

REPORT

*Housatonic River - Rest of River
RCRA Facility Investigation Report*

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average observed in surface sediments, the large errors bars indicate that there is significant variability in the data collected within this interval (Figure 4-8). The higher surface sediment PCB concentrations observed in backwaters are likely due to the highly depositional nature of these areas and the high organic carbon content of backwater surface sediments (i.e., average of 12%); TOC is relatively lower in sediments at depth within the backwaters (average of approximately 7%) (Table 4-3; Figure 4-10b).

4.5.2.2 Reach 6 – Woods Pond

In Woods Pond, PCB concentrations ranged from non-detect to 668 mg/kg (Table 4-8). PCBs were below the detection limit in approximately 25% of the sediment samples collected within the top 3 feet of sediment in this impoundment. Despite a large amount of variability in the data, PCB concentrations in samples from Woods Pond are generally highest in the top 6 inches, and decrease with depth. This can be illustrated by the probability distribution for Reach 6 in Figure 4-9, which shows that in the 10th to 60th percentile of the data, the concentrations in the top 6 inches are a factor of two or more greater than the concentrations in the deeper intervals. Average concentrations for the individual 6-inch intervals within the top 3 feet of sediment in Woods Pond range from 4.3 mg/kg within the 30-36 inch depth interval to 39 mg/kg within the 6-12 inch depth interval (Table 4-8). At depths of 3 to 7 feet, PCB concentrations were detected but at lower average concentrations ranging from 0.3 mg/kg (72-78") to 18 mg/kg (42-48") (Table 4-8). No distinct vertical pattern is present in the TOC averages (Figure 4-10b).

For the samples segmented into 6 inch sections, the highest average PCB concentration in Woods Pond is 39 mg/kg at a depth of 6 to 12 inches. The average PCB concentration in the surficial 0 to 6 inches of sediment is 32 mg/kg (Table 4-8), which is similar to the 6-12 inch average. Because rates of sediment accumulation may occur relatively slowly, interpretation of vertical patterns in PCBs is difficult at a resolution of 6 inches. Analysis of finely sectioned sediment cores collected within Woods Pond typically show that the PCB peak within the top 6 inches of sediment is generally below the surface, as discussed further in Section 4.5.4.