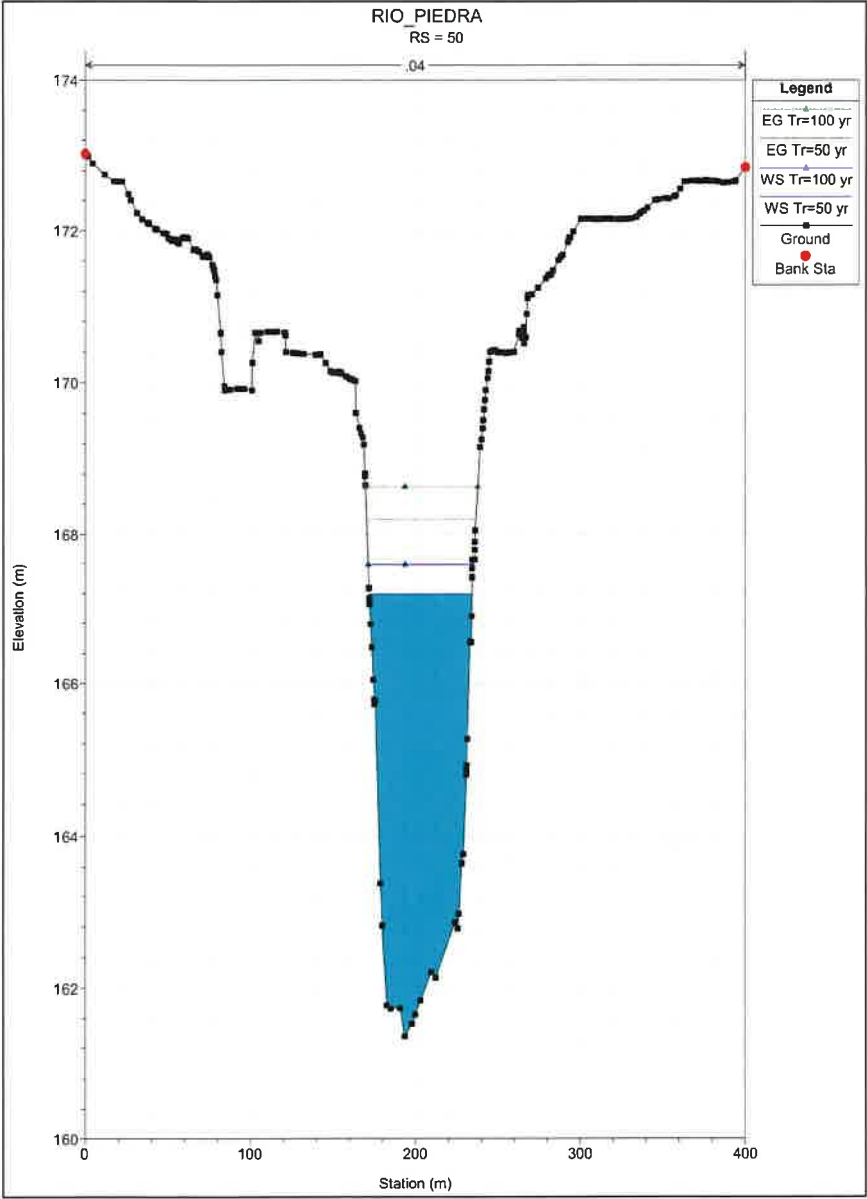
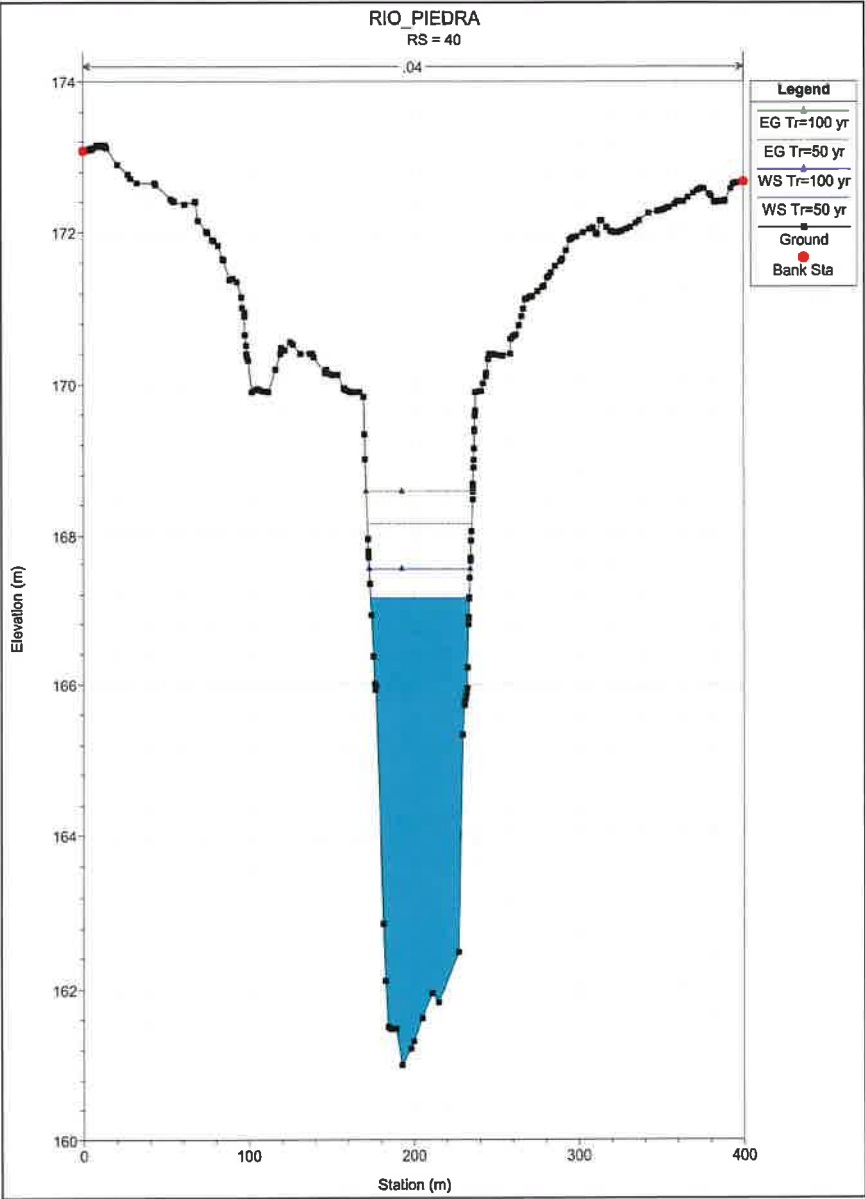
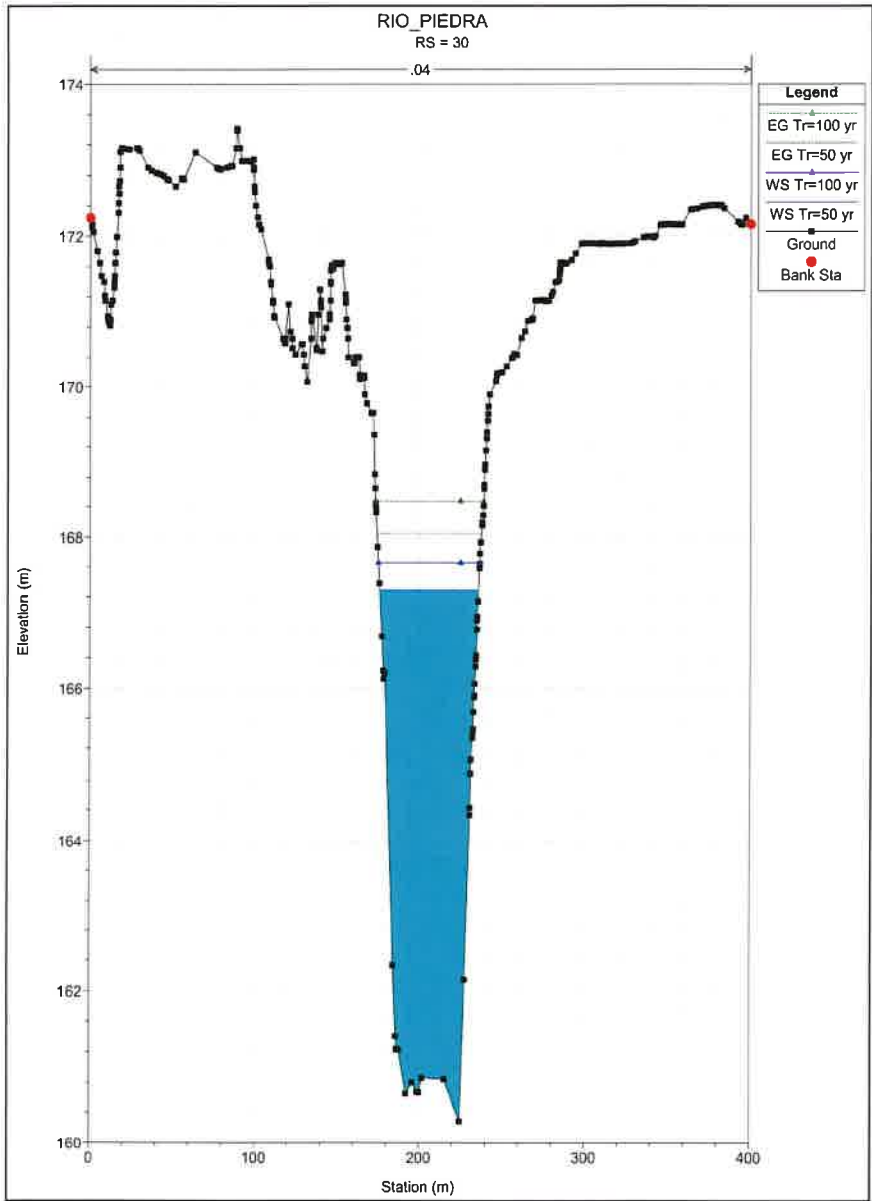
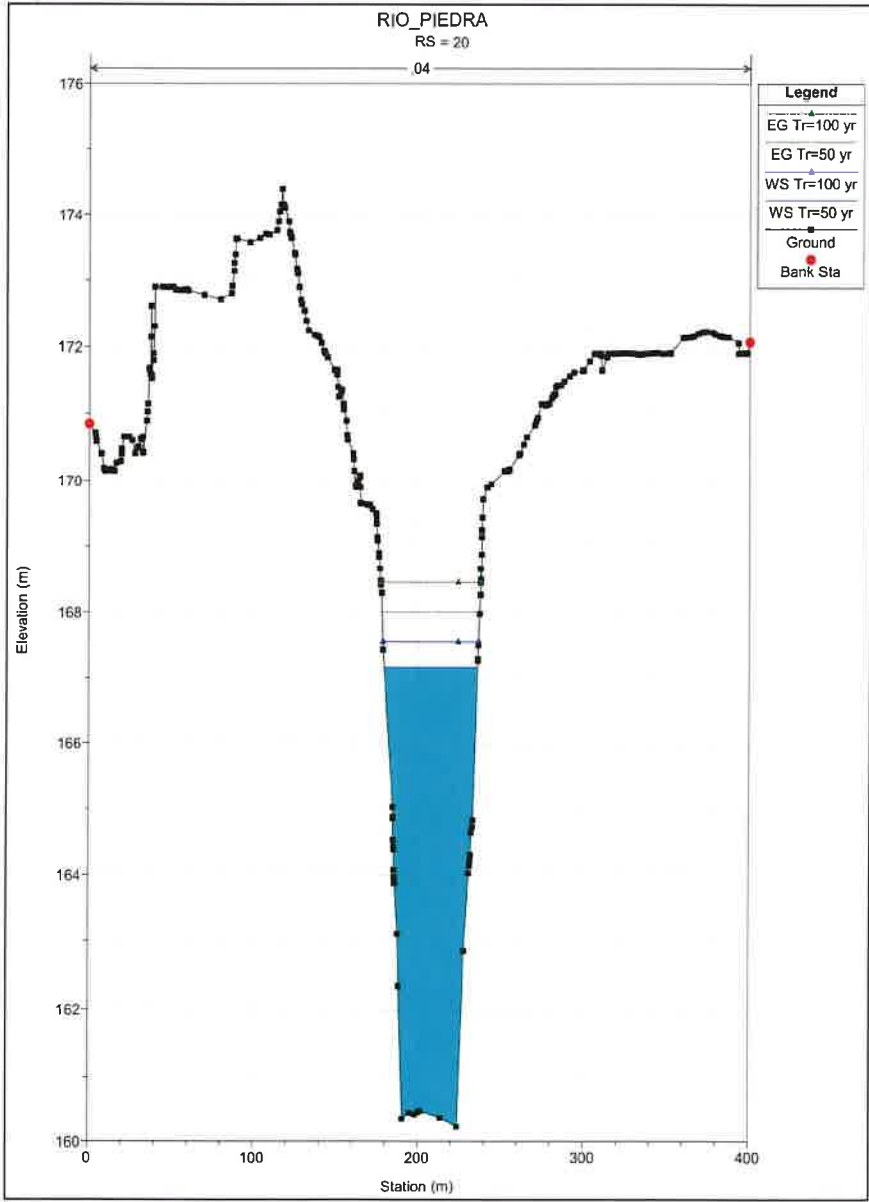
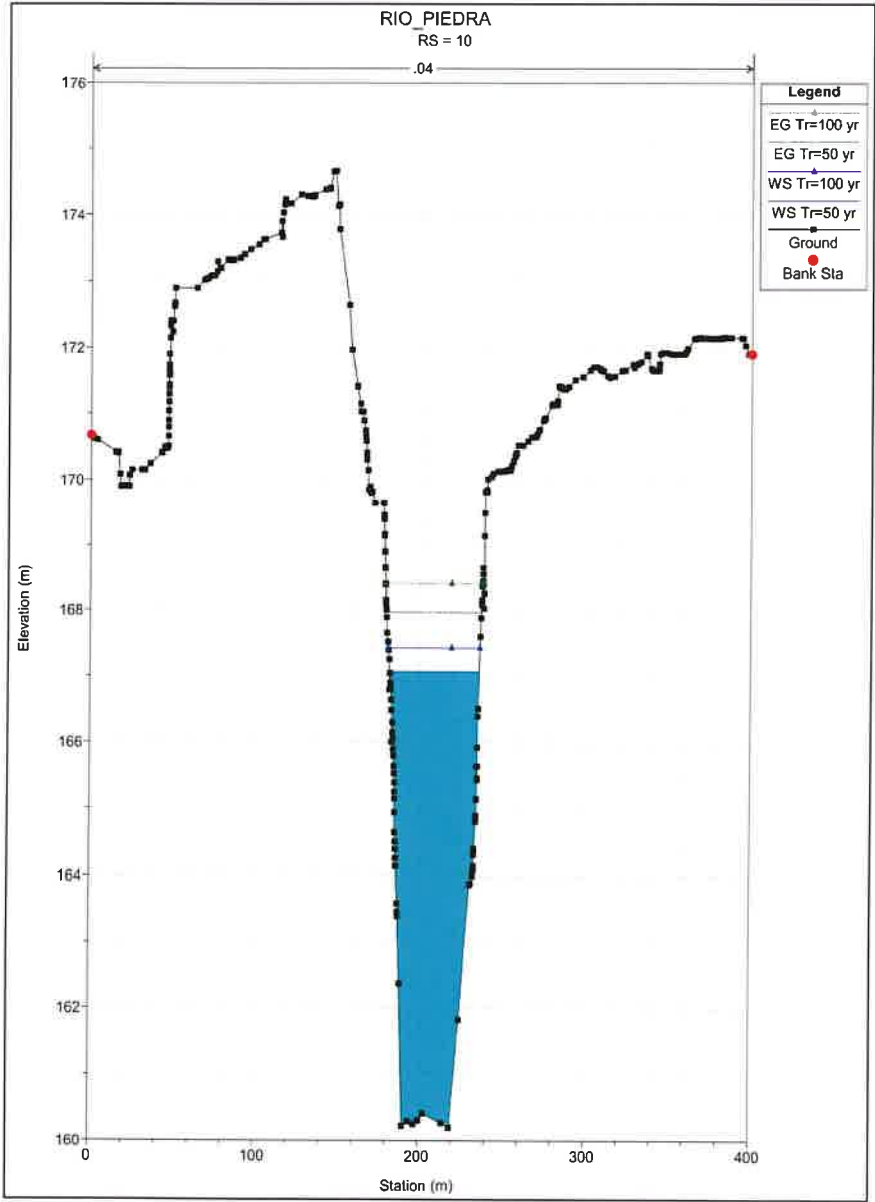


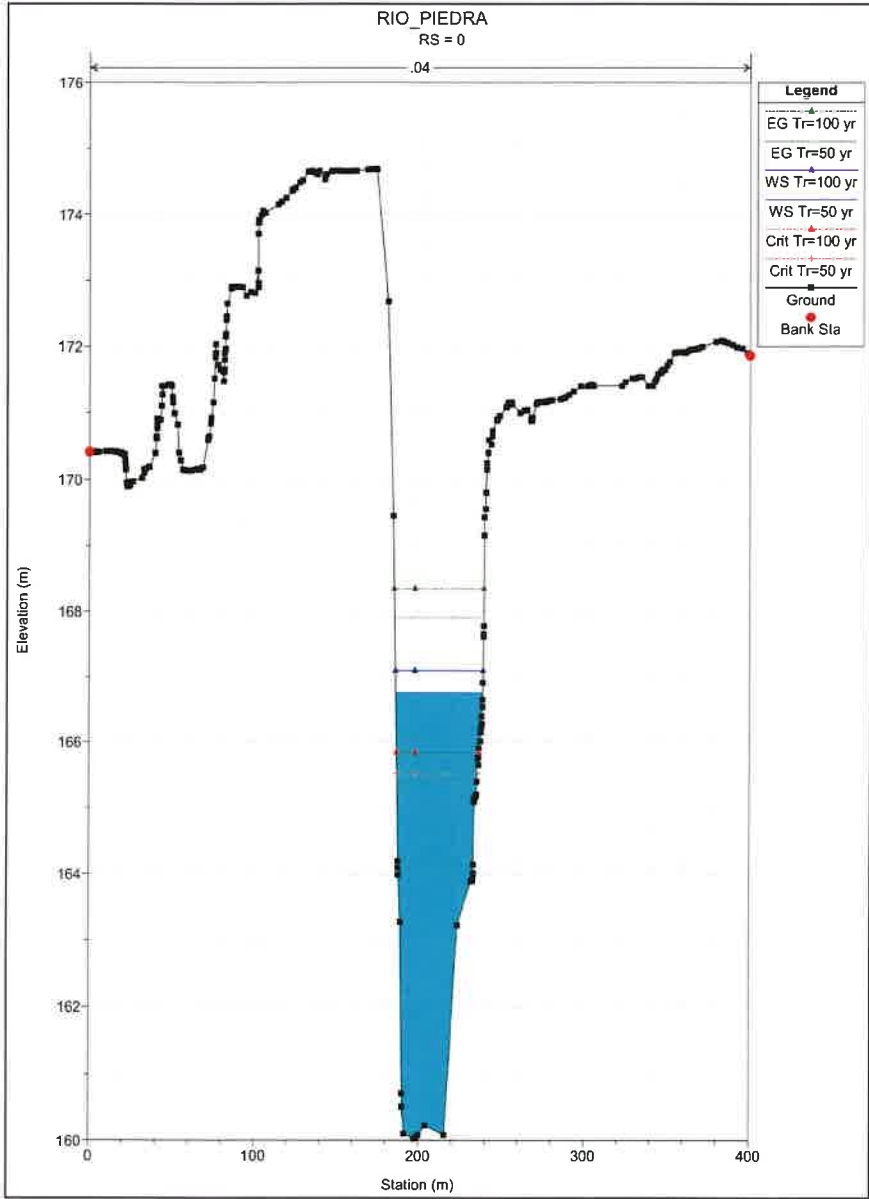




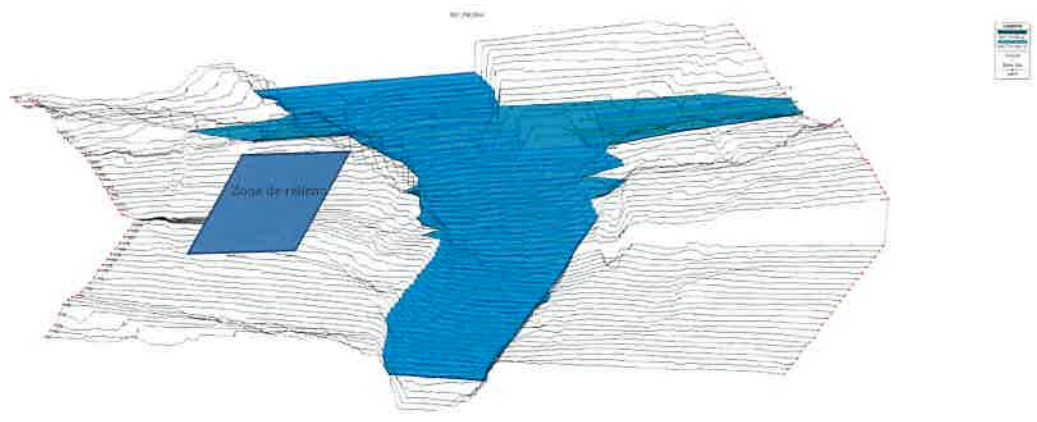








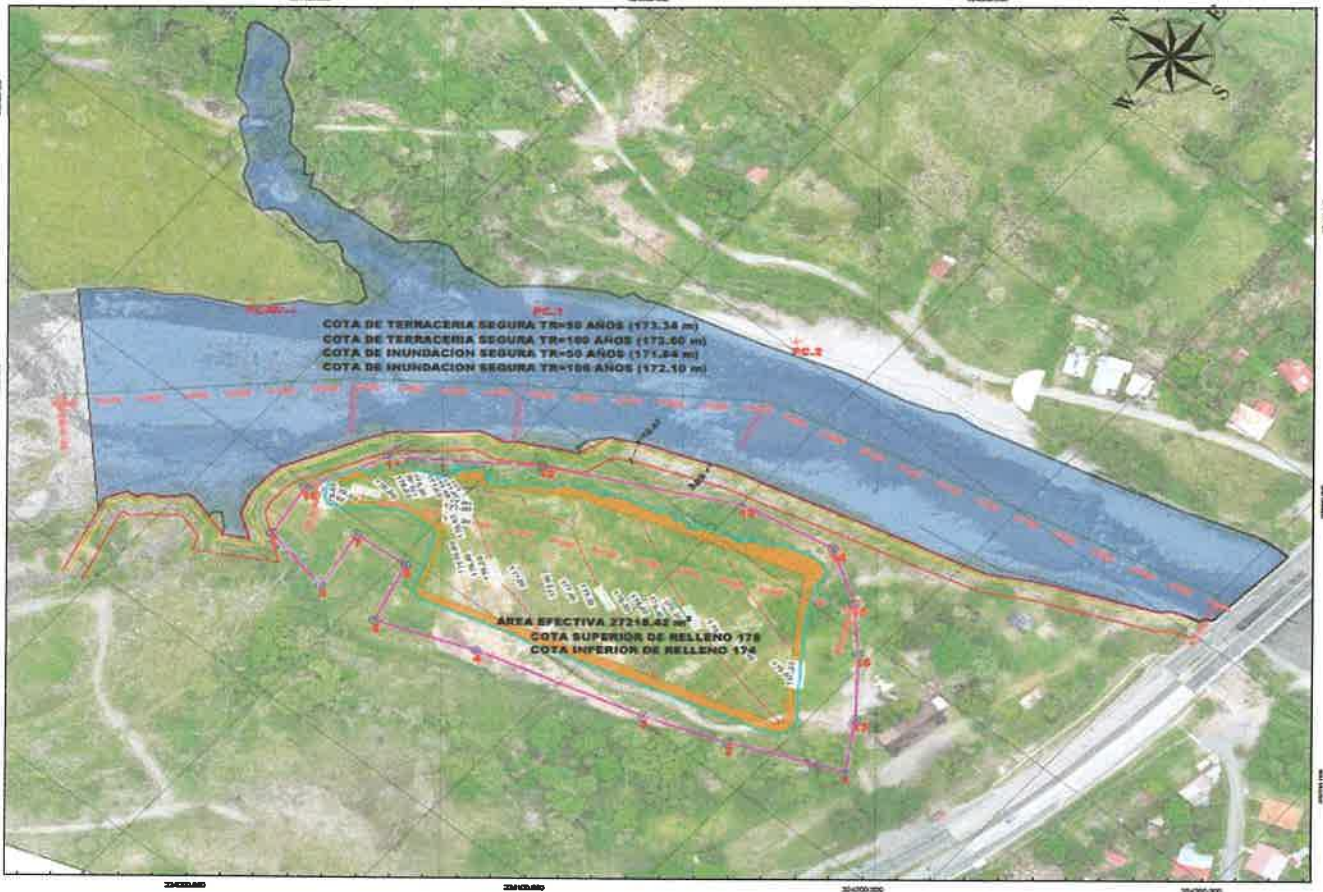
VISTA 3D Y VISTA DE PLANTA



Cálculo de inundabilidad

Una vez calculados los niveles de la lámina de agua, se ha elaborado una composición gráfica con las diferentes zonas de inundación correspondientes a los diferentes caudales de avenida. Los resultados se han implementado en entorno GIS. Se observa que los niveles de crecidas están muy por debajo del nivel del terreno





9. CONCLUSIONES Y RECOMENDACIONES

- La zona de estudio no es afectada por ninguna de las crecidas

10. TABLA DE RESULTADO

Plan: Plan 03 RP_1 Alignment - (1) RS: 560 Profile: Tr=50 yr

E.G. Elev (m)	175,05	Element	Left OB	Channel	Right OB
Vel Head (m)	1,09	Wt. n-Val.		0,040	
W.S. Elev (m)	173,95	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)	173,95	Flow Area (m2)		262,71	
E.G. Slope (m/m)	0,012742	Area (m2)		262,71	
Q Total (m3/s)	1217,14	Flow (m3/s)		1217,14	
Top Width (m)	121,87	Top Width (m)		121,87	
Vel Total (m/s)	4,63	Avg. Vel. (m/s)		4,63	
Max Chl Dpth (m)	4,05	Hydr. Depth (m)		2,16	
Conv. Total (m3/s)	10782,6	Conv. (m3/s)		10782,6	
Length Wtd. (m)	10,00	Wetted Per. (m)		124,88	
Min Ch El (m)	169,90	Shear (N/m2)		262,85	
Alpha	1,00	Stream Power (N/m s)		1217,80	
Frctn Loss (m)	0,12	Cum Volume (1000 m3)		158,29	
C & E Loss (m)	0,03	Cum SA (1000 m2)		51,49	

Plan: Plan 03 RP_1 Alignment - (1) RS: 560 Profile: Tr=100 yr

E.G. Elev (m)	175,28	Element	Left OB	Channel	Right OB
Vel Head (m)	1,16	Wt. n-Val.		0,040	
W.S. Elev (m)	174,11	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)	174,11	Flow Area (m2)		282,58	
E.G. Slope (m/m)	0,012377	Area (m2)		282,58	
Q Total (m3/s)	1350,45	Flow (m3/s)		1350,45	
Top Width (m)	121,97	Top Width (m)		121,97	
Vel Total (m/s)	4,78	Avg. Vel. (m/s)		4,78	
Max Chl Dpth (m)	4,21	Hydr. Depth (m)		2,32	
Conv. Total (m3/s)	12138,8	Conv. (m3/s)		12138,8	
Length Wtd. (m)	10,00	Wetted Per. (m)		125,46	
Min Ch El (m)	169,90	Shear (N/m2)		273,38	
Alpha	1,00	Stream Power (N/m s)		1306,49	
Frctn Loss (m)	0,11	Cum Volume (1000 m3)		172,19	
C & E Loss (m)	0,05	Cum SA (1000 m2)		52,51	

Plan: Plan 03 RP_1 Alignment - (1) RS: 550 Profile: Tr=50 yr

E.G. Elev (m)	174,74	Element	Left OB	Channel	Right OB
Vel Head (m)	1,01	Wt. n-Val.		0,040	
W.S. Elev (m)	173,73	Reach Len. (m)	10,00	10,00	10,00
Crit W.S. (m)	173,64	Flow Area (m2)		273,68	
E.G. Slope (m/m)	0,011176	Area (m2)		273,68	
Q Total (m3/s)	1217,14	Flow (m3/s)		1217,14	
Top Width (m)	121,88	Top Width (m)		121,88	
Vel Total (m/s)	4,45	Avg. Vel. (m/s)		4,45	
Max Chl Dpth (m)	3,83	Hydr. Depth (m)		2,25	
Conv. Total (m3/s)	11513,4	Conv. (m3/s)		11513,4	
Length Wtd. (m)	10,00	Wetted Per. (m)		125,37	
Min Ch El (m)	169,90	Shear (N/m2)		239,24	
Alpha	1,00	Stream Power (N/m s)		1063,97	
Frctn Loss (m)	0,11	Cum Volume (1000 m3)		155,61	
C & E Loss (m)	0,01	Cum SA (1000 m2)		50,27	



Estudio Hidráulico para NIVELACIÓN, CONFORMACIÓN Y BOTADERO EN FINCA PRIVADA.

Plan: Plan 03 RP_1 Alignment - (1) RS: 550 Profile: Tr=100 yr

E.G. Elev (m)	174.99	Element	Left OB	Channel	Right OB
Vel Head (m)	1.00	Wt. n-Val.		0.040	
W.S. Elev (m)	173.98	Reach Len. (m)	10.00	10.00	10.00
Crit W.S. (m)	173.80	Flow Area (m2)		304.71	
E.G. Slope (m/m)	0.009683	Area (m2)		304.71	
Q Total (m3/s)	1350.45	Flow (m3/s)		1350.45	
Top Width (m)	122.18	Top Width (m)		122.18	
Vel Total (m/s)	4.43	Avg. Vel. (m/s)		4.43	
Max Chl Dpth (m)	4.08	Hydr. Depth (m)		2.49	
Conv. Total (m3/s)	13723.8	Conv. (m3/s)		13723.8	
Length Wtd. (m)	10.00	Wetted Per. (m)		126.01	
Min Ch El (m)	169.90	Shear (N/m2)		229.61	
Alpha	1.00	Stream Power (N/m s)		1017.64	
Frctn Loss (m)	0.09	Cum Volume (1000 m3)		169.26	
C & E Loss (m)	0.00	Cum SA (1000 m2)		51.29	

Plan: Plan 03 RP_1 Alignment - (1) RS: 540 Profile: Tr=50 yr

E.G. Elev (m)	174.63	Element	Left OB	Channel	Right OB
Vel Head (m)	0.99	Wt. n-Val.		0.040	
W.S. Elev (m)	173.64	Reach Len. (m)	10.00	10.00	10.00
Crit W.S. (m)	173.47	Flow Area (m2)		276.61	
E.G. Slope (m/m)	0.009984	Area (m2)		276.61	
Q Total (m3/s)	1217.14	Flow (m3/s)		1217.14	
Top Width (m)	113.94	Top Width (m)		113.94	
Vel Total (m/s)	4.40	Avg. Vel. (m/s)		4.40	
Max Chl Dpth (m)	4.24	Hydr. Depth (m)		2.43	
Conv. Total (m3/s)	12181.4	Conv. (m3/s)		12181.4	
Length Wtd. (m)	10.00	Wetted Per. (m)		118.31	
Min Ch El (m)	169.40	Shear (N/m2)		228.89	
Alpha	1.00	Stream Power (N/m s)		1007.16	
Frctn Loss (m)	0.09	Cum Volume (1000 m3)		152.86	
C & E Loss (m)	0.05	Cum SA (1000 m2)		49.09	

Plan: Plan 03 RP_1 Alignment - (1) RS: 540 Profile: Tr=100 yr

E.G. Elev (m)	174.89	Element	Left OB	Channel	Right OB
Vel Head (m)	0.99	Wt. n-Val.		0.040	
W.S. Elev (m)	173.90	Reach Len. (m)	10.00	10.00	10.00
Crit W.S. (m)		Flow Area (m2)		306.32	
E.G. Slope (m/m)	0.008930	Area (m2)		306.32	
Q Total (m3/s)	1350.45	Flow (m3/s)		1350.45	
Top Width (m)	115.55	Top Width (m)		115.55	
Vel Total (m/s)	4.41	Avg. Vel. (m/s)		4.41	
Max Chl Dpth (m)	4.50	Hydr. Depth (m)		2.65	
Conv. Total (m3/s)	14290.7	Conv. (m3/s)		14290.7	
Length Wtd. (m)	10.00	Wetted Per. (m)		120.17	
Min Ch El (m)	169.40	Shear (N/m2)		223.24	
Alpha	1.00	Stream Power (N/m s)		984.15	
Frctn Loss (m)	0.08	Cum Volume (1000 m3)		166.20	
C & E Loss (m)	0.04	Cum SA (1000 m2)		50.10	

