



LAMPIRAN



PLAGIARISM
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9.22% PLAGIARIS
APPROXIMATELY

Report #10279550

BAB 1 PENDAHULUAN Latar Belakang Indonesia memiliki 5,950 daerah aliran sungai dan dari jumlah 2/3 nya mempunyai morfologi sungai berkelok-kelok (Halim, 2011). Salah satunya yaitu Sungai Sengkarang yang berada di Kecamatan Kedungwuni Kabupaten Pekalongan. Sungai Sengkarang memiliki panjang 52 km mengalir dari bagian utara yang merupakan bagian dari dataran tinggi Dieng dan bermuara di laut Jawa bagian selatan Kabupaten Pekalongan. Kecamatan Kedungwuni merupakan salah satu desa yang berjarak 13 kilometer dari pusat kota Kabupaten Pekalongan yang berada pada ketinggian ± 11 meter dari permukaan air laut termasuk pada desa yang dilewati oleh aliran Sungai Sengkarang. Aliran Sungai Sengkarang yang melewati Kecamatan Kedungwuni memiliki morfologi sungai yang berkelok-kelok (meandering) sehingga membuat desa Kedungwuni menjadi rawan akan bencana banjir. Morfologi sungai yang berkelok-kelok (meandering) pada Sungai Sengkarang ini memiliki pengaruh pada karakteristik sungai itu sendiri seperti meluapnya air pada bagian berkelok sungai karena kondisi penampang sungai yang tak mampu menampung debit aliran pada curah hujan tertentu. Untuk itu diperlukan penanggulangan bencana banjir dengan cara pembuatan alur baru pada Sungai Sengkarang. Pembuatan alur baru sungai yang disebut sudetan merupakan alternatif untuk meminimalkan pengaruh dari morfologi sungai yang berkelok-kelok (meandering) dan juga solusi mengatasi bencana banjir. Hal ini dilakukan agar sungai dapat di normalisasikan kembali dan dapat mempercepat aliran banjir menuju muara sungai (Halim, 2011). Namun pembuatan sudetan juga dapat mempengaruhi karakteristik sungai itu sendiri.



Tugas Akhir
Pengaruh Sudetan Terhadap Karakteristik Sungai
Sungai Sengkarang Kabupaten Pekalongan

LAPORAN PEMANTAUAN DEBIT BANJIR
TAHUN ...2011.....

Nama Bendung Post Klejak Hari Celasa
Nama Sungai Sengkarang Tanggal 01
Peil Mercu meter Bulan Februari
Panjang Bendung meter
Alamat Pengukur

JAM	Peil (cm)	Q (l/det)	KETERANGAN
01.00	185	653.919	
02.00	170	576.076	
03.00	160	526.001	
04.00	150	477.464	
05.00	140	430.525	
06.00	130	385.231	
07.00	130	385.231	
08.00	120	341.647	
09.00	120	341.647	
10.00	118	333.142	
11.00			
12.00			
13.00			
14.00			
15.00			
16.00			
17.00			
18.00			
19.00			
20.00			
21.00			
22.00			
23.00			
24.00			

Penjaga Bendung



Sta. 1000				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	16.882	1	1	1
15.77	17.918	<i>Manning's n Values</i>		
23.27	21.082	LOB	Channel	ROB
26.63	21.119	0.03	0.03	0.03
28.21	20.951	<i>Main Channel Bank Stations</i>		
30.59	19.737	<i>Left Bank</i>	<i>Rigth Bank</i>	
36.89	17.174	26.63	279.09	
46.81	17.547			
53	15.057			
63.54	15.99			
76.73	15.683			
89.53	15.525			
96.42	15.769			
99.42	17.655			
111.45	17.615			
128.49	17.667			
173.64	17.741			
189.24	17.637			
197.45	16.641			
205.23	15.474			
213.63	15.25			
219.62	15.044			
227.53	14.567			
235.61	15.513			
237.62	18.274			
249.98	17.954			
270.01	18.136			
279.09	20.767			
284.09	20.59			
295.48	18.558			
307.21	16.16			
314.48	15.58			

Sta. 999				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	16.815	19.8096	34.4817	47.5017
7.95	16.974	<i>Manning's n Values</i>		
15.18	20.986	LOB	Channel	ROB
18.16	20.929	0.03	0.03	0.03
18.46	20.929	<i>Main Channel Bank Stations</i>		
20.15	19.662	<i>Left Bank</i>	<i>Rigth Bank</i>	
20.94	19.551	26.63	279.09	
22.52	19.579			
22.52	18.979			
23.12	18.979			
23.12	18.485			
23.72	18.485			
23.72	17.831			
46.62	17.734			
50.48	15.76			
63.28	14.147			
70.56	14.839			
79.8	15.773			
81.11	17.521			
112.43	17.507			
149.5	17.658			
152.49	16.019			
158.6	15.813			
161.58	15.17			
172.9	15.47			
180.69	16.785			
183.31	17.783			
206.53	18.631			
217.47	20.967			
223.42	21.26			
236.4	21.181			
249.98	20.22			
256.56	19.754			

Sta. 998				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	16.642	10.8873	20.4321	38.836
12	17.067	<i>Manning's n Values</i>		
18.45	20.897	LOB	Channel	ROB
21.41	21.085	0.03	0.025	0.03
25.38	21.187	<i>Main Channel Bank Stations</i>		
26.13	21.187	<i>Left Bank</i>	<i>Rigth Bank</i>	
26.13	17.223	26.13	189.92	
49.18	16.368			
51.14	14.543			
58.56	13.904			
70.35	14.842			
78.83	15.838			
79.73	17.463			
97.22	17.647			
123.01	17.12			
130.99	16.526			
136.81	15.366			
144.17	14.142			
147.57	14.281			
159.52	14.016			
164.33	15.56			
165.92	16.905			
180.09	17.424			
189.92	20.12			
194.52	20.104			
203.92	18.87			
205.92	18.87			
218.59	17.343			
225.51	17.018			



Sta. 997				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	16.345	9.9903	9.6214	9.3345
16.69	16.89	<i>Manning's n Values</i>		
26.8	21.094	LOB	Channel	ROB
32.3	21.203	0.03	0.025	0.03
33.05	21.203	<i>Main Channel Bank Stations</i>		
33.05	17.363	<i>Left Bank</i>		<i>Rigth Bank</i>
50.18	17.357	33.05	192.11	
54.15	14.534			
63.42	13.355			
76.42	13.531			
85.31	15.191			
87.08	17.366			
103.63	17.473			
137.24	16.657			
142.26	15.573			
148.25	14.607			
156.52	13.821			
166.13	14.346			
173.39	14.885			
183.58	16.405			
190.91	20.975			
191.41	20.975			
192.11	20.807			
198.51	20.891			
205.59	19.175			
220.83	18.129			
223.33	18.129			
228.69	17.679			

Sta. 996				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	16.655	6.9811	8.3471	8.4806
7.93	17.648	<i>Manning's n Values</i>		
16.11	21.249	LOB	Channel	ROB
21.06	21.22	0.03	0.025	0.03
21.81	21.22	<i>Main Channel Bank Stations</i>		
21.81	17.37	<i>Left Bank</i>		<i>Rigth Bank</i>
33.74	17.516	21.81		171.25
37.11	15.278			
46.19	13.578			
60.35	13.918			
68.78	14.981			
71.75	17.707			
81.17	17.416			
109.43	16.863			
116.81	15.715			
127.58	14.403			
139.69	14.476			
148.56	15.059			
155.47	16.134			
157.85	17.27			
160.41	17.39			
166.45	21.094			
166.95	21.094			
171.25	20.781			
180.41	17.998			
190.34	16.034			
192.34	16.034			
199.53	15.097			
210.13	15.224			

Sta. 995				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	16.679	9.7292	9.5963	7.2461
9.31	17.82	<i>Manning's n Values</i>		
22.31	21.313	LOB	Channel	ROB
28.26	21.228	0.03	0.025	0.03
29.01	21.228	<i>Main Channel Bank Stations</i>		
29.01	17.568	<i>Left Bank</i>		<i>Rigth Bank</i>
32.53	17.447	29.01		170.27
35.33	15.553			
40.81	15.483			
46.25	13.739			
59.39	13.996			
71.36	14.536			
74.23	17.506			
86.22	17.247			
103.82	17.011			
109.42	16.682			
117.25	15.106			
127.49	15.103			
134.61	14.688			
142.27	15.826			
146.82	17.307			
159.31	17.524			
164.07	21.118			
164.57	21.118			
170.27	20.744			
176.45	18.889			
183.78	17.033			
187.18	15.895			
189.68	15.895			
190.28	15.245			
205.7	15.187			



Sta. 994				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.621	9.7118	10.2707	10.2821
10.28	14.838	<i>Manning's n Values</i>		
10.28	21.223	LOB	Channel	ROB
12.48	21.23	0.03	0.025	0.015
15.28	21.205	<i>Main Channel Bank Stations</i>		
15.28	13.517	Left Bank		Rigth Bank
23.87	13.517	12.48	151	
23.87	17.316			
25.37	17.316			
25.37	13.168			
41.03	13.674			
64.37	13.385			
94.16	14.535			
131.69	15.346			
132.23	17.206			
141.49	17.338			
145.2	21.084			
145.7	21.084			
151	20.778			
161.2	18.129			
163.7	16.234			
167.94	16.234			
170.46	15.5			
172.46	15.5			
175.2	15.5			
176.2	14.266			
186.52	14.174			

Sta. 993				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.638	6.8403	6.8635	7.6076
16.01	14.638	<i>Manning's n Values</i>		
16.01	21.244	LOB	Channel	ROB
16.76	21.244	0.015	0.025	0.013
20.73	21.241	<i>Main Channel Bank Stations</i>		
21.43	21.241	Left Bank		Rigth Bank
21.43	13.321	21.43		154.93
24.93	13.321			
24.93	21.216			
26.33	21.216			
26.33	13.321			
29.83	13.321			
29.83	21.234			
31.33	21.234			
31.33	16.51			
143.18	16.46			
143.18	21.127			
143.93	21.127			
154.93	21.067			
155.41	21.067			
163.41	17.879			
170.18	15.805			
173.06	15.333			
175.06	15.333			
175.68	14.629			
190.14	13.984			

Sta. 992				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	20.266	12.0601	12.2026	12.4325
0.8	20.266	<i>Manning's n Values</i>		
7.6	20.632	LOB	Channel	ROB
7.9	20.632	0.015	0.025	0.013
9.4	19.189	<i>Main Channel Bank Stations</i>		
9.9	19.189	Left Bank		Rigth Bank
10.3	18.934	9.9		142.08
11.05	18.934			
11.05	11.402			
19.62	11.402			
19.62	15.355			
21.12	15.355			
21.12	11.461			
43.49	11.27			
64.36	11.77			
135.07	11.328			
135.07	20.277			
135.82	20.277			
135.82	19.895			
138.82	20.012			
142.08	20.075			
142.88	20.075			
152.19	15.463			
155.44	15.293			
157.44	15.293			
158.44	15.293			
159.06	14.553			
164.74	14.084			
174.74	14.084			



Sta. 991				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	19.57	9.7292	9.5963	7.2461
5.96	19.72	<i>Manning's n Values</i>		
7.96	18.628	LOB	Channel	ROB
15.55	17.997	0.03	0.025	0.03
16.2	17.952	<i>Main Channel Bank Stations</i>		
16.95	17.952	<i>Left Bank</i>		<i>Rigth Bank</i>
16.95	11.712	29.01	170.27	
25.69	11.451			
25.69	15.31			
27.19	15.31			
27.19	11.363			
69.53	11.267			
107.81	11.297			
141.71	11.213			
145.72	15.525			
145.72	17.726			
146.47	17.726			
150.52	17.724			
157.39	15.092			
161.97	14.994			
163.77	14.994			
166.44	14.612			
167.22	14.171			
172.23	14.092			
182.55	14.061			

Sta. 990				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	18.52	9.3419	9.3113	9.3882
14.19	18.678	<i>Manning's n Values</i>		
25.99	18.41	LOB	Channel	ROB
35.38	18.066	0.015	0.013	0.015
46.37	17.994	<i>Main Channel Bank Stations</i>		
47.07	18.035	<i>Left Bank</i>		<i>Rigth Bank</i>
47.82	18.035	46.37	181.96	
47.82	11.795			
78.41	11.342			
137.33	11.737			
170.92	11.314			
178.81	17.731			
179.56	17.731			
181.96	17.629			
186.88	15.199			
190.17	14.974			
191.77	14.974			
194.69	14.751			
195.25	14.401			
202.06	14.025			
208.16	14.063			

Sta. 989				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	20.2	12.2952	12.5106	12.8159
6.85	19.932	<i>Manning's n Values</i>		
30.22	14.629	LOB	Channel	ROB
36.97	14.296	0.03	0.025	0.035
40.68	13.453	<i>Main Channel Bank Stations</i>		
45.17	11.51	<i>Left Bank</i>		<i>Rigth Bank</i>
51.15	10.871	36.97	183.41	
63.13	10.727			
97.34	11.284			
118.53	10.615			
154.73	10.221			
175.33	9.239			
180.21	15.142			
180.61	15.142			
182.61	15.414			
183.41	16.588			
185.41	16.588			
185.91	15.892			
186.91	15.892			
188.41	15.158			
191.81	14.912			
193.31	14.912			
210.41	14.758			
227.41	14.657			
228.41	15.052			
238.41	15.019			

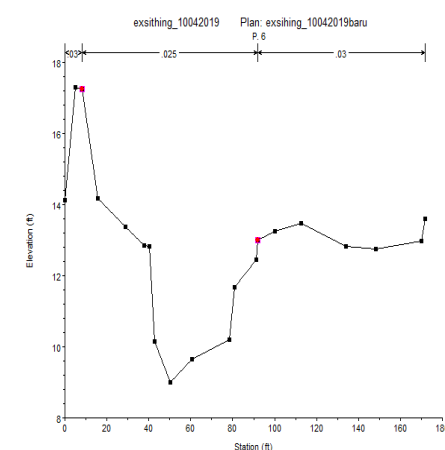


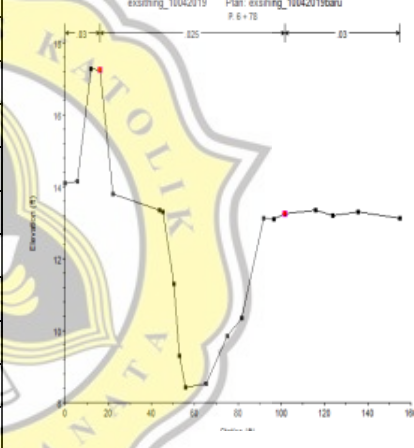
Sta. 987				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	15.234	44.4806	93.1372	130.3335
50.88	13.713	<i>Manning's n Values</i>		
68.85	13.296	LOB	Channel	ROB
77.83	12.419	0.03	0.025	0.03
79.82	11.977	<i>Main Channel Bank Stations</i>		
82.77	10.683	<i>Left Bank</i>		<i>Rigth Bank</i>
94.13	10.401	50.88		130.77
106.31	10.514			
121.92	10.834			
130.77	14.063			
148.97	13.958			
171.97	13.828			
202.77	14.108			
203.07	14.108			
203.07	12.858			
205.07	12.858			
205.07	14.055			
205.37	14.055			
207.37	14.055			
208.77	14.093			

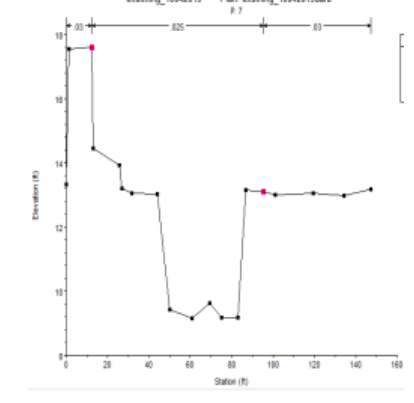
Sta. 986				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.895	99.5683	99.7414	99.7414
16.76	14.057	<i>Manning's n Values</i>		
40.55	13.294	LOB	Channel	ROB
54.71	12.769	0.03	0.025	0.03
61.29	12.598	<i>Main Channel Bank Stations</i>		
64.66	10.556	<i>Left Bank</i>		<i>Rigth Bank</i>
78.98	10.483	54.71		117.56
85.03	10.796			
100.2	10.709			
104.6	11.219			
111.67	13.706			
112.66	13.85			
117.56	13.809			
119.56	13.809			
121.26	13.67			
141.96	13.67			
158.56	13.375			
182.96	13.412			

Sta. 985				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.251	99.7211	107.0096	116.2134
14.4	14.563	<i>Manning's n Values</i>		
15.99	13.336	LOB	Channel	ROB
17.99	13.336	0.03	0.025	0.03
17.99	12.678	<i>Main Channel Bank Stations</i>		
26.39	12.056	<i>Left Bank</i>		<i>Rigth Bank</i>
34.2	11.723	15.99		107.98
35.45	10.212			
37.45	10.212			
40.59	12.511			
54.99	12.814			
59.38	12.497			
61.75	11.186			
69.76	10.473			
84.77	10.234			
97.94	10.767			
100.38	12.512			
107.48	12.849			
107.98	13.329			
119.98	13.629			
134.78	13.598			
154.98	13.454			
169.98	13.113			
180.38	12.819			
191.98	13.704			



Sta. 984				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.125	108.1165	97.7801	88.7866
4.9	17.302	<i>Manning's n Values</i>		
8.31	17.239	LOB	Channel	ROB
15.57	14.174	0.03	0.025	0.03
28.94	13.383	<i>Main Channel Bank Stations</i>		
37.93	12.862	<i>Left Bank</i>		<i>Rigth Bank</i>
40.32	12.831	8.31	92.1	
42.67	10.158			
50.3	8.991			
60.5	9.651			
78.27	10.197			
80.9	11.682			
91.1	12.445			
92.1	13.01			
100.1	13.262			
112.5	13.484			
134.1	12.824			
148.1	12.742			

Sta. 983				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.108	81.491	76.94	72.6402
5.64	14.146	<i>Manning's n Values</i>		
11.97	17.285	LOB	Channel	ROB
16.08	17.25	0.03	0.025	0.03
22.22	13.806	<i>Main Channel Bank Stations</i>		
43.82	13.345	<i>Left Bank</i>		<i>Rigth Bank</i>
45.22	13.293	16.08	101.83	
50.49	11.295			
53.06	9.288			
55.65	8.422			
65.21	8.531			
75.06	9.862			
81.73	10.346			
91.83	13.129			
96.63	13.103			
101.83	13.259			
116.03	13.339			
124.03	13.198			

Sta. 982				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	13.327	21.9786	21.3985	20.6063
1.18	17.549	<i>Manning's n Values</i>		
12.2	17.603	LOB	Channel	ROB
12.89	14.456	0.03	0.025	0.03
25.76	13.932	<i>Main Channel Bank Stations</i>		
26.78	13.189	<i>Left Bank</i>		<i>Rigth Bank</i>
31.56	13.045	12.2	95.36	
43.96	13.036			
50.11	9.42			
60.94	9.153			
69.48	9.621			
75.02	9.172			
83.02	9.172			
86.96	13.139			
95.36	13.109			
100.96	12.999			
119.36	13.051			



Sta. 981				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.142	99.5683	99.7414	99.7414
7	14.149	<i>Manning's n Values</i>		
12.19	17.656	LOB	Channel	ROB
17.7	17.463	0.03	0.025	0.03
25.77	14.217	<i>Main Channel Bank Stations</i>		
47.76	13.98	<i>Left Bank</i>		<i>Rigth Bank</i>
48.15	13.98	54.71		117.56
48.55	13.4			
63.27	13.276			
64.25	11.22			
65.75	11.22			
71.24	9.363			
81.65	9.457			
93.76	9.392			
107.73	13.046			
112.93	13.073			
124.33	13.13			
138.93	13.038			
161.53	13.153			
177.93	13.103			

Sta. 980				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	13.956	19.5735	19.2858	19.1295
8.42	13.926	<i>Manning's n Values</i>		
14.02	17.313	LOB	Channel	ROB
19.63	17.251	0.03	0.025	0.03
24.88	14.574	<i>Main Channel Bank Stations</i>		
59.88	14.259	<i>Left Bank</i>		<i>Rigth Bank</i>
61.06	14.146	19.63		119.996
62.43	13.237			
71.39	12.788			
73.7	10.434			
82.44	9.658			
91.27	9.441			
99.28	9.973			
108.01	10.24			
114.19	12.686			
117.39	13.191			
119.99	13.326			
135.39	13.121			
156.39	12.971			

Sta. 979				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	17.229	25.9922	18.8345	18.1096
5.2	17.203	<i>Manning's n Values</i>		
11.99	14.76	LOB	Channel	ROB
34.99	14.872	0.035	0.025	0.03
58.18	14.882	<i>Main Channel Bank Stations</i>		
60.77	14.935	<i>Left Bank</i>		<i>Rigth Bank</i>
62.16	13.285	5.2		123.51
67.46	12.637			
70.38	11.587			
72.87	10.45			
79.46	9.878			
83.9	9.637			
91.51	9.67			
101.94	10.099			
109.24	10.112			
114.11	13.203			
123.51	13.083			
135.51	12.988			
154.11	12.648			



Sta. 978				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	16.927	30.1297	16.7675	11.7651
2	17.045	<i>Manning's n Values</i>		
8	14.378	LOB	Channel	ROB
45.2	15.211	0.035	0.025	0.03
71.99	15.175	<i>Main Channel Bank Stations</i>		
73.17	15.186	<i>Left Bank</i>		<i>Rigth Bank</i>
74.13	14.585	2	131.48	
74.89	14.31			
76.35	14.25			
76.35	13.756			
76.76	13.756			
76.76	12.356			
79.81	12.961			
81.67	11.218			
86.46	10.207			
91.69	9.181			
103.21	9.648			
125.48	13.133			
131.48	13.109			
139.68	12.999			
156.88	12.771			

Sta. 977				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.84	79.1525	17.1453	12.2049
22.97	15.099	<i>Manning's n Values</i>		
23.37	15.178	LOB	Channel	ROB
23.87	14.451	0.035	0.025	0.03
25.87	14.28	<i>Main Channel Bank Stations</i>		
25.87	13.78	<i>Left Bank</i>		<i>Rigth Bank</i>
26.37	13.78	22.97		74.85
26.37	13.28			
26.87	13.28			
26.87	12.78			
27.37	12.78			
27.37	11.838			
27.87	11.838			
27.87	10.727			
32.67	9.272			
36.26	8.826			
40.66	9.503			
52.48	9.71			
65.97	10.386			
70.65	13.107			
74.85	13.111			
82.45	13.149			
95.45	13.063			
111.85	12.676			

Sta. 976				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.808	19.7772	17.8954	12.3119
9.97	14.656	<i>Manning's n Values</i>		
11.57	14.309	LOB	Channel	ROB
12.16	14.083	0.035	0.025	0.03
14.15	13.936	<i>Main Channel Bank Stations</i>		
14.15	13.436	<i>Left Bank</i>		<i>Rigth Bank</i>
14.65	13.436	9.97		54.83
14.65	12.936			
15.15	12.936			
15.15	11.9			
15.65	11.9			
15.65	11.4			
16.15	11.4			
16.15	10.149			
20.8	9.027			
26.62	9.25			
34.17	9.685			
44.72	10.155			
52.62	11.361			
54.83	13.152			
61.83	12.902			
69.23	12.874			
75.83	12.822			
88.63	12.691			



Sta. 975				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.909	20.5364	21.4545	18.0818
3.39	14.665	<i>Manning's n Values</i>		
6.39	14.311	LOB	Channel	ROB
6.78	14.312	0.035	0.025	0.03
10.37	13.783	<i>Main Channel Bank Stations</i>		
11.58	9.931	<i>Left Bank</i>		<i>Rigth Bank</i>
15.88	8.331	6.78		117.19
21.18	8.158			
26.18	9.277			
33.1	10.137			
44.26	11.587			
46.69	12.8			
54.69	12.898			
62.29	12.828			
76.09	12.907			
87.69	12.373			
109.69	12.546			
117.19	14.079			
120.19	13.1			
124.89	13.1			
130.89	11.116			

Sta. 974				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.646	19.999	18.6235	17.1361
26.59	14.879	<i>Manning's n Values</i>		
47.79	14.932	LOB	Channel	ROB
50.37	14.7	0.035	0.025	0.03
50.37	11.682	<i>Main Channel Bank Stations</i>		
51.17	11.682	<i>Left Bank</i>		<i>Rigth Bank</i>
51.17	12.334	47.79		157.44
52.67	12.334			
52.67	11.834			
54.17	11.834			
54.17	9.899			
55.67	9.899			
55.67	8.625			
61.17	7.426			
69.82	8.455			
73.56	9.638			
81.06	10.263			
84.03	11.368			
97.23	11.971			
101.3	12.787			
107.23	12.609			
117.23	12.771			
129.64	12.523			
145.24	12.197			
157.44	13.707			
161.44	13.707			
163.23	12.801			
166.23	12.801			

Sta. 973				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channe 1	ROB
0	14.656	19.1878	19.115 4	24.290 2
12.4	14.949	<i>Manning's n Values</i>		
21	14.911	LOB	Channe 1	ROB
30.6	14.994	0.035	0.025	0.03
40	14.921	<i>Main Channel Bank Stations</i>		
44	14.861	<i>Left Bank</i>		<i>Rigth Bank</i>
45.2	13.534	40		148.77
47.2	13.435			
47.2	12.935			
47.7	12.935			
47.7	12.435			
48.2	12.435			
48.2	11.935			
48.7	11.935			
48.7	11.435			
49.2	11.435			
49.2	9.779			
54.16	7.808			
62.42	7.859			
72.97	9.8			
78.81	10.901			
84.3	12.171			
104.27	11.615			
111.86	11.673			
113.66	12.11			
116.66	12.193			
121.26	12.166			
125.43	12.188			
138.45	12.776			
144.63	12.297			



Sta. 972					Sta. 971					Sta. 970				
Cross Section Coordinates		Downstream Reach Legths			Cross Section Coordinates		Downstream Reach Legths			Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB	Station	Elevation	LOB	Channel	ROB	Station	Elevation	LOB	Channel	ROB
0	14.948	20.2053	20.677	22.3671	0	14.645	9.3262	8.2904	8.2249	0	14.796	19.9886	17.249	v
10.78	14.873	<i>Manning's n Values</i>			16.79	14.61	<i>Manning's n Values</i>			18	14.687	<i>Manning's n Values</i>		
26.48	14.859	LOB	Channel	ROB	30.59	14.795	LOB	Channel	ROB	31.2	14.672	LOB	Channel	ROB
38.68	14.71	0.035	0.025	0.03	43.59	14.885	0.035	0.025	0.03	43.2	14.842	0.03	0.025	0.03
48.68	14.66	<i>Main Channel Bank Stations</i>			50.79	14.905	<i>Main Channel Bank Stations</i>			45.2	14.762	<i>Main Channel Bank Stations</i>		
49.88	14.612	<i>Left Bank</i>		<i>Rigth Bank</i>	53.59	14.934	<i>Left Bank</i>		<i>Rigth Bank</i>	48.17	10.561	<i>Left Bank</i>		<i>Rigth Bank</i>
50.88	11.359	49.88		114.18	55.81	12.563	50.79		110.86	50.36	10.561	43.2		97.82
54.88	11.149				57.81	12.563				50.36	10.995			
56.88	9.819				59.61	9.192				51.96	10.107			
58.88	9.819				64.23	8.362				51.96	8.297			
60.88	7.97				70.93	8.164				54.63	8.054			
69.18	8.198				75.3	8.849				59.98	8.009			
77.09	8.679				82.21	10.055				67.65	8.706			
85.02	9.935				83.33	10.682				71.31	9.073			
89.02	10.732				88.33	10.682				76.63	9.88			
89.32	10.732				91.69	11.366				80.45	11.789			
92.19	11.74				102.27	11.898				86.64	11.67			
104.28	12.223				107.07	11.827				94.29	11.794			
110.39	12.148				110.86	11.923				97.82	11.968			
114.18	12.182				117.64	12.057				106.6	12.133			
120.37	12.275	128.63	11.777	126.61	11.841									
136.75	12.153	145.24	11.873	141.59	11.656									
152.73	11.97	159.42	11.414	154.92	10.347									
156.56	12.458													



Sta. 969				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.445	20.0736	17.0169	15.785
4.59	14.779	<i>Manning's n Values</i>		
9.67	14.23	LOB	Channel	ROB
13.58	14.398	0.03	0.025	0.03
15.22	14.299	<i>Main Channel Bank Stations</i>		
16.65	13.307	<i>Left Bank</i>		<i>Rigth Bank</i>
18.56	13.115	13.58	59.56	
19.36	12.762			
23.36	9.975			
25.61	8.412			
33.01	8.036			
42.56	8.857			
50.96	9.882			
53.96	11.692			
59.56	11.762			
67.56	11.95			
82.16	11.996			
101.56	11.755			
112.56	12.457			

Sta. 968				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.472	50.7857	48.1217	44.6806
4.61	12.268	<i>Manning's n Values</i>		
17.4	12.6	LOB	Channel	ROB
21.98	12.435	0.03	0.025	0.03
27.33	12.378	<i>Main Channel Bank Stations</i>		
29.13	11.83	<i>Left Bank</i>		<i>Rigth Bank</i>
31.71	11.428	21.98	74.1	
33.1	9.915			
38.88	8.95			
45.46	8.883			
56.84	9.444			
67.94	9.987			
70.5	12.138			
74.1	12.115			
83.1	11.7			
88.9	11.718			
89.9	11.47			
97.7	10.847			
99.1	11.473			
114.3	11.901			
116.1	12.3			

Sta. 967				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.388	41.9399	45.2984	47.9925
2.8	12.384	<i>Manning's n Values</i>		
14.79	12.537	LOB	Channel	ROB
20.39	11.821	0.03	0.025	0.03
22.9	11.288	<i>Main Channel Bank Stations</i>		
27.21	11.647	<i>Left Bank</i>		<i>Rigth Bank</i>
32.58	11.647	14.79	116.31	
34.32	11.725			
37.11	11.53			
38.51	9.892			
41.91	9.389			
47.51	9.372			
60.11	9.184			
72.11	10.019			
76.71	10.502			
78.51	11.424			
85.11	11.454			
92.71	11.274			
101.11	10.953			
115.31	11.459			
116.31	11.873			
138.51	11.885			



Sta. 966				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.388	41.9399	45.2984	47.9925
2.8	12.384	<i>Manning's n Values</i>		
14.79	12.537	LOB	Channel	ROB
20.39	11.821	0.035	0.025	0.03
22.9	11.288	<i>Main Channel Bank Stations</i>		
27.21	11.647	<i>Left Bank</i>		<i>Rigth Bank</i>
32.58	11.647	14.79	116.31	
34.32	11.725			
37.11	11.53			
38.51	9.892			
41.91	9.389			
47.51	9.372			
60.11	9.184			
72.11	10.019			
76.71	10.502			
78.51	11.424			
85.11	11.454			
92.71	11.274			
101.11	10.953			
115.31	11.459			
116.31	11.873			
138.51	11.885			

Sta. 965				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.835	27.8639	34.2821	50.1194
6.6	11.898	<i>Manning's n Values</i>		
13.64	11.032	LOB	Channel	ROB
43.04	11.834	0.03	0.025	0.03
51.19	12.004	<i>Main Channel Bank Stations</i>		
56.54	11.985	<i>Left Bank</i>		<i>Rigth Bank</i>
58.53	9.696	51.19	172.46	
72.93	10.58			
91.16	9.457			
100.82	9.651			
107.47	10.274			
125.91	10.624			
140.14	9.95			
146.54	9.66			
156.38	9.193			
163.83	8.8			
167.06	10.342			
169.06	12.682			
172.46	12.567			
178.86	12.466			
185.06	11.433			
196.45	11.557			
198.64	12.432			
219.45	11.986			
228.45	11.724			

Sta. 964				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.194	34.1286	48.2235	49.591
6.79	12.68	<i>Manning's n Values</i>		
8.69	10.626	LOB	Channel	ROB
12.69	10.626	0.03	0.025	0.03
14.49	11.966	<i>Main Channel Bank Stations</i>		
22.49	11.62	<i>Left Bank</i>		<i>Rigth Bank</i>
32.68	11.695	40.28	175.61	
40.28	12.004			
52.48	12.349			
53.67	10.112			
58.25	9.534			
64.24	9.587			
66.46	10.416			
70.46	11.415			
81.45	11.232			
98.44	9.602			
104.03	9.997			
110.03	10.18			
123.64	10.444			
125.13	8.896			
136.5	9.523			
149.12	9.711			
155.48	10.173			
171.61	10.483			
171.61	11.962			
172.61	11.962			
172.61	12.462			
173.61	12.462			
173.61	12.962			
175.61	12.962			
175.61	12.003			
177.01	12.003			
187.41	12.039			
199.01	11.895			
207.41	11.513			



Sta. 963				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.647	26.5264	51.5377	47.9139
9.59	12.686	<i>Manning's n Values</i>		
17.11	10.231	LOB	Channel	ROB
21.2	9.562	0.03	0.025	0.03
25.22	10.288	<i>Main Channel Bank Stations</i>		
28	11.471	<i>Left Bank</i>	<i>Rigth Bank</i>	
34.81	11.607	41.55	169.18	
41.55	11.831			
46.12	11.893			
52.14	11.908			
54.93	11.672			
59.32	11.569			
61.71	11.492			
79.37	10.202			
90.79	10.12			
93.79	10.12			
101.21	9.363			
113.47	8.528			
129.18	9.364			
139.38	10.541			
146.98	10.588			
150.59	8.909			
156.1	7.898			
163.18	9.823			
167.18	12.884			
169.18	12.844			
169.18	12.216			
171.18	12.216			
185.18	11.815			
197.77	11.422			
225.15	11.568			

Sta. 962				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.922	25.2563	46.2509	47.2739
4.58	12.192	<i>Manning's n Values</i>		
11.89	11.018	LOB	Channel	ROB
20.09	10.663	0.03	0.025	0.03
22.09	11.973	<i>Main Channel Bank Stations</i>		
28.29	11.487	<i>Left Bank</i>	<i>Rigth Bank</i>	
37.49	11.417	48.29	145.98	
43.49	12.141			
48.29	11.715			
54.03	11.595			
56.67	10.521			
67.94	10.087			
79.2	9.741			
82.2	9.741			
92.48	9.571			
108.13	9.421			
121.67	9.047			
127.69	7.819			
130.69	7.139			
133.69	8.11			
136.49	9.122			
136.49	10.127			
136.99	10.127			
136.99	10.927			
137.49	10.927			
137.49	11.427			
137.99	11.427			
137.99	12.58			
139.99	12.58			
139.99	12.747			
140.99	12.747			
142.99	13.074			
145.98	13.55			
149.96	14.35			

Sta. 961				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.237	5.9374	7.0138	13.1834
1.79	11.381	<i>Manning's n Values</i>		
8.4	11.179	LOB	Channel	ROB
17.8	11.469	0.03	0.025	0.03
28.58	11.438	<i>Main Channel Bank Stations</i>		
34.39	11.834	<i>Left Bank</i>	<i>Rigth Bank</i>	
38.15	11.771	38.15	125.71	
42.72	11.844			
47.73	11.614			
52.55	11.275			
59.81	9.988			
72.71	9.778			
82.52	9.581			
85.52	9.581			
103.45	9.461			
113.25	9.176			
115.63	7.727			
118.19	7.165			
120.79	8.915			
122.79	11.987			
124.79	11.987			
125.71	12.77			
128.78	14.693			
130.87	15.406			



Sta. 960				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.62	14.266	20.6345	20.6345
13	11.501	<i>Manning's n Values</i>		
25.6	11.217	LOB	Channel	ROB
39.19	11.663	0.03	0.025	0.03
41.82	10.628	<i>Main Channel Bank Stations</i>		
55.58	11.349	<i>Left Bank</i>	<i>Rigth Bank</i>	
57.78	11.375	55.58	122.78	
63.78	11.292			
64.98	9.86			
71.78	9.161			
78.78	9.161			
81.78	9.716			
101.38	9.796			
103.38	9.106			
113.38	6.589			
118.78	7.106			
119.78	8.569			
119.78	8.779			
120.28	8.779			
120.28	9.517			
120.78	9.517			
120.78	10.255			
122.78	10.571			
126.37	11.135			
129.59	11.128			
130.41	15.66			
131.41	15.66			

Sta. 959				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.259	16.1624	17.2592	19.8301
19.39	11.235	<i>Manning's n Values</i>		
29.99	11.492	LOB	Channel	ROB
39.65	10.895	0.03	0.025	0.03
48.06	11.078	<i>Main Channel Bank Stations</i>		
57.78	11.547	<i>Left Bank</i>	<i>Rigth Bank</i>	
64.52	11.345	57.78	111.5	
65.52	10.052			
68.52	9.774			
69.9	9.177			
79.5	9.532			
82.5	9.532			
89.1	9.197			
98.5	7.795			
103.5	7.276			
108.5	6.997			
108.5	5.496			
109.5	5.496			
109.5	7.696			
111	7.696			
111	9.041			
111.5	9.041			
111.5	10.042			
112.5	10.042			
113.5	10.042			
114	10.279			
115	11.546			
116.65	11.546			
117.65	14.551			
119.15	14.551			

Sta. 958				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.31	11.3668	19.0099	9.7443
10.79	11.719	<i>Manning's n Values</i>		
24.59	11.519	LOB	Channel	ROB
26.4	10.856	0.03	0.025	0.03
38.62	10.874	<i>Main Channel Bank Stations</i>		
47.82	11.013	<i>Left Bank</i>	<i>Rigth Bank</i>	
60.37	11.378	60.37	115.91	
62.15	11.291			
65.72	11.271			
71.91	9.722			
75.71	9.157			
81.71	9.246			
84.71	9.132			
87.91	8.315			
100.02	7.532			
105.62	7.587			
110.62	9.248			
112.91	9.248			
113.41	9.747			
113.42	9.747			
115.41	9.9			
115.91	10.308			
116.41	10.308			
116.91	11.303			
117.91	11.303			
119.41	15.758			
121.41	15.758			



Sta. 957				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	10.98	13.8389	28.065	19.4856
12.35	10.66	<i>Manning's n Values</i>		
25.69	10.764	LOB	Channel	ROB
36.03	10.86	0.03	0.025	0.03
44.4	11.091	<i>Main Channel Bank Stations</i>		
49.58	11.033	<i>Left Bank</i>		<i>Rigth Bank</i>
51.36	10.613	49.58		145.98
52.96	10.198			
55.96	10.198			
57.97	9.475			
64.59	9.139			
68.58	7.96			
79.16	8.514			
91.55	9.214			
96.55	9.265			
99.55	10.04			
101.64	10.537			
101.64	11.04			
102.14	11.04			
102.14	12.328			
104.14	12.328			
106.47	13.867			
107.97	13.867			

Sta. 956				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.237	5.9374	7.0138	13.1834
1.79	11.381	<i>Manning's n Values</i>		
8.4	11.179	LOB	Channel	ROB
17.8	11.469	0.03	0.025	0.03
28.58	11.438	<i>Main Channel Bank Stations</i>		
34.39	11.834	<i>Left Bank</i>		<i>Rigth Bank</i>
38.15	11.771	38.15		125.71
42.72	11.844			
47.73	11.614			
52.55	11.275			
59.81	9.988			
72.71	9.778			
82.52	9.581			
85.52	9.581			
103.45	9.461			
113.25	9.176			
115.63	7.727			
118.19	7.165			
120.79	8.915			
122.79	11.987			
124.79	11.987			
125.71	12.77			
128.78	14.693			
130.87	15.406			

Sta. 955				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.835	27.8639	34.2821	50.1194
6.6	11.898	<i>Manning's n Values</i>		
13.64	11.032	LOB	Channel	ROB
43.04	11.834	0.03	0.025	0.03
51.19	12.004	<i>Main Channel Bank Stations</i>		
56.54	11.985	<i>Left Bank</i>		<i>Rigth Bank</i>
58.53	9.696	51.19		172.46
72.93	10.58			
91.16	9.457			
100.82	9.651			
107.47	10.274			
125.91	10.624			
140.14	9.95			
146.54	9.66			
156.38	9.193			
163.83	8.8			
167.06	10.342			
169.06	12.682			
172.46	12.567			
178.86	12.466			
185.06	11.433			
196.45	11.557			
198.64	12.432			
219.45	11.986			
228.45	11.724			



Sta. 954				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.194	34.1286	48.2235	49.591
6.79	12.68	<i>Manning's n Values</i>		
8.69	10.626	LOB	Channel	ROB
12.69	10.626	0.03	0.025	0.03
14.49	11.966	<i>Main Channel Bank Stations</i>		
22.49	11.62	<i>Left Bank</i>	<i>Rigth Bank</i>	
32.68	11.695	40.28	175.61	
40.28	12.004			
52.48	12.349			
53.67	10.112			
58.25	9.534			
64.24	9.587			
66.46	10.416			
70.46	11.415			
81.45	11.232			
98.44	9.602			
104.03	9.997			
110.03	10.18			
123.64	10.444			
125.13	8.896			
136.5	9.523			
149.12	9.711			
155.48	10.173			
171.61	10.483			
171.61	11.962			
172.61	11.962			
172.61	12.462			
173.61	12.462			
173.61	12.962			
175.61	12.962			
175.61	12.003			
177.01	12.003			

Sta. 953				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.647	26.5264	51.5377	47.9139
9.59	12.686	<i>Manning's n Values</i>		
17.11	10.231	LOB	Channel	ROB
21.2	9.562	0.03	0.025	0.03
25.22	10.288	<i>Main Channel Bank Stations</i>		
28	11.471	<i>Left Bank</i>	<i>Rigth Bank</i>	
34.81	11.607	41.55	169.18	
41.55	11.831			
46.12	11.893			
52.14	11.908			
54.93	11.672			
59.32	11.569			
61.71	11.492			
79.37	10.202			
90.79	10.12			
93.79	10.12			
101.21	9.363			
113.47	8.528			
129.18	9.364			
139.38	10.541			
146.98	10.588			
150.59	8.909			
156.1	7.898			
163.18	9.823			
167.18	12.884			
169.18	12.844			
169.18	12.216			
171.18	12.216			
185.18	11.815			
197.77	11.422			
225.15	11.568			

Sta. 952				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.922	25.2563	46.2509	47.2739
4.58	12.192	<i>Manning's n Values</i>		
11.89	11.018	LOB	Channel	ROB
20.09	10.663	0.03	0.025	0.03
22.09	11.973	<i>Main Channel Bank Stations</i>		
28.29	11.487	<i>Left Bank</i>	<i>Rigth Bank</i>	
37.49	11.417	48.29	102.14	
43.49	12.141			
48.29	11.715			
54.03	11.595			
56.67	10.521			
67.94	10.087			
79.2	9.741			
82.2	9.741			
92.48	9.571			
108.13	9.421			
121.67	9.047			
127.69	7.819			
130.69	7.139			
133.69	8.11			
136.49	9.122			
136.49	10.127			
136.99	10.127			
136.99	10.927			
137.49	10.927			
137.49	11.427			
137.99	11.427			
137.99	12.58			
139.99	12.58			
139.99	12.747			
140.99	12.747			
142.99	13.074			



Sta. 951				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.716	15.2038	18.1414	20.1157
17.78	10.592	<i>Manning's n Values</i>		
30.12	10.742	LOB	Channel	ROB
31.72	10.365	0.03	0.025	0.03
35.4	10.016	<i>Main Channel Bank Stations</i>		
42.78	10.78	<i>Left Bank</i>		<i>Rigth Bank</i>
48.49	11.06	60.49		116.87
52.29	10.804			
55.69	10.93			
60.49	10.793			
64.28	10.503			
67.28	10.474			
70.28	10.372			
74.71	10.372			
76.44	9.138			
84.7	8.535			
90.67	8.483			
103.81	8.521			
110.68	9.125			
113.37	10.169			
113.87	11.187			
114.87	11.187			
115.87	11.187			
115.87	11.451			
116.37	11.451			
116.37	11.917			
116.87	11.917			
116.87	12.412			
118.87	12.412			

Sta. 950				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.135	52.1657	32.7416	22.4203
15	13.926	<i>Manning's n Values</i>		
15.3	13.926	LOB	Channel	ROB
15.73	11.959	0.03	0.025	0.03
17.23	11.959	<i>Main Channel Bank Stations</i>		
19.23	11.959	<i>Left Bank</i>		<i>Rigth Bank</i>
19.23	11.454	15.3		181.36
19.73	11.454			
19.73	11.239			
25.89	10.943			
35.89	9.708			
37.35	10.62			
49.17	11.015			
62.77	10.726			
78.76	10.386			
83.25	8.36			
88.06	8.32			
91.45	8.567			
109.44	9.038			
125.93	8.766			
137.32	8.448			
144.25	8.199			
148.11	8.404			
153.97	10.495			
155.56	10.571			
168.36	11			
179.56	11.297			
181.36	11.439			
186.95	11.851			
196.47	12.947			

Sta. 949				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	13.079	51.9351	35.159	32.0759
35.77	12.909	<i>Manning's n Values</i>		
48.47	12.758	LOB	Channel	ROB
49.47	12.305	0.03	0.025	0.03
50.97	11.978	<i>Main Channel Bank Stations</i>		
52.97	11.629	<i>Left Bank</i>		<i>Rigth Bank</i>
52.97	11.055	48.47		195.31
61.29	10.79			
64.44	9.564			
76.96	9.566			
81.24	10.409			
85.51	10.965			
87.3	8.838			
111.05	8.717			
123.2	8.902			
124.83	9.647			
134.93	10.061			
154.73	9.166			
164.98	8.417			
176.98	8.135			
179.95	11.113			
182.53	10.942			
188.68	10.794			
195.31	11.135			
202.72	11.159			
209.73	11.668			



Sta. 948				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	13.792	18.4581	15.2683	15.0128
0.3	13.792	<i>Manning's n Values</i>		
2.65	12.755	LOB	Channel	ROB
36.03	12.767	0.03	0.025	0.03
57.83	12.732	<i>Main Channel Bank Stations</i>		
58.83	12.109	<i>Left Bank</i>	<i>Rigth Bank</i>	
66.23	11.782	57.83	194.1	
68.23	11.782			
68.23	11.112			
82.2	11.031			
92.37	10.404			
94.15	8.702			
102.35	8.499			
116.07	8.895			
134.32	8.888			
142.52	9.251			
166.59	8.785			
174.51	8.393			
178.81	8.266			
187.55	8.177			
191.98	11.034			
194.1	11.021			
200.07	11.033			
211.08	10.853			
220.3	11.375			

Sta. 947				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	13.099	20.8031	17.0719	13.2742
3.2	12.923	<i>Manning's n Values</i>		
29.17	12.502	LOB	Channel	ROB
31.55	11.802	0.03	0.025	0.03
51.55	11.415	<i>Main Channel Bank Stations</i>		
53.55	11.415	<i>Left Bank</i>	<i>Rigth Bank</i>	
53.55	11.11	29.17	177.88	
62.55	11.115			
70.95	10.684			
73.87	8.585			
81.03	8.398			
95.47	8.921			
107.47	8.867			
117.87	8.685			
118.94	9.375			
133.92	9.187			
143.12	9.306			
152.36	8.959			
157.5	8.534			
162	8.431			
166.36	8.699			
173.09	11.453			
177.88	11.282			
186.07	11.379			
199.68	11.589			
200.47	12.11			
205.47	12.204			

Sta. 946				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	13.364	18.881	17.491	17.2025
8.98	11.817	<i>Manning's n Values</i>		
13.17	11.174	LOB	Channel	ROB
29.97	11.26	0.03	0.025	0.03
41.97	11.311	<i>Main Channel Bank Stations</i>		
44.37	11.331	<i>Left Bank</i>	<i>Rigth Bank</i>	
46.37	11.419	8.98	154.32	
46.37	11.061			
53.57	10.758			
55.53	8.503			
63.87	8.429			
73.86	8.826			
80.03	8.913			
85.43	8.811			
87.8	8.465			
94.21	8.351			
97.8	8.636			
98.85	9.191			
111.51	9.258			
121.71	9.495			
131.55	9.328			
137.53	8.679			
144.39	8.525			
147.31	10.437			
151.1	10.76			
154.32	11.54			
157.68	11.512			
165.45	11.343			
173.25	11.442			
182.06	11.585			



Sta. 945				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.028	51.7214	46.1143	27.5697
3.45	13.897	<i>Manning's n Values</i>		
22.16	10.968	LOB	Channel	ROB
36.56	11.226	0.03	0.025	0.03
41.95	11.221	<i>Main Channel Bank Stations</i>		
42.74	9.818	<i>Left Bank</i>	<i>Rigth Bank</i>	
48.45	8.794	41.95	150.56	
64.76	8.272			
77.91	8.414			
88.37	8.547			
90.81	8.781			
98.45	8.99			
112.11	9.178			
119.12	8.309			
129.63	8.037			
131.02	8.472			
134.22	8.551			
136.58	8.754			
144.43	9.844			
146.61	11.068			
150.56	11.078			
161.33	10.943			
180.75	10.954			
183.94	12.37			
188.73	12.107			

Sta. 944				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	15.22	20.7601	17.9059	17.3325
5.3	14.275	<i>Manning's n Values</i>		
10.3	14.275	LOB	Channel	ROB
14.19	11.495	0.03	0.025	0.03
24.39	11.098	<i>Main Channel Bank Stations</i>		
32.36	11.067	<i>Left Bank</i>	<i>Rigth Bank</i>	
34.74	8.93	24.39	149.31	
48.66	9.196			
60.23	8.697			
67.22	8.358			
76.22	8.65			
87.39	8.528			
93.98	8.899			
107.76	9.408			
112.79	8.222			
117.39	8.329			
131.99	8.668			
139.87	8.652			
143.75	11.383			
149.31	11.494			
157.09	11.474			
164.47	11.09			
175.47	10.871			

Sta. 943				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.488	15.9972	56.9916	37.6838
3.26	13.834	<i>Manning's n Values</i>		
7.22	11.145	LOB	Channel	ROB
14.08	10.804	0.03	0.025	0.03
17.08	11.117	<i>Main Channel Bank Stations</i>		
18.53	8.645	<i>Left Bank</i>	<i>Rigth Bank</i>	
32.15	9.047	3.26	157.89	
36.95	8.346			
47.87	8.419			
60.53	8.391			
69.99	8.281			
70.98	8.724			
79.58	9.024			
88.06	8.702			
93.53	8.509			
99.27	8.134			
113.63	8.715			
120.08	11.143			
123.87	11.358			
124.23	11.426			
131.62	11.554			
141.36	11.228			
153.55	10.801			
157.89	13.778			
169.23	13.83			



Sta. 942				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.481	28.2938	25.2834	16.0423
10.39	14.442	<i>Manning's n Values</i>		
13.39	14.766	LOB	Channel	ROB
16.05	11.772	0.03	0.025	0.03
19.05	11.772	<i>Main Channel Bank Stations</i>		
24.05	8.559	<i>Left Bank</i>		<i>Rigth Bank</i>
34.39	8.434	13.39	145.15	
39.07	8.505			
43.32	8.388			
55.15	8.545			
72.11	8.681			
78.51	8.447			
89.58	8.633			
93.66	9.534			
96.02	9.195			
104.13	8.302			
107.7	11.469			
114.48	11.416			
121.05	11.367			
130.14	11.328			
139.65	10.867			
145.15	13.845			
154.12	13.989			
160.16	13.806			

Sta. 941				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.787	18.7299	15.4758	15.292
11.6	14.798	<i>Manning's n Values</i>		
21.6	14.973	LOB	Channel	ROB
24.1	14.836	0.03	0.025	0.03
28.32	8.691	<i>Main Channel Bank Stations</i>		
35.5	8.515	<i>Left Bank</i>		<i>Rigth Bank</i>
44.36	7.805	21.6		145.48
56.74	8.331			
66.79	8.367			
73.17	8.125			
74.74	9.886			
81.31	9.92			
85.83	9.219			
91.02	8.537			
95.85	8.635			
103.4	8.3			
109.81	11.774			
115.41	11.326			
123.54	11.073			
137.17	10.92			
145.48	13.542			
149.75	12.725			
154.92	13.153			

Sta. 940				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.783	17.3731	16.1621	15.906
20	14.635	<i>Manning's n Values</i>		
36	14.514	LOB	Channel	ROB
36.8	14.514	0.03	0.025	0.03
39.19	11.557	<i>Main Channel Bank Stations</i>		
40.39	11.501	<i>Left Bank</i>		<i>Rigth Bank</i>
41.19	10.495	36.8		151.13
42.59	10.495			
44.67	8.819			
54.87	8.166			
62.46	8.257			
68.82	8.206			
74.45	8.534			
83.01	9.204			
87.57	10.111			
95.59	10.037			
99.38	9.51			
103.37	8.402			
109.73	8.208			
116.67	8.554			
117.69	10.486			
121.38	10.433			
122.62	11.144			
127.39	10.03			
136.56	11.003			
145.79	10.994			
151.13	12.754			
153.03	12.754			



Sta. 939				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.643	14.8268	17.0063	16.1697
8.81	14.517	<i>Manning's n Values</i>		
17.95	14.59	LOB	Channel	ROB
20.61	12.268	0.03	0.025	0.03
36.94	10.774	<i>Main Channel Bank Stations</i>		
37.94	10.686	<i>Left Bank</i>		<i>Rigth Bank</i>
40.32	8.815	17.95		143.67
45.48	8.183			
49.12	6.41			
52.89	6.492			
58.55	8.265			
64.29	8.557			
73.15	8.515			
74.45	9.307			
87.33	9.702			
101.12	8.64			
104.97	8.089			
110.38	8.618			
113.04	8.43			
115.56	8.192			
116.96	10.328			
118.11	10.56			
120.56	11.228			
123.12	11.035			
128.89	11.12			
139.31	11.22			
143.67	12.485			
153.17	13.638			

Sta. 938				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.194	48.5416	49.8321	59.4625
7.2	13.092	<i>Manning's n Values</i>		
10.73	10.943	LOB	Channel	ROB
27.73	11.064	0.03	0.025	0.03
30.73	9.456	<i>Main Channel Bank Stations</i>		
32.73	9.456	<i>Left Bank</i>		<i>Rigth Bank</i>
34.93	10.588	7.2		104.61
36.63	11.269			
37.63	10.267			
44.13	9.331			
46.73	9.001			
50.13	8.264			
55.73	7.987			
60.13	7.927			
64.31	7.335			
74.08	7.507			
79.1	8.157			
80.29	8.536			
86.09	8.405			
88.73	9.502			
90.92	9.658			
95.51	11.048			
98.21	11.146			
103.78	11.173			
104.61	11.576			
109.81	11.775			
113.98	12.269			

Sta. 937				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	14.016	31.0829	51.1233	55.5694
10.35	14.026	<i>Manning's n Values</i>		
17.84	12.706	LOB	Channel	ROB
32.18	11.502	0.03	0.025	0.03
35.18	10.726	<i>Main Channel Bank Stations</i>		
49.24	10.412	<i>Left Bank</i>		<i>Rigth Bank</i>
50.22	9.773	10.35		107.67
52.22	9.773			
54.18	10.629			
60.18	10.723			
64.17	9.857			
69.38	8.228			
74.69	6.649			
80.58	5.954			
85.75	5.549			
90.83	7.194			
93.94	8.133			
97.7	12.026			
100.41	12.56			
105.45	13.911			
107.67	14.077			
116.86	14.202			
123.87	14.264			
132.48	14.333			



Sta. 936				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	13.737	21.8229	44.4439	49.0943
21.08	12.828	<i>Manning's n Values</i>		
29.16	11.319	LOB	Channel	ROB
42.76	10.611	0.03	0.025	0.03
44.56	10.867	<i>Main Channel Bank Stations</i>		
65.17	11.135	<i>Left Bank</i>		<i>Rigth Bank</i>
71.16	10.38	21.08		108.43
75.54	9.654			
76.85	8.132			
82.9	7.167			
87.42	6.284			
90.91	5.872			
94.44	5.202			
98.42	4.697			
101.94	7.554			
105.37	12.004			
107.15	12.174			
108.43	12.385			
111.49	14.601			

Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	13.421	12.1562	26.0964	29.2617
7.76	12.79	<i>Manning's n Values</i>		
10.73	11.364	LOB	Channel	ROB
34.91	10.162	0.03	0.025	0.03
47.72	10.935	<i>Main Channel Bank Stations</i>		
58.47	11.041	<i>Left Bank</i>		<i>Rigth Bank</i>
60.87	10.152	7.76		105.47
68.07	10.288			
69.47	8.019			
75.86	7.46			
80.07	7.045			
85.91	5.664			
91.11	5.463			
95.81	7.793			
96.86	10.505			
98.82	10.738			
100.62	11.119			
102.19	12.029			
103.15	12.471			
105.47	14.362			
107.96	14.314			
110.88	14.626			

Sta. 934				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	10.271	39.005	23.5828	24.9215
12.38	10.349	<i>Manning's n Values</i>		
21.37	10.831	LOB	Channel	ROB
34.15	10.831	0.03	0.025	0.03
35.35	10.368	<i>Main Channel Bank Stations</i>		
42.35	9.949	<i>Left Bank</i>		<i>Rigth Bank</i>
44.95	9.217	34.15		82.23
47.64	8.158			
51.4	7.638			
55.93	7.027			
62.46	6.058			
70.18	6.525			
72.36	8.041			
74.9	10.496			
78.56	10.739			
81.47	11.824			
82.23	13.563			
86.86	14.242			



Sta. 933					Sta. 932					Sta. 931				
Cross Section Coordinates		Downstream Reach Legths			Cross Section Coordinates		Downstream Reach Legths			Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB	Station	Elevation	LOB	Channel	ROB	Station	Elevation	LOB	Channel	ROB
0	9.951	26.1701	24.253	26.1007	0	10.142	20.175	21.7463	21.9998	0	12.974	53.1319	21.2492	22.6248
15	10.411	<i>Manning's n Values</i>			8.39	10.04	<i>Manning's n Values</i>			6.9	12.851	<i>Manning's n Values</i>		
23.4	10.43	LOB	Channel	ROB	18.38	9.875	LOB	Channel	ROB	9.17	10.248	LOB	Channel	ROB
30	9.687	0.03	0.025	0.03	27.58	10.588	0.03	0.025	0.03	40.77	10.27	0.03	0.025	0.03
33.53	9.2	<i>Main Channel Bank Stations</i>			28.78	10.733	<i>Main Channel Bank Stations</i>			55.16	10.621	<i>Main Channel Bank Stations</i>		
36.27	8.087	<i>Left Bank</i>		<i>Rigth Bank</i>	35.38	10.683	<i>Left Bank</i>		<i>Rigth Bank</i>	62.14	9.677	<i>Left Bank</i>		<i>Rigth Bank</i>
40.67	7.32	30		72.19	41.97	10.35	41.97		93.59	63.47	8.687	6.9		110.37
45.6	9.107				49.5	9.887				69.58	7.353			
50.46	5.893				50.89	8.236				72.39	7.012			
58.27	5.296				56.98	7.38				76.8	6.778			
63.09	7.261				60.72	6.937				81.85	6.348			
66.4	9.984				67.48	5.164				85.7	6.664			
68.25	9.984				75.22	5.672				91.04	7.17			
68.25	12.149				83.69	6.984				95.41	8.066			
70.11	12.149				85.8	8.171				99.08	9.385			
70.11	13.58				88.13	9.52				105.35	10.504			
72.19	14.014				92.63	13.9				105.95	10.853			
76.55	13.986				93.59	13.948				108.68	13.896			
82.78	14.024				96.14	14.017				110.37	13.843			
88.19	14.073				97.97	14.069				112.71	13.952			
90.6	14.303				101.19	14.211				115.05	13.995			
										119.06	14.016			



Sta. 930				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.889	22.4897	19.7382	20.0914
13.98	12.889	<i>Manning's n Values</i>		
16.53	10.8	LOB	Channel	ROB
42.52	9.881	0.03	0.025	0.03
50.92	10.234	<i>Main Channel Bank Stations</i>		
51.92	10.824	<i>Left Bank</i>		<i>Rigth Bank</i>
54.92	10.864	13.98	102.71	
55.92	10.281			
57.62	10.167			
60.04	8.508			
63.4	7.405			
70.28	7.344			
74.88	6.932			
77.78	6.415			
88.24	6.694			
91.7	7.832			
92.4	9.396			
94.38	12.571			
95.45	12.57			
98.5	13.658			
102.71	14.085			
107.67	14.117			
116.89	13.981			
119.09	13.94			
125.7	14.007			

Sta. 929				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	13.236	19.3188	20.9324	22.6943
22.05	12.613	<i>Manning's n Values</i>		
24.87	10.146	LOB	Channel	ROB
28.28	10.146	0.03	0.025	0.03
29.28	9.314	<i>Main Channel Bank Stations</i>		
38.87	9.726	<i>Left Bank</i>		<i>Rigth Bank</i>
46.87	9.91	22.05	97.78	
50.24	9.672			
51.81	7.957			
58.72	7.467			
65.68	7.395			
71.86	7.033			
85.68	7.086			
87.87	7.921			
89.67	9.839			
94.14	11.647			
96.34	13.604			
97.78	13.685			
98.18	13.685			
101.53	13.734			
108.57	13.782			
114.38	13.825			
122.99	14.08			

Sta. 928				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	13.185	18.711	21.8512	21.161
20.3	12.181	<i>Manning's n Values</i>		
25.46	11.343	LOB	Channel	ROB
27.46	10.613	0.03	0.025	0.03
29.86	10.449	<i>Main Channel Bank Stations</i>		
31.36	10.449	<i>Left Bank</i>		<i>Rigth Bank</i>
33.26	9.954	25.46	96.3	
37.26	9.771			
38.87	7.825			
46.49	7.683			
54.81	7.651			
61.49	7.713			
68	7.291			
74.62	7.675			
79.72	8.321			
83.71	8.064			
86.44	9.961			
89.98	10.746			
94.01	13.747			
96.3	14.078			
96.6	14.078			
99.14	13.928			
104.03	13.808			
112.66	14.088			
120.05	14.127			



Sta. 927				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.997	23.1071	23.375	13.4809
11.54	12.085	<i>Manning's n Values</i>		
13.54	12.085	LOB	Channel	ROB
25.49	11.735	0.03	0.025	0.03
26.49	11.196	<i>Main Channel Bank Stations</i>		
37.37	10.046	<i>Left Bank</i>		<i>Rigth Bank</i>
40.92	9.543	25.49		107.72
42.63	6.624			
47.64	6.325			
50.71	5.682			
54.71	6.465			
63.44	6.831			
66.95	7.037			
79.38	7.217			
90.76	7.243			
99.23	7.603			
103.77	10.401			
107.72	13.001			
109.79	13.096			
113.12	13.097			
118.88	13.138			
125.7	13.284			
135.49	13.349			
146.88	13.179			
156.88	13.087			

Sta. 926				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.043	18.6505	21.7046	18.2422
6.26	11.919	<i>Manning's n Values</i>		
8.26	11.919	LOB	Channel	ROB
17.47	11.927	0.03	0.025	0.03
18.36	11.217	<i>Main Channel Bank Stations</i>		
20.76	10.838	<i>Left Bank</i>		<i>Rigth Bank</i>
25.14	10.503	17.47		104.81
26.6	6.538			
30.68	5.364			
34.71	5.993			
41.25	6.508			
52.34	7.192			
63.23	7.577			
74.43	7.11			
82.46	8.308			
90.73	6.546			
96.61	10.497			
98.76	11.219			
101.13	12.679			
104.81	12.812			
107.73	12.862			
110.56	12.82			
118.19	13.095			
123.59	12.998			
136.59	13.183			

Sta. 925				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.912	18.6963	19.6286	24.763
14.6	11.832	<i>Manning's n Values</i>		
30.6	11.946	LOB	Channel	ROB
43	11.946	0.03	0.025	0.03
45	12.058	<i>Main Channel Bank Stations</i>		
47.6	12.063	<i>Left Bank</i>		<i>Rigth Bank</i>
48.8	8.458	45		136.07
50.39	6.921			
53.4	5.564			
55.44	5.408			
58.27	4.937			
61.45	5.892			
69.12	6.836			
80.66	7.559			
94.44	7.169			
105.09	8.131			
112.86	8.337			
122.69	7.031			
131.09	11.263			
132.98	11.538			
135.09	13.39			
136.07	12.534			
148.67	12.811			
152.87	12.687			
159.87	13.236			
172.27	12.998			
183.07	12.891			



Sta. 924				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.962	20.1456	21.4722	23.4556
14.2	11.846	<i>Manning's n Values</i>		
27.41	11.846	LOB	Channel	ROB
29.41	11.859	0.03	0.025	0.03
40.2	11.794	<i>Main Channel Bank Stations</i>		
42.5	11.548	<i>Left Bank</i>	<i>Rigth Bank</i>	
43.3	9.054	40.2	137.89	
45.2	9.209			
45.6	9.209			
45.9	6.317			
49.01	4.83			
51.97	5.149			
54.97	5.898			
58.69	6.218			
63.7	6.886			
76.4	7.104			
86.36	7.658			
95.61	7.855			
107.65	7.996			
116.97	7.011			
117.6	9.885			
124.52	10.369			
125.45	10.999			
134.08	11.323			
136.87	11.582			
137.89	11.772			
153.67	12.347			
162.06	12.791			
164.46	12.871			
168.05	13.155			
171.98	12.99			

Sta. 923				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.676	19.9368	21.8364	25.9826
11.98	11.702	<i>Manning's n Values</i>		
13.98	11.667	LOB	Channel	ROB
14.98	7.546	0.03	0.025	0.03
18.5	6.531	<i>Main Channel Bank Stations</i>		
21.31	6.347	<i>Left Bank</i>	<i>Rigth Bank</i>	
26.36	5.54	11.98	121.15	
31.1	6.1			
39.95	6.2			
45.36	6.945			
54.73	7.665			
67.02	7.866			
77.61	8.335			
85.94	8.386			
97.64	6.579			
101.2	10.111			
107.89	10.467			
115.08	11.181			
119.46	11.563			
121.15	12.346			
126.96	12.552			
131.51	12.429			

Sta. 922				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.661	28.2938	25.2834	16.0423
6.2	11.481	<i>Manning's n Values</i>		
7.7	11.373	LOB	Channel	ROB
8.2	7.973	0.03	0.025	0.03
10.82	7.042	<i>Main Channel Bank Stations</i>		
14.19	6.255	<i>Left Bank</i>	<i>Rigth Bank</i>	
17.06	5.523	6.2	101.73	
19.97	5.417			
23.89	6.011			
29.13	6.404			
34.4	6.624			
44.1	6.998			
50.89	7.65			
69.33	8.222			
91.46	6.815			
95.19	6.165			
97.55	9.761			
101.73	9.629			
106.1	9.744			
107.92	10.187			
114.91	10.49			
123.46	11.212			
129.98	12.055			



Sta. 921				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.222	18.7161	17.9236	16.0507
2	11.165	<i>Manning's n Values</i>		
4	11.143	LOB	Channel	ROB
5	7.675	0.03	0.025	0.03
7.32	6.836	<i>Main Channel Bank Stations</i>		
12.5	6.266	<i>Left Bank</i>	<i>Rigth Bank</i>	
15.57	6.164	2	98.92	
19.25	6.138			
25.54	6.294			
32.39	6.763			
34.2	7			
54.8	7.365			
66.55	7.843			
79.12	7.132			
92.16	6.772			
94.37	9.662			
98.92	9.733			
103.68	9.709			
113.52	10.404			
123.07	11.334			
130.58	12.329			

Sta. 920				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	13.327	19.6628	18.4666	12.8981
10.8	12.71	<i>Manning's n Values</i>		
14.98	11.438	LOB	Channel	ROB
32	11.346	0.03	0.025	0.03
43.98	11.393	<i>Main Channel Bank Stations</i>		
46.28	11.337	<i>Left Bank</i>	<i>Rigth Bank</i>	
46.98	7.818	43.98	140.94	
52.92	6.641			
58.69	6.446			
63.6	6.383			
69	6.342			
75.55	6.672			
89.88	7.665			
106.92	7.789			
117.62	7.817			
119.93	6.663			
132.09	6.34			
133.68	7.949			
135.94	8.663			
136.74	8.663			
140.94	10.141			
148.18	10.836			
161.82	11.883			
177.5	15.421			

Sta. 919				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.298	20.582	20.8386	18.2162
8.77	11.385	<i>Manning's n Values</i>		
22.57	11.366	LOB	Channel	ROB
30.99	11.369	0.03	0.025	0.03
38.97	11.42	<i>Main Channel Bank Stations</i>		
39.97	11.393	<i>Left Bank</i>	<i>Rigth Bank</i>	
40.97	7.595	38.97	125.52	
46.36	6.307			
51.09	6.207			
56.18	6.192			
59.66	6.358			
67.54	6.719			
72.74	7.221			
82.92	8.276			
95.12	7.805			
105.75	7.185			
107.75	6.171			
118.92	6.741			
122.21	8.345			
125.52	8.363			
127.12	8.701			
132.69	9.389			
143.83	10.163			
152.25	10.294			
161.23	10.743			



Sta. 918				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.081	19.2027	21.5824	14.3618
9	10.957	<i>Manning's n Values</i>		
16.07	11.089	LOB	Channel	ROB
22.66	11.158	0.03	0.025	0.03
31.07	11.249	<i>Main Channel Bank Stations</i>		
41.06	11.363	<i>Left Bank</i>		<i>Rigth Bank</i>
43.06	11.296	41.06	126.812	
43.66	7.795			
46.3	6.947			
54.03	6.477			
60.24	5.953			
62.47	6.18			
69.35	6.286			
75.41	6.557			
78.7	7.103			
89.4	8.039			
102.202	7.299			
106.202	6.243			
116.432	6.145			
118.622	7.843			
122.802	8.208			
125.592	8.763			
126.812	9.649			
142.552	10.923			
150.932	11.257			
166.032	12.561			

Sta. 915				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	9.985	22.5258	21.2812	15.6634
17.17	10.29	<i>Manning's n Values</i>		
20.74	9.267	LOB	Channel	ROB
26.6	7.784	0.03	0.025	0.03
29.31	6.725	<i>Main Channel Bank Stations</i>		
32.13	6.725	<i>Left Bank</i>		<i>Rigth Bank</i>
32.63	8.641	34.13	113.69	
33.13	8.641			
34.13	8.641			
37.98	6.599			
45.72	6.326			
50.83	5.657			
52.84	5.595			
55.07	5.856			
62.65	6.457			
69.06	6.892			
75.26	7.22			
76.09	7.586			
88.1	7.878			
92.91	6.208			
103.11	6.318			
107.33	9.256			
113.69	9.26			
121.25	9.472			
123.49	9.885			
132.01	10.467			
147.16	10.757			
157.75	11.421			

Sta. 914				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.222	23.52	22.262	15.6939
2	11.165	<i>Manning's n Values</i>		
4	11.143	LOB	Channel	ROB
5	7.675	0.03	0.025	0.03
7.32	6.836	<i>Main Channel Bank Stations</i>		
12.5	6.266	<i>Left Bank</i>		<i>Rigth Bank</i>
15.57	6.164	39.5	109.15	
19.25	6.138			
25.54	6.294			
32.39	6.763			
34.2	7			
54.8	7.365			
66.55	7.843			
79.12	7.132			
92.16	6.772			
94.37	9.662			
98.92	9.733			
103.68	9.709			
113.52	10.404			
123.07	11.334			
130.58	12.329			



Sta. 913				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.969	47.5193	41.7203	31.7775
11.09	13.009	<i>Manning's n Values</i>		
25.79	13.021	LOB	Channel	ROB
26.58	12.527	0.03	0.025	0.03
32.54	11.824	<i>Main Channel Bank Stations</i>		
44.09	11.164	<i>Left Bank</i>	<i>Rigth Bank</i>	
48.06	10.678	44.09	98.46	
49.49	8.757			
53.26	8.332			
56.02	6.533			
63.74	5.04			
69.63	4.502			
76.29	4.211			
78.72	5.322			
84.97	5.865			
91.07	6.439			
93.89	8.243			
94.94	9.157			
98.46	9.184			
101.79	8.793			
104.8	9.734			
107.56	10.285			
116.98	10.296			
124.97	10.532			
137.6	10.039			

Sta. 912				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.891	57.6542	42.3867	35.974
1.5	12.891	<i>Manning's n Values</i>		
15.46	12.525	LOB	Channel	ROB
25.12	12.551	0.03	0.025	0.03
26.12	12.551	<i>Main Channel Bank Stations</i>		
32.88	11.054	<i>Left Bank</i>	<i>Rigth Bank</i>	
42.35	9.365	32.88	121.159	
51.15	9.043			
55.75	8.888			
64.56	6.176			
71.95	6.93			
74.51	5.627			
81.91	5.801			
90.13	5.562			
96.93	5.319			
101.28	5.669			
109.47	6.087			
111.53	8.492			
113.65	8.91			
116.769	9.265			
120.559	9.51			
121.159	10.041			
128.959	9.87			
141.139	9.919			
149.539	10.469			
157.959	10.432			

Sta. 911				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	13.063	56.1007	43.1091	33.1529
3.06	12.411	<i>Manning's n Values</i>		
5.05	10.184	LOB	Channel	ROB
6.55	10.184	0.03	0.025	0.03
8.02	10.184	<i>Main Channel Bank Stations</i>		
8.02	9.684	<i>Left Bank</i>	<i>Rigth Bank</i>	
8.52	9.684	8.02	68.33	
8.52	9.184			
9.02	9.184			
9.02	8.684			
9.52	8.684			
9.52	8.184			
10.02	8.184			
10.02	7.278			
11.22	7.278			
13.27	8.203			
17.12	8.24			
19.94	6.212			
28.84	6.084			
34.19	5.925			
40.53	6.302			
44.83	4.9			
51.79	5.523			
59.51	6.525			
60.48	8.097			
62.7	9.076			
66.76	9.648			
68.33	9.639			
74.91	9.503			
81.71	9.497			
90.9	9.356			
92.74	10.37			
104.14	10.475			
116.14	10.569			
125.13	10.897			



Sta. 910				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.549	95.7873	78.3037	52.5354
1	12.549	<i>Manning's n Values</i>		
3.41	10.78	LOB	Channel	ROB
5.4	9.974	0.03	0.025	0.03
6.4	9.974	<i>Main Channel Bank Stations</i>		
6.4	9.474	<i>Left Bank</i>		<i>Rigth Bank</i>
6.9	9.474	6.4	63.05	
6.9	8.974			
7.4	8.974			
7.4	8.734			
9.36	6.696			
14.18	7.099			
16.43	5.824			
20.37	4.17			
27.07	3.968			
34.2	5.013			
40.87	6.192			
50.63	6.697			
57.25	8.555			
61.45	8.782			
63.05	8.683			
67.85	8.578			
69.45	9.044			
74.51	9.124			
93.57	9.383			
96.71	10.696			
109.43	10.944			
116.41	10.833			

Sta. 909				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.101	94.5497	85.3845	68.2171
10.08	11.201	<i>Manning's n Values</i>		
20.18	11.177	LOB	Channel	ROB
31.54	9.243	0.03	0.025	0.03
38.13	9.201	<i>Main Channel Bank Stations</i>		
40.33	9.201	<i>Left Bank</i>		<i>Rigth Bank</i>
40.33	9.739	40.33	112.17	
42.33	9.739			
42.33	9.329			
43.33	9.329			
43.33	8.133			
43.83	8.133			
43.83	7.633			
44.33	7.633			
44.33	7.235			
44.83	7.235			
44.83	6.735			
48.91	7.251			
51.93	6.102			
57.74	5.224			
74.05	5.271			
79.63	5.89			
81.64	5.644			
83.54	5.802			
85.17	6.232			
87.69	6.981			
91.76	7.72			
94.32	7.77			
97.49	7.617			
102.46	7.494			
108.92	7.91			
112.17	10.997			
122.64	11.458			
136.298	11.289			

Sta. 908				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.492	99.3716	101.9832	113.1763
3	12.492	<i>Manning's n Values</i>		
8.89	12.683	LOB	Channel	ROB
13.6	10.303	0.03	0.025	0.03
24.59	9.559	<i>Main Channel Bank Stations</i>		
27.59	9.443	<i>Left Bank</i>		<i>Rigth Bank</i>
30.62	7.51	24.59	129.18	
38.25	6.865			
39.16	5.697			
42.75	4.6			
46.76	3.72			
51.96	4.869			
58.46	5.78			
67.26	6.476			
78.44	6.64			
88.9	6.132			
102.51	6.47			
114.7	6.23			
122.59	10.465			
125.78	10.378			
129.18	10.342			
143.36	9.963			
154.97	10.182			
157.38	11.14			
165.98	11.29			
169.54	12.961			
179.73	13.133			



Sta. 907				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.77	97.8747	87.9878	71.3556
7.19	12.77	<i>Manning's n Values</i>		
10.19	12.979	LOB	Channel	ROB
30.39	12.961	0.03	0.025	0.03
42.79	12.845	<i>Main Channel Bank Stations</i>		
43.99	12.83	<i>Left Bank</i>		<i>Rigth Bank</i>
47.22	10.069	42.79	119.85	
49.08	10.069			
49.08	9.569			
49.58	9.569			
49.58	9.069			
50.08	9.069			
50.08	8.569			
50.58	8.569			
50.58	7.273			
51.08	7.273			
51.08	5.215			
57.34	4.501			
65.46	5.296			
67.17	6.897			
72.64	6.486			
82.88	6.61			
94.33	5.918			
97.33	5.589			
108.02	5.629			
112.29	9.262			
119.85	10.185			
125.45	10.185			
134.24	10.757			
138.02	11.098			
153.23	11.196			
163.22	11.315			

Sta. 906				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.91	95.7823	87.3697	55.6931
4.81	12.647	<i>Manning's n Values</i>		
5.81	12.647	LOB	Channel	ROB
16.8	12.943	0.03	0.025	0.03
17.8	12.943	<i>Main Channel Bank Stations</i>		
18.6	11.907	<i>Left Bank</i>		<i>Rigth Bank</i>
24.53	9.913	17.8	76.72	
26.03	9.913			
26.03	9.513			
26.53	9.513			
26.53	6.787			
28.51	5.366			
34.1	3.486			
37.01	3.316			
41.16	3.823			
45.56	5.069			
56.01	5.301			
62.96	6.087			
68.98	7.009			
70.32	9.637			
73.12	6.943			
75.72	9.143			
76.72	9.998			
81.51	9.809			
85.3	9.664			
86.86	10.93			
95.36	11.147			
103.19	11.259			
113.36	11.496			

Sta. 905				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.558	100.1063	100.95	103.6791
5.72	11.78	<i>Manning's n Values</i>		
8.33	10.268	LOB	Channel	ROB
9.83	9.272	0.03	0.025	0.03
10.83	9.272	<i>Main Channel Bank Stations</i>		
11.83	9.272	<i>Left Bank</i>		<i>Rigth Bank</i>
11.83	8.441	11.83	70.71	
12.83	8.441			
12.83	7.991			
13.33	7.991			
13.33	7.541			
13.83	7.541			
13.83	7.091			
14.33	7.091			
14.33	6.641			
14.83	6.641			
14.83	6.191			
15.33	6.191			
15.33	5.741			
15.83	5.741			
15.83	5.45			
19.63	4.646			
23.7	4.417			
29.6	4.529			
37.71	4.686			
49.5	5.087			
52.04	7.422			
56.79	7.895			
61.34	8.785			
64.11	8.434			
66.47	8.384			
69.03	8.362			
70.71	9.292			
75.28	10.149			
76.33	10.78			
83.72	11.04			



Sta. 904				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	10.827	83.9647	82.6619	72.7302
7.31	10.959	<i>Manning's n Values</i>		
14.73	10.787	LOB	Channel	ROB
16.86	8.879	0.03	0.025	0.03
23.85	8.352	<i>Main Channel Bank Stations</i>		
33.83	8.265	<i>Left Bank</i>		<i>Rigth Bank</i>
35.83	7.334	14.73	87	
37.84	7.334			
39.28	5.284			
43.83	4.592			
48.04	4.434			
50.65	4.348			
57.17	4.681			
62	4.723			
66.21	4.657			
70.08	5.254			
72.13	7.006			
79.36	7.665			
79.74	8.351			
81.75	9.371			
82.89	10.12			
87	10.263			
91.39	10.29			
98.76	10.235			
112.59	10.054			
122.2	10			

Sta. 903				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	10.627	62.6645	74.6282	83.2379
2	10.627	<i>Manning's n Values</i>		
9.55	10.368	LOB	Channel	ROB
24.59	10.238	0.03	0.025	0.03
31.47	8.953	<i>Main Channel Bank Stations</i>		
41.42	8.333	<i>Left Bank</i>		<i>Rigth Bank</i>
42.42	8.297	24.59	98.67	
43.42	7.073			
44.82	7.073			
47.17	5.956			
52.06	5.301			
59.01	4.572			
64	3.696			
71.69	3.599			
79.02	3.888			
84.19	7.767			
91.73	8.741			
96.27	9.461			
98.67	10.014			
109.87	9.677			
118.47	9.937			
130.27	9.657			
138.87	9.572			

Sta. 902				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	10.193	48.2655	66.7105	80.3452
2	10.193	<i>Manning's n Values</i>		
7.83	10.436	LOB	Channel	ROB
11.99	9.893	0.03	0.025	0.03
20.58	9.381	<i>Main Channel Bank Stations</i>		
30.97	8.931	<i>Left Bank</i>		<i>Rigth Bank</i>
33.47	8.876	30.97	88.37	
36.88	7.725			
43.38	6.738			
44.45	5.49			
47.45	5.49			
48.55	5.07			
52.38	4.746			
55.32	4.304			
63.34	2.574			
70.29	2.989			
76.24	4.936			
76.24	5.436			
76.74	5.436			
76.74	5.936			
77.29	5.936			
77.29	6.436			
77.69	6.436			
77.69	6.936			
78.19	6.936			
78.19	7.436			
78.69	7.436			
78.69	7.936			
79.24	7.936			
79.24	8.447			
80.16	8.447			
84.74	9.252			
86.98	12.399			
88.37	12.357			
94.12	12.589			
100.75	12.594			



Sta. 901				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	10.203	48.8452	63.2154	74.3501
13	10.293	<i>Manning's n Values</i>		
24.39	10.109	LOB	Channel	ROB
30.99	9.68	0.03	0.025	0.03
33.49	9.602	<i>Main Channel Bank Stations</i>		
34.84	8.559	<i>Left Bank</i>	<i>Rigth Bank</i>	
37.84	8.559	30.99	93.16	
40.03	6.124			
43.03	6.124			
46.03	5.398			
51.39	5.602			
54.63	5.351			
60.07	4.427			
70.75	4.032			
73.91	4.181			
83.64	5.226			
84.84	5.226			
84.84	6.226			
85.84	6.226			
85.84	7.226			
86.84	7.226			
86.84	8.441			
87.84	8.441			
89.87	10.126			
91.58	11.83			
93.16	11.911			
97.52	11.986			
102.35	12.056			

Sta. 900				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	10.114	55.1744	63.8637	69.6031
9.4	10.114	<i>Manning's n Values</i>		
21.8	10.219	LOB	Channel	ROB
36	10.394	0.03	0.025	0.03
45	10.511	<i>Main Channel Bank Stations</i>		
49.94	10.47	<i>Left Bank</i>	<i>Rigth Bank</i>	
52.59	8.737	45	121.52	
58.78	8.248			
64.53	6.961			
68.81	6.265			
71.81	7.765			
76.8	7.452			
79.12	6.616			
89.32	5.342			
92.78	3.782			
101.59	4.102			
106.78	4.362			
115.32	6.926			
118.86	7.219			
119.82	7.219			
119.82	7.719			
120.22	7.719			
120.22	8.219			
120.72	8.219			
121.52	9.396			
122.22	9.396			
125.501	8.502			
128.951	12.589			
136.411	14.246			

Sta. 899				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	10.169	78.9655	105.6949	136.5977
17	10.169	<i>Manning's n Values</i>		
34	10.329	LOB	Channel	ROB
43	10.119	0.03	0.025	0.03
49.97	9.892	<i>Main Channel Bank Stations</i>		
51.95	6.932	<i>Left Bank</i>	<i>Rigth Bank</i>	
53.95	6.016	43	121.09	
54.59	4.67			
56.55	3.439			
59.47	3.645			
62.48	3.808			
68.11	4.844			
76.22	4.999			
89.02	5.397			
102.9	5.073			
104.78	7.161			
109.48	7.189			
118.07	7.987			
121.09	10.542			
126.98	12.085			
131.93	12.31			



Sta. 898				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	9.937	49.823	82.9351	67.4305
12.4	9.937	<i>Manning's n Values</i>		
27.4	10.067	LOB	Channel	ROB
38.4	9.777	0.03	0.025	0.03
47.97	9.212	<i>Main Channel Bank Stations</i>		
49.95	4.636	<i>Left Bank</i>	<i>Rigth Bank</i>	
52.98	3.365	38.4	120.87	
55.43	3.597			
58.62	4.443			
71.43	4.566			
82.4	4.113			
93.95	4.2			
102.89	3.485			
109.54	4.498			
113.1	5.479			
113.78	6.53			
114.28	6.53			
114.28	7.03			
114.78	7.03			
114.78	7.53			
115.28	7.53			
115.28	8.03			
115.78	8.03			
115.78	8.53			
117.31	8.565			
120.87	9.236			
124.24	11.363			
128.43	12.108			
132.09	12.239			

Sta. 897				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	9.079	49.7077	92.3191	103.866
14.55	9.079	<i>Manning's n Values</i>		
24.95	8.576	LOB	Channel	ROB
34.95	8.833	0.03	0.025	0.03
46.95	9.104	<i>Main Channel Bank Stations</i>		
49.55	8.532	<i>Left Bank</i>	<i>Rigth Bank</i>	
50.95	8.249	34.95	102.11	
57.14	7.669			
60.14	7.412			
62.32	6.644			
70.92	4.927			
74.32	4.085			
78.98	3.199			
88.63	2.781			
93.95	5.266			
98.33	8.089			
100.55	12.018			
102.11	12.075			
108.29	12.302			
117.71	12.47			

Sta. 896				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	10.348	95.8229	103.7237	97.3903
14.15	10.348	<i>Manning's n Values</i>		
31.76	9.736	LOB	Channel	ROB
42.14	9.739	0.03	0.025	0.03
45.12	9.336	<i>Main Channel Bank Stations</i>		
47.81	7.119	<i>Left Bank</i>	<i>Rigth Bank</i>	
51.3	6.387	42.14	108.19	
54.22	4.098			
60.92	3.144			
66.85	3.021			
76.51	2.828			
87.47	3.134			
94.69	4.311			
96.22	7.109			
101.26	9.468			
104.38	10.189			
106.14	12.038			
108.19	12.332			
110.98	12.322			
115.95	12.339			
119.75	12.358			



Sta. 895				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.485	39.991	38.5443	33.4592
20.15	11.485	<i>Manning's n Values</i>		
22.12	10.742	LOB	Channel	ROB
27.12	9.599	0.03	0.025	0.03
43.55	9.824	<i>Main Channel Bank Stations</i>		
53.12	9.816	<i>Left Bank</i>		<i>Rigth Bank</i>
57.06	9.341	53.12		120.68
58.02	8.112			
63.46	6.921			
65.22	4.183			
75.27	3.031			
84.28	3.505			
89.3	3.886			
95.95	4.598			
100.8	5.37			
107.87	8.105			
112.85	8.657			
116.32	9.143			
118.22	9.887			
120.68	10.186			
123.88	10.709			
128.26	12.364			
131.96	12.886			
136.49	12.269			

Sta. 894				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	9.524	19.3723	16.4656	11.0768
21	9.524	<i>Manning's n Values</i>		
29.996	9.852	LOB	Channel	ROB
30.996	9.79	0.03	0.025	0.03
33.176	8.222	<i>Main Channel Bank Stations</i>		
37.156	6.832	<i>Left Bank</i>		<i>Rigth Bank</i>
38.956	5.736	29.996		100.478
39.766	5.738			
51.526	3.699			
56.666	3.748			
65.346	4.209			
70.496	4.695			
76.378	4.849			
85.188	8.192			
89.798	8.34			
94.428	9.439			
98.308	11.803			
100.478	11.956			
110.248	12.107			
117.268	12.083			
117.658	11.876			
128.258	11.897			
137.268	11.902			

Sta. 893				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	9.498	22.4428	19.3483	18.5873
2.91	9.498	<i>Manning's n Values</i>		
17.28	8.987	LOB	Channel	ROB
18.28	8.55	0.03	0.025	0.03
24.88	8.107	<i>Main Channel Bank Stations</i>		
28.87	7.539	<i>Left Bank</i>		<i>Rigth Bank</i>
33.45	5.151	17.28		104.99
40.19	3.813			
46.9	3.432			
50.27	3.622			
57.46	4.084			
66.49	4.536			
73.43	5.101			
82.87	7.469			
84.94	7.72			
89.87	8.158			
95.83	9.861			
100.9	11.487			
104.99	11.578			
112.79	11.866			
122.59	11.766			
131.18	11.774			
142.171	11.859			



Sta. 892				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.061	22.6711	17.5811	9.4708
2	12.061	<i>Manning's n Values</i>		
10.97	11.069	LOB	Channel	ROB
15.75	10.202	0.03	0.025	0.03
24.91	9.491	<i>Main Channel Bank Stations</i>		
35.91	9.285	<i>Left Bank</i>		<i>Rigth Bank</i>
38.91	9.217	35.91	114.82	
41	6.294			
45.37	6.02			
48.64	4.683			
52.62	3.184			
56.62	2.95			
61.14	3.609			
71.42	4.261			
76.25	4.561			
85.95	5.474			
96.45	7.277			
101.36	7.692			
104.83	8.159			
110.97	11.42			
114.82	11.382			
120.14	11.423			
129.42	11.878			
138.62	12.166			

Sta. 891				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.992	10.1439	9.2442	7.209
2.55	11.451	<i>Manning's n Values</i>		
4.94	10.121	LOB	Channel	ROB
18.91	9.803	0.03	0.025	0.03
21.91	9.565	<i>Main Channel Bank Stations</i>		
22.91	8.073	<i>Left Bank</i>		<i>Rigth Bank</i>
25.08	6.566	18.91		99.7
32.83	4.333			
36.61	3.078			
41.1	3.025			
48.6	3.615			
52.12	4.572			
63.22	4.658			
69.63	5.289			
74.66	5.289			
75.66	6.411			
81.09	6.38			
84.26	7.45			
91.82	8.862			
96.13	10.975			
99.7	11.229			
105.08	11.389			
113.46	11.25			
123.9	11.645			
134.5	11.769			

Sta. 890				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.357	19.9057	16.9024	8.4832
9.66	11.792	<i>Manning's n Values</i>		
15.77	10.733	LOB	Channel	ROB
16.77	10.733	0.03	0.025	0.03
17.77	9.982	<i>Main Channel Bank Stations</i>		
24.42	8.619	<i>Left Bank</i>		<i>Rigth Bank</i>
26.32	6.375	16.77		94.448
29.21	4.51			
39.02	2.545			
49.63	3.829			
56.92	4.372			
59.37	4.645			
71.318	6.083			
77.928	7.347			
82.988	7.497			
84.688	8.424			
88.858	9.341			
90.188	10.82			
94.448	11.062			
99.608	11.317			
110.248	11.273			
122.048	11.467			
134.848	11.07			



Sta. 899				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.175	19.1061	17.4818	7.144
8.41	11.956	<i>Manning's n Values</i>		
16.4	11.872	LOB	Channel	ROB
20.24	11.459	0.03	0.025	0.03
22.49	10.376	<i>Main Channel Bank Stations</i>		
24.3	8.039	<i>Left Bank</i>	<i>Rigth Bank</i>	
27.51	6.453	16.4	91.96	
28.7	5.674			
31.5	4.472			
36.39	3.106			
42.94	2.948			
48.63	3.192			
53.95	3.853			
55.36	4.751			
62.15	5.015			
65.05	6.211			
71.85	7.381			
76.75	7.309			
83.62	8.831			
87.31	10.577			
91.96	10.812			
100.36	11.519			
109.76	11.688			
118.53	11.845			
129.74	11.378			

Sta. 888				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.087	19.3849	14.9607	11.3648
2	12.087	<i>Manning's n Values</i>		
8.18	11.965	LOB	Channel	ROB
15.17	11.57	0.035	0.025	0.03
17.12	11.137	<i>Main Channel Bank Stations</i>		
19.14	9.3	<i>Left Bank</i>	<i>Rigth Bank</i>	
21.76	5.914	15.17	78	
26.26	4.688			
30.25	3.072			
35.28	2.984			
40.71	3.256			
45.6	3.541			
54.55	4.629			
58.34	6.651			
62.66	7.52			
69.66	8.196			
71.61	9.638			
74.99	9.891			
75.9	10.495			
78	10.685			
86.58	10.888			
99.59	11.478			
110.4	11.632			

Sta. 887				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.784	28.1573	24.2404	21.7126
3.58	11.466	<i>Manning's n Values</i>		
6.11	9.511	LOB	Channel	ROB
8.11	9.286	0.035	0.025	0.03
10.11	9.066	<i>Main Channel Bank Stations</i>		
10.11	8.566	<i>Left Bank</i>	<i>Rigth Bank</i>	
10.61	8.566	3.58	77.11	
10.61	8.066			
11.11	8.066			
11.11	7.566			
11.61	7.566			
11.61	7.066			
12.11	7.066			
12.11	6.566			
12.61	6.566			
12.61	6.066			
13.11	6.066			
13.11	5.566			
13.49	5.566			
13.49	4.915			
15.78	3.829			
17.5	3.833			
19.75	2.718			
23.7	1.984			
28.25	2.29			
33.27	3.843			
36.87	4.009			
42.64	4.381			
43.97	6.617			
50.1	8.489			
54.21	8.59			
56.63	8.993			
77.11	11.463			
87.31	11.745			



Sta. 886				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.76	49.5701	43.4978	24.7515
8.2	11.451	<i>Manning's n Values</i>		
12.55	10.956	LOB	Channel	ROB
14	9.961	0.035	0.025	0.03
14.36	9.961	<i>Main Channel Bank Stations</i>		
14.36	9.461	<i>Left Bank</i>		<i>Rigth Bank</i>
14.86	9.461	8.2		84.45
14.86	8.961			
15.36	8.961			
15.36	8.461			
15.86	8.461			
15.86	7.961			
16.36	7.961			
16.36	7.461			
16.86	7.461			
16.86	6.961			
17.36	6.961			
17.36	6.461			
17.86	6.461			
17.86	4.747			
26.2	3.687			
31.53	4.104			
39.58	4.171			
48.04	4.054			
55.14	4.297			
59.83	6.96			
62.23	8.547			
69.25	9.624			
84.45	10.626			
87.05	11.564			
101.01	11.504			
114.6	9.753			

Sta. 885				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.349	51.1842	42.9411	23.903
2.13	11.147	<i>Manning's n Values</i>		
5.04	9.279	LOB	Channel	ROB
7.42	8.592	0.035	0.025	0.03
8.42	8.592	<i>Main Channel Bank Stations</i>		
9.42	8.592	<i>Left Bank</i>		<i>Rigth Bank</i>
9.42	8.092	2.13		97.56
9.92	8.092			
9.92	7.592			
10.42	7.592			
10.42	7.092			
10.92	7.092			
10.92	6.592			
11.42	6.592			
11.92	6.092			
12.42	5.592			
12.42	5.092			
12.75	4.561			
17.27	4.349			
19.25	3.991			
25.4	3.493			
28.71	3.263			
32.97	3.969			
35.63	4.409			
41.4	4.515			
48.21	4.12			
50.77	3.314			
68.45	9.017			
76.82	9.004			
97.56	10.689			
106.89	11.233			
113.11	11.116			
119.45	11.859			

Sta. 884				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.926	25.163	27.5291	30.5018
3.13	11.926	<i>Manning's n Values</i>		
5.13	10.885	LOB	Channel	ROB
6.03	10.885	0.035	0.025	0.03
6.03	10.295	<i>Main Channel Bank Stations</i>		
6.53	10.295	<i>Left Bank</i>		<i>Rigth Bank</i>
6.53	9.795	6.03		90.44
7.03	9.795			
7.03	9.295			
7.53	9.295			
7.53	8.795			
8.03	8.795			
8.03	8.295			
8.53	8.295			
8.53	7.795			
9.03	7.795			
9.03	6.586			
13.39	6.455			
14.59	6.397			
16.83	5.049			
20.01	4.198			
22.82	3.769			
26.07	3.776			
31.14	3.674			
35.66	3.577			
39.15	3.775			
45.34	3.962			
75.58	9.504			
87.48	9.481			
90.44	11.011			
104.85	11.171			
120.681	11.305			



Sta. 883				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.018	8.8431	12.8467	19.8256
4.29	10.579	<i>Manning's n Values</i>		
5.29	10.579	LOB	Channel	ROB
5.29	10.079	0.035	0.025	0.03
5.79	10.079	<i>Main Channel Bank Stations</i>		
5.79	9.579	Left Bank	Rigth Bank	
6.29	9.579	5.29	88.72	
6.29	9.244			
10.24	8.163			
13.12	6.725			
15.5	6.037			
20.73	4.145			
24.6	3.634			
28.4	3.756			
31.57	3.378			
36.79	3.784			
42.89	3.96			
51.1	4.187			
54	4.863			
57.12	7.193			
63.6	8.631			
64.87	9.051			
68.11	9.279			
75.45	9.186			
85.71	9.5			
88.72	10.245			
95.25	10.92			

Sta. 882				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.751	11.5132	9.8845	24.173
9.21	11.305	<i>Manning's n Values</i>		
13.44	9.699	LOB	Channel	ROB
17.33	7.351	0.035	0.025	0.03
19.33	6.356	<i>Main Channel Bank Stations</i>		
21.33	6.259	Left Bank	Rigth Bank	
23.22	4.997	13.44	69.52	
25.75	4.073			
30.67	3.444			
35.86	3.019			
40.88	3.534			
44.14	3.961			
53.14	4.114			
58.22	4.54			
61.82	6.478			
64.86	6.95			
66.66	7.305			
69.52	8.879			
75.55	9.104			
85.18	10.419			
88.48	11.506			
95.75	11.796			

Sta. 881				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	5.644	14.5314	14.5314	21.9663
7.11	5.458	<i>Manning's n Values</i>		
11.49	5.073	LOB	Channel	ROB
11.89	4.155	0.015	0.025	0.015
14.06	3.349	<i>Main Channel Bank Stations</i>		
15.02	3.013	Left Bank	Rigth Bank	
17.28	2.348	7.11	75.6	
21.5	2.134			
26.72	2.584			
30.54	2.848			
37.29	2.293			
46.85	2.165			
49.99	3.553			
51.67	5.003			
55.2	5.49			
59.38	5.762			
65.36	7.741			
75.6	8.135			
82.854	10.566			



Sta. 880				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.276	18.3225	17.7583	16.7673
3.2	11.365	Manning's n Values		
7.28	9.65	LOB	Channel	ROB
9.52	7.645	0.015	0.025	0.015
13.73	5.989	Main Channel Bank Stations		
15.91	4.444	Left Bank	Rigth Bank	
19.14	3.305	3.2	77.73	
39.55	3.542			
45.8	4.159			
52.8	4.48			
56.03	6.369			
58.43	7.457			
61.6	8.138			
64.8	8.746			
70.37	9.207			
77.73	10.218			
83.09	11.622			

Sta. 879				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	10.268	24.8372	28.3842	30.8597
9.57	9.462	Manning's n Values		
12.42	7.789	LOB	Channel	ROB
22	6.746	0.03	0.025	0.03
25.59	5.761	Main Channel Bank Stations		
31.04	3.987	Left Bank	Rigth Bank	
32.99	3.7	9.57	83.28	
38.01	2.198			
42.96	2.418			
48.96	3.56			
52.21	4.106			
60.12	4.377			
68.62	4.33			
78.21	7.446			
83.28	9.504			
86.48	9.615			
90.67	10.505			
93.82	10.913			

Sta. 878				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.103	19.7643	24.5729	36.04
1	11.103	Manning's n Values		
10.43	9.825	LOB	Channel	ROB
18.35	8.564	0.03	0.025	0.03
23.39	7.641	Main Channel Bank Stations		
35.87	5.644	Left Bank	Rigth Bank	
38.7	3.902	18.35	106.31	
40.66	3.112			
48.74	2.496			
53.84	2.705			
60.56	3.257			
65.9	3.991			
72.88	3.974			
75.57	4.368			
82.82	8.133			
86.96	8.725			
90.46	8.591			
99.12	9.513			
106.31	12.314			
116.31	11.88			



Sta. 877				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.769	81.2704	93.8173	119.3306
10	11.557	<i>Manning's n Values</i>		
23	11.427	LOB	Channel	ROB
24	11.757	0.03	0.025	0.03
24.6	11.592	<i>Main Channel Bank Stations</i>		
34.48	10.423	<i>Left Bank</i>	<i>Rigth Bank</i>	
44.66	9.306	24.6	110.13	
46.56	8.384			
53.63	7.439			
60.9	4.774			
76.48	2.28			
92.06	4.949			
97.88	5.646			
101.2	5.461			
102.59	5.985			
105.76	8.447			
110.13	10.801			
115.85	11.839			

Sta. 876				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.67	102.3208	118.8699	131.5649
11.29	11.415	<i>Manning's n Values</i>		
13.38	10.735	LOB	Channel	ROB
24.51	11.071	0.03	0.025	0.03
29.93	13.749	<i>Main Channel Bank Stations</i>		
31.93	13.749	<i>Left Bank</i>	<i>Rigth Bank</i>	
32.33	13.749	32.33	132.33	
33.13	13.048			
34.29	13.048			
36.09	11.001			
38.09	11.001			
39.17	9.743			
45.76	8.48			
55.73	8.041			
56.13	8.041			
56.13	5.131			
62.12	5.275			
72.48	4.833			
76.51	3.997			
86.75	3.191			
106.74	2.271			
107.74	3.793			
107.74	5.278			
109.12	6.616			
115.41	11.405			
119.89	11.439			
126.68	12.255			
132.33	13.045			
132.63	13.045			
134.44	13.013			
136.65	12.993			
137.85	13.018			
138.15	13.018			

Sta. 875				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	6.836	65.2617	63.7399	60.4943
1.32	8.451	<i>Manning's n Values</i>		
7.81	10.586	LOB	Channel	ROB
10.91	12.976	0.03	0.025	0.03
11.41	12.976	<i>Main Channel Bank Stations</i>		
12.91	12.91	<i>Left Bank</i>	<i>Rigth Bank</i>	
16.74	10.383	11.41	38.23	
23.52	9.027			
23.77	6.919			
23.77	4.177			
36.53	4.214			
38.23	7.053			
48.07	6.743			



Sta. 874				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	10.623	25.8106	26.925	28.3952
2	10.623	<i>Manning's n Values</i>		
2.5	10.623	LOB	Channel	ROB
5.57	9.943	0.03	0.025	0.03
25.47	8.797	<i>Main Channel Bank Stations</i>		
27.88	8.314	<i>Left Bank</i>		<i>Rigth Bank</i>
36.27	6.855	2.5		108.82
46.48	3.993			
55.02	3.652			
63.97	3.166			
80.71	2.828			
85.5	4.963			
89.2	6.327			
92.37	9.003			
95.72	9.252			
99.72	9.628			
108.82	10.697			
115.49	11.438			
119.69	11.708			

Sta. 873				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.003	98.9356	94.0723	87.9181
4.02	11.47	<i>Manning's n Values</i>		
5.4	10.738	LOB	Channel	ROB
10.59	9.976	0.03	0.025	0.03
13.73	9.976	<i>Main Channel Bank Stations</i>		
14.9	8.275	<i>Left Bank</i>		<i>Rigth Bank</i>
21.16	3.907	13.73		79.32
24.45	3.307			
46.45	2.611			
57.48	2.699			
65.41	6.687			
70.72	6.932			
75.91	7.274			
79.32	8.005			
92.37	9.684			
102.41	11.098			

Sta. 872				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.909	97.1999	75.8032	62.2731
0.8	11.909	<i>Manning's n Values</i>		
5.35	6.998	LOB	Channel	ROB
10.05	6.269	0.03	0.025	0.03
11.55	6.269	<i>Main Channel Bank Stations</i>		
11.55	5.669	<i>Left Bank</i>		<i>Rigth Bank</i>
12.05	5.669	0.8		59.99
12.05	5.069			
12.55	5.069			
12.55	4.469			
13.05	4.469			
13.05	3.869			
13.55	3.869			
13.55	2.935			
41.93	3.702			
46.2	6.588			
49.68	7.334			
54.19	7.402			
59.56	7.706			
59.99	8.151			
70.56	8.844			
84.91	9.665			
85.77	10.734			
90.02	10.587			
95.13	11.376			



Sta. 871				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	12.296	97.0556	111.1805	127.7045
6	11.613	<i>Manning's n Values</i>		
8	11.562	LOB	Channel	ROB
11.95	8.549	0.03	0.025	0.03
26.79	6.957	<i>Main Channel Bank Stations</i>		
30.31	3.962	<i>Left Bank</i>		<i>Rigth Bank</i>
45.38	3.085	6		108.31
54.95	2.661			
58.85	2.271			
61.56	2.149			
66.57	2.768			
70.83	3.347			
74.74	5.709			
78.34	6.267			
81.51	7.026			
85.52	7.726			
93.28	7.788			
103.12	8.082			
103.93	9.174			
107.53	9.296			
108.31	10.949			
111.95	10.902			
115.63	11.415			

Sta. 870				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.922	91.4319	160.3499	214.1748
5	11.468	<i>Manning's n Values</i>		
16.08	10.014	LOB	Channel	ROB
18.08	10.014	0.03	0.025	0.03
22.82	9.789	<i>Main Channel Bank Stations</i>		
24.42	8.918	<i>Left Bank</i>		<i>Rigth Bank</i>
37.09	8.451	22.82		103.66
42.65	7.663			
55.63	6.977			
66.07	1.521			
70.56	1.377			
79.32	2.542			
84.31	2.394			
92.56	4.975			
101.16	10.748			
103.66	10.711			
112.45	10.714			
124.25	10.894			
125.26	11.783			
130.26	11.783			

Sta. 869				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	9.267	3418.449	3392.155	3387.831
5.68	9.241	<i>Manning's n Values</i>		
11.77	9.201	LOB	Channel	ROB
14.62	9.371	0.03	0.025	0.03
16.85	12.758	<i>Main Channel Bank Stations</i>		
18.05	12.758	<i>Left Bank</i>		<i>Rigth Bank</i>
19.05	12.758	19.05		129.07
22.39	11.045			
27.94	9.057			
34.08	9.155			
35.86	8.769			
38.78	8.763			
43.3	7.644			
67.44	7.103			
79.23	2.041			
86.66	1.582			
94.38	1.672			
110.3	3.269			
121.87	7.596			
124.09	7.617			
127.02	10.286			
129.07	10.377			
137.27	10.454			
145.47	10.558			
155.48	10.932			



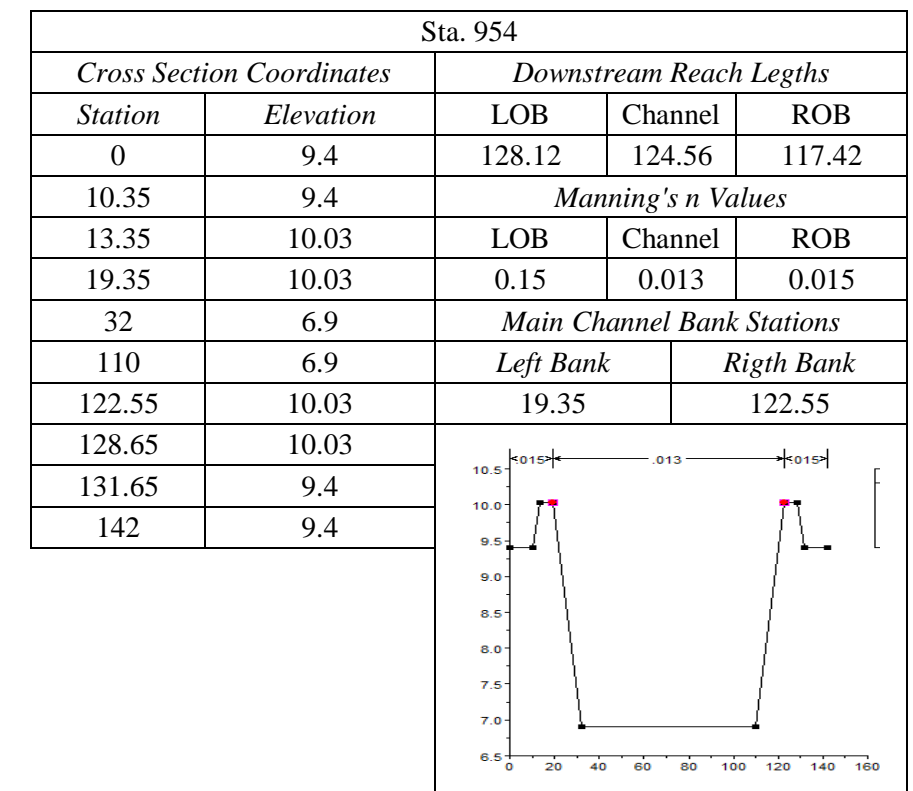
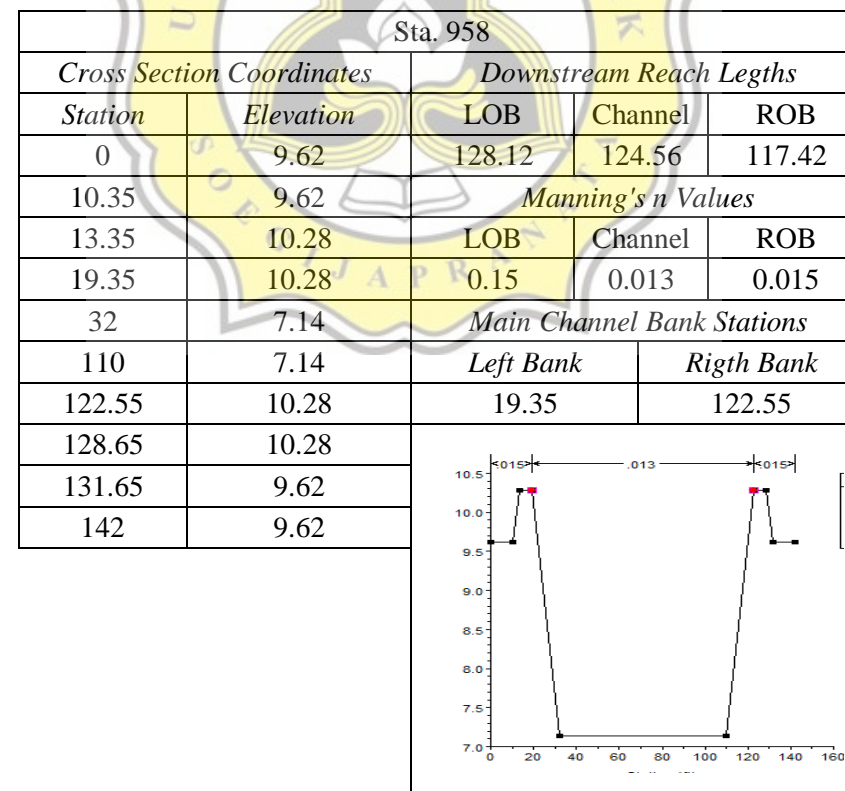
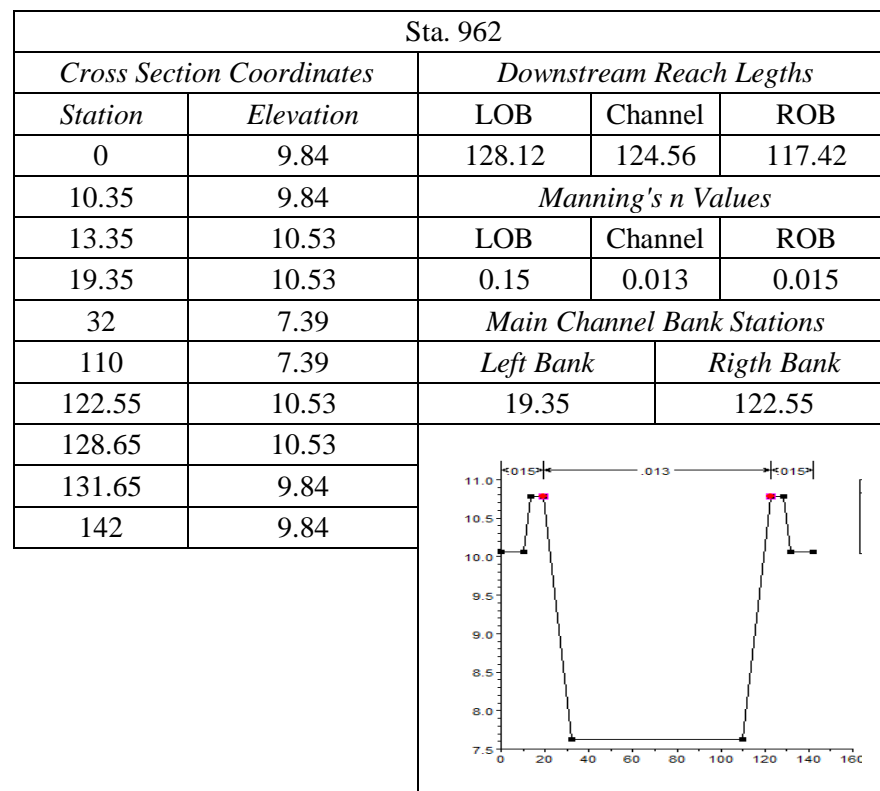
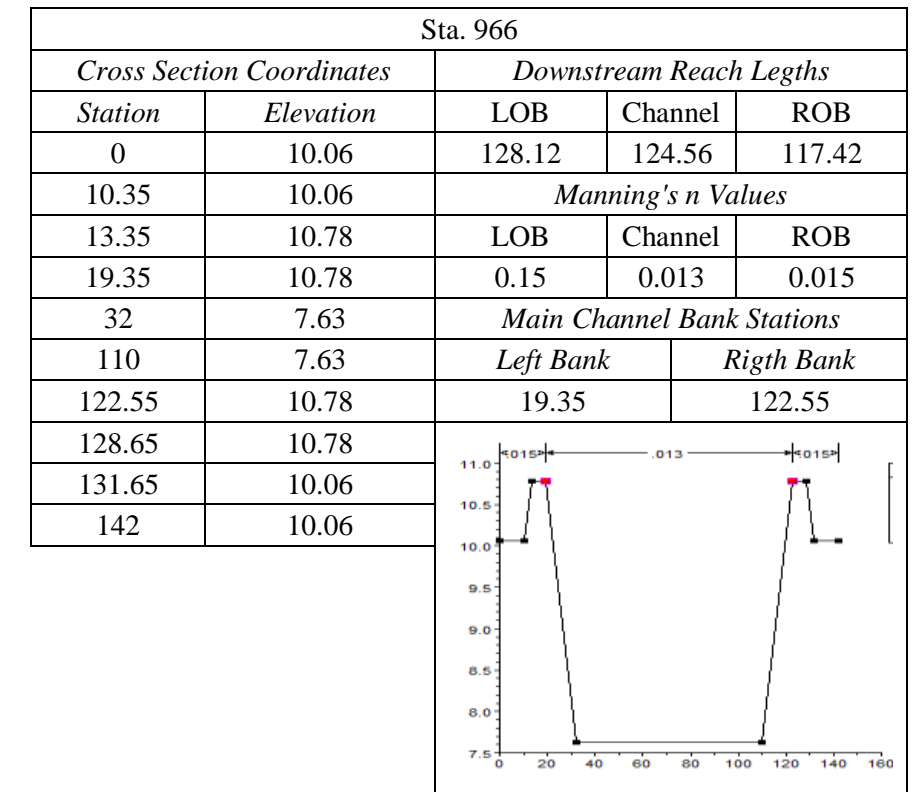
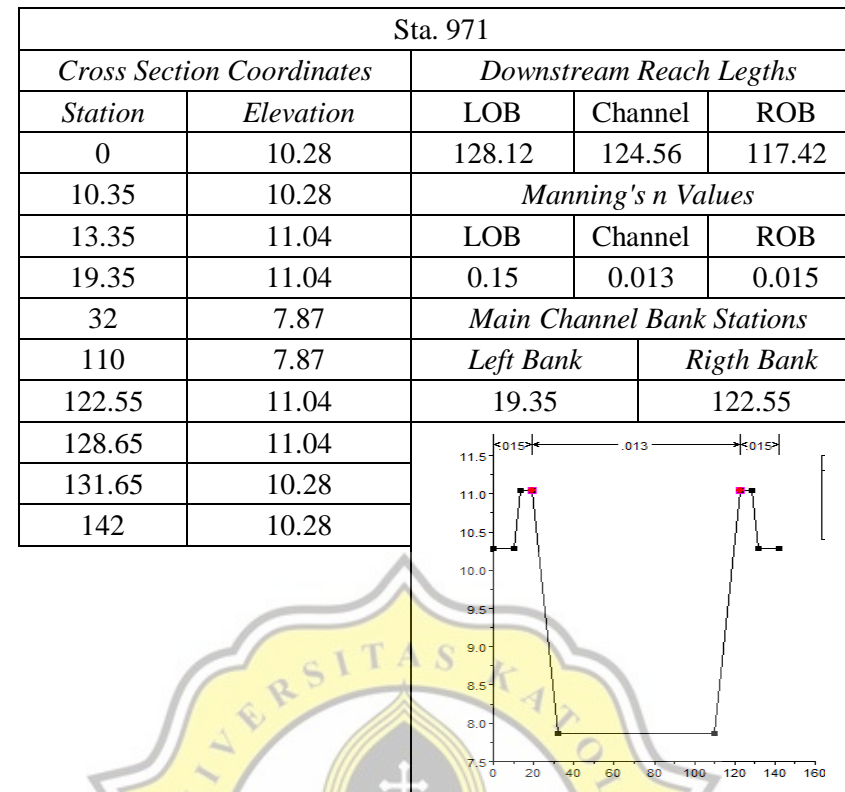
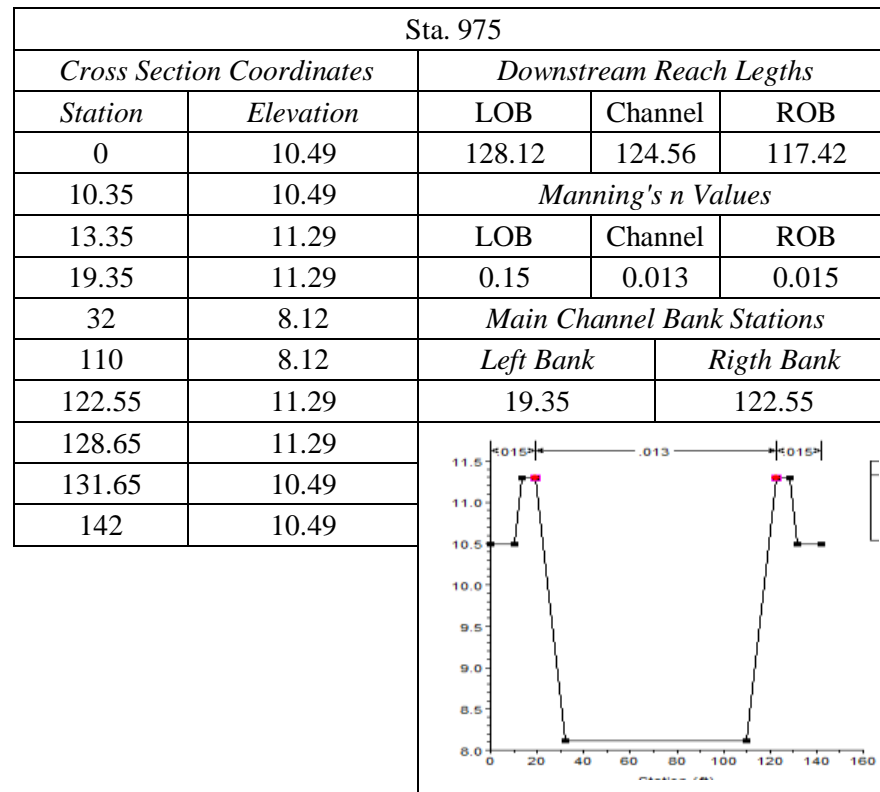
Sta. 1000				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	16.882	1	1	1
15.77	17.918	<i>Manning's n Values</i>		
23.27	21.082	LOB	Channel	ROB
26.63	21.119	0.03	0.03	0.03
28.21	20.951	<i>Main Channel Bank Stations</i>		
30.59	19.737	<i>Left Bank</i>		<i>Rigth Bank</i>
36.89	17.174	26.63		279.09
46.81	17.547			
53	15.057			
63.54	15.99			
76.73	15.683			
89.53	15.525			
96.42	15.769			
99.42	17.655			
111.45	17.615			
128.49	17.667			
173.64	17.741			
189.24	17.637			
197.45	16.641			
205.23	15.474			
213.63	15.25			
219.62	15.044			
227.53	14.567			
235.61	15.513			
237.62	18.274			
249.98	17.954			
270.01	18.136			
279.09	20.767			
284.09	20.59			
295.48	18.558			
307.21	16.16			
314.48	15.58			

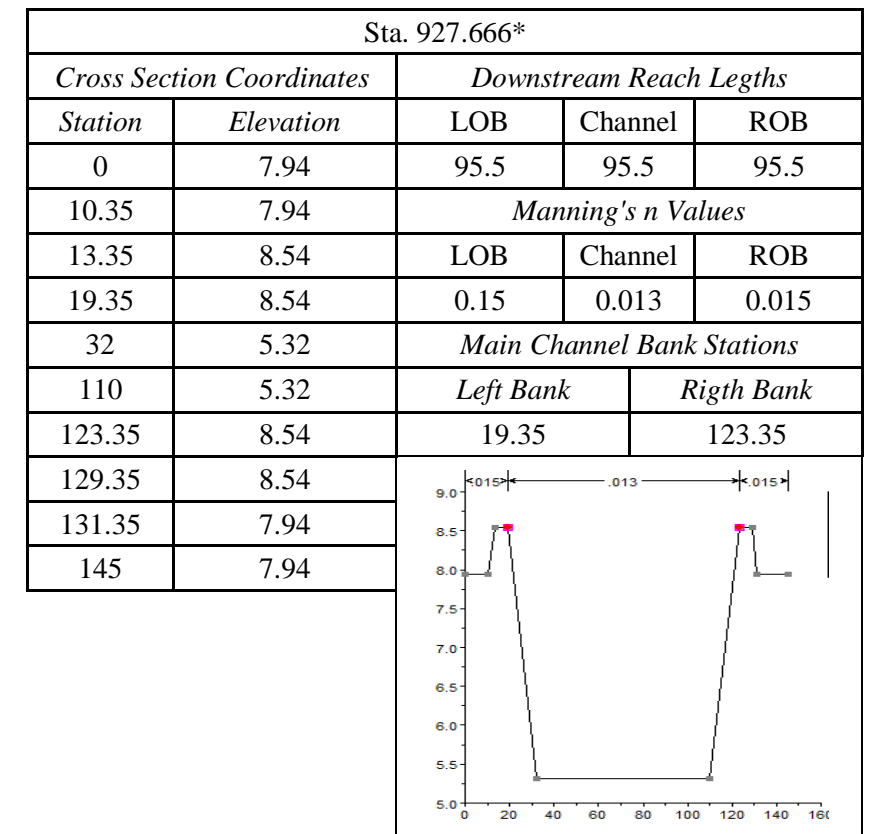
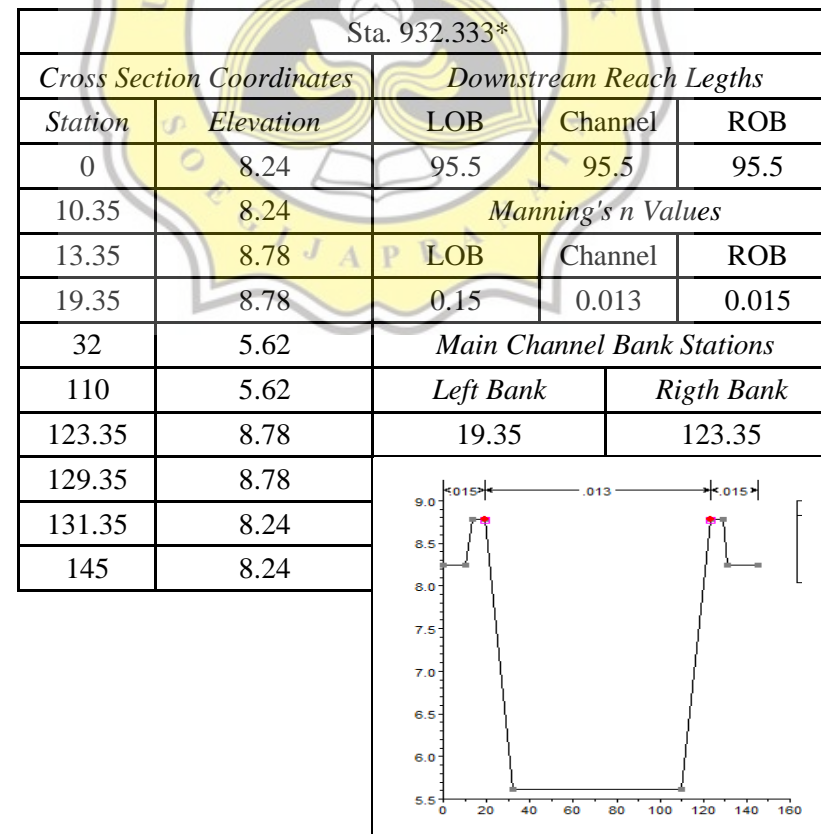
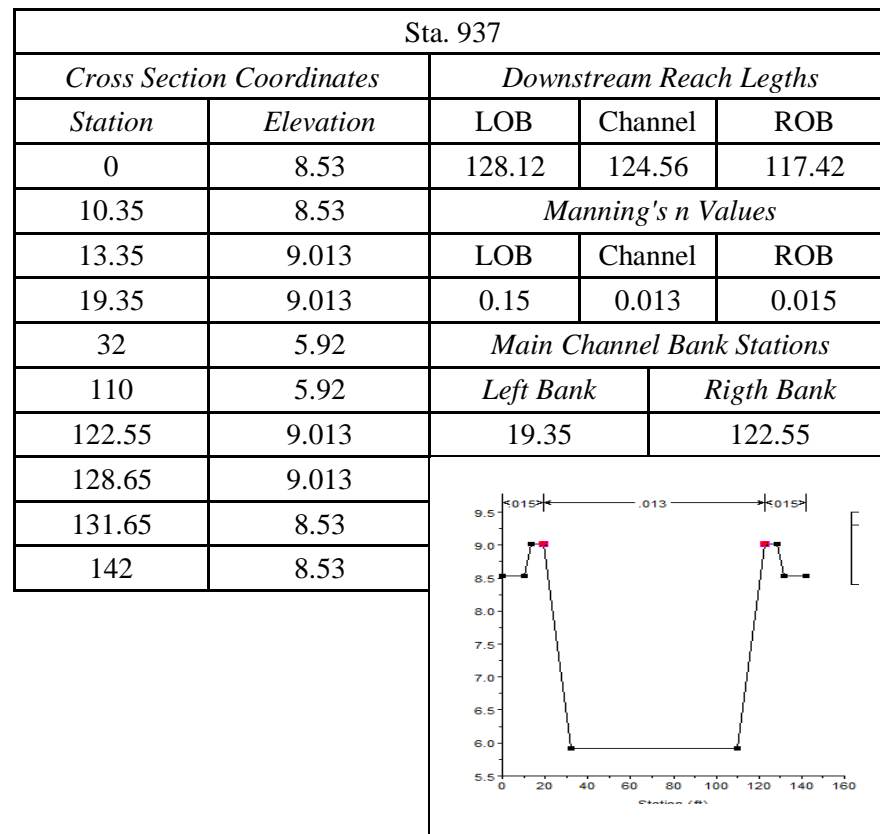
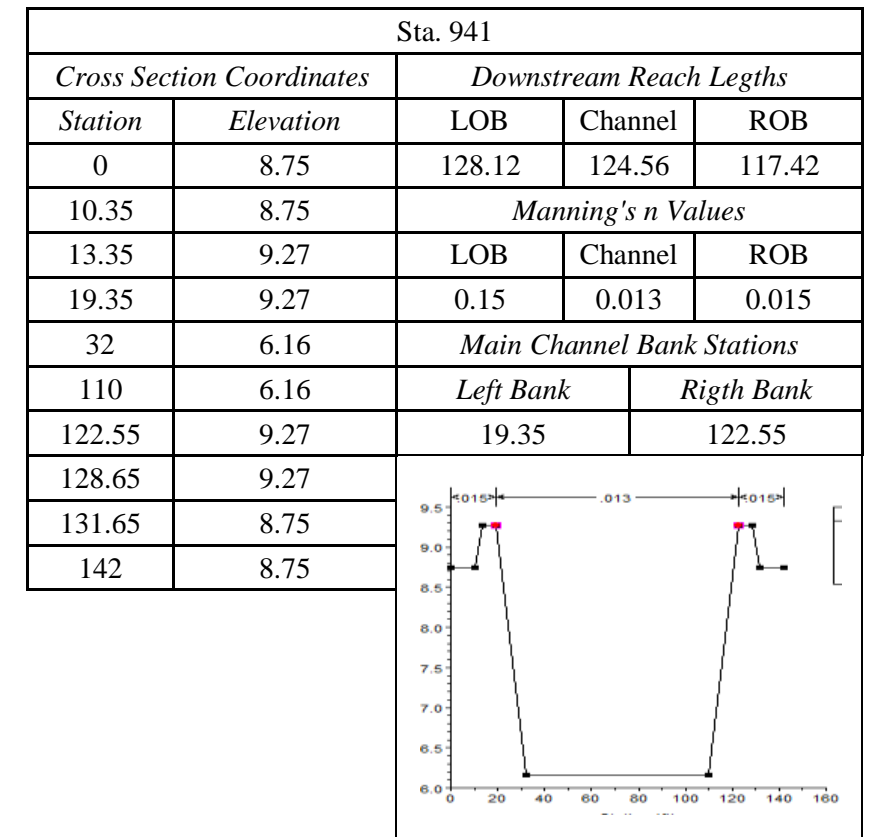
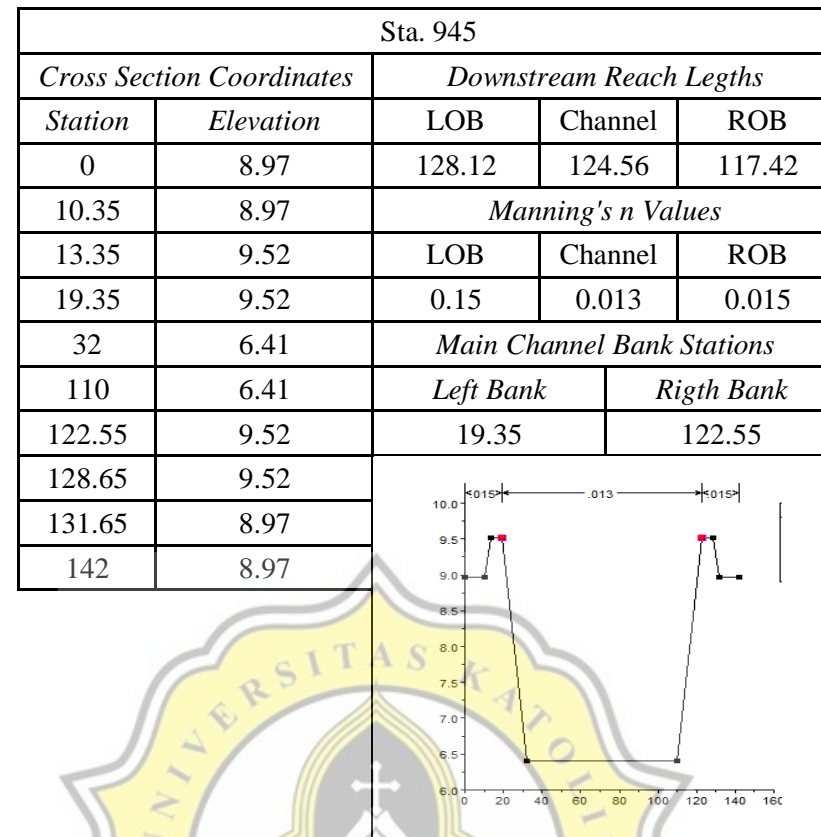
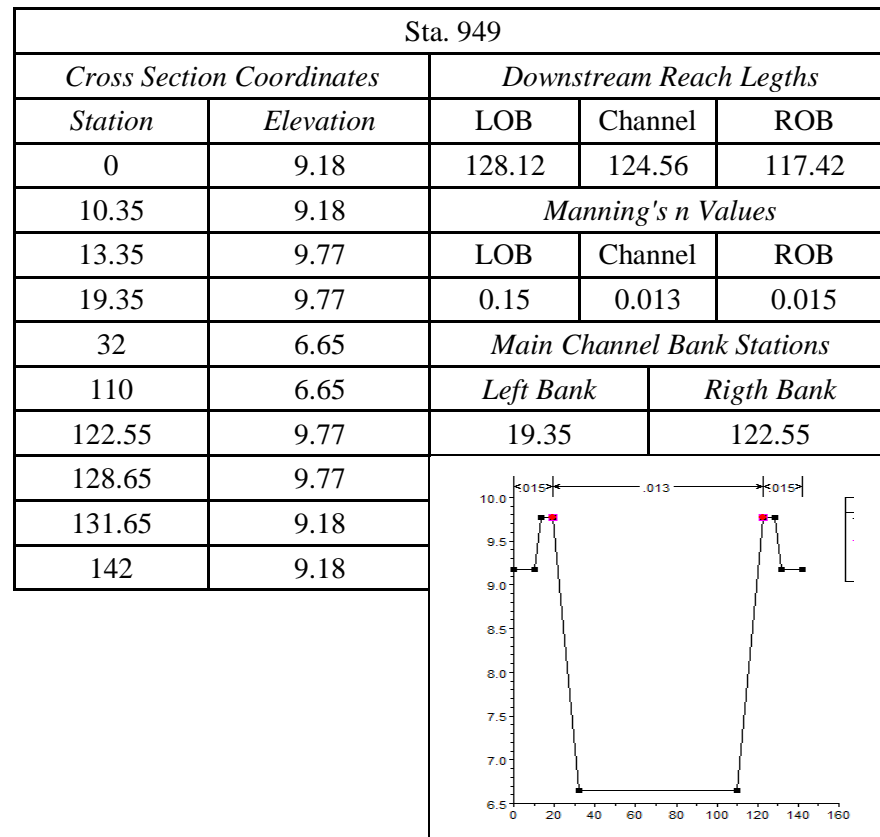
Sta. 990				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.731	165.6934	165.6934	165.6934
38.07	11.731	<i>Manning's n Values</i>		
41.07	12.035	LOB	Channel	ROB
47.07	12.035	0.15	0.013	0.015
60	9.58	<i>Main Channel Bank Stations</i>		
160	9.58	<i>Left Bank</i>		<i>Rigth Bank</i>
172.93	12.035	47.07		172.93
178.93	12.035			
181.93	11.731			
220	11.731			

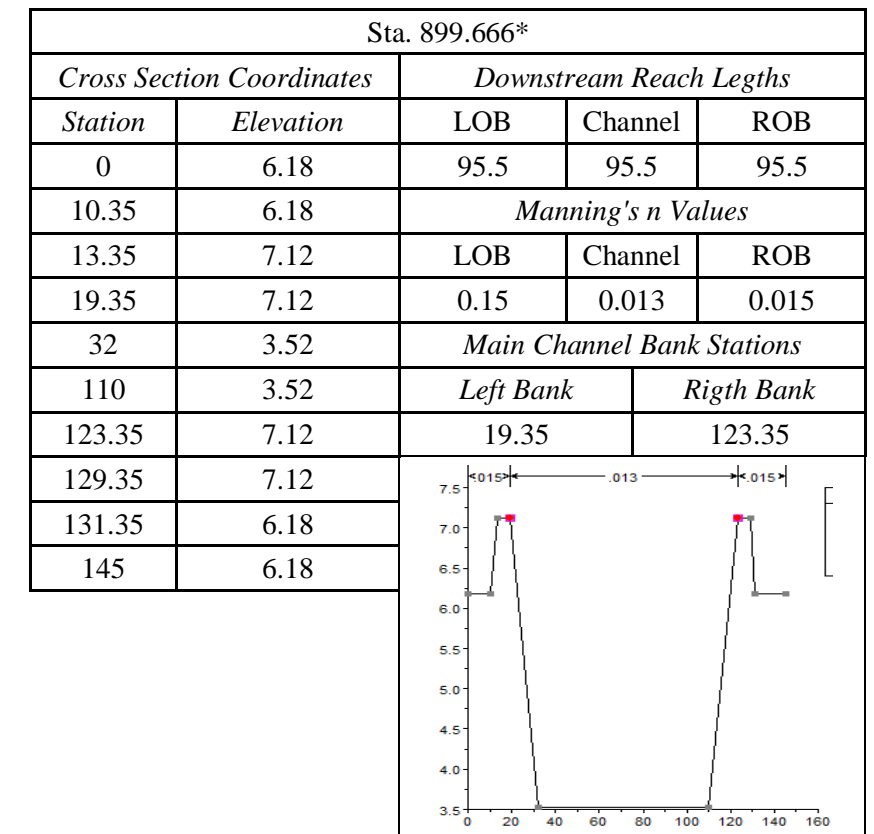
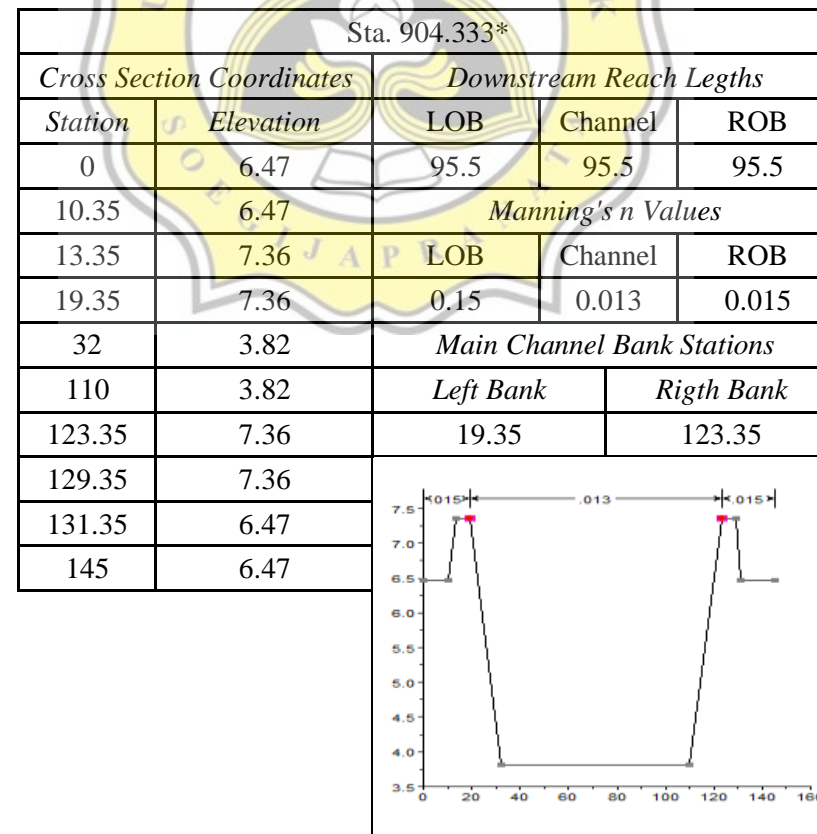
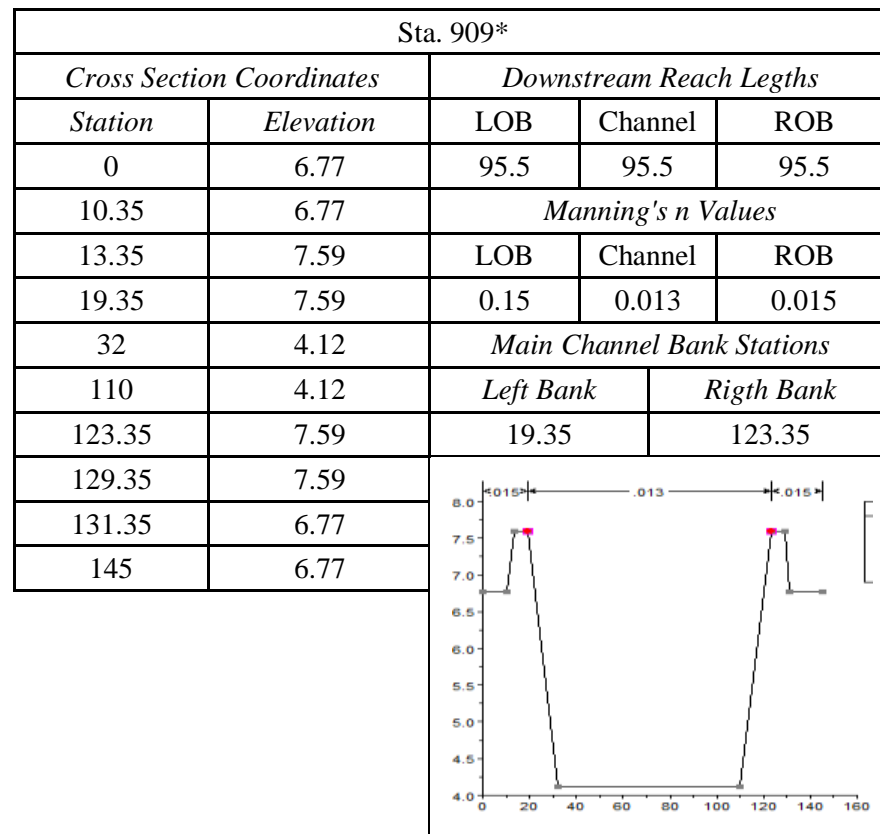
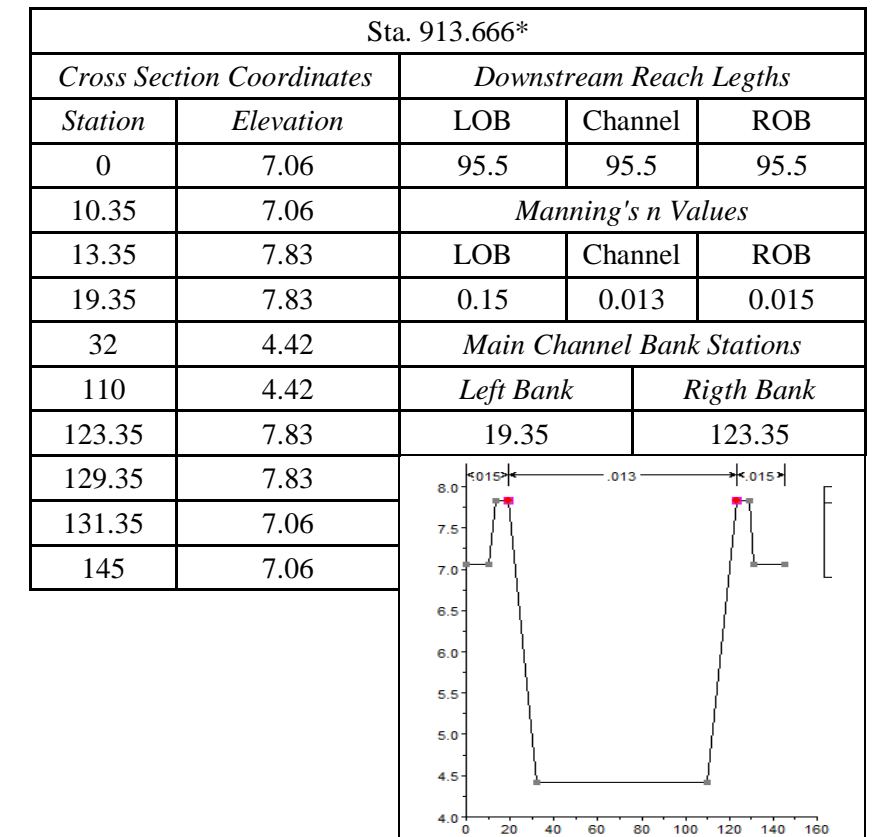
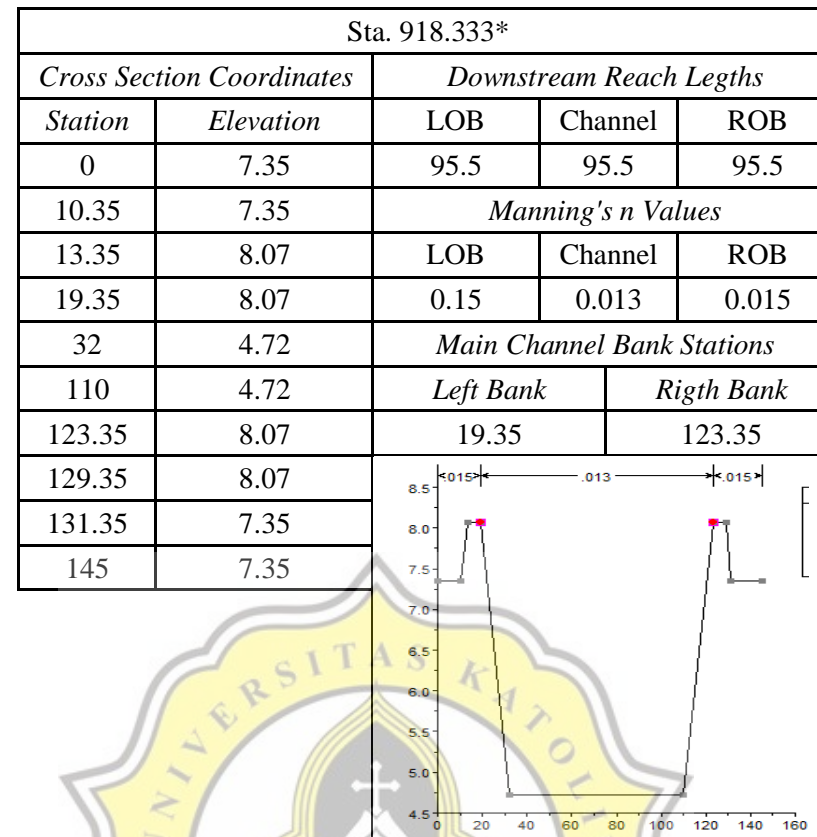
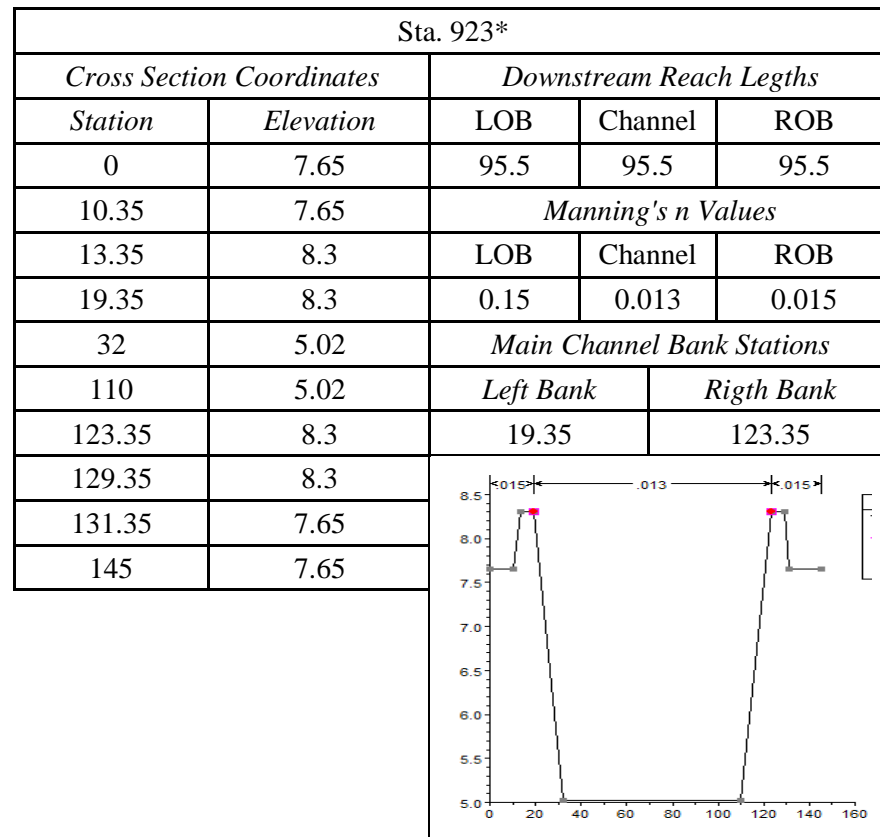
Sta. 988				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	11.15	128.12	124.56	117.42
10.35	11.15	<i>Manning's n Values</i>		
13.35	12.05	LOB	Channel	ROB
19.35	12.05	0.15	0.013	0.015
32	8.85	<i>Main Channel Bank Stations</i>		
110	8.85	<i>Left Bank</i>		<i>Rigth Bank</i>
122.55	12.05	19.35		122.55
128.65	12.05			
131.65	11.15			
142	11.15			

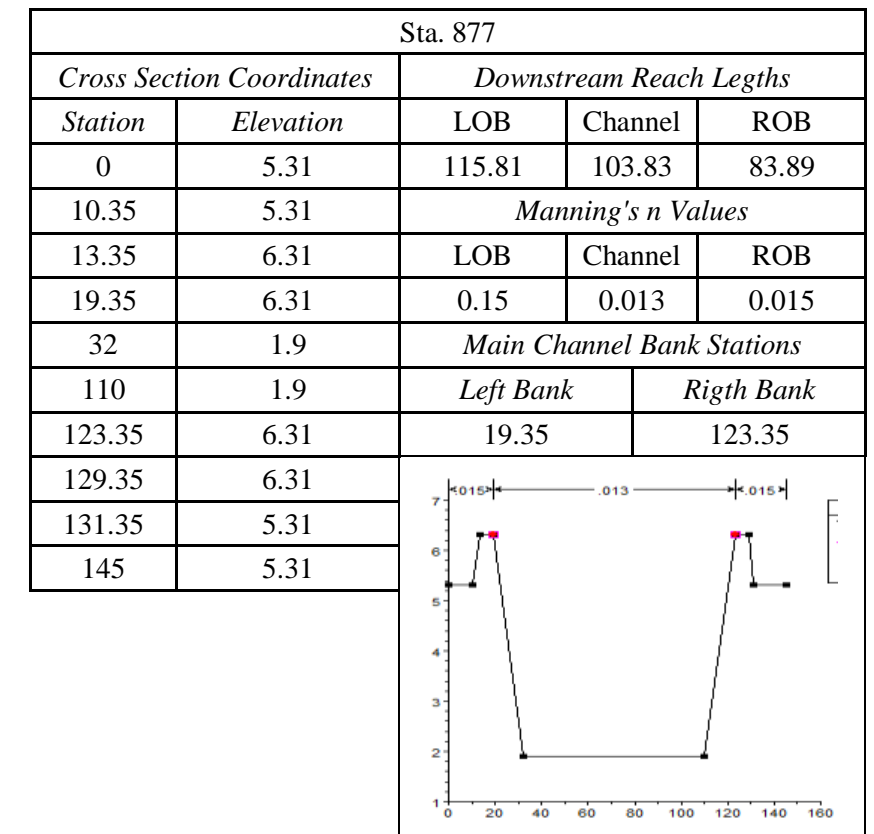
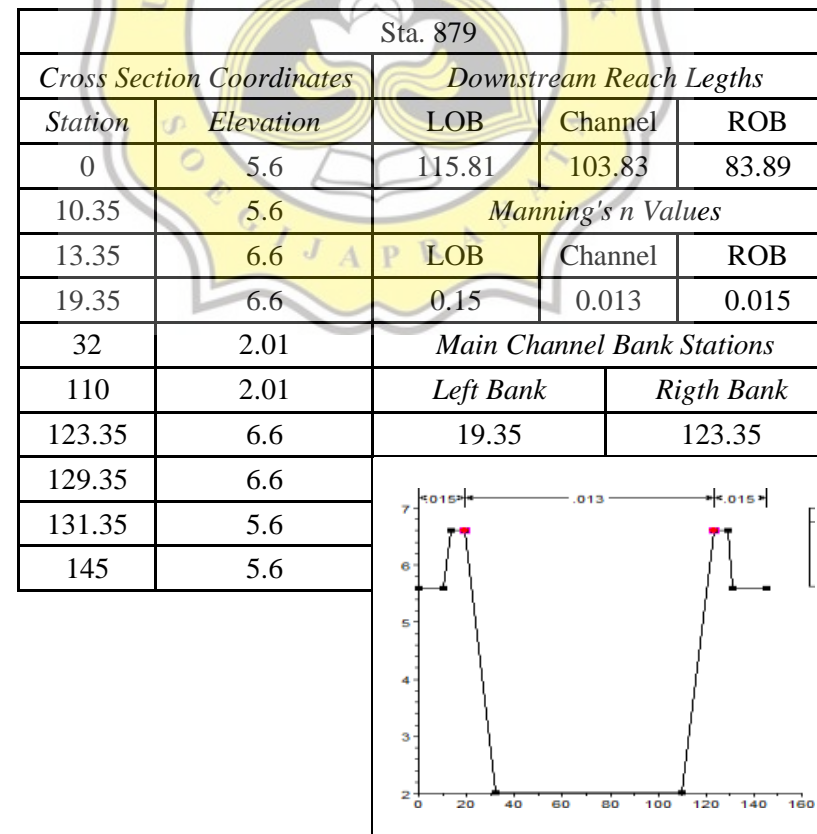
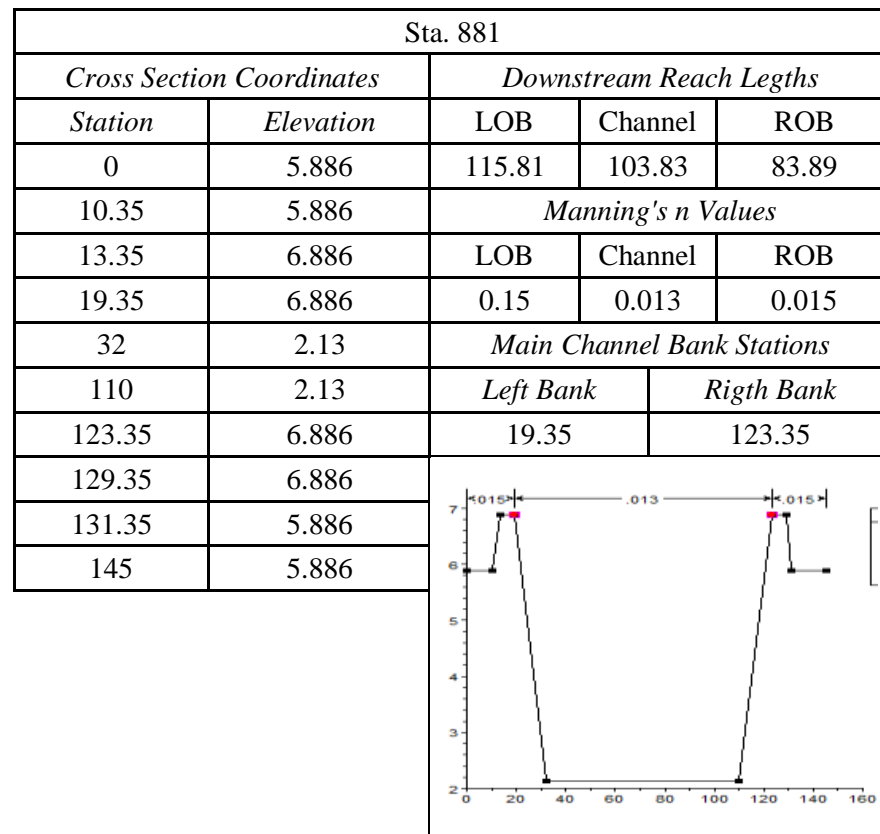
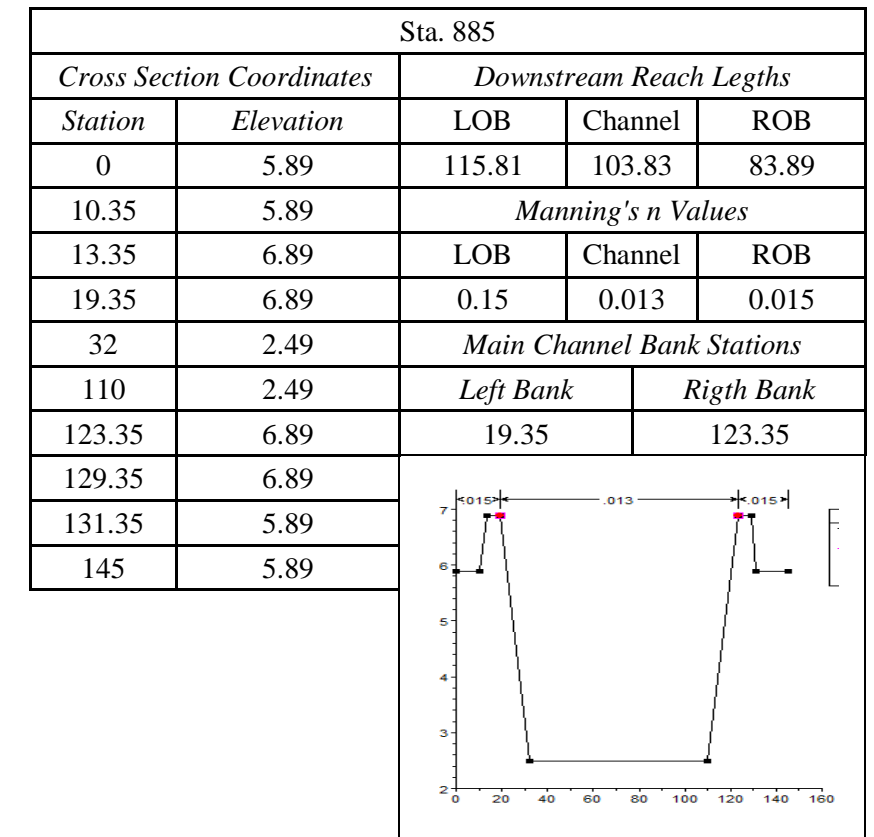
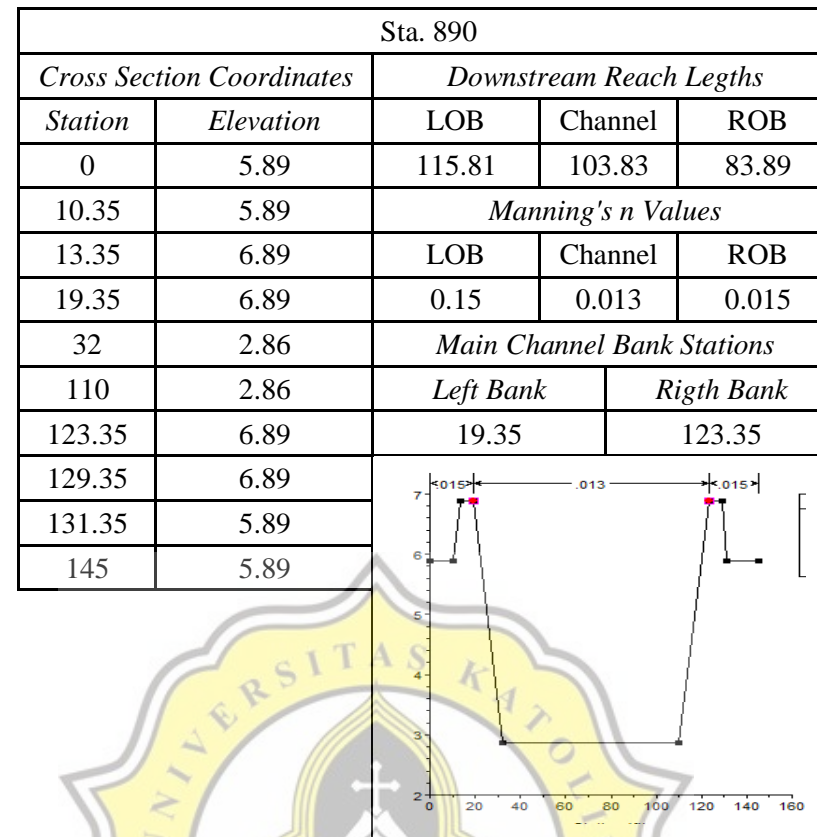
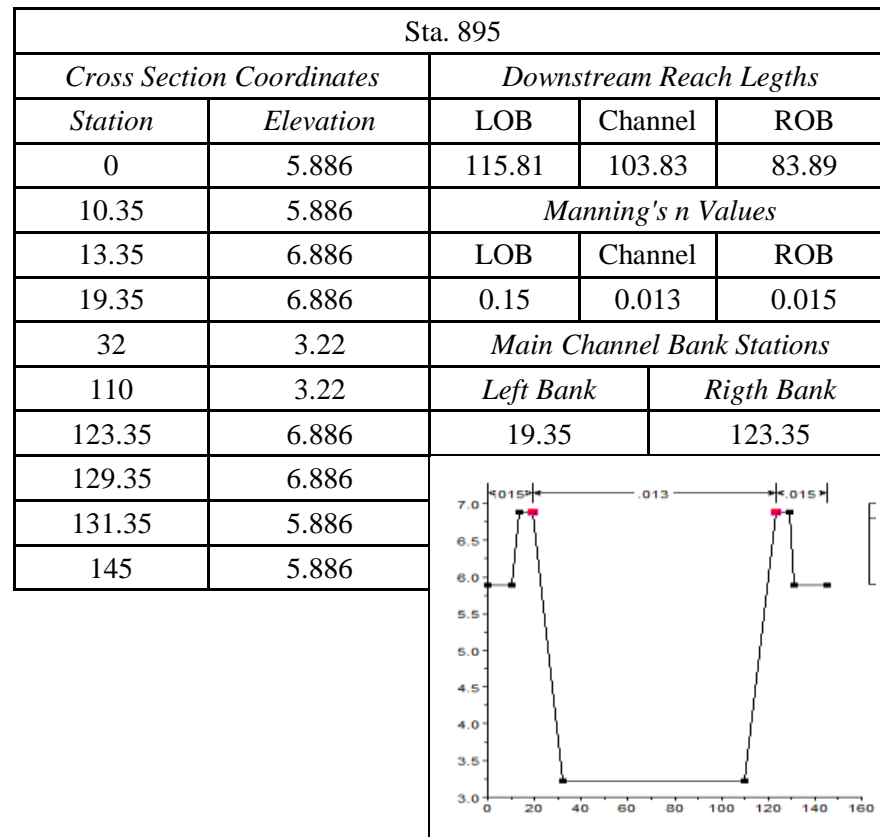
Sta. 984				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	10.93	128.12	124.56	117.42
10.35	10.93	<i>Manning's n Values</i>		
13.35	11.8	LOB	Channel	ROB
19.35	11.8	0.15	0.013	0.015
32	8.61	<i>Main Channel Bank Stations</i>		
110	8.61	<i>Left Bank</i>		<i>Rigth Bank</i>
122.55	11.8	19.35		122.55
128.65	11.8			
131.65	10.93			
142	10.93			

Sta. 979				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	10.71	128.12	124.56	117.42
10.35	10.71	<i>Manning's n Values</i>		
13.35	11.54	LOB	Channel	ROB
19.35	11.54	0.15	0.013	0.015
32	8.36	<i>Main Channel Bank Stations</i>		
110	8.36	<i>Left Bank</i>		<i>Rigth Bank</i>
122.55	11.54	19.35		122.55
128.65	11.54			
131.65	10.71			
142	10.71			







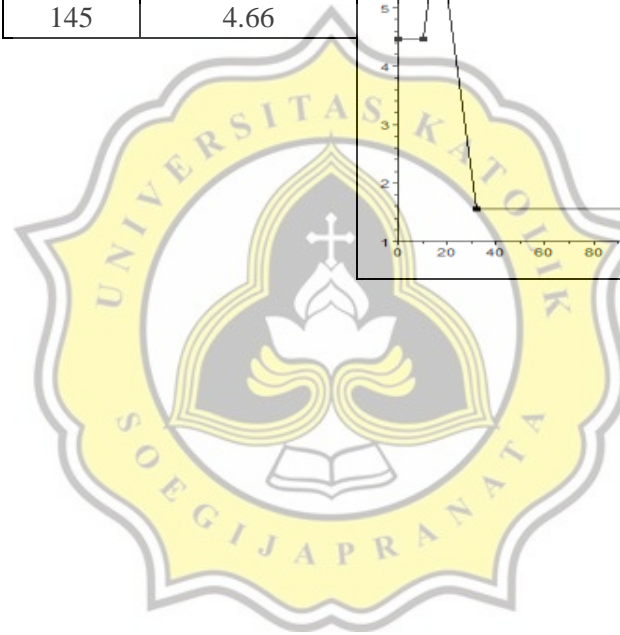




Sta. 875				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	5.03	115.81	103.83	83.89
10.35	5.03	<i>Manning's n Values</i>		
13.35	6.03	LOB	Channel	ROB
19.35	6.03	0.15	0.013	0.015
32	1.78	<i>Main Channel Bank Stations</i>		
110	1.78	<i>Left Bank</i>	<i>Rigth Bank</i>	
123.35	6.03	19.35	123.35	
129.35	6.03			
131.35	5.03			
145	5.03			

Sta. 872				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	4.46	115.81	103.83	83.89
10.35	4.46	<i>Manning's n Values</i>		
13.35	5.46	LOB	Channel	ROB
19.35	5.46	0.15	0.013	0.015
32	1.55	<i>Main Channel Bank Stations</i>		
110	1.55	<i>Left Bank</i>	<i>Rigth Bank</i>	
123.35	5.46	19.35	123.35	
129.35	5.46			
131.35	4.66			
145	4.66			

Sta. 869				
Cross Section Coordinates		Downstream Reach Legths		
Station	Elevation	LOB	Channel	ROB
0	3.886	115.81	103.83	83.89
10.35	3.886	<i>Manning's n Values</i>		
13.35	4.886	LOB	Channel	ROB
19.35	4.886	0.15	0.013	0.015
32	1.32	<i>Main Channel Bank Stations</i>		
110	1.32	<i>Left Bank</i>	<i>Rigth Bank</i>	
123.35	4.886	19.35	123.35	
129.35	4.886			
131.35	3.886			
145	3.886			





9.22% PLAGIARISM
APPROXIMATELY

Report #10279550

BAB 1 PENDAHULUAN Latar Belakang Indonesia memiliki 5,950 daerah aliran sungai dan dari jumlah 2/3 nya mempunyai morfologi sungai berkelok-kelok (Halim, 2011). Salah satunya yaitu Sungai Sengkarang yang berada di Kecamatan Kedungwuni Kabupaten Pekalongan. Sungai Sengkarang memiliki panjang 52 km mengalir dari bagian utara yang merupakan bagian dari dataran tinggi Dieng dan bermuara di laut Jawa bagian selatan Kabupaten Pekalongan. Kecamatan Kedungwuni merupakan salah satu desa yang berjarak 13 kilometer dari pusat kota Kabupaten Pekalongan yang berada pada ketinggian ± 11 meter dari permukaan air laut termasuk pada desa yang dilewati oleh aliran Sungai Sengkarang. Aliran Sungai Sengkarang yang melewati Kecamatan Kedungwuni memiliki morfologi sungai yang berkelok-kelok (meandering) sehingga membuat desa Kedungwuni menjadi rawan akan bencana banjir. Morfologi sungai yang berkelok-kelok (meandering) pada Sungai Sengkarang ini memiliki pengaruh pada karakteristik sungai itu sendiri seperti meluapnya air pada bagian berkelok sungai karena kondisi penampang sungai yang tak mampu menampung debit aliran pada curah hujan tertentu. Untuk itu diperlukan penanggulangan bencana banjir dengan cara pembuatan alur baru pada Sungai Sengkarang. Pembuatan alur baru sungai yang disebut sudetan merupakan alternatif untuk meminimalkan