Table 8-3. BCM upstream summary table – study specific

COC	Study-specific Data									
	Ecology Centrifuged Solids	King County Filtered Solids	King County Sediment Traps[a]	USGS Centrifuged Solids	Ecology Upstream Bedded Sediment	USGS Bedded Sediment	USACE Turning Basin Cores			
	2008–2009	2013–2015	2013–2015	2013–2017	2008	2013–2015	2008	2009	2011	2017
	All Conditions	Baseflow, Storm, Dam[b]	Baffle, Jar	Baseflow, Storm, Dam[b]	RM 5–RM 7 and >30% fines	RM 10 and < 62.5 µm	RM 4.3 - RM 4.75			
PCBs[c,e] (µg/kg)	n = 7 8 (median) 15 (mean) 67 (95UCL[d])	n = 3, 5, 4 7, 59, 5 (median) 8, 49, 6 (mean) 66 (95UCL[d])	n = 5, 4 1, 9 (median) 5, 13 (mean) 15 (95UCL[d])	n = 10, 17, 10 8, 18, 2 (median) 8, 25,3 (mean) 24 (95UCL[d])	n = 30 2 (median) 5 (mean) 10 (95UCL[d])	n = 7 6 (median) 6 (mean) 9 (95UCL[d])	n = 2 39 (median) 39 (mean)	n = 2 14 (median) 14 (mean)	n = 8 10 (median) 11 (mean)	n = 5 50 (median) 50 (mean)
							41 (95UCL[d]: 2008 - 2017); 43 (95UCL[d]: 2011, 2017)			
cPAH TEQ[c,f] (µg/kg)	n = 7 53 (median) 138 (mean) 640 (95UCL[d])	n = 2, 3, 4 36, 350, 39 (median) 36, 315, 44 (mean) 415 (95UCL[d])	n = 4, 4 35, 45 (median) 45, 54 (mean) 80 (95UCL[d])	n = 5, 17, 10 33, 141, 14 (median) 53, 156, 28 (mean) 157 (95UCL[d])	n = 31 16 (median) 37 (mean) 72 (95UCL[d])	n = 7 18 (median) 23 (mean) 31 (95UCL[d])	n = 2 75 (median) 75 (mean)	n = 2 17 (median) 17 (mean)	n = 9 20 (median) 25 (mean)	n = 5 28 (median) 27 (mean)
							40 (95UCL[d]: 2008 - 2017); 30 (95UCL[c] 2011, 2017)			
Dioxin/furan TEQ[c,f] (ng/kg)	n = 6 3 (median) 6 (mean) 10 (95UCL[d])	n = 3, 3, 4 3, 8, 3 (median) 3, 12, 4 (mean) 11 (95UCL[d])	n = 3, 2 1, 3 (median) 2, 3 (mean) 5 (95UCL[d])	n = 11, 17, 10 3, 9, 1 (median) 4, 10, 2 (mean) 9 (95UCL[d])	n = 31 2 (median) 2 (mean) 2 (95UCL[d])	n = 7 3 (median) 3 (mean) 4 (95UCL[d])	n = 2 3 (median) 3 (mean)	no data	n = 5 1 (median) 1 (mean)	n = 5 3 (median) 3 (mean)
							3 (95UCL[d]: 2008 - 2017); 3 (95UCL[d]: 2011, 2017)			
Arsenic[c] (mg/kg)	n = 7 14 (median) 17 (mean) 22 (95UCL[d])	n = 3, 3, 4 37, 17, 11 (median) 40, 19 11 (mean) 30 (95UCL[d])	n = 5, 2 5, 13 (median) 9, 13 (mean) 20 (95UCL[d])	n = 8, 17, 10 21, 15, 10 (median) 20, 18, 10 (mean) 20 (95UCL[d])	n = 31 9 (median) 9 (mean) 10 (95UCL[d])	n = 7 10 (median) 10 (mean) 11 (95UCL[d])	n = 2 12 (median) 12 (mean)	n = 2 5 (median) 5 (mean)	n = 9 10 (median) 9 (mean)	n = 5 13 (median) 11 (mean)
							11 (95UCL[d]: 2008 - 2017); 11 (95UCL[d]: 2011, 2017)			

[a] The traps were deployed for three-month intervals, within summer, fall, and winter seasons.

[b] King County and USGS suspended solids data (i.e., centrifuged or filtered solids) include baseflow and storm events with and without significant dam releases (qualified as > 2,000 cfs at USGS gage below Howard Hanson Dam), indicated as "Storm" and "Dam," respectively.

[c] If the sample result was non-detected, then ½ DL was used to calculate the summary statistics presented in this table.

[d] The sample sizes were too small to estimate a 95UCL for many of the subsets within each study (e.g., baseflow, storm, baffle, or jar), so a single 95UCL is reported for the combined values from each study.

[e] PCBs were calculated as the sum of detected congeners when available; otherwise, PCBs were calculated as the sum of detected Aroclors.

[f] cPAH and dioxin/furan TEQs were calculated using ½ DL for non-detected results.

95UCL – 95% upper confidence limit (on the mean)
BCM – bed composition model
cfs – cubic feet per second
COC – contaminant of concern
cPAH – carcinogenic polycyclic aromatic hydrocarbon
DL – detection limit
Ecology – Washington State Department of Ecology
MDL – method detection limit
PCB – polychlorinated biphenyl
RL – reporting limit
RM – river mile
TEQ – toxic equivalent
USGS – US Geological Survey

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