REPORT

Housatonic River - Rest of River RCRA Facility Investigation Report

Volume 4. Appendix B Figures
PCB Data for Water, Sediment, Soil, and Biota

General Electric Company
Pittsfield, Massachusetts

September 2003

QEA
Quantitative Environmental Analysis, LLC

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

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Appendix B.1

Surface Water PCB Data

BBL®
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

West Branch

East Branch

Confluence

E-5 TA03RP31, N.Leopard Frog Reproductive Study

Holmes Road Bridge

18-VP-2 TA04RS27

W-9A TA04RP32, N.Leopard Frog Reproductive Study

W-B TA04RP32, N.Leopard Frog Reproductive Study

Adjacent to Joseph Drive

WWT Road

23B-VP-1, TA05RS28

23B-VP-2, TA05RS29

WWT Farmer Location N WSU-428

Pittsfield Wastewater Treatment Plant

38-VP-1 TA08RS30

39-VP-1 TA03RS31

38-VP-2, TA08RS21
Frog Toxicity Development

W-7A TA08RP34,
N.Leopard Frog Reproductive Study

New Lenox Street

New Lenox Road Bridge

W-6 TA08RP35, N.Leopard Frog Reproductive Study

Roaring Brook

46-VP-1 TA08RS32

46-VP-5 TA10RS22 Wood Frog Reproductive Study

W-4 TA10RP36, N.Leopard Frog Reproductive Study

Frog Toxicity Study (Target Site)

EW-3 TA10RP37, N.Leopard Frog Reproductive Study

October Mtn Canoe Launch Sed Tox Location

Frog Toxicity Study (Target Site)

E-1 TA12RP38, N.Leopard Frog Reproductive Study

Frog Toxicity Study (Target Site)

W-1 TA12RP39, N.Leopard Frog Reproductive Study

Woods Pond Headwaters Sed Tox Locations

Woods Pond Headwaters

Woods Pond
Headwaters

Woods Pond Footbridge

Woods Pond

LENOX

Above Woods Pond Dam

Woods
Pond
Dam

Schweitzer/Lenoxdale Bridge

N

W

E

S

LOCATOR MAP

SCALE

0 0.1 0.2 0.4 0.6 Miles

LEGEND

- Sample Location
- Dams
- 1 mg/kg Isopleth
- 100 Year Floodplain
- Railroad
- Town Borders
- Housatonic River

Notes:

1. The 1 mg/kg PCB isopleth is approximate, and was derived using hydraulic modeling performed by BBL (1995/1996), available topographic mapping, available floodplain soil PCB data, and best professional judgment.
2. Hydrology and transportation coverages provided by MassGis.com.
3. 100-year floodplain coverage provided by FEMA (Q3 Flood data).

FIGURE B.1-1
HOUSATONIC RIVER SURFACE WATER SAMPLE LOCATIONS - CONFLUENCE TO WOODS POND MASSACHUSETTS

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

QEA Quantitative Environmental Analysis, LLC

Q:\Hous-NonBiota\mxd\Surface Water Locations.mxd

LENOX

Woods Pond Dam

Lenoxdale

Columbia Mill Dam

WEST STOCKBRIDGE

Lee

LEE

STOCKBRIDGE

Stockbridge

Glendale

South Lee

Glendale Dam

Willow Mill Dam

ALFORD

Housatonic

Rising Pond Dam

TYRINGHAM

GREAT BARRINGTON

Note: A surface water sample was collected near Great Barrington, MA. The location of this sample is currently unknown.

MONTEREY

Great Barrington

EGREMONT

Sheffield

NEW MARLBOROUGH

SHEFFIELD

Ashley Falls

N

W E

S

LOCATOR MAP

MA

SCALE

0 0.35 0.7 1.4 2.1 Miles

LEGEND

- Sample Location
- Dams
- 100-Year Floodplain
- Railroad
- County Borders
- Town Borders
- Housatonic River and Backwaters

Notes:

1. Hydrology and transportation coverages provided by MassGis.com.
2. 100-year floodplain coverage provided by FEMA (Q3 Flood data).

FIGURE B.1-2
HOUSATONIC RIVER SURFACE WATER LOCATIONS - WOODS POND TO MASSACHUSETTS/ CONN BORDER

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

QEA Quantitative Environmental Analysis, LLC

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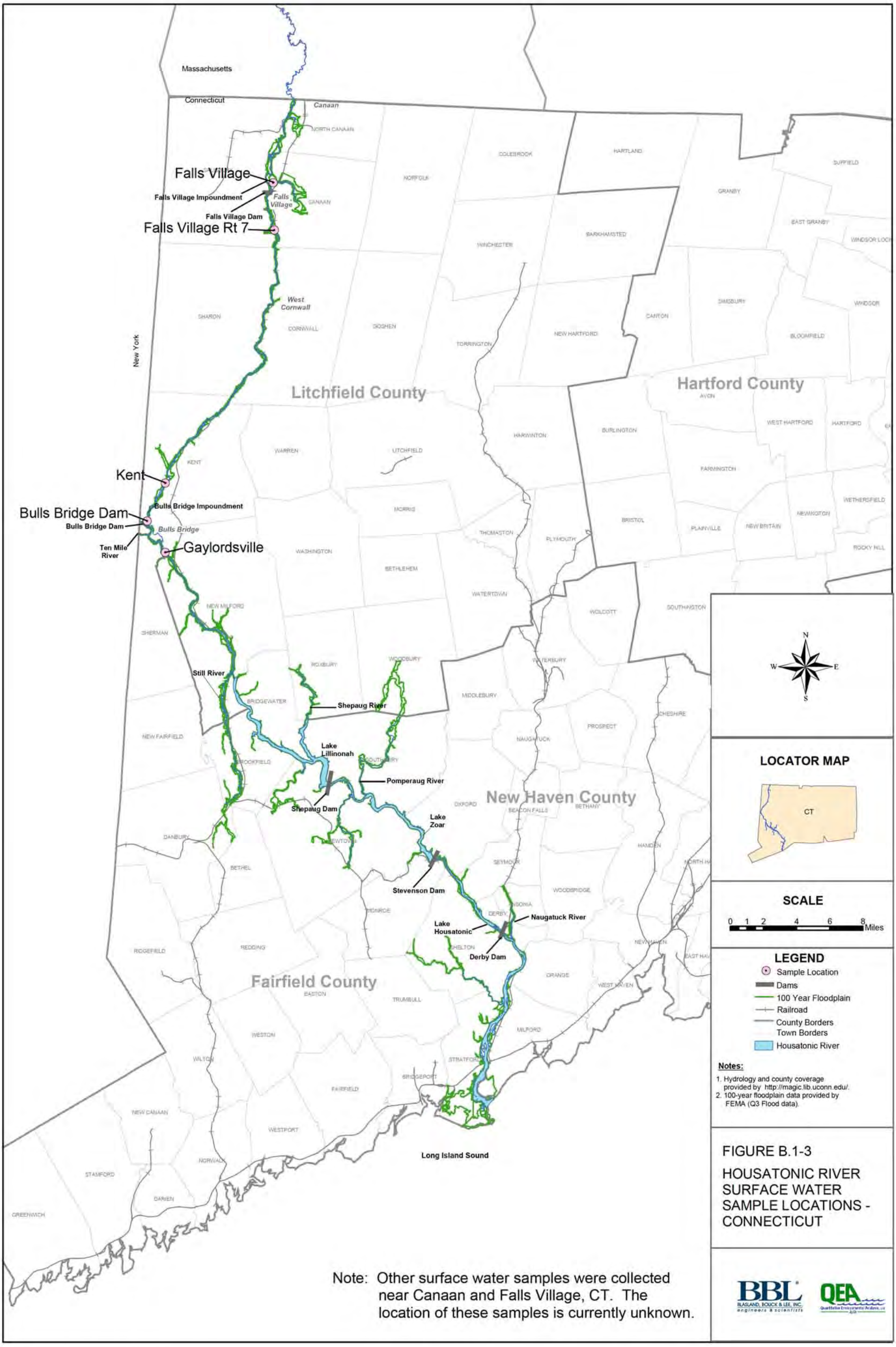

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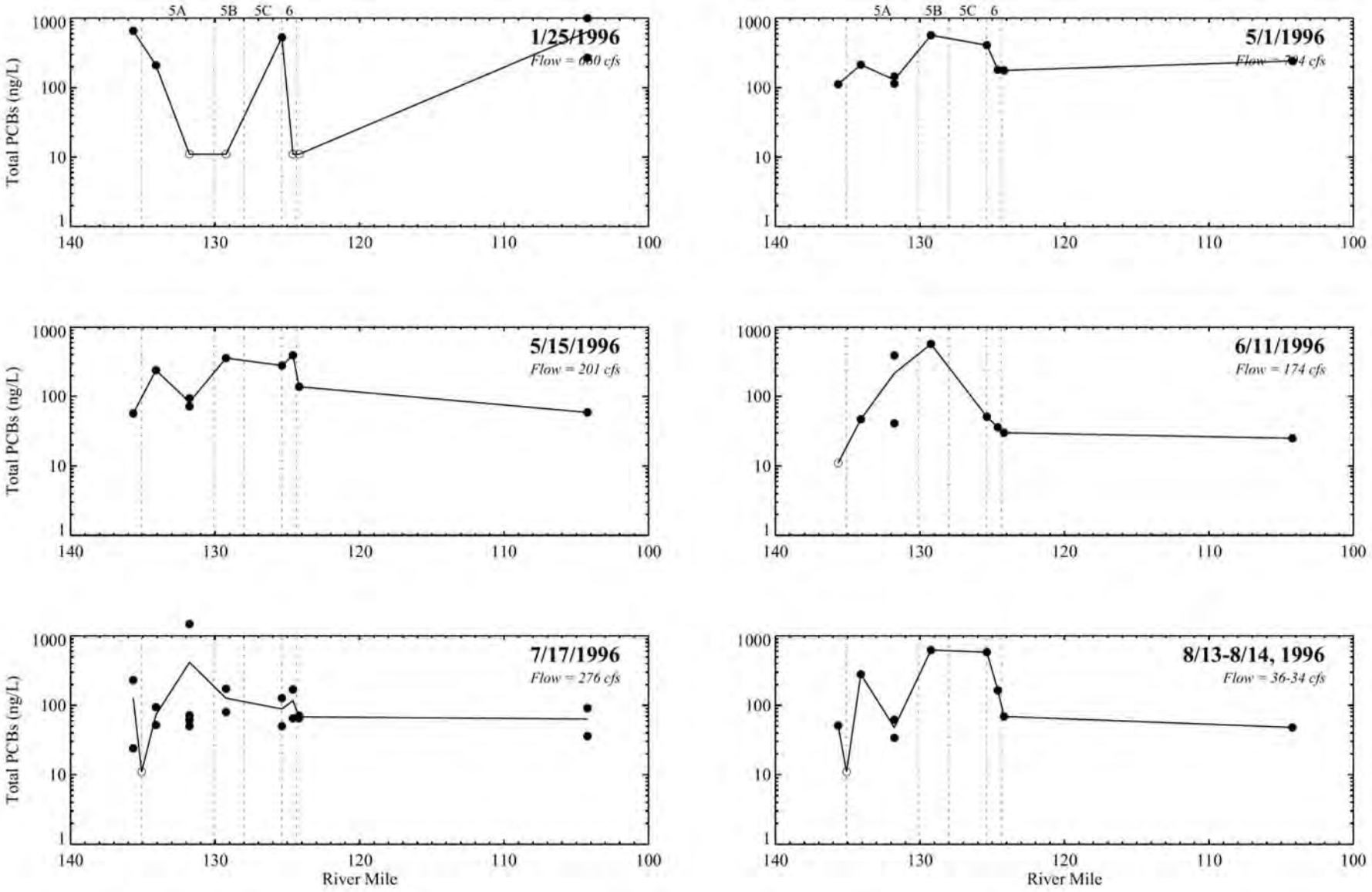
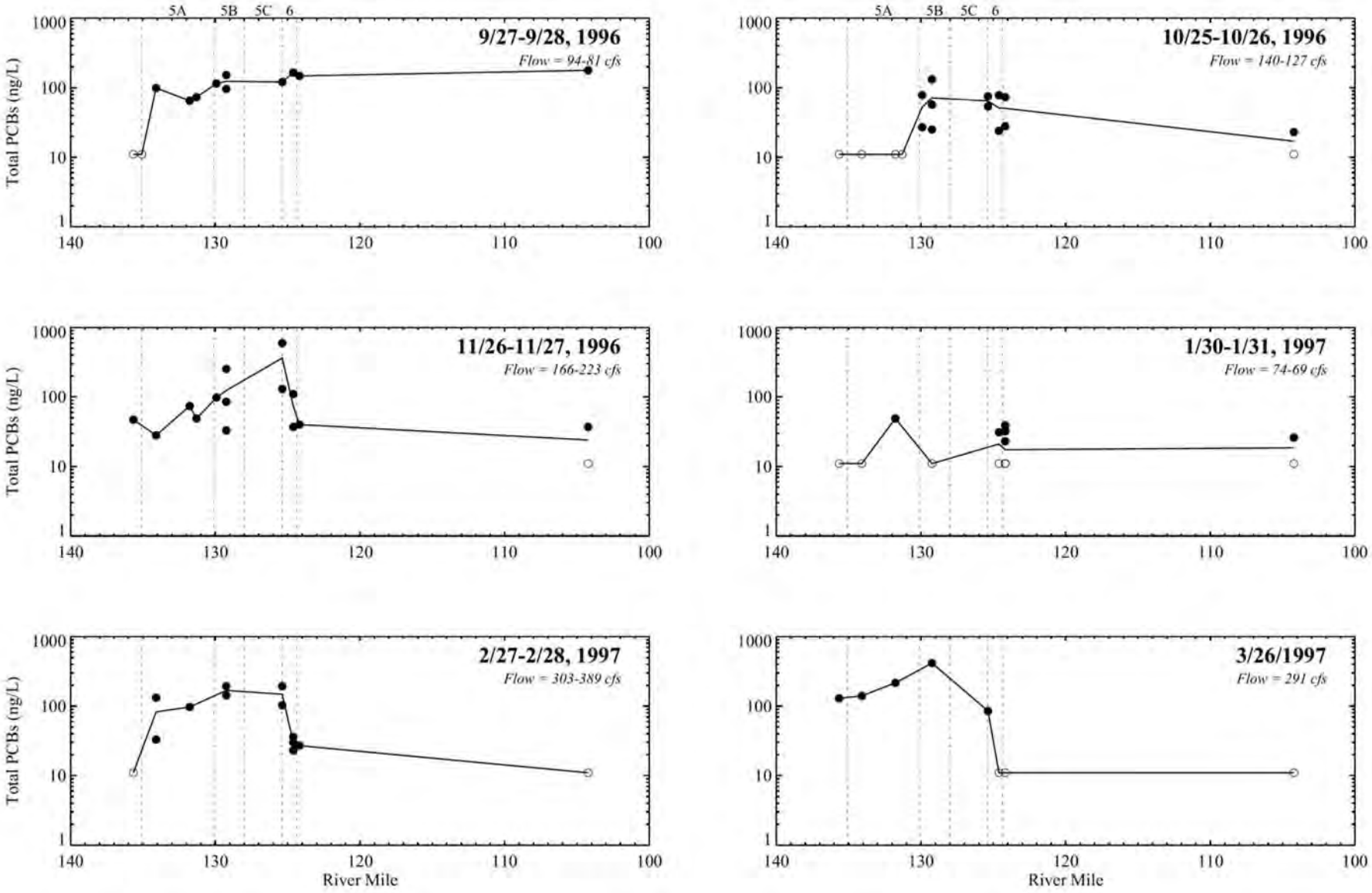


Figure B.1-4. Spatial profiles of PCB concentrations for 1996-2002 GE/EPA monthly water column monitoring data.

Note: Non-detect PCBs plotted as open symbols at 11 ng/L.



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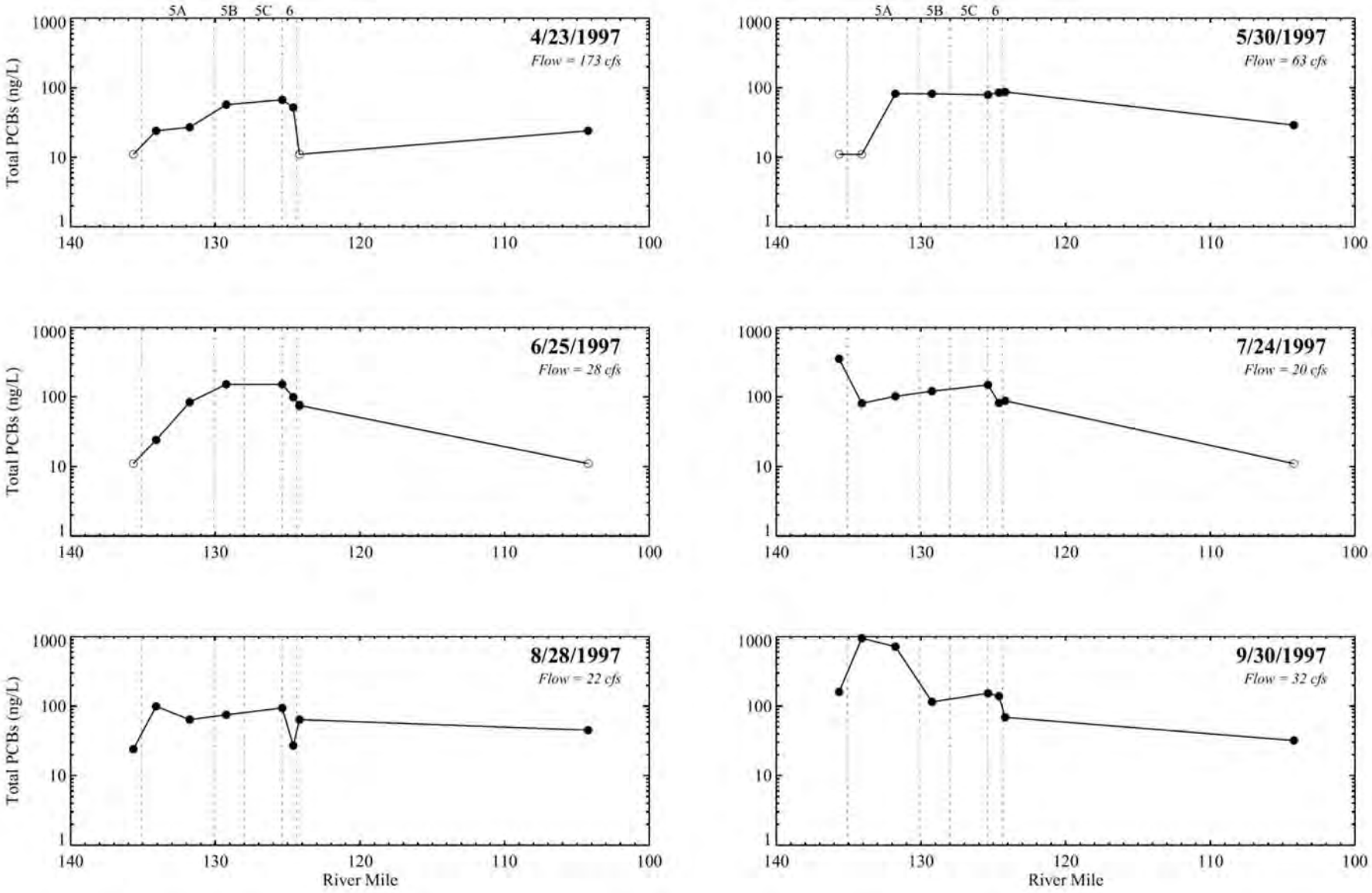
● GE data
▲ EPA data



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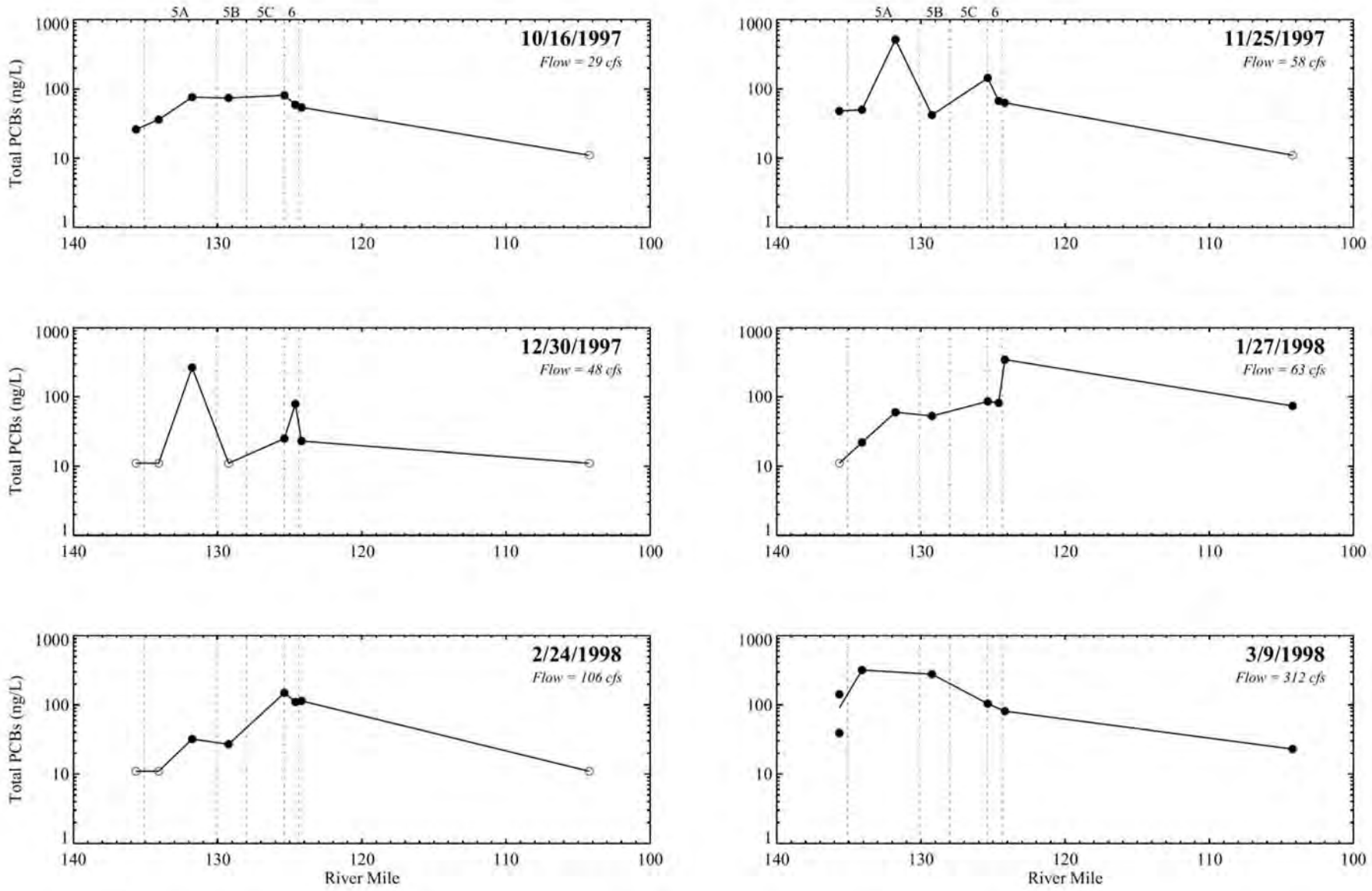

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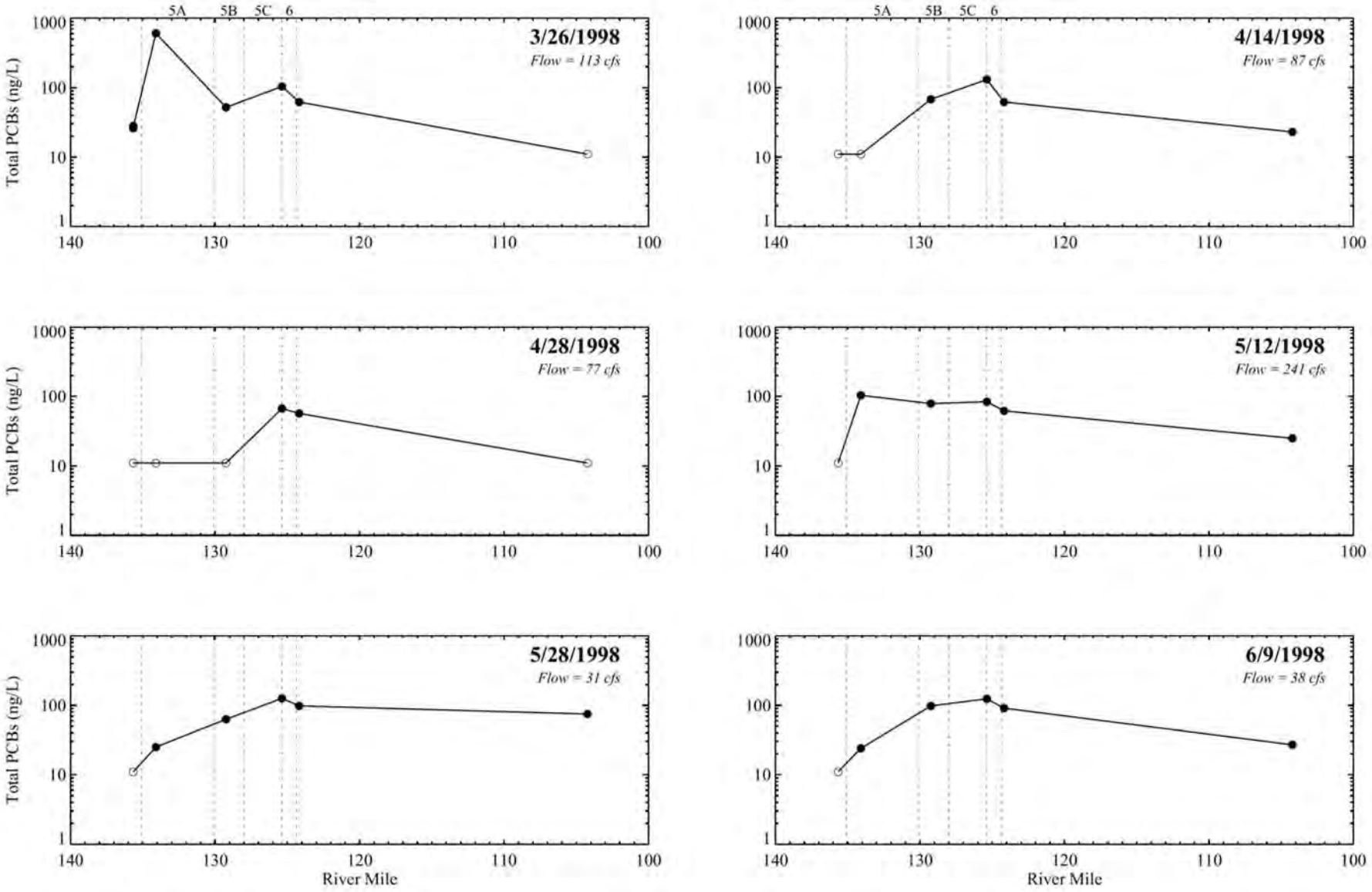

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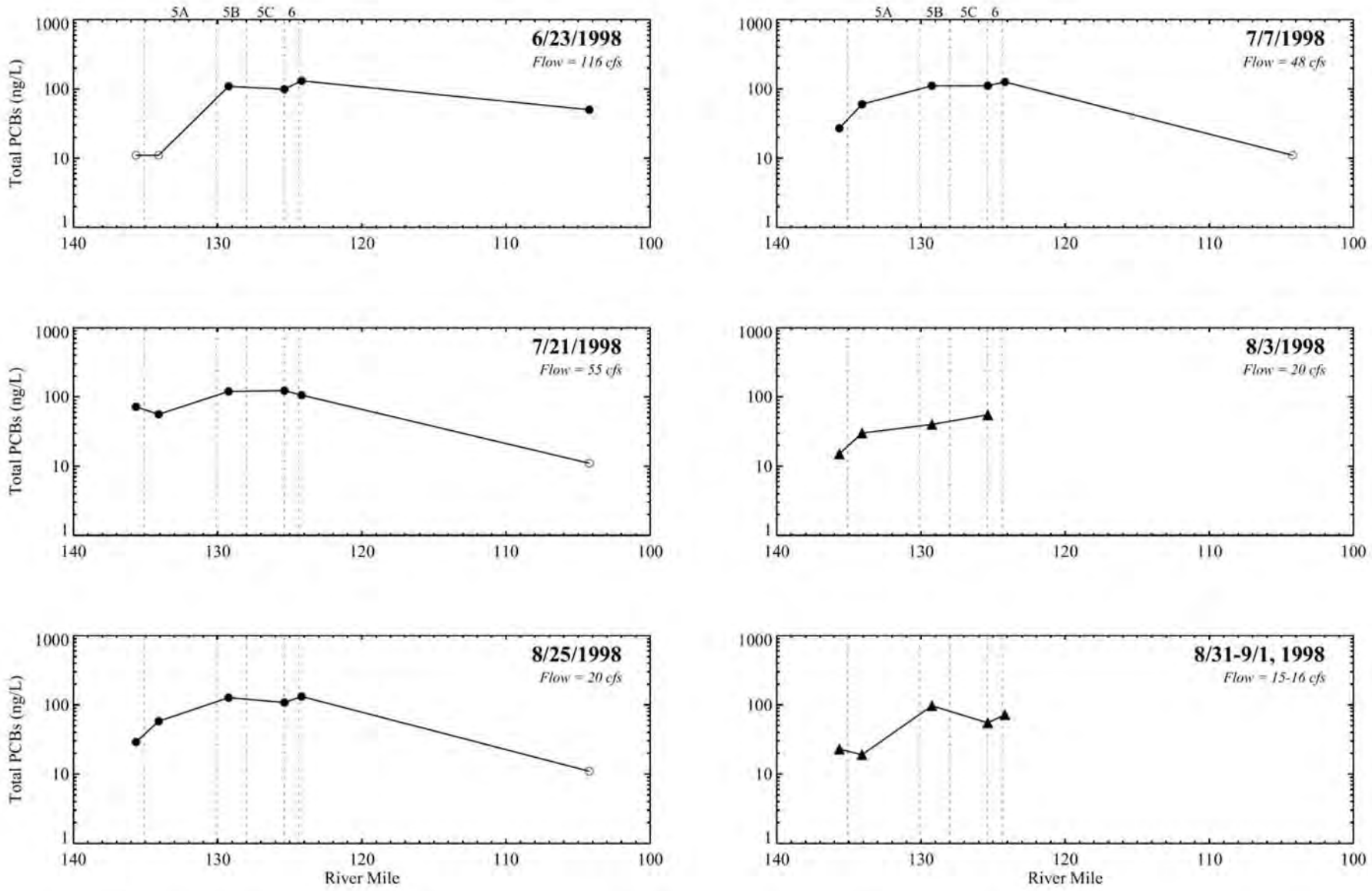

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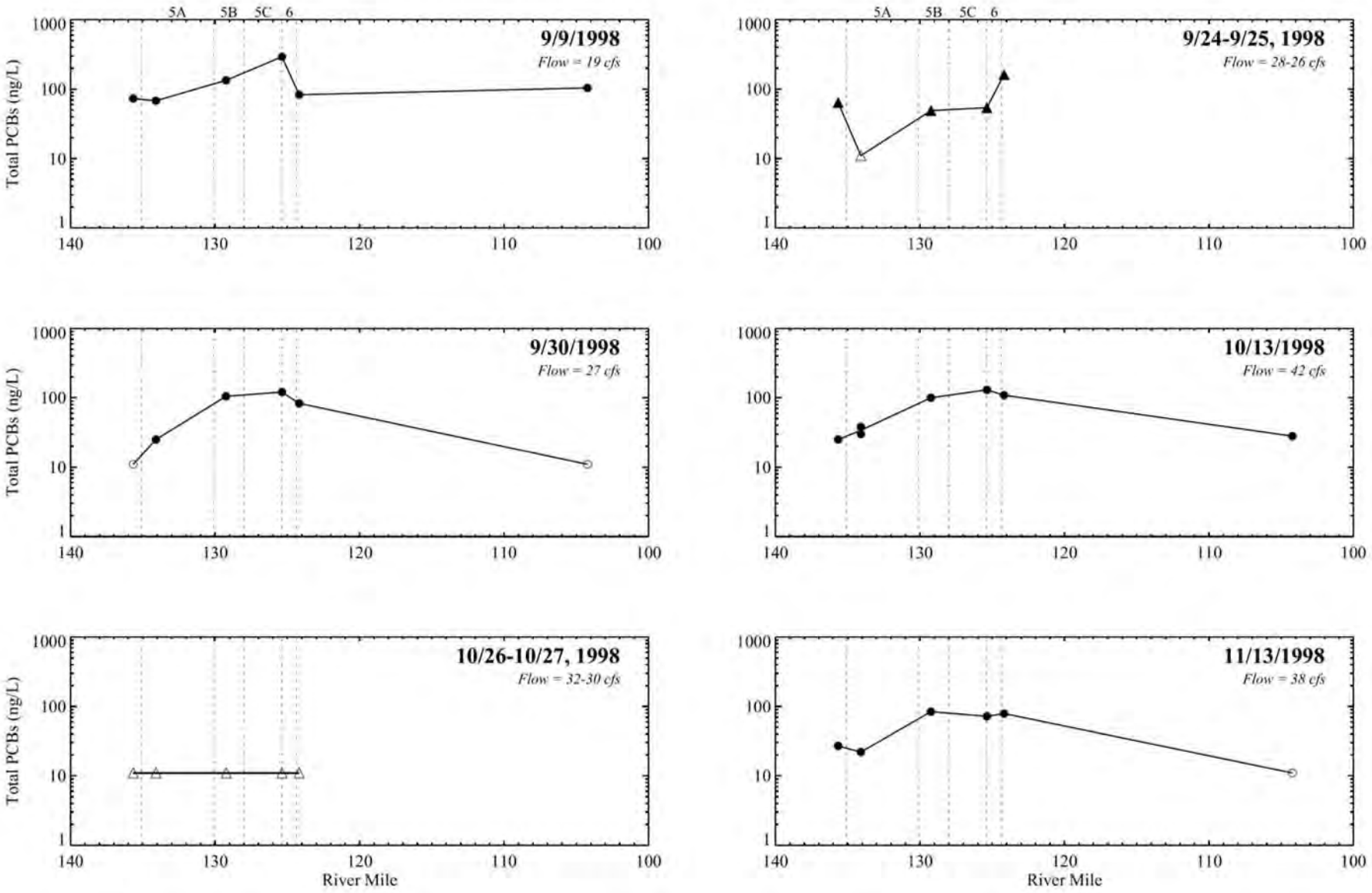

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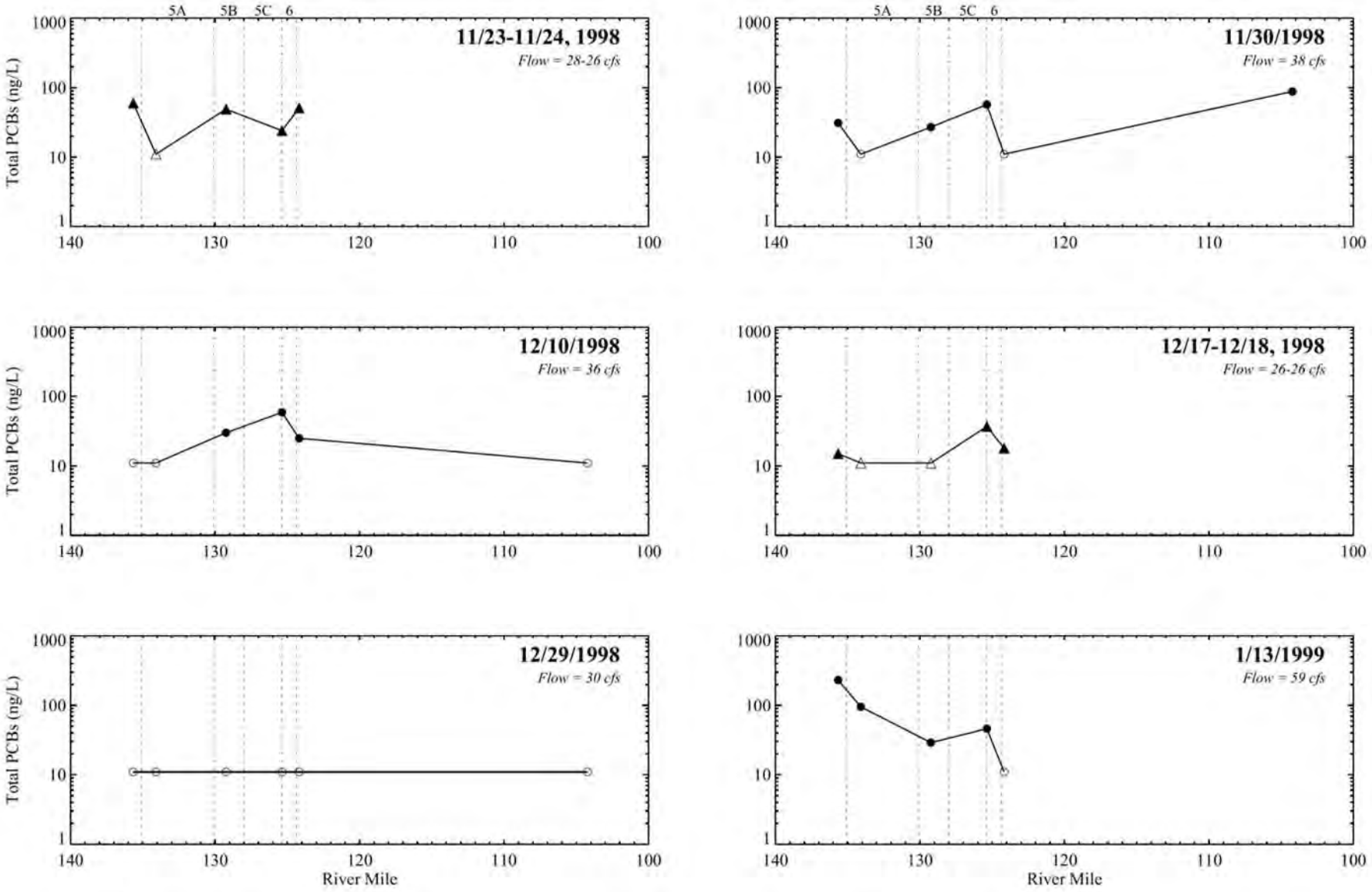

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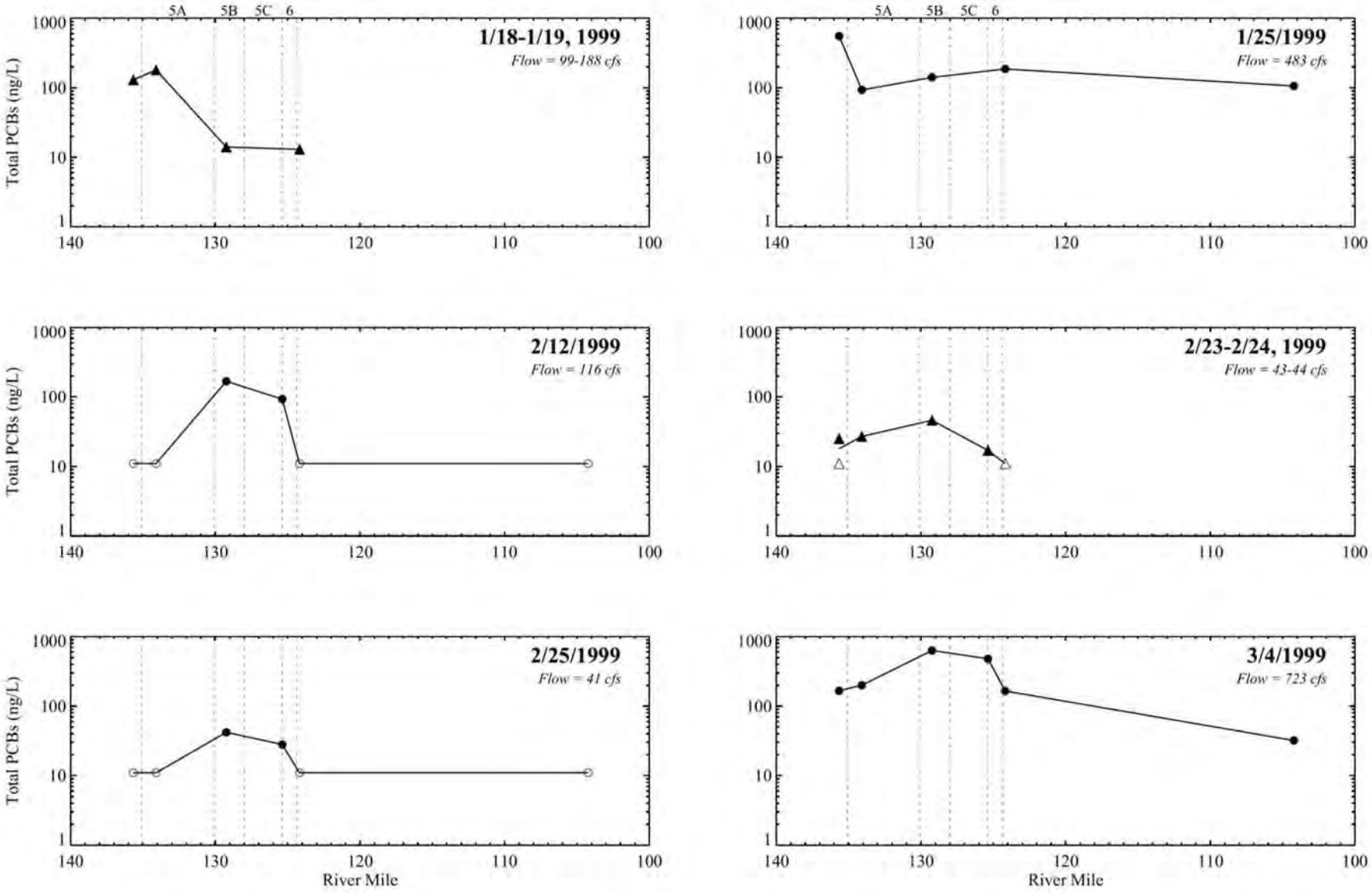

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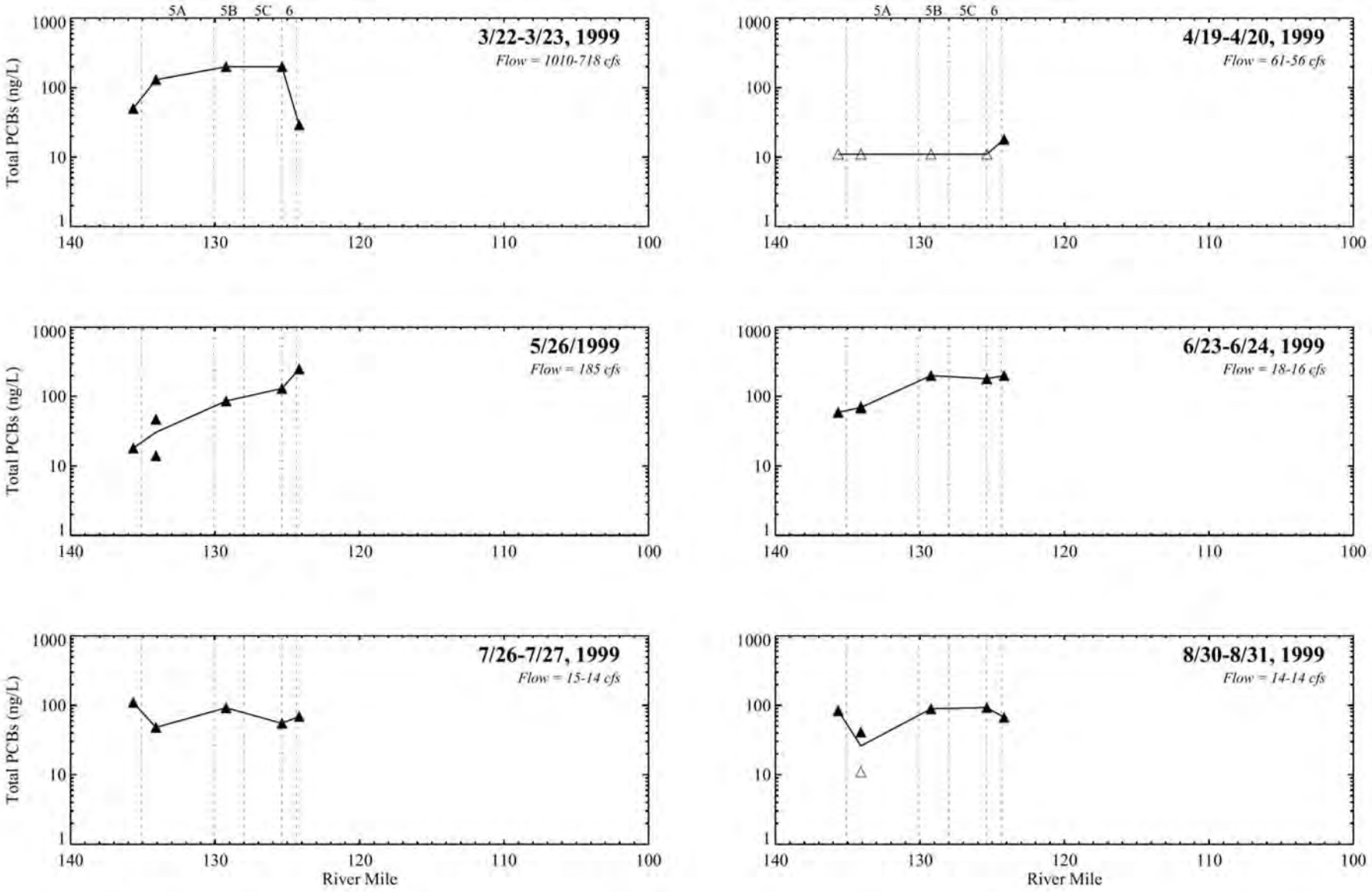

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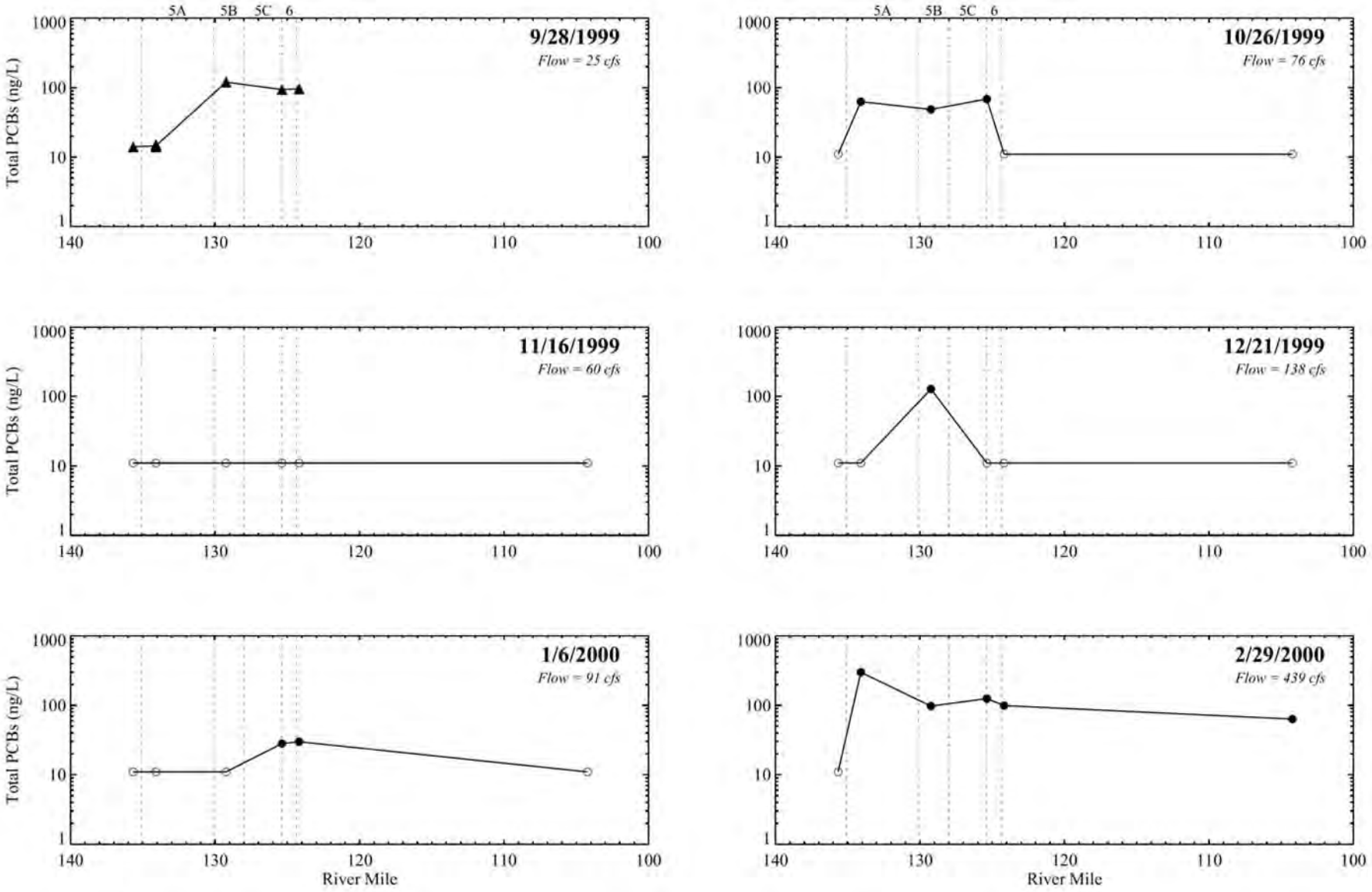

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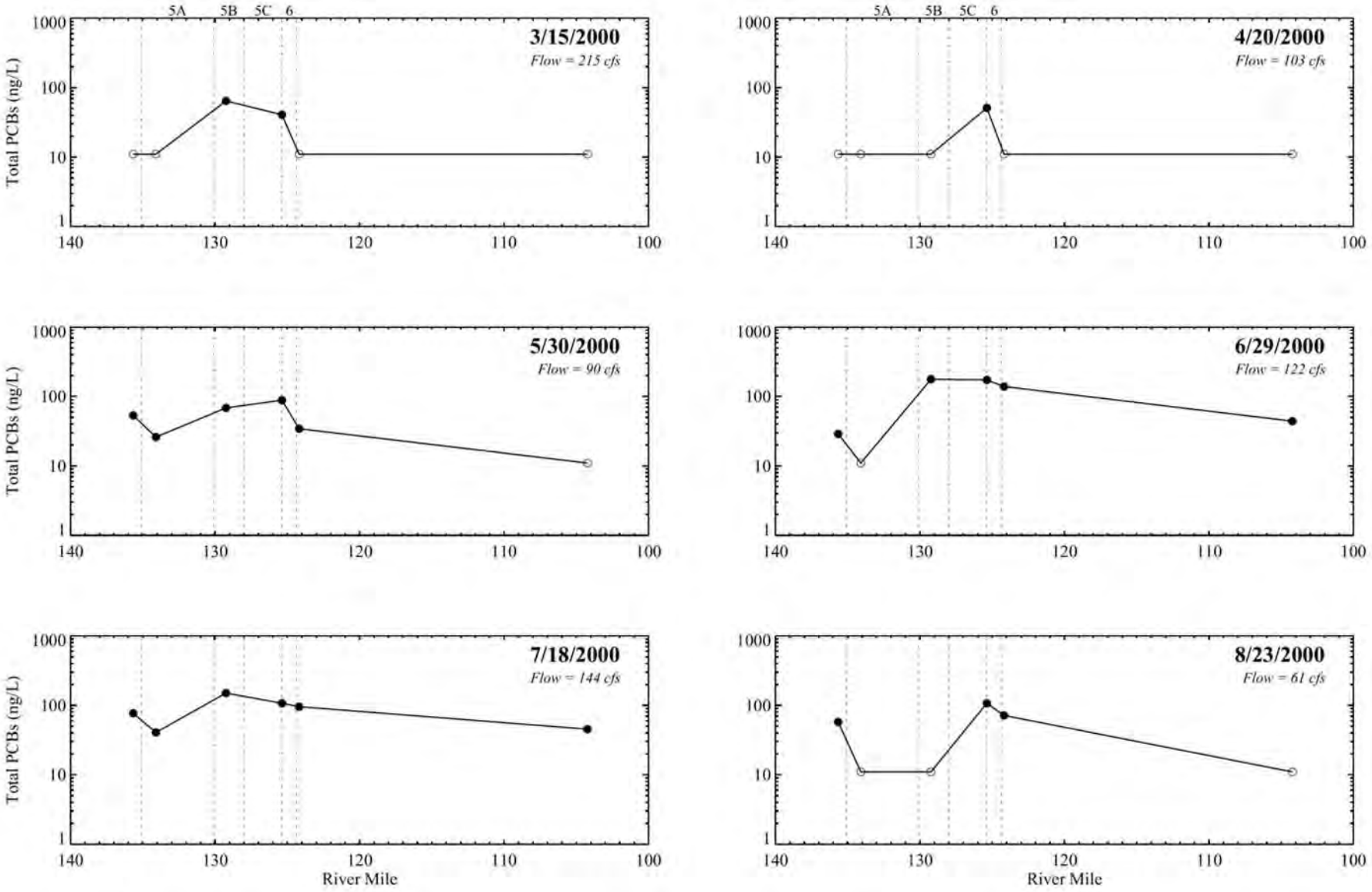

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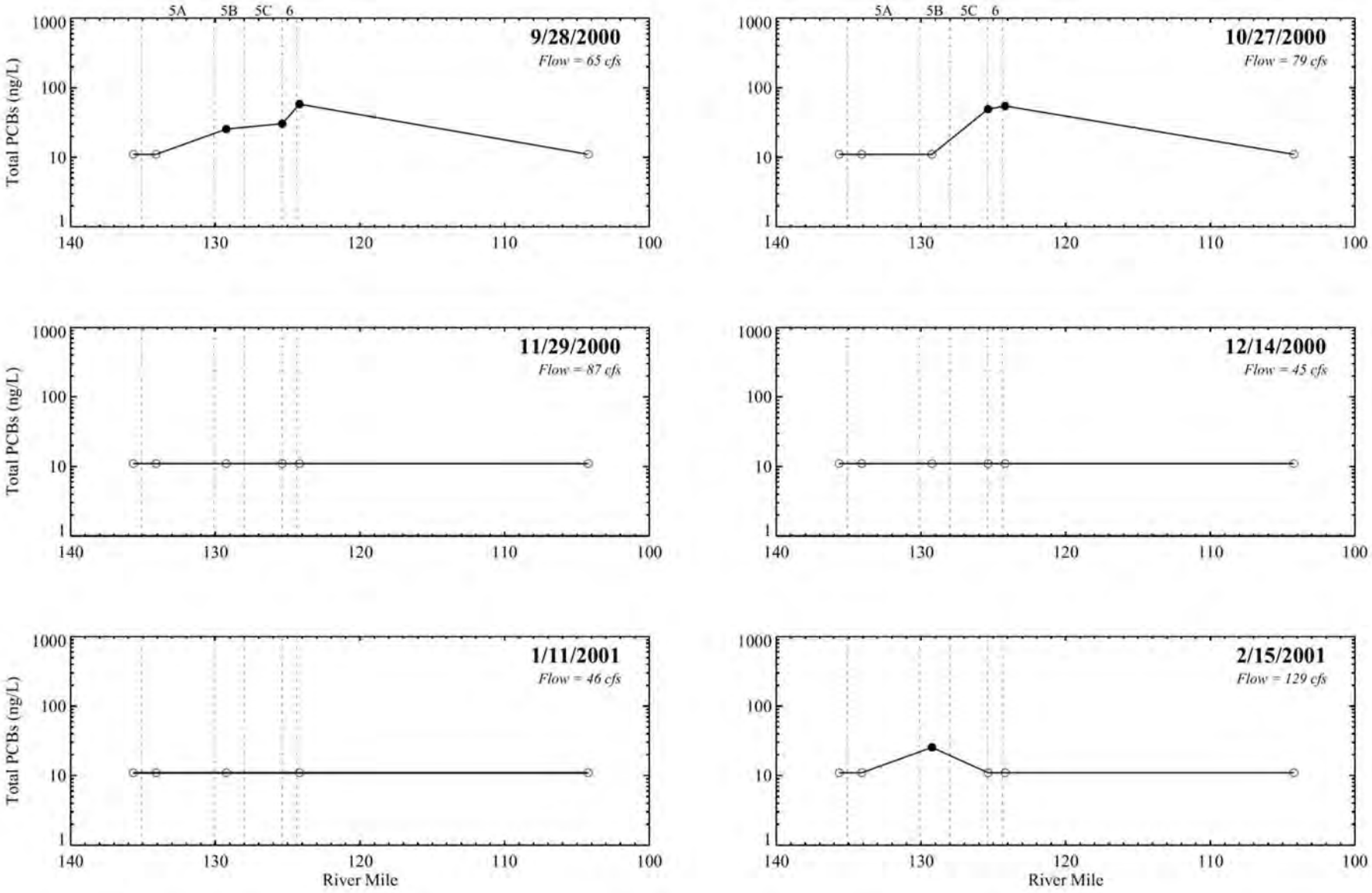

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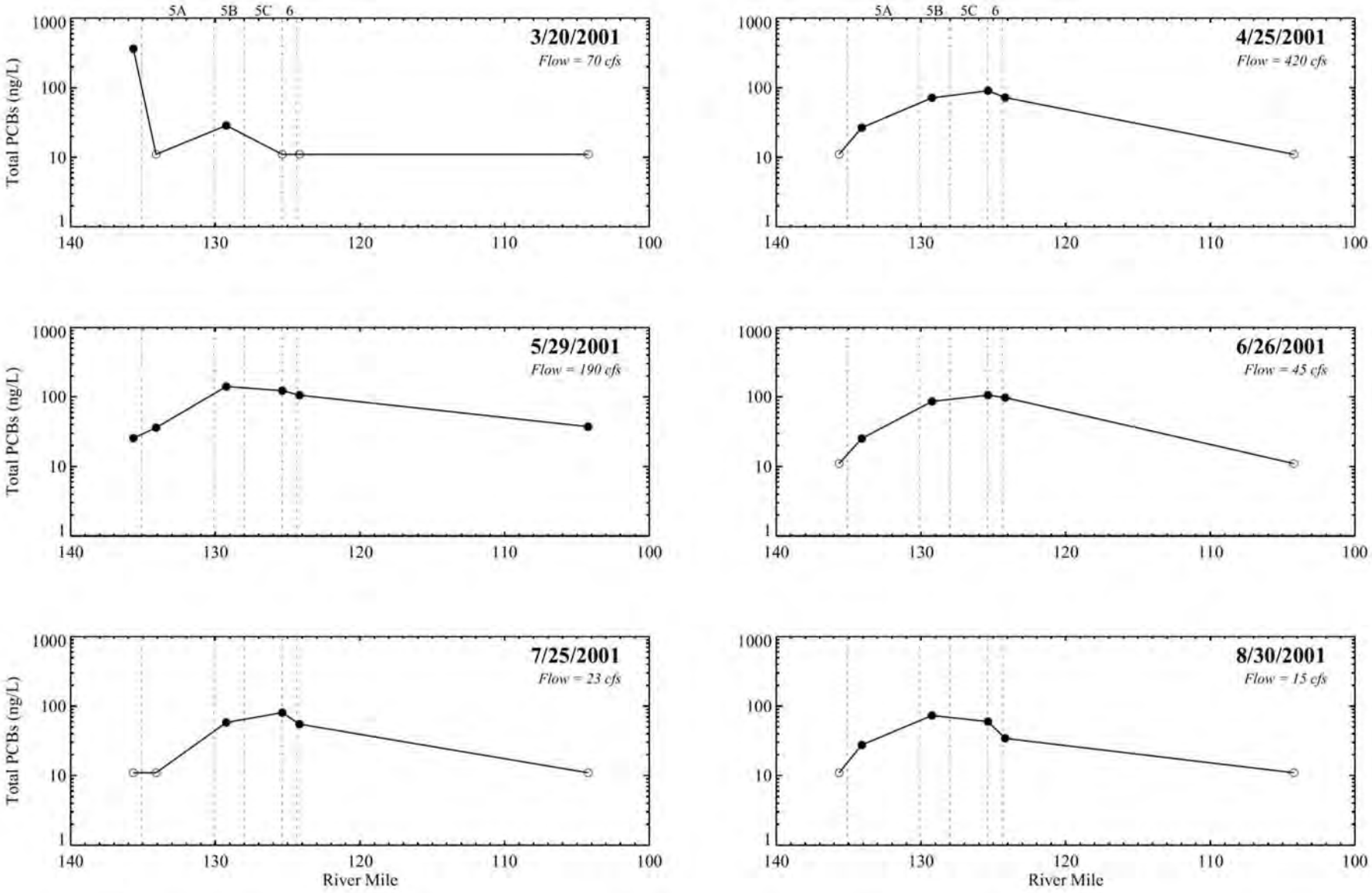

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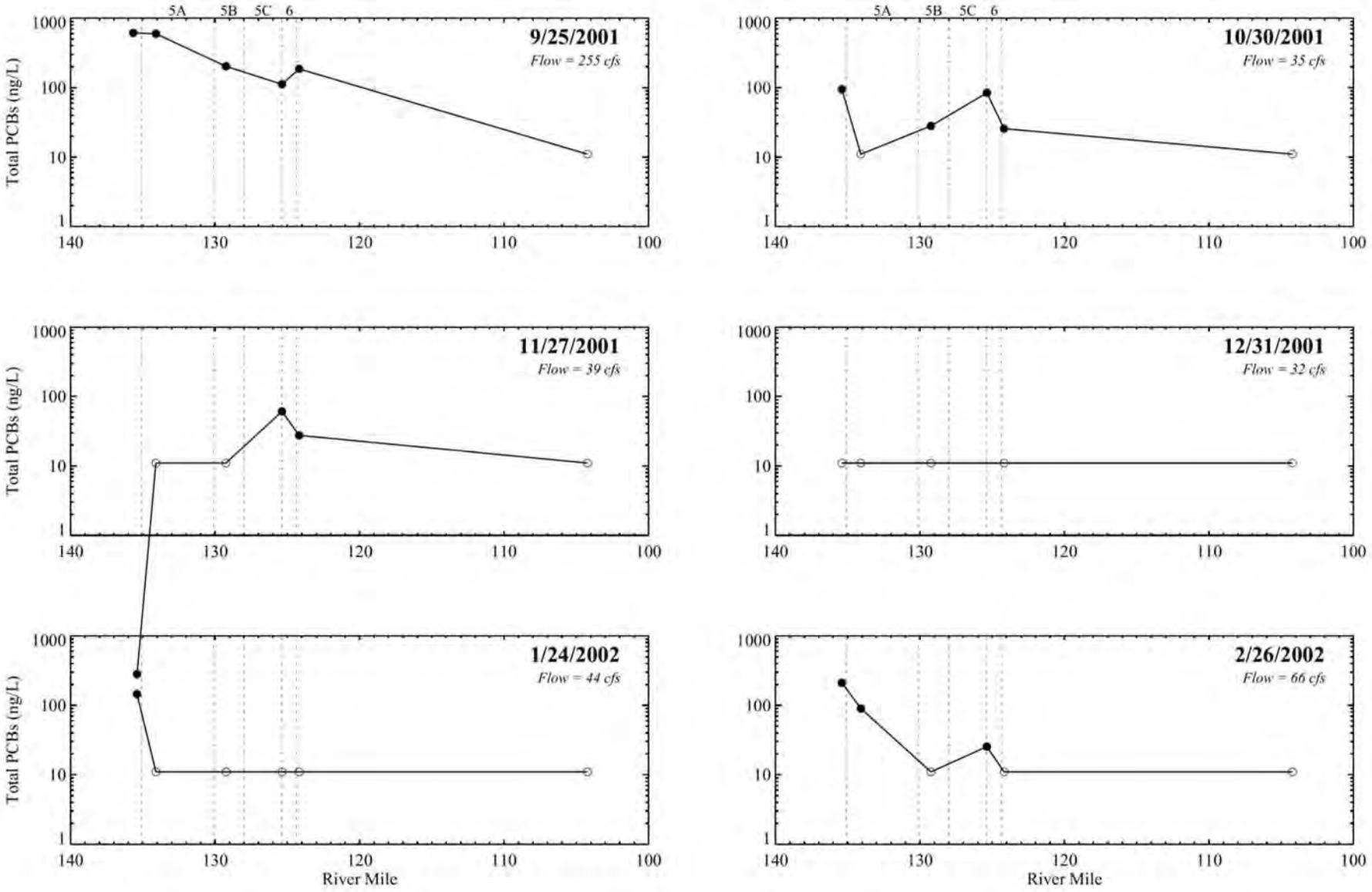

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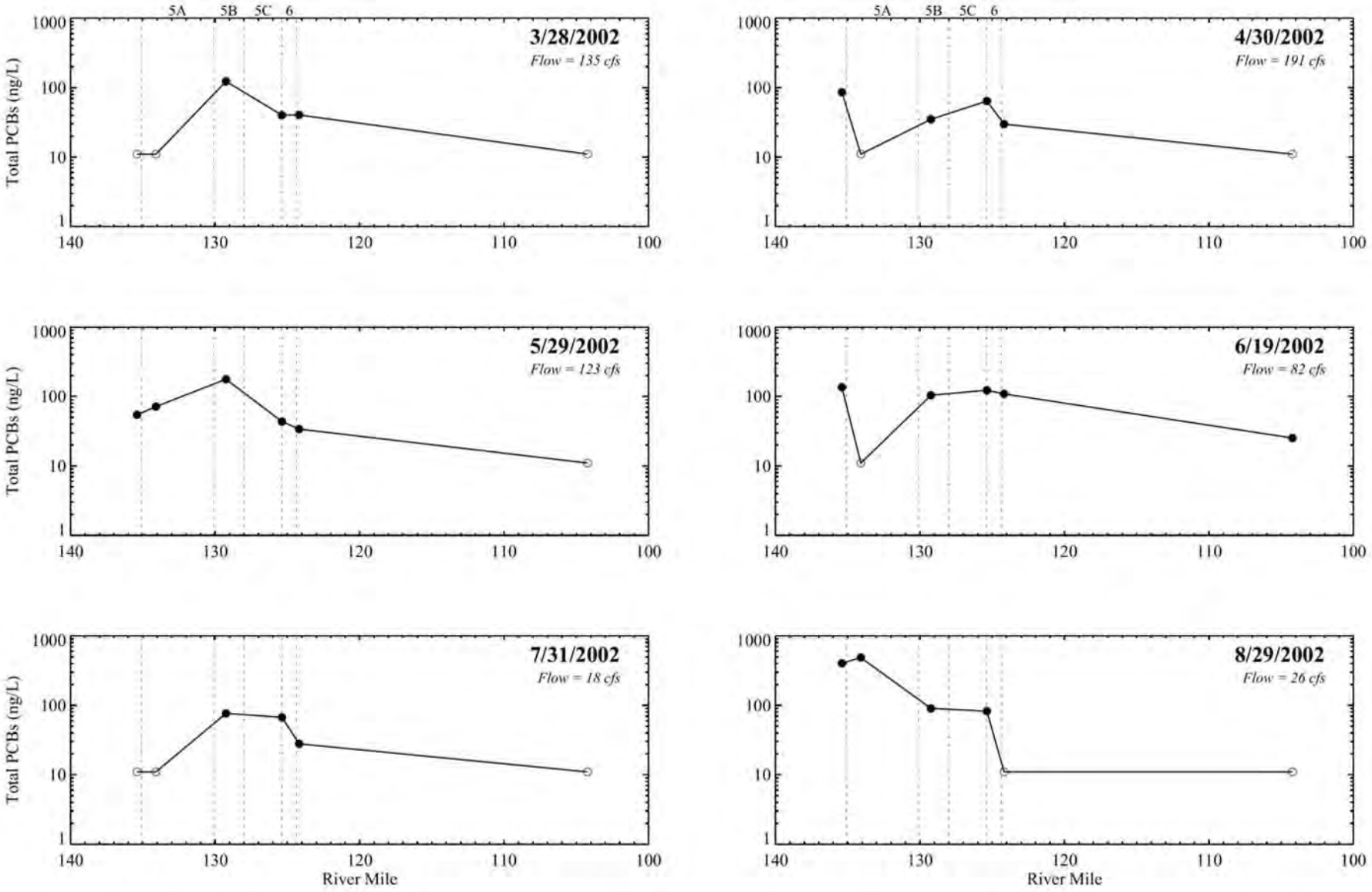


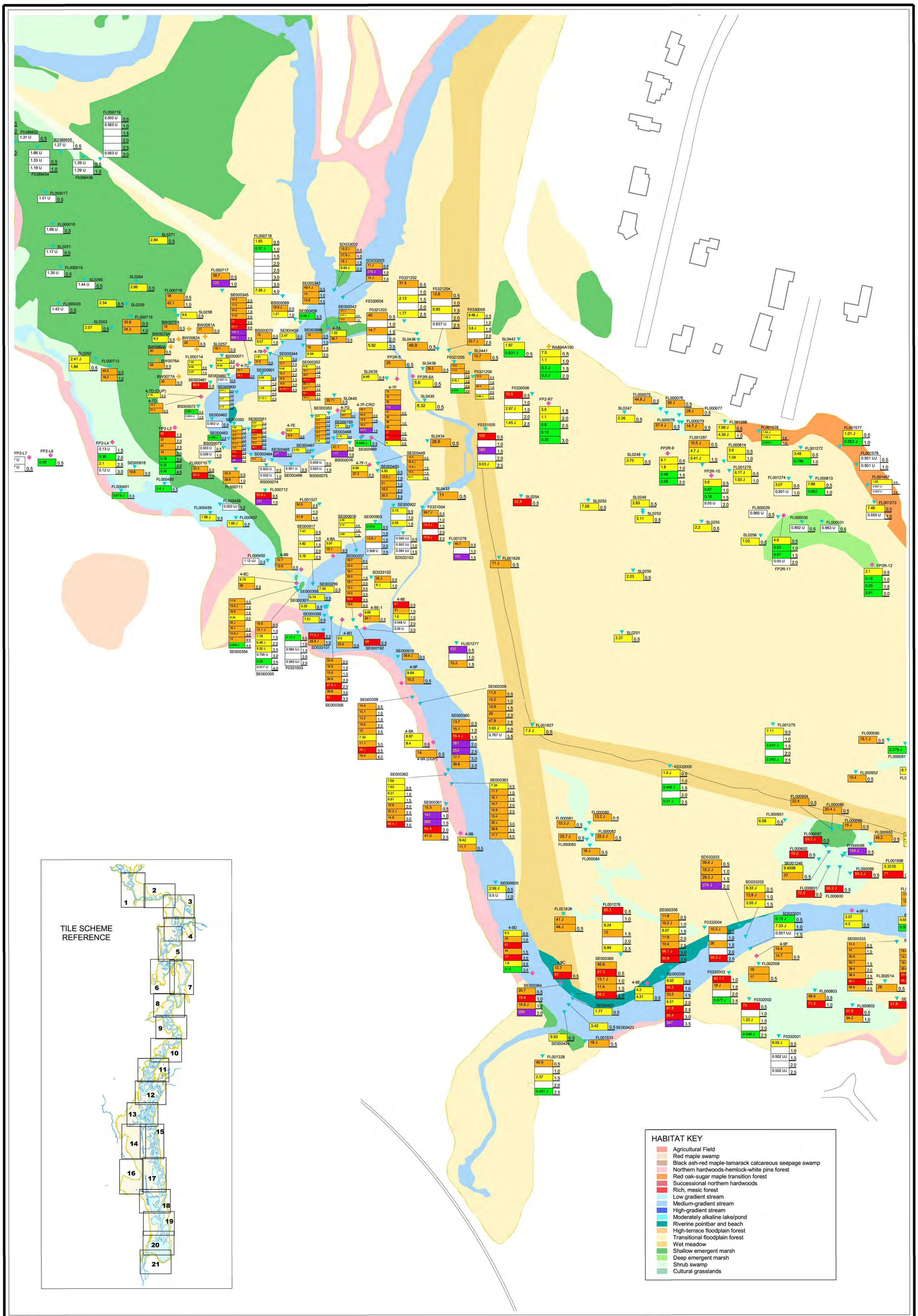
Figure B.1-4. Spatial profiles of PCB concentrations for 1996-2002 GE/EPA monthly water column monitoring data.

Note: Non-detect PCBs plotted as open symbols at 11 ng/L.

Appendices B.2 and B.3

Sediment and Soil PCB Data

BBL®
BLASLAND, BOUCK & LEE, INC.
engineers & scientists



LEGEND:

- EPA - Corp of Engineers Sample Location
- EPA - START Sample Location
- GE Sample Location
- Open Water
- 10-year Floodplain

PCB Concentration (ppm)

	result value		lower depth value
< 1	0.82	0.5	
1 - 10	2.83	1.0	
10 - 50	45.9	1.5	
50 - 100	87.1	2.0	
> 100	160	2.5	
no sample		3.0	
non-detect	0.65 U	3.5	result flag

NOTE:
Result flag indicates --

- U = not detected at reported value
- J = estimated detected value
- UJ = estimated non-detected value

N

Scale in Feet

100 0 100 200 300

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 1/21

NOTE: Datamart as of September 30, 2002

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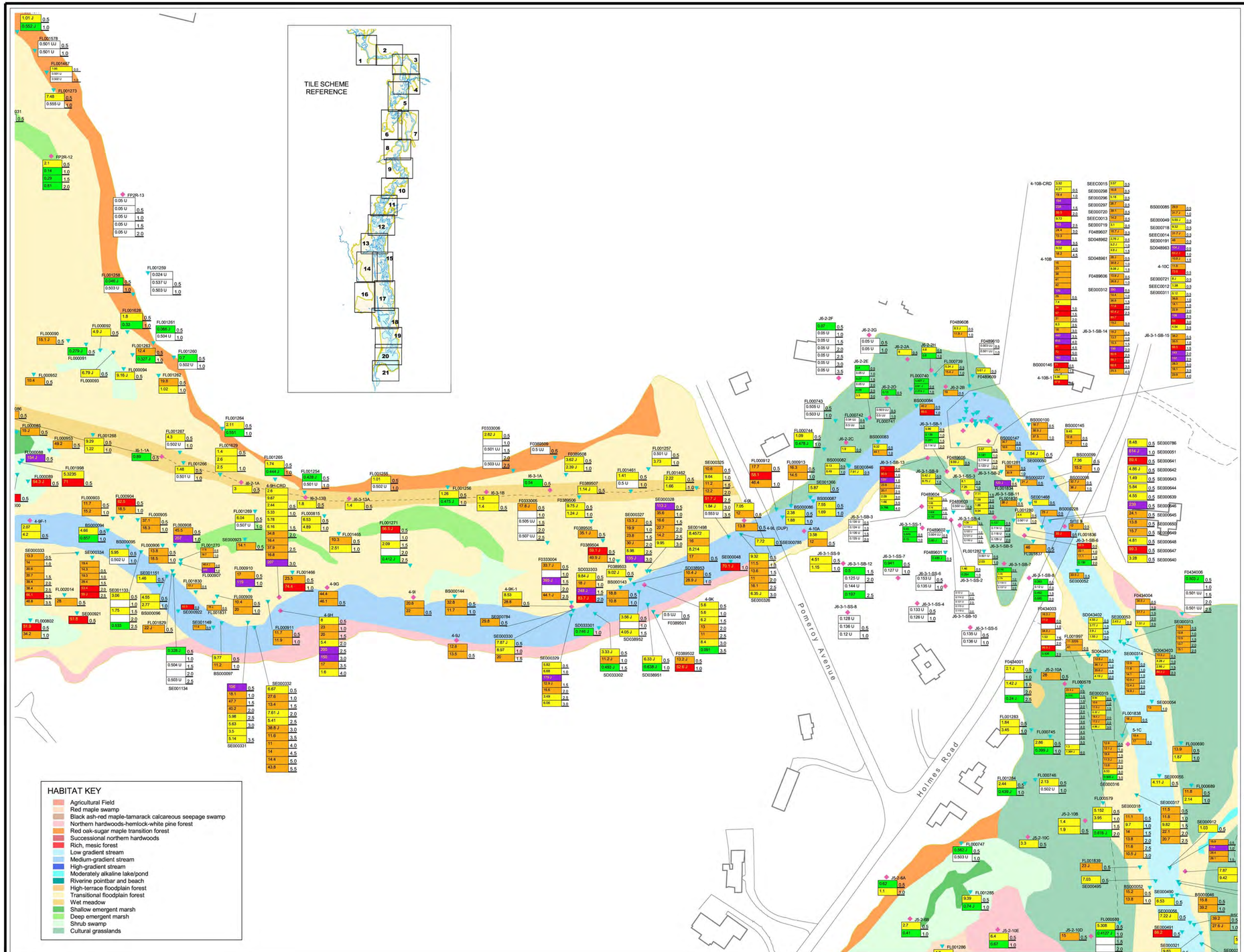

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NOTE: Result flag indicates --
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N

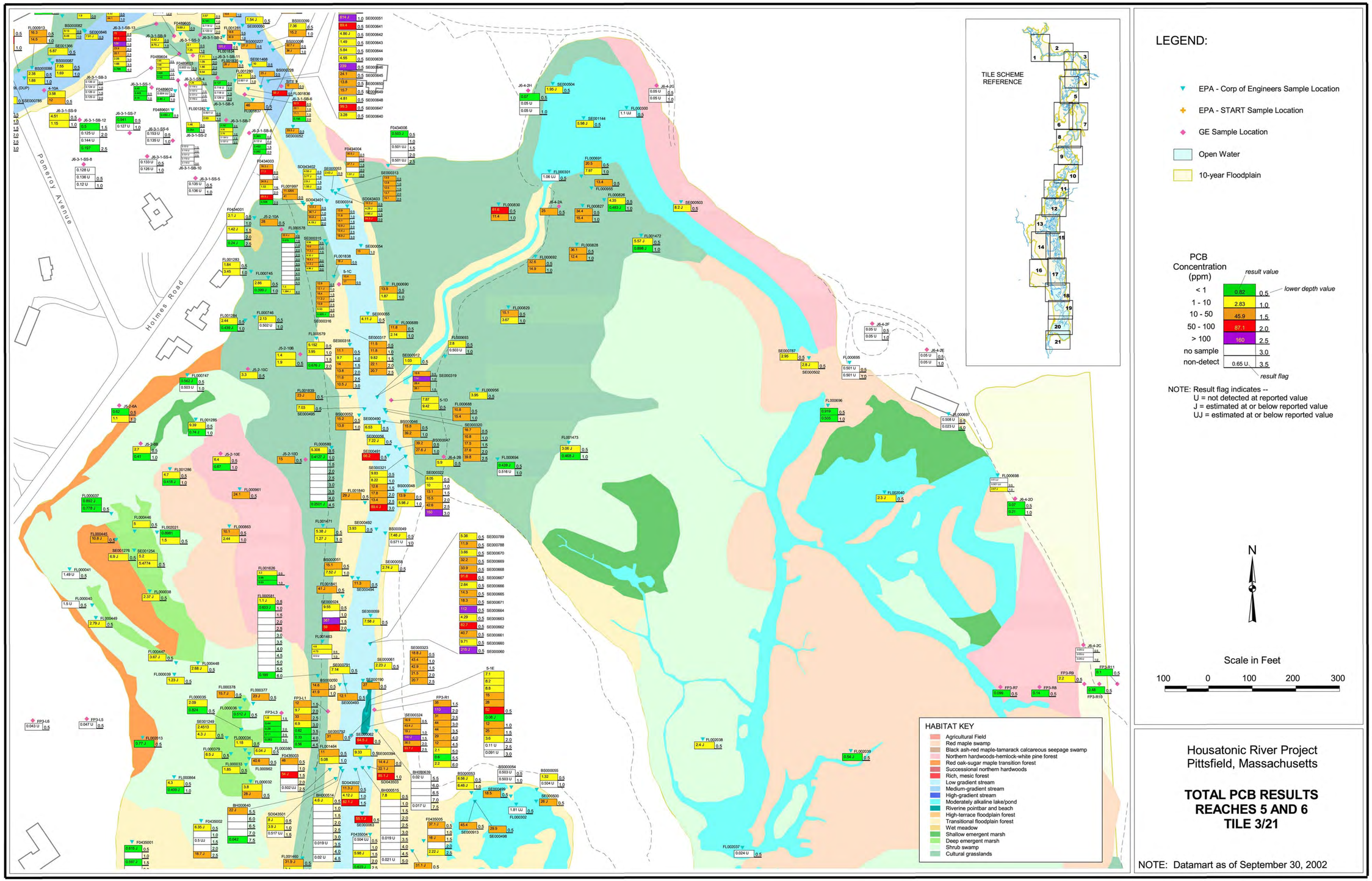
Scale in Feet

100 0 100 200 300

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 2/21

NOTE: Datamart as of September 30, 2002



LEGEND:

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Scale in Feet

100 0 100 200 300

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 3/21

NOTE: Datamart as of September 30, 2002

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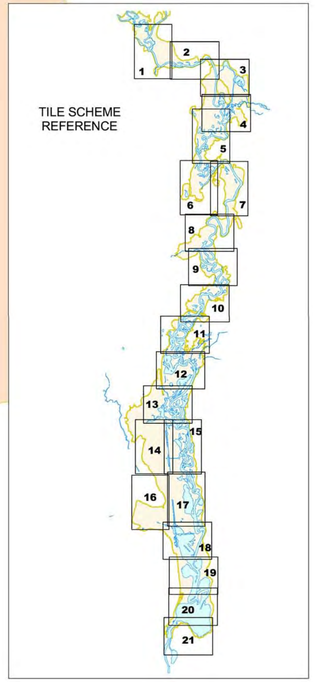
HABITAT KEY

- Agricultural Field
- Red maple swamp
- Black ash-red maple-tamarack calcareous seepage swamp
- Northern hardwoods-hemlock-white pine forest
- Red oak-sugar maple transition forest
- Successional northern hardwoods
- Rich, mesic forest
- Low gradient stream
- Medium-gradient stream
- High-gradient stream
- Moderately alkaline lake/pond
- Riverine pointbar and beach
- High-terrace floodplain forest
- Transitional floodplain forest
- Wet meadow
- Shallow emergent marsh
- Deep emergent marsh
- Shrub swamp
- Cultural grasslands

TILE SCHEME REFERENCE



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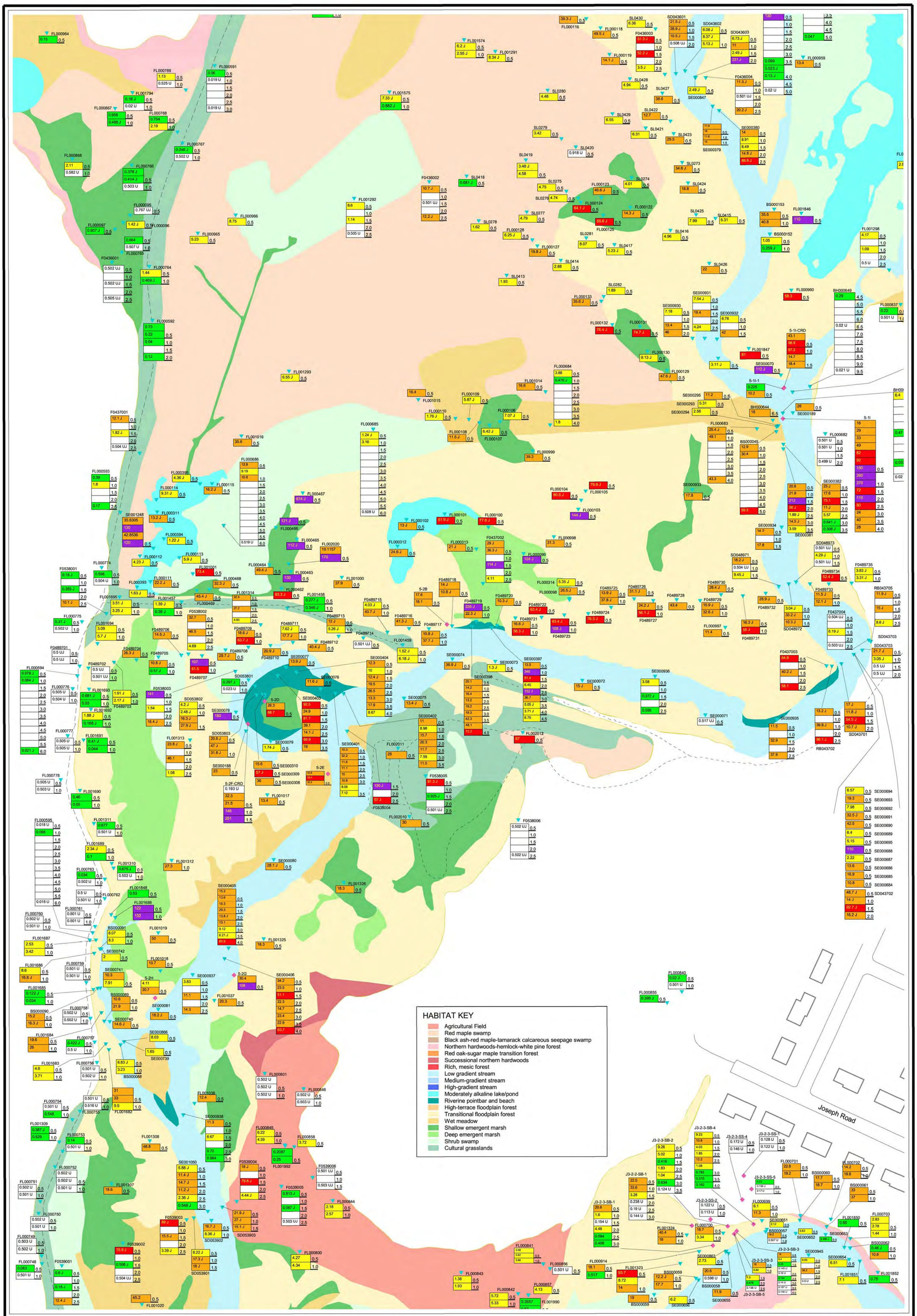
Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 4/21

NOTE: Datamart as of September 30, 2002



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Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 5/21

NOTE: Datamart as of September 30, 2002

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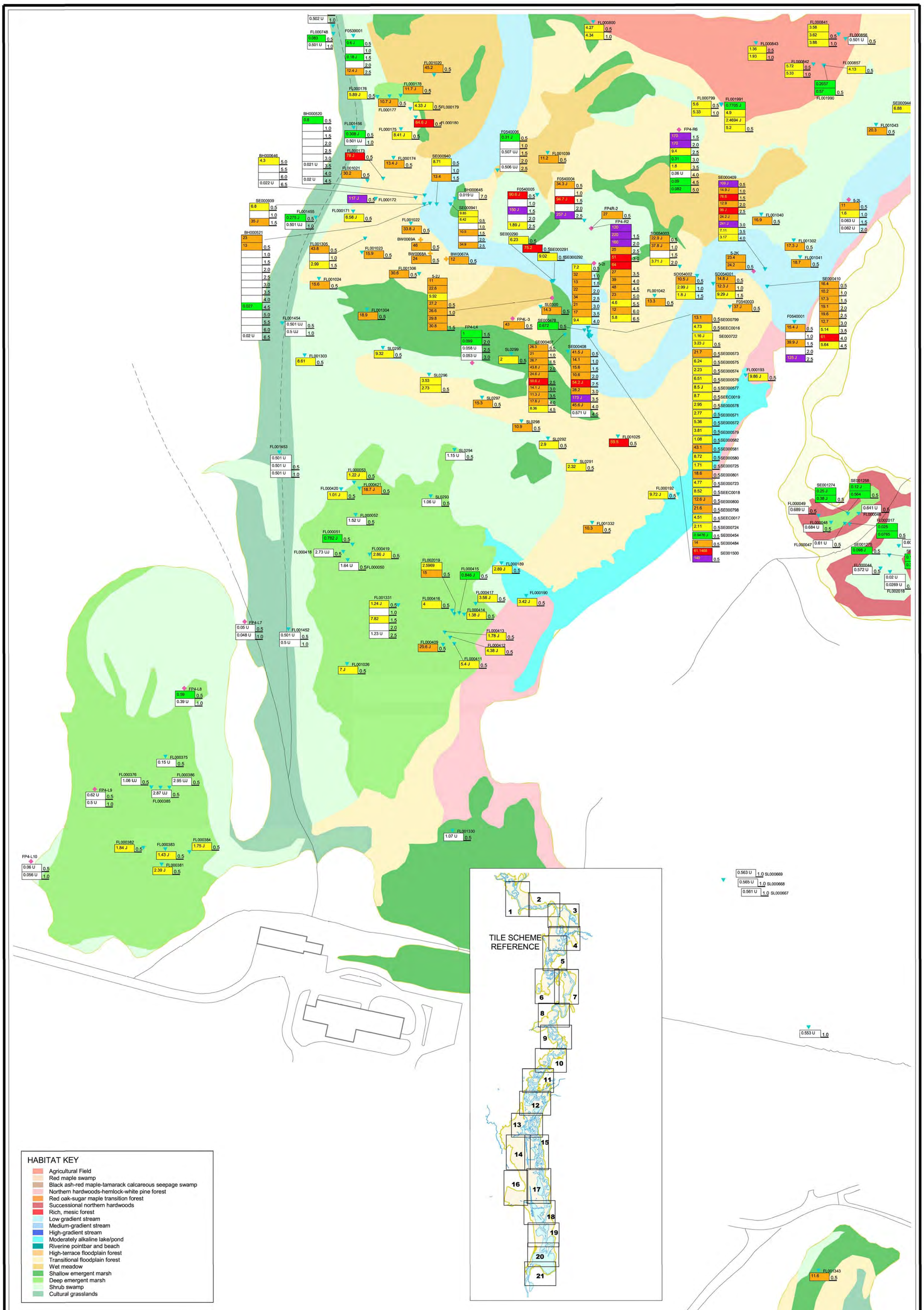

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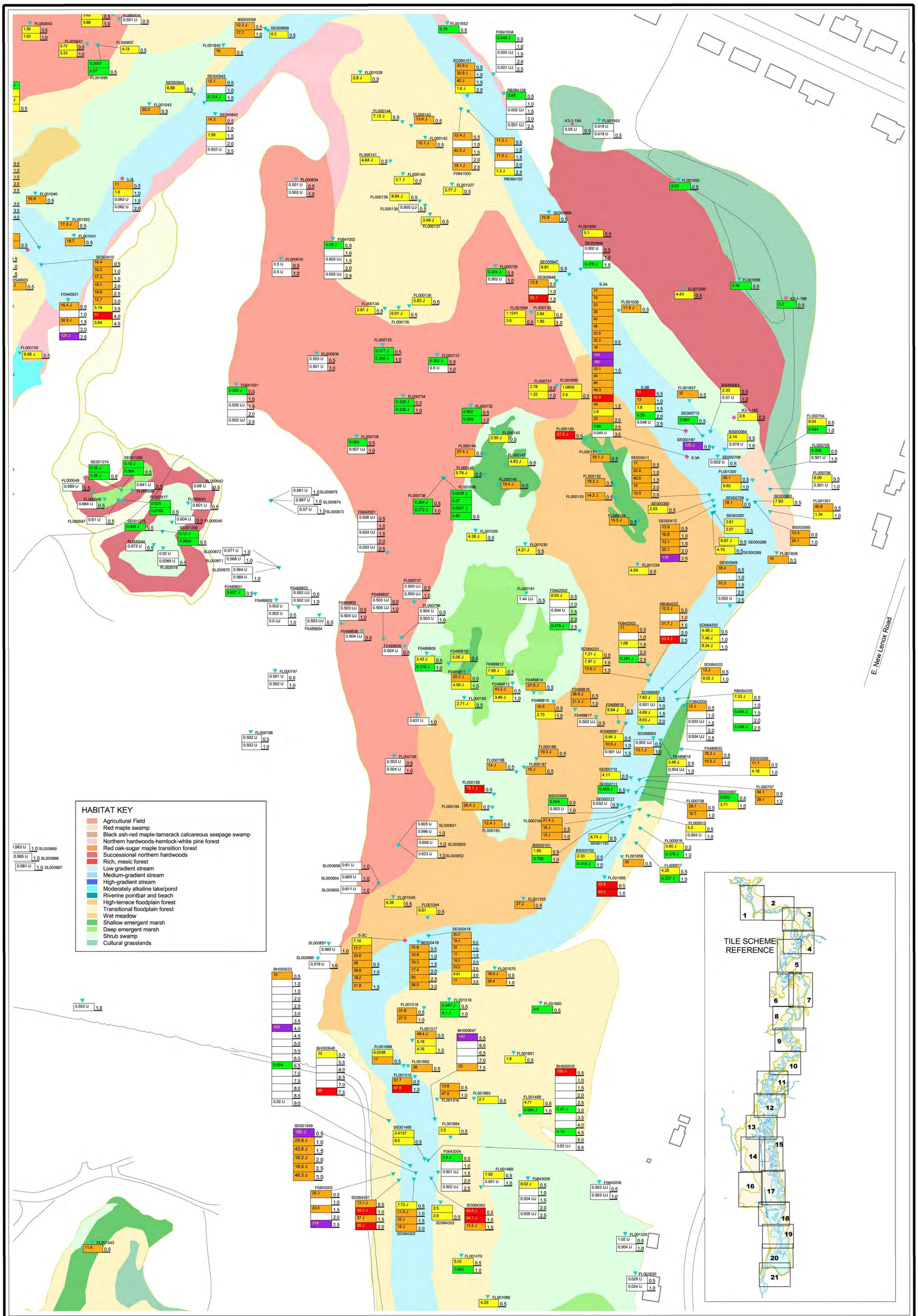

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Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
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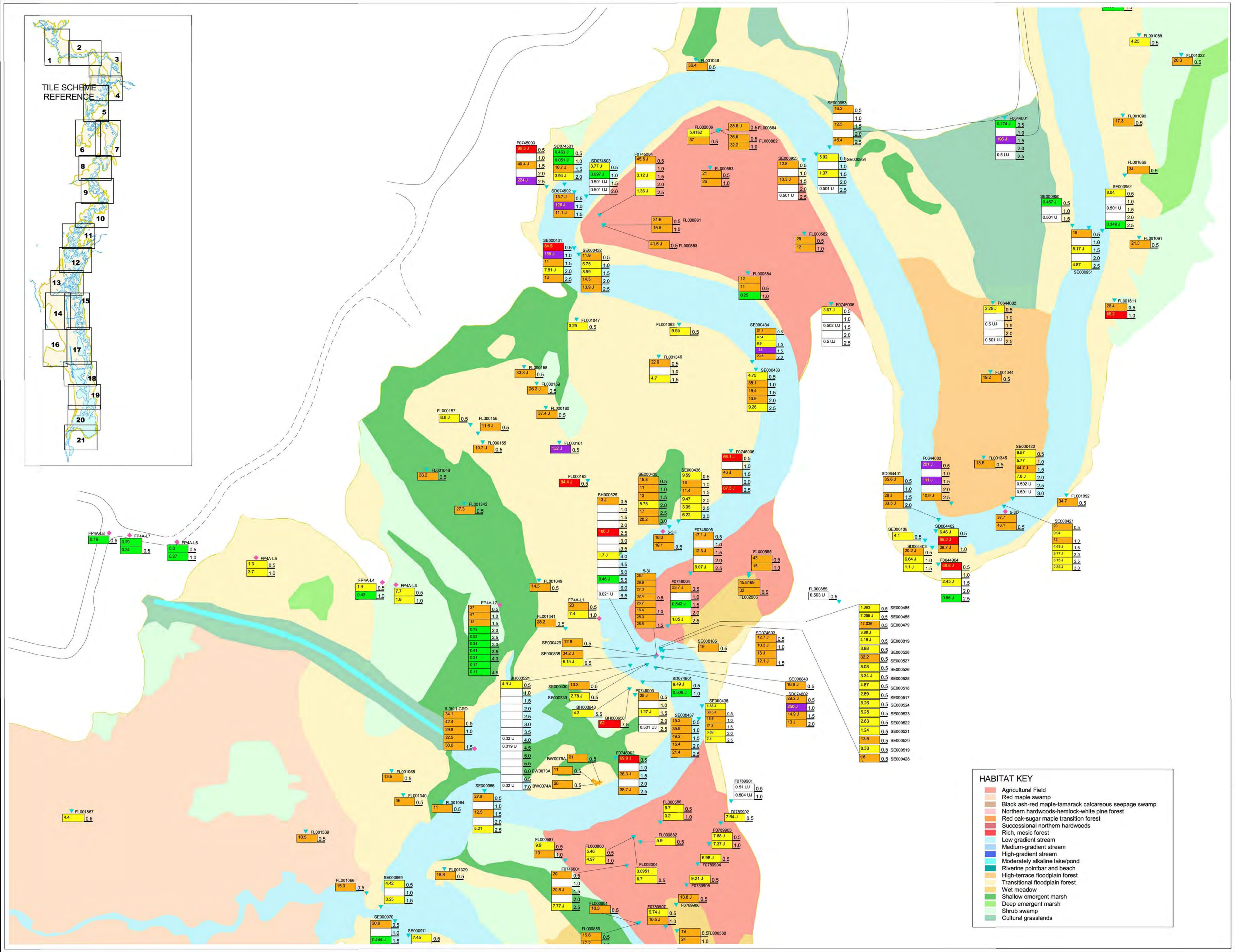
TILE 7/21

NOTE: Datamart as of September 30, 2002

| o:\gepitt\aprs\reach5&6_aprs\stacks2_sept02.apr | layout - tile 7 | o:\gepitt\epsfiles\portrait24x36\in\stacks7_sept02p.eps | 3:22 PM, 10/28/2002 |



LEGEND:

- ▼ EPA - Corp of Engineers Sample Location
- ✚ EPA - START Sample Location
- ◆ GE Sample Location
- Open Water
- 10-year Floodplain

PCB Concentration (ppm)	result value	lower depth value
< 1	0.82	0.5
1 - 10	2.83	1.0
10 - 50	45.9	1.5
50 - 100	87.1	2.0
> 100	160	2.5
no sample		3.0
non-detect	0.65 U (result flag)	3.5

NOTE: Result flag indicates --
U = not detected at reported value
J = estimated at or below reported value
UJ = estimated at or below reported value

N

Scale in Feet

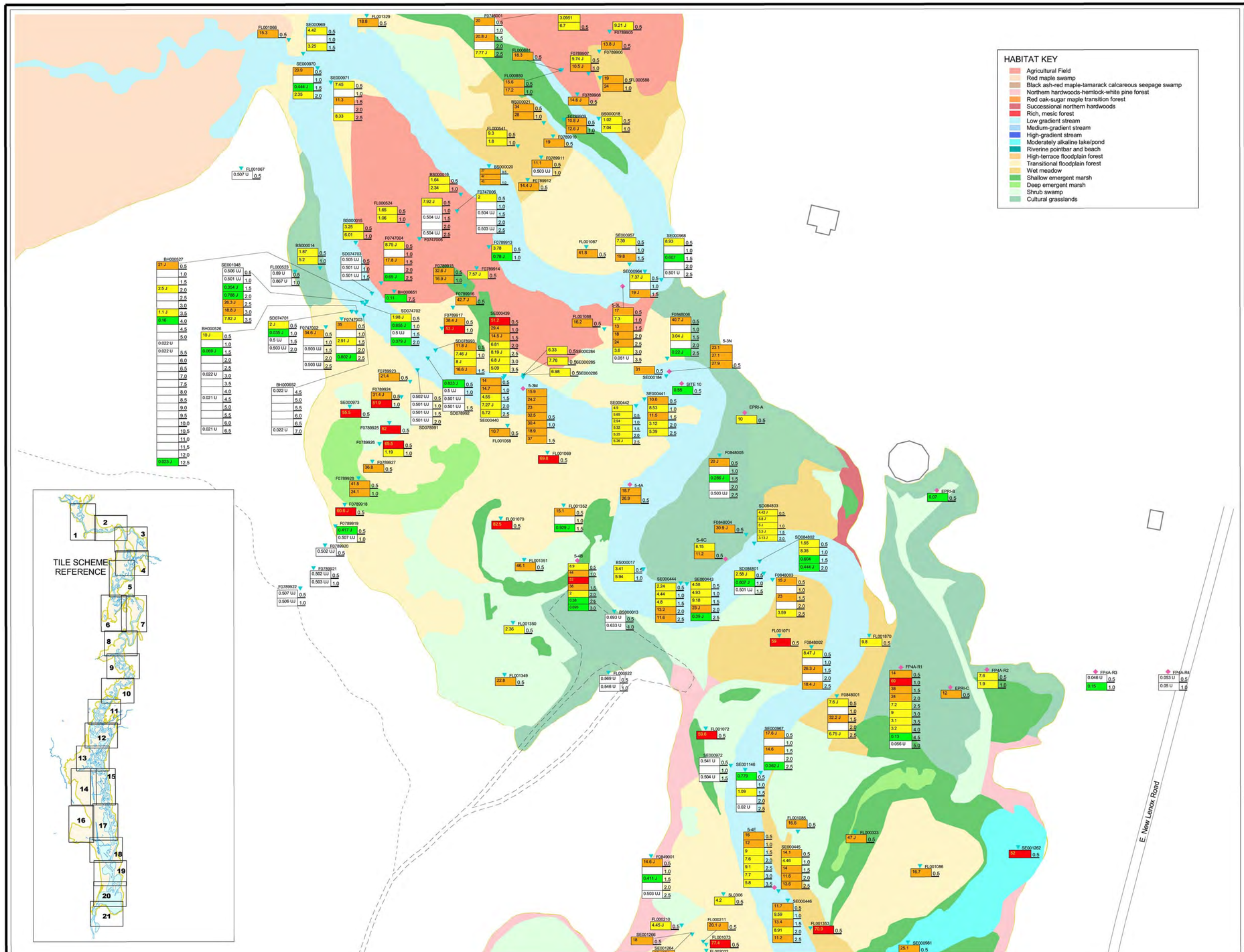
100 0 100 200 300

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 8/21

NOTE: Datamart as of September 30, 2002

| o:\gepitt\aprs\reach5&6_aprs\stacks2_sept02.apr | layout - tile 8 | o:\gepitt\epsfiles\landscape24x36\in\stacks8_sept02l.eps | 3:23 PM, 10/28/2002 |



LEGEND:

- EPA - Corp of Engineers Sample Location
- EPA - START Sample Location
- GE Sample Location
- Open Water
- 10-year Floodplain

PCB Concentration (ppm)

	result value		lower depth value
< 1	0.82	0.5	
1 - 10	2.83	1.0	
10 - 50	45.9	1.5	
50 - 100	87.1	2.0	
> 100	160	2.5	
no sample		3.0	
non-detect	0.65 U	3.5	result flag

NOTE: Result flag indicates --
U = not detected at reported value
J = estimated at or below reported value
UJ = estimated at or below reported value

N

Scale in Feet

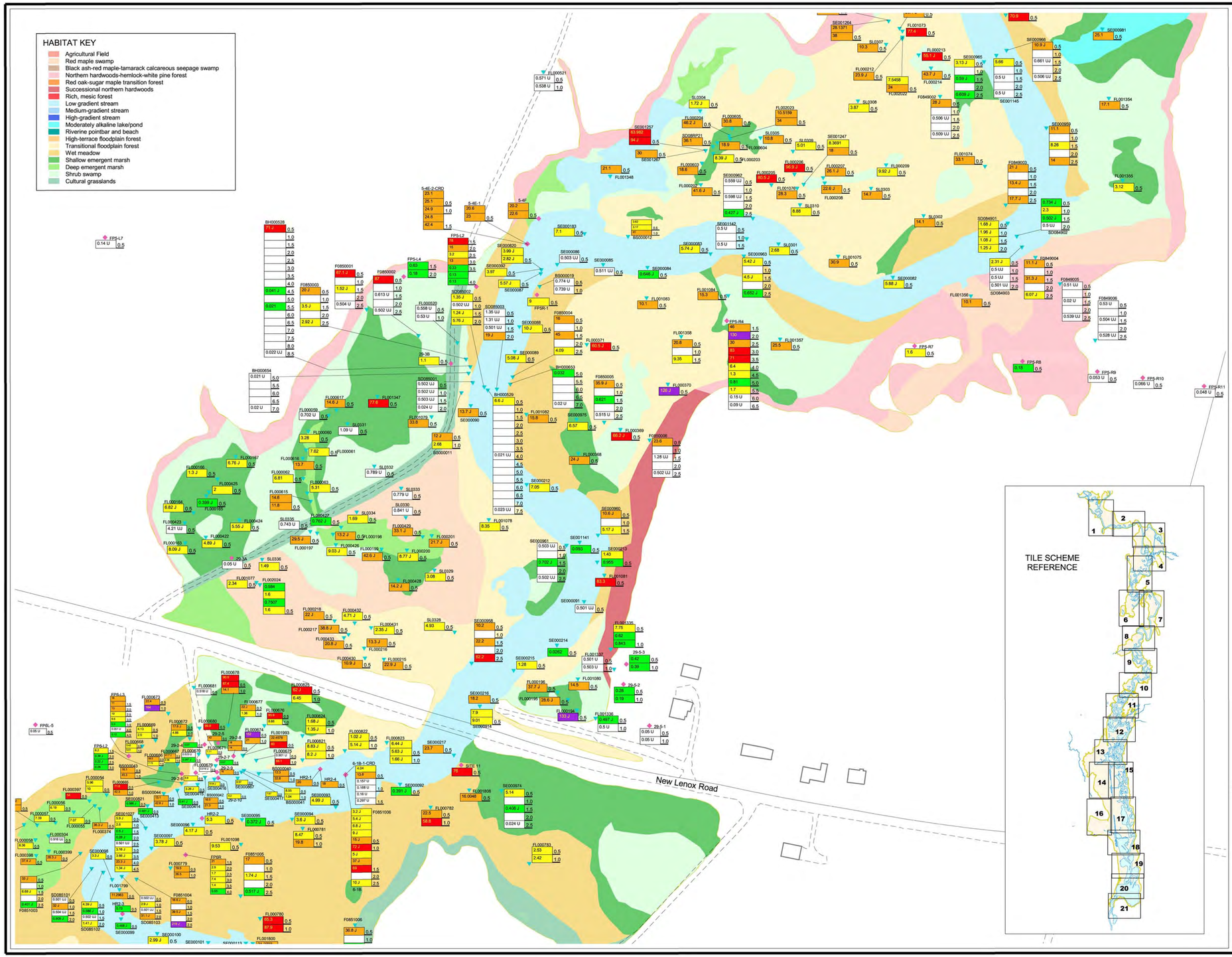
100 0 100 200 300

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 9/21

NOTE: Datamart as of September 30, 2002

| o:\gep\ttf\apns\reach5&6_apns\stacks2_sept02.apr | layout - tile 9 | o:\gep\ttf\eps\files\landscape24x36\r\stacks9_sept02t.eps | 3:24 PM, 10/28/2002 |



LEGEND:

- EPA - Corp of Engineers Sample Location
- EPA - START Sample Location
- GE Sample Location
- Open Water
- 10-year Floodplain

PCB Concentration (ppm)

	result value		lower depth value
< 1	0.82	0.5	
1 - 10	2.83	1.0	
10 - 50	45.9	1.5	
50 - 100	87.1	2.0	
> 100	160	2.5	
no sample		3.0	
non-detect	0.65 U	3.5	result flag

NOTE: Result flag indicates --
U = not detected at reported value
J = estimated at or below reported value
UJ = estimated at or below reported value

N

Scale in Feet

100 0 100 200 300

Housatonic River Project
Pittsfield, Massachusetts

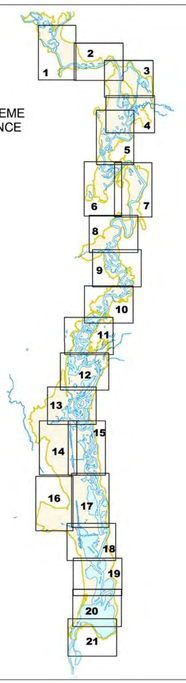
TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 10/21

NOTE: Datamart as of September 30, 2002

HABITAT KEY

- Agricultural Field
- Red maple swamp
- Black ash-red maple-tamarack calcareous seepage swamp
- Northern hardwoods-hemlock-white pine forest
- Red oak-sugar maple transition forest
- Successional northern hardwoods
- Rich, mesic forest
- Low gradient stream
- Medium-gradient stream
- High-gradient stream
- Moderately alkaline lake/pond
- Riverine pointbar and beach
- High-terrace floodplain forest
- Transitional floodplain forest
- Wet meadow
- Shallow emergent marsh
- Deep emergent marsh
- Shrub swamp
- Cultural grasslands

TILE SCHEME REFERENCE



LEGEND:

- EPA - Corp of Engineers Sample Location
- EPA - START Sample Location
- GE Sample Location
- Open Water
- 10-year Floodplain

PCB Concentration (ppm)

	result value		lower depth value
< 1	0.82	0.5	
1 - 10	2.83	1.0	
10 - 50	45.9	1.5	
50 - 100	87.1	2.0	
> 100	160	2.5	
no sample		3.0	
non-detect	0.65 U	3.5	result flag

NOTE: Result flag indicates --
U = not detected at reported value
J = estimated at or below reported value
UJ = estimated at or below reported value

N

Scale in Feet

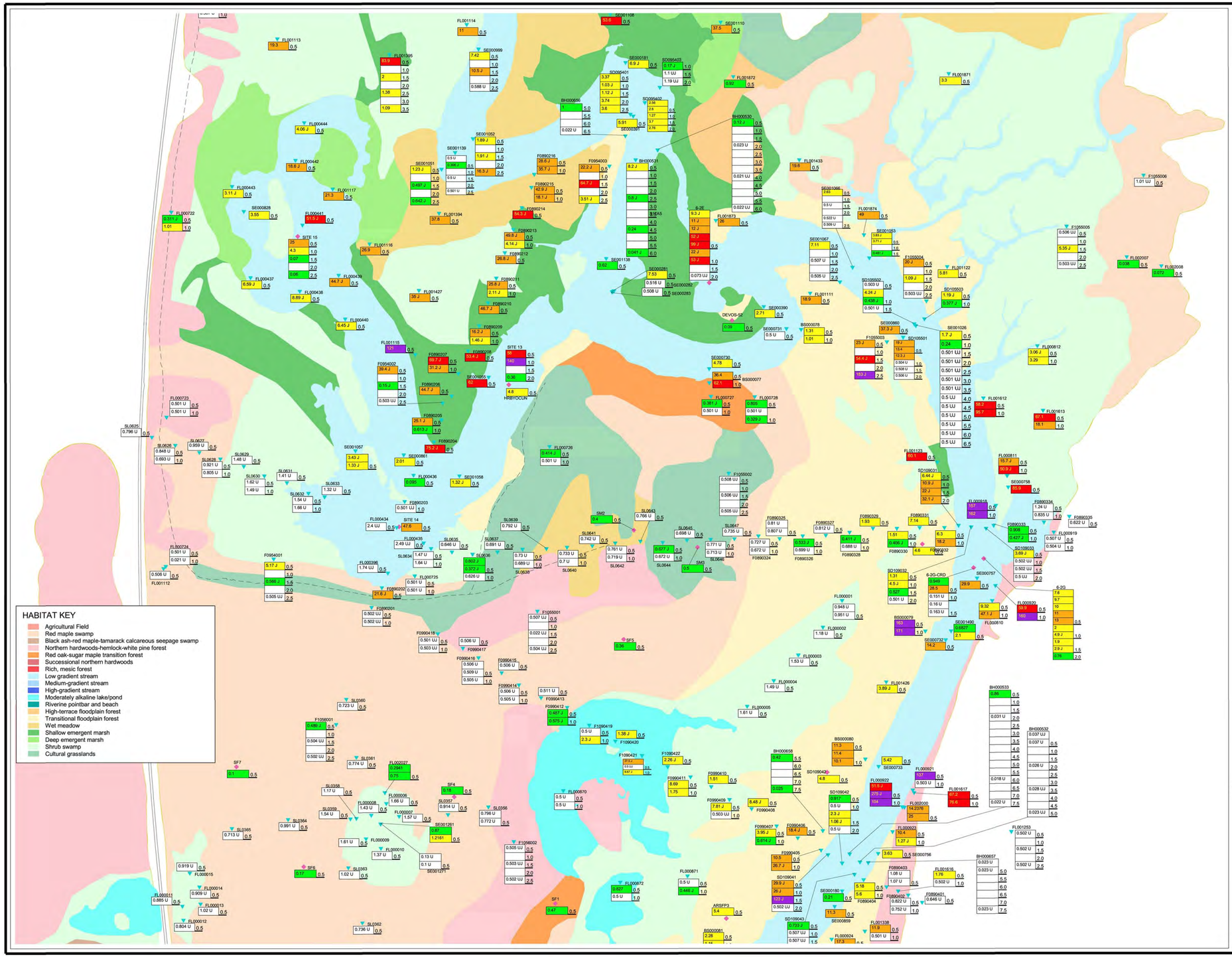
100 0 100 200 300

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 11/21

NOTE: Datamart as of September 30, 2002

| o:\gepitt\aprs\reach5&6_aprs\stacks3_sept02.apr | layout - tile 11 | o:\gepitt\epsfiles\landscape24x36\in\stacks11_sept02.eps | 3:33 PM, 10/28/2002 |



LEGEND:

- EPA - Corp of Engineers Sample Location
- EPA - START Sample Location
- GE Sample Location
- Open Water
- 10-year Floodplain

PCB Concentration (ppm)

	result value	lower depth value
< 1	0.82	0.5
1 - 10	2.83	1.0
10 - 50	45.9	1.5
50 - 100	87.1	2.0
> 100	160	2.5
no sample		3.0
non-detect	0.65 U	3.5

result flag

NOTE: Result flag indicates --
U = not detected at reported value
J = estimated at or below reported value
UJ = estimated at or below reported value

N

Scale in Feet

100 0 100 200 300

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 12/21

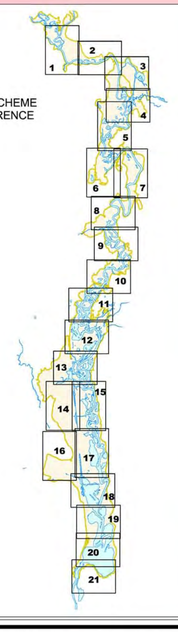
NOTE: Datamart as of September 30, 2002

| o:\gepittapns\reach5&6_apns\stacks3_sept02.apr | layout - tile 12 | o:\gepittepsfiles\landscape24x36in\stacks12_sept02i.eps | 3:34 PM, 10/28/2002 |

HABITAT KEY

- Agricultural Field
- Red maple swamp
- Black ash-red maple-tamarack calcareous seepage swamp
- Northern hardwoods-hemlock-white pine forest
- Red oak-sugar maple transition forest
- Successional northern hardwoods
- Rich, mesic forest
- Low gradient stream
- Medium-gradient stream
- High-gradient stream
- Moderately alkaline lake/pond
- Riverine pointbar and beach
- High-terrace floodplain forest
- Transitional floodplain forest
- Wet meadow
- Shallow emergent marsh
- Deep emergent marsh
- Shrub swamp
- Cultural grasslands

TILE SCHEME REFERENCE



LEGEND:

- EPA - Corp of Engineers Sample Location
- EPA - START Sample Location
- GE Sample Location
- Open Water
- 10-year Floodplain

PCB Concentration (ppm) — result value / lower depth value / result flag

PCB Concentration (ppm)	result value	lower depth value
< 1	0.82	0.5
1 - 10	2.83	1.0
10 - 50	45.9	1.5
50 - 100	87.1	2.0
> 100	160	2.5
no sample		3.0
non-detect	0.65 U	3.5

NOTE: Result flag indicates --
U = not detected at reported value
J = estimated at or below reported value
UJ = estimated at or below reported value

N

Scale in Feet

100 0 100 200 300

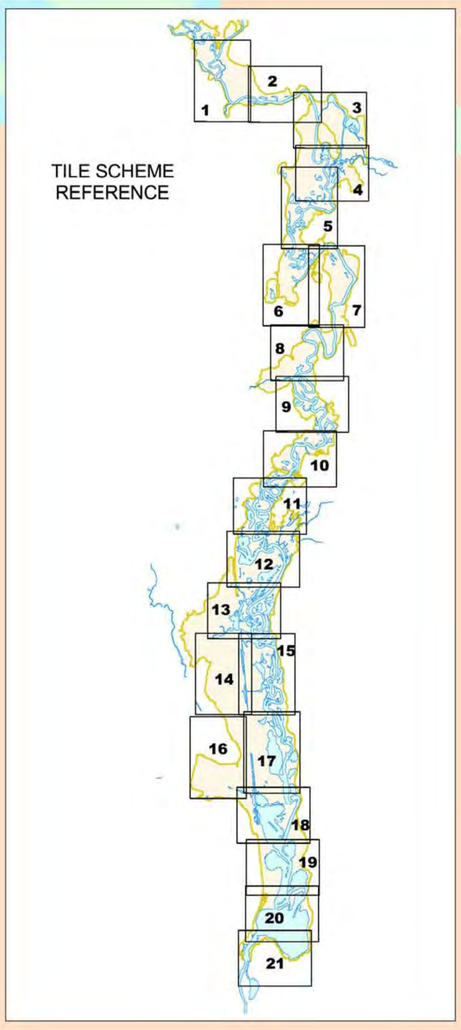
Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 13/21

NOTE: Datamart as of September 30, 2002

| o:\gepittsprs\reach5&6_aprs\stacks3_sept02.apr | layout - tile 13 | o:\gepittsps\files\landscape24x36\in\stacks13_sept02l.eps | 3:36 PM, 10/28/2002 |

TILE SCHEME REFERENCE



HABITAT KEY

- Agricultural Field
- Red maple swamp
- Black ash-red maple-tamarack calcareous seepage swamp
- Northern hardwoods-hemlock-white pine forest
- Red oak-sugar maple transition forest
- Successional northern hardwoods
- Rich, mesic forest
- Low gradient stream
- Medium-gradient stream
- High-gradient stream
- Moderately alkaline lake/pond
- Riverine pointbar and beach
- High-terrace floodplain forest
- Transitional floodplain forest
- Wet meadow
- Shallow emergent marsh
- Deep emergent marsh
- Shrub swamp
- Cultural grasslands

LEGEND:

- EPA - Corp of Engineers Sample Location
- EPA - START Sample Location
- GE Sample Location
- Open Water
- 10-year Floodplain

PCB Concentration (ppm)

	result value	lower depth value
< 1	0.82	0.5
1 - 10	2.83	1.0
10 - 50	45.9	1.5
50 - 100	87.1	2.0
> 100	160	2.5
no sample		3.0
non-detect	0.65 U	3.5

result flag

NOTE:
Result flag indicates --

- U = not detected at reported value
- J = estimated detected value
- UJ = estimated non-detected value

N

Scale in Feet

100 0 100 200 300

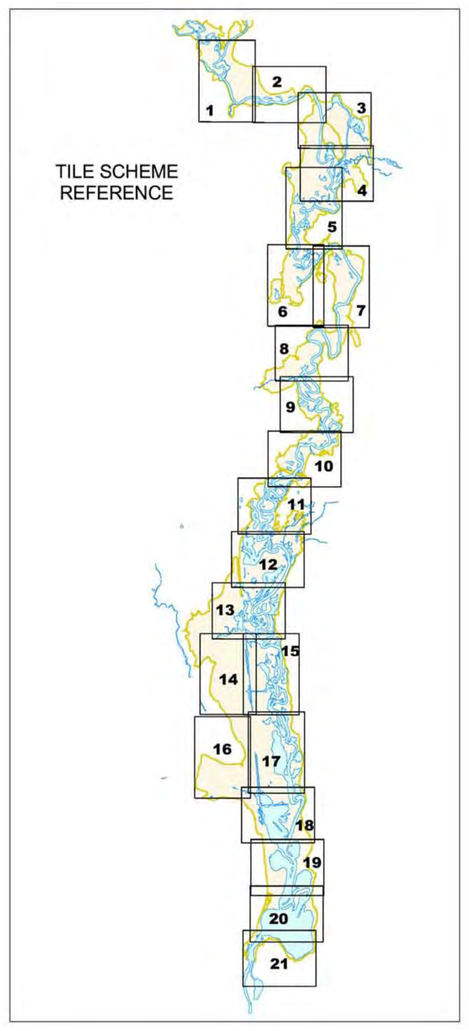
Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 14/21

NOTE: Datamart as of September 30, 2002

| o:\gepitt\aprs\reach5&6_aprs\stacks4_sept02.apr | layout - tile 14 | o:\gepitt\epsfiles\portrait24x36\in\stacks14_sept02p.eps | 3:39 PM, 10/28/2002 |

TILE SCHEME REFERENCE



HABITAT KEY

- Agricultural Field
- Red maple swamp
- Black ash-red maple-tamarack calcareous seepage swamp
- Northern hardwoods-hemlock-white pine forest
- Red oak-sugar maple transition forest
- Successional northern hardwoods
- Rich, mesic forest
- Low gradient stream
- Medium-gradient stream
- High-gradient stream
- Moderately alkaline lake/pond
- Riverine pointbar and beach
- High-terrace floodplain forest
- Transitional floodplain forest
- Wet meadow
- Shallow emergent marsh
- Deep emergent marsh
- Shrub swamp
- Cultural grasslands

LEGEND:

- EPA - Corp of Engineers Sample Location
- EPA - START Sample Location
- GE Sample Location
- Open Water
- 10-year Floodplain

PCB Concentration (ppm)

	result value		lower depth value
< 1	0.82	0.5	
1 - 10	2.83	1.0	
10 - 50	45.9	1.5	
50 - 100	87.1	2.0	
> 100	160	2.5	
no sample		3.0	
non-detect	0.65 U	3.5	result flag

NOTE:
Result flag indicates --

- U = not detected at reported value
- J = estimated detected value
- UJ = estimated non-detected value

N

Scale in Feet

100 0 100 200 300

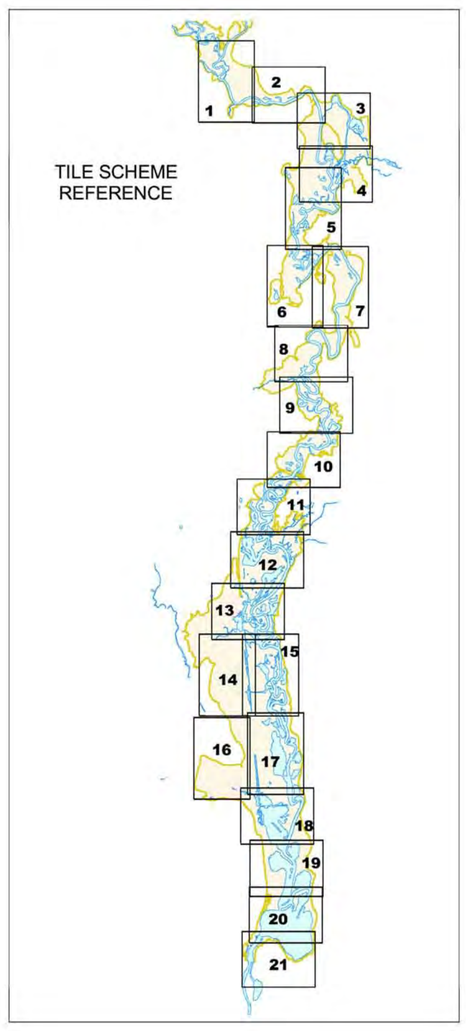
Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 15/21

NOTE: Datamart as of September 30, 2002

| o:\gepitt\aprs\reach5&6_aprs\stacks4_sept02.apr | layout - tile 15 | o:\gepitt\epsfiles\portrait24x36\in\stacks15_sept02p.eps | 3:40 PM, 10/28/2002 |

TILE SCHEME REFERENCE



FL000548 0.00865 U 0.5

FL0005 0.0188 U 0.5 0.0142 U 1.0

F1391035 0.707 U 0.5

F1391033 1.2 U 0.5

F1391034 0.739 U 0.5 0.631 U 1.0

F1391031 1.64 U 0.5

F1391032 1.55 U 0.5 1.44 U 1.0

F1391029 1.53 U 0.5

F1391030 1.62 U 0.5 1.38 U 1.0

F1391027 1.53 U 0.5

F1391028 1.51 U 0.5 1.49 U 1.0

F1391026 1.47 U 0.5 1.49 U 1.0

FL000890 1 UJ 0.5 1.9 UJ 1.0

FP7A-L8 0.076 U 0.074 U 0.5 0.064 U 1.0

FL000889 1 UJ 0.5 0.744 UJ 1.0

SE001252 0.0638 0.15 J 0.5

FL001174 1.33 UJ 0.5

FL00 1.78 U 1 UJ

FL001437 1.67 U 0.5

FL001435 1.43 U 0.5

FL000887 0.589 U 0.5 0.541 U 1.0

0.511 UJ 0.5 FL001173

FP7A-L7 0.17 0.5 0.13 U 1.0

FL001434 1.05 U 0.5

FL000886 0.835 U 0.5 0.739 U 1.0

FL001172 1.18 U 0.5

HABITAT KEY

- Agricultural Field
- Red maple swamp
- Black ash-red maple-tamarack calcareous seepage swamp
- Northern hardwoods-hemlock-white pine forest
- Red oak-sugar maple transition forest
- Successional northern hardwoods
- Rich, mesic forest
- Low gradient stream
- Medium-gradient stream
- High-gradient stream
- Moderately alkaline lake/pond
- Riverine pointbar and beach
- High-terrace floodplain forest
- Transitional floodplain forest
- Wet meadow
- Shallow emergent marsh
- Deep emergent marsh
- Shrub swamp
- Cultural grasslands

LEGEND:

- EPA - Corp of Engineers Sample Location
- EPA - START Sample Location
- GE Sample Location
- Open Water
- 10-year Floodplain

PCB Concentration (ppm)

	result value		lower depth value
< 1	0.82	0.5	
1 - 10	2.83	1.0	
10 - 50	45.9	1.5	
50 - 100	87.1	2.0	
> 100	160	2.5	
no sample		3.0	
non-detect	0.65 U	3.5	result flag

NOTE:
Result flag indicates --

U = not detected at reported value

J = estimated detected value

UJ = estimated non-detected value

N

Scale in Feet

100 0 100 200 300

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 16/21

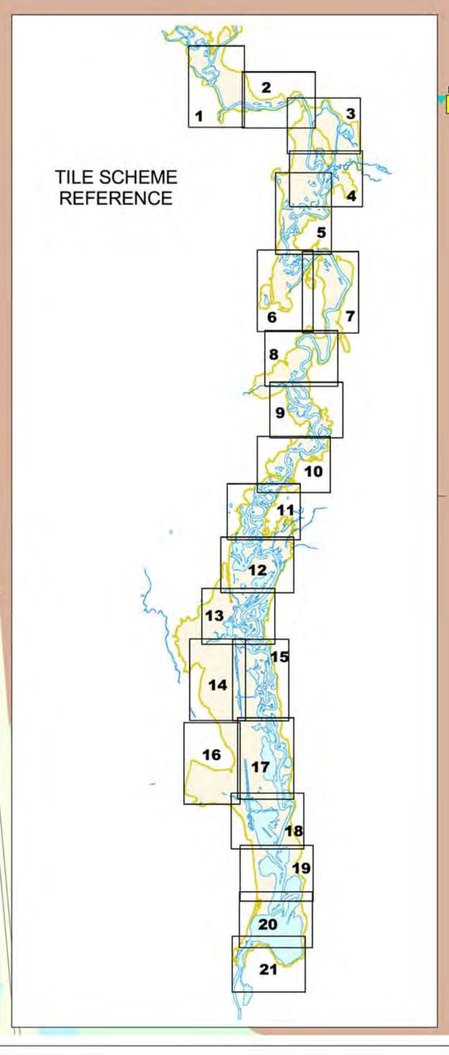
NOTE: Datamart as of September 30, 2002

| o:\gepitt\aprs\reach5&6_aprs\stacks4_sept02.apr | layout - tile 16 | o:\gepitt\epsfiles\portrait24x36\in\stacks16_sept02p.eps | 3:42 PM, 10/28/2002 |

HABITAT KEY

- Agricultural Field
- Red maple swamp
- Black ash-red maple-tamarack calcareous seepage swamp
- Northern hardwoods-hemlock-white pine forest
- Red oak-sugar maple transition forest
- Successional northern hardwoods
- Rich, mesic forest
- Low gradient stream
- Medium-gradient stream
- High-gradient stream
- Moderately alkaline lake/pond
- Riverine pointbar and beach
- High-terrace floodplain forest
- Transitional floodplain forest
- Wet meadow
- Shallow emergent marsh
- Deep emergent marsh
- Shrub swamp
- Cultural grasslands

TILE SCHEME REFERENCE



LEGEND:

- EPA - Corp of Engineers Sample Location
- EPA - START Sample Location
- GE Sample Location
- Open Water
- 10-year Floodplain

PCB Concentration (ppm)

	result value		
< 1	0.82	0.5	lower depth value
1 - 10	2.83	1.0	
10 - 50	45.9	1.5	
50 - 100	87.1	2.0	
> 100	160	2.5	
no sample		3.0	
non-detect	0.65 U	3.5	result flag

NOTE:
Result flag indicates --

- U = not detected at reported value
- J = estimated detected value
- UJ = estimated non-detected value

N

Scale in Feet

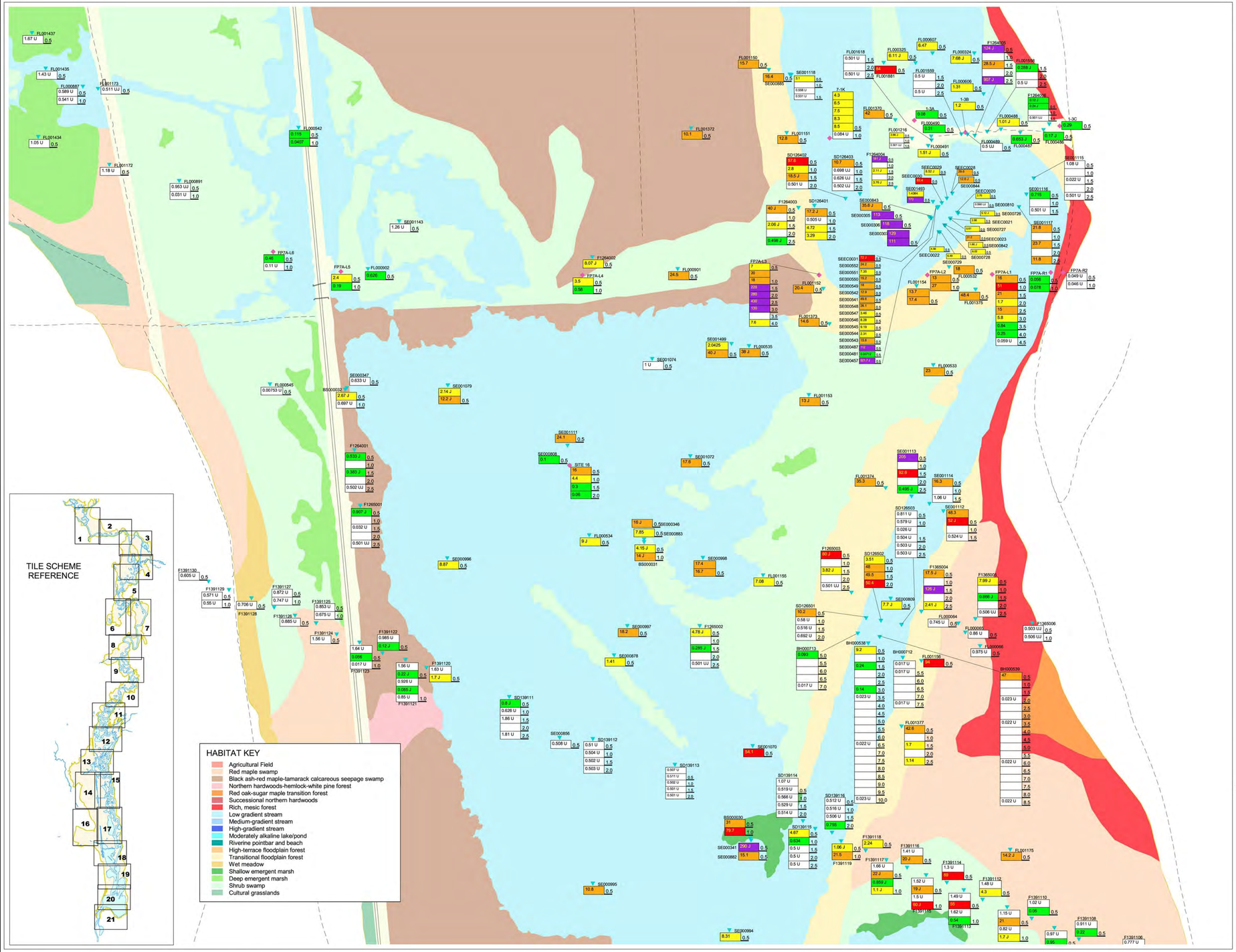
100 0 100 200 300

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 17/21

NOTE: Datamart as of September 30, 2002

| O:\gepitt\aprs\reach5&6_APRs\stacks4_sept02.apr | layout - tile 17 | o:\gepitt\epsfiles\portrait24x36\in\stacks17_sept02p.eps | 4:49 PM, 10/28/2002 |



LEGEND:

- EPA - Corp of Engineers Sample Location
- EPA - START Sample Location
- GE Sample Location
- Open Water
- 10-year Floodplain

PCB Concentration (ppm)

	result value	lower depth value
< 1	0.82	0.5
1 - 10	2.83	1.0
10 - 50	45.9	1.5
50 - 100	87.1	2.0
> 100	160	2.5
no sample		3.0
non-detect	0.65 U	3.5

result flag

NOTE: Result flag indicates --
U = not detected at reported value
J = estimated at or below reported value
UJ = estimated at or below reported value

N

Scale in Feet

100 0 100 200 300

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 18/21

NOTE: Datamart as of September 30, 2002

TILE SCHEME REFERENCE

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

LEGEND:

- EPA - Corp of Engineers Sample Location
- EPA - START Sample Location
- GE Sample Location
- Open Water
- 10-year Floodplain

PCB Concentration (ppm)

	result value		lower depth value
< 1	0.82	0.5	
1 - 10	2.83	1.0	
10 - 50	45.9	1.5	
50 - 100	87.1	2.0	
> 100	160	2.5	
no sample		3.0	
non-detect	0.65 U	3.5	result flag

NOTE: Result flag indicates --
U = not detected at reported value
J = estimated at or below reported value
UJ = estimated at or below reported value

HABITAT KEY

- Agricultural Field
- Red maple swamp
- Black ash-red maple-tamarack calcareous seepage swamp
- Northern hardwoods-hemlock-white pine forest
- Red oak-sugar maple transition forest
- Successional northern hardwoods
- Rich, mesic forest
- Low gradient stream
- Medium-gradient stream
- High-gradient stream
- Moderately alkaline lake/pond
- Riverine pointbar and beach
- High-terrace floodplain forest
- Transitional floodplain forest
- Wet meadow
- Shallow emergent marsh
- Deep emergent marsh
- Shrub swamp
- Cultural grasslands

N

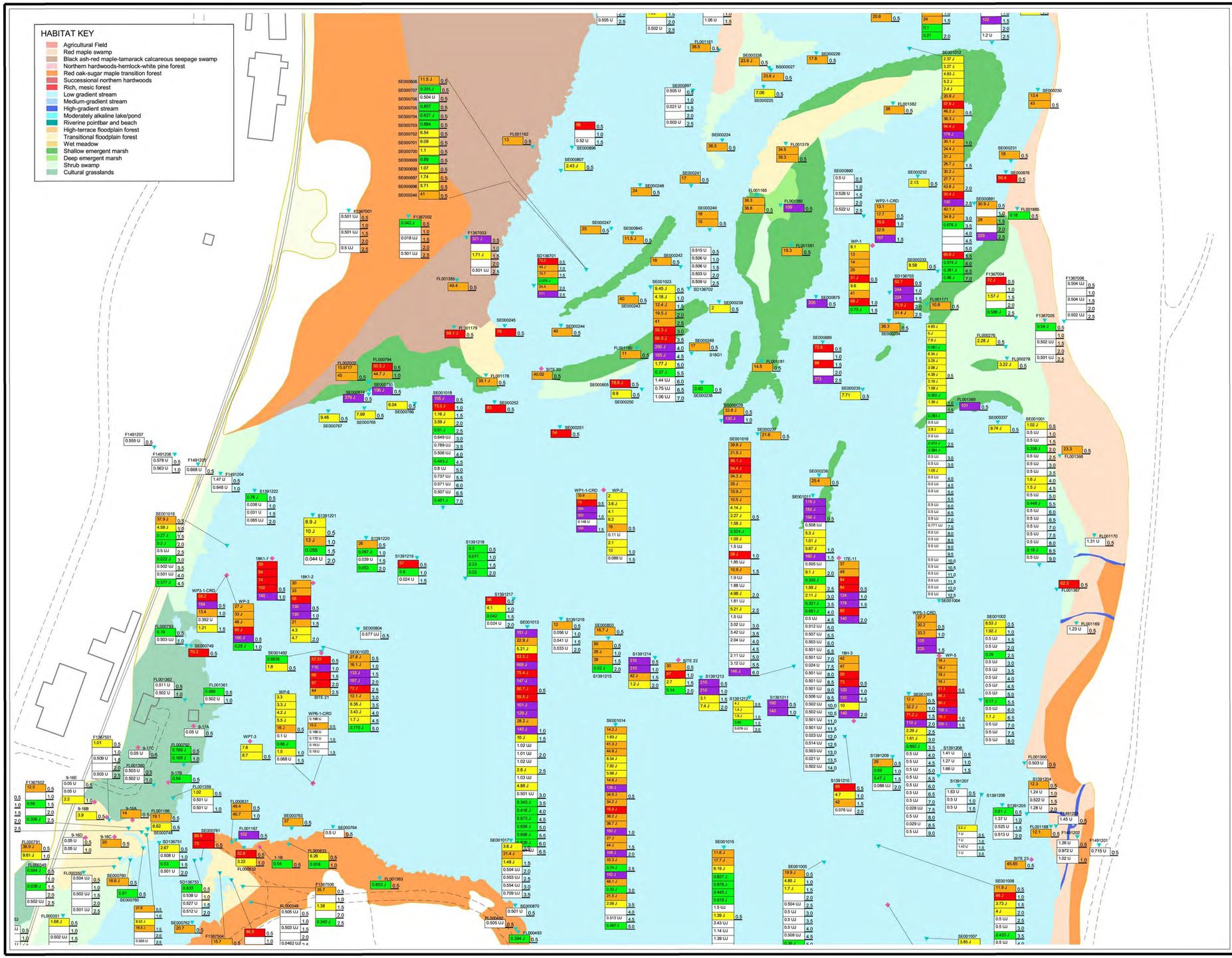
Scale in Feet

100 0 100 200 300

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 19/21

NOTE: Datamart as of September 30, 2002



LEGEND:

- EPA - Corp of Engineers Sample Location
- EPA - START Sample Location
- GE Sample Location
- Open Water
- 10-year Floodplain

PCB Concentration (ppm)

	result value	lower depth value
< 1	0.82	0.5
1 - 10	2.83	1.0
10 - 50	45.9	1.5
50 - 100	87.1	2.0
> 100	160	2.5
no sample		3.0
non-detect	0.65 U	3.5

result flag

NOTE: Result flag indicates --
U = not detected at reported value
J = estimated at or below reported value
UJ = estimated at or below reported value

N

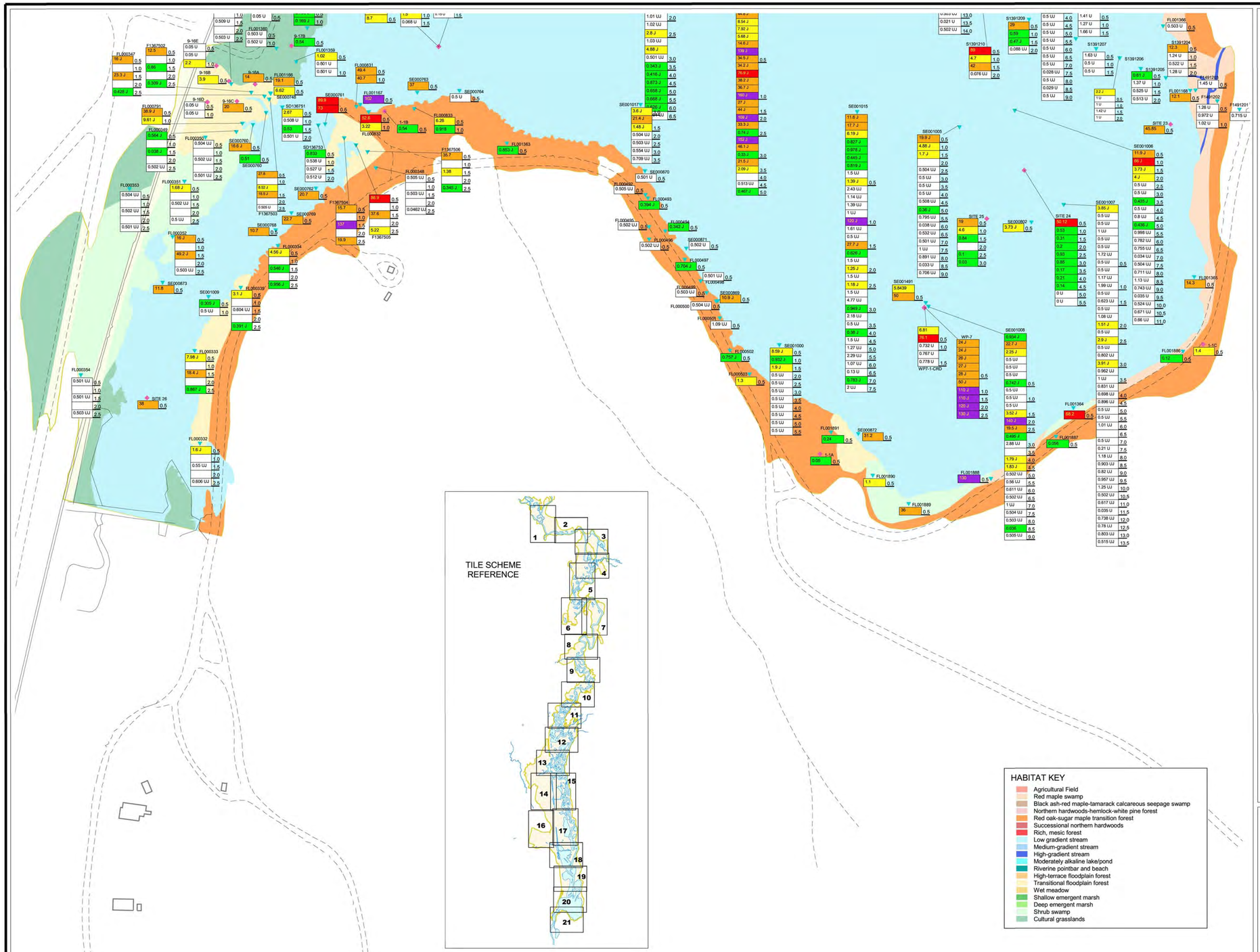
Scale in Feet

100 0 100 200 300

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 20/21

NOTE: Datamart as of September 30, 2002



LEGEND:

- EPA - Corp of Engineers Sample Location
- EPA - START Sample Location
- GE Sample Location
- Open Water
- 10-year Floodplain

PCB Concentration (ppm) — *result value* / *lower depth value*

	result value	lower depth value
< 1	0.82	0.5
1 - 10	2.83	1.0
10 - 50	45.9	1.5
50 - 100	87.1	2.0
> 100	160	2.5
no sample		3.0
non-detect	0.65 U	3.5

result flag

NOTE: Result flag indicates --
U = not detected at reported value
J = estimated at or below reported value
UJ = estimated at or below reported value

N

Scale in Feet

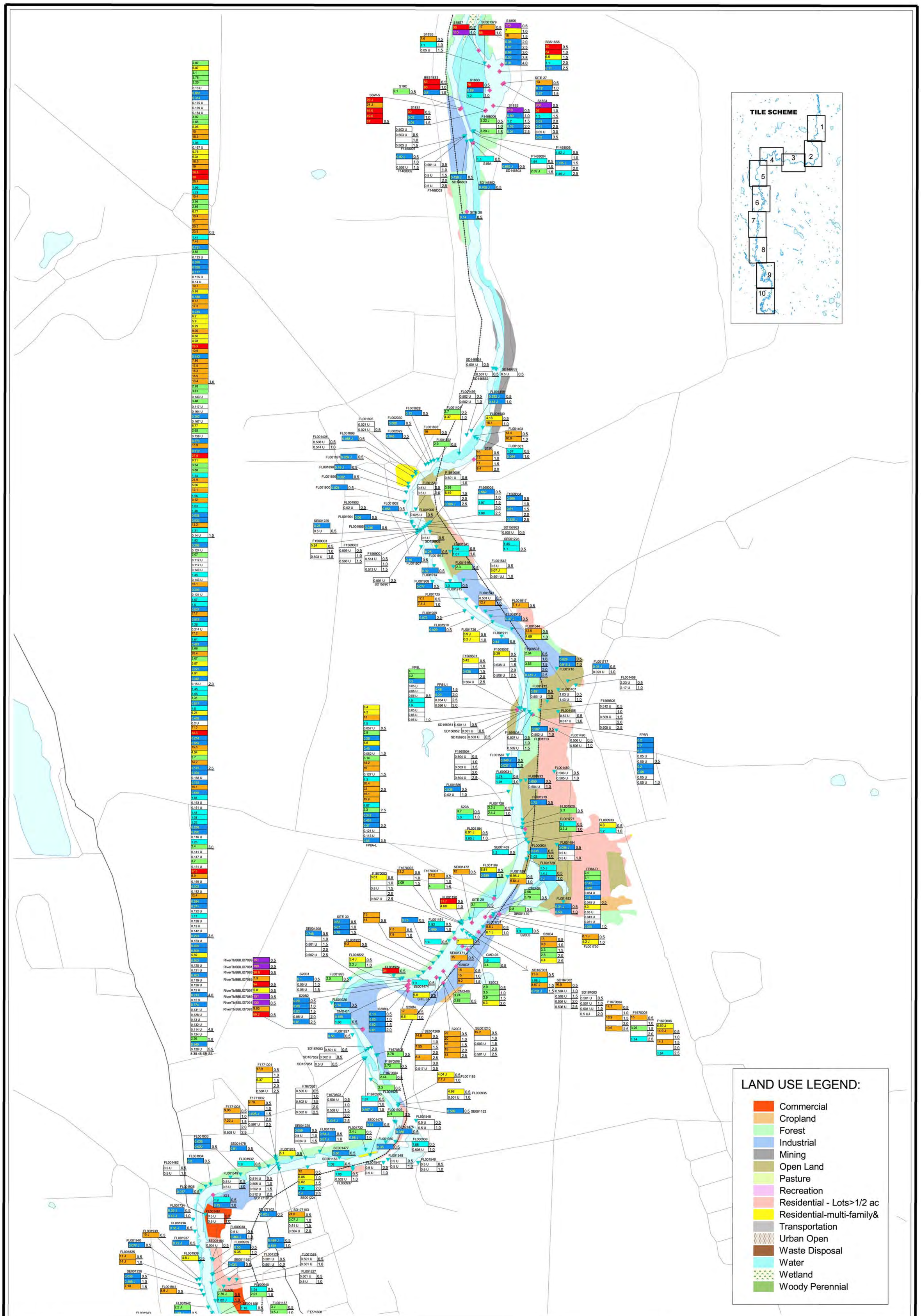
100 0 100 200 300

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACHES 5 AND 6
TILE 21/21

NOTE: Datamart as of September 30, 2002

| o:\gepittfapns\reach5&6_apns\stacks5_sept02.apr | layout - tile 21 | o:\gepittfeps\files\landscape24x36\in\stacks21_sept02l.eps | 3:50 PM, 10/28/2002 |



LEGEND:

- GE
- EPA - Corps of Engineers
- Roads
- Railroads
- River

PCB Concentration (ppm)

	result value	lower depth value
< 1	0.51	0.5
1 - 2	1.45	1.0
2 - 4	2.89	1.5
4 - 7	6.09	2.0
7 - 25	23.7	2.5
25 - 100	68.9	3.0
> 100	185	3.5
no sample		4.0
non-detect	0.65 U	4.5

result flag

NOTE:
Result flag indicates --

U = not detected at reported value

J = estimated detected value

UJ = estimated non-detected value

N

Scale in Feet

500 0 500 1000 1500

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS REACH 7 AND 8 TILE 1/10

NOTE: Datamart as of November 13, 2002

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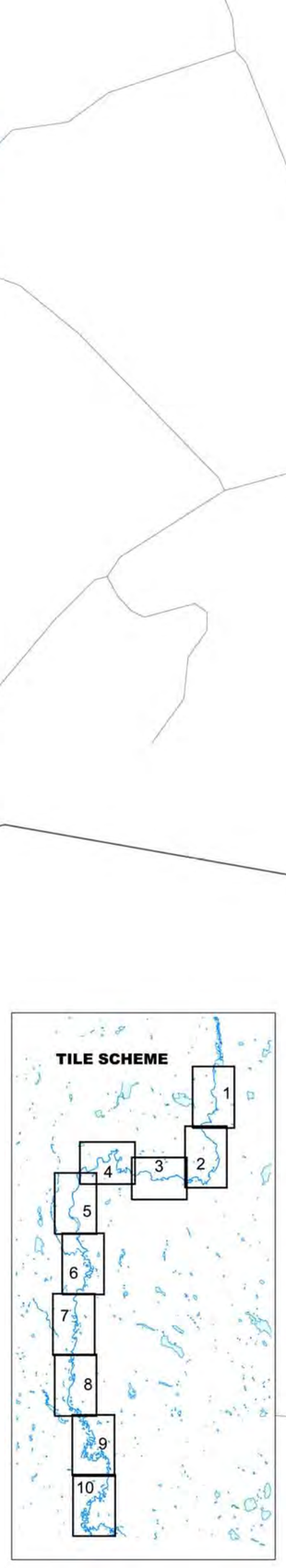


LEGEND:

- GE
- EPA - Corps of Engineers
- Roads
- Railroads
- River

PCB Concentration (ppm)

	result value	lower depth value
< 1	0.51	0.5
1 - 2	1.45	1.0
2 - 4	2.89	1.5
4 - 7	6.09	2.0
7 - 25	23.7	2.5
25 - 100	68.9	3.0
> 100	185	3.5
no sample		4.0
non-detect	0.65 U	4.5

result flag

NOTE:
Result flag indicates --

U = not detected at reported value

J = estimated detected value

UJ = estimated non-detected value

N

Scale in Feet

500 0 500 1000 1500

LAND USE LEGEND:

- Commercial
- Cropland
- Forest
- Industrial
- Mining
- Open Land
- Pasture
- Recreation
- Residential - Lots>1/2 ac
- Residential-multi-family&
- Transportation
- Urban Open
- Waste Disposal
- Water
- Wetland
- Woody Perennial

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS REACH 7 AND 8 TILE 2/10

NOTE: Datamart as of November 13, 2002

LEGEND:

- GE
- EPA - Corps of Engineers
- Roads
- Railroads
- River

PCB Concentration (ppm)

	result value	
< 1	0.51	0.5
1 - 2	1.45	1.0
2 - 4	2.89	1.5
4 - 7	6.09	2.0
7 - 25	23.7	2.5
25 - 100	68.9	3.0
> 100	185	3.5
no sample		4.0
non-detect	0.65 U	4.5

lower depth value

result flag

NOTE: Result flag indicates --
U = not detected at reported value
J = estimated at or below reported value
UJ = estimated at or below reported value

N

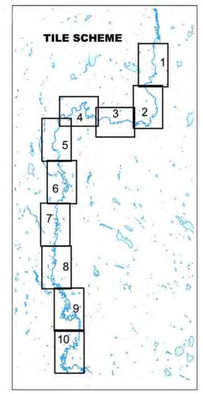
Scale in Feet

500 0 500 1000 1500

LAND USE LEGEND:

- Commercial
- Cropland
- Forest
- Industrial
- Mining
- Open Land
- Pasture
- Recreation
- Residential - Lots>1/2 ac
- Residential-multi-family&
- Transportation
- Urban Open
- Waste Disposal
- Water
- Wetland
- Woody Perennial

TILE SCHEME



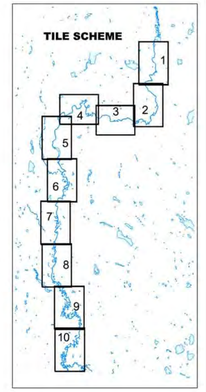
Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACH 7 AND 8
TILE 3/10

NOTE: Datamart as of November 13, 2002

LAND USE LEGEND:

- Commercial
- Cropland
- Forest
- Industrial
- Mining
- Open Land
- Pasture
- Recreation
- Residential - Lots>1/2 ac
- Residential-multi-family&
- Transportation
- Urban Open
- Waste Disposal
- Water
- Wetland
- Woody Perennial



LEGEND:

- GE
- EPA - Corps of Engineers
- Roads
- Railroads
- River

PCB Concentration (ppm)

	result value		
< 1	0.51	0.5	lower depth value
1 - 2	1.45	1.0	
2 - 4	2.89	1.5	
4 - 7	6.09	2.0	
7 - 25	23.7	2.5	
25 - 100	68.9	3.0	
> 100	185	3.5	
no sample		4.0	result flag
non-detect	0.65 U	4.5	

NOTE: Result flag indicates --
U = not detected at reported value
J = estimated at or below reported value
UJ = estimated at or below reported value

N

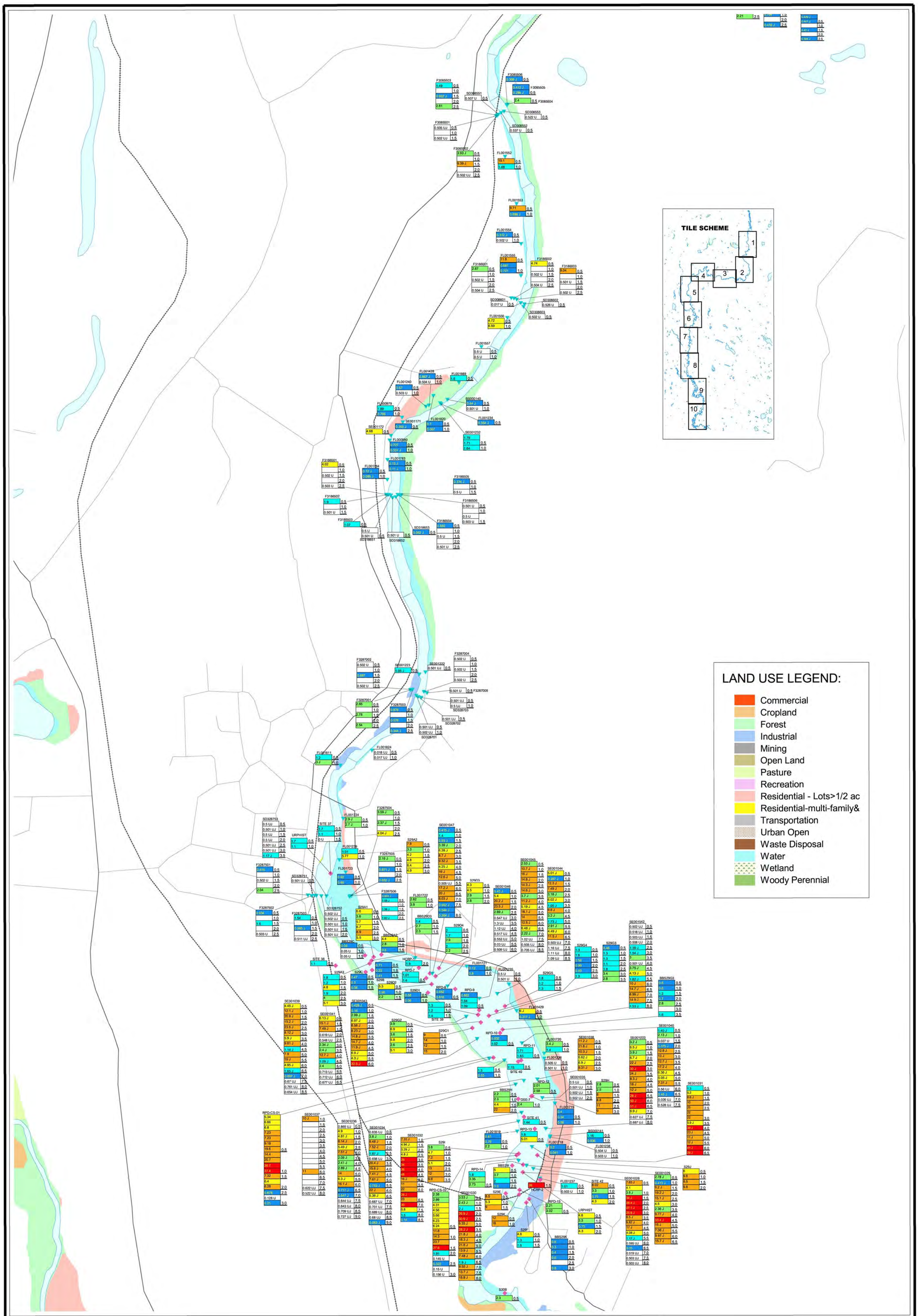
Scale in Feet

500 0 500 1000 1500

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACH 7 AND 8
TILE 4/10

NOTE: Datamart as of November 13, 2002



LEGEND:

- GE
- EPA - Corps of Engineers
- Roads
- Railroads
- River

PCB Concentration (ppm)

	result value		lower depth value
< 1	0.51	0.5	
1 - 2	1.45	1.0	
2 - 4	2.89	1.5	
4 - 7	6.09	2.0	
7 - 25	23.7	2.5	
25 - 100	68.9	3.0	
> 100	185	3.5	
no sample		4.0	
non-detect	0.65 U	4.5	result flag

NOTE:
Result flag indicates --

U = not detected at reported value

J = estimated detected value

UJ = estimated non-detected value

N

Scale in Feet

500 0 500 1000 1500

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACH 7 AND 8
TILE 5/10

NOTE: Datamart as of November 13, 2002

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TILE SCHEME

1
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10

LAND USE LEGEND:

- Commercial
- Cropland
- Forest
- Industrial
- Mining
- Open Land
- Pasture
- Recreation
- Residential - Lots>1/2 ac
- Residential-multi-family&
- Transportation
- Urban Open
- Waste Disposal
- Water
- Wetland
- Woody Perennial

LEGEND:

- GE
- EPA - Corps of Engineers
- Roads
- Railroads
- River

PCB Concentration (ppm)

	result value	lower depth value
< 1	0.51	0.5
1 - 2	1.45	1.0
2 - 4	2.89	1.5
4 - 7	6.09	2.0
7 - 25	23.7	2.5
25 - 100	68.9	3.0
> 100	185	3.5
no sample		4.0
non-detect	0.65 U	4.5

result flag

NOTE:
Result flag indicates --

U = not detected at reported value

J = estimated detected value

UJ = estimated non-detected value

N

Scale in Feet

500 0 500 1000 1500

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACH 7, 8 AND 9
TILE 6/10

NOTE: Datamart as of November 13, 2002

TILE SCHEME

1
2
3
4
5
6
7
8
9
10

LAND USE LEGEND:

- Commercial
- Cropland
- Forest
- Industrial
- Mining
- Open Land
- Pasture
- Recreation
- Residential - Lots>1/2 ac
- Residential-multi-family&
- Transportation
- Urban Open
- Waste Disposal
- Water
- Wetland
- Woody Perennial

LEGEND:

- GE
- EPA - Corps of Engineers
- Roads
- Railroads
- River

PCB Concentration (ppm)

	result value	lower depth value
< 1	0.51	0.5
1 - 2	1.45	1.0
2 - 4	2.89	1.5
4 - 7	6.09	2.0
7 - 25	23.7	2.5
25 - 100	68.9	3.0
> 100	185	3.5
no sample		4.0
non-detect	0.65 U	4.5

result flag

NOTE:
Result flag indicates --

U = not detected at reported value

J = estimated detected value

UJ = estimated non-detected value

N

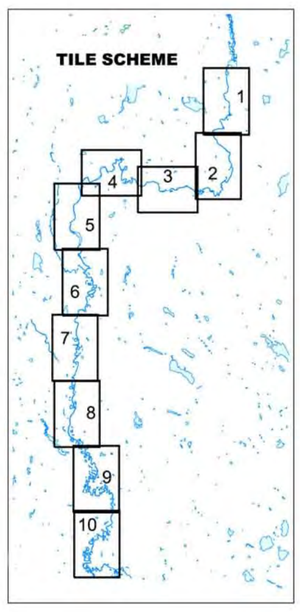
Scale in Feet

500 0 500 1000 1500

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACH 7, 8 AND 9
TILE 7/10

NOTE: Datamart as of November 13, 2002



LAND USE LEGEND:

- Commercial
- Cropland
- Forest
- Industrial
- Mining
- Open Land
- Pasture
- Recreation
- Residential - Lots>1/2 ac
- Residential-multi-family&
- Transportation
- Urban Open
- Waste Disposal
- Water
- Wetland
- Woody Perennial

LEGEND:

- GE
- EPA - Corps of Engineers
- Roads
- Railroads
- River

PCB Concentration (ppm)

	result value	lower depth value
< 1	0.51	0.5
1 - 2	1.45	1.0
2 - 4	2.89	1.5
4 - 7	6.09	2.0
7 - 25	23.7	2.5
25 - 100	68.9	3.0
> 100	185	3.5
no sample		4.0
non-detect	0.65 U	4.5

result flag

NOTE:
Result flag indicates --

U = not detected at reported value

J = estimated detected value

UJ = estimated non-detected value

N

Scale in Feet

500 0 500 1000 1500

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACH 7, 8 AND 9
TILE 8/10

NOTE: Datamart as of November 13, 2002

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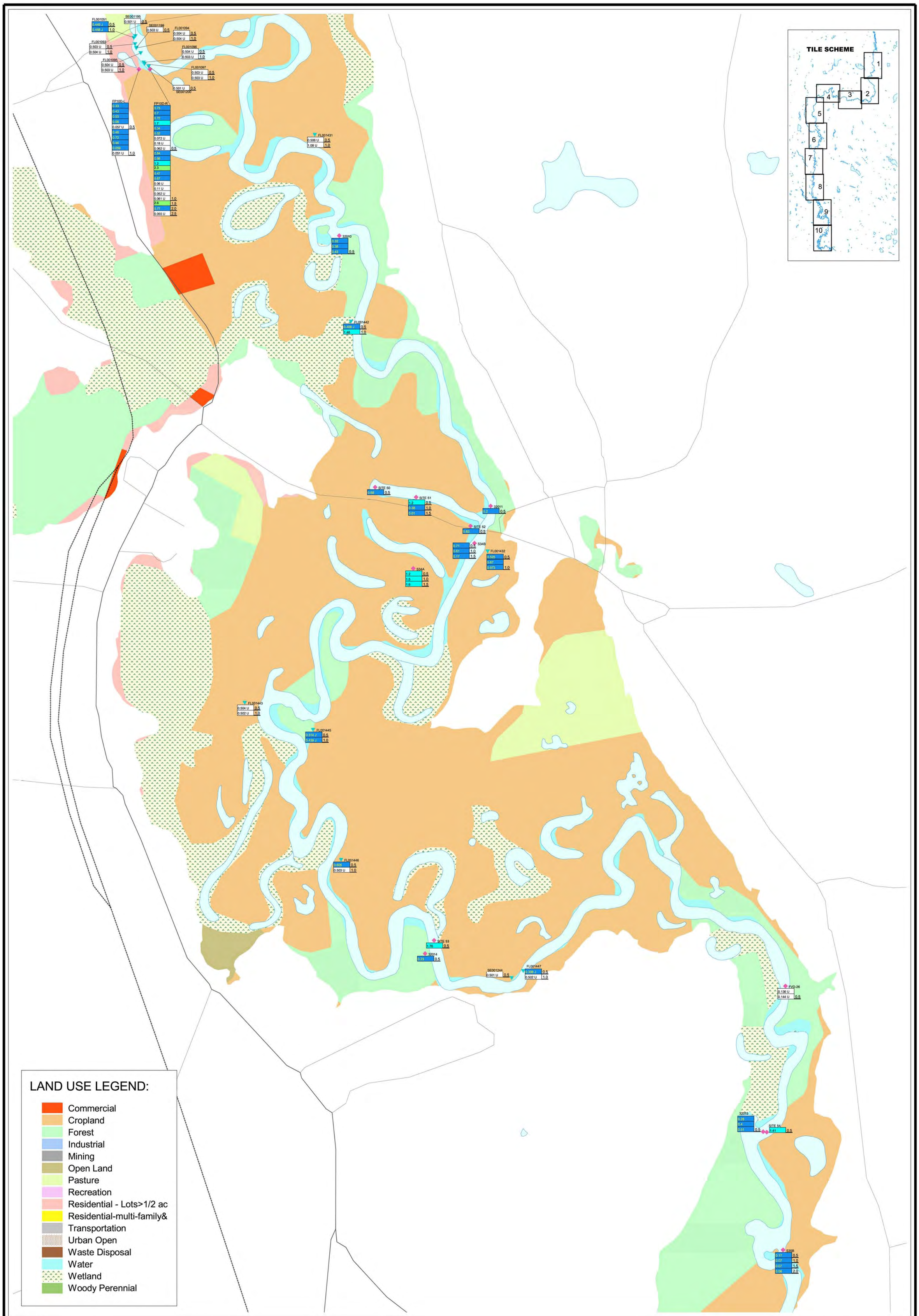

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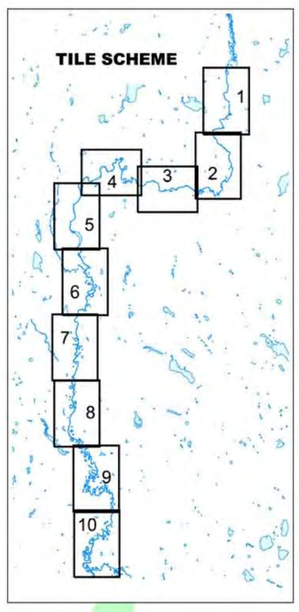

Massachusetts

Connecticut

LAND USE LEGEND:

- Commercial
- Cropland
- Forest
- Industrial
- Mining
- Open Land
- Pasture
- Recreation
- Residential - Lots>1/2 ac
- Residential-multi-family&
- Transportation
- Urban Open
- Waste Disposal
- Water
- Wetland
- Woody Perennial

LEGEND:

- GE
- EPA - Corps of Engineers
- Roads
- Railroads
- River

PCB Concentration (ppm)

	result value	lower depth value
< 1	0.51	0.5
1 - 2	1.45	1.0
2 - 4	2.89	1.5
4 - 7	6.09	2.0
7 - 25	23.7	2.5
25 - 100	68.9	3.0
> 100	185	3.5
no sample		4.0
non-detect	0.65 U	4.5

result flag

NOTE:
Result flag indicates --

U = not detected at reported value

J = estimated detected value

UJ = estimated non-detected value

N

Scale in Feet

500 0 500 1000 1500

Housatonic River Project
Pittsfield, Massachusetts

TOTAL PCB RESULTS
REACH 7, 8 AND 9
TILE 10/10

NOTE: Datamart as of November 13, 2002

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REPORT

Housatonic River - Rest of River RCRA Facility Investigation Report

Volume 2. Appendix C
Summary of Non-PCB Constituent Data for Water, Sediment, Soil, and Biota

General Electric Company
Pittsfield, Massachusetts

September 2003

QEA Quantitative Environmental Analysis, LLC

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

Table of Contents

Tables

Appendix C – Summary of Non-PCB Constituent Data for Water, Sediment, Soil, and Biota

1.1 General

In addition to the polychlorinated biphenyl (PCB) analyses discussed in the main body of the *Housatonic River - Rest of River RCRA Facility Investigation Report* (RFI Report), non-PCB constituents were also quantified in a smaller subset of surface water; sediment; floodplain, riverbank, and vernal pool soil; and biota samples. The text that follows provides a brief summary of the non-PCB constituent results for the surface water, sediment, and soil samples collected from the Rest of River area, and references tables in Appendix C that present summary statistics for all non-PCB constituents for which one or more Rest of River area samples contained detectable concentrations. Tables, which are referenced in Section 6 of the RFI Report, are also provided summarizing the non-PCB biota data.

The vast majority of surface water, sediment, and soil samples collected for non-PCB constituent analysis were collected by the United States Environmental Protection Agency (EPA) beginning in 1998 from the Rest of River area downstream of the Confluence of the East and West Branches of the Housatonic River (the Confluence). Sediment sampling was also performed in Rising Pond between 1989 and 1991, the results of which are also summarized below.

Non-PCB constituents analyzed include:

- Volatile organic compounds (VOCs);
- Semivolatile organic compounds (SVOCs);
- Polynuclear aromatic hydrocarbons (PAHs);
- Pesticides and herbicides;
- Polychlorinated dibenzo-p-dioxins/polychlorinated dibenzofurans (PCDDs/PCDFs);
- Metals; and
- Other inorganic compounds.

Table C-1 presents a complete listing of the individual compound constituents by media. The results of the non-PCB constituents that were detected are summarized in the following sections.

1.2 Surface Water

From August 1998 through May 2000, EPA collected surface water samples for the analysis of non-PCB constituents (note: inorganic and organic constituents are discussed in Section 3 of the RFI Report). Locations sampled included those locations associated with monthly or routine monitoring along with various intermediate locations; including:

- Holmes Road Bridge;
- Adjacent to Joseph Drive;
- Pittsfield Wastewater Treatment Plant (WWTP);
- New Lenox Road Bridge;
- Woods Pond Headwaters;

- Above Woods Pond Dam; and
- Schweitzer/Lenoxdale Bridge.

In addition, various discrete sampling locations (associated with risk assessment end points) were sampled and analyzed. Table C-2 provides a summary of the non-PCB compounds analyzed in surface water samples collected from the Rest of River area. Apparent in Table C-2, many of the non-PCB compounds were detected at very low frequencies, typically less than 10% of samples analyzed (i.e., Appendix IX pesticides, SVOCs, VOCs, and herbicides). PCDDs/PCDFs and metals (total and dissolved) were detected in approximately 20% of samples analyzed, while PAHs were detected in approximately 40% of samples analyzed.

The results of PCDD/PCDF analyses are discussed in detail in Section 3.9 of the RFI Report and are summarized in Table C-3. As noted above, PAHs were detected at the greatest frequency; however, the small sample size, generally one to two samples per location, make further evaluation of these data difficult. Generally, arithmetic mean and median PAH concentrations are consistent between sampling locations (Table C-4). With regard to metals, concentrations were typically similar among the locations sampled (Table C-5). Similar observations were made for the dissolved metals (Table C-6).

Tables C-7 through C-10 provide the summary statistics for detected VOC, SVOC, pesticide, and herbicide constituents. The typically low frequency of detection in these compounds prevents the analysis of any discernible trends.

1.3 Sediment

Between August 1998 and April 2002, EPA collected sediment samples for the analysis of non-PCB constituents during the agency's systematic and discrete sampling programs. Sediment samples were collected from the channel proper and backwater areas in Reach 5 (from the Confluence downstream to the headwaters of Woods Pond), Woods Pond, Rising Pond, and from the channel in Reach 9 (Rising Pond Dam to the Connecticut border). In addition, non-PCB constituent sampling conducted by Blasland & Bouck Engineers P.C. (Blasland & Bouck) and GZA GeoEnvironmental, Inc. (GZA) in Rising Pond between 1989 and 1991 are presented for comparison.

Table C-2 provides the summary of the non-PCB compounds analyzed in the channel and backwater sediments within the Rest of River area. Evident in Table C-2, PCDDs/PCDFs and metals were detected at the greatest frequency (> 75%), and to a lesser extent inorganics (approximately 30%) and Appendix IX SVOCs (between 10% and 15%), and are discussed below.

Concentrations of PCDDs/PCDFs in sediment are discussed in detail in Section 4.9 of this RFI Report and are summarized in Table C-11. Detected SVOC constituents were generally similar among the Reach 5 subreaches, Woods Pond, and Rising Pond, with slightly elevated concentrations, on average, in the backwater areas. Downstream of Rising Pond, SVOC concentrations were about one order of magnitude lower than those observed between the Confluence and Rising Pond Dam (Table C-12). For the most part, metals concentrations observed in the Rest of River sediments were generally similar within the more riverine reaches, with elevated concentrations observed in the impounded and/or depositional reaches (i.e., Reach 5C [from Roaring Brook to the headwaters of Woods Pond], 6 [Woods Pond], 8 [Rising Pond], and backwaters) (Table C-13). A similar trend is observed among the inorganic constituents (Table C-14), with both sulfide and ammonia (as N) sediment concentrations typically higher within the more depositional reaches.

As noted above, between 1989 and 1991, Blasland & Bouck and GZA collected sediment samples for non-PCB compound analysis from Rising Pond. Table C-15 presents a summary of the detected non-PCB data. Due to the small sample size for the 1989-1991 dataset, comparisons between the 1989-1991 and 1998-2002 data are limited. However, typically a similar range of concentrations are observed in both datasets.

Tables C-16 through C-18 present the summary statistics for detected pesticide, herbicide, and mineral constituents.

1.4 Floodplain and Riverbank Soil

Between August 1998 and June 2002, EPA collected floodplain and riverbank soil samples for the analysis of non-PCB compounds. Soil samples were collected from the floodplain and riverbanks in Reaches 5A (from the Confluence to the Pittsfield WWTP), 5B (from the Pittsfield WWTP to Roaring Brook), 5C, Woods Pond, and Reach 7.

Table C-2 provides a summary of the non-PCB compounds analyzed. Apparent in Table C-2, PCDDs/PCDFs and metals were the most frequently detected non-PCB compounds in floodplain and riverbank soils, with detected concentrations being reported in approximately 80% (or more) of samples analyzed. Other non-PCB compounds were detected in less than 10% of samples analyzed.

PCDD/PCDF concentrations in floodplain and riverbank soil are discussed in detail in Section 5.8 and summarized in Table C-19. Detected concentrations of metals were similar between locations, therefore no relationship is noted (Table C-20).

Tables C-21 through C-24 provide a summary of detected SVOC, pesticide, herbicide, and inorganic constituents.

1.5 Vernal Pools

Between February 1999 and May 2000, EPA collected soil samples from select vernal pool locations for the analysis of non-PCB constituents. Vernal pool samples were collected from the subreaches of Reach 5 only.

Similar to the floodplain and riverbank soils, PCDDs/PCDFs and metals were frequently detected (> 75%). PCDDs/PCDFs are discussed in detail in Section 5.8 and summarized in Table C-25. Metals were detected at generally higher concentrations in Reach 5B (Table C-26) in comparison to results from Reaches 5A and 5C (which were similar). PAHs were detected in approximately 99% of samples analyzed; however, as with the surface water, the low collection frequency by reach limits any discernable trends. It can be noted (Table C-27) that among comparable constituents, concentrations are generally higher in Reaches 5B and 5C.

Tables C-28 through C-30 provide the summary statistics for SVOCs, pesticides, and inorganic compounds detected in vernal pool soil samples.

Appendix C Tables

BBL®
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

General Electric Company
Housatonic River - Rest of River
RFI Report

Table C-1
Summary of Non-PCB Constituents by Media

Non-PCB Category	Non-PCB Constituent	Surface Water	Sediment	Backwaters	Floodplain and Riverbank Soil	Vernal Pool
Appendix IX Pesticides	1,2,3,4-TETRACHLOROBENZENE					X
	1,2,4,5-TETRACHLOROBENZENE	X	X	X	X	X
	4,4'-DDD	X	X	X	X	X
	4,4'-DDE	X	X	X	X	X
	4,4'-DDT	X	X	X	X	X
	ALDRIN	X	X	X	X	X
	ALPHA-BHC	X	X	X	X	X
	ALPHA-CHLORDANE					X
	BETA-BHC	X	X	X	X	X
	CHLORDANE	X	X	X	X	X
	CHLORPYRIFOS					X
	CIS-NONACHLOR					X
	DELTA-BHC	X	X	X	X	X
	DIELDRIN	X	X	X	X	X
	ENDOSULFAN I	X	X	X	X	X
	ENDOSULFAN II	X	X	X	X	X
	ENDOSULFAN SULFATE	X	X	X	X	X
	ENDRIN	X	X	X	X	X
	ENDRIN ALDEHYDE	X	X	X	X	X
	GAMMA BHC (LINDANE)	X	X	X	X	X
	GAMMA-CHLORDANE					X
	HEPTACHLOR	X	X	X	X	X
	HEPTACHLOR EPOXIDE	X	X	X	X	X
	HEXACHLOROBENZENE	X	X	X	X	X
	ISODRIN	X	X	X	X	X
	KEPONE	X	X	X	X	
	METHOXYCHLOR	X	X	X	X	X
	MIREX					X
	O,P'-DDD					X
	O,P'-DDE					X
	O,P'-DDT					X
	OXYCHLORDANE					X
	PENTACHLOROANISOLE					X
	PENTACHLOROBENZENE	X	X	X	X	X
	TOXAPHENE	X	X	X	X	X
	TRANS-NONACHLOR					X
Appendix IX SVOCs	1,2,4,5-TETRACHLOROBENZENE	X	X	X	X	X
	1,2,4-TRICHLOROBENZENE	X	X	X	X	X
	1,2-DICHLOROBENZENE	X	X	X	X	X
	1,3,5-TRINITROBENZENE	X	X	X	X	X
	1,3-DICHLOROBENZENE	X	X	X	X	X
	1,3-DINITROBENZENE	X	X	X	X	X
	1,4-DICHLOROBENZENE	X	X	X	X	X
	1,4-NAPHTHOQUINONE	X	X	X	X	X
	1-NAPHTHYLAMINE	X	X	X	X	X
	2,3,4,6-TETRACHLOROPHENOL	X	X	X	X	X
	2,4,5-TRICHLOROPHENOL	X	X	X	X	X
	2,4,6-TRICHLOROPHENOL	X	X	X	X	X
	2,4-DICHLOROPHENOL	X	X	X	X	X
	2,4-DIMETHYLPHENOL	X	X	X	X	X
	2,4-DINITROPHENOL	X	X	X	X	X
	2,4-DINITROTOLUENE	X	X	X	X	X
	2,6-DICHLOROPHENOL	X	X	X	X	X
	2,6-DINITROTOLUENE	X	X	X	X	X
	2-ACETYLAMINOFLUORENE	X	X	X	X	X
	2-CHLORONAPHTHALENE	X	X	X	X	X
	2-CHLOROPHENOL	X	X	X	X	X
	2-METHYLNAPHTHALENE	X	X	X	X	X
	2-METHYLPHENOL (O-CRESOL)	X	X	X	X	X
	2-NAPHTHYLAMINE	X	X	X	X	X
	2-NITROANILINE	X	X	X	X	X

Table C-1
Summary of Non-PCB Constituents by Media

Non-PCB Category	Non-PCB Constituent	Surface Water	Sediment	Backwaters	Floodplain and Riverbank Soil	Vernal Pool
Appendix IX SVOCs (continued)	2-NITROPHENOL	X	X	X	X	X
	2-PICOLINE (ALPHA-PICOLINE)	X	X	X	X	X
	3,3'-DICHLOROBENZIDINE	X	X	X	X	X
	3,3'-DIMETHYLBENZIDINE	X	X	X	X	X
	3-METHYLCHOLANTHRENE	X	X	X	X	X
	3-NITROANILINE	X	X	X	X	X
	4,6-DINITRO-2-METHYLPHENOL	X	X	X	X	X
	4-AMINOBIPHENYL	X	X	X	X	X
	4-BROMOPHENYL PHENYL ETHER	X	X	X	X	X
	4-CHLORO-3-METHYLPHENOL	X	X	X	X	X
	4-CHLOROANILINE	X	X	X	X	X
	4-CHLOROPHENYL PHENYL ETHER	X	X	X	X	X
	4-METHYLPHENOL	X	X	X	X	X
	4-NITROANILINE	X	X	X	X	X
	4-NITROPHENOL	X	X	X	X	X
	4-NITROQUINOLINE-1-OXIDE	X	X	X	X	X
	5-NITRO-O-TOLUIDINE	X	X	X	X	X
	7,12-DIMETHYLBENZ(A)ANTHRACENE	X	X	X	X	X
	A,A-DIMETHYLPHENETHYLAMINE	X	X	X	X	X
	ACENAPHTHENE	X	X	X	X	X
	ACENAPTHYLENE	X	X	X	X	X
	ACETOPHENONE	X	X	X	X	X
	ANILINE	X	X	X	X	X
	ANTHRACENE	X	X	X	X	X
	ARAMITE	X	X	X	X	X
	AZOBENZENE	X	X	X	X	X
	BENZO(A)ANTHRACENE	X	X	X	X	X
	BENZO(A)PYRENE	X	X	X	X	X
	BENZO(B)FLUORANTHENE	X	X	X	X	X
	BENZO(GHI)PERYLENE	X	X	X	X	X
	BENZO(K)FLUORANTHENE	X	X	X	X	X
	BENZYL ALCOHOL	X	X	X	X	X
	BIS(2-CHLOROETHOXY) METHANE	X	X	X	X	X
	BIS(2-CHLOROETHYL) ETHER	X	X	X	X	X
	BIS(2-CHLOROISOPROPYL) ETHER	X	X	X	X	X
	BIS(2-ETHYLHEXYL) PHTHALATE	X	X	X	X	X
	BUTYLBENZYLPHTHALATE	X	X	X	X	X
	CHLOROBENZILATE	X	X	X	X	X
	CHRYSENE	X	X	X	X	X
	DIALLATE	X	X	X	X	X
	DIBENZO(A,H)ANTHRACENE	X	X	X	X	X
	DIBENZOFURAN	X	X	X	X	X
	DIETHYL PHTHALATE	X	X	X	X	X
	DIMETHYL PHTHALATE	X	X	X	X	X
	DI-N-BUTYL PHTHALATE	X	X	X	X	X
	DI-N-OCTYL PHTHALATE	X	X	X	X	X
	DINOSEB	X	X	X	X	X
	ETHYL METHANESULFONATE	X	X	X	X	X
	FLUORANTHENE	X	X	X	X	X
	FLUORENE	X	X	X	X	X
	HEXACHLOROBENZENE	X	X	X	X	X
	HEXACHLOROBUTADIENE	X	X	X	X	X
	HEXACHLOROCYCLOPENTADIENE	X	X	X	X	X
	HEXACHLOROETHANE	X	X	X	X	X
	HEXACHLOROPROPENE	X	X	X	X	X
	INDENO(1,2,3-C,D)PYRENE	X	X	X	X	X
	ISOPHORONE	X	X	X	X	X
	ISOSAFROLE	X	X	X	X	X
	METHAPYRILENE	X	X	X	X	X
	METHYL METHANESULFONATE	X	X	X	X	X
	NAPHTHALENE	X	X	X	X	X

Table C-1
Summary of Non-PCB Constituents by Media

Non-PCB Category	Non-PCB Constituent	Surface Water	Sediment	Backwaters	Floodplain and Riverbank Soil	Vernal Pool
Appendix IX SVOCs (continued)	NITROBENZENE	X	X	X	X	X
	NITROSOMETHYLETHYLAMINE	X	X	X	X	X
	N-NITROSODIETHYLAMINE	X	X	X	X	X
	N-NITROSODIMETHYLAMINE	X	X	X	X	X
	N-NITROSO-DI-N-BUTYLAMINE	X	X	X	X	X
	N-NITROSO-DI-N-PROPYLAMINE	X	X	X	X	X
	N-NITROSODIPHENYLAMINE	X	X	X	X	X
	N-NITROSOMORPHOLINE	X	X	X	X	X
	N-NITROSOPIPERIDINE	X	X	X	X	X
	N-NITROSOPYRROLIDINE	X	X	X	X	X
	O-TOLUIDINE	X	X	X	X	X
	P-DIMETHYLAMINOAZOBENZENE	X	X	X	X	X
	PENTACHLOROBENZENE	X	X	X	X	X
	PENTACHLOROETHANE	X	X	X	X	X
	PENTACHLORONITROBENZENE	X	X	X	X	X
	PENTACHLOROPHENOL	X	X	X	X	X
	PHENACETIN	X	X	X	X	X
	PHENANTHRENE	X	X	X	X	X
	PHENOL	X	X	X	X	X
	P-PHENYLENEDIAMINE	X	X	X	X	X
	PRONAMIDE	X	X	X	X	X
	PYRENE	X	X	X	X	X
	PYRIDINE	X	X	X	X	X
	SAFROLE	X	X	X	X	X
	TOTAL PAH	X	X	X	X	X
	TOTAL PAH (HIGH MW)	X	X	X	X	X
	TOTAL PAH (LOW MW)	X	X	X	X	X
Appendix IX VOCs	1,1,1,2-TETRACHLOROETHANE	X				
	1,1,1-TRICHLOROETHANE	X				
	1,1,2,2-TETRACHLOROETHANE	X				
	1,1,2-TRICHLOROETHANE	X				
	1,1-DICHLOROETHANE	X				
	1,1-DICHLOROETHENE	X				
	1,2,3-TRICHLOROPROPANE	X				
	1,2-DIBROMO-3-CHLOROPROPANE	X				
	1,2-DIBROMOETHANE	X				
	1,2-DICHLOROETHANE	X				
	1,2-DICHLOROPROPANE	X				
	2-BUTANONE	X				
	2-CHLORO-1,3-BUTADIENE	X				
	2-CHLOROETHYLVINYLETHER	X				
	2-HEXANONE	X				
	4-METHYL-2-PENTANONE	X				
	ACETONE	X				
	ACROLEIN	X				
	ACRYLONITRILE	X				
	ALLYL CHLORIDE (3-CHLOROPROPENE)	X				
	BENZENE	X				
	BROMODICHLOROMETHANE	X				
	BROMOFORM	X				
	BROMOMETHANE	X				
	CARBON DISULFIDE	X				
	CARBON TETRACHLORIDE	X				
	CHLOROBENZENE	X				
	CHLOROETHANE	X				
	CHLOROFORM	X				
	CHLOROMETHANE	X				
	CIS-1,3-DICHLOROPROPENE	X				
	DIBROMOCHLOROMETHANE	X				
	DIBROMOMETHANE	X				
	ETHYL BENZENE	X				

Table C-1
Summary of Non-PCB Constituents by Media

Non-PCB Category	Non-PCB Constituent	Surface Water	Sediment	Backwaters	Floodplain and Riverbank Soil	Vernal Pool
Appendix IX VOCs (continued)	ETHYL METHACRYLATE	X				
	FREON 12	X				
	IODOMETHANE (METHYL IODIDE)	X				
	METHYL METHACRYLATE	X				
	METHYLACRYLONITRILE	X				
	METHYLENE CHLORIDE	X				
	PROPANE NITRILE (PROPIONITRILE)	X				
	STYRENE	X				
	TETRACHLOROETHYLENE(PCE)	X				
	TOLUENE	X				
	TRANS-1,2-DICHLOROETHENE	X				
	TRANS-1,3-DICHLOROPROPENE	X				
	TRANS-1,4-DICHLORO-2-BUTENE	X				
	TRICHLOROETHYLENE (TCE)	X				
	TRICHLOROFLUOROMETHANE	X				
	VINYL ACETATE	X				
	VINYL CHLORIDE	X				
	XYLENES (TOTAL)	X				
Dioxins/Furans	1,2,3,4,6,7,8-HPCDD	X	X	X	X	X
	1,2,3,4,6,7,8-HPCDF	X	X	X	X	X
	1,2,3,4,7,8,9-HPCDF	X	X	X	X	X
	1,2,3,4,7,8-HXCDD	X	X	X	X	X
	1,2,3,4,7,8-HXCDF	X	X	X	X	X
	1,2,3,6,7,8-HXCDD	X	X	X	X	X
	1,2,3,6,7,8-HXCDF	X	X	X	X	X
	1,2,3,7,8,9-HXCDD	X	X	X	X	X
	1,2,3,7,8,9-HXCDF	X	X	X	X	X
	1,2,3,7,8-PECDD	X	X	X	X	X
	1,2,3,7,8-PECDF	X	X	X	X	X
	2,3,4,6,7,8-HXCDF	X	X	X	X	X
	2,3,4,7,8-PECDF	X	X	X	X	X
	2,3,7,8-TCDD	X	X	X	X	X
	2,3,7,8-TCDF	X	X	X	X	X
	HPCDD (TOTAL)	X	X	X	X	X
	HPCDF (TOTAL)	X	X	X	X	X
	HXCDD (TOTAL)	X	X	X	X	X
	HXCDF (TOTAL)	X	X	X	X	X
	OCDD	X	X	X	X	X
	OCDF	X	X	X	X	X
	PECDD (TOTAL)	X	X	X	X	X
	PECDF (TOTAL)	X	X	X	X	X
	TCDD (TOTAL)	X	X	X	X	X
	TCDF (TOTAL)	X	X	X	X	X
Herbicides	2,4,5-T	X	X	X	X	
	2,4,5-TP (SILVEX)	X	X	X	X	
	2,4-D	X	X	X	X	
Inorganics	AMMONIA AS N		X			
	CYANIDE		X	X	X	X
	PH		X			
	SULFIDE		X	X	X	X
Metals	ALUMINUM					X
	ANTIMONY	X	X	X	X	X
	ARSENIC	X	X	X	X	X
	BARIUM	X	X	X	X	X
	BERYLLIUM	X	X	X	X	X
	CADMIUM	X	X	X	X	X
	CALCIUM	X				
	CHROMIUM	X	X	X	X	X
	COBALT	X	X	X	X	X
	COPPER	X	X	X	X	X

Table C-1
Summary of Non-PCB Constituents by Media

Non-PCB Category	Non-PCB Constituent	Surface Water	Sediment	Backwaters	Floodplain and Riverbank Soil	Vernal Pool
Metals (continued)	IRON					X
	LEAD	X	X	X	X	X
	MAGNESIUM	X				X
	MANGANESE					X
	MERCURY	X	X	X	X	X
	NICKEL	X	X	X	X	X
	SELENIUM	X	X	X	X	X
	SILVER	X	X	X	X	X
	STRONTIUM					X
	THALLIUM	X	X	X	X	X
	TIN	X	X	X	X	X
	VANADIUM	X	X	X	X	X
	ZINC	X	X	X	X	X
Dissolved Metals	ANTIMONY, DISSOLVED	X				
	ARSENIC, DISSOLVED	X				
	BARIUM, DISSOLVED	X				
	BERYLLIUM, DISSOLVED	X				
	CADMIUM, DISSOLVED	X				
	CALCIUM, DISSOLVED	X				
	CHROMIUM, DISSOLVED	X				
	COBALT, DISSOLVED	X				
	COPPER, DISSOLVED	X				
	LEAD, DISSOLVED	X				
	MAGNESIUM, DISSOLVED	X				
	MERCURY, DISSOLVED	X				
	NICKEL, DISSOLVED	X				
	SELENIUM, DISSOLVED	X				
	SILVER, DISSOLVED	X				
	THALLIUM, DISSOLVED	X				
	TIN, DISSOLVED	X				
	VANADIUM, DISSOLVED	X				
	ZINC, DISSOLVED	X				
Mineral	% ALBITE		X			
	% CHLORITE		X			
	% MICROCLINE		X			
	% ORGANICS		X			
	% QUARTZ		X			
	%MUSCOVITE		X			
PAHs	1,6,7-TRIMETHYLNAPHTHALENE					X
	1-METHYLNAPHTHALENE					X
	1-METHYLPHENANTHRENE					X
	2,6 DIMETHYLNAPHTHALENE					X
	2-METHYLNAPHTHALENE	X	X	X	X	X
	ACENAPHTHENE	X	X	X	X	X
	ACENAPTHYLENE	X	X	X	X	X
	ANTHRACENE	X	X	X	X	X
	BENZO(A)ANTHRACENE	X	X	X	X	X
	BENZO(A)PYRENE	X	X	X	X	X
	BENZO(B)FLUORANTHENE	X	X	X	X	X
	BENZO(E)PYRENE					X
	BENZO(GHI)PERYLENE	X	X	X	X	X
	BENZO(K)FLUORANTHENE	X	X	X	X	X
	BIPHENYL (DIPHENYL)					X
	C1-CHRYSENES					X
	C1-DIBENZOTHIOPHENES					X
	C1-FLUORANTHENES & PYRENES					X
	C1-FLUORENES					X
	C1-NAPHTHALENES					X
	C1-PHENANTHRENES & ANTHRACENES					X
	C2-CHRYSENES					X
	C2-DIBENZOTHIOPHENES					X

Table C-1
Summary of Non-PCB Constituents by Media

Non-PCB Category	Non-PCB Constituent	Surface Water	Sediment	Backwaters	Floodplain and Riverbank Soil	Vernal Pool
PAHs (continued)	C2-FLUORENES					X
	C2-NAPHTHALENES					X
	C2-PHENANTHRENES & ANTHRACENES					X
	C3-CHRYSENES					X
	C3-DIBENZOTHIOPHENES					X
	C3-FLUORENES					X
	C3-NAPHTHALENES					X
	C3-PHENANTHRENES & ANTHRACENES					X
	C4-CHRYSENES					X
	C4-NAPHTHALENES					X
	C4-PHENANTHRENES & ANTHRACENES					X
	CHRYSENE	X	X	X	X	X
	DIBENZO(A,H)ANTHRACENE	X	X	X	X	X
	DIBENZOTHIOPHENE					X
	FLUORANTHENE	X	X	X	X	X
	FLUORENE	X	X	X	X	X
	INDENO(1,2,3-C,D)PYRENE	X	X	X	X	X
	NAPHTHALENE	X	X	X	X	X
	PERYLENE					X
	PHENANTHRENE	X	X	X	X	X
	PYRENE	X	X	X	X	X

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Table C-2
Non-PCB Compound Analysis Summary

Compound	Total Number of Samples Collected	Constituents Analyzed[1]	Constituents Detected	Samples Analyzed[2]	Samples Detected
Surface Water					
Appendix IX Pesticides	133	21	2 (9.5%)	2,723	2 (< 0.1%)
Appendix IX SVOCs	109	113	10 (8.8%)	11,931	23 (0.2%)
Appendix IX VOCs	32	52	7 (13.5%)	1,544	51 (3.3%)
Dioxins/Furans	133	25	25 (100%)	3,325	831 (25%)
Herbicides	105	3	1 (33.3%)	313	2 (0.6%)
Metals	109	19	19 (100%)	2,007	423 (21.1%)
Filtered Metals	101	19	15 (78.9%)	1,853	335 (18.1%)
PAHs	11	16	14 (87.5%)	176	73 (41.5%)
Sediment					
Channel Sediment					
Appendix IX Pesticides	190	21	9 (42.9%)	3,473	24 (0.7%)
Appendix IX SVOCs	220	113	41 (36.3%)	20,159	3,180 (15.8%)
Dioxins/Furans	221	25	25 (100%)	5,091	4,460 (87.6%)
Herbicides	37	3	0 (0%)	93	0 (0%)
Inorganics	225	4	4 (100%)	377	106 (28.1%)
Metals	218	17	17 (100%)	3,319	2,524 (76%)
Mineral	6	6	6 (100%)	32	32 (100%)
Backwaters					
Appendix IX Pesticides	190	21	2 (9.5%)	255	2 (0.8%)
Appendix IX SVOCs	220	113	25 (22.1%)	1,597	154 (9.6%)
Dioxins/Furans	221	25	25 (100%)	425	396 (93.2%)
Herbicides	37	3	1 (33.3%)	18	1 (5.6%)
Inorganics	225	2	1 (50%)	27	7 (25.9%)
Metals	218	17	17 (100%)	276	242 (87.7%)
Floodplain					
Floodplain and Riverbank Soil					
Appendix IX Pesticides	125	21	9 (42.9%)	2,454	17 (0.7%)
Appendix IX SVOCs	126	113	42 (37.2%)	13,600	1,667 (12.3%)
Dioxins/Furans	155	25	25 (100%)	3,642	3,272 (89.8%)
Herbicides	15	3	2 (66.7%)	45	5 (11.1%)
Inorganics	129	3	3 (100%)	243	17 (7%)
Metals	126	17	17 (100%)	2,138	1,701 (79.6%)
Vernal Pools					
Appendix IX Pesticides	25	35	28 (80%)	637	159 (25%)
Appendix IX SVOCs	19	113	29 (25.7%)	2,005	246 (12.3%)
Dioxins/Furans	26	25	25 (100%)	769	599 (77.9%)
Inorganics	18	2	1 (50%)	36	1 (2.8%)
Metals	25	22	22 (100%)	425	355 (83.5%)
PAHs	7	44	44 (100%)	308	304 (98.7%)

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Table C-2
Non-PCB Compound Analysis Summary

Notes:

1. Not all samples were analyzed for the full suite of non-PCB constituents.
2. Total number of samples analyzed does not include QC samples or rejected analyses.
3. Number in parentheses represents the percent of total detected.

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Table C-3
Surface Water
Summary of Detected PCDDs/PCDFs (pg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Holmes Road Bridge								
1,2,3,4,6,7,8-HPCDD	15	40	2.6	30	81	< 0	ND	776
1,2,3,4,6,7,8-HPCDF	15	47	2.4	5.4	10	0.76	ND	67
1,2,3,4,7,8,9-HPCDF	15	7	1.1	2.2	3.9	0.56	ND	26
1,2,3,4,7,8-HXCDD	15	7	1.6	2.9	5.3	0.51	ND	38
1,2,3,4,7,8-HXCDF	15	20	1.2	1.4	2.0	0.82	ND	9.0
1,2,3,6,7,8-HXCDD	15	7	1.6	3.7	7.5	< 0	ND	59
1,2,3,6,7,8-HXCDF	15	33	1.5	2.1	3.0	1.2	ND	9.0
1,2,3,7,8,9-HXCDD	15	7	1.5	3.5	7.3	< 0	ND	59
1,2,3,7,8,9-HXCDF	15	7	1.3	1.4	1.8	0.95	ND	5.6
1,2,3,7,8-PECDD	15	7	1.1	1.6	2.5	0.74	ND	14
1,2,3,7,8-PECDF	15	13	1.4	1.6	1.9	1.2	ND	2.4
2,3,4,6,7,8-HXCDF	15	7	1.2	1.4	2.0	0.77	ND	9.5
2,3,7,8-TCDF	15	7	1.0	1.1	1.3	0.85	ND	1.4
HPCDD (TOTAL)	15	33	2.5	72	203	< 0	ND	1970
HPCDF (TOTAL)	15	40	2.2	11	26	< 0	ND	221
HXCDD (TOTAL)	15	7	1.5	31	91	< 0	ND	894
HXCDF (TOTAL)	15	47	1.7	13	24	2.1	ND	123
OCDD	15	47	7.5	108	276	< 0	ND	2530
OCDF	15	13	2.5	10	23	< 0	ND	198
PECDD (TOTAL)	15	7	1.4	6.2	16	< 0	ND	146
PECDF (TOTAL)	15	67	13	21	31	9.7	ND	63
TCDD (TOTAL)	15	13	1.0	1.7	2.9	0.44	ND	10
TCDF (TOTAL)	15	73	17	24	37	11	ND	91
WHO TEQs	15	100	4.8	5.6	8.3	3.0	1.6	23

Table C-3
Surface Water
Summary of Detected PCDDs/PCDFs (pg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Adjacent to Joseph Drive								
1,2,3,4,6,7,8-HPCDD	15	27	2.7	5.9	12	< 0	ND	51
1,2,3,4,6,7,8-HPCDF	15	47	3.3	4.1	6.5	1.8	ND	18
1,2,3,4,7,8-HXCDF	15	20	1.2	1.4	1.8	1.0	ND	2.0
1,2,3,6,7,8-HXCDF	15	33	1.7	3.8	7.4	0.19	ND	28
1,2,3,7,8-PECDF	15	27	1.8	3.3	6.3	0.32	ND	24
2,3,4,6,7,8-HXCDF	15	20	1.3	1.4	1.8	1.0	ND	1.7
2,3,4,7,8-PECDF	15	20	1.5	1.9	2.5	1.4	ND	3.5
2,3,7,8-TCDD	15	7	0.85	1.1	1.4	0.74	ND	2.5
2,3,7,8-TCDF	15	27	1.3	2.2	3.9	0.53	ND	14
HPCDD (TOTAL)	15	27	2.7	7.2	15	< 0	ND	63
HPCDF (TOTAL)	15	40	2.7	8.2	19	< 0	ND	82
HXCDF (TOTAL)	15	53	3.8	33	73	< 0	ND	300
OCDD	15	40	11	39	88	< 0	ND	380
OCDF	15	20	3.2	6.4	11	1.6	ND	36
PECDF (TOTAL)	15	73	30	61	119	3.2	ND	449
TCDD (TOTAL)	15	20	0.90	1.6	2.7	0.64	ND	8.1
TCDF (TOTAL)	15	73	39	58	102	14	ND	334
WHO TEQs	15	100	4.5	5.3	7.0	3.7	2.0	15

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Table C-3
Surface Water
Summary of Detected PCDDs/PCDFs (pg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Pittsfield WWTP								
1,2,3,4,6,7,8-HPCDD	14	36	3.2	11	22	< 0	ND	70
1,2,3,4,6,7,8-HPCDF	14	57	3.3	12	23	0.39	ND	63
1,2,3,4,7,8,9-HPCDF	14	7	1.5	3.2	6.8	< 0	ND	26
1,2,3,4,7,8-HXCDF	14	29	1.3	2.0	3.3	0.79	ND	9.6
1,2,3,6,7,8-HXCDF	14	43	1.9	4.5	8.5	0.56	ND	29
1,2,3,7,8-PECDF	14	14	1.7	3.0	5.4	0.56	ND	18
2,3,4,6,7,8-HXCDF	14	14	1.1	1.7	2.4	1.0	ND	3.5
2,3,4,7,8-PECDF	14	7	1.6	2.1	3.0	1.2	ND	4.5
2,3,7,8-TCDF	14	21	1.3	2.3	4.3	0.42	ND	15
HPCDD (TOTAL)	14	36	3.6	20	41	< 0	ND	132
HPCDF (TOTAL)	14	57	3.3	16	33	< 0	ND	110
HXCDD (TOTAL)	14	7	1.7	2.3	3.3	1.2	ND	8.4
HXCDF (TOTAL)	14	64	7.6	30	66	< 0	ND	259
OCDD	14	64	21	56	117	< 0	ND	430
OCDF	14	29	3.0	14	32	< 0	ND	125
PECDD (TOTAL)	14	21	2.4	5.6	9.3	2.0	ND	23
PECDF (TOTAL)	14	71	26	51	105	< 0	ND	389
TCDD (TOTAL)	14	14	0.98	1.6	2.4	0.79	ND	6.0
TCDF (TOTAL)	14	71	38	60	106	13	ND	337
WHO TEQs	14	100	5.0	6.4	8.8	4.1	2.2	17

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Table C-3
Surface Water
Summary of Detected PCDDs/PCDFs (pg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
New Lenox Road Bridge								
1,2,3,4,6,7,8-HPCDD	15	47	3.8	12	25	< 0	ND	104
1,2,3,4,6,7,8-HPCDF	15	47	3.6	6.3	9.8	2.8	ND	23
1,2,3,4,7,8,9-HPCDF	15	7	1.8	2.1	2.8	1.4	ND	1.8
1,2,3,4,7,8-HXCDD	15	7	2.7	2.6	3.7	1.5	ND	2.7
1,2,3,4,7,8-HXCDF	15	27	1.7	2.0	2.6	1.4	ND	3.8
1,2,3,6,7,8-HXCDD	15	7	2.9	2.8	3.9	1.7	ND	4.5
1,2,3,6,7,8-HXCDF	15	33	2.0	5.3	10	0.18	ND	40
1,2,3,7,8,9-HXCDD	15	7	2.7	2.6	3.6	1.6	ND	4.5
1,2,3,7,8-PECDF	15	33	2.3	4.7	8.9	0.48	ND	33
2,3,4,6,7,8-HXCDF	15	20	1.9	2.0	2.7	1.4	ND	4.2
2,3,4,7,8-PECDF	15	7	1.9	2.3	3.2	1.4	ND	6.6
2,3,7,8-TCDF	15	33	1.7	3.1	5.6	0.62	ND	20
HPCDD (TOTAL)	15	40	6.6	21	45	< 0	ND	189
HPCDF (TOTAL)	15	47	3.6	14	31	< 0	ND	132
HXCDD (TOTAL)	15	7	2.7	3.0	4.4	1.6	ND	9.0
HXCDF (TOTAL)	15	67	8.2	45	99	< 0	ND	413
OCDD	15	40	20	60	141	< 0	ND	622
OCDF	15	40	5.5	11	21	1.4	ND	78
PECDD (TOTAL)	15	20	2.7	4.1	6.1	2.0	ND	13
PECDF (TOTAL)	15	80	28	92	185	< 0	ND	725
TCDD (TOTAL)	15	33	1.6	2.2	3.1	1.3	ND	6.1
TCDF (TOTAL)	15	80	45	82	141	23	ND	430
WHO TEQs	15	100	5.9	6.8	9.2	4.5	2.3	19

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Table C-3
Surface Water
Summary of Detected PCDDs/PCDFs (pg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Woods Pond Headwaters								
1,2,3,4,6,7,8-HPCDD	14	57	4.5	5.7	7.8	3.6	ND	14
1,2,3,4,6,7,8-HPCDF	14	64	4.9	6.8	9.9	3.6	ND	24
1,2,3,4,7,8-HXCDF	14	21	1.9	1.9	2.3	1.5	ND	3.1
1,2,3,6,7,8-HXCDF	14	43	2.5	4.3	6.9	1.7	ND	19
1,2,3,7,8-PECDF	14	21	2.7	3.6	5.2	1.9	ND	12
2,3,4,6,7,8-HXCDF	14	21	1.9	1.9	2.3	1.5	ND	2.6
2,3,4,7,8-PECDF	14	7	2.0	2.7	3.7	1.7	ND	6.7
2,3,7,8-TCDD	14	7	0.88	1.3	1.8	0.84	ND	2.7
2,3,7,8-TCDF	14	50	2.6	3.5	5.1	2.0	ND	12
HPCDD (TOTAL)	14	50	4.8	7.7	12	3.7	ND	28
HPCDF (TOTAL)	14	64	6.9	7.2	10	4.1	ND	24
HXCDD (TOTAL)	14	7	1.6	1.7	2.2	1.3	ND	2.2
HXCDF (TOTAL)	14	64	10	34	60	9.1	ND	161
OCDD	14	57	20	25	35	15	ND	73
OCDF	14	36	2.9	5.5	8.4	2.7	ND	20
PECDD (TOTAL)	14	14	1.9	2.6	4.0	1.3	ND	9.4
PECDF (TOTAL)	14	71	20	54	92	16	ND	244
TCDD (TOTAL)	14	29	1.4	1.8	2.5	1.1	ND	4.9
TCDF (TOTAL)	14	79	53	71	108	34	ND	216
WHO TEQs	14	100	5.6	6.5	8.1	4.8	2.8	12

Table C-3
Surface Water
Summary of Detected PCDDs/PCDFs (pg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Above Woods Pond Dam								
1,2,3,4,6,7,8-HPCDD	13	62	5.8	9.4	16	2.3	ND	50
1,2,3,4,6,7,8-HPCDF	13	62	6.5	8.9	16	1.8	ND	50
1,2,3,4,7,8,9-HPCDF	13	8	1.8	3.8	7.1	0.39	ND	23
1,2,3,4,7,8-HXCDD	13	8	1.9	2.5	3.6	1.4	ND	7.0
1,2,3,4,7,8-HXCDF	13	46	2.1	3.1	4.6	1.6	ND	11
1,2,3,6,7,8-HXCDD	13	8	2.1	2.8	4.3	1.4	ND	9.6
1,2,3,6,7,8-HXCDF	13	54	3.5	4.3	6.3	2.4	ND	13
1,2,3,7,8,9-HXCDD	13	15	1.8	3.0	4.5	1.5	ND	8.9
1,2,3,7,8,9-HXCDF	13	8	1.5	1.9	2.9	1.0	ND	5.0
1,2,3,7,8-PECDD	13	8	1.7	1.9	2.6	1.2	ND	3.8
1,2,3,7,8-PECDF	13	31	2.2	2.7	3.6	1.8	ND	5.1
2,3,4,6,7,8-HXCDF	13	15	1.5	2.4	3.9	0.86	ND	11
2,3,4,7,8-PECDF	13	31	2.4	3.2	4.3	2.1	ND	7.0
2,3,7,8-TCDF	13	38	2.1	3.1	4.5	1.7	ND	10
HPCDD (TOTAL)	13	46	6.3	12	25	< 0	ND	89
HPCDF (TOTAL)	13	54	5.3	13	28	< 0	ND	102
HXCDD (TOTAL)	13	31	2.8	5.3	10	0.54	ND	33
HXCDF (TOTAL)	13	77	15	27	42	12	ND	79
OCDD	13	62	17	33	52	14	ND	112
OCDF	13	31	3.7	14	30	< 0	ND	104
PECDD (TOTAL)	13	15	1.9	2.9	4.4	1.4	ND	9.9
PECDF (TOTAL)	13	77	42	50	75	25	ND	132
TCDF (TOTAL)	13	85	38	63	101	24	ND	230
WHO TEQs	13	100	6.0	7.4	9.5	5.3	3.2	15

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Table C-3
Surface Water
Summary of Detected PCDDs/PCDFs (pg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Schweitzer/Lenoxdale Bridge								
1,2,3,4,6,7,8-HPCDD	14	50	4.2	5.1	7.3	3.0	ND	16
1,2,3,4,6,7,8-HPCDF	14	64	4.0	5.3	7.2	3.4	ND	13
1,2,3,4,7,8-HXCDF	14	21	1.6	1.5	1.9	1.2	ND	2.5
1,2,3,6,7,8-HXCDF	14	36	2.1	3.3	5.0	1.6	ND	10
1,2,3,7,8-PECDF	14	14	2.1	2.5	3.4	1.6	ND	5.3
2,3,4,6,7,8-HXCDF	14	14	1.4	1.5	1.8	1.1	ND	1.8
2,3,4,7,8-PECDF	14	7	1.6	2.3	3.1	1.5	ND	3.4
2,3,7,8-TCDF	14	29	1.7	2.6	3.7	1.5	ND	7.8
HPCDD (TOTAL)	14	50	3.9	6.9	11	3.0	ND	29
HPCDF (TOTAL)	14	50	4.4	5.3	7.3	3.2	ND	15
HXCDF (TOTAL)	14	71	11	20	32	8.6	ND	59
OCDD	14	36	15	22	34	9.9	ND	94
OCDF	14	21	3.6	4.9	6.8	3.1	ND	5.8
PECDD (TOTAL)	14	14	2.4	3.1	4.7	1.4	ND	11
PECDF (TOTAL)	14	79	32	47	68	25	ND	125
TCDD (TOTAL)	14	7	1.1	1.6	2.6	0.67	ND	7.3
TCDF (TOTAL)	14	79	33	54	83	25	ND	167
WHO TEQs	14	100	4.6	5.9	7.5	4.2	2.5	13

Table C-3
Surface Water
Summary of Detected PCDDs/PCDFs (pg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Discrete Sampling - Reach 5A								
1,2,3,4,6,7,8-HPCDD	11	36	2.4	2.2	2.9	1.6	ND	5.3
1,2,3,4,6,7,8-HPCDF	11	36	1.6	2.0	2.6	1.3	ND	4.4
1,2,3,4,7,8-HXCDF	11	18	0.75	0.92	1.2	0.64	ND	2.2
1,2,3,7,8-PECDF	11	9	0.72	1.3	2.1	0.40	ND	9.7
2,3,4,6,7,8-HXCDF	11	9	0.72	0.89	1.2	0.60	ND	2.3
2,3,4,7,8-PECDF	11	9	0.70	1.0	1.5	0.55	ND	3.0
2,3,7,8-TCDF	11	18	1.4	2.0	2.8	1.2	ND	4.6
HPCDD (TOTAL)	11	27	1.7	2.5	3.7	1.4	ND	7.1
HPCDF (TOTAL)	11	18	1.1	1.8	2.6	1.0	ND	4.8
HXCDF (TOTAL)	11	27	0.93	1.5	2.4	0.56	ND	9.0
PECDF (TOTAL)	11	36	1.2	7.8	15	0.39	ND	39
TCDF (TOTAL)	11	36	1.5	15	32	< 0	ND	83
WHO TEQs	11	100	4.0	4.3	5.6	2.9	2.0	9.9
Discrete Sampling - Reach 5B								
1,2,3,4,6,7,8-HPCDD	8	88	4.4	5.4	8.4	2.4	ND	16
1,2,3,4,6,7,8-HPCDF	8	88	3.5	5.3	8.6	2.0	ND	16
1,2,3,4,7,8-HXCDF	8	50	1.6	4.5	11	< 0	ND	26
1,2,3,7,8-PECDF	8	25	2.1	3.2	5.5	0.86	ND	9.7
2,3,4,6,7,8-HXCDF	8	13	0.90	1.8	3.0	0.60	ND	2.7
2,3,7,8-TCDF	8	25	1.7	2.8	4.9	0.76	ND	9.6
HPCDD (TOTAL)	8	38	2.8	7.8	15	0.15	ND	33
HPCDF (TOTAL)	8	75	4.4	4.0	5.2	2.8	ND	5.9
HXCDF (TOTAL)	8	63	5.5	31	79	< 0	ND	197
OCDD	8	13	15	22	39	4.5	ND	80
OCDF	8	38	4.9	5.0	6.9	3.1	ND	8.1
PECDF (TOTAL)	8	75	14	60	144	< 0	ND	350
TCDF (TOTAL)	8	63	4.6	121	338	< 0	ND	880
WHO TEQs	8	100	5.0	6.0	8.2	3.7	2.8	13

Table C-3
Surface Water
Summary of Detected PCDDs/PCDFs (pg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Discrete Sampling - Reach 5C								
1,2,3,4,6,7,8-HPCDD	14	36	2.6	14	33	< 0	ND	136
1,2,3,4,6,7,8-HPCDF	14	29	2.3	13	30	< 0	ND	119
1,2,3,4,7,8,9-HPCDF	14	7	2.3	2.4	3.2	1.6	ND	2.9
1,2,3,4,7,8-HXCDF	14	14	1.3	6.2	15	< 0	ND	66
1,2,3,6,7,8-HXCDD	14	14	1.7	2.9	4.6	1.1	ND	14
1,2,3,6,7,8-HXCDF	14	7	1.3	2.5	4.2	0.70	ND	10
1,2,3,7,8-PECDF	14	14	1.2	16	41	< 0	ND	180
2,3,4,6,7,8-HXCDF	14	14	1.4	3.6	7.4	< 0	ND	28
2,3,4,7,8-PECDF	14	14	0.91	6.0	12	0.0094	ND	41
2,3,7,8-TCDF	14	43	2.8	8.7	18	< 0	ND	66
HPCDD (TOTAL)	14	36	2.6	26	62	< 0	ND	260
HPCDF (TOTAL)	14	29	2.4	23	55	< 0	ND	229
HXCDD (TOTAL)	14	14	1.6	3.8	6.5	1.0	ND	19
HXCDF (TOTAL)	14	50	5.5	39	87	< 0	ND	338
OCDD	14	29	12	75	183	< 0	ND	771
OCDF	14	21	5.5	10	19	1.8	ND	63
PECDD (TOTAL)	14	7	1.6	1.5	1.9	1.1	ND	1.4
PECDF (TOTAL)	14	50	4.2	47	96	< 0	ND	316
TCDF (TOTAL)	14	50	19	104	223	< 0	ND	811
WHO TEQs	14	100	5.3	11	20	1.5	1.5	71

Notes:

1. All EPA (1998-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.

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Table C-4
Surface Water
Summary of PAHs (µg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Dawes/Pomeroy Avenue Bridge								
Holmes Road Bridge								
ACENAPHTHENE	2	100	0.067	0.067	NA	NA	0.064	0.070
ACENAPTHYLENE	2	50	0.011	0.011	NA	NA	ND	0.011
FLUORANTHENE	2	100	0.025	0.025	NA	NA	0.021	0.028
NAPHTHALENE	2	100	0.083	0.083	NA	NA	0.056	0.11
PHENANTHRENE	2	100	0.018	0.018	NA	NA	0.017	0.018
PYRENE	2	100	0.037	0.037	NA	NA	0.037	0.037
Adjacent to Joseph Drive								
ACENAPHTHENE	2	100	0.041	0.041	NA	NA	0.039	0.042
BENZO(B)FLUORANTHENE	2	50	0.011	0.011	NA	NA	ND	0.011
FLUORANTHENE	2	100	0.021	0.021	NA	NA	0.017	0.025
FLUORENE	2	100	0.010	0.010	NA	NA	0.010	0.010
NAPHTHALENE	2	100	0.039	0.039	NA	NA	0.031	0.047
PHENANTHRENE	2	100	0.013	0.013	NA	NA	0.012	0.013
PYRENE	2	100	0.028	0.028	NA	NA	0.025	0.030
Pittsfield WWTP								
ACENAPHTHENE	1	100	NA	0.018	NA	NA	NA	NA
FLUORANTHENE	1	100	NA	0.015	NA	NA	NA	NA
NAPHTHALENE	1	100	NA	0.015	NA	NA	NA	NA
PYRENE	1	100	NA	0.020	NA	NA	NA	NA

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Table C-4
Surface Water
Summary of PAHs (µg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
New Lenox Road Bridge								
ACENAPHTHENE	2	100	0.021	0.021	NA	NA	0.020	0.021
BENZO(A)ANTHRACENE	2	50	0.011	0.011	NA	NA	ND	0.011
BENZO(A)PYRENE	2	50	0.012	0.012	NA	NA	ND	0.014
BENZO(B)FLUORANTHENE	2	100	0.015	0.015	NA	NA	0.015	0.015
BENZO(GHI)PERYLENE	2	100	0.014	0.014	NA	NA	0.012	0.015
BENZO(K)FLUORANTHENE	2	50	0.011	0.011	NA	NA	ND	0.012
CHRYSENE	2	50	0.012	0.012	NA	NA	ND	0.013
FLUORANTHENE	2	100	0.026	0.026	NA	NA	0.019	0.032
INDENO(1,2,3-C,D)PYRENE	2	50	0.010	0.010	NA	NA	ND	0.010
NAPHTHALENE	2	100	0.020	0.020	NA	NA	0.016	0.024
PHENANTHRENE	2	100	0.013	0.013	NA	NA	0.010	0.016
PYRENE	2	100	0.033	0.033	NA	NA	0.027	0.038
Woods Pond Headwaters								
ACENAPHTHENE	2	100	0.013	0.013	NA	NA	0.011	0.015
BENZO(A)ANTHRACENE	2	50	0.011	0.011	NA	NA	ND	0.012
BENZO(A)PYRENE	2	100	0.012	0.012	NA	NA	0.011	0.013
BENZO(B)FLUORANTHENE	2	100	0.019	0.019	NA	NA	0.017	0.021
BENZO(GHI)PERYLENE	2	50	0.011	0.011	NA	NA	ND	0.011
CHRYSENE	2	100	0.013	0.013	NA	NA	0.013	0.013
FLUORANTHENE	2	100	0.029	0.029	NA	NA	0.025	0.032
INDENO(1,2,3-C,D)PYRENE	2	50	0.012	0.012	NA	NA	ND	0.012
NAPHTHALENE	2	50	0.013	0.013	NA	NA	ND	0.015
PHENANTHRENE	2	100	0.014	0.014	NA	NA	0.013	0.014
PYRENE	2	100	0.035	0.035	NA	NA	0.032	0.037

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Table C-4
Surface Water
Summary of PAHs (µg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Above Woods Pond Dam								
BENZO(A)ANTHRACENE	1	100	NA	0.010	NA	NA	NA	NA
CHRYSENE	1	100	NA	0.012	NA	NA	NA	NA
FLUORANTHENE	1	100	NA	0.027	NA	NA	NA	NA
PHENANTHRENE	1	100	NA	0.010	NA	NA	NA	NA
PYRENE	1	100	NA	0.027	NA	NA	NA	NA
Schweitzer/Lenoxdale Bridge								
CHRYSENE	1	100	NA	0.010	NA	NA	NA	NA
FLUORANTHENE	1	100	NA	0.028	NA	NA	NA	NA
PYRENE	1	100	NA	0.032	NA	NA	NA	NA

Notes:

1. All EPA (1998) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.
5. NA = Analysis not conducted due to sample size (n<3).

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Table C-5
Surface Water
Summary of Detected Metals (µg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Holmes Road Bridge								
ARSENIC	15	7	1.5	1.9	2.3	1.4	ND	3.0
BARIUM	15	100	17	19	22	16	9.8	31
CADMIUM	15	7	0.15	0.23	0.30	0.16	ND	0.39
CALCIUM	10	100	33750	31405	37701	25109	12600	44600
CHROMIUM	15	13	0.65	0.66	0.80	0.51	ND	0.96
COPPER	15	13	1.1	1.1	1.4	0.84	ND	1.2
LEAD	15	13	1.0	1.4	2.3	0.47	ND	7.5
MAGNESIUM	10	100	12025	11598	14330	8865	4070	17600
MERCURY	15	13	0.050	0.055	0.063	0.048	ND	0.11
NICKEL	15	7	1.1	1.3	1.7	0.97	ND	4.4
SELENIUM	15	7	1.8	1.9	2.3	1.4	ND	4.5
SILVER	15	7	0.95	0.87	1.1	0.67	ND	1.3
VANADIUM	15	7	1.2	1.3	1.5	0.99	ND	3.5
ZINC	15	33	3.6	5.5	8.3	2.7	ND	23
Adjacent to Joseph Drive								
ARSENIC	15	7	1.9	2.0	2.5	1.5	ND	3.5
BARIUM	15	100	18	19	22	16	12	29
BERYLLIUM	15	7	0.050	0.10	0.13	0.068	ND	0.15
CADMIUM	15	7	0.18	0.23	0.29	0.17	ND	0.30
CALCIUM	10	100	32800	31410	37148	25672	13100	41800
CHROMIUM	15	7	0.60	0.87	1.5	0.28	ND	4.9
COBALT	15	7	1.2	1.2	1.4	0.95	ND	2.3
COPPER	15	27	1.1	1.6	2.4	0.74	ND	6.7
LEAD	15	13	0.95	1.5	2.8	0.12	ND	11
MAGNESIUM	10	100	12000	12037	14514	9560	5680	17300
MERCURY	15	7	0.050	0.053	0.060	0.047	ND	0.10
VANADIUM	15	7	1.2	1.5	2.0	0.92	ND	4.9
ZINC	15	33	2.4	33	77	< 0	ND	322

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Table C-5
Surface Water
Summary of Detected Metals (µg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Pittsfield WWTP								
BARIUM	14	100	16	17	20	14	12	32
CADMIUM	14	7	0.15	0.21	0.28	0.15	ND	0.40
CALCIUM	10	100	33400	30670	35524	25816	14400	36900
CHROMIUM	14	7	0.55	0.97	1.8	0.13	ND	6.4
COBALT	14	7	1.1	1.2	1.5	0.89	ND	2.8
COPPER	14	64	2.6	3.9	5.5	2.3	ND	8.6
LEAD	14	14	0.83	1.9	3.8	< 0	ND	14
MAGNESIUM	10	100	12100	11537	13419	9655	6320	14800
MERCURY	14	14	0.050	0.057	0.067	0.047	ND	0.10
NICKEL	14	7	1.1	1.4	1.9	0.92	ND	4.4
SILVER	14	7	0.65	0.89	1.2	0.55	ND	2.8
THALLIUM	14	7	1.8	2.0	2.5	1.5	ND	4.0
VANADIUM	14	7	1.2	1.5	2.1	0.80	ND	5.6
ZINC	14	43	7.0	19	38	0.12	ND	136
New Lenox Road Bridge								
ARSENIC	15	7	1.5	2.0	2.5	1.5	ND	3.3
BARIUM	15	100	17	17	20	15	12	26
BERYLLIUM	15	7	0.050	0.097	0.13	0.066	ND	0.11
CALCIUM	10	100	33350	31240	36109	26371	16400	39400
CHROMIUM	15	20	0.50	1.1	1.8	0.36	ND	5.0
COBALT	15	7	1.2	1.2	1.4	0.96	ND	1.8
COPPER	15	53	1.8	2.7	3.7	1.6	ND	7.3
LEAD	15	13	1.0	1.6	2.9	0.34	ND	11
MAGNESIUM	10	100	11900	11827	13865	9789	6630	16100
MERCURY	15	7	0.050	0.053	0.060	0.047	ND	0.10
SELENIUM	15	7	1.8	1.8	2.1	1.5	ND	2.9
SILVER	15	7	0.60	0.91	1.2	0.59	ND	2.7
VANADIUM	15	7	1.2	1.4	1.9	0.95	ND	4.3
ZINC	15	33	5.2	15	31	< 0	ND	122

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Table C-5
Surface Water
Summary of Detected Metals (µg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Woods Pond Headwaters								
BARIUM	14	100	16	17	18	15	12	23
CALCIUM	9	100	32900	31600	36522	26678	19100	39800
CHROMIUM	14	14	0.55	0.86	1.4	0.31	ND	4.3
COPPER	14	71	2.0	2.5	3.3	1.6	ND	5.5
MAGNESIUM	9	100	11800	11651	13862	9441	6630	16000
MERCURY	14	21	0.050	0.071	0.096	0.046	ND	0.21
ZINC	14	21	4.9	8.6	15	1.9	ND	52
Above Woods Pond Dam								
BARIUM	13	100	15	16	18	14	11	24
CADMIUM	13	8	0.15	0.21	0.27	0.15	ND	0.21
CALCIUM	9	100	31400	29533	33222	25845	18600	35600
CHROMIUM	13	15	0.45	0.64	0.85	0.42	ND	1.5
COPPER	13	54	1.6	2.1	3.0	1.3	ND	4.4
MAGNESIUM	9	100	11300	11252	13127	9377	6370	15200
MERCURY	13	8	0.050	0.054	0.062	0.046	ND	0.10
SILVER	13	8	0.80	0.92	1.3	0.57	ND	2.7
THALLIUM	13	8	1.8	2.1	2.6	1.5	ND	4.1
ZINC	13	23	4.4	72	204	< 0	ND	860
Schweitzer/Lenoxdale Bridge								
ANTIMONY	14	7	2.5	2.6	3.4	1.8	ND	5.2
BARIUM	14	100	14	16	18	14	12	22
CADMIUM	14	7	0.15	0.21	0.27	0.15	ND	0.30
CALCIUM	10	100	31300	30790	34258	27322.4	19200	36800
CHROMIUM	14	21	0.58	0.70	0.93	0.47	ND	1.7
COPPER	14	57	1.4	1.8	2.3	1.2	ND	4.2
MAGNESIUM	10	100	11100	11341	13179	9503	6540	15600
MERCURY	14	7	0.050	0.054	0.061	0.046	ND	0.10
SELENIUM	14	7	1.8	1.9	2.2	1.6	ND	3.3
ZINC	14	29	4.2	6.7	11	2.3	ND	35

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Table C-5
Surface Water
Summary of Detected Metals (µg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Discrete Sampling - Reach 5A								
BARIUM	2	100	21	21	NA	NA	21	21
CALCIUM	2	100	38600	38600	NA	NA	38300	38900
MAGNESIUM	2	100	15700	15700	NA	NA	15500	15900
MERCURY	2	50	0.080	0.080	NA	NA	ND	0.11
VANADIUM	2	50	2.2	2.2	NA	NA	ND	3.0
ZINC	2	100	4.0	4.0	NA	NA	3.1	4.9
Discrete Sampling - Reach 5B								
BARIUM	1	100	NA	14	NA	NA	NA	NA
CALCIUM	1	100	NA	17400	NA	NA	NA	NA
COPPER	1	100	NA	4.8	NA	NA	NA	NA
LEAD	1	100	NA	6.9	NA	NA	NA	NA
MAGNESIUM	1	100	NA	6490	NA	NA	NA	NA
VANADIUM	1	100	NA	1.6	NA	NA	NA	NA
Discrete Sampling - Reach 5C								
ARSENIC	6	17	1.1	1.4	2.1	0.68	ND	3.1
BARIUM	6	67	12	13	18	7.8	ND	20
CALCIUM	6	100	31000	24658	36862	12455	1950	37500
COPPER	6	67	3.1	3.1	4.9	1.2	ND	5.7
LEAD	6	33	1.0	0.90	1.1	0.68	ND	1.1
MAGNESIUM	6	100	9465	8613	13132	4093	726	14400
TIN	6	17	1.4	1.5	1.9	1.2	ND	2.3
VANADIUM	6	50	1.7	2.1	3.2	0.95	ND	4.1
ZINC	6	50	8.1	8.4	13	3.9	ND	18

Notes:

1. All EPA (1998-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.
5. NA = Analysis not conducted due to sample size (n<3).

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Table C-6
Surface Water
Summary of Detected Dissolved Metals (µg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Holmes Road Bridge								
BARIUM, DISSOLVED	15	100	15	17	20	14	6.8	31
BERYLLIUM, DISSOLVED	15	7	0.098	0.10	0.13	0.070	ND	0.13
CADMIUM, DISSOLVED	15	7	0.15	0.22	0.29	0.16	ND	0.31
CALCIUM, DISSOLVED	10	100	31925	30395	36658	24132	11900	43000
COBALT, DISSOLVED	15	7	1.2	1.2	1.4	0.93	ND	2.2
COPPER, DISSOLVED	15	13	0.85	1.1	1.4	0.75	ND	3.0
LEAD, DISSOLVED	15	7	0.65	0.72	0.87	0.57	ND	1.1
MAGNESIUM, DISSOLVED	10	100	11155	11183	13924	8442	3810	16900
MERCURY, DISSOLVED	15	13	0.050	0.055	0.062	0.048	ND	0.10
SELENIUM, DISSOLVED	15	7	1.8	1.9	2.3	1.5	ND	4.0
SILVER, DISSOLVED	15	13	0.83	0.99	1.3	0.66	ND	2.9
ZINC, DISSOLVED	15	27	2.6	2.7	3.4	1.9	ND	5.7
Adjacent to Joseph Drive								
BARIUM, DISSOLVED	15	100	15	17	20	14	7.6	32
CALCIUM, DISSOLVED	10	100	31950	30910	36968	24852	11200	42400
CHROMIUM, DISSOLVED	15	7	0.45	0.63	0.84	0.42	ND	1.7
COBALT, DISSOLVED	15	7	1.2	1.2	1.4	0.93	ND	2.2
COPPER, DISSOLVED	15	7	1.1	0.98	1.2	0.77	ND	1.1
MAGNESIUM, DISSOLVED	10	100	11650	11759	14463	9055	4120	17500
MERCURY, DISSOLVED	15	7	0.050	0.053	0.060	0.047	ND	0.10
SILVER, DISSOLVED	15	7	0.75	0.87	1.1	0.67	ND	1.5
ZINC, DISSOLVED	15	20	2.2	3.1	4.9	1.4	ND	15

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Table C-6
Surface Water
Summary of Detected Dissolved Metals (µg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Pittsfield WWTP								
BARIUM, DISSOLVED	14	100	15	14	16	12	7.4	18
CADMIUM, DISSOLVED	14	7	0.18	0.21	0.27	0.16	ND	0.25
CALCIUM, DISSOLVED	10	100	33050	30280	35331	25229	11800	37000
CHROMIUM, DISSOLVED	14	7	0.55	0.54	0.63	0.46	ND	0.77
COBALT, DISSOLVED	14	7	1.1	1.2	1.4	0.87	ND	2.7
COPPER, DISSOLVED	14	36	1.3	2.6	4.1	1.2	ND	7.5
MAGNESIUM, DISSOLVED	10	100	12150	11339	13426	9252	4320	14900
MERCURY, DISSOLVED	14	7	0.050	0.054	0.061	0.046	ND	0.10
ZINC, DISSOLVED	14	29	3.6	4.8	6.6	3.0	ND	10
New Lenox Road Bridge								
BARIUM, DISSOLVED	15	100	15	15	18	13	8.0	22
BERYLLIUM, DISSOLVED	15	13	0.10	0.14	0.22	0.053	ND	0.67
CALCIUM, DISSOLVED	10	100	33050	31190	36335	26045	15100	41400
CHROMIUM, DISSOLVED	15	13	0.45	0.73	1.2	0.30	ND	3.7
COPPER, DISSOLVED	15	53	1.3	2.9	5.1	0.72	ND	17
MAGNESIUM, DISSOLVED	10	100	12050	11695	13863	9527	5480	16200
MERCURY, DISSOLVED	15	13	0.050	0.062	0.080	0.044	ND	0.18
ZINC, DISSOLVED	15	27	4.0	5.4	8.8	1.9	ND	29

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Table C-6
Surface Water
Summary of Detected Dissolved Metals (µg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Woods Pond Headwaters								
BARIUM, DISSOLVED	14	100	15	15	17	14	10	21
BERYLLIUM, DISSOLVED	14	7	0.078	0.10	0.13	0.068	ND	0.11
CALCIUM, DISSOLVED	9	100	33000	31244	36116	26372	18600	37800
CHROMIUM, DISSOLVED	14	21	0.45	0.86	1.4	0.35	ND	3.9
COBALT, DISSOLVED	14	7	1.2	1.2	1.4	0.95	ND	2.2
COPPER, DISSOLVED	14	43	1.5	1.9	2.7	1.1	ND	4.5
LEAD, DISSOLVED	14	7	0.80	0.77	0.93	0.61	ND	0.84
MAGNESIUM, DISSOLVED	9	100	11900	11540	13749	9331	6370	15300
MERCURY, DISSOLVED	14	7	0.050	0.054	0.061	0.046	ND	0.10
SELENIUM, DISSOLVED	14	7	1.7	1.8	2.2	1.4	ND	3.7
ZINC, DISSOLVED	14	21	3.5	4.0	5.1	2.9	ND	8.3
Above Woods Pond Dam								
BARIUM, DISSOLVED	14	100	15	15	17	13	11	22
CADMIUM, DISSOLVED	14	7	0.18	0.23	0.30	0.17	ND	0.28
CALCIUM, DISSOLVED	9	100	30400	29600	33343	25857	18700	35700
CHROMIUM, DISSOLVED	14	7	0.52	0.71	1.1	0.32	ND	3.2
COPPER, DISSOLVED	14	36	1.4	1.6	2.2	1.0	ND	4.5
LEAD, DISSOLVED	14	7	0.78	0.76	0.93	0.59	ND	1.0
MAGNESIUM, DISSOLVED	9	100	10800	11258	13235	9281	6270	15400
MERCURY, DISSOLVED	14	7	0.050	0.054	0.061	0.046	ND	0.10
NICKEL, DISSOLVED	14	7	1.1	1.5	2.2	0.81	ND	5.7
ZINC, DISSOLVED	14	21	3.6	6.08	11	1.0	ND	38

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Table C-6
Surface Water
Summary of Detected Dissolved Metals (µg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Schweitzer/Lenoxdale Bridge								
ANTIMONY, DISSOLVED	14	7	2.6	2.8	3.7	2.0	ND	6.2
BARIUM, DISSOLVED	14	100	14	15	17	13	10	23
BERYLLIUM, DISSOLVED	14	7	0.088	0.10	0.14	0.070	ND	0.11
CALCIUM, DISSOLVED	10	100	31000	30630	34013	27247	19200	36900
CHROMIUM, DISSOLVED	14	7	0.48	0.56	0.70	0.42	ND	1.4
COPPER, DISSOLVED	14	36	1.1	1.4	2.0	0.91	ND	3.8
MAGNESIUM, DISSOLVED	10	100	10950	11240	13067	9413	6430	15600
MERCURY, DISSOLVED	14	14	0.050	0.059	0.070	0.047	ND	0.12
ZINC, DISSOLVED	14	29	3.3	3.5	4.5	2.6	ND	6.8

Notes:

1. All EPA (1998-99) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.

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Table C-7
Surface Water
Summary of Detected Appendix IX VOCs (µg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Holmes Road Bridge								
ACETONE	4	50	2.4	2.2	2.8	1.5	ND	2.7
CHLOROBENZENE	5	80	1.0	1.1	1.6	0.54	ND	1.9
TRICHLOROETHYLENE (TCE)	5	60	0.61	0.52	0.75	0.29	ND	0.77
VINYL CHLORIDE	5	60	0.54	0.53	0.79	0.27	ND	0.93
Adjacent to Joseph Drive								
ACETONE	4	50	2.4	2.2	2.8	1.5	ND	2.7
CHLOROBENZENE	5	40	0.25	0.55	0.92	0.18	ND	1.1
VINYL CHLORIDE	5	20	0.25	0.27	0.32	0.23	ND	0.36
Pittsfield WWTP								
ACETONE	3	33	2.2	2.5	4.3	0.79	ND	4.2
BROMODICHLOROMETHANE	4	50	0.40	1.1	2.5	< 0	ND	3.2
CHLOROBENZENE	4	25	0.25	0.41	0.73	0.09	ND	0.89
CHLOROFORM	4	50	1.1	1.5	3.0	< 0	ND	3.4
DIBROMOCHLOROMETHANE	4	25	0.25	0.69	1.6	< 0	ND	2.0
New Lenox Road Bridge								
ACETONE	3	33	2.6	2.5	3.9	1.1	ND	3.7
BROMODICHLOROMETHANE	5	40	0.25	0.70	1.4	< 0	ND	2.1
CHLOROBENZENE	5	20	0.25	0.36	0.57	0.14	ND	0.78
CHLOROFORM	5	60	2.1	1.8	3.1	0.40	ND	3.8
DIBROMOCHLOROMETHANE	5	20	0.25	0.60	1.3	< 0	ND	2.0
Woods Pond Headwaters								
ACETONE	3	33	2.8	2.7	4.3	1.1	ND	4.0
BROMODICHLOROMETHANE	5	60	0.57	0.53	0.78	0.28	ND	0.87
CHLOROBENZENE	5	20	0.25	0.31	0.42	0.19	ND	0.54
CHLOROFORM	5	60	2.0	2.1	3.7	0.42	ND	4.1

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Table C-7
Surface Water
Summary of Detected Appendix IX VOCs (µg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Above Woods Pond Dam								
ACETONE	2	50	3.2	3.2	NA	NA	ND	4.1
BROMODICHLOROMETHANE	4	50	0.40	0.51	0.86	0.16	ND	1.0
CHLOROFORM	4	50	0.83	1.0	2.0	0.07	ND	2.2
DIBROMOCHLOROMETHANE	4	25	0.25	0.44	0.81	0.06	ND	1.0
Schweitzer/Lenoxdale Bridge								
ACETONE	2	50	3.0	3.0	NA	NA	ND	3.6
BROMODICHLOROMETHANE	4	25	0.25	0.37	0.62	0.13	ND	0.74
CHLOROFORM	4	50	0.73	0.83	1.5	0.14	ND	1.6
DIBROMOCHLOROMETHANE	4	25	0.25	0.37	0.62	0.13	ND	0.74

Notes:

1. All EPA (1998) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.
5. NA = Analysis not conducted due to sample size (n<3).

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Table C-8
Surface Water
Summary of Detected Appendix IX SVOCs (µg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Holmes Road Bridge								
1,4-DICHLOROBENZENE	15	7	5.0	5.7	6.9	4.5	ND	0.60
BIS(2-ETHYLHEXYL) PHTHALATE	15	7	5.0	4.8	5.4	4.2	ND	14
DIETHYL PHTHALATE	15	13	5.0	4.5	5.3	3.6	ND	0.70
Adjacent to Joseph Drive								
BIS(2-ETHYLHEXYL) PHTHALATE	15	7	5.0	5.3	6.0	4.7	ND	10
PYRENE	15	7	5.0	4.7	5.3	4.1	ND	0.50
Pittsfield WWTP								
FLUORANTHENE	14	7	5.0	4.7	5.4	4.1	ND	0.60
PYRENE	14	7	5.0	4.7	5.4	4.1	ND	0.60
New Lenox Road Bridge								
BIS(2-ETHYLHEXYL) PHTHALATE	15	7	5.0	4.7	5.3	4.2	ND	1.0
CHRYSENE	15	7	5.0	4.7	5.3	4.1	ND	0.50
FLUORANTHENE	15	7	5.0	4.7	5.3	4.2	ND	0.80
PHENANTHRENE	15	7	5.0	4.7	5.3	4.1	ND	0.60
PYRENE	15	7	5.0	4.7	5.3	4.2	ND	0.80
Woods Pond Headwaters								
BIS(2-ETHYLHEXYL) PHTHALATE	14	7	5.0	4.8	5.4	4.2	ND	120
DIETHYL PHTHALATE	14	14	5.0	13	29	< 0	ND	0.90
Above Woods Pond Dam								
BIS(2-ETHYLHEXYL) PHTHALATE	13	8	5.0	4.7	5.4	4.1	ND	0.70
Schweitzer/Lenoxdale Bridge								
BIS(2-ETHYLHEXYL) PHTHALATE	14	7	5.0	6.5	8.6	4.3	ND	9.2
DI-N-OCTYL PHTHALATE	14	7	5.0	4.8	5.5	4.1	ND	0.50
INDENO(1,2,3-C,D)PYRENE	14	7	5.0	4.8	5.5	4.1	ND	0.50

Table C-8
Surface Water
Summary of Detected Appendix IX SVOCs (µg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Discrete Sampling - Reach 5A								
ACETOPHENONE	2	50	3.5	3.5	NA	NA	ND	2.0
DIETHYL PHTHALATE	2	50	2.9	2.9	NA	NA	ND	0.70
Discrete Sampling - Reach 5C								
BIS(2-ETHYLHEXYL) PHTHALATE	6	17	5.0	4.3	5.7	3.0	ND	1.0

Notes:

1. All EPA (1998-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.
5. NA = Analysis not conducted due to sample size (n<3).

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Table C-9
Surface Water
Summary of Detected Appendix IX Pesticides (µg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Pittsfield WWTP								
ENDOSULFAN I	14	7	0.025	0.031	0.041	0.020	ND	0.10
Discrete Sampling - Reach 5C								
DELTA-BHC	14	7	0.025	0.032	0.044	0.019	ND	0.11

Notes:

1. All EPA (1998-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.

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Table C-10
Surface Water
Summary of Detected Herbicides (µg/L)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Pittsfield WWTP								
2,4,5-T	13	8	0.048	0.054	0.065	0.043	ND	0.12
Schweitzer/Lenoxdale Bridge								
2,4,5-T	14	7	0.048	0.058	0.077	0.039	ND	0.18

Notes:

1. All EPA (1998-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.

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Table C-11
Sediment
Summary of Detected PCDDs/PCDFs (pg/g)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5A - Confluence to Pittsfield WWTP								
1,2,3,4,6,7,8-HPCDD	82	100	54	158	218	97	0.26	1886
1,2,3,4,6,7,8-HPCDF	82	99	76	145	195	94	ND	1777
1,2,3,4,7,8,9-HPCDF	82	96	15	25	35	15	ND	343
1,2,3,4,7,8-HXCDD	82	90	1.1	2.9	3.9	1.8	ND	26
1,2,3,4,7,8-HXCDF	82	100	31	41	51	30	0.14	353
1,2,3,6,7,8-HXCDD	82	91	3.3	9.4	13	6.0	ND	83
1,2,3,6,7,8-HXCDF	82	100	12	16	20	12	0.15	108
1,2,3,7,8,9-HXCDD	82	89	1.8	5.6	7.7	3.5	ND	50
1,2,3,7,8,9-HXCDF	82	93	4.3	6.2	7.7	4.6	ND	44
1,2,3,7,8-PECDD	82	87	1.5	2.9	3.7	2.0	ND	22
1,2,3,7,8-PECDF	82	99	14	21	28	14	ND	263
2,3,4,6,7,8-HXCDF	82	96	12	19	23	15	ND	84
2,3,4,7,8-PECDF	82	99	23	35	43	27	ND	209
2,3,7,8-TCDD	82	83	0.79	1.2	1.6	0.80	ND	13
2,3,7,8-TCDF	82	98	36	46	57	35	ND	331
HPCDD (TOTAL)	82	100	109	304	419	189	0.26	3633
HPCDF (TOTAL)	82	98	172	324	422	227	ND	3076
HXCDD (TOTAL)	82	89	27	86	120	52	ND	820
HXCDF (TOTAL)	82	99	166	274	336	211	ND	1389
OCDD	81	99	411	1074	1401	748	ND	6911
OCDF	82	98	148	234	316	152	ND	2933
PECDD (TOTAL)	82	87	7.2	23	33	12	ND	366
PECDF (TOTAL)	82	99	196	301	373	230	ND	2067
TCDD (TOTAL)	82	82	4.4	9.1	12	6.0	ND	84

Table C-11
Sediment
Summary of Detected PCDDs/PCDFs (pg/g)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
TCDF (TOTAL)	82	99	205	277	343	211	ND	1707
WHO TEQ	82	100	28	41	49	32	0.31	213
Reach 5B - Pittsfield WWTP to Roaring Brook Confluence								
1,2,3,4,6,7,8-HPCDD	20	95	37	57	89	26	ND	279
1,2,3,4,6,7,8-HPCDF	20	95	38	56	84	28	ND	240
1,2,3,4,7,8,9-HPCDF	20	70	3.1	4.8	7.0	2.6	ND	18
1,2,3,4,7,8-HXCDD	20	60	0.58	0.96	1.4	0.48	ND	4.3
1,2,3,4,7,8-HXCDF	20	85	7.6	14	22	6.6	ND	72
1,2,3,6,7,8-HXCDD	20	65	1.9	3.1	4.8	1.4	ND	14
1,2,3,6,7,8-HXCDF	20	85	7.2	8.6	12	4.7	ND	34
1,2,3,7,8,9-HXCDD	20	65	1.1	1.8	2.8	0.80	ND	9.1
1,2,3,7,8,9-HXCDF	20	60	1.6	2.3	3.5	1.1	ND	11
1,2,3,7,8-PECDD	20	60	0.56	1.2	1.8	0.51	ND	5.8
1,2,3,7,8-PECDF	20	85	6.9	12	19	5.8	ND	48
2,3,4,6,7,8-HXCDF	20	85	4.6	8.0	12	3.9	ND	36
2,3,4,7,8-PECDF	20	90	10	18	27	8.9	ND	77
2,3,7,8-TCDD	20	65	0.41	0.68	1.1	0.28	ND	3.8
2,3,7,8-TCDF	20	85	15	29	43	14	ND	104
HPCDD (TOTAL)	20	95	72	108	166	49	ND	501
HPCDF (TOTAL)	20	95	78	115	172	58	ND	468
HXCDD (TOTAL)	20	85	18	27	41	12	ND	109
HXCDF (TOTAL)	20	90	82	127	186	68	ND	453
OCDD	20	95	299	438	662	214	ND	1734
OCDF	20	90	38	64	97	30	ND	301
PECDD (TOTAL)	20	65	3.5	7.8	13	2.9	ND	44
PECDF (TOTAL)	20	90	155	170	243	97	ND	633

Table C-11
Sediment
Summary of Detected PCDDs/PCDFs (pg/g)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
TCDD (TOTAL)	20	65	3.3	4.6	7.2	2.1	ND	21
TCDF (TOTAL)	20	90	142	208	304	112	ND	731
WHO TEQ	20	100	12	20	29	10	0.43	78
Reach 5C - Roaring Brook Confluence to Woods Pond Headwaters								
1,2,3,4,6,7,8-HPCDD	28	89	145	477	720	234	ND	2380
1,2,3,4,6,7,8-HPCDF	28	89	110	739	1317	160	ND	7260
1,2,3,4,7,8,9-HPCDF	28	86	9.0	35	59	10	ND	323
1,2,3,4,7,8-HXCDD	28	68	2.2	8.7	14	2.9	ND	76
1,2,3,4,7,8-HXCDF	28	86	34	81	133	28	ND	726
1,2,3,6,7,8-HXCDD	28	71	5.1	26	42	10	ND	185
1,2,3,6,7,8-HXCDF	28	86	18	38	65	12	ND	337
1,2,3,7,8,9-HXCDD	28	71	3.3	15	23	6.3	ND	103
1,2,3,7,8,9-HXCDF	28	75	4.8	13	24	2.7	ND	139
1,2,3,7,8-PECDD	28	61	1.4	7.6	13	2.1	ND	71
1,2,3,7,8-PECDF	28	86	26	65	136	< 0	ND	1762
2,3,4,6,7,8-HXCDF	28	86	21	65	114	15	ND	630
2,3,4,7,8-PECDF	28	82	46	74	118	31	ND	504
2,3,7,8-TCDD	28	64	0.69	1.8	2.8	0.86	ND	11
2,3,7,8-TCDF	28	89	53	66	97	35	ND	407
HPCDD (TOTAL)	27	89	250	913	1406	421	ND	4766
HPCDF (TOTAL)	27	89	220	1378	2489	267	ND	13100
HXCDD (TOTAL)	27	85	40	215	353	77	ND	1619
HXCDF (TOTAL)	27	89	260	988	1692	283	ND	6915
OCDD	28	89	1300	3604	5482	1726	ND	20176
OCDF	28	86	130	545	900	189	ND	3650
PECDD (TOTAL)	27	78	11	56	105	7.2	ND	648

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Table C-11
Sediment
Summary of Detected PCDDs/PCDFs (pg/g)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
PECDF (TOTAL)	27	89	440	986	1608	364	ND	7308
TCDD (TOTAL)	27	81	9.2	24	39	8.7	ND	195
TCDF (TOTAL)	27	89	450	769	1177	361	ND	5035
WHO TEQ	28	100	46	94	149	39	0.45	662
Backwaters								
1,2,3,4,6,7,8-HPCDD	17	100	154	387	608	165	6.1	1371
1,2,3,4,6,7,8-HPCDF	17	100	250	423	637	209	9.4	1217
1,2,3,4,7,8,9-HPCDF	17	82	12	23	34	11	ND	70
1,2,3,4,7,8-HXCDD	17	76	2.5	6.3	10	2.7	ND	25
1,2,3,4,7,8-HXCDF	17	100	39	68	107	28	0.92	311
1,2,3,6,7,8-HXCDD	17	94	8.1	22	34	9.9	ND	73
1,2,3,6,7,8-HXCDF	17	100	31	52	81	23	1.2	223
1,2,3,7,8,9-HXCDD	17	94	5.0	14	21	6.1	ND	50
1,2,3,7,8,9-HXCDF	17	82	8.9	15	24	6.6	ND	64
1,2,3,7,8-PECDD	17	76	5.2	7.1	10	3.7	ND	22
1,2,3,7,8-PECDF	17	100	42	78	133	24	1.0	457
2,3,4,6,7,8-HXCDF	17	100	29	59	91	27	0.82	230
2,3,4,7,8-PECDF	17	100	54	124	191	56	1.8	495
2,3,7,8-TCDD	17	76	1.3	2.7	4.1	1.2	ND	12
2,3,7,8-TCDF	17	100	85	164	270	59	2.7	855
HPCDD (TOTAL)	17	100	283	743	1174	312	6.3	2652
HPCDF (TOTAL)	17	100	310	803	1220	386	16	2320
HXCDD (TOTAL)	17	100	66	170	266	74	2.6	605
HXCDF (TOTAL)	17	100	340	813	1264	362	10	2940
OCDD	17	100	1100	2799	4445	1153	40	10082
OCDF	17	100	173	331	508	154	4.6	1038

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Table C-11
Sediment
Summary of Detected PCDDs/PCDFs (pg/g)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
PECDD (TOTAL)	17	76	14	45	70	21	ND	133
PECDF (TOTAL)	17	100	653	1339	2093	585	17	5546
TCDD (TOTAL)	17	71	6.8	13	22	5.1	ND	65
TCDF (TOTAL)	17	100	800	1599	2585	613	28	7105
WHO TEQ	17	100	54	124	193	56	2.0	513
Reach 6 - Woods Pond								
1,2,3,4,6,7,8-HPCDD	42	98	39	1210	1962	458	ND	10834
1,2,3,4,6,7,8-HPCDF	42	88	40	1281	2189	372	ND	15378
1,2,3,4,7,8,9-HPCDF	42	55	1.7	57	91	23	ND	508
1,2,3,4,7,8-HXCDD	42	48	0.75	19	31	7.4	ND	180
1,2,3,4,7,8-HXCDF	42	81	6.7	140	221	60	ND	1043
1,2,3,6,7,8-HXCDD	42	74	3.2	65	105	25	ND	557
1,2,3,6,7,8-HXCDF	42	83	5.3	105	167	43	ND	919
1,2,3,7,8,9-HXCDD	42	71	1.9	41	67	15	ND	406
1,2,3,7,8,9-HXCDF	42	57	0.97	27	43	11	ND	227
1,2,3,7,8-PECDD	42	67	2.6	15	23	6.5	ND	113
1,2,3,7,8-PECDF	42	81	7.5	82	131	34	ND	621
2,3,4,6,7,8-HXCDF	42	79	5.8	128	202	53	ND	981
2,3,4,7,8-PECDF	42	83	13	155	237	72	ND	1020
2,3,7,8-TCDD	42	55	0.55	4.5	6.9	2.2	ND	27
2,3,7,8-TCDF	42	93	18	200	318	83	ND	1490
HPCDD (TOTAL)	42	88	77	2292	3725	860	ND	21205
HPCDF (TOTAL)	42	88	74	2519	4275	764	ND	29598
HXCDD (TOTAL)	42	79	22	545	877	213	ND	4685
HXCDF (TOTAL)	42	74	79	1938	3111	764	ND	17300
OCDD	42	100	288	7585	12155	3015	1.0	64240

Table C-11
Sediment
Summary of Detected PCDDs/PCDFs (pg/g)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
OCDF	42	79	31	1003	1684	322	ND	11598
PECDD (TOTAL)	42	55	1.9	89	142	37	ND	584
PECDF (TOTAL)	42	79	127	2068	3205	930	ND	13139
TCDD (TOTAL)	42	55	0.70	37	63	11	ND	467
TCDF (TOTAL)	42	88	168	2234	3512	955	ND	14657
WHO TEQ	42	100	15	199	306	92	0.19	1133
Reach 8 - Rising Pond								
1,2,3,4,6,7,8-HPCDD	30	100	845	1638	2314	963	16	5646
1,2,3,4,6,7,8-HPCDF	30	100	244	1110	1842	379	7.0	8060
1,2,3,4,7,8,9-HPCDF	30	90	22	42	60	24	ND	163
1,2,3,4,7,8-HXCDD	30	83	8.1	16	23	9.6	ND	61
1,2,3,4,7,8-HXCDF	30	100	41	80	126	34	3.4	927
1,2,3,6,7,8-HXCDD	30	87	54	101	145	58	ND	354
1,2,3,6,7,8-HXCDF	30	100	26	82	127	36	1.9	591
1,2,3,7,8,9-HXCDD	30	87	19	39	56	23	ND	169
1,2,3,7,8,9-HXCDF	30	87	8.5	17	25	8.6	ND	146
1,2,3,7,8-PECDD	30	83	7.4	11	15	7.1	ND	39
1,2,3,7,8-PECDF	30	100	22	82	163	0.66	4.2	1661
2,3,4,6,7,8-HXCDF	30	97	39	75	107	42	ND	396
2,3,4,7,8-PECDF	30	100	69	104	155	54	5.4	1003
2,3,7,8-TCDD	30	77	2.6	3.8	5.4	2.3	ND	29
2,3,7,8-TCDF	30	100	75	146	240	53	12	1866
HPCDD (TOTAL)	30	100	1692	3984	5664	2303	37	14194
HPCDF (TOTAL)	30	100	700	2693	4308	1079	15	17574
HXCDD (TOTAL)	30	97	339	865	1250	480	ND	3547
HXCDF (TOTAL)	30	100	576	1459	2232	685	10	8499

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Table C-11
Sediment
Summary of Detected PCDDs/PCDFs (pg/g)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
OCDD	30	100	7646	15091	21301	8881	112	48080
OCDF	30	100	389	1127	1701	553	11	5546
PECDD (TOTAL)	30	87	82	136	194	78	ND	629
PECDF (TOTAL)	30	100	884	1375	1998	753	16	11688
TCDD (TOTAL)	30	83	15	45	84	5.9	ND	574
TCDF (TOTAL)	30	100	1021	1390	2060	720	33	13464
WHO TEQ	30	100	95	156	219	94	7.6	800
Reach 9 - Rising Pond Dam to Connecticut Border								
1,2,3,4,6,7,8-HPCDD	2	100	25	25	NA	NA	8.2	42
1,2,3,4,6,7,8-HPCDF	2	100	9.7	9.7	NA	NA	5.0	14
1,2,3,4,7,8,9-HPCDF	2	100	0.41	0.41	NA	NA	0.31	0.50
1,2,3,4,7,8-HXCDD	2	50	0.17	0.17	NA	NA	ND	0.13
1,2,3,4,7,8-HXCDF	2	100	0.82	0.82	NA	NA	0.50	1.1
1,2,3,6,7,8-HXCDD	2	100	1.0	1.0	NA	NA	0.51	1.5
1,2,3,6,7,8-HXCDF	2	100	0.55	0.55	NA	NA	0.35	0.76
1,2,3,7,8,9-HXCDD	2	100	0.43	0.43	NA	NA	0.27	0.59
1,2,3,7,8,9-HXCDF	2	50	0.13	0.13	NA	NA	ND	0.10
1,2,3,7,8-PECDD	2	50	0.083	0.083	NA	NA	ND	0.091
1,2,3,7,8-PECDF	2	100	1.1	1.1	NA	NA	0.67	1.5
2,3,4,6,7,8-HXCDF	2	100	0.74	0.74	NA	NA	0.40	1.1
2,3,4,7,8-PECDF	2	100	2.3	2.3	NA	NA	1.0	3.6
2,3,7,8-TCDD	2	100	0.15	0.15	NA	NA	0.061	0.24
2,3,7,8-TCDF	2	100	2.7	2.7	NA	NA	1.9	3.5
HPCDD (TOTAL)	2	100	50	50	NA	NA	16	84
HPCDF (TOTAL)	2	100	23	23	NA	NA	14	31
HXCDD (TOTAL)	2	100	6.5	6.5	NA	NA	2.7	10

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Table C-11
Sediment
Summary of Detected PCDDs/PCDFs (pg/g)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
HXCDF (TOTAL)	2	100	11	11	NA	NA	6.5	16
OCDD	2	100	147	147	NA	NA	52	241
OCDF	2	100	7.2	7.2	NA	NA	3.2	11
PECDD (TOTAL)	2	100	0.76	0.76	NA	NA	0.42	1.1
PECDF (TOTAL)	2	100	24	24	NA	NA	11	37
TCDD (TOTAL)	2	100	0.43	0.43	NA	NA	0.17	0.69
TCDF (TOTAL)	2	100	26	26	NA	NA	16	36
WHO TEQ	2	100	2.5	2.5	NA	NA	1.2	3.7

Notes:

1. All EPA (1998-02) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.
5. NA = Analysis not conducted due to sample size (n<3).

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Table C-12
Sediment
Summary of Detected Appendix IX SVOCs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5A - Confluence to Pittsfield WWTP								
1,2,4,5-TETRACHLOROBENZENE	81	17	0.23	0.29	0.35	0.22	ND	0.44
1,2,4-TRICHLOROBENZENE	81	48	0.19	0.24	0.31	0.16	ND	0.55
1,2-DICHLOROBENZENE	81	1	0.23	0.31	0.38	0.24	ND	0.024
1,3-DICHLOROBENZENE	81	26	0.22	0.27	0.34	0.20	ND	0.42
1,4-DICHLOROBENZENE	81	81	0.11	0.19	0.25	0.14	ND	1.2
2,6-DICHLOROPHENOL	81	1	0.23	0.31	0.38	0.25	ND	0.41
2-METHYLNAPHTHALENE	81	86	0.087	0.21	0.30	0.13	ND	1.2
2-METHYLPHENOL (O-CRESOL)	81	1	0.23	0.31	0.38	0.24	ND	0.023
4-METHYLPHENOL	81	12	0.22	0.29	0.36	0.22	ND	0.14
ACENAPHTHENE	81	88	0.12	0.24	0.33	0.16	ND	2.6
ACENAPTHYLENE	81	91	0.12	0.24	0.32	0.15	ND	2.3
ACETOPHENONE	81	1	0.23	0.30	0.37	0.24	ND	0.023
ANILINE	69	1	0.60	0.80	1.0	0.60	ND	0.61
ANTHRACENE	81	95	0.37	0.96	1.4	0.54	ND	11
BENZO(A)ANTHRACENE	81	98	0.96	2.0	2.6	1.3	ND	15
BENZO(A)PYRENE	81	98	0.94	1.6	2.0	1.2	ND	12
BENZO(B)FLUORANTHENE	81	98	0.85	1.4	1.8	0.99	ND	14
BENZO(GHI)PERYLENE	81	98	0.39	0.67	0.85	0.48	ND	4.7
BENZO(K)FLUORANTHENE	81	96	0.97	1.6	2.0	1.1	ND	11
BIS(2-ETHYLHEXYL) PHTHALATE	81	69	0.12	0.17	0.21	0.13	ND	0.46
BUTYLBENZYLPHTHALATE	81	5	0.23	0.30	0.37	0.23	ND	0.062
CHRYSENE	81	98	1.0	1.9	2.4	1.3	ND	14
DIBENZO(A,H)ANTHRACENE	81	95	0.14	0.24	0.32	0.16	ND	2.3
DIBENZOFURAN	81	83	0.12	0.27	0.38	0.16	ND	3.0
DI-N-BUTYL PHTHALATE	81	7	0.23	0.30	0.37	0.23	ND	0.32

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Table C-12
Sediment
Summary of Detected Appendix IX SVOCs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
FLUORANTHENE	81	98	2.0	3.6	4.8	2.4	ND	39
FLUORENE	81	91	0.20	0.44	0.61	0.27	ND	4.1
INDENO(1,2,3-C,D)PYRENE	81	98	0.40	0.71	0.92	0.51	ND	4.9
NAPHTHALENE	81	96	0.17	0.33	0.48	0.19	ND	4.7
N-NITROSO-DI-N-BUTYLAMINE	81	2	0.23	0.30	0.37	0.24	ND	0.056
N-NITROSO-DI-N-PROPYLAMINE	81	1	0.23	0.31	0.38	0.25	ND	0.48
PENTACHLOROBENZENE	81	46	0.20	0.24	0.31	0.17	ND	0.58
PENTACHLORONITROBENZENE	81	1	0.23	0.31	0.38	0.25	ND	0.39
PHENANTHRENE	81	98	1.3	3.1	4.4	1.8	ND	42
PHENOL	81	7	0.23	0.30	0.36	0.23	ND	0.58
PYRENE	81	98	1.9	3.4	4.5	2.4	ND	32
Reach 5B - Pittsfield WWTP to Roaring Brook Confluence								
1,2,4-TRICHLOROBENZENE	20	5	0.23	0.23	0.25	0.21	ND	0.056
1,2-DICHLOROBENZENE	20	5	0.23	0.22	0.25	0.20	ND	0.043
1,3-DICHLOROBENZENE	20	5	0.23	0.23	0.25	0.21	ND	0.048
1,4-DICHLOROBENZENE	20	45	0.21	0.16	0.21	0.12	ND	0.22
2-METHYLNAPHTHALENE	20	45	0.21	0.16	0.20	0.11	ND	0.26
ACENAPHTHENE	20	35	0.22	0.19	0.25	0.14	ND	0.53
ACENAPTHYLENE	20	45	0.21	0.16	0.19	0.12	ND	0.14
ACETOPHENONE	20	5	0.23	0.22	0.25	0.20	ND	0.039
ANTHRACENE	20	55	0.21	0.21	0.29	0.13	ND	0.85
BENZO(A)ANTHRACENE	20	80	0.24	0.35	0.52	0.17	ND	1.8
BENZO(A)PYRENE	20	75	0.25	0.33	0.47	0.19	ND	1.5
BENZO(B)FLUORANTHENE	20	75	0.24	0.31	0.48	0.14	ND	1.8
BENZO(GHI)PERYLENE	20	75	0.18	0.19	0.24	0.13	ND	0.54
BENZO(K)FLUORANTHENE	20	75	0.25	0.36	0.53	0.19	ND	1.8

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Table C-12
Sediment
Summary of Detected Appendix IX SVOCs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
BIS(2-ETHYLHEXYL) PHTHALATE	20	50	0.17	0.15	0.19	0.10	ND	0.14
BUTYLBENZYLPHTHALATE	20	5	0.23	0.23	0.25	0.20	ND	0.047
CHRYSENE	20	80	0.24	0.37	0.56	0.19	ND	1.9
DIBENZO(A,H)ANTHRACENE	20	60	0.068	0.13	0.17	0.085	ND	0.22
DIBENZOFURAN	20	40	0.22	0.17	0.21	0.12	ND	0.29
DIETHYL PHTHALATE	20	5	0.23	0.23	0.25	0.20	ND	0.050
DI-N-BUTYL PHTHALATE	20	5	0.23	0.23	0.25	0.22	ND	0.16
FLUORANTHENE	20	85	0.24	0.59	0.96	0.23	ND	3.6
FLUORENE	20	50	0.21	0.18	0.23	0.13	ND	0.53
INDENO(1,2,3-C,D)PYRENE	20	80	0.16	0.17	0.22	0.11	ND	0.54
NAPHTHALENE	20	50	0.21	0.17	0.22	0.13	ND	0.47
PENTACHLOROBENZENE	20	20	0.22	0.20	0.24	0.16	ND	0.027
PHENANTHRENE	20	75	0.25	0.49	0.80	0.19	ND	3.1
PYRENE	20	85	0.24	0.60	0.98	0.22	ND	3.8
Reach 5C - Roaring Brook Confluence to Woods Pond Headwaters								
1,2,4-TRICHLOROBENZENE	28	36	0.22	0.21	0.26	0.17	ND	0.27
1,2-DICHLOROBENZENE	28	7	0.26	0.36	0.47	0.26	ND	0.68
1,3-DICHLOROBENZENE	28	39	0.22	0.23	0.29	0.16	ND	0.29
1,4-DICHLOROBENZENE	28	64	0.22	0.31	0.41	0.21	ND	1.0
2-METHYLNAPHTHALENE	28	39	0.22	0.26	0.41	0.12	ND	2.2
2-METHYLPHENOL (O-CRESOL)	28	4	0.26	0.35	0.45	0.25	ND	0.043
4-METHYLPHENOL	28	29	0.23	0.27	0.34	0.20	ND	0.40
ACENAPHTHENE	28	21	0.23	0.41	0.68	0.14	ND	3.9
ACENAPTHYLENE	28	21	0.23	0.43	0.73	0.13	ND	4.3
ANTHRACENE	28	32	0.23	0.75	1.7	< 0	ND	14
BENZO(A)ANTHRACENE	28	86	0.22	0.99	2.4	< 0	ND	20

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Table C-12
Sediment
Summary of Detected Appendix IX SVOCs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
BENZO(A)PYRENE	28	86	0.24	0.88	1.9	< 0	ND	15
BENZO(B)FLUORANTHENE	28	82	0.22	0.85	1.8	< 0	ND	14
BENZO(GHI)PERYLENE	28	82	0.22	0.43	0.78	0.088	ND	4.9
BENZO(K)FLUORANTHENE	28	82	0.24	0.79	1.6	< 0	ND	12
BIS(2-ETHYLHEXYL) PHTHALATE	28	50	0.24	0.67	1.3	0.068	ND	8.6
CHRYSENE	28	89	0.24	0.89	1.9	< 0	ND	14
DIBENZO(A,H)ANTHRACENE	28	57	0.20	0.23	0.39	0.078	ND	2.3
DIBENZOFURAN	28	7	0.26	0.50	0.84	0.15	ND	5.0
FLUORANTHENE	28	89	0.25	2.0	4.8	< 0	ND	40
FLUORENE	28	25	0.23	0.62	1.3	< 0	ND	10
INDENO(1,2,3-C,D)PYRENE	28	82	0.21	0.44	0.79	0.082	ND	5.0
METHAPYRILENE	28	4	0.28	0.38	0.49	0.28	ND	0.82
NAPHTHALENE	28	57	0.21	0.38	0.79	< 0	ND	6.0
PHENANTHRENE	28	68	0.22	2.3	6.1	< 0	ND	54
PHENOL	28	7	0.26	0.35	0.45	0.25	ND	0.29
PYRENE	28	89	0.27	1.9	4.5	< 0	ND	36
Backwaters								
1,2,4-TRICHLOROBENZENE	15	13	0.55	0.57	0.74	0.40	ND	0.084
1,4-DICHLOROBENZENE	16	63	0.24	0.27	0.35	0.19	ND	0.26
2-METHYLNAPHTHALENE	15	13	0.55	0.57	0.74	0.40	ND	0.078
4-METHYLPHENOL	15	13	0.49	0.55	0.72	0.39	ND	0.15
ACENAPTHYLENE	15	13	0.55	0.58	0.74	0.42	ND	0.15
ANTHRACENE	14	14	0.52	0.52	0.67	0.37	ND	0.10
BENZO(A)ANTHRACENE	15	80	0.17	0.22	0.31	0.13	ND	0.61
BENZO(A)PYRENE	14	50	0.32	0.36	0.48	0.25	ND	0.70
BENZO(B)FLUORANTHENE	15	67	0.20	0.30	0.41	0.19	ND	0.80

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Table C-12
Sediment
Summary of Detected Appendix IX SVOCs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
BENZO(GHI)PERYLENE	15	67	0.19	0.26	0.35	0.17	ND	0.42
BENZO(K)FLUORANTHENE	15	67	0.23	0.32	0.43	0.21	ND	0.84
BIS(2-ETHYLHEXYL) PHTHALATE	15	40	0.49	0.44	0.60	0.27	ND	0.62
CHRYSENE	16	75	0.24	0.28	0.38	0.18	ND	0.89
DIBENZO(A,H)ANTHRACENE	13	8	0.55	0.56	0.70	0.42	ND	0.14
DIBENZOFURAN	14	7	0.55	0.55	0.69	0.41	ND	0.050
DIETHYL PHTHALATE	15	7	0.55	0.55	0.67	0.42	ND	0.13
FLUORANTHENE	15	80	0.24	0.36	0.55	0.18	ND	1.5
FLUORENE	14	7	0.55	0.55	0.69	0.42	ND	0.072
INDENO(1,2,3-C,D)PYRENE	15	67	0.15	0.25	0.34	0.15	ND	0.40
NAPHTHALENE	16	50	0.24	0.37	0.53	0.21	ND	0.17
PHENANTHRENE	15	80	0.18	0.28	0.40	0.15	ND	0.87
PYRENE	17	88	0.30	0.36	0.53	0.20	ND	1.5
TOTAL PAH	2	100	5.3	5.3	NA	NA	1.3	9.2
TOTAL PAH (HIGH MW)	2	100	1.6	1.6	NA	NA	0.40	2.9
TOTAL PAH (LOW MW)	2	100	3.6	3.6	NA	NA	0.94	6.3
Reach 6 - Woods Pond								
1,2,4-TRICHLOROBENZENE	28	36	0.27	0.28	0.34	0.22	ND	0.25
1,2-DICHLOROBENZENE	24	17	0.33	0.32	0.39	0.26	ND	0.14
1,3-DICHLOROBENZENE	28	39	0.30	0.29	0.34	0.24	ND	0.40
1,4-DICHLOROBENZENE	29	52	0.35	0.53	0.69	0.38	ND	1.6
2-METHYLNAPHTHALENE	28	50	0.25	0.23	0.27	0.18	ND	0.33
2-METHYLPHENOL (O-CRESOL)	23	4	0.34	0.36	0.42	0.30	ND	0.057
4-METHYLPHENOL	28	39	0.34	0.39	0.45	0.33	ND	0.88
ACENAPHTHENE	27	37	0.25	0.26	0.30	0.21	ND	0.23
ACENAPTHYLENE	25	24	0.31	0.29	0.35	0.23	ND	0.19

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Table C-12
Sediment
Summary of Detected Appendix IX SVOCs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
ACETOPHENONE	25	24	0.34	0.55	1.0	0.086	ND	6.0
ANTHRACENE	27	30	0.34	0.34	0.41	0.26	ND	0.93
BENZO(A)ANTHRACENE	29	55	0.34	0.55	0.74	0.35	ND	2.6
BENZO(A)PYRENE	30	57	0.36	0.61	0.82	0.40	ND	2.6
BENZO(B)FLUORANTHENE	29	55	0.34	0.60	0.78	0.41	ND	1.8
BENZO(GHI)PERYLENE	29	55	0.34	0.49	0.63	0.34	ND	1.6
BENZO(K)FLUORANTHENE	29	55	0.35	0.67	0.90	0.44	ND	2.4
BIS(2-ETHYLHEXYL) PHTHALATE	25	40	0.34	0.44	0.62	0.27	ND	1.9
CHRYSENE	31	58	0.34	0.74	1.0	0.46	ND	3.2
DIBENZO(A,H)ANTHRACENE	27	48	0.27	0.26	0.31	0.21	ND	0.39
DIBENZOFURAN	25	28	0.29	0.27	0.32	0.21	ND	0.13
FLUORANTHENE	31	58	0.35	1.1	1.6	0.60	ND	5.0
FLUORENE	28	43	0.28	0.27	0.31	0.22	ND	0.33
INDENO(1,2,3-C,D)PYRENE	29	55	0.34	0.45	0.57	0.32	ND	1.4
NAPHTHALENE	28	54	0.30	0.29	0.34	0.23	ND	0.68
PHENANTHRENE	31	58	0.34	0.64	0.87	0.41	ND	2.4
PHENOL	24	13	0.34	2.8	7.6	< 0	ND	58
PYRENE	31	68	0.35	1.4	2.0	0.69	ND	6.6
TOTAL PAH	10	100	40	43	53	34	27	75
TOTAL PAH (HIGH MW)	10	100	18	19	23	15	12	33
TOTAL PAH (LOW MW)	10	100	23	24	30	19	15	42
Reach 8 - Rising Pond								
1,2,4-TRICHLOROBENZENE	30	37	0.25	0.21	0.26	0.17	ND	0.11
1,2-DICHLOROBENZENE	30	13	0.29	0.28	0.32	0.24	ND	0.066
1,3-DICHLOROBENZENE	30	20	0.28	0.26	0.30	0.22	ND	0.15
1,4-DICHLOROBENZENE	30	73	0.13	0.16	0.20	0.12	ND	0.48

Table C-12
Sediment
Summary of Detected Appendix IX SVOCs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
2-METHYLNAPHTHALENE	30	60	0.10	0.16	0.21	0.12	ND	0.12
4-METHYLPHENOL	30	33	0.28	0.26	0.30	0.22	ND	0.45
ACENAPHTHENE	30	57	0.099	0.18	0.23	0.12	ND	0.10
ACENAPTHYLENE	30	17	0.29	0.27	0.31	0.23	ND	0.069
ANTHRACENE	30	80	0.092	0.15	0.19	0.10	ND	0.33
BENZO(A)ANTHRACENE	30	100	0.24	0.31	0.38	0.24	0.044	0.76
BENZO(A)PYRENE	30	100	0.25	0.33	0.41	0.25	0.047	0.93
BENZO(B)FLUORANTHENE	30	100	0.24	0.33	0.41	0.25	0.045	0.85
BENZO(GHI)PERYLENE	30	100	0.19	0.23	0.29	0.17	0.035	0.67
BENZO(K)FLUORANTHENE	30	100	0.29	0.37	0.46	0.28	0.046	1.1
BIS(2-ETHYLHEXYL) PHTHALATE	30	57	0.23	0.24	0.34	0.15	ND	1.4
BUTYLBENZYLPHTHALATE	30	3	0.30	0.30	0.33	0.28	ND	0.036
CHRYSENE	30	100	0.36	0.46	0.57	0.34	0.058	1.3
DIBENZO(A,H)ANTHRACENE	30	77	0.072	0.14	0.18	0.092	ND	0.21
DIBENZOFURAN	30	40	0.27	0.21	0.27	0.16	ND	0.094
DI-N-BUTYL PHTHALATE	30	3	0.31	0.32	0.35	0.30	ND	0.55
FLUORANTHENE	30	100	0.57	0.71	0.90	0.52	0.067	2.0
FLUORENE	30	80	0.089	0.14	0.19	0.093	ND	0.33
INDENO(1,2,3-C,D)PYRENE	30	100	0.18	0.22	0.28	0.17	0.031	0.60
NAPHTHALENE	30	83	0.092	0.13	0.16	0.089	ND	0.19
PHENANTHRENE	30	100	0.38	0.50	0.63	0.37	0.050	1.4
PYRENE	30	100	0.67	0.93	1.2	0.63	0.097	3.5
Reach 9 - Rising Pond Dam to Connecticut Border								
BENZO(A)ANTHRACENE	2	100	0.062	0.062	NA	NA	0.048	0.076
BENZO(A)PYRENE	2	100	0.057	0.057	NA	NA	0.033	0.081
BENZO(B)FLUORANTHENE	2	100	0.070	0.070	NA	NA	0.048	0.092

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Table C-12
Sediment
Summary of Detected Appendix IX SVOCs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
BENZO(GHI)PERYLENE	2	100	0.042	0.042	NA	NA	0.039	0.044
BENZO(K)FLUORANTHENE	2	100	0.084	0.084	NA	NA	0.067	0.10
CHRYSENE	2	100	0.077	0.077	NA	NA	0.064	0.089
FLUORANTHENE	2	100	0.074	0.074	NA	NA	0.066	0.081
INDENO(1,2,3-C,D)PYRENE	2	100	0.043	0.043	NA	NA	0.038	0.048
PHENANTHRENE	2	100	0.036	0.036	NA	NA	0.021	0.051
PYRENE	2	100	0.10	0.10	NA	NA	0.097	0.11

Notes:

1. All EPA (1998-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.
5. NA = Analysis not conducted due to sample size (n<3).

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Table C-13
Sediment
Summary of Detected Metals (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5A - Confluence to Pittsfield WWTP								
ANTIMONY	81	51	0.42	0.59	0.70	0.47	ND	4.9
ARSENIC	81	75	2.1	2.1	2.4	1.9	ND	4.5
BARIUM	81	100	20	24	27	20	5.6	96
BERYLLIUM	81	83	0.27	0.28	0.31	0.25	ND	0.78
CADMIUM	81	19	0.015	0.16	0.27	0.039	ND	4.2
CHROMIUM	81	100	14	20	24	17	5.7	86
COBALT	81	100	6.5	6.6	7.0	6.1	3.6	15
COPPER	81	99	18	25	29	20	ND	94
LEAD	81	100	21	40	49	30	3.4	303
MERCURY	75	92	0.060	0.26	0.51	0.0016	ND	9.6
NICKEL	81	95	12	12	13	11	ND	26
SELENIUM	81	2	0.14	0.15	0.17	0.13	ND	0.57
SILVER	81	31	0.085	0.38	0.58	0.18	ND	5.3
THALLIUM	81	38	0.55	0.66	0.77	0.56	ND	3.0
TIN	81	31	1.8	3.4	4.0	2.7	ND	15
VANADIUM	81	99	8.2	9.3	10	8.5	ND	24
ZINC	81	100	73	85	94	76	31	275
Reach 5B - Pittsfield WWTP to Roaring Brook Confluence								
ANTIMONY	20	30	0.20	0.36	0.54	0.19	ND	1.8
ARSENIC	20	70	0.94	1.5	2.1	0.79	ND	5.5
BARIUM	20	100	18	24	30	17	10	62
BERYLLIUM	20	60	0.13	0.20	0.28	0.13	ND	0.57
CADMIUM	20	25	0.025	0.11	0.19	0.032	ND	0.64
CHROMIUM	20	100	14	25	44	6.6	5.4	198
COBALT	20	95	5.9	6.5	7.6	5.5	ND	11
COPPER	20	90	13	22	36	8.6	ND	139

Table C-13
Sediment
Summary of Detected Metals (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
LEAD	20	100	12	20	31	8.9	2.0	104
MERCURY	19	74	0.050	0.15	0.30	0.0058	ND	1.4
NICKEL	20	100	11	12	13	10	8.2	19
SELENIUM	20	10	0.12	0.20	0.28	0.11	ND	0.98
SILVER	20	40	0.075	0.19	0.30	0.077	ND	0.87
THALLIUM	20	40	0.35	0.63	0.92	0.33	ND	2.3
TIN	20	20	1.1	1.9	2.7	1.1	ND	5.7
VANADIUM	20	95	6.7	7.9	9.6	6.2	ND	16
ZINC	20	100	59	71	89	54	32	193
Reach 5C - Roaring Brook Confluence to Woods Pond Headwaters								
ANTIMONY	28	50	0.41	1.6	2.3	0.88	ND	8.0
ARSENIC	28	82	2.0	3.2	4.2	2.2	ND	11
BARIUM	28	100	28	61	82	41	8.6	172
BERYLLIUM	28	75	0.26	0.37	0.48	0.26	ND	0.88
CADMIUM	28	54	0.36	2.6	4.2	1.1	ND	17
CHROMIUM	28	100	17	91	137	44	4.4	459
COBALT	28	100	7.9	8.6	9.9	7.4	3.5	14
COPPER	28	93	20	79	112	45	ND	268
LEAD	28	100	18	82	120	45	3.1	308
MERCURY	28	75	0.13	0.58	0.86	0.30	ND	2.5
NICKEL	28	100	12	16	19	13	6.2	28
SELENIUM	24	17	0.29	0.32	0.41	0.23	ND	1.1
SILVER	28	50	0.17	2.4	3.5	1.2	ND	9.1
THALLIUM	28	32	0.39	0.81	1.1	0.51	ND	3.1
TIN	28	32	1.1	7.7	12	3.8	ND	33
VANADIUM	28	100	9.2	13	15	9.9	3.7	25

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Table C-13
Sediment
Summary of Detected Metals (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
ZINC	28	100	71	205	288	121	24	948
Backwaters								
ANTIMONY	15	67	1.5	1.4	1.8	1.1	ND	2.5
ARSENIC	16	94	7.1	7.1	8.9	5.4	ND	14
BARIUM	17	100	95	100	124	77	25	215
BERYLLIUM	17	100	0.89	0.88	1.1	0.70	0.18	1.6
CADMIUM	15	87	2.5	2.5	3.8	1.3	ND	7.8
CHROMIUM	17	100	107	113	152	74	7.1	254
COBALT	17	100	15	14	17	12	3.2	23
COPPER	17	100	88	108	143	74	6.2	250
LEAD	17	100	103	115	157	73	7.3	299
MERCURY	17	100	1.0	0.93	1.2	0.65	0.040	1.7
NICKEL	17	100	26	24	29	19	4.6	50
SELENIUM	15	40	0.55	0.96	1.4	0.55	ND	2.5
SILVER	15	67	2.0	2.5	4.0	1.0	ND	10
THALLIUM	15	53	1.1	2.0	3.2	0.78	ND	7.9
TIN	15	67	12	12	16	7.5	ND	23
VANADIUM	17	100	23	23	27	19	11	41
ZINC	17	100	313	289	367	211	24	520
Reach 6 - Woods Pond								
ANTIMONY	26	58	0.57	2.1	3.2	1.1	ND	8.3
ARSENIC	30	90	3.9	5.3	6.7	4.0	ND	12
BARIUM	40	100	69	102	128	77	11	313
BERYLLIUM	39	100	0.67	0.73	0.83	0.63	0.24	1.5
CADMIUM	35	66	0.56	3.9	6.0	1.8	ND	24
CHROMIUM	39	90	46	143	204	83	ND	650

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Table C-13
Sediment
Summary of Detected Metals (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
COBALT	40	100	12	11	13	10	3.3	19
COPPER	40	100	45	117	158	76	9.5	463
LEAD	40	100	23	111	158	65	3.2	463
MERCURY	35	89	0.36	0.96	1.3	0.58	ND	4.0
NICKEL	40	100	21	22	25	19	6.1	45
SELENIUM	25	12	0.24	0.44	0.66	0.22	ND	2.4
SILVER	31	61	1.2	4.1	6.2	2.1	ND	20
THALLIUM	25	40	0.90	1.4	2.0	0.86	ND	5.0
TIN	28	50	4.5	14	20	8.5	ND	41
VANADIUM	40	100	17	17	20	15	7.0	41
ZINC	40	100	105	252	334	169	39	871
Reach 8 - Rising Pond								
ANTIMONY	30	83	2.0	4.1	7.0	1.1	ND	45
ARSENIC	30	100	6.1	6.4	7.5	5.2	1.4	16
BARIUM	30	100	123	167	223	112	19	793
BERYLLIUM	30	100	0.74	0.69	0.77	0.62	0.30	1.0
CADMIUM	30	100	2.3	6.0	9.9	2.1	0.11	50
CHROMIUM	30	100	81	75	92	58	7.6	187
COBALT	30	100	10	10	11	9.2	4.0	14
COPPER	30	100	95	125	166	85	13	612
LEAD	30	100	125	115	135	95	11	248
MERCURY	30	100	1.3	1.7	2.4	1.1	0.070	9.3
NICKEL	30	100	18	17	19	15	7.8	29
SELENIUM	30	10	0.22	0.40	0.57	0.23	ND	1.8
SILVER	30	90	1.0	1.4	2.0	0.73	ND	9.5
THALLIUM	30	13	0.75	0.87	1.1	0.66	ND	2.4

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Table C-13
Sediment
Summary of Detected Metals (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
TIN	30	87	14	13	16	11	ND	24
VANADIUM	30	100	19	18	20	15	5.1	37
ZINC	30	100	480	610	785	435	66	1790
Reach 9 - Rising Pond Dam to Connecticut Border								
ANTIMONY	2	100	0.46	0.46	NA	NA	0.25	0.67
ARSENIC	2	50	1.6	1.6	NA	NA	ND	2.4
BARIUM	2	100	13	13	NA	NA	9.9	16
BERYLLIUM	2	100	0.27	0.27	NA	NA	0.22	0.31
CADMIUM	2	50	0.078	0.078	NA	NA	ND	0.14
CHROMIUM	2	100	7.1	7.1	NA	NA	6.3	7.8
COBALT	2	100	5.7	5.7	NA	NA	5.0	6.4
COPPER	2	100	10	10	NA	NA	9.4	11
LEAD	2	100	13	13	NA	NA	7.9	17
MERCURY	2	100	0.040	0.040	NA	NA	0.030	0.050
NICKEL	2	100	11	11	NA	NA	10	11
VANADIUM	2	100	7.5	7.5	NA	NA	6.7	8.3
ZINC	2	100	54	54	NA	NA	46	62

Notes:

1. All EPA (1998-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.
5. NA = Analysis not conducted due to sample size (n<3).

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Table C-14
Sediment
Summary of Detected Inorganics

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5A - Confluence to Pittsfield WWTP								
AMMONIA AS N (mg/kg)	12	83	6.6	7.7	12	3.7	ND	28
PH	2	100	7.5	7.5	NA	NA	7.3	7.7
SULFIDE (mg/kg)	74	27	5.2	13	17	8.5	ND	117
Reach 5B - Pittsfield WWTP to Roaring Brook Confluence								
CYANIDE (mg/kg)	20	5	0.40	0.42	0.48	0.37	ND	0.86
SULFIDE (mg/kg)	20	35	5.7	14	24	5.4	ND	120
Reach 5C - Roaring Brook Confluence to Woods Pond Headwaters								
AMMONIA AS N (mg/kg)	9	100	41	44	66	22	10	97
CYANIDE (mg/kg)	22	5	0.42	0.52	0.63	0.42	ND	1.4
PH	2	100	7.1	7.1	NA	NA	7.1	7.1
SULFIDE (mg/kg)	22	59	27	38	55	22	ND	122
Backwaters								
SULFIDE (mg/kg)	13	54	101	146	241	51	ND	447
Reach 6 - Woods Pond								
SULFIDE (mg/kg)	29	55	38	239	406	72	ND	1940
Reach 8 - Rising Pond								
CYANIDE (mg/kg)	30	3	0.55	1.2	2.4	< 0	ND	19
SULFIDE (mg/kg)	30	70	67	92	130	55	ND	453
Reach 9 - Rising Pond Dam to Connecticut Border								
AMMONIA AS N (mg/kg)	6	50	4.0	5.4	9.3	1.5	ND	12

Notes:

1. All EPA (1998-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.
5. NA = Analysis not conducted due to sample size (n<3).

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Table C-15
1989-1991 Sediment Sampling
Summary of Detected Appendix IX Data

Compound/ Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
APPENDIX IX SEMIVOLATILES (mg/kg)								
BENZO(A)ANTHRACENE	4	100	0.37	0.37	0.46	0.28	0.29	0.45
BENZO(A)PYRENE	4	100	0.42	0.42	0.58	0.26	0.28	0.56
BENZO(B)FLUORANTHENE	4	100	0.46	0.46	0.62	0.29	0.31	0.60
BENZO(K)FLUORANTHENE	4	100	0.57	0.57	0.82	0.32	0.35	0.79
BIS(2-ETHYLHEXYL)PHTHALATE	2	50	1.3	1.3	NA	NA	ND	1.3
CHRYSENE	4	100	0.52	0.52	0.73	0.31	0.34	0.70
FLUORANTHENE	4	100	0.78	0.78	1.0	0.55	0.58	0.98
PHENANTHRENE	4	50	1.1	1.1	1.9	0.24	ND	0.35
PYRENE	4	100	0.89	0.89	1.2	0.52	0.57	1.2
APPENDIX IX VOLATILES (mg/kg)								
ACETONE	9	22	0.0050	0.0076	0.011	0.0041	ND	0.019
METHYLENE CHLORIDE	9	22	0.010	0.010	0.012	0.0090	ND	0.016
DIOXINS/FURANS (pg/g)								
TOTAL HXCDD	2	50	600	600	NA	NA	ND	200
TOTAL HXCDF	2	50	475	475	NA	NA	ND	300
TOTAL PECDF	2	50	860	860	NA	NA	ND	870
TOTAL TCDF	2	50	493	493	NA	NA	ND	610
INORGANICS (mg/kg)								
SULFIDE	2	100	153	153	NA	NA	76	230

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Table C-15
1989-1991 Sediment Sampling
Summary of Detected Appendix IX Data

Compound/ Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
METALS (mg/kg)								
ANTIMONY	2	100	5.5	5.5	NA	NA	4.0	7.0
ARSENIC	19	95	6.8	6.6	8.4	4.8	ND	15
BARIUM	19	100	178	177	225	130	16	359
BERYLLIUM	2	100	0.25	0.25	NA	NA	0.20	0.30
CADMIUM	19	100	7.0	13	19	5.8	0.20	50
CHROMIUM	4	100	110	101	138	64	50	136
CHROMIUM, TOTAL	15	100	96	94	119	70	11	174
COBALT	2	100	5.5	5.5	NA	NA	5.0	6.0
COPPER	2	100	71	71	NA	NA	56	85
LEAD	19	100	120	130	161	99	25	290
MERCURY	19	95	1.2	1.3	1.7	0.88	ND	3.0
NICKEL	2	100	28	28	NA	NA	17	39
SILVER	19	95	1.5	2.0	2.9	1.1	ND	6.0
TIN	2	100	6.5	6.5	NA	NA	3.0	10
VANADIUM	2	100	7.5	7.5	NA	NA	6.0	9.0
ZINC	2	100	213	213	NA	NA	141	285
TPH (mg/kg)								
TOTAL PETROLEUM HYDROCARBONS	19	100	480	803	1184	423	11	3100

Notes:

1. All sampling was conducted in Rising Pond.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. ND = Not Detected.
4. NA = Analysis not conducted due to sample size (n<3).

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Table C-16
Sediment
Summary of Detected Appendix IX Pesticides (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5A - Confluence to Pittsfield WWTP								
4,4'-DDD	76	1	0.24	0.38	0.50	0.25	ND	0.023
DELTA-BHC	72	1	0.12	0.20	0.26	0.13	ND	0.22
ENDRIN ALDEHYDE	76	12	0.27	0.44	0.57	0.30	ND	2.0
HEPTACHLOR EPOXIDE	75	1	0.12	0.20	0.26	0.13	ND	0.70
Reach 5B - Pittsfield WWTP to Roaring Brook Confluence								
BETA-BHC	20	5	0.013	0.037	0.061	0.014	ND	0.021
Reach 5C - Roaring Brook Confluence to Woods Pond Headwaters								
ALDRIN	24	4	0.015	0.12	0.21	0.022	ND	0.014
DELTA-BHC	23	4	0.012	0.12	0.22	0.018	ND	0.0041
ENDRIN ALDEHYDE	24	4	0.028	0.24	0.43	0.042	ND	0.0059
Backwaters								
ENDRIN ALDEHYDE	13	8	0.11	0.45	0.79	0.12	ND	0.023
GAMMA BHC (LINDANE)	13	8	0.055	0.23	0.39	0.058	ND	0.0061
Reach 6 - Woods Pond								
ALPHA-BHC	24	4	0.0023	0.11	0.19	0.023	ND	0.015
DELTA-BHC	22	9	0.0042	0.12	0.21	0.025	ND	0.15
ENDOSULFAN SULFATE	23	4	0.0050	0.22	0.39	0.047	ND	0.016
ENDRIN ALDEHYDE	23	4	0.0095	0.22	0.39	0.048	ND	0.017
HEPTACHLOR EPOXIDE	22	5	0.0023	0.14	0.24	0.032	ND	0.67
ISODRIN	24	4	0.0023	0.11	0.19	0.023	ND	0.017

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Table C-16
Sediment
Summary of Detected Appendix IX Pesticides (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 9 - Rising Pond Dam to Connecticut Border								
ALPHA-BHC	2	50	0.0027	0.0027	NA	NA	ND	0.0043

Notes:

1. All EPA (1998-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.
5. NA = Analysis not conducted due to sample size (n<3).

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Table C-17
Sediment
Summary of Detected Herbicides (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Backwaters								
2,4,5-T	6	17	0.0098	0.017	0.031	0.0024	ND	0.052

Notes:

1. All EPA (1998-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.

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Table C-18
Sediment
Summary of Detected Minerals (%)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5A - Confluence to Pittsfield WWTP								
% ALBITE	6	100	2.0	2.0	2.7	1.3	1.0	3.0
% CHLORITE	6	100	3.0	3.0	4.4	1.6	1.0	6.0
% MICROCLINE	6	100	1.5	1.8	2.8	0.9	1.0	4.0
% ORGANICS	2	100	10	10	NA	NA	9.0	11
% QUARTZ	6	100	69	64	79	50	39	85
% MUSCOVITE	6	100	21	22	27	16	13	32

Notes:

1. All EPA (1998-00) data are included.
2. NA = Analysis not conducted due to sample size (n<3).

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Table C-19
Floodplain Soil
Summary of Detected PCDDs/PCDFs (pg/g)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5A - Confluence to Pittsfield WWTP								
1,2,3,4,6,7,8-HPCDD	62	100	50	123	163	82	1.0	726
1,2,3,4,6,7,8-HPCDF	62	97	77	213	293	132	ND	1398
1,2,3,4,7,8,9-HPCDF	62	77	4.9	14	19	9.1	ND	87
1,2,3,4,7,8-HXCDD	62	63	0.77	2.3	3.1	1.5	ND	17
1,2,3,4,7,8-HXCDF	62	97	18	41	56	27	ND	277
1,2,3,6,7,8-HXCDD	62	85	2.5	6.6	8.8	4.4	ND	41
1,2,3,6,7,8-HXCDF	62	90	9.9	21	28	14	ND	128
1,2,3,7,8,9-HXCDD	62	79	1.3	3.8	5.1	2.5	ND	24
1,2,3,7,8,9-HXCDF	62	56	1.0	5.8	8.2	3.4	ND	50
1,2,3,7,8-PECDD	62	85	1.5	3.1	4.1	2.1	ND	20
1,2,3,7,8-PECDF	62	98	12	33	45	21	ND	193
2,3,4,6,7,8-HXCDF	62	90	8.9	22	29	14	ND	118
2,3,4,7,8-PECDF	62	98	19	45	60	30	ND	240
2,3,7,8-TCDD	62	61	0.45	0.90	1.2	0.62	ND	4.9
2,3,7,8-TCDF	62	97	26	54	73	36	ND	309
HPCDD (TOTAL)	50	100	81	233	314	152	0.92	1160
HPCDF (TOTAL)	50	98	142	424	598	249	ND	2666
HXCDD (TOTAL)	50	100	26	60	84	36	0.70	453
HXCDF (TOTAL)	50	94	139	351	483	219	ND	2055
OCDD	62	98	371	1082	1444	720	ND	5790
OCDF	62	90	71	198	264	131	ND	1050
PECDD (TOTAL)	50	96	6.8	21	31	11	ND	179
PECDF (TOTAL)	50	100	158	409	549	270	1.8	1750
TCDD (TOTAL)	50	74	1.7	8.1	12	4.4	ND	62
TCDF (TOTAL)	50	98	125	343	464	222	ND	1670
WHO TEQ	62	100	17	48	63	32	0.70	230

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Table C-19
Floodplain Soil
Summary of Detected PCDDs/PCDFs (pg/g)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5B - Pittsfield WWTP to Roaring Brook Confluence								
1,2,3,4,6,7,8-HPCDD	37	97	280	531	822	239	ND	5300
1,2,3,4,6,7,8-HPCDF	37	97	355	572	852	292	ND	5200
1,2,3,4,7,8,9-HPCDF	37	86	21	27	36	18	ND	140
1,2,3,4,7,8-HXCDD	37	78	3.7	6.8	9.9	3.7	ND	47
1,2,3,4,7,8-HXCDF	37	86	67	113	177	48	ND	1200
1,2,3,6,7,8-HXCDD	37	92	14	26	38	13	ND	220
1,2,3,6,7,8-HXCDF	37	95	41	55	74	36	ND	310
1,2,3,7,8,9-HXCDD	37	84	6.5	13	20	6.2	ND	120
1,2,3,7,8,9-HXCDF	37	84	8.7	12	15	7.9	ND	50
1,2,3,7,8-PECDD	37	59	3.3	6.1	8.3	3.9	ND	24
1,2,3,7,8-PECDF	37	92	73	89	114	63	ND	372
2,3,4,6,7,8-HXCDF	37	92	43	55	71	40	ND	230
2,3,4,7,8-PECDF	37	95	82	110	142	79	ND	478
2,3,7,8-TCDD	37	78	1.7	3.0	4.4	1.6	ND	24
2,3,7,8-TCDF	37	97	100	129	163	95	ND	510
HPCDD (TOTAL)	24	96	535	1154	1952	357	ND	9700
HPCDF (TOTAL)	24	100	724	1281	2059	502	1.9	9600
HXCDD (TOTAL)	24	96	126	250	397	103	ND	1700
HXCDF (TOTAL)	24	96	734	1139	1727	551	ND	7200
OCDD	37	100	2300	4532	6794	2269	7.4	40000
OCDF	37	95	342	467	615	320	ND	2400
PECDD (TOTAL)	24	92	27	46	69	24	ND	220
PECDF (TOTAL)	24	100	920	1417	1992	842	0.31	6300
TCDD (TOTAL)	24	92	14	25	37	12	ND	130
TCDF (TOTAL)	24	100	625	978	1329	627	0.24	3600
WHO TEQ	37	100	80	121	155	87	0.29	420

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Table C-19
Floodplain Soil
Summary of Detected PCDDs/PCDFs (pg/g)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5C - Roaring Brook Confluence to Woods Pond Headwaters								
1,2,3,4,6,7,8-HPCDD	38	97	128	501	772	231	ND	4100
1,2,3,4,6,7,8-HPCDF	38	97	172	1028	1869	188	ND	14000
1,2,3,4,7,8,9-HPCDF	38	82	5.3	32	51	13	ND	290
1,2,3,4,7,8-HXCDD	38	79	2.0	8.6	14	3.3	ND	88
1,2,3,4,7,8-HXCDF	38	95	17	89	129	49	ND	520
1,2,3,6,7,8-HXCDD	38	87	6.1	27	43	11	ND	250
1,2,3,6,7,8-HXCDF	38	92	9.8	91	175	6.1	ND	1600
1,2,3,7,8,9-HXCDD	38	84	4.1	14	22	6.3	ND	120
1,2,3,7,8,9-HXCDF	38	71	2.8	16	24	8.1	ND	100
1,2,3,7,8-PECDD	38	79	2.5	9.1	14	4.1	ND	73
1,2,3,7,8-PECDF	38	95	15	75	108	41	ND	306
2,3,4,6,7,8-HXCDF	38	89	11	64	99	29	ND	540
2,3,4,7,8-PECDF	38	95	17	120	174	67	ND	700
2,3,7,8-TCDD	38	84	1.6	4.7	8.2	1.3	ND	64
2,3,7,8-TCDF	37	100	33	113	160	66	0.34	432
HPCDD (TOTAL)	34	94	242	898	1443	352	ND	7600
HPCDF (TOTAL)	34	100	277	1812	3399	225	1.5	24000
HXCDD (TOTAL)	34	91	57	233	380	86	ND	2100
HXCDF (TOTAL)	34	100	205	1406	2396	416	1.2	14000
OCDD	38	89	1241	4248	6453	2042	ND	32000
OCDF	38	92	157	590	997	183	ND	7000
PECDD (TOTAL)	34	82	18	58	96	21	ND	540
PECDF (TOTAL)	34	97	295	1857	2993	722	ND	14000
TCDD (TOTAL)	34	91	7.3	27	41	14	ND	180
TCDF (TOTAL)	34	100	257	1142	1766	517	2.1	7900
WHO TEQ	38	100	20	136	200	72	0.56	990

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Table C-19
Floodplain Soil
Summary of Detected PCDDs/PCDFs (pg/g)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 6 - Woods Pond								
1,2,3,4,6,7,8-HPCDD	9	100	121	287	503	71	16	813
1,2,3,4,6,7,8-HPCDF	9	100	158	227	389	65	4.4	670
1,2,3,4,7,8,9-HPCDF	9	78	7.0	18	32	4.2	ND	50
1,2,3,4,7,8-HXCDD	9	100	2.2	4.4	7.4	1.5	0.43	12
1,2,3,4,7,8-HXCDF	9	100	20	73	135	11	1.1	214
1,2,3,6,7,8-HXCDD	9	100	6.5	13	23	3.8	0.88	37
1,2,3,6,7,8-HXCDF	9	100	13	45	82	7.8	0.78	130
1,2,3,7,8,9-HXCDD	9	100	4.4	8.2	14	2.7	0.77	21
1,2,3,7,8,9-HXCDF	9	67	1.3	13	24	1.7	ND	39
1,2,3,7,8-PECDD	9	78	2.2	9.6	19	< 0	ND	46
1,2,3,7,8-PECDF	9	100	21	99	188	9.8	1.0	335
2,3,4,6,7,8-HXCDF	9	100	16	51	90	12	0.88	130
2,3,4,7,8-PECDF	9	100	26	121	219	22	1.7	364
2,3,7,8-TCDD	9	89	2.4	2.5	3.9	1.2	ND	6.0
2,3,7,8-TCDF	9	100	32	149	278	20	2.4	508
HPCDD (TOTAL)	9	89	232	524	915	133	ND	1476
HPCDF (TOTAL)	9	100	278	457	784	130	7.9	1329
HXCDD (TOTAL)	9	89	55	105	179	32	ND	285
HXCDF (TOTAL)	9	100	207	619	1081	158	9.2	1567
OCDD	9	100	848	2208	3948	469	91	6599
OCDF	9	100	98	208	355	61	6.6	585
PECDD (TOTAL)	9	89	19	30	50	9.8	ND	82
PECDF (TOTAL)	9	100	246	1120	2026	213	16	3155
TCDD (TOTAL)	9	89	13	19	32	6.1	ND	55
TCDF (TOTAL)	9	100	176	840	1533	146	25	2589
WHO TEQ	9	100	30	118	208	27	2.1	330

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Table C-19
Floodplain Soil
Summary of Detected PCDDs/PCDFs (pg/g)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 7 - Woods Pond Dam to Rising Pond								
1,2,3,4,6,7,8-HPCDD	5	100	117	114	171	57	9.9	178
1,2,3,4,6,7,8-HPCDF	5	100	76	61	91	30	5.3	87
1,2,3,4,7,8,9-HPCDF	5	80	5.1	4.3	6.7	1.9	ND	6.6
1,2,3,4,7,8-HXCDD	5	100	1.4	1.5	2.3	0.67	0.16	2.3
1,2,3,4,7,8-HXCDF	5	100	21	17	27	7.8	0.97	28
1,2,3,6,7,8-HXCDD	5	100	6.2	6.1	9.3	2.9	0.47	10
1,2,3,6,7,8-HXCDF	5	100	12	10	16	4.9	0.69	16
1,2,3,7,8,9-HXCDD	5	100	3.5	3.2	4.8	1.6	0.33	4.8
1,2,3,7,8,9-HXCDF	5	60	2.0	2.4	4.1	0.69	ND	4.4
1,2,3,7,8-PECDD	5	100	2.3	1.8	2.6	0.97	0.27	2.3
1,2,3,7,8-PECDF	5	100	26	24	38	9.7	1.5	40
2,3,4,6,7,8-HXCDF	5	100	15	11	17	5.1	0.80	17
2,3,4,7,8-PECDF	5	100	34	28	45	12	2.1	44
2,3,7,8-TCDD	5	80	0.75	0.55	0.84	0.26	ND	0.80
2,3,7,8-TCDF	5	100	41	34	55	14	2.9	60
HPCDD (TOTAL)	5	100	226	214	318	110	23	330
HPCDF (TOTAL)	5	100	165	137	207	68	11	205
HXCDD (TOTAL)	5	100	42	40	61	20	3.6	64
HXCDF (TOTAL)	5	100	178	148	225	70	8.5	220
OCDD	5	100	878	789	1188	391	76	1270
OCDF	5	100	81	66	99	33	5.8	95
PECDD (TOTAL)	5	100	3.8	4.7	8.1	1.3	0.69	10
PECDF (TOTAL)	5	100	370	269	419	120	17	393
TCDD (TOTAL)	5	100	4.8	4.4	7.4	1.4	0.18	7.6
TCDF (TOTAL)	5	100	373	283	449	117	17	441
WHO TEQ	5	100	34	28	44	13	2.2	44

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Table C-19
Floodplain Soil
Summary of Detected PCDDs/PCDFs (pg/g)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 9 - Rising Pond Dam to Connecticut Border								
1,2,3,4,6,7,8-HPCDD	4	75	100	86	145	27	ND	141
1,2,3,4,6,7,8-HPCDF	4	75	41	37	63	11	ND	64
1,2,3,4,7,8,9-HPCDF	4	75	2.9	2.4	4.0	0.81	ND	3.6
1,2,3,4,7,8-HXCDD	4	75	1.2	1.1	1.8	0.44	ND	1.8
1,2,3,4,7,8-HXCDF	4	75	6.8	7.1	13	1.1	ND	15
1,2,3,6,7,8-HXCDD	4	75	5.9	5.0	8.5	1.6	ND	8.2
1,2,3,6,7,8-HXCDF	4	75	5.1	5.0	8.9	1.1	ND	9.6
1,2,3,7,8,9-HXCDD	4	75	3.3	2.8	4.8	0.92	ND	4.6
1,2,3,7,8,9-HXCDF	4	75	1.3	1.3	2.3	0.35	ND	2.5
1,2,3,7,8-PECDD	4	75	0.98	0.94	1.6	0.28	ND	1.7
1,2,3,7,8-PECDF	4	100	10	13	26	< 0	0.25	31
2,3,4,6,7,8-HXCDF	4	100	5.7	5.6	9.8	1.4	0.29	11
2,3,4,7,8-PECDF	4	75	11	14	28	0.13	ND	33
2,3,7,8-TCDD	4	50	0.31	0.36	0.59	0.12	ND	0.68
2,3,7,8-TCDF	4	100	18	23	46	< 0	0.74	55
HPCDD (TOTAL)	4	75	198	166	277	54	ND	262
HPCDF (TOTAL)	4	75	105	90	152	27	ND	147
HXCDD (TOTAL)	4	75	46	36	61	12	ND	53
HXCDF (TOTAL)	4	75	79	72	124	20	ND	127
OCDD	4	75	622	536	901	172	ND	881
OCDF	4	100	56	44	73	16	2.5	64
PECDD (TOTAL)	4	75	9.0	7.9	14	2.1	ND	14
PECDF (TOTAL)	4	75	128	143	274	12	ND	316
TCDD (TOTAL)	4	50	2.2	4.2	10	< 0	ND	12
TCDF (TOTAL)	4	100	148	189	387	< 0	2.5	459
WHO TEQ	4	100	14	15	28	2.3	0.66	32

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Table C-19
Floodplain Soil
Summary of Detected PCDDs/PCDFs (pg/g)

Notes:

1. All EPA (1998-02) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.

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Table C-20
Floodplain Soil
Summary of Detected Metals (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5A - Confluence to Pittsfield WWTP								
ANTIMONY	49	45	0.36	0.54	0.64	0.43	ND	1.7
ARSENIC	50	98	4.8	5.0	5.6	4.4	ND	13
BARIUM	50	100	40	45	51	38	15	99
BERYLLIUM	50	94	0.45	0.50	0.57	0.42	ND	1.3
CADMIUM	49	6	0.025	0.052	0.076	0.027	ND	0.34
CHROMIUM	50	100	17	22	26	18	8.0	69
COBALT	50	100	9.7	10	11	9.3	5.2	19
COPPER	50	100	27	34	41	27	7.6	144
LEAD	50	100	33	45	57	33	7.1	239
MERCURY	50	94	0.15	0.29	0.48	0.11	ND	4.6
NICKEL	50	100	17	18	20	16	9.9	40
SELENIUM	49	6	0.19	0.21	0.24	0.18	ND	0.67
SILVER	50	34	0.095	0.21	0.26	0.15	ND	0.9
THALLIUM	50	68	1.0	1.4	1.7	1.1	ND	5.2
TIN	49	27	2.2	3.6	4.9	2.2	ND	25
VANADIUM	50	100	14	15	17	14	7.5	30
ZINC	50	100	87	101	113	89	45	219
Reach 5B - Pittsfield WWTP to Roaring Brook Confluence								
ANTIMONY	24	58	0.63	0.76	0.93	0.59	ND	1.8
ARSENIC	24	100	3.4	3.7	4.2	3.2	1.3	6.7
BARIUM	24	100	45	51	59	44	28	97
BERYLLIUM	24	100	0.37	0.41	0.49	0.34	0.090	0.85
CADMIUM	24	75	0.36	0.61	0.96	0.26	ND	3.8
CHROMIUM	24	100	38	48	63	33	12	183
COBALT	24	100	8.9	9.3	10	8.3	5.4	15

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Table C-20
Floodplain Soil
Summary of Detected Metals (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
COPPER	24	100	41	48	60	37	10	131
LEAD	24	100	51	63	80	46	7.4	172
MERCURY	24	96	0.30	0.38	0.50	0.25	ND	1.4
NICKEL	24	100	16	17	19	16	11	26
SELENIUM	24	8	0.15	0.19	0.24	0.14	ND	0.47
SILVER	24	67	0.58	0.90	1.3	0.48	ND	4.1
THALLIUM	24	54	0.66	0.91	1.2	0.59	ND	2.7
TIN	24	46	3.3	4.6	6.1	3.1	ND	13
VANADIUM	24	100	14	14	16	13	7.2	27
ZINC	24	100	124	135	155	114	58	277
Reach 5C - Roaring Brook Confluence to Woods Pond Headwaters								
ANTIMONY	34	76	0.95	1.1	1.4	0.82	ND	3.3
ARSENIC	34	100	3.8	4.3	5.1	3.5	1.0	10
BARIUM	34	100	66	70	81	58	20	148
BERYLLIUM	34	88	0.57	0.57	0.69	0.46	ND	1.9
CADMIUM	34	65	0.42	1.1	1.6	0.54	ND	7.2
CHROMIUM	34	100	42	62	84	41	5.3	240
COBALT	34	100	9.9	10	11	8.9	3.8	18
COPPER	34	94	42	61	79	43	ND	178
LEAD	34	100	52	78	103	53	7.7	241
MERCURY	34	91	0.30	0.50	0.68	0.32	ND	1.9
NICKEL	34	100	17	17	20	15	3.4	31
SELENIUM	34	35	0.31	0.53	0.71	0.35	ND	2.4
SILVER	34	62	0.65	1.3	1.8	0.74	ND	6.3
THALLIUM	34	53	0.70	0.77	0.93	0.61	ND	2.1
TIN	34	50	4.5	6.4	8.7	4.2	ND	21

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Table C-20
Floodplain Soil
Summary of Detected Metals (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
VANADIUM	34	100	18	19	21	16	7.0	33
ZINC	34	100	134	156	192	120	30	383
Reach 6 - Woods Pond								
ANTIMONY	9	44	0.49	0.76	1.1	0.41	ND	1.8
ARSENIC	9	89	5.5	5.5	6.3	4.7	ND	7.3
BARIUM	9	100	81	76	97	54	19	121
BERYLLIUM	9	89	0.70	0.63	0.83	0.42	ND	1.0
CADMIUM	9	56	0.15	1.1	2.2	0.077	ND	3.9
CHROMIUM	9	100	29	38	60	16	6.0	97
COBALT	9	100	8.6	9.6	12	7.1	3.9	14
COPPER	9	100	37	55	84	26	5.6	126
LEAD	9	100	64	82	119	45	15	180
MERCURY	9	100	0.31	0.38	0.61	0.15	0.040	1.1
NICKEL	9	100	16	18	22	13	6.0	27
SELENIUM	9	33	0.37	0.53	0.79	0.27	ND	1.3
SILVER	9	67	0.67	1.3	2.2	0.37	ND	3.5
THALLIUM	9	56	1.6	1.4	1.9	0.85	ND	2.4
TIN	9	44	2.9	5.6	9.0	2.2	ND	14
VANADIUM	9	100	23	21	24	17	11	27
ZINC	9	100	160	163	227	100	36	302
Reach 7 - Woods Pond Dam to Rising Pond								
ANTIMONY	5	100	1.4	1.3	1.7	0.97	0.66	1.7
ARSENIC	5	100	4.5	4.9	5.8	4.0	4.1	6.6
BARIUM	5	100	80	88	109	68	69	126
BERYLLIUM	5	100	0.69	0.71	0.89	0.53	0.47	1.0
CADMIUM	5	80	1.7	1.4	2.1	0.69	ND	2.0

Table C-20
Floodplain Soil
Summary of Detected Metals (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
CHROMIUM	5	100	25	30	40	21	18	44
COBALT	5	100	12	12	15	9.7	9.8	18
COPPER	5	100	83	64	94	34	15	95
LEAD	5	100	50	56	84	28	21	98
MERCURY	5	100	0.49	0.47	0.71	0.23	0.11	0.72
NICKEL	5	100	18	19	23	15	15	26
SELENIUM	5	80	1.0	0.99	1.5	0.53	ND	1.6
SILVER	5	40	0.40	0.90	1.7	0.14	ND	2.0
THALLIUM	5	80	1.9	2.1	3.1	1.1	ND	3.8
TIN	5	40	4.1	5.3	9.0	1.5	ND	12
VANADIUM	5	100	23	23	27	19	19	30
ZINC	5	100	154	175	230	120	111	265
Reach 9 - Rising Pond Dam to Connecticut Border								
ANTIMONY	4	100	0.72	0.71	0.91	0.51	0.46	0.94
ARSENIC	4	100	4.0	4.2	4.9	3.5	3.6	5.2
BARIUM	4	100	46	53	67	38	43	74
BERYLLIUM	4	100	0.54	0.57	0.67	0.47	0.5	0.71
CADMIUM	4	25	0.043	0.13	0.32	< 0	ND	0.41
CHROMIUM	4	100	17	18	21	14	14	23
COBALT	4	100	11	11	13	9.5	10	14
COPPER	4	100	23	25	33	16	16	37
LEAD	4	100	19	20	28	11	9.8	31
MERCURY	4	75	0.15	0.14	0.24	0.038	ND	0.25
NICKEL	4	100	18	19	22	16	17	24
VANADIUM	4	100	17	18	21	14	15	21
ZINC	4	100	101	106	136	76	75	146

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Table C-20
Floodplain Soil
Summary of Detected Metals (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum

Notes:

1. All EPA (1998-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.

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Table C-21
Floodplain and Riverbank Soil
Summary of Detected Appendix IX SVOCs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5A - Confluence to Pittsfield WWTP								
1,2,4-TRICHLOROBENZENE	49	27	0.20	0.21	0.26	0.15	ND	0.16
1,3-DICHLOROBENZENE	49	2	0.22	0.25	0.30	0.20	ND	0.028
1,4-DICHLOROBENZENE	49	33	0.20	0.18	0.20	0.15	ND	0.17
2-METHYLNAPHTHALENE	49	49	0.18	0.18	0.21	0.14	ND	0.53
2-METHYLPHENOL (O-CRESOL)	49	2	0.22	0.25	0.30	0.20	ND	0.021
4-METHYLPHENOL	49	2	0.22	0.25	0.30	0.20	ND	0.049
ACENAPHTHENE	49	37	0.20	0.20	0.25	0.16	ND	0.91
ACENAPTHYLENE	49	57	0.19	0.23	0.32	0.14	ND	2.1
ANTHRACENE	49	53	0.20	0.38	0.63	0.13	ND	5.3
BENZO(A)ANTHRACENE	50	86	0.20	0.81	1.3	0.31	ND	12
BENZO(A)PYRENE	50	80	0.24	0.77	1.2	0.31	ND	11
BENZO(B)FLUORANTHENE	50	84	0.21	0.86	1.3	0.37	ND	11
BENZO(GHI)PERYLENE	50	72	0.20	0.33	0.43	0.23	ND	1.8
BENZO(K)FLUORANTHENE	50	82	0.24	0.86	1.4	0.28	ND	14
BIS(2-ETHYLHEXYL) PHTHALATE	49	16	0.21	0.24	0.29	0.18	ND	0.50
BUTYLBENZYLPHTHALATE	49	8	0.21	0.24	0.29	0.18	ND	0.075
CHRYSENE	50	88	0.23	0.90	1.4	0.35	ND	13
DIBENZO(A,H)ANTHRACENE	49	51	0.19	0.21	0.25	0.17	ND	0.94
DIBENZOFURAN	49	39	0.20	0.19	0.24	0.15	ND	0.89
DIETHYL PHTHALATE	50	4	0.21	0.25	0.30	0.20	ND	0.12
DIMETHYL PHTHALATE	49	2	0.22	0.26	0.31	0.21	ND	0.48
DI-N-BUTYL PHTHALATE	49	8	0.21	0.24	0.29	0.18	ND	0.036
FLUORANTHENE	50	92	0.20	1.2	2.1	0.40	ND	20
FLUORENE	49	43	0.20	0.26	0.35	0.16	ND	2.0
INDENO(1,2,3-C,D)PYRENE	50	78	0.19	0.32	0.42	0.22	ND	1.9
NAPHTHALENE	50	58	0.18	0.20	0.25	0.16	ND	0.99
PENTACHLOROBENZENE	49	10	0.21	0.24	0.29	0.18	ND	0.053
PHENANTHRENE	50	88	0.22	0.93	1.5	0.34	ND	12

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Table C-21
Floodplain and Riverbank Soil
Summary of Detected Appendix IX SVOCs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
PYRENE	50	94	0.29	1.3	2.0	0.62	ND	15
PYRIDINE	49	2	0.22	0.26	0.31	0.21	ND	0.48
TOTAL PAH	2	100	0.20	0.20	NA	NA	0.044	0.35
TOTAL PAH (HIGH MW)	2	100	0.082	0.082	NA	NA	0.020	0.14
TOTAL PAH (LOW MW)	2	100	0.12	0.12	NA	NA	0.024	0.21
Reach 5B - Pittsfield WWTP to Roaring Brook Confluence								
1,2,4,5-TETRACHLOROBENZENE	24	4	0.23	0.45	0.89	0.0097	ND	0.046
1,2,4-TRICHLOROBENZENE	24	46	0.21	0.37	0.82	< 0	ND	0.32
1,2-DICHLOROBENZENE	24	4	0.23	0.45	0.89	0.010	ND	0.060
1,3-DICHLOROBENZENE	24	4	0.23	0.45	0.89	0.010	ND	0.054
1,4-DICHLOROBENZENE	24	63	0.083	0.17	0.25	0.097	ND	0.89
2,4-DIMETHYLPHENOL	12	8	0.22	0.66	1.5	< 0	ND	0.030
2-METHYLNAPHTHALENE	24	71	0.058	0.33	0.78	< 0	ND	0.18
2-METHYLPHENOL (O-CRESOL)	23	4	0.23	0.46	0.92	< 0	ND	0.037
4-METHYLPHENOL	23	22	0.22	0.23	0.29	0.17	ND	0.79
ACENAPHTHENE	24	50	0.13	0.36	0.81	< 0	ND	0.050
ACENAPTHYLENE	24	71	0.057	0.34	0.79	< 0	ND	0.18
ANTHRACENE	24	83	0.083	0.33	0.78	< 0	ND	0.21
BENZO(A)ANTHRACENE	24	96	0.43	0.45	0.59	0.30	ND	1.8
BENZO(A)PYRENE	24	96	0.49	0.54	0.75	0.33	ND	2.7
BENZO(B)FLUORANTHENE	24	96	0.45	0.54	0.77	0.32	ND	2.8
BENZO(GHI)PERYLENE	24	96	0.30	0.41	0.60	0.21	ND	2.3
BENZO(K)FLUORANTHENE	24	96	0.51	0.55	0.75	0.35	ND	2.5
BIS(2-ETHYLHEXYL) PHTHALATE	24	71	0.080	0.18	0.30	0.060	ND	1.5
BUTYLBENZYLPHTHALATE	24	8	0.23	0.44	0.88	0.00036	ND	0.028
CHRYSENE	24	96	0.55	0.60	0.83	0.37	ND	2.9
DIBENZO(A,H)ANTHRACENE	24	92	0.095	0.14	0.22	0.068	ND	0.94
DIBENZOFURAN	24	54	0.060	0.36	0.81	< 0	ND	0.079
DI-N-BUTYL PHTHALATE	24	13	0.23	0.43	0.87	< 0	ND	0.045

Table C-21
Floodplain and Riverbank Soil
Summary of Detected Appendix IX SVOCs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
FLUORANTHENE	24	96	0.74	0.84	1.2	0.47	ND	4.7
FLUORENE	24	67	0.056	0.34	0.79	< 0	ND	0.099
INDENO(1,2,3-C,D)PYRENE	24	96	0.29	0.38	0.56	0.20	ND	2.1
NAPHTHALENE	24	88	0.093	0.33	0.78	< 0	ND	0.28
PHENANTHRENE	24	92	0.45	0.65	1.1	0.21	ND	1.1
PHENOL	24	13	0.22	0.44	0.88	< 0	ND	0.17
PYRENE	24	96	0.77	0.98	1.4	0.55	ND	5.2
TOTAL PAH	1	100	NA	7.9	NA	NA	NA	NA
TOTAL PAH (HIGH MW)	1	100	NA	2.2	NA	NA	NA	NA
TOTAL PAH (LOW MW)	1	100	NA	5.7	NA	NA	NA	NA
Reach 5C - Roaring Brook Confluence to Woods Pond Headwaters								
1,2,4-TRICHLOROBENZENE	34	21	0.25	0.29	0.36	0.21	ND	0.16
1,4-DICHLOROBENZENE	34	35	0.23	0.25	0.32	0.17	ND	0.18
2-METHYLNAPHTHALENE	34	41	0.23	0.25	0.32	0.17	ND	0.23
4-METHYLPHENOL	34	15	0.27	0.30	0.38	0.23	ND	0.087
ACENAPHTHENE	34	12	0.27	0.31	0.39	0.24	ND	0.056
ACENAPTHYLENE	34	29	0.25	0.26	0.34	0.19	ND	0.15
ANTHRACENE	34	32	0.24	0.27	0.35	0.19	ND	0.21
BENZO(A)ANTHRACENE	34	68	0.25	0.32	0.42	0.22	ND	1.2
BENZO(A)PYRENE	34	74	0.24	0.35	0.47	0.23	ND	1.6
BENZO(B)FLUORANTHENE	34	74	0.25	0.35	0.46	0.23	ND	1.6
BENZO(GHI)PERYLENE	34	68	0.23	0.33	0.44	0.22	ND	1.5
BENZO(K)FLUORANTHENE	34	74	0.26	0.37	0.48	0.25	ND	1.4
BIS(2-ETHYLHEXYL) PHTHALATE	34	47	0.22	0.23	0.31	0.15	ND	1.2
BUTYLBENZYLPHTHALATE	34	3	0.28	0.34	0.41	0.27	ND	0.026
CHRYSENE	34	79	0.26	0.37	0.51	0.24	ND	1.8
DIBENZO(A,H)ANTHRACENE	34	41	0.23	0.26	0.34	0.18	ND	0.42
DIBENZOFURAN	34	15	0.26	0.30	0.38	0.23	ND	0.092
DI-N-BUTYL PHTHALATE	34	6	0.28	0.34	0.41	0.27	ND	0.035

Table C-21
Floodplain and Riverbank Soil
Summary of Detected Appendix IX SVOCs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
FLUORANTHENE	34	82	0.29	0.43	0.60	0.26	ND	2.4
FLUORENE	34	26	0.25	0.27	0.35	0.19	ND	0.10
INDENO(1,2,3-C,D)PYRENE	34	68	0.22	0.31	0.42	0.21	ND	1.4
NAPHTHALENE	34	53	0.22	0.24	0.31	0.16	ND	0.40
N-NITROSO-DI-N-BUTYLAMINE	34	3	0.28	0.33	0.40	0.27	ND	0.044
PHENANTHRENE	34	76	0.24	0.33	0.44	0.21	ND	1.5
PYRENE	34	85	0.30	0.57	0.81	0.32	ND	3.3
Reach 6 - Woods Pond								
1,4-DICHLOROBENZENE	9	22	0.26	0.25	0.34	0.16	ND	0.065
2-METHYLNAPHTHALENE	9	22	0.27	0.30	0.40	0.21	ND	0.24
4-METHYLPHENOL	9	11	0.27	0.29	0.39	0.20	ND	0.050
4-NITROPHENOL	9	11	0.90	0.92	1.2	0.69	ND	1.5
ACENAPTHYLENE	9	33	0.26	0.27	0.38	0.16	ND	0.21
ACETOPHENONE	9	11	0.27	0.29	0.39	0.20	ND	0.066
ANTHRACENE	9	33	0.26	0.26	0.38	0.15	ND	0.15
BENZO(A)ANTHRACENE	9	78	0.19	0.25	0.41	0.093	ND	0.79
BENZO(A)PYRENE	9	44	0.39	0.41	0.61	0.22	ND	1.1
BENZO(B)FLUORANTHENE	9	89	0.21	0.31	0.60	0.021	ND	1.4
BENZO(GHI)PERYLENE	9	78	0.15	0.19	0.27	0.11	ND	0.34
BENZO(K)FLUORANTHENE	9	89	0.22	0.37	0.74	< 0	ND	1.8
BENZYL ALCOHOL	9	11	0.35	0.37	0.46	0.28	ND	0.59
BIS(2-ETHYLHEXYL) PHTHALATE	9	11	0.27	0.30	0.39	0.21	ND	0.073
CHRYSENE	9	100	0.10	0.28	0.54	0.033	0.022	1.2
DIBENZO(A,H)ANTHRACENE	9	22	0.26	0.27	0.38	0.16	ND	0.065
DIBENZOFURAN	9	11	0.31	0.32	0.40	0.24	ND	0.13
DI-N-BUTYL PHTHALATE	9	11	0.27	0.30	0.39	0.20	ND	0.040
FLUORANTHENE	9	100	0.14	0.27	0.45	0.087	0.022	0.80
FLUORENE	9	11	0.27	0.30	0.39	0.20	ND	0.043
INDENO(1,2,3-C,D)PYRENE	9	89	0.12	0.15	0.24	0.068	ND	0.30

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Table C-21
Floodplain and Riverbank Soil
Summary of Detected Appendix IX SVOCs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
NAPHTHALENE	9	67	0.098	0.14	0.20	0.081	ND	0.18
PHENANTHRENE	9	78	0.22	0.27	0.42	0.12	ND	0.76
P-PHENYLENEDIAMINE	6	17	0.44	0.41	0.53	0.28	ND	0.61
PYRENE	9	100	0.17	0.34	0.58	0.093	0.020	1.1
Reach 7 - Woods Pond Dam to Rising Pond								
1,4-DICHLOROBENZENE	5	20	0.22	0.22	0.33	0.11	ND	0.042
2-METHYLNAPHTHALENE	5	20	0.22	0.22	0.33	0.11	ND	0.042
ACENAPHTHENE	5	20	0.22	0.22	0.33	0.11	ND	0.053
ACENAPTHYLENE	5	20	0.22	0.23	0.32	0.13	ND	0.090
ACETOPHENONE	5	20	0.22	0.22	0.33	0.10	ND	0.032
ANTHRACENE	5	40	0.21	0.20	0.32	0.081	ND	0.14
BENZO(A)ANTHRACENE	5	80	0.16	0.20	0.35	0.053	ND	0.48
BENZO(A)PYRENE	5	80	0.17	0.23	0.43	0.035	ND	0.61
BENZO(B)FLUORANTHENE	5	80	0.20	0.23	0.42	0.045	ND	0.59
BENZO(GHI)PERYLENE	5	80	0.19	0.18	0.28	0.083	ND	0.34
BENZO(K)FLUORANTHENE	5	80	0.21	0.25	0.42	0.066	ND	0.59
BIS(2-ETHYLHEXYL) PHTHALATE	5	60	0.21	0.19	0.32	0.062	ND	0.26
CHRYSENE	5	80	0.21	0.27	0.49	0.051	ND	0.70
DIBENZO(A,H)ANTHRACENE	5	40	0.21	0.20	0.31	0.096	ND	0.12
DIBENZOFURAN	5	20	0.22	0.22	0.33	0.11	ND	0.041
FLUORANTHENE	5	100	0.16	0.35	0.74	< 0	0.026	1.1
FLUORENE	5	20	0.22	0.22	0.33	0.12	ND	0.062
INDENO(1,2,3-C,D)PYRENE	5	80	0.16	0.18	0.29	0.061	ND	0.38
NAPHTHALENE	5	60	0.090	0.15	0.29	0.011	ND	0.090
PHENANTHRENE	5	100	0.11	0.22	0.45	< 0	0.020	0.67
PYRENE	5	100	0.22	0.37	0.70	0.033	0.026	0.98
Reach 9 - Rising Pond Dam to Connecticut Border								
BENZO(A)ANTHRACENE	4	25	0.26	0.21	0.34	0.077	ND	0.022
BENZO(A)PYRENE	4	25	0.26	0.21	0.34	0.080	ND	0.026

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Table C-21
Floodplain and Riverbank Soil
Summary of Detected Appendix IX SVOCs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
BENZO(B)FLUORANTHENE	4	50	0.12	0.14	0.28	0.0059	ND	0.030
BENZO(K)FLUORANTHENE	4	50	0.13	0.15	0.28	0.014	ND	0.040
BIS(2-ETHYLHEXYL) PHTHALATE	4	25	0.26	0.30	0.43	0.17	ND	0.48
CHRYSENE	4	50	0.12	0.14	0.28	0.012	ND	0.037
FLUORANTHENE	4	50	0.14	0.15	0.28	0.032	ND	0.065
PHENANTHRENE	4	50	0.12	0.14	0.28	0.0048	ND	0.034
PYRENE	4	50	0.14	0.15	0.28	0.033	ND	0.064

Notes:

1. All EPA (1998-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.
5. NA = Analysis not conducted due to sample size (n<3).

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Table C-22
Floodplain Soil
Summary of Detected Appendix IX Pesticides (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5A - Confluence to Pittsfield WWTP								
4,4'-DDD	48	2	0.024	0.20	0.30	0.11	ND	0.0064
4,4'-DDE	49	4	0.026	0.20	0.29	0.11	ND	0.059
4,4'-DDT	35	6	0.021	0.24	0.40	0.078	ND	2.4
ALPHA-BHC	49	4	0.011	0.10	0.15	0.055	ND	0.0067
BETA-BHC	49	2	0.011	0.10	0.15	0.055	ND	0.0022
ENDRIN ALDEHYDE	48	2	0.021	0.21	0.30	0.11	ND	0.69
Reach 5B - Pittsfield WWTP to Roaring Brook Confluence								
ENDOSULFAN SULFATE	24	4	0.22	0.25	0.34	0.16	ND	0.052
HEPTACHLOR EPOXIDE	24	4	0.11	0.14	0.19	0.080	ND	0.55
Reach 5C - Roaring Brook Confluence to Woods Pond Headwaters								
ALPHA-BHC	34	3	0.019	0.058	0.086	0.031	ND	0.0031
BETA-BHC	34	6	0.019	0.059	0.086	0.031	ND	0.0085
HEPTACHLOR	33	3	0.024	0.060	0.088	0.032	ND	0.0060
Reach 7 - Woods Pond Dam to Rising Pond								
4,4'-DDT	2	50	0.37	0.37	NA	NA	ND	0.73
ENDRIN ALDEHYDE	5	20	0.041	0.11	0.28	< 0	ND	0.44

Notes:

1. All EPA (1998-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.

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Table C-23
Floodplain Soil
Summary of Detected Herbicides (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5A - Confluence to Pittsfield WWTP								
2,4,5-T	6	33	0.0031	0.0078	0.015	0.00074	ND	0.024
2,4,5-TP (SILVEX)	6	17	0.0031	0.0044	0.0063	0.0024	ND	0.0081
Reach 5C - Roaring Brook Confluence to Woods Pond Headwaters								
2,4,5-T	4	25	0.0058	0.0066	0.0089	0.0043	ND	0.0060
2,4,5-TP (SILVEX)	4	25	0.0058	0.0066	0.0089	0.0043	ND	0.0060

Notes:

1. All EPA (1998-99) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.

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Table C-24
Floodplain Soil
Summary of Detected Inorganics (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5A - Confluence to Pittsfield WWTP								
CYANIDE	49	4	0.36	0.40	0.43	0.36	ND	0.76
SULFIDE	43	7	4.7	5.1	5.6	4.6	ND	13
Reach 5B - Pittsfield WWTP to Roaring Brook Confluence								
CYANIDE	24	8	0.43	0.56	0.82	0.29	ND	3.6
SULFIDE	24	4	4.4	4.7	5.6	3.9	ND	13
Reach 5C - Roaring Brook Confluence to Woods Pond Headwaters								
SULFIDE	32	13	5.2	11	17	4.2	ND	99
Reach 9 - Rising Pond Dam to Connecticut Border								
SULFIDE	4	25	6.1	45	125	< 0	ND	165

Notes:

1. All EPA (1998-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.

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Table C-25
Vernal Pools
Summary of Detected PCDDS/PCDFs (pg/g)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5A - Confluence to Pittsfield WWTP								
1,2,3,4,6,7,8-HPCDD	15	93	21	188	474	< 0	ND	2178
1,2,3,4,6,7,8-HPCDF	15	93	19	464	1230	< 0	ND	5809
1,2,3,4,7,8,9-HPCDF	15	60	3.3	16	35	< 0	ND	149
1,2,3,4,7,8-HXCDD	15	47	1.3	4.8	8.9	0.65	ND	27
1,2,3,4,7,8-HXCDF	15	80	10	29	64	< 0	ND	270
1,2,3,6,7,8-HXCDD	15	67	4.7	12	27	< 0	ND	113
1,2,3,6,7,8-HXCDF	15	87	6.5	18	36	< 0	ND	143
1,2,3,7,8,9-HXCDD	15	47	2.1	7.5	15	0.38	ND	54
1,2,3,7,8,9-HXCDF	15	47	1.6	8.7	18	< 0	ND	70
1,2,3,7,8-PECDD	15	40	0.91	5.3	9.4	1.3	ND	25
1,2,3,7,8-PECDF	15	80	7.0	15	26	3.6	ND	84
2,3,4,6,7,8-HXCDF	15	73	9.0	23	50	< 0	ND	213
2,3,4,7,8-PECDF	15	87	7.8	33	69	< 0	ND	278
2,3,7,8-TCDD	15	20	0.44	1.3	2.3	0.28	ND	7.5
2,3,7,8-TCDF	15	93	9.4	30	55	6.1	ND	181
HPCDD (TOTAL)	12	92	57	422	1095	< 0	ND	4113
HPCDF (TOTAL)	12	100	68	968	2656	< 0	1.7	10237
HXCDD (TOTAL)	12	75	11	102	265	< 0	ND	994
HXCDF (TOTAL)	12	100	49	503	1295	< 0	0.55	4833
OCDD	15	80	179	1466	3733	< 0	ND	17273
OCDF	15	80	37	309	812	< 0	ND	3818
PECDD (TOTAL)	12	67	7.5	56	121	< 0	ND	284
PECDF (TOTAL)	12	92	62	384	879	< 0	ND	3040
TCDD (TOTAL)	12	50	0.56	8.4	21	< 0	ND	76

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Table C-25
Vernal Pools
Summary of Detected PCDDS/PCDFs (pg/g)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
TCDF (TOTAL)	12	100	70	306	635	< 0	0.44	2007
WHO TEQ	15	100	17	44	92	< 0	0.66	370
Reach 5B - Pittsfield WWTP to Roaring Brook Confluence								
1,2,3,4,6,7,8-HPCDD	12	100	157	454	803	104	24	1990
1,2,3,4,6,7,8-HPCDF	12	100	354	565	897	234	43	1650
1,2,3,4,7,8,9-HPCDF	12	100	12	27	44	9.7	2.3	79
1,2,3,4,7,8-HXCDD	12	83	2.6	6.9	11	2.5	ND	23
1,2,3,4,7,8-HXCDF	12	100	27	86	139	33	7.1	244
1,2,3,6,7,8-HXCDD	12	92	5.7	24	43	6.2	ND	92
1,2,3,6,7,8-HXCDF	12	100	23	40	64	17	3.7	113
1,2,3,7,8,9-HXCDD	12	92	4.6	14	24	3.6	ND	53
1,2,3,7,8,9-HXCDF	12	83	3.5	12	22	2.8	ND	50
1,2,3,7,8-PECDD	12	83	4.2	8.1	13	3.0	ND	26
1,2,3,7,8-PECDF	12	100	17	76	126	25	6.6	274
2,3,4,6,7,8-HXCDF	12	92	14	49	83	16	ND	143
2,3,4,7,8-PECDF	12	92	23	90	156	24	ND	321
2,3,7,8-TCDD	12	42	0.53	3.4	7.2	< 0	ND	23
2,3,7,8-TCDF	12	100	32	101	165	36	6.9	275
HPCDD (TOTAL)	10	100	158	835	1611	59	46	3675
HPCDF (TOTAL)	10	100	250	948	1686	210	80	3210
HXCDD (TOTAL)	10	100	39	203	381	26	8.3	749
HXCDF (TOTAL)	10	100	209	793	1414	172	65	2520
OCDD	12	100	1275	3501	6184	818	197	15210
OCDF	12	92	154	494	863	125	ND	1960
PECDD (TOTAL)	10	100	8.8	41	74	6.7	1.8	134
PECDF (TOTAL)	10	100	223	891	1608	174	72	2702

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Table C-25
Vernal Pools
Summary of Detected PCDDS/PCDFs (pg/g)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
TCDD (TOTAL)	10	70	0.82	18	35	0.60	ND	73
TCDF (TOTAL)	10	100	183	836	1516	156	54	2760
WHO TEQ	12	100	39	105	174	35	8.5	310
Reach 5C - Roaring Brook Confluence to Woods Pond Headwaters								
1,2,3,4,6,7,8-HPCDD	6	83	16	37	79	< 0	ND	136
1,2,3,4,6,7,8-HPCDF	6	100	24	39	72	5.5	4.0	110
1,2,3,4,7,8,9-HPCDF	6	33	2.0	2.4	4.3	0.54	ND	5.0
1,2,3,4,7,8-HXCDD	6	17	1.2	2.5	4.7	0.20	ND	2.0
1,2,3,4,7,8-HXCDF	6	50	4.6	4.5	7.0	2.0	ND	8.8
1,2,3,6,7,8-HXCDD	6	33	3.9	3.7	6.1	1.3	ND	6.9
1,2,3,6,7,8-HXCDF	6	50	3.2	3.2	5.4	0.96	ND	4.8
1,2,3,7,8,9-HXCDD	6	33	1.5	2.6	4.8	0.41	ND	2.3
1,2,3,7,8,9-HXCDF	6	17	0.94	2.3	4.7	0.00055	ND	1.4
1,2,3,7,8-PECDD	6	17	1.2	2.5	4.7	0.18	ND	1.9
1,2,3,7,8-PECDF	6	67	5.6	4.7	6.7	2.7	ND	6.7
2,3,4,6,7,8-HXCDF	6	67	3.5	3.8	6.1	1.4	ND	7.1
2,3,4,7,8-PECDF	6	67	4.5	5.8	9.9	1.6	ND	13
2,3,7,8-TCDF	6	83	4.4	8.6	16	1.2	ND	22
HPCDD (TOTAL)	4	100	68	96	202	< 0	3.7	246
HPCDF (TOTAL)	4	100	33	102	257	< 0	6.8	333
HXCDD (TOTAL)	4	75	13	24	55	< 0	ND	69
HXCDF (TOTAL)	4	100	20	45	103	< 0	6.2	132
OCDD	6	67	144	293	596	< 0	ND	974
OCDF	6	67	14	70	180	< 0	ND	344
PECDD (TOTAL)	4	75	4.4	13	35	< 0	ND	45
PECDF (TOTAL)	4	100	29	52	113	< 0	9.0	142

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Table C-25
Vernal Pools
Summary of Detected PCDDS/PCDFs (pg/g)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
TCDD (TOTAL)	4	50	2.3	7.8	20	< 0	ND	27
TCDF (TOTAL)	4	100	27	53	124	< 0	1.7	158
WHO TEQ	6	100	9.5	10	17	3.3	1.1	22

Notes:

1. All EPA (1999-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.

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Table C-26
Vernal Pools
Summary of Detected Metals (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5A - Confluence to Pittsfield WWTP								
ALUMINUM	3	100	9580	9123	14080	4165	4619	13169
ANTIMONY	8	50	1.1	1.2	1.6	0.88	ND	2.0
ARSENIC	11	82	3.7	4.4	5.9	3.0	ND	9.5
BARIUM	11	100	62	64	74	54	34	86
BERYLLIUM	11	100	0.57	0.56	0.67	0.44	0.25	0.95
CADMIUM	11	64	0.43	0.53	0.82	0.24	ND	1.5
CHROMIUM	11	100	29	31	47	15	8.4	104
COBALT	8	100	11	10	12	8.8	6.9	13
COPPER	11	100	31	43	60	26	17	116
IRON	3	100	21672	20246	25957	14534	14743	24322
LEAD	11	100	78	82	117	48	17	236
MAGNESIUM	3	100	4778	4844	5203	4485	4571	5183
MANGANESE	3	100	320	339	487	191	222	476
MERCURY	11	64	0.29	0.28	0.44	0.12	ND	0.91
NICKEL	11	100	20	20	22	17	14	26
SELENIUM	11	36	0.45	0.62	0.88	0.37	ND	1.8
SILVER	8	38	0.36	0.67	1.2	0.18	ND	1.9
STRONTIUM	3	100	9.4	11	17	6.0	8.1	17
THALLIUM	8	25	0.96	1.4	2.3	0.51	ND	4.0
TIN	8	50	5.1	4.5	6.4	2.7	ND	7.2
VANADIUM	11	100	19	19	22	16	10	29
ZINC	11	100	133	151	184	117	106	288

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Table C-26
Vernal Pools
Summary of Detected Metals (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5B - Pittsfield WWTP to Roaring Brook Confluence								
ALUMINUM	2	100	16184	16184	NA	NA	15701	16667
ANTIMONY	8	63	1.7	1.5	2.0	1.0	ND	2.4
ARSENIC	10	80	4.9	4.5	5.9	3.1	ND	7.2
BARIUM	10	100	83	80	91	68	50	103
BERYLLIUM	10	100	0.77	0.75	0.90	0.60	0.36	1.0
CADMIUM	10	70	0.97	1.2	1.8	0.61	ND	2.7
CHROMIUM	10	100	78	85	107	63	20	140
COBALT	8	100	11	10	12	8.9	7.1	13
COPPER	10	100	70	78	98	58	27	122
IRON	2	100	27683	27683	NA	NA	26221	29145
LEAD	10	100	123	126	162	90	19	206
MAGNESIUM	2	100	6204	6204	NA	NA	6026	6382
MANGANESE	2	100	465	465	NA	NA	393	538
MERCURY	10	100	0.79	0.76	0.94	0.58	0.40	1.3
NICKEL	10	100	23	23	26	19	16	29
SELENIUM	10	30	0.62	0.74	0.97	0.50	ND	1.2
SILVER	8	88	1.0	1.5	2.5	0.61	ND	4.0
STRONTIUM	2	100	12	12	NA	NA	12	12
THALLIUM	8	50	1.2	1.5	2.4	0.62	ND	4.1
TIN	8	63	8.3	8.0	10	5.6	ND	14
VANADIUM	10	100	22	22	26	18	13	31
ZINC	10	100	213	216	255	178	98	296

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Table C-26
Vernal Pools
Summary of Detected Metals (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5C - Roaring Brook Confluence to Woods Pond Headwaters								
ALUMINUM	2	100	9218	9218	NA	NA	9095	9342
ARSENIC	4	50	2.8	3.2	5.4	0.90	ND	6.2
BARIUM	4	100	45	57	96	18	23	121
BERYLLIUM	4	100	0.32	0.33	0.45	0.20	0.17	0.46
CADMIUM	4	75	0.40	0.39	0.75	0.04	ND	1.0
CHROMIUM	4	100	15	12	20	4.9	0.60	18
COBALT	2	100	4.7	4.7	NA	NA	0.80	7.5
COPPER	4	100	25	24	40	8.6	7.8	40
IRON	2	100	13089	13089	NA	NA	9667	16511
LEAD	4	100	56	56	63	49	49	71
MAGNESIUM	2	100	2554	2554	NA	NA	1520	3588
MANGANESE	2	100	144	144	NA	NA	69	219
MERCURY	4	75	0.19	0.17	0.26	0.074	ND	0.25
NICKEL	4	100	12	12	20	5.3	4.3	19
SELENIUM	4	100	1.4	1.5	2.4	0.64	0.69	3.9
STRONTIUM	2	100	6.7	6.7	NA	NA	2.1	11
TIN	2	50	1.7	1.7	NA	NA	ND	2.3
VANADIUM	4	100	17	15	22	7.9	3.2	20
ZINC	4	100	93	87	130	43	33	128

Notes:

1. All EPA (1999-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.
5. NA = Analysis not conducted due to sample size (n<3).

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Table C-27
Vernal Pools
Summary of Detected PAHs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5A - Confluence to Pittsfield WWTP								
1,6,7-TRIMETHYLNAPHTHALENE	3	100	0.0038	0.0075	0.016	< 0	0.0031	0.016
1-METHYLNAPHTHALENE	3	100	0.012	0.024	0.054	< 0	0.0061	0.054
1-METHYLPHENANTHRENE	3	100	0.012	0.033	0.077	< 0	0.011	0.077
2,6 DIMETHYLNAPHTHALENE	3	100	0.0054	0.011	0.022	< 0	0.0049	0.022
2-METHYLNAPHTHALENE	3	100	0.021	0.045	0.10	< 0	0.011	0.10
ACENAPHTHENE	3	100	0.019	0.017	0.031	0.0030	0.0043	0.029
ACENAPTHYLENE	3	100	0.028	0.094	0.23	< 0	0.023	0.23
ANTHRACENE	3	100	0.051	0.12	0.27	< 0	0.049	0.27
BENZO(A)ANTHRACENE	3	100	0.090	0.14	0.27	0.0060	0.057	0.27
BENZO(A)PYRENE	3	100	0.16	0.24	0.48	0.0026	0.093	0.48
BENZO(B)FLUORANTHENE	3	100	0.16	0.25	0.47	0.021	0.11	0.47
BENZO(E)PYRENE	3	100	0.074	0.11	0.23	< 0	0.038	0.23
BENZO(GHI)PERYLENE	3	100	0.075	0.12	0.24	< 0	0.046	0.24
BENZO(K)FLUORANTHENE	3	100	0.057	0.070	0.12	0.022	0.037	0.12
BIPHENYL (DIPHENYL)	3	33	0.0028	0.0072	0.016	< 0	ND	0.016
C1-CHRYSENES	3	100	0.066	0.12	0.24	< 0	0.042	0.24
C1-DIBENZOTHIOPHENES	3	100	0.0035	0.011	0.027	< 0	0.0032	0.027
C1-FLUORANTHENES & PYRENES	3	100	0.091	0.21	0.45	< 0	0.077	0.45
C1-FLUORENES	3	100	0.015	0.031	0.064	< 0	0.014	0.064
C1-NAPHTHALENES	3	100	0.033	0.069	0.16	< 0	0.017	0.16
C1-PHENANTHRENES & ANTHRACENES	3	100	0.043	0.12	0.26	< 0	0.040	0.26
C2-CHRYSENES	3	100	0.017	0.044	0.10	< 0	0.014	0.10
C2-DIBENZOTHIOPHENES	3	100	0.0058	0.016	0.037	< 0	0.0053	0.037
C2-FLUORENES	3	100	0.023	0.039	0.073	0.0051	0.021	0.073
C2-NAPHTHALENES	3	100	0.014	0.041	0.097	< 0	0.012	0.097

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Table C-27
Vernal Pools
Summary of Detected PAHs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
C2-PHENANTHRENES & ANTHRACENES	3	100	0.029	0.082	0.19	< 0	0.025	0.19
C3-CHRYSENES	3	100	0.00030	0.0031	0.0089	< 0	0.00020	0.0089
C3-DIBENZOTHIOPHENES	3	100	0.0037	0.010	0.023	< 0	0.0032	0.023
C3-FLUORENES	3	100	0.014	0.024	0.047	0.0014	0.012	0.047
C3-NAPHTHALENES	3	100	0.011	0.037	0.091	< 0	0.0098	0.091
C3-PHENANTHRENES & ANTHRACENES	3	100	0.019	0.056	0.13	< 0	0.019	0.13
C4-CHRYSENES	3	67	0.0036	0.015	0.043	< 0	ND	0.043
C4-NAPHTHALENES	3	100	0.0069	0.021	0.049	< 0	0.0065	0.049
C4-PHENANTHRENES & ANTHRACENES	3	100	0.0060	0.015	0.033	< 0	0.0043	0.033
CHRYSENE	3	100	0.12	0.17	0.31	0.024	0.072	0.31
DIBENZO(A,H)ANTHRACENE	3	100	0.014	0.030	0.070	< 0	0.0076	0.070
DIBENZOTHIOPHENE	3	100	0.0038	0.0076	0.016	< 0	0.0032	0.016
FLUORANTHENE	3	100	0.20	0.37	0.72	0.013	0.18	0.72
FLUORENE	3	100	0.016	0.032	0.068	< 0	0.011	0.068
INDENO(1,2,3-C,D)PYRENE	3	100	0.083	0.15	0.31	< 0	0.048	0.31
NAPHTHALENE	3	100	0.069	0.087	0.18	< 0	0.016	0.18
PERYLENE	3	100	0.017	0.056	0.14	< 0	0.015	0.14
PHENANTHRENE	3	100	0.081	0.16	0.34	< 0	0.070	0.34
PYRENE	3	100	0.18	0.35	0.71	< 0	0.15	0.71
Reach 5B - Pittsfield WWTP to Roaring Brook Confluence								
1,6,7-TRIMETHYLNAPHTHALENE	2	100	0.049	0.049	NA	NA	0.043	0.056
1-METHYLNAPHTHALENE	2	100	0.36	0.36	NA	NA	0.18	0.54
1-METHYLPHENANTHRENE	2	100	0.35	0.35	NA	NA	0.24	0.45
2,6 DIMETHYLNAPHTHALENE	2	100	0.082	0.082	NA	NA	0.067	0.098
2-METHYLNAPHTHALENE	2	100	0.73	0.73	NA	NA	0.36	1.1
ACENAPHTHENE	2	100	0.080	0.080	NA	NA	0.074	0.085

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Table C-27
Vernal Pools
Summary of Detected PAHs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
ACENAPTHYLENE	2	100	0.94	0.94	NA	NA	0.79	1.1
ANTHRACENE	2	100	1.3	1.3	NA	NA	0.89	1.8
BENZO(A)ANTHRACENE	2	100	2.5	2.5	NA	NA	2.3	2.8
BENZO(A)PYRENE	2	100	4.7	4.7	NA	NA	4.1	5.3
BENZO(B)FLUORANTHENE	2	100	4.6	4.6	NA	NA	3.8	5.4
BENZO(E)PYRENE	2	100	2.6	2.6	NA	NA	2.1	3.2
BENZO(GHI)PERYLENE	2	100	2.6	2.6	NA	NA	2.2	3.1
BENZO(K)FLUORANTHENE	2	100	1.2	1.2	NA	NA	1.1	1.3
BIPHENYL (DIPHENYL)	2	100	0.061	0.061	NA	NA	0.049	0.074
C1-CHRYSENES	2	100	2.6	2.6	NA	NA	2.2	3.0
C1-DIBENZOTHIOPHENES	2	100	0.12	0.12	NA	NA	0.081	0.17
C1-FLUORANTHENES & PYRENES	2	100	2.1	2.1	NA	NA	1.5	2.7
C1-FLUORENES	2	100	0.24	0.24	NA	NA	0.18	0.30
C1-NAPHTHALENES	2	100	1.1	1.1	NA	NA	0.54	1.6
C1-PHENANTHRENES & ANTHRACENES	2	100	1.2	1.2	NA	NA	0.85	1.5
C2-CHRYSENES	2	100	1.0	1.0	NA	NA	0.88	1.2
C2-DIBENZOTHIOPHENES	2	100	0.16	0.16	NA	NA	0.12	0.20
C2-FLUORENES	2	100	0.24	0.24	NA	NA	0.24	0.24
C2-NAPHTHALENES	2	100	0.69	0.69	NA	NA	0.33	1.0
C2-PHENANTHRENES & ANTHRACENES	2	100	0.94	0.94	NA	NA	0.71	1.2
C3-CHRYSENES	2	100	0.061	0.061	NA	NA	0.041	0.082
C3-DIBENZOTHIOPHENES	2	100	0.11	0.11	NA	NA	0.072	0.15
C3-FLUORENES	2	100	0.23	0.23	NA	NA	0.17	0.28
C3-NAPHTHALENES	2	100	0.58	0.58	NA	NA	0.31	0.86
C3-PHENANTHRENES & ANTHRACENES	2	100	0.72	0.72	NA	NA	0.58	0.85
C4-CHRYSENES	2	100	0.45	0.45	NA	NA	0.35	0.54

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Table C-27
Vernal Pools
Summary of Detected PAHs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
C4-NAPHTHALENES	2	100	0.33	0.33	NA	NA	0.18	0.47
C4-PHENANTHRENES & ANTHRACENES	2	100	0.19	0.19	NA	NA	0.15	0.23
CHRYSENE	2	100	2.9	2.9	NA	NA	2.5	3.3
DIBENZO(A,H)ANTHRACENE	2	100	0.72	0.72	NA	NA	0.58	0.85
DIBENZOTHIOPHENE	2	100	0.070	0.070	NA	NA	0.048	0.092
FLUORANTHENE	2	100	2.7	2.7	NA	NA	2.1	3.3
FLUORENE	2	100	0.24	0.24	NA	NA	0.20	0.28
INDENO(1,2,3-C,D)PYRENE	2	100	3.2	3.2	NA	NA	2.6	3.8
NAPHTHALENE	2	100	1.1	1.1	NA	NA	0.57	1.7
PERYLENE	2	100	0.27	0.27	NA	NA	0.040	0.50
PHENANTHRENE	2	100	1.4	1.4	NA	NA	1.0	1.8
PYRENE	2	100	2.9	2.9	NA	NA	2.3	3.6
Reach 5C - Roaring Brook Confluence to Woods Pond Headwaters								
1,6,7-TRIMETHYLNAPHTHALENE	2	100	0.038	0.038	NA	NA	0.0083	0.069
1-METHYLNAPHTHALENE	2	100	0.074	0.074	NA	NA	0.019	0.13
1-METHYLPHENANTHRENE	2	100	0.070	0.070	NA	NA	0.026	0.11
2,6 DIMETHYLNAPHTHALENE	2	100	0.029	0.029	NA	NA	0.010	0.048
2-METHYLNAPHTHALENE	2	100	0.081	0.081	NA	NA	0.030	0.13
ACENAPHTHENE	2	100	0.010	0.010	NA	NA	0.0058	0.015
ACENAPTHYLENE	2	100	0.11	0.11	NA	NA	0.057	0.17
ANTHRACENE	2	100	0.22	0.22	NA	NA	0.091	0.35
BENZO(A)ANTHRACENE	2	100	0.23	0.23	NA	NA	0.13	0.34
BENZO(A)PYRENE	2	100	0.32	0.32	NA	NA	0.16	0.48
BENZO(B)FLUORANTHENE	2	100	0.41	0.41	NA	NA	0.21	0.61
BENZO(E)PYRENE	2	100	0.12	0.12	NA	NA	0.069	0.17
BENZO(GHI)PERYLENE	2	100	0.17	0.17	NA	NA	0.094	0.25

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Table C-27
Vernal Pools
Summary of Detected PAHs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
BENZO(K)FLUORANTHENE	2	100	0.097	0.097	NA	NA	0.054	0.14
BIPHENYL (DIPHENYL)	2	50	0.010	0.010	NA	NA	ND	0.017
C1-CHRYSENES	2	100	0.24	0.24	NA	NA	0.096	0.38
C1-DIBENZOTHIOPHENES	2	100	0.023	0.023	NA	NA	0.0090	0.037
C1-FLUORANTHENES & PYRENES	2	100	0.33	0.33	NA	NA	0.15	0.52
C1-FLUORENES	2	100	0.059	0.059	NA	NA	0.019	0.10
C1-NAPHTHALENES	2	100	0.16	0.16	NA	NA	0.048	0.26
C1-PHENANTHRENES & ANTHRACENES	2	100	0.25	0.25	NA	NA	0.091	0.40
C2-CHRYSENES	2	100	0.15	0.15	NA	NA	0.044	0.26
C2-DIBENZOTHIOPHENES	2	100	0.033	0.033	NA	NA	0.012	0.054
C2-FLUORENES	2	100	0.11	0.11	NA	NA	0.028	0.19
C2-NAPHTHALENES	2	100	0.13	0.13	NA	NA	0.030	0.22
C2-PHENANTHRENES & ANTHRACENES	2	100	0.23	0.23	NA	NA	0.073	0.39
C3-CHRYSENES	2	100	0.00050	0.00050	NA	NA	0.00030	0.00070
C3-DIBENZOTHIOPHENES	2	100	0.023	0.023	NA	NA	0.0072	0.039
C3-FLUORENES	2	100	0.11	0.11	NA	NA	0.032	0.18
C3-NAPHTHALENES	2	100	0.13	0.13	NA	NA	0.027	0.24
C3-PHENANTHRENES & ANTHRACENES	2	100	0.16	0.16	NA	NA	0.024	0.30
C4-CHRYSENES	2	100	0.00010	0.00010	NA	NA	0.00010	0.00010
C4-NAPHTHALENES	2	100	0.081	0.081	NA	NA	0.016	0.15
C4-PHENANTHRENES & ANTHRACENES	2	100	0.064	0.064	NA	NA	0.0054	0.12
CHRYSENE	2	100	0.28	0.28	NA	NA	0.13	0.42
DIBENZO(A,H)ANTHRACENE	2	100	0.036	0.036	NA	NA	0.018	0.054
DIBENZOTHIOPHENE	2	100	0.012	0.012	NA	NA	0.0065	0.018
FLUORANTHENE	2	100	0.46	0.46	NA	NA	0.22	0.70
FLUORENE	2	100	0.036	0.036	NA	NA	0.018	0.054

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Table C-27
Vernal Pools
Summary of Detected PAHs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
INDENO(1,2,3-C,D)PYRENE	2	100	0.20	0.20	NA	NA	0.10	0.30
NAPHTHALENE	2	100	0.079	0.079	NA	NA	0.044	0.11
PERYLENE	2	100	0.046	0.046	NA	NA	0.028	0.064
PHENANTHRENE	2	100	0.21	0.21	NA	NA	0.12	0.31
PYRENE	2	100	0.42	0.42	NA	NA	0.21	0.64

Notes:

1. All EPA (2000) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.
5. NA = Analysis not conducted due to sample size (n<3).

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Table C-28
Vernal Pools
Summary of Detected Appendix IX SVOCs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5A - Confluence to Pittsfield WWTP								
1,2,4-TRICHLOROBENZENE	8	25	0.34	0.34	0.51	0.17	ND	0.053
1,4-DICHLOROBENZENE	8	38	0.34	0.32	0.50	0.15	ND	0.070
2-METHYLNAPHTHALENE	8	13	0.35	0.38	0.52	0.23	ND	0.062
4-METHYLPHENOL	8	50	0.42	0.43	0.61	0.25	ND	1.0
ACENAPHTHENE	8	13	0.36	0.37	0.52	0.23	ND	0.031
ACENAPTHYLENE	8	50	0.28	0.30	0.49	0.12	ND	0.19
ACETOPHENONE	8	50	0.26	0.23	0.34	0.11	ND	0.65
ANTHRACENE	8	50	0.24	0.30	0.48	0.11	ND	0.11
BENZO(A)ANTHRACENE	8	75	0.34	0.40	0.64	0.16	ND	1.0
BENZO(A)PYRENE	8	63	0.48	0.52	0.81	0.22	ND	1.4
BENZO(B)FLUORANTHENE	8	63	0.43	0.49	0.74	0.24	ND	1.2
BENZO(GHI)PERYLENE	8	63	0.39	0.38	0.56	0.20	ND	0.65
BENZO(K)FLUORANTHENE	8	63	0.47	0.49	0.74	0.23	ND	1.2
BIS(2-ETHYLHEXYL) PHTHALATE	8	13	0.35	0.37	0.52	0.23	ND	0.039
CHRYSENE	8	75	0.45	0.48	0.78	0.19	ND	1.3
DIBENZO(A,H)ANTHRACENE	8	50	0.28	0.31	0.49	0.14	ND	0.20
DI-N-BUTYL PHTHALATE	8	13	0.34	0.35	0.47	0.22	ND	0.067
FLUORANTHENE	8	88	0.37	0.47	0.78	0.17	ND	1.3
FLUORENE	8	25	0.34	0.34	0.51	0.17	ND	0.046
INDENO(1,2,3-C,D)PYRENE	8	63	0.38	0.36	0.54	0.19	ND	0.58
NAPHTHALENE	8	63	0.15	0.26	0.44	0.084	ND	0.15
PHENANTHRENE	8	75	0.38	0.37	0.54	0.19	ND	0.57
PYRENE	8	75	0.51	0.62	0.99	0.25	ND	1.7
TOTAL PAH	7	86	2.2	10	25	< 0	ND	53
TOTAL PAH (HIGH MW)	7	86	0.68	3.98	10	< 0	ND	23
TOTAL PAH (LOW MW)	7	71	1.5	6.29	14	< 0	ND	30

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Table C-28
Vernal Pools
Summary of Detected Appendix IX SVOCs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5B - Pittsfield WWTP to Roaring Brook Confluence								
1,2,4-TRICHLOROBENZENE	8	13	0.38	0.38	0.53	0.23	ND	0.039
1,4-DICHLOROBENZENE	8	50	0.18	0.20	0.32	0.088	ND	0.081
2-METHYLNAPHTHALENE	8	25	0.35	0.35	0.51	0.18	ND	0.068
4-METHYLPHENOL	8	38	0.44	1.0	2.2	< 0	ND	5.1
ACENAPTHYLENE	8	50	0.26	0.30	0.49	0.12	ND	0.14
ANTHRACENE	8	50	0.23	0.29	0.48	0.09	ND	0.076
BENZO(A)ANTHRACENE	8	88	0.23	0.26	0.37	0.15	ND	0.51
BENZO(A)PYRENE	8	88	0.24	0.29	0.43	0.15	ND	0.65
BENZO(B)FLUORANTHENE	8	88	0.28	0.28	0.40	0.17	ND	0.58
BENZO(GHI)PERYLENE	8	88	0.15	0.27	0.41	0.12	ND	0.61
BENZO(K)FLUORANTHENE	8	88	0.29	0.32	0.46	0.17	ND	0.66
BIS(2-ETHYLHEXYL) PHTHALATE	8	25	0.35	0.34	0.51	0.17	ND	0.047
CHRYSENE	8	88	0.29	0.34	0.47	0.20	ND	0.68
DIBENZO(A,H)ANTHRACENE	8	38	0.35	0.35	0.51	0.19	ND	0.21
DIETHYL PHTHALATE	8	38	0.29	0.30	0.48	0.13	ND	0.088
FLUORANTHENE	8	88	0.35	0.43	0.61	0.24	ND	0.83
FLUORENE	8	13	0.40	0.39	0.54	0.24	ND	0.037
INDENO(1,2,3-C,D)PYRENE	8	88	0.13	0.22	0.34	0.11	ND	0.49
NAPHTHALENE	8	75	0.092	0.17	0.28	0.063	ND	0.14
PHENANTHRENE	8	88	0.25	0.27	0.37	0.18	ND	0.44
PHENOL	8	13	0.42	0.66	1.1	0.20	ND	2.2
PYRENE	8	88	0.37	0.54	0.81	0.26	ND	1.2
TOTAL PAH	4	100	4.6	4.7	7.0	2.5	2.4	7.2
TOTAL PAH (HIGH MW)	4	100	1.3	1.2	1.6	0.74	0.65	1.6
TOTAL PAH (LOW MW)	4	100	3.3	3.5	5.3	1.7	1.8	5.6

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Table C-28
Vernal Pools
Summary of Detected Appendix IX SVOCs (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5C - Roaring Brook Confluence to Woods Pond Headwaters								
2-METHYLNAPHTHALENE	2	50	0.70	0.70	NA	NA	ND	0.28
4-METHYLPHENOL	2	50	1.1	1.1	NA	NA	ND	1.1
ACENAPTHYLENE	2	50	0.87	0.87	NA	NA	ND	0.61
ACETOPHENONE	2	100	0.56	0.56	NA	NA	0.37	1.0
ANTHRACENE	2	50	0.97	0.97	NA	NA	ND	0.82
BENZO(A)ANTHRACENE	2	50	4.5	4.5	NA	NA	ND	7.9
BENZO(A)PYRENE	2	50	2.8	2.8	NA	NA	ND	4.4
BENZO(B)FLUORANTHENE	2	50	4.5	4.5	NA	NA	ND	7.8
BENZO(GHI)PERYLENE	2	50	1.2	1.2	NA	NA	ND	1.2
BENZO(K)FLUORANTHENE	2	50	3.4	3.4	NA	NA	ND	5.7
CHRYSENE	2	50	4.7	4.7	NA	NA	ND	8.2
DIBENZO(A,H)ANTHRACENE	2	50	0.94	0.94	NA	NA	ND	0.76
DIBENZOFURAN	2	50	0.61	0.61	NA	NA	ND	0.1
FLUORENE	2	50	0.60	0.60	NA	NA	ND	0.081
INDENO(1,2,3-C,D)PYRENE	2	50	1.3	1.3	NA	NA	ND	1.5
NAPHTHALENE	2	50	0.69	0.69	NA	NA	ND	0.26
PHENANTHRENE	2	50	1.1	1.1	NA	NA	ND	1.0
TOTAL PAH	2	50	21	21	NA	NA	ND	40
TOTAL PAH (HIGH MW)	2	50	1.9	1.9	NA	NA	ND	2.8
TOTAL PAH (LOW MW)	2	50	19	19	NA	NA	ND	37

Notes:

1. All EPA (1999-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.
5. NA = Analysis not conducted due to sample size (n<3).

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Table C-29
Vernal Pools
Summary of Detected Appendix IX Pesticides (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5A - Confluence to Pittsfield WWTP								
1,2,3,4-TETRACHLOROBENZENE	3	100	0.0032	0.0056	0.011	0.00060	0.0029	0.011
1,2,4,5-TETRACHLOROBENZENE	3	100	0.0078	0.0092	0.016	0.0025	0.0042	0.016
4,4'-DDD	13	38	0.14	0.22	0.37	0.070	ND	0.48
4,4'-DDE	14	57	0.28	0.69	1.1	0.25	ND	2.4
4,4'-DDT	11	27	0.073	0.27	0.60	< 0	ND	0.22
ALDRIN	13	8	0.024	0.078	0.15	0.0038	ND	0.00089
ALPHA-BHC	13	31	0.024	0.078	0.15	0.0035	ND	0.0076
ALPHA-CHLORDANE	3	67	0.0039	0.0029	0.0049	0.00080	ND	0.0039
BETA-BHC	13	8	0.024	0.079	0.15	0.0051	ND	0.016
CHLORPYRIFOS	3	100	0.0036	0.0034	0.0058	0.0011	0.0013	0.0054
CIS-NONACHLOR	3	100	0.012	0.010	0.017	0.0040	0.0042	0.015
DELTA-BHC	13	15	0.024	0.078	0.15	0.0032	ND	0.0015
DIELDRIN	13	23	0.049	0.16	0.30	0.0069	ND	0.0066
ENDOSULFAN II	13	23	0.049	0.16	0.30	0.0069	ND	0.0059
ENDRIN	13	23	0.049	0.15	0.30	0.0061	ND	0.0024
GAMMA BHC (LINDANE)	13	15	0.024	0.078	0.15	0.0038	ND	0.0023
HEPTACHLOR	13	15	0.024	0.079	0.15	0.0045	ND	0.0095
HEXACHLOROBENZENE	3	100	0.0012	0.0012	0.0015	0.00094	0.00097	0.0015
MIREX	3	67	0.0015	0.0016	0.0027	0.00050	ND	0.0015
O,P'-DDD	3	100	0.049	0.055	0.10	0.010	0.019	0.096
O,P'-DDE	3	67	0.0084	0.015	0.035	< 0	ND	0.035
O,P'-DDT	3	100	0.024	0.038	0.079	< 0	0.011	0.078
OXYCHLORDANE	3	67	0.0023	0.0021	0.0028	0.0014	ND	0.0023
PENTACHLOROANISOLE	3	100	0.0024	0.0020	0.0034	0.00068	0.00071	0.0029
PENTACHLOROBENZENE	3	100	0.0029	0.0043	0.0084	0.00016	0.0016	0.0084
TRANS-NONACHLOR	3	100	0.0029	0.0034	0.0054	0.0014	0.0019	0.0053

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Table C-29
Vernal Pools
Summary of Detected Appendix IX Pesticides (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5B - Pittsfield WWTP to Roaring Brook Confluence								
1,2,3,4-TETRACHLOROBENZENE	2	100	0.071	0.071	NA	NA	0.052	0.090
1,2,4,5-TETRACHLOROBENZENE	2	100	0.070	0.070	NA	NA	0.023	0.12
4,4'-DDD	11	27	0.36	0.38	0.57	0.20	ND	0.39
4,4'-DDE	11	18	0.22	0.36	0.55	0.17	ND	0.20
4,4'-DDT	9	22	0.22	0.61	1.2	0.021	ND	2.8
ALPHA-BHC	11	9	0.11	0.17	0.27	0.069	ND	0.0021
ALPHA-CHLORDANE	2	50	0.0019	0.0019	NA	NA	ND	0.0015
CIS-NONACHLOR	2	100	0.34	0.34	NA	NA	0.13	0.55
DIELDRIN	10	20	0.29	0.36	0.58	0.14	ND	0.0082
ENDOSULFAN II	11	18	0.22	0.36	0.55	0.16	ND	0.14
ENDRIN	11	9	0.22	0.34	0.54	0.14	ND	0.0068
GAMMA BHC (LINDANE)	11	9	0.11	0.17	0.27	0.069	ND	0.00085
GAMMA-CHLORDANE	2	100	0.0011	0.0011	NA	NA	0.00042	0.0018
HEPTACHLOR	11	9	0.11	0.17	0.27	0.069	ND	0.0011
HEPTACHLOR EPOXIDE	11	9	0.11	0.17	0.27	0.070	ND	0.0058
HEXACHLOROBENZENE	2	100	0.0064	0.0064	NA	NA	0.0055	0.0074
MIREX	2	50	0.0062	0.0062	NA	NA	ND	0.011
O,P'-DDD	2	100	0.35	0.35	NA	NA	0.14	0.57
O,P'-DDE	2	100	0.026	0.026	NA	NA	0.0057	0.047
O,P'-DDT	2	100	0.44	0.44	NA	NA	0.22	0.66
OXYCHLORDANE	2	50	0.0060	0.0060	NA	NA	ND	0.0097
PENTACHLOROANISOLE	2	100	0.0021	0.0021	NA	NA	0.0017	0.0024
PENTACHLOROBENZENE	2	100	0.044	0.044	NA	NA	0.035	0.052
TRANS-NONACHLOR	2	50	0.0025	0.0025	NA	NA	ND	0.0027
Reach 5C - Roaring Brook Confluence to Woods Pond Headwaters								
1,2,3,4-TETRACHLOROBENZENE	2	100	0.0072	0.0072	NA	NA	0.0036	0.011
1,2,4,5-TETRACHLOROBENZENE	2	100	0.0082	0.0082	NA	NA	0.0060	0.011

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Table C-29
Vernal Pools
Summary of Detected Appendix IX Pesticides (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
4,4'-DDD	5	40	0.012	0.014	0.023	0.0053	ND	0.015
4,4'-DDE	5	40	0.031	0.031	0.052	0.011	ND	0.068
4,4'-DDT	5	60	0.026	0.027	0.041	0.012	ND	0.052
ALDRIN	5	40	0.0055	0.0063	0.011	0.0013	ND	0.0038
ALPHA-BHC	5	20	0.0055	0.0059	0.011	0.00064	ND	0.00026
ALPHA-CHLORDANE	2	100	0.0056	0.0056	NA	NA	0.0018	0.0093
BETA-BHC	5	20	0.0055	0.0060	0.011	0.00094	ND	0.0015
CHLORPYRIFOS	2	100	0.0047	0.0047	NA	NA	0.0013	0.0082
CIS-NONACHLOR	2	100	0.019	0.019	NA	NA	0.0057	0.032
DELTA-BHC	5	20	0.0055	0.0059	0.011	0.00064	ND	0.00026
DIELDRIN	5	40	0.011	0.012	0.022	0.0016	ND	0.0038
ENDOSULFAN II	5	40	0.012	0.014	0.024	0.0052	ND	0.016
ENDRIN	5	20	0.011	0.012	0.022	0.0021	ND	0.0058
GAMMA BHC (LINDANE)	5	40	0.0055	0.0063	0.011	0.0013	ND	0.0035
HEPTACHLOR	5	20	0.0055	0.0060	0.011	0.00095	ND	0.0010
HEXACHLOROBENZENE	2	100	0.0020	0.0020	NA	NA	0.0013	0.0026
O,P'-DDD	2	100	0.022	0.022	NA	NA	0.0073	0.037
O,P'-DDE	2	50	0.0024	0.0024	NA	NA	ND	0.0044
O,P'-DDT	2	100	0.034	0.034	NA	NA	0.017	0.050
OXYCHLORDANE	2	50	0.0036	0.0036	NA	NA	ND	0.0055
PENTACHLOROANISOLE	2	100	0.0015	0.0015	NA	NA	0.0010	0.0020
PENTACHLOROBENZENE	2	100	0.0027	0.0027	NA	NA	0.0013	0.0041
TRANS-NONACHLOR	2	100	0.0040	0.0040	NA	NA	0.0022	0.0059

Notes:

1. All EPA (1999-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.
5. NA = Analysis not conducted due to sample size (n<3).

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Table C-30
Vernal Pools
Summary of Detected Inorganics (mg/kg)

Constituent	Number of Samples	Frequency of Detection (%)	Median	Arithmetic Mean	+2 Standard Errors	-2 Standard Errors	Minimum	Maximum
Reach 5B - Pittsfield WWTP to Roaring Brook Confluence								
SULFIDE	8	13	9.1	17	32	2.0	ND	69

Notes:

1. All EPA (1999-00) data are included.
2. Non-detected values were assigned a value of one-half the detection limit prior to calculation.
3. Duplicate samples were averaged.
4. ND = Not Detected.

Table C-31
PCDD/PCDF Data Summary Table for Fish

Sample Location: REACH 5 - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range	Median	Arithmetic Mean[3]	Standard Error
Bluegill Skin-off Fillet						
1,2,3,4,7,8,9-HPCDF	1	100	-- - --	--	9.00E-07	--
1,2,3,7,8-PECDF	1	100	-- - --	--	7.60E-06	--
2,3,4,7,8-PECDF	1	100	-- - --	--	1.40E-06	--
2,3,7,8-TCDF	1	100	-- - --	--	3.60E-06	--
WHO TEQ (Human/Mammal)	1	--	-- - --	--	6.25E-06	--
Bluegill Offal						
WHO TEQ (Human/Mammal)	1	--	-- - --	--	1.24E-05	--
Bluegill Whole Body Reconstructed						
1,2,3,4,7,8,9-HPCDF	1	100	-- - --	--	6.55E-06	--
1,2,3,7,8-PECDF	1	100	-- - --	--	9.06E-06	--
2,3,4,7,8-PECDF	1	100	-- - --	--	6.74E-06	--
2,3,7,8-TCDF	1	100	-- - --	--	2.59E-06	--
WHO TEQ (Human/Mammal)	1	--	-- - --	--	1.01E-05	--
Brown Bullhead Skin-off Fillet						
1,2,3,4,6,7,8-HPCDF	16	69	ND - 1.37E-05	2.75E-06	3.93E-06	8.28E-07
1,2,3,4,7,8-HXCDF	16	19	ND - 3.40E-06	2.33E-06	2.35E-06	1.25E-07
1,2,3,6,7,8-HXCDF	16	6	ND - 3.40E-06	2.38E-06	2.31E-06	1.55E-07
1,2,3,7,8-PECDD	16	6	ND - 3.40E-06	2.38E-06	2.31E-06	1.55E-07
1,2,3,7,8-PECDF	16	94	ND - 1.89E-04	1.36E-05	3.22E-05	1.16E-05
2,3,4,6,7,8-HXCDF	16	6	ND - 3.40E-06	2.38E-06	2.32E-06	1.50E-07
2,3,4,7,8-PECDF	16	94	ND - 3.93E-05	1.30E-05	1.40E-05	2.14E-06
2,3,7,8-TCDD	16	19	ND - 1.20E-06	5.00E-07	5.91E-07	5.52E-08
2,3,7,8-TCDF	16	75	ND - 5.25E-05	4.65E-06	8.27E-06	3.13E-06
OCDD	16	19	ND - 6.75E-06	4.75E-06	4.31E-06	4.09E-07
WHO TEQ (Human/Mammal)	16	--	8.14E-06 - 3.44E-05	1.25E-05	1.41E-05	1.53E-06
Brown Bullhead Offal						
1,2,3,4,6,7,8-HPCDD	16	19	ND - 3.00E-06	2.40E-06	2.23E-06	1.01E-07
1,2,3,4,6,7,8-HPCDF	16	62	ND - 7.96E-05	3.40E-06	1.11E-05	4.88E-06
1,2,3,4,7,8-HXCDF	16	50	ND - 1.96E-05	2.49E-06	5.31E-06	1.29E-06
1,2,3,6,7,8-HXCDF	16	38	ND - 2.80E-06	2.08E-06	2.11E-06	1.04E-07
1,2,3,7,8-PECDF	16	100	5.90E-06 - 2.28E-03	5.32E-05	2.47E-04	1.39E-04
2,3,4,6,7,8-HXCDF	16	44	ND - 8.00E-06	2.49E-06	2.98E-06	4.41E-07
2,3,4,7,8-PECDF	16	100	1.45E-05 - 9.15E-05	4.34E-05	4.98E-05	5.77E-06
2,3,7,8-TCDD	16	19	ND - 3.30E-06	4.95E-07	7.46E-07	1.96E-07
2,3,7,8-TCDF	16	100	6.00E-06 - 7.17E-05	1.76E-05	1.98E-05	3.70E-06
OCDD	16	38	ND - 5.61E-05	4.95E-06	8.65E-06	3.24E-06
OCDF	16	19	ND - 9.62E-05	4.84E-06	9.92E-06	5.76E-06
WHO TEQ (Human/Mammal)	16	--	1.38E-05 - 1.61E-04	3.13E-05	4.42E-05	8.80E-06

Table C-31
PCDD/PCDF Data Summary Table for Fish

Sample Location: REACH 5 - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range			Median	Arithmetic Mean[3]	Standard Error
Brown Bullhead Whole Body Reconstructed								
1,2,3,4,6,7,8-HPCDF	16	69	ND	-	5.79E-05	4.79E-06	9.66E-06	3.45E-06
1,2,3,4,7,8-HXCDF	16	19	ND	-	1.59E-05	4.90E-06	5.84E-06	8.74E-07
1,2,3,6,7,8-HXCDF	16	6	ND	-	4.95E-06	3.56E-06	3.69E-06	2.13E-07
1,2,3,7,8-PECDD	16	6	ND	-	5.43E-06	4.84E-06	4.43E-06	2.05E-07
1,2,3,7,8-PECDF	16	94	ND	-	1.61E-03	4.59E-05	1.83E-04	9.80E-05
2,3,4,6,7,8-HXCDF	16	6	ND	-	7.21E-06	4.40E-06	4.26E-06	3.34E-07
2,3,4,7,8-PECDF	16	94	ND	-	7.49E-05	3.59E-05	3.99E-05	4.59E-06
2,3,7,8-TCDD	16	19	ND	-	2.61E-06	9.72E-07	1.09E-06	1.19E-07
2,3,7,8-TCDF	16	75	ND	-	5.89E-05	1.42E-05	1.78E-05	3.56E-06
OCDD	16	19	ND	-	4.39E-05	9.69E-06	1.07E-05	2.31E-06
WHO TEQ (Human/Mammal)	16	--	1.26E-05	-	1.17E-04	2.60E-05	3.56E-05	6.37E-06
Brown Bullhead Whole Body								
1,2,3,4,6,7,8-HPCDD	1	100	--	-	--	--	3.00E-07	--
1,2,3,4,6,7,8-HPCDF	1	100	--	-	--	--	1.19E-05	--
1,2,3,6,7,8-HXCDF	1	100	--	-	--	--	7.00E-07	--
1,2,3,7,8-PECDF	1	100	--	-	--	--	1.56E-04	--
2,3,4,7,8-PECDF	1	100	--	-	--	--	3.52E-05	--
2,3,7,8-TCDF	1	100	--	-	--	--	9.20E-06	--
WHO TEQ (Human/Mammal)	1	--	--	-	--	--	2.97E-05	--

Sample Location: REACH 6 - WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range			Median	Arithmetic Mean[3]	Standard Error
Brown Bullhead Skin-off Fillet								
1,2,3,4,6,7,8-HPCDD	15	33	ND	-	5.95E-06	2.45E-06	2.66E-06	4.59E-07
1,2,3,4,6,7,8-HPCDF	15	87	ND	-	1.11E-04	3.52E-06	1.25E-05	7.26E-06
1,2,3,4,7,8,9-HPCDF	15	27	ND	-	5.95E-06	2.45E-06	2.74E-06	4.75E-07
1,2,3,4,7,8-HXCDD	15	13	ND	-	5.95E-06	2.45E-06	3.02E-06	4.05E-07
1,2,3,4,7,8-HXCDF	15	40	ND	-	5.95E-06	2.45E-06	3.24E-06	3.59E-07
1,2,3,6,7,8-HXCDD	15	27	ND	-	5.95E-06	2.45E-06	2.80E-06	4.33E-07
1,2,3,6,7,8-HXCDF	15	53	ND	-	5.95E-06	2.25E-06	2.56E-06	4.48E-07
1,2,3,7,8,9-HXCDD	15	13	ND	-	5.95E-06	2.45E-06	3.01E-06	4.08E-07
1,2,3,7,8,9-HXCDF	15	13	ND	-	5.95E-06	2.45E-06	3.02E-06	4.04E-07
1,2,3,7,8-PECDD	15	7	ND	-	5.95E-06	2.45E-06	3.18E-06	3.23E-07
1,2,3,7,8-PECDF	15	100	7.60E-06	-	4.08E-04	3.80E-05	7.02E-05	2.73E-05
2,3,4,6,7,8-HXCDF	15	47	ND	-	5.95E-06	2.40E-06	2.75E-06	4.04E-07
2,3,4,7,8-PECDF	15	100	1.24E-05	-	4.20E-05	2.34E-05	2.41E-05	2.60E-06
2,3,7,8-TCDD	15	33	ND	-	1.19E-06	7.00E-07	7.04E-07	6.25E-08
2,3,7,8-TCDF	15	93	ND	-	4.34E-05	1.40E-05	1.57E-05	2.76E-06
OCDD	15	40	ND	-	1.19E-05	4.90E-06	5.26E-06	9.58E-07
OCDF	15	27	ND	-	1.19E-05	4.90E-06	5.61E-06	8.91E-07
WHO TEQ (Human/Mammal)	15	--	1.35E-05	-	5.46E-05	2.14E-05	2.32E-05	2.67E-06
Brown Bullhead Offal								
1,2,3,4,6,7,8-HPCDD	15	60	ND	-	4.50E-06	2.49E-06	2.70E-06	2.07E-07
1,2,3,4,6,7,8-HPCDF	15	100	2.60E-06	-	5.33E-05	1.32E-05	1.62E-05	3.69E-06
1,2,3,4,7,8,9-HPCDF	15	27	ND	-	2.49E-06	2.35E-06	1.89E-06	1.95E-07
1,2,3,4,7,8-HXCDD	15	40	ND	-	2.49E-06	1.90E-06	1.66E-06	2.07E-07
1,2,3,4,7,8-HXCDF	15	27	ND	-	9.80E-06	2.35E-06	3.65E-06	7.24E-07
1,2,3,6,7,8-HXCDD	15	40	ND	-	4.90E-06	2.46E-06	2.66E-06	2.25E-07
1,2,3,6,7,8-HXCDF	15	73	ND	-	6.10E-06	2.90E-06	3.22E-06	4.41E-07
1,2,3,7,8,9-HXCDD	15	13	ND	-	2.49E-06	2.35E-06	2.04E-06	1.52E-07
1,2,3,7,8,9-HXCDF	15	13	ND	-	2.49E-06	2.35E-06	1.99E-06	1.77E-07

Table C-31
PCDD/PCDF Data Summary Table for Fish

Sample Location: REACH 6 - WOODS POND								
Sample Year: 1998						Brown Bullhead - Offal (continued)		
1,2,3,7,8-PECDD	15	20	ND	-	4.60E-06	2.39E-06	2.43E-06	1.79E-07
1,2,3,7,8-PECDF	15	100	1.92E-05	-	2.89E-04	1.26E-04	1.25E-04	2.39E-05
2,3,4,6,7,8-HXCDF	15	73	ND	-	1.26E-05	4.40E-06	4.68E-06	7.37E-07
2,3,4,7,8-PECDF	15	100	1.99E-05	-	1.29E-04	6.29E-05	6.57E-05	7.18E-06
2,3,7,8-TCDD	15	47	ND	-	4.80E-06	4.95E-07	1.75E-06	4.20E-07
2,3,7,8-TCDF	15	93	ND	-	4.65E-05	2.65E-05	2.39E-05	3.03E-06
OCDD	15	73	ND	-	2.07E-05	1.15E-05	9.20E-06	1.53E-06
OCDF	15	67	ND	-	2.31E-05	4.30E-06	4.53E-06	1.40E-06
WHO TEQ (Human/Mammal)	15	--	2.21E-05	-	9.38E-05	4.57E-05	4.79E-05	4.72E-06
	Brown Bullhead Whole Body Reconstructed							
Constituent	**No. of Samples**	**Frequency of Detection (%)**	**Range**			**Median**	**Arithmetic Mean[3]**	**Standard Error**
1,2,3,4,6,7,8-HPCDD	15	33	ND	-	6.21E-06	4.39E-06	3.96E-06	3.89E-07
1,2,3,4,6,7,8-HPCDF	15	87	ND	-	6.53E-05	1.11E-05	1.53E-05	4.22E-06
1,2,3,4,7,8,9-HPCDF	15	27	ND	-	6.70E-06	4.64E-06	3.99E-06	5.39E-07
1,2,3,4,7,8-HXCDD	15	13	ND	-	6.70E-06	4.05E-06	3.72E-06	5.28E-07
1,2,3,4,7,8-HXCDF	15	40	ND	-	7.92E-06	4.62E-06	5.14E-06	3.68E-07
1,2,3,6,7,8-HXCDD	15	27	ND	-	6.70E-06	4.21E-06	4.32E-06	3.70E-07
1,2,3,6,7,8-HXCDF	15	53	ND	-	6.83E-06	4.06E-06	3.91E-06	3.55E-07
1,2,3,7,8,9-HXCDD	15	13	ND	-	6.70E-06	4.64E-06	4.45E-06	4.25E-07
1,2,3,7,8,9-HXCDF	15	13	ND	-	6.70E-06	4.64E-06	4.40E-06	4.12E-07
1,2,3,7,8-PECDD	15	7	ND	-	6.70E-06	4.62E-06	4.68E-06	2.26E-07
1,2,3,7,8-PECDF	15	100	1.83E-05	-	2.62E-04	1.06E-04	1.12E-04	2.22E-05
2,3,4,6,7,8-HXCDF	15	47	ND	-	1.02E-05	4.67E-06	5.18E-06	4.90E-07
2,3,4,7,8-PECDF	15	100	1.83E-05	-	1.08E-04	5.50E-05	5.56E-05	5.87E-06
2,3,7,8-TCDD	15	33	ND	-	3.90E-06	1.34E-06	1.80E-06	2.73E-07
2,3,7,8-TCDF	15	93	ND	-	3.81E-05	2.35E-05	2.18E-05	2.36E-06
OCDD	15	40	ND	-	1.65E-05	1.06E-05	1.02E-05	1.02E-06
OCDF	15	27	ND	-	2.09E-05	7.60E-06	7.23E-06	1.37E-06
WHO TEQ (Human/Mammal)	15	--	2.20E-05	-	7.92E-05	3.95E-05	4.19E-05	3.84E-06
Sample Location: REACH 8 - HOUSATONIC RIVER - RISING POND								
Sample Year: 1998								
	Brown Bullhead Skin-off Fillet							
Constituent	**No. of Samples**	**Frequency of Detection (%)**	**Range**			**Median**	**Arithmetic Mean[3]**	**Standard Error**
1,2,3,4,6,7,8-HPCDF	7	57	ND	-	4.88E-05	2.70E-06	9.90E-06	6.54E-06
1,2,3,7,8-PECDF	7	29	ND	-	3.40E-04	6.85E-06	5.42E-05	4.76E-05
2,3,7,8-TCDF	7	29	ND	-	2.32E-05	7.45E-06	8.71E-06	2.51E-06
WHO TEQ (Human/Mammal)	7	--	6.32E-06	-	2.44E-05	7.21E-06	1.00E-05	2.44E-06
	Brown Bullhead Offal							
Constituent	**No. of Samples**	**Frequency of Detection (%)**	**Range**			**Median**	**Arithmetic Mean[3]**	**Standard Error**
1,2,3,4,6,7,8-HPCDF	7	43	ND	-	2.52E-05	2.50E-06	6.23E-06	3.21E-06
1,2,3,4,7,8-HXCDF	7	14	ND	-	2.22E-05	2.40E-06	5.22E-06	2.83E-06
1,2,3,7,8-PECDF	7	100	2.40E-06	-	1.01E-04	3.50E-06	1.93E-05	1.37E-05
2,3,4,7,8-PECDF	7	100	1.25E-05	-	2.67E-05	1.50E-05	1.62E-05	1.89E-06
2,3,7,8-TCDF	7	100	1.10E-05	-	2.21E-05	1.32E-05	1.43E-05	1.46E-06
WHO TEQ (Human/Mammal)	7	--	1.20E-05	-	2.15E-05	1.35E-05	1.52E-05	1.54E-06
	Brown Bullhead Whole Body Reconstructed							
Constituent	**No. of Samples**	**Frequency of Detection (%)**	**Range**			**Median**	**Arithmetic Mean[3]**	**Standard Error**
1,2,3,4,6,7,8-HPCDF	7	57	ND	-	1.91E-05	4.50E-06	8.18E-06	2.41E-06
1,2,3,7,8-PECDF	7	29	ND	-	8.29E-05	5.24E-06	2.78E-05	1.32E-05
2,3,7,8-TCDF	7	29	ND	-	2.24E-05	1.33E-05	1.42E-05	1.60E-06
WHO TEQ (Human/Mammal)	7	--	1.06E-05	-	1.77E-05	1.25E-05	1.38E-05	1.12E-06

Table C-31
PCDD/PCDF Data Summary Table for Fish

Sample Location: REACH 6 - WOODS POND

Sample Year: 1990

Constituent	Brown Trout Skin-on, Scales-off Fillet						
	No. of Samples	Frequency of Detection (%)	Range			Median	Arithmetic Mean[3]	Standard Error
WHO TEQ (Human/Mammal)	1	--	--	-	--	--	2.06E-05	--

Sample Location: REACH 8 - HOUSATONIC RIVER RISING POND

Sample Year: 1990

Constituent	Brown Trout Skin-on, Scales-off Fillet						
	No. of Samples	Frequency of Detection (%)	Range			Median	Arithmetic Mean[3]	Standard Error
WHO TEQ (Human/Mammal)	1	--	--	-	--	--	1.45E-05	--

Sample Location: REACH 5 - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	Fallfish Whole-body Composite						
	No. of Samples	Frequency of Detection (%)	Range			Median	Arithmetic Mean[3]	Standard Error
1,2,3,4,6,7,8-HPCDD	5	20	ND	-	1.13E-05	2.47E-06	4.29E-06	1.75E-06
1,2,3,4,6,7,8-HPCDF	5	60	ND	-	3.06E-05	4.90E-06	1.23E-05	6.01E-06
1,2,3,4,7,8-HXCDF	5	20	ND	-	8.90E-06	2.47E-06	4.22E-06	1.26E-06
1,2,3,7,8-PECDF	5	100	3.80E-06	-	2.55E-04	4.70E-06	8.43E-05	5.16E-05
2,3,4,7,8-PECDF	5	80	ND	-	1.04E-05	4.50E-06	5.62E-06	1.43E-06
2,3,7,8-TCDF	5	100	2.55E-05	-	6.89E-05	4.69E-05	4.71E-05	8.95E-06
OCDD	5	60	ND	-	9.81E-06	2.00E-06	3.87E-06	1.63E-06
OCDF	5	20	ND	-	9.81E-06	4.93E-06	5.09E-06	1.54E-06
WHO TEQ (Human/Mammal)	5	--	9.25E-06	-	3.12E-05	1.80E-05	1.78E-05	3.99E-06
	Golden shiner Whole-body Composite						
Constituent	Samples	Detection (%)	Range			Median	Mean[3]	Error
1,2,3,4,6,7,8-HPCDF	5	40	ND	-	2.38E-05	3.80E-06	7.43E-06	4.12E-06
1,2,3,6,7,8-HXCDF	5	20	ND	-	2.38E-05	2.50E-06	6.79E-06	4.31E-06
1,2,3,7,8-PECDF	5	60	ND	-	8.82E-05	1.21E-05	2.92E-05	1.54E-05
2,3,4,6,7,8-HXCDF	5	20	ND	-	2.38E-05	2.50E-06	6.70E-06	4.33E-06
2,3,4,7,8-PECDF	5	40	ND	-	2.45E-05	1.42E-05	1.39E-05	3.20E-06
2,3,7,8-TCDD	5	20	ND	-	4.75E-06	5.00E-07	1.44E-06	8.32E-07
2,3,7,8-TCDF	5	40	ND	-	9.35E-05	4.84E-05	5.15E-05	1.36E-05
OCDF	5	20	ND	-	4.76E-05	4.95E-06	1.34E-05	8.67E-06
WHO TEQ (Human/Mammal)	5	--	9.20E-06	-	6.91E-05	2.05E-05	2.71E-05	1.07E-05

Sample Location: REACH 6 - WOODS POND

Sample Year: 1998

Constituent	Golden shiner Whole-body Composite						
	No. of Samples	Frequency of Detection (%)	Range			Median	Arithmetic Mean[3]	Standard Error
1,2,3,4,6,7,8-HPCDF	5	80	ND	-	1.22E-05	6.00E-06	6.45E-06	1.97E-06
1,2,3,4,7,8,9-HPCDF	5	20	ND	-	2.02E-05	9.35E-06	9.85E-06	3.06E-06
1,2,3,4,7,8-HXCDD	5	20	ND	-	2.69E-05	6.00E-06	9.50E-06	4.53E-06
1,2,3,6,7,8-HXCDD	5	40	ND	-	2.69E-05	9.35E-06	1.14E-05	5.31E-06
1,2,3,7,8-PECDF	5	60	ND	-	2.26E-04	2.69E-05	7.97E-05	4.40E-05
2,3,4,6,7,8-HXCDF	5	20	ND	-	2.69E-05	9.35E-06	1.29E-05	4.61E-06
2,3,4,7,8-PECDF	5	80	ND	-	3.05E-05	2.34E-05	2.18E-05	3.45E-06
2,3,7,8-TCDD	5	20	ND	-	5.40E-06	1.85E-06	2.72E-06	8.56E-07
2,3,7,8-TCDF	5	80	ND	-	1.17E-04	5.30E-05	6.21E-05	2.03E-05
OCDF	5	40	ND	-	4.03E-05	1.87E-05	2.13E-05	7.41E-06
WHO TEQ (Human/Mammal)	5	--	1.82E-05	-	7.54E-05	3.94E-05	4.55E-05	1.11E-05

Table C-31
PCDD/PCDF Data Summary Table for Fish

Sample Location: REACH 5 - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Goldfish Whole-body Range			Median	Arithmetic Mean[3]	Standard Error
1,2,3,4,6,7,8-HPCDD	15	40	ND	-	4.50E-06	1.80E-06	2.21E-06	2.44E-07
1,2,3,4,6,7,8-HPCDF	15	93	ND	-	6.51E-04	5.52E-05	1.16E-04	4.20E-05
1,2,3,4,7,8,9-HPCDF	15	7	ND	-	1.90E-06	1.57E-06	1.60E-06	3.72E-08
1,2,3,4,7,8-HXCDF	15	27	ND	-	4.93E-04	1.75E-06	6.23E-05	3.65E-05
1,2,3,6,7,8-HXCDF	15	13	ND	-	5.70E-06	1.57E-06	1.83E-06	2.92E-07
1,2,3,7,8-PECDD	15	7	ND	-	8.00E-06	1.60E-06	2.08E-06	4.25E-07
1,2,3,7,8-PECDF	15	100	6.58E-05	-	1.24E-03	3.07E-04	4.08E-04	7.97E-05
2,3,4,6,7,8-HXCDF	15	33	ND	-	8.90E-06	1.57E-06	2.93E-06	6.93E-07
2,3,4,7,8-PECDF	15	100	1.00E-05	-	1.53E-04	3.30E-05	4.39E-05	9.08E-06
2,3,7,8-TCDD	15	53	ND	-	8.30E-06	1.60E-06	2.10E-06	6.03E-07
2,3,7,8-TCDF	15	73	ND	-	2.46E-05	9.90E-06	9.91E-06	2.17E-06
OCDD	15	60	ND	-	1.74E-05	3.30E-06	6.96E-06	1.45E-06
OCDF	15	33	ND	-	9.40E-06	3.14E-06	3.67E-06	4.62E-07
WHO TEQ (Human/Mammal)	15	--	2.26E-05	-	1.06E-04	4.54E-05	5.60E-05	7.55E-06

Sample Location: REACH 6 - WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Goldfish Whole-body Range			Median	Arithmetic Mean[3]	Standard Error
1,2,3,4,6,7,8-HPCDD	14	71	ND	-	4.80E-06	1.83E-06	2.25E-06	3.32E-07
1,2,3,4,6,7,8-HPCDF	14	100	2.90E-06	-	3.01E-04	3.16E-05	6.58E-05	2.44E-05
1,2,3,4,7,8,9-HPCDF	14	36	ND	-	2.25E-06	1.59E-06	1.48E-06	1.46E-07
1,2,3,4,7,8-HXCDD	14	14	ND	-	3.50E-06	1.73E-06	1.85E-06	1.68E-07
1,2,3,4,7,8-HXCDF	14	86	ND	-	2.57E-04	1.18E-05	6.41E-05	2.53E-05
1,2,3,6,7,8-HXCDD	14	21	ND	-	2.25E-06	1.60E-06	1.52E-06	1.68E-07
1,2,3,6,7,8-HXCDF	14	50	ND	-	8.60E-06	2.03E-06	2.74E-06	5.52E-07
1,2,3,7,8,9-HXCDD	14	14	ND	-	2.25E-06	1.63E-06	1.59E-06	1.53E-07
1,2,3,7,8,9-HXCDF	14	14	ND	-	2.25E-06	1.63E-06	1.55E-06	1.54E-07
1,2,3,7,8-PECDD	14	14	ND	-	7.20E-06	1.71E-06	2.17E-06	3.93E-07
1,2,3,7,8-PECDF	14	71	ND	-	4.78E-04	2.36E-04	2.24E-04	4.55E-05
2,3,4,6,7,8-HXCDF	14	64	ND	-	9.80E-06	4.35E-06	4.69E-06	8.49E-07
2,3,4,7,8-PECDF	14	93	ND	-	1.41E-04	6.36E-05	6.62E-05	9.97E-06
2,3,7,8-TCDD	14	86	ND	-	1.03E-05	4.45E-06	4.43E-06	8.19E-07
2,3,7,8-TCDF	14	36	ND	-	2.74E-05	1.17E-05	1.32E-05	2.00E-06
OCDD	14	57	ND	-	1.10E-05	4.15E-06	5.05E-06	8.30E-07
OCDF	14	36	ND	-	4.50E-06	3.17E-06	2.70E-06	3.51E-07
WHO TEQ (Human/Mammal)	14	--	1.40E-05	-	1.04E-04	6.73E-05	6.07E-05	7.68E-06

Sample Location: REACH 8 - HOUSATONIC RIVER - RISING POND

Sample Year: 1990

Constituent	No. of Samples	Frequency of Detection (%)	Largemouth Bass Skin-on, Scales-off Fillet Range			Median	Arithmetic Mean[3]	Standard Error
2,3,7,8-TCDF	1	100	--	-	--	--	2.40E-05	--
WHO TEQ (Human/Mammal)	1	--	--	-	--	--	4.86E-05	--

Table C-31
PCDD/PCDF Data Summary Table for Fish

Sample Location: REACH 8 - HOUSATONIC RIVER - RISING POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range			Median	Arithmetic Mean[3]	Standard Error
Largemouth Bass Skin-off Fillet								
1,2,3,4,6,7,8-HPCDD	10	20	ND	-	5.90E-06	1.65E-06	2.33E-06	4.30E-07
1,2,3,4,6,7,8-HPCDF	10	20	ND	-	3.81E-05	1.65E-06	5.80E-06	3.61E-06
1,2,3,4,7,8,9-HPCDF	10	20	ND	-	4.00E-06	1.65E-06	2.20E-06	2.96E-07
1,2,3,4,7,8-HXCDF	10	20	ND	-	4.18E-05	1.65E-06	5.70E-06	4.01E-06
1,2,3,6,7,8-HXCDF	10	20	ND	-	2.35E-06	1.65E-06	1.67E-06	1.10E-07
1,2,3,7,8,9-HXCDF	10	20	ND	-	2.40E-06	1.65E-06	1.87E-06	1.06E-07
1,2,3,7,8-PECDF	10	30	ND	-	8.20E-05	3.30E-06	1.42E-05	8.02E-06
2,3,4,6,7,8-HXCDF	10	20	ND	-	2.40E-06	1.65E-06	1.87E-06	1.06E-07
2,3,4,7,8-PECDF	10	50	ND	-	6.50E-06	3.68E-06	3.76E-06	6.35E-07
2,3,7,8-TCDD	10	10	ND	-	5.00E-07	3.50E-07	3.85E-07	2.36E-08
2,3,7,8-TCDF	10	90	ND	-	1.92E-05	1.35E-05	1.37E-05	7.40E-07
OCDD	10	30	ND	-	1.89E-05	3.28E-06	4.58E-06	1.63E-06
OCDF	10	30	ND	-	1.49E-05	3.28E-06	4.04E-06	1.26E-06
WHO TEQ (Human/Mammal)	10	--	5.33E-06	-	1.75E-05	6.86E-06	7.94E-06	1.15E-06
Largemouth Bass Offal								
1,2,3,4,6,7,8-HPCDD	10	10	ND	-	2.45E-06	1.65E-06	1.66E-06	1.09E-07
1,2,3,4,6,7,8-HPCDF	10	100	1.20E-06	-	1.62E-04	4.24E-05	5.15E-05	1.61E-05
1,2,3,4,7,8,9-HPCDF	10	20	ND	-	1.65E-06	1.65E-06	1.50E-06	1.04E-07
1,2,3,4,7,8-HXCDF	10	80	ND	-	2.90E-04	6.72E-05	8.91E-05	3.28E-05
1,2,3,6,7,8-HXCDF	10	30	ND	-	2.45E-06	1.65E-06	1.39E-06	2.06E-07
1,2,3,7,8-PECDF	10	100	3.30E-06	-	1.19E-03	2.18E-04	3.02E-04	1.10E-04
2,3,4,6,7,8-HXCDF	10	10	ND	-	2.45E-06	1.65E-06	1.71E-06	8.36E-08
2,3,4,7,8-PECDF	10	100	3.40E-06	-	6.96E-05	2.65E-05	2.91E-05	5.63E-06
2,3,7,8-TCDD	10	70	ND	-	2.40E-06	1.40E-06	1.26E-06	2.30E-07
2,3,7,8-TCDF	10	100	1.07E-05	-	6.85E-05	3.45E-05	3.68E-05	5.29E-06
OCDD	10	30	ND	-	5.10E-06	3.25E-06	3.17E-06	2.96E-07
OCDF	10	40	ND	-	3.30E-06	3.20E-06	2.68E-06	3.03E-07
WHO TEQ (Human/Mammal)	10	--	5.95E-06	-	1.08E-04	3.91E-05	4.67E-05	9.46E-06
Largemouth Bass Whole Body Reconstructed								
1,2,3,4,6,7,8-HPCDD	10	20	ND	-	4.83E-06	3.30E-06	3.37E-06	1.89E-07
1,2,3,4,6,7,8-HPCDF	10	20	ND	-	1.20E-04	3.21E-05	3.90E-05	1.16E-05
1,2,3,4,7,8,9-HPCDF	10	20	ND	-	3.51E-06	3.30E-06	3.06E-06	2.06E-07
1,2,3,4,7,8-HXCDF	10	20	ND	-	2.14E-04	5.26E-05	6.59E-05	2.36E-05
1,2,3,6,7,8-HXCDF	10	20	ND	-	4.83E-06	3.24E-06	2.75E-06	3.94E-07
1,2,3,7,8,9-HXCDF	10	20	ND	-	4.83E-06	3.30E-06	3.40E-06	1.67E-07
1,2,3,7,8-PECDF	10	30	ND	-	8.76E-04	1.57E-04	2.22E-04	8.07E-05
2,3,4,6,7,8-HXCDF	10	20	ND	-	4.83E-06	3.29E-06	3.27E-06	2.20E-07
2,3,4,7,8-PECDF	10	50	ND	-	5.33E-05	2.05E-05	2.21E-05	4.22E-06
2,3,7,8-TCDD	10	10	ND	-	2.01E-06	1.21E-06	1.17E-06	1.36E-07
2,3,7,8-TCDF	10	90	ND	-	5.29E-05	2.85E-05	3.02E-05	3.81E-06
OCDD	10	30	ND	-	1.07E-05	6.54E-06	5.95E-06	7.98E-07
OCDF	10	30	ND	-	9.32E-06	6.44E-06	5.19E-06	8.36E-07
WHO TEQ (Human/Mammal)	10	--	5.75E-06	-	8.09E-05	3.06E-05	3.57E-05	6.93E-06

Table C-31
PCDD/PCDF Data Summary Table for Fish

Sample Location: REACH 8 - HOUSATONIC RIVER - RISING POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range			Median	Arithmetic Mean[3]	Standard Error
Largemouth Bass Whole Fish								
1,2,3,4,6,7,8-HPCDD	5	20	ND	-	2.48E-06	2.45E-06	2.02E-06	4.07E-07
1,2,3,4,6,7,8-HPCDF	5	100	2.64E-05	-	6.70E-05	5.18E-05	4.73E-05	6.88E-06
1,2,3,4,7,8,9-HPCDF	5	20	ND	-	2.50E-06	2.45E-06	2.29E-06	1.51E-07
1,2,3,4,7,8-HXCDF	5	60	ND	-	1.54E-04	7.60E-05	6.87E-05	2.98E-05
1,2,3,7,8-PECDF	5	100	9.63E-05	-	1.97E-04	1.44E-04	1.40E-04	1.77E-05
2,3,4,7,8-PECDF	5	100	6.90E-06	-	2.80E-05	1.34E-05	1.54E-05	3.57E-06
2,3,7,8-TCDF	5	100	1.03E-05	-	5.44E-05	1.71E-05	2.38E-05	7.86E-06
OCDD	5	20	ND	-	2.53E-05	4.95E-06	8.98E-06	4.08E-06
WHO TEQ (Human/Mammal)	5	--	1.41E-05	-	4.99E-05	2.54E-05	2.89E-05	6.16E-06
Largemouth Bass Whole Fish Composite								
1,2,3,4,6,7,8-HPCDD	5	40	ND	-	3.20E-06	2.33E-06	2.49E-06	2.71E-07
1,2,3,4,6,7,8-HPCDF	5	100	4.20E-06	-	2.76E-05	1.54E-05	1.71E-05	4.21E-06
1,2,3,4,7,8,9-HPCDF	5	20	ND	-	3.05E-06	2.33E-06	2.27E-06	2.60E-07
1,2,3,4,7,8-HXCDF	5	60	ND	-	4.12E-05	4.30E-06	1.39E-05	7.57E-06
1,2,3,6,7,8-HXCDF	5	20	ND	-	3.05E-06	2.33E-06	2.25E-06	2.75E-07
1,2,3,7,8,9-HXCDD	5	20	ND	-	3.05E-06	2.33E-06	2.29E-06	2.45E-07
1,2,3,7,8,9-HXCDF	5	20	ND	-	3.05E-06	2.33E-06	2.11E-06	3.93E-07
1,2,3,7,8-PECDD	5	40	ND	-	2.50E-06	1.97E-06	1.70E-06	4.12E-07
1,2,3,7,8-PECDF	5	100	5.10E-06	-	9.65E-05	4.38E-05	4.96E-05	1.49E-05
2,3,4,6,7,8-HXCDF	5	40	ND	-	3.05E-06	2.20E-06	2.29E-06	2.05E-07
2,3,4,7,8-PECDF	5	100	5.30E-06	-	1.22E-05	8.00E-06	8.14E-06	1.14E-06
2,3,7,8-TCDD	5	20	ND	-	6.00E-07	4.65E-07	4.72E-07	3.78E-08
2,3,7,8-TCDF	5	100	5.10E-06	-	1.69E-05	9.60E-06	1.03E-05	2.10E-06
OCDD	5	20	ND	-	6.15E-06	4.65E-06	4.76E-06	3.94E-07
WHO TEQ (Human/Mammal)	5	--	6.87E-06	-	1.72E-05	1.44E-05	1.27E-05	1.82E-06

Sample Year: 1999

Constituent	No. of Samples	Frequency of Detection (%)	Range			Median	Arithmetic Mean[3]	Standard Error
Largemouth Bass Offal								
1,2,3,4,6,7,8-HPCDF	6	100	3.45E-05	-	1.17E-04	4.23E-05	5.30E-05	1.30E-05
1,2,3,4,7,8-HXCDF	6	17	ND	-	3.11E-05	1.90E-06	6.77E-06	4.87E-06
1,2,3,7,8-PECDF	6	100	1.64E-04	-	1.95E-03	2.11E-04	5.03E-04	2.90E-04
2,3,4,6,7,8-HXCDF	6	17	ND	-	3.20E-06	1.90E-06	2.13E-06	2.29E-07
2,3,4,7,8-PECDF	6	100	8.20E-06	-	8.50E-05	1.17E-05	2.41E-05	1.23E-05
2,3,7,8-TCDD	6	17	ND	-	2.70E-06	4.00E-07	7.75E-07	3.85E-07
2,3,7,8-TCDF	6	83	ND	-	5.40E-05	9.05E-06	1.52E-05	8.03E-06
OCDD	6	50	ND	-	3.80E-06	1.45E-06	1.92E-06	5.95E-07
OCDF	6	17	ND	-	4.55E-06	3.53E-06	3.17E-06	6.18E-07
WHO TEQ (Human/Mammal)	6	--	1.88E-05	-	1.52E-04	2.27E-05	4.37E-05	2.17E-05
Largemouth Bass Ovary								
1,2,3,4,6,7,8-HPCDD	6	17	ND	-	6.45E-06	2.80E-06	3.44E-06	7.72E-07
1,2,3,4,6,7,8-HPCDF	6	100	6.70E-06	-	1.40E-04	2.05E-05	4.73E-05	2.24E-05
1,2,3,4,7,8-HXCDF	6	67	ND	-	1.47E-04	1.24E-05	3.71E-05	2.27E-05
1,2,3,6,7,8-HXCDF	6	17	ND	-	6.45E-06	2.40E-06	3.43E-06	7.41E-07
1,2,3,7,8-PECDF	6	100	1.32E-05	-	1.56E-03	2.03E-05	4.96E-04	3.04E-04
2,3,4,7,8-PECDF	6	100	2.58E-05	-	7.22E-05	3.94E-05	4.29E-05	6.37E-06
2,3,7,8-TCDD	6	67	ND	-	5.00E-06	3.05E-06	2.83E-06	6.94E-07
2,3,7,8-TCDF	6	100	5.52E-05	-	7.84E-05	6.33E-05	6.43E-05	3.30E-06
OCDD	6	17	ND	-	1.29E-05	5.58E-06	6.41E-06	1.82E-06
OCDF	6	17	ND	-	1.29E-05	4.75E-06	6.18E-06	1.80E-06
WHO TEQ (Human/Mammal)	6	--	2.87E-05	-	1.31E-04	3.94E-05	6.56E-05	1.95E-05

Table C-31
PCDD/PCDF Data Summary Table for Fish

Sample Location: REACH 6 - WOODS POND

Sample Year: 1990

Constituent	No. of Samples	Frequency of Detection (%)	Range			Median	Arithmetic Mean[3]	Standard Error
	Largemouth Bass Skin-on, Scales-off Fillet							
WHO TEQ (Human/Mammal)	1	--	--	-	--	--	2.11E-05	--

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range			Median	Arithmetic Mean[3]	Standard Error
	Largemouth Bass Skin-off Fillet							
1,2,3,4,6,7,8-HPCDF	10	60	ND	-	1.28E-05	2.33E-06	4.56E-06	1.42E-06
1,2,3,7,8-PECDF	10	80	ND	-	6.19E-05	1.82E-05	2.05E-05	5.65E-06
2,3,4,6,7,8-HXCDF	10	10	ND	-	4.85E-06	2.40E-06	2.25E-06	3.52E-07
2,3,4,7,8-PECDF	10	70	ND	-	9.80E-06	2.99E-06	3.35E-06	8.89E-07
2,3,7,8-TCDF	10	70	ND	-	3.37E-05	6.60E-06	9.32E-06	3.35E-06
OCDD	10	10	ND	-	2.17E-05	4.75E-06	6.02E-06	1.76E-06
OCDF	10	20	ND	-	1.53E-05	4.55E-06	5.03E-06	1.20E-06
WHO TEQ (Human/Mammal)	10	--	4.46E-06	-	1.89E-05	6.98E-06	8.30E-06	1.30E-06
	Largemouth Bass Offal							
1,2,3,4,6,7,8-HPCDD	10	50	ND	-	2.50E-06	1.25E-06	1.24E-06	2.25E-07
1,2,3,4,6,7,8-HPCDF	10	70	ND	-	2.85E-05	1.28E-05	1.29E-05	2.97E-06
1,2,3,4,7,8,9-HPCDF	10	40	ND	-	2.50E-06	1.60E-06	1.47E-06	1.80E-07
1,2,3,4,7,8-HXCDF	10	30	ND	-	1.71E-04	2.18E-06	2.78E-05	1.80E-05
1,2,3,6,7,8-HXCDF	10	20	ND	-	2.30E-06	1.68E-06	1.72E-06	9.86E-08
1,2,3,7,8,9-HXCDF	10	20	ND	-	2.50E-06	1.68E-06	1.56E-06	2.46E-07
1,2,3,7,8-PECDD	10	10	ND	-	3.70E-06	1.88E-06	2.10E-06	2.02E-07
1,2,3,7,8-PECDF	10	100	1.39E-05	-	6.07E-04	2.15E-04	2.60E-04	5.90E-05
2,3,4,6,7,8-HXCDF	10	50	ND	-	4.60E-06	1.75E-06	2.32E-06	3.58E-07
2,3,4,7,8-PECDF	10	100	1.61E-05	-	5.42E-05	3.83E-05	3.85E-05	3.73E-06
2,3,7,8-TCDD	10	70	ND	-	4.90E-06	2.55E-06	2.40E-06	5.09E-07
2,3,7,8-TCDF	10	100	2.17E-05	-	8.75E-05	2.65E-05	3.49E-05	6.29E-06
OCDD	10	50	ND	-	5.00E-06	2.35E-06	2.47E-06	4.59E-07
OCDF	10	40	ND	-	5.00E-06	3.23E-06	2.50E-06	6.27E-07
WHO TEQ (Human/Mammal)	10	--	2.05E-05	-	8.53E-05	3.89E-05	4.43E-05	6.34E-06
	Largemouth Bass Whole Body Reconstructed							
1,2,3,4,6,7,8-HPCDF	10	60	ND	-	2.04E-05	9.28E-06	1.08E-05	1.72E-06
1,2,3,7,8-PECDF	10	80	ND	-	4.09E-04	1.55E-04	1.85E-04	4.07E-05
2,3,4,6,7,8-HXCDF	10	10	ND	-	6.25E-06	3.51E-06	3.55E-06	4.18E-07
2,3,4,7,8-PECDF	10	70	ND	-	3.94E-05	2.83E-05	2.80E-05	2.65E-06
2,3,7,8-TCDF	10	70	ND	-	6.28E-05	2.03E-05	2.71E-05	4.69E-06
OCDD	10	10	ND	-	1.38E-05	5.38E-06	6.05E-06	1.01E-06
OCDF	10	20	ND	-	1.17E-05	6.38E-06	5.89E-06	9.64E-07
WHO TEQ (Human/Mammal)	10	--	1.63E-05	-	5.87E-05	2.85E-05	3.32E-05	4.36E-06
	Largemouth Bass Whole Fish							
1,2,3,4,6,7,8-HPCDD	5	20	ND	-	4.70E-06	1.80E-06	2.23E-06	6.70E-07
1,2,3,4,6,7,8-HPCDF	5	60	ND	-	6.60E-06	5.10E-06	4.88E-06	8.45E-07
1,2,3,4,7,8,9-HPCDF	5	20	ND	-	4.70E-06	1.80E-06	2.23E-06	6.70E-07
1,2,3,4,7,8-HXCDF	5	40	ND	-	4.70E-06	1.65E-06	2.13E-06	6.61E-07
1,2,3,7,8,9-HXCDF	5	20	ND	-	4.70E-06	1.80E-06	2.17E-06	7.06E-07
1,2,3,7,8-PECDF	5	80	ND	-	8.49E-05	1.65E-05	3.94E-05	1.82E-05
2,3,4,6,7,8-HXCDF	5	40	ND	-	4.70E-06	1.80E-06	2.43E-06	6.13E-07
2,3,4,7,8-PECDF	5	60	ND	-	2.31E-05	1.74E-05	1.40E-05	3.73E-06
2,3,7,8-TCDD	5	40	ND	-	1.90E-06	6.00E-07	8.30E-07	2.89E-07
2,3,7,8-TCDF	5	40	ND	-	3.32E-05	1.36E-05	1.58E-05	4.70E-06
OCDD	5	40	ND	-	9.45E-06	3.60E-06	4.43E-06	1.47E-06
OCDF	5	20	ND	-	9.45E-06	3.60E-06	4.63E-06	1.27E-06
WHO TEQ (Human/Mammal)	5	--	5.16E-06	-	2.19E-05	2.01E-05	1.56E-05	3.40E-06

Table C-31
PCDD/PCDF Data Summary Table for Fish

Sample Location: REACH 6 - WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range			Median	Arithmetic Mean[3]	Standard Error
	Largemouth Bass Whole Fish Composite							
1,2,3,4,6,7,8-HPCDF	5	60	ND	-	1.32E-05	6.70E-06	7.04E-06	1.98E-06
1,2,3,6,7,8-HXCDF	5	20	ND	-	4.60E-06	2.05E-06	2.59E-06	7.07E-07
1,2,3,7,8-PECDF	5	60	ND	-	1.62E-04	2.95E-05	4.75E-05	2.93E-05
2,3,4,6,7,8-HXCDF	5	20	ND	-	4.60E-06	2.05E-06	2.73E-06	6.28E-07
2,3,4,7,8-PECDF	5	40	ND	-	1.61E-05	1.13E-05	1.20E-05	1.62E-06
2,3,7,8-TCDF	5	40	ND	-	3.40E-05	2.54E-05	2.27E-05	4.03E-06
OCDD	5	20	ND	-	9.15E-06	3.30E-06	4.90E-06	1.51E-06
WHO TEQ (Human/Mammal)	5	--	1.02E-05	-	2.52E-05	1.45E-05	1.60E-05	2.82E-06
Sample Year: 1999								
	Largemouth Bass Offal							
1,2,3,4,6,7,8-HPCDD	6	17	ND	-	1.65E-06	1.48E-06	1.38E-06	1.45E-07
1,2,3,4,6,7,8-HPCDF	6	100	3.50E-06	-	4.31E-05	5.00E-06	1.55E-05	7.19E-06
1,2,3,4,7,8,9-HPCDF	6	33	ND	-	1.65E-06	1.48E-06	1.26E-06	1.99E-07
1,2,3,4,7,8-HXCDF	6	50	ND	-	9.70E-06	1.68E-06	3.18E-06	1.32E-06
1,2,3,6,7,8-HXCDF	6	50	ND	-	1.65E-06	1.40E-06	1.15E-06	2.43E-07
1,2,3,7,8-PECDD	6	17	ND	-	1.65E-06	1.48E-06	1.49E-06	5.69E-08
1,2,3,7,8-PECDF	6	100	8.30E-06	-	3.19E-04	9.75E-06	9.25E-05	5.49E-05
2,3,4,6,7,8-HXCDF	6	33	ND	-	2.30E-06	1.58E-06	1.50E-06	2.26E-07
2,3,4,7,8-PECDF	6	100	1.19E-05	-	2.61E-05	1.85E-05	1.90E-05	1.99E-06
2,3,7,8-TCDD	6	50	ND	-	1.50E-06	6.75E-07	7.42E-07	2.04E-07
2,3,7,8-TCDF	6	83	ND	-	1.73E-05	1.02E-05	9.05E-06	2.42E-06
OCDD	6	50	ND	-	3.30E-06	2.05E-06	2.03E-06	5.30E-07
WHO TEQ (Human/Mammal)	6	--	1.38E-05	-	2.60E-05	1.78E-05	1.86E-05	1.90E-06
	Largemouth Bass Ovary							
1,2,3,4,6,7,8-HPCDD	6	17	ND	-	6.45E-06	2.80E-06	3.44E-06	7.72E-07
1,2,3,4,6,7,8-HPCDF	6	100	6.70E-06	-	1.40E-04	2.05E-05	4.73E-05	2.24E-05
1,2,3,4,7,8-HXCDF	6	67	ND	-	1.47E-04	1.24E-05	3.71E-05	2.27E-05
1,2,3,6,7,8-HXCDF	6	17	ND	-	6.45E-06	2.40E-06	3.43E-06	7.41E-07
1,2,3,7,8-PECDF	6	100	1.32E-05	-	1.56E-03	2.03E-05	4.96E-04	3.04E-04
2,3,4,7,8-PECDF	6	100	2.58E-05	-	7.22E-05	3.94E-05	4.29E-05	6.37E-06
2,3,7,8-TCDD	6	67	ND	-	5.00E-06	3.05E-06	2.83E-06	6.94E-07
2,3,7,8-TCDF	6	100	5.52E-05	-	7.84E-05	6.33E-05	6.43E-05	3.30E-06
OCDD	6	17	ND	-	1.29E-05	5.58E-06	6.41E-06	1.82E-06
OCDF	6	17	ND	-	1.29E-05	4.75E-06	6.18E-06	1.80E-06
WHO TEQ (Human/Mammal)	6	--	2.87E-05	-	1.31E-04	3.94E-05	6.56E-05	1.95E-05
Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND								
Sample Year: 1998								
	Largemouth Bass Skin-off Fillet							
1,2,3,4,6,7,8-HPCDF	13	69	ND	-	2.13E-05	2.33E-06	6.13E-06	1.89E-06
1,2,3,4,7,8,9-HPCDF	13	31	ND	-	2.45E-06	1.75E-06	1.74E-06	1.39E-07
1,2,3,4,7,8-HXCDF	13	23	ND	-	2.50E-06	1.80E-06	1.90E-06	9.64E-08
1,2,3,6,7,8-HXCDF	13	23	ND	-	2.90E-06	1.75E-06	1.78E-06	1.97E-07
1,2,3,7,8-PECDF	13	100	3.30E-06	-	1.79E-04	2.75E-05	4.88E-05	1.61E-05
2,3,4,6,7,8-HXCDF	13	23	ND	-	3.70E-06	1.85E-06	1.99E-06	1.91E-07
2,3,4,7,8-PECDF	13	92	ND	-	3.22E-05	3.50E-06	6.34E-06	2.26E-06
2,3,7,8-TCDD	13	8	ND	-	2.30E-06	3.50E-07	5.37E-07	1.48E-07
2,3,7,8-TCDF	13	92	ND	-	2.26E-05	5.70E-06	7.32E-06	1.50E-06
OCDD	13	23	ND	-	5.00E-06	3.55E-06	3.75E-06	2.29E-07
OCDF	13	23	ND	-	1.03E-05	3.55E-06	4.14E-06	5.56E-07
WHO TEQ (Human/Mammal)	13	--	4.73E-06	-	3.33E-05	7.36E-06	1.03E-05	2.08E-06

Table C-31
PCDD/PCDF Data Summary Table for Fish

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range			Median	Arithmetic Mean[3]	Standard Error
Largemouth Bass Offal								
1,2,3,4,6,7,8-HPCDD	13	15	ND	-	2.50E-06	1.95E-06	2.00E-06	9.64E-08
1,2,3,4,6,7,8-HPCDF	13	77	ND	-	8.29E-04	6.80E-06	7.64E-05	6.29E-05
1,2,3,4,7,8-HXCDF	13	31	ND	-	2.22E-05	1.85E-06	5.48E-06	1.96E-06
1,2,3,6,7,8-HXCDF	13	8	ND	-	2.50E-06	1.85E-06	1.96E-06	9.20E-08
1,2,3,7,8-PECDF	13	100	9.70E-06	-	1.74E-03	1.05E-04	3.81E-04	1.57E-04
2,3,4,6,7,8-HXCDF	13	31	ND	-	8.30E-06	2.00E-06	2.73E-06	5.71E-07
2,3,4,7,8-PECDF	13	77	ND	-	6.23E-05	2.53E-05	2.84E-05	5.61E-06
2,3,7,8-TCDD	13	54	ND	-	4.00E-06	4.95E-07	1.55E-06	4.39E-07
2,3,7,8-TCDF	13	77	ND	-	5.32E-05	2.13E-05	2.57E-05	4.53E-06
OCDD	13	15	ND	-	5.00E-06	3.35E-06	3.12E-06	4.57E-07
OCDF	13	15	ND	-	5.00E-06	3.55E-06	3.66E-06	2.62E-07
WHO TEQ (Human/Mammal)	13	--	5.11E-06	-	1.14E-04	3.55E-05	4.19E-05	9.60E-06
Largemouth Bass Whole Body Reconstructed								
1,2,3,4,6,7,8-HPCDF	13	69	ND	-	6.00E-04	5.71E-06	5.68E-05	4.53E-05
1,2,3,4,7,8,9-HPCDF	13	31	ND	-	4.82E-06	3.63E-06	3.65E-06	1.31E-07
1,2,3,4,7,8-HXCDF	13	23	ND	-	1.57E-05	3.63E-06	5.66E-06	1.20E-06
1,2,3,6,7,8-HXCDF	13	23	ND	-	4.96E-06	3.64E-06	3.61E-06	2.50E-07
1,2,3,7,8-PECDF	13	100	1.34E-05	-	1.15E-03	7.77E-05	2.77E-04	1.07E-04
2,3,4,6,7,8-HXCDF	13	23	ND	-	6.99E-06	3.75E-06	3.93E-06	4.08E-07
2,3,4,7,8-PECDF	13	92	ND	-	4.53E-05	2.49E-05	2.44E-05	3.53E-06
2,3,7,8-TCDD	13	8	ND	-	3.16E-06	9.59E-07	1.49E-06	2.73E-07
2,3,7,8-TCDF	13	92	ND	-	3.93E-05	2.33E-05	2.28E-05	2.96E-06
OCDD	13	23	ND	-	9.93E-06	6.50E-06	6.20E-06	7.08E-07
OCDF	13	23	ND	-	1.00E-05	6.67E-06	7.01E-06	5.25E-07
WHO TEQ (Human/Mammal)	13	--	7.70E-06	-	8.49E-05	2.86E-05	3.22E-05	6.54E-06
Largemouth Bass Whole Fish								
1,2,3,4,6,7,8-HPCDD	10	20	ND	-	2.50E-06	1.75E-06	1.85E-06	2.03E-07
1,2,3,4,6,7,8-HPCDF	10	60	ND	-	5.29E-05	2.48E-06	9.57E-06	5.13E-06
1,2,3,7,8-PECDF	10	90	ND	-	3.30E-04	1.94E-05	7.68E-05	3.72E-05
2,3,4,6,7,8-HXCDF	10	10	ND	-	2.50E-06	1.73E-06	1.79E-06	2.05E-07
2,3,4,7,8-PECDF	10	90	ND	-	3.68E-05	9.50E-06	1.25E-05	3.40E-06
2,3,7,8-TCDD	10	20	ND	-	1.80E-06	4.48E-07	5.74E-07	1.41E-07
2,3,7,8-TCDF	10	70	ND	-	3.07E-05	1.58E-05	1.82E-05	2.66E-06
OCDD	10	10	ND	-	4.99E-06	3.28E-06	3.48E-06	4.27E-07
WHO TEQ (Human/Mammal)	10	--	6.62E-06	-	4.30E-05	1.15E-05	1.59E-05	3.64E-06
Largemouth Bass Whole Fish Composite								
1,2,3,4,6,7,8-HPCDD	7	14	ND	-	4.85E-06	3.35E-06	3.19E-06	6.08E-07
1,2,3,4,6,7,8-HPCDF	7	71	ND	-	1.73E-05	7.50E-06	9.77E-06	2.06E-06
1,2,3,6,7,8-HXCDF	7	29	ND	-	4.85E-06	2.44E-06	2.72E-06	6.31E-07
1,2,3,7,8-PECDF	7	100	2.90E-06	-	2.55E-04	9.42E-05	1.05E-04	3.24E-05
2,3,4,6,7,8-HXCDF	7	29	ND	-	6.90E-06	3.35E-06	3.58E-06	7.83E-07
2,3,4,7,8-PECDF	7	86	ND	-	2.07E-05	1.86E-05	1.61E-05	1.99E-06
2,3,7,8-TCDD	7	29	ND	-	9.50E-07	7.00E-07	7.49E-07	7.51E-08
2,3,7,8-TCDF	7	86	ND	-	3.15E-05	2.00E-05	2.09E-05	3.43E-06
OCDD	7	14	ND	-	9.75E-06	4.88E-06	5.09E-06	1.45E-06
WHO TEQ (Human/Mammal)	7	--	1.38E-05	-	2.82E-05	2.27E-05	2.20E-05	1.86E-06

Table C-31
PCDD/PCDF Data Summary Table for Fish

Sample Location: REACH 8 - HOUSATONIC RIVER - RISING POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range	Median	Arithmetic Mean[3]	Standard Error
Pumpkinseed Skin-off Fillet						
1,2,3,7,8-PECDF	13	15	ND - 1.18E-05	8.60E-06	7.61E-06	7.80E-07
2,3,4,7,8-PECDF	13	15	ND - 5.30E-06	4.05E-06	3.87E-06	2.46E-07
2,3,7,8-TCDF	13	38	ND - 2.81E-05	1.43E-05	1.42E-05	1.78E-06
WHO TEQ (Human/Mammal)	13	--	7.03E-06 - 1.43E-05	1.16E-05	1.09E-05	7.14E-07
Pumpkinseed Offal						
1,2,3,4,6,7,8-HPCDD	13	31	ND - 4.75E-06	2.40E-06	2.35E-06	3.73E-07
1,2,3,4,6,7,8-HPCDF	13	69	ND - 5.73E-05	1.55E-05	2.23E-05	5.78E-06
1,2,3,4,7,8,9-HPCDF	13	8	ND - 4.95E-06	2.50E-06	2.86E-06	3.63E-07
1,2,3,4,7,8-HXCDF	13	38	ND - 1.24E-04	4.75E-06	2.71E-05	1.16E-05
1,2,3,6,7,8-HXCDF	13	8	ND - 4.75E-06	2.50E-06	2.79E-06	2.60E-07
1,2,3,7,8-PECDF	13	100	5.20E-06 - 2.20E-04	5.08E-05	6.86E-05	1.75E-05
2,3,4,6,7,8-HXCDF	13	23	ND - 4.75E-06	2.41E-06	2.56E-06	3.21E-07
2,3,4,7,8-PECDF	13	100	4.30E-06 - 2.35E-05	1.08E-05	1.24E-05	1.82E-06
2,3,7,8-TCDD	13	8	ND - 1.90E-06	5.00E-07	6.77E-07	1.13E-07
2,3,7,8-TCDF	13	100	1.61E-05 - 1.03E-04	6.36E-05	5.76E-05	7.90E-06
OCDD	13	15	ND - 9.50E-06	4.90E-06	5.32E-06	5.38E-07
WHO TEQ (Human/Mammal)	13	--	1.26E-05 - 4.53E-05	2.26E-05	2.38E-05	2.66E-06
Pumpkinseed Whole Body Reconstructed						
1,2,3,7,8-PECDF	13	15	ND - 1.45E-04	3.70E-05	4.97E-05	1.14E-05
2,3,4,7,8-PECDF	13	15	ND - 1.70E-05	9.93E-06	1.05E-05	1.17E-06
2,3,7,8-TCDF	13	38	ND - 7.20E-05	4.99E-05	4.45E-05	5.21E-06
WHO TEQ (Human/Mammal)	13	--	1.24E-05 - 3.19E-05	1.86E-05	1.92E-05	1.62E-06
Pumpkinseed Whole Fish Composite						
1,2,3,4,6,7,8-HPCDD	5	40	ND - 2.48E-06	2.33E-06	1.76E-06	4.03E-07
1,2,3,4,6,7,8-HPCDF	5	100	6.80E-06 - 1.14E-05	9.80E-06	9.20E-06	9.76E-07
1,2,3,4,7,8-HXCDF	5	40	ND - 1.46E-05	2.48E-06	7.06E-06	2.86E-06
1,2,3,7,8-PECDF	5	100	2.24E-05 - 4.22E-05	3.43E-05	3.28E-05	3.83E-06
2,3,4,6,7,8-HXCDF	5	40	ND - 2.48E-06	2.33E-06	1.90E-06	3.10E-07
2,3,4,7,8-PECDF	5	100	3.60E-06 - 9.20E-06	5.40E-06	6.24E-06	1.13E-06
2,3,7,8-TCDF	5	100	3.37E-05 - 4.86E-05	4.02E-05	4.00E-05	2.81E-06
OCDD	5	20	ND - 6.55E-06	4.80E-06	4.89E-06	4.87E-07
WHO TEQ (Human/Mammal)	5	--	1.19E-05 - 1.77E-05	1.37E-05	1.42E-05	1.07E-06

Sample Location: REACH 6 - WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range	Median	Arithmetic Mean[3]	Standard Error
Pumpkinseed Skin-off Fillet						
1,2,3,4,6,7,8-HPCDD	15	20	ND - 4.97E-06	4.20E-06	3.24E-06	4.83E-07
1,2,3,4,6,7,8-HPCDF	15	47	ND - 3.95E-05	4.91E-06	8.41E-06	2.58E-06
1,2,3,4,7,8,9-HPCDF	15	7	ND - 4.97E-06	4.20E-06	3.56E-06	3.72E-07
1,2,3,4,7,8-HXCDD	15	7	ND - 4.97E-06	4.20E-06	3.51E-06	3.94E-07
1,2,3,6,7,8-HXCDF	15	20	ND - 4.97E-06	2.50E-06	3.12E-06	4.75E-07
1,2,3,7,8,9-HXCDF	15	13	ND - 4.97E-06	2.50E-06	3.26E-06	4.37E-07
1,2,3,7,8-PECDF	15	100	2.10E-06 - 2.15E-04	9.30E-06	3.18E-05	1.44E-05
2,3,4,6,7,8-HXCDF	15	20	ND - 4.97E-06	4.30E-06	3.54E-06	3.73E-07
2,3,4,7,8-PECDF	15	80	ND - 1.69E-05	4.97E-06	6.33E-06	1.14E-06
2,3,7,8-TCDD	15	13	ND - 2.50E-06	9.00E-07	8.37E-07	1.36E-07
2,3,7,8-TCDF	15	100	1.08E-05 - 1.70E-04	1.69E-05	3.18E-05	1.04E-05
OCDD	15	27	ND - 9.94E-06	5.00E-06	5.98E-06	1.03E-06
OCDF	15	20	ND - 9.94E-06	5.00E-06	6.29E-06	9.47E-07
WHO TEQ (Human/Mammal)	15	--	6.83E-06 - 4.28E-05	1.34E-05	1.50E-05	2.19E-06

Table C-31
PCDD/PCDF Data Summary Table for Fish

Sample Location: REACH 6 - WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range			Median	Arithmetic Mean[3]	Standard Error
Pumpkinseed Offal								
1,2,3,4,6,7,8-HPCDD	15	27	ND	-	4.75E-06	2.45E-06	2.11E-06	2.87E-07
1,2,3,4,6,7,8-HPCDF	15	80	ND	-	3.20E-05	2.80E-06	7.06E-06	2.55E-06
1,2,3,4,7,8,9-HPCDF	15	7	ND	-	4.75E-06	2.46E-06	2.45E-06	1.87E-07
1,2,3,4,7,8-HXCDF	15	20	ND	-	5.27E-05	2.48E-06	7.16E-06	3.54E-06
1,2,3,6,7,8-HXCDD	15	7	ND	-	4.75E-06	2.46E-06	2.38E-06	2.22E-07
1,2,3,7,8-PECDF	15	100	3.80E-06	-	4.50E-04	5.80E-05	1.10E-04	3.67E-05
2,3,4,6,7,8-HXCDF	15	20	ND	-	7.60E-06	2.47E-06	2.71E-06	4.08E-07
2,3,4,7,8-PECDF	15	93	ND	-	2.87E-05	8.90E-06	1.17E-05	1.95E-06
2,3,7,8-TCDD	15	33	ND	-	5.50E-06	5.00E-07	1.20E-06	3.52E-07
2,3,7,8-TCDF	15	100	3.11E-05	-	1.76E-04	7.14E-05	7.98E-05	1.13E-05
OCDD	15	60	ND	-	9.45E-06	3.80E-06	3.68E-06	5.50E-07
OCDF	15	20	ND	-	9.45E-06	4.91E-06	4.37E-06	5.53E-07
WHO TEQ (Human/Mammal)	15	--	1.19E-05	-	6.20E-05	2.04E-05	2.53E-05	4.02E-06
Pumpkinseed Whole Body Reconstructed								
1,2,3,4,6,7,8-HPCDD	15	20	ND	-	8.12E-06	5.90E-06	4.69E-06	6.06E-07
1,2,3,4,6,7,8-HPCDF	15	47	ND	-	2.35E-05	6.12E-06	8.54E-06	1.82E-06
1,2,3,4,7,8,9-HPCDF	15	7	ND	-	8.12E-06	6.06E-06	5.41E-06	3.83E-07
1,2,3,4,7,8-HXCDD	15	7	ND	-	8.12E-06	6.06E-06	5.50E-06	3.43E-07
1,2,3,6,7,8-HXCDF	15	20	ND	-	8.12E-06	5.90E-06	5.22E-06	4.09E-07
1,2,3,7,8,9-HXCDF	15	13	ND	-	8.12E-06	5.90E-06	5.32E-06	3.83E-07
1,2,3,7,8-PECDF	15	100	3.96E-06	-	3.41E-04	4.78E-05	8.63E-05	2.72E-05
2,3,4,6,7,8-HXCDF	15	20	ND	-	8.12E-06	6.06E-06	5.23E-06	4.84E-07
2,3,4,7,8-PECDF	15	80	ND	-	2.27E-05	8.72E-06	1.06E-05	1.38E-06
2,3,7,8-TCDD	15	13	ND	-	4.17E-06	1.26E-06	1.51E-06	2.06E-07
2,3,7,8-TCDF	15	100	3.18E-05	-	1.34E-04	6.09E-05	6.63E-05	7.95E-06
OCDD	15	27	ND	-	1.62E-05	7.37E-06	7.33E-06	1.11E-06
OCDF	15	20	ND	-	1.62E-05	1.18E-05	9.55E-06	1.20E-06
WHO TEQ (Human/Mammal)	15	--	1.20E-05	-	4.87E-05	1.85E-05	2.23E-05	2.86E-06
Pumpkinseed Whole Fish Composite								
1,2,3,4,6,7,8-HPCDD	5	20	ND	-	2.48E-06	1.65E-06	1.75E-06	1.96E-07
1,2,3,4,6,7,8-HPCDF	5	100	6.10E-06	-	2.00E-05	1.49E-05	1.34E-05	3.05E-06
1,2,3,4,7,8,9-HPCDF	5	20	ND	-	2.48E-06	1.65E-06	1.57E-06	3.33E-07
1,2,3,4,7,8-HXCDF	5	60	ND	-	5.22E-05	2.75E-05	2.52E-05	1.04E-05
1,2,3,7,8-PECDF	5	80	ND	-	7.65E-05	7.10E-05	6.22E-05	1.06E-05
2,3,4,6,7,8-HXCDF	5	20	ND	-	2.48E-06	1.65E-06	1.57E-06	3.33E-07
2,3,4,7,8-PECDF	5	80	ND	-	1.35E-05	1.19E-05	1.07E-05	1.28E-06
2,3,7,8-TCDD	5	60	ND	-	2.10E-06	8.00E-07	1.08E-06	3.48E-07
2,3,7,8-TCDF	5	60	ND	-	5.81E-05	5.47E-05	4.70E-05	6.49E-06
OCDD	5	60	ND	-	5.10E-06	2.60E-06	2.87E-06	6.43E-07
WHO TEQ (Human/Mammal)	5	--	1.27E-05	-	2.47E-05	2.29E-05	1.99E-05	2.55E-06

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range			Median	Arithmetic Mean[3]	Standard Error
Pumpkinseed Skin-off Fillet								
1,2,3,4,6,7,8-HPCDF	16	38	ND	-	2.18E-05	2.94E-06	4.64E-06	1.29E-06
1,2,3,4,7,8-HXCDF	16	6	ND	-	7.00E-06	2.38E-06	2.91E-06	3.61E-07
1,2,3,7,8-PECDF	16	94	ND	-	6.76E-05	1.54E-05	1.97E-05	4.69E-06
2,3,4,6,7,8-HXCDF	16	6	ND	-	7.00E-06	2.38E-06	2.86E-06	3.81E-07
2,3,4,7,8-PECDF	16	69	ND	-	8.30E-06	2.18E-06	2.71E-06	4.64E-07
2,3,7,8-TCDD	16	6	ND	-	1.40E-06	4.75E-07	5.79E-07	7.20E-08
2,3,7,8-TCDF	16	56	ND	-	3.14E-05	7.00E-06	8.68E-06	1.94E-06
OCDD	16	6	ND	-	1.41E-05	4.75E-06	5.71E-06	7.72E-07
OCDF	16	6	ND	-	1.41E-05	4.53E-06	5.51E-06	7.34E-07
WHO TEQ (Human/Mammal)	16	--	5.21E-06	-	2.19E-05	8.00E-06	8.93E-06	1.04E-06

Table C-31
PCDD/PCDF Data Summary Table for Fish

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range	Median	Arithmetic Mean[3]	Standard Error
Pumpkinseed Offal						
1,2,3,4,6,7,8-HPCDD	16	12	ND - 4.97E-06	2.00E-06	2.07E-06	2.53E-07
1,2,3,4,6,7,8-HPCDF	16	88	ND - 2.83E-04	1.20E-05	3.07E-05	1.71E-05
1,2,3,4,7,8,9-HPCDF	16	12	ND - 4.97E-06	2.10E-06	2.08E-06	2.55E-07
1,2,3,4,7,8-HXCDF	16	6	ND - 5.66E-04	2.15E-06	3.75E-05	3.53E-05
1,2,3,6,7,8-HXCDD	16	6	ND - 4.97E-06	2.10E-06	2.16E-06	2.31E-07
1,2,3,7,8,9-HXCDD	16	6	ND - 4.97E-06	2.10E-06	2.15E-06	2.38E-07
1,2,3,7,8,9-HXCDF	16	6	ND - 4.97E-06	2.10E-06	2.16E-06	2.34E-07
1,2,3,7,8-PECDD	16	6	ND - 4.97E-06	2.05E-06	2.12E-06	2.36E-07
1,2,3,7,8-PECDF	16	94	ND - 5.83E-04	1.67E-04	1.87E-04	4.27E-05
2,3,4,6,7,8-HXCDF	16	12	ND - 4.97E-06	2.15E-06	2.28E-06	2.32E-07
2,3,4,7,8-PECDF	16	81	ND - 1.81E-05	8.30E-06	9.34E-06	1.27E-06
2,3,7,8-TCDD	16	31	ND - 3.30E-06	5.00E-07	9.96E-07	2.31E-07
2,3,7,8-TCDF	16	88	ND - 1.33E-04	2.69E-05	4.69E-05	8.91E-06
OCDD	16	31	ND - 9.94E-06	3.35E-06	3.60E-06	5.78E-07
OCDF	16	12	ND - 9.94E-06	4.18E-06	4.14E-06	5.17E-07
WHO TEQ (Human/Mammal)	16	--	1.03E-05 - 8.85E-05	2.32E-05	2.72E-05	4.59E-06
Pumpkinseed Whole Body Reconstructed						
1,2,3,4,6,7,8-HPCDF	16	38	ND - 1.92E-04	1.01E-05	2.34E-05	1.15E-05
1,2,3,4,7,8-HXCDF	16	6	ND - 3.79E-04	4.36E-06	2.82E-05	2.34E-05
1,2,3,7,8-PECDF	16	94	ND - 4.32E-04	1.28E-04	1.39E-04	3.13E-05
2,3,4,6,7,8-HXCDF	16	6	ND - 9.95E-06	4.15E-06	4.72E-06	4.90E-07
2,3,4,7,8-PECDF	16	69	ND - 1.80E-05	7.46E-06	8.48E-06	1.05E-06
2,3,7,8-TCDD	16	6	ND - 2.50E-06	1.08E-06	1.27E-06	1.40E-07
2,3,7,8-TCDF	16	56	ND - 1.02E-04	2.45E-05	3.94E-05	6.77E-06
OCDD	16	6	ND - 1.99E-05	7.61E-06	7.94E-06	1.27E-06
OCDF	16	6	ND - 1.99E-05	8.31E-06	8.96E-06	1.05E-06
WHO TEQ (Human/Mammal)	16	--	9.33E-06 - 6.20E-05	2.00E-05	2.18E-05	3.02E-06
Pumpkinseed Whole Fish Composite						
1,2,3,4,6,7,8-HPCDD	5	40	ND - 2.10E-06	1.65E-06	1.41E-06	2.79E-07
1,2,3,4,6,7,8-HPCDF	5	80	ND - 8.00E-06	7.50E-06	5.81E-06	1.26E-06
1,2,3,7,8-PECDF	5	100	8.70E-06 - 1.39E-04	1.20E-04	9.12E-05	2.45E-05
2,3,4,6,7,8-HXCDF	5	40	ND - 2.45E-06	1.80E-06	1.70E-06	3.06E-07
2,3,4,7,8-PECDF	5	100	7.80E-06 - 1.15E-05	9.50E-06	9.66E-06	7.08E-07
2,3,7,8-TCDD	5	20	ND - 1.90E-06	4.00E-07	7.00E-07	3.01E-07
2,3,7,8-TCDF	5	100	2.38E-05 - 3.36E-05	2.84E-05	2.88E-05	1.57E-06
OCDD	5	40	ND - 4.85E-06	3.30E-06	3.14E-06	6.79E-07
WHO TEQ (Human/Mammal)	5	--	9.92E-06 - 1.93E-05	1.88E-05	1.64E-05	1.80E-06
Yellow Perch Skin-off Fillet						
1,2,3,4,6,7,8-HPCDD	31	6	ND - 4.96E-06	2.35E-06	2.43E-06	1.38E-07
1,2,3,4,6,7,8-HPCDF	31	55	ND - 1.95E-04	2.50E-06	1.22E-05	6.24E-06
1,2,3,4,7,8,9-HPCDF	31	3	ND - 4.96E-06	2.35E-06	2.48E-06	1.20E-07
1,2,3,4,7,8-HXCDF	31	13	ND - 4.96E-06	2.30E-06	2.32E-06	1.58E-07
1,2,3,6,7,8-HXCDF	31	16	ND - 4.96E-06	2.28E-06	2.24E-06	1.74E-07
1,2,3,7,8,9-HXCDF	31	3	ND - 4.96E-06	2.35E-06	2.47E-06	1.23E-07
1,2,3,7,8-PECDF	31	61	ND - 2.36E-04	1.57E-05	2.79E-05	7.74E-06
2,3,4,6,7,8-HXCDF	31	10	ND - 4.96E-06	2.35E-06	2.42E-06	1.39E-07
2,3,4,7,8-PECDF	31	55	ND - 9.85E-06	2.40E-06	3.30E-06	4.30E-07
2,3,7,8-TCDD	31	13	ND - 9.90E-07	4.50E-07	4.82E-07	2.72E-08
2,3,7,8-TCDF	31	74	ND - 3.01E-05	5.50E-06	7.87E-06	1.13E-06
OCDD	31	19	ND - 4.13E-05	4.58E-06	5.54E-06	1.22E-06
OCDF	31	6	ND - 4.38E-05	4.70E-06	6.08E-06	1.27E-06
WHO TEQ (Human/Mammal)	31	--	5.04E-06 - 2.63E-05	7.09E-06	8.68E-06	7.42E-07

Table C-31
PCDD/PCDF Data Summary Table for Fish

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range			Median	Arithmetic Mean[3]	Standard Error
Yellow Perch Offal								
1,2,3,4,6,7,8-HPCDD	30	47	ND	-	5.20E-06	2.43E-06	2.38E-06	1.58E-07
1,2,3,4,6,7,8-HPCDF	30	90	ND	-	1.20E-03	3.39E-05	1.48E-04	5.42E-05
1,2,3,4,7,8,9-HPCDF	30	20	ND	-	2.50E-06	1.83E-06	1.87E-06	9.43E-08
1,2,3,4,7,8-HXCDD	30	3	ND	-	2.50E-06	2.05E-06	2.03E-06	7.57E-08
1,2,3,4,7,8-HXCDF	30	30	ND	-	2.11E-03	2.25E-06	1.91E-04	1.00E-04
1,2,3,6,7,8-HXCDD	30	3	ND	-	2.50E-06	2.08E-06	2.08E-06	6.04E-08
1,2,3,6,7,8-HXCDF	30	17	ND	-	3.80E-06	2.15E-06	2.11E-06	9.56E-08
1,2,3,7,8,9-HXCDD	30	3	ND	-	2.50E-06	2.05E-06	2.02E-06	7.99E-08
1,2,3,7,8,9-HXCDF	30	10	ND	-	2.50E-06	1.90E-06	1.89E-06	1.09E-07
1,2,3,7,8-PECDF	30	100	4.40E-06	-	1.44E-03	4.59E-04	5.38E-04	7.50E-05
2,3,4,6,7,8-HXCDF	30	37	ND	-	1.25E-05	2.46E-06	4.14E-06	5.62E-07
2,3,4,7,8-PECDF	30	77	ND	-	7.55E-05	4.06E-05	3.89E-05	3.86E-06
2,3,7,8-TCDD	30	37	ND	-	3.80E-06	4.73E-07	9.61E-07	1.76E-07
2,3,7,8-TCDF	30	90	ND	-	2.51E-04	8.28E-05	9.67E-05	9.30E-06
OCDD	30	43	ND	-	6.50E-06	3.68E-06	3.68E-06	2.39E-07
OCDF	30	23	ND	-	5.05E-06	3.70E-06	3.31E-06	2.93E-07
WHO TEQ (Human/Mammal)	30	--	9.82E-06	-	3.23E-04	6.16E-05	8.10E-05	1.32E-05
Yellow Perch Whole Body Reconstructed								
1,2,3,4,6,7,8-HPCDD	30	7	ND	-	6.58E-06	3.84E-06	3.93E-06	2.00E-07
1,2,3,4,6,7,8-HPCDF	30	53	ND	-	8.27E-04	2.50E-05	1.04E-04	3.80E-05
1,2,3,4,7,8,9-HPCDF	30	3	ND	-	6.58E-06	3.85E-06	3.94E-06	2.07E-07
1,2,3,4,7,8-HXCDF	30	13	ND	-	1.33E-03	4.62E-06	1.36E-04	6.90E-05
1,2,3,6,7,8-HXCDF	30	17	ND	-	6.58E-06	3.93E-06	3.98E-06	2.10E-07
1,2,3,7,8,9-HXCDF	30	3	ND	-	6.58E-06	3.95E-06	4.14E-06	1.87E-07
1,2,3,7,8-PECDF	30	60	ND	-	9.64E-04	3.40E-04	3.78E-04	5.29E-05
2,3,4,6,7,8-HXCDF	30	10	ND	-	9.63E-06	4.75E-06	5.17E-06	2.82E-07
2,3,4,7,8-PECDF	30	53	ND	-	5.10E-05	3.03E-05	2.97E-05	2.26E-06
2,3,7,8-TCDD	30	13	ND	-	2.95E-06	9.30E-07	1.11E-06	9.80E-08
2,3,7,8-TCDF	30	73	ND	-	1.79E-04	6.31E-05	7.14E-05	6.48E-06
OCDD	30	20	ND	-	2.03E-05	6.87E-06	7.01E-06	6.32E-07
OCDF	30	7	ND	-	2.11E-05	7.84E-06	7.81E-06	6.44E-07
WHO TEQ (Human/Mammal)	30	--	8.24E-06	-	2.13E-04	4.25E-05	5.80E-05	9.34E-06
Yellow Perch Whole Fish Composite								
1,2,3,4,6,7,8-HPCDD	10	10	ND	-	4.98E-06	2.40E-06	2.97E-06	4.57E-07
1,2,3,4,6,7,8-HPCDF	10	70	ND	-	2.36E-05	6.30E-06	8.73E-06	2.19E-06
1,2,3,4,7,8-HXCDF	10	10	ND	-	1.09E-05	3.37E-06	4.02E-06	8.65E-07
1,2,3,6,7,8-HXCDF	10	10	ND	-	4.98E-06	2.70E-06	3.00E-06	4.77E-07
1,2,3,7,8-PECDF	10	100	8.90E-06	-	3.39E-04	5.55E-05	8.63E-05	3.03E-05
2,3,4,6,7,8-HXCDF	10	20	ND	-	4.98E-06	3.37E-06	3.16E-06	4.89E-07
2,3,4,7,8-PECDF	10	70	ND	-	2.90E-05	1.89E-05	1.69E-05	2.57E-06
2,3,7,8-TCDF	10	30	ND	-	8.81E-05	3.38E-05	3.91E-05	7.00E-06
OCDD	10	10	ND	-	9.96E-06	4.50E-06	5.50E-06	1.06E-06
WHO TEQ (Human/Mammal)	10	--	1.26E-05	-	3.37E-05	2.24E-05	2.28E-05	2.27E-06

Sample Location: REACH 6 - WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range			Median	Arithmetic Mean[3]	Standard Error
Yellow Perch Skin-off Fillet								
1,2,3,4,6,7,8-HPCDD	15	7	ND	-	8.30E-06	4.80E-06	4.37E-06	3.96E-07
1,2,3,4,6,7,8-HPCDF	15	60	ND	-	2.63E-05	4.90E-06	6.01E-06	1.52E-06
1,2,3,4,7,8,9-HPCDF	15	7	ND	-	7.35E-06	4.80E-06	4.43E-06	3.29E-07
1,2,3,4,7,8-HXCDF	15	13	ND	-	9.80E-06	4.85E-06	4.79E-06	4.86E-07
1,2,3,6,7,8-HXCDF	15	7	ND	-	7.35E-06	4.80E-06	4.41E-06	3.31E-07
1,2,3,7,8,9-HXCDF	15	7	ND	-	7.35E-06	4.80E-06	4.41E-06	3.31E-07
1,2,3,7,8-PECDF	15	100	1.25E-05	-	5.62E-05	2.10E-05	2.59E-05	3.28E-06

Table C-31
PCDD/PCDF Data Summary Table for Fish

Sample Location: REACH 6 - WOODS POND							
Sample Year: 1998							
	Yellow Perch - Skin-off Fillet (continued)						
2,3,4,6,7,8-HXCDF	15	7	ND	7.35E-06	4.85E-06	4.47E-06	3.31E-07
2,3,4,7,8-PECDF	15	87	ND	1.77E-05	1.24E-05	9.99E-06	1.54E-06
2,3,7,8-TCDD	15	7	ND	1.65E-06	9.50E-07	9.23E-07	8.38E-08
2,3,7,8-TCDF	15	93	ND	6.52E-05	4.58E-05	3.77E-05	5.37E-06
OCDD	15	20	ND	1.47E-05	9.60E-06	8.31E-06	8.96E-07
OCDF	15	20	ND	1.47E-05	9.60E-06	8.18E-06	8.68E-07
WHO TEQ (Human/Mammal)	15	--	6.41E-06	2.81E-05	2.03E-05	1.90E-05	1.79E-06
	Yellow Perch Offal						
Constituent	**No. of Samples**	**Frequency of Detection (%)**	**Range**		**Median**	**Arithmetic Mean[3]**	**Standard Error**
1,2,3,4,6,7,8-HPCDD	15	87	ND	3.50E-06	2.50E-06	2.50E-06	1.87E-07
1,2,3,4,6,7,8-HPCDF	15	73	ND	8.58E-05	2.09E-05	2.61E-05	6.98E-06
1,2,3,4,7,8,9-HPCDF	15	13	ND	4.70E-06	1.65E-06	1.91E-06	2.59E-07
1,2,3,4,7,8-HXCDD	15	7	ND	4.70E-06	1.80E-06	1.99E-06	2.43E-07
1,2,3,4,7,8-HXCDF	15	47	ND	2.83E-04	2.70E-06	3.47E-05	2.18E-05
1,2,3,6,7,8-HXCDD	15	20	ND	4.70E-06	1.80E-06	2.10E-06	2.83E-07
1,2,3,6,7,8-HXCDF	15	73	ND	3.90E-06	2.50E-06	2.48E-06	2.54E-07
1,2,3,7,8,9-HXCDF	15	7	ND	4.70E-06	1.80E-06	2.06E-06	2.39E-07
1,2,3,7,8-PECDD	15	7	ND	4.70E-06	1.90E-06	2.17E-06	2.04E-07
1,2,3,7,8-PECDF	15	100	1.49E-05	6.97E-04	2.34E-04	2.58E-04	6.02E-05
2,3,4,6,7,8-HXCDF	15	80	ND	1.10E-05	6.10E-06	5.56E-06	7.56E-07
2,3,4,7,8-PECDF	15	47	ND	6.74E-05	3.56E-05	3.93E-05	3.58E-06
2,3,7,8-TCDD	15	53	ND	5.60E-06	1.60E-06	1.81E-06	4.13E-07
2,3,7,8-TCDF	15	47	ND	2.79E-04	1.51E-04	1.63E-04	1.27E-05
OCDD	15	7	ND	4.95E-06	1.40E-06	1.97E-06	3.36E-07
WHO TEQ (Human/Mammal)	15	--	3.63E-05	1.14E-04	5.29E-05	5.82E-05	5.71E-06
	Yellow Perch Whole Body Reconstructed						
Constituent	**No. of Samples**	**Frequency of Detection (%)**	**Range**		**Median**	**Arithmetic Mean[3]**	**Standard Error**
1,2,3,4,6,7,8-HPCDD	15	7	ND	9.81E-06	5.18E-06	4.89E-06	4.81E-07
1,2,3,4,6,7,8-HPCDF	15	60	ND	5.90E-05	1.37E-05	1.98E-05	4.74E-06
1,2,3,4,7,8,9-HPCDF	15	7	ND	7.17E-06	5.50E-06	5.30E-06	3.50E-07
1,2,3,4,7,8-HXCDF	15	13	ND	2.07E-04	5.59E-06	2.75E-05	1.52E-05
1,2,3,6,7,8-HXCDF	15	7	ND	6.25E-06	4.64E-06	4.75E-06	2.32E-07
1,2,3,7,8,9-HXCDF	15	7	ND	7.17E-06	5.50E-06	5.50E-06	2.56E-07
1,2,3,7,8-PECDF	15	100	1.55E-05	5.07E-04	1.39E-04	1.78E-04	4.12E-05
2,3,4,6,7,8-HXCDF	15	7	ND	9.13E-06	6.62E-06	6.80E-06	3.47E-07
2,3,4,7,8-PECDF	15	87	ND	5.55E-05	3.96E-05	3.98E-05	2.13E-06
2,3,7,8-TCDD	15	7	ND	4.23E-06	1.66E-06	1.96E-06	2.42E-07
2,3,7,8-TCDF	15	93	ND	2.64E-04	1.70E-04	1.67E-04	1.29E-05
OCDD	15	20	ND	1.24E-05	8.16E-06	7.77E-06	8.23E-07
OCDF	15	20	ND	1.53E-05	1.10E-05	1.07E-05	7.00E-07
WHO TEQ (Human/Mammal)	15	--	3.07E-05	8.86E-05	4.22E-05	4.51E-05	4.10E-06
	Yellow Perch Whole Fish Composite						
Constituent	**No. of Samples**	**Frequency of Detection (%)**	**Range**		**Median**	**Arithmetic Mean[3]**	**Standard Error**
1,2,3,4,6,7,8-HPCDD	5	80	ND	1.85E-06	1.20E-06	1.27E-06	1.74E-07
1,2,3,4,6,7,8-HPCDF	5	60	ND	3.90E-06	2.15E-06	2.64E-06	4.92E-07
1,2,3,4,7,8-HXCDF	5	60	ND	5.60E-06	2.25E-06	3.00E-06	7.26E-07
1,2,3,6,7,8-HXCDF	5	20	ND	2.25E-06	2.05E-06	2.06E-06	6.78E-08
1,2,3,7,8-PECDF	5	60	ND	6.97E-05	2.87E-05	3.23E-05	9.95E-06
2,3,4,6,7,8-HXCDF	5	60	ND	2.25E-06	2.10E-06	1.96E-06	1.37E-07
2,3,4,7,8-PECDF	5	100	2.49E-05	3.51E-05	2.63E-05	2.79E-05	1.84E-06
2,3,7,8-TCDD	5	40	ND	1.80E-06	4.50E-07	8.20E-07	2.69E-07
2,3,7,8-TCDF	5	40	ND	1.28E-04	5.62E-05	8.38E-05	1.79E-05
OCDD	5	80	ND	6.50E-06	4.60E-06	4.78E-06	6.73E-07
WHO TEQ (Human/Mammal)	5	--	2.43E-05	3.12E-05	3.05E-05	2.84E-05	1.54E-06

Table C-31
PCDD/PCDF Data Summary Table for Fish

Sample Location: REACH 8 - HOUSATONIC RIVER - RISING POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range	Median	Arithmetic Mean[3]	Standard Error
Yellow Perch Skin-off Fillet						
1,2,3,4,6,7,8-HPCDD	6	17	ND - 4.80E-06	2.43E-06	2.82E-06	6.47E-07
1,2,3,4,6,7,8-HPCDF	6	50	ND - 6.20E-06	2.43E-06	3.24E-06	7.02E-07
1,2,3,4,7,8,9-HPCDF	6	17	ND - 4.80E-06	2.43E-06	2.77E-06	6.84E-07
1,2,3,4,7,8-HXCDF	6	33	ND - 9.00E-06	2.43E-06	3.48E-06	1.23E-06
1,2,3,6,7,8-HXCDF	6	33	ND - 4.45E-06	2.33E-06	2.22E-06	5.46E-07
1,2,3,7,8,9-HXCDF	6	17	ND - 4.80E-06	2.43E-06	2.77E-06	6.84E-07
1,2,3,7,8-PECDF	6	50	ND - 4.00E-05	1.22E-05	1.65E-05	6.23E-06
2,3,4,6,7,8-HXCDF	6	17	ND - 4.80E-06	2.43E-06	2.88E-06	6.01E-07
2,3,4,7,8-PECDF	6	83	ND - 1.74E-05	8.40E-06	9.86E-06	2.37E-06
2,3,7,8-TCDF	6	100	1.43E-05 - 5.13E-05	2.67E-05	2.86E-05	5.87E-06
OCDD	6	17	ND - 9.60E-06	4.88E-06	5.74E-06	1.22E-06
OCDF	6	17	ND - 9.60E-06	4.88E-06	5.69E-06	1.26E-06
WHO TEQ (Human/Mammal)	6	--	8.58E-06 - 2.45E-05	1.33E-05	1.46E-05	2.43E-06
Yellow Perch Offal						
1,2,3,4,6,7,8-HPCDD	6	67	ND - 3.90E-06	2.36E-06	2.40E-06	4.38E-07
1,2,3,4,6,7,8-HPCDF	6	100	1.88E-05 - 2.81E-04	7.28E-05	1.10E-04	4.34E-05
1,2,3,4,7,8,9-HPCDF	6	17	ND - 2.50E-06	2.46E-06	2.07E-06	3.76E-07
1,2,3,4,7,8-HXCDF	6	67	ND - 6.17E-04	1.24E-04	2.18E-04	1.04E-04
1,2,3,7,8-PECDF	6	100	9.04E-05 - 8.24E-04	2.34E-04	3.62E-04	1.29E-04
2,3,4,6,7,8-HXCDF	6	67	ND - 1.14E-05	4.80E-06	5.52E-06	1.47E-06
2,3,4,7,8-PECDF	6	100	3.57E-05 - 2.29E-04	5.80E-05	7.99E-05	3.02E-05
2,3,7,8-TCDD	6	33	ND - 5.00E-07	4.73E-07	3.58E-07	8.17E-08
2,3,7,8-TCDF	6	100	9.57E-05 - 2.88E-04	1.34E-04	1.56E-04	2.79E-05
WHO TEQ (Human/Mammal)	6	--	3.66E-05 - 2.46E-04	7.42E-05	1.01E-04	3.23E-05
Yellow Perch Whole Body Reconstructed						
1,2,3,4,6,7,8-HPCDD	6	17	ND - 6.04E-06	4.41E-06	3.97E-06	7.65E-07
1,2,3,4,6,7,8-HPCDF	6	50	ND - 1.95E-04	5.01E-05	7.88E-05	3.05E-05
1,2,3,4,7,8,9-HPCDF	6	17	ND - 6.53E-06	4.90E-06	4.60E-06	7.21E-07
1,2,3,4,7,8-HXCDF	6	33	ND - 4.62E-04	8.48E-05	1.58E-04	7.63E-05
1,2,3,6,7,8-HXCDF	6	33	ND - 6.04E-06	4.90E-06	4.68E-06	3.67E-07
1,2,3,7,8,9-HXCDF	6	17	ND - 6.53E-06	4.90E-06	5.13E-06	4.31E-07
1,2,3,7,8-PECDF	6	50	ND - 5.75E-04	1.62E-04	2.59E-04	9.40E-05
2,3,4,6,7,8-HXCDF	6	17	ND - 9.68E-06	5.97E-06	6.18E-06	1.03E-06
2,3,4,7,8-PECDF	6	83	ND - 1.76E-04	4.20E-05	5.97E-05	2.34E-05
2,3,7,8-TCDF	6	100	7.07E-05 - 2.24E-04	1.04E-04	1.17E-04	2.25E-05
OCDD	6	17	ND - 1.31E-05	9.81E-06	1.03E-05	8.26E-07
OCDF	6	17	ND - 1.31E-05	9.81E-06	1.03E-05	8.37E-07
WHO TEQ (Human/Mammal)	6	--	2.87E-05 - 1.88E-04	5.51E-05	7.57E-05	2.48E-05
Yellow Perch Whole Fish Composite						
1,2,3,4,6,7,8-HPCDD	5	80	ND - 2.43E-06	9.00E-07	1.19E-06	3.70E-07
1,2,3,4,6,7,8-HPCDF	5	100	6.30E-06 - 1.92E-05	7.30E-06	9.44E-06	2.45E-06
1,2,3,4,7,8,9-HPCDF	5	60	ND - 5.00E-06	3.00E-07	1.63E-06	9.45E-07
1,2,3,4,7,8-HXCDF	5	80	ND - 1.86E-05	1.20E-05	1.11E-05	2.61E-06
1,2,3,6,7,8-HXCDF	5	80	ND - 2.43E-06	9.00E-07	1.19E-06	3.21E-07
1,2,3,7,8,9-HXCDF	5	40	ND - 5.00E-06	2.43E-06	2.11E-06	8.73E-07
1,2,3,7,8-PECDF	5	100	1.94E-05 - 4.01E-05	2.59E-05	2.88E-05	4.03E-06
2,3,4,6,7,8-HXCDF	5	80	ND - 2.43E-06	1.40E-06	1.43E-06	3.07E-07
2,3,4,7,8-PECDF	5	100	1.07E-05 - 1.70E-05	1.45E-05	1.40E-05	1.02E-06
2,3,7,8-TCDF	5	100	3.94E-05 - 5.30E-05	4.20E-05	4.37E-05	2.46E-06
WHO TEQ (Human/Mammal)	5	--	1.56E-05 - 2.56E-05	2.05E-05	2.04E-05	1.75E-06

Table C-31
PCDD/PCDF Data Summary Table for Fish

Notes:

1. EPA collected all samples included in this data summary table. Samples are whole body individuals.
2. For sampling years with only one sample, the datum represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Units are mg/Kg or ppm.
5. ND = Not Detected.
6. -- = Not Applicable.

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
Bluegill Skin-off Fillet							
1,2,3,4-Tetrachlorobenzene	1	100	--	--	--	5.86E-03	--
1,2,4,5-Tetrachlorobenzene	1	100	--	--	--	1.60E-03	--
4,4'-DDD	1	100	--	--	--	8.19E-03	--
4,4'-DDE	1	100	--	--	--	5.04E-03	--
4,4'-DDT	1	100	--	--	--	9.48E-04	--
Cis-Nonachlor	1	100	--	--	--	1.34E-02	--
Hexachlorobenzene	1	100	--	--	--	3.60E-04	--
O,P'-DDD	1	100	--	--	--	2.14E-02	--
O,P'-DDT	1	100	--	--	--	2.00E-02	--
Oxychlordane	1	100	--	--	--	3.75E-03	--
Pentachloroanisole	1	100	--	--	--	9.70E-05	--
Pentachlorobenzene	1	100	--	--	--	3.45E-03	--
Trans-Nonachlor	1	100	--	--	--	7.35E-04	--
Bluegill Offal							
1,2,3,4-Tetrachlorobenzene	1	100	--	--	--	1.47E-01	--
1,2,4,5-Tetrachlorobenzene	1	100	--	--	--	2.07E-02	--
4,4'-DDD	1	100	--	--	--	2.33E-01	--
4,4'-DDE	1	100	--	--	--	2.64E-01	--
4,4'-DDT	1	100	--	--	--	1.61E-02	--
Alpha-BHC	1	100	--	--	--	2.87E-04	--
Alpha-Chlordane	1	100	--	--	--	2.13E-02	--
Chlorpyrifos	1	100	--	--	--	9.69E-04	--
Cis-Nonachlor	1	100	--	--	--	3.19E-01	--
Dieldrin	1	100	--	--	--	1.04E-02	--
Endosulfan II	1	100	--	--	--	1.31E-01	--
Endrin	1	100	--	--	--	3.51E-04	--
Hexachlorobenzene	1	100	--	--	--	9.04E-03	--
O,P'-DDD	1	100	--	--	--	4.61E-01	--
O,P'-DDT	1	100	--	--	--	5.83E-01	--
Pentachloroanisole	1	100	--	--	--	1.92E-03	--
Pentachlorobenzene	1	100	--	--	--	1.10E-01	--
Trans-Nonachlor	1	100	--	--	--	1.16E-02	--

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
Brown Bullhead Skin-off Fillet							
1,2,3,4-Tetrachlorobenzene	18	89	ND	3.11E-02	5.06E-03	9.62E-03	2.25E-03
1,2,4,5-Tetrachlorobenzene	18	100	6.70E-05	1.73E-02	1.20E-03	2.71E-03	9.61E-04
4,4'-DDD	18	94	ND	1.14E-02	2.56E-03	3.64E-03	7.67E-04
4,4'-DDE	18	83	ND	3.73E-02	4.21E-03	8.33E-03	2.45E-03
4,4'-DDT	18	11	ND	1.70E-03	1.50E-03	1.32E-03	9.89E-05
Alpha-BHC	18	28	ND	1.70E-03	1.35E-03	1.12E-03	1.38E-04
Alpha-Chlordane	18	6	ND	1.70E-03	1.50E-03	1.40E-03	5.64E-05
Beta-BHC	18	28	ND	1.70E-03	9.96E-04	8.57E-04	1.59E-04
Chlorpyrifos	18	44	ND	1.64E-03	6.12E-04	7.10E-04	1.53E-04
Cis-Nonachlor	18	100	6.63E-04	3.90E-02	7.97E-03	1.22E-02	2.38E-03
Delta-BHC	18	28	ND	2.55E-03	1.46E-03	1.30E-03	1.37E-04
Dieldrin	18	61	ND	7.87E-03	9.63E-04	1.27E-03	4.12E-04
Endosulfan II	18	28	ND	9.93E-03	1.61E-03	2.79E-03	6.48E-04
Gamma BHC (Lindane)	18	50	ND	1.65E-03	6.93E-04	7.63E-04	1.59E-04
Gamma Chlordane	18	61	ND	1.65E-03	9.85E-04	8.84E-04	1.42E-04
Heptachlor	18	11	ND	1.70E-03	1.50E-03	1.38E-03	7.92E-05
Heptachlor epoxide	18	6	ND	1.70E-03	1.50E-03	1.42E-03	5.41E-05
Hexachlorobenzene	18	89	ND	1.58E-03	3.63E-04	5.75E-04	1.14E-04
O,P'-DDD	18	100	1.46E-03	5.85E-02	1.29E-02	1.80E-02	3.50E-03
O,P'-DDE	18	6	ND	1.70E-03	1.51E-03	1.43E-03	5.57E-05
O,P'-DDT	18	100	1.12E-03	6.21E-02	1.10E-02	1.73E-02	3.78E-03
Oxychlordane	18	78	ND	2.84E-03	5.28E-04	8.97E-04	1.96E-04
Pentachloroanisole	18	89	ND	9.83E-04	1.53E-04	2.97E-04	7.21E-05
Pentachlorobenzene	18	83	ND	1.46E-02	3.34E-03	4.26E-03	9.62E-04
Trans-Nonachlor	18	78	ND	2.74E-03	8.41E-04	9.60E-04	1.85E-04
Brown Bullhead Offal							
1,2,3,4-Tetrachlorobenzene	18	100	4.94E-03	1.24E-01	5.18E-02	5.40E-02	7.49E-03
1,2,4,5-Tetrachlorobenzene	18	89	ND	2.10E-02	1.19E-02	1.12E-02	1.46E-03
4,4'-DDD	18	56	ND	7.90E-02	1.71E-02	1.88E-02	5.08E-03
4,4'-DDE	18	100	1.92E-02	3.36E-01	1.29E-01	1.28E-01	2.09E-02
4,4'-DDT	18	78	ND	1.32E-02	2.27E-03	4.10E-03	8.95E-04
Aldrin	18	22	ND	1.22E-03	9.83E-04	9.36E-04	4.94E-05
Alpha-BHC	18	67	ND	9.80E-04	4.36E-04	5.66E-04	7.22E-05
Alpha-Chlordane	18	78	ND	2.23E-02	6.61E-03	6.10E-03	1.27E-03
Beta-BHC	18	72	ND	3.02E-03	3.53E-04	6.02E-04	1.63E-04
Chlorpyrifos	18	39	ND	1.02E-03	9.10E-04	7.28E-04	8.08E-05
Cis-Nonachlor	18	44	ND	2.03E-01	1.03E-03	4.70E-02	1.59E-02
Delta-BHC	18	33	ND	4.34E-03	9.55E-04	1.02E-03	2.08E-04
Dieldrin	18	67	ND	4.05E-02	3.25E-03	8.49E-03	2.97E-03
Endosulfan II	18	39	ND	4.36E-02	1.01E-03	1.02E-02	3.43E-03
Endrin	18	56	ND	1.65E-03	9.14E-04	8.26E-04	8.25E-05
Gamma BHC (Lindane)	18	100	1.70E-05	2.63E-03	3.16E-04	4.79E-04	1.42E-04
Gamma Chlordane	18	94	ND	6.10E-03	2.85E-03	2.98E-03	3.86E-04
Heptachlor	18	11	ND	1.19E-03	9.77E-04	9.49E-04	2.85E-05
Hexachlorobenzene	18	100	4.00E-04	7.29E-03	3.55E-03	3.47E-03	4.21E-04
Mirex	18	50	ND	5.98E-03	1.09E-03	1.74E-03	2.94E-04
O,P'-DDD	18	100	2.45E-02	3.14E-01	1.24E-01	1.41E-01	1.94E-02
O,P'-DDT	18	100	2.83E-02	3.47E-01	1.10E-01	1.40E-01	2.18E-02
Oxychlordane	18	28	ND	1.01E-02	1.00E-03	2.69E-03	6.98E-04
Pentachloroanisole	18	100	2.19E-04	4.21E-03	1.96E-03	1.90E-03	2.27E-04
Pentachlorobenzene	18	100	2.47E-03	7.16E-02	2.44E-02	2.82E-02	4.38E-03
Trans-Nonachlor	18	100	1.12E-03	1.47E-02	4.98E-03	5.87E-03	7.43E-04

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	Brown Bullhead Whole Body						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	2	100	1.32E-02	3.27E-02	2.29E-02	2.29E-02	9.78E-03
1,2,4,5-Tetrachlorobenzene	2	100	4.42E-03	8.22E-03	6.32E-03	6.32E-03	1.90E-03
4,4'-DDD	2	100	1.45E-02	1.64E-02	1.54E-02	1.54E-02	9.45E-04
4,4'-DDE	2	100	2.65E-02	3.71E-02	3.18E-02	3.18E-02	5.31E-03
4,4'-DDT	2	100	5.96E-04	6.68E-04	6.32E-04	6.32E-04	3.60E-05
Alpha-BHC	2	50	ND	9.62E-04	5.59E-04	5.59E-04	4.03E-04
Cis-Nonachlor	2	100	3.35E-02	4.47E-02	3.91E-02	3.91E-02	5.57E-03
Dieldrin	2	100	3.06E-03	4.90E-03	3.98E-03	3.98E-03	9.21E-04
Endosulfan II	2	50	ND	1.37E-02	7.34E-03	7.34E-03	6.40E-03
Gamma BHC (Lindane)	2	100	2.98E-04	4.16E-04	3.57E-04	3.57E-04	5.90E-05
Gamma Chlordane	2	100	1.64E-03	2.25E-03	1.95E-03	1.95E-03	3.06E-04
Heptachlor epoxide	2	50	ND	1.01E-03	9.86E-04	9.86E-04	2.42E-05
Hexachlorobenzene	2	100	2.17E-03	2.29E-03	2.23E-03	2.23E-03	6.05E-05
Mirex	2	50	ND	9.62E-04	6.69E-04	6.69E-04	2.93E-04
O,P'-DDD	2	100	1.88E-03	6.08E-02	3.13E-02	3.13E-02	2.94E-02
O,P'-DDE	2	50	ND	9.62E-04	7.13E-04	7.13E-04	2.49E-04
O,P'-DDT	2	100	1.88E-03	6.53E-02	3.36E-02	3.36E-02	3.17E-02
Oxychlordane	2	50	ND	4.16E-03	2.55E-03	2.55E-03	1.61E-03
Pentachloroanisole	2	100	8.02E-04	1.50E-03	1.15E-03	1.15E-03	3.48E-04
Pentachlorobenzene	2	100	1.13E-02	1.50E-02	1.31E-02	1.31E-02	1.84E-03
Trans-Nonachlor	2	100	2.18E-03	4.05E-03	3.12E-03	3.12E-03	9.35E-04

Sample Location: REACH 6 - WOODS POND

Sample Year: 1998

Constituent	Brown Bullhead Skin-off Fillet						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	25	100	2.33E-03	4.92E-02	1.07E-02	1.39E-02	2.20E-03
1,2,4,5-Tetrachlorobenzene	25	96	ND	1.73E-02	4.29E-03	4.38E-03	7.17E-04
4,4'-DDD	25	100	2.04E-03	5.19E-02	9.20E-03	1.13E-02	2.13E-03
4,4'-DDE	25	96	ND	2.30E-01	3.10E-02	3.71E-02	8.51E-03
4,4'-DDT	25	36	ND	2.93E-03	9.98E-04	1.07E-03	1.21E-04
Aldrin	25	20	ND	2.46E-03	9.94E-04	1.02E-03	8.44E-05
Alpha-BHC	25	84	ND	2.46E-03	1.07E-04	2.41E-04	1.02E-04
Alpha-Chlordane	25	60	ND	4.43E-03	1.35E-03	1.52E-03	1.72E-04
Beta-BHC	25	44	ND	2.46E-03	9.75E-04	6.56E-04	1.15E-04
Chlorpyrifos	25	76	ND	2.46E-03	1.70E-04	3.95E-04	1.07E-04
Cis-Nonachlor	25	92	ND	2.06E-01	3.28E-02	3.65E-02	7.86E-03
Delta-BHC	25	28	ND	4.23E-03	1.00E-03	1.29E-03	1.65E-04
Dieldrin	25	100	5.04E-04	9.62E-03	1.06E-03	2.05E-03	3.88E-04
Endosulfan II	25	88	ND	3.93E-02	7.58E-03	1.01E-02	1.92E-03
Endrin	25	28	ND	2.46E-03	9.94E-04	9.23E-04	1.05E-04
Gamma BHC (Lindane)	25	96	ND	1.00E-03	1.78E-04	2.37E-04	4.43E-05
Gamma Chlordane	25	96	ND	3.67E-03	8.95E-04	1.14E-03	1.82E-04
Heptachlor	25	56	ND	2.46E-03	4.34E-04	6.52E-04	1.27E-04
Heptachlor epoxide	25	28	ND	1.34E-02	1.12E-03	1.63E-03	4.91E-04
Hexachlorobenzene	25	96	ND	3.04E-03	9.26E-04	1.01E-03	1.45E-04
O,P'-DDD	25	100	1.74E-02	2.90E-01	4.46E-02	5.93E-02	1.12E-02
O,P'-DDE	25	20	ND	3.08E-03	1.12E-03	1.39E-03	1.25E-04
O,P'-DDT	25	100	5.79E-03	3.80E-01	4.01E-02	5.89E-02	1.44E-02
Oxychlordane	25	52	ND	5.55E-03	1.53E-03	2.66E-03	3.37E-04
Pentachloroanisole	25	100	1.47E-04	1.45E-03	5.35E-04	5.56E-04	7.09E-05
Pentachlorobenzene	25	100	1.04E-03	1.96E-02	4.73E-03	6.58E-03	1.08E-03
Trans-Nonachlor	25	96	ND	8.47E-03	1.45E-03	1.91E-03	3.31E-04

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 6 - WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
	Brown Bullhead Offal						
1,2,3,4-Tetrachlorobenzene	25	92	ND	1.25E-01	1.75E-02	2.64E-02	5.91E-03
1,2,4,5-Tetrachlorobenzene	25	100	1.68E-03	2.61E-02	9.87E-03	1.06E-02	1.34E-03
4,4'-DDD	25	96	ND	4.35E-02	2.57E-02	2.43E-02	2.36E-03
4,4'-DDE	25	96	ND	3.14E-01	7.82E-02	1.07E-01	1.50E-02
4,4'-DDT	25	48	ND	6.01E-03	9.75E-04	1.42E-03	2.46E-04
Aldrin	25	8	ND	1.07E-03	9.86E-04	9.43E-04	1.58E-05
Alpha-BHC	25	32	ND	1.00E-03	8.75E-04	7.08E-04	7.32E-05
Alpha-Chlordane	25	20	ND	2.95E-01	9.90E-04	1.37E-02	1.17E-02
Beta-BHC	25	40	ND	2.27E-03	9.86E-04	7.59E-04	1.01E-04
Chlorpyrifos	25	68	ND	1.00E-03	2.25E-04	4.14E-04	7.95E-05
Cis-Nonachlor	25	96	ND	3.24E-01	7.78E-02	9.71E-02	1.44E-02
Delta-BHC	25	48	ND	1.02E-02	9.75E-04	2.07E-03	5.34E-04
Dieldrin	25	96	ND	1.03E-02	3.72E-03	4.24E-03	5.47E-04
Endosulfan II	25	80	ND	7.46E-02	2.27E-02	2.29E-02	3.47E-03
Endrin	25	12	ND	1.71E-03	9.86E-04	9.20E-04	5.13E-05
Gamma BHC (Lindane)	25	100	2.80E-05	2.10E-03	3.90E-04	5.52E-04	9.90E-05
Gamma Chlordane	25	100	1.18E-04	7.20E-03	2.04E-03	2.11E-03	3.03E-04
Heptachlor	25	12	ND	1.00E-03	9.60E-04	8.48E-04	5.29E-05
Heptachlor epoxide	25	40	ND	1.07E-02	9.96E-04	2.69E-03	5.83E-04
Hexachlorobenzene	25	100	1.92E-04	5.25E-03	1.69E-03	1.94E-03	2.31E-04
Mirex	25	4	ND	1.48E-03	9.88E-04	9.68E-04	2.59E-05
O,P'-DDD	25	100	4.64E-02	3.57E-01	1.55E-01	1.67E-01	1.68E-02
O,P'-DDE	25	12	ND	1.18E-02	9.86E-04	1.85E-03	5.29E-04
O,P'-DDT	25	96	ND	3.02E-01	1.33E-01	1.47E-01	1.84E-02
Oxychlordane	25	40	ND	3.52E-02	9.96E-04	7.24E-03	1.91E-03
Pentachloroanisole	25	100	1.62E-04	3.55E-03	1.24E-03	1.30E-03	1.47E-04
Pentachlorobenzene	25	100	1.41E-03	5.31E-02	1.40E-02	1.49E-02	2.27E-03
Trans-Nonachlor	25	100	6.27E-04	1.03E-01	4.39E-03	7.85E-03	4.00E-03

Sample Location: REACH 8 - HOUSATONIC RIVER - RISING POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
	Brown Bullhead Skin-off Fillet						
1,2,3,4-Tetrachlorobenzene	7	100	2.49E-04	1.43E-03	6.40E-04	6.95E-04	1.46E-04
1,2,4,5-Tetrachlorobenzene	7	14	ND	7.73E-04	3.83E-04	3.67E-04	9.07E-05
4,4'-DDD	7	100	5.24E-04	3.42E-03	1.38E-03	1.54E-03	3.64E-04
4,4'-DDE	7	100	2.61E-03	1.36E-02	5.49E-03	6.33E-03	1.35E-03
4,4'-DDT	7	100	1.17E-04	2.66E-04	1.71E-04	1.83E-04	2.42E-05
Alpha-BHC	7	100	5.90E-05	1.56E-04	1.24E-04	1.14E-04	1.45E-05
Alpha-Chlordane	7	86	ND	9.96E-04	4.08E-04	4.65E-04	9.94E-05
Beta-BHC	7	14	ND	9.98E-04	9.94E-04	8.54E-04	1.40E-04
Chlorpyrifos	7	14	ND	9.96E-04	8.20E-05	2.22E-04	1.29E-04
Cis-Nonachlor	7	100	1.26E-03	7.36E-03	2.98E-03	3.24E-03	7.40E-04
Dieldrin	7	71	ND	9.94E-04	8.70E-05	3.37E-04	1.70E-04
Endosulfan II	7	100	5.92E-04	3.57E-03	2.16E-03	2.25E-03	4.41E-04
Endrin	7	14	ND	9.98E-04	9.94E-04	8.55E-04	1.40E-04
Gamma BHC (Lindane)	7	100	1.27E-04	5.69E-04	1.47E-04	2.28E-04	5.99E-05
Gamma Chlordane	7	100	1.00E-04	6.68E-04	2.11E-04	2.86E-04	6.90E-05
Heptachlor	7	43	ND	9.98E-04	9.90E-04	6.24E-04	1.75E-04
Heptachlor epoxide	7	14	ND	9.98E-04	9.94E-04	7.28E-04	1.72E-04
Hexachlorobenzene	7	29	ND	1.50E-04	1.25E-04	1.27E-04	5.17E-06
O,P'-DDD	7	100	1.77E-03	7.92E-03	3.63E-03	3.97E-03	7.59E-04
O,P'-DDT	7	100	3.95E-03	1.34E-02	5.75E-03	7.02E-03	1.23E-03
Oxychlordane	7	29	ND	9.98E-04	9.94E-04	7.99E-04	1.28E-04
Pentachloroanisole	7	100	1.63E-04	7.51E-04	3.23E-04	3.71E-04	7.16E-05
Pentachlorobenzene	7	100	1.30E-04	3.52E-04	2.45E-04	2.57E-04	3.41E-05
Trans-Nonachlor	7	100	1.98E-04	1.49E-03	4.83E-04	7.45E-04	1.79E-04

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 8 - HOUSATONIC RIVER - RISING POND

Sample Year: 1998

Constituent	Brown Bullhead Offal						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	7	100	7.53E-04	2.36E-03	9.99E-04	1.16E-03	2.07E-04
1,2,4,5-Tetrachlorobenzene	7	86	ND	2.68E-03	8.25E-04	1.09E-03	3.64E-04
4,4'-DDD	7	100	7.69E-03	3.34E-02	1.02E-02	1.38E-02	3.37E-03
4,4'-DDE	7	100	1.06E-02	3.44E-02	1.50E-02	1.77E-02	3.17E-03
4,4'-DDT	7	100	1.50E-04	9.04E-04	2.17E-04	3.52E-04	1.04E-04
Alpha-BHC	7	71	ND	9.88E-04	1.18E-04	3.54E-04	1.64E-04
Alpha-Chlordane	7	86	ND	1.05E-03	8.09E-04	7.11E-04	1.09E-04
Beta-BHC	7	29	ND	1.00E-03	9.88E-04	7.19E-04	1.76E-04
Chlorpyrifos	7	43	ND	1.00E-03	9.85E-04	6.18E-04	1.77E-04
Cis-Nonachlor	7	14	ND	1.01E-02	9.90E-04	2.30E-03	1.30E-03
Delta-BHC	7	100	6.80E-05	8.63E-04	2.79E-04	3.69E-04	9.73E-05
Dieldrin	7	100	1.98E-04	8.08E-04	3.19E-04	3.98E-04	8.67E-05
Endosulfan II	7	29	ND	4.32E-03	9.98E-04	1.50E-03	4.71E-04
Endrin	7	14	ND	1.00E-03	9.90E-04	8.76E-04	1.15E-04
Gamma BHC (Lindane)	7	100	1.58E-04	7.06E-04	2.46E-04	3.00E-04	7.16E-05
Gamma Chlordane	7	100	1.09E-04	8.66E-04	4.00E-04	4.21E-04	9.80E-05
Heptachlor	7	43	ND	1.00E-03	9.88E-04	6.21E-04	1.76E-04
Heptachlor epoxide	7	86	ND	1.65E-03	8.15E-04	8.10E-04	1.69E-04
Hexachlorobenzene	7	100	2.28E-04	1.21E-03	5.75E-04	5.79E-04	1.17E-04
Mirex	7	14	ND	1.00E-03	9.88E-04	8.52E-04	1.39E-04
O,P'-DDD	7	100	6.26E-03	1.90E-02	8.38E-03	1.00E-02	1.77E-03
O,P'-DDT	7	100	1.30E-02	3.43E-02	1.61E-02	1.80E-02	2.78E-03
Oxychlordane	7	43	ND	9.98E-04	9.85E-04	7.65E-04	1.43E-04
Pentachloroanisole	7	100	5.58E-04	1.36E-03	6.48E-04	7.54E-04	1.09E-04
Pentachlorobenzene	7	100	1.09E-04	8.41E-04	3.48E-04	3.85E-04	9.54E-05
Trans-Nonachlor	7	100	7.49E-04	2.48E-03	1.34E-03	1.36E-03	2.32E-04

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 2000

Constituent	Common Carp Whole Fish						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	8	100	4.21E-02	2.57E-01	1.19E-01	1.36E-01	2.65E-02
1,2,4,5-Tetrachlorobenzene	8	100	8.54E-03	4.48E-02	2.21E-02	2.44E-02	4.61E-03
4,4'-DDD	8	100	2.67E-02	1.34E-01	8.23E-02	8.06E-02	1.15E-02
4,4'-DDE	8	100	9.72E-02	3.17E-01	2.05E-01	2.02E-01	2.47E-02
4,4'-DDT	8	100	5.81E-03	2.40E-02	9.49E-03	1.22E-02	2.13E-03
Aldrin	8	25	ND	4.83E-03	9.84E-04	1.61E-03	4.86E-04
Alpha-BHC	8	100	2.33E-04	1.72E-03	5.10E-04	7.17E-04	1.81E-04
Alpha-Chlordane	8	100	3.28E-03	2.13E-02	1.29E-02	1.20E-02	2.13E-03
Beta-BHC	8	75	ND	1.27E-03	7.83E-04	7.24E-04	1.33E-04
Chlorpyrifos	8	100	8.10E-05	1.45E-03	2.91E-04	4.39E-04	1.57E-04
Cis-Nonachlor	8	100	2.16E-02	3.99E-01	2.37E-01	2.27E-01	4.25E-02
Delta-BHC	8	50	ND	1.89E-02	4.50E-03	7.43E-03	2.75E-03
Dieldrin	8	100	1.94E-03	3.03E-02	1.04E-02	1.35E-02	3.41E-03
Endosulfan II	8	100	5.69E-03	7.78E-02	2.54E-02	3.25E-02	7.95E-03
Endrin	8	100	1.54E-03	8.74E-03	5.67E-03	5.83E-03	9.39E-04
Gamma BHC (Lindane)	8	100	2.82E-04	2.61E-03	1.13E-03	1.28E-03	2.82E-04
Gamma Chlordane	8	100	2.94E-03	1.35E-02	8.20E-03	8.20E-03	1.24E-03
Heptachlor Epoxide	8	100	3.42E-03	1.73E-02	7.86E-03	8.71E-03	1.81E-03
Hexachlorobenzene	8	100	4.49E-03	1.74E-02	9.04E-03	1.02E-02	1.53E-03
Mirex	8	50	ND	1.15E-03	9.38E-04	8.33E-04	1.17E-04
O,P'-DDD	8	100	8.10E-02	5.37E-01	3.80E-01	3.56E-01	5.96E-02
O,P'-DDE	8	100	5.47E-03	2.51E-02	1.88E-02	1.72E-02	2.29E-03
O,P'-DDT	8	100	3.52E-02	6.80E-01	3.35E-01	3.38E-01	6.73E-02
Oxychlordane	8	100	1.95E-03	3.84E-02	7.94E-03	1.34E-02	4.83E-03
Pentachloroanisole	8	100	8.53E-04	2.11E-03	1.34E-03	1.41E-03	1.57E-04
Pentachlorobenzene	8	100	3.11E-02	1.43E-01	7.01E-02	7.53E-02	1.32E-02
Trans-Nonachlor	8	100	3.60E-03	1.81E-02	1.11E-02	1.10E-02	1.61E-03

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
Fallfish Whole Fish Composite							
1,2,3,4-Tetrachlorobenzene	5	100	3.22E-02	3.62E-01	2.20E-01	1.96E-01	7.06E-02
1,2,4,5-Tetrachlorobenzene	5	100	7.33E-03	6.93E-02	3.84E-02	3.69E-02	1.29E-02
4,4'-DDD	5	100	1.21E-02	4.97E-02	2.12E-02	2.68E-02	7.36E-03
4,4'-DDE	5	100	1.94E-02	6.23E-02	3.32E-02	3.87E-02	8.94E-03
Alpha-BHC	5	100	7.00E-05	3.38E-04	1.71E-04	2.00E-04	5.92E-05
Chlorpyrifos	5	60	ND	3.12E-04	2.33E-04	2.20E-04	4.25E-05
Cis-Nonachlor	5	100	3.64E-02	8.66E-02	5.85E-02	5.81E-02	9.55E-03
Dieldrin	5	100	1.04E-03	2.57E-03	1.43E-03	1.71E-03	3.10E-04
Endosulfan II	5	100	9.25E-03	1.73E-02	1.30E-02	1.27E-02	1.35E-03
Endrin	5	40	ND	1.20E-03	9.45E-04	8.24E-04	1.40E-04
Gamma BHC (Lindane)	5	100	4.50E-05	1.34E-04	7.90E-05	8.62E-05	1.47E-05
Gamma Chlordane	5	100	3.07E-04	1.40E-03	1.24E-03	9.90E-04	2.20E-04
Heptachlor	5	40	ND	1.20E-03	9.45E-04	6.92E-04	2.20E-04
Heptachlor Epoxide	5	100	3.16E-04	6.31E-03	7.26E-04	2.79E-03	1.37E-03
Hexachlorobenzene	5	100	2.21E-03	1.12E-02	5.43E-03	6.39E-03	1.91E-03
Mirex	5	60	ND	9.96E-04	3.56E-04	5.76E-04	1.69E-04
O,P'-DDD	5	100	2.15E-02	6.13E-02	2.70E-02	3.85E-02	9.12E-03
O,P'-DDE	5	60	ND	9.96E-04	5.79E-04	5.55E-04	1.96E-04
O,P'-DDT	5	100	6.95E-02	1.26E-01	1.11E-01	9.91E-02	1.12E-02
Pentachloroanisole	5	100	3.35E-04	3.58E-03	1.91E-03	1.98E-03	7.08E-04
Pentachlorobenzene	5	100	1.73E-02	2.20E-01	1.06E-01	1.13E-01	4.18E-02
Trans-Nonachlor	5	100	1.03E-03	3.35E-03	1.53E-03	2.04E-03	5.16E-04
Golden Shiner Whole Fish Composite							
1,2,3,4-Tetrachlorobenzene	5	100	7.14E-03	1.06E-01	6.30E-02	5.58E-02	1.74E-02
1,2,4,5-Tetrachlorobenzene	5	100	1.92E-03	1.64E-02	1.35E-02	1.10E-02	2.82E-03
4,4'-DDD	5	80	ND	2.03E-02	1.02E-02	1.06E-02	4.05E-03
4,4'-DDE	5	80	ND	4.02E-02	1.35E-02	1.84E-02	7.76E-03
4,4'-DDT	5	40	ND	2.50E-03	9.80E-04	1.34E-03	3.15E-04
Aldrin	5	20	ND	1.25E-03	9.85E-04	1.05E-03	5.27E-05
Alpha-BHC	5	60	ND	2.50E-03	3.08E-04	8.49E-04	4.35E-04
Beta-BHC	5	60	ND	1.25E-03	5.49E-04	5.77E-04	2.40E-04
Chlorpyrifos	5	60	ND	2.50E-03	2.88E-04	8.28E-04	4.42E-04
Cis-Nonachlor	5	80	ND	3.52E-02	2.25E-02	1.95E-02	6.81E-03
Dieldrin	5	100	6.12E-04	3.71E-03	1.72E-03	1.84E-03	5.81E-04
Endosulfan II	5	40	ND	1.10E-02	2.50E-03	3.95E-03	1.86E-03
Endrin	5	20	ND	1.25E-03	9.80E-04	9.60E-04	1.01E-04
Gamma BHC (Lindane)	5	100	6.50E-05	1.29E-03	5.34E-04	5.61E-04	2.07E-04
Gamma Chlordane	5	100	2.47E-04	3.24E-03	1.44E-03	1.61E-03	4.99E-04
Hexachlorobenzene	5	100	5.75E-04	4.15E-03	3.45E-03	2.83E-03	6.83E-04
O,P'-DDD	5	100	1.01E-02	1.08E-01	4.25E-02	4.80E-02	1.62E-02
O,P'-DDT	5	100	9.86E-03	8.25E-02	5.32E-02	4.69E-02	1.26E-02
Oxychlordane	5	40	ND	8.37E-03	2.50E-03	3.48E-03	1.39E-03
Pentachloroanisole	5	80	ND	2.25E-03	1.34E-03	1.35E-03	3.52E-04
Pentachlorobenzene	5	80	ND	3.91E-02	1.25E-02	1.77E-02	7.77E-03
Trans-Nonachlor	5	100	4.93E-04	2.64E-03	2.01E-03	1.89E-03	3.73E-04

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 6 - WOODS POND

Sample Year: 1998

Constituent	Golden Shiner Whole Fish Composite						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	5	100	3.56E-02	5.15E-02	3.94E-02	4.14E-02	2.94E-03
1,2,4,5-Tetrachlorobenzene	5	100	1.08E-02	1.74E-02	1.46E-02	1.38E-02	1.22E-03
4,4'-DDD	5	100	1.33E-02	2.14E-02	1.63E-02	1.69E-02	1.31E-03
4,4'-DDE	5	100	3.97E-02	6.33E-02	4.82E-02	5.00E-02	3.88E-03
4,4'-DDT	5	100	1.85E-04	3.34E-04	2.70E-04	2.63E-04	2.58E-05
Alpha-BHC	5	100	8.80E-05	1.71E-04	1.54E-04	1.38E-04	1.53E-05
Alpha-Chlordane	5	80	ND	2.23E-03	1.62E-03	1.56E-03	2.63E-04
Beta-BHC	5	60	ND	1.23E-03	2.94E-04	5.60E-04	2.31E-04
Chlorpyrifos	5	40	ND	1.23E-03	9.64E-04	7.20E-04	2.14E-04
Cis-Nonachlor	5	100	3.54E-02	4.08E-02	3.98E-02	3.90E-02	9.35E-04
Dieldrin	5	100	8.95E-04	2.48E-03	1.95E-03	1.85E-03	2.71E-04
Endosulfan II	5	100	1.46E-02	2.33E-02	1.80E-02	1.83E-02	1.46E-03
Endrin	5	80	ND	1.23E-03	3.67E-04	4.95E-04	1.92E-04
Gamma BHC (Lindane)	5	100	3.86E-04	6.55E-04	5.50E-04	5.21E-04	4.54E-05
Gamma Chlordane	5	100	8.44E-04	1.50E-03	1.21E-03	1.24E-03	1.16E-04
Heptachlor	5	40	ND	9.90E-04	9.64E-04	6.80E-04	1.85E-04
Heptachlor Epoxide	5	100	6.46E-03	8.51E-03	7.62E-03	7.50E-03	3.49E-04
Hexachlorobenzene	5	100	1.71E-03	2.69E-03	2.40E-03	2.20E-03	1.94E-04
O,P'-DDD	5	100	6.16E-02	1.15E-01	6.78E-02	7.65E-02	9.75E-03
O,P'-DDT	5	100	5.23E-02	7.73E-02	5.95E-02	6.14E-02	4.29E-03
Pentachloroanisole	5	100	8.61E-04	2.42E-03	1.80E-03	1.68E-03	2.81E-04
Pentachlorobenzene	5	100	1.61E-02	2.77E-02	2.08E-02	2.12E-02	1.95E-03
Trans-Nonachlor	5	100	1.32E-03	3.30E-03	2.16E-03	2.27E-03	3.17E-04

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	Goldfish Whole Fish						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	18	100	2.91E-02	1.18E+00	2.34E-01	3.08E-01	7.00E-02
1,2,4,5-Tetrachlorobenzene	18	94	ND	2.84E-01	3.69E-02	5.80E-02	1.54E-02
4,4'-DDD	18	100	5.15E-03	1.64E+00	3.61E-02	1.36E-01	8.94E-02
4,4'-DDE	18	100	1.46E-02	6.47E-01	6.65E-02	1.44E-01	4.33E-02
4,4'-DDT	18	22	ND	3.09E-02	9.65E-04	3.18E-03	1.70E-03
Aldrin	18	6	ND	1.98E-03	9.58E-04	1.02E-03	5.70E-05
Alpha-BHC	18	44	ND	1.00E-03	9.48E-04	7.41E-04	7.91E-05
Alpha-Chlordane	18	11	ND	4.73E-03	9.63E-04	1.36E-03	2.75E-04
Beta-BHC	18	39	ND	2.80E-03	9.48E-04	9.40E-04	1.55E-04
Chlorpyrifos	18	44	ND	7.88E-03	9.68E-04	1.57E-03	4.28E-04
Cis-Nonachlor	18	100	4.33E-02	1.16E+00	3.59E-01	3.81E-01	7.15E-02
Delta-BHC	18	11	ND	1.01E-02	9.58E-04	1.40E-03	5.16E-04
Dieldrin	18	94	ND	1.37E-02	4.86E-03	5.44E-03	7.79E-04
Endosulfan II	18	28	ND	2.44E-01	9.75E-04	2.92E-02	1.61E-02
Endrin	18	11	ND	3.24E-02	9.65E-04	2.76E-03	1.75E-03
Gamma BHC (Lindane)	18	100	4.09E-04	6.23E-03	1.80E-03	2.69E-03	4.90E-04
Gamma Chlordane	18	100	1.83E-03	2.35E-02	5.85E-03	7.72E-03	1.25E-03
Heptachlor	18	6	ND	2.71E-03	9.65E-04	1.06E-03	9.72E-05
Heptachlor Epoxide	18	72	ND	8.09E-03	2.93E-03	3.58E-03	5.75E-04
Hexachlorobenzene	18	100	2.60E-03	2.18E-02	6.60E-03	8.01E-03	1.18E-03
Mirex	18	17	ND	4.59E-03	9.65E-04	1.26E-03	2.12E-04
O,P'-DDD	18	100	4.57E-02	1.09E+00	4.31E-01	4.54E-01	8.05E-02
O,P'-DDE	18	56	ND	7.67E-03	1.26E-03	1.83E-03	3.77E-04
O,P'-DDT	18	100	7.68E-02	1.19E+00	5.46E-01	6.09E-01	8.15E-02
Oxychlordane	18	83	ND	6.33E-02	1.18E-02	1.67E-02	3.97E-03
Pentachloroanisole	18	94	ND	6.43E-03	2.22E-03	2.55E-03	3.66E-04
Pentachlorobenzene	18	100	1.54E-02	4.21E-01	8.98E-02	1.21E-01	2.45E-02
Trans-Nonachlor	18	89	ND	1.10E-01	7.81E-03	1.51E-02	5.85E-03

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 6 - WOODS POND

Sample Year: 1998

Constituent	Goldfish Whole Fish						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	23	74	ND	4.57E-01	6.88E-02	1.15E-01	2.82E-02
1,2,4,5-Tetrachlorobenzene	23	100	3.67E-03	2.27E-01	2.61E-02	4.09E-02	1.02E-02
4,4'-DDD	23	100	8.04E-03	3.86E-01	1.27E-01	1.46E-01	2.10E-02
4,4'-DDE	23	100	2.66E-02	1.20E+00	4.02E-01	4.17E-01	7.00E-02
4,4'-DDT	23	4	ND	1.65E-03	9.73E-04	9.80E-04	5.87E-05
Aldrin	23	9	ND	2.35E-02	9.73E-04	2.00E-03	9.77E-04
Alpha-BHC	23	35	ND	1.65E-03	9.49E-04	8.14E-04	9.40E-05
Alpha-Chlordane	23	9	ND	2.43E-02	9.73E-04	2.20E-03	1.02E-03
Beta-BHC	23	65	ND	7.14E-03	1.00E-03	2.16E-03	4.00E-04
Chlorpyrifos	23	35	ND	4.68E-03	9.73E-04	1.34E-03	2.31E-04
Cis-Nonachlor	23	87	ND	9.71E-01	2.98E-01	3.48E-01	5.08E-02
Delta-BHC	23	39	ND	1.95E-02	9.90E-04	5.01E-03	1.29E-03
Dieldrin	23	96	ND	3.35E-01	1.01E-02	7.73E-02	2.22E-02
Endosulfan II	23	61	ND	1.34E-01	6.06E-02	5.58E-02	1.04E-02
Endrin	23	17	ND	1.69E-03	9.73E-04	1.02E-03	6.75E-05
Gamma BHC (Lindane)	23	87	ND	6.41E-03	2.02E-03	2.36E-03	3.52E-04
Gamma Chlordane	23	83	ND	9.42E-02	5.89E-03	1.55E-02	5.15E-03
Heptachlor	23	26	ND	3.69E-02	9.81E-04	8.38E-03	2.70E-03
Heptachlor Epoxide	23	83	ND	4.45E-02	1.13E-02	1.45E-02	2.84E-03
Hexachlorobenzene	23	87	ND	2.63E-02	5.96E-03	6.70E-03	1.16E-03
Mirex	23	4	ND	1.65E-03	9.73E-04	9.79E-04	5.92E-05
O,P'-DDD	23	100	3.77E-02	1.46E+00	4.83E-01	5.49E-01	6.57E-02
O,P'-DDE	23	61	ND	6.44E-02	2.69E-03	1.77E-02	4.61E-03
O,P'-DDT	23	100	4.79E-02	1.42E+00	6.15E-01	6.91E-01	7.18E-02
Oxychlordane	23	26	ND	3.39E-02	9.90E-04	6.54E-03	2.08E-03
Pentachloroanisole	23	96	ND	1.13E-02	2.45E-03	3.19E-03	5.55E-04
Pentachlorobenzene	23	74	ND	3.12E-01	3.30E-02	6.60E-02	1.83E-02
Toxaphene	23	4	ND	3.26E-02	9.75E-03	1.09E-02	1.03E-03
Trans-Nonachlor	23	96	ND	1.26E-01	1.25E-02	2.75E-02	6.70E-03

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 2000

Constituent	Goldfish Whole Fish						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	1	100	--	--	--	8.64E-02	--
1,2,4,5-Tetrachlorobenzene	1	100	--	--	--	1.86E-02	--
4,4'-DDD	1	100	--	--	--	9.49E-02	--
4,4'-DDE	1	100	--	--	--	1.70E-01	--
4,4'-DDT	1	100	--	--	--	5.40E-03	--
Alpha-BHC	1	100	--	--	--	4.43E-04	--
Alpha-Chlordane	1	100	--	--	--	7.91E-03	--
Beta-BHC	1	100	--	--	--	2.24E-04	--
Chlorpyrifos	1	100	--	--	--	2.33E-04	--
Cis-Nonachlor	1	100	--	--	--	2.23E-01	--
Dieldrin	1	100	--	--	--	9.93E-03	--
Endosulfan II	1	100	--	--	--	2.23E-02	--
Endrin	1	100	--	--	--	3.32E-03	--
Gamma BHC (Lindane)	1	100	--	--	--	5.05E-04	--
Gamma Chlordane	1	100	--	--	--	5.10E-03	--
Heptachlor Epoxide	1	100	--	--	--	3.18E-03	--
Hexachlorobenzene	1	100	--	--	--	8.84E-03	--
Mirex	1	100	--	--	--	4.29E-04	--
O,P'-DDD	1	100	--	--	--	2.62E-01	--
O,P'-DDE	1	100	--	--	--	1.77E-02	--
O,P'-DDT	1	100	--	--	--	3.05E-01	--
Oxychlordane	1	100	--	--	--	1.45E-02	--
Pentachloroanisole	1	100	--	--	--	1.53E-03	--
Pentachlorobenzene	1	100	--	--	--	5.29E-02	--
Trans-Nonachlor	1	100	--	--	--	1.30E-02	--

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 8 - HOUSATONIC RIVER - RISING POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
Largemouth Bass Skin-off Fillet							
1,2,3,4-Tetrachlorobenzene	11	64	ND	8.01E-04	2.32E-04	3.14E-04	6.14E-05
1,2,4,5-Tetrachlorobenzene	11	45	ND	2.07E-03	4.49E-04	6.77E-04	1.77E-04
4,4'-DDD	11	82	ND	3.75E-03	1.49E-03	1.69E-03	2.47E-04
4,4'-DDE	11	100	6.20E-03	2.62E-02	1.15E-02	1.30E-02	1.97E-03
4,4'-DDT	11	82	ND	9.95E-04	2.91E-04	4.10E-04	8.85E-05
Alpha-BHC	11	64	ND	9.98E-04	1.53E-04	4.26E-04	1.35E-04
Alpha-Chlordane	11	9	ND	9.95E-04	9.80E-04	9.20E-04	5.79E-05
Beta-BHC	11	73	ND	9.95E-04	1.15E-04	3.30E-04	1.28E-04
Chlorpyrifos	11	18	ND	9.98E-04	9.80E-04	8.05E-04	1.17E-04
Cis-Nonachlor	11	100	2.69E-03	7.78E-03	5.03E-03	5.31E-03	5.21E-04
Dieldrin	11	100	2.50E-05	4.21E-04	1.69E-04	2.13E-04	3.87E-05
Endosulfan II	11	82	ND	3.87E-03	1.21E-03	1.53E-03	2.86E-04
Endrin	11	9	ND	9.98E-04	9.85E-04	8.93E-04	8.83E-05
Gamma BHC (Lindane)	11	100	6.60E-05	2.37E-04	8.80E-05	1.01E-04	1.44E-05
Gamma Chlordane	11	45	ND	9.95E-04	9.40E-04	5.89E-04	1.34E-04
Heptachlor	11	18	ND	9.98E-04	9.80E-04	8.13E-04	1.12E-04
Heptachlor epoxide	11	73	ND	1.38E-03	9.98E-04	9.03E-04	1.26E-04
Hexachlorobenzene	11	27	ND	1.87E-04	1.39E-04	1.33E-04	1.24E-05
Mirex	11	45	ND	9.98E-04	9.70E-04	5.52E-04	1.52E-04
O,P'-DDD	11	100	6.11E-03	2.14E-02	1.24E-02	1.36E-02	1.45E-03
O,P'-DDT	11	100	5.76E-03	2.25E-02	1.31E-02	1.39E-02	1.60E-03
Oxychlordane	11	91	ND	1.19E-03	7.24E-04	7.16E-04	7.44E-05
Pentachloroanisole	11	9	ND	5.50E-05	3.25E-05	3.30E-05	3.38E-06
Pentachlorobenzene	11	91	ND	9.98E-04	1.63E-04	2.30E-04	7.76E-05
Trans-Nonachlor	11	100	6.32E-04	1.35E-03	9.01E-04	9.19E-04	5.69E-05
Largemouth Bass Offal							
1,2,3,4-Tetrachlorobenzene	11	100	2.90E-04	3.79E-03	2.26E-03	2.33E-03	3.36E-04
1,2,4,5-Tetrachlorobenzene	11	64	ND	4.63E-03	2.09E-03	1.93E-03	3.83E-04
4,4'-DDD	11	100	8.10E-04	6.77E-02	2.51E-02	3.10E-02	5.43E-03
4,4'-DDE	11	100	4.07E-03	3.36E-01	1.63E-01	1.68E-01	2.62E-02
4,4'-DDT	11	64	ND	2.11E-02	4.83E-03	6.80E-03	1.97E-03
Alpha-BHC	11	73	ND	9.95E-04	2.70E-04	4.12E-04	1.12E-04
Alpha-Chlordane	11	9	ND	9.95E-04	9.60E-04	9.13E-04	5.33E-05
Beta-BHC	11	64	ND	1.85E-03	1.37E-04	5.54E-04	1.83E-04
Chlorpyrifos	11	64	ND	1.07E-03	9.80E-04	7.79E-04	1.04E-04
Cis-Nonachlor	11	91	ND	1.12E-01	5.52E-02	5.40E-02	1.08E-02
Delta-BHC	11	9	ND	2.91E-03	9.80E-04	1.14E-03	1.76E-04
Dieldrin	11	91	ND	1.03E-02	4.26E-03	4.06E-03	7.40E-04
Endosulfan II	11	82	ND	6.66E-02	2.96E-02	3.22E-02	6.32E-03
Endrin	11	45	ND	1.64E-03	9.80E-04	1.03E-03	8.64E-05
Gamma BHC (Lindane)	11	100	6.30E-05	1.33E-03	5.23E-04	6.09E-04	1.17E-04
Gamma Chlordane	11	45	ND	1.32E-03	9.55E-04	9.46E-04	6.86E-05
Heptachlor	11	9	ND	9.95E-04	9.80E-04	8.93E-04	7.59E-05
Hexachlorobenzene	11	100	8.90E-05	2.10E-03	9.99E-04	1.00E-03	1.72E-04
Mirex	11	27	ND	2.75E-03	9.85E-04	1.35E-03	2.08E-04
O,P'-DDD	11	100	5.32E-03	3.27E-01	1.50E-01	1.60E-01	2.47E-02
O,P'-DDT	11	100	4.20E-03	3.41E-01	1.71E-01	1.88E-01	2.84E-02
Oxychlordane	11	9	ND	1.47E-02	9.80E-04	2.22E-03	1.25E-03
Pentachloroanisole	11	91	ND	8.94E-04	2.18E-04	3.41E-04	8.82E-05
Pentachlorobenzene	11	100	1.09E-04	2.62E-03	1.44E-03	1.42E-03	2.59E-04
Trans-Nonachlor	11	100	8.15E-04	2.99E-02	1.08E-02	1.27E-02	2.34E-03

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 8 - HOUSATONIC RIVER - RISING POND

Sample Year: 1998

Constituent	Largemouth Bass Whole Fish						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	14	93	ND	6.29E-03	2.21E-03	2.63E-03	3.92E-04
1,2,4,5-Tetrachlorobenzene	14	86	ND	1.13E-02	4.79E-03	4.88E-03	8.97E-04
4,4'-DDD	14	100	8.23E-03	5.93E-02	1.39E-02	1.99E-02	3.86E-03
4,4'-DDE	14	93	ND	1.77E-01	5.74E-02	7.26E-02	1.16E-02
4,4'-DDT	14	64	ND	1.04E-02	9.73E-04	1.59E-03	6.81E-04
Alpha-BHC	14	79	ND	9.90E-04	1.87E-04	3.70E-04	9.26E-05
Alpha-Chlordane	14	14	ND	2.85E-03	9.70E-04	1.09E-03	1.36E-04
Beta-BHC	14	93	ND	1.06E-03	4.12E-04	4.57E-04	9.13E-05
Chlorpyrifos	14	93	ND	9.16E-04	3.17E-04	4.01E-04	7.55E-05
Cis-Nonachlor	14	93	ND	6.17E-02	2.98E-02	3.39E-02	4.32E-03
Delta-BHC	14	36	ND	9.85E-04	9.51E-04	6.73E-04	1.09E-04
Dieldrin	14	86	ND	3.44E-03	1.46E-03	1.72E-03	2.03E-04
Endosulfan II	14	100	7.88E-03	3.68E-02	1.64E-02	1.86E-02	2.12E-03
Endrin	14	7	ND	9.90E-04	9.71E-04	9.36E-04	2.72E-05
Gamma BHC (Lindane)	14	100	3.27E-04	1.41E-03	7.75E-04	7.36E-04	9.07E-05
Gamma Chlordane	14	86	ND	1.43E-03	4.73E-04	5.91E-04	9.58E-05
Heptachlor	14	50	ND	9.90E-04	7.23E-04	6.21E-04	1.03E-04
Heptachlor epoxide	14	64	ND	8.14E-03	9.80E-04	1.72E-03	5.24E-04
Hexachlorobenzene	14	86	ND	8.29E-02	7.94E-04	6.96E-03	5.85E-03
Mirex	14	14	ND	9.85E-04	9.67E-04	8.85E-04	6.37E-05
O,P'-DDD	14	100	4.72E-02	1.76E-01	6.38E-02	8.09E-02	9.73E-03
O,P'-DDE	14	7	ND	1.48E-03	9.72E-04	9.98E-04	3.77E-05
O,P'-DDT	14	100	4.12E-02	1.98E-01	6.81E-02	8.31E-02	1.21E-02
Oxychlordane	14	93	ND	7.13E-03	2.72E-03	3.01E-03	4.61E-04
Pentachloroanisole	14	100	1.42E-04	5.06E-04	3.04E-04	3.05E-04	3.36E-05
Pentachlorobenzene	14	100	6.57E-04	9.63E-03	3.18E-03	4.06E-03	8.53E-04
Toxaphene	14	64	ND	1.96E-02	1.86E-02	1.58E-02	1.25E-03
Trans-Nonachlor	14	100	2.58E-03	8.99E-03	4.39E-03	4.88E-03	5.22E-04

Constituent	Largemouth Bass Whole Fish Composite						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	
1,2,3,4-Tetrachlorobenzene	5	100	9.13E-04	3.05E-03	2.57E-03	2.06E-03	4.67E-04
1,2,4,5-Tetrachlorobenzene	5	80	ND	7.67E-03	2.29E-03	3.74E-03	1.56E-03
4,4'-DDD	5	100	5.99E-03	9.30E-03	7.02E-03	7.53E-03	6.90E-04
4,4'-DDE	5	100	3.49E-02	4.96E-02	3.69E-02	4.11E-02	3.29E-03
4,4'-DDT	5	40	ND	1.00E-03	9.69E-04	7.48E-04	1.43E-04
Alpha-BHC	5	100	5.80E-05	5.85E-04	1.45E-04	2.75E-04	1.08E-04
Alpha-Chlordane	5	20	ND	1.89E-03	9.80E-04	1.16E-03	1.83E-04
Beta-BHC	5	80	ND	9.69E-04	6.30E-05	2.75E-04	1.77E-04
Chlorpyrifos	5	100	1.22E-04	3.74E-04	2.76E-04	2.38E-04	4.88E-05
Cis-Nonachlor	5	100	1.82E-02	2.68E-02	1.89E-02	2.13E-02	1.73E-03
Dieldrin	5	100	6.32E-04	1.95E-03	1.55E-03	1.40E-03	2.17E-04
Endosulfan II	5	100	5.40E-03	2.11E-02	9.84E-03	1.08E-02	2.77E-03
Gamma BHC (Lindane)	5	100	3.37E-04	1.05E-03	7.78E-04	6.76E-04	1.31E-04
Gamma Chlordane	5	100	1.80E-04	7.78E-04	2.90E-04	3.57E-04	1.09E-04
Heptachlor	5	60	ND	9.69E-04	1.42E-04	4.65E-04	2.02E-04
Heptachlor epoxide	5	100	1.17E-03	1.98E-03	1.43E-03	1.54E-03	1.72E-04
Hexachlorobenzene	5	60	ND	4.25E-03	4.97E-04	1.28E-03	7.62E-04
O,P'-DDD	5	100	4.14E-02	5.66E-02	4.53E-02	4.77E-02	3.13E-03
O,P'-DDT	5	100	3.41E-02	5.58E-02	4.04E-02	4.33E-02	4.20E-03
Oxychlordane	5	100	1.72E-03	2.30E-03	1.90E-03	1.99E-03	1.25E-04
Pentachloroanisole	5	100	1.82E-04	2.40E-04	2.10E-04	2.10E-04	1.01E-05
Pentachlorobenzene	5	100	4.19E-04	7.94E-03	5.75E-03	4.38E-03	1.62E-03
Toxaphene	5	60	ND	2.00E-02	1.94E-02	1.56E-02	2.45E-03
Trans-Nonachlor	5	100	2.30E-03	3.52E-03	2.69E-03	2.75E-03	2.25E-04

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 8 - HOUSATONIC RIVER - RISING POND

Sample Year: 1999

Constituent	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
Largemouth Bass Ovary							
1,2,3,4-Tetrachlorobenzene	6	100	1.73E-02	3.32E-02	1.98E-02	2.22E-02	2.54E-03
1,2,4,5-Tetrachlorobenzene	6	100	3.09E-03	7.69E-03	5.17E-03	5.28E-03	8.22E-04
4,4'-DDD	6	100	4.42E-02	8.42E-02	7.57E-02	6.86E-02	6.48E-03
4,4'-DDE	6	100	1.75E-01	5.44E-01	4.28E-01	3.99E-01	5.60E-02
4,4'-DDT	6	100	2.91E-03	1.34E-02	5.48E-03	6.48E-03	1.52E-03
Alpha-BHC	6	100	4.58E-04	7.34E-04	5.79E-04	5.89E-04	4.92E-05
Chlorpyrifos	6	67	ND	4.42E-03	5.98E-04	1.80E-03	8.03E-04
Cis-Nonachlor	6	100	1.39E-01	2.56E-01	1.88E-01	1.89E-01	1.76E-02
Dieldrin	6	100	9.87E-03	1.92E-02	1.25E-02	1.34E-02	1.46E-03
Endosulfan II	6	100	5.82E-02	1.15E-01	7.39E-02	7.83E-02	8.93E-03
Endrin	6	100	2.04E-03	4.28E-03	3.12E-03	3.06E-03	3.57E-04
Gamma BHC (Lindane)	6	100	2.45E-04	4.17E-04	2.86E-04	3.02E-04	2.70E-05
Gamma Chlordane	6	100	3.79E-03	1.27E-02	5.11E-03	6.18E-03	1.35E-03
Hexachlorobenzene	6	100	3.50E-03	1.24E-02	4.52E-03	5.68E-03	1.38E-03
Mirex	6	100	9.98E-04	1.90E-03	1.75E-03	1.62E-03	1.33E-04
O,P'-DDD	6	100	3.87E-01	5.47E-01	4.97E-01	4.82E-01	2.37E-02
O,P'-DDE	6	100	1.11E-02	3.25E-02	1.87E-02	1.93E-02	3.30E-03
O,P'-DDT	6	100	4.61E-01	7.01E-01	5.64E-01	5.71E-01	3.27E-02
Pentachloroanisole	6	100	9.40E-04	1.52E-03	1.22E-03	1.25E-03	8.71E-05
Pentachlorobenzene	6	100	1.00E-02	5.45E-02	1.53E-02	2.12E-02	6.78E-03
Trans-Nonachlor	6	100	1.78E-02	3.54E-02	3.03E-02	2.84E-02	2.85E-03
Largemouth Bass Offal							
1,2,3,4-Tetrachlorobenzene	6	100	1.52E-03	2.50E-02	2.78E-03	6.28E-03	3.74E-03
1,2,4,5-Tetrachlorobenzene	6	17	ND	4.17E-03	6.79E-04	1.21E-03	5.93E-04
4,4'-DDD	6	100	4.51E-03	6.65E-02	1.25E-02	1.98E-02	9.50E-03
4,4'-DDE	6	100	3.42E-02	2.19E-01	5.38E-02	8.17E-02	2.89E-02
4,4'-DDT	6	83	ND	2.37E-03	1.20E-03	1.31E-03	2.70E-04
Alpha-BHC	6	17	ND	1.42E-04	3.85E-05	5.38E-05	1.78E-05
Chlorpyrifos	6	100	4.80E-04	8.22E-04	6.05E-04	6.33E-04	5.32E-05
Cis-Nonachlor	6	100	1.51E-02	2.14E-01	3.18E-02	5.75E-02	3.15E-02
Dieldrin	6	100	8.17E-04	1.23E-02	1.67E-03	3.18E-03	1.82E-03
Endosulfan II	6	100	3.63E-03	1.30E-01	7.53E-03	2.81E-02	2.05E-02
Gamma BHC (Lindane)	6	67	ND	9.75E-04	3.97E-04	4.62E-04	1.89E-04
Gamma Chlordane	6	100	2.21E-04	6.00E-03	7.86E-04	1.56E-03	9.03E-04
Hexachlorobenzene	6	100	8.80E-05	7.54E-03	4.98E-04	1.62E-03	1.19E-03
Mirex	6	83	ND	9.23E-04	4.86E-04	4.93E-04	1.10E-04
O,P'-DDD	6	100	3.04E-02	4.19E-01	8.98E-02	1.27E-01	5.97E-02
O,P'-DDE	6	100	9.01E-04	2.62E-02	1.63E-03	5.80E-03	4.10E-03
O,P'-DDT	6	100	3.31E-02	3.53E-01	8.93E-02	1.20E-01	4.83E-02
Pentachloroanisole	6	83	ND	8.49E-04	1.90E-04	2.76E-04	1.17E-04
Pentachlorobenzene	6	50	ND	3.64E-02	1.47E-03	7.18E-03	5.85E-03
Trans-Nonachlor	6	100	2.20E-03	2.64E-02	5.38E-03	8.27E-03	3.73E-03

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 6 - WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
Largemouth Bass Skin-off Fillet							
1,2,3,4-Tetrachlorobenzene	14	100	2.53E-03	2.65E-02	5.48E-03	8.32E-03	1.83E-03
1,2,4,5-Tetrachlorobenzene	14	93	ND	5.58E-03	1.95E-03	2.16E-03	3.92E-04
4,4'-DDD	14	100	8.06E-04	6.17E-03	2.59E-03	2.81E-03	4.07E-04
4,4'-DDE	14	100	4.92E-03	2.63E-02	1.16E-02	1.26E-02	1.63E-03
4,4'-DDT	14	71	ND	1.07E-03	5.50E-04	5.85E-04	9.36E-05
Aldrin	14	29	ND	1.07E-03	9.67E-04	8.23E-04	7.53E-05
Alpha-BHC	14	64	ND	1.07E-03	9.80E-05	3.98E-04	1.23E-04
Alpha-Chlordane	14	43	ND	1.32E-03	9.71E-04	8.87E-04	7.23E-05
Beta-BHC	14	21	ND	9.90E-04	9.67E-04	6.16E-04	1.22E-04
Chlorpyrifos	14	43	ND	9.96E-04	1.03E-04	3.42E-04	1.14E-04
Cis-Nonachlor	14	100	3.61E-03	2.30E-02	9.33E-03	1.17E-02	1.52E-03
Delta-BHC	14	50	ND	1.93E-03	9.88E-04	9.62E-04	1.43E-04
Dieldrin	14	86	ND	1.19E-03	6.84E-04	7.45E-04	7.99E-05
Endosulfan II	14	50	ND	7.50E-03	1.03E-03	2.49E-03	5.94E-04
Gamma BHC (Lindane)	14	93	ND	1.96E-04	8.45E-05	9.41E-05	1.25E-05
Gamma Chlordane	14	29	ND	9.96E-04	9.81E-04	7.65E-04	1.01E-04
Heptachlor	14	36	ND	1.07E-03	9.59E-04	6.54E-04	1.23E-04
Heptachlor Epoxide	14	57	ND	1.68E-03	8.98E-04	7.24E-04	1.22E-04
Hexachlorobenzene	14	100	1.10E-04	1.10E-03	4.37E-04	4.68E-04	8.12E-05
Mirex	14	14	ND	1.07E-03	9.84E-04	8.60E-04	8.72E-05
O,P'-DDD	14	100	9.10E-03	4.12E-02	2.16E-02	2.15E-02	2.48E-03
O,P'-DDE	14	36	ND	1.29E-03	9.75E-04	9.75E-04	3.36E-05
O,P'-DDT	14	100	8.67E-03	3.46E-02	2.21E-02	2.17E-02	2.01E-03
Oxychlordane	14	71	ND	2.44E-03	1.01E-03	1.11E-03	1.83E-04
Pentachloroanisole	14	71	ND	3.11E-04	1.44E-04	1.24E-04	2.30E-05
Pentachlorobenzene	14	100	9.22E-04	1.76E-02	2.55E-03	4.19E-03	1.20E-03
Trans-Nonachlor	14	100	2.28E-04	1.73E-03	7.58E-04	8.03E-04	1.09E-04
Largemouth Bass Offal							
1,2,3,4-Tetrachlorobenzene	14	100	2.08E-02	5.25E-01	5.85E-02	1.12E-01	4.03E-02
1,2,4,5-Tetrachlorobenzene	14	93	ND	1.20E-01	1.51E-02	2.61E-02	8.76E-03
4,4'-DDD	14	100	1.66E-02	1.46E-01	4.54E-02	5.36E-02	8.68E-03
4,4'-DDE	14	100	6.82E-02	5.57E-01	2.53E-01	2.84E-01	4.02E-02
4,4'-DDT	14	43	ND	6.00E-02	9.90E-04	6.80E-03	4.16E-03
Alpha-BHC	14	36	ND	9.98E-04	9.65E-04	6.41E-04	1.25E-04
Alpha-Chlordane	14	7	ND	1.38E-03	9.86E-04	1.01E-03	2.91E-05
Beta-BHC	14	71	ND	2.71E-03	9.90E-04	1.17E-03	1.71E-04
Chlorpyrifos	14	57	ND	1.11E-03	9.24E-04	6.71E-04	1.00E-04
Cis-Nonachlor	14	100	3.97E-02	6.71E-01	2.23E-01	2.52E-01	4.14E-02
Delta-BHC	14	64	ND	1.13E-02	9.85E-04	3.41E-03	1.24E-03
Dieldrin	14	93	ND	1.70E-02	7.33E-03	7.41E-03	1.15E-03
Endosulfan II	14	57	ND	1.37E-01	2.24E-02	3.27E-02	1.05E-02
Endrin	14	29	ND	1.10E-03	9.65E-04	8.89E-04	5.95E-05
Gamma BHC (Lindane)	14	100	4.01E-04	1.71E-03	1.06E-03	1.04E-03	1.12E-04
Gamma Chlordane	14	43	ND	1.24E-03	9.81E-04	9.98E-04	3.44E-05
Heptachlor	14	7	ND	9.98E-04	9.84E-04	9.26E-04	5.14E-05
Heptachlor Epoxide	14	29	ND	1.85E-02	9.90E-04	4.43E-03	1.61E-03
Hexachlorobenzene	14	100	1.11E-03	1.34E-02	3.02E-03	4.15E-03	1.06E-03
Mirex	14	7	ND	2.64E-03	9.84E-04	1.09E-03	1.19E-04
O,P'-DDD	14	100	1.45E-01	7.72E-01	3.86E-01	4.27E-01	5.23E-02
O,P'-DDE	14	14	ND	1.86E-02	9.86E-04	3.12E-03	1.48E-03
O,P'-DDT	14	100	1.32E-01	1.18E+00	5.51E-01	5.98E-01	8.30E-02
Oxychlordane	14	64	ND	2.92E-02	1.78E-03	9.79E-03	2.95E-03
Pentachloroanisole	14	100	2.64E-04	1.53E-03	7.97E-04	8.40E-04	1.09E-04
Pentachlorobenzene	14	100	2.19E-03	3.63E-01	2.69E-02	5.71E-02	2.53E-02
Trans-Nonachlor	14	100	6.17E-03	2.01E-02	9.38E-03	1.15E-02	1.42E-03

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 6 - WOODS POND

Sample Year: 1998

Constituent	Largemouth Bass Whole Fish						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	11	100	7.98E-03	1.82E-01	3.72E-02	6.05E-02	1.70E-02
1,2,4,5-Tetrachlorobenzene	11	100	1.89E-03	2.90E-02	1.05E-02	1.29E-02	2.86E-03
4,4'-DDD	11	100	6.76E-03	9.74E-02	2.24E-02	3.83E-02	8.70E-03
4,4'-DDE	11	100	2.21E-02	1.55E-01	9.53E-02	1.06E-01	1.36E-02
4,4'-DDT	11	73	ND	1.07E-02	1.00E-03	2.95E-03	1.08E-03
Alpha-BHC	11	64	ND	1.63E-03	1.03E-04	4.71E-04	1.68E-04
Alpha-Chlordane	11	64	ND	8.30E-03	1.28E-03	2.77E-03	7.77E-04
Beta-BHC	11	82	ND	9.64E-04	1.31E-04	2.90E-04	1.05E-04
Chlorpyrifos	11	82	ND	1.00E-03	3.23E-04	4.40E-04	9.37E-05
Cis-Nonachlor	11	100	1.37E-02	2.59E-01	5.67E-02	8.67E-02	2.07E-02
Delta-BHC	11	64	ND	2.29E-02	3.97E-03	6.49E-03	2.29E-03
Dieldrin	10	100	4.53E-04	7.94E-02	1.38E-03	1.35E-02	8.52E-03
Endosulfan II	11	82	ND	7.31E-02	2.01E-02	2.43E-02	6.24E-03
Endrin	11	45	ND	1.63E-03	9.44E-04	8.08E-04	1.17E-04
Gamma BHC (Lindane)	11	100	1.36E-04	1.19E-03	6.22E-04	6.16E-04	1.09E-04
Gamma Chlordane	11	82	ND	2.16E-03	1.25E-03	1.33E-03	1.50E-04
Heptachlor	11	27	ND	1.63E-03	9.66E-04	9.23E-04	1.40E-04
Heptachlor Epoxide	11	73	ND	1.86E-02	2.09E-03	5.61E-03	1.80E-03
Hexachlorobenzene	11	100	5.72E-04	9.19E-03	2.16E-03	3.63E-03	9.96E-04
Mirex	11	9	ND	1.63E-03	9.66E-04	9.61E-04	9.53E-05
O,P'-DDD	11	100	3.83E-02	2.34E-01	1.44E-01	1.54E-01	1.87E-02
O,P'-DDE	11	27	ND	2.01E-02	9.75E-04	4.86E-03	2.25E-03
O,P'-DDT	11	100	3.37E-02	3.38E-01	1.49E-01	1.69E-01	2.88E-02
Oxychlordane	11	9	ND	1.63E-03	9.75E-04	1.04E-03	6.02E-05
Pentachloroanisole	11	91	ND	1.93E-03	7.93E-04	8.29E-04	1.54E-04
Pentachlorobenzene	11	100	1.97E-03	1.38E-01	1.09E-02	3.63E-02	1.46E-02
Trans-Nonachlor	11	100	1.22E-03	8.73E-03	3.76E-03	4.41E-03	6.96E-04

Constituent	Largemouth Bass Whole Fish Composite						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	5	100	4.75E-03	4.45E-02	6.66E-03	2.09E-02	9.18E-03
1,2,4,5-Tetrachlorobenzene	5	100	1.58E-03	1.58E-02	2.66E-03	7.26E-03	3.09E-03
4,4'-DDD	5	100	5.63E-03	1.29E-02	8.19E-03	8.89E-03	1.41E-03
4,4'-DDE	5	100	3.00E-02	7.54E-02	4.93E-02	5.23E-02	8.62E-03
4,4'-DDT	5	40	ND	9.90E-04	9.60E-04	7.41E-04	1.43E-04
Aldrin	5	60	ND	1.00E-03	3.82E-04	5.52E-04	1.75E-04
Alpha-BHC	5	40	ND	9.90E-04	9.60E-04	6.23E-04	2.15E-04
Beta-BHC	5	80	ND	1.05E-03	1.85E-04	4.71E-04	2.26E-04
Chlorpyrifos	5	60	ND	9.90E-04	3.13E-04	5.15E-04	1.96E-04
Cis-Nonachlor	5	100	2.03E-02	6.19E-02	3.08E-02	3.70E-02	7.72E-03
Delta-BHC	5	40	ND	9.06E-03	9.90E-04	3.93E-03	1.82E-03
Dieldrin	5	100	1.64E-03	2.32E-03	1.95E-03	1.99E-03	1.17E-04
Endosulfan II	5	40	ND	1.52E-02	9.90E-04	5.38E-03	2.89E-03
Endrin	5	40	ND	9.90E-04	9.38E-04	7.48E-04	1.62E-04
Gamma BHC (Lindane)	5	100	1.26E-04	8.16E-04	2.11E-04	4.27E-04	1.58E-04
Gamma Chlordane	5	40	ND	9.90E-04	9.60E-04	8.75E-04	8.38E-05
Heptachlor	5	40	ND	9.90E-04	9.60E-04	6.71E-04	1.86E-04
Heptachlor Epoxide	5	40	ND	1.35E-02	9.90E-04	5.61E-03	2.86E-03
Hexachlorobenzene	5	100	2.76E-04	2.10E-03	4.01E-04	9.13E-04	3.72E-04
O,P'-DDD	5	100	4.30E-02	1.25E-01	5.94E-02	7.67E-02	1.63E-02
O,P'-DDT	5	100	6.44E-03	5.90E-02	4.15E-02	3.32E-02	1.06E-02
Pentachloroanisole	5	40	ND	9.97E-04	9.45E-05	4.40E-04	2.18E-04
Pentachlorobenzene	5	100	2.36E-03	1.48E-02	2.87E-03	7.32E-03	2.89E-03
Trans-Nonachlor	5	100	9.10E-04	2.89E-03	1.03E-03	1.69E-03	4.35E-04

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 6 - WOODS POND

Sample Year: 1999

Constituent	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
Largemouth Bass Ovary							
1,2,3,4-Tetrachlorobenzene	6	100	8.17E-02	1.24E-01	8.56E-02	9.29E-02	6.61E-03
1,2,4,5-Tetrachlorobenzene	6	100	1.65E-02	2.59E-02	1.89E-02	1.97E-02	1.34E-03
4,4'-DDD	6	100	3.87E-02	7.69E-02	5.45E-02	5.78E-02	5.55E-03
4,4'-DDE	6	100	1.08E-01	3.58E-01	1.66E-01	1.96E-01	4.06E-02
4,4'-DDT	6	100	2.40E-03	5.79E-03	3.21E-03	3.64E-03	4.85E-04
Alpha-BHC	6	100	8.42E-04	1.23E-03	1.06E-03	1.06E-03	6.05E-05
Chlorpyrifos	6	83	ND	3.91E-03	3.83E-04	9.55E-04	5.91E-04
Cis-Nonachlor	6	100	1.11E-01	3.06E-01	1.66E-01	1.86E-01	2.76E-02
Dieldrin	6	100	1.53E-02	2.48E-02	1.97E-02	1.92E-02	1.45E-03
Endosulfan II	6	100	4.53E-02	7.05E-02	6.22E-02	5.91E-02	3.82E-03
Endrin	6	100	2.51E-03	3.74E-03	3.17E-03	3.17E-03	2.17E-04
Gamma BHC (Lindane)	6	100	4.13E-04	7.29E-04	4.96E-04	5.15E-04	4.78E-05
Gamma Chlordane	6	100	4.76E-03	9.06E-03	6.30E-03	6.48E-03	6.00E-04
Hexachlorobenzene	6	100	4.84E-03	8.76E-03	7.96E-03	7.52E-03	5.63E-04
Mirex	6	100	8.57E-04	1.63E-03	1.34E-03	1.29E-03	1.21E-04
O,P'-DDD	6	100	1.53E-01	6.44E-01	4.19E-01	4.13E-01	6.71E-02
O,P'-DDE	6	100	1.51E-02	3.21E-02	2.14E-02	2.18E-02	2.36E-03
O,P'-DDT	6	100	1.67E-01	6.09E-01	4.20E-01	3.92E-01	6.44E-02
Pentachloroanisole	6	100	7.08E-04	1.06E-03	8.48E-04	8.54E-04	4.94E-05
Pentachlorobenzene	6	100	3.76E-02	6.43E-02	5.45E-02	5.32E-02	3.59E-03
Trans-Nonachlor	6	100	7.47E-03	3.45E-02	1.44E-02	1.65E-02	3.93E-03
Largemouth Bass Offal							
1,2,3,4-Tetrachlorobenzene	6	100	1.70E-02	3.97E-02	2.18E-02	2.61E-02	4.30E-03
1,2,4,5-Tetrachlorobenzene	6	67	ND	8.75E-03	5.21E-03	5.34E-03	1.20E-03
4,4'-DDD	6	100	1.19E-02	3.37E-02	2.34E-02	2.36E-02	3.18E-03
4,4'-DDE	6	100	4.91E-02	2.20E-01	8.06E-02	1.03E-01	2.48E-02
4,4'-DDT	6	50	ND	2.43E-03	1.02E-03	1.26E-03	2.41E-04
Alpha-BHC	6	67	ND	2.05E-04	1.18E-04	1.21E-04	2.77E-05
Chlorpyrifos	6	100	5.12E-04	6.58E-04	5.38E-04	5.69E-04	2.85E-05
Cis-Nonachlor	6	100	2.97E-02	1.40E-01	7.45E-02	7.86E-02	1.47E-02
Dieldrin	6	100	2.57E-03	5.89E-03	3.93E-03	3.98E-03	4.91E-04
Endosulfan II	6	100	1.42E-02	6.01E-02	1.89E-02	2.48E-02	7.18E-03
Gamma BHC (Lindane)	6	100	1.33E-04	3.07E-04	1.73E-04	2.00E-04	3.09E-05
Gamma Chlordane	6	100	1.23E-03	3.77E-03	2.29E-03	2.34E-03	3.40E-04
Hexachlorobenzene	6	100	1.45E-03	3.09E-03	2.26E-03	2.24E-03	2.37E-04
Mirex	6	83	ND	9.71E-04	5.96E-04	6.07E-04	8.45E-05
O,P'-DDD	6	100	8.19E-02	3.31E-01	1.48E-01	1.74E-01	3.52E-02
O,P'-DDE	6	100	3.66E-03	9.76E-03	6.19E-03	6.31E-03	8.93E-04
O,P'-DDT	6	100	8.73E-02	2.78E-01	1.48E-01	1.61E-01	2.66E-02
Pentachloroanisole	6	83	ND	5.91E-04	2.56E-04	2.92E-04	7.74E-05
Pentachlorobenzene	6	100	9.16E-03	2.21E-02	1.27E-02	1.41E-02	2.12E-03
Trans-Nonachlor	6	100	4.49E-03	7.05E-03	5.36E-03	5.64E-03	4.15E-04

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND
Sample Year: 1998

Constituent	Largemouth Bass Skin-off Fillet						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	18	100	3.86E-03	3.88E-01	1.82E-02	4.74E-02	2.19E-02
1,2,4,5-Tetrachlorobenzene	18	94	ND	8.87E-02	4.63E-03	1.20E-02	5.14E-03
4,4'-DDD	18	100	3.81E-04	8.59E-02	6.20E-03	1.52E-02	5.25E-03
4,4'-DDE	18	94	ND	2.46E-01	1.10E-02	3.90E-02	1.65E-02
4,4'-DDT	18	56	ND	5.80E-03	9.64E-04	1.46E-03	3.70E-04
Alpha-BHC	18	39	ND	9.78E-04	9.44E-04	7.10E-04	7.61E-05
Alpha-Chlordane	18	11	ND	1.30E-03	9.75E-04	9.87E-04	2.49E-05
Beta-BHC	18	33	ND	9.88E-04	9.56E-04	7.02E-04	9.20E-05
Chlorpyrifos	18	72	ND	2.20E-03	4.86E-04	6.16E-04	1.49E-04
Cis-Nonachlor	18	89	ND	3.31E-01	1.21E-02	3.87E-02	1.81E-02
Delta-BHC	18	22	ND	4.83E-03	9.70E-04	1.17E-03	2.22E-04
Dieldrin	17	82	ND	1.97E-02	9.20E-04	2.38E-03	1.14E-03
Endosulfan II	18	72	ND	2.83E-02	4.49E-03	6.78E-03	1.84E-03
Endrin	18	11	ND	9.88E-04	9.61E-04	8.54E-04	6.91E-05
Gamma BHC (Lindane)	18	78	ND	1.97E-03	2.55E-04	4.92E-04	1.37E-04
Gamma Chlordane	18	39	ND	2.72E-03	9.61E-04	9.56E-04	1.42E-04
Heptachlor	18	17	ND	9.88E-04	9.56E-04	8.63E-04	5.21E-05
Heptachlor Epoxide	18	11	ND	1.20E-03	9.74E-04	9.55E-04	2.35E-05
Hexachlorobenzene	18	100	1.56E-04	7.12E-03	8.33E-04	1.60E-03	4.68E-04
Mirex	18	11	ND	1.10E-03	9.72E-04	9.11E-04	5.51E-05
O,P'-DDD	18	100	3.46E-03	2.89E-01	2.20E-02	5.64E-02	2.04E-02
O,P'-DDE	18	17	ND	1.59E-03	9.70E-04	1.00E-03	3.98E-05
O,P'-DDT	18	100	3.24E-03	3.59E-01	2.51E-02	5.53E-02	1.99E-02
Oxychlordane	18	83	ND	1.65E-02	9.89E-04	3.02E-03	1.12E-03
Pentachloroanisole	18	72	ND	2.13E-03	1.70E-04	4.55E-04	1.51E-04
Pentachlorobenzene	18	100	1.58E-03	1.99E-01	7.73E-03	2.28E-02	1.11E-02
Trans-Nonachlor	18	94	ND	1.08E-02	1.02E-03	2.36E-03	7.08E-04

Constituent	Largemouth Bass Offal						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	18	100	1.49E-02	5.16E-01	1.36E-01	1.74E-01	3.20E-02
1,2,4,5-Tetrachlorobenzene	18	100	4.27E-03	1.63E-01	2.70E-02	4.06E-02	9.30E-03
4,4'-DDD	18	94	ND	5.17E-01	4.99E-02	9.20E-02	2.93E-02
4,4'-DDE	18	89	ND	7.01E-01	1.62E-01	1.84E-01	4.35E-02
4,4'-DDT	18	61	ND	7.51E-02	2.67E-03	1.19E-02	5.25E-03
Aldrin	18	11	ND	2.65E-03	9.80E-04	1.03E-03	1.06E-04
Alpha-BHC	18	56	ND	1.11E-03	8.79E-04	7.00E-04	8.12E-05
Alpha-Chlordane	18	17	ND	1.70E-02	9.80E-04	2.61E-03	1.05E-03
Beta-BHC	18	78	ND	1.84E-03	9.93E-04	9.47E-04	1.15E-04
Chlorpyrifos	18	100	1.26E-04	1.90E-03	6.88E-04	9.10E-04	1.46E-04
Cis-Nonachlor	18	83	ND	5.71E-01	7.15E-02	1.73E-01	4.74E-02
Dieldrin	18	100	6.76E-04	2.12E-02	3.77E-03	4.86E-03	1.11E-03
Endosulfan II	18	78	ND	2.29E-01	3.17E-02	5.91E-02	1.71E-02
Endrin	18	22	ND	1.44E-03	9.76E-04	9.44E-04	4.65E-05
Gamma BHC (Lindane)	18	100	6.50E-05	3.61E-03	1.11E-03	1.38E-03	2.49E-04
Gamma Chlordane	18	89	ND	6.27E-03	1.40E-03	2.05E-03	3.55E-04
Heptachlor	18	28	ND	1.05E-03	9.64E-04	7.97E-04	7.30E-05
Hexachlorobenzene	18	100	8.98E-04	1.35E-02	4.93E-03	6.05E-03	8.88E-04
Mirex	18	17	ND	1.05E-03	9.74E-04	8.95E-04	4.87E-05
O,P'-DDD	18	94	ND	1.01E+00	3.02E-01	3.63E-01	7.12E-02
O,P'-DDT	18	94	ND	1.09E+00	3.02E-01	3.74E-01	7.89E-02
Oxychlordane	18	44	ND	3.68E-02	1.02E-03	6.72E-03	2.26E-03
Pentachloroanisole	18	100	1.47E-04	2.52E-03	1.33E-03	1.21E-03	1.57E-04
Pentachlorobenzene	18	100	5.85E-03	3.07E-01	4.99E-02	8.12E-02	1.76E-02
Trans-Nonachlor	18	100	8.60E-04	2.94E-02	7.09E-03	1.08E-02	2.02E-03

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	Largemouth Bass Whole Fish						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	15	100	2.55E-02	3.51E-01	7.81E-02	9.65E-02	2.13E-02
1,2,4,5-Tetrachlorobenzene	15	100	6.05E-03	9.71E-02	1.73E-02	2.08E-02	5.64E-03
4,4'-DDD	15	87	ND	1.07E-01	2.51E-02	3.03E-02	6.68E-03
4,4'-DDE	15	87	ND	1.88E-01	6.49E-02	7.18E-02	1.41E-02
4,4'-DDT	15	87	ND	1.39E-02	2.83E-03	3.80E-03	8.38E-04
Aldrin	15	7	ND	9.95E-04	9.66E-04	9.06E-04	6.32E-05
Alpha-BHC	15	60	ND	9.92E-04	1.16E-04	4.38E-04	1.16E-04
Alpha-Chlordane	15	20	ND	1.48E-03	9.80E-04	1.02E-03	4.66E-05
Beta-BHC	15	33	ND	9.95E-04	9.55E-04	6.75E-04	1.11E-04
Chlorpyrifos	15	93	ND	1.46E-03	3.72E-04	4.93E-04	9.45E-05
Cis-Nonachlor	15	93	ND	3.47E-01	5.89E-02	8.89E-02	2.77E-02
Delta-BHC	15	7	ND	9.95E-04	9.66E-04	9.32E-04	3.73E-05
Dieldrin	15	100	4.08E-04	2.60E-02	2.43E-03	4.54E-03	1.69E-03
Endosulfan II	15	67	ND	4.21E-02	3.95E-03	9.32E-03	2.91E-03
Endrin	15	20	ND	1.23E-03	9.65E-04	9.51E-04	3.84E-05
Gamma BHC (Lindane)	15	100	2.80E-04	2.01E-03	6.68E-04	8.23E-04	1.16E-04
Gamma Chlordane	15	73	ND	3.52E-03	9.76E-04	1.35E-03	2.14E-04
Heptachlor	15	7	ND	2.04E-03	9.70E-04	1.04E-03	7.15E-05
Heptachlor Epoxide	15	33	ND	1.37E-03	9.66E-04	8.62E-04	9.45E-05
Hexachlorobenzene	15	100	6.97E-04	7.39E-03	3.35E-03	3.62E-03	5.30E-04
Mirex	15	33	ND	9.95E-04	9.55E-04	8.09E-04	8.09E-05
O,P'-DDD	15	100	7.61E-03	2.91E-01	1.13E-01	1.25E-01	2.45E-02
O,P'-DDE	15	40	ND	1.10E-03	9.56E-04	9.08E-04	4.46E-05
O,P'-DDT	15	100	9.13E-03	6.47E-01	1.51E-01	1.90E-01	5.05E-02
Oxychlordane	15	47	ND	1.64E-02	9.95E-04	4.10E-03	1.12E-03
Pentachloroanisole	15	100	2.33E-04	2.27E-03	7.74E-04	9.40E-04	1.54E-04
Pentachlorobenzene	15	100	6.87E-03	1.20E-01	3.63E-02	4.82E-02	1.01E-02
Trans-Nonachlor	15	100	1.94E-03	1.77E-02	3.94E-03	5.48E-03	1.07E-03

Constituent	Largemouth Bass Whole Fish Composite						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	7	100	3.55E-02	3.20E-01	9.00E-02	1.52E-01	4.33E-02
1,2,4,5-Tetrachlorobenzene	7	100	1.01E-02	6.73E-02	1.72E-02	3.09E-02	8.34E-03
4,4'-DDD	7	100	1.73E-02	6.23E-02	2.36E-02	3.04E-02	6.02E-03
4,4'-DDE	7	100	4.66E-02	1.10E-01	6.00E-02	6.35E-02	8.36E-03
4,4'-DDT	7	100	1.72E-03	1.26E-02	3.78E-03	5.54E-03	1.43E-03
Alpha-BHC	7	57	ND	9.75E-04	2.80E-04	5.33E-04	1.53E-04
Alpha-Chlordane	7	29	ND	9.50E-03	9.71E-04	2.15E-03	1.22E-03
Beta-BHC	7	86	ND	9.75E-04	5.02E-04	4.97E-04	1.09E-04
Chlorpyrifos	7	100	2.86E-04	1.59E-03	1.01E-03	9.07E-04	1.69E-04
Cis-Nonachlor	7	100	4.86E-02	1.30E-01	5.74E-02	7.63E-02	1.39E-02
Delta-BHC	7	14	ND	2.32E-02	9.71E-04	4.21E-03	3.17E-03
Dieldrin	7	71	ND	3.26E-02	2.60E-03	6.28E-03	4.40E-03
Endosulfan II	7	86	ND	5.63E-02	1.64E-02	1.99E-02	6.49E-03
Endrin	7	14	ND	1.47E-03	9.71E-04	1.10E-03	8.69E-05
Gamma BHC (Lindane)	7	71	ND	1.84E-03	9.48E-04	9.83E-04	1.52E-04
Gamma Chlordane	7	57	ND	2.92E-03	1.07E-03	1.57E-03	3.27E-04
Heptachlor	7	29	ND	1.47E-03	9.71E-04	8.30E-04	1.71E-04
Heptachlor Epoxide	7	14	ND	8.54E-03	9.71E-04	2.12E-03	1.07E-03
Hexachlorobenzene	7	100	3.51E-03	9.00E-03	4.05E-03	5.33E-03	8.00E-04
Mirex	7	14	ND	9.96E-04	9.71E-04	8.91E-04	7.94E-05
O,P'-DDD	7	100	7.41E-02	1.46E-01	1.02E-01	1.05E-01	1.03E-02
O,P'-DDT	7	100	7.68E-02	1.83E-01	1.54E-01	1.32E-01	1.66E-02
Oxychlordane	7	86	ND	1.28E-02	7.83E-03	7.58E-03	1.32E-03
Pentachloroanisole	7	100	9.62E-04	2.56E-03	1.22E-03	1.38E-03	2.09E-04
Pentachlorobenzene	7	86	ND	1.29E-01	4.12E-02	5.37E-02	1.75E-02
Toxaphene	7	14	ND	1.94E-02	9.74E-03	1.18E-02	1.45E-03
Trans-Nonachlor	7	100	3.44E-03	1.16E-02	4.35E-03	5.25E-03	1.08E-03

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 8 - HOUSATONIC RIVER - RISING POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
Pumpkinseed Skin-off Fillet							
1,2,3,4-Tetrachlorobenzene	13	100	3.64E-04	1.80E-03	6.23E-04	7.70E-04	1.16E-04
4,4'-DDD	13	100	4.49E-04	3.72E-03	1.46E-03	1.64E-03	2.12E-04
4,4'-DDE	13	100	3.20E-03	2.12E-02	1.00E-02	1.09E-02	1.40E-03
4,4'-DDT	13	77	ND	3.78E-03	4.00E-04	7.44E-04	2.66E-04
Aldrin	13	8	ND	1.20E-03	9.90E-04	9.33E-04	7.63E-05
Alpha-BHC	13	100	3.30E-05	1.94E-04	1.44E-04	1.30E-04	1.46E-05
Alpha-Chlordane	13	69	ND	1.20E-03	5.20E-04	6.50E-04	9.17E-05
Beta-BHC	13	31	ND	1.20E-03	9.86E-04	7.22E-04	1.27E-04
Chlorpyrifos	13	8	ND	1.20E-03	5.00E-05	2.85E-04	1.23E-04
Cis-Nonachlor	13	100	1.07E-03	6.66E-03	2.94E-03	3.27E-03	3.85E-04
Delta-BHC	13	38	ND	1.20E-03	9.85E-04	6.40E-04	1.38E-04
Dieldrin	13	38	ND	1.00E-03	9.86E-04	6.78E-04	1.16E-04
Endosulfan II	13	92	ND	4.46E-03	1.32E-03	1.70E-03	2.96E-04
Endrin	13	8	ND	1.20E-03	9.90E-04	9.34E-04	7.59E-05
Gamma BHC (Lindane)	13	100	7.90E-05	3.51E-04	1.29E-04	1.59E-04	2.26E-05
Gamma Chlordane	13	8	ND	1.20E-03	9.90E-04	9.37E-04	7.28E-05
Heptachlor	13	38	ND	1.00E-03	9.86E-04	6.34E-04	1.31E-04
Heptachlor Epoxide	13	31	ND	1.00E-03	9.86E-04	7.08E-04	1.23E-04
Hexachlorobenzene	13	23	ND	6.11E-04	1.51E-04	1.83E-04	4.16E-05
O,P'-DDD	13	100	2.46E-03	1.57E-02	9.07E-03	9.18E-03	1.05E-03
O,P'-DDE	13	8	ND	1.20E-03	9.90E-04	9.43E-04	6.66E-05
O,P'-DDT	13	100	1.87E-03	1.85E-02	1.16E-02	1.12E-02	1.35E-03
Oxychlordane	13	31	ND	1.00E-03	9.86E-04	8.67E-04	5.64E-05
Pentachloroanisole	13	31	ND	5.70E-04	9.35E-05	1.68E-04	4.66E-05
Pentachlorobenzene	13	85	ND	9.92E-04	2.53E-04	3.01E-04	6.72E-05
Trans-Nonachlor	13	100	2.89E-04	1.96E-03	9.77E-04	9.88E-04	1.26E-04
Pumpkinseed Offal							
1,2,3,4-Tetrachlorobenzene	13	100	9.94E-04	6.34E-03	2.07E-03	2.64E-03	4.59E-04
1,2,4,5-Tetrachlorobenzene	13	85	ND	6.95E-03	2.46E-03	2.62E-03	5.68E-04
4,4'-DDD	13	100	9.64E-03	1.09E+00	2.99E-02	1.13E-01	8.17E-02
4,4'-DDE	13	77	ND	1.64E-01	6.34E-02	6.52E-02	1.35E-02
4,4'-DDT	13	69	ND	2.24E-02	1.15E-03	3.28E-03	1.63E-03
Alpha-BHC	13	54	ND	9.94E-04	1.55E-04	4.87E-04	1.33E-04
Alpha-Chlordane	13	23	ND	1.71E-03	9.88E-04	1.07E-03	7.96E-05
Beta-BHC	13	62	ND	9.90E-04	5.39E-04	5.54E-04	1.06E-04
Chlorpyrifos	13	38	ND	9.96E-04	9.85E-04	6.72E-04	1.17E-04
Cis-Nonachlor	13	38	ND	4.41E-02	9.96E-04	1.04E-02	3.95E-03
Delta-BHC	13	69	ND	1.82E-03	9.01E-04	8.02E-04	1.30E-04
Dieldrin	13	92	ND	2.27E-03	1.24E-03	1.32E-03	1.61E-04
Endosulfan II	13	38	ND	3.38E-02	9.96E-04	7.62E-03	2.87E-03
Endrin	13	54	ND	1.21E-03	9.75E-04	7.18E-04	1.02E-04
Gamma BHC (Lindane)	13	100	1.00E-04	1.16E-03	4.20E-04	5.41E-04	9.80E-05
Gamma Chlordane	13	69	ND	9.96E-04	3.60E-04	5.05E-04	1.01E-04
Heptachlor	13	38	ND	9.96E-04	9.70E-04	6.61E-04	1.17E-04
Hexachlorobenzene	13	100	1.94E-04	1.93E-03	8.43E-04	8.86E-04	1.47E-04
Mirex	13	69	ND	3.31E-03	9.90E-04	1.41E-03	2.33E-04
O,P'-DDD	13	77	ND	1.56E-01	4.84E-02	5.16E-02	1.20E-02
O,P'-DDT	13	100	2.71E-02	1.68E-01	6.81E-02	7.75E-02	9.98E-03
Oxychlordane	13	46	ND	1.14E-02	9.96E-04	2.37E-03	8.57E-04
Pentachloroanisole	13	100	1.20E-04	1.00E-03	5.32E-04	5.50E-04	8.41E-05
Pentachlorobenzene	13	100	2.08E-04	4.39E-03	7.21E-04	1.26E-03	3.57E-04
Trans-Nonachlor	13	100	2.79E-03	1.21E-02	5.36E-03	6.22E-03	6.60E-04

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 8 - HOUSATONIC RIVER - RISING POND

Sample Year: 1998

Constituent	Pumpkinseed Whole Fish Composite						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	5	100	1.62E-03	2.29E-03	2.14E-03	2.03E-03	1.34E-04
1,2,4,5-Tetrachlorobenzene	5	100	3.05E-04	1.36E-03	1.18E-03	9.51E-04	1.94E-04
4,4'-DDD	5	100	9.39E-03	1.30E-02	1.03E-02	1.05E-02	6.56E-04
4,4'-DDE	5	100	3.97E-02	5.01E-02	4.23E-02	4.38E-02	2.01E-03
4,4'-DDT	5	100	2.66E-04	1.28E-03	7.91E-04	8.01E-04	1.80E-04
Alpha-BHC	5	100	1.90E-05	1.89E-04	1.13E-04	1.13E-04	3.30E-05
Alpha-Chlordane	5	20	ND	9.73E-04	9.60E-04	9.09E-04	4.47E-05
Beta-BHC	5	100	3.20E-05	5.78E-04	1.53E-04	2.21E-04	1.02E-04
Chlorpyrifos	5	100	1.90E-04	3.09E-04	2.33E-04	2.35E-04	2.04E-05
Cis-Nonachlor	5	100	1.37E-02	1.87E-02	1.69E-02	1.63E-02	9.77E-04
Delta-BHC	5	60	ND	9.90E-04	2.28E-04	4.77E-04	2.08E-04
Dieldrin	5	80	ND	1.49E-03	1.06E-03	1.06E-03	1.77E-04
Endosulfan II	5	100	4.63E-03	1.58E-02	1.30E-02	1.06E-02	2.39E-03
Gamma BHC (Lindane)	5	100	4.80E-04	7.09E-04	5.88E-04	5.79E-04	3.97E-05
Gamma Chlordane	5	40	ND	9.73E-04	9.08E-04	6.75E-04	1.68E-04
Heptachlor	5	100	8.10E-05	5.43E-04	1.60E-04	2.55E-04	8.35E-05
Heptachlor Epoxide	5	80	ND	1.93E-03	9.79E-04	1.05E-03	2.74E-04
Hexachlorobenzene	5	80	ND	1.89E-03	4.49E-04	7.38E-04	2.98E-04
O,P'-DDD	5	100	3.39E-02	4.44E-02	4.02E-02	3.92E-02	2.14E-03
O,P'-DDT	5	100	3.09E-02	3.69E-02	3.66E-02	3.55E-02	1.14E-03
Oxychlordane	5	100	2.54E-03	3.94E-03	3.17E-03	3.21E-03	2.56E-04
Pentachloroanisole	5	100	3.27E-04	5.47E-04	4.07E-04	4.15E-04	3.82E-05
Pentachlorobenzene	5	100	3.63E-04	2.00E-03	7.84E-04	9.52E-04	2.99E-04
Toxaphene	5	60	ND	1.95E-02	1.81E-02	1.53E-02	2.25E-03
Trans-Nonachlor	5	100	2.67E-03	3.26E-03	2.81E-03	2.86E-03	1.05E-04

Sample Location: REACH 6 - WOODS POND

Sample Year: 1998

Constituent	Pumpkinseed Skin-off Fillet						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	25	100	2.72E-03	2.67E-02	7.61E-03	9.33E-03	1.24E-03
1,2,4,5-Tetrachlorobenzene	25	100	1.16E-03	1.47E-02	1.99E-03	3.07E-03	5.66E-04
4,4'-DDD	25	100	4.48E-04	3.54E-02	2.62E-03	4.67E-03	1.42E-03
4,4'-DDE	25	100	2.25E-03	1.42E-01	1.22E-02	1.83E-02	5.39E-03
4,4'-DDT	25	60	ND	4.54E-03	1.03E-03	9.94E-04	1.69E-04
Aldrin	25	8	ND	1.32E-03	1.15E-03	1.09E-03	3.32E-05
Alpha-BHC	25	84	ND	1.22E-03	2.44E-04	3.46E-04	6.98E-05
Alpha-Chlordane	25	52	ND	1.48E-03	9.96E-04	9.23E-04	6.73E-05
Beta-BHC	25	8	ND	1.32E-03	9.98E-04	9.06E-04	9.00E-05
Chlorpyrifos	25	8	ND	1.24E-03	9.96E-04	7.95E-04	9.84E-05
Cis-Nonachlor	25	100	1.93E-03	5.69E-02	8.34E-03	1.13E-02	2.17E-03
Delta-BHC	25	16	ND	1.32E-03	1.15E-03	9.53E-04	7.89E-05
Dieldrin	25	96	ND	1.39E-03	5.74E-04	6.51E-04	6.16E-05
Endosulfan II	25	80	ND	2.63E-02	3.08E-03	3.99E-03	1.02E-03
Endrin	25	4	ND	1.32E-03	1.07E-03	1.07E-03	4.60E-05
Gamma BHC (Lindane)	25	96	ND	1.67E-03	9.50E-05	1.90E-04	6.41E-05
Gamma Chlordane	25	20	ND	1.32E-03	1.03E-03	8.85E-04	8.73E-05
Heptachlor	25	28	ND	1.24E-03	1.07E-03	8.75E-04	8.65E-05
Heptachlor Epoxide	25	12	ND	1.32E-03	1.07E-03	1.04E-03	5.08E-05
Hexachlorobenzene	25	100	1.64E-04	1.91E-03	4.33E-04	5.42E-04	8.36E-05
Mirex	25	8	ND	1.32E-03	1.07E-03	1.03E-03	5.71E-05
O,P'-DDD	25	100	5.12E-03	1.94E-01	1.92E-02	2.80E-02	7.19E-03
O,P'-DDE	25	8	ND	1.32E-03	1.15E-03	1.07E-03	4.20E-05
O,P'-DDT	25	100	3.40E-03	2.22E-01	1.54E-02	2.39E-02	8.37E-03
Oxychlordane	25	36	ND	1.36E-02	1.23E-03	2.21E-03	5.17E-04
Pentachloroanisole	25	68	ND	7.46E-04	1.79E-04	2.04E-04	3.27E-05
Pentachlorobenzene	25	100	8.48E-04	1.04E-02	3.30E-03	3.76E-03	4.83E-04
Trans-Nonachlor	25	92	ND	5.90E-03	8.45E-04	1.11E-03	2.32E-04

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 6 - WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
Pumpkinseed Offal							
1,2,3,4-Tetrachlorobenzene	25	72	ND	1.27E-01	2.49E-02	3.62E-02	7.32E-03
1,2,4,5-Tetrachlorobenzene	25	88	ND	2.67E-02	1.13E-02	1.12E-02	1.35E-03
4,4'-DDD	25	92	ND	5.40E-02	2.22E-02	2.33E-02	2.80E-03
4,4'-DDE	25	92	ND	2.95E-01	7.60E-02	9.56E-02	1.83E-02
4,4'-DDT	25	20	ND	5.77E-03	9.75E-04	1.25E-03	2.21E-04
Alpha-BHC	25	48	ND	9.98E-04	7.25E-04	5.34E-04	8.32E-05
Beta-BHC	25	76	ND	2.91E-03	9.75E-04	1.04E-03	1.49E-04
Chlorpyrifos	25	72	ND	1.24E-03	6.24E-04	6.27E-04	7.60E-05
Cis-Nonachlor	25	100	8.71E-03	2.07E-01	5.86E-02	7.69E-02	1.14E-02
Delta-BHC	25	60	ND	8.77E-03	9.10E-04	1.66E-03	4.59E-04
Dieldrin	25	96	ND	9.84E-03	4.20E-03	4.41E-03	4.40E-04
Endosulfan II	25	84	ND	4.95E-02	2.59E-02	2.43E-02	2.86E-03
Endrin	25	24	ND	1.32E-03	9.60E-04	8.77E-04	4.37E-05
Gamma BHC (Lindane)	25	100	1.46E-04	3.46E-03	8.87E-04	1.02E-03	1.63E-04
Gamma Chlordane	25	32	ND	9.90E-04	8.40E-04	7.06E-04	6.45E-05
Heptachlor	25	12	ND	9.98E-04	9.53E-04	8.30E-04	5.40E-05
Heptachlor Epoxide	25	24	ND	2.35E-02	9.75E-04	4.10E-03	1.36E-03
Hexachlorobenzene	25	100	3.74E-04	4.30E-03	1.98E-03	1.96E-03	2.07E-04
Mirex	25	8	ND	9.98E-04	9.55E-04	8.96E-04	3.18E-05
O,P'-DDD	25	100	2.72E-02	3.67E-01	1.74E-01	1.81E-01	1.93E-02
O,P'-DDT	25	92	ND	4.33E-01	7.63E-02	1.10E-01	2.37E-02
Oxychlordane	25	16	ND	2.29E-02	9.62E-04	2.66E-03	9.94E-04
Pentachloroanisole	25	96	ND	1.82E-03	1.08E-03	1.05E-03	9.95E-05
Pentachlorobenzene	25	100	1.55E-03	5.53E-02	1.84E-02	1.92E-02	2.29E-03
Toxaphene	25	4	ND	1.91E-02	9.65E-03	9.69E-03	4.19E-04
Trans-Nonachlor	25	100	1.36E-03	1.06E-02	4.44E-03	5.28E-03	5.04E-04
Pumpkinseed Whole Fish Composite							
1,2,3,4-Tetrachlorobenzene	5	100	6.90E-03	6.45E-02	4.54E-02	4.03E-02	9.88E-03
1,2,4,5-Tetrachlorobenzene	5	100	2.61E-03	1.38E-02	1.20E-02	9.33E-03	2.23E-03
4,4'-DDD	5	100	6.11E-03	2.31E-02	1.60E-02	1.59E-02	2.87E-03
4,4'-DDE	5	100	1.21E-02	6.61E-02	3.00E-02	3.90E-02	1.04E-02
4,4'-DDT	5	80	ND	1.11E-03	8.66E-04	8.95E-04	6.67E-05
Aldrin	5	20	ND	1.65E-03	9.51E-04	1.07E-03	2.67E-04
Alpha-BHC	5	40	ND	1.65E-03	9.50E-04	7.50E-04	2.93E-04
Beta-BHC	5	60	ND	1.63E-03	3.92E-04	6.52E-04	2.85E-04
Chlorpyrifos	5	60	ND	3.97E-03	1.65E-03	1.71E-03	6.16E-04
Cis-Nonachlor	5	100	1.89E-02	4.46E-02	3.47E-02	3.40E-02	4.55E-03
Delta-BHC	5	60	ND	4.14E-03	9.35E-04	1.34E-03	7.11E-04
Dieldrin	5	100	1.36E-03	2.95E-02	4.06E-03	8.56E-03	5.28E-03
Endosulfan II	5	20	ND	1.93E-02	1.63E-03	4.90E-03	3.61E-03
Gamma BHC (Lindane)	5	100	2.02E-04	1.54E-03	6.44E-04	7.29E-04	2.19E-04
Gamma Chlordane	5	80	ND	2.49E-03	1.51E-03	1.54E-03	2.63E-04
Heptachlor Epoxide	5	80	ND	2.92E-03	2.04E-03	2.00E-03	3.51E-04
Hexachlorobenzene	5	100	3.72E-04	2.97E-03	2.27E-03	2.01E-03	4.35E-04
O,P'-DDD	5	100	3.42E-02	2.00E-01	6.84E-02	8.73E-02	2.91E-02
O,P'-DDE	5	20	ND	5.75E-03	1.63E-03	2.18E-03	9.05E-04
O,P'-DDT	5	100	3.52E-02	2.13E-01	7.15E-02	9.05E-02	3.14E-02
Oxychlordane	5	60	ND	1.12E-02	9.89E-03	6.66E-03	2.34E-03
Pentachloroanisole	5	100	5.81E-04	1.43E-03	1.32E-03	1.16E-03	1.54E-04
Pentachlorobenzene	5	100	2.29E-03	2.41E-02	1.94E-02	1.69E-02	4.04E-03
Trans-Nonachlor	5	100	1.52E-03	3.49E-03	3.07E-03	2.83E-03	3.40E-04

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
Pumpkinseed Skin-off Fillet							
1,2,3,4-Tetrachlorobenzene	26	100	3.90E-03	7.34E-02	1.32E-02	1.58E-02	2.46E-03
1,2,4,5-Tetrachlorobenzene	26	92	ND	1.67E-02	3.42E-03	3.82E-03	5.91E-04
4,4'-DDD	26	100	1.11E-03	1.83E-02	3.93E-03	4.90E-03	6.93E-04
4,4'-DDE	26	100	2.97E-03	2.76E-02	9.74E-03	1.13E-02	1.23E-03
4,4'-DDT	26	69	ND	1.87E-03	6.24E-04	6.80E-04	8.71E-05
Alpha-BHC	26	42	ND	1.23E-03	9.42E-04	6.48E-04	8.90E-05
Alpha-Chlordane	26	12	ND	1.47E-03	9.83E-04	1.06E-03	4.53E-05
Beta-BHC	26	15	ND	1.47E-03	9.77E-04	9.07E-04	7.91E-05
Chlorpyrifos	26	38	ND	1.23E-03	9.42E-04	6.74E-04	8.39E-05
Cis-Nonachlor	26	92	ND	1.73E-02	9.58E-03	9.06E-03	8.35E-04
Delta-BHC	26	35	ND	1.47E-03	9.71E-04	8.88E-04	7.76E-05
Dieldrin	26	92	ND	7.37E-03	8.27E-04	2.05E-03	4.49E-04
Endosulfan II	26	88	ND	9.57E-03	3.14E-03	3.81E-03	4.61E-04
Endrin	26	19	ND	1.47E-03	9.74E-04	8.99E-04	8.18E-05
Gamma BHC (Lindane)	26	85	ND	1.23E-03	1.48E-04	2.80E-04	6.96E-05
Gamma Chlordane	26	23	ND	1.47E-03	9.83E-04	9.47E-04	7.97E-05
Heptachlor	26	27	ND	1.47E-03	9.83E-04	9.57E-04	7.19E-05
Heptachlor Epoxide	26	12	ND	2.34E-03	9.94E-04	1.16E-03	6.04E-05
Hexachlorobenzene	26	100	1.69E-04	2.33E-03	6.86E-04	7.29E-04	8.00E-05
Mirex	26	4	ND	1.47E-03	9.90E-04	1.05E-03	5.47E-05
O,P'-DDD	26	96	ND	5.39E-02	1.91E-02	2.03E-02	2.27E-03
O,P'-DDE	26	42	ND	2.34E-03	1.04E-03	1.13E-03	9.53E-05
O,P'-DDT	26	100	2.61E-03	4.55E-02	1.63E-02	1.82E-02	2.05E-03
Oxychlordane	26	46	ND	2.12E-03	1.13E-03	1.18E-03	6.99E-05
Pentachloroanisole	26	88	ND	8.10E-04	2.25E-04	2.54E-04	3.55E-05
Pentachlorobenzene	26	100	1.49E-03	3.22E-02	6.10E-03	6.78E-03	1.14E-03
Trans-Nonachlor	26	96	ND	2.03E-03	1.03E-03	1.08E-03	1.02E-04
Pumpkinseed Offal							
1,2,3,4-Tetrachlorobenzene	26	100	1.99E-02	2.95E-01	9.16E-02	1.02E-01	1.30E-02
1,2,4,5-Tetrachlorobenzene	26	96	ND	4.90E-02	1.79E-02	1.92E-02	2.24E-03
4,4'-DDD	26	77	ND	9.74E-02	3.42E-02	3.46E-02	5.46E-03
4,4'-DDE	26	100	2.57E-02	3.76E-01	1.05E-01	1.27E-01	1.68E-02
4,4'-DDT	26	77	ND	2.92E-02	5.87E-03	7.25E-03	1.30E-03
Aldrin	26	8	ND	1.02E-03	9.79E-04	9.10E-04	4.39E-05
Alpha-BHC	26	38	ND	1.34E-03	9.62E-04	8.65E-04	5.28E-05
Alpha-Chlordane	26	27	ND	2.26E-02	9.82E-04	3.28E-03	9.90E-04
Beta-BHC	26	85	ND	4.12E-03	8.87E-04	1.11E-03	1.98E-04
Chlorpyrifos	26	50	ND	1.46E-03	9.55E-04	7.63E-04	6.55E-05
Cis-Nonachlor	26	69	ND	2.67E-01	4.78E-02	6.71E-02	1.50E-02
Delta-BHC	26	23	ND	9.98E-04	9.67E-04	8.59E-04	4.32E-05
Dieldrin	26	77	ND	3.71E-02	2.29E-03	4.77E-03	1.72E-03
Endosulfan II	26	73	ND	4.86E-02	1.93E-02	1.87E-02	2.91E-03
Endrin	26	4	ND	1.02E-03	9.80E-04	9.51E-04	2.28E-05
Gamma BHC (Lindane)	26	100	1.27E-04	3.85E-03	9.09E-04	1.35E-03	2.05E-04
Gamma Chlordane	26	31	ND	1.71E-03	9.79E-04	9.23E-04	5.95E-05
Heptachlor	26	23	ND	1.02E-03	9.69E-04	8.28E-04	5.99E-05
Hexachlorobenzene	26	100	1.11E-03	8.33E-03	4.08E-03	4.12E-03	3.32E-04
Mirex	26	38	ND	7.69E-03	9.74E-04	1.61E-03	3.16E-04
O,P'-DDD	26	100	3.45E-02	4.95E-01	1.84E-01	2.00E-01	2.06E-02
O,P'-DDT	26	100	3.17E-02	3.78E-01	1.37E-01	1.48E-01	1.82E-02
Oxychlordane	26	62	ND	2.48E-02	8.67E-03	8.00E-03	1.37E-03
Pentachloroanisole	26	100	4.67E-04	2.85E-03	1.55E-03	1.76E-03	1.34E-04
Pentachlorobenzene	26	100	9.36E-03	1.07E-01	3.78E-02	4.32E-02	5.47E-03
Trans-Nonachlor	26	100	4.18E-03	3.24E-02	7.87E-03	9.02E-03	1.09E-03

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
Pumpkinseed Whole Fish Composite							
1,2,3,4-Tetrachlorobenzene	5	100	5.73E-02	7.44E-02	6.40E-02	6.66E-02	3.25E-03
1,2,4,5-Tetrachlorobenzene	5	100	1.04E-02	2.02E-02	1.93E-02	1.77E-02	1.86E-03
4,4'-DDD	5	100	2.52E-02	3.47E-02	2.55E-02	2.75E-02	1.82E-03
4,4'-DDE	5	80	ND	6.90E-02	5.18E-02	4.46E-02	1.15E-02
4,4'-DDT	5	100	2.92E-03	3.77E-03	3.55E-03	3.46E-03	1.43E-04
Alpha-BHC	5	40	ND	1.14E-03	9.51E-04	6.76E-04	2.20E-04
Beta-BHC	5	80	ND	9.65E-04	5.70E-05	3.24E-04	1.83E-04
Chlorpyrifos	5	100	2.53E-04	5.78E-04	4.60E-04	4.32E-04	6.49E-05
Cis-Nonachlor	5	100	4.44E-02	5.70E-02	5.41E-02	5.26E-02	2.23E-03
Dieldrin	5	100	1.38E-03	3.25E-02	2.30E-03	8.11E-03	6.10E-03
Endosulfan II	5	100	9.87E-03	2.09E-02	1.68E-02	1.59E-02	2.16E-03
Endrin	5	20	ND	1.14E-03	9.65E-04	8.62E-04	1.55E-04
Gamma BHC (Lindane)	5	100	5.50E-04	9.06E-04	7.89E-04	7.60E-04	5.94E-05
Gamma Chlordane	5	20	ND	1.14E-03	9.51E-04	8.96E-04	1.18E-04
Heptachlor	5	20	ND	1.14E-03	9.65E-04	8.43E-04	1.73E-04
Hexachlorobenzene	5	100	3.57E-03	4.71E-03	3.74E-03	3.91E-03	2.07E-04
O,P'-DDD	5	100	8.70E-02	1.01E-01	9.47E-02	9.36E-02	2.81E-03
O,P'-DDT	5	100	8.35E-02	1.14E-01	1.01E-01	9.95E-02	5.01E-03
Oxychlordane	5	100	8.18E-03	1.04E-02	9.20E-03	9.25E-03	3.70E-04
Pentachloroanisole	5	100	9.36E-04	1.80E-03	1.56E-03	1.49E-03	1.50E-04
Pentachlorobenzene	5	100	2.74E-02	4.15E-02	2.88E-02	3.13E-02	2.60E-03
Trans-Nonachlor	5	100	4.25E-03	5.11E-03	4.81E-03	4.70E-03	1.57E-04
Smallmouth Bass Whole Fish							
1,2,3,4-Tetrachlorobenzene	2	100	1.49E-01	2.57E-01	2.03E-01	2.03E-01	5.41E-02
1,2,4,5-Tetrachlorobenzene	2	50	ND	2.77E-02	1.43E-02	1.43E-02	1.34E-02
4,4'-DDD	2	100	3.83E-02	1.43E-01	9.06E-02	9.06E-02	5.23E-02
4,4'-DDE	2	100	1.10E-01	1.76E-01	1.43E-01	1.43E-01	3.30E-02
4,4'-DDT	2	50	ND	2.70E-03	1.82E-03	1.82E-03	8.83E-04
Alpha-BHC	2	100	3.50E-05	7.80E-05	5.65E-05	5.65E-05	2.15E-05
Chlorpyrifos	2	100	3.05E-04	3.05E-04	3.05E-04	3.05E-04	0.00E+00
Cis-Nonachlor	2	100	1.99E-01	3.41E-01	2.70E-01	2.70E-01	7.08E-02
Dieldrin	2	100	4.13E-03	5.01E-03	4.57E-03	4.57E-03	4.39E-04
Gamma BHC (Lindane)	2	100	4.23E-04	5.51E-04	4.87E-04	4.87E-04	6.40E-05
Gamma Chlordane	2	100	3.20E-03	3.71E-03	3.45E-03	3.45E-03	2.54E-04
Heptachlor Epoxide	2	100	1.49E-03	1.69E-03	1.59E-03	1.59E-03	9.95E-05
Hexachlorobenzene	2	100	6.13E-03	8.69E-03	7.41E-03	7.41E-03	1.28E-03
Mirex	2	100	5.29E-04	1.18E-03	8.54E-04	8.54E-04	3.25E-04
O,P'-DDD	2	100	2.81E-01	2.95E-01	2.88E-01	2.88E-01	7.39E-03
O,P'-DDE	2	100	1.27E-03	1.50E-03	1.38E-03	1.38E-03	1.14E-04
O,P'-DDT	2	100	4.05E-01	6.12E-01	5.09E-01	5.09E-01	1.04E-01
Pentachloroanisole	2	100	1.46E-03	2.07E-03	1.77E-03	1.77E-03	3.01E-04
Pentachlorobenzene	2	100	1.08E-01	1.77E-01	1.42E-01	1.42E-01	3.46E-02
Trans-Nonachlor	2	100	4.28E-03	5.91E-03	5.09E-03	5.09E-03	8.14E-04

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 2000

Constituent	White Sucker Whole Fish						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	46	100	1.05E-02	2.01E-01	6.41E-02	7.87E-02	7.68E-03
1,2,4,5-Tetrachlorobenzene	46	100	1.06E-03	3.92E-01	1.28E-02	2.20E-02	8.30E-03
4,4'-DDD	46	100	1.74E-02	1.07E-01	3.51E-02	4.44E-02	3.58E-03
4,4'-DDE	46	100	3.31E-02	3.41E-01	7.96E-02	1.05E-01	1.05E-02
4,4'-DDT	46	100	3.35E-03	4.73E-02	1.30E-02	1.52E-02	1.54E-03
Aldrin	46	7	ND	2.01E-03	9.47E-04	9.72E-04	2.62E-05
Alpha-BHC	46	72	ND	9.98E-04	4.00E-04	5.21E-04	4.66E-05
Alpha-Chlordane	46	67	ND	2.30E-02	2.86E-03	3.54E-03	5.33E-04
Beta-BHC	46	50	ND	2.01E-03	9.14E-04	8.16E-04	5.69E-05
Chlorpyrifos	46	70	ND	2.01E-03	7.61E-04	6.78E-04	6.45E-05
Cis-Nonachlor	46	67	ND	3.97E-01	7.86E-02	8.89E-02	1.36E-02
Delta-BHC	46	30	ND	2.29E-02	9.76E-04	4.96E-03	1.01E-03
Dieldrin	46	100	1.86E-03	2.20E-01	8.17E-03	3.33E-02	7.65E-03
Endosulfan II	46	67	ND	7.25E-02	1.28E-02	1.38E-02	1.95E-03
Endrin	46	87	ND	5.10E-03	1.91E-03	2.05E-03	1.66E-04
Gamma BHC (Lindane)	46	74	ND	2.19E-03	5.32E-04	6.31E-04	6.80E-05
Gamma Chlordane	46	100	5.42E-04	9.08E-03	2.81E-03	3.15E-03	2.67E-04
Heptachlor Epoxide	46	67	ND	1.84E-02	1.80E-03	3.69E-03	5.97E-04
Hexachlorobenzene	46	100	1.09E-03	1.38E-02	7.15E-03	7.07E-03	4.71E-04
Mirex	46	33	ND	2.37E-03	9.45E-04	9.37E-04	6.30E-05
O,P'-DDD	46	100	3.74E-02	8.02E-01	1.92E-01	2.63E-01	2.80E-02
O,P'-DDE	46	67	ND	3.23E-02	6.17E-03	6.23E-03	8.44E-04
O,P'-DDT	46	100	3.39E-02	7.39E-01	1.86E-01	2.34E-01	2.26E-02
Oxychlordane	46	100	1.16E-03	3.10E-02	6.88E-03	8.67E-03	1.01E-03
Pentachloroanisole	46	100	1.50E-04	7.46E-03	1.76E-03	1.96E-03	1.91E-04
Pentachlorobenzene	46	100	4.57E-03	1.11E-01	4.24E-02	5.27E-02	4.50E-03
Trans-Nonachlor	46	100	2.85E-03	2.12E-02	5.75E-03	7.57E-03	6.55E-04

Sample Location: REACH 6 - WOODS POND

Sample Year: 2000

Constituent	White Sucker Whole Fish						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	11	100	1.14E-02	9.34E-02	2.35E-02	4.36E-02	9.18E-03
1,2,4,5-Tetrachlorobenzene	11	100	2.03E-03	3.10E-02	5.57E-03	1.13E-02	2.99E-03
4,4'-DDD	11	100	2.45E-02	7.20E-02	5.69E-02	5.21E-02	5.15E-03
4,4'-DDE	11	100	4.22E-02	2.36E-01	9.27E-02	1.03E-01	1.63E-02
4,4'-DDT	11	100	1.71E-03	3.65E-02	7.88E-03	1.07E-02	2.87E-03
Alpha-BHC	11	91	ND	1.01E-03	4.32E-04	5.00E-04	7.64E-05
Alpha-Chlordane	11	100	2.59E-03	8.94E-03	6.30E-03	5.68E-03	6.53E-04
Cis-Nonachlor	11	100	4.58E-02	2.49E-01	1.03E-01	1.20E-01	1.98E-02
Dieldrin	11	100	4.92E-03	3.24E-02	1.49E-02	1.50E-02	2.38E-03
Endosulfan II	11	100	1.44E-02	7.50E-02	3.56E-02	4.03E-02	5.30E-03
Endrin	11	100	1.86E-04	2.32E-03	8.06E-04	1.07E-03	2.06E-04
Gamma BHC (Lindane)	11	91	ND	9.73E-04	2.63E-04	3.07E-04	9.12E-05
Gamma Chlordane	11	100	3.31E-04	3.31E-03	2.31E-03	2.08E-03	3.49E-04
Heptachlor Epoxide	11	100	6.06E-04	1.11E-02	3.87E-03	4.27E-03	8.81E-04
Hexachlorobenzene	11	100	8.65E-04	5.52E-02	4.69E-03	9.34E-03	4.64E-03
Mirex	11	9	ND	2.81E-03	9.65E-04	1.13E-03	1.68E-04
O,P'-DDD	11	100	5.12E-02	6.57E-01	2.65E-01	2.74E-01	5.16E-02
O,P'-DDE	11	100	5.12E-03	2.54E-02	1.40E-02	1.44E-02	1.99E-03
O,P'-DDT	11	100	3.33E-02	4.89E-01	1.68E-01	1.82E-01	3.81E-02
Oxychlordane	11	100	4.11E-03	4.89E-02	2.14E-02	2.12E-02	3.64E-03
Pentachloroanisole	11	100	1.91E-04	2.72E-03	7.10E-04	9.77E-04	2.48E-04
Pentachlorobenzene	11	100	7.49E-03	2.39E-01	2.55E-02	4.97E-02	1.96E-02
Trans-Nonachlor	11	100	2.96E-03	1.41E-02	8.11E-03	7.69E-03	1.04E-03

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
Yellow Perch Skin-off Fillet							
1,2,3,4-Tetrachlorobenzene	50	100	7.80E-03	7.86E-02	1.99E-02	2.20E-02	1.51E-03
1,2,4,5-Tetrachlorobenzene	50	96	ND	1.42E-02	4.36E-03	4.73E-03	2.86E-04
4,4'-DDD	50	100	1.07E-03	1.85E-01	3.51E-03	9.26E-03	3.69E-03
4,4'-DDE	50	98	ND	5.37E-02	7.92E-03	9.53E-03	1.15E-03
4,4'-DDT	50	86	ND	9.39E-03	9.51E-04	1.10E-03	1.80E-04
Aldrin	50	4	ND	1.58E-03	9.75E-04	9.61E-04	2.79E-05
Alpha-BHC	50	30	ND	1.58E-03	9.65E-04	7.58E-04	5.58E-05
Alpha-Chlordane	50	22	ND	2.13E-03	9.75E-04	1.01E-03	4.93E-05
Beta-BHC	50	14	ND	1.92E-03	9.67E-04	9.09E-04	4.69E-05
Chlorpyrifos	50	28	ND	1.58E-03	9.66E-04	8.09E-04	4.84E-05
Cis-Nonachlor	50	92	ND	7.57E-02	1.17E-02	1.56E-02	1.75E-03
Delta-BHC	50	58	ND	1.12E-02	1.25E-03	2.83E-03	3.79E-04
Dieldrin	50	96	ND	1.33E-02	1.52E-03	3.39E-03	4.82E-04
Endosulfan II	50	88	ND	7.49E-02	6.50E-03	9.61E-03	1.57E-03
Endrin	50	42	ND	1.92E-03	9.41E-04	6.92E-04	6.40E-05
Gamma BHC (Lindane)	50	58	ND	1.92E-03	2.21E-04	4.60E-04	6.89E-05
Gamma Chlordane	50	44	ND	1.58E-03	9.41E-04	6.65E-04	5.68E-05
Heptachlor	50	44	ND	1.92E-03	9.37E-04	7.32E-04	5.65E-05
Heptachlor Epoxide	50	12	ND	1.92E-03	9.78E-04	1.02E-03	3.22E-05
Hexachlorobenzene	50	98	ND	2.79E-03	8.47E-04	9.19E-04	5.69E-05
O,P'-DDD	50	100	2.15E-03	1.33E-01	1.73E-02	2.19E-02	2.98E-03
O,P'-DDE	50	48	ND	3.51E-03	1.10E-03	1.34E-03	7.43E-05
O,P'-DDT	50	100	2.11E-03	1.75E-01	2.02E-02	2.67E-02	3.83E-03
Oxychlordane	50	30	ND	2.75E-03	9.75E-04	9.97E-04	4.80E-05
Pentachloroanisole	50	100	8.10E-05	1.21E-03	3.65E-04	4.22E-04	2.98E-05
Pentachlorobenzene	50	100	1.89E-03	2.57E-02	1.01E-02	1.09E-02	6.69E-04
Trans-Nonachlor	50	94	ND	4.72E-03	9.41E-04	1.09E-03	1.03E-04
Yellow Perch Offal							
1,2,3,4-Tetrachlorobenzene	50	98	ND	5.65E-01	2.58E-01	2.77E-01	1.69E-02
1,2,4,5-Tetrachlorobenzene	50	82	ND	1.50E-01	4.21E-02	4.67E-02	4.66E-03
4,4'-DDD	50	92	ND	4.95E-01	5.13E-02	6.31E-02	9.76E-03
4,4'-DDE	50	98	ND	3.22E-01	1.35E-01	1.41E-01	8.87E-03
4,4'-DDT	50	22	ND	6.24E-02	9.83E-04	5.07E-03	1.53E-03
Alpha-BHC	50	50	ND	1.93E-03	9.57E-04	7.60E-04	6.47E-05
Alpha-Chlordane	50	8	ND	2.37E-02	9.79E-04	2.01E-03	5.86E-04
Beta-BHC	50	58	ND	3.45E-03	9.80E-04	1.07E-03	8.28E-05
Chlorpyrifos	50	92	ND	4.75E-03	7.42E-04	1.02E-03	1.16E-04
Cis-Nonachlor	50	86	ND	5.33E-01	2.20E-01	2.24E-01	1.91E-02
Delta-BHC	50	6	ND	2.01E-02	9.79E-04	1.39E-03	3.84E-04
Dieldrin	50	98	ND	1.92E-02	5.00E-03	5.88E-03	5.59E-04
Endosulfan II	50	78	ND	2.80E-01	3.38E-02	6.04E-02	1.03E-02
Endrin	50	36	ND	4.87E-03	9.81E-04	1.27E-03	1.37E-04
Gamma BHC (Lindane)	50	80	ND	3.61E-03	1.26E-03	1.53E-03	1.34E-04
Gamma Chlordane	50	76	ND	1.32E-02	1.65E-03	2.72E-03	3.23E-04
Heptachlor	50	6	ND	4.32E-03	9.79E-04	1.04E-03	6.90E-05
Heptachlor Epoxide	50	30	ND	2.07E-02	9.85E-04	4.01E-03	7.50E-04
Hexachlorobenzene	50	100	2.59E-03	1.78E-02	8.07E-03	8.57E-03	3.65E-04
Mirex	50	6	ND	7.24E-03	9.78E-04	1.08E-03	1.27E-04
O,P'-DDD	50	100	2.44E-02	6.66E-01	3.17E-01	3.32E-01	1.63E-02
O,P'-DDT	50	100	1.43E-02	3.18E+00	3.64E-01	4.35E-01	6.21E-02
Oxychlordane	50	42	ND	2.13E-02	9.96E-04	6.41E-03	9.62E-04
Pentachloroanisole	50	100	1.56E-03	9.18E-03	4.04E-03	4.11E-03	1.94E-04
Pentachlorobenzene	50	100	3.79E-04	2.76E-01	1.08E-01	1.20E-01	7.83E-03
Trans-Nonachlor	50	100	5.12E-03	4.76E-02	9.84E-03	1.14E-02	9.15E-04

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	Yellow Perch Whole Fish Composite						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	10	100	1.99E-03	1.27E-01	7.09E-02	6.30E-02	1.36E-02
1,2,4,5-Tetrachlorobenzene	10	100	8.02E-03	2.06E-02	1.63E-02	1.54E-02	1.39E-03
4,4'-DDD	10	100	1.71E-02	3.59E-02	2.55E-02	2.62E-02	1.56E-03
4,4'-DDE	10	100	2.62E-02	8.37E-02	3.98E-02	4.25E-02	5.20E-03
4,4'-DDT	10	100	2.06E-03	1.00E-02	3.83E-03	4.37E-03	7.05E-04
Alpha-BHC	10	80	ND	9.86E-04	1.34E-04	2.83E-04	1.17E-04
Alpha-Chlordane	10	20	ND	1.80E-03	9.92E-04	1.10E-03	9.05E-05
Beta-BHC	10	10	ND	1.42E-03	9.77E-04	9.38E-04	9.38E-05
Chlorpyrifos	10	50	ND	9.67E-04	5.31E-04	5.37E-04	1.11E-04
Cis-Nonachlor	10	100	3.74E-02	9.69E-02	5.44E-02	6.03E-02	7.43E-03
Delta-BHC	10	10	ND	1.42E-03	9.77E-04	8.42E-04	1.34E-04
Dieldrin	10	100	1.10E-03	4.63E-03	2.31E-03	2.63E-03	3.58E-04
Endosulfan II	10	100	8.32E-03	1.51E-02	1.22E-02	1.17E-02	8.86E-04
Endrin	10	20	ND	1.65E-03	9.95E-04	1.12E-03	7.65E-05
Gamma BHC (Lindane)	10	90	ND	1.16E-03	7.35E-04	6.50E-04	1.13E-04
Gamma Chlordane	10	100	1.09E-03	3.64E-03	2.47E-03	2.45E-03	2.57E-04
Heptachlor	10	30	ND	1.42E-03	9.73E-04	8.53E-04	1.22E-04
Heptachlor Epoxide	10	50	ND	1.56E-03	1.05E-03	1.16E-03	7.49E-05
Hexachlorobenzene	10	100	1.81E-03	6.01E-03	4.59E-03	4.37E-03	3.94E-04
Mirex	10	50	ND	9.94E-04	7.04E-04	6.48E-04	1.09E-04
O,P'-DDD	10	100	1.99E-03	1.51E-01	8.63E-02	8.20E-02	1.65E-02
O,P'-DDE	10	50	ND	9.94E-04	8.87E-04	8.23E-04	5.26E-05
O,P'-DDT	10	100	5.05E-02	2.01E-01	1.30E-01	1.20E-01	1.50E-02
Oxychlordane	10	50	ND	1.39E-02	2.85E-03	4.65E-03	1.41E-03
Pentachloroanisole	10	100	1.01E-03	3.15E-03	2.10E-03	2.02E-03	2.61E-04
Pentachlorobenzene	10	100	1.41E-02	6.05E-02	3.51E-02	3.49E-02	4.85E-03
Trans-Nonachlor	10	100	2.96E-03	4.95E-03	4.11E-03	3.89E-03	2.12E-04

Sample Location: REACH 6 - WOODS POND

Sample Year: 1998

Constituent	Yellow Perch Skin-off Fillet						
	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	25	100	9.32E-04	1.29E-02	4.96E-03	5.27E-03	6.50E-04
1,2,4,5-Tetrachlorobenzene	25	92	ND	4.31E-03	2.09E-03	1.99E-03	2.17E-04
4,4'-DDD	25	100	2.83E-04	3.52E-03	1.57E-03	1.60E-03	1.85E-04
4,4'-DDE	25	100	9.69E-04	1.64E-02	7.67E-03	7.69E-03	8.88E-04
4,4'-DDT	25	36	ND	1.65E-03	4.24E-04	5.61E-04	9.35E-05
Aldrin	25	32	ND	1.65E-03	9.65E-04	8.62E-04	7.93E-05
Alpha-BHC	25	32	ND	1.65E-03	9.65E-04	7.84E-04	1.00E-04
Alpha-Chlordane	25	56	ND	1.65E-03	8.11E-04	7.53E-04	8.40E-05
Beta-BHC	25	12	ND	1.65E-03	9.80E-04	6.19E-04	1.06E-04
Chlorpyrifos	25	20	ND	1.65E-03	4.80E-05	3.86E-04	1.06E-04
Cis-Nonachlor	25	100	1.29E-03	1.55E-02	8.58E-03	8.02E-03	8.81E-04
Delta-BHC	25	32	ND	1.65E-03	9.80E-04	8.82E-04	9.78E-05
Dieldrin	25	72	ND	1.63E-03	7.12E-04	7.76E-04	6.82E-05
Endosulfan II	25	32	ND	4.35E-03	1.13E-03	1.86E-03	2.44E-04
Endrin	25	12	ND	1.65E-03	9.90E-04	9.53E-04	7.65E-05
Gamma BHC (Lindane)	25	80	ND	2.74E-04	9.50E-05	9.21E-05	1.25E-05
Gamma Chlordane	25	16	ND	1.65E-03	9.90E-04	9.46E-04	7.21E-05
Heptachlor	25	24	ND	1.65E-03	9.80E-04	8.57E-04	9.11E-05
Heptachlor Epoxide	25	24	ND	1.65E-03	9.80E-04	8.97E-04	7.96E-05
Hexachlorobenzene	25	96	ND	1.07E-03	5.05E-04	4.55E-04	6.03E-05
O,P'-DDD	25	100	2.88E-03	2.89E-02	1.36E-02	1.36E-02	1.45E-03
O,P'-DDE	25	32	ND	1.65E-03	9.65E-04	9.36E-04	6.38E-05
O,P'-DDT	25	100	2.21E-03	2.43E-02	1.18E-02	1.18E-02	1.29E-03
Oxychlordane	25	32	ND	2.79E-03	1.06E-03	1.22E-03	9.46E-05
Pentachloroanisole	25	60	ND	5.54E-04	2.06E-04	2.19E-04	3.12E-05

Table C-32
Pesticide Data Summary Table for Fish

Pentachlorobenzene	25	100	1.21E-04 - 6.87E-03	3.06E-03	2.71E-03	3.62E-04
Trans-Nonachlor	25	92	ND - 1.34E-03	4.84E-04	5.51E-04	6.41E-05

Sample Location: REACH 6 - WOODS POND

Sample Year: 1998

	Yellow Perch Offal					
Constituent	No. of Samples	Frequency of Detection (%)	Range Minimum - Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	25	100	1.66E-02 - 2.24E-01	8.56E-02	1.01E-01	1.28E-02
1,2,4,5-Tetrachlorobenzene	25	96	ND - 6.38E-02	2.37E-02	2.53E-02	3.43E-03
4,4'-DDD	25	100	2.58E-02 - 1.24E-01	5.88E-02	5.96E-02	5.08E-03
4,4'-DDE	25	100	5.95E-02 - 4.99E-01	2.47E-01	2.59E-01	2.61E-02
4,4'-DDT	25	20	ND - 4.82E-03	9.81E-04	1.50E-03	2.05E-04
Alpha-BHC	25	68	ND - 9.95E-04	1.77E-04	4.49E-04	7.84E-05
Alpha-Chlordane	25	24	ND - 1.28E-02	9.88E-04	3.08E-03	7.65E-04
Beta-BHC	25	60	ND - 1.71E-03	9.75E-04	9.47E-04	1.01E-04
Chlorpyrifos	25	76	ND - 9.80E-04	5.48E-04	5.64E-04	5.91E-05
Cis-Nonachlor	25	100	7.01E-02 - 4.51E-01	2.27E-01	2.35E-01	2.27E-02
Delta-BHC	25	8	ND - 1.65E-03	9.75E-04	9.85E-04	6.63E-05
Dieldrin	25	76	ND - 2.54E-02	8.16E-03	8.55E-03	1.28E-03
Endosulfan II	25	40	ND - 1.18E-01	9.95E-04	3.01E-02	7.81E-03
Endrin	25	16	ND - 1.65E-03	9.75E-04	1.07E-03	4.71E-05
Gamma BHC (Lindane)	25	100	4.88E-04 - 2.20E-03	1.33E-03	1.27E-03	1.02E-04
Gamma Chlordane	25	52	ND - 4.45E-03	1.51E-03	1.57E-03	1.74E-04
Heptachlor Epoxide	25	12	ND - 2.67E-02	9.81E-04	2.95E-03	1.31E-03
Hexachlorobenzene	25	100	1.24E-03 - 8.96E-03	5.43E-03	5.30E-03	4.64E-04
O,P'-DDD	25	100	1.32E-01 - 8.20E-01	3.73E-01	4.06E-01	3.79E-02
O,P'-DDT	25	100	1.42E-01 - 8.39E-01	3.75E-01	4.06E-01	4.00E-02
Oxychlordane	25	32	ND - 3.35E-02	9.90E-04	8.35E-03	2.30E-03
Pentachloroanisole	25	100	6.28E-04 - 5.33E-03	2.57E-03	2.73E-03	2.96E-04
Pentachlorobenzene	25	100	7.00E-03 - 1.18E-01	4.63E-02	4.62E-02	5.24E-03
Trans-Nonachlor	25	100	4.05E-03 - 1.76E-02	9.50E-03	8.99E-03	6.95E-04

	Yellow Perch Whole Fish Composite					
Constituent	No. of Samples	Frequency of Detection (%)	Range Minimum - Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	5	100	2.33E-02 - 4.67E-02	3.41E-02	3.49E-02	3.78E-03
1,2,4,5-Tetrachlorobenzene	5	100	6.47E-03 - 1.13E-02	9.60E-03	9.34E-03	8.03E-04
4,4'-DDD	5	100	1.65E-02 - 2.72E-02	2.34E-02	2.27E-02	1.88E-03
4,4'-DDE	5	100	7.76E-02 - 1.07E-01	8.11E-02	8.88E-02	6.04E-03
4,4'-DDT	5	100	5.31E-04 - 1.65E-03	1.16E-03	1.05E-03	2.13E-04
Alpha-BHC	5	80	ND - 9.86E-04	1.44E-04	3.24E-04	1.77E-04
Alpha-Chlordane	5	20	ND - 1.19E-03	9.49E-04	9.98E-04	4.86E-05
Beta-BHC	5	60	ND - 2.10E-03	9.49E-04	1.15E-03	2.52E-04
Chlorpyrifos	5	40	ND - 9.85E-04	9.44E-04	6.45E-04	1.92E-04
Cis-Nonachlor	5	100	5.82E-02 - 7.08E-02	6.09E-02	6.23E-02	2.32E-03
Delta-BHC	5	100	4.64E-03 - 9.27E-03	6.55E-03	6.77E-03	7.77E-04
Dieldrin	5	100	1.69E-03 - 3.61E-02	3.09E-02	2.17E-02	7.56E-03
Endosulfan II	5	100	9.76E-03 - 2.35E-02	1.87E-02	1.83E-02	2.52E-03
Endrin	5	40	ND - 1.19E-03	9.44E-04	9.54E-04	6.76E-05
Gamma BHC (Lindane)	5	100	6.01E-04 - 1.84E-03	1.08E-03	1.15E-03	2.03E-04
Gamma Chlordane	5	100	1.24E-03 - 1.67E-03	1.30E-03	1.37E-03	7.71E-05
Heptachlor Epoxide	5	100	1.35E-03 - 1.46E-02	1.82E-03	6.54E-03	3.02E-03
Hexachlorobenzene	5	100	1.63E-03 - 2.62E-03	2.17E-03	2.17E-03	1.59E-04
O,P'-DDD	5	100	8.47E-02 - 1.42E-01	1.19E-01	1.16E-01	1.07E-02
O,P'-DDE	5	60	ND - 6.70E-03	5.14E-03	3.92E-03	1.22E-03
O,P'-DDT	5	100	8.52E-02 - 1.50E-01	1.25E-01	1.18E-01	1.25E-02
Oxychlordane	5	40	ND - 1.19E-03	9.44E-04	8.93E-04	9.34E-05
Pentachloroanisole	5	100	9.76E-04 - 2.45E-03	1.53E-03	1.60E-03	2.39E-04
Pentachlorobenzene	5	100	1.04E-02 - 1.86E-02	1.66E-02	1.53E-02	1.65E-03
Trans-Nonachlor	5	100	2.07E-03 - 3.26E-03	2.29E-03	2.45E-03	2.10E-04

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 8 - HOUSATONIC RIVER - RISING POND

Sample Year: 1998

Constituent	No. of Samples	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean	Standard Error
Yellow Perch Skin-off Fillet							
1,2,3,4-Tetrachlorobenzene	6	100	3.72E-04	9.86E-04	6.01E-04	6.28E-04	8.13E-05
4,4'-DDD	6	100	8.57E-04	6.63E-03	1.72E-03	2.67E-03	8.78E-04
4,4'-DDE	6	100	5.49E-03	4.01E-02	9.69E-03	1.49E-02	5.32E-03
4,4'-DDT	6	67	ND	9.90E-04	6.20E-04	6.26E-04	1.48E-04
Aldrin	6	17	ND	9.94E-04	9.82E-04	8.42E-04	1.40E-04
Alpha-BHC	6	100	9.60E-05	1.84E-04	1.47E-04	1.40E-04	1.49E-05
Alpha-Chlordane	6	33	ND	1.12E-03	9.83E-04	9.37E-04	7.39E-05
Beta-BHC	6	83	ND	9.94E-04	3.65E-05	2.67E-04	1.65E-04
Chlorpyrifos	6	50	ND	9.85E-04	1.50E-04	3.93E-04	1.85E-04
Cis-Nonachlor	6	100	3.60E-03	2.49E-02	7.12E-03	9.57E-03	3.22E-03
Delta-BHC	6	33	ND	9.94E-04	9.72E-04	7.45E-04	1.63E-04
Dieldrin	6	83	ND	9.85E-04	2.05E-04	3.85E-04	1.47E-04
Endosulfan II	6	100	1.45E-03	7.80E-03	3.51E-03	3.93E-03	9.98E-04
Endrin	6	83	ND	9.94E-04	6.05E-05	2.15E-04	1.56E-04
Gamma BHC (Lindane)	6	100	7.00E-05	1.53E-04	1.15E-04	1.12E-04	1.20E-05
Gamma Chlordane	6	100	1.06E-04	4.36E-04	1.21E-04	1.76E-04	5.26E-05
Heptachlor	6	17	ND	9.94E-04	9.82E-04	8.22E-04	1.59E-04
Heptachlor Epoxide	6	50	ND	9.94E-04	5.54E-04	5.42E-04	1.99E-04
Hexachlorobenzene	6	67	ND	3.06E-04	2.24E-04	2.29E-04	1.83E-05
Mirex	6	17	ND	9.94E-04	9.85E-04	8.32E-04	1.51E-04
O,P'-DDD	6	100	5.04E-03	3.85E-02	1.23E-02	1.51E-02	4.90E-03
O,P'-DDT	6	100	7.12E-03	5.41E-02	1.30E-02	1.91E-02	7.23E-03
Oxychlordane	6	67	ND	2.16E-03	9.24E-04	9.94E-04	2.53E-04
Pentachloroanisole	6	33	ND	3.07E-04	8.83E-05	1.21E-04	3.84E-05
Pentachlorobenzene	6	100	2.41E-04	6.64E-04	3.38E-04	4.00E-04	7.53E-05
Trans-Nonachlor	6	100	2.81E-04	3.13E-03	8.82E-04	1.27E-03	4.12E-04
Yellow Perch Offal							
1,2,3,4-Tetrachlorobenzene	6	100	2.09E-03	5.86E-03	2.85E-03	3.45E-03	6.14E-04
1,2,4,5-Tetrachlorobenzene	6	83	ND	4.49E-03	2.33E-03	2.50E-03	5.19E-04
4,4'-DDD	6	100	3.41E-02	5.55E-01	6.22E-02	1.41E-01	8.33E-02
4,4'-DDE	6	100	8.69E-02	6.31E-01	1.69E-01	2.37E-01	8.21E-02
4,4'-DDT	6	83	ND	2.35E-02	2.10E-03	8.45E-03	4.41E-03
Alpha-BHC	6	50	ND	9.98E-04	7.95E-04	7.63E-04	1.03E-04
Alpha-Chlordane	6	50	ND	1.06E-02	1.35E-03	2.87E-03	1.55E-03
Beta-BHC	6	67	ND	9.65E-04	5.09E-04	5.38E-04	1.72E-04
Chlorpyrifos	6	67	ND	9.86E-04	3.13E-04	4.89E-04	1.59E-04
Cis-Nonachlor	6	50	ND	1.02E-01	3.54E-02	4.13E-02	1.86E-02
Delta-BHC	6	50	ND	6.68E-03	1.31E-03	2.16E-03	9.16E-04
Dieldrin	6	100	6.05E-04	9.47E-03	5.21E-03	4.85E-03	1.45E-03
Endosulfan II	6	67	ND	1.23E-01	4.07E-02	4.88E-02	1.98E-02
Endrin	6	33	ND	1.04E-03	9.75E-04	8.83E-04	1.05E-04
Gamma BHC (Lindane)	6	100	3.20E-04	2.25E-03	7.22E-04	1.02E-03	2.92E-04
Gamma Chlordane	6	100	4.89E-04	2.16E-03	1.32E-03	1.32E-03	2.21E-04
Hexachlorobenzene	6	100	1.48E-03	4.84E-03	3.00E-03	2.98E-03	5.16E-04
Mirex	6	33	ND	2.74E-03	9.92E-04	1.34E-03	2.87E-04
O,P'-DDD	6	100	6.59E-02	5.61E-01	1.58E-01	2.14E-01	7.38E-02
O,P'-DDT	6	100	7.29E-02	8.47E-01	1.89E-01	2.88E-01	1.16E-01
Pentachloroanisole	6	100	8.08E-04	2.04E-03	1.38E-03	1.37E-03	1.77E-04
Pentachlorobenzene	6	100	1.14E-03	1.14E-02	3.52E-03	4.26E-03	1.50E-03
Trans-Nonachlor	6	83	ND	1.76E-02	9.14E-03	9.56E-03	2.51E-03

Table C-32
Pesticide Data Summary Table for Fish

Sample Location: REACH 8 - HOUSATONIC RIVER - RISING POND							
Sample Year: 1998							
	Yellow Perch Whole Fish Composite						
Constituent	No. of Samples	Frequency of Detection (%)	Range Minimum	- Maximum	Median	Arithmetic Mean	Standard Error
1,2,3,4-Tetrachlorobenzene	5	100	8.00E-04	- 3.24E-03	1.01E-03	1.52E-03	4.48E-04
1,2,4,5-Tetrachlorobenzene	5	80	ND	- 1.57E-03	6.74E-04	7.63E-04	2.38E-04
4,4'-DDD	5	100	7.73E-03	- 1.54E-02	8.62E-03	1.01E-02	1.42E-03
4,4'-DDE	5	100	2.82E-02	- 4.02E-02	3.23E-02	3.38E-02	2.18E-03
4,4'-DDT	5	100	3.72E-04	- 9.80E-04	6.08E-04	6.15E-04	1.09E-04
Aldrin	5	40	ND	- 9.66E-04	9.40E-04	6.98E-04	1.60E-04
Alpha-BHC	5	100	8.10E-05	- 2.38E-04	8.80E-05	1.22E-04	2.96E-05
Alpha-Chlordane	5	20	ND	- 1.05E-03	9.66E-04	9.83E-04	1.90E-05
Beta-BHC	5	60	ND	- 9.80E-04	1.17E-04	4.38E-04	2.18E-04
Chlorpyrifos	5	80	ND	- 9.66E-04	6.90E-05	2.83E-04	1.76E-04
Cis-Nonachlor	5	100	1.49E-02	- 2.42E-02	1.75E-02	1.82E-02	1.57E-03
Delta-BHC	5	20	ND	- 9.80E-04	9.40E-04	5.98E-04	2.23E-04
Dieldrin	5	100	4.60E-04	- 1.39E-03	6.64E-04	8.10E-04	1.59E-04
Endosulfan II	5	100	2.54E-03	- 1.35E-02	4.65E-03	5.87E-03	1.96E-03
Endrin	5	40	ND	- 9.95E-04	9.40E-04	7.25E-04	1.49E-04
Gamma BHC (Lindane)	5	100	2.55E-04	- 5.14E-04	3.45E-04	3.67E-04	4.28E-05
Gamma Chlordane	5	100	4.87E-04	- 8.27E-04	5.64E-04	6.22E-04	6.07E-05
Heptachlor	5	60	ND	- 9.80E-04	2.94E-04	4.64E-04	2.07E-04
Heptachlor Epoxide	5	100	8.24E-04	- 1.61E-03	1.47E-03	1.30E-03	1.44E-04
Hexachlorobenzene	5	20	ND	- 3.90E-04	2.88E-04	3.02E-04	3.24E-05
O,P'-DDD	5	100	2.94E-02	- 4.51E-02	3.30E-02	3.48E-02	2.74E-03
O,P'-DDT	5	100	3.05E-02	- 3.52E-02	3.47E-02	3.34E-02	1.02E-03
Oxychlordane	5	100	1.61E-03	- 2.43E-03	1.84E-03	1.93E-03	1.38E-04
Pentachloroanisole	5	100	4.41E-04	- 6.33E-04	5.03E-04	5.15E-04	3.38E-05
Pentachlorobenzene	5	100	4.14E-04	- 5.17E-03	5.46E-04	1.45E-03	9.31E-04
Toxaphene	5	20	ND	- 1.93E-02	9.83E-03	1.16E-02	1.92E-03
Trans-Nonachlor	5	100	2.10E-03	- 2.74E-03	2.60E-03	2.49E-03	1.18E-04

Notes:

1. EPA collected all samples included in this data summary table. Samples are whole body individuals.
2. For sampling years with only one sample, the datum represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Units are mg/Kg or ppm.
5. ND = Not Detected.
6. NA = Not Available.
7. -- = Not Applicable.

General Electric Company
Housatonic River - Rest of River
RFI Report

Table C-33
Metals Data Summary Table for Fish

Sample Location: REACH 6 - WOODS POND

Sample Year: 1999

Constituent	No. of Samples	Frequency of Detection	Range Minimum	-	Range Maximum	Median	Arithmetic Mean[3]	Standard Error
Largemouth Bass Skin-off Fillet								
Lead	6	33	ND	-	8.75E-02	7.25E-02	7.04E-02	6.66E-03
Mercury	6	100	3.30E-01	-	7.20E-01	4.38E-01	4.61E-01	5.68E-02
Largemouth Bass Offal								
Lead	6	33	ND	-	8.00E-02	3.75E-02	5.00E-02	9.57E-03
Mercury	6	100	1.70E-01	-	4.60E-01	2.40E-01	2.63E-01	4.10E-02
Nickel	6	17	ND	-	1.50E-01	6.00E-02	7.17E-02	1.60E-02

Notes:

1. EPA collected all samples included in this data summary table. Samples are whole body individuals.
2. For sampling years with only one sample, the datum represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Units are mg/Kg or ppm.
5. ND = Not Detected.

Table C-34
PCDD/PCDF Data Summary Table for Frogs

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND							
Sample Year: 1998	**Bullfrog (Whole body)**						
Constituent	**No. of Samples[1]**	**Frequency of Detection (%)**	**Range**			**Median**	**Arithmetic Mean[2,3]**	**Standard Error**
1,2,3,4,6,7,8-HPCDF	1	100	--	-	--	--	3.80E-06	--
1,2,3,7,8-PECDF	1	100	--	-	--	--	1.60E-05	--
2,3,4,7,8-PECDF	1	100	--	-	--	--	1.10E-05	--
OCDD	1	100	--	-	--	--	6.50E-06	--
WHO TEQ(Human/Mammal)	1	--	--	-	--	--	1.09E-05	--
Sample Year: 1999	**Bullfrog (Leg)**						
Constituent	**No. of Samples[1]**	**Frequency of Detection (%)**	**Range**			**Median**	**Arithmetic Mean[2,3]**	**Standard Error**
1,2,3,7,8-PECDF	2	100	3.30E-06	-	4.40E-06	3.85E-06	3.85E-06	5.50E-07
2,3,4,7,8-PECDF	2	100	1.50E-06	-	2.00E-06	1.75E-06	1.75E-06	2.50E-07
2,3,7,8-TCDF	2	100	1.90E-06	-	3.50E-06	2.70E-06	2.70E-06	8.00E-07
WHO TEQ(Human/Mammal)	2	--	4.58E-05	-	4.65E-05	4.62E-05	4.62E-05	3.67E-07
Sample Year: 1999	**Bullfrog (Offal)**						
Constituent	**No. of Samples[1]**	**Frequency of Detection (%)**	**Range**			**Median**	**Arithmetic Mean[2,3]**	**Standard Error**
1,2,3,4,6,7,8-HPCDD	2	50	ND	-	1.50E-06	NA	1.25E-06	2.50E-07
1,2,3,4,7,8,9-HPCDF	2	50	ND	-	1.60E-06	NA	8.83E-06	7.23E-06
1,2,3,4,7,8-HXCDF	2	100	4.70E-06	-	1.34E-05	9.05E-06	9.05E-06	4.35E-06
2,3,7,8-TCDF	2	100	2.00E-05	-	3.45E-05	2.73E-05	2.73E-05	7.25E-06
WHO TEQ(Human/Mammal)	2	--	3.33E-05	-	3.64E-05	3.49E-05	3.49E-05	1.53E-06
Sample Year: 2000	**Wood Frog**						
Constituent	**No. of Samples[1]**	**Frequency of Detection (%)**	**Range**			**Median**	**Arithmetic Mean[2,3]**	**Standard Error**
2,3,7,8-TCDF	3	67	ND	-	2.81E-05	1.27E-05	1.49E-05	7.06E-06
1,2,3,7,8-PECDF	3	33	ND	-	8.50E-06	NA	8.50E-06	NA
1,2,3,4,6,7,8-HPCDF	3	67	ND	-	3.02E-05	1.81E-05	2.04E-05	5.15E-06
WHO TEQ(Human/Mammal)	3	--	4.57E-05	-	9.68E-05	4.95E-05	6.40E-05	1.64E-05

Table C-34
PCDD/PCDF Data Summary Table for Frogs

Sample Year: 2000	Leopard Frog (whole body w/o ovaries)					
Constituent	No. of Samples[1]	Frequency of Detection (%)	Range	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4,6,7,8-HPCDD	3	0	ND - ND	NA	1.25E-05	NA
1,2,3,4,6,7,8-HPCDF	3	0	ND - ND	NA	1.26E-05	NA
1,2,3,4,7,8,9-HPCDF	3	0	ND - ND	NA	1.26E-05	NA
1,2,3,4,7,8-HXCDD	3	0	ND - ND	NA	1.26E-05	NA
1,2,3,4,7,8-HXCDF	3	0	ND - ND	NA	1.26E-05	NA
1,2,3,6,7,8-HXCDD	3	0	ND - ND	NA	1.26E-05	NA
1,2,3,6,7,8-HXCDF	3	0	ND - ND	NA	1.26E-05	NA
1,2,3,7,8,9-HXCDD	3	0	ND - ND	NA	1.26E-05	NA
1,2,3,7,8,9-HXCDF	3	0	ND - ND	NA	1.26E-05	NA
1,2,3,7,8-PECDD	3	0	ND - ND	NA	1.26E-05	NA
1,2,3,7,8-PECDF	3	0	ND - ND	NA	1.26E-05	NA
2,3,4,6,7,8-HXCDF	3	0	ND - ND	NA	1.26E-05	NA
2,3,4,7,8-PECDF	3	0	ND - ND	NA	1.26E-05	NA
2,3,7,8-TCDD	3	0	ND - ND	NA	2.53E-06	NA
2,3,7,8-TCDF	3	0	ND - ND	NA	2.53E-06	NA
OCDD	3	0	ND - ND	NA	2.51E-05	NA
OCDF	3	33	ND - 3.06E-01	NA	2.48E-05	NA
Sample Location: REACH 5C - HOUSATONIC RIVER - ROARING BROOK TO WOODS POND						
Sample Year: 1999						
	Bullfrog (Leg)					
Constituent	No. of Samples[1]	Frequency of Detection (%)	Range	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4,7,8-HXCDF	2	50	ND - 2.00E-07	NA	9.70E-06	9.50E-06
1,2,3,7,8-PECDF	2	50	ND - 8.40E-06	NA	4.50E-06	3.90E-06
2,3,4,7,8-PECDF	2	50	ND - 1.40E-06	NA	9.00E-07	5.00E-07
2,3,7,8-TCDF	2	100	1.70E-06 - 3.70E-06	2.70E-06	2.70E-06	1.00E-06
WHO TEQ(Human/Mammal)	2	--	2.95E-05 - 3.86E-05	3.40E-05	3.40E-05	4.52E-06
	Bullfrog (Offal)					
Constituent	No. of Samples[1]	Frequency of Detection (%)	Range	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,7,8-PECDF	2	50	ND - 4.50E-05	NA	3.02E-05	1.48E-05
1,2,3,4,7,8-HXCDF	2	100	1.60E-06 - 8.10E-06	4.85E-06	4.85E-06	3.25E-06
2,3,7,8-TCDF	2	100	2.38E-05 - 3.22E-05	2.80E-05	2.80E-05	4.20E-06
WHO TEQ(Human/Mammal)	2	--	4.19E-05 - 4.48E-05	4.33E-05	4.33E-05	1.46E-06

Table C-34
PCDD/PCDF Data Summary Table for Frogs

Sample Location: REACH 5D - BACKWATERS UPSTREAM OF WOODS POND

Sample Year: 1999

Constituent	No. of Samples[1]	Frequency of Detection (%)	Range	Median	Arithmetic Mean[2,3]	Standard Error
Bullfrog (Leg)						
1,2,3,7,8-PECDF	2	100	5.90E-06 - 7.50E-06	6.70E-06	6.70E-06	8.00E-07
2,3,7,8-TCDF	2	100	3.00E-06 - 3.50E-06	3.25E-06	3.25E-06	2.50E-07
WHO TEQ(Human/Mammal)	2	--	1.01E-04 - 1.09E-04	1.05E-04	1.05E-04	3.69E-06
Bullfrog (Offal)						
1,2,3,4,7,8-HXCDF	1	100	-- - --	--	6.10E-06	--
2,3,7,8-TCDF	1	100	-- - --	--	2.70E-05	--
WHO TEQ(Human/Mammal)	1	--	-- - --	--	3.79E-05	--

Sample Location: REACH 6 - HOUSATONIC RIVER - WOODS POND

Sample Year: 1999

Constituent	No. of Samples[1]	Frequency of Detection (%)	Range	Median	Arithmetic Mean[2,3]	Standard Error
Bullfrog (Leg)						
1,2,3,4,6,7,8-HPCDF	3	33	ND - 1.80E-06	NA	2.13E-05	1.18E-05
1,2,3,7,8-PECDF	3	33	ND - 6.10E-06	NA	3.06E-05	1.23E-05
2,3,4,7,8-PECDF	3	67	ND - 3.00E-06	2.05E-06	1.57E-05	1.37E-05
2,3,7,8-TCDF	3	67	ND - 4.80E-06	4.60E-06	5.92E-06	1.32E-06
WHO TEQ(Human/Mammal)	3	--	3.86E-05 - 1.07E-04	8.68E-05	7.75E-05	2.03E-05
Bullfrog (Offal)						
1,2,3,4,7,8-HXCDF	3	100	9.00E-06 - 1.46E-05	1.04E-05	1.13E-05	1.68E-06
1,2,3,7,8-PECDF	3	67	ND - 4.98E-05	4.74E-05	3.58E-05	1.17E-05
2,3,7,8-TCDF	3	100	2.67E-05 - 4.12E-05	2.79E-05	3.19E-05	4.65E-06
WHO TEQ(Human/Mammal)	3	--	3.80E-05 - 4.13E-05	3.90E-05	3.94E-05	9.81E-07

Sample Location: REACH 6A - HOUSATONIC RIVER - WOODS POND (WEST HALF)

Sample Year: 1999

Constituent	No. of Samples[1]	Frequency of Detection (%)	Range	Median	Arithmetic Mean[2,3]	Standard Error
Bullfrog (Leg)						
1,2,3,7,8-PECDF	1	100	-- - --	--	1.90E-06	--
WHO TEQ(Human/Mammal)	1	--	-- - --	--	4.81E-05	--
Bullfrog (Offal)						
1,2,3,4,7,8-HXCDF	1	100	-- - --	--	1.70E-06	--
2,3,7,8-TCDF	1	100	-- - --	--	1.40E-05	--
WHO TEQ(Human/Mammal)	1	--	-- - --	--	2.93E-05	--

Table C-34
PCDD/PCDF Data Summary Table for Frogs

Sample Location: REACH 6B - HOUSATONIC RIVER - WOODS POND (EAST HALF)

Sample Year: 1999

Constituent	Bullfrog (Leg) No. of Samples[1]	Frequency of Detection (%)	Range	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,7,8-PECDF	1	100	-- - --	--	6.40E-06	--
WHO TEQ(Human/Mammal)	1	--	-- - --	--	5.84E-05	--
Constituent	**Bullfrog (Offal) No. of Samples[1]**	**Frequency of Detection (%)**	**Range**	**Median**	**Arithmetic Mean[2,3]**	**Standard Error**
1,2,3,4,7,8,9-HPCDF	1	100	-- - --	--	1.10E-06	--
1,2,3,4,7,8-HXCDF	1	100	-- - --	--	1.00E-05	--
2,3,7,8-TCDF	1	100	-- - --	--	2.40E-05	--
WHO TEQ(Human/Mammal)	1	--	-- - --	--	3.46E-05	--

Notes:

1. EPA collected all samples included in this data summary table. Samples are whole body individuals.
2. For sampling years with only one sample, the datum represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Units are mg/Kg or ppm.
5. ND = Not Detected.
6. NA = Not Available.
7. -- = Not Applicable.

Table C-35
Pesticide Data Summary Table for Frogs

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND							
Sample Year: 1998	**Bullfrog Whole Body**						
Constituent	**No. of Samples[1]**	**Frequency of Detection (%)**	**Range Minimum - Maximum**			**Median**	**Arithmetic Mean[2,3]**	**Standard Error**
1,2,3,4-Tetrachlorobenzene	1	100	--	-	--	--	1.00E-02	--
4,4'-DDD	1	100	--	-	--	--	2.10E-03	--
4,4'-DDE	1	100	--	-	--	--	5.70E-03	--
Alpha-BHC	1	100	--	-	--	--	2.30E-05	--
Cis-Nonachlor	1	100	--	-	--	--	6.90E-04	--
Dieldrin	1	100	--	-	--	--	9.40E-04	--
Endosulfan II	1	100	--	-	--	--	1.30E-03	--
Gamma BHC (Lindane)	1	100	--	-	--	--	7.40E-05	--
Gamma Chlordane	1	100	--	-	--	--	3.10E-04	--
Heptachlor epoxide	1	100	--	-	--	--	1.90E-04	--
Hexachlorobenzene	1	100	--	-	--	--	1.50E-03	--
O,P'-DDD	1	100	--	-	--	--	1.00E-02	--
O,P'-DDE	1	100	--	-	--	--	1.60E-03	--
O,P'-DDT	1	100	--	-	--	--	2.60E-02	--
Pentachloroanisole	1	100	--	-	--	--	2.70E-04	--
Pentachlorobenzene	1	100	--	-	--	--	6.10E-03	--
Trans-Nonachlor	1	100	--	-	--	--	5.30E-04	--
Sample Year: 1999	**Bullfrog Leg**						
Constituent	**No. of Samples[1]**	**Frequency of Detection (%)**	**Range Minimum - Maximum**			**Median**	**Arithmetic Mean[2,3]**	**Standard Error**
1,2,3,4-Tetrachlorobenzene	3	100	8.30E-05	-	1.57E-03	2.92E-04	6.47E-04	4.64E-04
1,2,4,5-Tetrachlorobenzene	3	67	ND	-	7.51E-04	7.49E-04	6.06E-04	1.42E-04
4,4'-DDD	3	100	1.71E-04	-	3.73E-04	1.88E-04	2.44E-04	6.47E-05
4,4'-DDE	3	100	4.85E-04	-	1.43E-03	9.66E-04	9.59E-04	2.72E-04
Aldrin	3	67	ND	-	1.94E-03	1.30E-03	1.20E-03	3.83E-04
Chlorpyrifos	3	100	4.16E-04	-	1.22E-03	1.16E-03	9.32E-04	2.59E-04
Cis-Nonachlor	3	33	ND	-	2.90E-05	NA	6.59E-04	3.15E-04
Delta-BHC	3	33	ND	-	7.00E-05	NA	6.73E-04	3.01E-04
Endosulfan II	3	67	ND	-	4.10E-04	3.20E-04	5.34E-04	2.19E-04
Heptachlor	3	33	ND	-	8.00E-06	NA	6.52E-04	3.22E-04
Heptachlor epoxide	3	33	ND	-	5.70E-04	NA	8.40E-04	1.34E-04
Hexachlorobenzene	3	33	ND	-	4.40E-05	NA	6.64E-04	3.10E-04
O,P'-DDD	3	100	4.05E-04	-	6.78E-04	6.71E-04	5.85E-04	8.99E-05
O,P'-DDE	3	100	3.80E-05	-	8.90E-05	6.30E-05	6.33E-05	1.47E-05
O,P'-DDT	3	100	3.05E-03	-	6.66E-03	3.91E-03	4.54E-03	1.09E-03
Oxychlordane	3	100	1.66E-04	-	6.98E-03	3.43E-04	2.50E-03	2.24E-03
Pentachloroanisole	3	67	ND	-	3.40E-05	3.10E-05	2.92E-05	2.52E-06
Pentachlorobenzene	3	67	ND	-	5.44E-04	3.79E-04	3.32E-04	1.06E-04

Table C-35
Pesticide Data Summary Table for Frogs

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND								
Sample Year: 1999	**Bullfrog Offal**							
Constituent	**No. of Samples[1]**	**Frequency of Detection (%)**	**Range Minimum**		**Maximum**	**Median**	**Arithmetic Mean[2,3]**	**Standard Error**
1,2,3,4-Tetrachlorobenzene	3	100	4.79E-04	-	7.86E-03	2.68E-03	3.67E-03	2.19E-03
1,2,4,5-Tetrachlorobenzene	3	100	1.97E-04	-	9.10E-04	3.94E-04	5.00E-04	2.13E-04
4,4'-DDD	3	100	2.13E-03	-	5.84E-03	3.16E-03	3.71E-03	1.11E-03
4,4'-DDE	3	100	7.05E-03	-	1.60E-02	1.24E-02	1.18E-02	2.60E-03
Aldrin	3	67	ND	-	1.86E-04	1.21E-04	3.98E-04	2.80E-04
Alpha-BHC	3	100	2.23E-04	-	3.86E-04	2.74E-04	2.94E-04	4.81E-05
Beta-BHC	3	100	1.37E-04	-	3.87E-04	3.05E-04	2.76E-04	7.36E-05
Chlorpyrifos	3	33	ND	-	1.90E-04	NA	7.12E-04	2.63E-04
Cis-Nonachlor	3	100	1.92E-04	-	7.04E-04	1.98E-04	3.65E-04	1.70E-04
Delta-BHC	3	33	ND	-	2.80E-04	NA	7.52E-04	2.36E-04
Dieldrin	3	100	4.17E-04	-	7.75E-04	6.49E-04	6.14E-04	1.05E-04
Endosulfan II	3	100	1.18E-03	-	2.86E-03	1.65E-03	1.90E-03	4.99E-04
Endrin	3	67	ND	-	1.17E-03	7.10E-04	7.99E-04	2.80E-04
Gamma BHC (Lindane)	3	100	2.20E-05	-	2.07E-04	3.70E-05	8.87E-05	5.93E-05
Heptachlor	3	33	ND	-	1.30E-04	NA	7.02E-04	2.86E-04
Heptachlor epoxide	3	33	ND	-	8.60E-03	NA	3.53E-03	2.55E-03
Hexachlorobenzene	3	100	1.06E-04	-	4.11E-04	3.58E-04	2.92E-04	9.41E-05
Mirex	3	100	4.10E-05	-	1.08E-04	5.00E-05	6.63E-05	2.10E-05
O,P'-DDD	3	100	5.42E-03	-	8.25E-03	7.52E-03	7.06E-03	8.48E-04
O,P'-DDE	3	100	8.00E-06	-	1.41E-04	5.20E-05	6.70E-05	3.91E-05
O,P'-DDT	3	100	2.75E-02	-	4.37E-02	3.30E-02	3.47E-02	4.75E-03
Pentachloroanisole	3	100	2.90E-05	-	2.57E-04	1.01E-04	1.29E-04	6.73E-05
Pentachlorobenzene	3	100	1.73E-03	-	3.85E-03	2.33E-03	2.64E-03	6.31E-04
Trans-Nonachlor	3	100	1.23E-04	-	6.96E-04	2.25E-04	3.48E-04	1.76E-04
Sample Year: 2000	**Wood Frog**							
Constituent	**No. of Samples[1]**	**Frequency of Detection (%)**	**Range Minimum**		**Maximum**	**Median**	**Arithmetic Mean[2,3]**	**Standard Error**
1,2,3,4-Tetrachlorobenzene	3	67	ND	-	2.79E-03	2.16E-03	1.79E-03	7.06E-04
1,2,4,5-Tetrachlorobenzene	3	33	ND	-	6.44E-03	NA	6.44E-03	NA
4,4'-DDD	3	100	1.08E-03	-	2.76E-02	2.68E-03	1.05E-02	8.60E-03
4,4'-DDE	3	100	4.91E-03	-	1.20E-01	2.04E-02	4.85E-02	3.62E-02
4,4'-DDT	3	100	1.19E-03	-	3.09E-03	3.08E-03	2.45E-03	6.33E-04
Alpha-BHC	3	33	ND	-	2.78E-04	NA	2.78E-04	NA
Beta-BHC	3	100	7.43E-04	-	2.01E-03	1.30E-03	1.35E-03	3.67E-04
Cis-Nonachlor	3	67	ND	-	2.78E-03	1.81E-03	2.08E-03	3.50E-04
Endosulfan II	3	67	ND	-	5.22E-03	4.53E-03	3.85E-03	1.04E-03
Hexachlorobenzene	3	100	1.04E-04	-	4.13E-04	2.30E-04	2.49E-04	8.97E-05
O,P'-DDD	3	100	1.22E-03	-	1.58E-02	1.05E-02	9.16E-03	4.26E-03
O,P'-DDE	3	33	ND	-	6.05E-04	NA	6.05E-04	NA
O,P'-DDT	3	100	1.14E-02	-	4.42E-02	2.18E-02	2.58E-02	9.66E-03
Pentachloroanisole	3	100	4.03E-04	-	4.64E-04	4.17E-04	4.28E-04	1.84E-05
Pentachlorobenzene	3	100	7.69E-04	-	1.79E-03	1.03E-03	1.20E-03	3.06E-04

Table C-35
Pesticide Data Summary Table for Frogs

Sample Year: 2000	Leopard Frog Whole body w/o ovary						
Constituent	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	3	33	ND	2.65E-03	NA	1.49E-03	NA
1,2,4,5-Tetrachlorobenzene	3	33	ND	5.04E-03	NA	2.26E-03	NA
4,4'-DDD	3	33	ND	1.12E-03	NA	1.02E-03	NA
4,4'-DDE	3	100	9.26E-04	6.58E-03	1.26E-03	2.92E-03	0.0018
4,4'-DDT	3	33	ND	5.72E-03	NA	2.95E-03	NA
Aldrin	3	0	ND	ND	NA	1.41E-03	NA
Alpha-BHC	3	67	ND	1.99E-03	1.45E-04	7.45E-04	0.0006
Alpha-Chlordane	3	0	ND	ND	NA	1.41E-03	NA
Beta-BHC	3	67	ND	1.99E-03	1.51E-03	1.20E-03	0.0006
Chlorpyrifos	3	0	ND	ND	NA	1.41E-03	NA
Cis-Nonachlor	3	0	ND	ND	NA	1.41E-03	NA
Delta-BHC	3	0	ND	ND	NA	1.41E-03	NA
Dieldrin	3	0	ND	ND	NA	1.41E-03	NA
Endosulfan II	3	0	ND	ND	NA	1.41E-03	NA
Endrin	3	0	ND	ND	NA	1.41E-03	NA
Gamma BHC (Lindane)	3	0	ND	ND	NA	1.41E-03	NA
Gamma-chlordane	3	0	ND	ND	NA	1.41E-03	NA
Heptachlor	3	0	ND	ND	NA	1.41E-03	NA
Heptachloepoxide	3	33	ND	1.99E-03	NA	1.14E-03	NA
Hexachlorobenzene	3	67	ND	1.99E-03	7.30E-05	7.06E-04	0.0006
Mirex	3	0	ND	ND	NA	1.41E-03	NA
O,P'-DDD	3	33	ND	1.99E-03	NA	1.32E-03	NA
O,P'-DDE	3	0	ND	ND	NA	1.32E-03	NA
O,P'-DDT	3	67	ND	4.07E-03	1.12E-03	2.00E-03	0.001
Oxychlordane		33	ND	3.26E-03	NA	1.54E-03	NA
Pentachloroanisole	3	67	ND	1.99E-03	3.98E-04	9.18E-04	0.0005
Pentachlorobenzene	3	67	ND	1.53E-03	1.12E-03	9.88E-04	0.0004
Toxaphene		0	ND	ND	NA	1.41E-02	NA
Trans_nonachlor	3	0	ND	ND	NA	1.41E-03	NA

Table C-35
Pesticide Data Summary Table for Frogs

Sample Location: REACH 5C - HOUSATONIC RIVER - ROARING BROOK TO WOODS POND

Sample Year: 1999

Constituent	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
Bullfrog Leg							
1,2,3,4-Tetrachlorobenzene	6	100	1.78E-04	1.25E-03	7.43E-04	7.61E-04	1.65E-04
1,2,4,5-Tetrachlorobenzene	6	67	ND	9.94E-04	9.20E-04	6.46E-04	1.56E-04
4,4'-DDD	6	100	8.50E-05	7.17E-04	1.45E-04	2.52E-04	9.98E-05
4,4'-DDE	6	100	5.14E-04	1.82E-03	7.71E-04	9.78E-04	2.16E-04
Aldrin	6	67	ND	2.50E-03	1.49E-03	1.34E-03	2.72E-04
Beta-BHC	6	17	ND	1.50E-05	NA	8.25E-04	1.62E-04
Chlorpyrifos	6	100	4.51E-04	1.11E-03	9.09E-04	8.02E-04	1.12E-04
Delta-BHC	6	50	ND	1.05E-04	6.10E-05	5.31E-04	2.05E-04
Dieldrin	6	33	ND	2.10E-05	1.80E-05	6.63E-04	2.04E-04
Endosulfan II	6	67	ND	3.70E-04	2.69E-04	5.08E-04	1.57E-04
Gamma BHC (Lindane)	6	17	ND	5.90E-05	NA	8.32E-04	1.55E-04
Heptachlor	6	17	ND	8.00E-06	NA	8.24E-04	1.63E-04
Hexachlorobenzene	6	33	ND	7.90E-05	6.90E-05	6.80E-04	1.93E-04
O,P'-DDD	6	100	2.99E-04	2.07E-03	6.94E-04	9.18E-04	2.65E-04
O,P'-DDE	6	50	ND	3.21E-04	2.23E-04	6.19E-04	1.67E-04
O,P'-DDT	6	100	2.58E-03	8.52E-03	3.68E-03	4.40E-03	8.90E-04
Oxychlordane	6	83	ND	4.78E-04	2.73E-04	3.86E-04	1.31E-04
Pentachloroanisole	6	67	ND	1.46E-04	3.30E-05	5.11E-05	1.92E-05
Pentachlorobenzene	6	67	ND	5.76E-04	2.51E-04	3.02E-04	7.06E-05
Bullfrog Offal							
1,2,3,4-Tetrachlorobenzene	6	100	2.37E-04	6.68E-03	5.80E-03	4.61E-03	9.94E-04
1,2,4,5-Tetrachlorobenzene	6	100	2.62E-04	1.64E-03	1.34E-03	1.08E-03	2.44E-04
4,4'-DDD	6	100	2.08E-03	7.32E-03	3.12E-03	3.84E-03	7.81E-04
4,4'-DDE	6	100	6.38E-03	1.62E-02	1.04E-02	1.12E-02	1.47E-03
Aldrin	6	83	ND	2.80E-04	8.70E-05	2.67E-04	1.31E-04
Alpha-BHC	6	100	3.40E-05	2.54E-04	1.55E-04	1.54E-04	3.37E-05
Beta-BHC	6	83	ND	1.22E-03	3.65E-04	6.57E-04	1.79E-04
Chlorpyrifos	6	50	ND	5.39E-04	3.55E-04	6.85E-04	1.37E-04
Cis-Nonachlor	6	100	8.40E-05	4.32E-04	1.88E-04	2.42E-04	5.51E-05
Delta-BHC	6	50	ND	8.00E-05	6.90E-05	5.24E-04	2.04E-04
Dieldrin	6	100	1.24E-04	7.32E-04	5.04E-04	4.80E-04	9.55E-05
Endosulfan II	6	100	9.20E-04	4.35E-03	2.14E-03	2.31E-03	4.67E-04
Endrin	6	67	ND	8.52E-04	6.43E-04	6.92E-04	1.26E-04
Gamma BHC (Lindane)	6	83	ND	9.00E-05	4.30E-05	1.98E-04	1.39E-04
Heptachlor	6	17	ND	5.30E-05	NA	8.11E-04	1.52E-04
Hexachlorobenzene	6	100	1.00E-04	5.23E-04	3.83E-04	3.28E-04	7.46E-05
Mirex	6	83	ND	1.48E-04	7.30E-05	2.28E-04	1.34E-04
O,P'-DDD	6	100	2.79E-03	1.67E-02	8.61E-03	9.53E-03	1.97E-03
O,P'-DDE	6	83	ND	8.50E-05	8.40E-05	2.14E-04	1.40E-04
O,P'-DDT	6	100	2.33E-02	5.72E-02	3.17E-02	3.41E-02	4.87E-03
Pentachloroanisole	6	100	1.00E-04	1.39E-03	1.63E-04	3.65E-04	2.06E-04
Pentachlorobenzene	6	100	1.21E-03	4.57E-03	3.62E-03	3.35E-03	5.11E-04
Trans-Nonachlor	6	83	ND	2.83E-04	1.52E-04	2.87E-04	1.24E-04

Table C-35
Pesticide Data Summary Table for Frogs

Sample Location: REACH 5D - HOUSATONIC RIVER - BACKWATERS UPSTREAM OF WOODS POND

Sample Year: 1999

Constituent	Bullfrog Leg: No. of Samples[1]	Frequency of Detection (%)	Range: Minimum - Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	2	100	5.57E-04 - 5.97E-04	5.77E-04	5.77E-04	2.00E-05
4,4'-DDD	2	100	1.33E-04 - 1.38E-04	1.36E-04	1.36E-04	2.50E-06
4,4'-DDE	2	100	6.75E-04 - 7.66E-04	7.21E-04	7.21E-04	4.55E-05
Chlorpyrifos	2	100	5.64E-04 - 6.25E-04	5.95E-04	5.95E-04	3.05E-05
Delta-BHC	2	100	5.60E-05 - 6.20E-05	5.90E-05	5.90E-05	3.00E-06
Hexachlorobenzene	2	100	1.09E-04 - 1.15E-04	1.12E-04	1.12E-04	3.00E-06
O,P'-DDD	2	100	1.27E-03 - 1.37E-03	1.32E-03	1.32E-03	5.05E-05
O,P'-DDE	2	100	7.10E-05 - 9.70E-05	8.40E-05	8.40E-05	1.30E-05
O,P'-DDT	2	100	3.12E-03 - 3.34E-03	3.23E-03	3.23E-03	1.07E-04
Oxychlordane	2	100	1.85E-04 - 2.18E-04	2.02E-04	2.02E-04	1.65E-05

Constituent	Bullfrog Offal: No. of Samples[1]	Frequency of Detection (%)	Range: Minimum - Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	1	100	-- - --	--	4.20E-03	--
1,2,4,5-Tetrachlorobenzene	1	100	-- - --	--	1.30E-03	--
4,4'-DDD	1	100	-- - --	--	2.00E-03	--
4,4'-DDE	1	100	-- - --	--	7.00E-03	--
4,4'-DDT	1	100	-- - --	--	2.70E-05	--
Alpha-BHC	1	100	-- - --	--	6.90E-05	--
Beta-BHC	1	100	-- - --	--	3.60E-04	--
Chlorpyrifos	1	100	-- - --	--	1.60E-04	--
Cis-Nonachlor	1	100	-- - --	--	4.60E-04	--
Delta-BHC	1	100	-- - --	--	5.80E-05	--
Dieldrin	1	100	-- - --	--	7.60E-03	--
Endosulfan II	1	100	-- - --	--	3.20E-03	--
Endrin	1	100	-- - --	--	4.20E-04	--
Heptachlor	1	100	-- - --	--	1.20E-04	--
Hexachlorobenzene	1	100	-- - --	--	6.20E-04	--
O,P'-DDD	1	100	-- - --	--	1.10E-02	--
O,P'-DDE	1	100	-- - --	--	6.80E-05	--
O,P'-DDT	1	100	-- - --	--	2.80E-02	--
Oxychlordane	1	100	-- - --	--	2.10E-03	--
Pentachloroanisole	1	100	-- - --	--	1.60E-04	--
Pentachlorobenzene	1	100	-- - --	--	4.50E-03	--

Table C-35
Pesticide Data Summary Table for Frogs

Sample Location: REACH 6 - HOUSATONIC RIVER - WOODS POND

Sample Year: 1999

Constituent	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
Bullfrog Leg							
1,2,3,4-Tetrachlorobenzene	6	100	2.38E-04	5.81E-04	4.50E-04	4.44E-04	4.86E-05
1,2,4,5-Tetrachlorobenzene	6	17	ND	1.50E-03	NA	4.38E-04	2.14E-04
4,4'-DDD	6	100	8.40E-05	3.27E-04	2.31E-04	2.17E-04	4.22E-05
4,4'-DDE	6	100	3.22E-04	1.82E-03	8.23E-04	9.76E-04	2.37E-04
Beta-BHC	6	17	ND	3.80E-05	NA	8.05E-04	1.53E-04
Chlorpyrifos	6	100	3.68E-04	5.24E-04	4.46E-04	4.46E-04	2.67E-05
Delta-BHC	6	100	3.40E-05	8.10E-05	5.40E-05	5.72E-05	6.61E-06
Dieldrin	6	67	ND	4.80E-05	2.20E-05	3.41E-04	1.99E-04
Endosulfan II	6	100	1.25E-04	3.72E-04	2.32E-04	2.38E-04	3.42E-05
Heptachlor	6	50	ND	1.30E-05	1.10E-05	4.86E-04	2.13E-04
Hexachlorobenzene	6	100	3.80E-05	1.58E-04	5.90E-05	7.37E-05	1.80E-05
O,P'-DDD	6	100	5.70E-04	1.70E-03	9.69E-04	1.02E-03	1.62E-04
O,P'-DDE	6	33	ND	2.15E-04	1.33E-04	6.87E-04	1.76E-04
O,P'-DDT	6	100	1.46E-03	4.59E-03	2.55E-03	2.75E-03	4.69E-04
Oxychlordane	6	100	1.13E-04	2.28E-03	2.64E-04	6.67E-04	3.41E-04
Pentachloroanisole	6	50	ND	8.88E-04	3.14E-04	2.27E-04	1.40E-04
Pentachlorobenzene	6	17	ND	9.50E-04	NA	4.53E-04	1.04E-04
Bullfrog Offal							
1,2,3,4-Tetrachlorobenzene	6	100	1.37E-03	6.07E-03	3.20E-03	3.35E-03	7.00E-04
1,2,4,5-Tetrachlorobenzene	6	100	1.05E-03	1.80E-03	1.48E-03	1.43E-03	1.07E-04
4,4'-DDD	6	100	1.10E-03	3.37E-03	2.30E-03	2.33E-03	3.73E-04
4,4'-DDE	6	100	4.94E-03	1.33E-02	7.72E-03	8.52E-03	1.26E-03
4,4'-DDT	6	17	ND	5.20E-04	NA	8.77E-04	7.30E-05
Aldrin	6	100	3.60E-05	1.78E-03	9.70E-05	3.91E-04	2.79E-04
Alpha-BHC	6	67	ND	3.83E-04	2.94E-04	5.25E-04	1.40E-04
Beta-BHC	6	33	ND	1.15E-03	9.13E-04	9.28E-04	6.14E-05
Chlorpyrifos	6	100	1.59E-04	1.17E-03	3.86E-04	5.05E-04	1.69E-04
Cis-Nonachlor	6	100	6.80E-05	4.27E-04	1.44E-04	1.67E-04	5.43E-05
Delta-BHC	6	50	ND	3.58E-04	1.94E-04	5.82E-04	1.55E-04
Dieldrin	6	83	ND	6.22E-04	2.45E-04	4.13E-04	1.27E-04
Endosulfan II	6	100	9.48E-04	2.32E-03	1.60E-03	1.70E-03	2.14E-04
Endrin	6	50	ND	8.21E-04	6.12E-04	7.59E-04	1.10E-04
Heptachlor	6	33	ND	5.81E-04	4.05E-04	7.59E-04	1.21E-04
Heptachlor epoxide	6	17	ND	7.00E-05	NA	7.97E-04	1.46E-04
Hexachlorobenzene	6	83	ND	7.60E-04	4.21E-04	5.63E-04	1.03E-04
Mirex	6	33	ND	2.88E-04	1.58E-04	6.86E-04	1.70E-04
O,P'-DDD	6	100	3.79E-03	1.31E-02	1.03E-02	9.67E-03	1.36E-03
O,P'-DDE	6	100	3.00E-05	7.43E-04	1.37E-04	2.64E-04	1.09E-04
O,P'-DDT	6	100	1.24E-02	3.01E-02	2.81E-02	2.52E-02	2.74E-03
Oxychlordane	6	33	ND	1.60E-02	9.26E-03	3.71E-03	2.47E-03
Pentachloroanisole	6	100	8.90E-05	4.21E-03	2.38E-04	1.14E-03	6.79E-04
Pentachlorobenzene	6	100	2.15E-03	4.66E-03	3.57E-03	3.41E-03	4.49E-04
Trans-Nonachlor	6	17	ND	2.60E-04	NA	8.29E-04	1.14E-04

Table C-35
Pesticide Data Summary Table for Frogs

Sample Location: REACH 6A - HOUSATONIC RIVER - WOODS POND (WEST HALF)

Sample Year: 1999

Constituent	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
Bullfrog Leg							
1,2,3,4-Tetrachlorobenzene	3	100	2.18E-04	2.83E-04	2.60E-04	2.54E-04	1.90E-05
4,4'-DDD	3	100	6.30E-05	4.27E-04	1.40E-04	2.10E-04	1.11E-04
4,4'-DDE	3	100	2.87E-04	1.70E-03	7.06E-04	8.98E-04	4.19E-04
Beta-BHC	3	33	ND	2.50E-05	NA	6.70E-04	3.22E-04
Chlorpyrifos	3	100	3.27E-04	5.38E-04	4.25E-04	4.30E-04	6.10E-05
Delta-BHC	3	100	2.30E-05	1.04E-04	2.90E-05	5.20E-05	2.61E-05
Dieldrin	3	33	ND	8.00E-06	NA	6.62E-04	3.27E-04
Endosulfan II	3	100	1.51E-04	2.08E-04	1.76E-04	1.78E-04	1.65E-05
Heptachlor	3	33	ND	1.30E-05	NA	6.64E-04	3.25E-04
Hexachlorobenzene	3	100	3.20E-05	6.50E-05	5.70E-05	5.13E-05	9.94E-06
O,P'-DDD	3	100	3.39E-04	1.02E-03	3.50E-04	5.69E-04	2.24E-04
O,P'-DDE	3	33	ND	6.00E-05	NA	6.79E-04	3.10E-04
O,P'-DDT	3	100	1.70E-03	2.84E-03	2.55E-03	2.36E-03	3.42E-04
Oxychlordane	3	100	1.37E-04	5.37E-04	2.77E-04	3.17E-04	1.17E-04
Bullfrog Offal							
1,2,3,4-Tetrachlorobenzene	3	100	1.14E-03	2.76E-03	1.79E-03	1.89E-03	4.71E-04
1,2,4,5-Tetrachlorobenzene	3	100	3.27E-04	1.40E-03	5.15E-04	7.48E-04	3.32E-04
4,4'-DDD	3	100	8.73E-04	4.30E-03	1.94E-03	2.37E-03	1.01E-03
4,4'-DDE	3	100	2.70E-03	1.46E-02	1.03E-02	9.18E-03	3.47E-03
Aldrin	3	67	ND	1.87E-04	1.51E-04	4.10E-04	2.60E-04
Alpha-BHC	3	67	ND	1.67E-04	1.18E-04	4.06E-04	2.90E-04
Beta-BHC	3	67	ND	4.69E-04	4.24E-04	6.10E-04	1.88E-04
Chlorpyrifos	3	100	2.05E-04	1.04E-03	2.19E-04	4.87E-04	2.75E-04
Cis-Nonachlor	3	100	7.20E-05	2.83E-04	1.07E-04	1.54E-04	6.53E-05
Delta-BHC	3	67	ND	1.41E-04	9.95E-05	3.76E-04	2.78E-04
Dieldrin	3	67	ND	1.20E-04	1.15E-04	4.04E-04	2.89E-04
Endosulfan II	3	100	6.45E-04	3.09E-03	1.48E-03	1.74E-03	7.19E-04
Endrin	3	67	ND	1.29E-04	8.55E-05	3.84E-04	3.00E-04
Gamma BHC (Lindane)	3	33	ND	1.60E-05	NA	6.43E-04	3.14E-04
Hexachlorobenzene	3	100	3.16E-04	3.90E-04	3.47E-04	3.51E-04	2.15E-05
Mirex	3	33	ND	3.60E-05	NA	6.45E-04	3.05E-04
O,P'-DDD	3	100	3.12E-03	1.19E-02	3.71E-03	6.24E-03	2.83E-03
O,P'-DDE	3	100	8.00E-05	6.04E-04	1.90E-04	2.91E-04	1.60E-04
O,P'-DDT	3	100	1.71E-02	3.32E-02	2.46E-02	2.50E-02	4.65E-03
Oxychlordane	3	33	ND	2.20E-03	NA	1.35E-03	4.25E-04
Pentachloroanisole	3	100	9.30E-05	2.35E-04	1.38E-04	1.55E-04	4.19E-05
Pentachlorobenzene	3	100	1.87E-03	2.62E-03	2.32E-03	2.27E-03	2.18E-04
Trans-Nonachlor	3	33	ND	3.10E-04	NA	7.19E-04	2.03E-04

Table C-35
Pesticide Data Summary Table for Frogs

Sample Location: REACH 6B - HOUSATONIC RIVER - WOODS POND (EAST HALF)

Sample Year: 1999

Constituent	Bullfrog Leg: No. of Samples[1]	Frequency of Detection (%)	Range Minimum - Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	1	100	-- - --	--	5.20E-04	--
4,4'-DDD	1	100	-- - --	--	2.20E-04	--
4,4'-DDE	1	100	-- - --	--	9.30E-04	--
Chlorpyrifos	1	100	-- - --	--	4.50E-04	--
Delta-BHC	1	100	-- - --	--	4.70E-05	--
Dieldrin	1	100	-- - --	--	3.10E-05	--
Endosulfan II	1	100	-- - --	--	2.60E-04	--
Hexachlorobenzene	1	100	-- - --	--	4.40E-05	--
O,P'-DDD	1	100	-- - --	--	6.40E-04	--
O,P'-DDT	1	100	-- - --	--	2.40E-03	--
Oxychlordane	1	100	-- - --	--	2.10E-04	--
Pentachloroanisole	1	100	-- - --	--	2.10E-04	--

Constituent	Bullfrog Offal: No. of Samples[1]	Frequency of Detection (%)	Range Minimum - Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	1	100	-- - --	--	5.10E-03	--
1,2,4,5-Tetrachlorobenzene	1	100	-- - --	--	1.60E-03	--
4,4'-DDD	1	100	-- - --	--	3.40E-03	--
4,4'-DDE	1	100	-- - --	--	1.10E-02	--
Aldrin	1	100	-- - --	--	9.10E-05	--
Alpha-BHC	1	100	-- - --	--	2.30E-04	--
Beta-BHC	1	100	-- - --	--	4.50E-04	--
Chlorpyrifos	1	100	-- - --	--	3.80E-04	--
Cis-Nonachlor	1	100	-- - --	--	9.70E-05	--
Dieldrin	1	100	-- - --	--	2.30E-04	--
Endosulfan II	1	100	-- - --	--	1.70E-03	--
Endrin	1	100	-- - --	--	2.30E-04	--
Hexachlorobenzene	1	100	-- - --	--	4.40E-04	--
Mirex	1	100	-- - --	--	2.00E-05	--
O,P'-DDD	1	100	-- - --	--	7.50E-03	--
O,P'-DDE	1	100	-- - --	--	1.60E-04	--
O,P'-DDT	1	100	-- - --	--	2.60E-02	--
Pentachloroanisole	1	100	-- - --	--	1.90E-03	--
Pentachlorobenzene	1	100	-- - --	--	3.60E-03	--

Notes:

1. EPA collected all samples included in this data summary table.
2. For sampling years with only one sample, the datum represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Units are mg/Kg or ppm.
5. ND = Not Detected.
6. NA = Not Available.
7. -- = Not Applicable.

General Electric Company
Housatonic River - Rest of River
RFI Report

Table C-36
Metals Data Summary Table for Frogs

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 2000

Constituent	Wood Frog							
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	-	Maximum	Median	Arithmetic Mean[2,3]	Standard Error
Aluminum	3	100	18.5	-	116	92.4	75.8	29.48
Arsenic	3	100	0.160	-	0.270	0.190	0.207	0.033
Barium	3	100	24.5	-	31.1	27.0	27.6	1.93
Cadmium	3	100	0.08	-	0.32	0.130	0.177	0.073
Chromium	3	100	7.40	-	21.5	8.21	12.4	4.56
Copper	3	100	3.07	-	6.22	5.52	4.94	0.95
Iron	3	100	141	-	299	283	241	49.95
Lead	3	100	0.980	-	1.28	1.04	1.10	0.092
Magnesium	3	100	1137	-	1231	1171	1180	27.25
Manganese	3	100	19.3	-	44.5	26.2	30.0	7.51
Mercury	3	100	0.25	-	0.650	0.270	0.390	0.13
Nickel	3	33	ND	-	1.65	NA	1.65	NA
Selenium	3	100	1.61	-	1.65	1.63	1.63	0.012
Strotinum	3	100	8.43	-	12.4	11.6	10.8	1.21
Vanadium	3	100	0.300	-	0.840	0.310	0.483	0.178
Zinc	3	100	92.7	-	116	95.0	101	7.44
	Leopard Frog (whole body w/o ovary)							
Constituent	**No. of Samples[1]**	**Frequency of Detection (%)**	**Range Minimum**	**-**	**Maximum**	**Median**	**Arithmetic Mean[2,3]**	**Standard Error**
Aluminum	3	100	10.3	-	21	11.4	14.1	3.32
Arsenic	3	100	0.200	-	0.420	0.240	0.287	0.068
Barium	3	100	5.1	-	12.3	8.8	8.7	2.08
Beryllium	3	0	ND	-	ND	NA	0.1	NA
Cadmium	3	100	0.19	-	0.43	0.260	0.293	0.071
Chromium	3	100	3.70	-	7.8	6.41	6.0	1.21
Copper	3	100	3.40	-	18.46	17.10	12.99	4.81
Iron	3	100	85	-	164	112	120	22.96
Lead	3	100	0.290	-	0.75	0.55	0.53	0.133
Magnesium	3	100	1145	-	1465	1315	1308	92.35
Manganese	3	100	6.4	-	18.2	17.3	14.0	3.77
Mercury	3	67	ND	-	0.230	0.220	0.172	0.05
Nickel	3	0	ND	-	ND	NA	0.20	NA
Selenium	3	100	0.85	-	1.05	0.88	0.93	0.062
Strotinum	3	100	4.87	-	14.5	12.3	10.6	2.91
Vanadium	3	100	0.210	-	1.150	1.010	0.790	0.293
Zinc	3	100	57.6	-	110	69.4	79	15.98

Notes:

1. EPA collected all samples included in this data summary table. Samples are whole body individuals.
2. For sampling years with only one sample, the datum represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Units are mg/Kg or ppm.
5. ND = Not Detected.
6. NA = Not Available.

Table C-37
Polycyclic Aromatic Hydrocarbon (PAH) Data Summary Table for Frogs

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 2000

	Wood Frog							
Constituent	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	-	Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,6,7-Trimethylnaphthalene	3	33	ND	-	9.00E-03	--	9.00E-03	--
1-Methylnaphthalene	3	67	ND	-	2.88E-02	3.90E-03	1.12E-02	8.87E-03
1-Methylphenanthrene	3	67	ND	-	3.03E-02	2.90E-03	1.12E-02	9.59E-03
2,6-Dimethylnaphthalene	3	33	ND	-	1.96E-02	--	1.96E-02	--
2-Methylnaphthalene	3	67	ND	-	4.65E-02	5.20E-03	1.77E-02	1.45E-02
Acenaphthene	3	33	ND	-	1.65E-02	--	1.65E-02	--
Acenapthylene	3	33	ND	-	1.13E-02	--	1.13E-02	--
Anthracene	3	33	ND	-	1.57E-02	--	1.57E-02	--
Benzo(a)anthracene	3	33	ND	-	5.20E-03	--	5.20E-03	--
Benzo(a)pyrene	3	67	ND	-	1.44E-02	5.30E-03	6.85E-03	3.99E-03
Benzo(e)pyrene	3	100	9.00E-04	-	4.80E-03	3.00E-03	2.90E-03	1.13E-03
Biphenyl (diphenyl)	3	33	ND	-	3.52E-02	--	3.52E-02	--
C1-Chrysenes	3	100	9.00E-04	-	1.04E-02	1.60E-03	4.30E-03	3.06E-03
C1-Dibenzothiophenes	3	67	ND	-	7.70E-03	1.10E-03	2.97E-03	2.38E-03
C1-Fluorenes	3	33	ND	-	4.05E-02	--	4.05E-02	--
C1-Naphthalenes	3	67	ND	-	7.53E-02	9.10E-03	2.88E-02	2.33E-02
C1-Phenanthrenes & Anthracenes	3	33	ND	-	1.53E-02	--	1.53E-02	--
C2-Chrysenes	3	33	ND	-	1.20E-03	--	1.20E-03	--
C2-Dibenzothiophenes	3	33	ND	-	8.00E-04	--	8.00E-04	--
C2-Fluorenes	3	33	ND	-	8.85E-02	--	8.85E-02	--
C2-Naphthalenes	3	33	ND	-	5.68E-02	--	5.68E-02	--
C2-Phenanthrenes & Anthracenes	3	33	ND	-	4.60E-03	--	4.60E-03	--
C3-Dibenzothiophenes	3	33	ND	-	1.20E-03	--	1.20E-03	--
C3-Fluorenes	3	33	ND	-	2.20E-03	--	2.20E-03	--
C3-Naphthalenes	3	100	1.50E-03	-	2.99E-02	6.80E-03	1.27E-02	8.72E-03
C3-Phenanthrenes & Anthracenes	3	67	ND	-	1.80E-03	1.00E-03	9.50E-04	5.06E-04
C4-Chrysenes	3	33	ND	-	1.60E-03	--	1.60E-03	--
C4-Naphthalenes	3	33	ND	-	9.00E-04	--	9.00E-04	--
C4-Phenanthrenes & Anthracenes	3	33	ND	-	1.20E-03	--	1.20E-03	--
Dibenzothiophene	3	33	ND	-	4.50E-03	--	4.50E-03	--
Fluoranthene	3	33	ND	-	8.10E-03	--	8.10E-03	--
Fluorene	3	33	ND	-	3.20E-02	--	3.20E-02	--
Naphthalene	3	33	ND	-	9.82E-02	--	9.82E-02	--
Perylene	3	33	ND	-	1.47E-02	--	1.47E-02	--
Phenanthrene	3	33	ND	-	3.46E-02	--	3.46E-02	--
Pyrene	3	33	ND	-	7.90E-03	--	7.90E-03	--
Total PAH	3	67	ND	-	2.28E-01	2.13E-02	8.44E-02	7.19E-02
Total PAH (High MW)	3	67	ND	-	2.08E-01	8.10E-03	7.34E-02	6.74E-02
Total PAH (Low MW)	3	67	ND	-	1.96E-02	1.32E-02	1.13E-02	5.44E-03

Table C-37
Polycyclic Aromatic Hydrocarbon (PAH) Data Summary Table for Frogs

Constituent	Leopard Frog (whole body w/o ovary)							
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	-	Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,6,7-Trimethylnaphthalene	3	0	ND	-	ND	--	6.17E-04	--
1-Methylnaphthalene	3	0	ND	-	ND	--	1.52E-03	--
1-Methylphenanthrene	3	33	ND	-	9.50E-04	--	5.83E-04	--
2,6 Dimethylnaphthalene	3	0	ND	-	ND	--	9.33E-04	--
2-Methylnaphthalene	3	0	ND	-	ND	--	2.02E-03	--
Acenaphthene	3	0	ND	-	ND	--	7.83E-04	--
Acenapthylene	3	0	ND	-	ND	--	4.17E-04	--
Anthracene	3	0	ND	-	ND	--	4.17E-04	--
Benzo(A)Anthracene	3	0	ND	-	ND	--	3.83E-04	--
Benzo(A)Pyrene	3	0	ND	-	ND	--	4.17E-04	--
Benzo(B)Fluoranthene	3	0	ND	-	ND	--	4.17E-04	--
Benzo(E)Pyrene	3	0	ND	-	ND	--	2.50E-04	--
Benzo(Ghi)Perylene	3	0	ND	-	ND	--	3.83E-04	--
Benzo(K)Fluoranthene	3	0	ND	-	ND	--	2.00E-04	--
Biphenyl (Diphenyl)	3	0	ND	-	ND	--	2.38E-03	--
C1-Chrysenes	3	0	ND	-	ND	--	4.50E-03	--
C1-Dibenzothiophenes	3	33	ND	-	2.00E-03	--	8.50E-04	--
C1-Fluoranthenes & Pyrenes	3	0	ND	-	ND	--	1.33E-04	--
C1-Fluorenes	3	0	ND	-	ND	--	1.98E-03	--
C1-Naphthalenes	3	0	ND	-	ND	--	3.53E-03	--
C1-Phenanthrenes & Anthracenes	3	0	ND	-	ND	--	2.08E-03	--
C2-Chrysenes	3	0	ND	-	ND	--	1.67E-03	--
C2-Dibenzothiophenes	3	0	ND	-	ND	--	1.37E-03	--
C2-Fluorenes	3	0	ND	-	ND	--	5.00E-04	--
C2-Naphthalenes	3	0	ND	-	ND	--	2.47E-03	--
C2-Phenanthrenes & Anthracenes	3	0	ND	-	ND	--	1.45E-03	--
C3-Chrysenes	3	0	ND	-	ND	--	1.43E-03	--
C3-Dibenzothiophenes	3	0	ND	-	ND	--	1.92E-03	--
C3-Fluorenes	3	0	ND	-	ND	--	7.67E-04	--
C3-Naphthalenes	3	100	6.00E-04	-	1.95E-03	1.10E-03	1.22E-03	3.94E-04
C3-Phenanthrenes & Anthracenes	3	0	ND	-	ND	--	2.52E-03	--
C4-Chrysenes	3	0	ND	-	ND	--	3.20E-03	--
C4-Naphthalenes	3	0	ND	-	ND	--	1.77E-03	--
C4-Phenanthrenes & Anthracenes	3	0	ND	-	ND	--	1.00E-04	--
Chrysene	3	0	ND	-	ND	--	5.67E-04	--
Dibenzo(A,H)Anthracene	3	0	ND	-	ND	--	3.17E-04	--
Dibenzothiophene	3	0	ND	-	ND	--	3.00E-04	--
Fluoranthene	3	0	ND	-	ND	--	7.00E-04	--
Fluorene	3	0	ND	-	ND	--	1.42E-03	--
Indeno(1,2,3-C,D)Pyrene	3	0	ND	-	ND	--	3.50E-04	--
Naphthalene	3	0	ND	-	ND	--	6.67E-03	--
Perylene	3	0	ND	-	ND	--	4.83E-04	--
Phenanthrene	3	0	ND	-	ND	--	2.07E-03	--
Pyrene	3	0	ND	-	ND	--	8.50E-04	--
Total Pah	3	0	ND	-	ND	--	6.67E-03	--
Total Pah (High Mw)	3	0	ND	-	ND	--	6.67E-03	--
Total Pah (Low Mw)	3	0	ND	-	ND	--	9.33E-04	--

Notes:

1. EPA collected all samples included in this data summary table. Samples are whole body individuals.
2. For sampling years with only one sample, the datum represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Units are mg/Kg or ppm.
5. ND = Not Detected.
6. -- = Not Applicable.

Table C-38
PCDD/PCDF Data Summary Table for Crayfish

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1999

Constituent	Crayfish						
	No. of Samples[1]	Frequency of Detection (%)	Range			Median	Arithmetic Mean[2]	Standard Error
1,2,3,4,6,7,8-HPCDD	12	50	ND	-	6.30E-06	2.35E-06	3.46E-06	5.18E-07
1,2,3,4,6,7,8-HPCDF	12	58	ND	-	6.90E-06	4.50E-06	5.31E-06	7.32E-07
1,2,3,4,7,8,9-HPCDF	12	17	ND	-	2.20E-06	2.05E-06	2.97E-06	3.98E-07
1,2,3,4,7,8-HXCDD	12	17	ND	-	3.00E-07	2.50E-07	2.89E-06	5.32E-07
1,2,3,4,7,8-HXCDF	12	25	ND	-	1.41E-05	8.30E-06	4.75E-06	1.02E-06
1,2,3,6,7,8-HXCDD	12	8	ND	-	3.00E-07	NA	3.06E-06	1.34E-06
1,2,3,6,7,8-HXCDF	12	33	ND	-	1.20E-06	6.50E-07	2.70E-06	5.58E-07
1,2,3,7,8,9-HXCDF	12	8	ND	-	9.00E-07	NA	3.11E-06	4.53E-07
1,2,3,7,8-PECDD	12	17	ND	-	1.00E-06	8.00E-07	2.63E-06	4.91E-07
1,2,3,7,8-PECDF	12	67	ND	-	7.82E-05	3.88E-05	3.86E-05	5.97E-06
2,3,4,6,7,8-HXCDF	12	25	ND	-	4.10E-06	2.40E-06	3.28E-06	4.47E-07
2,3,4,7,8-PECDF	12	58	ND	-	1.59E-05	8.40E-06	1.09E-05	2.36E-06
2,3,7,8-TCDD	12	8	ND	-	6.00E-07	NA	6.54E-07	8.36E-08
2,3,7,8-TCDF	12	100	1.43E-05	-	1.11E-04	3.31E-05	4.03E-05	8.06E-06
OCDD	12	58	ND	-	2.71E-05	1.29E-05	1.16E-05	1.95E-06
OCDF	12	50	ND	-	5.70E-06	3.05E-06	4.78E-06	9.09E-07
WHO TEQ(Human/Mammal)	12	--	6.74E-06	-	4.25E-05	1.43E-05	1.71E-05	2.70E-06

Notes:

1. EPA collected all samples included in this data summary table. Samples are whole body individuals.
2. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
3. Units are mg/Kg or ppm.
4. ND = Not Detected.
5. NA = Not Available.
6. -- = Not Applicable.

Table C-39
Pesticide Data Summary Table for Crayfish

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1999

Constituent	Crayfish							
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	-	Maximum	Median	Arithmetic Mean[2]	Standard Deviation[2]
1,2,3,4-Tetrachlorobenzene	40	100	5.68E-03	-	1.16E-01	1.49E-02	2.50E-02	2.75E-02
1,2,4,5-Tetrachlorobenzene	40	75	ND	-	2.49E-02	3.10E-03	5.20E-03	5.60E-03
4,4'-DDD	40	95	ND	-	2.21E-02	3.22E-03	4.79E-03	4.80E-03
4,4'-DDE	40	100	2.94E-03	-	3.29E-02	7.56E-03	9.26E-03	5.32E-03
4,4'-DDT	40	43	ND	-	2.07E-03	2.92E-04	1.54E-03	9.99E-04
Aldrin	40	3	ND	-	3.61E-04	3.61E-04	2.29E-03	3.32E-04
Alpha-BHC	40	55	ND	-	9.52E-04	4.61E-04	1.32E-03	9.91E-04
Beta-BHC	40	8	ND	-	1.87E-04	1.24E-04	2.18E-03	5.99E-04
Chlorpyrifos	40	28	ND	-	7.88E-03	2.92E-03	2.62E-03	1.21E-03
Cis-Nonachlor	40	100	5.61E-03	-	9.27E-02	1.41E-02	2.23E-02	1.96E-02
Delta-BHC	40	13	NE	-	5.76E-04	2.26E-04	2.09E-03	6.96E-04
Dieldrin	40	100	1.40E-04	-	4.21E-03	1.04E-03	1.29E-03	9.36E-04
Endosulfan II	40	93	ND	-	7.56E-02	7.86E-03	1.48E-02	1.88E-02
Endrin	40	15	ND	-	6.91E-04	1.64E-04	2.04E-03	7.82E-04
Gamma Chlordane	40	23	ND	-	2.64E-04	5.40E-05	1.83E-03	9.56E-04
Heptachlor	40	30	ND	-	5.25E-04	1.19E-04	1.69E-03	1.02E-03
Hexachlorobenzene	40	98	ND	-	4.40E-03	7.56E-04	1.13E-03	1.04E-03
Mirex	40	8	ND	-	1.24E-04	7.60E-05	2.18E-03	6.14E-04
O,P'-DDD	40	100	6.08E-03	-	7.82E-02	1.63E-02	2.51E-02	1.67E-02
O,P'-DDE	40	53	ND	-	8.20E-03	1.06E-03	2.07E-03	1.32E-03
O,P'-DDT	40	100	9.51E-03	-	1.31E-01	2.77E-02	4.00E-02	2.70E-02
Pentachloroanisole	40	73	ND	-	5.46E-04	2.23E-04	2.57E-04	3.49E-04
Pentachlorobenzene	40	98	ND	-	6.11E-02	8.99E-03	1.38E-02	1.29E-02
Trans-Nonachlor	40	100	4.69E-04	-	3.62E-03	1.01E-03	2.35E-02	1.09E-03

Notes:

1. EPA collected all samples included in this data summary table. Samples are whole body individuals.
2. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
3. Units are mg/Kg or ppm.
4. ND = Not Detected

Table C-40
PCDD/PCDF Data Summary Table for Benthic Invertebrates

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1999

Constituent	Shredder						
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4,6,7,8-HPCDF	2	50	ND	1.30E-05	2.49E-05	2.49E-05	1.19E-05
1,2,3,7,8-PECDF	2	50	ND	5.36E-05	4.5E-05	4.52E-05	8.42E-06
WHO TEQ(Human/Mammal)	2	--	2.68E-04	9.19E-05	1.80E-04	1.80E-04	8.81E-05
Constituent	**Predator**						
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4,6,7,8-HPCDD	3	33	ND	4.31E-05	5.95E-05	2.43E-04	2.34E-04
1,2,3,4,6,7,8-HPCDF	3	33	ND	2.22E-05	6.58E-05	2.38E-04	2.37E-04
1,2,3,7,8-PECDF	3	67	ND	5.40E-05	2.13E-05	2.17E-04	2.50E-04
2,3,7,8-TCDF	3	67	ND	2.69E-05	2.69E-05	5.79E-05	4.11E-05
OCDF	3	33	ND	1.65E-05	1.32E-04	4.66E-04	4.82E-04
WHO TEQ(Human/Mammal)	3	--	1.47E-04	1.56E-03	1.63E-04	6.24E-04	5.75E-04

Sample Location: REACH 6 - HOUSATONIC RIVER - WOODS POND

Sample Year: 1999

Constituent	Shredder						
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4,6,7,8-HPCDF	1	100	--	--	--	2.22E-05	--
WHO TEQ(Human/Mammal)	1	--	--	--	--	6.58E-05	--

Notes:

1. EPA collected all samples included in this data summary table. All samples were 20-gram composites.
2. For sampling years with only one sample, the data represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Units are mg/Kg or ppm.
5. ND = Not Detected.
6. NA = Not Available.
7. -- = Not Applicable.

Table C-41
Pesticide Data Summary Table for Benthic Invertebrates

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1999

Constituent	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
Predator							
1,2,3,4-Tetrachlorobenzene	6	100	4.20E-03	1.78E-01	2.80E-02	5.66E-02	1.04E-01
1,2,4,5-Tetrachlorobenzene	6	33	ND	1.21E-02	2.17E-02	4.04E-02	8.83E-02
4,4'-DDD	6	83	ND	1.16E-02	5.74E-03	9.44E-03	4.38E-02
4,4'-DDE	6	100	4.30E-03	4.21E-02	7.02E-03	1.68E-02	5.34E-02
Alpha-BHC	6	50	ND	1.78E-02	5.06E-03	1.05E-02	4.43E-02
Alpha-Chlordane	6	17	ND	1.45E-04	1.75E-02	3.76E-02	9.05E-02
Chlorpyrifos	6	17	ND	1.70E-02	1.04E-02	3.55E-02	9.09E-02
Cis-Nonachlor	6	67	ND	7.86E-02	0.00759	2.50E-02	7.35E-02
Dieldrin	6	100	4.45E-04	3.28E-03	4.81E-04	1.33E-03	1.49E-02
Endosulfan II	6	83	ND	2.56E-02	1.05E-02	1.34E-02	4.76E-02
Gamma Chlordane	6	17	ND	7.51E-04	0.00354	3.31E-02	9.22E-02
Heptachlor	6	33	ND	4.06E-03	3.92E-03	3.36E-02	9.18E-02
Heptachlor epoxide	6	33	ND	4.63E-02	3.11E-02	4.27E-02	8.84E-02
Hexachlorobenzene	6	33	ND	1.34E-03	1.75E-02	3.75E-02	9.06E-02
O,P'-DDD	6	83	ND	1.20E-01	2.38E-02	3.82E-02	8.58E-02
O,P'-DDE	6	83	ND	4.20E-03	2.16E-03	6.99E-03	4.45E-02
O,P'-DDT	6	100	1.77E-02	3.32E-01	4.69E-02	1.18E-01	1.51E-01
Pentachloroanisole	7	100	4.05E-04	1.38E-02	1.71E-03	4.20E-03	2.63E-02
Pentachlorobenzene	6	100	2.62E-03	1.47E-01	1.08E-02	3.84E-02	9.70E-02
Shredder							
1,2,3,4-Tetrachlorobenzene	7	100	2.44E-03	8.54E-02	3.74E-02	4.20E-02	6.88E-02
1,2,4,5-Tetrachlorobenzene	7	86	ND	8.28E-02	1.38E-02	2.59E-02	6.62E-02
4,4'-DDD	7	100	1.19E-03	1.07E-02	8.61E-03	6.49E-03	2.38E-02
4,4'-DDE	7	100	2.09E-03	3.55E-02	1.40E-02	1.51E-02	4.07E-02
4,4'-DDT	7	57	ND	4.88E-03	3.44E-03	3.70E-03	2.17E-02
Alpha-BHC	7	71	ND	4.48E-03	1.84E-03	2.60E-03	1.55E-02
Cis-Nonachlor	7	71	ND	8.25E-02	2.82E-02	3.43E-02	6.43E-02
Delta-BHC	7	14	ND	5.08E-04	0.00463	5.44E-03	2.29E-02
Dieldrin	7	100	9.90E-05	4.33E-03	1.69E-03	1.99E-03	1.55E-02
Endosulfan II	7	86	ND	2.58E-02	1.01E-02	1.04E-02	3.41E-02
Heptachlor	7	29	ND	1.24E-03	0.00463	5.34E-03	2.32E-02
Heptachlor epoxide	7	29	ND	1.48E-02	7.81E-03	8.25E-03	2.28E-02
Hexachlorobenzene	7	100	4.47E-04	4.55E-03	1.39E-03	1.98E-03	1.41E-02
O,P'-DDD	7	100	6.91E-03	1.55E-01	3.91E-02	5.54E-02	8.61E-02
O,P'-DDE	7	71	ND	8.43E-03	2.27E-03	3.55E-03	1.92E-02
O,P'-DDT	7	100	7.67E-03	1.92E-01	6.29E-02	7.55E-02	9.48E-02
Pentachloroanisole	7	100	5.14E-04	3.20E-03	1.52E-03	1.54E-03	1.09E-02
Pentachlorobenzene	7	100	1.24E-03	4.82E-02	2.17E-02	2.28E-02	5.14E-02

Table C-41
Pesticide Data Summary Table for Benthic Invertebrates

Sample Location: REACH 6 - HOUSATONIC RIVER - WOODS POND

Sample Year: 1999

Constituent	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
Predator							
1,2,3,4-Tetrachlorobenzene	1	100	--	--	--	1.68E-02	--
4,4'-DDD	1	100	--	--	--	9.22E-03	--
4,4'-DDE	1	100	--	--	--	1.96E-02	--
Alpha-BHC	1	100	--	--	--	1.65E-03	--
Cis-Nonachlor	1	100	--	--	--	4.71E-02	--
Dieldrin	1	100	--	--	--	1.62E-03	--
Endosulfan II	1	100	--	--	--	2.50E-02	--
O,P'-DDD	1	100	--	--	--	6.31E-02	--
O,P'-DDE	1	100	--	--	--	2.70E-03	--
O,P'-DDT	1	100	--	--	--	8.17E-02	--
Pentachlorobenzene	1	100	--	--	--	1.08E-02	--
Shredder							
1,2,3,4-Tetrachlorobenzene	1	100	--	--	--	3.00E-03	--
4,4'-DDD	1	100	--	--	--	9.06E-04	--
4,4'-DDE	1	100	--	--	--	3.22E-03	--
Dieldrin	1	100	--	--	--	2.32E-04	--
Endosulfan II	1	100	--	--	--	4.56E-03	--
Gamma-Chlordane	1	100	--	--	--	5.50E-05	--
O,P'-DDD	1	100	--	--	--	1.17E-02	--
O,P'-DDT	1	100	--	--	--	6.69E-03	--
Pentachloroanisole	1	100	--	--	--	7.98E-04	--
Pentachlorobenzene	1	100	--	--	--	1.13E-03	--
Trans-Nonachlor	1	100	--	--	--	4.10E-04	--

Notes:

1. EPA collected all samples included in this data summary table. Samples were 20-gram composites.
2. For sampling years with only one sample, the data represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the detection limit for all non-detects.
4. Units are mg/Kg or ppm.
5. ND = Not Detected
6. NA = Not Available.
7. -- = Not Applicable.

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Table C-42
PCDD/PCDF Data Summary Table for Earthworms

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND							
Sample Year: 2000							
	Earthworm Composites						
Constituent	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Maximum	Median	Arithmetic Mean[2]	Standard Error
OCDD	3	67	ND	1.80E-04	5.77E-05	8.28E-05	5.02E-05
WHO TEQ(Human/Mammal)	3	--	1.45E-05	4.02E-05	2.75E-05	2.74E-05	7.43E-06

Notes:

1. EPA collected all samples included in this data summary table. Samples are whole-body composites.
2. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
3. Units are mg/Kg or ppm
4. ND = Not Detected.
4. -- = Not Applicable.

Table C-43
Pesticide Data Summary Table for Earthworm

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 2000

Constituent	Earthworm Composites						
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	30	93	ND	7.72E-03	3.38E-03	3.48E-03	3.78E-04
1,2,4,5-Tetrachlorobenzene	30	97	ND	2.19E-02	2.90E-03	7.14E-03	1.17E-03
4,4'-DDD	30	97	ND	6.65E-03	2.30E-03	2.40E-03	3.09E-04
4,4'-DDE	30	100	2.43E-03	1.63E-02	7.13E-03	7.45E-03	5.63E-04
4,4'-DDT	30	100	3.41E-04	2.35E-02	1.08E-02	1.03E-02	1.47E-03
Aldrin	30	60	ND	4.90E-03	3.88E-03	3.02E-03	3.11E-04
Alpha-BHC	30	80	ND	2.27E-03	3.21E-04	5.35E-04	1.11E-04
Alpha-Chlordane	30	3	ND	3.16E-04	NA	NA	NA
Beta-BHC	30	17	ND	2.56E-03	4.10E-03	3.70E-03	2.33E-04
Chlorpyrifos	30	20	ND	1.57E-02	4.42E-03	5.11E-03	5.20E-04
Cis-Nonachlor	30	100	3.66E-04	5.88E-02	3.48E-02	2.85E-02	4.05E-03
Delta-BHC	30	47	ND	4.90E-03	3.47E-03	3.01E-03	2.77E-04
Dieldrin	30	93	ND	4.39E-03	1.79E-03	1.88E-03	1.66E-04
Endosulfan II	30	100	8.89E-04	1.98E-02	5.83E-03	7.42E-03	1.07E-03
Endrin	30	90	ND	9.56E-03	4.49E-03	4.81E-03	3.82E-04
Gamma BHC (Lindane)	30	17	ND	4.90E-03	4.27E-03	3.78E-03	2.44E-04
Gamma-Chlordane	30	30	ND	4.85E-03	3.83E-03	3.20E-03	2.77E-04
Heptachlor	30	43	ND	4.90E-03	3.86E-03	3.35E-03	2.47E-04
Heptachlor Epoxide	30	37	ND	4.85E-03	3.76E-03	2.74E-03	3.46E-04
Hexachlorobenzene	30	87	ND	4.46E-03	1.32E-03	1.60E-03	2.37E-04
Mirex	30	7	ND	1.53E-04	4.35E-03	3.96E-03	2.09E-04
O,P'-DDD	30	100	1.76E-03	6.92E-02	3.90E-02	3.22E-02	3.96E-03
O,P'-DDE	30	97	ND	1.16E-02	5.89E-04	1.75E-03	4.52E-04
O,P'-DDT	30	100	4.20E-03	9.30E-02	5.88E-02	4.86E-02	5.91E-03
Oxychlordane	30	70	ND	5.43E-03	1.05E-03	2.09E-03	3.41E-04
Pentachloroanisole	30	87	ND	5.01E-03	3.21E-04	1.31E-03	3.18E-04
Pentachlorobenzene	30	97	1.50E-04	3.52E-02	8.76E-04	2.87E-03	1.15E-03
Trans-Nonachlor	30	63	ND	4.46E-03	8.76E-04	1.94E-03	3.00E-04

Notes:

1. EPA collected all samples included in this data summary table. Samples are whole body individuals.
2. For sampling years with only one sample, the datum represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Units are mg/Kg or ppm.
5. ND = Not Detected.
6. NA = Not Available.

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Table C-44
PCDD/PCDF Data Summary Table for Zooplankton

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND								
Sample Year: 2000								
	Zooplankton							
	Concentrations in pg/L							
Constituent	**No. of Samples[1]**	**Frequency of Detection (%)**	**Range**			**Median**	**Arithmetic Mean[2]**	**Standard Error**
1,2,3,7,8-PECDF	1	100	--	-	--	--	58.5	--
1,2,3,4,7,8,9-HPCDF	1	100	--	-	--	--	307	--
WHO TEQ (Human/Mammal)	1	--	--	-	--	--	283	--

Notes:

1. EPA collected all samples included in this data summary table. Samples are whole body individuals.
2. For sampling years with only one sample, the datum represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Units are picograms per liter (pg/L).
5. -- = Not Applicable.

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Table C-45
Pesticide Data Summary Table for Zooplankton

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 2000

Constituent	Zooplankton Concentrations in ng/L					
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum - Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	4	100	4.99 - 22.2	14.5	14.0	4.16
1,2,4,5-Tetrachlorobenzene	4	100	18.3 - 29.4	23.7	23.8	2.29
4,4'-DDD	4	100	1.61 - 14.1	5.37	6.62	2.80
4,4'-DDE	4	100	7.41 - 20.4	12.4	13.2	2.75
4,4'-DDT	4	75	ND - 9.90	9.49	7.58	2.05
Alpha-BHC	4	50	ND - 1.07	5.53	8.55	5.21
CIS-Nonachlor	4	100	13.4 - 86.9	19.2	34.7	17.49
Delta-BHC	4	50	ND - 7.50	8.30	9.94	4.66
Dieldrin	4	100	4.34 - 11.7	8.90	8.45	1.63
Endosulfan II	4	25	ND - 18.0	9.55	11.4	2.25
Gamma-Chlordane	4	25	ND - 5.84	8.71	11.5	3.81
Hexachlorobenzene	4	75	ND - 14.6	4.91	6.13	3.48
O,P'-DDD	4	100	14.5 - 39.2	26.3	26.6	5.12
O,P'-DDE	4	75	ND - 5.74	4.87	5.12	1.93
O,P'-DDT	4	100	16.8 - 74.0	28.5	37.0	12.69
Oxychlordane	4	25	ND - 3.92	8.71	7.84	1.35
Pentachloroanisole	4	100	1.09 - 1.68	1.23	1.31	0.13
Pentachlorobenzene	4	100	1.91 - 59.8	5.91	18.4	13.90

Sample Location - REACH 6 - HOUSATONIC RIVER - WOODS POND

Sample Year: 2000

Constituent	Zooplankton Concentrations in ng/L					
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum - Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	1	100	-- - --	--	3.94	--
1,2,4,5-Tetrachlorobenzene	1	100	-- - --	--	12.2	--
4,4'-DDD	1	100	-- - --	--	2.07	--
4,4'-DDE	1	100	-- - --	--	8.75	--
Alpha-BHC	1	100	-- - --	--	1.58	--
CIS-Nonachlor	1	100	-- - --	--	9.87	--
Dieldrin	1	100	-- - --	--	3.86	--
Hexachlorobenzene	1	100	-- - --	--	0.400	--
O,P'-DDD	1	100	-- - --	--	14.1	--
O,P'-DDE	1	100	-- - --	--	8.88	--
O,P'-DDT	1	100	-- - --	--	14.2	--
Pentachloroanisole	1	100	-- - --	--	1.76	--
Pentachlorobenzene	1	100	-- - --	--	1.90	--

Notes:

1. EPA collected all samples included in this data summary table. Samples are whole body individuals.
2. For sampling years with only one sample, the datum represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Units are mg/Kg or ppm.
5. ND = Not Detected.
6. -- = Not Applicable.

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Table C-46
PCDD/PCDF Data Summary Table for Aquatic Vegetation (Periphyton, Algae, and Aquatic Macrophytes)

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 2000

	Filamentous Algae						
	Concentrations in mg/kg						
Constituent	No. of Samples[1]	Frequency of Detection (%)	Range			Median	Arithmetic Mean[2]	Standard Error
2,3,7,8-TCDF	2	50	ND	-	1.39E-05	NA	8.58E-06	NA
OCDD	2	100	7.68E-05	-	8.01E-05	7.85E-05	7.85E-05	1.65E-06
2,3,4,7,8-PECDF	2	50	ND	-	1.31E-05	NA	1.47E-05	NA
1,2,3,4,6,7,8-HPCDF	2	100	1.11E-05	-	1.12E-05	1.12E-05	1.12E-05	5.00E-08
1,2,3,4,6,7,8-HPCDD	2	100	1.29E-05	-	1.31E-05	1.30E-05	1.30E-05	1.00E-07
TEQs	2	--	3.55E-05	-	4.06E-05	3.80E-05	3.80E-05	2.55E-06

	Macrophyte						
	Concentrations in mg/kg						
Constituent	No. of Samples[1]	Frequency of Detection (%)	Range			Median	Arithmetic Mean[2]	Standard Error
2,3,7,8-TCDF	2	100	1.11E-05	-	2.92E-05	2.02E-05	2.02E-05	9.05E-06
1,2,3,4,7,8-HXCDD	2	50	ND	-	4.40E-06	9.88E-06	9.88E-06	5.48E-06
OCDF	2	50	ND	-	2.73E-05	2.90E-05	2.90E-05	1.68E-06
OCDD	2	100	8.84E-05	-	1.94E-04	1.41E-04	1.41E-04	5.26E-05
1,2,3,7,8-PECDF	2	50	ND	-	2.10E-05	1.82E-05	1.82E-05	2.83E-06
2,3,4,7,8-PECDF	2	50	ND	-	2.75E-05	1.81E-05	1.81E-05	9.40E-06
1,2,3,4,7,8-HXCDF	2	50	ND	-	1.27E-05	1.40E-05	1.40E-05	1.33E-06
1,2,3,6,7,8-HXCDF	2	50	ND	-	1.02E-05	1.28E-05	1.28E-05	2.58E-06
2,3,4,6,7,8-HXCDF	2	50	ND	-	1.18E-05	1.36E-05	1.36E-05	1.78E-06
1,2,3,4,6,7,8-HPCDD	2	50	ND	-	3.33E-05	2.43E-05	2.43E-05	8.98E-06
TEQs	2	--	3.58E-05	-	4.38E-05	3.98E-05	3.98E-05	3.95536E-06

	Periphyton (from macrophyte)						
	Concentrations in mg/kg						
Constituent	No. of Samples[1]	Frequency of Detection (%)	Range			Median	Arithmetic Mean[2]	Standard Error
2,3,7,8-TCDF	1	100	--	-	--	--	8.49E-04	--
1,2,3,7,8,9-HXCDD	1	100	--	-	--	--	4.15E-05	--
1,2,3,6,7,8-HXCDD	1	100	--	-	--	--	5.91E-05	--
1,2,3,4,7,8-HXCDD	1	100	--	-	--	--	2.23E-05	--
OCDF	1	100	--	-	--	--	5.48E-04	--
OCDD	1	100	--	-	--	--	6.24E-03	--
1,2,3,7,8-PECDF	1	100	--	-	--	--	3.42E-04	--
2,3,4,7,8-PECDF	1	100	--	-	--	--	5.52E-04	--
1,2,3,4,7,8-HXCDF	1	100	--	-	--	--	2.18E-04	--
1,2,3,6,7,8-HXCDF	1	100	--	-	--	--	1.84E-04	--
2,3,4,6,7,8-HXCDF	1	100	--	-	--	--	1.88E-04	--
1,2,3,4,6,7,8-HPCDF	1	100	--	-	--	--	5.68E-04	--
1,2,3,4,7,8,9-HPCDF	1	100	--	-	--	--	3.34E-05	--
1,2,3,4,6,7,8-HPCDD	1	100	--	-	--	--	1.00E-03	--
TEQs	1	--	--	-	--	--	4.76E-04	--

Table C-46
PCDD/PCDF Data Summary Table for Aquatic Vegetation (Periphyton, Algae, and Aquatic Macrophytes)

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 2000

Constituent	Periphyton (substrate) Concentrations in mg/kg							
	No. of Samples[1]	Frequency of Detection (%)	Range			Median	Arithmetic Mean[2]	Standard Error
2,3,7,8-TCDF	1	100	--	-	--	--	3.90E-04	--
1,2,3,7,8,9-HXCDD	1	100	--	-	--	--	2.32E-05	--
1,2,3,4,7,8-HXCDD	1	100	--	-	--	--	1.27E-05	--
1,2,3,6,7,8-HXCDD	1	100	--	-	--	--	3.37E-05	--
OCDF	1	100	--	-	--	--	3.80E-04	--
OCDD	1	100	--	-	--	--	4.40E-03	--
1,2,3,7,8-PECDF	1	100	--	-	--	--	3.29E-04	--
2,3,4,7,8-PECDF	1	100	--	-	--	--	3.42E-04	--
1,2,3,6,7,8-HXCDF	1	100	--	-	--	--	1.19E-04	--
1,2,3,4,7,8-HXCDF	1	100	--	-	--	--	3.08E-04	--
2,3,4,6,7,8-HXCDF	1	100	--	-	--	--	1.42E-04	--
1,2,3,4,6,7,8-HPCDF	1	100	--	-	--	--	4.83E-04	--
1,2,3,4,7,8,9-HPCDF	1	100	--	-	--	--	2.83E-05	--
1,2,3,4,6,7,8-HPCDD	1	100	--	-	--	--	5.91E-04	--
TEQs	1	--	--	-	--	--	3.21E-04	--

Sample Location: REACH 5A - CONFLUENCE OF EAST & WEST BRANCH OF HOUSATONIC RIVER TO UPSTREAM OF WWTP

Sample Year: 2000

Constituent	Detritus (filtered)					
	No. of Samples[1]	Frequency of Detection (%)	Range	Median	Arithmetic Mean[2]	Standard Error
All PCDDs/PCDFs	1	below detection limit (10 - 100 pg/L) for all constituents		--	--	--
TEQs	--			--	--	--

Sample Location: REACH 6 - HOUSATONIC RIVER - WOODS POND

Sample Year: 2000

Constituent	Filamentous Algae Concentrations in mg/kg							
	No. of Samples[1]	Frequency of Detection (%)	Range			Median	Arithmetic Mean[2]	Standard Error
OCDF	1	100	--	-	--	--	8.40E-06	--
TEQs	1	--	--	-	--	--	3.59E-05	--

Notes:

1. EPA collected all samples included in this data summary table. Samples are whole body individuals.
2. For sampling years with only one sample, the datum represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Units are mg/Kg or ppm.
5. ND = Not Detected.
6. NA = Not Available.
7. -- = Not Applicable.

Table C-47
Pesticide Data Summary Table for Aquatic Vegetation
(Periphyton, Algae, and Aquatic Macrophytes)

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 2000

Constituent	Filamentous Algae Concentrations in mg/kg						
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	3	100	1.72E-03	2.43E-03	2.42E-03	2.19E-03	2.36E-04
1,2,4,5-Tetrachlorobenzene	3	100	1.17E-03	4.61E-03	2.11E-03	2.63E-03	1.03E-03
4,4'-DDD	3	33	ND	2.18E-03	2.78E-03	2.73E-03	3.10E-04
4,4'-DDE	3	100	1.26E-03	2.41E-03	1.36E-03	1.67E-03	3.69E-04
4,4'-DDT	3	33	ND	2.65E-03	2.78E-03	2.89E-03	1.81E-04
Alpha-BHC	3	33	ND	4.30E-04	2.78E-03	2.15E-03	8.71E-04
Chlorpyrifos	3	33	ND	5.79E-04	1.70E-03	1.84E-03	7.74E-04
Cis-Nonachlor	3	100	1.27E-03	7.72E-03	2.74E-03	3.91E-03	1.95E-03
Dieldrin	3	100	4.46E-04	2.17E-03	9.35E-04	1.18E-03	5.14E-04
Endosulfan II	3	33	ND	1.85E-03	1.85E-03	2.11E-03	3.38E-04
Gamma-Chlordane	3	33	ND	5.91E-04	2.78E-03	2.21E-03	8.18E-04
Hexachlorobenzene	3	33	ND	1.14E-03	2.78E-03	2.39E-03	6.37E-04
O,P'-DDD	3	100	1.65E-03	1.10E-02	2.86E-03	5.17E-03	2.95E-03
O,P'-DDE	3	67	ND	9.72E-04	9.72E-04	1.07E-03	3.34E-04
O,P'-DDT	3	100	7.63E-04	7.93E-03	1.82E-03	3.50E-03	2.23E-03
Pentachloroanisole	3	100	1.90E-04	8.11E-04	2.07E-04	4.03E-04	2.04E-04
Pentachlorobenzene	3	100	9.92E-04	1.81E-03	1.78E-03	1.53E-03	2.68E-04
Trans-Nonachlor	3	33	ND	8.10E-04	2.78E-03	2.28E-03	7.47E-04

Constituent	Macrophyte Concentrations in mg/kg						
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	4	100	1.02E-03	3.23E-03	1.43E-03	1.78E-03	4.94E-04
1,2,4,5-Tetrachlorobenzene	4	100	3.92E-04	2.59E-03	1.50E-03	1.50E-03	4.57E-04
4,4'-DDD	4	75	ND	1.24E-03	9.33E-04	1.10E-03	3.49E-04
4,4'-DDE	4	100	1.55E-03	2.63E-03	1.77E-03	1.93E-03	2.42E-04
4,4'-DDT	4	75	ND	6.24E-03	2.72E-03	3.08E-03	1.17E-03
Alpha-BHC	4	50	2.08E-04	3.13E-04	1.17E-03	1.18E-03	5.30E-04
Cis-Nonachlor	4	100	3.55E-03	4.56E-03	4.28E-03	4.17E-03	2.34E-04
Dieldrin	4	75	ND	2.51E-03	2.79E-03	3.21E-03	1.09E-03
Endosulfan II	4	25	ND	1.54E-03	2.09E-03	2.20E-03	3.19E-04
Endrin	4	25	ND	2.33E-03	2.70E-03	2.65E-03	2.41E-04
Gamma BHC (Lindane)	4	25	ND	1.63E-04	2.55E-03	2.08E-03	6.85E-04
Gamma-Chlordane	4	25	ND	9.52E-04	2.55E-03	2.28E-03	5.05E-04
Hexachlorobenzene	4	25	ND	1.95E-04	2.55E-03	2.09E-03	6.77E-04
O,P'-DDD	4	75	ND	8.65E-03	3.89E-03	4.65E-03	1.40E-03
O,P'-DDE	4	50	ND	5.73E-04	1.30E-03	1.33E-03	4.42E-04
O,P'-DDT	4	100	3.35E-03	5.19E-03	3.71E-03	3.99E-03	4.09E-04
Oxychlordane	4	75	ND	1.54E-03	1.82E-03	1.86E-03	4.91E-04
Pentachloroanisole	4	100	1.61E-04	9.27E-04	4.84E-04	5.14E-04	1.74E-04
Pentachlorobenzene	4	100	1.14E-03	2.95E-03	1.90E-03	1.97E-03	4.05E-04
Trans-Nonachlor	4	50	ND	8.54E-04	1.44E-03	1.67E-03	5.50E-04

Table C-47
Pesticide Data Summary Table for Aquatic Vegetation
(Periphyton, Algae, and Aquatic Macrophytes)

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 2000

Constituent	Periphyton (from macrophyte) Concentrations in mg/kg						
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	3	100	1.74E-02	3.93E-02	2.29E-02	2.65E-02	6.59E-03
1,2,4,5-Tetrachlorobenzene	3	100	4.48E-03	2.80E-02	1.34E-02	1.53E-02	6.86E-03
4,4'-DDD	3	100	1.02E-02	2.07E-02	1.62E-02	1.57E-02	3.04E-03
4,4'-DDE	3	100	1.75E-02	5.39E-02	2.68E-02	3.27E-02	1.09E-02
4,4'-DDT	3	100	7.27E-04	2.58E-02	7.54E-03	1.14E-02	7.49E-03
Alpha-bhc	3	67	ND	8.00E-04	8.00E-04	1.35E-03	5.74E-04
Chlorpyrifos	3	67	ND	8.69E-04	8.69E-04	1.16E-03	7.02E-04
Cis-Nonachlor	3	100	3.09E-02	6.70E-02	5.78E-02	5.19E-02	1.08E-02
Delta-BHC	3	67	ND	3.24E-03	3.16E-03	2.97E-03	2.35E-04
Dieldrin	3	100	1.41E-03	2.33E-02	1.35E-02	1.27E-02	6.34E-03
Endrin	3	67	ND	1.30E-03	1.30E-03	1.67E-03	4.15E-04
Gamma BHC (Lindane)	3	67	ND	7.92E-03	2.08E-03	3.40E-03	2.32E-03
Gamma-Chlordane	3	100	2.37E-03	6.16E-03	3.09E-03	3.88E-03	1.16E-03
Heptachlor	3	33	ND	3.15E-03	2.08E-03	2.40E-03	3.78E-04
Heptachlor Epoxide	3	67	ND	4.09E-03	2.50E-03	2.33E-03	1.07E-03
Hexachlorobenzene	3	67	ND	7.61E-03	2.08E-03	3.66E-03	1.99E-03
O,P'-DDD	3	100	3.88E-02	8.33E-02	6.88E-02	6.36E-02	1.31E-02
O,P'-DDT	3	100	3.68E-02	7.75E-02	7.50E-02	6.31E-02	1.31E-02
Oxychlordane	3	33	ND	3.92E-03	2.08E-03	2.66E-03	6.35E-04
Pentachloroanisole	3	67	ND	1.17E-03	1.17E-03	1.47E-03	5.31E-04
Pentachlorobenzene	3	100	9.44E-03	1.27E-02	1.21E-02	1.14E-02	9.92E-04
Trans-Nonachlor	3	33	ND	9.78E-03	2.08E-03	4.61E-03	2.59E-03

Constituent	Periphyton (filtered) Concentrations in ng/L						
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	1	100	--	--	--	2.39E+02	--
1,2,4,5-Tetrachlorobenzene	1	100	--	--	--	6.71E+01	--
4,4'-DDD	1	100	--	--	--	5.02E+01	--
4,4'-DDE	1	100	--	--	--	5.98E+01	--
4,4'-DDT	1	100	--	--	--	5.42E+01	--
Cis-Nonachlor	1	100	--	--	--	2.35E+02	--
Dieldrin	1	100	--	--	--	6.16E+01	--
Hexachlorobenzene	1	100	--	--	--	2.77E+01	--
O,P'-DDD	1	100	--	--	--	1.97E+02	--
O,P'-DDT	1	100	--	--	--	2.79E+02	--
Oxychlordane	1	100	--	--	--	1.89E+01	--
Pentachloroanisole	1	100	--	--	--	3.77E+00	--
Pentachlorobenzene	1	100	--	--	--	1.30E+02	--

Table C-47
Pesticide Data Summary Table for Aquatic Vegetation
(Periphyton, Algae, and Aquatic Macrophytes)

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 2000

Constituent	Periphyton (substrate) Concentrations in mg/kg								
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	-	Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	4	100	7.03E-03	-	7.69E-02	2.77E-02	3.48E-02	1.49E-02
1,2,4,5-Tetrachlorobenzene	4	100	6.46E-03	-	2.10E-02	1.17E-02	1.27E-02	3.08E-03
4,4'-DDD	4	100	6.22E-03	-	2.94E-02	1.48E-02	1.63E-02	4.80E-03
4,4'-DDE	4	100	1.11E-02	-	2.46E-02	1.70E-02	1.74E-02	2.77E-03
4,4'-DDT	4	100	2.87E-03	-	1.55E-02	1.21E-02	1.06E-02	2.78E-03
Aldrin	4	25	ND	-	2.24E-03	2.36E-03	2.35E-03	2.64E-04
Alpha-BHC	4	25	ND	-	4.46E-04	2.36E-03	2.04E-03	5.52E-04
Beta-BHC	4	50	ND	-	5.41E-04	1.12E-03	1.40E-03	6.01E-04
Chlorpyrifos	4	50	ND	-	7.44E-03	2.73E-03	3.34E-03	1.47E-03
Cis-Nonachlor	4	100	2.56E-02	-	6.78E-02	5.24E-02	4.95E-02	9.20E-03
Delta-BHC	4	25	ND	-	7.42E-03	2.73E-03	3.78E-03	1.22E-03
Dieldrin	4	100	4.39E-03	-	2.65E-02	1.07E-02	1.30E-02	5.08E-03
Endosulfan II	4	25	ND	-	1.56E-02	2.36E-03	5.50E-03	3.36E-03
Endrin	4	25	ND	-	1.37E-03	2.36E-03	2.27E-03	3.36E-04
Gamma-Chlordane	4	75	ND	-	3.36E-03	2.57E-03	2.56E-03	3.69E-04
Heptachlor Epoxide	4	25	ND	-	1.97E-03	2.36E-03	2.42E-03	2.14E-04
Hexachlorobenzene	4	100	1.45E-04	-	5.29E-03	3.26E-03	2.99E-03	1.16E-03
O,P'-DDD	4	100	2.95E-02	-	9.55E-02	5.65E-02	5.95E-02	1.41E-02
O,P'-DDE	4	25	ND	-	2.11E-03	2.18E-03	2.14E-03	1.63E-04
O,P'-DDT	4	100	3.48E-02	-	7.58E-02	6.26E-02	5.89E-02	9.37E-03
Oxychlordane	4	75	ND	-	2.53E-03	1.71E-03	1.85E-03	2.34E-04
Pentachloroanisole	4	100	3.38E-04	-	1.35E-03	6.39E-04	7.40E-04	2.27E-04
Pentachlorobenzene	4	100	2.02E-03	-	3.72E-02	1.80E-02	1.88E-02	7.69E-03
Trans-Nonachlor	4	75	ND	-	1.75E-03	1.34E-03	1.21E-03	3.18E-04

Sample Location: REACH 5A-CONFLUENCE OF EAST & WEST BRANCH OF HOUSATONIC RIVER UPSTREAM OF WWTP

Sample Year: 2000

Constituent	Detritus (filtered) Concentrations in ng/L							
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	-	Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,4,5-Tetrachlorobenzene	1	100	–	-	–	–	7.51E+00	–

Sample Location: REACH 5B - DOWNSTREAM OF WWTP TO UPSTREAM OF ROARING BROOK CONFLUENCE

Sample Year: 2000

Constituent	Detritus (filtered) Concentrations in ng/L							
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	-	Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	2	100	1.15E+00	-	1.72E+00	1.44E+00	1.44E+00	2.85E-01
1,2,4,5-Tetrachlorobenzene	2	100	7.70E+00	-	7.78E+00	7.74E+00	7.74E+00	4.25E-02
4,4'-DDE	2	100	3.52E-01	-	5.86E-01	4.69E-01	4.69E-01	1.17E-01
4,4'-DDT	2	50	ND	-	1.51E+00	3.26E+00	3.26E+00	1.74E+00
Cis-Nonachlor	2	100	1.30E+00	-	2.18E+00	1.74E+00	1.74E+00	4.41E-01
Dieldrin	2	50	ND	-	2.66E-01	2.63E+00	2.63E+00	2.37E+00
Gamma-Chlordane	2	50	ND	-	5.02E-01	2.75E+00	2.75E+00	2.25E+00
O,P'-DDD	2	100	1.08E+00	-	2.02E+00	1.55E+00	1.55E+00	4.69E-01
O,P'-DDT	2	100	1.29E+00	-	1.98E+00	1.63E+00	1.63E+00	3.49E-01
Pentachloroanisole	2	100	3.57E-01	-	4.99E-01	4.28E-01	4.28E-01	7.10E-02
Pentachlorobenzene	2	50	ND	-	6.75E-01	2.84E+00	2.84E+00	2.16E+00

Table C-47
Pesticide Data Summary Table for Aquatic Vegetation
(Periphyton, Algae, and Aquatic Macrophytes)

Sample Location - REACH 6 - HOUSATONIC RIVER - WOODS POND

Sample Year: 2000

Constituent	Filamentous Algae Concentrations in mg/kg: No. of Samples[1]	Frequency of Detection (%)	Range Minimum - Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	1	100	-- - --	--	1.07E-03	--
1,2,4,5-Tetrachlorobenzene	1	100	-- - --	--	1.99E-03	--
4,4'-DDD	1	100	-- - --	--	1.46E-04	--
4,4'-DDE	1	100	-- - --	--	6.84E-04	--
Cis-Nonachlor	1	100	-- - --	--	1.25E-03	--
Dieldrin	1	100	-- - --	--	5.02E-04	--
O,P'-DDD	1	100	-- - --	--	1.59E-03	--
O,P'-DDE	1	100	-- - --	--	6.59E-04	--
O,P'-DDT	1	100	-- - --	--	1.16E-03	--
Pentachloroanisole	1	100	-- - --	--	7.78E-04	--
Pentachlorobenzene	1	100	-- - --	--	8.11E-04	--

Constituent	Macrophyte Concentrations in mg/kg: No. of Samples[1]	Frequency of Detection (%)	Range Minimum - Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	1	100	-- - --	--	1.15E-03	--
1,2,4,5-Tetrachlorobenzene	1	100	-- - --	--	2.01E-03	--
4,4'-DDD	1	100	-- - --	--	1.81E-03	--
4,4'-DDE	1	100	-- - --	--	2.98E-03	--
Alpha-BHC	1	100	-- - --	--	1.76E-04	--
Cis-Nonachlor	1	100	-- - --	--	8.49E-03	--
Dieldrin	1	100	-- - --	--	1.21E-03	--
Endosulfan II	1	100	-- - --	--	2.41E-03	--
O,P'-DDD	1	100	-- - --	--	7.63E-03	--
O,P'-DDE	1	100	-- - --	--	5.45E-04	--
O,P'-DDT	1	100	-- - --	--	1.18E-02	--
Pentachloroanisole	1	100	-- - --	--	6.72E-04	--
Pentachlorobenzene	1	100	-- - --	--	1.13E-03	--

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 2000

Constituent	Periphyton (from macrophyte) Concentrations in mg/kg: No. of Samples[1]	Frequency of Detection (%)	Range Minimum - Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	1	100	-- - --	--	3.77E-02	--
1,2,4,5-Tetrachlorobenzene	1	100	-- - --	--	4.01E-02	--
4,4'-DDD	1	100	-- - --	--	3.00E-02	--
4,4'-DDE	1	100	-- - --	--	6.97E-02	--
4,4'-DDT	1	100	-- - --	--	9.52E-03	--
Alpha-BHC	1	100	-- - --	--	1.99E-04	--
Cis-Nonachlor	1	100	-- - --	--	9.26E-02	--
Delta-BHC	1	100	-- - --	--	4.44E-03	--
Dieldrin	1	100	-- - --	--	2.19E-02	--
Gamma-Chlordane	1	100	-- - --	--	5.69E-03	--
Heptachlor Epoxide	1	100	-- - --	--	4.64E-03	--
Hexachlorobenzene	1	100	-- - --	--	1.70E-03	--
Mirex	1	100	-- - --	--	3.27E-03	--
O,P'-DDD	1	100	-- - --	--	9.74E-02	--
O,P'-DDT	1	100	-- - --	--	1.29E-01	--
Pentachloroanisole	1	100	-- - --	--	9.19E-04	--
Pentachlorobenzene	1	100	-- - --	--	1.49E-02	--
Trans-Nonachlor	1	100	-- - --	--	2.05E-03	--

Table C-47
Pesticide Data Summary Table for Aquatic Vegetation
(Periphyton, Algae, and Aquatic Macrophytes)

Sample Location: REACH 6 - WOODS POND

Sample Year: 2000

Constituent	Periphyton (substrate) Concentrations in mg/kg						
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum - Maximum			Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	1	100	--	-	--	--	1.69E-02	--
1,2,4,5-Tetrachlorobenzene	1	100	--	-	--	--	4.07E-03	--
4,4'-DDD	1	100	--	-	--	--	1.26E-02	--
4,4'-DDE	1	100	--	-	--	--	5.68E-02	--
4,4'-DDT	1	100	--	-	--	--	2.53E-03	--
Alpha-BHC	1	100	--	-	--	--	3.45E-04	--
Chlorpyrifos	1	100	--	-	--	--	3.37E-04	--
Cis-Nonachlor	1	100	--	-	--	--	5.24E-02	--
Delta-BHC	1	100	--	-	--	--	3.27E-03	--
Dieldrin	1	100	--	-	--	--	3.65E-02	--
Gamma-Chlordane	1	100	--	-	--	--	2.18E-04	--
Heptachlor Epoxide	1	100	--	-	--	--	3.48E-03	--
Hexachlorobenzene	1	100	--	-	--	--	1.05E-03	--
O,P'-DDD	1	100	--	-	--	--	9.99E-02	--
O,P'-DDT	1	100	--	-	--	--	1.07E-01	--
Pentachloroanisole	1	100	--	-	--	--	9.51E-04	--
Pentachlorobenzene	1	100	--	-	--	--	6.15E-03	--

Constituent	Detritus (filtered) Concentrations in ng/L						
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum - Maximum			Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	1	100	--	-	--	--	3.48E-01	--
1,2,4,5-Tetrachlorobenzene	1	100	--	-	--	--	5.10E+00	--
4,4'-DDD	1	100	--	-	--	--	6.22E-01	--
4,4'-DDE	1	100	--	-	--	--	3.35E+00	--
4,4'-DDT	1	100	--	-	--	--	6.49E-01	--
Alpha-Chlordane	1	100	--	-	--	--	2.09E-01	--
Cis-Nonachlor	1	100	--	-	--	--	4.07E+00	--
Dieldrin	1	100	--	-	--	--	1.23E+00	--
Endrin	1	100	--	-	--	--	1.02E-01	--
O,P'-DDD	1	100	--	-	--	--	5.84E+00	--
O,P'-DDT	1	100	--	-	--	--	5.69E+00	--
Pentachloroanisole	1	100	--	-	--	--	3.67E-01	--
Pentachlorobenzene	1	100	--	-	--	--	1.43E-01	--

Table C-47
Pesticide Data Summary Table for Aquatic Vegetation
(Periphyton, Algae, and Aquatic Macrophytes)

Sample Location: REACH 6A - HOUSATONIC RIVER - WOODS POND (WEST HALF)

Sample Year: 2000

Constituent	Detritus (filtered) Concentrations in ng/L						
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum - Maximum			Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	1	100	--	-	--	--	1.72E+00	--
1,2,4,5-Tetrachlorobenzene	1	100	--	-	--	--	1.11E+01	--
4,4'-DDE	1	100	--	-	--	--	1.11E+00	--
Cis-Nonachlor	1	100	--	-	--	--	2.15E+00	--
Dieldrin	1	100	--	-	--	--	6.80E-01	--
O,P'-DDD	1	100	--	-	--	--	2.35E+00	--
O,P'-DDT	1	100	--	-	--	--	2.67E+00	--
Pentachloroanisole	1	100	--	-	--	--	5.70E-01	--

Notes:

1. EPA collected all samples included in this data summary table. Samples are whole body individuals.
2. For sampling years with only one sample, the datum represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Units are mg/Kg or ppm.
5. ND = Not Detected.
6. -- = Not Applicable.

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Table C-48
PCDD/PCDF Data Summary Table for Terrestrial Vegetation (Grass)

Sample Location: REACH 5B - DOWNSTREAM OF WWTP TO UPSTREAM OF ROARING BROOK CONFLUENCE						
Sample Year: 2001						
	Grass					
Constituent	**No. of Samples[1]**	**Frequency of Detection (%)**	**Range**	**Median**	**Arithmetic Mean[2]**	**Standard Error**
OCDD	10	20	ND - 3.40E-06	2.48E-06	0.00000253	9.92E-08
WHO TEQ (Human/Mammal)	10	–	2.90E-06 - 3.13E-06	3.01E-06	3.05E-06	2.43346E-08

Notes:

1. EPA collected samples included in this data summary table.
2. The arithmetic mean and standard deviation were calculated using 1/2 the laboratory detection limit for all non-detects.
3. Units are mg/Kg or ppm.
4. ND = Not Detected.
5. – = Not Applicable.

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Table C-49
PCDD/PCDF Data Summary Table for Waterfowl

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	No. of Samples[1]	Frequency of Detection (%)	Range			Median	Arithmetic Mean[2]	Standard Error
Mallard Breast								
1,2,3,4,7,8-HXCDF	3	33	ND	-	2.00E-06	NA	2.83E-06	1.42E-07
1,2,3,7,8-PECDF	3	100	1.70E-06	-	6.90E-06	6.70E-06	5.10E-06	1.70E-06
2,3,4,7,8-PECDF	3	100	7.50E-06	-	2.13E-05	1.77E-05	1.55E-05	4.13E-06
WHO TEQ (Human/Mammal)	3	--	9.36E-06	-	1.71E-05	1.57E-05	1.41E-05	2.39E-06
Mallard Liver								
1,2,3,7,8-PECDF	3	67	ND	-	2.47E-05	1.62E-05	1.77E-05	5.17E-06
2,3,4,7,8-PECDF	3	67	ND	-	6.87E-05	5.10E-05	4.09E-05	1.44E-05
2,3,7,8-TCDF	3	100	4.22E-05	-	1.12E-04	9.17E-05	8.18E-05	2.06E-05
WHO TEQ (Human/Mammal)	3	--	6.06E-05	-	8.89E-05	6.63E-05	7.19E-05	8.64E-06
Wood Duck Breast[a]								
2,3,7,8-TCDF	9	100	1.42E-05	-	9.21E-05	5.26E-05	5.01E-05	8.46E-06
WHO TEQ (Human/Mammal)	9	--	8.02E-06	-	2.16E-05	1.39E-05	1.47E-05	1.71E-06
Wood Duck Liver								
2,3,4,7,8-PECDF	8	25	ND	-	1.55E-04	1.45E-04	5.22E-05	2.04E-05
2,3,7,8-TCDF	8	100	4.45E-05	-	3.89E-04	6.86E-05	1.19E-04	4.09E-05
OCDD	8	13	ND	-	7.80E-06	NA	3.98E-05	4.86E-06
Total PCDDs	8	13	ND	-	7.80E-06	NA	3.98E-05	4.86E-06
WHO TEQ (Human/Mammal)	8	--	4.68E-05	-	1.57E-04	6.29E-05	8.05E-05	1.44E-05

General Electric Company
Housatonic River - Rest of River
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Table C-49
PCDD/PCDF Data Summary Table for Waterfowl

Sample Location: REACH 6 - WOODS POND							
Sample Year: 1998							
	Mallard Breast						
Constituent	No. of Samples[1]	Frequency of Detection (%)	Range			Median	Arithmetic Mean[2]	Standard Error
1,2,3,4,6,7,8-HPCDD	2	50	ND	-	1.40E-06	NA	1.93E-06	5.25E-07
1,2,3,4,6,7,8-HPCDF	2	50	ND	-	2.10E-06	NA	2.20E-06	1.00E-07
1,2,3,4,7,8-HXCDF	2	50	ND	-	5.80E-06	NA	4.13E-06	1.67E-06
1,2,3,6,7,8-HXCDD	2	50	ND	-	2.80E-06	NA	2.63E-06	1.75E-07
1,2,3,6,7,8-HXCDF	2	50	ND	-	1.70E-06	NA	2.08E-06	3.75E-07
1,2,3,7,8-PECDD	2	50	ND	-	4.40E-06	NA	3.43E-06	9.75E-07
1,2,3,7,8-PECDF	2	50	ND	-	1.60E-05	NA	1.09E-05	5.50E-06
2,3,4,6,7,8-HXCDF	2	50	ND	-	1.50E-06	NA	1.98E-06	4.75E-07
2,3,4,7,8-PECDF	2	100	3.80E-05	-	1.20E-04	8.10E-05	8.10E-05	4.29E-05
2,3,7,8-TCDD	2	50	ND	-	4.00E-06	NA	2.25E-06	1.75E-06
2,3,7,8-TCDF	2	100	7.29E-05	-	1.15E-04	9.41E-05	9.41E-05	2.12E-05
WHO TEQ (Human/Mammal)	2	--	3.18E-05	-	8.41E-05	5.80E-05	5.80E-05	2.61E-05
	Mallard Liver						
Constituent	No. of Samples[1]	Frequency of Detection (%)	Range			Median	Arithmetic Mean[2]	Standard Error
1,2,3,7,8-PECDF	2	50	ND	-	2.60E-05	NA	1.71E-05	8.37E-06
2,3,4,7,8-PECDF	2	100	5.91E-05	-	1.35E-04	9.70E-05	9.70E-05	3.79E-05
2,3,7,8-TCDF	2	100	7.18E-05	-	1.12E-04	9.17E-05	9.17E-05	1.98E-05
WHO TEQ (Human/Mammal)	2	--	7.98E-05	-	1.19E-04	9.95E-05	9.95E-05	1.97E-05
	Wood Duck Breast[b]						
Constituent	No. of Samples[1]	Frequency of Detection (%)	Range			Median	Arithmetic Mean2	Standard Error
1,2,3,4,6,7,8-HPCDD	14	7	ND	-	4.80E-06	NA	2.56E-06	1.75E-07
1,2,3,4,6,7,8-HPCDF	14	14	ND	-	4.80E-06	2.75E-06	2.46E-06	2.18E-07
1,2,3,4,7,8,9-HPCDF	14	7	ND	-	4.80E-06	NA	2.56E-06	1.75E-07
1,2,3,4,7,8-HXCDD	14	7	ND	-	4.80E-06	NA	2.56E-06	1.75E-07
1,2,3,4,7,8-HXCDF	14	21	ND	-	4.80E-06	2.30E-06	2.46E-06	2.18E-07
1,2,3,6,7,8-HXCDD	14	7	ND	-	4.80E-06	NA	2.56E-06	1.75E-07
1,2,3,6,7,8-HXCDF	14	21	ND	-	4.80E-06	1.20E-06	2.38E-06	2.36E-07
1,2,3,7,8,9-HXCDD	14	7	ND	-	4.80E-06	NA	2.56E-06	1.75E-07
1,2,3,7,8,9-HXCDF	14	7	ND	-	4.80E-06	NA	2.56E-06	1.75E-07
1,2,3,7,8-PECDD	14	7	ND	-	4.80E-06	NA	2.56E-06	1.75E-07
1,2,3,7,8-PECDF	14	7	ND	-	2.70E-06	NA	2.07E-06	2.53E-07
2,3,4,6,7,8-HXCDF	14	14	ND	-	4.80E-06	3.00E-06	2.50E-06	1.98E-07
2,3,4,7,8-PECDF	14	7	ND	-	7.00E-06	NA	8.80E-06	1.94E-06
2,3,7,8-TCDD	14	14	ND	-	1.00E-06	9.00E-07	5.43E-07	4.22E-08
2,3,7,8-TCDF	14	64	ND	-	1.00E-04	5.85E-05	4.20E-05	8.25E-06
OCDD	14	14	ND	-	9.60E-06	6.00E-06	4.96E-06	3.99E-07
OCDF	14	7	ND	-	9.60E-06	NA	5.12E-06	3.49E-07
Total PCDDs	14	14	ND	-	9.60E-06	6.00E-06	4.96E-06	3.99E-07
Total PCDFs	14	7	ND	-	9.60E-06	NA	5.12E-06	3.49E-07
WHO TEQ (Human/Mammal)	14	--	7.54E-06	-	2.26E-05	1.36E-05	1.37E-05	1.32E-06

Table C-49
PCDD/PCDF Data Summary Table for Waterfowl

Sample Location: REACH 6 - WOODS POND							
Sample Year: 1998							
	Wood Duck Liver						
Constituent	No. of Samples[1]	Frequency of Detection (%)	Range			Median	Arithmetic Mean[2]	Standard Error
1,2,3,4,6,7,8-HPCDD	12	8	ND	-	8.10E-06	NA	1.95E-05	1.64E-06
1,2,3,4,7,8,9-HPCDF	12	8	ND	-	1.30E-05	NA	1.98E-05	1.39E-06
1,2,3,4,7,8-HXCDF	12	8	ND	-	1.60E-05	NA	2.00E-05	1.31E-06
1,2,3,6,7,8-HXCDD	12	8	ND	-	1.20E-05	NA	1.97E-05	1.45E-06
1,2,3,6,7,8-HXCDF	12	8	ND	-	1.60E-05	NA	2.00E-05	1.31E-06
1,2,3,7,8-PECDD	12	8	ND	-	1.60E-05	NA	2.00E-05	1.31E-06
1,2,3,7,8-PECDF	12	25	ND	-	4.11E-05	3.78E-05	1.59E-05	4.36E-06
2,3,4,7,8-PECDF	12	25	ND	-	1.92E-04	8.90E-05	3.71E-05	1.59E-05
2,3,7,8-TCDF	12	75	ND	-	3.17E-04	8.01E-05	8.88E-05	2.30E-05
OCDD	12	17	ND	-	7.10E-05	4.14E-05	4.04E-05	4.35E-06
OCDF	12	8	ND	-	5.30E-05	NA	4.19E-05	2.69E-06
Total PCDDs	12	17	ND	-	7.10E-05	4.14E-05	4.04E-05	4.35E-06
Total PCDFs	12	8	ND	-	5.30E-05	NA	4.19E-05	2.69E-06
WHO TEQ (Human/Mammal)	12	--	2.77E-05	-	1.71E-04	5.67E-05	6.50E-05	1.15E-05

Notes:

1. EPA collected all samples included in this data summary table. Samples are individual.
2. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
3. Units are mg/Kg or ppm.
4. ND = Not Detected
5. NA = Not Available

[i] Includes one duplicate breast sample.

[ii] Includes two duplicate breast samples.

Table C-50
Pesticide Data Summary Table for Waterfowl

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	Mallard Breast							
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	-	Maximum	Median	Arithmetic Mean[2]	Standard Error
1,2,3,4-Tetrachlorobenzene	3	33	ND	-	4.43E-03	NA	2.57E-03	9.27E-04
1,2,4,5-Tetrachlorobenzene	3	33	ND	-	1.00E-03	NA	1.44E-03	2.17E-04
4,4'-DDD	3	67	ND	-	1.84E-03	1.20E-03	1.35E-03	3.98E-04
4,4'-DDE	3	100	7.31E-03	-	2.00E-02	9.99E-03	1.24E-02	3.86E-03
Alpha-BHC	3	33	ND	-	7.20E-05	NA	1.13E-03	5.27E-04
Alpha-Chlordane	3	33	ND	-	1.71E-04	NA	1.16E-03	4.94E-04
Endosulfan II	3	33	ND	-	9.96E-04	NA	1.43E-03	2.19E-04
Hexachlorobenzene	3	67	1.44E-04	-	5.80E-04	3.62E-04	2.47E-04	1.70E-04
O,P'-DDD	3	100	2.14E-03	-	2.00E-02	9.47E-03	1.05E-02	5.18E-03
O,P'-DDT	3	100	1.03E-02	-	2.92E-02	2.19E-02	2.04E-02	5.50E-03
Oxychlordane	3	33	ND	-	3.24E-04	NA	9.46E-04	3.87E-04
Pentachlorobenzene	3	100	7.00E-05	-	3.81E-03	3.73E-03	2.54E-03	1.23E-03
Trans-Nonachlor	3	33	ND	-	3.76E-04	NA	1.23E-03	4.26E-04

Constituent	Mallard Liver							
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	-	Maximum	Median	Arithmetic Mean[2]	Standard Error
1,2,3,4-Tetrachlorobenzene	3	100	7.74E-04	-	1.84E-02	1.74E-02	1.22E-02	5.72E-03
1,2,4,5-Tetrachlorobenzene	3	67	ND	-	1.12E-02	1.10E-02	9.54E-03	1.50E-03
4,4'-DDD	3	100	1.68E-03	-	6.76E-03	5.93E-03	4.79E-03	1.57E-03
4,4'-DDE	3	100	2.08E-02	-	5.66E-02	4.40E-02	4.05E-02	1.05E-02
Chlorpyrifos	3	67	ND	-	4.15E-03	3.64E-03	4.60E-03	1.01E-03
Cis-Nonachlor	3	67	ND	-	6.98E-04	6.88E-04	2.64E-03	1.95E-03
Dieldrin	3	67	ND	-	2.13E-03	1.84E-03	3.41E-03	1.57E-03
Endosulfan II	3	100	4.87E-04	-	2.95E-03	1.19E-03	1.54E-03	7.34E-04
Gamma BHC (Lindane)	3	67	ND	-	6.93E-04	6.20E-04	2.59E-03	1.97E-03
Heptachlor epoxide	3	100	4.31E-04	-	1.18E-03	6.56E-04	7.57E-04	2.23E-04
Hexachlorobenzene	3	67	ND	-	1.26E-03	1.16E-03	2.95E-03	1.79E-03
O,P'-DDD	3	100	4.56E-03	-	4.34E-02	3.83E-02	2.88E-02	1.22E-02
O,P'-DDT	3	100	2.07E-02	-	6.17E-02	5.19E-02	4.48E-02	1.24E-02
Pentachlorobenzene	3	100	3.48E-04	-	1.16E-02	1.02E-02	7.38E-03	3.54E-03
Trans-Nonachlor	3	100	5.17E-04	-	6.87E-03	6.37E-03	4.59E-03	2.04E-03

Table C-50
Pesticide Data Summary Table for Waterfowl

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	Wood Duck Breast[a] No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2]	Standard Error
1,2,3,4-Tetrachlorobenzene	9	89	ND	2.24E-03	6.13E-04	8.07E-04	2.69E-04
1,2,4,5-Tetrachlorobenzene	9	67	ND	1.27E-03	6.19E-04	1.03E-03	1.83E-04
4,4'-DDD	9	100	9.65E-04	5.43E-03	2.66E-03	3.04E-03	4.54E-04
4,4'-DDE	9	100	1.19E-02	4.03E-02	2.58E-02	2.46E-02	3.04E-03
Alpha-BHC	9	22	ND	1.97E-04	1.93E-04	1.18E-03	2.07E-04
Alpha-Chlordane	9	44	ND	4.55E-04	4.11E-04	1.09E-03	2.21E-04
Chlorpyrifos	9	11	ND	3.25E-04	NA	1.17E-03	2.09E-04
Delta-BHC	9	33	ND	4.70E-05	4.10E-05	1.03E-03	2.59E-04
Endosulfan II	9	44	ND	8.37E-04	8.01E-04	1.12E-03	1.72E-04
Endrin	9	11	ND	2.14E-04	NA	1.26E-03	1.70E-04
Heptachlor	9	11	ND	2.25E-04	NA	1.28E-03	1.66E-04
Hexachlorobenzene	9	100	1.32E-04	5.49E-04	2.64E-04	2.74E-04	4.10E-05
O,P'-DDD	9	100	9.81E-03	2.41E-02	1.37E-02	1.53E-02	1.68E-03
O,P'-DDE	9	33	ND	6.55E-04	4.47E-04	1.18E-03	1.90E-04
O,P'-DDT	9	100	1.74E-02	6.81E-02	5.16E-02	4.36E-02	6.23E-03
Oxychlordane	9	56	ND	3.13E-03	1.60E-03	1.58E-03	2.59E-04
Pentachlorobenzene	9	100	2.27E-04	1.09E-03	7.33E-04	6.83E-04	1.04E-04
Trans-Nonachlor	9	33	ND	4.95E-04	3.65E-04	9.67E-04	2.30E-04

Constituent	Wood Duck Liver No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2]	Standard Error
1,2,3,4-Tetrachlorobenzene	8	100	1.26E-03	7.98E-03	4.27E-03	4.05E-03	8.43E-04
1,2,4,5-Tetrachlorobenzene	8	75	ND	1.38E-02	6.48E-03	7.06E-03	1.04E-03
4,4'-DDD	8	100	9.86E-04	1.27E-02	3.51E-03	4.60E-03	1.27E-03
4,4'-DDE	8	100	2.11E-02	1.01E-01	3.42E-02	4.65E-02	1.13E-02
4,4'-DDT	8	13	ND	1.75E-03	NA	6.04E-03	7.26E-04
Aldrin	8	13	ND	2.19E-03	NA	6.09E-03	6.81E-04
Alpha-BHC	8	13	ND	8.06E-04	NA	6.03E-03	8.32E-04
Alpha-Chlordane	8	88	ND	3.84E-03	1.68E-03	2.83E-03	7.23E-04
Beta-BHC	8	50	ND	2.12E-03	8.36E-04	3.54E-03	9.67E-04
Chlorpyrifos	8	63	ND	4.16E-03	1.06E-03	3.52E-03	1.00E-03
Cis-Nonachlor	8	63	ND	5.95E-04	3.89E-04	2.69E-03	1.14E-03
Delta-BHC	8	38	ND	8.26E-04	2.85E-04	4.52E-03	1.25E-03
Dieldrin	8	50	ND	2.31E-03	1.27E-03	4.32E-03	1.16E-03
Endosulfan II	8	88	ND	3.23E-03	2.00E-03	2.68E-03	6.46E-04
Endrin	8	25	ND	7.66E-04	5.49E-04	4.44E-03	1.21E-03
Gamma BHC (Lindane)	8	100	1.05E-04	1.66E-03	5.54E-04	7.27E-04	2.04E-04
Heptachlor epoxide	8	25	ND	6.40E-04	5.83E-04	5.31E-03	1.09E-03
Hexachlorobenzene	8	88	ND	1.85E-03	8.12E-04	1.63E-03	7.39E-04
O,P'-DDD	8	100	9.15E-03	5.43E-02	1.56E-02	2.32E-02	5.88E-03
O,P'-DDT	8	100	1.97E-02	1.28E-01	3.49E-02	5.34E-02	1.36E-02
Pentachloroanisole	8	25	ND	8.05E-04	5.11E-04	8.90E-04	7.04E-04
Pentachlorobenzene	8	100	3.25E-04	3.13E-03	1.63E-03	1.74E-03	3.88E-04
Trans-Nonachlor	8	38	ND	9.42E-04	7.01E-04	4.66E-03	1.21E-03

Table C-50
Pesticide Data Summary Table for Waterfowl

Sample Location - REACH 6 - HOUSATONIC RIVER - WOODS POND

Sample Year: 1998

Constituent	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2]	Standard Error
Mallard Breast							
1,2,3,4-Tetrachlorobenzene	2	100	1.35E-03	9.10E-03	5.22E-03	5.22E-03	3.87E-03
1,2,4,5-Tetrachlorobenzene	2	100	9.12E-04	2.14E-03	1.52E-03	1.52E-03	6.11E-04
4,4'-DDD	2	50	ND	7.70E-03	NA	4.46E-03	3.24E-03
4,4'-DDE	2	100	3.22E-02	1.33E-01	8.26E-02	8.26E-02	5.04E-02
Chlorpyrifos	2	50	ND	6.40E-05	NA	6.45E-04	5.81E-04
Cis-Nonachlor	2	100	1.91E-04	1.26E-03	7.25E-04	7.25E-04	5.33E-04
Dieldrin	2	50	ND	1.70E-02	NA	8.73E-03	8.63E-03
Hexachlorobenzene	2	100	7.59E-04	8.34E-04	7.97E-04	7.97E-04	3.75E-05
Mirex	2	100	4.70E-05	1.32E-04	8.95E-05	8.95E-05	4.25E-05
O,P'-DDD	2	50	ND	2.10E-02	NA	1.12E-02	9.95E-03
O,P'-DDT	2	100	3.43E-02	1.89E-01	1.11E-01	1.11E-01	7.71E-02
Pentachlorobenzene	2	100	1.18E-03	7.33E-03	4.25E-03	4.25E-03	3.08E-03
Trans-Nonachlor	2	100	9.30E-04	1.76E-03	1.34E-03	1.34E-03	4.13E-04
Mallard Liver							
1,2,3,4-Tetrachlorobenzene	2	100	1.15E-03	2.22E-02	1.17E-02	1.17E-02	1.05E-02
1,2,4,5-Tetrachlorobenzene	2	50	ND	1.40E-02	NA	7.22E-03	6.72E-03
4,4'-DDD	2	100	3.66E-03	5.87E-03	4.77E-03	4.77E-03	1.11E-03
4,4'-DDE	2	100	5.11E-02	8.06E-02	6.59E-02	6.59E-02	1.48E-02
Chlorpyrifos	2	50	ND	2.60E-03	NA	1.57E-03	1.07E-03
Cis-Nonachlor	2	100	3.87E-04	5.93E-04	4.90E-04	4.90E-04	1.03E-04
Delta-BHC	2	50	ND	3.60E-04	NA	4.31E-04	6.90E-02
Dieldrin	2	50	ND	1.90E-03	NA	1.21E-03	7.07E-04
Endosulfan II	2	50	ND	2.90E-02	NA	1.46E-02	1.41E-02
Gamma BHC (Lindane)	2	100	9.50E-05	1.38E-04	1.17E-04	1.17E-04	2.15E-05
Hexachlorobenzene	2	100	8.51E-04	1.83E-03	1.34E-03	1.34E-03	4.91E-04
O,P'-DDD	2	100	1.14E-02	2.67E-02	1.90E-02	1.90E-02	7.66E-03
O,P'-DDT	2	100	4.80E-02	7.93E-02	6.37E-02	6.37E-02	1.56E-02
Pentachloroanisole	2	50	ND	2.20E-04	NA	1.36E-04	8.25E-05
Pentachlorobenzene	2	100	9.59E-04	1.40E-02	7.49E-03	7.49E-03	6.53E-03
Trans-Nonachlor	2	100	3.04E-03	4.08E-03	3.56E-03	3.56E-03	5.18E-04

Table C-50
Pesticide Data Summary Table for Waterfowl

Sample Location - REACH 6 - HOUSATONIC RIVER - WOODS POND

Sample Year: 1998

Constituent	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2]	Standard Error
Wood Duck Breast[b]							
1,2,3,4-Tetrachlorobenzene	14	86	ND	7.64E-03	1.12E-03	1.52E-03	4.98E-04
1,2,4,5-Tetrachlorobenzene	14	43	ND	3.89E-03	9.38E-04	1.53E-03	2.08E-04
4,4'-DDD	14	93	ND	5.33E-03	1.58E-03	2.25E-03	3.64E-04
4,4'-DDE	14	100	8.64E-03	4.22E-02	1.83E-02	2.19E-02	2.82E-03
4,4'-DDT	14	14	ND	6.80E-03	3.45E-03	1.84E-03	4.01E-04
Aldrin	14	7	ND	1.30E-04	NA	1.46E-03	1.09E-04
Alpha-BHC	14	14	ND	1.40E-04	1.37E-04	1.35E-03	1.42E-04
Alpha-Chlordane	14	21	ND	8.50E-04	8.00E-05	1.24E-03	1.77E-04
Beta-BHC	14	7	ND	1.10E-04	NA	1.46E-03	1.10E-04
Chlorpyrifos	14	7	ND	2.60E-04	NA	1.47E-03	1.00E-04
Cis-Nonachlor	14	14	ND	1.17E-04	8.85E-05	1.37E-03	1.48E-04
Gamma BHC (Lindane)	14	7	ND	2.80E-05	NA	1.45E-03	1.16E-04
Gamma Chlordane	14	7	ND	1.90E-04	NA	1.46E-03	1.05E-04
Heptachlor	14	7	ND	8.10E-05	NA	1.46E-03	1.12E-04
Heptachlor epoxide	14	7	ND	1.90E-04	NA	1.46E-03	1.05E-04
Hexachlorobenzene	14	100	1.93E-04	1.07E-03	4.76E-04	4.93E-04	6.01E-05
Mirex	14	7	ND	3.10E-04	NA	1.37E-03	1.38E-04
O,P'-DDD	14	100	2.04E-03	2.36E-02	9.27E-03	1.03E-02	1.52E-03
O,P'-DDT	14	100	6.65E-03	8.21E-02	2.74E-02	3.54E-02	5.77E-03
Oxychlordane	14	64	ND	2.48E-03	1.06E-03	1.25E-03	1.72E-04
Pentachlorobenzene	14	100	7.90E-05	4.18E-03	7.24E-04	1.29E-03	3.48E-04
Trans-Nonachlor	14	43	ND	8.70E-04	4.95E-04	1.13E-03	1.52E-04
Wood Duck Liver							
1,2,3,4-Tetrachlorobenzene	12	100	1.92E-03	2.69E-02	6.95E-03	8.93E-03	2.17E-03
1,2,4,5-Tetrachlorobenzene	12	92	ND	2.00E-02	9.03E-03	9.06E-03	1.33E-03
4,4'-DDD	12	83	ND	9.29E-03	3.60E-03	3.54E-03	8.85E-04
4,4'-DDE	12	100	3.63E-03	9.51E-02	1.65E-02	2.99E-02	9.51E-03
Alpha-Chlordane	12	42	ND	2.23E-02	2.83E-03	5.59E-03	1.94E-03
Beta-BHC	12	67	ND	7.18E-03	4.30E-03	5.17E-03	1.08E-03
Chlorpyrifos	12	58	ND	7.76E-03	1.45E-03	4.27E-03	1.21E-03
Cis-Nonachlor	12	58	ND	2.56E-03	6.63E-04	3.07E-03	1.19E-03
Delta-BHC	12	50	ND	1.24E-03	6.45E-04	2.91E-03	1.29E-03
Dieldrin	12	67	ND	6.00E-02	1.48E-03	1.05E-02	5.03E-03
Endosulfan II	12	17	ND	2.00E-03	1.89E-03	3.65E-03	1.24E-03
Endrin	12	33	ND	1.14E-03	3.02E-04	3.31E-03	1.26E-03
Gamma BHC (Lindane)	12	100	9.00E-05	7.44E-03	1.99E-03	2.45E-03	6.20E-04
Heptachlor epoxide	12	17	ND	1.20E-03	8.35E-04	3.95E-03	1.25E-03
Hexachlorobenzene	12	83	ND	3.38E-03	1.71E-03	1.69E-03	2.44E-04
O,P'-DDD	12	75	ND	8.55E-02	1.39E-02	2.00E-02	7.15E-03
O,P'-DDE	12	25	ND	8.65E-03	4.37E-03	5.71E-03	1.10E-03
O,P'-DDT	12	83	ND	1.40E-01	2.41E-02	3.82E-02	1.29E-02
Oxychlordane	12	8	ND	1.40E-02	NA	4.97E-03	1.48E-03
Pentachloroanisole	12	25	ND	1.70E-04	1.30E-04	2.27E-03	1.29E-03
Pentachlorobenzene	12	83	ND	6.76E-03	1.71E-03	2.38E-03	6.12E-04
Trans-Nonachlor	12	42	ND	3.04E-03	1.16E-03	3.18E-03	1.18E-03

Notes:

1. EPA collected all samples included in this data summary table. Samples are individuals.
2. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
3. Units are mg/Kg or ppm.
4. ND = Not Detected.
5. NA = Not Available.

[a] Includes one duplicate breast sample.

[b] Includes two duplicate breast samples.

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Table C-51
PCDD/PCDF Data Summary Table for Tree Swallows

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	Tree Swallow (Breast) No. of Samples[1]	Frequency of Detection (%)	Range	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4,6,7,8-HPCDD	3	100	7.50E-06 - 2.14E-05	1.47E-05	1.45E-05	4.01E-06
1,2,3,4,6,7,8-HPCDF	3	67	ND - 5.30E-06	4.30E-06	4.50E-06	6.11E-07
1,2,3,4,7,8,9-HPCDF	3	33	ND - 7.00E-07	NA	3.18E-06	1.27E-06
1,2,3,4,7,8-HXCDD	3	67	ND - 3.30E-06	2.60E-06	3.37E-06	8.67E-07
1,2,3,4,7,8-HXCDF	3	100	4.00E-06 - 1.56E-05	8.40E-06	9.33E-06	3.38E-06
1,2,3,6,7,8-HXCDD	3	100	3.40E-06 - 8.80E-06	6.20E-06	6.13E-06	1.56E-06
1,2,3,6,7,8-HXCDF	3	100	6.40E-06 - 2.20E-05	1.81E-05	1.55E-05	4.69E-06
1,2,3,7,8,9-HXCDD	3	33	ND - 2.80E-06	NA	3.88E-06	6.07E-07
1,2,3,7,8-PECDF	3	100	8.80E-06 - 6.00E-05	5.53E-05	4.14E-05	1.63E-05
2,3,4,6,7,8-HXCDF	3	100	2.80E-06 - 1.02E-05	7.70E-06	6.90E-06	2.17E-06
2,3,4,7,8-PECDF	3	100	2.23E-05 - 1.14E-04	5.79E-05	6.46E-05	2.66E-05
2,3,7,8-TCDD	3	67	ND - 6.60E-06	4.40E-06	3.20E-06	1.75E-06
2,3,7,8-TCDF	3	100	8.70E-05 - 5.07E-04	1.92E-04	2.62E-04	1.26E-04
OCDD	3	100	7.40E-06 - 1.96E-05	1.25E-05	1.32E-05	3.54E-06
WHO TEQ (Human/Mammal)	3	--	3.07E-05 - 1.28E-04	6.11E-05	7.32E-05	2.87E-05

Constituent	Tree Swallow (Egg) No. of Samples[1]	Frequency of Detection (%)	Range	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4,6,7,8-HPCDD	3	100	3.05E-05 - 3.71E-05	3.09E-05	3.28E-05	2.14E-06
1,2,3,4,6,7,8-HPCDF	3	67	ND - 1.27E-05	1.08E-05	1.02E-05	1.25E-06
1,2,3,4,7,8-HXCDD	3	33	ND - 7.00E-06	NA	9.95E-06	1.48E-06
1,2,3,4,7,8-HXCDF	3	100	1.44E-05 - 1.99E-05	1.79E-05	1.74E-05	1.61E-06
1,2,3,6,7,8-HXCDD	3	100	1.98E-05 - 2.28E-05	2.09E-05	2.12E-05	8.76E-07
1,2,3,6,7,8-HXCDF	3	100	3.70E-05 - 4.21E-05	3.92E-05	3.94E-05	1.48E-06
1,2,3,7,8,9-HXCDD	3	67	ND - 3.80E-06	3.20E-06	5.93E-06	2.76E-06
1,2,3,7,8-PECDF	3	100	4.21E-05 - 5.20E-05	4.61E-05	4.67E-05	2.88E-06
2,3,4,6,7,8-HXCDF	3	100	9.10E-06 - 1.35E-05	1.16E-05	1.14E-05	1.27E-06
2,3,4,7,8-PECDF	3	100	7.49E-05 - 9.17E-05	8.48E-05	8.38E-05	4.88E-06
2,3,7,8-TCDD	3	100	5.20E-06 - 7.30E-06	6.90E-06	6.47E-06	6.44E-07
2,3,7,8-TCDF	3	100	2.98E-04 - 4.95E-04	3.20E-04	3.71E-04	6.24E-05
OCDD	3	100	2.86E-05 - 4.79E-05	3.53E-05	3.73E-05	5.66E-06
WHO TEQ (Human/Mammal)	3	--	9.94E-05 - 1.22E-04	1.11E-04	1.11E-04	6.49E-06

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Table C-51
PCDD/PCDF Data Summary Table for Tree Swallows

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1999

Constituent	Tree Swallow (Breast)					
	No. of Samples[1]	Frequency of Detection (%)	Range	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4,6,7,8-HPCDD	3	100	9.80E-06 - 2.24E-05	1.14E-05	1.45E-05	3.96E-06
1,2,3,4,6,7,8-HPCDF	3	100	4.50E-06 - 5.90E-06	5.00E-06	5.13E-06	4.10E-07
1,2,3,4,7,8,9-HPCDF	3	33	ND - 9.00E-07	NA	1.79E-06	4.47E-07
1,2,3,4,7,8-HXCDD	3	33	ND - 1.00E-06	NA	1.78E-06	3.94E-07
1,2,3,4,7,8-HXCDF	3	100	8.80E-06 - 1.42E-05	9.70E-06	1.09E-05	1.67E-06
1,2,3,6,7,8-HXCDD	3	100	2.60E-06 - 2.23E-05	2.60E-06	9.17E-06	6.57E-06
1,2,3,6,7,8-HXCDF	3	67	ND - 3.40E-06	3.30E-06	2.94E-06	3.67E-07
1,2,3,7,8,9-HXCDD	3	67	ND - 1.10E-06	7.50E-07	1.19E-06	4.85E-07
1,2,3,7,8,9-HXCDF	3	33	ND - 3.00E-07	NA	1.59E-06	6.47E-07
1,2,3,7,8-PECDD	3	33	ND - 4.70E-06	NA	2.99E-06	8.54E-07
1,2,3,7,8-PECDF	3	100	1.59E-05 - 3.86E-05	1.66E-05	2.37E-05	7.45E-06
2,3,4,6,7,8-HXCDF	3	100	6.00E-06 - 6.20E-06	6.10E-06	6.10E-06	5.77E-08
2,3,4,7,8-PECDF	3	100	3.32E-05 - 6.31E-05	3.35E-05	4.33E-05	9.92E-06
2,3,7,8-TCDD	3	100	1.90E-06 - 3.80E-06	3.70E-06	3.13E-06	6.17E-07
2,3,7,8-TCDF	3	100	1.02E-04 - 2.27E-04	1.03E-04	1.44E-04	4.13E-05
OCDD	3	100	8.00E-06 - 2.11E-05	1.23E-05	1.38E-05	3.86E-06
WHO TEQ (Human/Mammal)	3	--	3.44E-05 - 6.74E-05	3.90E-05	4.69E-05	1.03E-05

Constituent	Tree Swallow (Egg)					
	No. of Samples[1]	Frequency of Detection (%)	Range	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4,6,7,8-HPCDD	21	52	ND - 2.70E-04	6.10E-05	6.90E-05	1.22E-05
1,2,3,4,6,7,8-HPCDF	21	67	ND - 2.41E-04	1.08E-04	9.24E-05	1.34E-05
1,2,3,4,7,8,9-HPCDF	21	5	ND - 5.00E-07	NA	4.00E-05	4.95E-06
1,2,3,4,7,8-HXCDD	21	5	ND - 2.80E-05	NA	4.12E-05	4.60E-06
1,2,3,4,7,8-HXCDF	21	5	ND - 1.30E-04	NA	4.63E-05	6.35E-06
1,2,3,6,7,8-HXCDD	21	5	ND - 6.30E-05	NA	4.29E-05	4.66E-06
1,2,3,6,7,8-HXCDF	21	19	ND - 2.14E-05	6.90E-06	3.71E-05	5.35E-06
1,2,3,7,8,9-HXCDD	21	5	ND - 3.00E-06	NA	4.00E-05	4.91E-06
1,2,3,7,8,9-HXCDF	21	5	ND - 4.20E-06	NA	3.98E-05	4.90E-06
1,2,3,7,8-PECDD	21	10	ND - 3.29E-05	2.33E-05	4.51E-05	5.46E-06
1,2,3,7,8-PECDF	21	95	ND - 1.54E-03	6.94E-04	7.56E-04	9.50E-05
2,3,4,6,7,8-HXCDF	21	10	ND - 2.24E-05	1.74E-05	3.95E-05	4.84E-06
2,3,4,7,8-PECDF	21	67	ND - 2.42E-04	9.91E-05	1.00E-04	1.25E-05
2,3,7,8-TCDF	21	71	ND - 9.94E-04	3.91E-04	3.18E-04	5.79E-05
OCDD	21	48	ND - 1.49E-04	5.18E-05	8.25E-05	1.07E-05
OCDF	21	5	ND - 4.10E-05	NA	8.22E-05	9.27E-06
WHO TEQ (Human/Mammal)	21	--	1.12E-04 - 3.44E-04	1.86E-04	2.04E-04	1.52E-05

Constituent	Tree Swallow (GI Tract)					
	No. of Samples[1]	Frequency of Detection (%)	Range	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4,6,7,8-HPCDD	3	100	1.29E-05 - 4.66E-05	1.51E-05	2.49E-05	1.09E-05
1,2,3,4,6,7,8-HPCDF	3	100	5.50E-06 - 1.58E-05	1.27E-05	1.13E-05	3.05E-06
1,2,3,4,7,8-HXCDF	3	100	3.00E-06 - 0.0000076	4.50E-06	5.03E-06	1.35E-06
1,2,3,6,7,8-HXCDF	3	33	ND - 1.50E-06	NA	5.01E-05	2.58E-05
1,2,3,7,8-PECDF	3	100	1.31E-05 - 1.42E-04	4.79E-05	6.78E-05	3.86E-05
2,3,4,7,8-PECDF	3	67	ND - 1.55E-05	9.20E-06	2.42E-05	1.55E-05
2,3,7,8-TCDD	3	33	ND - 3.40E-06	NA	1.07E-05	4.17E-06
2,3,7,8-TCDF	3	100	1.16E-05 - 3.77E-05	3.17E-05	2.70E-05	7.89E-06
OCDD	3	100	3.19E-05 - 1.83E-04	3.83E-05	8.44E-05	4.93E-05
WHO TEQ (Human/Mammal)	3	--	1.03E-04 - 1.76E-04	1.32E-04	1.37E-04	2.13E-05

Table C-51
PCDD/PCDF Data Summary Table for Tree Swallows

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 2000

Constituent	No. of Samples[1]	Frequency of Detection (%)	Range	Median	Arithmetic Mean[2,3]	Standard Error
Tree Swallow (Breast)						
1,2,3,4,6,7,8-HPCDD	3	33	ND - 1.02E-05	9.60E-06	2.18E-05	1.22E-05
1,2,3,4,6,7,8-HPCDF	3	100	4.28E-05 - 7.08E-05	4.52E-05	5.29E-05	8.96E-06
1,2,3,7,8-PECDF	3	100	3.25E-04 - 4.75E-04	3.59E-04	3.86E-04	4.56E-05
2,3,4,7,8-PECDF	3	100	2.59E-05 - 5.71E-05	4.74E-05	4.35E-05	9.22E-06
2,3,7,8-TCDF	3	100	8.76E-05 - 2.21E-04	1.29E-04	1.46E-04	3.94E-05
OCDD	3	100	7.70E-06 - 1.23E-05	8.50E-06	9.50E-06	1.42E-06
WHO TEQ (Human/Mammal)	3	100	7.70E-06 - 1.23E-05	8.50E-06	9.50E-06	1.42E-06
Tree Swallow (Egg)						
1,2,3,4,6,7,8-HPCDD	23	61	ND - 9.61E-05	4.29E-05	1.64E-04	3.24E-05
1,2,3,4,6,7,8-HPCDF	23	78	ND - 8.14E-04	1.39E-04	2.56E-04	4.27E-05
1,2,3,4,7,8,9-HPCDF	23	4	ND - 2.10E-06	NA	3.62E-04	3.35E-05
1,2,3,4,7,8-HXCDD	23	9	ND - 2.29E-05	2.02E-05	3.45E-04	3.61E-05
1,2,3,4,7,8-HXCDF	23	9	ND - 6.22E-04	3.75E-04	3.83E-04	3.20E-05
1,2,3,6,7,8-HXCDD	23	26	ND - 7.86E-05	2.98E-05	2.90E-04	4.29E-05
1,2,3,6,7,8-HXCDF	23	4	ND - 8.90E-06	NA	3.55E-04	3.32E-05
1,2,3,7,8,9-HXCDD	23	4	ND - 9.00E-06	NA	3.63E-04	3.33E-05
1,2,3,7,8-PECDD	23	17	ND - 3.04E-05	2.15E-05	3.12E-04	4.04E-05
1,2,3,7,8-PECDF	23	96	ND - 1.41E-03	3.79E-04	4.69E-04	6.69E-05
2,3,4,6,7,8-HXCDF	23	13	ND - 3.77E-05	2.31E-05	3.37E-04	3.85E-05
2,3,4,7,8-PECDF	23	74	ND - 1.73E-04	7.90E-05	1.93E-04	4.43E-05
2,3,7,8-TCDD	23	22	ND - 1.25E-05	7.40E-06	5.74E-05	7.15E-06
2,3,7,8-TCDF	23	96	ND - 6.71E-04	2.70E-04	2.97E-04	2.70E-05
OCDD	23	57	ND - 9.70E-05	4.68E-05	3.46E-04	8.18E-05
OCDF	23	9	ND - 1.15E-05	1.07E-05	6.78E-04	7.31E-05
WHO TEQ (Human/Mammal)	23	--	2.72E-04 - 1.78E-03	6.44E-04	7.20E-04	7.57E-05
Tree Swallow (GI Tract)						
1,2,3,4,6,7,8-HPCDF	3	67	ND - 3.00E-05	2.20E-05	2.04E-04	1.82E-04
1,2,3,7,8-PECDF	3	67	ND - 8.17E-05	5.86E-05	1.16E-04	5.85E-05
2,3,7,8-TCDF	3	67	ND - 2.92E-05	0.00002295	3.29E-05	1.05E-05
OCDD	3	33	ND - 4.70E-05	NA	5.47E-04	3.18E-04
WHO TEQ (Human/Mammal)	3	--	5.70E-04 - 1.38E-03	6.47E-04	8.67E-04	2.60E-04

Notes:
1. EPA collected all samples included in this data summary table. Samples are individual.
2. For sampling years with only one sample, the datum represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Units are mg/Kg or ppm.
5. ND = Not Detected.
6. NA = Not Available.
7. -- = Not Applicable.

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Table C-52
Pesticide Data Summary Table for Tree Swallows

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	Tree Swallow (Breast) No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	15	100	1.40E-02	9.70E-02	4.41E-02	4.33E-02	5.62E-03
1,2,4,5-Tetrachlorobenzene	15	100	8.87E-03	4.65E-02	1.67E-02	1.89E-02	2.41E-03
4,4'-DDD	15	100	4.55E-03	1.45E-02	8.03E-03	8.72E-03	7.32E-04
4,4'-DDE	15	100	7.66E-02	3.79E-01	1.28E-01	1.37E-01	1.92E-02
4,4'-DDT	15	100	5.50E-04	4.56E-03	1.91E-03	2.02E-03	2.97E-04
Alpha-BHC	15	93	ND	5.80E-04	3.90E-04	4.41E-04	4.16E-05
Alpha-Chlordane	15	53	ND	4.22E-03	1.71E-03	1.23E-03	2.89E-04
Beta-BHC	15	33	ND	2.20E-04	1.80E-04	2.83E-04	4.98E-05
Chlorpyrifos	15	7	ND	2.70E-04	NA	3.07E-04	4.68E-05
Cis-Nonachlor	15	100	9.90E-04	8.23E-03	2.21E-03	3.25E-03	5.78E-04
Delta-BHC	15	73	ND	1.52E-03	2.30E-04	4.19E-04	1.06E-04
Dieldrin	15	100	3.39E-03	7.90E-03	4.61E-03	5.09E-03	3.53E-04
Endosulfan II	15	7	ND	1.80E-02	NA	1.46E-03	1.20E-03
Endrin	15	47	ND	9.60E-04	6.20E-04	4.05E-04	6.63E-05
Gamma BHC (Lindane)	15	100	2.00E-04	9.50E-04	3.50E-04	4.27E-04	5.00E-05
Gamma Chlordane	15	13	ND	2.28E-03	1.88E-03	5.24E-04	1.55E-04
Heptachlor	15	13	ND	5.90E-04	4.40E-04	3.17E-04	4.92E-05
Heptachlor epoxide	15	100	7.20E-04	1.21E-02	1.41E-03	3.09E-03	8.91E-04
Hexachlorobenzene	15	100	1.88E-03	1.70E-02	4.28E-03	5.97E-03	1.15E-03
Mirex	15	33	ND	1.63E-02	5.60E-04	1.36E-03	1.06E-03
O,P'-DDD	15	100	4.10E-04	8.10E-03	2.13E-03	2.65E-03	5.42E-04
O,P'-DDE	15	13	ND	2.51E-03	1.81E-03	4.53E-04	1.58E-04
O,P'-DDT	15	100	5.60E-04	1.03E-02	1.79E-03	2.69E-03	6.97E-04
Oxychlordane	15	100	3.72E-03	2.76E-02	6.58E-03	9.55E-03	1.78E-03
Pentachloroanisole	15	93	ND	2.48E-03	8.60E-04	9.98E-04	1.28E-04
Pentachlorobenzene	15	100	1.37E-02	1.21E-01	3.99E-02	4.26E-02	6.35E-03
Trans-Nonachlor	15	100	2.74E-03	4.11E-02	7.00E-03	1.07E-02	2.51E-03

Constituent	Tree Swallow (Egg) No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	37	100	2.39E-03	2.16E-01	3.53E-02	4.21E-02	5.97E-03
1,2,4,5-Tetrachlorobenzene	37	100	1.67E-03	6.23E-02	1.51E-02	2.10E-02	2.45E-03
4,4'-DDD	37	97	ND	5.06E-02	1.06E-02	1.26E-02	1.50E-03
4,4'-DDE	37	100	5.28E-02	1.04E+00	3.16E-01	3.61E-01	3.33E-02
4,4'-DDT	37	86	ND	2.45E-02	4.07E-03	4.69E-03	8.14E-04
Aldrin	37	3	ND	9.00E-04	NA	9.60E-04	3.61E-05
Alpha-BHC	37	54	ND	1.60E-03	3.85E-04	8.18E-04	7.49E-05
Alpha-Chlordane	37	70	ND	3.54E-02	2.12E-03	3.50E-03	1.00E-03
Beta-BHC	37	35	ND	3.66E-03	3.80E-04	9.02E-04	9.37E-05
Chlorpyrifos	37	5	ND	1.68E-03	1.60E-03	9.93E-04	4.36E-05
Cis-Nonachlor	37	100	1.44E-03	4.67E-02	6.87E-03	1.05E-02	1.61E-03
Delta-BHC	37	16	ND	3.98E-03	4.15E-04	9.91E-04	9.55E-05
Dieldrin	37	95	ND	8.68E-02	8.85E-03	1.21E-02	2.37E-03
Endosulfan II	37	41	ND	4.95E-02	1.21E-02	7.42E-03	1.96E-03
Endrin	37	32	ND	8.42E-03	1.50E-03	1.33E-03	2.13E-04
Gamma BHC (Lindane)	37	100	1.40E-04	1.70E-03	4.30E-04	5.82E-04	6.05E-05
Gamma Chlordane	37	54	ND	1.84E-02	4.62E-03	3.64E-03	6.61E-04
Heptachlor	37	3	ND	1.80E-03	NA	9.81E-04	4.34E-05
Heptachlor epoxide	37	97	ND	1.43E-01	6.97E-03	1.53E-02	4.08E-03
Hexachlorobenzene	37	100	4.50E-04	3.15E-02	6.03E-03	8.38E-03	1.10E-03
Mirex	37	97	ND	6.56E-02	7.50E-03	1.21E-02	2.23E-03
O,P'-DDD	37	62	ND	8.76E-02	1.31E-02	1.59E-02	3.89E-03
O,P'-DDE	37	3	ND	4.80E-03	NA	1.06E-03	1.10E-04
O,P'-DDT	37	95	ND	1.14E-01	6.48E-03	1.74E-02	3.96E-03
Oxychlordane	37	97	ND	1.42E-01	2.29E-02	2.98E-02	3.94E-03
Pentachloroanisole	37	32	ND	1.91E-03	8.35E-04	9.47E-04	5.90E-05
Pentachlorobenzene	37	100	2.10E-03	1.66E-01	2.90E-02	3.52E-02	4.50E-03
Trans-Nonachlor	37	100	6.00E-04	1.39E-01	1.19E-02	2.04E-02	3.82E-03

Table C-52
Pesticide Data Summary Table for Tree Swallows

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND							
Sample Year:	**1998**						
	Tree Swallow (GI Tract)						
Constituent	**No. of Samples[1]**	**Frequency of Detection (%)**	**Range Minimum**	**Maximum**	**Median**	**Arithmetic Mean[2,3]**	**Standard Error**
1,2,3,4-Tetrachlorobenzene	3	100	4.41E-03	1.28E-02	1.10E-02	9.40E-03	2.55E-03
1,2,4,5-Tetrachlorobenzene	3	100	2.88E-03	5.02E-03	4.01E-03	3.97E-03	6.18E-04
4,4'-DDD	3	100	7.70E-04	2.78E-03	2.32E-03	1.96E-03	6.08E-04
4,4'-DDE	3	100	1.81E-03	4.17E-02	4.88E-03	1.61E-02	1.28E-02
4,4'-DDT	3	67	ND	1.26E-03	1.13E-03	1.07E-03	9.75E-05
Alpha-BHC	3	67	ND	5.60E-04	4.50E-04	6.21E-04	1.82E-04
Beta-BHC	3	33	ND	4.20E-04	NA	7.00E-04	1.52E-04
Cis-Nonachlor	3	33	ND	6.80E-04	NA	8.62E-04	9.10E-05
Delta-BHC	3	33	ND	1.00E-03	NA	9.82E-04	2.96E-05
Dieldrin	3	100	1.70E-04	2.50E-03	1.22E-03	1.30E-03	6.74E-04
Gamma BHC (Lindane)	3	33	ND	2.20E-04	NA	7.08E-04	2.44E-04
Heptachlor	3	100	5.70E-04	1.64E-03	7.50E-04	9.87E-04	3.31E-04
Heptachlor epoxide	3	67	ND	5.20E-03	4.90E-03	3.59E-03	1.32E-03
Hexachlorobenzene	3	100	1.01E-02	2.14E-02	1.22E-02	1.46E-02	3.47E-03
O,P'-DDD	3	67	ND	1.76E-03	1.18E-03	1.11E-03	3.43E-04
O,P'-DDT	3	33	ND	5.80E-04	NA	7.59E-04	1.11E-04
Oxychlordane	3	100	3.38E-03	3.71E-03	3.40E-03	3.50E-03	1.07E-04
Pentachloroanisole	3	100	3.70E-04	8.30E-04	7.80E-04	6.60E-04	1.46E-04
Pentachlorobenzene	3	100	1.19E-02	1.79E-02	1.36E-02	1.45E-02	1.76E-03
Trans-Nonachlor	3	100	9.60E-04	2.13E-03	1.99E-03	1.69E-03	3.69E-04
Sample Year:	**1999**						
	Tree Swallow (Breast)						
Constituent	**No. of Samples[1]**	**Frequency of Detection (%)**	**Range Minimum**	**Maximum**	**Median**	**Arithmetic Mean[2,3]**	**Standard Error**
1,2,3,4-Tetrachlorobenzene	15	100	8.35E-03	8.88E-02	2.00E-02	2.97E-02	6.17E-03
1,2,4,5-Tetrachlorobenzene	15	100	3.72E-03	3.32E-02	1.31E-02	1.46E-02	2.20E-03
4,4'-DDD	15	100	7.50E-03	2.56E-02	1.22E-02	1.31E-02	1.28E-03
4,4'-DDE	15	100	6.72E-02	2.19E-01	1.20E-01	1.25E-01	1.08E-02
4,4'-DDT	15	93	ND	4.73E-03	1.51E-03	1.70E-03	3.36E-04
Aldrin	15	53	ND	1.46E-03	9.04E-04	1.52E-03	2.21E-04
Alpha-BHC	15	100	2.07E-04	9.32E-04	5.23E-04	5.64E-04	5.72E-05
Alpha-Chlordane	15	13	ND	9.99E-03	8.43E-03	3.08E-03	5.83E-04
Beta-BHC	15	7	ND	1.00E-03	NA	2.19E-03	9.72E-05
Chlorpyrifos	15	60	ND	7.88E-04	4.55E-04	1.14E-03	2.42E-04
Cis-Nonachlor	15	100	1.64E-02	5.75E-02	3.32E-02	3.36E-02	2.71E-03
Dieldrin	15	93	ND	5.73E-03	2.31E-03	2.76E-03	3.21E-04
Endosulfan II	15	100	1.11E-02	4.24E-02	2.76E-02	2.79E-02	2.15E-03
Endrin	15	53	ND	1.73E-03	7.48E-04	1.50E-03	1.96E-04
Gamma BHC (Lindane)	15	100	1.45E-04	1.14E-03	2.25E-04	3.28E-04	6.60E-05
Gamma Chlordane	15	60	ND	1.13E-03	4.43E-04	1.20E-03	2.29E-04
Heptachlor	15	47	ND	6.51E-04	3.79E-04	1.37E-03	2.50E-04
Heptachlor epoxide	15	93	ND	1.56E-02	2.20E-03	5.06E-03	1.39E-03
Hexachlorobenzene	15	100	4.53E-04	6.69E-03	2.87E-03	2.97E-03	4.60E-04
Mirex	15	93	ND	2.16E-03	5.54E-04	1.01E-03	1.90E-04
O,P'-DDD	15	100	6.73E-02	1.50E-01	9.52E-02	9.63E-02	5.72E-03
O,P'-DDE	15	47	ND	4.46E-03	2.79E-03	2.52E-03	1.62E-04
O,P'-DDT	15	100	6.63E-02	1.53E-01	9.06E-02	9.70E-02	5.84E-03
Oxychlordane	15	100	6.03E-03	2.48E-02	1.16E-02	1.31E-02	1.42E-03
Pentachloroanisole	15	100	1.64E-04	2.51E-03	1.23E-03	1.14E-03	1.58E-04
Pentachlorobenzene	15	100	5.18E-03	8.94E-02	2.32E-02	2.70E-02	6.01E-03
Trans-Nonachlor	15	100	1.88E-03	3.40E-02	6.18E-03	1.02E-02	2.54E-03

Table C-52
Pesticide Data Summary Table for Tree Swallows

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1999

Constituent	Tree Swallow (Egg) No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	55	100	1.46E-02	3.85E-01	5.01E-02	9.22E-02	1.31E-02
1,2,4,5-Tetrachlorobenzene	55	100	1.70E-03	7.58E-02	9.57E-03	1.66E-02	2.20E-03
4,4'-DDD	55	100	1.11E-02	1.01E-01	3.40E-02	4.04E-02	2.89E-03
4,4'-DDE	55	100	1.72E-01	1.36E+00	4.69E-01	4.90E-01	2.72E-02
4,4'-DDT	55	95	ND	1.05E-02	3.42E-03	3.99E-03	3.22E-04
Aldrin	55	13	ND	3.77E-03	2.70E-03	8.55E-03	4.03E-04
Alpha-BHC	55	85	ND	2.12E-03	7.51E-04	2.37E-03	5.11E-04
Alpha-Chlordane	55	9	ND	1.17E-02	1.03E-02	9.90E-03	4.03E-04
Beta-BHC	55	44	ND	1.80E-03	7.27E-04	5.97E-03	6.45E-04
Chlorpyrifos	55	18	ND	2.72E-03	5.15E-04	7.77E-03	4.98E-04
Cis-Nonachlor	55	100	9.51E-03	1.85E-01	5.18E-02	6.55E-02	5.58E-03
Delta-BHC	55	2	ND	4.40E-04	NA	9.39E-03	3.24E-04
Dieldrin	55	100	8.92E-04	1.52E-02	5.41E-03	5.97E-03	4.23E-04
Endosulfan II	55	100	2.11E-02	1.61E-01	6.20E-02	7.06E-02	4.75E-03
Endrin	55	24	ND	2.44E-03	1.25E-03	7.44E-03	5.28E-04
Gamma BHC (Lindane)	55	100	1.91E-04	3.59E-03	7.70E-04	8.99E-04	7.97E-05
Gamma Chlordane	55	22	ND	8.71E-04	2.98E-04	7.60E-03	5.80E-04
Heptachlor epoxide	55	87	ND	6.72E-02	1.47E-02	1.73E-02	1.94E-03
Hexachlorobenzene	55	100	3.38E-03	3.36E-02	8.17E-03	1.06E-02	8.54E-04
Mirex	55	100	2.37E-03	8.05E-02	1.03E-02	1.49E-02	1.81E-03
O,P'-DDD	55	100	8.65E-02	6.31E-01	2.58E-01	2.77E-01	1.55E-02
O,P'-DDE	55	35	ND	2.38E-02	1.22E-02	1.03E-02	5.24E-04
O,P'-DDT	55	100	1.17E-01	6.57E-01	2.69E-01	3.03E-01	1.68E-02
Oxychlordane	55	100	1.49E-02	8.54E-02	3.66E-02	4.07E-02	2.29E-03
Pentachloroanisole	55	100	3.60E-04	6.25E-03	1.25E-03	1.55E-03	1.31E-04
Pentachlorobenzene	55	100	1.34E-02	2.25E-01	3.95E-02	6.35E-02	7.51E-03
Trans-Nonachlor	55	100	5.34E-03	9.08E-02	1.70E-02	2.26E-02	2.45E-03

Constituent	Tree Swallow (GI Tract) No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	6	100	9.21E-04	3.13E-02	1.34E-02	1.42E-02	4.30E-03
1,2,4,5-Tetrachlorobenzene	6	83	ND	1.86E-02	3.98E-03	7.63E-03	2.37E-03
4,4'-DDD	6	83	ND	1.16E-02	2.84E-03	4.72E-03	1.85E-03
4,4'-DDE	6	100	2.92E-03	1.24E-01	2.25E-02	3.51E-02	1.84E-02
4,4'-DDT	6	83	ND	6.11E-03	3.06E-03	3.68E-03	1.40E-03
Alpha-BHC	6	100	1.42E-04	1.02E-03	2.19E-04	4.51E-04	1.62E-04
Alpha-Chlordane	6	33	ND	4.01E-02	2.90E-02	1.75E-02	4.89E-03
Chlorpyrifos	6	50	ND	6.42E-03	1.61E-04	5.84E-03	1.87E-03
Cis-Nonachlor	6	100	1.28E-03	4.29E-02	1.32E-02	1.55E-02	6.11E-03
Dieldrin	6	100	1.81E-04	8.74E-03	1.84E-03	2.66E-03	1.29E-03
Endosulfan II	6	100	1.36E-03	3.80E-02	4.60E-03	9.42E-03	5.76E-03
Endrin	6	33	ND	2.69E-03	1.70E-03	6.78E-03	1.63E-03
Gamma BHC (Lindane)	6	33	ND	4.96E-04	3.50E-04	6.42E-03	1.93E-03
Gamma Chlordane	6	50	ND	9.06E-03	1.90E-03	8.15E-03	2.71E-03
Heptachlor	6	100	7.80E-05	9.61E-04	2.01E-04	3.13E-04	1.39E-04
Heptachlor epoxide	6	83	ND	1.34E-02	3.83E-03	5.53E-03	1.95E-03
Hexachlorobenzene	6	100	2.80E-04	3.36E-03	1.15E-03	1.47E-03	4.82E-04
Mirex	6	50	ND	1.32E-03	7.79E-04	5.06E-03	1.89E-03
O,P'-DDD	6	100	5.30E-03	1.17E-01	2.87E-02	3.81E-02	1.66E-02
O,P'-DDE	6	33	ND	6.90E-04	4.89E-04	8.24E-03	2.88E-03
O,P'-DDT	6	100	5.97E-03	1.17E-01	2.80E-02	3.73E-02	1.67E-02
Oxychlordane	6	50	ND	7.15E-03	6.93E-03	7.97E-03	6.18E-04
Pentachloroanisole	6	100	4.44E-04	1.07E-03	9.38E-04	8.35E-04	1.04E-04
Pentachlorobenzene	6	100	3.62E-04	2.10E-02	5.08E-03	7.41E-03	2.97E-03
Trans-Nonachlor	6	100	4.03E-04	1.72E-02	4.18E-03	7.22E-03	3.27E-03

Table C-52
Pesticide Data Summary Table for Tree Swallows

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 2000

Constituent	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
Tree Swallow (Breast)							
1,2,3,4-Tetrachlorobenzene	20	100	7.50E-04	9.64E-02	2.70E-02	2.94E-02	5.76E-03
1,2,4,5-Tetrachlorobenzene	20	100	4.70E-04	1.74E-02	9.04E-03	8.57E-03	1.25E-03
4,4'-DDD	20	100	2.94E-03	2.74E-02	7.61E-03	9.17E-03	1.37E-03
4,4'-DDE	20	100	3.94E-02	1.13E-01	6.09E-02	6.74E-02	4.08E-03
4,4'-DDT	20	65	ND	2.18E-03	1.49E-03	1.72E-03	1.33E-04
Aldrin	20	10	ND	3.95E-04	2.67E-04	2.19E-03	1.78E-04
Alpha-BHC	20	65	ND	8.72E-04	2.07E-04	9.92E-04	2.35E-04
Alpha-Chlordane	20	5	ND	2.70E-03	NA	2.42E-03	1.01E-04
Chlorpyrifos	20	20	ND	6.83E-04	1.44E-04	1.98E-03	2.22E-04
Cis-Nonachlor	20	100	6.81E-04	7.47E-02	1.79E-02	2.23E-02	4.43E-03
Delta-BHC	20	20	ND	8.10E-03	5.47E-03	2.96E-03	3.58E-04
Dieldrin	20	100	4.89E-04	6.22E-02	1.30E-03	8.45E-03	3.81E-03
Endosulfan II	20	95	ND	3.25E-02	1.42E-02	1.56E-02	1.85E-03
Endrin	20	40	ND	2.37E-04	1.28E-04	1.53E-03	2.80E-04
Gamma BHC (Lindane)	20	75	ND	3.31E-04	1.83E-04	7.33E-04	2.11E-04
Gamma Chlordane	20	30	ND	3.39E-04	1.14E-04	1.73E-03	2.58E-04
Heptachlor	20	20	ND	3.66E-04	1.86E-04	1.97E-03	2.25E-04
Heptachlor epoxide	20	65	ND	5.41E-03	2.03E-03	2.23E-03	2.91E-04
Hexachlorobenzene	20	100	6.50E-04	7.85E-03	2.83E-03	3.10E-03	3.88E-04
Mirex	20	95	ND	2.63E-03	6.30E-04	9.94E-04	2.15E-04
O,P'-DDD	20	100	2.65E-02	1.16E-01	6.97E-02	6.76E-02	4.57E-03
O,P'-DDE	20	20	ND	7.48E-03	3.85E-03	2.70E-03	2.84E-04
O,P'-DDT	20	100	5.00E-02	1.11E-01	7.75E-02	7.71E-02	3.97E-03
Oxychlordane	20	100	1.43E-03	2.47E-02	8.54E-03	1.05E-02	1.54E-03
Pentachloroanisole	20	100	1.14E-04	1.81E-03	5.99E-04	6.71E-04	1.05E-04
Pentachlorobenzene	20	100	2.00E-03	5.09E-02	2.09E-02	2.04E-02	3.12E-03
Trans-Nonachlor	20	100	6.81E-04	1.73E-02	5.63E-03	6.50E-03	1.00E-03
Tree Swallow (Egg)							
1,2,3,4-Tetrachlorobenzene	40	100	1.05E-03	1.97E-01	2.08E-02	4.41E-02	8.36E-03
1,2,4,5-Tetrachlorobenzene	40	98	ND	1.03E-01	1.63E-02	1.86E-02	2.57E-03
4,4'-DDD	40	100	2.82E-03	7.19E-02	1.99E-02	2.52E-02	2.86E-03
4,4'-DDE	40	100	5.57E-02	7.45E-01	3.32E-01	3.56E-01	2.69E-02
4,4'-DDT	40	98	ND	2.97E-02	2.18E-03	3.36E-03	7.81E-04
Alpha-BHC	40	55	ND	7.83E-04	2.79E-04	4.62E-03	7.26E-04
Alpha-Chlordane	40	15	ND	3.56E-02	4.97E-03	1.00E-02	8.10E-04
Beta-BHC	40	48	ND	1.32E-03	3.17E-04	5.58E-03	8.62E-04
Chlorpyrifos	40	18	ND	3.86E-04	2.00E-04	8.25E-03	6.88E-04
Cis-Nonachlor	40	53	ND	3.90E-02	1.42E-02	1.29E-02	1.33E-03
Delta-BHC	40	85	ND	1.98E-02	3.98E-03	5.73E-03	6.96E-04
Dieldrin	40	100	2.55E-03	6.55E-02	1.37E-02	2.18E-02	2.93E-03
Endosulfan II	40	40	ND	4.07E-02	1.65E-02	1.31E-02	1.10E-03
Endrin	40	3	ND	2.00E-03	NA	9.65E-03	4.06E-04
Gamma BHC (Lindane)	40	65	ND	1.67E-03	6.65E-04	4.08E-03	8.16E-04
Gamma Chlordane	40	8	ND	1.22E-03	2.75E-04	9.18E-03	5.30E-04
Heptachlor	40	10	ND	1.09E-03	1.05E-03	8.99E-03	5.58E-04
Heptachlor epoxide	40	93	ND	4.92E-02	1.13E-02	1.40E-02	1.86E-03
Hexachlorobenzene	40	100	8.30E-04	2.14E-02	5.77E-03	7.59E-03	8.30E-04
Mirex	40	100	4.77E-04	2.35E-01	6.52E-03	1.46E-02	5.77E-03
O,P'-DDD	40	100	3.51E-02	5.05E-01	1.65E-01	2.07E-01	2.03E-02
O,P'-DDE	40	48	ND	2.35E-03	1.16E-03	5.40E-03	6.72E-04
O,P'-DDT	40	100	4.99E-02	5.36E-01	2.28E-01	2.56E-01	2.09E-02
Oxychlordane	40	100	2.42E-03	4.31E-02	2.11E-02	2.03E-02	1.48E-03
Pentachloroanisole	40	100	3.25E-04	2.55E-03	9.23E-04	1.03E-03	9.59E-05
Pentachlorobenzene	40	100	2.19E-03	1.47E-01	2.82E-02	4.15E-02	6.36E-03
Trans-Nonachlor	40	100	5.58E-04	5.75E-02	1.26E-02	1.36E-02	1.84E-03

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Table C-52
Pesticide Data Summary Table for Tree Swallows

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND							
Sample Year: 2000							
	Tree Swallow (GI Tract)						
Constituent	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	-	Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-Tetrachlorobenzene	3	100	1.36E-02	-	1.79E-02	1.45E-02	1.53E-02	1.30E-03
1,2,4,5-Tetrachlorobenzene	3	100	1.04E-02	-	1.61E-02	1.58E-02	1.41E-02	1.87E-03
4,4'-DDD	3	100	1.65E-03	-	1.82E-03	1.71E-03	1.73E-03	4.88E-05
4,4'-DDE	3	100	1.19E-02	-	1.42E-02	1.33E-02	1.31E-02	6.70E-04
Alpha-BHC	3	100	4.33E-04	-	5.55E-04	5.38E-04	5.09E-04	3.82E-05
Cis-Nonachlor	3	100	5.52E-03	-	1.43E-02	1.07E-02	1.02E-02	2.55E-03
Delta-BHC	3	100	5.66E-04	-	1.29E-03	9.06E-04	9.20E-04	2.09E-04
Dieldrin	3	100	4.16E-03	-	1.05E-02	6.90E-03	7.18E-03	1.83E-03
Endosulfan II	3	100	1.92E-03	-	3.41E-03	2.66E-03	2.66E-03	4.32E-04
Heptachlor epoxide	3	100	8.13E-04	-	1.64E-03	8.40E-04	1.10E-03	2.71E-04
Hexachlorobenzene	3	100	1.62E-03	-	1.88E-03	1.88E-03	1.79E-03	8.68E-05
O,P'-DDD	3	100	1.38E-02	-	2.72E-02	1.87E-02	1.99E-02	3.92E-03
O,P'-DDE	3	100	4.80E-04	-	1.12E-03	8.51E-04	8.17E-04	1.85E-04
O,P'-DDT	3	100	1.16E-02	-	2.52E-02	1.88E-02	1.85E-02	3.93E-03
Pentachloroanisole	3	100	8.58E-04	-	9.90E-04	8.63E-04	9.04E-04	4.32E-05
Pentachlorobenzene	3	100	1.37E-02	-	1.46E-02	1.38E-02	1.40E-02	2.75E-04
Trans-Nonachlor	3	67	ND	-	4.91E-04	4.11E-04	4.66E-03	4.25E-03

Notes:

1. EPA collected all samples included in this data summary table. The samples are individuals.
2. For sampling years with only one sample, the datum represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Units are mg/Kg or ppm.
5. ND = Not Detected.
6. NA = Not Available.
7. – = Not Applicable.

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Table C-53
Metals Data Summary Table for Tree Swallows

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	Tree Swallow (Breast) No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
Aluminum	14	93	ND	1.53E+01	4.42E+00	5.10E+00	1.17E+00
Aresenic	14	100	6.30E-03	1.95E-01	6.29E-02	8.29E-02	1.43E-02
Barium	14	100	2.66E-01	1.54E+00	8.49E-01	8.50E-01	1.09E-01
Cadmium	14	100	1.58E-02	3.04E-01	5.69E-02	7.34E-02	1.93E-02
Chromium	14	100	3.92E-01	1.37E+00	6.53E-01	7.25E-01	8.02E-02
Copper	14	100	6.23E+00	1.07E+01	7.49E+00	7.55E+00	2.92E-01
Iron	14	100	1.67E+02	3.00E+02	2.19E+02	2.26E+02	1.14E+01
Lead	14	93	ND	1.51E-01	6.64E-02	8.38E-02	1.76E-02
Magnesium	14	100	5.90E+02	1.04E+03	8.21E+02	8.11E+02	3.60E+01
Manganese	14	100	1.68E+00	5.19E+00	2.82E+00	3.06E+00	3.43E-01
Mercury	14	100	2.24E-01	5.38E-01	3.54E-01	3.58E-01	2.54E-02
Molybdenum	14	100	4.40E-01	1.10E+00	8.04E-01	7.97E-01	5.44E-02
Nickel	14	43	ND	8.50E-01	3.46E-01	2.93E-01	5.11E-02
Selenium	14	100	1.51E+00	3.50E+00	2.30E+00	2.35E+00	1.28E-01
Strotinum	14	100	1.51E+00	1.19E+01	3.32E+00	4.58E+00	9.00E-01
Vanadium	14	64	ND	2.71E+00	1.43E+00	1.00E+00	2.52E-01
Zinc	14	100	7.62E+01	1.15E+02	9.76E+01	9.64E+01	3.39E+00

Constituent	Tree Swallow (Egg) No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
Aluminum	1	100	--	--	--	2.43E+01	--
Aresenic	1	100	--	--	--	2.30E-01	--
Barium	1	100	--	--	--	1.68E+00	--
Cadmium	1	100	--	--	--	7.40E-02	--
Chromium	1	100	--	--	--	6.40E-01	--
Copper	1	100	--	--	--	7.69E+00	--
Iron	1	100	--	--	--	2.25E+02	--
Lead	1	100	--	--	--	9.00E-02	--
Magnesium	1	100	--	--	--	1.13E+03	--
Manganese	1	100	--	--	--	7.80E+00	--
Mercury	1	100	--	--	--	4.10E-01	--
Molybdenum	1	100	--	--	--	3.40E-01	--
Strotinum	1	100	--	--	--	6.59E+00	--
Vanadium	1	100	--	--	--	8.00E-01	--
Zinc	1	100	--	--	--	1.14E+02	--

Notes:

1. EPA collected all samples included in this data summary table. Samples are individuals.
2. For sampling years with only one sample, the datum represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Only detected constituents are presented.
5. Units are mg/Kg or ppm.
6. ND = Not Detected.
7. -- = Not Applicable.

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Table C-54
Total PAH Data Summary Table for Tree Swallows

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND							
Sample Year: 2000							
	Tree Swallow (Breast)						
				Total PAH Concentration (mg/kg)			
Constituent	No. of Samples[1]	Average Lipid (%)	Frequency of Detection	Range	Median	Arithmetic Mean[2]	Standard Error
PAH	20	7.31	100%	1.60E-02 - 4.50E-02	2.70E-02	2.80E-02	1.63E-03

Notes:

1. EPA collected samples included in this data summary table. Samples are individuals.
2. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.

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Table C-55
Pesticide Data Summary Table for Chickadee

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1999

Constituent	Chickadee						
	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
1,2,3,4-TETRACHLOROBENZENE	3	100	8.07E-04	4.96E-03	1.42E-03	2.40E-03	1.30E-03
1,2,4,5-TETRACHLOROBENZENE	3	67	ND	8.77E-03	4.36E-03	5.04E-03	1.98E-03
4,4'-DDD	3	100	5.98E-03	1.73E-02	6.31E-03	9.87E-03	3.73E-03
4,4'-DDE	3	100	5.50E-02	1.05E-01	6.38E-02	7.47E-02	1.55E-02
4,4'-DDT	3	100	1.13E-03	1.52E-03	1.35E-03	1.33E-03	1.12E-04
ALPHA-BHC	3	67	ND	1.14E-02	6.56E-04	4.08E-03	3.64E-03
BETA-BHC	3	67	ND	8.77E-03	1.04E-03	3.50E-03	2.64E-03
CIS-NONACHLOR	3	100	2.14E-03	8.55E-03	4.12E-03	4.94E-03	1.89E-03
DELTA-BHC	3	33	ND	1.34E-04	8.77E-03	6.76E-03	3.39E-03
DIELDRIN	3	100	1.09E-03	2.47E-03	2.15E-03	1.90E-03	4.18E-04
ENDOSULFAN II	3	100	9.28E-03	1.22E-02	1.20E-02	1.11E-02	9.37E-04
GAMMA BHC (LINDANE)	3	33	ND	1.29E-04	8.77E-03	6.75E-03	3.40E-03
GAMMA-CHLORDANE	3	33	ND	1.71E-04	8.77E-03	5.90E-03	2.87E-03
HEPTACHLOR	3	67	ND	3.39E-04	3.39E-04	3.08E-03	2.85E-03
HEPTACHLOR EPOXIDE	3	100	3.91E-04	3.50E-03	4.54E-04	1.45E-03	1.03E-03
HEXACHLOROBENZENE	3	100	6.83E-04	2.92E-03	1.60E-03	1.74E-03	6.50E-04
MIREX	3	67	ND	7.32E-04	7.32E-04	4.10E-03	3.63E-03
O,P'-DDD	3	100	4.94E-02	9.47E-02	5.94E-02	6.79E-02	1.37E-02
O,P'-DDE	3	33	ND	6.27E-04	8.77E-03	6.92E-03	3.23E-03
O,P'-DDT	3	100	6.06E-02	1.15E-01	9.63E-02	9.07E-02	1.60E-02
OXYCHLORDANE	3	100	2.39E-03	3.42E-03	2.96E-03	2.92E-03	2.99E-04
PENTACHLOROANISOLE	3	100	3.30E-04	1.27E-03	6.00E-04	7.33E-04	2.79E-04
PENTACHLOROBENZENE	3	100	4.68E-04	1.51E-03	8.84E-04	9.55E-04	3.04E-04
TRANS-NONACHLOR	3	100	3.49E-03	5.56E-03	4.37E-03	4.47E-03	5.99E-04

Notes:

1. EPA collected all samples included in this data summary table. Samples are whole body individuals.
2. For sampling years with only one sample, the datum represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Units are mg/Kg or ppm.
5. ND = Not Detected.

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Table C-56
Pesticide Data Summary Table for House Wrens

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1998

Constituent	House Wren (Avian Egg)						
	No. of Samples[1]	Frequency of Detection (%)	Range			Median	Arithmetic Mean	Standard Error
1,2,3,4-TETRACHLOROBENZENE	5	100	1.72E-03	-	1.95E-02	7.29E-03	1.03E-02	3.38E-03
1,2,4,5-TETRACHLOROBENZENE	5	100	3.44E-03	-	9.52E-03	6.21E-03	6.33E-03	1.16E-03
4,4'-DDD	5	100	9.89E-03	-	4.76E-02	1.23E-02	1.87E-02	7.25E-03
4,4'-DDE	5	100	8.07E-02	-	1.36E+00	2.30E-01	4.15E-01	2.37E-01
4,4'-DDT	5	100	1.98E-03	-	1.69E-02	2.86E-03	5.55E-03	2.86E-03
ALPHA-BHC	5	80	ND	-	1.12E-03	6.35E-04	3.45E-03	2.71E-03
BETA-BHC	5	20	ND	-	4.85E-03	NA	1.16E-02	1.74E-03
CHLORPYRIFOS	5	20	ND	-	8.80E-04	NA	1.17E-02	2.74E-03
CIS-NONACHLOR	5	100	3.84E-03	-	6.16E-02	9.88E-03	2.28E-02	1.12E-02
DELTA-BHC	5	20	ND	-	8.31E-04	NA	1.14E-02	2.73E-03
DIELDRIN	5	100	1.22E-03	-	3.86E-03	1.54E-03	2.34E-03	5.76E-04
ENDOSULFAN II	5	100	1.74E-02	-	7.30E-02	4.32E-02	4.29E-02	9.50E-03
ENDRIN	5	80	ND	-	1.78E-03	1.52E-03	4.25E-03	2.98E-03
GAMMA-CHLORDANE	5	20	ND	-	6.50E-05	NA	1.15E-02	2.90E-03
HEPTACHLOR	5	80	ND	-	5.31E-04	3.40E-04	2.65E-03	2.31E-03
HEPTACHLOR EPOXIDE	5	100	2.49E-03	-	1.65E-02	3.64E-03	6.14E-03	2.64E-03
HEXACHLOROBENZENE	5	100	3.95E-03	-	1.96E-02	6.33E-03	1.01E-02	3.34E-03
MIREX	5	100	6.05E-03	-	1.34E+00	1.55E-02	2.79E-01	2.66E-01
O,P'-DDD	5	100	1.05E-01	-	3.91E-01	1.19E-01	1.80E-01	5.44E-02
O,P'-DDT	5	100	1.90E-01	-	7.92E-01	2.95E-01	3.76E-01	1.07E-01
OXYCHLORDANE	5	100	8.76E-03	-	5.01E-02	1.30E-02	1.94E-02	7.76E-03
PENTACHLOROANISOLE	5	100	4.93E-04	-	1.06E-03	9.34E-04	8.56E-04	1.05E-04
PENTACHLOROBENZENE	5	100	1.22E-03	-	1.92E-02	9.04E-03	8.56E-03	3.39E-03
TRANS-NONACHLOR	5	100	9.24E-04	-	1.77E-02	8.60E-03	7.56E-03	3.07E-03

Notes:

1. EPA collected samples included in this data summary table. Samples are individuals.
2. Units are mg/Kg or ppm.
3. ND = Not Detected.
4. NA = Not Available

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Table C-57
PCDD/PCDF Data Summary Table for Small Mammals

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS ROAD

Sample Year: 1999

Constituent	White Footed Mouse						
	No. of Samples[1]	Frequency of Detection (%)	Range			Median	Arithmetic Mean[2,3]	Standard Error
OCDD	6	50	ND	-	3.05E-05	9.78E-06	1.30E-05	3.66E-06
1,2,3,7,8-PECDF	6	17	ND	-	5.00E-06	--	5.00E-06	--
2,3,4,7,8-PECDF	6	17	ND	-	3.08E-05	--	3.08E-05	--
1,2,3,4,7,8-HXCDF	6	33	ND	-	2.45E-05	5.20E-06	1.05E-05	3.64E-06
1,2,3,6,7,8-HXCDF	6	33	ND	-	1.03E-05	5.20E-06	6.51E-06	1.07E-06
2,3,4,6,7,8-HXCDF	6	17	ND	-	1.31E-05	--	1.31E-05	--
1,2,3,4,6,7,8-HPCDF	6	33	ND	-	3.18E-05	5.20E-06	1.34E-05	5.42E-06
WHO TEQ (Human/Mammal)	6	--	1.09E-05	-	2.87E-05	1.27E-05	1.49E-05	2.78E-06

Constituent	Short Tailed Shrew						
	No. of Samples[1]	Frequency of Detection (%)	Range			Median	Arithmetic Mean[2,3]	Standard Error
2,3,7,8-TCDF	6	33	ND	-	1.21E-05	1.05E-06	4.53E-06	2.24E-06
OCDD	6	33	ND	-	5.23E-05	1.04E-05	1.75E-05	6.99E-06
1,2,3,7,8-PECDF	6	50	ND	-	3.41E-04	5.42E-05	1.15E-04	5.80E-05
2,3,4,7,8-PECDF	6	33	ND	-	1.32E-04	5.23E-06	4.25E-05	2.40E-05
1,2,3,4,6,7,8-HPCDF	6	67	ND	-	9.64E-05	5.60E-06	2.85E-05	1.57E-05
WHO TEQ (Human/Mammal)	6	--	1.27E-05	-	7.97E-05	2.02E-05	3.72E-05	1.32E-05

Notes:

1. EPA collected all samples included in this data summary table. Samples are whole body individuals.
2. For sampling years with only one sample, the datum represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Units are mg/Kg or ppm.
5. ND = Not Detected.
6. -- = Not Applicable.

Table C-58
Pesticide Data Summary Table for Small Mammals

Sample Location: REACH 5 - HOUSATONIC RIVER - CONFLUENCE TO WOODS POND

Sample Year: 1999

Constituent	No. of Samples[1]	Frequency of Detection (%)	Range Minimum	-	Range Maximum	Median	Arithmetic Mean[2,3]	Standard Error
White Footed Mouse								
1,2,3,4-TETRACHLOROBENZENE	52	77	ND	-	3.39E-03	2.77E-04	8.12E-04	1.87E-05
1,2,4,5-TETRACHLOROBENZENE	52	100	3.30E-05	-	9.13E-03	6.76E-04	1.84E-03	4.40E-05
4,4'-DDD	52	35	ND	-	4.81E-03	2.26E-03	1.88E-03	2.11E-05
4,4'-DDE	52	92	ND	-	4.90E-03	6.05E-04	8.96E-04	1.58E-05
4,4'-DDT	52	4	ND	-	4.90E-03	2.34E-03	2.48E-03	1.50E-05
ALDRIN	52	10	ND	-	4.81E-03	2.33E-03	2.23E-03	1.90E-05
ALPHA-BHC	52	67	ND	-	4.90E-03	1.63E-04	1.02E-03	2.61E-05
ALPHA-CHLORDANE	52	4	ND	-	8.30E-03	2.34E-03	2.60E-03	2.17E-05
BETA-BHC	52	29	ND	-	4.90E-03	2.26E-03	1.85E-03	2.24E-05
CHLORPYRIFOS	52	10	ND	-	4.90E-03	2.34E-03	2.43E-03	1.71E-05
CIS-NONACHLOR	52	48	ND	-	4.90E-03	2.00E-03	1.62E-03	2.64E-05
DELTA-BHC	52	10	ND	-	4.90E-03	2.34E-03	2.32E-03	1.98E-05
DIELDRIN	52	81	ND	-	4.90E-03	3.70E-04	8.91E-04	2.27E-05
ENDOSULFAN II	52	63	ND	-	4.81E-03	5.07E-04	1.13E-03	2.24E-05
ENDRIN	52	12	ND	-	4.81E-03	2.33E-03	2.24E-03	1.86E-05
GAMMA BHC (LINDANE)	52	4	ND	-	4.90E-03	2.34E-03	2.45E-03	1.65E-05
GAMMA-CHLORDANE	52	2	ND	-	1.90E-04	NA	1.90E-04	NA
HEPTACHLOR	52	21	ND	-	4.90E-03	2.27E-03	1.92E-03	2.07E-05
HEPTACHLOR EPOXIDE	52	17	ND	-	4.90E-03	2.30E-03	2.01E-03	1.86E-05
HEXACHLOROBENZENE	52	98	ND	-	5.00E-03	2.61E-04	4.47E-04	1.44E-05
MIREX	52	2	ND	-	1.40E-03	NA	1.40E-03	NA
O,P'-DDD	52	90	ND	-	1.29E-02	8.68E-04	2.10E-03	6.15E-05
O,P'-DDE	52	63	ND	-	3.19E-02	1.05E-03	2.22E-03	9.42E-05
O,P'-DDT	52	100	9.87E-04	-	1.57E-01	1.24E-02	2.03E-02	5.25E-04
OXYCHLORDANE	52	75	ND	-	4.81E-03	8.88E-04	1.26E-03	1.99E-05
PENTACHLOROANISOLE	52	96	ND	-	1.05E-03	1.77E-04	2.18E-04	3.29E-06
PENTACHLOROBENZENE	52	71	ND	-	2.30E-03	4.55E-04	8.66E-04	1.41E-05
1,2,3,4-TETRACHLOROBENZENE	52	6	ND	-	4.81E-03	2.34E-03	2.39E-03	1.48E-05
Short Tailed Shrew								
1,2,3,4-TETRACHLOROBENZENE	24	96	ND	-	2.28E-03	3.88E-04	4.92E-04	2.09E-05
1,2,4,5-TETRACHLOROBENZENE	24	100	2.80E-04	-	5.38E-03	1.23E-03	1.57E-03	5.98E-05
4,4'-DDD	24	100	7.46E-04	-	3.15E-02	5.04E-03	9.60E-03	3.52E-04
4,4'-DDE	24	100	1.13E-02	-	2.85E-01	4.63E-02	5.27E-02	2.23E-03
4,4'-DDT	24	96	ND	-	9.45E-02	4.20E-03	8.35E-03	7.77E-04
ALDRIN	24	13	ND	-	2.49E-03	2.28E-03	2.07E-03	2.77E-05
ALPHA-BHC	24	100	3.00E-05	-	2.79E-04	1.63E-04	1.61E-04	2.80E-06
ALPHA-CHLORDANE	24	13	ND	-	2.49E-03	2.34E-03	2.08E-03	2.73E-05
BETA-BHC	24	8	ND	-	2.49E-03	2.34E-03	2.14E-03	2.59E-05
CHLORPYRIFOS	24	21	ND	-	2.49E-03	2.30E-03	2.08E-03	2.33E-05
CIS-NONACHLOR	24	96	ND	-	1.84E-02	5.23E-03	6.55E-03	2.07E-04
DELTA-BHC	24	8	ND	-	2.49E-03	2.35E-03	2.17E-03	2.25E-05
DIELDRIN	24	83	ND	-	3.82E-02	3.69E-03	7.73E-03	3.73E-04
ENDOSULFAN II	24	92	ND	-	1.23E-02	7.50E-03	6.10E-03	1.48E-04
ENDRIN	24	58	ND	-	2.43E-03	5.80E-04	1.19E-03	4.06E-05
GAMMA BHC (LINDANE)	24	46	ND	-	2.49E-03	2.08E-03	1.27E-03	4.84E-05
GAMMA-CHLORDANE	24	4	ND	-	9.10E-04	NA	9.10E-04	NA
HEPTACHLOR	24	8	ND	-	2.49E-03	2.34E-03	2.14E-03	2.65E-05
HEPTACHLOR EPOXIDE	24	17	ND	-	2.49E-03	2.35E-03	1.99E-03	3.44E-05
HEXACHLOROBENZENE	24	88	ND	-	2.28E-03	3.09E-04	5.32E-04	2.86E-05
MIREX	24	21	ND	-	2.49E-03	2.34E-03	1.92E-03	3.40E-05
O,P'-DDD	24	100	6.49E-03	-	4.02E-01	2.42E-01	2.07E-01	5.19E-03
O,P'-DDE	24	83	ND	-	3.26E-03	5.23E-04	1.14E-03	4.46E-05
O,P'-DDT	24	100	1.92E-02	-	6.25E-01	3.37E-01	2.93E-01	7.17E-03
OXYCHLORDANE	24	79	ND	-	3.21E-03	1.47E-03	1.65E-03	2.57E-05
PENTACHLOROANISOLE	24	100	7.20E-05	-	3.39E-04	1.50E-04	1.62E-04	2.66E-06
PENTACHLOROBENZENE	24	100	6.01E-04	-	2.30E-03	8.98E-04	1.11E-03	2.08E-05
1,2,3,4-TETRACHLOROBENZENE	24	100	1.34E-03	-	9.62E-03	6.61E-03	6.02E-03	1.02E-04

Table C-58
Pesticide Data Summary Table for Small Mammals

Notes:

1. EPA collected all samples included in this data summary table. Samples are whole body individuals.
2. For sampling years with only one sample, the datum represents the concentration of that individual sample.
3. The arithmetic mean and standard deviation were calculated using one-half the laboratory detection limit for all non-detects.
4. Units are mg/Kg or ppm.
5. ND = Not Detected.
6. NA = Not Available.

REPORT

Housatonic River - Rest of River RCRA Facility Investigation Report

Volume 2. Appendix D
Evaluation of Data Quality/ Interpretation Issues

General Electric Company
Pittsfield, Massachusetts

September 2003

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Table of Contents

D. Evaluation of Data Quality/Interpretation Issues

D.1 Variability in Analytical Measurements

Many of the analyses provided in this RFI report involve the use of analytical data generated by more than one laboratory. It was necessary for EPA to contract several laboratories for PCB analysis because of the size of its 1998-2002 sampling program. Further, some analyses presented in this Report combine data collected by EPA with data collected by GE, both of which used different laboratories. Interpretation of the results presented in this Report requires an understanding of the variability associated with the analytical data. Therefore, this Appendix provides information regarding the level of variability inherent in the analytical data presented in this Report. Specifically, the variability in PCBs, TOC, and fish lipid content is examined.

Variability is inherent in measured quantities of environmental media. Spatial heterogeneity in the field is a major source of this variability. Nonetheless, there are a number of other sources of variability, including but not limited to: (1) sample collection and handling methods, and (2) laboratory analytical techniques, such as extraction and quantitation procedures. One way to evaluate the magnitude of analytical variability in data collected from the Housatonic River is to examine duplicate and split samples collected from different media (i.e, water, sediment, and fish) during the 1998-2002 EPA sampling program. Duplicate sample analysis involves the analysis of duplicate sample aliquots by a single laboratory. These analyses can be used to provide an estimate of the intra-laboratory analytical variability. Split sample analysis, however, involves the analysis of duplicate sample aliquots by two different laboratories (e.g., a GE and EPA contracted laboratory). These samples can be used to quantify the amount of inter-laboratory variability, and can be used to identify potential biases between individual laboratories.

Analyses of duplicate and split sample results have been conducted by Weston on behalf of EPA to evaluate the variability of both intra-laboratory (duplicate samples) and inter-laboratory (split samples) for sediment/soil and fish PCB data (e.g., McGrath et al., 2002). Based on these analyses, it was concluded that both intra-laboratory and inter-laboratory variability are significant in PCB analyses conducted on the Housatonic River. As expected, the variability observed between different laboratories (split samples) was generally greater than that observed within a single lab (duplicate samples). For example, Weston (2002) noted that the mean relative percent difference (RPD) between sediment/soil duplicate samples was approximately 35%. The variability observed between sediment/soil split samples was nearly twice as high, having a mean RPD of approximately 64% (only including samples where both the EPA and GE results were above the detection limit). Similarly, the mean RPDs in fish tissue duplicates and splits were approximately 29% and 41% respectively. As a means of further illustrating this variability, split sample PCB results for GE and EPA laboratory analyses are plotted against each other in Figures D.1-1 through D.1-3, for water column, sediment, and fish tissue, respectively. These plots demonstrate that for any given PCB concentration, split sample results generally differ by between a factor of 2 to 10, and vary by media. In general, the least amount of variability is observed in the fish tissue data. Statistical comparisons of EPA-GE split samples are discussed further in Appendix D.2.

In addition to PCB measurements, relatively large variability was also observed in sediment TOC data and fish tissue lipid content. Figures D.1-4 and D.1-5 present comparisons of EPA versus GE TOC and fish tissue lipid content results, respectively. The variability present in these measurements will serve to compound the uncertainty associated with analysis of organic carbon-normalized PCB concentrations and normalization of fish tissue PCB data to lipid content.

As discussed above, the large amount of local variability in the Housatonic River data (e.g., the sediment PCB concentrations plotted in Figure 4-1) is not unexpected for an environmental dataset. The analyses presented in this Appendix demonstrate that variability associated with the laboratory analyses (i.e., inter-laboratory and intra-laboratory in the case of multiple laboratories) contribute to the overall variability and uncertainty in the data. Therefore, variability was considered in the data analyses conducted throughout the RFI Report. For example when comparing average concentrations between locations, depths, or fish species, two standard errors about the mean are presented to provide a measure of the variability associated with each average.

D.2 Statistical Comparisons between GE and EPA PCB Analyses on Split Samples

Some of the analyses presented in the RFI report included data from both GE and EPA. In a number of cases, the data were combined to provide a more robust dataset for the analysis and limited differences between laboratory results were not an issue (e.g., combination of EPA and GE congener-specific sediment PCB analyses to evaluate homolog composition in sediments [Figure 4-27]). However, for the temporal trend analyses, explicit comparisons are made between EPA and GE datasets. Because most of the recent samples were analyzed by EPA's laboratories and the historical samples were analyzed by GE's laboratories, differences/biases between these datasets have the potential to affect the interpretation of any apparent trend in the data. Therefore, statistical tests were performed with the split samples to provide a more quantitative comparison of the laboratories. These tests were done for water, sediment, and fish samples because temporal trend analyses were conducted for these media in the RFI Report (see Sections 3, 4, and 6).

The general approach used to compare the split samples was to perform a Student's t-test (two-tailed) on paired samples. This test is used to evaluate the null hypothesis that the datasets' means are the same when there is a natural pairing of observations in the samples. Or in other words, the test is equivalent to evaluating whether the difference between the two results is statistically different from zero. Student's t-tests require normally-distributed data; therefore, the tests discussed in this Appendix were performed on log-transformed concentrations because the EPA and GE concentrations, as well as the differences between sample pairs, generally follow a lognormal distribution as indicated by plotting linearly on a log probability plot (Figure D.2-1). In order to avoid complications associated with differing detection limits, sample pairs in which PCBs were not detected in at least one sample were excluded from the t-tests . If the computed t-statistic from the test is greater than the critical t-value for a given confidence level (95% was used in this Appendix), then the null hypothesis is rejected, indicating a statistical difference beween the two laboratories' results. It is important to note that this analysis does not account for intra-laboratory analytical variability (analytical variability within a single laboratory). It is assumed that intra-laboratory variability is essentially random and present in all laboratory generated data, and therefore does not affect the analysis as the number of samples increases.

D.2.1 Surface Water

Splits of 141 EPA surface water samples (plotted in Figure D.1-1) were analyzed by GE. There were 62 sample pairs in which PCBs were detected by both EPA's laboratory (ITS) and GE's laboratory (NEA). Paired t-test results for the log-transformed split sample concentrations are listed in Table D.2-1.

Table D.2-1. GE-EPA Surface Water PCB Split Sample Comparison

Student's t-Test: Paired Two Sample for Means		
	log(EPA, ng/L)	log(GE, ng/L)
Mean	2.04	2.06
Variance	0.17	0.20
Observations	62	62
Pearson Correlation	0.64	
Hypothesized Mean Difference	0	
df	61	
t Stat	-0.32	
P(T<=t) two-tail	0.75	
t Critical two-tail	2.00	

Because the absolute value of the t-statistic (0.3) is less than the critical t-value (2.0; df=61, α=0.05), the null hypothesis cannot be rejected at a 95% level of significance, indicating that the GE and EPA PCB analyses on surface water split samples are not statistically different.

D.2.2 Sediments

Splits of 488 EPA sediment samples (plotted in Figure D.1-2) were analyzed by GE. Excluding rejected samples and non-detect results, 317 sample pairs were available to make comparisons between EPA's laboratories (ENE, ITS, ONSITE, and QUANTERRA) and GE's lab (NEA). Paired t-test results for the log-transformed split sample concentrations are listed in Table D.2-2.

Table D.2-2. GE-EPA Sediment PCB Split Sample Comparison

Student's t-Test: Paired Two Sample for Means		
	log(EPA, mg/kg)	log(GE, mg/kg)
Mean	0.84	0.96
Variance	0.62	0.57
Observations	317	317
Pearson Correlation	0.81	
Hypothesized Mean Difference	0	
df	316	
t Stat	-4.79	
P(T<=t) two-tail	0.00	
t Critical two-tail	1.97	

Because the absolute value of the t-statistic (4.8) is greater than the critical t-value (2.0; df=316, α=0.05), the null hypothesis is rejected; indicating that there is a statistically significant difference between the GE and EPA PCB analyses on sediment split samples.

The EPA analyses of sediment samples were conducted by multiple laboratories. To further evaluate the differences between the EPA and GE analyses, paired t-tests were performed to compare the GE results with the

three major laboratories used by EPA (ITS [n=36], ONSITE [n=267], and QUANTERRA [n=11]). Results from these tests are listed in Tables D.2-3, D.2-4, and D.2-5, for the ITS, ONSITE, and QUANTERRA split samples, respectively.

Table D.2-3. GE-EPA/ITS Sediment PCB Split Sample Comparison

Student's t-Test: Paired Two Sample for Means		
	log(EPA, mg/kg)	log(GE, mg/kg)
Mean	0.52	0.63
Variance	1.04	0.61
Observations	36	36
Pearson Correlation	0.90	
Hypothesized Mean Difference	0	
df	35	
t Stat	-1.42	
P(T<=t) two-tail	0.16	
t Critical two-tail	2.03	

Table D.2-4. GE-EPA/ONSITE Sediment PCB Split Sample Comparison

Student's t-Test: Paired Two Sample for Means		
	log(EPA, mg/kg)	log(GE, mg/kg)
Mean	0.90	1.03
Variance	0.53	0.52
Observations	267	267
Pearson Correlation	0.78	
Hypothesized Mean Difference	0	
df	266	
t Stat	-4.21	
P(T<=t) two-tail	0.00	
t Critical two-tail	1.97	

Table D.2-5. GE-EPA/QUANTERRA Sediment PCB Split Sample Comparison

Student's t-Test: Paired Two Sample for Means		
	log(EPA, mg/kg)	log(GE, mg/kg)
Mean	0.24	0.39
Variance	0.96	0.84
Observations	11	11
Pearson Correlation	0.93	
Hypothesized Mean Difference	0	
df	10	
t Stat	-1.44	
P(T<=t) two-tail	0.18	
t Critical two-tail	2.23	

For the individual EPA lab comparisons, the absolute value of the t-statistics for ITS and QUANTERRA (both 1.4) are less than the critical t-values (2.0 and 2.2, respectively), indicating that the null hypothesis cannot be rejected for these two laboratories. However for the GE-EPA/ONSITE comparison, the absolute value of the t-statistic (4.2) is greater than the critical t-value (2.0; df=266, α=0.05), for which the null hypothesis is rejected, indicating that there is a difference between the PCB analyses on sediment split samples conducted by GE and EPA/ONSITE. As shown by the values in Table D.2-4, the GE analyses are higher than the corresponding ONSITE analyses.

Because much of the EPA data were analyzed by ONSITE, analysis of spatial patterns using only the EPA data would generally not be affected. However, comparison of these data with the GE data for the purposes of evaluating temporal trends must take into account the apparent difference. Therefore, the analyses and discussion in Section 4 of the RFI report considered the analytical differences discussed in this Appendix.

D.2.3 Fish

Splits of 18 EPA fish samples (plotted in Figure D.1-3) were analyzed by GE. PCBs were detected in all samples by both EPA's laboratory (GERG) and GE's laboratory (NEA). Paired t-test results for the log-transformed split sample concentrations are listed in Table D.2-6.

Table D.2-6. GE-EPA Fish PCB Split Sample Comparison

Student's t-Test: Paired Two Sample for Means		
	log(EPA, mg/kg)	log(GE, mg/kg)
Mean	0.77	0.71
Variance	0.30	0.26
Observations	18	18
Pearson Correlation	0.92	
Hypothesized Mean Difference	0	
df	17	
t Stat	1.10	
P(T<=t) two-tail	0.29	
t Critical two-tail	2.11	

Because the absolute value of the t-statistic (1.1) is less than the critical t-value (2.1; df=17, α=0.05), the null hypothesis cannot be rejected, indicating that the GE and EPA PCB analyses on fish split samples are not statistically different.

D.3 The Occurrence and Implications of Low Lipid Values in Fish Fillet Tissue Samples

Fillet samples with extremely low lipid values are found in the EPA Housatonic River database. These data have the potential to skew averages of lipid-normalized PCB concentrations. Values at and below approximately 0.3% lipid are of concern for two reasons. First, the distributions of the data often show breaks at about 0.3% lipid (Figure D.3-1; dotted line is at 0.3%). Second, these values are lower than can reasonably be expected based on fish physiology. Fillet lipids occur in two major types: (1) cell membrane lipids constituting approximately 0.2 to 1.6% of fillet wet weight (Ewald and Larsson 1994), and (2) storage lipids. The amount of storage lipids in a fillet depends on the nutritional status of the fish whereas the amount of membrane lipid is constrained by cell structural requirements. A significant number of samples in the EPA database fall well below or in the low range for cell membrane lipid content.

The treatment of these low-lipid samples has important implications in the analysis of fish data trends based on lipid normalized PCB results. For certain species and locations, these samples comprise a large fraction of the data. Within Reach 6 (Woods Pond), fillets with 0.3% lipid or lower are reported for 75% of largemouth bass and 30% of yellow perch. In Reach 5, 60% of brown bullhead and 35% of largemouth bass fillets have 0.3% or lower lipid content (Figure D.3-1). Figure D.3-2 shows largemouth bass data by river mile in Reaches 5 and 6 from the 1998 EPA sampling program. While low-lipid fillets do not appear to have an impact on wet-weight PCB concentrations, their inclusion in averaging of lipid-normalized PCB concentrations of these same data would introduce a substantial bias. When dividing similar fillet PCB concentrations by their corresponding lipid contents, the lipid values that are low by a factor of 10 will result in normalized PCB concentrations that are skewed high relative to the remainder of the data. Therefore, it may be inappropriate to include fillets with reported lipid contents of 0.3% or less in trend analysis.

Two possible explanations have been identified for the unusual frequency of occurrence of these data in the EPA database[1]. First, it is possible that, in 1998, the fish within Reaches 5 and 6 of the Housatonic River were very lean. Second, it is possible that the efficiency to which fatty tissue was removed from the muscle tissue during fillet preparation could cause this variability in lipid content. Regarding fillet technique, a small difference in filleting, leaving, for example, 0.5 g of lipid on the carcass instead of on a 100g fillet, could account for the level of differences among datasets that are of concern here.

Either of these factors may then be magnified by incomplete lipid extraction of a low-lipid fillet, based on the commonly-used analytical procedures employed in environmental monitoring programs. Some of the commonly used solvent systems extract PCBs and storage lipids efficiently, but cell membrane lipids relatively poorly (de Boer 1988, Randall et al. 1991). Sample size and extraction time are also important factors in the analysis of lipids (de Boer 1998; Honeycut et al. 1995). Different methods were used by the laboratories principally used for the fish tissue analyses in the EPA and GE programs, GERG and NEA, respectively. The split sampling comparison (Appendix D.1) was based on a set of 18 paired fillets from a variety of species, predominantly largemouth bass, brown bullhead and yellow perch, from several locations. All fillets were prepared in the field by EPA Program field crew. Despite differences of up to a factor of two, no bias in either laboratory's methods was detectable and both laboratories reported at least one lipid value at or below 0.3% (Appendix D.1).

[1] Reporting error is an unlikely explanation for the high frequency of very low lipid content. The EPA database has undergone quality assurance checks. The samples with low lipid levels were either not flagged, indicating that the reported values are above the detection limit, with no quality control problems, or were flagged as "estimates" (i.e., detectable but below the Practical Quantitation Limit for the analytical batch). In other words, all of these samples were reported as valid data.

In part because of the occurrence of the low-lipid fillets in the 1998 EPA dataset, GE collected additional largemouth bass samples in 2002. Fifteen adult-sized fish were sampled from both Reach 5B and Reach 6. These samples were shipped to NEA where they were filleted according to the procedures outlined in the Supplemental Investigation Work Plan (Weston, 2000). One fillet was removed from each fish and had its associated scales and skin removed. The rest of the carcass ("offal"), including the skin and scales, was analyzed separately. Both preparations were analyzed for PCB congeners and percent lipids according to methods used previously by NEA for both the split sample and GE supplemental adult fish sampling programs. These data can be compared with the fillet and offal data from the 1998 EPA sampling program.

On an offal basis and on a whole-body basis, PCB concentrations in Reaches 5 and 6 are very similar between the EPA 1998 and GE 2002 datasets (Table 6-3). However, the 2002 wet weight PCB concentrations in largemouth bass fillets average 2.5 to 10 fold higher in comparison to the 1998 data in Reaches 5 and 6, respectively (Table 6-3). Relationships between fillet and offal preparations for largemouth bass differ in the two datasets (Figure D.3-3). In the EPA 1998 dataset, fillet lipid content shows no consistent relationship with that of offal from the same fish, in contrast to the GE dataset. In the EPA dataset, wet-weight PCB concentrations of offal are generally more than 10-fold greater than in the corresponding fillet; in the GE data, offal PCB concentrations are approximately 2-fold greater than in the corresponding fillet. On a lipid-normalized basis, PCB concentrations in the offal from the EPA 1998 dataset are approximately 50-70% higher than the fillet while in the GE dataset offal and fillet concentrations are approximately equivalent (see also, Table 6-3).

The comparison of these two datasets puts some perspective on the fillet lipid issue and the associated PCB concentrations. The ability to reconstruct whole-body data from matching fillet and offal preparations may mitigate data analysis and model calibration issues associated with low-lipid fillet results. With respect to the application of bioaccumulation models, which compute PCB concentrations on a whole-body basis, these two datasets are consistent with one another. It should be noted that the variation in the relationship between fillet and offal lipid content and PCB concentration in the two datasets introduces uncertainty in the conversion of whole-body based model results to equivalent fillet values for the human health risk assessment.

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Appendix D Figures

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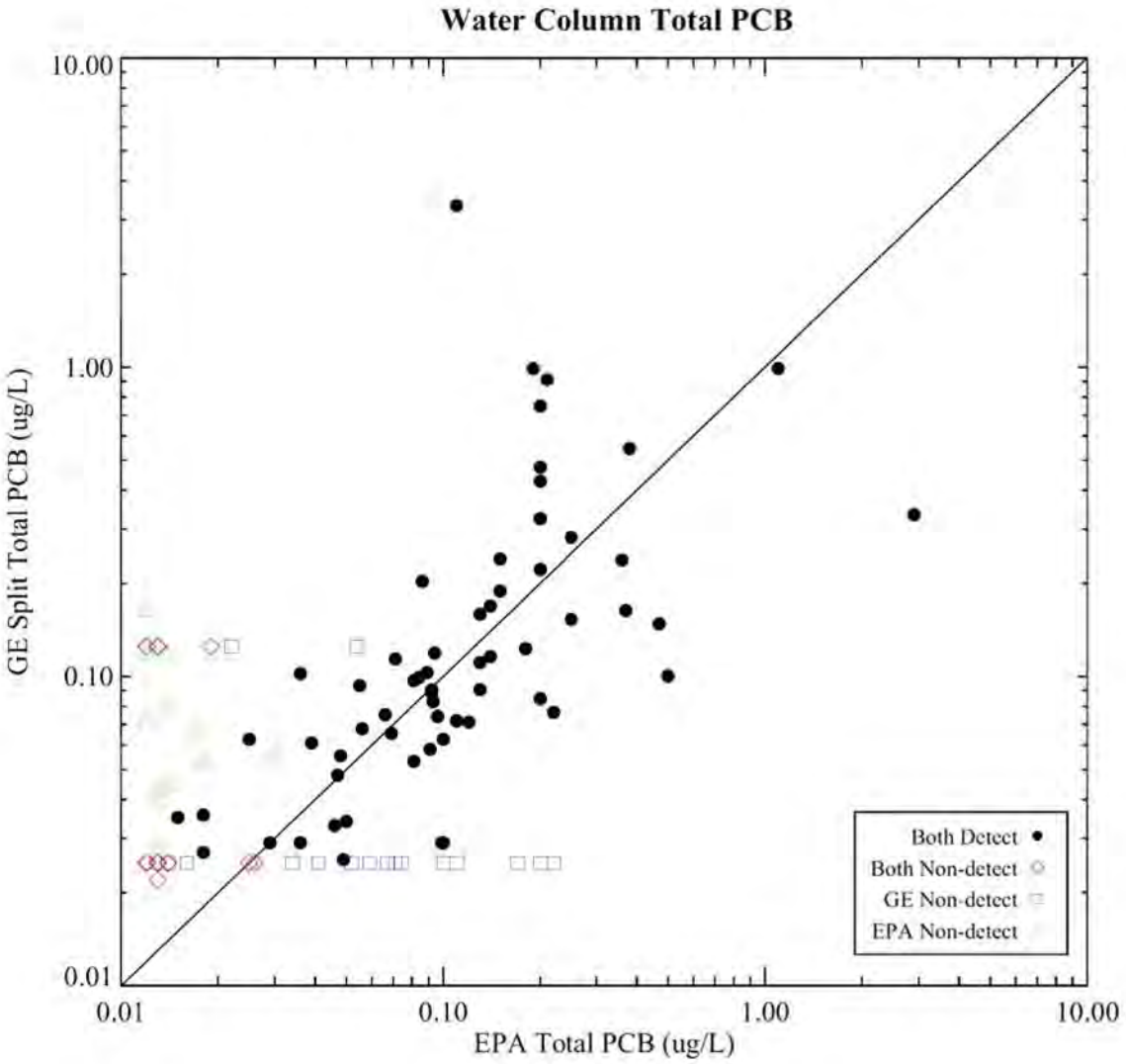

Figure D.1-1. Comparison between EPA and GE split water column total PCB concentration data.

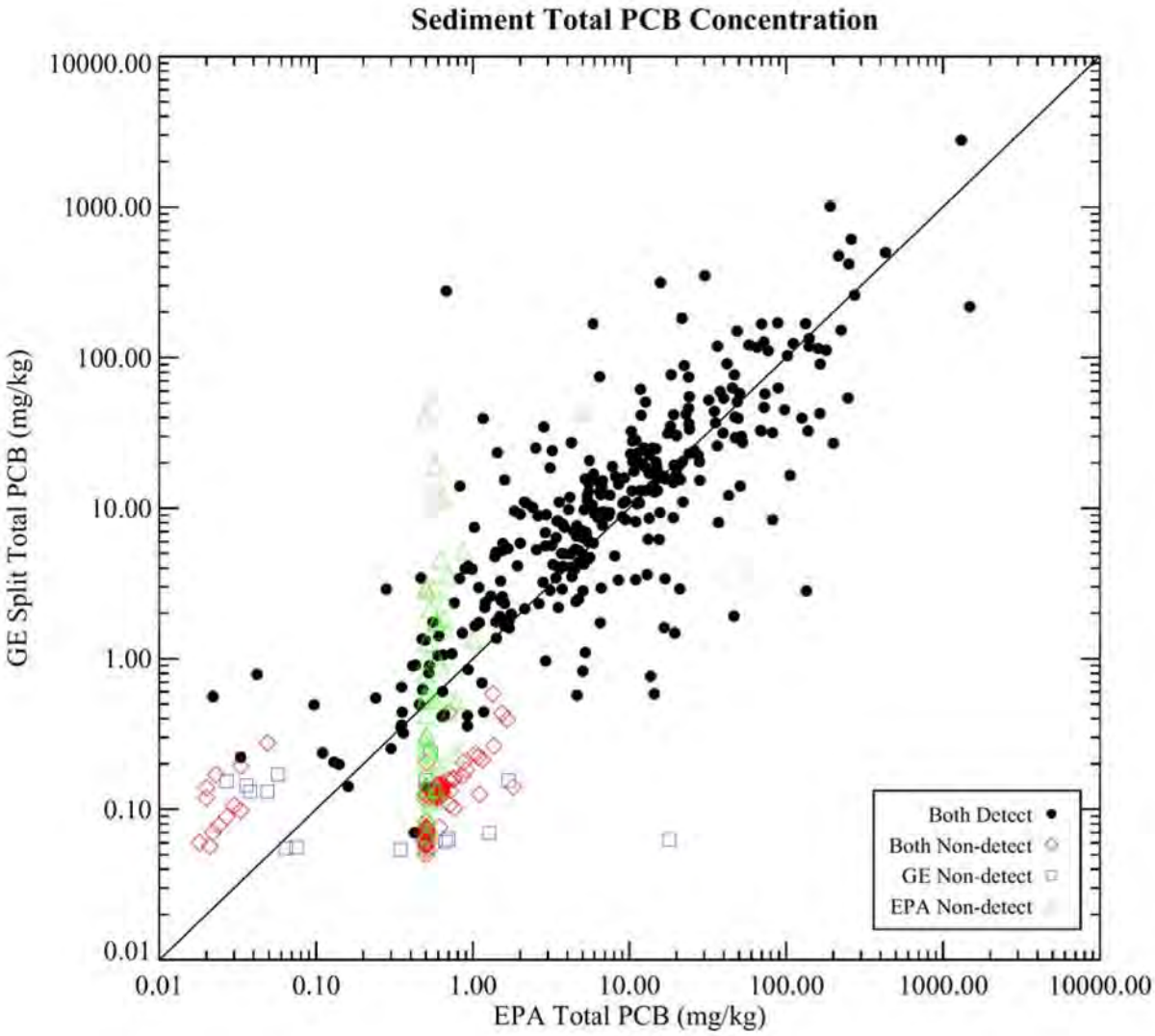

Figure D.1-2. Comparison between EPA and GE split sediment total PCB concentration data.

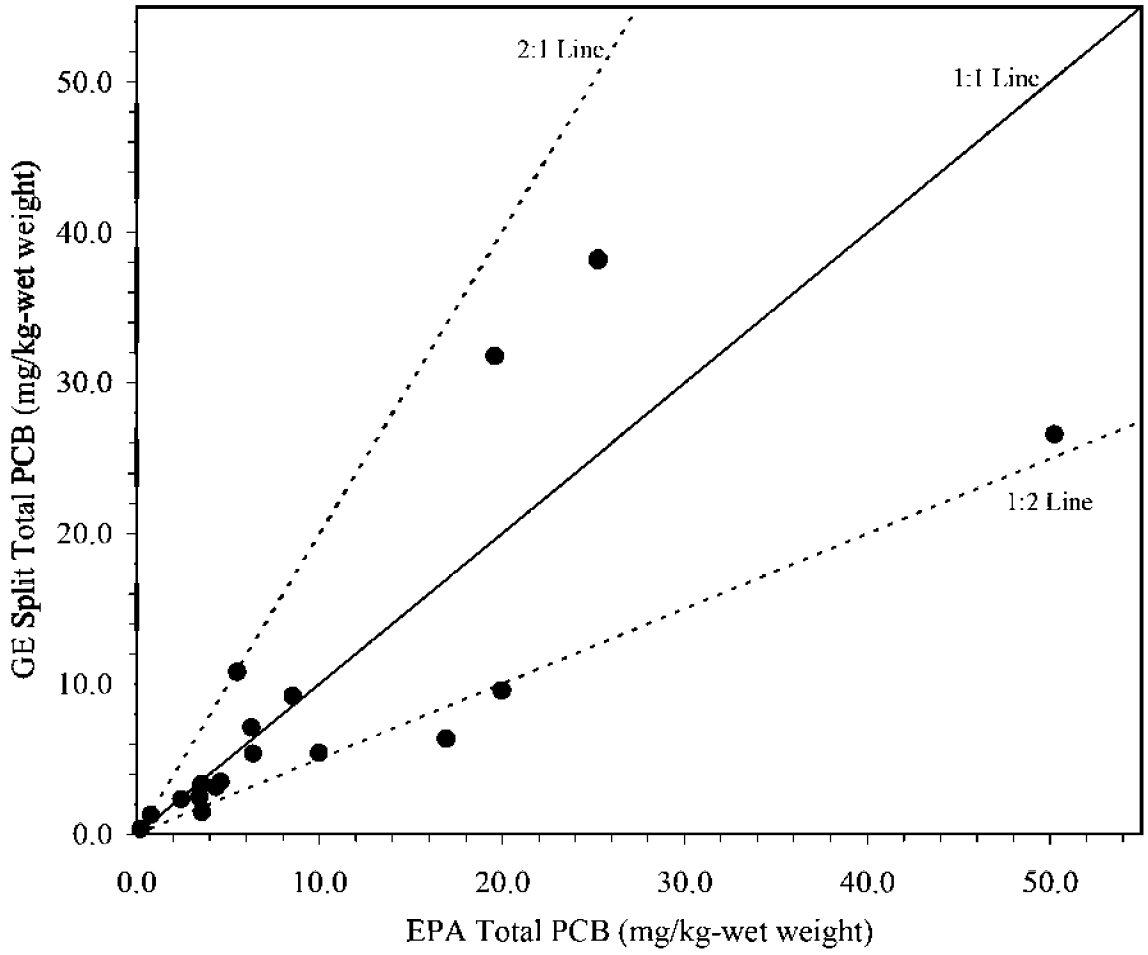

Figure D.1-3. Comparison between EPA and GE split fish tissue total PCB concentration data.

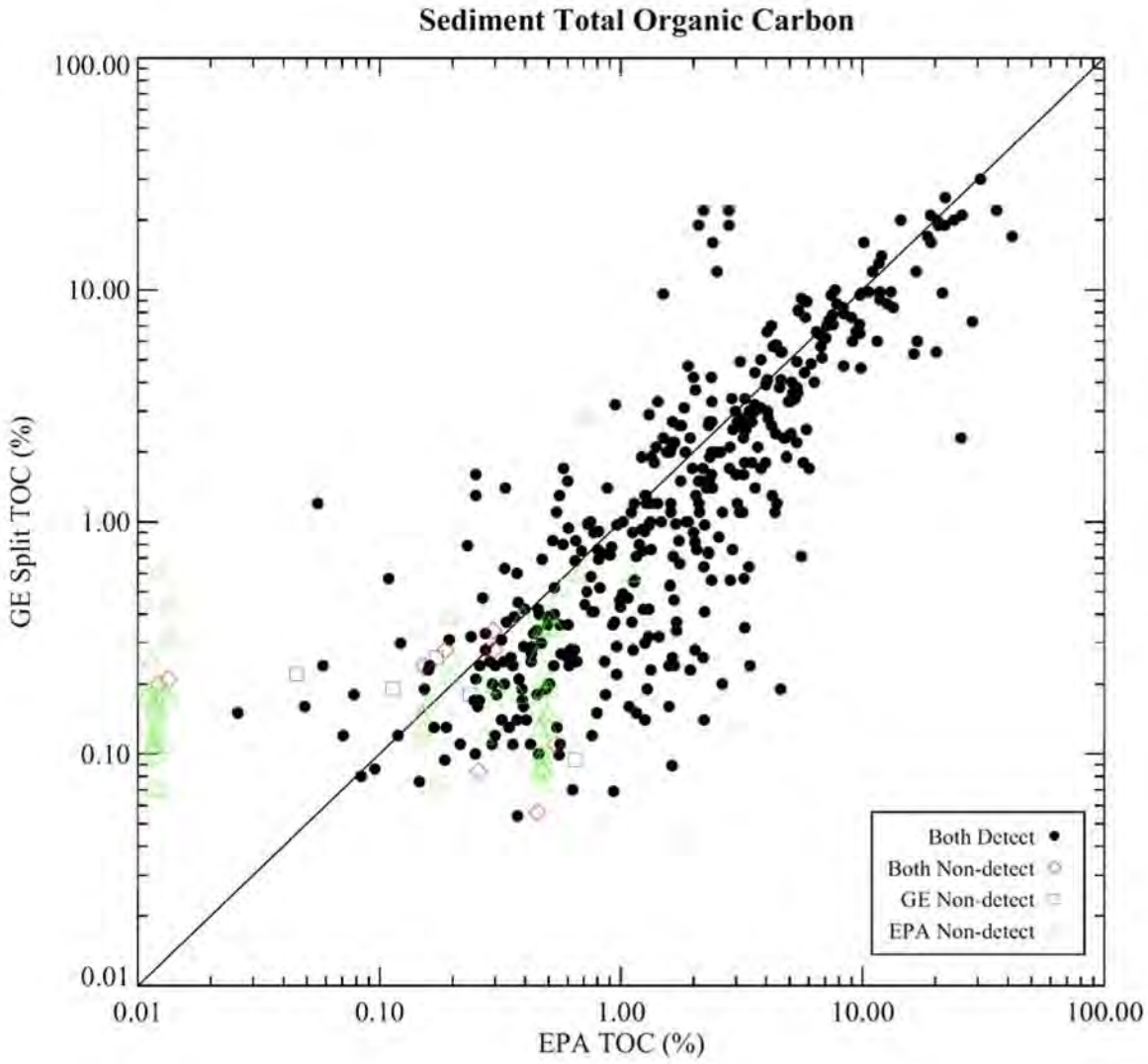

Figure D.1-4. Comparison between EPA and GE split sediment total organic carbon data.

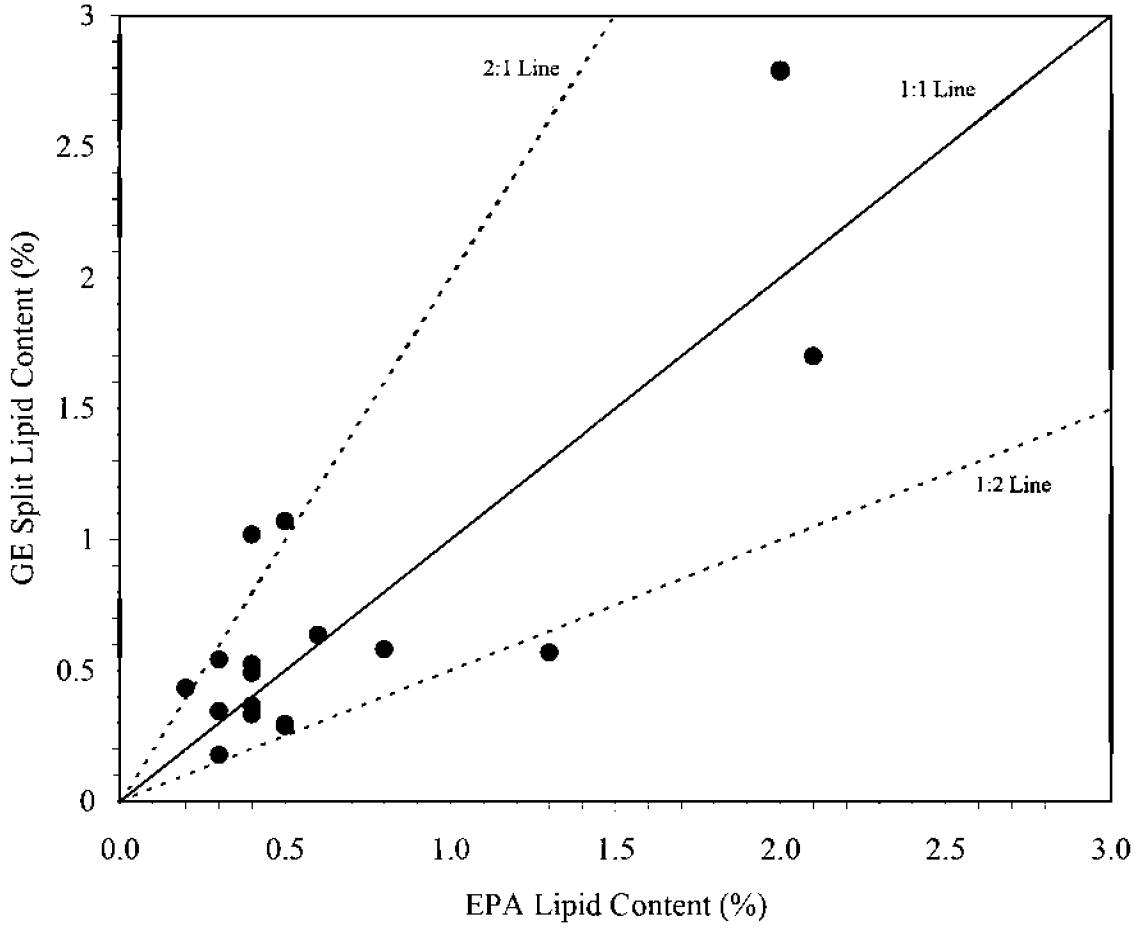

Figure D.1-5. Comparison between EPA and GE split fish tissue lipid content data.

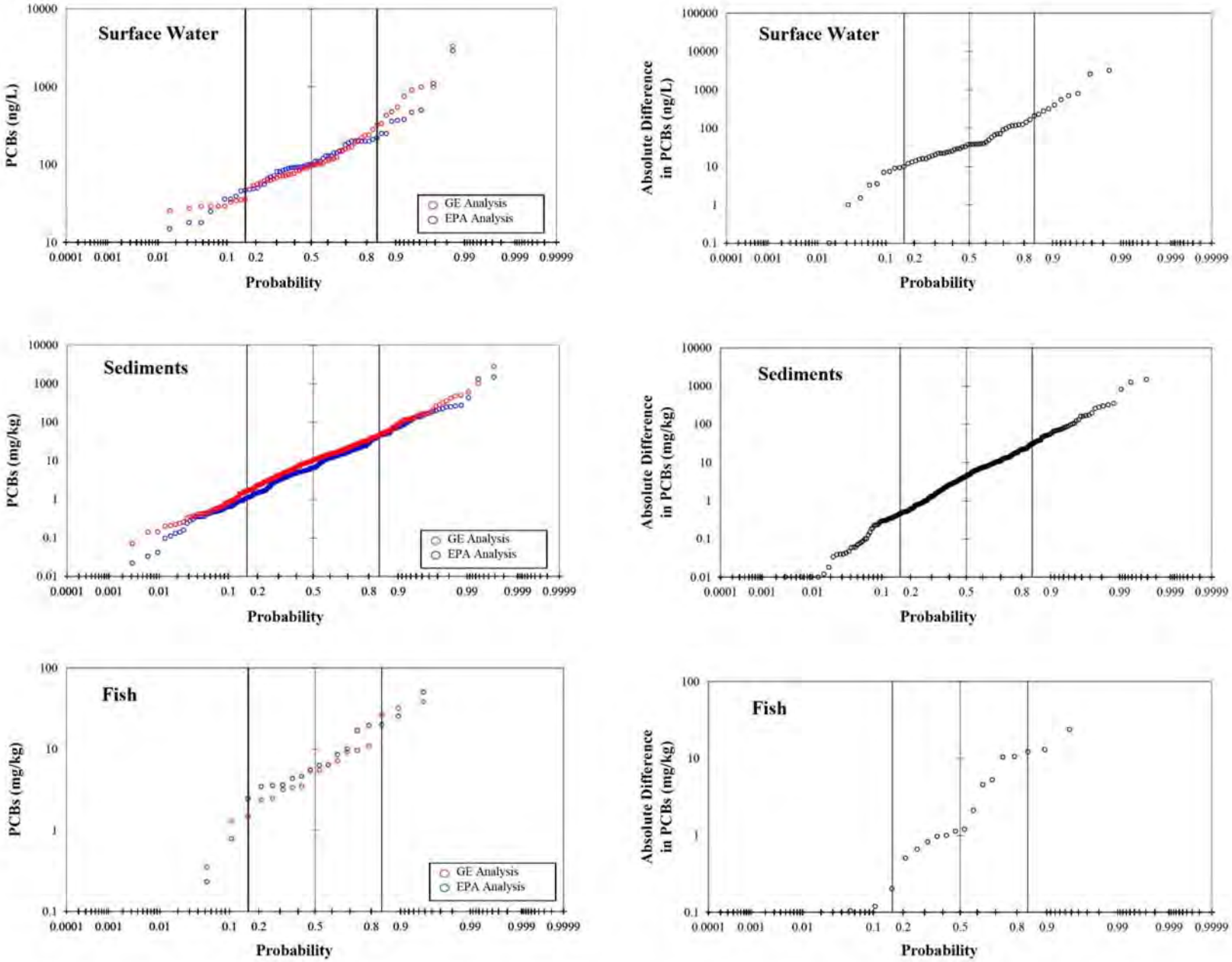

Figure D.2-1. Probability distributions of GE and EPA split sample PCB results and the absolute difference between paired samples, by media.

Note: Only samples in which PCBS were detected are plotted.

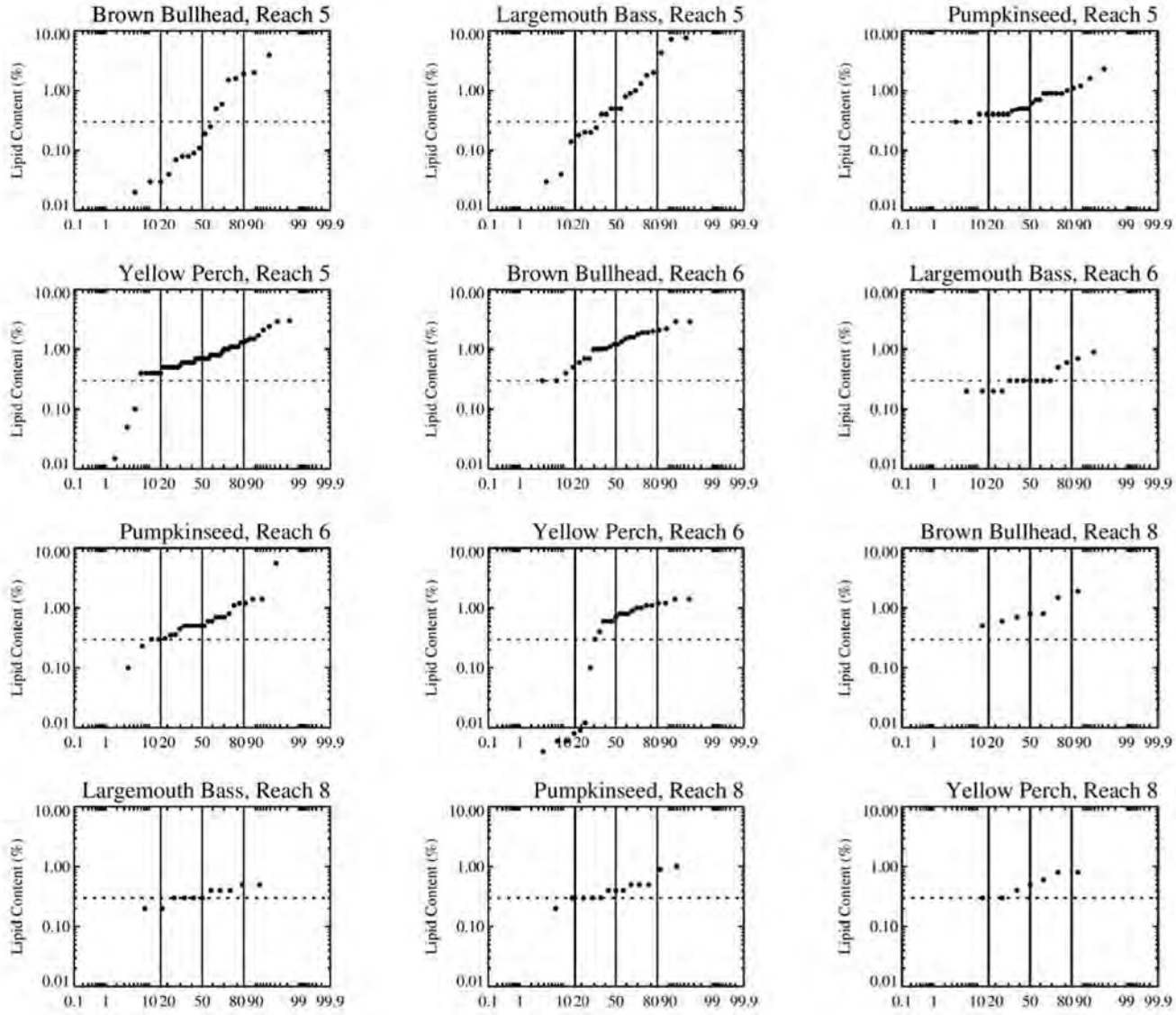

Figure D.3-1. Probability distributions of fish fillet lipid content (EPA 1998 data set).

Data: EPA (Released: November, 2002). fillet samples only.

Note: The dashed line represents a fillet lipid content of 0.3%..

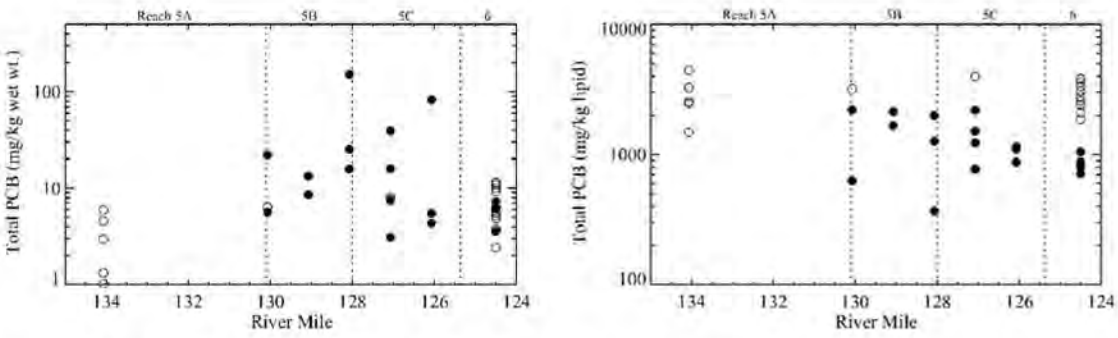

Figure D.3-2. Largemouth bass fillet data from the 1998 EPA sampling program. Open symbols indicate samples with lipid contents ≤ 0.3%.

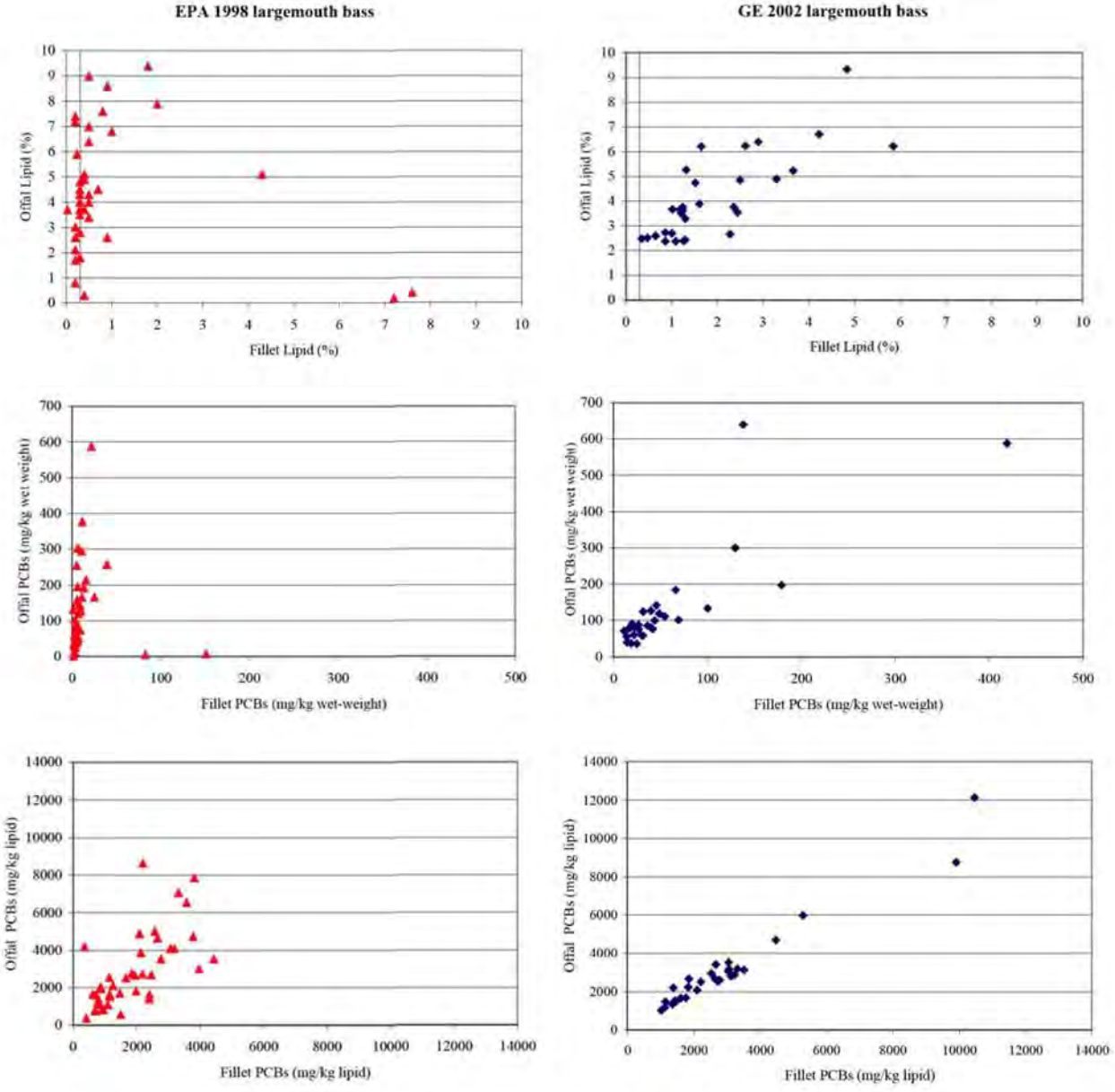

Figure D.3-3. Fillet-offal comparisons for largemouth bass from the 1998 EPA and 2002 GE sampling programs. EPA data from Reaches 5, 6, and 8. GE data from Reaches 5B and 6.

REPORT

Housatonic River - Rest of River RCRA Facility Investigation Report

Volume 2. Appendix E
Mathematical Equations for Fate and Transport Evaluation

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E. Mathematical Equations for Fate and Transport Evaluation

E.1 Drainage Area Proration Factors

Because flow rate data from the USGS gages at Coltsville and Great Barrington have indicated an approximately uniform runoff rate within the watershed (i.e., Section 2.4.1), drainage area proration provides a sufficiently accurate method for estimating the average flow rate at particular locations along the Housatonic River. This approach is based on the following equation:

$$Q_{loc} = (DA_{loc} / DA_{colt}) Q_{colt} \qquad \text{(E.1-1)}$$

where:
- Q_{loc} = estimated tributary flow rate (cfs);
- Q_{colt} = Coltsville flow rate (average of 105 cfs);
- DA_{loc} = tributary drainage area (mi^2); and
- DA_{colt} = Coltsville drainage area (57.6 mi^2).

Note that the drainage area ratio (i.e., DA_{loc} / DA_{colt}) is referred to as the Drainage Area Proration (DAP) factor. These factors and estimated average flow rates at various locations within the system are listed in Table E.1-1.

Table E.1-1. Estimated average flow rates at various locations and tributaries.

Location or Tributary	Drainage Area (mi^2)	DAP Factor	Mean Flow Rate (cfs)
West Branch	60	1.03	108
East Branch at Dawes/Pomeroy Avenue	69	1.19	125
Holmes Road Bridge	128	2.22	233
Sackett Brook	11	0.19	20
Roaring Brook	8	0.14	14
New Lenox Road Bridge	143	2.48	260
Yokun Brook	6	0.10	11
Woods Pond Dam	168	2.91	306
Schweitzer Bridge	169	2.93	308

E.2 Suspended Sediment Rating Curves

Measured TSS concentration data can be used to estimate tributary and in-river solids loading rates through application of sediment rating curves, which have the following form:

$$C_{ss} = C_{low}, \quad Q \le Q_{mean}$$

$$C_{ss} = C_{high}\,(Q/Q_{mean})^{n}, \quad Q > Q_{mean} \qquad \text{(E.2-1)}$$

where:
- C_{ss} = suspended sediment concentration (mg/L);
- Q = local flow rate (cfs);
- Q_{mean} = local mean flow rate (cfs);
- C_{low} = low-flow constant;
- C_{high} = high-flow constant; and
- n = site-specific exponent.

A commonly-used correction coefficient (Ferguson 1986) is used to account for the bias that results from the transforming of rating curves from logarithmic space into normal space. The correction coefficient, which is a function of the variance of the log-transformed TSS concentrations, is lumped into C_{high} for simplicity in Equation (E.2-1). This equation was applied to the Housatonic River data by using flow rates measured at the USGS Coltsville gaging station and drainage area proration (see Appendix E.1) to estimate flow rates at several other locations. This approximation introduces uncertainty into the sediment rating curves for these locations; however, this approach is still useful for providing estimates of sediment loads on an annual timescale. The corresponding rating curve parameter values are listed in Table E.2-1. Note that the break point in the sediment rating curve between low- and high-flow conditions is at the mean flow rate.

Table E.2-1. TSS rating curve parameters for eight locations within Reaches 5 and 6.

Location	C_{low}	C_{high}	n	Q_{mean} (cfs)
East Branch, Hubbard Avenue	2.6	2.6	1.00	105
Dawes/Pomeroy Avenue Bridge	3.6	5.6	1.08	125
West Branch	3.5	5.1	0.99	108
Holmes Road Bridge	4.3	9.0	0.63	233
Sackett Brook	1.2	2.8	1.34	20
New Lenox Road Bridge	4.0	6.3	0.96	260
Woods Pond Headwaters	3.7	3.2	1.02	306
Woods Pond Dam	5.4	4.5	0.34	306

E.3 Equilibrium Partitioning Coefficients

Generally, the sorptive tendency of PCBs is described by an organic carbon-referenced sorption partition coefficient (K_{oc}; L^3/M) that describes the equilibrium ratio of sorbed chemical concentration to dissolved chemical concentration after the sorption reaction has attained equilibrium:

$$K_{oc} = \frac{c_s / f_{oc}}{c_d} \qquad \text{(E.3-1)}$$

where: c_d = freely dissolved water column PCB concentration ($M\ L^{-3}$);
c_s = sorbed PCB concentration ($M\ M^{-1}$); and
f_{oc} = organic carbon fraction of the solids.

K_{oc} is typically treated as a basic property of an organic chemical that is independent of the sorbant material. K_{oc} is proportional to other properties of the chemical that are related to hydrophobicity, such as the octanol/water partition coefficient (K_{ow}).

PCBs are known to partition to dissolved and colloidal organic matter in both the water column and sediment. The partition coefficient describing the equilibrium sorption of PCBs to dissolved/colloidal organic matter is typically expressed on an organic carbon basis and is termed K_{doc}:

$$K_{doc} = \frac{c_{doc} / m_{doc}}{c_d} \qquad \text{(E.3-2)}$$

where: c_{doc} = PCB concentration sorbed to DOC ($M\ L^{-3}$); and
m_{doc} = DOC concentration ($M\ L^{-3}$).

The value of K_{doc} is typically less than that of K_{oc}. For example, Evans (1988) found that K_{doc} values for three PCB congeners sorbing to natural dissolved/colloidal organic matter from ten lakes and two streams in south-central Ontario were 0.2 to 4% of the corresponding K_{ow} values.

If equations E.3-1 and E.3-2 are combined to express the three phase K_{oc} as a function of measured parameters, the following expression is obtained:

$$K_{oc} = \frac{c_s}{f_{oc}\, c_d'}(1 + m_{doc}\, K_{doc}) \qquad \text{(E.3-3)}$$

where: c_d' = the effective total PCB concentration measured in the pore water (i.e., freely dissolved plus DOC-sorbed phases; $M\ L^{-3}$).

This equation can be solved for paired sediment-pore water samples if the reasonable assumption that K_{doc} is 10% of K_{ow} is made (e.g., Poerschmann and Kopinke 2001). For the purposes of the sediment calculations in the Report, K_{ow} was calculated based on published congener specific values (Hawker and Connell 1988) and the PCB congener composition of the samples. For surface water data, it was assumed that K_{doc} is 1% of K_{ow} (compared to 10% used in the calculation of sediment/pore water partition coefficients). This difference was

used to represent the difference in the nature of the carbon between the water column and sediments (i.e., the DOC data suggest a low level of refractory carbon present in the water column, as opposed to larger organic molecules that are produced during decomposition of detritus in the bed and are would therefore be in a more labile form).

E.4 Diffusion Flux of PCB from Surface Sediments to the Overlying Water Column

The diffusive flux of PCB from sediment pore water to the water column can be described by the following mass flux equation:

$$J_s = k_f A_s (c_d' - c_{d,wc}) \qquad \text{(E.4-1)}$$

where:
- J_s = diffusive mass loading (M/T);
- k_f = the sediment/water mass transfer coefficient (L/T);
- A_s = sediment surface area (L^2);
- c_d' = the effective total PCB concentration measured in the pore water (i.e., freely dissolved plus DOC-sorbed phases; $M\ L^{-3}$) ; and
- $c_{d,wc}$ = water column PCB concentration (M/L^3).

For hydrophobic compounds such as PCB, c_d' is much greater than $c_{d,wc}$. Therefore $c_{d,wc}$ can be removed from the above equation. Using 3-phase equilibrium partitioning coefficients to express pore water concentration (c_d') as a function of sediment PCB concentration (c_s), organic carbon fraction (f_{oc}), and DOC concentration (m_{doc}), the sediment diffusive flux equation becomes:

$$J_s = k_f A_s \frac{c_s}{f_{oc} K_{oc}} (1 + m_{doc} K_{doc}) \qquad \text{(E.4-2)}$$

This equation provides a means of estimating diffusive PCB loading from Housatonic River sediments using surficial sediment PCB and TOC concentrations. For the calculations in this Report, the river was divided into one-mile sections between the Confluence and Woods Pond Headwaters. For each section, the average sediment organic carbon-normalized PCB concentration was calculated using 1998-2002 surface sediment (0-6") data (e.g., Figure 4-13). Organic carbon normalized PCB concentration is the (c_s / f_{oc}) term in Equation (E.4-2). Table E.4-1 summarizes the values used for the remaining parameters in the diffusive flux equation.

Table E.4-1. Parameters used in the low flow sediment PCB diffusive flux calculation.

Parameter		Value	Units	Source
k_f	sediment/water exchange	0.003	m/d	estimated
A_s	sediment surface area	calculated	m^2	GIS analysis for each section
m_{doc}	pore water DOC concentration	16.5	mg/L	2001 EPA/GE data (see Section 8.4)
K_{oc}	OC partition coefficient	2.5×10^6	L/kg	2001 EPA/GE data (see Section 8.8.1.2)
K_{doc}	DOC partition coefficient	2.5×10^5	L/kg	estimated 10% of K_{oc} (Appendix E.3)

E.5 Volatilization Flux Analysis

The importance of volatilization within the main channel areas of the River was evaluated using an upper bound calculation for Woods Pond. In this analysis, a steady-state mass balance calculation is used to estimate the loss of water column PCBs via volatilization under low-flow conditions:

$$V\frac{dc}{dt} = Qc_{in} - Qc - J_v A_s \quad (= 0 \textit{ for steady state}) \qquad \text{(E.5-1)}$$

where:
- V = volume of pond (L^3);
- Q = flow rate ($L^3 T^{-1}$);
- c_{in} = water column PCB concentration entering pond ($M L^{-3}$);
- c = water column total PCB concentration within pond ($M L^{-3}$);
- J_v = volatilization flux ($M L^{-2} T^{-1}$); and
- A_s = surface area of pond (L^2).

The rate at which volatilization occurs is dependent on the mass transfer coefficient at the air-water interface and the concentration of PCBs in the water column. Only freely-dissolved PCB can be transported across the interface, so sorption to particulate or dissolved organic carbon reduces volatilization. The PCB flux from the water column due to volatilization is expressed as follows:

$$J_v = k_L\left(c_d - \frac{c_{air}}{H}\right) \qquad \text{(E.5-2)}$$

where:
- k_L = volatilization mass transfer coefficient ($L T^{-1}$);
- c_d = freely dissolved PCB concentration in water ($M L^{-3}$);
- c_{air} = vapor phase PCB concentration in air ($M L^{-3}$); and
- H = dimensionless Henry's Constant.

This steady-state mass balance for Woods Pond can be simplified by combining equations E.5-1 and E.5-2, setting c_{air} equal to zero (based on air monitoring PCB data from the Woods Pond region discussed in Section 7), and expressing c_d as the product of the fraction dissolved (f_d; from equilibrium partitioning) and the total water column PCB concentration:

$$\frac{c}{c_{in}} = \frac{1}{1 + \frac{A_s k_L f_d}{Q}} \qquad \text{(E.5-3)}$$

The volatilization mass transfer coefficient is dependent on the rates of mass transfer through relatively thin layers of water and air at the interface, which are in turn dependent on the concentration gradients in the layers, and the diffusivity of PCBs in the layers (O'Connor 1983, 1984):

$$k_L = \frac{k_g k_l}{k_g + \frac{k_l}{H}} \qquad \text{(E.5-4)}$$

where: k_g = vapor phase mass transfer constant (L T^{-1}); and
k_l = water phase mass transfer constant (L T^{-1}).

A Henry's Law Constant of 5 Pa-m^3/mol, which corresponds to a dimensionless value (i.e., H in E.5-2) of 0.0021 at 20 °C, was used in this calculation. This value was estimated based on published Henry's Law Constants for PCB congeners (Brunner et al. 1990) in the penta to hexa range, which is consistent with the mean composition from dissolved water column data from Woods Pond (Section 3.8). The liquid phase mass transfer coefficient (k_l in Equation E.5-4) was calculated from the O'Connor-Dobbins equation (O'Connor and Dobbins 1958):

$$k_l = \sqrt{\frac{D_w U}{h}} \qquad \text{(E.5-5)}$$

where: D_w = molecular diffusivity (defined below) of PCBs in water (L^2 T^{-1});
h = mean water depth (L); and
U = average current velocity (L T^{-1}).

This equation predicts that mass transfer is positively related to current velocity, which reflects the fact that increased turbulence tends to increase the effective surface area of the air-water interface, and thereby the efficiency of gas-liquid exchange. Molecular diffusivity for this expression was calculated using the equation presented by Hayduk and Laudie (1974):

$$D_w = \frac{13.26x10^{-5}}{\mu^{1.14}(\overline{V})^{0.589}} \qquad \text{(E.5-6)}$$

where: μ = water viscosity (centipoise); and
$\overline{V}$ = PCB molar volume (cm^3/mol).

The molar volume was assigned a mean value of 300 cm^3/mol based on the average homolog composition observed in the Woods Pond water column data (Section 3.8) and published homolog-specific molar volumes for PCBs (Mackay et al. 1992a). Using this value results in a molecular diffusivity of 4.6E-6 cm^2/s. The average depth in Woods Pond was estimated to be 1.5 m based on bathymetry data (Section 2.2.2.2; Figure 2-9). Based on 1999-2001 EPA measurements, a representative current velocity measured at Woods Pond Footbridge under low flow (corresponding to a flow of approximately 50 cfs at Coltsville) of 0.05 m/s was used for this calculation.

Using the values described above in equation E.5-5 yields an estimate for k_l of 0.34 m/d. The vapor phase mass transfer coefficient (k_g in Equation E.5-4) was assumed to be a constant value of 100 m/d, which is a reasonable approximation for streams and rivers (O'Connor 1983). Based on these values and the estimated Henry's Constant, equation E.5-4 evaluates to an overall volatilization mass transfer coefficient of 0.13 m/d. Substituting this coefficient, a typical low flow at Woods Pond of 100 cfs (Section 2.4), a dissolved PCB

fraction of 0.4 (Section 8.8.1.2), and the total surface area of Woods Pond of 270,000 m^2 into equation E.5-3 yields an estimate of (c / c_{in}) equal to 0.95. This calculation suggests that volatilization would cause water column dissolved PCB concentrations to decrease across Woods Pond by approximately 5% under typical low-flow conditions.

E.6 Bank Erosion Sediment Load Estimate

An order-of-magnitude estimate of the annual sediment mass load to the River from bank erosion, can be made using the following equation:

$$M_{bank} = \rho_b \, L_b \, h_b \, E_b \qquad \text{(E.6-1)}$$

where:

	M_{bank}	=	bank erosion mass loading ($M\ T^{-1}$);
	ρ_b	=	bank dry density ($M\ L^{-3}$);
	L_b	=	total length of eroding bank (L);
	h_b	=	average bank height (L); and
	E_b	=	annual average bank erosion rate ($L\ T^{-1}$).

Approximate values for the reach of the river where EPA mapping identified areas of active bank erosion are: ρ_b = 1.5 g/cm^3, L_b = 13,400 ft, and h_b = 8 ft. It was assumed in this analysis that the average bank erosion rate ranges from 0.3 to 0.7 ft/yr, based on the averages from EPA toe pin data and bank measurements between the Confluence and New Lenox Road Bridge. The result was an estimated range of 1400 to 3200 metric tons/yr of sediment load to the river from bank erosion.

E.7 Resuspension Potential

A field study was conducted by GE during June 1997 to measure the resuspension properties of cohesive sediments in the Housatonic River. A portable resuspension device, commonly referred to as a shaker, was used to measure the erosion properties of surficial sediment cores collected from the Woods Pond, Columbia Mill, Willow Mill, Glendale, Rising Pond, Falls Village and Bulls Bridge Dam impoundments. A total of 42 surficial cores were obtained from these seven backwaters and typical shaker procedures were used to test the cores (Ziegler 1998). The objective of the field study was to obtain site-specific parameters for the Lick equation:

$$\varepsilon = A(\tau/\tau_{cr} - 1)^n \qquad \text{(E.7-1)}$$

where: ε = sediment resuspension potential (mg/cm^2);
τ = bottom shear stress (dynes/cm^2);
τ_{cr} = critical shear stress (=1 dyne/cm^2);
A = site-specific parameter; and
n = site-specific parameter.

Measured values of ε from this study for applied shear stresses of 3, 5, and 9 dynes/cm^2 are listed in Table E.7-1.

Table E.7-1. Housatonic River resuspension potential data.

Dam Backwater	Core	ε_3	ε_5	ε_9
Woods Pond	1	1.4	8.4	11
Woods Pond	2	3.7	14	18
Woods Pond	3	1.1	6.3	10
Woods Pond	4	4.7	11	21
Woods Pond	5	10	14	109
Woods Pond	6	5.8	21	68
Woods Pond	7	8.2	29	103
Woods Pond	8	0.8	5.0	28
Woods Pond	9	7.8	24	109
Columbia Mill	1	0.8	1.0	16
Columbia Mill	2	2.1	9.4	41
Columbia Mill	3	0.0	1.4	14
Columbia Mill	4	0.7	2.1	9.2
Willow Mill	1	0.1	1.8	43
Willow Mill	2	0.4	1.1	14
Willow Mill	3	0.2	2.0	26
Willow Mill	4	0.5	0.7	3.3
Willow Mill	5	0.6	2.6	12
Glendale	1	2.3	9.1	53
Glendale	2	1.6	3.8	26
Glendale	3	0.9	2.8	18
Glendale	4	1.6	7.7	37
Glendale	5	1.4	5.8	53
Glendale	6	4.1	22	132
Rising Pond	1	0.8	2.1	11
Rising Pond	2	1.2	5.6	44

Dam Backwater	Core	ε_3	ε_5	ε_9
Rising Pond	3	2.1	5.9	7.0
Rising Pond	4	0.2	1.2	9.5
Rising Pond	5	0.0	0.4	5.8
Rising Pond	6	3.9	18	132
Falls Village	1	0.9	4.8	40
Falls Village	2	0.4	2.3	23
Falls Village	3	0.9	4.8	35
Falls Village	4	0.6	1.8	39
Falls Village	5	3.0	8.7	59
Falls Village	6	1.0	5.1	29
Falls Village	7	1.4	3.5	17
Bulls Bridge	1	2.1	7.9	35
Bulls Bridge	2	1.3	4.9	43
Bulls Bridge	3	2.2	8.0	48
Bulls Bridge	4	1.2	3.9	29
Bulls Bridge	5	2.7	9.1	111

Regression analyses based on a linearization of Equation E.7-1 were used to estimate values of A and n for each core. Average values of the exponent (n) and the constant (A) in the Lick equation were developed for two shear stress ranges: 1) less than 5 dynes/cm^2 (A_{low} and n_{low}) and 2) greater than 5 dynes/cm^2 (A_{high} and n_{high}) and are listed in Table E.7-2.

Table E.7-2. Housatonic River average erosion parameters.

Location	A_{low}	n_{low}	A_{high}	n_{high}
Woods Pond	1.0	1.8	1.5	1.5
Columbia Mill	0.092	2.3	0.04	2.9
Willow Mill	0.049	2.5	0.016	3.3
Glendale	0.49	1.9	0.16	2.7
Rising Pond	0.12	2.3	0.087	2.5
Falls Village	0.21	2.1	0.06	3.0
Bulls Bridge	0.48	1.8	0.12	2.8

Values for n ranged from 1.5 to 3.3 for the seven impoundments; this range of exponent values is similar to that found in other river systems (e.g., Lick et al. 1995). Values of A ranged over approximately two orders of magnitude (i.e., 0.016 to 1.5 mg/cm^2), with this amount of variation in cohesive sediment erosion properties being typical.

The resuspension data for Woods Pond were used to estimate the relative erodibility of cohesive sediments in this riverine system. Similar shaker studies have been conducted in the Upper Hudson River, NY (Ziegler et al. 2000); Lower Fox River, WI; Saginaw River, MI; and Buffalo River, NY (Lick et al. 1995). Scour depths were estimated using A and n values for Woods Pond and the other four rivers, where the current velocity and bed dry density were assumed be 2 ft/s and 0.4 g/cm^3, respectively. The resulting scour depths for Woods Pond, the Upper Hudson River, Lower Fox River, Saginaw River, and Buffalo River are: 2.0, 1.8, 8.0, 1.6 and 0.8 mm, respectively. Thus, the erodibility of Woods Pond cohesive sediments is similar to that found in other rivers.

E.8 Mass Loading Estimates from Bed Load Sampling

Estimates of mass loading associated with the EPA bed load sampling program were developed based on USGS flow data, information from the Agency's field sampling protocols, and laboratory measurements of solids and PCBs.

Water column loading rates (W_w) of suspended sediment and PCBs were calculated by multiplying the USGS 15-minute flow data (Q; prorated to adjust for the increase in drainage area downstream of the gage in Coltsville; Appendix E.1) by the measured concentrations (C):

$$W_w = QC \qquad \text{(E.8-1)}$$

The loading rates for bed load sediment were calculated by the following equation:

$$W_b = \left(\frac{M_s}{DT}\right)\left(\frac{B_R}{b_s}\right) \qquad \text{(E.8-2)}$$

where:

W_b	=	sediment bed loading rate (M/T);
M_s	=	dry mass of solids collected by the sampler (M);
DT	=	total deployment time of the sampler (T);
B_R	=	width of the River at sampling locations (L); and
b_s	=	nominal width of the opening in the sampling device (L; 0.25 ft).

Deployment times reported by EPA were 50 minutes, except for the second sample at Pomeroy Avenue during the May 2002 event, in which the sampler was deployed for 35 minutes. The width over which bed load occurs that was used in the calculations was estimated based on the GIS shoreline at the sampling locations (i.e., 50 feet at Pomeroy Avenue and 100 feet at New Lenox Road).

Loading rates for PCBs associated with bed load solids were simply calculated by multiplying the solids loading rate by the measured PCB concentration for each sample.

Total event loadings for both water column and bed load transport were calculated by integrating the calculated instantaneous loading rates over time. The data were linearly interpolated to a time step of 15-minutes, and summed over the entire event.

E.9 REFERENCES

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Due to the interactive nature of the large Microsoft Access database files, which comprise much of Appendix F, they cannot be shown here in Portable Document Format or delivered for convenient download off this website.

Please contact the US EPA New England Superfund Records and Information Center at (617) 918-1440 if you would like copies of Appendix F on CD-ROM.

WATER COLUMN, SEDIMENT, & BIOTA DATABASE (RIVER)

I. Modifications to database structure:
None.

II. Record Changes:

None.

III. Record Additions:
BBLID(s): 10967 - 10990
Added the following data received since the previous release of the database:

- Water monitoring samples collected on 8/15/02 and 8/28/02 as part of the Upper « Mile Reach Removal Action.
- One round of monthly water column monitoring samples collected on 8/28/02 and 8/29/02.

Non standard lab qualifiers for these record additions:
- AF - Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
- PE - Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.

IV. Record Deletions:
None.

FLOODPLAIN DATABASE (FLDPLN)

I. Modifications to database structure:
None.

II. Record Changes:

None.

III. Record Additions:

BBLID(s): 4341 - 4346
Added the following data received since the previous release of the database:
- Floodplain Properties Adjacent to 1 1/2 Mile Housatonic River Pre-design Investigation sample data.

IV. Record Deletions:
None.

TAX PARCEL DATABASE (PARCELINFO)

I. Modifications to database structure:

None.

II. Record Changes:
None.

III. Record Additions:
None.

IV. Record Deletions:
None.SPECIES DATABASE (SPECIES)

I. Modifications to database structure:
None.

II. Record Changes:
None.
III. Record Additions:
None.
IV. Record Deletions:
None.

HOUSATONIC RIVER DATABASE STRUCTURE

GENERAL ELECTRIC COMPANY, PITTSFIELD, MASSACHUSETTS

DEFINITION OF TABLES RIVER AND FLDPLN

Field	Field Name	Units	Field Size	Data Type	Comments
1	BBLID			COUNTER	A unique number assigned sequentially to each record added to the database. (Note: This number remains fixed and will not change regardless if records are added or deleted.)
2	SAMP_ID		50	TEXT	The sample identifier as noted on the sample chain-of-custody form or as referenced in the corresponding investigation summary report.
3	TAX_ID		25	TEXT	For Floodplain samples only: The tax ID of the parcel on which the sample was collected.
4	LOCATION		100	TEXT	The geographic location from which the sample was collected as referenced in the corresponding investigation summary report (e.g., Newell Street Bridge).
5	NORTHING_27	feet	DOUBLE	NUMBER	MA Mainland Stateplane y coordinate for sample location (NAD 1927).
6	EASTING_27	feet	DOUBLE	NUMBER	MA Mainland Stateplane x coordinate for sample location (NAD 1927).
7	NORTHING_83	meters	DOUBLE	NUMBER	MA Mainland Stateplane y coordinate for sample location (NAD 1983).
8	EASTING_83	meters	DOUBLE	NUMBER	MA Mainland Stateplane x coordinate for sample location (NAD 1983).
9	COORD_QUAL		50	TEXT	Description of source/accuracy of coordinate data.
10	MEDIA		1	TEXT	Type of matrix: W = water, S = sediment, B = biota, V = plant/vegetation, F = floodplain soil
11	SAMPLER		30	TEXT	The organization that collected the sample. (e.g., BBL)
12	INVEST		150	TEXT	The report from which data was taken. (e.g., MCP Interim Phase II Rpt/CAS for Housatonic River, 12/91).
13	DESC		255	TEXT	Sample description.
14	ST_MILE	mi	DOUBLE	NUMBER	Starting river mile from Long Island Sound. (NOTE: All river miles are an approximation).
15	END_MILE	mi	DOUBLE	NUMBER	Ending river mile from Long Island Sound. This number will be the same as ST_MILE for any sample not collected over a range. (NOTE: All river miles are an approximation).
16	REACH		5	TEXT	BBL designated river reach and sub-reach identifications.
17	DATE_COL			DATE/TIME	Date of sample collection (MM/DD/YY). For any composite samples collected over a range of dates, this field contains the date of the first date in the date range. Memo field indicates if sample date is an estimate.
18	TIME_COL			DATE/TIME	Time of sample collection (hh:mm). Currently only available for water samples collected by BBL after 1996.
19	WTR_DPTH	meters	DOUBLE	NUMBER	Depth of water at sample location.
20	ST_DPTH	cm	DOUBLE	NUMBER	Starting depth of sediment core section.
21	END_DPTH	cm	DOUBLE	NUMBER	Ending depth of sediment core section.
22	LAB		40	TEXT	Name of the laboratory that performed sample analysis or “UNKNOWN”.

DEFINITION OF TABLES RIVER AND FLDPLN

Field	Field Name	Units	Field Size	Data Type	Comments
23	LAB_ID		50	TEXT	The laboratory's internal ID assigned to sample.
24	TOT_SOL	%	DOUBLE	NUMBER	Total percent solids for sediment samples.
25	DENSITY	g/ml	DOUBLE	NUMBER	Bulk density (dry weight) for sediment samples.
26	MOIST	%	DOUBLE	NUMBER	Moisture content for sediment samples.
27	SPP		4	TEXT	Biota species code according to table SPECIES.

Field	Field Name	Units	Field Size	Data Type	Comments
28	SAMPLTYPE		20	TEXT	Biota: COMP=composite, IND=individual; INDNA=individual (numerical average of individual analyses); Sediment: COMP=composite, GRAB=surface grab, CORE =core section, NONE =no sample obtained; Water Column: COMP=composite of multiple grab samples, OR an alphanumeric code as defined below : (i.e. 5,A,B) 1 Peristaltic pump with Teflon tubing collected mid-width at 0.5 times total water depth. The sample was pumped directly into laboratory supplied containers. 2 Grab samples obtained by placing the appropriate laboratory supplied sample containers directly into the flow at mid-depth and mid-width. 3 Peristaltic pump with Teflon tubing obtained mid-width at 0.2, 0.5, 0.8 times total water depth. Equal volume samples were pumped into a 5 gallon carboy, homogenized, and then distributed into laboratory supplied containers. 4 Peristaltic pump with Teflon tubing collected mid-width at 0.5 times total water depth. The sample was pumped into a five gallon glass carboy, homogenized, and then distributed into laboratory supplied containers. 5 Grab samples obtained at mid-width of stream by lowering a one-liter glass container to 0.5 times the total water depth for one minute. This procedure was performed 5 times compositing the sample volume into two 4000 ml stainless steel beakers for homogenization and distribution into laboratory supplied sample containers. 6 DH-76 sampler at mid-width lowered and raised at a uniform rate. The sampler was then removed from the water and emptied into two 4000 ml stainless steel beakers. This procedure was performed 5 times. The collected sample was homogenized and distributed into laboratory supplied containers. 7 A five gallon glass carboy was submerged to 0.5 times the total water depth until sufficient sample volume was collected. The sample was then homogenized and a peristaltic pump and Teflon tubing was utilized to distribute sample into appropriate containers. 8 Grab samples obtained at mid-width of river by lowering a one liter glass container to 0.5 times the total water depth for approximately one minute. The water sample collected was then emptied into one 4000 ml stainless steel beaker. This procedure was repeated until the beaker was two-thirds full. The sample was thoroughly mixed and placed directly into laboratory supplied containers. 9 DH-76 sampler deployed at mid-width of river. The sampler was lowered and raised at a uniform rate. The sampler was then emptied into a 4000 ml beaker. The procedure was repeated until the beaker was two-thirds full. The collected sample was homogenized and distributed into laboratory supplied containers. 10 Grab samples were collected mid-depth at 25, 50, and 75 percent of the total river width and composited in a stainless steel beaker into one sample for analysis. The sample was mixed and distributed into appropriate laboratory supplied containers. 11 DH-76 sampler deployed at mid-width of river. The sampler was lowered and raised at a uniform rate.The sampler was then emptied directly into appropriate laboratory supplied containers filling each container with equal volume per cast. 12 Wildco stainless steel Kemmerer water sampler was utilized at the center of the river. The Kemmerer was lowered 3 times to collect three equal volume water samples at depths of 0.2, 0.5, and 0.8 times the total water depth. With each cast, the sampler was removed from the water and emptied directly into the appropriate laboratory supplied container filling each one-third of the way. 13 Grab sample obtained at center of river by lowering and raising a laboratory supplied container through the water column until it was full. 14 Grab sample obtained at one station near shore (between 5 and 20 feet) at mid-depth and emptied into a 4000 ml beaker. This procedure was performed three times. The collected sample was homogenized and distributed into appropriate laboratory supplied containers (See next page for continuation of definitions.)

Field	Field Name	Units	Field Size	Data Type	Comments
28 (cont'd)	SAMPLETYPE		20	TEXT	(Continued from previous page.) A - Timed rate of travel concept sampled upstream to downstream. B - Sample collected two minutes after original sample using same procedure. C - Sampling performed downstream to upstream utilizing one field crew. D - Sampling performed downstream to upstream utilizing two field crews. E - Sampling station selected was 10 feet from shore due to accessibility. F - Sampling performed downstream to upstream utilizing one field crew.
29	INDVDS		DOUBLE	NUMBER	For Biota samples only: for COMP sampletype = Total number of individuals in a composite biota sample. for INDNA sampletype = Total number of individual samples that were averaged.
30	AGE	yr	DOUBLE	NUMBER	For Biota samples only: Age of fish in years.
31	SEX		10	TEXT	For Biota samples only: Sex of fish. Where M=male, F=female, IM=immature male, IF=immature female, U=unknown.
32	LEN	mm	DOUBLE	NUMBER	For Biota samples only: for IND sampletype = total length of individual. for COMP sampletype = average of total length of each individual in composite.
33	WGT	grams	DOUBLE	NUMBER	For Biota samples only: for IND sampletype = total weight of individual. for COMP sampletype = sum of total weight of each individual in composite.
34	PREP		3	TEXT	For Biota samples only: Preparation method where SSF = fillet (scales on/ skin on), SF = fillet (scales off/ skin on), OF= fillet (skin off), WF=whole fish, WBM = whole body (minus shell), U=unknown.
35	LIPID		DOUBLE	NUMBER	For Biota samples only: Percent Lipid.
36	FLOW	cubic ft/sec	DOUBLE	NUMBER	Estimated instantaneous flow at sampling location.
37	WTR_TMP	deg. C	DOUBLE	NUMBER	Water temperature for water samples only.
38	TOT_DISS		1	TEXT	Total (T) or dissolved (D) PCBs (derived from a filtered water sample).
39	A1016_C	ppb	DOUBLE	NUMBER	Aroclor 1016 concentration.
40	A1016_Q		10	TEXT	Data validation qualifier for results: J = approximate sample result U = sample result non-detect UJ =sample result non-detect - reporting limit is approximate R = reject the sample result or the detection limit (Note: See lab report for definition of any other qualifiers not listed here. A "U" in this field with no associated concentration indicates the lab did not specify a detection limit).

Field	Field Name	Units	Field Size	Data Type	Comments
41	A1221_C	ppb	DOUBLE	NUMBER	Aroclor 1221 concentration.
42	A1221_Q		10	TEXT	Data validation qualifier for results: J = approximate sample result U = sample result non-detect UJ =sample result non-detect - reporting limit is approximate R = reject the sample result or the detection limit (Note: See lab report for definition of any other qualifiers not listed here. A "U" in this field with no associated concentration indicates the lab did not specify a detection limit).
43	A1232_C	ppb	DOUBLE	NUMBER	Aroclor 1232 concentration.
44	A1232_Q		10	TEXT	Data validation qualifier for results: J = approximate sample result U = sample result non-detect UJ =sample result non-detect - reporting limit is approximate R = reject the sample result or the detection limit (Note: See lab report for definition of any other qualifiers not listed here. A "U" in this field with no associated concentration indicates the lab did not specify a detection limit).
45	A1242_C	ppb	DOUBLE	NUMBER	Aroclor 1242 concentration.
46	A1242_Q		10	TEXT	Data validation qualifier for results: J = approximate sample result U = sample result non-detect UJ =sample result non-detect - reporting limit is approximate R = reject the sample result or the detection limit (Note: See lab report for definition of any other qualifiers not listed here. A "U" in this field with no associated concentration indicates the lab did not specify a detection limit).
47	A1248_C	ppb	DOUBLE	NUMBER	Aroclor 1248 concentration.
48	A1248_Q		10	TEXT	Data validation qualifier for results: J = approximate sample result U = sample result non-detect UJ =sample result non-detect - reporting limit is approximate R = reject the sample result or the detection limit (Note: See lab report for definition of any other qualifiers not listed here. A "U" in this field with no associated concentration indicates the lab did not specify a detection limit).
49	A1254_C	ppb	DOUBLE	NUMBER	Aroclor 1254 concentration.

DEFINITION OF TABLES RIVER AND FLDPLN

Field	Field Name	Units	Field Size	Data Type	Comments
50	A1254_Q		10	TEXT	Data validation qualifier for results: J = approximate sample result U = sample result non-detect UJ =sample result non-detect - reporting limit is approximate R = reject the sample result or the detection limit (Note: See lab report for definition of any other qualifiers not listed here. A "U" in this field with no associated concentration indicates the lab did not specify a detection limit).
51	A1260_C	ppb	DOUBLE	NUMBER	Aroclor 1260 concentration.
52	A1260_Q		10	TEXT	Data validation qualifier for results: J = approximate sample result U = sample result non-detect UJ =sample result non-detect - reporting limit is approximate R = reject the sample result or the detection limit (Note: See lab report for definition of any other qualifiers not listed here. A "U" in this field with no associated concentration indicates the lab did not specify a detection limit).
53	T_PCB_C	ppb	DOUBLE	NUMBER	Total PCB concentration.
54	T_PCB_Q		10	TEXT	Data validation qualifier for results: J = approximate sample result U = sample result non-detect UJ =sample result non-detect - reporting limit is approximate R = reject the sample result or the detection limit (Note: See lab report for definition of any other qualifiers not listed here. A "U" in this field with no associated concentration indicates the lab did not specify a detection limit).
55	CN_PCB_C	ppb	DOUBLE	NUMBER	Congener Total PCB concentration for biota data.
56	CN_PCB_Q		10	TEXT	Data validation qualifier for results: J = approximate sample result U = sample result non-detect UJ =sample result non-detect - reporting limit is approximate R = reject the sample result or the detection limit (Note: See lab report for definition of any other qualifiers not listed here. A "U" in this field with no associated concentration indicates the lab did not specify a detection limit).
57	TOC_C	mg/kg or mg/l	DOUBLE	NUMBER	Total organic carbon in core composite samples only.
58	TOC_Q		10	TEXT	Data validation qualifier for results: J = approximate sample result U = sample result non-detect UJ =sample result non-detect - reporting limit is approximate R = reject the sample result or the detection limit (Note: See lab report for definition of any other qualifiers not listed here. A "U" in this field with no associated concentration indicates the lab did not specify a detection limit).

DEFINITION OF TABLES RIVER AND FLDPLN

Field	Field Name	Units	Field Size	Data Type	Comments
59	TSS_C	mg/l	DOUBLE	NUMBER	Total suspended solids in water samples only.
60	TSS_Q		10	TEXT	Data validation qualifier for results: J = approximate sample result U = sample result non-detect UJ =sample result non-detect - reporting limit is approximate R = reject the sample result or the detection limit (Note: See lab report for definition of any other qualifiers not listed here. A "U" in this field with no associated concentration indicates the lab did not specify a detection limit).
61	PROGRAM		100	TEXT	This field indicated the sampling program under which the sample was collected.
62	CHLORO_C	ppb	DOUBLE	NUMBER	Chlorophyll (a) concentration
63	CHLORO_Q		10	TEXT	Chlorophyll (a) qualifier
64	OILGR_C	ppm	DOUBLE	NUMBER	Oil and Grease concentration
65	OILGR_Q		10	TEXT	Data validation qualifier for results: J = approximate sample result U = sample result non-detect UJ =sample result non-detect - reporting limit is approximate R = reject the sample result or the detection limit (Note: See lab report for definition of any other qualifiers not listed here. A "U" in this field with no associated concentration indicates the lab did not specify a detection limit).
66	SPEC_GRAV	g/ml	DOUBLE	NUMBER	Specific Gravity
67	PH	standard units	DOUBLE	NUMBER	pH
68	PH_DUP	standard units	DOUBLE	NUMBER	Duplicate pH
69	CONDUCT	mS/cm	DOUBLE	NUMBER	Conductivity
70	CONDUCT_DUP	mS/cm	DOUBLE	NUMBER	Duplicate Conductivity reading
71	POC_C	mg/l	DOUBLE	NUMBER	Particulate Organic Carbon
72	POC_Q		10	TEXT	Data validation qualifier for results: J = approximate sample result U = sample result non-detect UJ =sample result non-detect - reporting limit is approximate R = reject the sample result or the detection limit (Note: See lab report for definition of any other qualifiers not listed here. A "U" in this field with no associated concentration indicates the lab did not specify a detection limit).

DEFINITION OF TABLES RIVER AND FLDPLN

Field	Field Name	Units	Field Size	Data Type	Comments
73	HYDRO_D1	mm	DOUBLE	NUMBER	Hydrometer result (particle diameter)
74	HYDRO_P1	%	DOUBLE	NUMBER	Hydrometer result (percent finer than diameter in HYDRO_D1)
75	HYDRO_D2	mm	DOUBLE	NUMBER	Hydrometer result (particle diameter)
76	HYDRO_P2	%	DOUBLE	NUMBER	Hydrometer result (percent finer than diameter in HYDRO_D2)
77	HYDRO_D3	mm	DOUBLE	NUMBER	Hydrometer result (particle diameter)
78	HYDRO_P3	%	DOUBLE	NUMBER	Hydrometer result (percent finer than diameter in HYDRO_D3)
79	HYDRO_D4	mm	DOUBLE	NUMBER	Hydrometer result (particle diameter)
80	HYDRO_P4	%	DOUBLE	NUMBER	Hydrometer result (percent finer than diameter in HYDRO_D4)
81	HYDRO_D5	mm	DOUBLE	NUMBER	Hydrometer result (particle diameter)
82	HYDRO_P5	%	DOUBLE	NUMBER	Hydrometer result (percent finer than diameter in HYDRO_D5)
83	HYDRO_D6	mm	DOUBLE	NUMBER	Hydrometer result (particle diameter)
84	HYDRO_P6	%	DOUBLE	NUMBER	Hydrometer result (percent finer than diameter in HYDRO_D6)
85	HYDRO_D7	mm	DOUBLE	NUMBER	Hydrometer result (particle diameter)
86	HYDRO_P7	%	DOUBLE	NUMBER	Hydrometer result (percent finer than diameter in HYDRO_D7)
87	HYDRO_D8	mm	DOUBLE	NUMBER	Hydrometer result (particle diameter)
88	HYDRO_P8	%	DOUBLE	NUMBER	Hydrometer result (percent finer than diameter in HYDRO_D8)
89	HYDRO_D9	mm	DOUBLE	NUMBER	Hydrometer result (particle diameter)
90	HYDRO_P9	%	DOUBLE	NUMBER	Hydrometer result (percent finer than diameter in HYDRO_D9)
91	CS_137_C	pci/gm	DOUBLE	NUMBER	Cesium-137 concentration
92	CS_137_Q		10	TEXT	Data validation qualifier for results: J = approximate sample result U = sample result non-detect UJ =sample result non-detect - reporting limit is approximate R = reject the sample result or the detection limit (Note: See lab report for definition of any other qualifiers not listed here. A “U” in this field with no associated concentration indicates the lab did not specify a detection limit).

Field	Field Name	Units	Field Size	Data Type	Comments
93	BE_7_C	pci/gm	DOUBLE	NUMBER	Berrylium-7 concentration
94	BE_7_Q		10	TEXT	Data validation qualifier for results: J = approximate sample result U = sample result non-detect UJ =sample result non-detect - reporting limit is approximate R = reject the sample result or the detection limit (Note: See lab report for definition of any other qualifiers not listed here. A "U" in this field with no associated concentration indicates the lab did not specify a detection limit).
95	VALIDATED		3	TEXT	YES = Sample has been updated in database with data validation results.
96	MEMO			MEMO	Additional sample information that may be relevant.

Notes:

1. Text fields are presented with a fixed field length as reported. Memo and Date/Time field sizes are undefined (seen Note 2). Number fields are formatted as DOUBLE (Numbers are stored with 10 digits of precision).

2. Data Types are defined below:
   Text = Text up to 255 characters or the length set by Field Size.
   Memo = Text with a maximum length of 64,000 bytes.
   Number = Any numeric type formatted as defined by Field Size.
   Date/Time = Date and time values for years 100 to 9999.
   Counter = A numeric value that Access automatically increments for each record added.

3. For floodplain samples, exact river miles were not identified for the majority of the samples. Instead, a river mile range in which the sample was collected was used (i.e. Lyman St. Bridge to Newell St. Bridge). For these samples the ST_MILE and END_MILE fields contain the beginning and ending miles for the range. The LOCATION field contains the description of the range.

HOUSATONIC RIVER DATABASE STRUCTURE

GENERAL ELECTRIC COMPANY, PITTSFIELD, MASSACHUSETTS

DEFINTION OF TABLE PARCELINFO

Field	Field Name	Units	Field Size	Data Type	Comments
1	TAX_ID		25	TEXT	For Floodplain samples only: The tax ID of the parcel on which the sample was collected.
2	TOWNSHIP		25	TEXT	For Floodplain samples only: The town where the sample was collected.
3	OWNER		75	TEXT	For Floodplain samples only: The name of the owner of the property where the sample was collected.
4	ADDR1		75	TEXT	For Floodplain samples only: The street address of the property where the sample was collected.
5	ADDR2		50	TEXT	For Floodplain samples only: City, State Abbreviation Zipcode
6	OWNER_DATE			DATE/TIME	For Floodplain samples only: The date (MM/DD/YY) the ownership information was recorded.
7	BANK		1	TEXT	For Floodplain samples only: The bank the sample was collected on: E = East bank or W = West bank

Notes:

1. This file can be linked with the floodplain database (FLDPLN) by the field TAX_ID.

General Electric Company
Housatonic River Project

Data Dictionary for Tables STAGE, PROBING, and BATHYMETRY

STAGE (1997 Spring High Flow Monitoring Data)

YEAR	- Year collected
MONTH	- Month collected
DAY	- Day collected
HOUR	- Hour collected
MINUTE	- Minute collected
STATION	- WPH (Woods Pond Headwaters); WPD (Woods Pond Dam); RPD (Rising Pond Dam).
STAGE	- Stage height (ft)
TEMP	- Temperature (degrees C)
STAGE_COR	- Corrected stage height (ft); (Ref: Technical memorandum from J. Rhea and K. Russell at QEA to A. Silfer at GE dated 11/6/98)

PROBING (1997 Sediment Bed Mapping Survey Data)

TRANSECT	- Transect ID
DATE	- Date collected
NORTHING	- Northing coordinate of transect midpoint (MASP NAD83 meters)
EASTING	- Easting coordinate of transect midpoint (MASP NAD83 meters)
WEST_TO_MID	- Sediment bed characterization from the west bank to mid channel
MID_CHANNEL	- Mid-channel sediment bed characterization
MID_TO_EAST	- Sediment bed characterization from mid channel to the east bank
NOTES	

BATHYMETRY (1997 Bathymetric Survey Data)

TRANSECT	- Transect ID
DATE	- Date collected
NORTHING	- Northing coordinate of transect midpoint (MASP NAD83 meters)
EASTING	- Easting coordinate of transect midpoint (MASP NAD83 meters)
GBFLOW	- USGS provisional flow data measured at Great Barrington (cfs)
DIST_FROM_WEST	- Distance of measurement from west shore (ft)
DEPTH	- Water depth (ft)
NOTES	

GE Weather Station Data Documentation

The data table in the database named **GE Weather Station Data.mdb** on this CD contain raw data from the Weather Station located on the GE site next to the helipad adjacent to Building 64T, south of East Street in Pittsfield, MA. Data is recorded every fifteen minutes. The database includes data starting from January 1994.

The weather station was struck by lightning at approximately 8:00PM on June 28, 1999 and was not fully repaired and back in operation until 2:45PM on October 6, 1999. During the intervening time the station was "repaired" several times but failed to record reliable data. Also during this time, two new sensors were added to the station for measurement of barometric pressure and evaporation rate.

There are 14 columns of numerical data. The content of each column is detailed below.

Column	Contents	Units
1	Data_Logger_Identifier	
2	Year	
3	Day_of_Year	(sequential from Jan 1 = 1)
4	Time_of_Day	(24 hour clock hhmm)
5	Wind_Speed	mph
6	Wind _Direction	compass degrees
7	Deviation_in_Wind_Direction	percent
8	Temperature	degrees F
9	Relative_Humidity	percent
10	Solar_Radiation	Langleys, Integrated (previous 15 minutes)
11	Barometric_Pressure	mBars
12	Evaporation_Rate	inches of water
13	Precipitation	inches of water, during fifteen minute interval
14	Backup_Battery	volts

Notes: Time of day is always Eastern Standard Time. It does not change for Daylight Savings Time.
mBar = 0.00098692 atm.
Langley = calorie/square centimeter

REPOSITORY TARGET SHEET

US EPA New England
Superfund Document Management System (SDMS)
Native Files Target Sheet

SDMS Document ID #: 580278

Site Name: GE - HOUSATONIC RIVER (MAD002084093)

File Type(s) Attached: .MDB

Document Type this Target Sheet Represents:
[ ] Map [ ] Photograph/Graphic [ ] Graph/Chart

[ ] Video [ ] Compact Disc [X] Other: **Microsoft Access Databse (.mdb)**

Description or Comments:

GE Weather Station Data.mdb

hr103102.mdb

To view the attached files, open the "Attachment Panel"
by clicking on the paper clip -  - at the bottom left of this window.

** Please note to view attachments the software corresponding with the specified file type is necessary. **

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US EPA New England

Superfund Document Management System

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