

Genova, 22/10/2020

Prot. n. NP/2020/1466099

Classif./Fasc. 2017/G13.12.5/19

**Bacino del fiume Po - Variante Bacini Padani (VBP)
in Provincia di Genova
Aggiornamento quadro dissesti 2020**

Relazione istruttoria integrativa all'allegato della nota prot. PG/2020/15388

Valle Stura

Le modifiche interessano i Comuni di **Campo Ligure** (frane codici 32, 33 e 34) e **Rossiglione** (frana codice 31) e sono conseguenti all'evento alluvionale di ottobre 2019. Sono state verificate nell'anno corrente con sopralluoghi d'ufficio. Il quadro dei dissesti a **Masone** è integrato con modifiche che derivano da indicazioni dello studio di approfondimento di PUC in itinere (frane codici 35, 37, 38, 39, 40, 41, 42, 43, 44, 45 e 10) e con l'inserimento della frana codice 36 nei pressi del casello autostradale verificatasi nel mese di giugno u.s.

Relativamente ai tematismi idraulici, è stato indagato ai fini idraulici il rio **Mongrosso**, affluente del torrente Stura a **Campo Ligure**. Il rio Mongrosso è un piccolo affluente studiato nell'ambito di una richiesta di autorizzazione idraulica; le verifiche mostrano un'estesa area a pericolosità molto elevata che interessa la zona del campo sportivo di Campo Ligure, oltre un'area a pericolosità media; la modifica riguarda la Carta delle fasce fluviali, la Carta dei tratti indagati e delle tracce delle sezioni idrauliche e le verifiche idrauliche, riportate in allegato.

Inoltre, nell'ambito dell'aggiornamento del PUC di **Masone**, sono state ripериметrate, sulla base di evidenze morfologiche, la fascia C in località "Lovera" e presso lo stabilimento "Baretto", in sponda sinistra del T. Vezzulla e le aree storicamente inondate esterne alla fascia C in località "Cà Bucchin", in sponda destra del T. Vezzulla.

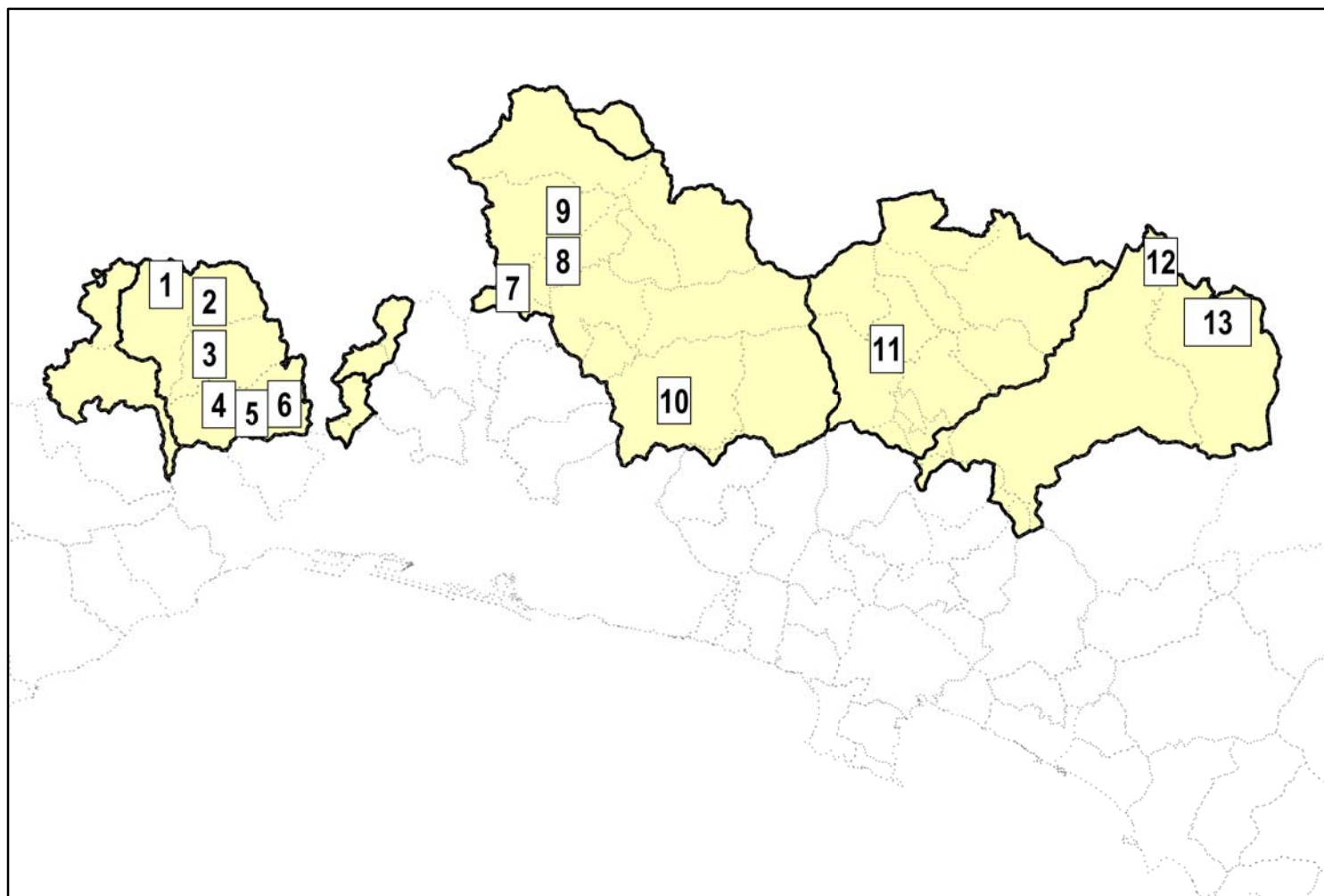
Valle Scrivia

L'aggiornamento è relativo al torrente **Seminella**, affluente del torrente Scrivia a **Busalla**. Più in dettaglio è stato indagato, nell'ambito di una richiesta di autorizzazione idraulica un nuovo tratto a monte del tratto già indagato nella VBP e pertanto vengono aggiornate, come riportate in allegato, la Carta dei dissesti, la Carta dei tratti indagati e delle tracce delle sezioni idrauliche, nonché le verifiche idrauliche.

**IL DIRIGENTE
(Ing. Roberto BONI)**

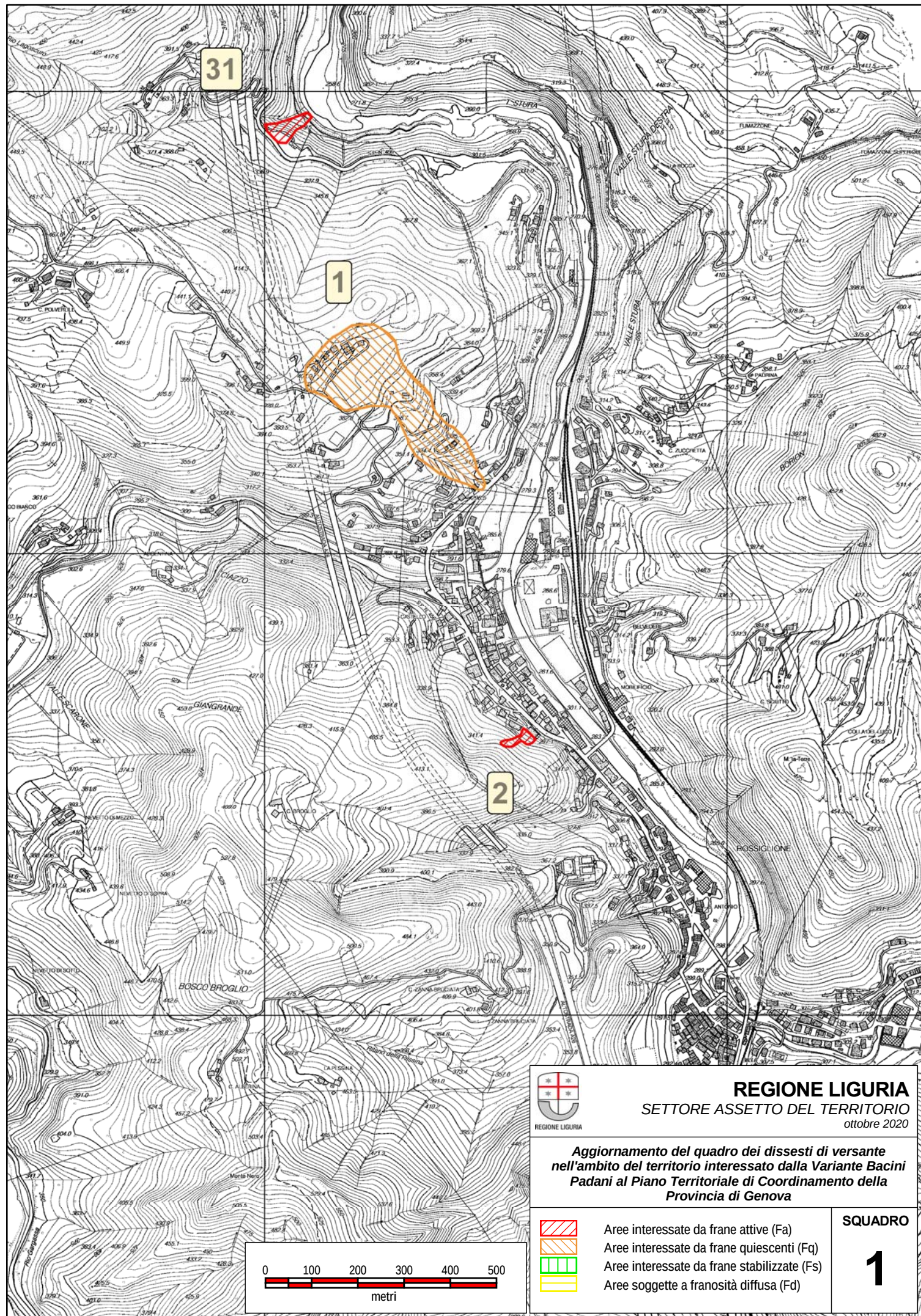


Firmato digitalmente da:
ROBERTO BONI
Regione Liguria
Firmato il: 28-10-2020
17:16:44
Seriale certificato:
702580
Valido dal 16-06-2020
al 16-06-2023



***Aggiornamento del quadro dei dissesti di versante
nell'ambito del territorio interessato dalla Variante Bacini
Padani al Piano Territoriale di Coordinamento della
Provincia di Genova***

**QUADRO D'UNIONE DELLE TAVOLE
- FRANE -**



REGIONE LIGURIA

REGIONE LIGURIA

SETTORE ASSETTO DEL TERRITORIO
ottobre 2020

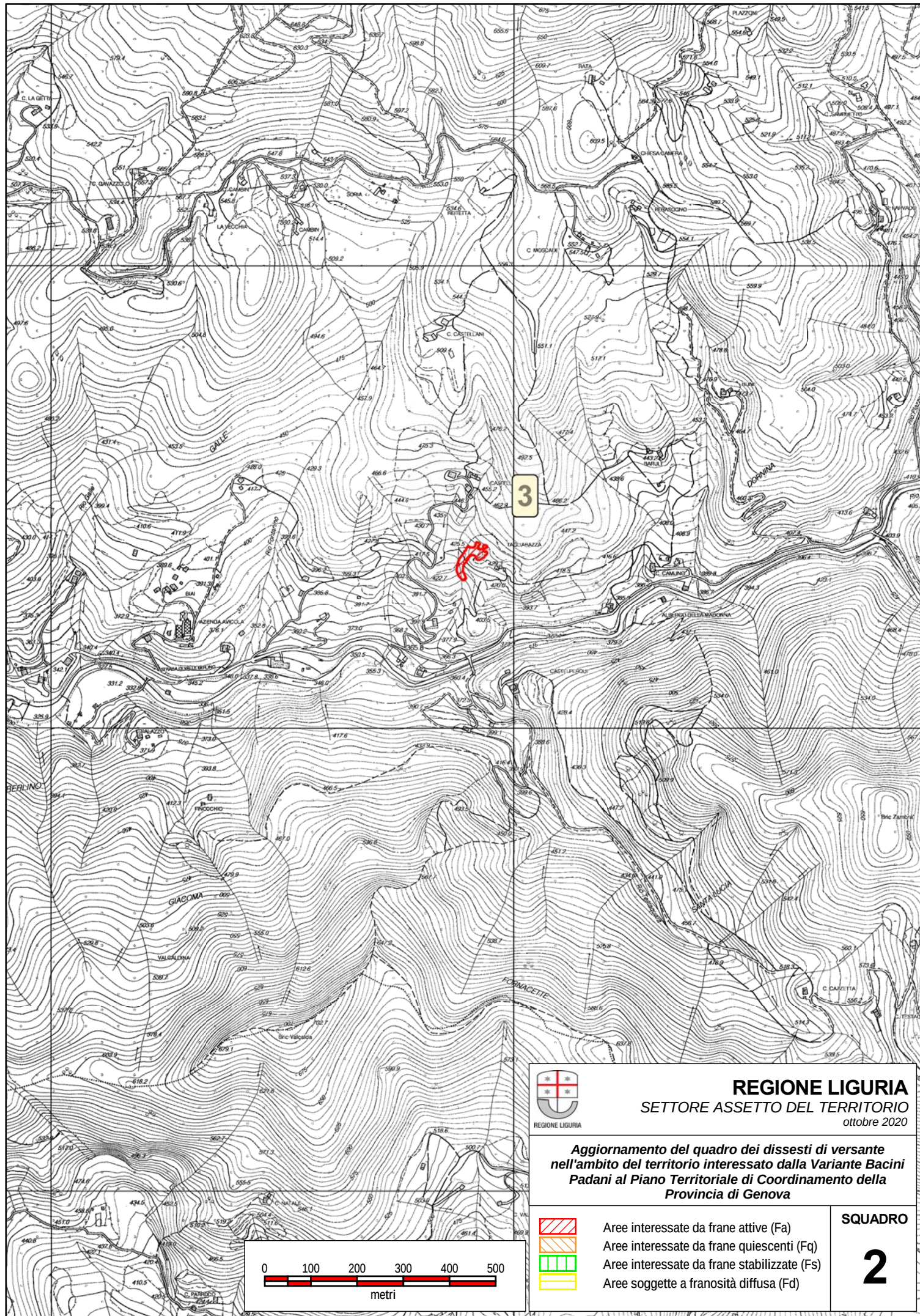
**Aggiornamento del quadro dei dissesti di versante
nell'ambito del territorio interessato dalla Variante Bacini
Padani al Piano Territoriale di Coordinamento della
Provincia di Genova**



Aree interessate da frane attive (Fa)
Aree interessate da frane quiescenti (Fq)
Aree interessate da frane stabilizzate (Fs)
Aree soggette a franosità diffusa (Fd)

SQUADRO

1



REGIONE LIGURIA

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SETTORE ASSETTO DEL TERRITORIO

ottobre 2020

**Aggiornamento del quadro dei dissesti di versante
nell'ambito del territorio interessato dalla Variante Bacini
Padani al Piano Territoriale di Coordinamento della
Provincia di Genova**

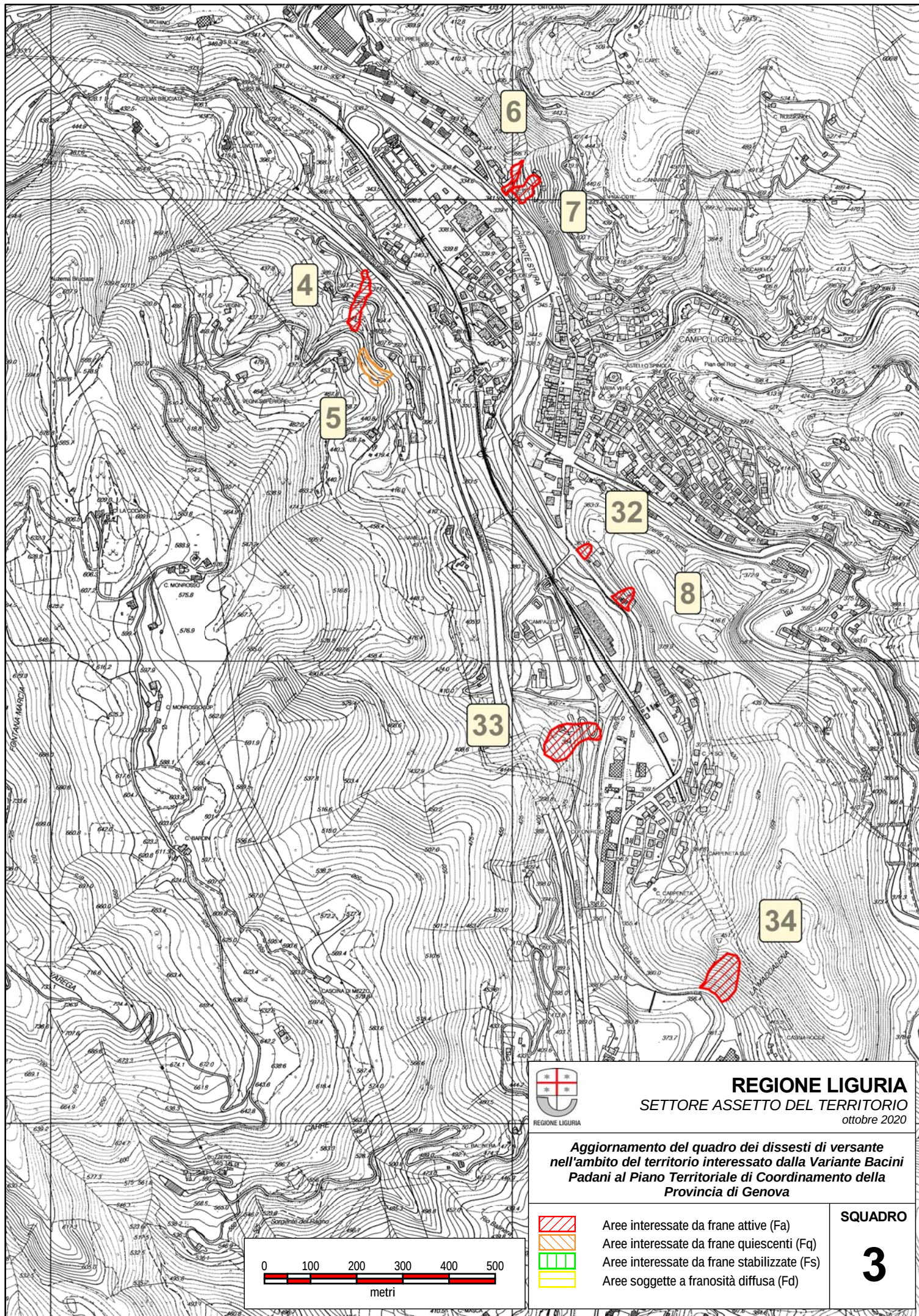


Aree interessate da frane attive (Fa)
Aree interessate da frane quiescenti (Fq)
Aree interessate da frane stabilizzate (Fs)
Aree soggette a franosità diffusa (Fd)

SQUADRO

2

0 100 200 300 400 500
metri



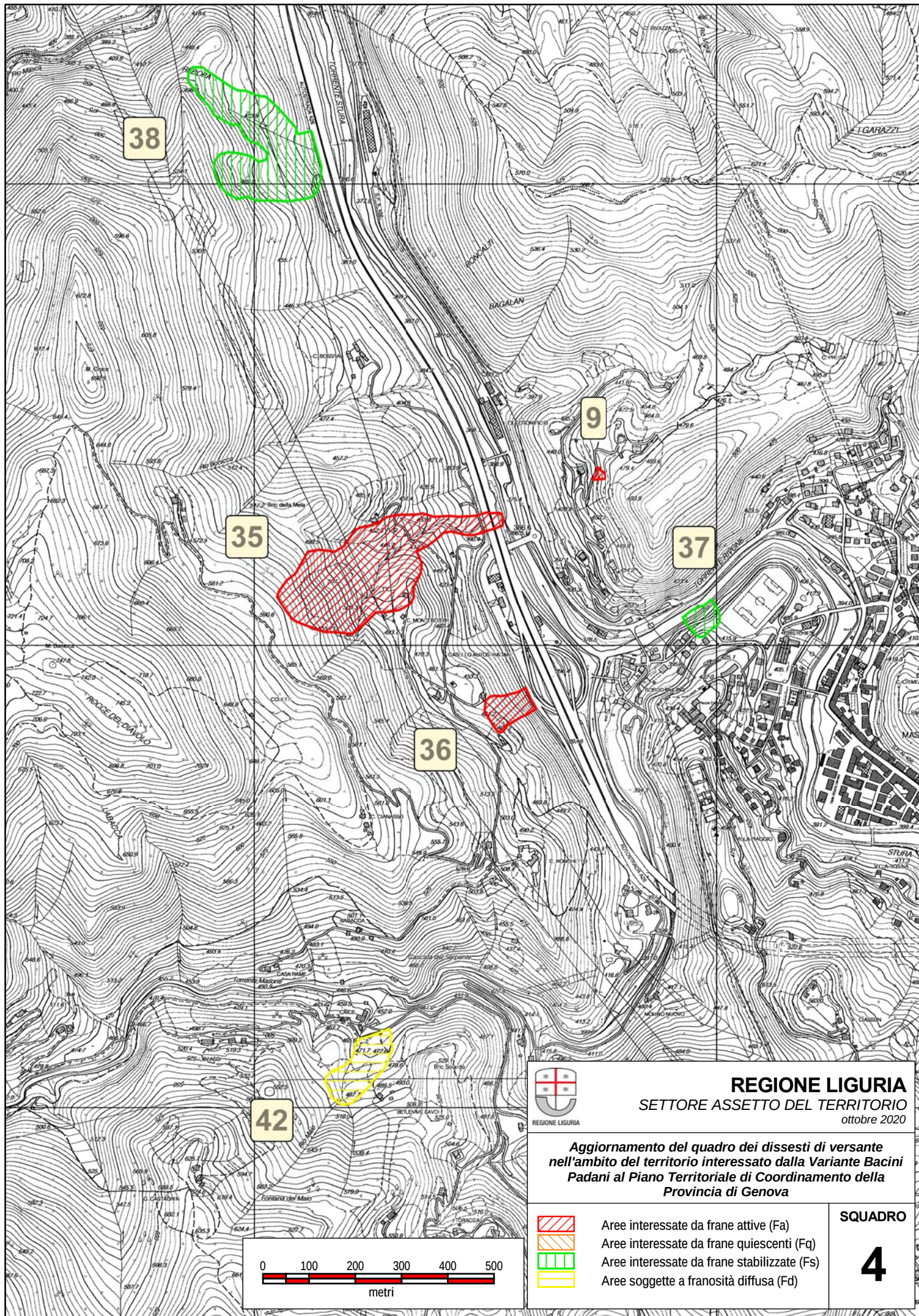
REGIONE LIGURIA
SETTORE ASSETTO DEL TERRITORIO
ottobre 2020

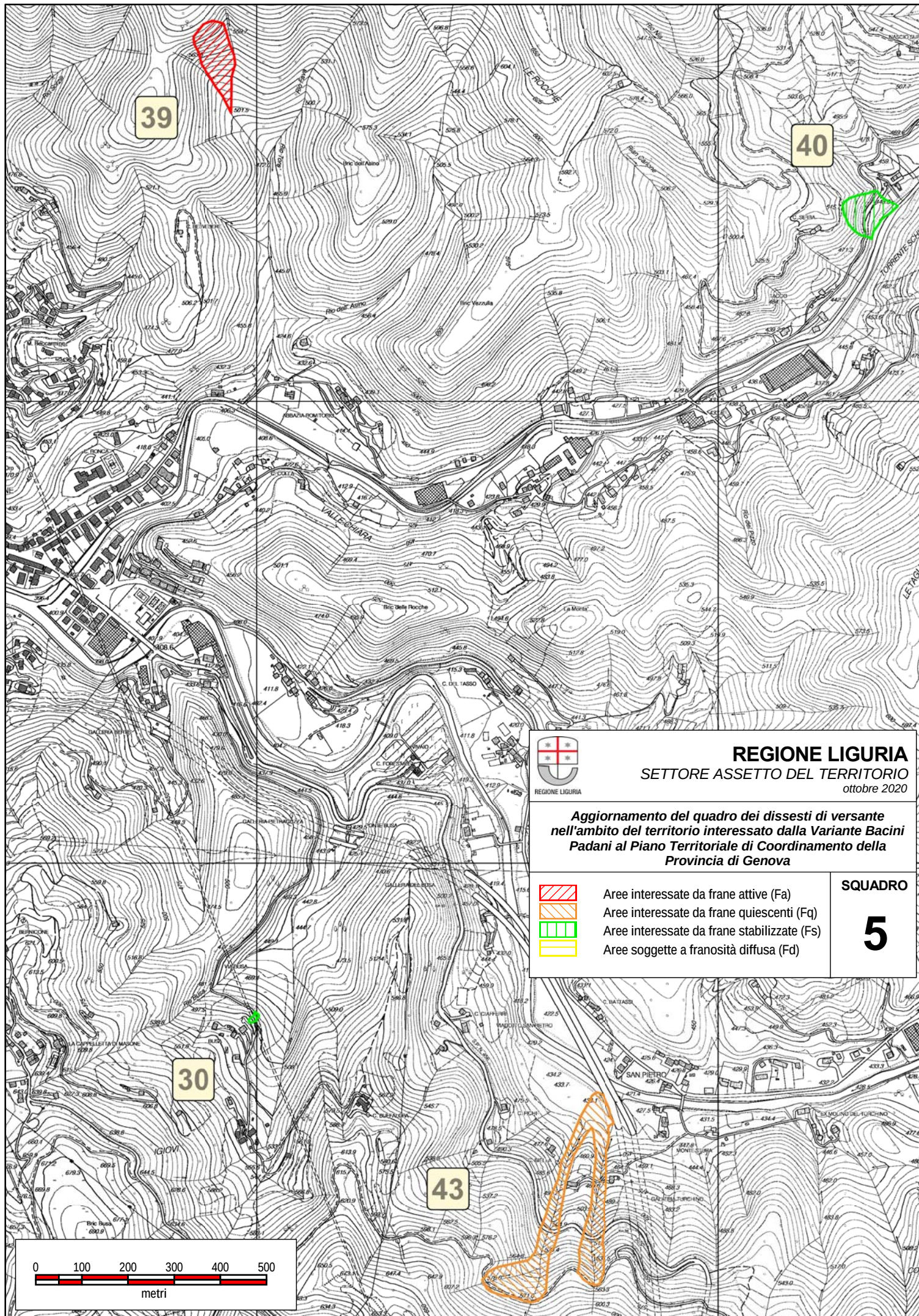
**Aggiornamento del quadro dei dissesti di versante
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Padani al Piano Territoriale di Coordinamento della
Provincia di Genova**

-  Aree interessate da frane attive (Fa)
-  Aree interessate da frane quiescenti (Fq)
-  Aree interessate da frane stabilizzate (Fs)
-  Aree soggette a franosità diffusa (Fd)

SQUADRO

3





REGIONE LIGURIA
SETTORE ASSETTO DEL TERRITORIO
ottobre 2020

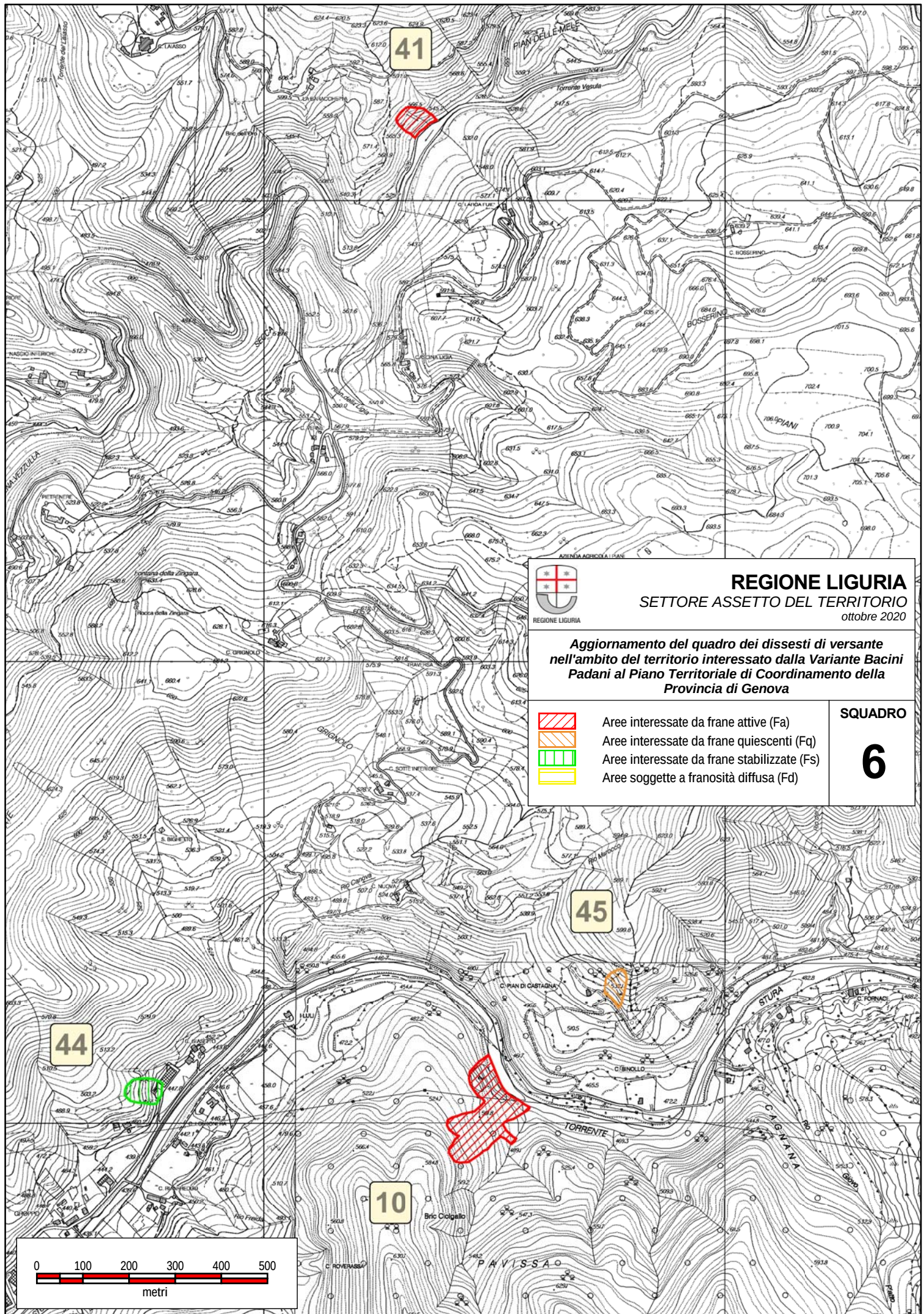
**Aggiornamento del quadro dei dissesti di versante
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SQUADRO

5



REGIONE LIGURIA
SETTORE ASSETTO DEL TERRITORIO
 ottobre 2020

**Aggiornamento del quadro dei dissesti di versante
 nell'ambito del territorio interessato dalla Variante Bacini
 Padani al Piano Territoriale di Coordinamento della
 Provincia di Genova**

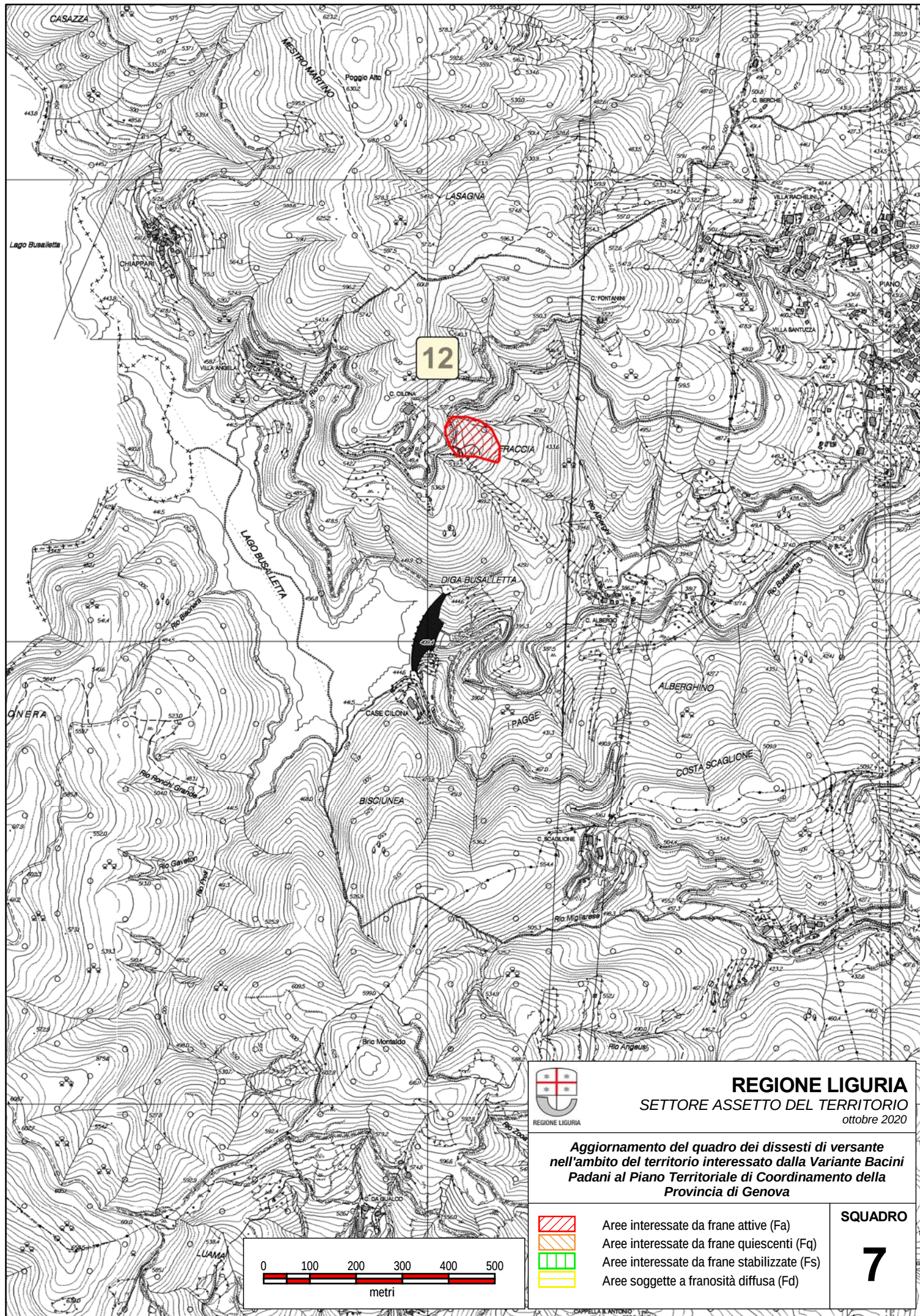


Aree interessate da frane attive (Fa)
 Aree interessate da frane quiescenti (Fq)
 Aree interessate da frane stabilizzate (Fs)
 Aree soggette a franosità diffusa (Fd)

SQUADRO

6

0 100 200 300 400 500
 metri



REGIONE LIGURIA

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SETTORE ASSETTO DEL TERRITORIO

ottobre 2020

**Aggiornamento del quadro dei dissesti di versante
nell'ambito del territorio interessato dalla Variante Bacini
Padani al Piano Territoriale di Coordinamento della
Provincia di Genova**

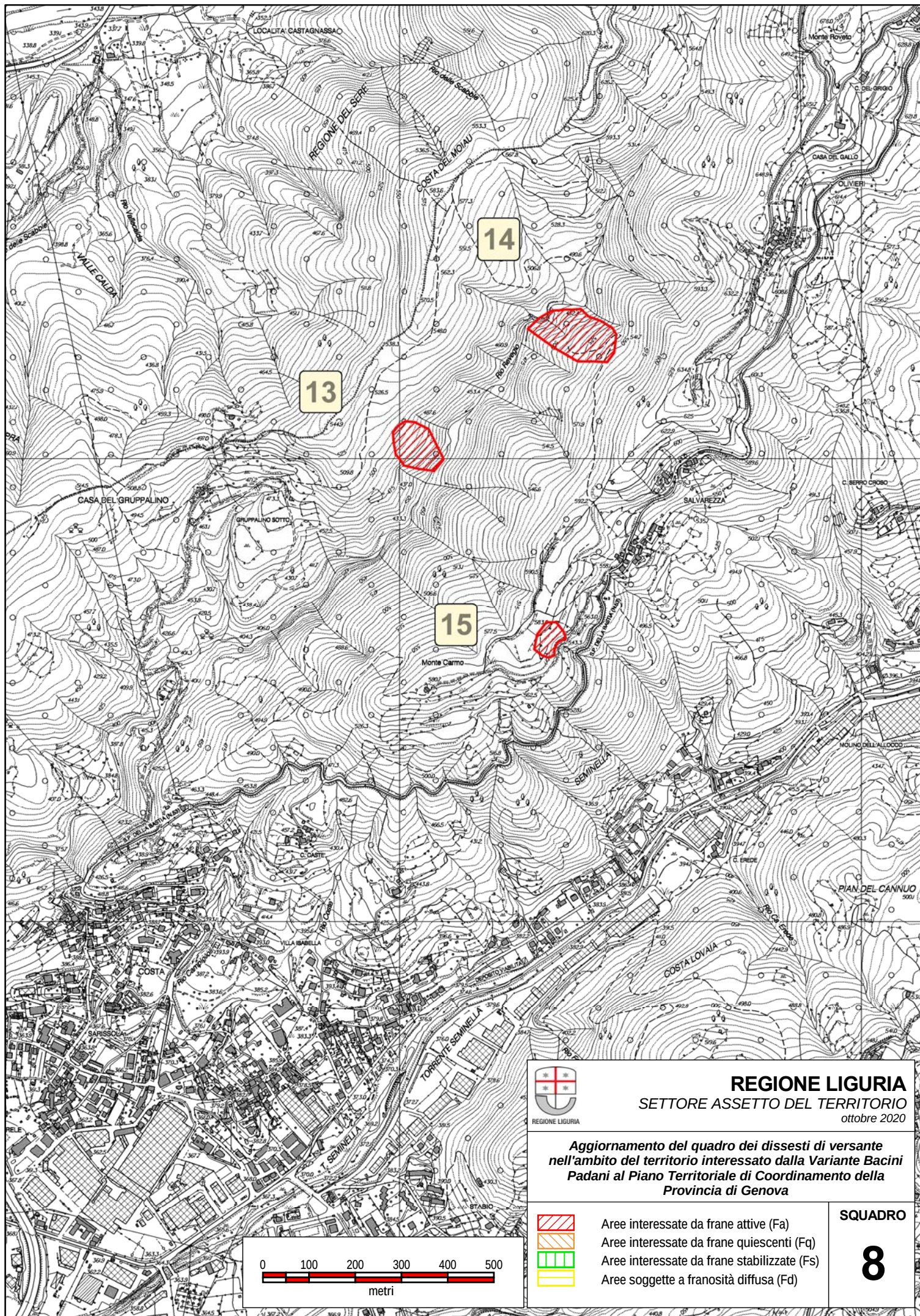


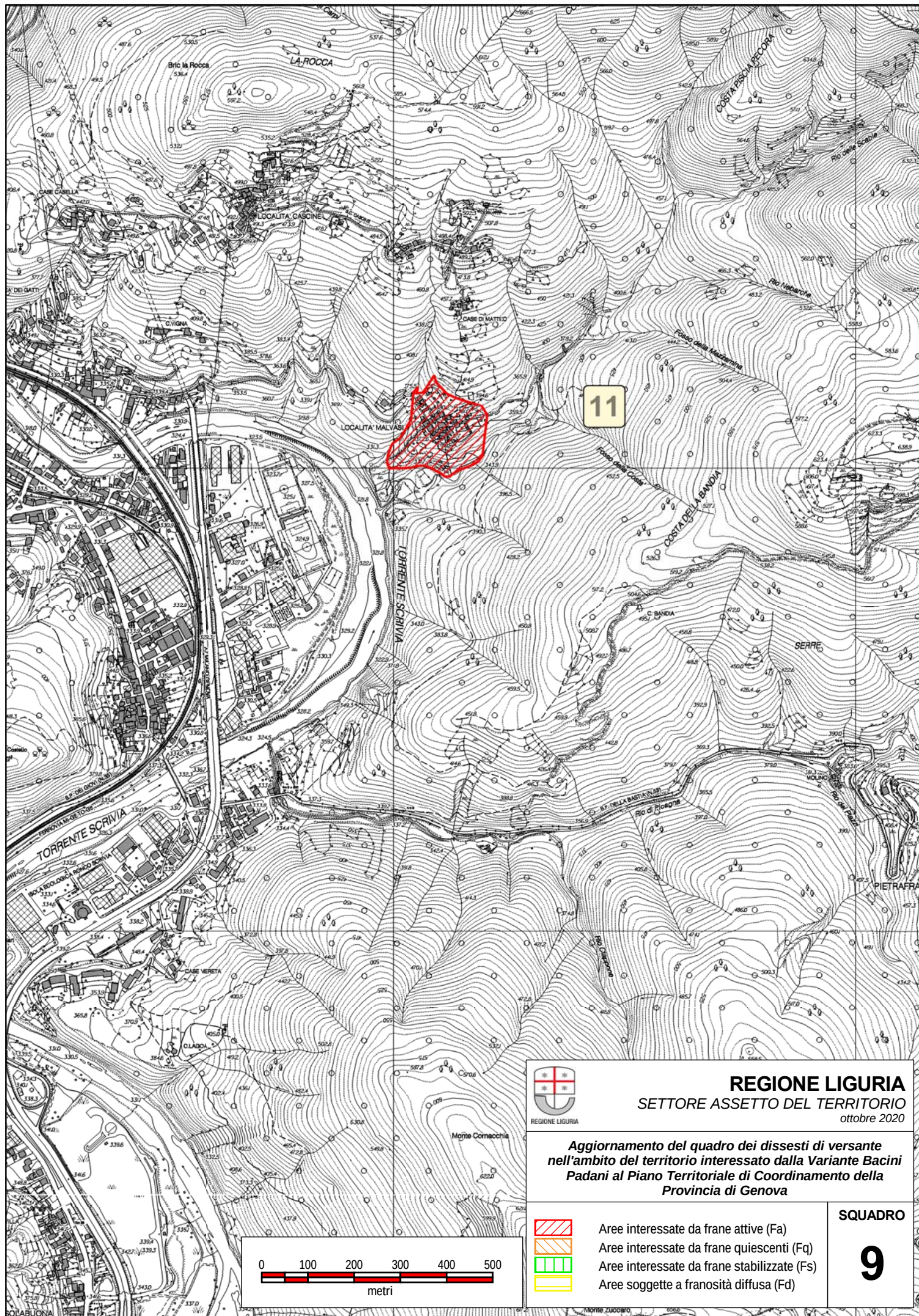
Aree interessate da frane attive (Fa)
Aree interessate da frane quiescenti (Fq)
Aree interessate da frane stabilizzate (Fs)
Aree soggette a franosità diffusa (Fd)

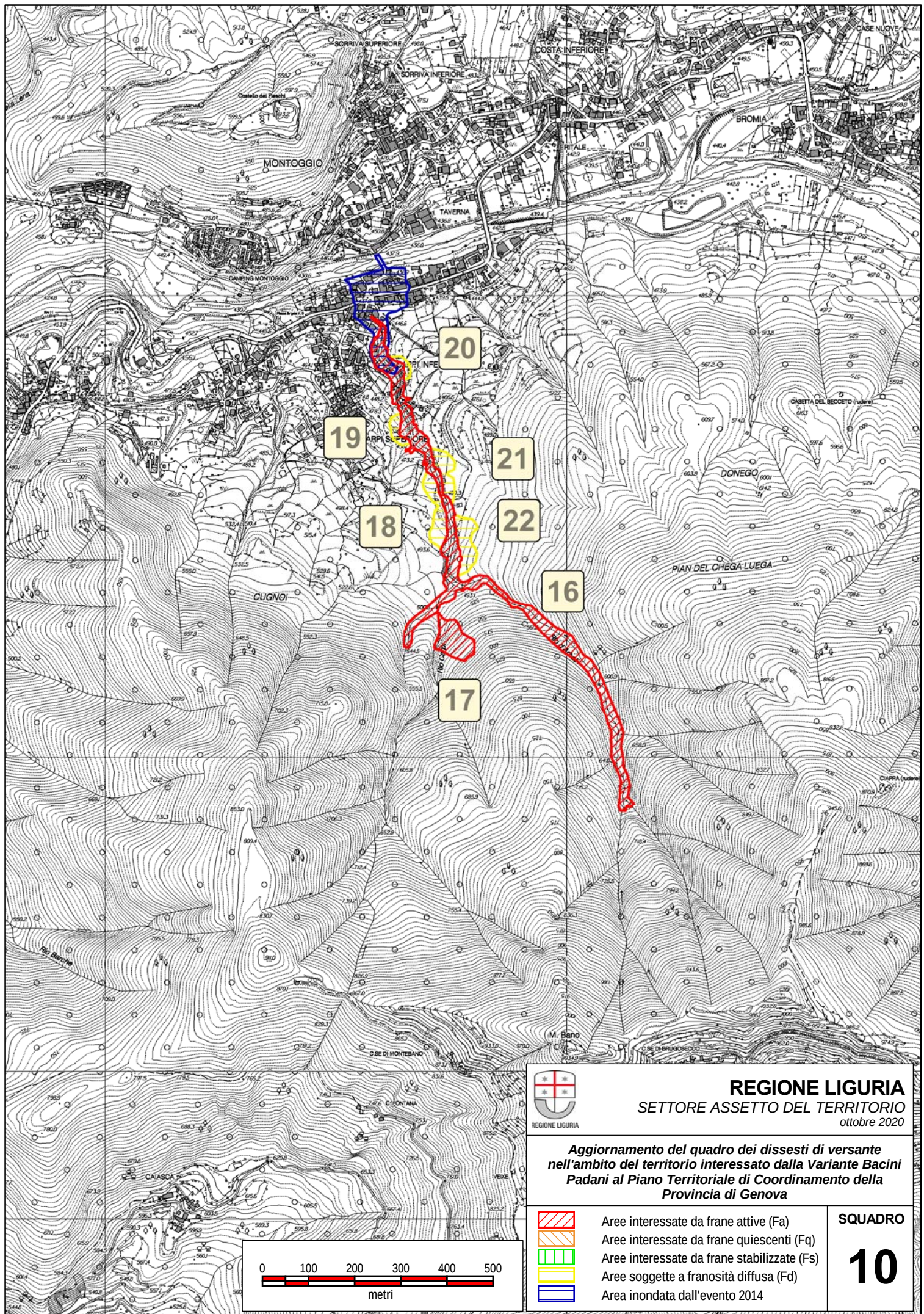
SQUADRO

7

0 100 200 300 400 500
metri







REGIONE LIGURIA

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SETTORE ASSETTO DEL TERRITORIO

ottobre 2020

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Padani al Piano Territoriale di Coordinamento della
Provincia di Genova**



Aree interessate da frane attive (Fa)

Aree interessate da frane quiescenti (Fq)

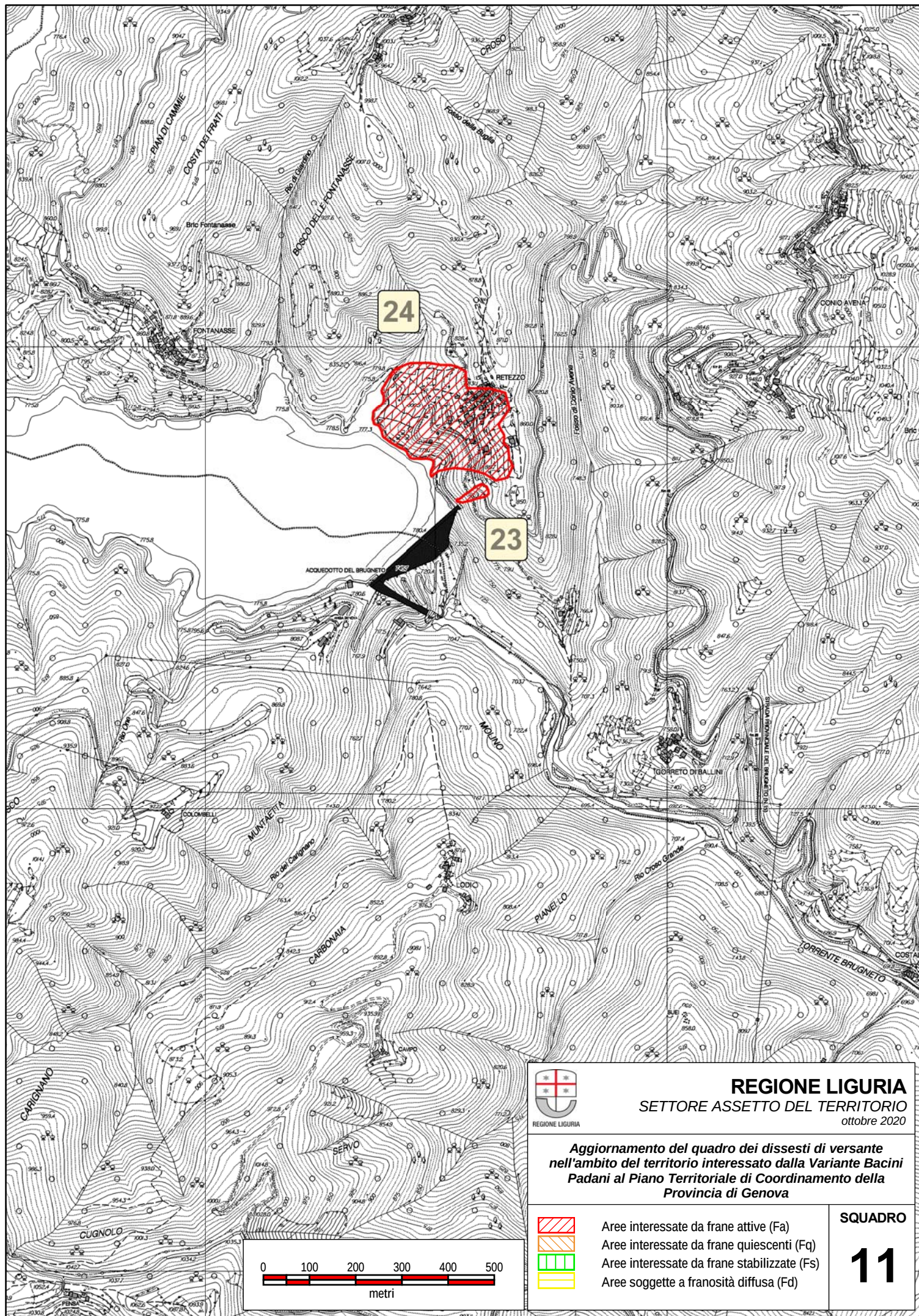
Aree interessate da frane stabilizzate (Fs)

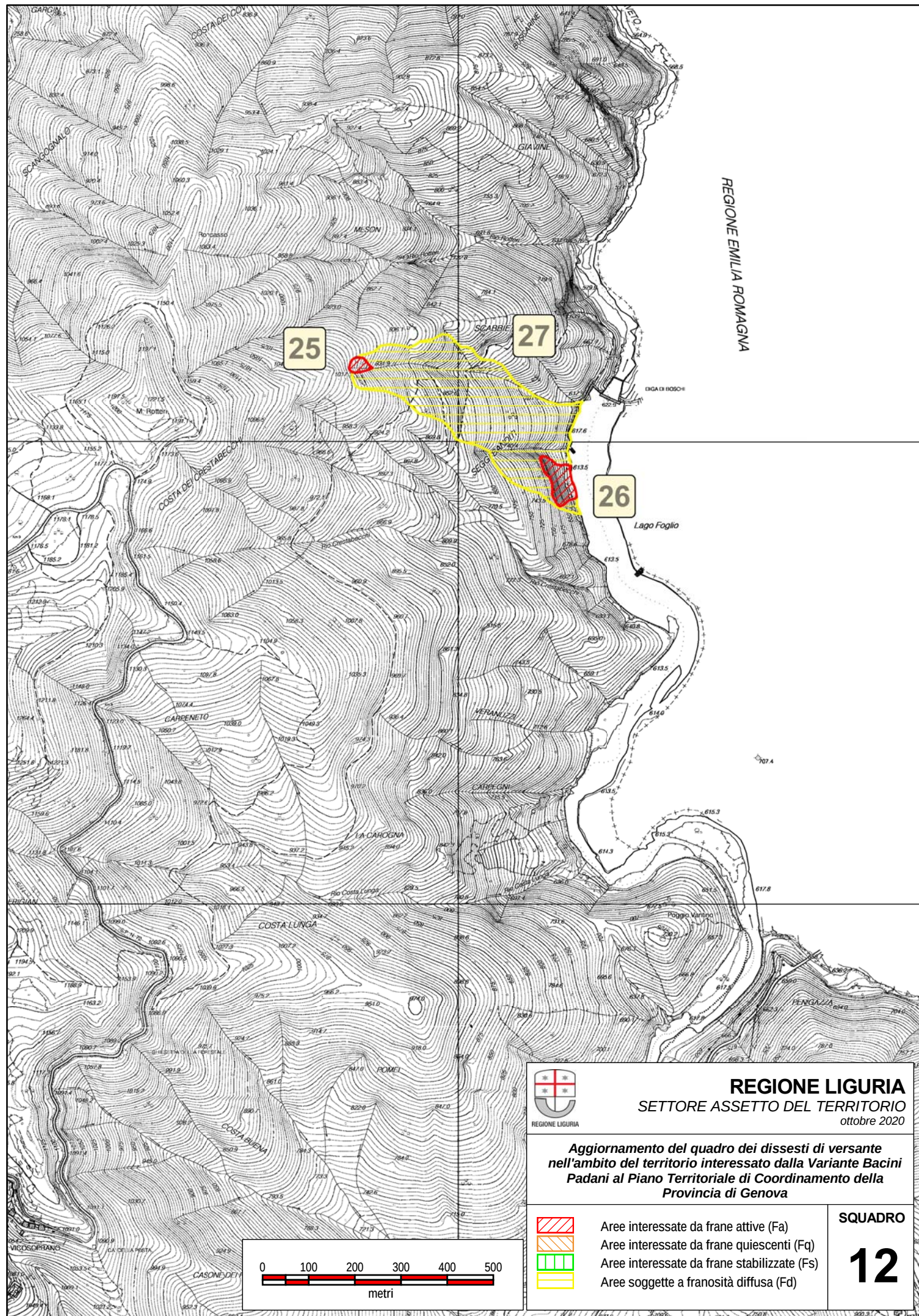
Aree soggette a franosità diffusa (Fd)

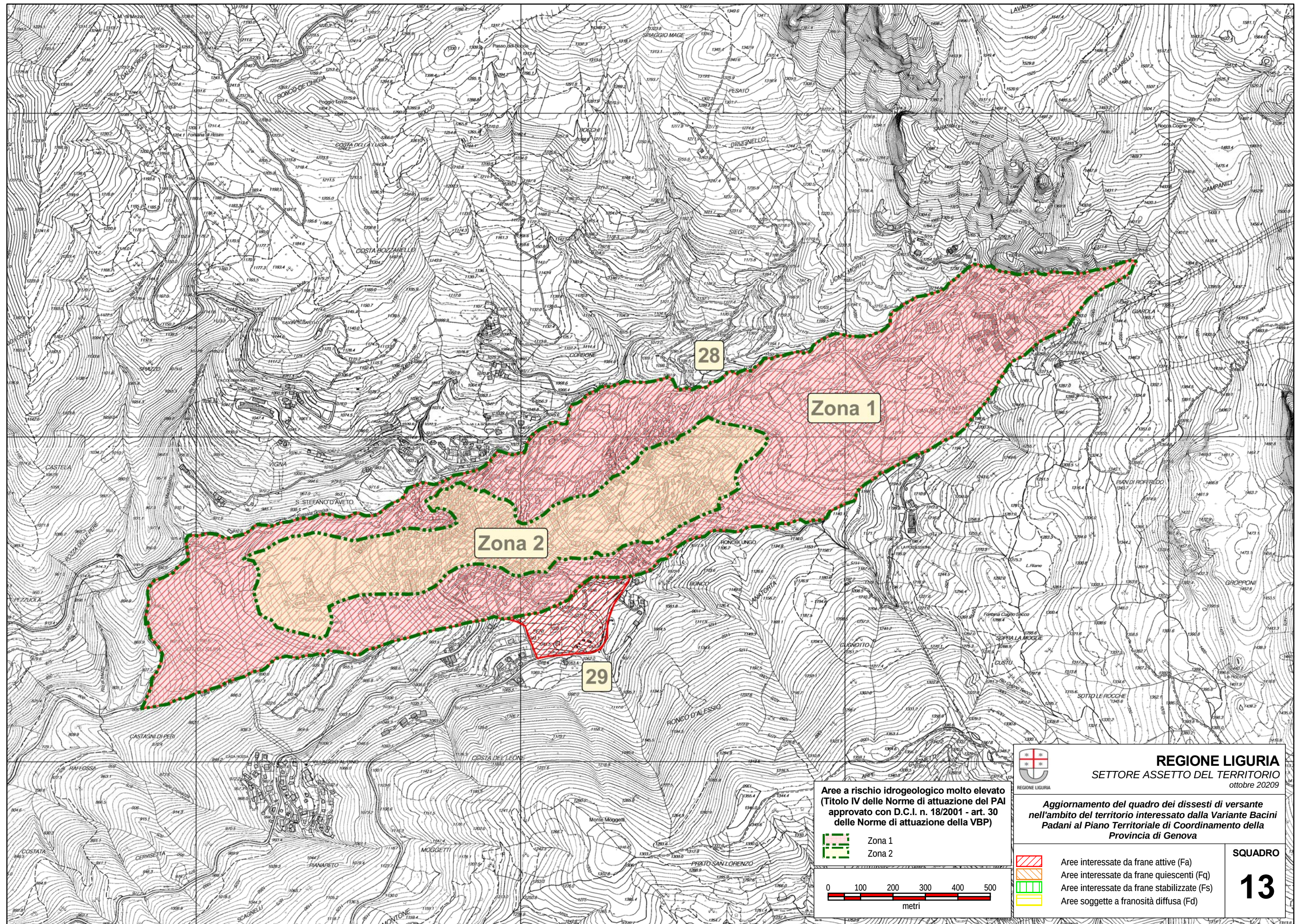
Area inondata dall'evento 2014

SQUADRO

10

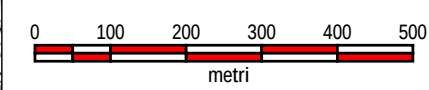






Aree a rischio idrogeologico molto elevato
(Titolo IV delle Norme di attuazione del PAI
approvato con D.C.I. n. 18/2001 - art. 30
delle Norme di attuazione della VBP)

- Zona 1
- Zona 2



REGIONE LIGURIA
SETTORE ASSETTO DEL TERRITORIO
ottobre 20209

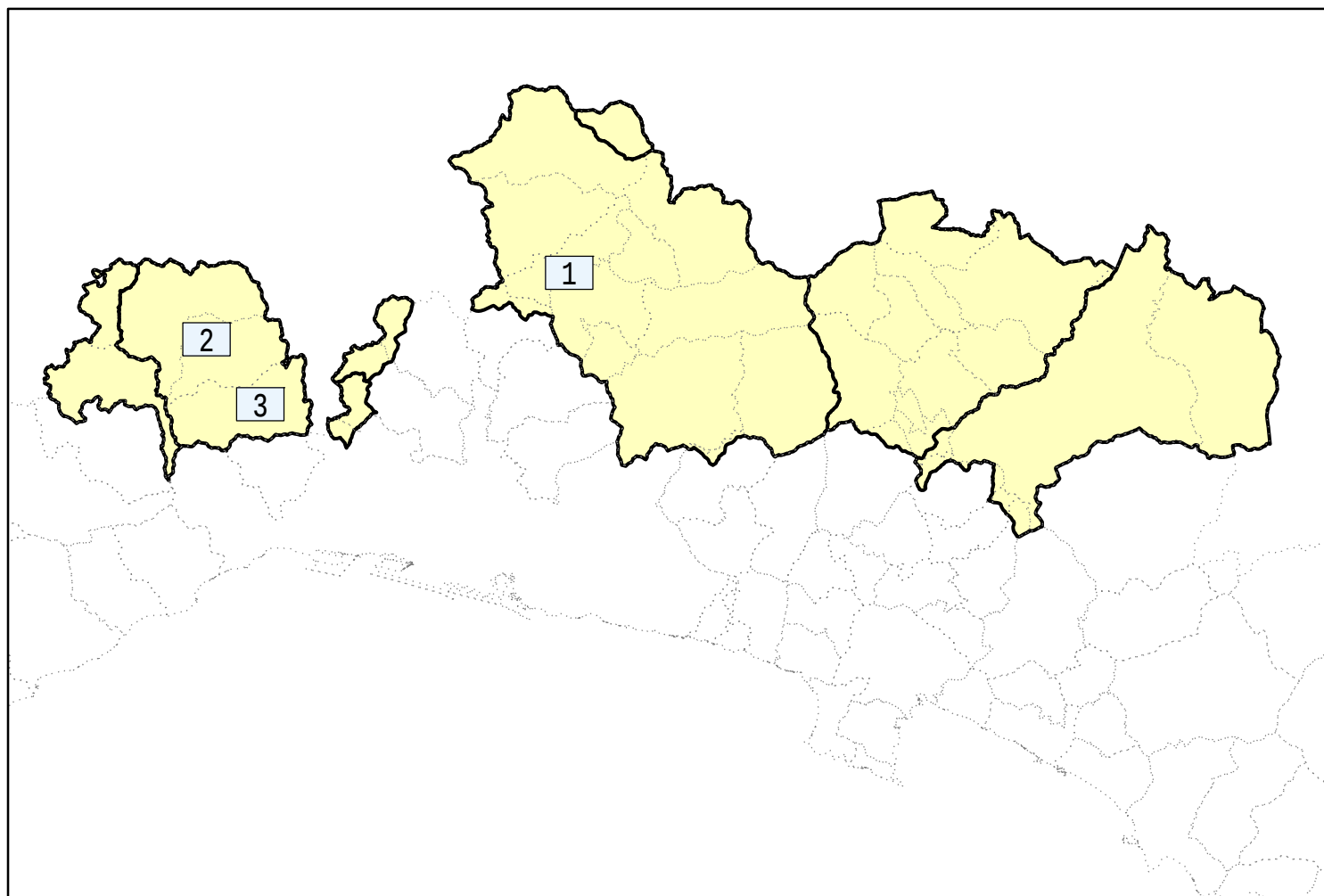
Aggiornamento del quadro dei dissesti di versante
nell'ambito del territorio interessato dalla Variante Bacini
Padani al Piano Territoriale di Coordinamento della
Provincia di Genova

- Aree interessate da frane attive (Fa)
- Aree interessate da frane quiescenti (Fq)
- Aree interessate da frane stabilizzate (Fs)
- Aree soggette a franosità diffusa (Fd)

SQUADRO

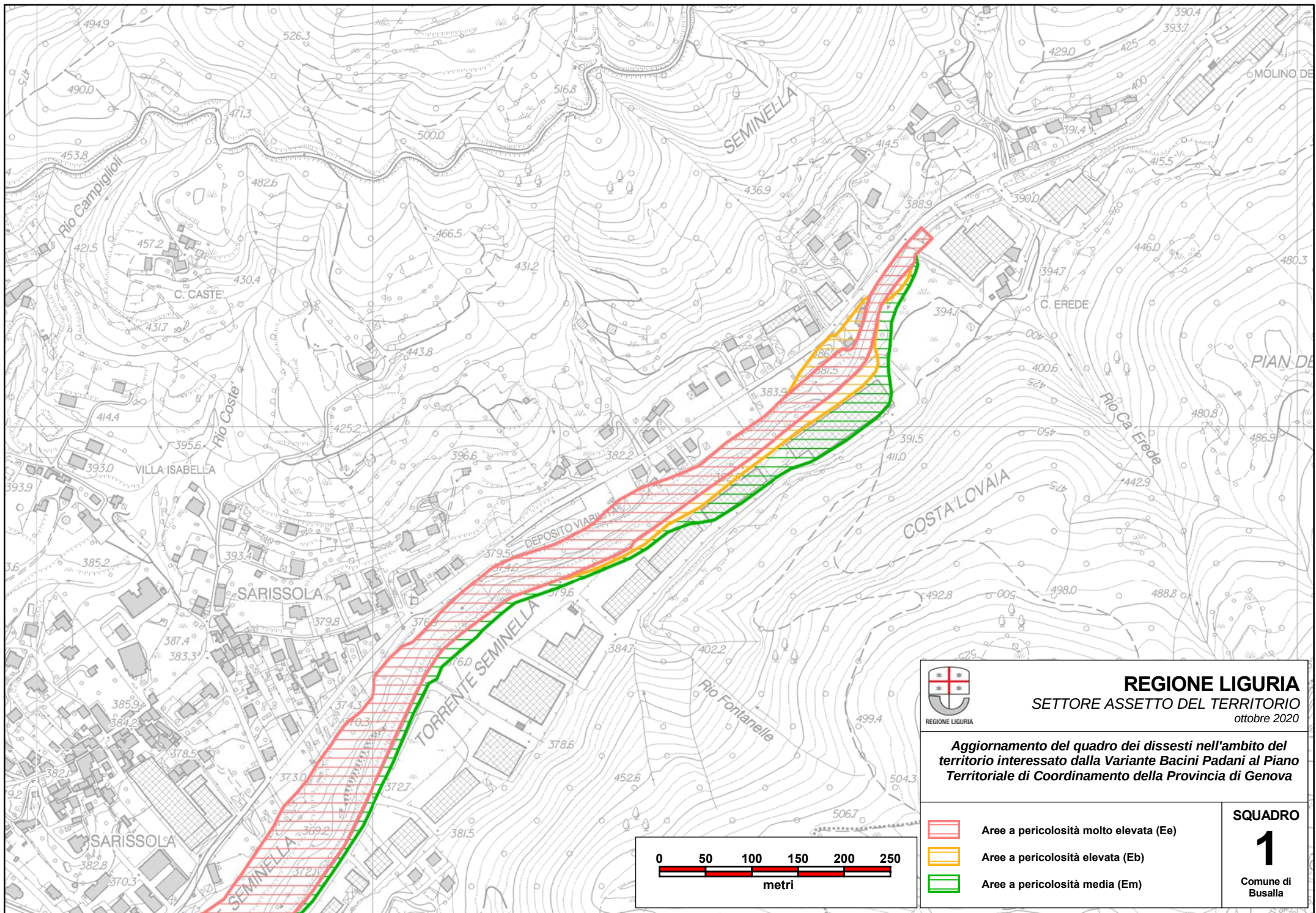
13

id. n.	Comune - località	stato di attività
1	Rossiglione	quiescente
2	Rossiglione	attiva
3	Rossiglione - Berlino	attiva
4	Campoligure - Vegnina	attiva
5	Campoligure - Vegnina	quiescente
6	Campoligure	attiva
7	Campoligure	attiva
8	Campoligure - Campazzo	attiva
9	Masone	attiva
10	Masone - San Pietro	attiva
11	Ronco Scrivia - Malvasi	attiva
12	Busalla - Fraccia	attiva
13	Busalla - Revegio	attiva
14	Busalla - Revegio	attiva
15	Busalla - Monte Carmo	attiva
16	Montoggio - Rio Carpi	attiva
17	Montoggio - Rio Carpi	attiva
18	Montoggio - Rio Carpi	franosità diffusa
19	Montoggio - Rio Carpi	franosità diffusa
20	Montoggio - Rio Carpi	franosità diffusa
21	Montoggio - Rio Carpi	franosità diffusa
22	Montoggio - Rio Carpi	franosità diffusa
23	Montoggio - Rio Carpi	evento 2014
23	Rondanina - Rettezzo	attiva
24	Rondanina - Rettezzo	attiva
25	Rezzoaglio - Lago Fogli	attiva
26	Rezzoaglio - Lago Fogli	attiva
27	Rezzoaglio - Lago Fogli	franosità diffusa
28	Santo Stefano d'Aveto	attiva
28	Santo Stefano d'Aveto	Zona 1
29	Santo Stefano d'Aveto	attiva
29	Santo Stefano d'Aveto	Zona 2
30	Masone - Cappelletta	stabilizzata
31	Rossiglione	attiva
32	Campo Ligure	attiva
33	Campo Ligure	attiva
34	Campo Ligure - La Maddalena	attiva
35	Masone	attiva
36	Masone - Casello autostrada	attiva
37	Masone - Campo sportivo	stabilizzata
38	Masone - Maddalena	stabilizzata
39	Masone - Passo del Mulo	attiva
40	Masone - Vezzulla	stabilizzata
41	Masone - Vezzulla	attiva
42	Masone - Caice	franosità diffusa
43	Masone - San Pietro	quiescente
44	Masone - Giasetto	stabilizzata
45	Masone - Pian di Castagna	quiescente



Aggiornamento del quadro dei dissesti nell'ambito del territorio interessato dalla Variante Bacini Padani al Piano Territoriale di Coordinamento della Provincia di Genova

**QUADRO D'UNIONE DELLE TAVOLE
- AREE INONDABILI -**



REGIONE LIGURIA
SETTORE ASSETTO DEL TERRITORIO
ottobre 2020

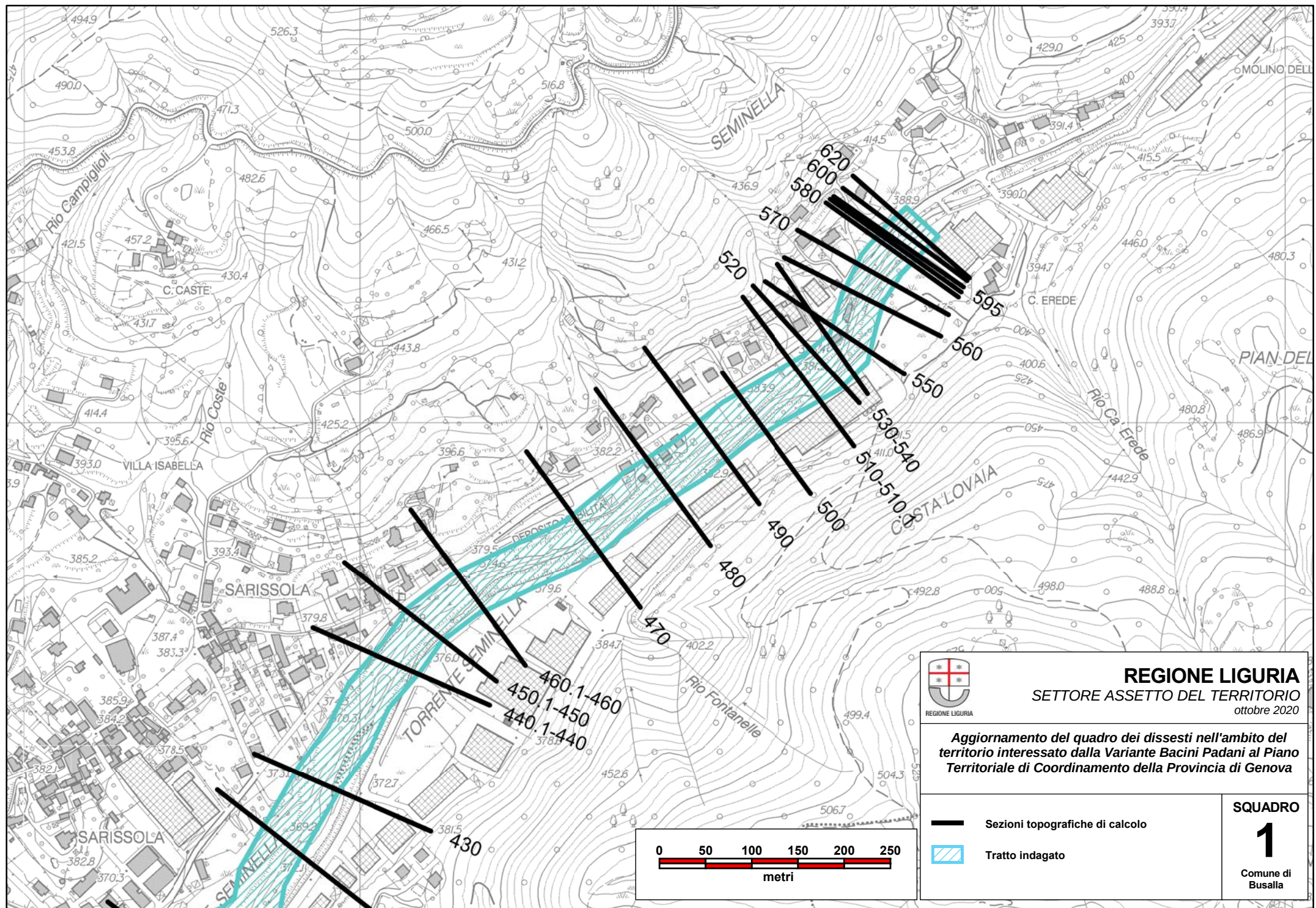
*Aggiornamento del quadro dei dissesti nell'ambito del
territorio interessato dalla Variante Bacini Padani al Piano
Territoriale di Coordinamento della Provincia di Genova*

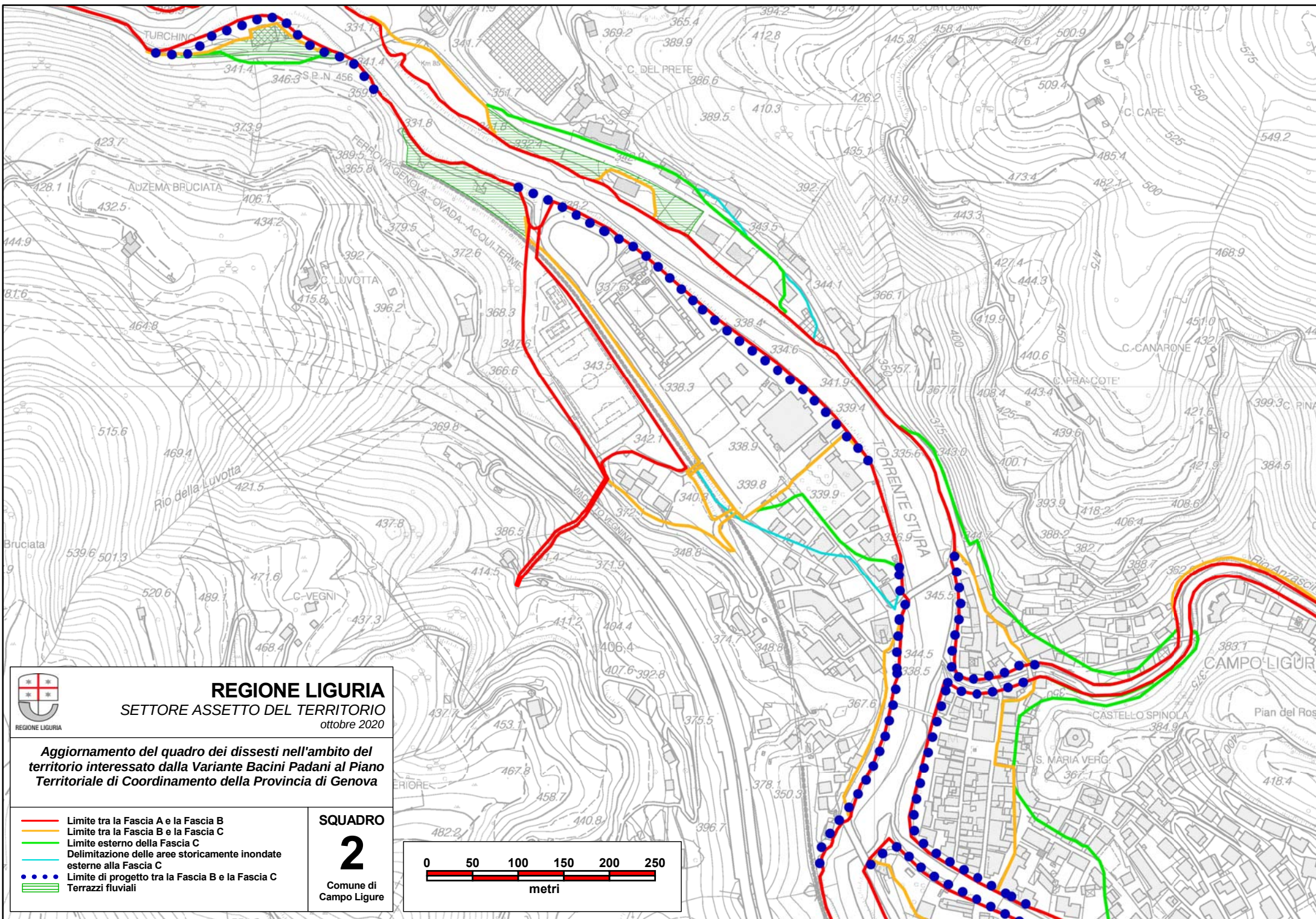
-  Aree a pericolosità molto elevata (Ee)
-  Aree a pericolosità elevata (Eb)
-  Aree a pericolosità media (Em)

SQUADRO

1

Comune di
Busalla







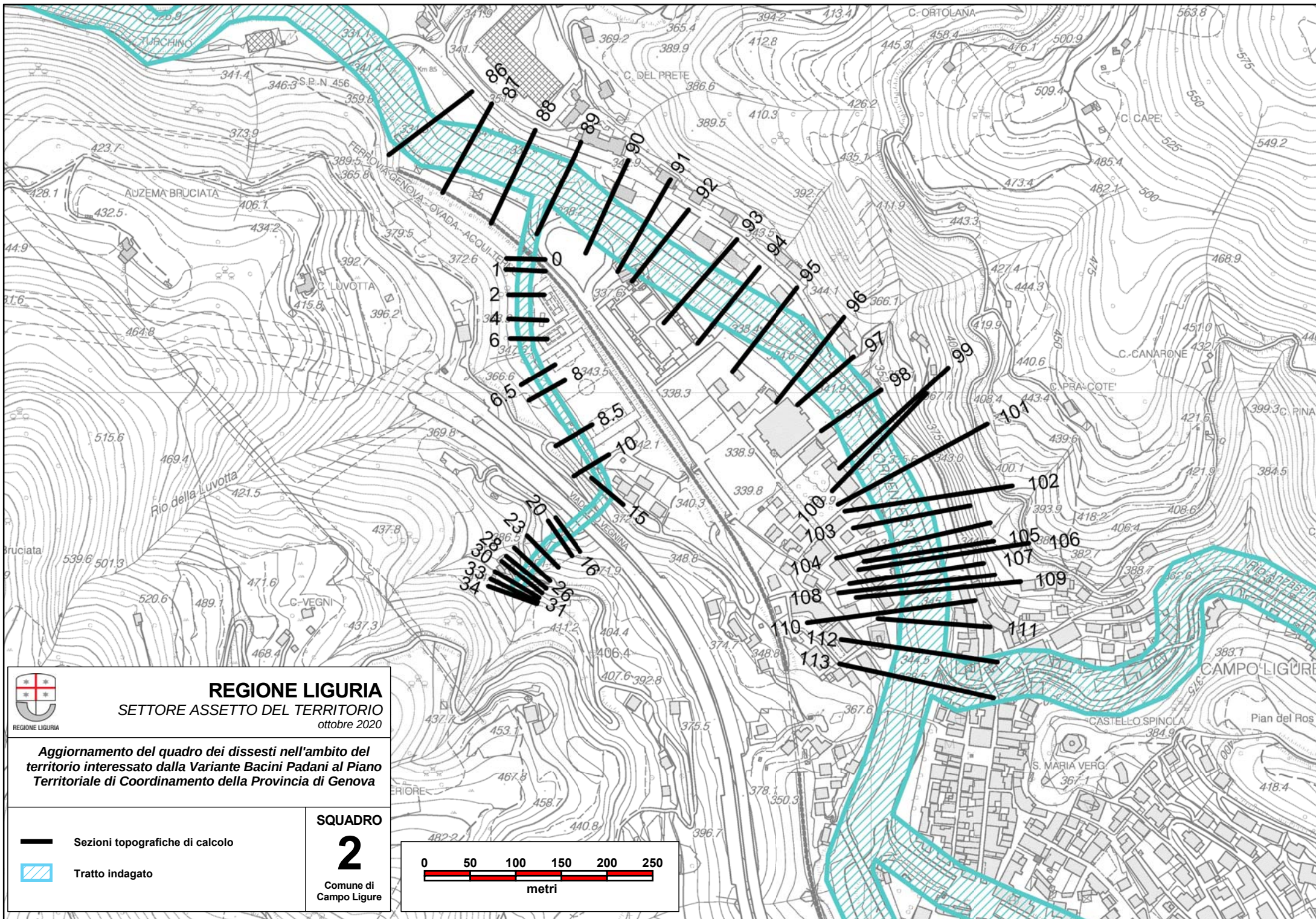
REGIONE LIGURIA
SETTORE ASSETTO DEL TERRITORIO
ottobre 2020

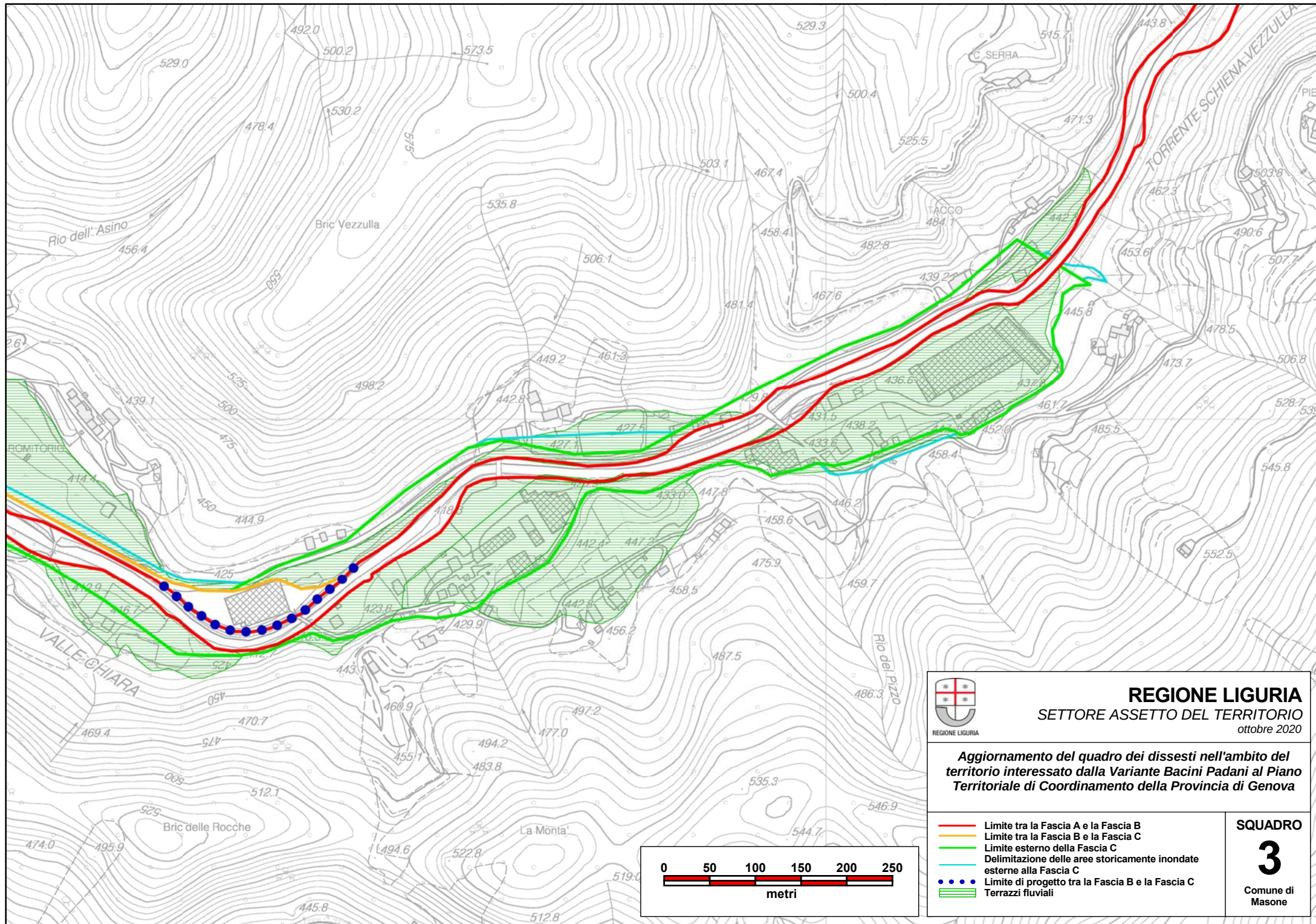
Aggiornamento del quadro dei dissesti nell'ambito del territorio interessato dalla Variante Bacini Padani al Piano Territoriale di Coordinamento della Provincia di Genova

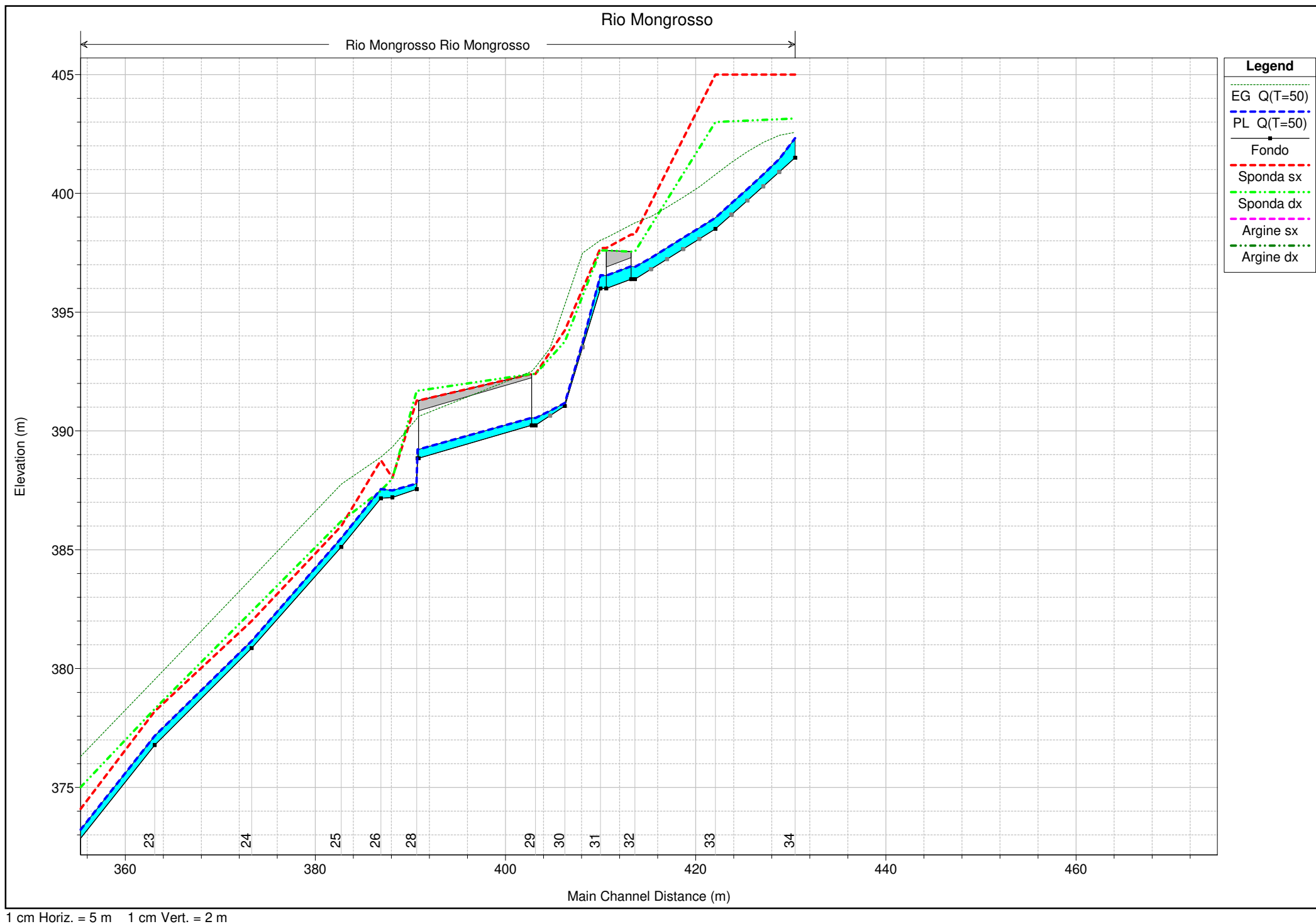
- Limite tra la Fascia A e la Fascia B
- Limite tra la Fascia B e la Fascia C
- Limite esterno della Fascia C
- Delimitazione delle aree storicamente inondate esterne alla Fascia C
- Limite di progetto tra la Fascia B e la Fascia C
- Terrazzi fluviali

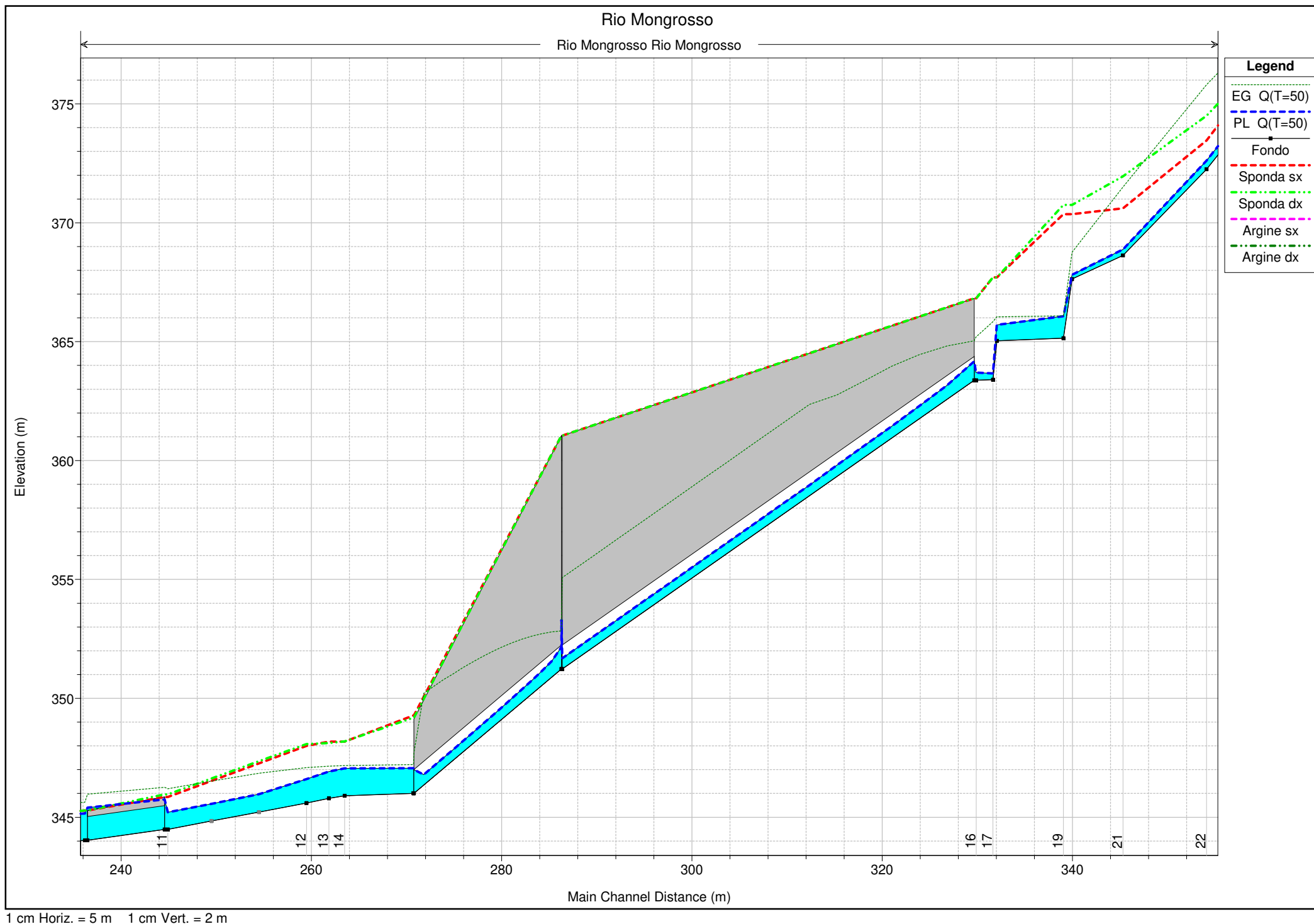
SQUADRO
2
Comune di Campo Ligure

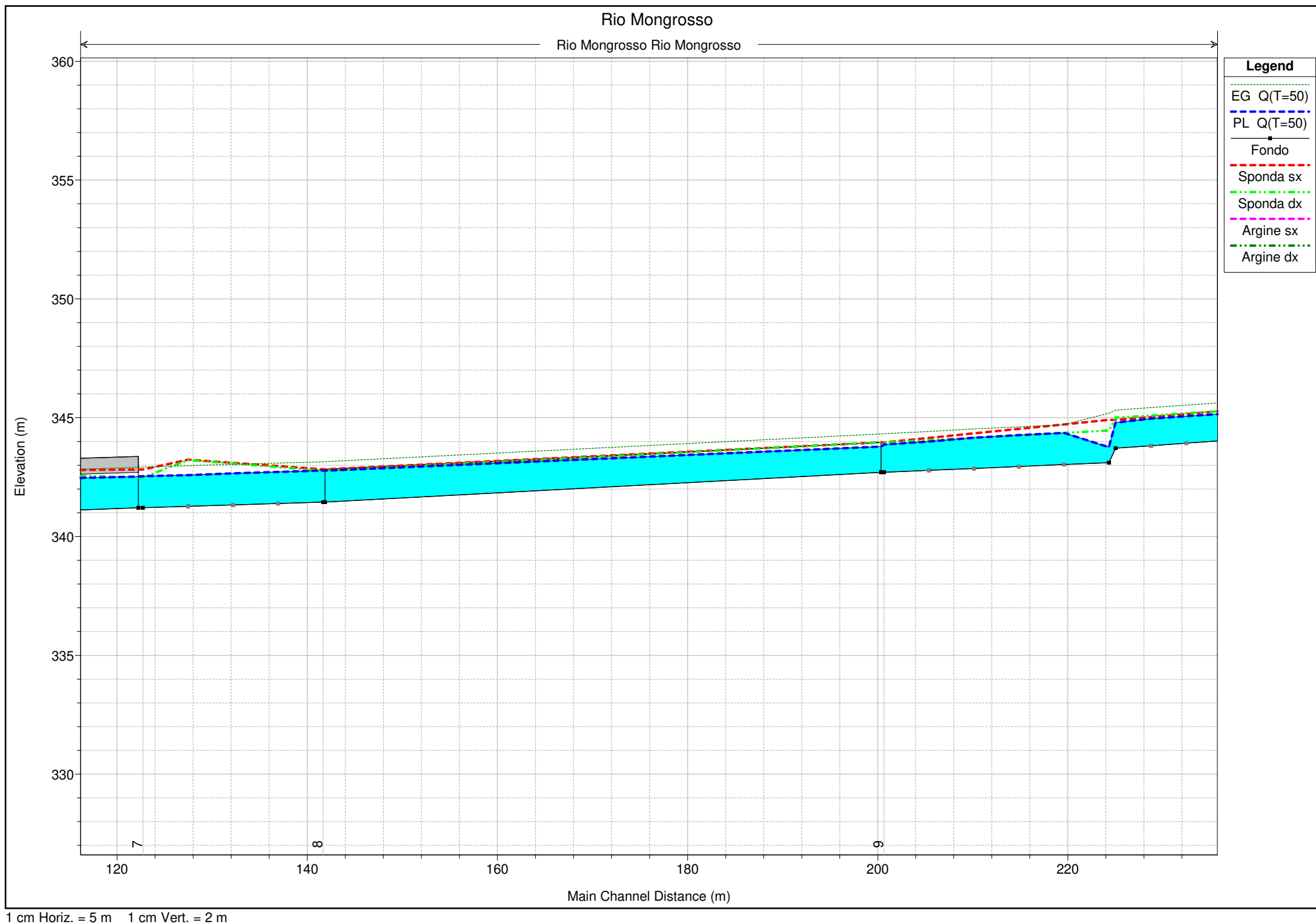
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metri

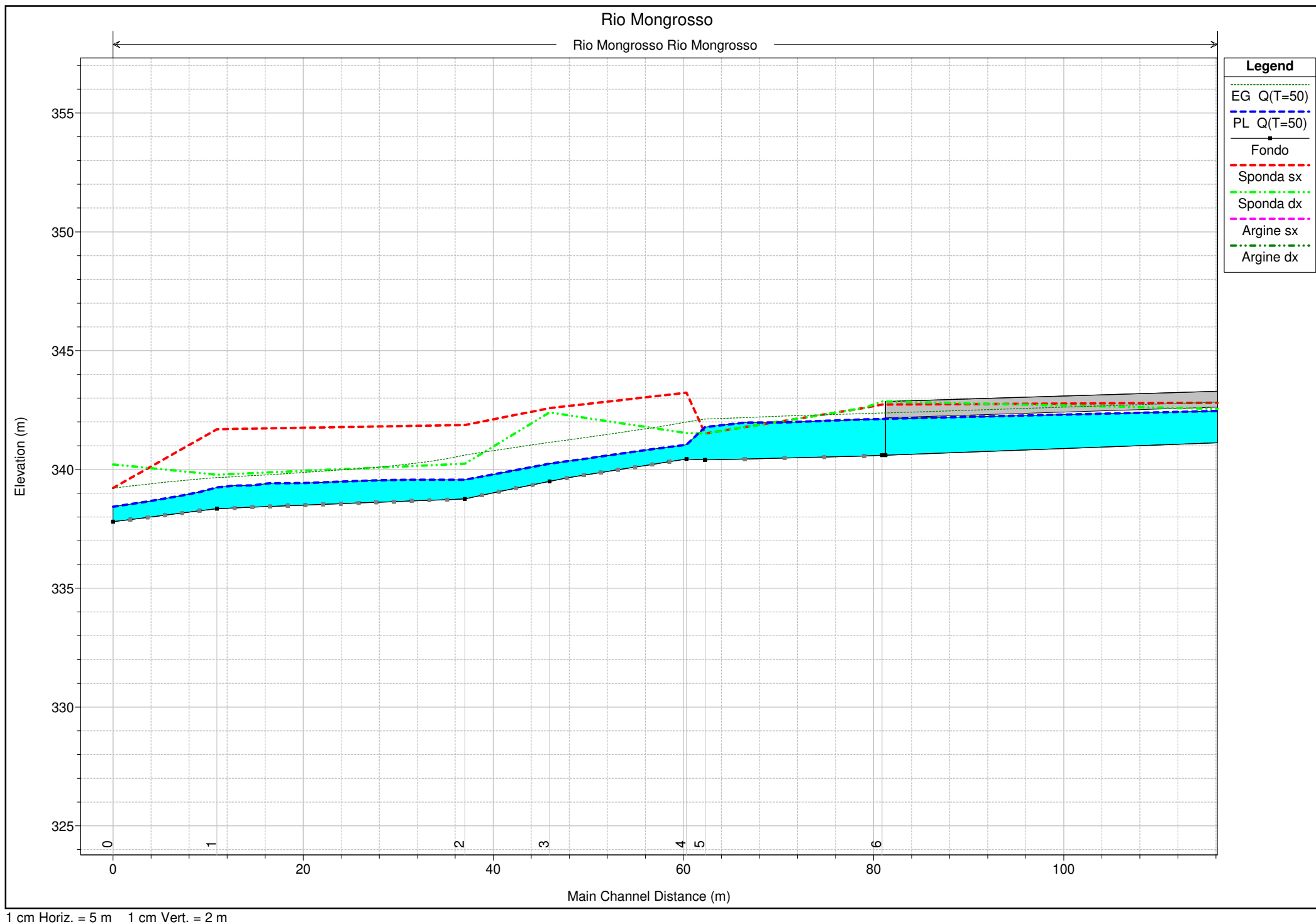


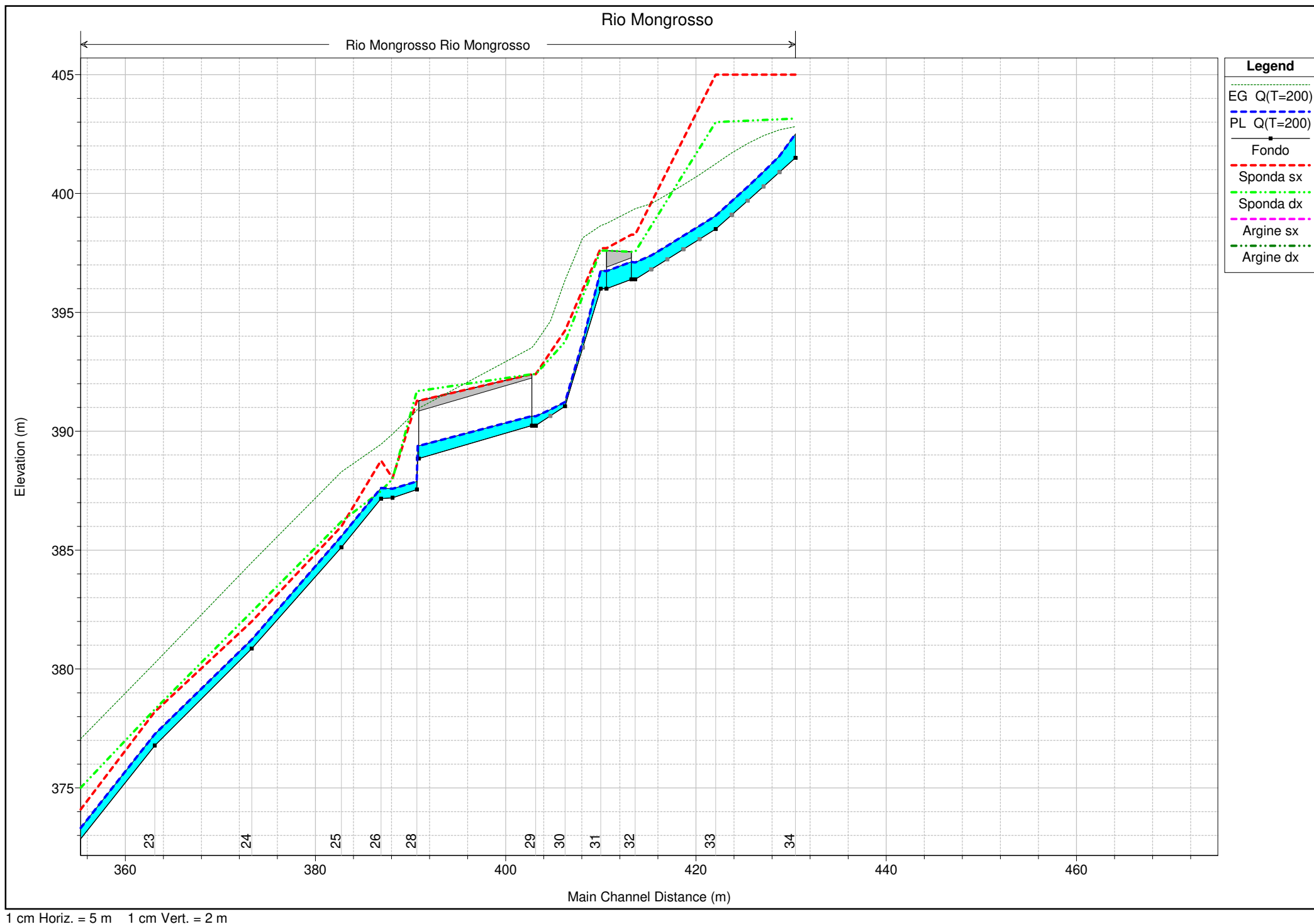


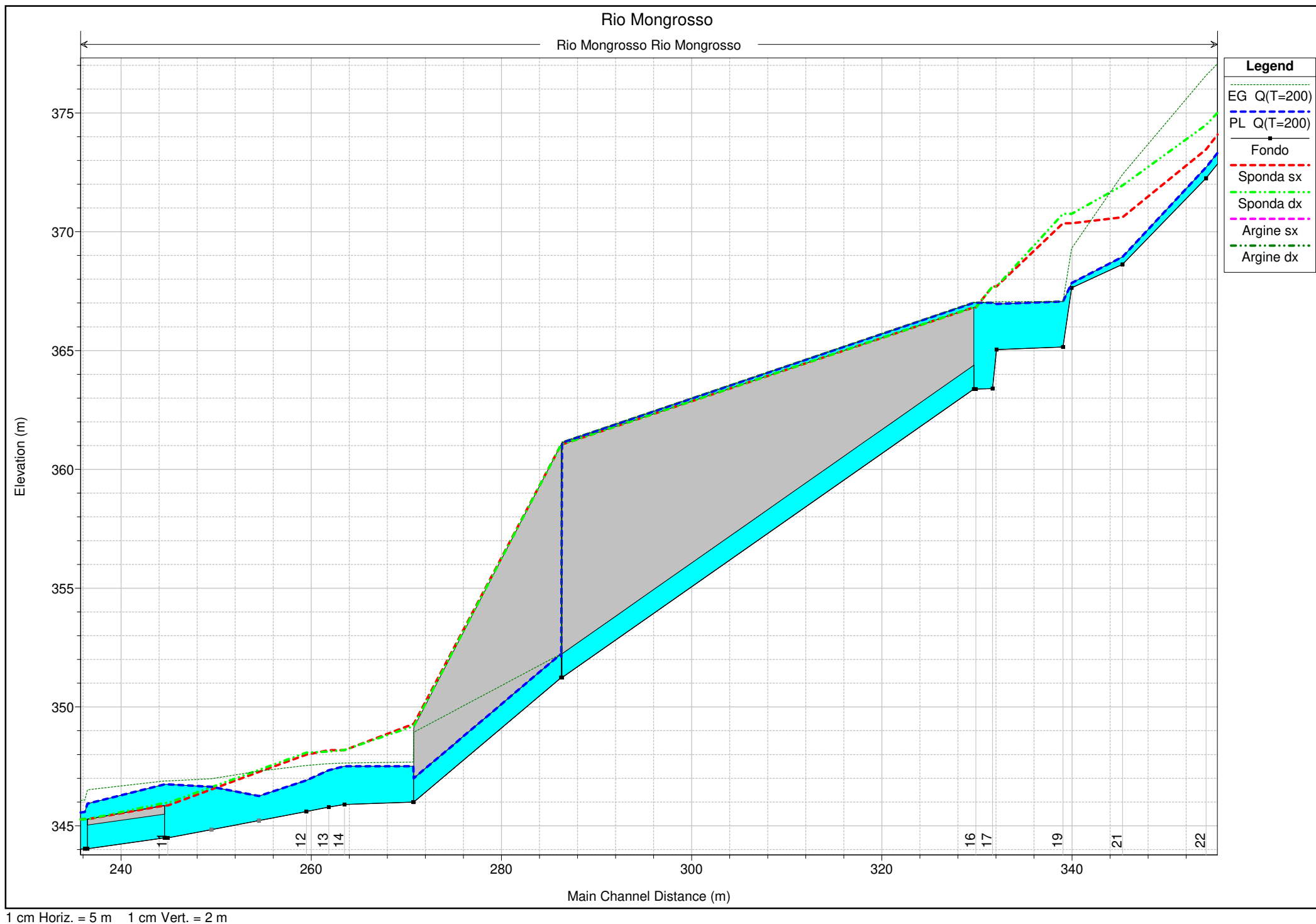


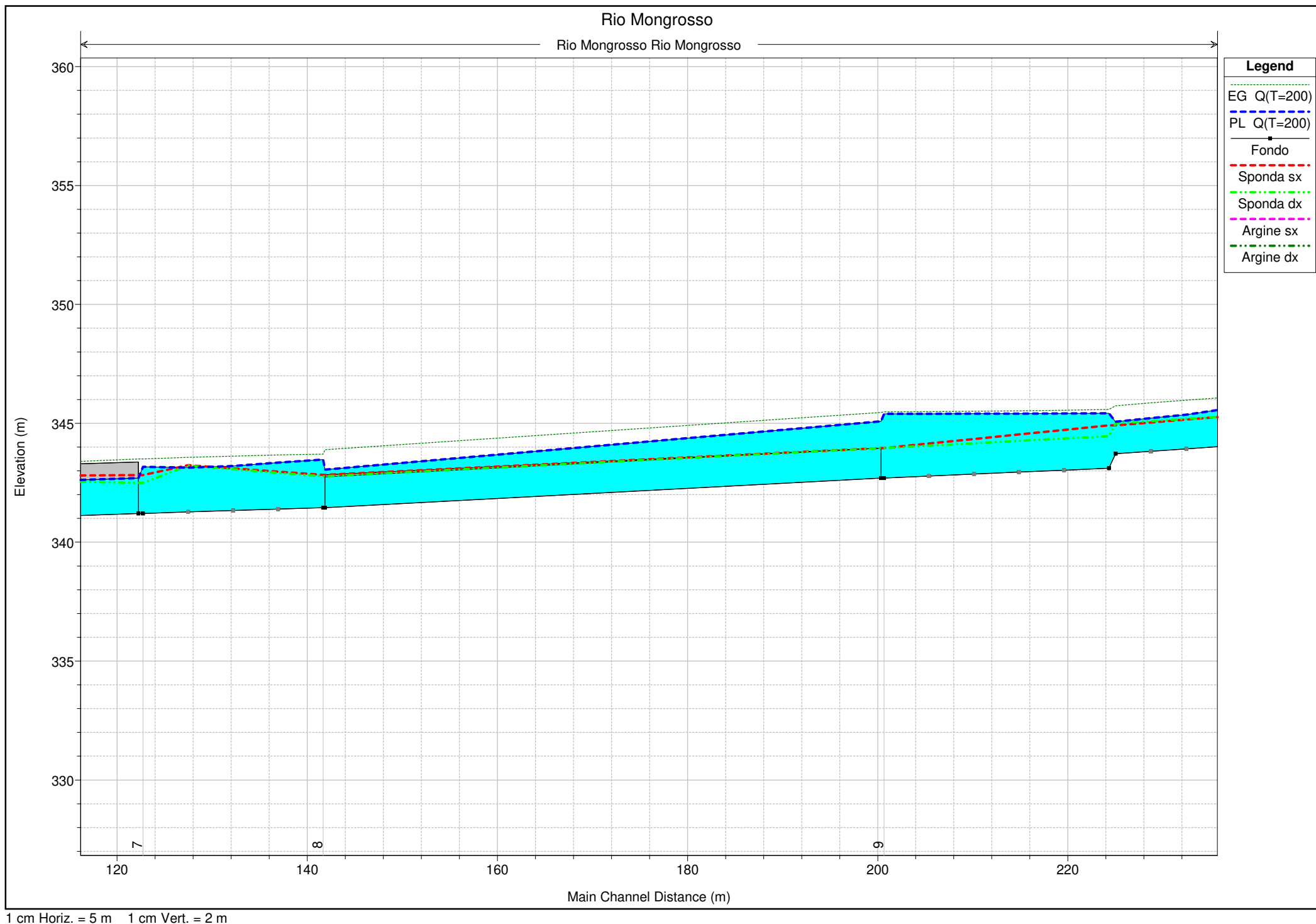


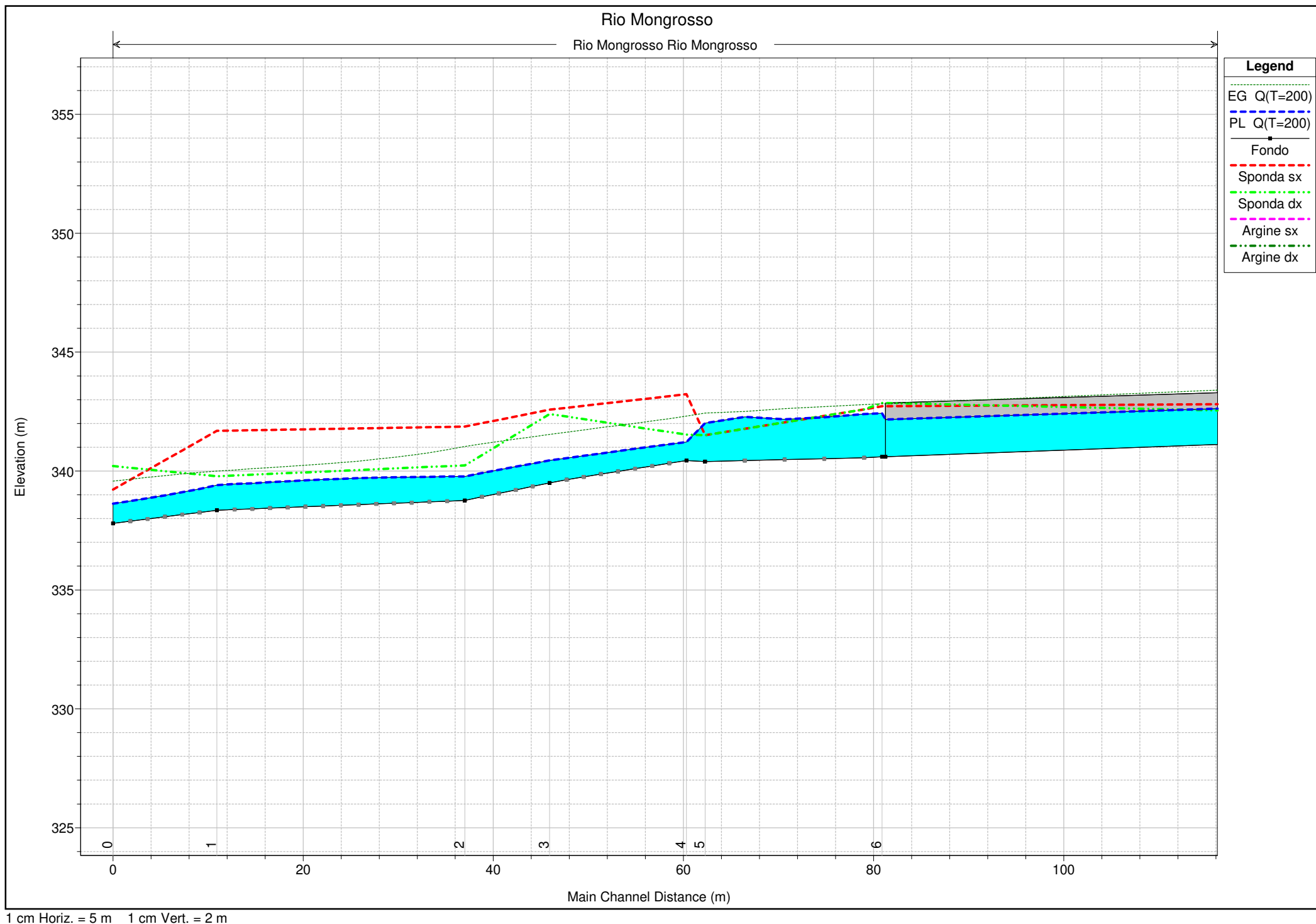


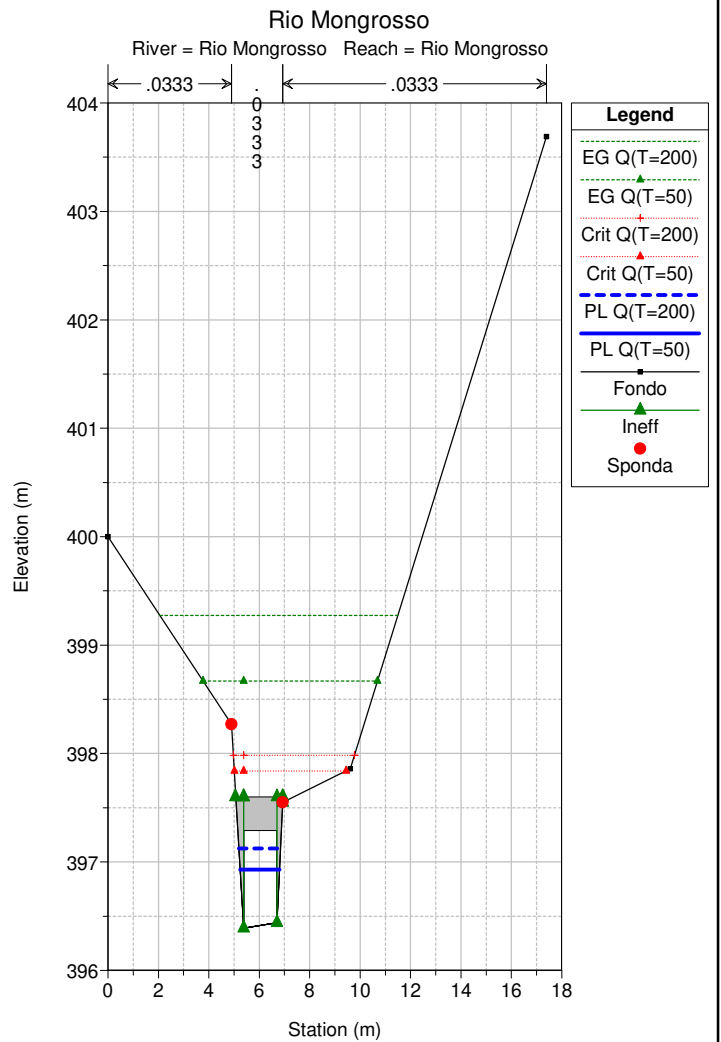
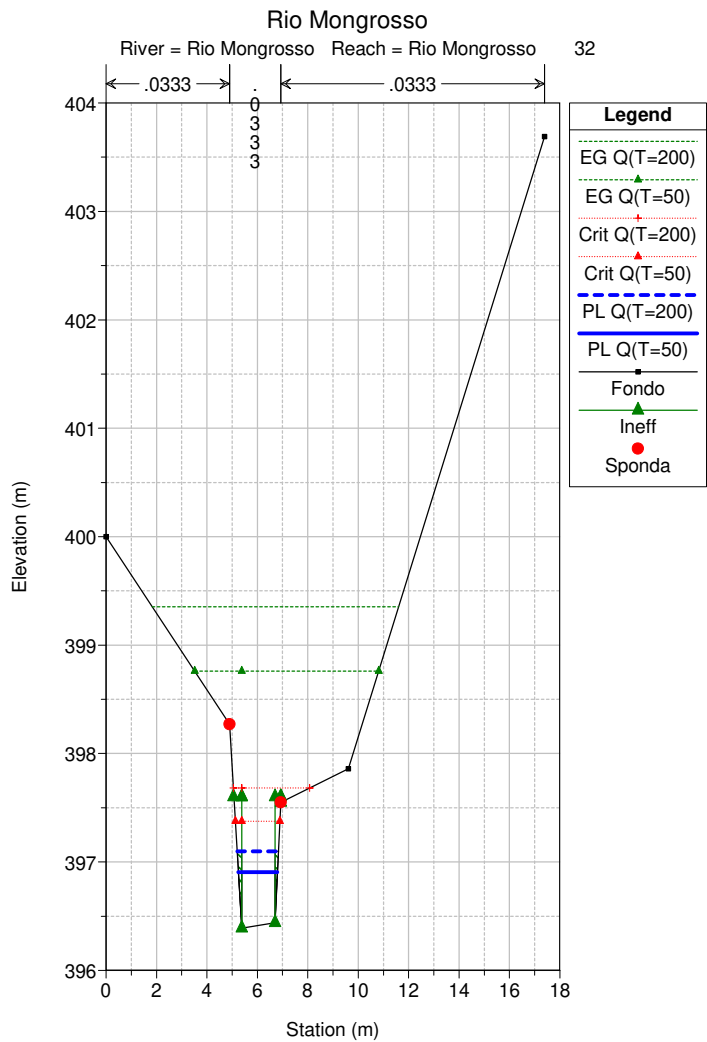
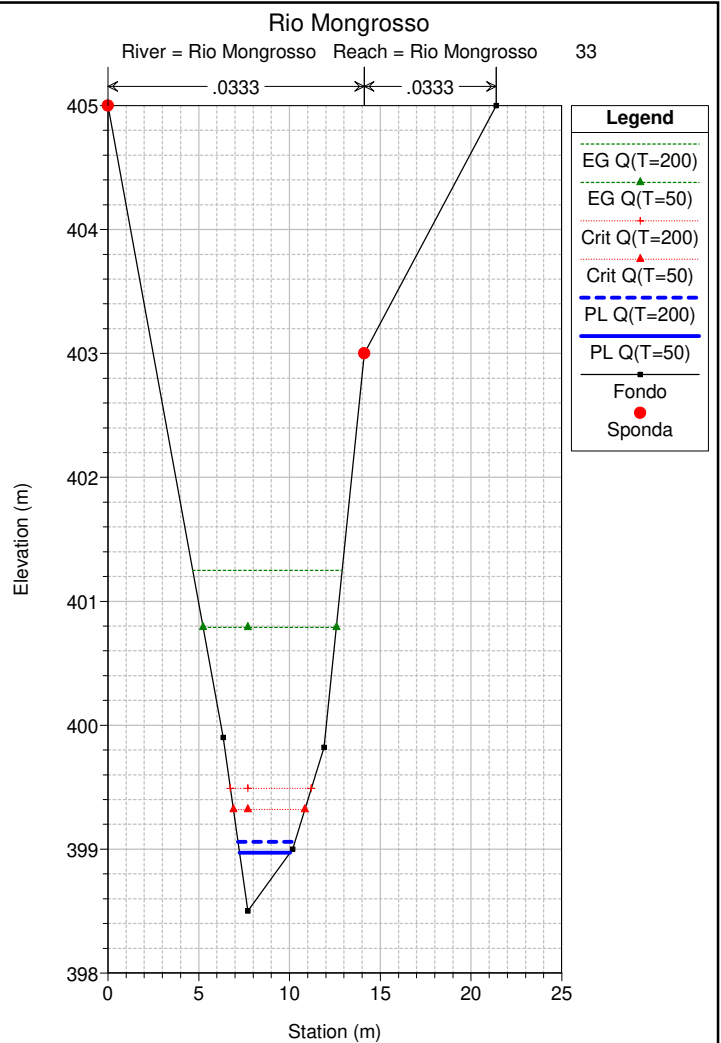
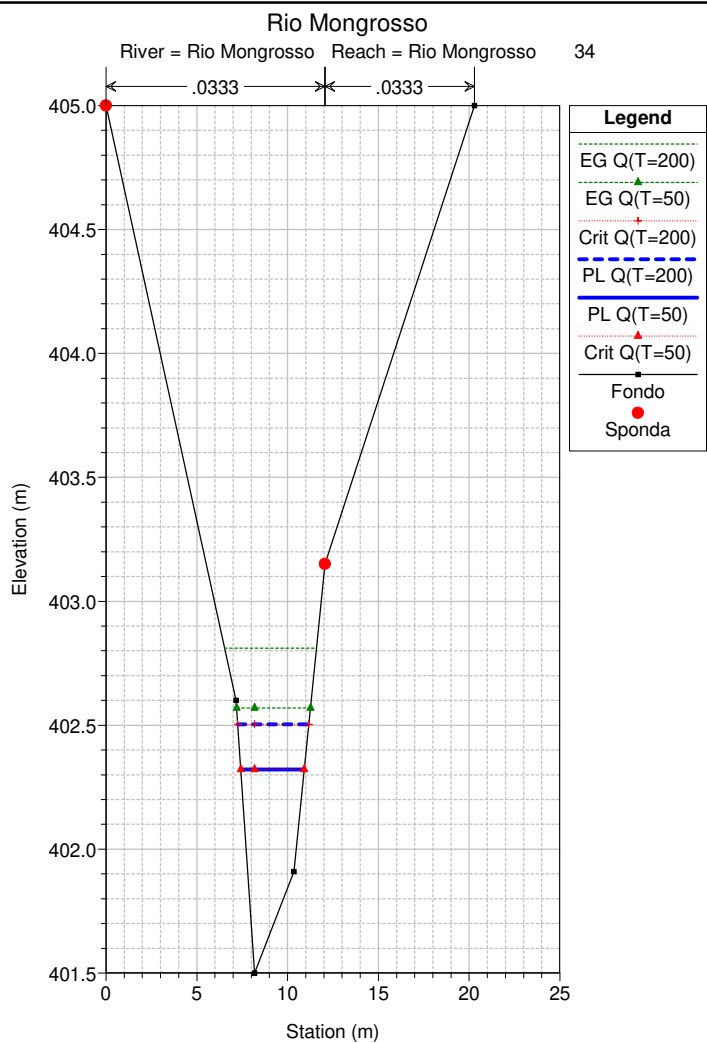


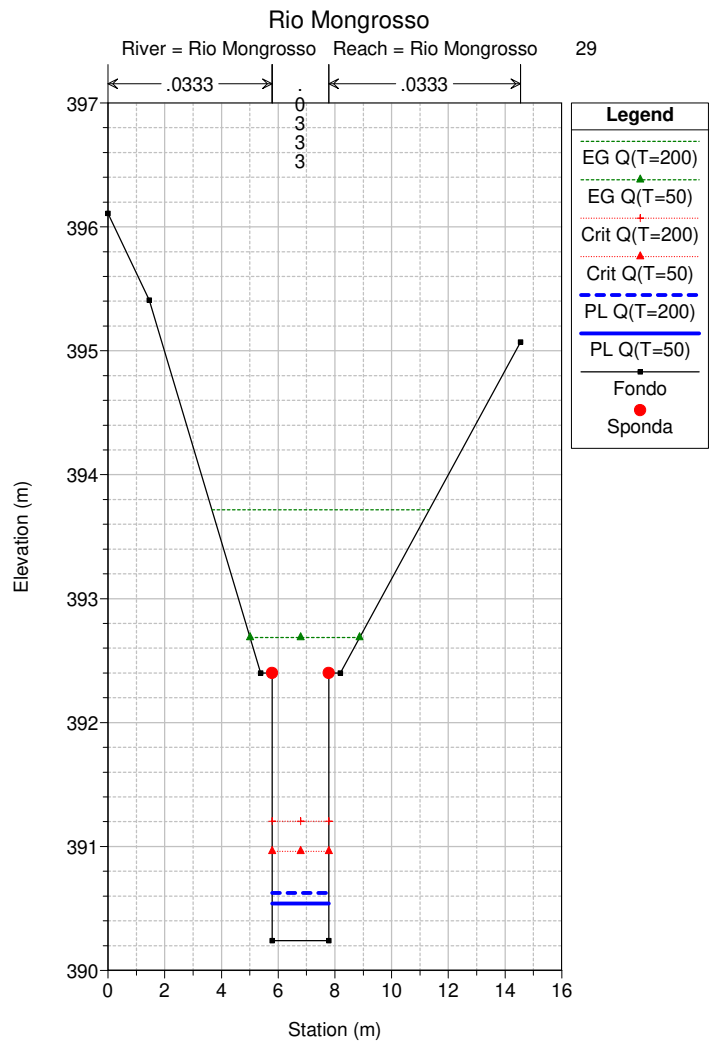
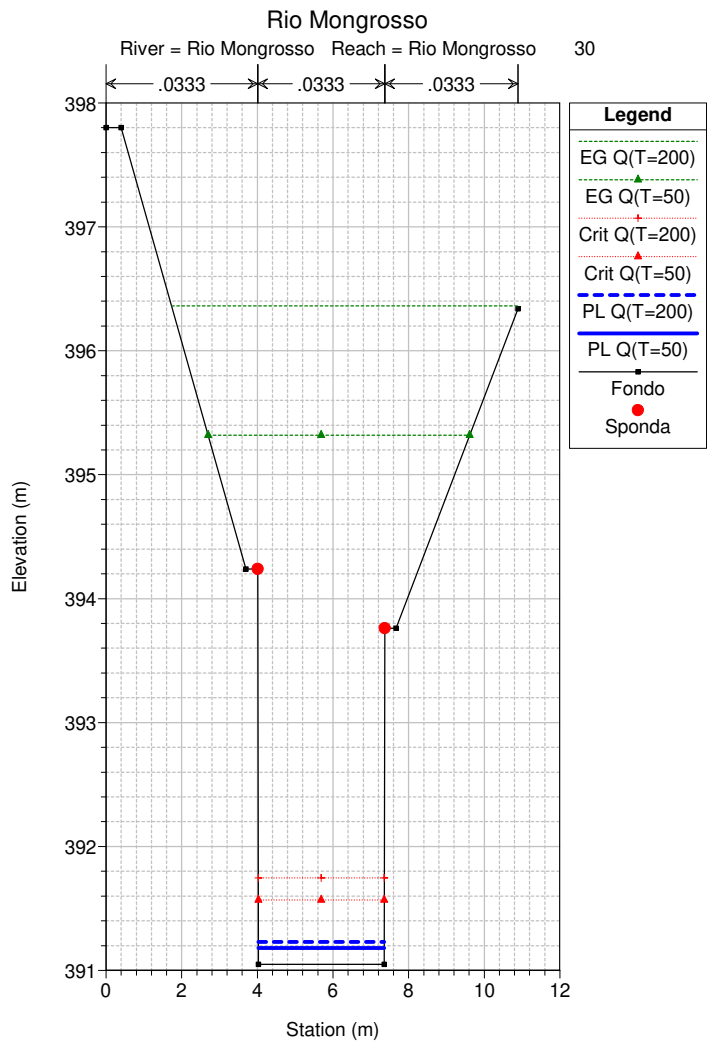
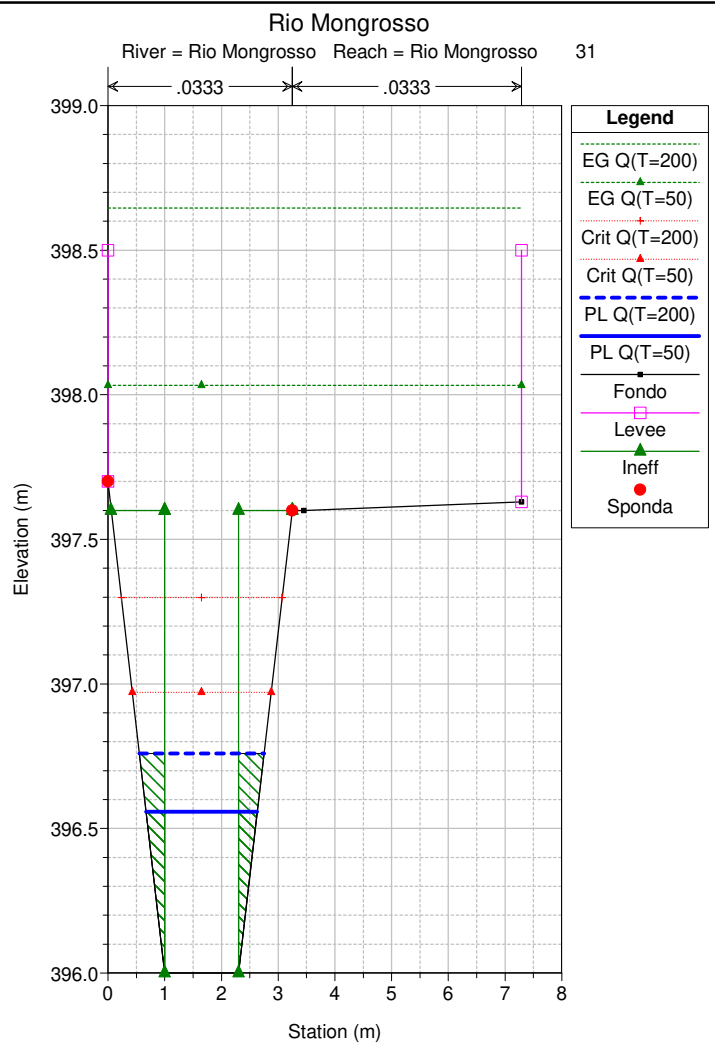
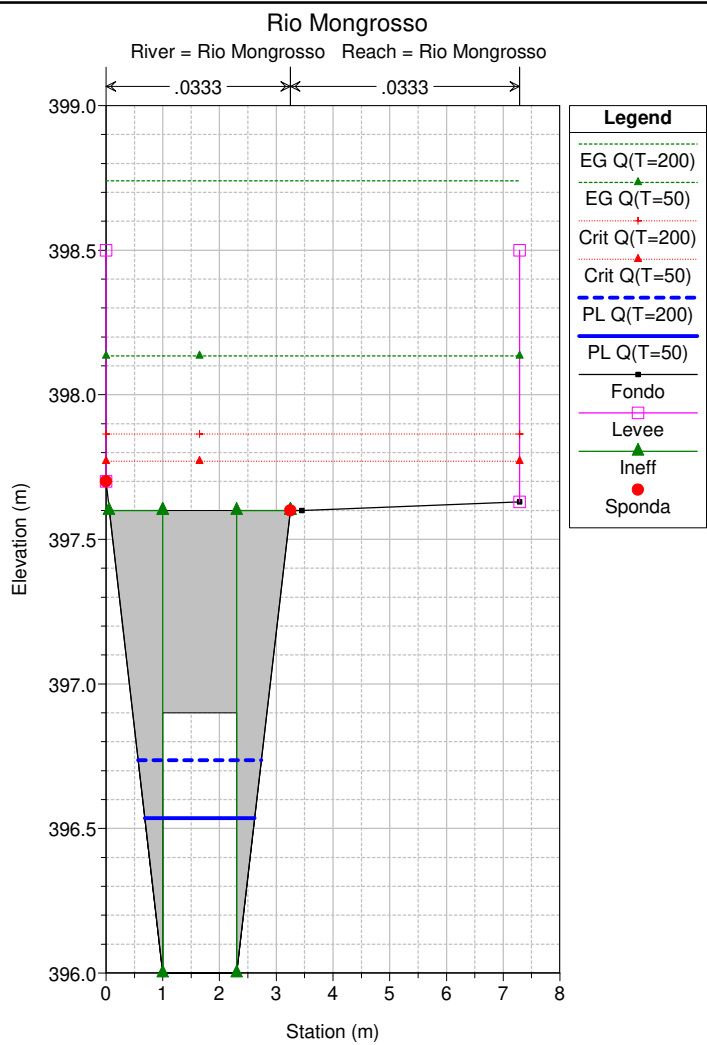


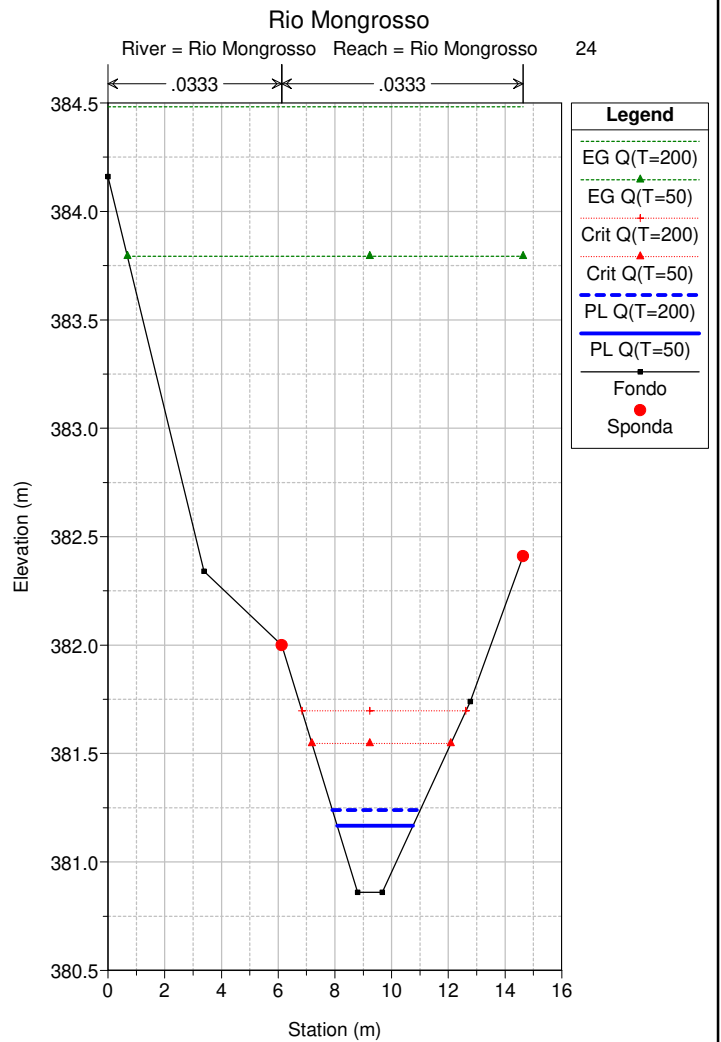
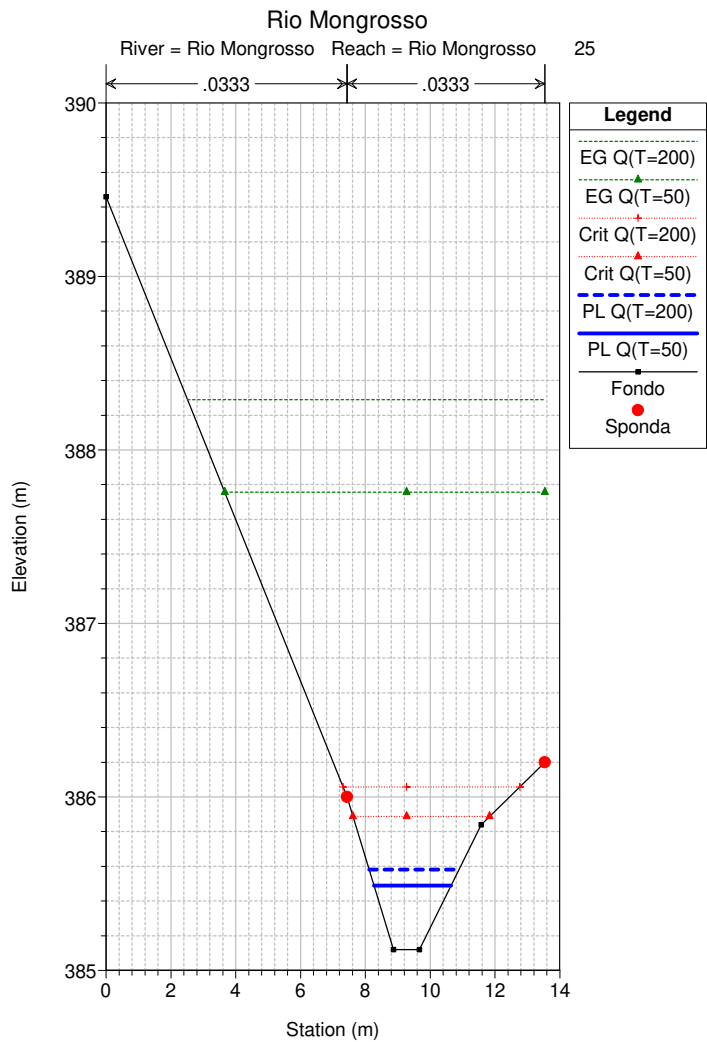
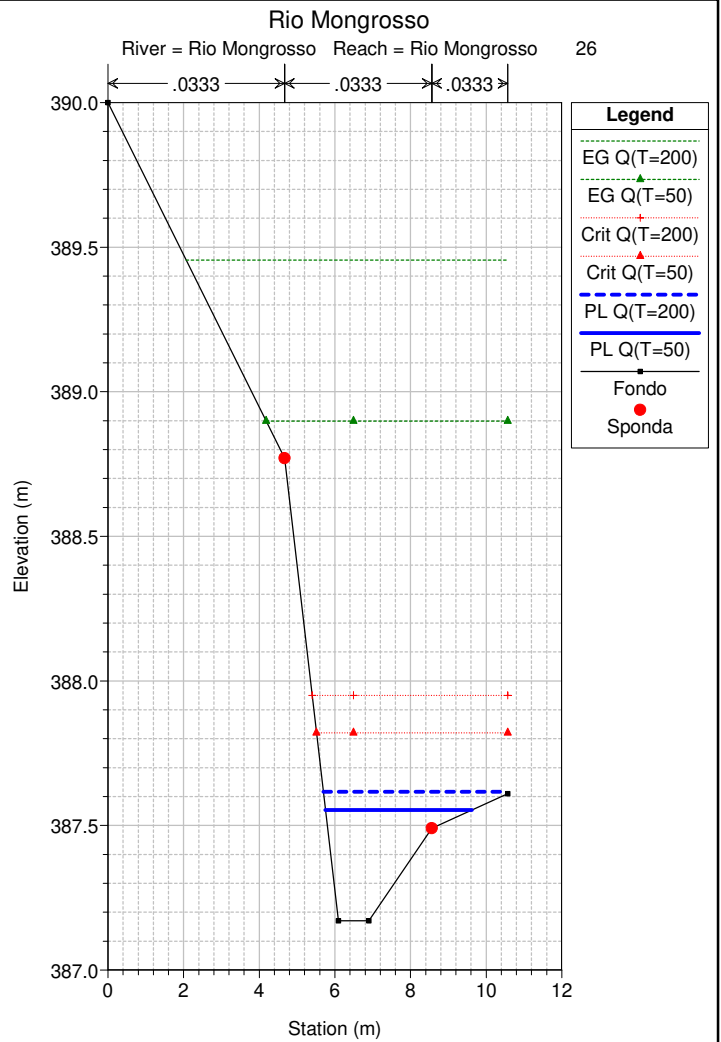
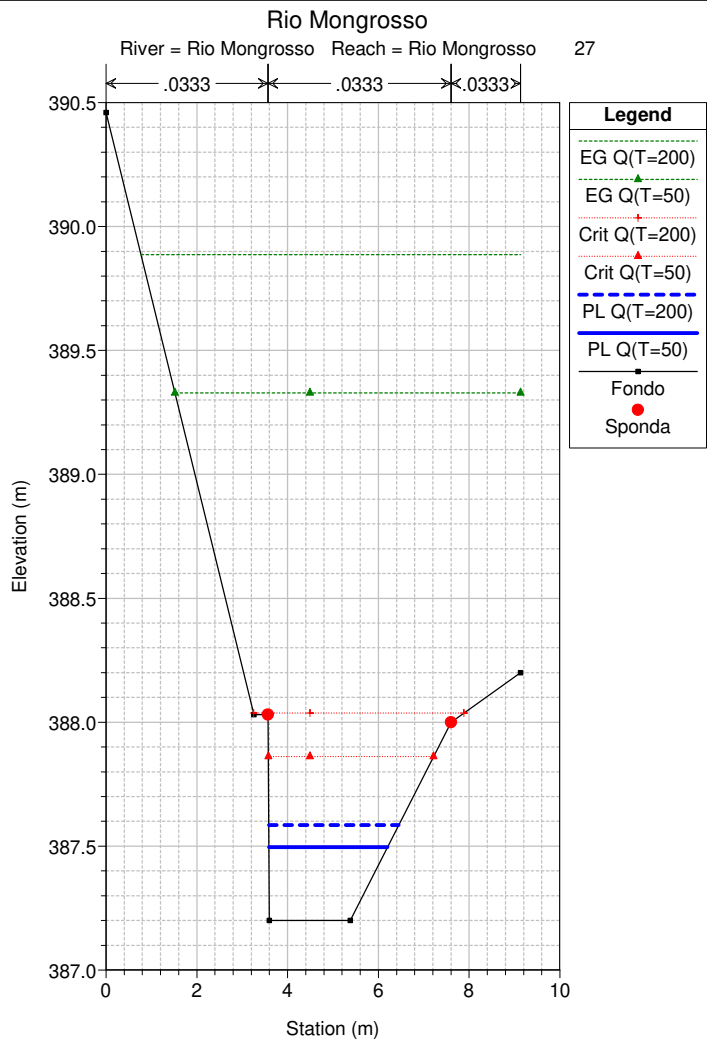


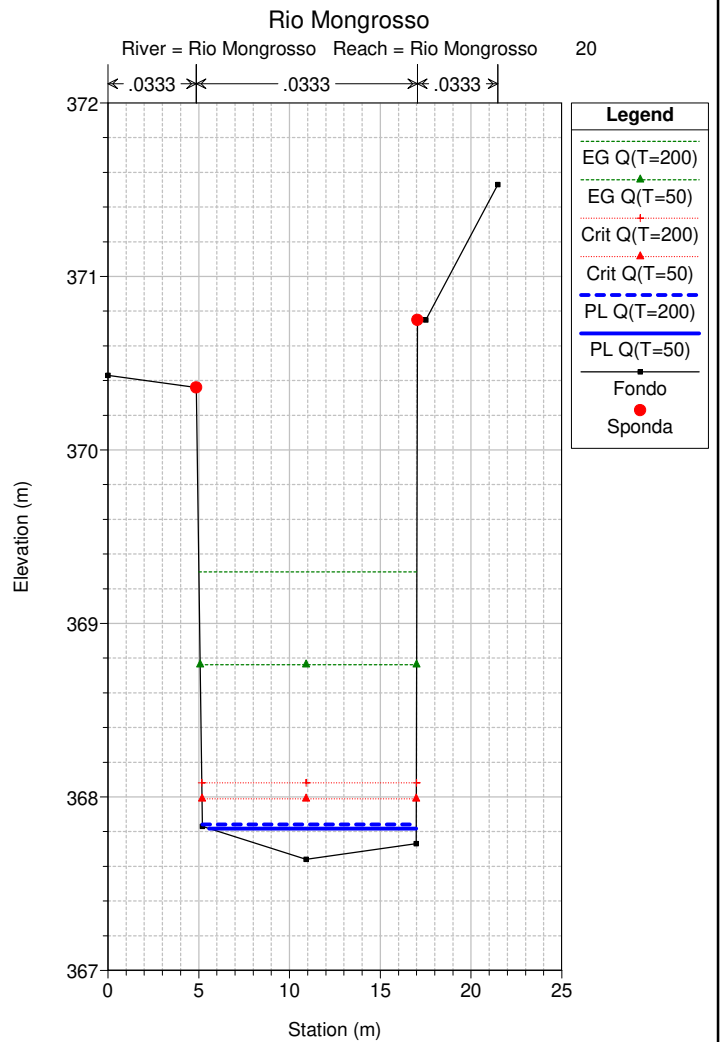
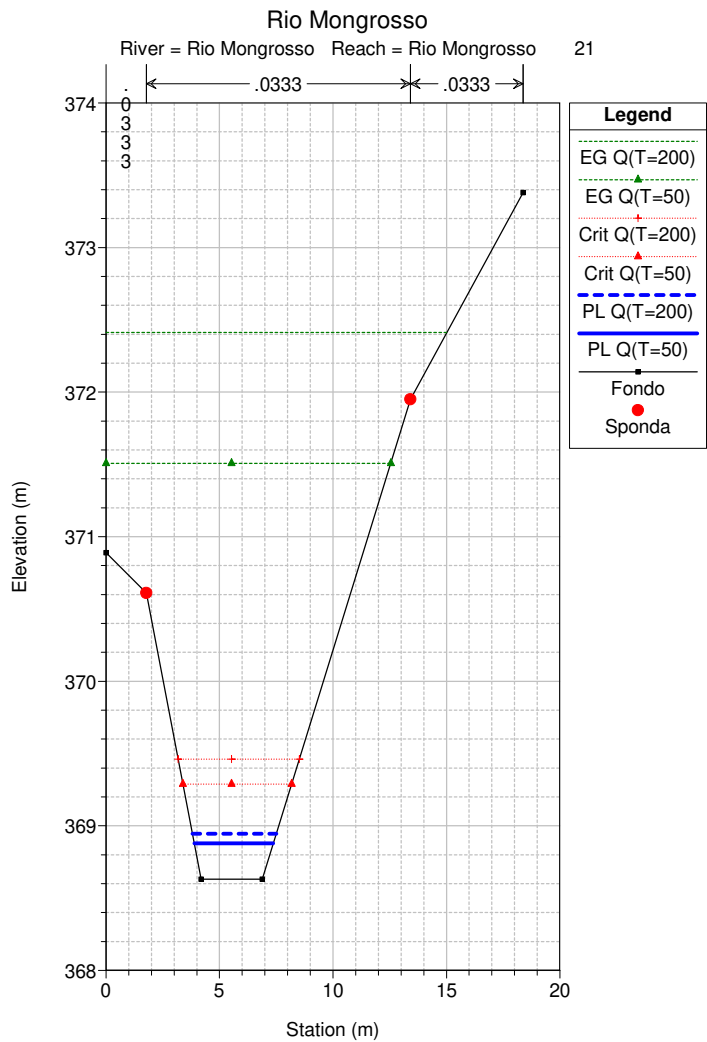
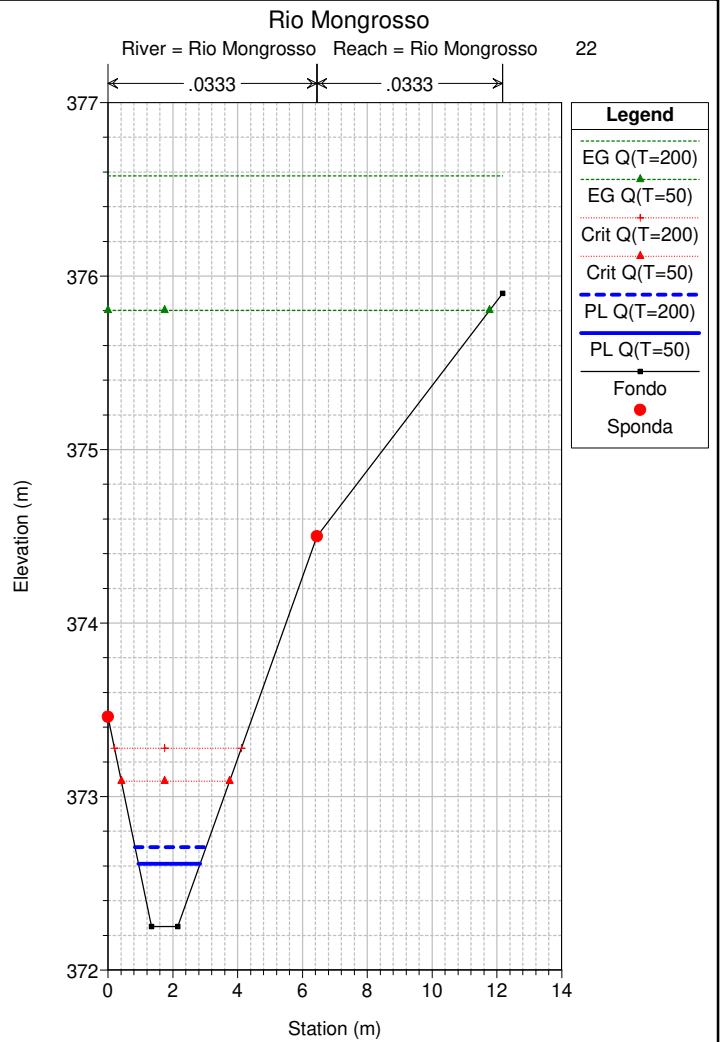
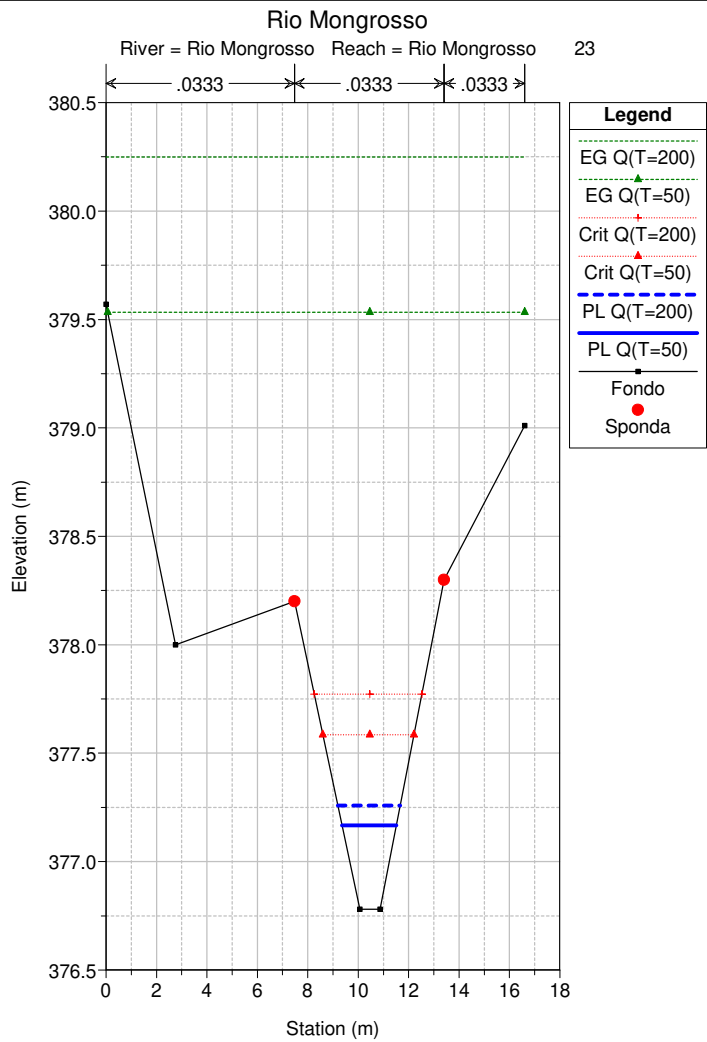


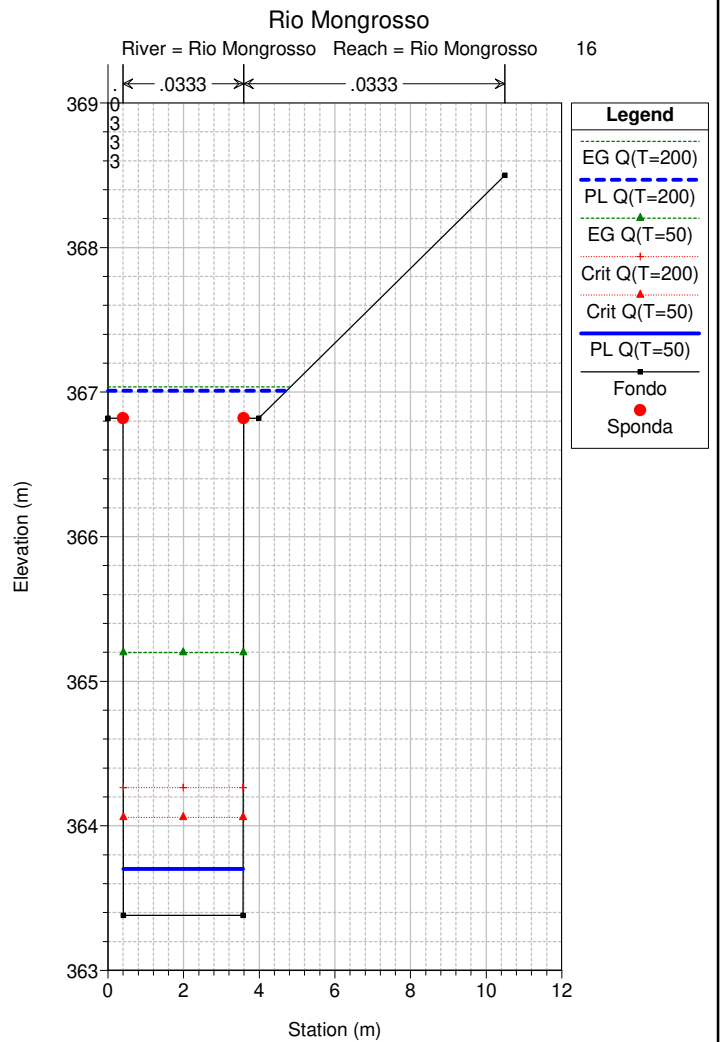
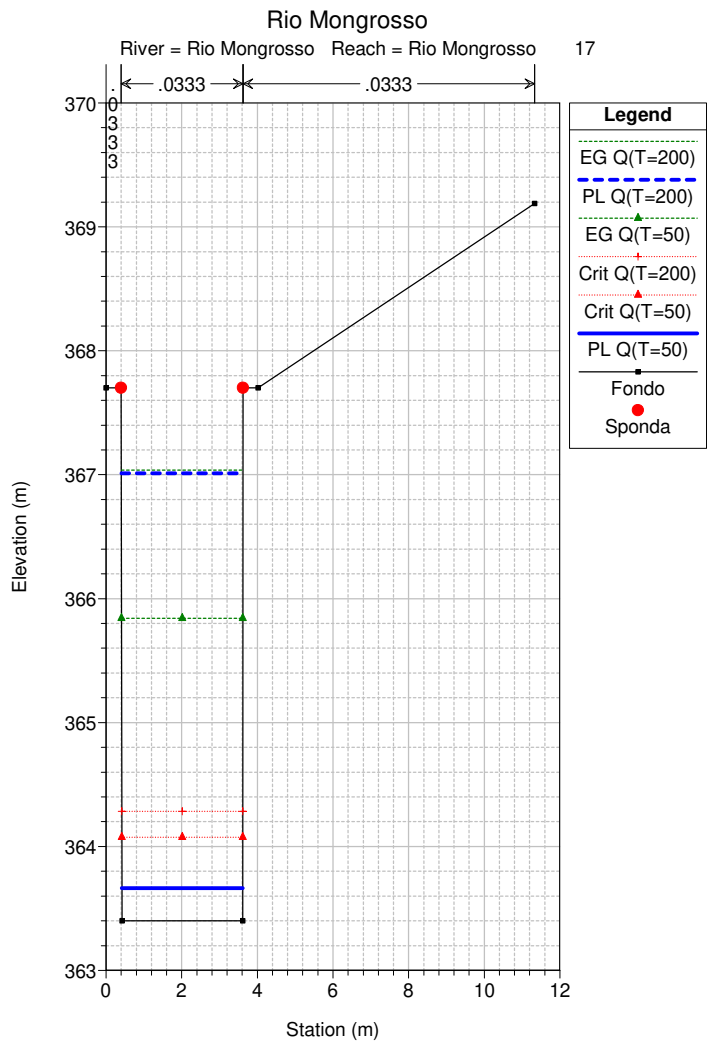
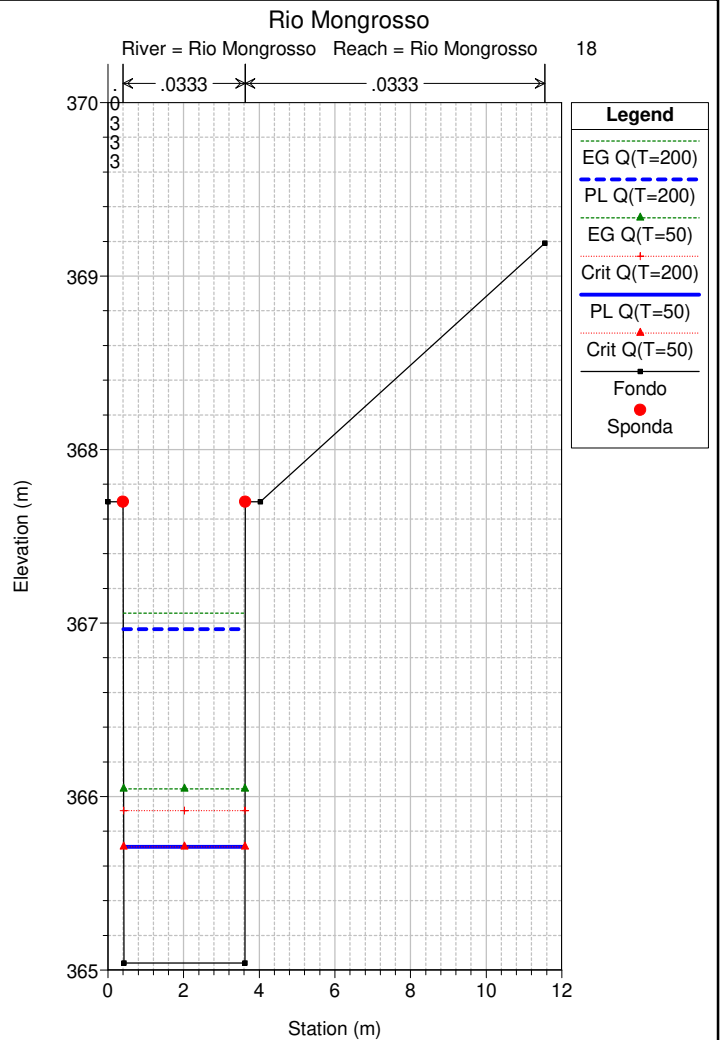
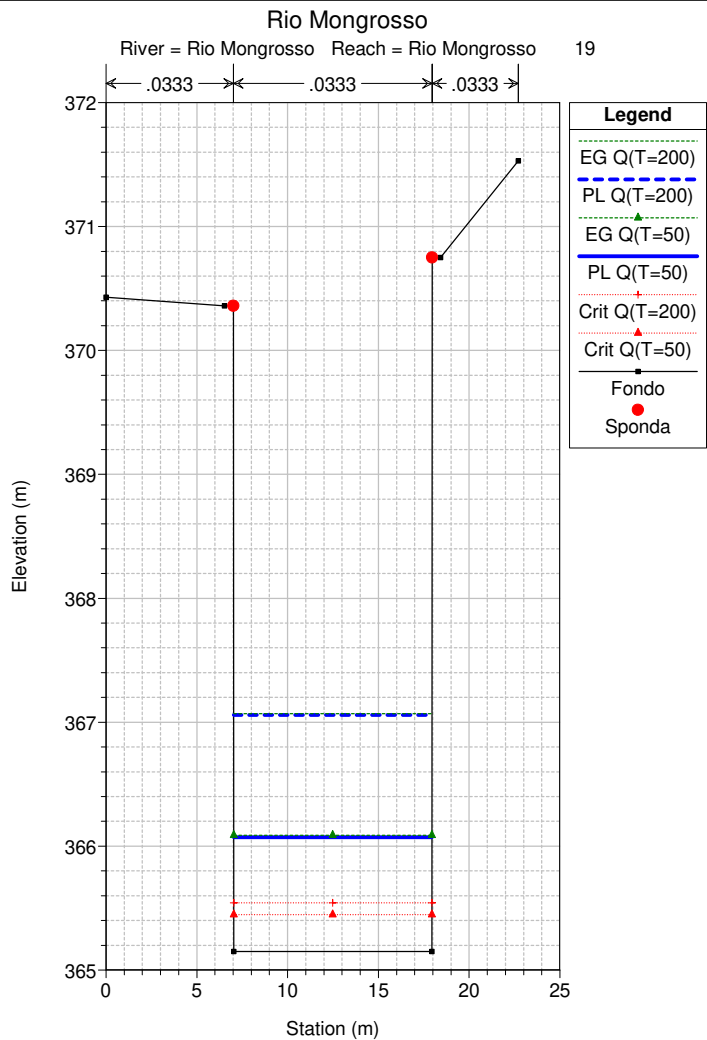


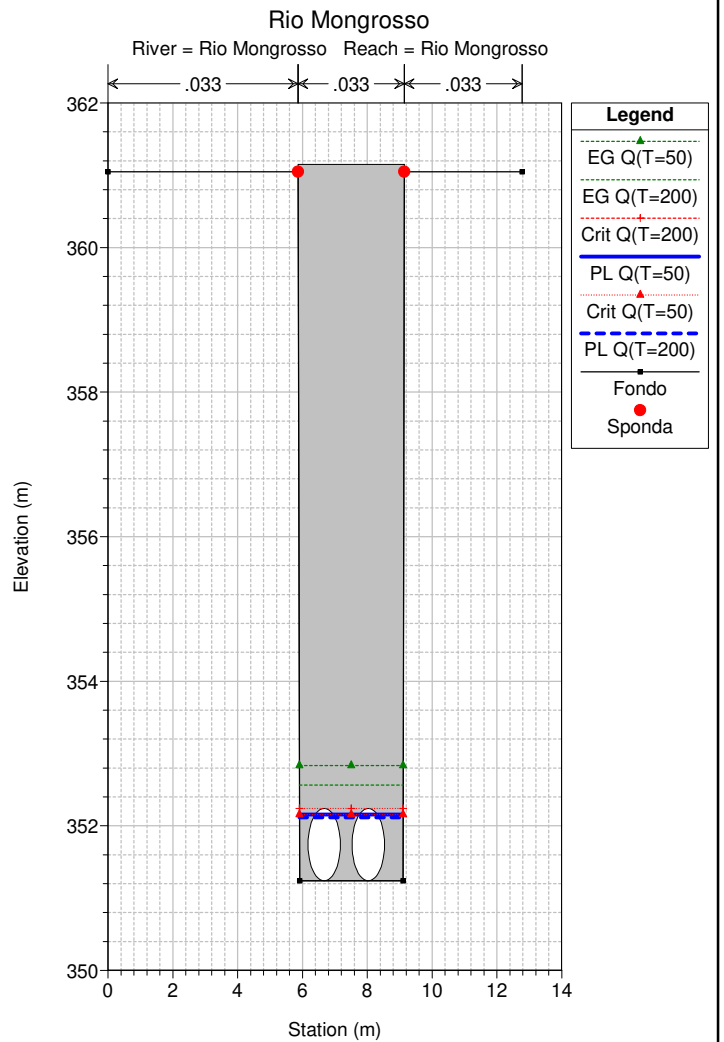
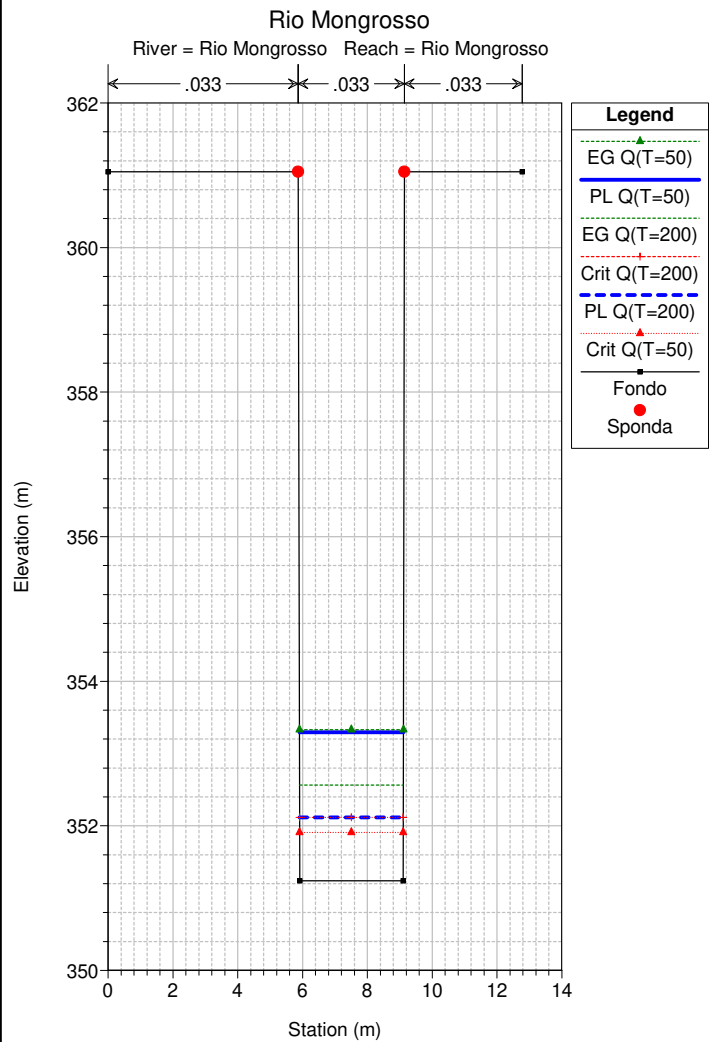
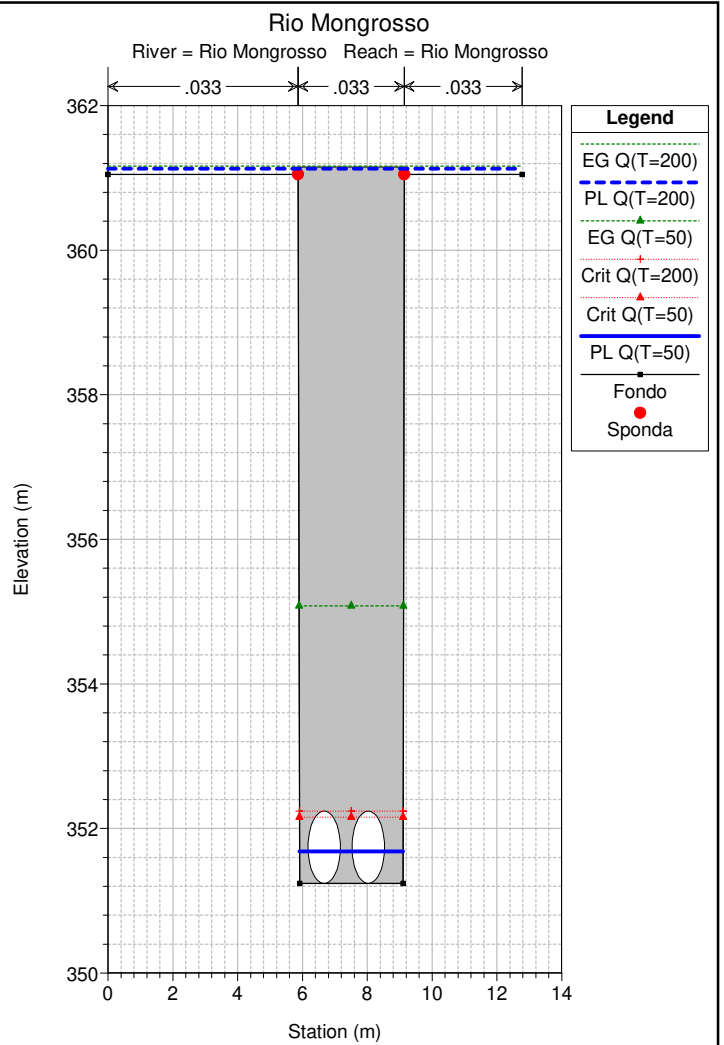
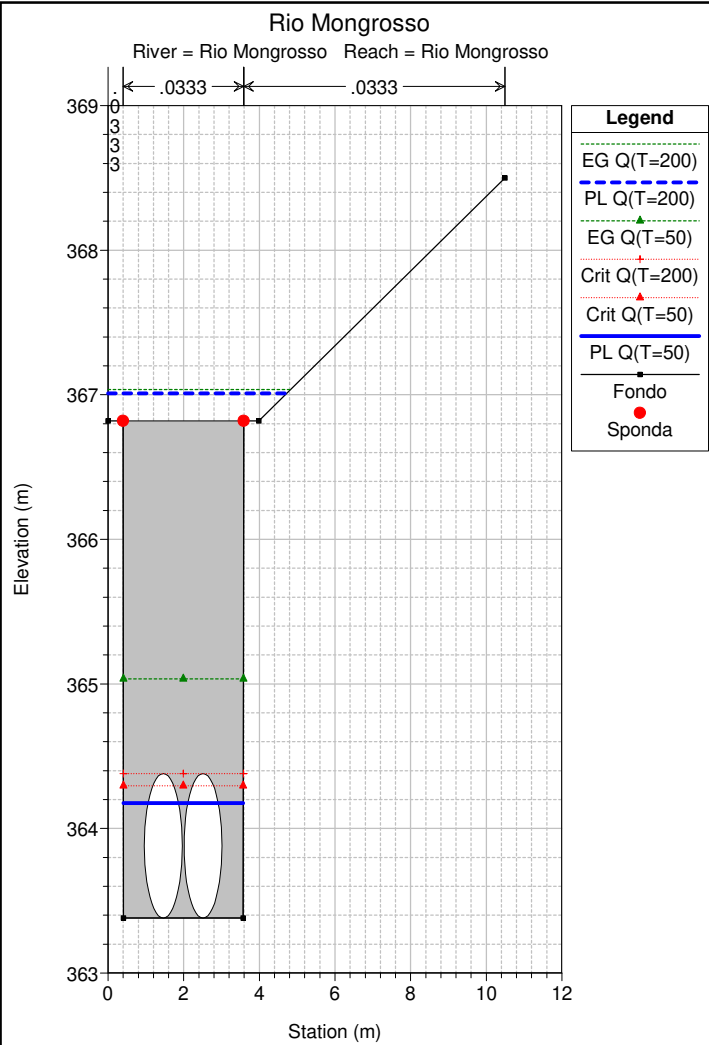


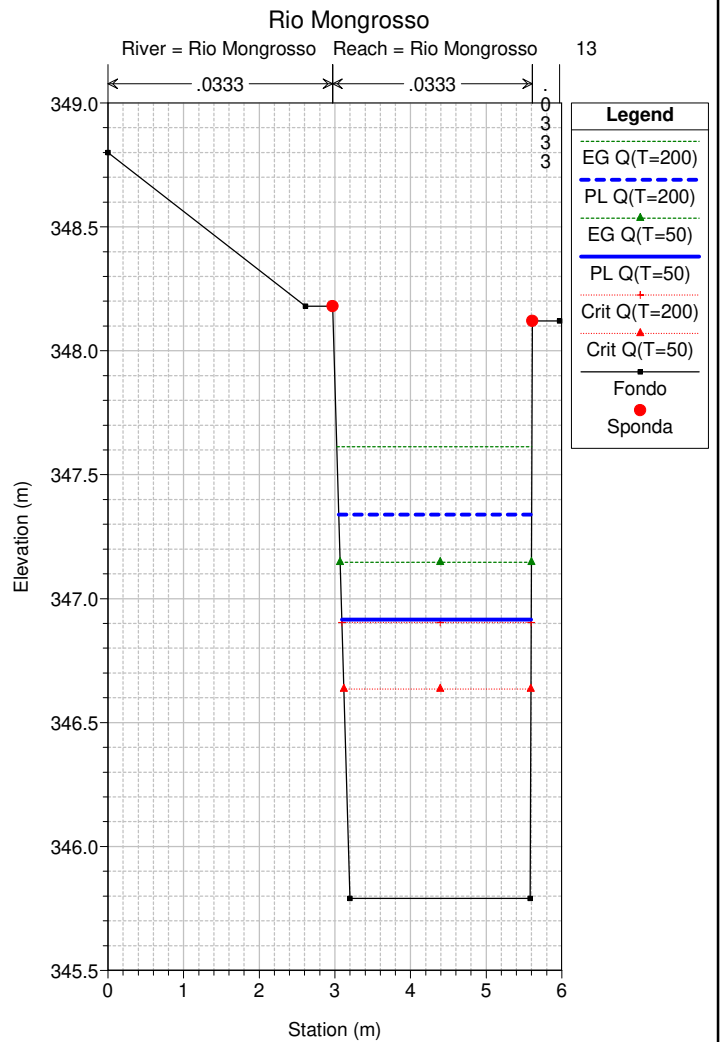
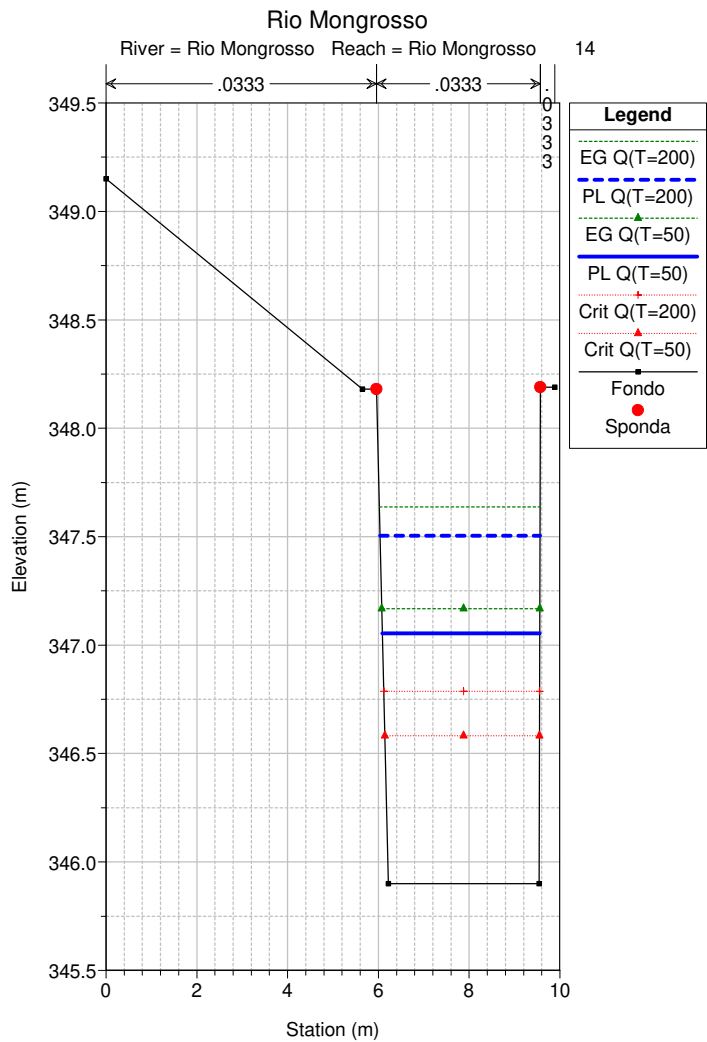
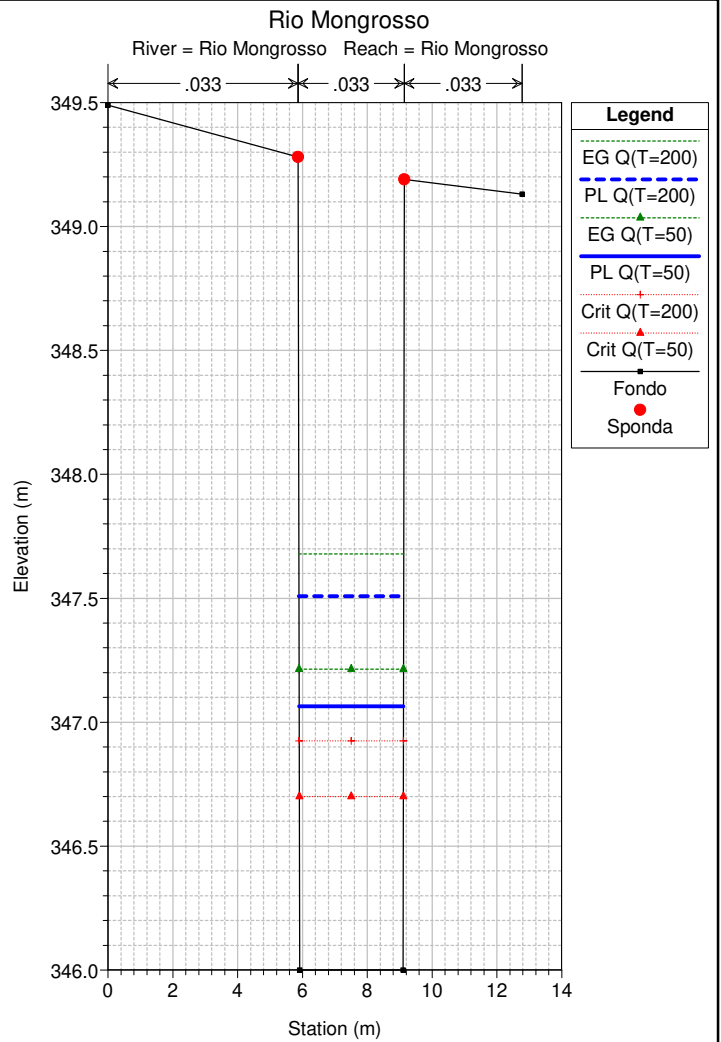
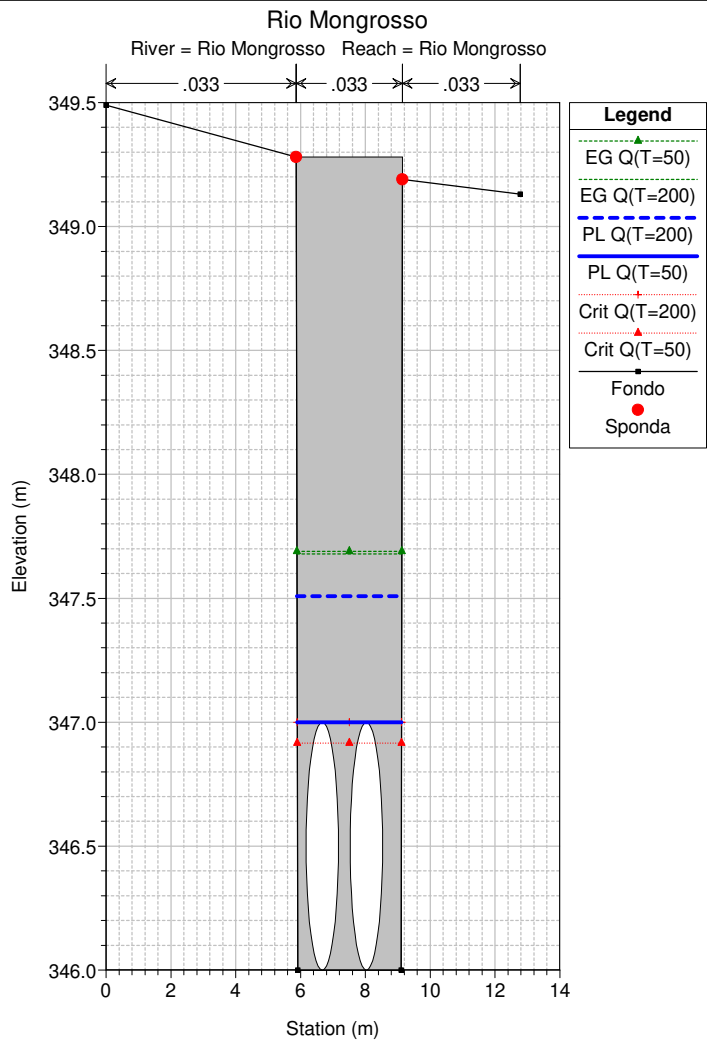


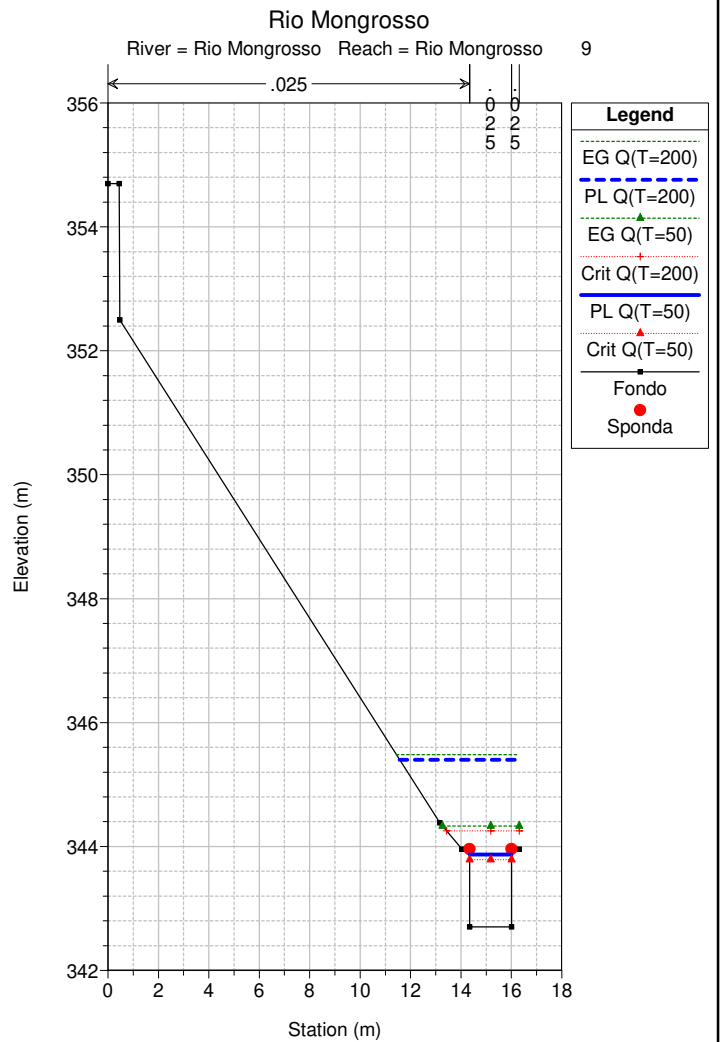
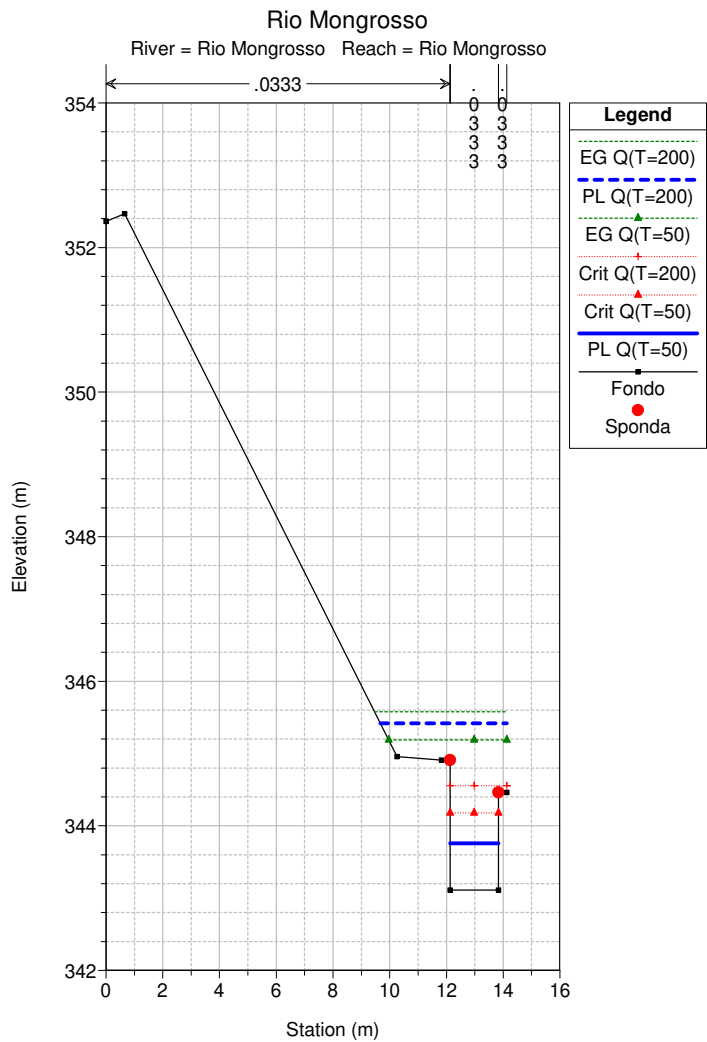
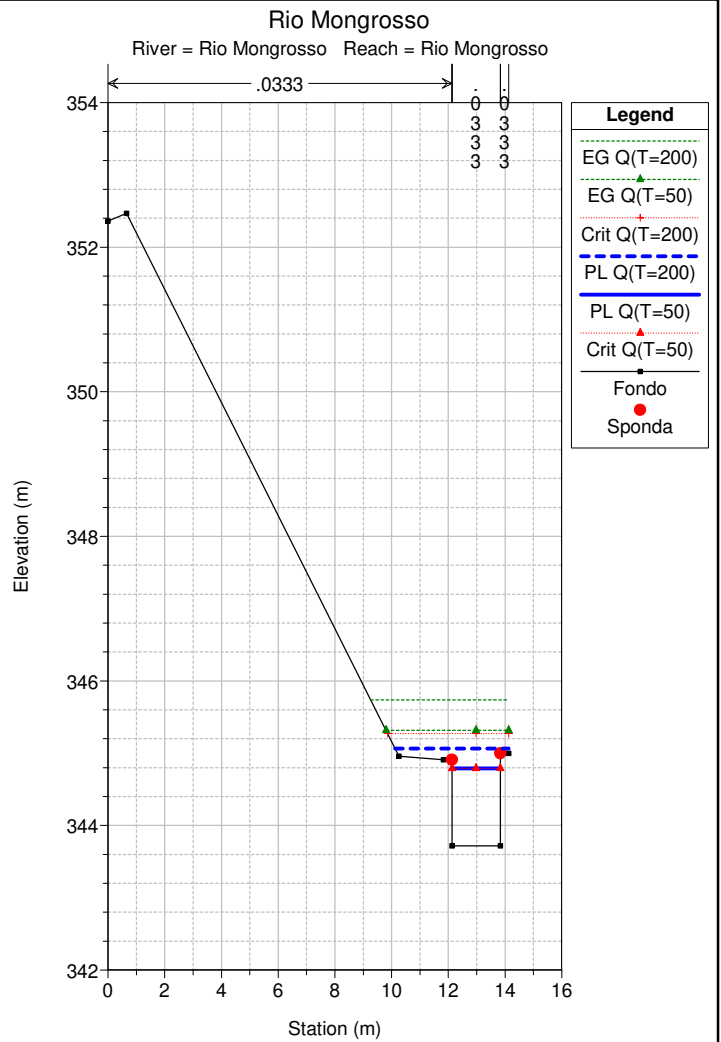
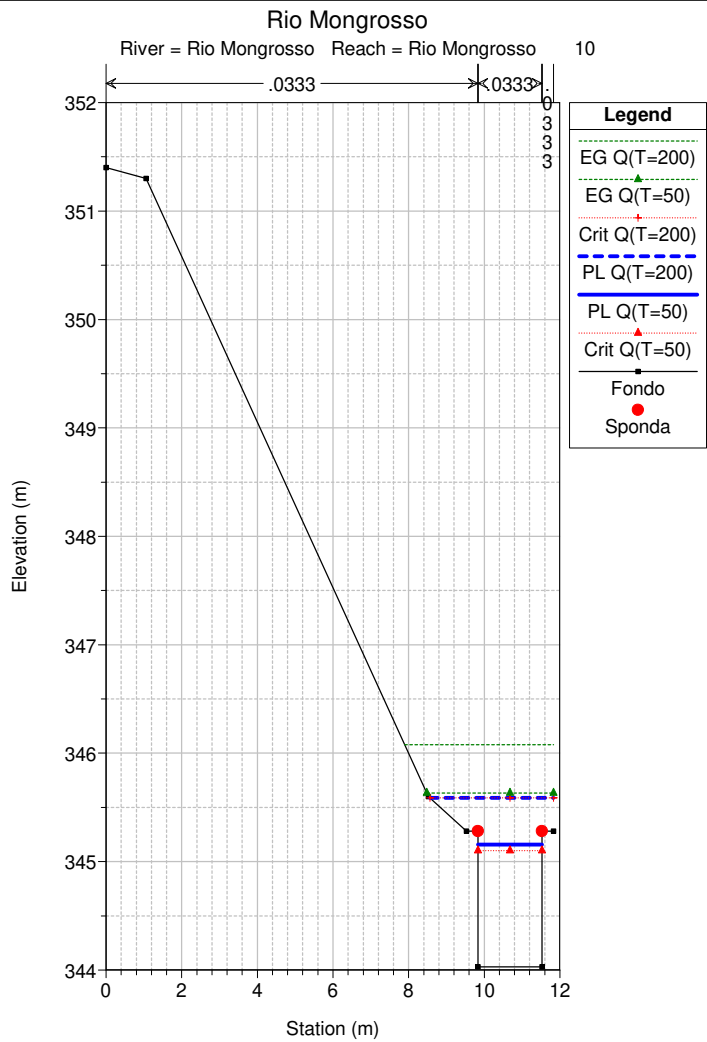


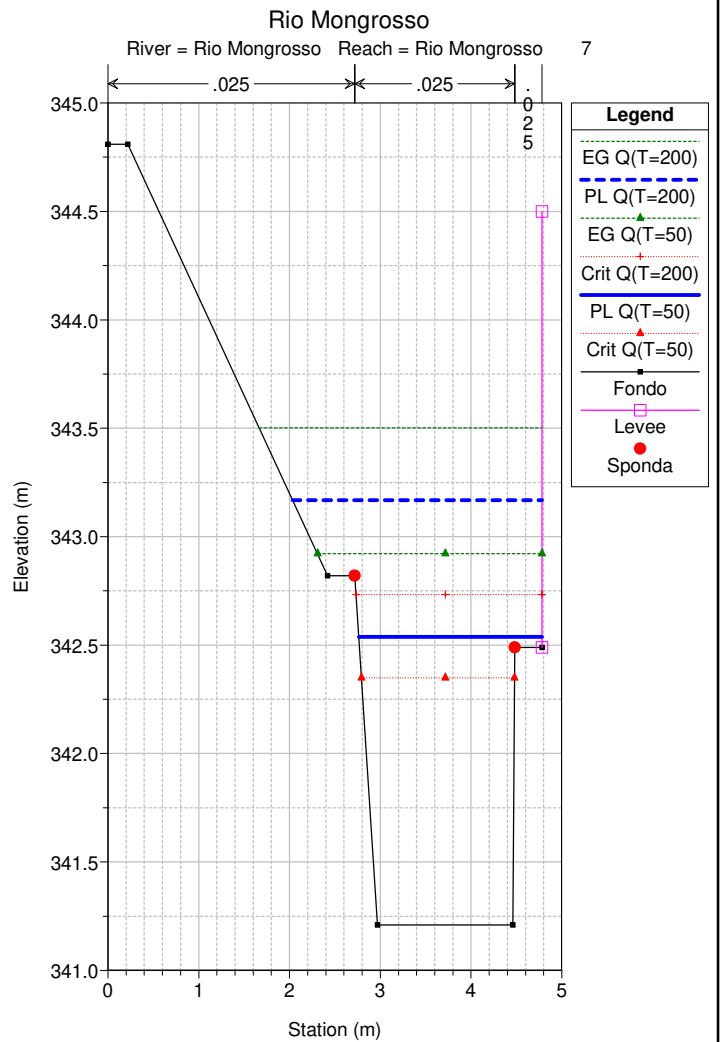
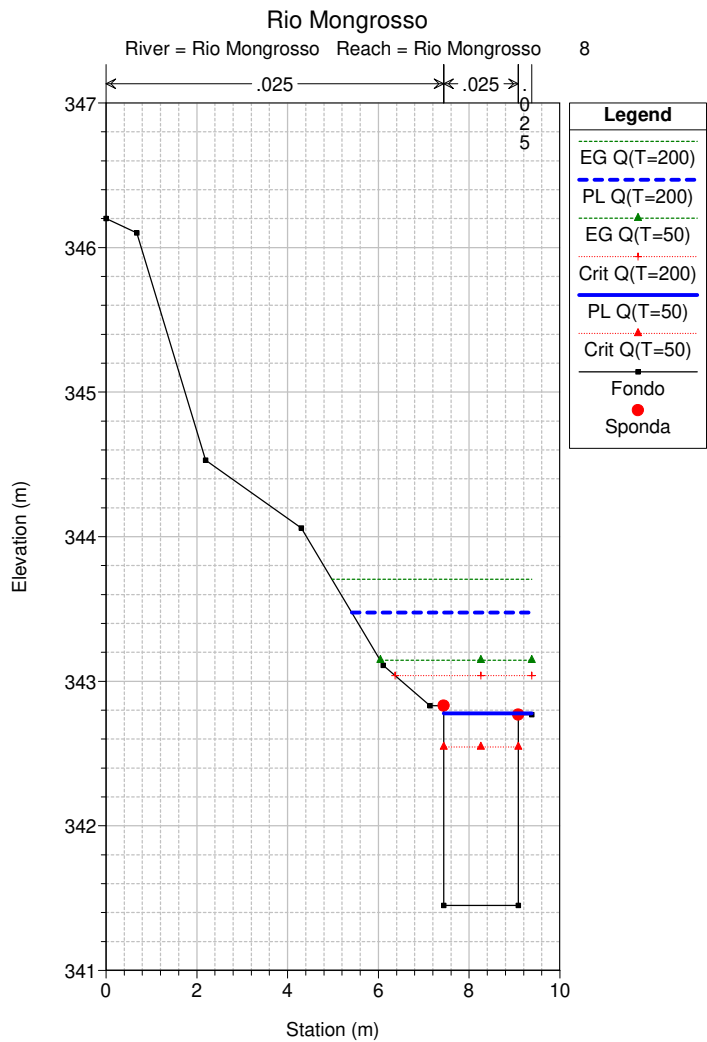
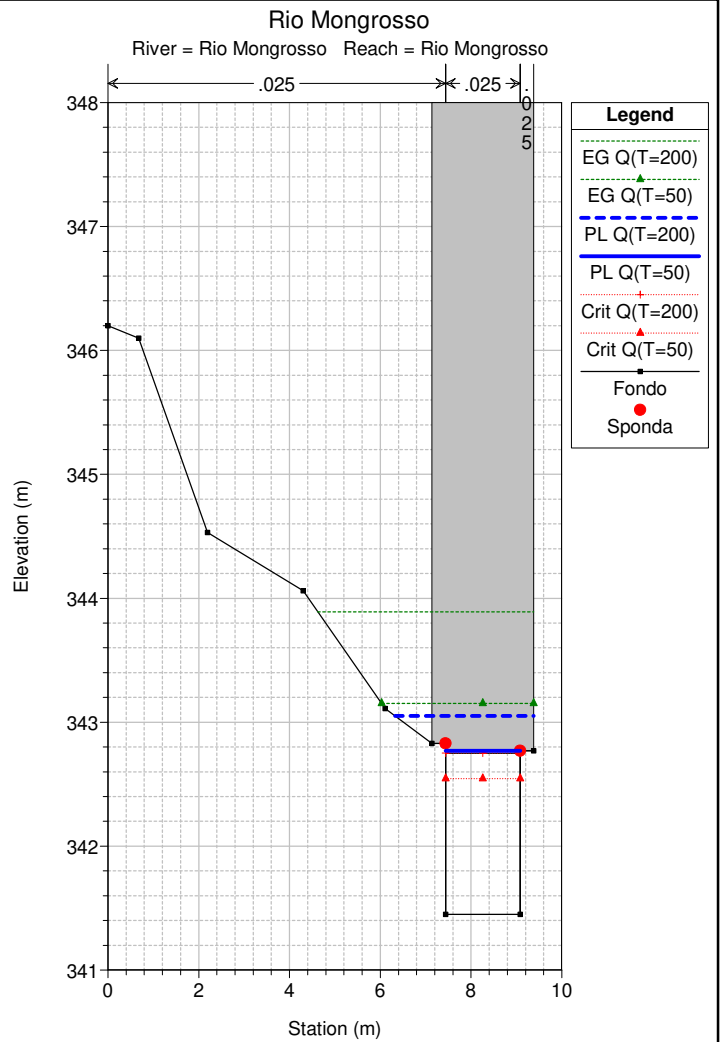
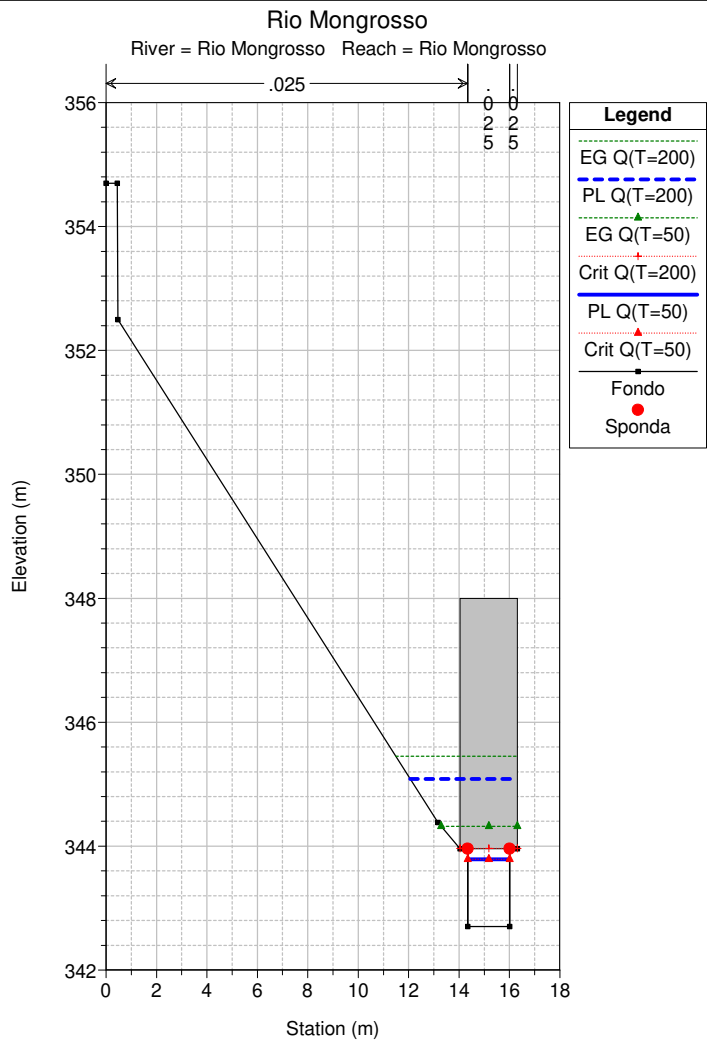


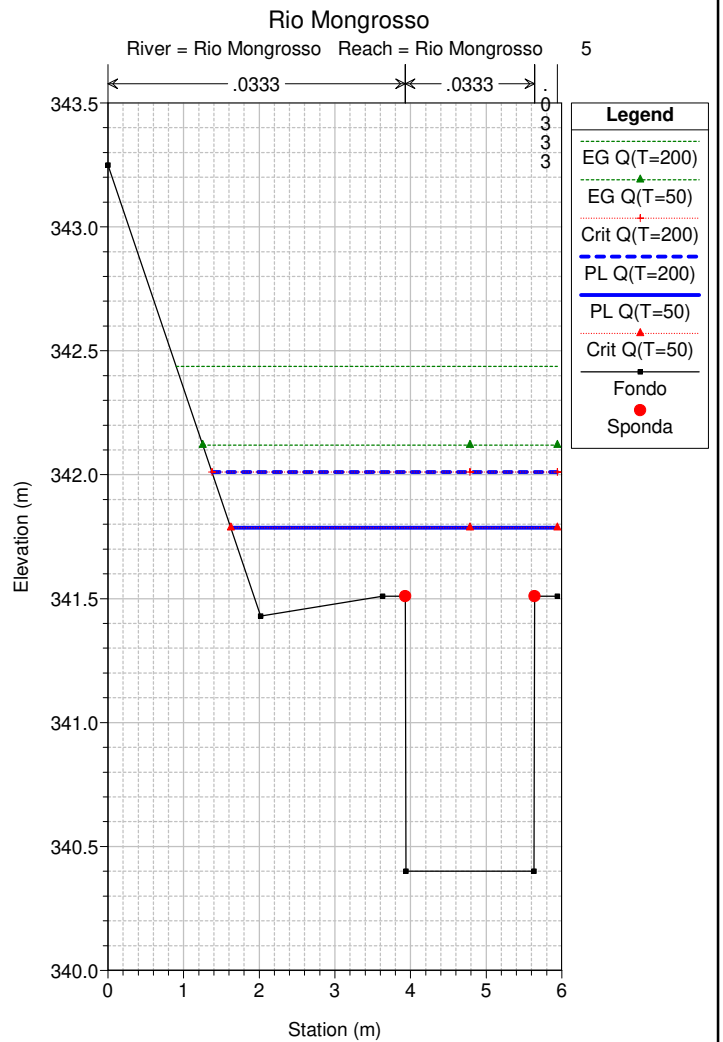
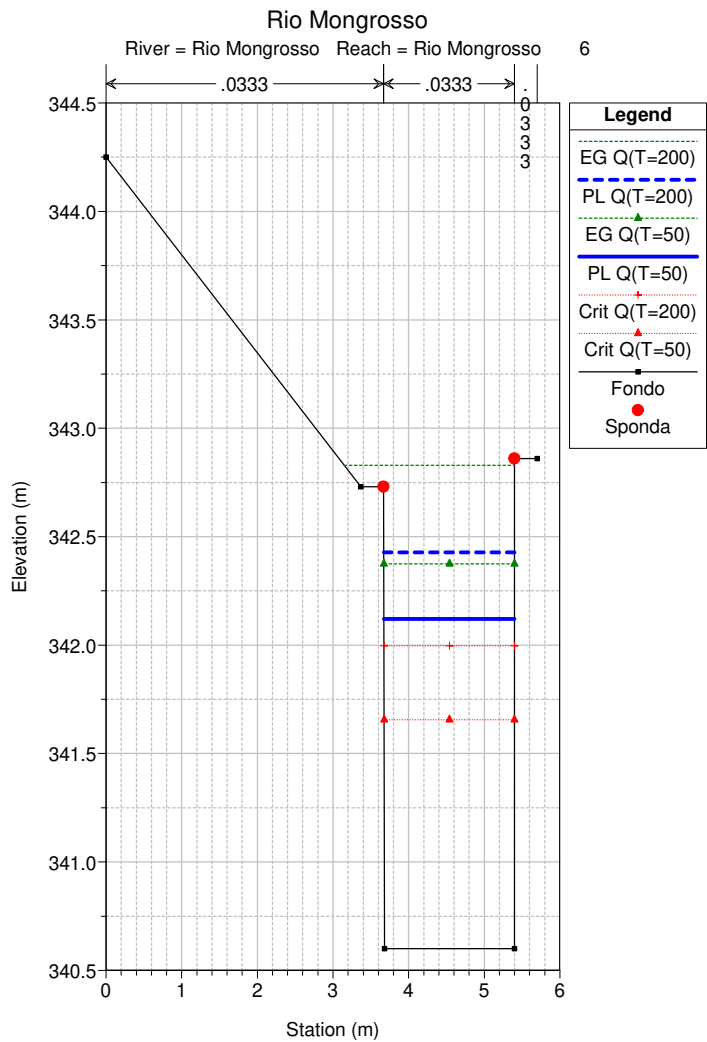
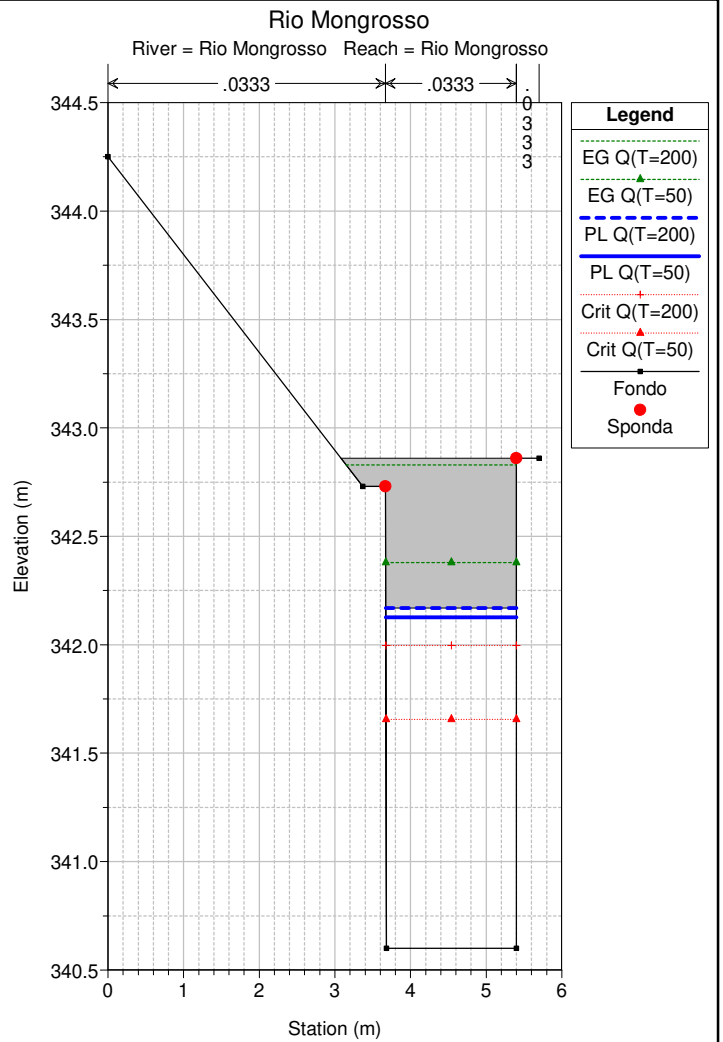
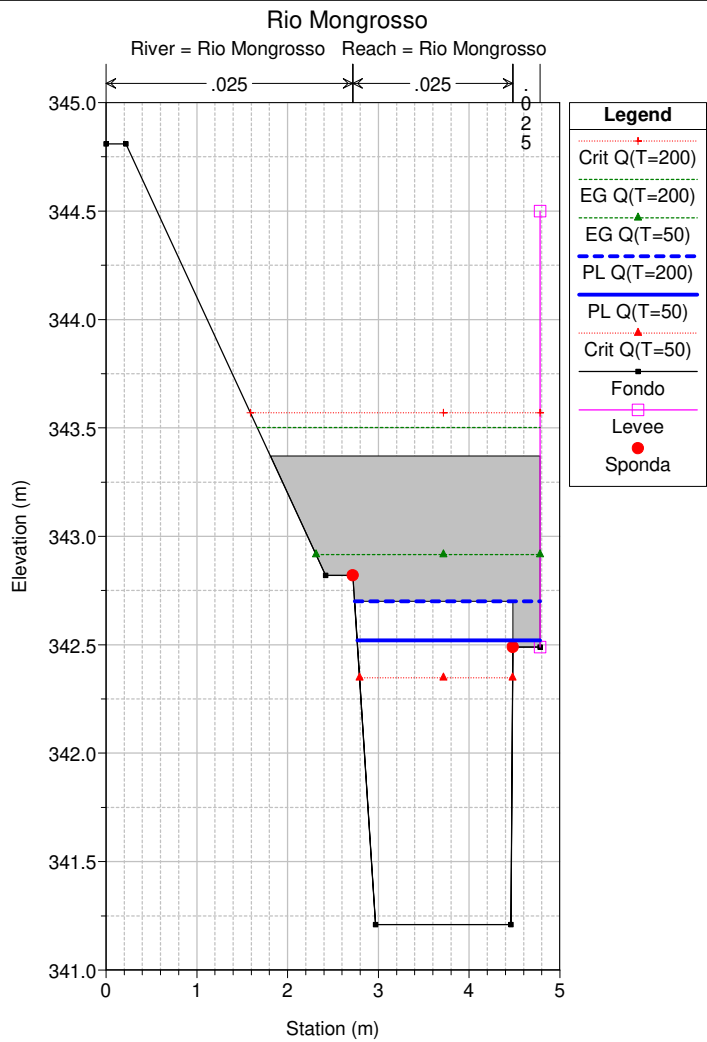


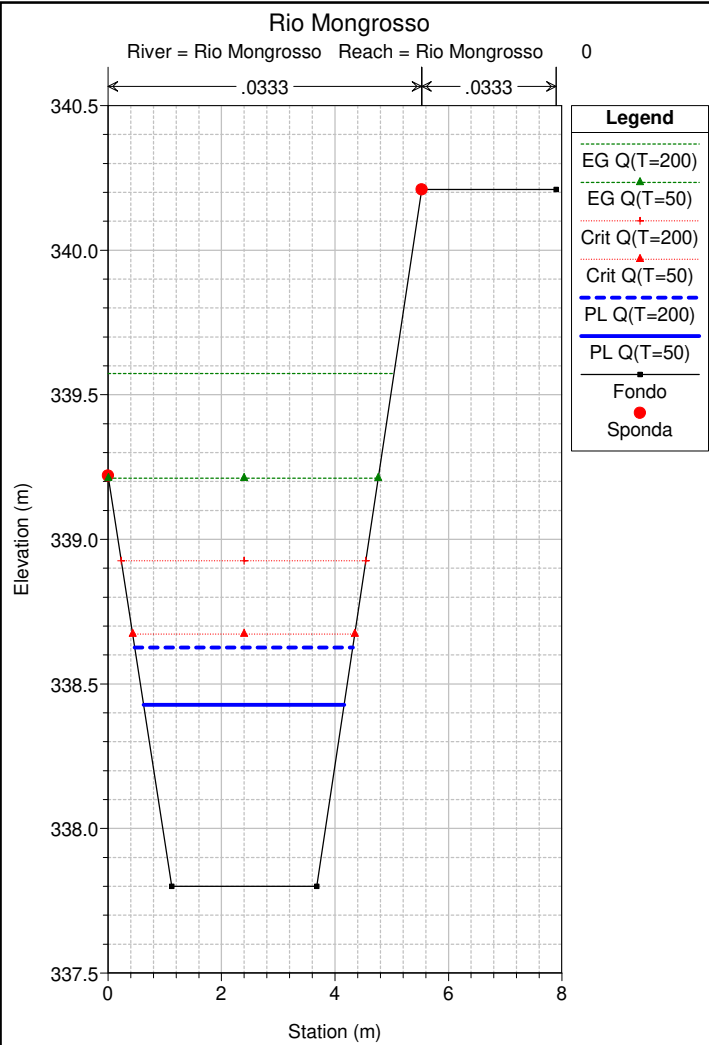












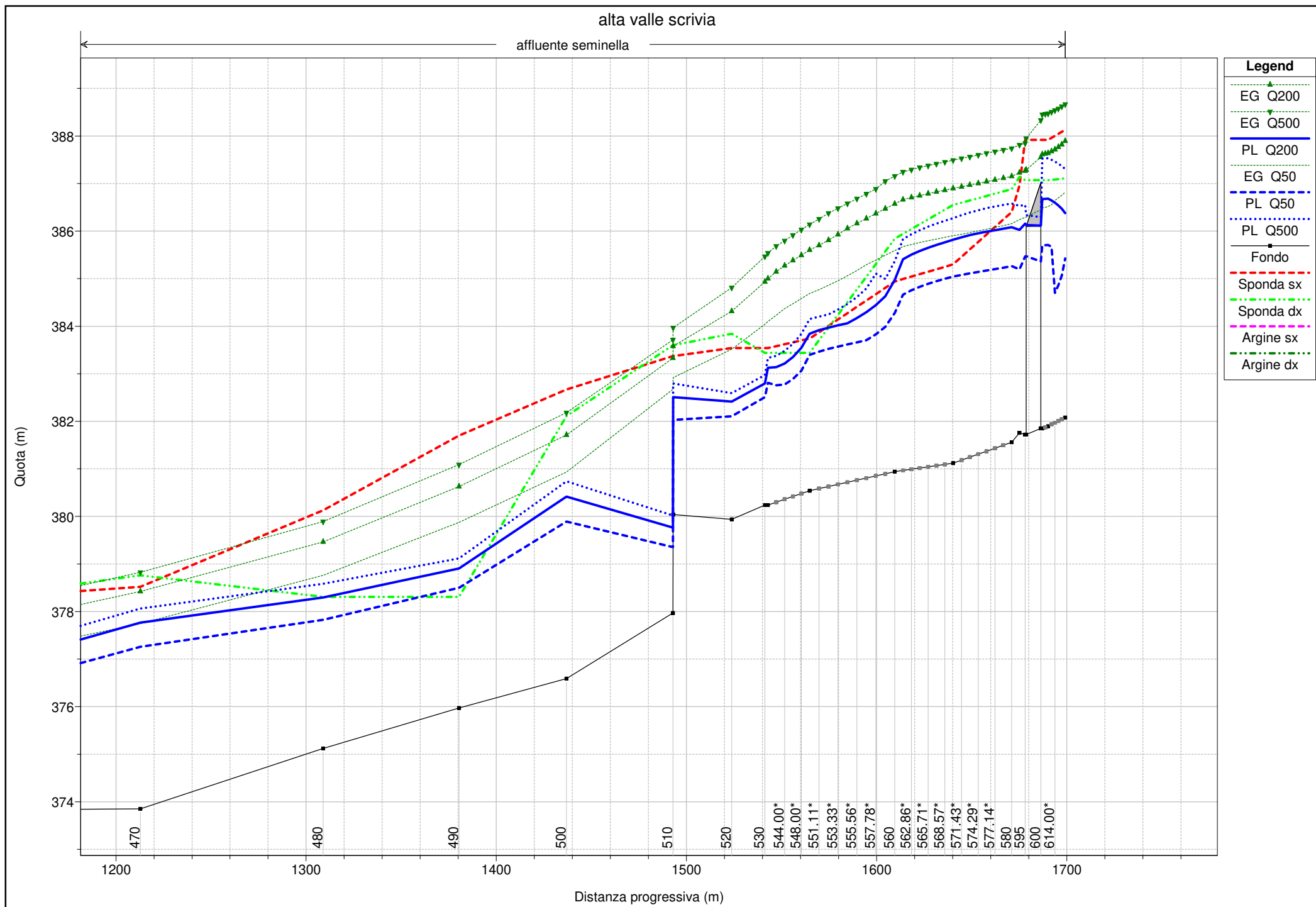
Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	LOB Elev (m)	L. Freeboard (m)	ROB Elev (m)	R. Freeboard (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Rio Mongrosso	34	Q(T=200)	6.00	401.50	402.50	405.00	2.50	403.15	0.65	402.50	402.81	0.015532	2.46	2.44	3.92	0.99
Rio Mongrosso	34	Q(T=50)	3.90	401.50	402.32	405.00	2.68	403.15	0.83	402.32	402.57	0.016290	2.21	1.77	3.50	0.99
Rio Mongrosso	33	Q(T=200)	6.00	398.50	399.06	405.00	5.94	403.00	3.94	399.49	401.25	0.277918	6.56	0.92	3.13	3.87
Rio Mongrosso	33	Q(T=50)	3.90	398.50	398.97	405.00	6.03	403.00	4.03	399.32	400.79	0.305689	5.97	0.65	2.78	3.93
Rio Mongrosso	32	Q(T=200)	6.00	396.39	397.10	398.27	1.17	397.55	0.45	397.68	399.36	0.081819	6.65	0.90	1.64	2.57
Rio Mongrosso	32	Q(T=50)	3.90	396.39	396.90	398.27	1.37	397.55	0.65	397.38	398.76	0.104724	6.03	0.65	1.55	2.75
Rio Mongrosso	31.5	Bridge														
Rio Mongrosso	31	Q(T=200)	6.00	396.00	396.76	397.70	0.94	397.60	0.84	397.30	398.65	0.059406	6.08	0.99	2.20	2.23
Rio Mongrosso	31	Q(T=50)	3.90	396.00	396.56	397.70	1.14	397.60	1.04	396.97	398.03	0.069947	5.38	0.73	1.96	2.30
Rio Mongrosso	30	Q(T=200)	6.00	391.05	391.23	394.24	3.01	393.76	2.53	391.75	396.36	1.260881	10.03	0.60	3.32	7.55
Rio Mongrosso	30	Q(T=50)	3.90	391.05	391.18	394.24	3.06	393.76	2.58	391.57	395.32	1.509371	9.01	0.43	3.32	7.97
Rio Mongrosso	29	Q(T=200)	6.00	390.24	390.63	392.40	1.77	392.40	1.77	391.20	393.72	0.371028	7.79	0.77	2.00	4.01
Rio Mongrosso	29	Q(T=50)	3.90	390.24	390.54	392.40	1.86	392.40	1.86	390.96	392.69	0.329992	6.49	0.60	2.00	3.78
Rio Mongrosso	28.5	Bridge														
Rio Mongrosso	28.1	Q(T=200)	6.00	388.85	389.39	391.28	1.89	391.70	2.31	389.83	390.96	0.106244	5.54	1.08	2.67	2.40
Rio Mongrosso	28.1	Q(T=50)	3.90	388.85	389.23	391.28	2.05	391.70	2.47	389.58	390.59	0.137541	5.17	0.75	2.47	2.69
Rio Mongrosso	28	Q(T=200)	6.00	387.55	387.88	391.28	3.40	391.70	3.82	388.41	390.87	0.386720	7.65	0.78	2.50	4.36
Rio Mongrosso	28	Q(T=50)	3.90	387.55	387.78	391.28	3.50	391.70	3.92	388.20	390.50	0.527579	7.30	0.53	2.42	4.96
Rio Mongrosso	27	Q(T=200)	6.00	387.20	387.58	388.03	0.45	388.00	0.42	388.04	389.89	0.286639	6.72	0.89	2.86	3.84
Rio Mongrosso	27	Q(T=50)	3.90	387.20	387.50	388.03	0.53	388.00	0.50	387.86	389.33	0.299717	5.99	0.65	2.61	3.84
Rio Mongrosso	26	Q(T=200)	6.00	387.17	387.62	388.77	1.15	387.49	-0.13	387.95	389.46	0.209256	6.14	1.06	4.88	3.45
Rio Mongrosso	26	Q(T=50)	3.90	387.17	387.55	388.77	1.22	387.49	-0.06	387.82	388.90	0.190255	5.16	0.78	3.87	3.20
Rio Mongrosso	25	Q(T=200)	6.00	385.12	385.58	386.00	0.42	386.20	0.62	386.06	388.29	0.328953	7.29	0.82	2.77	4.27
Rio Mongrosso	25	Q(T=50)	3.90	385.12	385.49	386.00	0.51	386.20	0.71	385.89	387.76	0.351251	6.67	0.58	2.37	4.29
Rio Mongrosso	24	Q(T=200)	6.00	380.86	381.24	382.00	0.76	382.41	1.17	381.70	384.48	0.492217	7.97	0.75	3.10	5.17
Rio Mongrosso	24	Q(T=50)	3.90	380.86	381.17	382.00	0.83	382.41	1.24	381.55	383.79	0.503241	7.18	0.54	2.67	5.08
Rio Mongrosso	23	Q(T=200)	6.00	376.78	377.26	378.20	0.94	378.30	1.04	377.77	380.25	0.343869	7.66	0.78	2.47	4.34
Rio Mongrosso	23	Q(T=50)	3.90	376.78	377.17	378.20	1.03	378.30	1.13	377.59	379.53	0.340958	6.81	0.57	2.15	4.22
Rio Mongrosso	22	Q(T=200)	6.00	372.25	372.71	373.46	0.75	374.50	1.79	373.28	376.58	0.466171	8.71	0.69	2.19	4.97
Rio Mongrosso	22	Q(T=50)	3.90	372.25	372.61	373.46	0.85	374.50	1.89	373.09	375.80	0.490516	7.91	0.49	1.91	4.97
Rio Mongrosso	21	Q(T=200)	8.30	368.63	368.95	370.61	1.66	371.95	3.00	369.46	372.41	0.456988	8.25	1.01	3.69	5.04
Rio Mongrosso	21	Q(T=50)	5.50	368.63	368.88	370.61	1.73	371.95	3.07	369.29	371.51	0.456175	7.18	0.77	3.48	4.89
Rio Mongrosso	20	Q(T=200)	8.30	367.64	367.84	370.36	2.52	370.75	2.91	368.08	369.30	0.480094	5.35	1.55	11.78	4.70
Rio Mongrosso	20	Q(T=50)	5.50	367.64	367.82	370.36	2.54	370.75	2.93	367.99	368.76	0.384771	4.30	1.28	11.41	4.10

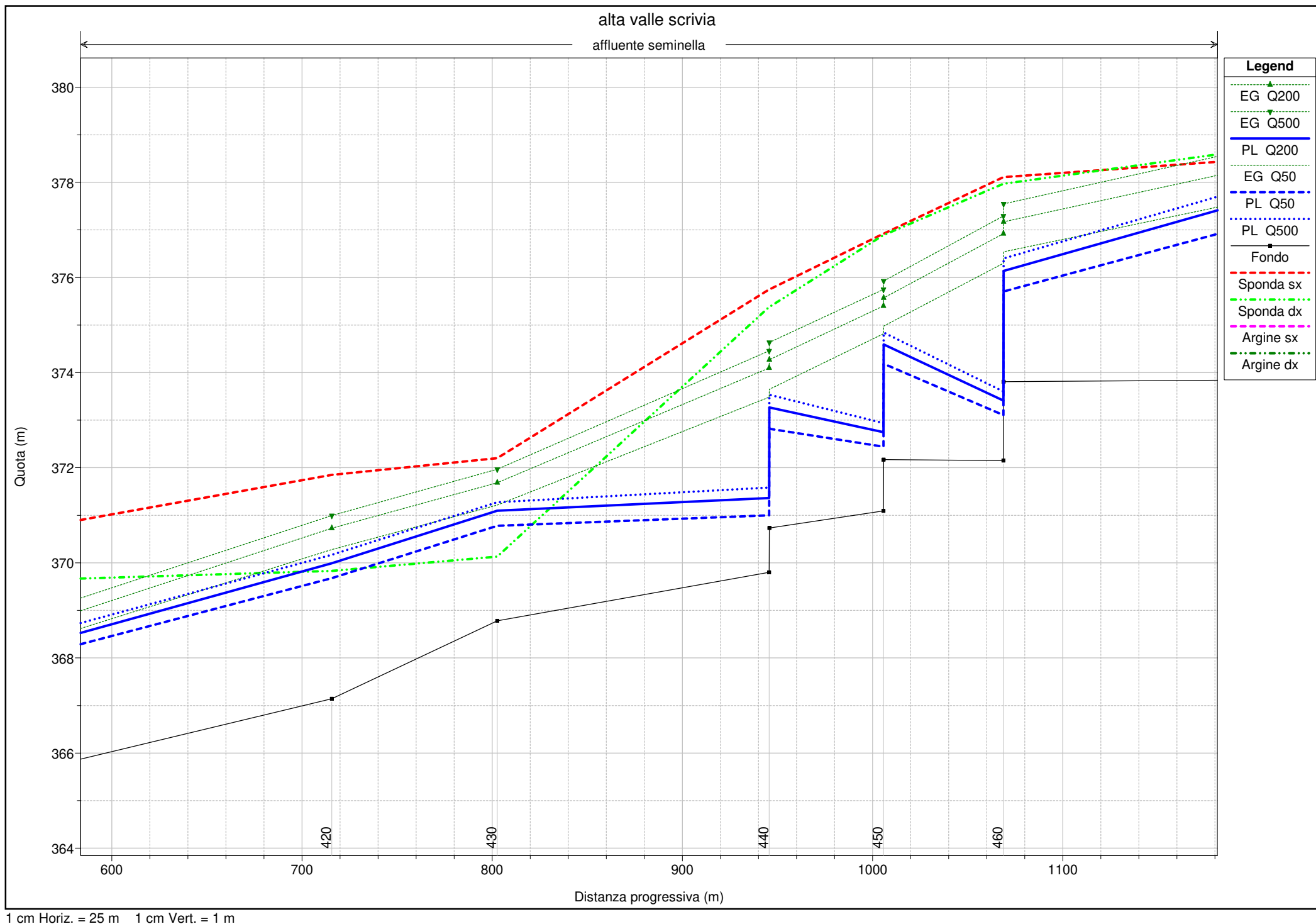
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	LOB Elev	L. Freeboard	ROB Elev	R. Freeboard	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Rio Mongrosso	19	Q(T=200)	8.30	365.15	367.06	370.36	3.30	370.75	3.69	365.54	367.07	0.000111	0.40	20.83	10.92	0.09
Rio Mongrosso	19	Q(T=50)	5.50	365.15	366.07	370.36	4.29	370.75	4.68	365.45	366.09	0.000458	0.55	10.04	10.91	0.18
Rio Mongrosso	18	Q(T=200)	8.30	365.04	366.97	367.70	0.73	367.70	0.73	365.92	367.06	0.002387	1.34	6.18	3.22	0.31
Rio Mongrosso	18	Q(T=50)	5.50	365.04	365.71	367.70	1.99	367.70	1.99	365.71	366.04	0.019853	2.56	2.14	3.21	1.00
Rio Mongrosso	17	Q(T=200)	8.30	363.40	367.01	367.70	0.69	367.70	0.69	364.28	367.04	0.000498	0.72	11.56	3.22	0.12
Rio Mongrosso	17	Q(T=50)	5.50	363.40	363.66	367.70	4.04	367.70	4.04	364.07	365.84	0.343710	6.53	0.84	3.19	4.06
Rio Mongrosso	16	Q(T=200)	8.30	363.38	367.01	366.82	-0.19	366.82	-0.19	364.26	367.04	0.000475	0.72	11.75	4.73	0.12
Rio Mongrosso	16	Q(T=50)	5.50	363.38	363.70	366.82	3.12	366.82	3.12	364.06	365.20	0.189914	5.42	1.01	3.16	3.06
Rio Mongrosso	15.5		Culvert													
Rio Mongrosso	15.2	Q(T=200)	8.30	351.24	352.12	361.05	8.93	361.05	8.93	352.12	352.56	0.020425	2.96	2.80	3.20	1.01
Rio Mongrosso	15.2	Q(T=50)	5.50	351.24	353.30	361.05	7.75	361.05	7.75	351.91	353.33	0.000876	0.84	6.57	3.21	0.19
Rio Mongrosso	15.1		Culvert													
Rio Mongrosso	15	Q(T=200)	8.85	346.00	347.51	349.28	1.77	349.19	1.68	346.92	347.68	0.005059	1.83	4.84	3.23	0.48
Rio Mongrosso	15	Q(T=50)	5.85	346.00	347.06	349.28	2.22	349.19	2.13	346.70	347.21	0.005795	1.72	3.41	3.22	0.53
Rio Mongrosso	14	Q(T=200)	8.85	345.90	347.50	348.18	0.68	348.19	0.69	346.79	347.64	0.003648	1.61	5.49	3.52	0.41
Rio Mongrosso	14	Q(T=50)	5.85	345.90	347.06	348.18	1.13	348.19	1.14	346.58	347.17	0.004021	1.49	3.92	3.47	0.45
Rio Mongrosso	13	Q(T=200)	8.85	345.79	347.34	348.18	0.84	348.12	0.78	346.90	347.61	0.009680	2.32	3.82	2.55	0.60
Rio Mongrosso	13	Q(T=50)	5.85	345.79	346.92	348.18	1.26	348.12	1.20	346.64	347.15	0.010113	2.13	2.75	2.50	0.65
Rio Mongrosso	12	Q(T=200)	8.85	345.60	346.91	348.00	1.09	348.08	1.17	346.91	347.54	0.029309	3.51	2.52	2.02	1.00
Rio Mongrosso	12	Q(T=50)	5.85	345.60	346.60	348.00	1.40	348.08	1.48	346.60	347.09	0.026786	3.08	1.90	1.97	1.00
Rio Mongrosso	11	Q(T=200)	8.85	344.49	346.74	345.85	-0.89	345.96	-0.78	345.82	346.89	0.004070	1.78	5.46	3.96	0.38
Rio Mongrosso	11	Q(T=50)	5.85	344.49	345.21	345.85	0.64	345.96	0.75	345.50	346.20	0.071906	4.40	1.33	1.86	1.66
Rio Mongrosso	10.5		Bridge													
Rio Mongrosso	10	Q(T=200)	8.85	344.03	345.59	345.28	-0.31	345.28	-0.31	345.59	346.08	0.020728	3.17	2.98	3.27	0.81
Rio Mongrosso	10	Q(T=50)	5.85	344.03	345.16	345.28	0.12	345.28	0.12	345.10	345.63	0.027127	3.05	1.92	1.70	0.92
Rio Mongrosso	9.5	Q(T=200)	8.85	343.72	345.07	344.91	-0.16	345.00	-0.07	345.27	345.74	0.033896	3.70	2.57	4.01	1.02
Rio Mongrosso	9.5	Q(T=50)	5.85	343.72	344.79	344.91	0.12	345.00	0.21	344.79	345.32	0.031128	3.22	1.82	1.70	0.99
Rio Mongrosso	9.4	Q(T=200)	8.85	343.11	345.42	344.91	-0.51	344.46	-0.96	344.56	345.58	0.005222	1.88	5.26	4.46	0.40
Rio Mongrosso	9.4	Q(T=50)	5.85	343.11	343.76	344.91	1.15	344.46	0.70	344.18	345.19	0.118002	5.30	1.10	1.70	2.10
Rio Mongrosso	9	Q(T=200)	8.85	342.70	345.40	343.96	-1.44	343.96	-1.44	344.25	345.48	0.001062	1.37	7.26	4.74	0.27
Rio Mongrosso	9	Q(T=50)	5.85	342.70	343.87	343.96	0.09	343.96	0.09	343.79	344.33	0.014725	3.00	1.95	1.67	0.89
Rio Mongrosso	8.5		Bridge													
Rio Mongrosso	8	Q(T=200)	8.85	341.45	343.48	342.83	-0.65	342.77	-0.71	343.04	343.71	0.004483	2.24	4.38	3.97	0.50
Rio Mongrosso	8	Q(T=50)	5.85	341.45	342.78	342.83	0.05	342.77	-0.01	342.55	343.15	0.011147	2.69	2.18	1.94	0.75

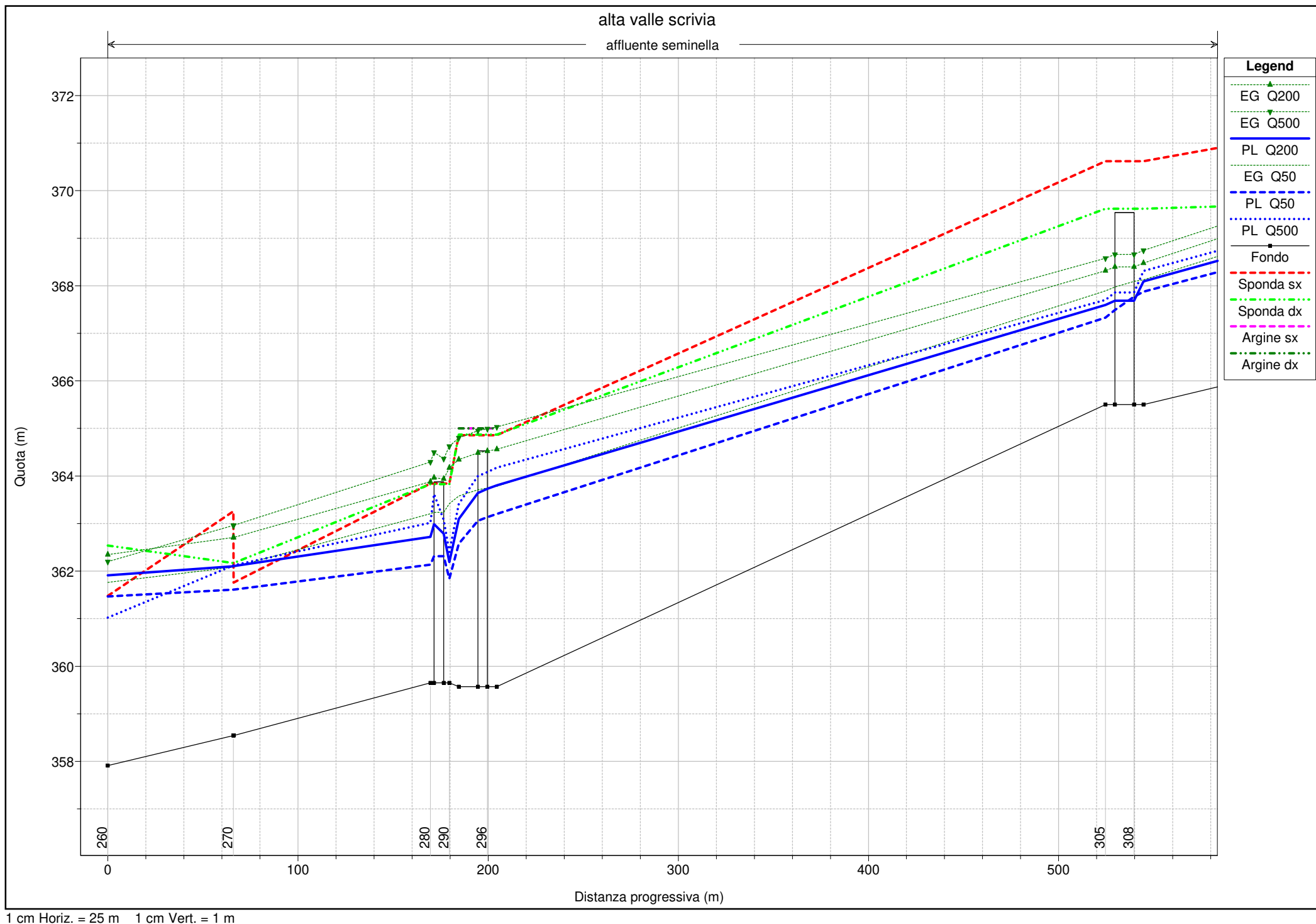
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	LOB Elev	L. Freeboard	ROB Elev	R. Freeboard	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Rio Mongrosso	7	Q(T=200)	8.85	341.21	343.17	342.82	-0.35	342.49	-0.68	342.73	343.50	0.006412	2.61	3.61	2.74	0.61
Rio Mongrosso	7	Q(T=50)	5.85	341.21	342.54	342.82	0.28	342.49	-0.05	342.35	342.92	0.011325	2.74	2.14	2.02	0.79
Rio Mongrosso	6.5	Bridge														
Rio Mongrosso	6	Q(T=200)	8.85	340.60	342.43	342.73	0.30	342.86	0.43	342.00	342.83	0.017842	2.81	3.15	1.73	0.66
Rio Mongrosso	6	Q(T=50)	5.85	340.60	342.12	342.73	0.61	342.86	0.74	341.66	342.38	0.012250	2.23	2.62	1.73	0.58
Rio Mongrosso	5	Q(T=200)	11.40	340.40	342.01	341.51	-0.50	341.51	-0.50	342.01	342.44	0.017063	3.09	4.10	4.56	0.78
Rio Mongrosso	5	Q(T=50)	7.50	340.40	341.79	341.51	-0.28	341.51	-0.28	341.79	342.12	0.015901	2.70	3.10	4.31	0.73
Rio Mongrosso	4	Q(T=200)	11.40	340.44	341.22	343.23	2.01	341.53	0.31	341.56	342.31	0.058632	4.64	2.46	4.27	1.95
Rio Mongrosso	4	Q(T=50)	7.50	340.44	341.04	343.23	2.19	341.53	0.49	341.33	342.00	0.070703	4.34	1.73	3.88	2.08
Rio Mongrosso	3	Q(T=200)	11.40	339.50	340.45	342.58	2.13	342.40	1.95	340.79	341.54	0.051519	4.63	2.46	3.46	1.75
Rio Mongrosso	3	Q(T=50)	7.50	339.50	340.24	342.58	2.34	342.40	2.16	340.52	341.14	0.054051	4.20	1.79	3.10	1.77
Rio Mongrosso	2	Q(T=200)	11.40	338.76	339.77	341.87	2.10	340.24	0.47	340.18	341.03	0.059344	4.97	2.29	3.19	1.87
Rio Mongrosso	2	Q(T=50)	7.50	338.76	339.56	341.87	2.31	340.24	0.68	339.90	340.61	0.061962	4.53	1.66	2.80	1.88
Rio Mongrosso	1	Q(T=200)	11.40	338.35	339.41	341.69	2.28	339.78	0.37	339.58	340.00	0.023876	3.41	3.34	4.57	1.27
Rio Mongrosso	1	Q(T=50)	7.50	338.35	339.24	341.69	2.45	339.78	0.54	339.30	339.66	0.019459	2.85	2.63	4.07	1.13
Rio Mongrosso	0	Q(T=200)	11.40	337.80	338.63	339.22	0.59	340.21	1.58	338.93	339.57	0.043864	4.31	2.64	3.84	1.66
Rio Mongrosso	0	Q(T=50)	7.50	337.80	338.43	339.22	0.79	340.21	1.78	338.67	339.21	0.047934	3.92	1.91	3.54	1.70

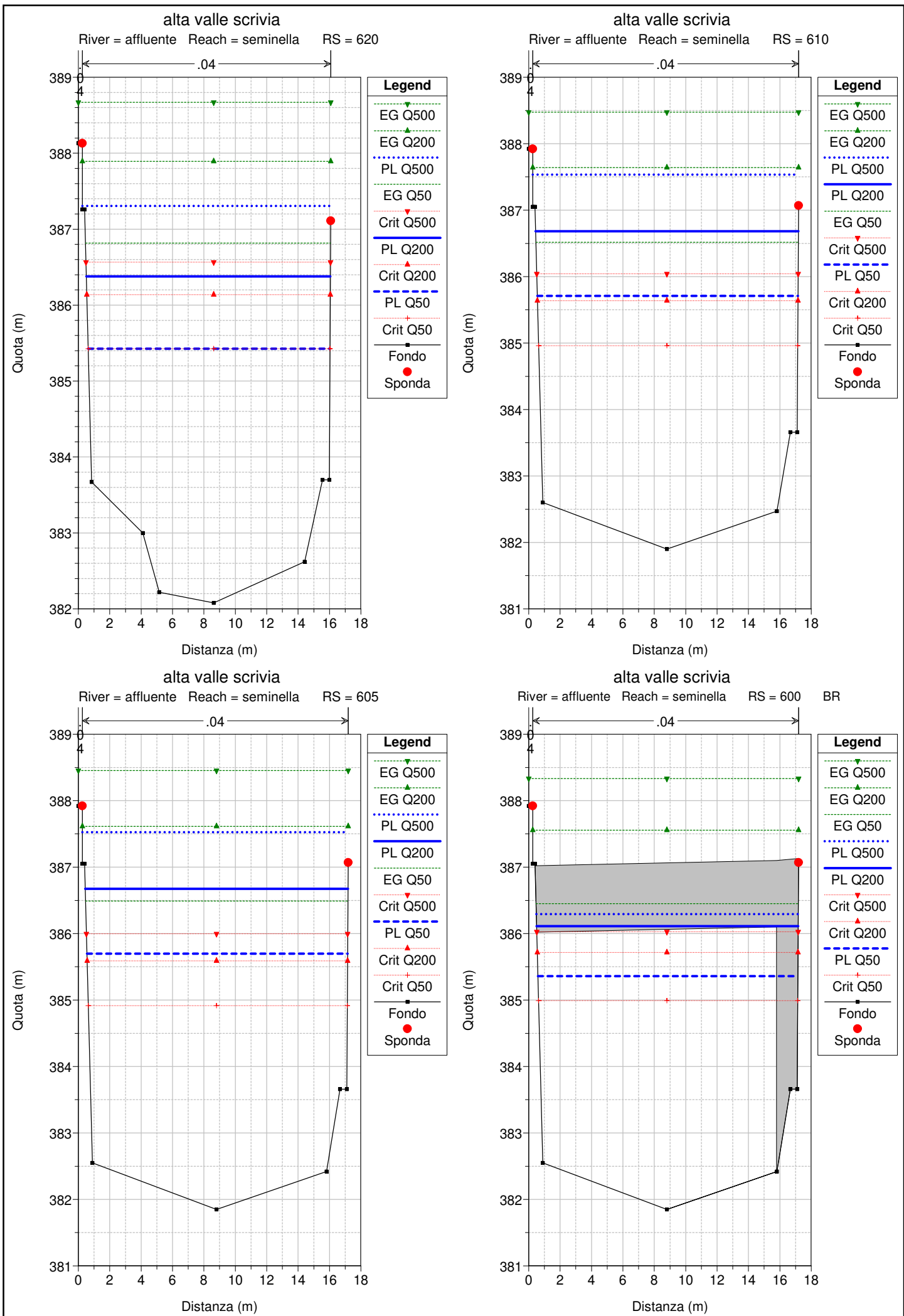
Torrente Seminella

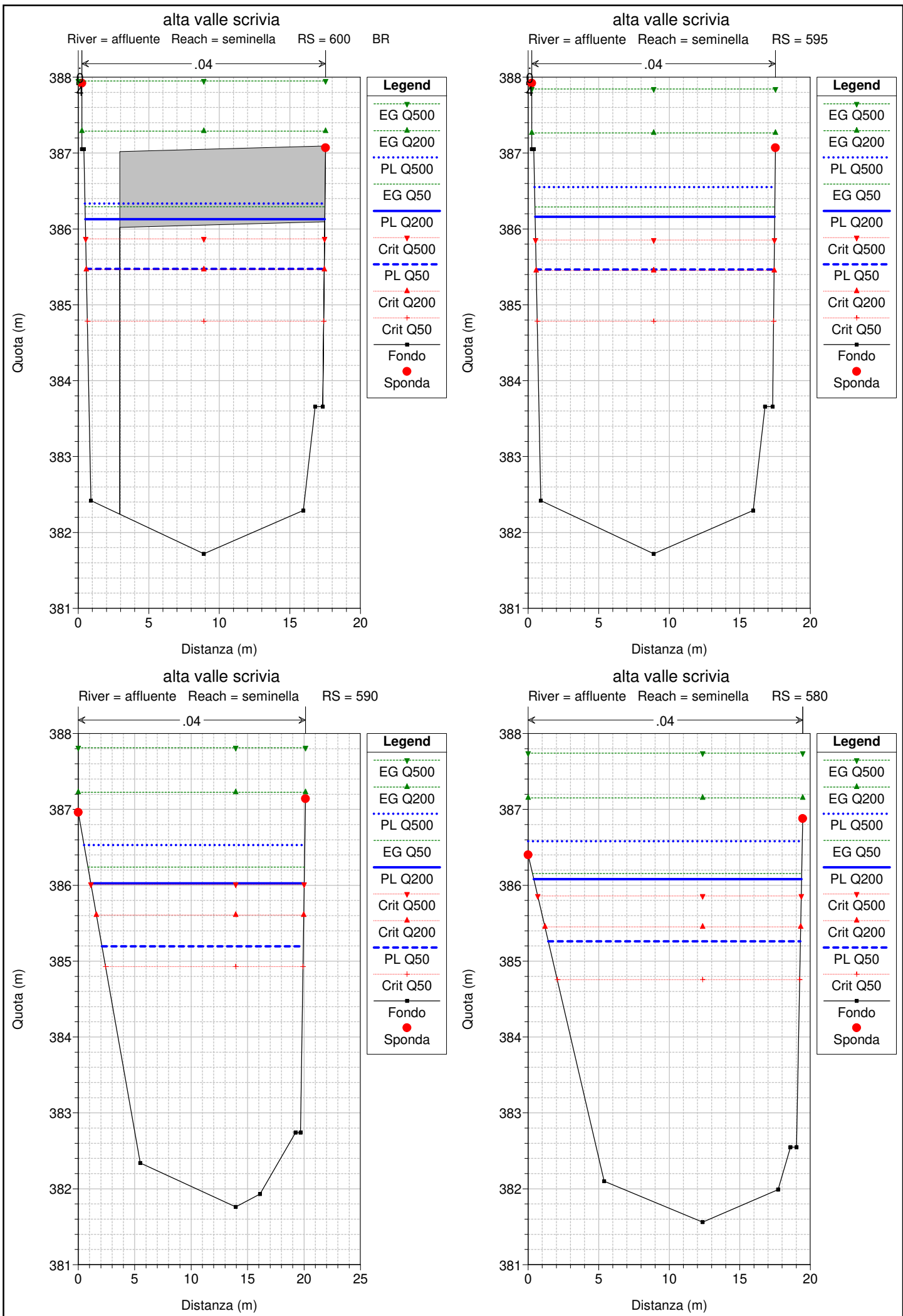
- Profili di corrente
- Sezioni idrauliche
- Tabelle dei risultati

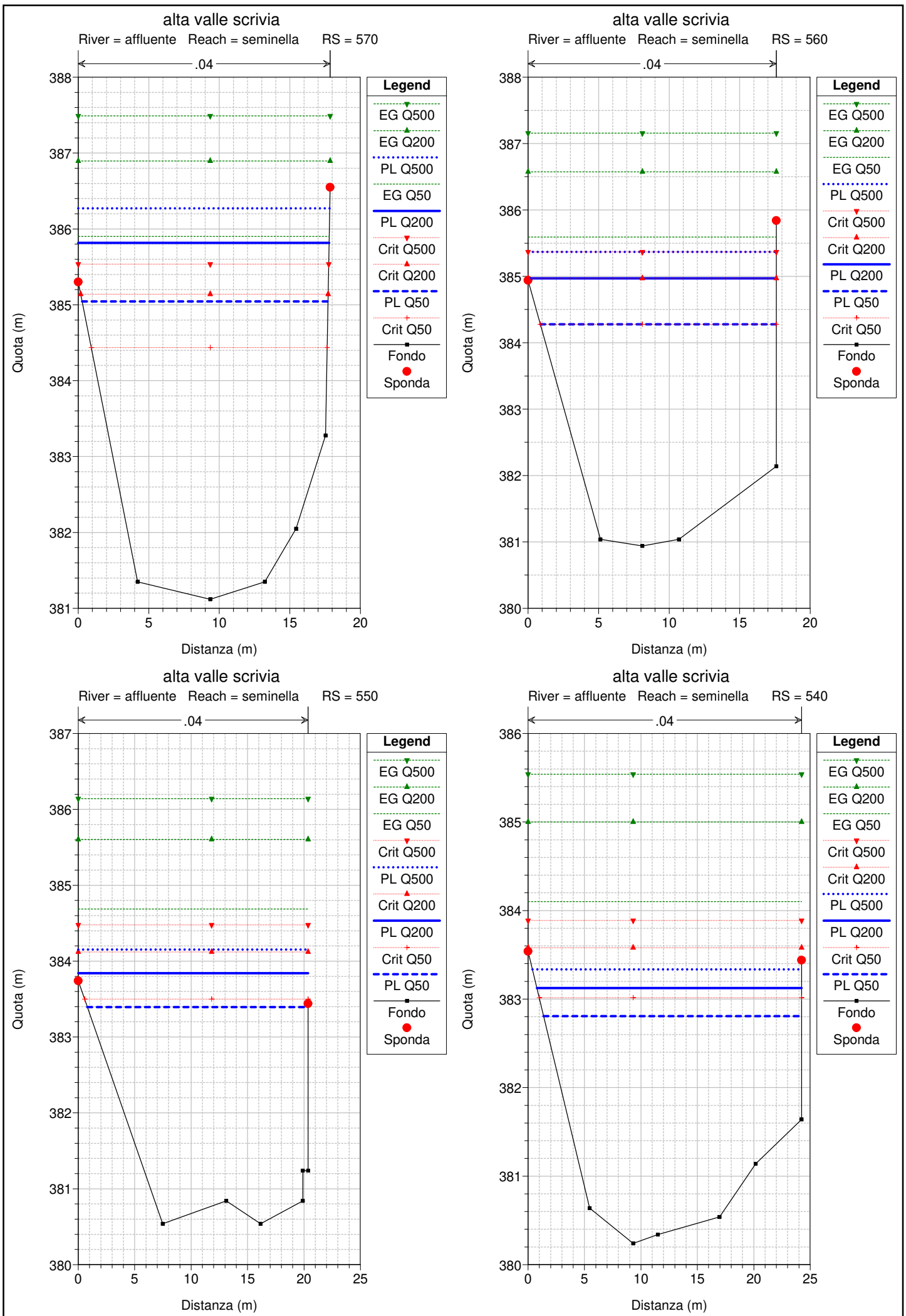


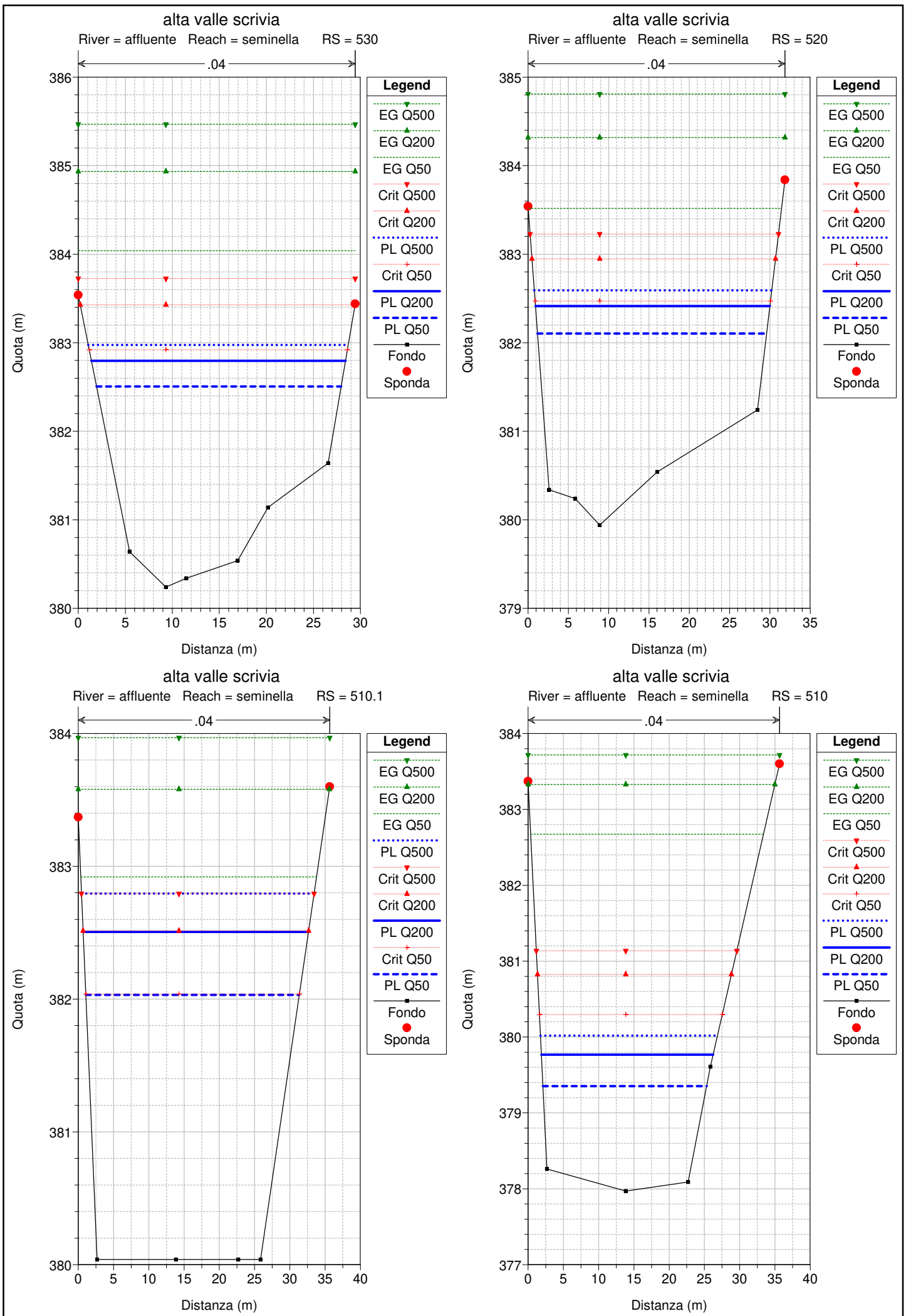


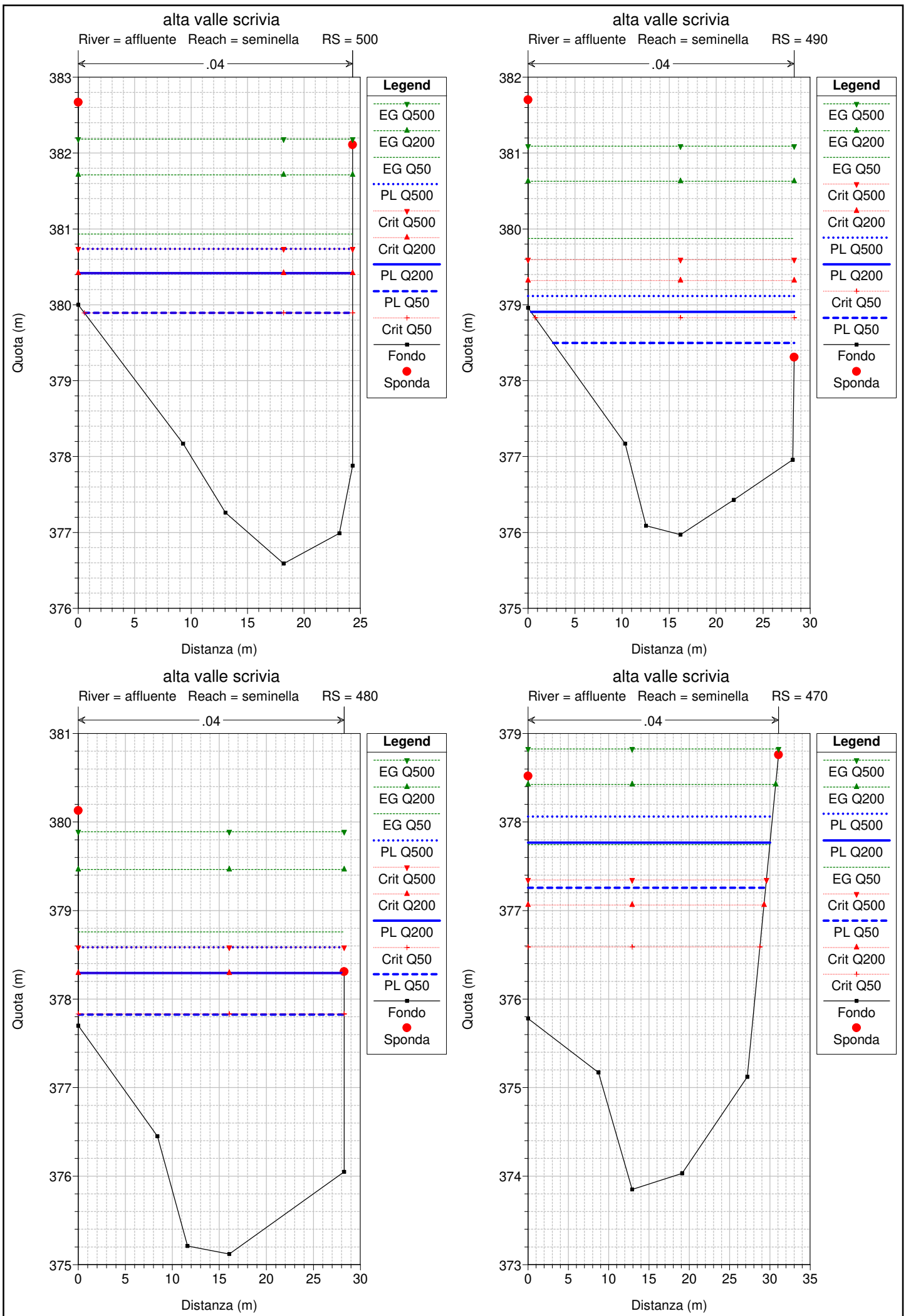


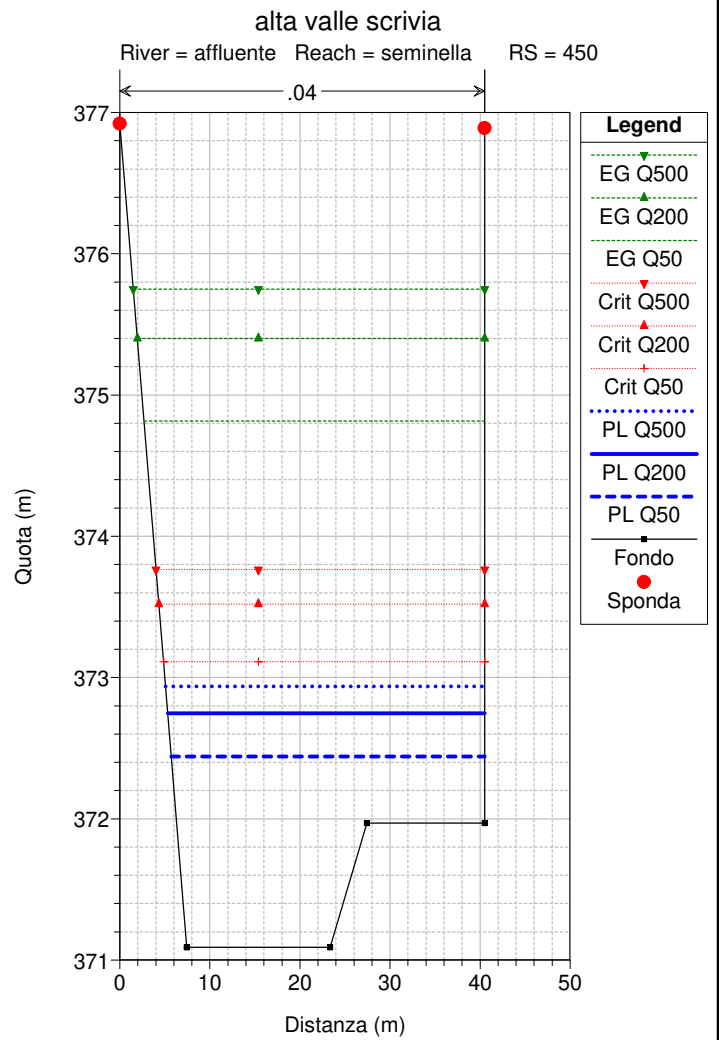
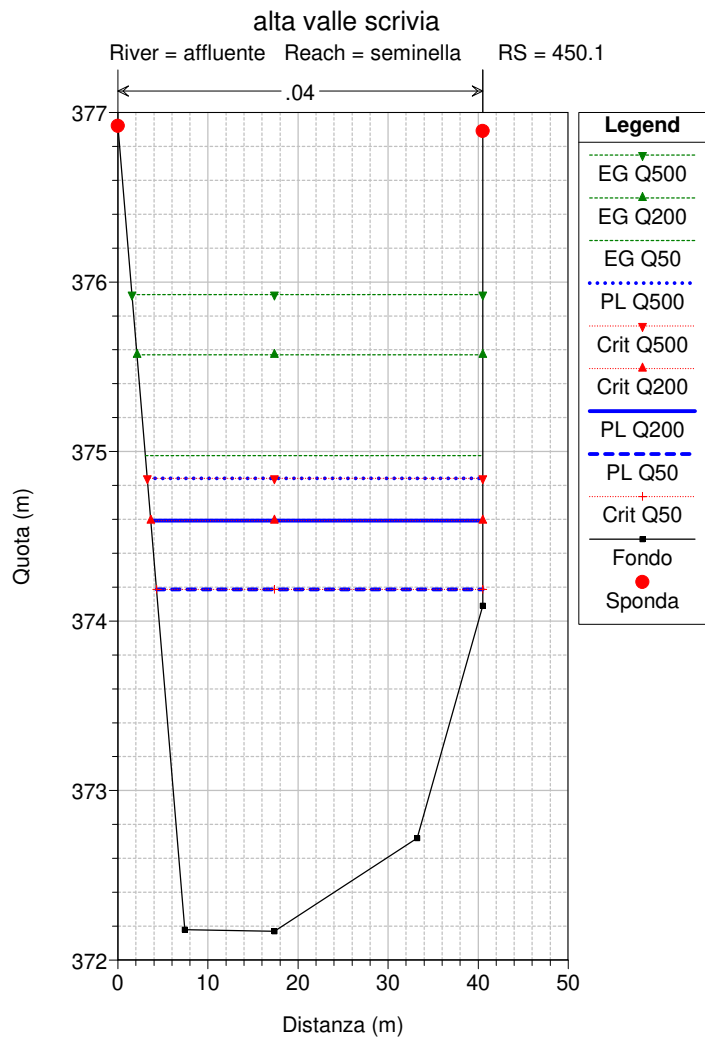
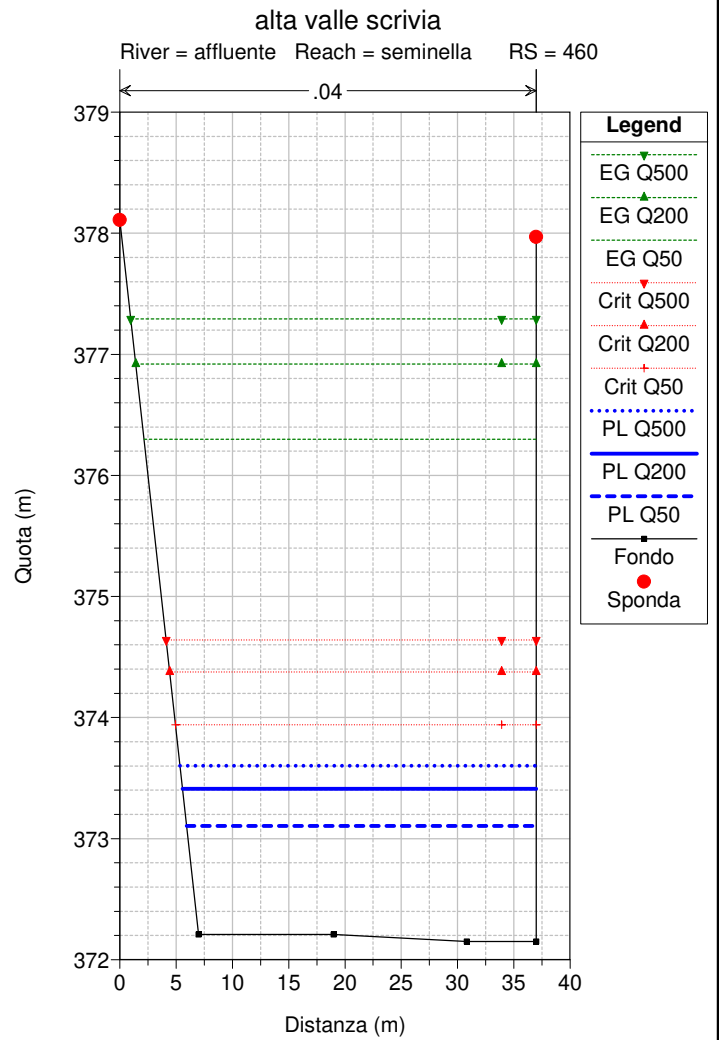
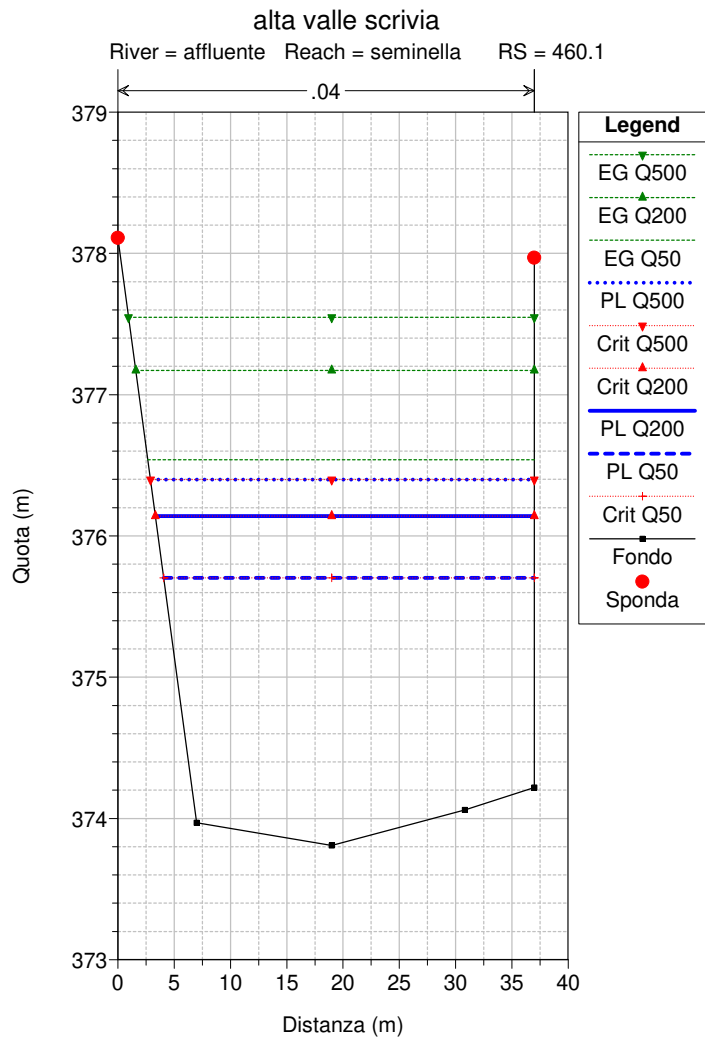


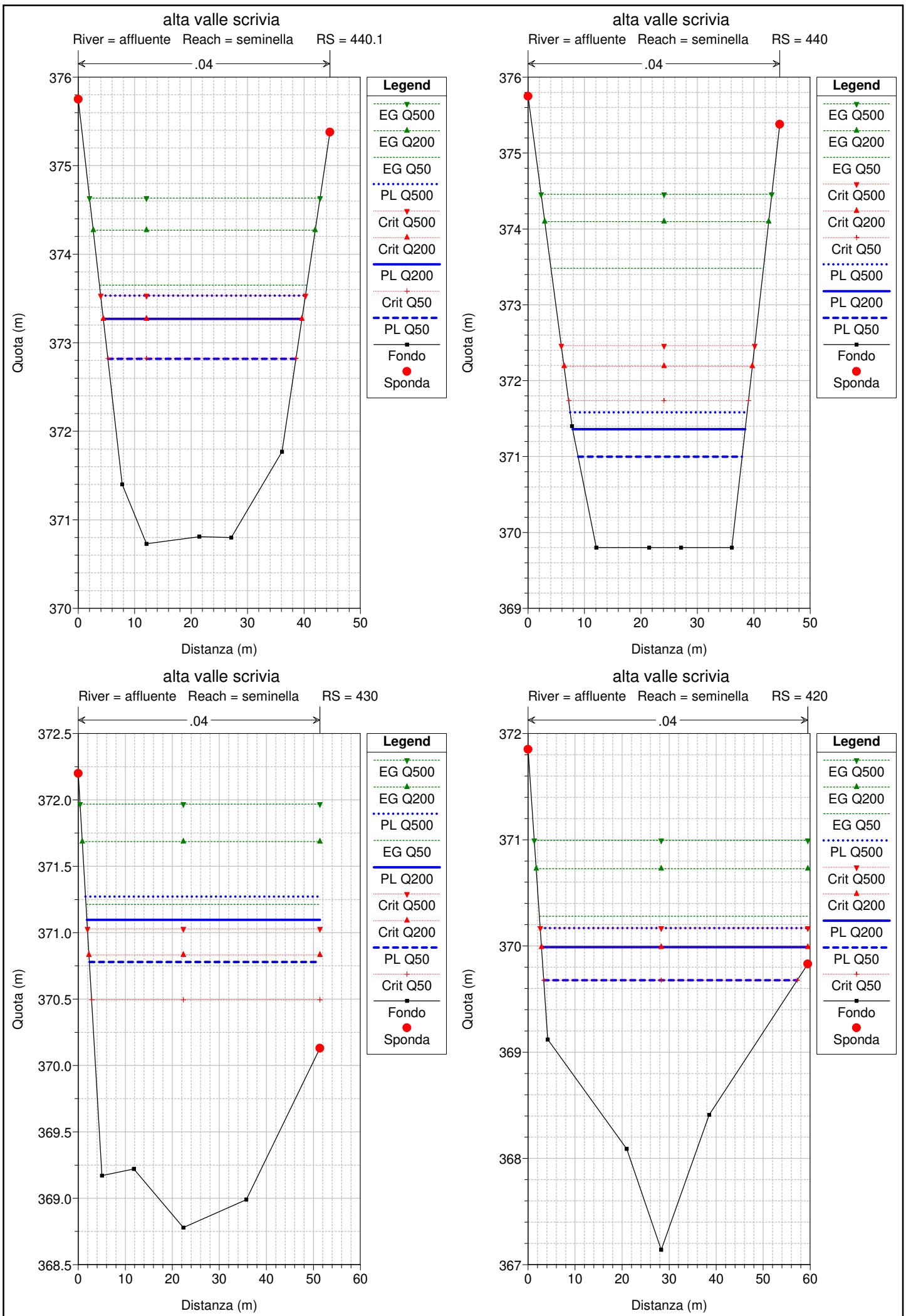


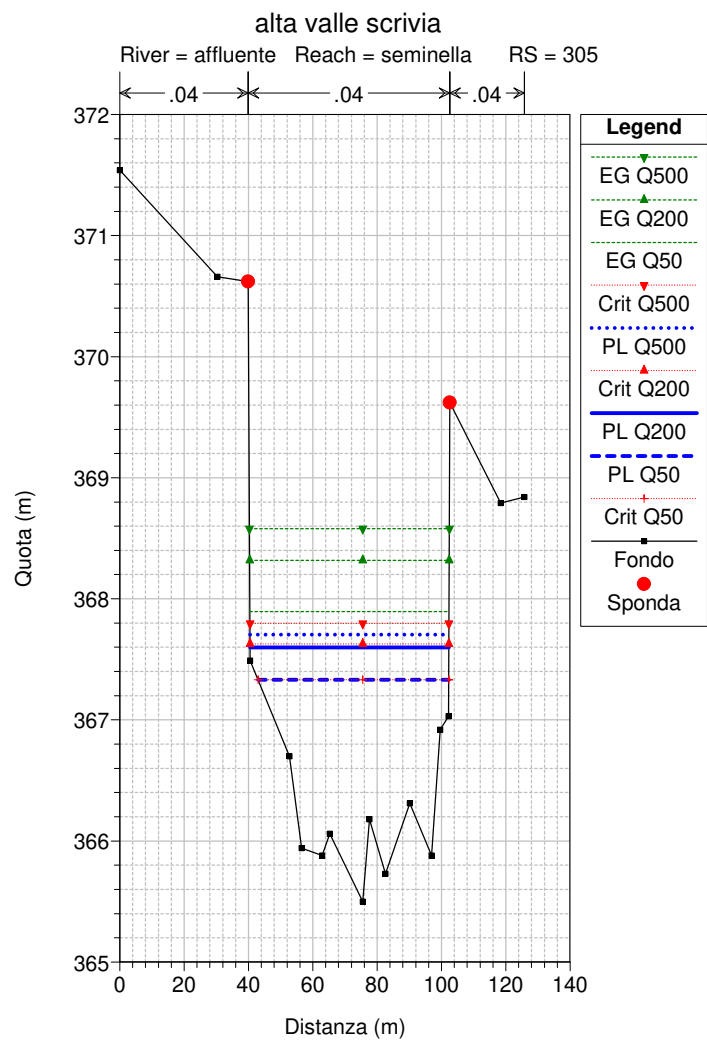
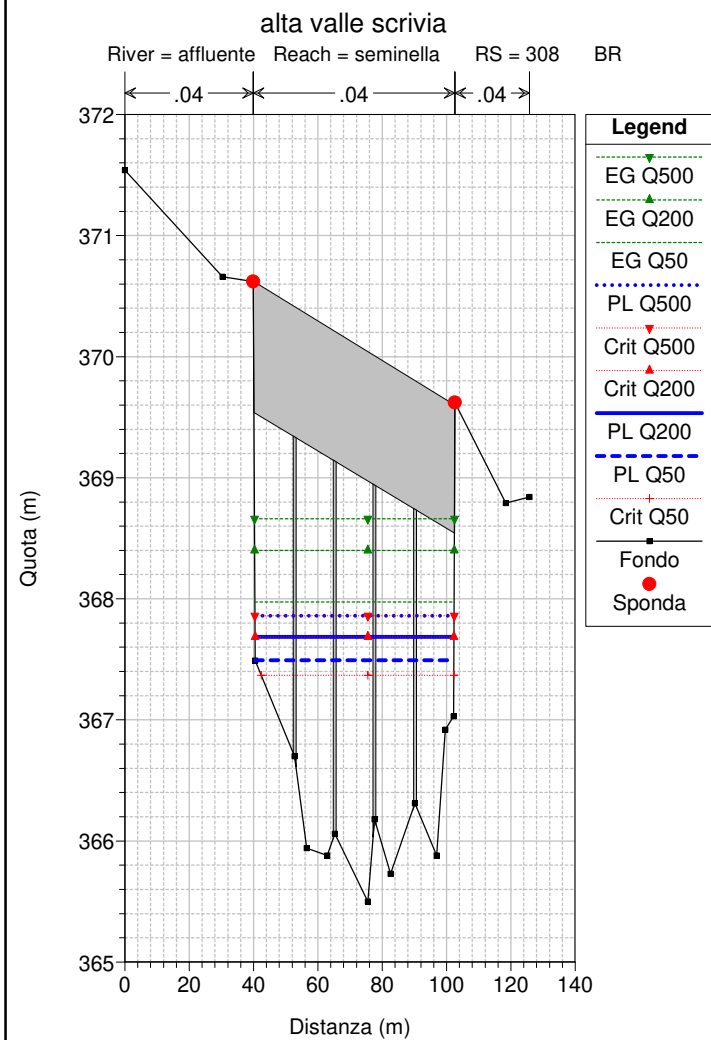
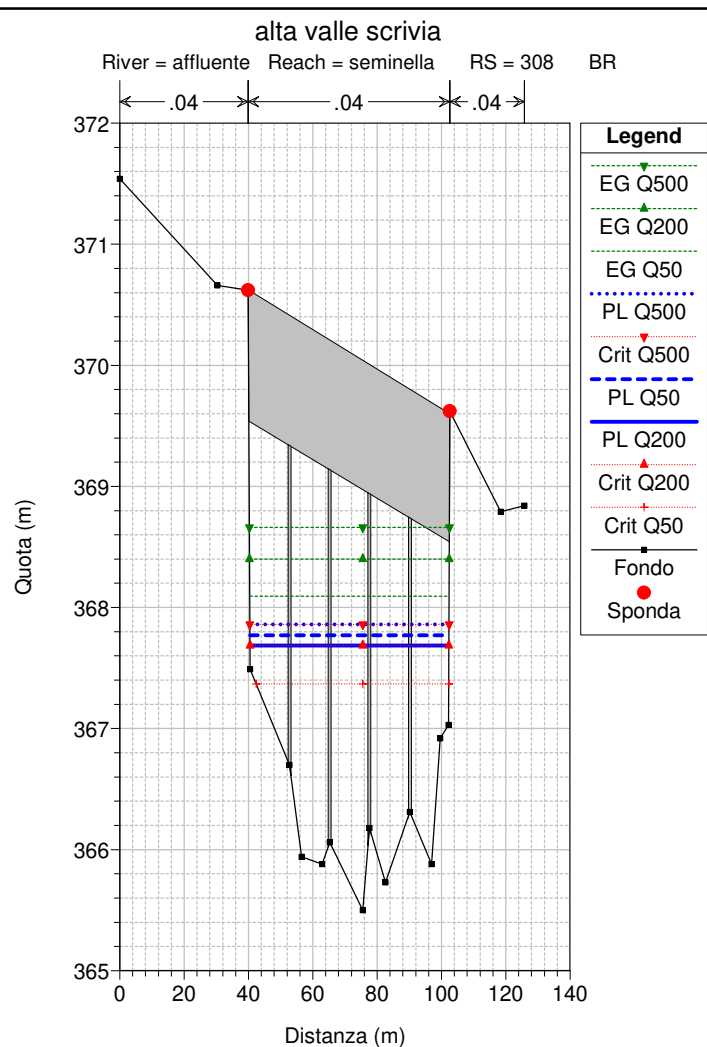
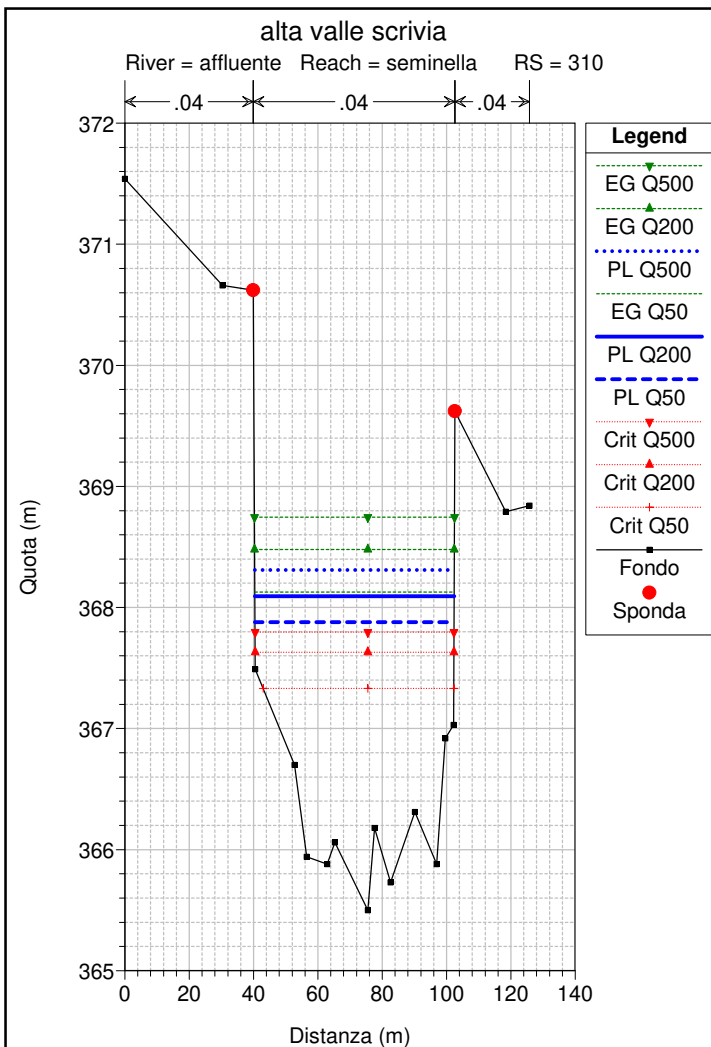


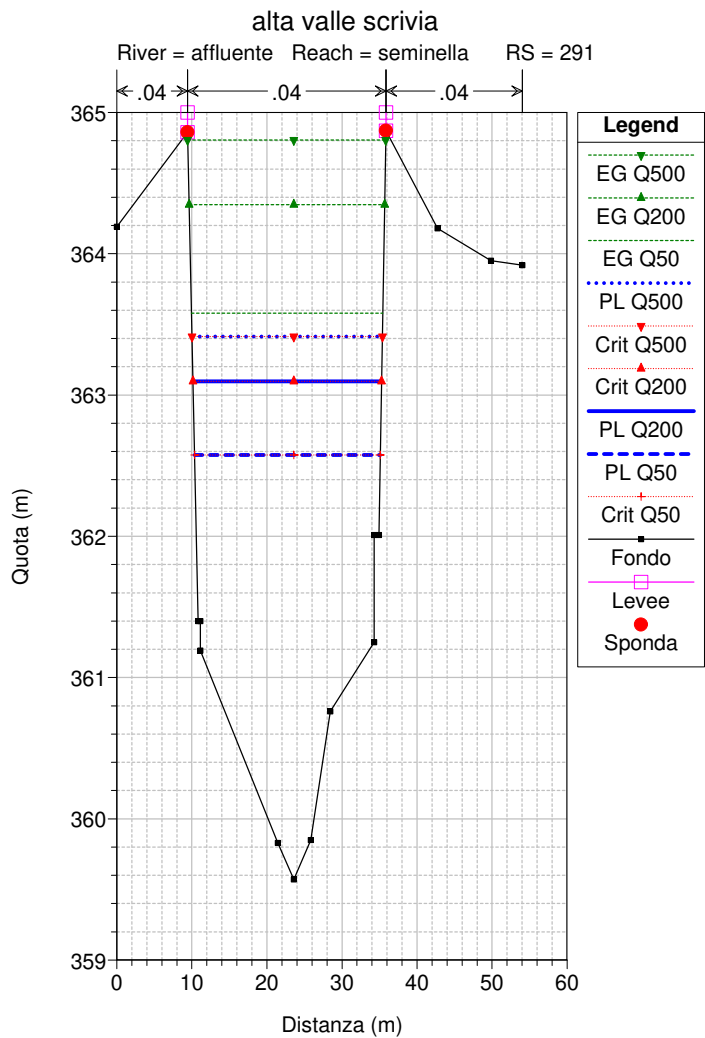
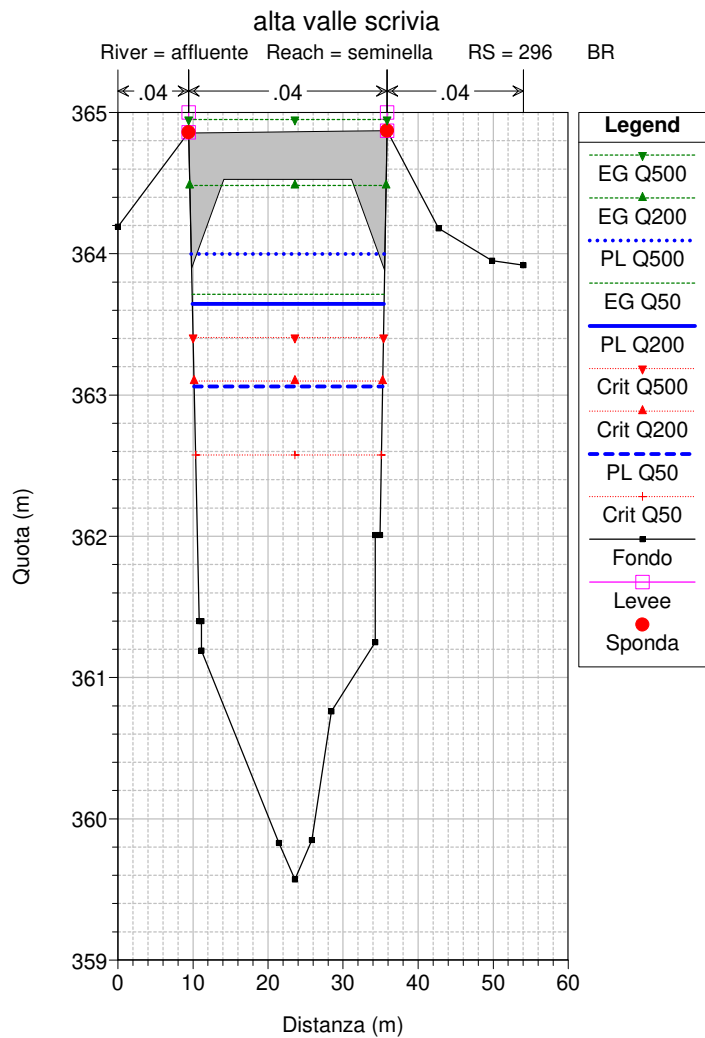
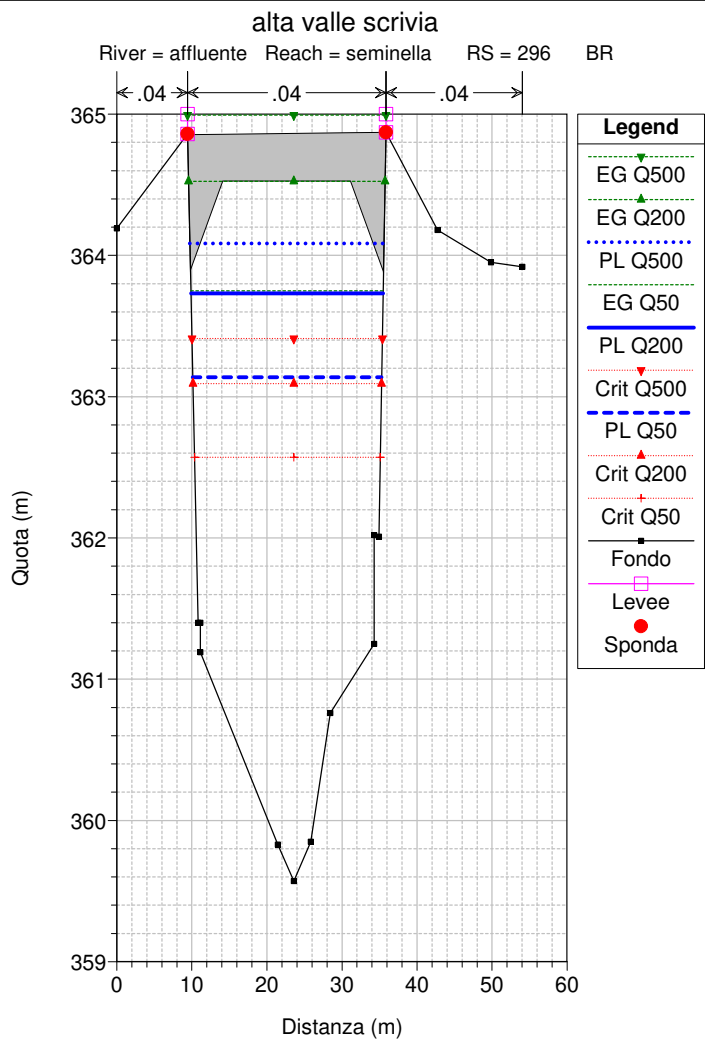
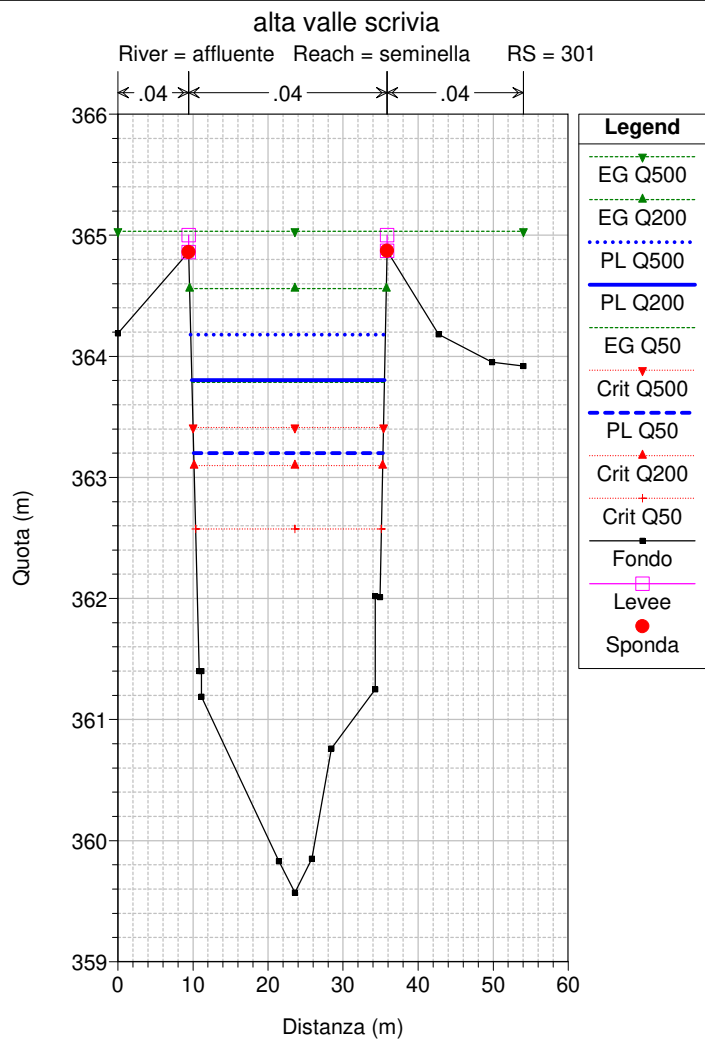


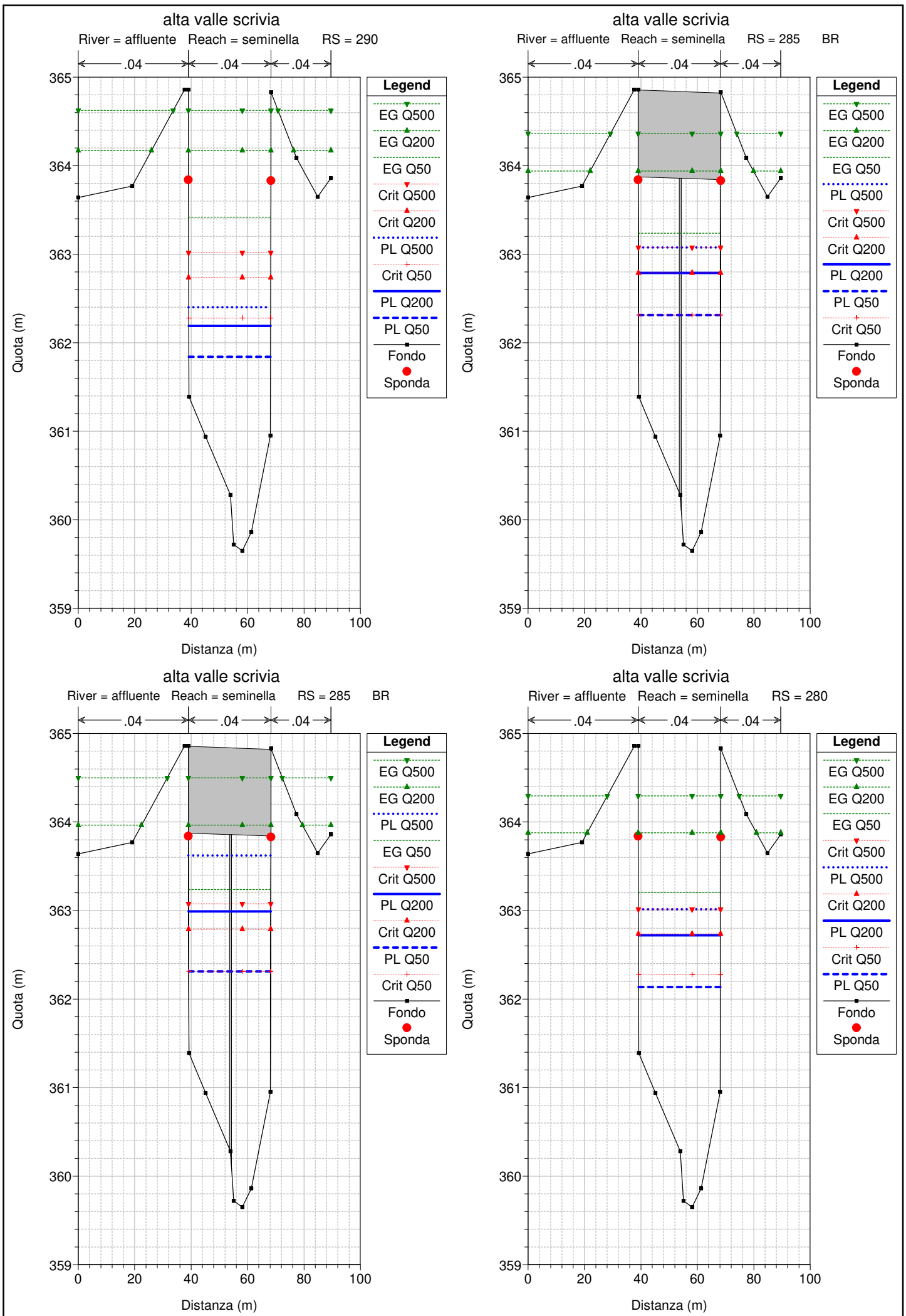


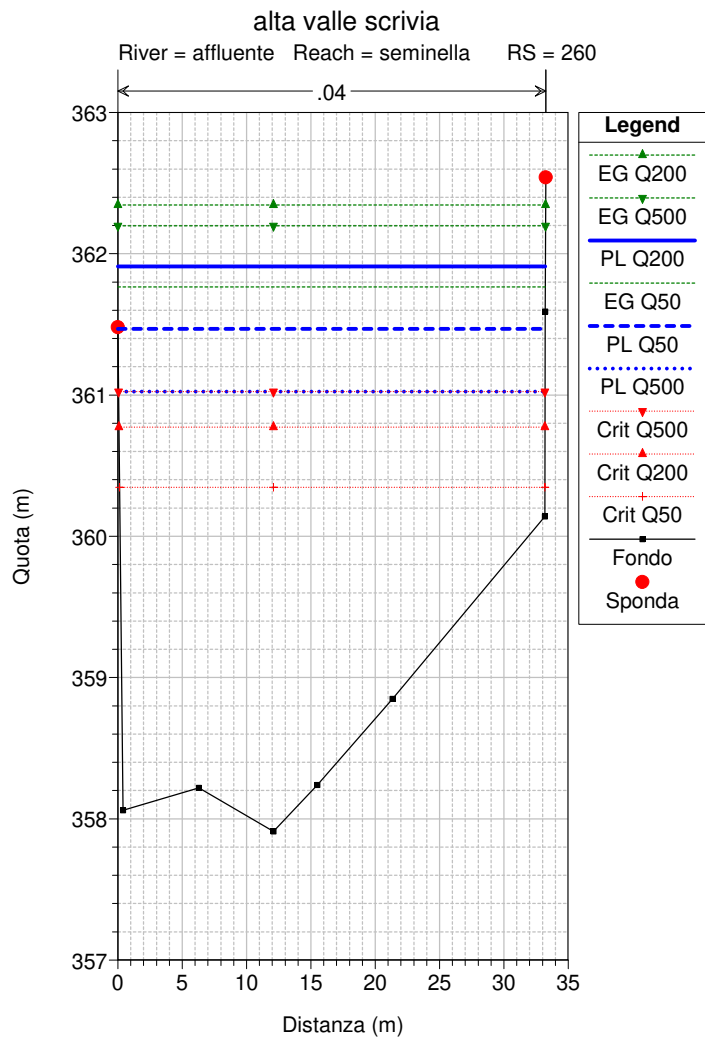
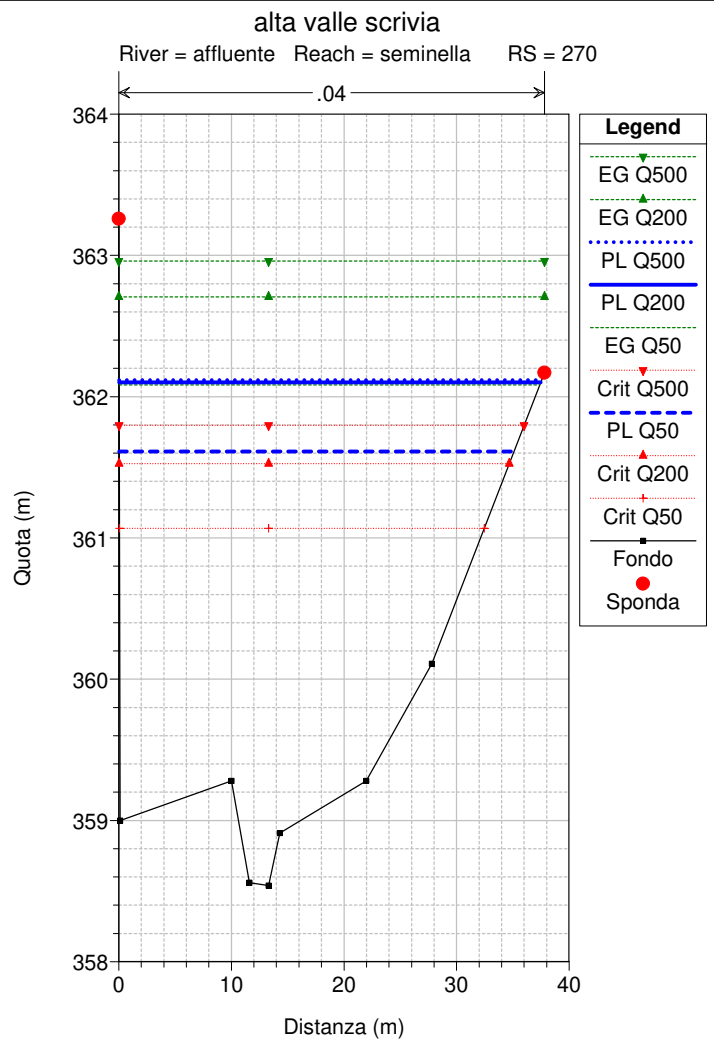
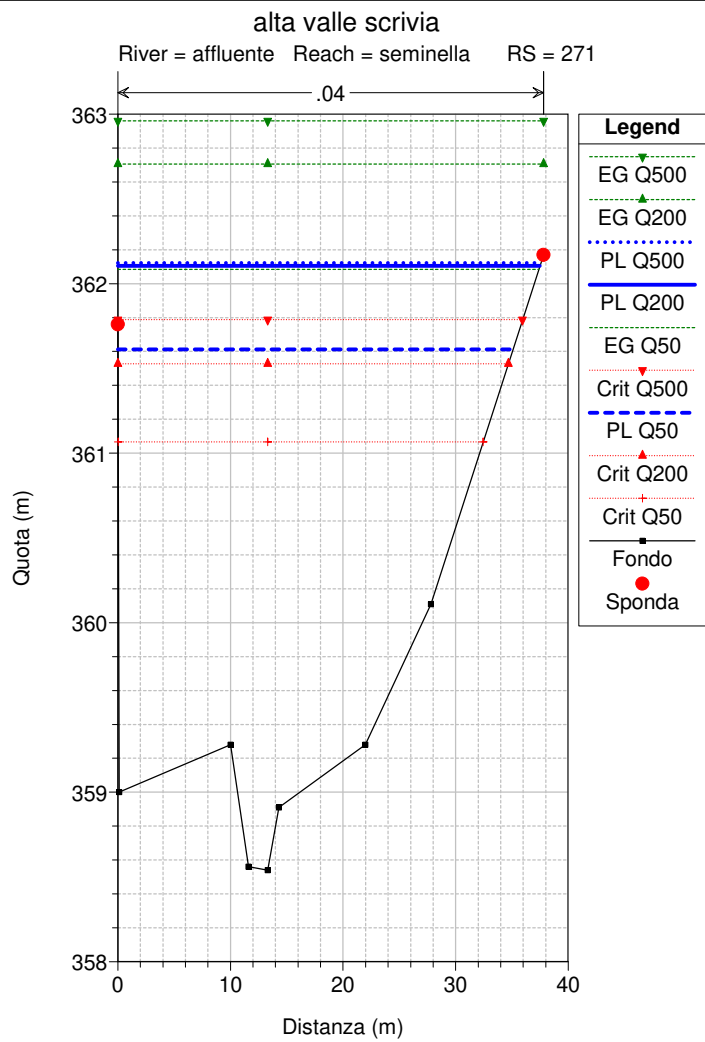












Reach	River Sta		Profile	Q Total	Min Ch El	W.S. Elev	LOB Elev	L. Freeboard	ROB Elev	R. Freeboard	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
seminella	620		Q50	222.00	382.08	385.42	388.13	2.70	387.11	1.69	385.42	386.82	0.015365	5.22	42.51	15.41	1.00
seminella	620		Q200	312.00	382.08	386.38	388.13	1.75	387.11	0.73	386.14	387.89	0.012738	5.45	57.27	15.55	0.91
seminella	620		Q500	371.00	382.08	387.31	388.13	0.82	387.11	-0.20	386.56	388.67	0.009571	5.17	71.76	15.83	0.78
seminella	610		Q50	222.00	381.90	385.71	387.92	2.21	387.07	1.36	384.96	386.52	0.007344	3.98	55.80	16.61	0.69
seminella	610		Q200	312.00	381.90	386.68	387.92	1.24	387.07	0.39	385.64	387.64	0.006930	4.33	72.05	16.74	0.67
seminella	610		Q500	371.00	381.90	387.53	387.92	0.39	387.07	-0.46	386.04	388.47	0.005906	4.29	86.40	16.94	0.61
seminella	605		Q50	222.00	381.85	385.70	387.92	2.22	387.07	1.37	384.92	386.49	0.007108	3.93	56.42	16.61	0.68
seminella	605		Q200	312.00	381.85	386.67	387.92	1.25	387.07	0.40	385.59	387.61	0.006760	4.29	72.67	16.74	0.66
seminella	605		Q500	371.00	381.85	387.53	387.92	0.39	387.07	-0.46	386.00	388.45	0.005783	4.26	87.05	16.94	0.60
seminella	600		Bridge														
seminella	595		Q50	222.00	381.72	385.47	387.92	2.45	387.07	1.60	384.78	386.29	0.007628	4.02	55.25	16.87	0.71
seminella	595		Q200	312.00	381.72	386.16	387.92	1.76	387.07	0.91	385.45	387.27	0.008600	4.66	66.99	16.98	0.75
seminella	595		Q500	371.00	381.72	386.55	387.92	1.37	387.07	0.52	385.85	387.84	0.009256	5.04	73.66	17.05	0.77
seminella	590		Q50	222.00	381.76	385.19	386.96	1.77	387.14	1.95	384.93	386.24	0.010751	4.53	49.01	17.83	0.87
seminella	590		Q200	312.00	381.76	386.03	386.96	0.93	387.14	1.11	385.61	387.23	0.009769	4.85	64.28	18.91	0.84
seminella	590		Q500	371.00	381.76	386.53	386.96	0.43	387.14	0.61	386.01	387.81	0.009282	5.01	74.00	19.56	0.82
seminella	580		Q50	222.00	381.56	385.26	386.40	1.14	386.88	1.62	384.76	386.16	0.008490	4.19	53.01	17.87	0.78
seminella	580		Q200	312.00	381.56	386.08	386.40	0.32	386.88	0.80	385.45	387.15	0.008252	4.58	68.10	18.98	0.77
seminella	580		Q500	371.00	381.56	386.58	386.40	-0.18	386.88	0.30	385.86	387.74	0.008019	4.77	77.71	19.43	0.76
seminella	570		Q50	222.00	381.12	385.04	385.30	0.26	386.55	1.51	384.44	385.90	0.007581	4.10	54.15	17.44	0.74
seminella	570		Q200	312.00	381.12	385.82	385.30	-0.52	386.55	0.73	385.14	386.90	0.007825	4.60	67.83	17.79	0.75
seminella	570		Q500	371.00	381.12	386.27	385.30	-0.97	386.55	0.28	385.54	387.49	0.008010	4.89	75.93	17.83	0.76
seminella	560	SEM-19	Q50	222.00	380.94	384.28	384.94	0.66	385.84	1.56	384.28	385.59	0.014564	5.08	43.74	16.73	1.00
seminella	560	SEM-19	Q200	312.00	380.94	384.97	384.94	-0.03	385.84	0.87	384.97	386.57	0.014477	5.61	55.64	17.60	1.01
seminella	560	SEM-19	Q500	371.00	380.94	385.37	384.94	-0.43	385.84	0.47	385.37	387.16	0.014469	5.92	62.64	17.60	1.00
seminella	550	SEM-18	Q50	222.00	380.54	383.40	383.74	0.35	383.44	0.04	383.50	384.69	0.016736	5.03	44.11	19.55	1.07
seminella	550	SEM-18	Q200	312.00	380.54	383.84	383.74	-0.10	383.44	-0.40	384.12	385.60	0.019382	5.88	53.05	20.36	1.16
seminella	550	SEM-18	Q500	371.00	380.54	384.15	383.74	-0.41	383.44	-0.71	384.48	386.14	0.019456	6.25	59.40	20.36	1.17
seminella	540	SEM-17	Q50	222.00	380.24	382.81	383.54	0.73	383.44	0.63	383.01	384.10	0.018741	5.04	44.07	22.86	1.16
seminella	540	SEM-17	Q200	312.00	380.24	383.12	383.54	0.42	383.44	0.32	383.58	385.00	0.023346	6.07	51.41	23.46	1.31
seminella	540	SEM-17	Q500	371.00	380.24	383.34	383.54	0.20	383.44	0.10	383.89	385.54	0.025073	6.58	56.40	23.86	1.37
seminella	530	SEM-17	Q50	222.00	380.24	382.51	383.54	1.03	383.44	0.93	382.92	384.04	0.027816	5.49	40.47	26.01	1.40
seminella	530	SEM-17	Q200	312.00	380.24	382.80	383.54	0.74	383.44	0.64	383.43	384.93	0.032517	6.48	48.18	27.02	1.55
seminella	530	SEM-17	Q500	371.00	380.24	382.98	383.54	0.56	383.44	0.46	383.72	385.47	0.034483	6.99	53.06	27.64	1.61
seminella	520	SEM-16	Q50	222.00	379.94	382.10	383.54	1.44	383.84	1.74	382.47	383.52	0.027670	5.26	42.17	28.43	1.38
seminella	520	SEM-16	Q200	312.00	379.94	382.41	383.54	1.13	383.84	1.43	382.95	384.32	0.030079	6.11	51.06	29.08	1.47
seminella	520	SEM-16	Q500	371.00	379.94	382.59	383.54	0.95	383.84	1.25	383.23	384.81	0.031511	6.60	56.25	29.46	1.52
seminella	510.1	SEM-15	Q50	222.00	380.04	382.03	383.37	1.34	383.60	1.57	382.04	382.92	0.013893	4.17	53.19	30.25	1.01
seminella	510.1	SEM-15	Q200	312.00	380.04	382.51	383.37	0.86	383.60	1.09	382.51	383.58	0.013160	4.59	67.96	31.94	1.01

Reach	River Sta		Profile	Q Total	Min Ch El	W.S. Elev	LOB Elev	L. Freeboard	ROB Elev	R. Freeboard	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
seminella	510.1	SEM-15	Q500	371.00	380.04	382.80	383.37	0.57	383.60	0.80	382.80	383.97	0.012682	4.80	77.34	32.97	1.00
seminella	510	SEM-15	Q50	222.00	377.97	379.35	383.37	4.02	383.60	4.25	380.30	382.67	0.087598	8.07	27.52	23.21	2.37
seminella	510	SEM-15	Q200	312.00	377.97	379.77	383.37	3.60	383.60	3.83	380.83	383.33	0.067733	8.36	37.33	24.35	2.16
seminella	510	SEM-15	Q500	371.00	377.97	380.02	383.37	3.35	383.60	3.58	381.14	383.72	0.060066	8.52	43.57	25.10	2.06
seminella	500	SEM-14	Q50	222.00	376.59	379.89	382.67	2.78	382.11	2.22	379.89	380.93	0.014214	4.51	49.20	23.76	1.00
seminella	500	SEM-14	Q200	312.00	376.59	380.42	382.67	2.25	382.11	1.69	380.42	381.71	0.014050	5.04	61.90	24.30	1.01
seminella	500	SEM-14	Q500	371.00	376.59	380.74	382.67	1.93	382.11	1.37	380.74	382.18	0.013801	5.32	69.68	24.30	1.00
seminella	490	SEM-13	Q50	222.00	375.97	378.50	381.70	3.20	378.31	-0.19	378.83	379.87	0.023895	5.19	42.75	25.64	1.28
seminella	490	SEM-13	Q200	312.00	375.97	378.91	381.70	2.79	378.31	-0.60	379.32	380.63	0.025136	5.81	53.68	27.99	1.34
seminella	490	SEM-13	Q500	371.00	375.97	379.12	381.70	2.58	378.31	-0.81	379.59	381.09	0.025785	6.22	59.64	28.30	1.37
seminella	480	SEM-12	Q50	222.00	375.12	377.83	380.13	2.30	378.31	0.49	377.83	378.76	0.014470	4.28	51.86	28.27	1.01
seminella	480	SEM-12	Q200	312.00	375.12	378.29	380.13	1.84	378.31	0.02	378.29	379.46	0.013917	4.79	65.14	28.27	1.01
seminella	480	SEM-12	Q500	371.00	375.12	378.59	380.13	1.55	378.31	-0.27	378.59	379.89	0.013580	5.06	73.34	28.27	1.00
seminella	470	SEM-11	Q50	222.00	373.85	377.26	378.52	1.26	378.76	1.50	376.59	377.74	0.005244	3.09	71.74	29.48	0.63
seminella	470	SEM-11	Q200	312.00	373.85	377.77	378.52	0.75	378.76	0.99	377.06	378.42	0.005752	3.59	86.91	30.02	0.67
seminella	470	SEM-11	Q500	371.00	373.85	378.06	378.52	0.46	378.76	0.70	377.34	378.83	0.006046	3.87	95.81	30.34	0.70
seminella	460.1	SEM-10	Q50	222.00	373.81	375.70	378.11	2.41	377.97	2.27	375.70	376.54	0.014305	4.04	54.89	32.93	1.00
seminella	460.1	SEM-10	Q200	312.00	373.81	376.14	378.11	1.97	377.97	1.83	376.14	377.17	0.013580	4.50	69.39	33.67	1.00
seminella	460.1	SEM-10	Q500	371.00	373.81	376.40	378.11	1.71	377.97	1.57	376.40	377.55	0.013253	4.74	78.21	34.11	1.00
seminella	460	SEM-10	Q50	222.00	372.15	373.11	378.11	5.00	377.97	4.86	373.94	376.30	0.121149	7.91	28.05	31.06	2.66
seminella	460	SEM-10	Q200	312.00	372.15	373.41	378.11	4.70	377.97	4.56	374.38	376.92	0.093011	8.30	37.60	31.42	2.42
seminella	460	SEM-10	Q500	371.00	372.15	373.60	378.11	4.51	377.97	4.37	374.64	377.29	0.081893	8.51	43.60	31.65	2.32
seminella	450.1	SEM-9	Q50	222.00	372.17	374.19	376.92	2.73	376.89	2.70	374.19	374.98	0.014141	3.94	56.40	36.21	1.01
seminella	450.1	SEM-9	Q200	312.00	372.17	374.59	376.92	2.33	376.89	2.30	374.59	375.57	0.013382	4.38	71.21	36.85	1.01
seminella	450.1	SEM-9	Q500	371.00	372.17	374.84	376.92	2.08	376.89	2.05	374.84	375.93	0.012904	4.61	80.47	37.24	1.00
seminella	450	SEM-9	Q50	222.00	371.09	372.44	376.92	4.48	376.89	4.45	373.11	374.82	0.084755	6.83	32.53	34.78	2.25
seminella	450	SEM-9	Q200	312.00	371.09	372.75	376.92	4.17	376.89	4.14	373.52	375.40	0.066687	7.21	43.25	35.18	2.08
seminella	450	SEM-9	Q500	371.00	371.09	372.94	376.92	3.98	376.89	3.95	373.76	375.75	0.059366	7.43	49.96	35.42	2.00
seminella	440.1	SEM-8	Q50	222.00	370.73	372.82	375.75	2.93	375.38	2.56	372.82	373.65	0.013715	4.04	55.01	33.31	1.00
seminella	440.1	SEM-8	Q200	312.00	370.73	373.27	375.75	2.48	375.38	2.11	373.27	374.27	0.012890	4.43	70.39	35.17	1.00
seminella	440.1	SEM-8	Q500	371.00	370.73	373.53	375.75	2.22	375.38	1.85	373.53	374.63	0.012519	4.65	79.84	36.27	1.00
seminella	440	SEM-8	Q50	222.00	369.80	371.00	375.75	4.75	375.38	4.38	371.74	373.48	0.070817	6.98	31.82	29.05	2.13
seminella	440	SEM-8	Q200	312.00	369.80	371.36	375.75	4.39	375.38	4.02	372.19	374.10	0.056916	7.32	42.61	30.57	1.98
seminella	440	SEM-8	Q500	371.00	369.80	371.58	375.75	4.17	375.38	3.80	372.46	374.46	0.050937	7.51	49.42	31.33	1.91
seminella	430	SEM-7	Q50	222.00	368.78	370.78	372.20	1.42	370.13	-0.65	370.49	371.21	0.007816	2.92	76.10	49.03	0.75
seminella	430	SEM-7	Q200	312.00	368.78	371.10	372.20	1.10	370.13	-0.97	370.83	371.69	0.008492	3.40	91.71	49.56	0.80
seminella	430	SEM-7	Q500	371.00	368.78	371.27	372.20	0.93	370.13	-1.14	371.03	371.97	0.008980	3.69	100.47	49.85	0.83
seminella	420	SEM-6	Q50	222.00	367.14	369.68	371.85	2.17	369.83	0.15	369.68	370.28	0.014987	3.44	64.59	53.90	1.00
seminella	420	SEM-6	Q200	312.00	367.14	369.99	371.85	1.86	369.83	-0.16	369.99	370.73	0.014339	3.80	82.03	56.64	1.01

Reach	River Sta		Profile	Q Total	Min Ch El	W.S. Elev	LOB Elev	L. Freeboard	ROB Elev	R. Freeboard	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
seminella	420	SEM-6	Q500	371.00	367.14	370.17	371.85	1.68	369.83	-0.34	370.17	370.99	0.013898	4.02	92.19	56.91	1.01
seminella	310	SEM-5	Q50	222.00	365.50	367.88	370.62	2.74	369.62	1.74	367.33	368.13	0.004247	2.21	100.36	61.90	0.55
seminella	310	SEM-5	Q200	312.00	365.50	368.09	370.62	2.53	369.62	1.53	367.63	368.48	0.005588	2.74	113.68	61.98	0.65
seminella	310	SEM-5	Q500	371.00	365.50	368.31	370.62	2.31	369.62	1.31	367.80	368.74	0.005492	2.92	127.14	62.05	0.65
seminella	308	SEM-5		Bridge													
seminella	305	SEM-5	Q50	222.00	365.50	367.33	370.62	3.29	369.62	2.29	367.33	367.90	0.015343	3.32	66.78	59.29	1.00
seminella	305	SEM-5	Q200	312.00	365.50	367.60	370.62	3.02	369.62	2.02	367.63	368.32	0.015589	3.76	83.04	61.80	1.04
seminella	305	SEM-5	Q500	371.00	365.50	367.70	370.62	2.92	369.62	1.92	367.80	368.58	0.017215	4.14	89.55	61.84	1.10
seminella	301	SEM-4	Q50	222.00	359.57	363.20	364.86	1.66	364.87	1.67	362.57	363.78	0.006026	3.38	65.64	25.21	0.67
seminella	301	SEM-4	Q200	312.00	359.57	363.80	364.86	1.06	364.87	1.07	363.10	364.56	0.006282	3.86	80.92	25.65	0.69
seminella	301	SEM-4	Q500	371.00	359.57	364.18	364.86	0.68	364.87	0.69	363.41	365.03	0.006311	4.09	90.62	25.94	0.70
seminella	296	SEM-4		Bridge													
seminella	291	SEM-4	Q50	222.00	359.57	362.58	364.86	2.28	364.87	2.29	362.58	363.58	0.013994	4.44	50.01	24.74	1.00
seminella	291	SEM-4	Q200	312.00	359.57	363.10	364.86	1.76	364.87	1.77	363.10	364.35	0.013479	4.95	63.04	25.13	1.00
seminella	291	SEM-4	Q500	371.00	359.57	363.41	364.86	1.45	364.87	1.46	363.41	364.81	0.013211	5.22	71.03	25.36	1.00
seminella	290	SEM-3	Q50	222.00	359.65	361.84	363.84	2.00	363.83	1.99	362.28	363.42	0.034546	5.56	39.92	28.97	1.51
seminella	290	SEM-3	Q200	312.00	359.65	362.19	363.84	1.65	363.83	1.64	362.74	364.17	0.033071	6.23	50.06	29.02	1.52
seminella	290	SEM-3	Q500	371.00	359.65	362.40	363.84	1.44	363.83	1.43	363.02	364.62	0.032366	6.60	56.20	29.05	1.52
seminella	285	SEM-3		Bridge													
seminella	280	SEM-3	Q50	222.00	359.65	362.14	363.84	1.70	363.83	1.69	362.28	363.21	0.018551	4.58	48.47	29.01	1.13
seminella	280	SEM-3	Q200	312.00	359.65	362.72	363.84	1.12	363.83	1.11	362.74	363.88	0.014125	4.76	65.49	29.10	1.01
seminella	280	SEM-3	Q500	371.00	359.65	363.02	363.84	0.82	363.83	0.81	363.02	364.30	0.013585	5.01	74.05	29.15	1.00
seminella	271	SEM-2	Q50	222.00	358.54	361.61	361.76	0.15	362.17	0.56	361.07	362.08	0.006212	3.04	72.99	35.09	0.67
seminella	271	SEM-2	Q200	312.00	358.54	362.10	361.76	-0.34	362.17	0.07	361.53	362.71	0.006531	3.43	90.84	37.48	0.70
seminella	271	SEM-2	Q500	371.00	358.54	362.12	361.76	-0.36	362.17	0.05	361.79	362.96	0.009042	4.05	91.51	37.57	0.83
seminella	270	SEM-2	Q50	222.00	358.54	361.61	363.26	1.65	362.17	0.56	361.07	362.08	0.006240	3.05	72.88	35.05	0.67
seminella	270	SEM-2	Q200	312.00	358.54	362.10	363.26	1.16	362.17	0.07	361.53	362.71	0.006565	3.44	90.69	37.44	0.71
seminella	270	SEM-2	Q500	371.00	358.54	362.12	363.26	1.14	362.17	0.05	361.80	362.96	0.009119	4.07	91.25	37.52	0.83
seminella	260	SEM-1	Q50	222.00	357.91	361.47	361.48	0.01	362.54	1.07	360.35	361.76	0.002828	2.41	92.05	33.20	0.46
seminella	260	SEM-1	Q200	312.00	357.91	361.91	361.48	-0.43	362.54	0.63	360.77	362.35	0.003518	2.92	106.74	33.22	0.52
seminella	260	SEM-1	Q500	371.00	357.91	361.02	361.48	0.46	362.54	1.52	361.02	362.20	0.013673	4.80	77.34	33.14	1.00