

Table 4 Stormwater Quality Comparators\*

Constituent	Units	Comparative Study Data*						STIA			
		NURP 1983	BURP 1984	Metro 1982	Bellevue 1995 <sup>(b)</sup>	Highway Runoff <sup>(c)</sup> 1981	Portland NPDES <sup>(d)</sup> 1993	Landside (SDE4, SDN1)	Airfield (SDS3, SDS4, SDN3, SDN4)	WA State Standard <sup>(e)</sup>	
pH	std units		5.2 - 7.4		7.2 - 7.8			6.7	7.3	6.5 - 8.5	
TPH	mg/l				3.7			2.6 FOG 1.8 TPH	0.5 FOG 0.13 TPH	no standard	
Fecal coliforms	mpn per 100 ml	1000 to 21000	980		201		6.5	1.7 TPH-Dx	0.08 TPH-Dx		
BOD <sub>5</sub>	mg/l	9	6.6					110	8	50	
TSS	mg/l	100	50		82.3	106	20	6.7	6	no standard	
Turb	mg/l		19		28.4		119	42.5	7.45	no standard	
glycols	mg/l	not analyzed in any of these studies							22	6.2	based on background
Cu (TR) <sup>(f)</sup>	µg/l	34		20	10.4	43		5 <sup>(g)</sup>	5 <sup>(g)</sup>	no standard	
Pb (TR) <sup>(f)</sup>	µg/l	144	170	210	26.3	466 <sup>(e)</sup>	25	24	27	10.3 <sup>(h)</sup>	
Zn (TR) <sup>(f)</sup>	µg/l	160	120	110	161.4	638	376	11	1	39 <sup>(h)</sup>	
statistic reported		median	mean <sup>(g)</sup> median	mean	log- normal median	mean	median	7-yr median	7-yr median	7-yr median	na

(a) Comparative values used in this report are in bold. Blank space means no data available, reported, or applicable.  
 (b) Bellevue, 1995 data are for instream stormwater runoff samples from the "Sturtevant Creek, downstream" site.  
 (c) Highway runoff from an 15 location in Seattle with 57,000 ADT, 43 to 54 storm samples in 1980-81 (Chul, Mar, and Horner, 1982). Because this study was conducted prior to the phase-out of leaded gasoline, lead results were higher than for other later studies.  
 (d) City of Portland 1993 NPDES Part 2 Municipal Application. Median of 10 samples from "12" industrial" outfall.  
 (e) Standards listed are for class AA waters, see WAC 173-201A.  
 (f) Total recoverable metals. WA State acute standards expressed as total recoverable, calculated at 56 mg/l hardness using generic translators in Ecology's "TSDCALC6 XLW" spreadsheet (see Section 4.5.3). This hardness value is the median of seven instream samples collected in Miller and Des Moines Creeks in 1999.  
 (g) For Turb, Cu, Pb, and Zn, BURP 1984 data was mean of grab samples, therefore Bellevue, 1995 data are more representative comparators because they represent median of composite samples, comparable to STIA samples and data for these parameters.  
 (h) STIA median data cited reflect 37 to 112 samples per parameter for landside group samples, and 90 to 153 samples per parameter for airfield group samples  
 (i) About 70% of all STIA sample results for glycols have been below detection limits of 5 mg/l (to April 1997) and 2 mg/l (May 1997-current).

