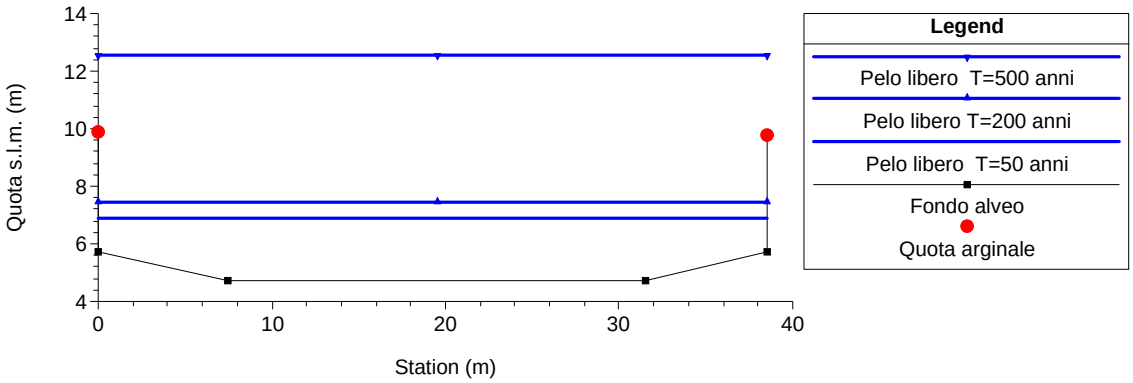
quiliano-31/01/01

River = quiliano Reach = foce RS = 42



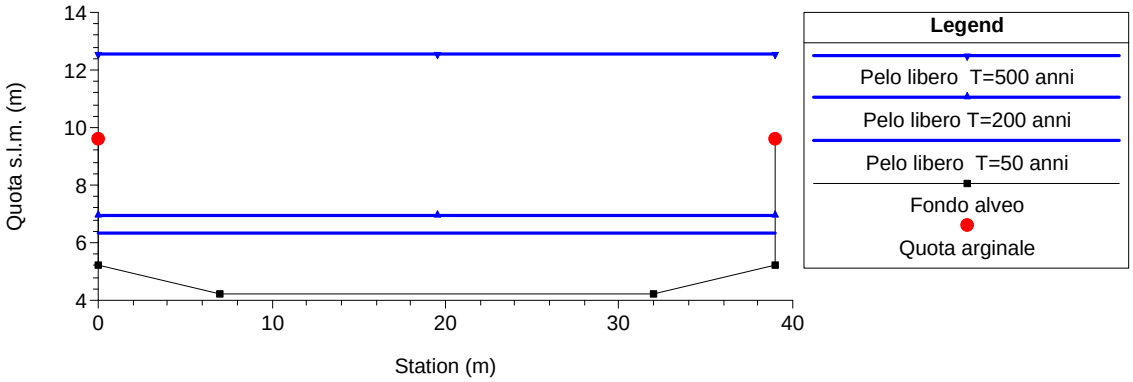
quiliano-31/01/01

River = quiliano Reach = foce RS = 41



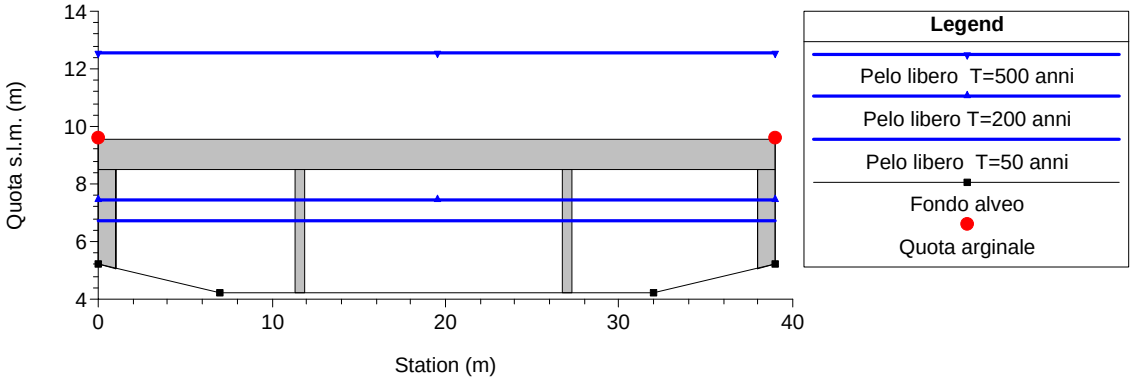
quiliano-31/01/01

River = quiliano Reach = foce RS = 40



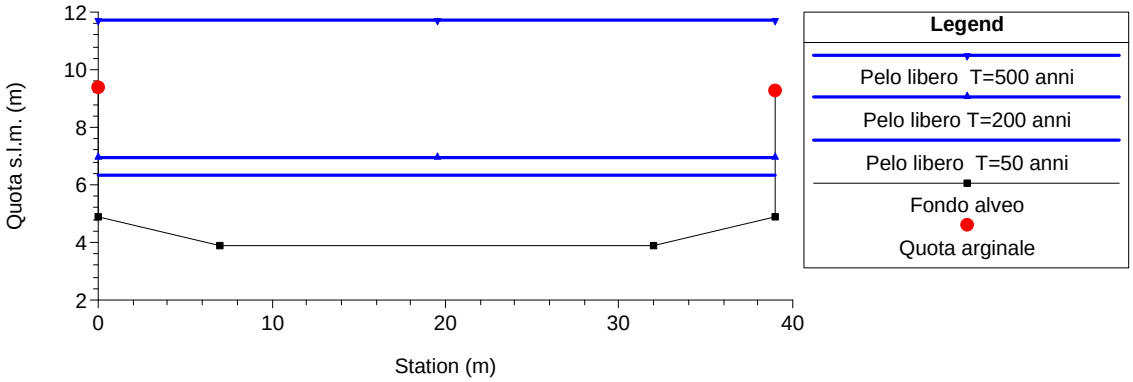
quiliano-31/01/01

River = quiliano Reach = foce RS = 39 BR U



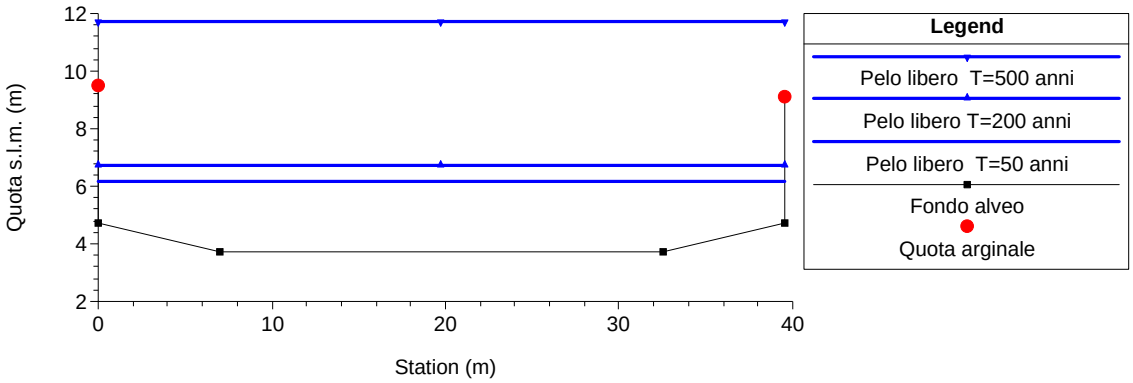
quiliano-31/01/01

River = quiliano Reach = foce RS = 38



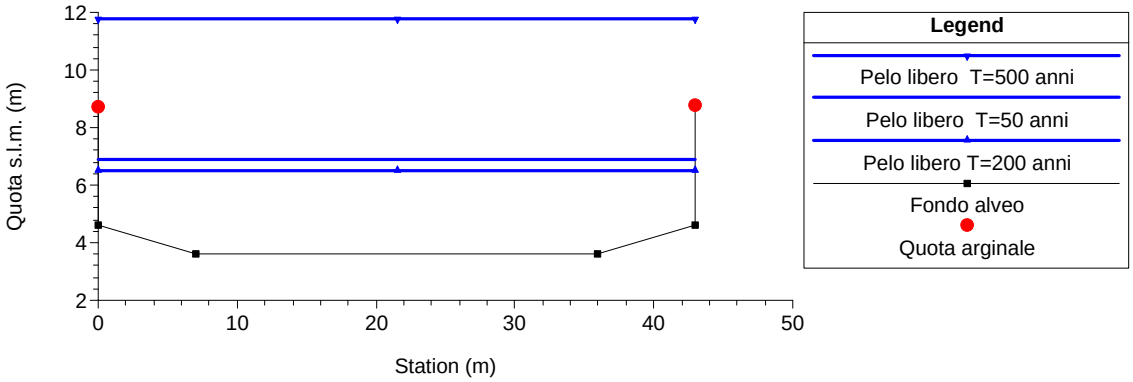
quiliano-31/01/01

River = quiliano Reach = foce RS = 37



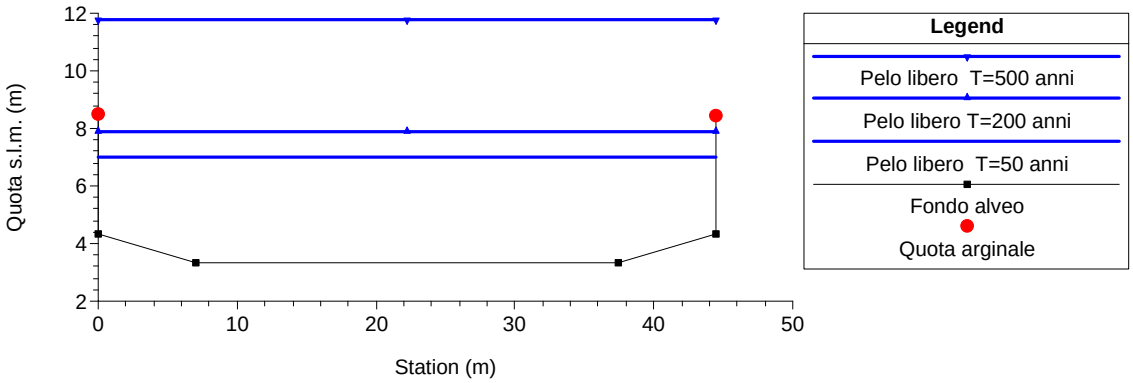
quiliano-31/01/01

River = quiliano Reach = foce RS = 36



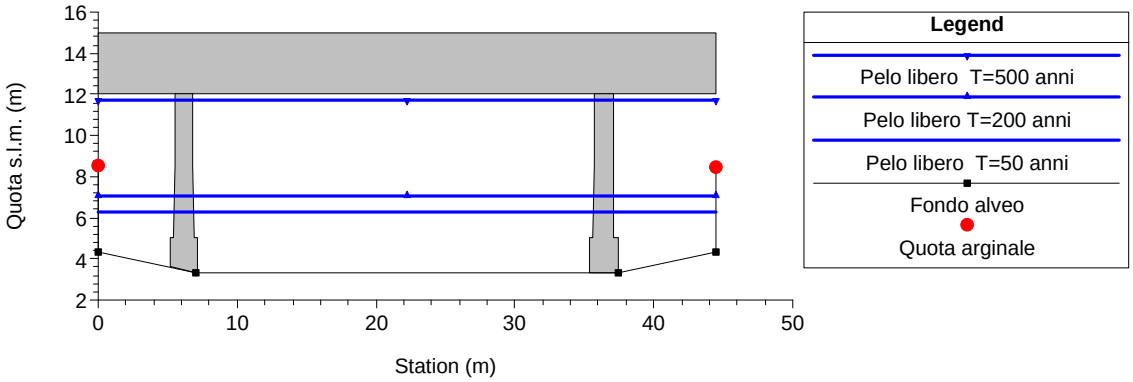
quiliano-31/01/01

River = quiliano Reach = foce RS = 35



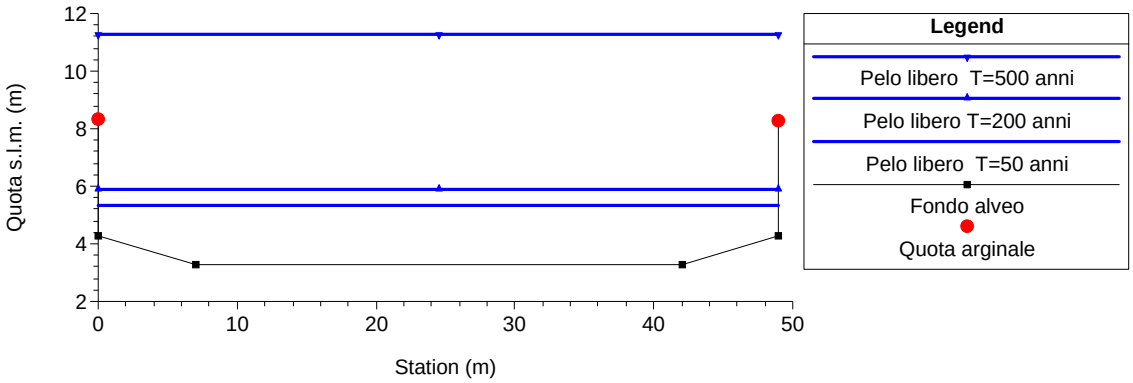
quiliano-31/01/01

River = quiliano Reach = foce RS = 34 BR U



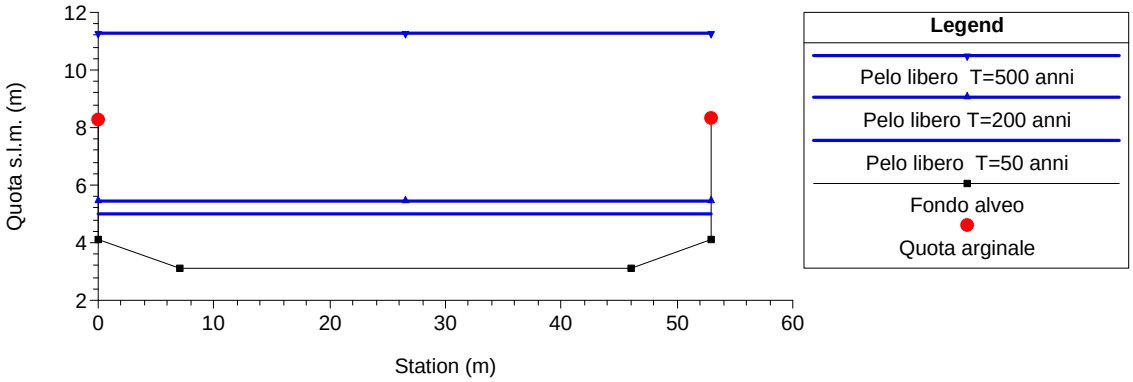
quiliano-31/01/01

River = quiliano Reach = foce RS = 33



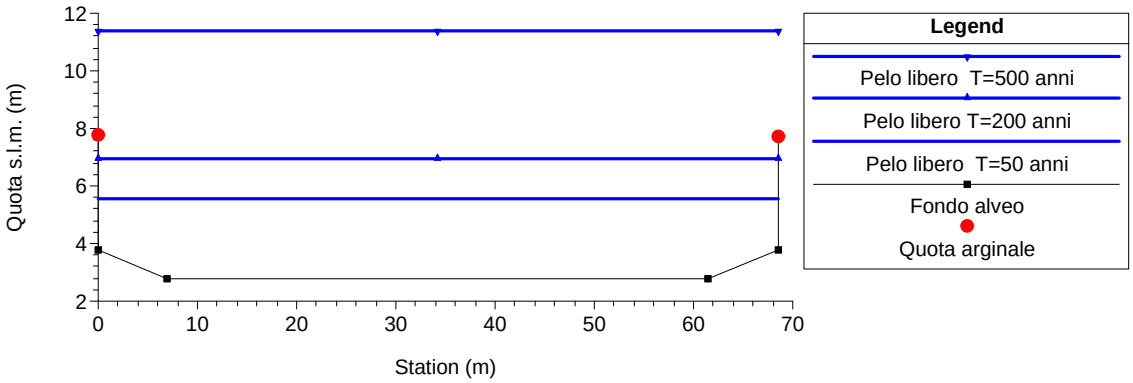
quiliano-31/01/01

River = quiliano Reach = foce RS = 32



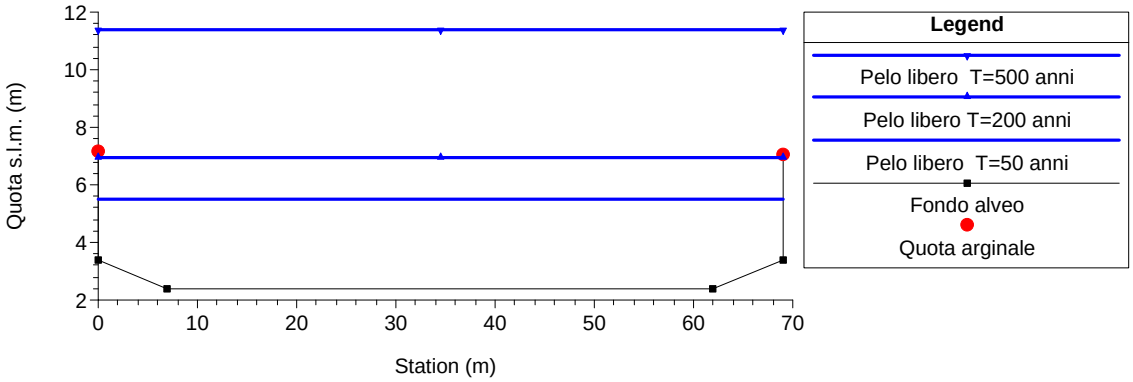
quiliano-31/01/01

River = quiliano Reach = foce RS = 31



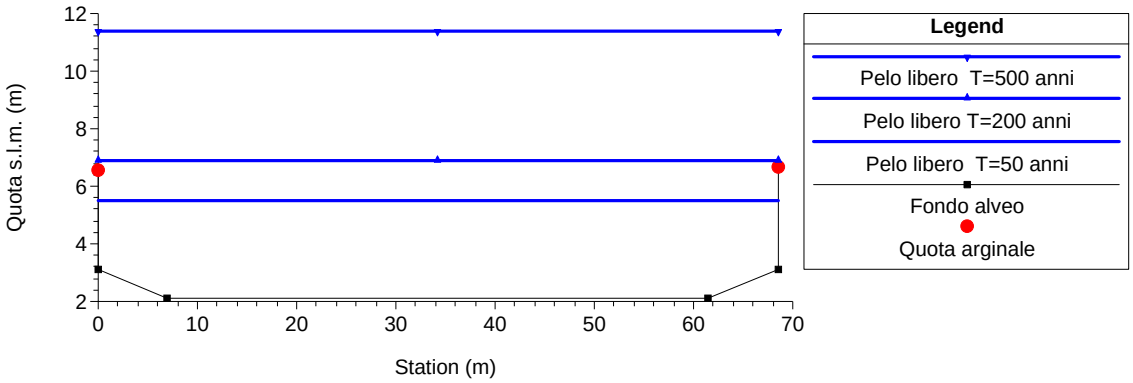
quiliano-31/01/01

River = quiliano Reach = foce RS = 30



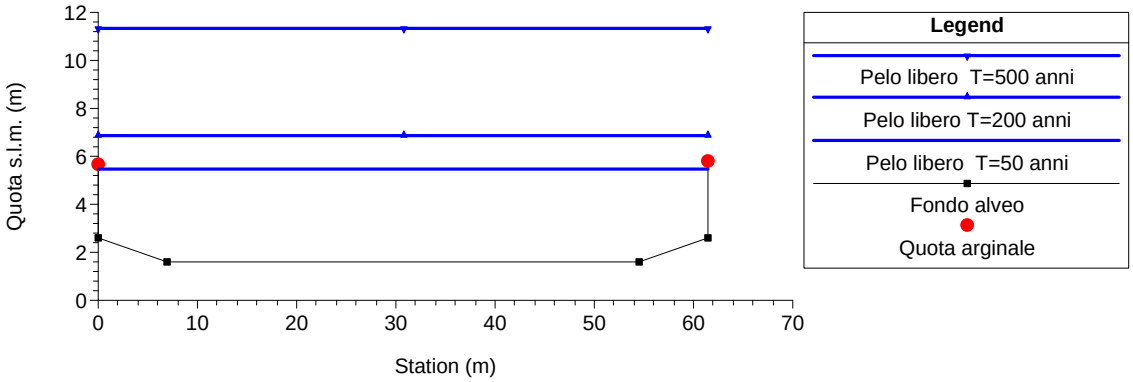
quiliano-31/01/01

River = quiliano Reach = foce RS = 29



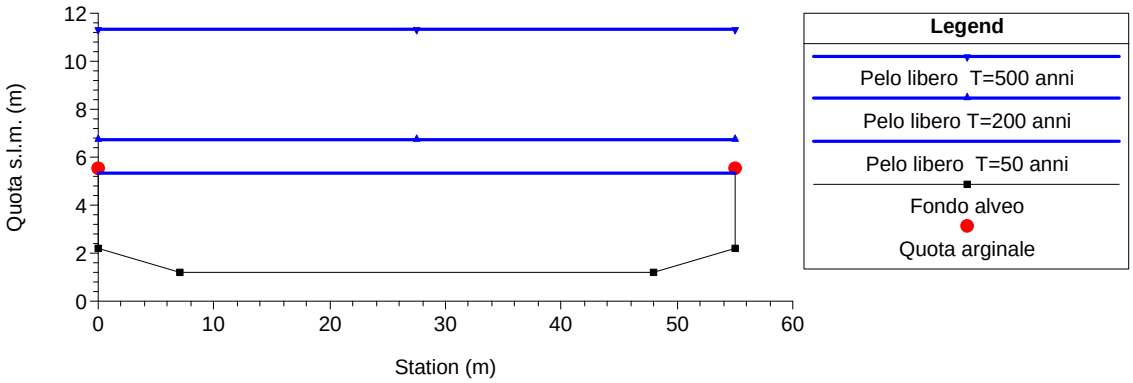
quiliano-31/01/01

River = quiliano Reach = foce RS = 28



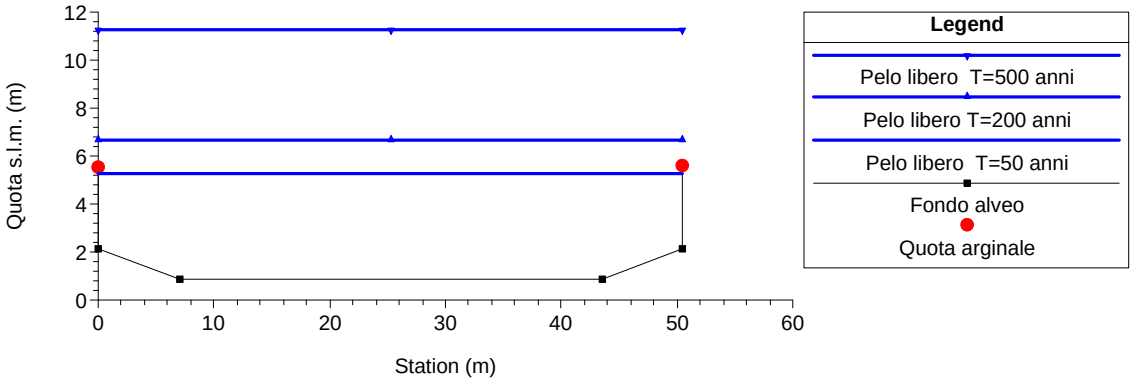
quiliano-31/01/01

River = quiliano Reach = foce RS = 27



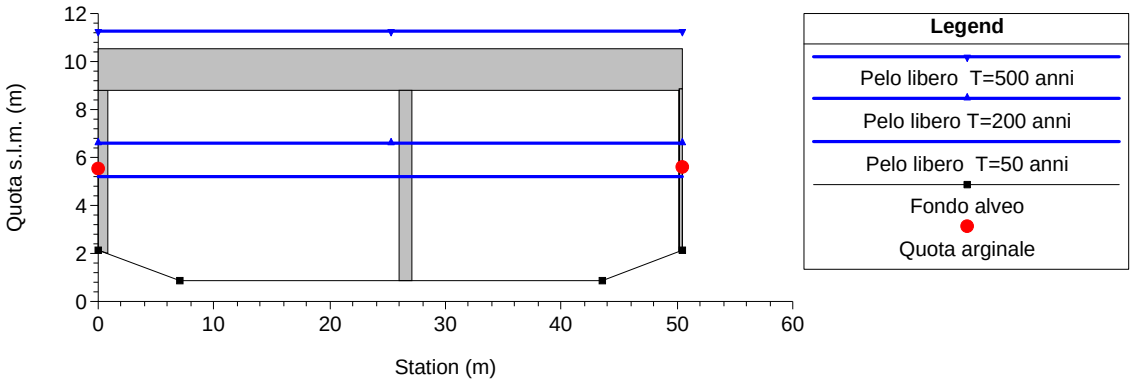
quiliano-31/01/01

River = quiliano Reach = foce RS = 26



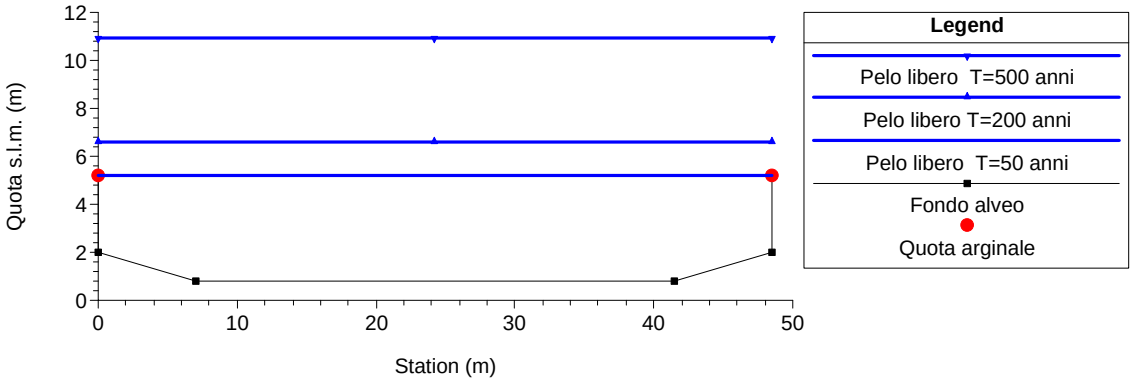
quiliano-31/01/01

River = quiliano Reach = foce RS = 25 BR U



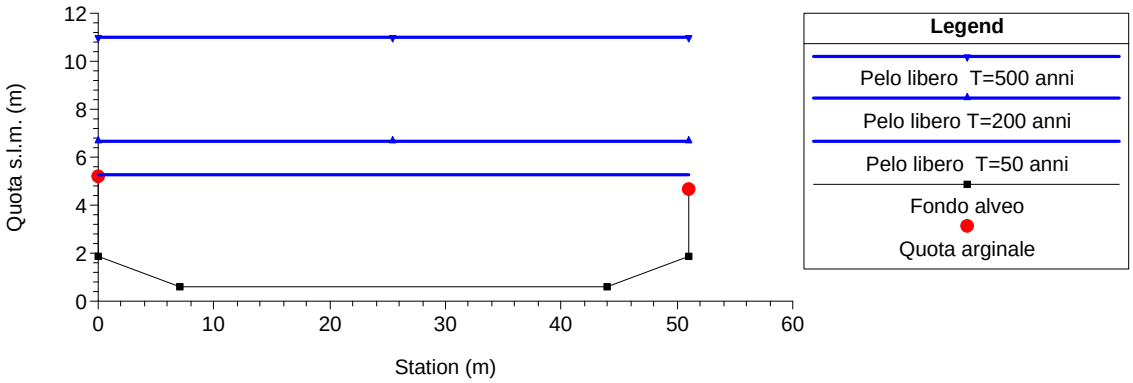
quiliano-31/01/01

River = quiliano Reach = foce RS = 24



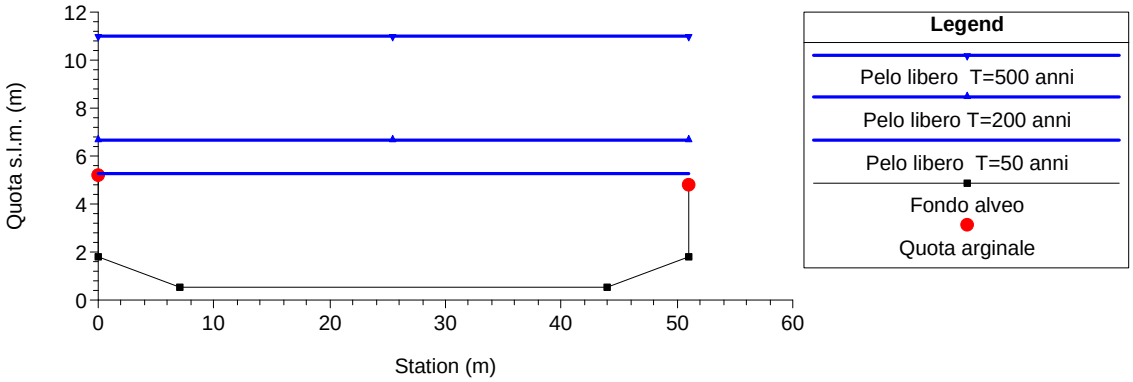
quiliano-31/01/01

River = quiliano Reach = foce RS = 23



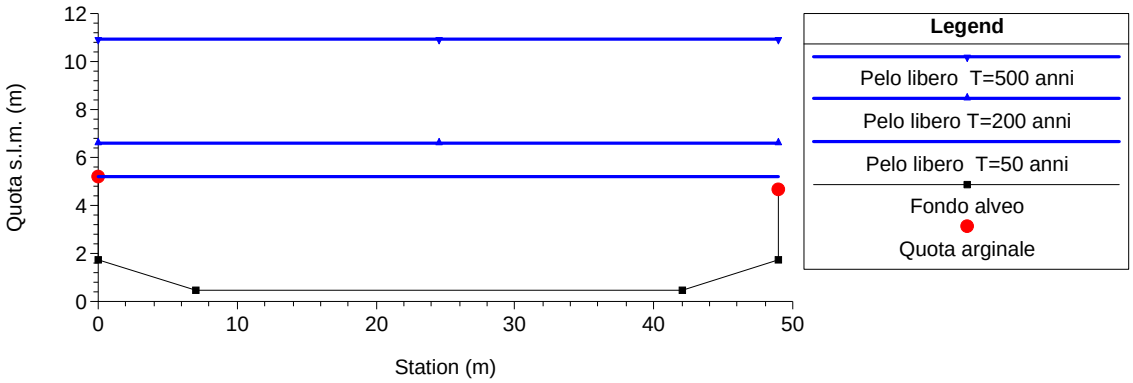
quiliano-31/01/01

River = quiliano Reach = foce RS = 22



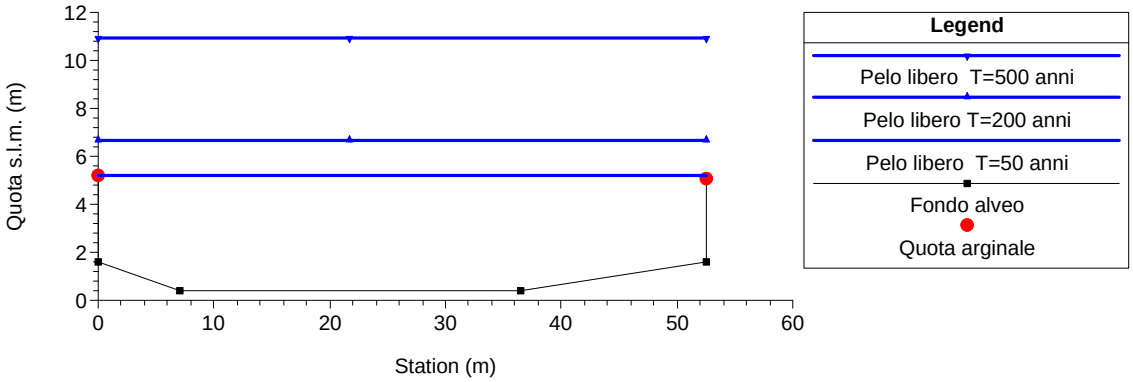
quiliano-31/01/01

River = quiliano Reach = foce RS = 21



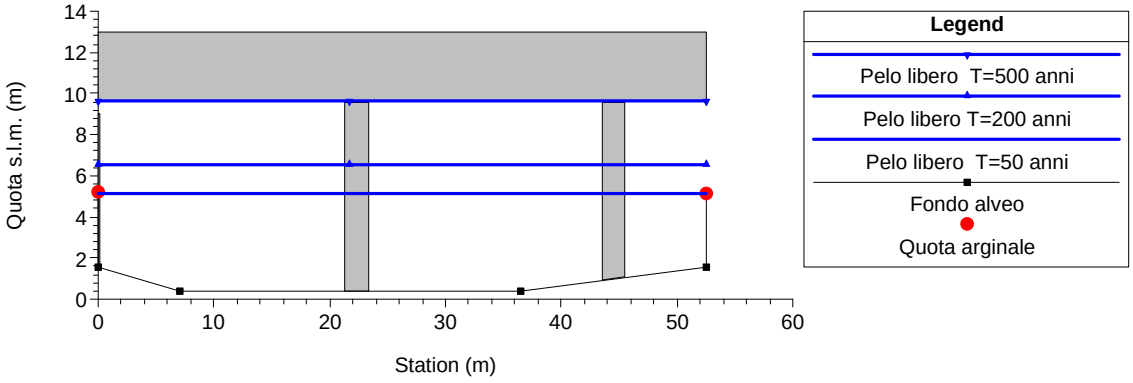
quiliano-31/01/01

River = quiliano Reach = foce RS = 20



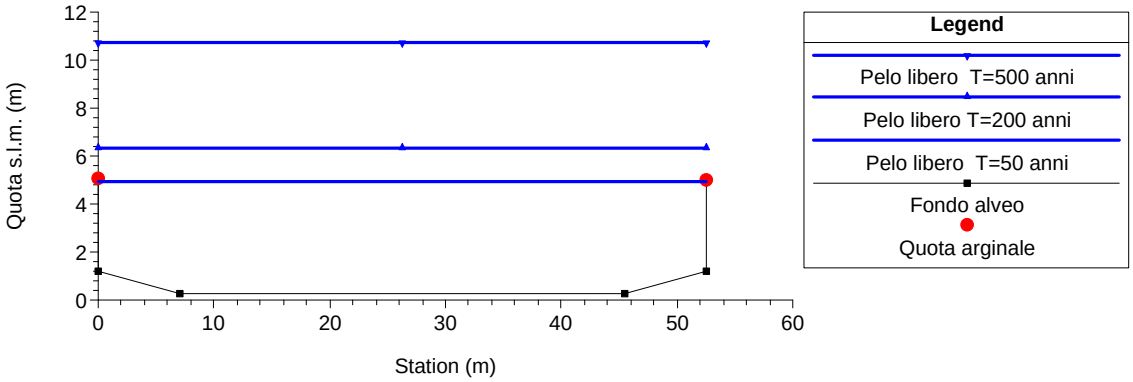
quiliano-31/01/01

River = quiliano Reach = foce RS = 19 BR U



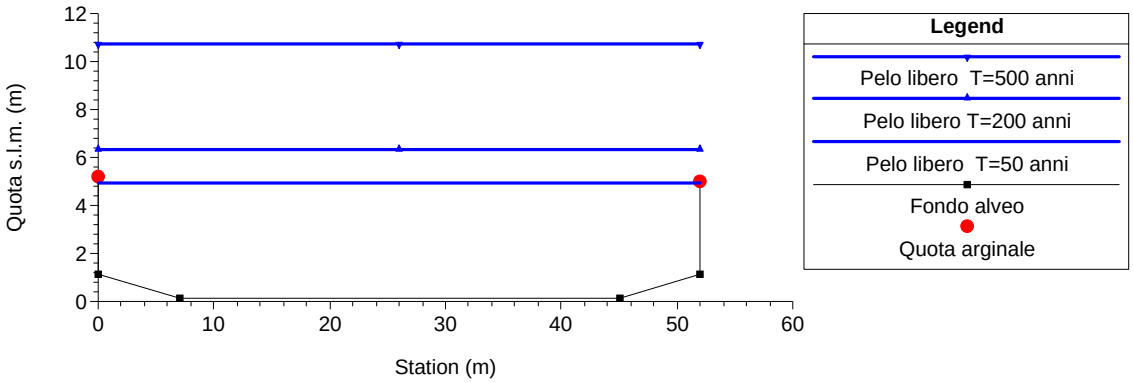
quiliano-31/01/01

River = quiliano Reach = foce RS = 18



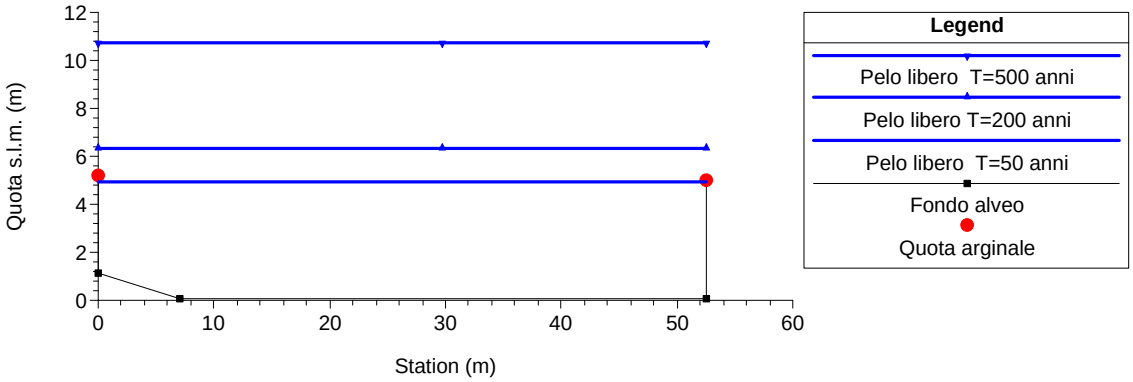
quiliano-31/01/01

River = quiliano Reach = foce RS = 17



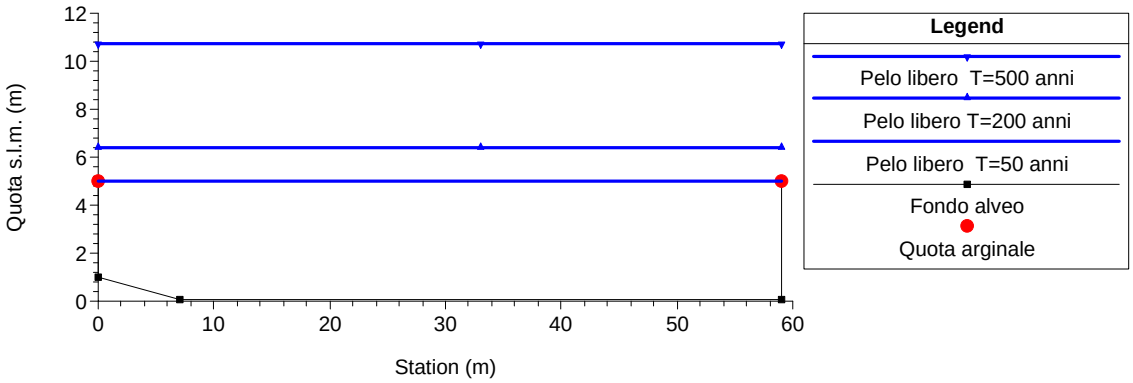
quiliano-31/01/01

River = quiliano Reach = foce RS = 16



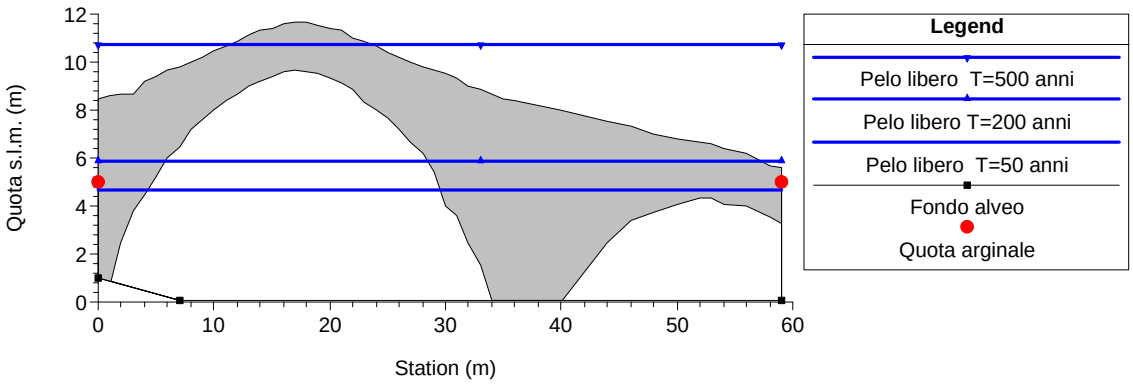
quiliano-31/01/01

River = quiliano Reach = foce RS = 15



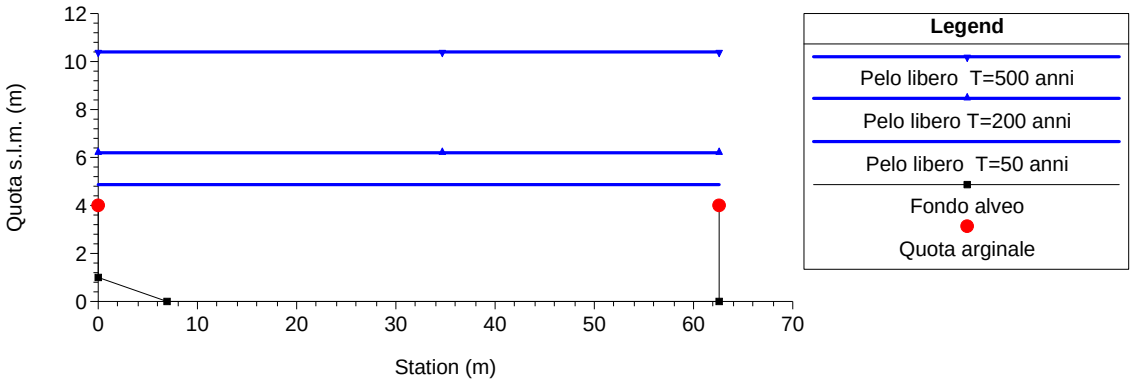
quiliano-31/01/01

River = quiliano Reach = foce RS = 14 BR U



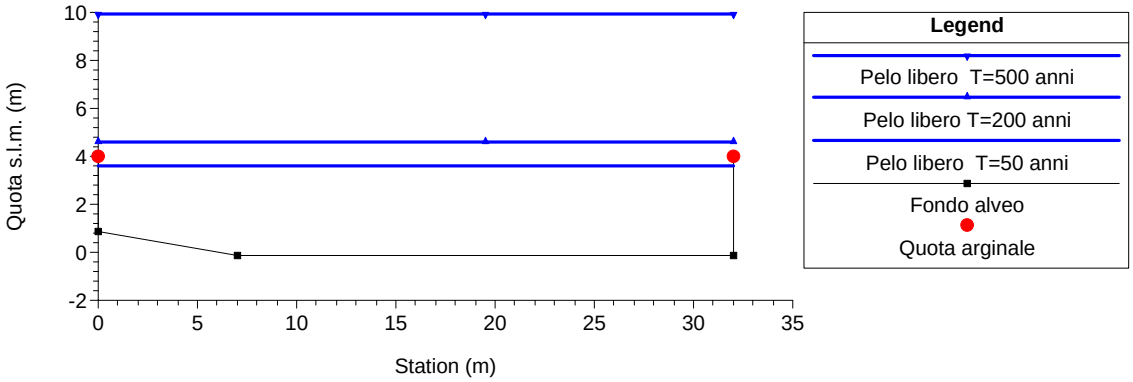
quiliano-31/01/01

River = quiliano Reach = foce RS = 13



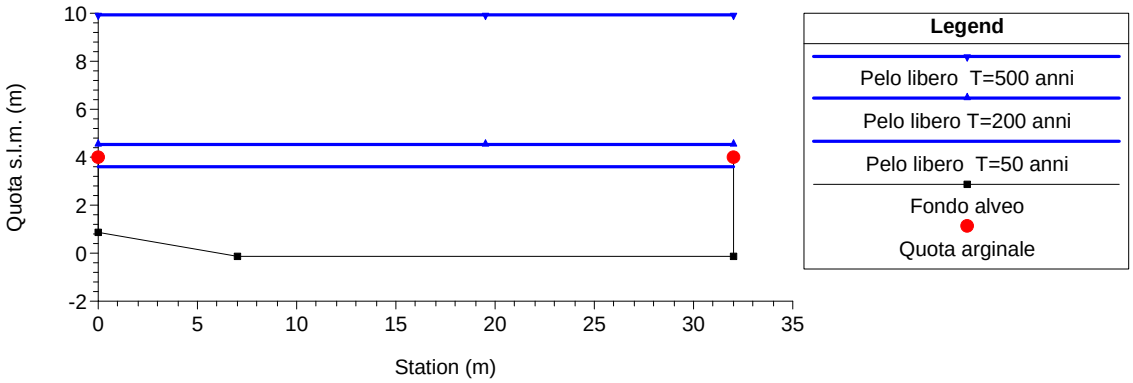
quiliano-31/01/01

River = quiliano Reach = foce RS = 12.5



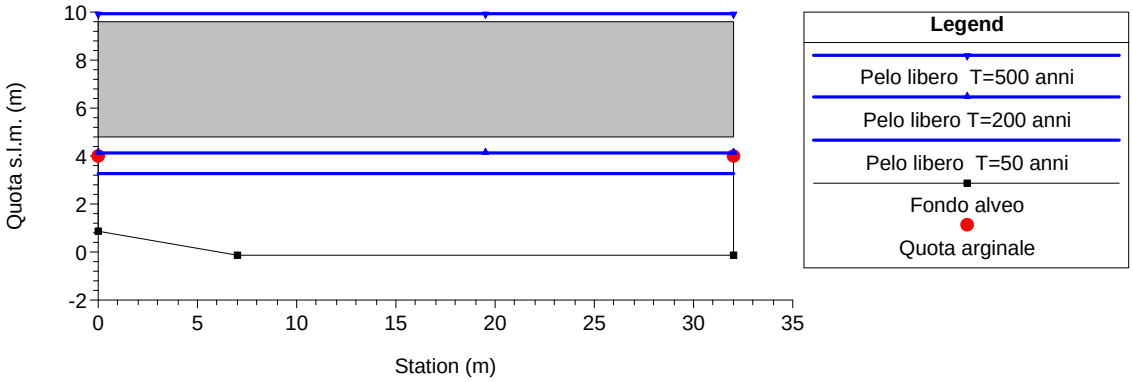
quiliano-31/01/01

River = quiliano Reach = foce RS = 12



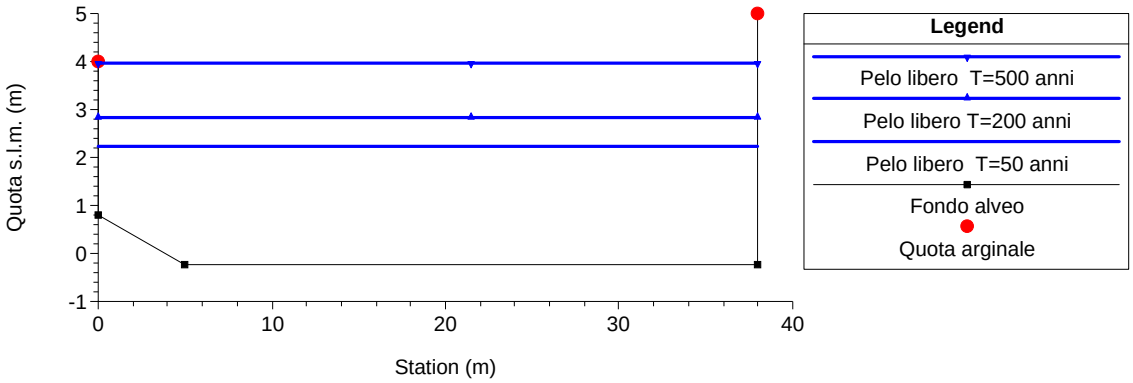
quiliano-31/01/01

River = quiliano Reach = foce RS = 11 BR U



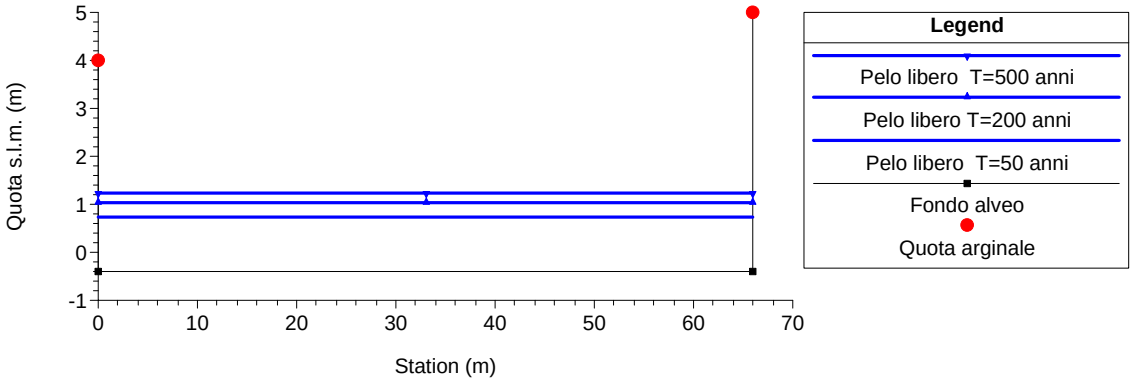
quiliano-31/01/01

River = quiliano Reach = foce RS = 10



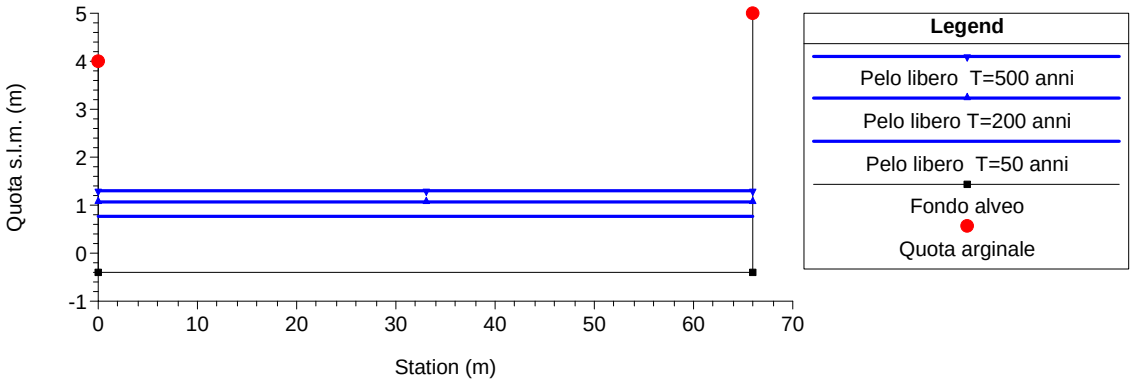
quiliano-31/01/01

River = quiliano Reach = foce RS = 9



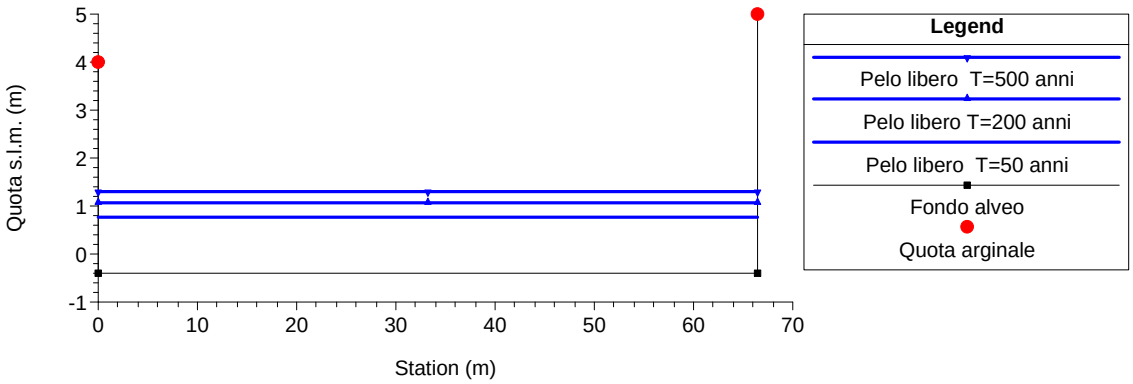
quiliano-31/01/01

River = quiliano Reach = foce RS = 8



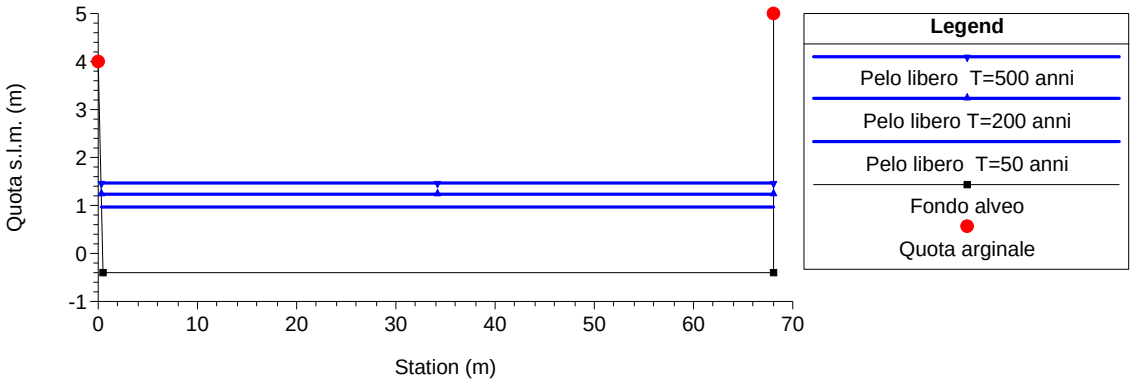
quiliano-31/01/01

River = quiliano Reach = foce RS = 7



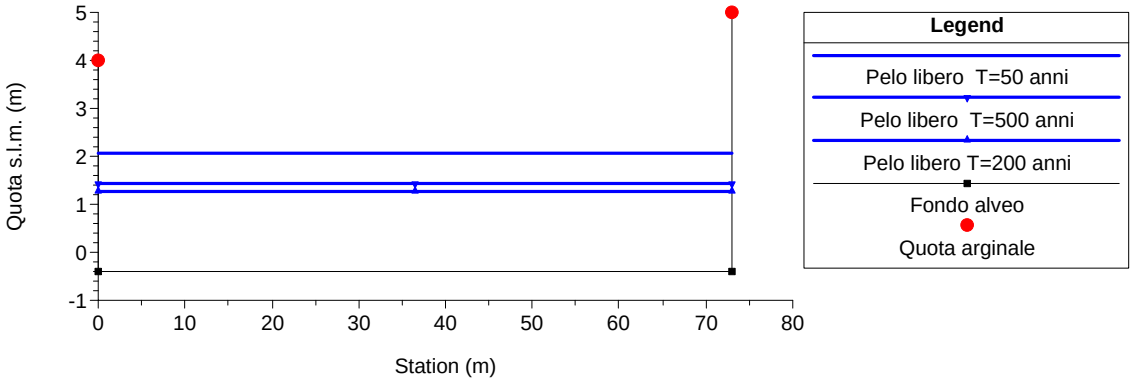
quiliano-31/01/01

River = quiliano Reach = foce RS = 6



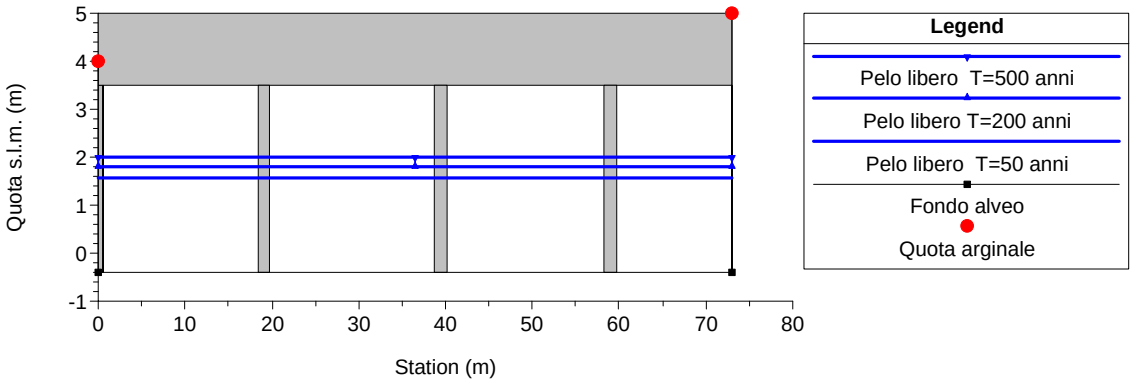
quiliano-31/01/01

River = quiliano Reach = foce RS = 5



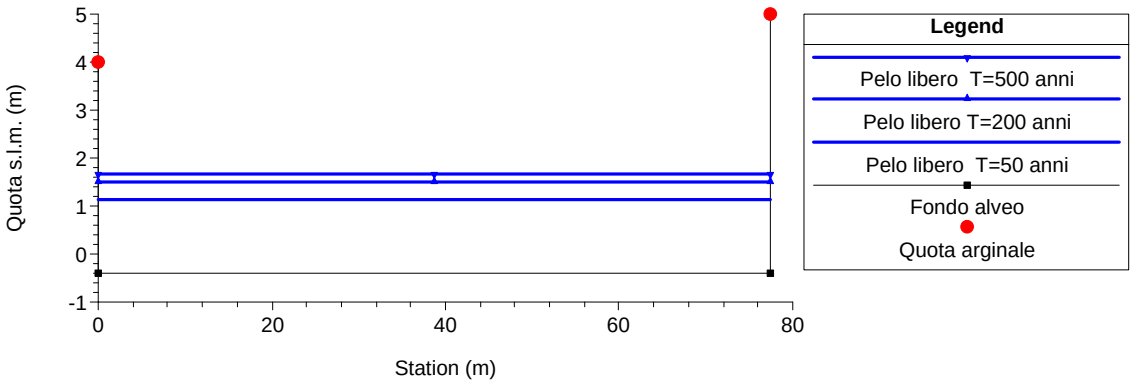
quiliano-31/01/01

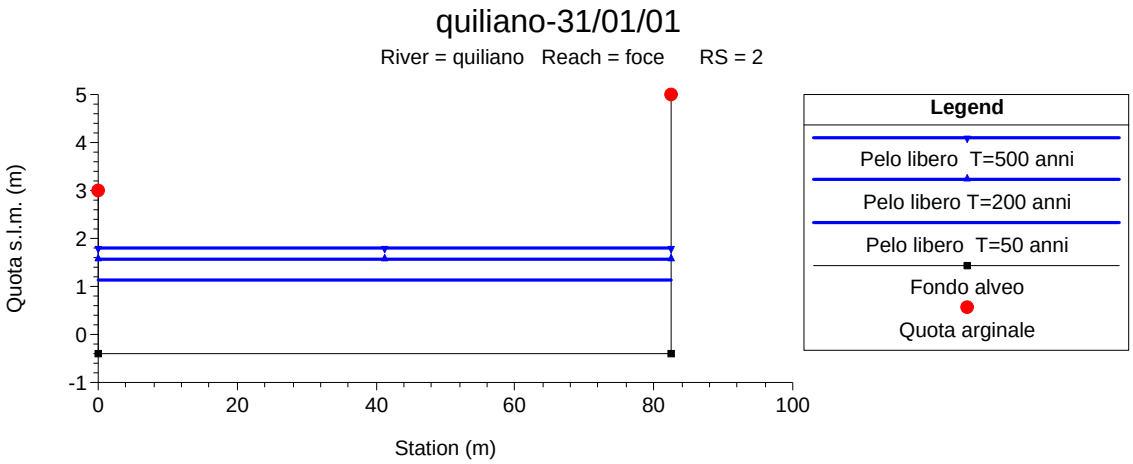
River = quiliano Reach = foce RS = 4 BR U

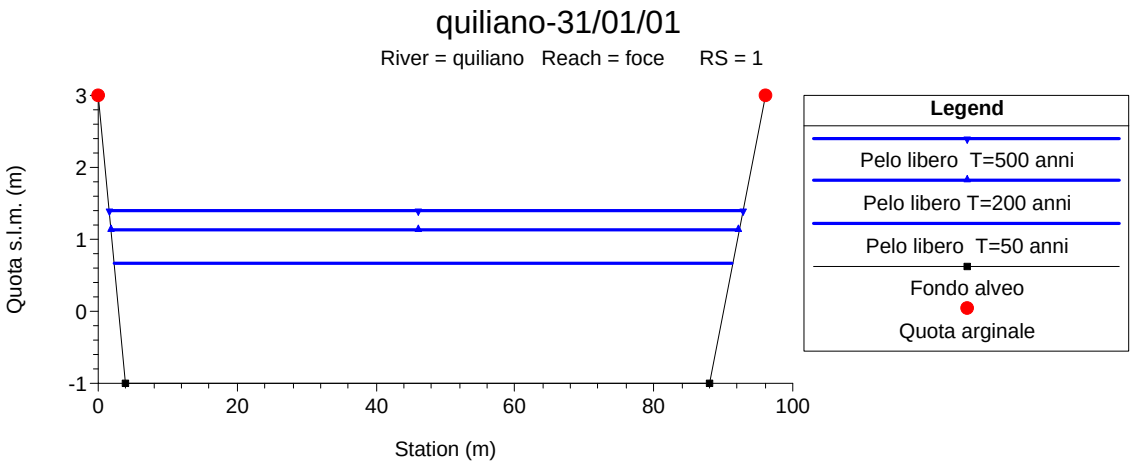


quiliano-31/01/01

River = quiliano Reach = foce RS = 3




quiliano-31/01/01
River = quiliano Reach = foce RS = 2
Quota s.l.m. (m)
Station (m)
Legend
Pelo libero T=500 anni
Pelo libero T=200 anni
Pelo libero T=50 anni
Fondo alveo
Quota arginale


quiliano-31/01/01
River = quiliano Reach = foce RS = 1
Quota s.l.m. (m)
Station (m)
Legend
Pelo libero T=500 anni
Pelo libero T=200 anni
Pelo libero T=50 anni
Fondo alveo
Quota arginale

MODELLAZIONE IDRAULICA IN CONDIZIONI DI MOTO PERMANENTE:
TABELLE DELLE GRANDEZZE IDRAULICHE SIGNIFICATIVE PER LE PORTATE T=50, 200, 500 ANNI

QUILIANO stato attuale al 31/01/01

- **Loc. Becchi**
- **T. Trexenda**
- **Quiliano monte**
- **Quiliano foce**

Dalle analisi effettuate con la configurazione dell'alveo allo stato attuale (31/01/01) è derivata la redazione delle Tavv. 9 (fasce di inondabilità), 11 (rischio idraulico) e 14 (aree inondabili).

Torrente Quiliano T=50 anni										
Sezioni	Portata totale	Fondo alveo	Argine sinistro	Argine destro	Pelo libero	Profondità critica	Energia (m2)	Velocità (m/s)	Area bagnata	N° Froude
121	242	50.2	52.3	52.2	54.59	3.78	55.84	4.95	48.84	0.78
120	242	49.6	59.2	50.7	53.54	3.94	55.38	6	40.3	1.01
119	242	49	62.6	50.9	51.45	3.17	53.98	7.05	34.31	1.66
118	242	48.7	55	50.5	52.46	2.93	53.04	3.38	71.59	0.62
117	242	48.5	55	55.4	52.46	2.88	53	3.28	73.84	0.57
116.5	Bridge									
116	242	48.3	55	55.4	52.05	2.93	52.72	3.61	67.05	0.65
115	242	48.2	51.7	50.6	52.14	2.76	52.64	3.15	76.92	0.54
114	337	46.7	52	47.6	50.53	3.83	52.41	6.06	55.57	1.01
113	337	45.7	51.8	47.7	49.3	4.01	51.52	6.59	51.12	1.22
112	337	45.3	50.5	49.1	50.45	3.76	51.07	3.47	97.24	0.54
111	337	45.1	50.3	50.9	49.14	4.04	50.86	5.81	57.98	1.01
110	337	44.7	48.5	52.1	49.37	3.62	50.31	4.3	78.45	0.66
109	337	44.3	51.8	53.3	48.38	4.08	50.01	5.66	59.55	1
108	337	43.9	46.1	50.5	48.1	3.13	48.84	3.8	88.6	0.62
107	337	43.1	45.3	44.7	48.08	3.26	48.68	3.41	98.89	0.5
106	337	42.4	47.4	44.1	48.08	3.57	48.58	3.13	107.7	0.45
105	337	42	47.3	43.6	46.29	4.29	48.31	6.31	53.43	1
104	337	41.8	47.1	45.3	44.3	3.18	46.69	6.85	49.19	1.65
103	337	39.79	43.05	42.75	43.09	3.53	44.47	5.21	64.6	1.15
102	337	38.97	42.53	40.07	42.12	3.35	43.57	5.35	62.92	1.14
101	337	37.5	41.94	39.97	41.53	4.3	43.03	5.44	61.22	1.17
100	337	37.68	40.25	39.48	41.22	3.17	42.03	4	82.93	0.77
99	337	36.63	39.06	38.69	39.91	3.69	41.53	5.78	55.01	1.2
98	337	34.31	35.4	37.08	38.15	4.44	40.26	6.81	42.46	1.36
97	337	33.33	35.73	36.54	36.91	4.36	39.4	7.04	47.12	1.55
96	337	33.16	35.7	35.7	36.7	4.06	38.51	6.25	47.88	1.21
95	337	32.2	34.31	34.42	35.22	3.73	37.58	7.09	43.23	1.45
94	337	31.48	33.95	33.51	33.99	3.26	36.33	6.8	49.2	1.59
93	337	30.89	33.34	33.92	33.18	2.92	35.12	6.18	54.41	1.46
92	337	30.04	39.33	35.7	33.98	2.5	34.27	2.41	139.66	0.44
91	337	29.66	34.87	34.56	33.92	2.48	34.22	2.41	139.66	0.4
90.5	Bridge									
90	337	29.66	34.87	34.56	32.33	2.48	33.22	4.16	80.94	0.88
89	337	27.9	31.81	33.59	31.38	3.18	32.28	4.22	79.84	0.84
88	337	27.77	31.01	31.07	31.1	2.68	31.9	3.96	85.11	0.71
87	337	26.62	30.95	33	30.1	3.48	31.54	5.3	63.53	1.01
86	337	25.28	29.35	29.84	29.65	3.47	30.56	4.23	79.69	0.69
85	337	25.31	28.82	29.29	29.52	3.31	30.37	4.09	82.38	0.67
84	337	24.22	28.2	28.9	29.36	3.66	30.12	3.88	86.48	0.57
83	337	24.06	28.51	28.63	29.31	3.28	29.88	3.37	99.81	0.48
82.5	Bridge									
82	337	24.06	28.51	28.63	27.76	3.28	28.97	4.87	69.26	0.83
81	337	23.33	26.59	27.31	27.26	3.52	28.56	5.06	66.45	0.84
80	337	22.73	25.98	26.01	27.15	3.6	28.18	4.49	74.56	0.7
79	337	22.46	25.5	25.48	26.98	3.47	27.91	4.26	78.84	0.65
78	337	20.97	25.1	25.08	27.13	3.85	27.68	3.31	101.18	0.45
77.5	Bridge									
77	337	20.94	25.1	25.08	24.8	3.86	26.44	5.67	59.4	1
76	337	19.66	23.99	24.4	22.48	3.31	24.68	6.56	51.34	1.29
75	337	18.97	23.11	23.39	22.01	3.34	23.91	6.1	55.23	1.17
74	337	18.4	22.5	22.3	21.64	3.52	23.53	6.1	55.27	1.16
73	337	17.2	21.4	21.4	20.43	3.39	22.19	5.87	57.42	1.09

72	337	16.2	20.6	20.3	19.79	3.2	21.02	4.93	68.42	0.84
71	337	15.11	19.26	18.85	18.93	3.56	20.24	5.06	66.57	0.89
70.5	Bridge									
70	337	15.11	19.26	18.85	18.67	3.56	20.21	5.5	61.33	1
69	337	14.6	18	18	17.62	3.21	19.37	5.86	57.5	1.1
68	337	14.37	17.3	17.5	17	3.09	18.96	6.2	54.36	1.31
67	337	14.03	17.32	17.2	17.5	2.83	18.39	4.18	80.5	0.73

Torrente Quiliano 31/01/01 T=50 anni										
Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
66	590	14.68	18.2	18.18	18.15	2.64	18.9	3.83	154.1	0.66
65	590	14.45	18.26	17.6	17.4	2.95	18.7	5.04	117.11	1
64	590	14.33	18.2	17.88	16.33	2.63	18.59	6.67	88.48	1.52
63	590	14.3	18.08	17.85	16.36	2.63	18.49	6.47	91.14	1.45
62	590	14.25	16.03	17.8	16.13	2.52	18.37	6.62	89.15	1.59
61	590	13.5	17.12	17.01	15.85	2.15	16.62	3.87	152.31	0.86
60	590	13.18	17.07	17.08	16.1	1.91	16.5	2.8	210.96	0.52
59	590	12.6	16.17	16.1	15.13	2.53	16.19	4.57	129.2	1
58	590	12.35	16.15	16	13.94	2.21	16.08	6.47	91.13	1.65
57	590	11.8	15.22	15.29	14.24	2.44	15.33	4.63	127.41	1
56	590	11.65	15.5	15.22	14.53	2.2	15.17	3.54	166.89	0.67
55	590	11.1	14.1	14.62	14.04	2.54	14.86	4.02	146.88	0.79
54	590	10.8	14.1	14.61	14.25	2.3	14.76	3.16	186.5	0.54
53.6	590	10.27	13.65	13.86	13.83	2.7	14.5	3.64	162.12	0.64
53.5	Bridge									
53.4	590	10.26	13.64	13.84	13.73	2.72	14.45	3.76	156.98	0.67
53	590	10.1	13.5	13.61	13.5	2.89	14.37	4.12	143.1	0.76
52	590	9.9	13.54	13.6	13.71	2.56	14.28	3.33	177.03	0.55
51	590	9.4	13	13	12.57	3.17	13.99	5.28	111.7	1
50	590	9.35	13	13	11.64	2.87	13.88	6.64	88.92	1.41
49	590	8.9	12.4	12.33	11.91	2.94	13.22	5.07	116.28	0.96
48	590	8.73	12.4	12.32	12.21	2.77	13.08	4.14	142.55	0.71
47	590	8.28	10.81	11.68	11.41	3.12	12.79	5.21	113.17	1
46	590	7.75	10.79	11.66	9.72	2.82	12.6	7.51	78.55	1.72
45	590	7.25	10.1	11.27	10.51	3.26	11.92	5.25	112.38	1
44	590	6.5	10.8	10	8.48	2.93	11.72	7.98	73.95	1.9
43	590	5.9	10	10	8.07	3.04	11.01	7.59	77.72	1.72
42	590	5.5	10	10.1	7.67	3.04	10.6	7.58	77.85	1.71
41	590	4.7	9.9	9.8	6.9	3.07	9.85	7.6	77.61	1.71
40	590	4.2	9.6	9.6	6.35	3.04	9.35	7.66	76.99	1.74
39	Bridge									
38	590	3.9	9.4	9.3	6.34	3.04	8.62	6.69	88.2	1.42
37	590	3.7	9.5	9.1	6.16	3.01	8.34	6.54	90.15	1.38
36	590	3.6	8.7	8.79	6.9	2.84	7.88	4.37	135.03	0.79
35	590	3.35	8.5	8.47	6.98	2.77	7.72	3.82	154.63	0.65
34	Bridge									
33	590	3.25	8.35	8.3	5.35	2.6	7.28	6.16	95.8	1.41
32	590	3.1	8.3	8.31	4.99	2.46	7.03	6.32	93.33	1.52
31	590	2.8	7.8	7.75	5.53	2.07	6.08	3.28	179.92	0.65
30	590	2.4	7.18	7.07	5.52	2.05	5.93	2.83	208.53	0.52
29	590	2.1	6.57	6.69	5.5	2.07	5.85	2.61	225.78	0.46
28	590	1.6	5.7	5.82	5.44	2.22	5.77	2.58	228.93	0.43
27	590	1.2	5.5	5.5	5.37	2.4	5.73	2.66	222.05	0.42
26	590	0.9	5.5	5.6	5.28	2.57	5.67	2.77	212.73	0.43
25	Bridge									
24	590	0.8	5.2	5.2	5.2	2.64	5.62	2.88	205.2	0.45
23	590	0.6	5.2	4.7	5.24	2.56	5.58	2.59	227.9	0.39

22	590	0.55	5.2	4.8	5.24	2.56	5.57	2.56	230.46	0.38
21	590	0.5	5.2	4.7	5.2	2.63	5.56	2.66	221.85	0.4
20	590	0.4	5.2	5.1	5.22	2.6	5.53	2.46	239.69	0.37
19	Bridge									
18	590	0.25	5.1	5	4.92	2.47	5.23	2.48	238.26	0.37
17	590	0.1	5.2	5	4.92	2.5	5.22	2.42	243.61	0.36
16	590	0.08	5.2	5	4.93	2.41	5.21	2.35	251	0.34
15	590	0.05	5	5	4.97	2.23	5.19	2.06	287.04	0.3
14	Bridge									
13	590	0	4	4	4.87	2.14	5.07	1.96	301.16	0.28
12.5	590	-0.1	4	4	3.61	3.37	4.95	5.12	115.28	0.86
12	590	-0.1	4	4	3.58	3.37	4.94	5.16	114.3	0.87
11	Bridge									
10	590	-0.25	4	5	2.22	2.98	4.35	6.47	91.22	1.33
9	590	-0.4	4	5	0.72	2.01	3.95	7.95	74.17	2.4
8	590	-0.4	4	5	0.76	2.01	3.77	7.68	76.81	2.27
7	590	-0.4	4	5	0.77	2	3.69	7.57	77.94	2.23
6	590	-0.4	4	5	0.97	1.98	3.04	6.37	92.59	1.74
5	590	-0.4	4	5	2.07	1.88	2.62	3.27	180.18	0.67
4	Bridge									
3	590	-0.4	4	5	1.15	1.81	2.38	4.93	119.74	1.27
2	590	-0.4	3	5	1.14	1.73	2.24	4.65	126.83	1.2
1	590	-1	3	3	0.67	1.69	1.52	4.09	144.11	1.03

Torrente Quiliano T=200 anni										
Sezioni	Portata totale	Fondo alveo	Argine sinistro	Argine destro	Pelo libero	Profondità critica	Energia (m2)	Velocità (m/s)	Area bagnata	N° Froude
121	350	50.2	52.3	52.2	55.88	4.74	57.39	5.44	64.32	0.75
120	350	49.6	59.2	50.7	54.57	4.97	56.9	6.77	51.73	1
119	350	49	62.6	50.9	55.03	3.9	55.62	3.41	102.75	0.48
118	350	48.7	55	50.5	55.13	3.53	55.47	2.6	134.84	0.35
117	350	48.5	55	55.4	55.1	3.53	55.46	2.66	131.43	0.35
116.5	Bridge									
116	350	48.3	55	55.4	53.68	3.61	54.29	3.45	101.47	0.5
115	350	48.2	51.7	50.6	53.75	3.41	54.24	3.11	112.6	0.44
114	488	46.7	52	47.6	51.57	4.87	53.97	6.86	71.16	1
113	488	45.7	51.8	47.7	49.96	4.96	53.07	7.81	62.5	1.31
112	488	45.3	50.5	49.1	51.76	4.53	52.5	3.81	128.04	0.52
111	488	45.1	50.3	50.9	50.14	5.04	52.27	6.47	75.38	1
110	488	44.7	48.5	52.1	50.45	4.54	51.71	4.97	98.18	0.69
109	488	44.3	51.8	53.3	49.3	5	51.37	6.39	76.42	1
108	488	43.9	46.1	50.5	49.79	3.92	50.53	3.8	128.4	0.52
107	488	43.1	45.3	44.7	49.74	4.09	50.42	3.65	133.83	0.46
106	488	42.4	47.4	44.1	49.75	4.43	50.33	3.38	144.4	0.42
105	488	42	47.3	43.6	47.42	5.42	50.01	7.14	68.39	1
104	488	41.8	47.1	45.3	44.62	3.89	48.22	8.41	57.99	1.86
103	488	39.79	43.05	42.75	43.69	4.16	45.39	5.8	83.2	1.13
102	488	38.97	42.53	40.07	42.82	4.14	44.56	5.86	82.95	1.1
101	488	37.5	41.94	39.97	42.34	5.1	43.9	5.61	84.35	1.05
100	488	37.68	40.25	39.48	41.08	3.85	42.98	6.13	78.68	1.21
99	488	36.63	39.06	38.69	40.44	4.29	42.43	6.5	67.52	1.22
98	488	34.31	35.4	37.08	38.62	5.06	41.25	7.74	50.23	1.42
97	488	33.33	35.73	36.54	37.42	5	40.42	7.86	58.67	1.56
96	488	33.16	35.7	35.7	37.05	4.63	39.55	7.5	54.05	1.36
95	488	32.2	34.31	34.42	35.63	4.31	38.54	8.09	50.53	1.53
94	488	31.48	33.95	33.51	34.46	3.84	37.31	7.61	61.54	1.59
93	488	30.89	33.34	33.92	33.64	3.56	36.12	7.01	68.69	1.5
92	488	30.04	39.33	35.7	35.04	3.05	35.38	2.58	189.35	0.41
91	488	29.66	34.87	34.56	34.96	3.08	35.32	2.67	180.15	0.4
90.5	Bridge									
90	488	29.66	34.87	34.56	32.99	3.08	34.09	4.65	105.01	0.88
89	488	27.9	31.81	33.59	32.29	3.83	33.31	4.49	108.62	0.78
88	488	27.77	31.01	31.07	32.03	3.39	33.01	4.4	110.35	0.7
87	488	26.62	30.95	33	31.01	4.39	32.67	5.74	84.16	0.96
86	488	25.28	29.35	29.84	31.24	4.36	32.19	4.32	112.61	0.59
85	488	25.31	28.82	29.29	31.2	4.14	32.05	4.09	118.77	0.56
84	488	24.22	28.2	28.9	31.03	4.61	31.89	4.13	117.12	0.52
83	488	24.06	28.51	28.63	31.02	4.16	31.69	3.63	133.89	0.45
82.5	Bridge									
82	488	24.06	28.51	28.63	28.95	4.16	30.36	5.26	92.7	0.78
81	488	23.33	26.59	27.31	28.51	4.47	30.02	5.46	88.7	0.78
80	488	22.73	25.98	26.01	28.46	4.51	29.69	4.93	98.09	0.67
79	488	22.46	25.5	25.48	28.34	4.38	29.46	4.69	103.55	0.63
78	488	20.97	25.1	25.08	28.49	4.8	29.24	3.85	126.04	0.47
77.5	Bridge									
77	488	20.94	25.1	25.08	25.74	4.8	27.8	6.37	76.49	0.99
76	488	19.66	23.99	24.4	23.18	4.19	26.05	7.51	65	1.32
75	488	18.97	23.11	23.39	22.71	4.22	25.25	7.06	69.14	1.21
74	488	18.4	22.5	22.3	22.42	4.46	24.85	6.9	70.73	1.16
73	488	17.2	21.4	21.4	22.48	4.3	23.75	5	97.13	0.71

72	488	16.2	20.6	20.3	22.55	4.08	23.34	3.96	122.46	0.51
71	488	15.11	19.26	18.85	22.5	4.45	23.13	3.51	138.04	0.43
70.5	Bridge									
70	488	15.11	19.26	18.85	19.56	4.45	21.49	6.15	79.14	0.99
69	488	14.6	18	18	18.49	4.09	20.64	6.51	74.78	1.07
68	488	14.37	17.3	17.5	17.55	3.86	20.2	7.22	67.58	1.37
67	488	14.03	17.32	17.2	18.32	3.61	19.52	4.85	100.27	0.76

Torrente Quiliano 31/01/01 T=200 anni										
Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
66	850	14.68	18.2	18.18	18.97	3.36	19.98	4.46	190.74	0.69
65	850	14.45	18.26	17.6	18.12	3.67	19.76	5.69	149.45	1
64	850	14.33	18.2	17.88	16.96	3.35	19.64	7.26	117.12	1.44
63	850	14.3	18.08	17.85	16.97	3.35	19.59	7.17	118.55	1.41
62	850	14.25	16.03	17.8	16.63	3.19	19.46	7.45	114.02	1.58
61	850	13.5	17.12	17.01	15.57	2.67	17.71	6.48	131.1	1.55
60	850	13.18	17.07	17.08	16.87	2.43	17.39	3.19	266.52	0.53
59	850	12.6	16.17	16.1	15.72	3.12	17.07	5.16	164.82	1
58	850	12.35	16.15	16	14.47	2.81	16.95	6.97	122.01	1.53
57	850	11.8	15.22	15.29	15.29	3.04	16.33	4.5	188.7	0.8
56	850	11.65	15.5	15.22	15.48	2.81	16.23	3.82	222.27	0.62
55	850	11.1	14.1	14.62	15.11	3.16	15.98	4.12	206.44	0.68
54	850	10.8	14.1	14.61	15.28	2.94	15.9	3.51	242.19	0.53
53.6	850	10.27	13.65	13.86	14.86	3.38	15.67	3.99	212.79	0.61
53.5	Bridge									
53.4	850	10.26	13.64	13.84	14.74	3.4	15.6	4.12	206.45	0.64
53	850	10.1	13.5	13.61	14.54	3.59	15.53	4.42	192.17	0.7
52	850	9.9	13.54	13.6	14.72	3.26	15.45	3.79	224.32	0.55
51	850	9.4	13	13	13.36	3.96	15.16	5.94	142.98	1
50	850	9.35	13	13	12.34	3.66	15.06	7.31	116.25	1.36
49	850	8.9	12.4	12.33	12.28	3.7	14.41	6.47	131.41	1.16
48	850	8.73	12.4	12.32	11.54	3.53	14.32	7.38	115.11	1.41
47	850	8.28	10.81	11.68	12.17	3.89	13.93	5.89	144.13	1
46	850	7.75	10.79	11.66	10.35	3.59	13.77	8.2	103.7	1.63
45	850	7.25	10.1	11.27	11.29	4.04	13.08	5.92	143.48	1
44	850	6.5	10.8	10	9.08	3.7	12.87	8.62	98.56	1.78
43	850	5.9	10	10	8.65	3.82	12.31	8.47	100.32	1.69
42	850	5.5	10	10.1	8.22	3.82	11.96	8.56	99.26	1.71
41	850	4.7	9.9	9.8	7.46	3.87	11.21	8.57	99.14	1.71
40	850	4.2	9.6	9.6	6.95	3.83	10.61	8.47	100.33	1.69
39	Bridge									
38	850	3.9	9.4	9.3	6.96	3.83	9.88	7.57	112.25	1.42
37	850	3.7	9.5	9.1	6.74	3.79	9.62	7.51	113.21	1.42
36	850	3.6	8.7	8.79	6.51	3.58	9.15	7.19	118.21	1.38
35	850	3.35	8.5	8.47	7.9	3.49	8.87	4.34	195.69	0.66
34	Bridge									
33	850	3.25	8.35	8.3	5.87	3.27	8.37	7	121.46	1.42
32	850	3.1	8.3	8.31	5.45	3.1	8.11	7.23	117.54	1.55
31	850	2.8	7.8	7.75	6.92	2.6	7.41	3.09	275.49	0.49
30	850	2.4	7.18	7.07	6.93	2.59	7.32	2.78	305.58	0.42
29	850	2.1	6.57	6.69	6.92	2.61	7.27	2.63	322.87	0.39
28	850	1.6	5.7	5.82	6.85	2.8	7.22	2.69	315.83	0.38
27	850	1.2	5.5	5.5	6.77	3.03	7.18	2.84	299.05	0.39
26	850	0.9	5.5	5.6	6.66	3.24	7.13	3.01	282.69	0.41
25	Bridge									
24	850	0.8	5.2	5.2	6.61	3.32	7.11	3.1	273.8	0.42
23	850	0.6	5.2	4.7	6.66	3.22	7.07	2.83	300.26	0.37

22	850	0.55	5.2	4.8	6.66	3.22	7.06	2.81	302.82	0.37
21	850	0.5	5.2	4.7	6.61	3.3	7.05	2.92	291.13	0.38
20	850	0.4	5.2	5.1	6.64	3.25	7.02	2.7	314.36	0.35
19	Bridge									
18	850	0.25	5.1	5	6.33	3.12	6.71	2.72	312.54	0.36
17	850	0.1	5.2	5	6.33	3.15	6.7	2.68	317.1	0.35
16	850	0.08	5.2	5	6.34	3.06	6.69	2.61	325.24	0.34
15	850	0.05	5	5	6.39	2.83	6.66	2.29	371.09	0.29
14	Bridge									
13	850	0	4	4	6.21	2.72	6.46	2.21	384.67	0.28
12.5	850	-0.1	4	4	4.59	4.27	6.3	5.8	146.66	0.86
12	850	-0.1	4	4	4.51	4.27	6.28	5.9	144.05	0.89
11	Bridge									
10	850	-0.25	4	5	2.83	3.78	5.64	7.42	114.61	1.36
9	850	-0.4	4	5	1.02	2.56	5.22	9.08	93.66	2.43
8	850	-0.4	4	5	1.06	2.56	5.04	8.84	96.12	2.34
7	850	-0.4	4	5	1.06	2.55	4.99	8.79	96.75	2.33
6	850	-0.4	4	5	1.22	2.53	4.28	7.75	109.71	1.94
5	850	-0.4	4	5	1.26	2.4	3.76	7	121.47	1.73
4	Bridge									
3	850	-0.4	4	5	1.5	2.31	3.2	5.76	147.48	1.33
2	850	-0.4	3	5	1.57	2.21	2.97	5.24	162.2	1.19
1	850	-1	3	3	1.14	2.16	2.2	4.56	186.57	1.01

Torrente Quiliano T=500 anni										
Sezioni	Portata totale	Fondo alveo	Argine sinistro	Argine destro	Pelo libero	Profondità critica	Energia (m2)	Velocità (m/s)	Area bagnata	N° Froude
121	422	50.2	52.3	52.2	56.68	5.32	58.34	5.71	73.95	0.73
120	422	49.6	59.2	50.7	55.17	5.57	57.83	7.23	58.4	1.01
119	422	49	62.6	50.9	56.21	4.36	56.78	3.33	126.74	0.43
118	422	48.7	55	50.5	56.31	3.92	56.65	2.59	162.89	0.32
117	422	48.5	55	55.4	56.28	3.92	56.64	2.69	157.07	0.32
116.5	Bridge									
116	422	48.3	55	55.4	54.63	4.01	55.24	3.47	121.47	0.46
115	422	48.2	51.7	50.6	54.69	3.8	55.2	3.16	133.49	0.41
114	587	46.7	52	47.6	52.21	5.51	54.91	7.27	80.77	1
113	587	45.7	51.8	47.7	50.38	5.52	53.99	8.42	69.72	1.33
112	587	45.3	50.5	49.1	52.53	5	53.35	4.02	146.02	0.51
111	587	45.1	50.3	50.9	50.71	5.61	53.1	6.85	85.73	1
110	587	44.7	48.5	52.1	51.06	5.1	52.52	5.37	109.32	0.7
109	587	44.3	51.8	53.3	50.04	5.55	52.2	6.51	90.14	0.94
108	587	43.9	46.1	50.5	50.81	4.41	51.56	3.84	152.72	0.49
107	587	43.1	45.3	44.7	50.73	4.59	51.46	3.79	154.76	0.45
106	587	42.4	47.4	44.1	50.75	4.94	51.38	3.53	166.31	0.41
105	587	42	47.3	43.6	48.1	6.1	51.03	7.58	77.43	1
104	587	41.8	47.1	45.3	44.82	4.29	49.17	9.24	63.51	1.96
103	587	39.79	43.05	42.75	43.96	4.52	45.96	6.3	91.66	1.17
102	587	38.97	42.53	40.07	43.27	4.55	45.11	6.05	95.67	1.06
101	587	37.5	41.94	39.97	42.39	5.46	44.56	6.62	85.71	1.23
100	587	37.68	40.25	39.48	41.24	4.26	43.65	6.92	83.45	1.33
99	587	36.63	39.06	38.69	40.73	4.65	42.98	6.96	74.24	1.25
98	587	34.31	35.4	37.08	38.91	5.4	41.82	8.19	55.06	1.44
97	587	33.33	35.73	36.54	37.7	5.34	41	8.32	64.91	1.57
96	587	33.16	35.7	35.7	37.28	4.94	40.12	8.09	58	1.42
95	587	32.2	34.31	34.42	35.86	4.62	39.08	8.6	54.75	1.56
94	587	31.48	33.95	33.51	34.73	4.18	37.86	8.04	68.53	1.59
93	587	30.89	33.34	33.92	33.89	3.86	36.66	7.47	76.48	1.54
92	587	30.04	39.33	35.7	35.04	3.4	35.53	3.1	189.44	0.5
91	587	29.66	34.87	34.56	34.92	3.43	35.45	3.25	178.3	0.49
90.5	Bridge									
90	587	29.66	34.87	34.56	33.42	3.43	34.62	4.86	120.68	0.86
89	587	27.9	31.81	33.59	32.87	4.24	33.95	4.61	127.29	0.74
88	587	27.77	31.01	31.07	32.64	3.84	33.68	4.55	126.95	0.67
87	587	26.62	30.95	33	31.99	4.85	33.4	5.32	106.71	0.79
86	587	25.28	29.35	29.84	32.06	4.87	33.1	4.51	129.57	0.57
85	587	25.31	28.82	29.29	32.04	4.63	32.96	4.26	136.94	0.54
84	587	24.22	28.2	28.9	31.83	5.16	32.81	4.41	131.85	0.53
83	587	24.06	28.51	28.63	31.85	4.7	32.61	3.88	150.25	0.45
82.5	Bridge									
82	587	24.06	28.51	28.63	29.48	4.7	31.11	5.67	103.27	0.79
81	587	23.33	26.59	27.31	28.43	5.01	30.69	6.68	87.27	0.96
80	587	22.73	25.98	26.01	28.32	5.04	30.19	6.09	95.58	0.84
79	587	22.46	25.5	25.48	28.04	4.92	29.84	5.97	98	0.82
78	587	20.97	25.1	25.08	28.32	5.34	29.46	4.74	122.95	0.58
77.5	Bridge									
77	587	20.94	25.1	25.08	26.28	5.34	28.61	6.79	86.19	0.99
76	587	19.66	23.99	24.4	23.6	4.74	26.87	8.02	73.24	1.33
75	587	18.97	23.11	23.39	23.2	4.76	26.02	7.44	78.91	1.2
74	587	18.4	22.5	22.3	22.91	4.97	25.6	7.28	80.3	1.15
73	587	17.2	21.4	21.4	23.23	4.84	24.61	5.22	111.67	0.69

72	587	16.2	20.6	20.3	23.31	4.64	24.22	4.24	137.4	0.51
71	587	15.11	19.26	18.85	23.27	4.95	24	3.79	153.44	0.44
70.5	Bridge									
70	587	15.11	19.26	18.85	20.06	4.95	22.25	6.56	89.17	0.99
69	587	14.6	18	18	19.19	4.59	21.38	6.58	88.78	1
68	587	14.37	17.3	17.5	17.89	4.31	20.93	7.73	75.65	1.39
67	587	14.03	17.32	17.2	18.74	4.07	20.17	5.3	110.4	0.79

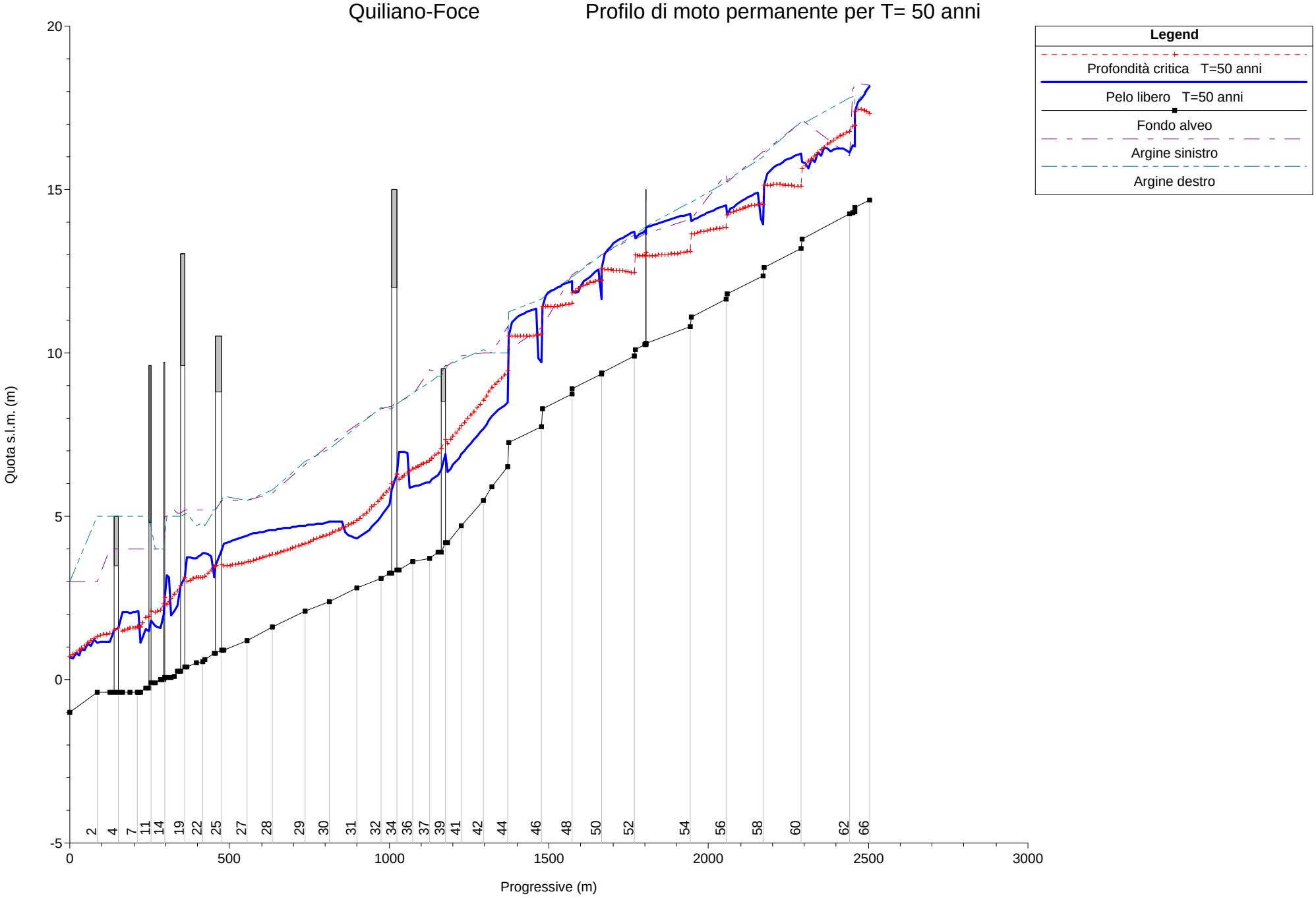
Torrente Quiliano 31/01/01 T=500 anni										
Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
66	1000	14.68	18.2	18.18	19.39	3.74	20.55	4.76	210.02	0.7
65	1000	14.45	18.26	17.6	18.5	4.05	20.33	6	166.78	1
64	1000	14.33	18.2	17.88	17.3	3.73	20.2	7.54	132.59	1.4
63	1000	14.3	18.08	17.85	17.31	3.73	20.15	7.46	134.05	1.38
62	1000	14.25	16.03	17.8	16.9	3.54	20.02	7.82	127.85	1.57
61	1000	13.5	17.12	17.01	15.73	2.95	18.22	7	142.83	1.6
60	1000	13.18	17.07	17.08	17.27	2.71	17.85	3.38	295.84	0.54
59	1000	12.6	16.17	16.1	16.03	3.42	17.54	5.45	183.43	1
58	1000	12.35	16.15	16	14.76	3.14	17.41	7.22	138.6	1.49
57	1000	11.8	15.22	15.29	15.96	3.36	16.94	4.4	227.39	0.71
56	1000	11.65	15.5	15.22	16.1	3.13	16.86	3.87	258.25	0.59
55	1000	11.1	14.1	14.62	15.85	3.49	16.69	4.04	247.4	0.61
54	1000	10.8	14.1	14.61	15.98	3.27	16.63	3.56	280.4	0.5
53.6	1000	10.27	13.65	13.86	15.6	3.74	16.42	4.01	249.49	0.57
53.5	Bridge									
53.4	1000	10.26	13.64	13.84	15.29	3.76	16.22	4.28	233.57	0.63
53	1000	10.1	13.5	13.61	15.1	3.95	16.16	4.57	218.63	0.68
52	1000	9.9	13.54	13.6	15.27	3.62	16.08	4	250.06	0.55
51	1000	9.4	13	13	13.77	4.37	15.77	6.27	159.4	1
50	1000	9.35	13	13	12.72	4.07	15.67	7.61	131.43	1.33
49	1000	8.9	12.4	12.33	12.68	4.1	15	6.75	148.23	1.14
48	1000	8.73	12.4	12.32	11.89	3.94	14.93	7.72	129.56	1.39
47	1000	8.28	10.81	11.68	12.57	4.29	14.54	6.22	160.58	1
46	1000	7.75	10.79	11.66	10.7	4.01	14.36	8.47	118.03	1.58
45	1000	7.25	10.1	11.27	11.7	4.45	13.69	6.25	160	1
44	1000	6.5	10.8	10	12.42	4.1	13.34	4.24	235.62	0.57
43	1000	5.9	10	10	12.44	4.24	13.27	4.03	247.89	0.51
42	1000	5.5	10	10.1	12.49	4.24	13.21	3.77	265.56	0.46
41	1000	4.7	9.9	9.8	12.54	4.28	13.13	3.4	294.54	0.39
40	1000	4.2	9.6	9.6	12.58	4.24	13.08	3.13	319.81	0.35
39	Bridge									
38	1000	3.9	9.4	9.3	11.71	4.24	12.28	3.36	297.4	0.39
37	1000	3.7	9.5	9.1	11.72	4.21	12.25	3.23	309.92	0.37
36	1000	3.6	8.7	8.79	11.77	3.97	12.2	2.9	344.29	0.33
35	1000	3.35	8.5	8.47	11.79	3.88	12.17	2.71	368.72	0.3
34	Bridge									
33	1000	3.25	8.35	8.3	11.25	3.63	11.6	2.6	385.27	0.3
32	1000	3.1	8.3	8.31	11.29	3.45	11.57	2.34	427.21	0.26
31	1000	2.8	7.8	7.75	11.37	2.89	11.52	1.72	580	0.19
30	1000	2.4	7.18	7.07	11.37	2.88	11.51	1.63	612.19	0.18
29	1000	2.1	6.57	6.69	11.37	2.89	11.5	1.59	628.02	0.17
28	1000	1.6	5.7	5.82	11.34	3.12	11.49	1.69	592.21	0.17
27	1000	1.2	5.5	5.5	11.31	3.36	11.48	1.82	548.99	0.18
26	1000	0.9	5.5	5.6	11.28	3.59	11.47	1.94	515.55	0.19
25	Bridge									
24	1000	0.8	5.2	5.2	10.95	3.68	11.17	2.07	484.17	0.21
23	1000	0.6	5.2	4.7	10.97	3.57	11.16	1.92	520.1	0.19

22	1000	0.55	5.2	4.8	10.97	3.57	11.16	1.91	522.61	0.19
21	1000	0.5	5.2	4.7	10.95	3.66	11.15	1.99	503.64	0.2
20	1000	0.4	5.2	5.1	10.97	3.59	11.14	1.85	541.25	0.18
19	Bridge									
18	1000	0.25	5.1	5	10.72	3.46	10.89	1.84	542.94	0.18
17	1000	0.1	5.2	5	10.72	3.49	10.89	1.83	545.12	0.18
16	1000	0.08	5.2	5	10.72	3.4	10.89	1.8	555.14	0.18
15	1000	0.05	5	5	10.75	3.14	10.88	1.59	627.77	0.16
14	Bridge									
13	1000	0	4	4	10.37	3.02	10.49	1.55	644.64	0.15
12.5	1000	-0.1	4	4	9.95	4.74	10.45	3.14	318.09	0.32
12	1000	-0.1	4	4	9.95	4.74	10.45	3.14	318.04	0.32
11	Bridge									
10	1000	-0.25	4	5	3.95	4.2	6.02	6.37	157.1	1
9	1000	-0.4	4	5	1.25	2.86	5.55	9.19	108.78	2.29
8	1000	-0.4	4	5	1.29	2.86	5.4	8.99	111.26	2.21
7	1000	-0.4	4	5	1.29	2.85	5.32	8.89	112.53	2.18
6	1000	-0.4	4	5	1.46	2.81	4.69	7.97	125.5	1.87
5	1000	-0.4	4	5	1.45	2.67	4.26	7.43	134.63	1.75
4	Bridge									
3	1000	-0.4	4	5	1.67	2.57	3.65	6.22	160.65	1.38
2	1000	-0.4	3	5	1.8	2.47	3.35	5.51	181.5	1.19
1	1000	-1	3	3	1.4	2.4	2.55	4.76	210.19	1

PROFILI DI RIGURGITO IN CONDIZIONI DI MOTO PERMANENTE PER LE PORTATE T=50, 200, 500 ANNI

QUILIANO FOCE stato di progetto

Per la redazione delle Tavv. 9 (fasce di inondabilità), 11 (rischio idraulico) e 14 (aree inondabili) non sono state utilizzate le risultanze della modellazione effettuata con la configurazione di progetto. La cartografia di Piano sarà aggiornata ad avvenuta ultimazione degli interventi ad oggi in itinere.


Quiliano-Foce
Profilo di moto permanente per T= 50 anni
Legend
Profondità critica T=50 anni
Pelo libero T=50 anni
Fondo alveo
Argine sinistro
Argine destro
Quota s.l.m. (m)
Progressive (m)
20
15
10
5
0
-5
0
500
1000
1500
2000
2500
3000
2
4
7
11
14
19
22
25
27
28
29
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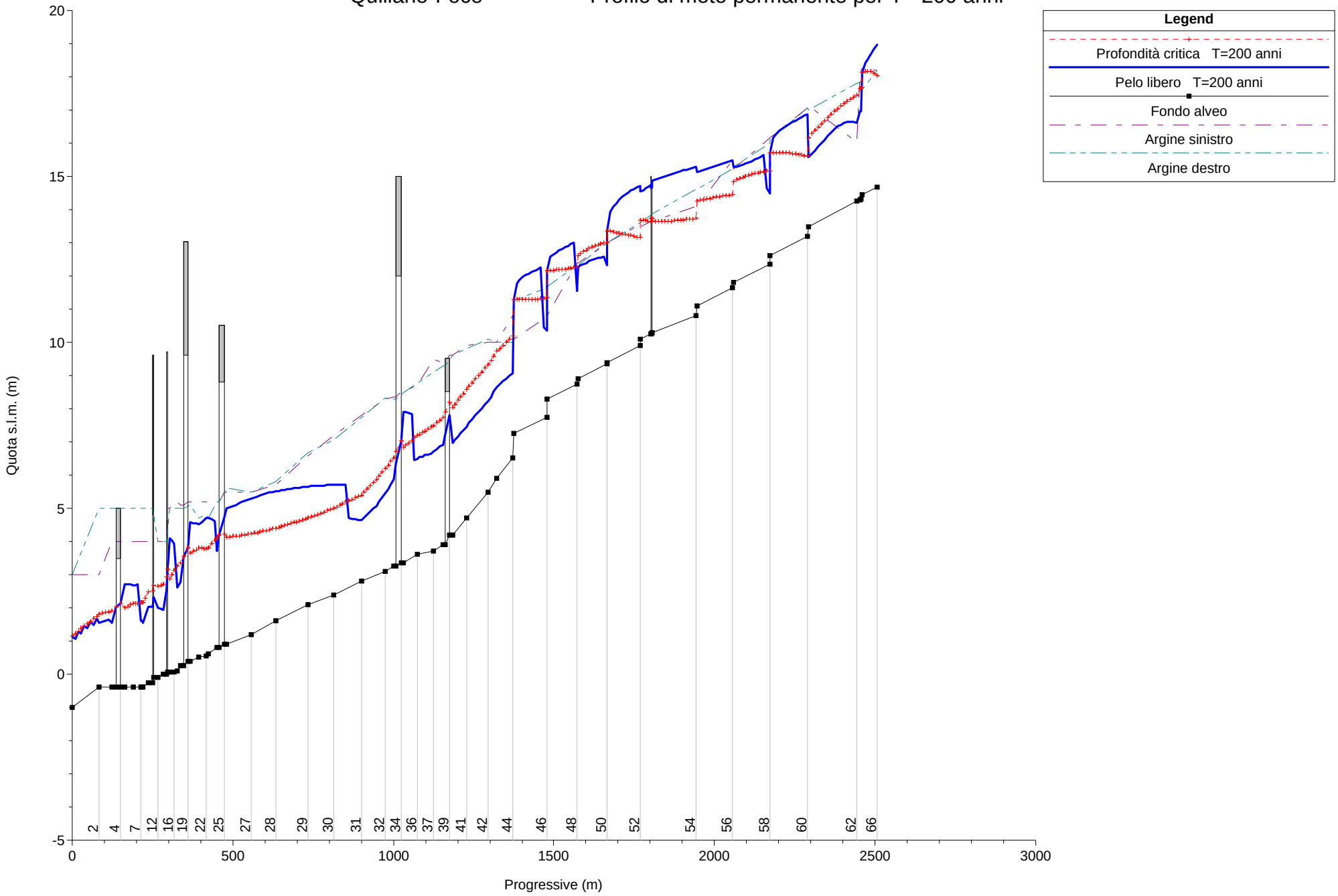
44
46
48
50
52
54
56
58
60
62
66


Quiliano-Foce
Profilo di moto permanente per T= 200 anni
Legend
Profondità critica T=200 anni
Pelo libero T=200 anni
Fondo alveo
Argine sinistro
Argine destro
Quota s.l.m. (m)
Progressive (m)
20
15
10
5
0
-5
0
500
1000
1500
2000
2500
3000
2
4
7
12
16
19
22
25
27
28
29
30
31
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41
42
44
46
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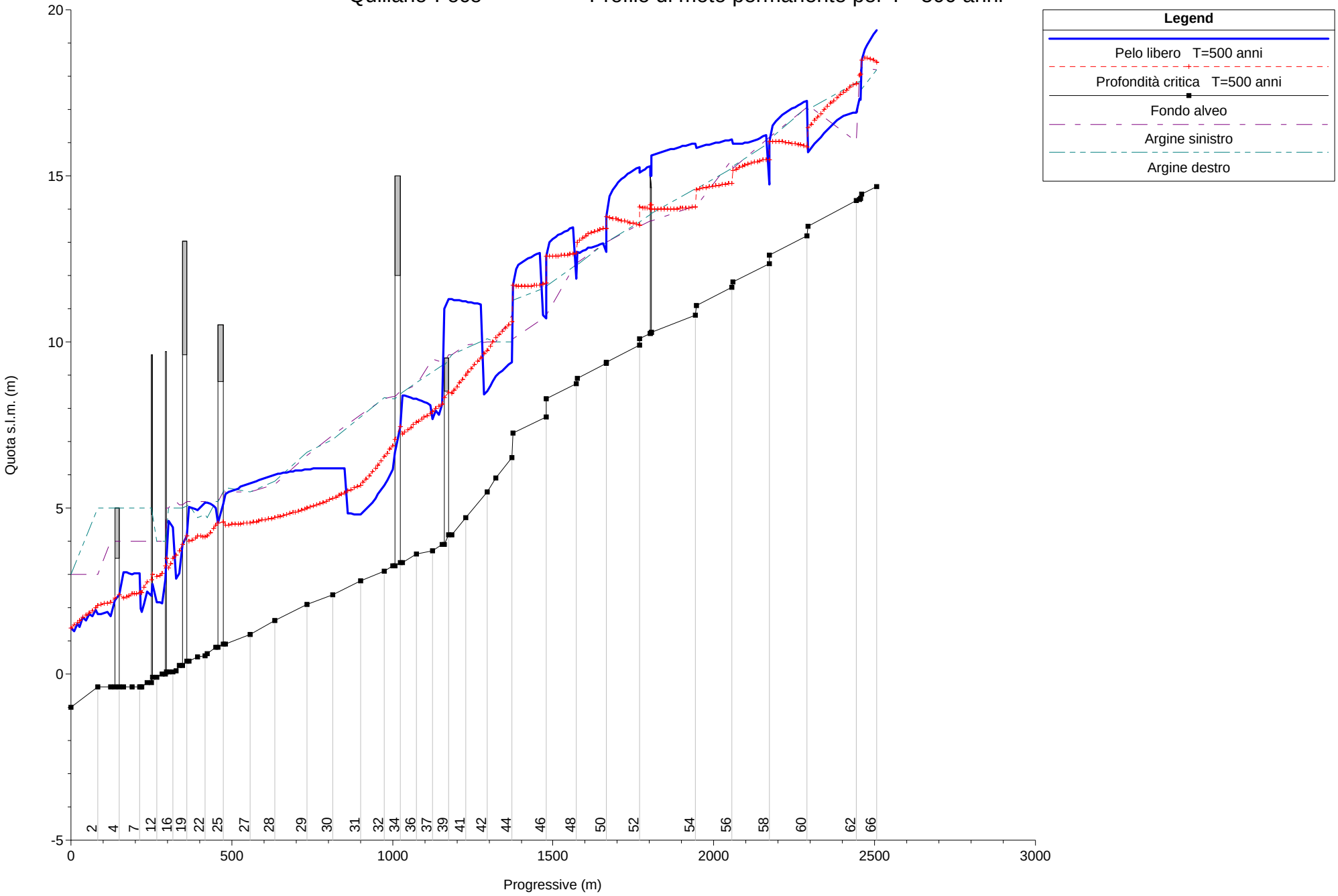
50
52
54
56
58
60
62
66


Quiliano-Foce
Profilo di moto permanente per T= 500 anni
Legend
Pelo libero T=500 anni
Profondità critica T=500 anni
Fondo alveo
Argine sinistro
Argine destro
Quota s.l.m. (m)
Progressive (m)
20
15
10
5
0
-5
0
500
1000
1500
2000
2500
3000
2
4
7
12
16
19
22
25
27
28
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30
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36
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39
41
42
44
46
48
50
52
54
56
58
60
62
66

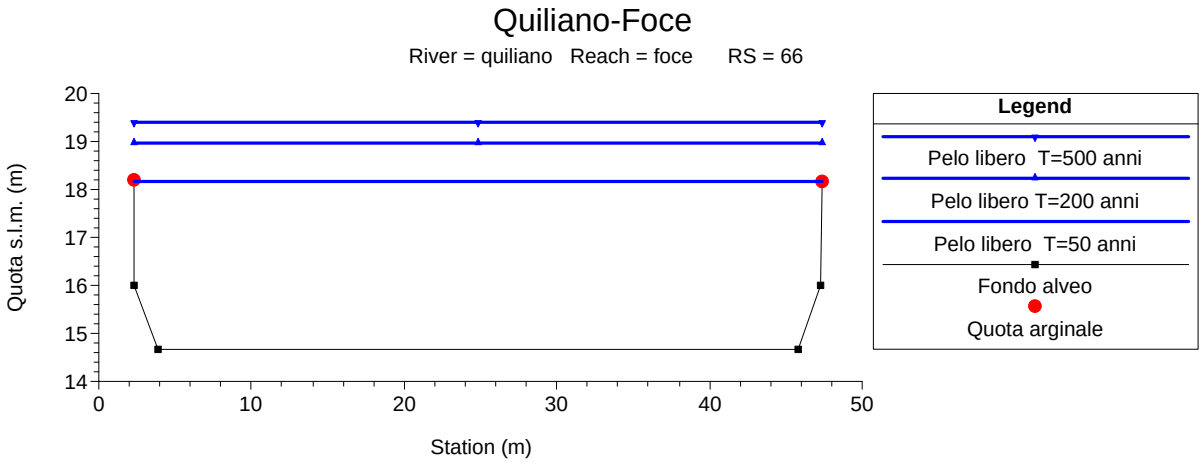
GEOMETRIA DELLE SEZIONI ED ALTEZZA DEL PELO LIBERO IN CONDIZIONI DI MOTO PERMANENTE
PER LE PORTATE T=50, 200, 500 ANNI

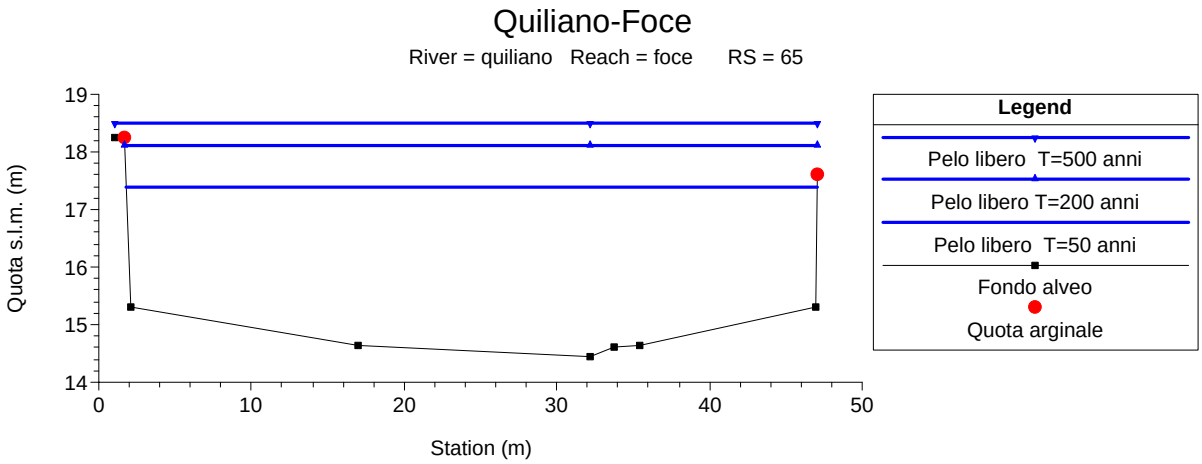
QUILIANO FOCE stato di progetto

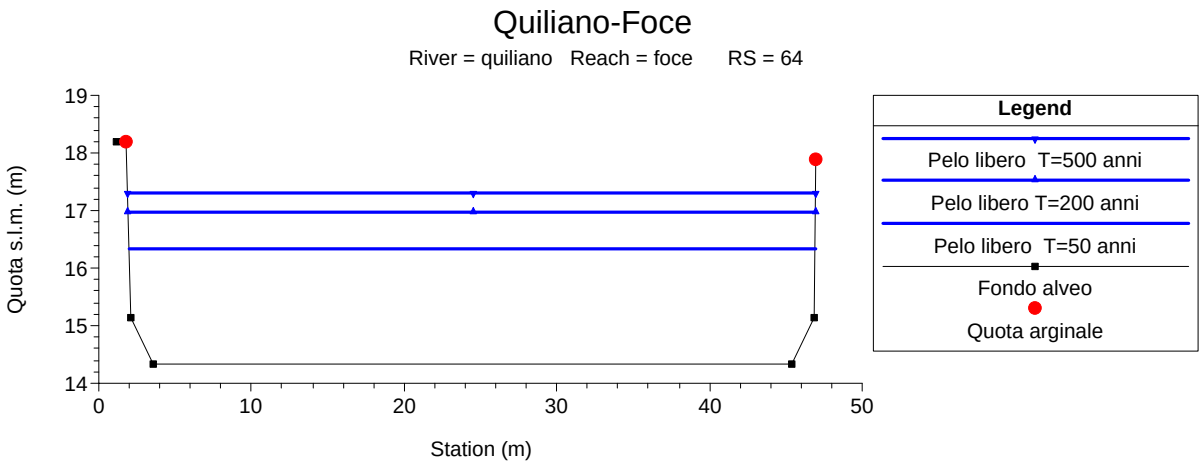
da sez. 66
a sez. 1

Per la redazione delle Tavv. 9 (fasce di inondabilità), 11 (rischio idraulico) e 14 (aree inondabili) non sono state utilizzate le risultanze della modellazione effettuata con la configurazione di progetto. La cartografia di Piano sarà aggiornata ad avvenuta ultimazione degli interventi ad oggi in itinere.

QUILIANO – Sezioni trasversali

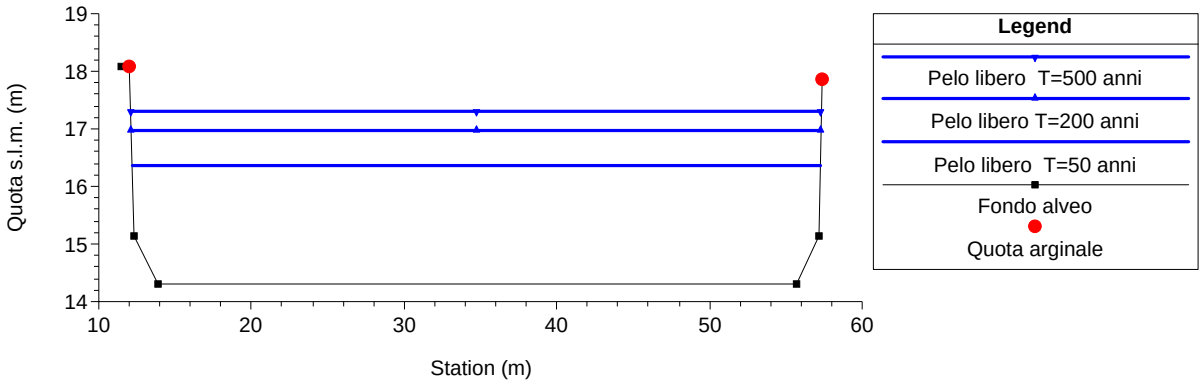






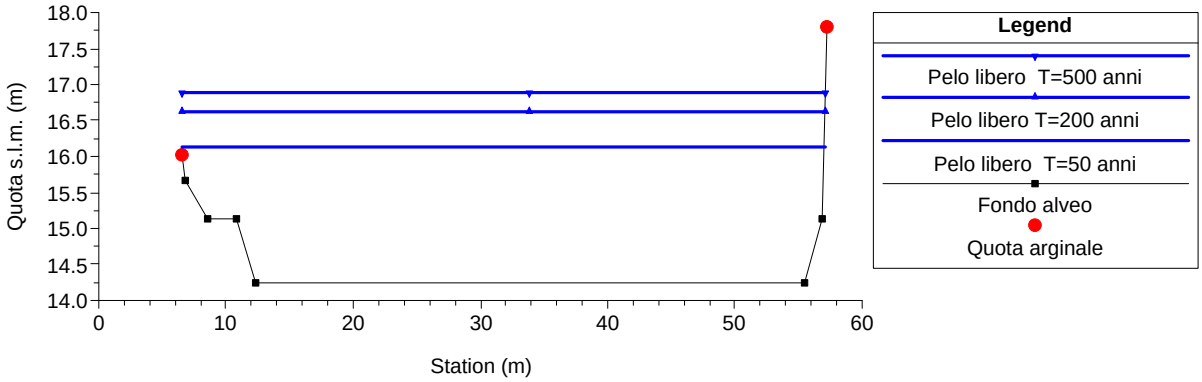
Quiliano-Foce

River = quiliano Reach = foce RS = 63



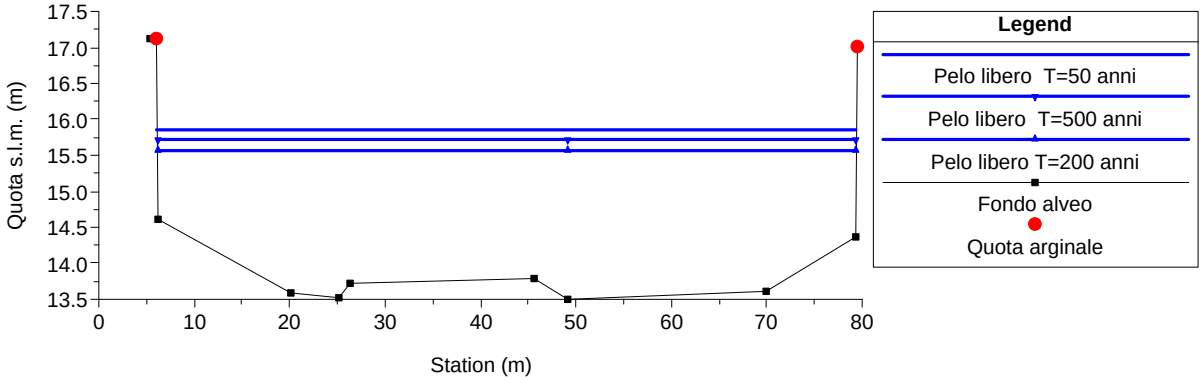
Quiliano-Foce

River = quiliano Reach = foce RS = 62



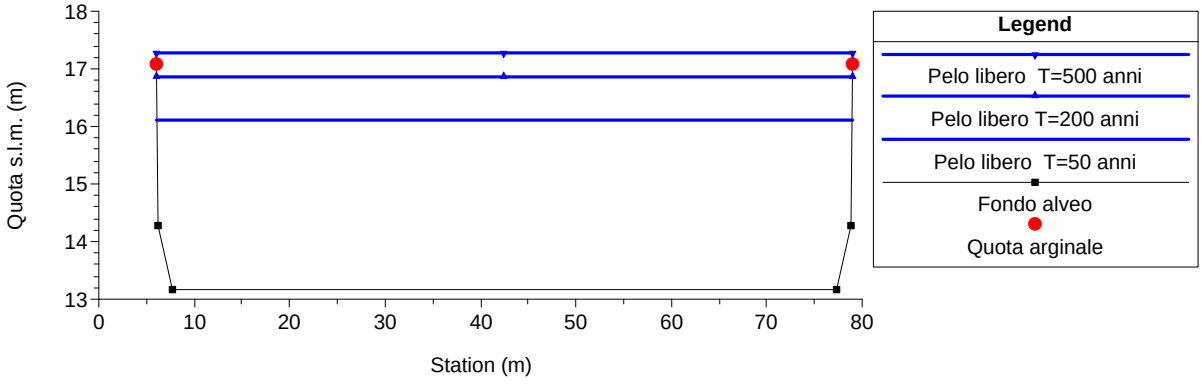
Quiliano-Foce

River = quiliano Reach = foce RS = 61



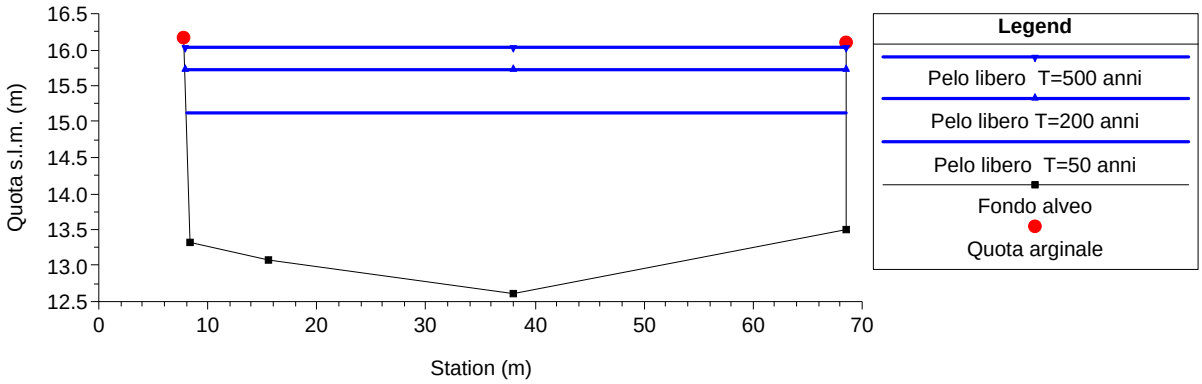
Quiliano-Foce

River = quiliano Reach = foce RS = 60



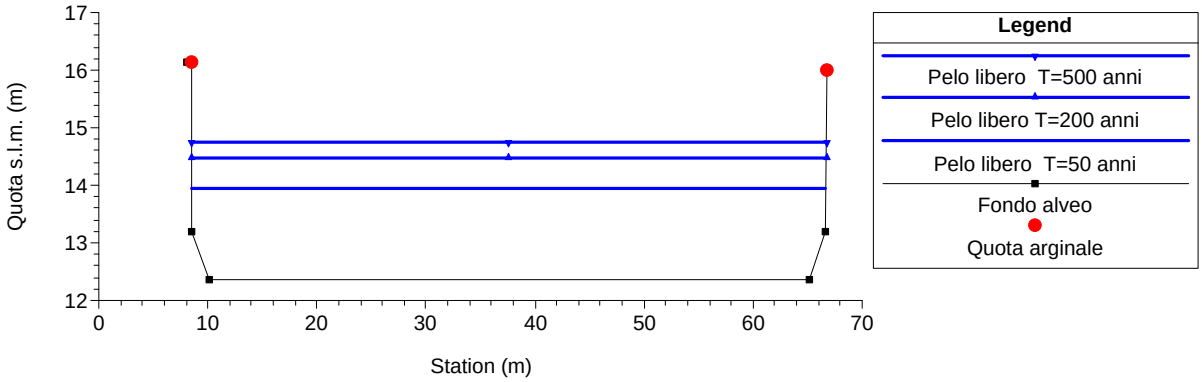
Quiliano-Foce

River = quiliano Reach = foce RS = 59



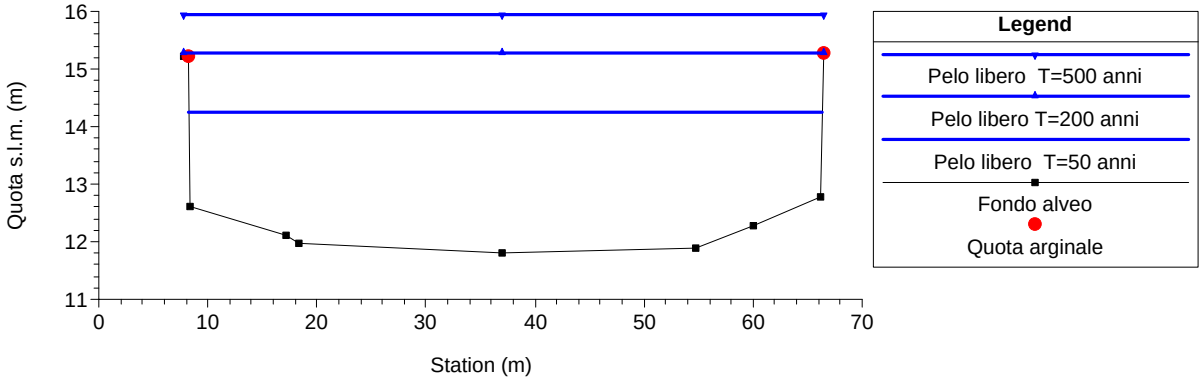
Quiliano-Foce

River = quiliano Reach = foce RS = 58



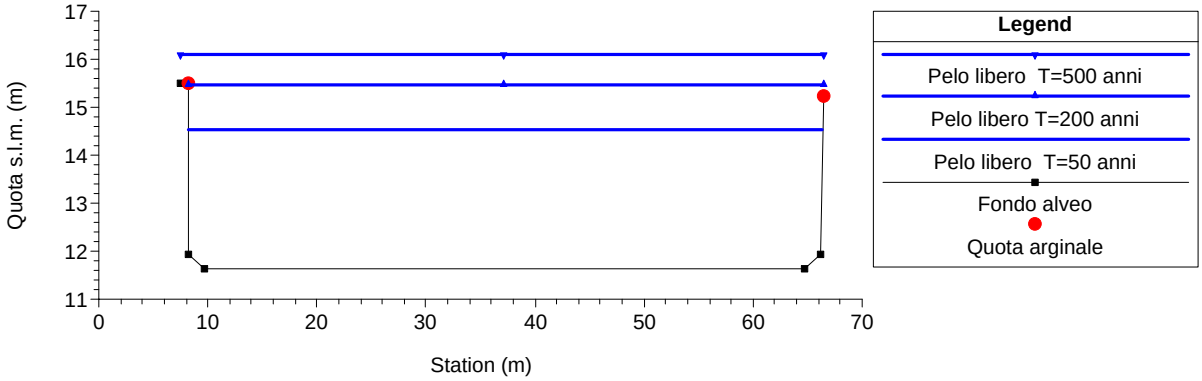
Quiliano-Foce

River = quiliano Reach = foce RS = 57



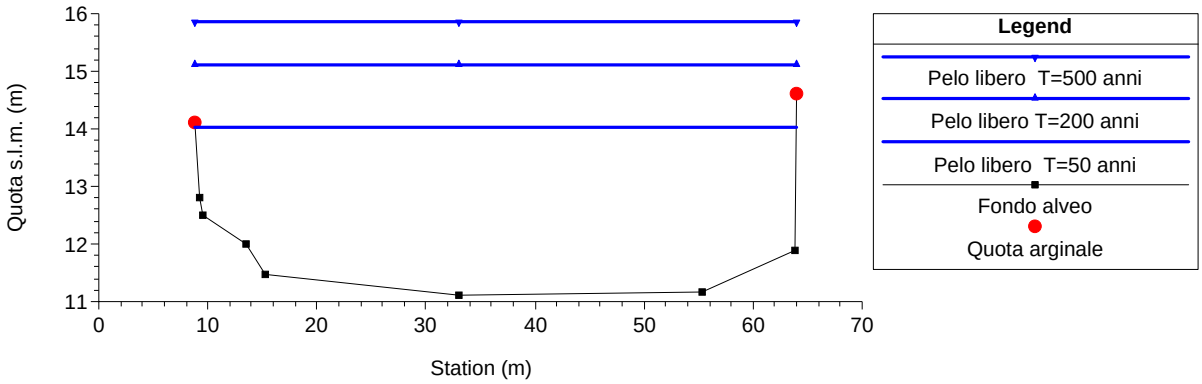
Quiliano-Foce

River = quiliano Reach = foce RS = 56



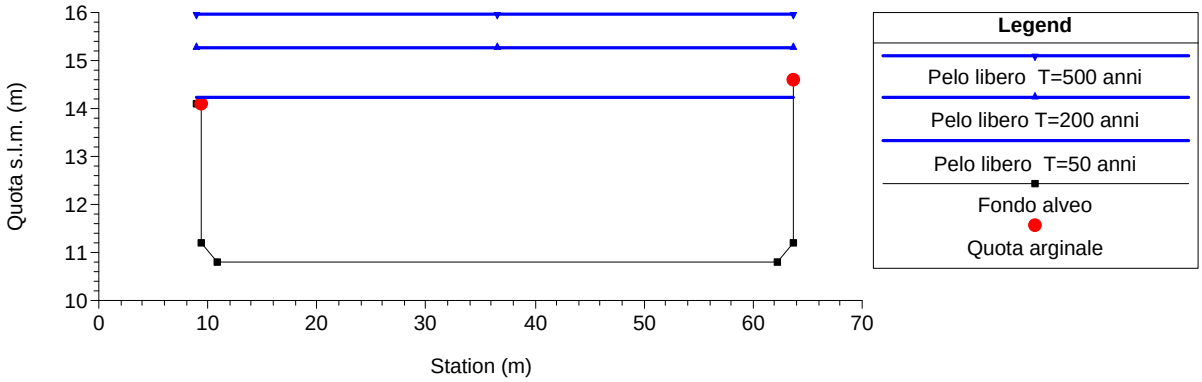
Quiliano-Foce

River = quiliano Reach = foce RS = 55



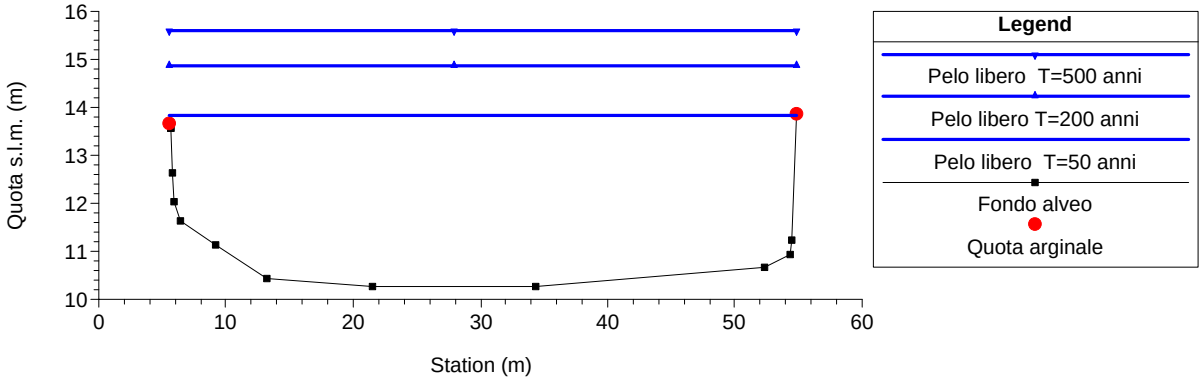
Quiliano-Foce

River = quiliano Reach = foce RS = 54



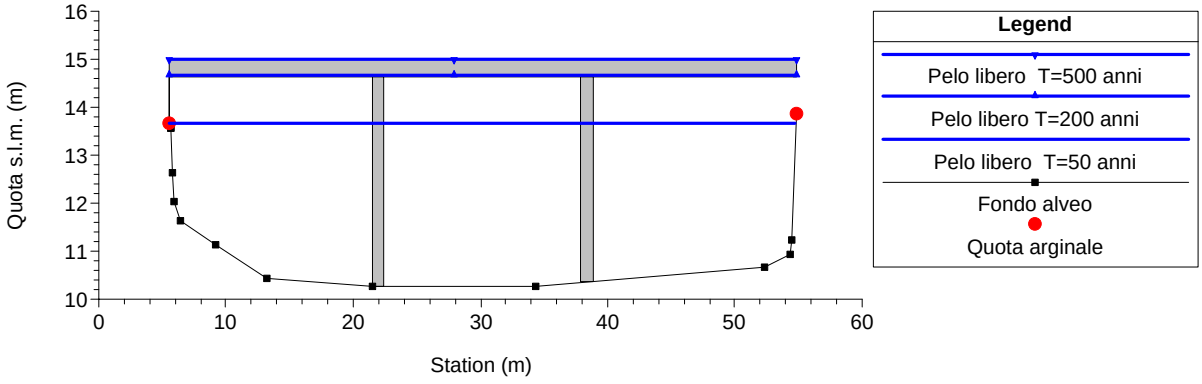
Quiliano-Foce

River = quiliano Reach = foce RS = 53.6



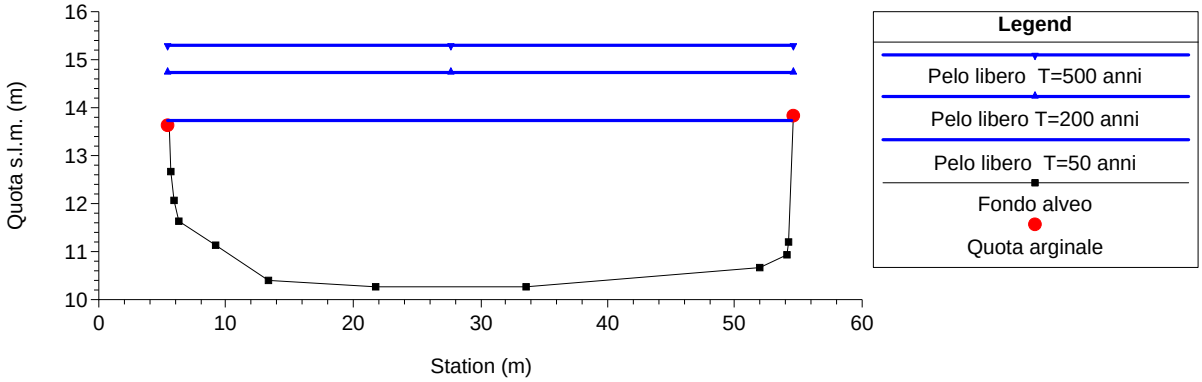
Quiliano-Foce

River = quiliano Reach = foce RS = 53.5 BR U



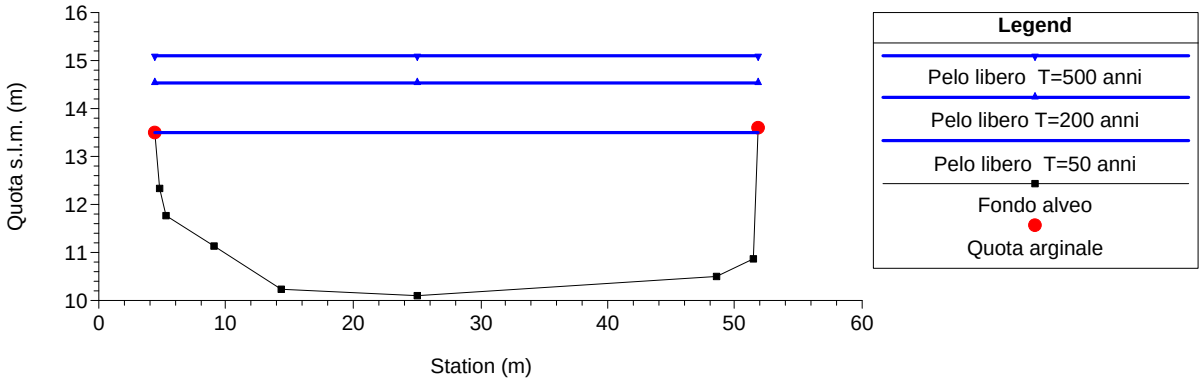
Quiliano-Foce

River = quiliano Reach = foce RS = 53.4



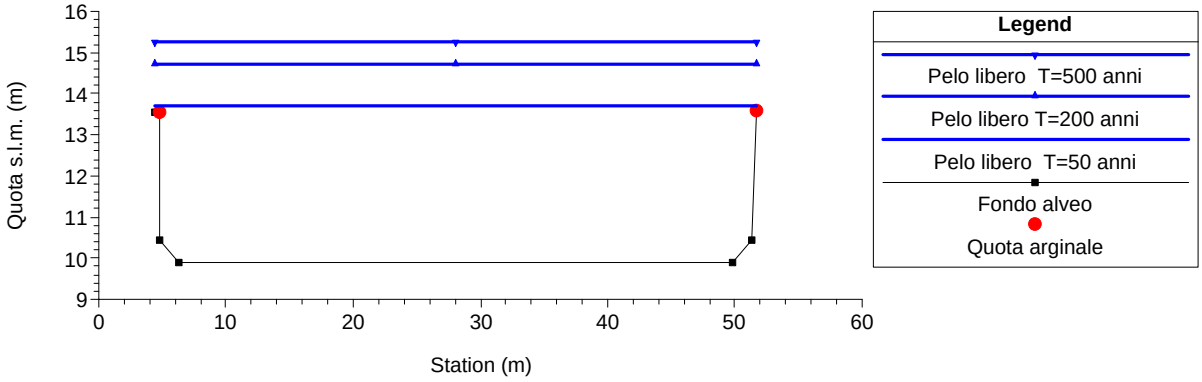
Quiliano-Foce

River = quiliano Reach = foce RS = 53



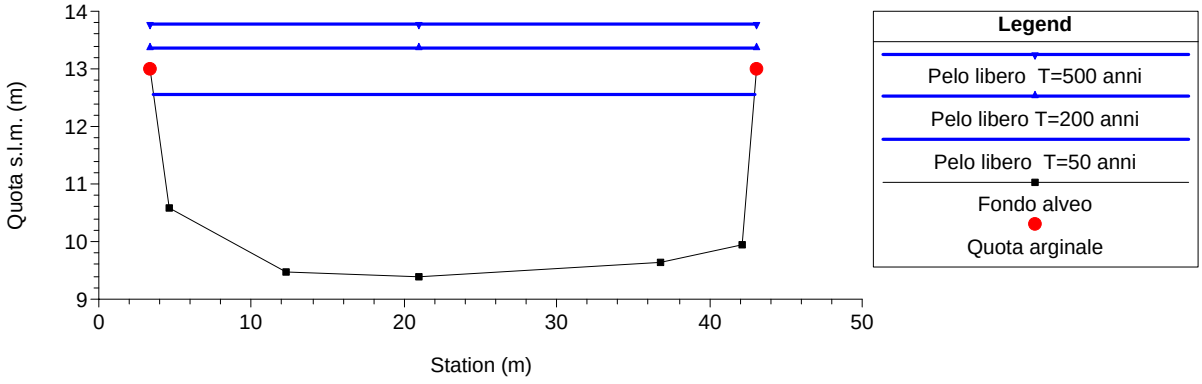
Quiliano-Foce

River = quiliano Reach = foce RS = 52



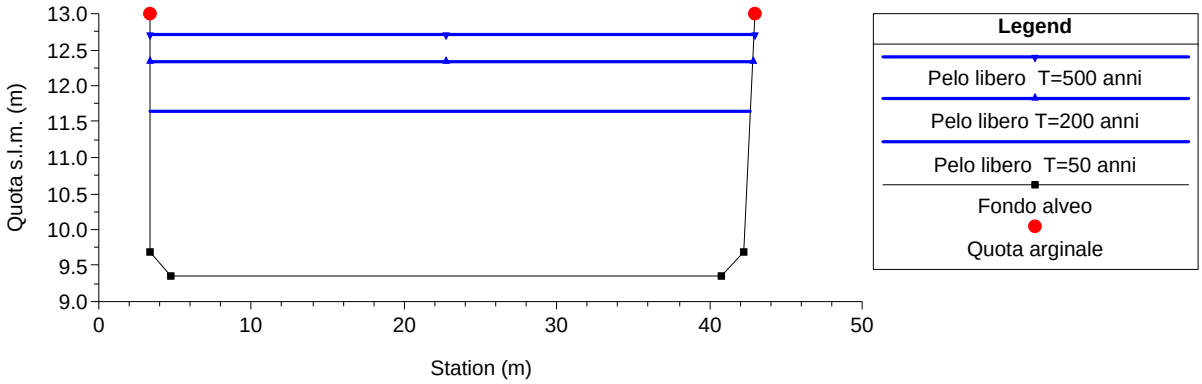
Quiliano-Foce

River = quiliano Reach = foce RS = 51



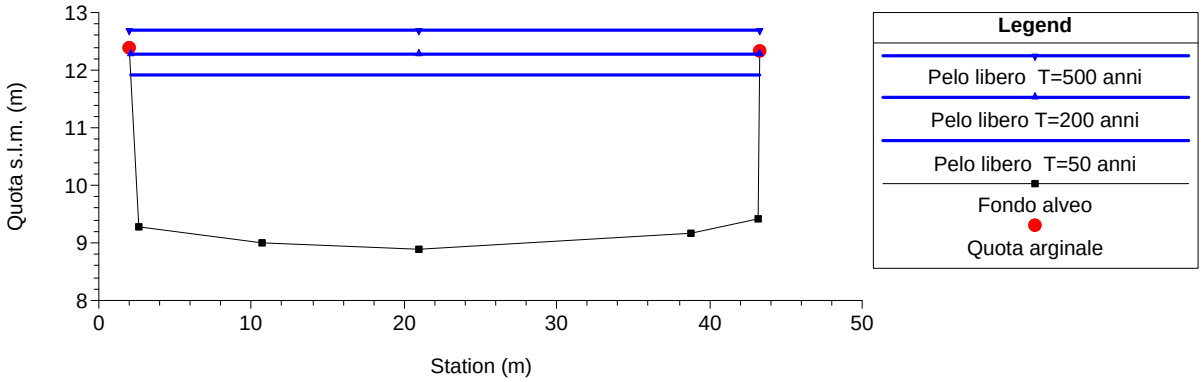
Quiliano-Foce

River = quiliano Reach = foce RS = 50



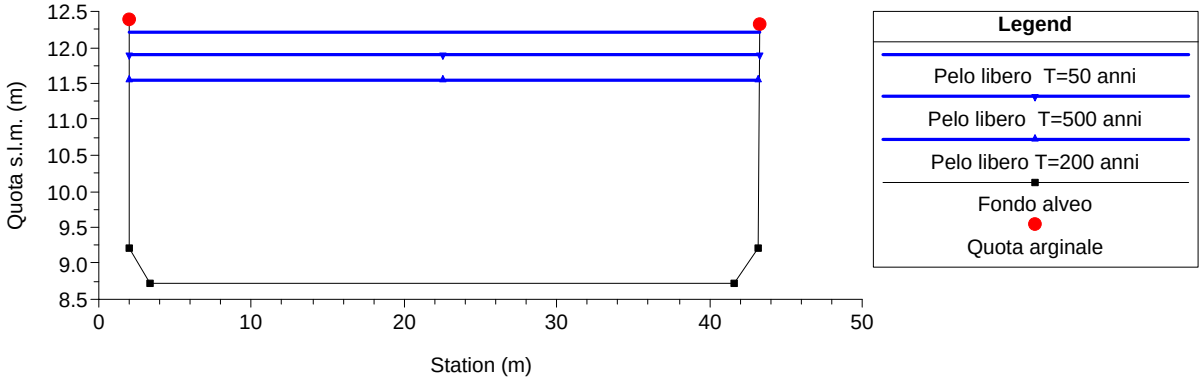
Quiliano-Foce

River = quiliano Reach = foce RS = 49



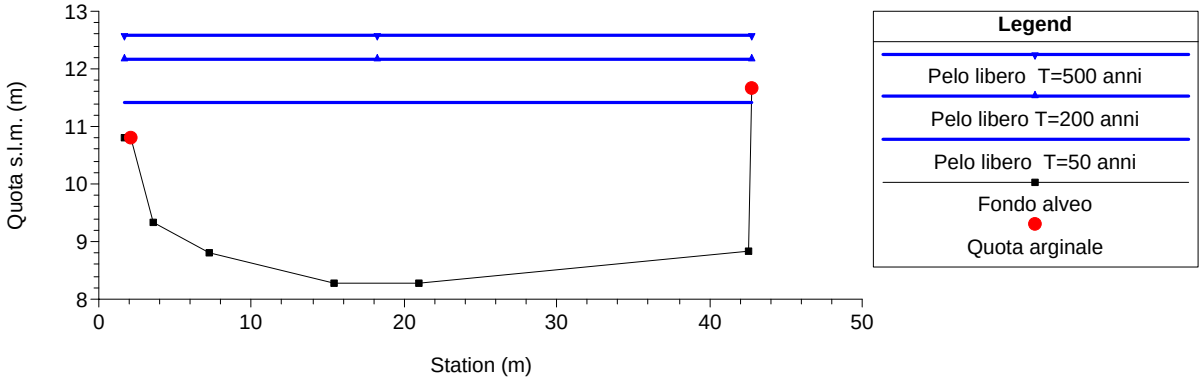
Quiliano-Foce

River = quiliano Reach = foce RS = 48



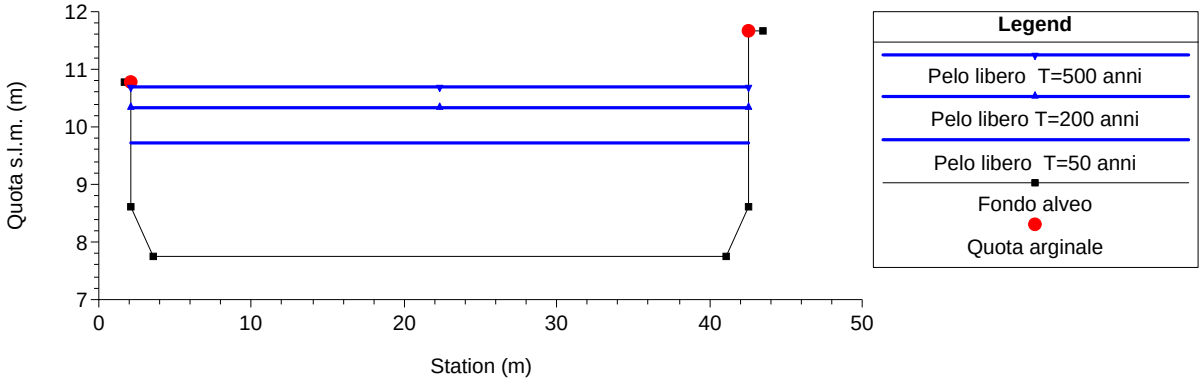
Quiliano-Foce

River = quiliano Reach = foce RS = 47



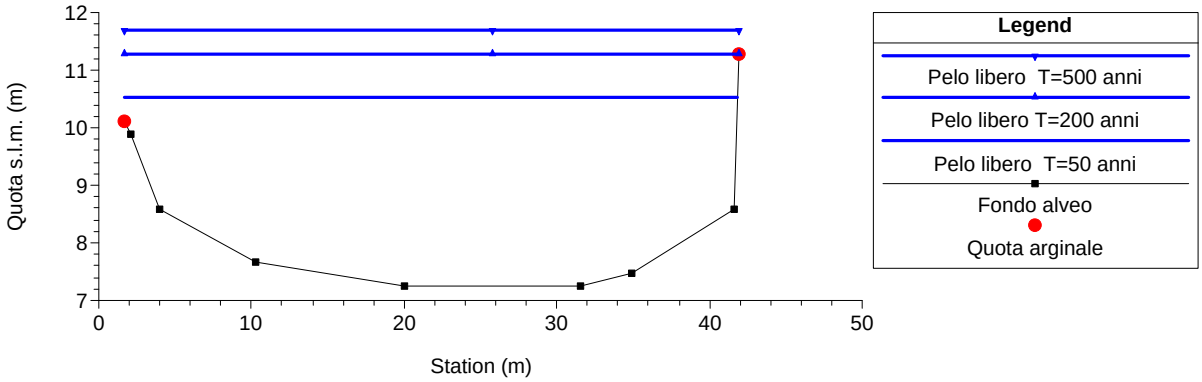
Quiliano-Foce

River = quiliano Reach = foce RS = 46



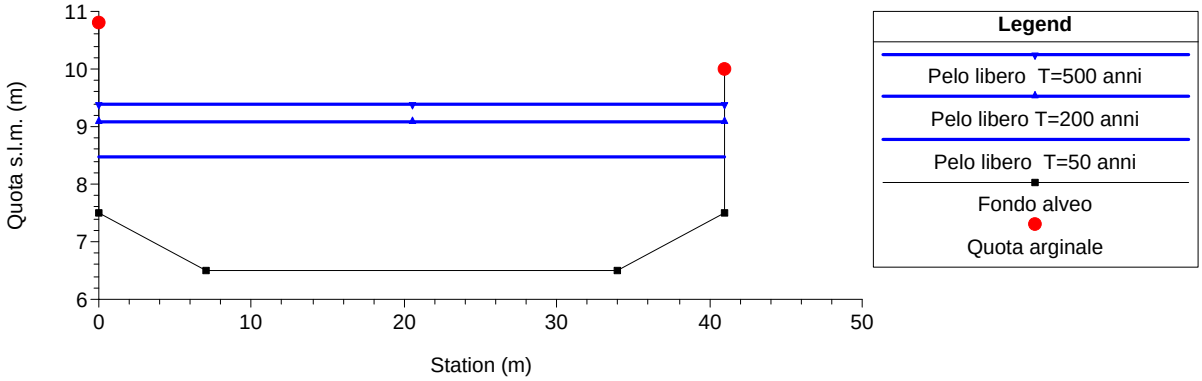
Quiliano-Foce

River = quiliano Reach = foce RS = 45



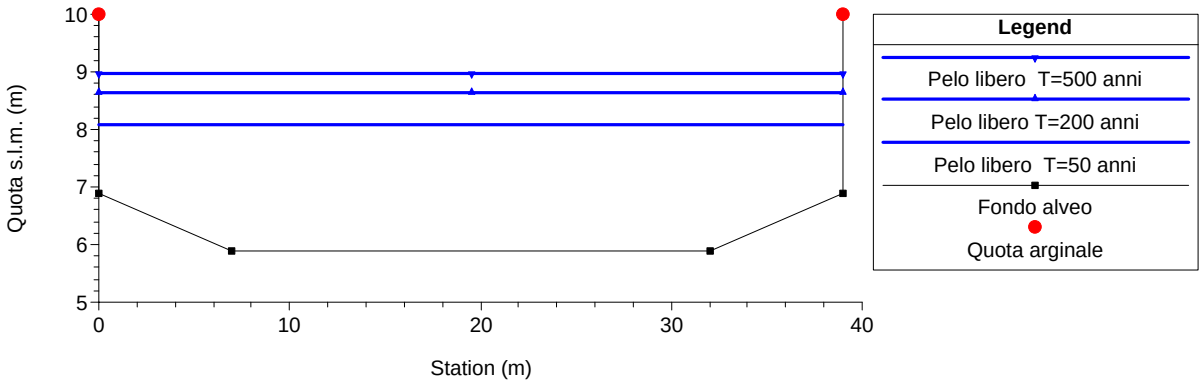
Quiliano-Foce

River = quiliano Reach = foce RS = 44



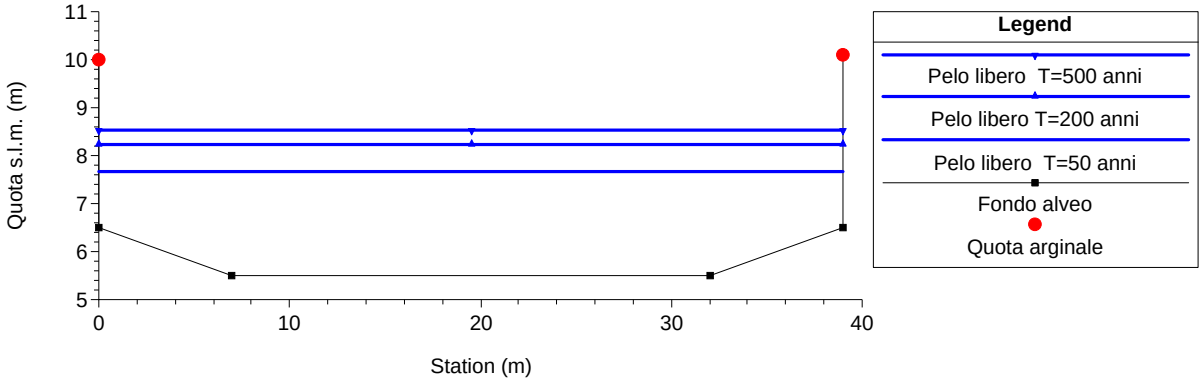
Quiliano-Foce

River = quiliano Reach = foce RS = 43



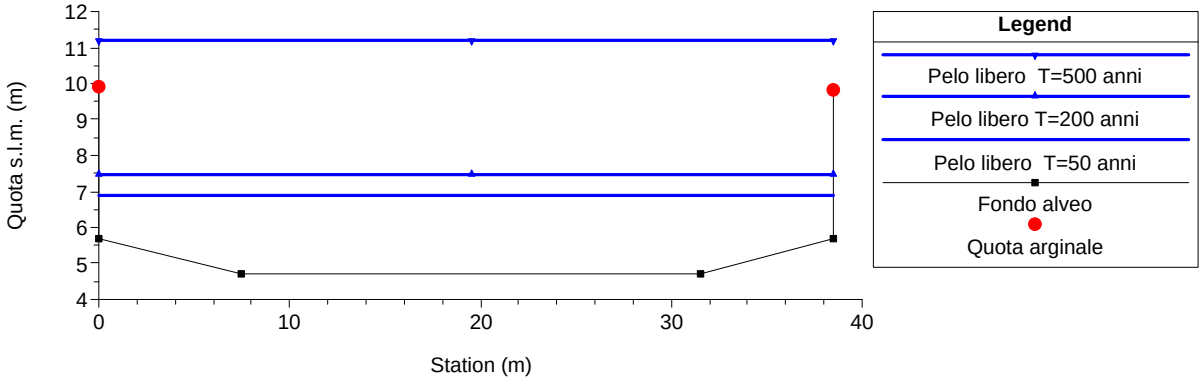
Quiliano-Foce

River = quiliano Reach = foce RS = 42



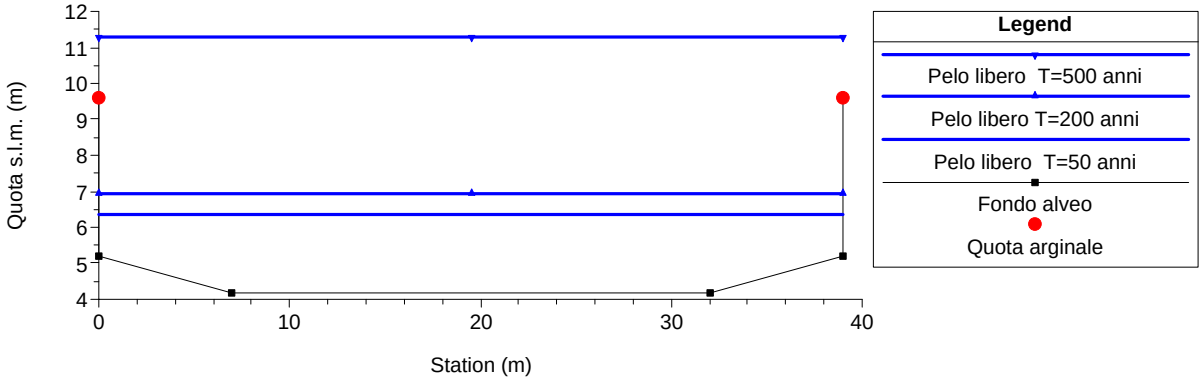
Quiliano-Foce

River = quiliano Reach = foce RS = 41



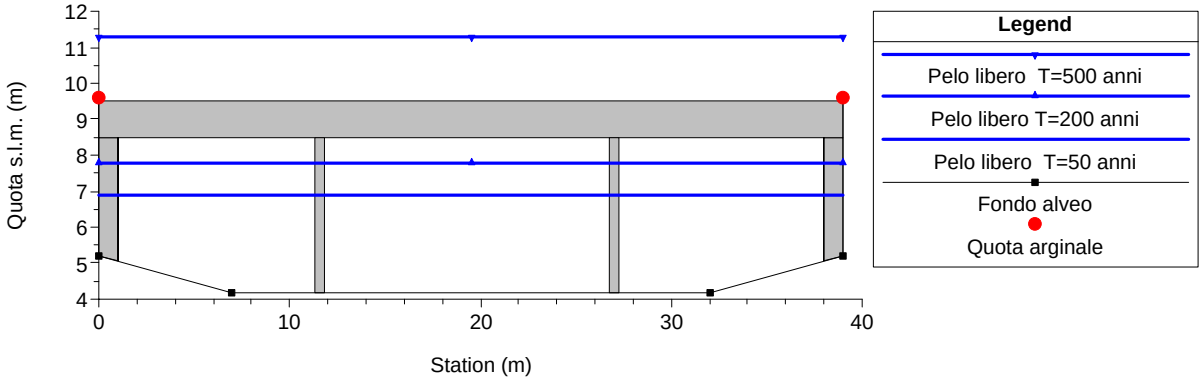
Quiliano-Foce

River = quiliano Reach = foce RS = 40



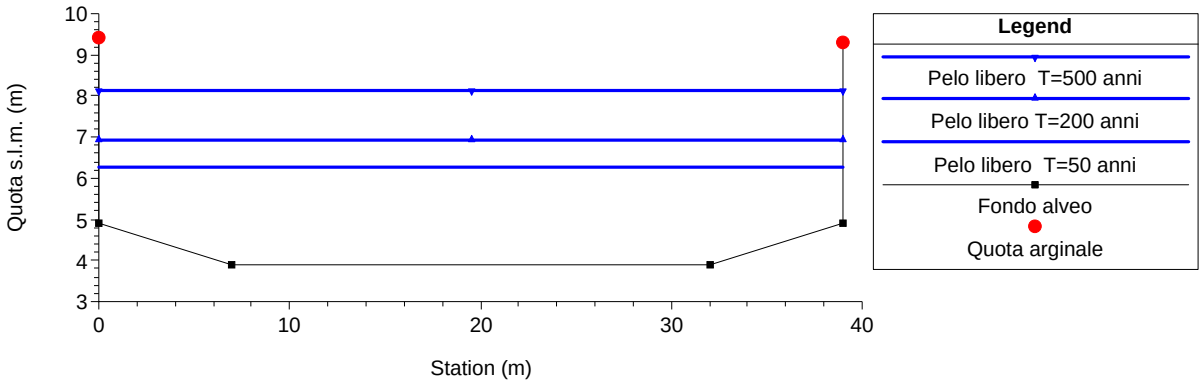
Quiliano-Foce

River = quiliano Reach = foce RS = 39 BR U



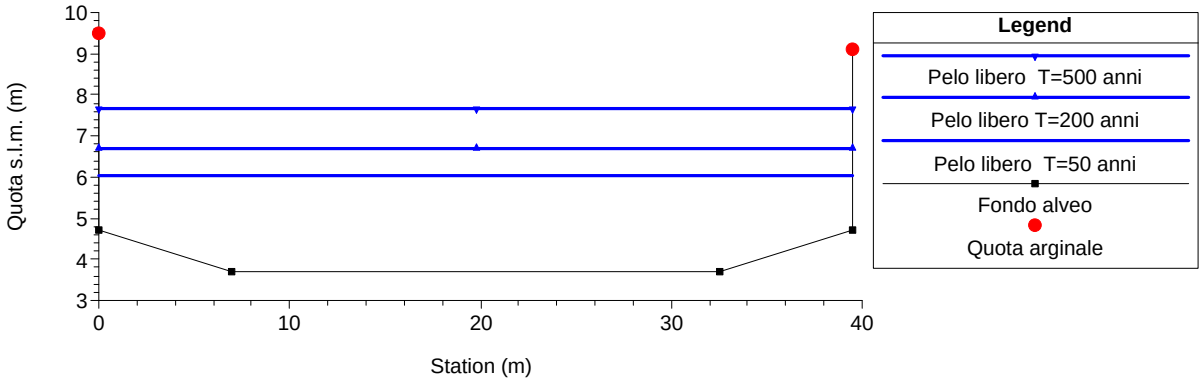
Quiliano-Foce

River = quiliano Reach = foce RS = 38



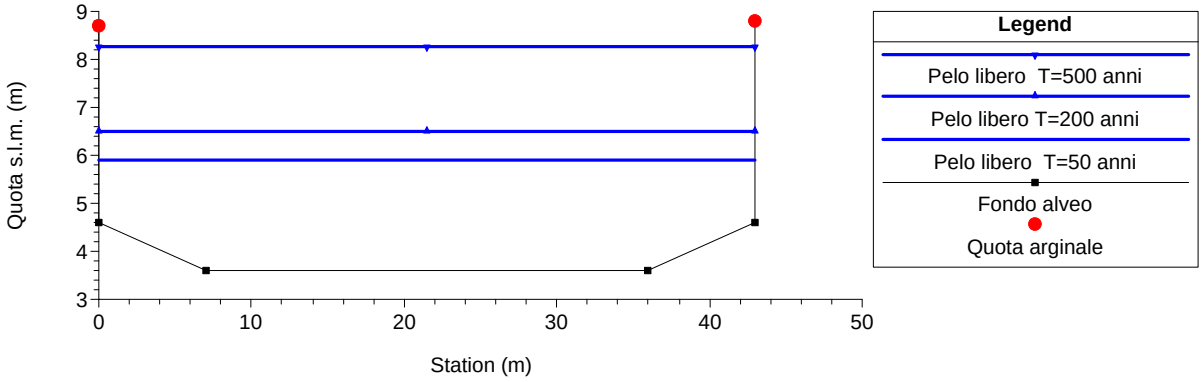
Quiliano-Foce

River = quiliano Reach = foce RS = 37



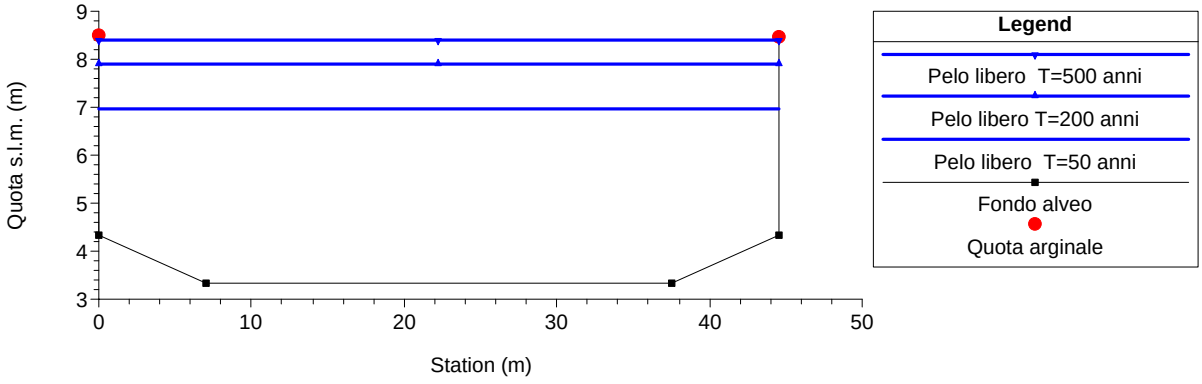
Quiliano-Foce

River = quiliano Reach = foce RS = 36



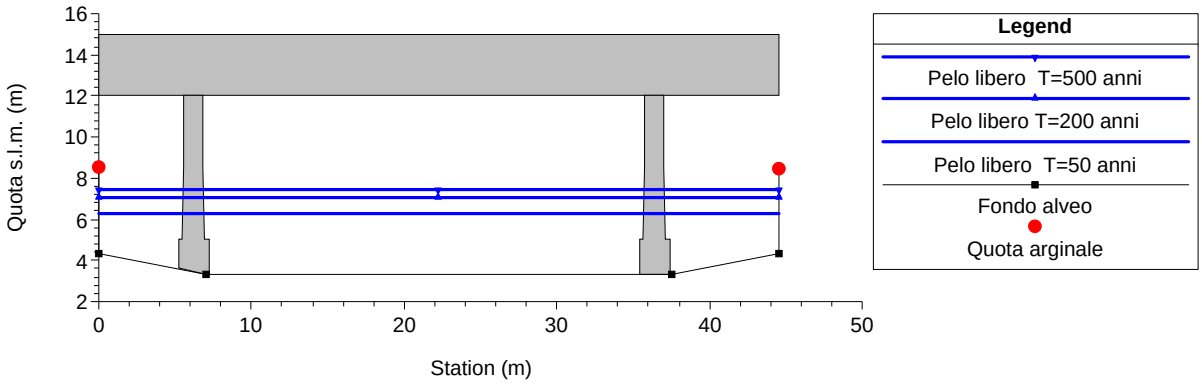
Quiliano-Foce

River = quiliano Reach = foce RS = 35



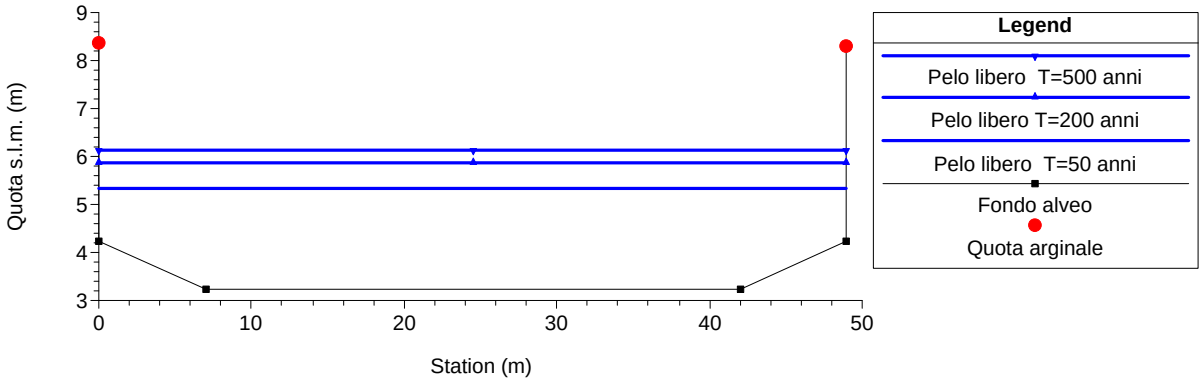
Quiliano-Foce

River = quiliano Reach = foce RS = 34 BR U



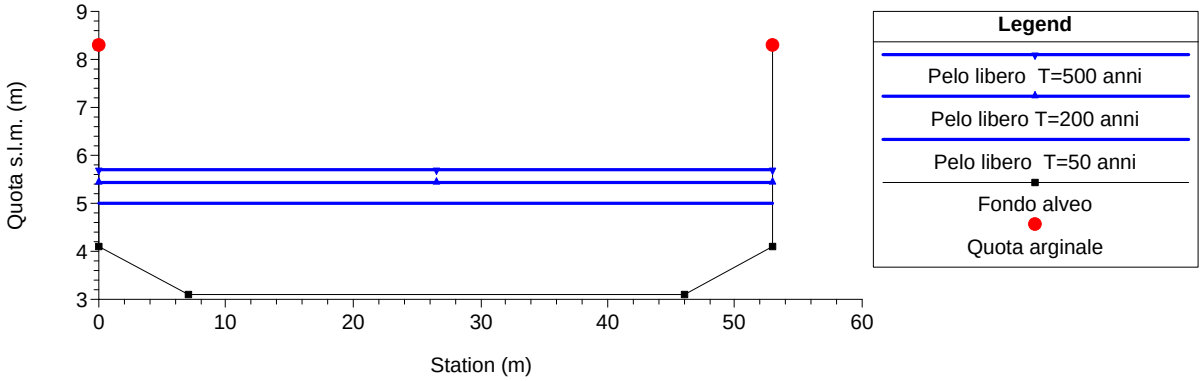
Quiliano-Foce

River = quiliano Reach = foce RS = 33



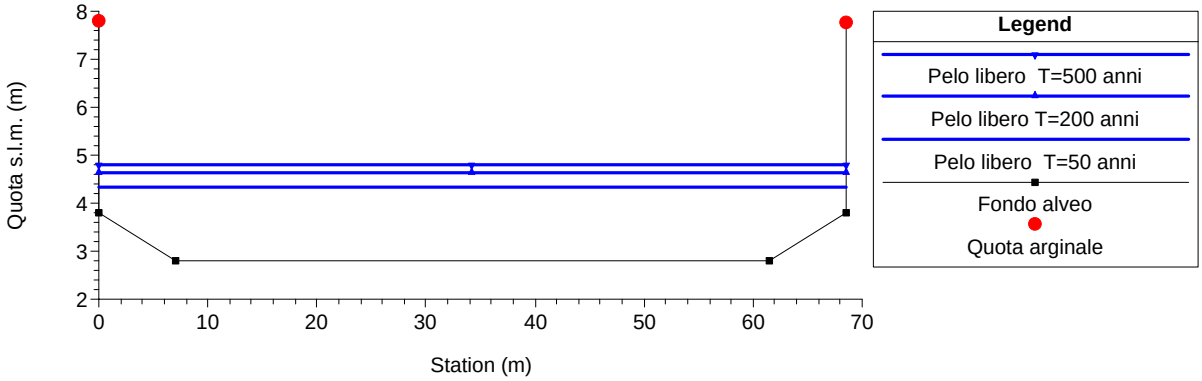
Quiliano-Foce

River = quiliano Reach = foce RS = 32



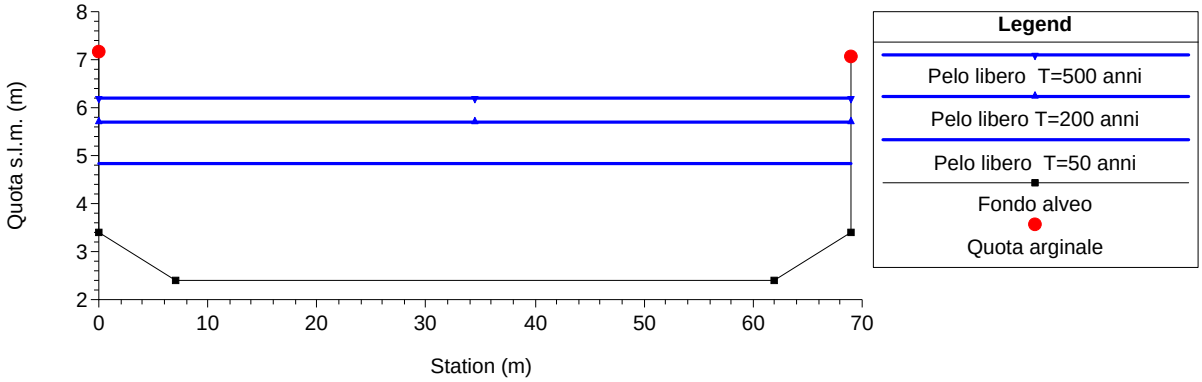
Quiliano-Foce

River = quiliano Reach = foce RS = 31



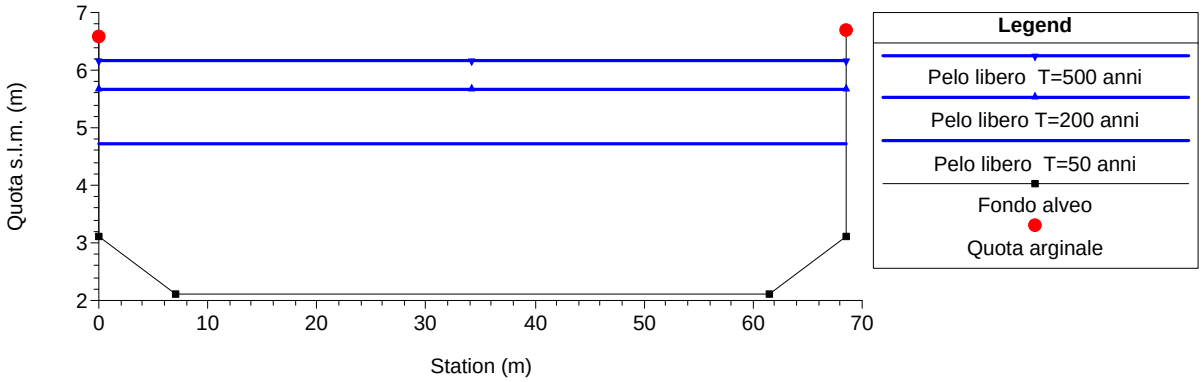
Quiliano-Foce

River = quiliano Reach = foce RS = 30



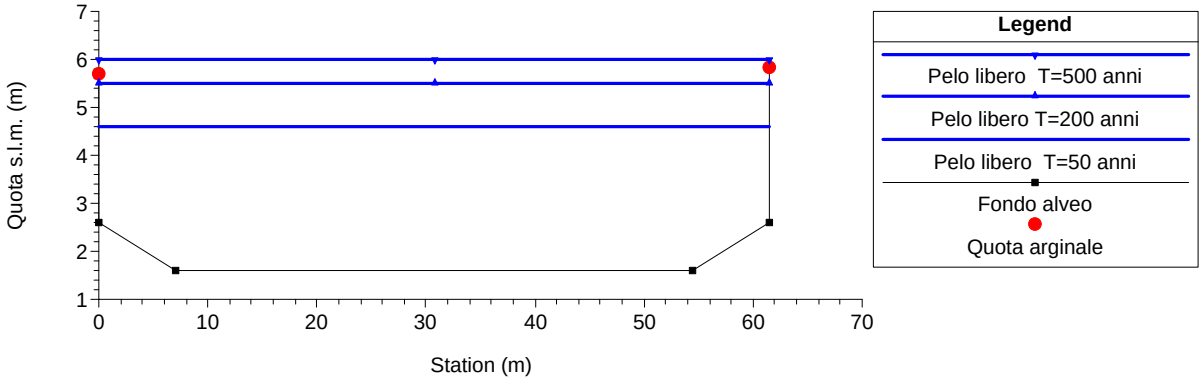
Quiliano-Foce

River = quiliano Reach = foce RS = 29



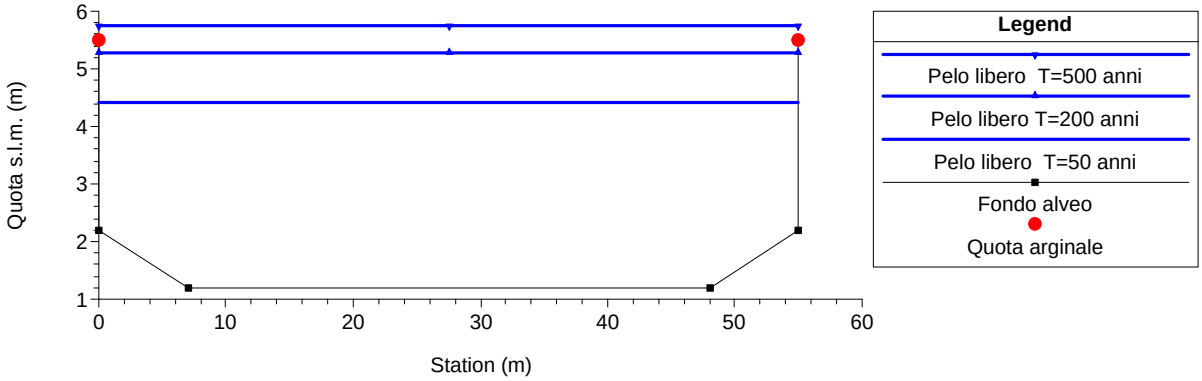
Quiliano-Foce

River = quiliano Reach = foce RS = 28



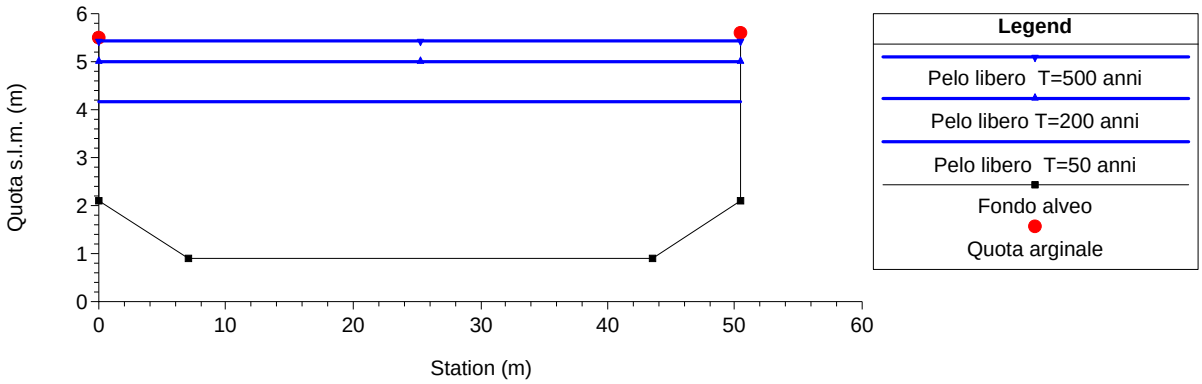
Quiliano-Foce

River = quiliano Reach = foce RS = 27



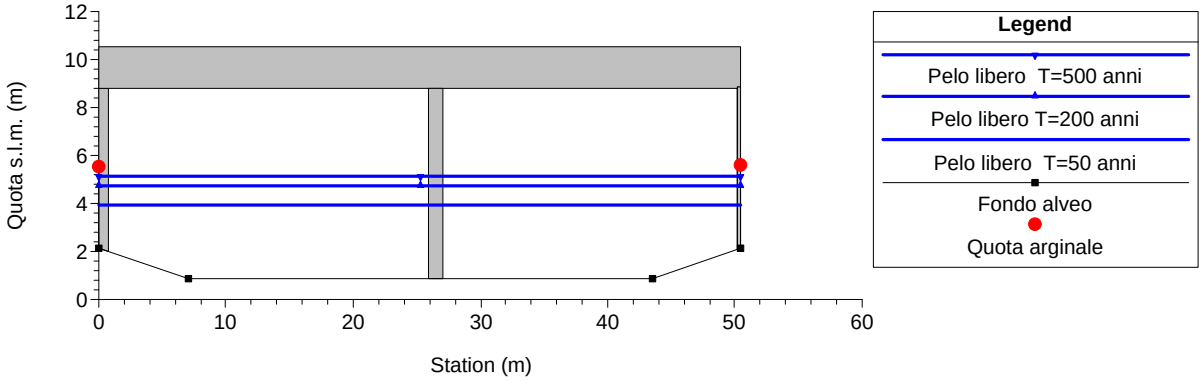
Quiliano-Foce

River = quiliano Reach = foce RS = 26



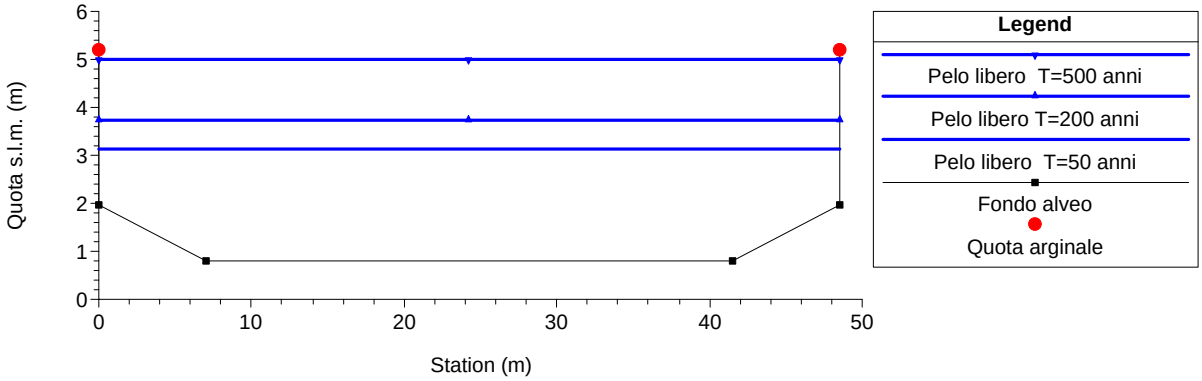
Quiliano-Foce

River = quiliano Reach = foce RS = 25 BR U



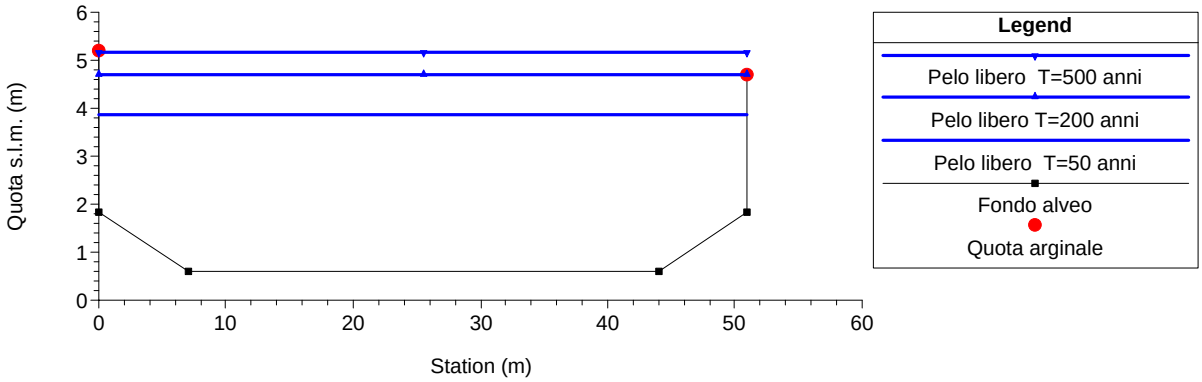
Quiliano-Foce

River = quiliano Reach = foce RS = 24



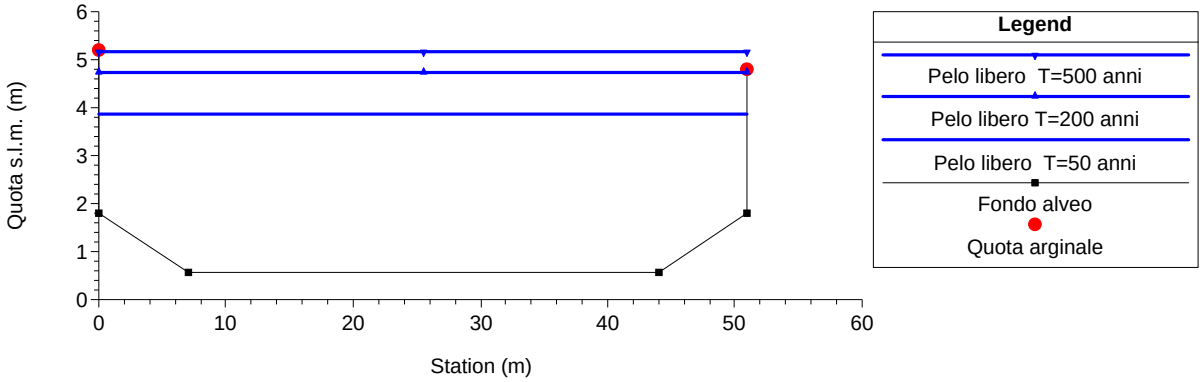
Quiliano-Foce

River = quiliano Reach = foce RS = 23



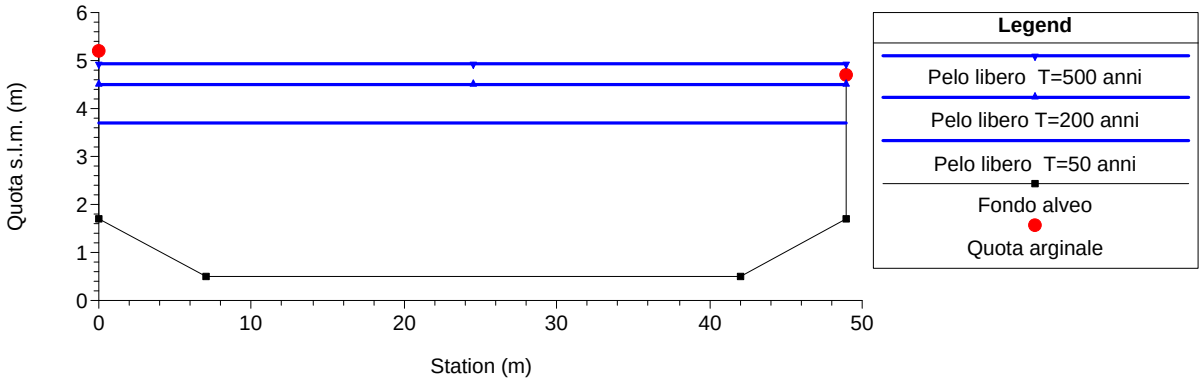
Quiliano-Foce

River = quiliano Reach = foce RS = 22



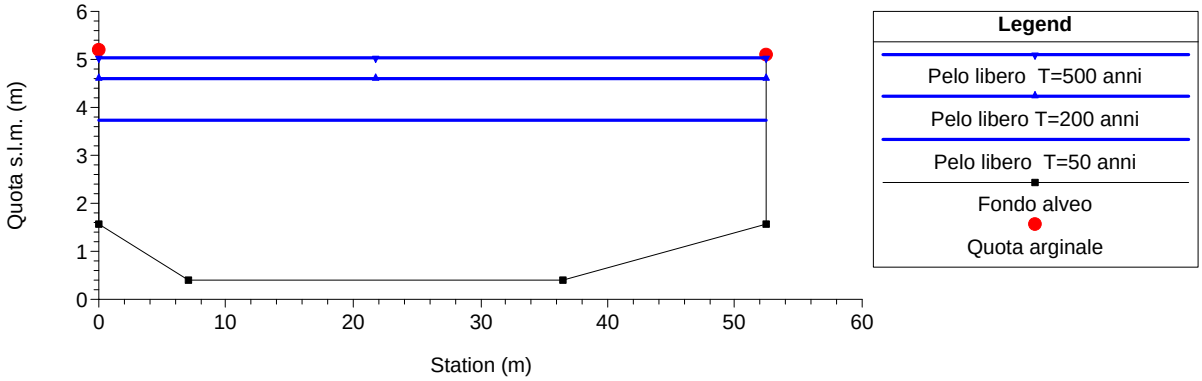
Quiliano-Foce

River = quiliano Reach = foce RS = 21



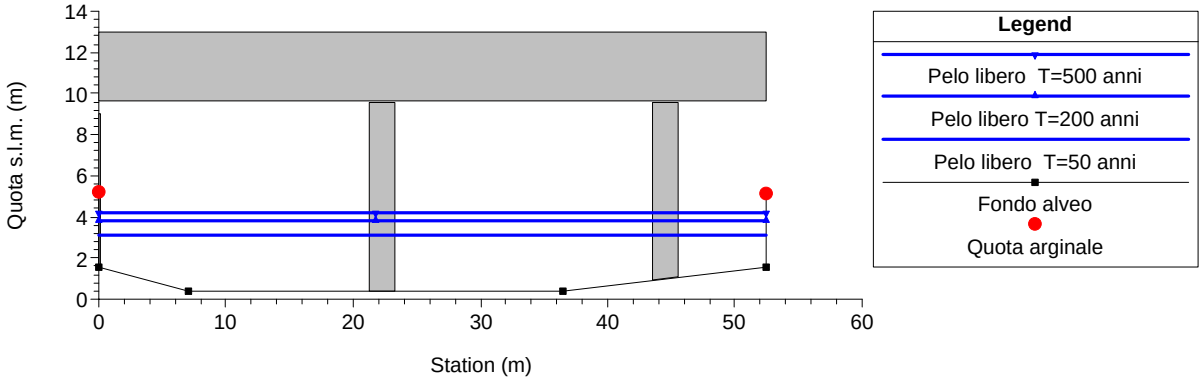
Quiliano-Foce

River = quiliano Reach = foce RS = 20



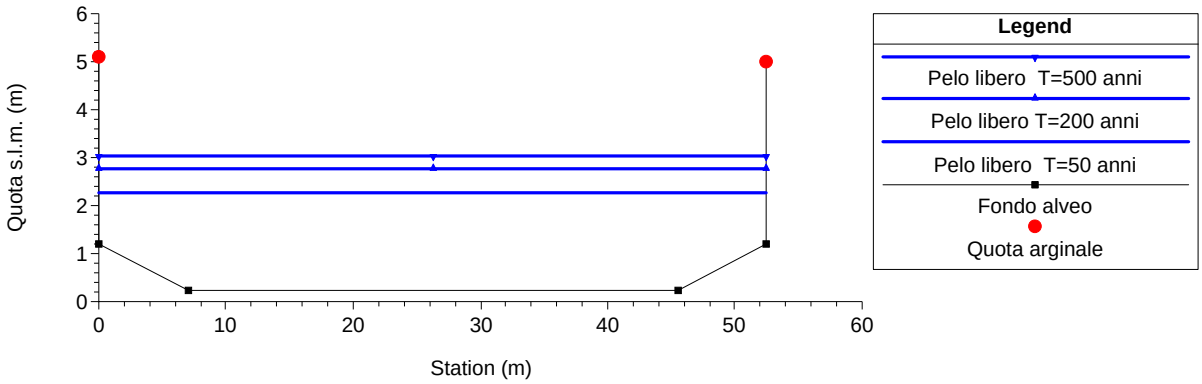
Quiliano-Foce

River = quiliano Reach = foce RS = 19 BR U



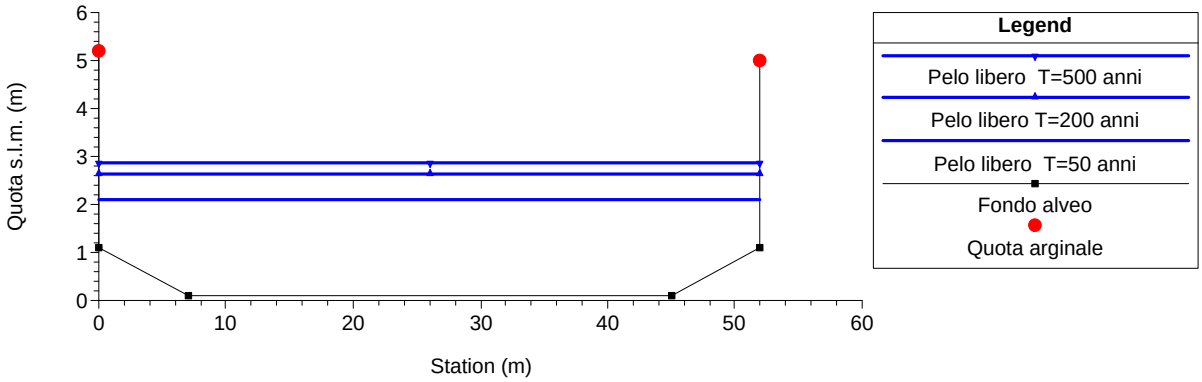
Quiliano-Foce

River = quiliano Reach = foce RS = 18



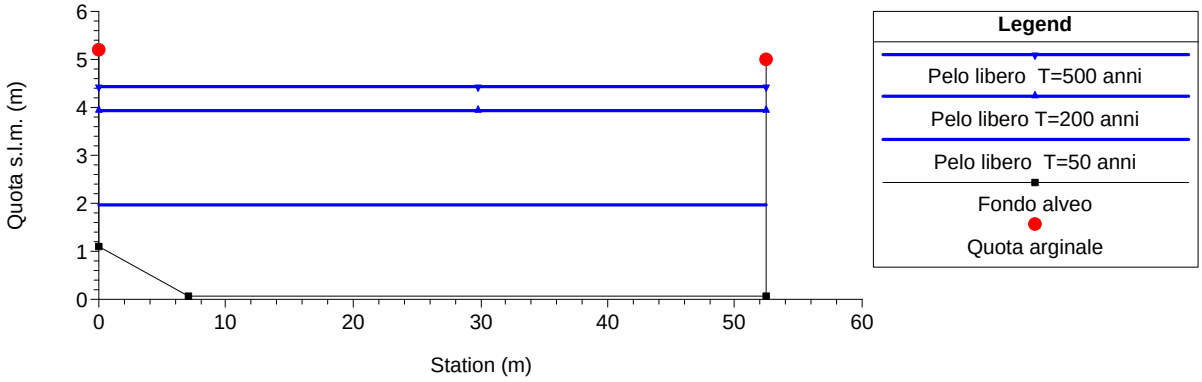
Quiliano-Foce

River = quiliano Reach = foce RS = 17



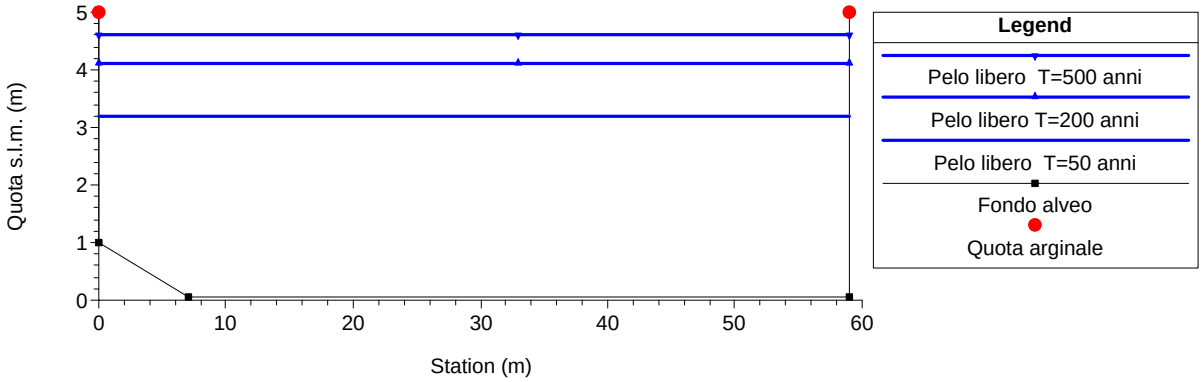
Quiliano-Foce

River = quiliano Reach = foce RS = 16



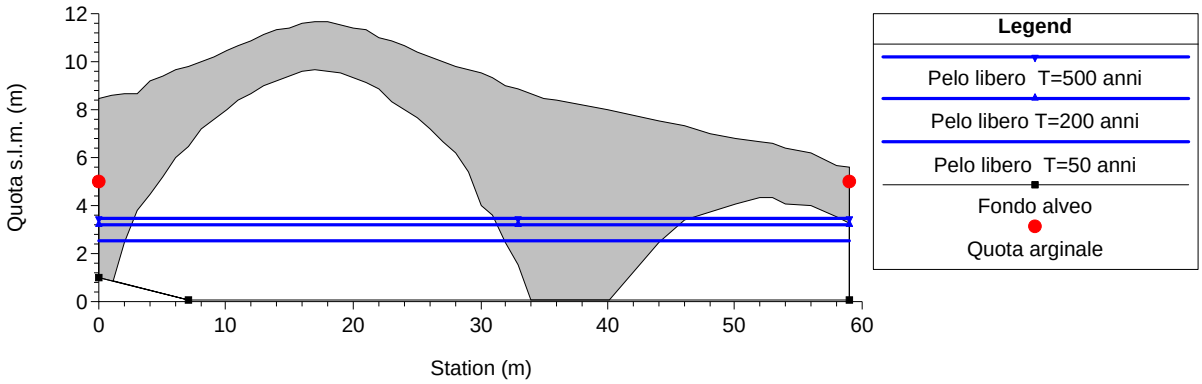
Quiliano-Foce

River = quiliano Reach = foce RS = 15



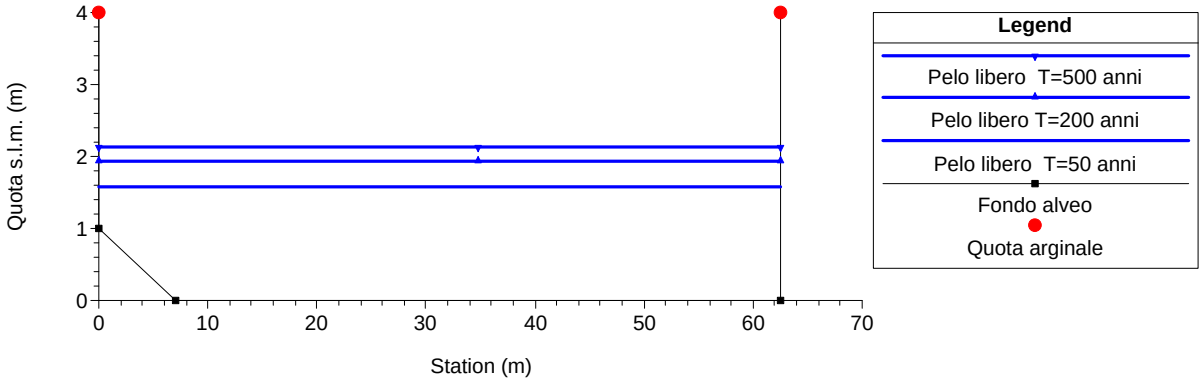
Quiliano-Foce

River = quiliano Reach = foce RS = 14 BR U



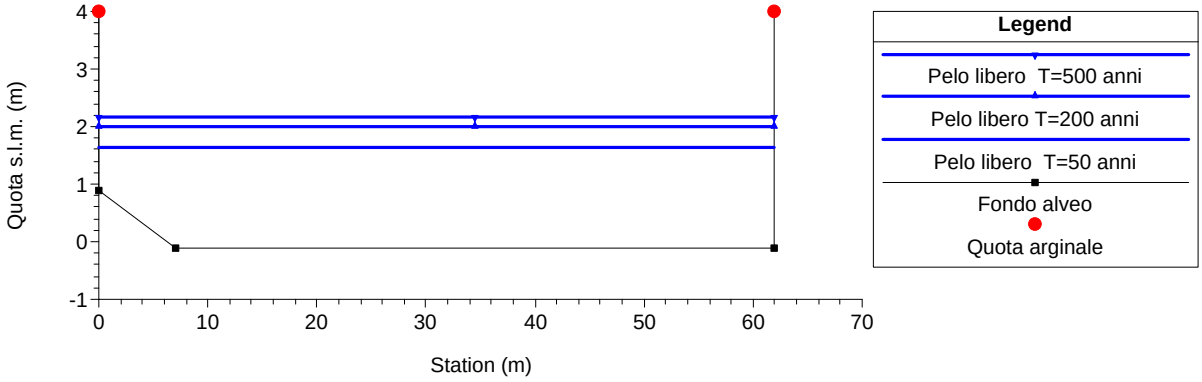
Quiliano-Foce

River = quiliano Reach = foce RS = 13



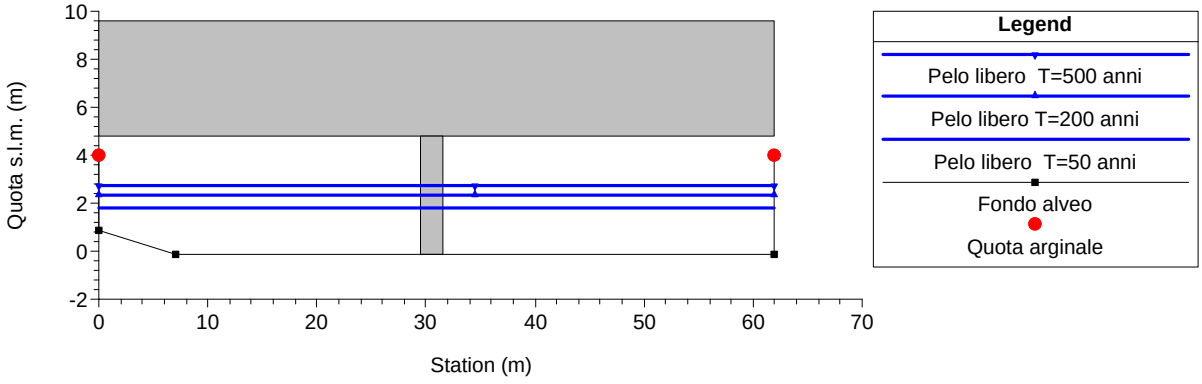
Quiliano-Foce

River = quiliano Reach = foce RS = 12



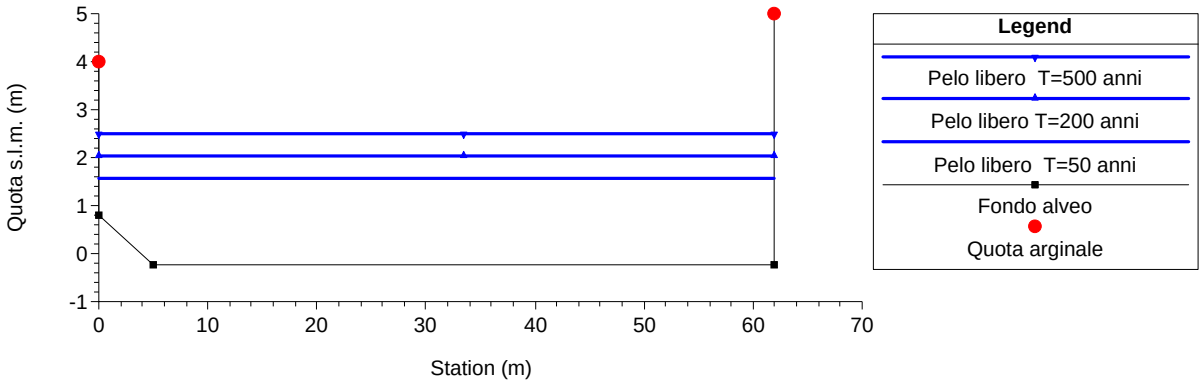
Quiliano-Foce

River = quiliano Reach = foce RS = 11 BR U



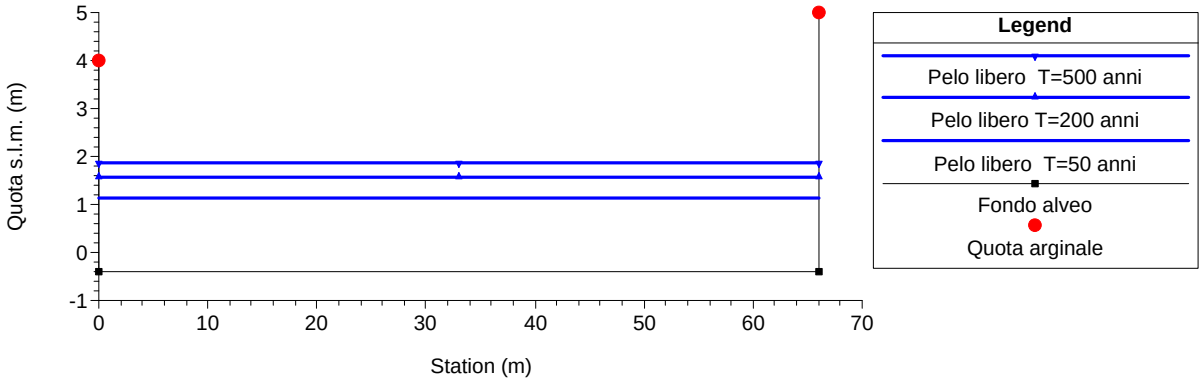
Quiliano-Foce

River = quiliano Reach = foce RS = 10



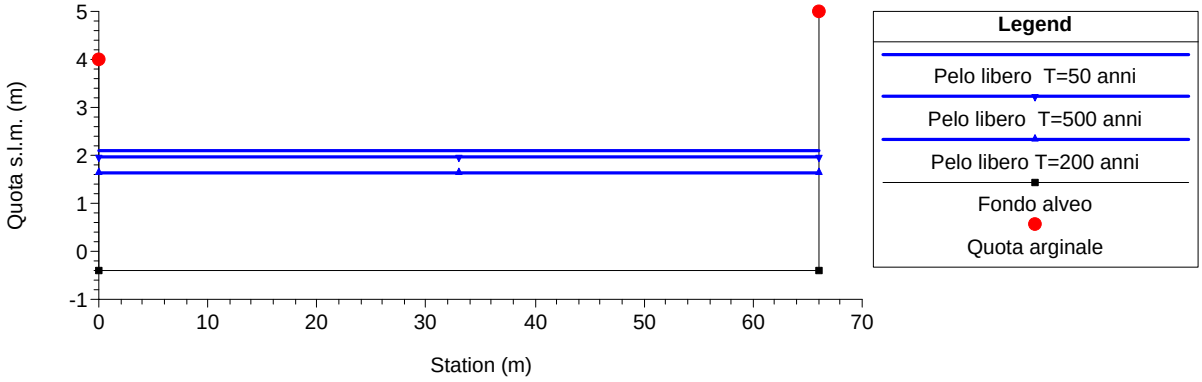
Quiliano-Foce

River = quiliano Reach = foce RS = 9



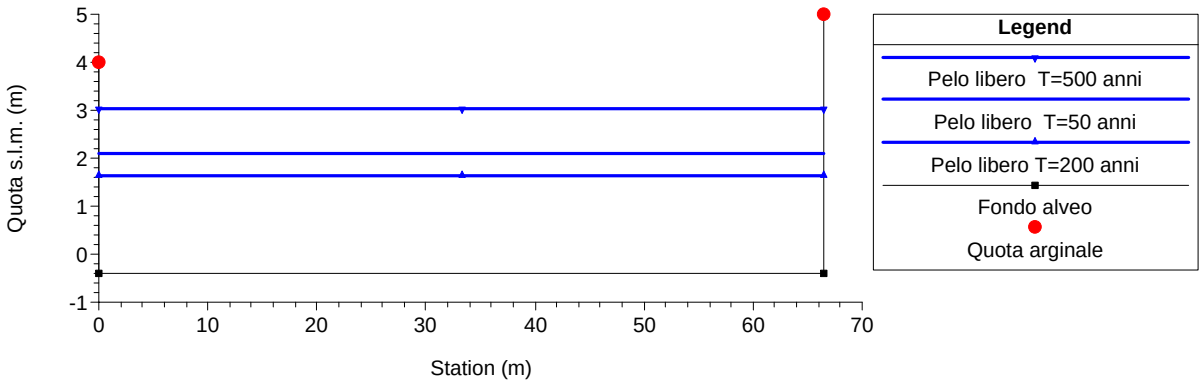
Quiliano-Foce

River = quiliano Reach = foce RS = 8



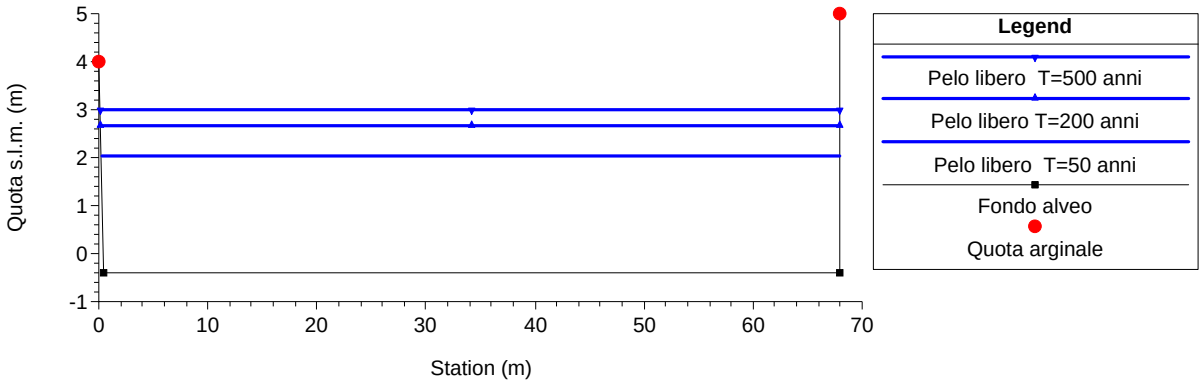
Quiliano-Foce

River = quiliano Reach = foce RS = 7



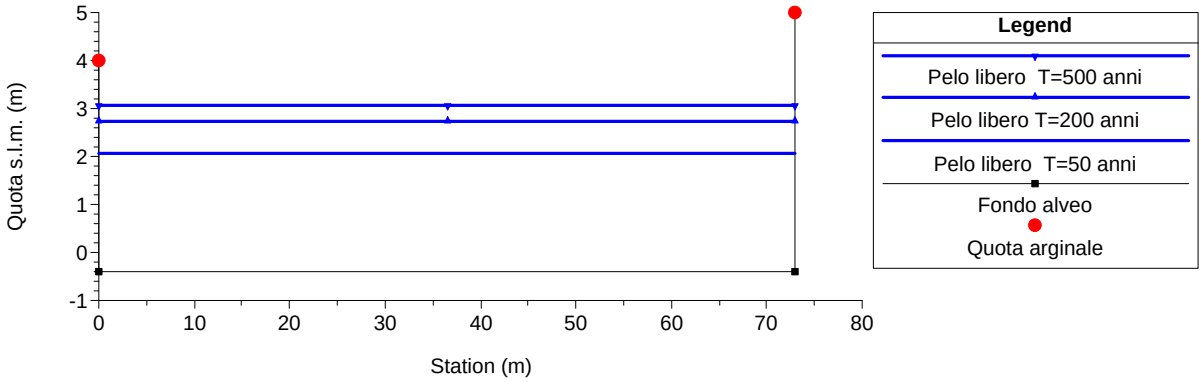
Quiliano-Foce

River = quiliano Reach = foce RS = 6



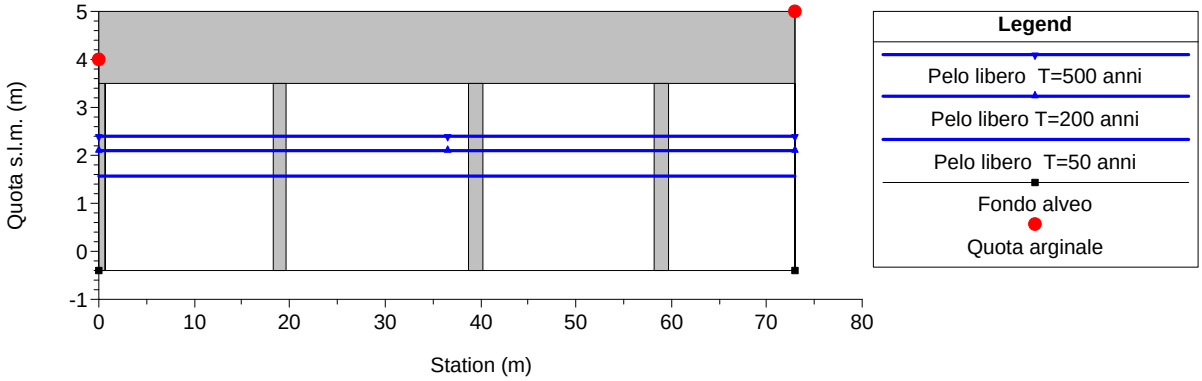
Quiliano-Foce

River = quiliano Reach = foce RS = 5



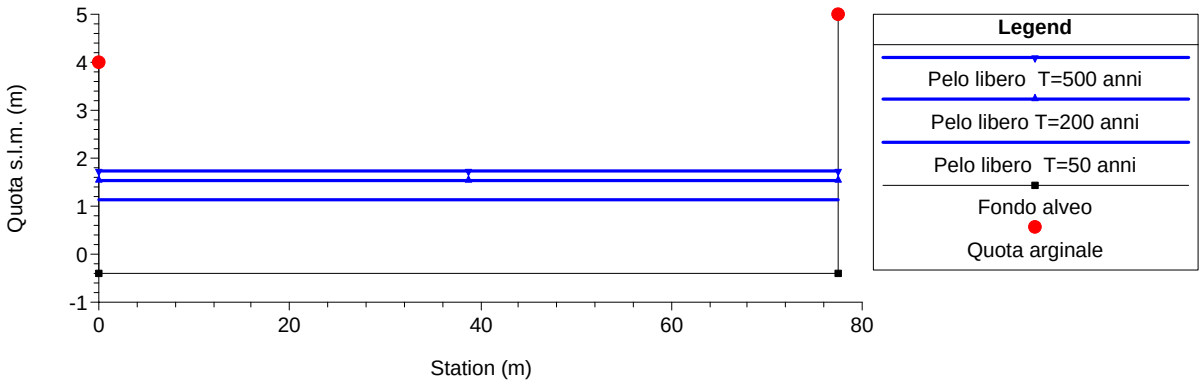
Quiliano-Foce

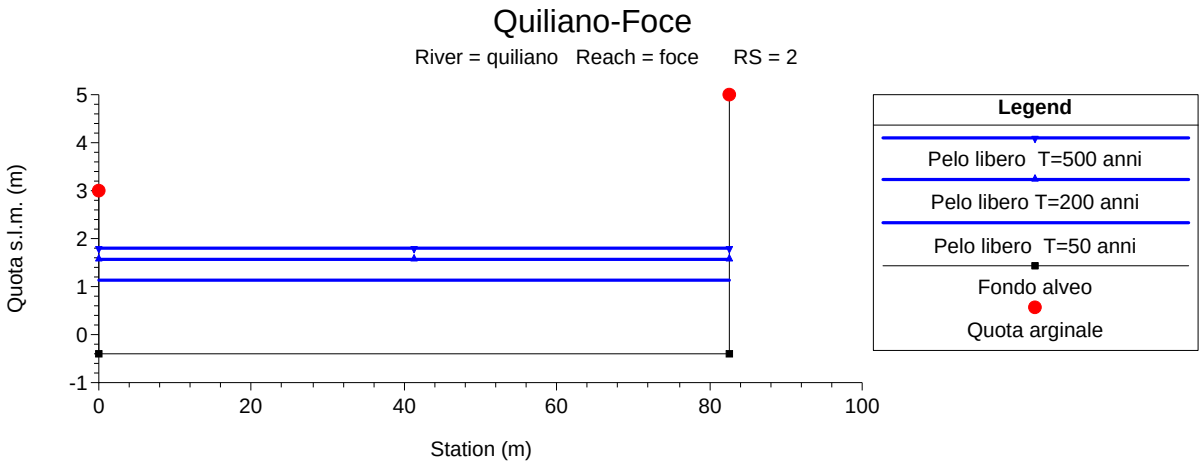
River = quiliano Reach = foce RS = 4 BR U

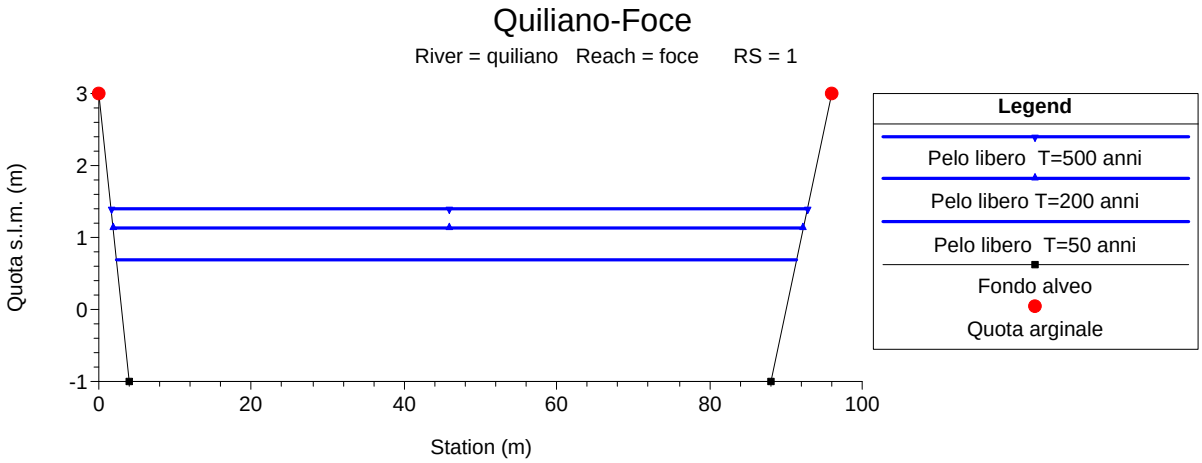


Quiliano-Foce

River = quiliano Reach = foce RS = 3




Quiliano-Foce
River = quiliano Reach = foce RS = 2
Quota s.l.m. (m)
Station (m)
Legend
Pelo libero T=500 anni
Pelo libero T=200 anni
Pelo libero T=50 anni
Fondo alveo
Quota arginale


Quiliano-Foce
River = quiliano Reach = foce RS = 1
Quota s.l.m. (m)
Station (m)
Legend
Pelo libero T=500 anni
Pelo libero T=200 anni
Pelo libero T=50 anni
Fondo alveo
Quota arginale

MODELLAZIONE IDRAULICA IN CONDIZIONI DI MOTO PERMANENTE:
TABELLE DELLE GRANDEZZE IDRAULICHE SIGNIFICATIVE PER LE PORTATE T=50, 200, 500 ANNI

QUILIANO FOCE stato di progetto

Per la redazione delle Tavv. 9 (fasce di inondabilità), 11 (rischio idraulico) e 14 (aree inondabili) non sono state utilizzate le risultanze della modellazione effettuata con la configurazione di progetto. La cartografia di Piano sarà aggiornata ad avvenuta ultimazione degli interventi ad oggi in itinere.

Torrente Quiliano - Foce T=50 anni										
Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
66	590	14.68	18.2	18.18	18.15	2.64	18.9	3.83	154.1	0.66
65	590	14.45	18.26	17.6	17.4	2.95	18.7	5.04	117.11	1
64	590	14.33	18.2	17.88	16.33	2.63	18.59	6.67	88.48	1.52
63	590	14.3	18.08	17.85	16.36	2.63	18.49	6.47	91.14	1.45
62	590	14.25	16.03	17.8	16.13	2.52	18.37	6.62	89.15	1.59
61	590	13.5	17.12	17.01	15.85	2.15	16.62	3.87	152.3	0.86
60	590	13.18	17.07	17.08	16.1	1.91	16.5	2.8	210.95	0.52
59	590	12.6	16.17	16.1	15.13	2.53	16.19	4.57	129.2	1
58	590	12.35	16.15	16	13.94	2.21	16.08	6.47	91.13	1.65
57	590	11.8	15.22	15.29	14.24	2.44	15.33	4.63	127.41	1
56	590	11.65	15.5	15.22	14.53	2.2	15.17	3.54	166.89	0.67
55	590	11.1	14.1	14.62	14.04	2.54	14.86	4.02	146.88	0.79
54	590	10.8	14.1	14.61	14.25	2.3	14.76	3.16	186.5	0.54
53.6	590	10.27	13.65	13.86	13.83	2.7	14.5	3.64	162.13	0.64
53.5	Bridge									
53.4	590	10.26	13.64	13.84	13.73	2.72	14.45	3.76	156.99	0.67
53	590	10.1	13.5	13.61	13.5	2.89	14.37	4.12	143.11	0.76
52	590	9.9	13.54	13.6	13.71	2.56	14.28	3.33	177.03	0.55
51	590	9.4	13	13	12.57	3.17	13.99	5.28	111.7	1
50	590	9.35	13	13	11.64	2.87	13.88	6.64	88.92	1.41
49	590	8.9	12.4	12.33	11.91	2.94	13.22	5.07	116.28	0.96
48	590	8.73	12.4	12.32	12.21	2.77	13.08	4.14	142.55	0.71
47	590	8.28	10.81	11.68	11.41	3.12	12.79	5.21	113.17	1
46	590	7.75	10.79	11.66	9.72	2.82	12.6	7.51	78.55	1.72
45	590	7.25	10.1	11.27	10.51	3.26	11.92	5.25	112.38	1
44	590	6.5	10.8	10	8.48	2.93	11.72	7.98	73.95	1.9
43	590	5.9	10	10	8.07	3.04	11.01	7.59	77.72	1.72
42	590	5.5	10	10.1	7.67	3.04	10.6	7.58	77.85	1.71
41	590	4.7	9.9	9.8	6.9	3.07	9.85	7.6	77.61	1.71
40	590	4.2	9.6	9.6	6.35	3.04	9.35	7.66	76.99	1.74
39	Bridge									
38	590	3.9	9.4	9.3	6.25	3.04	8.72	6.96	84.77	1.51
37	590	3.7	9.5	9.1	6.04	3.01	8.47	6.9	85.5	1.5
36	590	3.6	8.7	8.79	5.9	2.84	8	6.41	92.02	1.4
35	590	3.35	8.5	8.47	6.98	2.77	7.72	3.82	154.63	0.65
34	Bridge									
33	590	3.25	8.35	8.3	5.35	2.6	7.28	6.16	95.8	1.41
32	590	3.1	8.3	8.31	4.99	2.46	7.03	6.32	93.33	1.52
31	590	2.8	7.8	7.75	4.33	2.07	6.19	6.03	97.79	1.61
30	590	2.4	7.18	7.07	4.82	2.05	5.51	3.68	160.35	0.77
29	590	2.1	6.57	6.69	4.72	2.07	5.32	3.42	172.75	0.69
28	590	1.6	5.7	5.82	4.58	2.22	5.15	3.34	176.47	0.63
27	590	1.2	5.5	5.5	4.42	2.4	5.03	3.47	170.21	0.63
26	590	0.9	5.5	5.6	4.17	2.57	4.89	3.77	156.54	0.68
25	Bridge									
24	590	0.8	5.2	5.2	3.14	2.64	4.74	5.6	105.35	1.21
23	590	0.6	5.2	4.7	3.86	2.56	4.58	3.74	157.67	0.68
22	590	0.55	5.2	4.8	3.87	2.56	4.56	3.68	160.4	0.66
21	590	0.5	5.2	4.7	3.7	2.63	4.51	3.97	148.46	0.73
20	590	0.4	5.2	5.1	3.74	2.6	4.42	3.64	162.1	0.66
19	Bridge									

18	590	0.25	5.1	5	2.26	2.47	4.07	5.97	98.84	1.39
17	590	0.1	5.2	5	2.1	2.5	3.98	6.08	97.06	1.42
16	590	0.08	5.2	5	1.98	2.41	3.9	6.15	95.95	1.45
15	590	0.05	5	5	3.19	2.23	3.73	3.24	182.11	0.59
14	Bridge									
13	590	0	4	4	1.58	2.14	3.54	6.2	95.09	1.61
12	590	-0.1	4	4	1.64	2.15	3.27	5.66	104.23	1.39
11	Bridge									
10	590	-0.25	4	5	1.55	2.14	3.04	5.41	109.12	1.3
9	590	-0.4	4	5	1.14	2.01	2.86	5.8	101.68	1.49
8	590	-0.4	4	5	2.08	2.01	2.74	3.6	163.93	0.73
7	590	-0.4	4	5	2.09	2	2.73	3.57	165.23	0.72
6	590	-0.4	4	5	2.05	1.98	2.69	3.57	165.38	0.73
5	590	-0.4	4	5	2.06	1.88	2.61	3.28	179.72	0.67
4	Bridge									
3	590	-0.4	4	5	1.15	1.81	2.38	4.93	119.74	1.27
2	590	-0.4	3	5	1.14	1.73	2.24	4.65	126.83	1.2
1	590	-1	3	3	0.68	1.69	1.52	4.05	145.54	1.01

Torrente Quiliano - Foce T=200 anni										
Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
66	850	14.68	18.2	18.18	18.97	3.36	19.98	4.46	190.74	0.69
65	850	14.45	18.26	17.6	18.12	3.67	19.76	5.69	149.45	1
64	850	14.33	18.2	17.88	16.96	3.35	19.64	7.26	117.12	1.44
63	850	14.3	18.08	17.85	16.97	3.35	19.59	7.17	118.55	1.41
62	850	14.25	16.03	17.8	16.63	3.19	19.46	7.45	114.02	1.58
61	850	13.5	17.12	17.01	15.57	2.67	17.71	6.48	131.1	1.55
60	850	13.18	17.07	17.08	16.87	2.43	17.39	3.19	266.51	0.53
59	850	12.6	16.17	16.1	15.72	3.12	17.07	5.16	164.82	1
58	850	12.35	16.15	16	14.47	2.81	16.95	6.97	122.01	1.53
57	850	11.8	15.22	15.29	15.29	3.04	16.33	4.5	188.71	0.8
56	850	11.65	15.5	15.22	15.48	2.81	16.23	3.82	222.28	0.62
55	850	11.1	14.1	14.62	15.11	3.16	15.98	4.12	206.44	0.68
54	850	10.8	14.1	14.61	15.28	2.94	15.9	3.51	242.19	0.53
53.6	850	10.27	13.65	13.86	14.86	3.38	15.67	3.99	212.79	0.61
53.5	Bridge									
53.4	850	10.26	13.64	13.84	14.74	3.4	15.6	4.12	206.46	0.64
53	850	10.1	13.5	13.61	14.54	3.59	15.53	4.42	192.18	0.7
52	850	9.9	13.54	13.6	14.72	3.26	15.45	3.79	224.32	0.55
51	850	9.4	13	13	13.36	3.96	15.16	5.94	142.98	1
50	850	9.35	13	13	12.34	3.66	15.06	7.31	116.25	1.36
49	850	8.9	12.4	12.33	12.27	3.7	14.41	6.47	131.29	1.16
48	850	8.73	12.4	12.32	11.54	3.53	14.32	7.39	115.06	1.41
47	850	8.28	10.81	11.68	12.17	3.89	13.93	5.89	144.13	1
46	850	7.75	10.79	11.66	10.35	3.59	13.77	8.2	103.7	1.63
45	850	7.25	10.1	11.27	11.29	4.04	13.08	5.92	143.48	1
44	850	6.5	10.8	10	9.08	3.7	12.87	8.62	98.56	1.78
43	850	5.9	10	10	8.65	3.82	12.31	8.47	100.32	1.69
42	850	5.5	10	10.1	8.22	3.82	11.96	8.56	99.26	1.71
41	850	4.7	9.9	9.8	7.46	3.87	11.21	8.57	99.14	1.71
40	850	4.2	9.6	9.6	6.95	3.83	10.61	8.47	100.33	1.69
39	Bridge									
38	850	3.9	9.4	9.3	6.91	3.83	9.93	7.69	110.47	1.46
37	850	3.7	9.5	9.1	6.7	3.79	9.66	7.62	111.6	1.45
36	850	3.6	8.7	8.79	6.5	3.58	9.16	7.22	117.65	1.39
35	850	3.35	8.5	8.47	7.9	3.49	8.87	4.34	195.69	0.66
34	Bridge									
33	850	3.25	8.35	8.3	5.87	3.27	8.37	7	121.46	1.42
32	850	3.1	8.3	8.31	5.45	3.1	8.11	7.23	117.54	1.55
31	850	2.8	7.8	7.75	4.63	2.6	7.25	7.17	118.48	1.74
30	850	2.4	7.18	7.07	5.71	2.59	6.46	3.84	221.4	0.68
29	850	2.1	6.57	6.69	5.66	2.61	6.32	3.59	236.93	0.62
28	850	1.6	5.7	5.82	5.51	2.8	6.19	3.64	233.56	0.6
27	850	1.2	5.5	5.5	5.29	3.03	6.06	3.91	217.64	0.63
26	850	0.9	5.5	5.6	4.99	3.24	5.93	4.29	198.33	0.69
25	Bridge									
24	850	0.8	5.2	5.2	3.72	3.32	5.79	6.37	133.46	1.23
23	850	0.6	5.2	4.7	4.71	3.22	5.62	4.23	201.04	0.68
22	850	0.55	5.2	4.8	4.72	3.22	5.6	4.17	203.82	0.67
21	850	0.5	5.2	4.7	4.51	3.3	5.55	4.52	188.12	0.74
20	850	0.4	5.2	5.1	4.59	3.25	5.45	4.12	206.35	0.66
19	Bridge									

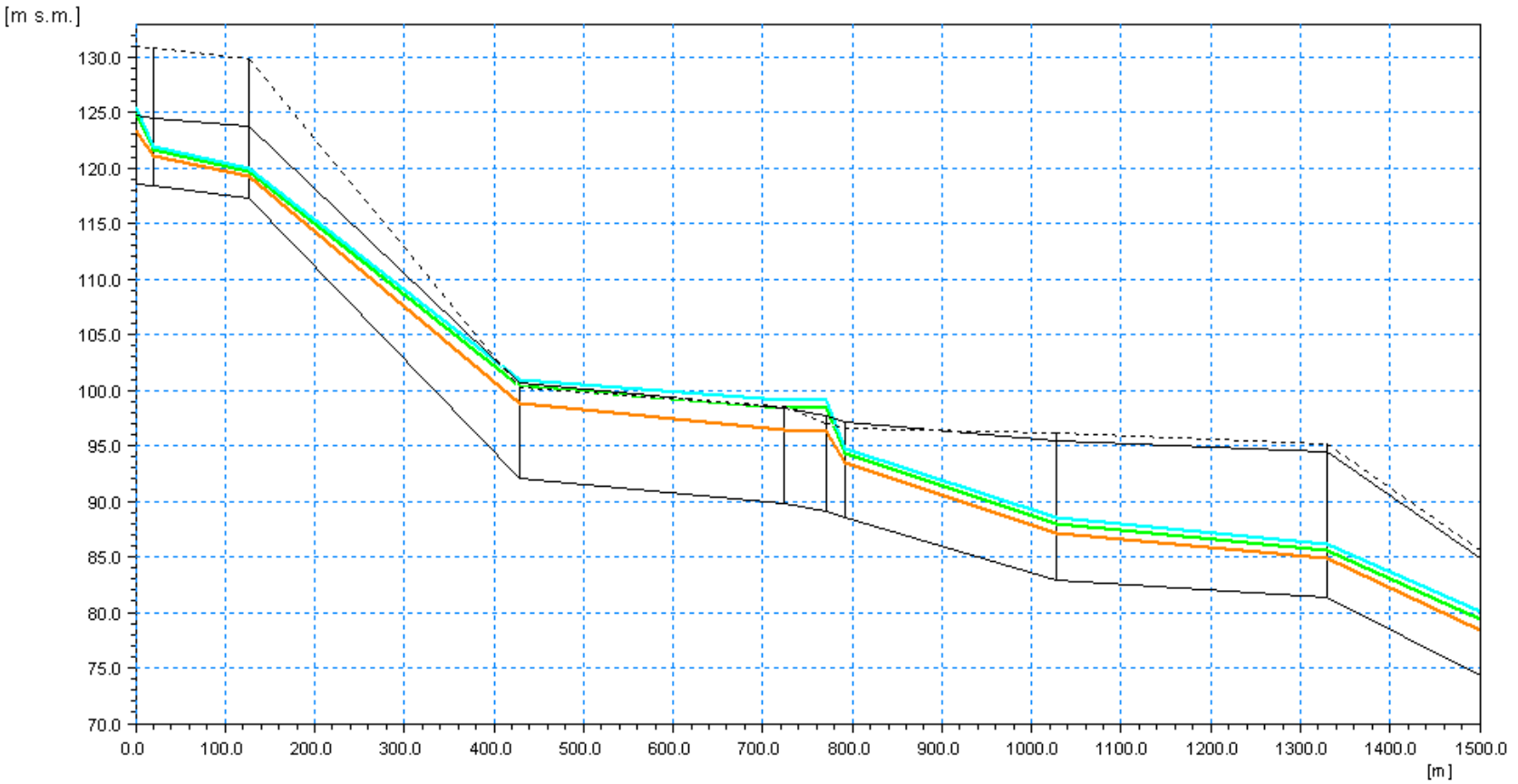
18	850	0.25	5.1	5	2.77	3.12	5.11	6.78	125.45	1.4
17	850	0.1	5.2	5	2.62	3.15	5.01	6.86	123.96	1.42
16	850	0.08	5.2	5	3.94	3.06	4.87	4.27	199.06	0.7
15	850	0.05	5	5	4.11	2.83	4.77	3.6	236.21	0.57
14	Bridge									
13	850	0	4	4	1.94	2.72	4.59	7.21	117.88	1.68
12	850	-0.1	4	4	1.99	2.73	4.31	6.74	126.02	1.51
11	Bridge									
10	850	-0.25	4	5	2.03	2.72	3.94	6.13	138.56	1.31
9	850	-0.4	4	5	1.55	2.56	3.77	6.6	128.86	1.51
8	850	-0.4	4	5	1.63	2.56	3.68	6.35	133.76	1.42
7	850	-0.4	4	5	1.62	2.55	3.66	6.32	134.57	1.42
6	850	-0.4	4	5	2.68	2.53	3.53	4.08	208.23	0.74
5	850	-0.4	4	5	2.72	2.4	3.43	3.73	227.95	0.67
4	Bridge									
3	850	-0.4	4	5	1.53	2.31	3.17	5.67	149.85	1.3
2	850	-0.4	3	5	1.56	2.21	2.97	5.25	161.84	1.2
1	850	-1	3	3	1.14	2.16	2.2	4.56	186.57	1.01

Torrente Quiliano - Foce T=500 anni										
Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
66	1000	14.68	18.2	18.18	19.39	3.74	20.55	4.76	210.02	0.7
65	1000	14.45	18.26	17.6	18.5	4.05	20.33	6	166.78	1
64	1000	14.33	18.2	17.88	17.3	3.73	20.2	7.54	132.59	1.4
63	1000	14.3	18.08	17.85	17.31	3.73	20.15	7.46	134.05	1.38
62	1000	14.25	16.03	17.8	16.9	3.54	20.02	7.82	127.85	1.57
61	1000	13.5	17.12	17.01	15.73	2.95	18.22	7	142.83	1.6
60	1000	13.18	17.07	17.08	17.27	2.71	17.85	3.38	295.83	0.54
59	1000	12.6	16.17	16.1	16.03	3.42	17.54	5.45	183.43	1
58	1000	12.35	16.15	16	14.76	3.14	17.41	7.22	138.6	1.49
57	1000	11.8	15.22	15.29	15.96	3.36	16.94	4.4	227.39	0.71
56	1000	11.65	15.5	15.22	16.1	3.13	16.86	3.87	258.25	0.59
55	1000	11.1	14.1	14.62	15.85	3.49	16.69	4.04	247.41	0.61
54	1000	10.8	14.1	14.61	15.98	3.27	16.63	3.56	280.4	0.5
53.6	1000	10.27	13.65	13.86	15.6	3.74	16.42	4.01	249.49	0.57
53.5	Bridge									
53.4	1000	10.26	13.64	13.84	15.29	3.76	16.22	4.28	233.58	0.63
53	1000	10.1	13.5	13.61	15.1	3.95	16.16	4.57	218.64	0.68
52	1000	9.9	13.54	13.6	15.27	3.62	16.08	4	250.06	0.55
51	1000	9.4	13	13	13.77	4.37	15.77	6.27	159.4	1
50	1000	9.35	13	13	12.72	4.07	15.67	7.61	131.43	1.33
49	1000	8.9	12.4	12.33	12.7	4.1	15	6.72	148.86	1.13
48	1000	8.73	12.4	12.32	11.9	3.94	14.92	7.7	129.9	1.38
47	1000	8.28	10.81	11.68	12.57	4.29	14.54	6.22	160.58	1
46	1000	7.75	10.79	11.66	10.7	4.01	14.36	8.47	118.03	1.58
45	1000	7.25	10.1	11.27	11.7	4.45	13.69	6.25	160	1
44	1000	6.5	10.8	10	9.4	4.1	13.48	8.95	111.79	1.73
43	1000	5.9	10	10	8.97	4.24	12.98	8.87	112.77	1.66
42	1000	5.5	10	10.1	8.52	4.24	12.66	9.01	110.93	1.71
41	1000	4.7	9.9	9.8	11.21	4.28	12.07	4.11	243.49	0.52
40	1000	4.2	9.6	9.6	11.29	4.24	11.99	3.71	269.36	0.45
39	Bridge									
38	1000	3.9	9.4	9.3	8.14	4.24	10.17	6.31	158.49	1
37	1000	3.7	9.5	9.1	7.67	4.21	9.94	6.68	149.7	1.1
36	1000	3.6	8.7	8.79	8.28	3.97	9.63	5.15	194.29	0.77
35	1000	3.35	8.5	8.47	8.39	3.88	9.47	4.6	217.39	0.66
34	Bridge									
33	1000	3.25	8.35	8.3	6.15	3.63	8.94	7.41	134.93	1.43
32	1000	3.1	8.3	8.31	5.69	3.45	8.69	7.67	130.31	1.56
31	1000	2.8	7.8	7.75	4.79	2.89	7.84	7.73	129.29	1.8
30	1000	2.4	7.18	7.07	6.21	2.88	6.99	3.91	255.85	0.65
29	1000	2.1	6.57	6.69	6.17	2.89	6.86	3.68	271.75	0.59
28	1000	1.6	5.7	5.82	6	3.12	6.73	3.79	263.66	0.58
27	1000	1.2	5.5	5.5	5.74	3.36	6.61	4.12	242.64	0.63
26	1000	0.9	5.5	5.6	5.43	3.59	6.48	4.54	220.38	0.69
25	Bridge									
24	1000	0.8	5.2	5.2	4.99	3.68	6.33	5.13	195.12	0.82
23	1000	0.6	5.2	4.7	5.16	3.57	6.18	4.46	224.09	0.68
22	1000	0.55	5.2	4.8	5.17	3.57	6.16	4.41	226.88	0.67
21	1000	0.5	5.2	4.7	4.94	3.66	6.1	4.78	209.19	0.74
20	1000	0.4	5.2	5.1	5.03	3.59	6	4.35	229.83	0.66
19	Bridge									

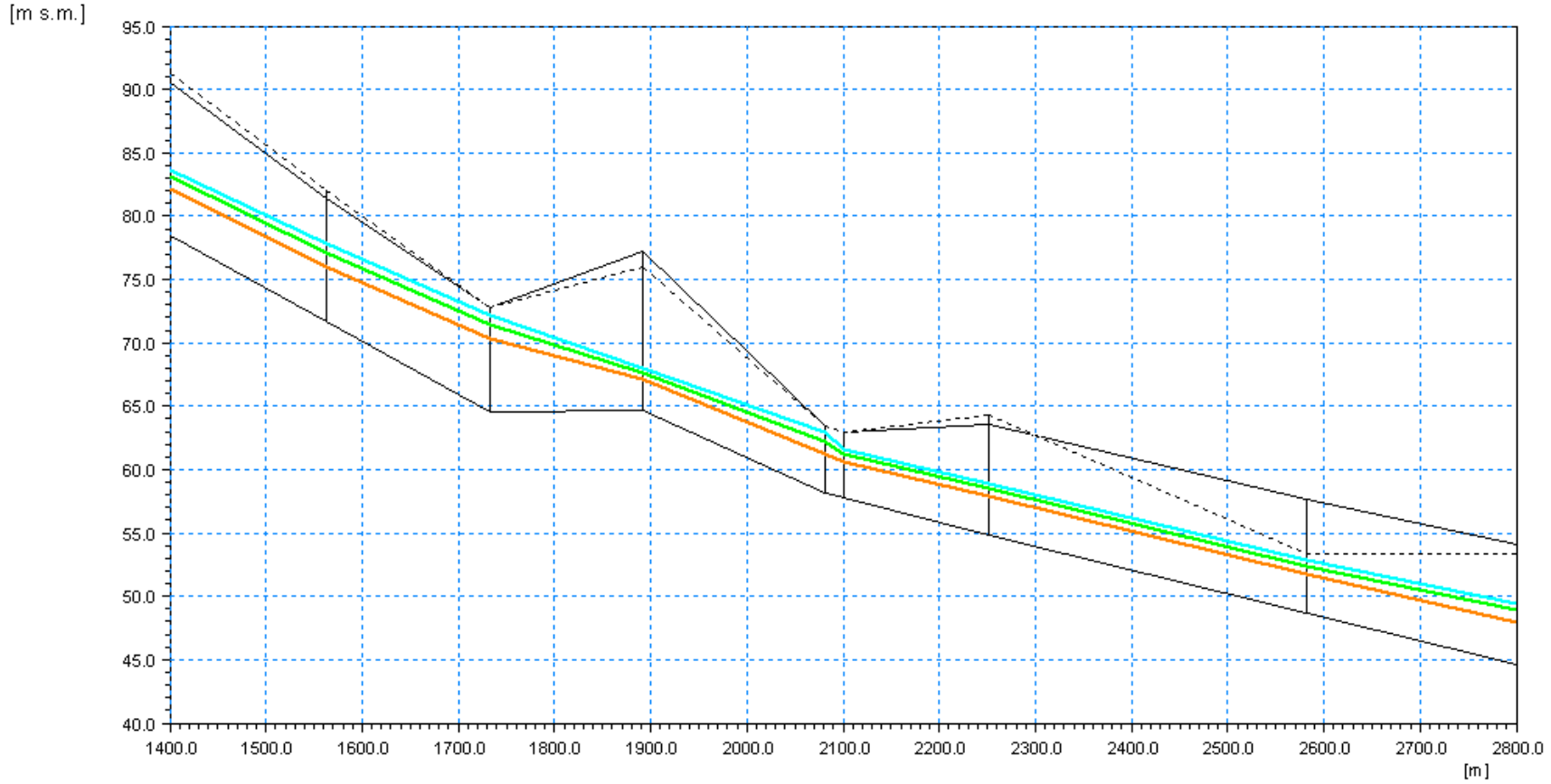
18	1000	0.25	5.1	5	3.03	3.46	5.65	7.17	139.49	1.4
17	1000	0.1	5.2	5	2.88	3.49	5.57	7.27	137.62	1.43
16	1000	0.08	5.2	5	4.42	3.4	5.43	4.46	224.44	0.69
15	1000	0.05	5	5	4.61	3.14	5.33	3.76	265.61	0.57
14	Bridge									
13	1000	0	4	4	2.13	3.02	5.17	7.73	129.34	1.72
12	1000	-0.1	4	4	2.17	3.04	4.88	7.29	137.13	1.57
11	Bridge									
10	1000	-0.25	4	5	2.49	3.03	4.31	5.98	167.34	1.16
9	1000	-0.4	4	5	1.86	2.86	4.15	6.71	149.1	1.42
8	1000	-0.4	4	5	1.95	2.86	4.07	6.44	155.17	1.34
7	1000	-0.4	4	5	3.03	2.85	4.01	4.38	228.17	0.76
6	1000	-0.4	4	5	3.01	2.81	3.97	4.33	230.73	0.75
5	1000	-0.4	4	5	3.07	2.67	3.87	3.94	253.52	0.68
4	Bridge									
3	1000	-0.4	4	5	1.75	2.57	3.59	6.01	166.27	1.31
2	1000	-0.4	3	5	1.8	2.47	3.35	5.52	181.27	1.19
1	1000	-1	3	3	1.4	2.4	2.55	4.76	210.19	1

PROFILI DI RIGURGITO IN CONDIZIONI DI MOTO PERMANENTE PER LE PORTATE T=50, 200, 500 ANNI

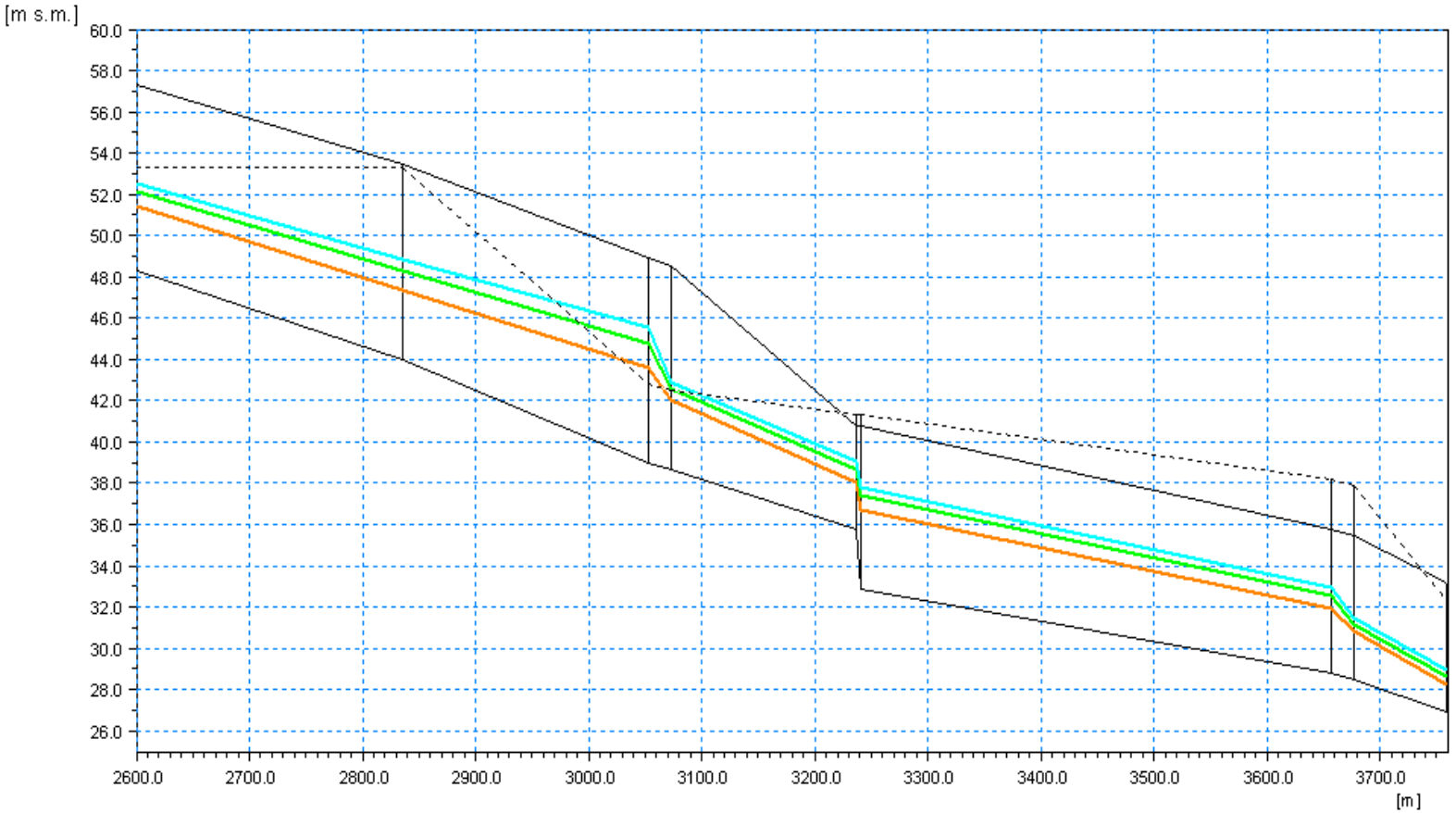
RIO TECCI - T.QUAZZOLA



Progressiva	0.000	126.300	429.000	723.700	771.700	1027.100	1330.600
ID Sezione	50	48	47	46	45	43	42



Progressiva	1562.700	1733.200	1891.900	2080.600	2250.700	2582.500
ID Sezione	**41**	**40**	**39**	**38**	**36**	**35**

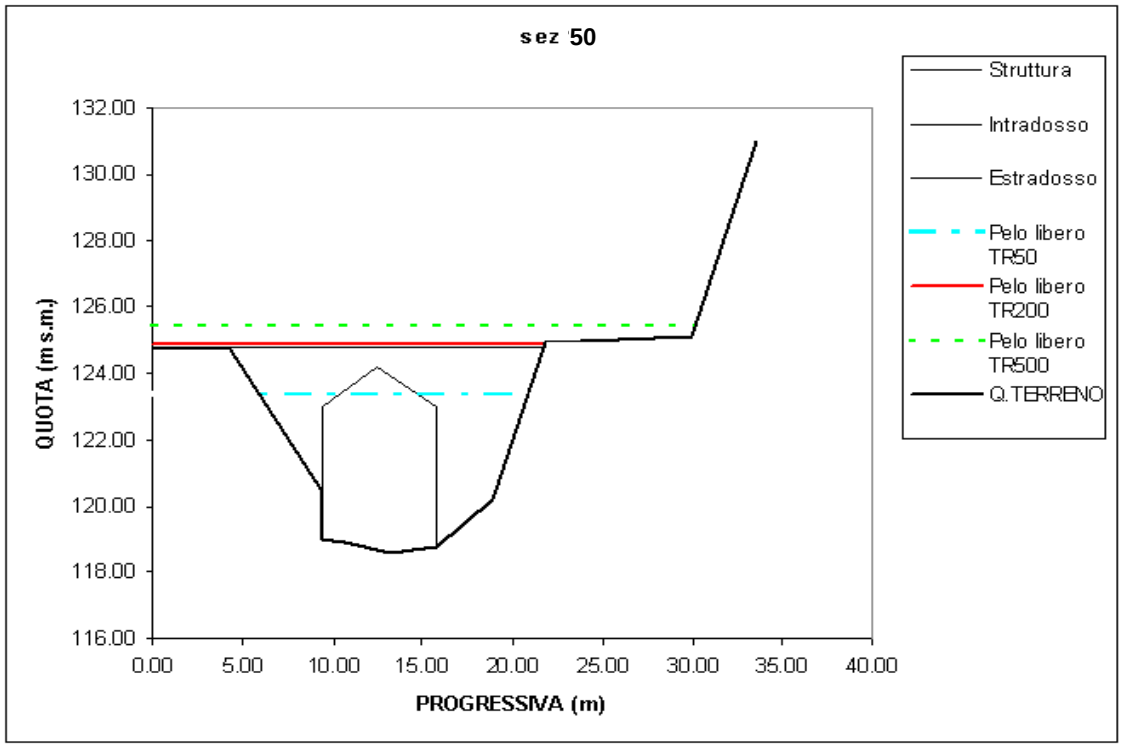


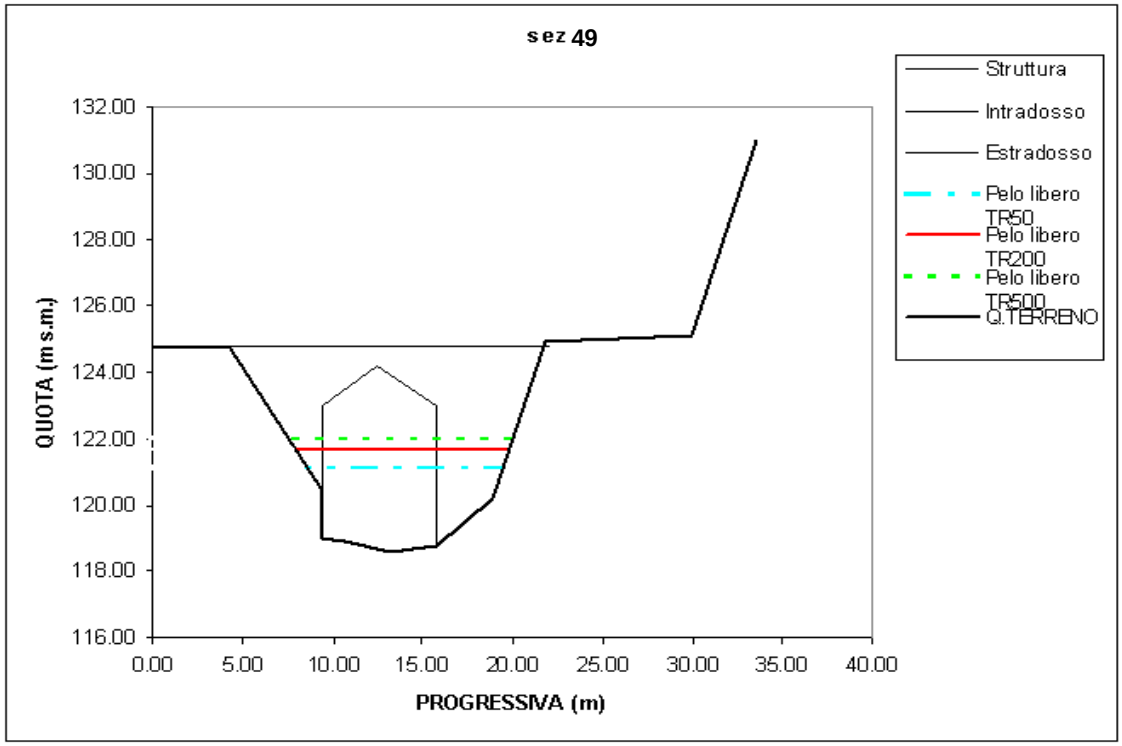
Progressiva	2836.100	3052.400	3072.400	3237.100	3656.300	3676.300	3759.400
ID Sezione	**34**	**33**	**32**	**31**	**29**	**28**	**27**

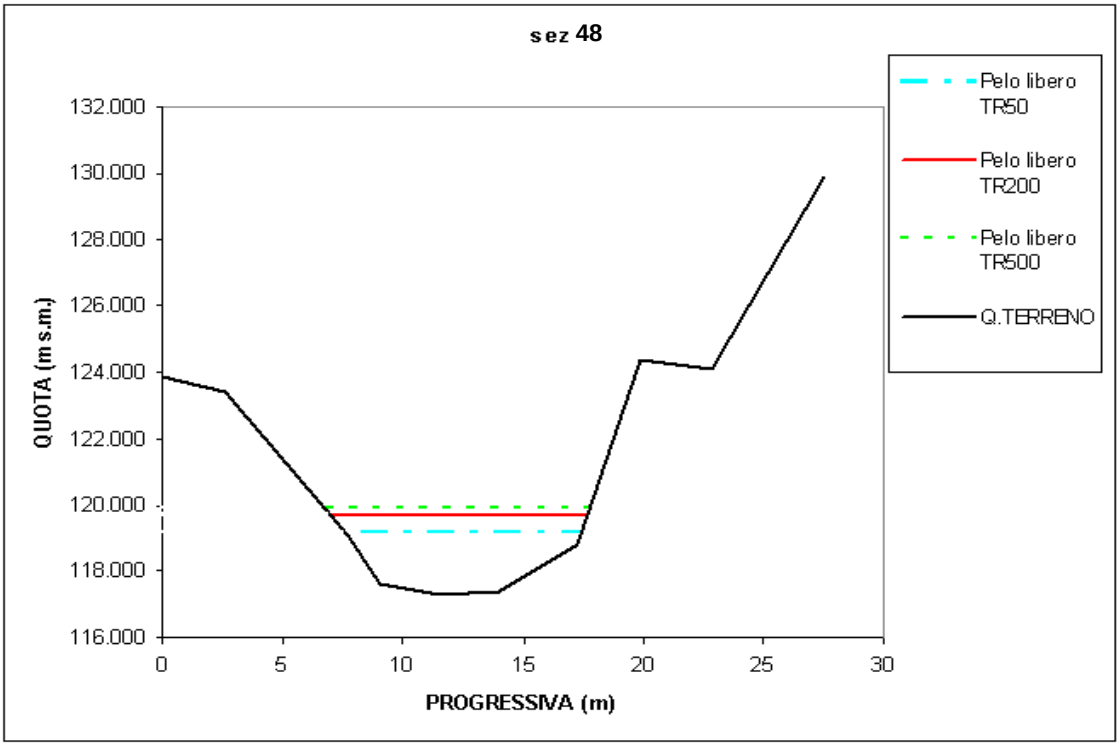
GEOMETRIA DELLE SEZIONI ED ALTEZZA DEL PELO LIBERO IN CONDIZIONI DI MOTO PERMANENTE
PER LE PORTATE T=50, 200, 500 ANNI

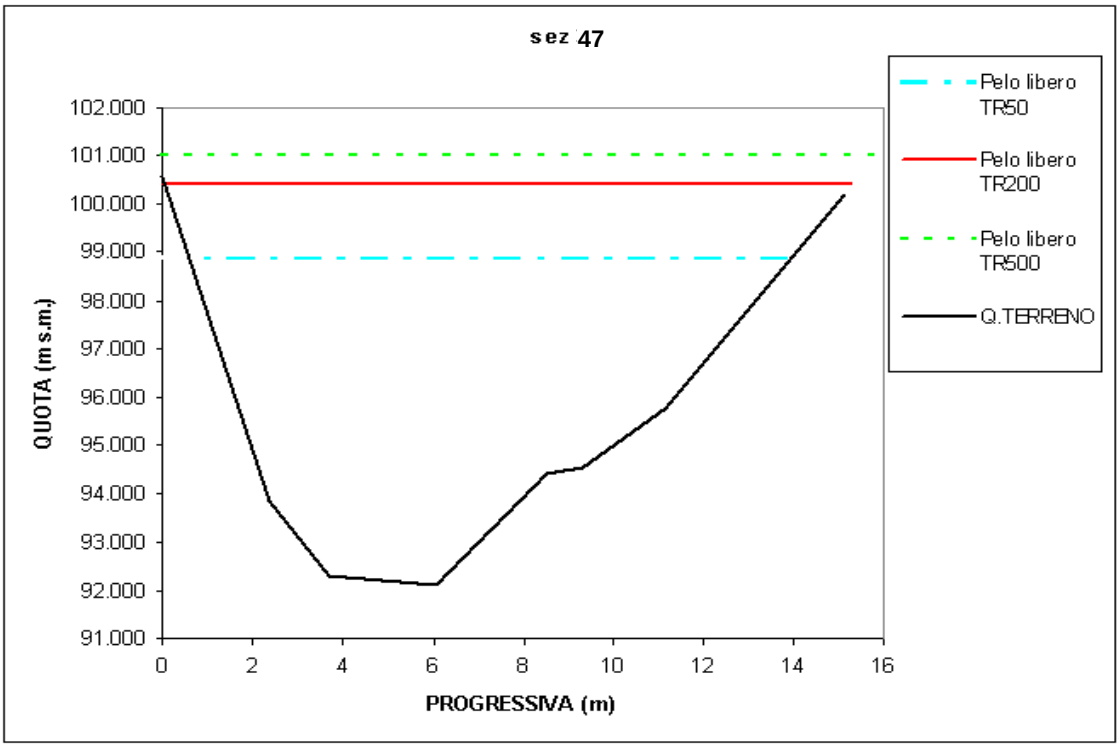
RIO TECCI - T.QUAZZOLA

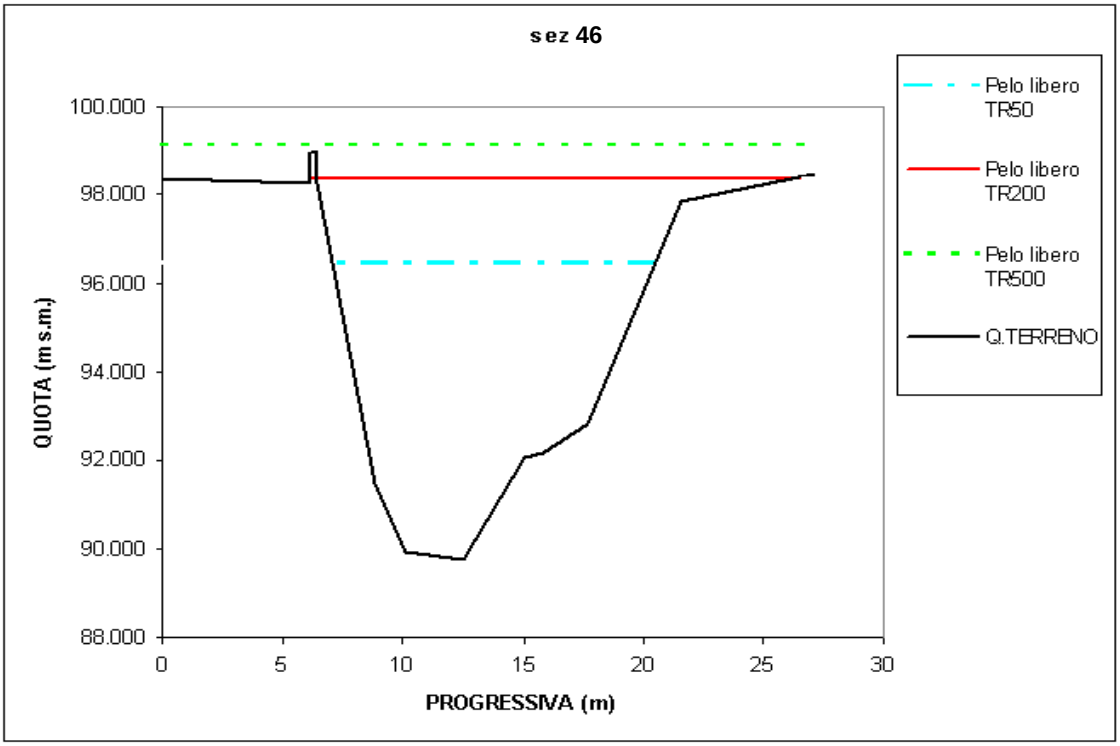
dalla sez. 1m
alla sez. 18

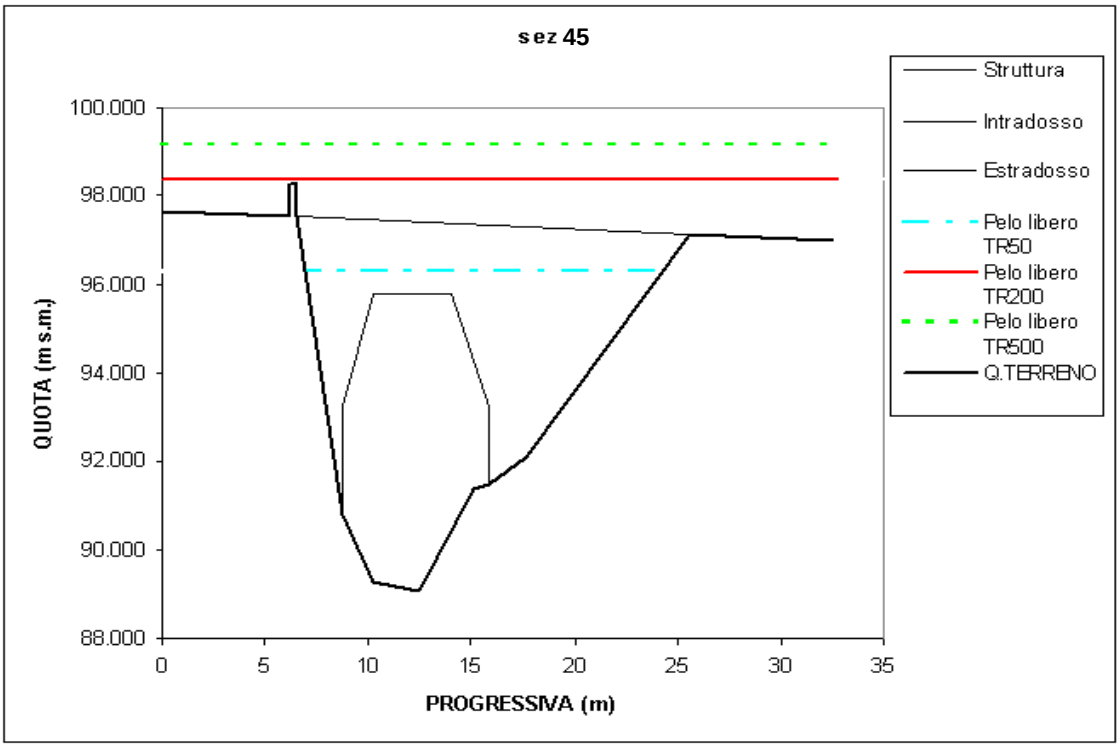

sez 50
Struttura
Intradosso
Estradosso
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO
132.00
130.00
128.00
126.00
124.00
122.00
120.00
118.00
116.00
QUOTA (m s.m.)
0.00
5.00
10.00
15.00
20.00
25.00
30.00
35.00
40.00
PROGRESSIVA (m)

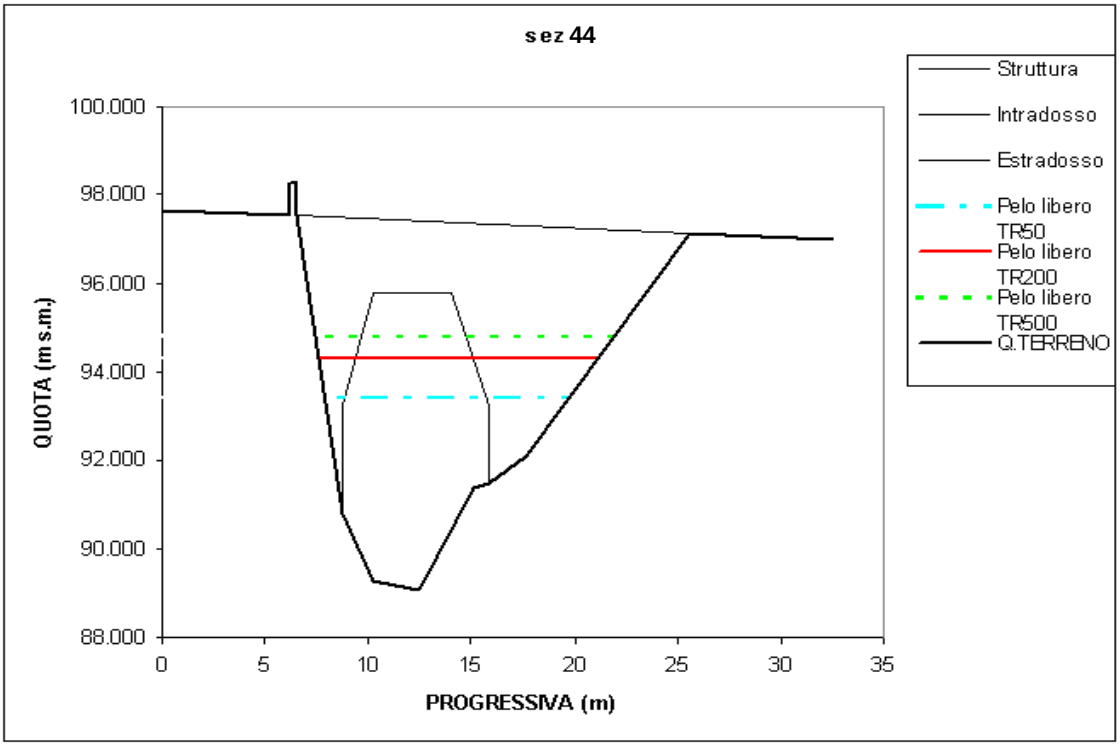

sez 49
Struttura
Intradosso
Estradosso
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO
132.00
130.00
128.00
126.00
124.00
122.00
120.00
118.00
116.00
QUOTA (m s.m.)
0.00
5.00
10.00
15.00
20.00
25.00
30.00
35.00
40.00
PROGRESSIVA (m)

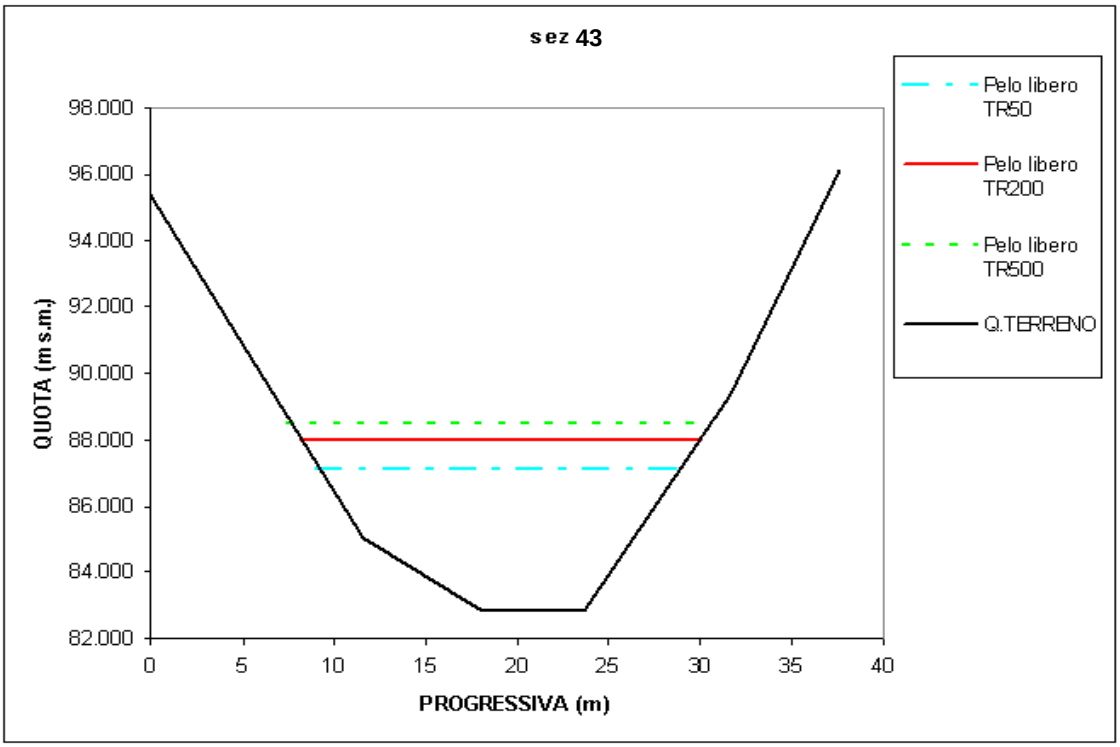

sez 48
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO
QUOTA (m s.m.)
132.000
130.000
128.000
126.000
124.000
122.000
120.000
118.000
116.000
0
5
10
15
20
25
30
PROGRESSIVA (m)

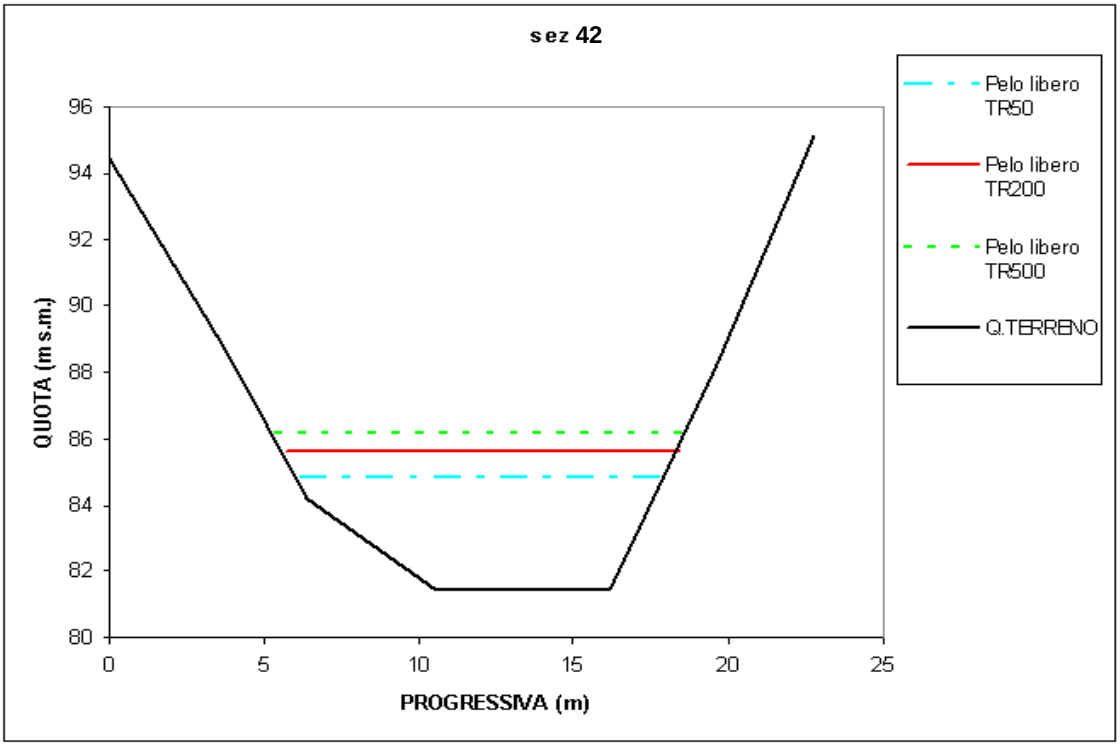

sez 47
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO
QUOTA (m s.m.)
102.000
101.000
100.000
99.000
98.000
97.000
96.000
95.000
94.000
93.000
92.000
91.000
0
2
4
6
8
10
12
14
16
PROGRESSIVA (m)

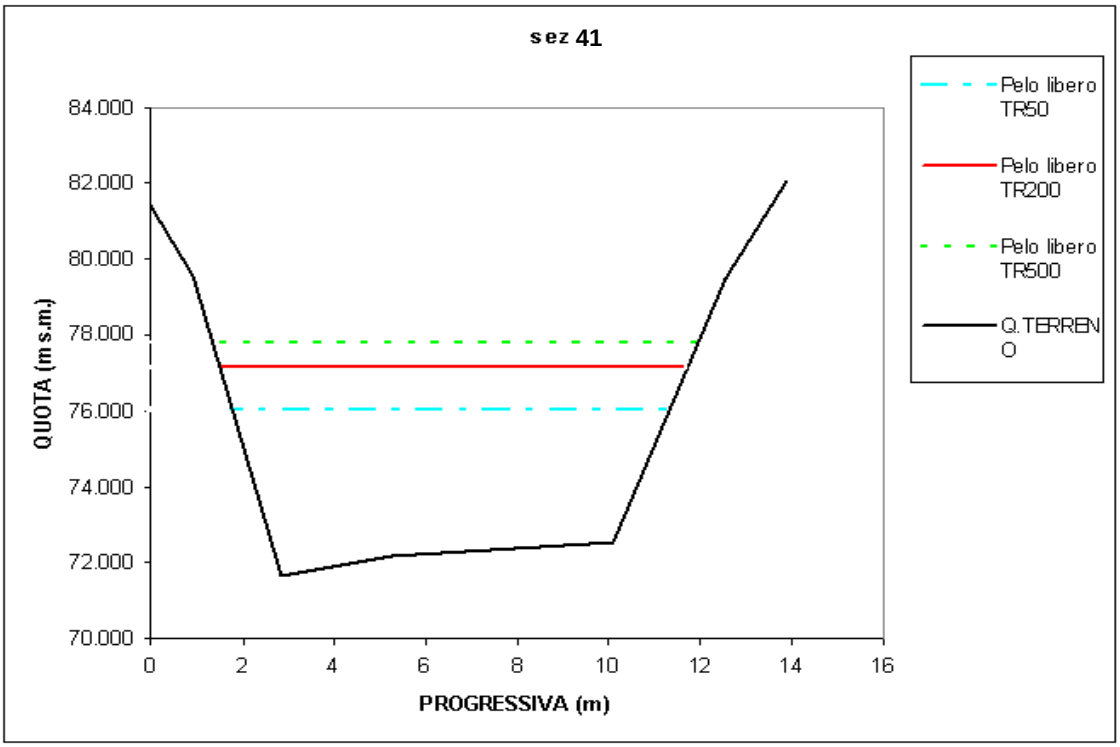

sez 46
100.000
98.000
96.000
94.000
92.000
90.000
88.000
QUOTA (m s.m.)
0
5
10
15
20
25
30
PROGRESSIVA (m)
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO

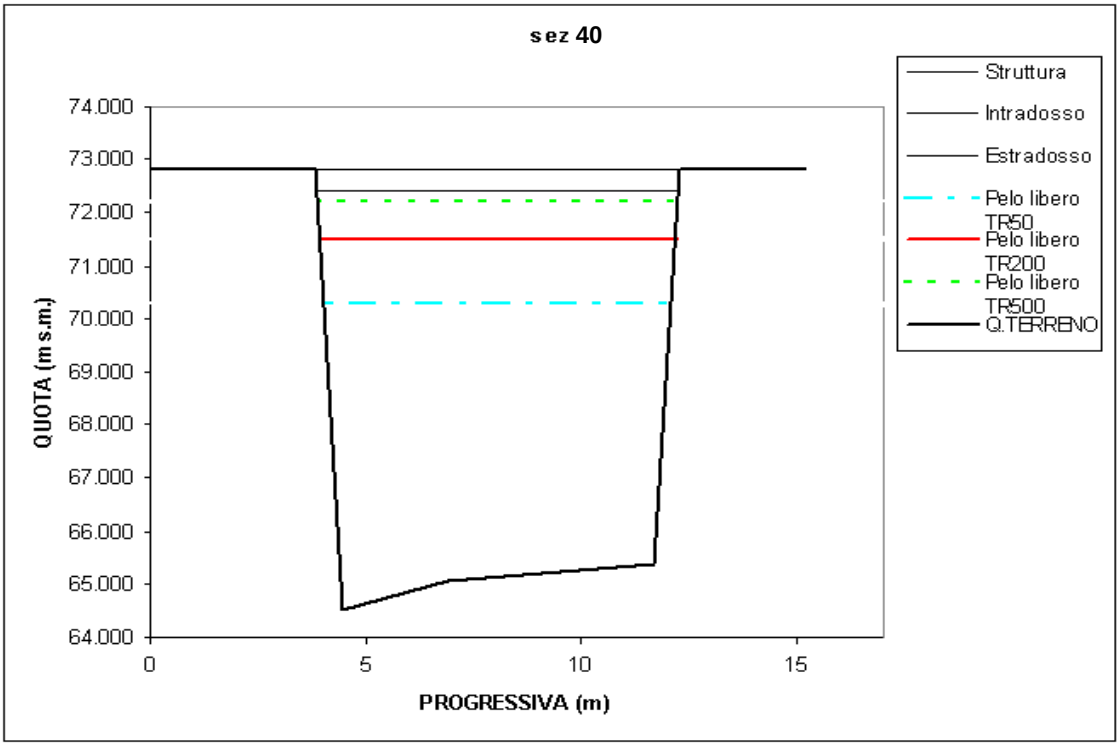

sez 45
100.000
98.000
96.000
94.000
92.000
90.000
88.000
QUOTA (m s.m.)
0
5
10
15
20
25
30
35
PROGRESSIVA (m)
Struttura
Intradosso
Estradosso
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO

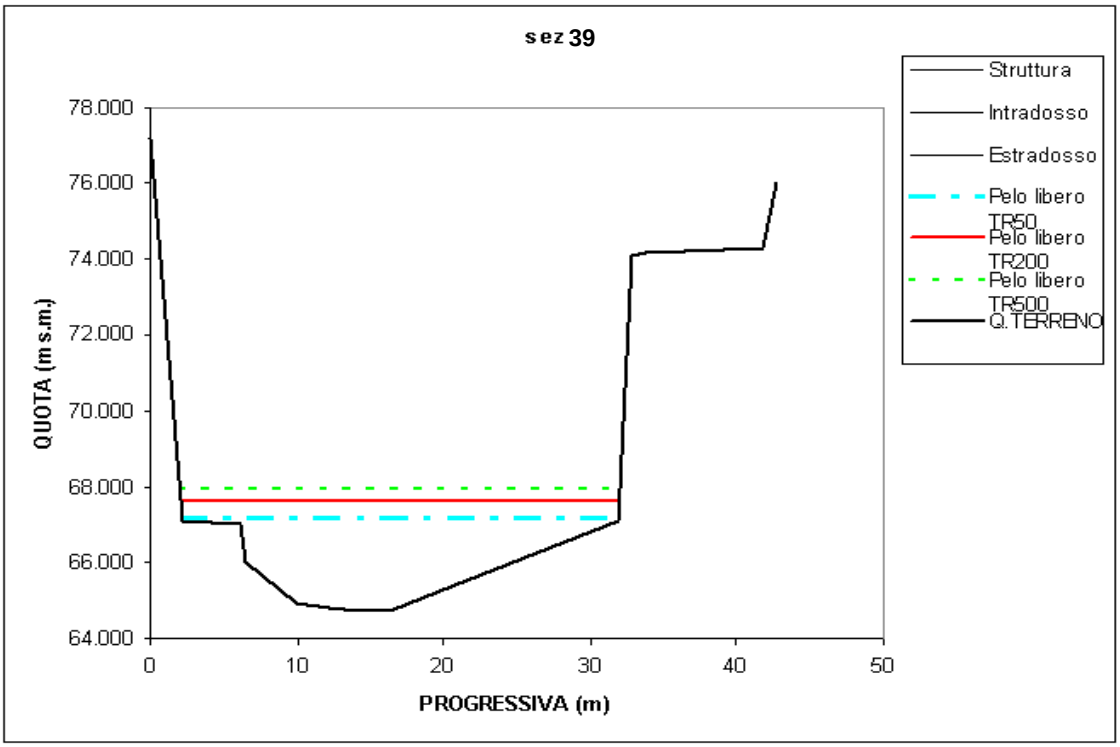

sez 44
Struttura
Intradosso
Estradosso
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO
100.000
98.000
96.000
94.000
92.000
90.000
88.000
QUOTA (m s.m.)
0
5
10
15
20
25
30
35
PROGRESSIVA (m)

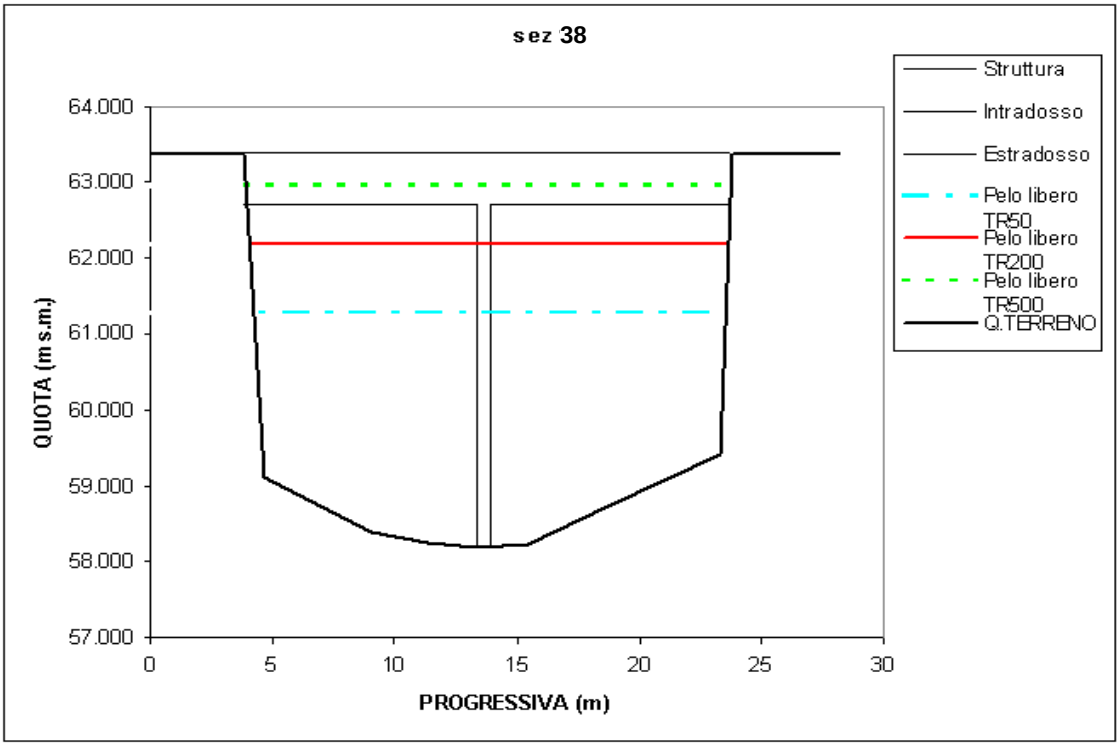

sez 43
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO
98.000
96.000
94.000
92.000
90.000
88.000
86.000
84.000
82.000
QUOTA (m s.m.)
0
5
10
15
20
25
30
35
40
PROGRESSIVA (m)

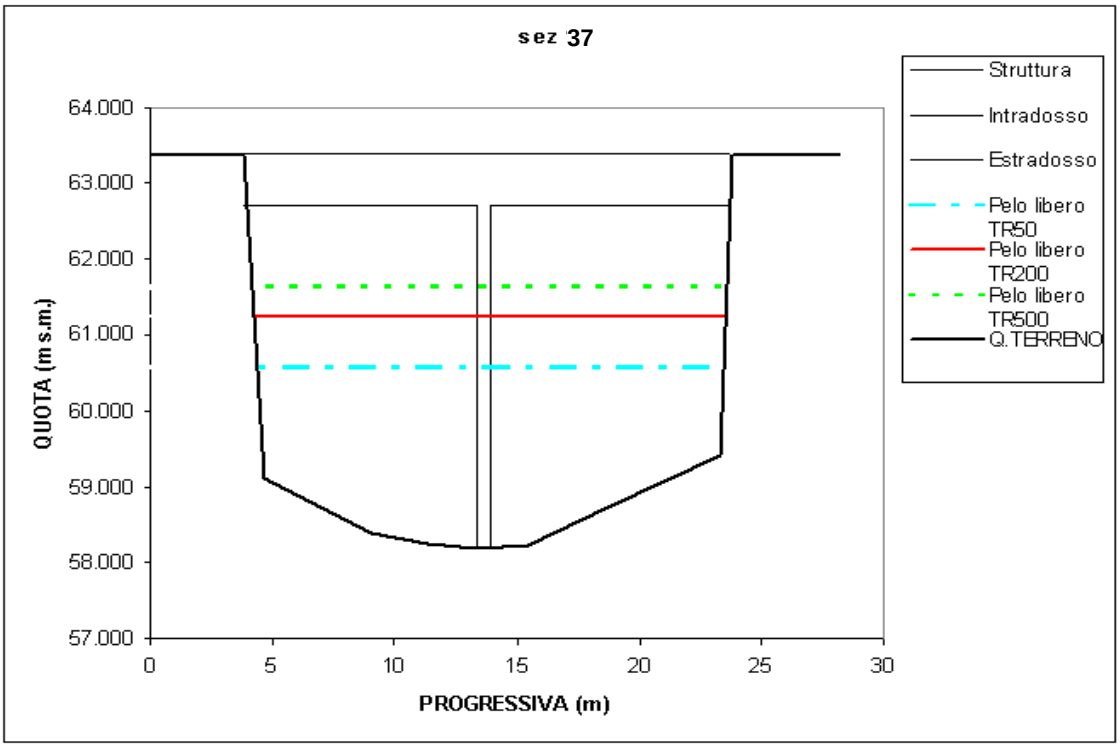

sez 42
96
94
92
90
88
86
84
82
80
QUOTA (m s.m.)
0
5
10
15
20
25
PROGRESSIVA (m)
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO

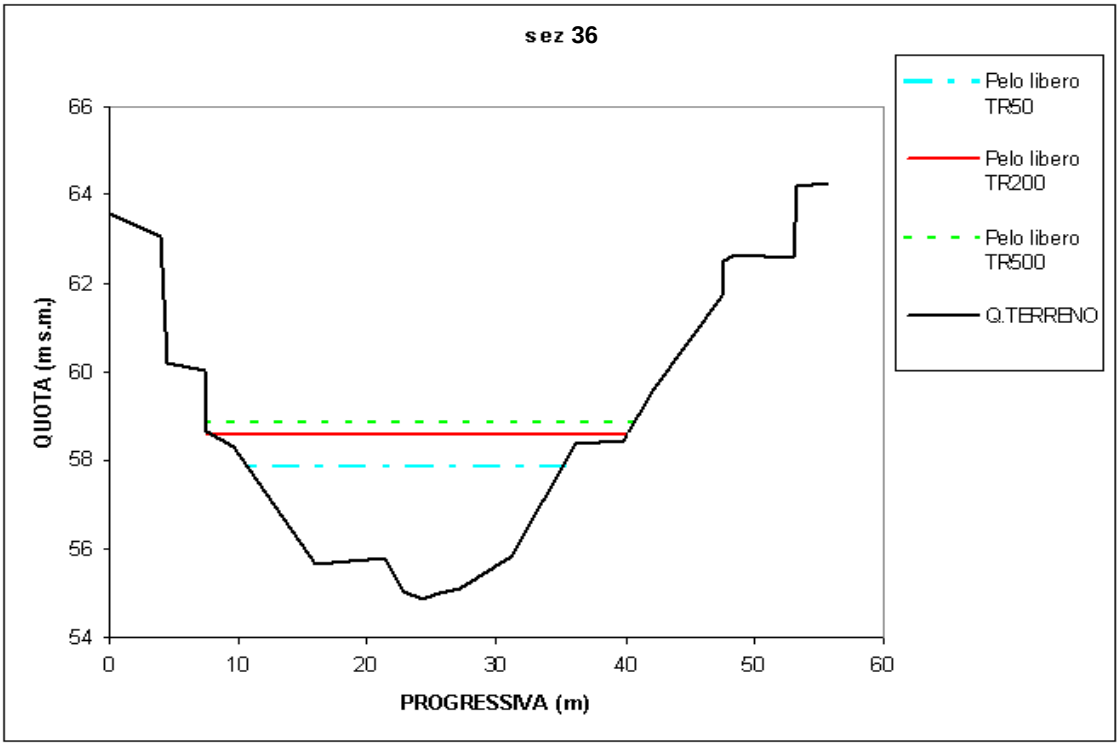

sez 41
84.000
82.000
80.000
78.000
76.000
74.000
72.000
70.000
QUOTA (m s.m.)
0
2
4
6
8
10
12
14
16
PROGRESSIVA (m)
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO

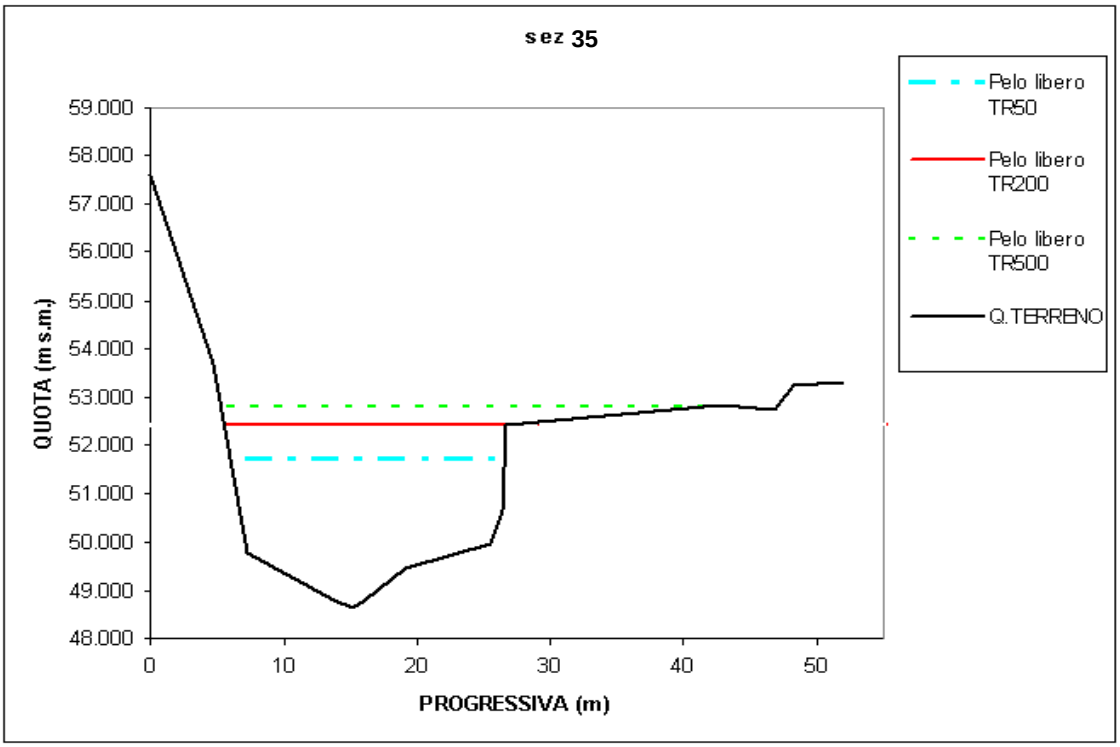

sez 40
Struttura
Intradosso
Estradosso
Pelo libero
TR50 Pelo libero
TR200 Pelo libero
TR500 Q.TERRENO
74.000
73.000
72.000
71.000
70.000
69.000
68.000
67.000
66.000
65.000
64.000
QUOTA (m s.m.)
0
5
10
15
PROGRESSIVA (m)

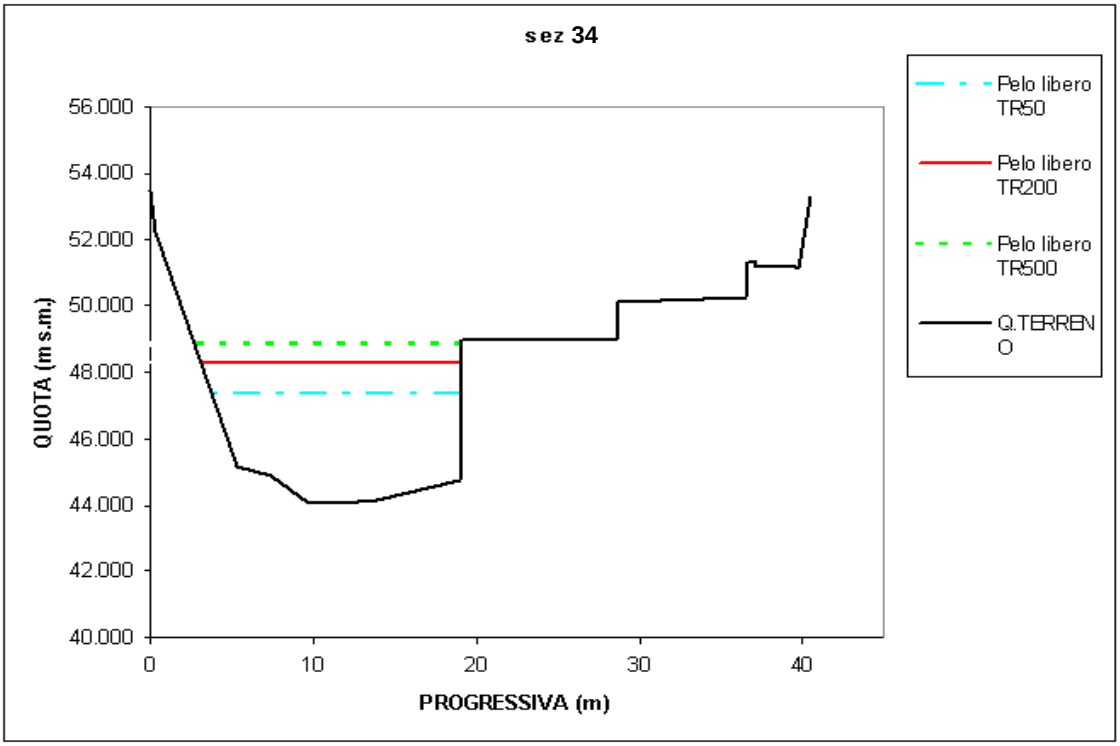

sez 39
Struttura
Intradosso
Estradosso
Pelo libero
TR50 Pelo libero
TR200 Pelo libero
TR500 Q.TERRENO
78.000
76.000
74.000
72.000
70.000
68.000
66.000
64.000
QUOTA (m s.m.)
0
10
20
30
40
50
PROGRESSIVA (m)

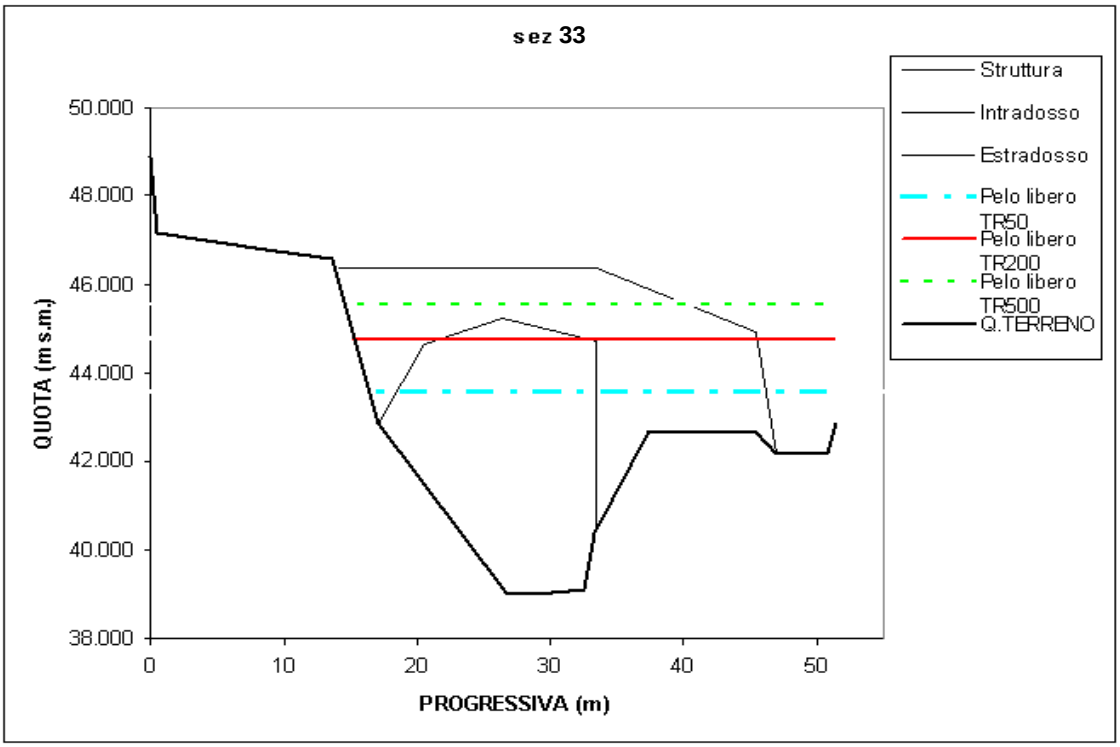

sez 38
Struttura
Intradosso
Estradosso
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO
64.000
63.000
62.000
61.000
60.000
59.000
58.000
57.000
QUOTA (m s.m.)
0
5
10
15
20
25
30
PROGRESSIVA (m)

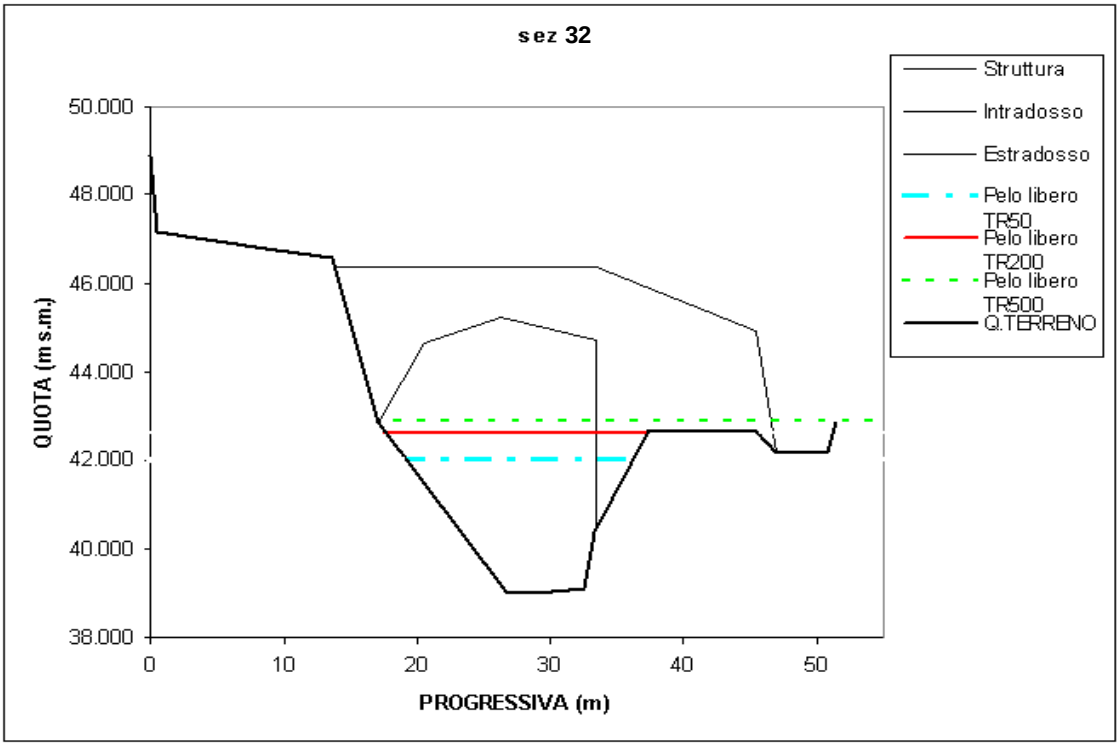

sez 37
Struttura
Intradosso
Estradosso
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO
64.000
63.000
62.000
61.000
60.000
59.000
58.000
57.000
QUOTA (m s.m.)
0
5
10
15
20
25
30
PROGRESSIVA (m)

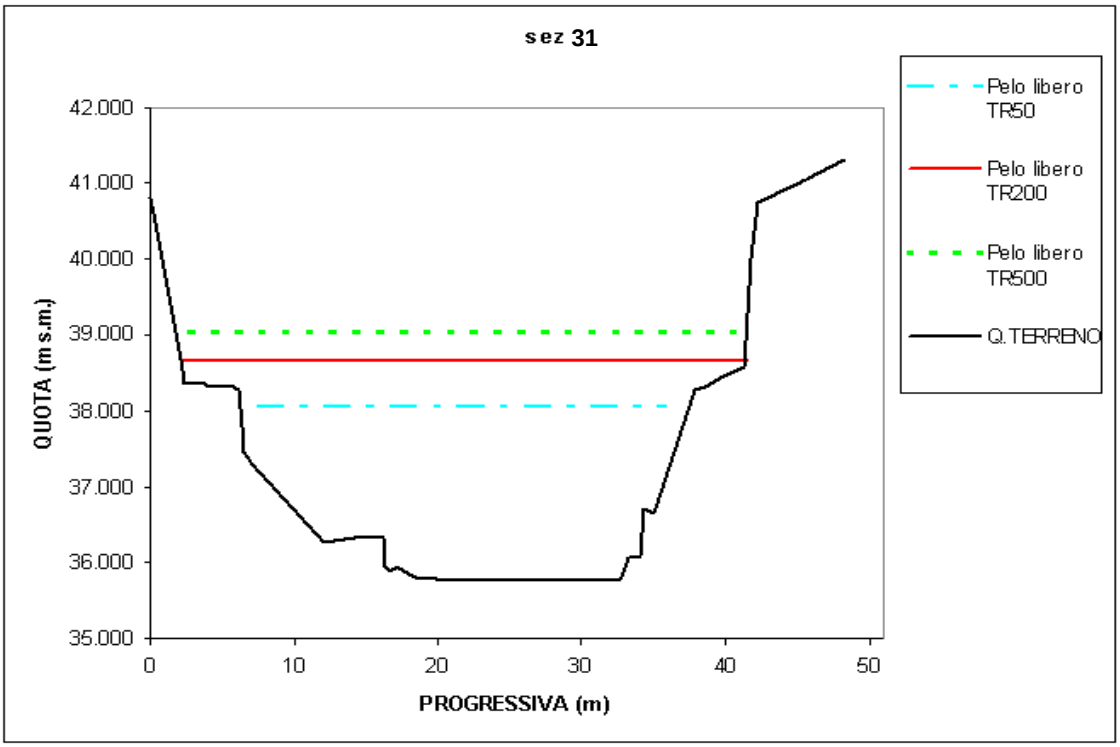

sez 36
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO
QUOTA (m s.m.)
66
64
62
60
58
56
54
0
10
20
30
40
50
60
PROGRESSIVA (m)

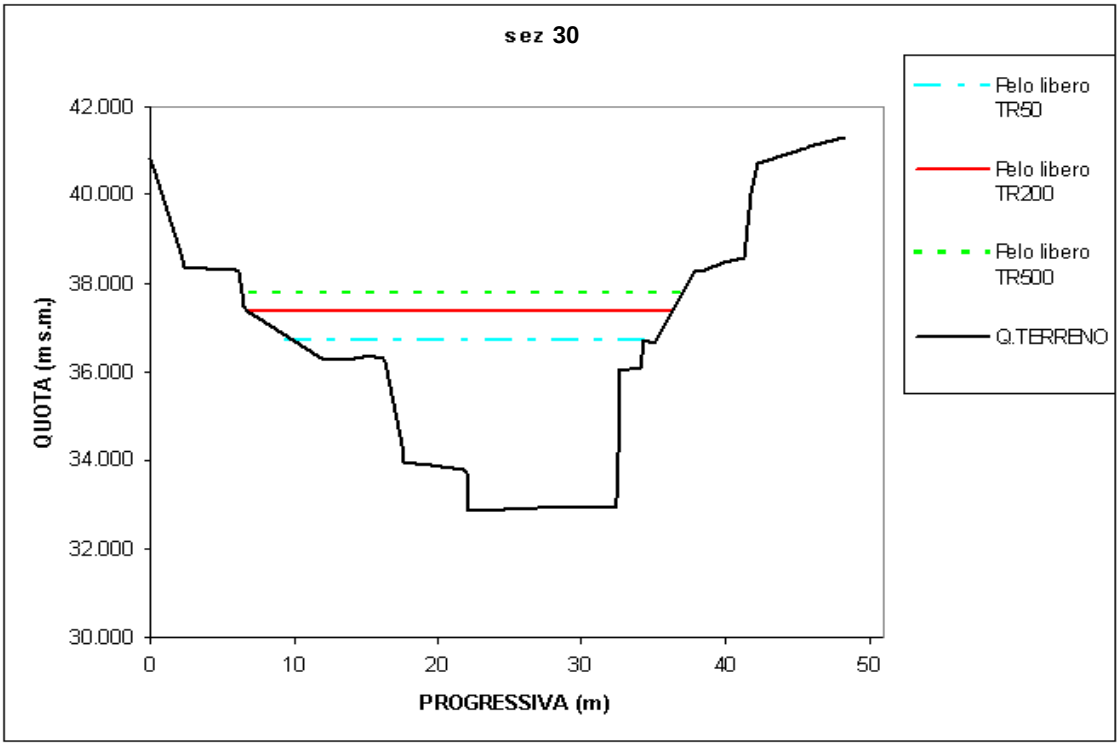

sez 35
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO
QUOTA (m s.m.)
59.000
58.000
57.000
56.000
55.000
54.000
53.000
52.000
51.000
50.000
49.000
48.000
0
10
20
30
40
50
PROGRESSIVA (m)

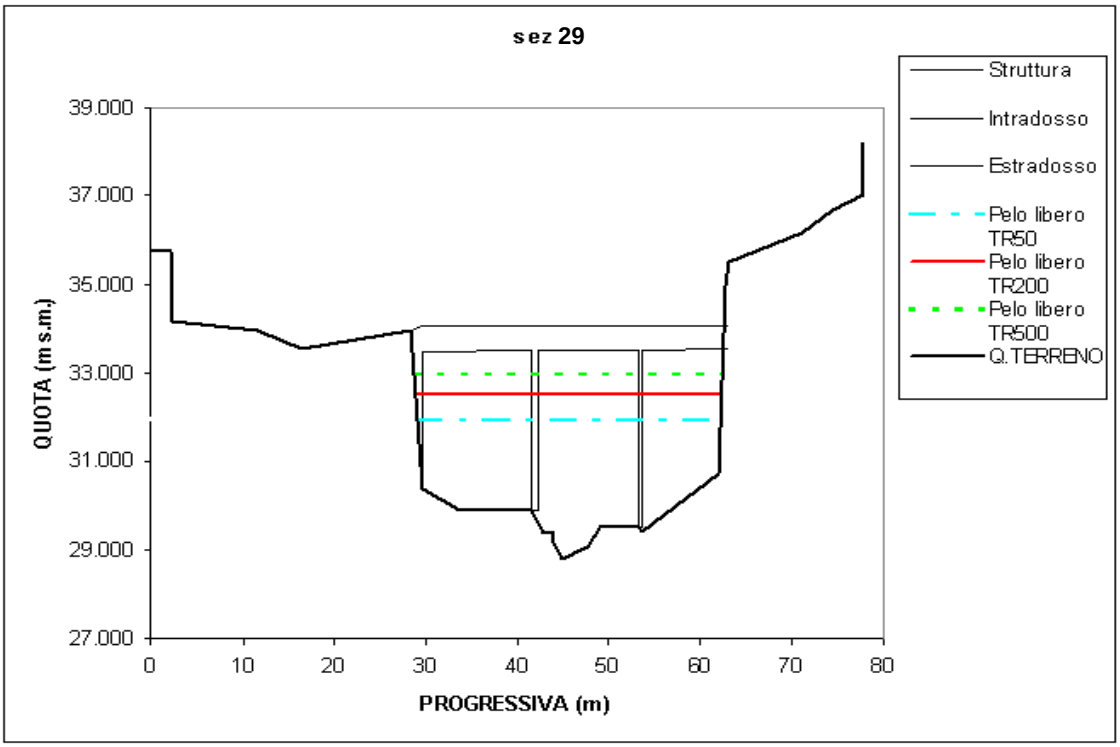

sez 34
56.000
54.000
52.000
50.000
48.000
46.000
44.000
42.000
40.000
QUOTA (m s.m.)
0
10
20
30
40
PROGRESSIVA (m)
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO

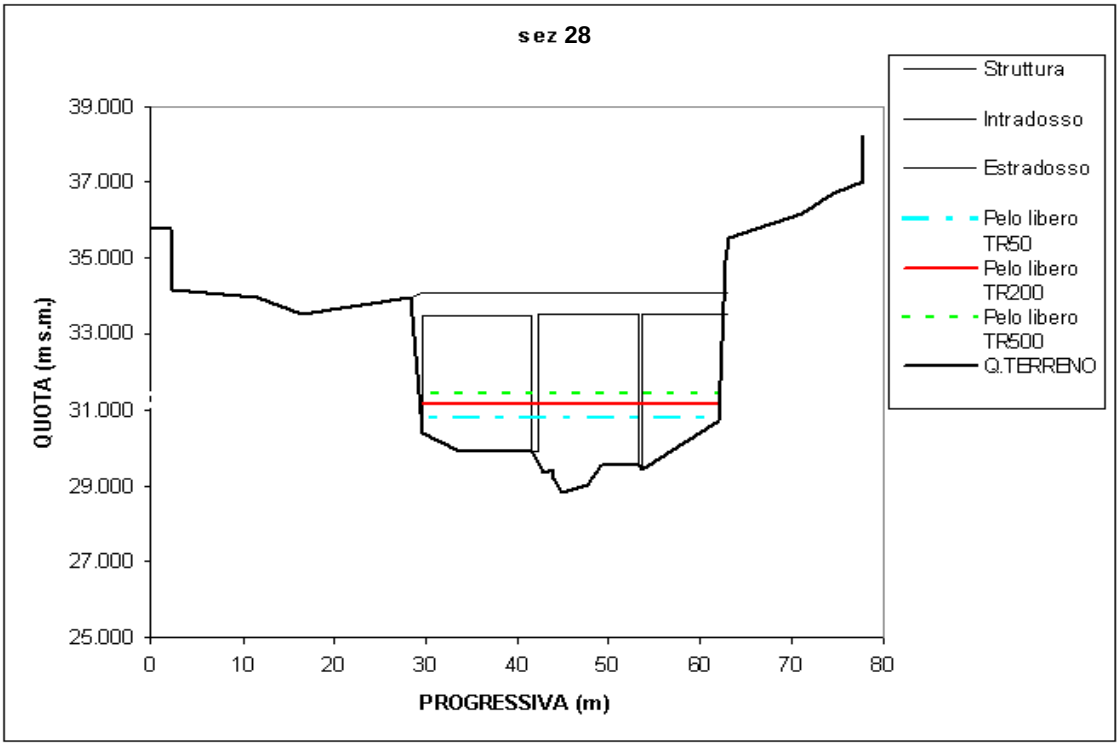

sez 33
50.000
48.000
46.000
44.000
42.000
40.000
38.000
QUOTA (m s.m.)
0
10
20
30
40
50
PROGRESSIVA (m)
Struttura
Intradosso
Estradosso
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO

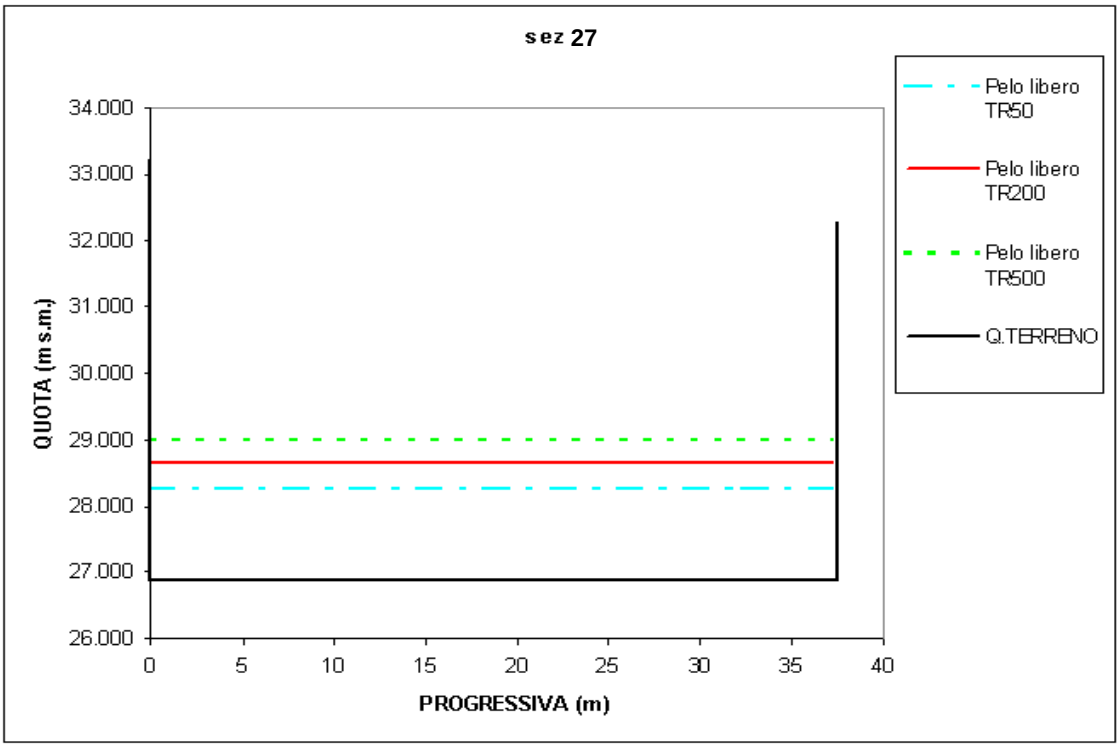

sez 32
Struttura
Intradosso
Estradosso
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO
50.000
48.000
46.000
44.000
42.000
40.000
38.000
QUOTA (m s.m.)
0
10
20
30
40
50
PROGRESSIVA (m)


sez 31
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO
42.000
41.000
40.000
39.000
38.000
37.000
36.000
35.000
QUOTA (m s.m.)
0
10
20
30
40
50
PROGRESSIVA (m)


sez 30
42.000
40.000
38.000
36.000
34.000
32.000
30.000
QUOTA (m s.m.)
0
10
20
30
40
50
PROGRESSIVA (m)
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO


sez 29
39.000
37.000
35.000
33.000
31.000
29.000
27.000
QUOTA (m s.m.)
0
10
20
30
40
50
60
70
80
PROGRESSIVA (m)
Struttura
Intradosso
Estradosso
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO


sez 28
Struttura
Intradosso
Estradosso
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO
39.000
37.000
35.000
33.000
31.000
29.000
27.000
25.000
QUOTA (m s.m.)
0
10
20
30
40
50
60
70
80
PROGRESSIVA (m)


sez 27
Pelo libero TR50
Pelo libero TR200
Pelo libero TR500
Q.TERRENO
34.000
33.000
32.000
31.000
30.000
29.000
28.000
27.000
26.000
QUOTA (m s.m.)
0
5
10
15
20
25
30
35
40
PROGRESSIVA (m)

MODELLAZIONE IDRAULICA IN CONDIZIONI DI MOTO PERMANENTE:
TABELLE DELLE GRANDEZZE IDRAULICHE SIGNIFICATIVE PER LE PORTATE T=50, 200, 500 ANNI

RIO TECCI - T.QUAZZOLA

TORRENTE QUAZZOLA – PROFILO DI CORRENTE PER T=50 ANNI							
ID Sez.	**Progr. (m)**	**Quota fondo (m s.m.)**	**P.L. (m s.m.)**	**A (m^2)**	**b (m)**	**v (m/s)**	**Fr (-)**
50	0.00	118.60	123.39	50.43	15.04	2.06	0.36
49	20.00	118.39	121.07	22.70	11.29	4.58	1.03
48	126.30	117.25	119.20	13.90	9.94	6.48	2.02
47	429.00	92.10	98.86	56.34	13.31	2.62	0.41
46	723.70	89.75	96.46	57.39	13.41	3.31	0.51
45	771.70	89.06	96.31	71.72	17.30	2.65	0.42
44	791.70	88.58	93.42	35.61	12.70	5.34	1.02
43	1027.10	82.86	87.10	57.96	19.68	3.28	0.61
42	1330.60	81.41	84.81	30.62	11.85	6.20	1.23
41	1562.70	71.67	76.02	31.95	9.55	5.95	1.04
40	1733.20	64.52	70.28	39.88	8.06	4.76	0.68
39	1891.90	64.73	67.17	41.12	28.04	4.62	1.22
38	2080.60	58.19	61.29	50.72	19.38	3.75	0.74
37	2100.60	57.80	60.57	44.47	19.27	4.27	0.90
36	2250.70	54.86	57.85	46.72	24.39	4.07	0.94
35	2582.50	48.62	51.70	45.82	20.50	4.15	0.89
34	2836.10	44.02	47.36	42.23	15.24	4.50	0.86
33	3052.40	38.99	43.58	79.25	35.04	2.40	0.51
32	3072.40	38.64	42.02	40.33	23.22	4.71	1.14
31	3237.10	35.76	38.07	57.72	31.34	3.29	0.77
30	3241.10	32.87	36.71	57.47	25.06	3.31	0.70
29	3656.30	28.80	31.94	71.04	33.19	2.67	0.58
28	3676.30	28.45	30.80	45.10	32.71	4.21	1.15
27	3759.40	26.88	28.25	51.38	37.50	3.70	1.01

Torrente Quazzola - Risultati delle simulazioni idrauliche – T = 50 anni

TORRENTE QUAZZOLA – PROFILO DI CORRENTE PER T=200 ANNI							
ID Sez.	**Progr. (m)**	**Quota fondo (m s.m.)**	**P.L. (m s.m.)**	**A (m2)**	**b (m)**	**v (m/s)**	**Fr (-)**
50	0.00	118.60	124.84	74.72	22.06	2.09	0.36
49	20.00	118.39	121.66	29.69	12.34	5.26	1.08
48	126.30	117.25	119.67	21.40	10.71	7.29	1.65
47	429.00	92.10	100.40	78.23	15.04	2.80	0.39
46	723.70	89.75	98.36	86.55	22.80	3.24	0.53
45	771.70	89.06	98.36	123.65	32.22	2.26	0.37
44	791.70	88.58	94.30	47.50	14.38	5.89	1.03
43	1027.10	82.86	87.97	76.05	21.73	3.68	0.63
42	1330.60	81.41	85.63	41.12	12.78	6.81	1.21
41	1562.70	71.67	77.12	42.85	10.22	6.54	1.02
40	1733.20	64.52	71.48	49.66	8.24	5.64	0.73
39	1891.90	64.73	67.63	54.87	29.94	5.10	1.20
38	2080.60	58.19	62.20	68.51	19.69	4.09	0.70
37	2100.60	57.80	61.25	57.64	19.50	4.86	0.90
36	2250.70	54.86	58.55	65.51	31.81	4.27	0.95
35	2582.50	48.62	52.40	60.33	22.77	4.64	0.91
34	2836.10	44.02	48.29	56.59	15.93	4.95	0.84
33	3052.40	38.99	44.75	120.90	36.12	2.32	0.40
32	3072.40	38.64	42.59	57.01	34.40	4.91	1.22
31	3237.10	35.76	38.66	78.74	39.32	3.56	0.80
30	3241.10	32.87	37.40	76.50	29.65	3.66	0.73
29	3656.30	28.80	32.53	90.72	33.56	3.09	0.60
28	3676.30	28.45	31.18	57.64	32.94	4.86	1.17
27	3759.40	26.88	28.66	66.75	37.50	4.19	1.00

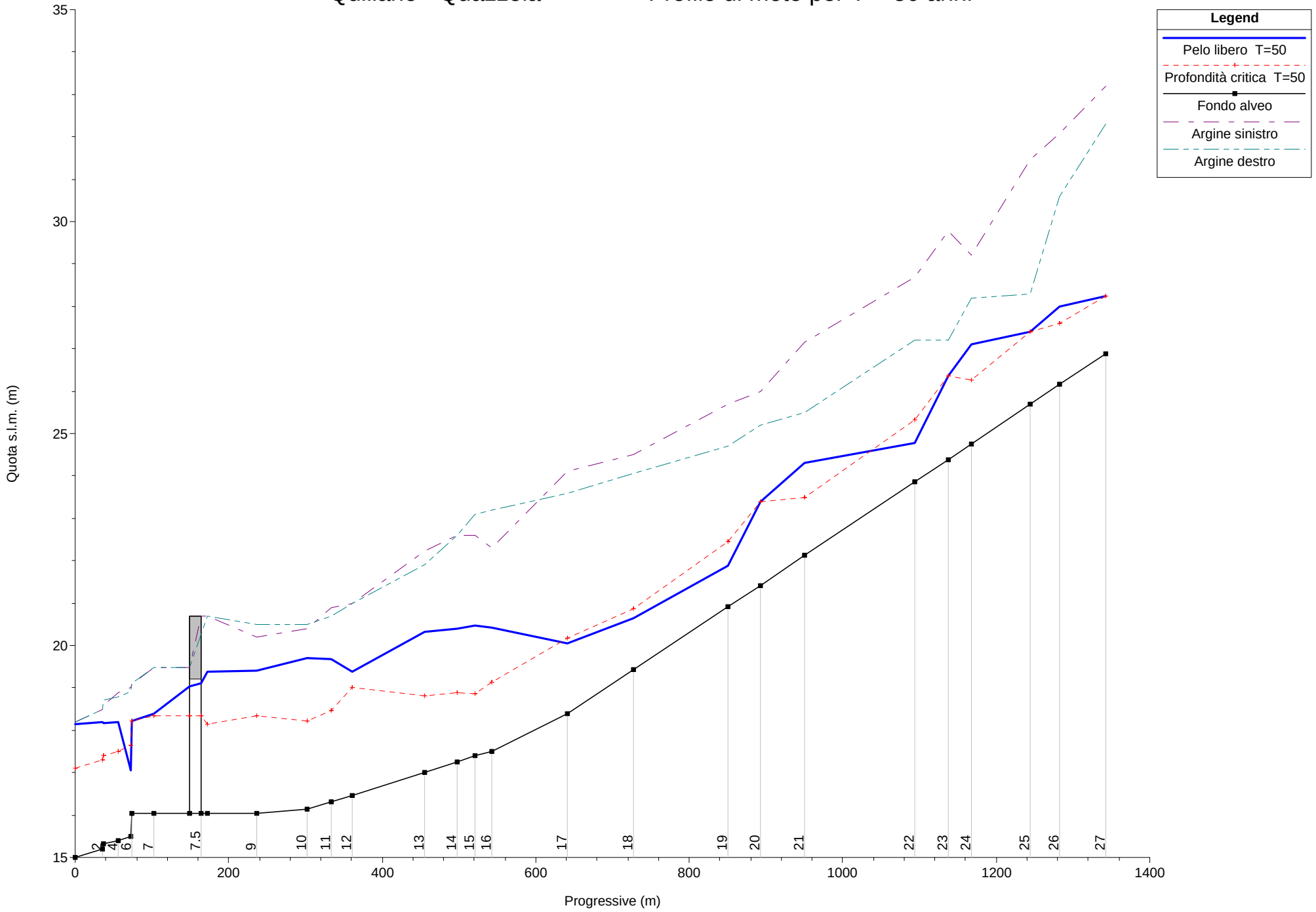
Torrente Quazzola -Risultati delle simulazioni idrauliche – T = 200 anni

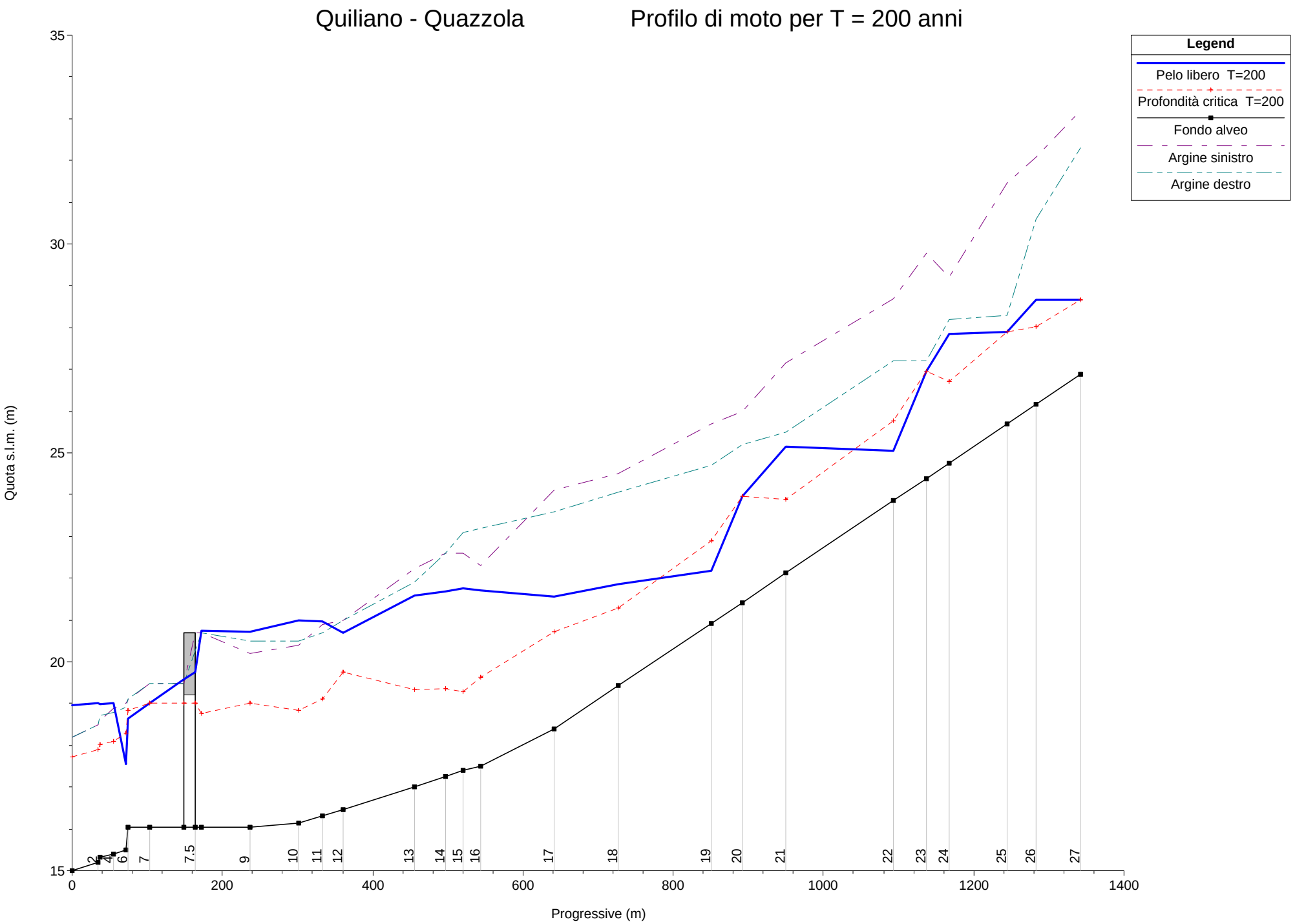
TORRENTE QUAZZOLA – PROFILO DI CORRENTE PER T=500 ANNI							
ID Sez.	**Progr. (m)**	**Quota fondo (m s.m.)**	**P.L. (m s.m.)**	**A (m^2)**	**b (m)**	**v (m/s)**	**Fr (-)**
50	0.00	118.60	125.43	90.90	30.16	2.09	0.38
49	20.00	118.39	121.99	33.86	12.93	5.61	1.11
48	126.30	117.25	119.94	24.58	11.15	7.73	1.11
47	429.00	92.10	101.00	87.28	15.11	3.05	0.41
46	723.70	89.75	99.14	107.03	26.84	3.18	0.51
45	771.70	89.06	99.16	149.38	32.22	2.28	0.34
44	791.70	88.58	94.80	54.95	15.34	6.19	1.04
43	1027.10	82.86	88.48	87.47	22.93	3.89	0.64
42	1330.60	81.41	86.14	47.57	13.33	7.15	1.21
41	1562.70	71.67	77.78	49.75	10.62	6.83	1.01
40	1733.20	64.52	72.20	55.63	8.36	6.11	0.76
39	1891.90	64.73	67.94	64.08	30.04	5.31	1.16
38	2080.60	58.19	62.95	83.43	19.94	4.08	0.64
37	2100.60	57.80	61.63	65.06	19.63	5.23	0.92
36	2250.70	54.86	58.85	75.35	33.14	4.51	0.95
35	2582.50	48.62	52.81	71.98	36.25	4.72	1.07
34	2836.10	44.02	48.87	66.09	16.45	5.14	0.82
33	3052.40	38.99	45.53	149.29	36.83	2.28	0.36
32	3072.40	38.64	42.88	67.01	34.71	5.07	1.17
31	3237.10	35.76	39.03	93.41	39.84	3.64	0.76
30	3241.10	32.87	37.77	87.55	30.72	3.88	0.73
29	3656.30	28.80	32.95	105.05	33.82	3.24	0.59
28	3676.30	28.45	31.43	65.80	33.10	5.17	1.17
27	3759.40	26.88	28.99	79.13	37.50	4.30	0.95

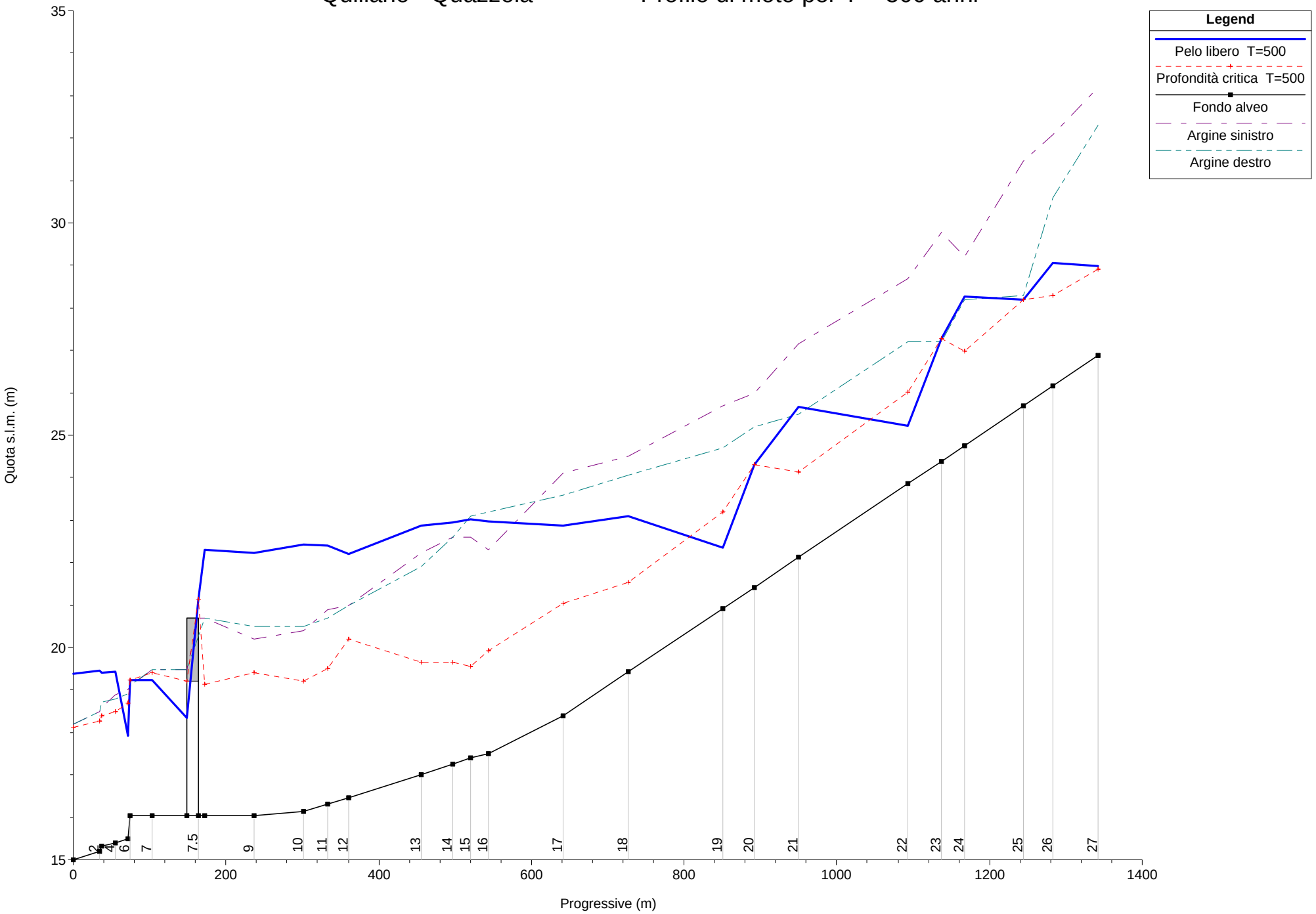
Torrente Quazzola -Risultati delle simulazioni idrauliche – T = 500 anni

PROFILI DI RIGURGITO IN CONDIZIONI DI MOTO PERMANENTE PER LE PORTATE T=50, 200, 500 ANNI

QUAZZOLA


Quiliano - Quazzola
Profilo di moto per T = 50 anni
Legend
Pelo libero T=50
Profondità critica T=50
Fondo alveo
Argine sinistro
Argine destro
Quota s.l.m. (m)
Progressive (m)
35
30
25
20
15
0
200
400
600
800
1000
1200
1400
2
4
6
7
7.5
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27

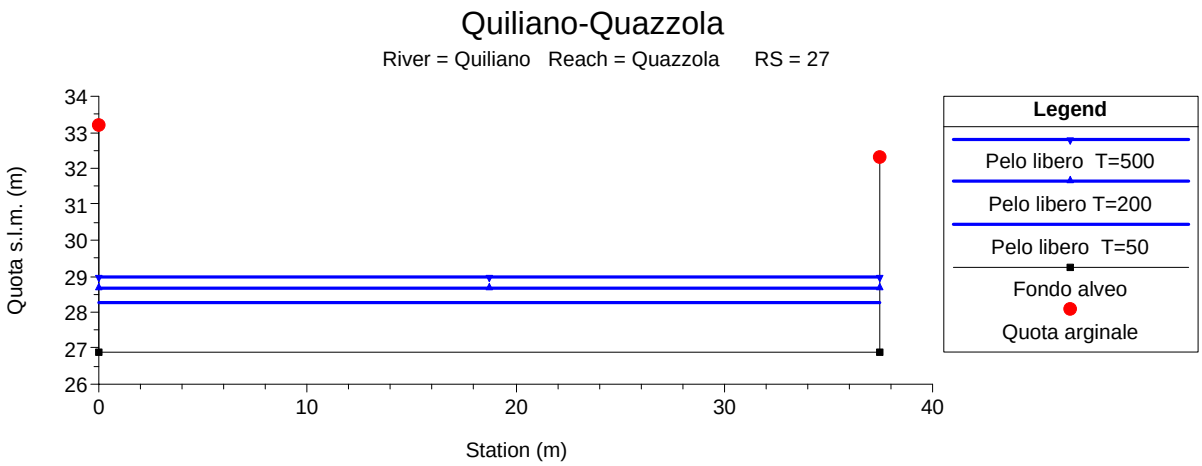

Quiliano - Quazzola
Profilo di moto per T = 200 anni
Legend
Pelo libero T=200
Profondità critica T=200
Fondo alveo
Argine sinistro
Argine destro
Quota s.l.m. (m)
Progressive (m)
35
30
25
20
15
0
200
400
600
800
1000
1200
1400
2
4
6
7
7.5
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27

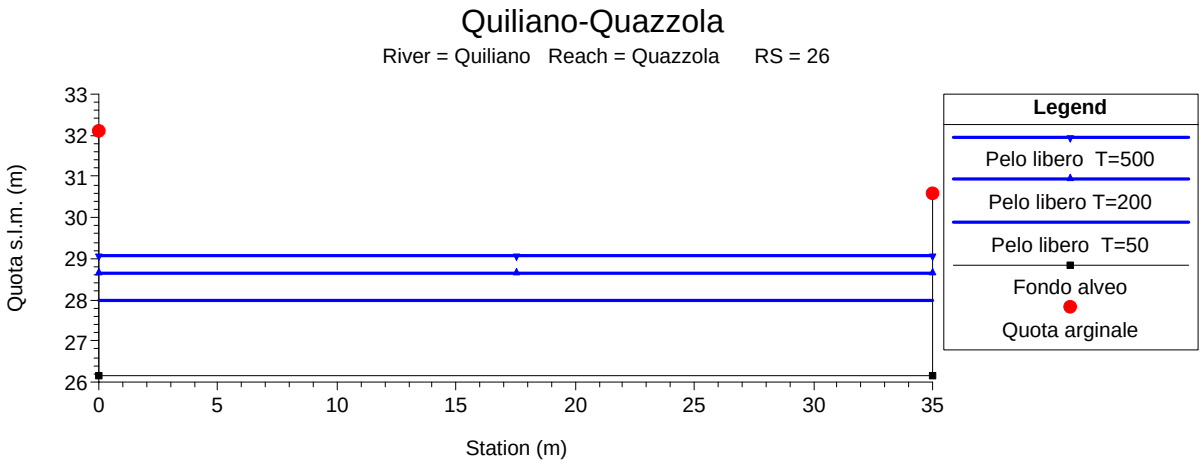

Quiliano - Quazzola
Profilo di moto per T = 500 anni
Legend
Pelo libero T=500
Profondità critica T=500
Fondo alveo
Argine sinistro
Argine destro
Quota s.l.m. (m)
Progressive (m)
35
30
25
20
15
0
200
400
600
800
1000
1200
1400
2
4
6
7
7.5
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27

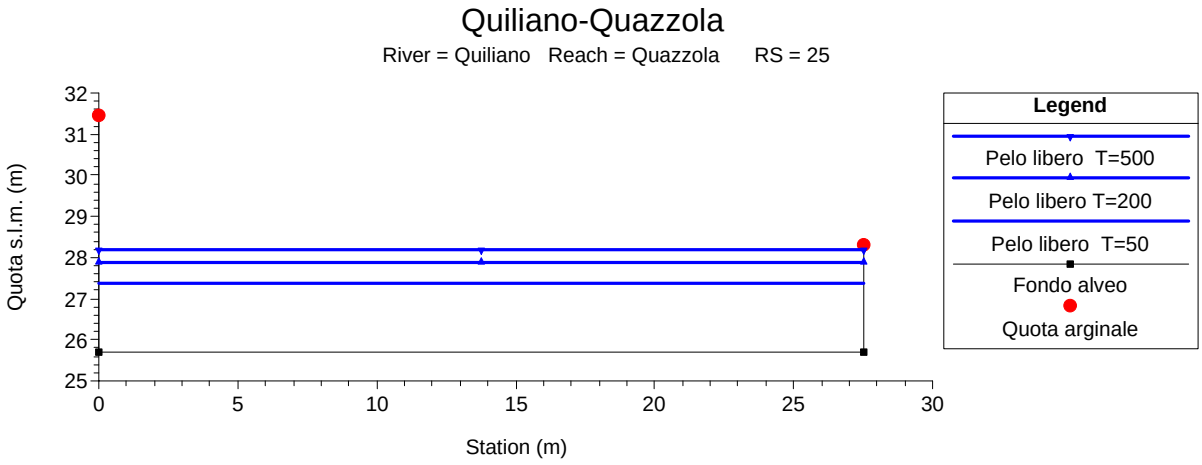
GEOMETRIA DELLE SEZIONI ED ALTEZZA DEL PELO LIBERO IN CONDIZIONI DI MOTO PERMANENTE PER LE PORTATE T=50, 200, 500 ANNI

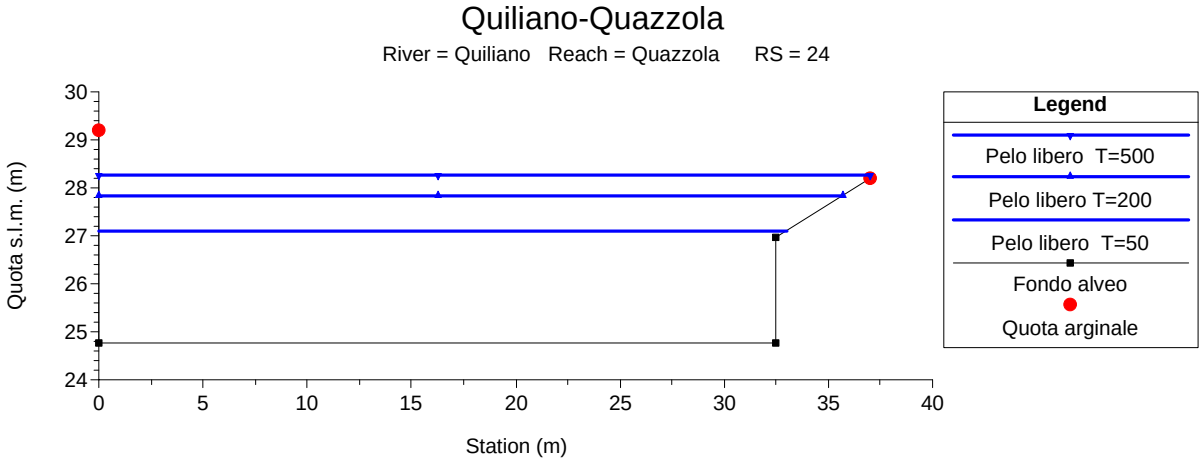
QUAZZOLA

QUAZZOLA


Quiliano-Quazzola
River = Quiliano Reach = Quazzola RS = 27
Quota s.l.m. (m)
Station (m)
Legend
Pelo libero T=500
Pelo libero T=200
Pelo libero T=50
Fondo alveo
Quota arginale

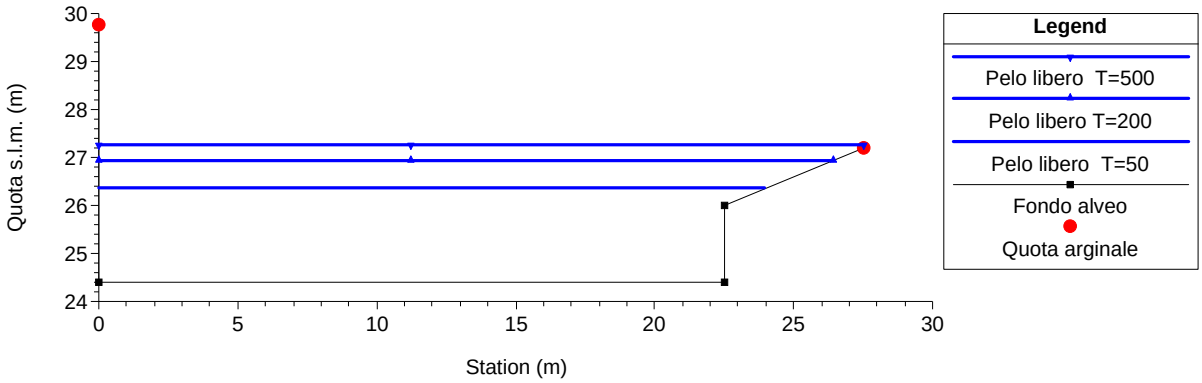

Quiliano-Quazzola
River = Quiliano Reach = Quazzola RS = 26
Quota s.l.m. (m)
Station (m)
Legend
Pelo libero T=500
Pelo libero T=200
Pelo libero T=50
Fondo alveo
Quota arginale


Quiliano-Quazzola
River = Quiliano Reach = Quazzola RS = 25
Quota s.l.m. (m)
Station (m)
Legend
Pelo libero T=500
Pelo libero T=200
Pelo libero T=50
Fondo alveo
Quota arginale


Quiliano-Quazzola
River = Quiliano Reach = Quazzola RS = 24
Quota s.l.m. (m)
Station (m)
Legend
Pelo libero T=500
Pelo libero T=200
Pelo libero T=50
Fondo alveo
Quota arginale

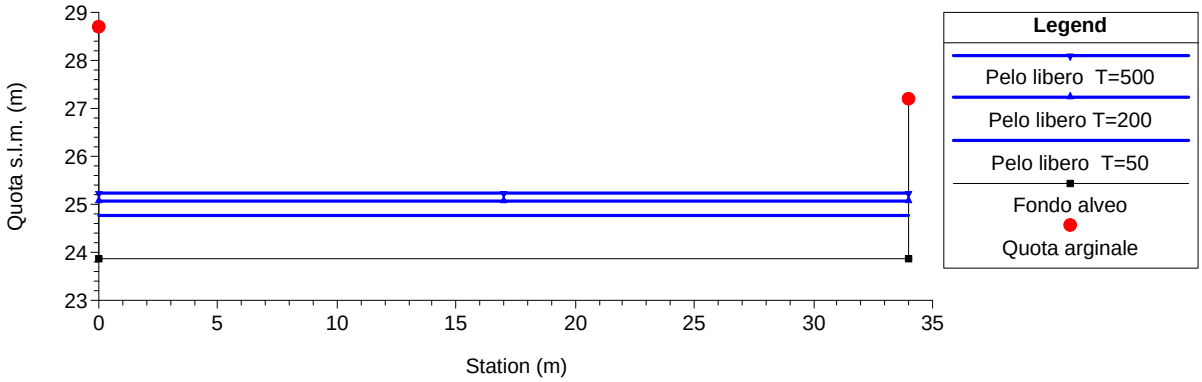
Quiliano-Quazzola

River = Quiliano Reach = Quazzola RS = 23



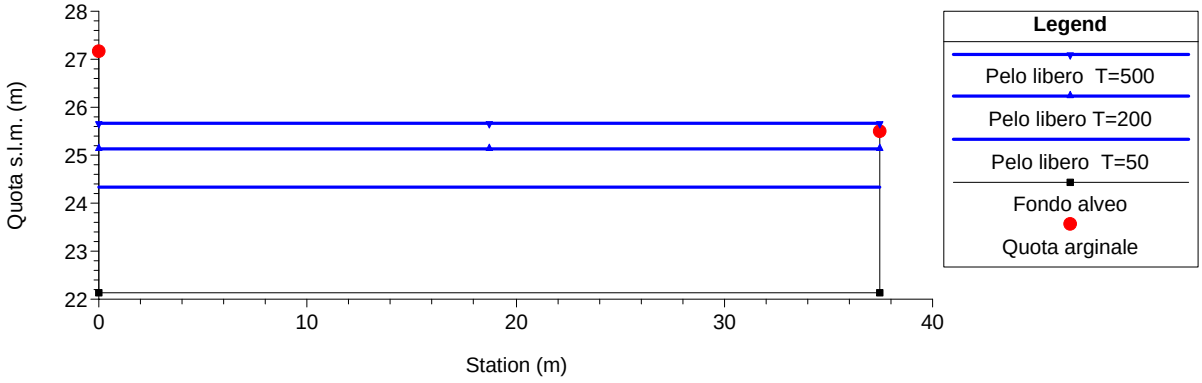
Quiliano-Quazzola

River = Quiliano Reach = Quazzola RS = 22



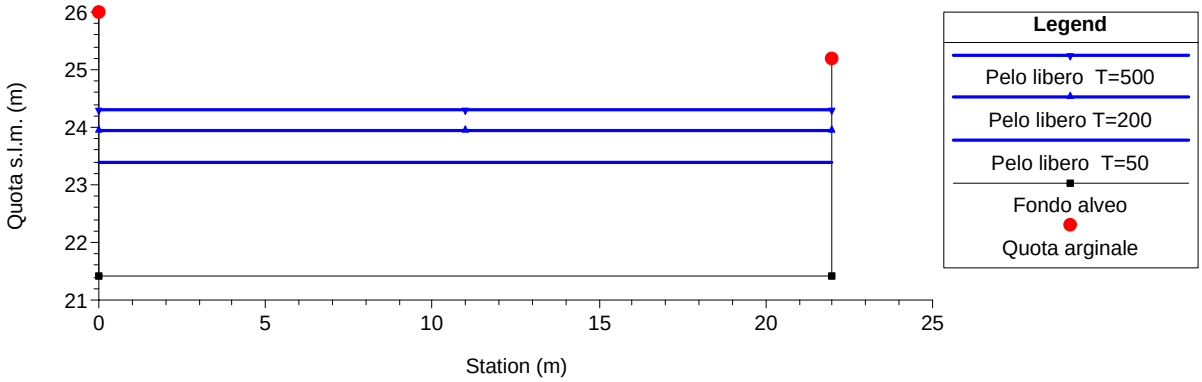
Quiliano-Quazzola

River = Quiliano Reach = Quazzola RS = 21



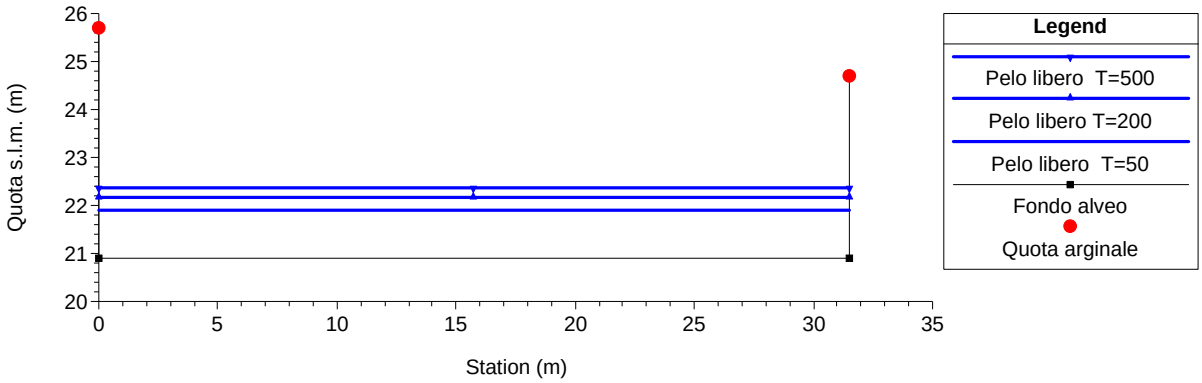
Quiliano-Quazzola

River = Quiliano Reach = Quazzola RS = 20



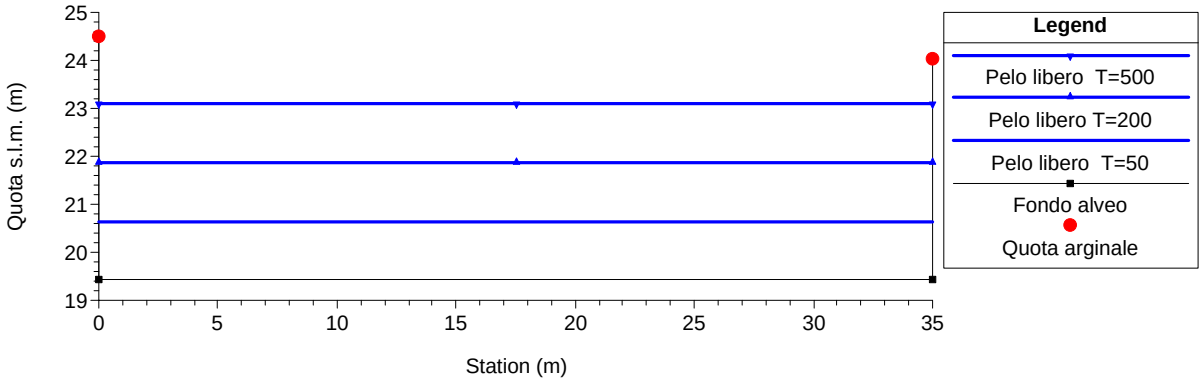
Quiliano-Quazzola

River = Quiliano Reach = Quazzola RS = 19



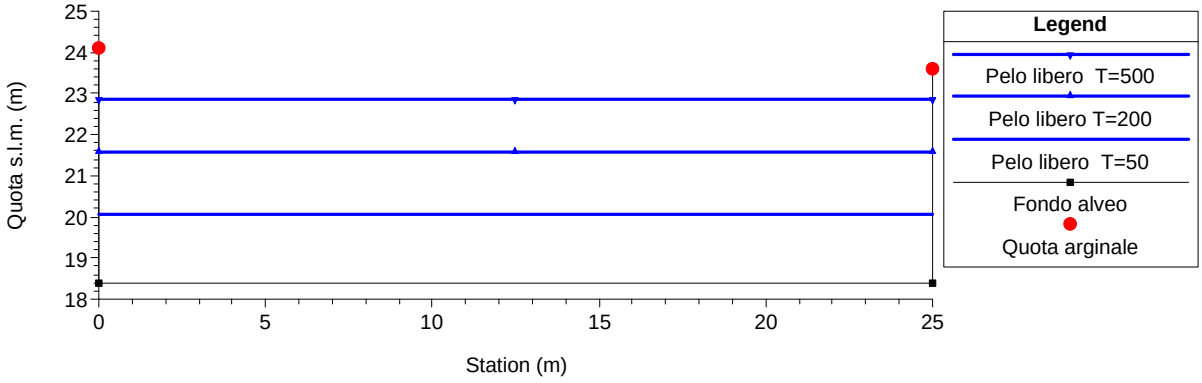
Quiliano-Quazzola

River = Quiliano Reach = Quazzola RS = 18



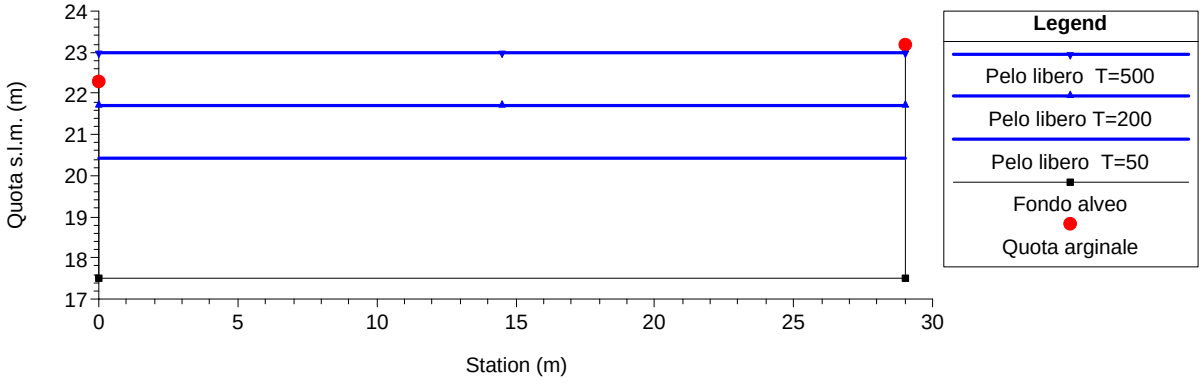
Quiliano-Quazzola

River = Quiliano Reach = Quazzola RS = 17



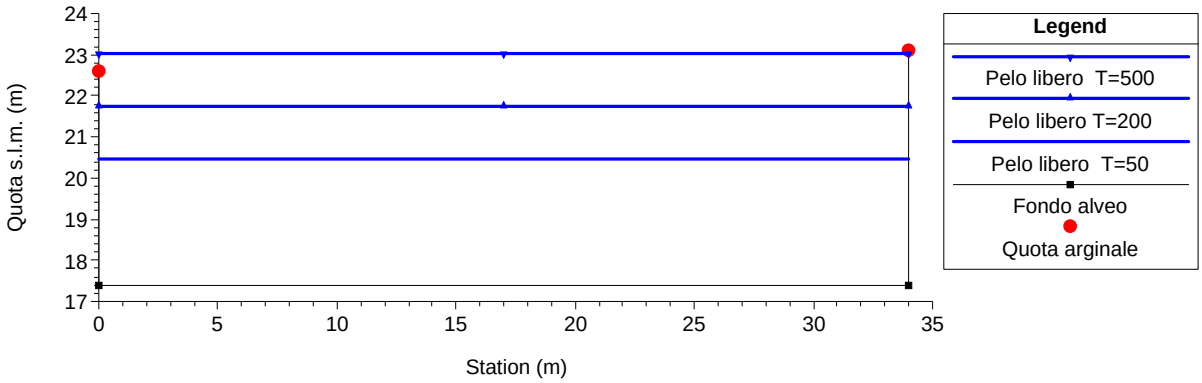
Quiliano-Quazzola

River = Quiliano Reach = Quazzola RS = 16



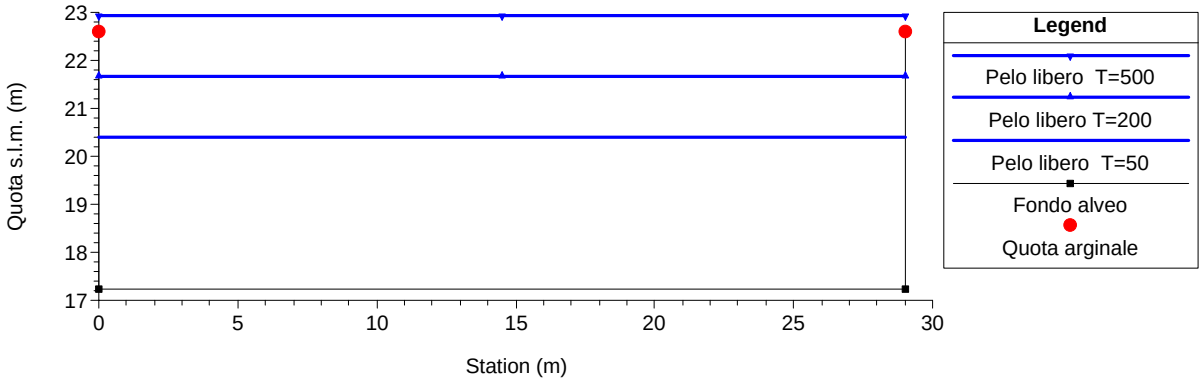
Quiliano-Quazzola

River = Quiliano Reach = Quazzola RS = 15



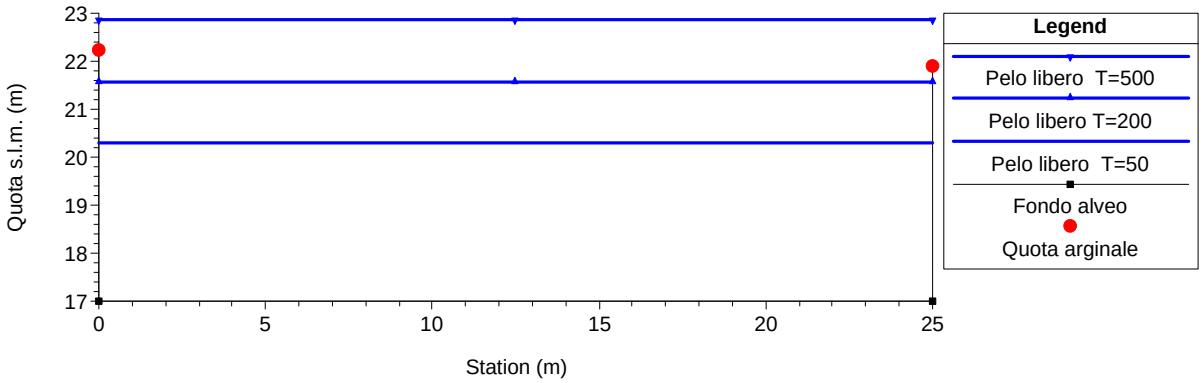
Quiliano-Quazzola

River = Quiliano Reach = Quazzola RS = 14



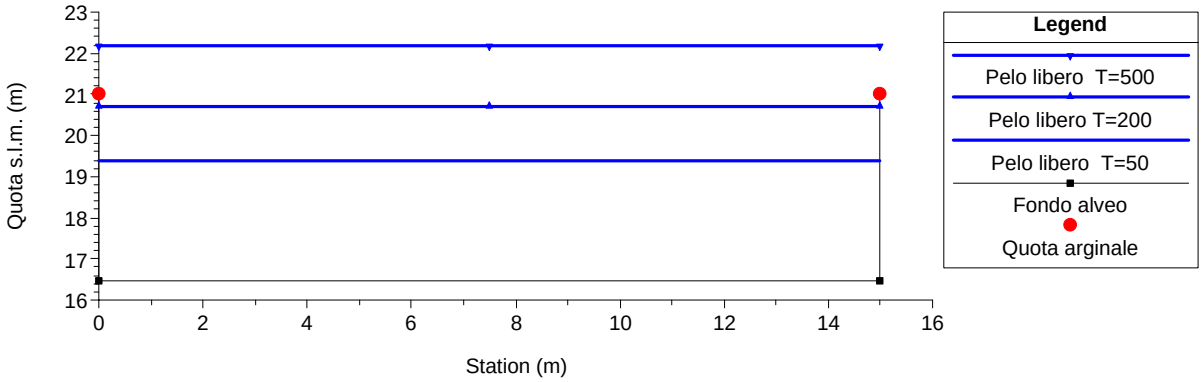
Quiliano-Quazzola

River = Quiliano Reach = Quazzola RS = 13



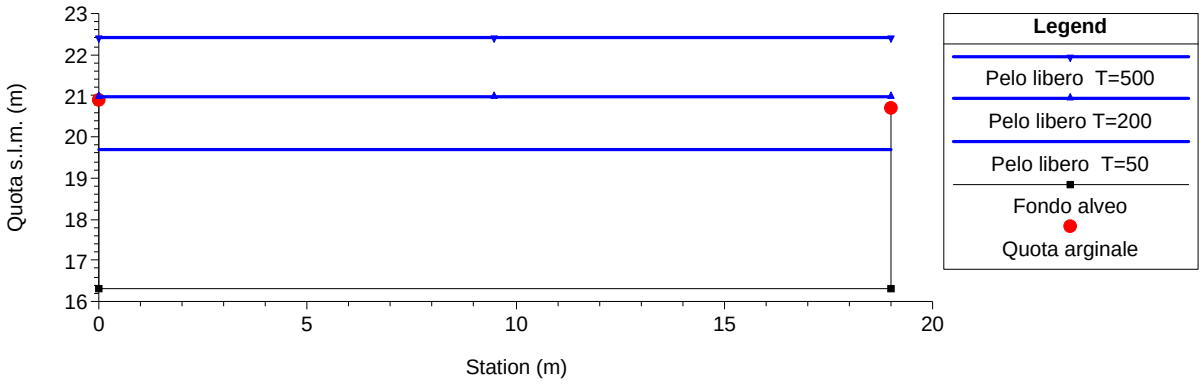
Quiliano-Quazzola

River = Quiliano Reach = Quazzola RS = 12



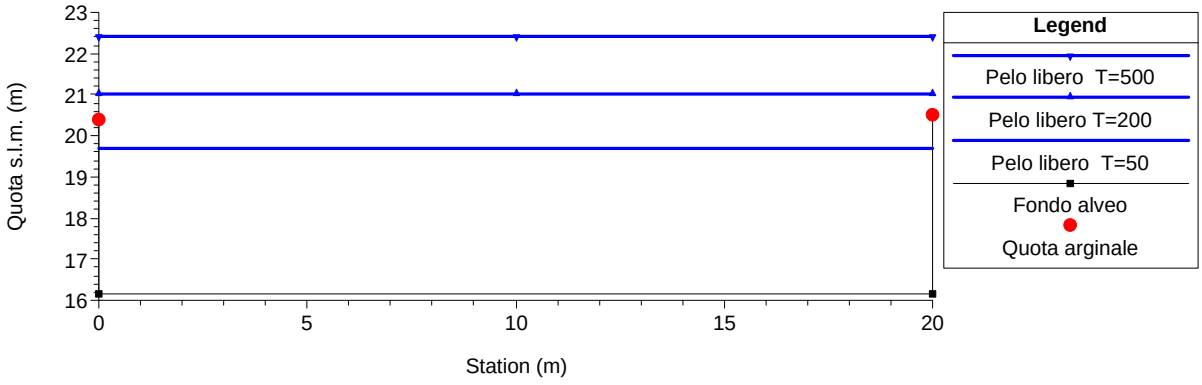
Quiliano-Quazzola

River = Quiliano Reach = Quazzola RS = 11



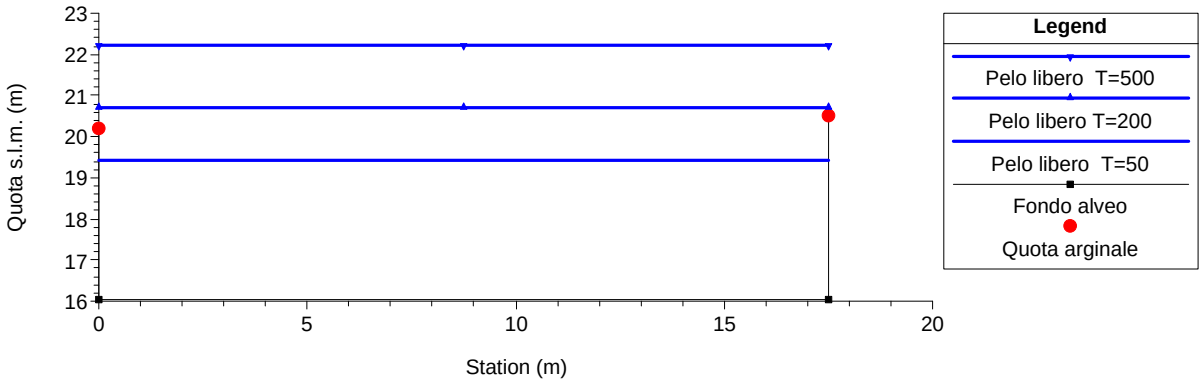
Quiliano-Quazzola

River = Quiliano Reach = Quazzola RS = 10



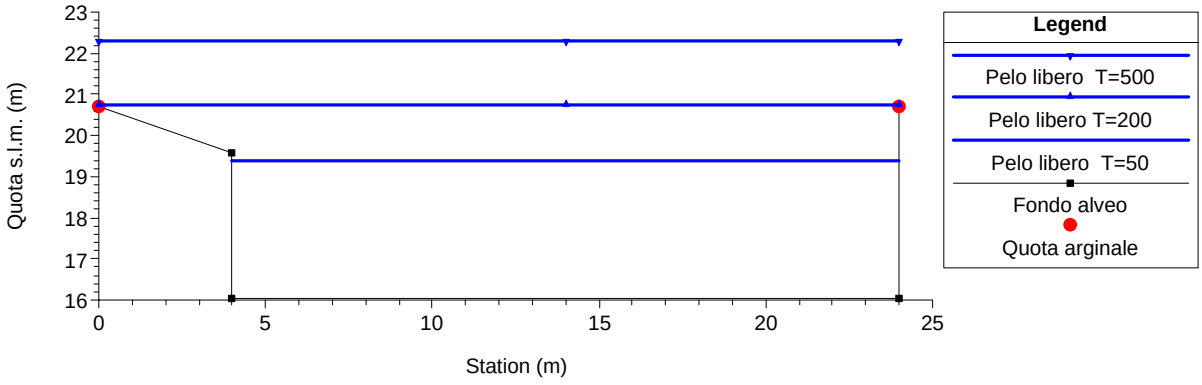
Quiliano-Quazzola

River = Quiliano Reach = Quazzola RS = 9

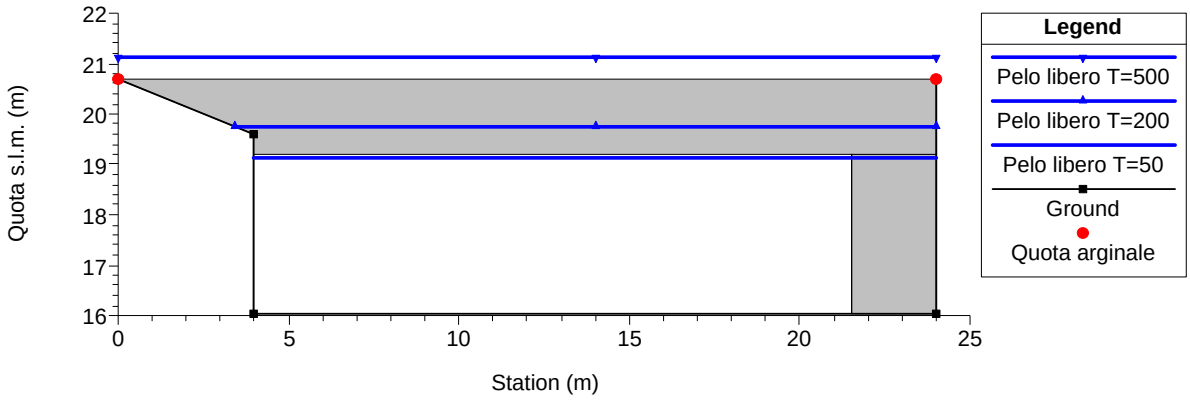


Quiliano-Quazzola

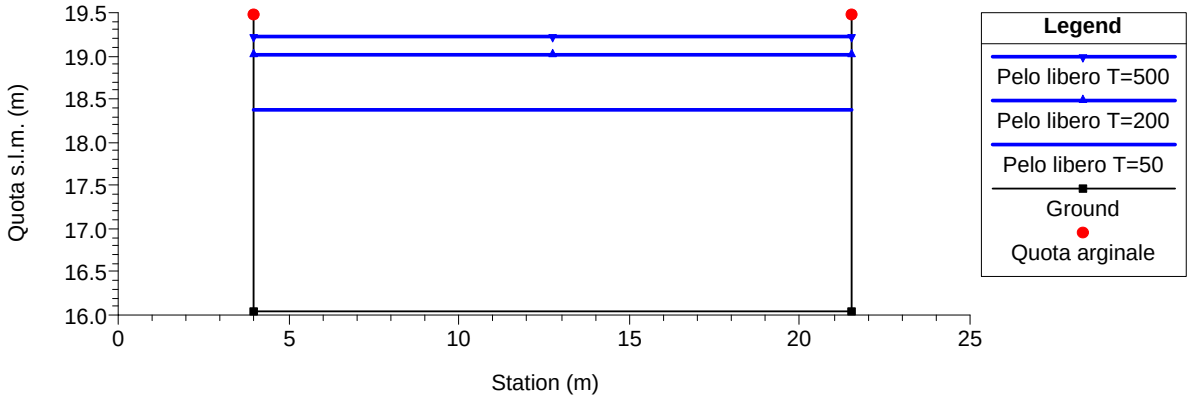
River = Quiliano Reach = Quazzola RS = 8



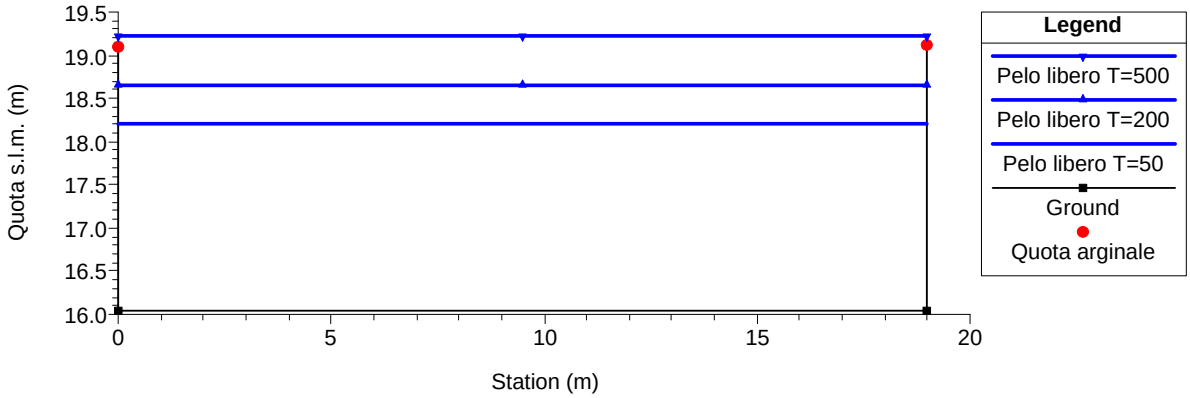
River = Quiliano Reach = Quazzola RS = 7.5 BR



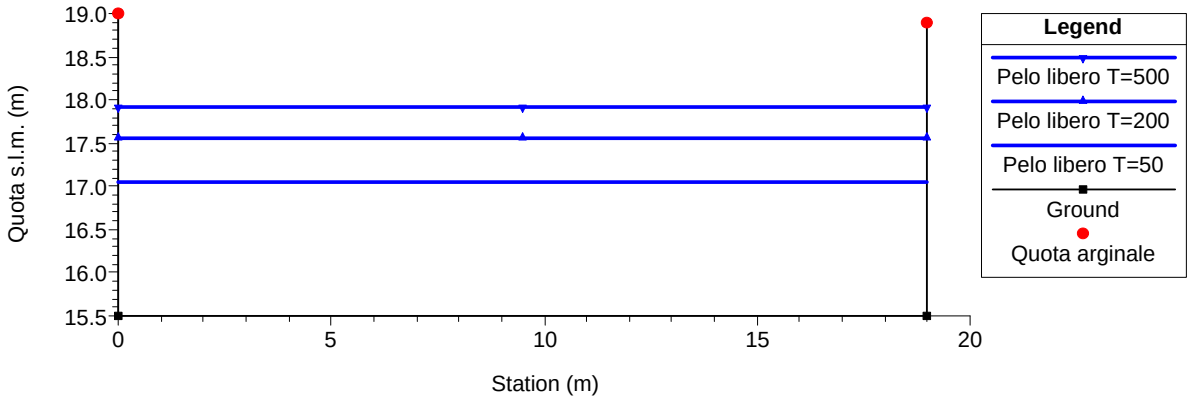
River = Quiliano Reach = Quazzola RS = 7



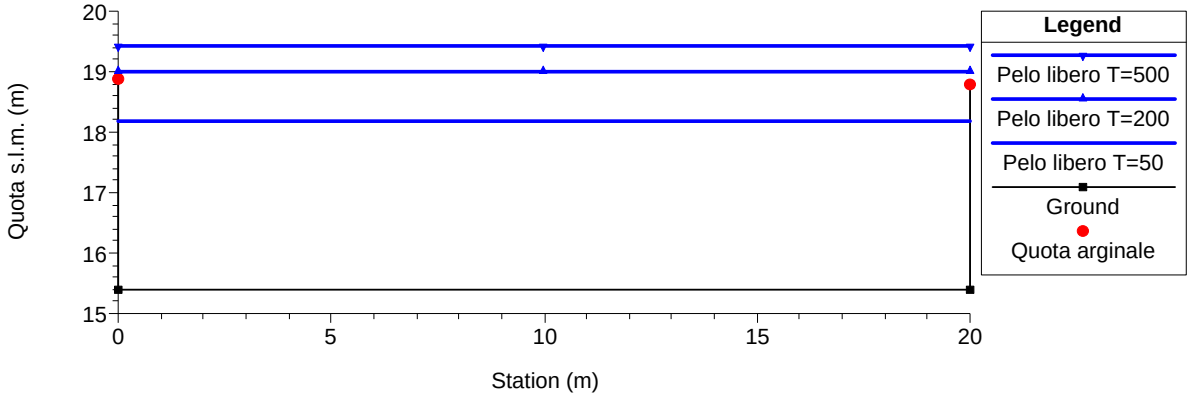
River = Quiliano Reach = Quazzola RS = 6



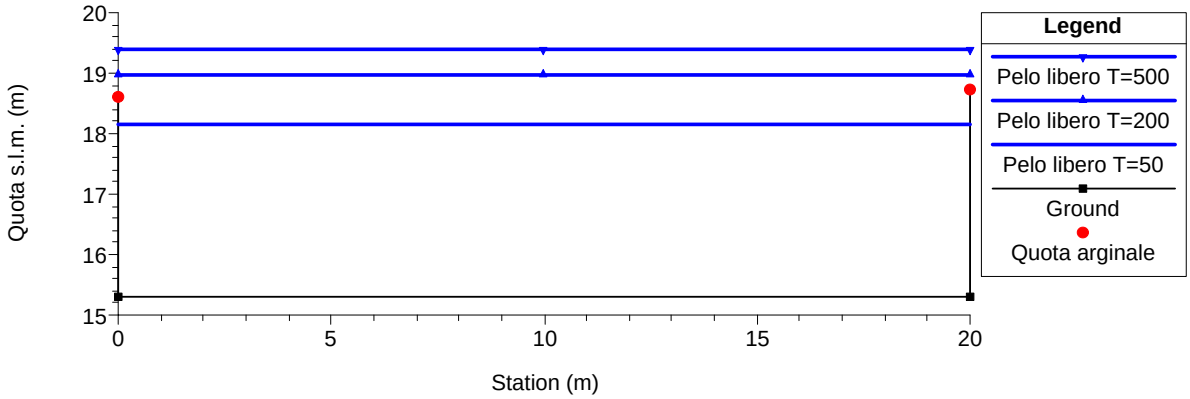
River = Quiliano Reach = Quazzola RS = 5



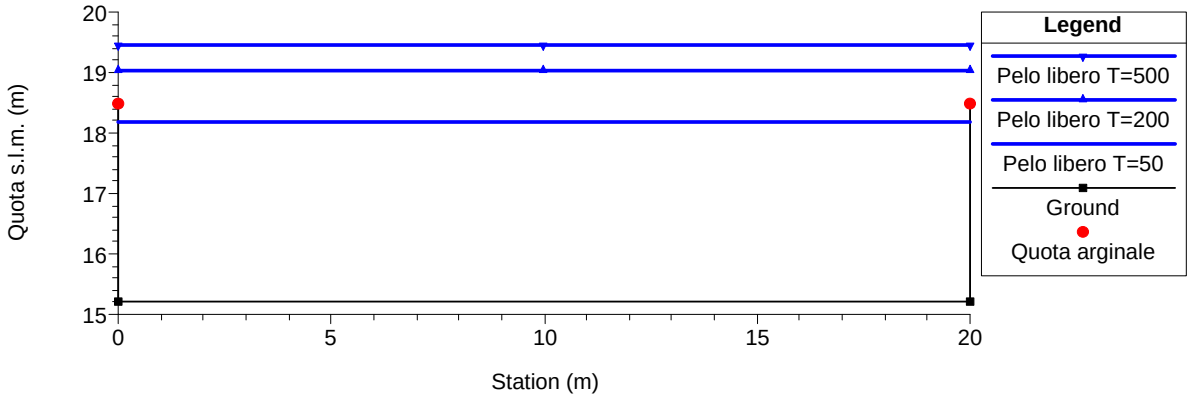
River = Quiliano Reach = Quazzola RS = 4



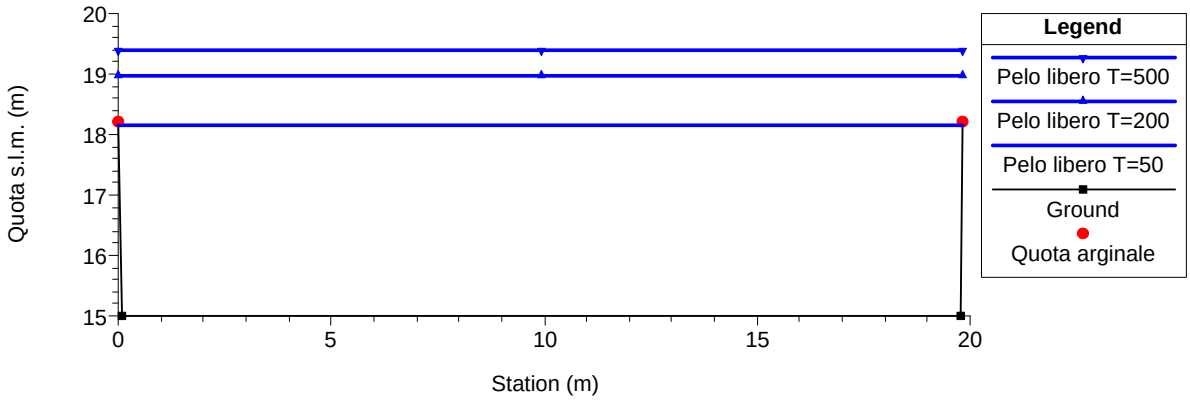
River = Quiliano Reach = Quazzola RS = 3



River = Quiliano Reach = Quazzola RS = 2



River = Quiliano Reach = Quazzola RS = 1



MODELLAZIONE IDRAULICA IN CONDIZIONI DI MOTO PERMANENTE:
TABELLE DELLE GRANDEZZE IDRAULICHE SIGNIFICATIVE PER LE PORTATE T=50, 200, 500 ANNI

QUAZZOLA

Torrente Quiliano - Quazzola T=50 anni										
Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
27	190	26.88	33.2	32.29	28.25	1.37	28.95	3.69	51.5	1
26	190	26.16	32.09	30.6	27.98	1.44	28.44	2.98	63.81	0.7
25	190	25.7	31.45	28.3	27.39	1.69	28.24	4.09	46.5	1
24	190	24.76	29.2	28.2	27.11	1.51	27.43	2.48	76.48	0.52
23	190	24.39	29.77	27.2	26.35	1.96	27.28	4.28	44.39	1
22	190	23.86	28.7	27.2	24.78	1.47	26.67	6.1	31.14	2.04
21	190	22.12	27.16	25.5	24.32	1.37	24.59	2.31	82.41	0.5
20	190	21.42	26	25.2	23.38	1.96	24.37	4.41	43.1	1.01
19	190	20.91	25.7	24.7	21.89	1.54	23.81	6.13	31	1.97
18	190	19.42	24.5	24.05	20.65	1.44	21.64	4.41	43.05	1.27
17	190	18.38	24.1	23.6	20.04	1.8	21.11	4.56	41.62	1.13
16	190	17.51	22.3	23.2	20.43	1.63	20.69	2.24	84.72	0.42
15	190	17.39	22.6	23.1	20.48	1.47	20.65	1.81	105.06	0.33
14	190	17.25	22.6	22.6	20.41	1.63	20.62	2.08	91.54	0.37
13	190	17.01	22.23	21.9	20.32	1.8	20.58	2.3	82.6	0.4
12	190	16.47	21	21	19.4	2.53	20.35	4.32	43.95	0.81
11	190	16.31	20.9	20.7	19.69	2.16	20.13	2.96	64.16	0.51
10	190	16.14	20.39	20.5	19.7	2.09	20.06	2.67	71.24	0.45
9	190	16.05	20.2	20.5	19.41	2.28	19.94	3.23	58.85	0.56
8	190	16.05	20.7	20.7	19.39	2.09	19.8	2.85	66.7	0.5
7.5	Bridge									
7	190	16.05	19.47	19.48	18.38	18.33	19.49	4.66	40.79	0.97
6	190	16.05	19.09	19.12	18.21	18.21	19.3	4.63	41.07	1
5	190	15.5	19	18.9	17.05	17.66	19.18	6.46	29.4	1.66
4	190	15.4	18.89	18.78	18.19	17.49	18.78	3.41	55.73	0.65
3	190	15.31	18.6	18.72	18.16	17.4	18.72	3.34	56.95	0.63
2	190	15.2	18.5	18.5	18.19	17.29	18.7	3.18	59.79	0.59
1	190	15	18.2	18.2	18.15	17.11	18.62	3.05	62.22	0.55

Torrente Quiliano - Quazzola T=200 anni										
Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
27	280	26.88	33.2	32.29	28.66	1.78	29.56	4.2	66.69	1
26	280	26.16	32.09	30.6	28.66	1.87	29.18	3.21	87.31	0.65
25	280	25.7	31.45	28.3	27.89	2.19	28.99	4.65	60.21	1
24	280	24.76	29.2	28.2	27.84	1.96	28.23	2.76	101.56	0.52
23	280	24.39	29.77	27.2	26.95	2.56	28.08	4.72	59.37	1
22	280	23.86	28.7	27.2	25.06	1.9	27.47	6.88	40.7	2.01
21	280	22.12	27.16	25.5	25.15	1.78	25.46	2.46	113.65	0.45
20	280	21.42	26	25.2	23.96	2.54	25.24	5.02	55.81	1.01
19	280	20.91	25.7	24.7	22.18	2	24.67	6.98	40.1	1.98
18	280	19.42	24.5	24.05	21.86	1.86	22.41	3.28	85.36	0.67
17	280	18.38	24.1	23.6	21.57	2.33	22.2	3.51	79.7	0.63
16	280	17.51	22.3	23.2	21.71	2.11	21.98	2.3	121.71	0.36
15	280	17.39	22.6	23.1	21.76	1.9	21.94	1.88	148.55	0.29
14	280	17.25	22.6	22.6	21.68	2.11	21.92	2.18	128.49	0.33
13	280	17.01	22.23	21.9	21.58	2.33	21.89	2.45	114.26	0.37
12	280	16.47	21	21	20.69	3.28	21.69	4.42	63.31	0.69
11	280	16.31	20.9	20.7	20.98	2.8	21.48	3.16	88.67	0.47
10	280	16.14	20.39	20.5	21	2.7	21.42	2.88	97.18	0.42
9	280	16.05	20.2	20.5	20.72	2.96	21.32	3.43	81.66	0.51
8	280	16.05	20.7	20.7	20.74	2.7	21.17	2.91	96.2	0.46
7.5	Bridge									
7	280	16.05	19.47	19.48	19	19	20.5	5.41	51.71	1.01
6	280	16.05	19.09	19.12	18.64	18.85	20.29	5.69	49.23	1.13
5	280	15.5	19	18.9	17.56	18.3	20.17	7.17	39.07	1.6
4	280	15.4	18.89	18.78	19.01	18.1	19.78	3.88	72.25	0.65
3	280	15.31	18.6	18.72	18.98	18.01	19.72	3.81	73.48	0.63
2	280	15.2	18.5	18.5	19.02	17.91	19.7	3.67	76.34	0.6
1	280	15	18.2	18.2	18.97	17.73	19.62	3.57	78.47	0.57

Torrente Quiliano - Quazzola T=500 anni										
Sezioni	Portata totale (m3/s)	Fondo alveo (m)	Argine sinistro (m)	Argine destro (m)	Pelo libero (m)	Profondità critica (m)	Energia (m2)	Velocità (m/s)	Area bagnata (m2)	N° Froude
27	340	26.88	33.2	32.29	28.99	2.02	29.93	4.29	79.25	0.94
26	340	26.16	32.09	30.6	29.07	2.12	29.64	3.34	101.74	0.63
25	340	25.7	31.45	28.3	28.19	2.49	29.45	4.97	68.43	1.01
24	340	24.76	29.2	28.2	28.26	2.23	28.69	2.91	116.93	0.52
23	340	24.39	29.77	27.2	27.28	2.89	28.54	4.97	68.36	1.01
22	340	23.86	28.7	27.2	25.23	2.16	27.93	7.27	46.74	1.98
21	340	22.12	27.16	25.5	25.66	2.02	25.99	2.56	132.75	0.43
20	340	21.42	26	25.2	24.31	2.89	25.77	5.35	63.52	1.01
19	340	20.91	25.7	24.7	22.36	2.27	25.18	7.44	45.68	1.97
18	340	19.42	24.5	24.05	23.09	2.12	23.45	2.65	128.42	0.44
17	340	18.38	24.1	23.6	22.88	2.65	23.34	3.02	112.4	0.46
16	340	17.51	22.3	23.2	22.97	2.41	23.2	2.15	158.3	0.29
15	340	17.39	22.6	23.1	23.01	2.16	23.17	1.78	191.24	0.24
14	340	17.25	22.6	22.6	22.95	2.4	23.16	2.06	165.19	0.28
13	340	17.01	22.23	21.9	22.86	2.65	23.14	2.33	146.23	0.31
12	340	16.47	21	21	22.2	3.73	22.99	3.96	85.87	0.53
11	340	16.31	20.9	20.7	22.41	3.18	22.85	2.93	115.94	0.38
10	340	16.14	20.39	20.5	22.43	3.08	22.8	2.7	125.86	0.34
9	340	16.05	20.2	20.5	22.23	3.37	22.73	3.15	108.06	0.4
8	340	16.05	20.7	20.7	22.29	3.08	22.62	2.55	133.41	0.35
7.5	Bridge									
7	340	16.05	19.47	19.48	19.23	19.42	21.13	6.12	55.6	1.1
6	340	16.05	19.09	19.12	19.23	19.24	20.84	5.63	60.36	1.01
5	340	15.5	19	18.9	17.92	18.68	20.71	7.4	45.92	1.52
4	340	15.4	18.89	18.78	19.44	18.48	20.34	4.21	80.78	0.67
3	340	15.31	18.6	18.72	19.41	18.39	20.28	4.15	81.95	0.65
2	340	15.2	18.5	18.5	19.44	18.28	20.26	4.01	84.87	0.62
1	340	15	18.2	18.2	19.39	18.11	20.17	3.92	86.78	0.6