

The Geomorphic Profiles of the Oxbows of the Caloosahatchee River

Baseline Studies

by

Rae Ann Wessel

Ecosystem Specialists, Inc.

www.caloosahatchee.org/oxbows

John Capece and Alphajoh Cham

Southern DataStream, Inc.

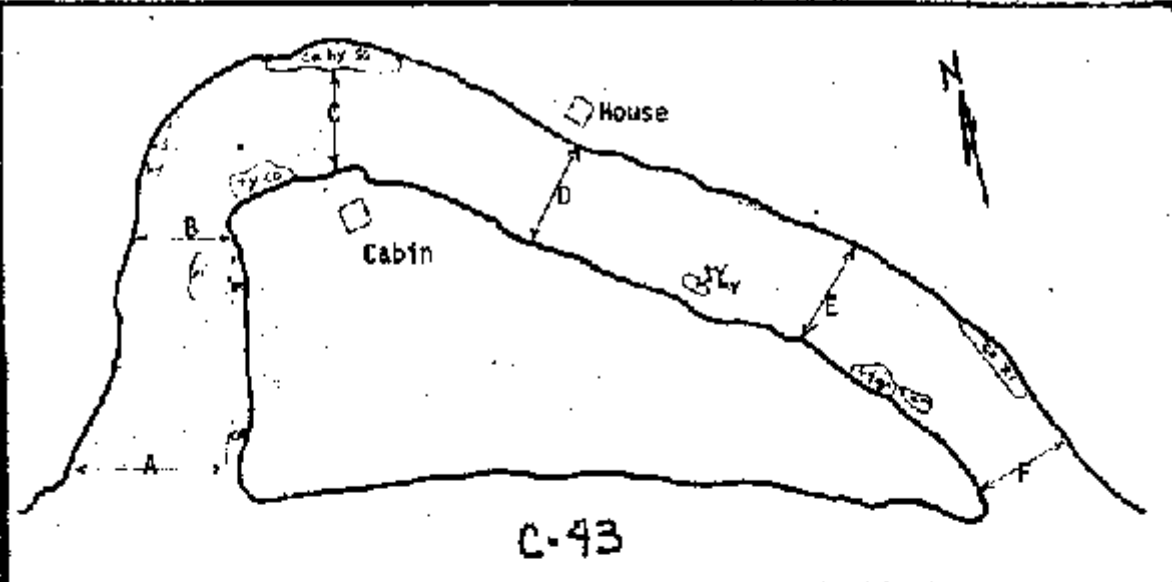
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December 5, 2001

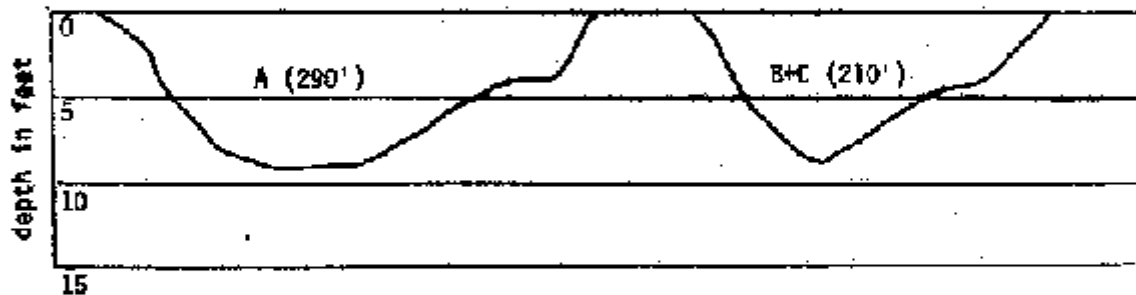
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Acronyms		
SFWMD	South Florida Water Management District	
CRCA	Caloosahatchee River Citizens Association	
NGVD	National Geodetic Vertical Datum	



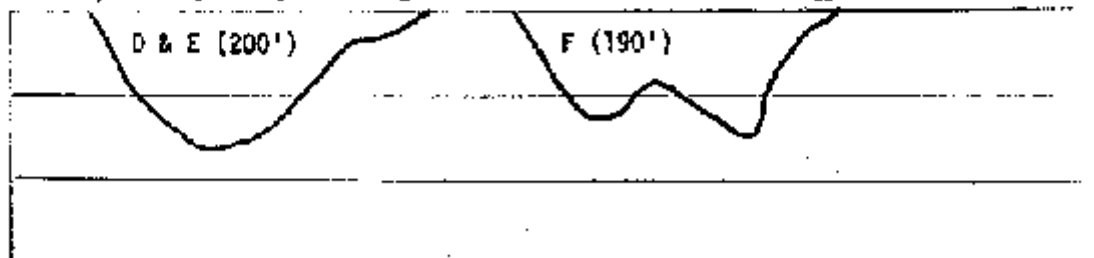
DEPTH PROFILES



COMMENTS

Bottom Substrates

- A) Fine organic material
- C) Fine organic material, dead Corbicula
- F) Sand, marl, fine organic material, live and dead Corbicula



OXBOW # 2

DATE INVENTORIED : 2/14/78

LOCATION R 26 E
T 43 S
SEC. 23, 24

CENTER LINE LENGTH : 2295'

TOTAL AREA : 11.6 Acres

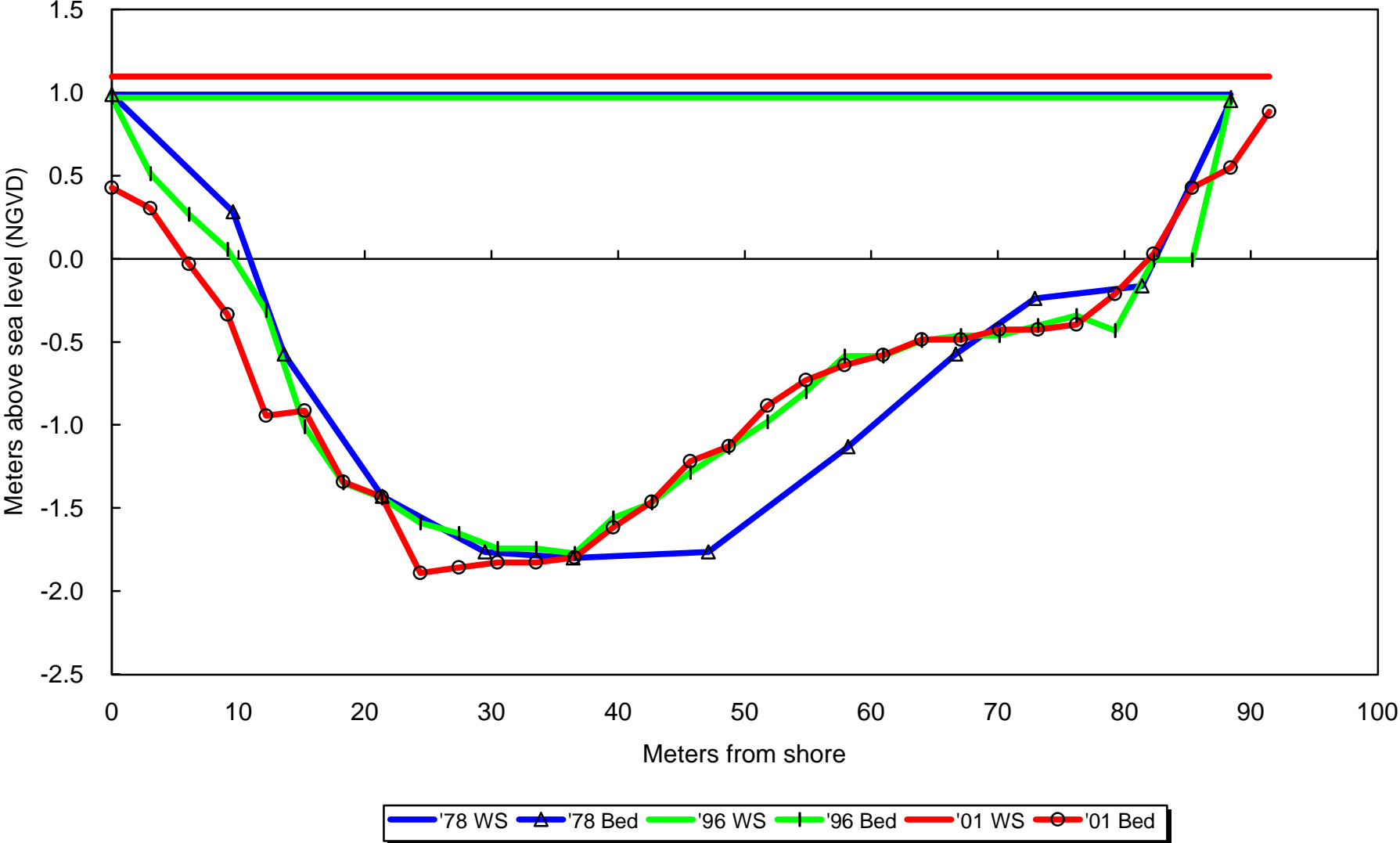
DRAWING SCALE 1" = 300 feet

1996 Elev

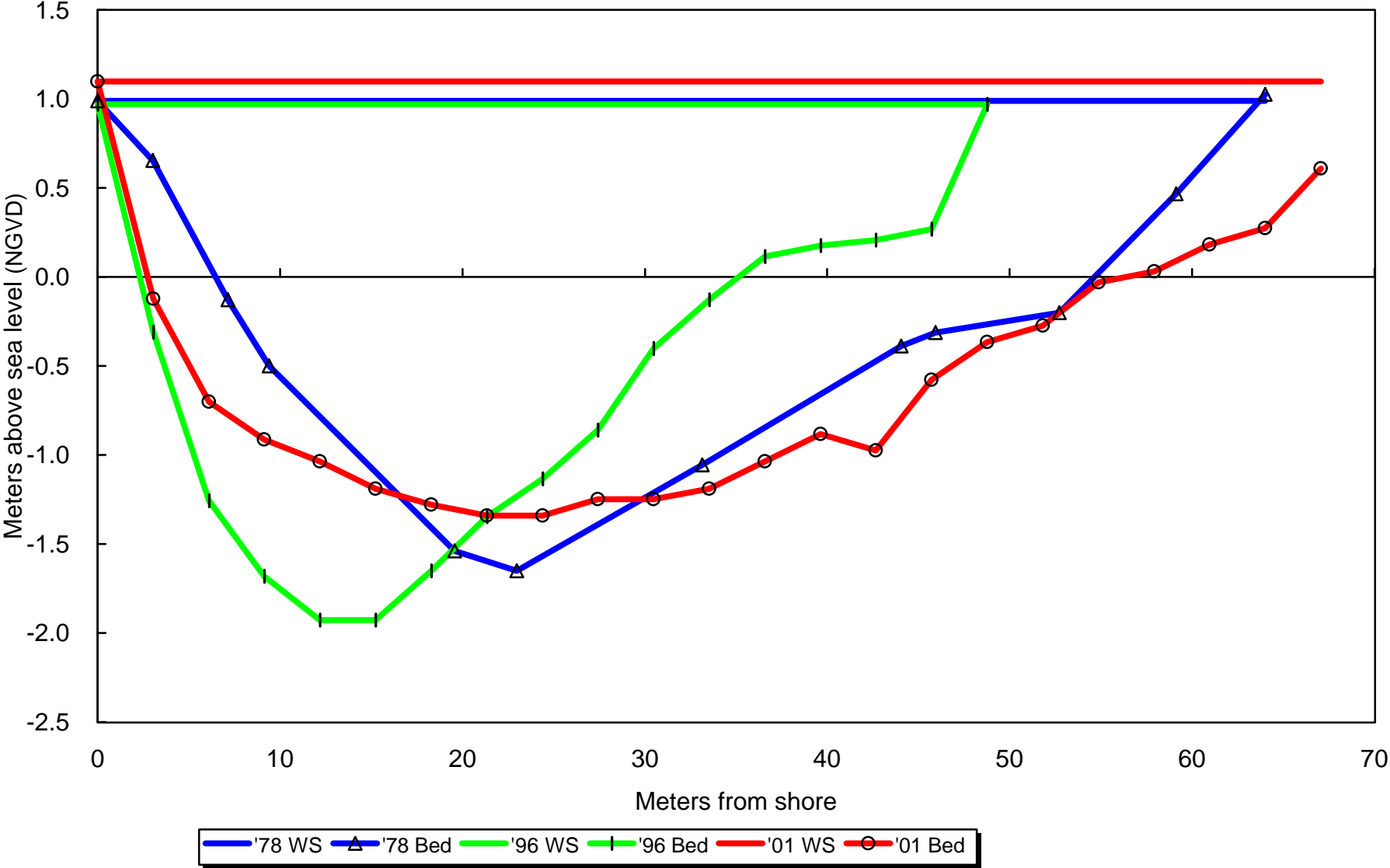
A				B			C			D			E			F			1996	
X (ft)	X (m)	Depth (ft)	Depth (m)	BElev (m)	Depth (ft)	Depth (m)	BElev (m)	Depth (ft)	Depth (m)	BElev (m)	Depth (ft)	Depth (m)	BElev (m)	Depth (ft)	Depth (m)	BElev (m)	Depth (ft)	Depth (m)	BElev (m)	WS (m)
0	0.00	0.00	0.00	0.97	0.00	0.00	0.97	0.00	0.00	0.97	0.00	0.00	0.97	0.00	0.00	0.97	0.00	0.00	0.97	0.97
10	3.05	-1.50	-0.46	0.51	-4.20	-1.28	-0.31	-4.50	-1.37	-0.40	-3.40	-1.04	-0.07	-0.20	-0.06	0.91	-2.87	-0.87	0.09	0.97
20	6.10	-2.30	-0.70	0.27	-7.30	-2.23	-1.26	-5.10	-1.55	-0.59	-4.50	-1.37	-0.40	-3.70	-1.13	-0.16	-3.40	-1.04	-0.07	0.97
30	9.14	-3.00	-0.91	0.05	-8.70	-2.65	-1.68	-5.90	-1.80	-0.83	-5.50	-1.68	-0.71	-4.70	-1.43	-0.46	-4.60	-1.40	-0.43	0.97
40	12.19	-4.20	-1.28	-0.31	-9.50	-2.90	-1.93	-6.60	-2.01	-1.04	-6.40	-1.95	-0.98	-5.60	-1.71	-0.74	-5.00	-1.52	-0.55	0.97
50	15.24	-6.50	-1.98	-1.01	-9.50	-2.90	-1.93	-6.60	-2.01	-1.04	-6.60	-2.01	-1.04	-5.90	-1.80	-0.83	-5.10	-1.55	-0.59	0.97
60	18.29	-7.60	-2.32	-1.35	-8.60	-2.62	-1.65	-7.10	-2.16	-1.19	-6.80	-2.07	-1.10	-6.20	-1.89	-0.92	-5.00	-1.52	-0.55	0.97
70	21.34	-7.90	-2.41	-1.44	-7.60	-2.32	-1.35	-6.70	-2.04	-1.07	-6.40	-1.95	-0.98	-6.40	-1.95	-0.98	-4.90	-1.49	-0.52	0.97
80	24.38	-8.40	-2.56	-1.59	-6.90	-2.10	-1.13	-6.70	-2.04	-1.07	-6.00	-1.83	-0.86	-6.30	-1.92	-0.95	-4.80	-1.46	-0.49	0.97
90	27.43	-8.60	-2.62	-1.65	-6.00	-1.83	-0.86	-6.40	-1.95	-0.98	-5.60	-1.71	-0.74	-6.10	-1.86	-0.89	-5.00	-1.52	-0.55	0.97
100	30.48	-8.90	-2.71	-1.74	-4.50	-1.37	-0.40	-6.30	-1.92	-0.95	-5.00	-1.52	-0.55	-5.30	-1.62	-0.65	-5.20	-1.58	-0.62	0.97
110	33.53	-8.90	-2.71	-1.74	-3.60	-1.10	-0.13	-5.40	-1.65	-0.68	-4.60	-1.40	-0.43	-4.50	-1.37	-0.40	-5.20	-1.58	-0.62	0.97
120	36.58	-9.00	-2.74	-1.77	-2.80	-0.85	0.12	-5.60	-1.71	-0.74	-3.60	-1.10	-0.13	-3.90	-1.19	-0.22	-5.30	-1.62	-0.65	0.97
130	39.62	-8.30	-2.53	-1.56	-2.60	-0.79	0.18	-5.40	-1.65	-0.68	-3.20	-0.98	-0.01	-3.20	-0.98	-0.01	-5.40	-1.65	-0.68	0.97
140	42.67	-8.00	-2.44	-1.47	-2.50	-0.76	0.21	-4.90	-1.49	-0.52	-2.90	-0.88	0.09	-2.80	-0.85	0.12	-5.30	-1.62	-0.65	0.97
150	45.72	-7.40	-2.26	-1.29	-2.30	-0.70	0.27	-4.20	-1.28	-0.31	-2.80	-0.85	0.12	-2.60	-0.79	0.18	-5.20	-1.58	-0.62	0.97
160	48.77	-6.90	-2.10	-1.13	0.00	0.00	0.97	-4.00	-1.22	-0.25	-2.80	-0.85	0.12	-2.30	-0.70	0.27	-4.90	-1.49	-0.52	0.97
170	51.82	-6.40	-1.95	-0.98				-3.90	-1.19	-0.22	-2.70	-0.82	0.15	-2.10	-0.64	0.33	-4.20	-1.28	-0.31	0.97
180	54.86	-5.80	-1.77	-0.80				-3.80	-1.16	-0.19	-2.70	-0.82	0.15	-2.00	-0.61	0.36	-4.00	-1.22	-0.25	0.97
190	57.91	-5.10	-1.55	-0.59				-3.00	-0.91	0.05	-2.40	-0.73	0.24	-1.80	-0.55	0.42	-3.80	-1.16	-0.19	0.97
200	60.96	-5.10	-1.55	-0.59				-3.50	-1.07	-0.10	-1.80	-0.55	0.42	-1.30	-0.40	0.57	-3.40	-1.04	-0.07	0.97
210	64.01	-4.80	-1.46	-0.49				0.00	0.00	0.97	0.00	0.00	0.97	0.00	0.00	0.97	-1.60	-0.49	0.48	0.97
220	67.06	-4.70	-1.43	-0.46													-1.60	-0.49	0.48	0.97
230	70.10	-4.70	-1.43	-0.46													0.00	0.00	0.97	0.97
240	73.15	-4.50	-1.37	-0.40																0.97
250	76.20	-4.30	-1.31	-0.34																0.97
260	79.25	-4.60	-1.40	-0.43																0.97
270	82.30	-3.20	-0.98	-0.01																0.97
280	85.34	-3.20	-0.98	-0.01																0.97
290	88.39	0.00	0.00	0.97																0.97

Meters above
mean low water

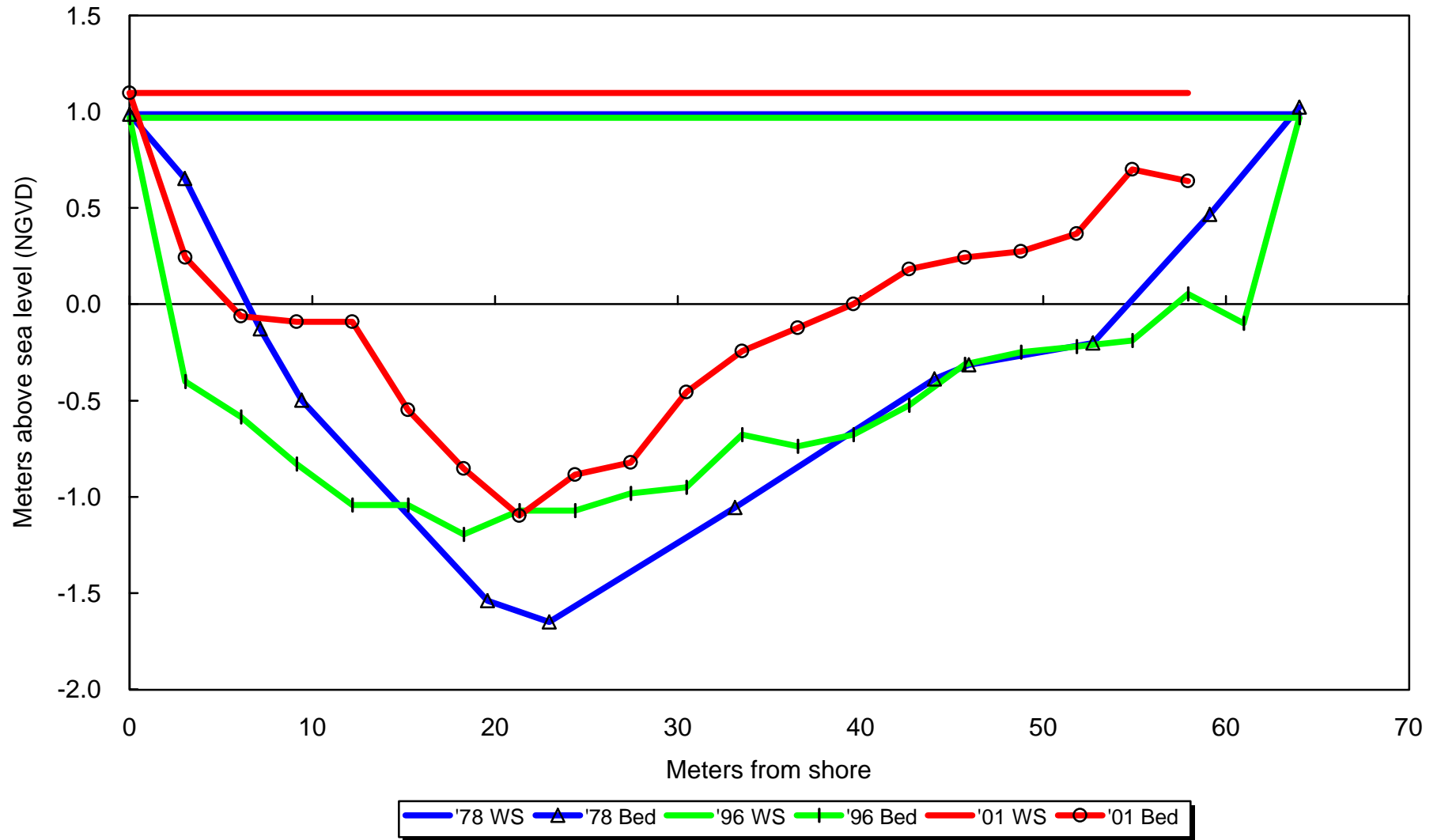
Oxbow 2, cross-section A



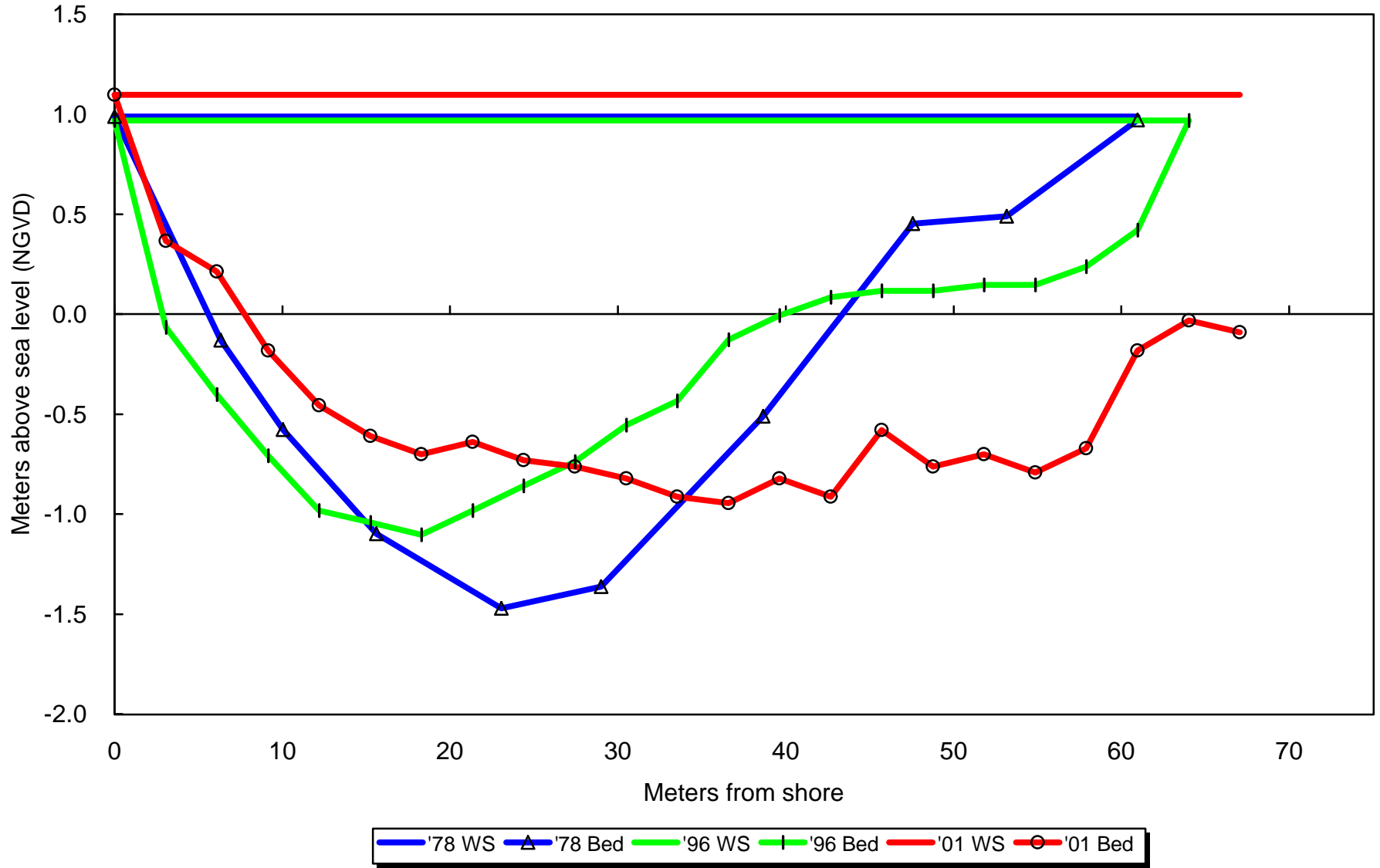
Oxbow 2, cross-section B



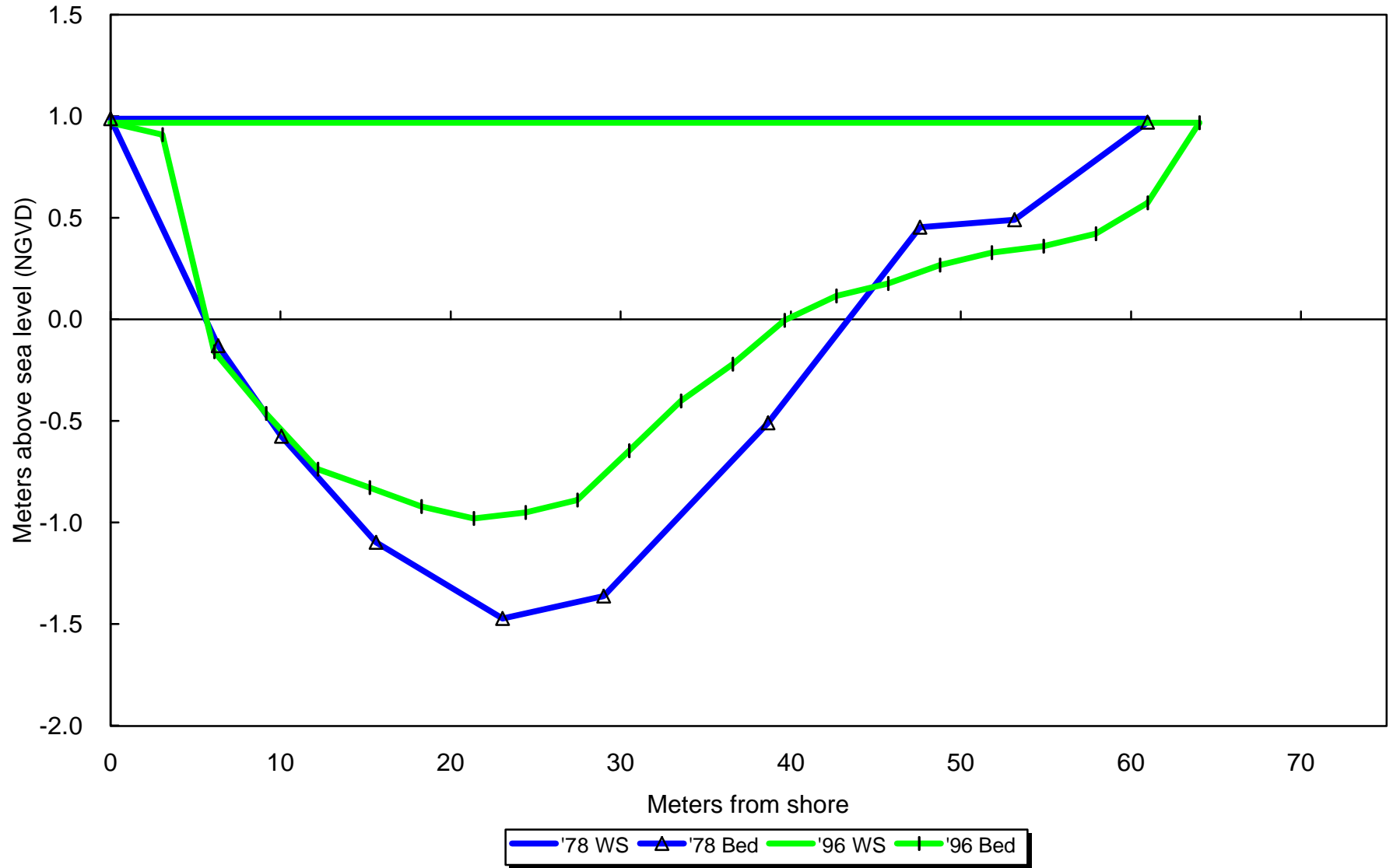
Oxbow 2, cross-section C



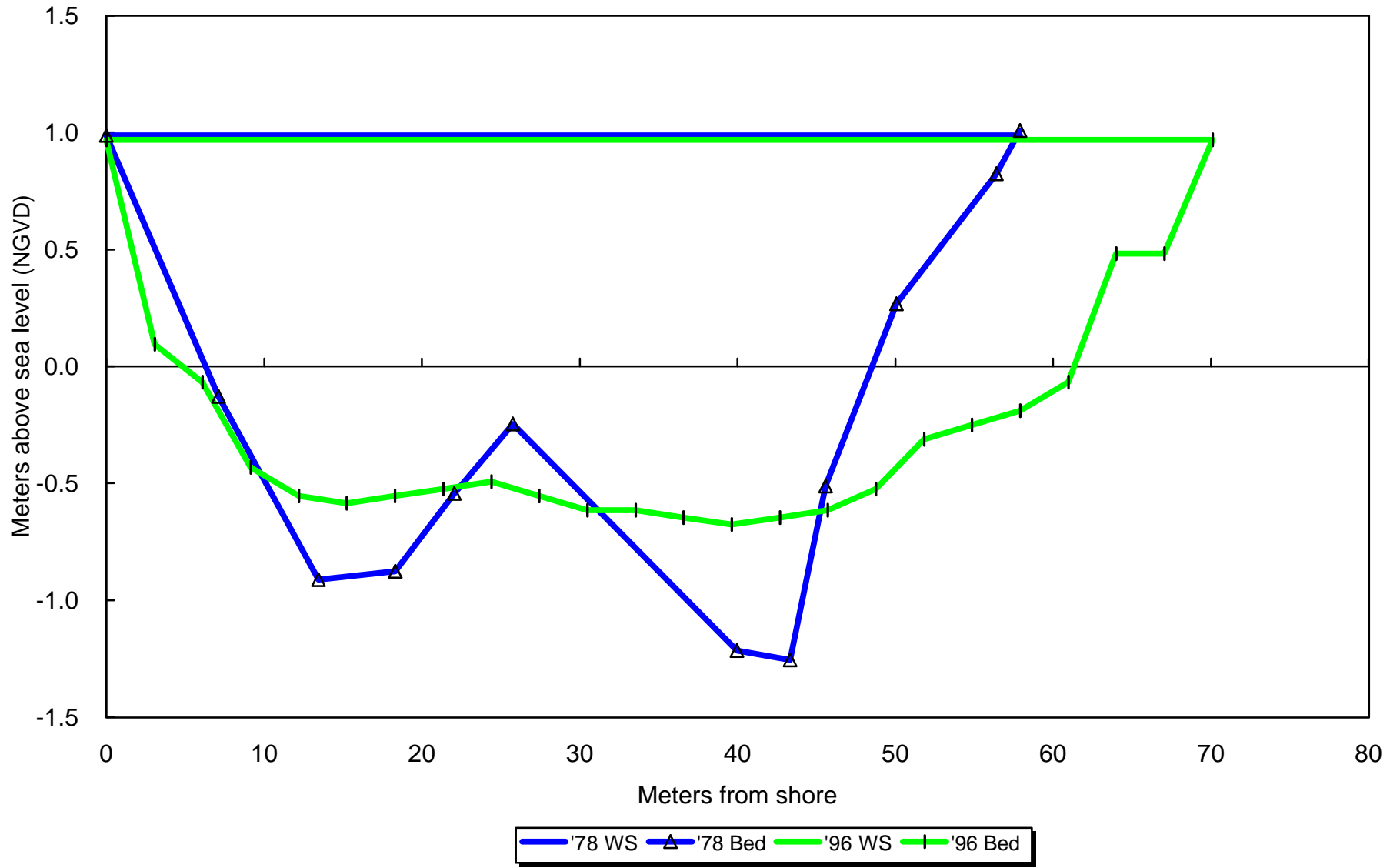
Oxbow 2, cross-section D

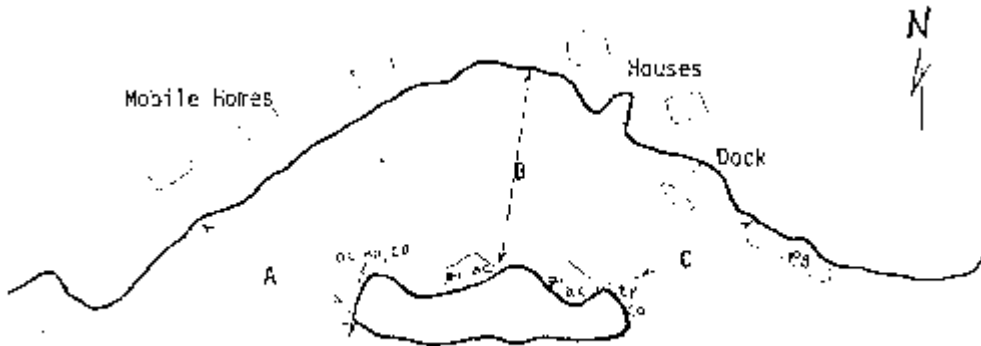


Oxbow 2, cross-section E



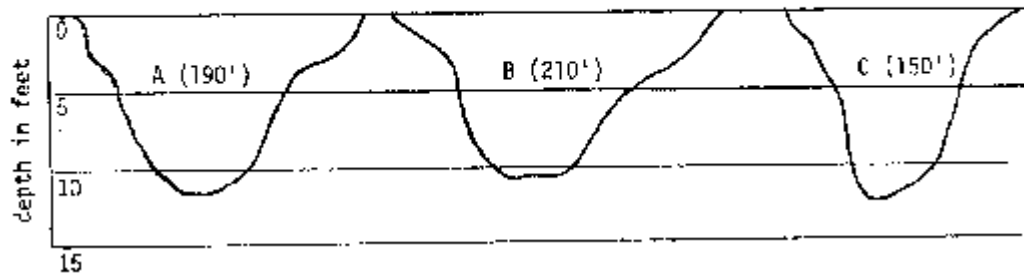
Oxbow 2, cross-section F





C-43

DEPTH PROFILES



Oxbow 3A

X (ft)	X (m)	Depth (m)		Area (sq. m)		Elevation (m)		Water Surface (m)		X (ft)	Depth (ft)			Elev (m)	X (ft)	X(m)	Depth (ft)	Depth (m)	Bottom (m)	WS (m)
		1978	1996	1978	1996	1978	1996	1978	1996		1996	1996	1996							
0.0	0.00	0.00	-0.17	0.05	0.13	0.99	0.76	0.99	0.94	0	-0.5	-0.15	0.78	0	0.00	-1.90	-0.58	0.51	1.09	
4.8	1.46	-0.15	-0.37	0.16	0.39	0.84	0.57	0.99	0.94	10	-1.8	-0.56	0.38	10	3.05	-2.10	-0.64	0.45	1.09	
6.9	2.09	-0.23	-0.45	0.09	0.19	0.76	0.48	0.99	0.94	20	-4.3	-1.30	-0.36	20	6.10	-3.30	-1.01	0.08	1.09	
7.6	2.30	-0.63	-0.48	0.26	0.19	0.36	0.46	0.99	0.94	30	-7.3	-2.21	-1.27	30	9.14	-4.60	-1.40	-0.31	1.09	
9.5	2.90	-0.81	-0.56	0.30	0.21	0.18	0.38	0.99	0.94	40	-9.5	-2.90	-1.96	40	12.19	-7.70	-2.35	-1.26	1.09	
10.0	3.05	-0.83	-0.58	0.25	0.17	0.16	0.36	0.99	0.94	50	-10.0	-3.05	-2.11	50	15.24	-9.40	-2.87	-1.78	1.09	
11.5	3.50	-0.90	-0.69	1.37	1.05	0.09	0.25	0.99	0.94	60	-10.5	-3.20	-2.26	60	18.29	-10.00	-3.05	-1.96	1.09	
20.0	6.10	-1.10	-1.32	1.74	2.09	-0.11	-0.38	0.99	0.94	70	-9.9	-3.02	-2.09	70	21.34	-10.30	-3.14	-2.05	1.09	
21.9	6.67	-1.14	-1.49	0.98	1.27	-0.16	-0.55	0.99	0.94	80	-9.2	-2.80	-1.86	80	24.38	-7.20	-2.19	-1.11	1.09	
25.6	7.80	-1.31	-1.83	1.47	2.05	-0.33	-0.89	0.99	0.94	90	-7.9	-2.41	-1.48	90	27.43	-9.00	-2.74	-1.66	1.09	
29.2	8.91	-1.68	-2.16	1.13	1.45	-0.70	-1.23	0.99	0.94	100	-7.6	-2.31	-1.37	100	30.48	-9.00	-2.74	-1.66	1.09	
30.0	9.14	-1.74	-2.23	2.79	3.57	-0.75	-1.30	0.99	0.94	110	-7.6	-2.31	-1.37	110	33.53	-8.90	-2.71	-1.62	1.09	
39.7	12.11	-2.47	-2.90	3.76	4.42	-1.48	-1.96	0.99	0.94	120	-7.0	-2.13	-1.20	120	36.58	-8.10	-2.47	-1.38	1.09	
40.0	12.19	-2.48	-2.92	3.88	4.56	-1.49	-1.98	0.99	0.94	130	-6.5	-1.98	-1.05	130	39.62	-8.10	-2.47	-1.38	1.09	
50.0	15.24	-3.08	-3.07	5.08	5.06	-2.09	-2.13	0.99	0.94	140	-6.2	-1.88	-0.94	140	42.67	-7.80	-2.38	-1.29	1.09	
50.8	15.49	-3.13	-3.08	3.48	3.43	-2.14	-2.15	0.99	0.94	150	-4.0	-1.22	-0.28	150	45.72	-7.40	-2.26	-1.17	1.09	
57.3	17.46	-3.29	-3.18	4.60	4.45	-2.30	-2.24	0.99	0.94	160	-4.6	-1.40	-0.46	160	48.77	-7.60	-2.32	-1.23	1.09	
60.0	18.29	-3.35	-3.22	3.86	3.71	-2.37	-2.29	0.99	0.94	170	-3.1	-0.94	0.00	170	51.82	-4.70	-1.43	-0.34	1.09	
64.9	19.77	-3.47	-3.14	5.29	4.78	-2.49	-2.20	0.99	0.94	180	-3.6	-1.09	-0.16	180	54.86	-4.00	-1.22	-0.13	1.09	
70.0	21.34	-3.57	-3.04	3.14	2.68	-2.58	-2.11	0.99	0.94	190	-1.9	-0.59	0.35	190	57.91	-3.50	-1.07	0.02	1.09	
70.6	21.53	-3.58	-3.03	5.45	4.62	-2.59	-2.09	0.99	0.94	200	-1.8	-0.53	0.40	200	60.96	-3.00	-0.91	0.17	1.09	
80.0	24.38	-3.57	-2.82	6.29	4.97	-2.58	-1.88	0.99	0.94	210	-1.3	-0.38	0.55	210	64.01	-2.70	-0.82	0.27	1.09	
82.2	25.06	-3.57	-2.73	5.44	4.16	-2.58	-1.80	0.99	0.94	220	-0.7	-0.20	0.73	220	67.06	-2.30	-0.70	0.39	1.09	
90.0	27.43	-3.51	-2.44	4.77	3.31	-2.52	-1.50	0.99	0.94	230	-0.7	-0.20	0.73							
91.1	27.78	-3.50	-2.42	5.33	3.69	-2.51	-1.49	0.99	0.94											
100.0	30.48	-3.33	-2.33	9.59	6.71	-2.35	-1.40	0.99	0.94											
110.0	33.53	-3.15	-2.33	5.86	4.33	-2.16	-1.40	0.99	0.94											
112.2	34.20	-3.11	-2.29	4.74	3.49	-2.12	-1.36	0.99	0.94											
120.0	36.58	-2.71	-2.15	3.32	2.64	-1.72	-1.22	0.99	0.94											
120.2	36.65	-2.70	-2.15	4.11	3.28	-1.71	-1.22	0.99	0.94											
130.0	39.62	-2.03	-2.00	6.12	6.03	-1.04	-1.07	0.99	0.94											
140.0	42.67	-1.35	-1.90	2.42	3.41	-0.36	-0.97	0.99	0.94											
141.8	43.21	-1.23	-1.78	1.60	2.32	-0.24	-0.85	0.99	0.94											
148.5	45.28	-1.06	-1.34	1.33	1.67	-0.07	-0.40	0.99	0.94											
150.0	45.72	-1.04	-1.24	1.62	1.93	-0.05	-0.30	0.99	0.94											
158.7	48.38	-0.93	-1.40	1.42	2.13	0.05	-0.46	0.99	0.94											
160.0	48.77	-0.92	-1.42	1.58	2.43	0.07	-0.48	0.99	0.94											
170.0	51.82	-0.79	-0.96	1.69	2.04	0.19	-0.02	0.99	0.94											
173.9	53.01	-0.75	-1.02	1.14	1.55	0.24	-0.08	0.99	0.94											
180.0	54.86	-0.58	-1.11	0.81	1.56	0.41	-0.18	0.99	0.94											
183.1	55.82	-0.49	-0.95	0.75	1.45	0.50	-0.02	0.99	0.94											
190.0	57.91	-0.02	-0.61	0.25	0.63	0.97	0.33	0.99	0.94											
190.0	57.91		-0.61		0.92		0.33	0.99	0.94											
200.0	60.96		-0.55		1.69		0.38	0.99	0.94											
210.0	64.01		-0.40		1.23		0.53	0.99	0.94											
220.0	67.06		-0.23		0.69		0.71	0.99	0.94											
230.0	70.10		-0.23		0.00		0.71	0.99	0.94											

Franklin Lock upstream
water surface elevation (ft)

February 14, 1978
January 28, 1996
June 5, 2001

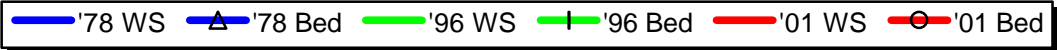
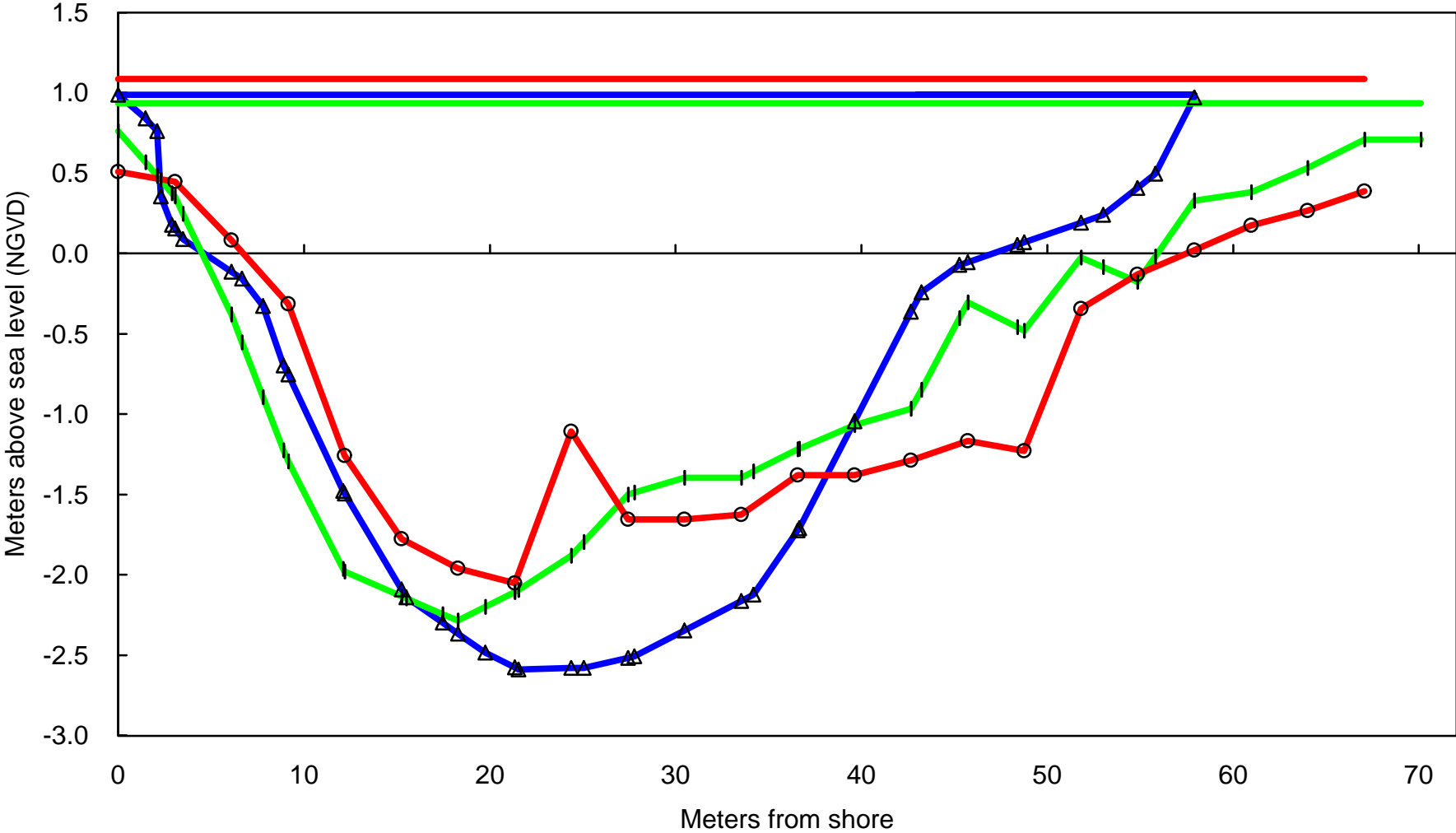
3.24
3.07
3.57

0.987552
0.935736
1.088136

1978 1996 Change
119 119 0%

Total Area

Oxbow 3, cross-section A



Oxbow 3B

X (m)	Depth (m)		Area (sq. m)		Elevation (m)		Water Surface (m)		X (ft)	Depth (ft)		X (m)	X (ft)	Depth (ft)	Depth (m)	BElev (m)	WS (m)
	1978	1996	1978	1996	1978	1996	1978	1996		1996	1996						
0.00	0.00	-0.12	0.02	0.03	0.99	0.81	0.99	0.94		0	-0.33	0.00	0	-1.70	-0.52	0.57	1.09
0.68	-0.11	-0.17	0.16	0.26	0.88	0.76	0.99	0.94		10	-1.08	3.05	10	-2.80	-0.85	0.23	1.09
3.05	-0.28	-0.35	0.75	0.95	0.71	0.59	0.99	0.94		20	-3.00	6.10	20	-4.40	-1.34	-0.25	1.09
6.10	-0.50	-0.94	1.51	2.85	0.49	0.00	0.99	0.94		30	-4.67	9.14	30	-5.60	-1.71	-0.62	1.09
9.14	-0.72	-1.44	1.45	2.93	0.27	-0.51	0.99	0.94		40	-6.08	12.19	40	-6.20	-1.89	-0.80	1.09
10.15	-0.79	-1.59	0.95	1.92	0.20	-0.65	0.99	0.94		50	-6.83	15.24	50	-7.40	-2.26	-1.17	1.09
11.56	-1.04	-1.79	1.02	1.76	-0.05	-0.85	0.99	0.94		60	-6.83	18.29	60	-8.80	-2.68	-1.59	1.09
12.12	-1.20	-1.86	0.38	0.59	-0.22	-0.93	0.99	0.94		70	-6.83	21.34	70	-9.70	-2.96	-1.87	1.09
12.19	-1.23	-1.87	1.92	2.92	-0.24	-0.94	0.99	0.94		80	-6.83	24.38	80	-10.20	-3.11	-2.02	1.09
15.24	-2.45	-2.10	3.96	3.40	-1.46	-1.17	0.99	0.94		90	-7.33	27.43	90	-9.80	-2.99	-1.90	1.09
15.42	-2.52	-2.10	3.84	3.21	-1.53	-1.17	0.99	0.94		100	-7.58	30.48	100	-9.10	-2.77	-1.69	1.09
18.29	-2.89	-2.10	6.16	4.49	-1.90	-1.17	0.99	0.94		110	-7.67	33.53	110	-8.40	-2.56	-1.47	1.09
19.69	-3.06	-2.10	4.67	3.21	-2.08	-1.17	0.99	0.94		120	-7.08	36.58	120	-8.50	-2.59	-1.50	1.09
21.34	-3.17	-2.10	4.39	2.91	-2.19	-1.17	0.99	0.94		130	-7.25	39.62	130	-7.00	-2.13	-1.05	1.09
22.46	-3.25	-2.10	2.92	1.89	-2.26	-1.17	0.99	0.94		140	-6.75	42.67	140	-6.40	-1.95	-0.86	1.09
23.13	-3.29	-2.10	3.17	2.03	-2.30	-1.17	0.99	0.94		150	-6.08	45.72	150	-6.00	-1.83	-0.74	1.09
24.38	-3.25	-2.10	2.72	1.76	-2.26	-1.17	0.99	0.94		160	-4.50	48.77	160	-5.70	-1.74	-0.65	1.09
24.81	-3.24	-2.12	4.93	3.24	-2.25	-1.19	0.99	0.94		170	-4.25	51.82	170	-5.10	-1.55	-0.47	1.09
27.43	-3.23	-2.26	6.37	4.45	-2.25	-1.32	0.99	0.94		180	-4.00	54.86	180	-4.90	-1.49	-0.41	1.09
28.75	-3.23	-2.29	4.93	3.49	-2.25	-1.35	0.99	0.94		190	-3.50	57.91	190	-4.40	-1.34	-0.25	1.09
30.48	-3.23	-2.33	4.13	2.98	-2.24	-1.40	0.99	0.94		200	-3.00	60.96	200	-4.80	-1.46	-0.37	1.09
31.31	-3.23	-2.34	4.92	3.56	-2.24	-1.40	0.99	0.94		210	-3.00	64.01	210	-3.00	-0.91	0.17	1.09
33.53	-3.10	-2.36	4.05	3.09	-2.11	-1.42	0.99	0.94		220	-2.50	67.06	220	-2.40	-0.73	0.36	1.09
33.93	-3.07	-2.34	4.68	3.56	-2.09	-1.40	0.99	0.94		230	-0.15						
36.58	-2.73	-2.18	7.79	6.21	-1.75	-1.24	0.99	0.94									
39.62	-2.34	-2.23	7.14	6.80	-1.36	-1.30	0.99	0.94									
42.67	-1.95	-2.08	5.96	6.34	-0.97	-1.14	0.99	0.94									
45.72	-1.56	-1.87	3.30	3.96	-0.58	-0.94	0.99	0.94									
46.89	-1.41	-1.69	2.15	2.57	-0.43	-0.75	0.99	0.94									
48.77	-1.31	-1.39	2.92	3.11	-0.32	-0.46	0.99	0.94									
51.36	-1.16	-1.33	1.54	1.76	-0.17	-0.39	0.99	0.94									
51.42	-1.16	-1.33	0.26	0.30	-0.17	-0.39	0.99	0.94									
51.82	-1.14	-1.32	1.96	2.27	-0.15	-0.38	0.99	0.94									
54.86	-0.97	-1.24	2.13	2.73	0.02	-0.30	0.99	0.94									
56.22	-0.89	-1.17	1.36	1.79	0.09	-0.24	0.99	0.94									
57.91	-0.69	-1.09	1.64	2.58	0.30	-0.15	0.99	0.94									
60.96	-0.33	-0.94	1.01	2.85	0.66	0.00	0.99	0.94									
64.01	0.03	-0.94	0.27	1.43	1.02	0.00	0.99	0.94									
64.01		-0.94		1.43		0.00	0.99	0.94									
67.06		-0.78		2.39		0.15	0.99	0.94									
70.10		-0.07		0.55		0.87	0.99	0.94									
			1978	1996	Change												
Total Area			113	111	-3%												

Franklin Lock upstream
water surface elevation (ft)

3.24 0.987552

February 14, 1978

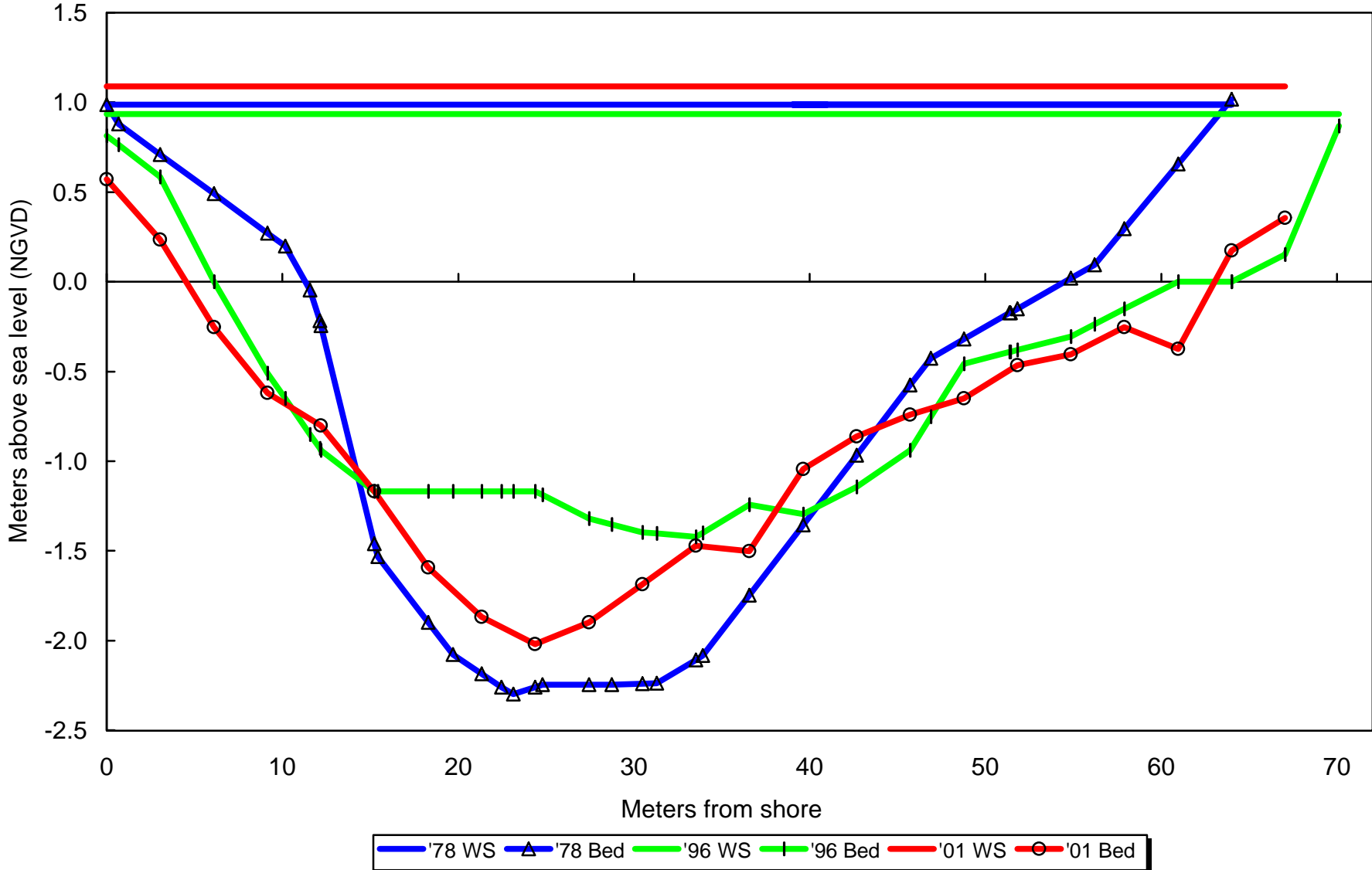
3.07 0.935736

January 28, 1996

3.57 1.088136

June 5, 2001

Oxbow 3, cross-section B



Oxbow 3C

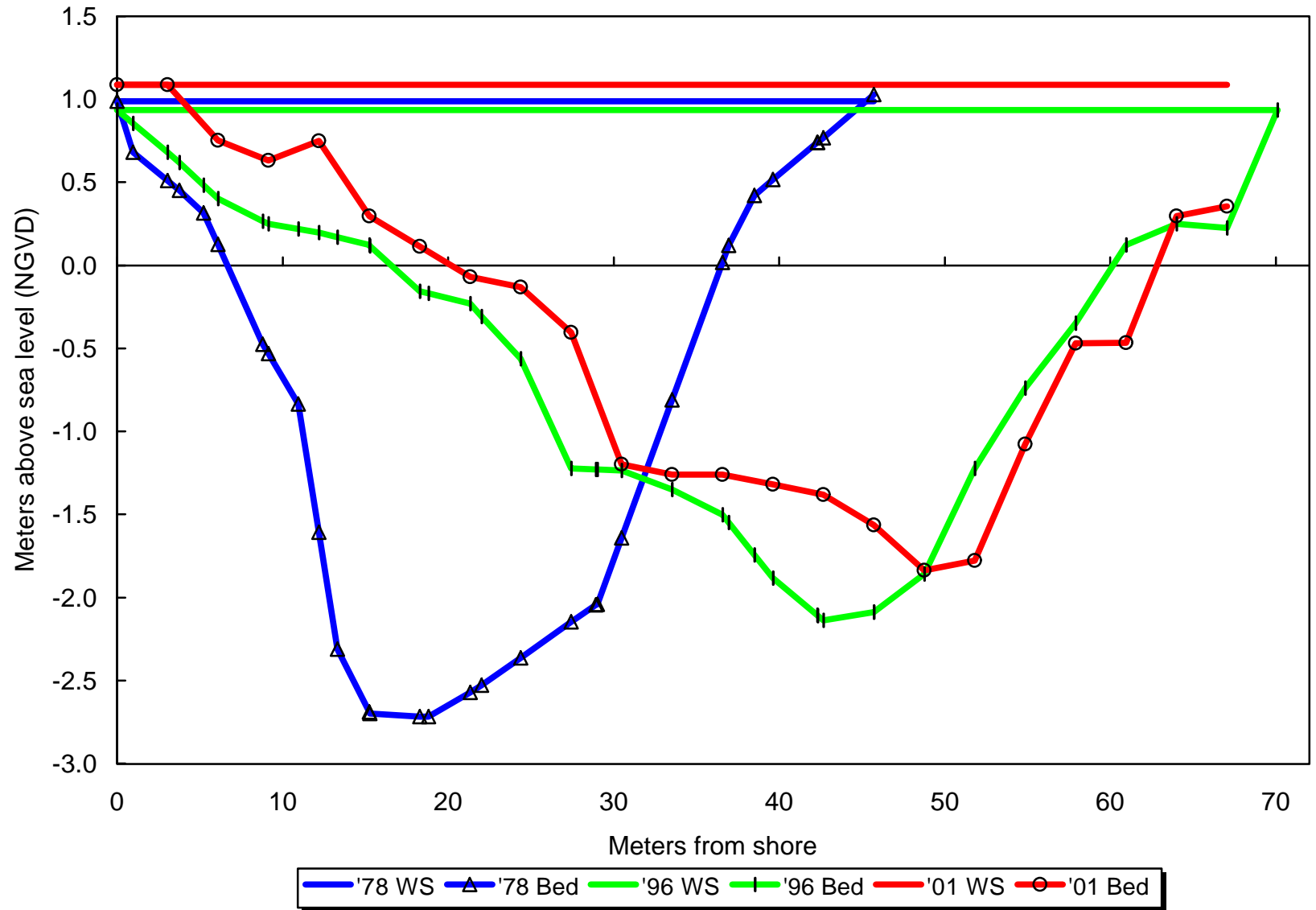
X (m)	Depth (m)		Area (sq. m)		Elevation (m)		Water Surface (m) X (ft)		Depth (ft)		X (ft)	X(m)	Depth (ft)	Depth (m)	BElev (m)	WS (m)	
	1978	1996	1978	1996	1978	1996	1978	1996	1996	1996		2001	2001	2001	2001	2001	2001
0.00	0.00	0.00	0.07	0.02	0.99	0.94	0.99	0.94	0	0.00	0	0.00	0.00	0.00	1.09	1.09	
0.97	-0.31	-0.08	0.47	0.12	0.68	0.86	0.99	0.94	10	-0.83	10	3.05	0.00	0.00	1.09	1.09	
3.05	-0.48	-0.25	0.66	0.35	0.51	0.68	0.99	0.94	20	-1.75	20	6.10	-1.10	-0.34	0.75	1.09	
3.75	-0.53	-0.32	0.58	0.35	0.45	0.62	0.99	0.94	30	-2.25	30	9.14	-1.50	-0.46	0.63	1.09	
5.23	-0.67	-0.45	0.79	0.53	0.32	0.48	0.99	0.94	40	-2.42	40	12.19	-1.11	-0.34	0.75	1.09	
6.10	-0.86	-0.53	1.54	0.95	0.13	0.40	0.99	0.94	50	-2.67	50	15.24	-2.60	-0.79	0.30	1.09	
8.81	-1.46	-0.67	2.23	1.02	-0.48	0.27	0.99	0.94	60	-3.58	60	18.29	-3.20	-0.98	0.11	1.09	
9.14	-1.52	-0.69	1.63	0.74	-0.53	0.25	0.99	0.94	70	-3.83	70	21.34	-3.80	-1.16	-0.07	1.09	
10.95	-1.82	-0.72	2.78	1.09	-0.84	0.22	0.99	0.94	80	-4.92	80	24.38	-4.00	-1.22	-0.13	1.09	
12.19	-2.60	-0.74	3.07	0.87	-1.61	0.20	0.99	0.94	90	-7.08	90	27.43	-4.90	-1.49	-0.41	1.09	
13.32	-3.30	-0.77	5.03	1.17	-2.31	0.17	0.99	0.94	100	-7.13	100	30.48	-7.50	-2.29	-1.20	1.09	
15.24	-3.68	-0.81	3.62	0.80	-2.69	0.12	0.99	0.94	110	-7.50	110	33.53	-7.70	-2.35	-1.26	1.09	
15.29	-3.69	-0.82	5.62	1.25	-2.70	0.12	0.99	0.94	120	-8.00	120	36.58	-7.70	-2.35	-1.26	1.09	
18.29	-3.70	-1.09	6.55	1.93	-2.72	-0.16	0.99	0.94	130	-9.25	130	39.62	-7.90	-2.41	-1.32	1.09	
18.82	-3.71	-1.10	5.65	1.68	-2.72	-0.17	0.99	0.94	140	-10.08	140	42.67	-8.10	-2.47	-1.38	1.09	
21.34	-3.56	-1.17	5.70	1.87	-2.57	-0.23	0.99	0.94	150	-9.92	150	45.72	-8.70	-2.65	-1.56	1.09	
22.03	-3.52	-1.24	5.36	1.89	-2.53	-0.31	0.99	0.94	160	-9.17	160	48.77	-9.60	-2.93	-1.84	1.09	
24.38	-3.35	-1.50	9.05	4.05	-2.36	-0.56	0.99	0.94	170	-7.08	170	51.82	-9.40	-2.87	-1.78	1.09	
27.43	-3.14	-2.16	7.11	4.89	-2.15	-1.22	0.99	0.94	180	-5.50	180	54.86	-7.10	-2.16	-1.08	1.09	
28.92	-3.03	-2.16	2.39	1.71	-2.04	-1.23	0.99	0.94	190	-4.21	190	57.91	-5.11	-1.56	-0.47	1.09	
29.01	-3.03	-2.17	2.36	1.69	-2.04	-1.23	0.99	0.94	200	-2.67	200	60.96	-5.10	-1.55	-0.47	1.09	
30.48	-2.63	-2.17	5.94	4.90	-1.64	-1.24	0.99	0.94	210	-2.25	210	64.01	-2.60	-0.79	0.30	1.09	
33.53	-1.80	-2.29	5.48	6.97	-0.81	-1.35	0.99	0.94	220	-2.33	220	67.06	-2.40	-0.73	0.36	1.09	
36.58	-0.97	-2.44	1.66	4.18	0.02	-1.50	0.99	0.94	230	0.00							
36.95	-0.87	-2.49	0.83	2.39	0.12	-1.55	0.99	0.94									
38.50	-0.57	-2.68	0.75	3.57	0.42	-1.74	0.99	0.94									
39.62	-0.47	-2.82	0.90	5.37	0.52	-1.88	0.99	0.94									
42.30	-0.25	-3.04	0.34	4.12	0.74	-2.11	0.99	0.94									
42.33	-0.25	-3.04	0.05	0.56	0.74	-2.11	0.99	0.94									
42.67	-0.22	-3.07	0.37	5.20	0.77	-2.14	0.99	0.94									
45.72	0.04	-3.02	0.20	4.61	1.03	-2.09	0.99	0.94									
45.72		-3.02		4.61		-2.09	0.99	0.94									
48.77		-2.80		8.52		-1.86	0.99	0.94									
51.82		-2.16		6.58		-1.22	0.99	0.94									
54.86		-1.68		5.11		-0.74	0.99	0.94									
57.91		-1.28		3.91		-0.35	0.99	0.94									
60.96		-0.81		2.48		0.12	0.99	0.94									
64.01		-0.69		2.09		0.25	0.99	0.94									
67.06		-0.71		2.16		0.23	0.99	0.94									
70.10		0.00		0.54		0.94	0.99	0.94									

Franklin Lock upstream
water surface elevation (ft)

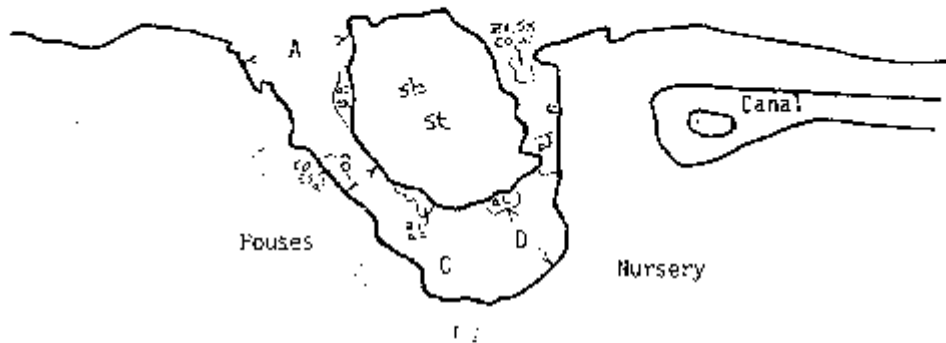
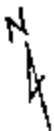
February 14, 1978	3.24	0.987552
January 28, 1996	3.07	0.935736
June 5, 2001	3.57	1.088136

1978 1996 Change
89 107 20%

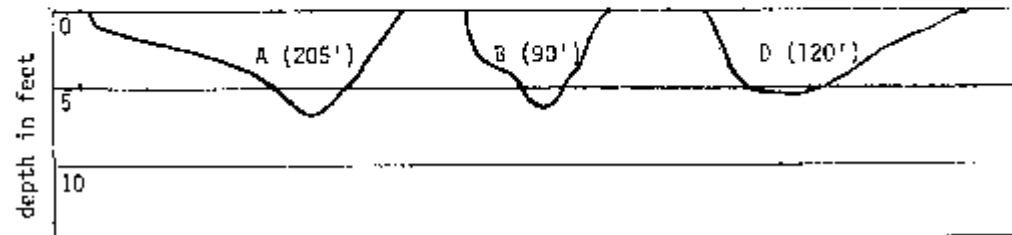
Oxbow 3, cross-section C



C-43



DEPTH PROFILES



Oxbow 9

18.05	28.12	0.00	18.05	28.12	0.00
24.62	28.06		18.05	27.60	5.00
18.05	27.60	5.00			
24.62	27.55				
18.06	27.08	10.00			
24.62	27.03				
18.06	26.57	15.00			
24.62	26.54				

1978 dY	1978 levelled Y	1978 Y feet	1978 X feet	1978 Elev Y m	1978 Elev X m	1978 Area	1978 WS (m)
18.31	28.11 9A	0.00	28.11	0.00	0.00	0.63	0.99
18.34	28.02 9A	0.00	28.02	-0.86	2.95	0.73	0.90
18.40	27.99 9A	0.00	27.99	-1.21	9.15	0.62	2.79
19.20	27.75 9A	-0.01	27.76	-3.42	88.14	-0.06	26.86
19.51	27.29 9A	-0.01	27.30	-7.84	118.24	-1.40	36.04
19.73	27.42 9A	-0.01	27.43	-6.58	140.08	-1.02	42.70
19.77	27.40 9A	-0.01	27.41	-6.79	144.11	-1.08	43.92
19.84	27.42 9A	-0.01	27.43	-6.53	150.50	-1.00	45.87
20.03	27.62 9A	-0.01	27.63	-4.63	169.78	-0.42	51.75
20.10	27.67 9A	-0.01	27.68	-4.15	176.18	-0.28	53.70
20.12	27.73 9A	-0.01	27.75	-3.51	178.64	-0.08	54.45
20.39	28.10 9A	-0.02	28.12	0.05	205.00	1.00	62.48

20.82	28.10 9B	-0.02	28.11	0.00	0.00	0.99	0.00	0.36	0.99
20.83	27.98 9B	-0.02	28.00	-1.15	1.26	0.64	0.38	4.10	0.99
20.89	27.77 9B	-0.02	27.79	-3.12	7.16	0.04	2.18	20.50	0.99
20.96	27.72 9B	-0.02	27.74	-3.60	14.42	-0.11	4.40	38.17	0.99
21.11	27.66 9B	-0.02	27.68	-4.19	28.35	-0.29	8.64	40.53	0.99
21.16	27.57 9B	-0.02	27.60	-4.99	33.77	-0.53	10.29	0.00	0.99
21.11	27.66 9B	-0.02	27.68	-4.19	28.35	-0.29	8.64	0.20	0.99
21.17	27.57 9B	-0.02	27.60	-4.99	33.87	-0.53	10.32	27.54	0.99
21.22	27.48 9B	-0.02	27.50	-5.89	39.39	-0.81	12.01	28.52	0.99
21.27	27.45 9B	-0.02	27.47	-6.19	43.55	-0.90	13.27	27.85	0.99
21.32	27.43 9B	-0.02	27.45	-6.42	48.39	-0.97	14.75	37.57	0.99
21.39	27.45 9B	-0.02	27.47	-6.18	55.26	-0.90	16.84	37.38	0.99
21.44	27.52 9B	-0.02	27.54	-5.49	60.48	-0.69	18.44	21.00	0.99
21.47	27.59 9B	-0.02	27.62	-4.78	62.90	-0.47	19.17	27.05	0.99
21.56	27.70 9B	-0.03	27.73	-3.75	71.81	-0.16	21.89	21.05	0.99
21.58	27.74 9B	-0.03	27.77	-3.33	74.13	-0.03	22.59	12.26	0.99
21.63	27.90 9B	-0.03	27.93	-1.82	79.16	0.43	24.13	-67.36	0.99
21.75	28.09 9B	-0.03	28.11	-0.01	90.00	0.99	27.43	-0.30	0.99

1978 dY	1978 levelled Y	1978 Y feet	1978 X feet	1978 Elev Y m	1978 Elev X m	1978 Area	1978 WS (m)		
22.38	28.08 12D	-0.03	28.11	0.00	0.00	0.99	0.00	0.68	0.99
22.43	28.00 12D	-0.03	28.03	-0.75	3.63	0.76	1.11	3.57	0.99
22.52	27.82 12D	-0.03	27.85	-2.45	9.55	0.24	2.91	9.47	0.99
22.54	27.70 12D	-0.03	27.73	-3.63	11.37	-0.12	3.46	12.40	0.99
22.62	27.61 12D	-0.03	27.64	-4.49	16.39	-0.38	4.99	20.82	0.99
22.68	27.54 12D	-0.03	27.58	-5.12	20.64	-0.57	6.29	25.89	0.99
22.76	27.52 12D	-0.03	27.55	-5.34	26.50	-0.64	8.08	44.10	0.99
22.91	27.51 12D	-0.04	27.54	-5.45	37.16	-0.67	11.33	50.17	0.99
23.03	27.51 12D	-0.04	27.55	-5.42	44.90	-0.67	13.69	37.25	0.99
23.11	27.54 12D	-0.04	27.58	-5.11	50.90	-0.57	15.51	33.31	0.99
23.21	27.58 12D	-0.04	27.62	-4.74	57.94	-0.46	17.66	38.47	0.99
23.34	27.65 12D	-0.04	27.69	-4.08	67.15	-0.26	20.47	59.03	0.99
23.63	27.83 12D	-0.04	27.87	-2.26	86.88	0.30	26.48	35.34	0.99
23.79	27.93 12D	-0.04	27.97	-1.35	98.45	0.58	30.01	12.84	0.99
23.90	27.96 12D	-0.04	28.00	-1.05	105.92	0.67	32.28	11.33	0.99
24.10	28.07 12D	-0.05	28.11	0.02	120.00	0.99	36.58	1.20	0.99

395.89

2001 Elev A	X (m)	Depth (ft)	Depth (m)	BElev (m)	WS (m)
0	0.00	-2.00	-0.61	0.30	0.91
10	3.05	-2.95	-0.90	0.01	0.91
20	6.10	-3.20	-0.98	-0.06	0.91
30	9.14	-3.55	-1.08	-0.17	0.91
40	12.19	-3.85	-1.17	-0.26	0.91
50	15.24	-4.00	-1.22	-0.31	0.91
60	18.29	-4.10	-1.25	-0.34	0.91
70	21.34	-4.30	-1.31	-0.40	0.91
80	24.38	-4.35	-1.33	-0.41	0.91
90	27.43	-4.55	-1.39	-0.48	0.91
100	30.48	-4.65	-1.42	-0.51	0.91
110	33.53	-4.90	-1.49	-0.58	0.91
120	36.58	-5.20	-1.58	-0.67	0.91
130	39.62	-5.70	-1.74	-0.83	0.91
140	42.67	-6.00	-1.83	-0.92	0.91
150	45.72	-6.30	-1.92	-1.01	0.91
160	48.77	-6.30	-1.92	-1.01	0.91
170	51.82	-6.30	-1.92	-1.01	0.91
180	54.86	-6.20	-1.89	-0.98	0.91
190	57.91	-5.65	-1.72	-0.81	0.91
200	60.96	-4.90	-1.49	-0.58	0.91
210	64.01	-4.40	-1.34	-0.43	0.91
220	67.06	-4.00	-1.22	-0.31	0.91
230	70.10	-3.50	-1.07	-0.16	0.91
240	73.15	-2.15	-0.66	0.26	0.91

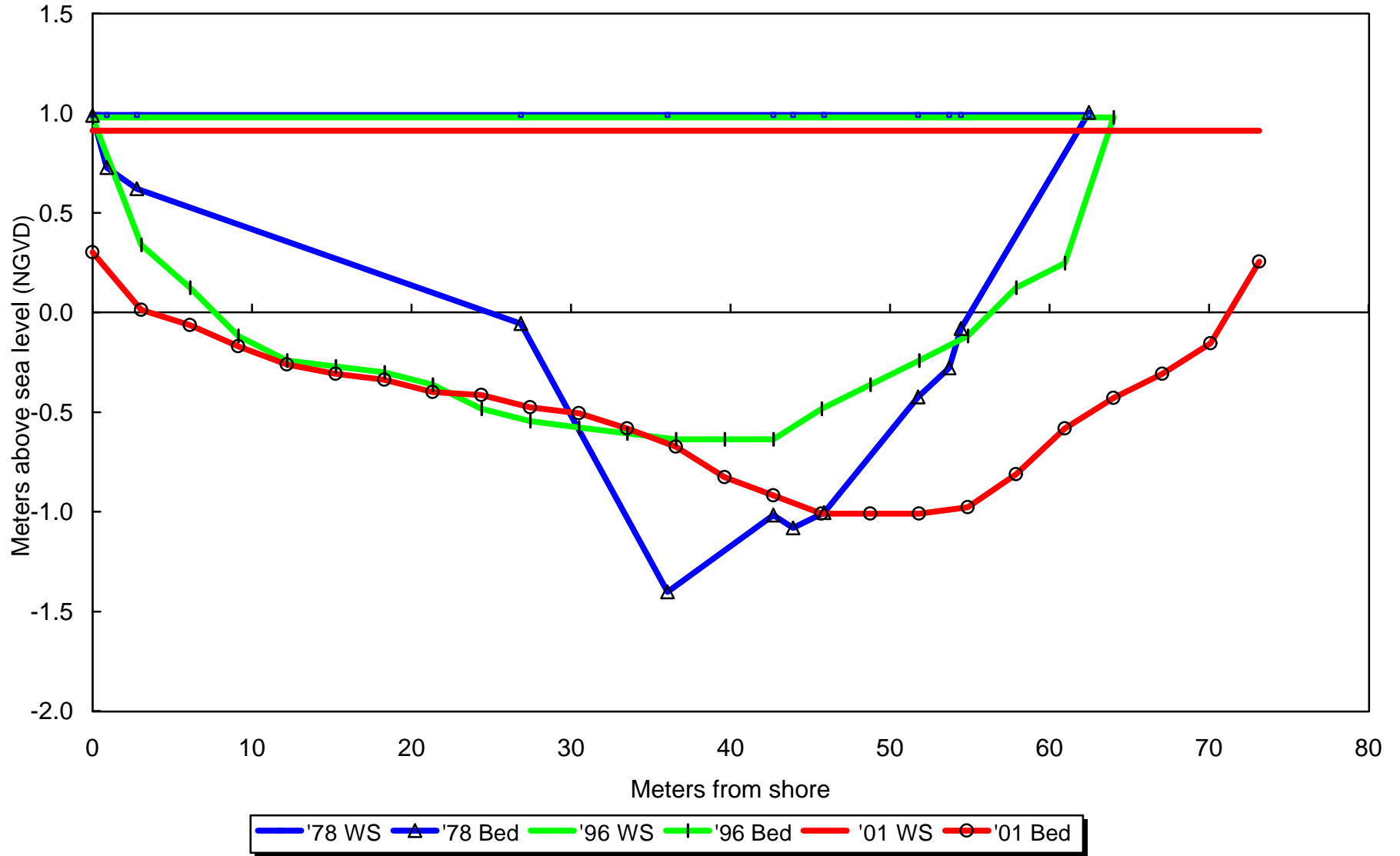
B X (ft)	X (m)	Depth (ft)	Depth (m)	BElev (m)	WS (m)
0	0.00	-1.20	-0.37	0.55	0.91
10	3.05	-2.65	-0.81	0.10	0.91
20	6.10	-3.60	-1.10	-0.19	0.91
30	9.14	-4.20	-1.28	-0.37	0.91
40	12.19	-5.00	-1.52	-0.61	0.91
50	15.24	-5.00	-1.52	-0.61	0.91
60	18.29	-4.00	-1.22	-0.31	0.91
70	21.34	-3.20	-0.98	-0.06	0.91
80	24.38	-2.90	-0.88	0.03	0.91
90	27.43	-2.30	-0.70	0.21	0.91
100	30.48	-1.80	-0.55	0.36	0.91
110	33.53	-1.60	-0.49	0.42	0.91
120	36.58	-1.40	-0.43	0.48	0.91
130	39.62	-1.15	-0.35	0.56	0.91
140	42.67	-0.90	-0.27	0.64	0.91
150	45.72	-0.50	-0.15	0.76	0.91

C X (ft)	X (m)	Depth (ft)	Depth (m)	BElev (m)	WS (m)
0	0.00	0.00	0.00	0.91	0.91
10	3.05	-0.30	-0.09	0.82	0.91
20	6.10	-0.50	-0.15	0.76	0.91
30	9.14	-1.30	-0.40	0.52	0.91
40	12.19	-1.50	-0.46	0.45	0.91
50	15.24	-1.30	-0.40	0.52	0.91
60	18.29	-1.00	-0.30	0.61	0.91
70	21.34	-0.50	-0.15	0.76	0.91

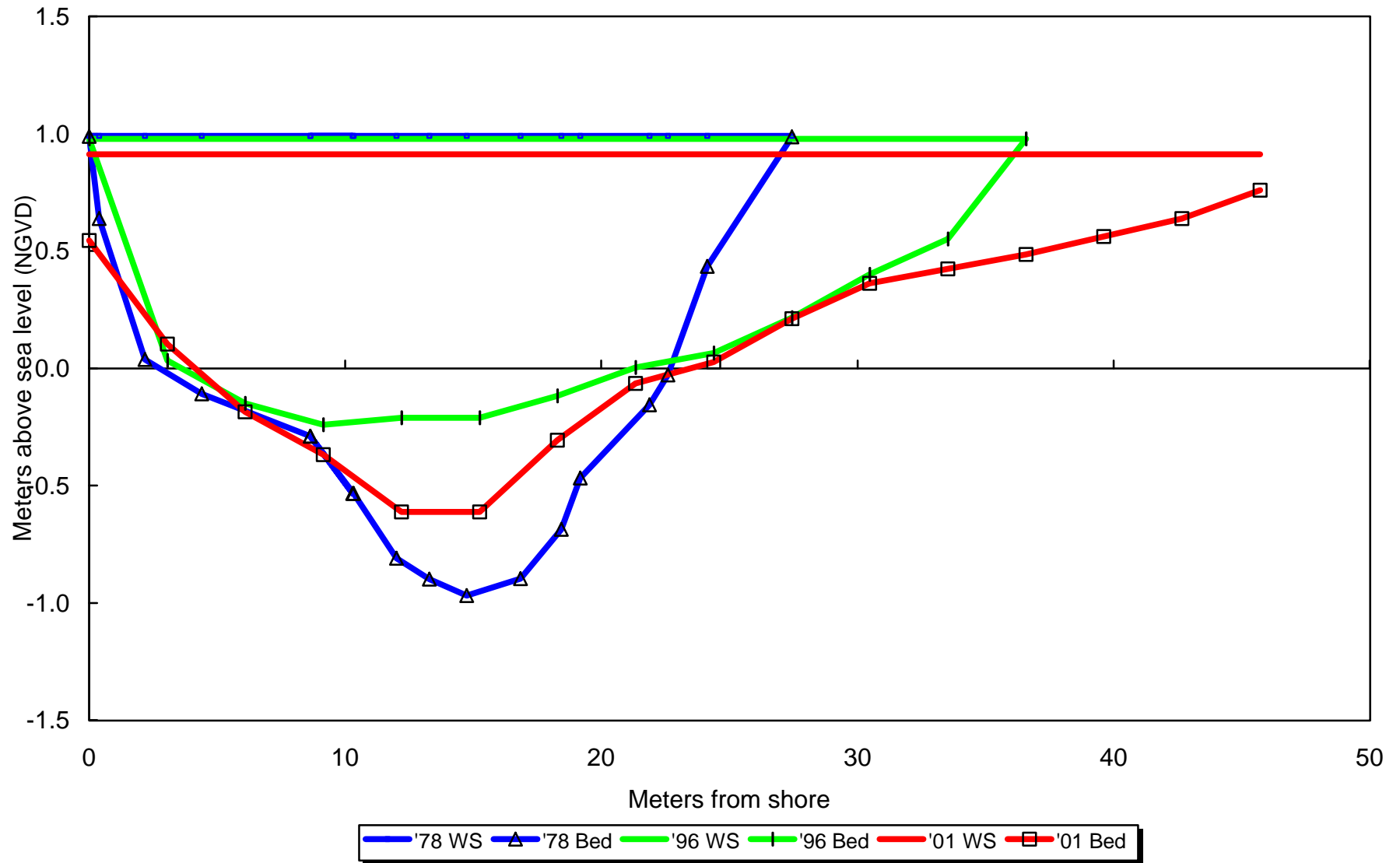
D X (ft)	X (m)	Depth (ft)	Depth (m)	BElev (m)	WS (m)
0	0.00	-1.90	-0.58	0.33	0.91
10	3.05	-3.25	-0.99	-0.08	0.91
20	6.10	-3.90	-1.19	-0.28	0.91
30	9.14	-3.50	-1.07	-0.16	0.91
40	12.19	-3.70	-1.13	-0.22	0.91
50	15.24	-3.70	-1.13	-0.22	0.91
60	18.29	-3.40	-1.04	-0.12	0.91
70	21.34	-2.50	-0.76	0.15	0.91
80	24.38	-2.50	-0.76	0.15	0.91
90	27.43	-2.10	-0.64	0.27	0.91
100	30.48	-1.95	-0.59	0.32	0.91
110	33.53	-1.50	-0.46	0.45	0.91
120	36.58	-1.25	-0.38	0.53	0.91
130	39.62	-3.50	-1.07	-0.16	0.91

D X (ft)	X (m)	Depth (ft)	Depth (m)	BElev (m)	WS (m)
0	0.00	0.00	0.00	0.98	0.98
10	3.05	-1.00	-0.30	0.67	0.98
20	6.10	-1.20	-0.37	0.61	0.98
30	9.14	-1.10	-0.34	0.64	0.98
40	12.19	-1.20	-0.37	0.61	0.98
50	15.24	-0.90	-0.27	0.70	0.98
60	18.29	0.00	0.00	0.98	0.98

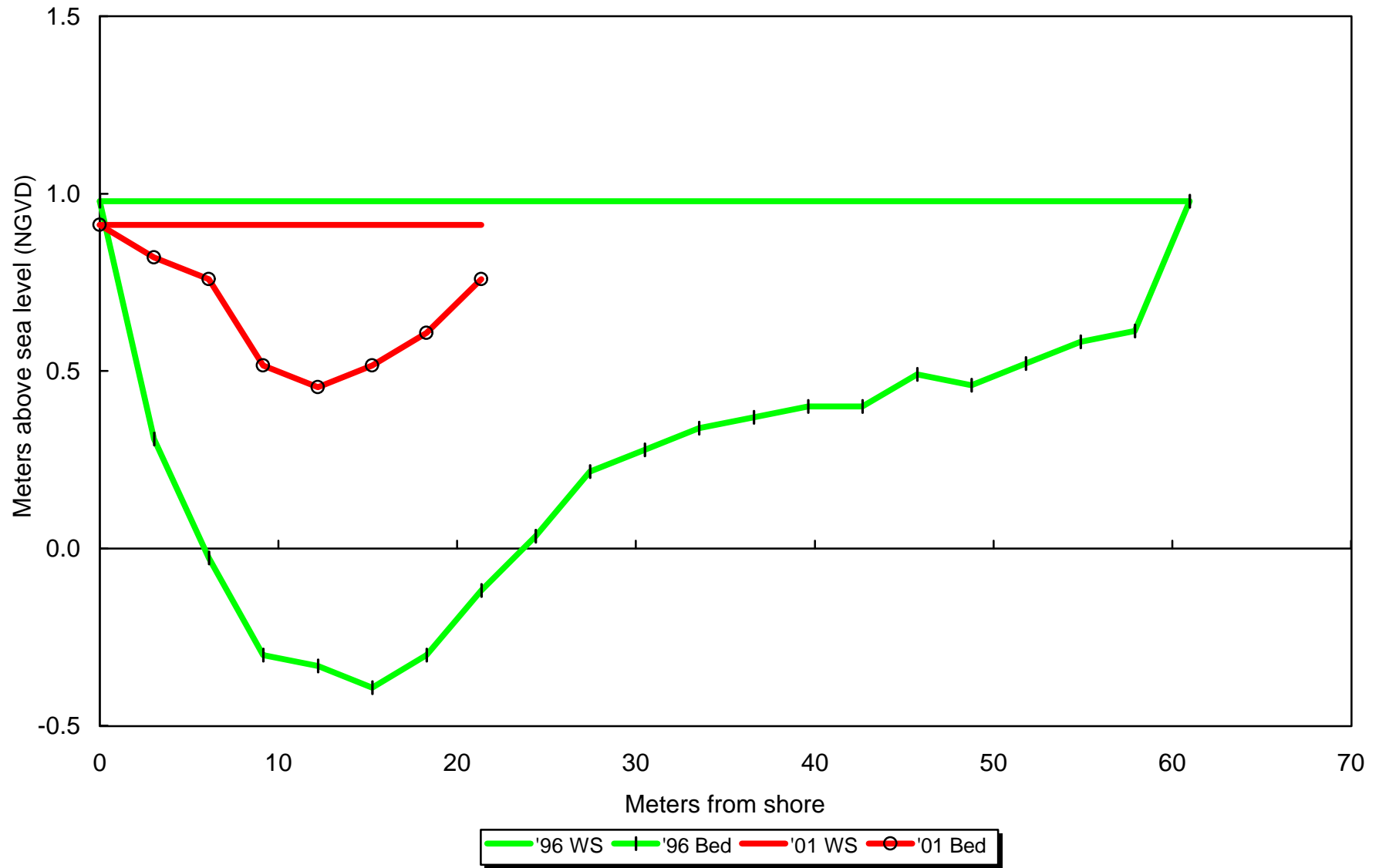
Oxbow 9, cross-section A



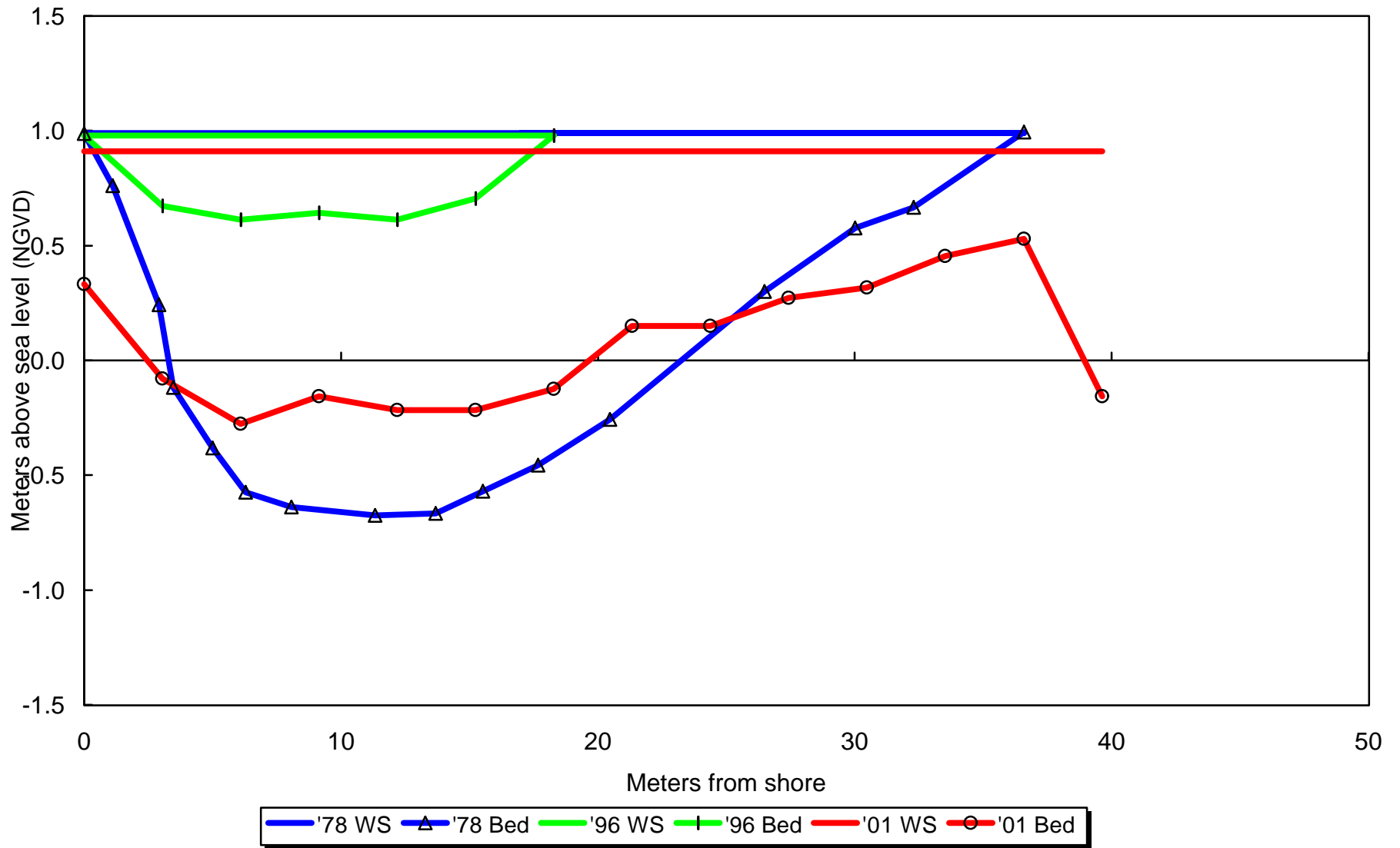
Oxbow 9, cross-section B



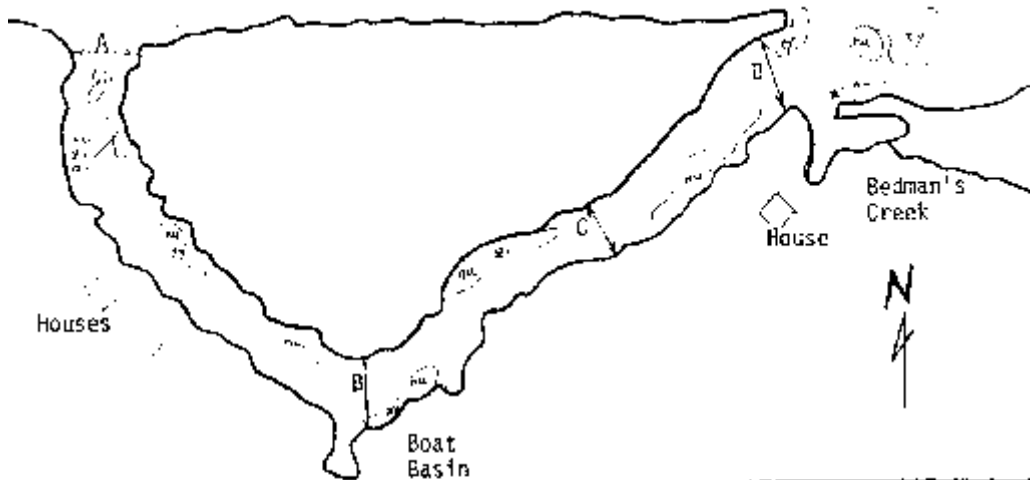
Oxbow 9, cross-section C



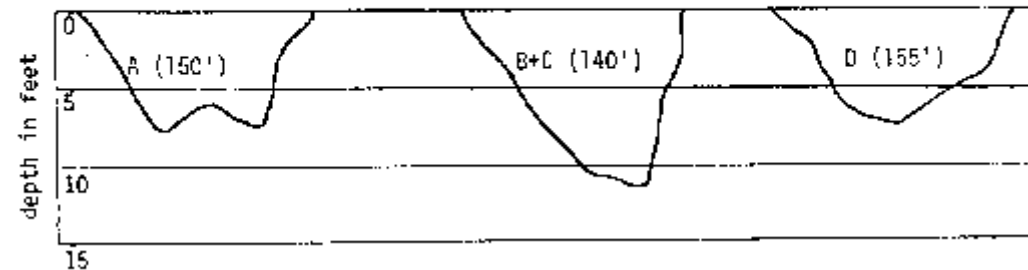
Oxbow 9, cross-section D



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DEPTH PROFILES



Oxbow 11 A

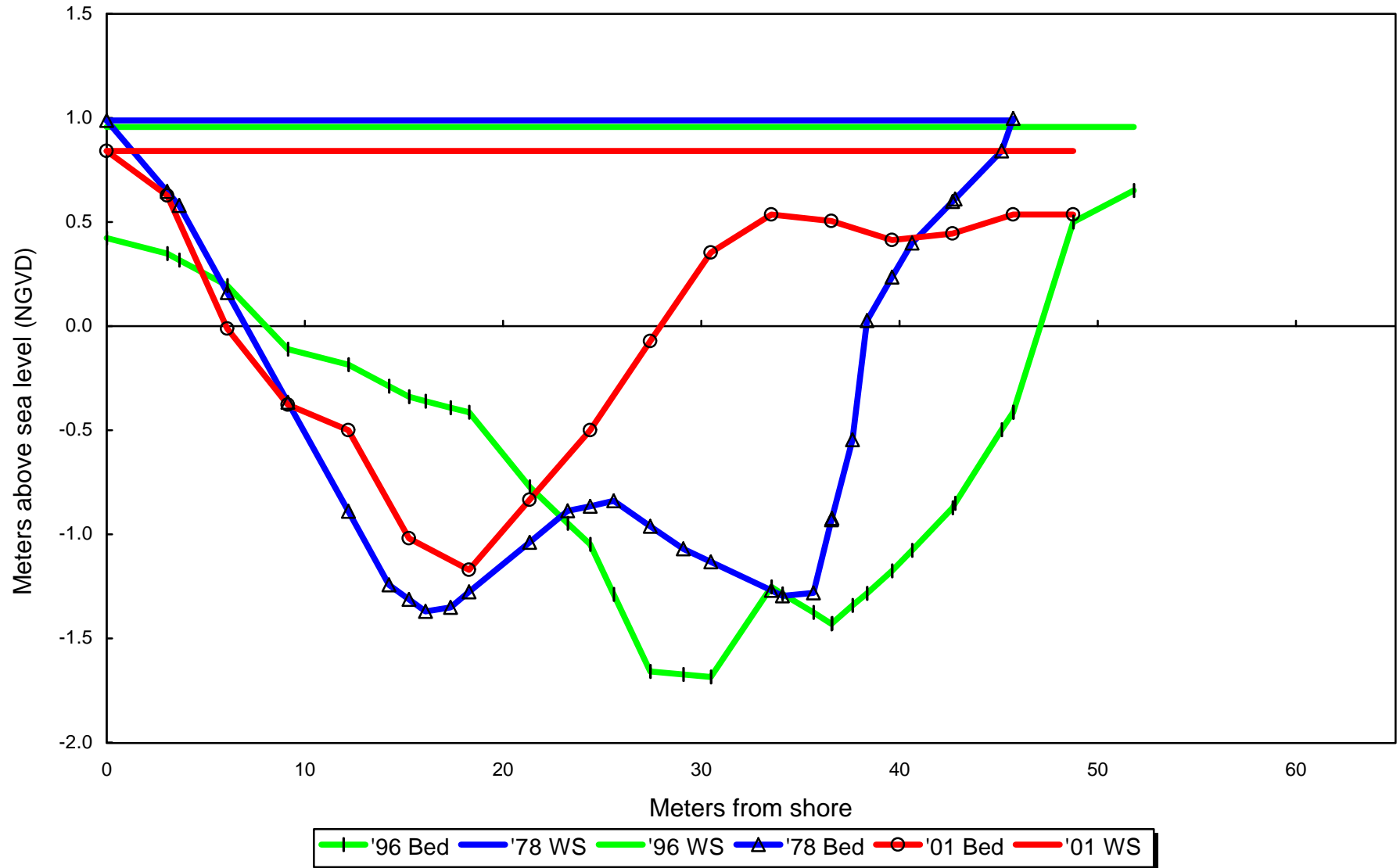
X (m)	Depth (m)		Area (sq. m)		Elevation (m)		Water Surface (m)		X (ft)	Depth (ft)		X (ft)	X (m)	Depth (ft)	Depth (m)	BElev (m)	WS (m)
	1978	1996	1978	1996	1978	1996	1978	1996		1996	1996						
0.00	0.00	-0.53	0.26	0.46	0.99	0.42	0.99	0.96	0	-1.75	0	0.00	0.00	0.00	0.84	0.84	
3.05	-0.34	-0.61	0.62	1.12	0.65	0.35	0.99	0.96	10	-2.00	10	3.05	-0.70	-0.21	0.63	0.84	
3.66	-0.41	-0.64	0.62	0.98	0.58	0.32	0.99	0.96	20	-2.50	20	6.10	-2.80	-0.85	-0.01	0.84	
6.10	-0.83	-0.76	2.27	2.09	0.16	0.20	0.99	0.96	30	-3.50	30	9.14	-4.00	-1.22	-0.38	0.84	
9.14	-1.35	-1.07	4.12	3.25	-0.36	-0.11	0.99	0.96	40	-3.75	40	12.19	-4.40	-1.34	-0.50	0.84	
12.19	-1.88	-1.14	4.79	2.91	-0.89	-0.19	0.99	0.96	50	-4.25	50	15.24	-6.10	-1.86	-1.02	0.84	
14.24	-2.23	-1.25	3.40	1.90	-1.24	-0.29	0.99	0.96	60	-4.50	60	18.29	-6.60	-2.01	-1.17	0.84	
15.24	-2.30	-1.30	2.13	1.20	-1.31	-0.34	0.99	0.96	70	-5.67	70	21.34	-5.50	-1.68	-0.84	0.84	
16.09	-2.36	-1.32	2.47	1.38	-1.37	-0.36	0.99	0.96	80	-6.58	80	24.38	-4.40	-1.34	-0.50	0.84	
17.34	-2.34	-1.35	2.57	1.48	-1.35	-0.39	0.99	0.96	90	-8.58	90	27.43	-3.00	-0.91	-0.07	0.84	
18.29	-2.26	-1.37	4.52	2.74	-1.28	-0.41	0.99	0.96	100	-8.67	100	30.48	-1.60	-0.49	0.35	0.84	
21.34	-2.03	-1.73	5.05	4.30	-1.04	-0.77	0.99	0.96	110	-7.25	110	33.53	-1.00	-0.30	0.54	0.84	
23.27	-1.87	-1.90	2.86	2.90	-0.89	-0.95	0.99	0.96	120	-7.83	120	36.58	-1.10	-0.34	0.51	0.84	
24.38	-1.85	-2.01	2.15	2.33	-0.86	-1.05	0.99	0.96	130	-7.00	130	39.62	-1.40	-0.43	0.41	0.84	
25.59	-1.83	-2.25	2.78	3.42	-0.84	-1.29	0.99	0.96	140	-6.00	140	42.67	-1.30	-0.40	0.45	0.84	
27.43	-1.95	-2.62	3.40	4.57	-0.96	-1.66	0.99	0.96	150	-4.50	150	45.72	-1.00	-0.30	0.54	0.84	
29.08	-2.06	-2.63	3.13	4.01	-1.07	-1.67	0.99	0.96	160	-1.50	160	48.77	-1.00	-0.30	0.54	0.84	
30.48	-2.12	-2.64	4.71	5.87	-1.13	-1.69	0.99	0.96	170	-1.00							
33.53	-2.26	-2.21	4.07	3.99	-1.27	-1.25	0.99	0.96									
34.09	-2.28	-2.24	2.42	2.38	-1.30	-1.29	0.99	0.96									
35.65	-2.27	-2.33	2.82	2.90	-1.28	-1.38	0.99	0.96									
36.58	-1.92	-2.39	0.90	1.13	-0.93	-1.43	0.99	0.96									
36.60	-1.91	-2.38	1.00	1.25	-0.92	-1.43	0.99	0.96									
37.63	-1.53	-2.30	1.34	2.01	-0.55	-1.34	0.99	0.96									
38.35	-0.96	-2.24	0.96	2.24	0.03	-1.28	0.99	0.96									
39.62	-0.75	-2.13	0.86	2.43	0.24	-1.18	0.99	0.96									
40.62	-0.59	-2.03	0.90	3.10	0.40	-1.08	0.99	0.96									
42.67	-0.39	-1.83	0.43	2.00	0.60	-0.87	0.99	0.96									
42.81	-0.38	-1.81	0.47	2.25	0.61	-0.85	0.99	0.96									
45.16	-0.15	-1.46	0.21	2.12	0.84	-0.50	0.99	0.96									
45.72	0.01	-1.37	0.02	0.38	1.00	-0.41	0.99	0.96									
45.72		-1.37		2.09		-0.41	0.99	0.96									
48.77		-0.46		1.39		0.50	0.99	0.96									
51.82		-0.30		0.12		0.65	0.99	0.96									

Franklin Lock upstream
water surface elevation (ft)

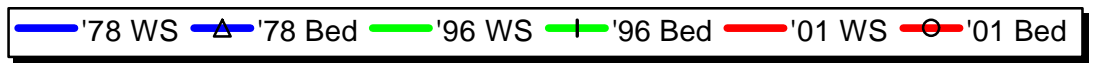
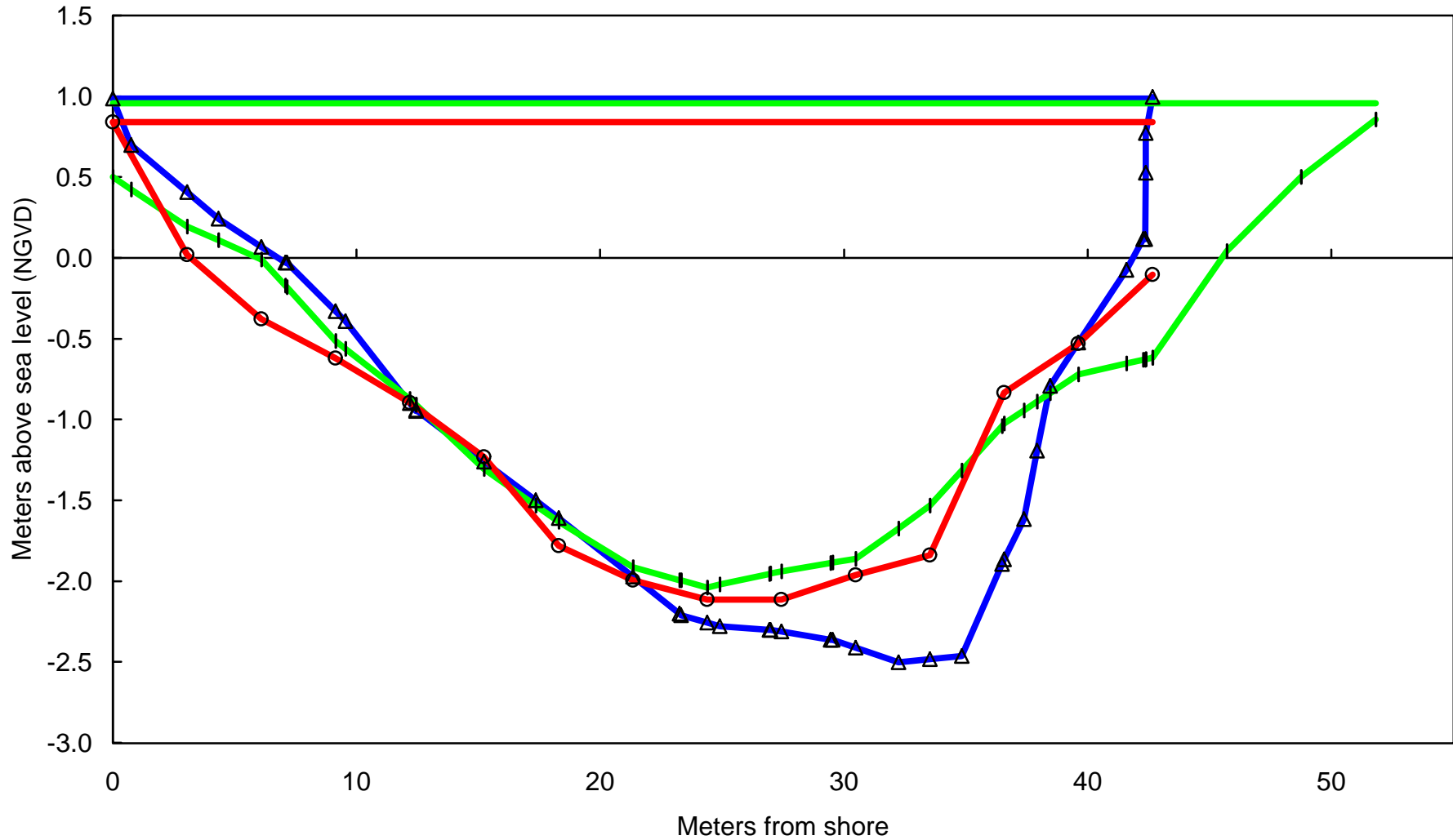
February 14, 1978	3.2	0.9876
January 20, 1996	3.1	0.9571
April 25, 2001	2.8	0.8412

	1978	1996	Change
Total Area	68	79	15%

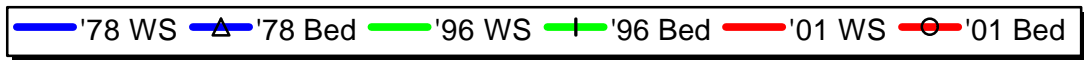
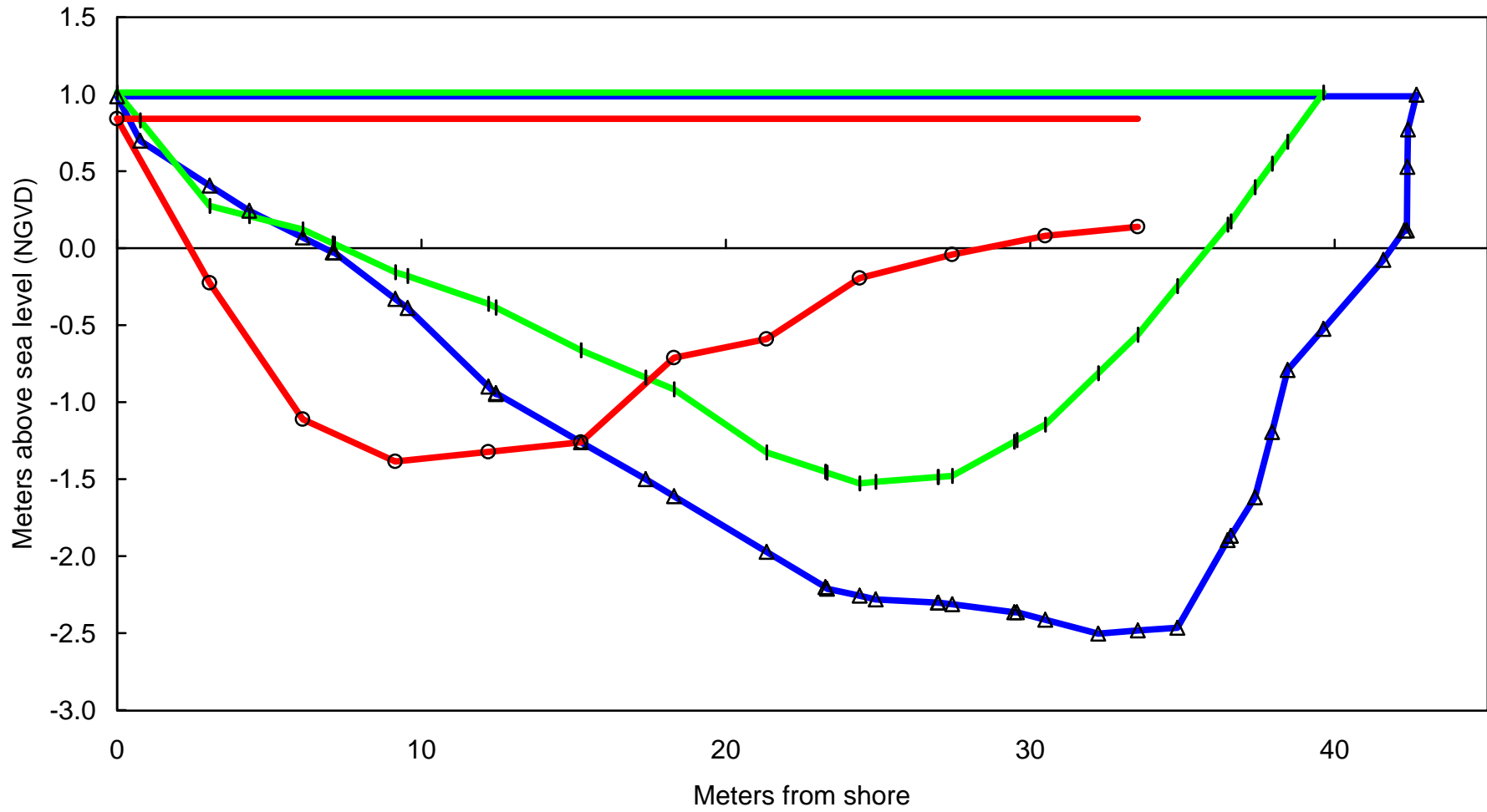
Oxbow 11, cross-section A



Oxbow 11, cross-section B



Oxbow 11, cross-section C



Oxbow 11D

X (m)	Depth (m)		Area (sq. m)		Elevation (m)		Water Surface (m)		X (ft)	Depth (ft)		X (m)	Depth (ft)	Depth (m)	BElev (m), WS (m)		
	1978	1996	1978	1996	1978	1996	1978	1996		1996	1996				2001	2001	2001
0.00	0.00	0.00	0.22	0.21	0.99	0.96	0.99	0.96		0	0.0	0	0.00	-1.00	-0.30	0.60	0.84
3.05	-0.29	-0.28	0.46	0.44	0.69	0.68	0.99	0.96		10	-0.9	10	3.05	-0.80	-0.24	-0.01	0.84
3.14	-0.30	-0.29	0.16	0.15	0.68	0.66	0.99	0.96		20	-2.3	20	6.10	-2.80	-0.85	0.14	0.84
4.08	-0.45	-0.42	0.67	0.62	0.53	0.54	0.99	0.96		30	-3.8	30	9.14	-2.30	-0.70	0.11	0.84
6.10	-0.58	-0.69	0.89	1.06	0.41	0.27	0.99	0.96		40	-5.0	40	12.19	-2.40	-0.73	0.17	0.84
7.17	-0.64	-0.86	0.39	0.52	0.35	0.10	0.99	0.96		50	-5.4	50	15.24	-2.20	-0.67	0.02	0.84
7.32	-0.63	-0.88	0.43	0.60	0.36	0.08	0.99	0.96		60	-4.3	60	18.29	-2.70	-0.82	0.14	0.84
8.55	-0.92	-1.07	0.57	0.66	0.06	-0.12	0.99	0.96		70	-2.8	70	21.34	-2.30	-0.70	-0.04	0.84
8.55	-0.92	-1.07	0.28	0.32	0.07	-0.12	0.99	0.96		80	-2.5	80	24.38	-2.90	-0.88	0.17	0.84
9.14	-1.03	-1.17	1.33	1.50	-0.04	-0.21	0.99	0.96		90	-2.2	90	27.43	-2.20	-0.67	0.23	0.84
11.12	-1.39	-1.40	2.12	2.13	-0.40	-0.44	0.99	0.96		100	-2.8	100	30.48	-2.00	-0.61	0.26	0.84
12.19	-1.64	-1.52	1.32	1.22	-0.66	-0.57	0.99	0.96		110	-3.9	110	33.53	-1.90	-0.58	0.20	0.84
12.73	-1.77	-1.55	2.70	2.36	-0.78	-0.59	0.99	0.96		120	-5.1	120	36.58	-2.10	-0.64	0.29	0.84
15.24	-1.97	-1.65	3.44	2.89	-0.98	-0.69	0.99	0.96		130	-5.0	130	39.62	-1.80	-0.55	0.14	0.84
16.23	-2.05	-1.54	1.07	0.81	-1.06	-0.59	0.99	0.96		140	-3.6	140	42.67	-2.30	-0.70	0.41	0.84
16.29	-2.05	-1.54	2.11	1.59	-1.06	-0.58	0.99	0.96		150	-2.2	150	45.72	-1.40	-0.43	0.84	0.84
18.29	-2.14	-1.32	3.37	2.08	-1.15	-0.36	0.99	0.96		160	-0.8						
19.44	-2.19	-1.15	3.34	1.75	-1.20	-0.19	0.99	0.96									
21.34	-2.23	-0.86	3.74	1.45	-1.24	0.09	0.99	0.96									
22.80	-2.26	-0.81	3.44	1.24	-1.27	0.14	0.99	0.96									
24.38	-2.28	-0.76	1.92	0.64	-1.29	0.20	0.99	0.96									
24.48	-2.28	-0.76	3.28	1.09	-1.30	0.20	0.99	0.96									
27.26	-2.12	-0.67	3.13	0.99	-1.13	0.29	0.99	0.96									
27.43	-2.10	-0.66	3.39	1.07	-1.12	0.30	0.99	0.96									
30.48	-1.88	-0.84	5.74	2.55	-0.90	0.12	0.99	0.96									
33.53	-1.66	-1.19	5.05	3.63	-0.67	-0.24	0.99	0.96									
36.56	-1.44	-1.55	2.20	2.36	-0.45	-0.59	0.99	0.96									
36.58	-1.44	-1.55	2.04	2.20	-0.45	-0.59	0.99	0.96									
39.39	-1.34	-1.53	2.04	2.33	-0.35	-0.57	0.99	0.96									
39.62	-1.33	-1.52	1.20	1.37	-0.34	-0.57	0.99	0.96									
41.20	-1.25	-1.30	1.78	1.85	-0.26	-0.34	0.99	0.96									
42.47	-1.10	-1.12	0.81	0.83	-0.11	-0.16	0.99	0.96									
42.67	-1.06	-1.09	0.96	0.99	-0.07	-0.13	0.99	0.96									
44.29	-0.68	-0.86	0.88	1.11	0.31	0.09	0.99	0.96									
45.25	-0.43	-0.73	0.31	0.52	0.56	0.23	0.99	0.96									
45.72	-0.29	-0.66	0.13	0.29	0.70	0.30	0.99	0.96									
46.11	-0.17	-0.61	0.04	0.14	0.81	0.35	0.99	0.96									
46.17	-0.17	-0.60	0.10	0.34	0.81	0.36	0.99	0.96									
47.24	0.00	-0.46	0.05	0.59	0.98	0.50	0.99	0.96									
48.77		-0.25		0.08		0.70	0.99	0.96									

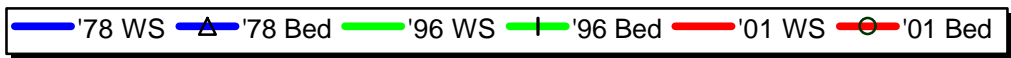
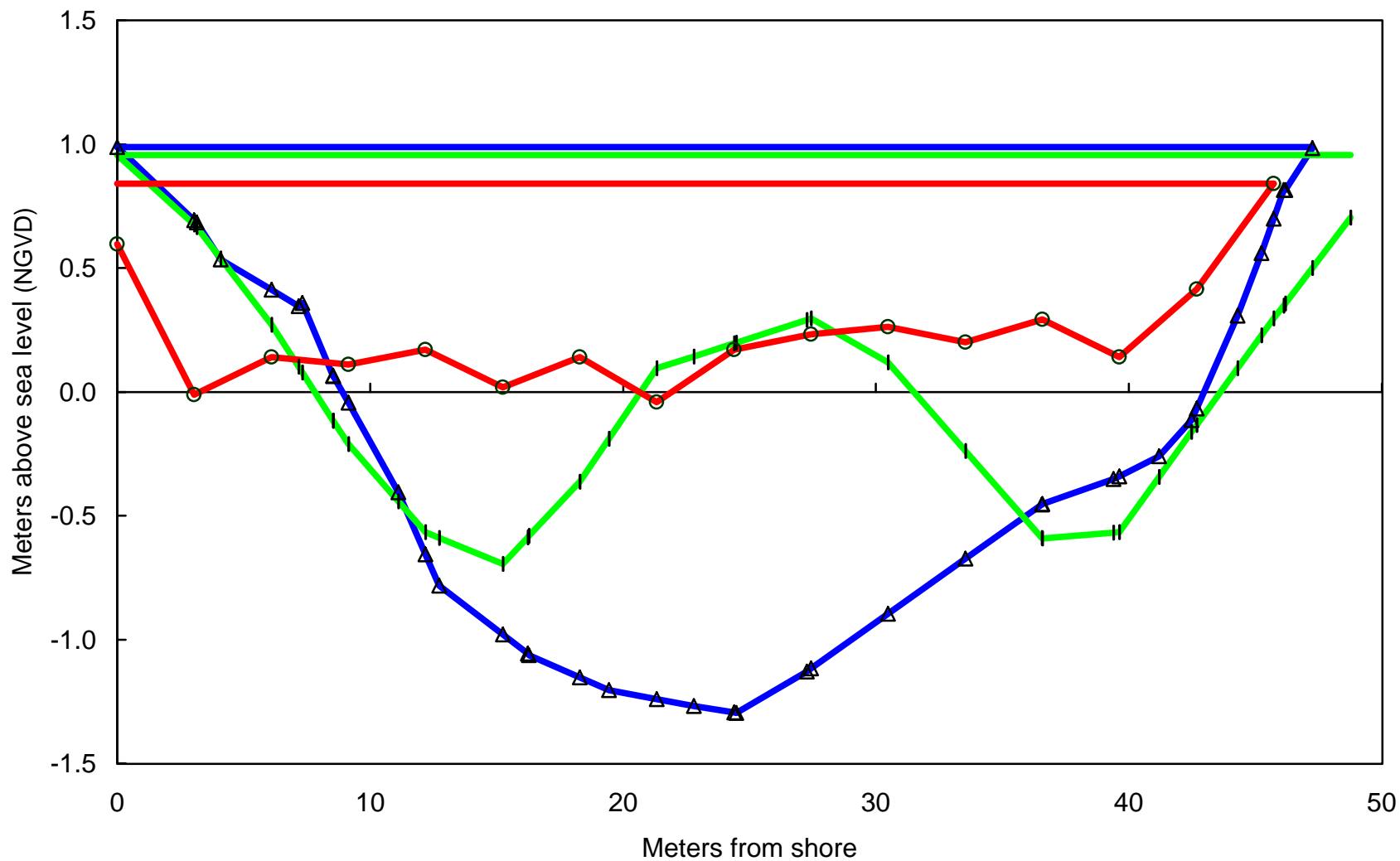
Franklin Lock upstream
water surface elevation (ft)

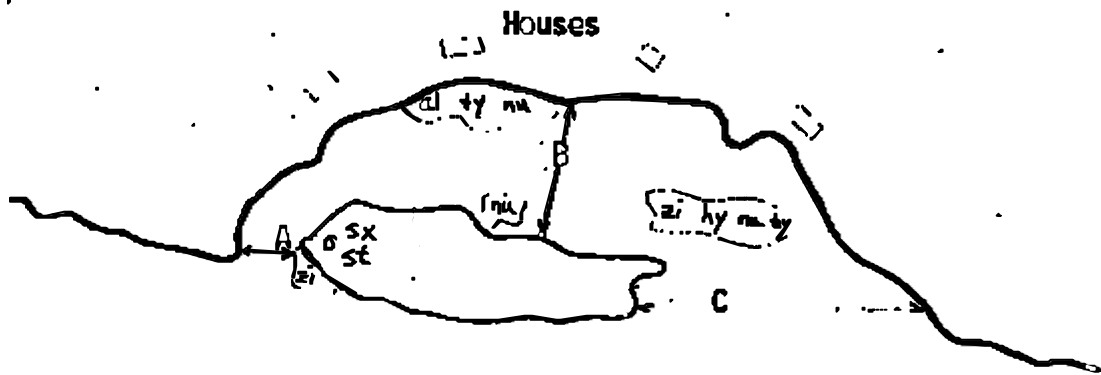
February 14, 1978	3.24	0.98755
January 20, 1996	3.14	0.95707
April 25, 2001	2.76	0.84125

1978	1996	Change
67	49	-28%

Total Area

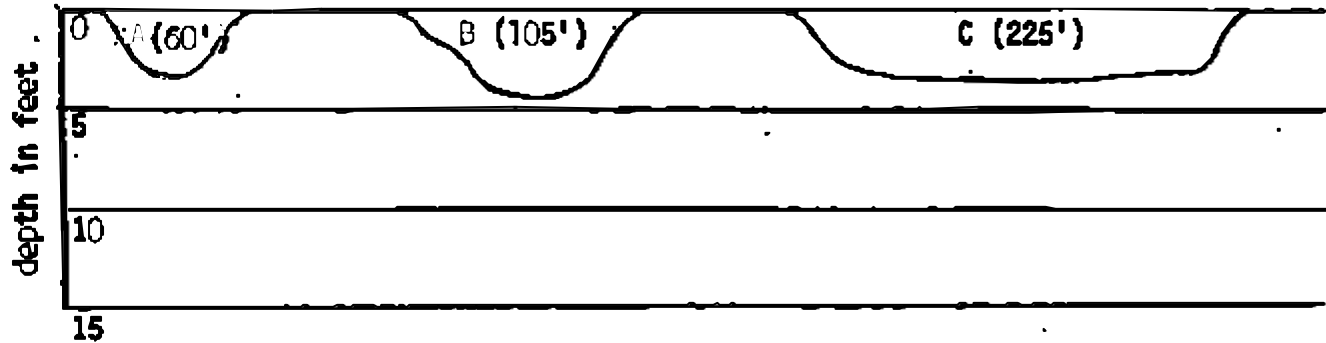
Oxbow 11, cross-section D



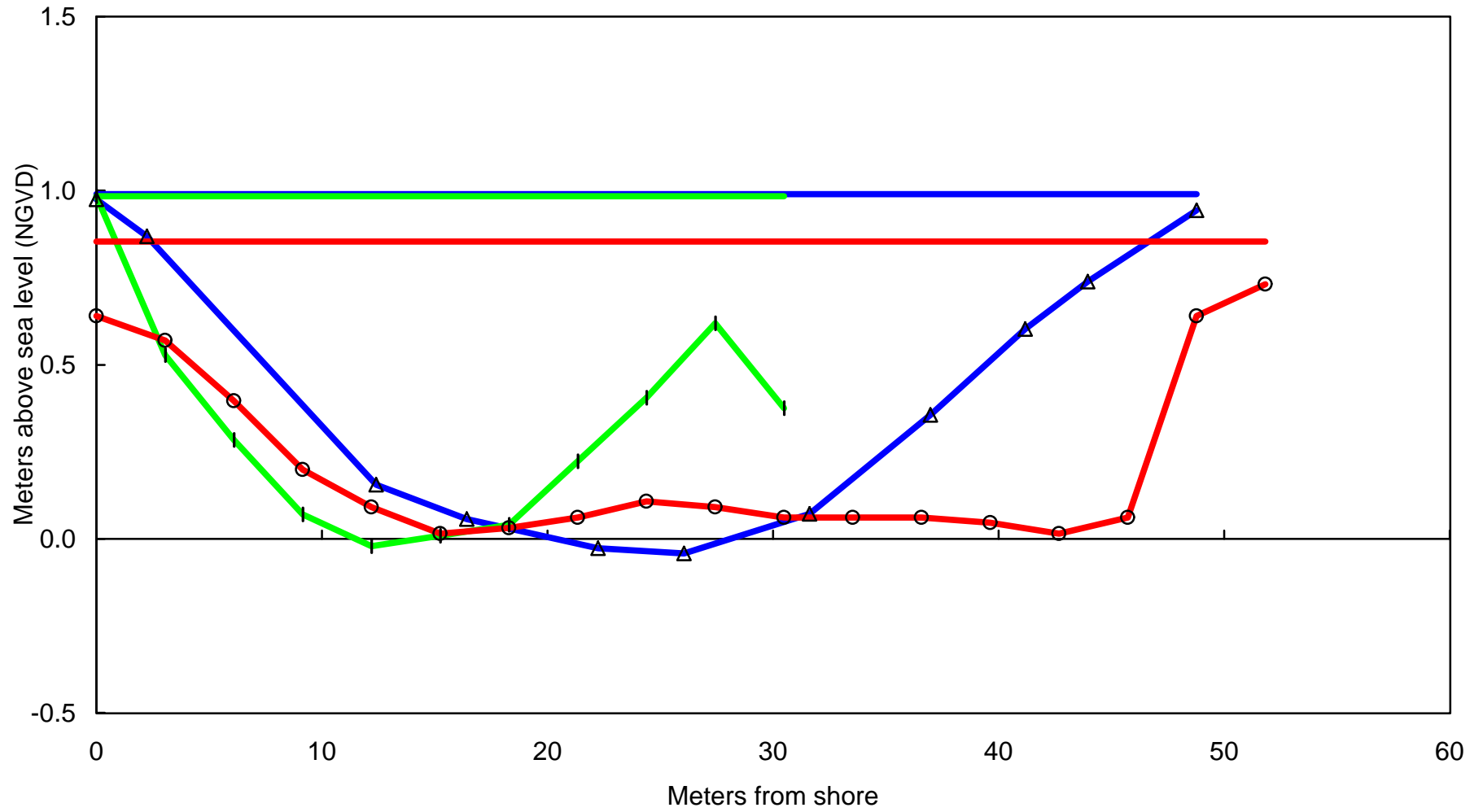


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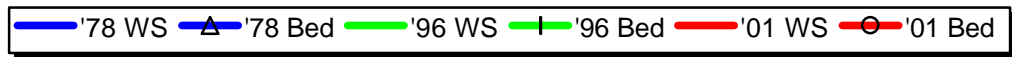
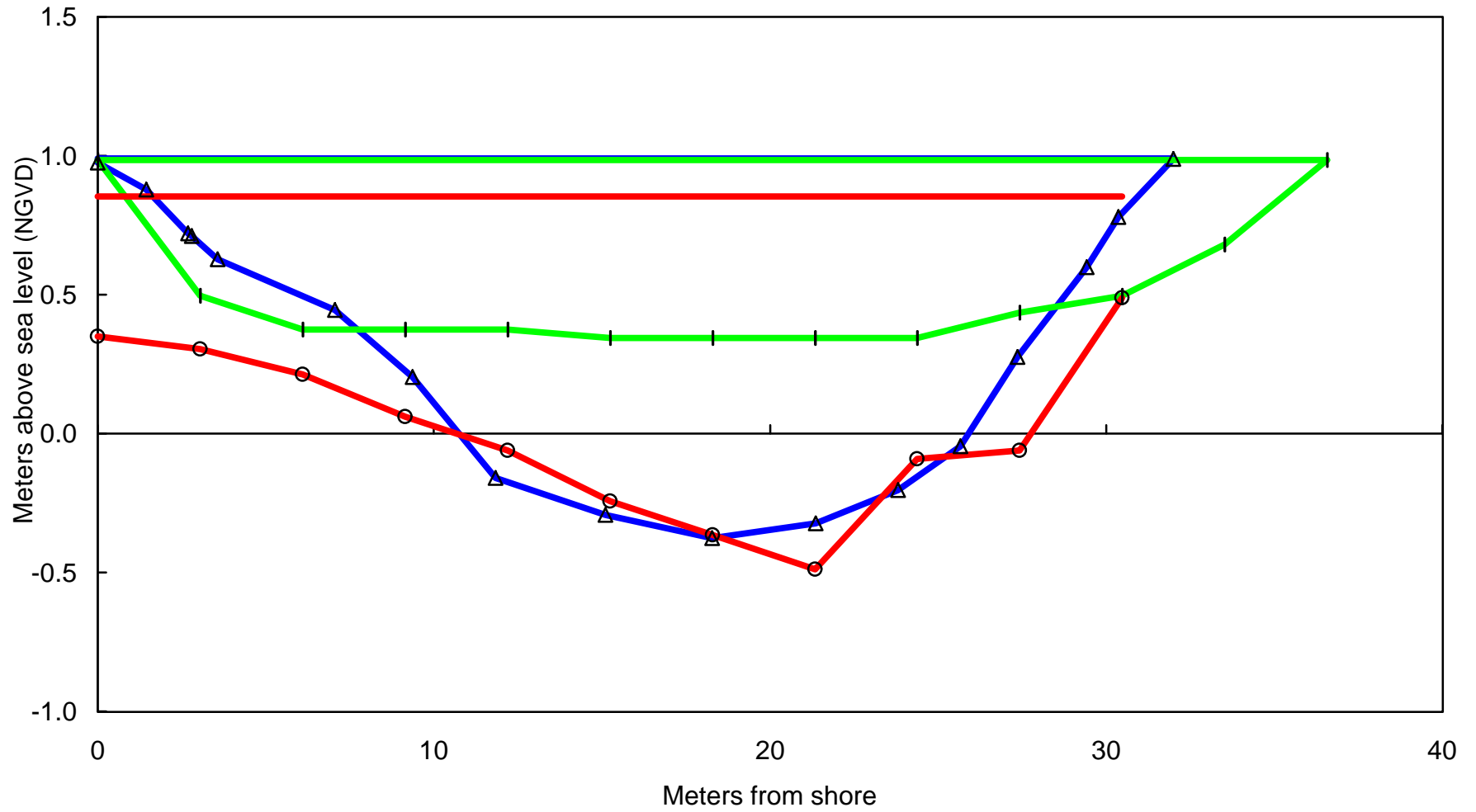


Oxbow 12, cross-section A

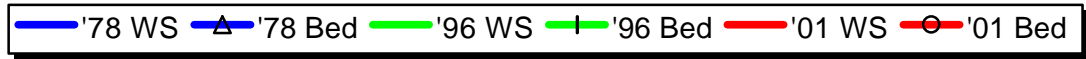
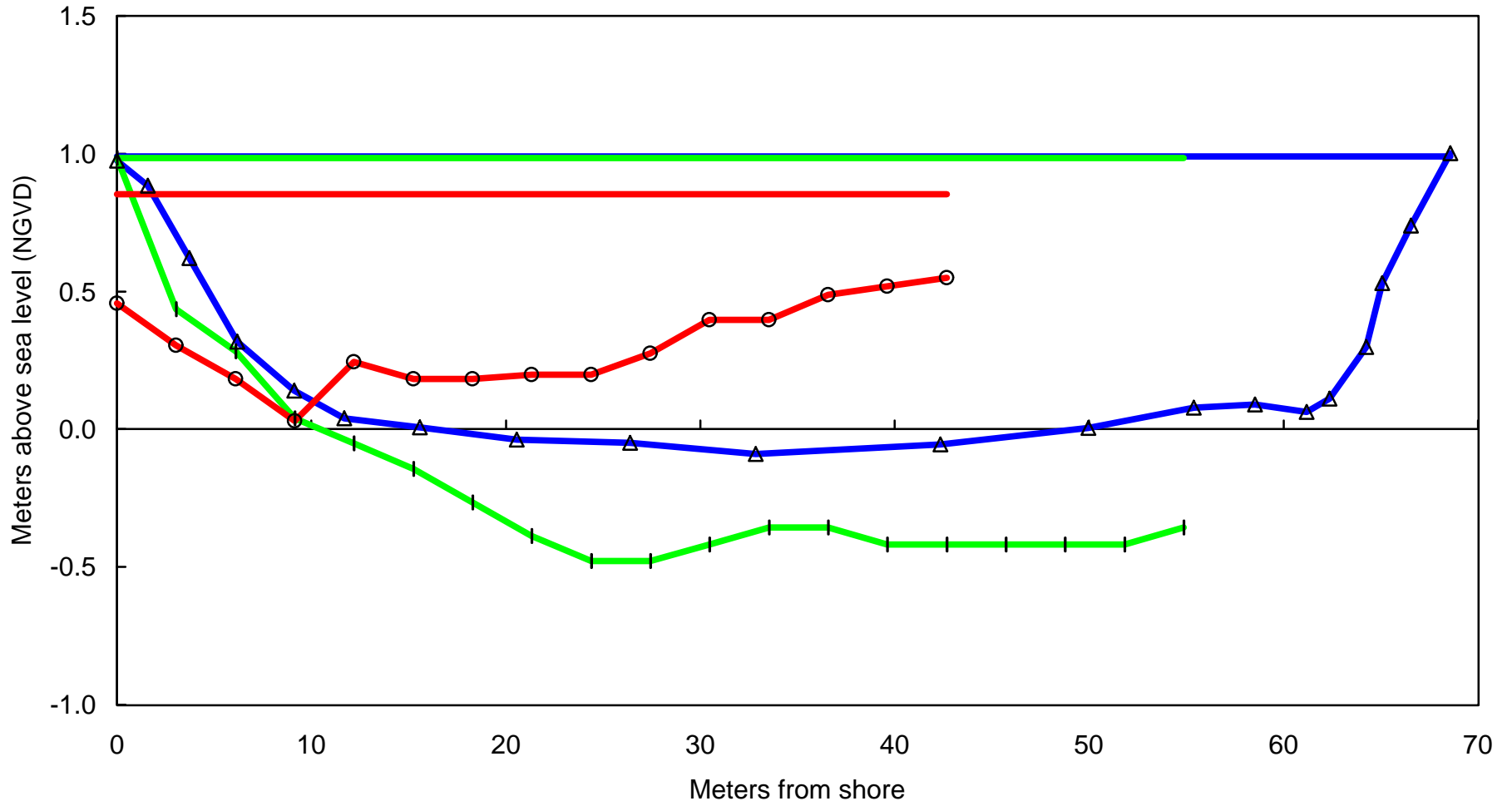


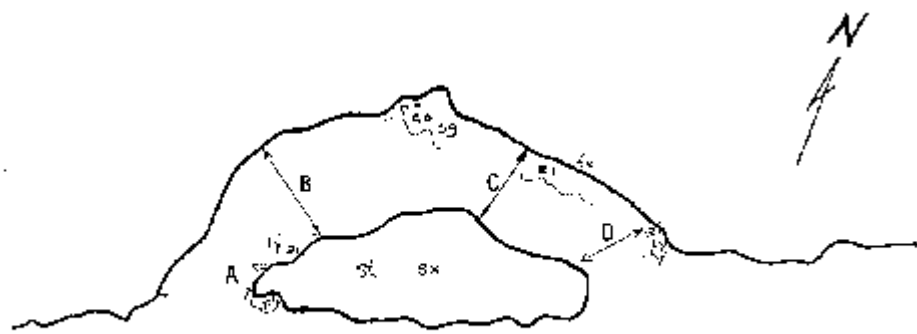
'78 WS '78 Bed '96 WS '96 Bed '01 WS '01 Bed

Oxbow 12, cross-section B



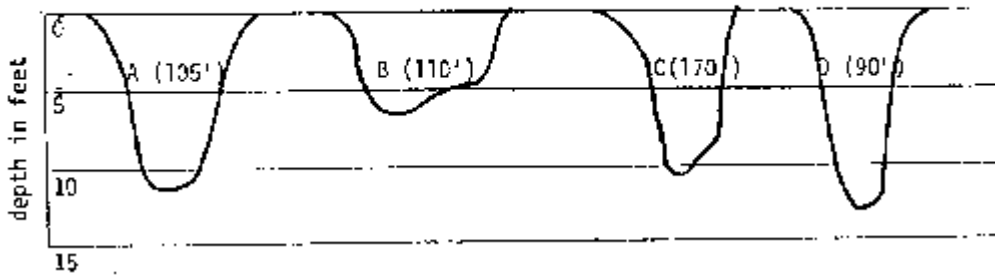
Oxbow 12, cross-section C



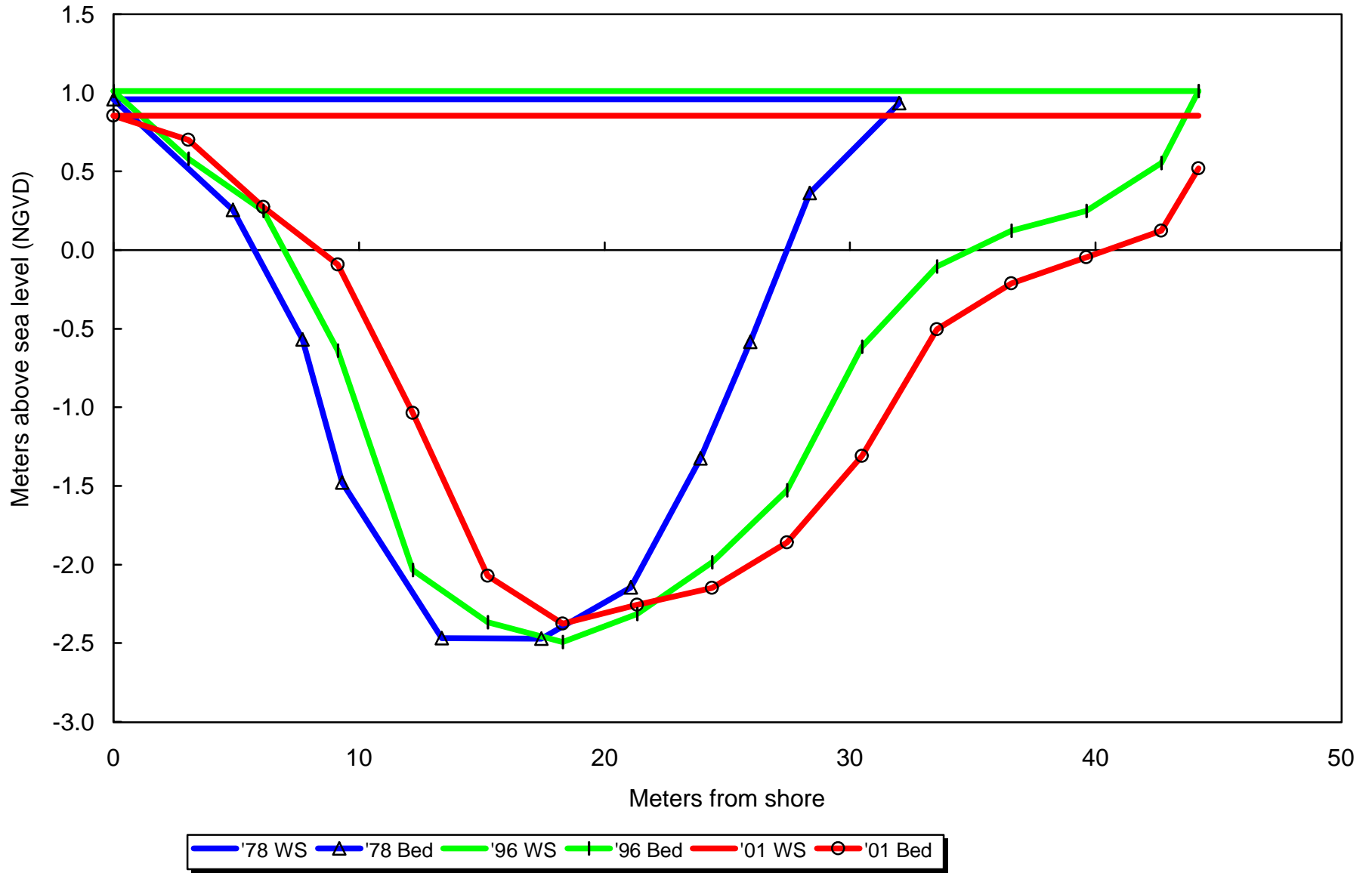


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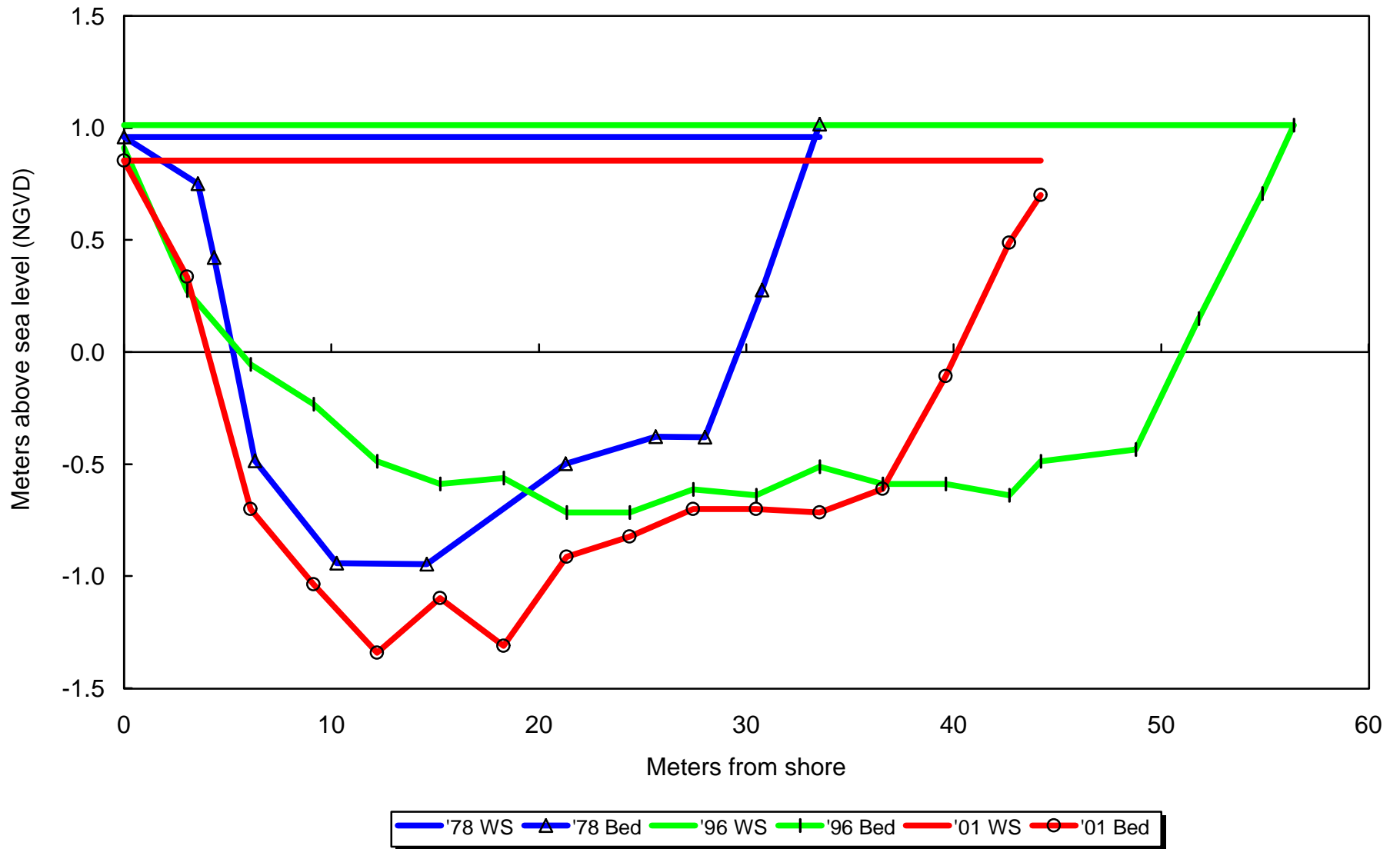
DEPTH PROFILES



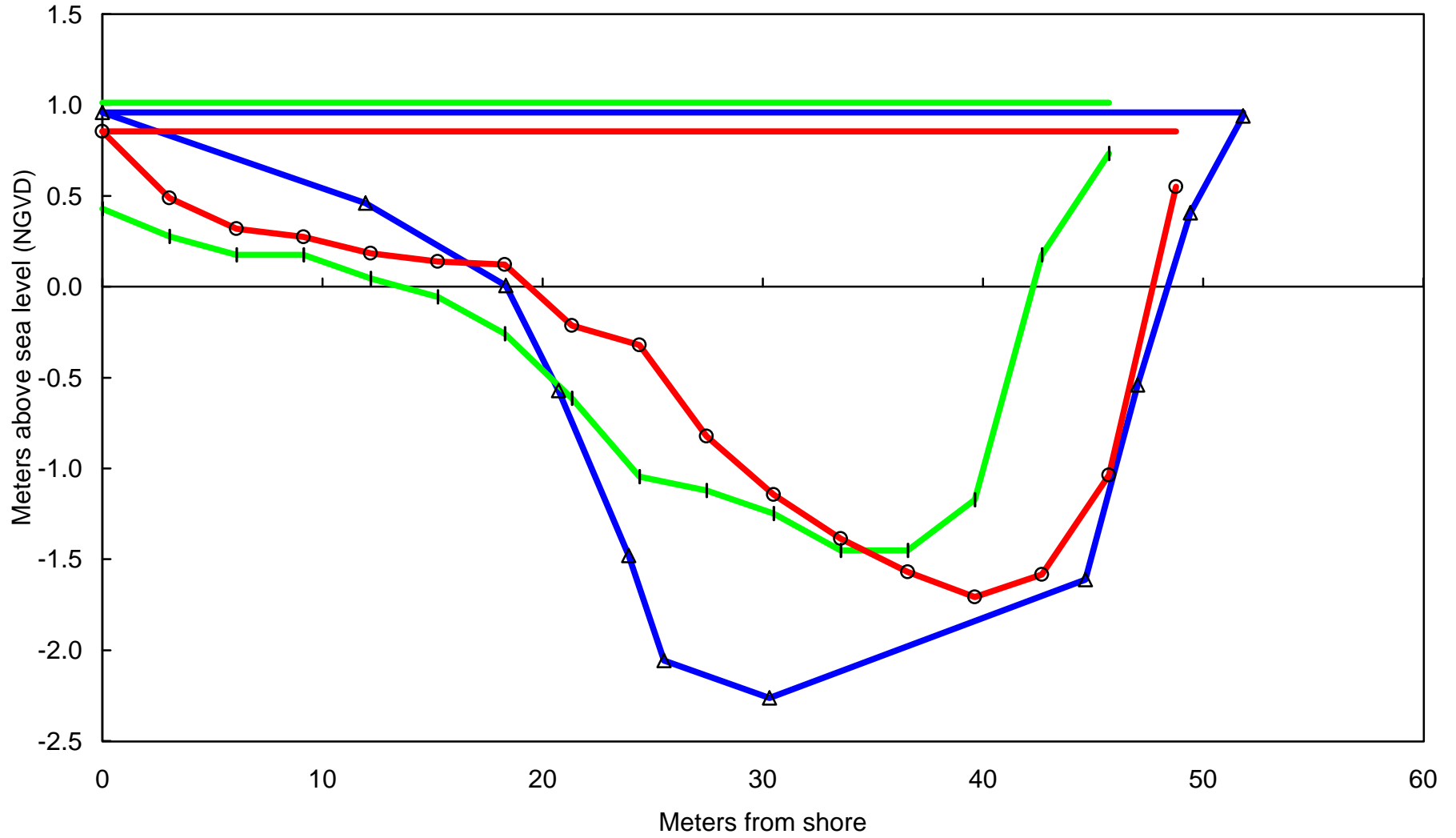
Oxbow 15, cross-section A



Oxbow 15, cross-section B

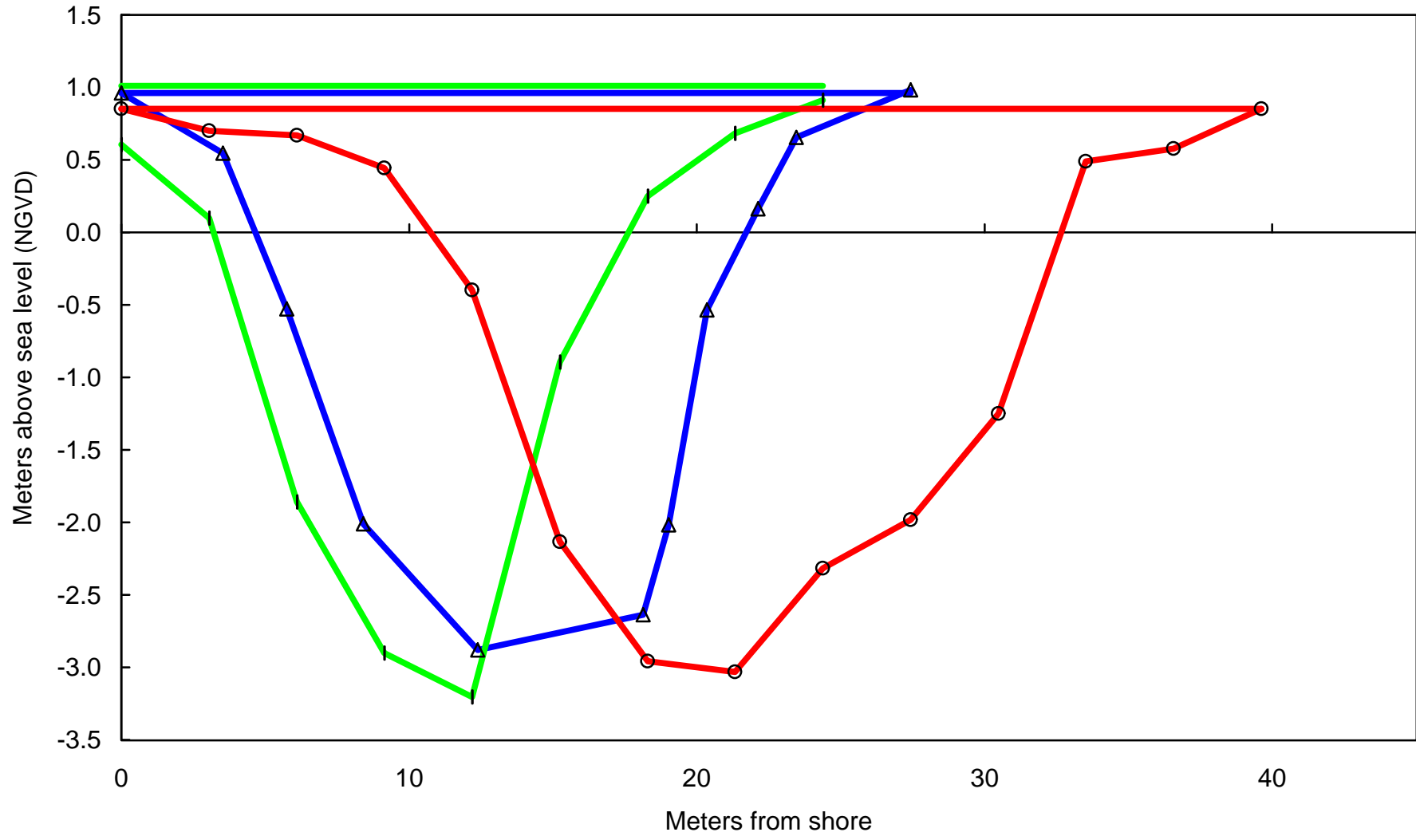


Oxbow 15, cross-section C

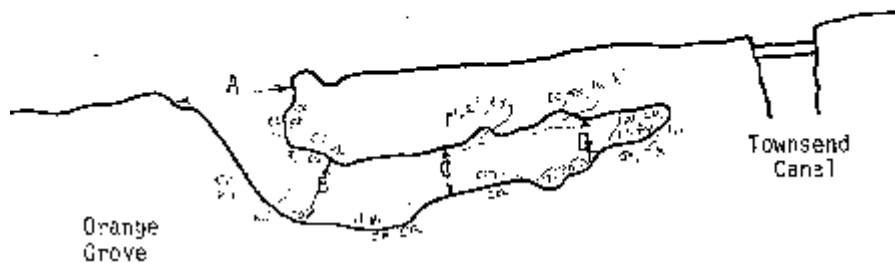


'78 WS '78 Bed '96 WS '96 Bed '01 WS '01 Bed

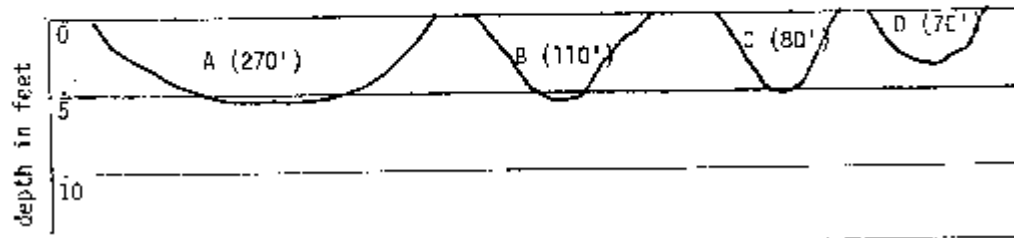
Oxbow 15, cross-section D



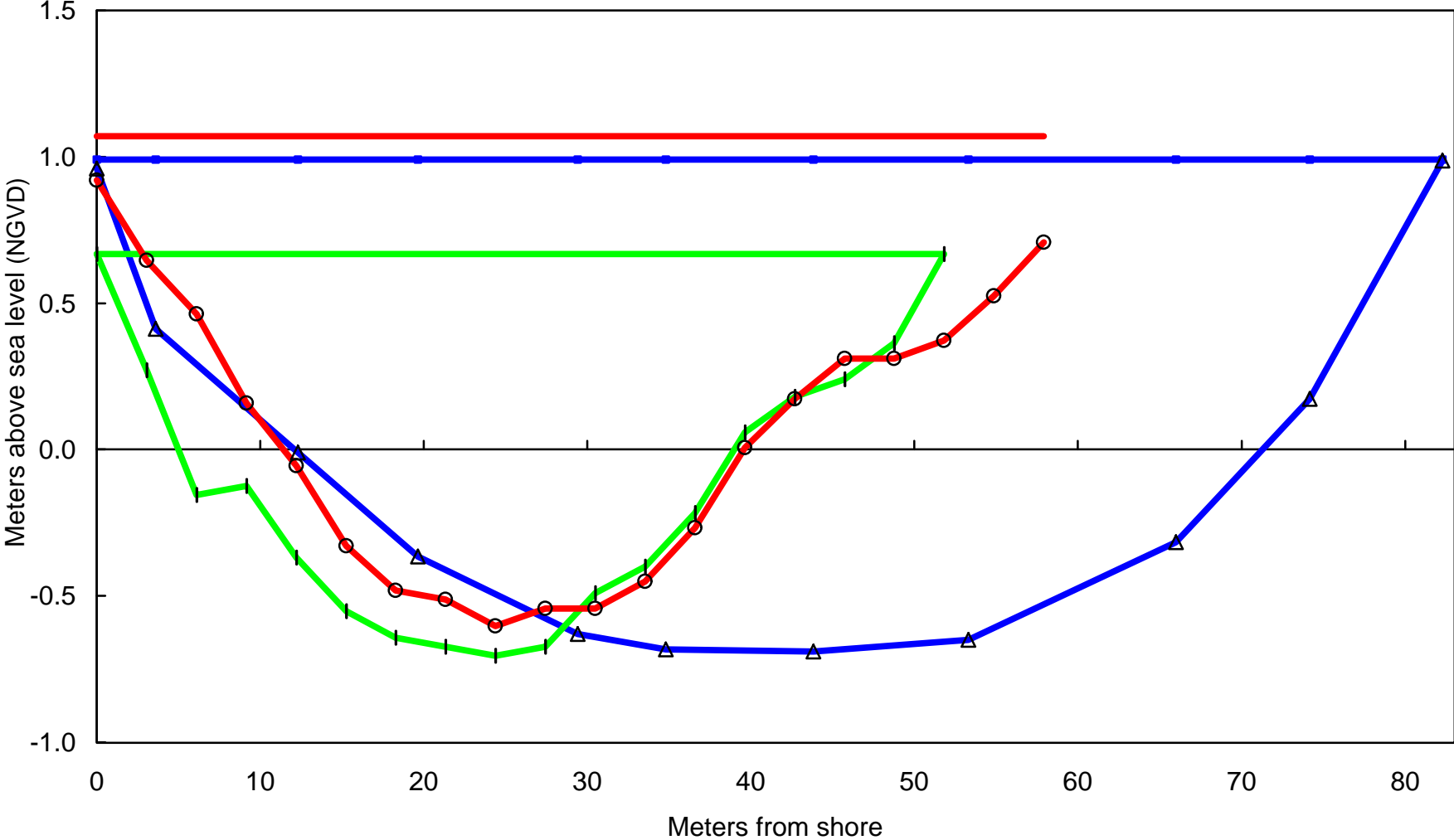
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DEPTH PROFILES

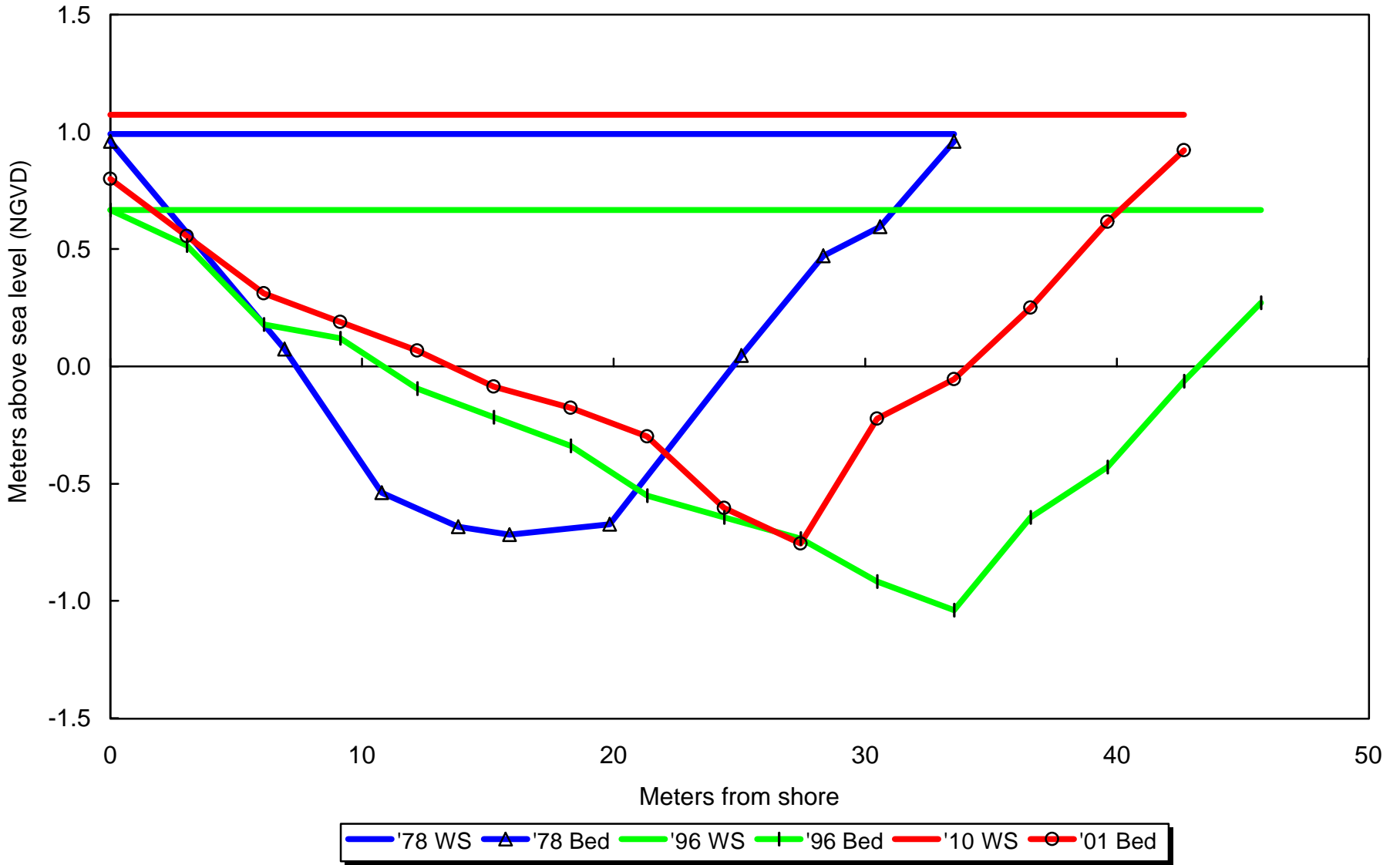


Oxbow 18, cross-section A

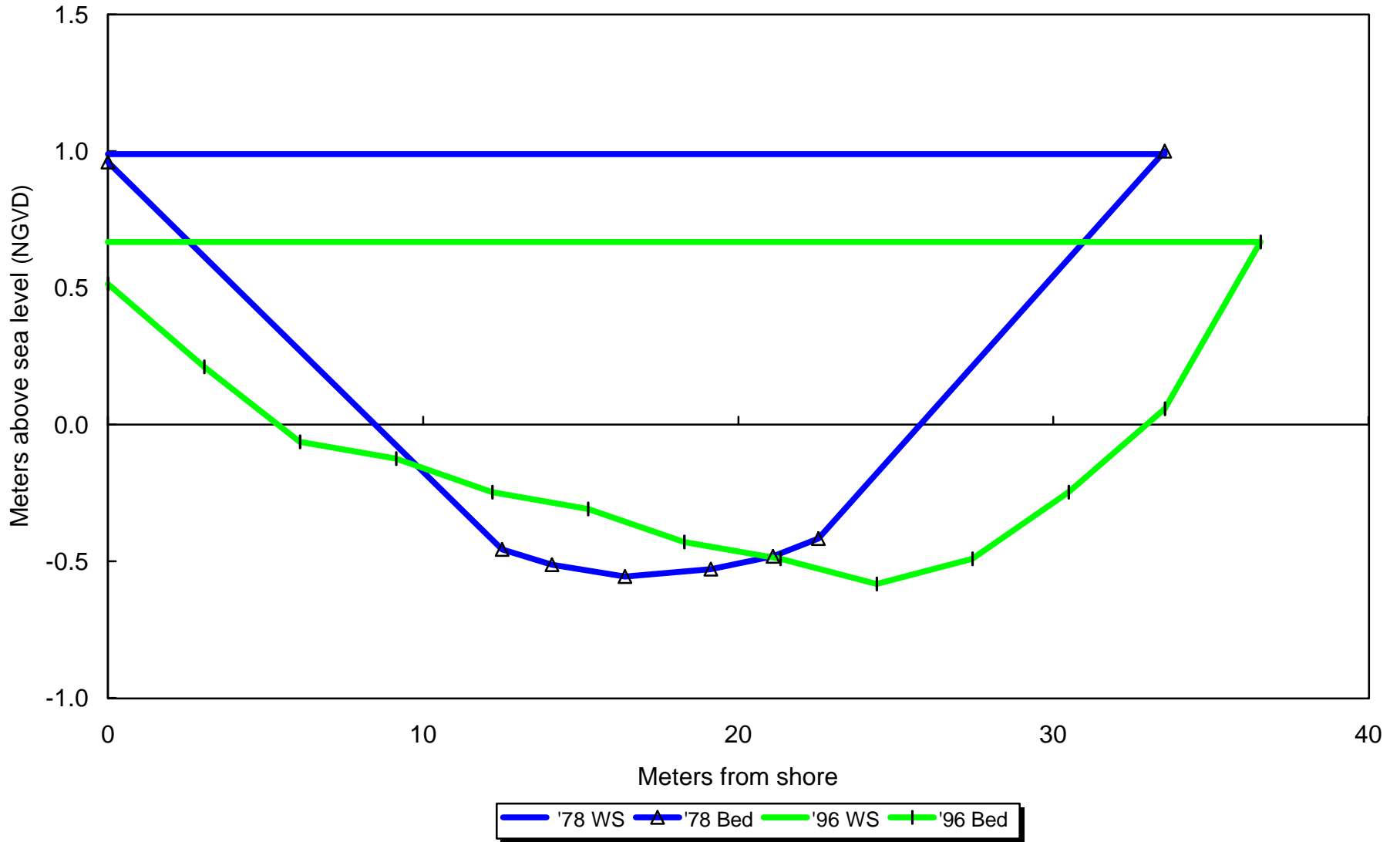


'78 WS '78 Bed '96 WS '96 Bed '01 WS '01 Bed

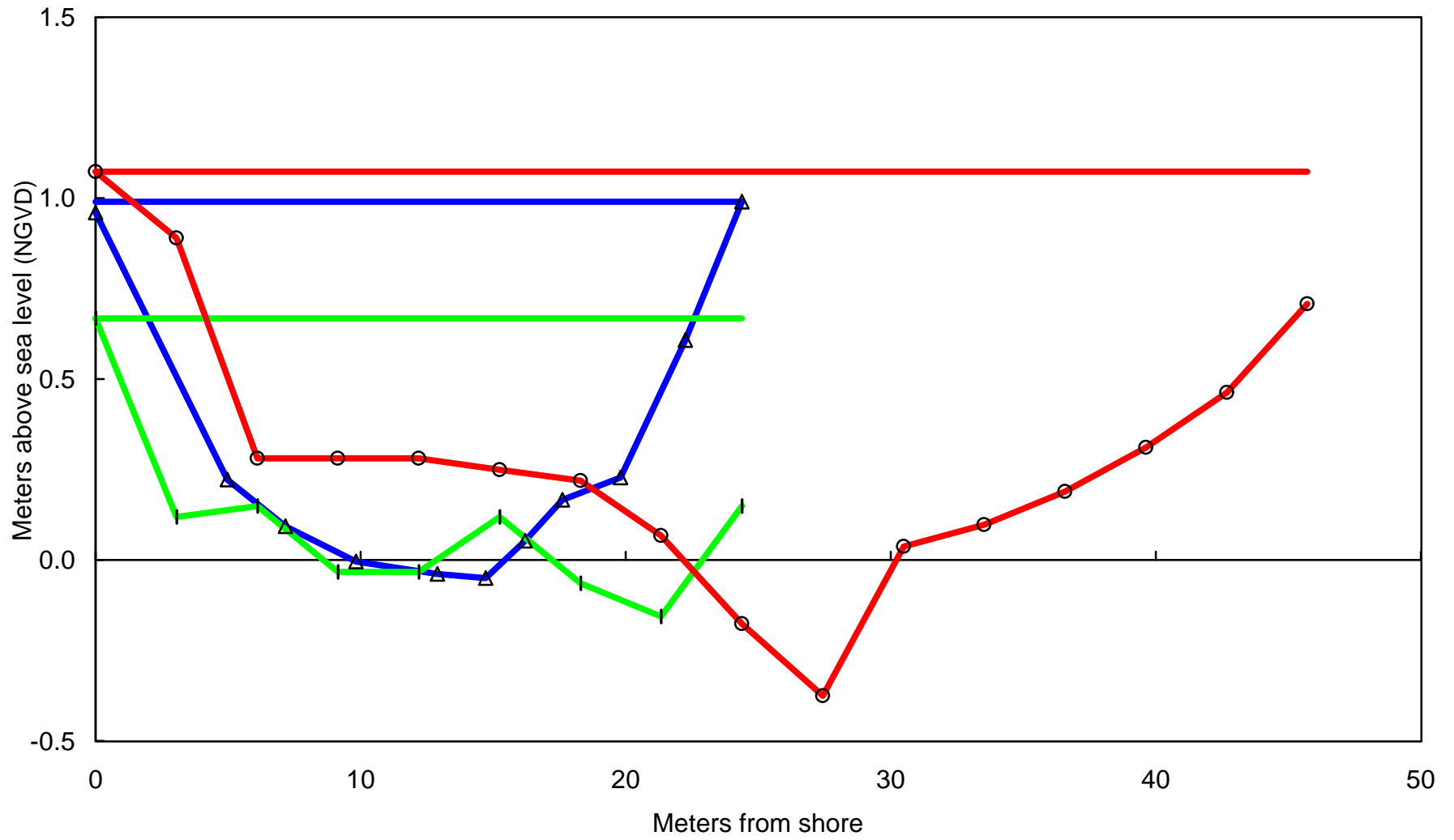
Oxbow 18, cross-section B



Oxbow 18, cross-section C

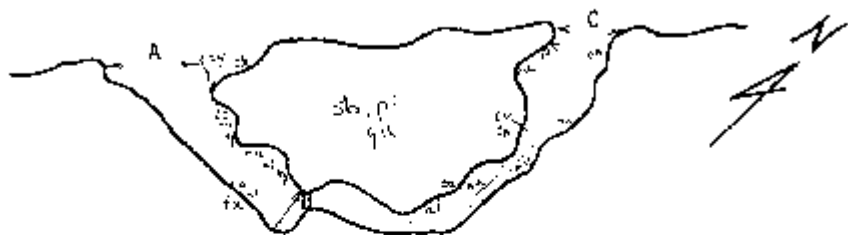


Oxbow 18, cross-section D

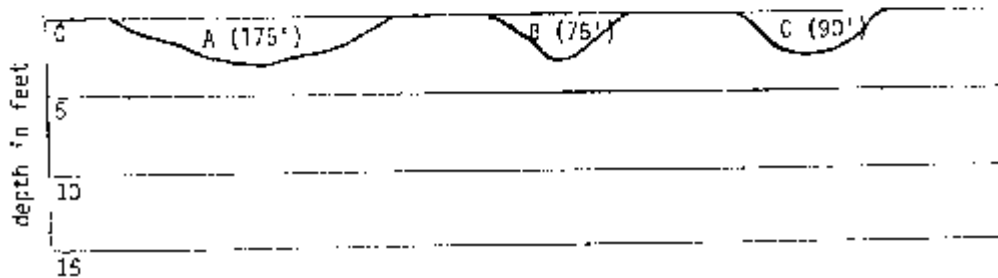


'78 WS '78 Bed '96 WS '96 Bed '01 WS '01 Bed

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DEPTH PROFILES



Oxbow 24A

X (m)	Depth (m)		Area (sq. m)		Elevation (m)		Water Surface (m)		X (ft)	Depth (ft)		X (ft)	X (m)		Depth (ft)		Depth (m)		BElev (m)		WS (m)	
	1978	1996	1978	1996	1978	1996	1978	1996		1996	1996		2001	2001	2001	2001	2001	2001	2001	2001		
0	0.00	0.00	0.16	0.21	0.96	1.03	0.96	1.03		0	0.0		0	0.00	0.00	0.00	0.84	0.84				
3.048	-0.21	-0.27	0.34	0.45	0.75	0.75	0.96	1.03		10	-0.9		10	3.05	-1.20	-0.37	0.48	0.84				
3.2654	-0.22	-0.29	0.34	0.43	0.74	0.74	0.96	1.03		20	-1.4		20	6.10	-2.30	-0.70	0.14	0.84				
6.096	-0.33	-0.43	0.75	0.98	0.63	0.60	0.96	1.03		30	-1.5		30	9.14	-2.50	-0.76	0.08	0.84				
7.862	-0.39	-0.44	0.60	0.68	0.57	0.58	0.96	1.03		40	-2.0		40	12.19	-1.75	-0.53	0.31	0.84				
9.144	-0.43	-0.46	0.93	0.99	0.53	0.57	0.96	1.03		50	-2.5		50	15.24	-1.50	-0.46	0.38	0.84				
12.192	-0.52	-0.61	0.80	0.94	0.44	0.42	0.96	1.03		60	-3.5		60	18.29	-0.80	-0.24	0.60	0.84				
12.224	-0.52	-0.61	0.02	0.03	0.44	0.42	0.96	1.03		70	-3.8		70	21.34	-0.80	-0.24	0.60	0.84				
12.282	-0.52	-0.61	0.79	0.93	0.44	0.41	0.96	1.03		80	-3.9		80	24.38	-0.30	-0.09	0.75	0.84				
15.24	-0.69	-0.76	1.58	1.74	0.27	0.27	0.96	1.03		90	-4.0											
16.856	-0.78	-0.92	1.19	1.41	0.18	0.10	0.96	1.03		100	-4.0											
18.288	-0.81	-1.07	0.92	1.21	0.15	-0.04	0.96	1.03		110	-4.1											
19.122	-0.83	-1.09	1.26	1.66	0.13	-0.06	0.96	1.03		120	-3.9											
21.336	-0.88	-1.16	1.20	1.58	0.08	-0.13	0.96	1.03		130	-3.0											
21.855	-0.89	-1.16	0.24	0.32	0.07	-0.14	0.96	1.03		140	-2.2											
21.884	-0.89	-1.16	1.13	1.47	0.07	-0.14	0.96	1.03		150	-1.6											
24.384	-0.93	-1.19	1.92	2.45	0.03	-0.16	0.96	1.03		160	-1.4											
26.009	-0.96	-1.20	1.46	1.84	0.00	-0.18	0.96	1.03		170	-1.4											
27.432	-0.95	-1.22	1.66	2.12	0.01	-0.19	0.96	1.03		180	-1.3											
29.491	-0.95	-1.22	0.99	1.27	0.01	-0.19	0.96	1.03		190	0.0											
29.52	-0.95	-1.22	0.47	0.60	0.01	-0.19	0.96	1.03														
30.48	-0.91	-1.22	1.61	2.15	0.05	-0.19	0.96	1.03	X (ft)													
33.051	-0.81	-1.24	1.24	1.90	0.15	-0.22	0.96	1.03		1978	1978											
33.528	-0.80	-1.25	1.42	2.20	0.16	-0.22	0.96	1.03														
36.576	-0.75	-1.19	1.88	2.97	0.21	-0.16	0.96	1.03		0	0.0											
38.53	-0.72	-1.01	0.72	1.02	0.24	0.01	0.96	1.03		11	-0.7											
38.588	-0.72	-1.01	0.39	0.55	0.24	0.02	0.96	1.03		26	-1.3											
39.624	-0.70	-0.91	1.25	1.64	0.26	0.11	0.96	1.03		40	-1.7											
42.182	-0.65	-0.71	0.85	0.94	0.31	0.32	0.96	1.03		40	-1.7											
42.269	-0.65	-0.70	0.16	0.17	0.31	0.32	0.96	1.03		55	-2.6											
42.672	-0.63	-0.67	1.08	1.16	0.33	0.36	0.96	1.03		63	-2.7											
45.72	-0.49	-0.49	1.49	1.49	0.47	0.54	0.96	1.03		72	-2.9											
48.768	-0.35	-0.43	0.55	0.67	0.61	0.60	0.96	1.03		72	-2.9											
48.865	-0.34	-0.43	0.03	0.03	0.62	0.60	0.96	1.03		85	-3.1											
48.923	-0.34	-0.43	0.51	0.63	0.62	0.60	0.96	1.03		97	-3.1											
51.816	-0.12	-0.43	0.26	0.94	0.84	0.60	0.96	1.03		97	-3.1											
53.34	0.00	-0.41	0.04	0.63	0.96	0.62	0.96	1.03		108	-2.7											
54.864		-0.40		0.91		0.63	0.96	1.03		126	-2.4											
57.912		0.00		0.30		1.03	0.96	1.03		127	-2.4											
										138	-2.1											
										139	-2.1											
										160	-1.1											
										161	-1.1											
										175	0.0											
			1978	1996	Change																	
Total Area			32	44	35%																	

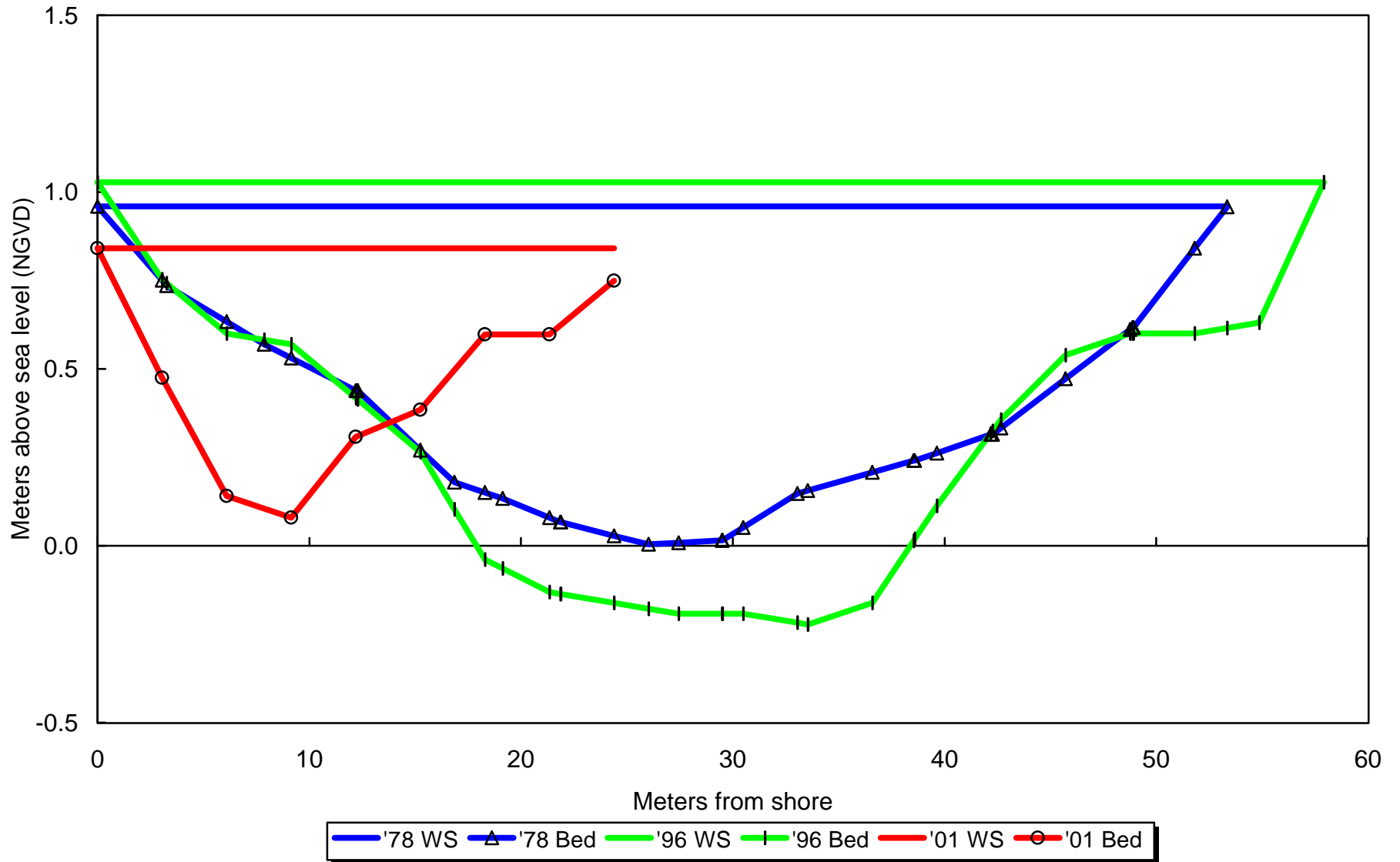
Franklin Lock upstream
water surface elevation (ft)

March 29, 1978
February 11, 1996
April 25, 2001

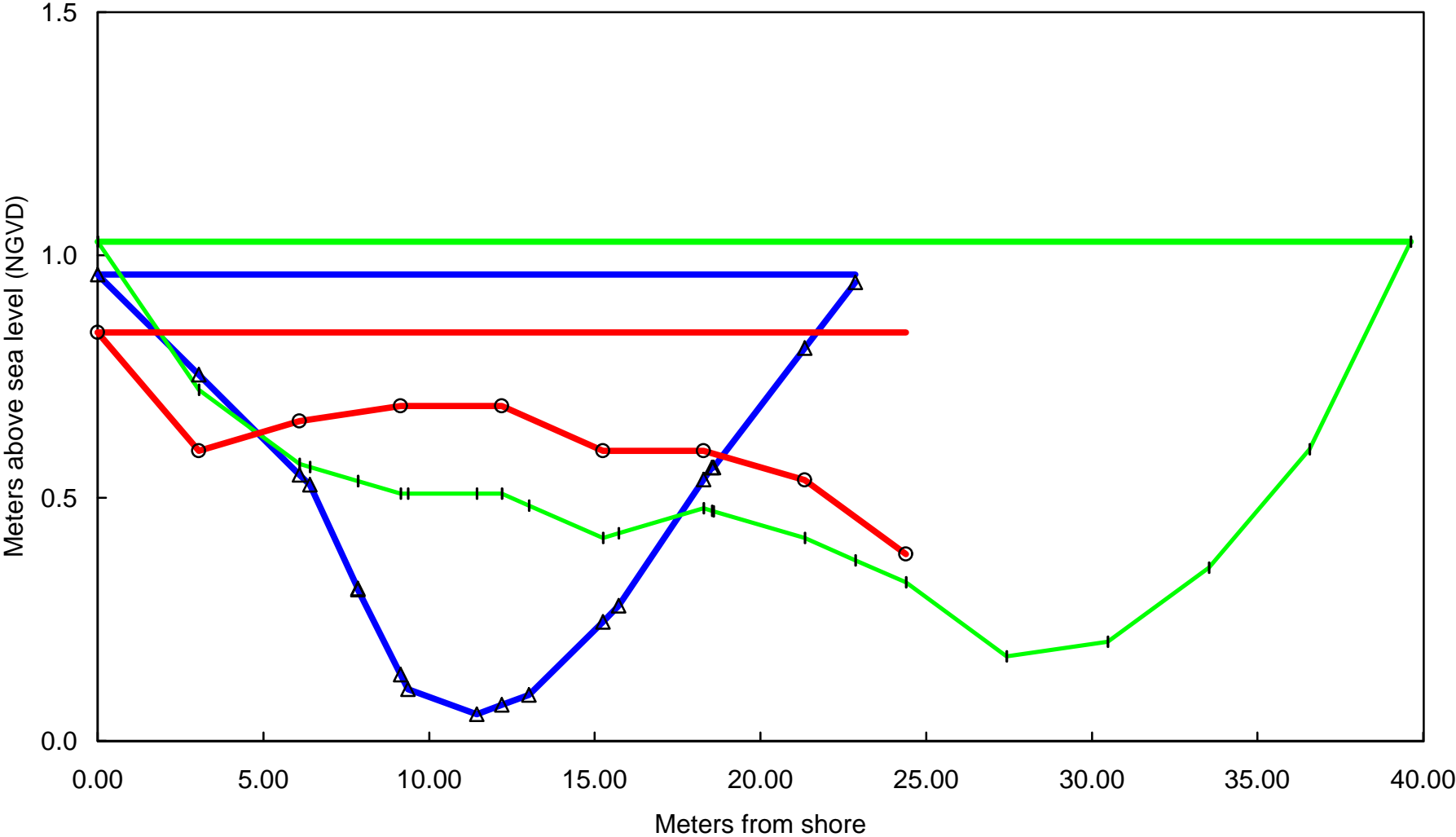
3.15
3.37
2.76

0.9601
1.0272
0.8412

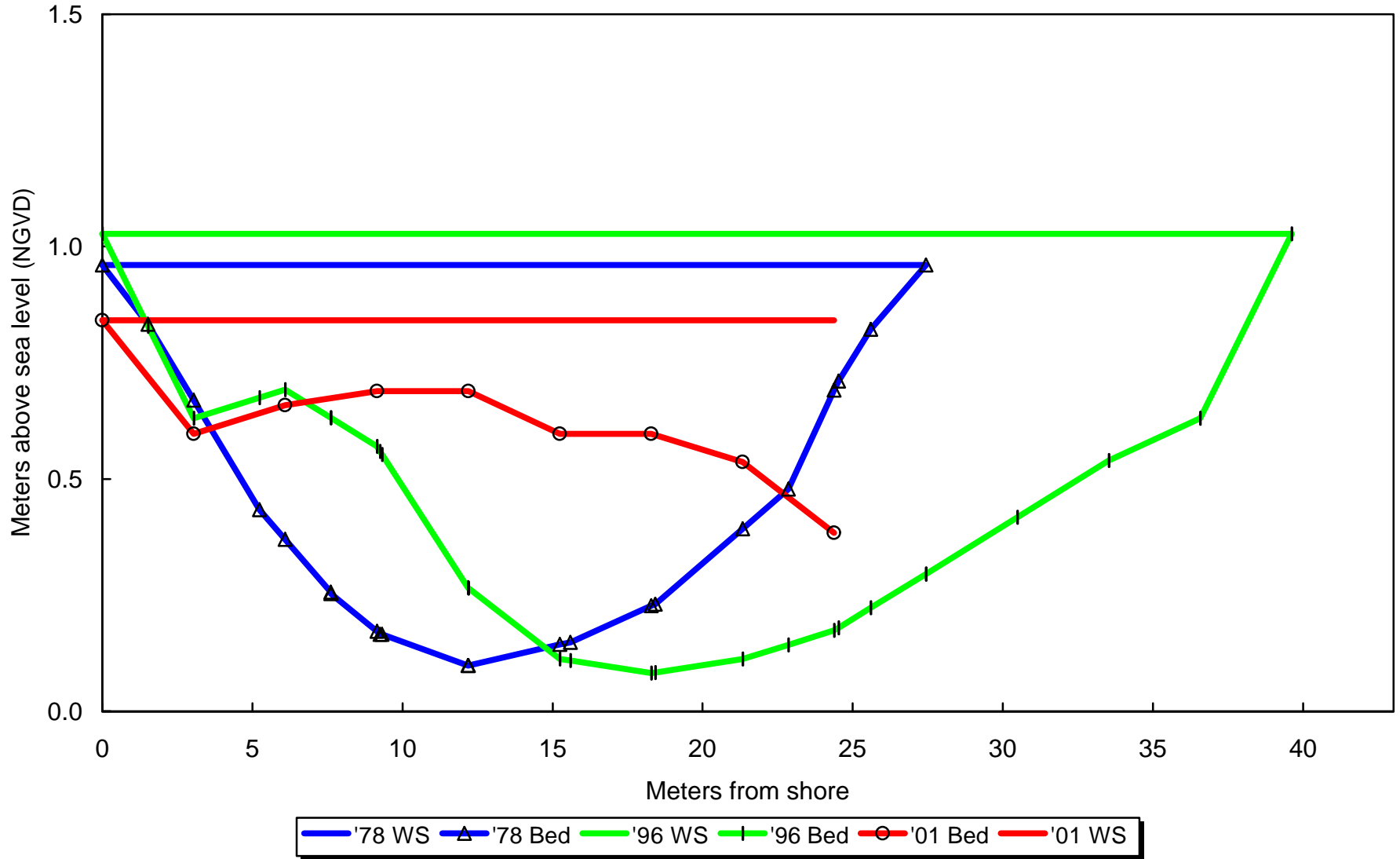
Oxbow 24, cross-section A

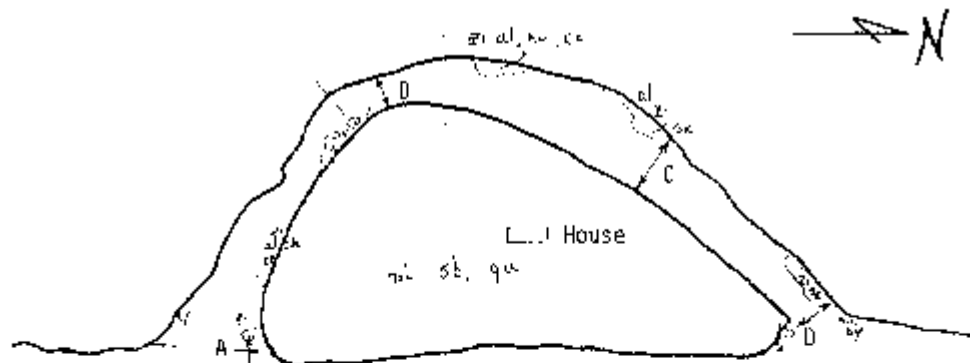


Oxbow 24, cross-section B



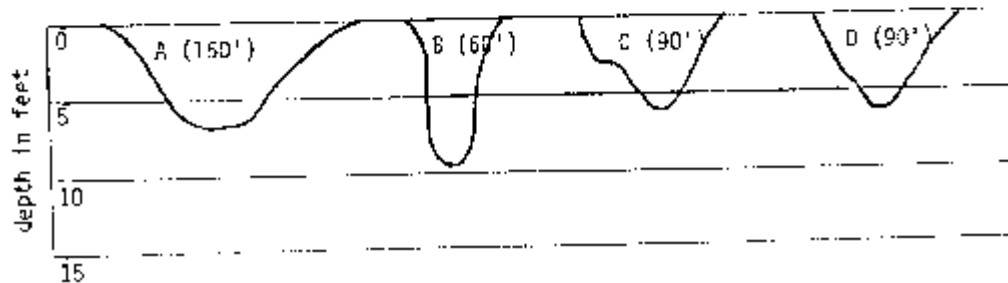
Oxbow 24, cross-section C





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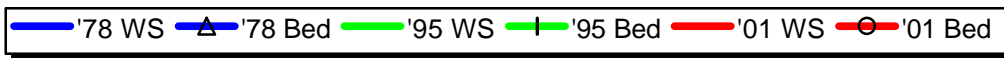
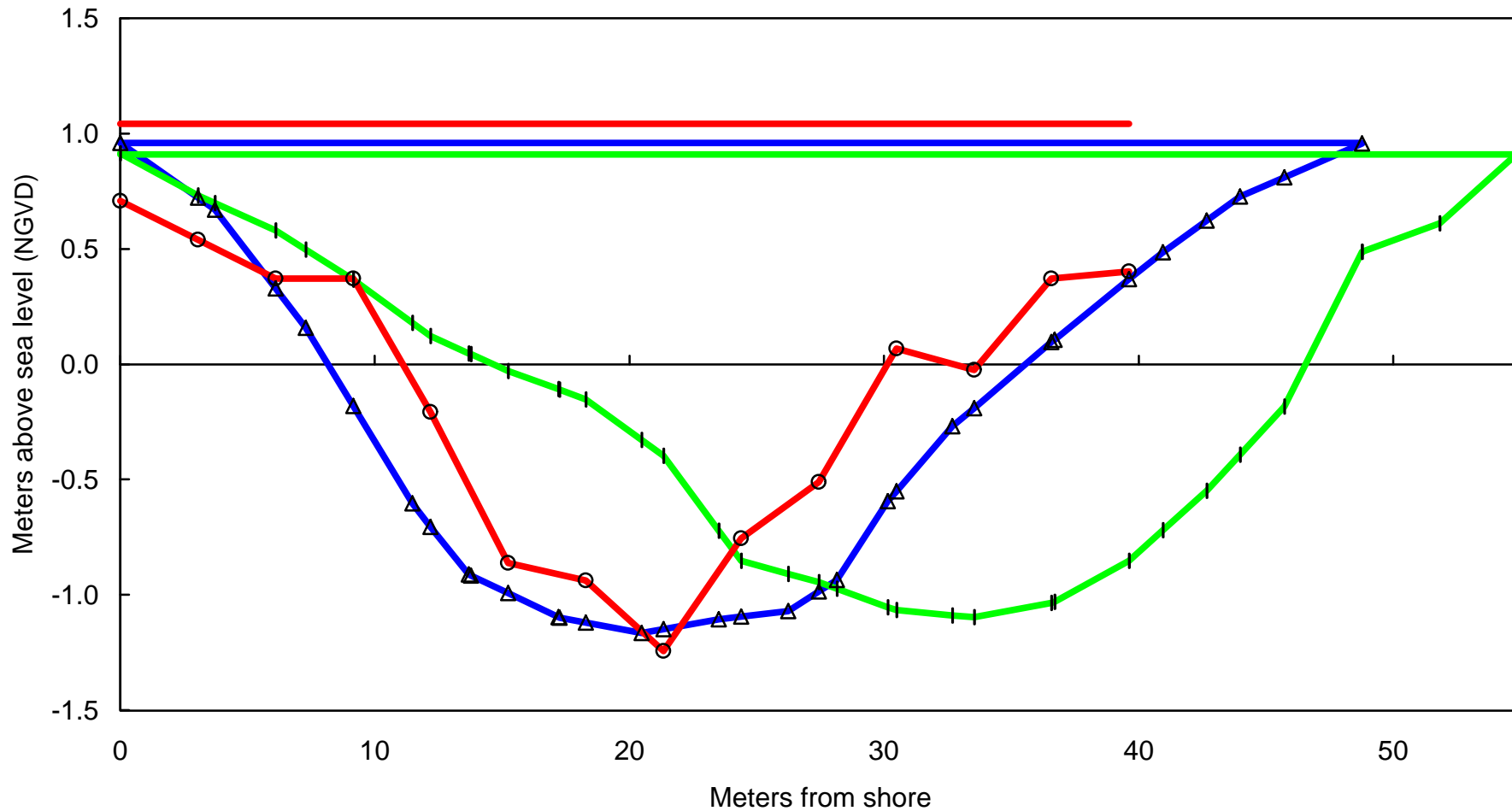
Oxbow 26A

X (m)	Depth (m)		Area (sq. m)		Elevation (m)		Water Surface (m)		X (ft)	Depth (ft)		X (ft)	X (m)	Depth (ft)	Depth (m)	BElev (m)	WS (m)	
	1978	1995	1978	1995	1978	1995	1978	1995		1995	1995							
0.00	0.00	0.00	0.18	0.14	0.96	0.91	0.96	0.91		0	0.0		0	0.00	-1.10	-0.34	0.71	1.04
3.05	-0.24	-0.18	0.44	0.33	0.72	0.73	0.96	0.91		10	-0.6		10	3.05	-1.65	-0.50	0.54	1.04
3.71	-0.29	-0.21	0.44	0.32	0.67	0.70	0.96	0.91		20	-1.1		20	6.10	-2.20	-0.67	0.37	1.04
6.10	-0.63	-0.33	1.13	0.59	0.33	0.58	0.96	0.91		30	-1.8		30	9.14	-2.20	-0.67	0.37	1.04
7.27	-0.80	-0.41	1.22	0.63	0.16	0.50	0.96	0.91		40	-2.6		40	12.19	-4.10	-1.25	-0.21	1.04
9.14	-1.14	-0.54	2.39	1.14	-0.18	0.37	0.96	0.91		50	-3.1		50	15.24	-6.25	-1.91	-0.86	1.04
11.47	-1.56	-0.73	2.38	1.11	-0.60	0.18	0.96	0.91		60	-3.5		60	18.29	-6.50	-1.98	-0.94	1.04
12.19	-1.66	-0.79	1.85	0.87	-0.70	0.12	0.96	0.91		70	-4.3		70	21.34	-7.50	-2.29	-1.24	1.04
13.69	-1.87	-0.86	1.48	0.68	-0.91	0.05	0.96	0.91		80	-5.8		80	24.38	-5.90	-1.80	-0.76	1.04
13.78	-1.88	-0.87	1.46	0.67	-0.92	0.04	0.96	0.91		90	-6.1		90	27.43	-5.10	-1.55	-0.51	1.04
15.24	-1.95	-0.94	3.34	1.61	-0.99	-0.03	0.96	0.91		100	-6.5		100	30.48	-3.20	-0.98	0.07	1.04
17.20	-2.06	-1.02	2.07	1.03	-1.10	-0.11	0.96	0.91		110	-6.6		110	33.53	-3.50	-1.07	-0.02	1.04
17.26	-2.06	-1.02	1.12	0.56	-1.10	-0.11	0.96	0.91		120	-6.4		120	36.58	-2.20	-0.67	0.37	1.04
18.29	-2.08	-1.06	3.35	1.71	-1.12	-0.15	0.96	0.91		130	-5.8		130	39.62	-2.10	-0.64	0.40	1.04
20.48	-2.13	-1.24	3.24	1.89	-1.17	-0.33	0.96	0.91		140	-4.8							
21.34	-2.11	-1.31	3.19	1.97	-1.15	-0.40	0.96	0.91		150	-3.6							
23.50	-2.07	-1.63	3.15	2.49	-1.11	-0.72	0.96	0.91		160	-1.4							
24.38	-2.05	-1.76	2.80	2.41	-1.09	-0.85	0.96	0.91		170	-1.0							
26.23	-2.03	-1.82	3.09	2.77	-1.07	-0.91	0.96	0.91		180	0.0							
27.43	-1.95	-1.85	1.86	1.77	-0.99	-0.94	0.96	0.91										
28.14	-1.90	-1.88	2.58	2.56	-0.94	-0.97	0.96	0.91	X (ft)									
30.15	-1.55	-1.96	1.81	2.29	-0.59	-1.05	0.96	0.91		1978	1978							
30.48	-1.51	-1.98	1.91	2.50	-0.55	-1.07	0.96	0.91										
32.68	-1.23	-2.00	1.87	3.05	-0.27	-1.09	0.96	0.91		0	0.0					3.15	0.9601	
33.53	-1.15	-2.01	2.24	3.91	-0.19	-1.10	0.96	0.91		12	-1.0					3.00	0.9144	
36.58	-0.86	-1.95	1.37	3.07	0.10	-1.04	0.96	0.91		24	-2.6					3.42	1.0424	
36.69	-0.85	-1.94	1.30	2.96	0.11	-1.03	0.96	0.91		38	-5.1							
39.62	-0.59	-1.76	1.26	3.76	0.37	-0.85	0.96	0.91		45	-6.1							
40.95	-0.47	-1.63	0.72	2.49	0.49	-0.72	0.96	0.91		45	-6.2							
42.67	-0.34	-1.46	0.51	2.21	0.62	-0.55	0.96	0.91		56	-6.7							
43.98	-0.23	-1.30	0.36	1.98	0.73	-0.39	0.96	0.91		57	-6.8							
45.72	-0.15	-1.09	0.36	2.62	0.81	-0.18	0.96	0.91		67	-7.0							
48.77	0.00	-0.42	0.11	0.64	0.96	0.49	0.96	0.91		77	-6.8							
48.77		-0.42		0.64		0.49	0.96	0.91		86	-6.7							
51.82		-0.30		0.92		0.61	0.96	0.91		92	-6.2							
54.86		0.00		0.23		0.91	0.96	0.91		99	-5.1							
										107	-4.0							
										120	-2.8							
										134	-1.6							
										144	-0.8							
										160	0.0							
			1978	1995	Change													
Total Area			57	61	7%													

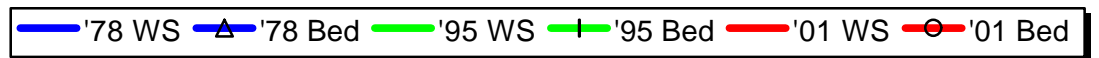
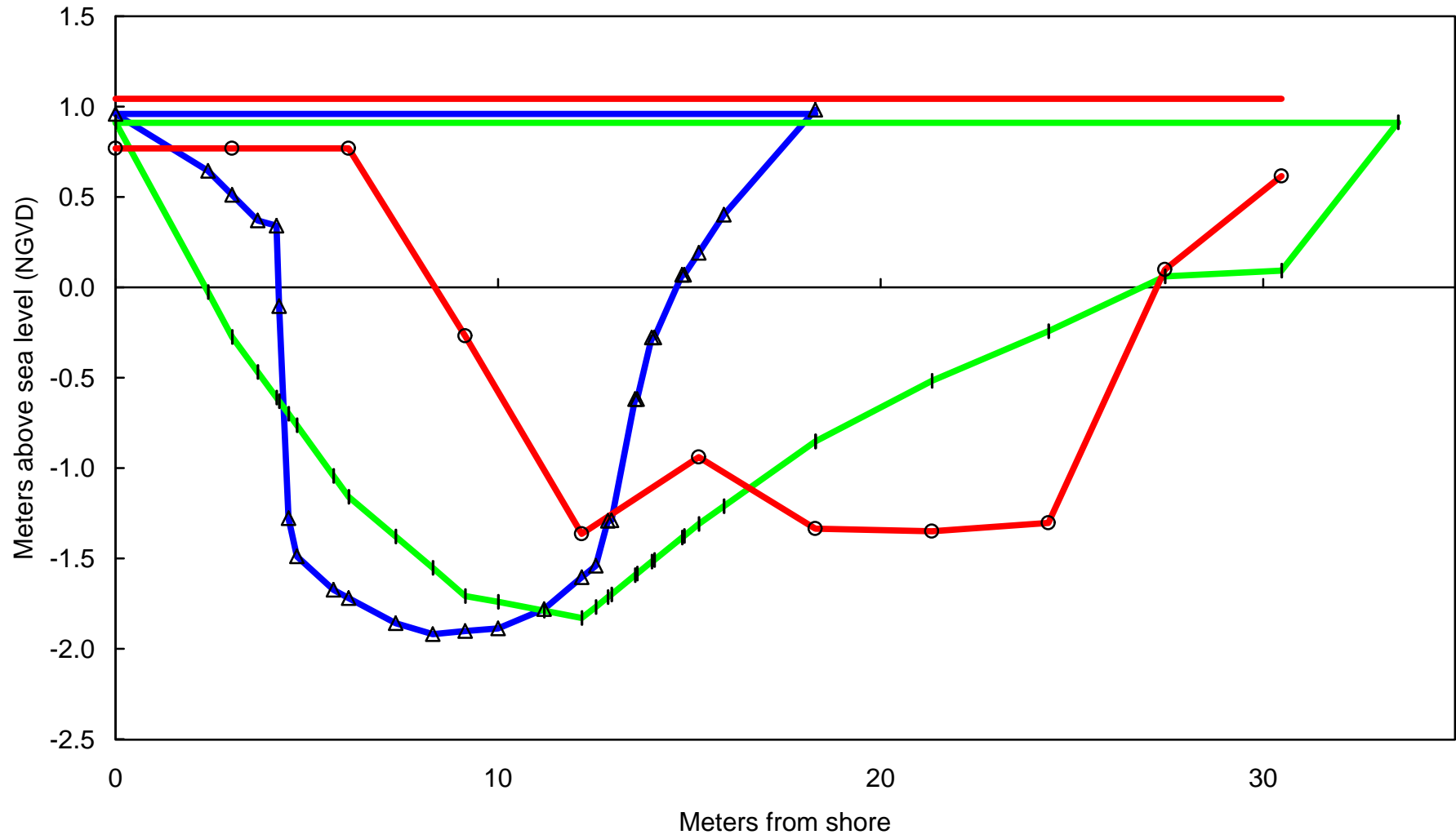
Franklin Lock upstream
water surface elevation (ft)

March 29, 1978
December 2, 1995
May 30, 2001

Oxbow 26, cross-section A



Oxbow 26, cross-section B



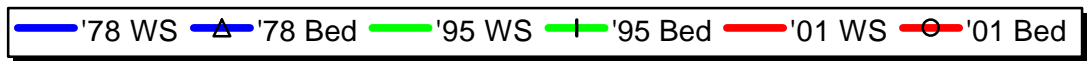
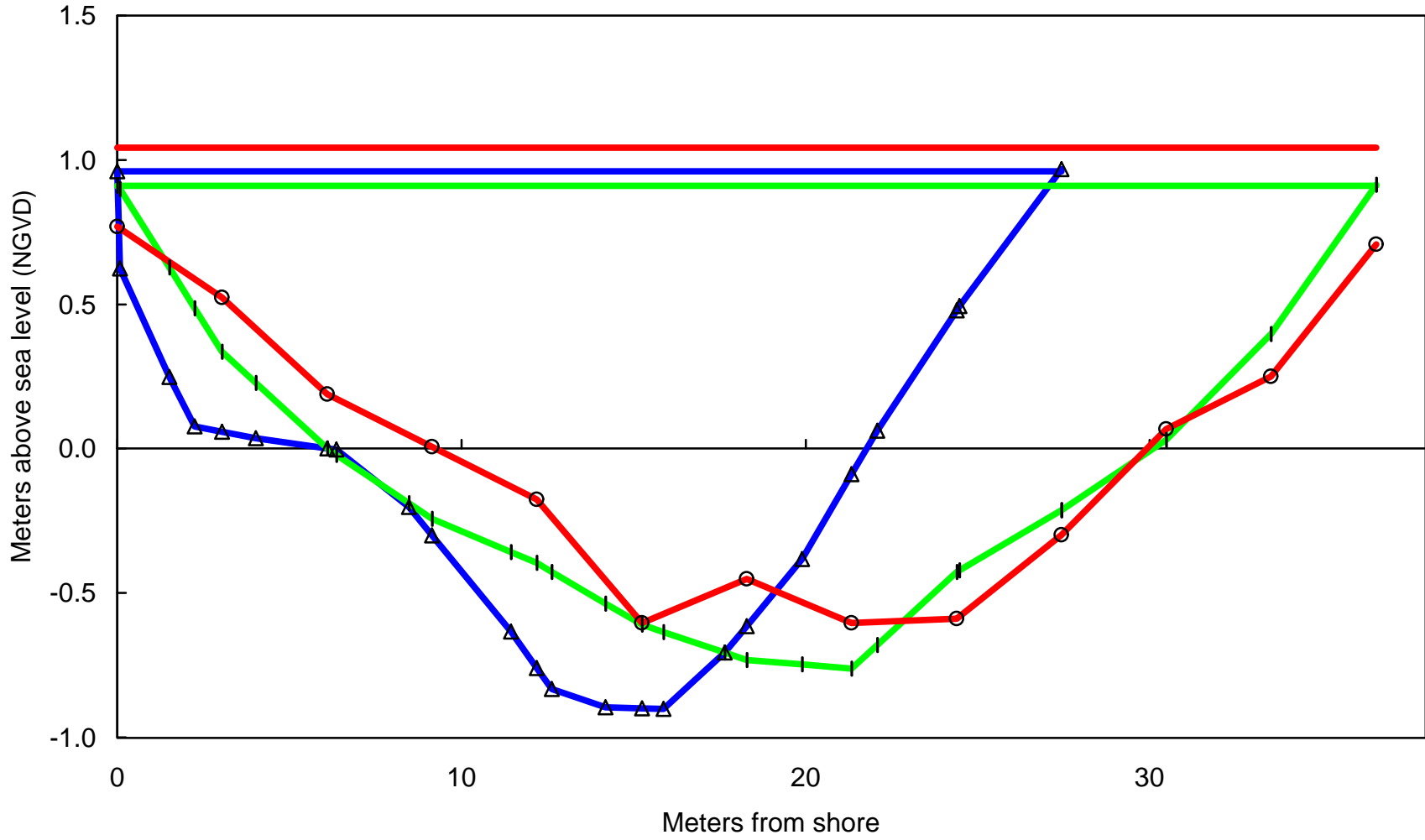
Oxbow 26C

X (m)	Depth (m)		Area (sq. m)		Elevation (m)		Water Surface (m)		X (ft)	Depth (ft)		X (ft)	X (m)	Depth (ft)	Depth (m)	BElev (m)	WS (m)	
	1978	1995	1978	1995	1978	1995	1978	1995		1995	1995							2001
0.00	0.00	0.00	0.01	0.00	0.96	0.91	0.96	0.91		0	0.0		0	0.00	-0.90	-0.27	0.77	1.04
0.08	-0.34	-0.01	0.25	0.01	0.62	0.90	0.96	0.91		10	-1.9		10	3.05	-1.70	-0.52	0.52	1.04
1.51	-0.71	-0.28	0.77	0.31	0.25	0.63	0.96	0.91		20	-3.0		20	6.10	-2.80	-0.85	0.19	1.04
2.25	-0.88	-0.42	0.68	0.33	0.08	0.49	0.96	0.91		30	-3.8		30	9.14	-3.40	-1.04	0.01	1.04
3.05	-0.90	-0.57	0.80	0.51	0.06	0.34	0.96	0.91		40	-4.3		40	12.19	-4.00	-1.22	-0.18	1.04
4.03	-0.92	-0.68	1.41	1.04	0.04	0.23	0.96	0.91		50	-5.0		50	15.24	-5.40	-1.65	-0.60	1.04
6.10	-0.96	-0.91	1.12	1.07	0.00	0.00	0.96	0.91		60	-5.4		60	18.29	-4.90	-1.49	-0.45	1.04
6.37	-0.96	-0.93	1.14	1.11	0.00	-0.02	0.96	0.91		70	-5.5		70	21.34	-5.40	-1.65	-0.60	1.04
8.47	-1.16	-1.10	1.61	1.52	-0.20	-0.19	0.96	0.91		80	-4.4		80	24.38	-5.35	-1.63	-0.59	1.04
9.14	-1.26	-1.15	1.87	1.71	-0.30	-0.24	0.96	0.91		90	-3.7		90	27.43	-4.40	-1.34	-0.30	1.04
11.43	-1.59	-1.27	2.43	1.93	-0.63	-0.36	0.96	0.91		100	-2.9		100	30.48	-3.20	-0.98	0.07	1.04
12.19	-1.72	-1.31	1.03	0.78	-0.76	-0.40	0.96	0.91		110	-1.7		110	33.53	-2.60	-0.79	0.25	1.04
12.63	-1.79	-1.34	1.79	1.34	-0.83	-0.43	0.96	0.91		120	0.0		120	36.58	-1.10	-0.34	0.71	1.04
14.19	-1.85	-1.45	2.42	1.89	-0.89	-0.54	0.96	0.91										
15.24	-1.86	-1.52	1.57	1.28	-0.90	-0.61	0.96	0.91	X (ft)	Depth (ft)								
15.87	-1.86	-1.54	2.25	1.87	-0.90	-0.63	0.96	0.91		1978	1978							
17.66	-1.67	-1.62	2.01	1.95	-0.71	-0.71	0.96	0.91										
18.29	-1.57	-1.64	1.76	1.84	-0.61	-0.73	0.96	0.91		0	0.0							
19.89	-1.34	-1.66	2.05	2.53	-0.38	-0.75	0.96	0.91		0	-1.1						3.15	0.9601
21.34	-1.05	-1.67	1.14	1.82	-0.09	-0.76	0.96	0.91		5	-2.3						3.00	0.9144
22.08	-0.90	-1.59	1.37	2.42	0.06	-0.68	0.96	0.91		7	-2.9						3.42	1.0424
24.38	-0.48	-1.34	0.58	1.60	0.48	-0.43	0.96	0.91		13	-3.0							
24.47	-0.47	-1.33	0.71	2.03	0.49	-0.42	0.96	0.91		21	-3.2							
27.43	0.01	-1.12	0.35	1.67	0.97	-0.21	0.96	0.91		28	-3.8							
27.43		-1.12		1.71		-0.21	0.96	0.91		38	-5.2							
30.48		-0.88		2.68		0.03	0.96	0.91		41	-5.9							
33.53		-0.51		1.57		0.40	0.96	0.91		47	-6.1							
36.58		0.00		0.39		0.91	0.96	0.91		52	-6.1							
										58	-5.5							
										65	-4.4							
										72	-2.9							
										80	-1.5							
										90	0.0							
Total Area			1978	1995	Change													
			31	39	25%													

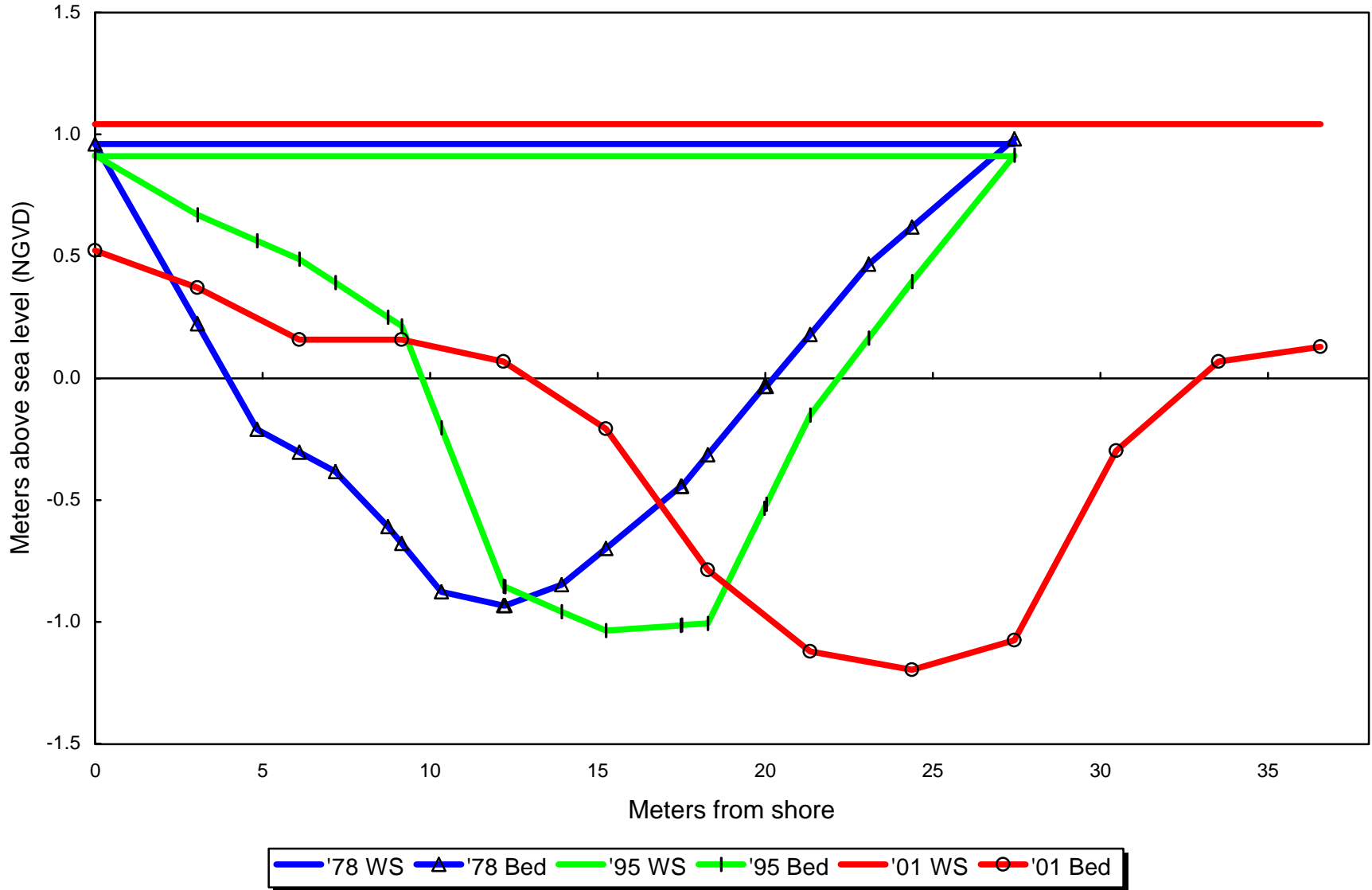
Franklin Lock upstream
water surface elevation (ft)

March 29, 1978
December 2, 1995
May 30, 2001

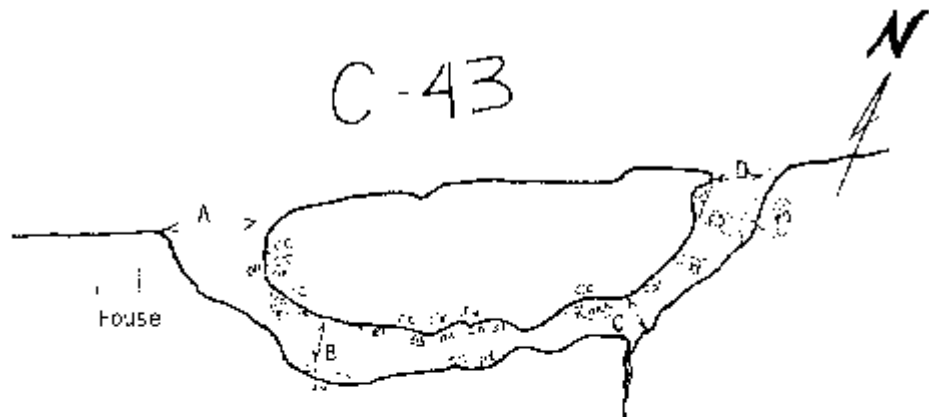
Oxbow 26, cross-section C



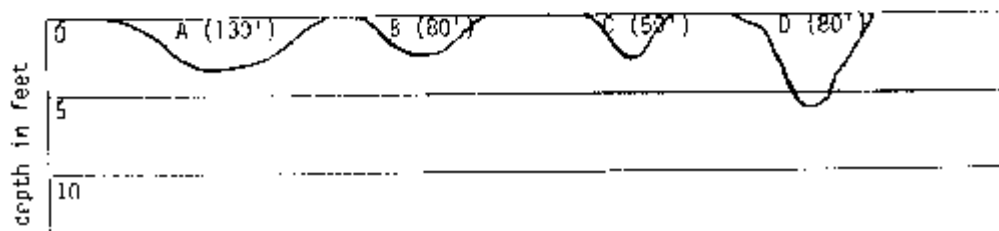
Oxbow 26, cross-section D



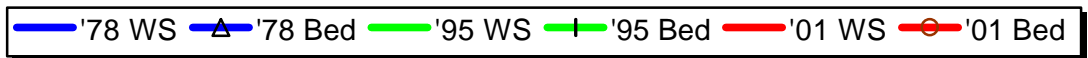
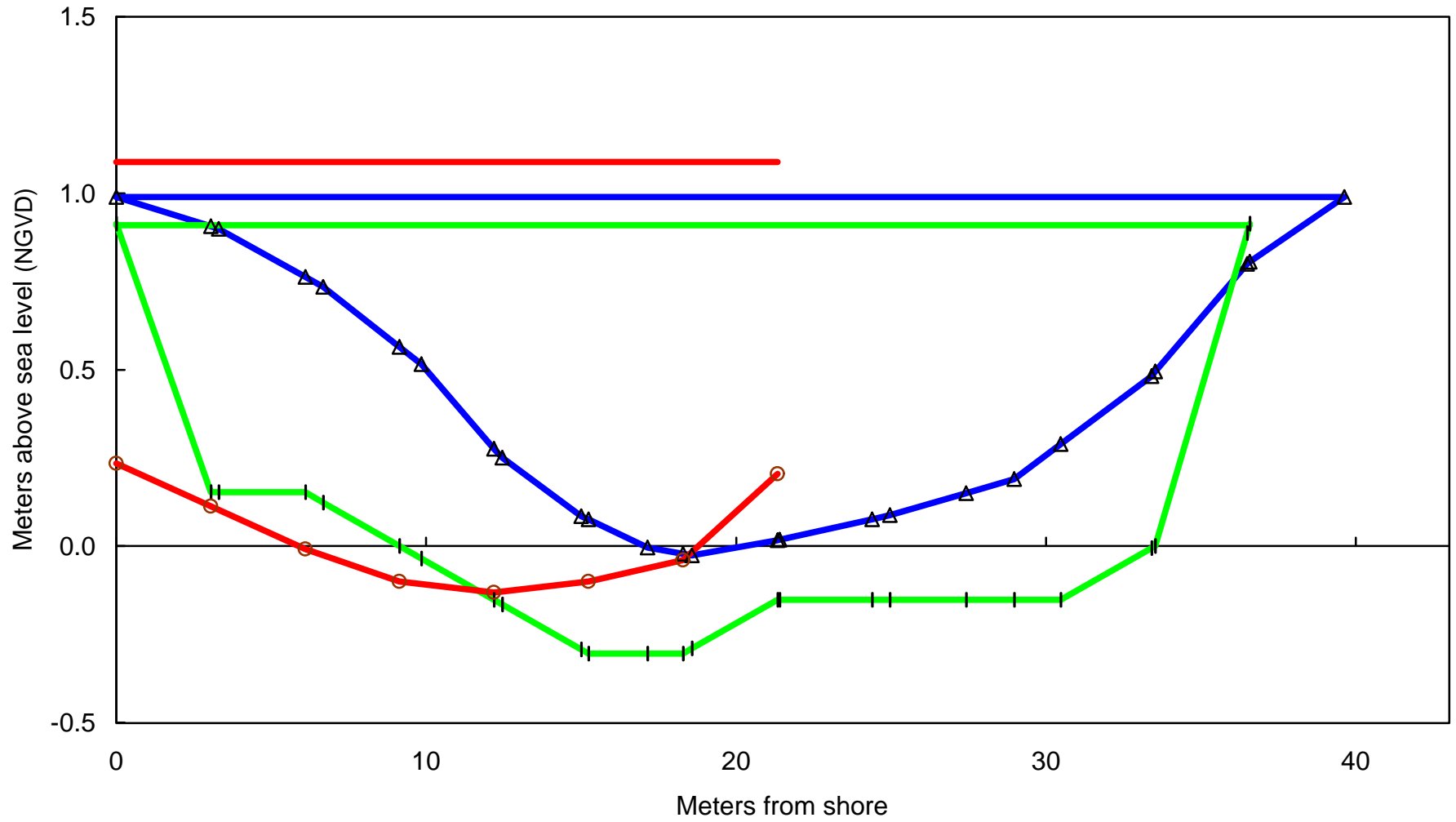
C-43



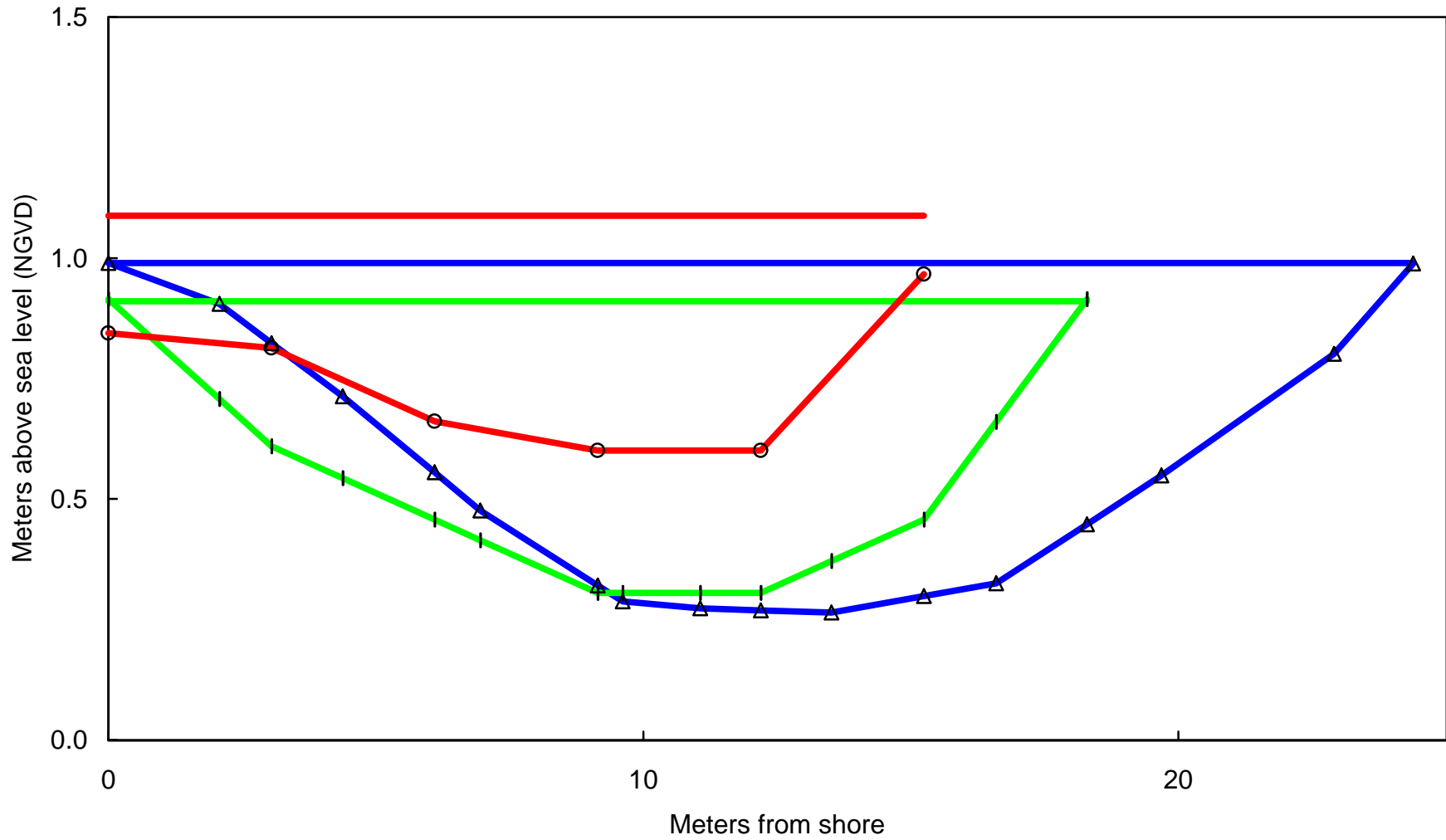
DEPTH PROFILES



Oxbow 32, cross-section A



Oxbow 32, cross-section B



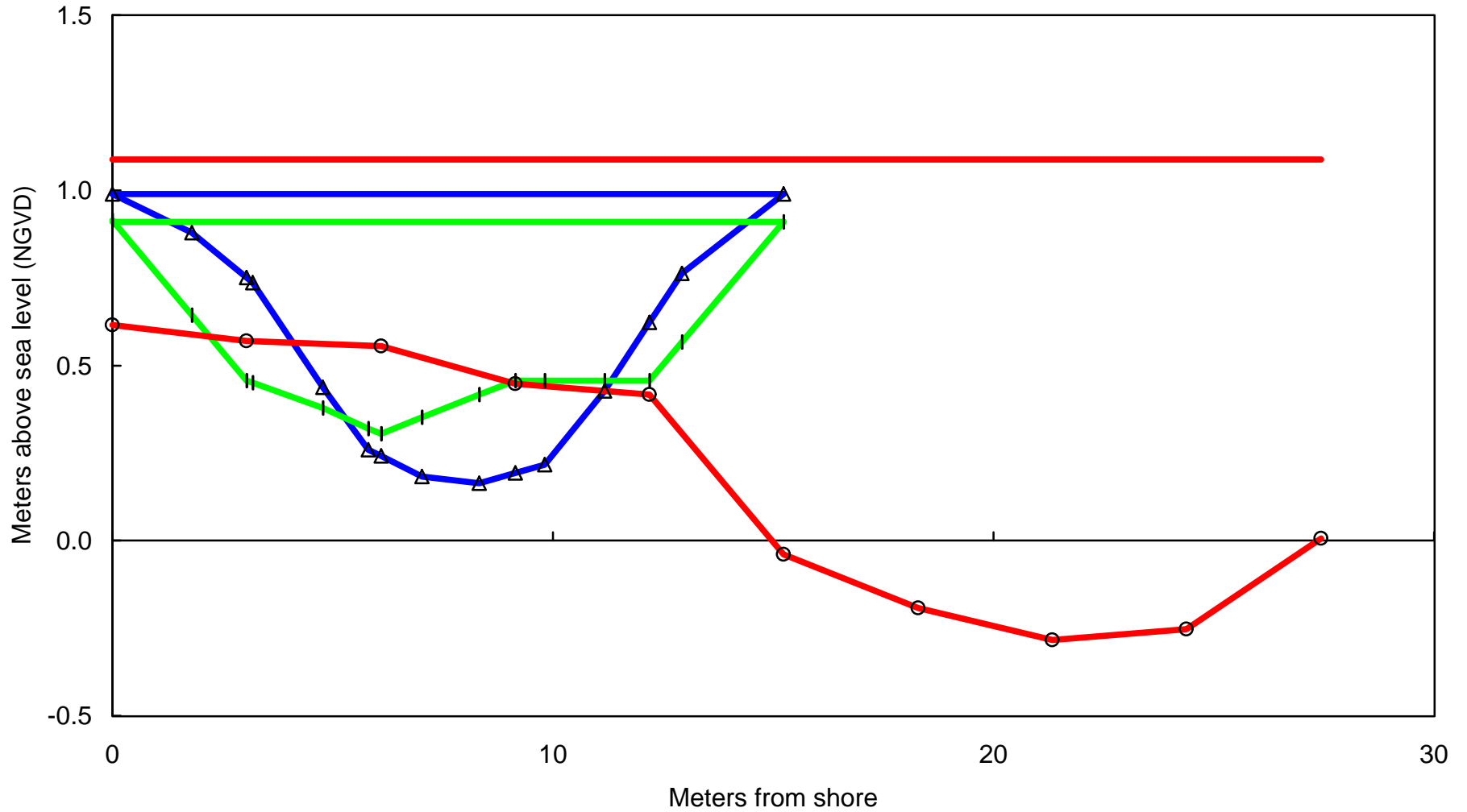
— '78 WS ▲ '78 Bed — '95 WS + '95 Bed — '01 WS ○ '01 Bed

Oxbow 32C

X (m)	Depth (m)		Area (sq. m)		Elevation (m)		Water Surface (m)		X (ft)	Depth (ft)		X (ft)	X (m)	Depth (ft)	Depth (m)	BElev (m)	WS (m)	
	1978	1995	1978	1995	1978	1995	1978	1995		1995	1995							2001
0.00	0.00	0.00	0.05	0.12	0.99	0.91	0.99	0.91		0	0.0		0	0.00	-1.55	-0.47	0.62	1.09
1.80	-0.11	-0.27	0.17	0.41	0.88	0.64	0.99	0.91		10	-1.5		10	3.05	-1.70	-0.52	0.57	1.09
3.05	-0.24	-0.45	0.17	0.31	0.75	0.46	0.99	0.91		20	-2.0		20	6.10	-1.75	-0.53	0.55	1.09
3.18	-0.25	-0.46	0.22	0.40	0.74	0.45	0.99	0.91		30	-1.5		30	9.14	-2.10	-0.64	0.45	1.09
4.77	-0.55	-0.53	0.72	0.70	0.44	0.38	0.99	0.91		40	-1.5		40	12.19	-2.20	-0.67	0.42	1.09
5.81	-0.73	-0.59	0.48	0.39	0.26	0.32	0.99	0.91		50	0.0		50	15.24	-3.70	-1.13	-0.04	1.09
6.10	-0.75	-0.61	0.46	0.37	0.24	0.30	0.99	0.91					60	18.29	-4.20	-1.28	-0.19	1.09
7.03	-0.81	-0.56	0.90	0.62	0.18	0.35	0.99	0.91	X (ft)		Depth (ft)		70	21.34	-4.50	-1.37	-0.28	1.09
8.33	-0.83	-0.49	0.87	0.52	0.16	0.42	0.99	0.91		1978	1978		80	24.38	-4.40	-1.34	-0.25	1.09
9.14	-0.80	-0.45	0.59	0.34	0.19	0.46	0.99	0.91					90	27.43	-3.55	-1.08	0.01	1.09
9.82	-0.77	-0.45	0.78	0.46	0.22	0.46	0.99	0.91		0	0.0							
11.17	-0.56	-0.45	0.67	0.54	0.43	0.46	0.99	0.91		6	-0.4							
12.19	-0.37	-0.45	0.32	0.40	0.62	0.46	0.99	0.91		10	-0.8							
12.93	-0.23	-0.34	0.35	0.52	0.76	0.57	0.99	0.91		16	-1.8							
15.24	0.00	0.00	0.13	0.20	0.99	0.91	0.99	0.91		19	-2.4							
										23	-2.6							
			1978	1995	Change					27	-2.7		April 26, 1978		3.25	0.9906		
			7	6	-9%					32	-2.5		December 2, 1995		3.00	0.9144		
Total Area										37	-1.8		June 5, 2001		3.57	1.0881		
										42	-0.7							
										50	0.1							

Franklin Lock upstream
water surface elevation (ft)

Oxbow 32, cross-section C



'78 WS '78 Bed '95 WS '95 Bed '01 WS '01 Bed

Oxbow 32, cross-section D

