

Figure 52. Total mercury in bottom sediment (bottom of core), 1994 (Richman 1996). CB=core bottom.

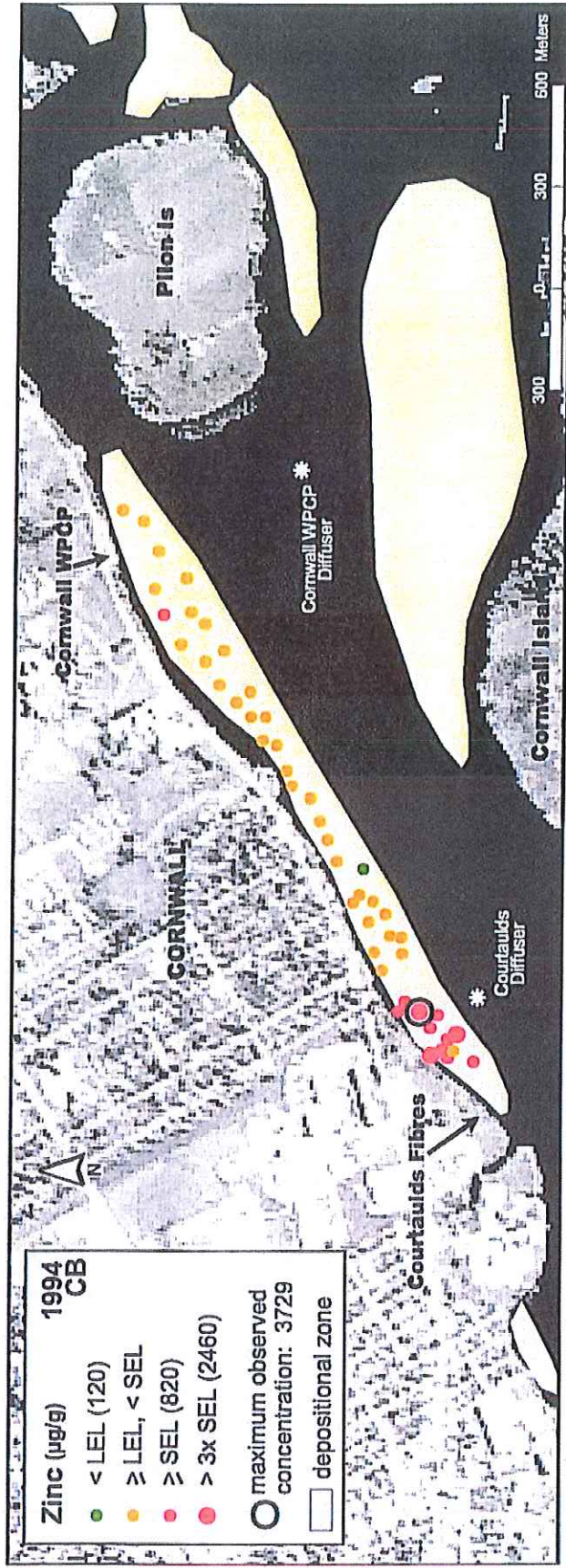


Figure 53. Zinc in bottom sediment (bottom of core), 1994 (Richman 1996). CB=core bottom.

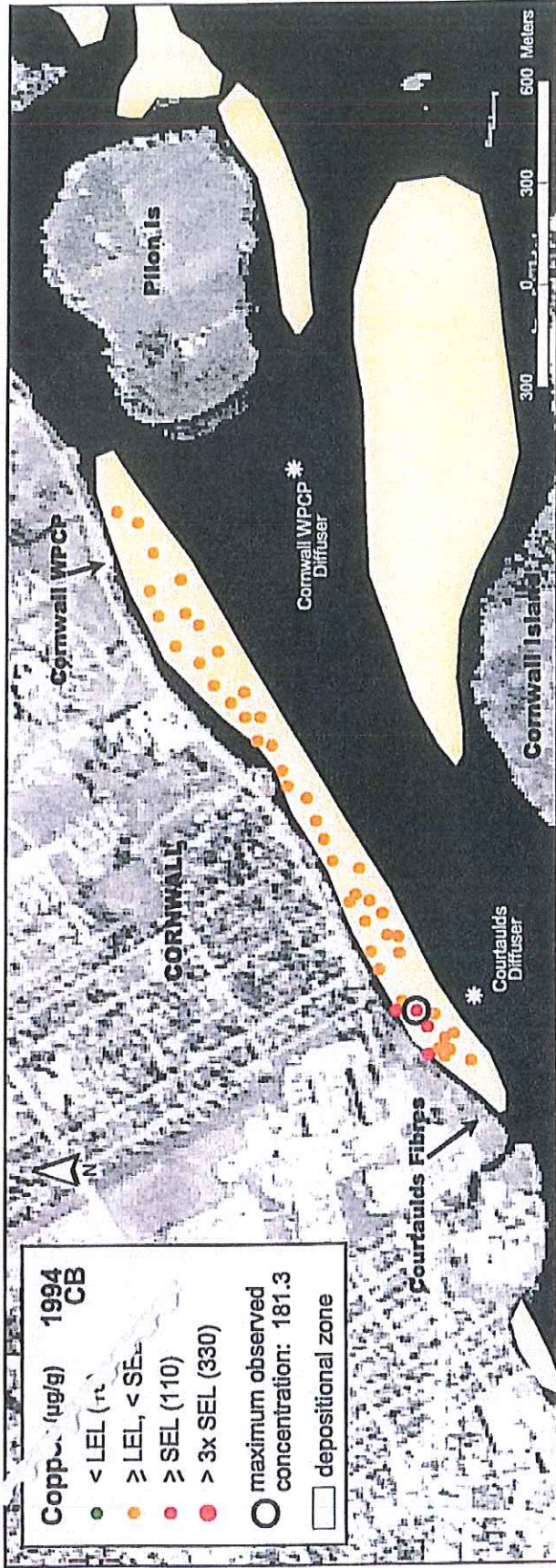


Figure 54. Copper in bottom sediment (bottom of core), 1994 (Richman 1996). CB=core bottom.

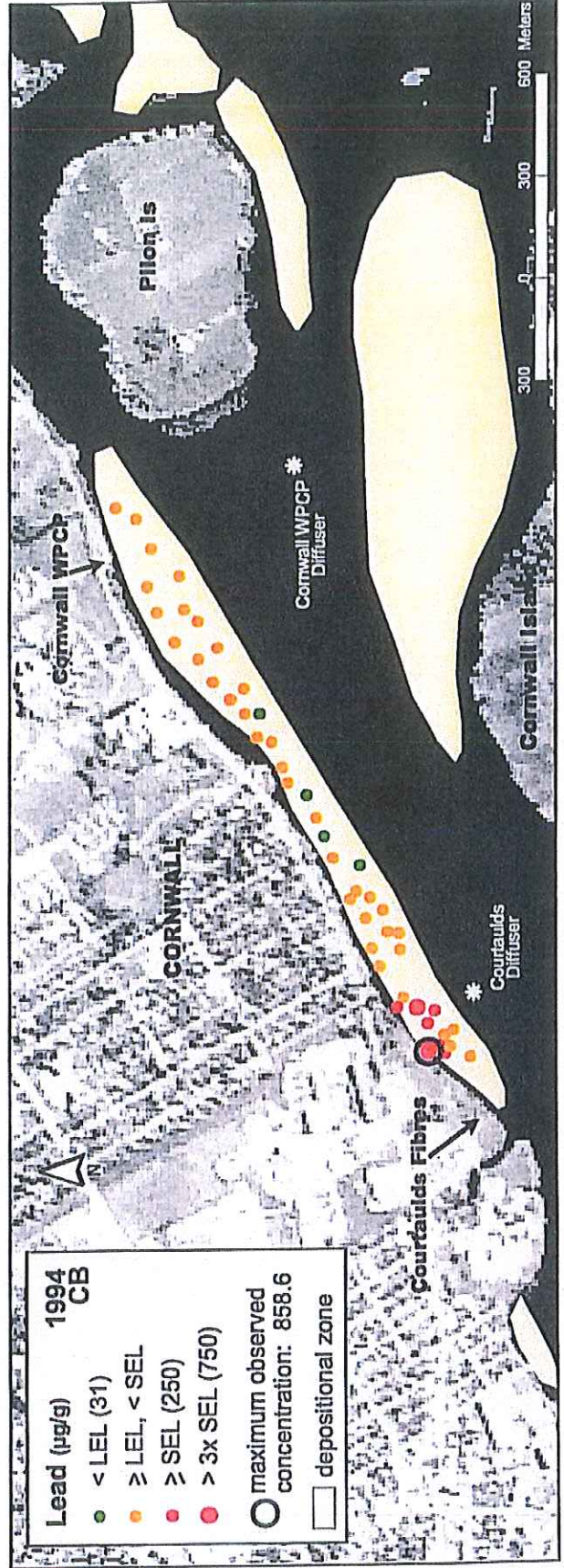


Figure 55. Lead in bottom sediment (bottom of core), 1994 (Richman 1996). CB=core bottom.

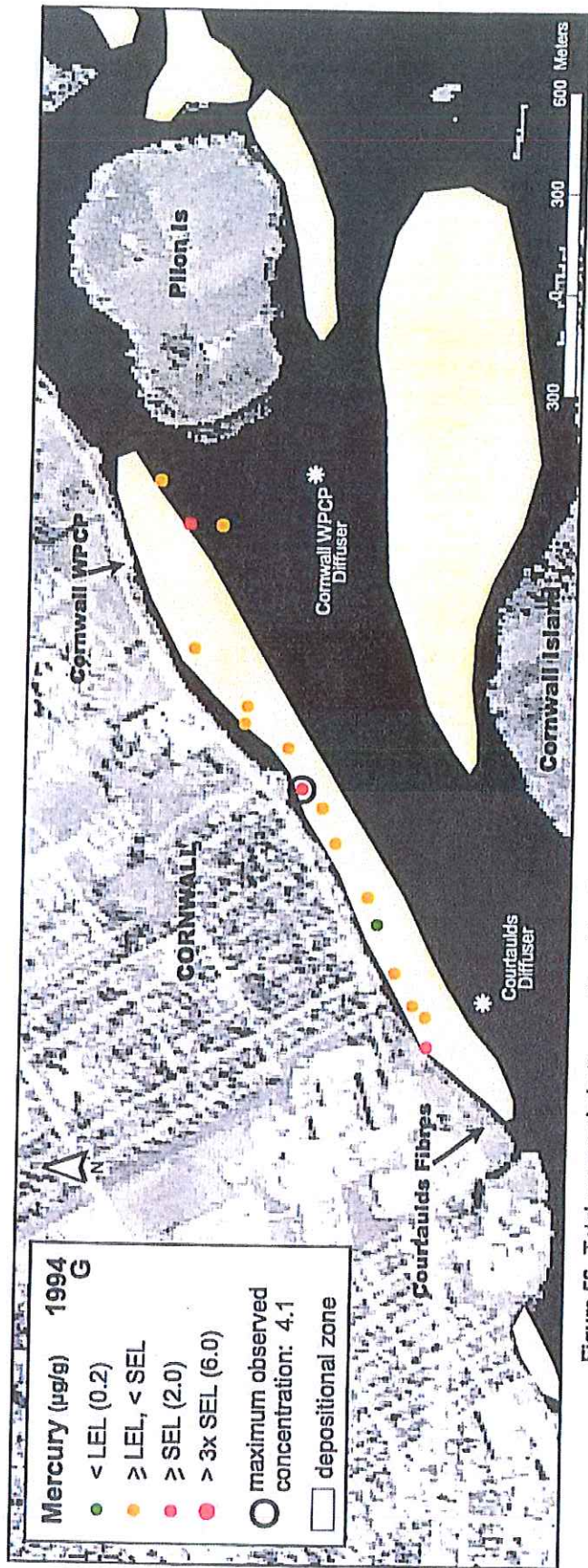


Figure 56. Total mercury in bottom sediment (surface grab sample), 1994 (Richman 1996). G=surface grab sample.

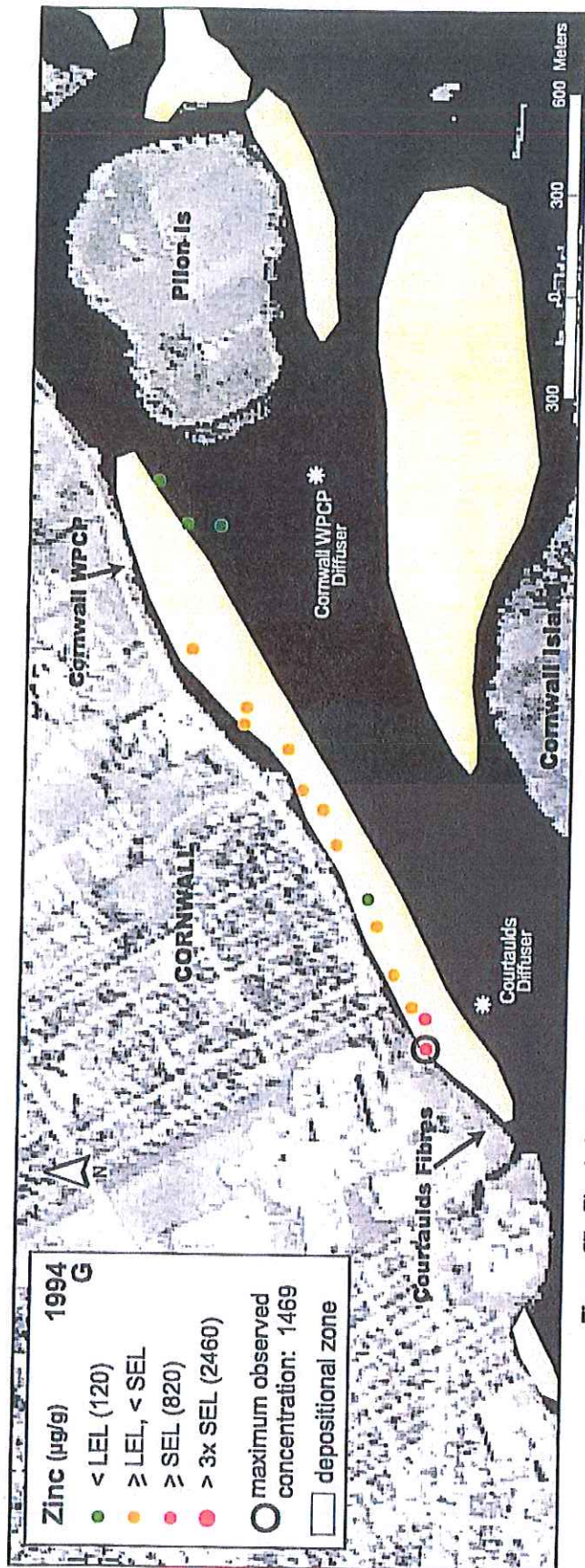


Figure 57. Zinc in bottom sediment (surface grab sample), 1994 (Richman 1996). G=surface grab sample.

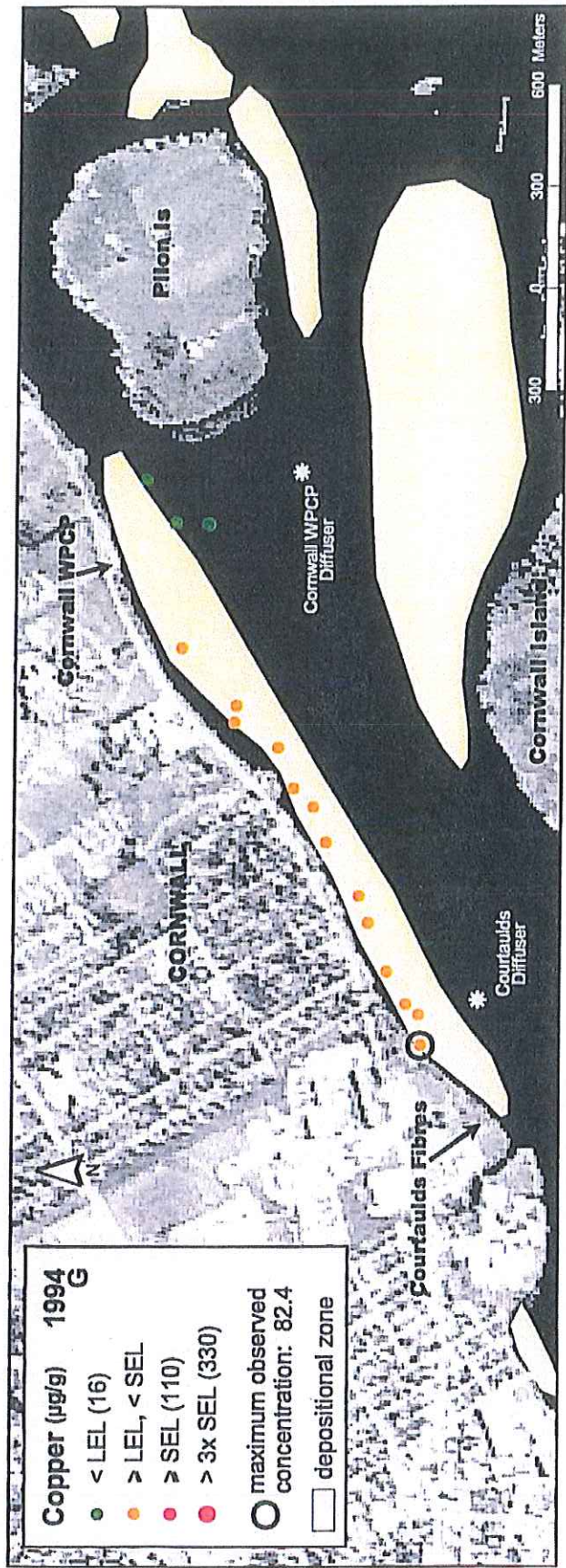


Figure 58. Copper in bottom sediment (surface grab sample), 1994 (Richman 1996). G=surface grab sample.

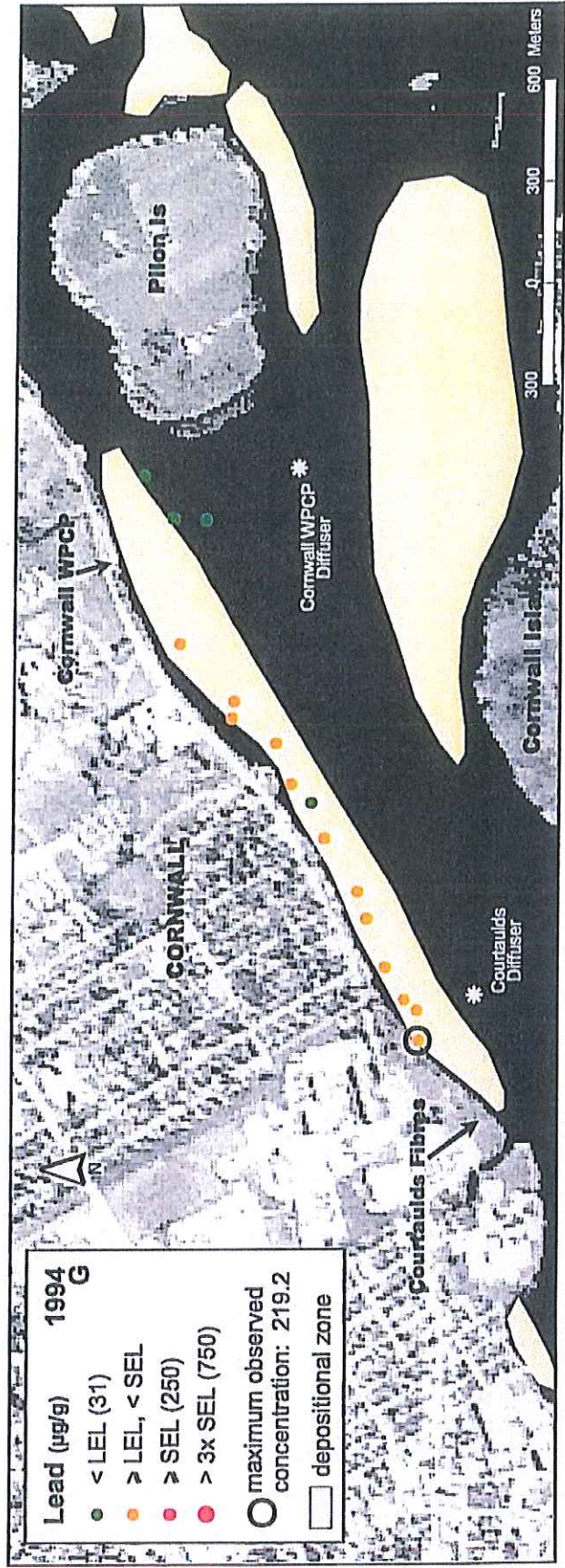


Figure 59. Lead in bottom sediment (surface grab sample), 1994 (Richman 1996). G=surface grab sample.

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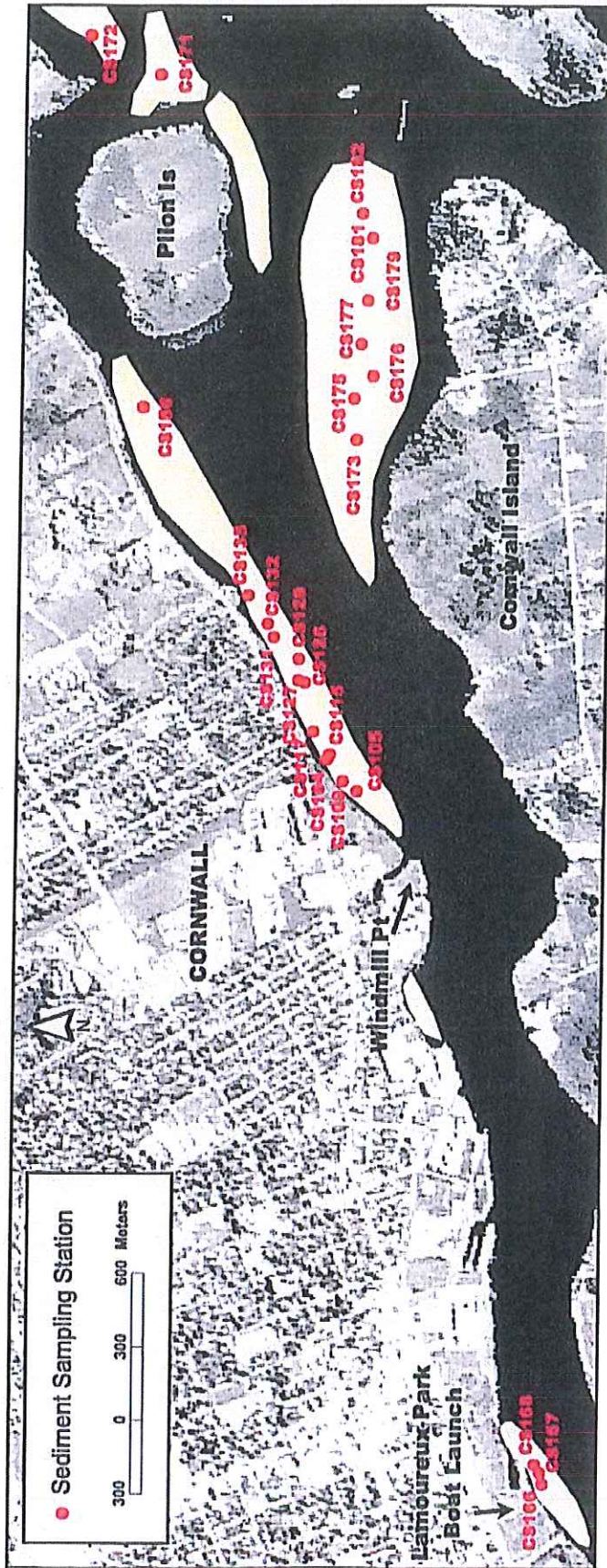


Figure 60. 1997 bottom sediment sampling locations (Richman 1999).

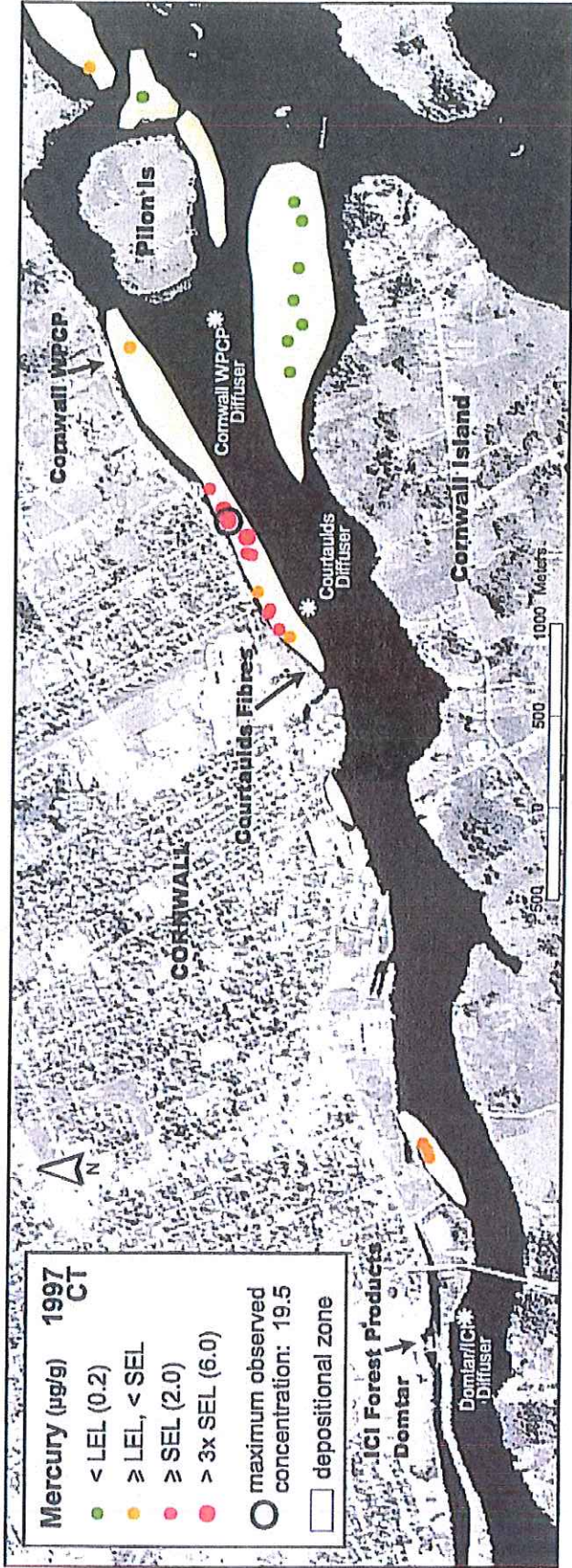


Figure 61. Total mercury in bottom sediment (top 10 cm of core), 1997 (Richman 1999). CT=core top.

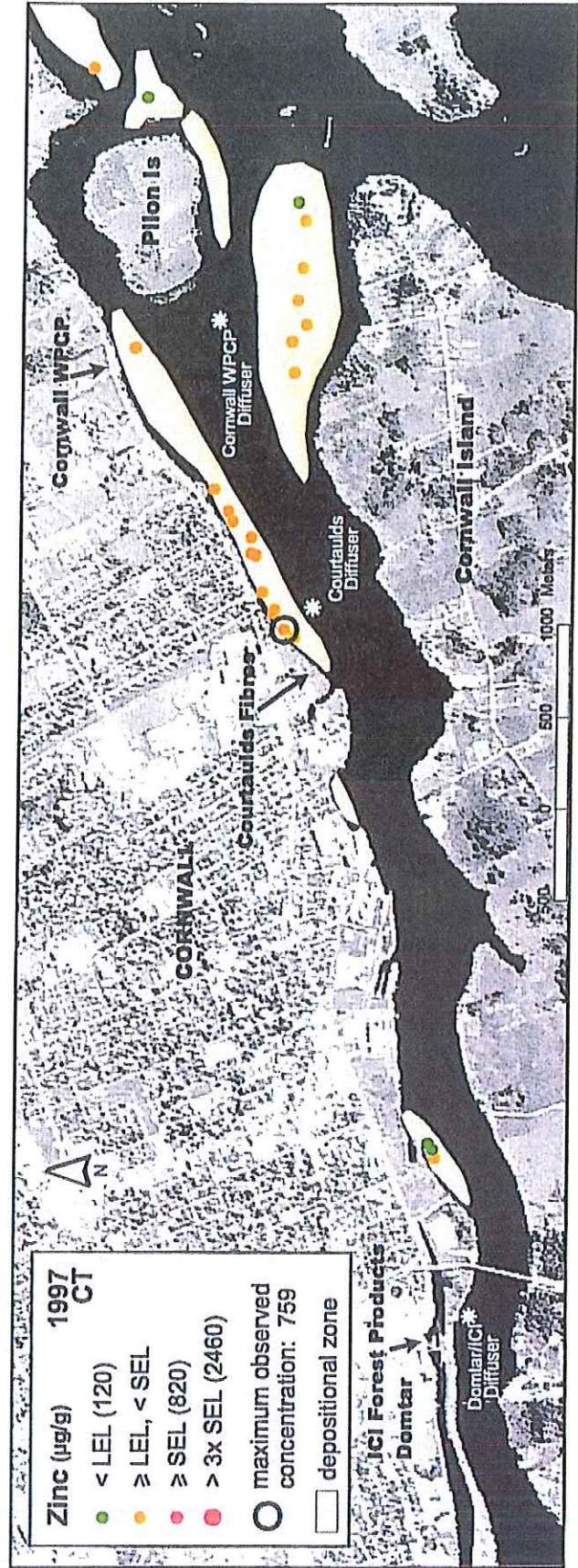


Figure 62. Zinc in bottom sediment (top 10 cm of core), 1997 (Richman 1999). CT=core top.

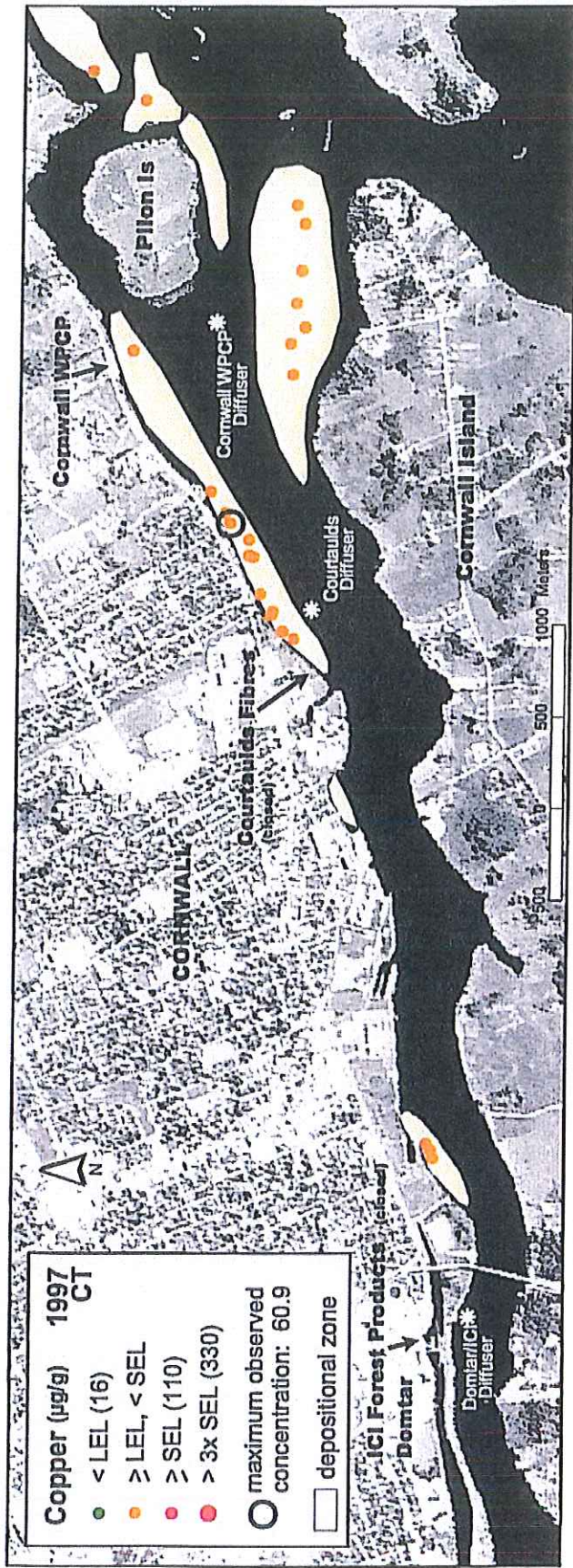


Figure 63. Copper in bottom sediment (top 10 cm of core), 1997 (Richman 1999). CT=core top.

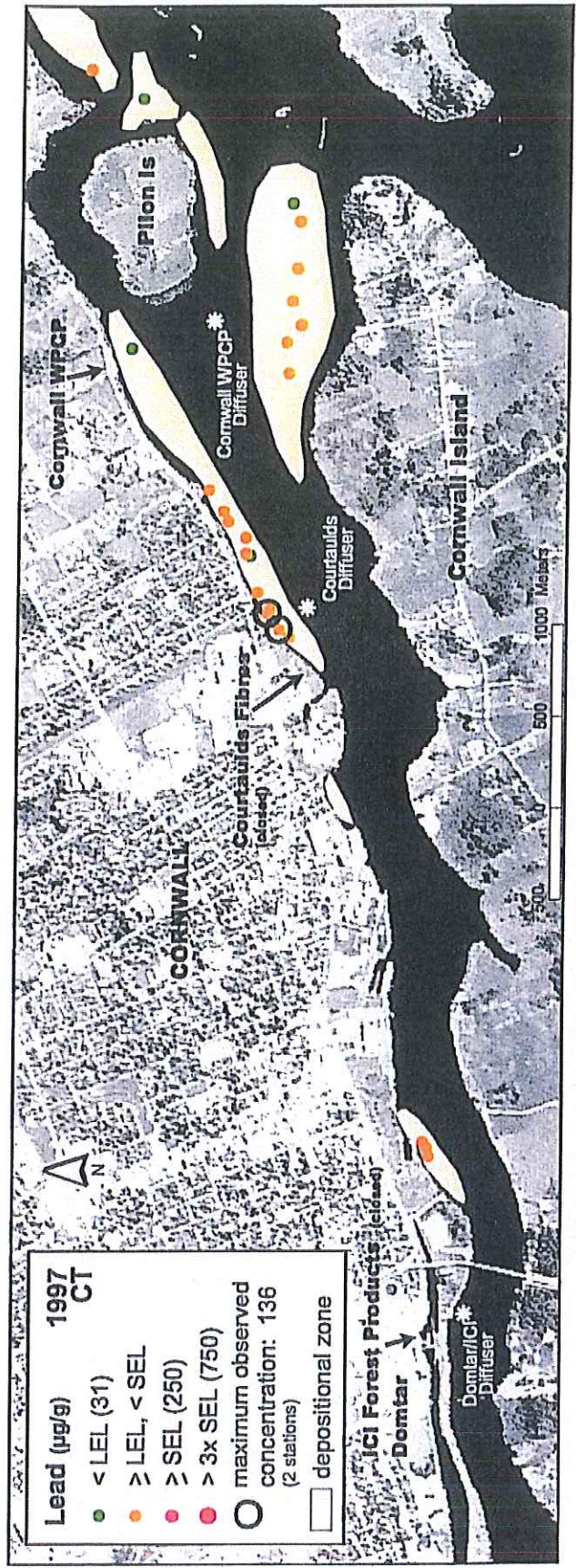


Figure 64. Lead in bottom sediment (top 10 cm of core), 1997 (Richman 1999). CT=core top.

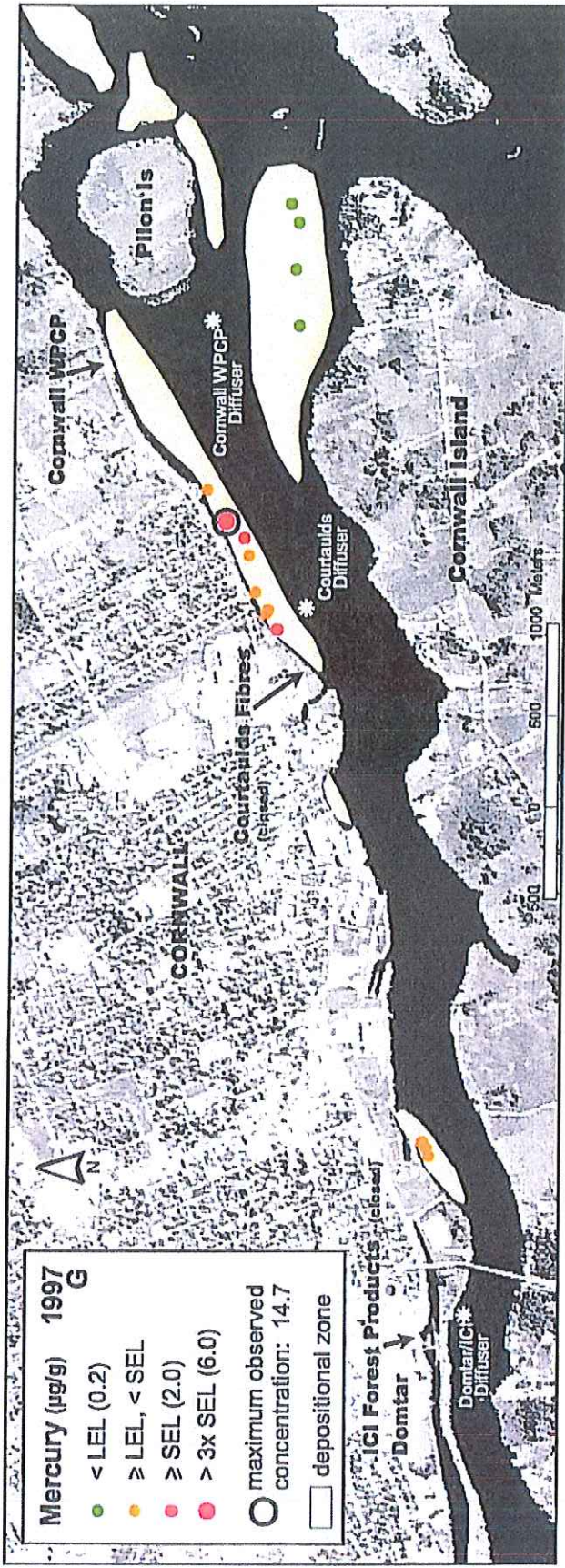


Figure 65. Total mercury in bottom sediment (top 3 cm), 1997 (Richman 1999). G=surface grab sample.

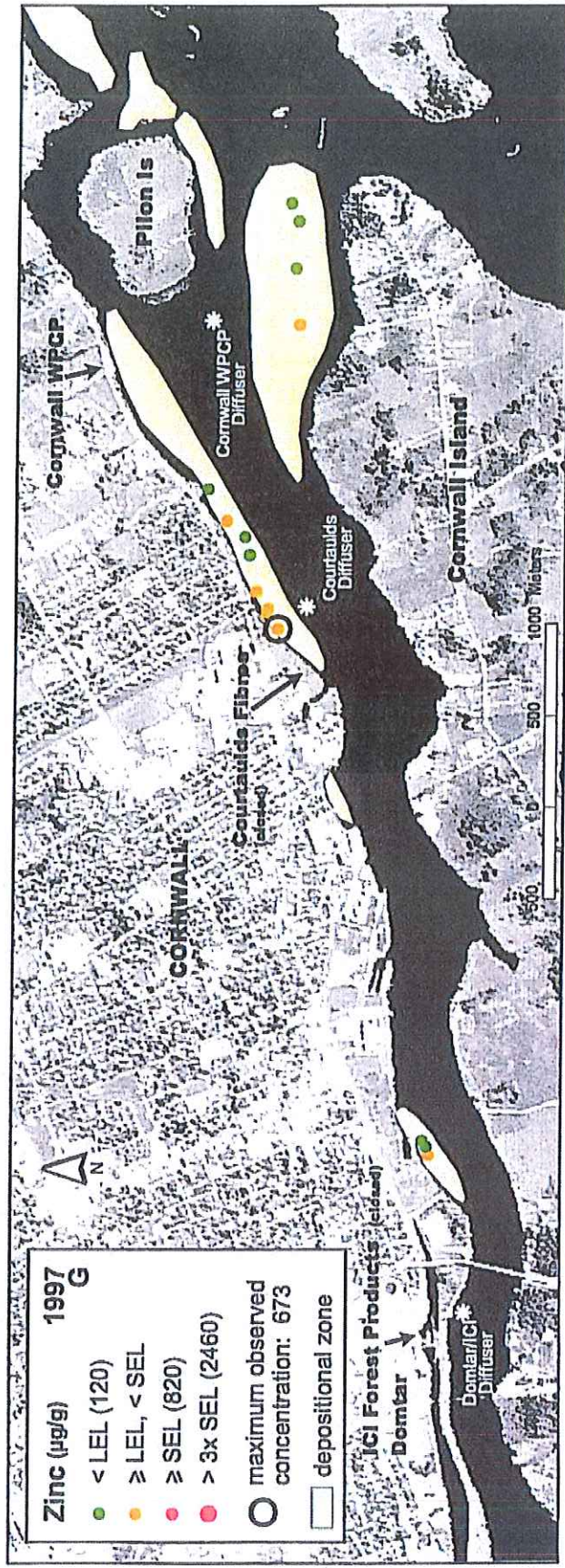


Figure 66. Zinc in bottom sediment (top 3 cm), 1997 (Richman 1999). G=surface grab sample.

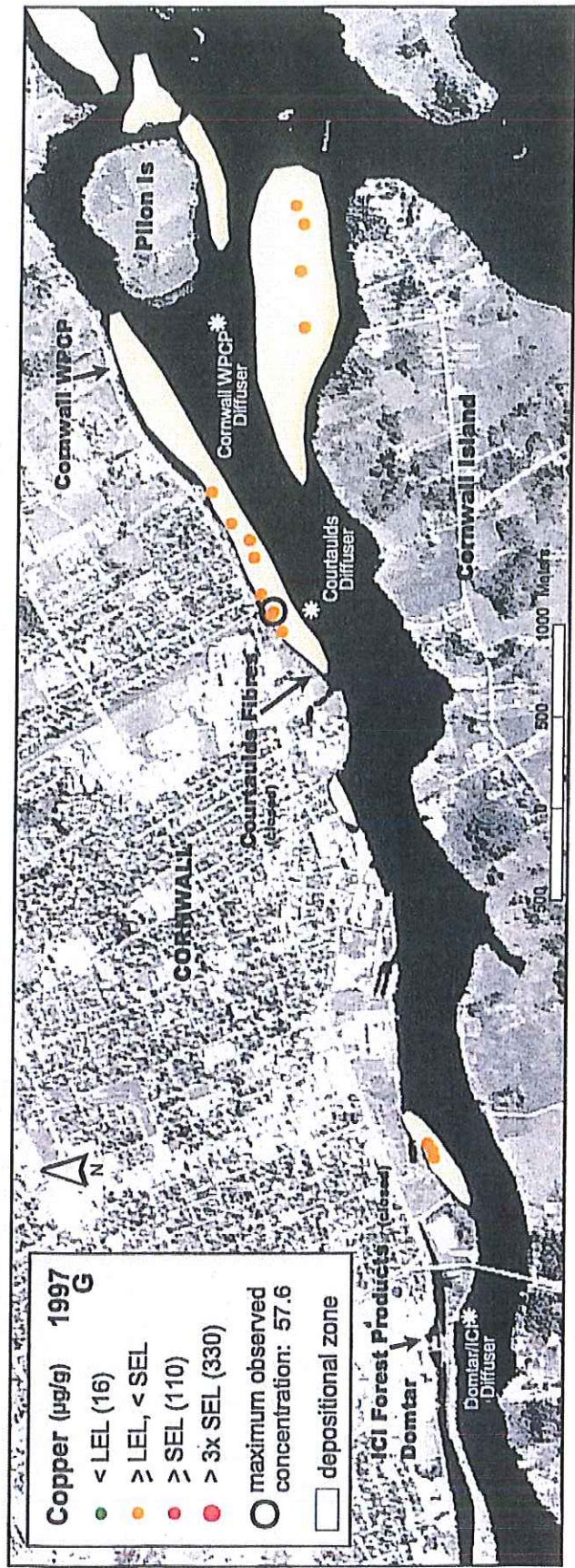


Figure 67. Copper in bottom sediment (top 3 cm), 1997 (Richman 1999). G=surface grab sample.

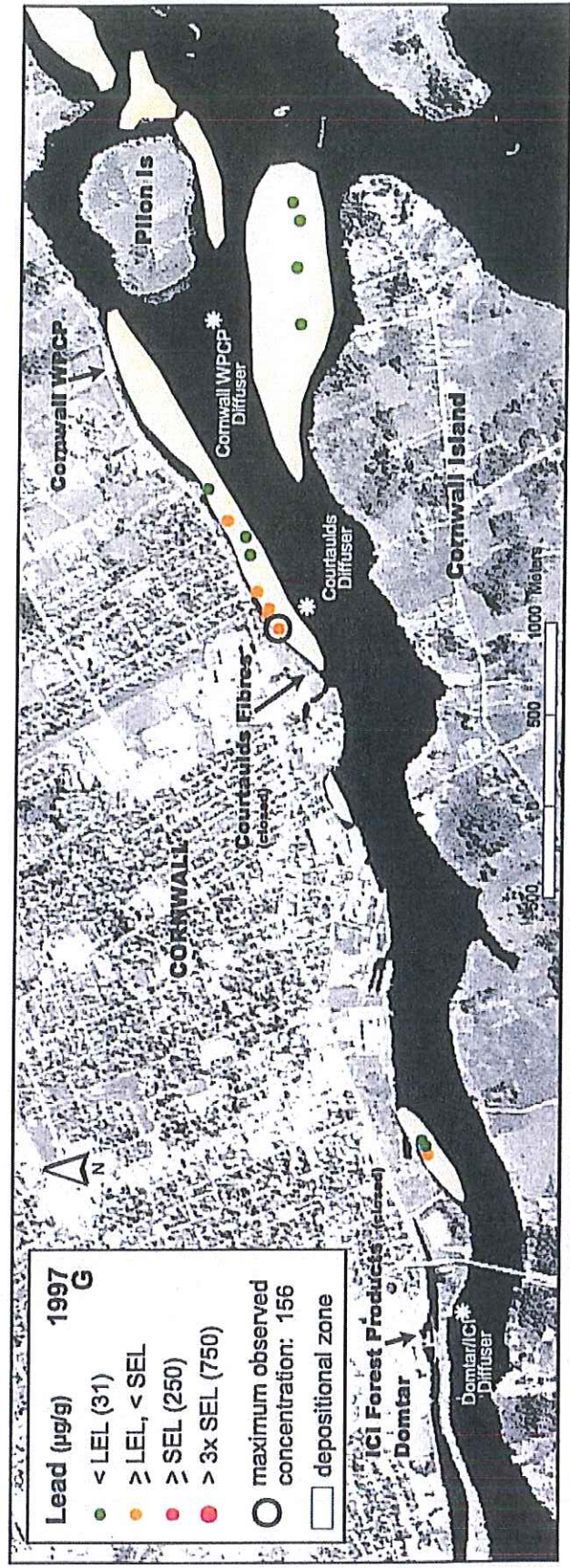


Figure 68. Lead in bottom sediment (top 3 cm), 1997 (Richman 1999). G=surface grab sample.

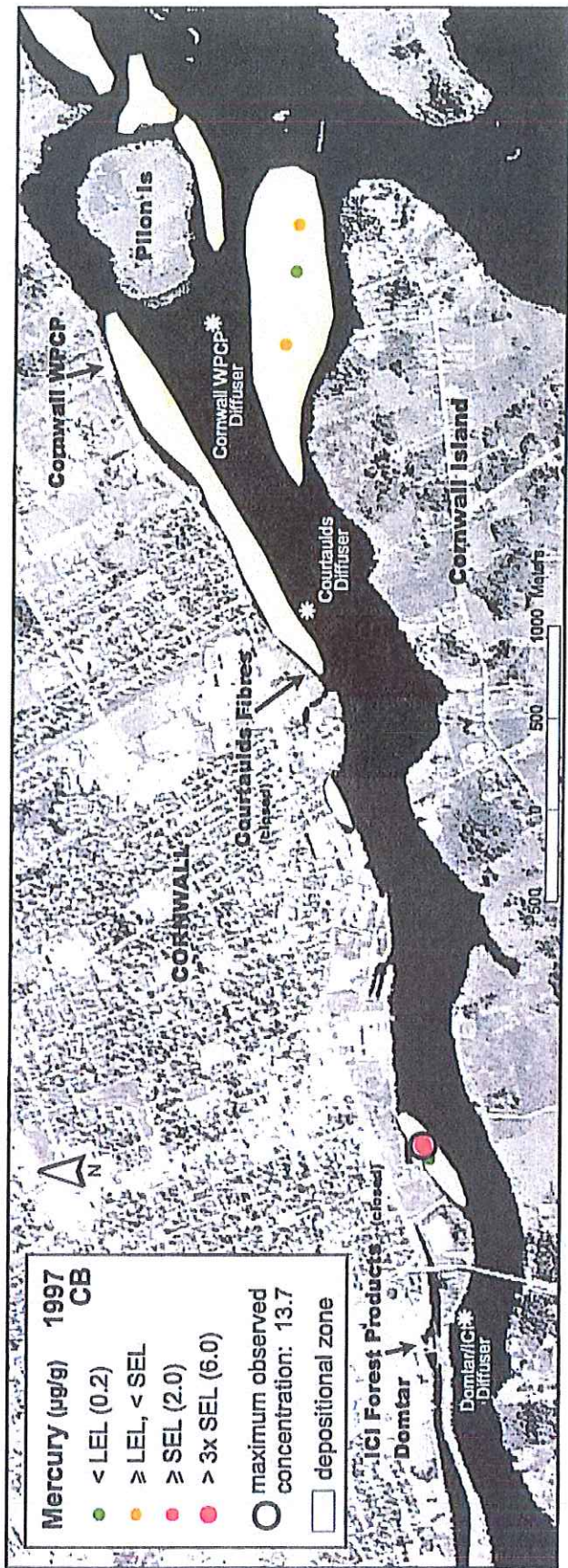


Figure 69. Total mercury in bottom sediment (bottom 10 cm of core), 1997 (Richman 1999). CB=core bottom.

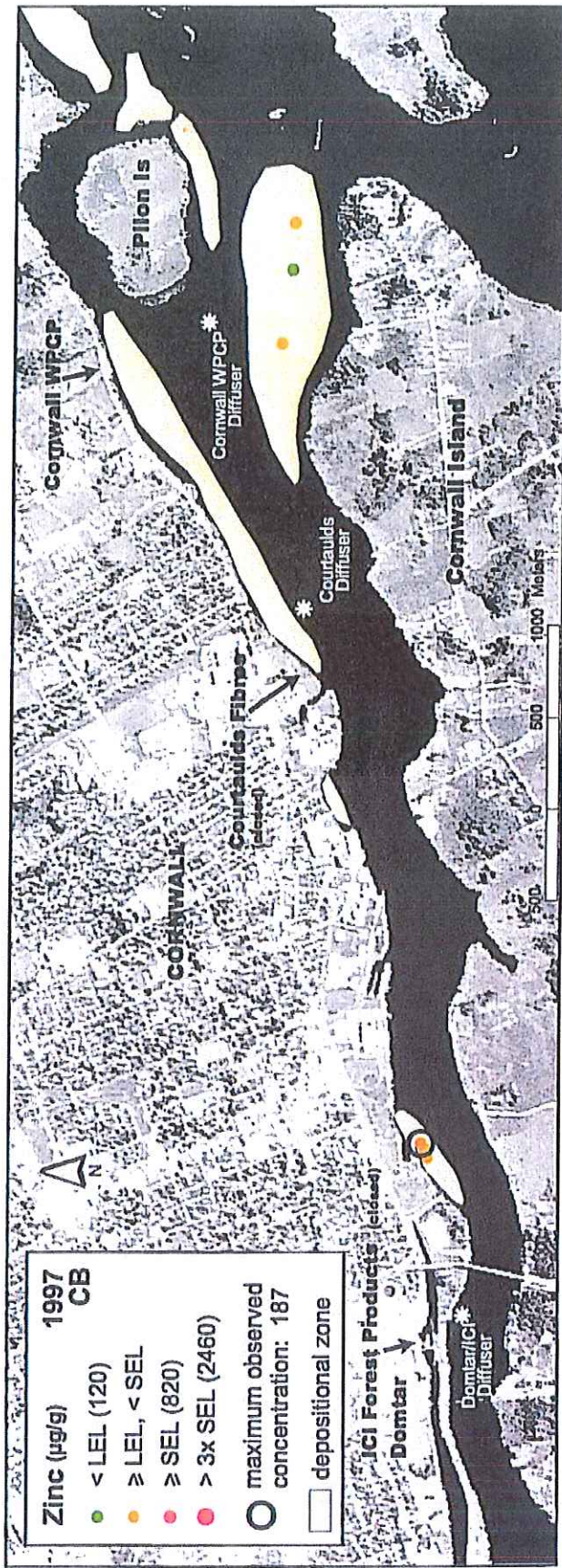


Figure 70. Zinc in bottom sediment (bottom 10 cm of core), 1997 (Richman 1999). CB=core bottom.

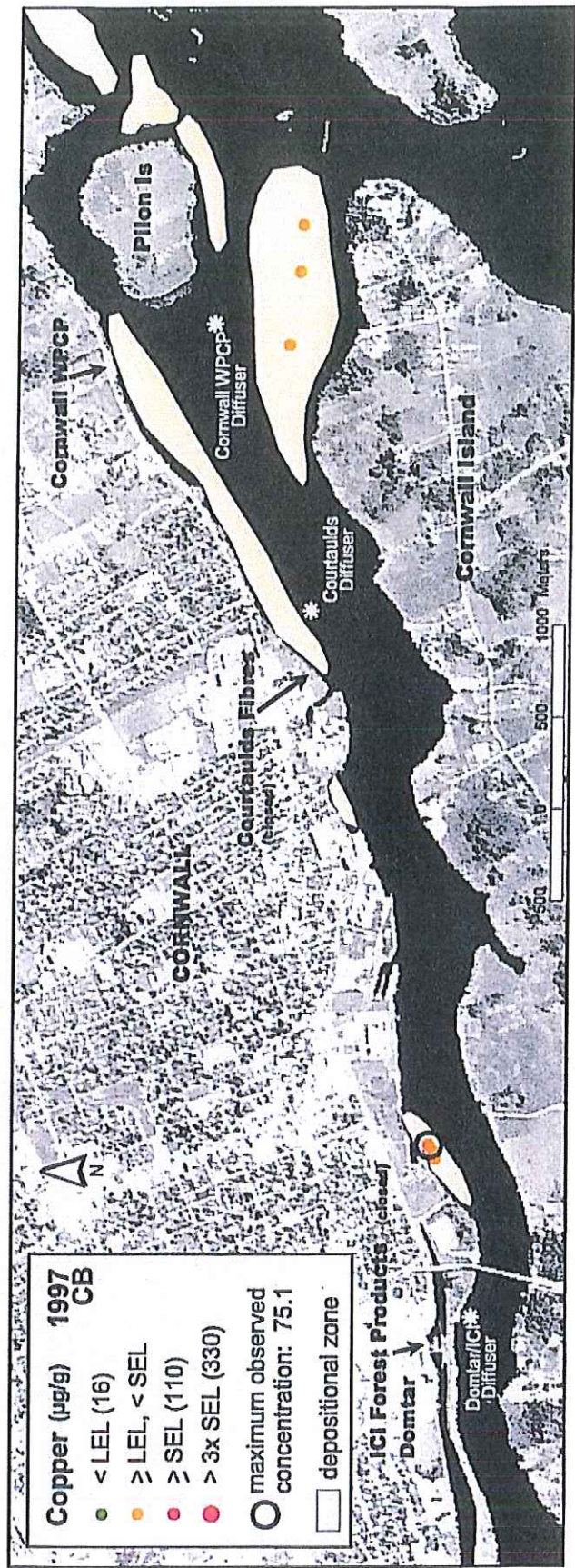


Figure 71. Copper in bottom sediment (bottom 10 cm of core), 1997 (Richman 1999). CB=core bottom.

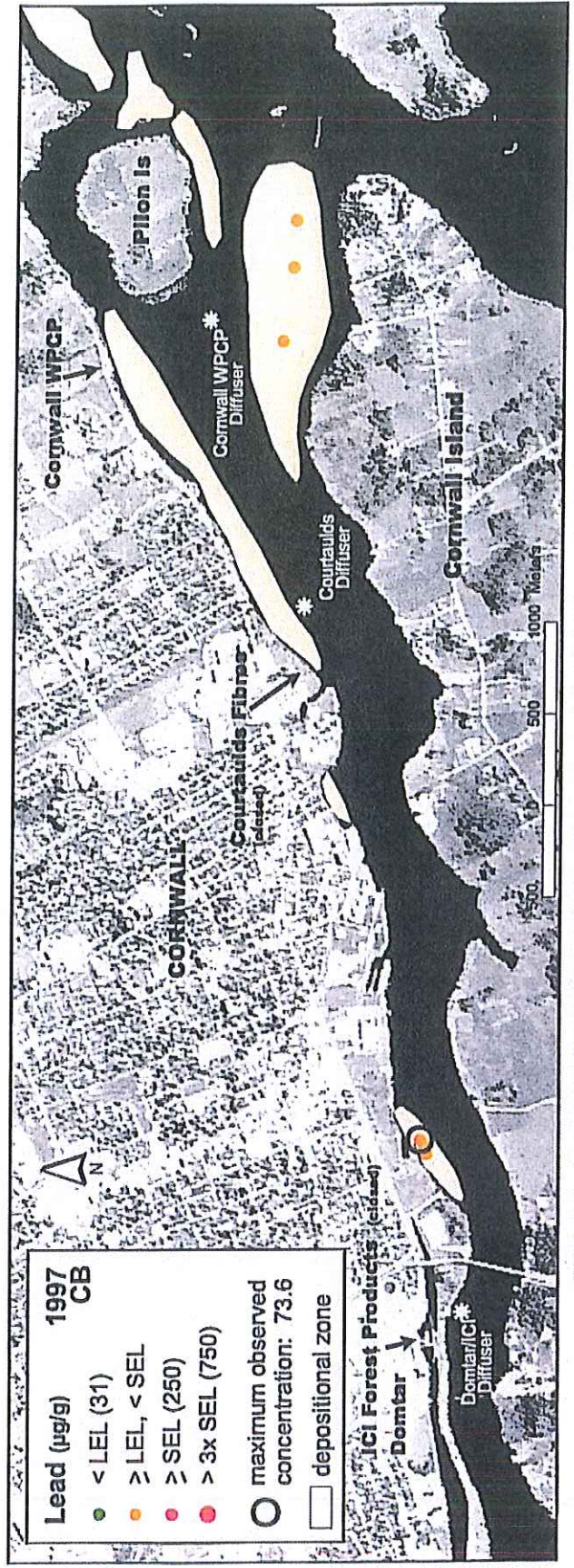


Figure 72. Lead in bottom sediment (bottom 10 cm of core), 1997 (Richman 1999). CB=core bottom.

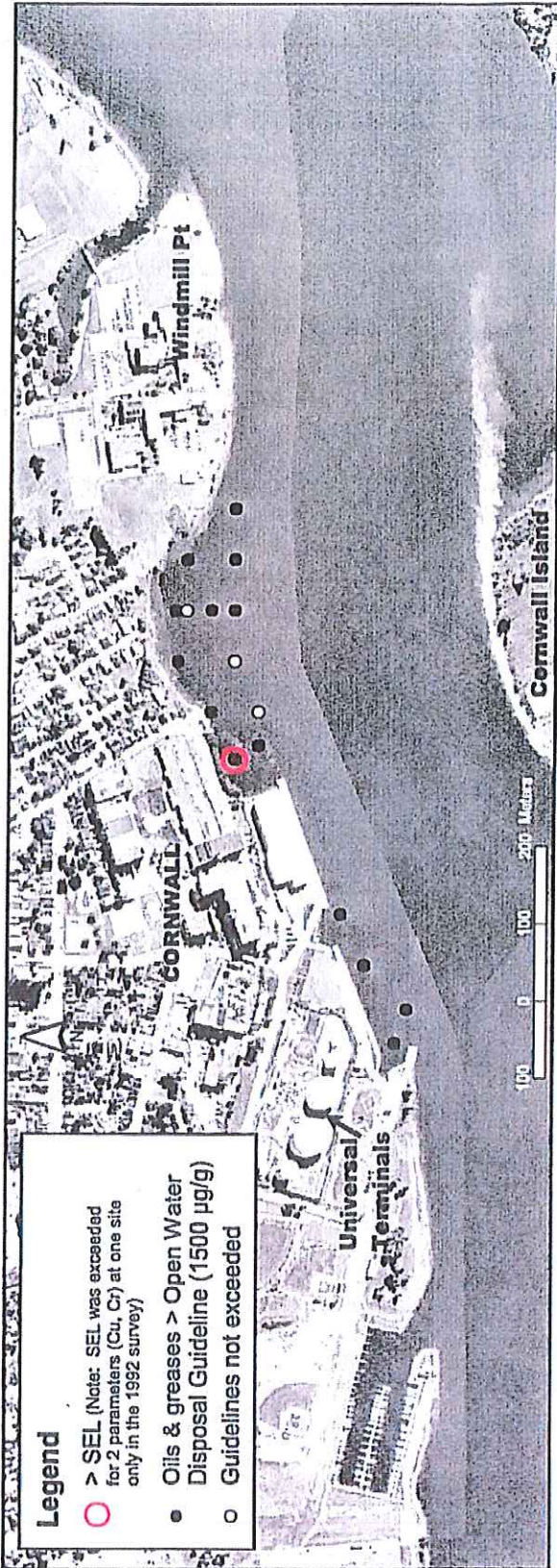


Figure 73A. Stations sampled and stations at which guidelines were exceeded in 1992 MOE bottom sediment survey of oil tank storage area (Metcalfe-Smith et al. 1995). Surface grab samples were taken at all stations.

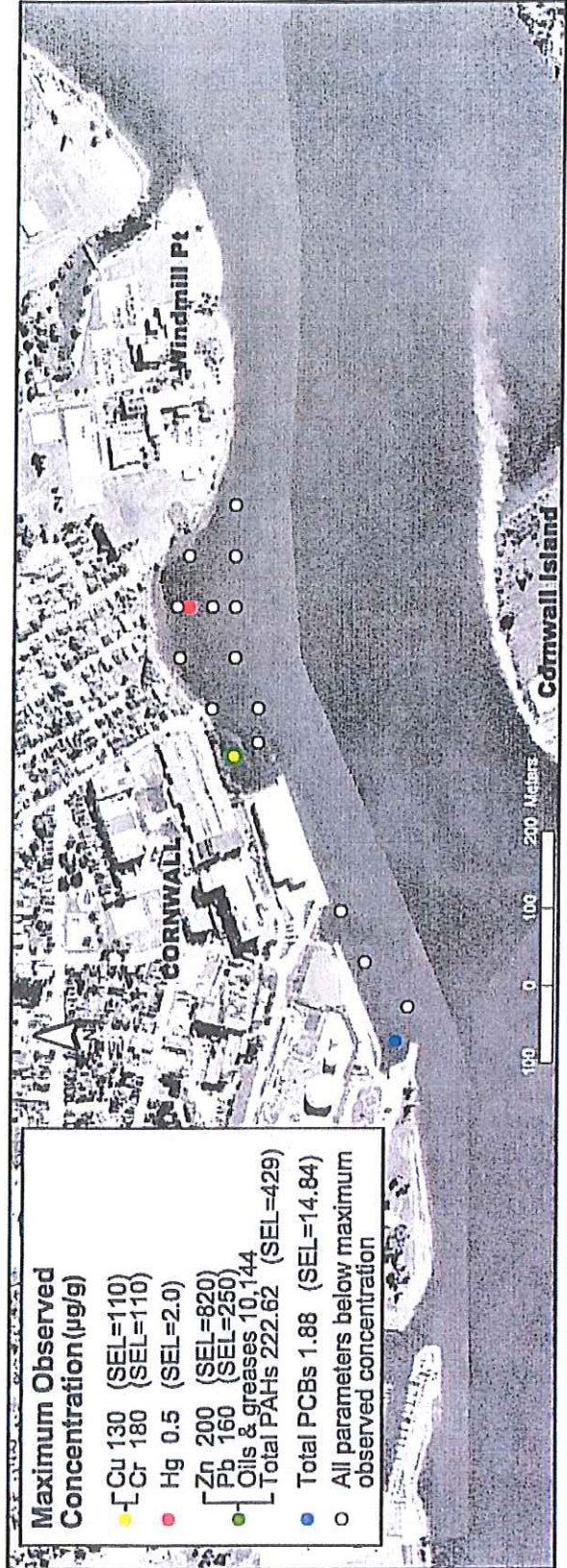


Figure 73B. Maximum observed concentrations of contaminants in 1992 MOE bottom sediment survey of oil tank storage area (Metcalfe-Smith et al. 1995). Surface grab samples were taken at all stations.

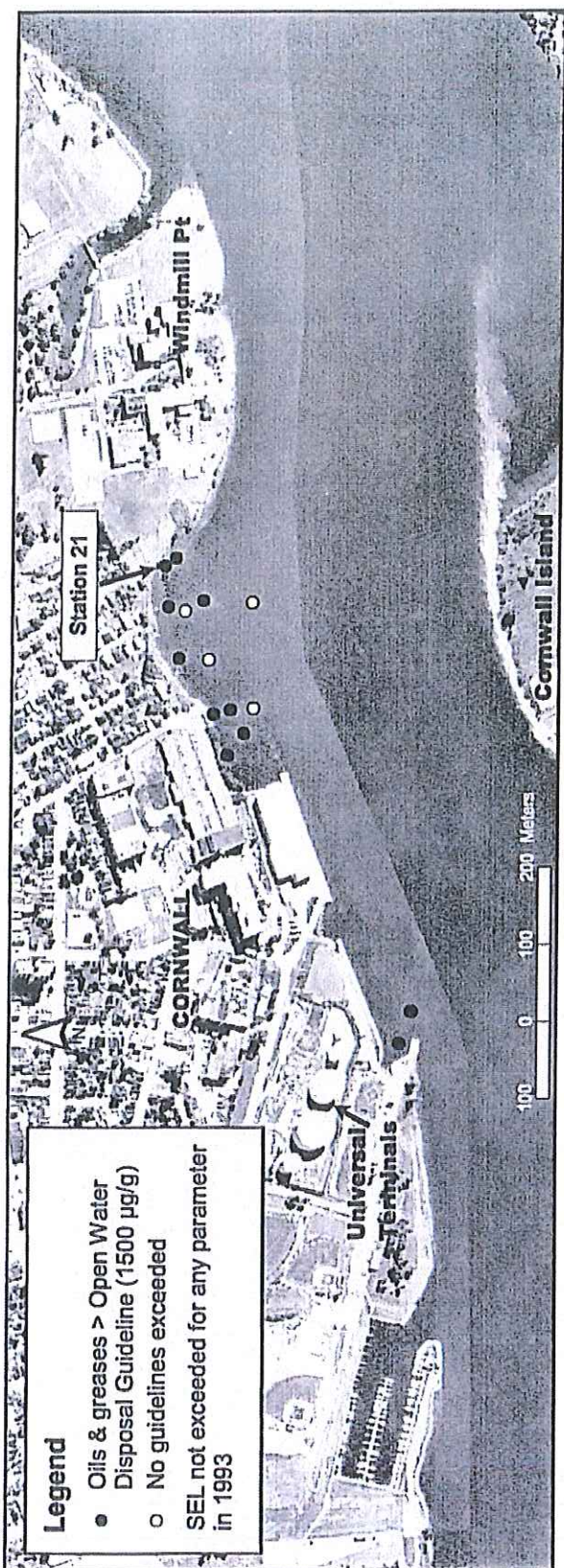


Figure 74A. Stations sampled and stations at which guidelines were exceeded in 1993 EC bottom sediment survey of oil tank storage area (Metcalfe-Smith et al. 1995). Surface grab samples were taken at all stations except for core sample taken at station 21 (marked with arrow).

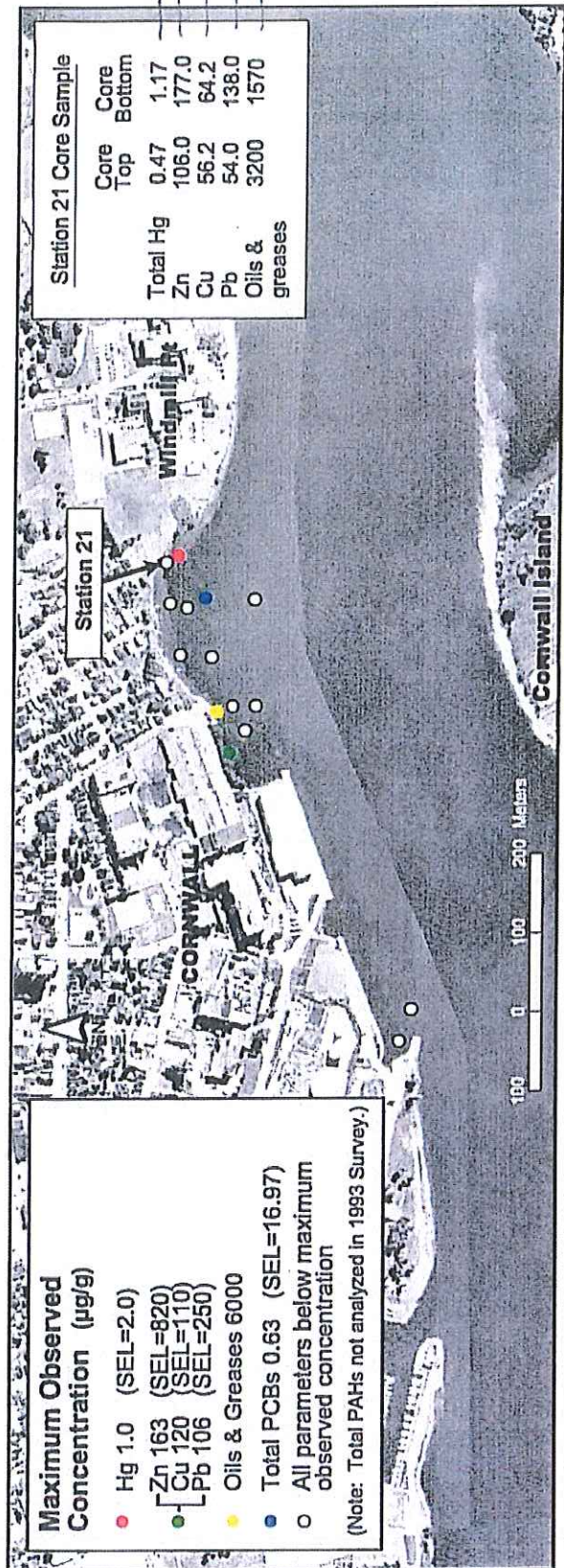


Figure 74B. Maximum observed concentrations of contaminants in 1993 EC bottom sediment survey of oil tank storage area (Metcalfe-Smith et al. 1995). Surface grab samples were taken at all stations except for core sample taken at station 21 (marked with arrow).

Station 21 Core Sample	
Core Top	0.47
Core Bottom	1.17
Total Hg	106.0
Zn	177.0
Cu	56.2
Pb	64.2
Oils & greases	138.0
	3200
	1570

2.5 times
1.7 times
1.14 times
2.6 times
2.0 times



Figure 75. St. Lawrence River (Lake St. Francis).

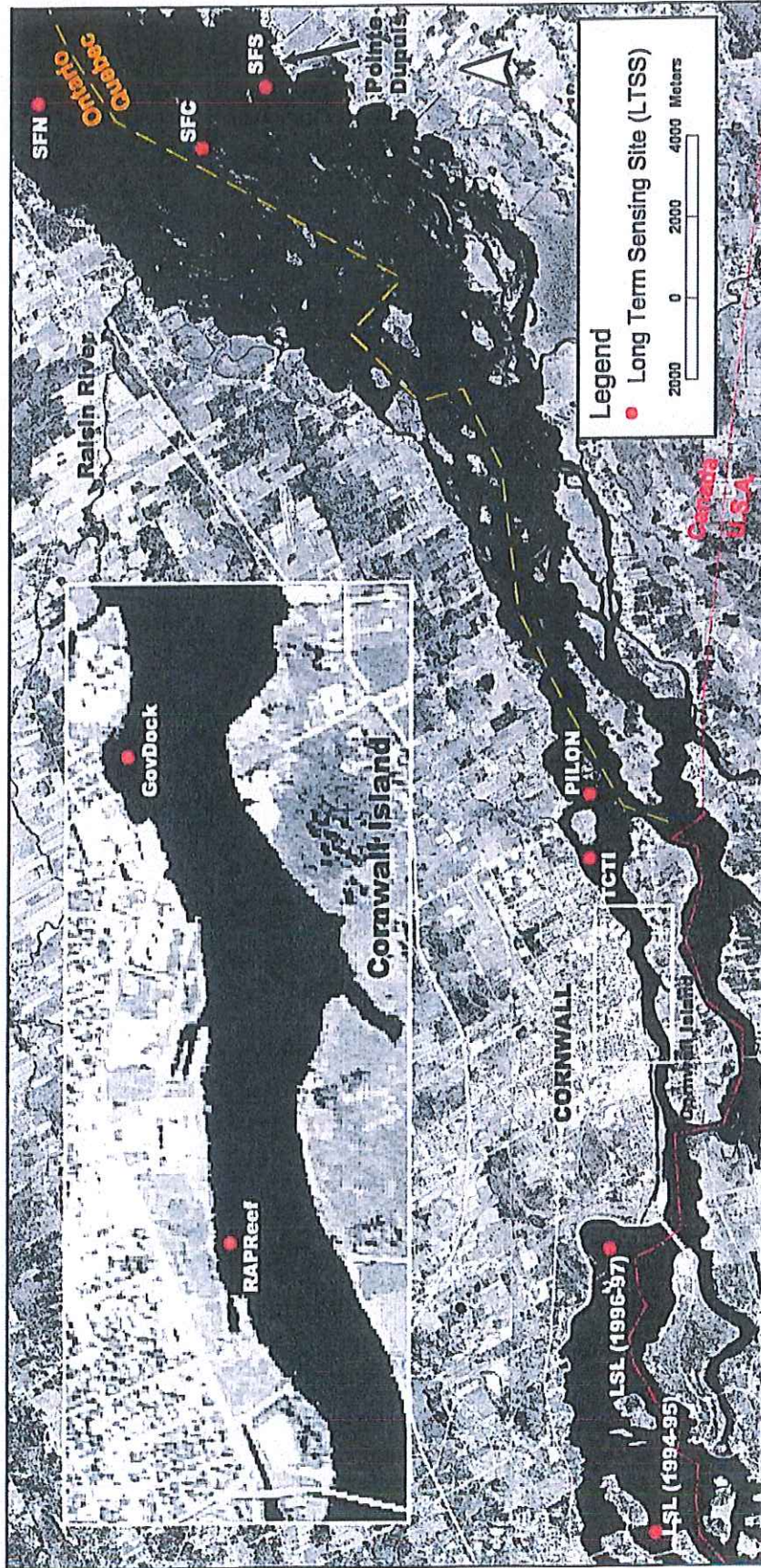


Figure 76. Long term sensing sites (LTSS) for suspended solids study. Source: Lepage (1999); H.Biberhofer (Environment Canada, pers.comm).

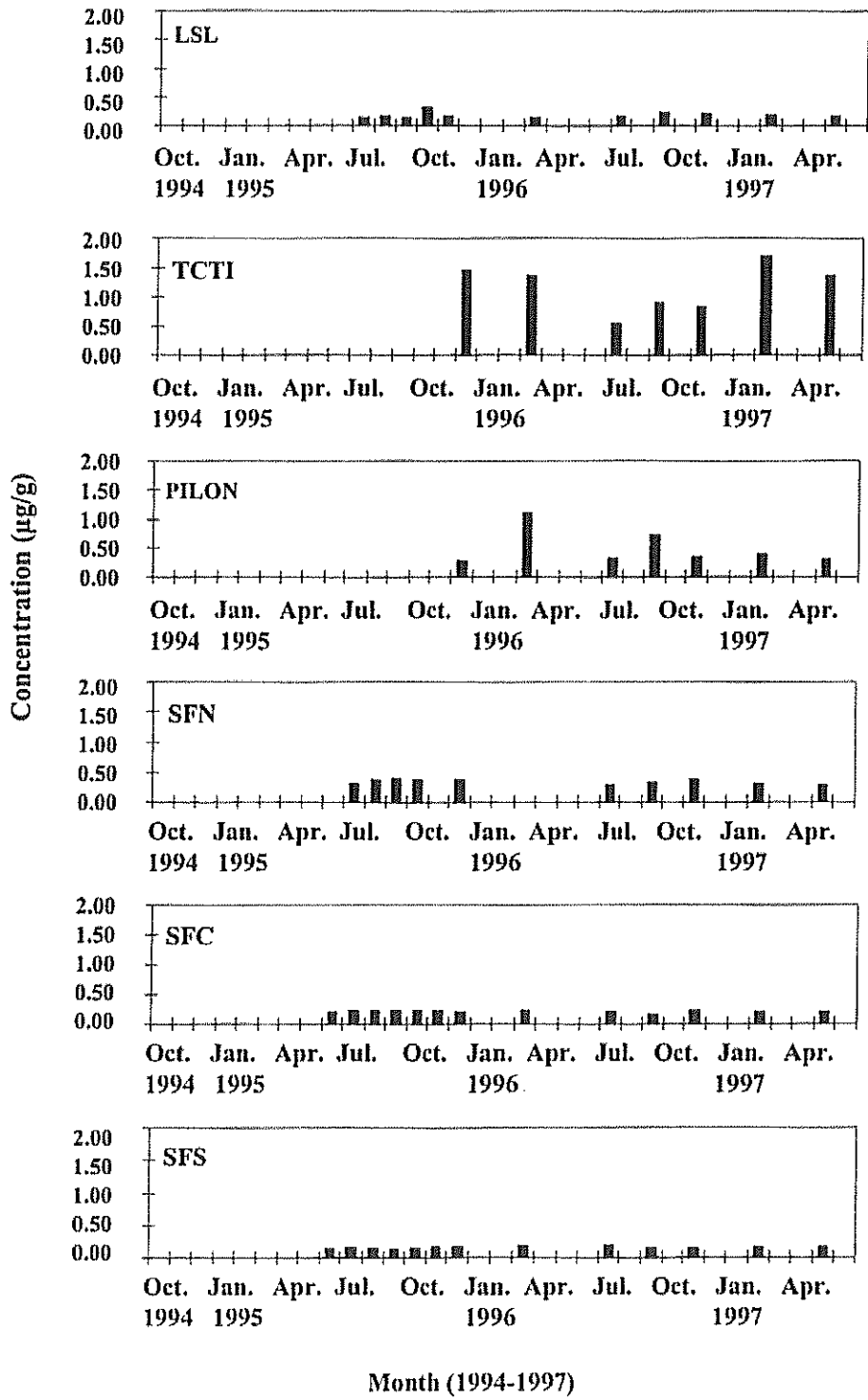
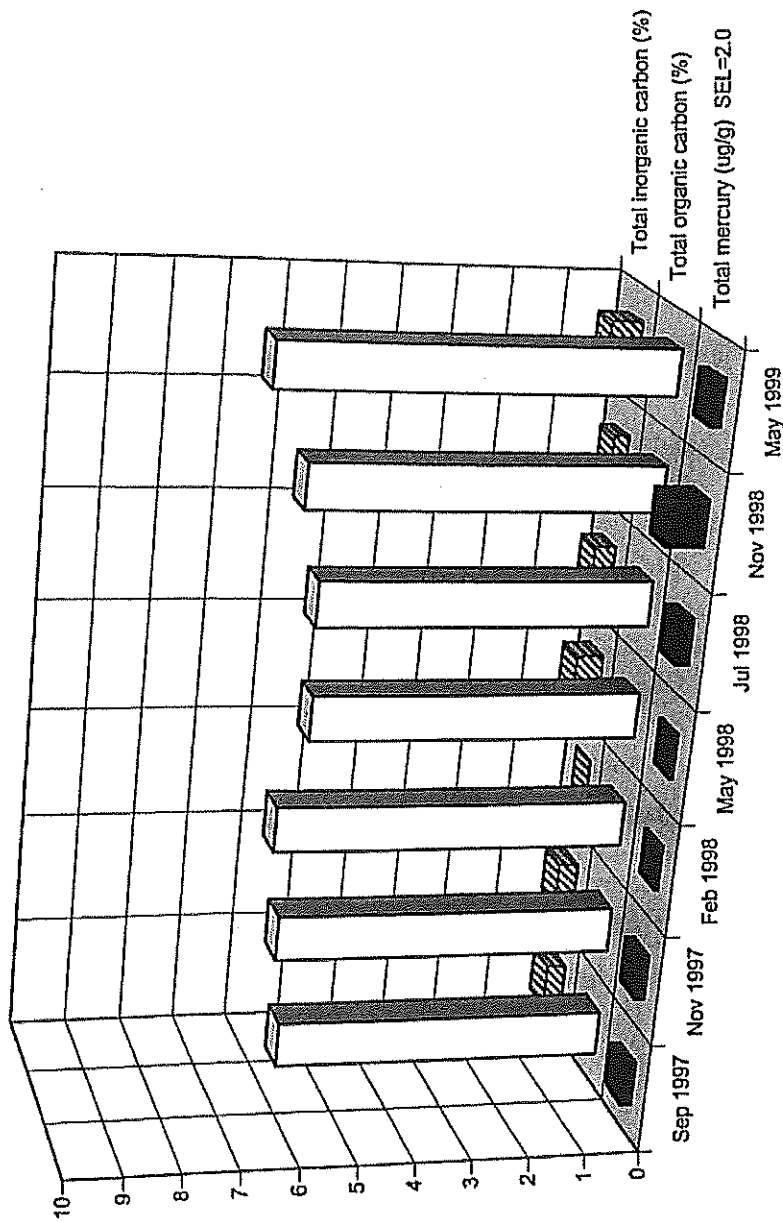


Figure 77A. Variation in total mercury ($\mu\text{g/g}$) in suspended matter of the St. Lawrence River between November 1994 and May 1997. Source: Lepage (1999).



	Sep 1997	Nov 1997	Feb 1998	May 1998	Jul 1998	Nov 1998	May 1999
Total mercury (ug/g) SEL=2.0	0.19	0.17	0.06	0.05	0.22	0.55	0.17
Total organic carbon (%)	5.87	6.04	6.24	5.81	5.88	6.24	6.94
Total inorganic carbon (%)	0.35	0.35	0.01	0.50	0.40	0.27	0.56

Figure 77B. Sampling results for LSL site (upstream reference LTSS site). Only TOP trap samples (5 m above river bottom) were taken on dates shown. Data source: H. Biberhofer and S. Lepage, Environment Canada, 2000.

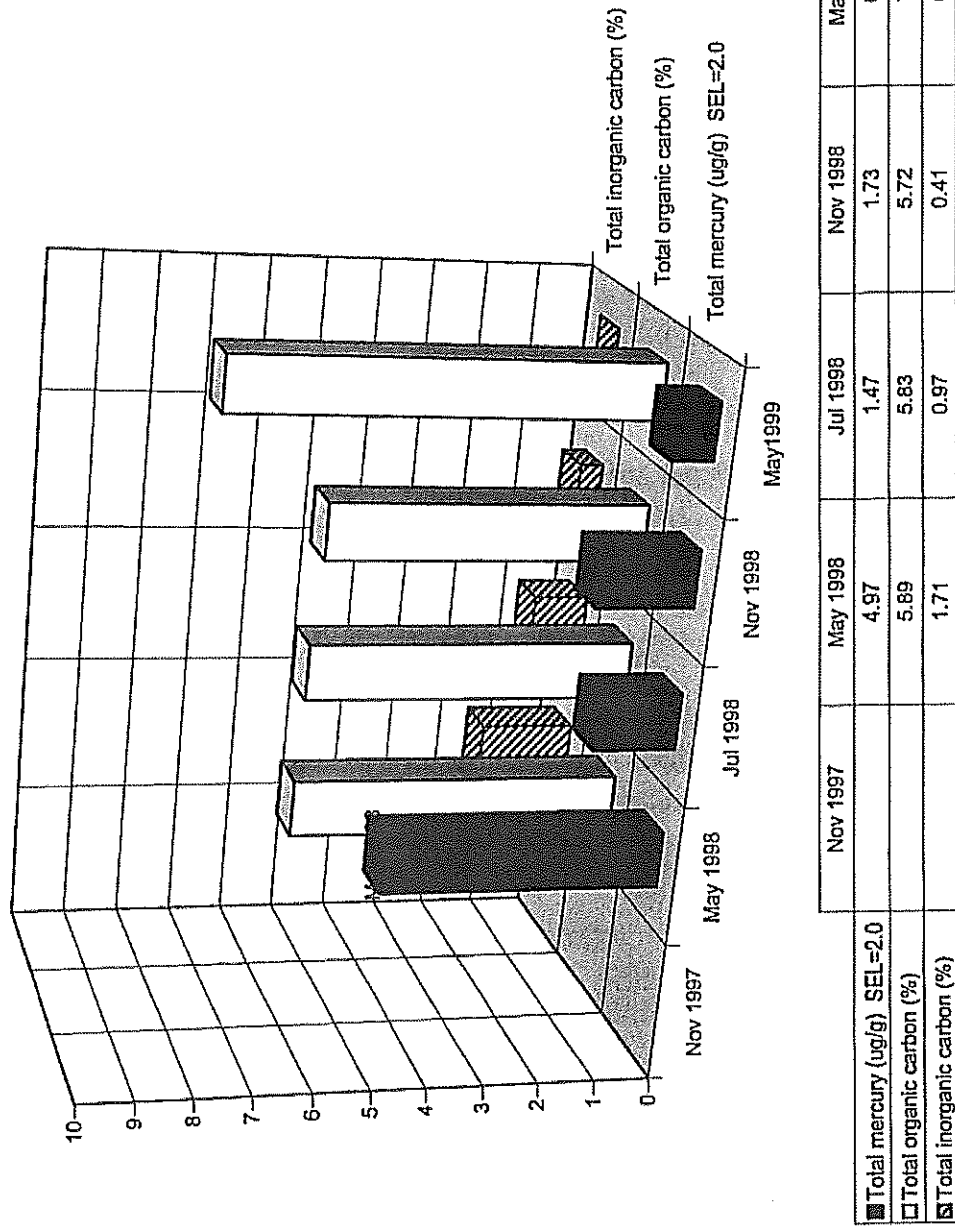
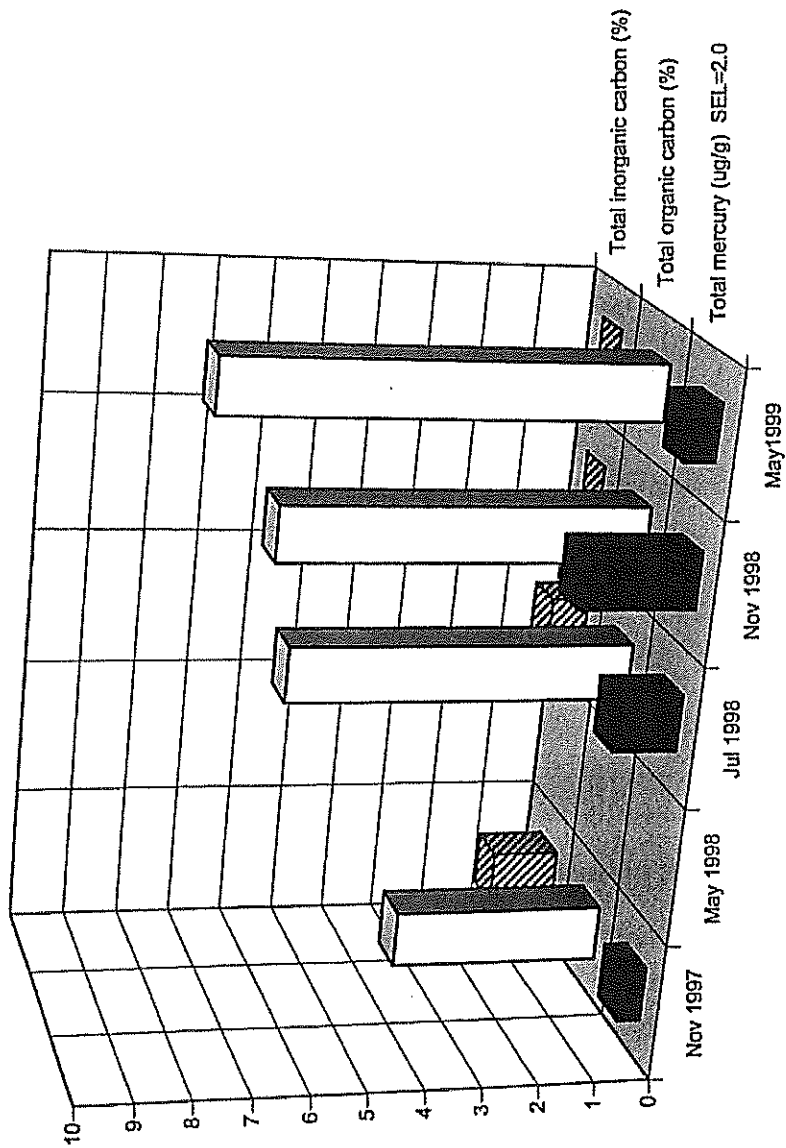


Figure 77C. Sampling results for RAPReef LTSS site (TOP trap, 5 m above river bottom). N=1 for all sampling dates. Blank table cell=no data. Data source: H. Biberhofer and S. Lepage, Environment Canada, 2000.



	Nov 1997	May 1998	Jul 1998	Nov 1998	May 1999
Total mercury (ug/g) SEL=2.0	0.42	1.12	2.05	6.59	7.81
Total organic carbon (%)	3.76	6.20	0.68	0	0.01
Total inorganic carbon (%)	1.21				

Figure 77D. Sampling results for RAPReef LTSS site (BOTTOM trap, 1 m above river bottom). N=1 for all sampling dates. Blank table cell=no data. Data source: H. Biberhofer and S. Lepage, Environment Canada, 2000.