

Table S1 – Sediment contamination and site localisation. For each site, a sample site code was assigned to name raw reads (e.g. 1*.fastq or 3p*.fastq from Riaucourt and Scey, respectively). Geographic coordinates are indicated in decimal degrees.

Sites	Riaucourt	Scey	Seurre	Nantua	Oise	Courcelles	Condé	Saint-Mihiel	Madine	Jouy-aux-Arches	Montigny1	Montigny2
Site topography	canal	harbor	harbor	lake	canal	harbor	pond	canal	lake	canal	canal	canal
Sample site codes	1	2	3p	4	P5	6	7p	8	9	11	12 and 12p	12pp
Longitude (DD)	5.150222	5.974818	5.142649	5.601775	2.509842	3.026757	3.597964	5.534464	5.747214	6.078712	6.161272	6.165338
Latitude (DD)	48.1793889	47.653304	47.001986	46.156036	49.280340	50.425258	50.459077	48.887146	48.929616	49.065957	49.108543	49.112834
Anthracene	390	10	27	513	122	1304	334	48	42	114	32	841
Benzo(a)anthracene	2890	46	190	2362	218	5007	1108	214	487	494	175	3324
Benzo(a)pyrene	2600	52	248	2253	203	5291	920	82	425	503	214	3380
Benzo(ghi)perylene	1570	48	289	1280	133	2770	609	210	239	306	184	1785
Benzo(k)fluoranthene	1490	27	140	1211	127	3073	564	163	198	232	130	1920
Chrysene	2560	25	217	2293	204	5310	1102	230	482	492	159	3687
Fluoranthene	5909	90	509	4586	448	12072	2065	737	940	1142	425	7762
Indenolpyrene	955	14	79	791	70	1607	334	130	150	172	159	1140
Naphtalene	81	5	5	5	11	130	182	18	5	5	142	1043
PCB101	2.5	2.5	2.5	2.5	2.5	2.5	9	2.5	2.5	2.5	2.5	2.5
PCB118	2.5	2.5	2.5	2.5	2.5	2.5	12	2.5	2.5	2.5	2.5	2.5
PCB138	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
PCB153	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
PCB180	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
PCB28	2.5	2.5	2.5	2.5	2.5	2.5	7	2.5	2.5	2.5	2.5	2.5
PCB52	2.5	2.5	2.5	2.5	2.5	2.5	11	2.5	2.5	2.5	2.5	2.5
Phenanthrene	1910	25	191	1687	148	4579	1620	203	223	489	175	2606
Sum PCB	2.5	2.5	2.5	2.5	2.5	2.5	44	2.5	2.5	2.5	2.5	2.5
Al	25840	49250	43790	4338	15920	23070	84850	29580	8708	65680	67210	40840
As	22.5	24	15.4	4.5	3.6	16.2	8.2	7.8	21.9	26.4	24.1	11.4
Cd	0.3	0.2	0.8	0.2	0.1	54.7	0.4	0.3	0.2	1	0.9	0.3
Cr	116.8	58.3	59.7	42.2	46.5	62.4	122	53.9	23	93.3	93.9	81.5
Co	7.7	8	8.1	2.5	3.9	6.1	17.9	7.2	5.4	13.3	11.6	6.8
Cu	16.5	13	108.5	39.8	12.1	79	58.3	23.1	5.9	44.1	38.8	44.9
Fe	42200	19130	22900	6848	11150	14740	25250	17230	24230	40480	33660	27660
Mn	235.4	188.1	372.9	126.4	258.2	346.3	695.8	204.2	336.5	692.9	626.8	882.3
Hg	0.05	0.01	0.14	0.52	0.07	4.46	0.16	0.06	0.02	0.2	0.2	0.04
Ni	28	16	23.6	21.7	8.6	17.6	49	22.6	10.6	42	37.1	16
Pb	25.2	24.3	34.8	143.5	15.7	1004	30.4	18.6	8.5	61.8	58.5	69.7
Zn	129.1	48.3	265	128	60.2	2443	192.8	122.5	41.3	275.9	214.4	109.9