

Addendum

To assist in potential remedial projects, MELP has requested a number of cross-sections through the study area and a detailed sediment budget for depositional and erosional areas. As such, the study area upstream of Matsqui bend has been subdivided into four cells (Figure 1A). Cells 1 and 3 represent deposition of Matsqui Bar and the Sumas Mountain gravel bar respectively, while Cells 2 and 4 represent erosion along the left bank. Volumetric channel changes between survey dates in these cells are as follows:

	Area (m²)	1952 – 1984 (m³)	1984 – 1991 (m³)	1991 – 1999 (m³)	1952 – 1999 (m³)
Cell 1	930,000	+ 1,680,000	+ 705,000	+ 600,000	+ 2,985,000
Cell 2	555,000	- 1,730,000	- 820,000	- 570,000	- 3,120,000
Cell 3	510,000	+ 310,000	- 5,000	- 160,000	+ 145,000
Cell 4	300,000	+ 450,000	- 900,000	- 95,000	- 545,000

The most active cells in the 1952-1999 period have been Cells 1 and 2. During this period there has been an average deposition of 3.2 m in Cell 1 and 5.6 m of erosion in Cell 2.

Eight cross-sections through the study area have also been constructed from the raw data of the four bathymetric surveys. These lines correspond with the primary data lines of the 1999 survey and for the other years the closest data was used for comparison.

Figure 1a

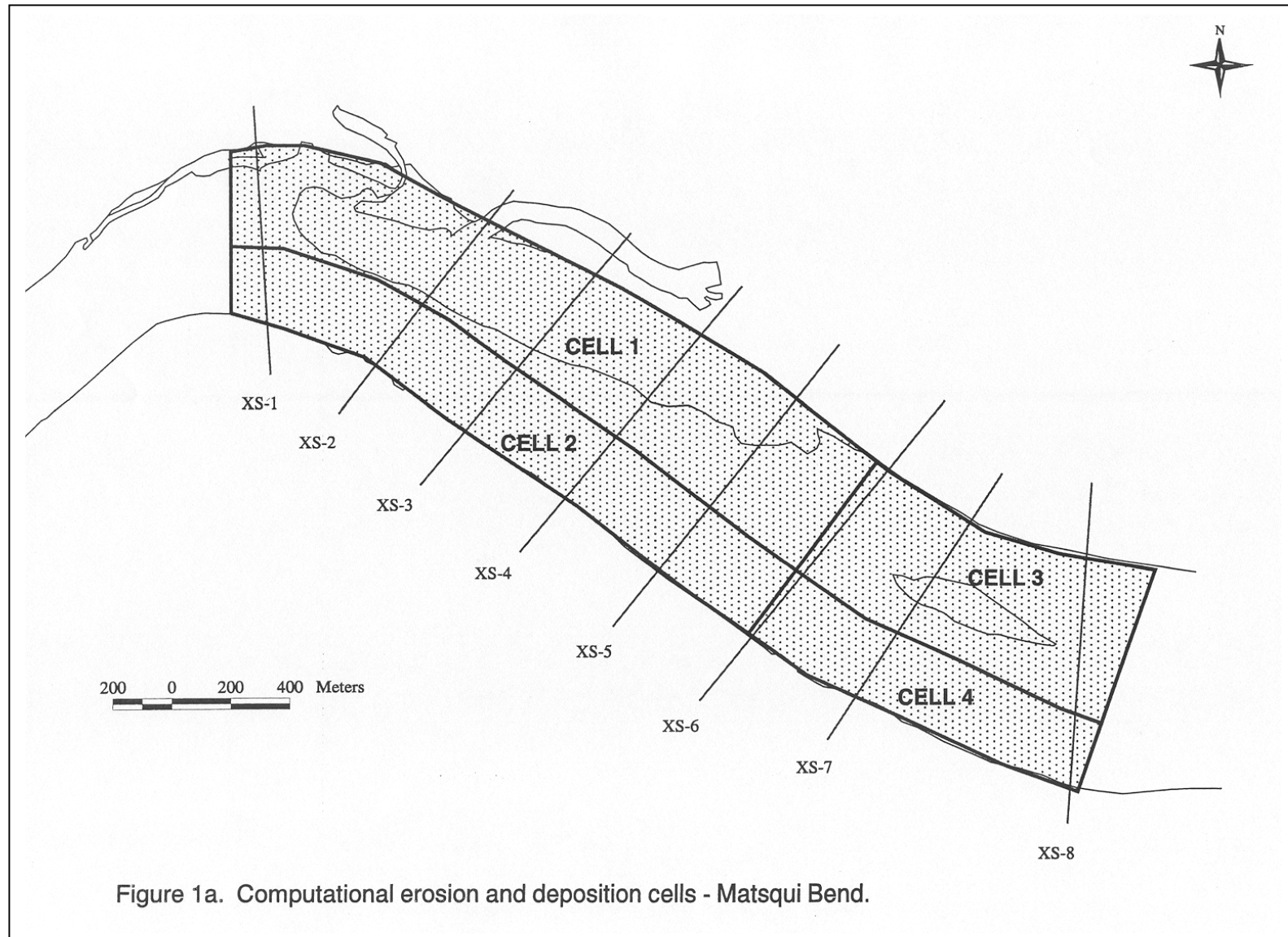
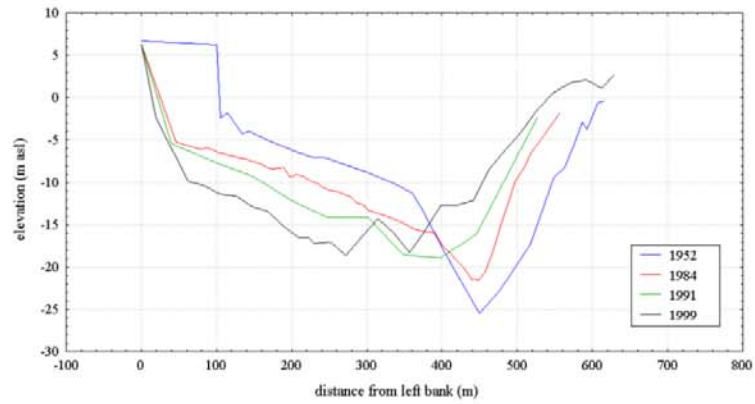
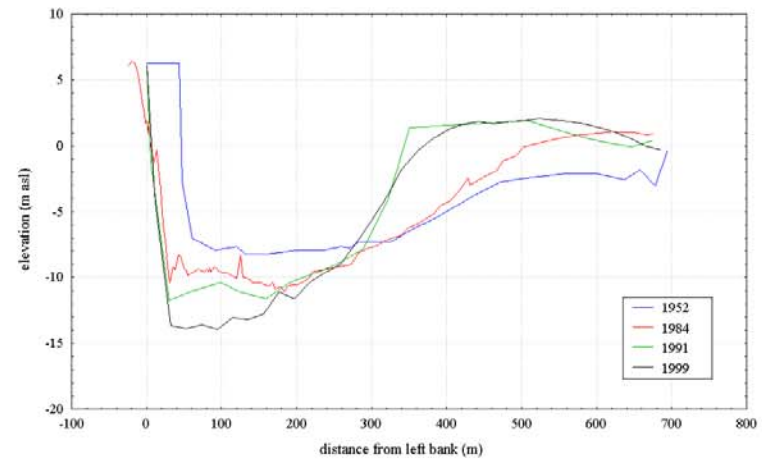


Figure 1a. Computational erosion and deposition cells - Matsqui Bend.

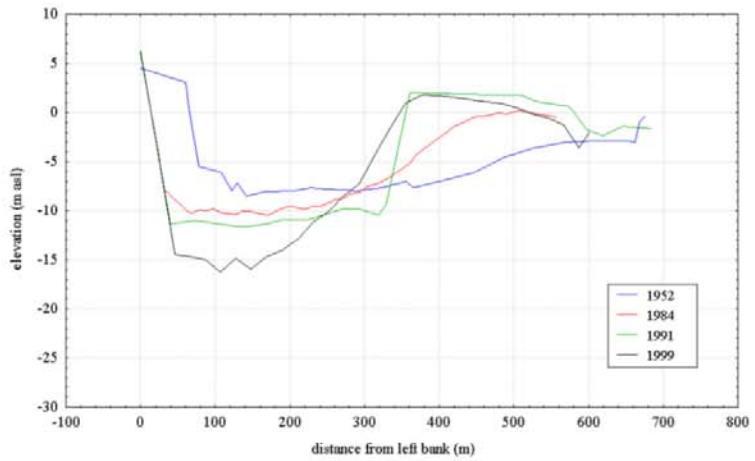
Cross-section #1



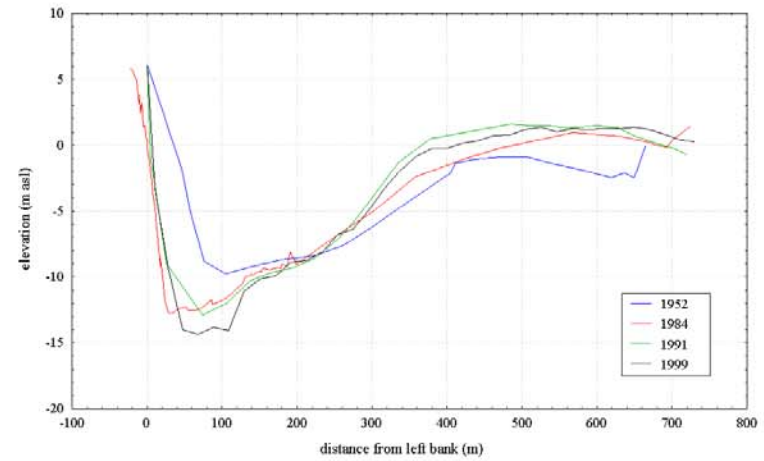
Cross-section #3



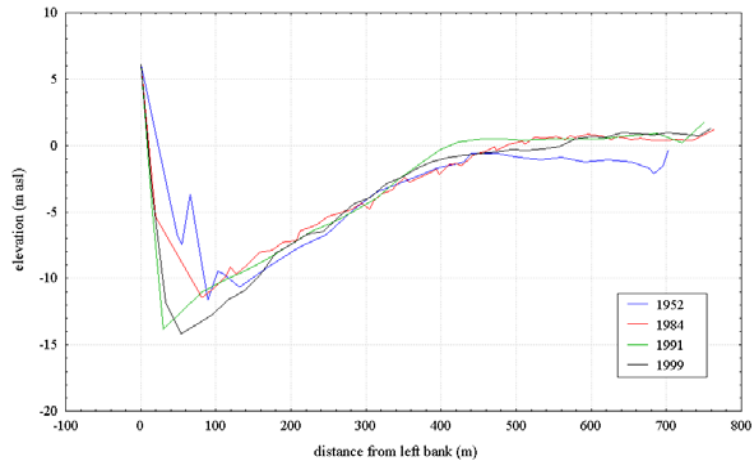
Cross-section #2



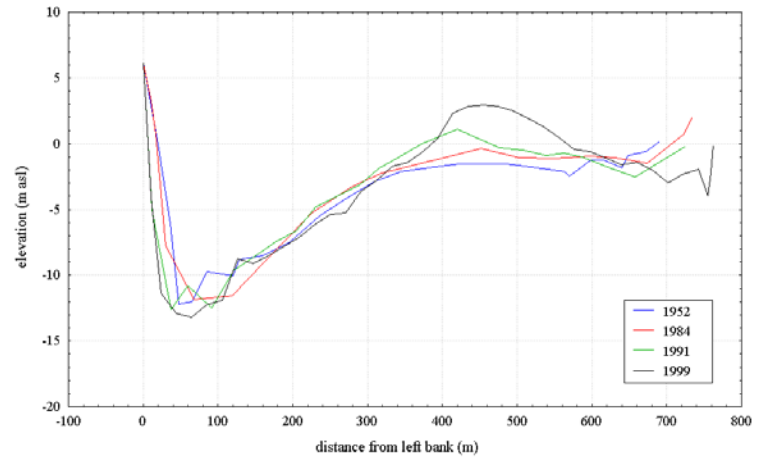
Cross-section #4



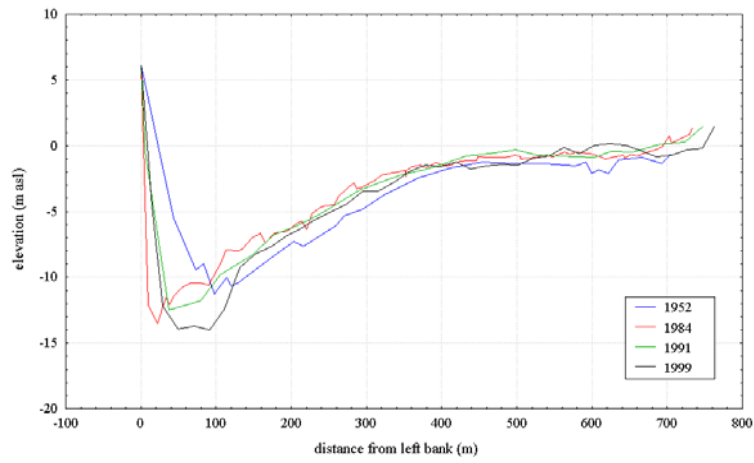
Cross-section #5



Cross-section #7



Cross-section #6



Cross-section #8

