CALIBRATION OF THE PCB
WATER QUALITY MODEL FOR THE DELAWARE ESTUARY
FOR PENTA-PCBs AND CARBON

APPENDIX G
DECADAL SCALE CONSISTENCY CHECK SIMULATION RESULTS FOR
FURTHER SEDIMENT TRANSPORT SCENARIOS

APPENDIX G. SIMULATION RESULTS FOR FURTHER SEDIMENT TRANSPORT SCENARIOS

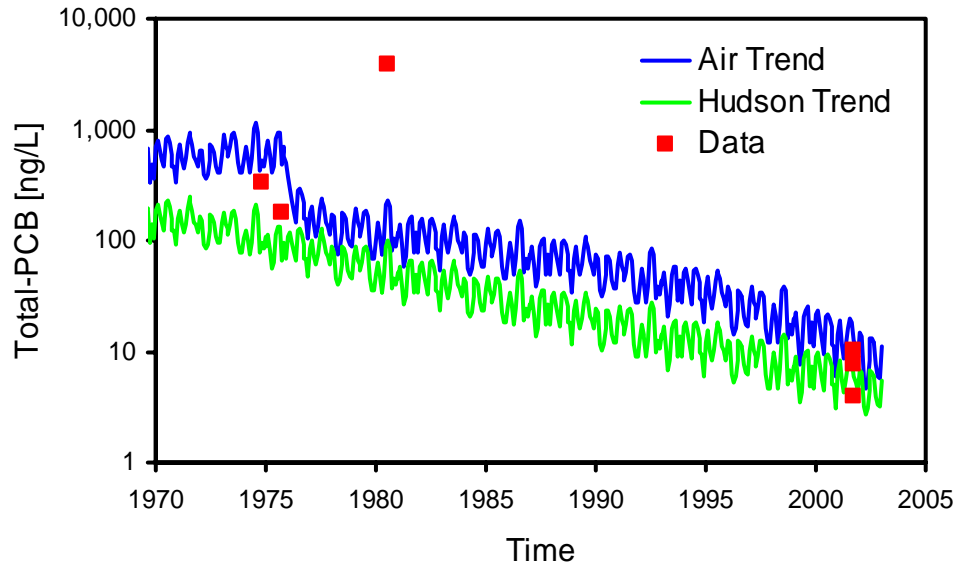## A.1. Large reservoir/low interaction

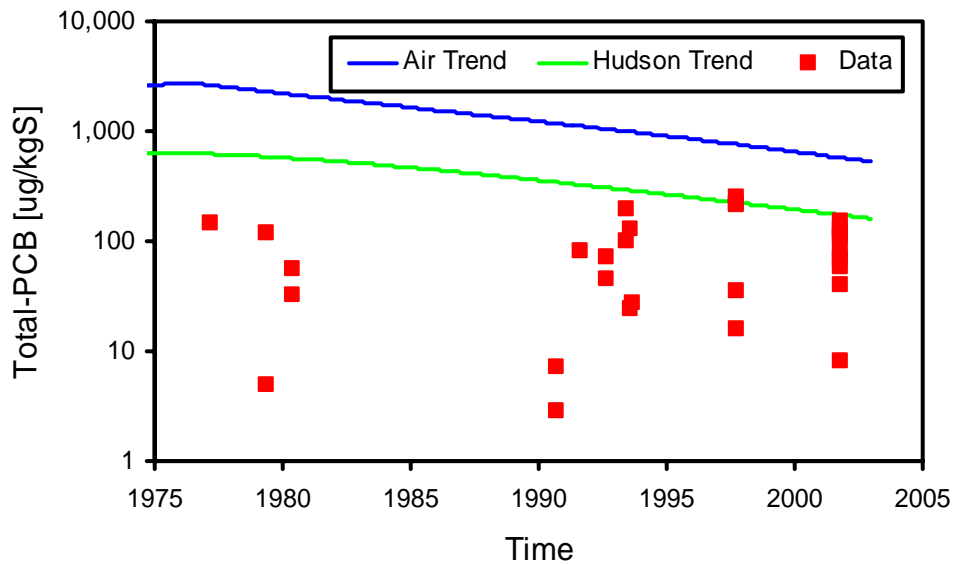Figure A.1.1 – Historical water column total-PCB concentrations in Zone 3.

Figure A.1.2(a) – Historical sediment bed total-PCB concentrations in Zone 2. Model results are average of layers 1 and 2.
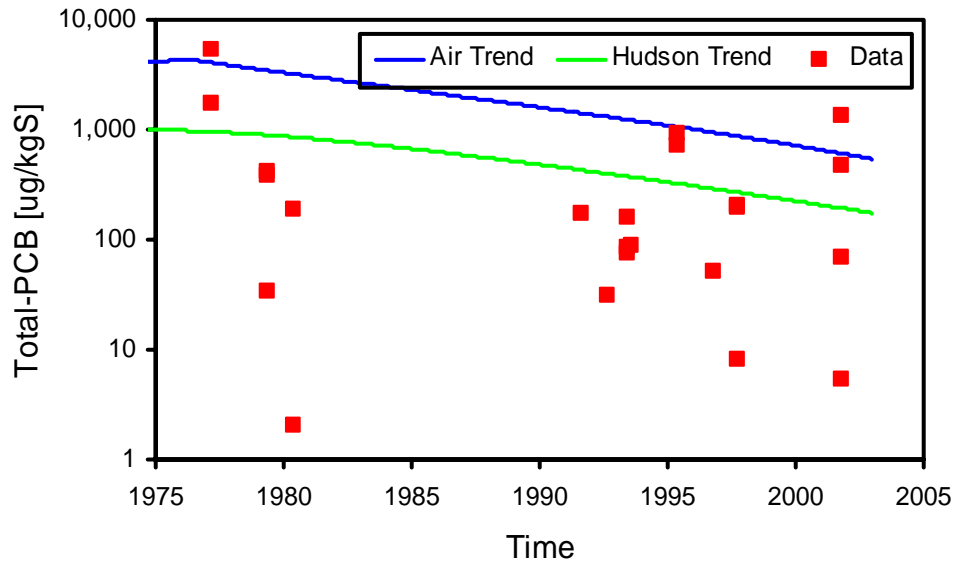
Figure A.1.2(b) – Historical sediment bed total-PCB concentrations in Zone 3. Model results are average of layers 1 and 2.
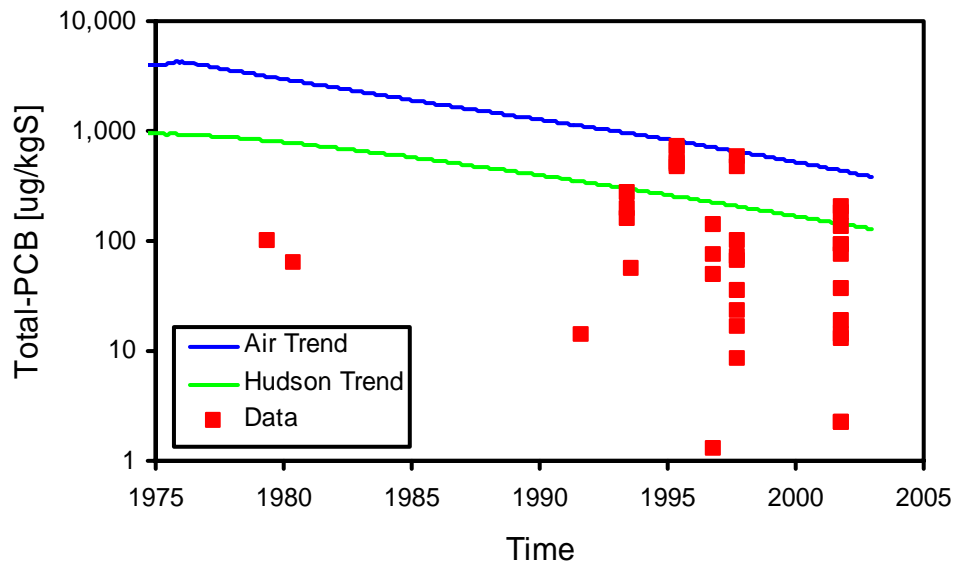

Figure A.1.2(c) – Historical sediment bed total-PCB concentrations in Zone 4. Model results are average of layers 1 and 2.
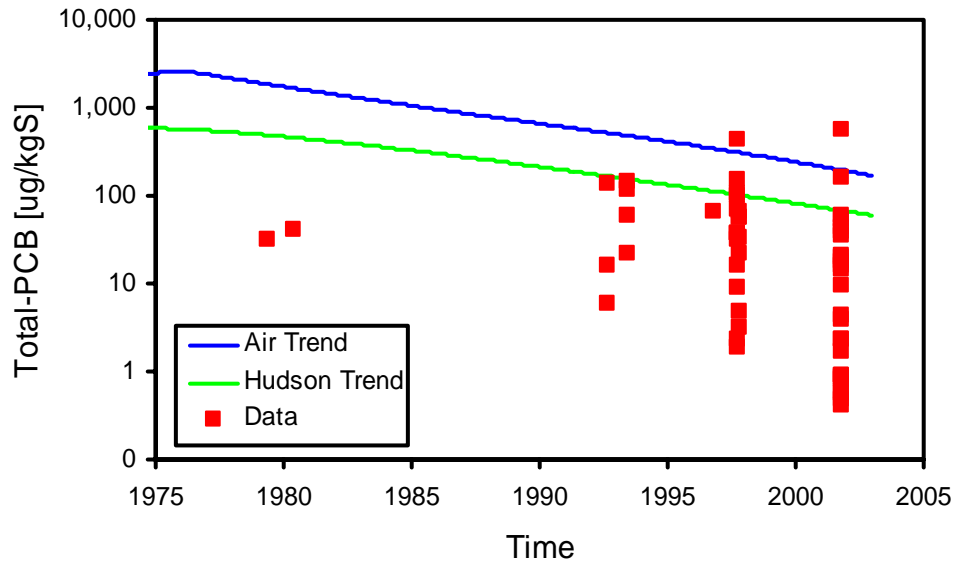
Figure A.1.2(d) – Historical sediment bed total-PCB concentrations in Zone 5. Model results are average of layers 1 and 2.
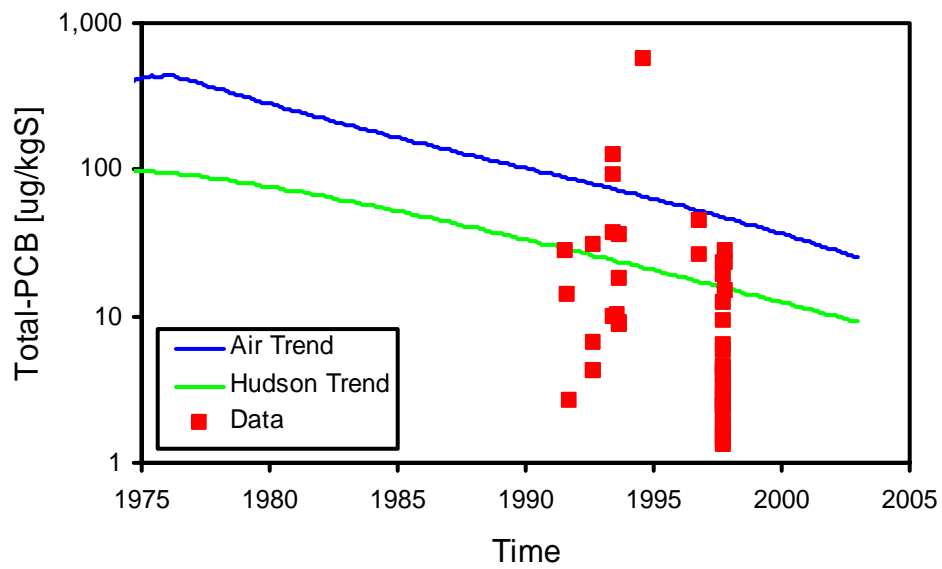

Figure A.1.2(e) – Historical sediment bed total-PCB concentrations in Zone 6. Model results are average of layers 1 and 2.
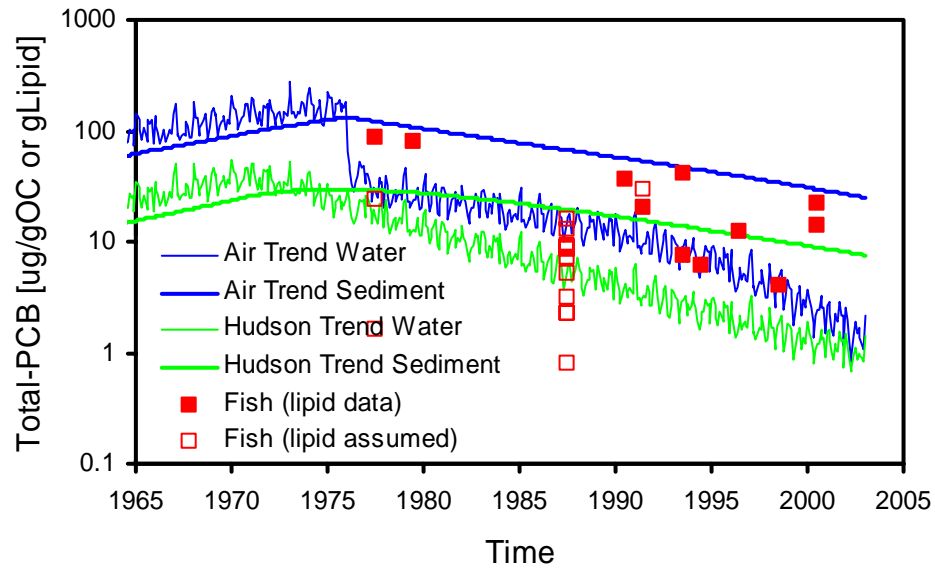
Figure A.1.3(a) – Historical fish total-PCB concentration in Zone 2. Data are for White Perch. Model sediment results are for layer 1.
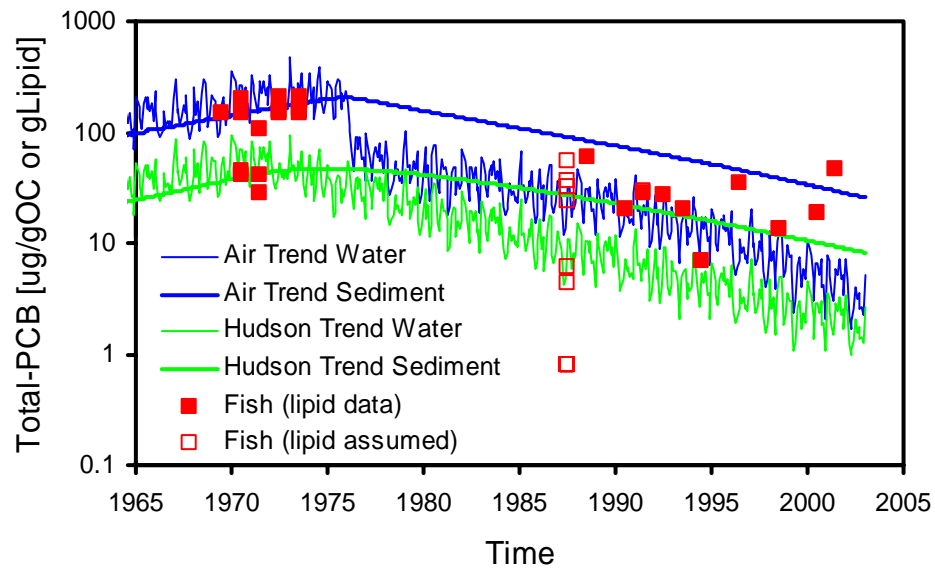

Figure A.1.3(b) – Historical fish total-PCB concentration in Zone 3. Data are for White Perch. Model sediment results are for layer 1.
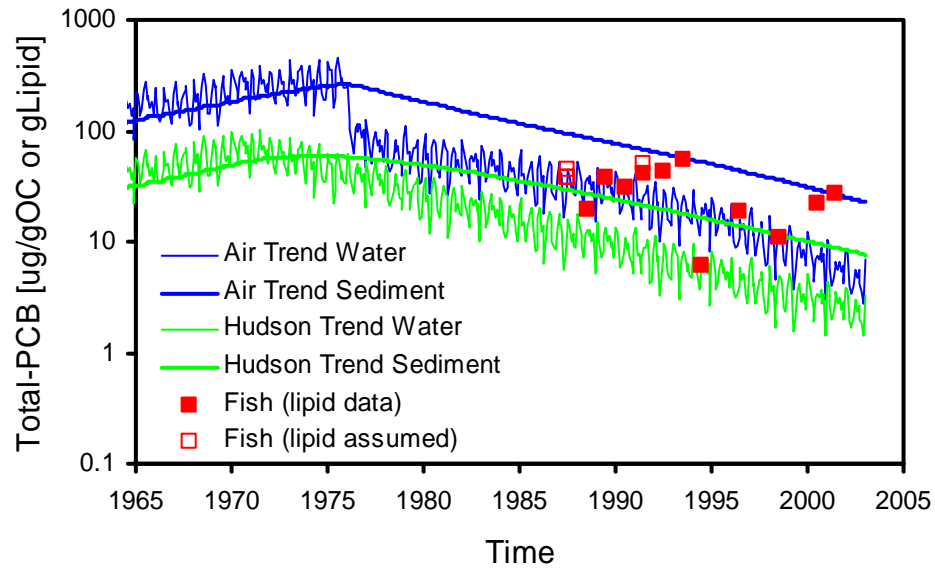
Figure A.1.3(c) – Historical fish total-PCB concentration in Zone 4. Data are for White Perch. Model sediment results are for layer 1.
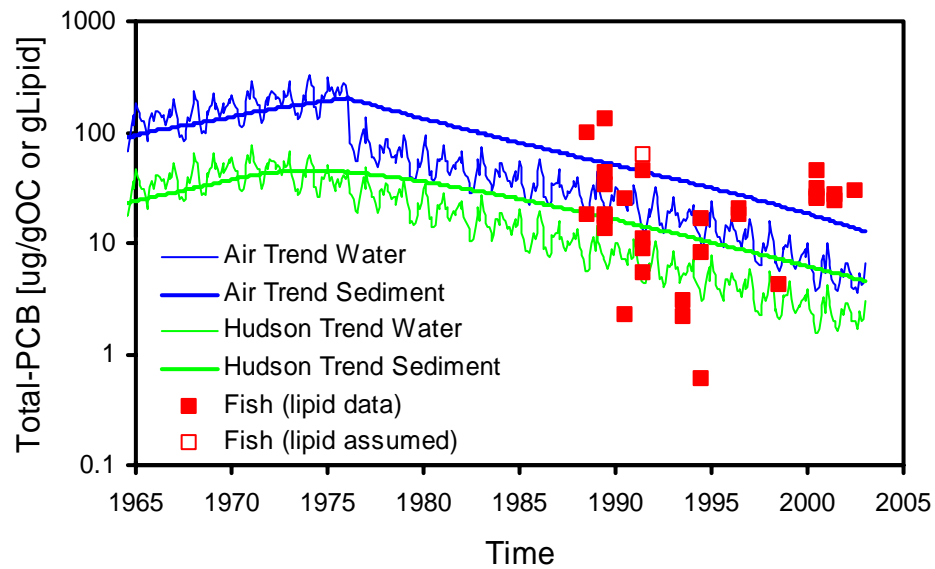

Figure A.1.3(d) – Historical fish total-PCB concentration in Zone 5. Data are for White Perch. Model sediment results are for layer 1.
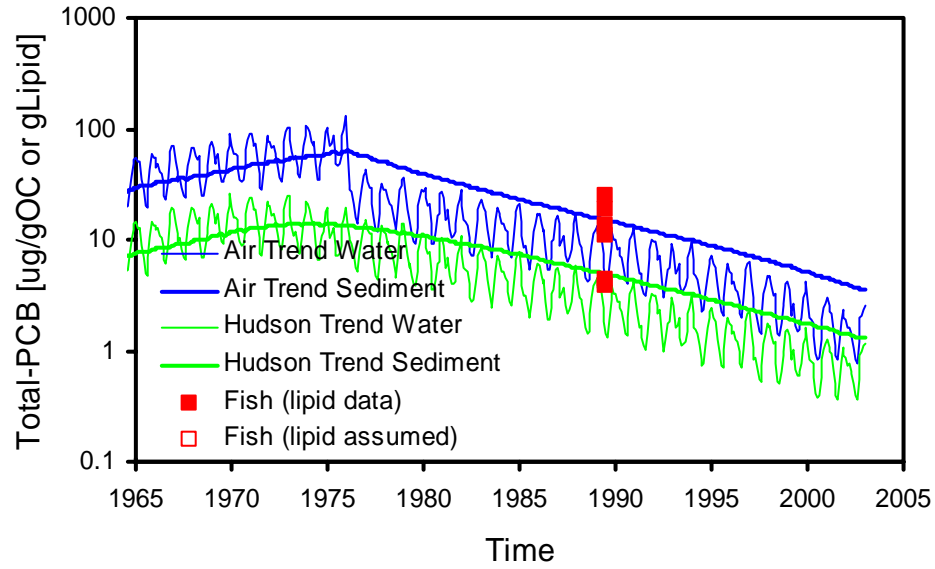
Figure A.1.3(e) – Historical fish total-PCB concentration in Zone 6. Data are for White Perch. Model sediment results are for layer 1.
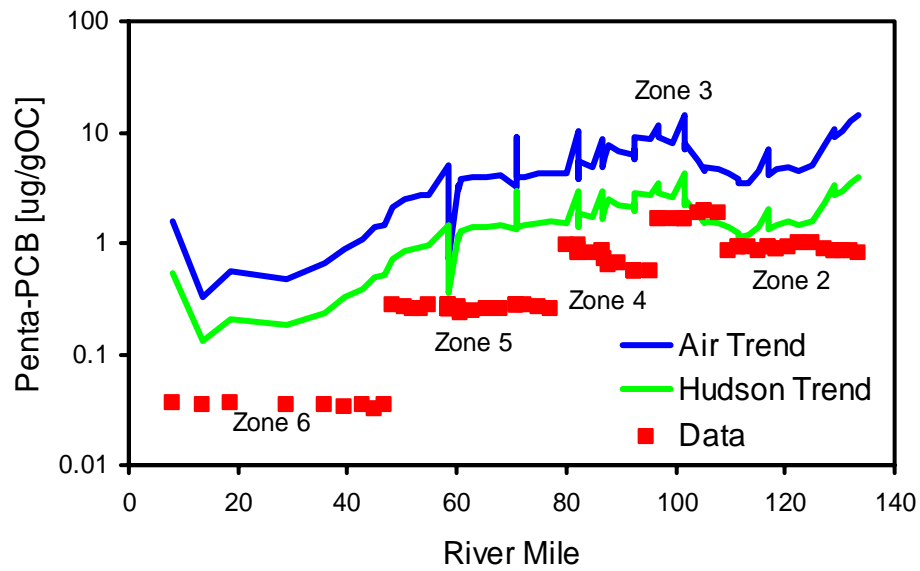

Figure A.1.4 – Contemporary surface sediment penta-PCB concentrations. Model results are for sediment layer 1.
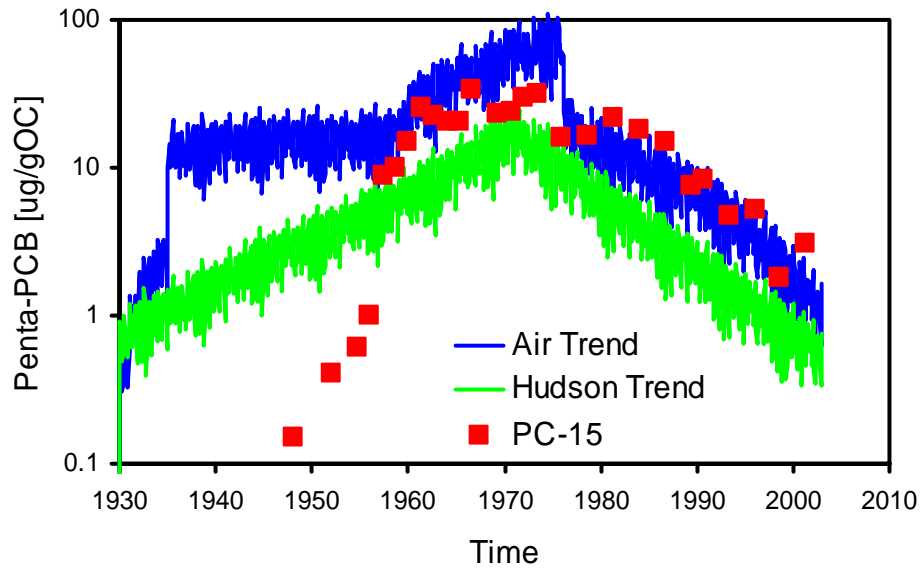
Figure A.1.5 – Historical water column penta-PCB concentrations. Data are from Woodbury Creek core (PC-15; Sommerfield and Madsen, 2003; Eisenreich, 2003). Depth was converted to time using 1.5 cm/yr net deposition rate. Model results are for Segment 44.

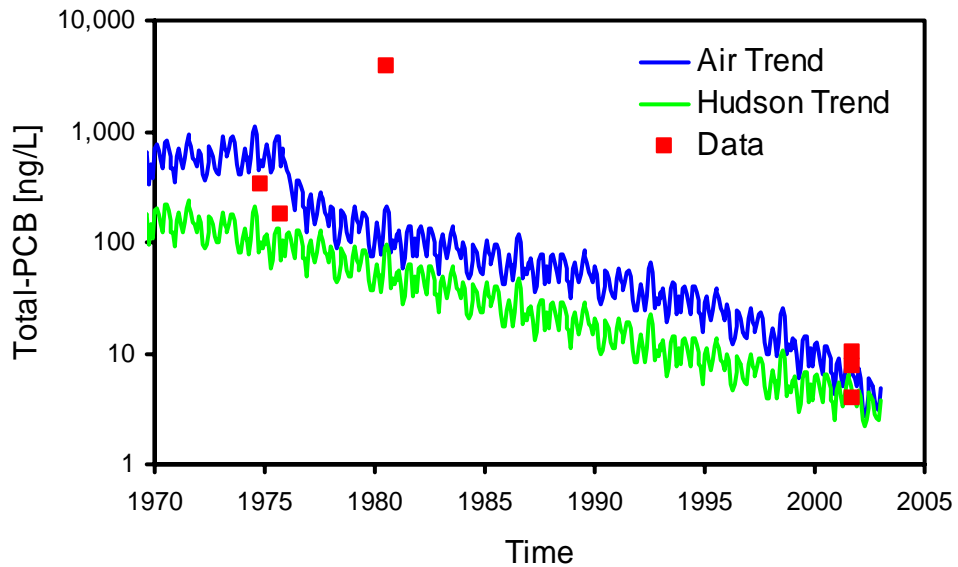A.2. Small reservoir/high interaction

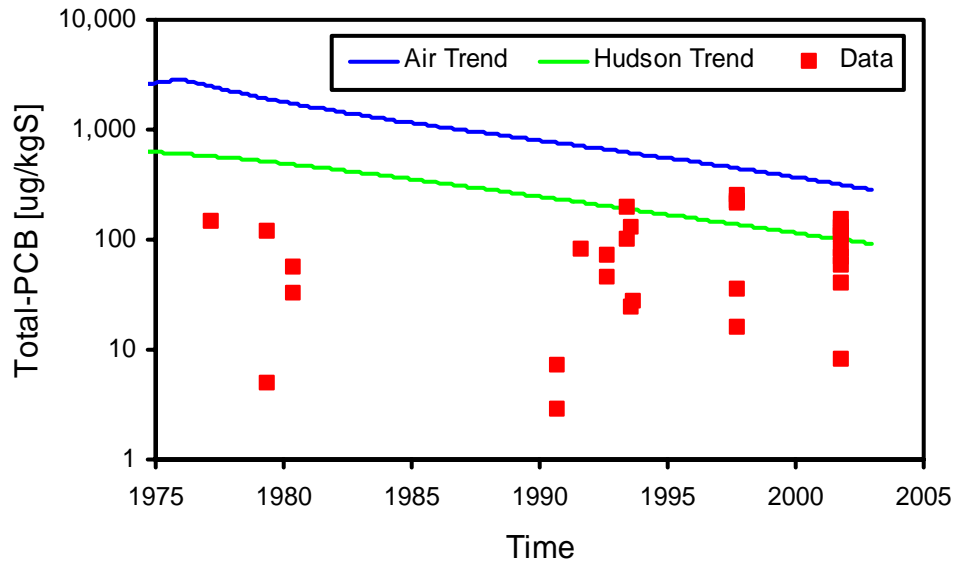Figure A.2.1 – Historical water column total-PCB concentrations in Zone 3.

Figure A.2.2(a) – Historical sediment bed total-PCB concentrations in Zone 2. Model results are average of layers 1 and 2.
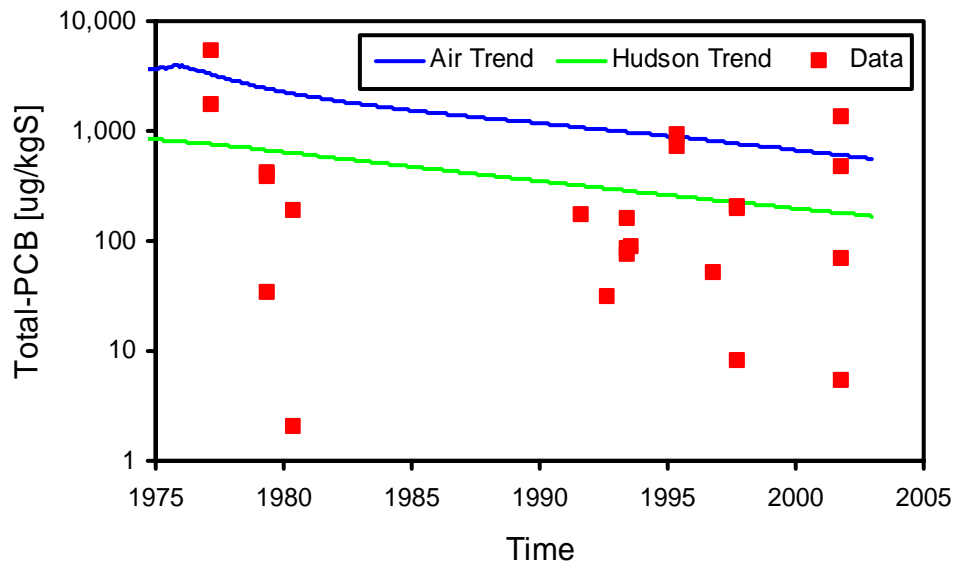

Figure A.2.2(b) – Historical sediment bed total-PCB concentrations in Zone 3. Model results are average of layers 1 and 2.
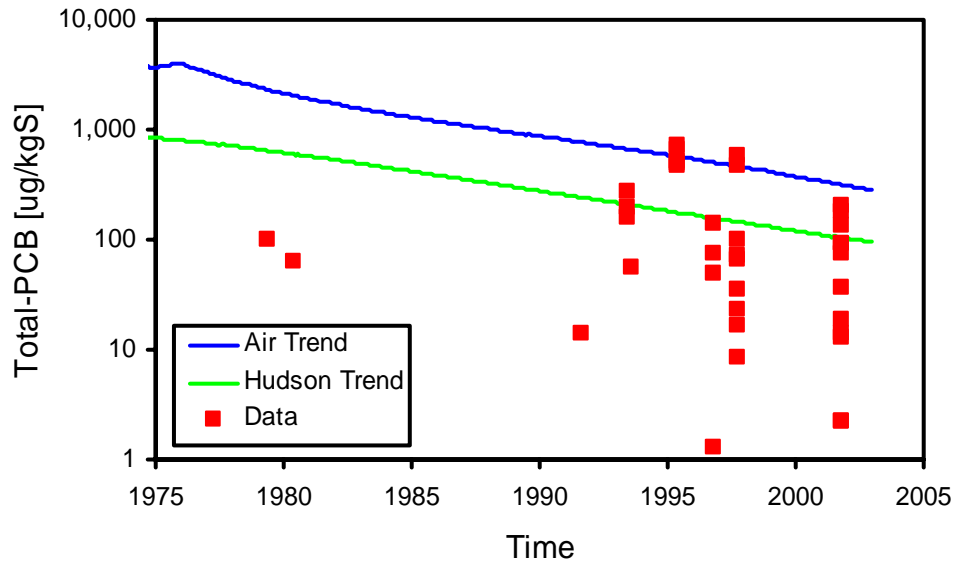
Figure A.2.2(c) – Historical sediment bed total-PCB concentrations in Zone 4. Model results are average of layers 1 and 2.
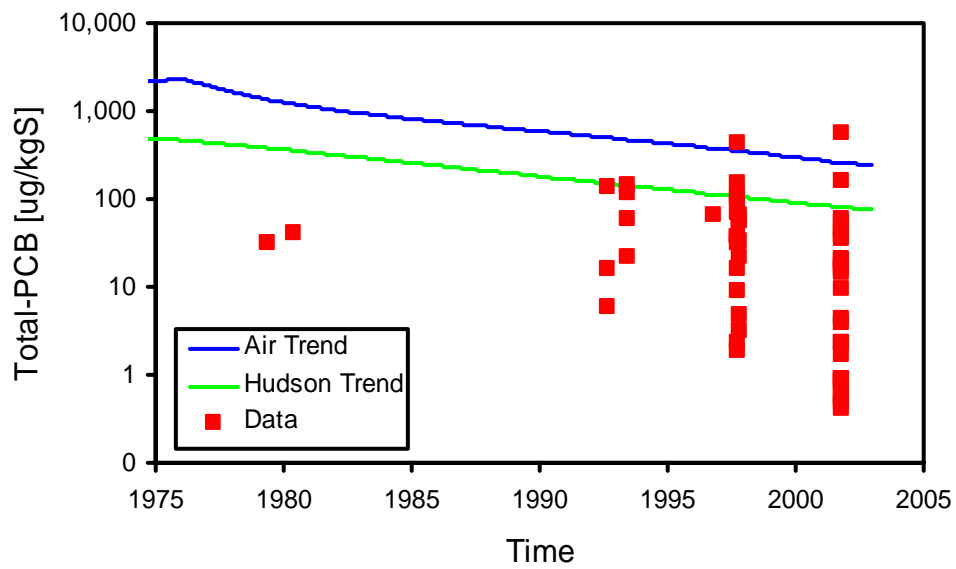

Figure A.2.2(d) – Historical sediment bed total-PCB concentrations in Zone 5. Model results are average of layers 1 and 2.
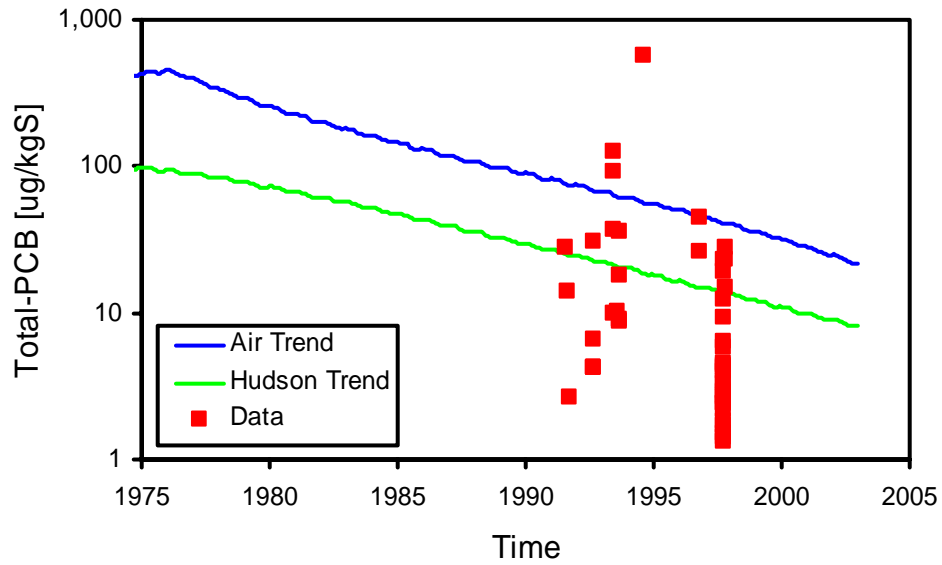
Figure A.2.2(e) – Historical sediment bed total-PCB concentrations in Zone 6. Model results are average of layers 1 and 2.
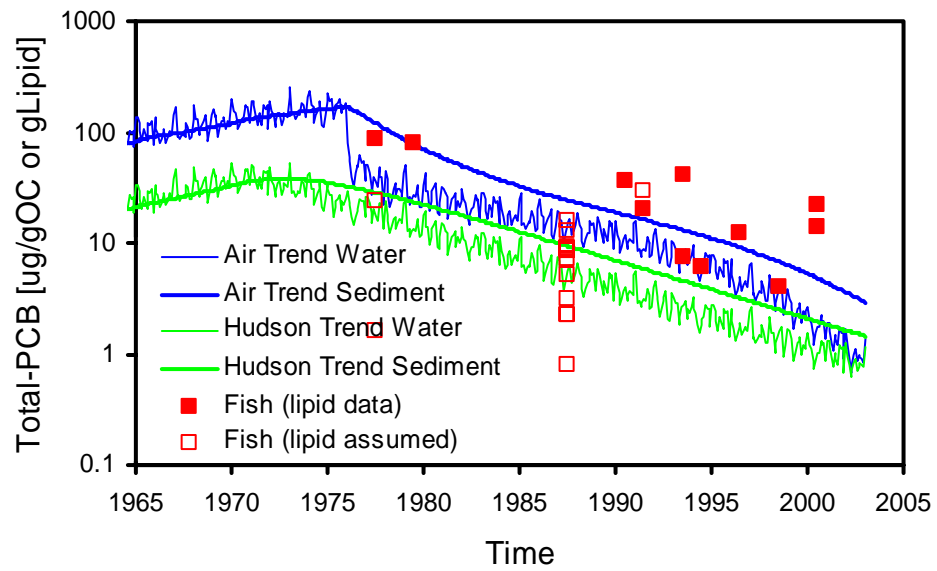

Figure A.2.3(a) – Historical fish total-PCB concentration in Zone 2. Data are for White Perch. Model sediment results are for layer 1.
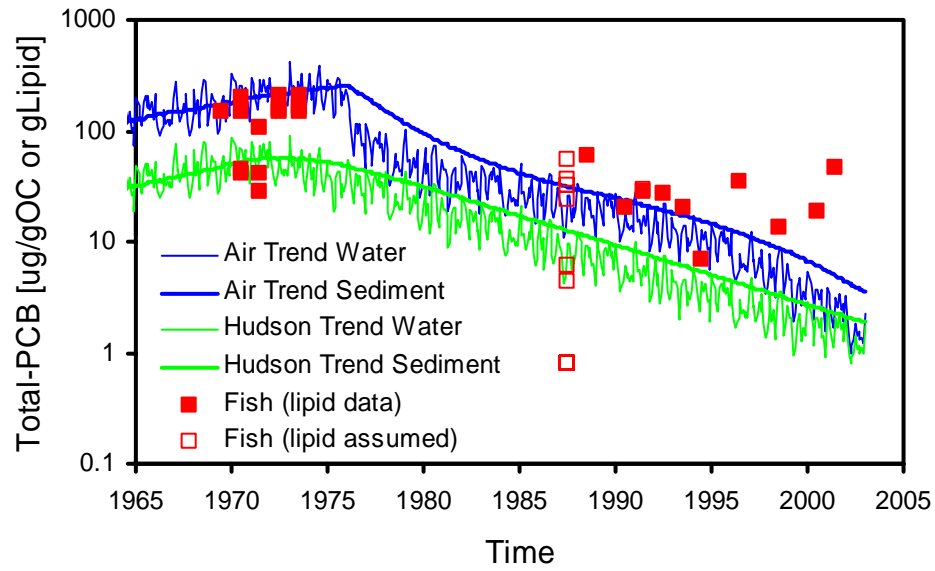
Figure A.2.3(b) – Historical fish total-PCB concentration in Zone 3. Data are for White Perch. Model sediment results are for layer 1.
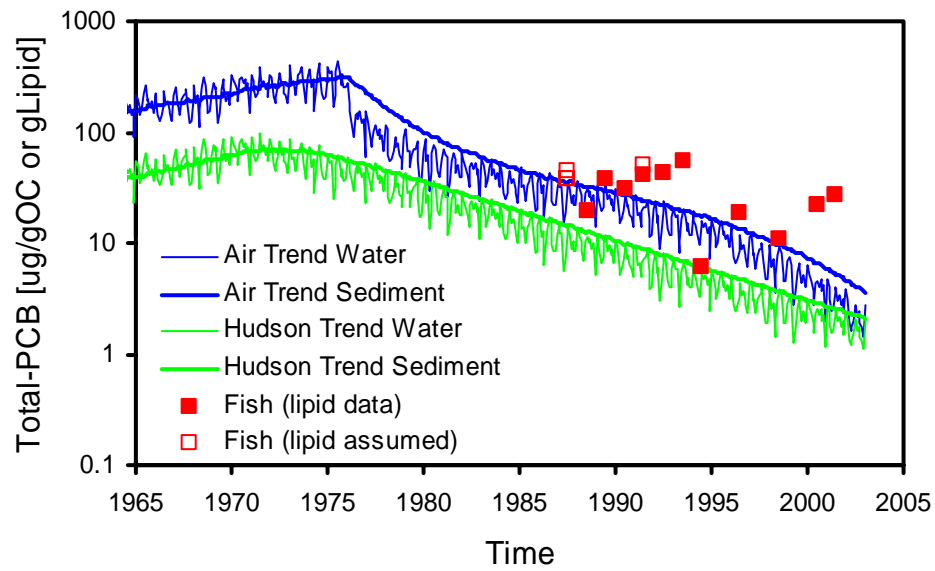

Figure A.2.3(c) – Historical fish total-PCB concentration in Zone 4. Data are for White Perch. Model sediment results are for layer 1.
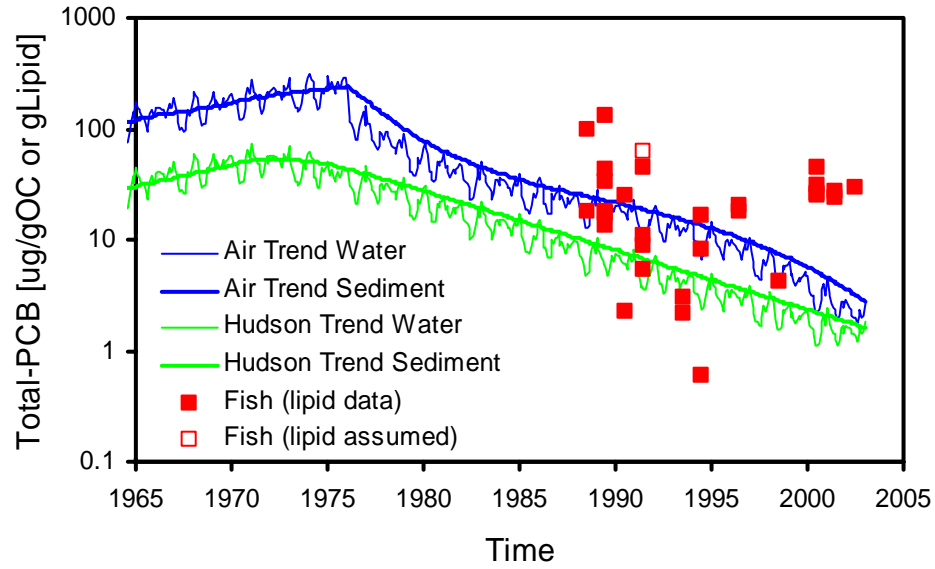
Figure A.2.3(d) – Historical fish total-PCB concentration in Zone 5. Data are for White Perch. Model sediment results are for layer 1.
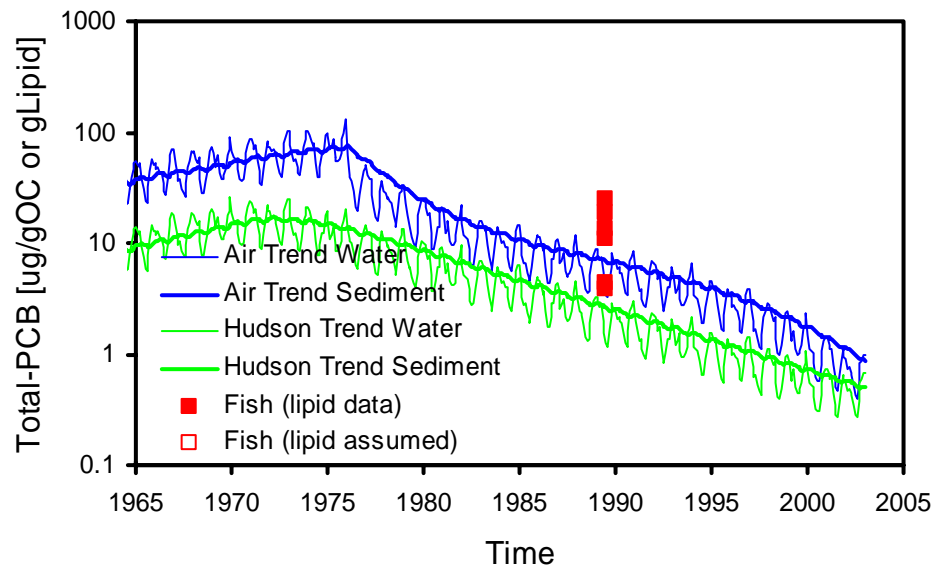

Figure A.2.3(e) – Historical fish total-PCB concentration in Zone 6. Data are for White Perch. Model sediment results are for layer 1.
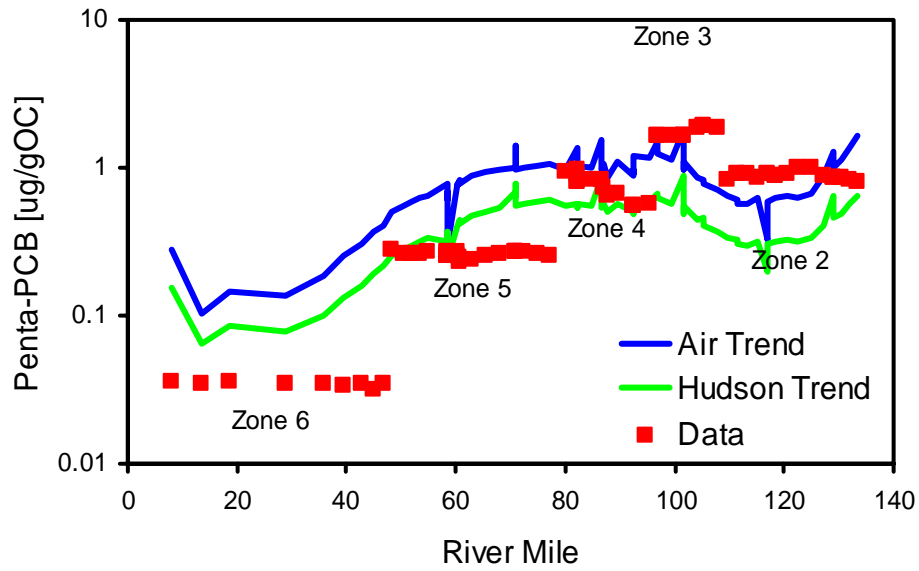
Figure A.2.4 – Contemporary surface sediment penta-PCB concentrations. Model results are for sediment layer 1.
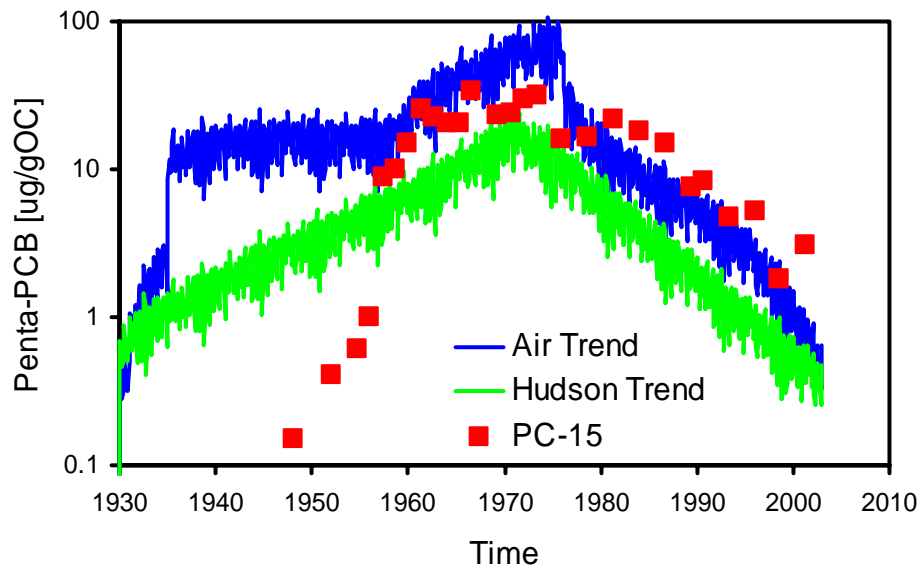

Figure A.2.5 – Historical water column penta-PCB concentrations. Data are from Woodbury Creek core (PC-15; Sommerfield and Madsen, 2003; Eisenreich, 2003). Depth was converted to time using 1.5 cm/yr net deposition rate. Model results are for Segment 44.
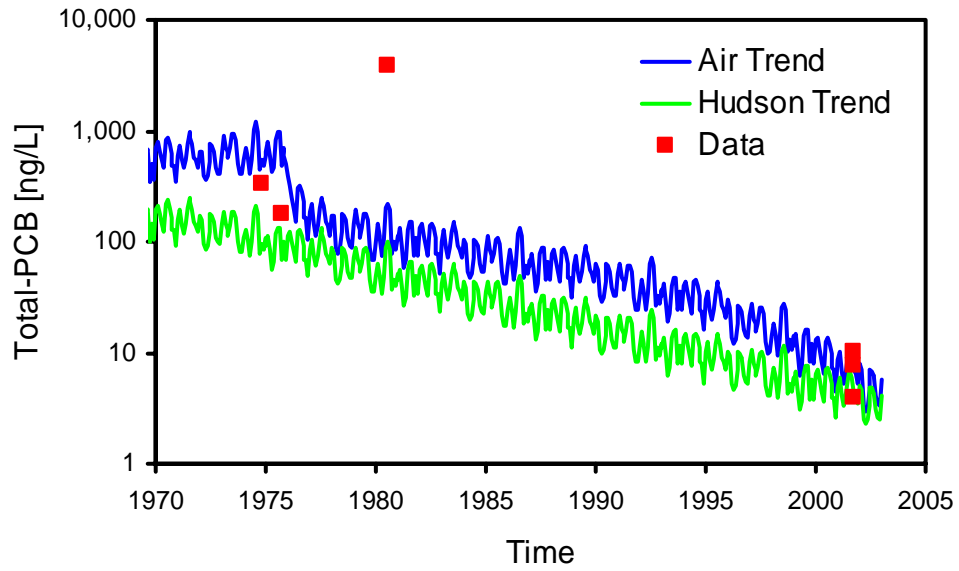
A.3. Small reservoir/low interaction

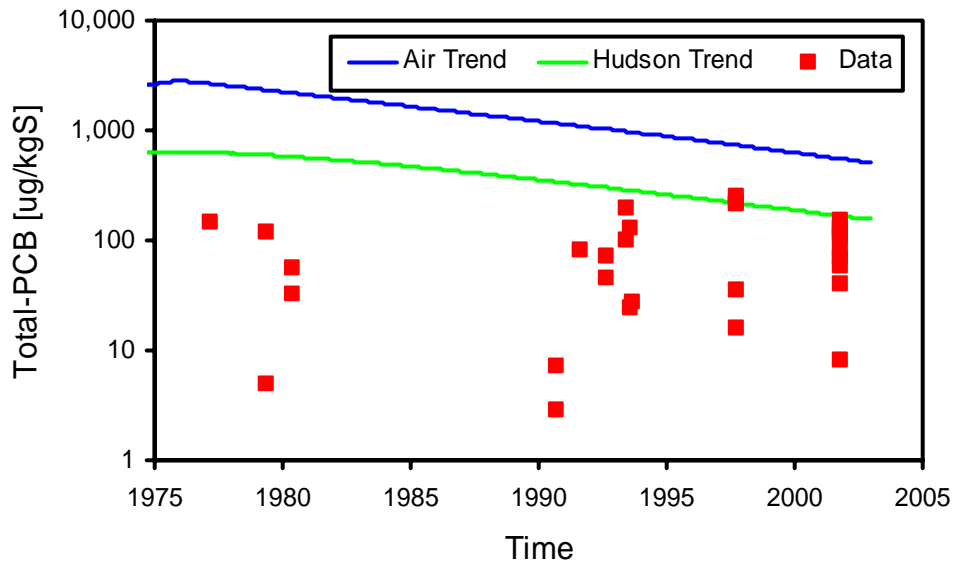Figure A.3.1 – Historical water column total-PCB concentrations in Zone 3.

Figure A.3.2(a) – Historical sediment bed total-PCB concentrations in Zone 2. Model results are average of layers 1 and 2.
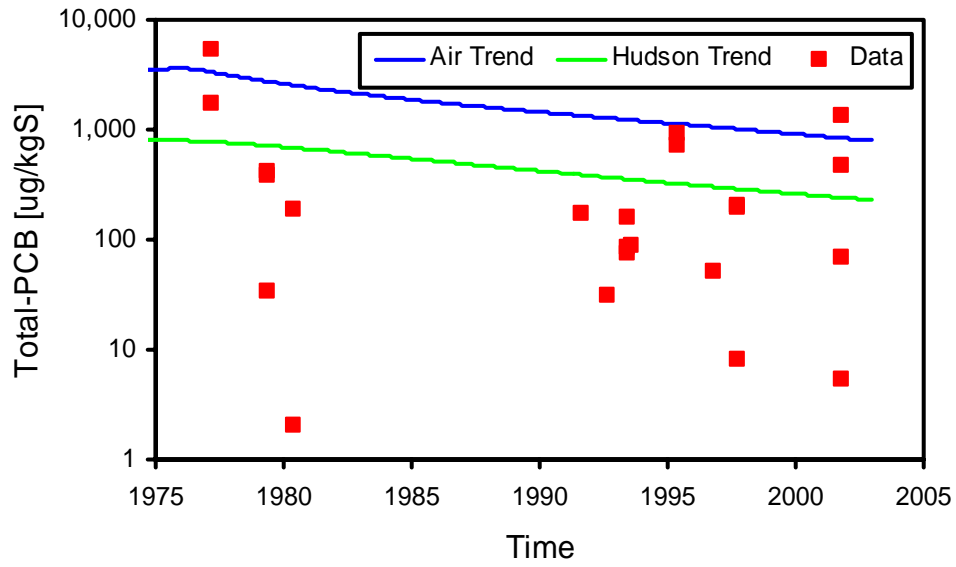
Figure A.3.2(b) – Historical sediment bed total-PCB concentrations in Zone 3. Model results are average of layers 1 and 2.
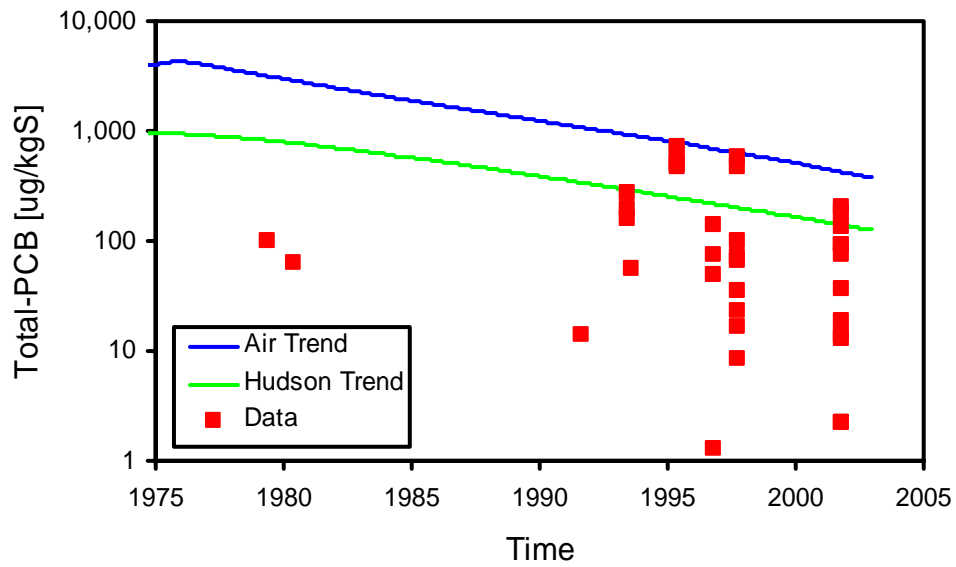

Figure A.3.2(c) – Historical sediment bed total-PCB concentrations in Zone 4. Model results are average of layers 1 and 2.
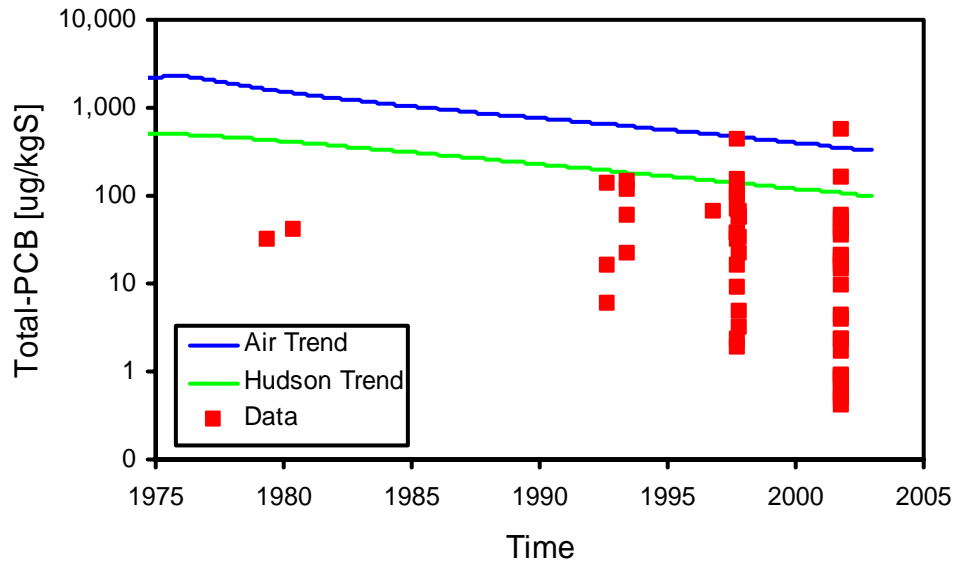
Figure A.3.2(d) – Historical sediment bed total-PCB concentrations in Zone 5. Model results are average of layers 1 and 2.
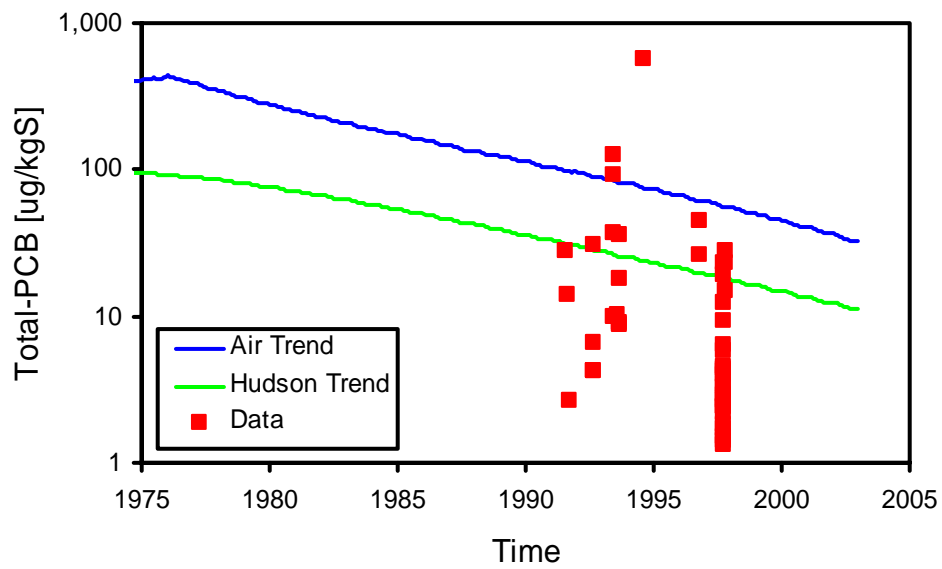

Figure A.3.2(e) – Historical sediment bed total-PCB concentrations in Zone 6. Model results are average of layers 1 and 2.
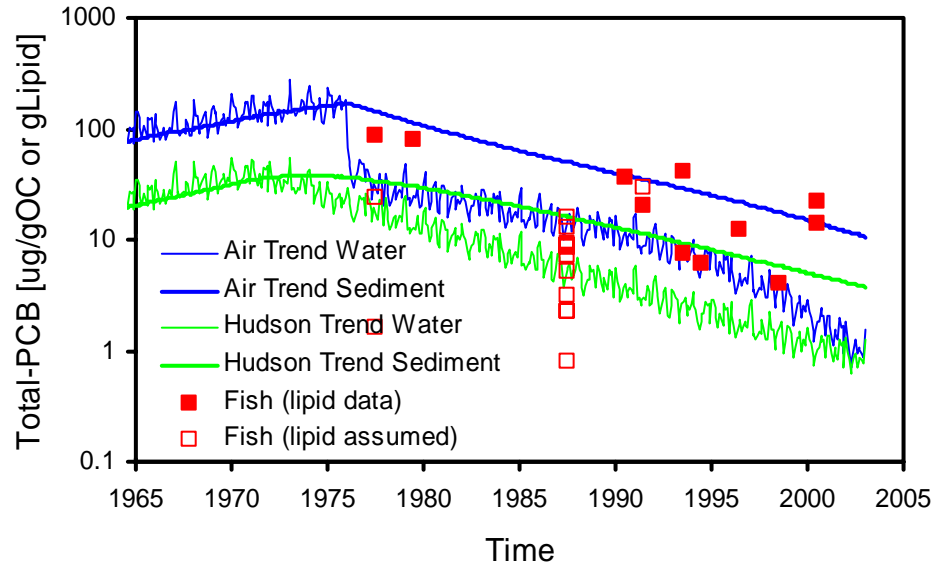
Figure A.3.3(a) – Historical fish total-PCB concentration in Zone 2. Data are for White Perch. Model sediment results are for layer 1.
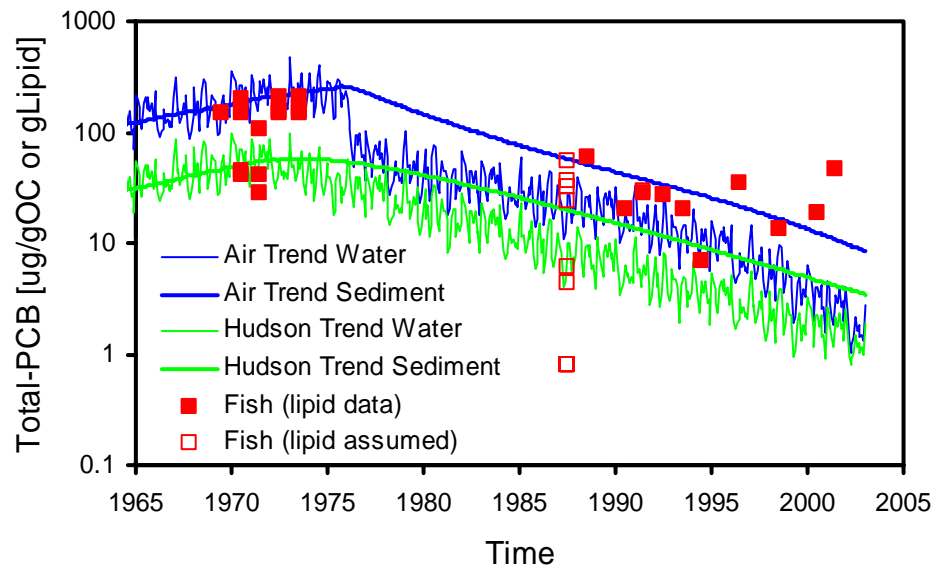

Figure A.3.3(b) – Historical fish total-PCB concentration in Zone 3. Data are for White Perch. Model sediment results are for layer 1.
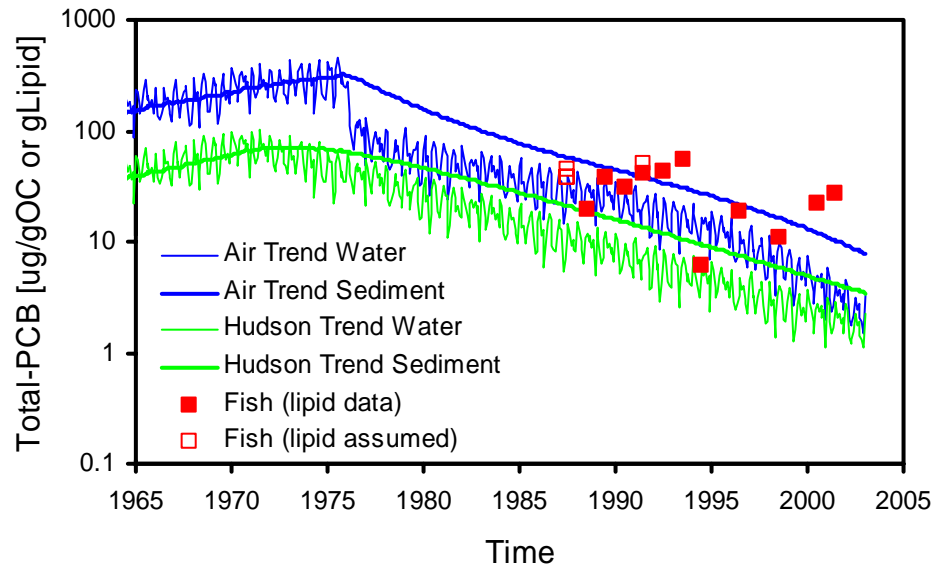
Figure A.3.3(c) – Historical fish total-PCB concentration in Zone 4. Data are for White Perch. Model sediment results are for layer 1.
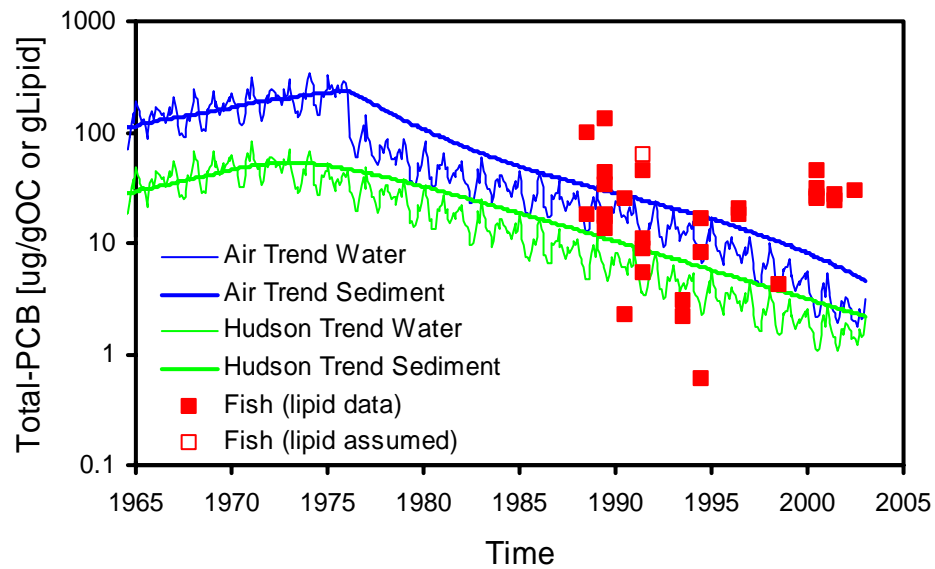

Figure A.3.3(d) – Historical fish total-PCB concentration in Zone 5. Data are for White Perch. Model sediment results are for layer 1.
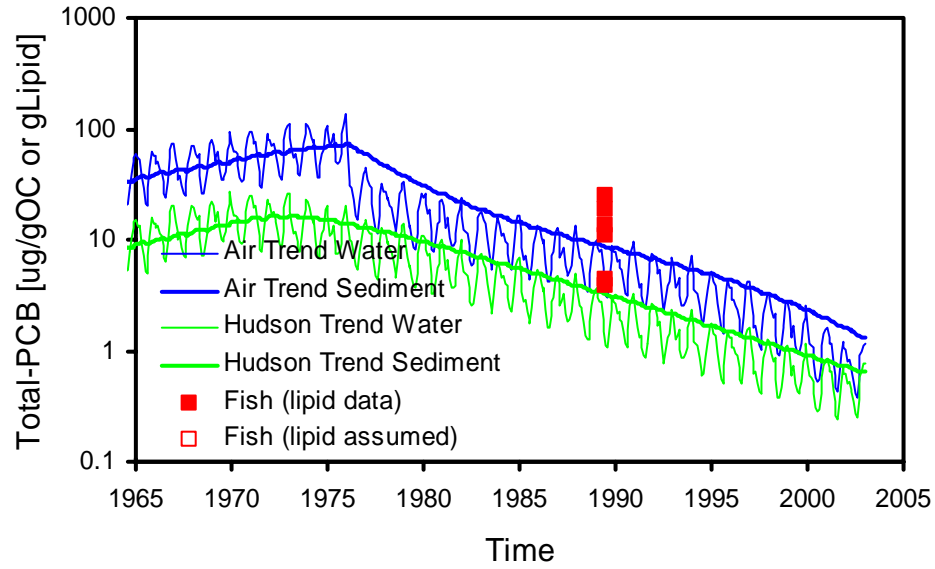
Figure A.3.3(e) – Historical fish total-PCB concentration in Zone 6. Data are for White Perch. Model sediment results are for layer 1.
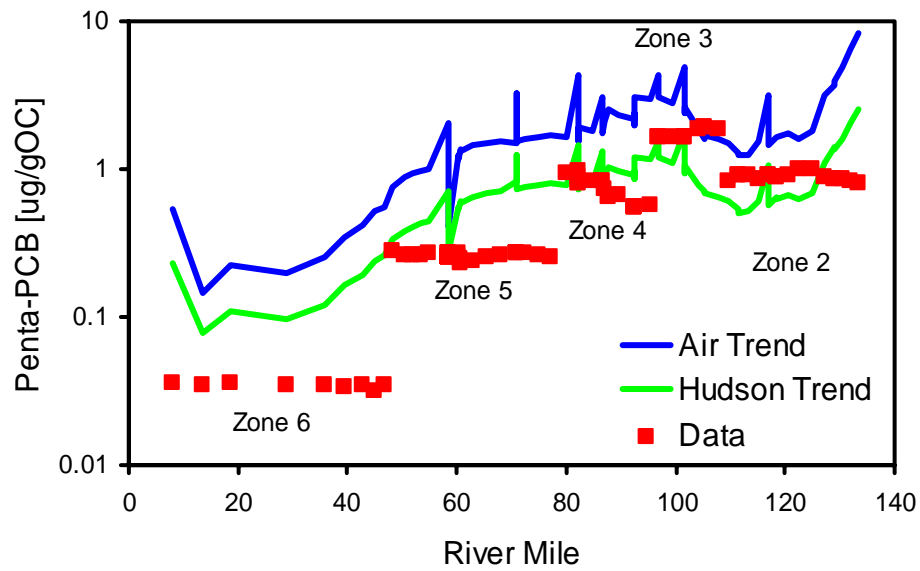

Figure A.3.4 – Contemporary surface sediment penta-PCB concentrations. Model results are for sediment layer 1.
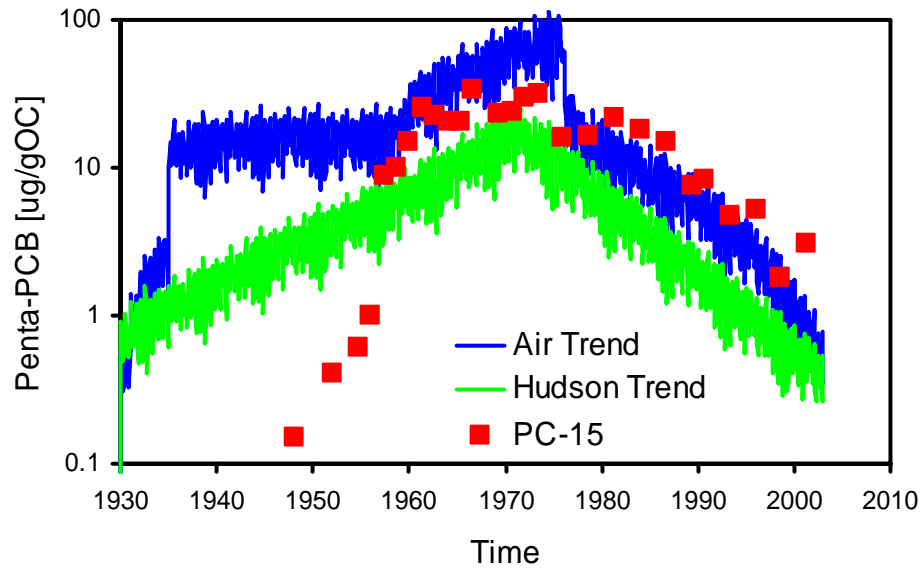
Figure A.3.5 – Historical water column penta-PCB concentrations. Data are from Woodbury Creek core (PC-15; Sommerfield and Madsen, 2003; Eisenreich, 2003). Depth was converted to time using 1.5 cm/yr net deposition rate. Model results are for Segment 44.
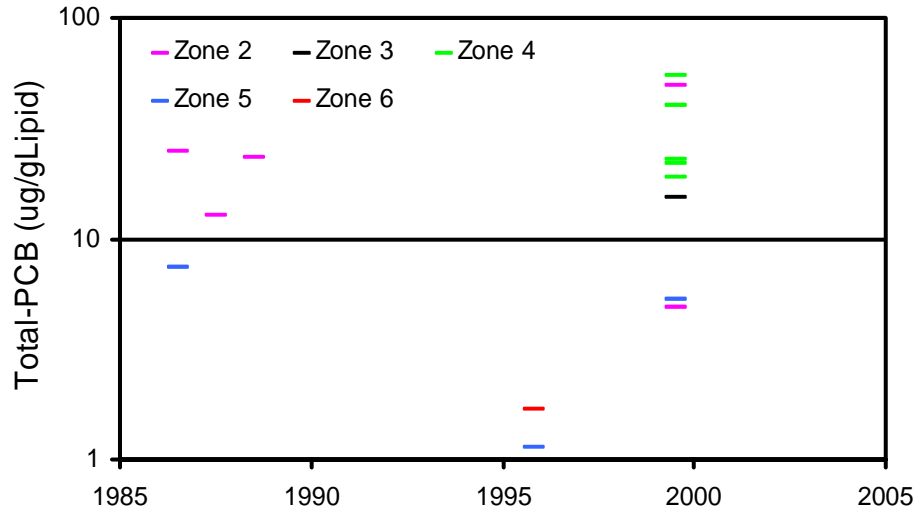
HISTORICAL BIOTA DATA

Figure B.1 – Historical American Eel total-PCB concentration in the Delaware Estuary.
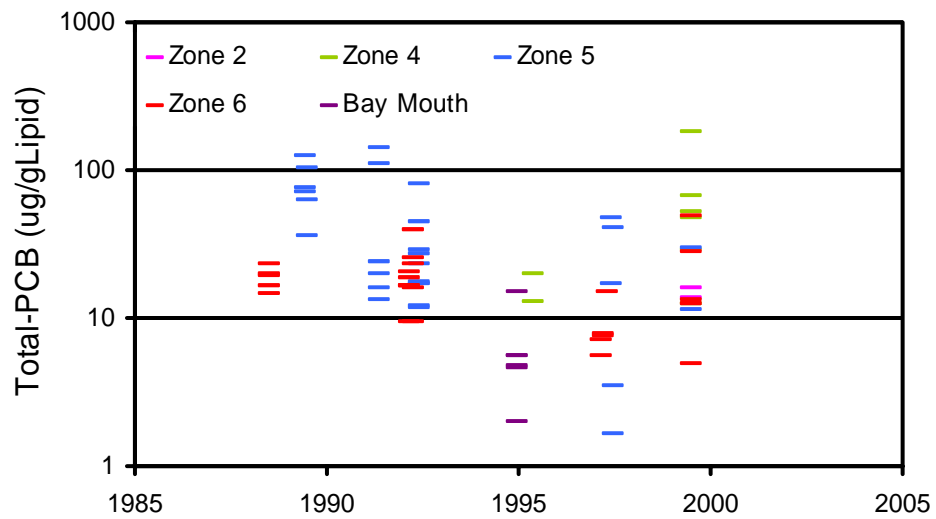

Figure B.2 – Historical Striped Bass total-PCB concentration in the Delaware Estuary.
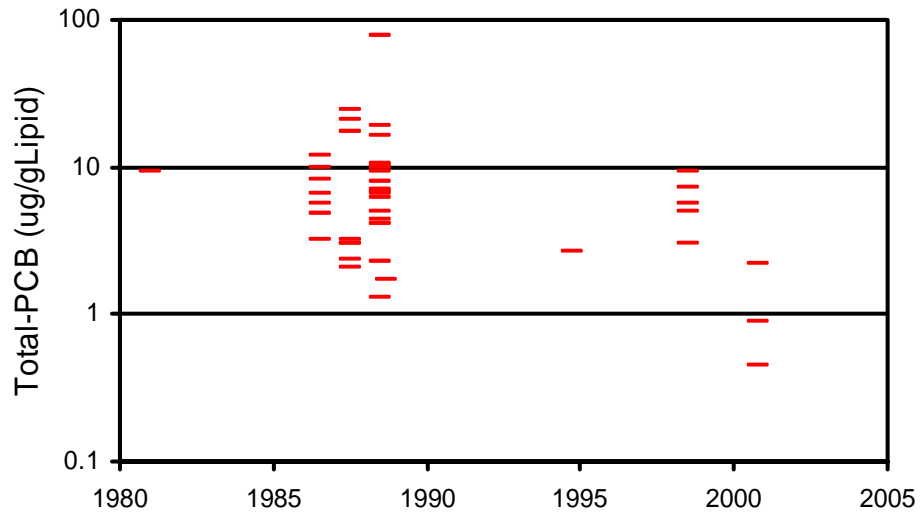
Figure B.3 – Historical Weakfish total-PCB concentration in Delaware Bay (Zone 6).
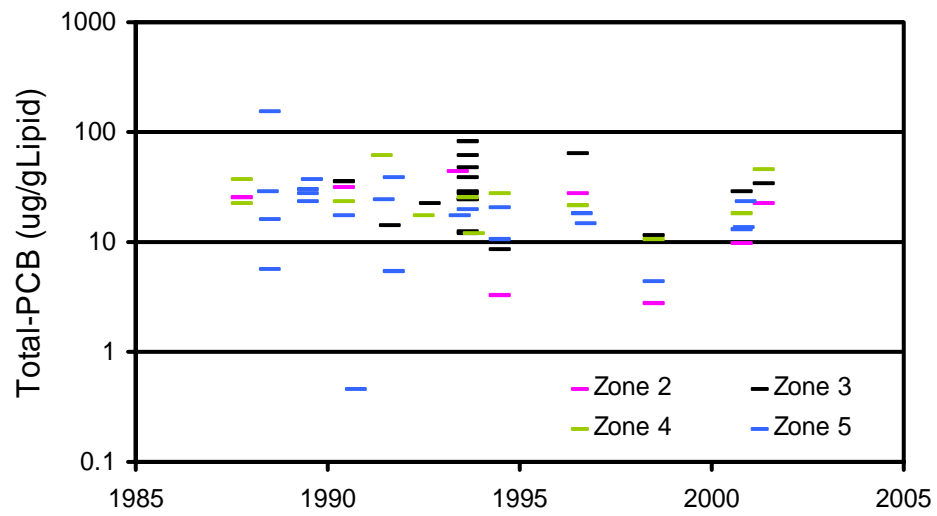

Figure B.4 – Historical Channel/White Catfish total-PCB concentration in the Delaware Estuary.
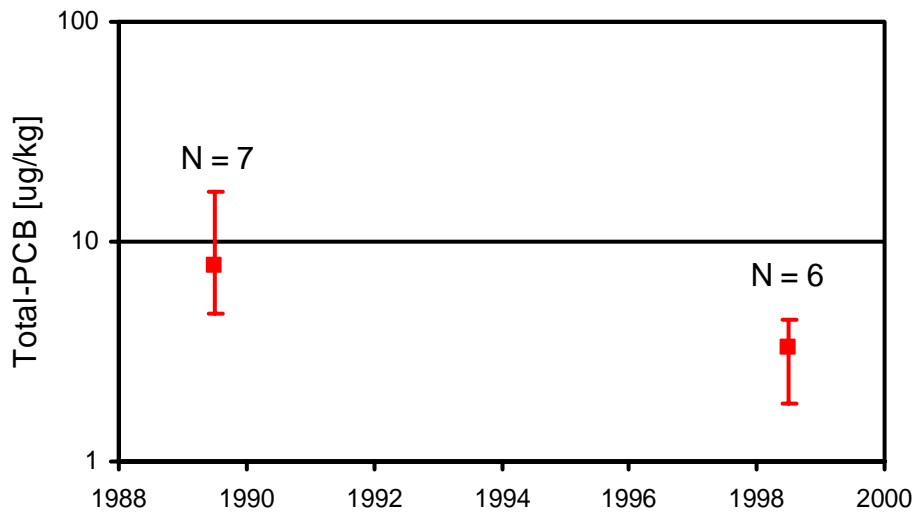
Figure B.5 – Historical Osprey Eggs total-PCB concentration in Zone 6. Symbols are median and range.