

Figure No. 14. 2000 Upper Hudson River PISCES stations with results as PCB water concentrations (ng/L, analyses comparable to 1997/98) – Above the dam at Stillwater.



General Information: High PCB levels were found at Station 49 in 1998 using PISCES, so in 2000 the lower/southern end of the Stillwater Pool was sampled more extensively. A long hot spot extends along the east side of the River in Washington Co. from above Station 62 to below Station 64 yet higher PCB levels were found on the west side of the River. The estimated PCB water concentrations at Station 49 are virtually the same as those found in 1998.

<u>Results:</u>	Station No.	PISCES – Total PCBs (ng)	Est. water conc. (ng/L)	Station No.	PISCES – Total PCBs (ng)	Est. water conc. (ng/L)
	61W-s	4073	71.7	61W-b	3068	53.2
	62E-s	1844 & 2681	37.2	62E-b	1371	22.4
	63W-s	3641	60.2	63W-b	1910	35.7
	64E-s	1446 & 1886	27.4	64E-b	896	18.5
	49E-s	4277 & 7251	109	49E-b	6324	114

Figure No. 15. 2001 Upper Hudson River PISCES stations with results as PCB water concentrations (ng/L, analyses comparable to 1997/98) – Area on west side of river upstream from the Fenimore Bridge.



General Information: Five stations were set off the west bank above Fenimore Bridge to follow up on previous findings of elevated PCB levels in PISCES (1998) and fish (1997, this work; 1999, Sloan et al 2002) sampled in this area. Duplicate Hassett samplers were used at each station. Samplers were tied to a metal fence post driven into the substrate and were suspended about one foot off the river bottom in about 2 - 3 feet of water. There may be two low level PCB sources in the area, one above Station 75 and one at/above Station 77.

<u>Results:</u>	Station No.	PISCES – Total PCBs (ng)	Est. water conc. (ng/L)
	75	81.4 & 106.2	2.7
	32	75.9 & 97.5	2.5
	76	72.3 & 93.6	2.4
	77	106.1 & 130.6	3.2
	33	99.0 & 101.4	2.8



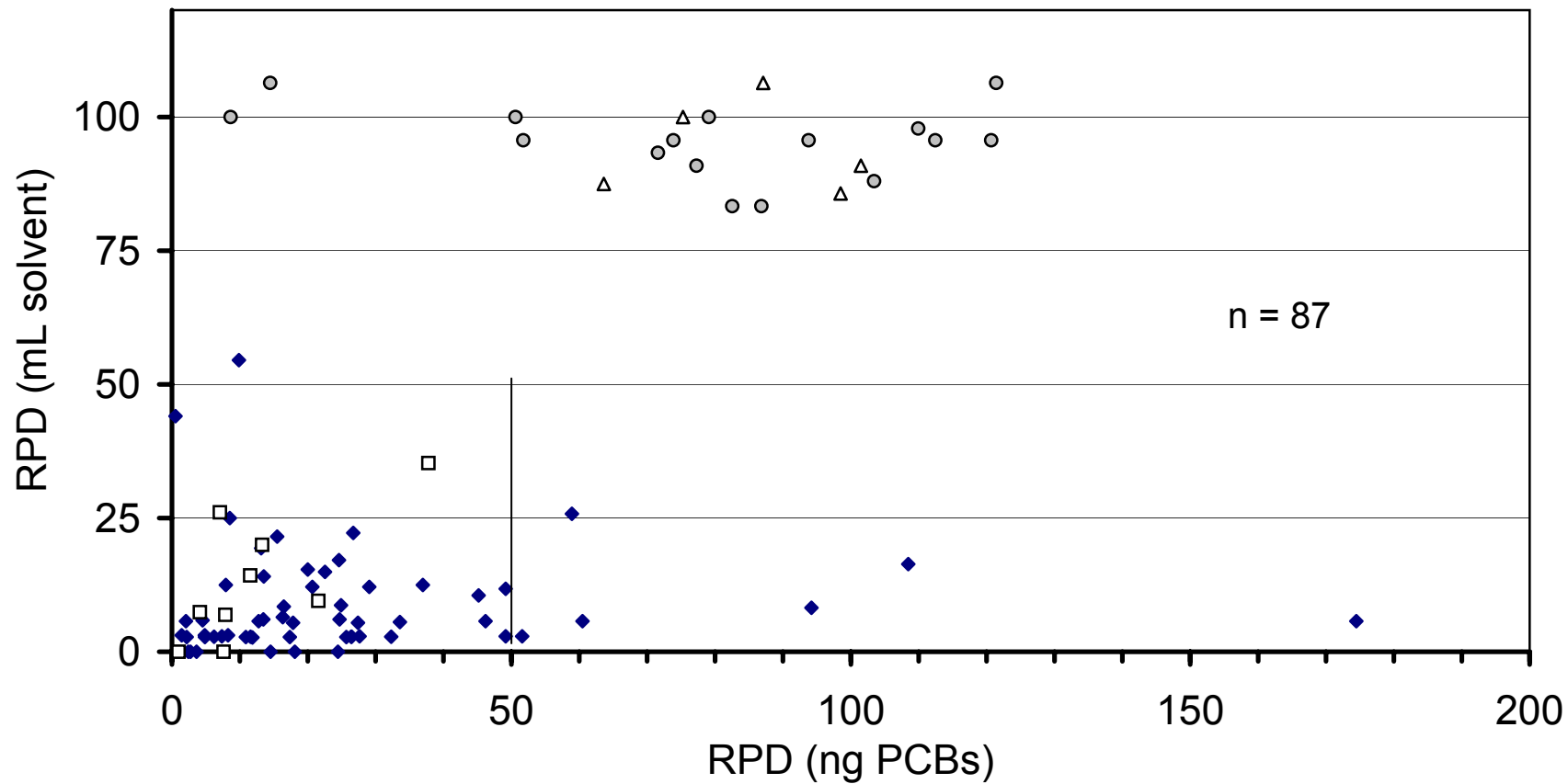
Figure 16. Types of passive samplers (PISCES) used in Upper Hudson River PCB trackdown; Hassett sampler (left) and bag sampler (right).



Figure 17. Photograph at Upper Hudson River Station 38 of stake set used in 2001 to keep PISCES at a fixed level above the bottom.

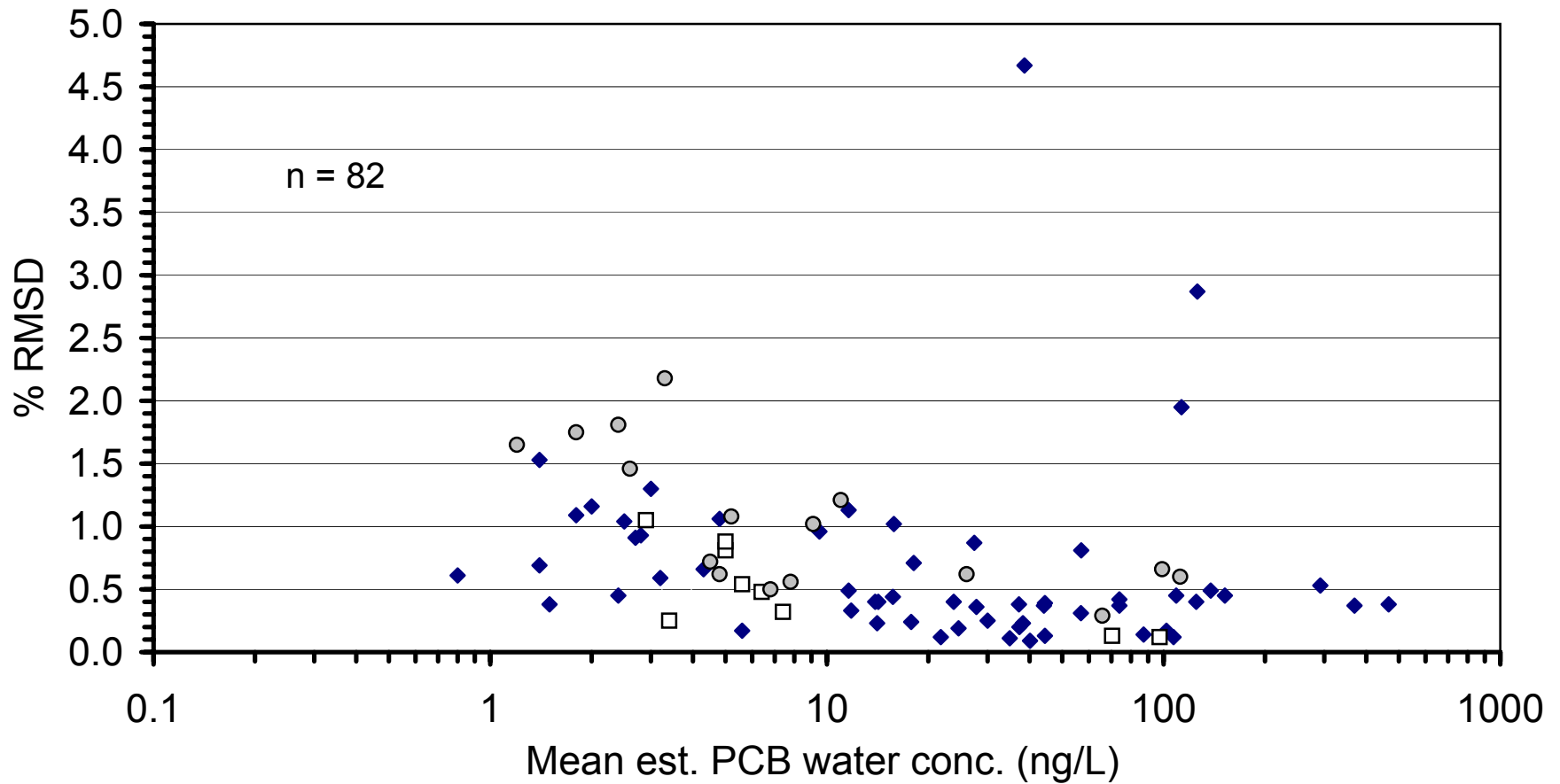


Figure 18. Photograph showing arrangement of several PISCES sets at/near Upper Hudson River Station 38 in 2001. Stake nearest shore is Station 38B, site in the middle is Station 38 and the float further offshore is Station 66.



Hassett's (57 diamonds & 5 triangles); bags (9 squares); Hassett & bag (16 circles)

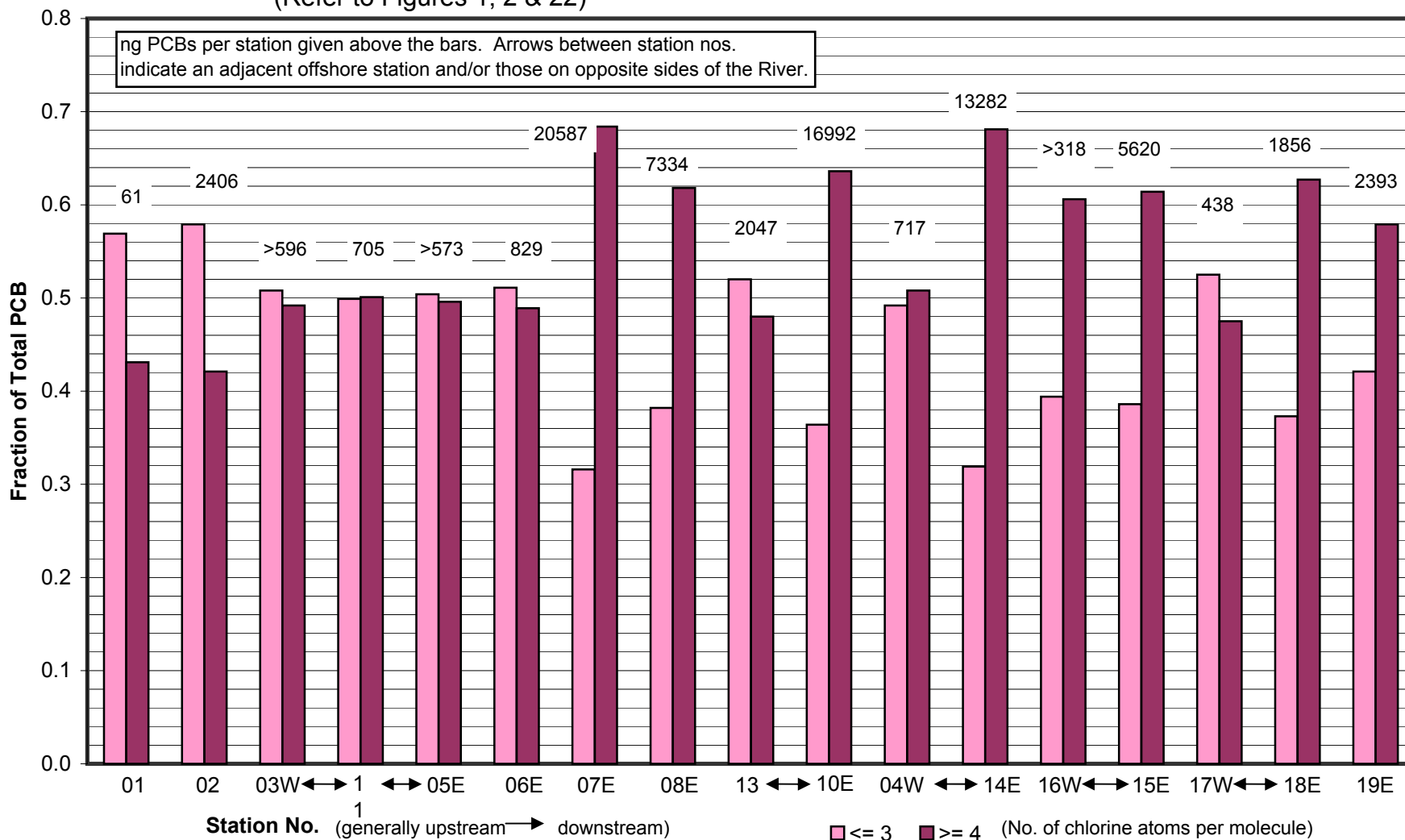
Figure 19. RPD (mL solvent) vs. RPD (ng PCBs) for PISCES pairs, Upper Hudson River, 1997-2001.



Hassetts (diamonds) = 57; bags (squares) = 9; Hassett & bag (circles) = 16

Figure 20. RMSD vs. est. PCB water conc. (ng/L) for PISCES pairs, Upper Hudson River, 1997-2001.

Figure 21. Comparison of PCB homolog chlorine content at Upper Hudson River PISCES stations, 1997.
 (Refer to Figures 1, 2 & 22)



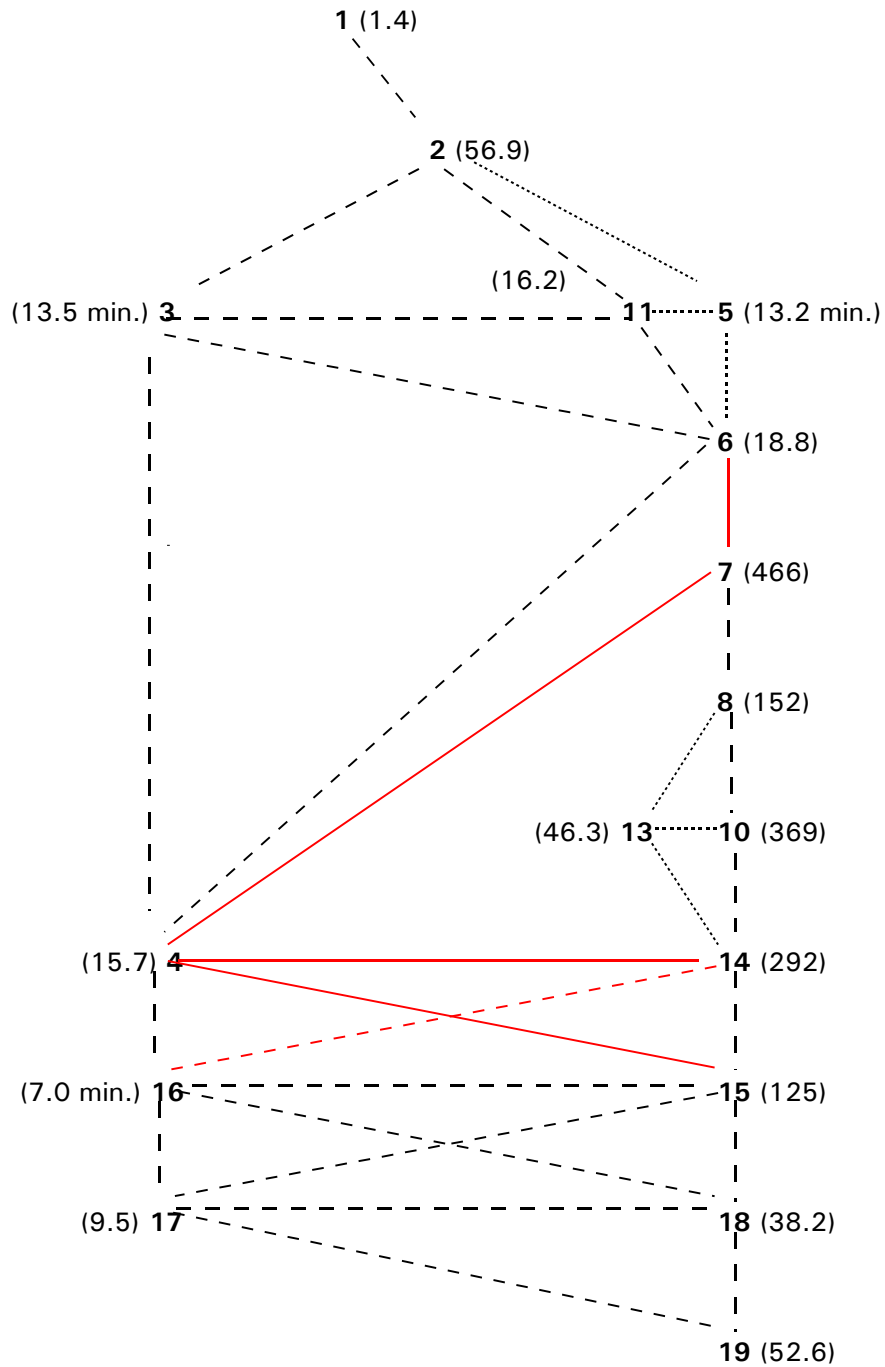


Figure 22. Schematic of 1997 Upper Hudson River PISCES stations (N 8) showing results of significance testing (t-test, $\alpha = 0.05$) between RMSD means at adjacent stations (dotted line - duplicates not available, dashed line - not significantly different, solid line - significantly different). Estimated PCB water concentrations (ng/L) provided in parentheses. Refer to Figures 1 & 2.

Figure 23. Comparison of PCB homolog chlorine content at Upper Hudson River PISCES stations upstream above Bakers Falls, 1998. (Refer to Figures 3 & 4)

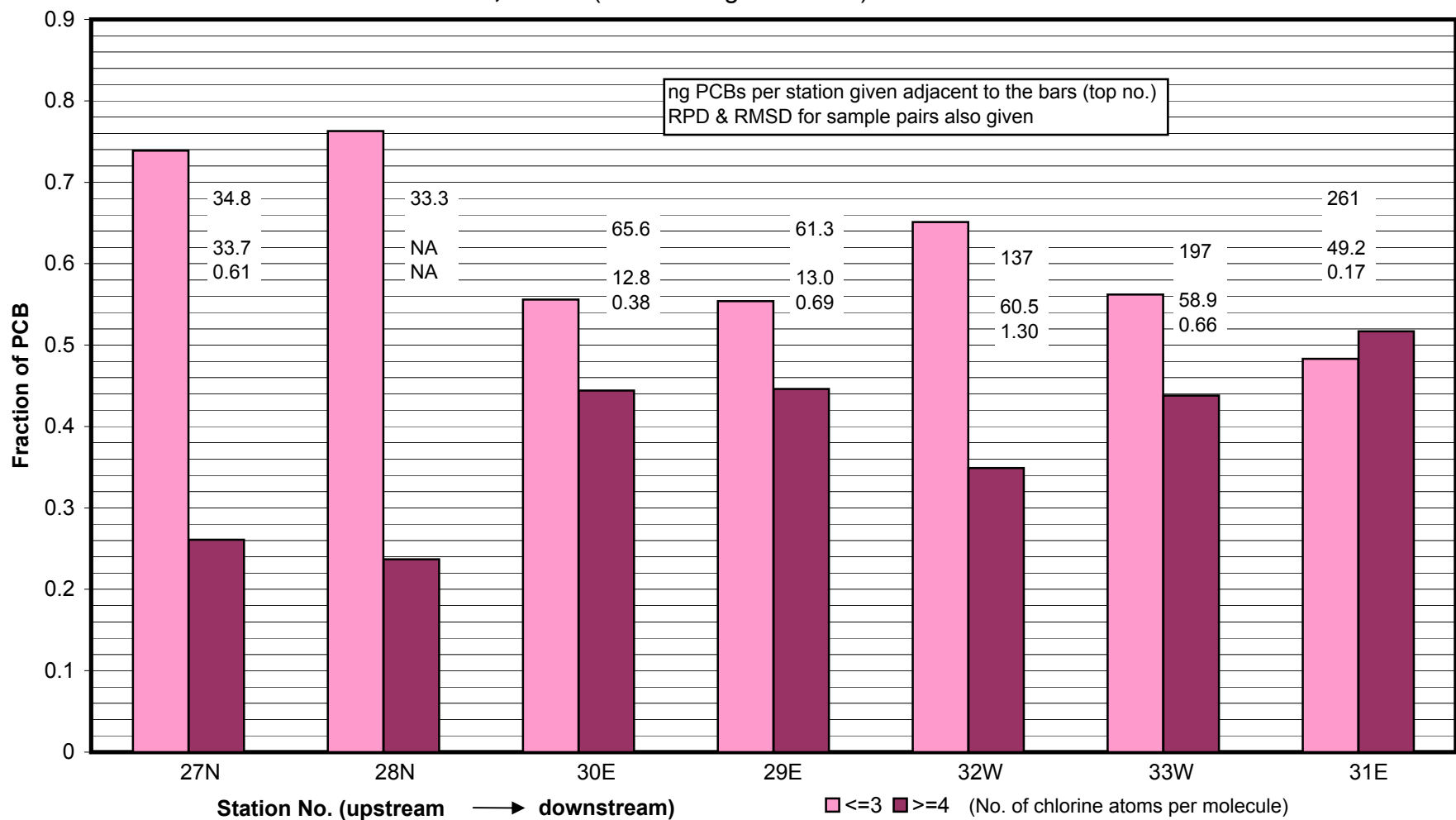


Figure 24. Comparison of PCB homolog composition in PISCES samples at Station 38, Sept. 1998.

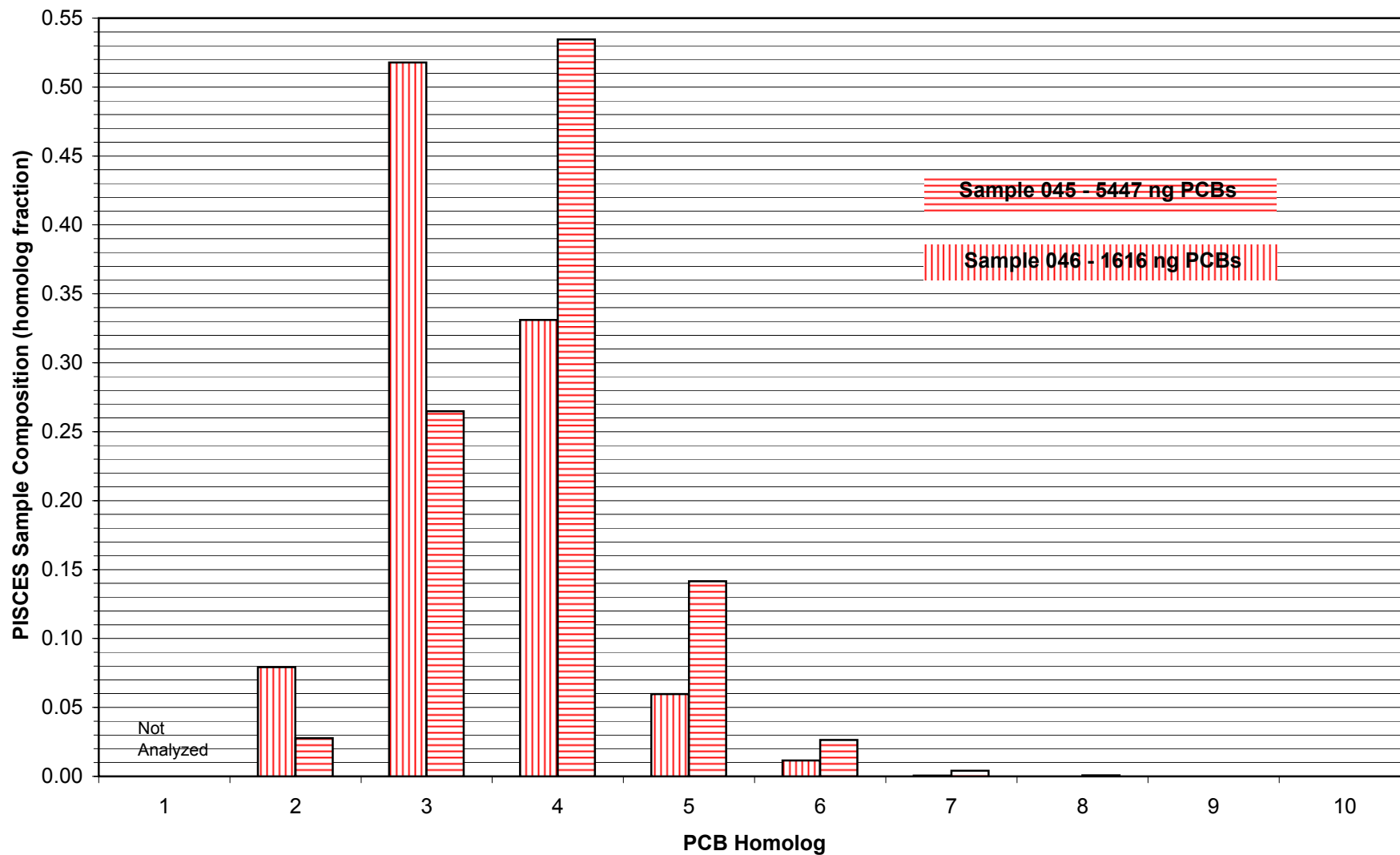
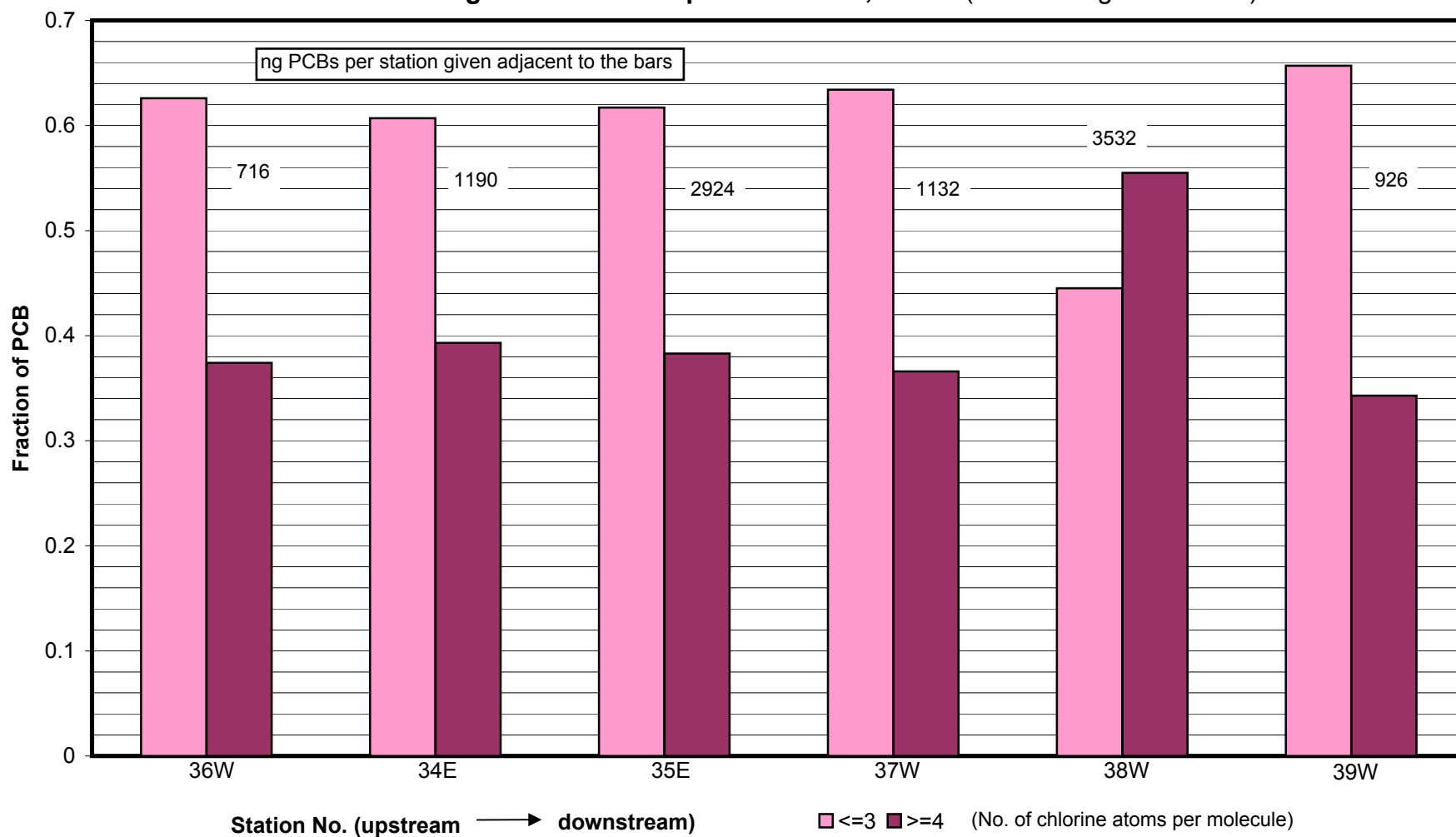


Figure 25. Comparison of PCB homolog chlorine content at Upper Hudson River PISCES stations in the area around Rogers Island and Special Area 13, 1998. (Refer to Figures 5 & 26)



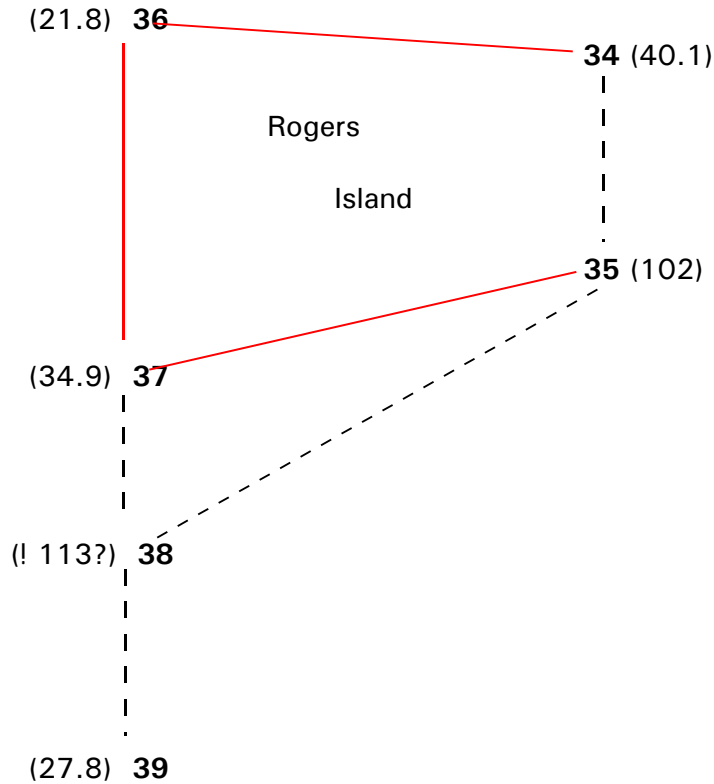
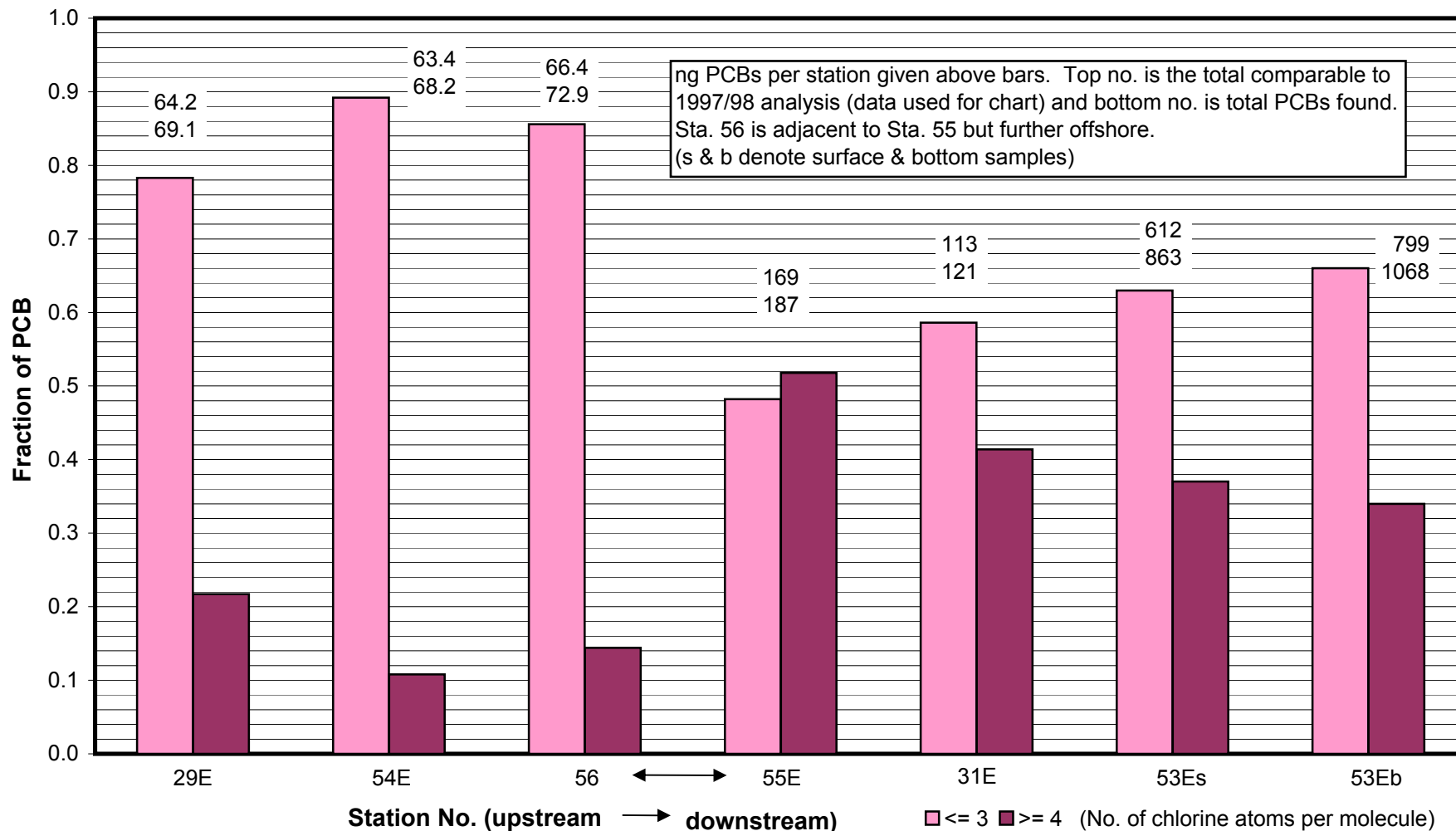


Figure 26. Schematic of 1998 Upper Hudson River PISCES stations (N 8) near Station 38 showing results of significance testing (t-test, $\alpha = 0.05$) between RMSD means at adjacent stations (dashed line - not significantly different, solid line - significantly different). Estimated PCB water concentrations (ng/L) given in parentheses. Refer to Figure 5.

Figure 27. Comparison of PCB homolog chlorine content at Upper Hudson River PISCES stations upstream above Bakers Falls on the east side of the River, 2000. (Refer to Figures 10 & 28)



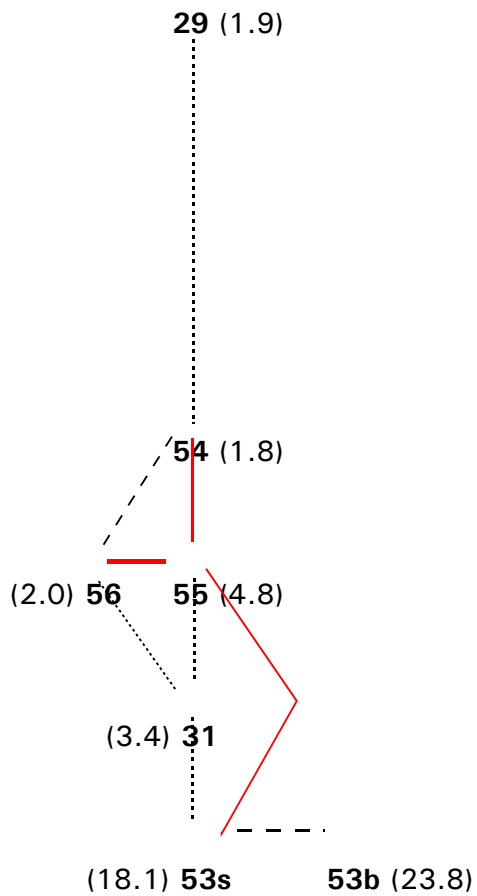


Figure 28. Schematic of 2000 Upper Hudson River PISCES stations (N 8) on the east side of the River above Bakers Falls showing results of significance testing (t-test, $\alpha = 0.05$) between RMSD means at adjacent stations (dotted line - duplicates not available, dashed line - not significantly different, solid line - significantly different). Estimated PCB water concentrations (ng/L) given in parentheses. Refer to Figure 10.

Figure 29A. Comparison of PCB homolog chlorine content at Upper Hudson River PISCES stations in the area around Station 38 at the north end of the Thompson Island Pool, 2000. (Refer to Figures 11 & 31)

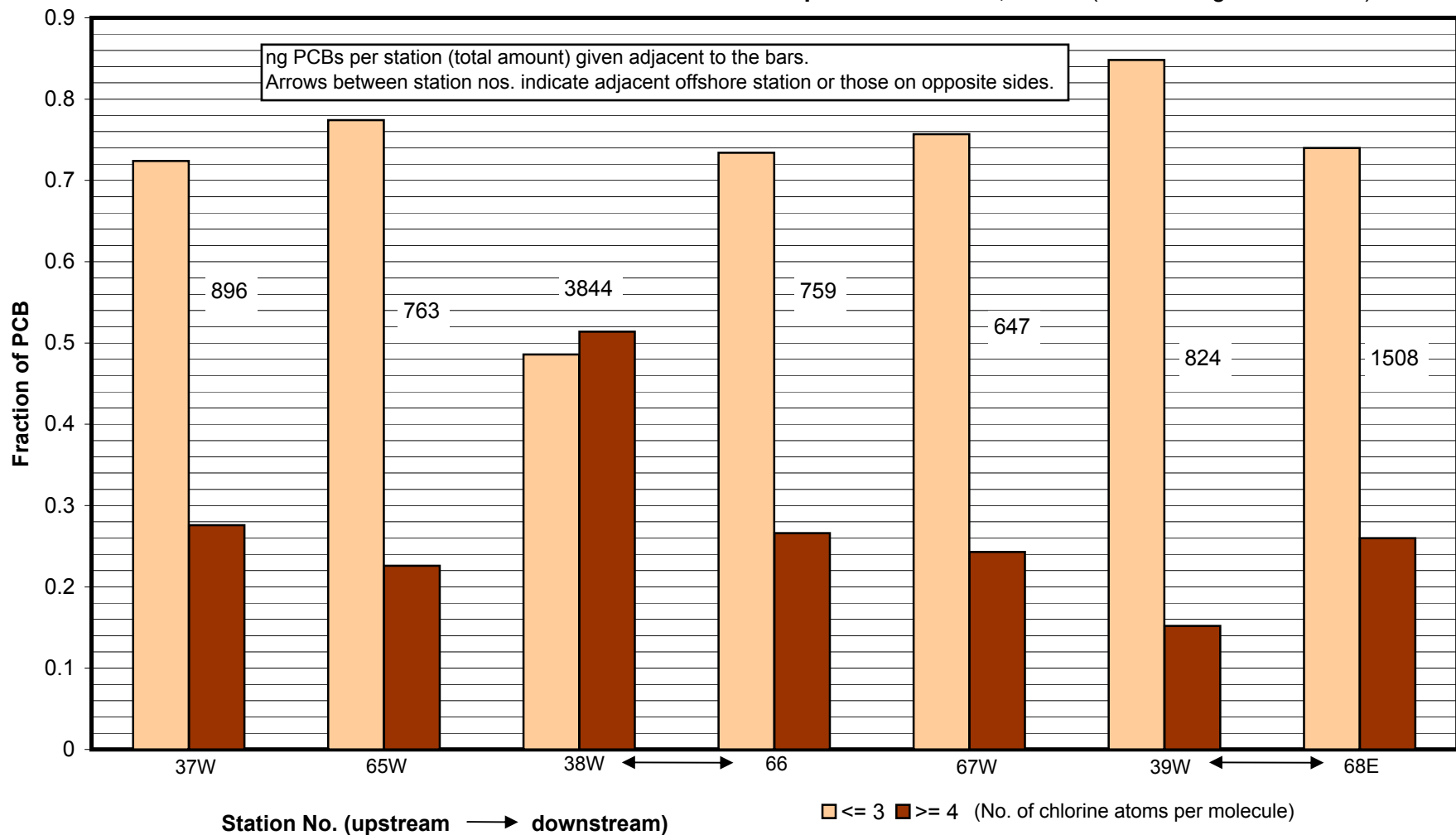


Figure 29B. Comparison of PCB homolog chlorine content at Upper Hudson River PISCES stations in the area around Station 38 at the north end of the Thompson Island Pool, 2000. (Refer to Figs. 11, 25, 31 & 37)

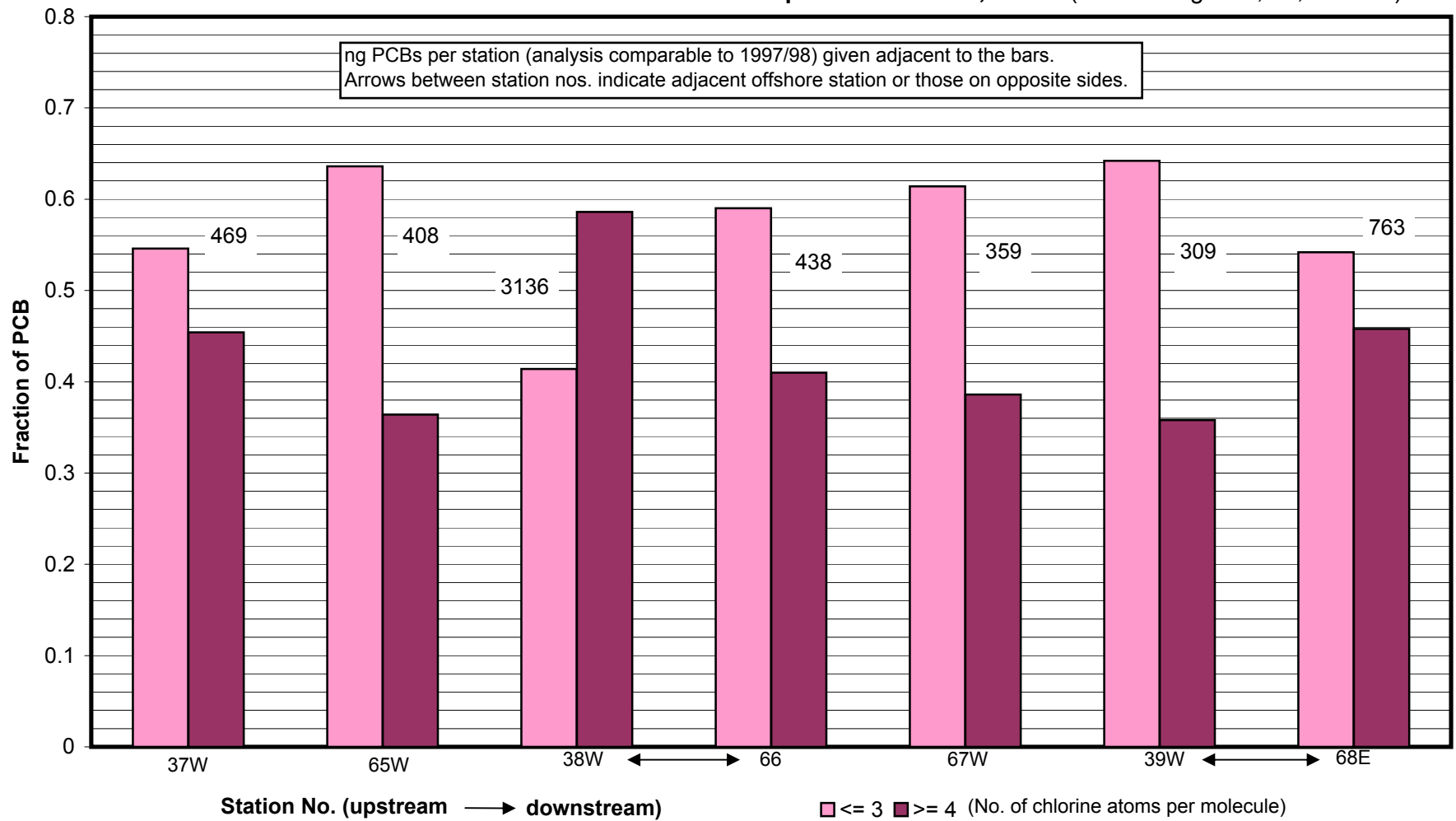
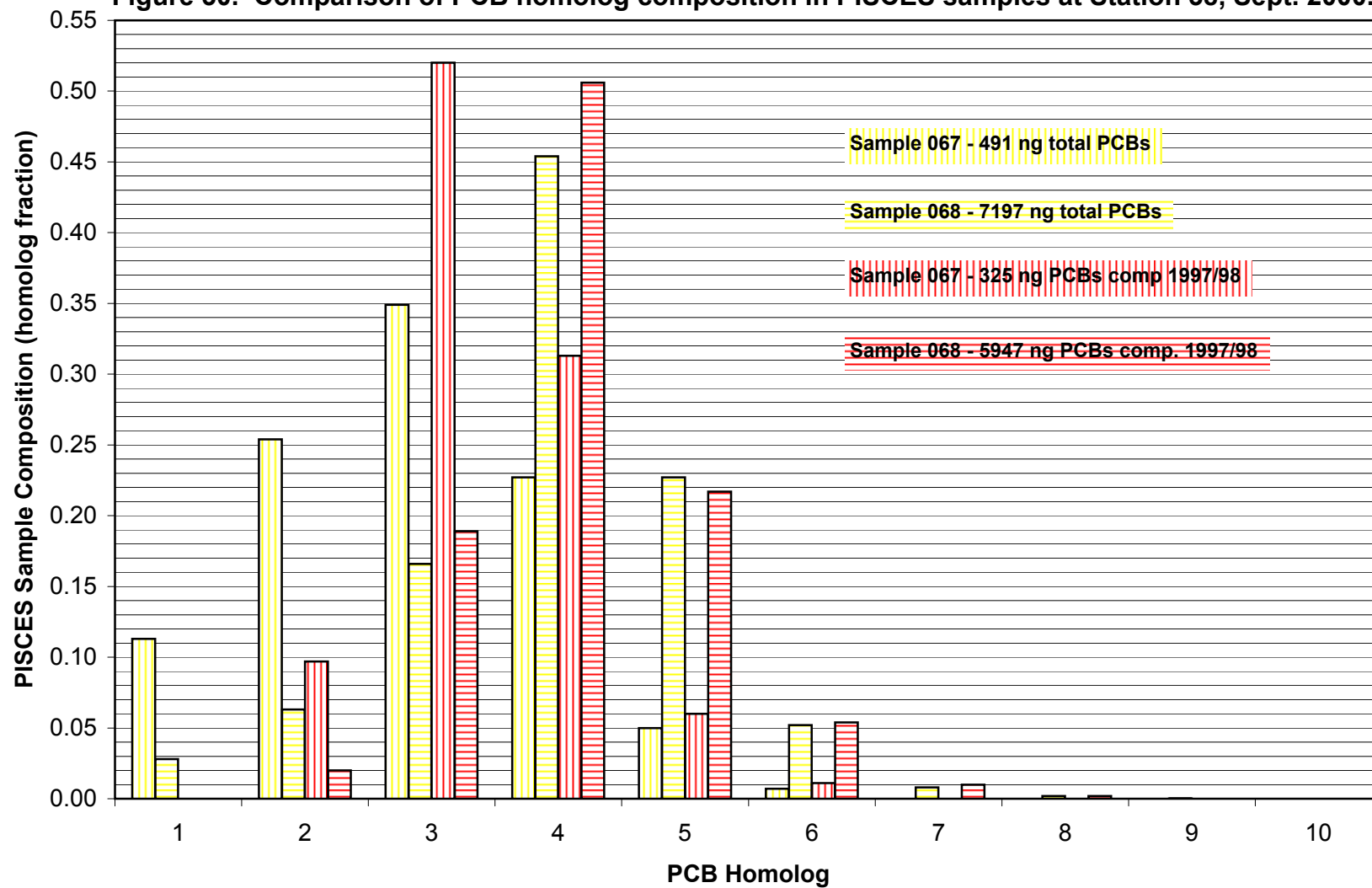


Figure 30. Comparison of PCB homolog composition in PISCES samples at Station 38, Sept. 2000.



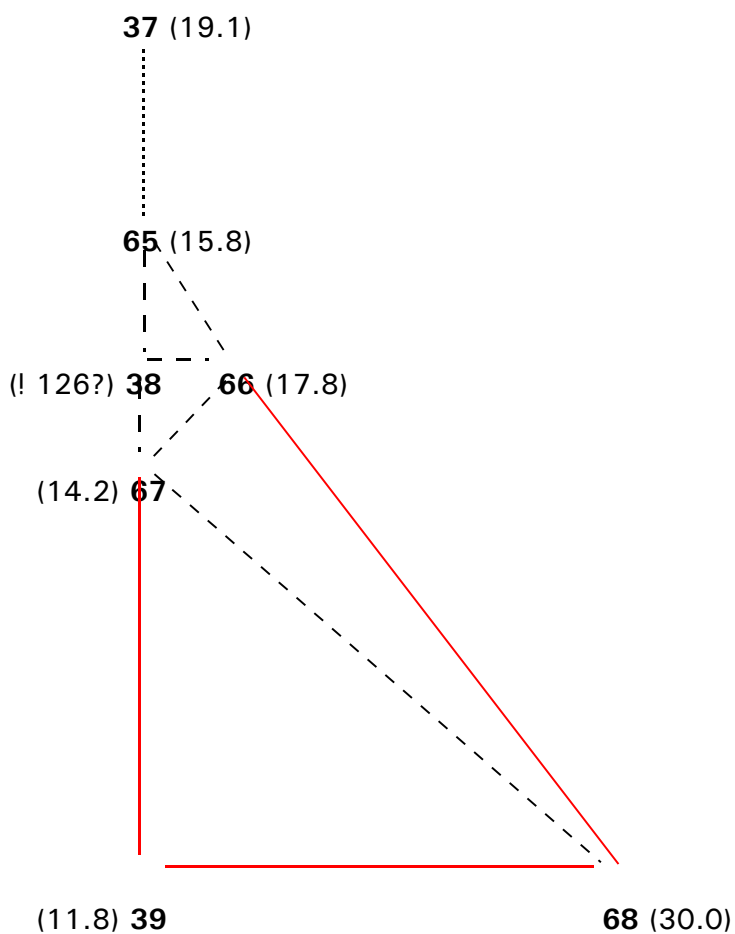


Figure 31. Schematic of 2000 Upper Hudson River PISCES stations (N 8) near Station 38 showing results of significance testing (t-test, $\alpha = 0.05$) between RMSD means at adjacent stations (dotted line - duplicates not available, dashed line - not significantly different, solid line - significantly different). Estimated PCB water concentrations (ng/L) given in parentheses. Refer to Figure 11.

Figure 32. Comparison of PCB homolog chlorine content at Upper Hudson River PISCES stations in the Moses Kill, 2000. (Refer to Figure 12)

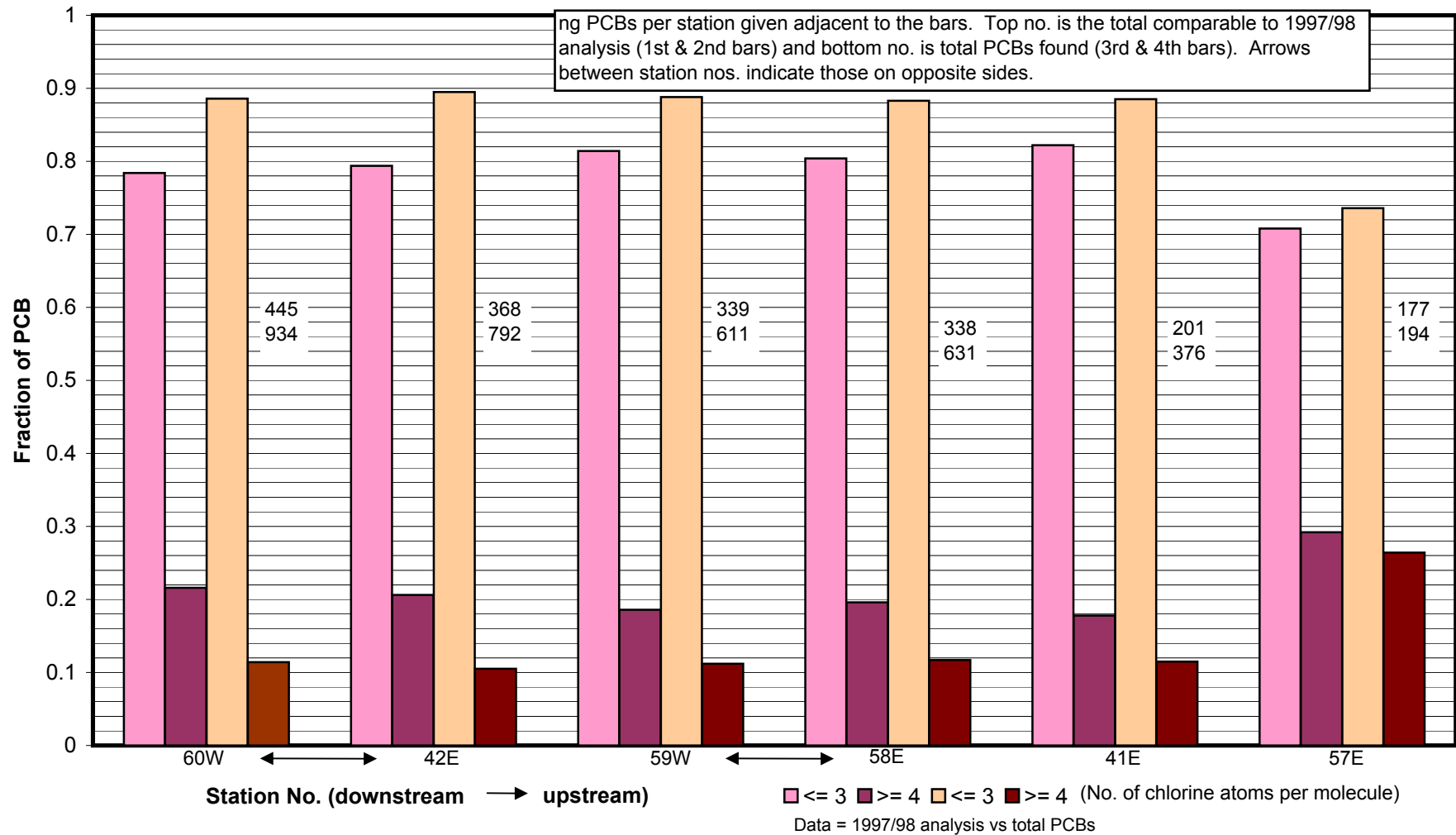
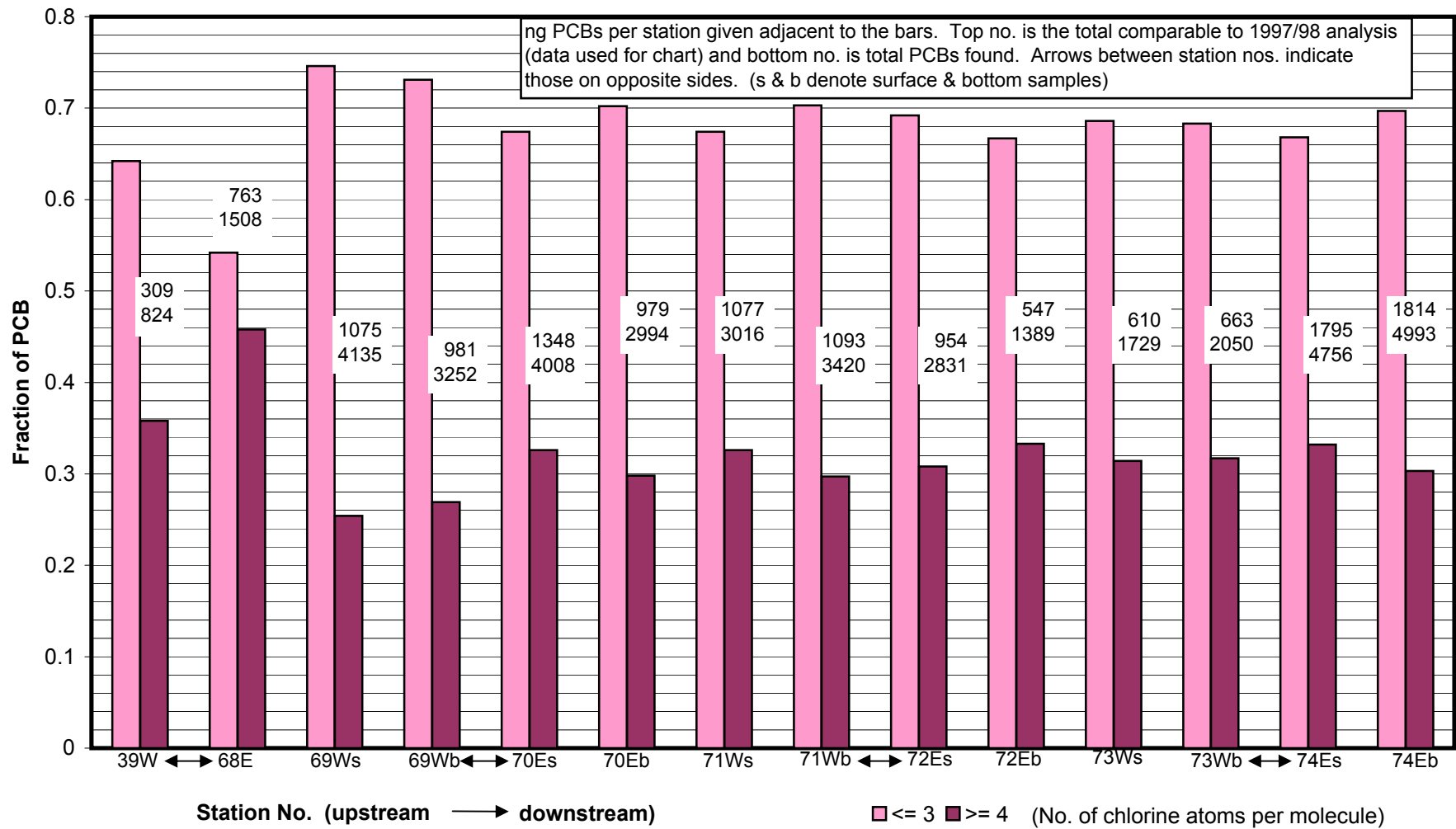


Figure 33. Comparison of PCB homolog chlorine content at Upper Hudson River PISCES stations in the Thompson Island Pool, 2000. (Refer to Figures 13 & 34)



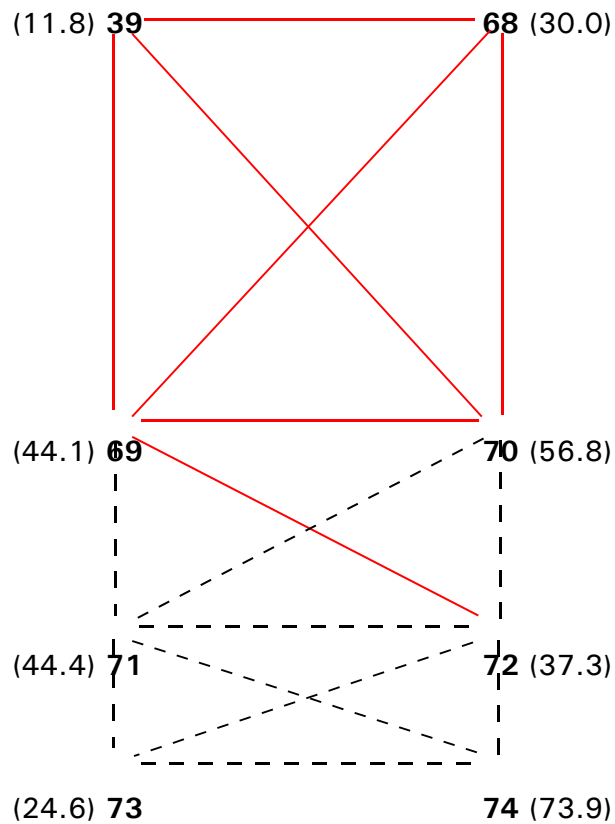


Figure 34. Schematic of 2000 Upper Hudson River PISCES stations (N 8) in the Thompson Island Pool showing results of significance testing (t-test, $\alpha = 0.05$) between RMSD means at adjacent surface stations (dashed line - not significantly different, solid line - significantly different). Estimated PCB water concentrations (ng/L) given in parentheses. Refer to Figure 13.

Figure 35. Comparison of PCB homolog chlorine content at Upper Hudson River PISCES stations in the Stillwater Pool, 2000. (Refer to Figure 14)

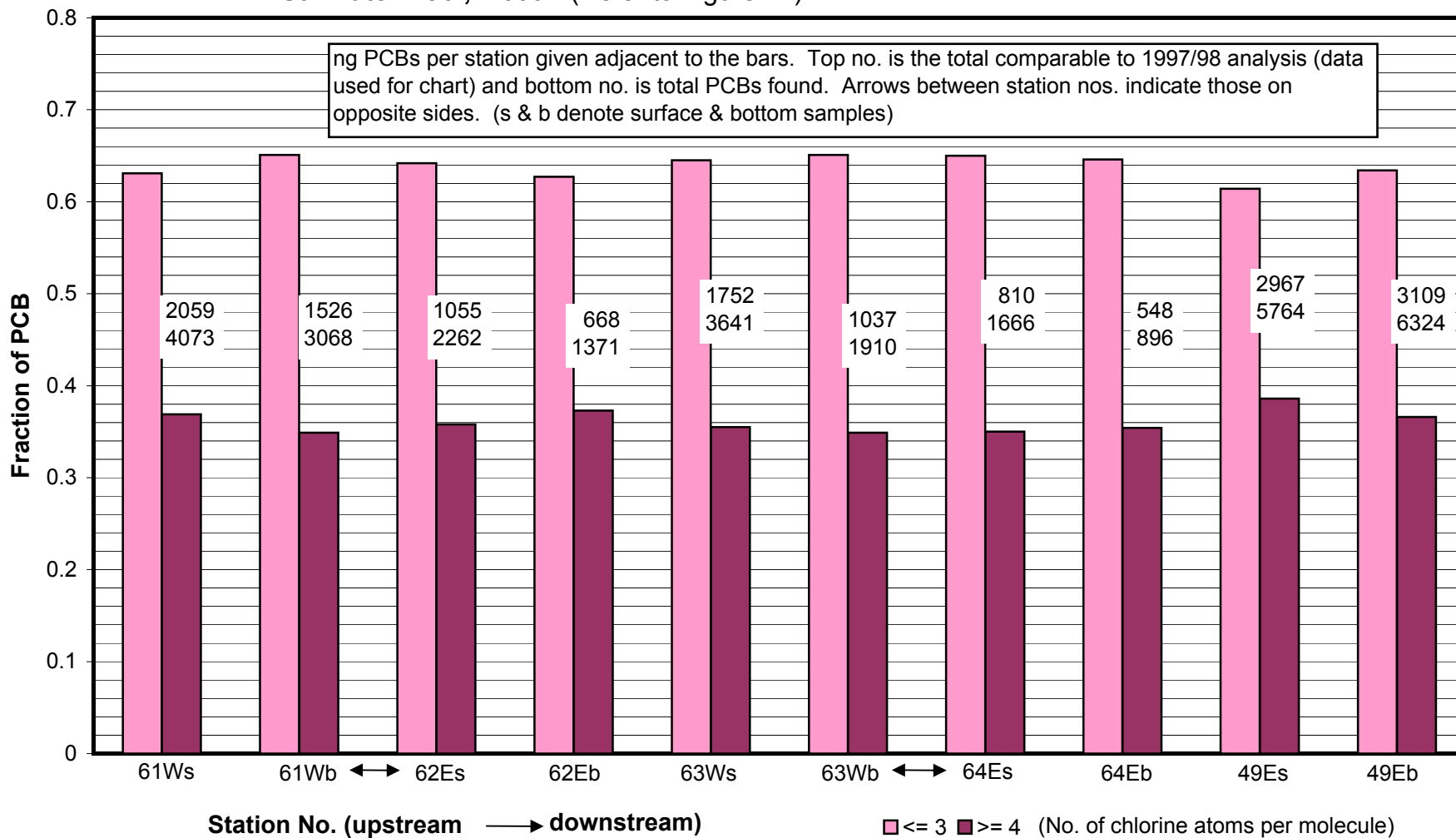


Figure 36. Comparison of PCB homolog chlorine content at Upper Hudson River PISCES stations upstream above Bakers Falls on the west side of the River, 2001. (Refer to Figure 15)

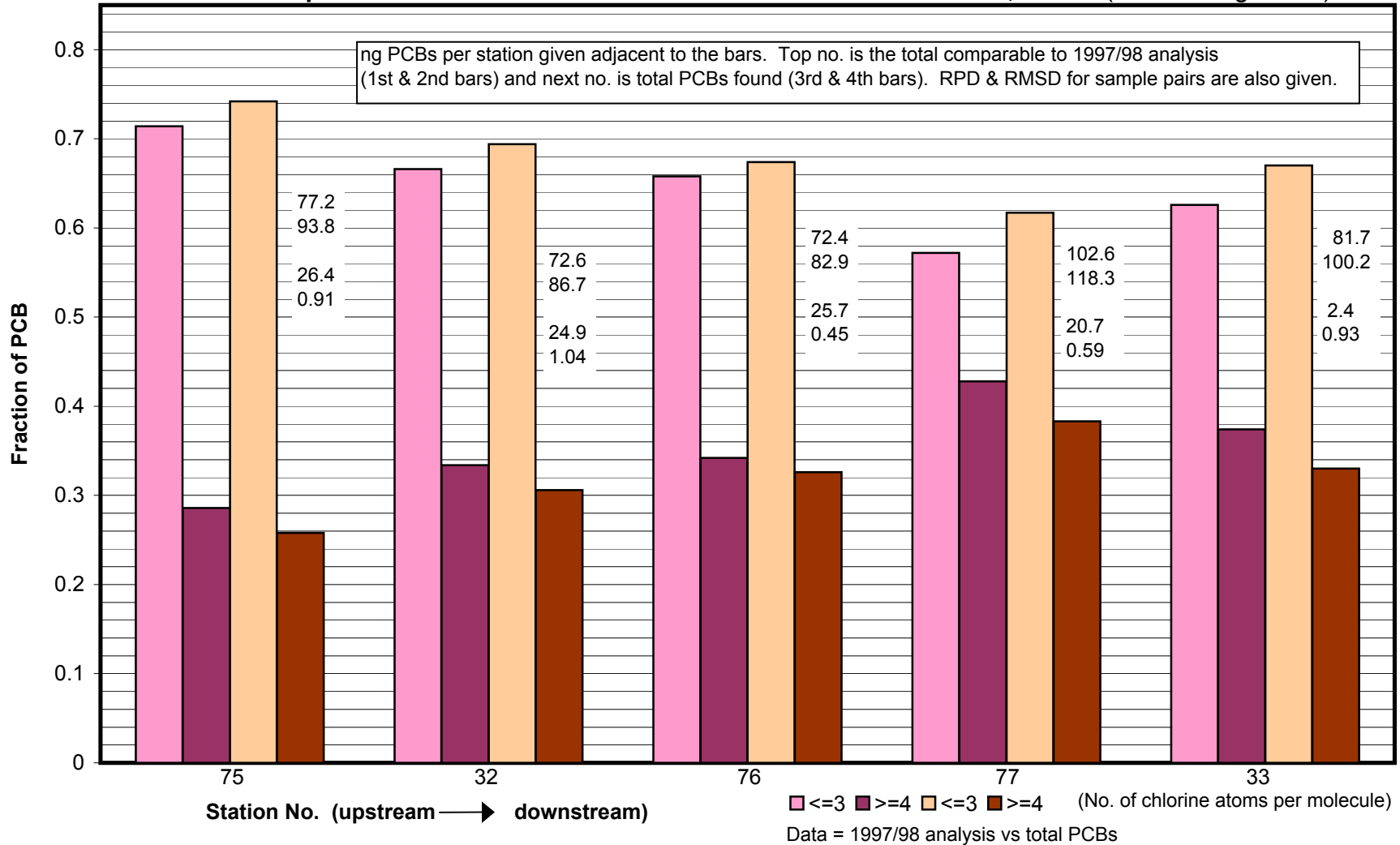


Figure 37. Comparison of PCB homolog chlorine content at Upper Hudson River PISCES stations adjacent to Station 38, 2001. (Refer to Figure 11)

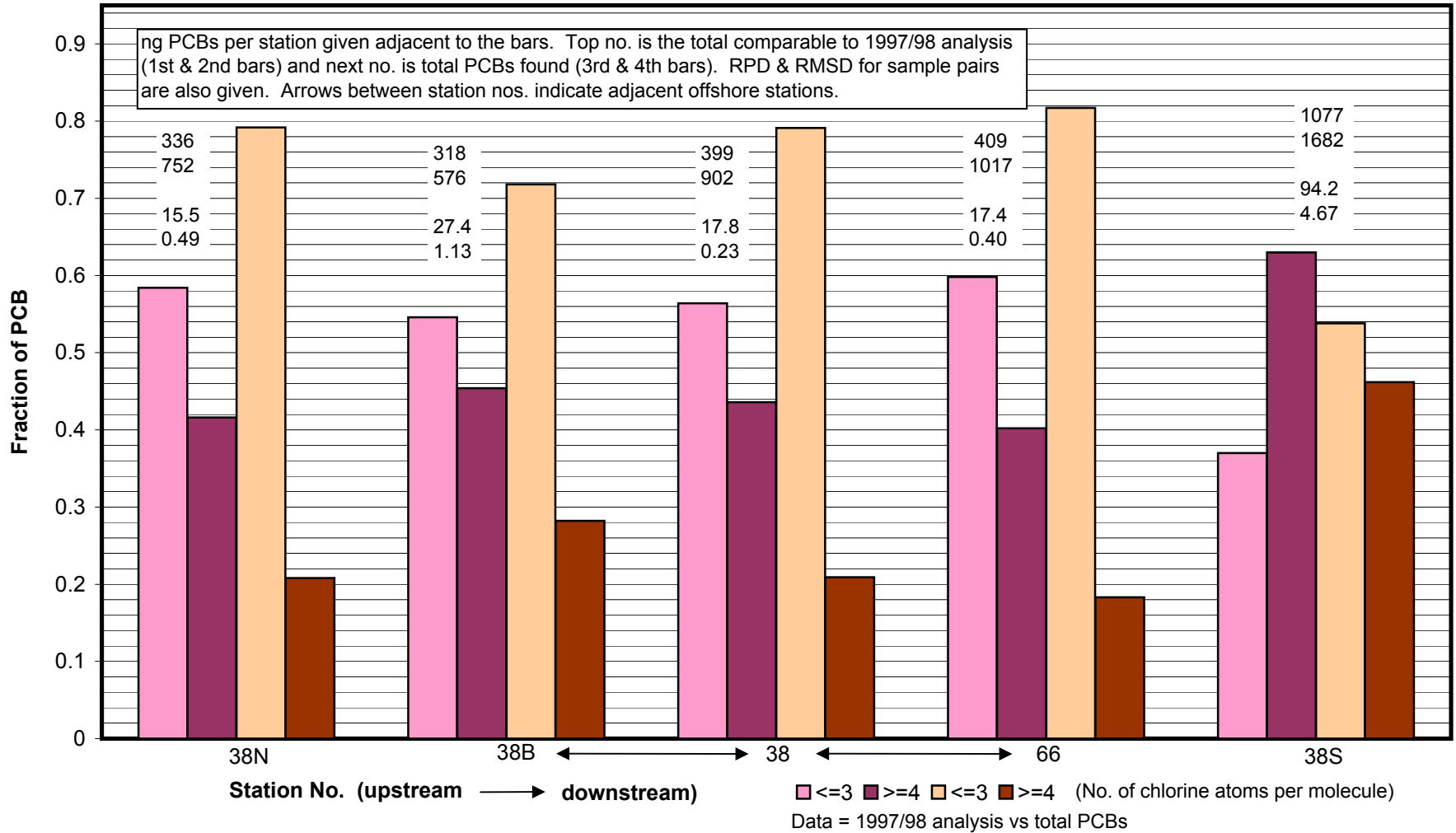


Figure 38. Comparison of PCB homolog composition in PISCES samples at Station 38S, Oct. 2001.

