

## **Appendix F**

### **Area 1 Sediment Geomorphology-PCB and Remedial Action Levels Analysis Data**

**Table F-1**  
**Shallow Sediment (0-6") PCB RAL Analysis by Transverse Location Category**  
**Area 1 Sections 2-4, OU5 Kalamazoo River**

Channel Location	Samples Above RAL		Samples Below or Equal to RAL	
	n	%	n	%
<b>RAL = 1 mg/kg PCB</b>				
Backwater	1	25%	3	75%
Confluence	1	25%	3	75%
Left Channel	45	23%	153	77%
Mid Channel	4	3%	126	97%
Right Channel	25	15%	145	85%
<b>RAL = 2 mg/kg PCB</b>				
Backwater	1	25%	3	75%
Confluence	1	25%	3	75%
Left Channel	24	12%	174	88%
Mid Channel	3	2%	127	98%
Right Channel	9	5%	161	95%
<b>RAL = 5 mg/kg PCB</b>				
Backwater	1	25%	3	75%
Confluence	1	25%	3	75%
Left Channel	17	9%	181	91%
Mid Channel	2	2%	128	98%
Right Channel	6	4%	164	96%
<b>RAL = 10 mg/kg PCB</b>				
Backwater	0	0%	4	100%
Confluence	0	0%	4	100%
Left Channel	9	5%	189	95%
Mid Channel	2	2%	128	98%
Right Channel	6	4%	164	96%
<b>RAL = 50 mg/kg PCB</b>				
Backwater	0	0%	4	100%
Confluence	0	0%	4	100%
Left Channel	4	2%	194	98%
Mid Channel	2	2%	128	98%
Right Channel	4	2%	166	98%

PREPARED/DATE: LSV 7/23/13  
 CHECKED/DATE: NTG 7/23/13

**Table F-2**  
**Deep Sediment (>6") PCB RAL Analysis by Transverse Location Category**  
**Area 1 Sections 2-4, OU5 Kalamazoo River**

Channel Location	Samples Above RAL		Samples Below or Equal to RAL	
	n	%	n	%
<b>RAL = 1 mg/kg PCB</b>				
Backwater	1	25%	3	75%
Confluence	3	100%	0	0%
Left Channel	38	33%	78	67%
Mid Channel	7	11%	58	89%
Right Channel	12	14%	73	86%
<b>RAL = 2 mg/kg PCB</b>				
Backwater	1	25%	3	75%
Confluence	2	67%	1	33%
Left Channel	31	27%	85	73%
Mid Channel	6	9%	59	91%
Right Channel	7	8%	78	92%
<b>RAL = 5 mg/kg PCB</b>				
Backwater	1	25%	3	75%
Confluence	1	33%	2	67%
Left Channel	22	19%	94	81%
Mid Channel	4	6%	61	94%
Right Channel	5	6%	80	94%
<b>RAL = 10 mg/kg PCB</b>				
Backwater	0	0%	4	100%
Confluence	1	33%	2	67%
Left Channel	20	17%	96	83%
Mid Channel	2	3%	63	97%
Right Channel	5	6%	80	94%
<b>RAL = 50 mg/kg PCB</b>				
Backwater	0	0%	4	100%
Confluence	0	0%	3	100%
Left Channel	10	9%	106	91%
Mid Channel	0	0%	65	100%
Right Channel	2	2%	83	98%

PREPARED/DATE: LSV 7/23/13  
 CHECKED/DATE: NTG 7/23/13

**Table F-3  
 Shallow Sediment (0-6") PCB RAL Analysis by Slope Category  
 Area 1 Sections 2-4, OU5 Kalamazoo River**

Slope Category	Samples Above RAL		Samples Below or Equal to RAL	
	n	%	n	%
<b>RAL = 1 mg/kg PCB</b>				
low	35	17%	174	83%
moderate	13	8%	150	92%
high	18	20%	71	80%
<b>RAL = 2 mg/kg PCB</b>				
low	18	9%	191	91%
moderate	4	2%	159	98%
high	11	12%	78	88%
<b>RAL = 5 mg/kg PCB</b>				
low	14	7%	195	93%
moderate	4	2%	159	98%
high	7	8%	82	92%
<b>RAL = 10 mg/kg PCB</b>				
low	9	4%	200	96%
moderate	2	1%	161	99%
high	6	7%	83	93%
<b>RAL = 50 mg/kg PCB</b>				
low	4	2%	205	98%
moderate	1	1%	162	99%
high	5	6%	84	94%

PREPARED/DATE: LSV 7/23/13  
 CHECKED/DATE: NTG 7/23/13

**Table F-4**  
**Deep Sediment (>6") PCB RAL Analysis by Slope Category**  
**Area 1 Sections 2-4, OU5 Kalamazoo River**

Slope Category	Samples Above RAL		Samples Below or Equal to RAL	
	n	%	n	%
<b>RAL = 1 mg/kg PCB</b>				
low	32	24%	101	76%
moderate	5	8%	59	92%
high	18	35%	34	65%
<b>RAL = 2 mg/kg PCB</b>				
low	24	18%	109	82%
moderate	2	3%	62	97%
high	17	33%	35	67%
<b>RAL = 5 mg/kg PCB</b>				
low	17	13%	116	87%
moderate	2	3%	62	97%
high	11	21%	41	79%
<b>RAL = 10 mg/kg PCB</b>				
low	14	11%	119	89%
moderate	2	3%	62	97%
high	10	19%	42	81%
<b>RAL = 50 mg/kg PCB</b>				
low	6	5%	127	95%
moderate	0	0%	64	100%
high	6	12%	46	88%

PREPARED/DATE: LSV 7/23/13

CHECKED/DATE: NTG 7/23/13

**Table F-5  
 Shallow Sediment (0-6") PCB RAL Analysis by Curve Position Category  
 Area 1 Sections 2-4, OU5 Kalamazoo River**

Curve Position	Samples Above RAL		Samples Below or Equal to RAL	
	n	%	n	%
<b>RAL = 1 mg/kg PCB</b>				
Inside Curve	24	24%	77	76%
Midchannel in Curve	2	3%	72	97%
Outside Curve	18	18%	82	82%
Straight	31	14%	192	86%
<b>RAL = 2 mg/kg PCB</b>				
Inside Curve	13	13%	88	87%
Midchannel in Curve	2	3%	72	97%
Outside Curve	8	8%	92	92%
Straight	14	6%	209	94%
<b>RAL = 5 mg/kg PCB</b>				
Inside Curve	9	9%	92	91%
Midchannel in Curve	2	3%	72	97%
Outside Curve	6	6%	94	94%
Straight	9	4%	214	96%
<b>RAL = 10 mg/kg PCB</b>				
Inside Curve	9	9%	92	91%
Midchannel in Curve	2	3%	72	97%
Outside Curve	5	5%	95	95%
Straight	1	0%	222	100%
<b>RAL = 50 mg/kg PCB</b>				
Inside Curve	5	5%	96	95%
Midchannel in Curve	2	3%	72	97%
Outside Curve	3	3%	97	97%
Straight	0	0%	223	100%

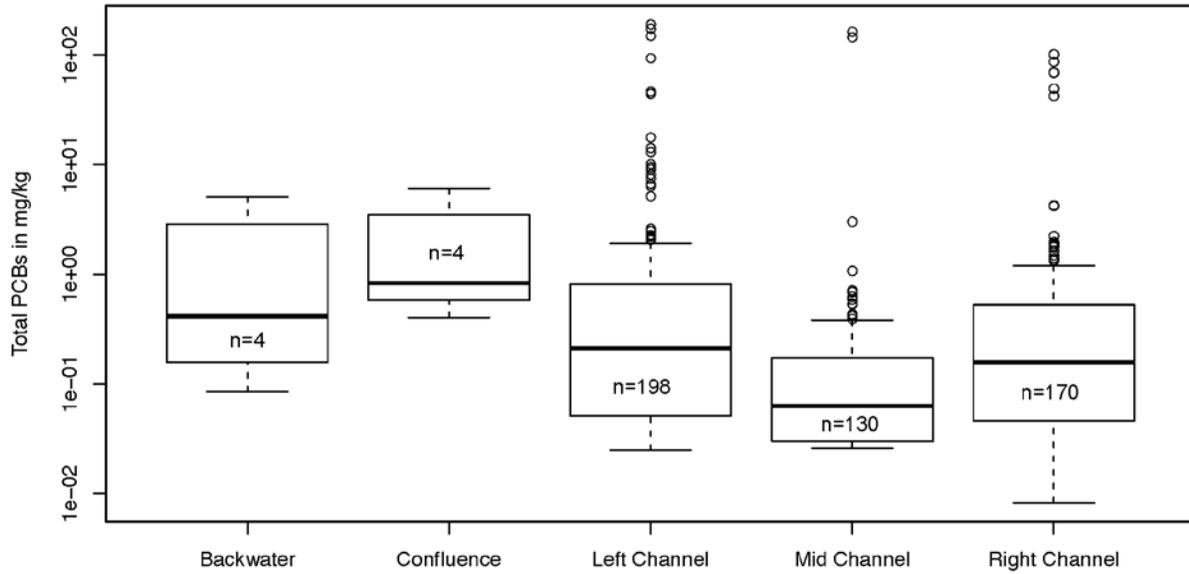
PREPARED/DATE: LSV 7/23/13  
 CHECKED/DATE: NTG 7/23/13

**Figure F-6  
 Deep Sediment (>6") PCB RAL Analysis by Curve Position Category  
 Area 1 Sections 2-4, OU5 Kalamazoo River**

Curve Position	Samples Above RAL		Samples Below or Equal to RAL	
	n	%	n	%
<b>RAL = 1 mg/kg PCB</b>				
Inside Curve	26	40%	39	60%
Midchannel in Curve	5	13%	33	87%
Outside Curve	8	16%	41	84%
Straight	19	17%	94	83%
<b>RAL = 2 mg/kg PCB</b>				
Inside Curve	24	37%	41	63%
Midchannel in Curve	4	11%	34	89%
Outside Curve	6	12%	43	88%
Straight	11	10%	102	90%
<b>RAL = 5 mg/kg PCB</b>				
Inside Curve	16	25%	49	75%
Midchannel in Curve	3	8%	35	92%
Outside Curve	5	10%	44	90%
Straight	8	7%	105	93%
<b>RAL = 10 mg/kg PCB</b>				
Inside Curve	15	23%	50	77%
Midchannel in Curve	1	3%	37	97%
Outside Curve	5	10%	44	90%
Straight	7	6%	106	94%
<b>RAL = 50 mg/kg PCB</b>				
Inside Curve	10	15%	55	85%
Midchannel in Curve	0	0%	38	100%
Outside Curve	1	2%	48	98%
Straight	1	1%	112	99%

PREPARED/DATE: LSV 7/23/13  
 CHECKED/DATE: NTG 7/23/13

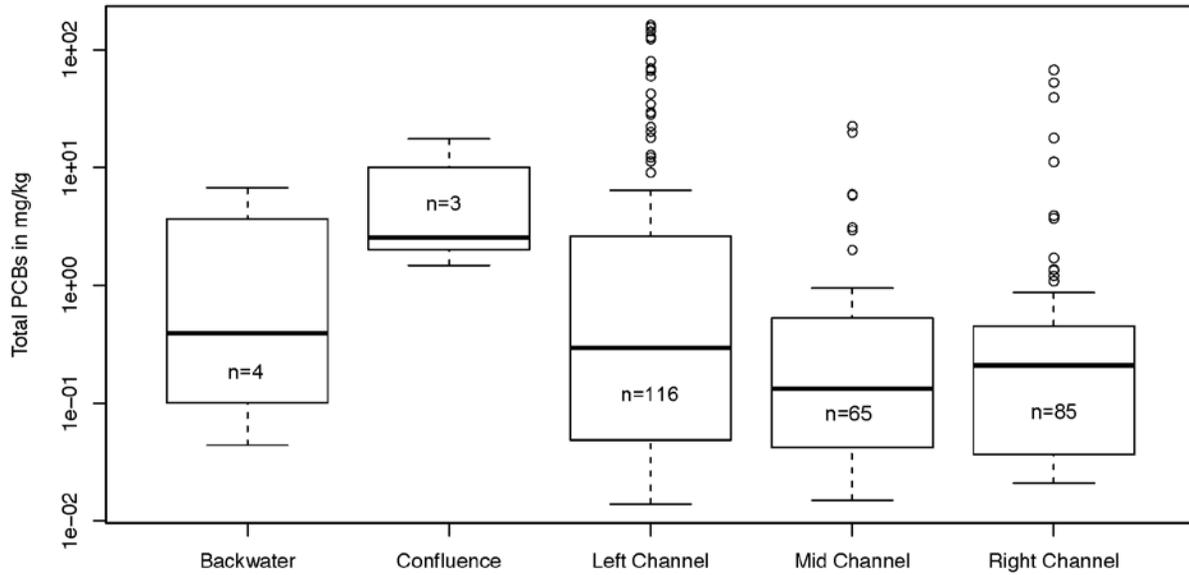
**Figure F-1**  
**Box and Whisker Plots of Shallow (0-6”) PCB Data by Transverse Location**



Notes:

1. Boxes extend from lower quartile value (25%) to upper quartile value (75%). The median value is shown as a bold line inside the box. Whiskers extend 1.5 times the inter-quartile range (i.e., box height) above and below the box. Whiskers do not appear equal length due to log scale.
2. Numbers inside each box represent the total number of data points in that geomorphic category.

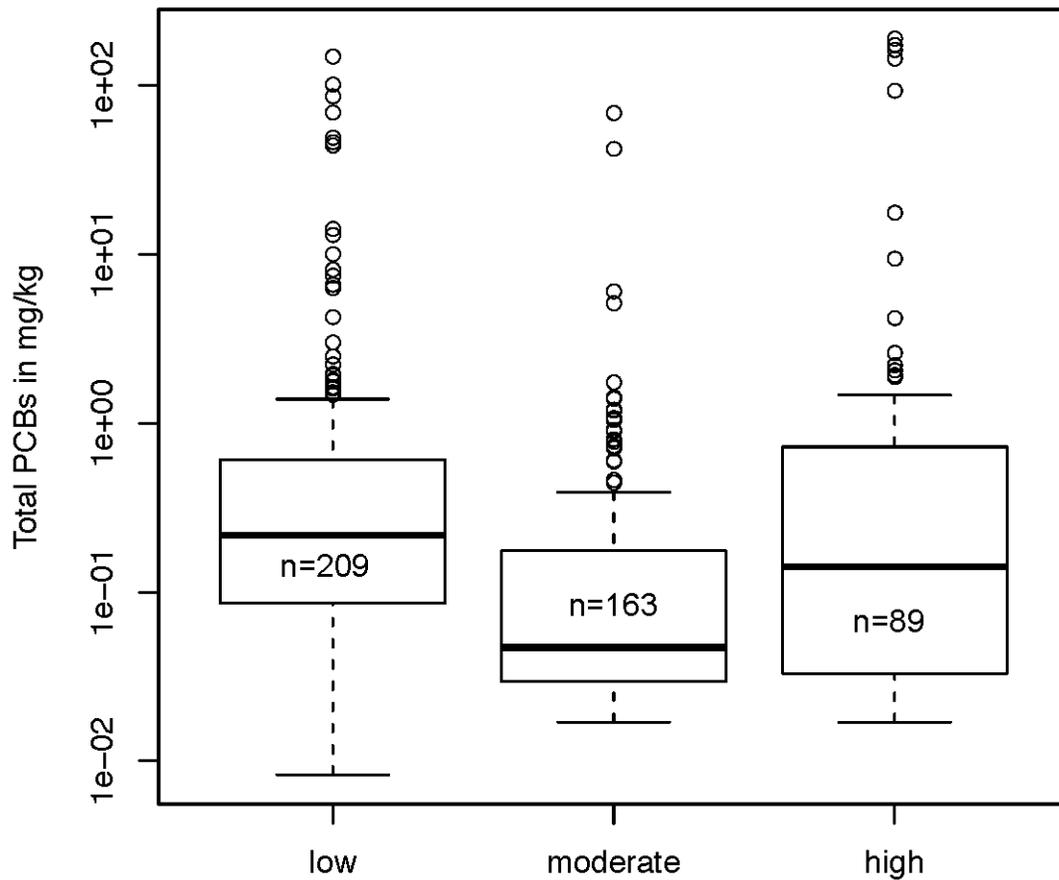
**Figure F-2**  
**Box and Whisker Plots of Deep (>6") PCB Data by Transverse Location**



Notes:

1. Boxes extend from lower quartile value (25%) to upper quartile value (75%). The median value is shown as a bold line inside the box. Whiskers extend 1.5 times the inter-quartile range (i.e., box height) above and below the box. Whiskers do not appear equal length due to log scale.
2. Numbers inside each box represent the total number of data points in that geomorphic category.

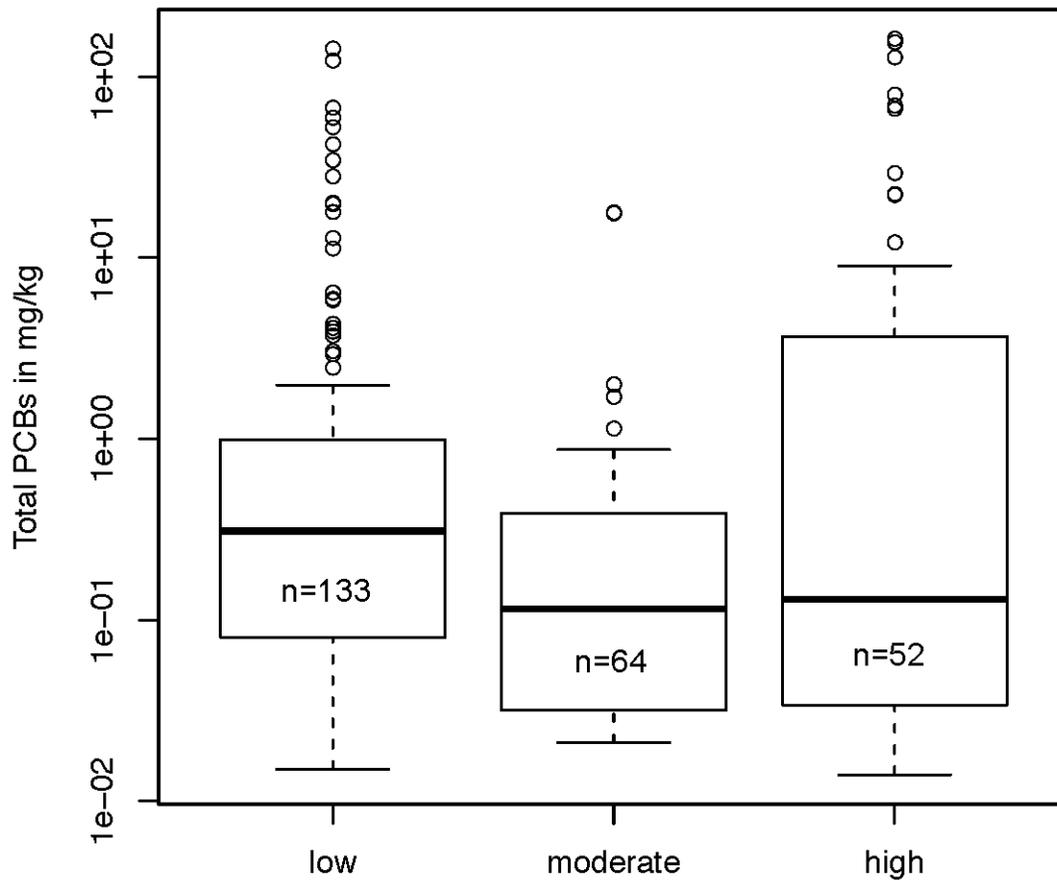
**Figure F-3**  
**Box and Whisker Plots of Shallow (0-6") PCB Data by Slope Category**



Notes:

1. Boxes extend from lower quartile value (25%) to upper quartile value (75%). The median value is shown as a bold line inside the box. Whiskers extend 1.5 times the inter-quartile range (i.e., box height) above and below the box. Whiskers do not appear equal length due to log scale.
2. Numbers inside each box represent the total number of data points in that geomorphic category.

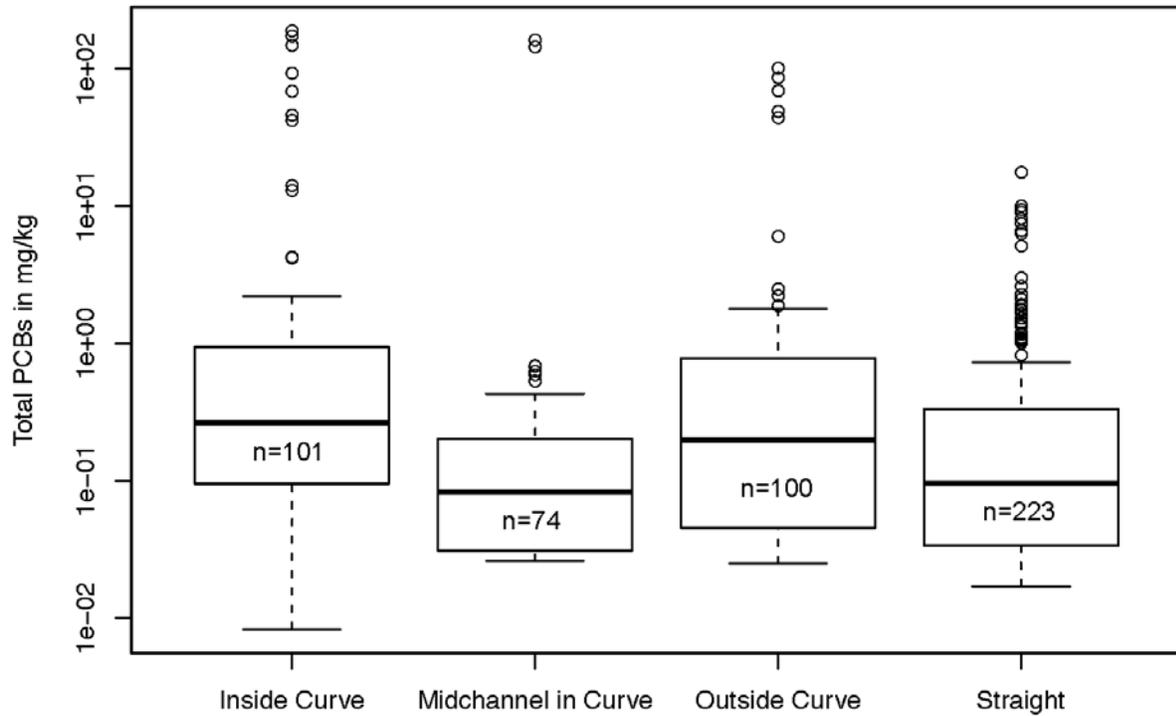
**Figure F-4**  
**Box and Whisker Plots of Deep (>6") PCB Data by Slope Category**



Notes:

1. Boxes extend from lower quartile value (25%) to upper quartile value (75%). The median value is shown as a bold line inside the box. Whiskers extend 1.5 times the inter-quartile range (i.e., box height) above and below the box. Whiskers do not appear equal length due to log scale.
2. Numbers inside each box represent the total number of data points in that geomorphic category.

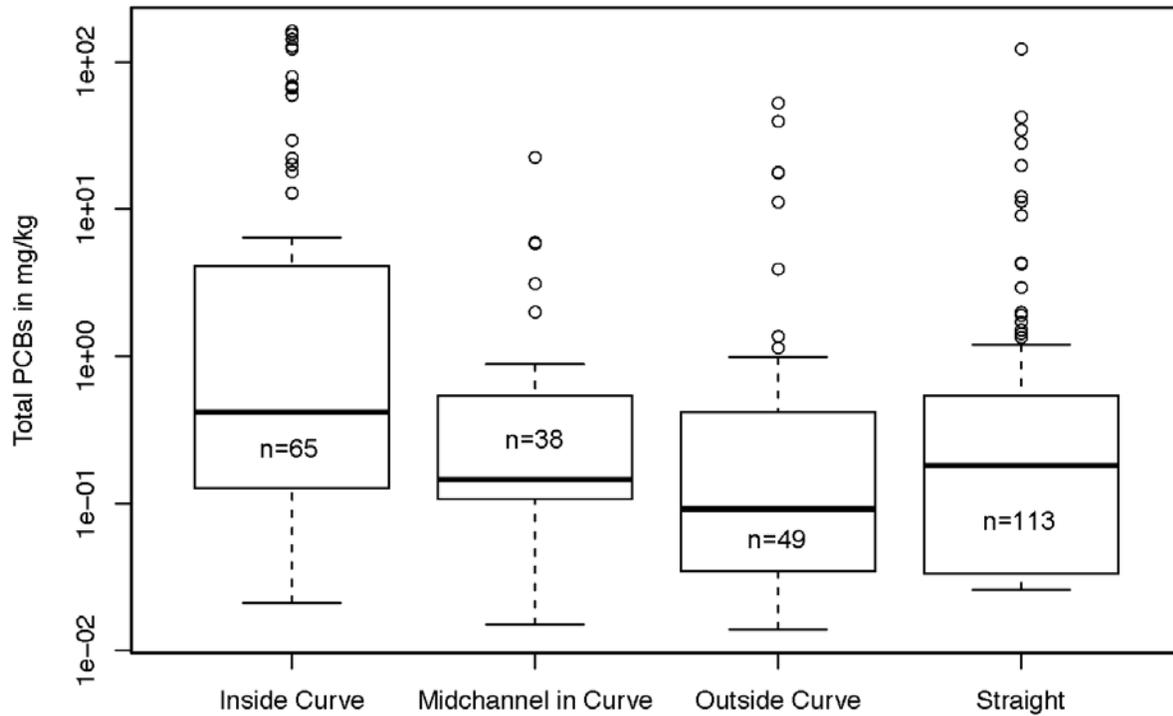
**Figure F-5**  
**Box and Whisker Plots of Shallow (0-6") PCB Data by Curve Position**



Notes:

1. Boxes extend from lower quartile value (25%) to upper quartile value (75%). The median value is shown as a bold line inside the box. Whiskers extend 1.5 times the inter-quartile range (i.e., box height) above and below the box. Whiskers do not appear equal length due to log scale.
2. Numbers inside each box represent the total number of data points in that geomorphic category.

**Figure F-6**  
**Box and Whisker Plots of Deep (>6”) PCB Data by Curve Position**



Notes:

3. Boxes extend from lower quartile value (25%) to upper quartile value (75%). The median value is shown as a bold line inside the box. Whiskers extend 1.5 times the inter-quartile range (i.e., box height) above and below the box. Whiskers do not appear equal length due to log scale.
4. Numbers inside each box represent the total number of data points in that geomorphic category.