

Table 3. Average and maximum erosion distances and rates for each site over our three time periods, expressed in meters and m/year, as well as the area of each erosion site between 1955 and 2015, with estimated cubic volume loss based on DEM.

Erosional Rates and Volume Estimations of the Colville River										
Site	Years	Avg. Erosion Distance (m)	Avg. Erosion Rate (m/year)	Max. Erosion Distance (m)	Max. Erosion Rate (m/year)	Erosion Area, Hand-Digitized Calculation (m ²)	Erosion Area, Change Detection Calculation (m ²)	Cubic Volume of Erosion, Hand-Digitized (m ³)	Cubic Volume of Erosion, Change Detection (m ³)	% Error Change Detection vs. Hand-Digitized
1	1955–1982	43	1.59	56	2.07	25,085	24,571	Average Elevation: 5.04 m		
	1982–2015	52	1.58	61	1.85	31,959	31,819	126,428	123,838	2.05%
	1955–2015	95	1.58	117	1.95	57,044	57,411	161,073	160,368	0.44%
2	1955–1979	29	1.21	37	1.54	14,845	12,954	Average Elevation: 5.63 m		
	1979–2015	32	0.89	37	1.03	14,747	16,555	83,577	72,931	12.74%
	1955–2015	61	1.02	68	1.13	29,592	26,866	83,026	93,205	12.26%
3	1955–1979	42	1.78	66	2.75	51,714	53,626	Average Elevation: 7.51 m		
	1979–2015	78	2.17	125	3.47	97,843	100,907	388,372	402,731	3.70%
	1955–2015	120	2	180	3	149,557	156,396	734,801	757,812	3.13%
4	1955–1979	16	0.67	33	1.38	23,884	25,381	Average Elevation: 33.56 m		
	1979–2015	38	1.06	53	1.47	50,352	47,877	1,123,173	1,174,534	4.57%
	1955–2015	54	0.9	87	1.45	74,236	72,889	801,547	851,786	6.27%
								1,689,813	1,606,752	4.92%
								2,491,360	2,446,155	1.81%