comune di montevarchi - provincia di arezzo

avvio del procedimento Del.C.C. n.55 del 15.05.2008
valutazione iniziale Del.G.C. n.171 del 17.07.2008
valutazione intermedia e rapporto ambientale preliminare Del.C.C. n.47 del 29.05.2009
relazione di sintesi finale - rapporto ambientale Del.G.C. n.251del 29.10.2009
rapporto ambientale - relazione di sintesi non tecnica Del.C.C. n..... del .....
adozione Del.C.C. n..... del .....

variante di adeguamento
alla disciplina urbanistica regionale e ai contenuti dell'art.55 co.6 della L.R.1/2005

RELAZIONE IDRAULICA - ALLEGATO 2 - VOLUME III

PIANO STRUTTURALE

dicembre 2009

comune di montevarchi - provincia di arezzo

Sindaco	*Giorgio Valentini*
Assessore	*Moreno Grassi*
Responsabile del procedimento	*Domenico Scrascia*
Garante della comunicazione	*Francesca Barucci*
Progetto	*Stefania Fanfani*
	Domenico Scrascia
Sistema informativo	*Ugo Fabbri*
Ufficio di piano	*Gabriele Banchetti*
	Stefano Borchi
Indagini geologiche ed idrauliche	*Claudia Lombardi*
	Roberto Nevini
	Michele Sani

RELAZIONE IDRAULICA - ALLEGATO 2 - VOLUME III

PIANO STRUTTURALE

dicembre 2009

verifiche idrauliche stato attuale

volume I

borro del Quercio
borro dello Spedaluzzo
borro del Giglio

volume II

borro della Sabina
borro del Caspri
borro della Dogana
borro dell'Ornaccio

volume III

borro del Valdilago
torrente Caposelvi (loc. Mercatale)
torrente Caposelvi
torrente Ambra

verifiche idrauliche stato attuale - volume III

- borro del Valdilago
- torrente Caposelvi (loc. Mercatale)
- torrente Caposelvi
- torrente Ambra

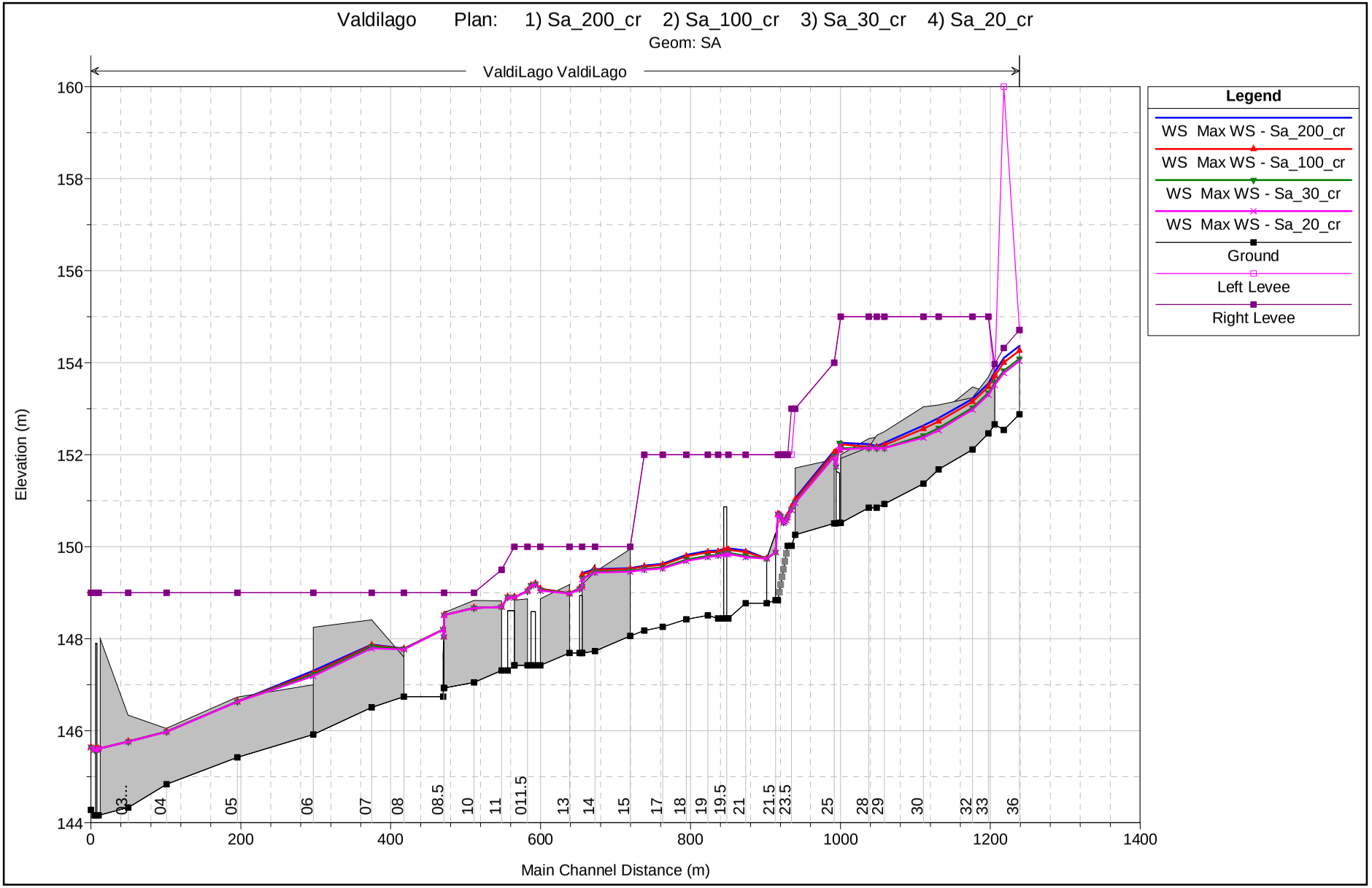
borro di Valdilago

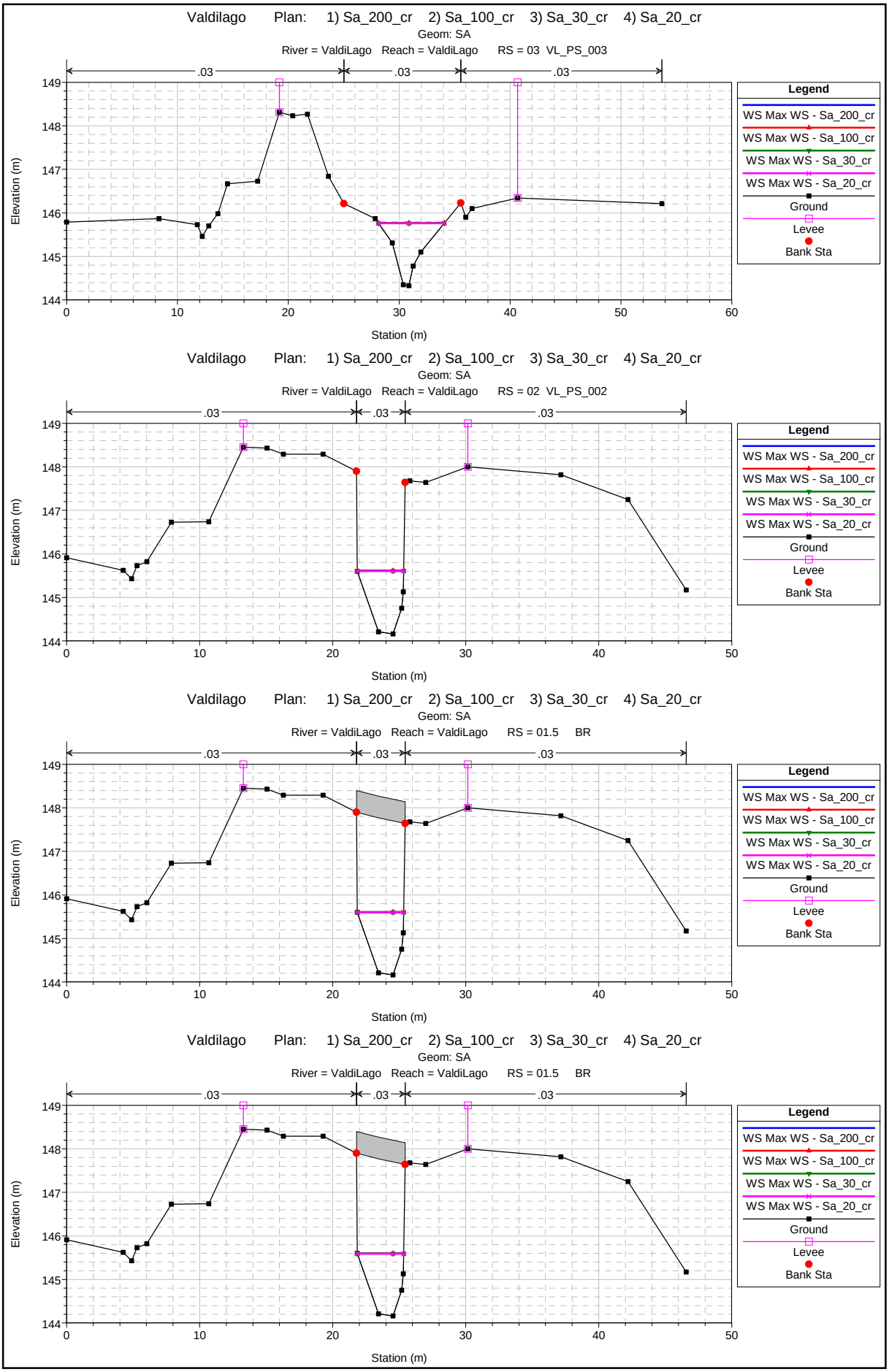
verifiche con Tpioggia critico per il Borro di Valdilago

- moto vario
  Tr=200, 100, 30 e 20 anni
  profilo
  livelli idrici nelle sezioni di verifica
  tabella di output del software Hec-ras 4.0
  livelli e portate in ingresso alle aree di accumulo

verifiche con Tpioggia critico per il fiume Arno

- moto permanente
  Tr=200, 100, 30 e 20 anni
  profilo
  livelli idrici nelle sezioni di verifica
  tabella di output del software Hec-ras 4.0

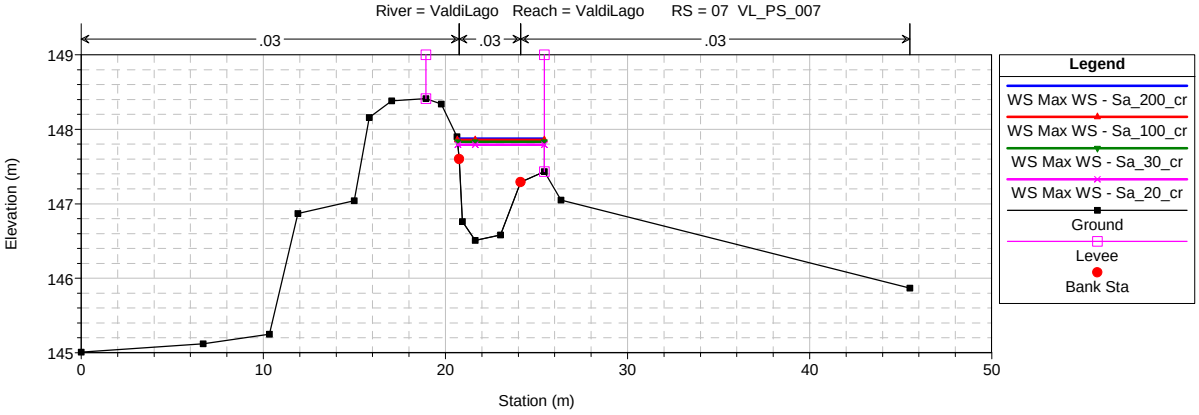

Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
ValdiLago ValdiLago
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Left Levee
Right Levee
Elevation (m)
Main Channel Distance (m)
160
158
156
154
152
150
148
146
144
0
200
400
600
800
1000
1200
1400
03...
04
05
06
07
08
08.5
10
11
011.5
13
14
15
17
18
19
19.5
21
21.5
23.5
25
28
29
30
32
33
36


Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 03 VL_PS_003
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Bank Sta
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 02 VL_PS_002
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Bank Sta
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 01.5 BR
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Bank Sta
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 01.5 BR
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Bank Sta

Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

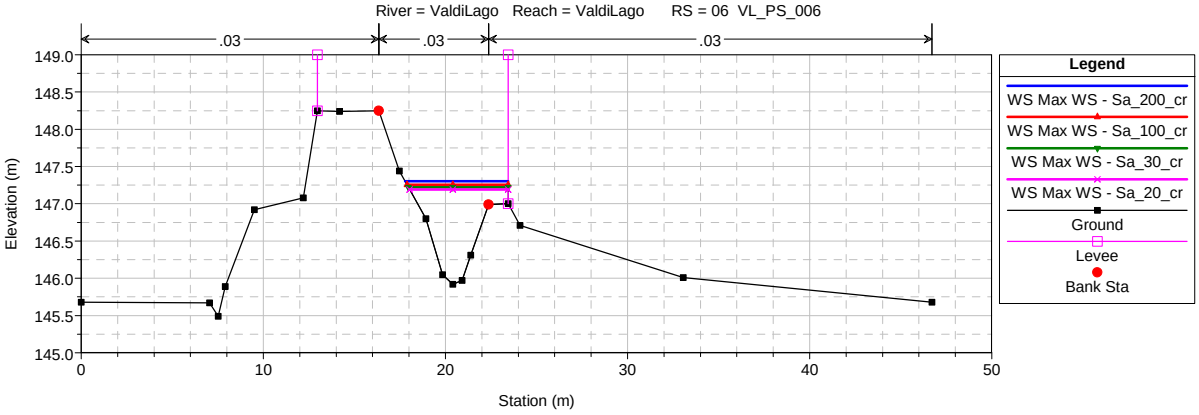
River = ValdiLago Reach = ValdiLago RS = 07 VL_PS_007



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

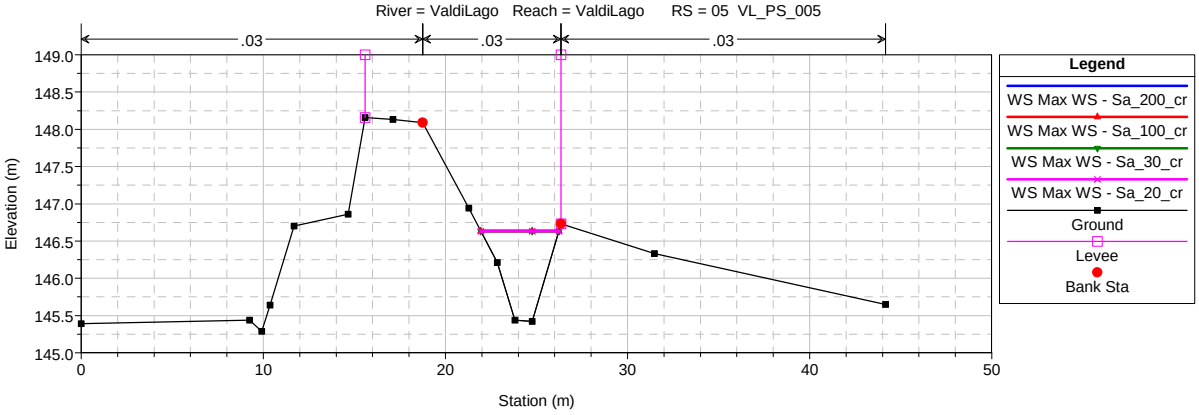
River = ValdiLago Reach = ValdiLago RS = 06 VL_PS_006



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

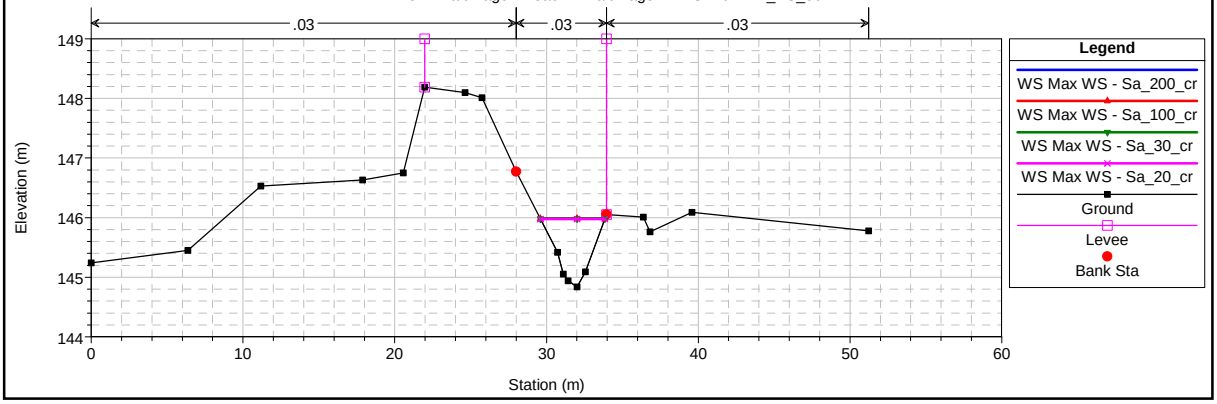
River = ValdiLago Reach = ValdiLago RS = 05 VL_PS_005



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

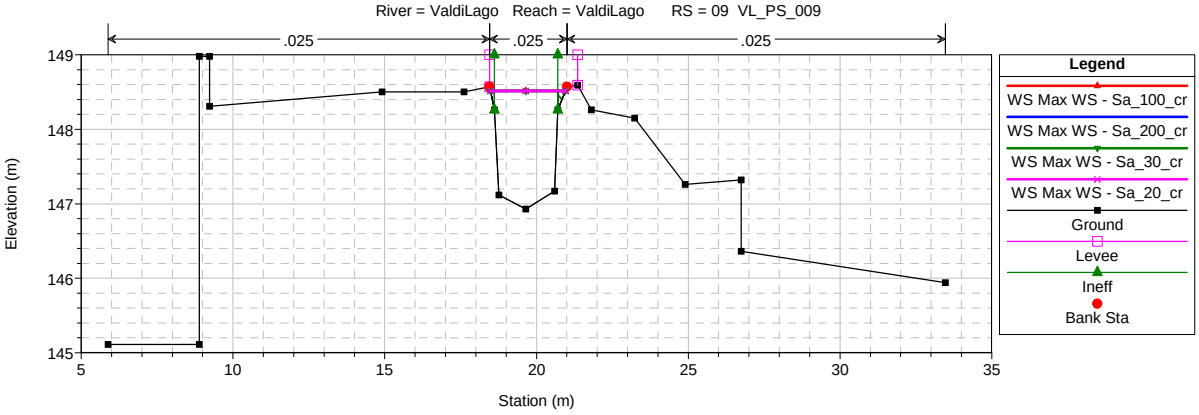
River = ValdiLago Reach = ValdiLago RS = 04 VL_PS_004



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

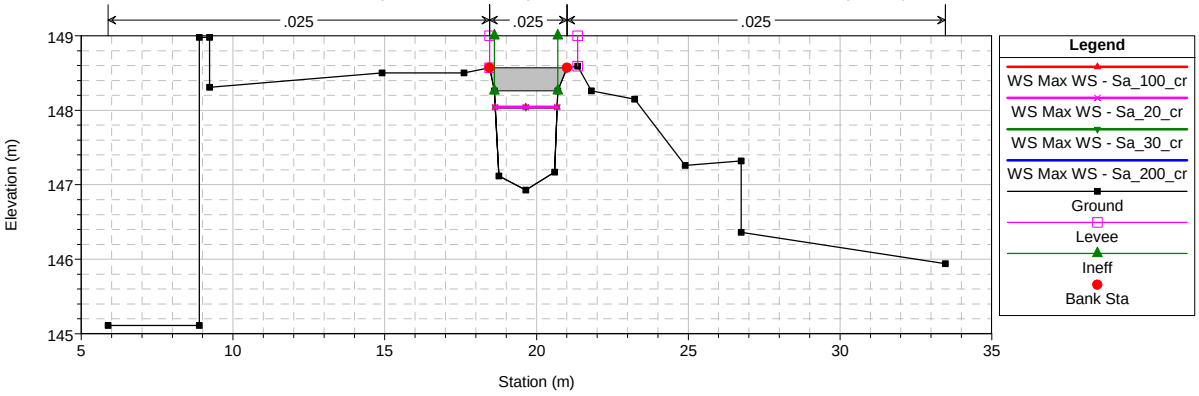
River = ValdiLago Reach = ValdiLago RS = 09 VL_PS_009



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

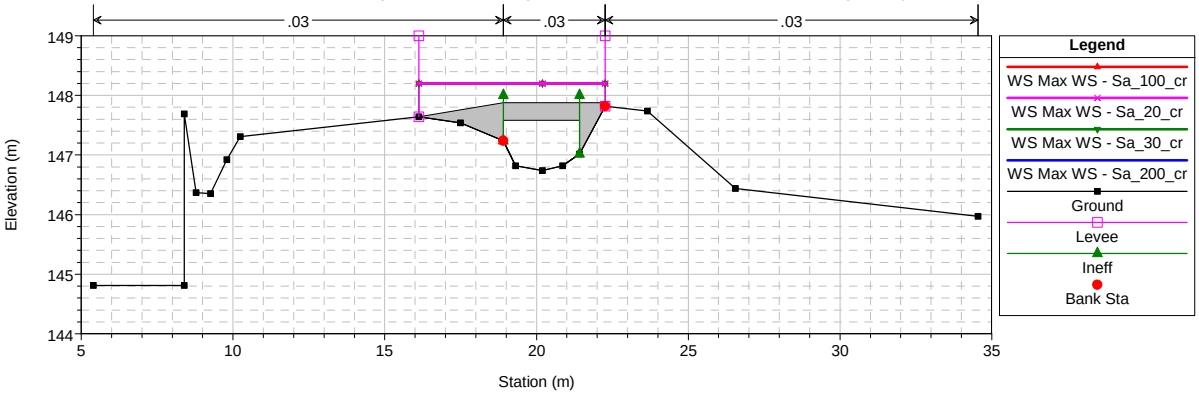
River = ValdiLago Reach = ValdiLago RS = 08.5 BR Tratto tombato Valdilago di Sopra



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

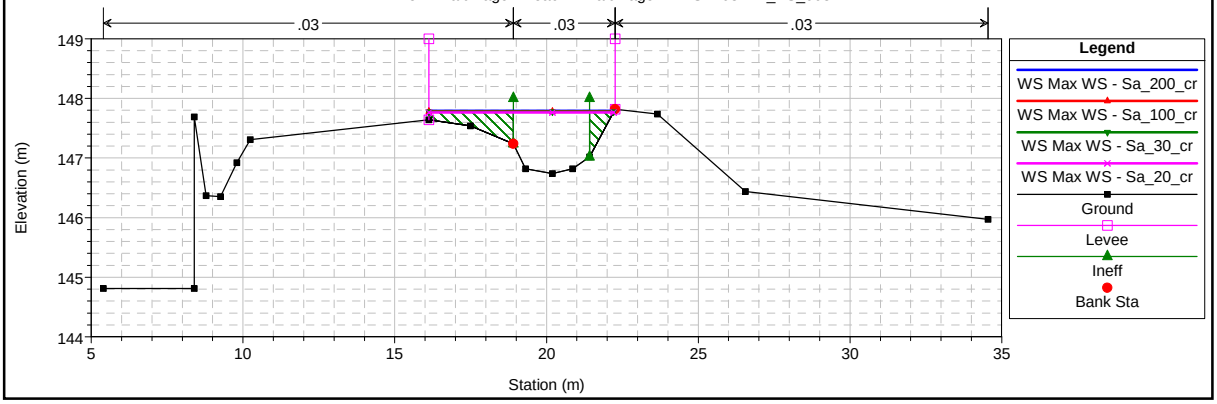
River = ValdiLago Reach = ValdiLago RS = 08.5 BR Tratto tombato Valdilago di Sopra



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

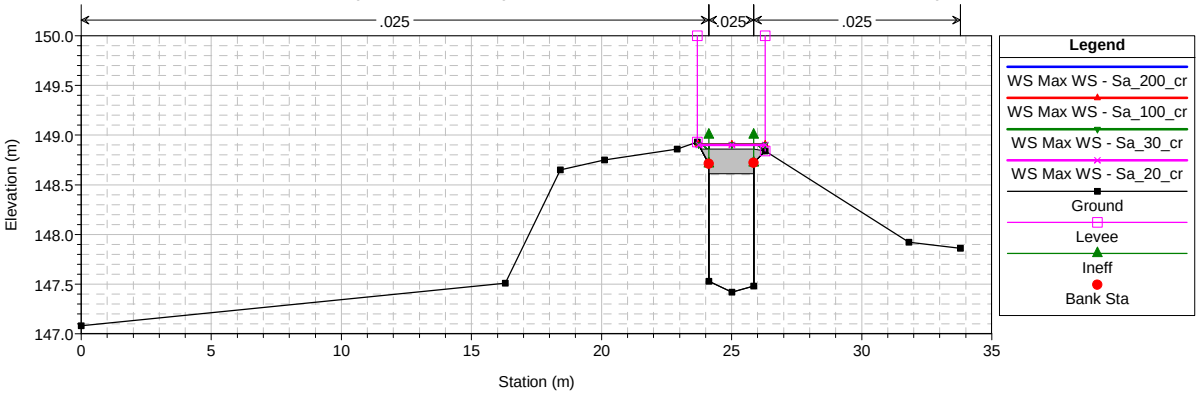
River = ValdiLago Reach = ValdiLago RS = 08 VL_PS_008



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

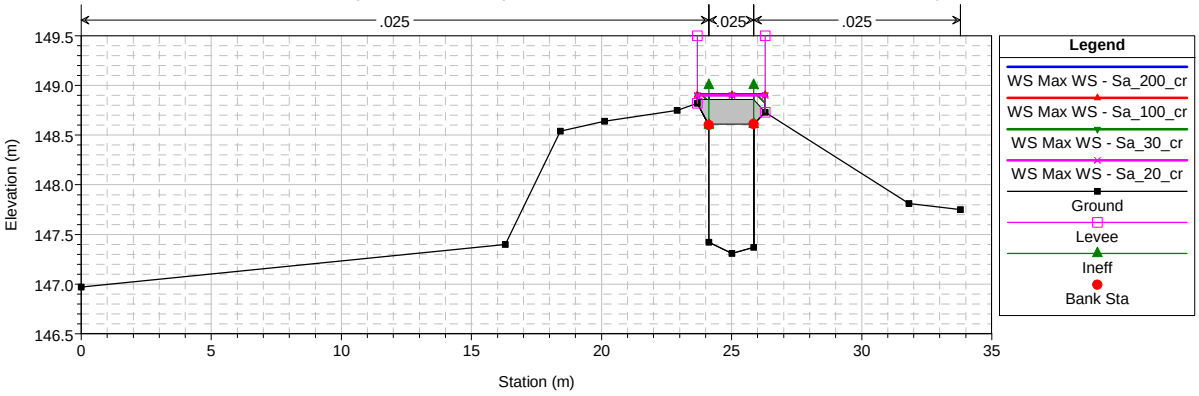
River = ValdiLago Reach = ValdiLago RS = 11.2 BR tratto tombato a valle del Canale Battagli



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

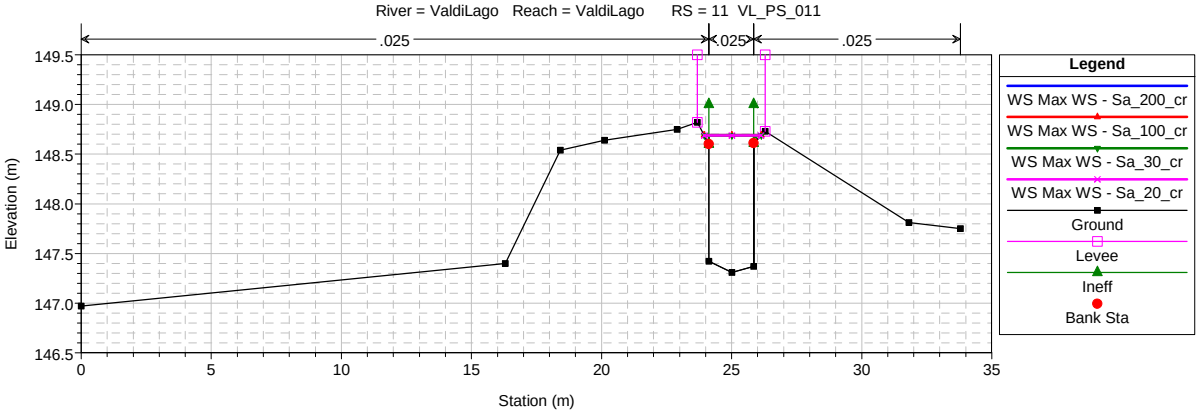
River = ValdiLago Reach = ValdiLago RS = 11.2 BR tratto tombato a valle del Canale Battagli



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

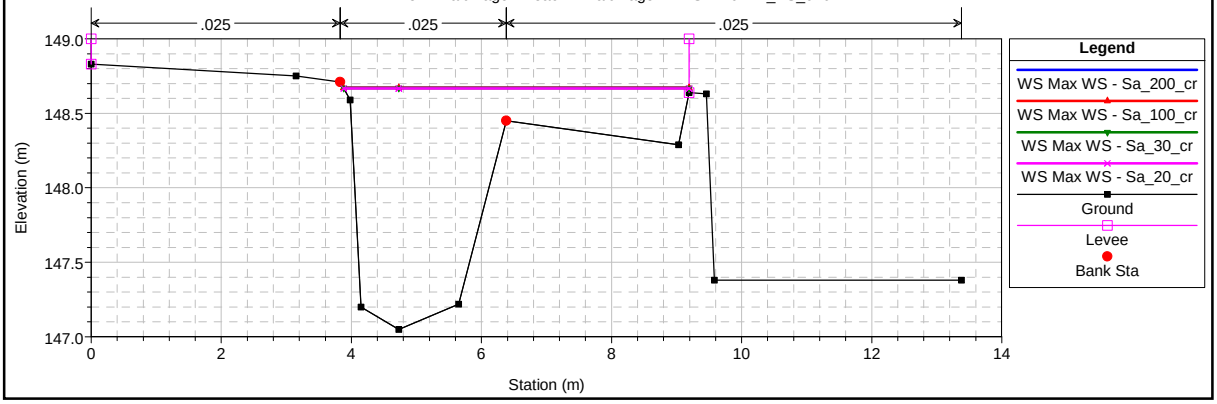
River = ValdiLago Reach = ValdiLago RS = 11 VL_PS_011

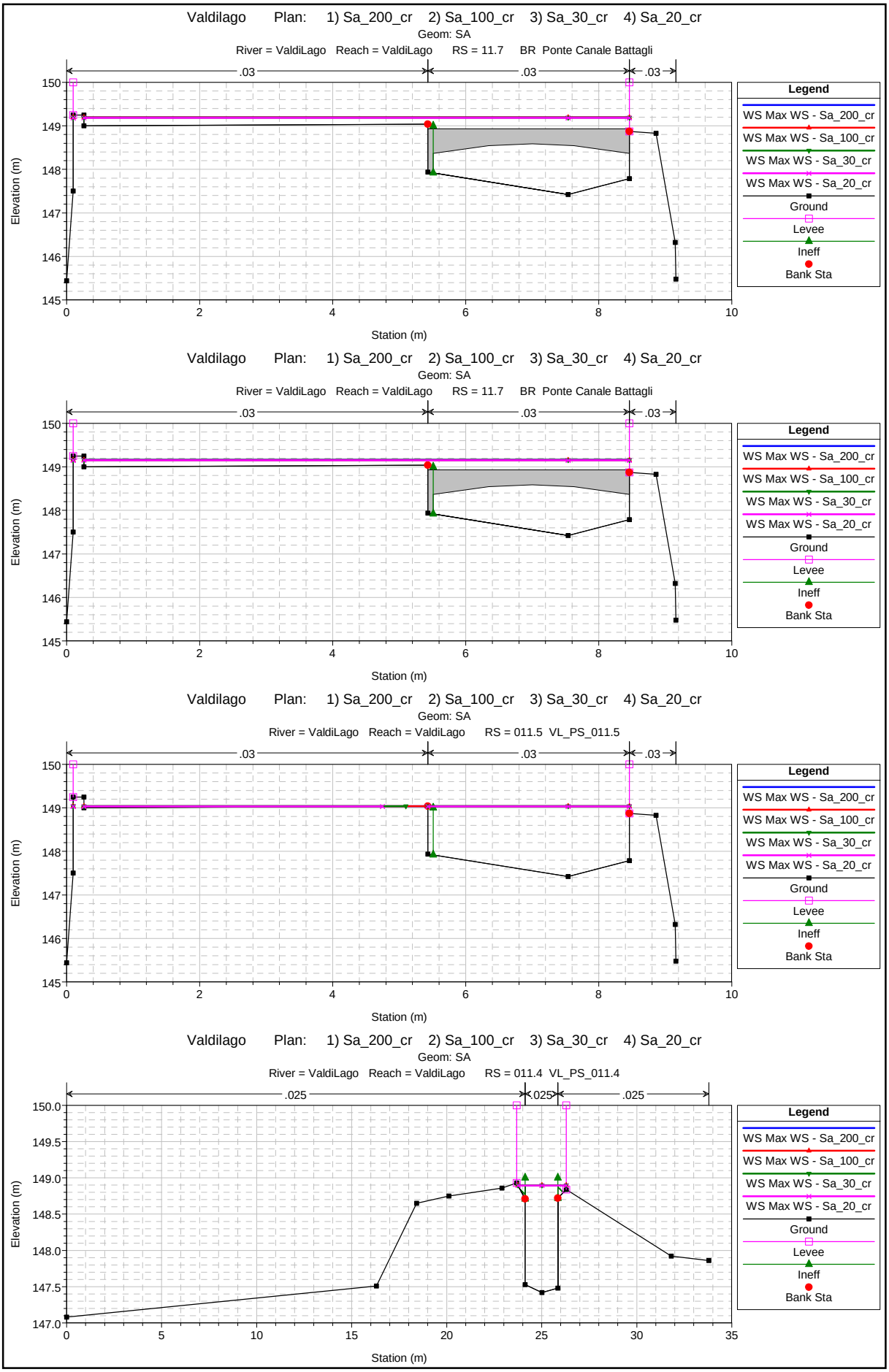


Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

River = ValdiLago Reach = ValdiLago RS = 10 VL_PS_010

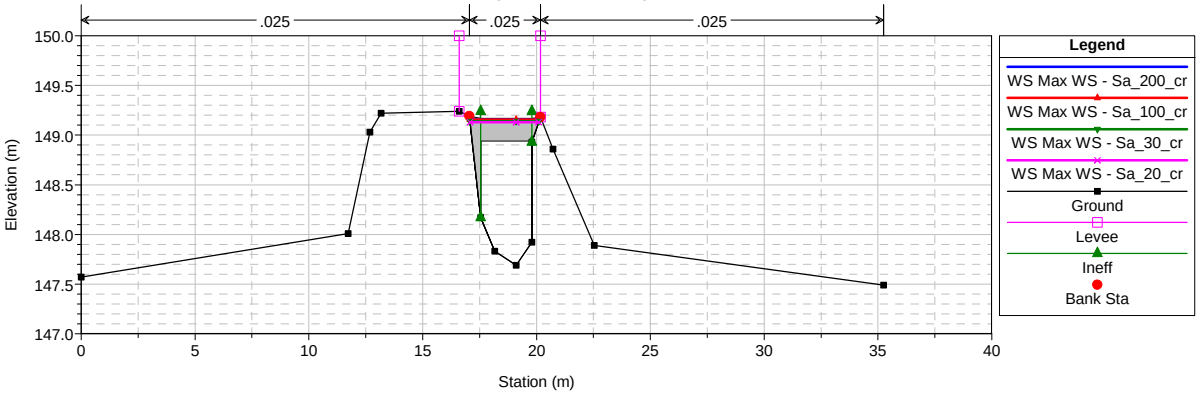



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 11.7 BR Ponte Canale Battagli
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 11.7 BR Ponte Canale Battagli
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 011.5 VL_PS_011.5
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 011.4 VL_PS_011.4
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Ineff
Bank Sta

Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

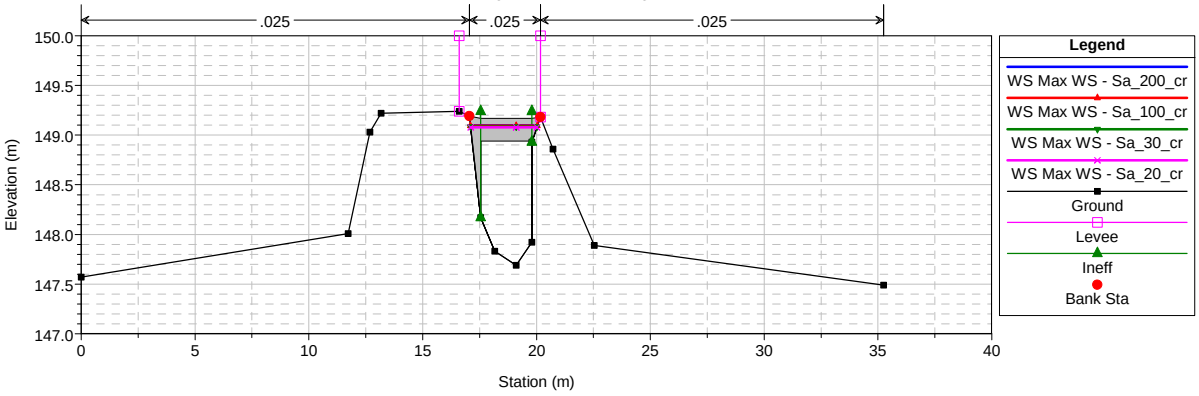
River = ValdiLago Reach = ValdiLago RS = 13.5 BR



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

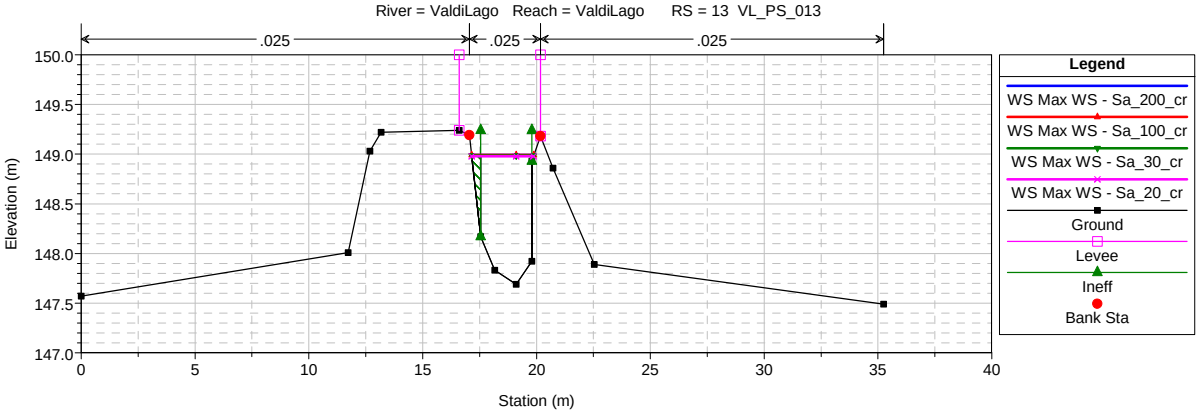
River = ValdiLago Reach = ValdiLago RS = 13.5 BR



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

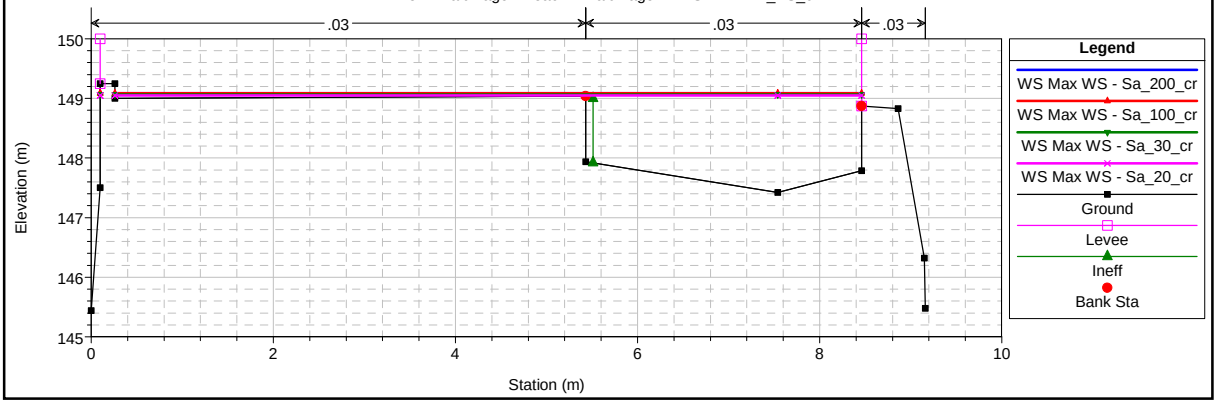
River = ValdiLago Reach = ValdiLago RS = 13 VL_PS_013

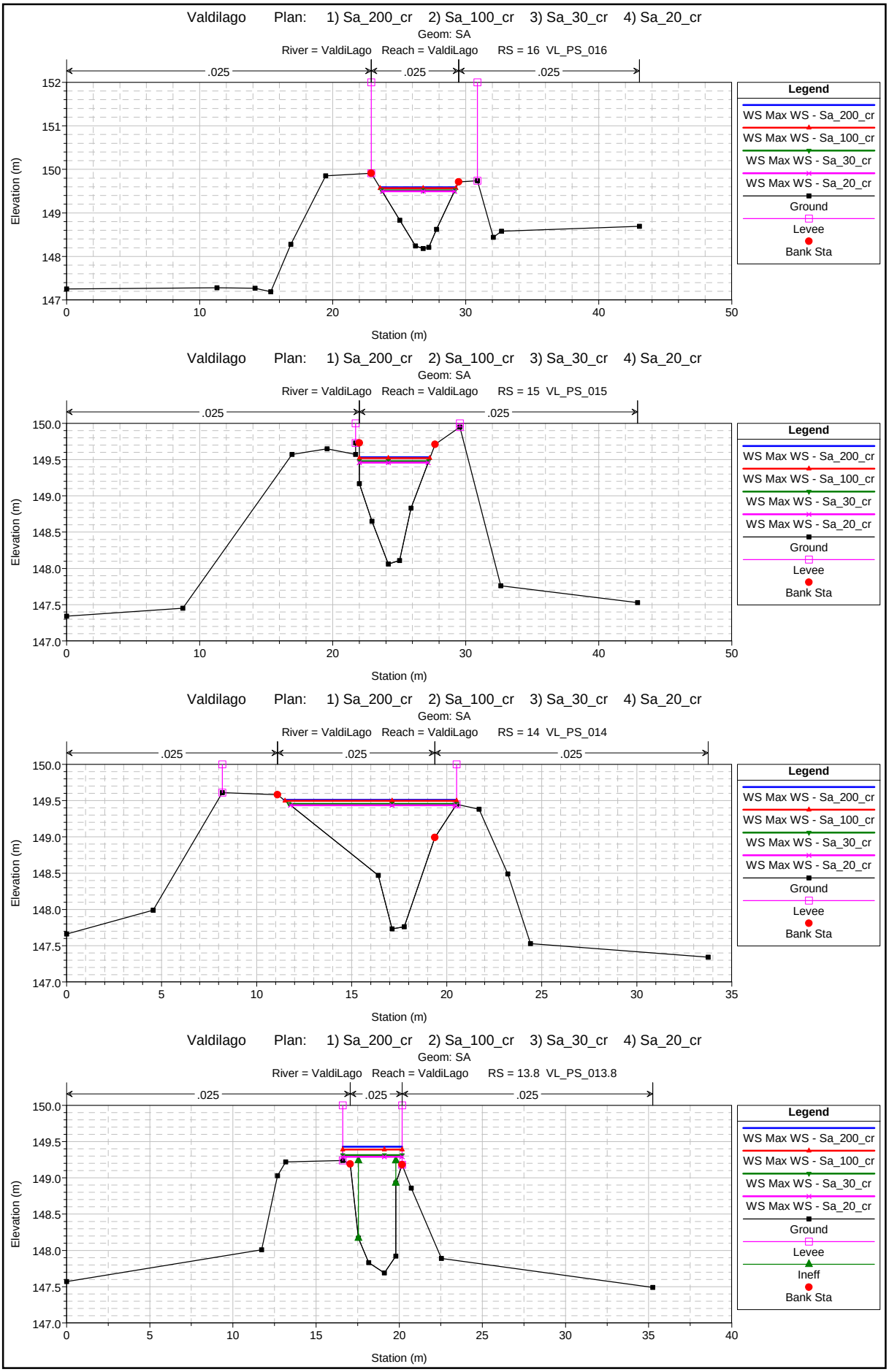


Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

River = ValdiLago Reach = ValdiLago RS = 12 VL_PS_012

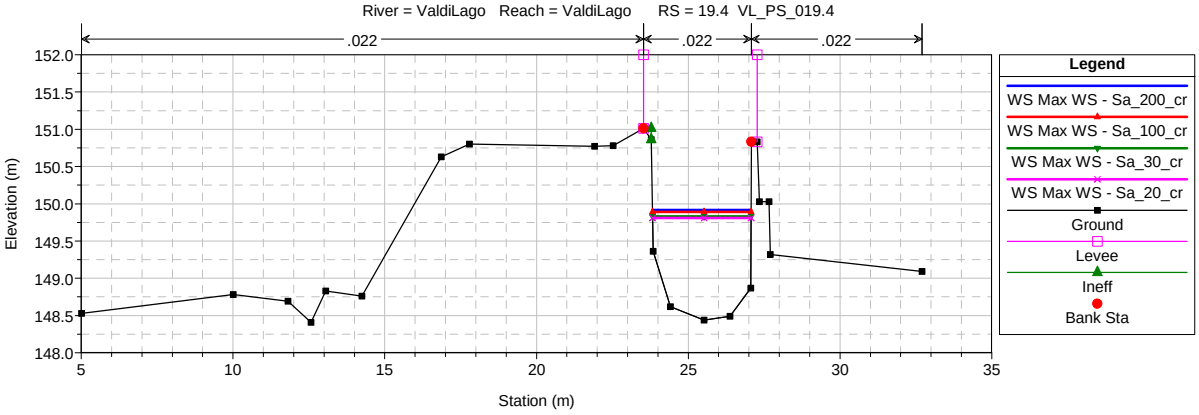



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 16 VL_PS_016
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Bank Sta
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 15 VL_PS_015
.025
.025
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Bank Sta
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 14 VL_PS_014
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Bank Sta
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 13.8 VL_PS_013.8
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Ineff
Bank Sta

Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

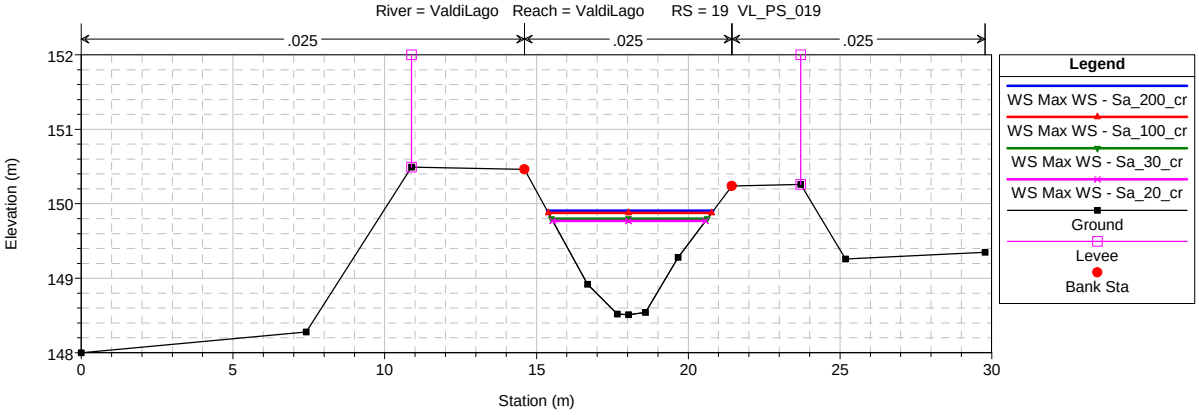
River = ValdiLago Reach = ValdiLago RS = 19.4 VL_PS_019.4



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

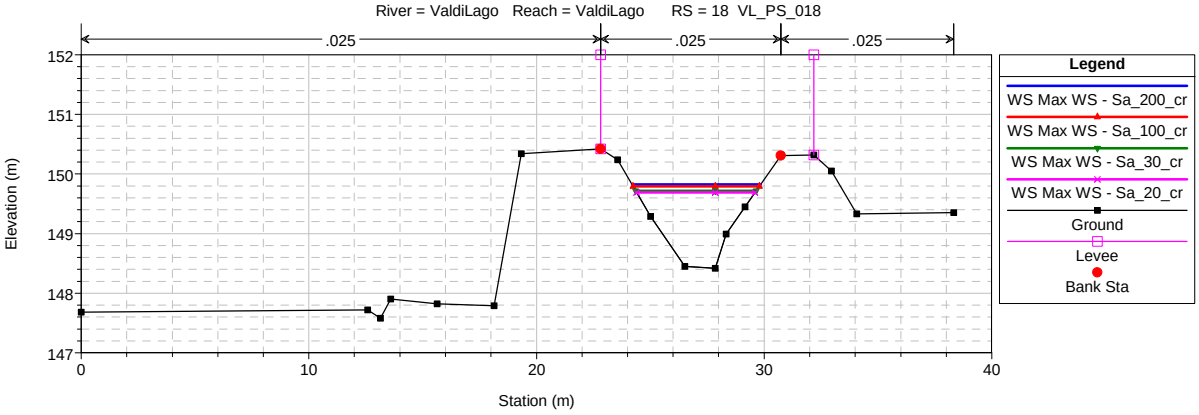
River = ValdiLago Reach = ValdiLago RS = 19 VL_PS_019



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

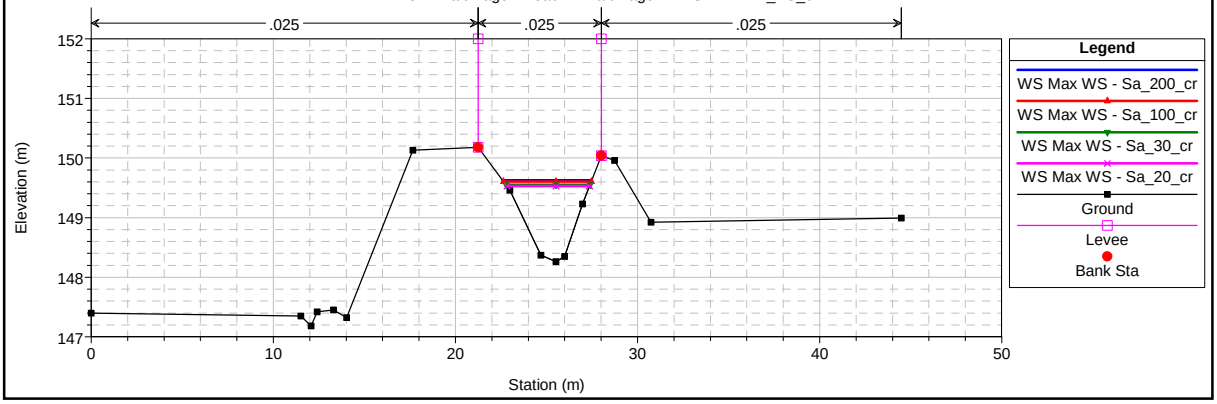
River = ValdiLago Reach = ValdiLago RS = 18 VL_PS_018



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

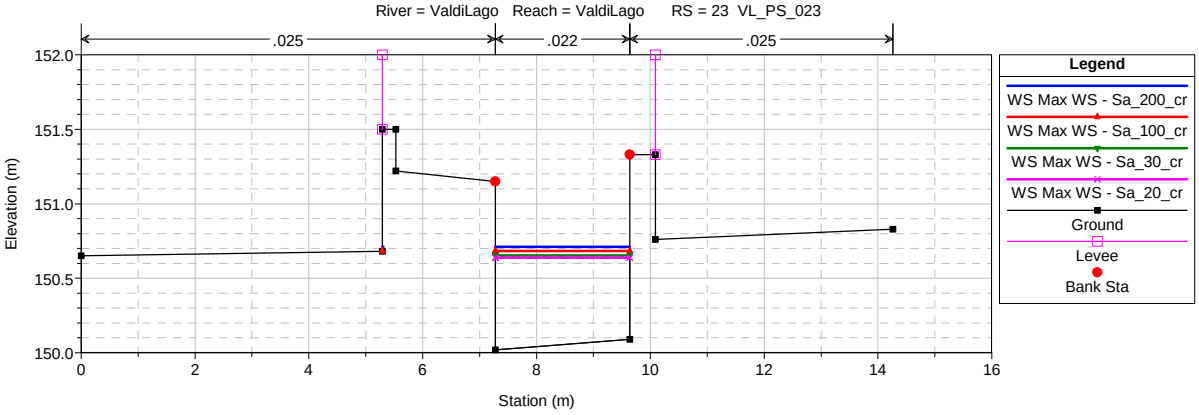
River = ValdiLago Reach = ValdiLago RS = 17 VL_PS_017



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

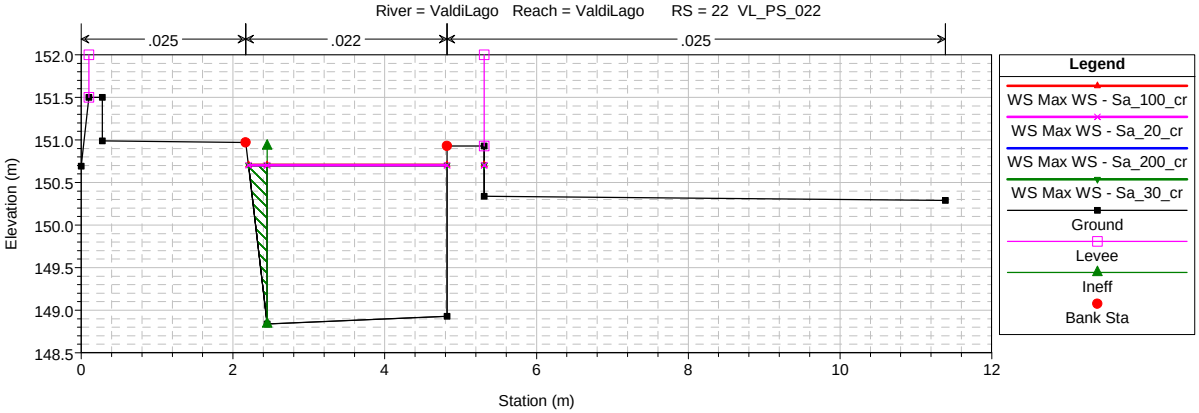
River = ValdiLago Reach = ValdiLago RS = 23 VL_PS_023



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

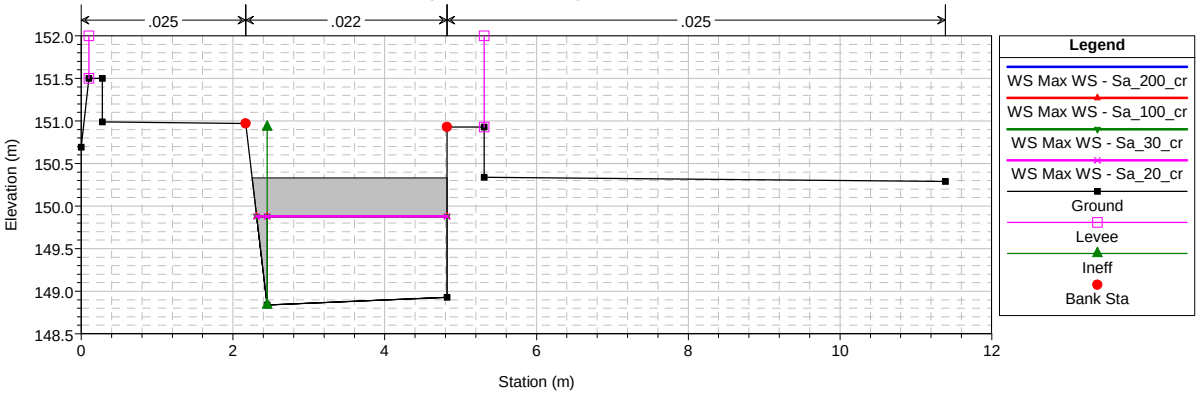
River = ValdiLago Reach = ValdiLago RS = 22 VL_PS_022



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

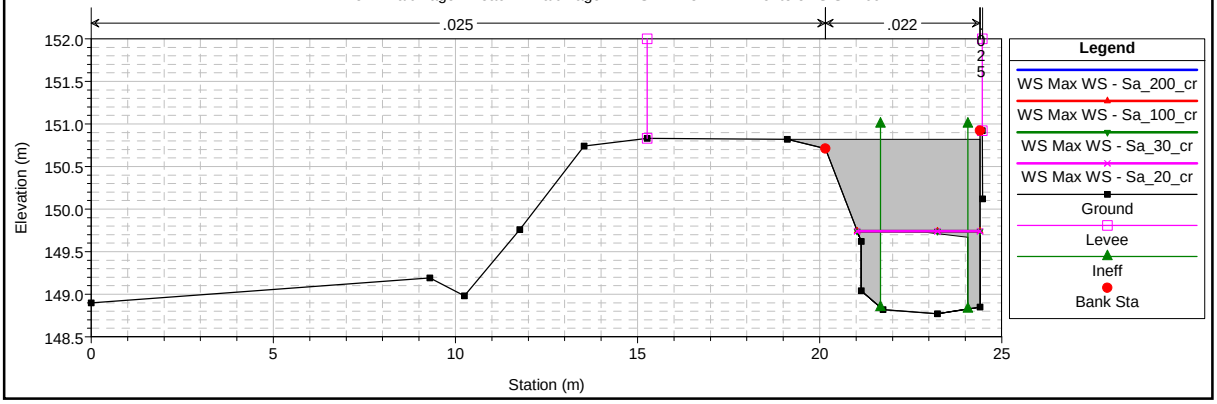
River = ValdiLago Reach = ValdiLago RS = 21.5 BR Ponte ex S.S. n°69

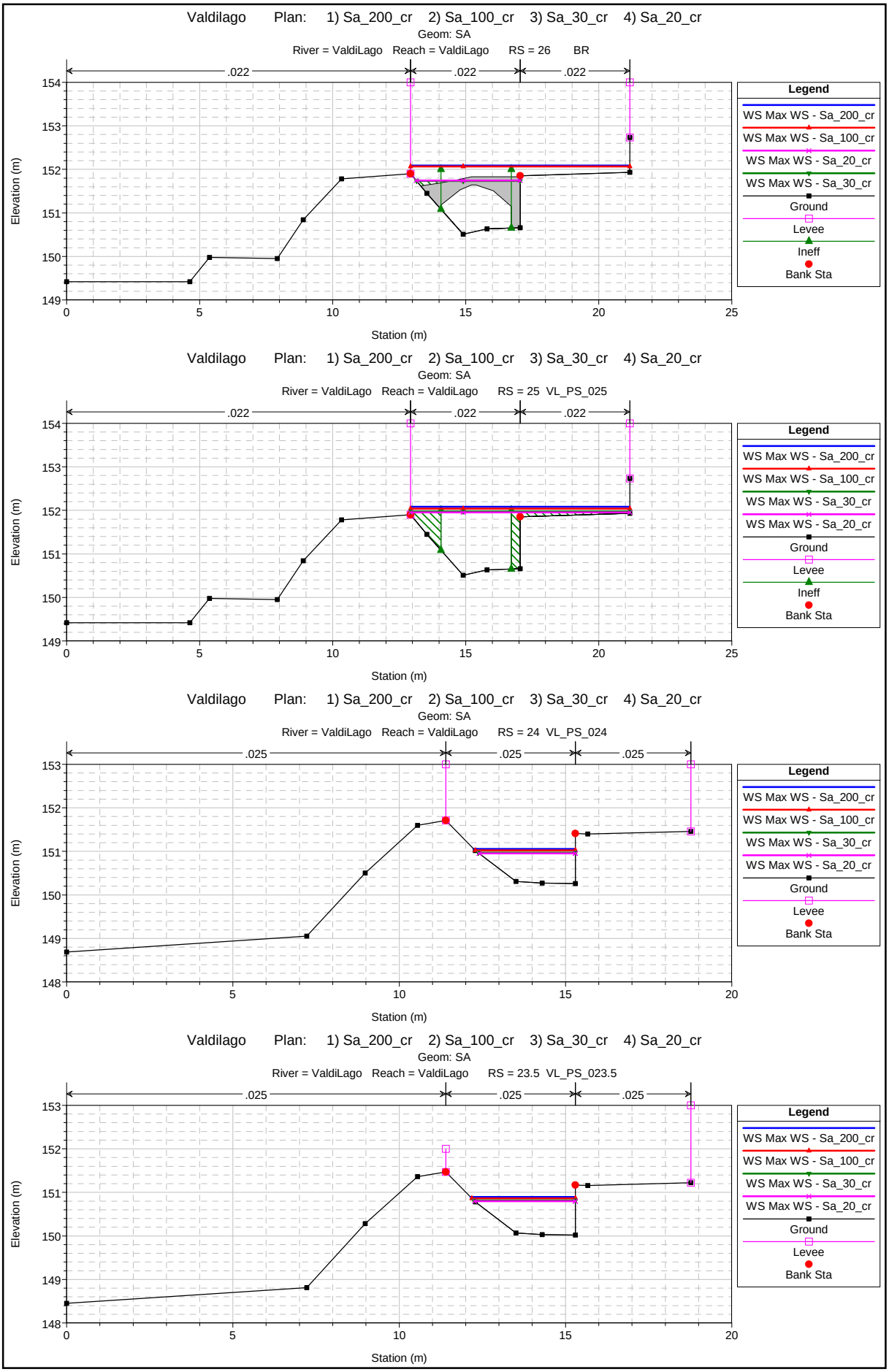


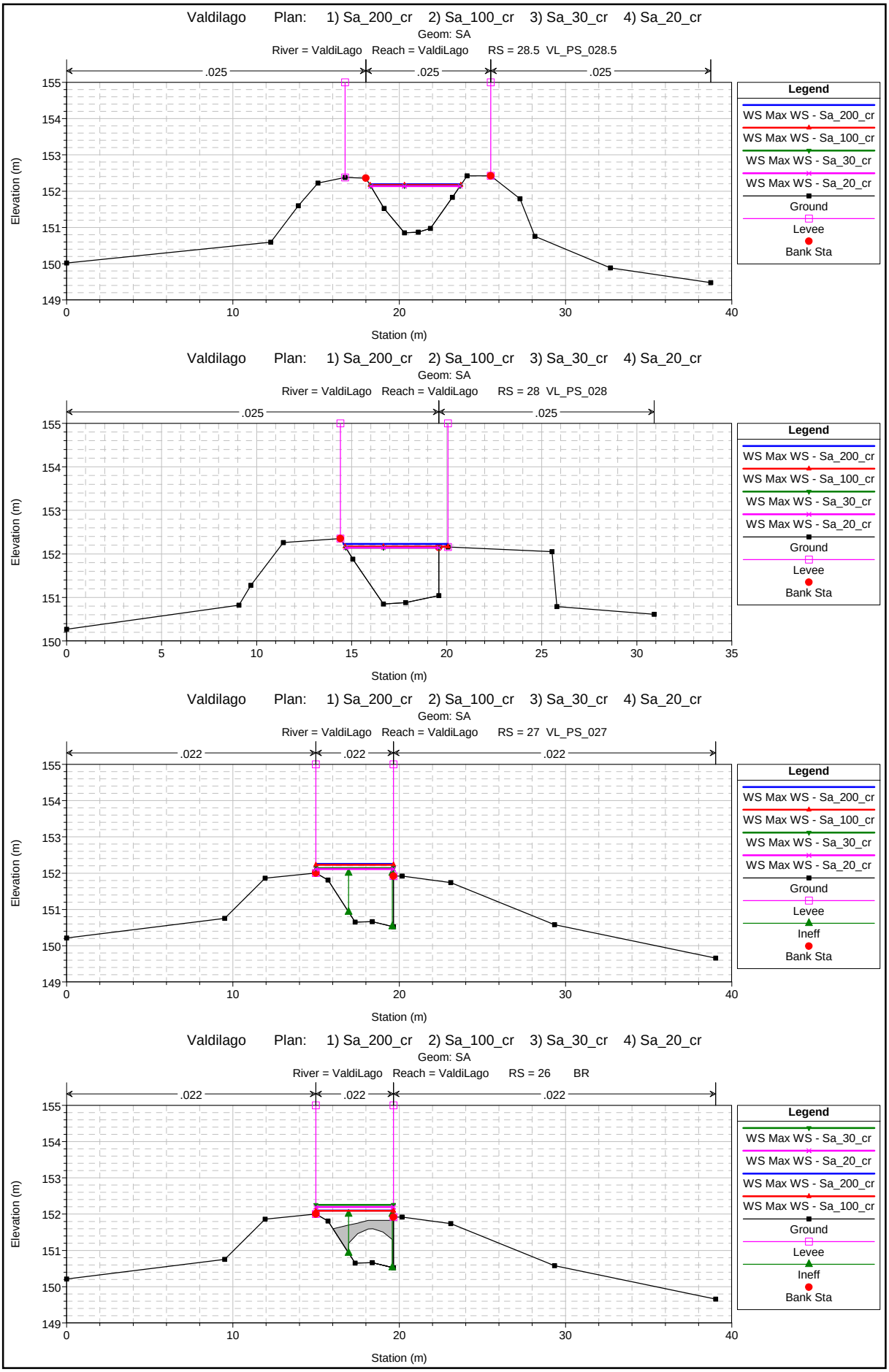
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

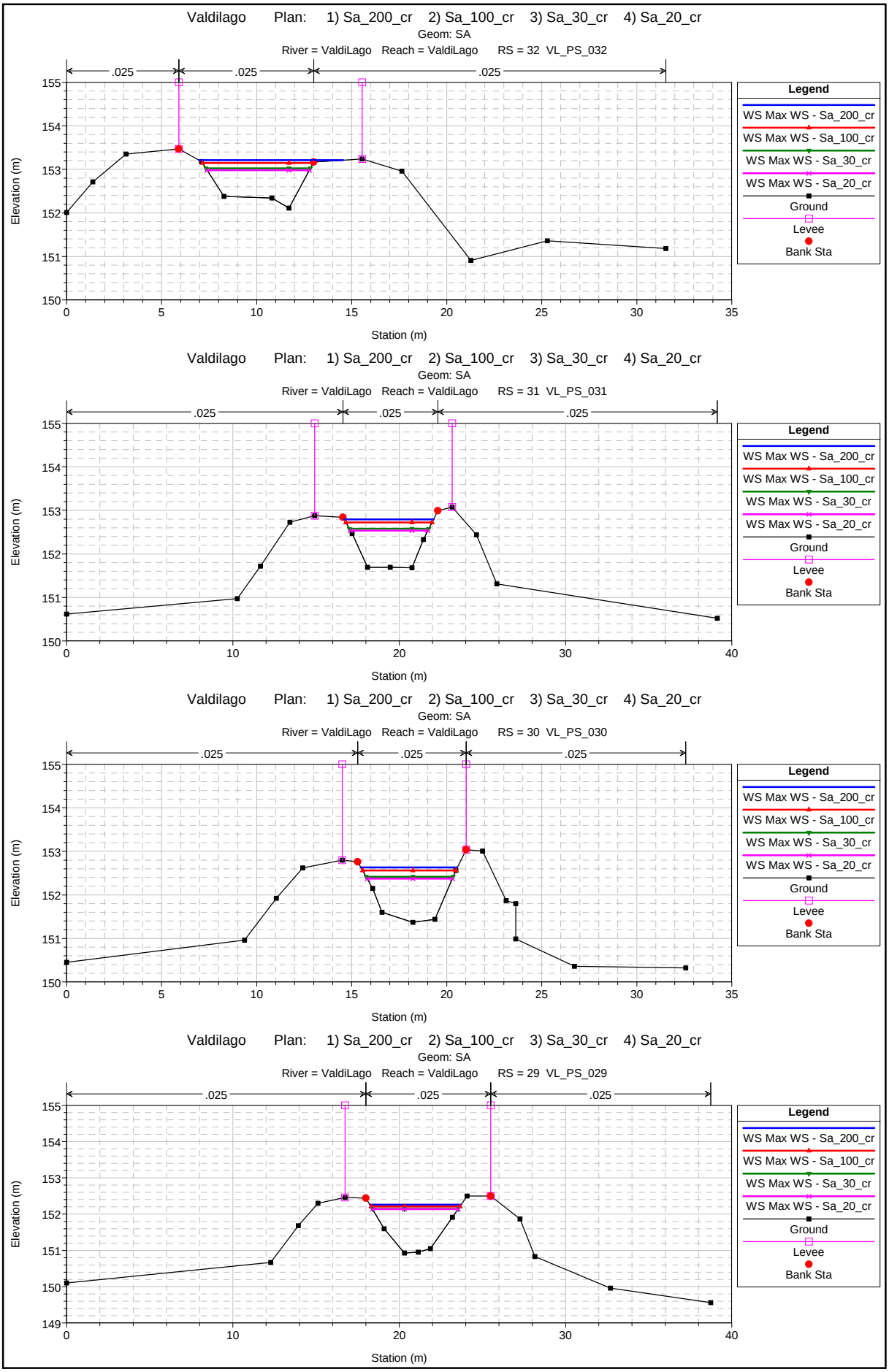
Geom: SA

River = ValdiLago Reach = ValdiLago RS = 21.5 BR Ponte ex S.S. n°69




Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 26 BR
.022
.022
.022
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_20_cr
WS Max WS - Sa_30_cr
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 25 VL_PS_025
.022
.022
.022
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 24 VL_PS_024
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Bank Sta
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 23.5 VL_PS_023.5
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Bank Sta

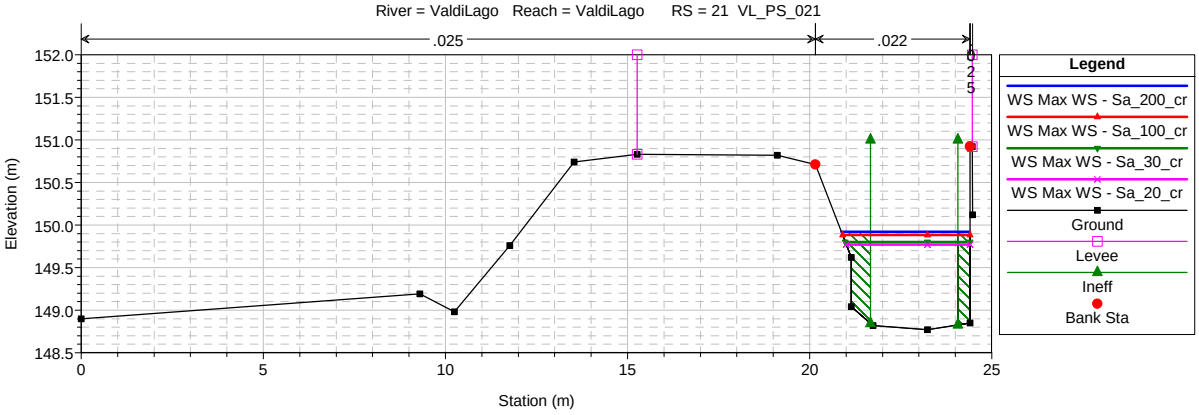

Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 28.5 VL_PS_028.5
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Bank Sta
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 28 VL_PS_028
.025
.025
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Bank Sta
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 27 VL_PS_027
.022
.022
.022
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 26 BR
.022
.022
.022
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
Ground
Levee
Ineff
Bank Sta


Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 32 VL_PS_032
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Bank Sta
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 31 VL_PS_031
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Bank Sta
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 30 VL_PS_030
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Bank Sta
Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 29 VL_PS_029
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Bank Sta

Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

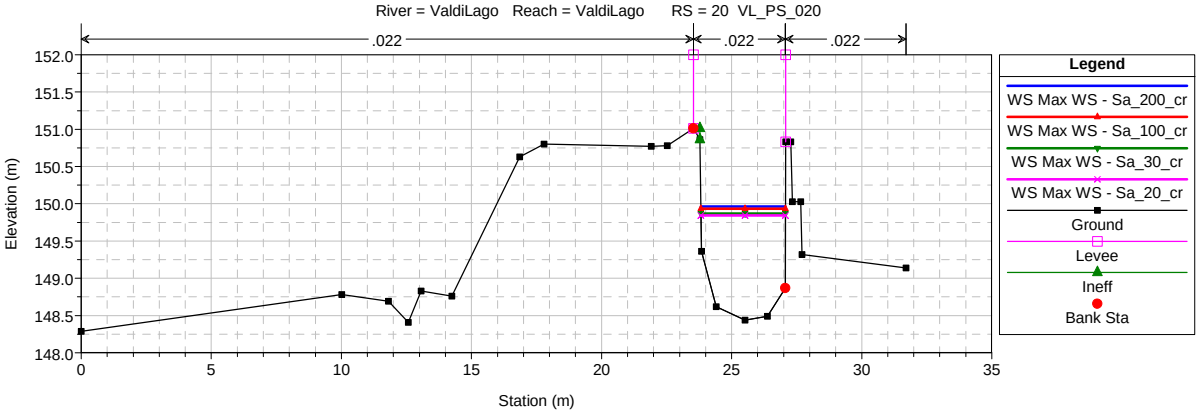
River = ValdiLago Reach = ValdiLago RS = 21 VL_PS_021



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

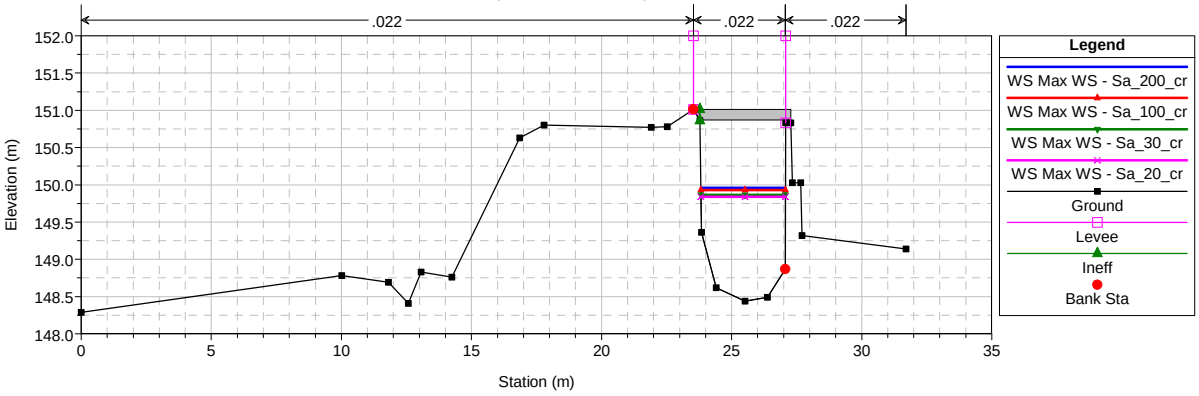
River = ValdiLago Reach = ValdiLago RS = 20 VL_PS_020



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

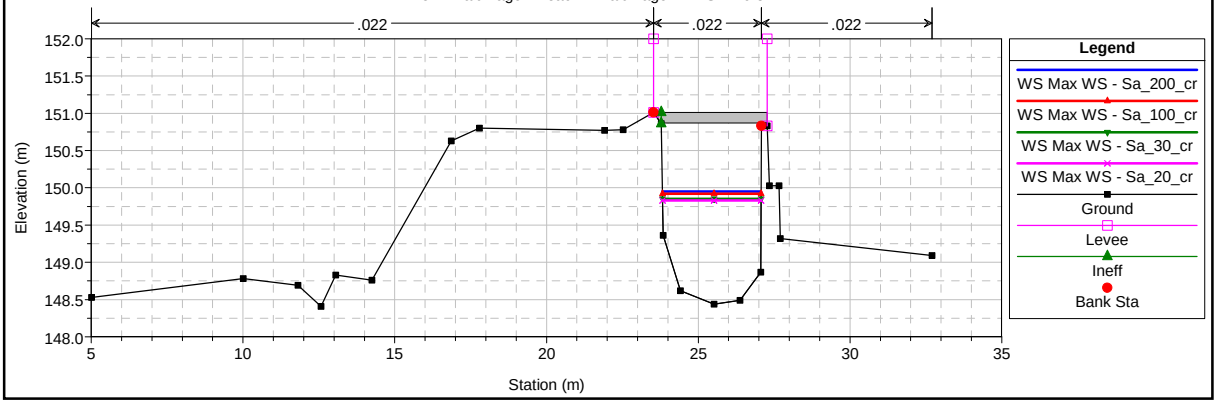
River = ValdiLago Reach = ValdiLago RS = 19.5 BR



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

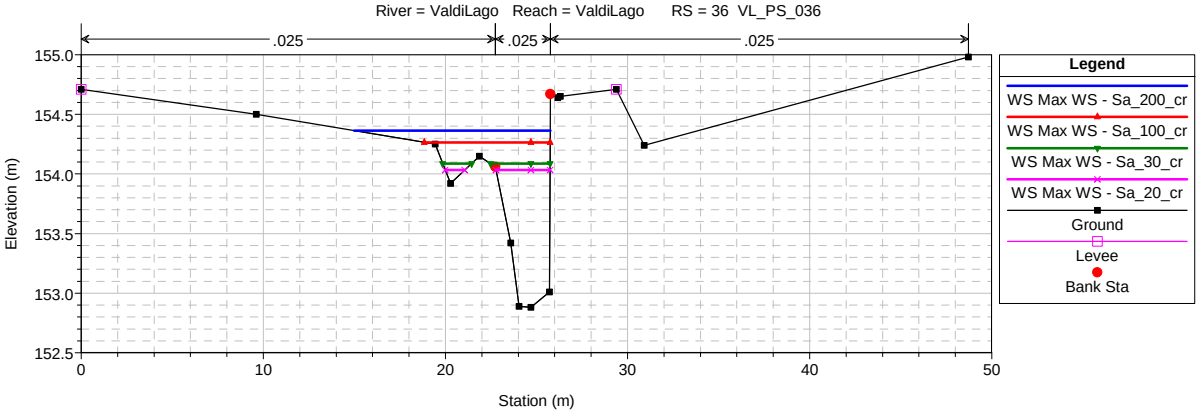
River = ValdiLago Reach = ValdiLago RS = 19.5 BR



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

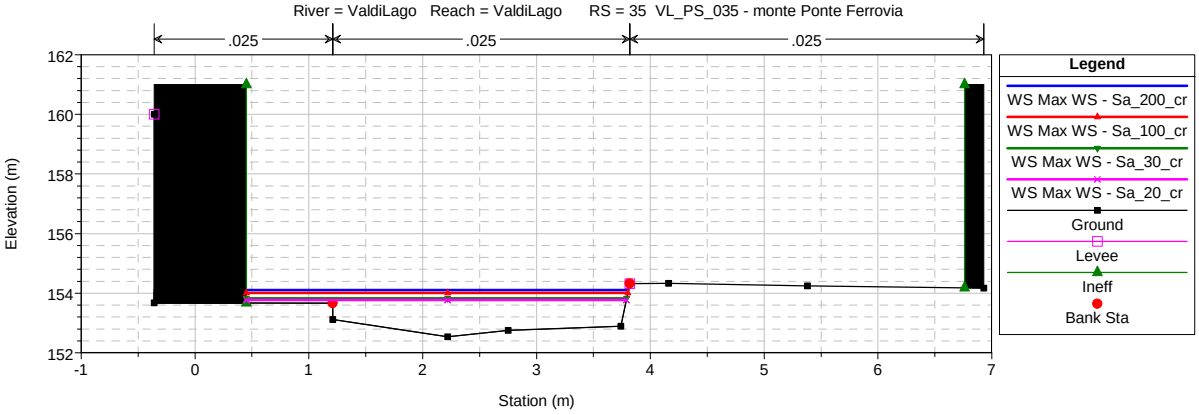
River = ValdiLago Reach = ValdiLago RS = 36 VL_PS_036



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

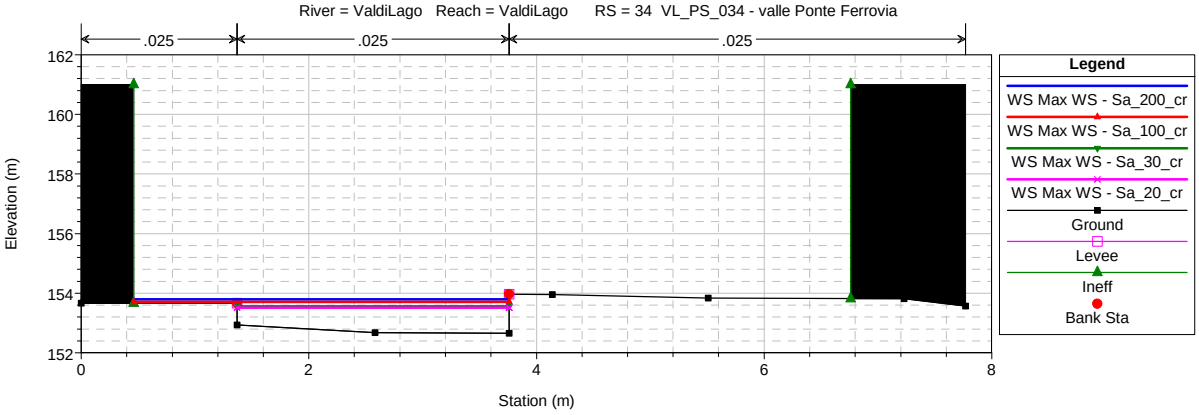
River = ValdiLago Reach = ValdiLago RS = 35 VL_PS_035 - monte Ponte Ferrovia



Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

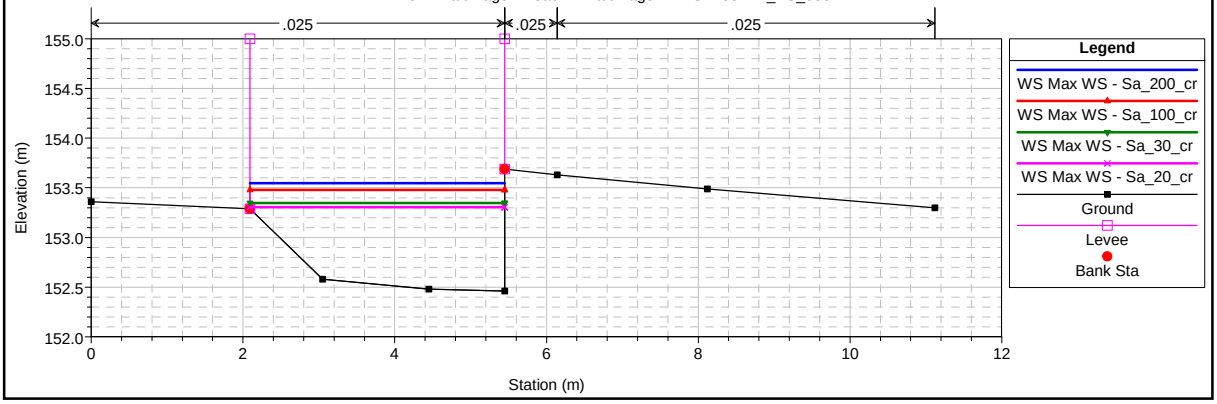
River = ValdiLago Reach = ValdiLago RS = 34 VL_PS_034 - valle Ponte Ferrovia

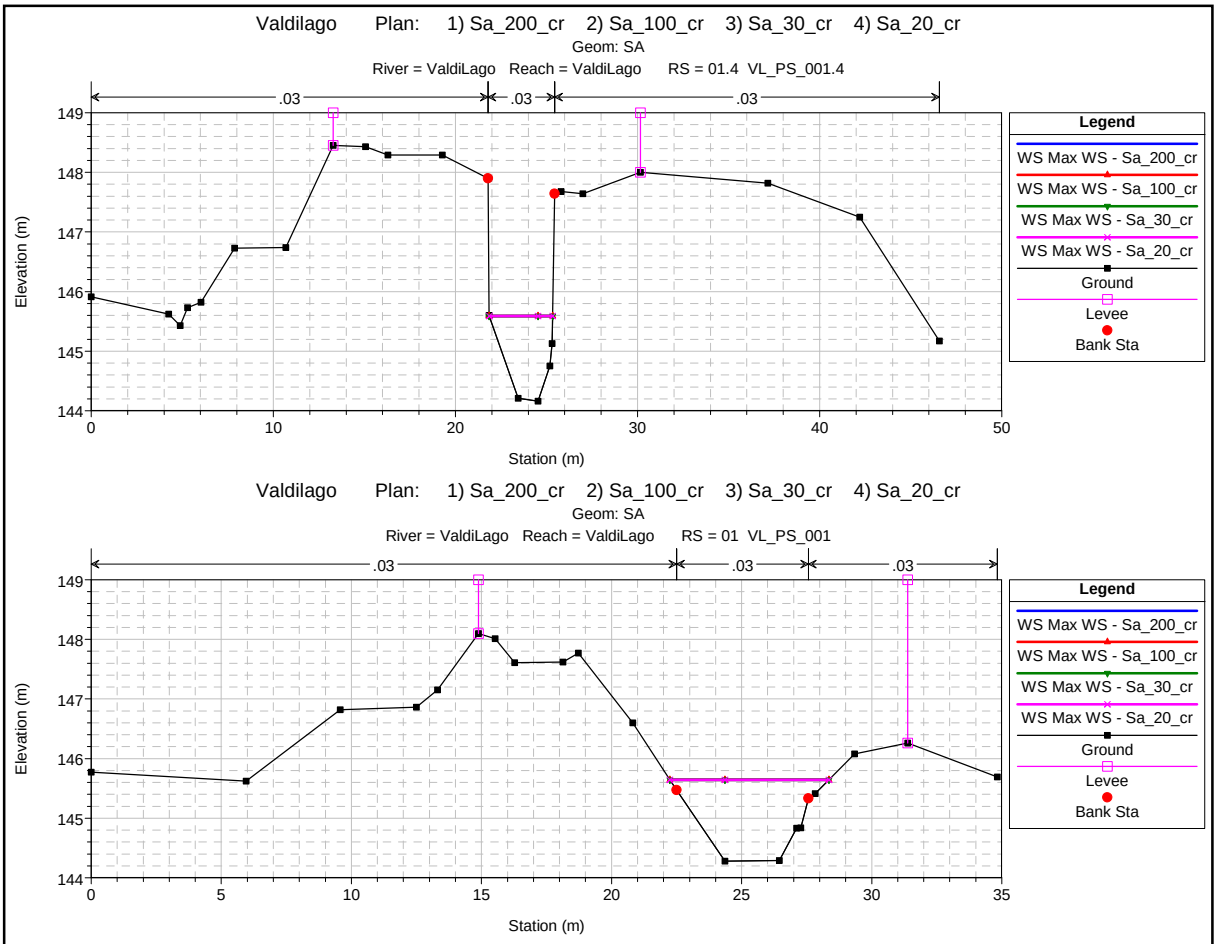


Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr

Geom: SA

River = ValdiLago Reach = ValdiLago RS = 33 VL_PS_033




Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 01.4 VL_PS_001.4
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Bank Sta

Valdilago Plan: 1) Sa_200_cr 2) Sa_100_cr 3) Sa_30_cr 4) Sa_20_cr
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 01 VL_PS_001
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Max WS - Sa_200_cr
WS Max WS - Sa_100_cr
WS Max WS - Sa_30_cr
WS Max WS - Sa_20_cr
Ground
Levee
Bank Sta

HEC-RAS River: ValdiLago Reach: ValdiLago Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
ValdiLago	36	Max WS	Sa_200_cr	13.77	152.88	154.36	154.59	154.92	0.011420	3.48	4.75	10.77	1.03
ValdiLago	36	Max WS	Sa_100_cr	11.79	152.88	154.27	154.50	154.81	0.011858	3.39	3.88	6.91	1.05
ValdiLago	36	Max WS	Sa_30_cr	8.81	152.88	154.09	154.25	154.61	0.013039	3.24	2.82	4.86	1.09
ValdiLago	36	Max WS	Sa_20_cr	8.03	152.88	154.03	154.21	154.54	0.013179	3.17	2.58	4.03	1.09
ValdiLago	35	Max WS	Sa_200_cr	13.76	152.54	154.10	154.22	154.85	0.014003	3.90	3.69	3.36	1.09
ValdiLago	35	Max WS	Sa_100_cr	11.78	152.54	154.00	154.10	154.66	0.013184	3.65	3.36	3.35	1.06
ValdiLago	35	Max WS	Sa_30_cr	8.81	152.54	153.83	153.90	154.36	0.012399	3.27	2.77	3.34	1.03
ValdiLago	35	Max WS	Sa_20_cr	8.03	152.54	153.77	153.84	154.28	0.012212	3.16	2.60	3.34	1.02
ValdiLago	34	Max WS	Sa_200_cr	13.76	152.66	153.79	154.26	155.26	0.037189	5.40	2.62	3.30	1.68
ValdiLago	34	Max WS	Sa_100_cr	11.78	152.66	153.71	154.17	155.01	0.035422	5.07	2.36	3.30	1.64
ValdiLago	34	Max WS	Sa_30_cr	8.81	152.66	153.56	153.91	154.59	0.032047	4.49	1.96	2.39	1.58
ValdiLago	34	Max WS	Sa_20_cr	8.02	152.66	153.51	153.85	154.47	0.031206	4.34	1.85	2.39	1.57
ValdiLago	33.9			Lat Struct									
ValdiLago	33.8			Lat Struct									
ValdiLago	33	Max WS	Sa_200_cr	13.21	152.46	153.55	153.79	154.48	0.021373	4.28	3.09	3.36	1.42
ValdiLago	33	Max WS	Sa_100_cr	11.58	152.46	153.48	153.69	154.31	0.020519	4.05	2.86	3.36	1.40
ValdiLago	33	Max WS	Sa_30_cr	8.81	152.46	153.35	153.52	154.03	0.019380	3.65	2.41	3.36	1.38
ValdiLago	33	Max WS	Sa_20_cr	8.02	152.46	153.30	153.46	153.94	0.019104	3.53	2.27	3.36	1.37
ValdiLago	32	Max WS	Sa_200_cr	12.88	152.11	153.21	153.33	153.67	0.010134	3.00	4.33	7.59	1.13
ValdiLago	32	Max WS	Sa_100_cr	11.47	152.11	153.15	153.26	153.59	0.010398	2.92	3.92	5.83	1.14
ValdiLago	32	Max WS	Sa_30_cr	8.80	152.11	153.02	153.08	153.41	0.011008	2.75	3.20	5.49	1.15
ValdiLago	32	Max WS	Sa_20_cr	8.02	152.11	152.98	153.04	153.35	0.011241	2.69	2.98	5.38	1.15
ValdiLago	31	Max WS	Sa_200_cr	12.87	151.68	152.79	152.82	153.23	0.008488	2.93	4.39	5.38	1.04
ValdiLago	31	Max WS	Sa_100_cr	11.46	151.68	152.72	152.75	153.14	0.008582	2.85	4.02	5.19	1.04
ValdiLago	31	Max WS	Sa_30_cr	8.81	151.68	152.58	152.59	152.94	0.008757	2.68	3.29	4.78	1.03
ValdiLago	31	Max WS	Sa_20_cr	8.02	151.68	152.53	152.54	152.88	0.008763	2.61	3.07	4.65	1.02
ValdiLago	30	Max WS	Sa_200_cr	12.87	151.37	152.63	152.61	153.05	0.007455	2.85	4.51	5.08	0.97
ValdiLago	30	Max WS	Sa_100_cr	11.46	151.37	152.56	152.53	152.95	0.007383	2.76	4.16	4.91	0.96
ValdiLago	30	Max WS	Sa_30_cr	8.81	151.37	152.42		152.75	0.007174	2.54	3.47	4.58	0.93
ValdiLago	30	Max WS	Sa_20_cr	8.02	151.37	152.37		152.68	0.007039	2.46	3.26	4.48	0.92

HEC-RAS River: ValdiLago Reach: ValdiLago Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
ValdiLago	29	Max WS	Sa_200_cr	12.87	150.93	152.26	152.23	152.65	0.007127	2.77	4.65	5.49	0.96
ValdiLago	29	Max WS	Sa_100_cr	11.46	150.93	152.21		152.56	0.006728	2.63	4.36	5.34	0.93
ValdiLago	29	Max WS	Sa_30_cr	8.72	150.93	152.15		152.38	0.004788	2.16	4.04	5.17	0.78
ValdiLago	29	Max WS	Sa_20_cr	7.94	150.93	152.14		152.34	0.004061	1.98	4.01	5.15	0.72
ValdiLago	28.5	Max WS	Sa_200_cr	12.87	150.85	152.19	152.16	152.57	0.006933	2.74	4.69	5.51	0.95
ValdiLago	28.5	Max WS	Sa_100_cr	8.48	150.85	152.17		152.34	0.003228	1.85	4.57	5.45	0.65
ValdiLago	28.5	Max WS	Sa_30_cr	7.94	150.85	152.14		152.31	0.003081	1.79	4.43	5.38	0.63
ValdiLago	28.5	Max WS	Sa_20_cr	7.89	150.85	152.14		152.30	0.003055	1.78	4.43	5.38	0.63
ValdiLago	28	Max WS	Sa_200_cr	10.45	150.85	152.23		152.43	0.003232	1.97	5.33	5.49	0.61
ValdiLago	28	Max WS	Sa_100_cr	8.43	150.85	152.17		152.31	0.002516	1.69	4.99	5.40	0.54
ValdiLago	28	Max WS	Sa_30_cr	7.91	150.85	152.15		152.28	0.002361	1.62	4.88	4.90	0.52
ValdiLago	28	Max WS	Sa_20_cr	7.86	150.85	152.14		152.28	0.002332	1.61	4.88	4.90	0.52
ValdiLago	27	Max WS	Sa_200_cr	8.81	150.52	152.26	151.69	152.38	0.001528	1.54	5.71	4.67	0.45
ValdiLago	27	Max WS	Sa_100_cr	8.22	150.52	152.23	151.65	152.34	0.001429	1.48	5.57	4.67	0.43
ValdiLago	27	Max WS	Sa_30_cr	6.98	150.52	152.14	151.54	152.23	0.001282	1.35	5.17	4.67	0.41
ValdiLago	27	Max WS	Sa_20_cr	6.62	150.52	152.11	151.51	152.20	0.001240	1.31	5.04	4.67	0.40
ValdiLago	26			Bridge									
ValdiLago	25	Max WS	Sa_200_cr	6.68	150.51	152.08		152.16	0.001024	1.28	5.72	8.24	0.37
ValdiLago	25	Max WS	Sa_100_cr	8.22	150.51	152.04		152.18	0.001797	1.66	5.36	8.24	0.50
ValdiLago	25	Max WS	Sa_30_cr	7.06	150.51	151.97		152.19	0.001554	2.05	3.45	8.24	0.57
ValdiLago	25	Max WS	Sa_20_cr	6.68	150.51	151.95		152.15	0.001460	1.96	3.40	8.24	0.55
ValdiLago	24.8			Lat Struct									
ValdiLago	24	Max WS	Sa_200_cr	8.09	150.26	151.05	151.35	152.01	0.032796	4.33	1.87	3.06	1.76
ValdiLago	24	Max WS	Sa_100_cr	8.01	150.26	151.02	151.35	152.07	0.037557	4.53	1.77	3.01	1.88
ValdiLago	24	Max WS	Sa_30_cr	7.02	150.26	150.97	151.27	151.93	0.037015	4.34	1.62	2.92	1.86
ValdiLago	24	Max WS	Sa_20_cr	6.68	150.26	150.95	151.24	151.88	0.036368	4.26	1.57	2.90	1.85
ValdiLago	23.5	Max WS	Sa_200_cr	8.02	150.02	150.89	151.11	151.63	0.022797	3.79	2.12	3.16	1.48
ValdiLago	23.5	Max WS	Sa_100_cr	8.01	150.02	150.86	151.11	151.66	0.025911	3.96	2.02	3.12	1.57
ValdiLago	23.5	Max WS	Sa_30_cr	7.02	150.02	150.82	151.03	151.53	0.024483	3.74	1.88	3.06	1.52

HEC-RAS River: ValdiLago Reach: ValdiLago Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
ValdiLago	23.5	Max WS	Sa_20_cr	6.67	150.02	150.80	151.00	151.48	0.023802	3.65	1.83	3.04	1.50
ValdiLago	23	Max WS	Sa_200_cr	7.94	150.02	150.71	151.10	152.05	0.040360	5.13	1.55	2.36	2.02
ValdiLago	23	Max WS	Sa_100_cr	8.01	150.02	150.68	151.11	152.17	0.046591	5.41	1.48	2.36	2.18
ValdiLago	23	Max WS	Sa_30_cr	7.02	150.02	150.65	151.02	151.91	0.041127	4.98	1.41	2.36	2.05
ValdiLago	23	Max WS	Sa_20_cr	6.66	150.02	150.64	150.99	151.83	0.039632	4.83	1.38	2.36	2.02
ValdiLago	22	Max WS	Sa_200_cr	6.26	148.84	150.70	149.78	150.81	0.000967	1.45	4.31	2.62	0.34
ValdiLago	22	Max WS	Sa_100_cr	6.25	148.84	150.71	149.78	150.81	0.000963	1.45	4.32	2.62	0.34
ValdiLago	22	Max WS	Sa_30_cr	6.49	148.84	150.70	149.79	150.82	0.001041	1.51	4.31	2.62	0.36
ValdiLago	22	Max WS	Sa_20_cr	6.24	148.84	150.70	149.78	150.81	0.000962	1.45	4.31	2.62	0.34
ValdiLago	21.5			Bridge									
ValdiLago	21	Max WS	Sa_200_cr	8.48	148.77	149.92	149.88	150.42	0.004115	3.14	2.70	3.53	0.95
ValdiLago	21	Max WS	Sa_100_cr	8.01	148.77	149.88	149.84	150.36	0.004109	3.07	2.61	3.50	0.94
ValdiLago	21	Max WS	Sa_30_cr	7.01	148.77	149.80		150.23	0.004120	2.92	2.41	3.42	0.93
ValdiLago	21	Max WS	Sa_20_cr	6.69	148.77	149.77		150.19	0.004112	2.86	2.34	3.40	0.92
ValdiLago	20	Max WS	Sa_200_cr	8.49	148.44	149.96	149.52	150.16	0.001868	1.97	4.32	3.26	0.54
ValdiLago	20	Max WS	Sa_100_cr	8.02	148.44	149.93	149.48	150.12	0.001777	1.90	4.22	3.25	0.53
ValdiLago	20	Max WS	Sa_30_cr	7.01	148.44	149.87	149.41	150.02	0.001590	1.75	4.01	3.25	0.50
ValdiLago	20	Max WS	Sa_20_cr	6.68	148.44	149.84	149.38	149.99	0.001531	1.70	3.92	3.25	0.49
ValdiLago	19.5			Bridge									
ValdiLago	19.4	Max WS	Sa_200_cr	8.49	148.44	149.92		150.13	0.002773	2.04	4.16	3.25	0.57
ValdiLago	19.4	Max WS	Sa_100_cr	8.01	148.44	149.89		150.09	0.002611	1.96	4.08	3.25	0.56
ValdiLago	19.4	Max WS	Sa_30_cr	7.01	148.44	149.83		150.00	0.002286	1.81	3.88	3.25	0.53
ValdiLago	19.4	Max WS	Sa_20_cr	6.67	148.44	149.81		149.96	0.002181	1.75	3.81	3.25	0.52
ValdiLago	19	Max WS	Sa_200_cr	8.49	148.51	149.91		150.09	0.003314	1.86	4.56	5.49	0.65
ValdiLago	19	Max WS	Sa_100_cr	8.01	148.51	149.88		150.05	0.003287	1.83	4.38	5.38	0.65
ValdiLago	19	Max WS	Sa_30_cr	7.01	148.51	149.80		149.96	0.003244	1.76	3.98	5.14	0.64
ValdiLago	19	Max WS	Sa_20_cr	6.67	148.51	149.77		149.93	0.003241	1.74	3.84	5.05	0.64
ValdiLago	18	Max WS	Sa_200_cr	8.48	148.42	149.82		149.99	0.003189	1.81	4.68	5.65	0.64
ValdiLago	18	Max WS	Sa_100_cr	8.01	148.42	149.79		149.95	0.003159	1.78	4.50	5.54	0.63

HEC-RAS River: ValdiLago Reach: ValdiLago Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
ValdiLago	18	Max WS	Sa_30_cr	7.01	148.42	149.72		149.87	0.003101	1.71	4.10	5.30	0.62
ValdiLago	18	Max WS	Sa_20_cr	6.65	148.42	149.69		149.83	0.003088	1.68	3.95	5.20	0.62
ValdiLago	17	Max WS	Sa_200_cr	8.48	148.26	149.63		149.87	0.005016	2.18	3.89	4.91	0.78
ValdiLago	17	Max WS	Sa_100_cr	8.01	148.26	149.61		149.83	0.004818	2.12	3.77	4.83	0.77
ValdiLago	17	Max WS	Sa_30_cr	7.00	148.26	149.55		149.75	0.004416	1.99	3.52	4.62	0.73
ValdiLago	17	Max WS	Sa_20_cr	6.64	148.26	149.53		149.72	0.004290	1.95	3.41	4.54	0.72
ValdiLago	16	Max WS	Sa_200_cr	8.48	148.18	149.59		149.76	0.003348	1.84	4.61	5.76	0.66
ValdiLago	16	Max WS	Sa_100_cr	8.01	148.18	149.57		149.73	0.003185	1.78	4.50	5.69	0.64
ValdiLago	16	Max WS	Sa_30_cr	7.00	148.18	149.52		149.66	0.002897	1.66	4.21	5.51	0.61
ValdiLago	16	Max WS	Sa_20_cr	6.63	148.18	149.50		149.63	0.002807	1.62	4.09	5.43	0.60
ValdiLago	15	Max WS	Sa_200_cr	8.48	148.06	149.53		149.70	0.003143	1.82	4.66	5.31	0.62
ValdiLago	15	Max WS	Sa_100_cr	8.01	148.06	149.52		149.67	0.002919	1.74	4.59	5.29	0.60
ValdiLago	15	Max WS	Sa_30_cr	7.00	148.06	149.48		149.61	0.002541	1.60	4.38	5.20	0.56
ValdiLago	15	Max WS	Sa_20_cr	6.63	148.06	149.46		149.58	0.002424	1.55	4.28	5.16	0.54
ValdiLago	14.9			Lat Struct									
ValdiLago	14	Max WS	Sa_200_cr	8.44	147.73	149.51		149.59	0.001451	1.26	6.90	9.09	0.44
ValdiLago	14	Max WS	Sa_100_cr	7.98	147.73	149.50		149.57	0.001359	1.21	6.77	9.02	0.43
ValdiLago	14	Max WS	Sa_30_cr	6.99	147.73	149.46		149.52	0.001211	1.12	6.40	8.82	0.40
ValdiLago	14	Max WS	Sa_20_cr	6.63	147.73	149.44		149.50	0.001168	1.09	6.23	8.69	0.39
ValdiLago	13.88			Lat Struct									
ValdiLago	13.8	Max WS	Sa_200_cr	6.82	147.69	149.43	148.82	149.57	0.002392	1.66	4.18	3.56	0.46
ValdiLago	13.8	Max WS	Sa_100_cr	6.79	147.69	149.39	148.81	149.54	0.002593	1.70	4.04	3.56	0.48
ValdiLago	13.8	Max WS	Sa_30_cr	6.57	147.69	149.31	148.79	149.47	0.002961	1.76	3.76	3.56	0.51
ValdiLago	13.8	Max WS	Sa_20_cr	6.36	147.69	149.29	148.77	149.45	0.002924	1.73	3.69	3.56	0.51
ValdiLago	13.5			Bridge									
ValdiLago	13	Max WS	Sa_200_cr	6.84	147.69	148.99		149.35	0.006253	2.64	2.59	2.74	0.79
ValdiLago	13	Max WS	Sa_100_cr	6.80	147.69	148.99		149.34	0.006206	2.63	2.59	2.74	0.78
ValdiLago	13	Max WS	Sa_30_cr	6.58	147.69	148.98		149.32	0.005905	2.56	2.57	2.72	0.76
ValdiLago	13	Max WS	Sa_20_cr	6.36	147.69	148.98		149.29	0.005602	2.48	2.56	2.71	0.74

HEC-RAS River: ValdiLago Reach: ValdiLago Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
ValdiLago	12.9			Lat Struct									
ValdiLago	12	Max WS	Sa_200_cr	5.90	147.42	149.09	148.39	149.18	0.002255	1.34	4.69	8.20	0.36
ValdiLago	12	Max WS	Sa_100_cr	5.89	147.42	149.09	148.39	149.18	0.002265	1.34	4.66	8.20	0.36
ValdiLago	12	Max WS	Sa_30_cr	5.83	147.42	149.07	148.39	149.16	0.002332	1.35	4.51	8.20	0.36
ValdiLago	12	Max WS	Sa_20_cr	5.76	147.42	149.05	148.38	149.14	0.002397	1.36	4.35	8.20	0.37
ValdiLago	11.7			Bridge									
ValdiLago	011.5	Max WS	Sa_200_cr	5.90	147.42	149.04		149.14	0.002558	1.40	4.30	8.20	0.38
ValdiLago	011.5	Max WS	Sa_100_cr	5.89	147.42	149.04		149.14	0.002554	1.40	4.30	8.20	0.38
ValdiLago	011.5	Max WS	Sa_30_cr	5.83	147.42	149.04		149.14	0.002512	1.39	4.27	7.88	0.38
ValdiLago	011.5	Max WS	Sa_20_cr	5.76	147.42	149.03		149.13	0.002468	1.38	4.25	7.53	0.37
ValdiLago	11.49			Lat Struct									
ValdiLago	011.4	Max WS	Sa_200_cr	5.14	147.42	148.90	148.43	149.12	0.005391	2.08	2.47	2.55	0.55
ValdiLago	011.4	Max WS	Sa_100_cr	5.13	147.42	148.90	148.43	149.12	0.005377	2.08	2.47	2.55	0.55
ValdiLago	011.4	Max WS	Sa_30_cr	5.08	147.42	148.90	148.42	149.11	0.005308	2.06	2.47	2.54	0.55
ValdiLago	011.4	Max WS	Sa_20_cr	5.04	147.42	148.90	148.42	149.11	0.005241	2.05	2.46	2.54	0.55
ValdiLago	11.2			Bridge									
ValdiLago	11	Max WS	Sa_200_cr	5.13	147.31	148.69		148.94	0.006819	2.23	2.30	2.20	0.62
ValdiLago	11	Max WS	Sa_100_cr	5.13	147.31	148.69		148.94	0.006815	2.23	2.30	2.20	0.62
ValdiLago	11	Max WS	Sa_30_cr	5.08	147.31	148.69		148.94	0.006718	2.21	2.30	2.19	0.61
ValdiLago	11	Max WS	Sa_20_cr	5.04	147.31	148.69		148.93	0.006626	2.19	2.30	2.18	0.61
ValdiLago	10.9			Lat Struct									
ValdiLago	10.8			Lat Struct									
ValdiLago	10	Max WS	Sa_200_cr	5.10	147.05	148.67		148.77	0.002206	1.45	3.89	5.31	0.42
ValdiLago	10	Max WS	Sa_100_cr	5.09	147.05	148.67		148.77	0.002204	1.45	3.89	5.31	0.42
ValdiLago	10	Max WS	Sa_30_cr	5.05	147.05	148.67		148.77	0.002186	1.45	3.88	5.31	0.42
ValdiLago	10	Max WS	Sa_20_cr	5.01	147.05	148.67		148.76	0.002168	1.44	3.86	5.31	0.42

HEC-RAS River: ValdiLago Reach: ValdiLago Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
ValdiLago	09	Max WS	Sa_200_cr	4.74	146.93	148.51	147.90	148.65	0.002621	1.62	2.92	2.47	0.44
ValdiLago	09	Max WS	Sa_100_cr	4.75	146.93	148.51	147.91	148.65	0.002635	1.63	2.92	2.47	0.44
ValdiLago	09	Max WS	Sa_30_cr	4.74	146.93	148.51	147.91	148.65	0.002624	1.62	2.92	2.47	0.44
ValdiLago	09	Max WS	Sa_20_cr	4.74	146.93	148.51	147.91	148.65	0.002629	1.63	2.92	2.47	0.44
ValdiLago	08.5			Bridge									
ValdiLago	08	Max WS	Sa_200_cr	5.05	146.74	147.79		148.02	0.005044	2.14	2.35	6.11	0.71
ValdiLago	08	Max WS	Sa_100_cr	5.01	146.74	147.78		148.02	0.005097	2.14	2.34	6.10	0.71
ValdiLago	08	Max WS	Sa_30_cr	4.94	146.74	147.78		148.01	0.005065	2.13	2.32	6.09	0.71
ValdiLago	08	Max WS	Sa_20_cr	4.98	146.74	147.77		148.01	0.005317	2.17	2.30	6.08	0.72
ValdiLago	7.9			Lat Struct									
ValdiLago	7.8			Lat Struct									
ValdiLago	07	Max WS	Sa_200_cr	3.84	146.51	147.87		147.91	0.000849	0.90	4.55	4.78	0.27
ValdiLago	07	Max WS	Sa_100_cr	3.99	146.51	147.86		147.90	0.000958	0.95	4.48	4.77	0.29
ValdiLago	07	Max WS	Sa_30_cr	4.21	146.51	147.83		147.88	0.001168	1.03	4.35	4.76	0.31
ValdiLago	07	Max WS	Sa_20_cr	4.55	146.51	147.79		147.86	0.001554	1.17	4.16	4.75	0.36
ValdiLago	06	Max WS	Sa_200_cr	10.35	145.92	147.30	147.30	147.65	0.010224	2.66	4.06	5.66	0.94
ValdiLago	06	Max WS	Sa_100_cr	9.36	145.92	147.26	147.25	147.58	0.010016	2.57	3.79	5.55	0.93
ValdiLago	06	Max WS	Sa_30_cr	8.46	145.92	147.22		147.52	0.009434	2.45	3.59	5.47	0.90
ValdiLago	06	Max WS	Sa_20_cr	7.65	145.92	147.19		147.46	0.008767	2.32	3.42	5.40	0.86
ValdiLago	05	Max WS	Sa_200_cr	5.27	145.42	146.64		146.79	0.005548	1.75	3.01	4.30	0.67
ValdiLago	05	Max WS	Sa_100_cr	5.27	145.42	146.63		146.79	0.005546	1.75	3.01	4.30	0.67
ValdiLago	05	Max WS	Sa_30_cr	5.26	145.42	146.63		146.79	0.005544	1.75	3.01	4.30	0.67
ValdiLago	05	Max WS	Sa_20_cr	5.23	145.42	146.63		146.79	0.005538	1.74	3.00	4.29	0.67
ValdiLago	04	Max WS	Sa_200_cr	5.27	144.84	145.98		146.18	0.007695	1.96	2.69	4.26	0.79
ValdiLago	04	Max WS	Sa_100_cr	5.27	144.84	145.98		146.18	0.007686	1.96	2.69	4.26	0.79
ValdiLago	04	Max WS	Sa_30_cr	5.26	144.84	145.98		146.17	0.007688	1.96	2.69	4.26	0.79
ValdiLago	04	Max WS	Sa_20_cr	5.23	144.84	145.98		146.17	0.007689	1.96	2.67	4.25	0.79
ValdiLago	03	Max WS	Sa_200_cr	5.27	144.33	145.76		145.87	0.004169	1.43	3.68	5.95	0.58
ValdiLago	03	Max WS	Sa_100_cr	5.27	144.33	145.76		145.87	0.004167	1.43	3.68	5.95	0.58

HEC-RAS River: ValdiLago Reach: ValdiLago Profile: Max WS (Continued)

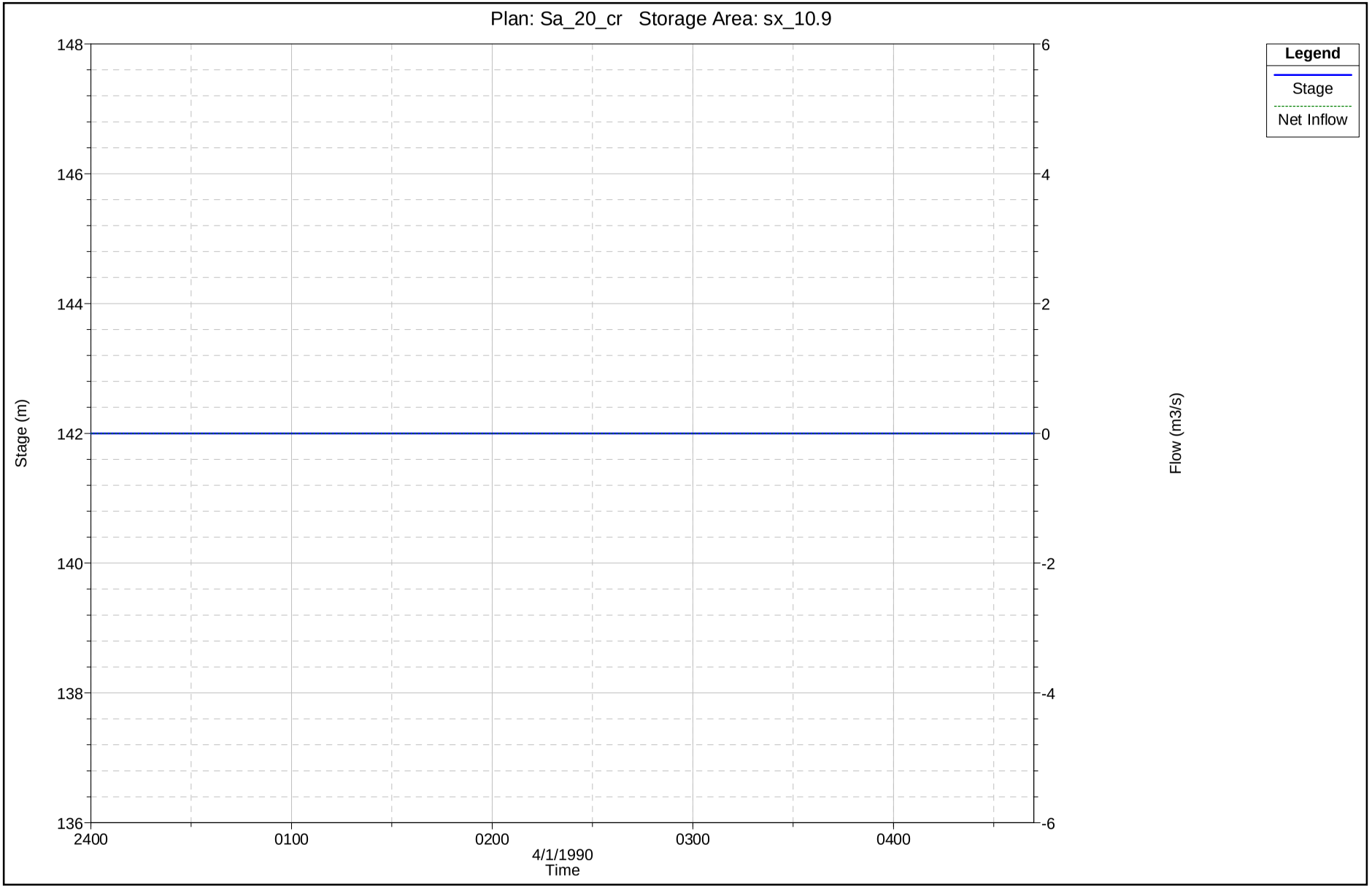
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
ValdiLago	03	Max WS	Sa_30_cr	5.26	144.33	145.76		145.87	0.004174	1.43	3.68	5.95	0.58
ValdiLago	03	Max WS	Sa_20_cr	5.23	144.33	145.76		145.86	0.004190	1.43	3.66	5.93	0.58
ValdiLago	02	Max WS	Sa_200_cr	5.27	144.16	145.61	145.15	145.72	0.003183	1.49	3.53	3.50	0.47
ValdiLago	02	Max WS	Sa_100_cr	5.27	144.16	145.61	145.15	145.72	0.003181	1.49	3.53	3.50	0.47
ValdiLago	02	Max WS	Sa_30_cr	5.26	144.16	145.61	145.14	145.72	0.003180	1.49	3.53	3.50	0.47
ValdiLago	02	Max WS	Sa_20_cr	5.23	144.16	145.61	145.14	145.72	0.003173	1.49	3.51	3.50	0.47
ValdiLago	01.5			Bridge									
ValdiLago	01.4	Max WS	Sa_200_cr	5.27	144.16	145.59		145.71	0.003357	1.52	3.46	3.49	0.49
ValdiLago	01.4	Max WS	Sa_100_cr	5.27	144.16	145.59		145.71	0.003358	1.52	3.46	3.48	0.49
ValdiLago	01.4	Max WS	Sa_30_cr	5.26	144.16	145.59		145.71	0.003356	1.52	3.46	3.48	0.49
ValdiLago	01.4	Max WS	Sa_20_cr	5.23	144.16	145.59		145.70	0.003345	1.52	3.45	3.48	0.49
ValdiLago	01	Max WS	Sa_200_cr	5.27	144.28	145.65	145.01	145.69	0.001011	0.99	5.45	6.12	0.31
ValdiLago	01	Max WS	Sa_100_cr	5.27	144.28	145.65	145.01	145.69	0.001011	0.99	5.45	6.12	0.31
ValdiLago	01	Max WS	Sa_30_cr	5.26	144.28	145.64	145.01	145.69	0.001011	0.99	5.44	6.12	0.31
ValdiLago	01	Max WS	Sa_20_cr	5.23	144.28	145.64	145.01	145.69	0.001011	0.98	5.42	6.11	0.31

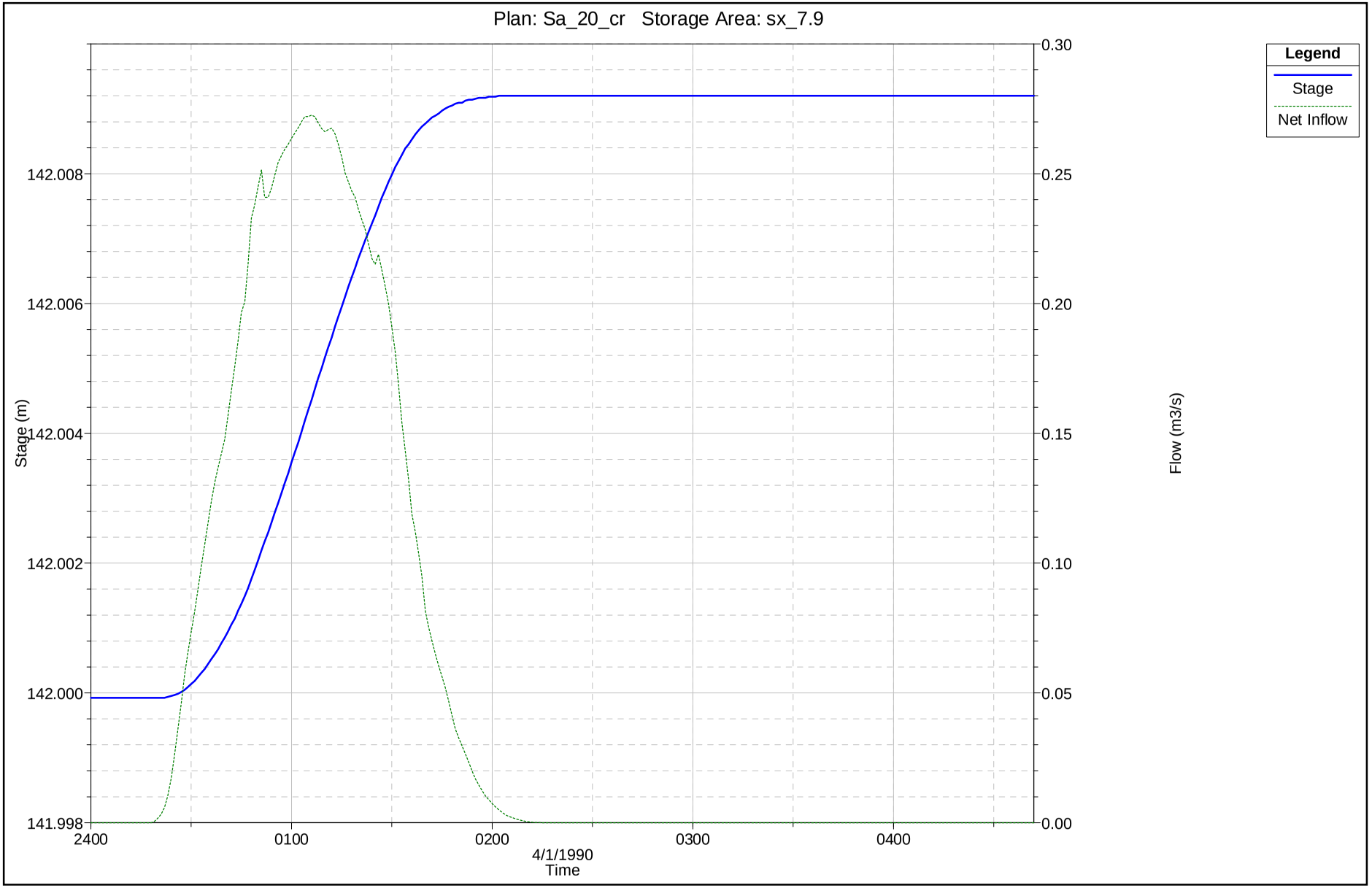
HEC-RAS Profile: Max WS

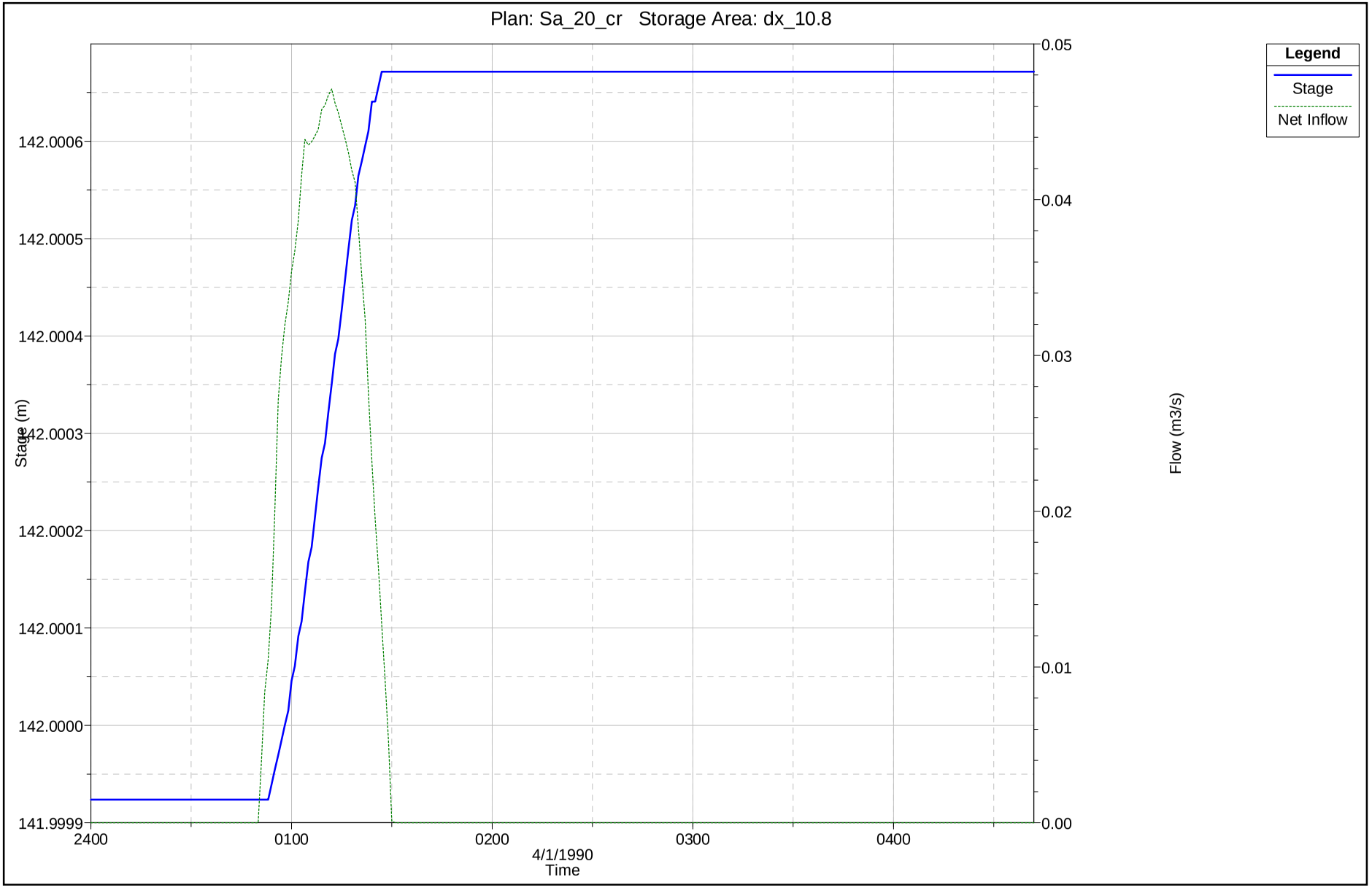
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
11.49_DX	Max WS	Sa_200_cr	142.05	142.00	0.77	100.00	4.82
11.49_DX	Max WS	Sa_100_cr	142.05	142.00	0.76	100.00	4.57
11.49_DX	Max WS	Sa_30_cr	142.04	142.00	0.74	100.00	4.08
11.49_DX	Max WS	Sa_20_cr	142.04	142.00	0.72	100.00	4.15
12.9_DX	Max WS	Sa_200_cr	142.04	142.00	0.94	100.00	3.66
12.9_DX	Max WS	Sa_100_cr	142.03	142.00	0.91	100.00	3.23
12.9_DX	Max WS	Sa_30_cr	142.02	142.00	0.75	100.00	2.35
12.9_DX	Max WS	Sa_20_cr	142.02	142.00	0.60	100.00	2.16
13.88_SX	Max WS	Sa_200_cr	142.01	142.00	0.40	100.00	0.61
13.88_SX	Max WS	Sa_100_cr	142.00	142.00	0.25	100.00	0.31
13.88_SX	Max WS	Sa_30_cr	142.00	142.00	0.05	100.00	0.03
13.88_SX	Max WS	Sa_20_cr	142.00	142.00	0.02	100.00	0.00
14.9_DX	Max WS	Sa_200_cr	142.02	142.00	1.24	100.00	2.32
14.9_DX	Max WS	Sa_100_cr	142.01	142.00	0.94	100.00	1.49
14.9_DX	Max WS	Sa_30_cr	142.00	142.00	0.38	100.00	0.43
14.9_DX	Max WS	Sa_20_cr	142.00	142.00	0.25	100.00	0.24
24.8_SX	Max WS	Sa_200_cr	142.01	142.00	0.40	100.00	0.52
24.8_SX	Max WS	Sa_100_cr	142.00	142.00	0.21	100.00	0.27
24.8_SX	Max WS	Sa_30_cr	142.00	142.00	0.04	100.00	0.03
24.8_SX	Max WS	Sa_20_cr	142.00	142.00	0.02	100.00	0.03
33.8_SX	Max WS	Sa_200_cr	142.03	142.00	2.33	100.00	3.14
33.8_SX	Max WS	Sa_100_cr	142.02	142.00	1.29	100.00	1.65
33.8_SX	Max WS	Sa_30_cr	142.00	142.00	0.35	100.00	0.37
33.8_SX	Max WS	Sa_20_cr	142.00	142.00	0.22	100.00	0.24
33.9_DX	Max WS	Sa_200_cr	142.07	142.00	3.99	100.00	6.58
33.9_DX	Max WS	Sa_100_cr	142.05	142.00	2.87	100.00	4.85
33.9_DX	Max WS	Sa_30_cr	142.02	142.00	1.59	100.00	2.22
33.9_DX	Max WS	Sa_20_cr	142.02	142.00	1.29	100.00	1.98

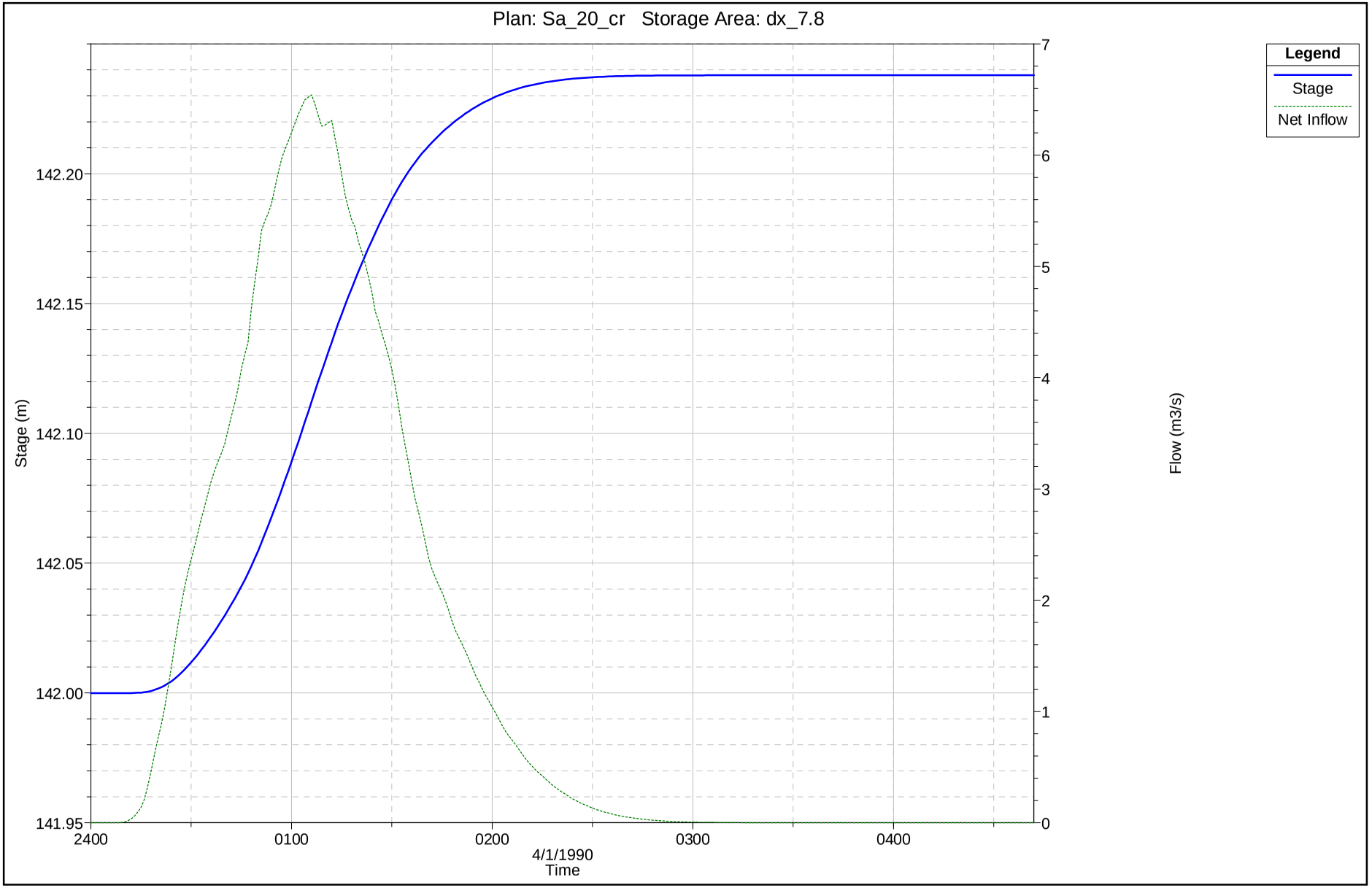
HEC-RAS Profile: Max WS (Continued)

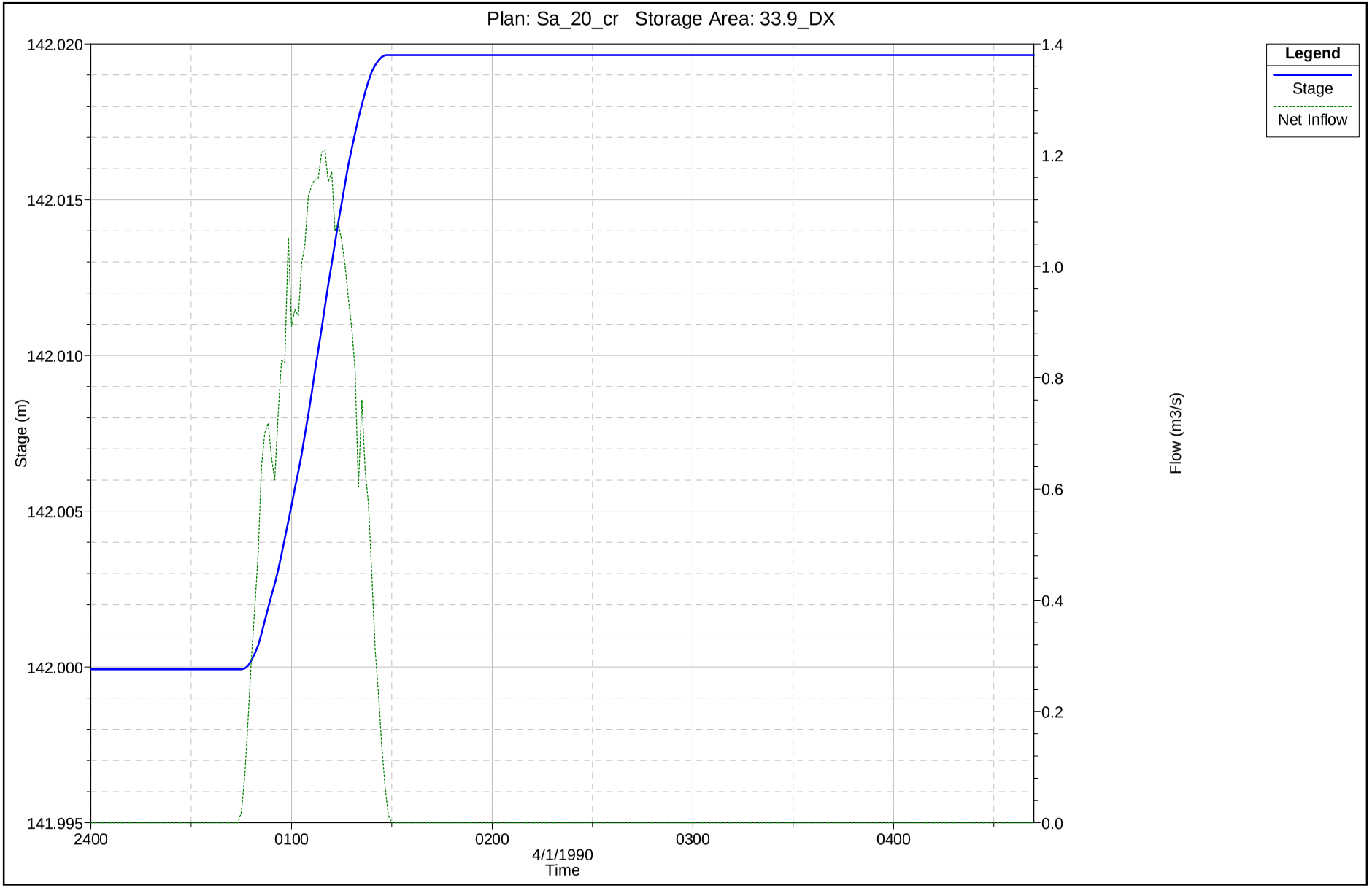
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
dx_10.8	Max WS	Sa_200_cr	142.00	142.00	0.07	100.00	0.18
dx_10.8	Max WS	Sa_100_cr	142.00	142.00	0.07	100.00	0.15
dx_10.8	Max WS	Sa_30_cr	142.00	142.00	0.06	100.00	0.09
dx_10.8	Max WS	Sa_20_cr	142.00	142.00	0.05	100.00	0.06
dx_7.8	Max WS	Sa_200_cr	142.48	142.00	15.72	100.00	47.91
dx_7.8	Max WS	Sa_100_cr	142.40	142.00	12.26	100.00	40.36
dx_7.8	Max WS	Sa_30_cr	142.30	142.00	9.28	100.00	29.78
dx_7.8	Max WS	Sa_20_cr	142.24	142.00	6.54	100.00	23.81
sx_10.9	Max WS	Sa_200_cr	142.00	142.00	0.00	100.00	0.00
sx_10.9	Max WS	Sa_100_cr	142.00	142.00	0.00	100.00	0.00
sx_10.9	Max WS	Sa_30_cr	142.00	142.00	0.00	100.00	0.00
sx_10.9	Max WS	Sa_20_cr	142.00	142.00	0.00	100.00	0.00
sx_7.9	Max WS	Sa_200_cr	142.02	142.00	0.40	100.00	1.59
sx_7.9	Max WS	Sa_100_cr	142.01	142.00	0.36	100.00	1.43
sx_7.9	Max WS	Sa_30_cr	142.01	142.00	0.32	100.00	1.13
sx_7.9	Max WS	Sa_20_cr	142.01	142.00	0.27	100.00	0.91

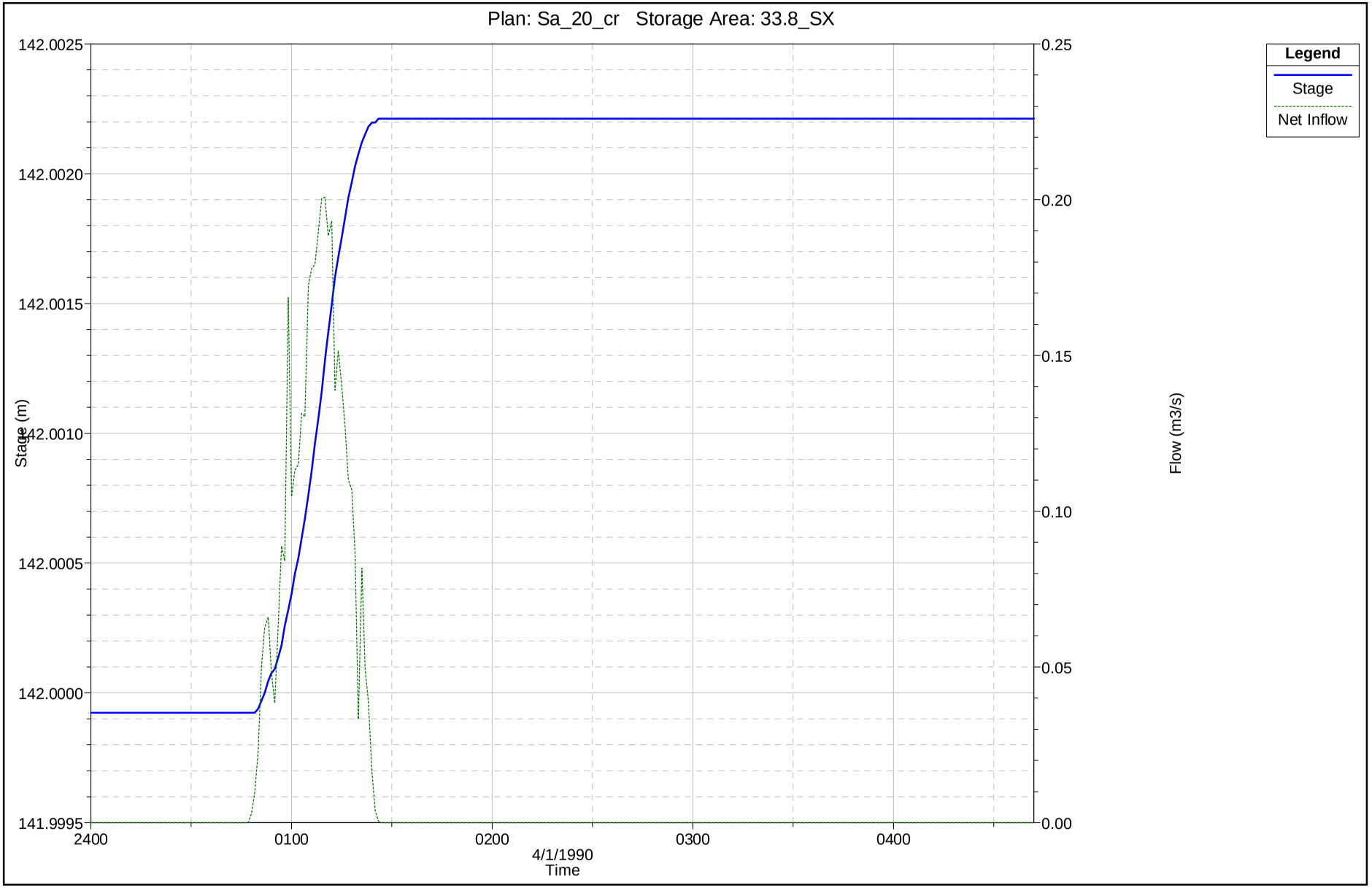

Plan: Sa_20_cr Storage Area: sx_10.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
148
146
144
142
140
138
136
6
4
2
0
-2
-4
-6
2400
0100
0200
0300
0400
4/1/1990
Time

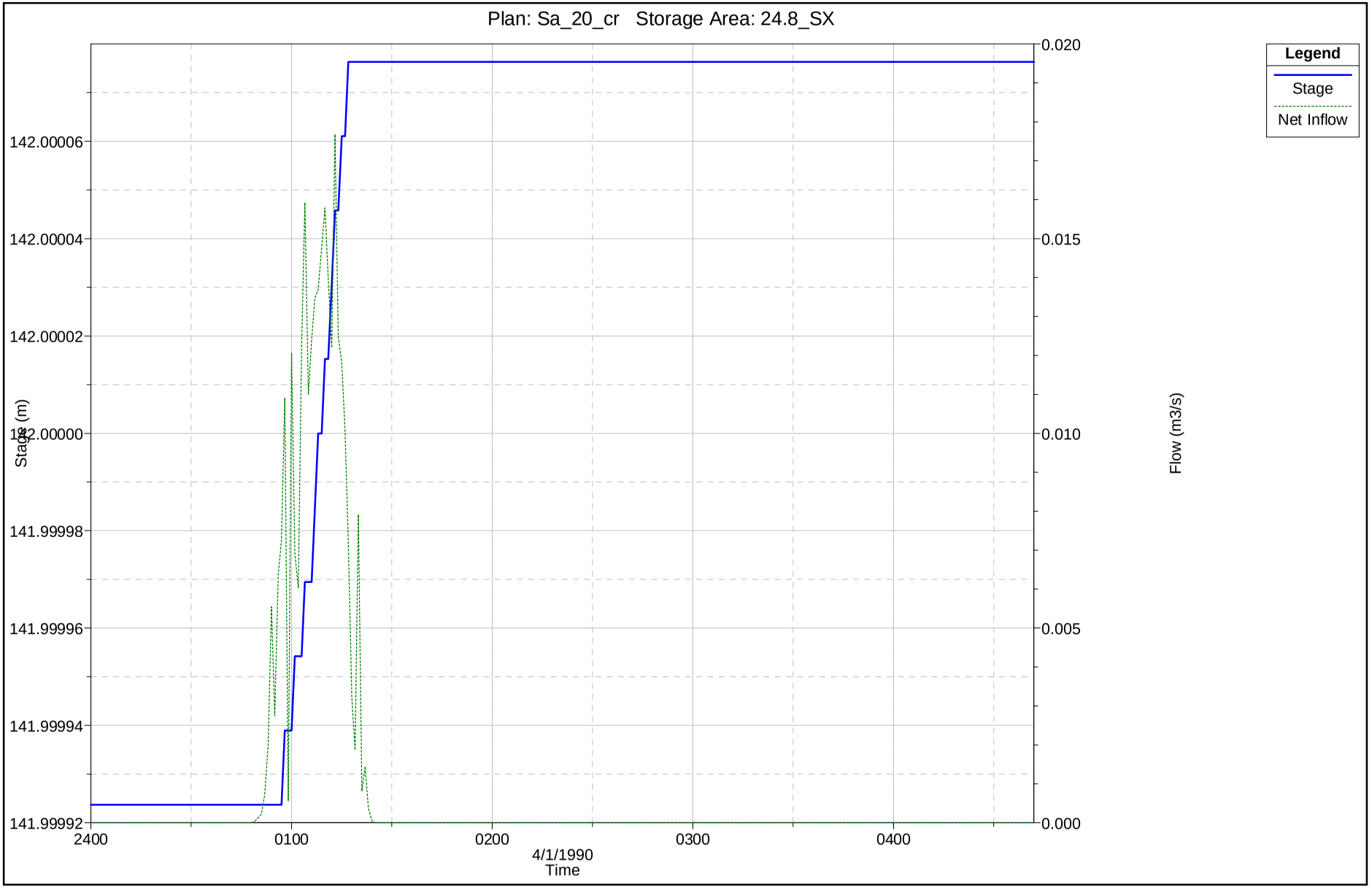

Plan: Sa_20_cr Storage Area: sx_7.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.008
142.006
142.004
142.002
142.000
141.998
0.30
0.25
0.20
0.15
0.10
0.05
0.00
2400
0100
0200
0300
0400
4/1/1990
Time

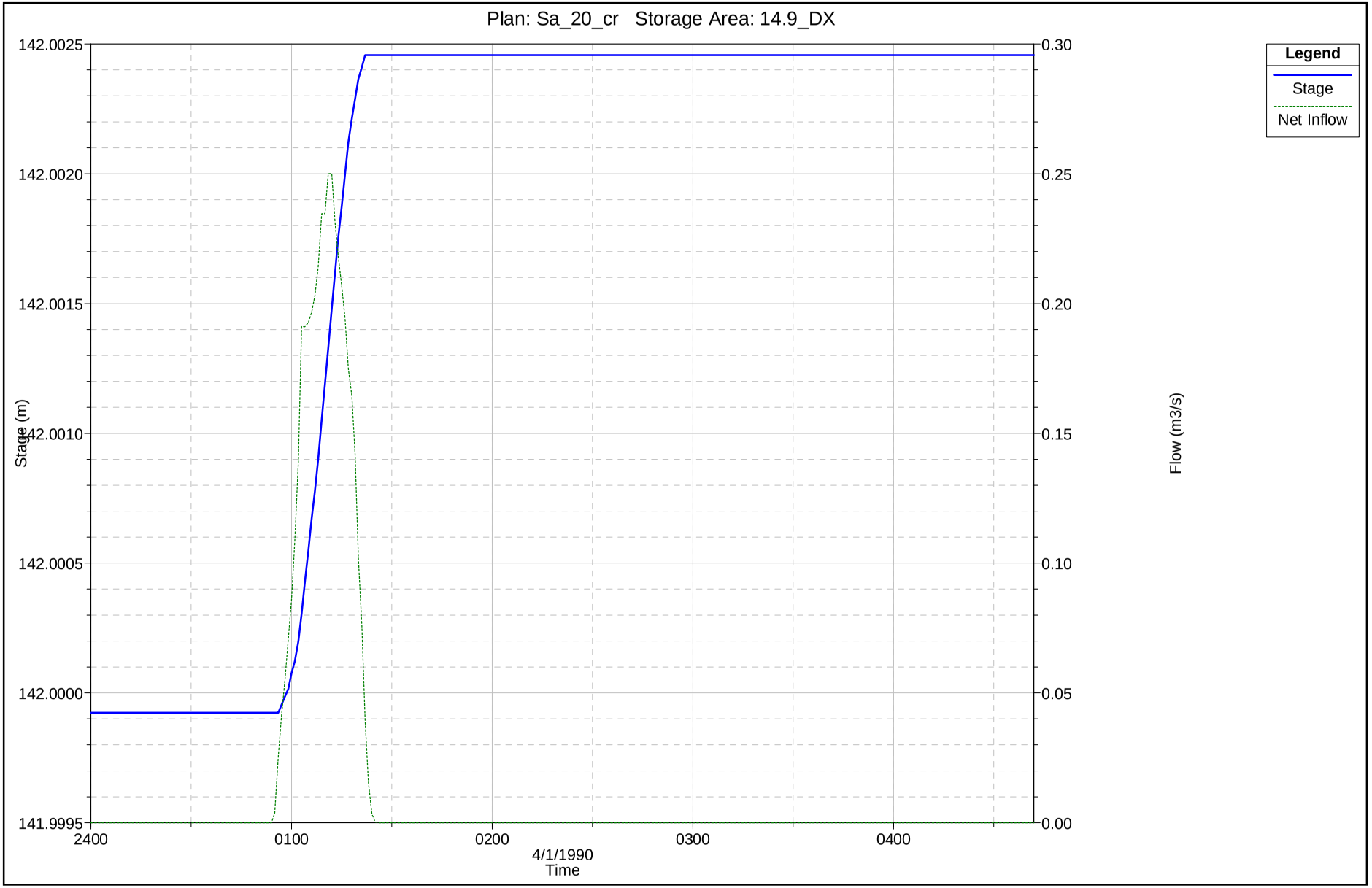

Plan: Sa_20_cr Storage Area: dx_10.8
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.0006
142.0005
142.0004
142.0003
142.0002
142.0001
142.0000
141.9999
0.05
0.04
0.03
0.02
0.01
0.00
2400
0100
0200
0300
0400
4/1/1990
Time

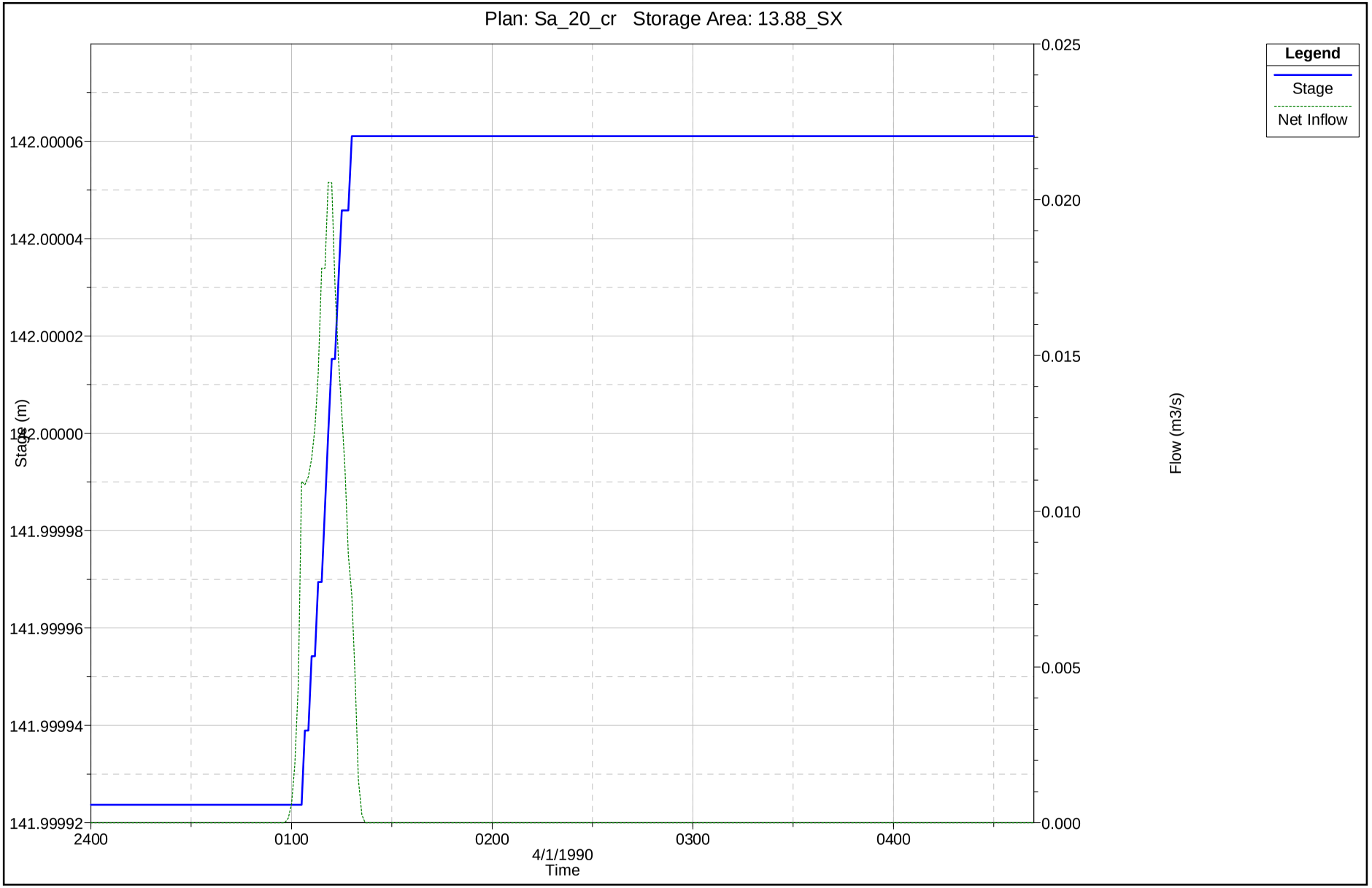

Plan: Sa_20_cr Storage Area: dx_7.8
Legend
Stage
Net Inflow
Stage (m)
142.20
142.15
142.10
142.05
142.00
141.95
Flow (m3/s)
7
6
5
4
3
2
1
0
2400
0100
0200
0300
0400
4/1/1990
Time

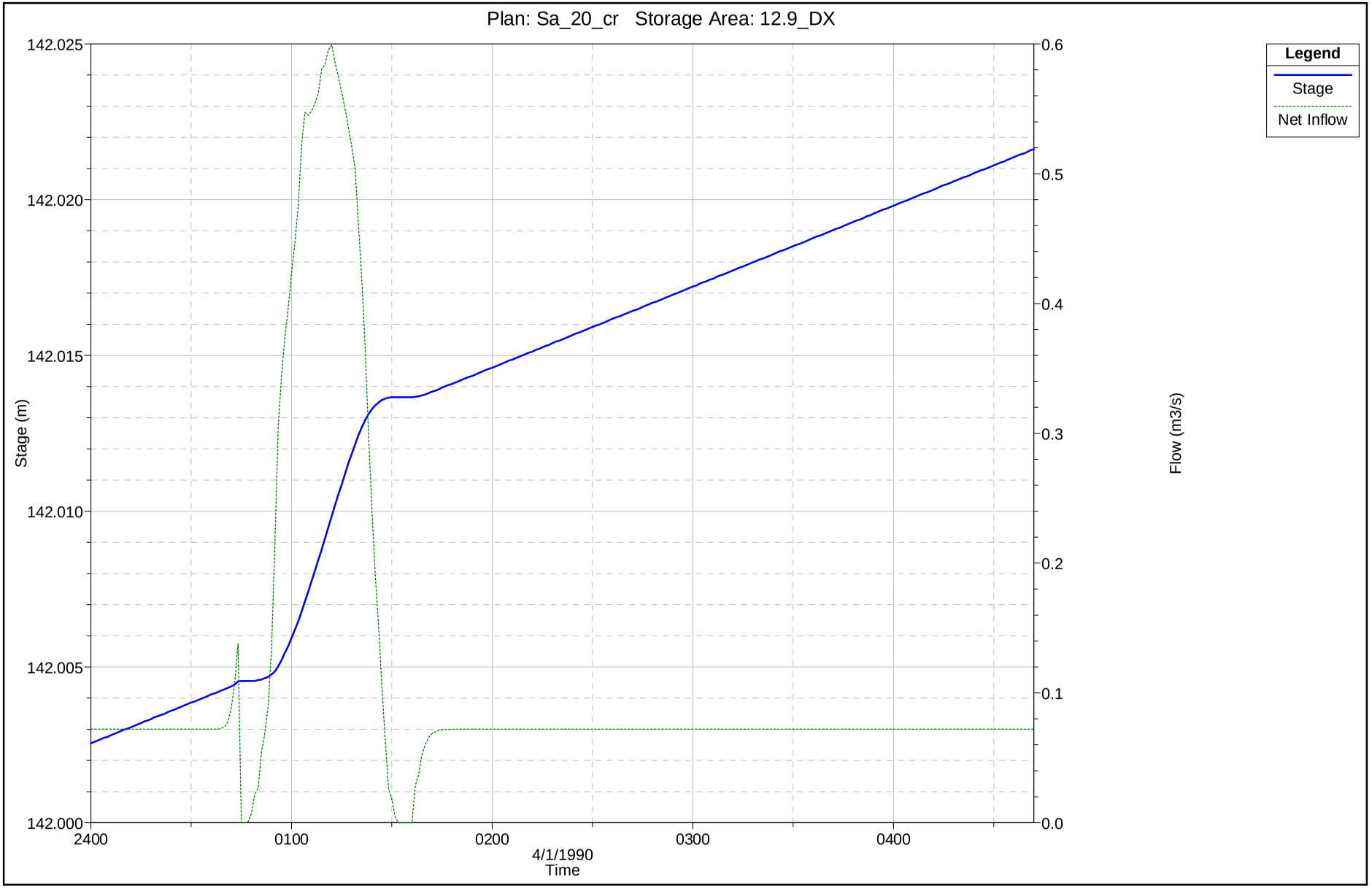

Plan: Sa_20_cr Storage Area: 33.9_DX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.020
142.015
142.010
142.005
142.000
141.995
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

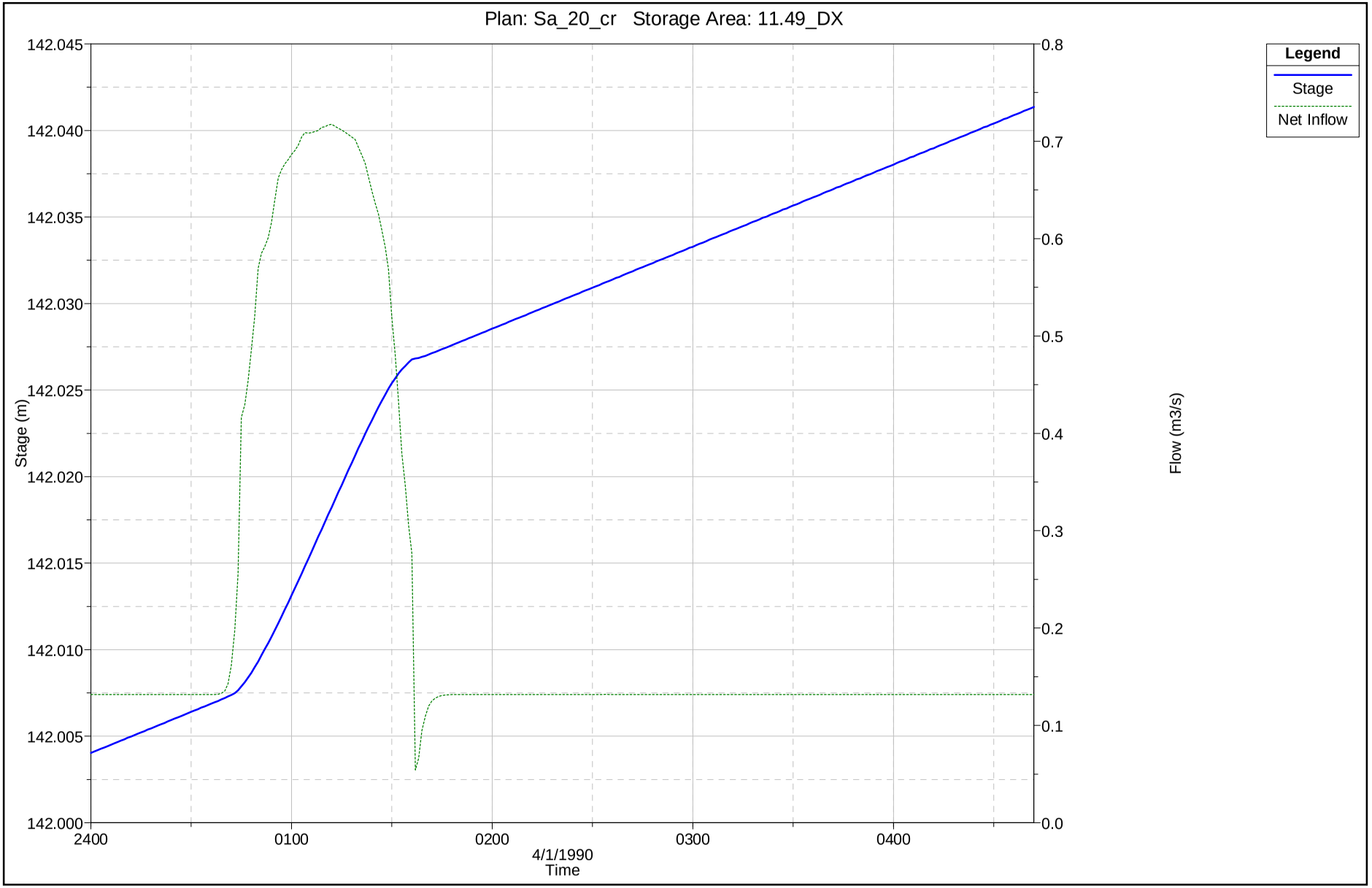

Plan: Sa_20_cr Storage Area: 33.8_SX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.0025
142.0020
142.0015
142.0010
142.0005
142.0000
141.9995
0.25
0.20
0.15
0.10
0.05
0.00
2400
0100
0200
0300
0400
4/1/1990
Time

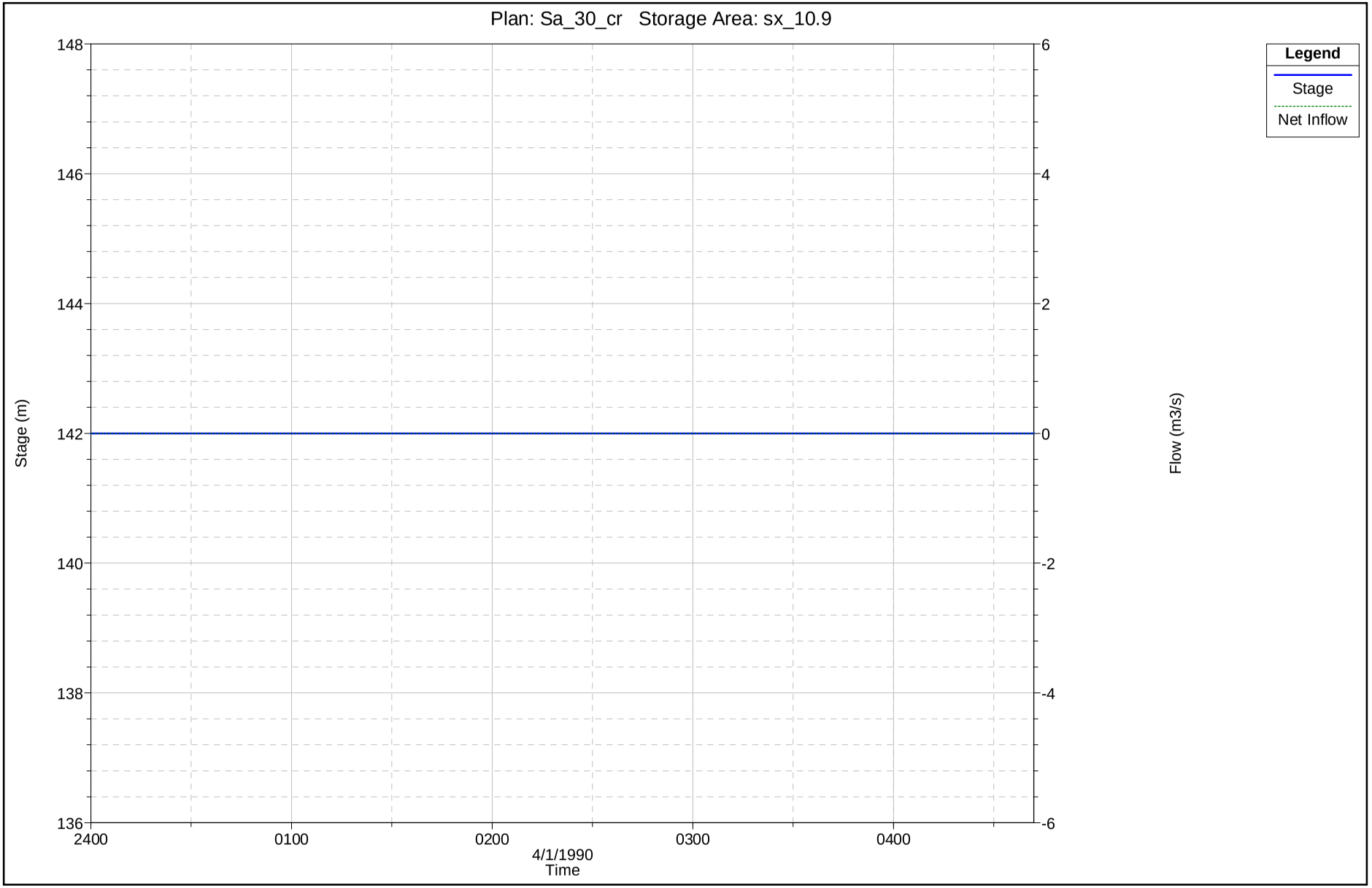

Plan: Sa_20_cr Storage Area: 24.8_SX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.00006
142.00004
142.00002
142.00000
141.99998
141.99996
141.99994
141.99992
0.020
0.015
0.010
0.005
0.000
2400
0100
0200
0300
0400
4/1/1990
Time

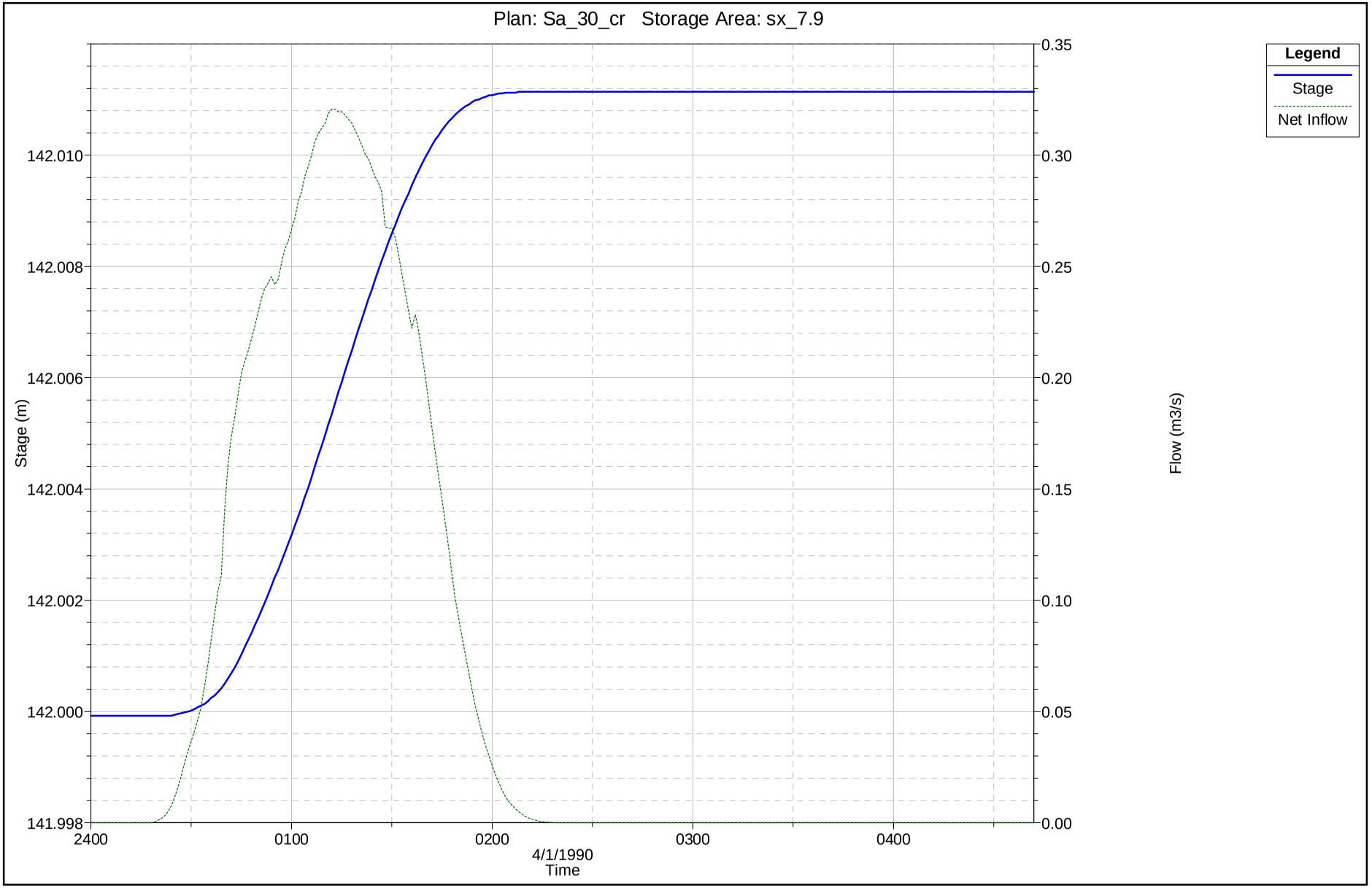

Plan: Sa_20_cr Storage Area: 14.9_DX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.0025
142.0020
142.0015
142.0010
142.0005
142.0000
141.9995
0.30
0.25
0.20
0.15
0.10
0.05
0.00
2400
0100
0200
0300
0400
4/1/1990
Time

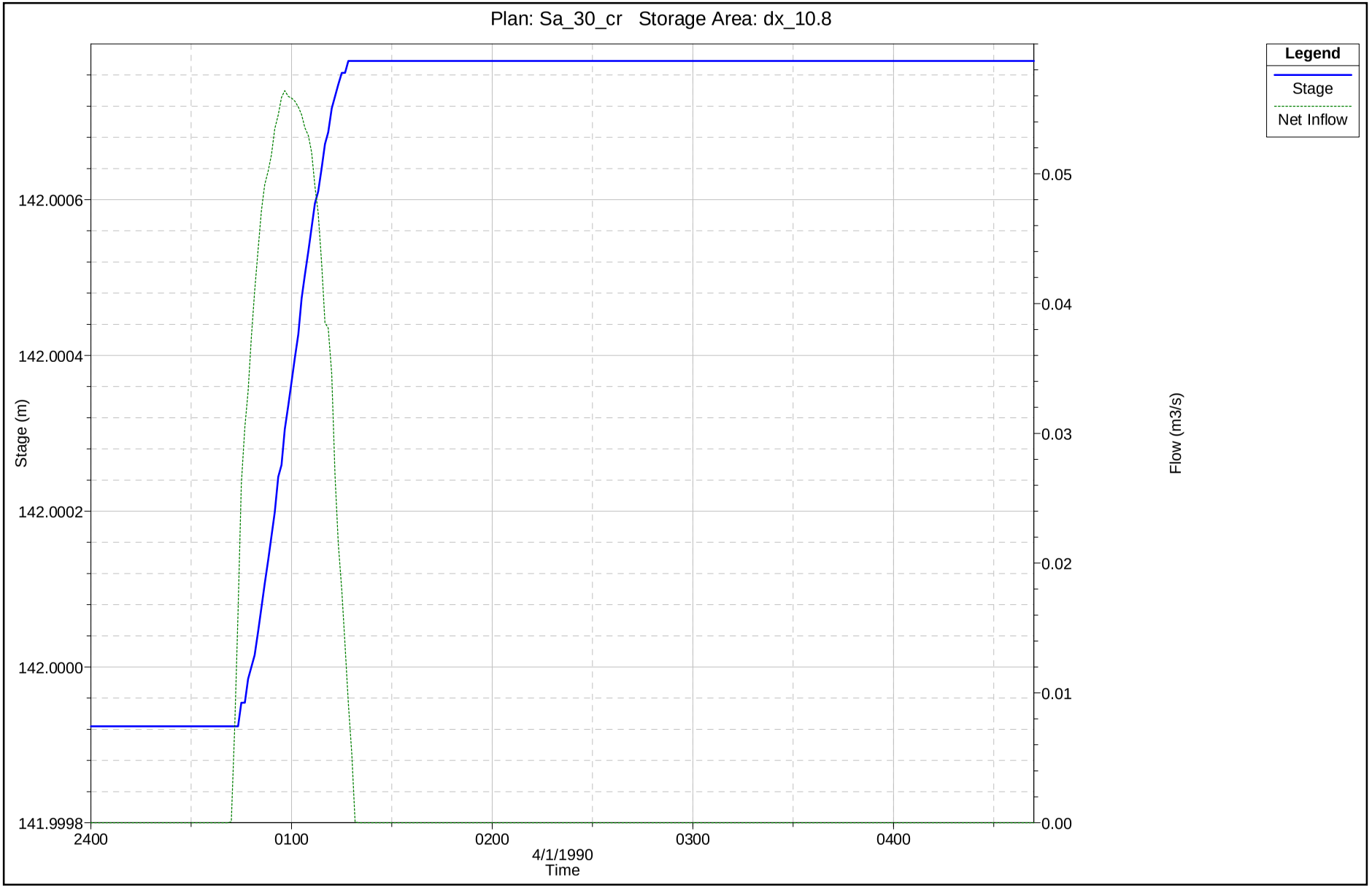

Plan: Sa_20_cr Storage Area: 13.88_SX
Legend
Stage
Net Inflow
142.00006
142.00004
142.00002
142.00000
141.99998
141.99996
141.99994
141.99992
Stage (m)
0.025
0.020
0.015
0.010
0.005
0.000
Flow (m3/s)
2400
0100
0200
0300
0400
4/1/1990
Time

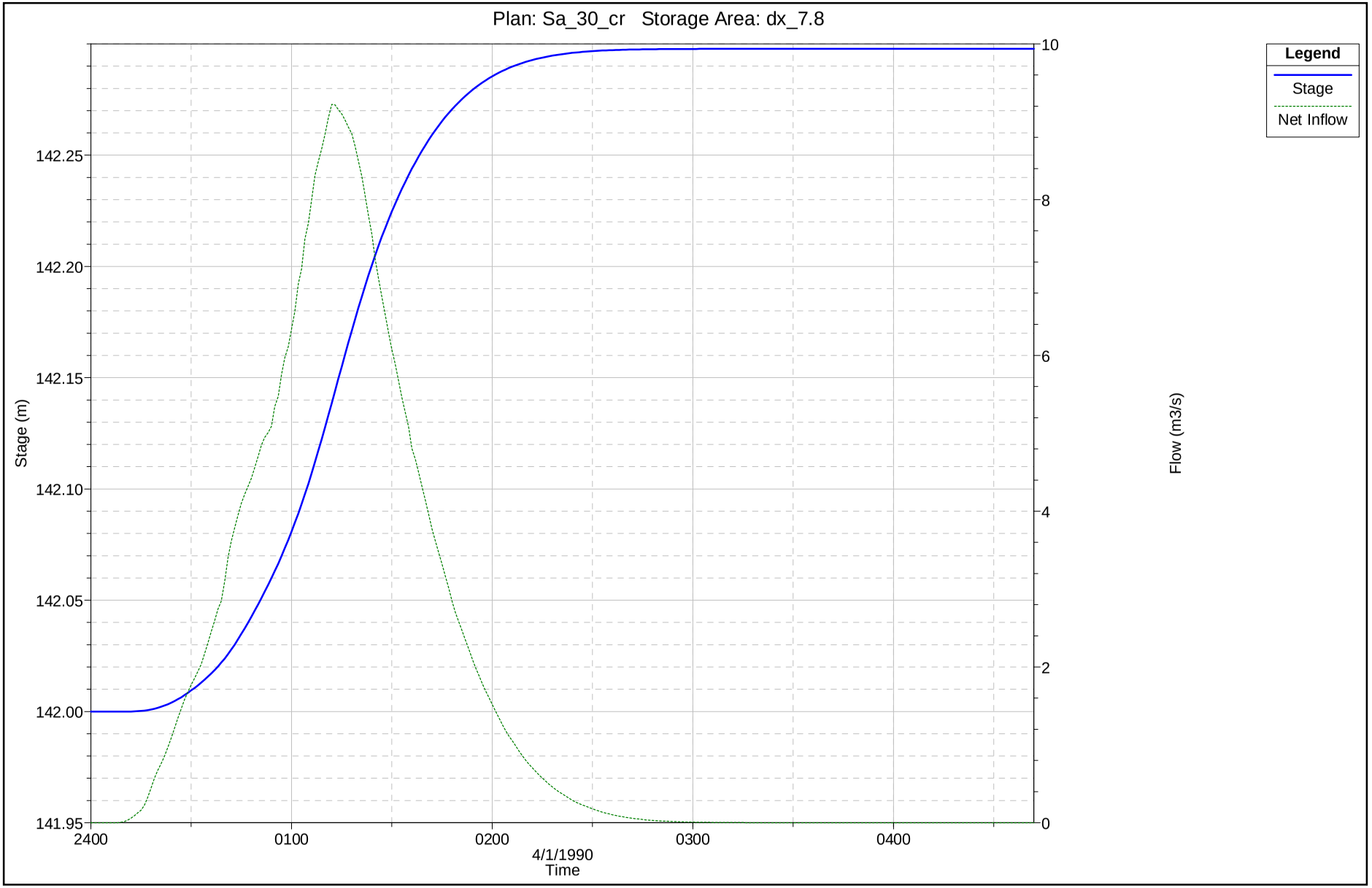

Plan: Sa_20_cr Storage Area: 12.9_DX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.025
142.020
142.015
142.010
142.005
142.000
0.6
0.5
0.4
0.3
0.2
0.1
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

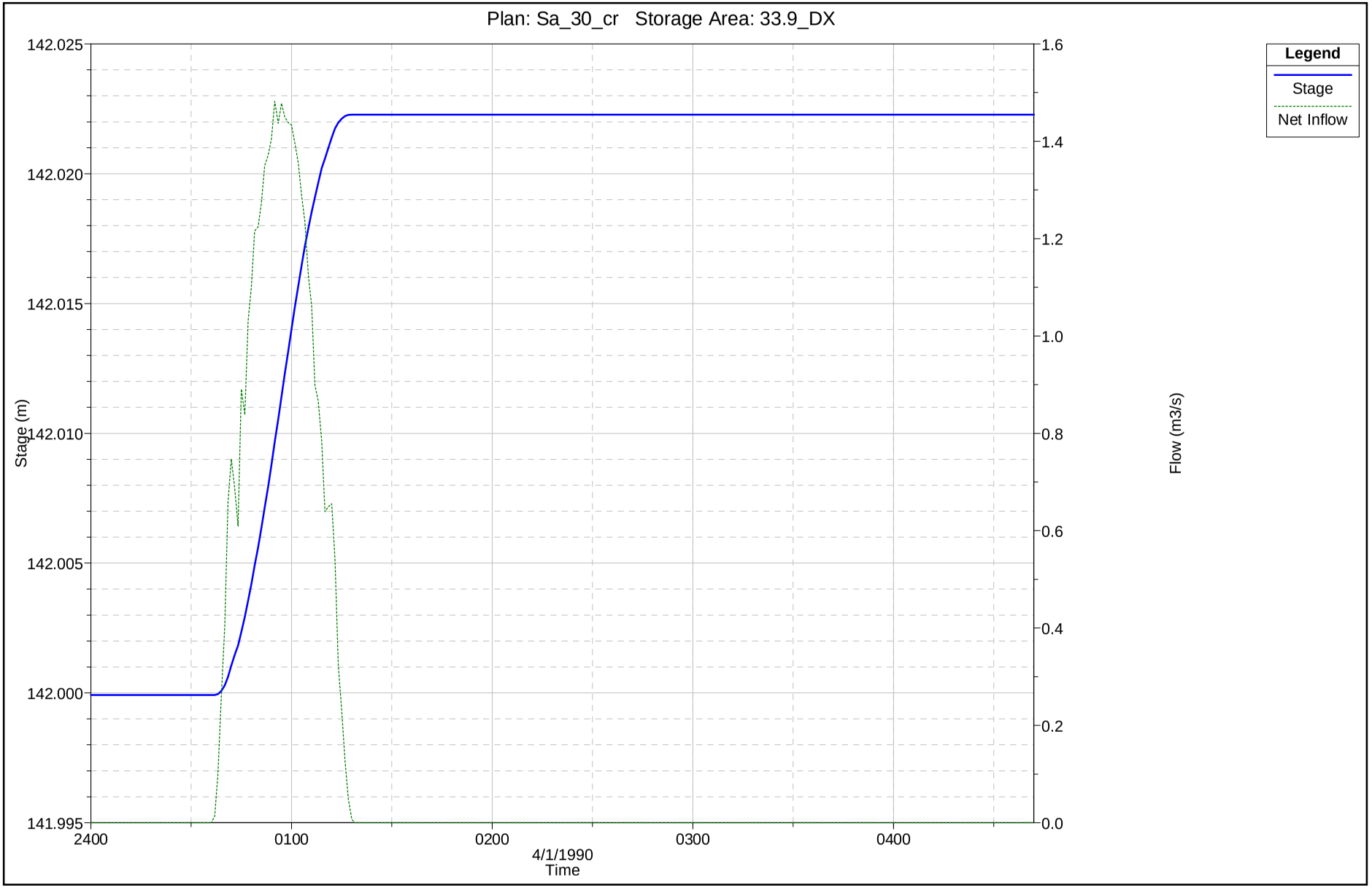

Plan: Sa_20_cr Storage Area: 11.49_DX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.045
142.040
142.035
142.030
142.025
142.020
142.015
142.010
142.005
142.000
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

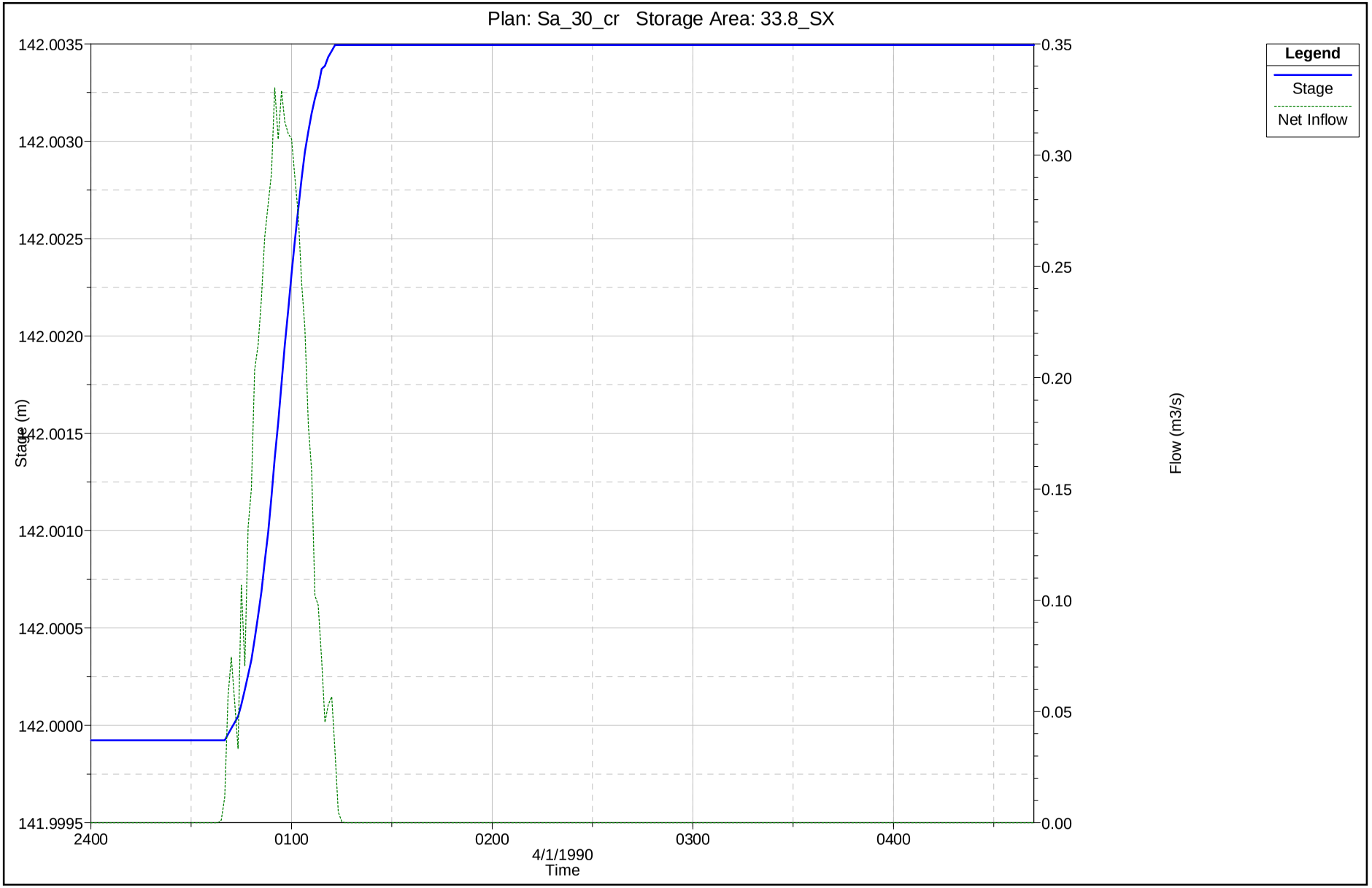

Plan: Sa_30_cr Storage Area: sx_10.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
148
146
144
142
140
138
136
6
4
2
0
-2
-4
-6
2400
0100
0200
0300
0400
4/1/1990
Time

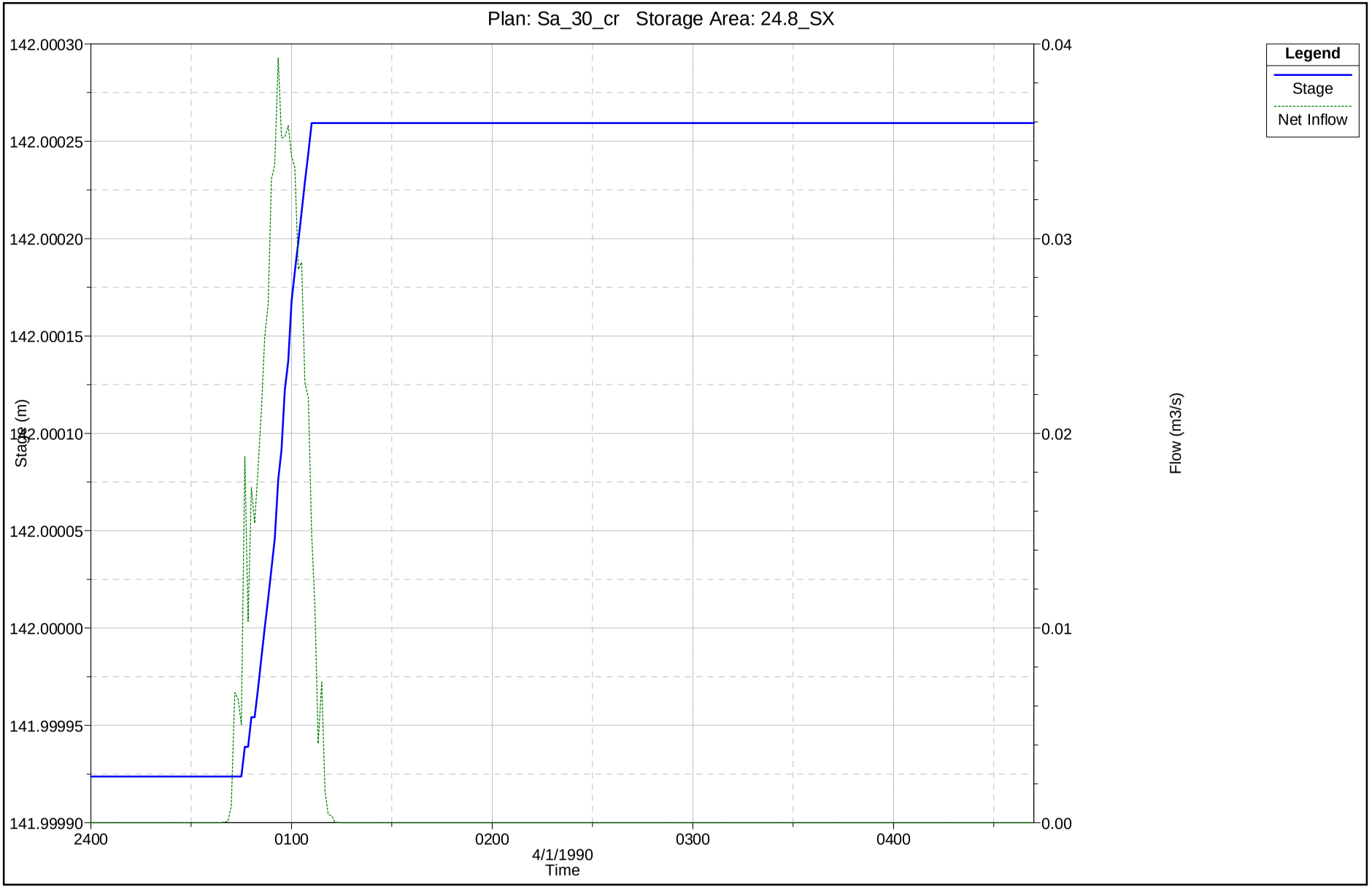

Plan: Sa_30_cr Storage Area: sx_7.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.010
142.008
142.006
142.004
142.002
142.000
141.998
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
2400
0100
0200
0300
0400
4/1/1990
Time

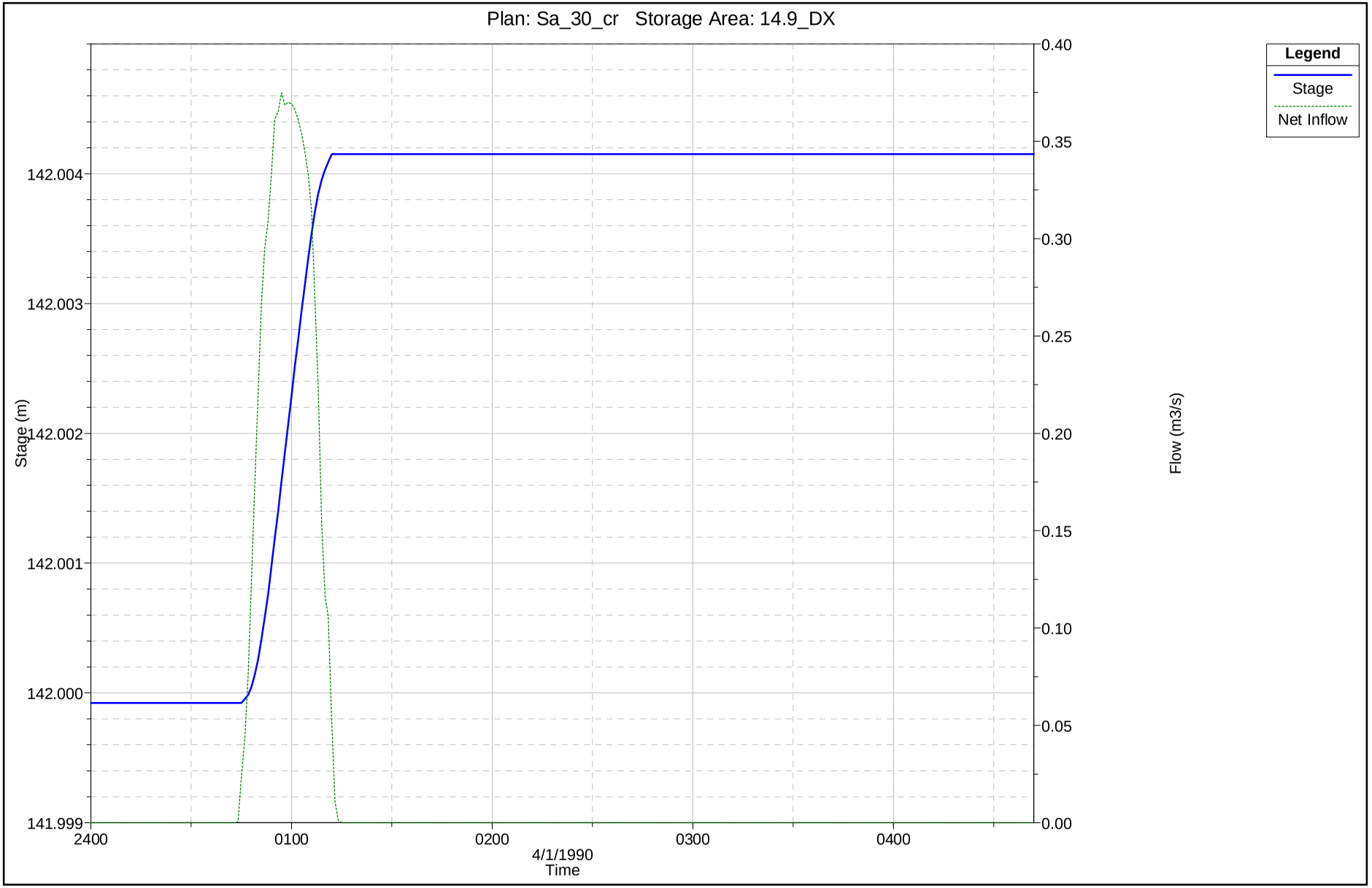

Plan: Sa_30_cr Storage Area: dx_10.8
Legend
Stage
Net Inflow
142.0006
142.0004
142.0002
142.0000
141.9998
Stage (m)
0.05
0.04
0.03
0.02
0.01
0.00
Flow (m3/s)
2400
0100
0200
0300
0400
4/1/1990
Time

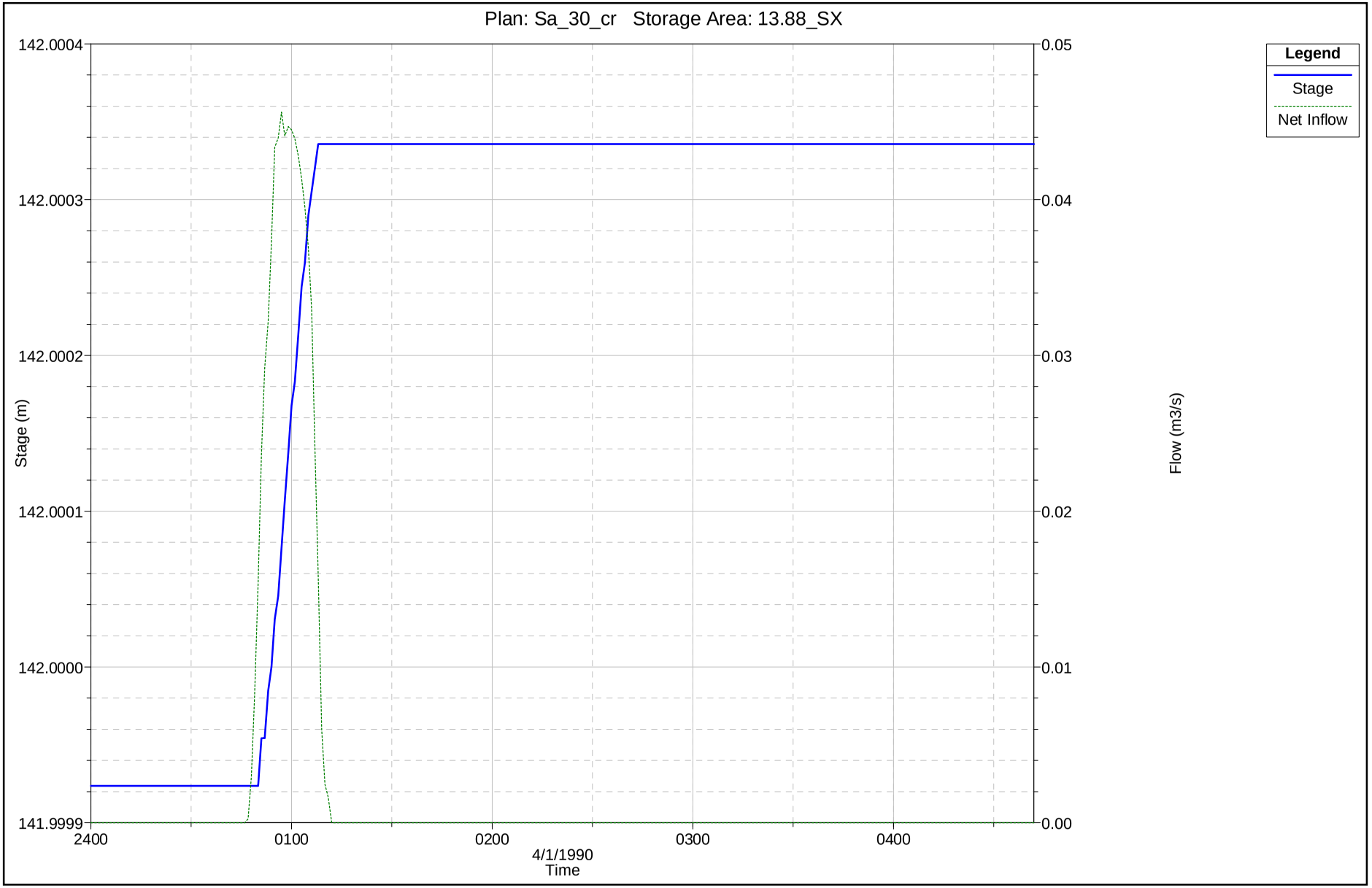

Plan: Sa_30_cr Storage Area: dx_7.8
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.25
142.20
142.15
142.10
142.05
142.00
141.95
10
8
6
4
2
0
2400
0100
0200
0300
0400
4/1/1990
Time

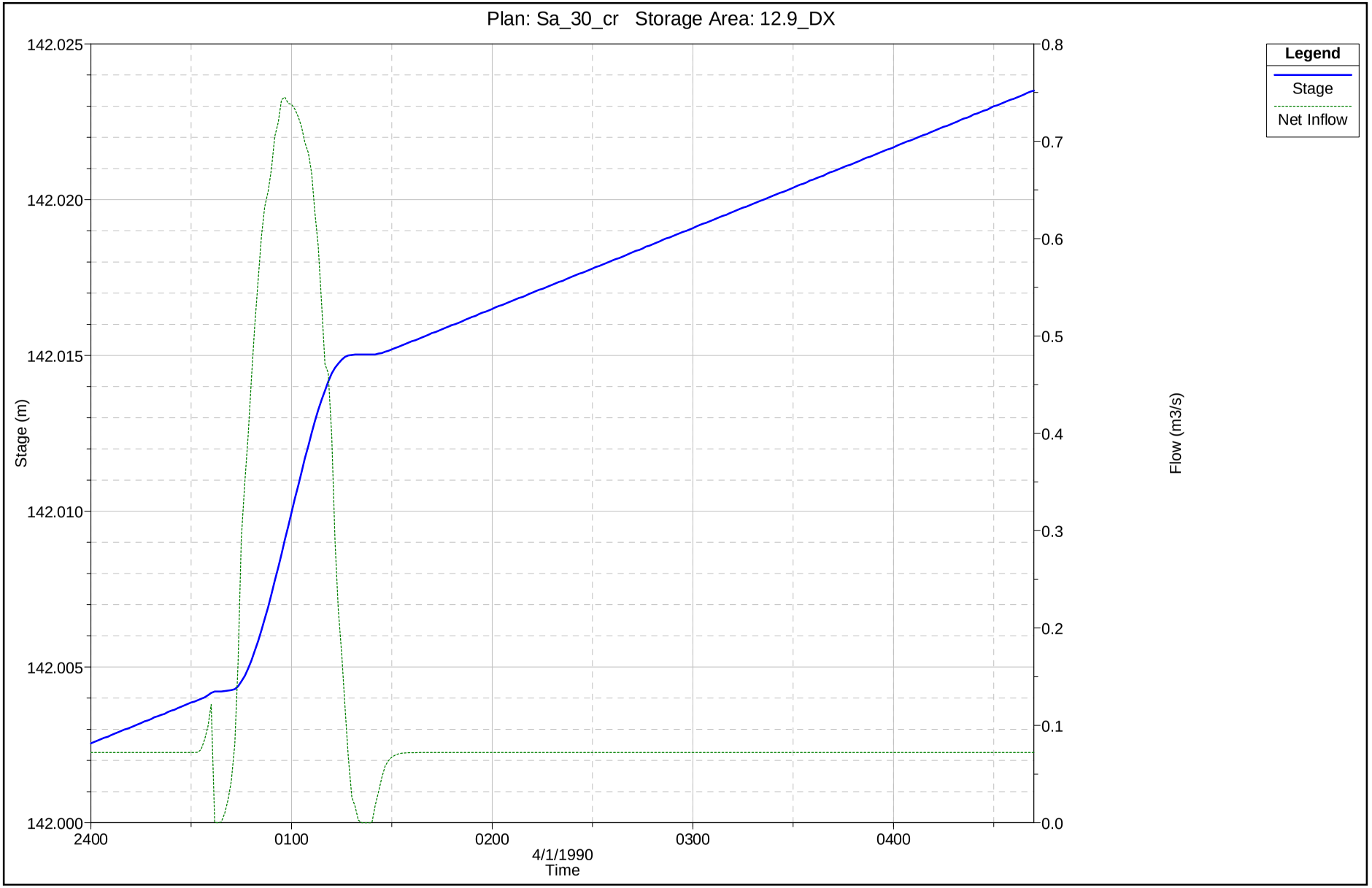

Plan: Sa_30_cr Storage Area: 33.9_DX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.025
142.020
142.015
142.010
142.005
142.000
141.995
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

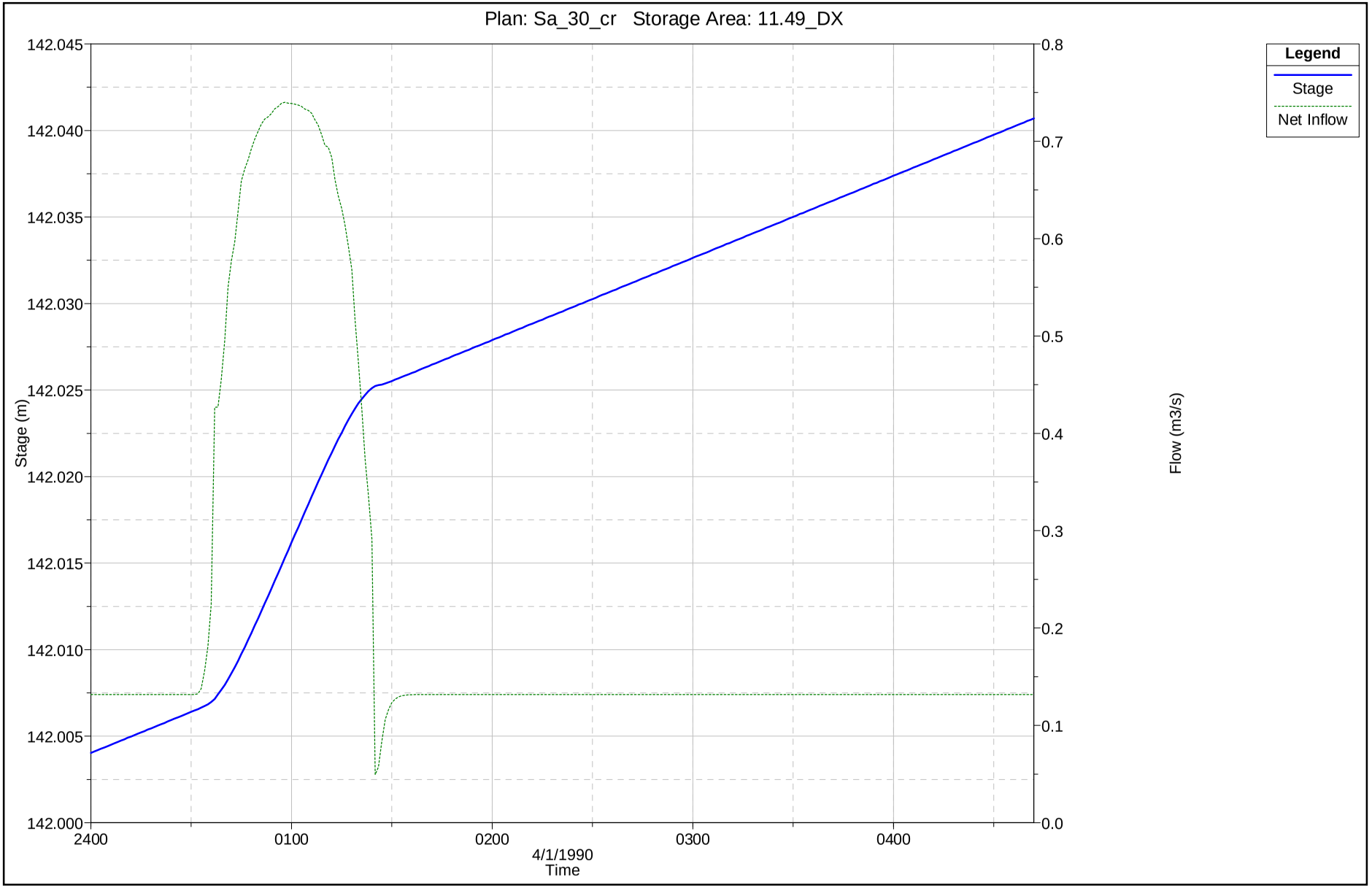

Plan: Sa_30_cr Storage Area: 33.8_SX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.0035
142.0030
142.0025
142.0020
142.0015
142.0010
142.0005
142.0000
141.9995
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
2400
0100
0200
0300
0400
4/1/1990
Time

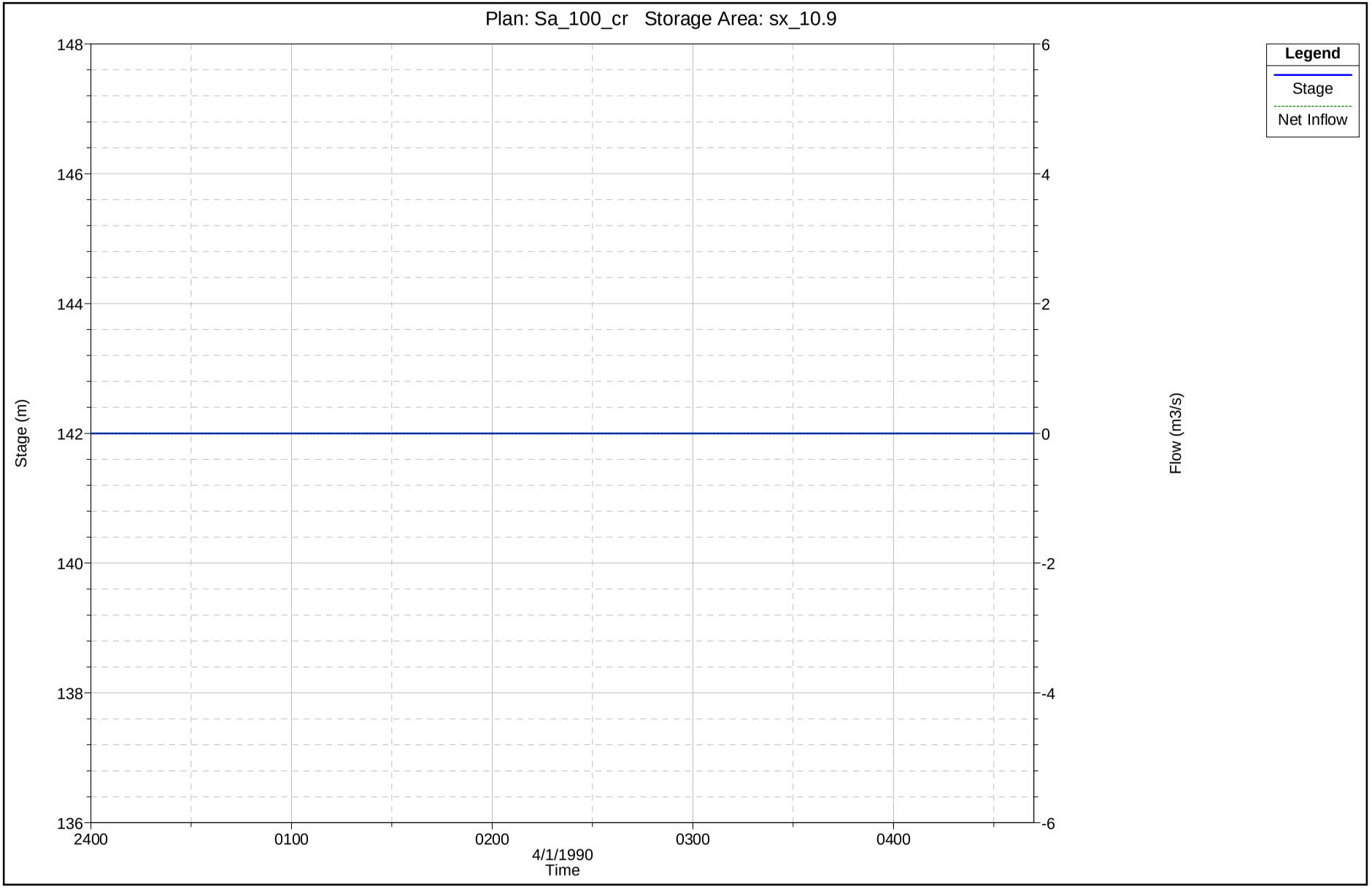

Plan: Sa_30_cr Storage Area: 24.8_SX
Legend
Stage
Net Inflow
142.00030
142.00025
142.00020
142.00015
142.00010
142.00005
142.00000
141.99995
141.99990
Stage (m)
0.04
0.03
0.02
0.01
0.00
Flow (m3/s)
2400
0100
0200
0300
0400
4/1/1990
Time

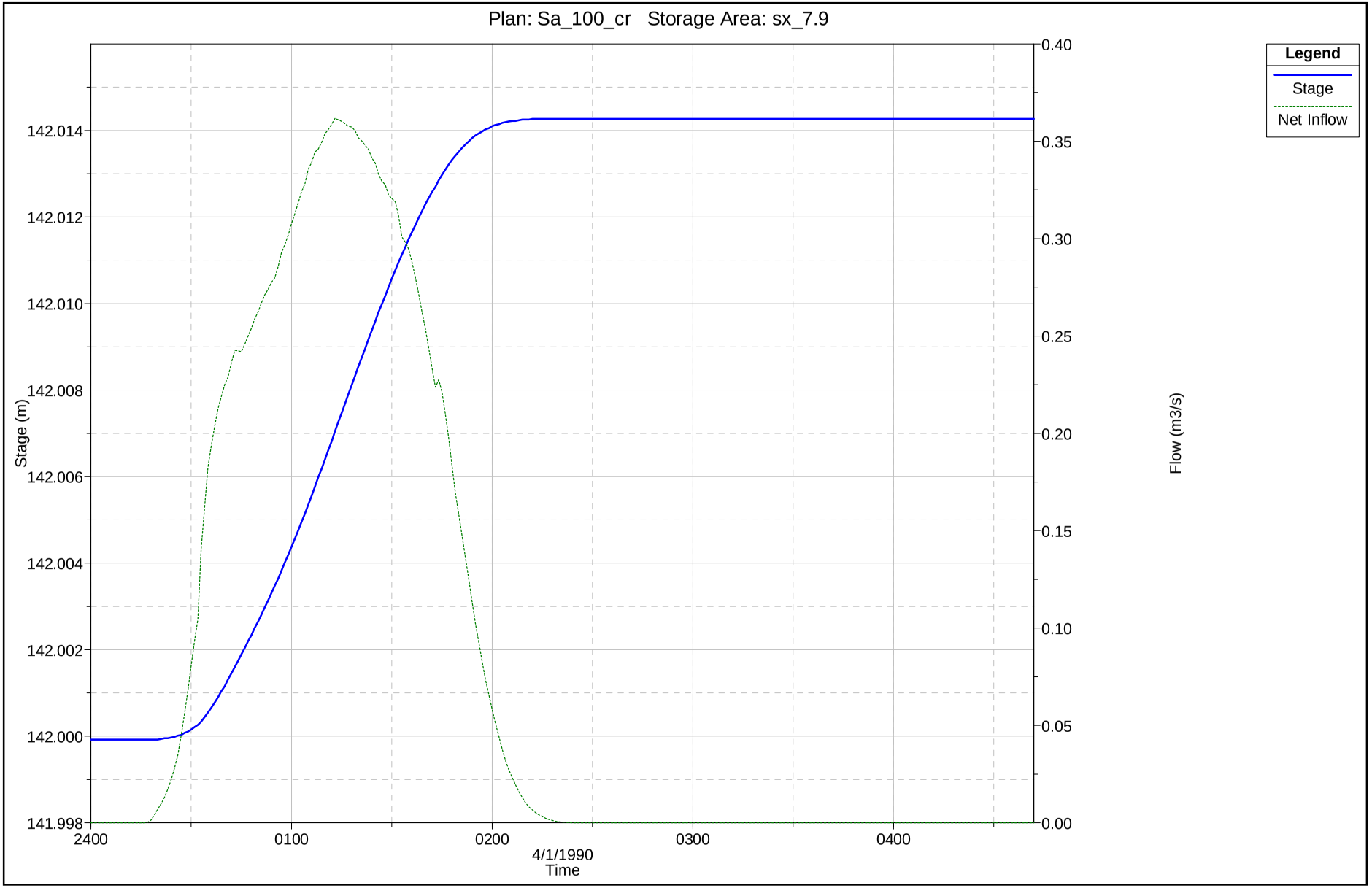

Plan: Sa_30_cr Storage Area: 14.9_DX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.004
142.003
142.002
142.001
142.000
141.999
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
2400
0100
0200
0300
0400
4/1/1990
Time

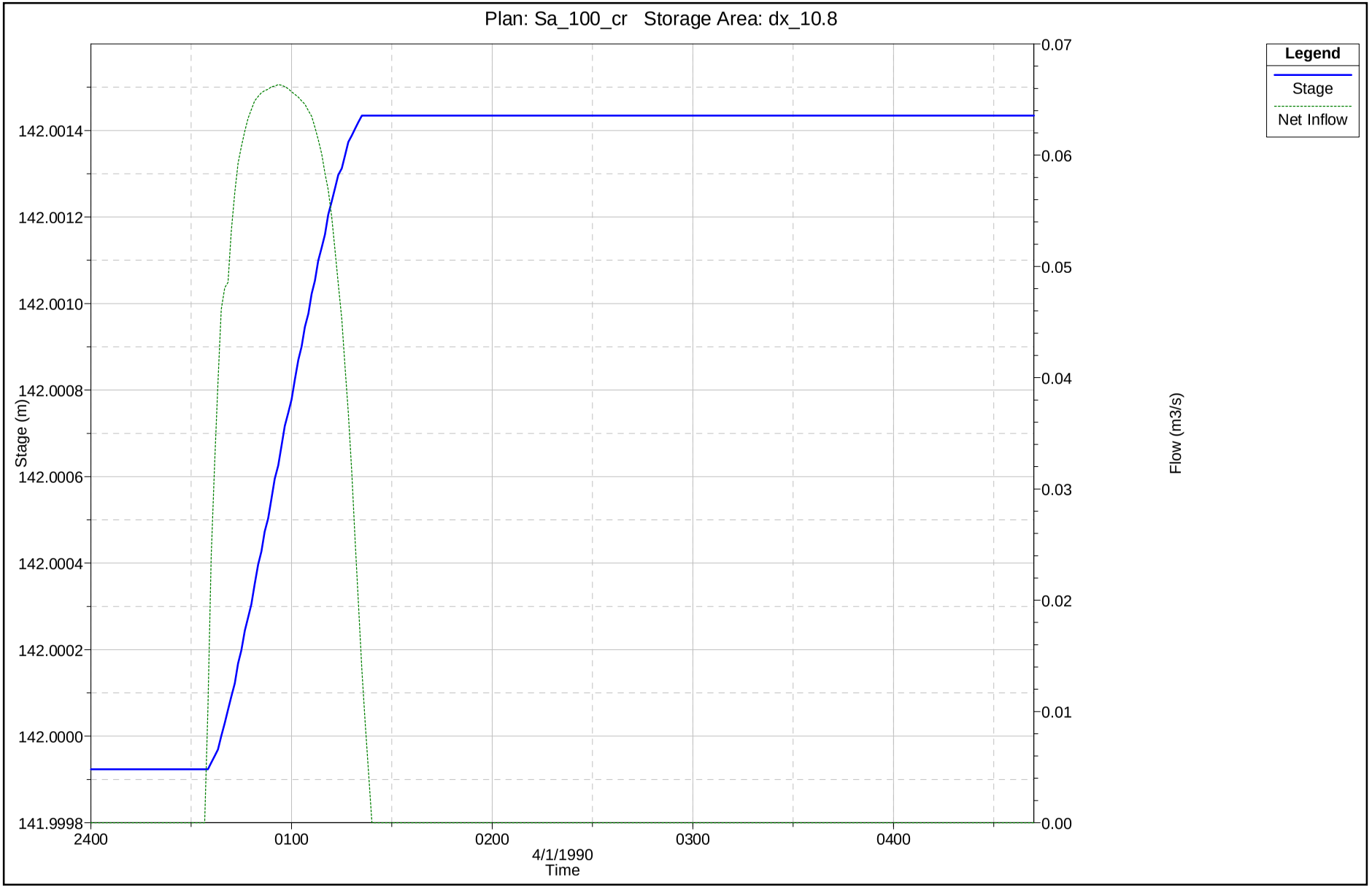

Plan: Sa_30_cr Storage Area: 13.88_SX
142.0004
142.0003
142.0002
142.0001
142.0000
141.9999
Stage (m)
0.05
0.04
0.03
0.02
0.01
0.00
Flow (m3/s)
2400
0100
0200
0300
0400
4/1/1990
Time
Legend
Stage
Net Inflow

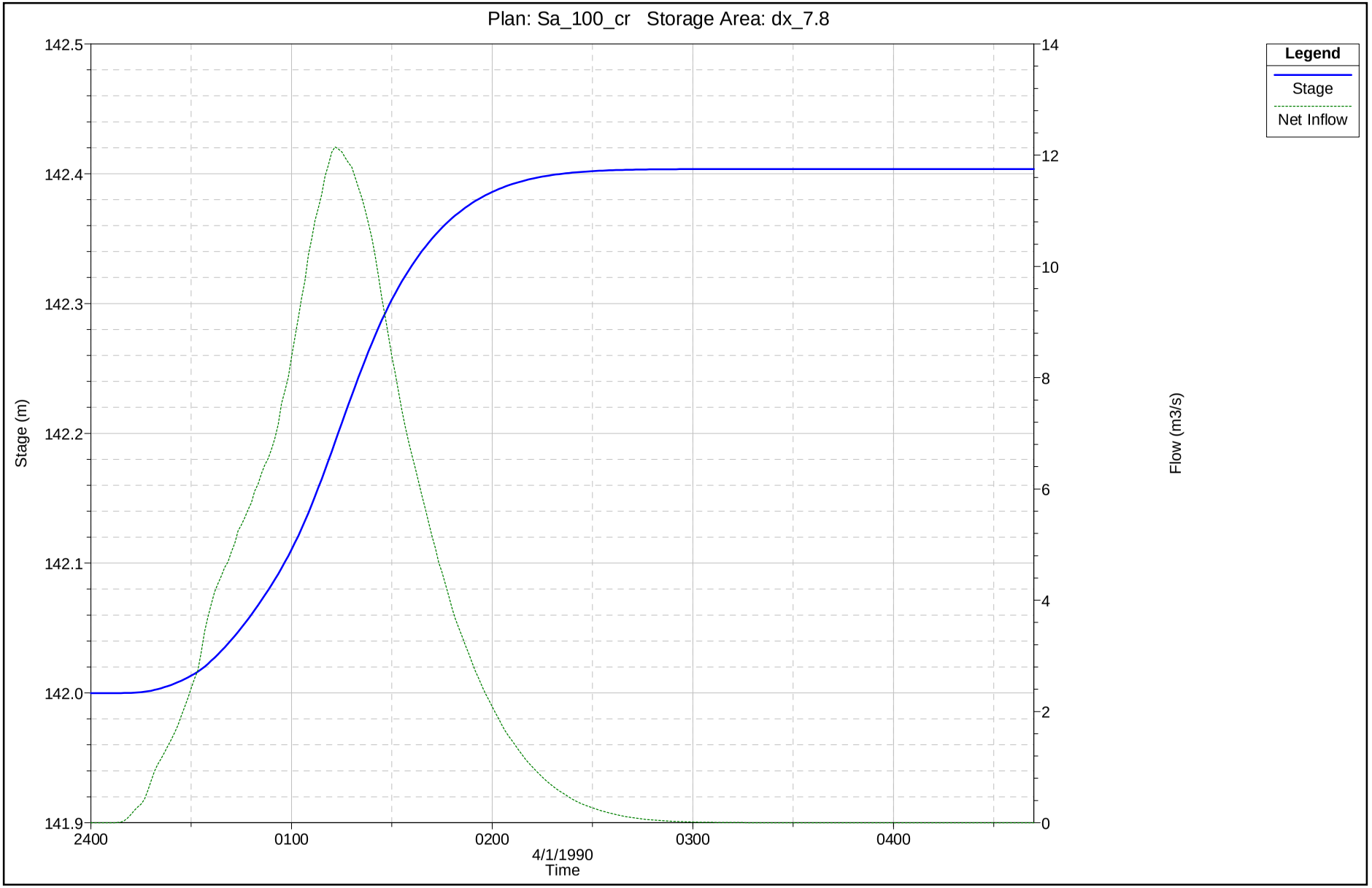

Plan: Sa_30_cr Storage Area: 12.9_DX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.025
142.020
142.015
142.010
142.005
142.000
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

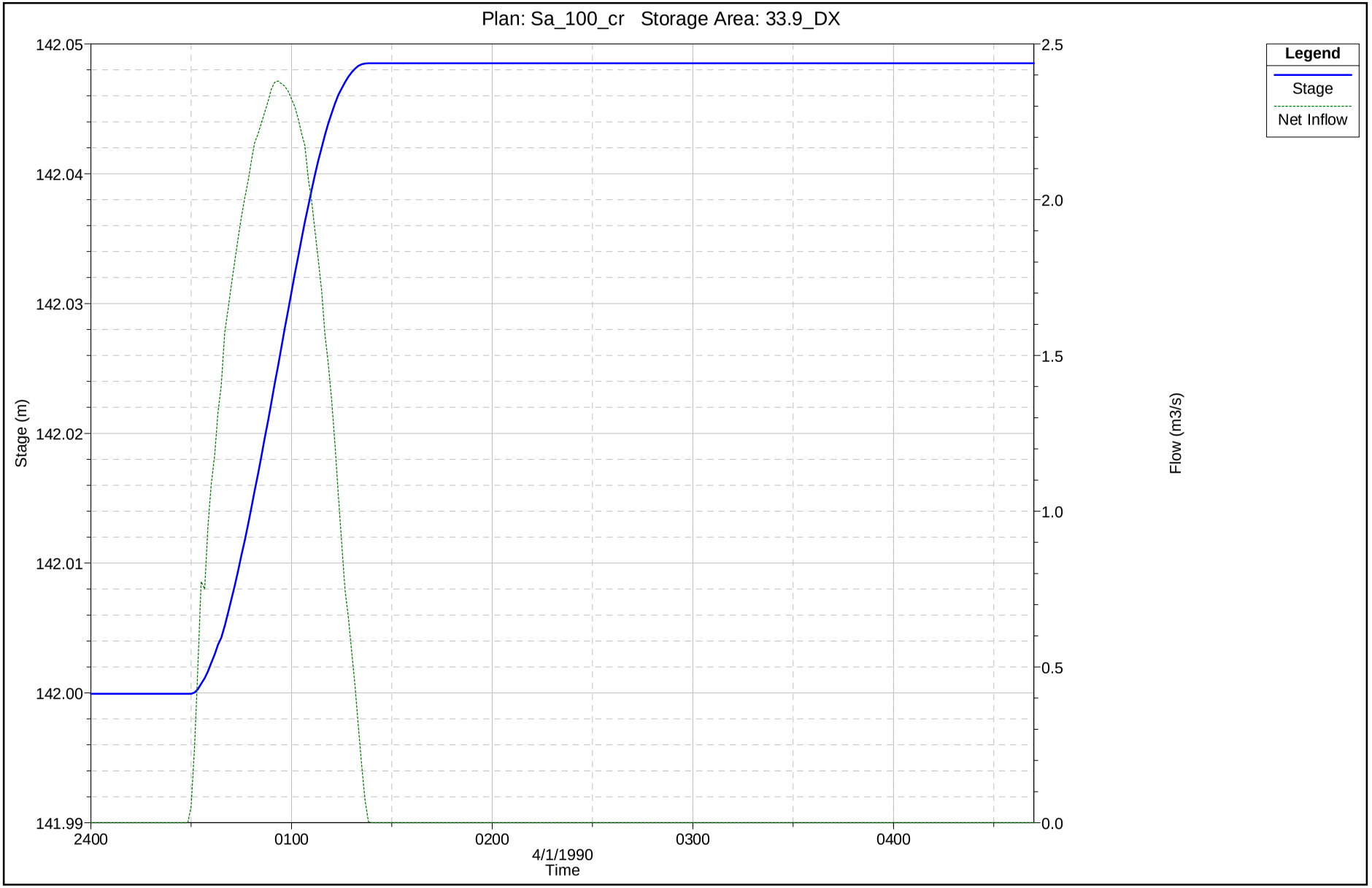

Plan: Sa_30_cr Storage Area: 11.49_DX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.045
142.040
142.035
142.030
142.025
142.020
142.015
142.010
142.005
142.000
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

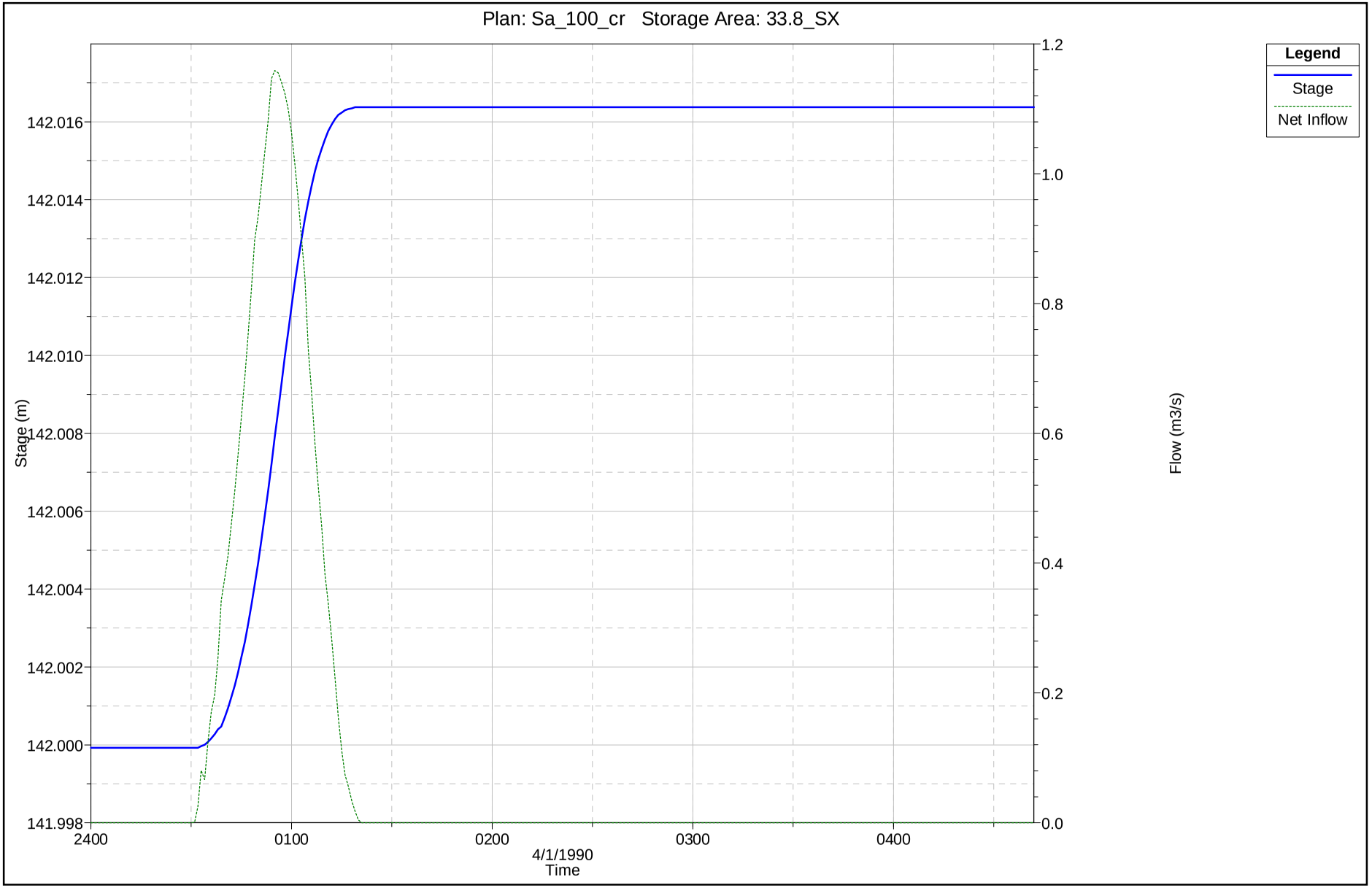

Plan: Sa_100_cr Storage Area: sx_10.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
148
146
144
142
140
138
136
6
4
2
0
-2
-4
-6
2400
0100
0200
0300
0400
4/1/1990
Time

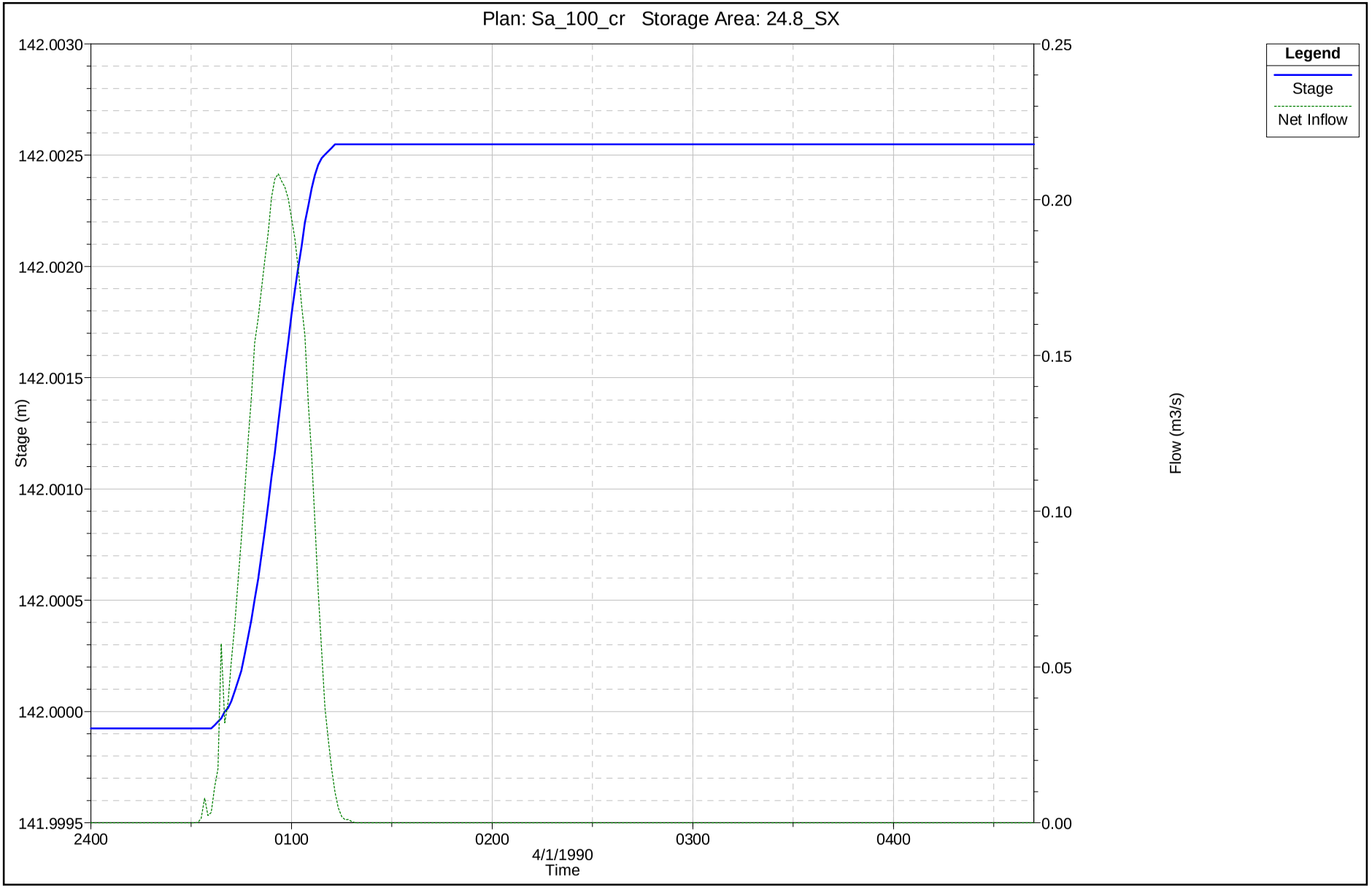

Plan: Sa_100_cr Storage Area: sx_7.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.014
142.012
142.010
142.008
142.006
142.004
142.002
142.000
141.998
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
2400
0100
0200
0300
0400
4/1/1990
Time

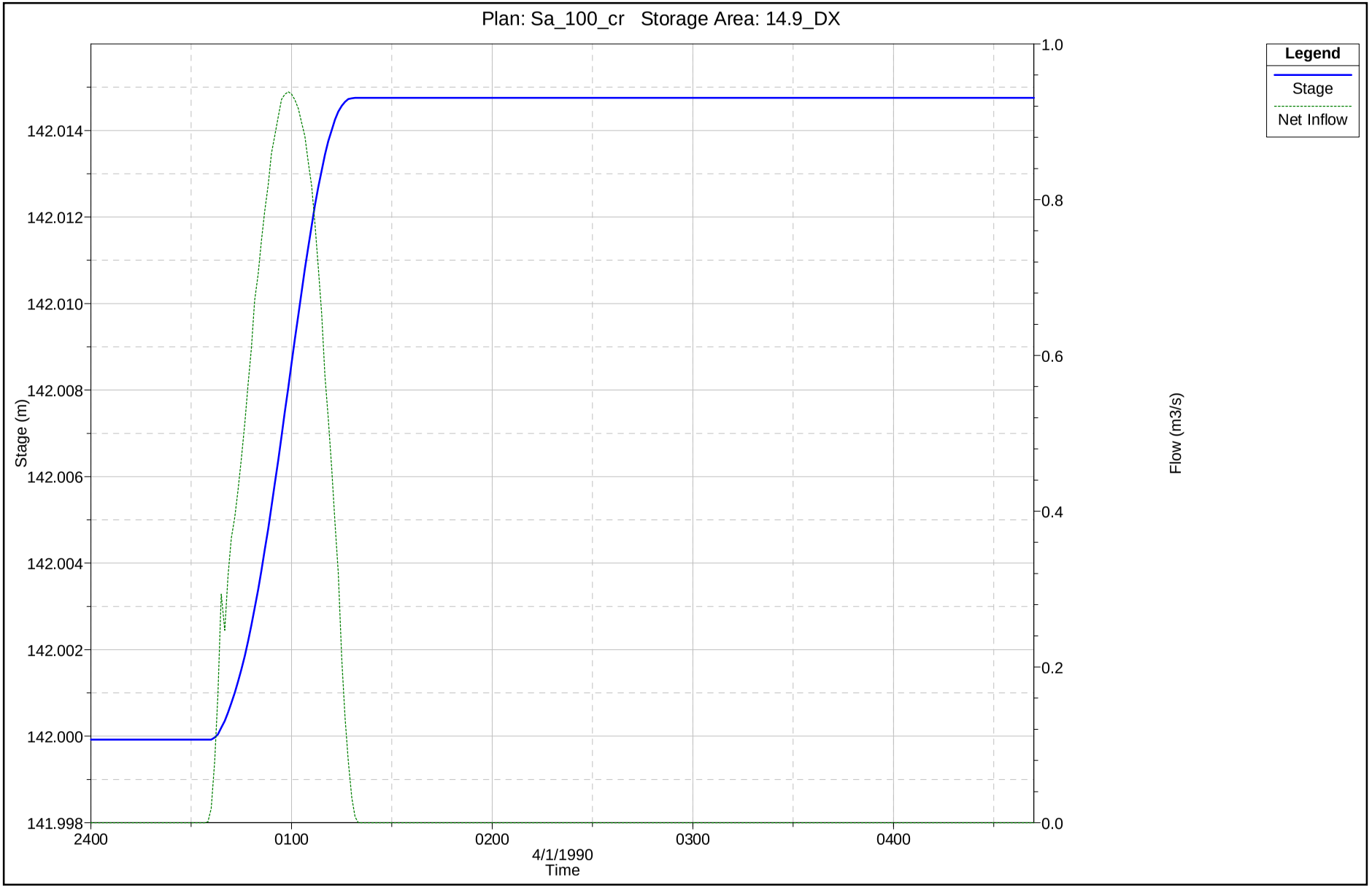

Plan: Sa_100_cr Storage Area: dx_10.8
Legend
Stage
Net Inflow
Stage (m)
142.0014
142.0012
142.0010
142.0008
142.0006
142.0004
142.0002
142.0000
141.9998
Flow (m3/s)
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
2400
0100
0200
0300
0400
4/1/1990
Time

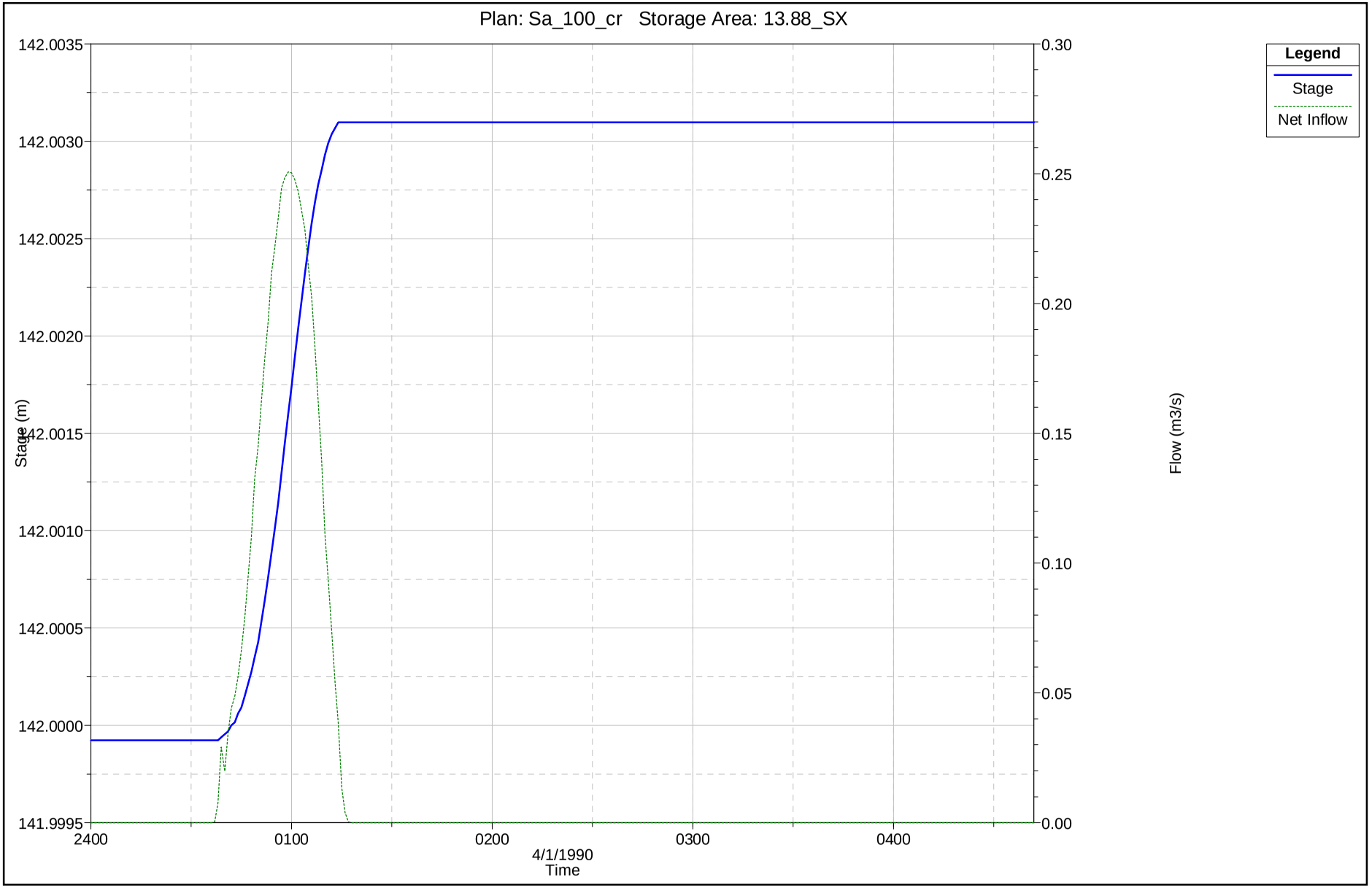

Plan: Sa_100_cr Storage Area: dx_7.8
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.5
142.4
142.3
142.2
142.1
142.0
141.9
14
12
10
8
6
4
2
0
2400
0100
0200
0300
0400
4/1/1990
Time

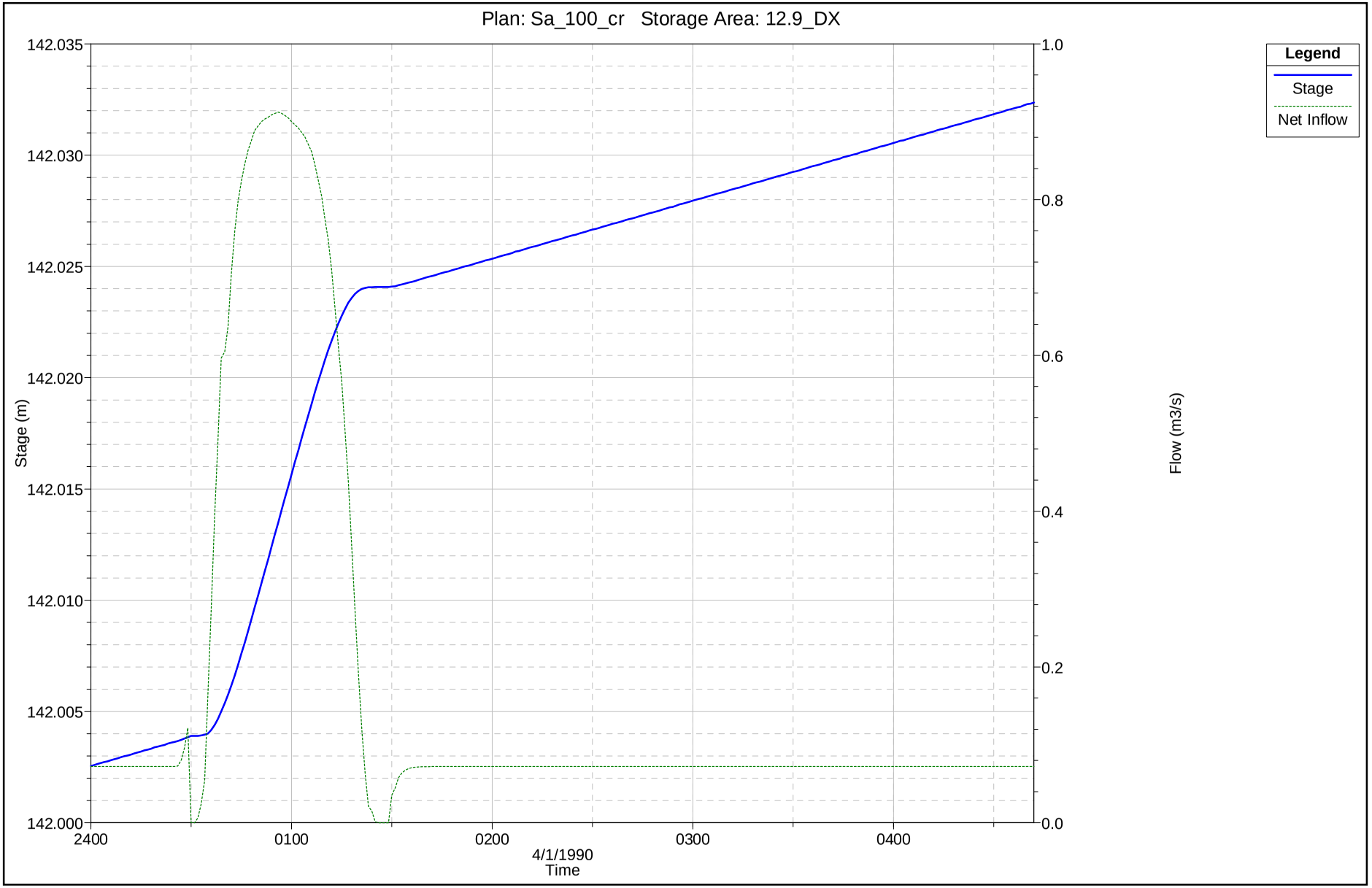

Plan: Sa_100_cr Storage Area: 33.9_DX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.05
142.04
142.03
142.02
142.01
142.00
141.99
2.5
2.0
1.5
1.0
0.5
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

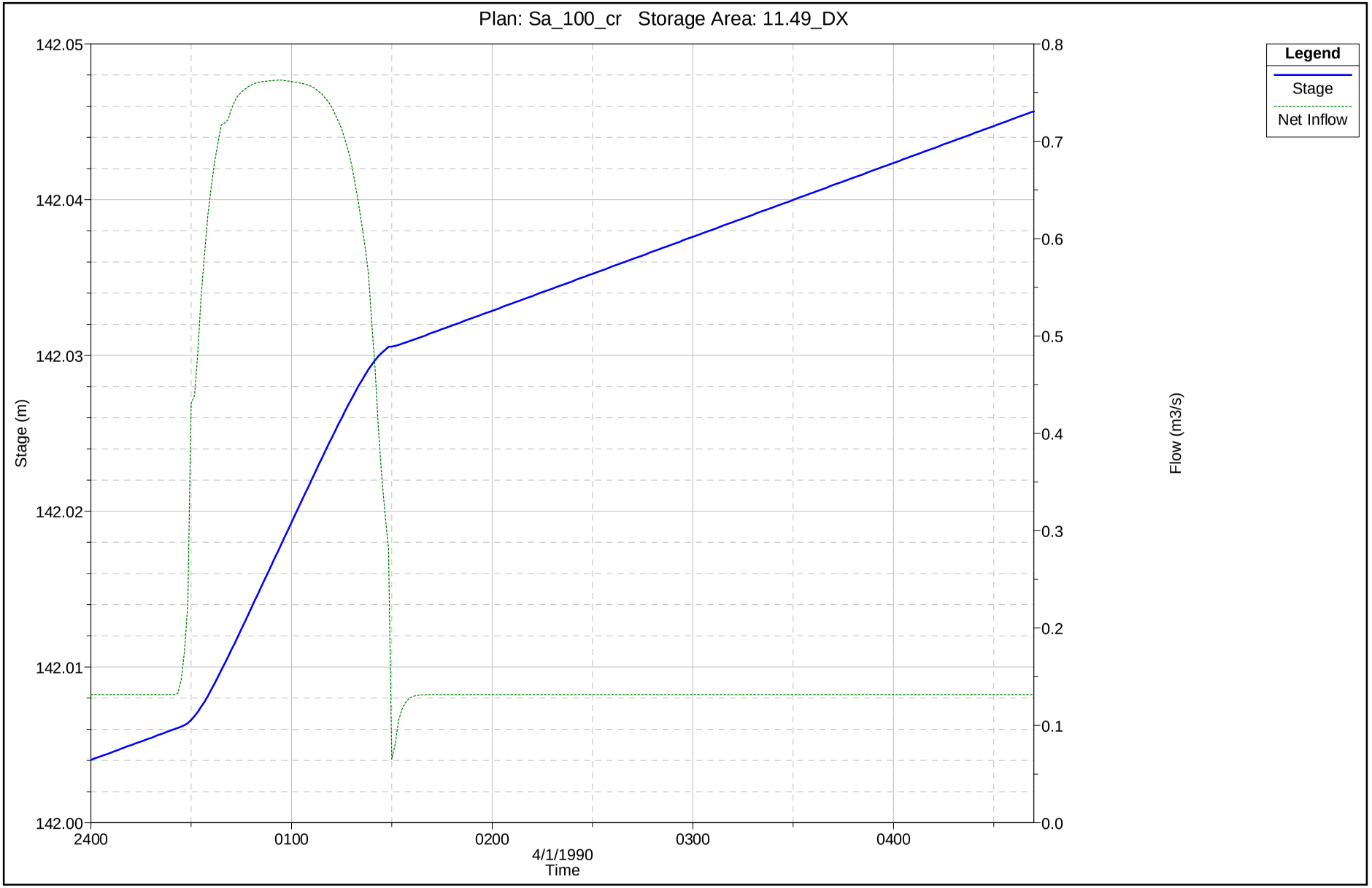

Plan: Sa_100_cr Storage Area: 33.8_SX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.016
142.014
142.012
142.010
142.008
142.006
142.004
142.002
142.000
141.998
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

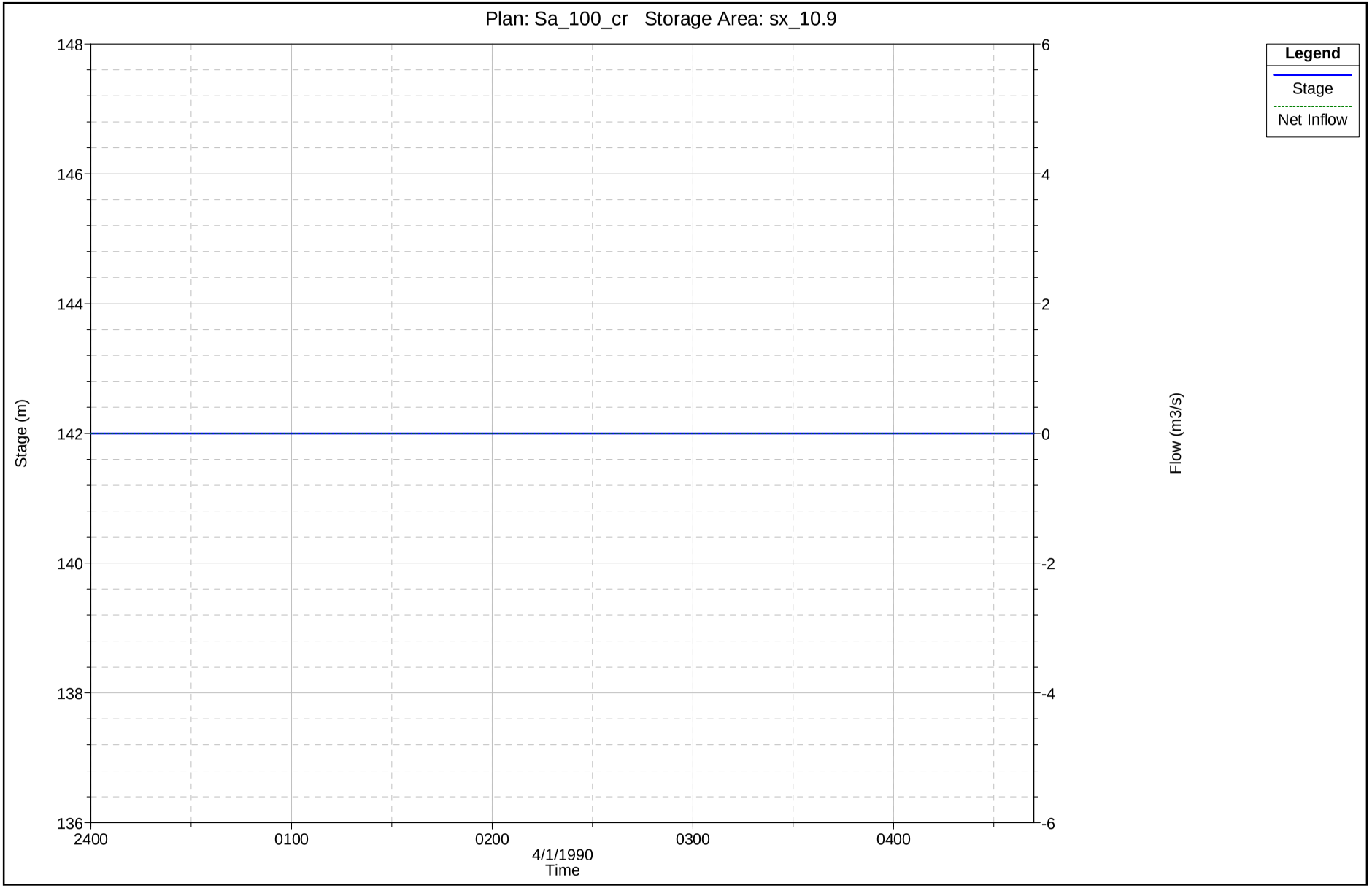

Plan: Sa_100_cr Storage Area: 24.8_SX
142.0030
142.0025
142.0020
142.0015
142.0010
142.0005
142.0000
141.9995
Stage (m)
0.25
0.20
0.15
0.10
0.05
0.00
Flow (m3/s)
2400
0100
0200
0300
0400
4/1/1990
Time
Legend
Stage
Net Inflow

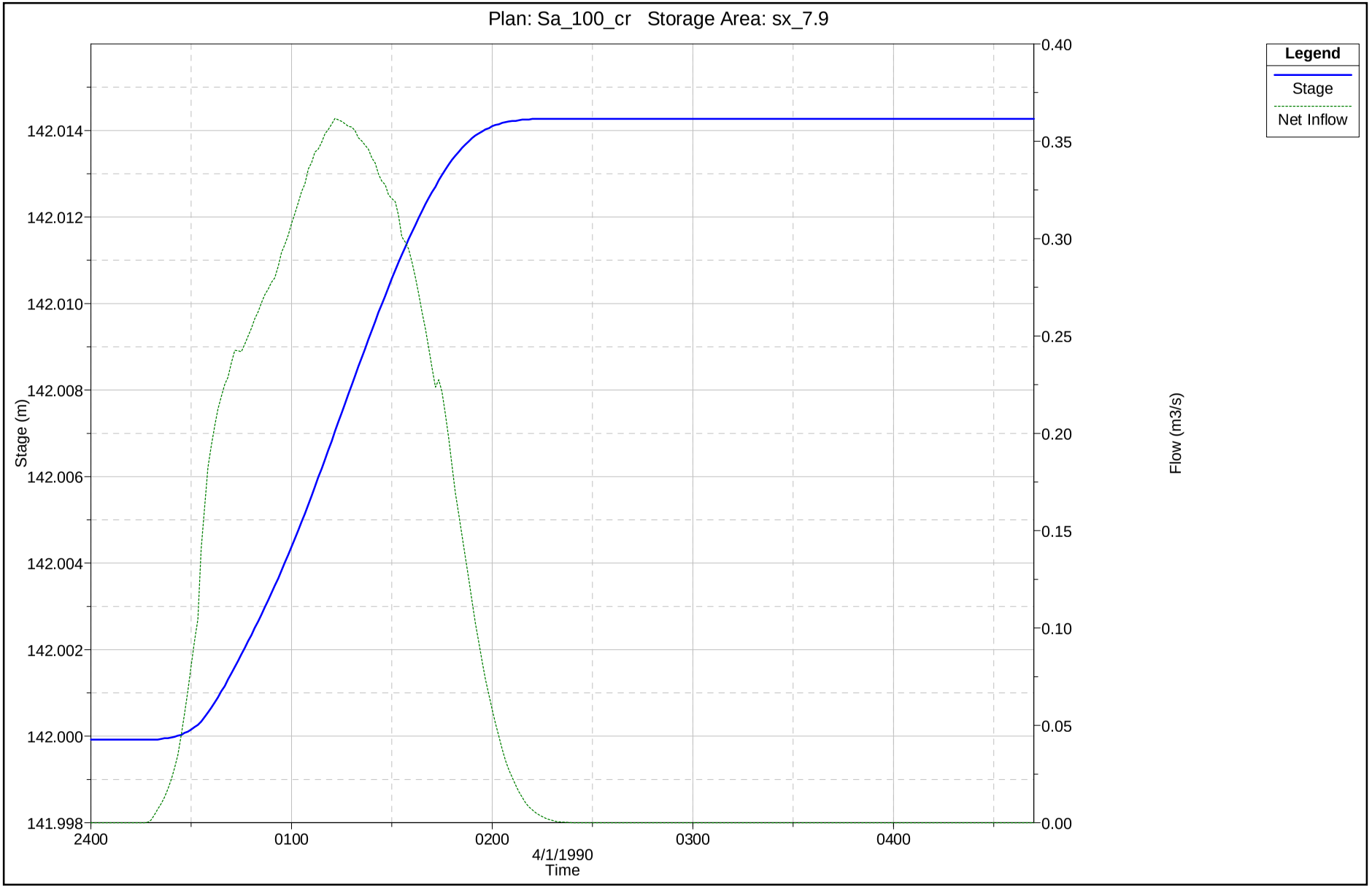

Plan: Sa_100_cr Storage Area: 14.9_DX
Legend
Stage
Net Inflow
Stage (m)
142.014
142.012
142.010
142.008
142.006
142.004
142.002
142.000
141.998
Flow (m3/s)
1.0
0.8
0.6
0.4
0.2
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

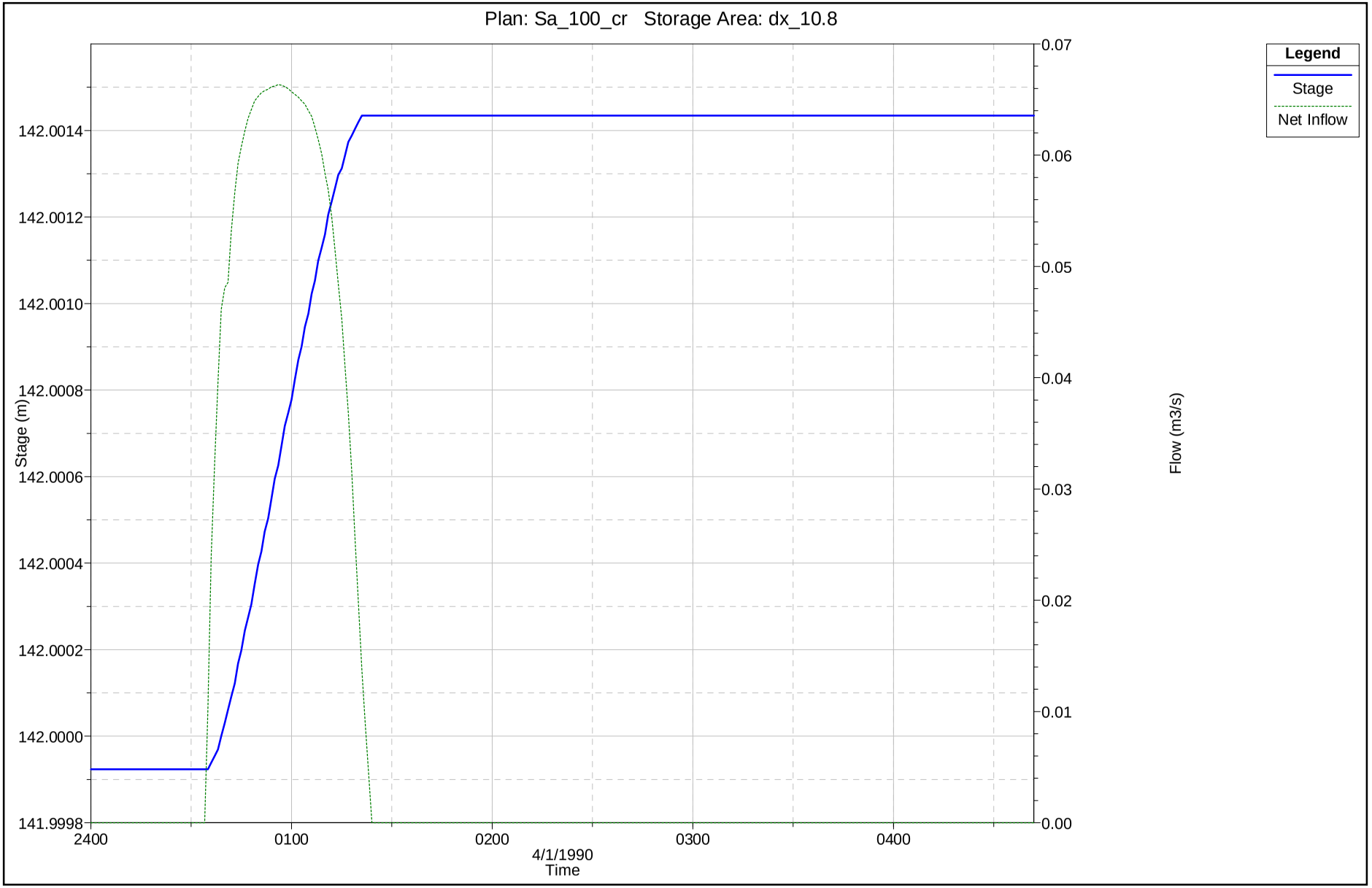

Plan: Sa_100_cr Storage Area: 13.88_SX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.0035
142.0030
142.0025
142.0020
142.0015
142.0010
142.0005
142.0000
141.9995
0.30
0.25
0.20
0.15
0.10
0.05
0.00
2400
0100
0200
0300
0400
4/1/1990
Time

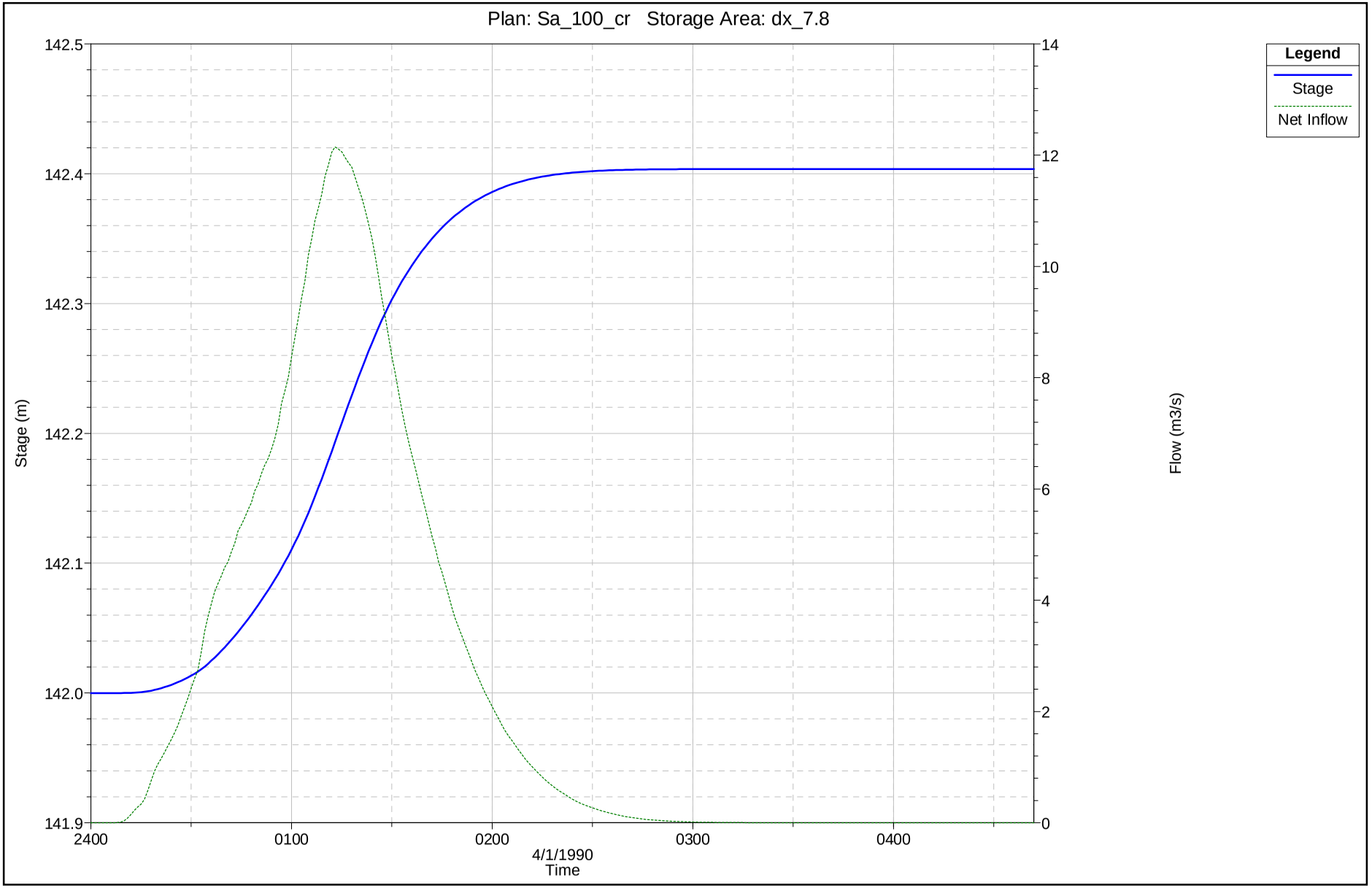

Plan: Sa_100_cr Storage Area: 12.9_DX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.035
142.030
142.025
142.020
142.015
142.010
142.005
142.000
1.0
0.8
0.6
0.4
0.2
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

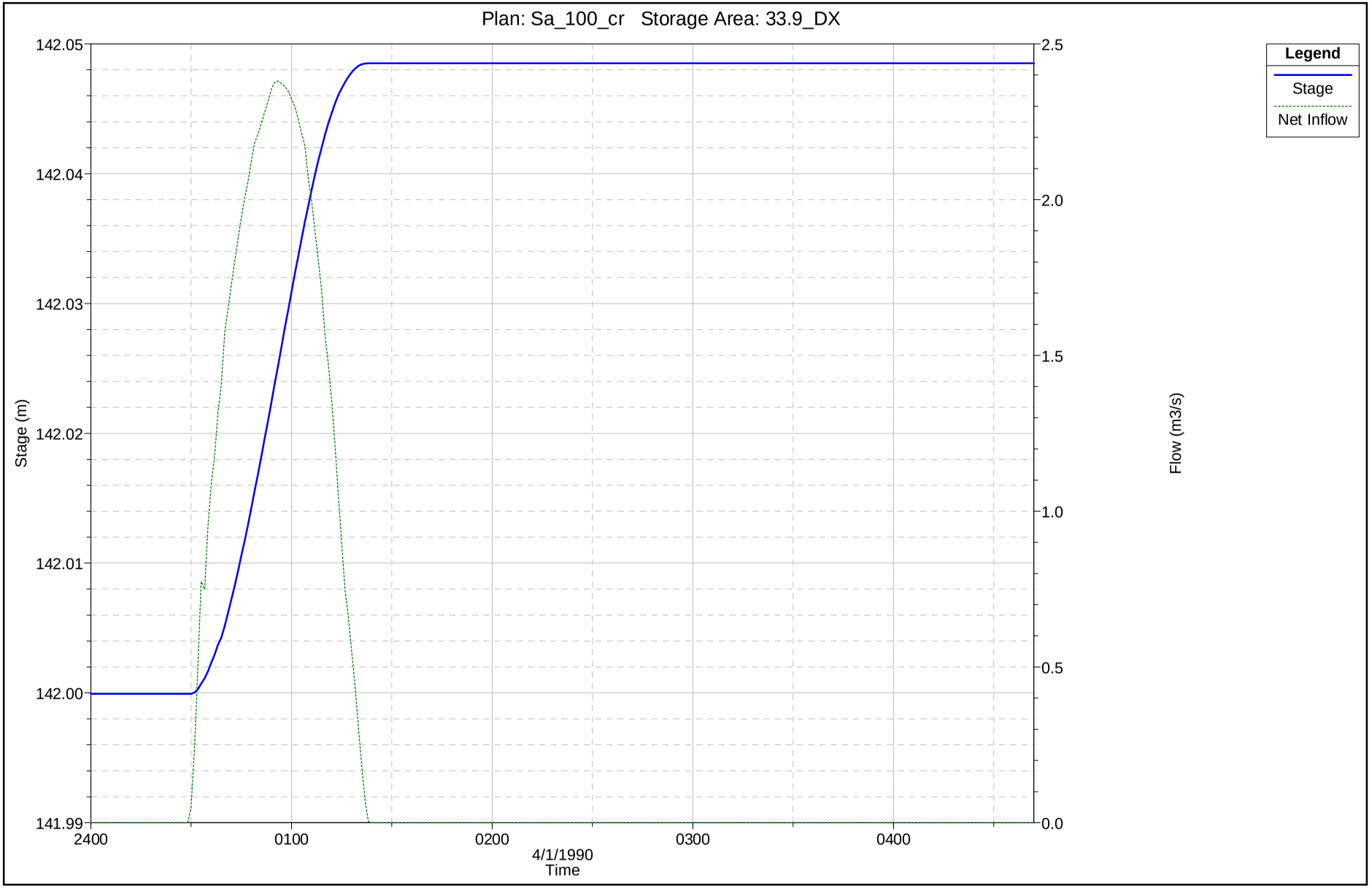

Plan: Sa_100_cr Storage Area: 11.49_DX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.05
142.04
142.03
142.02
142.01
142.00
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

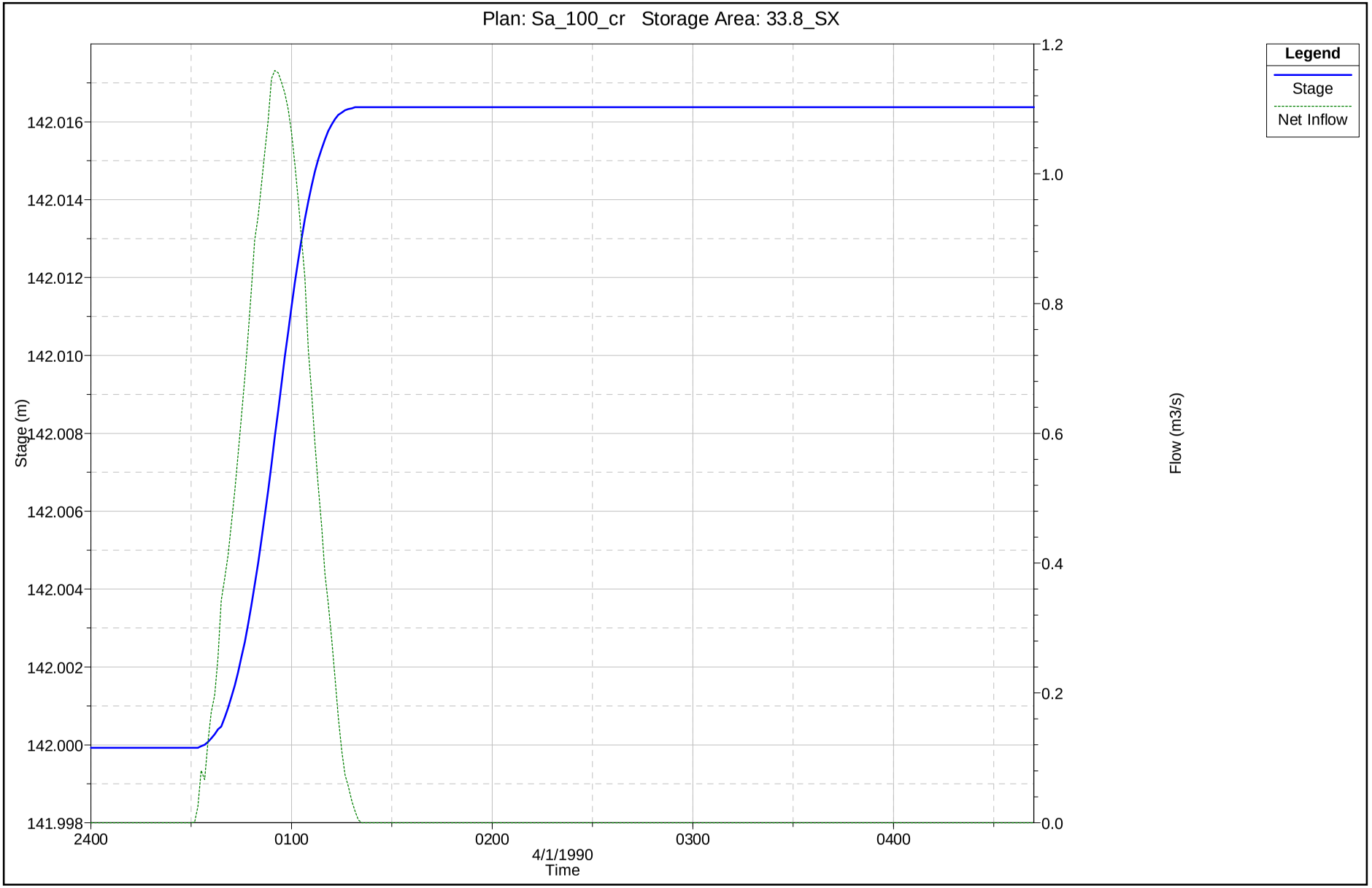

Plan: Sa_100_cr Storage Area: sx_10.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
148
146
144
142
140
138
136
6
4
2
0
-2
-4
-6
2400
0100
0200
0300
0400
4/1/1990
Time

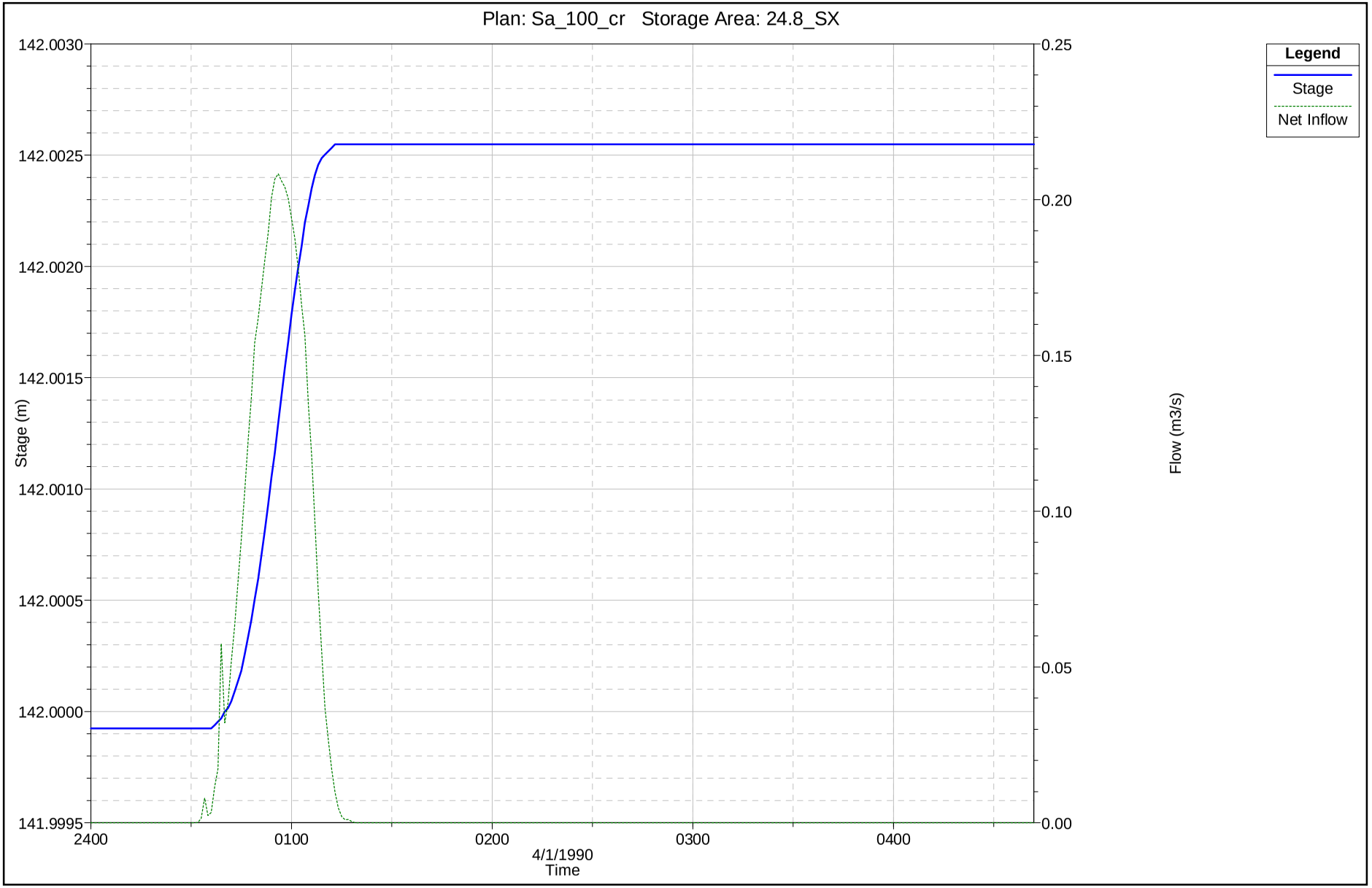

Plan: Sa_100_cr Storage Area: sx_7.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.014
142.012
142.010
142.008
142.006
142.004
142.002
142.000
141.998
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
2400
0100
0200
0300
0400
4/1/1990
Time

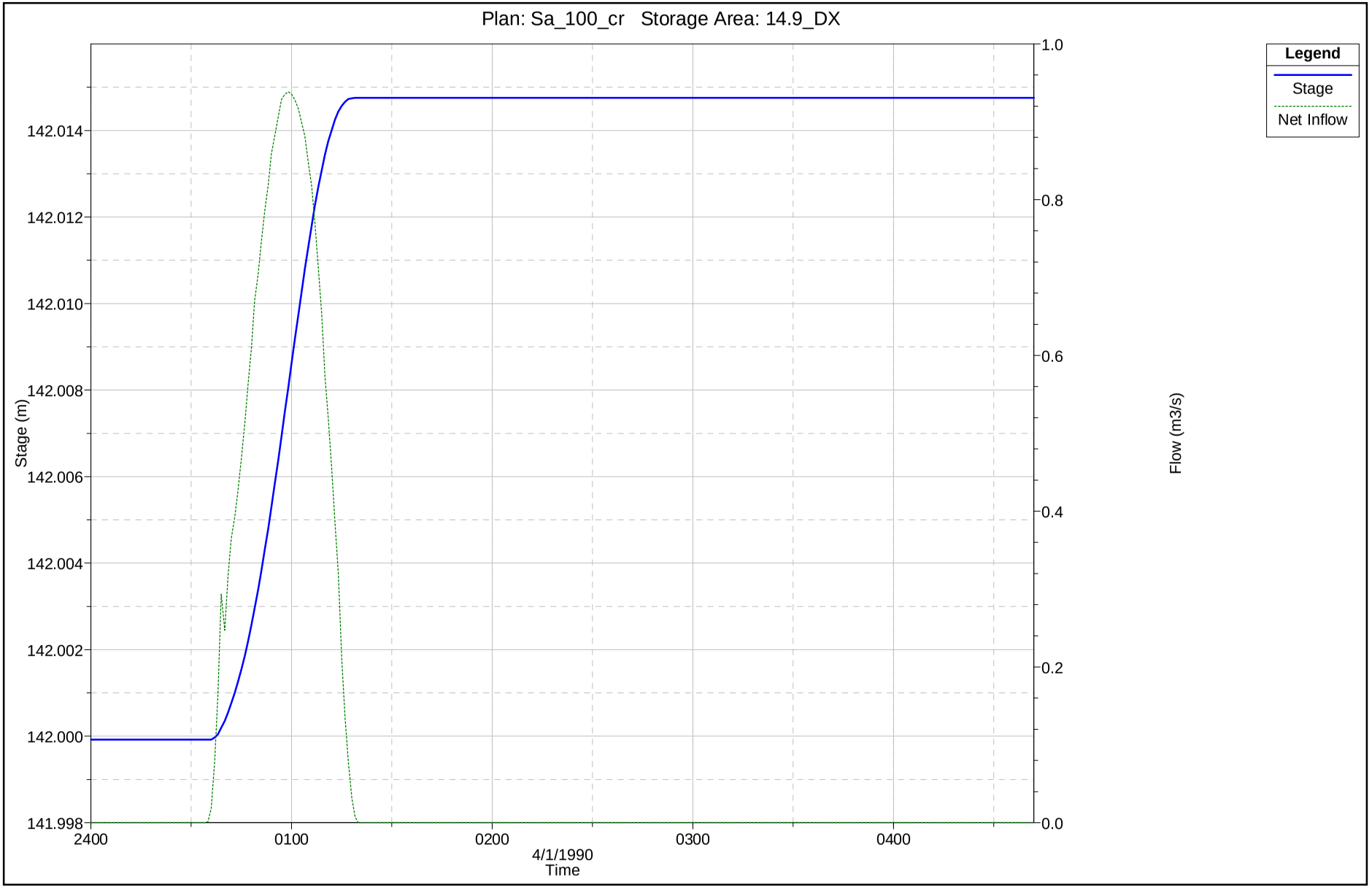

Plan: Sa_100_cr Storage Area: dx_10.8
Legend
Stage
Net Inflow
Stage (m)
142.0014
142.0012
142.0010
142.0008
142.0006
142.0004
142.0002
142.0000
141.9998
Flow (m3/s)
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
2400
0100
0200
0300
0400
4/1/1990
Time

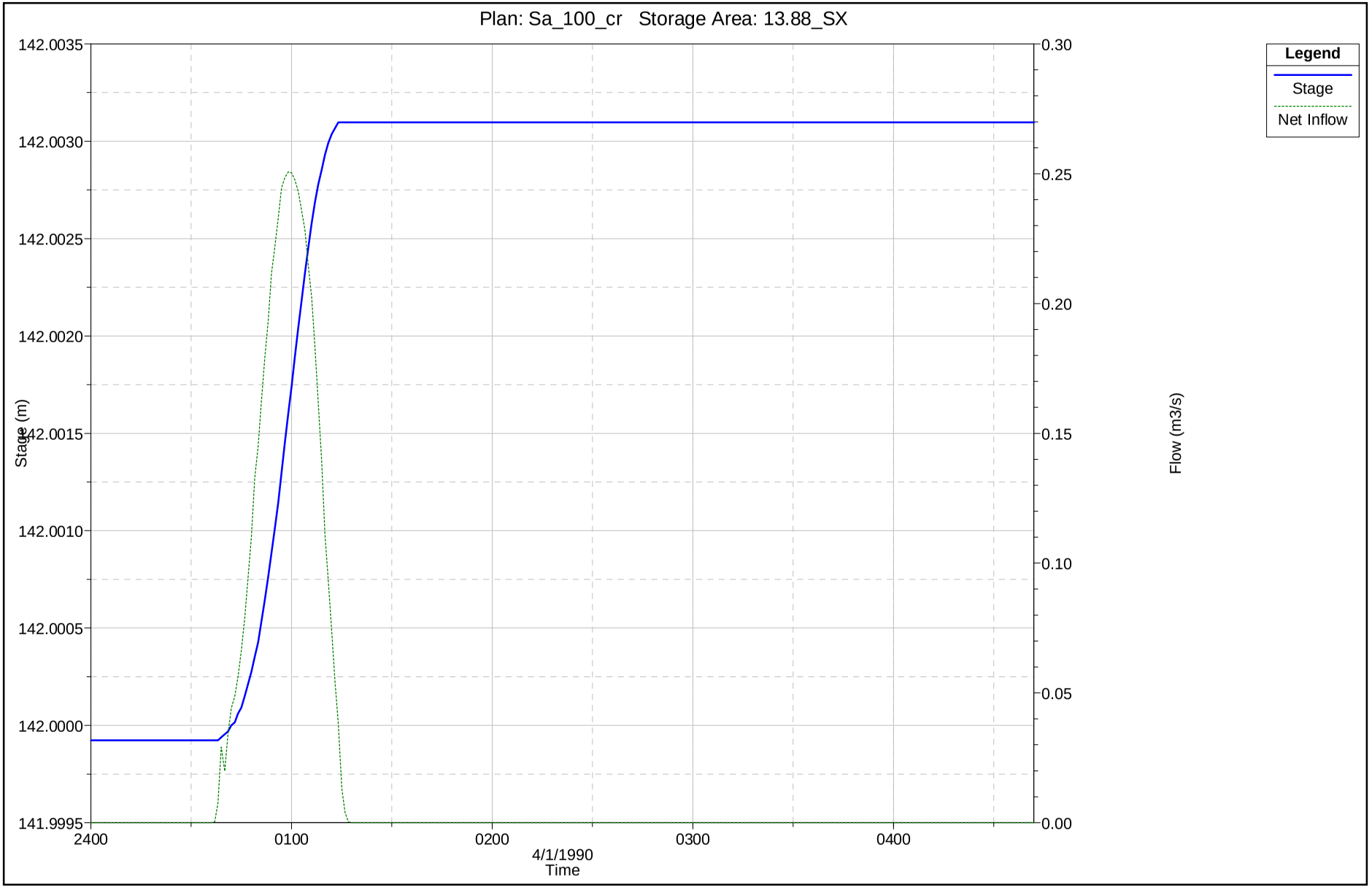

Plan: Sa_100_cr Storage Area: dx_7.8
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.5
142.4
142.3
142.2
142.1
142.0
141.9
14
12
10
8
6
4
2
0
2400
0100
0200
0300
0400
4/1/1990
Time

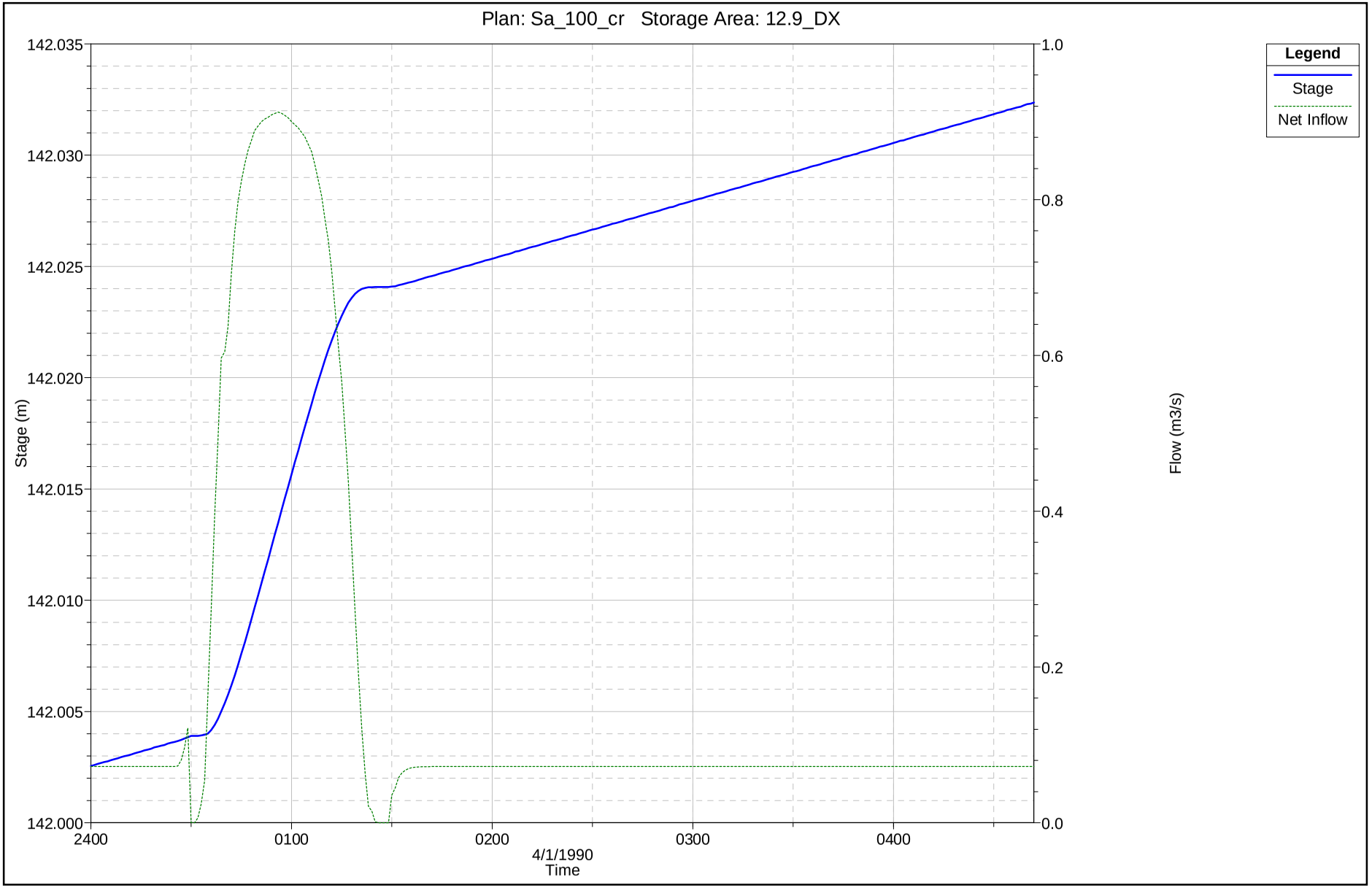

Plan: Sa_100_cr Storage Area: 33.9_DX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.05
142.04
142.03
142.02
142.01
142.00
141.99
2.5
2.0
1.5
1.0
0.5
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

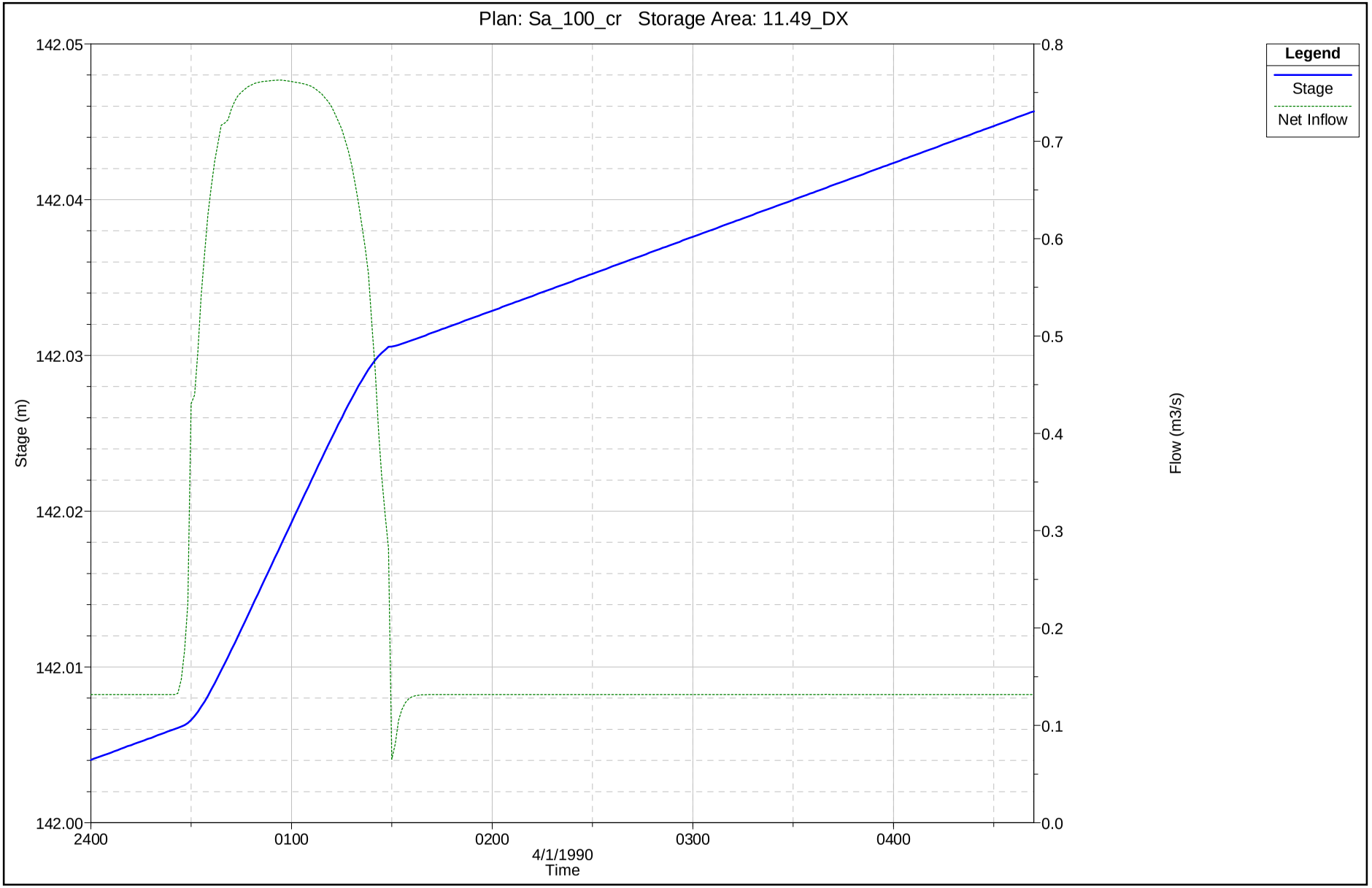

Plan: Sa_100_cr Storage Area: 33.8_SX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.016
142.014
142.012
142.010
142.008
142.006
142.004
142.002
142.000
141.998
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

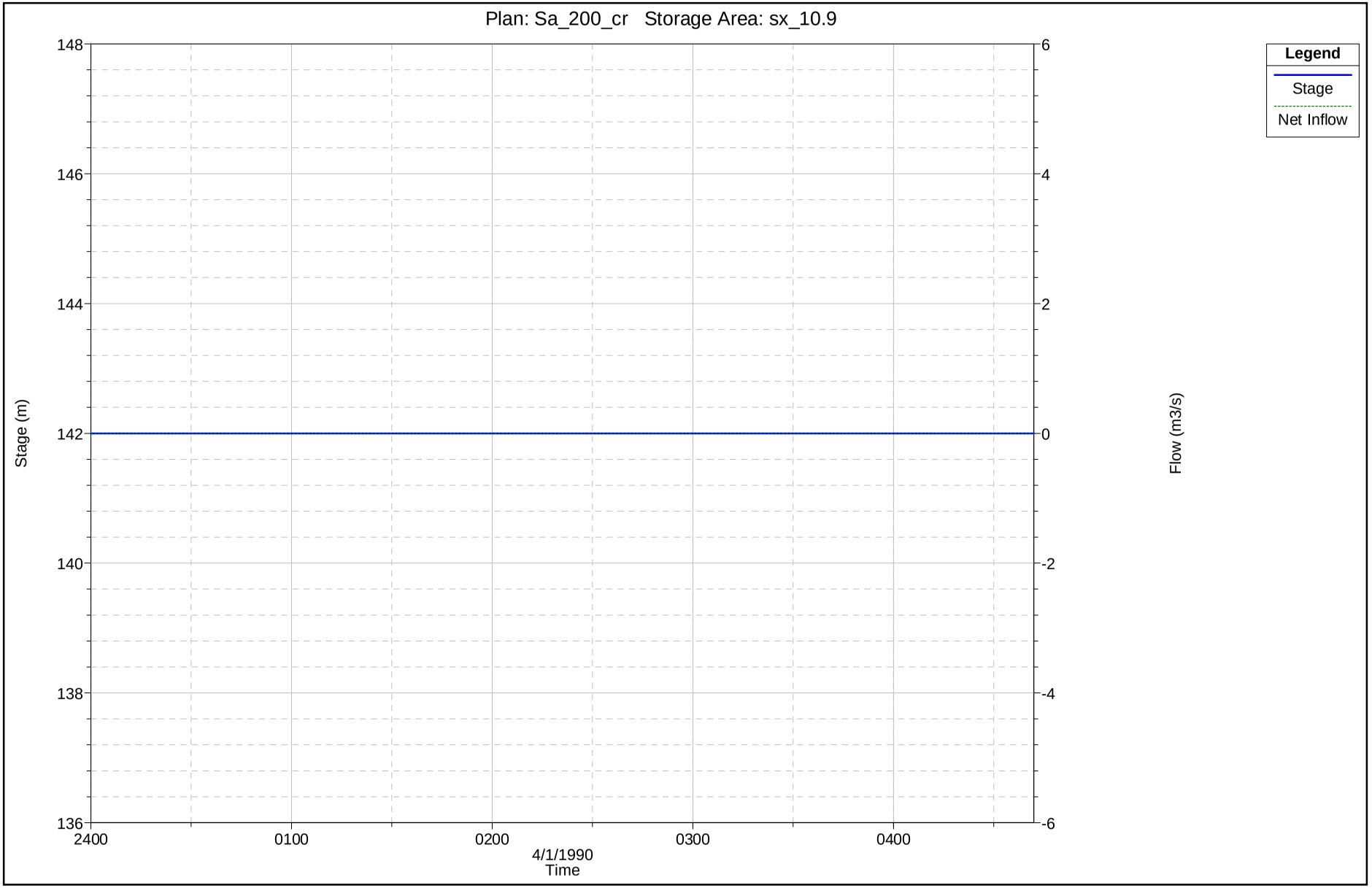

Plan: Sa_100_cr Storage Area: 24.8_SX
142.0030
142.0025
142.0020
142.0015
142.0010
142.0005
142.0000
141.9995
Stage (m)
0.25
0.20
0.15
0.10
0.05
0.00
Flow (m3/s)
2400
0100
0200
0300
0400
4/1/1990
Time
Legend
Stage
Net Inflow

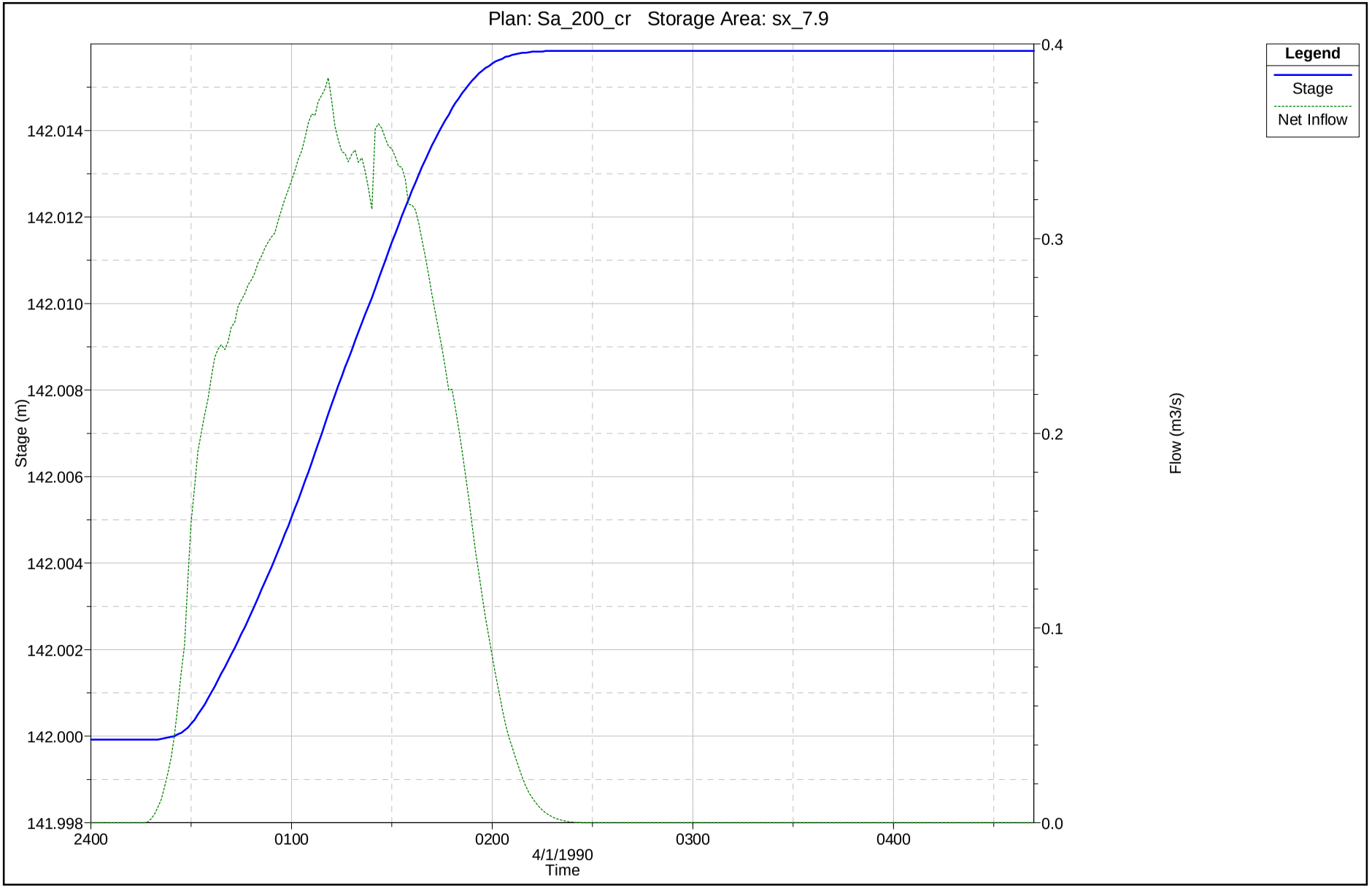

Plan: Sa_100_cr Storage Area: 14.9_DX
Legend
Stage
Net Inflow
Stage (m)
142.014
142.012
142.010
142.008
142.006
142.004
142.002
142.000
141.998
Flow (m3/s)
1.0
0.8
0.6
0.4
0.2
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

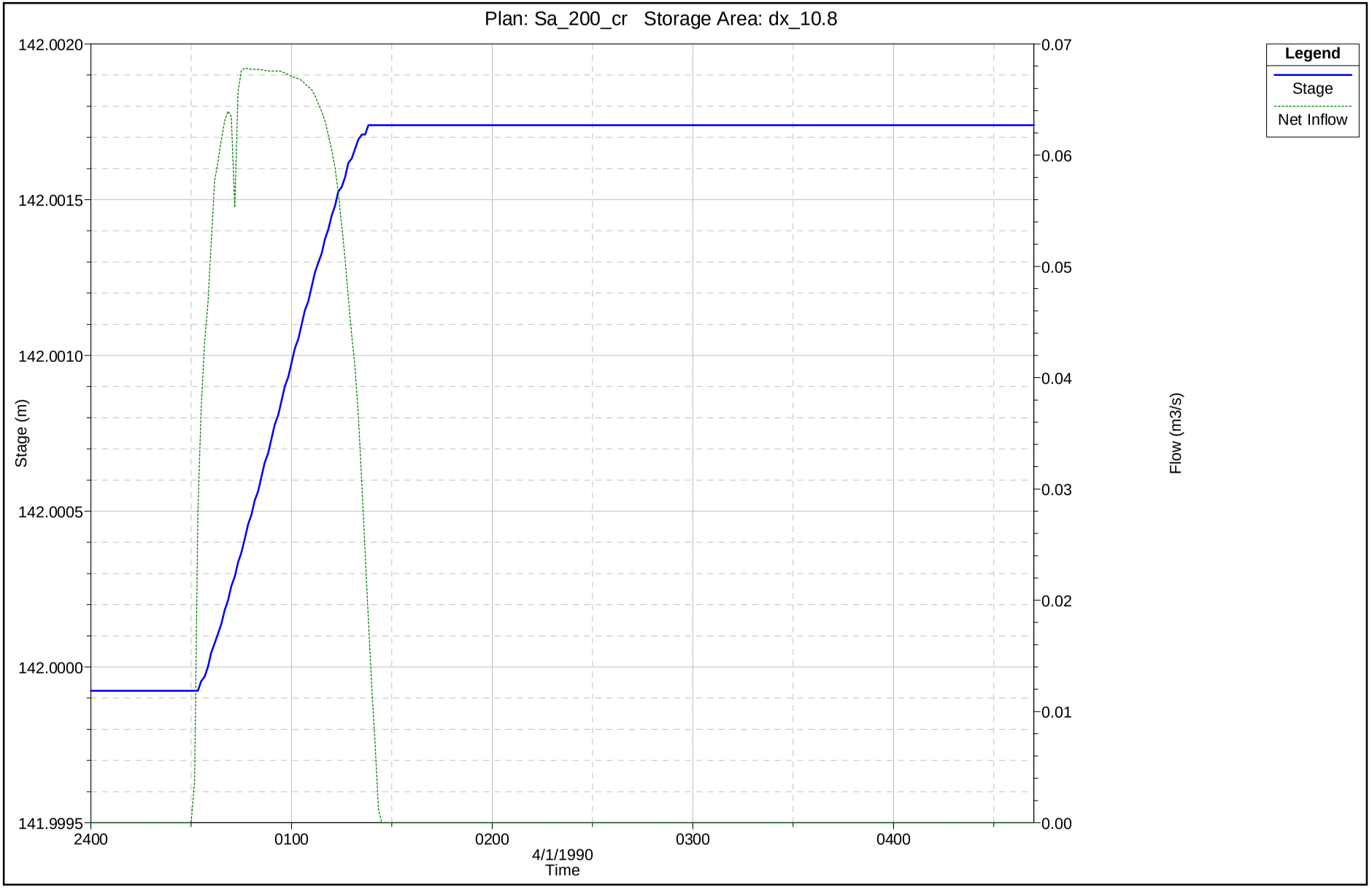

Plan: Sa_100_cr Storage Area: 13.88_SX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.0035
142.0030
142.0025
142.0020
142.0015
142.0010
142.0005
142.0000
141.9995
0.30
0.25
0.20
0.15
0.10
0.05
0.00
2400
0100
0200
0300
0400
4/1/1990
Time

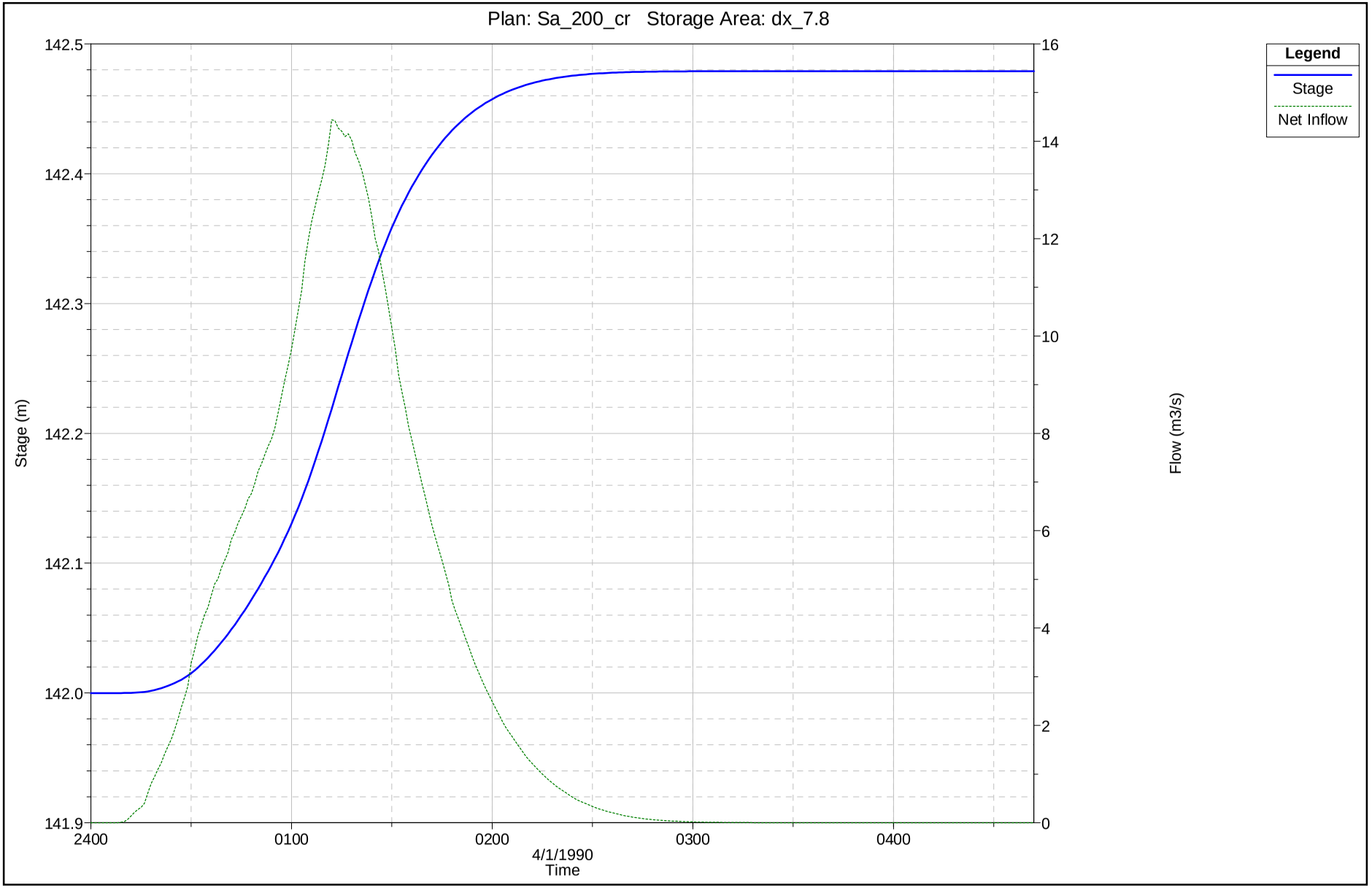

Plan: Sa_100_cr Storage Area: 12.9_DX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.035
142.030
142.025
142.020
142.015
142.010
142.005
142.000
1.0
0.8
0.6
0.4
0.2
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

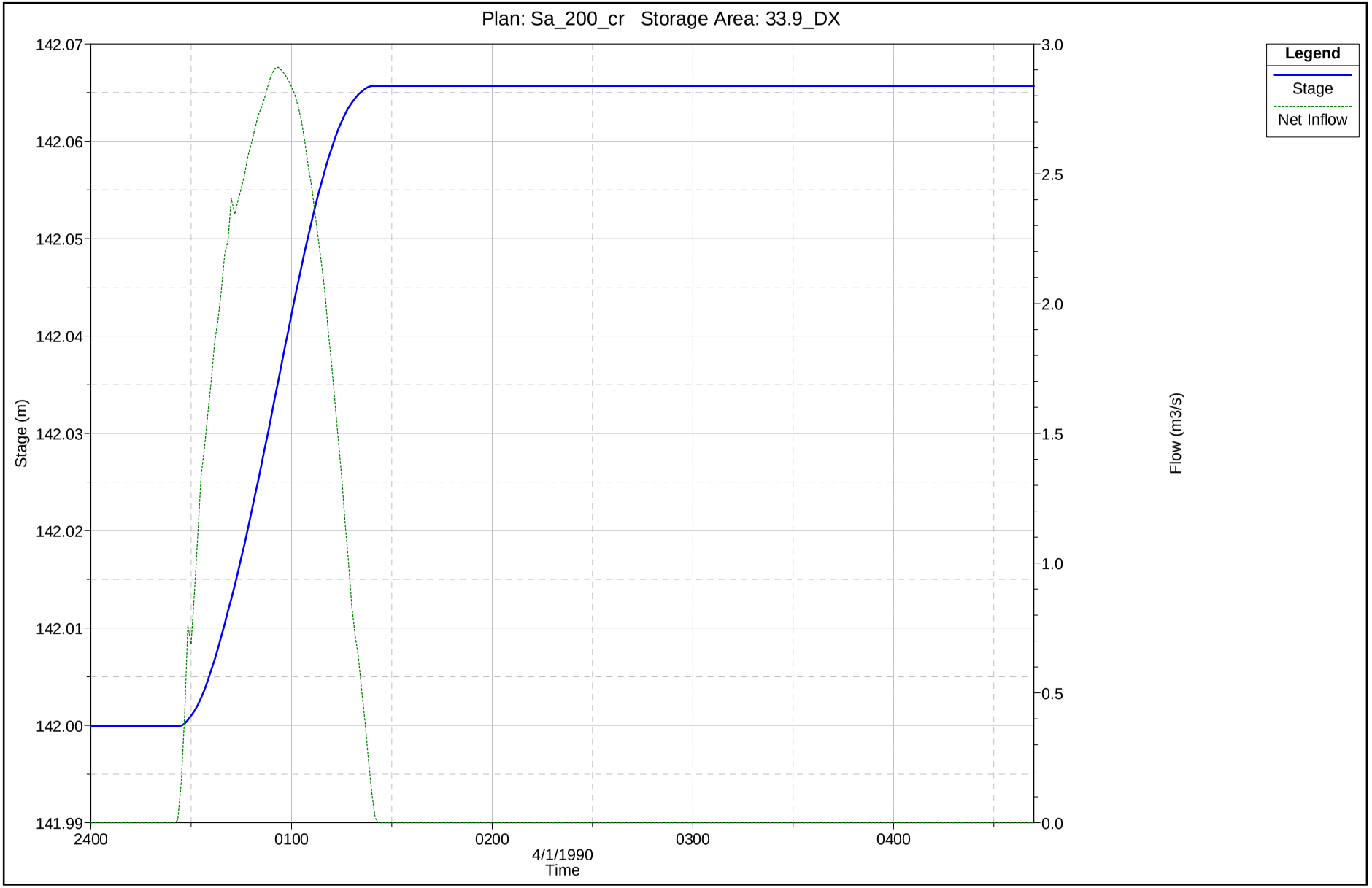

Plan: Sa_100_cr Storage Area: 11.49_DX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.05
142.04
142.03
142.02
142.01
142.00
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

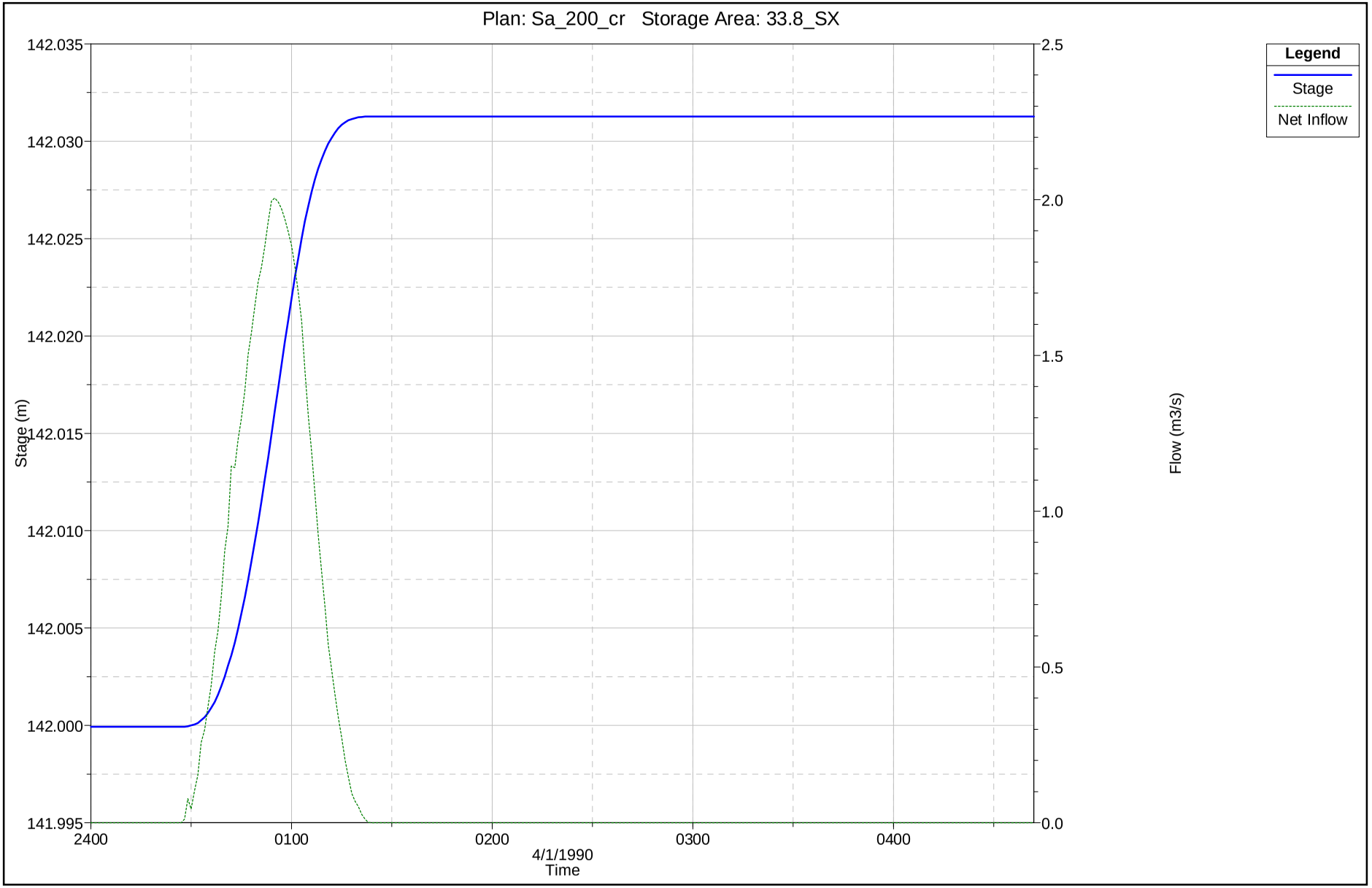

Plan: Sa_200_cr Storage Area: sx_10.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
148
146
144
142
140
138
136
6
4
2
0
-2
-4
-6
2400
0100
0200
0300
0400
4/1/1990
Time

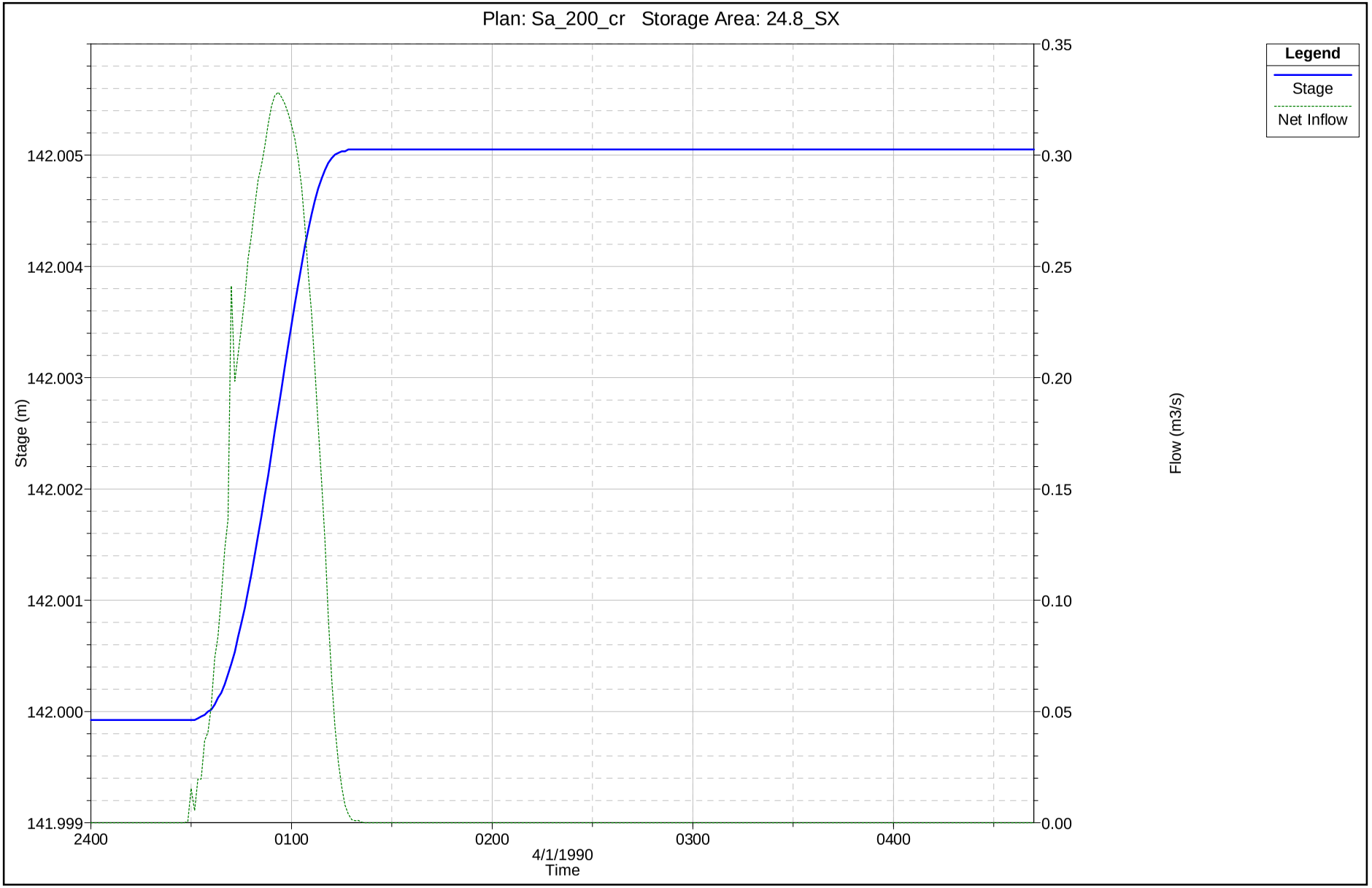

Plan: Sa_200_cr Storage Area: sx_7.9
Legend
Stage
Net Inflow
Stage (m)
142.014
142.012
142.010
142.008
142.006
142.004
142.002
142.000
141.998
Flow (m3/s)
0.4
0.3
0.2
0.1
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

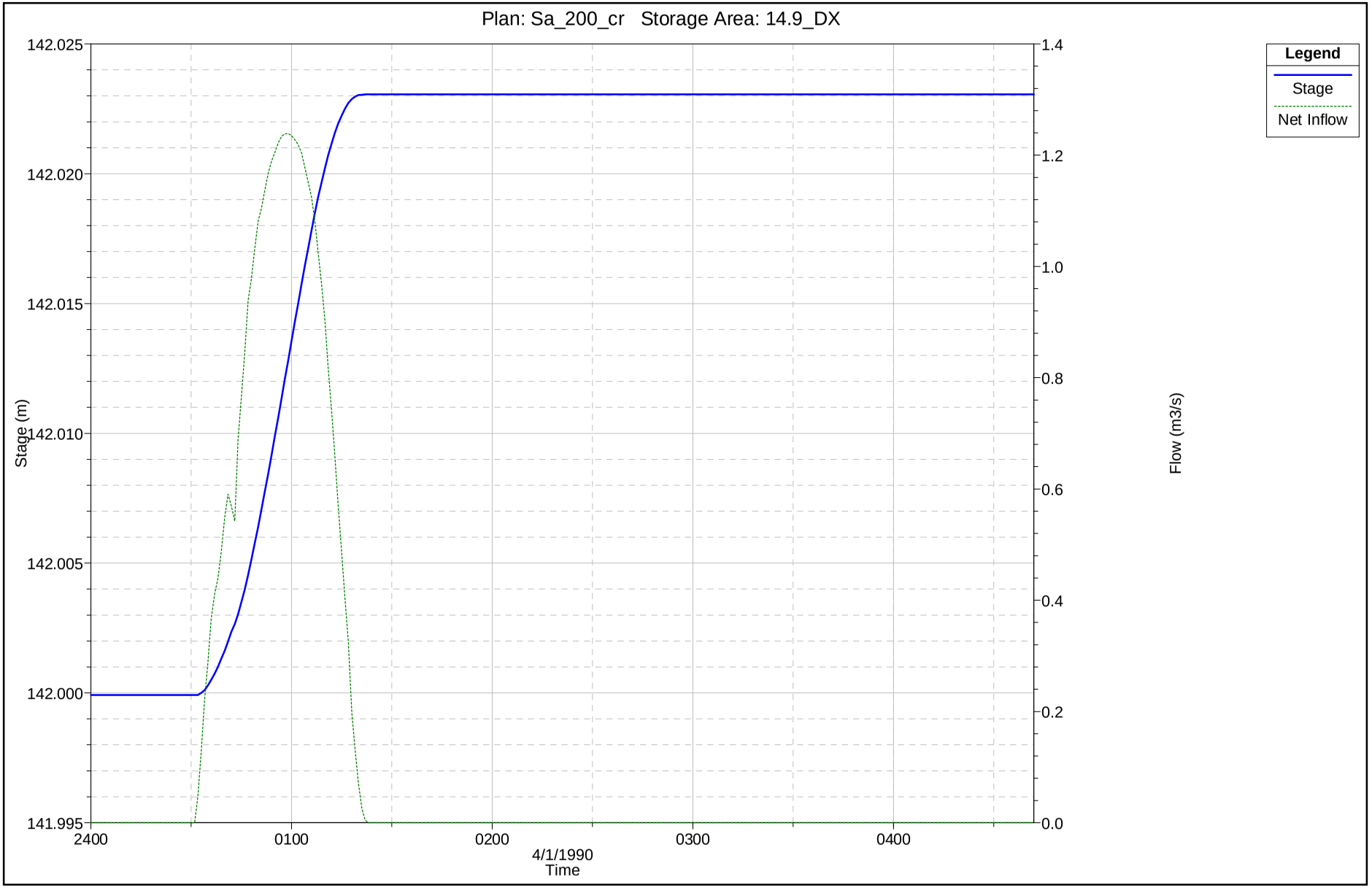

Plan: Sa_200_cr Storage Area: dx_10.8
142.0020
142.0015
142.0010
142.0005
142.0000
141.9995
Stage (m)
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
Flow (m3/s)
2400
0100
0200
0300
0400
4/1/1990
Time
Legend
Stage
Net Inflow

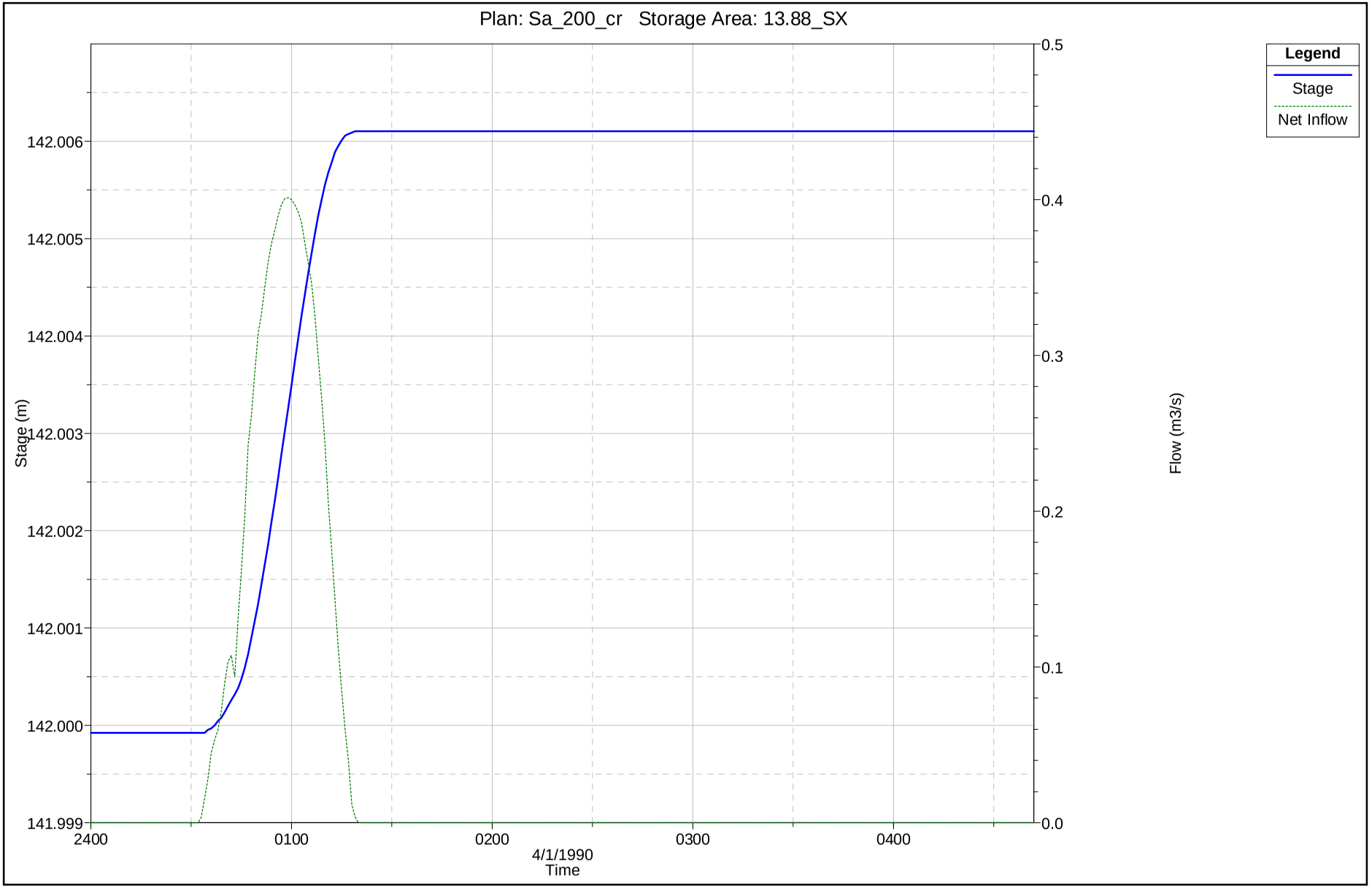

Plan: Sa_200_cr Storage Area: dx_7.8
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.5
142.4
142.3
142.2
142.1
142.0
141.9
16
14
12
10
8
6
4
2
0
2400
0100
0200
0300
0400
4/1/1990
Time

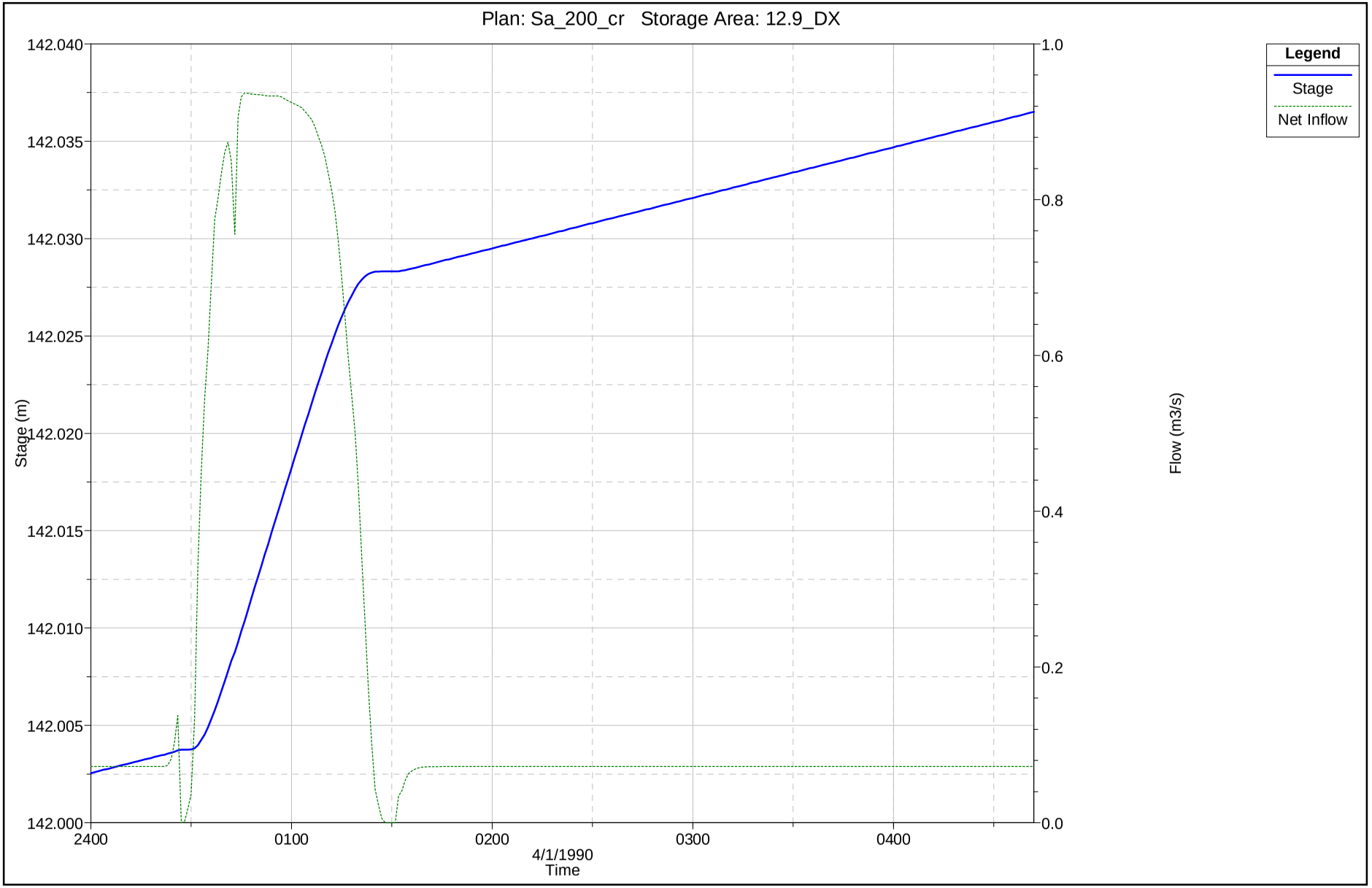

Plan: Sa_200_cr Storage Area: 33.9_DX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.07
142.06
142.05
142.04
142.03
142.02
142.01
142.00
141.99
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

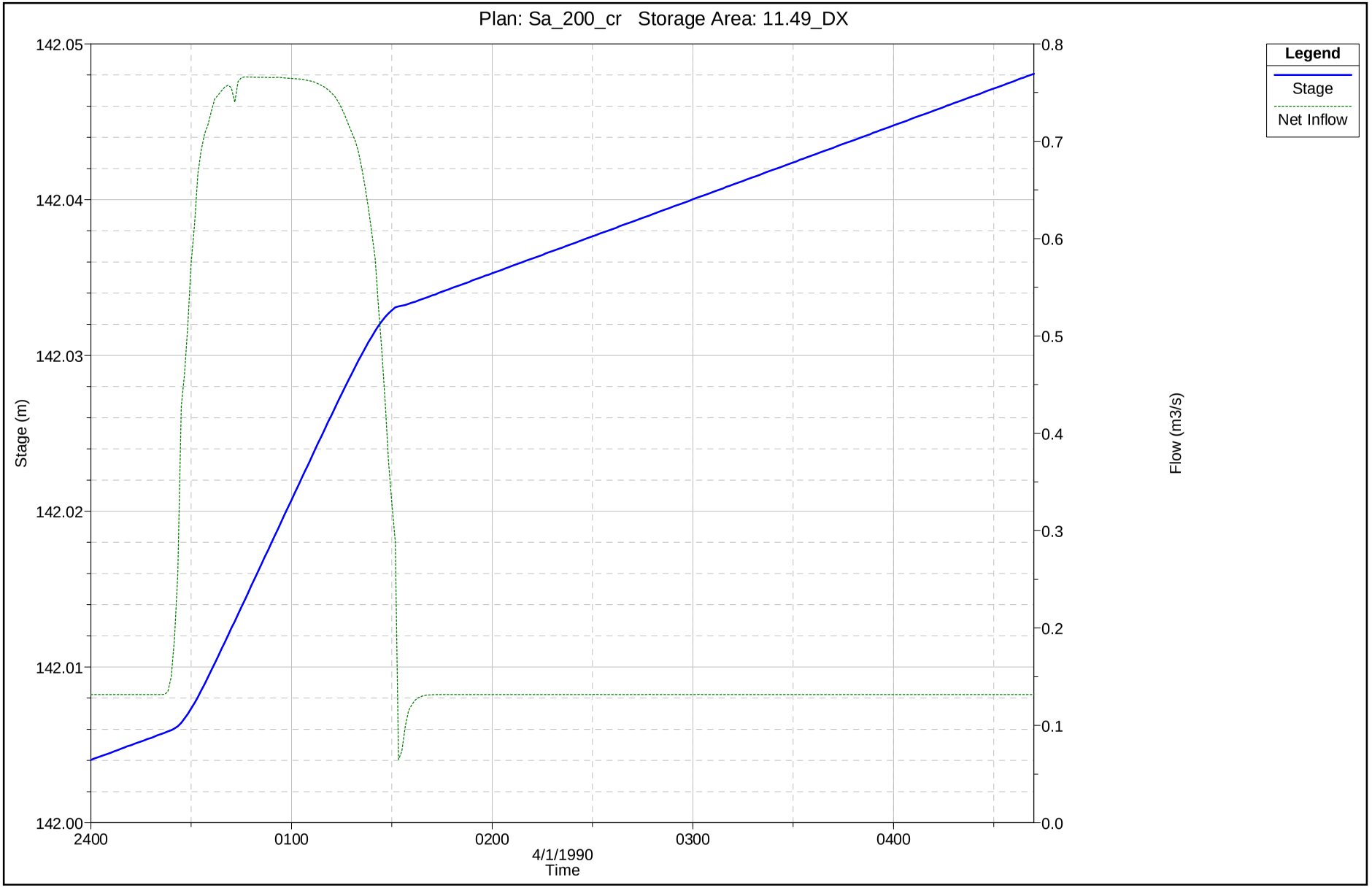

Plan: Sa_200_cr Storage Area: 33.8_SX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.035
142.030
142.025
142.020
142.015
142.010
142.005
142.000
141.995
2.5
2.0
1.5
1.0
0.5
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

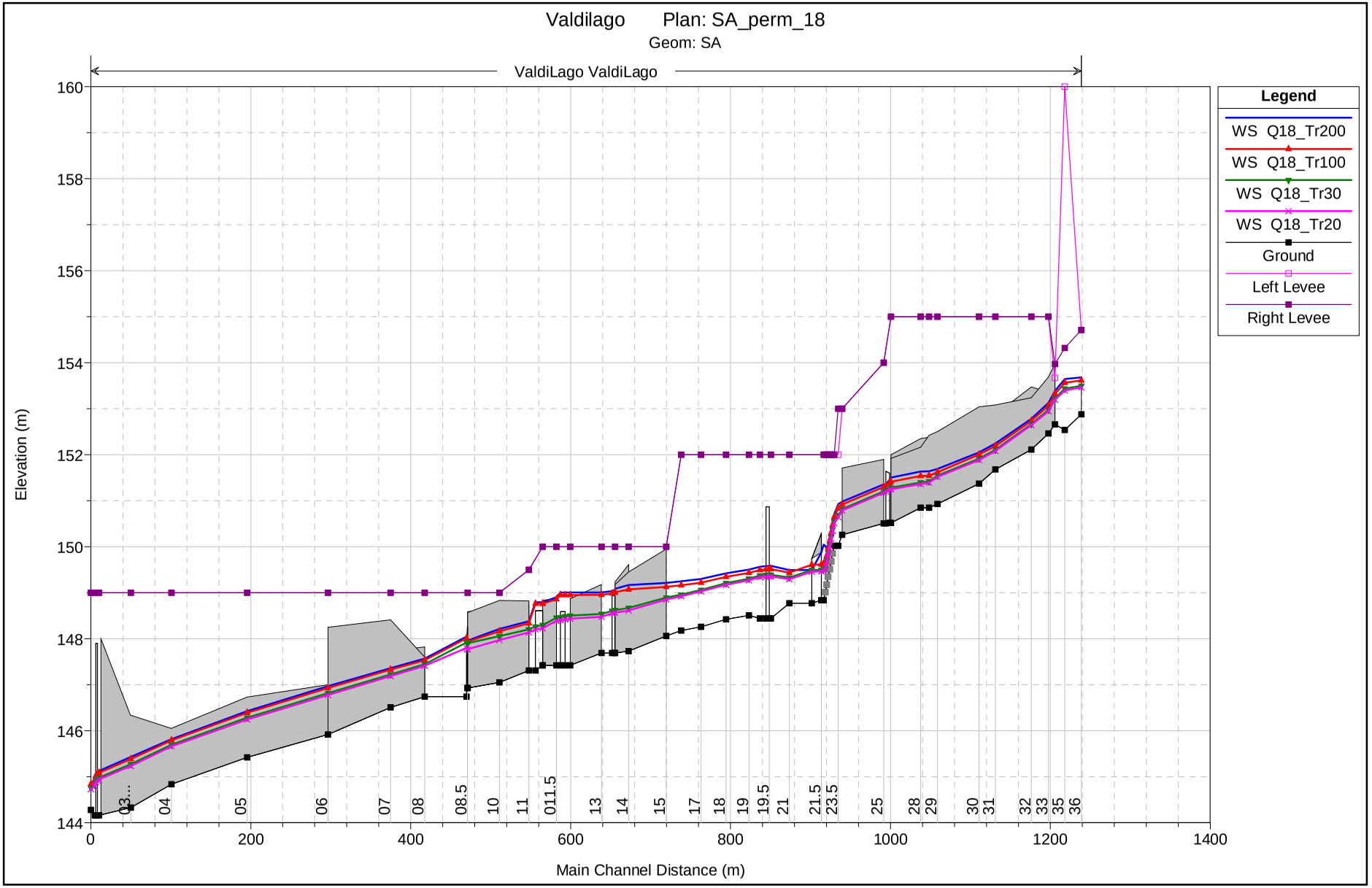

Plan: Sa_200_cr Storage Area: 24.8_SX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.005
142.004
142.003
142.002
142.001
142.000
141.999
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
2400
0100
0200
0300
0400
4/1/1990
Time

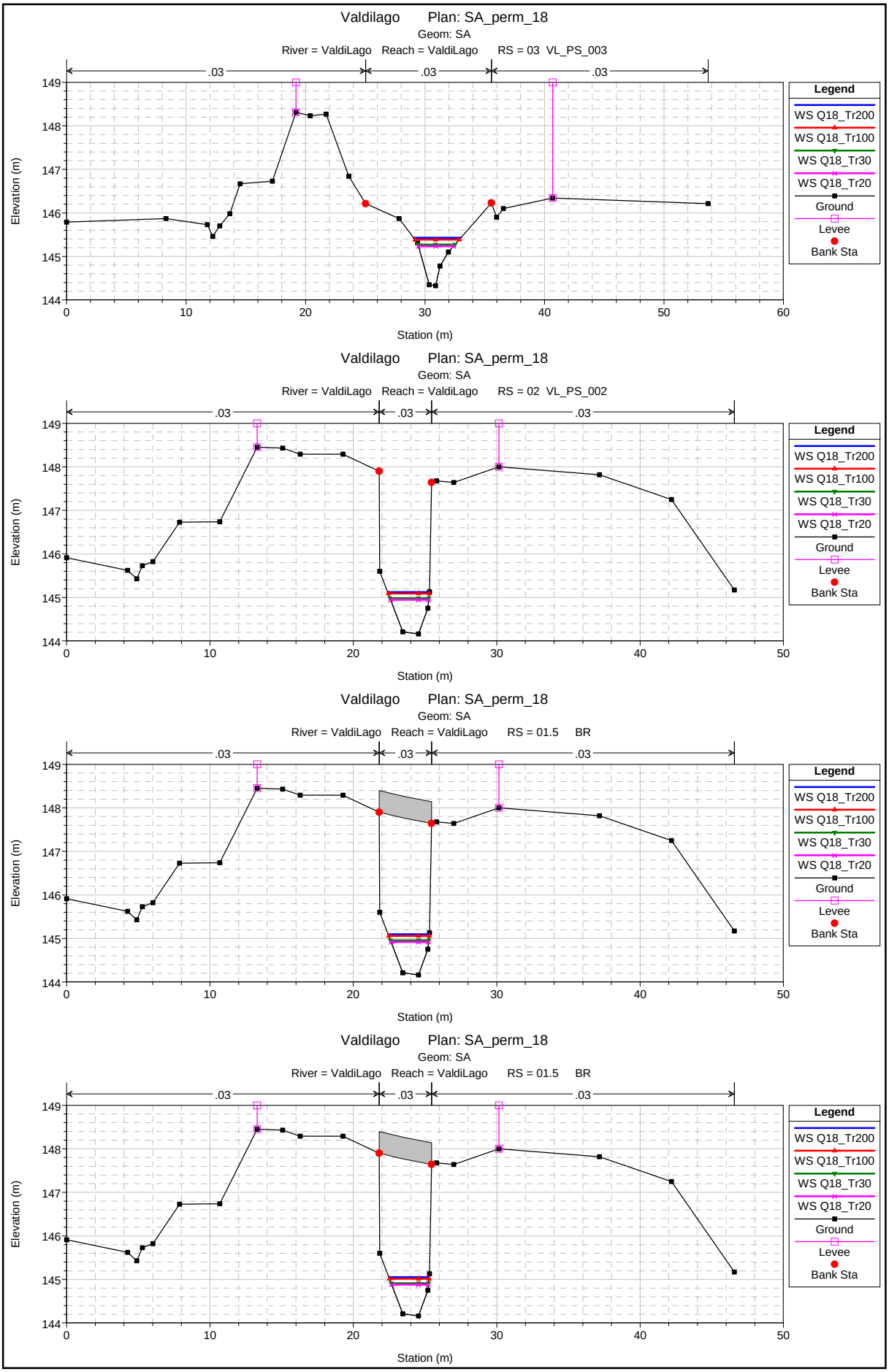

Plan: Sa_200_cr Storage Area: 14.9_DX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.025
142.020
142.015
142.010
142.005
142.000
141.995
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

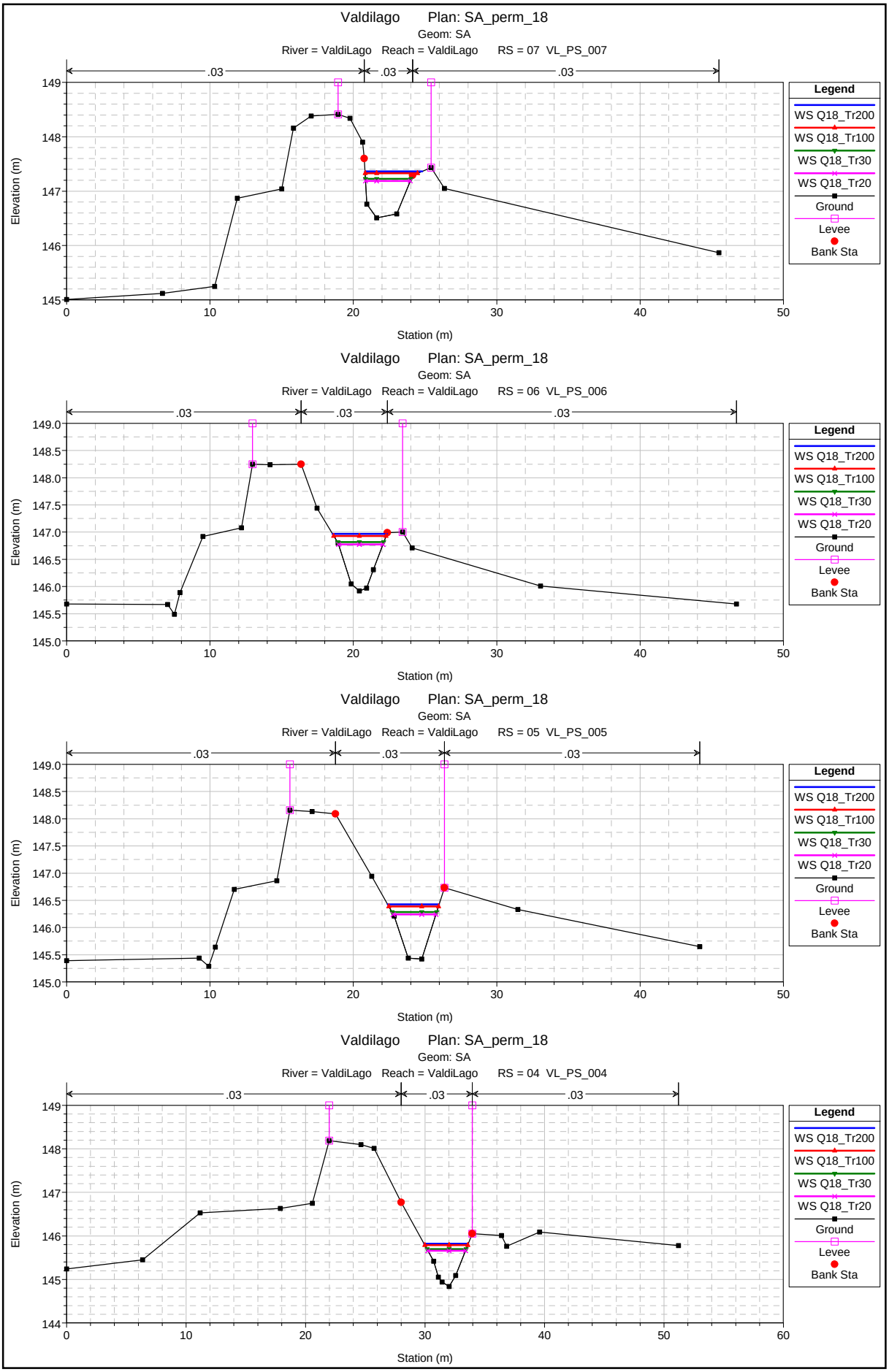

Plan: Sa_200_cr Storage Area: 13.88_SX
Legend
Stage
Net Inflow
Stage (m)
142.006
142.005
142.004
142.003
142.002
142.001
142.000
141.999
Flow (m3/s)
0.5
0.4
0.3
0.2
0.1
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

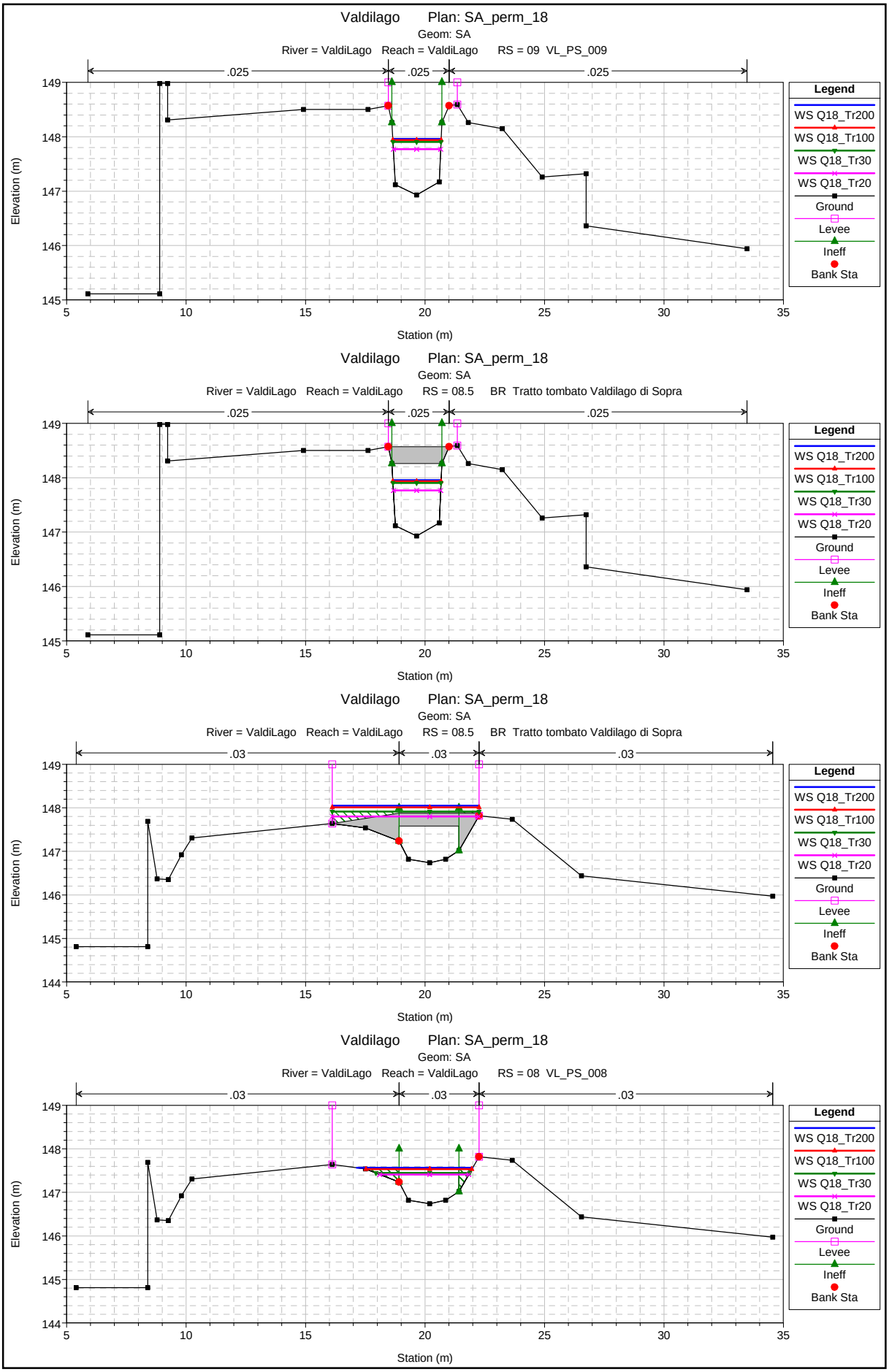

Plan: Sa_200_cr Storage Area: 12.9_DX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.040
142.035
142.030
142.025
142.020
142.015
142.010
142.005
142.000
1.0
0.8
0.6
0.4
0.2
0.0
2400
0100
0200
0300
0400
4/1/1990
Time


Plan: Sa_200_cr Storage Area: 11.49_DX
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
142.05
142.04
142.03
142.02
142.01
142.00
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
2400
0100
0200
0300
0400
4/1/1990
Time

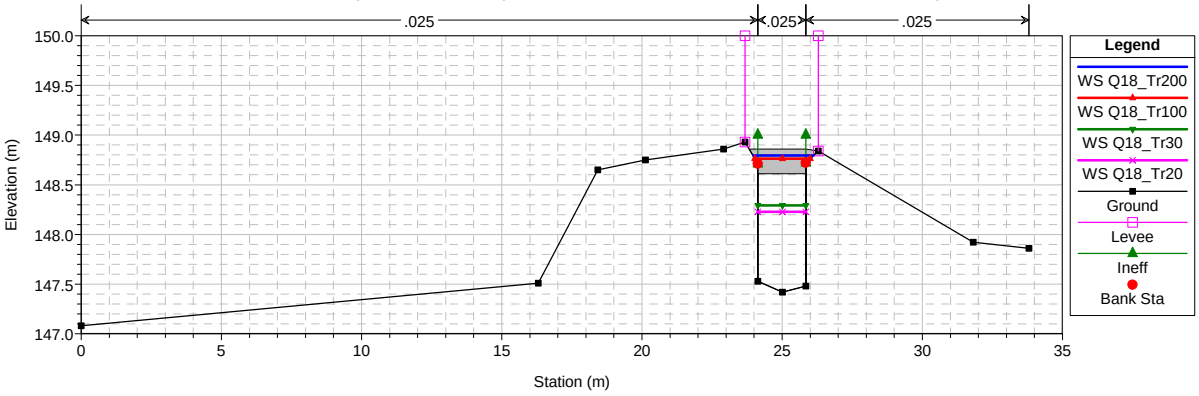

Valdilago Plan: SA_perm_18
Geom: SA
ValdiLago ValdiLago
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Left Levee
Right Levee
Elevation (m)
Main Channel Distance (m)
160
158
156
154
152
150
148
146
144
0
200
400
600
800
1000
1200
1400
03...
04
05
06
07
08
08.5
10
11
011.5
13
14
15
17
18
19
19.5
21
21.5
23.5
25
28
29
30
31
32
33
35
36


Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 03 VL_PS_003
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 02 VL_PS_002
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 01.5 BR
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 01.5 BR
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta

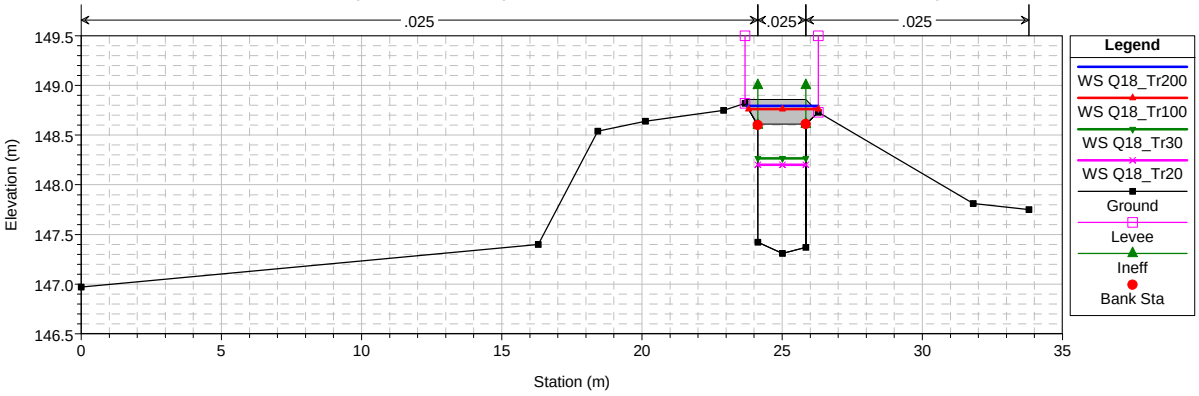

Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 07 VL_PS_007
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 06 VL_PS_006
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 05 VL_PS_005
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 04 VL_PS_004
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta


Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 09 VL_PS_009
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 08.5 BR Tratto tombato Valdilago di Sopra
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 08.5 BR Tratto tombato Valdilago di Sopra
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 08 VL_PS_008
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta

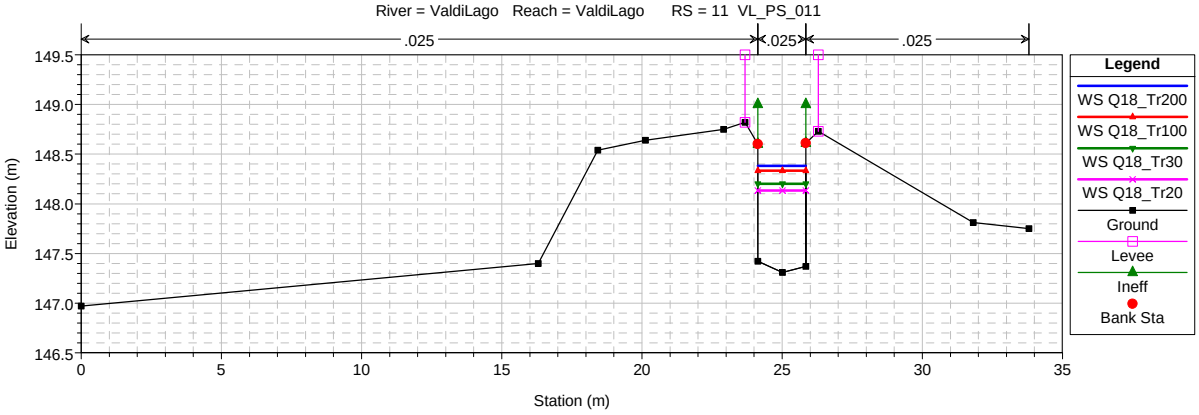
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 11.2 BR tratto tombato a valle del Canale Battagli



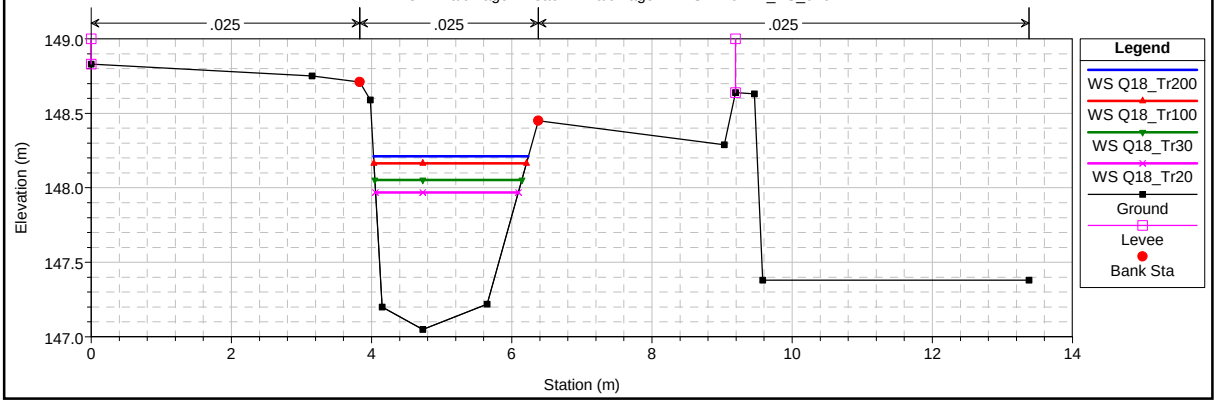
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 11.2 BR tratto tombato a valle del Canale Battagli

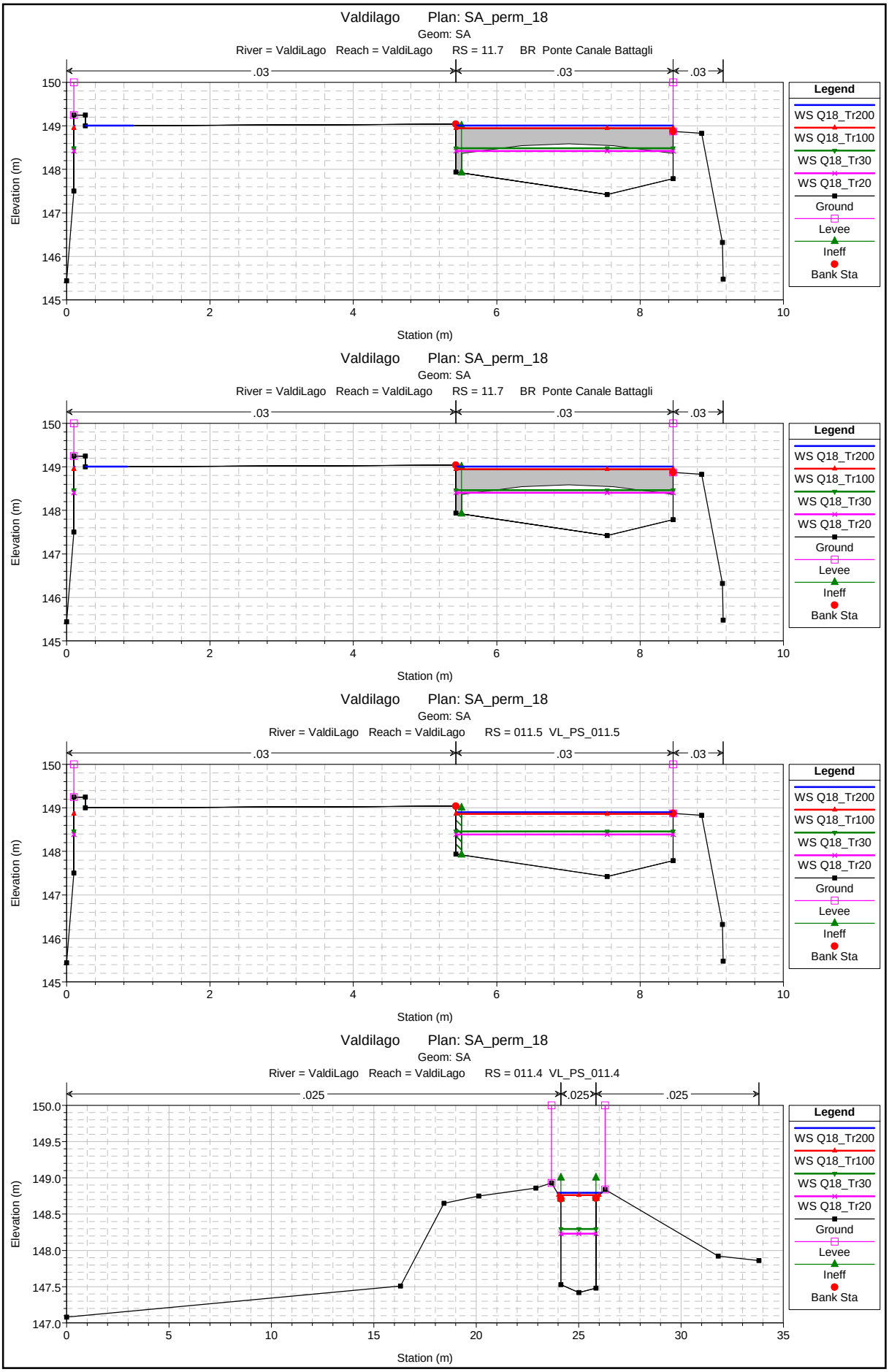


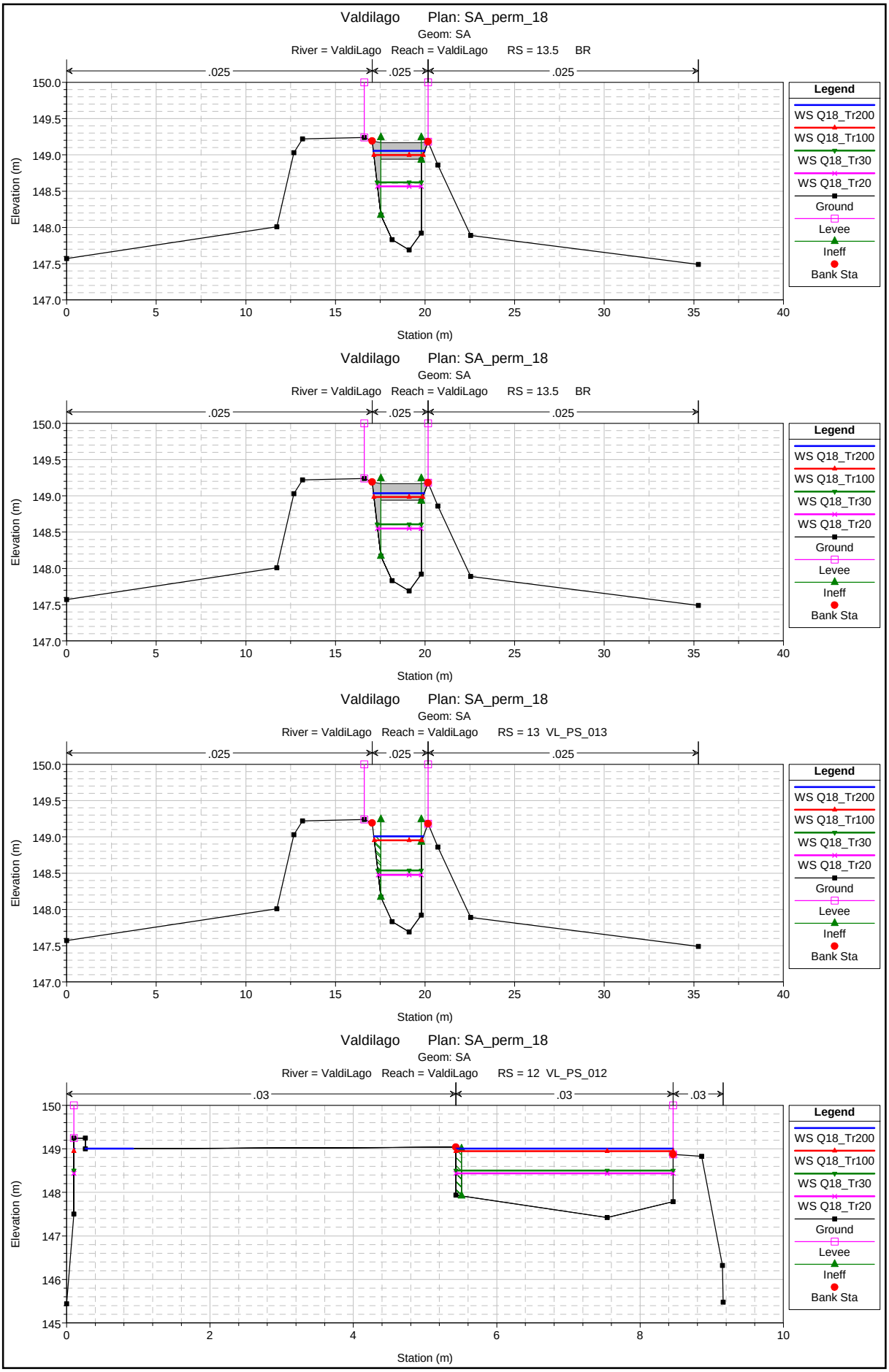
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 11 VL_PS_011

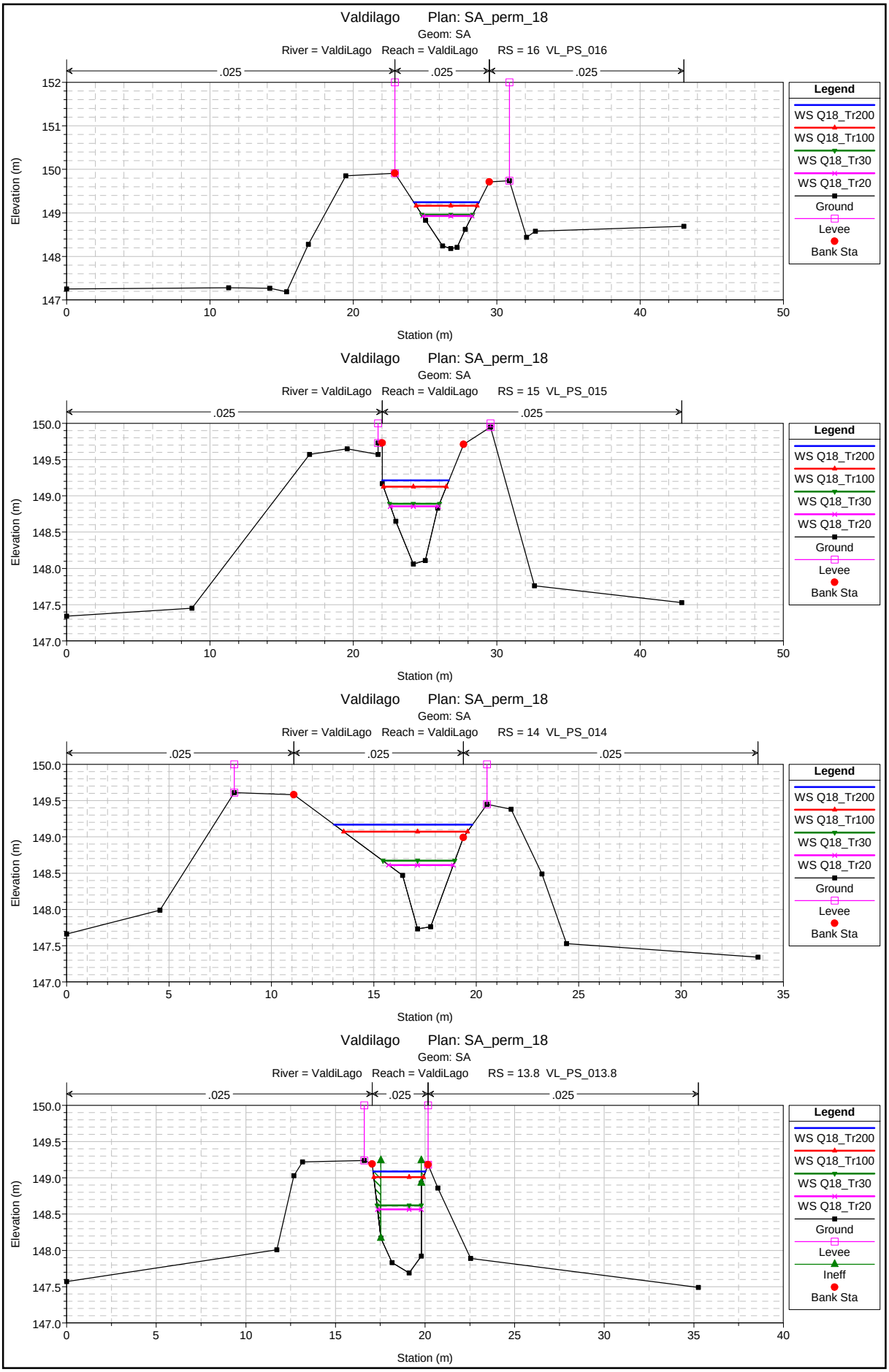


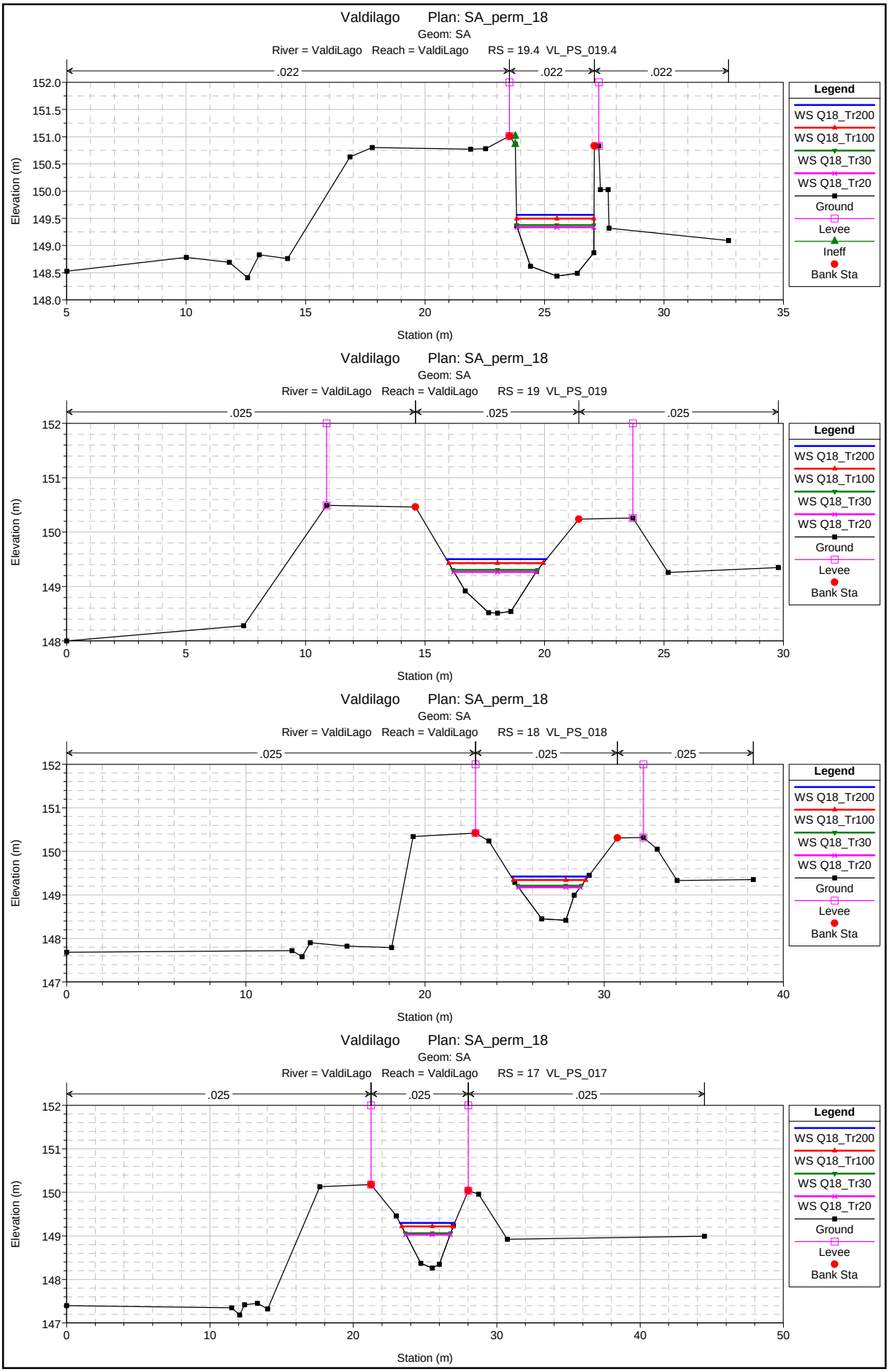
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 10 VL_PS_010




Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 11.7 BR Ponte Canale Battagli
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 11.7 BR Ponte Canale Battagli
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 011.5 VL_PS_011.5
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 011.4 VL_PS_011.4
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta


Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 13.5 BR
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 13.5 BR
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 13 VL_PS_013
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 12 VL_PS_012
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta

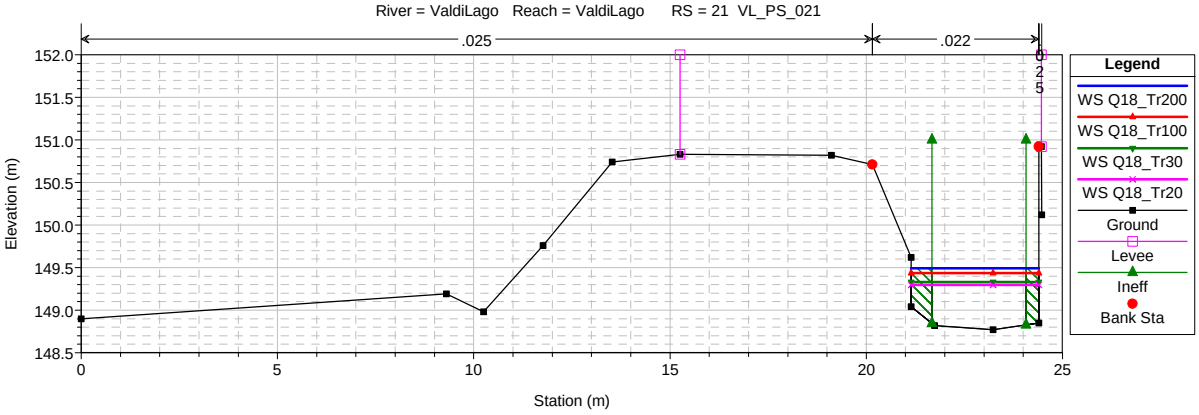

Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 16 VL_PS_016
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 15 VL_PS_015
.025
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 14 VL_PS_014
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 13.8 VL_PS_013.8
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta


Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 19.4 VL_PS_019.4
.022
.022
.022
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 19 VL_PS_019
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 18 VL_PS_018
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 17 VL_PS_017
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta

Valdilago Plan: SA_perm_18

Geom: SA

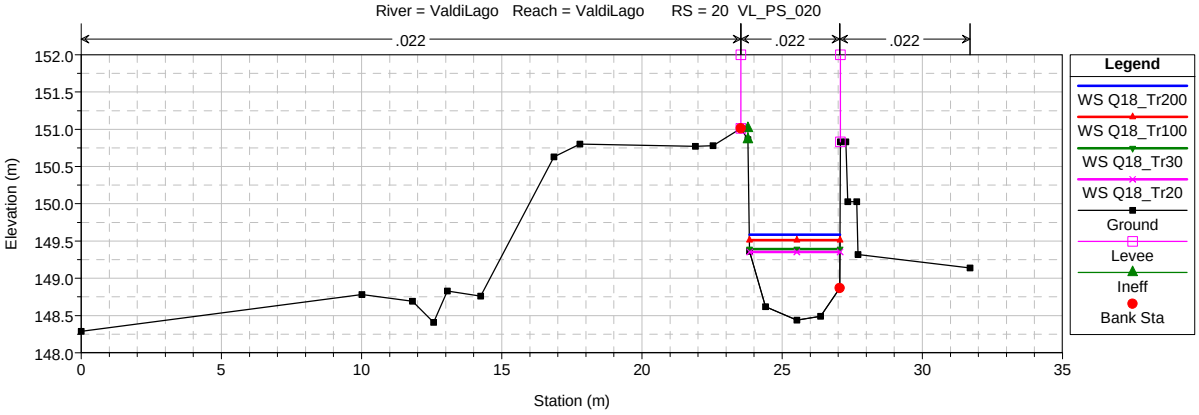
River = ValdiLago Reach = ValdiLago RS = 21 VL_PS_021



Valdilago Plan: SA_perm_18

Geom: SA

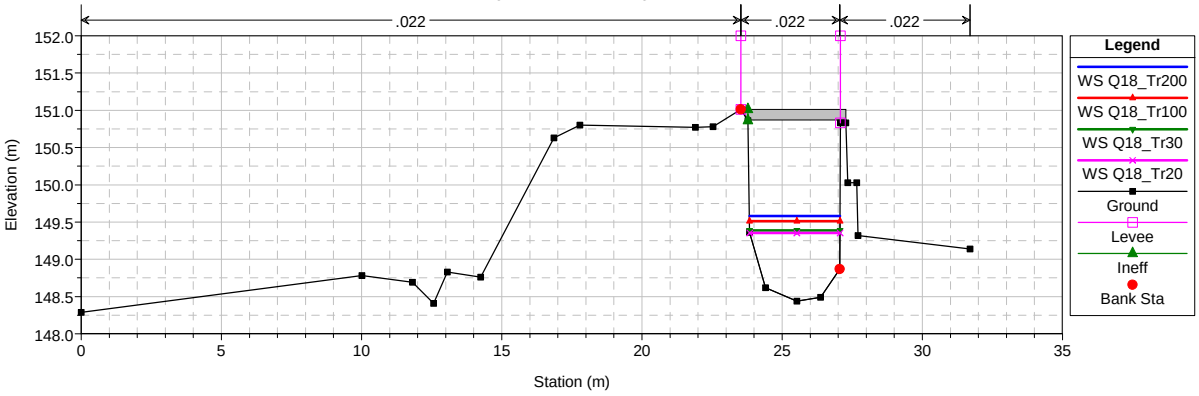
River = ValdiLago Reach = ValdiLago RS = 20 VL_PS_020



Valdilago Plan: SA_perm_18

Geom: SA

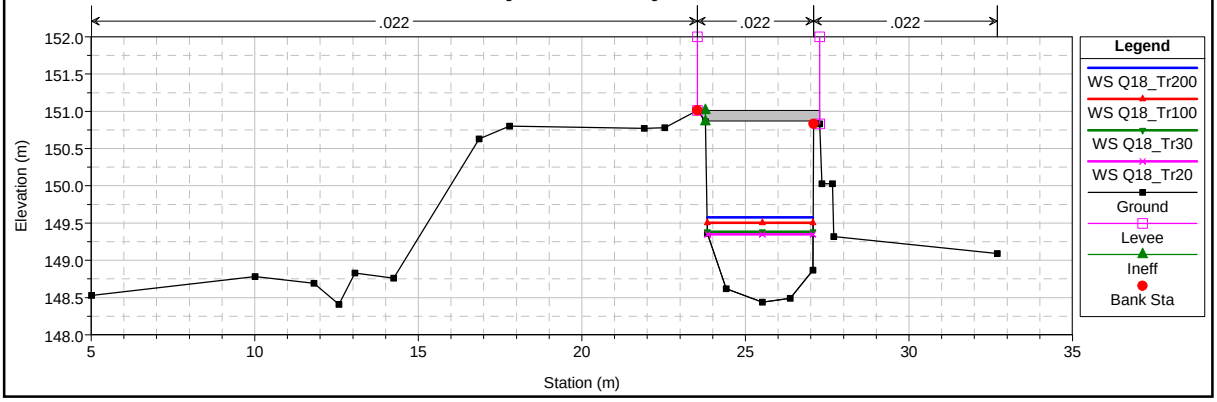
River = ValdiLago Reach = ValdiLago RS = 19.5 BR

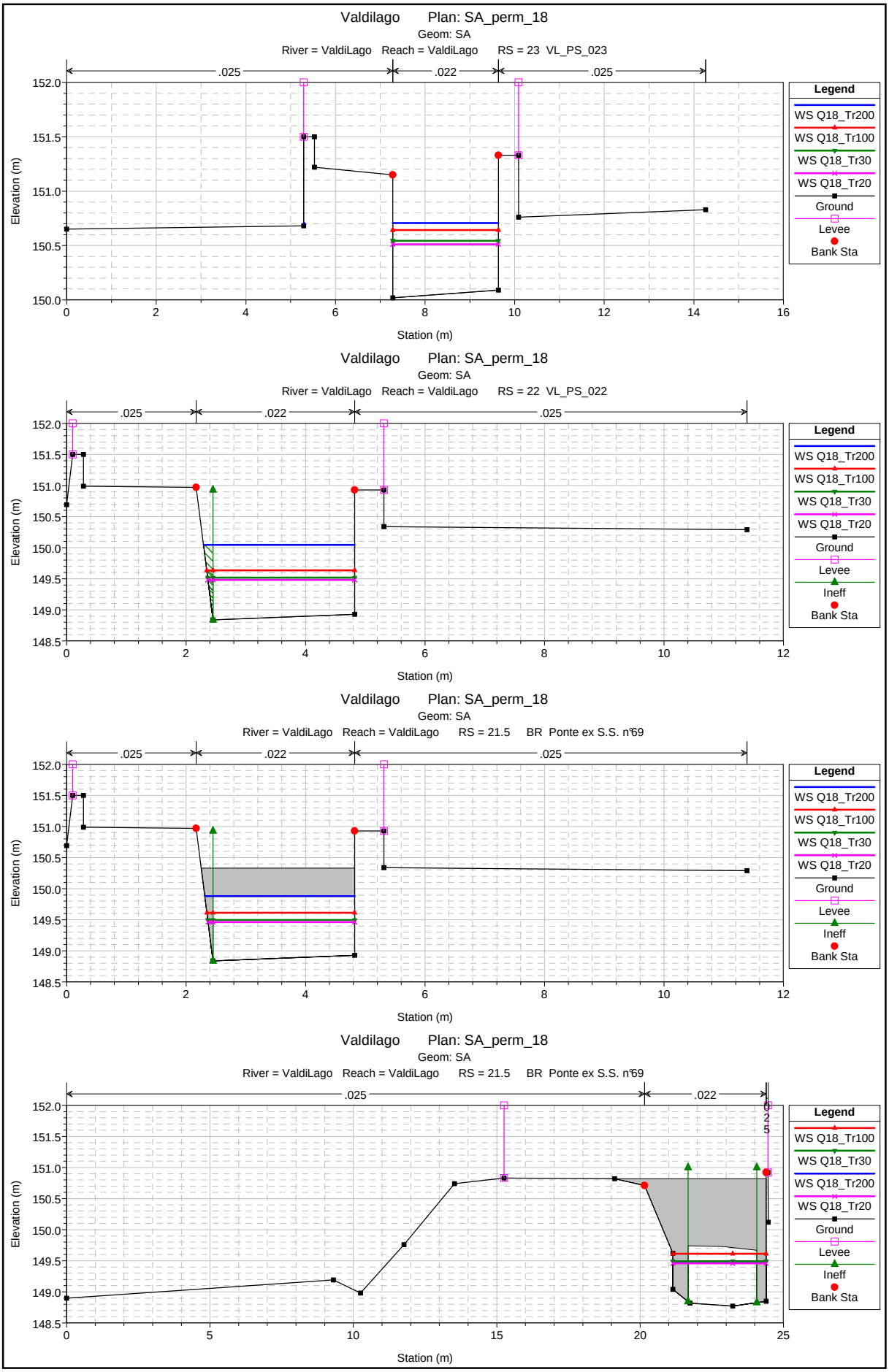


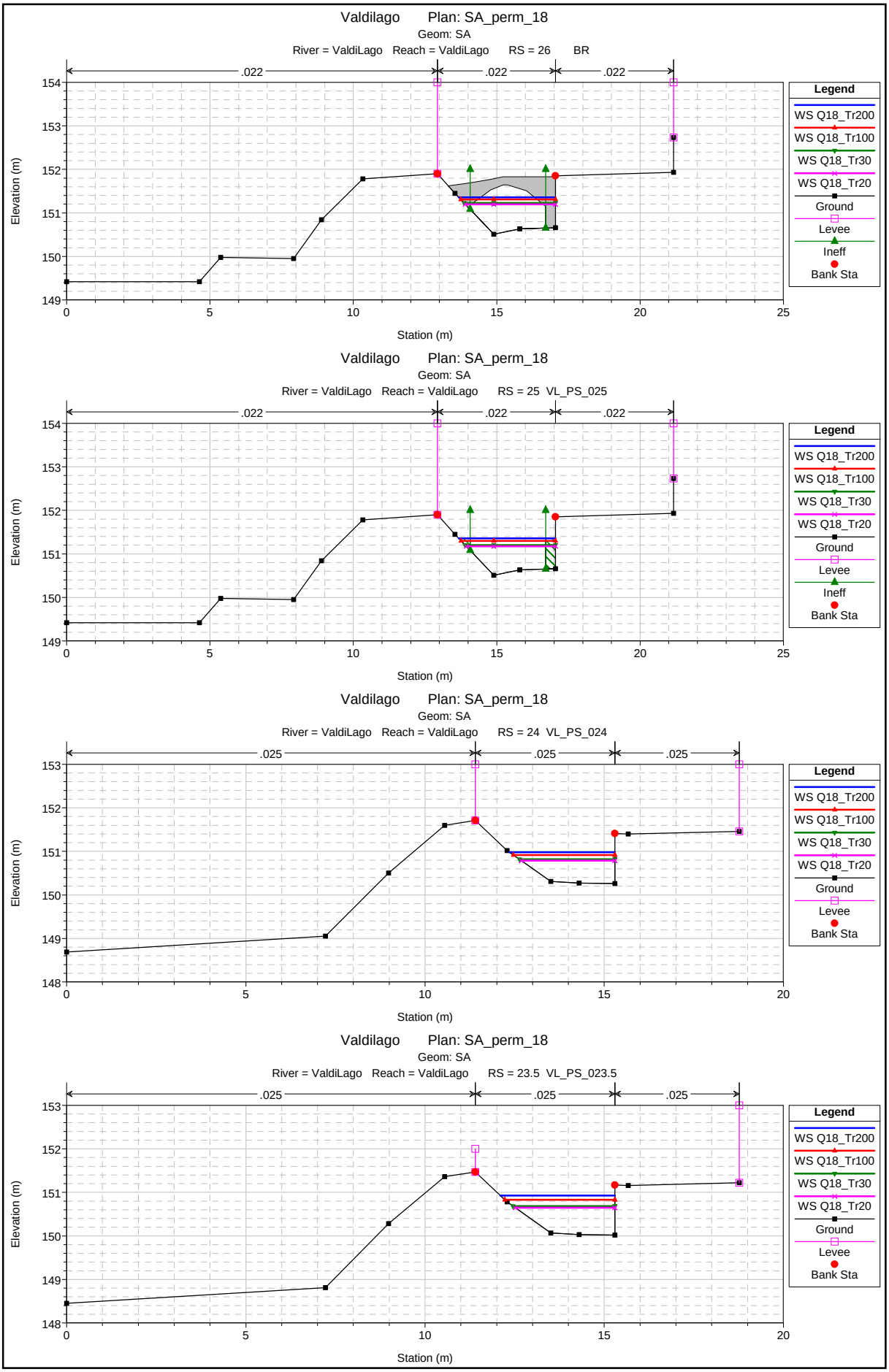
Valdilago Plan: SA_perm_18

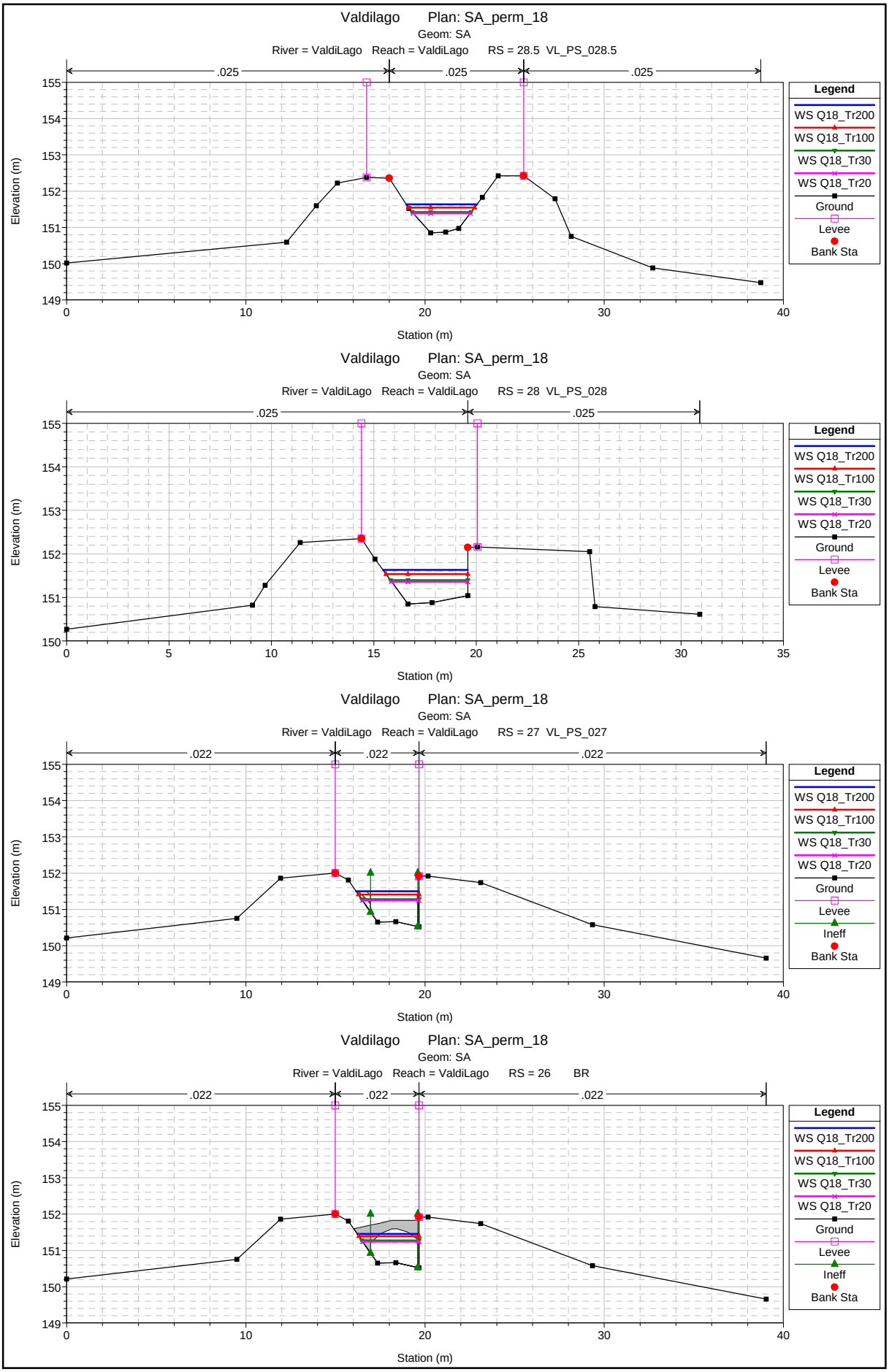
Geom: SA

River = ValdiLago Reach = ValdiLago RS = 19.5 BR




Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 23 VL_PS_023
.025
.022
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 22 VL_PS_022
.025
.022
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 21.5 BR Ponte ex S.S. n°69
.025
.022
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 21.5 BR Ponte ex S.S. n°69
.025
.022
Elevation (m)
Station (m)
Legend
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr200
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta

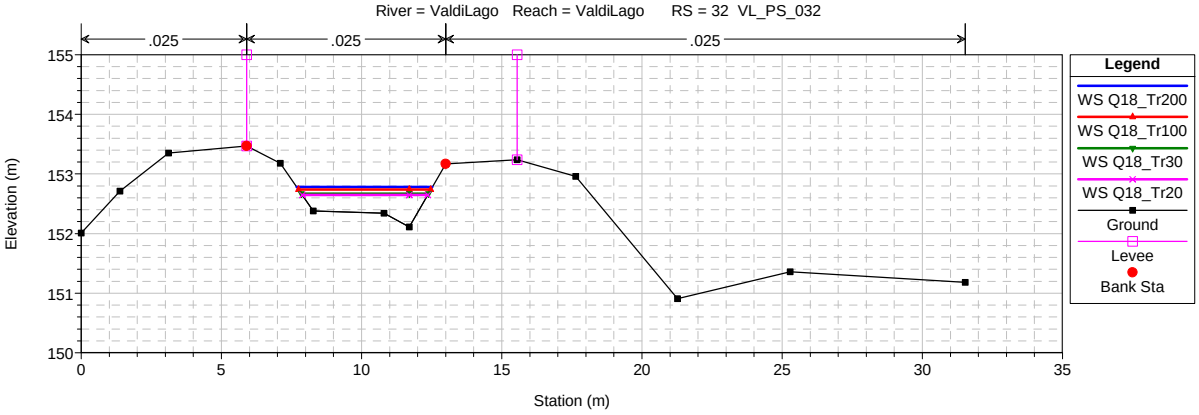

Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 26 BR
.022
.022
.022
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 25 VL_PS_025
.022
.022
.022
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 24 VL_PS_024
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 23.5 VL_PS_023.5
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta


Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 28.5 VL_PS_028.5
.025
.025
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 28 VL_PS_028
.025
.025
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 27 VL_PS_027
.022
.022
.022
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 26 BR
.022
.022
.022
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta

Valdilago Plan: SA_perm_18

Geom: SA

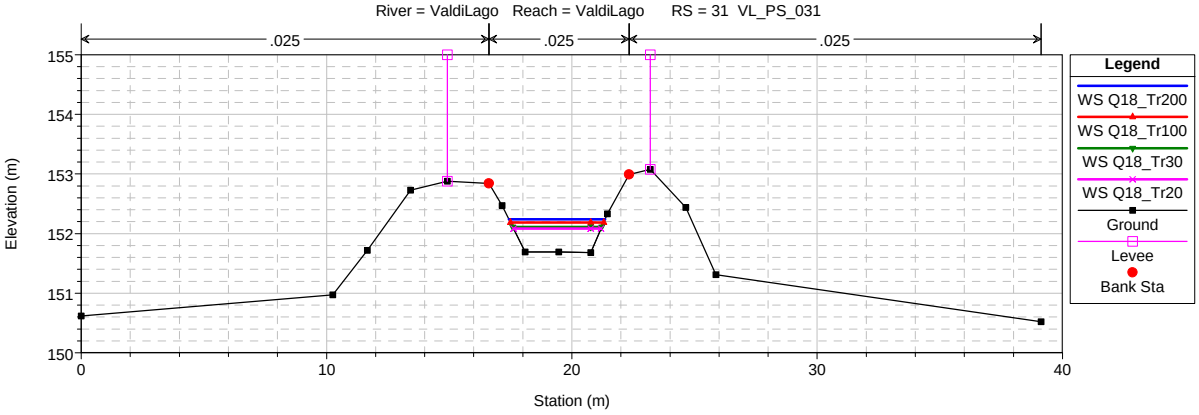
River = ValdiLago Reach = ValdiLago RS = 32 VL_PS_032



Valdilago Plan: SA_perm_18

Geom: SA

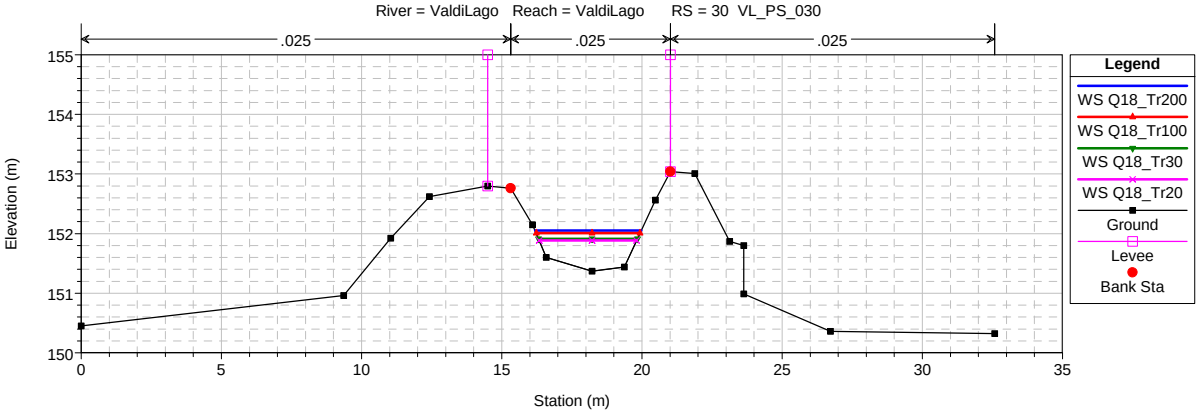
River = ValdiLago Reach = ValdiLago RS = 31 VL_PS_031



Valdilago Plan: SA_perm_18

Geom: SA

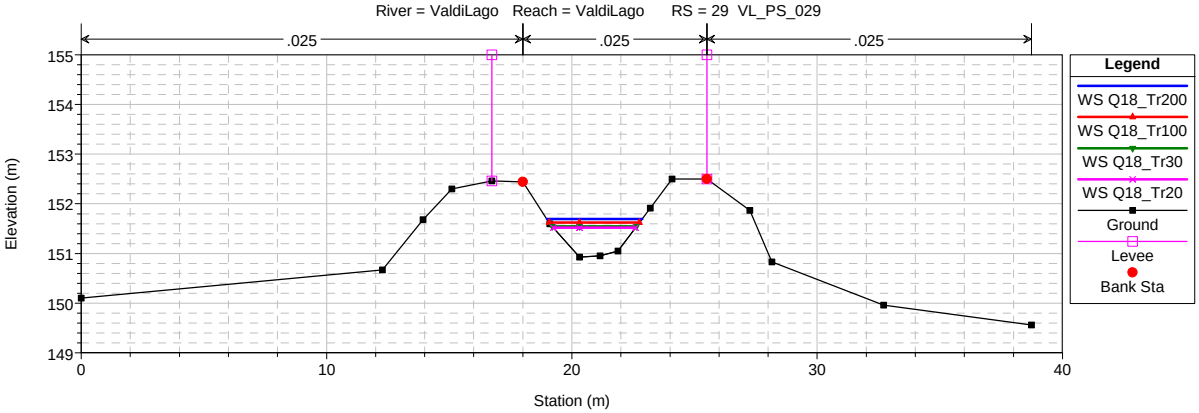
River = ValdiLago Reach = ValdiLago RS = 30 VL_PS_030



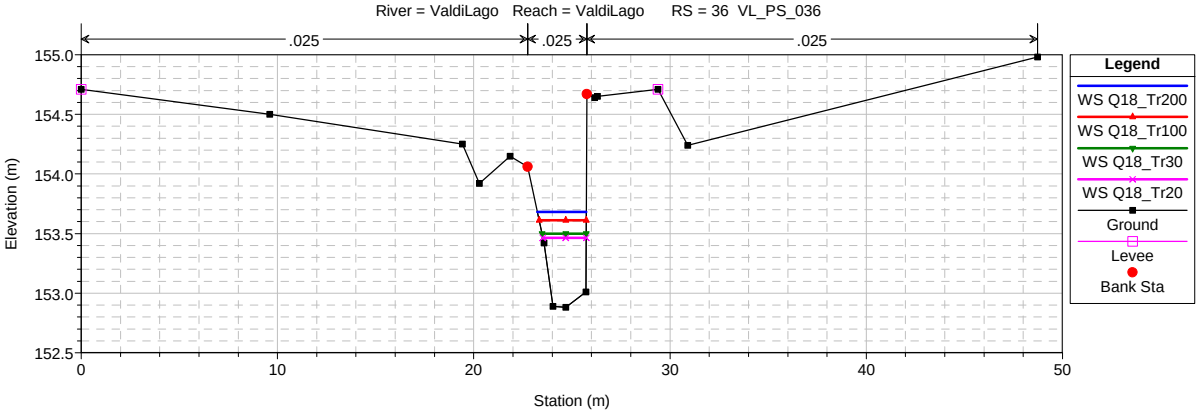
Valdilago Plan: SA_perm_18

Geom: SA

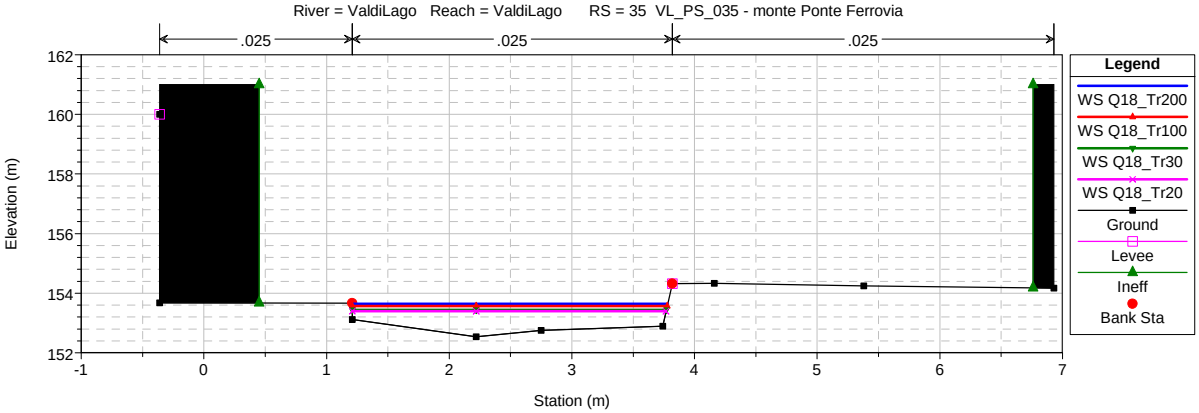
River = ValdiLago Reach = ValdiLago RS = 29 VL_PS_029



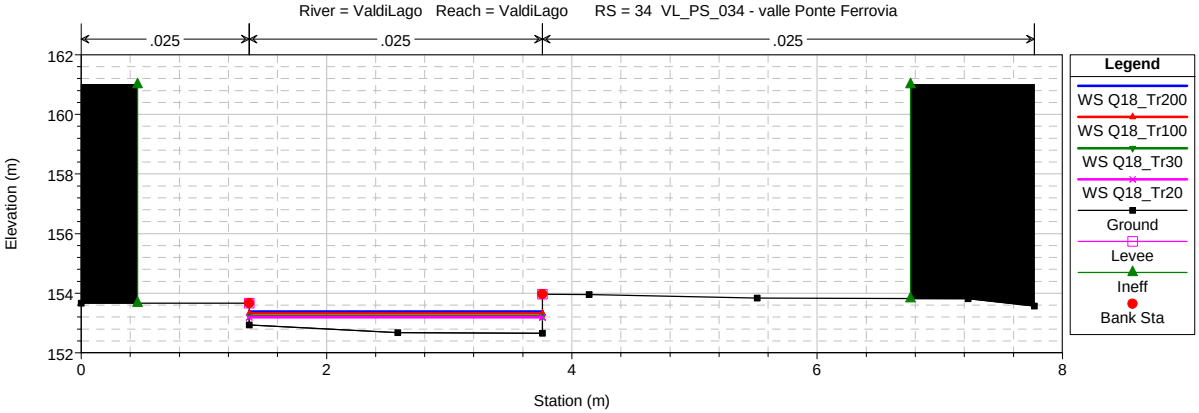
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 36 VL_PS_036



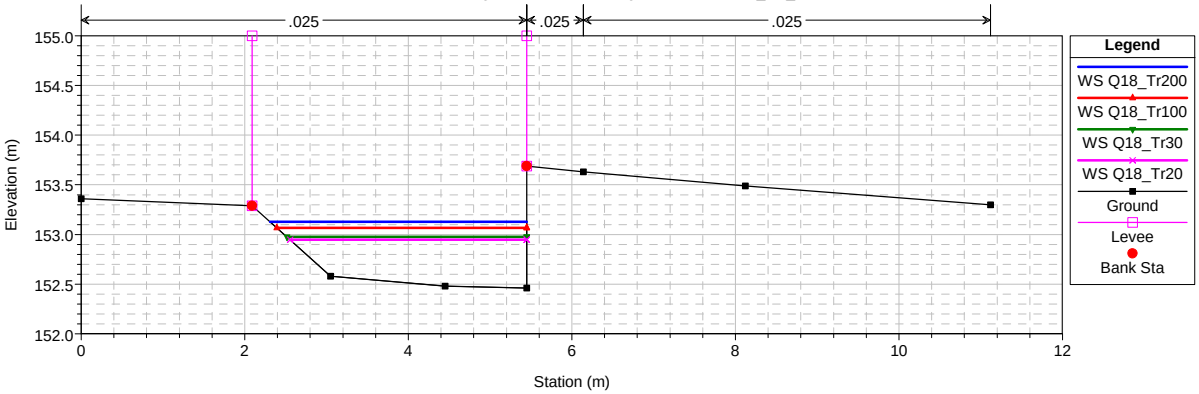
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 35 VL_PS_035 - monte Ponte Ferrovia

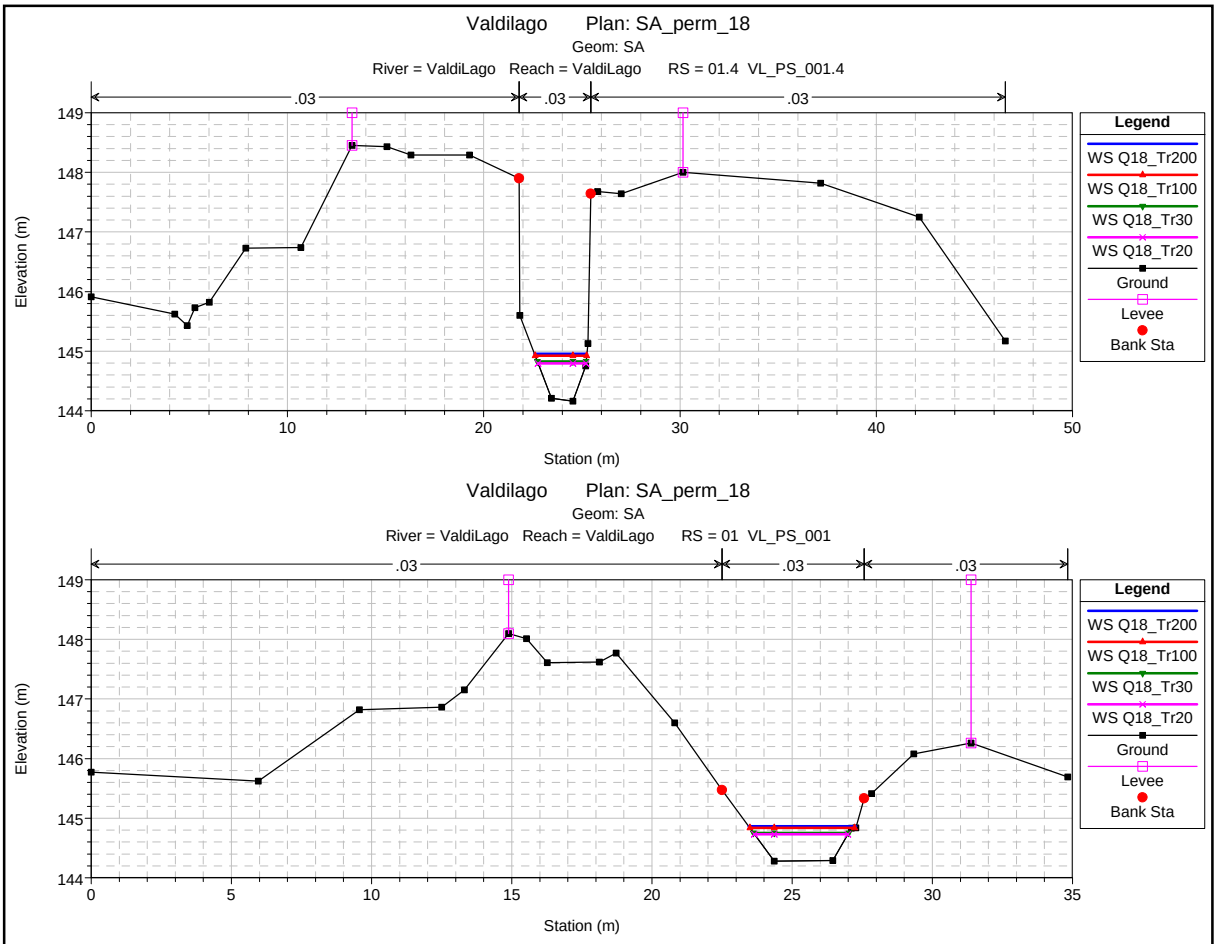


Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 34 VL_PS_034 - valle Ponte Ferrovia



Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 33 VL_PS_033




Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 01.4 VL_PS_001.4
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Valdilago Plan: SA_perm_18
Geom: SA
River = ValdiLago Reach = ValdiLago RS = 01 VL_PS_001
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta

HEC-RAS Plan: Sa_perm_18 River: ValdiLago Reach: ValdiLago

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
ValdiLago	36	Q18_Tr200	3.89	152.88	153.68	153.68	154.00	0.011224	2.49	1.56	2.49	1.00
ValdiLago	36	Q18_Tr100	3.32	152.88	153.61	153.61	153.90	0.011188	2.38	1.39	2.40	1.00
ValdiLago	36	Q18_Tr30	2.51	152.88	153.50	153.50	153.75	0.011265	2.22	1.13	2.25	1.00
ValdiLago	36	Q18_Tr20	2.28	152.88	153.46	153.46	153.70	0.011330	2.16	1.05	2.20	1.00
ValdiLago	35	Q18_Tr200	3.89	152.54	153.65	153.41	153.81	0.004422	1.78	2.19	2.57	0.61
ValdiLago	35	Q18_Tr100	3.32	152.54	153.56	153.35	153.71	0.004296	1.68	1.98	2.57	0.61
ValdiLago	35	Q18_Tr30	2.51	152.54	153.44	153.25	153.55	0.004097	1.52	1.65	2.56	0.61
ValdiLago	35	Q18_Tr20	2.28	152.54	153.40	153.22	153.51	0.004051	1.47	1.55	2.56	0.60
ValdiLago	34	Q18_Tr200	3.89	152.66	153.39	153.39	153.71	0.012171	2.51	1.55	2.39	1.00
ValdiLago	34	Q18_Tr100	3.32	152.66	153.32	153.32	153.61	0.012024	2.39	1.39	2.39	1.00
ValdiLago	34	Q18_Tr30	2.51	152.66	153.22	153.22	153.46	0.011789	2.17	1.16	2.39	1.00
ValdiLago	34	Q18_Tr20	2.28	152.66	153.19	153.19	153.42	0.011607	2.09	1.09	2.39	0.99
ValdiLago	33.9		Lat Struct									
ValdiLago	33.8		Lat Struct									
ValdiLago	33	Q18_Tr200	3.89	152.46	153.13	153.13	153.40	0.010329	2.30	1.69	3.14	1.00
ValdiLago	33	Q18_Tr100	3.32	152.46	153.07	153.07	153.31	0.010496	2.20	1.51	3.06	1.00
ValdiLago	33	Q18_Tr30	2.51	152.46	152.98	152.98	153.19	0.010709	2.03	1.23	2.93	1.00
ValdiLago	33	Q18_Tr20	2.28	152.46	152.95	152.95	153.15	0.010848	1.98	1.15	2.90	1.00
ValdiLago	32	Q18_Tr200	3.89	152.11	152.78	152.78	152.98	0.009137	1.99	1.96	4.84	1.00
ValdiLago	32	Q18_Tr100	3.32	152.11	152.74	152.74	152.92	0.009420	1.90	1.74	4.71	1.00
ValdiLago	32	Q18_Tr30	2.51	152.11	152.67	152.67	152.83	0.009927	1.76	1.42	4.53	1.00
ValdiLago	32	Q18_Tr20	2.28	152.11	152.65	152.65	152.80	0.010055	1.71	1.33	4.47	1.00
ValdiLago	31	Q18_Tr200	3.89	151.68	152.24	152.24	152.47	0.008934	2.12	1.83	3.93	0.99
ValdiLago	31	Q18_Tr100	3.32	151.68	152.19	152.19	152.40	0.009317	2.05	1.62	3.80	1.00
ValdiLago	31	Q18_Tr30	2.51	151.68	152.11	152.11	152.29	0.009578	1.89	1.33	3.63	1.00
ValdiLago	31	Q18_Tr20	2.28	151.68	152.08	152.08	152.26	0.009688	1.84	1.24	3.57	1.00
ValdiLago	30	Q18_Tr200	3.89	151.37	152.05	152.01	152.26	0.007166	2.00	1.94	3.79	0.89

HEC-RAS Plan: Sa_perm_18 River: ValdiLago Reach: ValdiLago (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
ValdiLago	30	Q18_Tr100	3.32	151.37	152.01	151.96	152.18	0.006758	1.87	1.78	3.70	0.86
ValdiLago	30	Q18_Tr30	2.51	151.37	151.91	151.88	152.07	0.007261	1.75	1.43	3.53	0.88
ValdiLago	30	Q18_Tr20	2.28	151.37	151.88	151.85	152.03	0.007350	1.71	1.34	3.47	0.88
ValdiLago	29	Q18_Tr200	3.89	150.93	151.69	151.65	151.89	0.006844	1.97	1.97	3.88	0.88
ValdiLago	29	Q18_Tr100	3.32	150.93	151.62	151.59	151.81	0.007469	1.95	1.71	3.68	0.91
ValdiLago	29	Q18_Tr30	2.51	150.93	151.55	151.50	151.70	0.006856	1.75	1.44	3.44	0.86
ValdiLago	29	Q18_Tr20	2.28	150.93	151.52	151.47	151.66	0.006786	1.69	1.35	3.35	0.85
ValdiLago	28.5	Q18_Tr200	3.89	150.85	151.64	151.56	151.82	0.005938	1.87	2.08	3.96	0.83
ValdiLago	28.5	Q18_Tr100	3.32	150.85	151.54	151.51	151.73	0.007343	1.93	1.72	3.69	0.91
ValdiLago	28.5	Q18_Tr30	2.51	150.85	151.42	151.42	151.61	0.009181	1.94	1.29	3.30	0.99
ValdiLago	28.5	Q18_Tr20	2.28	150.85	151.39	151.39	151.58	0.009389	1.91	1.20	3.20	0.99
ValdiLago	28	Q18_Tr200	3.89	150.85	151.63	151.45	151.75	0.003526	1.52	2.55	4.14	0.62
ValdiLago	28	Q18_Tr100	3.32	150.85	151.54	151.40	151.66	0.004162	1.54	2.16	3.99	0.67
ValdiLago	28	Q18_Tr30	2.51	150.85	151.40	151.32	151.52	0.005490	1.55	1.62	3.78	0.75
ValdiLago	28	Q18_Tr20	2.28	150.85	151.36	151.30	151.48	0.005899	1.54	1.48	3.72	0.78
ValdiLago	27	Q18_Tr200	3.89	150.52	151.50	151.25	151.65	0.001878	1.73	2.25	3.51	0.60
ValdiLago	27	Q18_Tr100	3.32	150.52	151.41	151.19	151.55	0.001971	1.65	2.01	3.38	0.60
ValdiLago	27	Q18_Tr30	2.51	150.52	151.28	151.10	151.40	0.002068	1.50	1.68	3.20	0.60
ValdiLago	27	Q18_Tr20	2.28	150.52	151.25	151.07	151.36	0.002052	1.44	1.59	3.15	0.59
ValdiLago	26		Bridge									
ValdiLago	25	Q18_Tr200	3.89	150.51	151.36	151.27	151.59	0.003948	2.13	1.82	3.37	0.82
ValdiLago	25	Q18_Tr100	3.32	150.51	151.30	151.21	151.50	0.003848	1.99	1.67	3.29	0.80
ValdiLago	25	Q18_Tr30	2.51	150.51	151.20	151.12	151.36	0.003787	1.77	1.42	3.15	0.77
ValdiLago	25	Q18_Tr20	2.28	150.51	151.17	151.09	151.32	0.003789	1.70	1.34	3.11	0.76
ValdiLago	24.8		Lat Struct									
ValdiLago	24	Q18_Tr200	3.89	150.26	150.98	150.98	151.26	0.010744	2.36	1.65	2.94	1.01
ValdiLago	24	Q18_Tr100	3.32	150.26	150.92	150.92	151.18	0.010863	2.27	1.47	2.83	1.01

HEC-RAS Plan: Sa_perm_18 River: ValdiLago Reach: ValdiLago (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
ValdiLago	24	Q18_Tr30	2.51	150.26	150.82	150.82	151.04	0.010946	2.10	1.20	2.67	1.00
ValdiLago	24	Q18_Tr20	2.28	150.26	150.79	150.79	151.00	0.010966	2.04	1.12	2.61	1.00
ValdiLago	23.5	Q18_Tr200	3.89	150.02	150.93	150.74	151.08	0.004721	1.75	2.22	3.20	0.67
ValdiLago	23.5	Q18_Tr100	3.32	150.02	150.83	150.68	150.98	0.005143	1.73	1.92	3.08	0.70
ValdiLago	23.5	Q18_Tr30	2.51	150.02	150.69	150.58	150.83	0.005907	1.68	1.49	2.85	0.74
ValdiLago	23.5	Q18_Tr20	2.28	150.02	150.65	150.55	150.79	0.006092	1.66	1.38	2.78	0.75
ValdiLago	23	Q18_Tr200	3.89	150.02	150.71	150.71	151.03	0.009822	2.53	1.54	2.36	1.00
ValdiLago	23	Q18_Tr100	3.32	150.02	150.64	150.64	150.93	0.009674	2.39	1.39	2.36	1.00
ValdiLago	23	Q18_Tr30	2.51	150.02	150.54	150.54	150.79	0.009514	2.18	1.15	2.36	1.00
ValdiLago	23	Q18_Tr20	2.28	150.02	150.51	150.51	150.74	0.009549	2.12	1.08	2.36	1.00
ValdiLago	22	Q18_Tr200	3.89	148.84	150.04	149.53	150.15	0.001333	1.42	2.75	2.53	0.42
ValdiLago	22	Q18_Tr100	3.32	148.84	149.64	149.47	149.81	0.003503	1.87	1.78	2.47	0.69
ValdiLago	22	Q18_Tr30	2.51	148.84	149.52	149.37	149.66	0.003356	1.67	1.50	2.46	0.67
ValdiLago	22	Q18_Tr20	2.28	148.84	149.48	149.34	149.61	0.003330	1.61	1.41	2.45	0.67
ValdiLago	21.5		Bridge									
ValdiLago	21	Q18_Tr200	3.89	148.77	149.49	149.44	149.77	0.004286	2.33	1.67	3.26	0.89
ValdiLago	21	Q18_Tr100	3.32	148.77	149.43	149.38	149.67	0.004181	2.17	1.53	3.26	0.87
ValdiLago	21	Q18_Tr30	2.51	148.77	149.33	149.28	149.53	0.004361	1.97	1.28	3.26	0.86
ValdiLago	21	Q18_Tr20	2.28	148.77	149.30	149.25	149.48	0.004466	1.91	1.20	3.26	0.86
ValdiLago	20	Q18_Tr200	3.89	148.44	149.59	149.14	149.67	0.001054	1.26	3.09	3.24	0.41
ValdiLago	20	Q18_Tr100	3.32	148.44	149.51	149.09	149.58	0.000976	1.16	2.86	3.23	0.39
ValdiLago	20	Q18_Tr30	2.51	148.44	149.39	148.99	149.44	0.000875	1.02	2.46	3.23	0.37
ValdiLago	20	Q18_Tr20	2.28	148.44	149.35	148.97	149.40	0.000843	0.97	2.34	3.22	0.36
ValdiLago	19.5		Bridge									
ValdiLago	19.4	Q18_Tr200	3.89	148.44	149.56	149.14	149.65	0.001400	1.29	3.02	3.24	0.42
ValdiLago	19.4	Q18_Tr100	3.32	148.44	149.49	149.08	149.57	0.001271	1.19	2.80	3.23	0.41
ValdiLago	19.4	Q18_Tr30	2.51	148.44	149.37	148.99	149.43	0.001106	1.04	2.41	3.23	0.38

HEC-RAS Plan: Sa_perm_18 River: ValdiLago Reach: ValdiLago (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
ValdiLago	19.4	Q18_Tr20	2.28	148.44	149.34	148.97	149.39	0.001053	0.99	2.29	3.21	0.38
ValdiLago	19	Q18_Tr200	3.89	148.51	149.50	149.28	149.62	0.003112	1.49	2.60	4.19	0.61
ValdiLago	19	Q18_Tr100	3.32	148.51	149.43	149.22	149.54	0.003166	1.44	2.30	3.95	0.60
ValdiLago	19	Q18_Tr30	2.51	148.51	149.31	149.13	149.40	0.003317	1.37	1.83	3.56	0.61
ValdiLago	19	Q18_Tr20	2.28	148.51	149.27	149.10	149.36	0.003331	1.34	1.70	3.45	0.61
ValdiLago	18	Q18_Tr200	3.89	148.42	149.42	149.19	149.53	0.003002	1.46	2.67	4.30	0.59
ValdiLago	18	Q18_Tr100	3.32	148.42	149.34	149.12	149.44	0.003098	1.42	2.35	4.04	0.59
ValdiLago	18	Q18_Tr30	2.51	148.42	149.21	149.02	149.31	0.003369	1.36	1.84	3.58	0.61
ValdiLago	18	Q18_Tr20	2.28	148.42	149.17	148.99	149.26	0.003375	1.33	1.71	3.44	0.60
ValdiLago	17	Q18_Tr200	3.89	148.26	149.30	149.09	149.43	0.003493	1.59	2.45	3.82	0.63
ValdiLago	17	Q18_Tr100	3.32	148.26	149.22	149.02	149.34	0.003570	1.54	2.16	3.60	0.63
ValdiLago	17	Q18_Tr30	2.51	148.26	149.06	148.92	149.18	0.004346	1.54	1.63	3.18	0.68
ValdiLago	17	Q18_Tr20	2.28	148.26	149.03	148.89	149.14	0.004302	1.49	1.53	3.09	0.68
ValdiLago	16	Q18_Tr200	3.89	148.18	149.25	148.99	149.34	0.002549	1.37	2.85	4.56	0.55
ValdiLago	16	Q18_Tr100	3.32	148.18	149.16	148.93	149.25	0.002709	1.34	2.47	4.26	0.56
ValdiLago	16	Q18_Tr30	2.51	148.18	148.96	148.83	149.07	0.004296	1.49	1.69	3.55	0.69
ValdiLago	16	Q18_Tr20	2.28	148.18	148.93	148.80	149.03	0.004359	1.46	1.56	3.43	0.69
ValdiLago	15	Q18_Tr200	3.89	148.06	149.21	148.89	149.30	0.002083	1.27	3.07	4.66	0.50
ValdiLago	15	Q18_Tr100	3.32	148.06	149.13	148.83	149.20	0.002213	1.24	2.67	4.40	0.51
ValdiLago	15	Q18_Tr30	2.51	148.06	148.89	148.73	149.00	0.003840	1.44	1.75	3.49	0.65
ValdiLago	15	Q18_Tr20	2.28	148.06	148.86	148.70	148.96	0.003825	1.40	1.62	3.35	0.64
ValdiLago	14.9		Lat Struct									
ValdiLago	14	Q18_Tr200	3.89	147.73	149.17	148.71	149.21	0.001141	0.94	4.17	6.75	0.37
ValdiLago	14	Q18_Tr100	3.32	147.73	149.07	148.64	149.12	0.001270	0.94	3.55	6.05	0.38
ValdiLago	14	Q18_Tr30	2.51	147.73	148.67	148.52	148.79	0.004998	1.53	1.65	3.52	0.71
ValdiLago	14	Q18_Tr20	2.28	147.73	148.61	148.47	148.74	0.005544	1.57	1.45	3.16	0.74
ValdiLago	13.88		Lat Struct									

HEC-RAS Plan: Sa_perm_18 River: ValdiLago Reach: ValdiLago (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
ValdiLago	13.8	Q18_Tr200	3.89	147.69	149.09	148.51	149.19	0.001544	1.39	2.81	2.93	0.40
ValdiLago	13.8	Q18_Tr100	3.32	147.69	149.01	148.45	149.09	0.001397	1.26	2.63	2.77	0.37
ValdiLago	13.8	Q18_Tr30	2.51	147.69	148.62	148.34	148.72	0.002707	1.43	1.76	2.47	0.52
ValdiLago	13.8	Q18_Tr20	2.28	147.69	148.57	148.31	148.66	0.002781	1.40	1.63	2.44	0.52
ValdiLago	13.5		Bridge									
ValdiLago	13	Q18_Tr200	3.89	147.69	149.01	148.51	149.12	0.001934	1.48	2.62	2.77	0.44
ValdiLago	13	Q18_Tr100	3.32	147.69	148.95	148.45	149.04	0.001652	1.33	2.50	2.66	0.40
ValdiLago	13	Q18_Tr30	2.51	147.69	148.54	148.34	148.67	0.003793	1.60	1.57	2.43	0.61
ValdiLago	13	Q18_Tr20	2.28	147.69	148.48	148.31	148.60	0.004159	1.59	1.43	2.40	0.64
ValdiLago	12.9		Lat Struct									
ValdiLago	12	Q18_Tr200	3.52	147.42	149.01	148.17	149.04	0.000978	0.86	4.09	3.71	0.24
ValdiLago	12	Q18_Tr100	3.22	147.42	148.95	148.15	148.98	0.000730	0.84	3.83	3.03	0.24
ValdiLago	12	Q18_Tr30	2.51	147.42	148.50	148.07	148.55	0.001544	1.00	2.52	3.03	0.34
ValdiLago	12	Q18_Tr20	2.28	147.42	148.43	148.04	148.48	0.001646	0.98	2.32	3.03	0.35
ValdiLago	11.7		Bridge									
ValdiLago	011.5	Q18_Tr200	3.52	147.42	148.90	148.17	148.95	0.000966	0.95	3.69	3.03	0.27
ValdiLago	011.5	Q18_Tr100	3.22	147.42	148.86	148.15	148.90	0.000898	0.90	3.57	3.03	0.26
ValdiLago	011.5	Q18_Tr30	2.51	147.42	148.46	148.07	148.51	0.001835	1.05	2.38	3.03	0.37
ValdiLago	011.5	Q18_Tr20	2.28	147.42	148.39	148.04	148.45	0.001962	1.04	2.19	3.03	0.39
ValdiLago	11.49		Lat Struct									
ValdiLago	011.4	Q18_Tr200	3.50	147.42	148.79	148.21	148.91	0.003223	1.53	2.29	2.16	0.42
ValdiLago	011.4	Q18_Tr100	3.22	147.42	148.76	148.17	148.87	0.002958	1.44	2.24	1.99	0.40
ValdiLago	011.4	Q18_Tr30	2.51	147.42	148.29	148.06	148.45	0.005894	1.76	1.43	1.72	0.61
ValdiLago	011.4	Q18_Tr20	2.28	147.42	148.23	148.03	148.38	0.006036	1.73	1.32	1.72	0.63
ValdiLago	11.2		Bridge									

HEC-RAS Plan: Sa_perm_18 River: ValdiLago Reach: ValdiLago (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
ValdiLago	11	Q18_Tr200	3.50	147.31	148.38	148.10	148.58	0.006516	1.97	1.77	1.72	0.62
ValdiLago	11	Q18_Tr100	3.22	147.31	148.33	148.06	148.52	0.006297	1.91	1.69	1.72	0.62
ValdiLago	11	Q18_Tr30	2.51	147.31	148.20	147.95	148.35	0.005575	1.72	1.46	1.72	0.60
ValdiLago	11	Q18_Tr20	2.28	147.31	148.14	147.92	148.28	0.005720	1.69	1.35	1.72	0.61
ValdiLago	10.9		Lat Struct									
ValdiLago	10.8		Lat Struct									
ValdiLago	10	Q18_Tr200	3.50	147.05	148.21	147.92	148.37	0.004545	1.77	1.97	2.21	0.60
ValdiLago	10	Q18_Tr100	3.22	147.05	148.16	147.88	148.32	0.004450	1.72	1.87	2.18	0.59
ValdiLago	10	Q18_Tr30	2.51	147.05	148.05	147.77	148.17	0.003859	1.54	1.63	2.10	0.56
ValdiLago	10	Q18_Tr20	2.28	147.05	147.97	147.73	148.09	0.004329	1.56	1.46	2.04	0.59
ValdiLago	09	Q18_Tr200	3.50	146.93	147.96	147.75	148.16	0.006081	1.97	1.77	2.02	0.67
ValdiLago	09	Q18_Tr100	3.22	146.93	147.94	147.71	148.12	0.005534	1.86	1.73	2.02	0.64
ValdiLago	09	Q18_Tr30	2.51	146.93	147.91	147.61	148.02	0.003734	1.51	1.66	2.01	0.53
ValdiLago	09	Q18_Tr20	2.28	146.93	147.77	147.58	147.91	0.004968	1.64	1.39	1.98	0.62
ValdiLago	08.5		Bridge									
ValdiLago	08	Q18_Tr200	3.50	146.74	147.57	147.43	147.76	0.005991	1.95	1.79	4.85	0.74
ValdiLago	08	Q18_Tr100	3.22	146.74	147.54	147.40	147.71	0.005887	1.88	1.72	4.44	0.72
ValdiLago	08	Q18_Tr30	2.51	146.74	147.45	147.32	147.59	0.005715	1.68	1.49	3.92	0.70
ValdiLago	08	Q18_Tr20	2.28	146.74	147.41	147.29	147.55	0.005693	1.62	1.41	3.73	0.69
ValdiLago	7.9		Lat Struct									
ValdiLago	7.8		Lat Struct									
ValdiLago	07	Q18_Tr200	3.50	146.51	147.36	147.18	147.50	0.005502	1.62	2.18	3.99	0.64
ValdiLago	07	Q18_Tr100	3.22	146.51	147.33	147.15	147.45	0.005562	1.58	2.05	3.66	0.64
ValdiLago	07	Q18_Tr30	2.51	146.51	147.22	147.07	147.33	0.005734	1.48	1.70	3.19	0.65
ValdiLago	07	Q18_Tr20	2.28	146.51	147.19	147.04	147.29	0.005807	1.44	1.58	3.12	0.65

HEC-RAS Plan: Sa_perm_18 River: ValdiLago Reach: ValdiLago (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
ValdiLago	06	Q18_Tr200	3.50	145.92	146.97	146.75	147.09	0.004882	1.51	2.32	3.80	0.62
ValdiLago	06	Q18_Tr100	3.22	145.92	146.93	146.71	147.04	0.004892	1.48	2.17	3.65	0.61
ValdiLago	06	Q18_Tr30	2.51	145.92	146.82	146.62	146.92	0.004933	1.41	1.78	3.22	0.61
ValdiLago	06	Q18_Tr20	2.28	145.92	146.77	146.59	146.87	0.004966	1.39	1.65	3.10	0.61
ValdiLago	05	Q18_Tr200	3.50	145.42	146.43	146.23	146.56	0.005586	1.60	2.19	3.60	0.65
ValdiLago	05	Q18_Tr100	3.22	145.42	146.39	146.19	146.51	0.005589	1.57	2.06	3.47	0.65
ValdiLago	05	Q18_Tr30	2.51	145.42	146.28	146.10	146.39	0.005470	1.47	1.71	3.12	0.63
ValdiLago	05	Q18_Tr20	2.28	145.42	146.24	146.06	146.35	0.005460	1.44	1.59	2.98	0.63
ValdiLago	04	Q18_Tr200	3.50	144.84	145.82	145.69	145.97	0.006948	1.71	2.05	3.71	0.73
ValdiLago	04	Q18_Tr100	3.22	144.84	145.79	145.66	145.93	0.006813	1.66	1.94	3.60	0.72
ValdiLago	04	Q18_Tr30	2.51	144.84	145.70	145.57	145.82	0.006681	1.55	1.62	3.28	0.71
ValdiLago	04	Q18_Tr20	2.28	144.84	145.66	145.53	145.78	0.006647	1.51	1.51	3.16	0.70
ValdiLago	03	Q18_Tr200	3.50	144.33	145.43	145.31	145.58	0.008228	1.72	2.03	3.97	0.77
ValdiLago	03	Q18_Tr100	3.22	144.33	145.39	145.28	145.54	0.008559	1.73	1.86	3.72	0.78
ValdiLago	03	Q18_Tr30	2.51	144.33	145.27	145.18	145.42	0.009068	1.70	1.48	3.10	0.78
ValdiLago	03	Q18_Tr20	2.28	144.33	145.23	145.14	145.38	0.009239	1.68	1.36	2.93	0.79
ValdiLago	02	Q18_Tr200	3.50	144.16	145.12	144.96	145.29	0.006771	1.78	1.97	2.92	0.69
ValdiLago	02	Q18_Tr100	3.22	144.16	145.09	144.92	145.24	0.006691	1.73	1.86	2.86	0.69
ValdiLago	02	Q18_Tr30	2.51	144.16	144.98	144.83	145.11	0.006504	1.60	1.56	2.71	0.67
ValdiLago	02	Q18_Tr20	2.28	144.16	144.95	144.80	145.07	0.006421	1.56	1.47	2.65	0.67
ValdiLago	01.5		Bridge									
ValdiLago	01.4	Q18_Tr200	3.50	144.16	144.96	144.96	145.24	0.014337	2.34	1.49	2.67	1.00
ValdiLago	01.4	Q18_Tr100	3.22	144.16	144.92	144.92	145.19	0.014467	2.30	1.40	2.62	1.00
ValdiLago	01.4	Q18_Tr30	2.51	144.16	144.83	144.83	145.06	0.014591	2.15	1.17	2.48	1.00
ValdiLago	01.4	Q18_Tr20	2.28	144.16	144.80	144.80	145.02	0.014788	2.10	1.09	2.43	1.00
ValdiLago	01	Q18_Tr200	3.50	144.28	144.87	144.87	145.08	0.013150	2.07	1.69	3.84	1.00
ValdiLago	01	Q18_Tr100	3.22	144.28	144.84	144.84	145.05	0.013315	2.04	1.58	3.74	1.00

HEC-RAS Plan: Sa_perm_18 River: ValdiLago Reach: ValdiLago (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
ValdiLago	01	Q18_Tr30	2.51	144.28	144.75	144.75	144.95	0.013956	1.95	1.29	3.40	1.01
ValdiLago	01	Q18_Tr20	2.28	144.28	144.73	144.73	144.91	0.013786	1.88	1.21	3.33	1.00

HEC-RAS Plan: Sa_perm_18

Storage Area	Profile	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
		(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
11.49_DX	Q18_Tr200	142.00	142.00	0.02	100.00	0.00
11.49_DX	Q18_Tr100	142.00	142.00	0.00	100.00	0.00
11.49_DX	Q18_Tr30	142.00	142.00	0.00	100.00	0.00
11.49_DX	Q18_Tr20	142.00	142.00	0.00	100.00	0.00
12.9_DX	Q18_Tr200	142.00	142.00	0.37	100.00	0.00
12.9_DX	Q18_Tr100	142.00	142.00	0.10	100.00	0.00
12.9_DX	Q18_Tr30	142.00	142.00	0.00	100.00	0.00
12.9_DX	Q18_Tr20	142.00	142.00	0.00	100.00	0.00
13.88_SX	Q18_Tr200	142.00	142.00	0.00	100.00	0.00
13.88_SX	Q18_Tr100	142.00	142.00	0.00	100.00	0.00
13.88_SX	Q18_Tr30	142.00	142.00	0.00	100.00	0.00
13.88_SX	Q18_Tr20	142.00	142.00	0.00	100.00	0.00
14.9_DX	Q18_Tr200	142.00	142.00	0.00	100.00	0.00
14.9_DX	Q18_Tr100	142.00	142.00	0.00	100.00	0.00
14.9_DX	Q18_Tr30	142.00	142.00	0.00	100.00	0.00
14.9_DX	Q18_Tr20	142.00	142.00	0.00	100.00	0.00
24.8_SX	Q18_Tr200	142.00	142.00	0.00	100.00	0.00
24.8_SX	Q18_Tr100	142.00	142.00	0.00	100.00	0.00
24.8_SX	Q18_Tr30	142.00	142.00	0.00	100.00	0.00
24.8_SX	Q18_Tr20	142.00	142.00	0.00	100.00	0.00
33.8_SX	Q18_Tr200	142.00	142.00	0.00	100.00	0.00
33.8_SX	Q18_Tr100	142.00	142.00	0.00	100.00	0.00
33.8_SX	Q18_Tr30	142.00	142.00	0.00	100.00	0.00
33.8_SX	Q18_Tr20	142.00	142.00	0.00	100.00	0.00
33.9_DX	Q18_Tr200	142.00	142.00	0.00	100.00	0.00
33.9_DX	Q18_Tr100	142.00	142.00	0.00	100.00	0.00
33.9_DX	Q18_Tr30	142.00	142.00	0.00	100.00	0.00
33.9_DX	Q18_Tr20	142.00	142.00	0.00	100.00	0.00

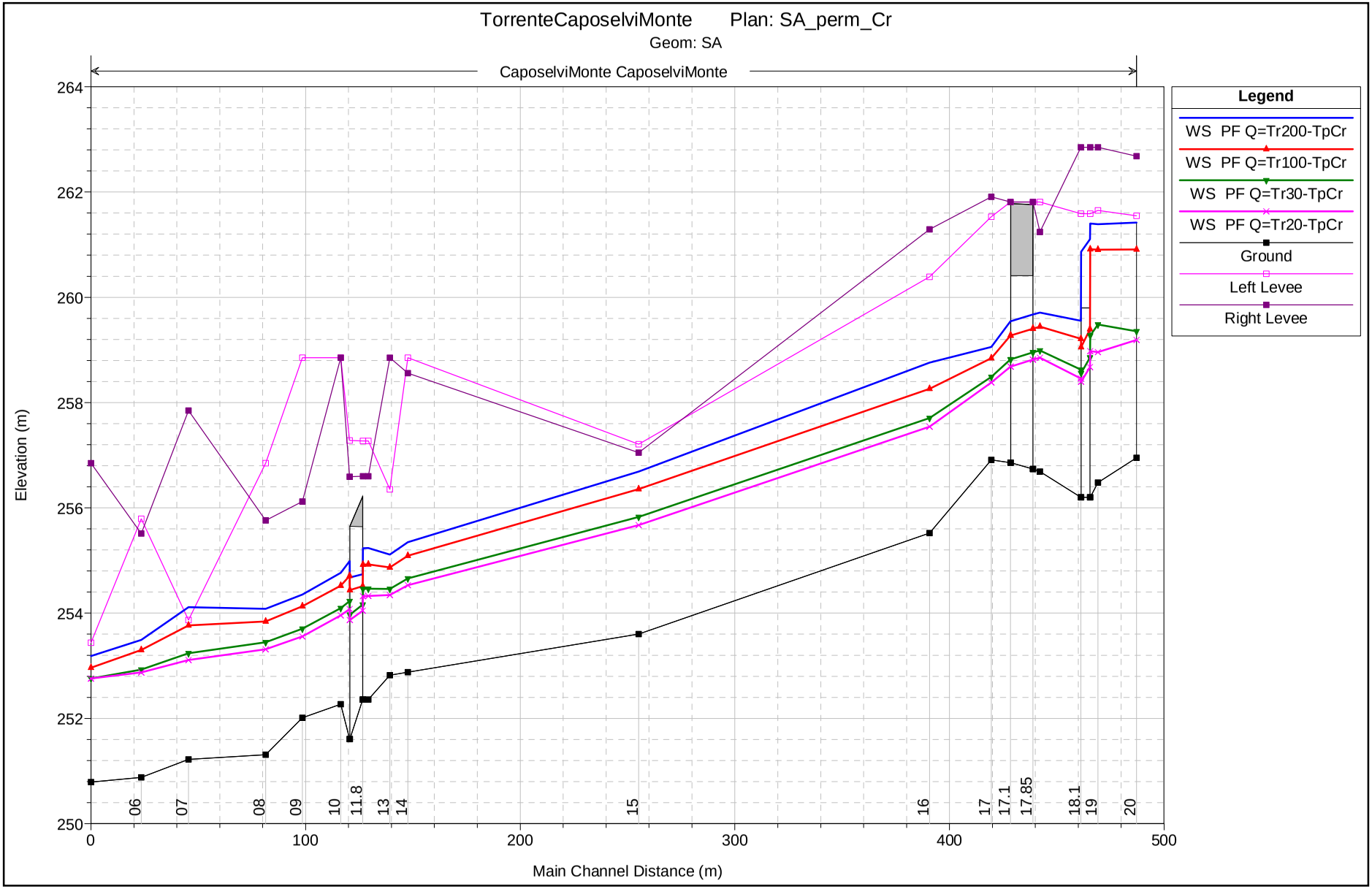
HEC-RAS Plan: Sa_perm_18 (Continued)

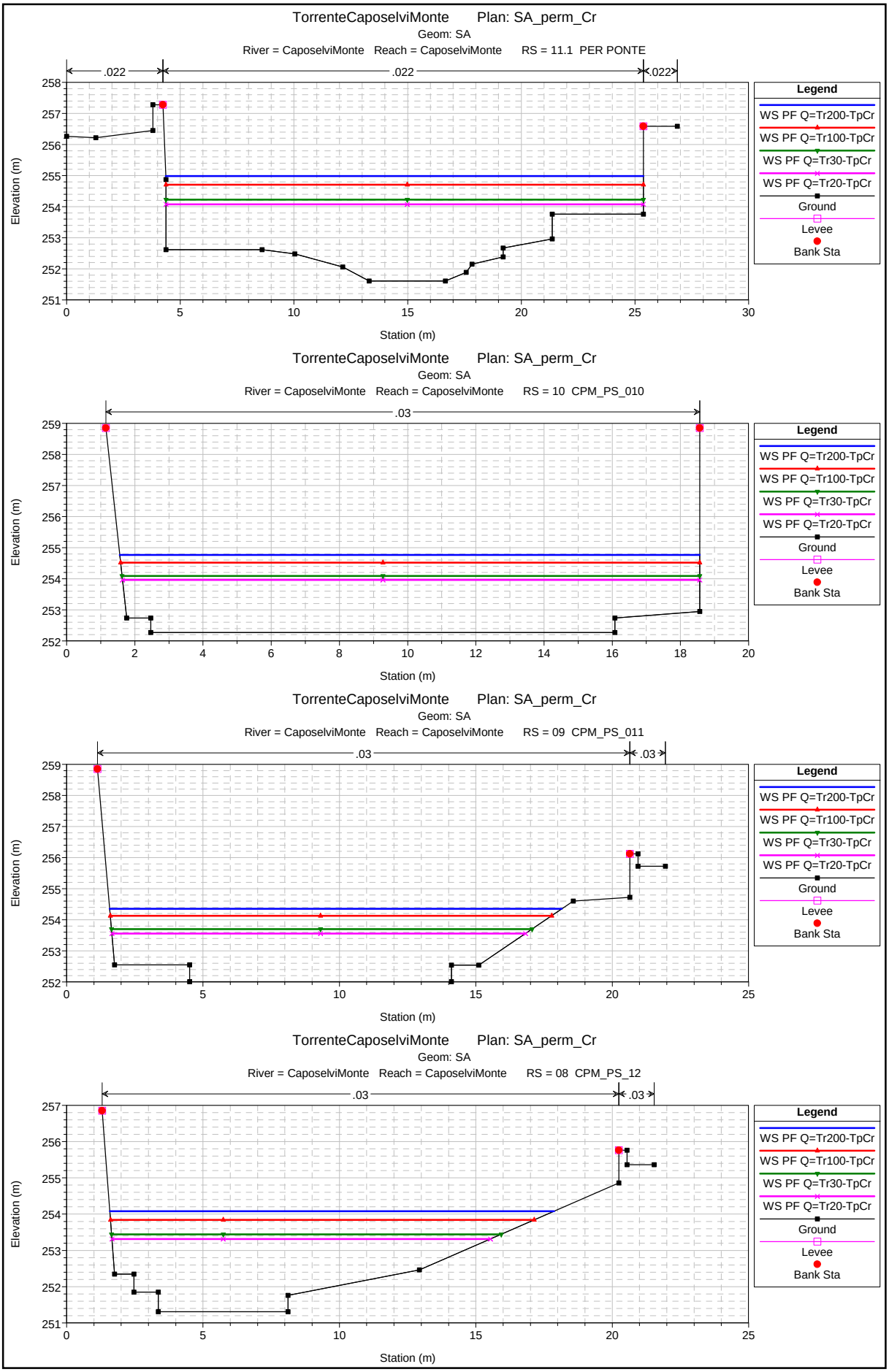
Storage Area	Profile	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
		(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
dx_10.8	Q18_Tr200	142.00	142.00	0.00	100.00	0.00
dx_10.8	Q18_Tr100	142.00	142.00	0.00	100.00	0.00
dx_10.8	Q18_Tr30	142.00	142.00	0.00	100.00	0.00
dx_10.8	Q18_Tr20	142.00	142.00	0.00	100.00	0.00
dx_7.8	Q18_Tr200	142.00	142.00	0.00	100.00	0.00
dx_7.8	Q18_Tr100	142.00	142.00	0.00	100.00	0.00
dx_7.8	Q18_Tr30	142.00	142.00	0.00	100.00	0.00
dx_7.8	Q18_Tr20	142.00	142.00	0.00	100.00	0.00
sx_10.9	Q18_Tr200	142.00	142.00	0.00	100.00	0.00
sx_10.9	Q18_Tr100	142.00	142.00	0.00	100.00	0.00
sx_10.9	Q18_Tr30	142.00	142.00	0.00	100.00	0.00
sx_10.9	Q18_Tr20	142.00	142.00	0.00	100.00	0.00
sx_7.9	Q18_Tr200	142.00	142.00	0.00	100.00	0.00
sx_7.9	Q18_Tr100	142.00	142.00	0.00	100.00	0.00
sx_7.9	Q18_Tr30	142.00	142.00	0.00	100.00	0.00
sx_7.9	Q18_Tr20	142.00	142.00	0.00	100.00	0.00

torrente Caposelvi (loc. Mercatale)

verifiche con Tpioggia critico per il Torrente Caposelvi (loc. Mercatale)

- moto permanente
  Tr=200, 100, 30 e 20 anni
  profilo
  livelli idrici nelle sezioni di verifica
  tabella di output del software Hec-ras 4.0

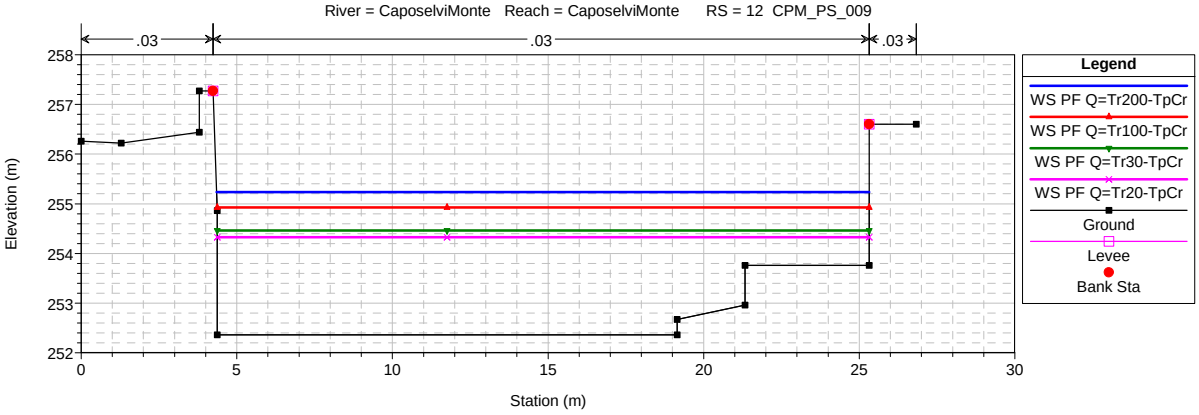

TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
CaposelviMonte CaposelviMonte
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Left Levee
Right Levee
Elevation (m)
264
262
260
258
256
254
252
250
0
100
200
300
400
500
Main Channel Distance (m)
06
07
08
09
10
11.8
13
14
15
16
17
17.1
17.85
18.1
19
20


TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 11.1 PER PONTE
.022
.022
.022
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Bank Sta
TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 10 CPM_PS_010
.03
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Bank Sta
TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 09 CPM_PS_011
.03
.03
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Bank Sta
TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 08 CPM_PS_12
.03
.03
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Bank Sta

TorrenteCaposelviMonte Plan: SA_perm_Cr

Geom: SA

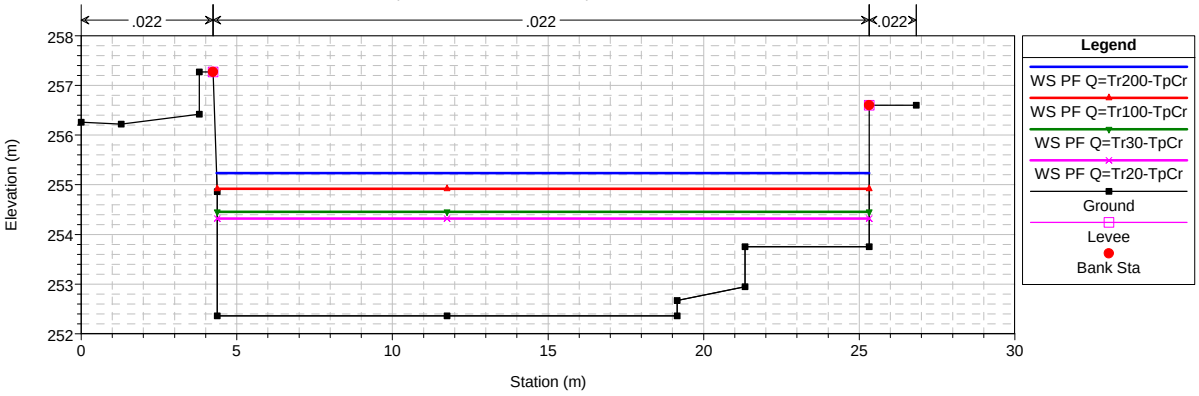
River = CaposelviMonte Reach = CaposelviMonte RS = 12 CPM_PS_009



TorrenteCaposelviMonte Plan: SA_perm_Cr

Geom: SA

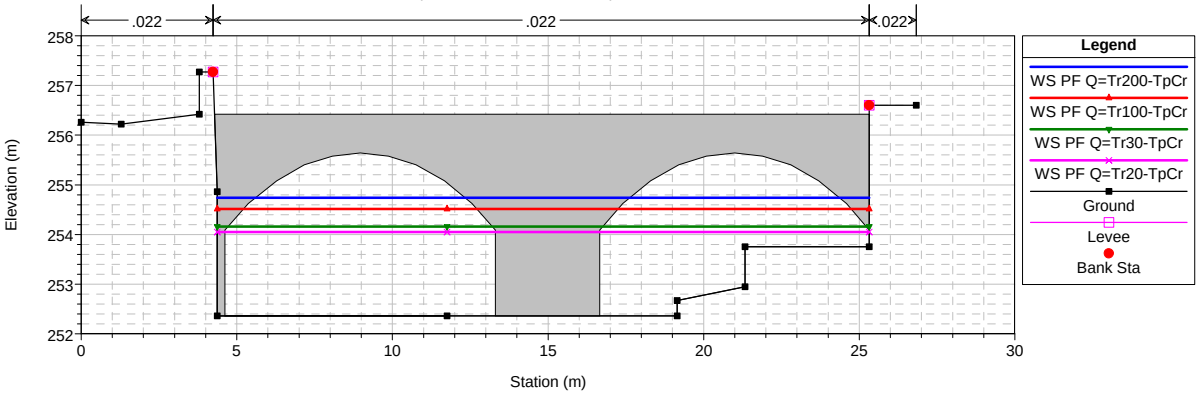
River = CaposelviMonte Reach = CaposelviMonte RS = 11.9 PER PONTE



TorrenteCaposelviMonte Plan: SA_perm_Cr

Geom: SA

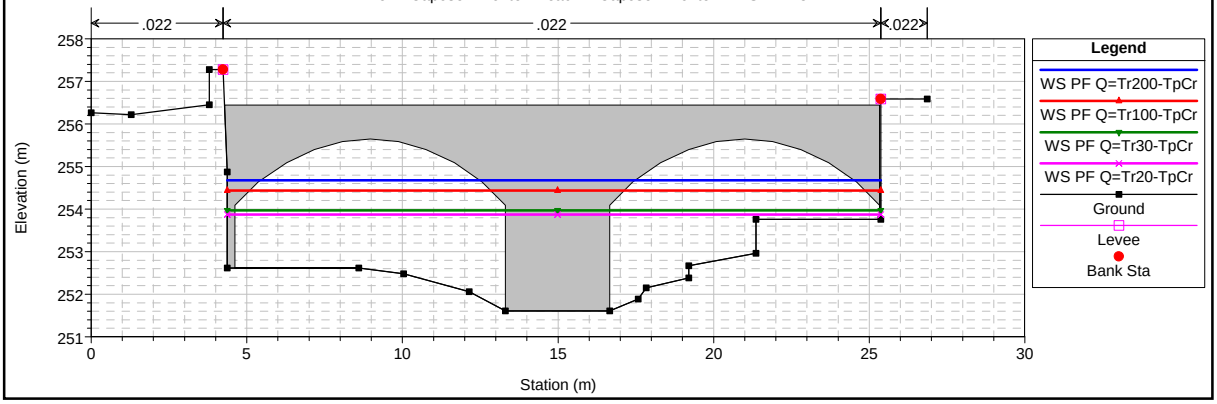
River = CaposelviMonte Reach = CaposelviMonte RS = 11.8 BR

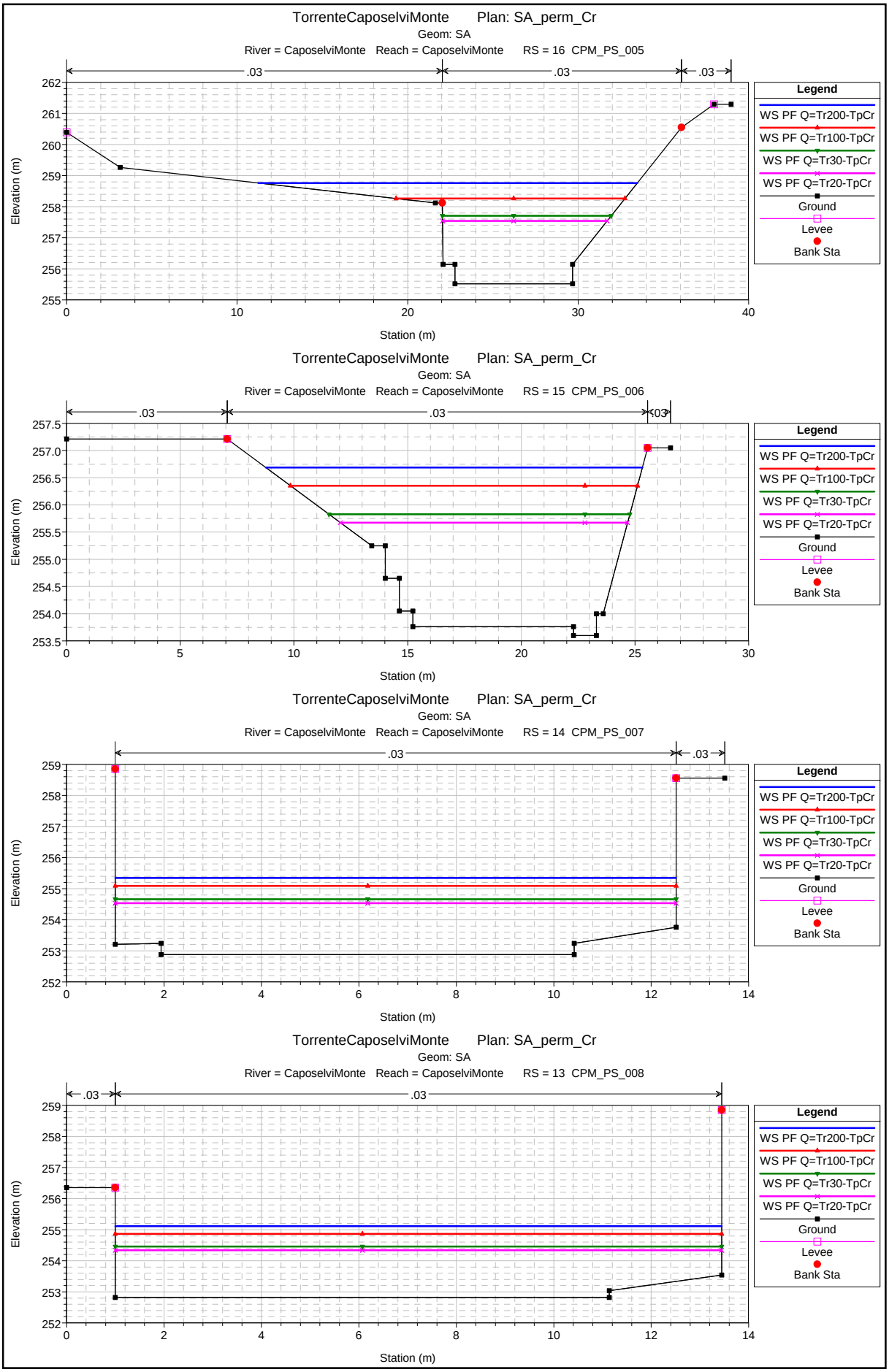


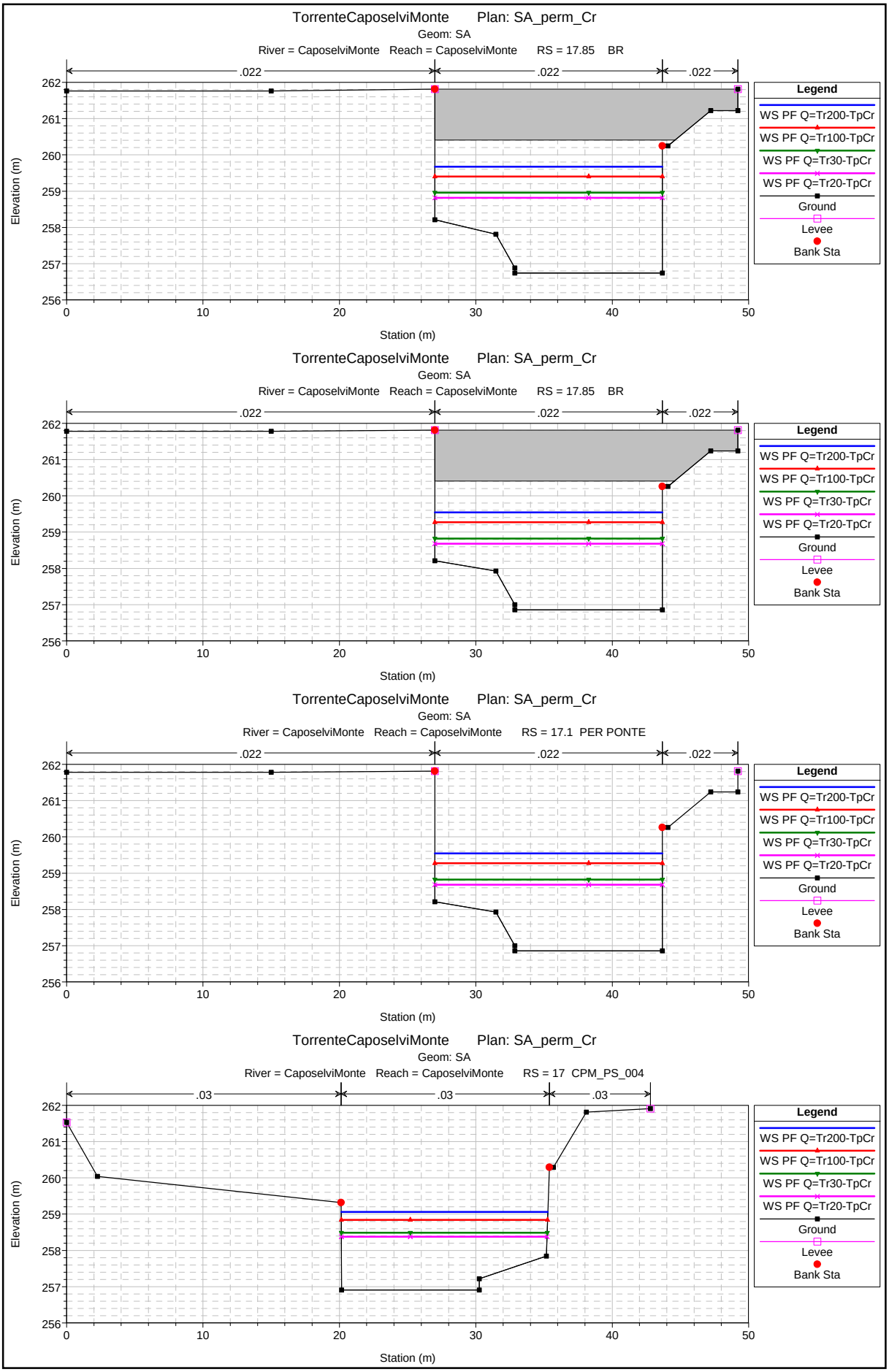
TorrenteCaposelviMonte Plan: SA_perm_Cr

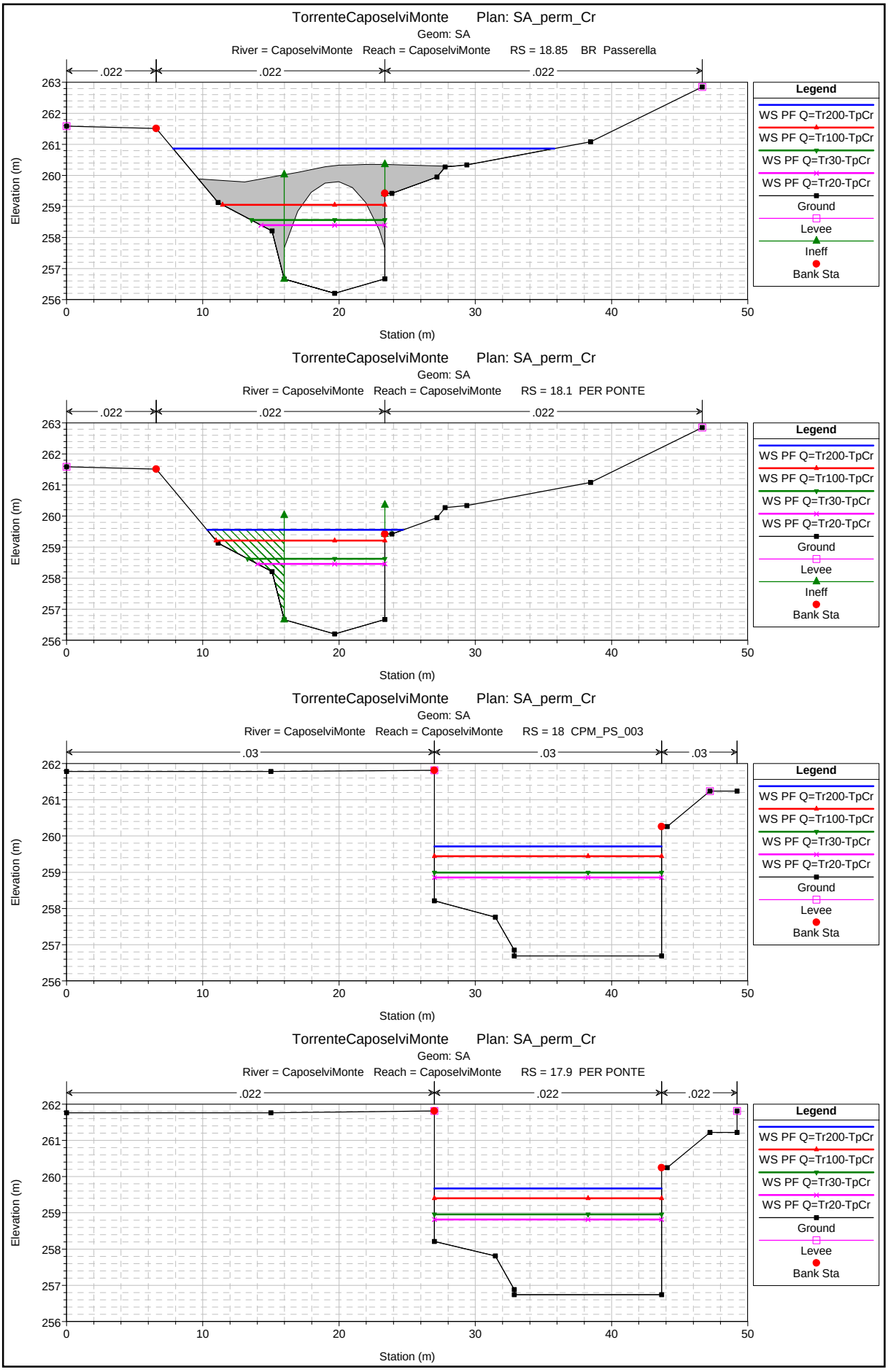
Geom: SA

River = CaposelviMonte Reach = CaposelviMonte RS = 11.8 BR




TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 16 CPM_PS_005
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Bank Sta
TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 15 CPM_PS_006
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Bank Sta
TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 14 CPM_PS_007
.03
.03
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Bank Sta
TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 13 CPM_PS_008
.03
.03
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Bank Sta

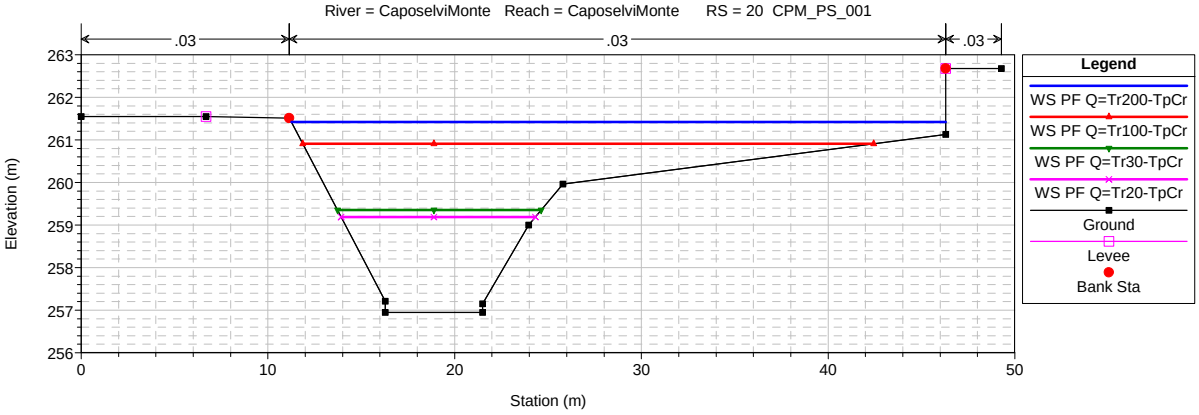

TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 17.85 BR
.022
.022
.022
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Bank Sta
TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 17.85 BR
.022
.022
.022
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Bank Sta
TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 17.1 PER PONTE
.022
.022
.022
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Bank Sta
TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 17 CPM_PS_004
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Bank Sta


TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 18.85 BR Passerella
.022
.022
.022
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Ineff
Bank Sta
TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 18.1 PER PONTE
.022
.022
.022
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Ineff
Bank Sta
TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 18 CPM_PS_003
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Bank Sta
TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 17.9 PER PONTE
.022
.022
.022
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Bank Sta

TorrenteCaposelviMonte Plan: SA_perm_Cr

Geom: SA

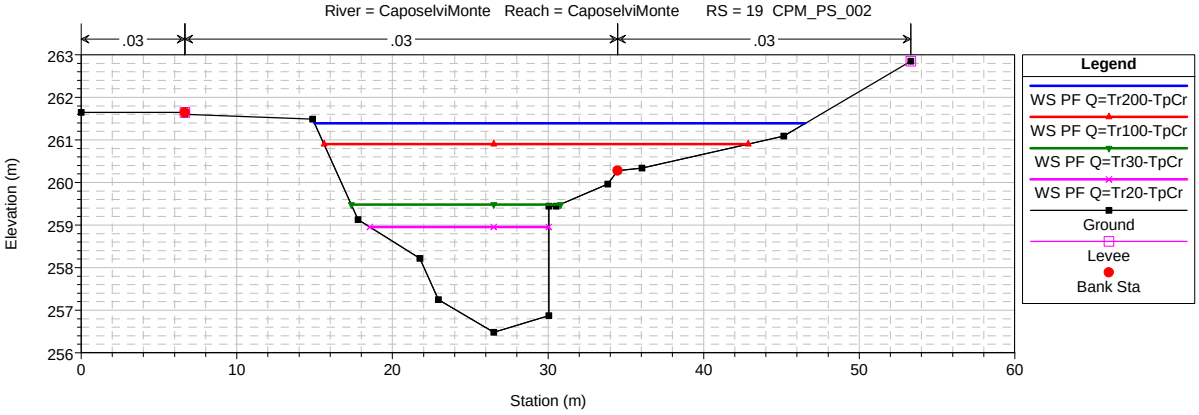
River = CaposelviMonte Reach = CaposelviMonte RS = 20 CPM_PS_001



TorrenteCaposelviMonte Plan: SA_perm_Cr

Geom: SA

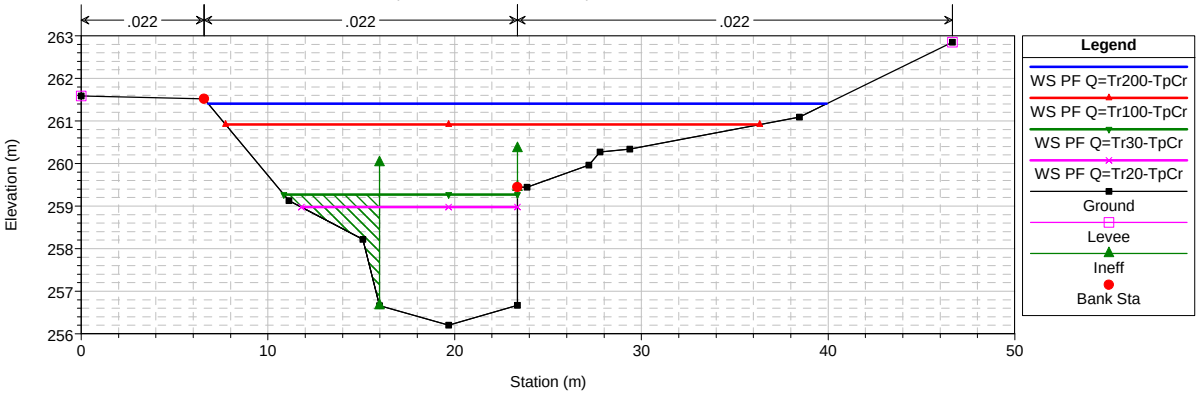
River = CaposelviMonte Reach = CaposelviMonte RS = 19 CPM_PS_002



TorrenteCaposelviMonte Plan: SA_perm_Cr

Geom: SA

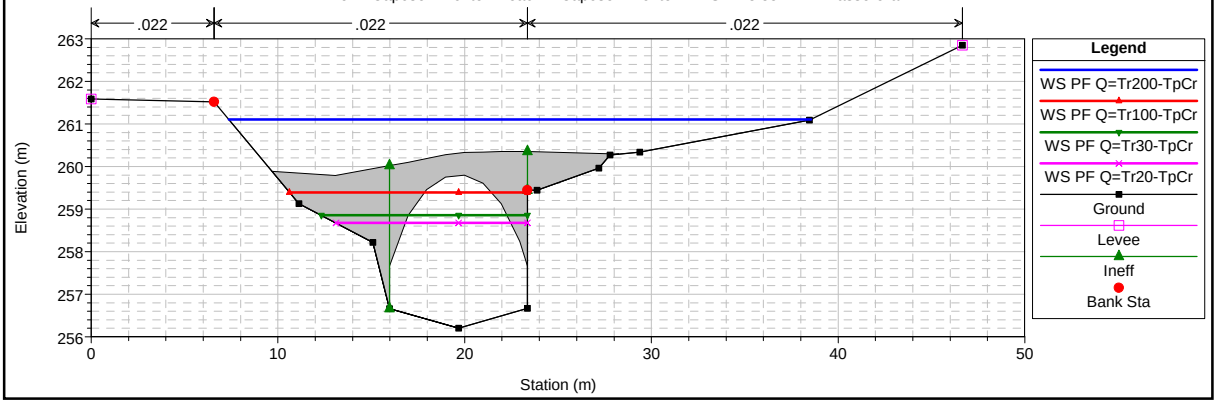
River = CaposelviMonte Reach = CaposelviMonte RS = 18.9 PER PONTE

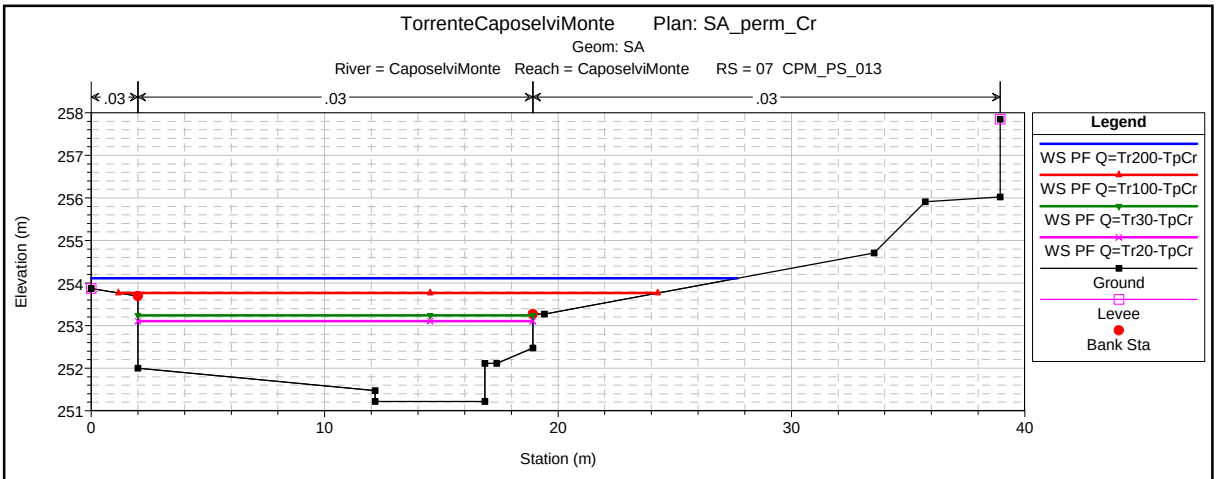


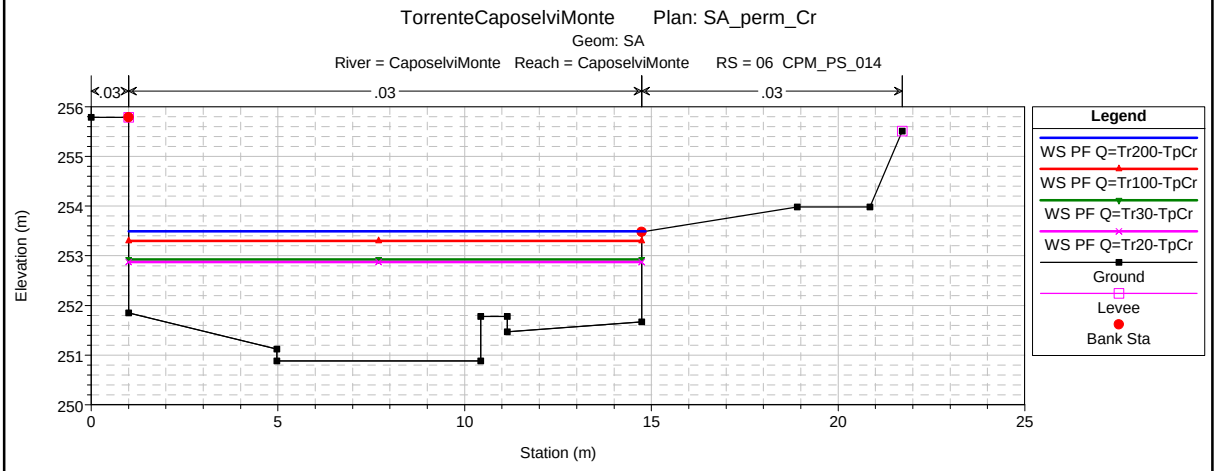
TorrenteCaposelviMonte Plan: SA_perm_Cr

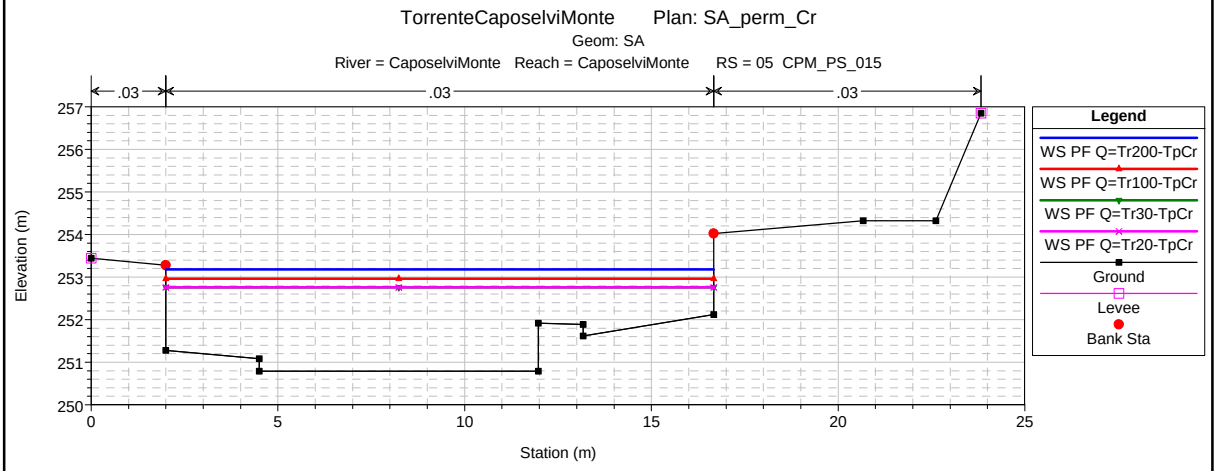
Geom: SA

River = CaposelviMonte Reach = CaposelviMonte RS = 18.85 BR Passerella




TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 07 CPM_PS_013
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Bank Sta


TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 06 CPM_PS_014
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Bank Sta


TorrenteCaposelviMonte Plan: SA_perm_Cr
Geom: SA
River = CaposelviMonte Reach = CaposelviMonte RS = 05 CPM_PS_015
.03
.03
.03
Elevation (m)
Station (m)
Legend
WS PF Q=Tr200-TpCr
WS PF Q=Tr100-TpCr
WS PF Q=Tr30-TpCr
WS PF Q=Tr20-TpCr
Ground
Levee
Bank Sta

HEC-RAS Plan: SA_perm_Cr River: CaposelviMonte Reach: CaposelviMonte

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
CaposelviMonte	20	PF Q=Tr200-TpCr	127.51	256.95	261.42	260.36	261.62	0.001837	2.01	63.55	35.03	0.48
CaposelviMonte	20	PF Q=Tr100-TpCr	107.07	256.95	260.91	259.85	261.18	0.003090	2.31	46.33	30.58	0.60
CaposelviMonte	20	PF Q=Tr30-TpCr	75.71	256.95	259.35	259.35	260.20	0.009238	4.09	18.52	10.90	1.00
CaposelviMonte	20	PF Q=Tr20-TpCr	66.79	256.95	259.19	259.19	260.00	0.009383	3.98	16.77	10.39	1.00
CaposelviMonte	19	PF Q=Tr200-TpCr	127.51	256.48	261.39	259.84	261.60	0.001141	2.07	66.45	31.53	0.38
CaposelviMonte	19	PF Q=Tr100-TpCr	107.07	256.48	260.90	259.53	261.13	0.001488	2.15	51.89	27.25	0.43
CaposelviMonte	19	PF Q=Tr30-TpCr	75.71	256.48	259.48	259.04	259.96	0.005045	3.07	24.67	13.46	0.72
CaposelviMonte	19	PF Q=Tr20-TpCr	66.79	256.48	258.96	258.87	259.65	0.008709	3.68	18.16	11.51	0.93
CaposelviMonte	18.9	PF Q=Tr200-TpCr	127.51	256.20	261.40	259.55	261.59	0.000522	2.00	71.66	33.13	0.35
CaposelviMonte	18.9	PF Q=Tr100-TpCr	107.07	256.20	260.91	259.21	261.12	0.000646	2.08	56.36	28.62	0.38
CaposelviMonte	18.9	PF Q=Tr30-TpCr	75.71	256.20	259.27	258.63	259.93	0.002350	3.60	21.02	12.52	0.68
CaposelviMonte	18.9	PF Q=Tr20-TpCr	66.79	256.20	258.98	258.46	259.62	0.002542	3.55	18.82	11.58	0.71
CaposelviMonte	18.85		Bridge									
CaposelviMonte	18.1	PF Q=Tr200-TpCr	127.51	256.20	259.55	259.55	261.11	0.004970	5.52	23.09	14.39	1.00
CaposelviMonte	18.1	PF Q=Tr100-TpCr	107.07	256.20	259.21	259.21	260.59	0.005025	5.21	20.55	12.40	1.00
CaposelviMonte	18.1	PF Q=Tr30-TpCr	75.71	256.20	258.63	258.63	259.73	0.005087	4.66	16.24	10.08	1.00
CaposelviMonte	18.1	PF Q=Tr20-TpCr	66.79	256.20	258.46	258.46	259.47	0.005063	4.46	14.97	9.34	1.00
CaposelviMonte	18	PF Q=Tr200-TpCr	127.51	256.69	259.71	258.90	260.14	0.002991	2.91	43.77	16.69	0.57
CaposelviMonte	18	PF Q=Tr100-TpCr	107.07	256.69	259.44	258.70	259.82	0.002928	2.73	39.27	16.69	0.57
CaposelviMonte	18	PF Q=Tr30-TpCr	75.71	256.69	258.99	258.37	259.28	0.002811	2.39	31.73	16.69	0.55
CaposelviMonte	18	PF Q=Tr20-TpCr	66.79	256.69	258.85	258.27	259.11	0.002762	2.27	29.42	16.69	0.55
CaposelviMonte	17.9	PF Q=Tr200-TpCr	127.51	256.74	259.67	258.94	260.13	0.001769	3.01	42.43	16.69	0.60
CaposelviMonte	17.9	PF Q=Tr100-TpCr	107.07	256.74	259.41	258.75	259.81	0.001749	2.82	37.95	16.69	0.60
CaposelviMonte	17.9	PF Q=Tr30-TpCr	75.71	256.74	258.96	258.41	259.27	0.001719	2.49	30.45	16.69	0.59
CaposelviMonte	17.9	PF Q=Tr20-TpCr	66.79	256.74	258.82	258.31	259.11	0.001705	2.37	28.16	16.69	0.58
CaposelviMonte	17.85		Bridge									
CaposelviMonte	17.1	PF Q=Tr200-TpCr	127.51	256.86	259.54	259.05	260.10	0.002379	3.31	38.54	16.69	0.70
CaposelviMonte	17.1	PF Q=Tr100-TpCr	107.07	256.86	259.27	258.85	259.78	0.002453	3.15	34.03	16.69	0.70
CaposelviMonte	17.1	PF Q=Tr30-TpCr	75.71	256.86	258.82	258.52	259.24	0.002676	2.86	26.45	16.69	0.73
CaposelviMonte	17.1	PF Q=Tr20-TpCr	66.79	256.86	258.68	258.41	259.07	0.002773	2.77	24.14	16.69	0.73

HEC-RAS Plan: SA_perm_Cr River: CaposelviMonte Reach: CaposelviMonte (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
CaposelviMonte	17	PF Q=Tr200-TpCr	127.51	256.91	259.06	259.06	260.02	0.009394	4.35	29.30	15.15	1.00
CaposelviMonte	17	PF Q=Tr100-TpCr	107.07	256.91	258.85	258.85	259.70	0.009474	4.11	26.07	15.13	1.00
CaposelviMonte	17	PF Q=Tr30-TpCr	75.71	256.91	258.49	258.49	259.17	0.009710	3.66	20.69	15.10	1.00
CaposelviMonte	17	PF Q=Tr20-TpCr	66.79	256.91	258.38	258.38	259.01	0.009808	3.51	19.04	15.08	1.00
CaposelviMonte	16	PF Q=Tr200-TpCr	127.51	255.52	258.76	258.76	259.63	0.006781	4.20	32.80	22.22	0.84
CaposelviMonte	16	PF Q=Tr100-TpCr	107.07	255.52	258.26	258.26	259.30	0.009549	4.51	23.93	13.42	0.97
CaposelviMonte	16	PF Q=Tr30-TpCr	75.71	255.52	257.70	257.70	258.61	0.010558	4.22	17.96	9.90	1.00
CaposelviMonte	16	PF Q=Tr20-TpCr	66.79	255.52	257.54	257.54	258.39	0.010682	4.08	16.37	9.66	1.00
CaposelviMonte	15	PF Q=Tr200-TpCr	127.51	253.60	256.69	256.41	257.41	0.006388	3.75	33.96	16.57	0.84
CaposelviMonte	15	PF Q=Tr100-TpCr	107.07	253.60	256.35	256.16	257.07	0.007162	3.74	28.64	15.27	0.87
CaposelviMonte	15	PF Q=Tr30-TpCr	75.71	253.60	255.83	255.71	256.48	0.008179	3.58	21.16	13.23	0.90
CaposelviMonte	15	PF Q=Tr20-TpCr	66.79	253.60	255.67	255.55	256.29	0.008369	3.49	19.15	12.63	0.90
CaposelviMonte	14	PF Q=Tr200-TpCr	127.51	252.88	255.35	255.35	256.50	0.010306	4.76	26.76	11.51	1.00
CaposelviMonte	14	PF Q=Tr100-TpCr	107.07	252.88	255.09	255.09	256.12	0.010264	4.50	23.82	11.51	1.00
CaposelviMonte	14	PF Q=Tr30-TpCr	75.71	252.88	254.66	254.66	255.48	0.010310	4.01	18.88	11.51	1.00
CaposelviMonte	14	PF Q=Tr20-TpCr	66.79	252.88	254.53	254.53	255.28	0.010326	3.84	17.38	11.51	1.00
CaposelviMonte	13	PF Q=Tr200-TpCr	127.51	252.82	255.11	255.11	256.21	0.009901	4.64	27.47	12.45	1.00
CaposelviMonte	13	PF Q=Tr100-TpCr	107.07	252.82	254.87	254.87	255.85	0.009953	4.39	24.40	12.45	1.00
CaposelviMonte	13	PF Q=Tr30-TpCr	75.71	252.82	254.46	254.46	255.24	0.010090	3.92	19.33	12.45	1.00
CaposelviMonte	13	PF Q=Tr20-TpCr	66.79	252.82	254.34	254.34	255.05	0.010010	3.74	17.86	12.45	1.00
CaposelviMonte	12	PF Q=Tr200-TpCr	127.51	252.36	255.24	254.23	255.52	0.001974	2.38	53.69	20.97	0.47
CaposelviMonte	12	PF Q=Tr100-TpCr	107.07	252.36	254.93	254.06	255.19	0.002073	2.27	47.19	20.95	0.48
CaposelviMonte	12	PF Q=Tr30-TpCr	75.71	252.36	254.46	253.69	254.67	0.002130	2.02	37.46	20.95	0.48
CaposelviMonte	12	PF Q=Tr20-TpCr	66.79	252.36	254.33	253.59	254.52	0.002130	1.93	34.60	20.95	0.48
CaposelviMonte	11.9	PF Q=Tr200-TpCr	127.51	252.36	255.23	254.23	255.52	0.001064	2.38	53.65	20.97	0.47
CaposelviMonte	11.9	PF Q=Tr100-TpCr	107.07	252.36	254.92	254.06	255.18	0.001118	2.27	47.15	20.95	0.48
CaposelviMonte	11.9	PF Q=Tr30-TpCr	75.71	252.36	254.46	253.69	254.67	0.001150	2.02	37.42	20.95	0.48
CaposelviMonte	11.9	PF Q=Tr20-TpCr	66.79	252.36	254.32	253.58	254.51	0.001150	1.93	34.56	20.95	0.48
CaposelviMonte	11.8		Bridge									

HEC-RAS Plan: SA_perm_Cr River: CaposelviMonte Reach: CaposelviMonte (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
CaposelviMonte	11.1	PF Q=Tr200-TpCr	127.51	251.61	254.99	254.10	255.30	0.001210	2.49	51.28	21.01	0.51
CaposelviMonte	11.1	PF Q=Tr100-TpCr	107.07	251.61	254.71	253.93	254.99	0.001242	2.36	45.43	21.00	0.51
CaposelviMonte	11.1	PF Q=Tr30-TpCr	75.71	251.61	254.23	253.52	254.46	0.001360	2.14	35.36	21.00	0.53
CaposelviMonte	11.1	PF Q=Tr20-TpCr	66.79	251.61	254.08	253.42	254.30	0.001421	2.07	32.21	21.00	0.53
CaposelviMonte	10	PF Q=Tr200-TpCr	127.51	252.27	254.77	254.18	255.27	0.003885	3.15	40.43	17.01	0.65
CaposelviMonte	10	PF Q=Tr100-TpCr	107.07	252.27	254.52	253.98	254.97	0.003818	2.95	36.26	16.99	0.65
CaposelviMonte	10	PF Q=Tr30-TpCr	75.71	252.27	254.09	253.65	254.44	0.003810	2.61	28.98	16.95	0.64
CaposelviMonte	10	PF Q=Tr20-TpCr	66.79	252.27	253.96	253.55	254.28	0.003823	2.50	26.71	16.93	0.64
CaposelviMonte	09	PF Q=Tr200-TpCr	127.51	252.01	254.35	254.22	255.15	0.007389	3.96	32.17	16.57	0.91
CaposelviMonte	09	PF Q=Tr100-TpCr	107.07	252.01	254.13	254.01	254.85	0.007419	3.75	28.55	16.18	0.90
CaposelviMonte	09	PF Q=Tr30-TpCr	75.71	252.01	253.70	253.64	254.32	0.008345	3.48	21.78	15.42	0.93
CaposelviMonte	09	PF Q=Tr20-TpCr	66.79	252.01	253.56	253.52	254.15	0.008944	3.41	19.59	15.16	0.96
CaposelviMonte	08	PF Q=Tr200-TpCr	127.51	251.31	254.08	254.08	255.00	0.009208	4.24	30.04	16.28	1.00
CaposelviMonte	08	PF Q=Tr100-TpCr	107.07	251.31	253.84	253.84	254.69	0.009478	4.08	26.26	15.54	1.00
CaposelviMonte	08	PF Q=Tr30-TpCr	75.71	251.31	253.44	253.44	254.15	0.009831	3.73	20.32	14.28	1.00
CaposelviMonte	08	PF Q=Tr20-TpCr	66.79	251.31	253.32	253.32	253.98	0.010023	3.61	18.49	13.87	1.00
CaposelviMonte	07	PF Q=Tr200-TpCr	127.51	251.22	254.11	253.48	254.54	0.003070	2.95	46.18	27.68	0.60
CaposelviMonte	07	PF Q=Tr100-TpCr	107.07	251.22	253.77	253.25	254.21	0.003787	2.96	37.22	23.11	0.65
CaposelviMonte	07	PF Q=Tr30-TpCr	75.71	251.22	253.24	252.92	253.64	0.004877	2.82	26.85	16.93	0.71
CaposelviMonte	07	PF Q=Tr20-TpCr	66.79	251.22	253.11	252.82	253.48	0.004985	2.71	24.61	16.93	0.72
CaposelviMonte	06	PF Q=Tr200-TpCr	127.51	250.88	253.49	253.35	254.39	0.008321	4.20	30.37	13.84	0.90
CaposelviMonte	06	PF Q=Tr100-TpCr	107.07	250.88	253.30	253.12	254.06	0.007738	3.86	27.72	13.74	0.87
CaposelviMonte	06	PF Q=Tr30-TpCr	75.71	250.88	252.93	252.74	253.50	0.007260	3.35	22.57	13.74	0.84
CaposelviMonte	06	PF Q=Tr20-TpCr	66.79	250.88	252.87	252.62	253.35	0.006219	3.05	21.88	13.74	0.77
CaposelviMonte	05	PF Q=Tr200-TpCr	127.51	250.79	253.18	253.18	254.17	0.010145	4.40	29.01	14.67	1.00
CaposelviMonte	05	PF Q=Tr100-TpCr	107.07	250.79	252.96	252.96	253.84	0.010246	4.15	25.81	14.67	1.00
CaposelviMonte	05	PF Q=Tr30-TpCr	75.71	250.79	252.76	252.60	253.32	0.007516	3.32	22.81	14.67	0.85
CaposelviMonte	05	PF Q=Tr20-TpCr	66.79	250.79	252.76	252.49	253.20	0.005849	2.93	22.81	14.67	0.75

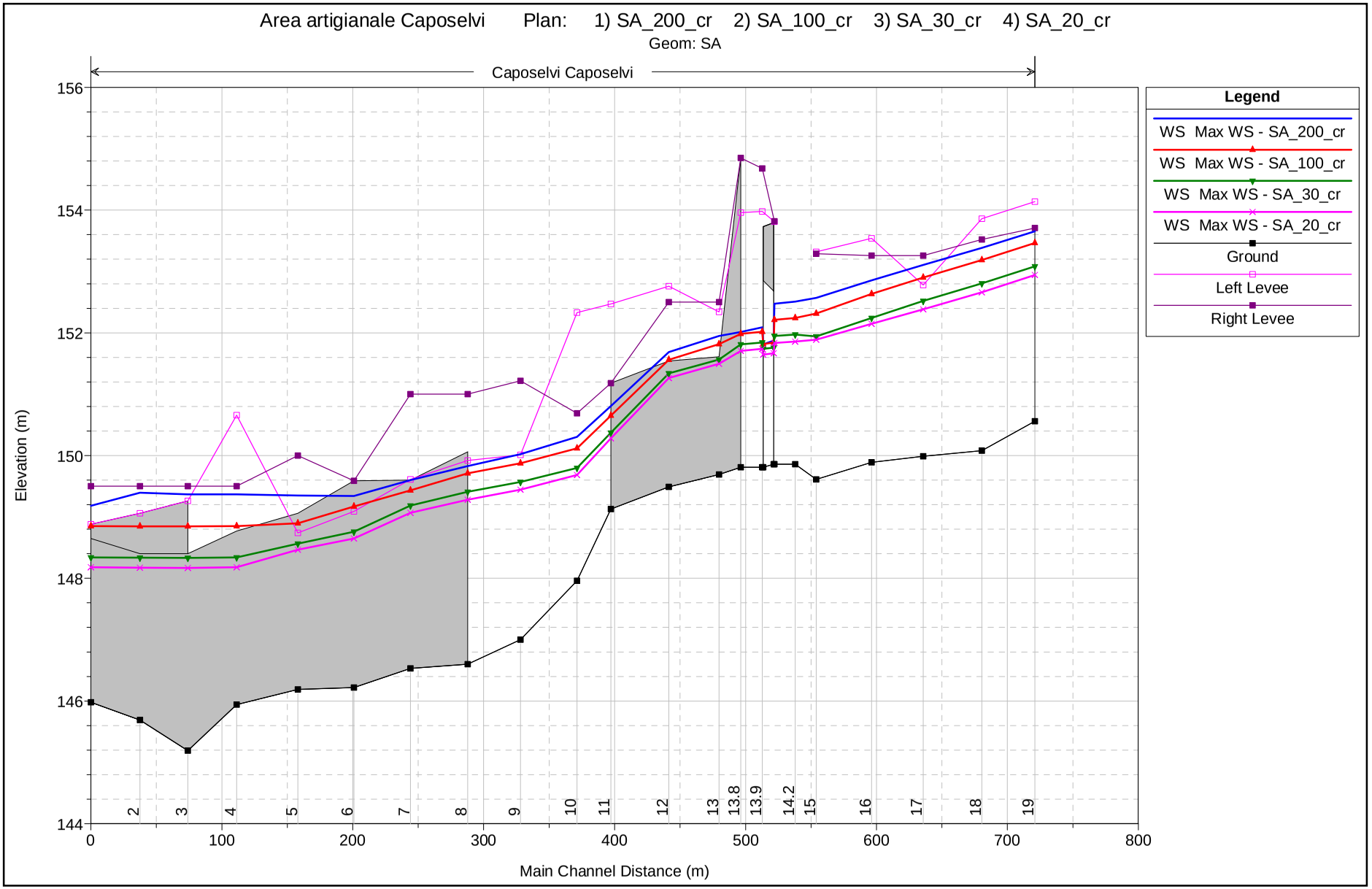
torrente Caposelvi

verifiche con Tpioggia critico per il Torrente Caposelvi

- moto vario
  Tr=200, 100, 30 e 20 anni
  profilo
  livelli idrici nelle sezioni di verifica
  tabella di output del software Hec-ras 4.0
  livelli e portate in ingresso alle aree di accumulo

verifiche con Tpioggia critico per il fiume Arno

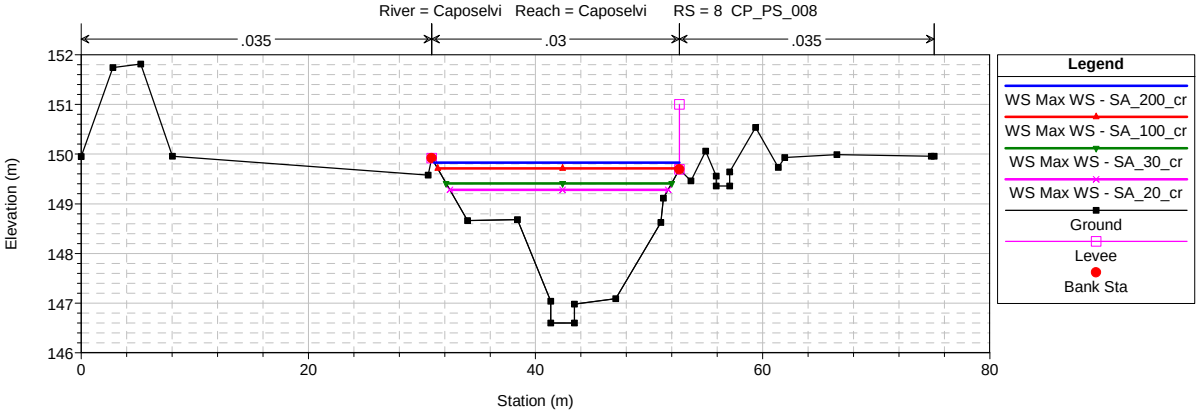
- moto permanente
  Tr=200, 100, 30 e 20 anni
  profilo
  livelli idrici nelle sezioni di verifica
  tabella di output del software Hec-ras 4.0


Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
Caposelvi Caposelvi
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Left Levee
Right Levee
Elevation (m)
Main Channel Distance (m)
156
154
152
150
148
146
144
0
100
200
300
400
500
600
700
800
2
3
4
5
6
7
8
9
10
11
12
13
13.8
13.9
14.2
15
16
17
18
19

Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr

Geom: SA

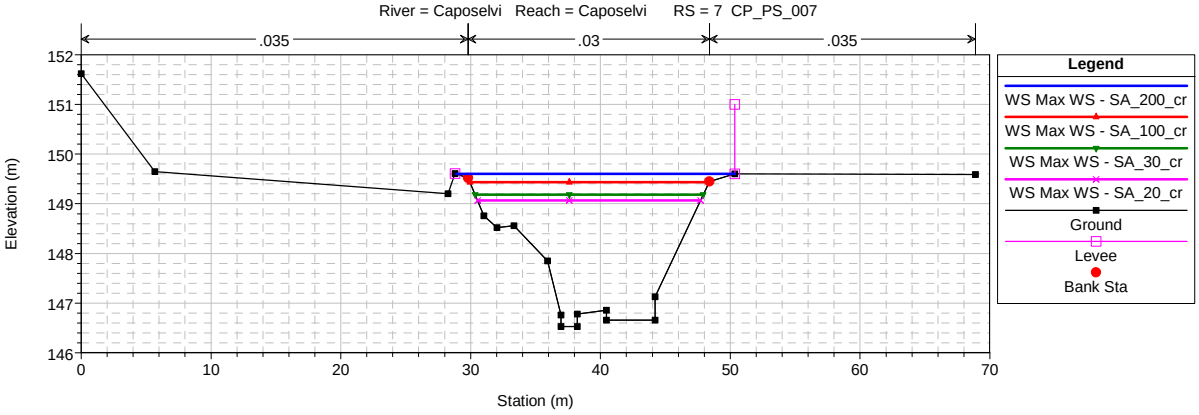
River = Caposelvi Reach = Caposelvi RS = 8 CP_PS_008



Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr

Geom: SA

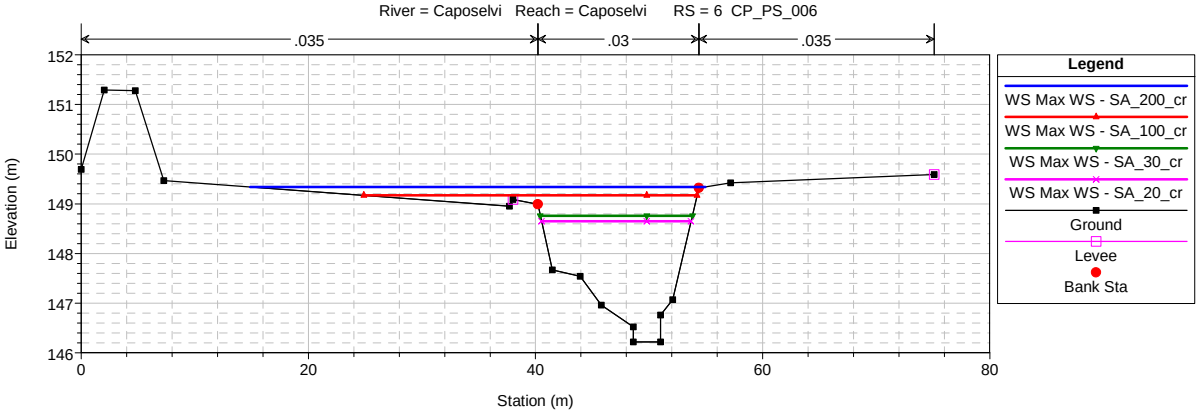
River = Caposelvi Reach = Caposelvi RS = 7 CP_PS_007



Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr

Geom: SA

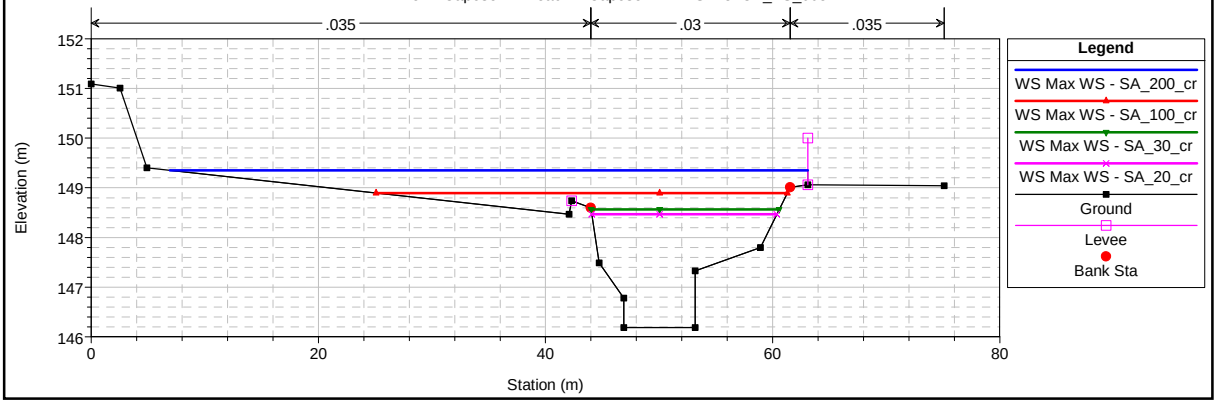
River = Caposelvi Reach = Caposelvi RS = 6 CP_PS_006



Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr

Geom: SA

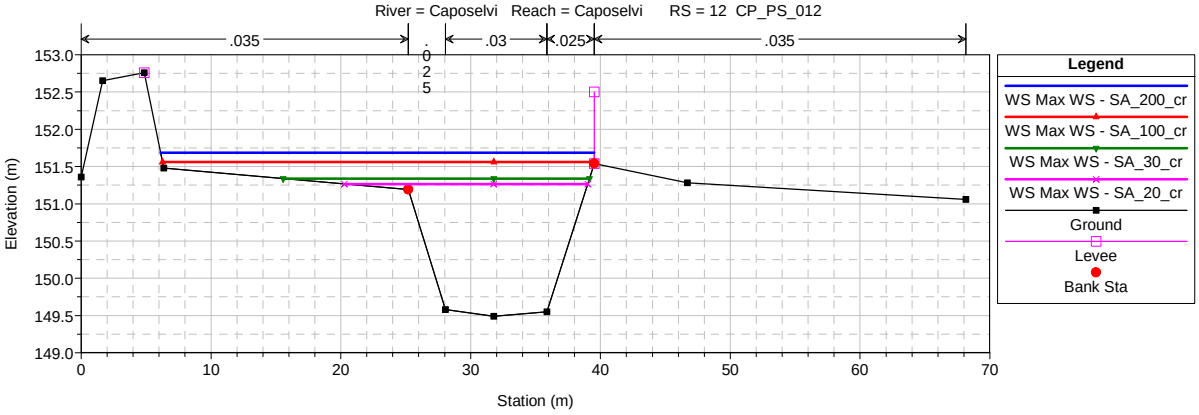
River = Caposelvi Reach = Caposelvi RS = 5 CP_PS_005



Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr

Geom: SA

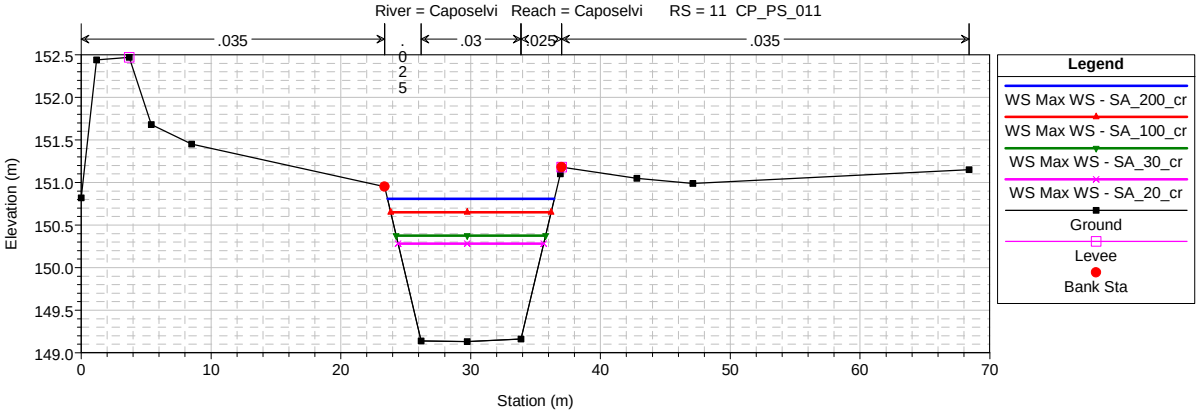
River = Caposelvi Reach = Caposelvi RS = 12 CP_PS_012



Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr

Geom: SA

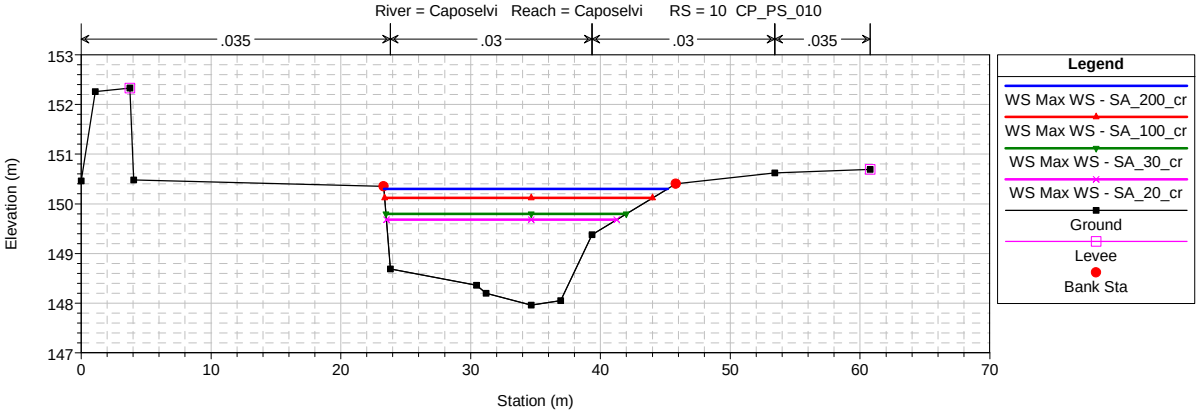
River = Caposelvi Reach = Caposelvi RS = 11 CP_PS_011



Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr

Geom: SA

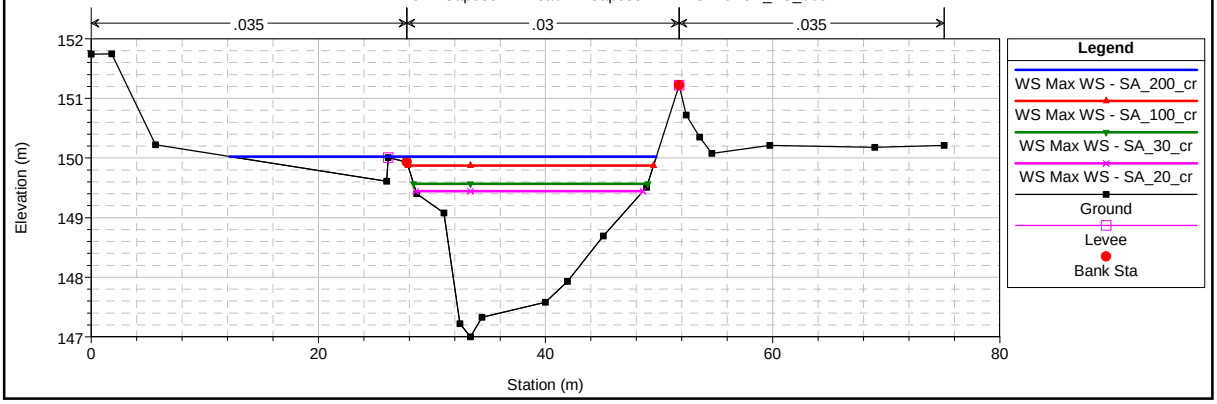
River = Caposelvi Reach = Caposelvi RS = 10 CP_PS_010

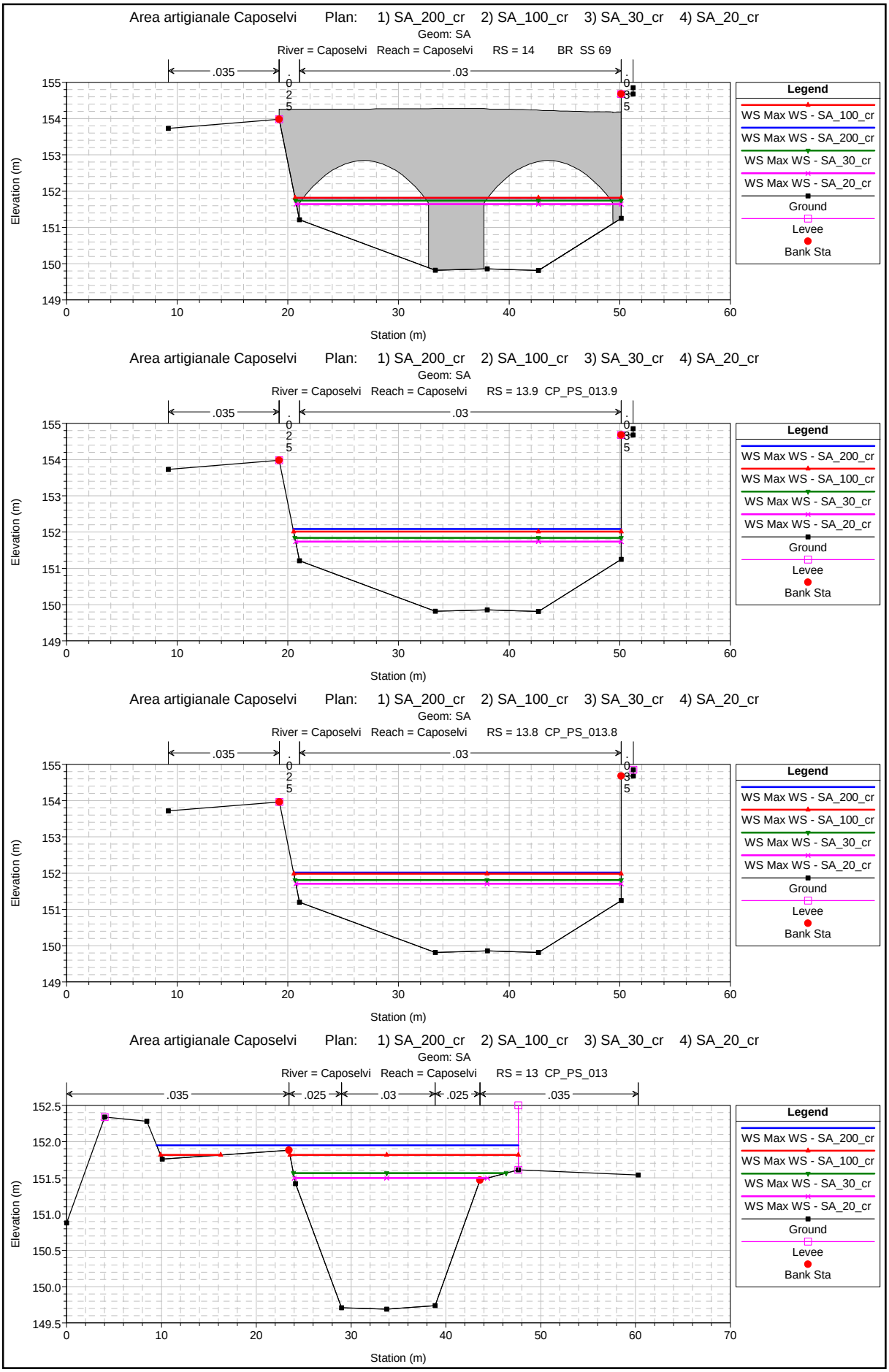


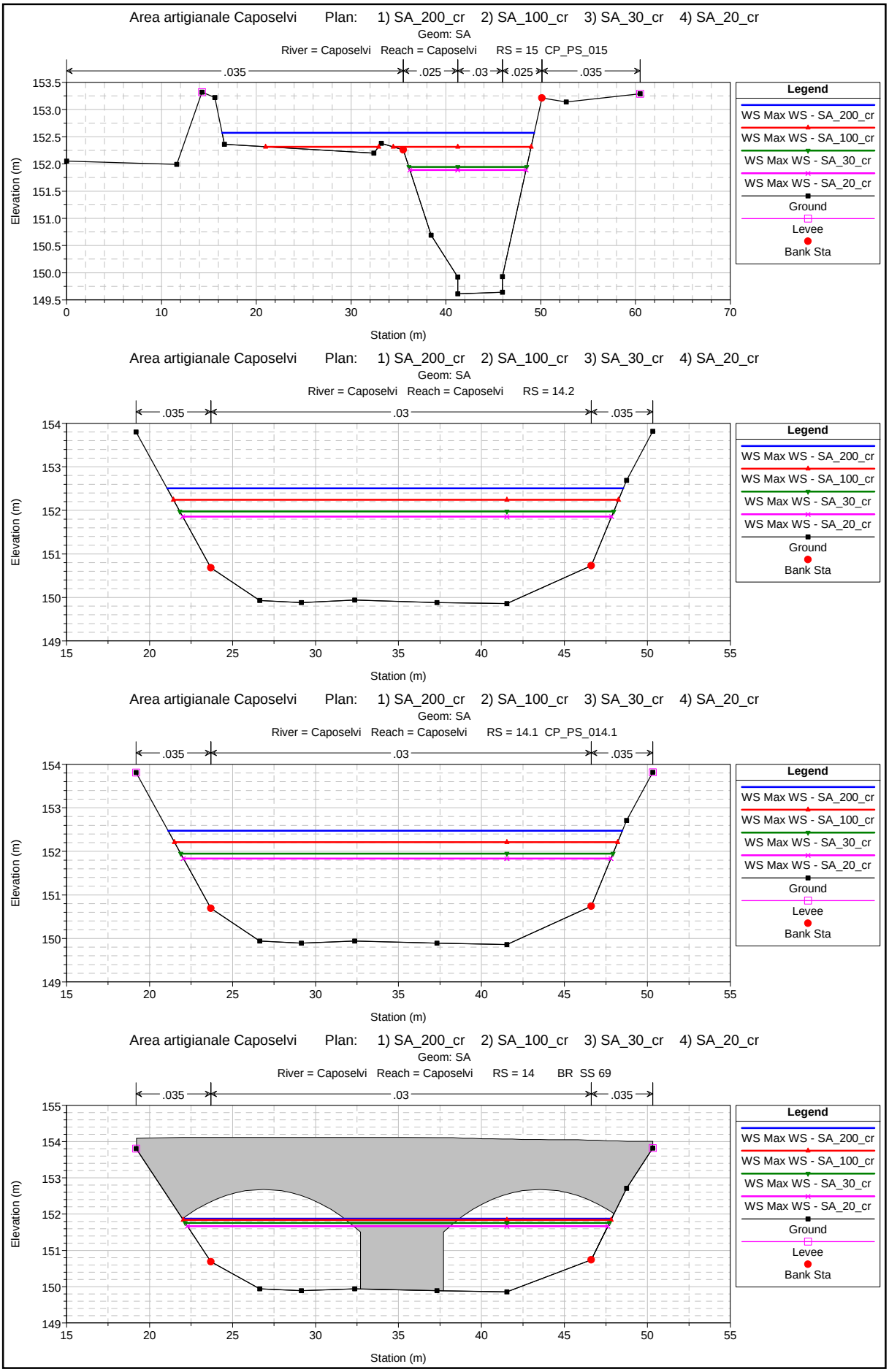
Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr

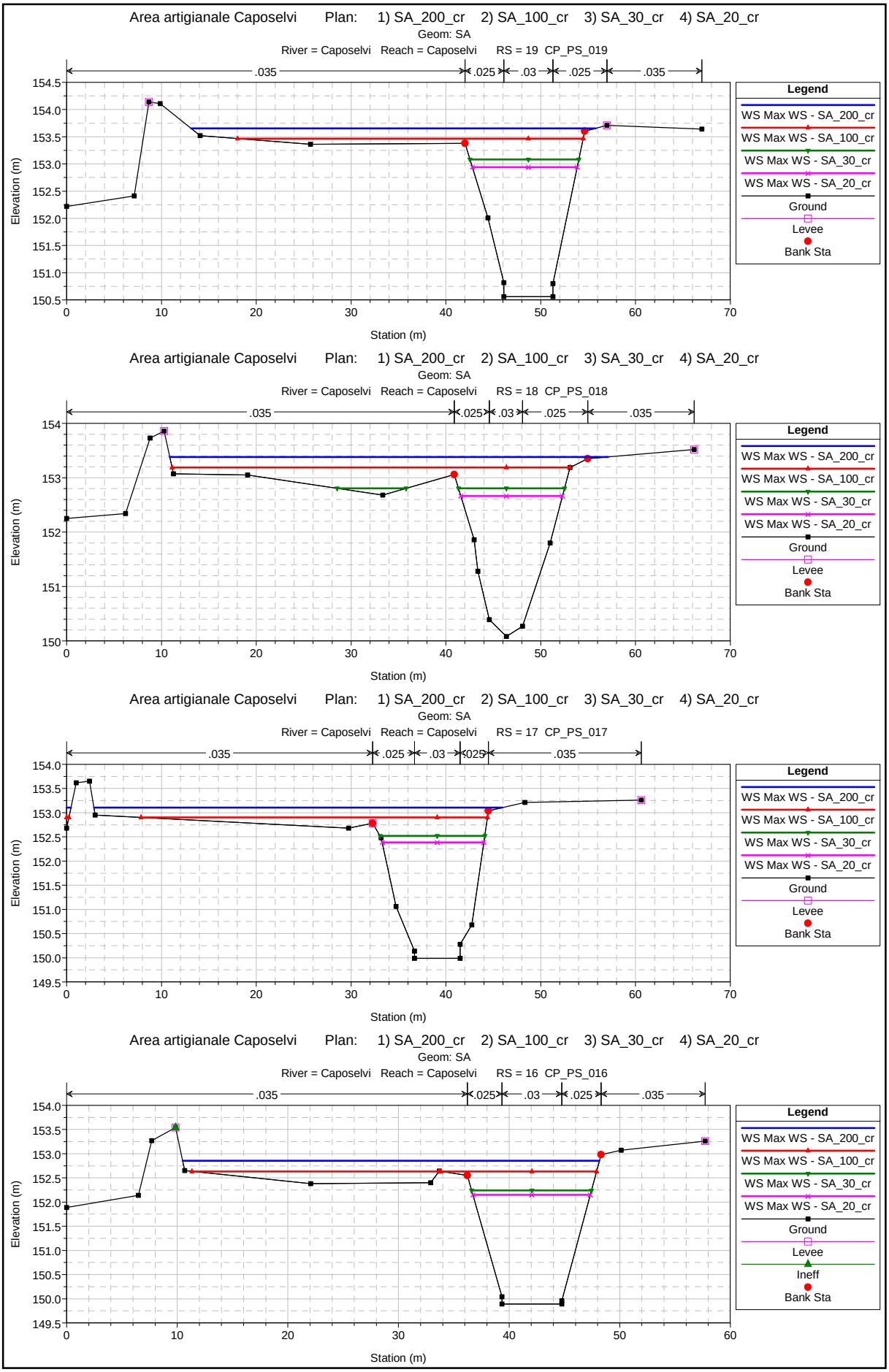
Geom: SA

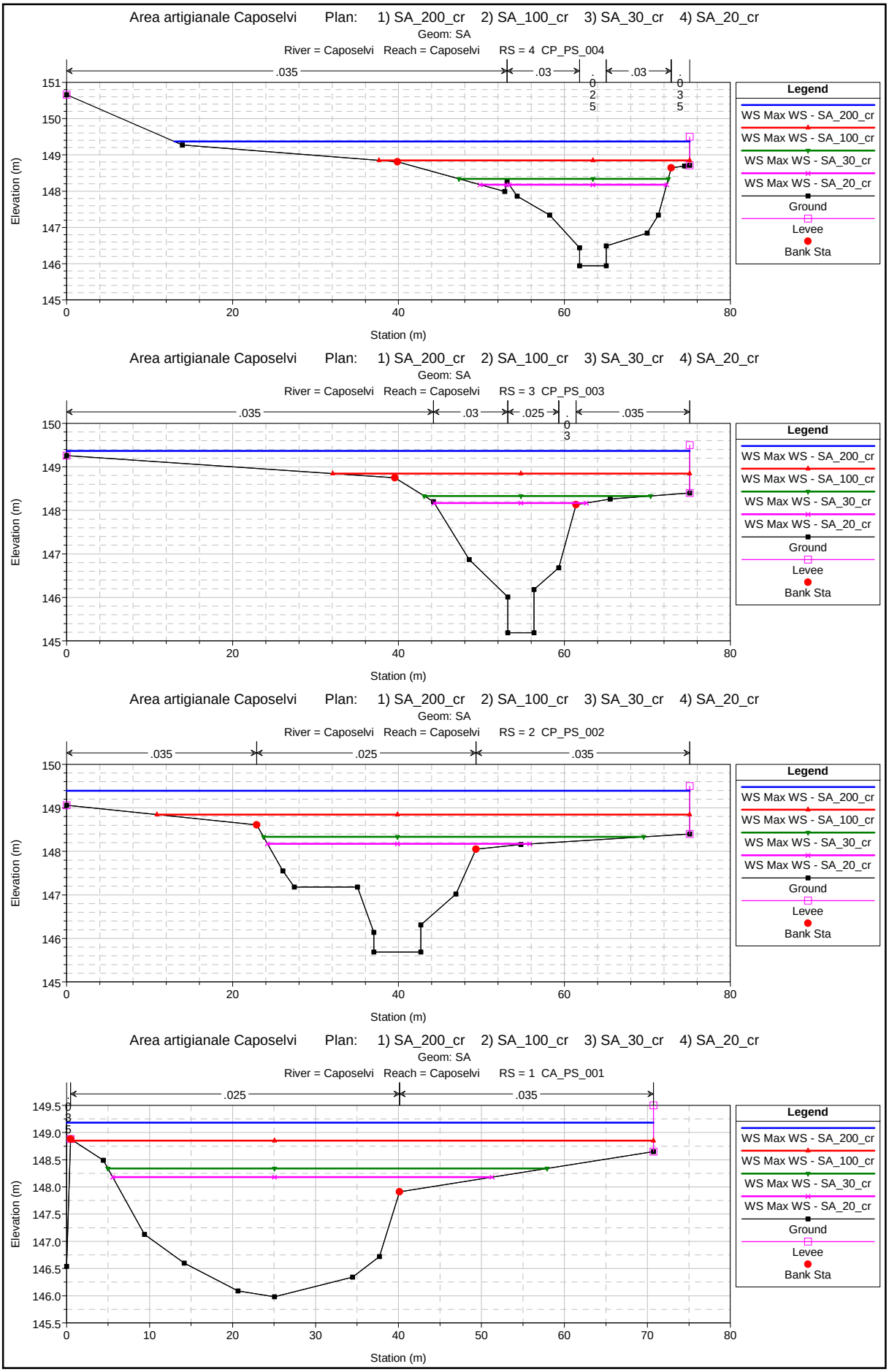
River = Caposelvi Reach = Caposelvi RS = 9 CP_PS_009




Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 14 BR SS 69
.035
.03
Elevation (m)
Station (m)
Legend
WS Max WS - SA_100_cr
WS Max WS - SA_200_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 13.9 CP_PS_013.9
.035
.03
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 13.8 CP_PS_013.8
.035
.03
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 13 CP_PS_013
.035
.025
.03
.025
.035
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta


Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 15 CP_PS_015
.035
.025
.03
.025
.035
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 14.2
.035
.03
.035
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Bank Sta
Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 14.1 CP_PS_014.1
.035
.03
.035
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 14 BR SS 69
.035
.03
.035
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta


Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 19 CP_PS_019
.035
.025
.03
.025
.035
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 18 CP_PS_018
.035
.025
.03
.025
.035
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 17 CP_PS_017
.035
.025
.03
.025
.035
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 16 CP_PS_016
.035
.025
.03
.025
.035
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Ineff
Bank Sta


Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 4 CP_PS_004
.035
.03
.025
.03
.035
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 3 CP_PS_003
.035
.03
.025
.035
.03
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 2 CP_PS_002
.035
.025
.035
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 1 CA_PS_001
.025
.035
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta

HEC-RAS River: Caposelvi Reach: Caposelvi Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Caposelvi	19	Max WS	SA_200_cr	130.29	150.56	153.65	154.01	154.67	0.006916	4.58	34.16	42.67	1.00
Caposelvi	19	Max WS	SA_100_cr	108.62	150.56	153.47	153.85	154.44	0.007025	4.38	26.54	36.44	1.00
Caposelvi	19	Max WS	SA_30_cr	77.73	150.56	153.08	153.00	153.85	0.006583	3.89	20.00	11.48	0.94
Caposelvi	19	Max WS	SA_20_cr	68.99	150.56	152.94	152.85	153.66	0.006549	3.75	18.39	11.06	0.93
Caposelvi	18	Max WS	SA_200_cr	130.28	150.08	153.38	153.52	154.20	0.006638	4.31	39.63	46.22	1.02
Caposelvi	18	Max WS	SA_100_cr	108.60	150.08	153.19	153.47	154.09	0.006649	4.35	31.20	41.96	1.01
Caposelvi	18	Max WS	SA_30_cr	77.72	150.08	152.80	153.05	153.68	0.007246	4.15	19.13	18.47	1.03
Caposelvi	18	Max WS	SA_20_cr	68.99	150.08	152.66	152.69	153.49	0.007265	4.03	17.12	10.73	1.02
Caposelvi	17	Max WS	SA_200_cr	130.27	149.99	153.10	153.26	154.02	0.005900	4.38	36.66	43.53	0.93
Caposelvi	17	Max WS	SA_100_cr	108.59	149.99	152.90	153.19	153.80	0.006141	4.23	28.21	36.78	0.93
Caposelvi	17	Max WS	SA_30_cr	77.71	149.99	152.52	152.32	153.23	0.005531	3.73	20.86	11.05	0.87
Caposelvi	17	Max WS	SA_20_cr	67.09	149.99	152.38	152.14	152.99	0.005057	3.46	19.39	10.73	0.82
Caposelvi	16	Max WS	SA_200_cr	130.26	149.89	152.86	153.14	153.82	0.006789	4.56	35.76	37.68	0.99
Caposelvi	16	Max WS	SA_100_cr	108.59	149.89	152.63	152.97	153.65	0.007497	4.53	27.45	36.41	1.03
Caposelvi	16	Max WS	SA_30_cr	77.71	149.89	152.24	152.24	153.11	0.007493	4.13	18.82	10.84	1.00
Caposelvi	16	Max WS	SA_20_cr	66.97	149.89	152.15	152.05	152.87	0.006511	3.76	17.80	10.61	0.93
Caposelvi	15	Max WS	SA_200_cr	130.25	149.61	152.57	152.83	153.55	0.006730	4.48	33.29	32.92	1.01
Caposelvi	15	Max WS	SA_100_cr	108.59	149.61	152.32	152.63	153.32	0.007674	4.44	25.10	26.48	1.05
Caposelvi	15	Max WS	SA_30_cr	77.70	149.61	151.94	151.96	152.75	0.007443	3.98	19.54	12.41	1.01
Caposelvi	15	Max WS	SA_20_cr	66.72	149.61	151.89	151.78	152.53	0.006062	3.54	18.87	12.24	0.91
Caposelvi	14.2	Max WS	SA_200_cr	130.24	149.86	152.51	151.53	152.76	0.001367	2.24	60.72	27.49	0.46
Caposelvi	14.2	Max WS	SA_100_cr	108.59	149.86	152.24	151.36	152.46	0.001398	2.10	53.58	26.82	0.45
Caposelvi	14.2	Max WS	SA_30_cr	77.70	149.86	151.97	151.09	152.12	0.001120	1.72	46.41	26.14	0.40
Caposelvi	14.2	Max WS	SA_20_cr	68.98	149.86	151.86	151.02	151.99	0.001086	1.63	43.43	25.85	0.39
Caposelvi	14.1	Max WS	SA_200_cr	130.24	149.86	152.48	151.54	152.73	0.001439	2.28	59.69	27.38	0.47
Caposelvi	14.1	Max WS	SA_100_cr	108.59	149.86	152.21	151.37	152.44	0.001483	2.14	52.56	26.71	0.46
Caposelvi	14.1	Max WS	SA_30_cr	77.69	149.86	151.95	151.10	152.10	0.001181	1.75	45.62	26.05	0.41
Caposelvi	14.1	Max WS	SA_20_cr	68.97	149.86	151.84	151.02	151.97	0.001147	1.66	42.68	25.76	0.40
Caposelvi	14			Bridge									
Caposelvi	13.9	Max WS	SA_200_cr	130.24	149.81	152.09	151.57	152.41	0.002787	2.49	52.21	29.65	0.60

HEC-RAS River: Caposelvi Reach: Caposelvi Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Caposelvi	13.9	Max WS	SA_100_cr	94.24	149.81	152.02	151.32	152.20	0.001665	1.88	50.09	29.60	0.46
Caposelvi	13.9	Max WS	SA_30_cr	77.69	149.81	151.84	151.20	152.00	0.001597	1.73	44.98	29.49	0.45
Caposelvi	13.9	Max WS	SA_20_cr	68.97	149.81	151.74	151.11	151.88	0.001587	1.65	41.85	29.42	0.44
Caposelvi	13.8	Max WS	SA_200_cr	130.24	149.81	152.01	151.57	152.36	0.003160	2.59	50.19	29.61	0.64
Caposelvi	13.8	Max WS	SA_100_cr	94.19	149.81	151.98	151.32	152.17	0.001754	1.91	49.27	29.59	0.47
Caposelvi	13.8	Max WS	SA_30_cr	77.69	149.81	151.81	151.19	151.97	0.001688	1.76	44.21	29.47	0.46
Caposelvi	13.8	Max WS	SA_20_cr	68.97	149.81	151.71	151.11	151.85	0.001683	1.68	41.09	29.40	0.45
Caposelvi	13.7			Lat Struct									
Caposelvi	13	Max WS	SA_200_cr	130.08	149.69	151.95	151.92	152.60	0.004832	3.60	38.81	38.15	0.87
Caposelvi	13	Max WS	SA_100_cr	108.54	149.69	151.82	151.65	152.36	0.004454	3.29	33.98	30.44	0.82
Caposelvi	13	Max WS	SA_30_cr	77.69	149.69	151.57	151.29	151.97	0.003909	2.80	27.87	22.44	0.75
Caposelvi	13	Max WS	SA_20_cr	59.04	149.69	151.50	151.06	151.75	0.002646	2.24	26.41	20.36	0.61
Caposelvi	12	Max WS	SA_200_cr	124.93	149.49	151.68	151.99	152.73	0.008912	4.69	31.37	33.41	1.14
Caposelvi	12	Max WS	SA_100_cr	106.78	149.49	151.56	151.85	152.54	0.008806	4.46	27.26	33.27	1.12
Caposelvi	12	Max WS	SA_30_cr	77.68	149.49	151.34	151.57	152.11	0.007940	3.90	20.54	23.60	1.05
Caposelvi	12	Max WS	SA_20_cr	68.97	149.49	151.27	151.33	151.95	0.007410	3.66	19.00	18.75	1.00
Caposelvi	11	Max WS	SA_200_cr	124.63	149.13	150.81	151.69	153.51	0.030908	7.28	17.12	12.84	2.01
Caposelvi	11	Max WS	SA_100_cr	106.78	149.13	150.65	151.58	153.19	0.032695	7.06	15.11	12.35	2.04
Caposelvi	11	Max WS	SA_30_cr	77.69	149.13	150.37	151.07	152.57	0.035829	6.57	11.83	11.50	2.07
Caposelvi	11	Max WS	SA_20_cr	68.96	149.13	150.28	150.92	152.37	0.037493	6.41	10.76	11.21	2.09
Caposelvi	10	Max WS	SA_200_cr	124.63	147.96	150.30	150.27	151.02	0.008250	3.76	33.14	21.86	0.97
Caposelvi	10	Max WS	SA_100_cr	106.78	147.96	150.12	150.10	150.80	0.008512	3.66	29.19	20.63	0.98
Caposelvi	10	Max WS	SA_30_cr	77.69	147.96	149.80	149.77	150.38	0.008605	3.38	22.96	18.51	0.97
Caposelvi	10	Max WS	SA_20_cr	68.96	147.96	149.68	149.66	150.24	0.008770	3.30	20.87	17.75	0.97
Caposelvi	9	Max WS	SA_200_cr	124.62	147.00	150.02	149.74	150.54	0.004781	3.20	41.38	37.59	0.77
Caposelvi	9	Max WS	SA_100_cr	103.41	147.00	149.87	149.55	150.32	0.004477	2.95	35.09	21.64	0.74
Caposelvi	9	Max WS	SA_30_cr	77.69	147.00	149.57	149.24	149.94	0.004641	2.71	28.63	20.62	0.74
Caposelvi	9	Max WS	SA_20_cr	68.96	147.00	149.44	149.10	149.80	0.004775	2.64	26.11	20.02	0.74
Caposelvi	8	Max WS	SA_200_cr	124.62	146.60	149.83	149.53	150.37	0.005166	3.27	38.11	21.60	0.79
Caposelvi	8	Max WS	SA_100_cr	103.32	146.60	149.71	149.32	150.14	0.004359	2.90	35.58	21.30	0.72

HEC-RAS River: Caposelvi Reach: Caposelvi Profile: Max WS (Continued)

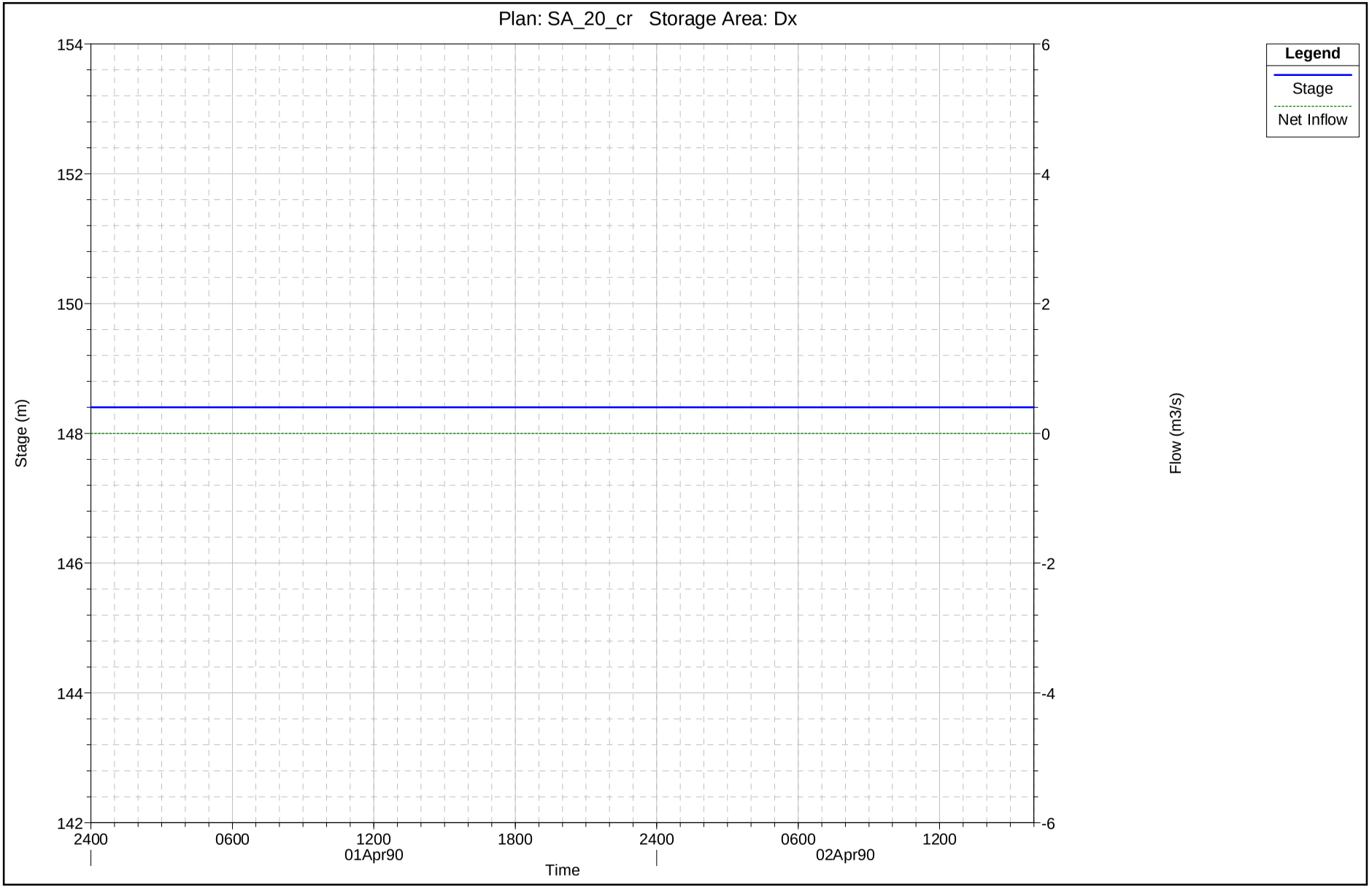
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Caposelvi	8	Max WS	SA_30_cr	77.69	146.60	149.41	149.04	149.77	0.004226	2.64	29.44	19.87	0.69
Caposelvi	8	Max WS	SA_20_cr	68.95	146.60	149.28	148.94	149.62	0.004307	2.56	26.90	19.23	0.69
Caposelvi	7.8			Lat Struct									
Caposelvi	7	Max WS	SA_200_cr	124.52	146.53	149.60	149.33	150.23	0.005515	3.50	35.74	21.44	0.81
Caposelvi	7	Max WS	SA_100_cr	106.61	146.53	149.43	149.14	149.98	0.005422	3.29	32.45	18.42	0.79
Caposelvi	7	Max WS	SA_30_cr	77.68	146.53	149.18	148.81	149.58	0.004447	2.78	27.93	17.56	0.70
Caposelvi	7	Max WS	SA_20_cr	68.94	146.53	149.07	148.69	149.43	0.004357	2.66	25.92	17.17	0.69
Caposelvi	6	Max WS	SA_200_cr	122.58	146.22	149.34	149.59	150.13	0.006777	4.01	34.70	40.08	0.89
Caposelvi	6	Max WS	SA_100_cr	106.60	146.22	149.17	149.23	149.94	0.007058	3.90	28.80	29.35	0.90
Caposelvi	6	Max WS	SA_30_cr	77.68	146.22	148.76	148.66	149.43	0.007689	3.62	21.45	13.39	0.91
Caposelvi	6	Max WS	SA_20_cr	68.92	146.22	148.65	148.53	149.26	0.007467	3.45	19.98	13.17	0.89
Caposelvi	5	Max WS	SA_200_cr	64.62	146.19	149.35	148.19	149.45	0.000830	1.47	55.62	56.18	0.32
Caposelvi	5	Max WS	SA_100_cr	106.07	146.19	148.90	148.83	149.46	0.005910	3.39	34.44	36.21	0.82
Caposelvi	5	Max WS	SA_30_cr	77.68	146.19	148.56	148.36	149.07	0.006281	3.13	24.78	16.56	0.82
Caposelvi	5	Max WS	SA_20_cr	68.92	146.19	148.47	148.24	148.92	0.006036	2.97	23.17	16.28	0.80
Caposelvi	4	Max WS	SA_200_cr	61.82	145.94	149.37	147.93	149.41	0.000463	0.98	69.94	62.12	0.23
Caposelvi	4	Max WS	SA_100_cr	24.73	145.94	148.85	147.30	148.87	0.000251	0.58	43.22	37.45	0.16
Caposelvi	4	Max WS	SA_30_cr	20.65	145.94	148.34	147.21	148.37	0.000494	0.74	27.77	25.23	0.23
Caposelvi	4	Max WS	SA_20_cr	20.86	145.94	148.18	147.21	148.22	0.000676	0.87	23.93	22.17	0.27
Caposelvi	3	Max WS	SA_200_cr	58.86	145.19	149.37	147.54	149.41	0.000277	0.93	80.95	75.10	0.19
Caposelvi	3	Max WS	SA_100_cr	23.82	145.19	148.85	146.86	148.86	0.000133	0.55	48.37	43.04	0.13
Caposelvi	3	Max WS	SA_30_cr	20.65	145.19	148.33	146.78	148.36	0.000239	0.69	30.59	27.29	0.17
Caposelvi	3	Max WS	SA_20_cr	20.84	145.19	148.17	146.79	148.20	0.000306	0.77	27.03	18.34	0.20
Caposelvi	2.99			Lat Struct									
Caposelvi	2	Max WS	SA_200_cr	44.38	145.69	149.39	147.40	149.41	0.000058	0.54	108.71	75.10	0.11
Caposelvi	2	Max WS	SA_100_cr	25.75	145.69	148.85	146.96	148.86	0.000057	0.45	68.69	64.22	0.10
Caposelvi	2	Max WS	SA_30_cr	20.63	145.69	148.33	146.81	148.35	0.000114	0.53	40.85	45.82	0.14
Caposelvi	2	Max WS	SA_20_cr	20.83	145.69	148.17	146.82	148.19	0.000168	0.61	34.59	31.63	0.17
Caposelvi	1	Max WS	SA_200_cr	37.62	145.98	149.18	146.89	149.19	0.000027	0.36	121.82	70.72	0.08

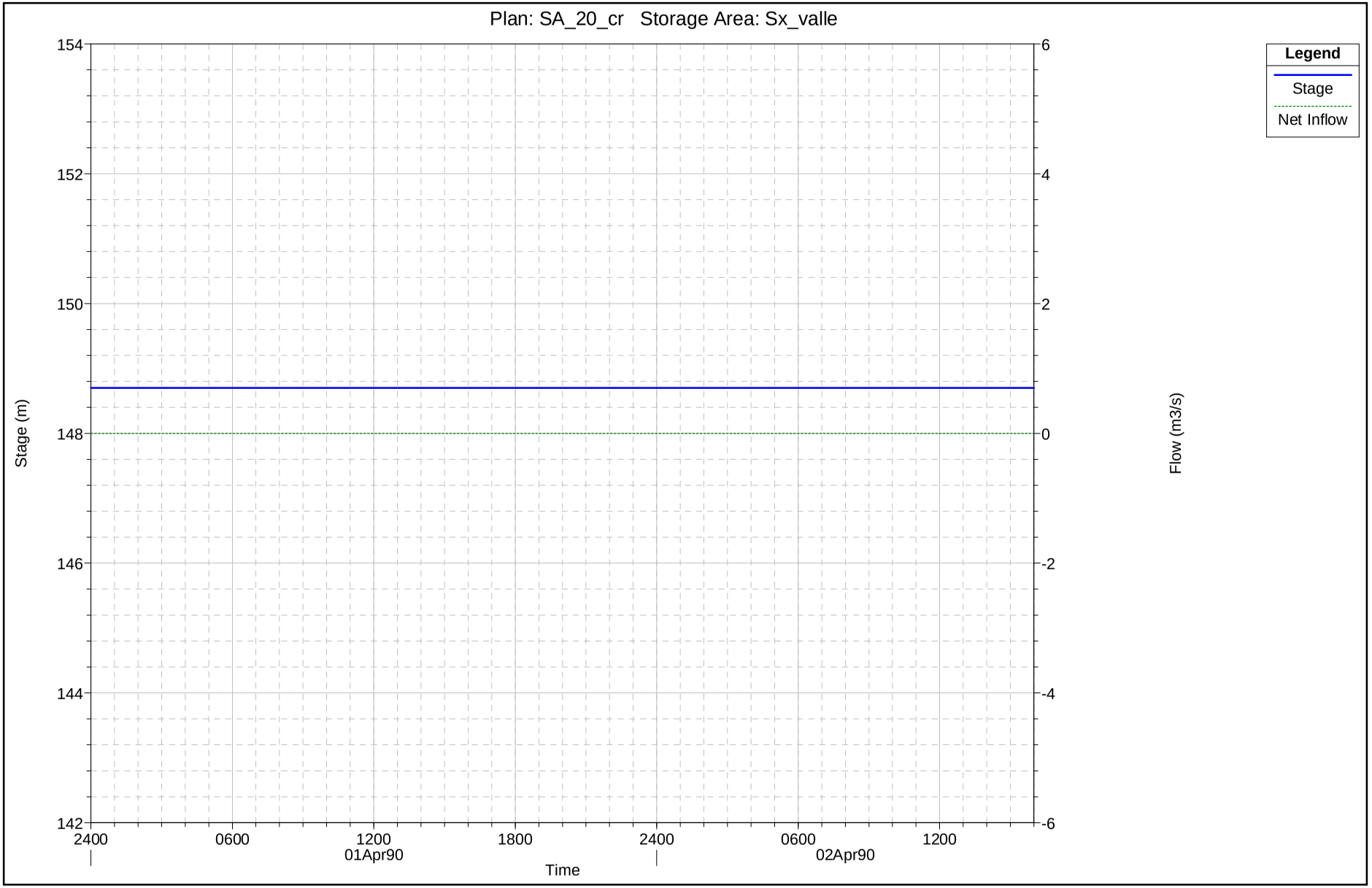
HEC-RAS River: Caposelvi Reach: Caposelvi Profile: Max WS (Continued)

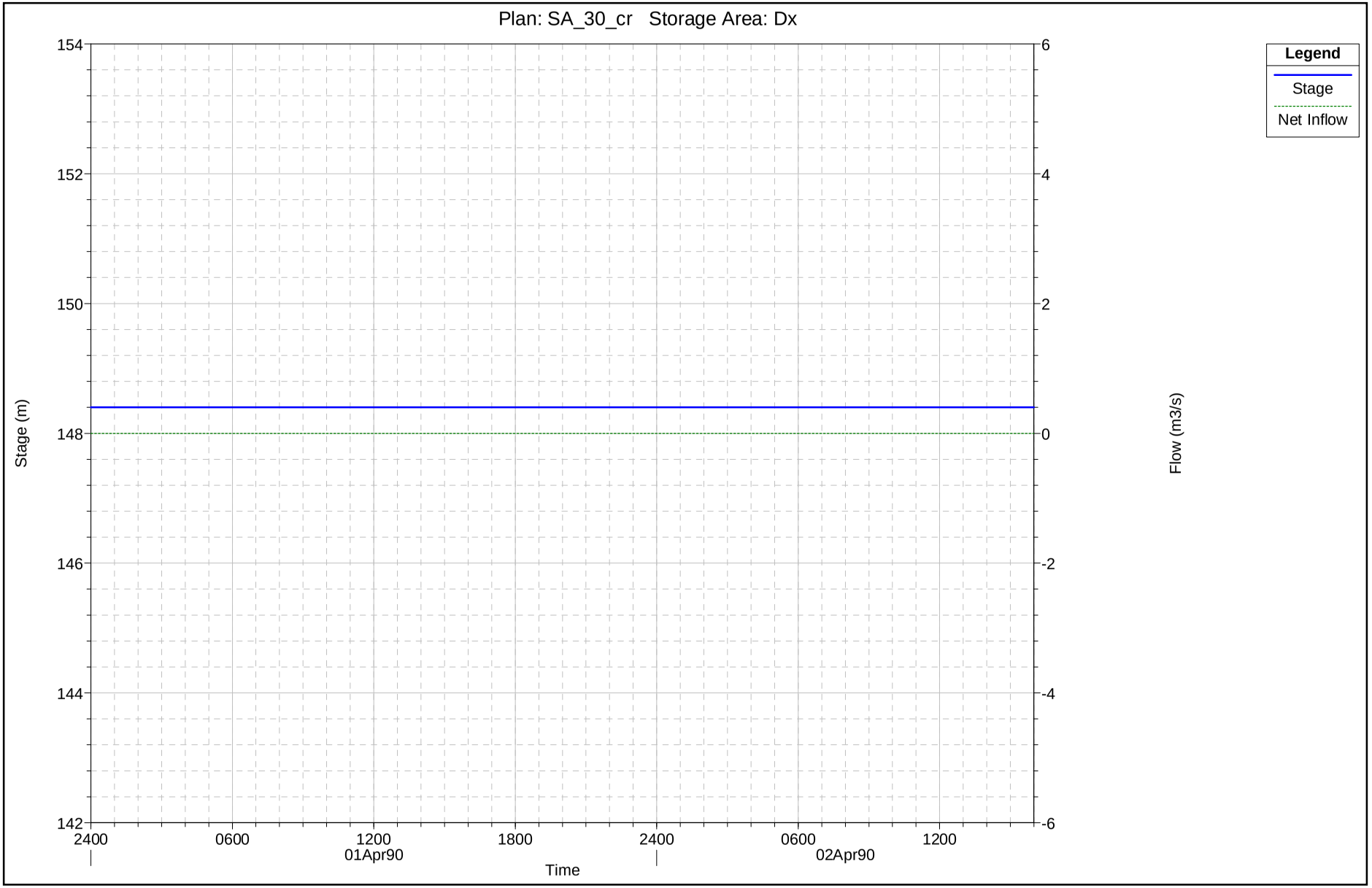
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Caposelvi	1	Max WS	SA_100_cr	24.60	145.98	148.85	146.73	148.85	0.000020	0.29	97.94	69.95	0.06
Caposelvi	1	Max WS	SA_30_cr	20.62	145.98	148.34	146.66	148.35	0.000033	0.33	65.50	52.94	0.08
Caposelvi	1	Max WS	SA_20_cr	20.80	145.98	148.18	146.67	148.19	0.000046	0.37	57.61	45.75	0.09

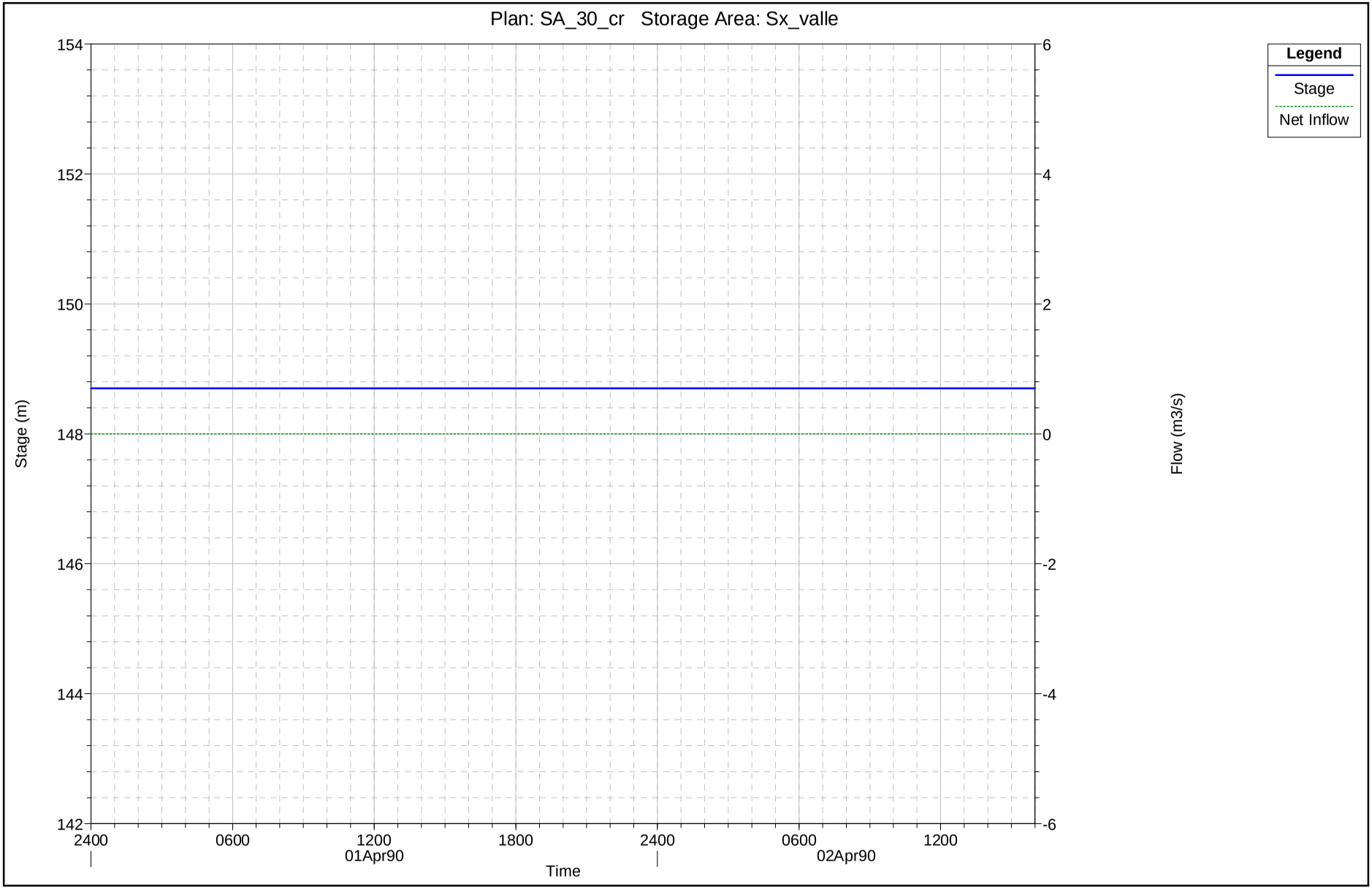
HEC-RAS Profile: Max WS

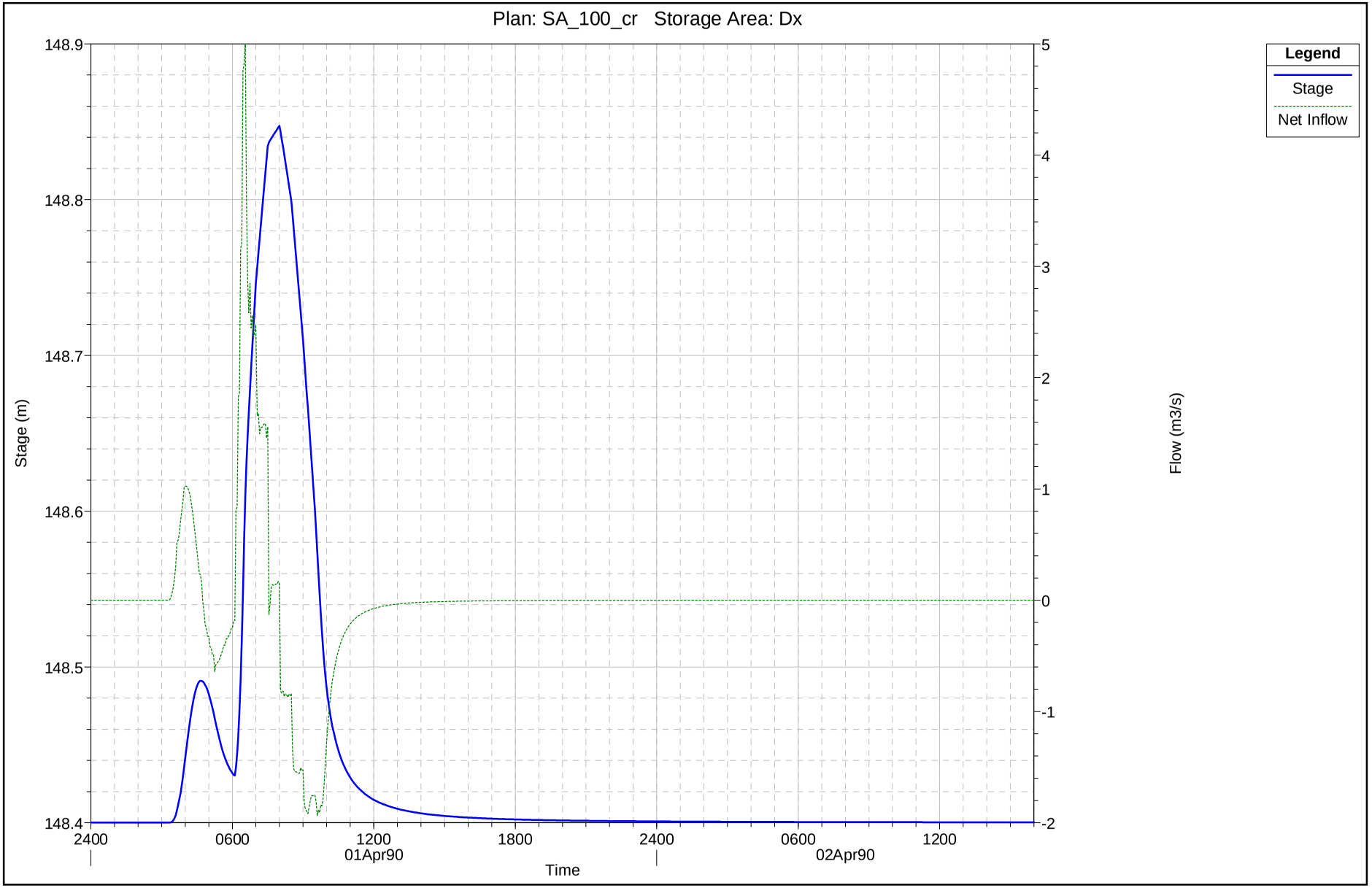
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
Dx	Max WS	SA_200_cr	149.33	148.40	49.31	30.63	28.46
Dx	Max WS	SA_100_cr	148.85	148.40	1.67	30.63	13.70
Dx	Max WS	SA_30_cr	148.40	148.40	0.00	30.63	0.00
Dx	Max WS	SA_20_cr	148.40	148.40	0.00	30.63	0.00
Sx_valle	Max WS	SA_200_cr	149.18	148.70	11.68	8.00	3.81
Sx_valle	Max WS	SA_100_cr	148.70	148.70	0.00	8.00	0.00
Sx_valle	Max WS	SA_30_cr	148.70	148.70	0.00	8.00	0.00
Sx_valle	Max WS	SA_20_cr	148.70	148.70	0.00	8.00	0.00

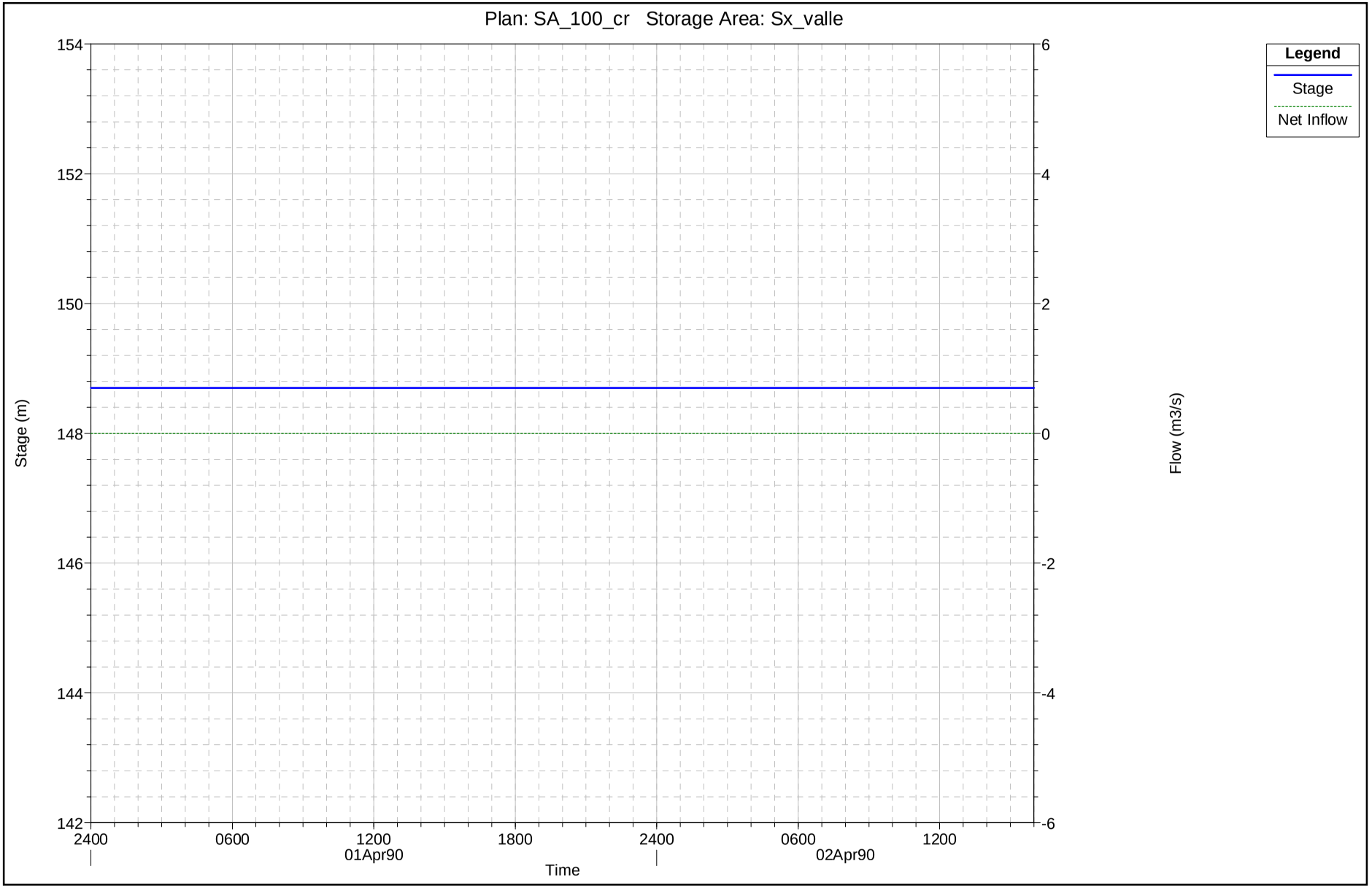

Plan: SA_20_cr Storage Area: Dx
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
154
152
150
148
146
144
142
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
01Apr90
02Apr90
Time

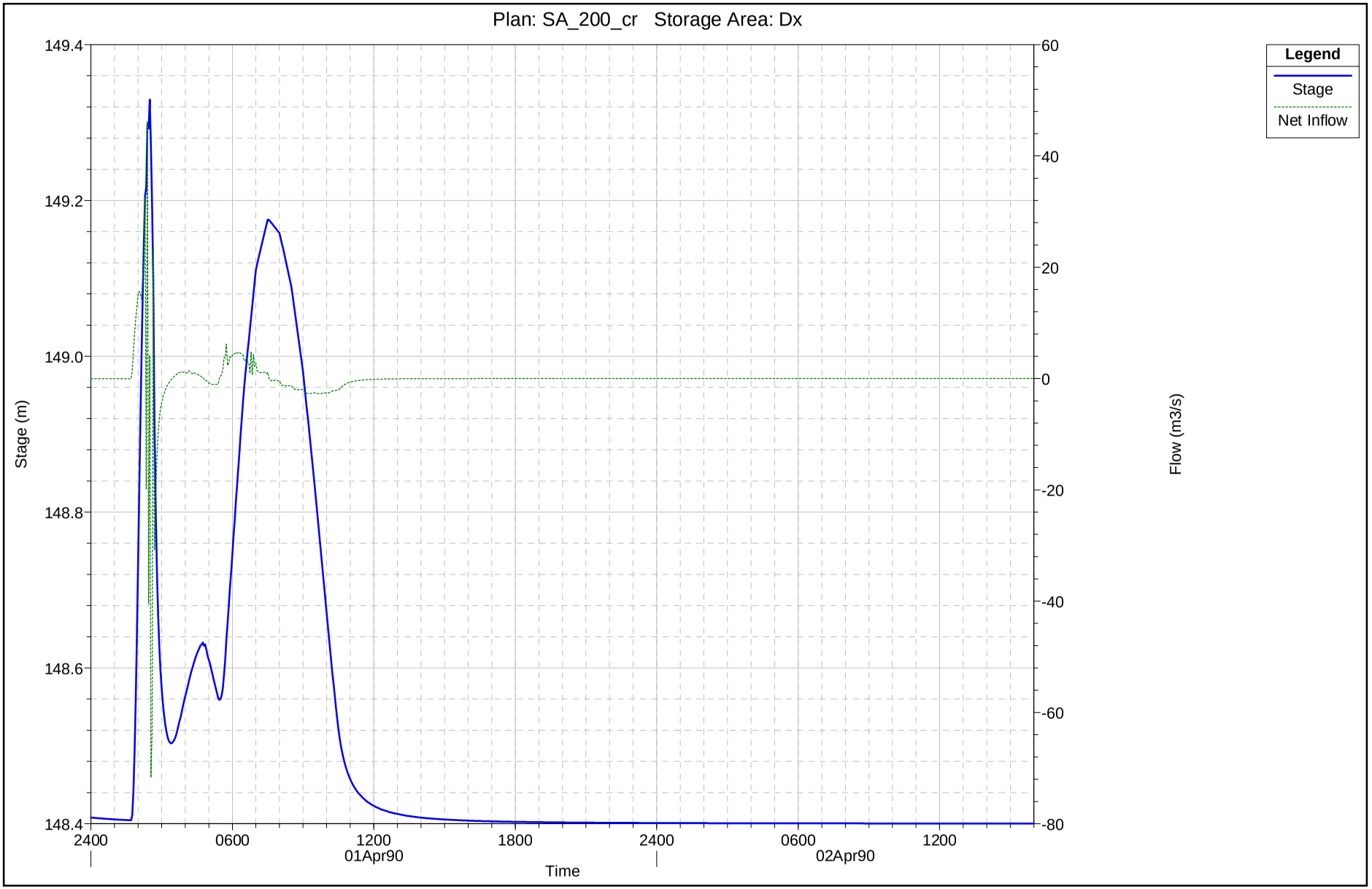

Plan: SA_20_cr Storage Area: Sx_valle
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
154
152
150
148
146
144
142
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
01Apr90
02Apr90
Time

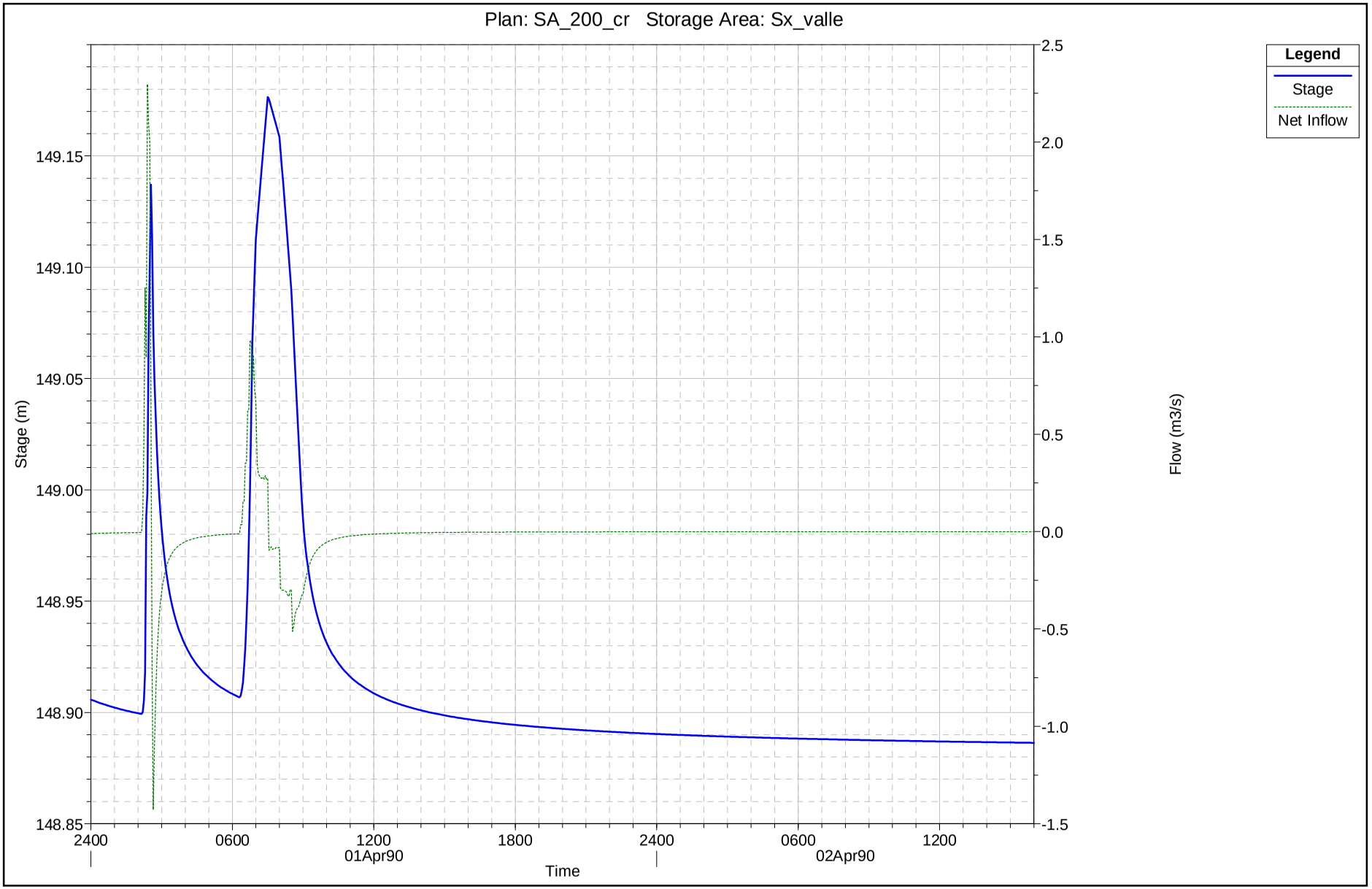

Plan: SA_30_cr Storage Area: Dx
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
154
152
150
148
146
144
142
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
01Apr90
02Apr90
Time

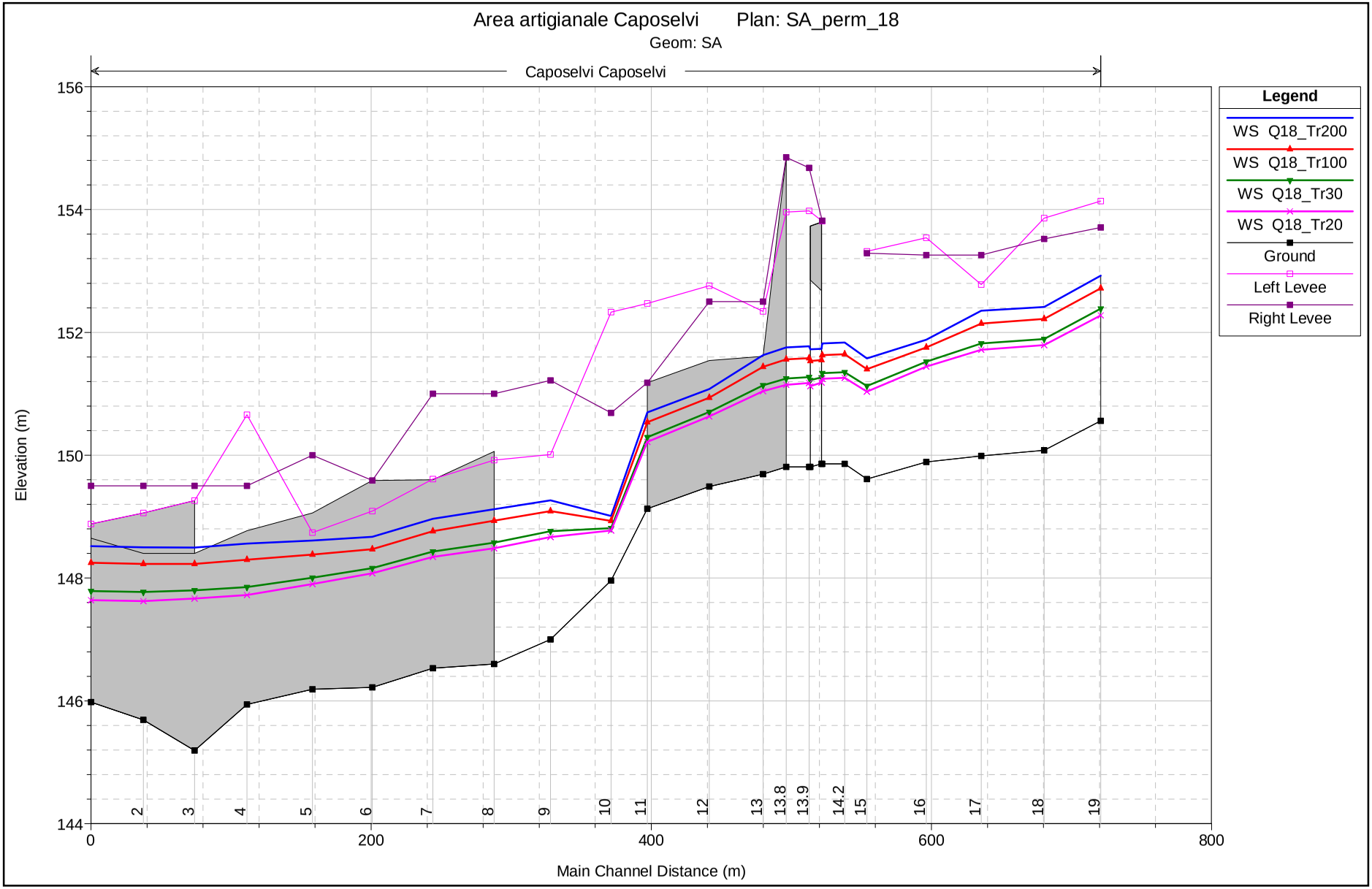

Plan: SA_30_cr Storage Area: Sx_valle
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
154
152
150
148
146
144
142
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
01Apr90
02Apr90
Time

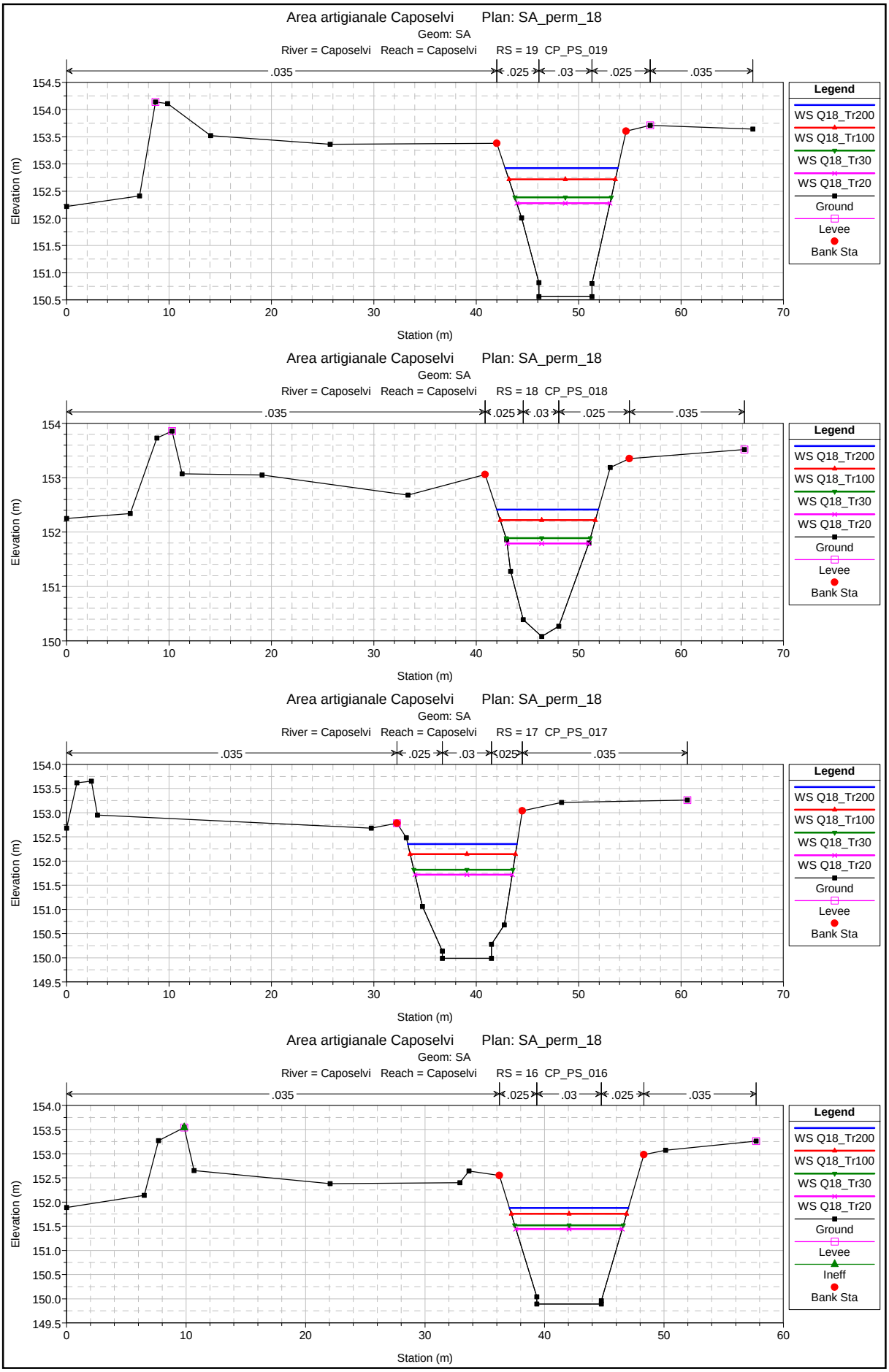

Plan: SA_100_cr Storage Area: Dx
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
148.9
148.8
148.7
148.6
148.5
148.4
5
4
3
2
1
0
-1
-2
2400
0600
1200
1800
2400
0600
1200
01Apr90
02Apr90
Time

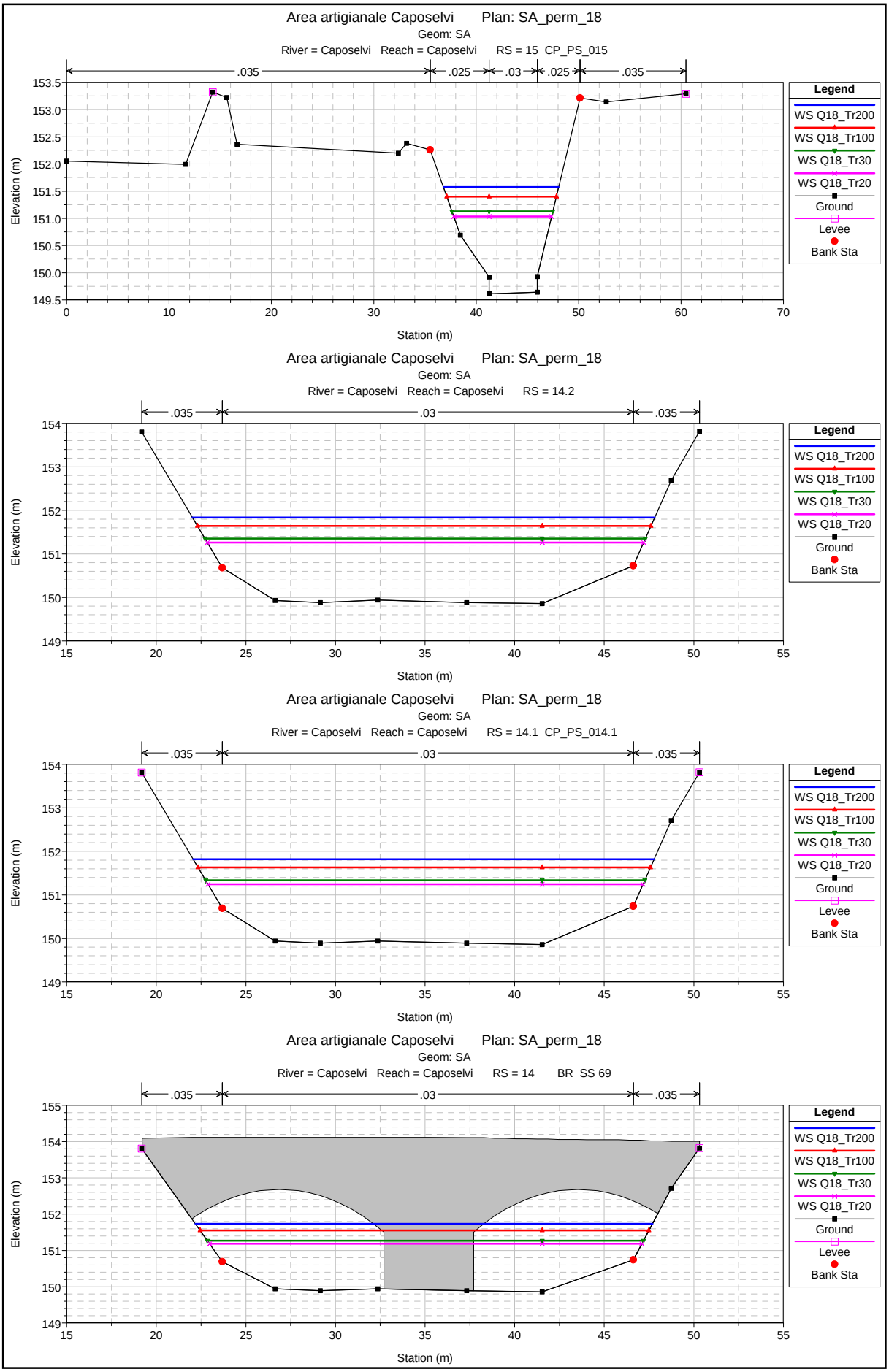

Plan: SA_100_cr Storage Area: Sx_valle
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
154
152
150
148
146
144
142
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
01Apr90
02Apr90
Time

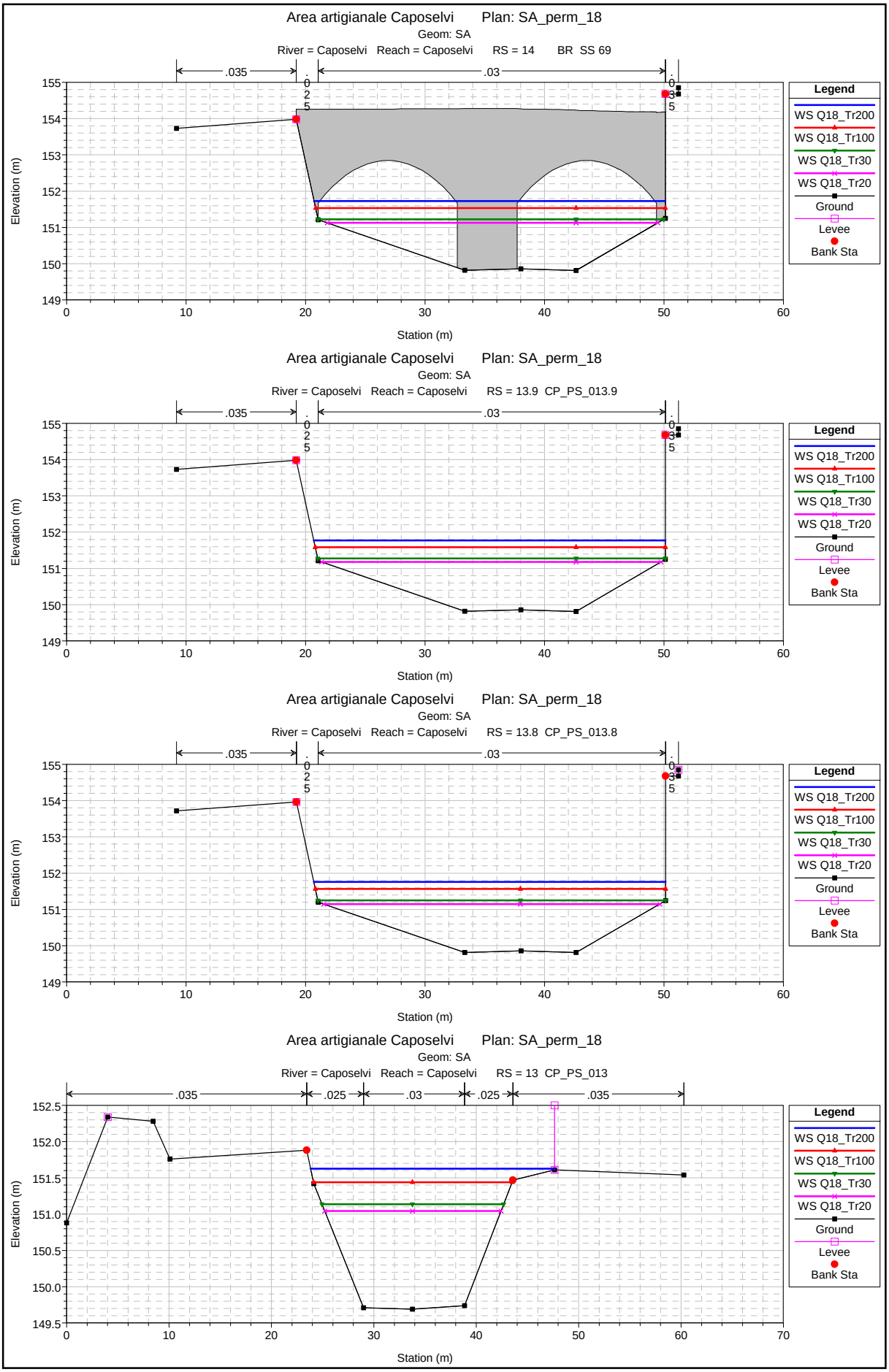

Plan: SA_200_cr Storage Area: Dx
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
149.4
149.2
149.0
148.8
148.6
148.4
60
40
20
0
-20
-40
-60
-80
2400
0600
1200
1800
2400
0600
1200
01Apr90
02Apr90
Time

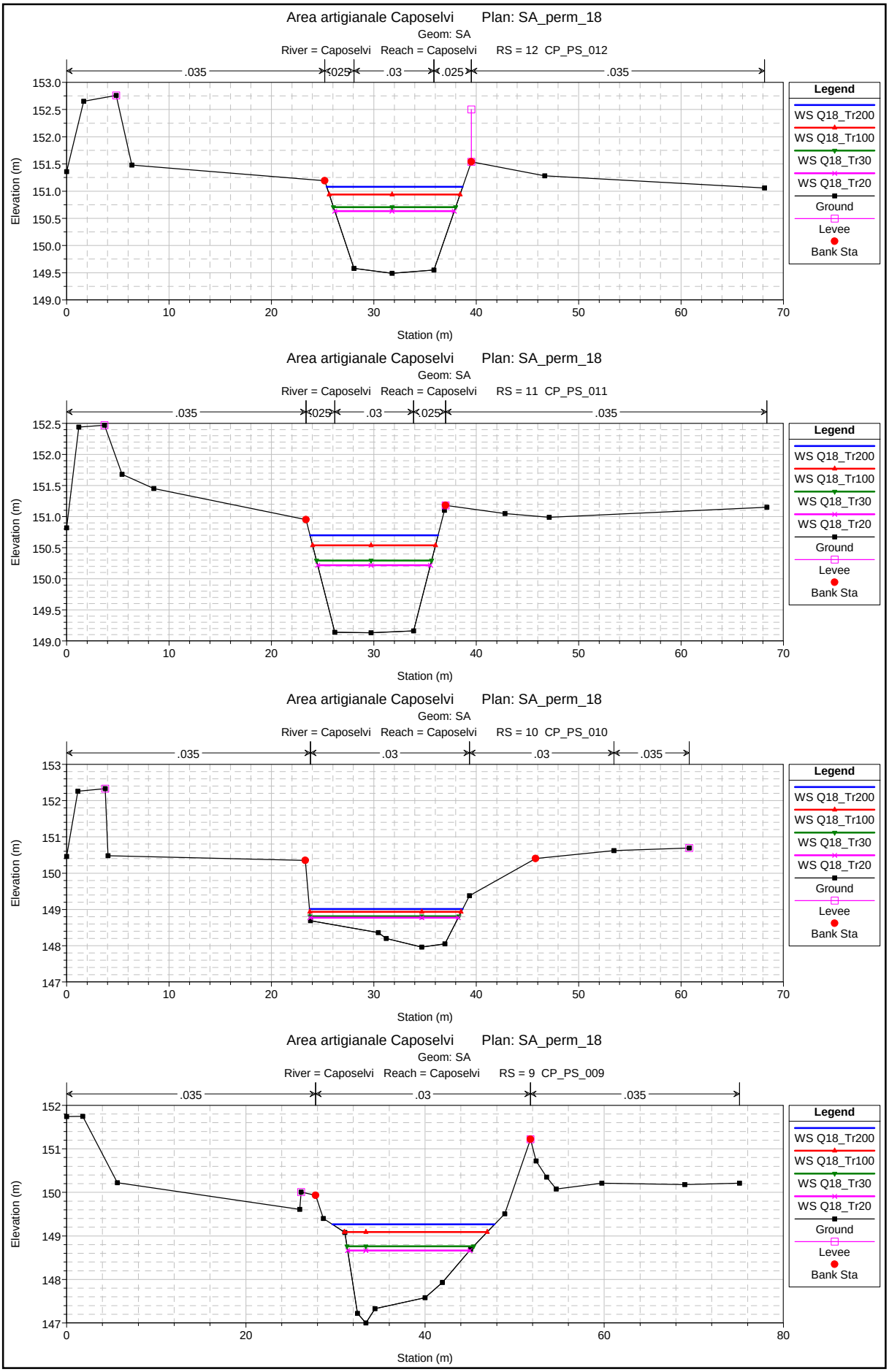

Plan: SA_200_cr Storage Area: Sx_valle
Legend
Stage
Net Inflow
Stage (m)
149.15
149.10
149.05
149.00
148.95
148.90
148.85
Flow (m3/s)
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
2400
0600
1200
1800
2400
0600
1200
01Apr90
02Apr90
Time

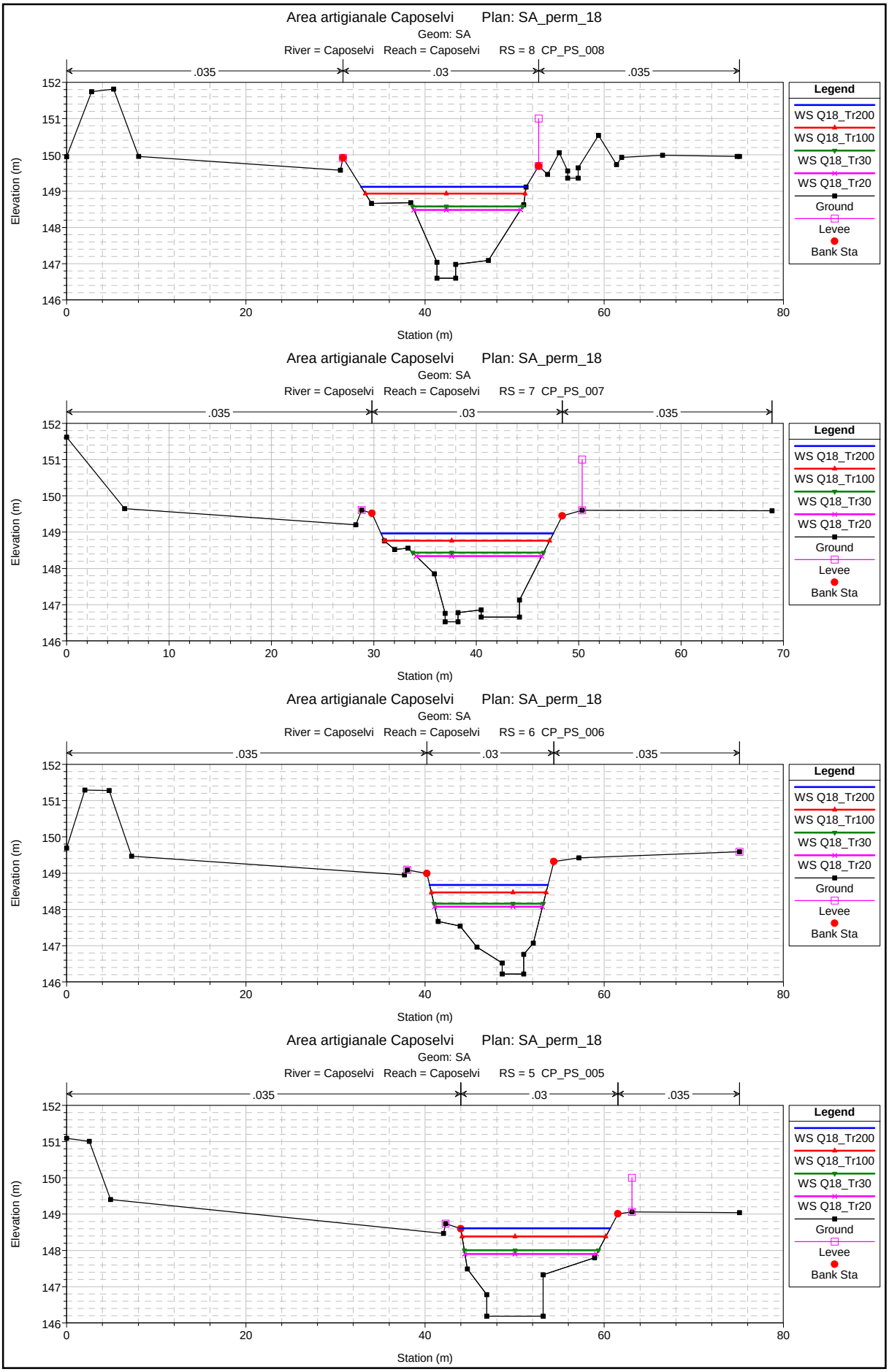

Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
Caposelvi Caposelvi
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Left Levee
Right Levee
Elevation (m)
Main Channel Distance (m)
156
154
152
150
148
146
144
0
200
400
600
800
2
3
4
5
6
7
8
9
10
11
12
13
13.8
13.9
14.2
15
16
17
18
19

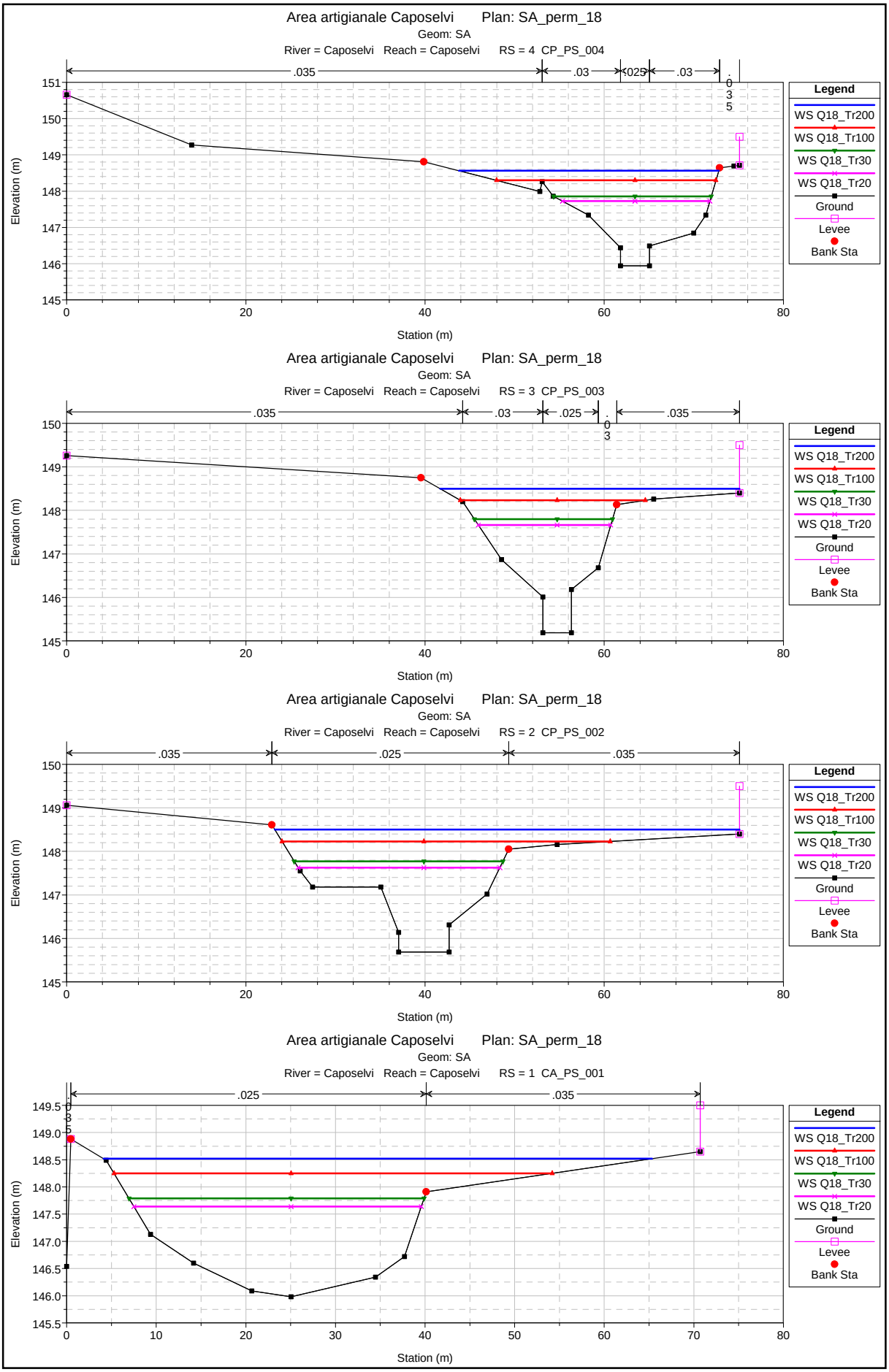

Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 19 CP_PS_019
.035
.025
.03
.025
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 18 CP_PS_018
.035
.025
.03
.025
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 17 CP_PS_017
.035
.025
.03
.025
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 16 CP_PS_016
.035
.025
.03
.025
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta


Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 15 CP_PS_015
.035
.025
.03
.025
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 14.2
.035
.03
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Bank Sta
Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 14.1 CP_PS_014.1
.035
.03
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 14 BR SS 69
.035
.03
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta


Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 14 BR SS 69
.035
.025
.03
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 13.9 CP_PS_013.9
Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 13.8 CP_PS_013.8
Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 13 CP_PS_013


Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 12 CP_PS_012
.035
.025
.03
.025
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 11 CP_PS_011
.035
.025
.03
.025
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 10 CP_PS_010
.035
.03
.03
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 9 CP_PS_009
.035
.03
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta


Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 8 CP_PS_008
.035
.03
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 7 CP_PS_007
.035
.03
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 6 CP_PS_006
.035
.03
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 5 CP_PS_005
.035
.03
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta


Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 4 CP_PS_004
.035
.03
.025
.03
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 3 CP_PS_003
.035
.03
.025
.03
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 2 CP_PS_002
.035
.025
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Area artigianale Caposelvi Plan: SA_perm_18
Geom: SA
River = Caposelvi Reach = Caposelvi RS = 1 CA_PS_001
.025
.035
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta

HEC-RAS Plan: Sa_perm_18 River: Caposelvi Reach: Caposelvi

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Caposelvi	19	Q18_Tr200	55.18	150.56	152.92	152.58	153.39	0.004319	3.03	18.19	11.01	0.75
Caposelvi	19	Q18_Tr100	46.27	150.56	152.72	152.38	153.15	0.004351	2.89	16.00	10.40	0.74
Caposelvi	19	Q18_Tr30	33.61	150.56	152.39	152.08	152.74	0.004400	2.65	12.70	9.41	0.73
Caposelvi	19	Q18_Tr20	30.03	150.56	152.28	151.98	152.61	0.004431	2.57	11.70	9.09	0.72
Caposelvi	18	Q18_Tr200	55.18	150.08	152.41	152.41	153.15	0.007256	3.80	14.54	9.92	1.00
Caposelvi	18	Q18_Tr100	46.27	150.08	152.22	152.22	152.90	0.007417	3.65	12.68	9.29	1.00
Caposelvi	18	Q18_Tr30	33.61	150.08	151.89	151.89	152.49	0.007898	3.42	9.81	8.23	1.00
Caposelvi	18	Q18_Tr20	30.03	150.08	151.79	151.79	152.36	0.008053	3.34	9.00	7.97	1.00
Caposelvi	17	Q18_Tr200	55.18	149.99	152.35	151.91	152.78	0.003594	2.90	19.06	10.67	0.69
Caposelvi	17	Q18_Tr100	46.27	149.99	152.14	151.73	152.53	0.003599	2.74	16.86	10.28	0.68
Caposelvi	17	Q18_Tr30	33.61	149.99	151.82	151.44	152.13	0.003535	2.47	13.63	9.68	0.66
Caposelvi	17	Q18_Tr20	30.03	149.99	151.72	151.36	152.00	0.003507	2.37	12.66	9.50	0.66
Caposelvi	16	Q18_Tr200	55.18	149.89	151.88	151.83	152.57	0.007140	3.67	15.04	9.96	0.95
Caposelvi	16	Q18_Tr100	46.27	149.89	151.75	151.64	152.33	0.006405	3.35	13.82	9.66	0.89
Caposelvi	16	Q18_Tr30	33.61	149.89	151.52	151.34	151.95	0.005559	2.89	11.62	9.09	0.82
Caposelvi	16	Q18_Tr20	30.03	149.89	151.44	151.24	151.83	0.005315	2.75	10.92	8.90	0.79
Caposelvi	15	Q18_Tr200	55.18	149.61	151.58	151.58	152.25	0.007709	3.64	15.18	11.25	1.00
Caposelvi	15	Q18_Tr100	46.27	149.61	151.40	151.40	152.02	0.008001	3.49	13.26	10.70	1.00
Caposelvi	15	Q18_Tr30	33.61	149.61	151.13	151.13	151.65	0.008421	3.22	10.45	9.84	1.00
Caposelvi	15	Q18_Tr20	30.03	149.61	151.04	151.04	151.54	0.008695	3.14	9.57	9.56	1.00
Caposelvi	14.2	Q18_Tr200	55.18	149.86	151.84	150.88	151.92	0.000726	1.32	42.84	25.79	0.31
Caposelvi	14.2	Q18_Tr100	46.27	149.86	151.64	150.79	151.72	0.000749	1.24	37.94	25.31	0.31
Caposelvi	14.2	Q18_Tr30	33.61	149.86	151.35	150.63	151.41	0.000781	1.11	30.63	24.57	0.31
Caposelvi	14.2	Q18_Tr20	30.03	149.86	151.26	150.58	151.32	0.000791	1.07	28.44	24.34	0.31
Caposelvi	14.1	Q18_Tr200	55.18	149.86	151.82	150.88	151.91	0.000755	1.34	42.30	25.73	0.32
Caposelvi	14.1	Q18_Tr100	46.27	149.86	151.63	150.79	151.71	0.000783	1.26	37.40	25.24	0.32
Caposelvi	14.1	Q18_Tr30	33.61	149.86	151.34	150.64	151.40	0.000826	1.13	30.09	24.50	0.32
Caposelvi	14.1	Q18_Tr20	30.03	149.86	151.25	150.59	151.31	0.000840	1.09	27.91	24.28	0.32

HEC-RAS Plan: Sa_perm_18 River: Caposelvi Reach: Caposelvi (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Caposelvi	14		Bridge									
Caposelvi	13.9	Q18_Tr200	55.18	149.81	151.77	150.97	151.86	0.000938	1.29	42.89	29.44	0.34
Caposelvi	13.9	Q18_Tr100	46.27	149.81	151.58	150.87	151.66	0.001040	1.24	37.24	29.32	0.35
Caposelvi	13.9	Q18_Tr30	33.61	149.81	151.27	150.71	151.35	0.001342	1.19	28.24	29.11	0.39
Caposelvi	13.9	Q18_Tr20	30.03	149.81	151.18	150.65	151.25	0.001464	1.18	25.45	28.39	0.40
Caposelvi	13.8	Q18_Tr200	55.18	149.81	151.76	150.97	151.84	0.000961	1.30	42.58	29.44	0.34
Caposelvi	13.8	Q18_Tr100	46.27	149.81	151.56	150.87	151.64	0.001074	1.26	36.86	29.31	0.36
Caposelvi	13.8	Q18_Tr30	33.61	149.81	151.25	150.70	151.32	0.001436	1.21	27.66	29.10	0.40
Caposelvi	13.8	Q18_Tr20	30.03	149.81	151.15	150.65	151.22	0.001575	1.21	24.80	28.12	0.41
Caposelvi	13.7		Lat Struct									
Caposelvi	13	Q18_Tr200	55.18	149.69	151.63	151.01	151.81	0.001715	1.90	29.31	23.82	0.50
Caposelvi	13	Q18_Tr100	46.27	149.69	151.44	150.88	151.61	0.001858	1.83	25.27	19.40	0.51
Caposelvi	13	Q18_Tr30	33.61	149.69	151.14	150.67	151.29	0.002033	1.71	19.67	17.74	0.52
Caposelvi	13	Q18_Tr20	30.03	149.69	151.04	150.61	151.19	0.002095	1.67	18.03	17.22	0.52
Caposelvi	12	Q18_Tr200	55.18	149.49	151.08	151.06	151.66	0.007345	3.39	16.27	13.28	0.98
Caposelvi	12	Q18_Tr100	46.27	149.49	150.94	150.91	151.46	0.007355	3.21	14.42	12.77	0.96
Caposelvi	12	Q18_Tr30	33.61	149.49	150.70	150.66	151.14	0.007499	2.91	11.54	11.93	0.94
Caposelvi	12	Q18_Tr20	30.03	149.49	150.63	150.59	151.03	0.007555	2.81	10.68	11.67	0.94
Caposelvi	11	Q18_Tr200	55.18	149.13	150.70	150.70	151.33	0.007797	3.51	15.71	12.50	1.00
Caposelvi	11	Q18_Tr100	46.27	149.13	150.54	150.54	151.12	0.008134	3.37	13.74	12.00	1.00
Caposelvi	11	Q18_Tr30	33.61	149.13	150.29	150.29	150.78	0.008571	3.08	10.90	11.24	1.00
Caposelvi	11	Q18_Tr20	30.03	149.13	150.22	150.22	150.67	0.008696	2.98	10.06	11.01	1.00
Caposelvi	10	Q18_Tr200	55.18	147.96	149.01	149.47	150.52	0.047318	5.45	10.13	14.96	2.11
Caposelvi	10	Q18_Tr100	46.27	147.96	148.93	149.33	150.29	0.049112	5.17	8.95	14.79	2.12
Caposelvi	10	Q18_Tr30	33.61	147.96	148.81	149.14	149.93	0.052061	4.68	7.18	14.53	2.12
Caposelvi	10	Q18_Tr20	30.03	147.96	148.77	149.08	149.81	0.052981	4.51	6.66	14.46	2.12
Caposelvi	9	Q18_Tr200	55.18	147.00	149.26	148.89	149.57	0.004304	2.43	22.67	18.10	0.69

HEC-RAS Plan: Sa_perm_18 River: Caposelvi Reach: Caposelvi (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Caposelvi	9	Q18_Tr100	46.27	147.00	149.09	148.74	149.37	0.004144	2.35	19.67	15.96	0.68
Caposelvi	9	Q18_Tr30	33.61	147.00	148.76	148.51	149.03	0.004807	2.28	14.77	14.15	0.71
Caposelvi	9	Q18_Tr20	30.03	147.00	148.67	148.44	148.92	0.004993	2.23	13.45	13.64	0.72
Caposelvi	8	Q18_Tr200	55.18	146.60	149.12	148.76	149.39	0.003887	2.31	23.88	18.43	0.65
Caposelvi	8	Q18_Tr100	46.27	146.60	148.93	148.50	149.19	0.004345	2.26	20.47	17.85	0.67
Caposelvi	8	Q18_Tr30	33.61	146.60	148.58	148.24	148.84	0.004305	2.28	14.73	12.33	0.67
Caposelvi	8	Q18_Tr20	30.03	146.60	148.48	148.15	148.73	0.004293	2.21	13.60	11.92	0.66
Caposelvi	7.8		Lat Struct									
Caposelvi	7	Q18_Tr200	55.18	146.53	148.97	148.42	149.23	0.003423	2.28	24.18	16.82	0.61
Caposelvi	7	Q18_Tr100	46.27	146.53	148.76	148.25	149.01	0.003735	2.22	20.83	16.13	0.62
Caposelvi	7	Q18_Tr30	33.61	146.53	148.43	147.96	148.66	0.003579	2.10	16.00	12.77	0.60
Caposelvi	7	Q18_Tr20	30.03	146.53	148.34	147.86	148.55	0.003481	2.02	14.86	12.27	0.59
Caposelvi	6	Q18_Tr200	55.18	146.22	148.67	148.32	149.05	0.004574	2.72	20.29	13.21	0.70
Caposelvi	6	Q18_Tr100	46.27	146.22	148.47	148.17	148.82	0.004854	2.62	17.66	12.81	0.71
Caposelvi	6	Q18_Tr30	33.61	146.22	148.16	147.94	148.46	0.005404	2.44	13.77	12.20	0.73
Caposelvi	6	Q18_Tr20	30.03	146.22	148.08	147.86	148.36	0.005426	2.35	12.77	12.03	0.73
Caposelvi	5	Q18_Tr200	55.18	146.19	148.61	148.06	148.85	0.002889	2.16	25.56	16.82	0.56
Caposelvi	5	Q18_Tr100	46.27	146.19	148.38	147.93	148.61	0.003256	2.12	21.81	16.05	0.58
Caposelvi	5	Q18_Tr30	33.61	146.19	148.01	147.69	148.23	0.004397	2.11	15.96	14.98	0.65
Caposelvi	5	Q18_Tr20	30.03	146.19	147.90	147.59	148.12	0.004753	2.08	14.45	14.70	0.67
Caposelvi	4	Q18_Tr200	55.18	145.94	148.56	147.85	148.70	0.002266	1.63	33.79	29.00	0.48
Caposelvi	4	Q18_Tr100	46.27	145.94	148.30	147.71	148.45	0.002702	1.73	26.69	24.50	0.53
Caposelvi	4	Q18_Tr30	33.61	145.94	147.85	147.49	148.04	0.003334	1.90	17.69	17.59	0.60
Caposelvi	4	Q18_Tr20	30.03	145.94	147.72	147.42	147.92	0.003808	1.94	15.46	16.44	0.64
Caposelvi	3	Q18_Tr200	55.18	145.19	148.50	147.48	148.63	0.001334	1.64	35.79	33.39	0.41
Caposelvi	3	Q18_Tr100	46.27	145.19	148.23	147.33	148.37	0.001372	1.65	28.22	20.64	0.41
Caposelvi	3	Q18_Tr30	33.61	145.19	147.80	147.09	147.93	0.001599	1.60	20.98	15.41	0.44
Caposelvi	3	Q18_Tr20	30.03	145.19	147.67	147.01	147.79	0.001688	1.58	18.95	14.79	0.45

HEC-RAS Plan: Sa_perm_18 River: Caposelvi Reach: Caposelvi (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Caposelvi	2.99		Lat Struct									
Caposelvi	2	Q18_Tr200	55.18	145.69	148.50	147.53	148.58	0.000557	1.25	49.27	51.87	0.31
Caposelvi	2	Q18_Tr100	46.27	145.69	148.23	147.42	148.31	0.000725	1.29	36.53	36.62	0.35
Caposelvi	2	Q18_Tr30	33.61	145.69	147.77	147.14	147.87	0.001207	1.37	24.48	23.30	0.43
Caposelvi	2	Q18_Tr20	30.03	145.69	147.62	147.06	147.73	0.001514	1.42	21.08	22.51	0.47
Caposelvi	1	Q18_Tr200	55.18	145.98	148.52	147.07	148.55	0.000171	0.79	75.76	61.22	0.18
Caposelvi	1	Q18_Tr100	46.27	145.98	148.25	146.98	148.28	0.000197	0.79	60.93	48.90	0.19
Caposelvi	1	Q18_Tr30	33.61	145.98	147.79	146.84	147.82	0.000274	0.78	42.90	32.92	0.22
Caposelvi	1	Q18_Tr20	30.03	145.98	147.64	146.80	147.67	0.000315	0.79	38.03	32.07	0.23

HEC-RAS Plan: Sa_perm_18

Storage Area	Profile	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
		(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
Dx	Q18_Tr200	148.40	148.40	1.62	30.63	0.00
Dx	Q18_Tr100	148.40	148.40	0.00	30.63	0.00
Dx	Q18_Tr30	148.40	148.40	0.00	30.63	0.00
Dx	Q18_Tr20	148.40	148.40	0.00	30.63	0.00
Sx_valle	Q18_Tr200	148.70	148.70	0.00	8.00	0.00
Sx_valle	Q18_Tr100	148.70	148.70	0.00	8.00	0.00
Sx_valle	Q18_Tr30	148.70	148.70	0.00	8.00	0.00
Sx_valle	Q18_Tr20	148.70	148.70	0.00	8.00	0.00

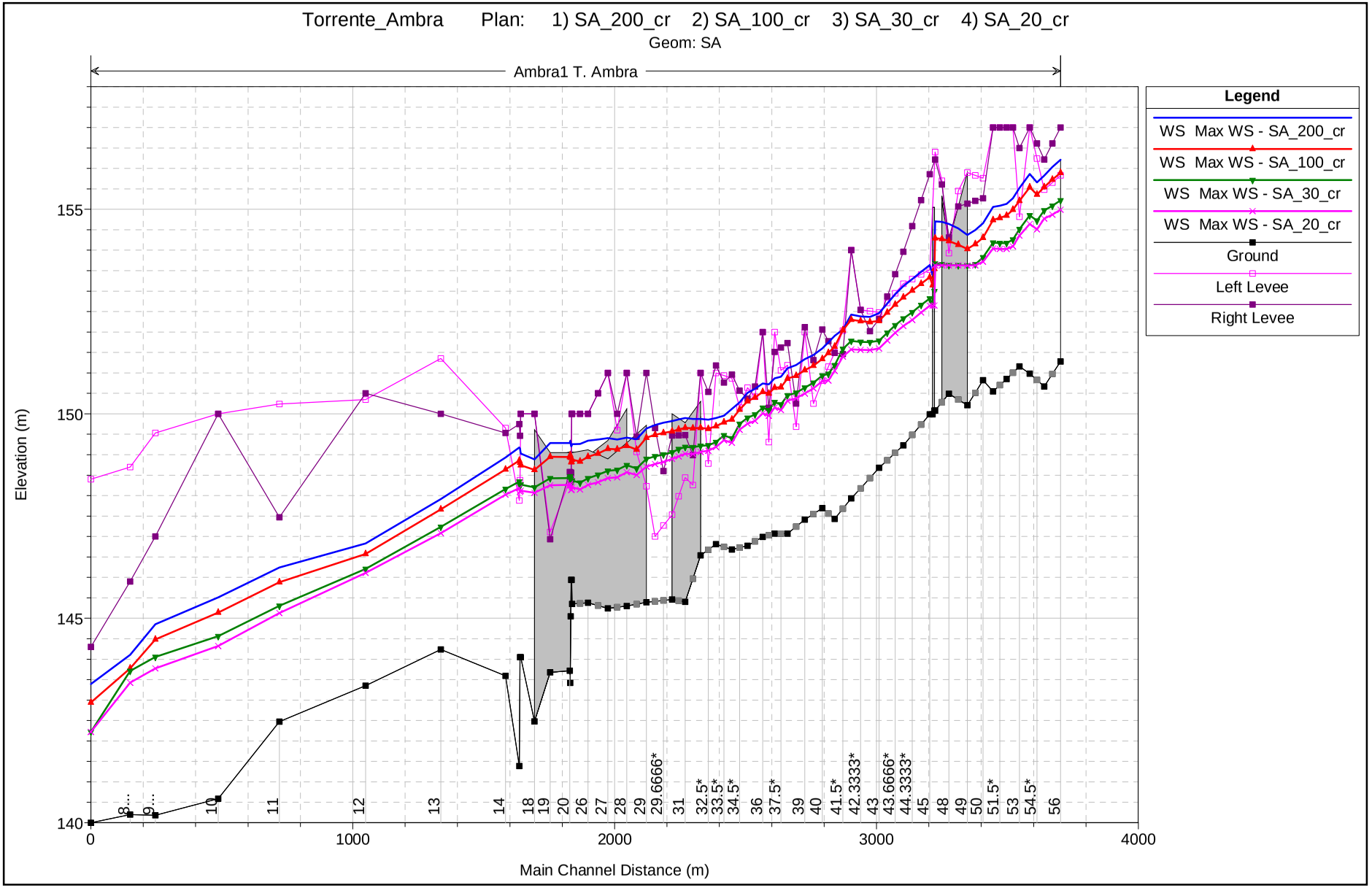
torrente Ambra

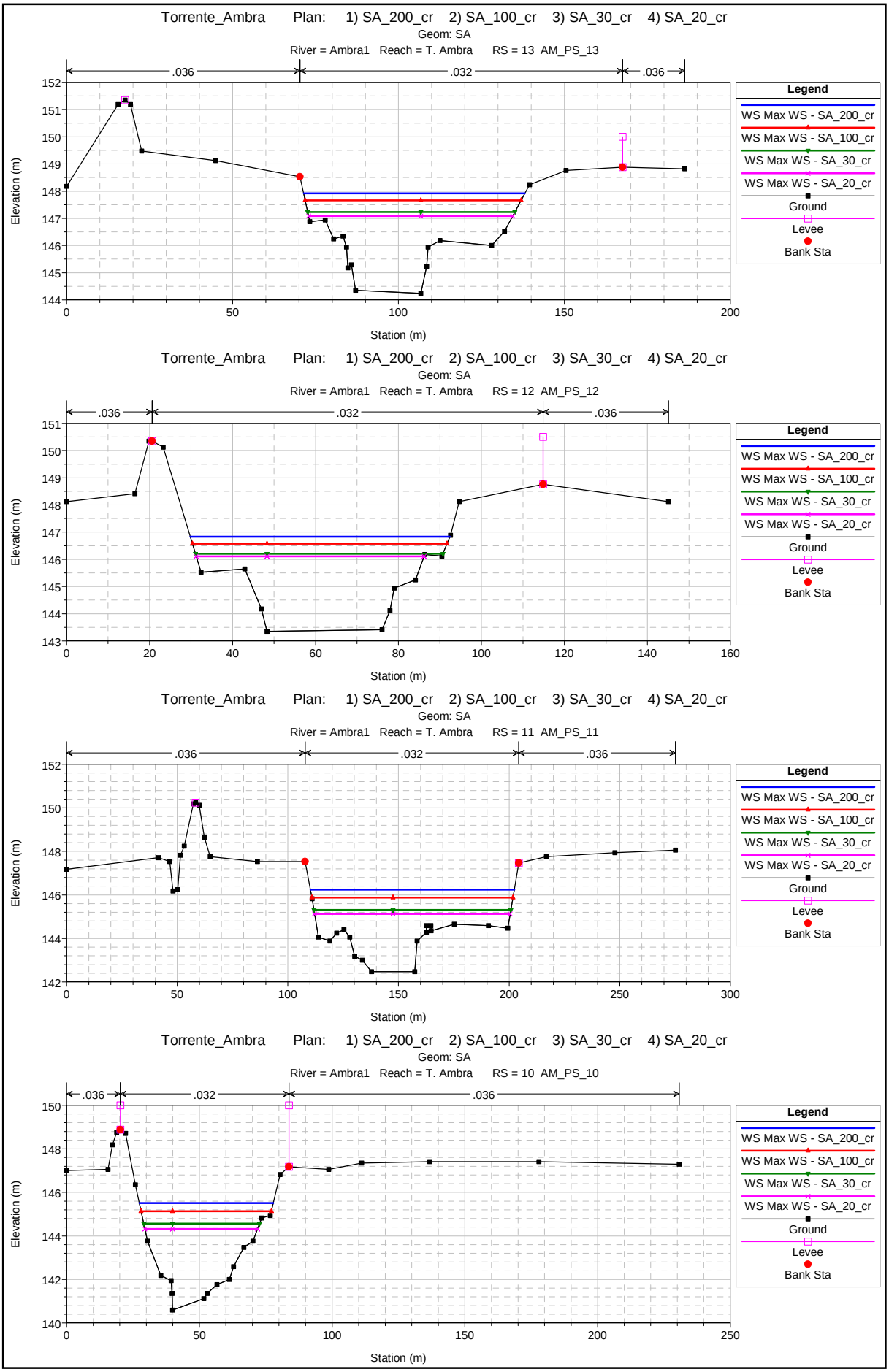
verifiche con Tpioggia critico per il Torrente Ambra

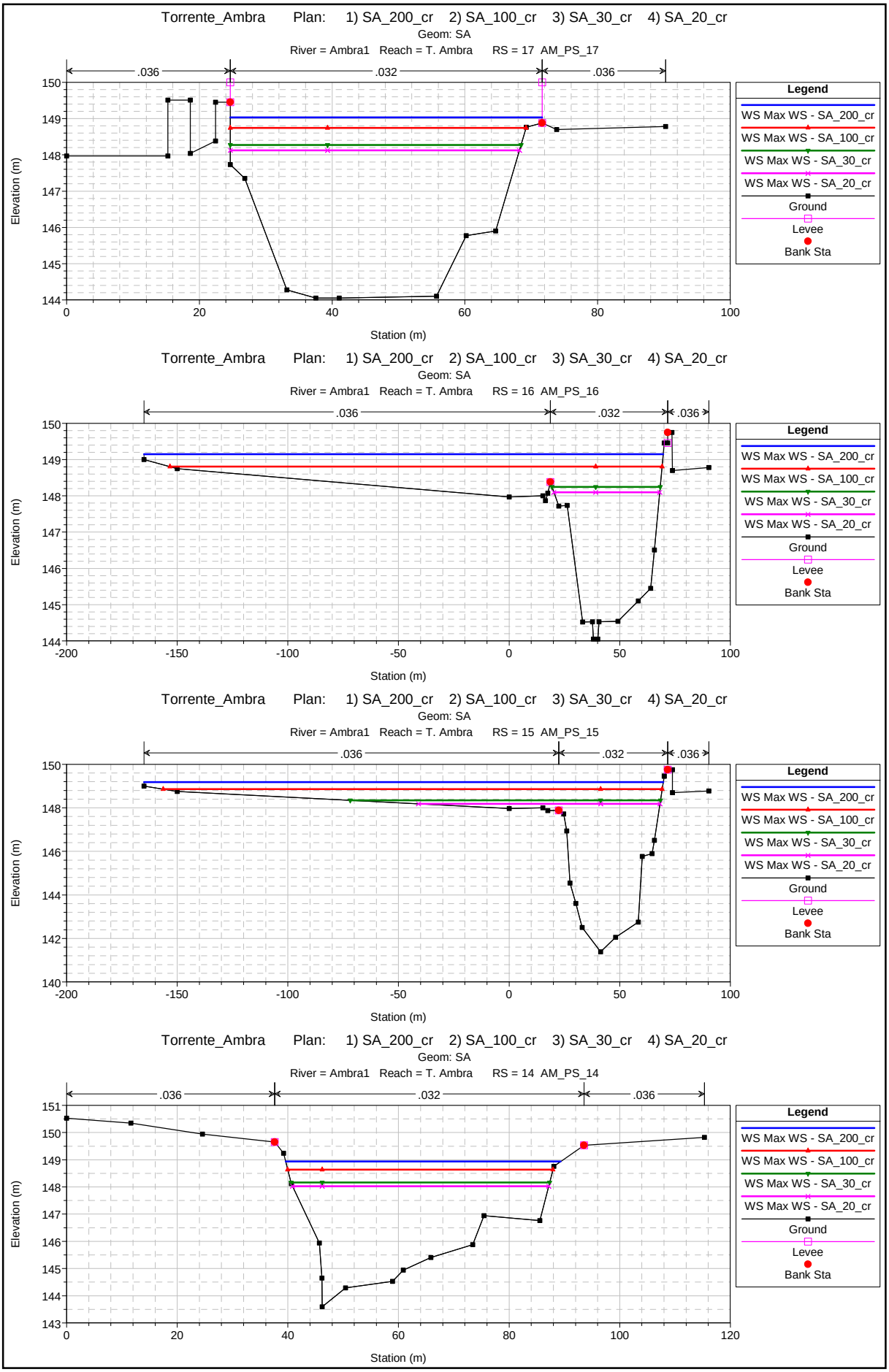
- moto vario
  Tr=200, 100, 30 e 20 anni
  profilo
  livelli idrici nelle sezioni di verifica
  tabella di output del software Hec-ras 4.0
  livelli e portate in ingresso alle aree di accumulo

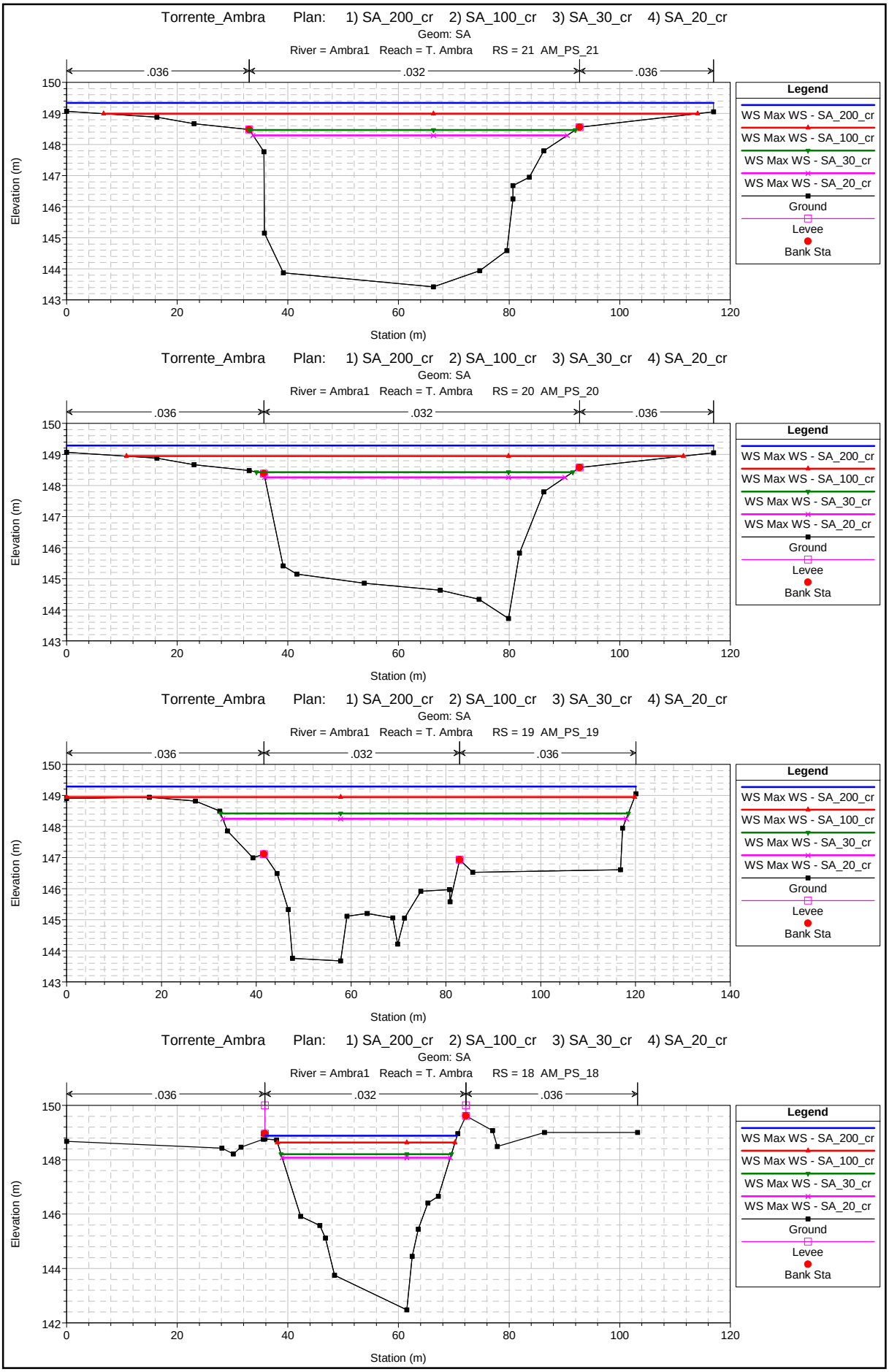
verifiche con Tpioggia critico per il fiume Arno

- moto permanente
  Tr=200, 100, 30 e 20 anni
  profilo
  livelli idrici nelle sezioni di verifica
  tabella di output del software Hec-ras 4.0


Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
Ambra1 T. Ambra
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Left Levee
Right Levee
Elevation (m)
155
150
145
140
0
1000
2000
3000
4000
Main Channel Distance (m)
8...
9...
10
11
12
13
14
18
19
20
26
27
28
29
29.6666*
31
32.5*
33.5*
34.5*
36
37.5*
39
40
41.5*
42.3333*
43
43.6666*
44.3333*
45
48
49
50
51.5*
53
54.5*
56


Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 13 AM_PS_13
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 12 AM_PS_12
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 11 AM_PS_11
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 10 AM_PS_10
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta

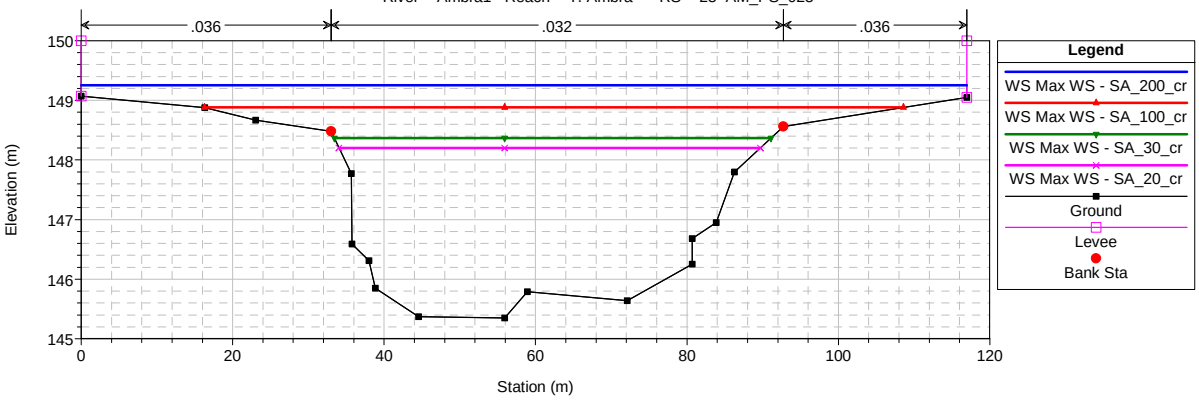

Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 17 AM_PS_17
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 16 AM_PS_16
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 15 AM_PS_15
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 14 AM_PS_14
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta


Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 21 AM_PS_21
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 20 AM_PS_20
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 19 AM_PS_19
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 18 AM_PS_18
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta

Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr

Geom: SA

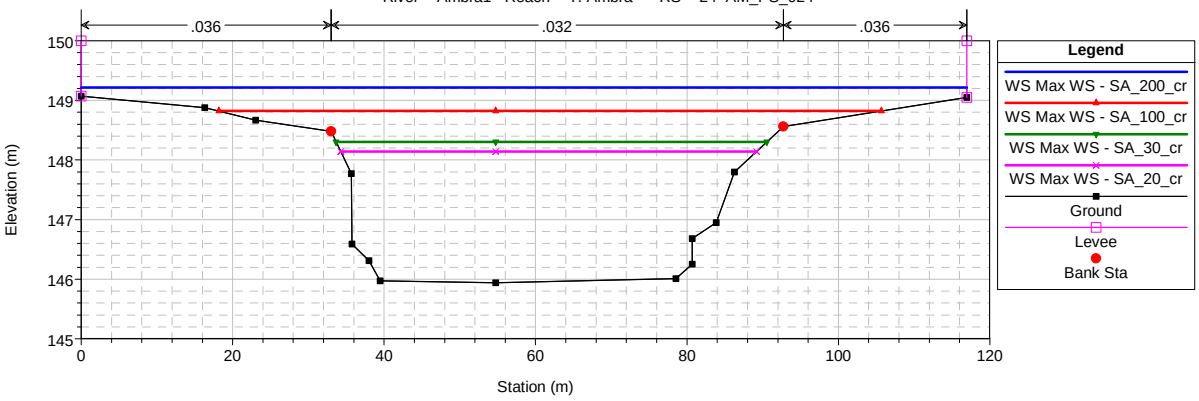
River = Ambra1 Reach = T. Ambra RS = 25 AM_PS_025



Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr

Geom: SA

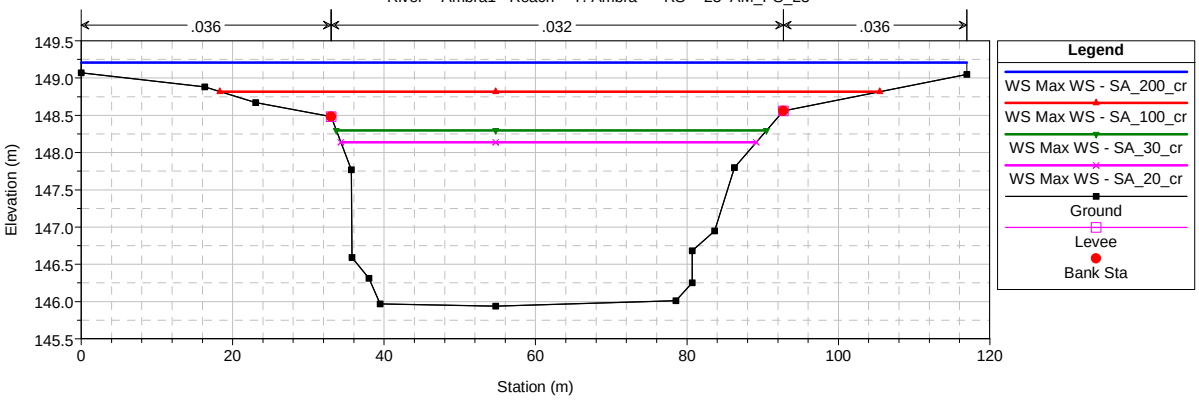
River = Ambra1 Reach = T. Ambra RS = 24 AM_PS_024



Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr

Geom: SA

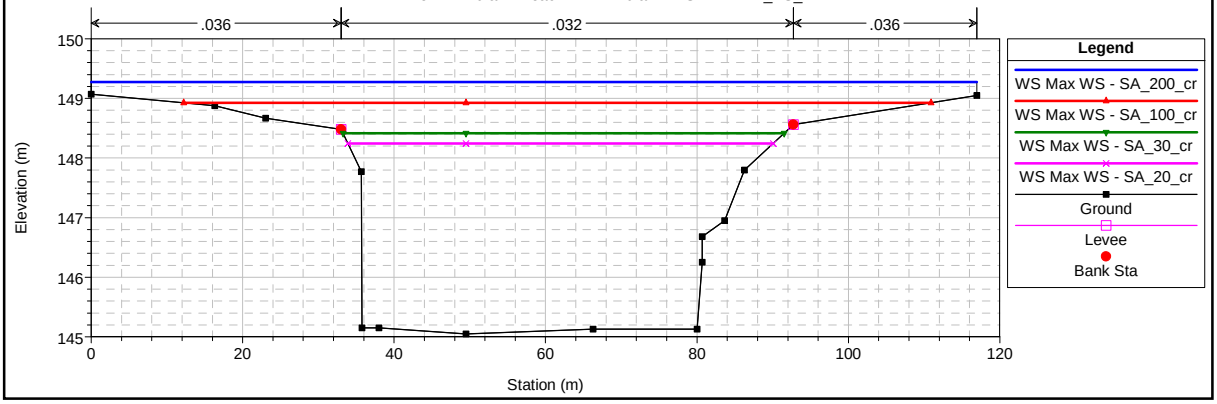
River = Ambra1 Reach = T. Ambra RS = 23 AM_PS_23

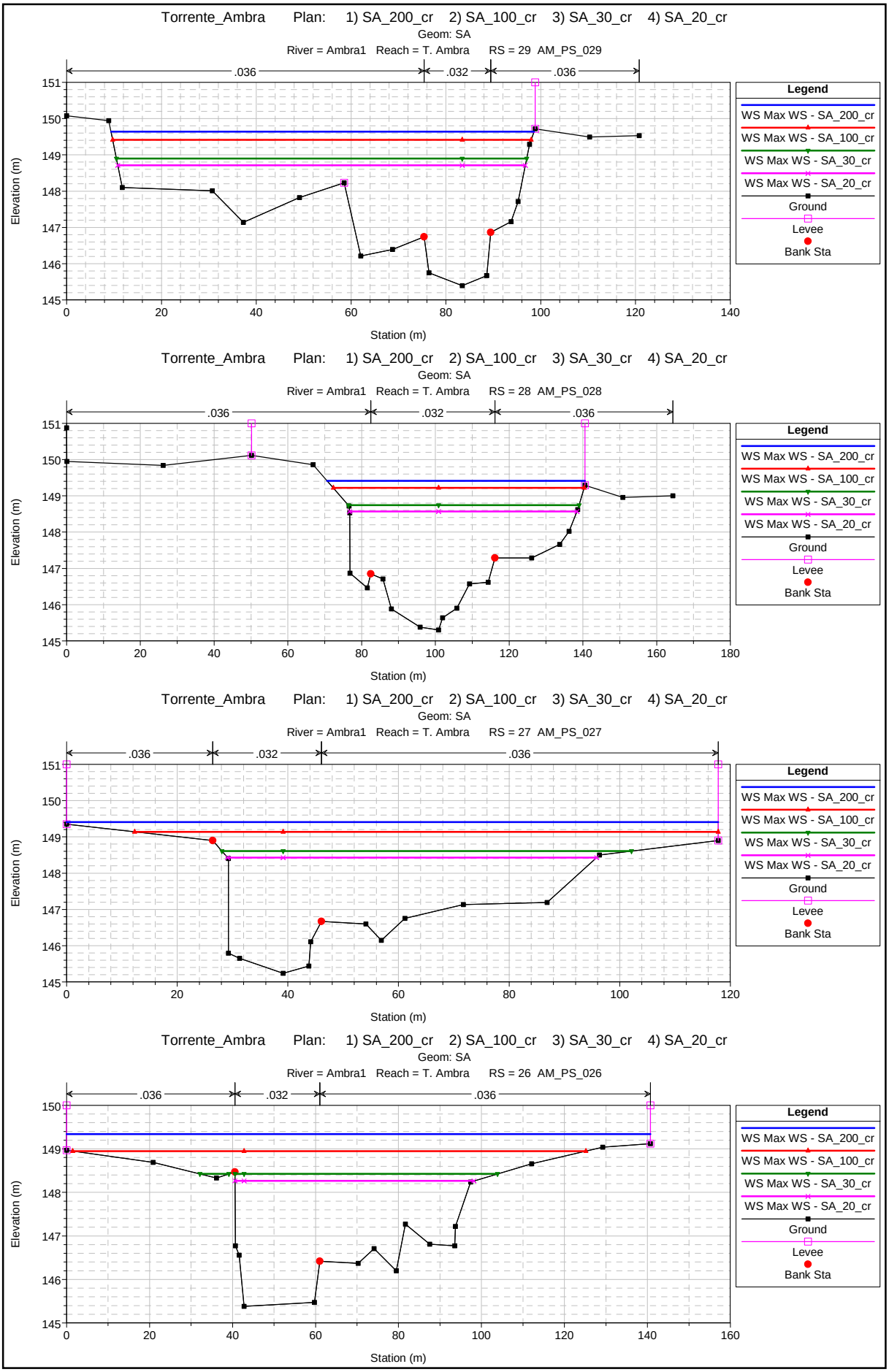


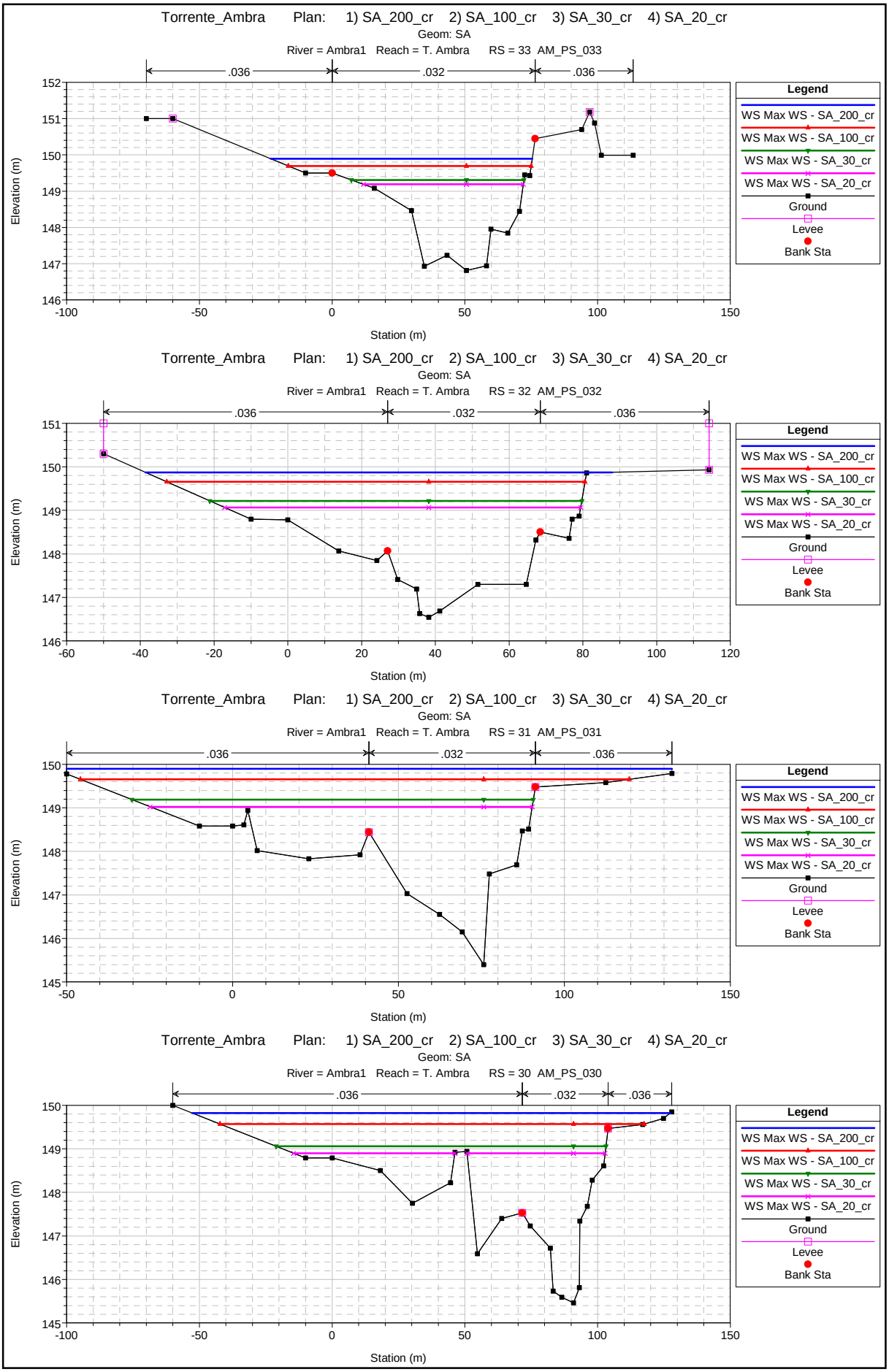
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr

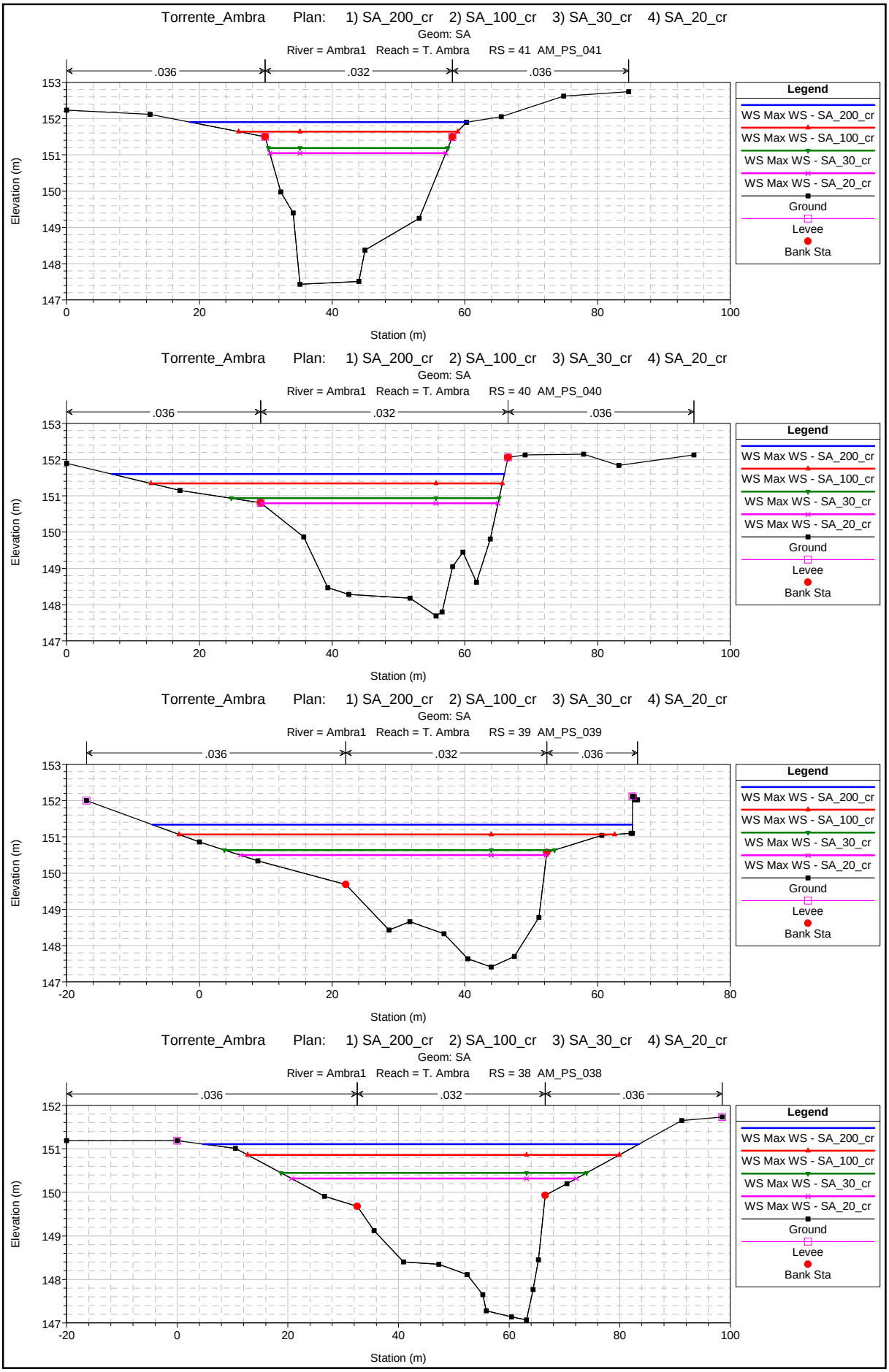
Geom: SA

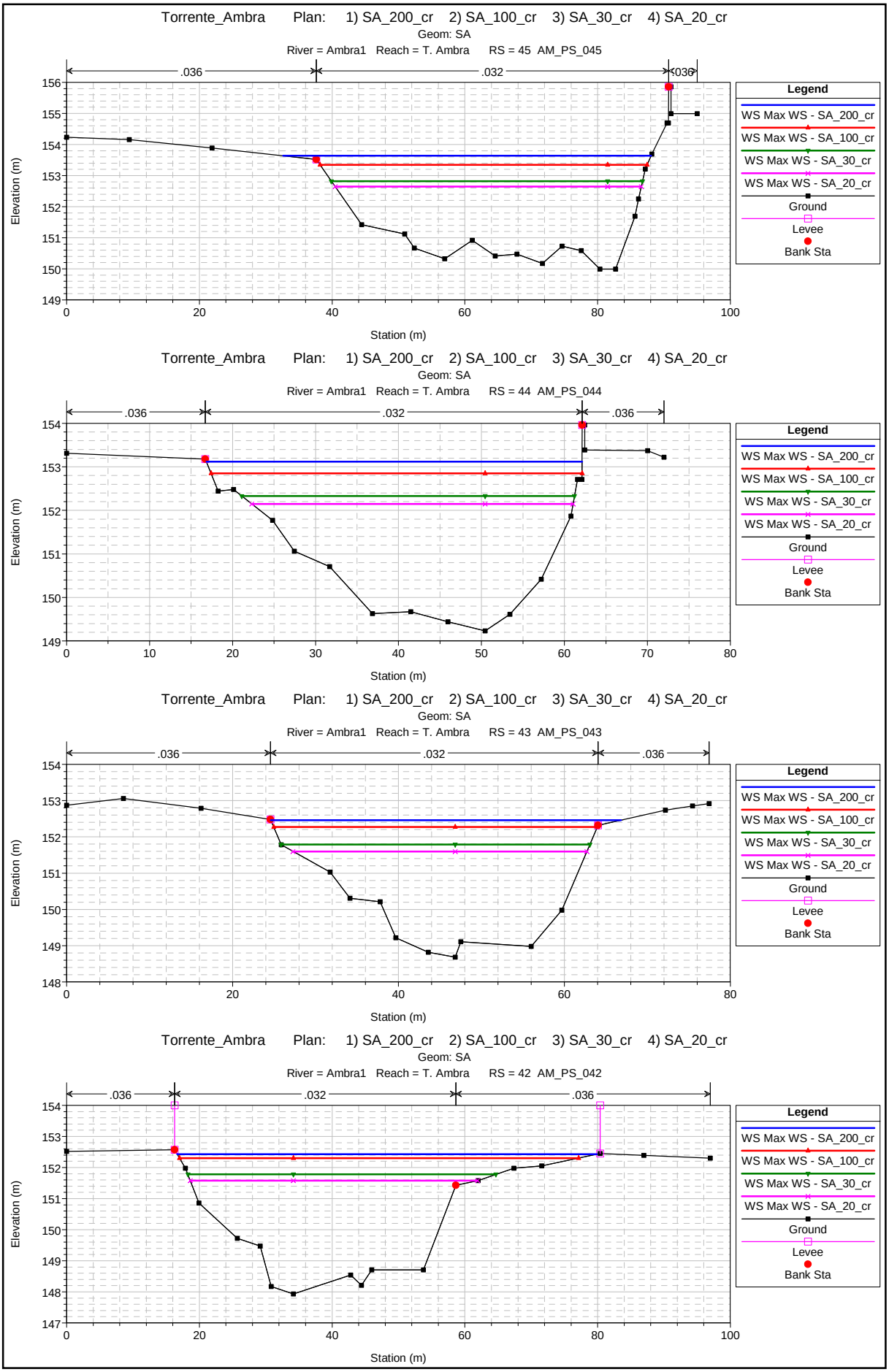
River = Ambra1 Reach = T. Ambra RS = 22 AM_PS_22

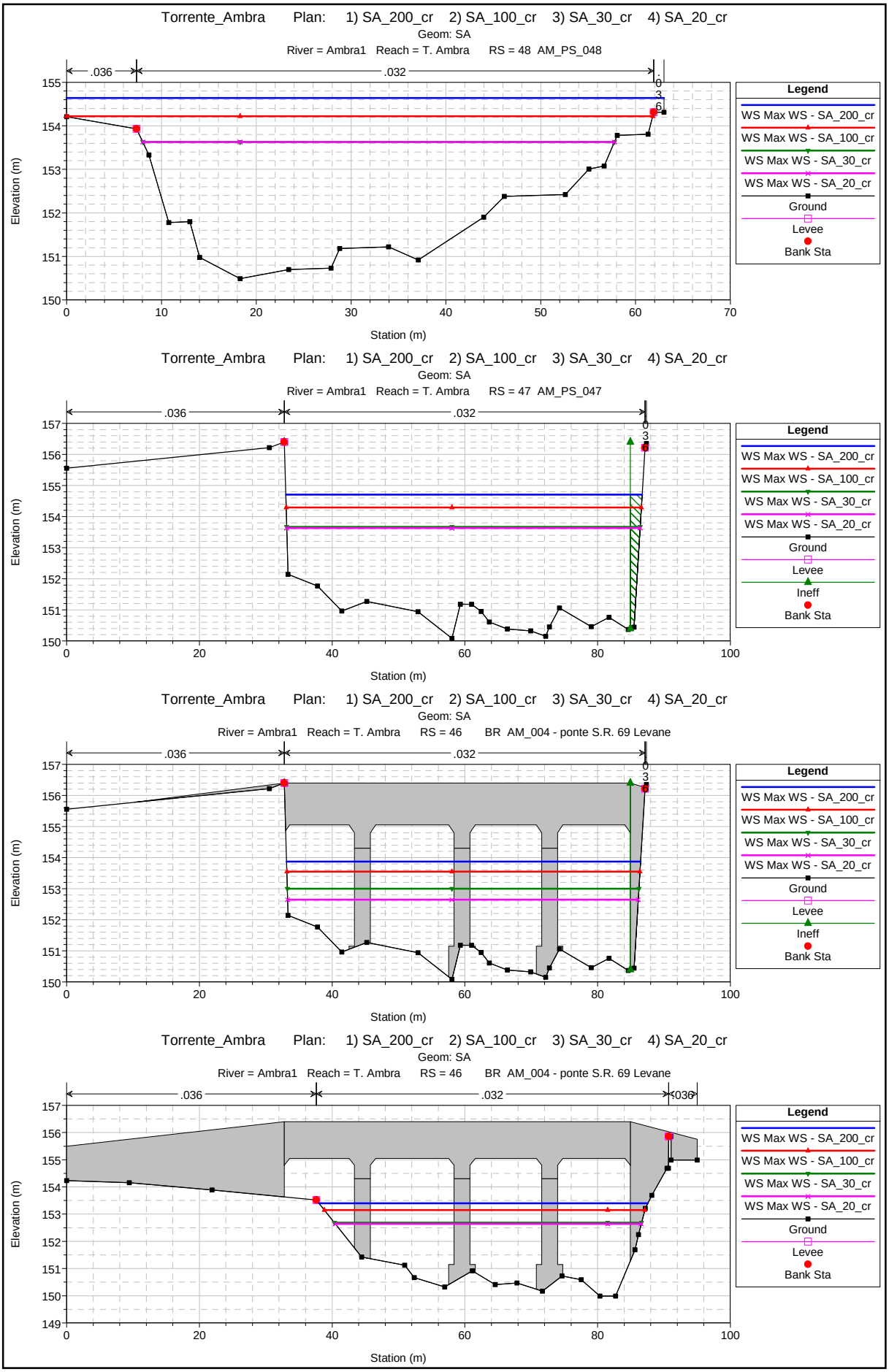


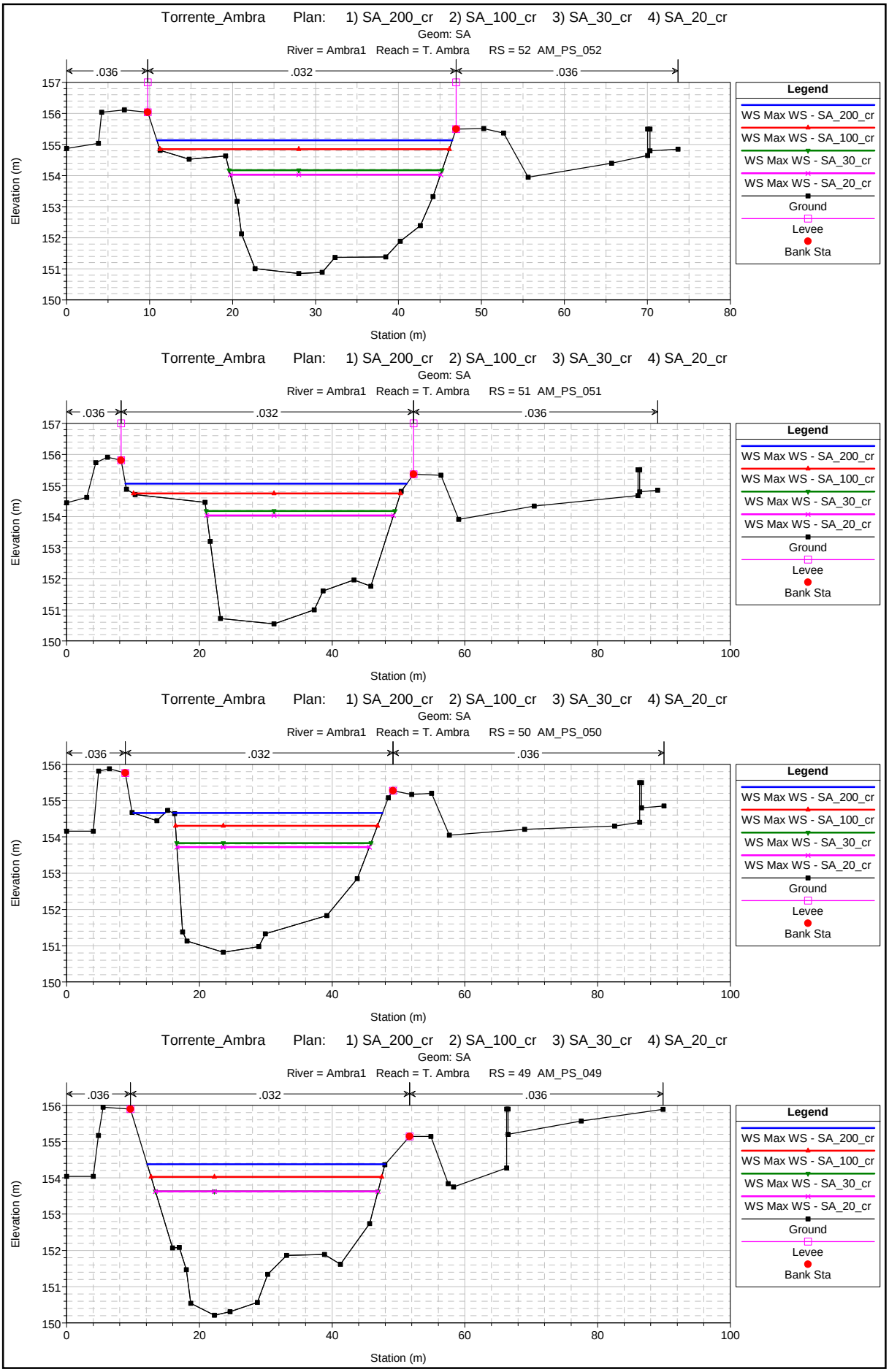

Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 29 AM_PS_029
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 28 AM_PS_028
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 27 AM_PS_027
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 26 AM_PS_026
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta

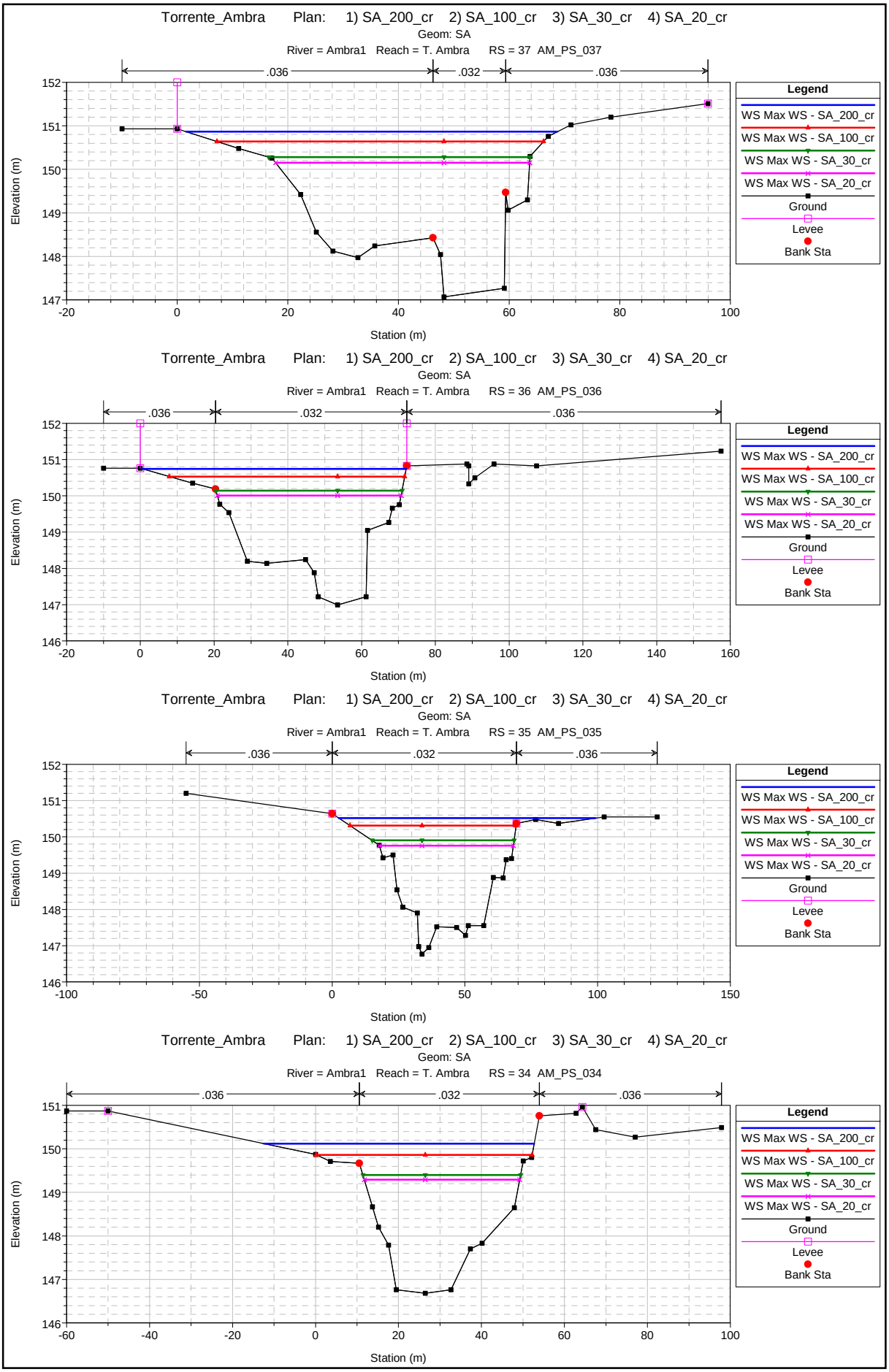

Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 33 AM_PS_033
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 32 AM_PS_032
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 31 AM_PS_031
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 30 AM_PS_030
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta

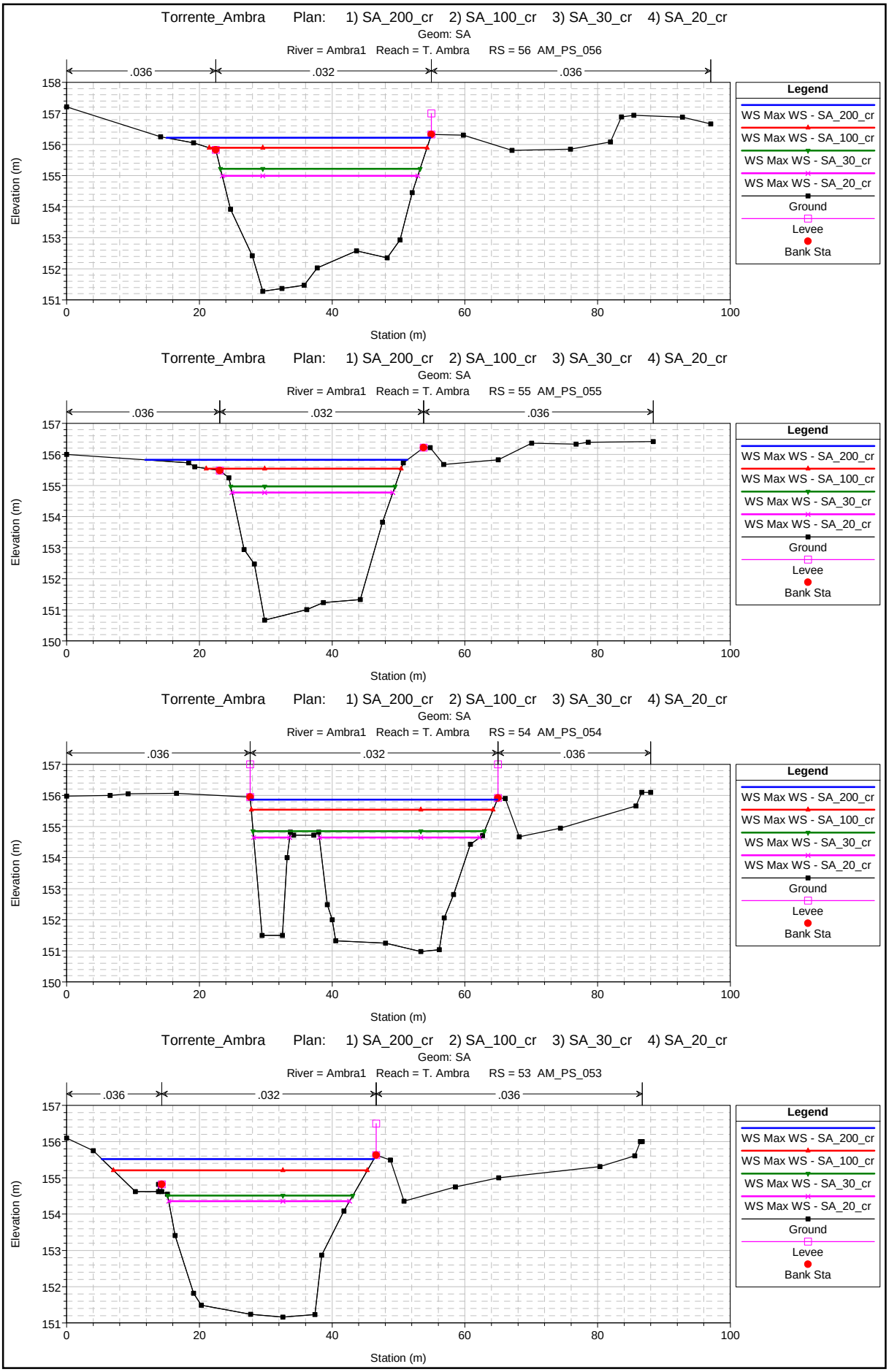

Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 41 AM_PS_041
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 40 AM_PS_040
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 39 AM_PS_039
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 38 AM_PS_038
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta

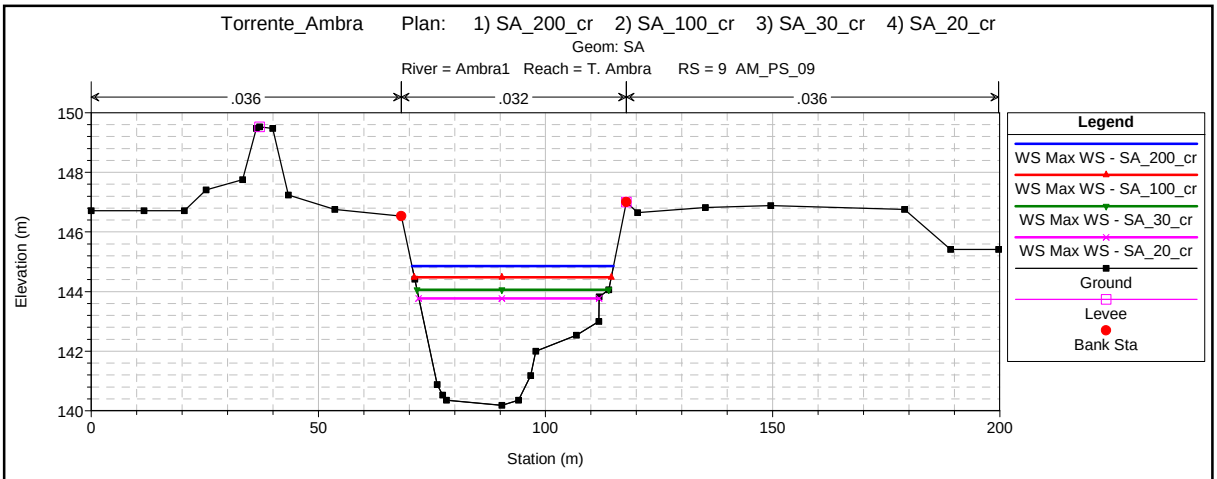

Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 45 AM_PS_045
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 44 AM_PS_044
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 43 AM_PS_043
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 42 AM_PS_042
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta

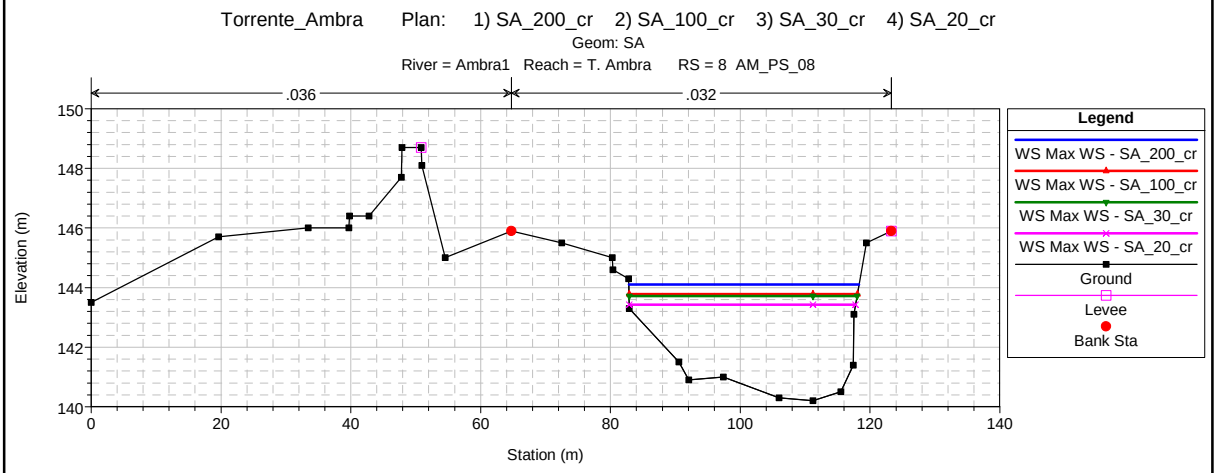

Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 48 AM_PS_048
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 47 AM_PS_047
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Ineff
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 46 BR AM_004 - ponte S.R. 69 Levane
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Ineff
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 46 BR AM_004 - ponte S.R. 69 Levane
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta

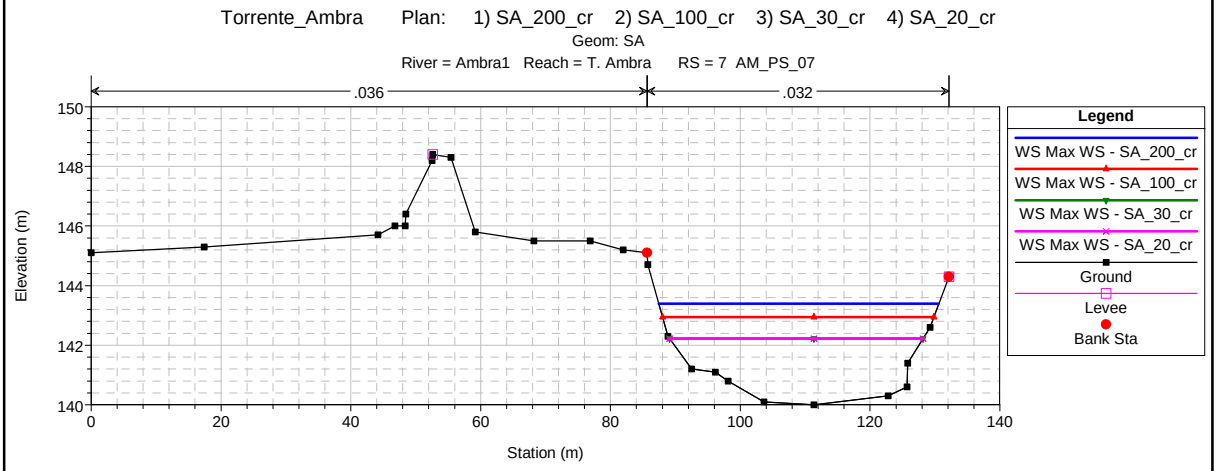

Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 52 AM_PS_052
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 51 AM_PS_051
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 50 AM_PS_050
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 49 AM_PS_049
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta


Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 37 AM_PS_037
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 36 AM_PS_036
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 35 AM_PS_035
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 34 AM_PS_034
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta


Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 56 AM_PS_056
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 55 AM_PS_055
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 54 AM_PS_054
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta
Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 53 AM_PS_053
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta


Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 9 AM_PS_09
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta


Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 8 AM_PS_08
.036
.032
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta


Torrente_Ambra Plan: 1) SA_200_cr 2) SA_100_cr 3) SA_30_cr 4) SA_20_cr
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 7 AM_PS_07
.036
.032
Elevation (m)
Station (m)
Legend
WS Max WS - SA_200_cr
WS Max WS - SA_100_cr
WS Max WS - SA_30_cr
WS Max WS - SA_20_cr
Ground
Levee
Bank Sta

HEC-RAS River: Ambra1 Reach: T. Ambra Profile: Max WS

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
T. Ambra	56	Max WS	SA_200_cr	416.00	151.28	156.21		156.90	0.002881	3.67	114.48	39.77	0.63
T. Ambra	56	Max WS	SA_100_cr	347.48	151.28	155.89		156.47	0.002707	3.38	102.96	32.80	0.60
T. Ambra	56	Max WS	SA_30_cr	247.85	151.28	155.22		155.68	0.002692	3.02	82.00	30.07	0.58
T. Ambra	56	Max WS	SA_20_cr	218.92	151.28	154.99		155.42	0.002712	2.91	75.21	29.45	0.58
T. Ambra	55	Max WS	SA_200_cr	415.99	150.67	155.83		156.72	0.003928	4.20	100.46	39.49	0.72
T. Ambra	55	Max WS	SA_100_cr	347.47	150.67	155.54		156.29	0.003469	3.81	91.19	29.37	0.67
T. Ambra	55	Max WS	SA_30_cr	247.84	150.67	154.97		155.51	0.002787	3.25	76.35	24.75	0.59
T. Ambra	55	Max WS	SA_20_cr	218.93	150.67	154.78		155.25	0.002621	3.06	71.49	24.23	0.57
T. Ambra	54	Max WS	SA_200_cr	415.98	150.98	155.86		156.44	0.003133	3.38	123.13	37.19	0.59
T. Ambra	54	Max WS	SA_100_cr	347.47	150.98	155.54		156.04	0.002981	3.13	111.16	36.43	0.57
T. Ambra	54	Max WS	SA_30_cr	247.83	150.98	154.85		155.27	0.003244	2.86	86.70	34.85	0.58
T. Ambra	54	Max WS	SA_20_cr	218.93	150.98	154.64		155.03	0.002745	2.74	79.93	29.59	0.53
T. Ambra	53	Max WS	SA_200_cr	415.98	151.16	155.52		156.33	0.003928	4.03	107.26	40.98	0.72
T. Ambra	53	Max WS	SA_100_cr	347.47	151.16	155.21		155.92	0.003750	3.75	94.97	38.26	0.70
T. Ambra	53	Max WS	SA_30_cr	247.82	151.16	154.51		155.14	0.003953	3.49	71.02	27.89	0.70
T. Ambra	53	Max WS	SA_20_cr	218.92	151.16	154.36		154.91	0.003690	3.29	66.62	27.22	0.67
T. Ambra	52	Max WS	SA_200_cr	415.97	150.85	155.13		156.10	0.005817	4.37	95.28	35.60	0.85
T. Ambra	52	Max WS	SA_100_cr	347.46	150.85	154.85		155.69	0.005676	4.07	85.34	34.90	0.83
T. Ambra	52	Max WS	SA_30_cr	247.82	150.85	154.17		154.90	0.004660	3.78	65.60	25.67	0.75
T. Ambra	52	Max WS	SA_20_cr	218.92	150.85	154.03		154.67	0.004285	3.53	62.08	25.36	0.72
T. Ambra	51	Max WS	SA_200_cr	415.87	150.55	155.06		155.80	0.004619	3.80	109.42	42.40	0.76
T. Ambra	51	Max WS	SA_100_cr	347.46	150.55	154.74		155.41	0.004623	3.61	96.16	40.20	0.75
T. Ambra	51	Max WS	SA_30_cr	247.81	150.55	154.18		154.69	0.003010	3.16	78.35	28.43	0.61
T. Ambra	51	Max WS	SA_20_cr	218.92	150.55	154.04		154.48	0.002755	2.95	74.28	28.13	0.58
T. Ambra	50	Max WS	SA_200_cr	415.91	150.82	154.66		155.72	0.006956	4.57	91.08	36.31	0.92
T. Ambra	50	Max WS	SA_100_cr	347.46	150.82	154.31		155.28	0.006043	4.36	79.61	30.44	0.86
T. Ambra	50	Max WS	SA_30_cr	247.81	150.82	153.83		154.56	0.005551	3.79	65.35	29.26	0.81
T. Ambra	50	Max WS	SA_20_cr	218.91	150.82	153.72		154.35	0.005041	3.52	62.15	28.99	0.77
T. Ambra	49	Max WS	SA_200_cr	415.84	150.21	154.37		155.31	0.005373	4.28	97.20	35.86	0.83
T. Ambra	49	Max WS	SA_100_cr	347.46	150.21	154.03		154.88	0.005602	4.09	84.98	34.75	0.83
T. Ambra	49	Max WS	SA_30_cr	51.84	150.21	153.63		153.66	0.000212	0.73	71.32	33.53	0.16

HEC-RAS River: Ambra1 Reach: T. Ambra Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
T. Ambra	49	Max WS	SA_20_cr	51.06	150.21	153.63		153.65	0.000206	0.72	71.32	33.53	0.16
T. Ambra	48.9			Lat Struct									
T. Ambra	48.8			Lat Struct									
T. Ambra	48	Max WS	SA_200_cr	418.16	150.49	154.64		155.00	0.001816	2.64	161.54	63.00	0.50
T. Ambra	48	Max WS	SA_100_cr	347.45	150.49	154.22		154.56	0.002142	2.59	135.23	61.82	0.53
T. Ambra	48	Max WS	SA_30_cr	51.71	150.49	153.63		153.64	0.000103	0.50	102.63	49.74	0.11
T. Ambra	48	Max WS	SA_20_cr	50.82	150.49	153.63		153.64	0.000099	0.50	102.63	49.74	0.11
T. Ambra	47	Max WS	SA_200_cr	415.80	150.08	154.70	152.77	154.93	0.000832	2.11	197.19	53.68	0.35
T. Ambra	47	Max WS	SA_100_cr	347.45	150.08	154.29	152.55	154.49	0.000843	1.98	175.80	53.51	0.34
T. Ambra	47	Max WS	SA_30_cr	247.81	150.08	153.67	152.22	153.82	0.000828	1.72	143.66	53.26	0.33
T. Ambra	47	Max WS	SA_20_cr	50.00	150.08	153.63	151.25	153.64	0.000035	0.35	141.60	53.24	0.07
T. Ambra	46			Bridge									
T. Ambra	45	Max WS	SA_200_cr	415.79	149.99	153.64		154.13	0.002811	3.10	134.25	55.47	0.61
T. Ambra	45	Max WS	SA_100_cr	347.44	149.99	153.34		153.78	0.002804	2.92	119.18	49.26	0.60
T. Ambra	45	Max WS	SA_30_cr	247.79	149.99	152.82		153.18	0.002905	2.63	94.24	46.87	0.59
T. Ambra	45	Max WS	SA_20_cr	218.93	149.99	152.65		152.98	0.003003	2.55	85.99	46.10	0.60
T. Ambra	44	Max WS	SA_200_cr	415.79	149.23	153.12		153.78	0.004009	3.61	115.33	45.28	0.72
T. Ambra	44	Max WS	SA_100_cr	347.43	149.23	152.85		153.43	0.003958	3.37	103.15	44.72	0.71
T. Ambra	44	Max WS	SA_30_cr	247.79	149.23	152.33		152.81	0.003904	3.07	80.73	40.09	0.69
T. Ambra	44	Max WS	SA_20_cr	218.91	149.23	152.15		152.60	0.003960	2.98	73.54	38.71	0.69
T. Ambra	43	Max WS	SA_200_cr	415.78	148.68	152.46		153.38	0.005785	4.25	97.99	42.20	0.86
T. Ambra	43	Max WS	SA_100_cr	344.21	148.68	152.27		153.01	0.005101	3.81	90.23	39.00	0.80
T. Ambra	43	Max WS	SA_30_cr	247.79	148.68	151.79		152.39	0.005257	3.45	71.91	37.21	0.79
T. Ambra	43	Max WS	SA_20_cr	218.89	148.68	151.60		152.18	0.005388	3.37	64.96	35.41	0.79
T. Ambra	42	Max WS	SA_200_cr	415.76	147.93	152.43		152.89	0.002113	3.04	144.35	63.25	0.54
T. Ambra	42	Max WS	SA_100_cr	344.10	147.93	152.30		152.65	0.001652	2.63	136.58	60.13	0.48
T. Ambra	42	Max WS	SA_30_cr	247.77	147.93	151.78		152.05	0.001536	2.30	108.95	46.41	0.45
T. Ambra	42	Max WS	SA_20_cr	218.90	147.93	151.58		151.82	0.001541	2.20	99.88	43.29	0.44

HEC-RAS River: Ambra1 Reach: T. Ambra Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
T. Ambra	41	Max WS	SA_200_cr	415.76	147.43	151.91	151.69	153.07	0.005928	4.79	89.20	41.86	0.87
T. Ambra	41	Max WS	SA_100_cr	347.42	147.43	151.64		152.63	0.005631	4.39	79.39	32.99	0.84
T. Ambra	41	Max WS	SA_30_cr	247.77	147.43	151.19		151.90	0.004829	3.73	66.43	27.06	0.76
T. Ambra	41	Max WS	SA_20_cr	218.90	147.43	151.05		151.67	0.004462	3.50	62.63	26.52	0.73
T. Ambra	40	Max WS	SA_200_cr	415.75	147.69	151.60		152.46	0.005242	4.17	106.74	59.10	0.82
T. Ambra	40	Max WS	SA_100_cr	347.42	147.69	151.34		152.12	0.005232	3.92	92.33	52.94	0.81
T. Ambra	40	Max WS	SA_30_cr	247.77	147.69	150.93		151.52	0.004932	3.40	73.04	40.37	0.76
T. Ambra	40	Max WS	SA_20_cr	218.89	147.69	150.80		151.33	0.004805	3.22	67.88	35.68	0.75
T. Ambra	39	Max WS	SA_200_cr	415.74	147.41	151.33		152.10	0.004205	4.08	121.42	72.31	0.75
T. Ambra	39	Max WS	SA_100_cr	347.41	147.41	151.07		151.78	0.004328	3.88	102.63	65.62	0.75
T. Ambra	39	Max WS	SA_30_cr	247.77	147.41	150.64		151.22	0.004271	3.44	78.11	49.72	0.73
T. Ambra	39	Max WS	SA_20_cr	218.89	147.41	150.50		151.03	0.004193	3.27	71.46	46.13	0.71
T. Ambra	38	Max WS	SA_200_cr	415.74	147.07	151.11		151.79	0.003732	3.81	128.26	78.88	0.71
T. Ambra	38	Max WS	SA_100_cr	347.40	147.07	150.86		151.47	0.003673	3.56	110.33	67.21	0.69
T. Ambra	38	Max WS	SA_30_cr	247.77	147.07	150.45		150.93	0.003523	3.12	85.08	55.28	0.66
T. Ambra	38	Max WS	SA_20_cr	218.89	147.07	150.32		150.76	0.003411	2.95	78.13	51.51	0.64
T. Ambra	37	Max WS	SA_200_cr	415.73	147.07	150.87		151.58	0.005021	4.57	125.63	67.13	0.78
T. Ambra	37	Max WS	SA_100_cr	347.40	147.07	150.64		151.25	0.004552	4.17	111.51	59.07	0.73
T. Ambra	37	Max WS	SA_30_cr	247.76	147.07	150.28		150.70	0.003429	3.35	92.45	47.26	0.62
T. Ambra	37	Max WS	SA_20_cr	218.89	147.07	150.15		150.53	0.003211	3.15	86.41	45.93	0.60
T. Ambra	36	Max WS	SA_200_cr	415.71	146.99	150.74		151.29	0.003672	3.31	130.06	71.41	0.68
T. Ambra	36	Max WS	SA_100_cr	347.39	146.99	150.53		151.00	0.003465	3.04	116.03	63.84	0.65
T. Ambra	36	Max WS	SA_30_cr	247.76	146.99	150.15		150.50	0.003265	2.63	94.10	50.43	0.62
T. Ambra	36	Max WS	SA_20_cr	218.88	146.99	150.01		150.33	0.003219	2.51	87.29	49.82	0.60
T. Ambra	35	Max WS	SA_200_cr	415.68	146.77	150.52		151.03	0.004436	3.19	132.52	96.72	0.73
T. Ambra	35	Max WS	SA_100_cr	347.27	146.77	150.31		150.76	0.004088	2.98	116.70	62.60	0.70
T. Ambra	35	Max WS	SA_30_cr	247.75	146.77	149.90		150.26	0.003599	2.66	93.08	53.51	0.64
T. Ambra	35	Max WS	SA_20_cr	218.87	146.77	149.76		150.09	0.003449	2.56	85.52	50.47	0.63
T. Ambra	34	Max WS	SA_200_cr	415.63	146.68	150.12	150.00	151.00	0.005976	4.18	103.94	65.14	0.87
T. Ambra	34	Max WS	SA_100_cr	347.39	146.68	149.86	149.64	150.66	0.006133	3.96	89.01	52.05	0.87
T. Ambra	34	Max WS	SA_30_cr	247.69	146.68	149.40		150.05	0.006062	3.58	69.21	37.99	0.85

HEC-RAS River: Ambra1 Reach: T. Ambra Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
T. Ambra	34	Max WS	SA_20_cr	218.86	146.68	149.29		149.87	0.005687	3.36	65.08	37.42	0.81
T. Ambra	33	Max WS	SA_200_cr	414.32	146.81	149.89		150.38	0.004822	3.12	137.79	98.50	0.75
T. Ambra	33	Max WS	SA_100_cr	346.91	146.81	149.69		150.14	0.005112	2.97	118.89	91.48	0.76
T. Ambra	33	Max WS	SA_30_cr	247.61	146.81	149.31		149.71	0.005405	2.80	88.49	65.02	0.77
T. Ambra	33	Max WS	SA_20_cr	218.78	146.81	149.19		149.56	0.005142	2.71	80.85	60.16	0.75
T. Ambra	32	Max WS	SA_200_cr	413.68	146.54	149.87		150.17	0.002108	2.73	197.02	126.62	0.53
T. Ambra	32	Max WS	SA_100_cr	345.75	146.54	149.66		149.93	0.002068	2.55	171.60	113.44	0.52
T. Ambra	32	Max WS	SA_30_cr	247.33	146.54	149.22		149.48	0.002451	2.44	124.66	100.88	0.55
T. Ambra	32	Max WS	SA_20_cr	218.43	146.54	149.07		149.33	0.002665	2.41	109.68	96.53	0.57
T. Ambra	31.9			Lat Struct									
T. Ambra	31.8			Lat Struct									
T. Ambra	31	Max WS	SA_200_cr	413.23	145.40	149.90		150.05	0.001112	2.01	268.64	182.42	0.39
T. Ambra	31	Max WS	SA_100_cr	345.80	145.40	149.65		149.81	0.001183	1.95	225.69	165.32	0.39
T. Ambra	31	Max WS	SA_30_cr	247.29	145.40	149.19		149.34	0.001392	1.87	162.85	120.99	0.41
T. Ambra	31	Max WS	SA_20_cr	218.34	145.40	149.02		149.17	0.001514	1.85	143.34	115.14	0.43
T. Ambra	30	Max WS	SA_200_cr	411.61	145.46	149.82		150.00	0.001458	2.30	256.57	179.93	0.43
T. Ambra	30	Max WS	SA_100_cr	345.62	145.46	149.57		149.75	0.001605	2.27	213.59	159.73	0.45
T. Ambra	30	Max WS	SA_30_cr	247.07	145.46	149.06		149.27	0.002243	2.36	143.76	124.25	0.51
T. Ambra	30	Max WS	SA_20_cr	218.09	145.46	148.90		149.09	0.002152	2.21	124.61	112.76	0.50
T. Ambra	29	Max WS	SA_200_cr	409.44	145.39	149.64		149.87	0.001361	2.77	211.25	89.24	0.44
T. Ambra	29	Max WS	SA_100_cr	340.13	145.39	149.42		149.62	0.001266	2.57	191.25	88.27	0.42
T. Ambra	29	Max WS	SA_30_cr	246.80	145.39	148.90		149.10	0.001479	2.52	146.16	86.53	0.45
T. Ambra	29	Max WS	SA_20_cr	217.31	145.39	148.71		148.91	0.001612	2.53	129.86	85.96	0.46
T. Ambra	28.8			Lat Struct									
T. Ambra	28	Max WS	SA_200_cr	402.51	145.30	149.42		149.74	0.001525	2.73	175.23	69.94	0.47
T. Ambra	28	Max WS	SA_100_cr	339.00	145.30	149.22		149.49	0.001365	2.48	161.55	68.03	0.44
T. Ambra	28	Max WS	SA_30_cr	246.42	145.30	148.74		148.95	0.001320	2.19	130.46	62.55	0.42
T. Ambra	28	Max WS	SA_20_cr	216.67	145.30	148.57		148.77	0.001309	2.09	119.80	61.67	0.42

HEC-RAS River: Ambra1 Reach: T. Ambra Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
T. Ambra	27.9			Lat Struct									
T. Ambra	27	Max WS	SA_200_cr	386.08	145.24	149.41		149.62	0.001514	2.49	207.61	117.82	0.43
T. Ambra	27	Max WS	SA_100_cr	335.75	145.24	149.14		149.36	0.001741	2.52	177.51	105.53	0.46
T. Ambra	27	Max WS	SA_30_cr	245.75	145.24	148.61		148.82	0.001920	2.47	129.62	74.03	0.47
T. Ambra	27	Max WS	SA_20_cr	215.34	145.24	148.43		148.63	0.001795	2.37	117.35	66.76	0.45
T. Ambra	26	Max WS	SA_200_cr	362.25	145.38	149.34		149.54	0.001234	2.48	223.72	140.71	0.41
T. Ambra	26	Max WS	SA_100_cr	334.34	145.38	148.95		149.23	0.001855	2.82	170.43	123.69	0.49
T. Ambra	26	Max WS	SA_30_cr	244.01	145.38	148.43		148.68	0.001901	2.56	120.61	70.35	0.48
T. Ambra	26	Max WS	SA_20_cr	213.08	145.38	148.26		148.48	0.001742	2.37	110.50	57.62	0.46
T. Ambra	25	Max WS	SA_200_cr	368.98	145.35	149.26		149.44	0.000919	1.95	208.12	116.96	0.36
T. Ambra	25	Max WS	SA_100_cr	332.75	145.35	148.88		149.10	0.001223	2.06	166.53	92.31	0.40
T. Ambra	25	Max WS	SA_30_cr	243.24	145.35	148.37		148.55	0.001277	1.87	129.77	57.67	0.40
T. Ambra	25	Max WS	SA_20_cr	211.82	145.35	148.20		148.36	0.001184	1.76	120.48	55.66	0.38
T. Ambra	24	Max WS	SA_200_cr	368.76	145.94	149.22		149.44	0.001254	2.14	189.46	116.96	0.41
T. Ambra	24	Max WS	SA_100_cr	331.84	145.94	148.82		149.09	0.001795	2.32	147.10	87.51	0.48
T. Ambra	24	Max WS	SA_30_cr	242.12	145.94	148.30		148.54	0.002025	2.16	111.97	56.89	0.49
T. Ambra	24	Max WS	SA_20_cr	210.15	145.94	148.14		148.36	0.001924	2.04	103.01	54.92	0.48
T. Ambra	23	Max WS	SA_200_cr	369.14	145.94	149.21		149.44	0.001279	2.16	188.07	116.96	0.41
T. Ambra	23	Max WS	SA_100_cr	331.85	145.94	148.82		149.09	0.001811	2.32	146.61	87.17	0.48
T. Ambra	23	Max WS	SA_30_cr	242.06	145.94	148.30		148.54	0.002046	2.17	111.57	56.83	0.49
T. Ambra	23	Max WS	SA_20_cr	209.54	145.94	148.14		148.35	0.001933	2.04	102.63	54.86	0.48
T. Ambra	22	Max WS	SA_200_cr	371.39	145.05	149.28		149.42	0.000617	1.72	236.28	116.96	0.29
T. Ambra	22	Max WS	SA_100_cr	333.94	145.05	148.93		149.08	0.000742	1.76	196.73	98.74	0.32
T. Ambra	22	Max WS	SA_30_cr	243.66	145.05	148.41		148.54	0.000699	1.54	158.14	58.25	0.30
T. Ambra	22	Max WS	SA_20_cr	212.43	145.05	148.25		148.35	0.000626	1.43	148.49	56.17	0.28
T. Ambra	21	Max WS	SA_200_cr	372.36	143.42	149.33		149.42	0.000270	1.34	300.96	116.96	0.20
T. Ambra	21	Max WS	SA_100_cr	334.83	143.42	148.99		149.08	0.000294	1.33	261.24	107.40	0.21
T. Ambra	21	Max WS	SA_30_cr	244.14	143.42	148.47		148.53	0.000242	1.11	219.32	58.93	0.18
T. Ambra	21	Max WS	SA_20_cr	213.07	143.42	148.30		148.35	0.000206	1.02	209.21	56.78	0.17
T. Ambra	20	Max WS	SA_200_cr	372.18	143.72	149.29		149.42	0.000473	1.63	250.87	116.96	0.26

HEC-RAS River: Ambra1 Reach: T. Ambra Profile: Max WS (Continued)

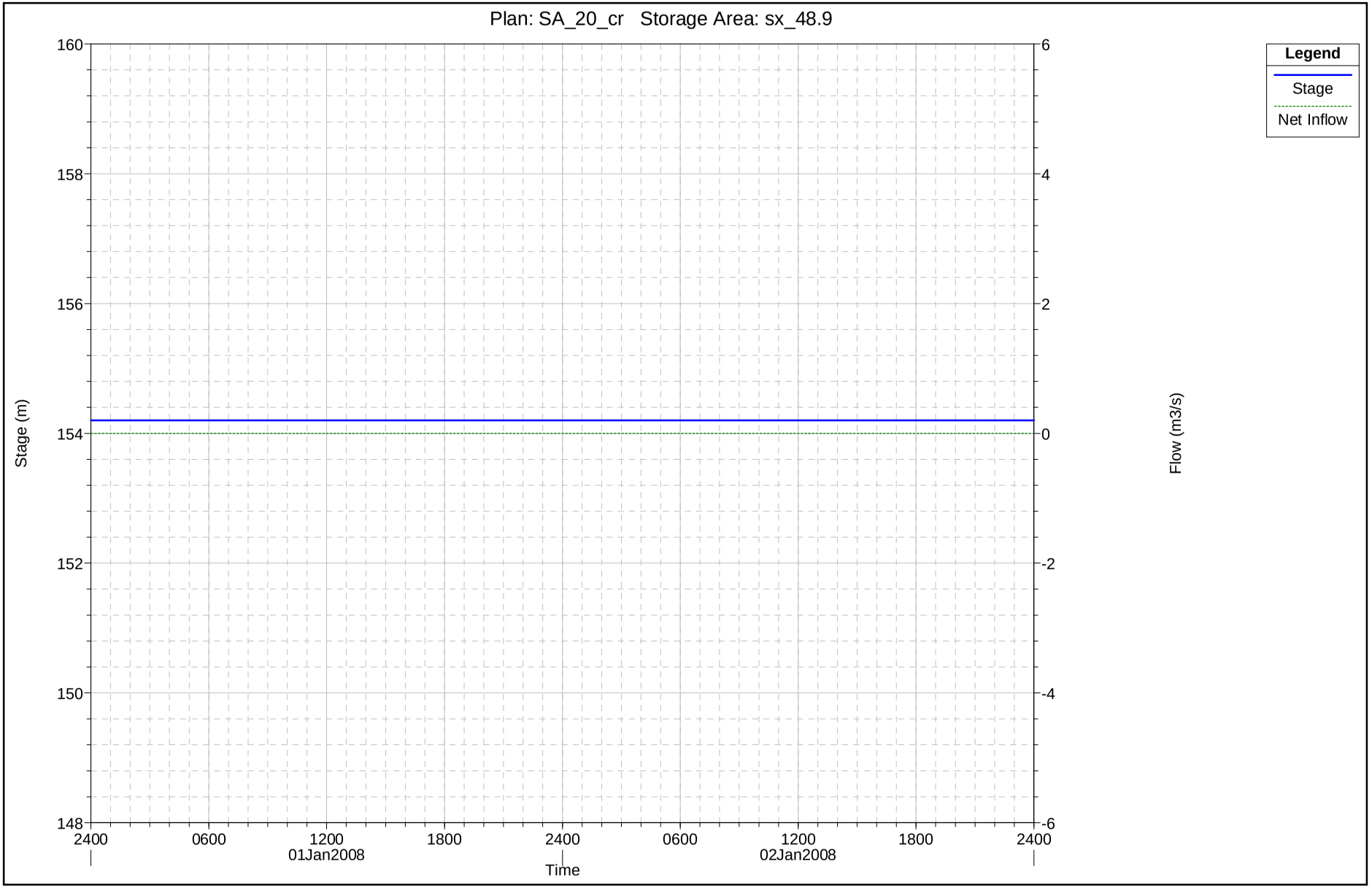
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
T. Ambra	20	Max WS	SA_100_cr	334.01	143.72	148.94		149.08	0.000544	1.64	211.59	100.71	0.28
T. Ambra	20	Max WS	SA_30_cr	243.86	143.72	148.43		148.53	0.000481	1.41	172.66	57.20	0.26
T. Ambra	20	Max WS	SA_20_cr	212.63	143.72	148.26		148.35	0.000424	1.30	163.27	54.28	0.24
T. Ambra	19	Max WS	SA_200_cr	382.39	143.68	149.29		149.39	0.000408	1.56	299.02	120.10	0.24
T. Ambra	19	Max WS	SA_100_cr	334.63	143.68	148.95		149.05	0.000452	1.56	258.14	119.84	0.25
T. Ambra	19	Max WS	SA_30_cr	243.71	143.68	148.42		148.50	0.000418	1.36	210.03	86.01	0.24
T. Ambra	19	Max WS	SA_20_cr	212.48	143.68	148.25		148.32	0.000394	1.27	195.24	85.13	0.23
T. Ambra	18	Max WS	SA_200_cr	385.30	142.48	148.89		149.35	0.001937	3.03	127.22	34.76	0.51
T. Ambra	18	Max WS	SA_100_cr	324.46	142.48	148.63		149.01	0.001564	2.74	118.63	32.10	0.45
T. Ambra	18	Max WS	SA_30_cr	240.72	142.48	148.20		148.47	0.001211	2.29	105.22	30.80	0.40
T. Ambra	18	Max WS	SA_20_cr	208.28	142.48	148.07		148.29	0.001014	2.06	101.17	30.39	0.36
T. Ambra	17	Max WS	SA_200_cr	390.91	144.05	149.03		149.28	0.000952	2.22	175.94	47.00	0.37
T. Ambra	17	Max WS	SA_100_cr	332.02	144.05	148.74		148.96	0.000826	2.04	162.61	44.58	0.34
T. Ambra	17	Max WS	SA_30_cr	241.79	144.05	148.27		148.42	0.000666	1.71	141.77	43.82	0.30
T. Ambra	17	Max WS	SA_20_cr	209.38	144.05	148.12		148.24	0.000577	1.55	135.26	43.58	0.28
T. Ambra	16	Max WS	SA_200_cr	395.60	144.05	149.15		149.27	0.000631	1.75	321.13	234.63	0.30
T. Ambra	16	Max WS	SA_100_cr	332.22	144.05	148.80		148.96	0.000783	1.83	241.90	222.40	0.33
T. Ambra	16	Max WS	SA_30_cr	241.73	144.05	148.25		148.42	0.000960	1.83	132.15	48.87	0.36
T. Ambra	16	Max WS	SA_20_cr	208.80	144.05	148.10		148.24	0.000836	1.67	125.03	47.80	0.33
T. Ambra	15	Max WS	SA_200_cr	395.59	141.39	149.18		149.26	0.000220	1.34	409.03	234.68	0.18
T. Ambra	15	Max WS	SA_100_cr	332.70	141.39	148.86		148.93	0.000218	1.29	333.91	225.59	0.18
T. Ambra	15	Max WS	SA_30_cr	242.85	141.39	148.34		148.41	0.000184	1.11	237.16	140.21	0.16
T. Ambra	15	Max WS	SA_20_cr	211.30	141.39	148.18		148.24	0.000158	1.01	217.17	109.14	0.15
T. Ambra	14	Max WS	SA_200_cr	388.13	143.59	148.93		149.26	0.001637	2.54	152.56	49.71	0.46
T. Ambra	14	Max WS	SA_100_cr	324.28	143.59	148.64		148.92	0.001511	2.34	138.29	47.95	0.44
T. Ambra	14	Max WS	SA_30_cr	239.52	143.59	148.16		148.38	0.001437	2.07	115.64	46.75	0.42
T. Ambra	14	Max WS	SA_20_cr	207.67	143.59	148.03		148.21	0.001286	1.90	109.27	46.30	0.39
T. Ambra	13	Max WS	SA_200_cr	472.57	144.24	147.92		148.44	0.003868	3.22	146.72	66.67	0.69
T. Ambra	13	Max WS	SA_100_cr	395.39	144.24	147.66		148.13	0.003924	3.04	129.99	65.10	0.69
T. Ambra	13	Max WS	SA_30_cr	281.83	144.24	147.23		147.62	0.004124	2.74	102.75	62.46	0.68
T. Ambra	13	Max WS	SA_20_cr	249.17	144.24	147.08		147.45	0.004343	2.67	93.38	61.53	0.69

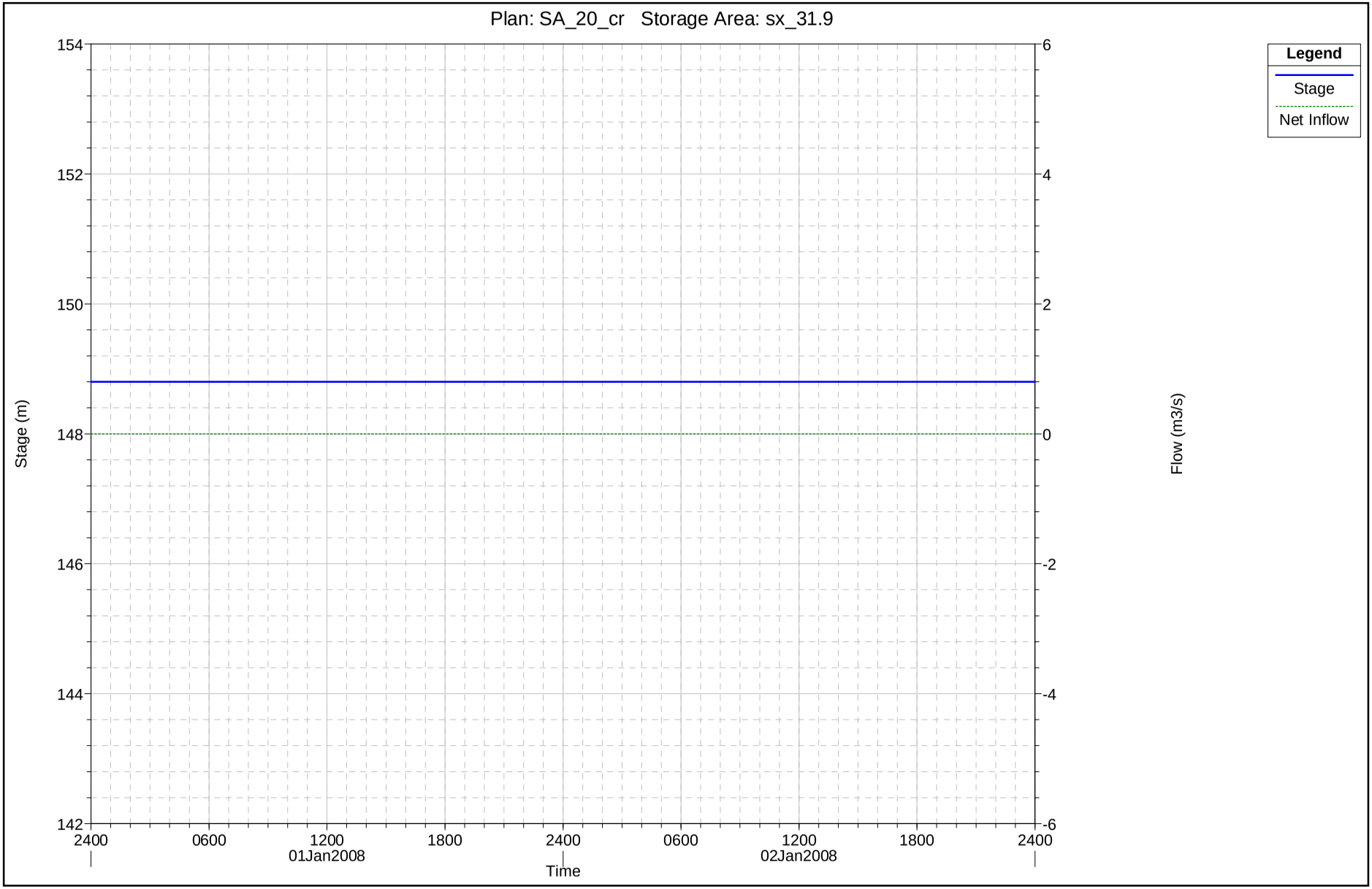
HEC-RAS River: Ambra1 Reach: T. Ambra Profile: Max WS (Continued)

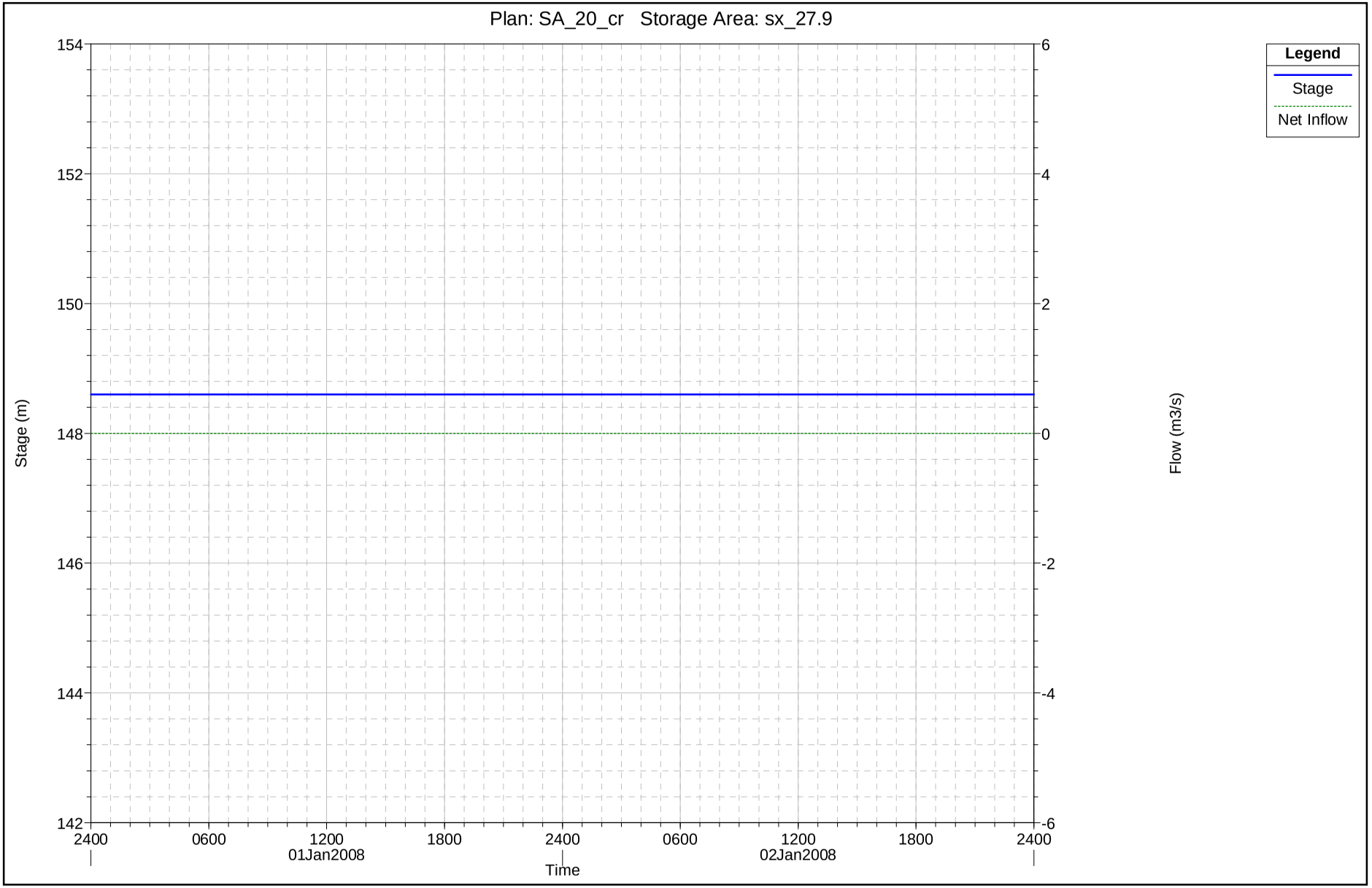
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
T. Ambra	12	Max WS	SA_200_cr	472.49	143.35	146.83		147.37	0.003627	3.25	145.44	62.59	0.68
T. Ambra	12	Max WS	SA_100_cr	395.36	143.35	146.57		147.05	0.003635	3.05	129.54	61.39	0.67
T. Ambra	12	Max WS	SA_30_cr	281.80	143.35	146.21		146.56	0.003312	2.62	107.41	59.68	0.62
T. Ambra	12	Max WS	SA_20_cr	249.15	143.35	146.11		146.41	0.002794	2.45	101.61	54.94	0.58
T. Ambra	11	Max WS	SA_200_cr	472.47	142.47	146.24		146.49	0.001643	2.19	215.55	92.16	0.46
T. Ambra	11	Max WS	SA_100_cr	395.32	142.47	145.88		146.12	0.001958	2.16	182.60	90.90	0.49
T. Ambra	11	Max WS	SA_30_cr	281.78	142.47	145.31		145.54	0.002920	2.15	130.93	89.00	0.57
T. Ambra	11	Max WS	SA_20_cr	249.15	142.47	145.13		145.37	0.003455	2.16	115.27	88.42	0.60
T. Ambra	10	Max WS	SA_200_cr	472.44	140.59	145.51		146.01	0.002502	3.14	150.27	50.46	0.58
T. Ambra	10	Max WS	SA_100_cr	395.31	140.59	145.14		145.60	0.002606	3.00	131.79	49.09	0.58
T. Ambra	10	Max WS	SA_30_cr	281.03	140.59	144.56		144.93	0.002383	2.67	105.19	43.61	0.55
T. Ambra	10	Max WS	SA_20_cr	248.77	140.59	144.32		144.67	0.002536	2.62	94.90	42.46	0.56
T. Ambra	9	Max WS	SA_200_cr	472.43	140.18	144.85		145.41	0.002542	3.30	143.10	44.40	0.59
T. Ambra	9	Max WS	SA_100_cr	395.31	140.18	144.48		144.98	0.002571	3.12	126.77	43.40	0.58
T. Ambra	9	Max WS	SA_30_cr	278.60	140.18	144.05		144.39	0.002054	2.57	108.50	42.20	0.51
T. Ambra	9	Max WS	SA_20_cr	246.10	140.18	143.77		144.10	0.002146	2.54	97.02	39.73	0.52
T. Ambra	8	Max WS	SA_200_cr	472.41	140.20	144.11		145.10	0.005203	4.42	106.80	35.48	0.81
T. Ambra	8	Max WS	SA_100_cr	395.29	140.20	143.78		144.66	0.005205	4.15	95.21	35.18	0.81
T. Ambra	8	Max WS	SA_30_cr	268.73	140.20	143.71		144.14	0.002593	2.89	92.95	35.12	0.57
T. Ambra	8	Max WS	SA_20_cr	223.32	140.20	143.43		143.80	0.002561	2.69	82.90	34.86	0.56
T. Ambra	7	Max WS	SA_200_cr	221.44	140.00	143.39	142.04	143.59	0.001153	1.96	112.87	43.15	0.39
T. Ambra	7	Max WS	SA_100_cr	196.99	140.00	142.94	141.91	143.16	0.001613	2.10	93.75	41.80	0.45
T. Ambra	7	Max WS	SA_30_cr	144.91	140.00	142.22	141.62	142.48	0.002741	2.25	64.52	39.04	0.56
T. Ambra	7	Max WS	SA_20_cr	134.60	140.00	142.22	141.56	142.44	0.002365	2.09	64.52	39.04	0.52

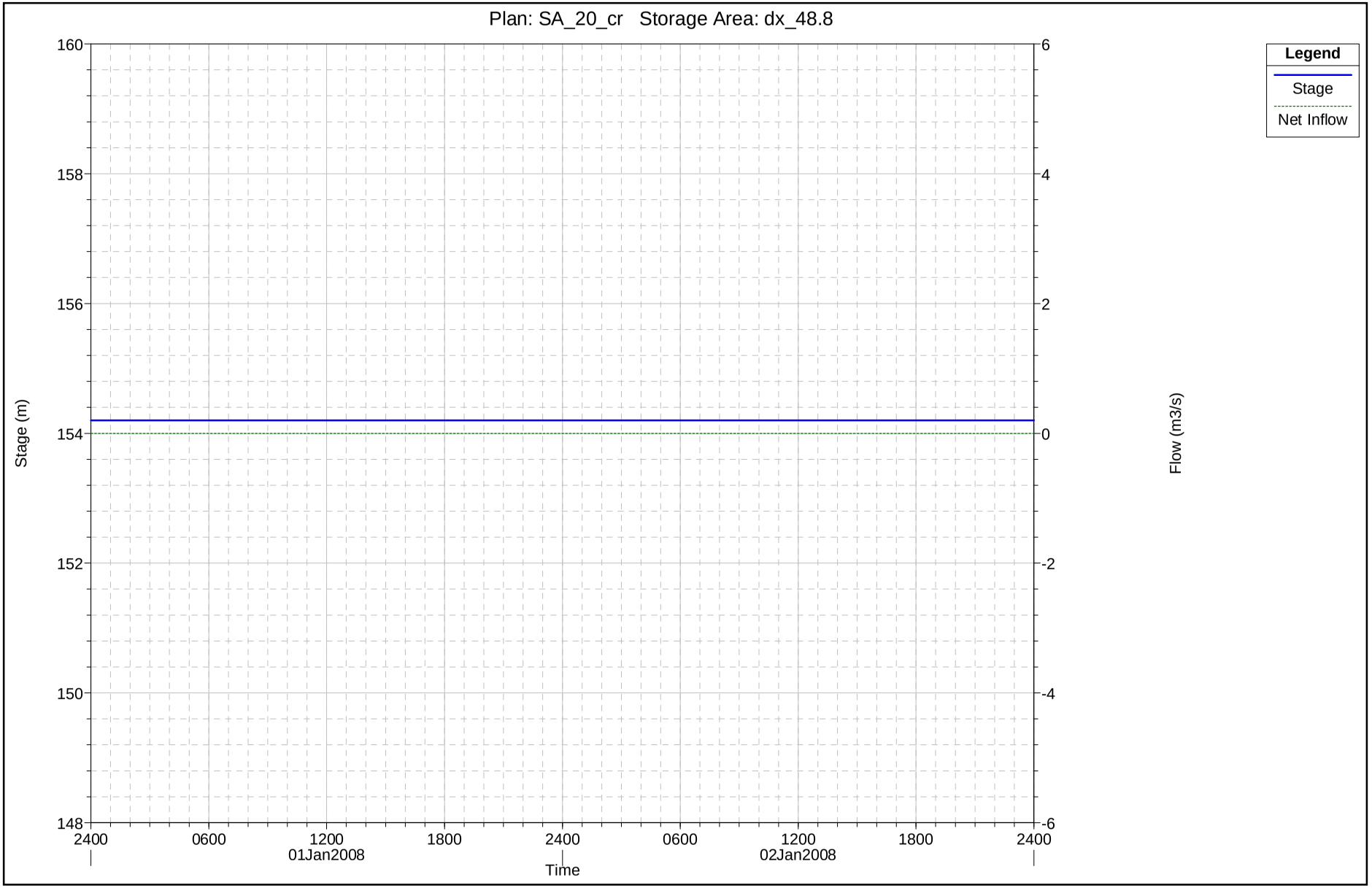
HEC-RAS Profile: Max WS

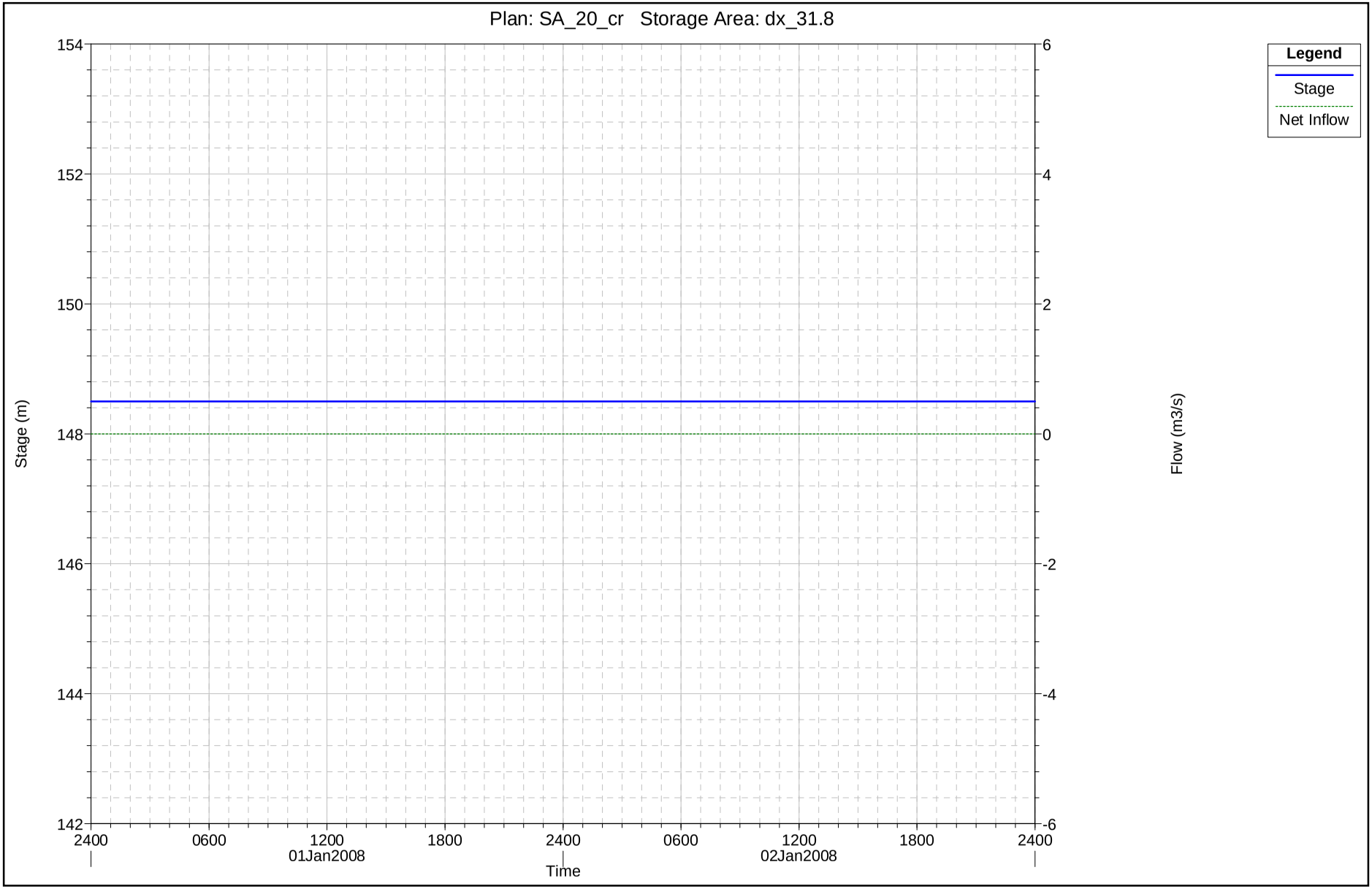
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
dx_28.8	Max WS	SA_200_cr	149.35	148.50	0.10	20.00	14.04
dx_28.8	Max WS	SA_100_cr	149.09	148.50	0.01	16.25	9.54
dx_28.8	Max WS	SA_30_cr	148.50	148.50	0.00	16.25	0.00
dx_28.8	Max WS	SA_20_cr	148.50	148.50	0.00	16.25	0.00
dx_31.8	Max WS	SA_200_cr	148.66	148.50	1.13	36.00	5.63
dx_31.8	Max WS	SA_100_cr	148.50	148.50	0.00	36.00	0.00
dx_31.8	Max WS	SA_30_cr	148.50	148.50	0.00	36.00	0.00
dx_31.8	Max WS	SA_20_cr	148.50	148.50	0.00	36.00	0.00
dx_48.8	Max WS	SA_200_cr	154.59	154.20	0.01	12.49	4.88
dx_48.8	Max WS	SA_100_cr	154.20	154.20	0.00	12.49	0.00
dx_48.8	Max WS	SA_30_cr	154.20	154.20	0.00	12.49	0.00
dx_48.8	Max WS	SA_20_cr	154.20	154.20	0.00	12.49	0.00
sx_27.9	Max WS	SA_200_cr	149.29	148.60	0.67	36.99	18.19
sx_27.9	Max WS	SA_100_cr	148.60	148.60	0.00	19.00	0.00
sx_27.9	Max WS	SA_30_cr	148.60	148.60	0.00	19.00	0.00
sx_27.9	Max WS	SA_20_cr	148.60	148.60	0.00	19.00	0.00
sx_31.9	Max WS	SA_200_cr	148.98	148.80	0.56	16.25	2.89
sx_31.9	Max WS	SA_100_cr	148.80	148.80	0.00	16.25	0.00
sx_31.9	Max WS	SA_30_cr	148.80	148.80	0.00	16.25	0.00
sx_31.9	Max WS	SA_20_cr	148.80	148.80	0.00	16.25	0.00
sx_48.9	Max WS	SA_200_cr	154.60	154.20	0.00	2.18	0.88
sx_48.9	Max WS	SA_100_cr	154.20	154.20	0.00	2.18	0.00
sx_48.9	Max WS	SA_30_cr	154.20	154.20	0.00	2.18	0.00
sx_48.9	Max WS	SA_20_cr	154.20	154.20	0.00	2.18	0.00

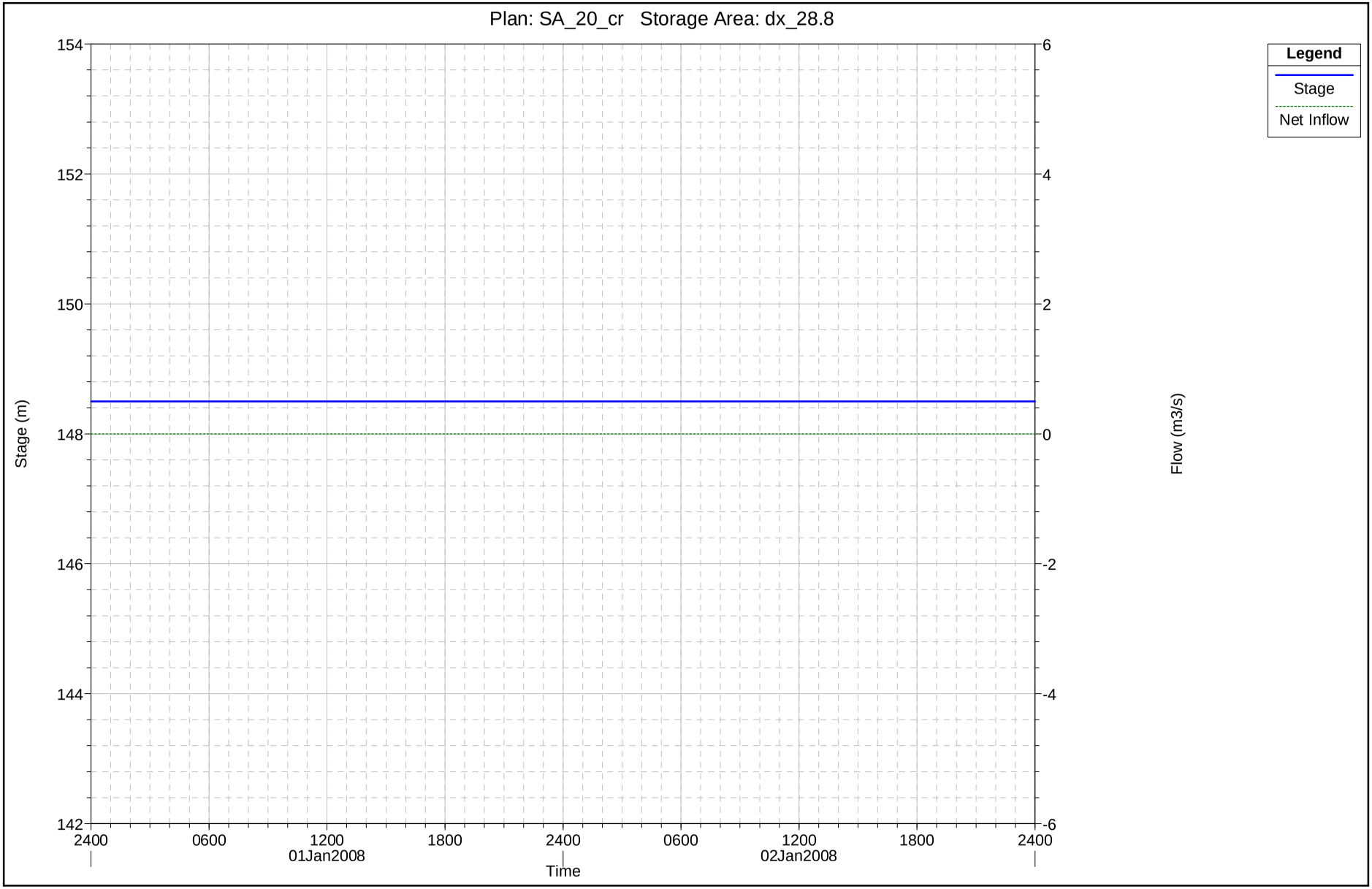

Plan: SA_20_cr Storage Area: sx_48.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
160
158
156
154
152
150
148
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

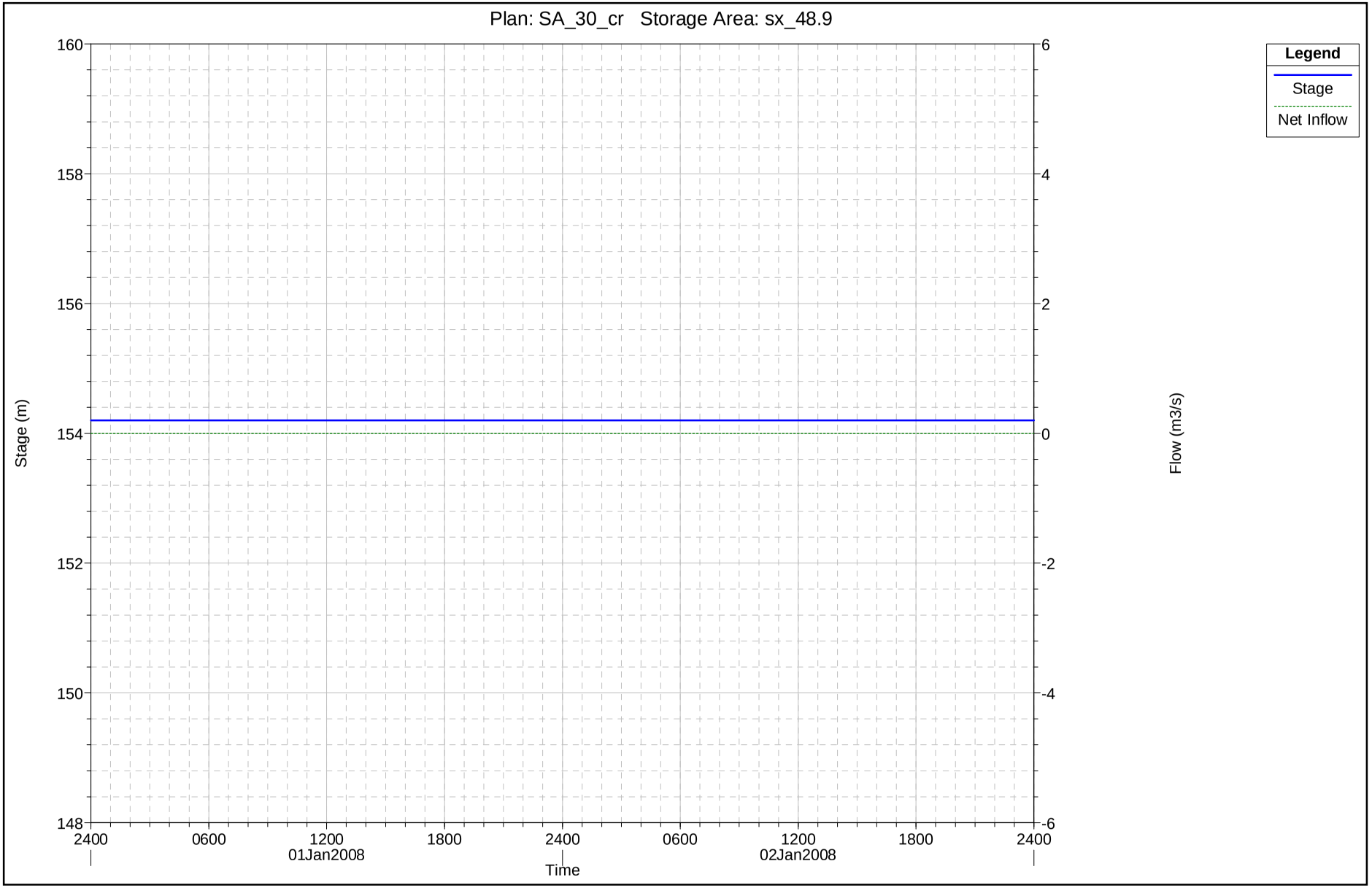

Plan: SA_20_cr Storage Area: sx_31.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
154
152
150
148
146
144
142
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

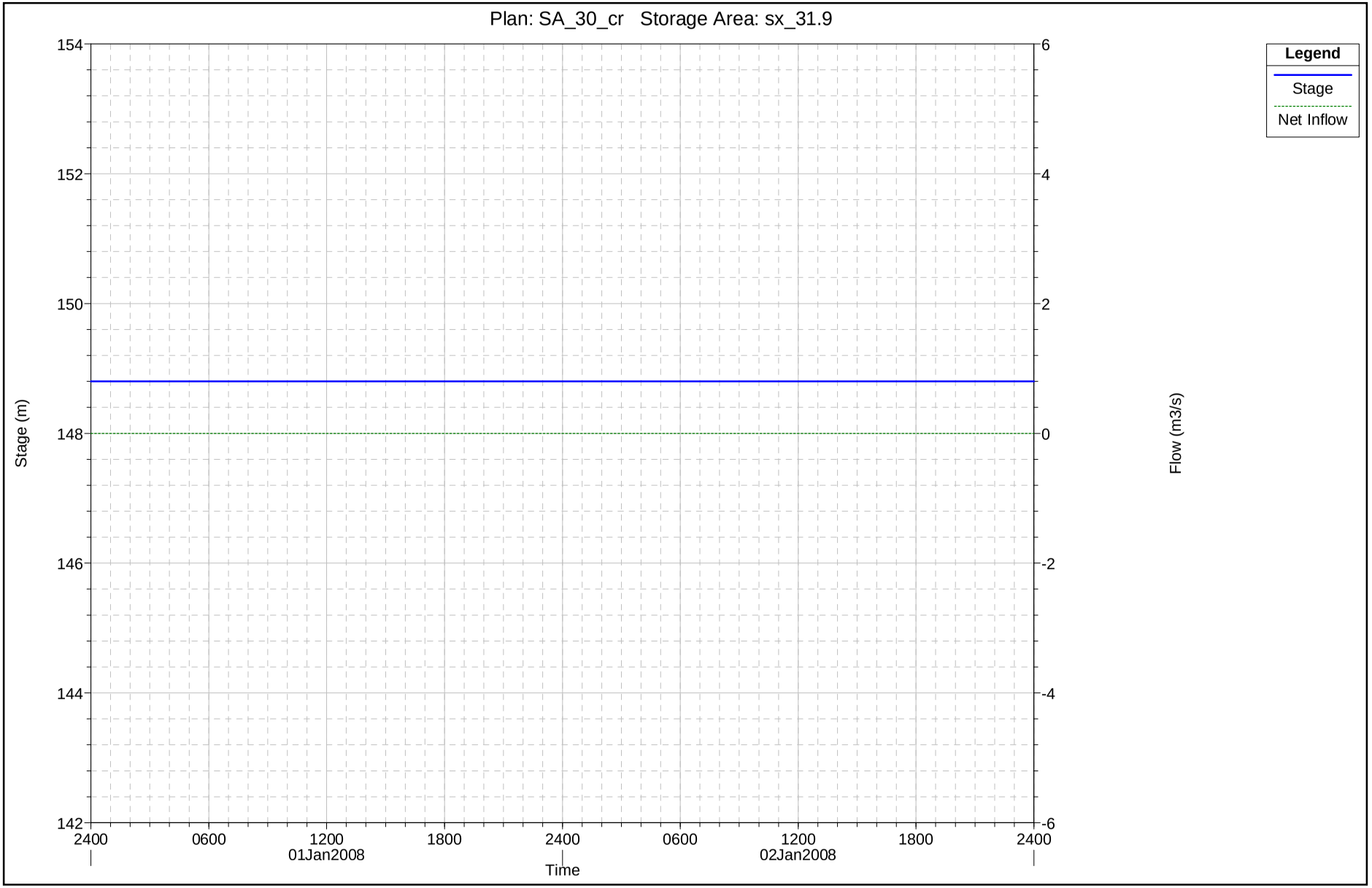

Plan: SA_20_cr Storage Area: sx_27.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
154
152
150
148
146
144
142
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

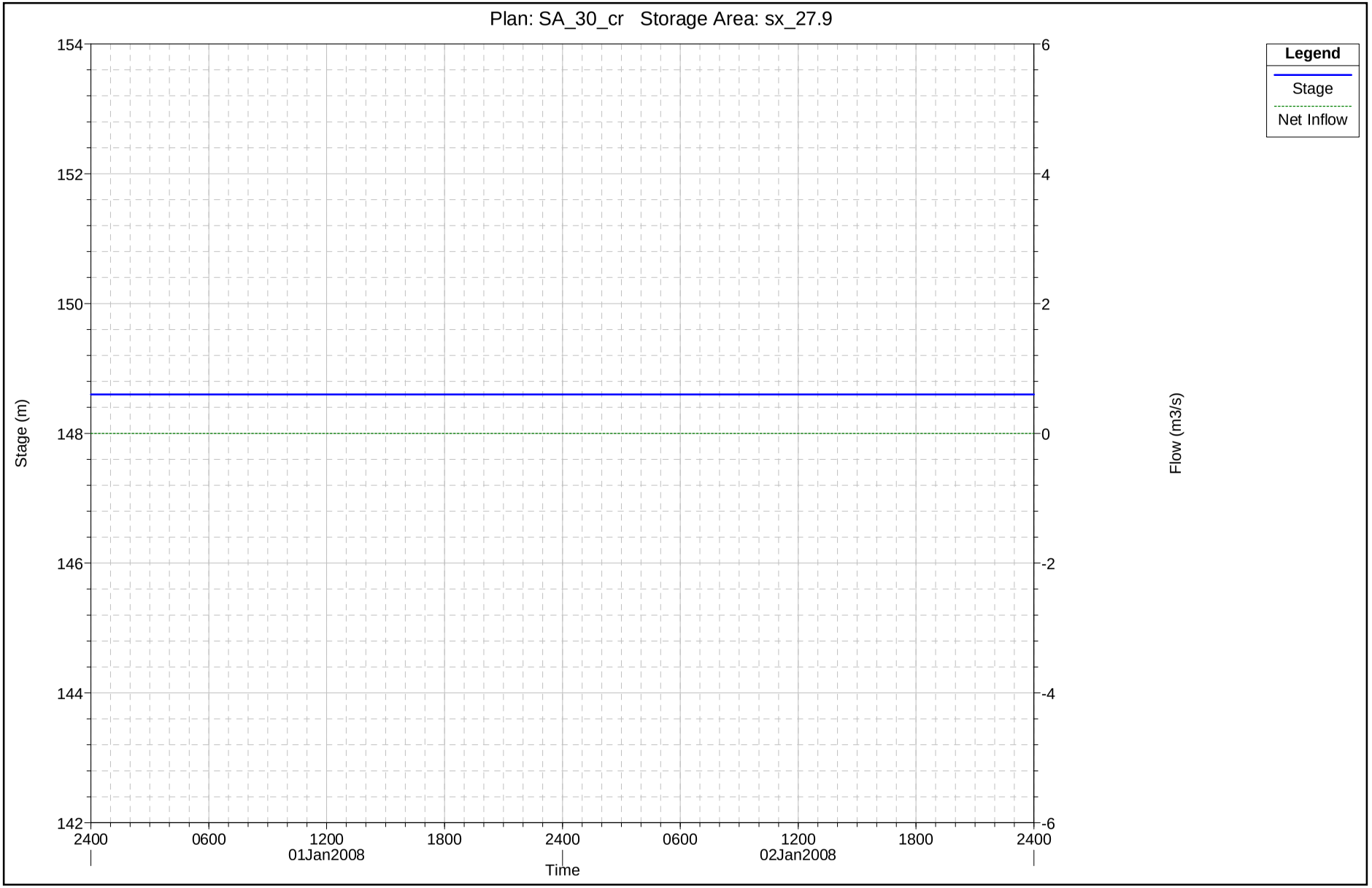

Plan: SA_20_cr Storage Area: dx_48.8
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
160
158
156
154
152
150
148
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

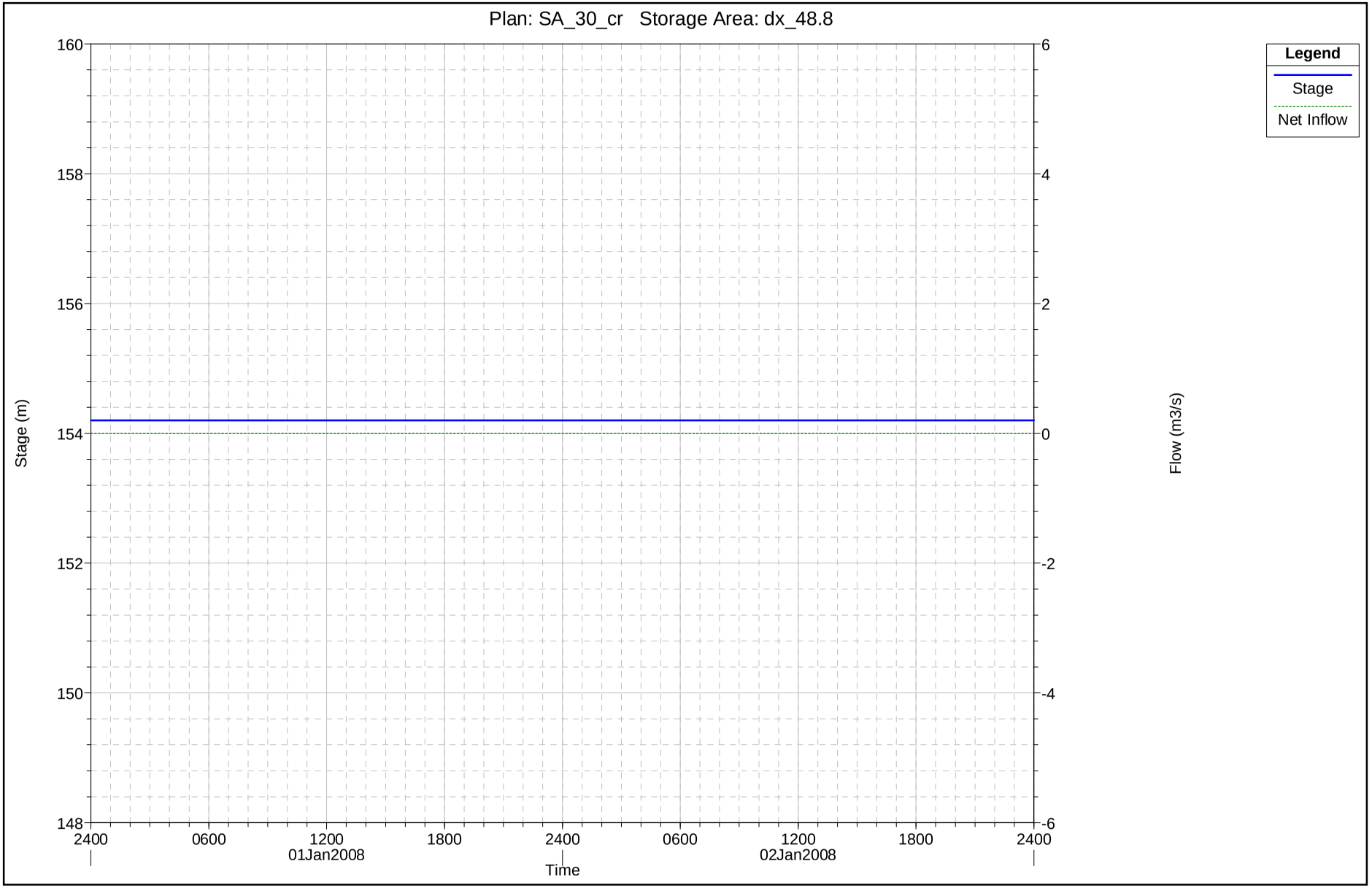

Plan: SA_20_cr Storage Area: dx_31.8
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
154
152
150
148
146
144
142
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

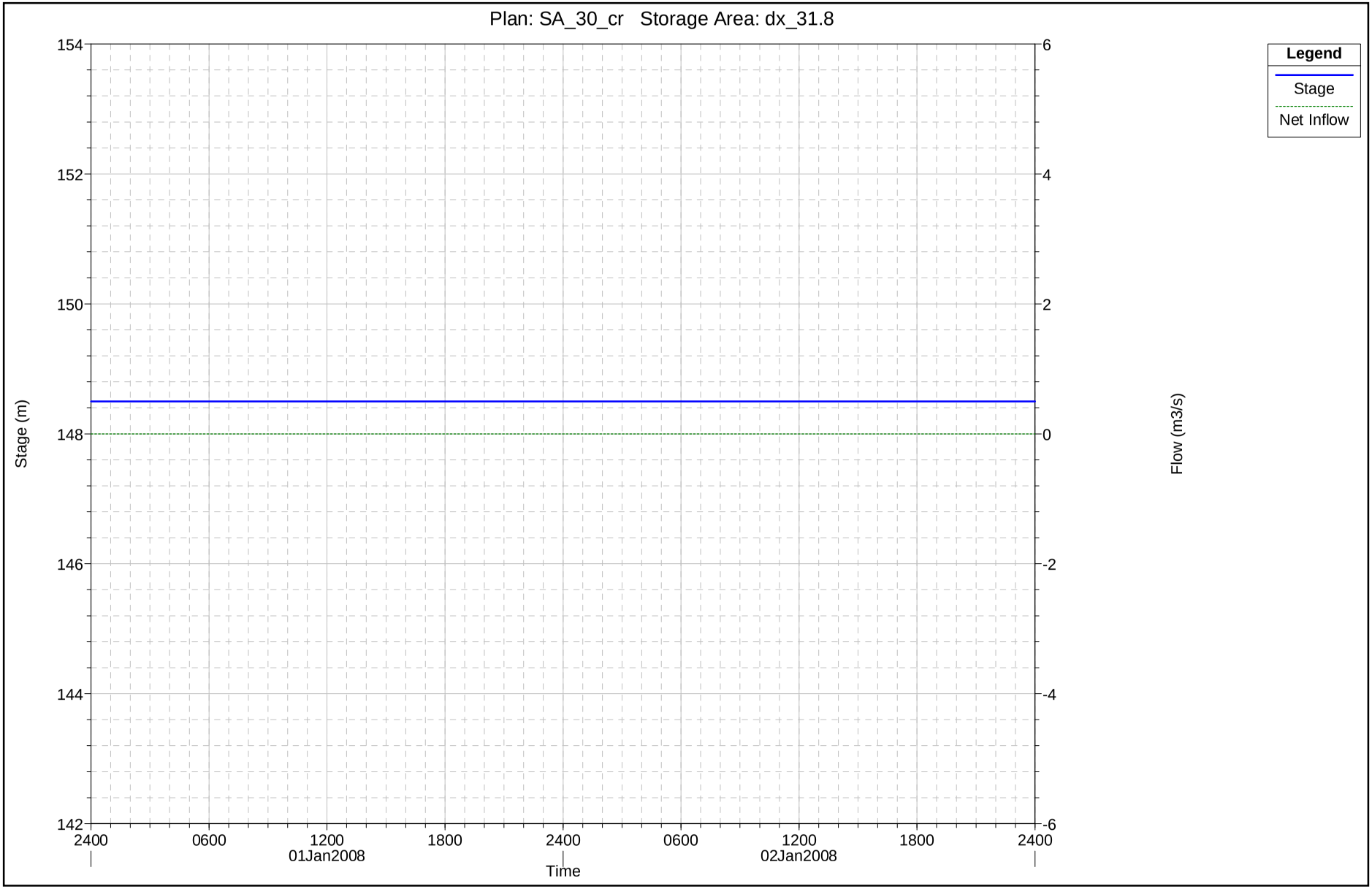

Plan: SA_20_cr Storage Area: dx_28.8
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
154
152
150
148
146
144
142
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

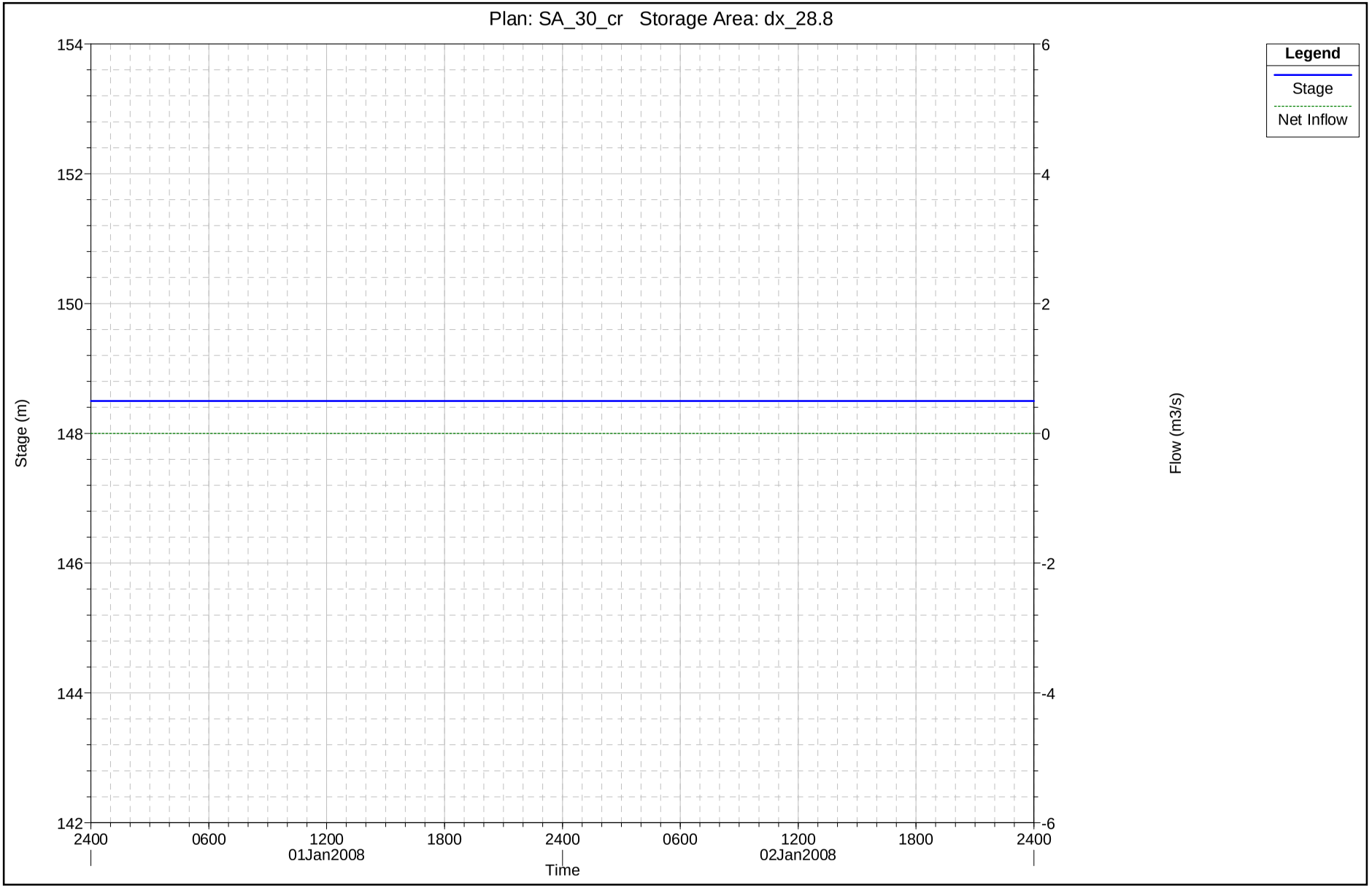

Plan: SA_30_cr Storage Area: sx_48.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
160
158
156
154
152
150
148
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

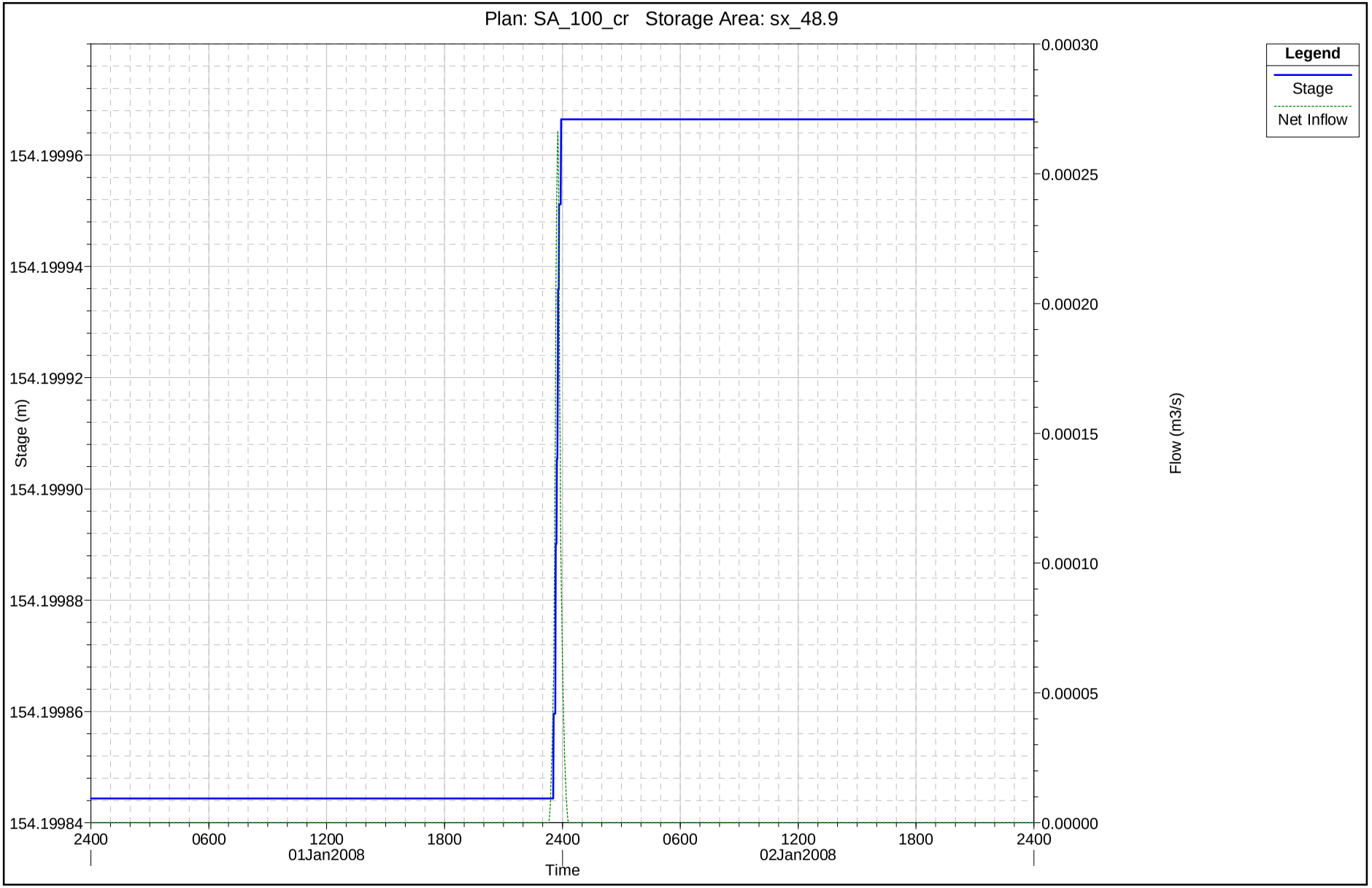

Plan: SA_30_cr Storage Area: sx_31.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
154
152
150
148
146
144
142
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

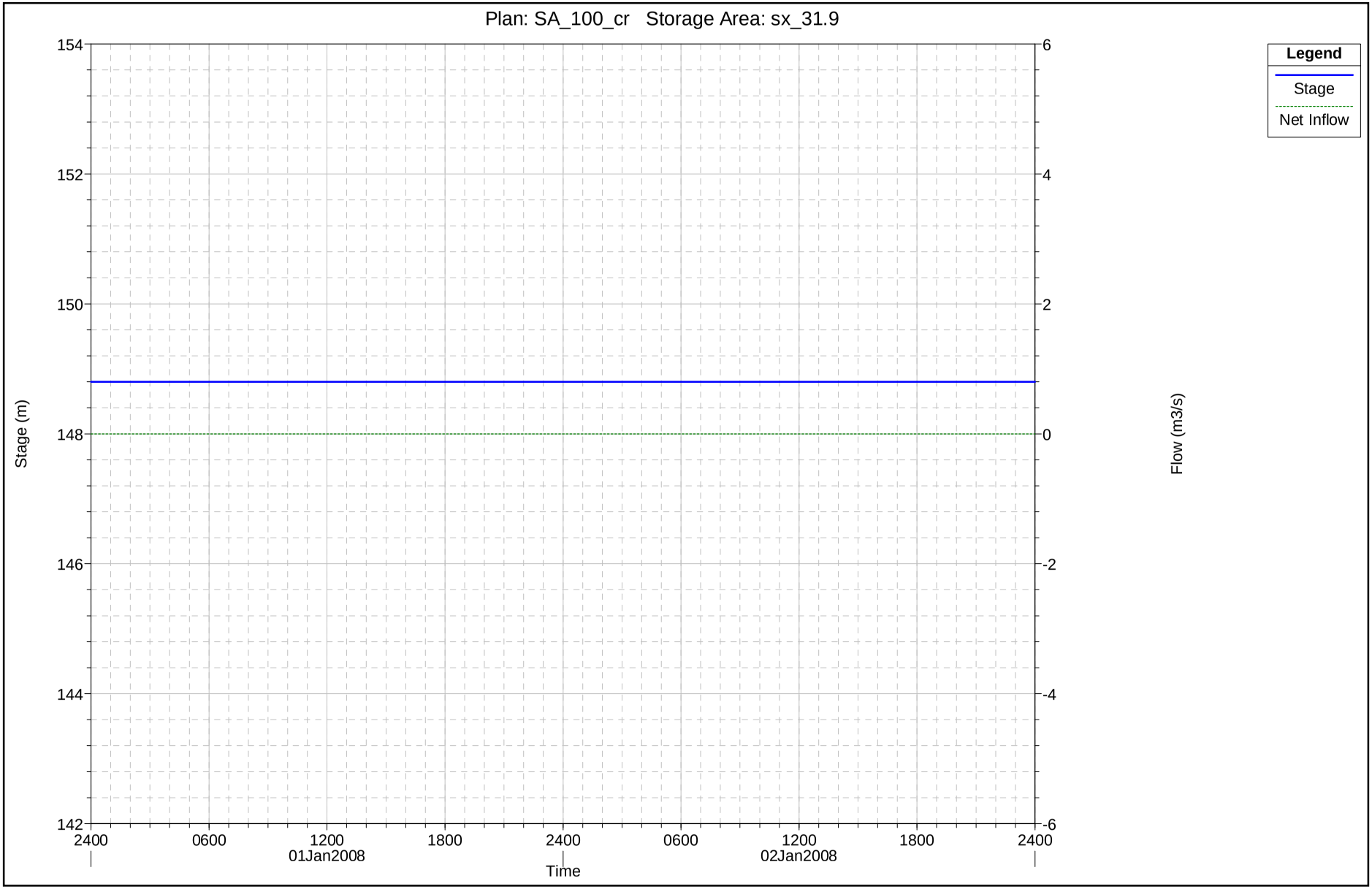

Plan: SA_30_cr Storage Area: sx_27.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
154
152
150
148
146
144
142
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

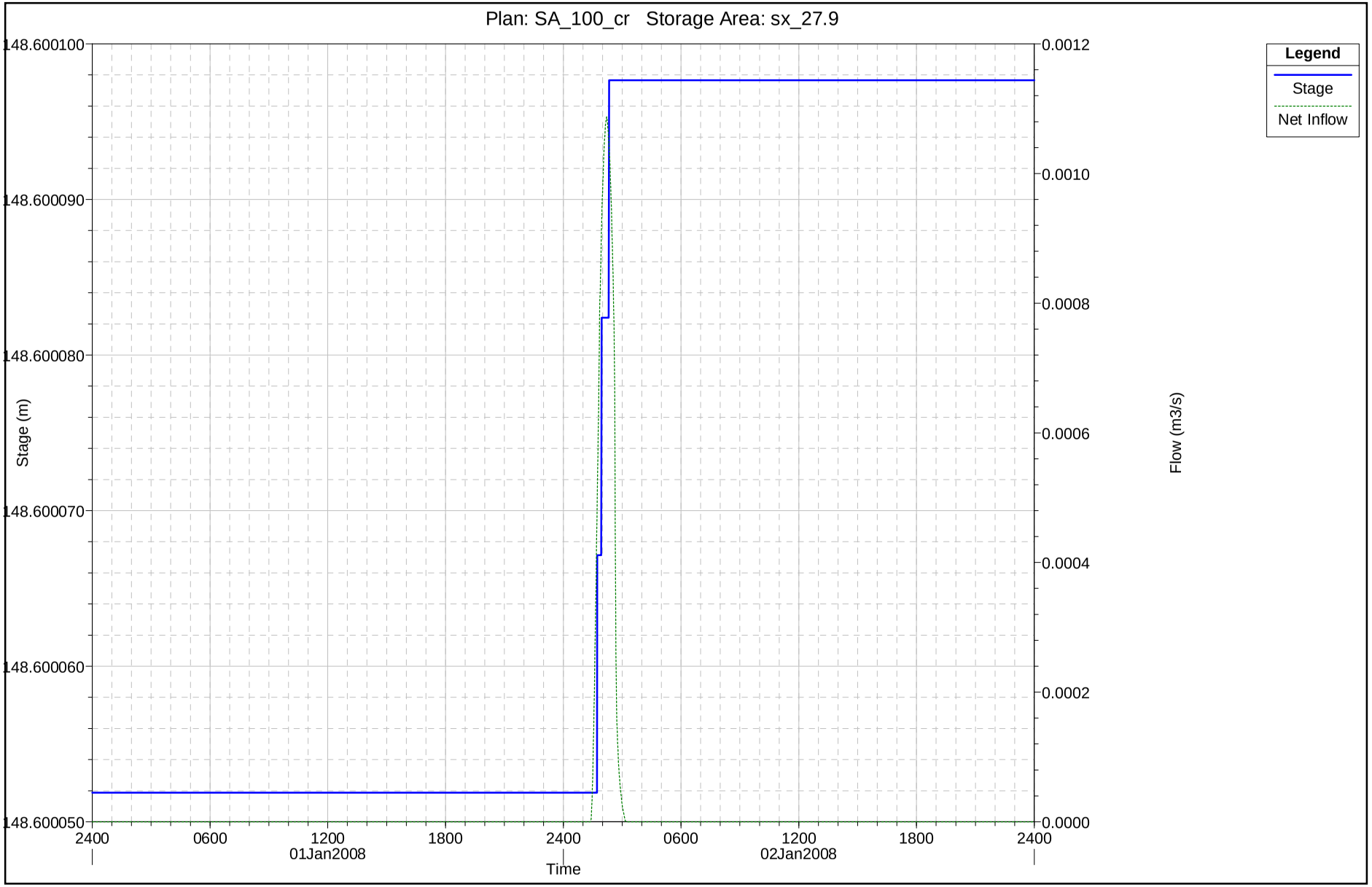

Plan: SA_30_cr Storage Area: dx_48.8
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
160
158
156
154
152
150
148
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

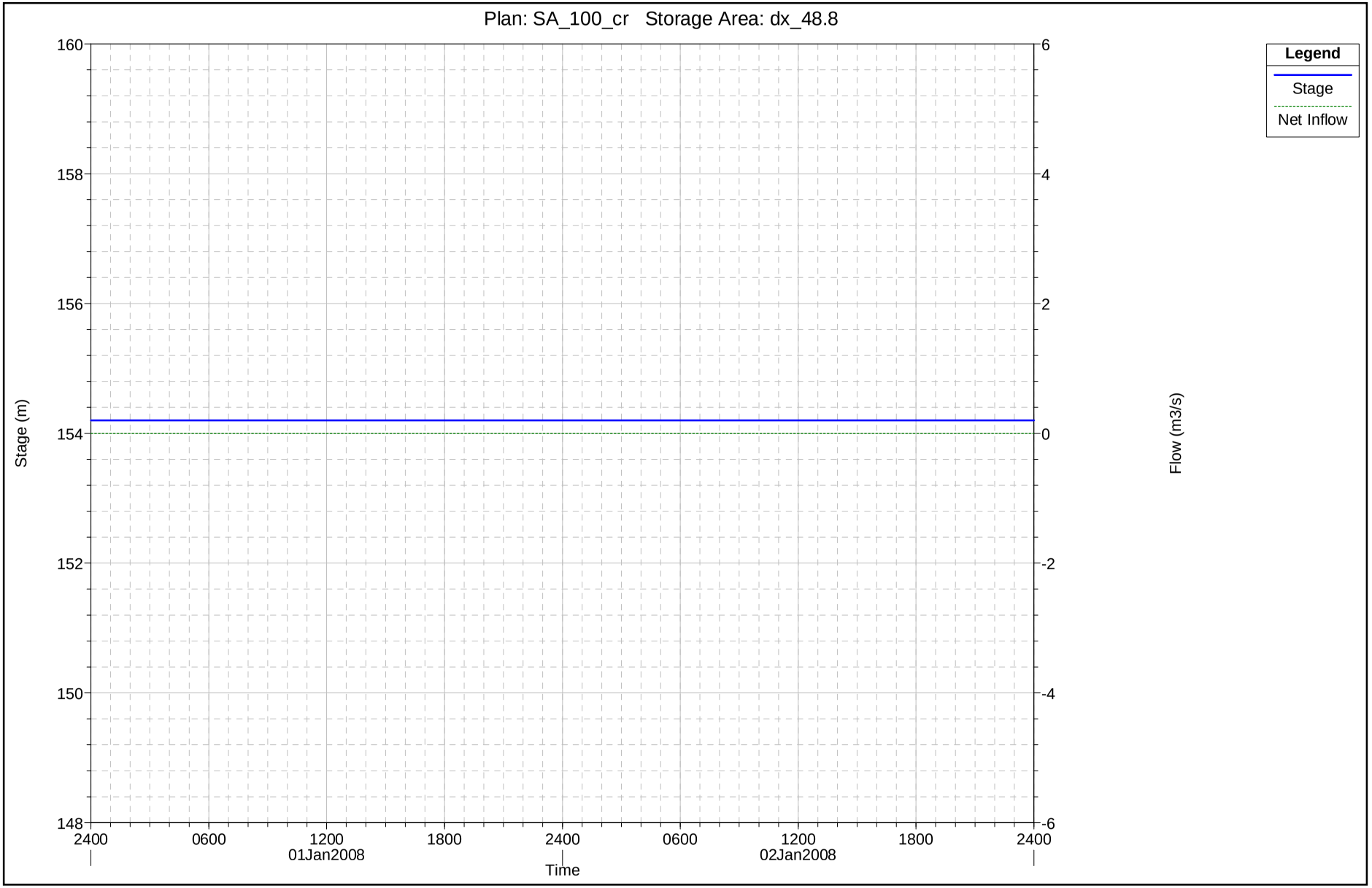

Plan: SA_30_cr Storage Area: dx_31.8
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
154
152
150
148
146
144
142
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

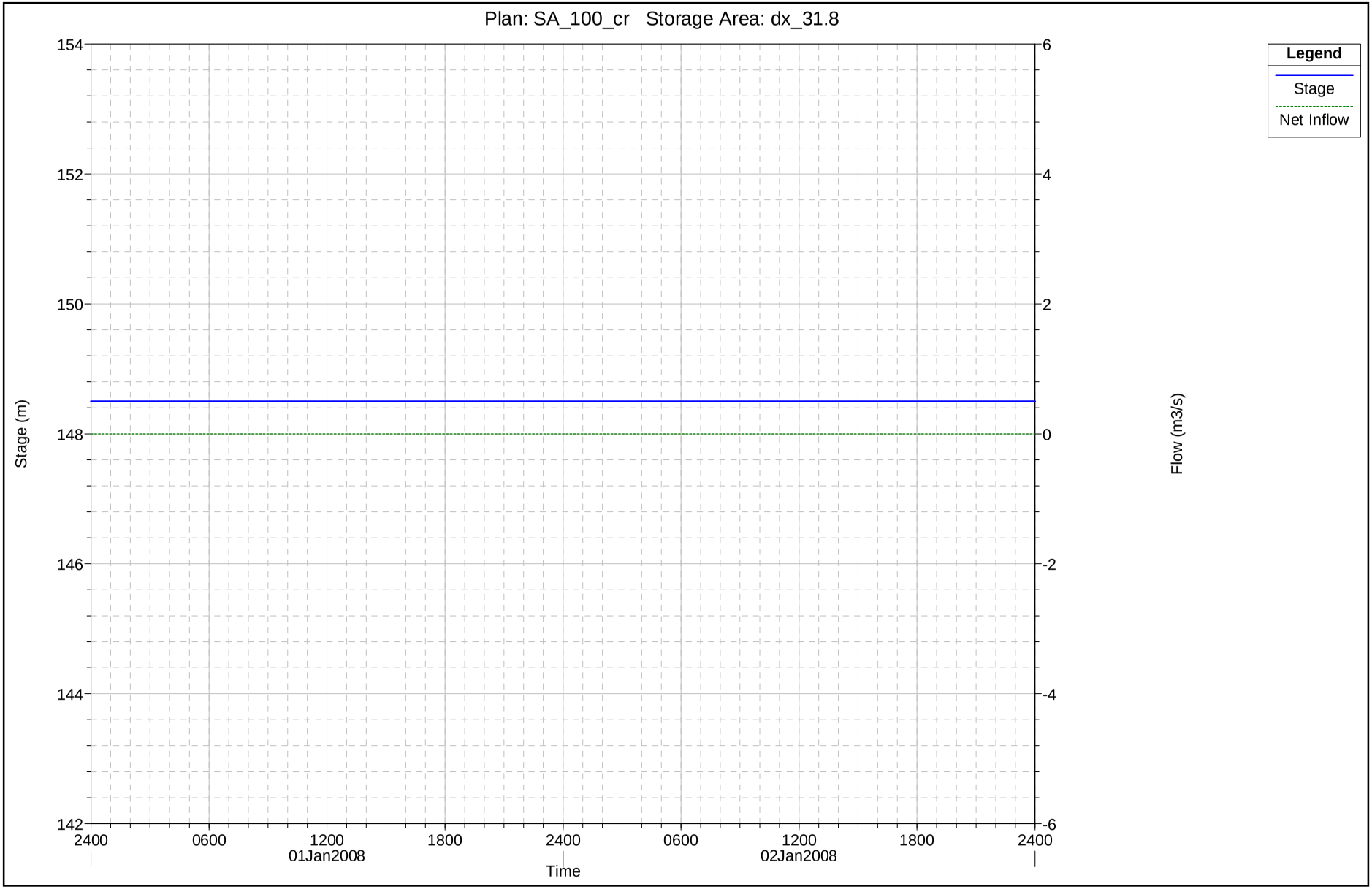

Plan: SA_30_cr Storage Area: dx_28.8
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
154
152
150
148
146
144
142
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

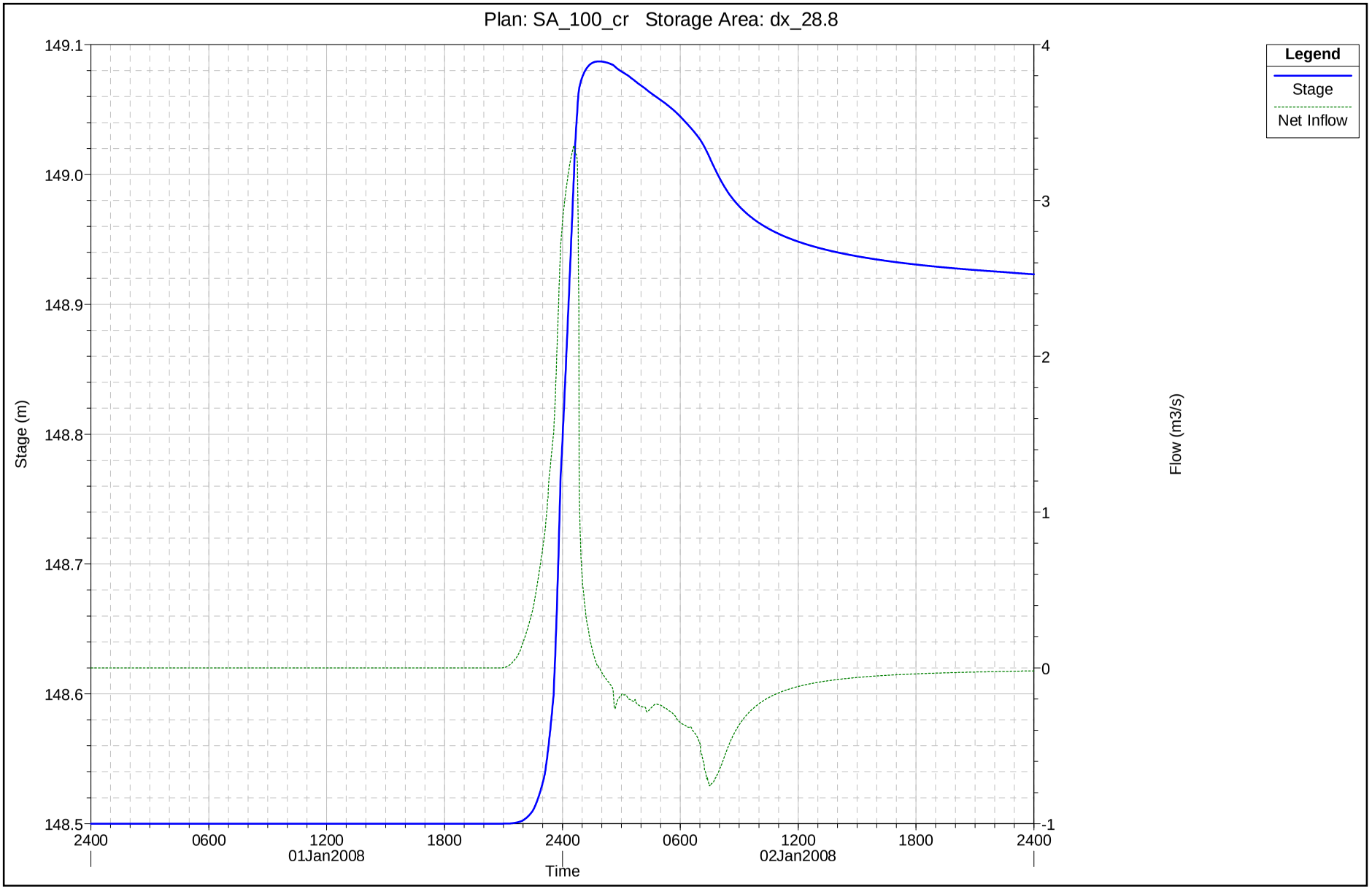

Plan: SA_100_cr Storage Area: sx_48.9
Legend
Stage
Net Inflow
Stage (m)
154.19996
154.19994
154.19992
154.19990
154.19988
154.19986
154.19984
Flow (m3/s)
0.00030
0.00025
0.00020
0.00015
0.00010
0.00005
0.00000
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

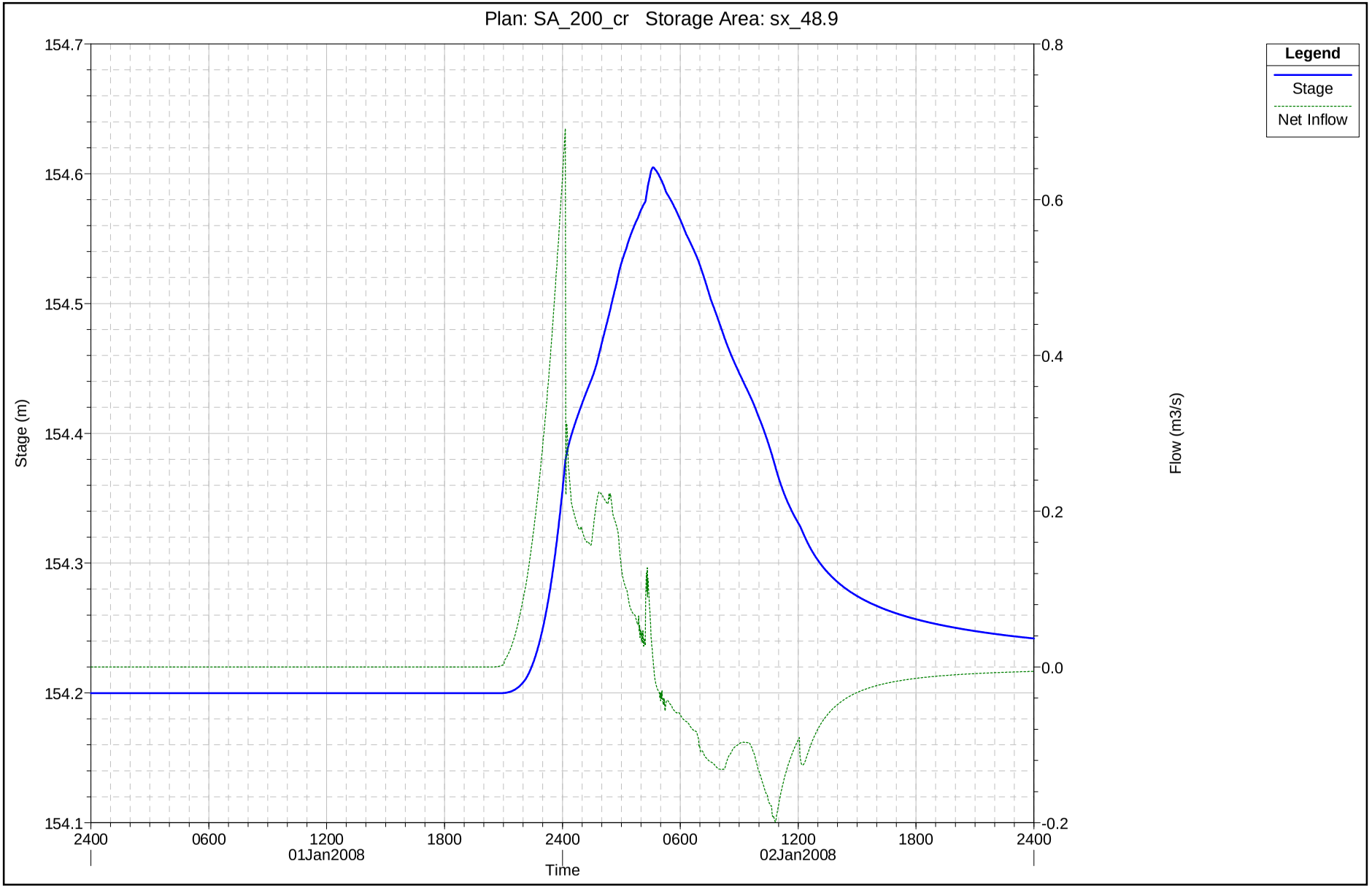

Plan: SA_100_cr Storage Area: sx_31.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
154
152
150
148
146
144
142
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

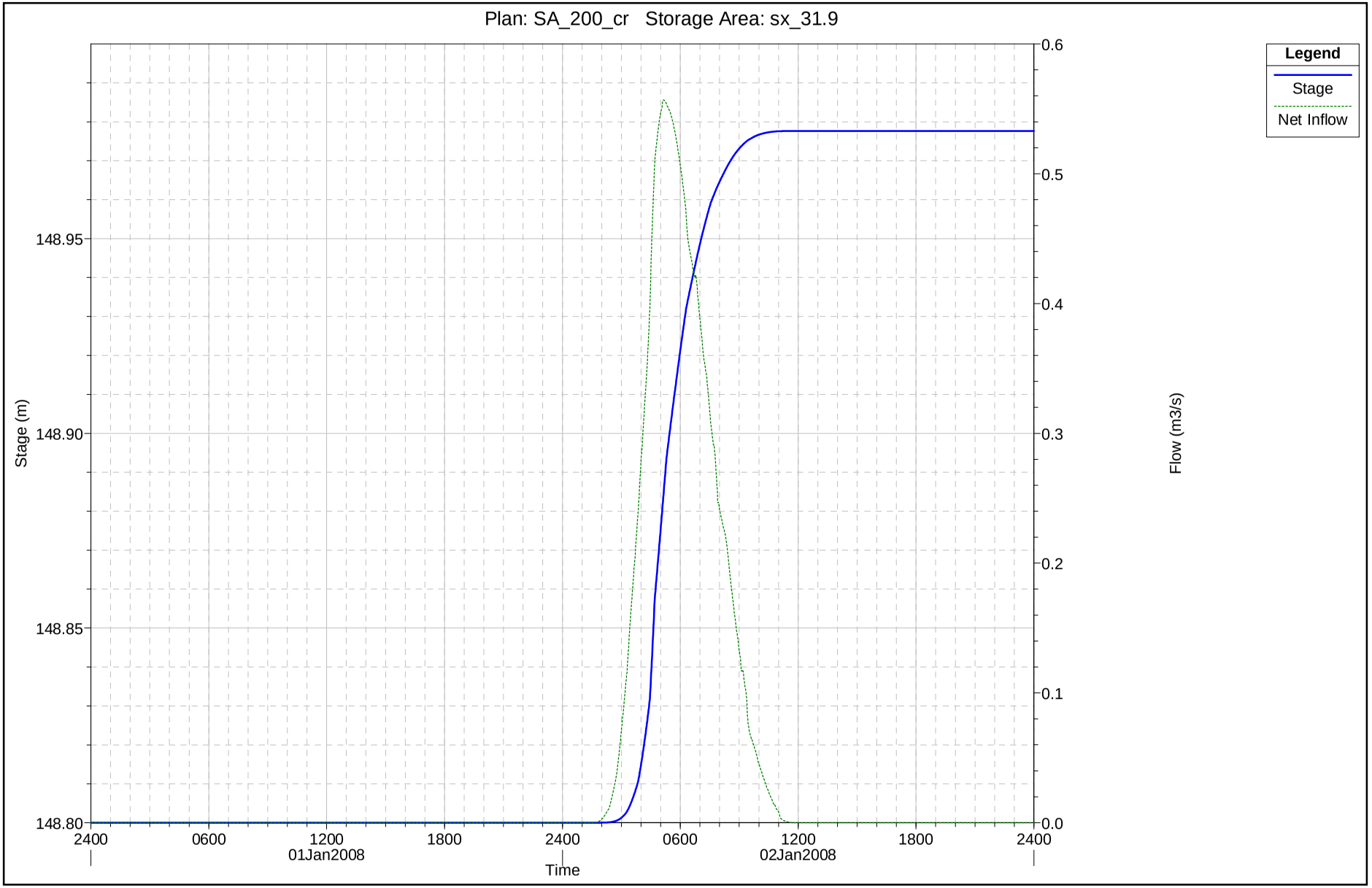

Plan: SA_100_cr Storage Area: sx_27.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
148.600100
148.600090
148.600080
148.600070
148.600060
148.600050
0.0012
0.0010
0.0008
0.0006
0.0004
0.0002
0.0000
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

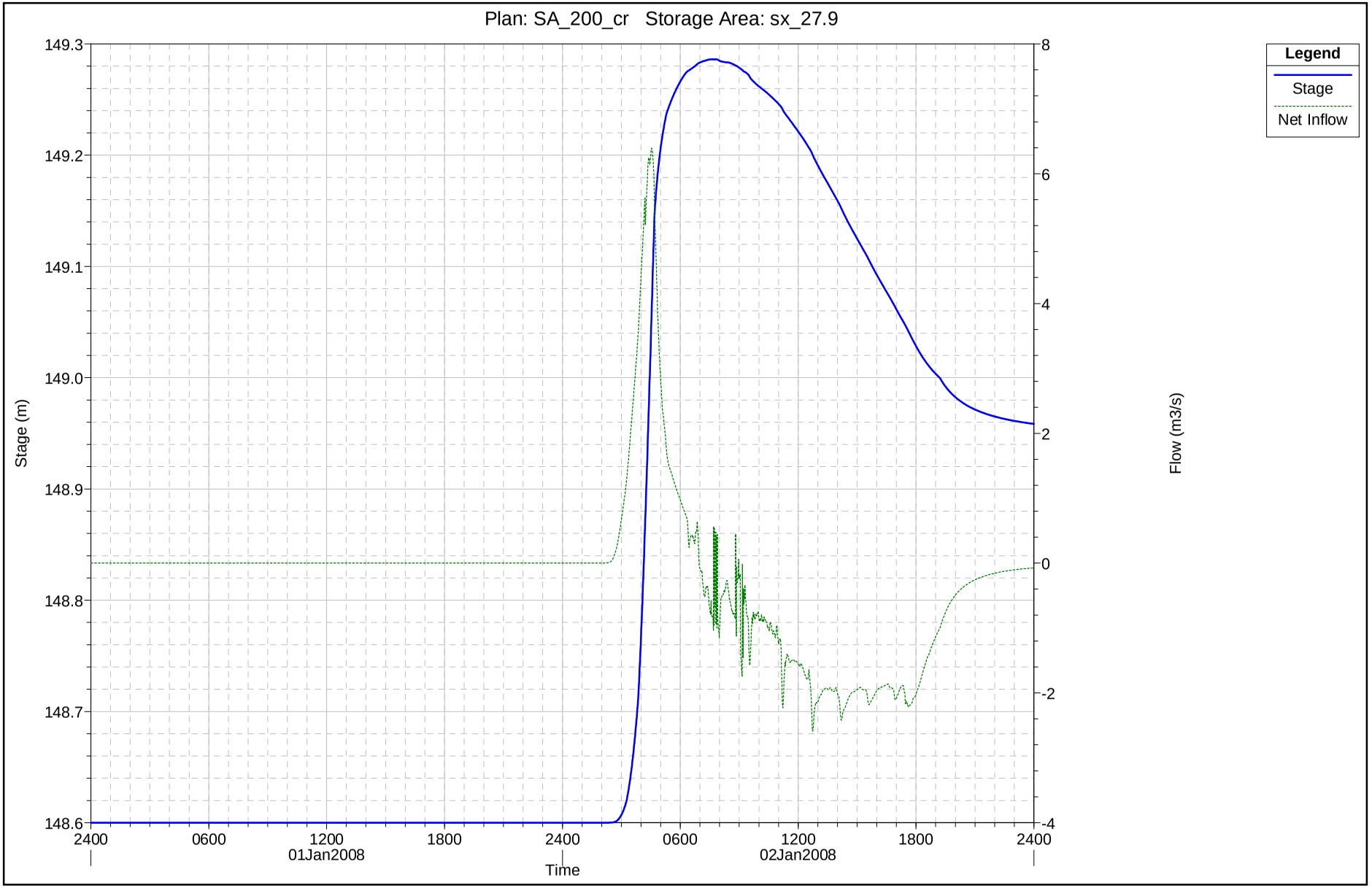

Plan: SA_100_cr Storage Area: dx_48.8
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
160
158
156
154
152
150
148
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

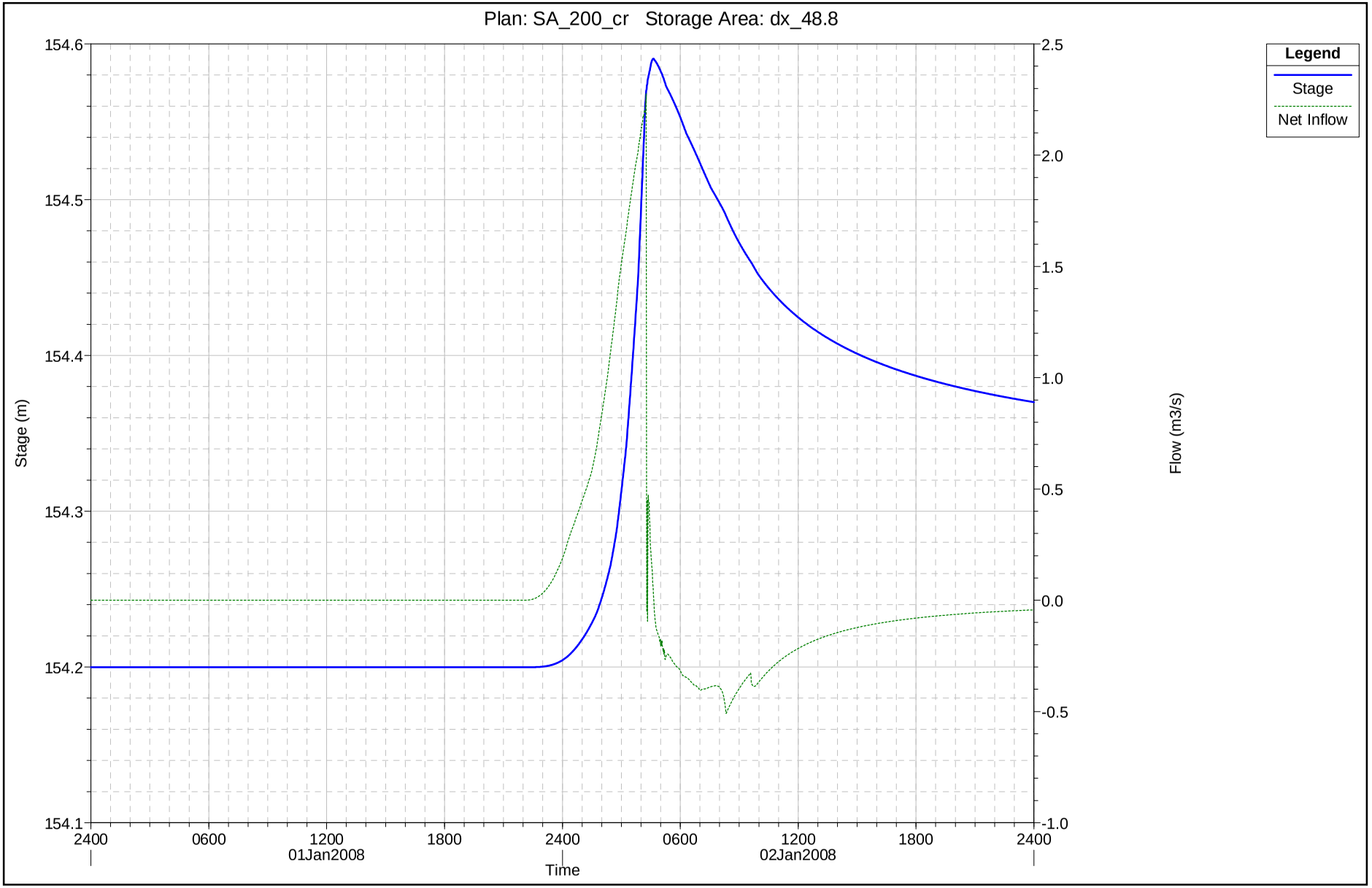

Plan: SA_100_cr Storage Area: dx_31.8
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
154
152
150
148
146
144
142
6
4
2
0
-2
-4
-6
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

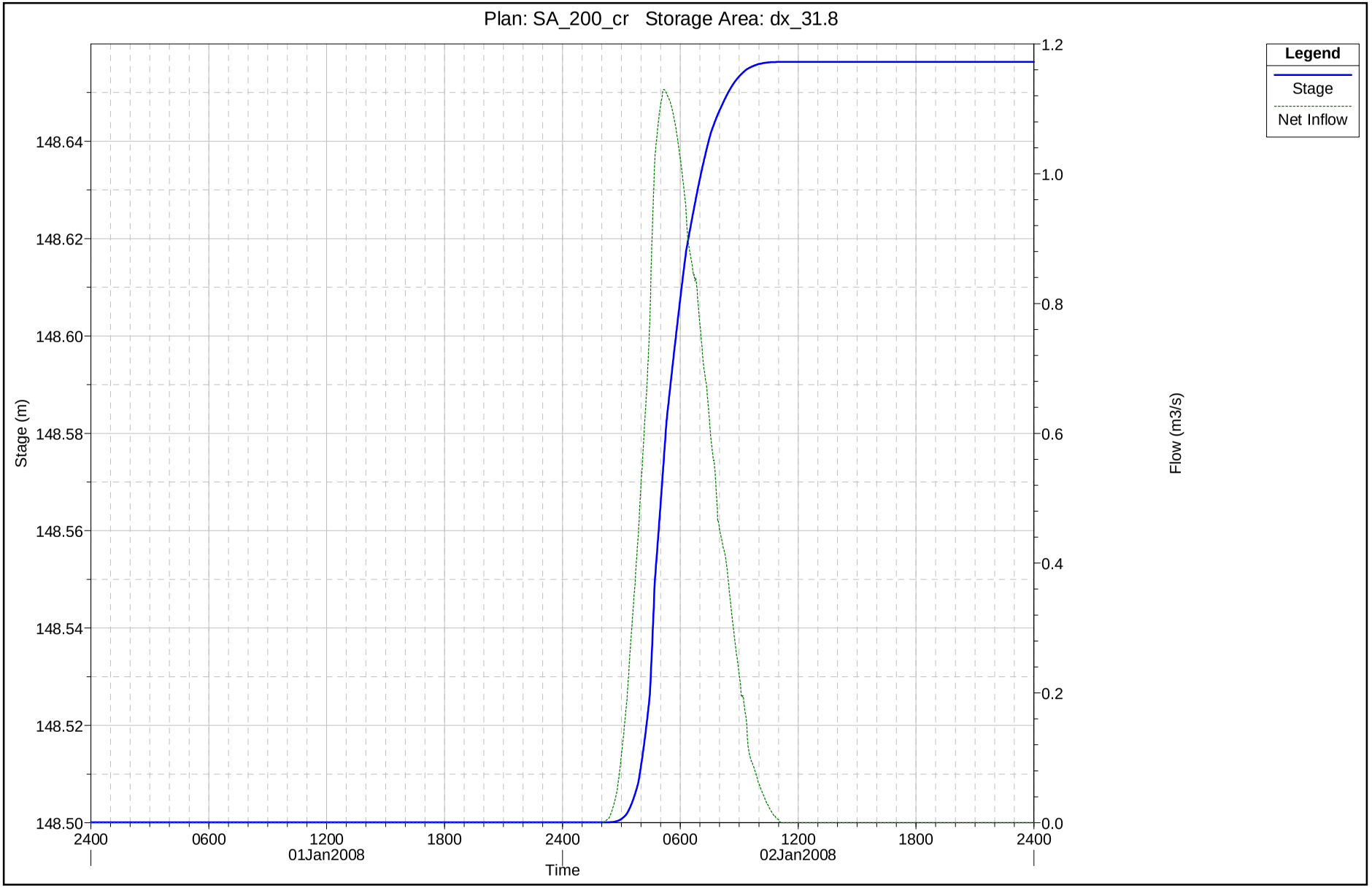

Plan: SA_100_cr Storage Area: dx_28.8
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
149.1
149.0
148.9
148.8
148.7
148.6
148.5
4
3
2
1
0
-1
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

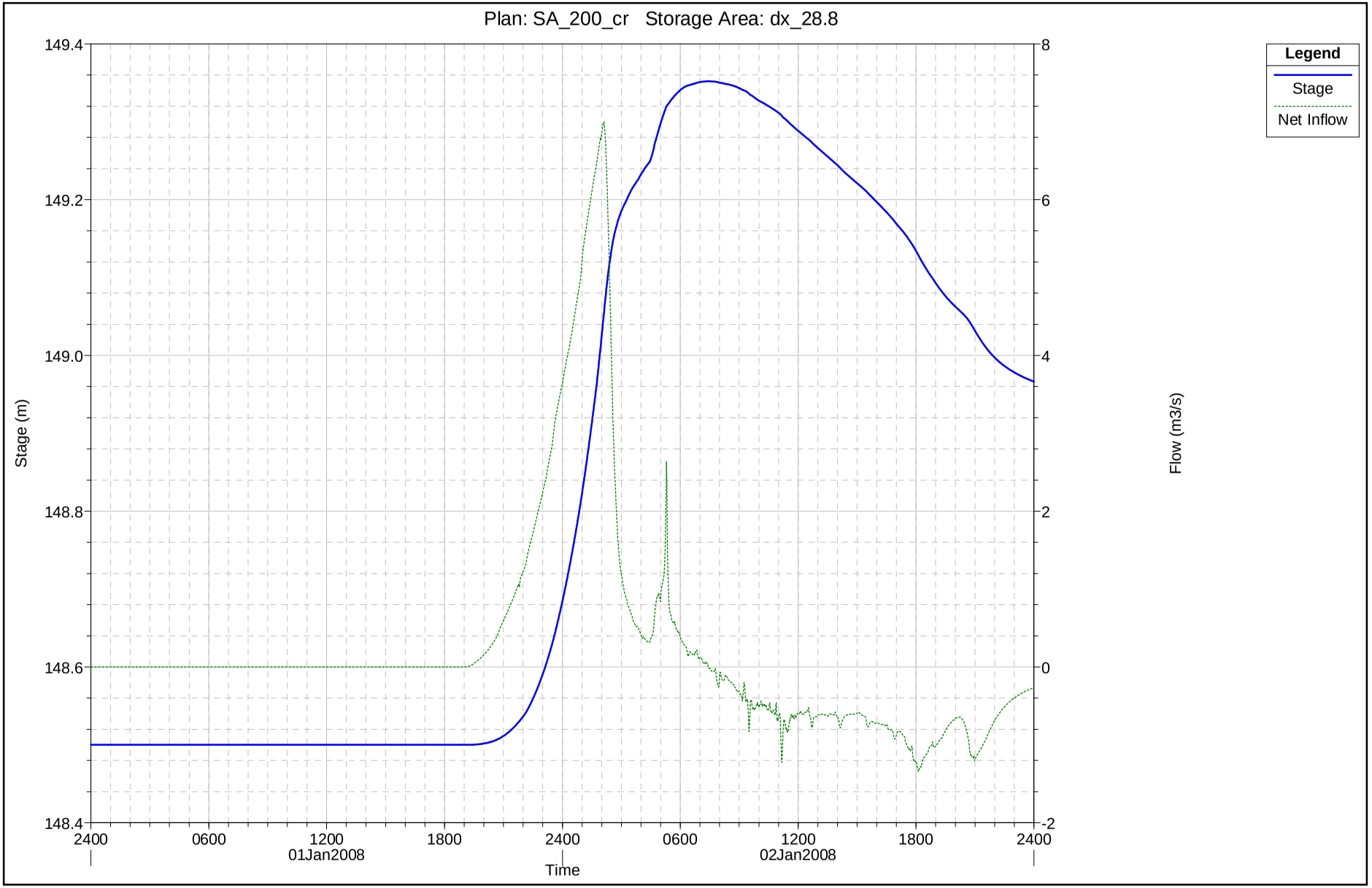

Plan: SA_200_cr Storage Area: sx_48.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
154.7
154.6
154.5
154.4
154.3
154.2
154.1
0.8
0.6
0.4
0.2
0.0
-0.2
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

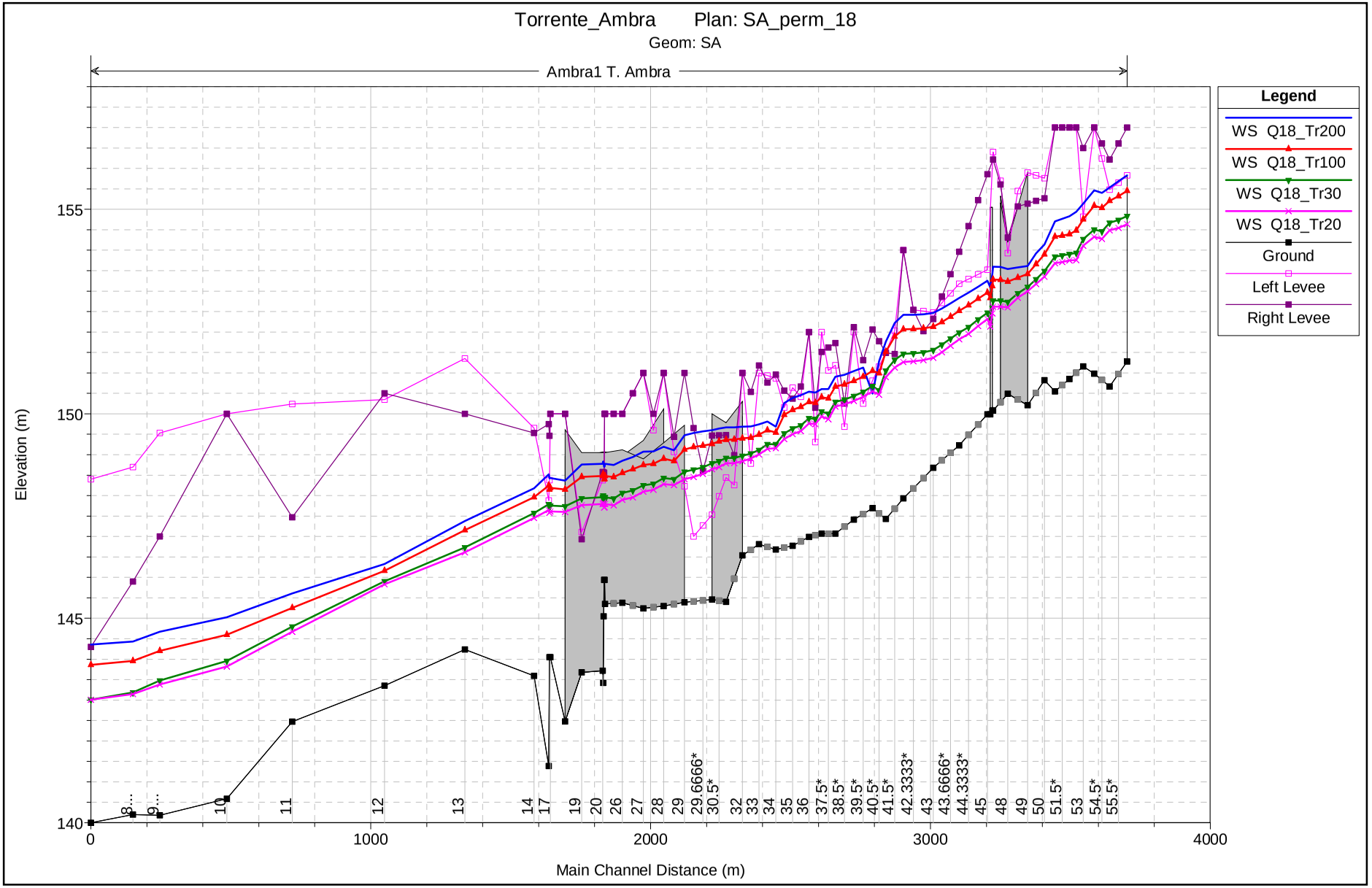

Plan: SA_200_cr Storage Area: sx_31.9
Legend
Stage
Net Inflow
Stage (m)
148.95
148.90
148.85
148.80
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Flow (m3/s)
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

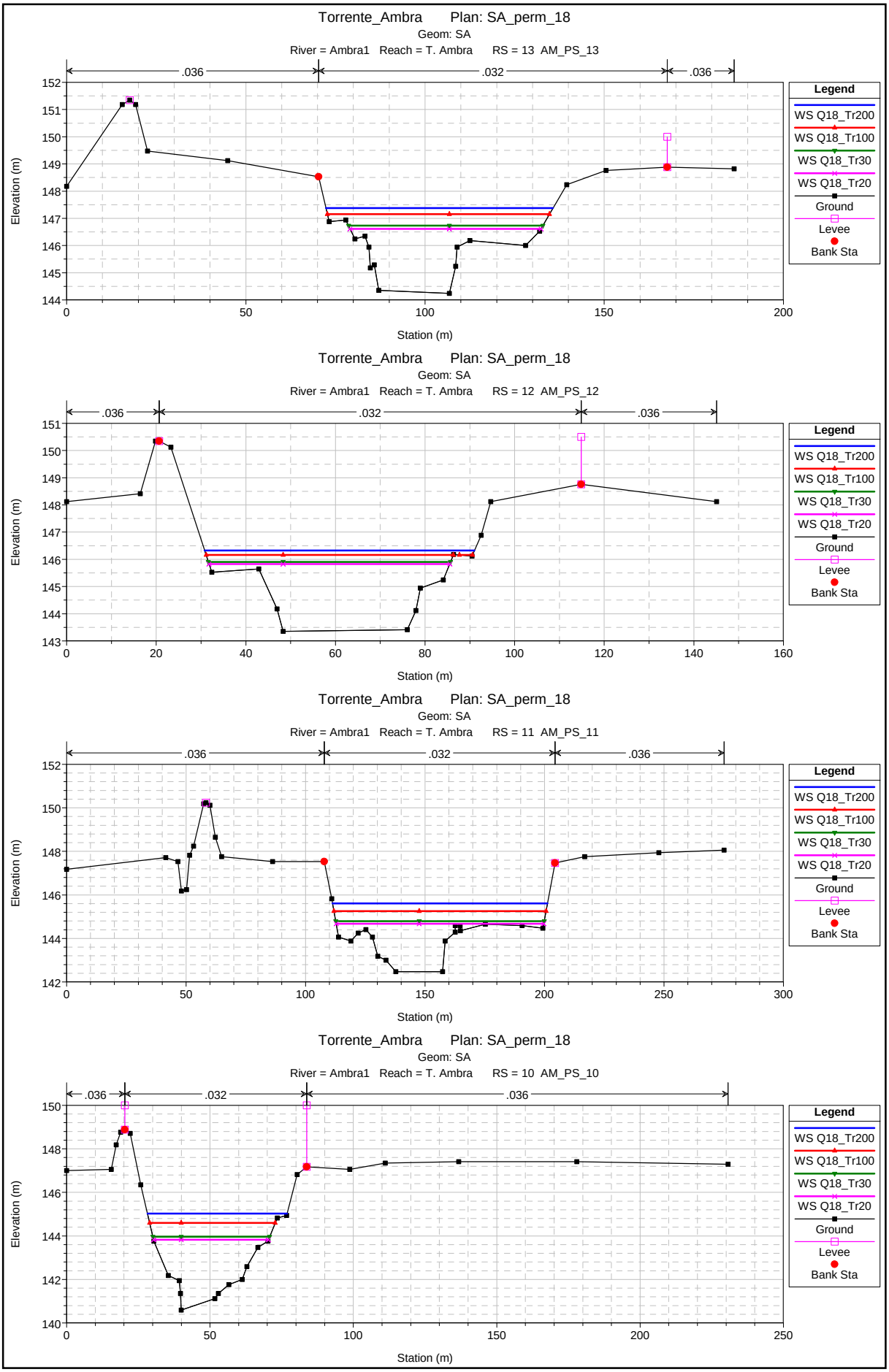

Plan: SA_200_cr Storage Area: sx_27.9
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
149.3
149.2
149.1
149.0
148.9
148.8
148.7
148.6
8
6
4
2
0
-2
-4
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time


Plan: SA_200_cr Storage Area: dx_48.8
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
154.6
154.5
154.4
154.3
154.2
154.1
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time


Plan: SA_200_cr Storage Area: dx_31.8
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
148.64
148.62
148.60
148.58
148.56
148.54
148.52
148.50
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time


Plan: SA_200_cr Storage Area: dx_28.8
Legend
Stage
Net Inflow
Stage (m)
Flow (m3/s)
149.4
149.2
149.0
148.8
148.6
148.4
8
6
4
2
0
-2
2400
0600
1200
1800
2400
0600
1200
1800
2400
01Jan2008
02Jan2008
Time

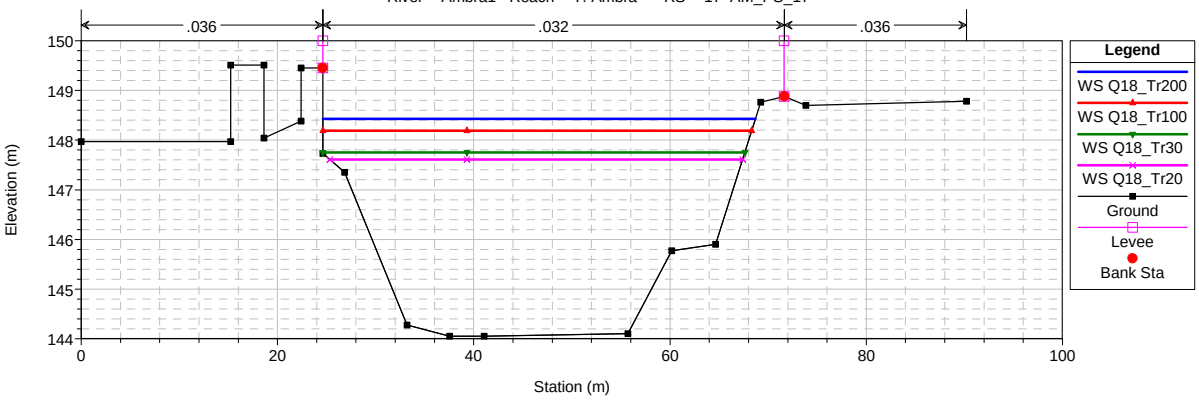

Torrente_Ambra Plan: SA_perm_18
Geom: SA
Ambra1 T. Ambra
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Left Levee
Right Levee
Elevation (m)
Main Channel Distance (m)
140
145
150
155
0
1000
2000
3000
4000


Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 13 AM_PS_13
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 12 AM_PS_12
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 11 AM_PS_11
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 10 AM_PS_10
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta

Torrente_Ambra Plan: SA_perm_18

Geom: SA

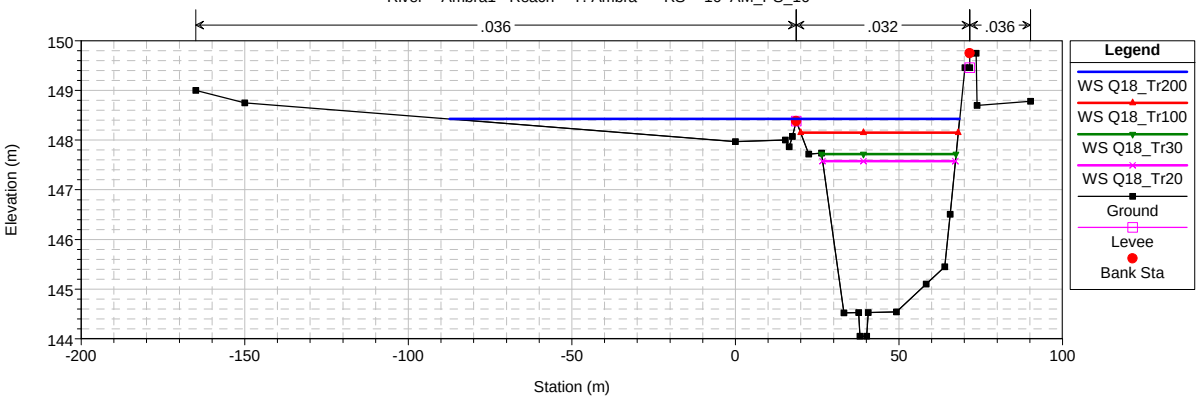
River = Ambra1 Reach = T. Ambra RS = 17 AM_PS_17



Torrente_Ambra Plan: SA_perm_18

Geom: SA

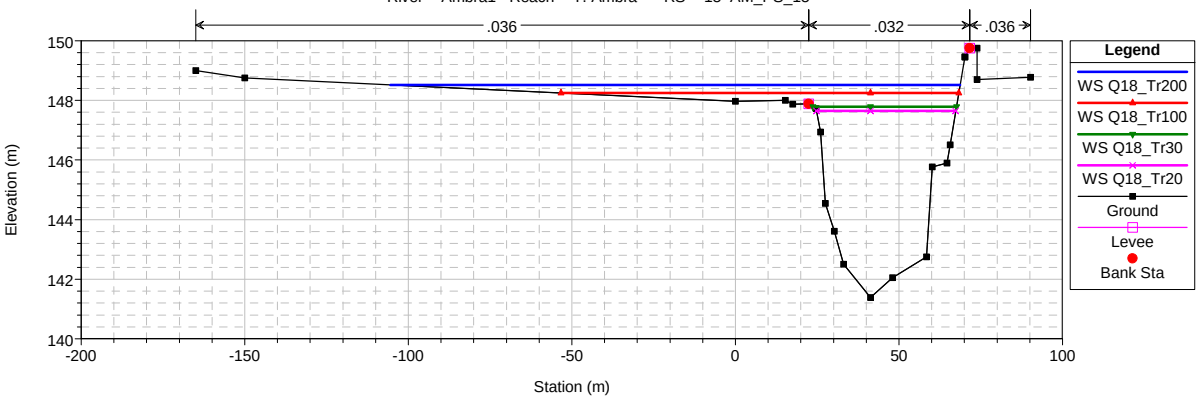
River = Ambra1 Reach = T. Ambra RS = 16 AM_PS_16



Torrente_Ambra Plan: SA_perm_18

Geom: SA

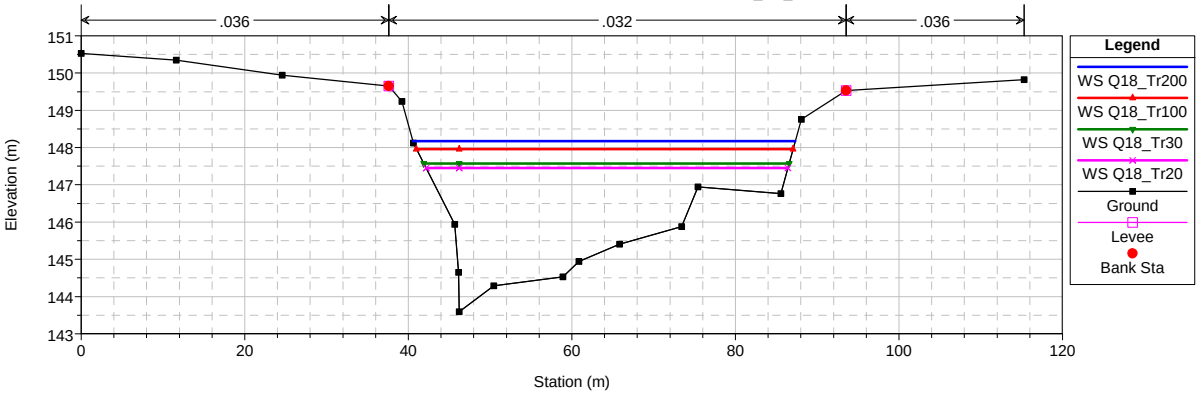
River = Ambra1 Reach = T. Ambra RS = 15 AM_PS_15

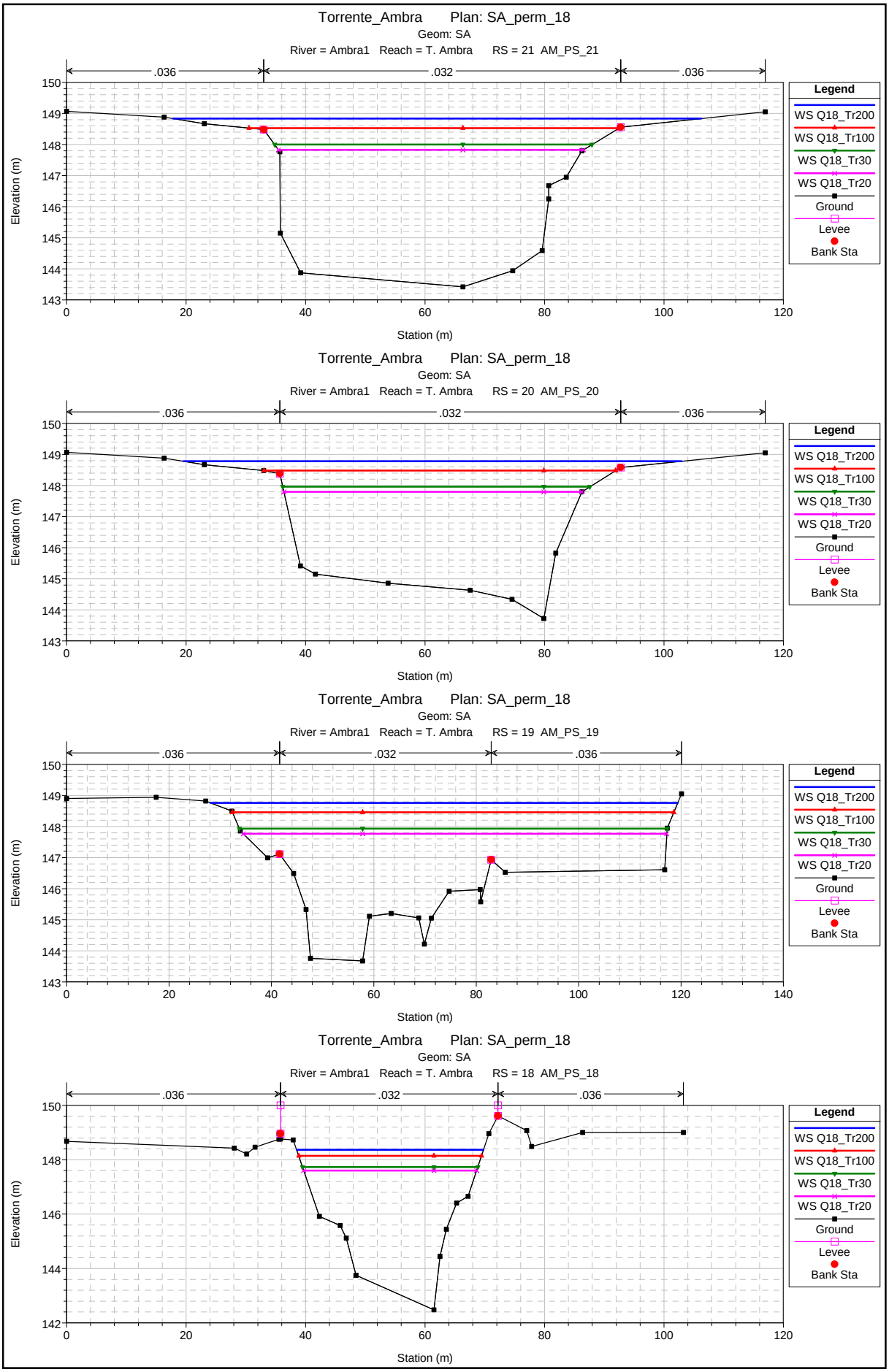


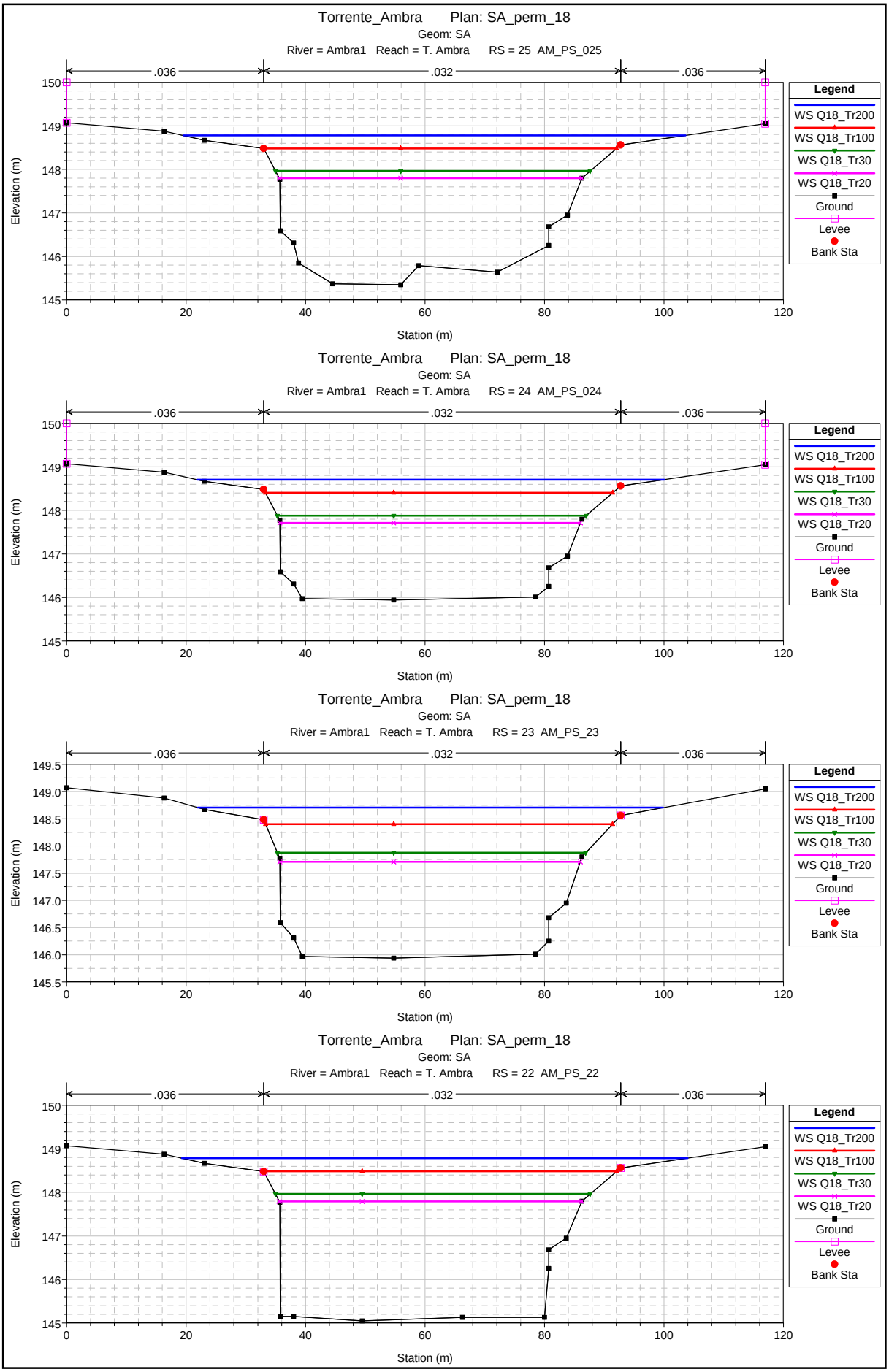
Torrente_Ambra Plan: SA_perm_18

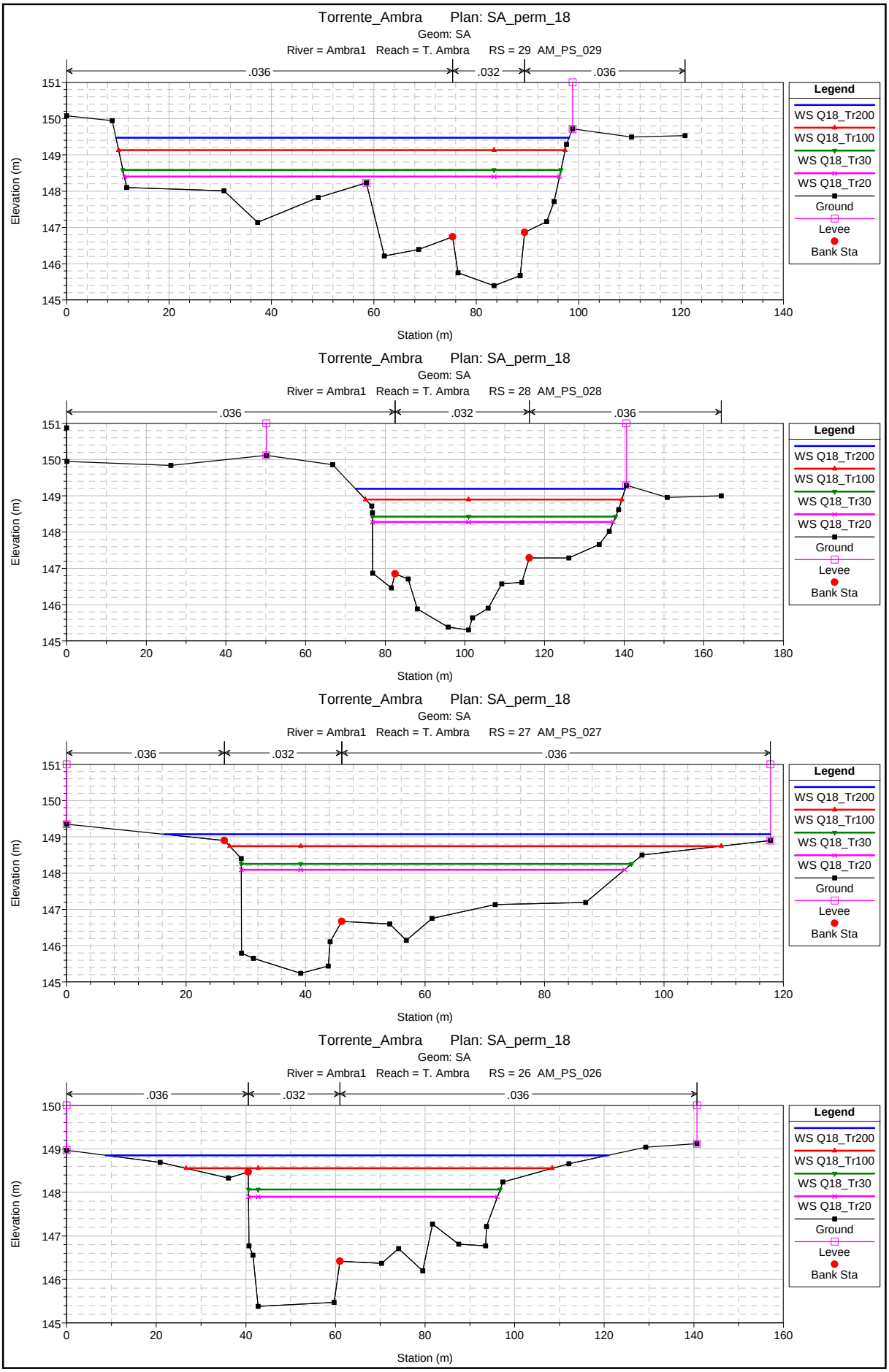
Geom: SA

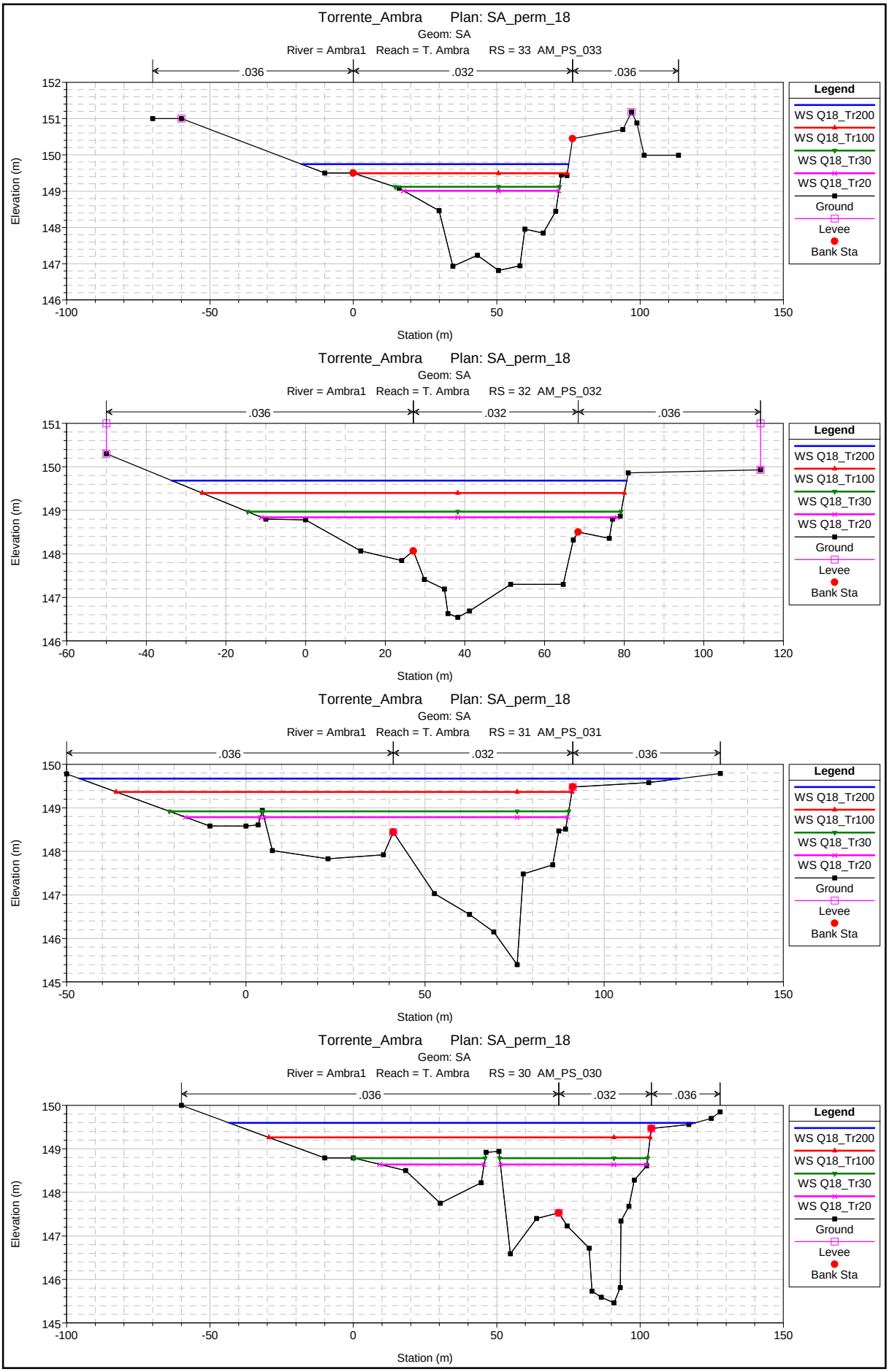
River = Ambra1 Reach = T. Ambra RS = 14 AM_PS_14

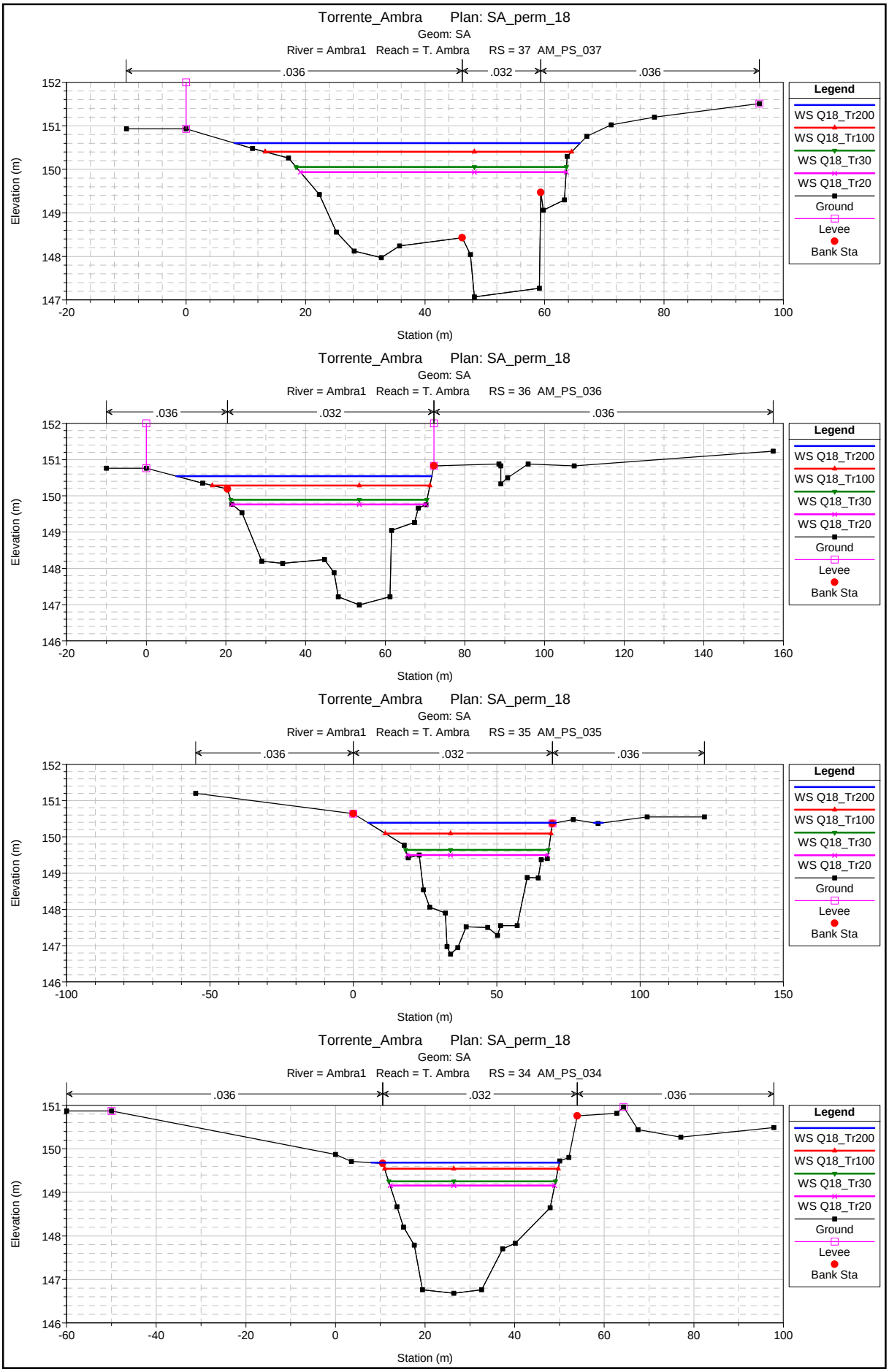


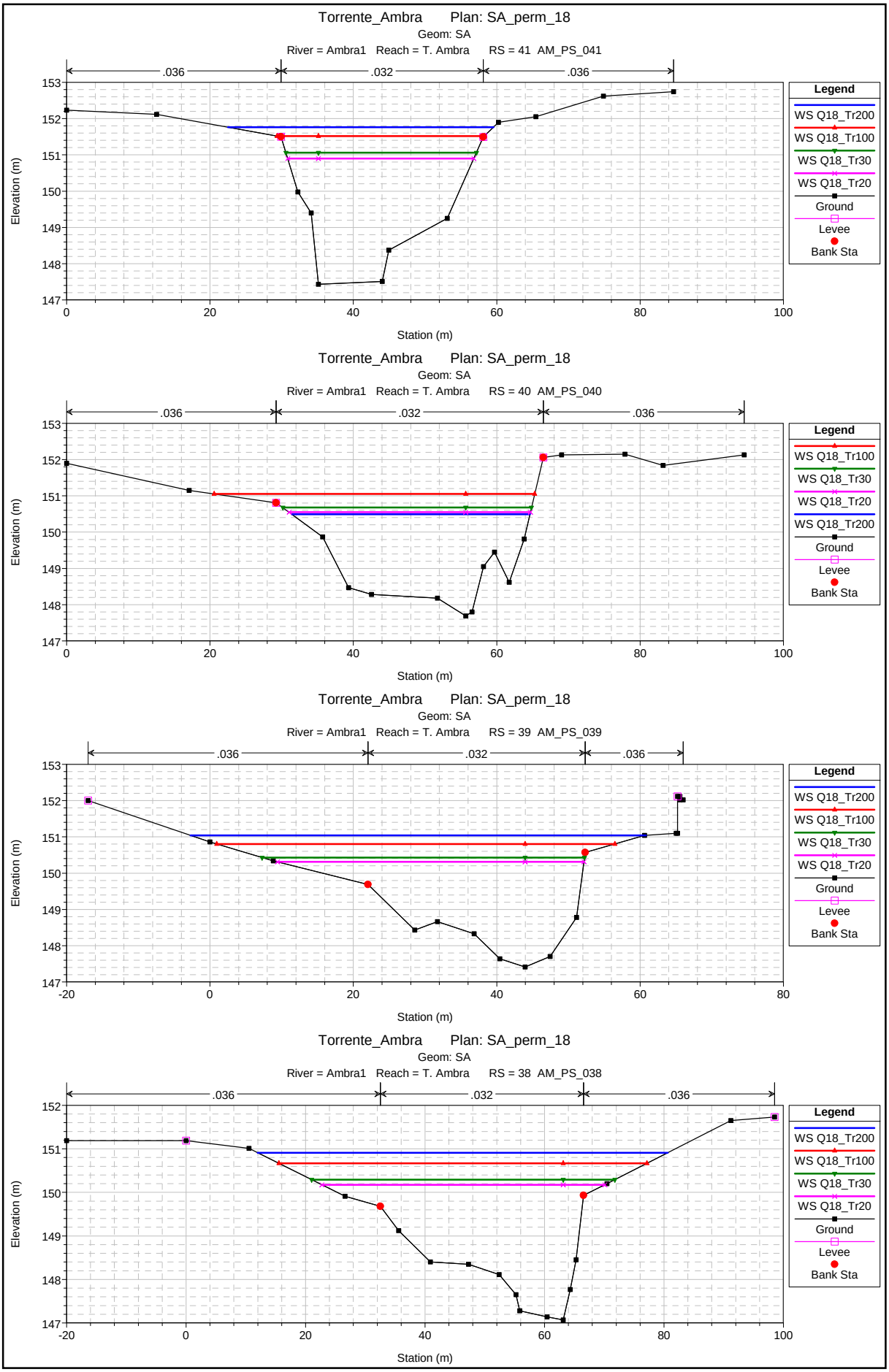

Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 21 AM_PS_21
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 20 AM_PS_20
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 19 AM_PS_19
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 18 AM_PS_18
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta

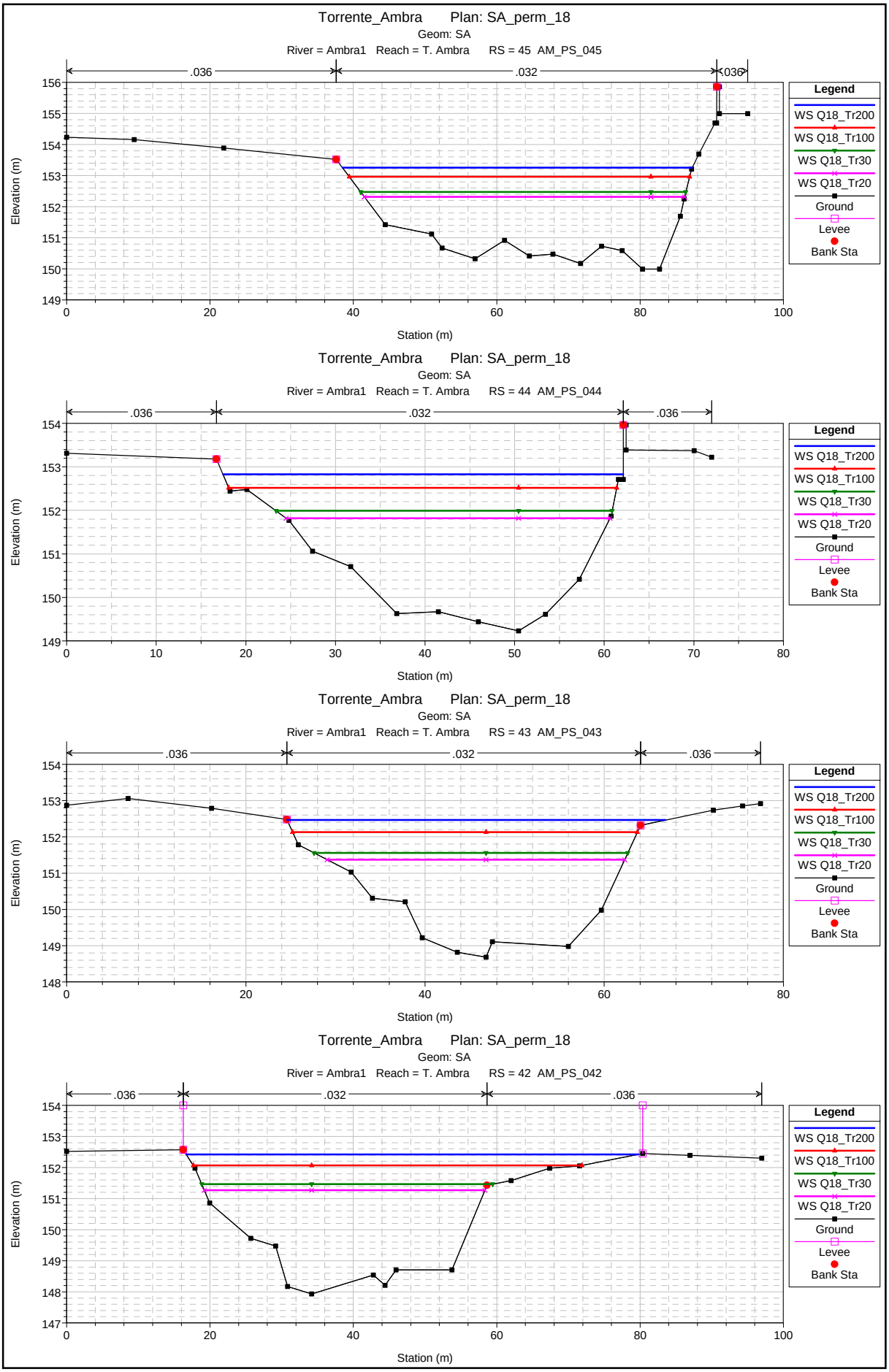

Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 25 AM_PS_025
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 24 AM_PS_024
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 23 AM_PS_23
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 22 AM_PS_22
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta

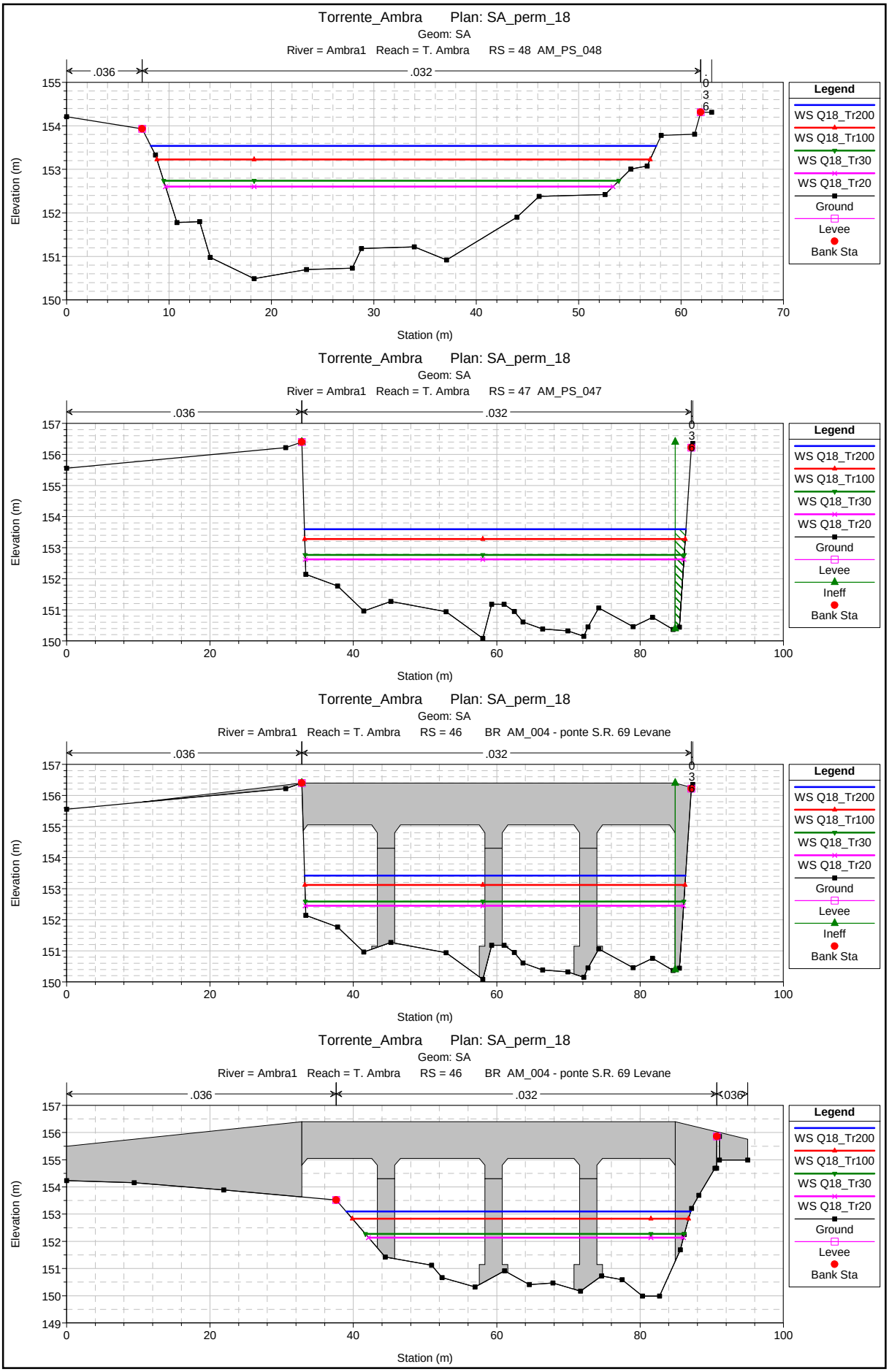

Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 29 AM_PS_029
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 28 AM_PS_028
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 27 AM_PS_027
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 26 AM_PS_026
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta

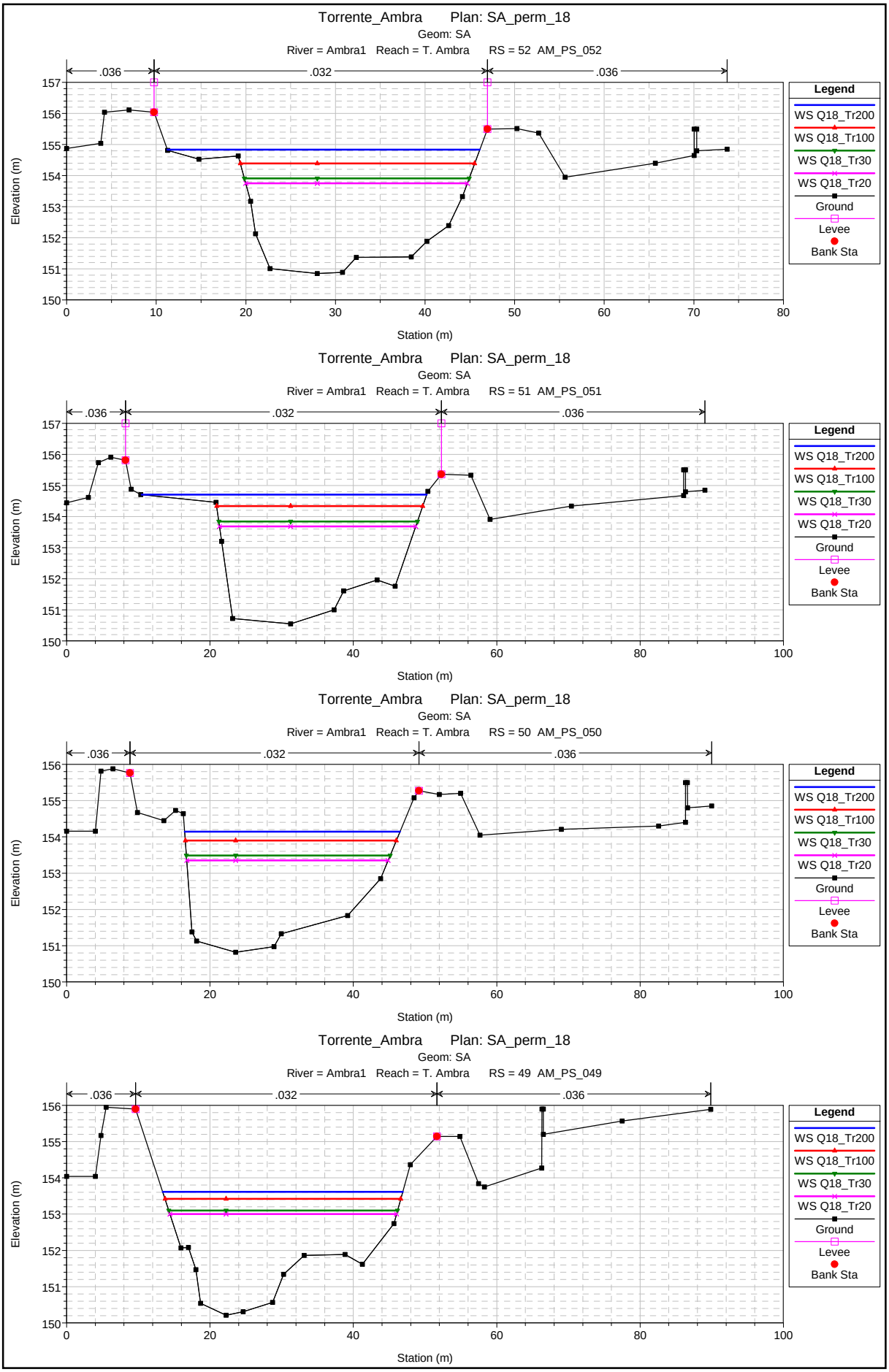

Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 33 AM_PS_033
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 32 AM_PS_032
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 31 AM_PS_031
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 30 AM_PS_030
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta

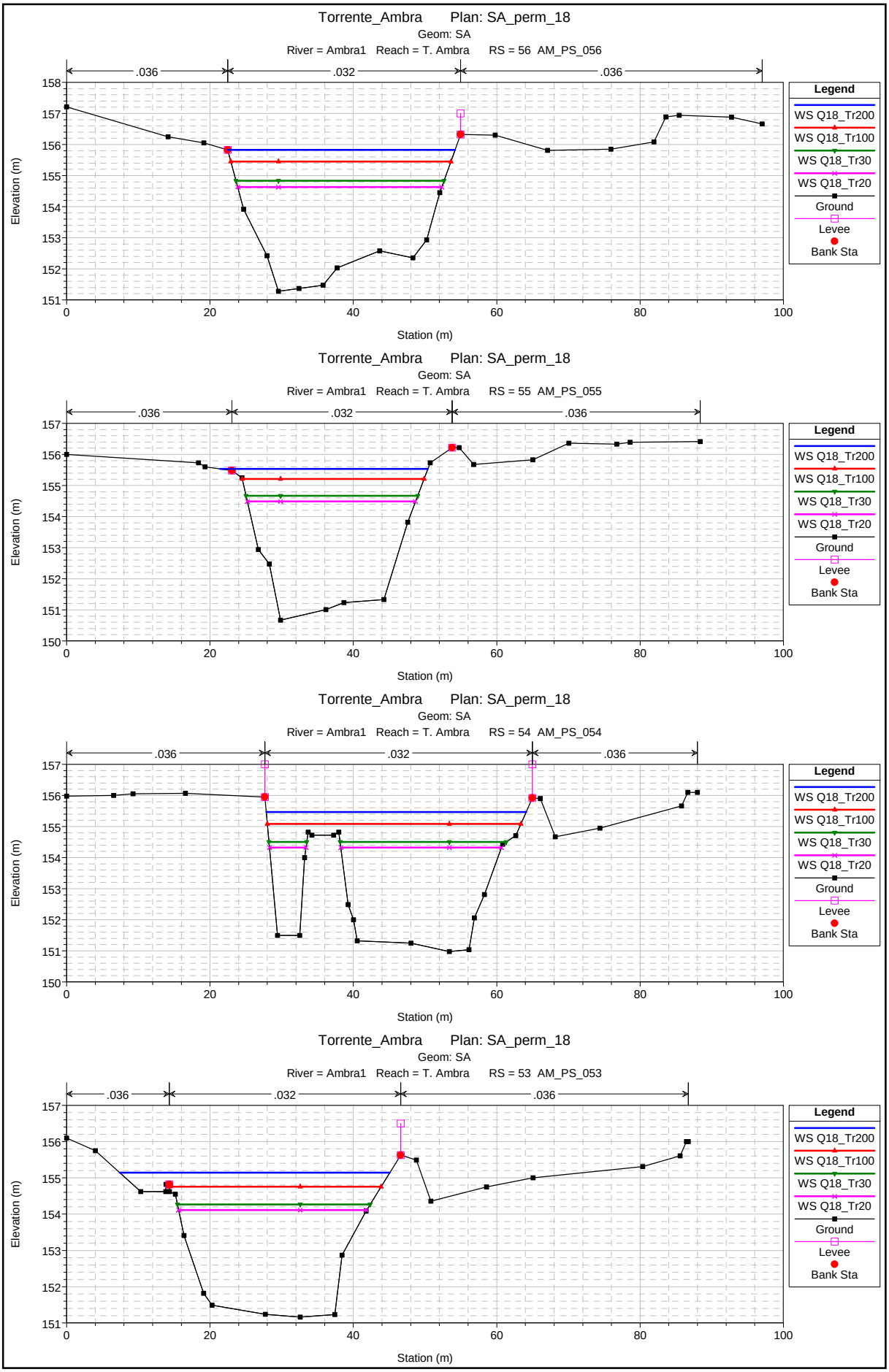

Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 37 AM_PS_037
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 36 AM_PS_036
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 35 AM_PS_035
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 34 AM_PS_034
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta

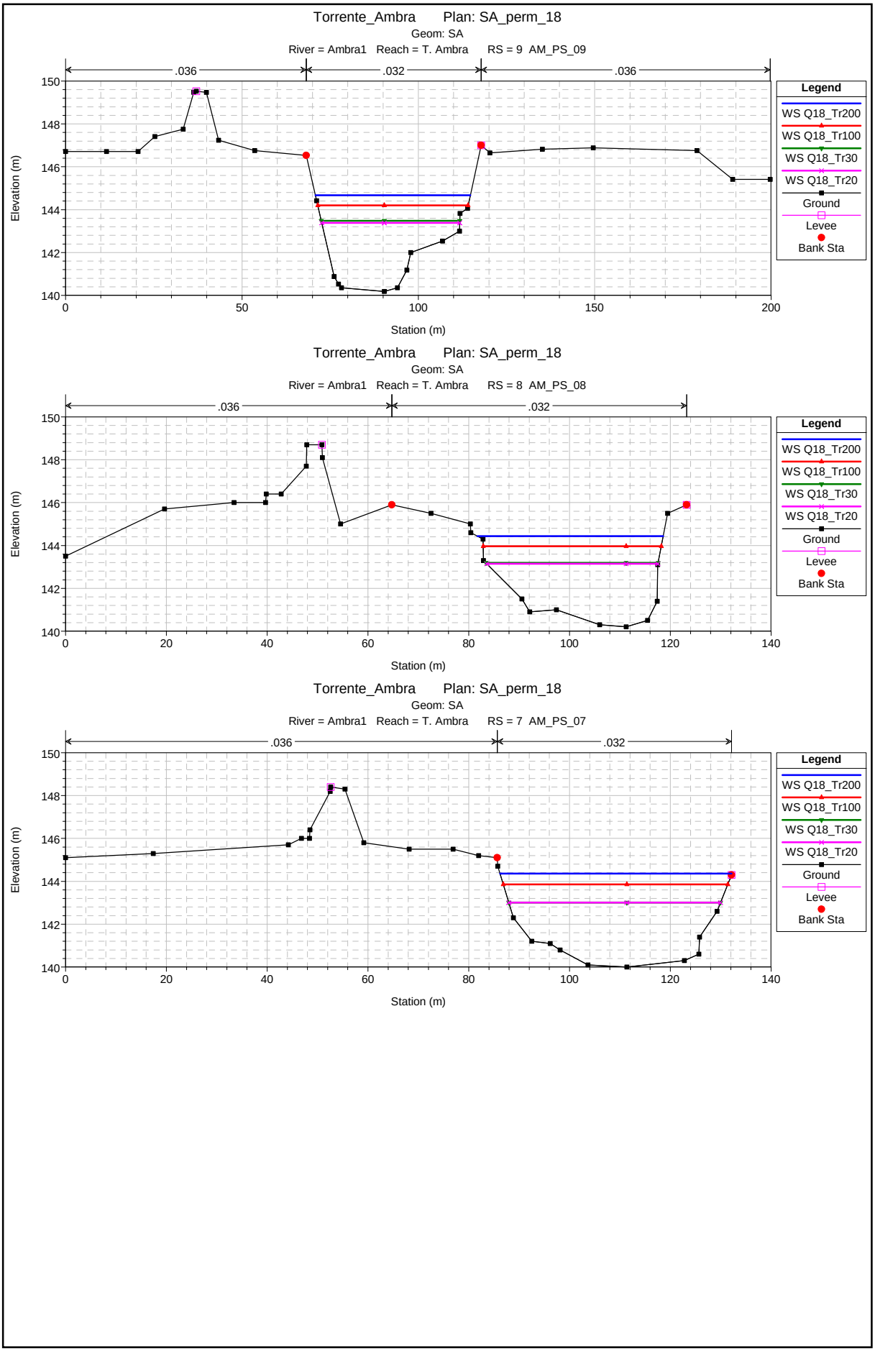

Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 41 AM_PS_041
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 40 AM_PS_040
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
WS Q18_Tr200
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 39 AM_PS_039
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 38 AM_PS_038
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta


Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 45 AM_PS_045
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 44 AM_PS_044
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 43 AM_PS_043
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 42 AM_PS_042
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta


Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 48 AM_PS_048
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 47 AM_PS_047
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 46 BR AM_004 - ponte S.R. 69 Levane
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Ineff
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 46 BR AM_004 - ponte S.R. 69 Levane
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta


Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 52 AM_PS_052
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 51 AM_PS_051
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 50 AM_PS_050
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 49 AM_PS_049
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta


Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 56 AM_PS_056
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 55 AM_PS_055
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 54 AM_PS_054
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 53 AM_PS_053
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta


Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 9 AM_PS_09
.036
.032
.036
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 8 AM_PS_08
.036
.032
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta
Torrente_Ambra Plan: SA_perm_18
Geom: SA
River = Ambra1 Reach = T. Ambra RS = 7 AM_PS_07
.036
.032
Elevation (m)
Station (m)
Legend
WS Q18_Tr200
WS Q18_Tr100
WS Q18_Tr30
WS Q18_Tr20
Ground
Levee
Bank Sta

HEC-RAS Plan: SA_perm_18 River: Ambra1 Reach: T. Ambra

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
T. Ambra	56	Q18_Tr200	316.22	151.28	155.83	154.69	156.33	0.002388	3.14	100.85	31.74	0.56
T. Ambra	56	Q18_Tr100	263.70	151.28	155.45	154.40	155.90	0.002387	2.96	89.10	30.71	0.55
T. Ambra	56	Q18_Tr30	187.73	151.28	154.83	153.94	155.19	0.002401	2.66	70.66	29.03	0.54
T. Ambra	56	Q18_Tr20	165.81	151.28	154.63	153.80	154.97	0.002415	2.56	64.89	28.48	0.54
T. Ambra	55	Q18_Tr200	316.22	150.67	155.53	154.36	156.15	0.002903	3.48	90.86	29.00	0.61
T. Ambra	55	Q18_Tr100	263.70	150.67	155.21	154.02	155.73	0.002557	3.21	82.23	25.37	0.57
T. Ambra	55	Q18_Tr30	187.73	150.67	154.67	153.48	155.05	0.002138	2.72	68.94	23.95	0.51
T. Ambra	55	Q18_Tr20	165.81	150.67	154.49	153.30	154.82	0.002006	2.57	64.62	23.47	0.49
T. Ambra	54	Q18_Tr200	316.22	150.98	155.46	154.10	155.90	0.002657	2.91	108.50	36.27	0.54
T. Ambra	54	Q18_Tr100	263.70	150.98	155.09	153.80	155.48	0.002778	2.78	94.95	35.39	0.54
T. Ambra	54	Q18_Tr30	187.73	150.98	154.51	153.31	154.82	0.002277	2.47	75.91	28.45	0.48
T. Ambra	54	Q18_Tr20	165.81	150.98	154.33	153.16	154.60	0.002121	2.34	70.91	27.51	0.46
T. Ambra	53	Q18_Tr200	316.22	151.16	155.14	154.30	155.76	0.003339	3.50	92.36	37.66	0.65
T. Ambra	53	Q18_Tr100	263.70	151.16	154.75	153.98	155.34	0.003548	3.38	77.96	29.53	0.66
T. Ambra	53	Q18_Tr30	187.73	151.16	154.27	153.47	154.70	0.002998	2.92	64.29	26.86	0.60
T. Ambra	53	Q18_Tr20	165.81	151.16	154.11	153.30	154.50	0.002828	2.76	60.09	26.20	0.58
T. Ambra	52	Q18_Tr200	316.22	150.85	154.83	154.10	155.54	0.004804	3.73	84.74	34.85	0.76
T. Ambra	52	Q18_Tr100	263.70	150.85	154.39	153.79	155.09	0.004130	3.70	71.26	26.15	0.72
T. Ambra	52	Q18_Tr30	187.73	150.85	153.91	153.30	154.42	0.003689	3.19	58.88	25.08	0.66
T. Ambra	52	Q18_Tr20	165.81	150.85	153.75	153.14	154.21	0.003538	3.02	54.95	24.73	0.65
T. Ambra	51	Q18_Tr200	316.22	150.55	154.71	153.72	155.27	0.003965	3.34	94.77	39.77	0.69
T. Ambra	51	Q18_Tr100	263.70	150.55	154.34	153.43	154.85	0.002902	3.19	82.69	28.75	0.60
T. Ambra	51	Q18_Tr30	187.73	150.55	153.84	152.97	154.22	0.002547	2.73	68.83	27.72	0.55
T. Ambra	51	Q18_Tr20	165.81	150.55	153.69	152.82	154.02	0.002423	2.57	64.44	27.39	0.54
T. Ambra	50	Q18_Tr200	316.22	150.82	154.14	153.88	155.06	0.006064	4.24	74.65	30.04	0.86
T. Ambra	50	Q18_Tr100	263.70	150.82	153.90	153.60	154.68	0.005707	3.91	67.48	29.44	0.82
T. Ambra	50	Q18_Tr30	187.73	150.82	153.49	153.16	154.07	0.005215	3.38	55.53	28.43	0.77
T. Ambra	50	Q18_Tr20	165.81	150.82	153.35	153.01	153.88	0.005053	3.21	51.72	28.09	0.75

HEC-RAS Plan: SA_perm_18 River: Ambra1 Reach: T. Ambra (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
T. Ambra	49	Q18_Tr200	316.22	150.21	153.62	153.58	154.63	0.008028	4.46	70.89	33.49	0.98
T. Ambra	49	Q18_Tr100	263.70	150.21	153.42	153.32	154.27	0.007454	4.09	64.48	32.90	0.93
T. Ambra	49	Q18_Tr30	187.73	150.21	153.10	152.92	153.72	0.006495	3.47	54.05	31.92	0.85
T. Ambra	49	Q18_Tr20	165.81	150.21	153.00	152.79	153.54	0.006115	3.26	50.86	31.61	0.82
T. Ambra	48.9		Lat Struct									
T. Ambra	48.8		Lat Struct									
T. Ambra	48	Q18_Tr200	316.22	150.49	153.54	153.14	154.07	0.004410	3.22	98.09	49.36	0.73
T. Ambra	48	Q18_Tr100	263.70	150.49	153.23	152.92	153.74	0.005145	3.17	83.08	48.16	0.77
T. Ambra	48	Q18_Tr30	187.73	150.49	152.74	152.59	153.23	0.006799	3.11	60.28	44.45	0.85
T. Ambra	48	Q18_Tr20	165.81	150.49	152.60	152.49	153.08	0.007305	3.05	54.37	43.70	0.87
T. Ambra	47	Q18_Tr200	316.22	150.08	153.60	152.45	153.86	0.001476	2.26	139.74	53.23	0.44
T. Ambra	47	Q18_Tr100	263.70	150.08	153.28	152.27	153.51	0.001536	2.13	123.53	53.10	0.44
T. Ambra	47	Q18_Tr30	187.73	150.08	152.77	151.98	152.96	0.001721	1.94	96.99	52.88	0.45
T. Ambra	47	Q18_Tr20	165.81	150.08	152.62	151.88	152.80	0.001754	1.85	89.41	52.82	0.45
T. Ambra	46		Bridge									
T. Ambra	45	Q18_Tr200	316.22	149.99	153.26	152.46	153.64	0.002587	2.75	114.93	48.79	0.57
T. Ambra	45	Q18_Tr100	263.70	149.99	152.97	152.25	153.31	0.002667	2.61	100.94	47.49	0.57
T. Ambra	45	Q18_Tr30	187.73	149.99	152.47	151.92	152.77	0.002981	2.41	78.03	45.35	0.59
T. Ambra	45	Q18_Tr20	165.81	149.99	152.32	151.82	152.59	0.003100	2.33	71.12	44.68	0.59
T. Ambra	44	Q18_Tr200	316.22	149.23	152.83	152.14	153.32	0.003369	3.09	102.24	44.68	0.65
T. Ambra	44	Q18_Tr100	263.70	149.23	152.52	151.89	152.97	0.003613	2.98	88.47	43.29	0.67
T. Ambra	44	Q18_Tr30	187.73	149.23	151.99	151.49	152.38	0.003706	2.78	67.51	37.51	0.66
T. Ambra	44	Q18_Tr20	165.81	149.23	151.82	151.36	152.19	0.003796	2.71	61.27	36.16	0.66
T. Ambra	43	Q18_Tr200	316.22	148.68	152.46	151.80	153.00	0.003341	3.23	98.04	42.23	0.66
T. Ambra	43	Q18_Tr100	263.70	148.68	152.13	151.53	152.62	0.003605	3.11	84.84	38.48	0.67
T. Ambra	43	Q18_Tr30	187.73	148.68	151.56	151.08	152.00	0.004204	2.95	63.53	35.01	0.70
T. Ambra	43	Q18_Tr20	165.81	148.68	151.37	150.93	151.80	0.004345	2.90	57.15	33.20	0.71

HEC-RAS Plan: SA_perm_18 River: Ambra1 Reach: T. Ambra (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
T. Ambra	42	Q18_Tr200	316.22	147.93	152.42	150.89	152.69	0.001230	2.31	143.96	63.10	0.41
T. Ambra	42	Q18_Tr100	263.70	147.93	152.07	150.64	152.31	0.001254	2.20	123.01	54.24	0.41
T. Ambra	42	Q18_Tr30	187.73	147.93	151.47	150.23	151.66	0.001310	1.97	95.22	40.59	0.41
T. Ambra	42	Q18_Tr20	165.81	147.93	151.27	150.10	151.45	0.001325	1.90	87.43	39.14	0.41
T. Ambra	41	Q18_Tr200	316.22	147.43	151.76	151.14	152.51	0.004036	3.83	83.66	37.04	0.71
T. Ambra	41	Q18_Tr100	263.70	147.43	151.52	150.82	152.14	0.003768	3.49	75.59	28.93	0.68
T. Ambra	41	Q18_Tr30	187.73	147.43	151.06	150.31	151.51	0.003244	2.99	62.88	26.56	0.62
T. Ambra	41	Q18_Tr20	165.81	147.43	150.90	150.14	151.30	0.003081	2.82	58.72	25.96	0.60
T. Ambra	40	Q18_Tr200	316.22	147.69	150.50	150.91	152.04	0.015885	5.50	57.47	33.23	1.34
T. Ambra	40	Q18_Tr100	263.70	147.69	151.05	150.64	151.65	0.004642	3.42	78.05	44.72	0.75
T. Ambra	40	Q18_Tr30	187.73	147.69	150.68	150.20	151.12	0.004225	2.95	63.63	34.70	0.70
T. Ambra	40	Q18_Tr20	165.81	147.69	150.55	150.06	150.95	0.004016	2.80	59.24	33.66	0.67
T. Ambra	39	Q18_Tr200	316.22	147.41	151.04	150.68	151.65	0.003710	3.57	101.11	63.53	0.70
T. Ambra	39	Q18_Tr100	263.70	147.41	150.81	150.41	151.35	0.003699	3.36	86.99	55.56	0.68
T. Ambra	39	Q18_Tr30	187.73	147.41	150.43	149.94	150.85	0.003441	2.91	68.48	44.98	0.64
T. Ambra	39	Q18_Tr20	165.81	147.41	150.31	149.80	150.69	0.003304	2.75	63.21	42.76	0.63
T. Ambra	38	Q18_Tr200	316.22	147.07	150.91	150.34	151.39	0.002834	3.17	113.67	68.63	0.61
T. Ambra	38	Q18_Tr100	263.70	147.07	150.67	150.06	151.10	0.002830	2.97	97.81	61.58	0.60
T. Ambra	38	Q18_Tr30	187.73	147.07	150.29	149.63	150.62	0.002625	2.57	76.77	50.74	0.56
T. Ambra	38	Q18_Tr20	165.81	147.07	150.18	149.50	150.47	0.002502	2.42	71.09	47.39	0.55
T. Ambra	37	Q18_Tr200	316.22	147.07	150.60	150.04	151.13	0.003939	3.85	109.33	57.88	0.68
T. Ambra	37	Q18_Tr100	263.70	147.07	150.40	149.82	150.84	0.003429	3.44	98.39	51.30	0.63
T. Ambra	37	Q18_Tr30	187.73	147.07	150.06	149.45	150.36	0.002732	2.84	82.08	45.30	0.55
T. Ambra	37	Q18_Tr20	165.81	147.07	149.94	149.35	150.21	0.002584	2.68	76.68	44.50	0.53
T. Ambra	36	Q18_Tr200	316.22	146.99	150.54	149.85	150.93	0.002835	2.76	116.57	64.15	0.59
T. Ambra	36	Q18_Tr100	263.70	146.99	150.29	149.62	150.63	0.002924	2.60	101.48	54.63	0.59
T. Ambra	36	Q18_Tr30	187.73	146.99	149.89	149.27	150.16	0.002956	2.31	81.29	49.28	0.57
T. Ambra	36	Q18_Tr20	165.81	146.99	149.77	149.13	150.01	0.002936	2.20	75.23	48.69	0.57

HEC-RAS Plan: SA_perm_18 River: Ambra1 Reach: T. Ambra (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
T. Ambra	35	Q18_Tr200	316.22	146.77	150.39	149.64	150.73	0.003057	2.60	121.69	68.61	0.60
T. Ambra	35	Q18_Tr100	263.70	146.77	150.09	149.40	150.42	0.003141	2.54	103.75	57.79	0.61
T. Ambra	35	Q18_Tr30	187.73	146.77	149.64	149.04	149.92	0.003162	2.36	79.61	49.80	0.60
T. Ambra	35	Q18_Tr20	165.81	146.77	149.50	148.93	149.77	0.003258	2.28	72.75	49.00	0.60
T. Ambra	34	Q18_Tr200	316.22	146.68	149.68	149.51	150.48	0.006351	3.94	80.28	42.01	0.88
T. Ambra	34	Q18_Tr100	263.70	146.68	149.54	149.26	150.18	0.005456	3.53	74.78	38.75	0.81
T. Ambra	34	Q18_Tr30	187.73	146.68	149.26	148.88	149.70	0.004439	2.94	63.81	37.25	0.72
T. Ambra	34	Q18_Tr20	165.81	146.68	149.16	148.76	149.54	0.004129	2.76	60.18	36.74	0.69
T. Ambra	33	Q18_Tr200	316.22	146.81	149.74	149.28	150.09	0.003829	2.62	123.33	93.18	0.66
T. Ambra	33	Q18_Tr100	263.70	146.81	149.49	149.05	149.84	0.004703	2.61	100.98	74.21	0.71
T. Ambra	33	Q18_Tr30	187.73	146.81	149.12	148.70	149.42	0.004234	2.45	76.71	57.35	0.68
T. Ambra	33	Q18_Tr20	165.81	146.81	149.01	148.57	149.29	0.004019	2.35	70.68	54.12	0.66
T. Ambra	32	Q18_Tr200	316.22	146.54	149.69	149.03	149.90	0.001642	2.30	174.99	114.30	0.47
T. Ambra	32	Q18_Tr100	263.70	146.54	149.40	148.78	149.62	0.001939	2.30	143.18	106.02	0.50
T. Ambra	32	Q18_Tr30	187.73	146.54	148.97	148.52	149.20	0.002460	2.24	100.55	93.78	0.54
T. Ambra	32	Q18_Tr20	165.81	146.54	148.84	148.42	149.07	0.002640	2.20	88.61	89.31	0.55
T. Ambra	31.9		Lat Struct									
T. Ambra	31.8		Lat Struct									
T. Ambra	31	Q18_Tr200	316.22	145.40	149.67	148.66	149.80	0.000962	1.77	228.44	167.44	0.35
T. Ambra	31	Q18_Tr100	263.70	145.40	149.37	148.51	149.50	0.001135	1.77	184.91	127.28	0.38
T. Ambra	31	Q18_Tr30	187.73	145.40	148.92	148.15	149.04	0.001325	1.68	131.59	111.34	0.39
T. Ambra	31	Q18_Tr20	165.81	145.40	148.79	148.04	148.91	0.001399	1.64	117.00	105.69	0.40
T. Ambra	30	Q18_Tr200	316.22	145.46	149.60	148.64	149.74	0.001274	2.04	218.33	162.59	0.40
T. Ambra	30	Q18_Tr100	263.70	145.46	149.26	148.50	149.43	0.001674	2.15	169.91	133.05	0.45
T. Ambra	30	Q18_Tr30	187.73	145.46	148.79	148.17	148.96	0.001987	2.06	112.38	97.44	0.48
T. Ambra	30	Q18_Tr20	165.81	145.46	148.64	148.06	148.81	0.002102	2.02	99.06	87.51	0.48

HEC-RAS Plan: SA_perm_18 River: Ambra1 Reach: T. Ambra (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
T. Ambra	29	Q18_Tr200	316.22	145.39	149.47	148.41	149.64	0.001015	2.32	196.13	88.51	0.38
T. Ambra	29	Q18_Tr100	263.70	145.39	149.13	148.16	149.30	0.001161	2.33	165.99	87.23	0.40
T. Ambra	29	Q18_Tr30	187.73	145.39	148.59	147.78	148.77	0.001535	2.40	119.14	85.58	0.45
T. Ambra	29	Q18_Tr20	165.81	145.39	148.40	147.66	148.60	0.001770	2.46	103.33	85.01	0.47
T. Ambra	28.8		Lat Struct									
T. Ambra	28	Q18_Tr200	316.22	145.30	149.19	148.07	149.43	0.001227	2.34	159.72	67.72	0.42
T. Ambra	28	Q18_Tr100	263.70	145.30	148.90	147.87	149.11	0.001227	2.19	140.48	64.37	0.41
T. Ambra	28	Q18_Tr30	187.73	145.30	148.43	147.52	148.60	0.001222	1.94	111.21	61.08	0.40
T. Ambra	28	Q18_Tr20	165.81	145.30	148.28	147.40	148.44	0.001229	1.86	101.90	60.48	0.40
T. Ambra	27.9		Lat Struct									
T. Ambra	27	Q18_Tr200	316.22	145.24	149.07	148.12	149.28	0.001730	2.48	170.41	101.51	0.45
T. Ambra	27	Q18_Tr100	263.70	145.24	148.75	147.95	148.96	0.001921	2.49	140.51	82.31	0.47
T. Ambra	27	Q18_Tr30	187.73	145.24	148.25	147.68	148.45	0.001834	2.32	105.53	65.29	0.45
T. Ambra	27	Q18_Tr20	165.81	145.24	148.10	147.59	148.29	0.001897	2.28	95.48	64.17	0.46
T. Ambra	26	Q18_Tr200	316.22	145.38	148.85	147.90	149.13	0.001882	2.79	158.96	112.07	0.49
T. Ambra	26	Q18_Tr100	263.70	145.38	148.55	147.71	148.81	0.001898	2.63	130.44	81.74	0.48
T. Ambra	26	Q18_Tr30	187.73	145.38	148.07	147.43	148.28	0.001835	2.32	99.28	56.15	0.47
T. Ambra	26	Q18_Tr20	165.81	145.38	147.90	147.25	148.10	0.001905	2.27	90.05	55.54	0.47
T. Ambra	25	Q18_Tr200	316.22	145.35	148.78	147.41	148.99	0.001263	2.04	157.65	84.09	0.41
T. Ambra	25	Q18_Tr100	263.70	145.35	148.48	147.22	148.67	0.001315	1.94	136.26	59.04	0.41
T. Ambra	25	Q18_Tr30	187.73	145.35	147.96	146.92	148.12	0.001270	1.75	107.40	52.69	0.39
T. Ambra	25	Q18_Tr20	165.81	145.35	147.80	146.81	147.94	0.001240	1.68	98.88	50.67	0.38
T. Ambra	24	Q18_Tr200	316.22	145.94	148.71	147.71	148.98	0.001931	2.33	137.67	78.25	0.49
T. Ambra	24	Q18_Tr100	263.70	145.94	148.40	147.52	148.66	0.002089	2.24	117.76	58.13	0.50
T. Ambra	24	Q18_Tr30	187.73	145.94	147.88	147.22	148.11	0.002308	2.11	89.00	51.69	0.51
T. Ambra	24	Q18_Tr20	165.81	145.94	147.71	147.13	147.93	0.002424	2.06	80.53	50.33	0.52
T. Ambra	23	Q18_Tr200	316.22	145.94	148.70	147.70	148.98	0.001948	2.33	137.22	77.90	0.49

HEC-RAS Plan: SA_perm_18 River: Ambra1 Reach: T. Ambra (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
T. Ambra	23	Q18_Tr100	263.70	145.94	148.40	147.52	148.66	0.002109	2.25	117.38	58.07	0.50
T. Ambra	23	Q18_Tr30	187.73	145.94	147.88	147.22	148.10	0.002340	2.12	88.59	51.62	0.52
T. Ambra	23	Q18_Tr20	165.81	145.94	147.71	147.13	147.93	0.002463	2.07	80.11	50.29	0.52
T. Ambra	22	Q18_Tr200	316.22	145.05	148.79	146.85	148.94	0.000781	1.75	183.87	84.63	0.32
T. Ambra	22	Q18_Tr100	263.70	145.05	148.48	146.64	148.62	0.000766	1.63	162.21	59.28	0.31
T. Ambra	22	Q18_Tr30	187.73	145.05	147.96	146.33	148.06	0.000650	1.41	133.06	52.69	0.28
T. Ambra	22	Q18_Tr20	165.81	145.05	147.80	146.23	147.89	0.000603	1.33	124.45	50.66	0.27
T. Ambra	21	Q18_Tr200	316.22	143.42	148.83	145.54	148.92	0.000301	1.31	245.87	88.47	0.21
T. Ambra	21	Q18_Tr100	263.70	143.42	148.53	145.33	148.60	0.000272	1.18	222.76	61.93	0.20
T. Ambra	21	Q18_Tr30	187.73	143.42	148.00	145.02	148.05	0.000193	0.97	192.92	53.14	0.16
T. Ambra	21	Q18_Tr20	165.81	143.42	147.83	144.92	147.87	0.000167	0.90	184.08	51.05	0.15
T. Ambra	20	Q18_Tr200	316.22	143.72	148.78	146.50	148.92	0.000577	1.64	196.51	83.41	0.29
T. Ambra	20	Q18_Tr100	263.70	143.72	148.48	146.30	148.59	0.000540	1.50	175.38	58.85	0.27
T. Ambra	20	Q18_Tr30	187.73	143.72	147.96	145.98	148.04	0.000433	1.27	147.37	51.42	0.24
T. Ambra	20	Q18_Tr20	165.81	143.72	147.79	145.87	147.87	0.000395	1.19	138.96	49.88	0.23
T. Ambra	19	Q18_Tr200	316.22	143.68	148.76	147.03	148.87	0.000480	1.55	240.10	91.29	0.26
T. Ambra	19	Q18_Tr100	263.70	143.68	148.46	146.64	148.55	0.000469	1.45	213.13	86.20	0.25
T. Ambra	19	Q18_Tr30	187.73	143.68	147.93	146.28	148.01	0.000471	1.30	168.54	83.54	0.25
T. Ambra	19	Q18_Tr20	165.81	143.68	147.76	146.16	147.83	0.000471	1.24	154.56	82.71	0.24
T. Ambra	18	Q18_Tr200	316.22	142.48	148.36	146.79	148.78	0.001830	2.87	110.23	31.29	0.49
T. Ambra	18	Q18_Tr100	263.70	142.48	148.15	146.41	148.48	0.001523	2.55	103.50	30.62	0.44
T. Ambra	18	Q18_Tr30	187.73	142.48	147.74	145.86	147.95	0.001110	2.06	91.14	29.36	0.37
T. Ambra	18	Q18_Tr20	165.81	142.48	147.60	145.57	147.78	0.000985	1.90	87.16	28.94	0.35
T. Ambra	17	Q18_Tr200	316.22	144.05	148.43	146.57	148.66	0.000986	2.13	148.61	44.07	0.37
T. Ambra	17	Q18_Tr100	263.70	144.05	148.19	146.34	148.38	0.000856	1.91	138.19	43.69	0.34
T. Ambra	17	Q18_Tr30	187.73	144.05	147.75	145.96	147.88	0.000684	1.57	119.25	42.99	0.30
T. Ambra	17	Q18_Tr20	165.81	144.05	147.61	145.77	147.72	0.000616	1.46	113.19	42.07	0.29
T. Ambra	16	Q18_Tr200	316.22	144.05	148.42	146.84	148.65	0.001269	2.16	168.76	155.92	0.41

HEC-RAS Plan: SA_perm_18 River: Ambra1 Reach: T. Ambra (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
T. Ambra	16	Q18_Tr100	263.70	144.05	148.15	146.61	148.37	0.001263	2.07	127.50	48.17	0.41
T. Ambra	16	Q18_Tr30	187.73	144.05	147.72	146.23	147.87	0.000923	1.75	107.36	41.13	0.35
T. Ambra	16	Q18_Tr20	165.81	144.05	147.58	146.11	147.72	0.000847	1.63	101.71	40.62	0.33
T. Ambra	15	Q18_Tr200	316.22	141.39	148.52	144.53	148.61	0.000270	1.38	264.68	174.15	0.20
T. Ambra	15	Q18_Tr100	263.70	141.39	148.25	144.26	148.33	0.000234	1.24	224.60	121.63	0.19
T. Ambra	15	Q18_Tr30	187.73	141.39	147.79	143.83	147.84	0.000161	0.99	189.95	43.91	0.15
T. Ambra	15	Q18_Tr20	165.81	141.39	147.64	143.70	147.69	0.000135	0.90	183.65	42.55	0.14
T. Ambra	14	Q18_Tr200	316.22	143.59	148.18	147.29	148.55	0.002464	2.72	116.23	46.78	0.55
T. Ambra	14	Q18_Tr100	263.70	143.59	147.96	147.08	148.27	0.002260	2.48	106.25	46.07	0.52
T. Ambra	14	Q18_Tr30	187.73	143.59	147.57	146.54	147.80	0.001996	2.11	88.77	44.69	0.48
T. Ambra	14	Q18_Tr20	165.81	143.59	147.45	146.41	147.65	0.001902	1.99	83.23	44.24	0.46
T. Ambra	13	Q18_Tr200	316.22	144.24	147.38	146.95	147.78	0.004011	2.83	111.67	63.34	0.68
T. Ambra	13	Q18_Tr100	263.70	144.24	147.15	146.73	147.52	0.004213	2.70	97.79	61.97	0.69
T. Ambra	13	Q18_Tr30	187.73	144.24	146.73	146.43	147.07	0.004702	2.56	73.21	54.24	0.70
T. Ambra	13	Q18_Tr20	165.81	144.24	146.61	146.33	146.93	0.004921	2.49	66.53	53.25	0.71
T. Ambra	12	Q18_Tr200	316.22	143.35	146.33	145.74	146.71	0.003426	2.76	114.39	60.22	0.64
T. Ambra	12	Q18_Tr100	263.70	143.35	146.16	145.41	146.48	0.003063	2.52	104.53	58.08	0.60
T. Ambra	12	Q18_Tr30	187.73	143.35	145.90	145.00	146.12	0.002286	2.08	90.40	54.04	0.51
T. Ambra	12	Q18_Tr20	165.81	143.35	145.83	144.86	146.02	0.002053	1.92	86.45	53.71	0.48
T. Ambra	11	Q18_Tr200	316.22	142.47	145.61	144.92	145.81	0.002004	2.00	157.87	89.99	0.48
T. Ambra	11	Q18_Tr100	263.70	142.47	145.25	144.79	145.47	0.002888	2.09	126.12	88.82	0.56
T. Ambra	11	Q18_Tr30	187.73	142.47	144.80	144.36	145.04	0.005100	2.18	86.05	87.32	0.70
T. Ambra	11	Q18_Tr20	165.81	142.47	144.67	144.23	144.92	0.006228	2.21	75.06	86.91	0.76
T. Ambra	10	Q18_Tr200	316.22	140.59	145.03	143.82	145.34	0.001895	2.50	126.35	48.67	0.50
T. Ambra	10	Q18_Tr100	263.70	140.59	144.60	143.54	144.91	0.002014	2.47	106.66	43.77	0.51
T. Ambra	10	Q18_Tr30	187.73	140.59	143.96	143.12	144.24	0.002426	2.35	79.79	40.70	0.54
T. Ambra	10	Q18_Tr20	165.81	140.59	143.82	142.98	144.08	0.002352	2.23	74.25	40.04	0.52
T. Ambra	9	Q18_Tr200	316.22	140.18	144.67	143.17	144.95	0.001356	2.34	135.08	43.91	0.43

HEC-RAS Plan: SA_perm_18 River: Ambra1 Reach: T. Ambra (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
T. Ambra	9	Q18_Tr100	263.70	140.18	144.20	142.94	144.47	0.001547	2.30	114.85	42.64	0.45
T. Ambra	9	Q18_Tr30	187.73	140.18	143.48	142.49	143.72	0.001874	2.20	85.23	39.27	0.48
T. Ambra	9	Q18_Tr20	165.81	140.18	143.38	142.32	143.59	0.001686	2.04	81.44	39.12	0.45
T. Ambra	8	Q18_Tr200	316.22	140.20	144.43	143.05	144.80	0.001743	2.67	118.57	36.85	0.47
T. Ambra	8	Q18_Tr100	263.70	140.20	143.96	142.79	144.30	0.001892	2.60	101.61	35.35	0.49
T. Ambra	8	Q18_Tr30	187.73	140.20	143.19	142.36	143.51	0.002489	2.52	74.59	34.17	0.54
T. Ambra	8	Q18_Tr20	165.81	140.20	143.15	142.23	143.41	0.002049	2.26	73.21	33.96	0.49
T. Ambra	7	Q18_Tr200	316.22	140.00	144.36	142.46	144.57	0.000880	2.03	156.12	45.94	0.35
T. Ambra	7	Q18_Tr100	263.70	140.00	143.86	142.24	144.06	0.000982	1.98	133.48	44.55	0.36
T. Ambra	7	Q18_Tr30	187.73	140.00	143.01	141.86	143.20	0.001332	1.94	96.69	42.01	0.41
T. Ambra	7	Q18_Tr20	165.81	140.00	143.01	141.75	143.16	0.001039	1.71	96.69	42.01	0.36

HEC-RAS Plan: SA_perm_18

Storage Area	Profile	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
		(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
dx_28.8	Q18_Tr200	148.50	148.50	1.89	16.25	0.00
dx_28.8	Q18_Tr100	148.50	148.50	0.00	16.25	0.00
dx_28.8	Q18_Tr30	148.50	148.50	0.00	16.25	0.00
dx_28.8	Q18_Tr20	148.50	148.50	0.00	16.25	0.00
dx_31.8	Q18_Tr200	148.50	148.50	0.00	36.00	0.00
dx_31.8	Q18_Tr100	148.50	148.50	0.00	36.00	0.00
dx_31.8	Q18_Tr30	148.50	148.50	0.00	36.00	0.00
dx_31.8	Q18_Tr20	148.50	148.50	0.00	36.00	0.00
dx_48.8	Q18_Tr200	154.20	154.20	0.00	12.49	0.00
dx_48.8	Q18_Tr100	154.20	154.20	0.00	12.49	0.00
dx_48.8	Q18_Tr30	154.20	154.20	0.00	12.49	0.00
dx_48.8	Q18_Tr20	154.20	154.20	0.00	12.49	0.00
sx_27.9	Q18_Tr200	148.60	148.60	0.00	19.00	0.00
sx_27.9	Q18_Tr100	148.60	148.60	0.00	19.00	0.00
sx_27.9	Q18_Tr30	148.60	148.60	0.00	19.00	0.00
sx_27.9	Q18_Tr20	148.60	148.60	0.00	19.00	0.00
sx_31.9	Q18_Tr200	148.80	148.80	0.00	16.25	0.00
sx_31.9	Q18_Tr100	148.80	148.80	0.00	16.25	0.00
sx_31.9	Q18_Tr30	148.80	148.80	0.00	16.25	0.00
sx_31.9	Q18_Tr20	148.80	148.80	0.00	16.25	0.00
sx_48.9	Q18_Tr200	154.20	154.20	0.00	2.18	0.00
sx_48.9	Q18_Tr100	154.20	154.20	0.00	2.18	0.00
sx_48.9	Q18_Tr30	154.20	154.20	0.00	2.18	0.00
sx_48.9	Q18_Tr20	154.20	154.20	0.00	2.18	0.00