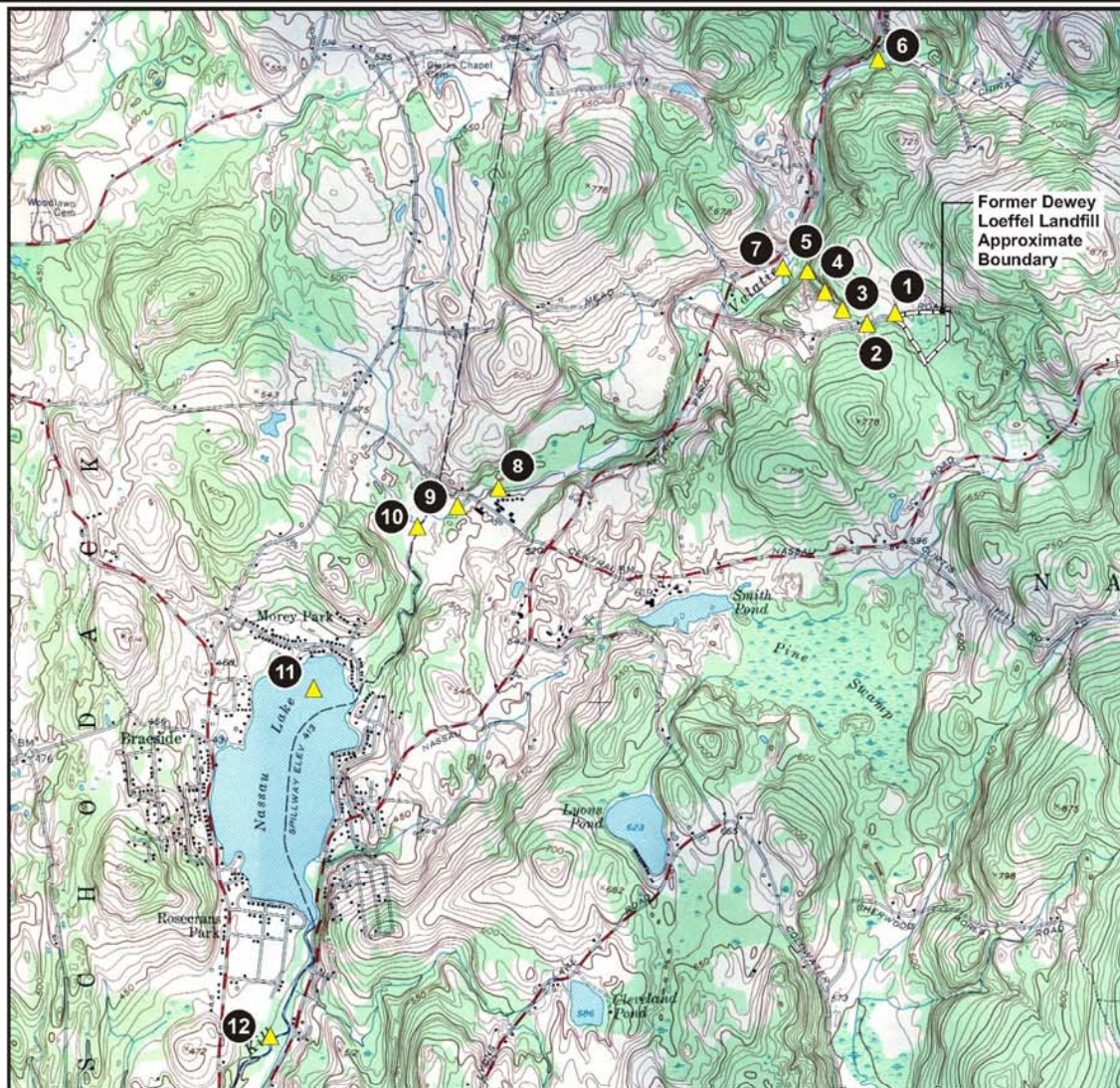


# Valatie Kill and Nassau Lake PCBs 2009 Data and Trends in Fish



REFERENCE: Base Map Source USGS 7.5 Minute Quads Nassau, New York, 1953, Photoinspected 1978.



**STATION  
NUMBER**

**LOCATION**

- 1 Wetland Above Former Mead Road Pond
- 2 Former Mead Road Pond
- 3 T11A Upper Third
- 4 T11A Middle Third
- 5 T11A Lower Third
- 6 Valatie Kill, Confluence with T14 (China Hill Road)
- 7 Valatie Kill, Below Confluence with T11A
- 8 Valatie Kill, Above Area 28
- 9 Valatie Kill, Area 28
- 10 Valatie Kill, Below Area 28
- 11 Nassau Lake
- 12 Valatie Kill, Below Nassau Lake (Above County Rte 7)

**NOTES:**

1. Sampling locations are approximate and based on coordinates provided in NYSDEC database (2004).
2. Current topography of former Dewey Loeffel landfill not depicted.

2000 0 2000  
Approximate Scale: 1" = 2000'

LOEFFEL SITE ENVIRONS,  
NASSAU, NEW YORK

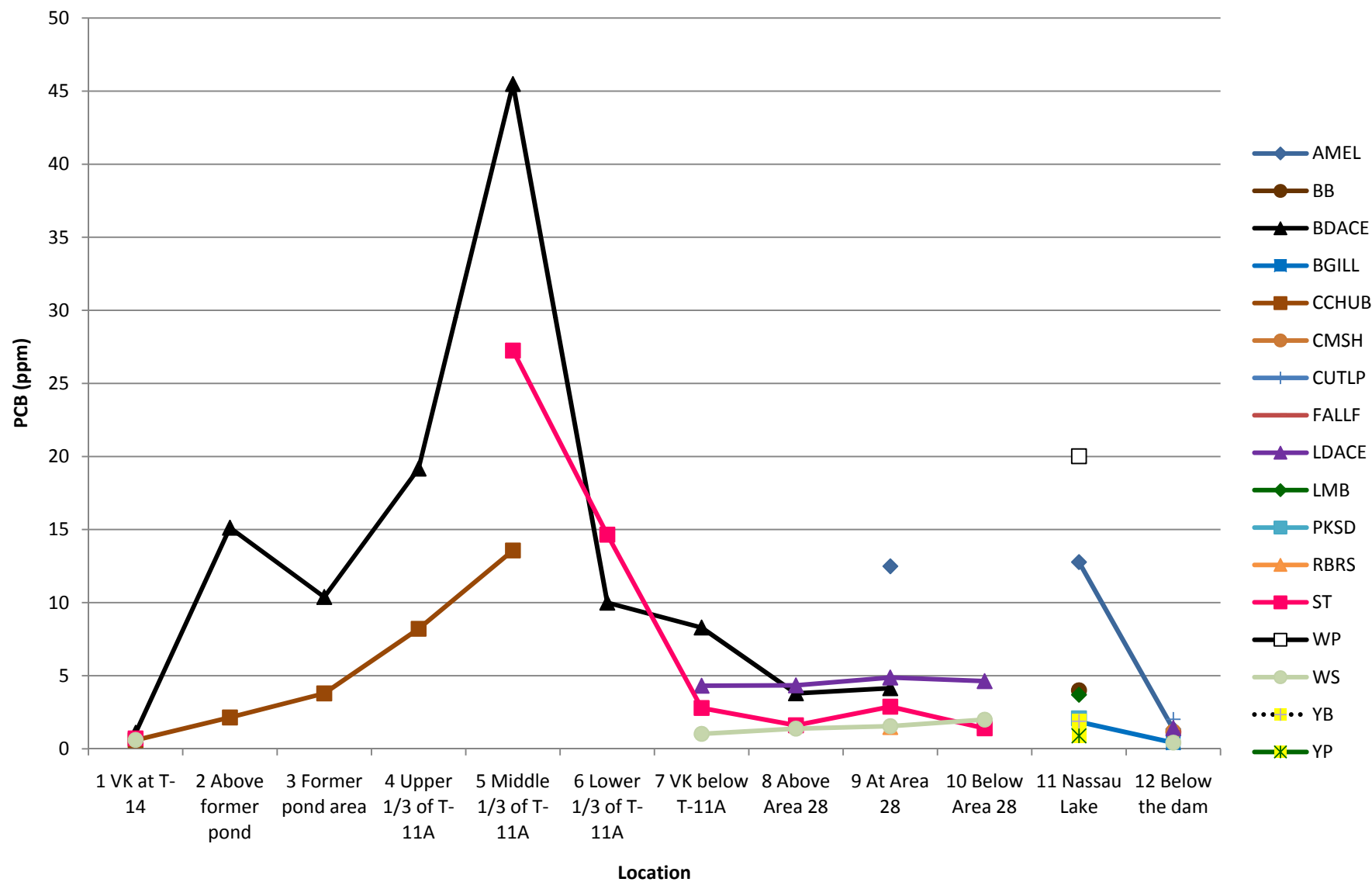
**FISH SAMPLING LOCATIONS**



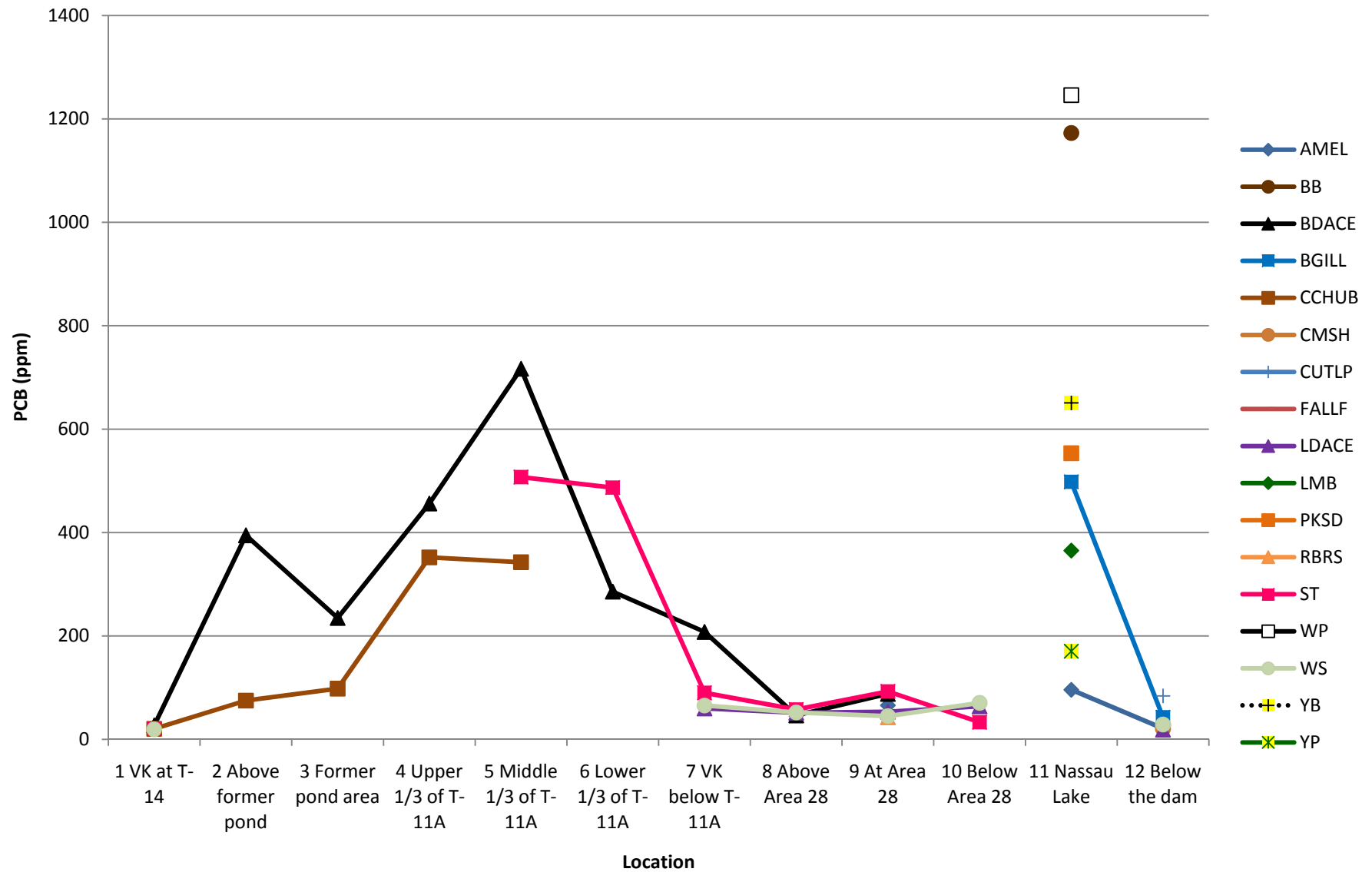
FIGURE  
1

# 2009 Overview

## 2009 Valatie Kill and Nassau Lake Average Wet Weight PCB by Location and Species



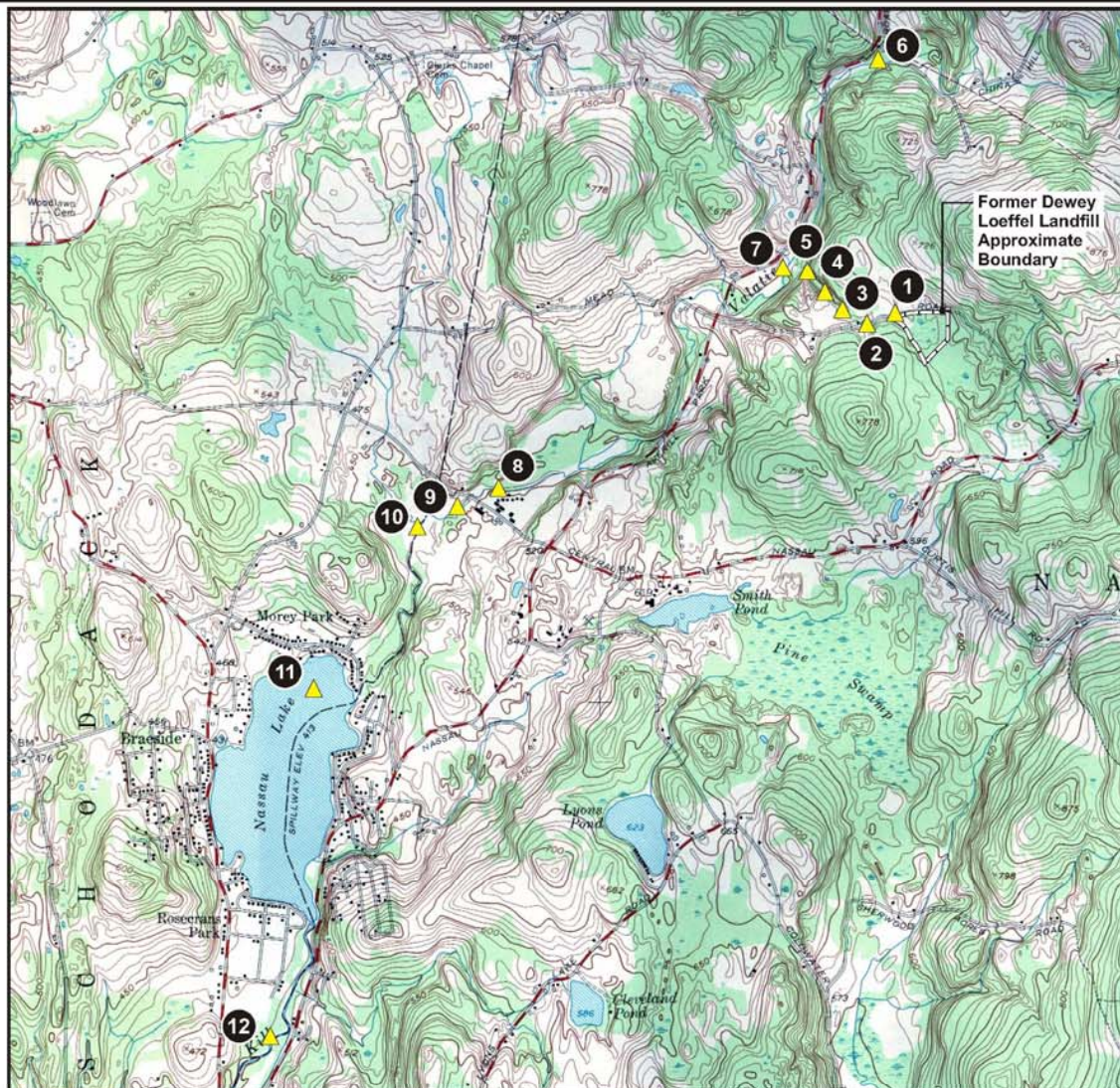
## 2009 Valatie Kill and Nassau Lake Average Lipid Based PCB by Location and Species



# Wet Weight Trends in PCB Concentrations at Individual Locations

T-14 – Reference Area





REFERENCE: Base Map Source USGS 7.5 Minute Quads Nassau, New York, 1953, Photoinspected 1978.



**STATION  
NUMBER**

**LOCATION**

- 1 Wetland Above Former Mead Road Pond
- 2 Former Mead Road Pond
- 3 T11A Upper Third
- 4 T11A Middle Third
- 5 T11A Lower Third
- 6 Valatie Kill, Confluence with T14 (China Hill Road)
- 7 Valatie Kill, Below Confluence with T11A
- 8 Valatie Kill, Above Area 28
- 9 Valatie Kill, Area 28
- 10 Valatie Kill, Below Area 28
- 11 Nassau Lake
- 12 Valatie Kill, Below Nassau Lake (Above County Rte 7)

**NOTES:**

1. Sampling locations are approximate and based on coordinates provided in NYSDEC database (2004).
2. Current topography of former Dewey Loeffel landfill not depicted.

2000 0 2000  
Approximate Scale: 1" = 2000'

LOEFFEL SITE ENVIRONS,  
NASSAU, NEW YORK

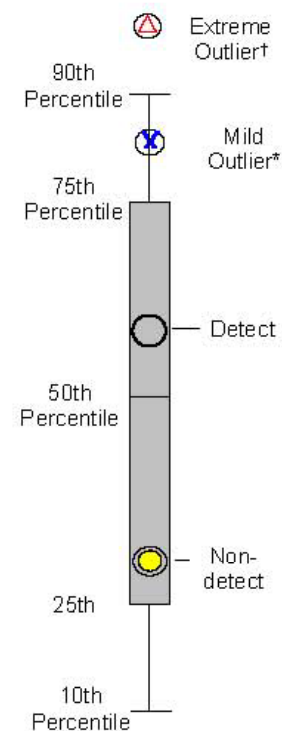
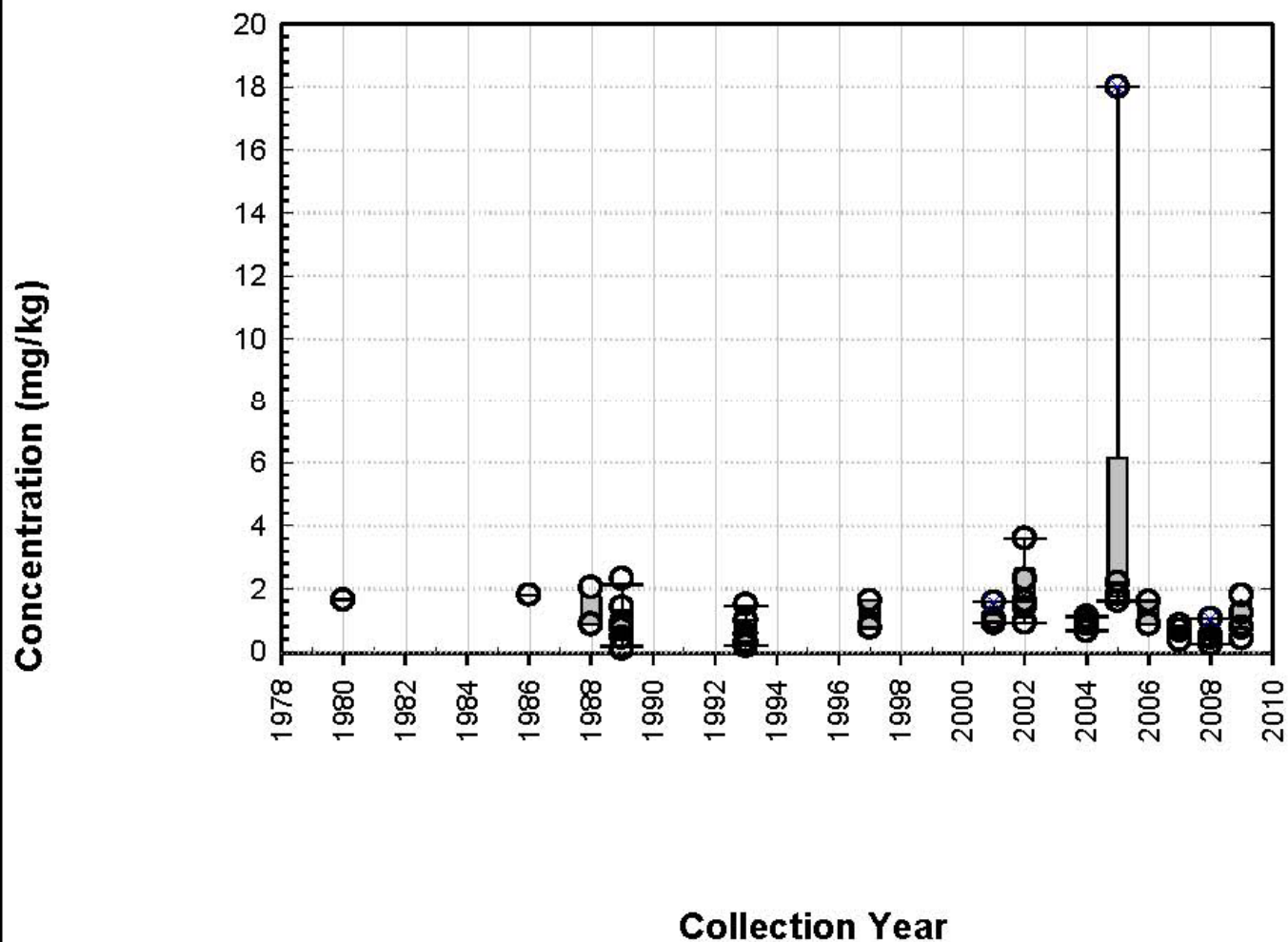
**FISH SAMPLING LOCATIONS**



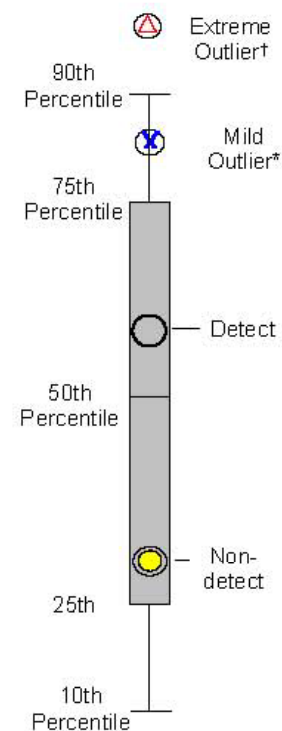
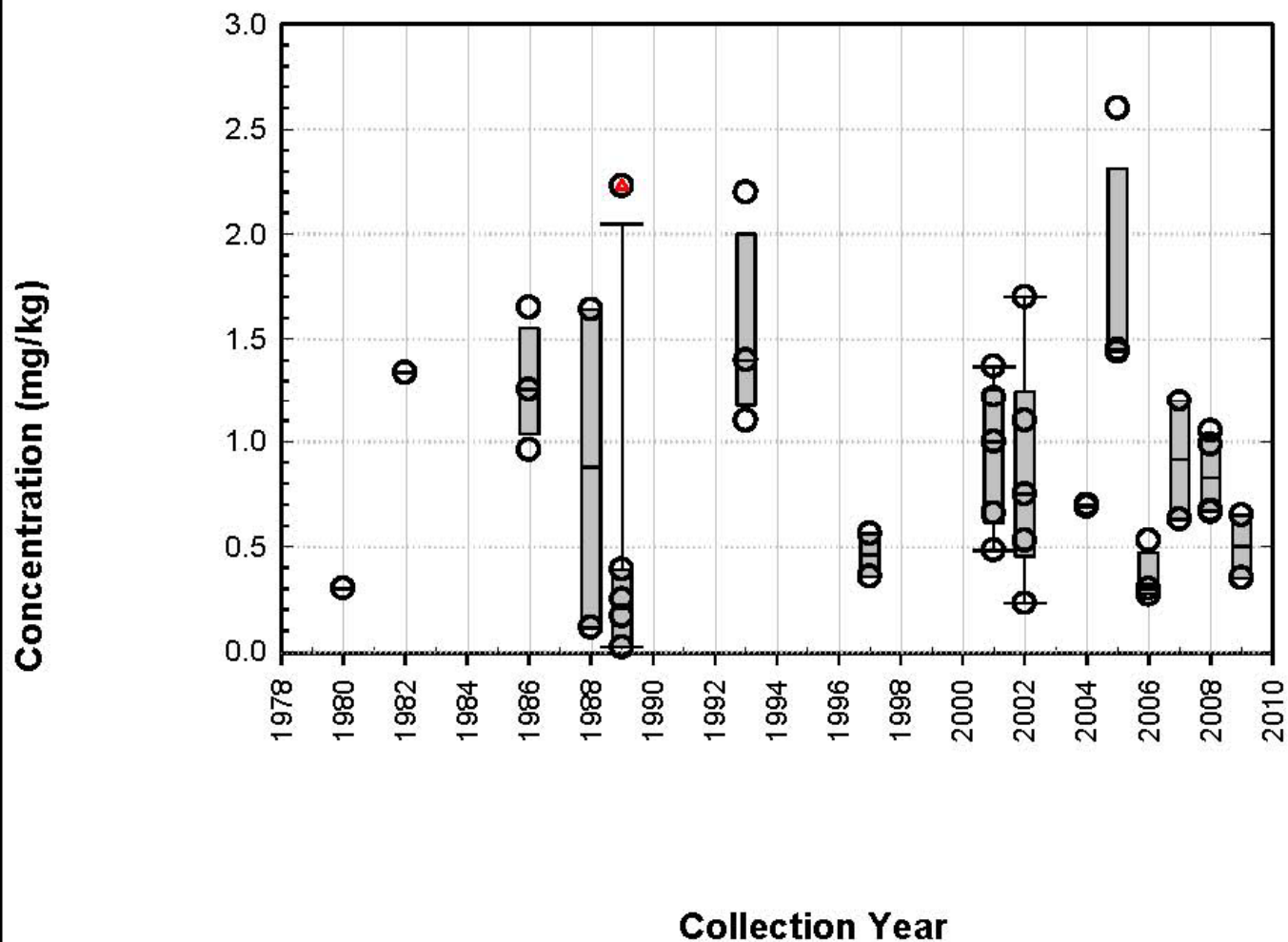
FIGURE  
1



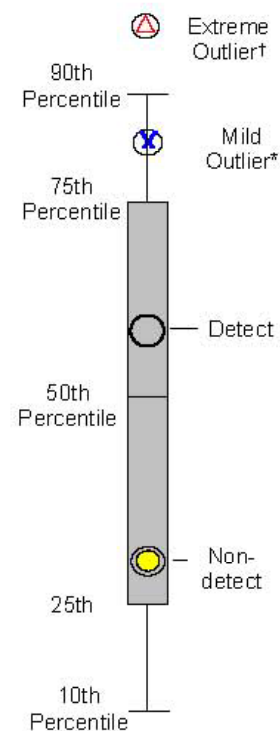
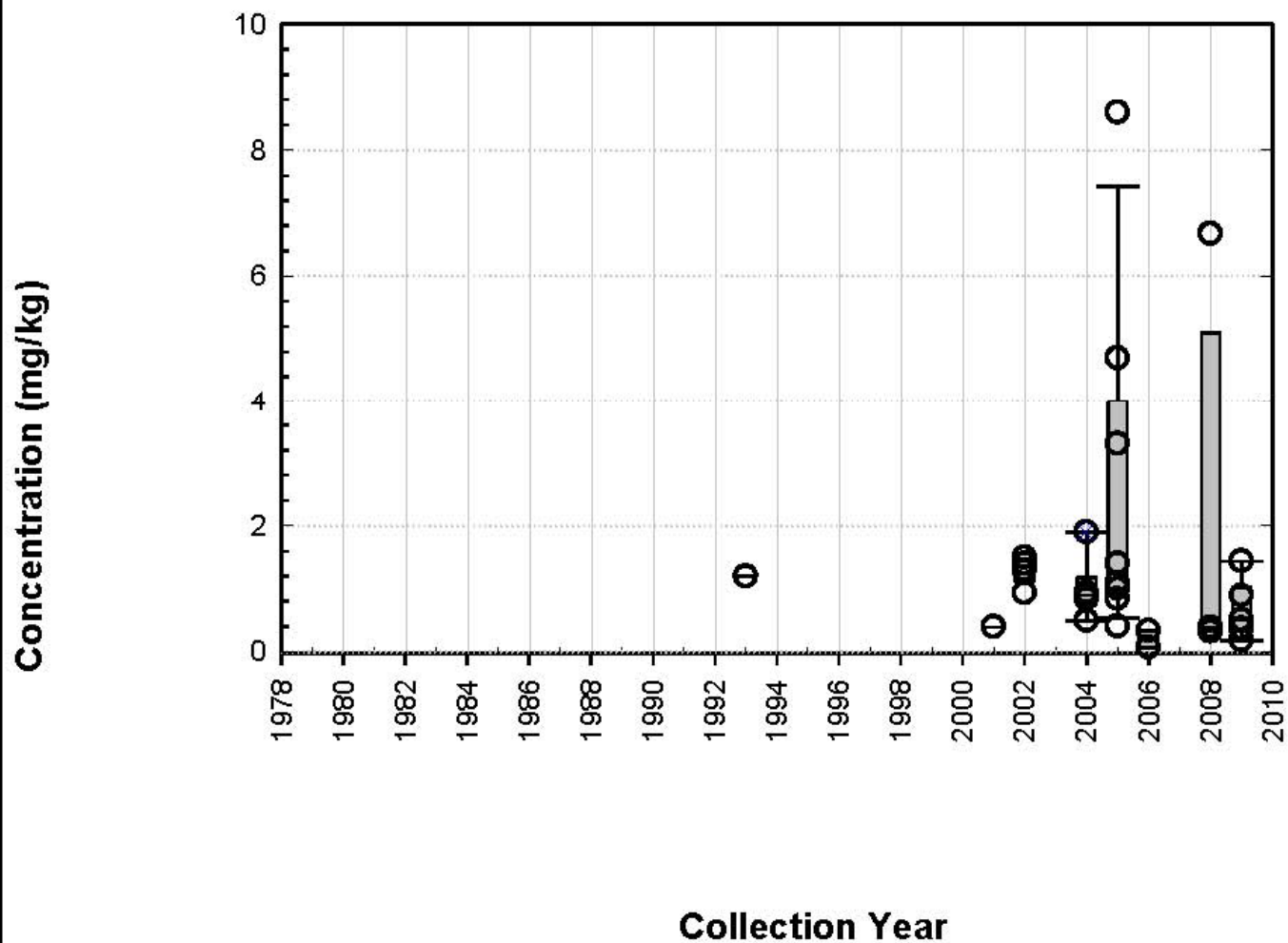
# **Total PCBs - Whole Body** **T-14 Reference Area – Blacknose dace**



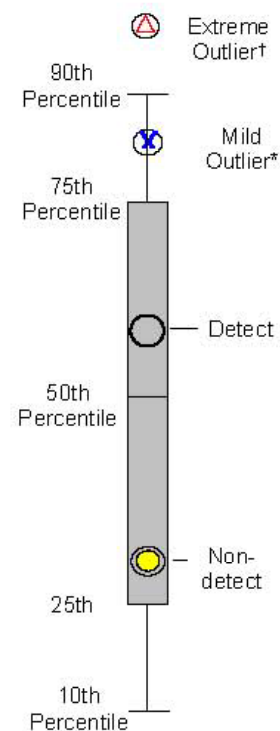
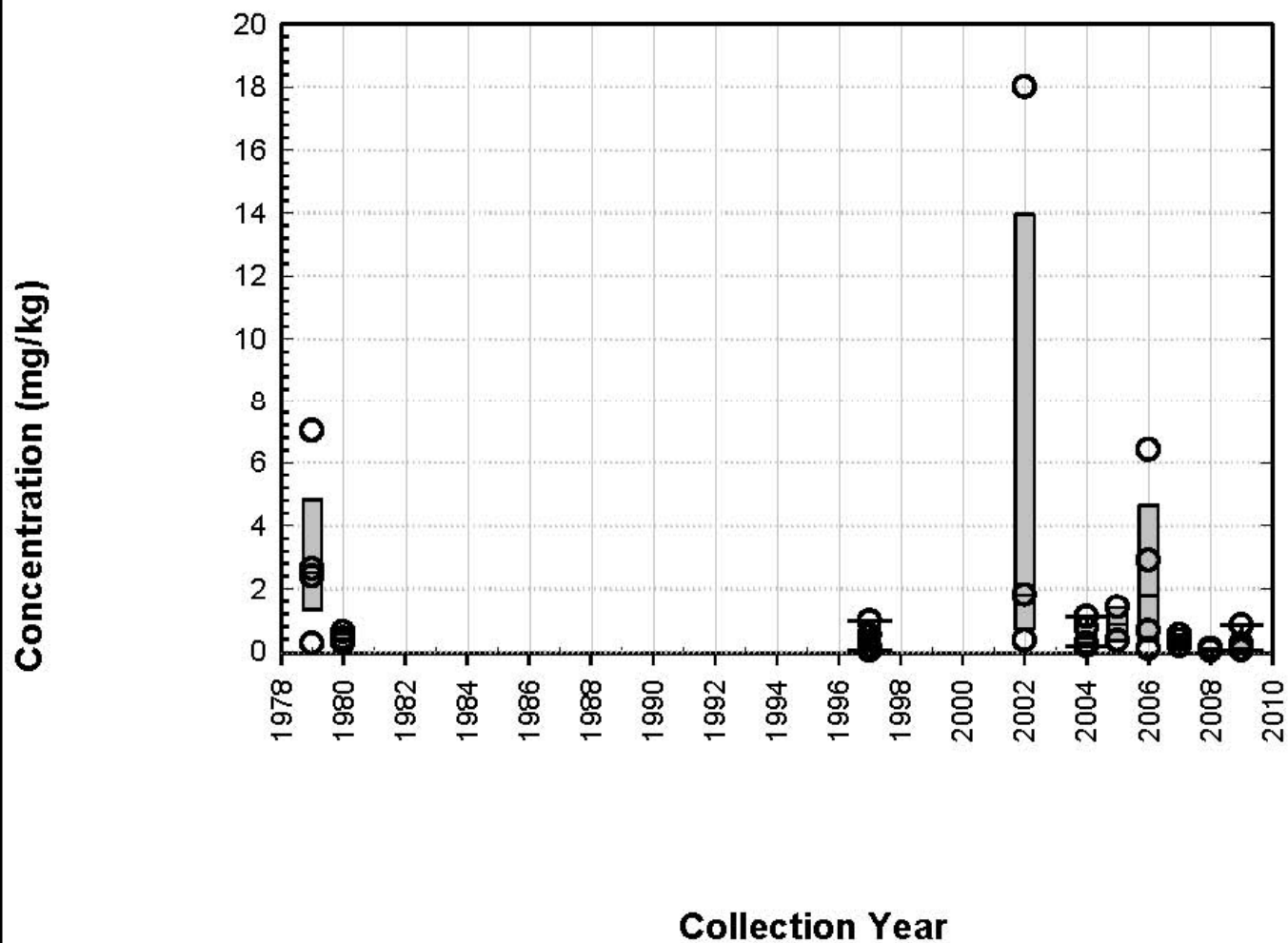
# **Total PCBs - Whole Body** **T-14 Reference Area – Creek chub**



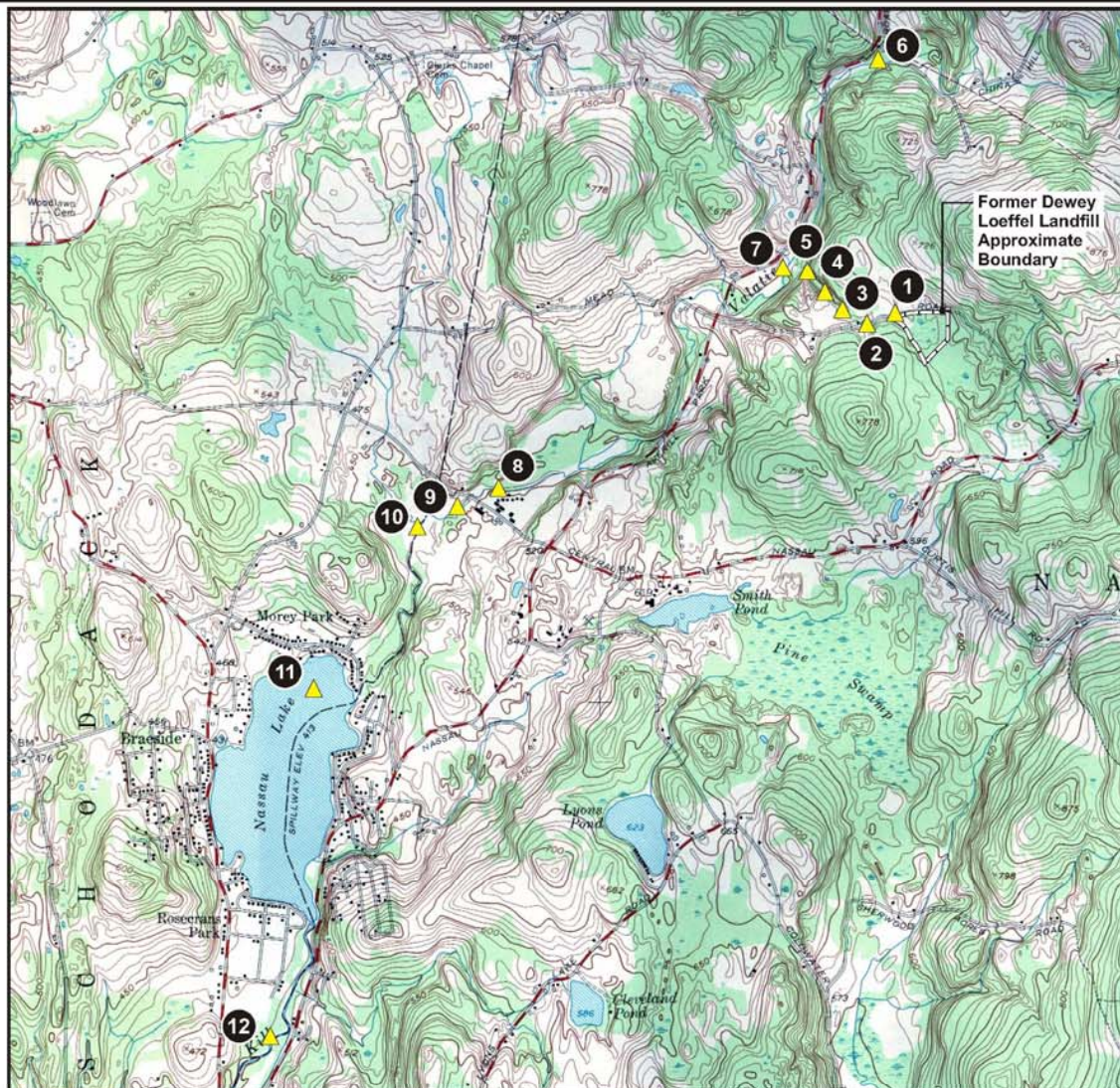
# **Total PCBs - Edible Portion** **T-14 Reference Area – Brook trout**



# **Total PCBs - Edible Portion** **T-14 Reference Area – White sucker**







REFERENCE: Base Map Source USGS 7.5 Minute Quads Nassau, New York, 1953, Photoinspected 1978.



**STATION  
NUMBER**

**LOCATION**

- 1 Wetland Above Former Mead Road Pond
- 2 Former Mead Road Pond
- 3 T11A Upper Third
- 4 T11A Middle Third
- 5 T11A Lower Third
- 6 Valatie Kill, Confluence with T14 (China Hill Road)
- 7 Valatie Kill, Below Confluence with T11A
- 8 Valatie Kill, Above Area 28
- 9 Valatie Kill, Area 28
- 10 Valatie Kill, Below Area 28
- 11 Nassau Lake
- 12 Valatie Kill, Below Nassau Lake (Above County Rte 7)

**NOTES:**

1. Sampling locations are approximate and based on coordinates provided in NYSDEC database (2004).
2. Current topography of former Dewey Loeffel landfill not depicted.

2000 0 2000  
Approximate Scale: 1" = 2000'

LOEFFEL SITE ENVIRONS,  
NASSAU, NEW YORK

**FISH SAMPLING LOCATIONS**

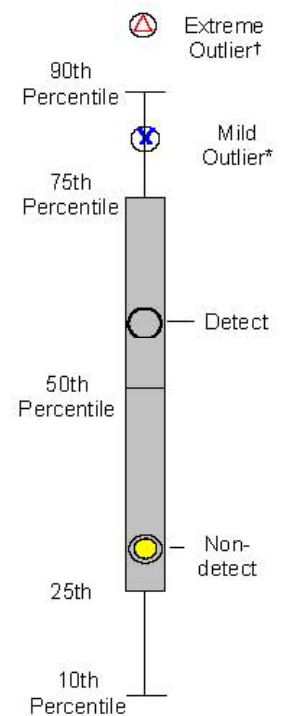
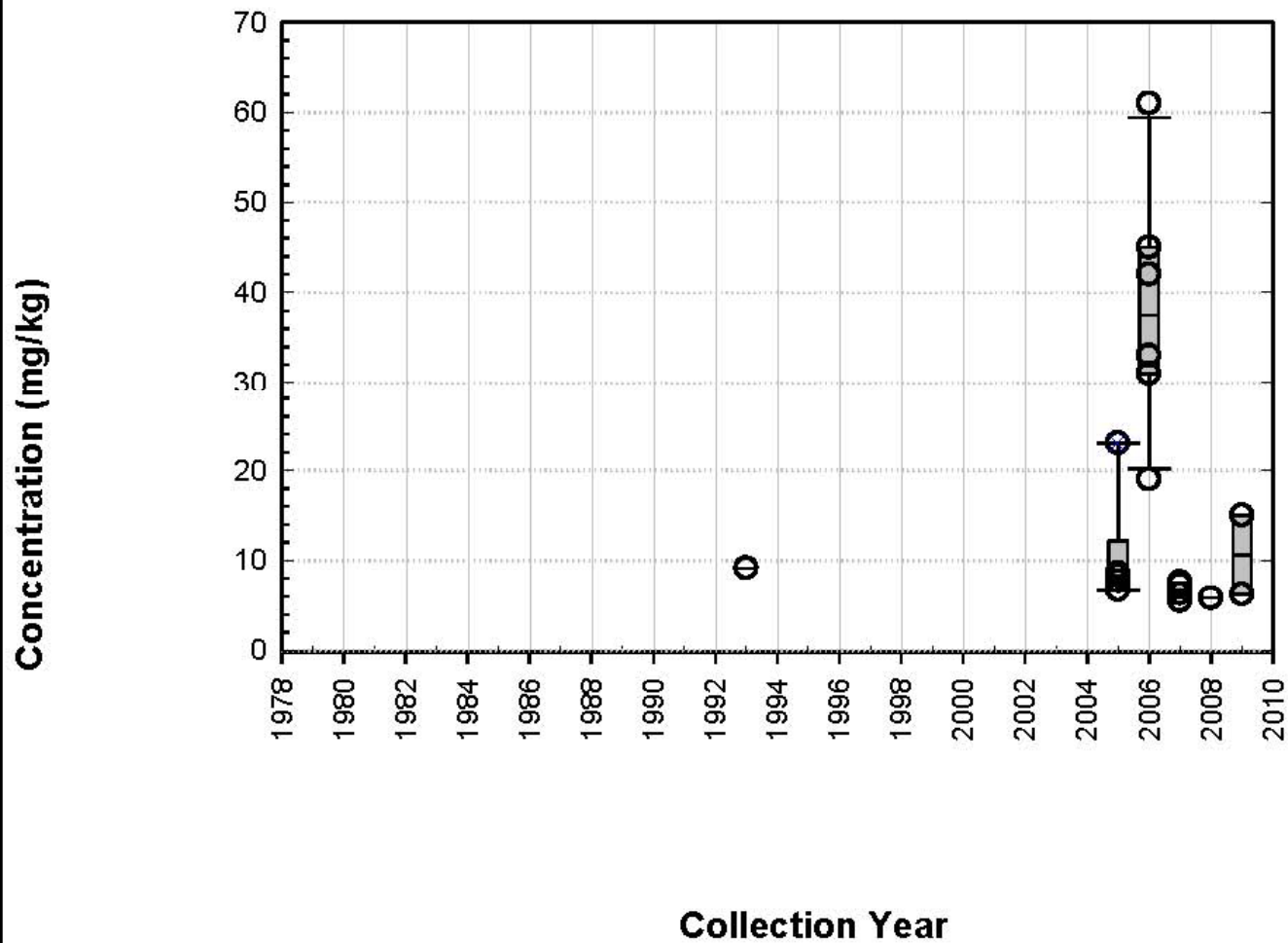


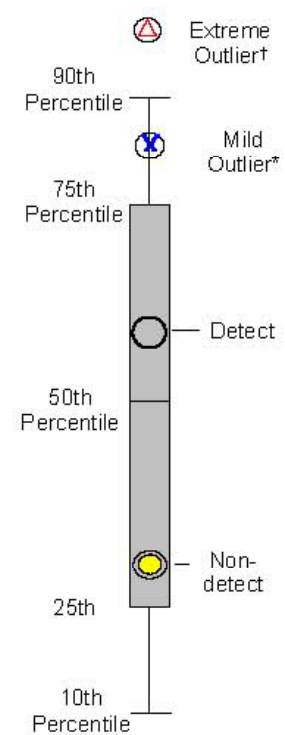
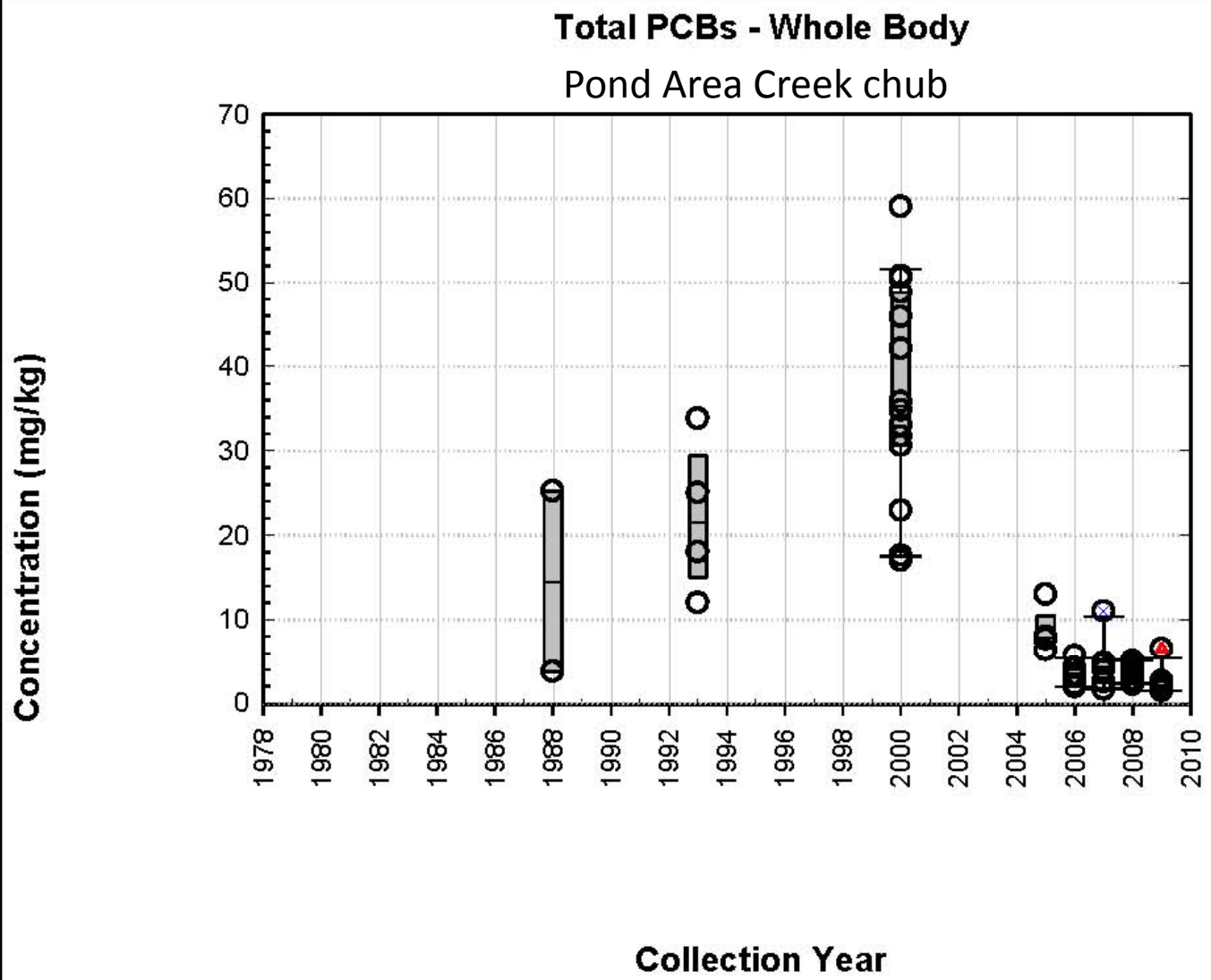
FIGURE  
1



Former Mead Rd. Pond

# **Total PCBs - Whole Body** **Pond Area Blacknose dace**

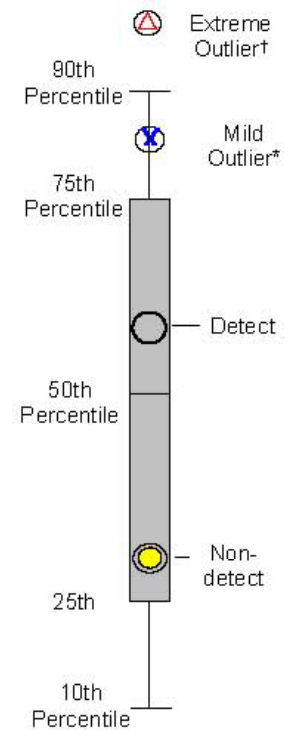
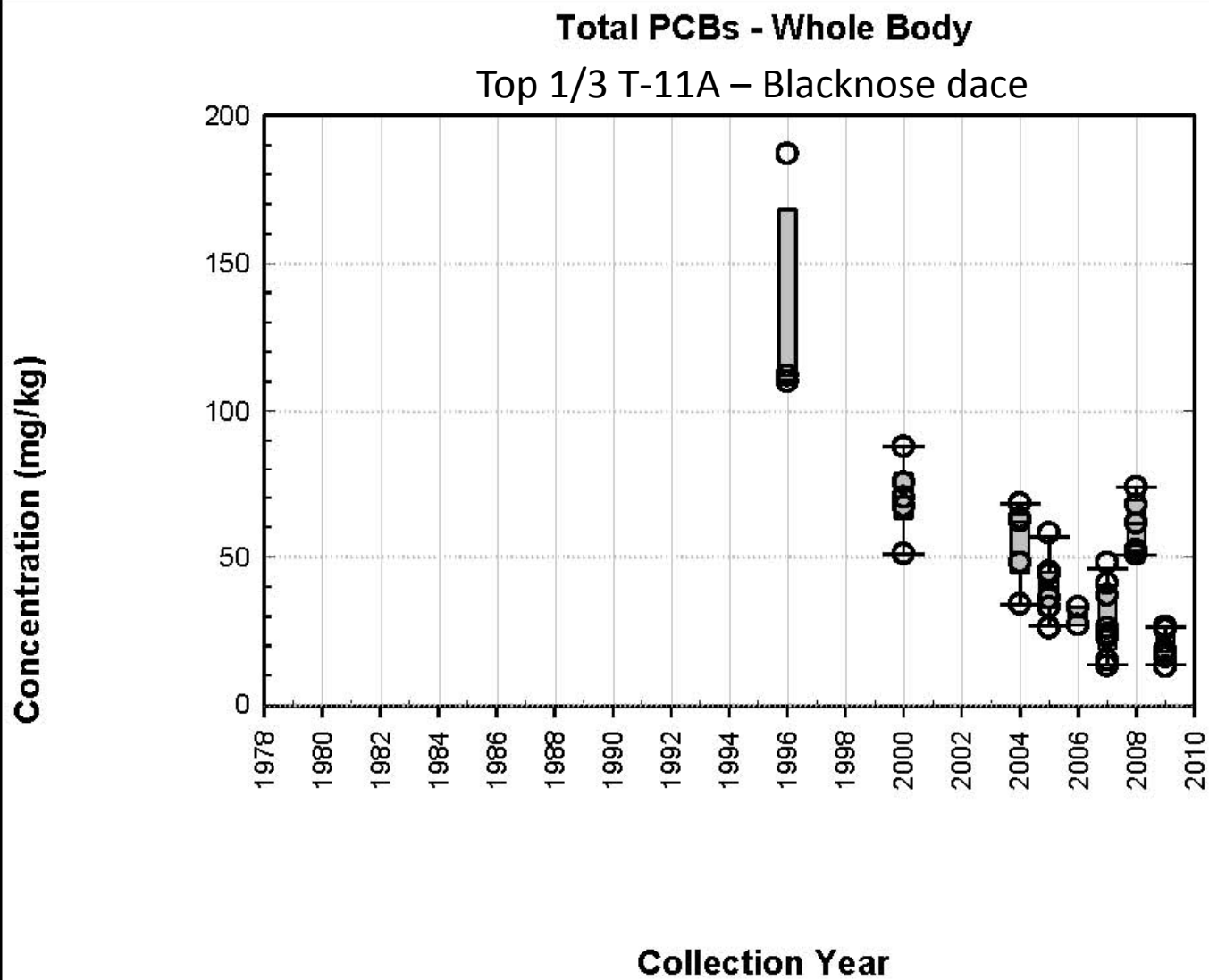




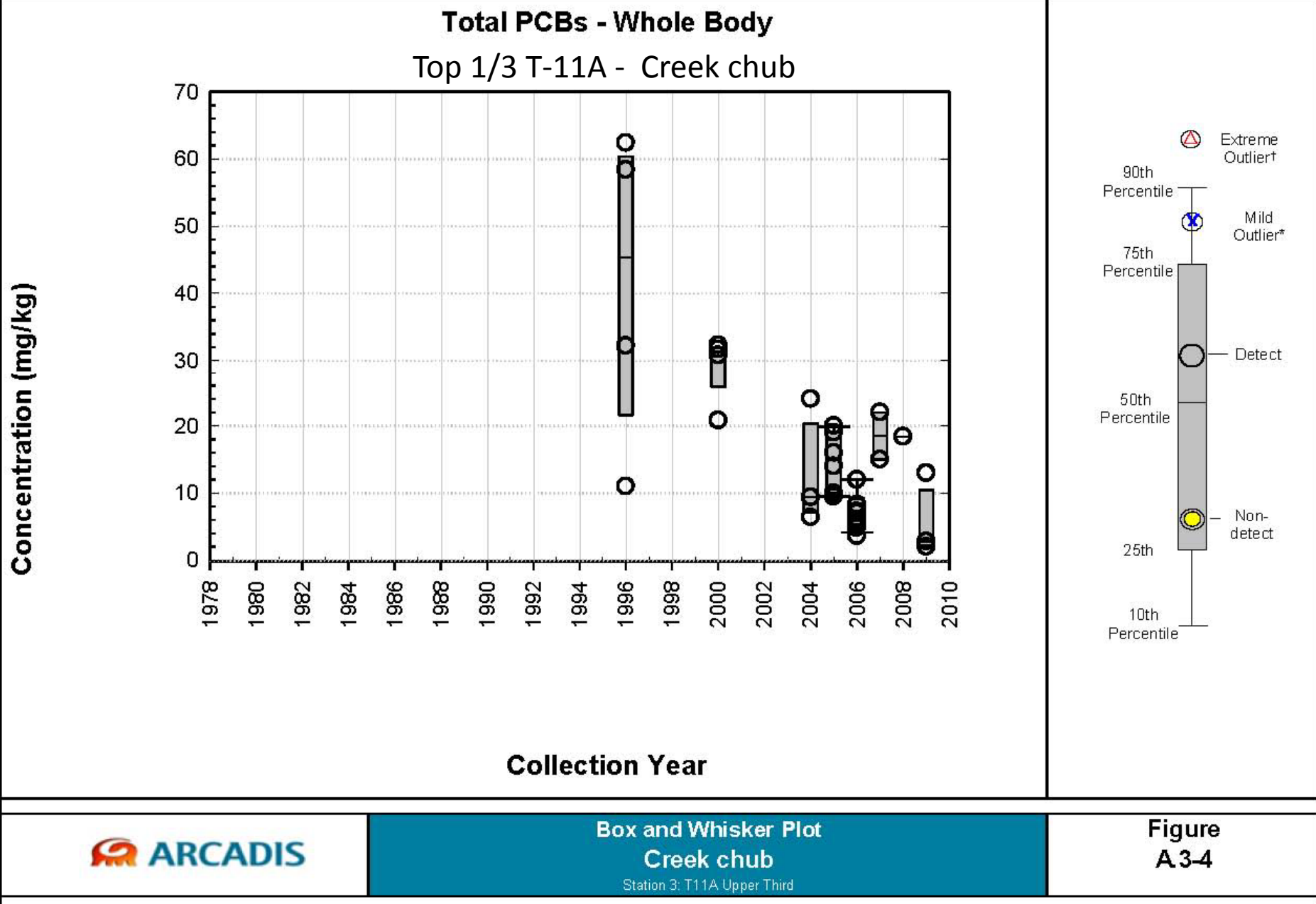
**Box and Whisker Plot  
Creek chub**  
Station 2: Former Mead Road Pond

**Figure  
A2-6**

T-11A – Top Third

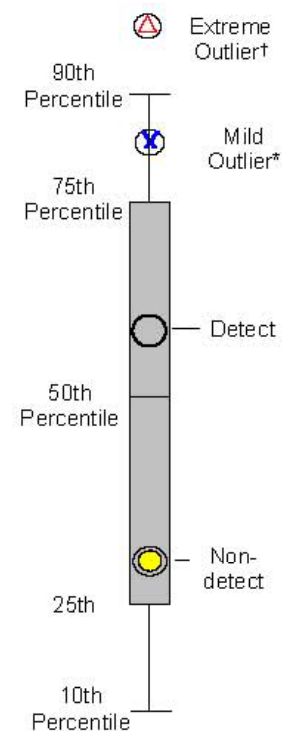
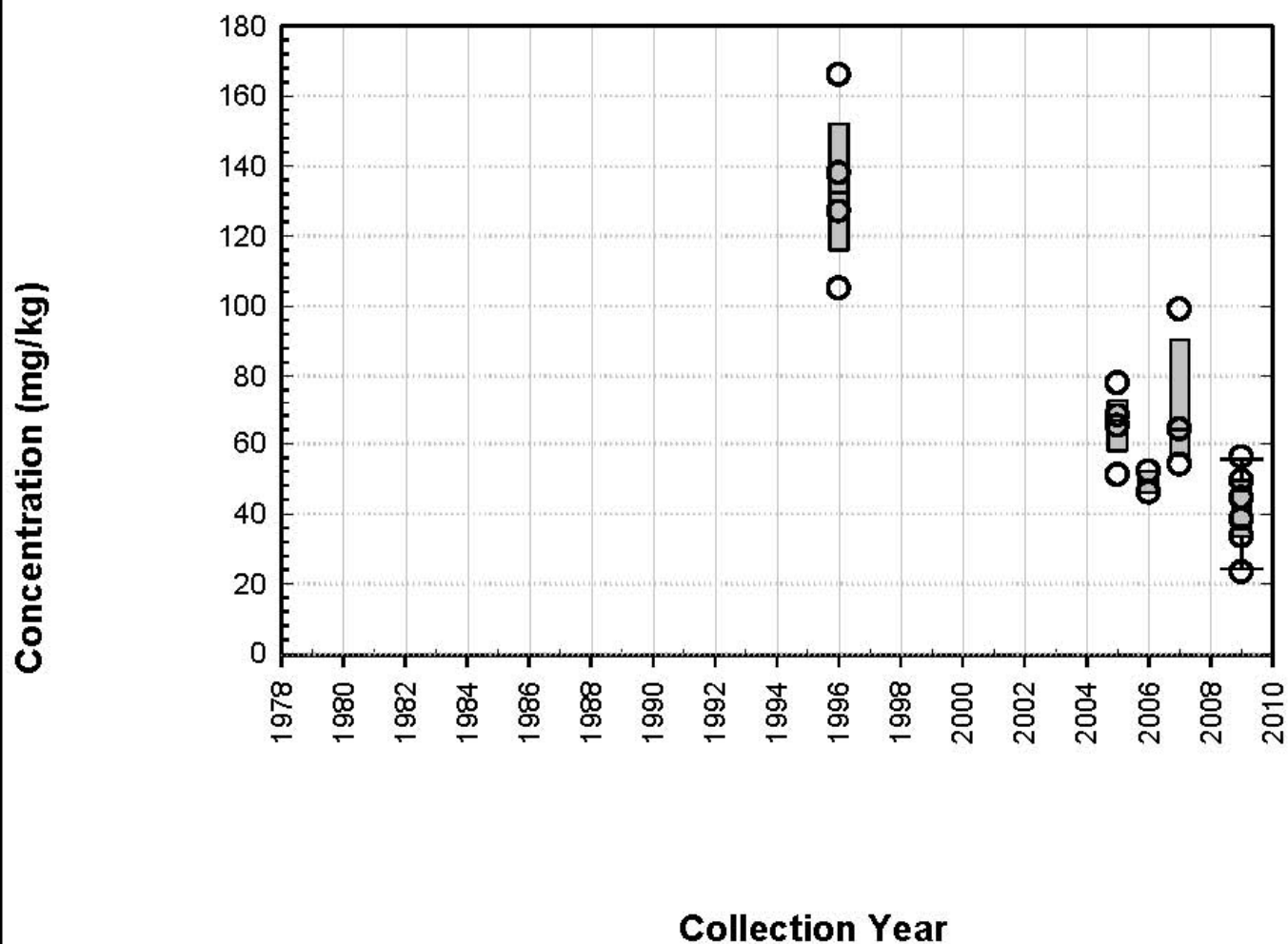




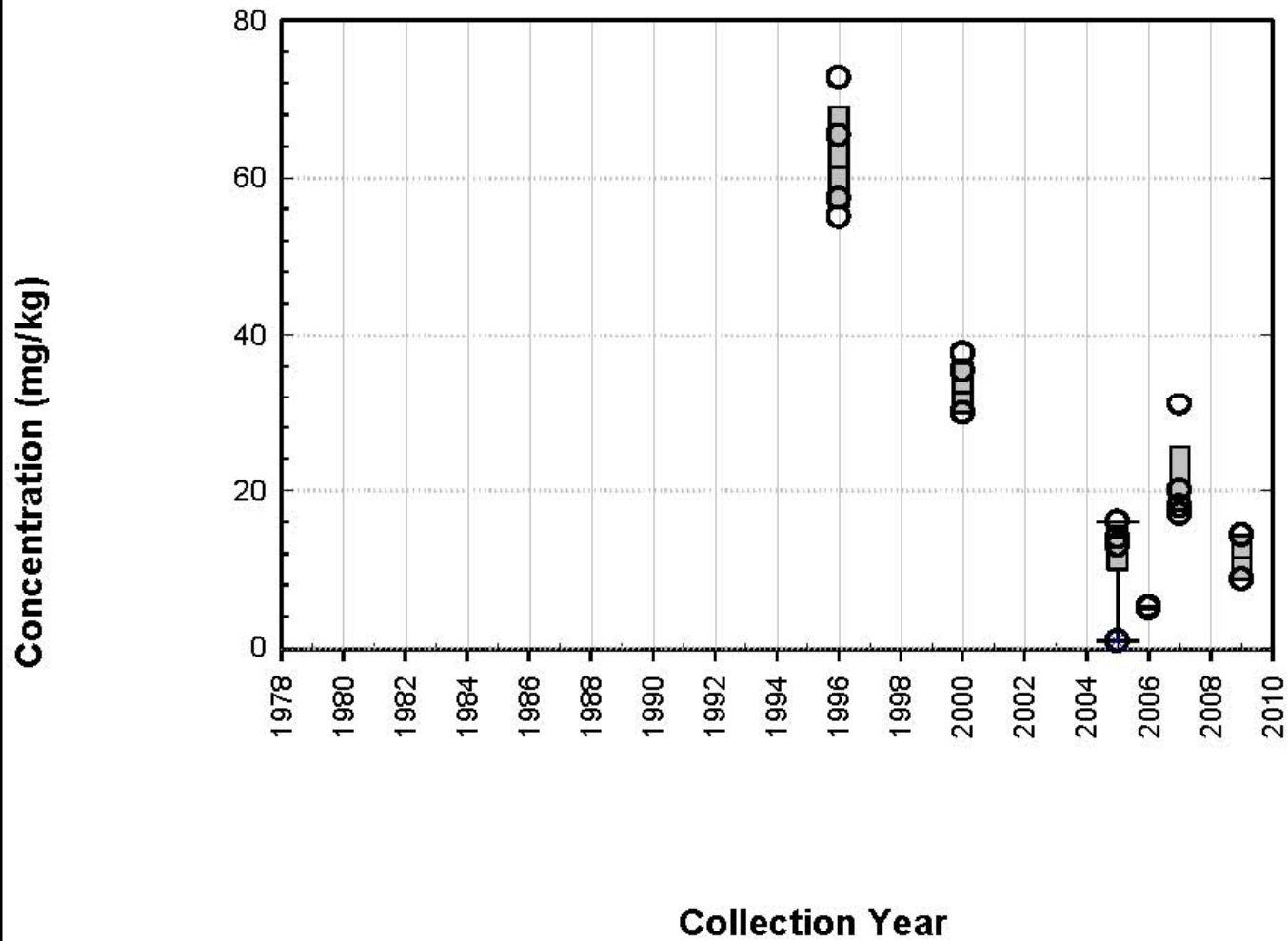


T-11A – Middle Third

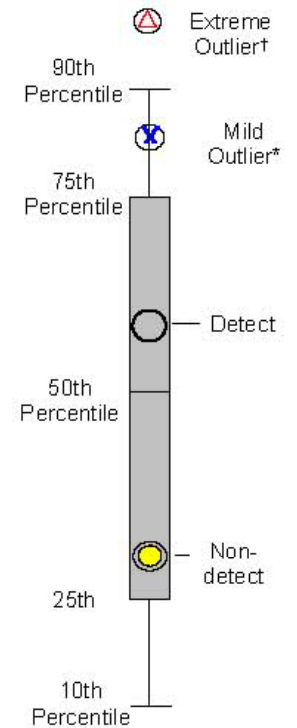
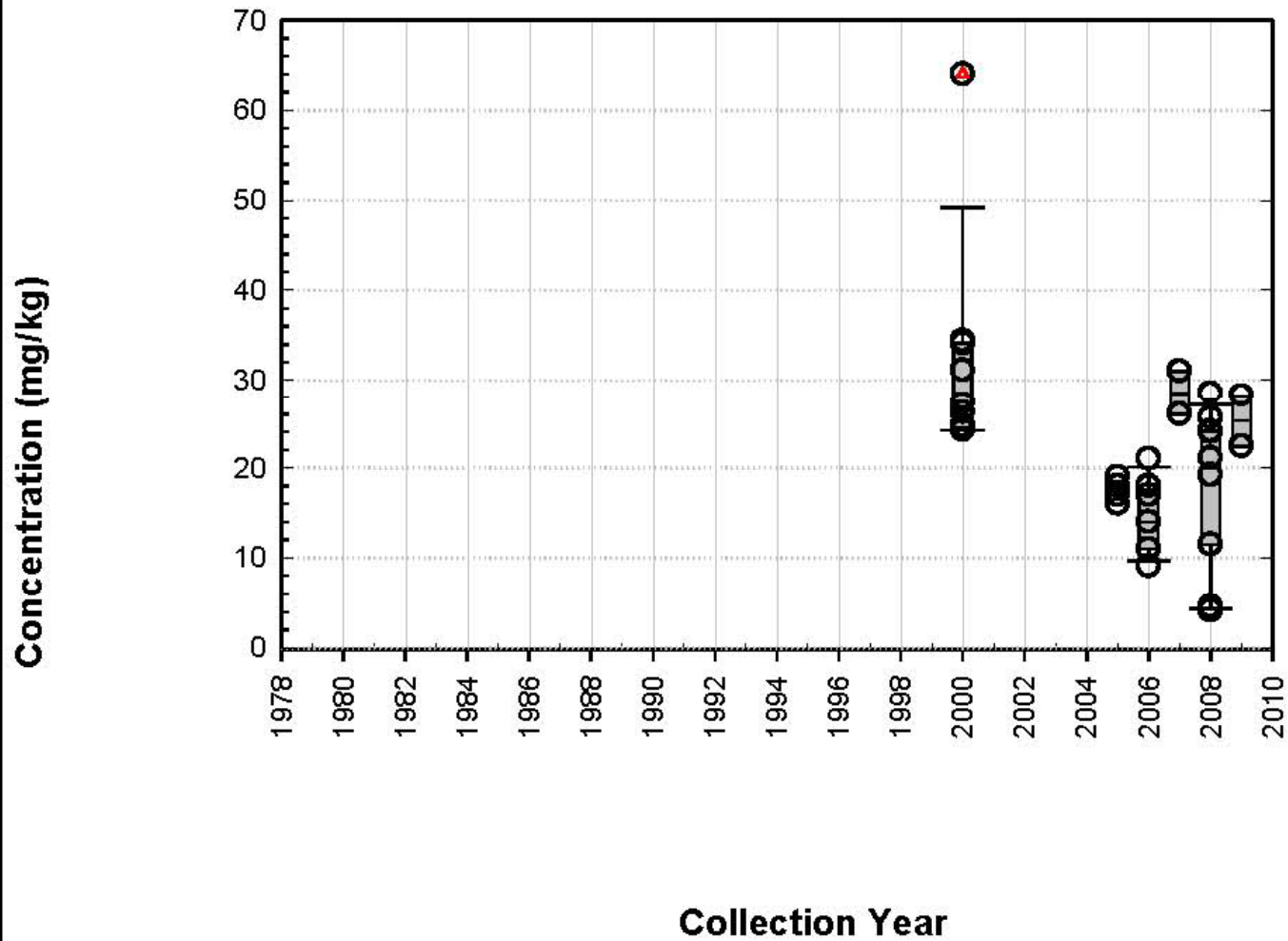
# **Total PCBs - Whole Body** **T-11A Middle 1/3 – Blacknose dace**



# **Total PCBs - Whole Body** **T-11A Middle 1/3 – Creek chub**



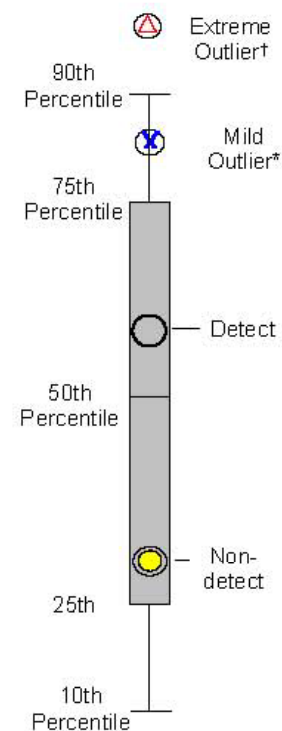
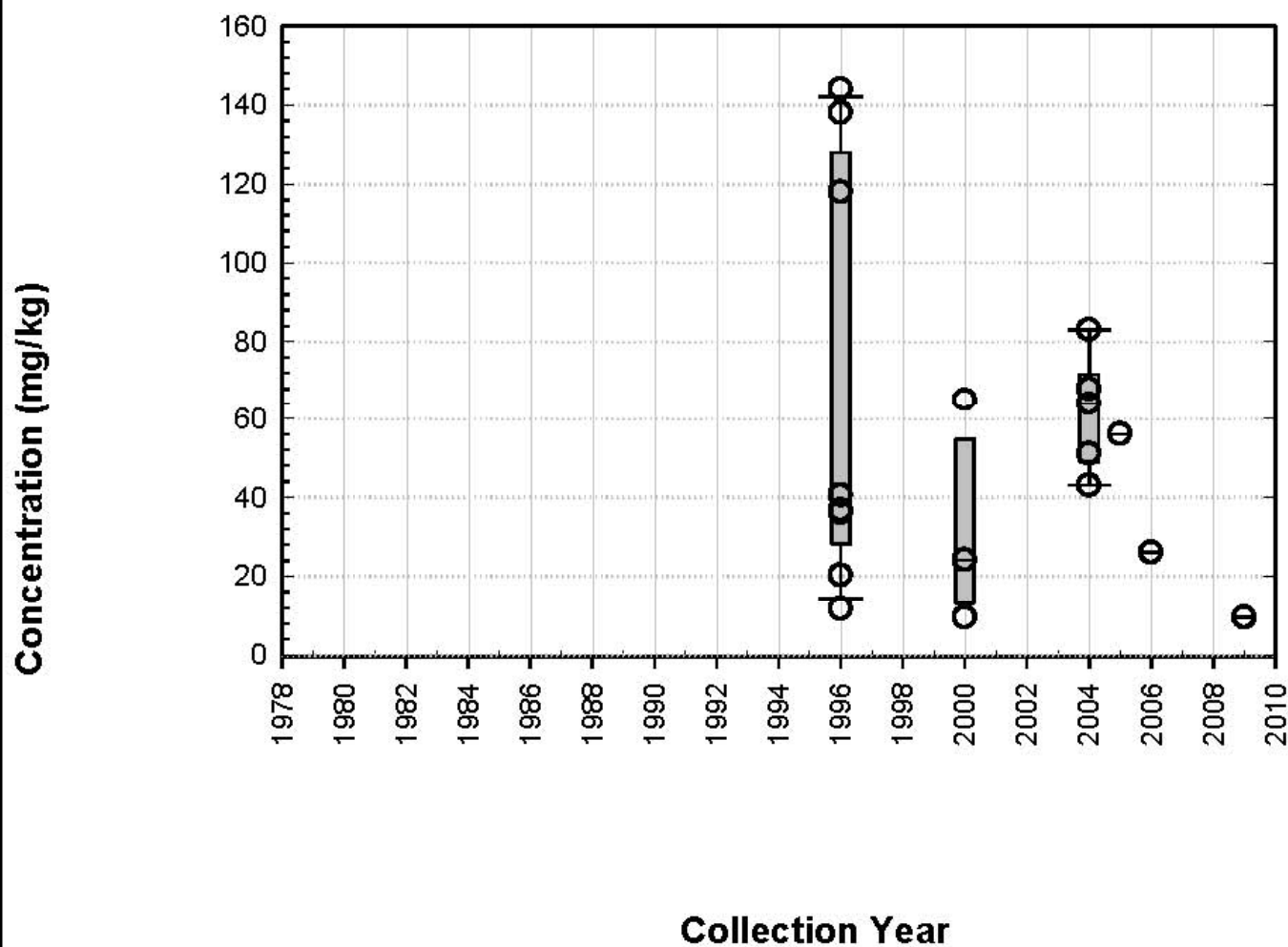
# **Total PCBs - Whole Body** **T-11A Middle 1/3 – Brook Trout**



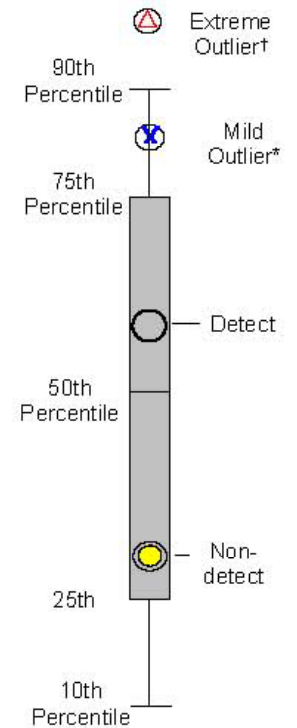
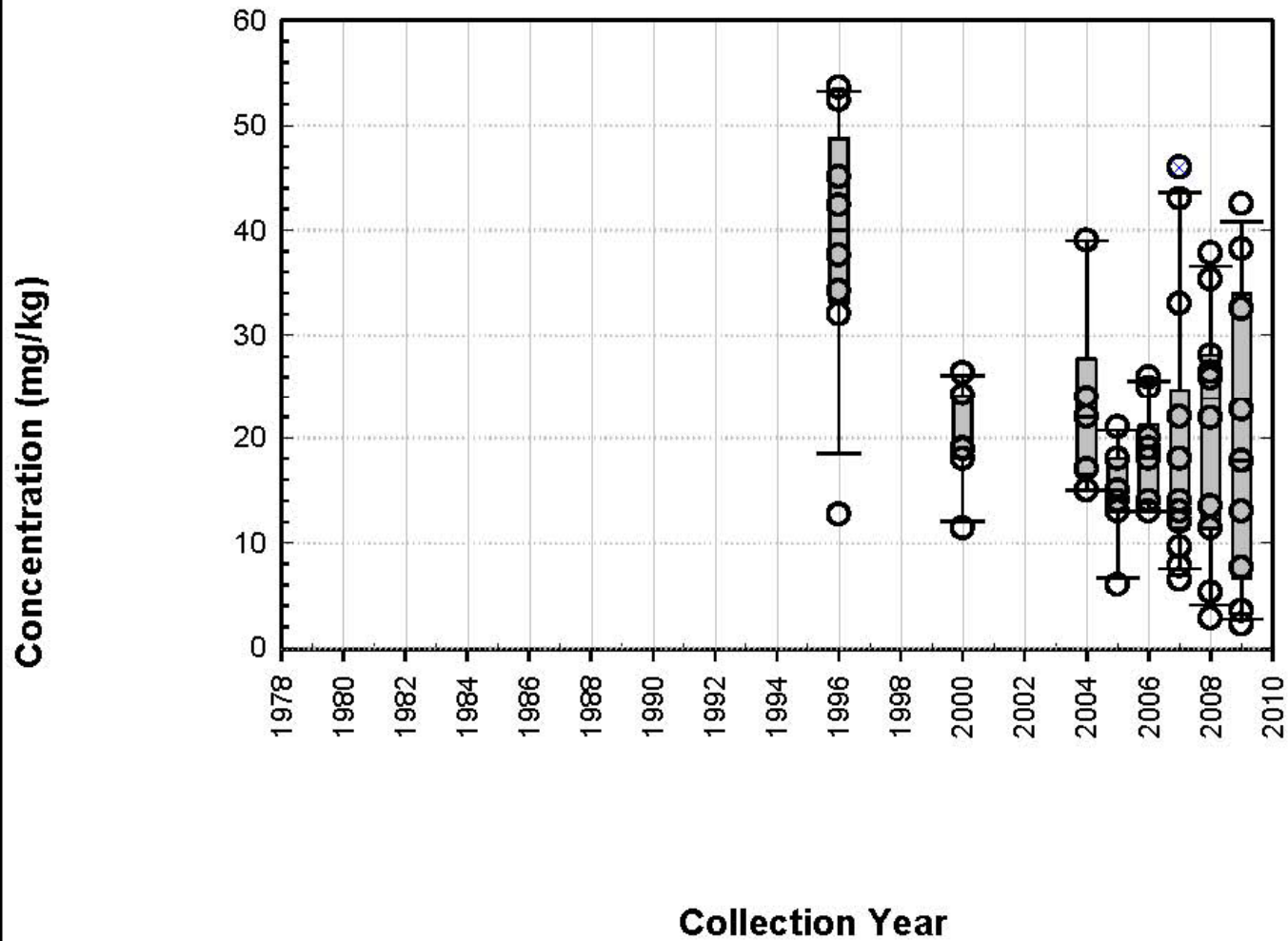


T-11A – Bottom Third

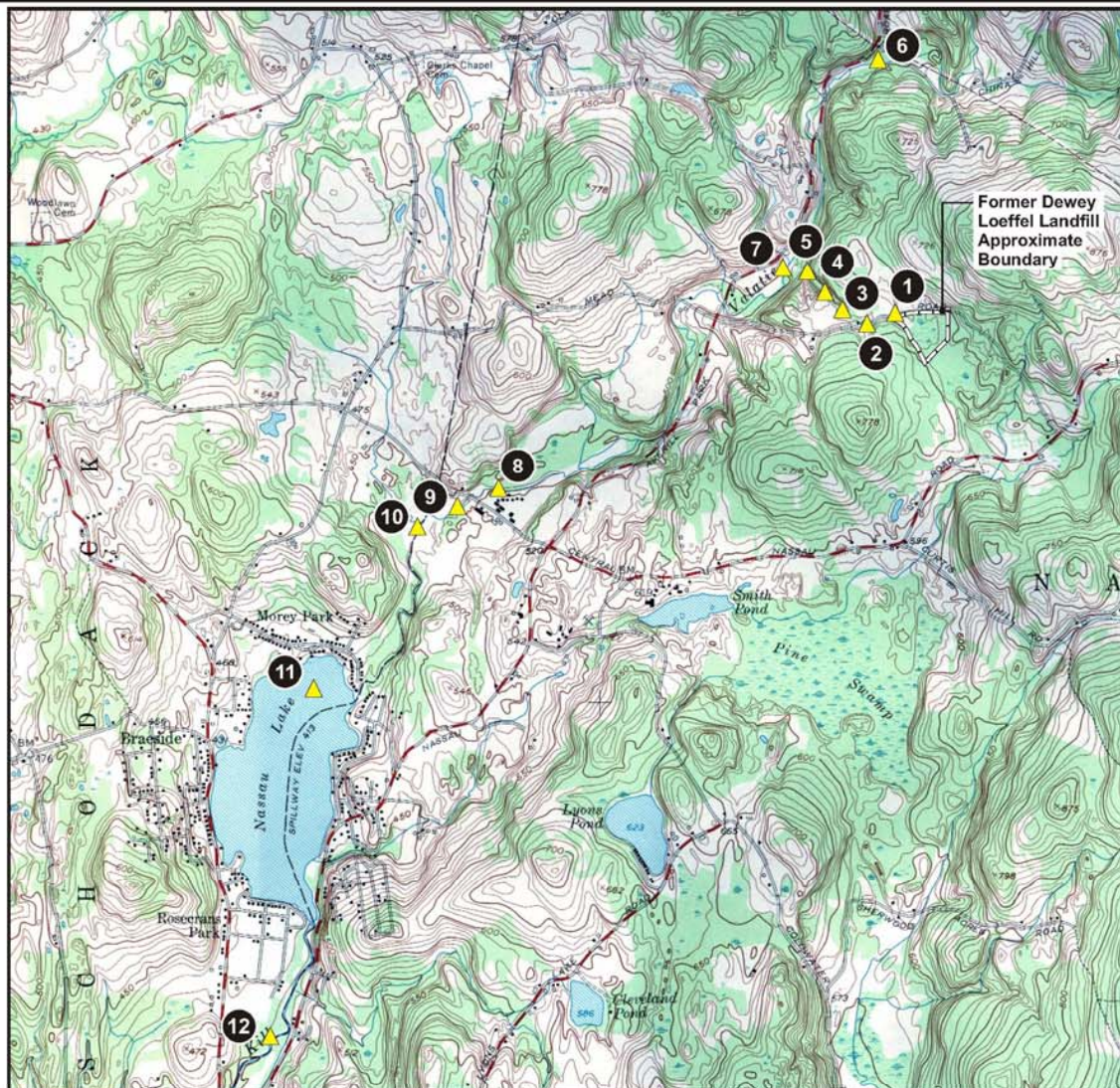
# **Total PCBs - Whole Body** **T-11A Bottom 1/3 – Blacknose dace**



# **Total PCBs - Whole Body** **T-11A Bottom 1/3 – Brook Trout**



Valatie Kill below T-11A



REFERENCE: Base Map Source USGS 7.5 Minute Quads Nassau, New York, 1953, Photoinspected 1978.



**STATION  
NUMBER**

**LOCATION**

- 1 Wetland Above Former Mead Road Pond
- 2 Former Mead Road Pond
- 3 T11A Upper Third
- 4 T11A Middle Third
- 5 T11A Lower Third
- 6 Valatie Kill, Confluence with T14 (China Hill Road)
- 7 Valatie Kill, Below Confluence with T11A
- 8 Valatie Kill, Above Area 28
- 9 Valatie Kill, Area 28
- 10 Valatie Kill, Below Area 28
- 11 Nassau Lake
- 12 Valatie Kill, Below Nassau Lake (Above County Rte 7)

**NOTES:**

1. Sampling locations are approximate and based on coordinates provided in NYSDEC database (2004).
2. Current topography of former Dewey Loeffel landfill not depicted.

2000 0 2000  
Approximate Scale: 1" = 2000'

LOEFFEL SITE ENVIRONS,  
NASSAU, NEW YORK

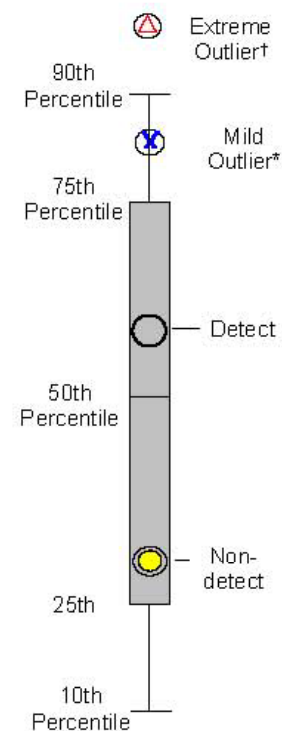
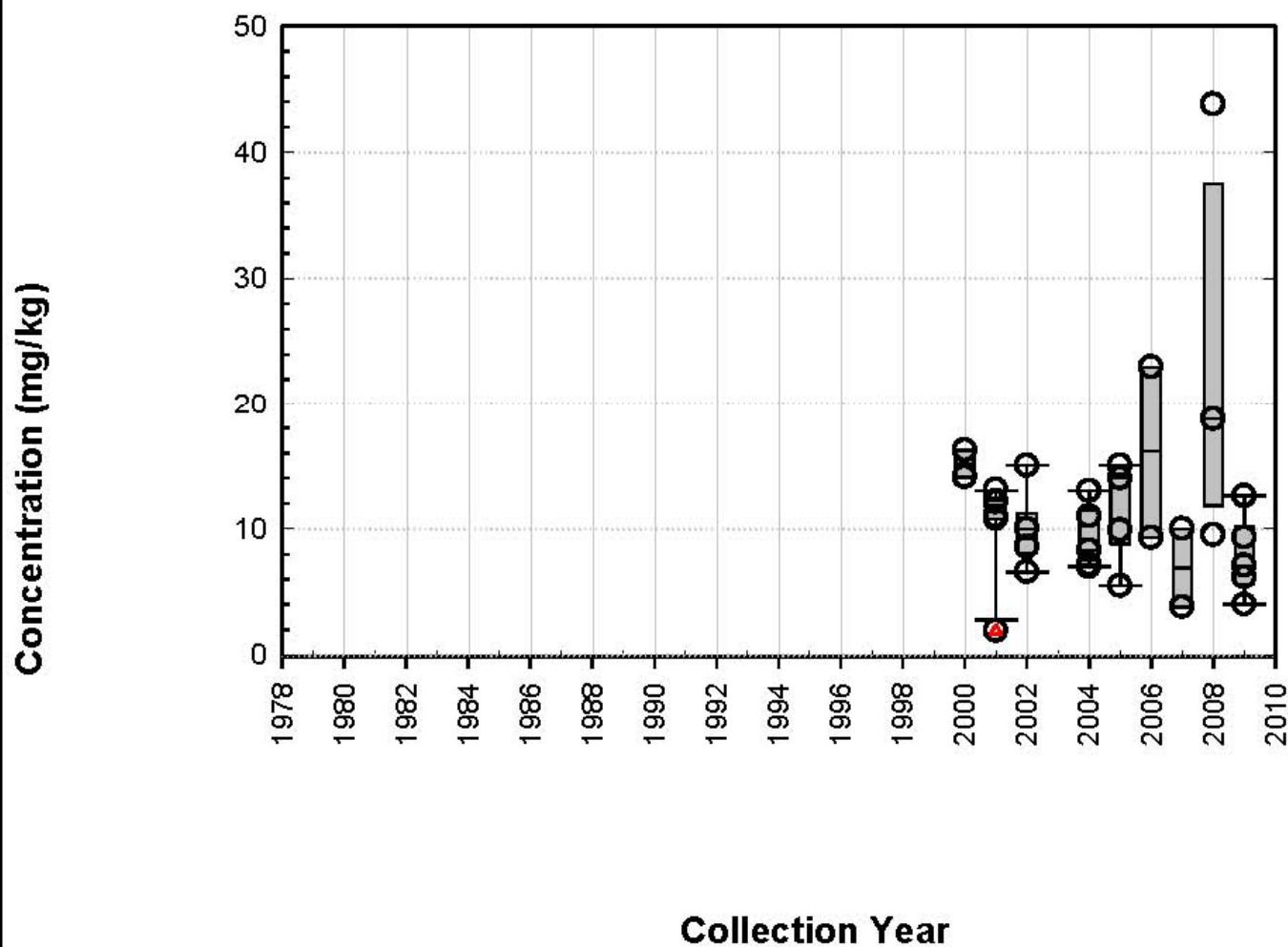
**FISH SAMPLING LOCATIONS**



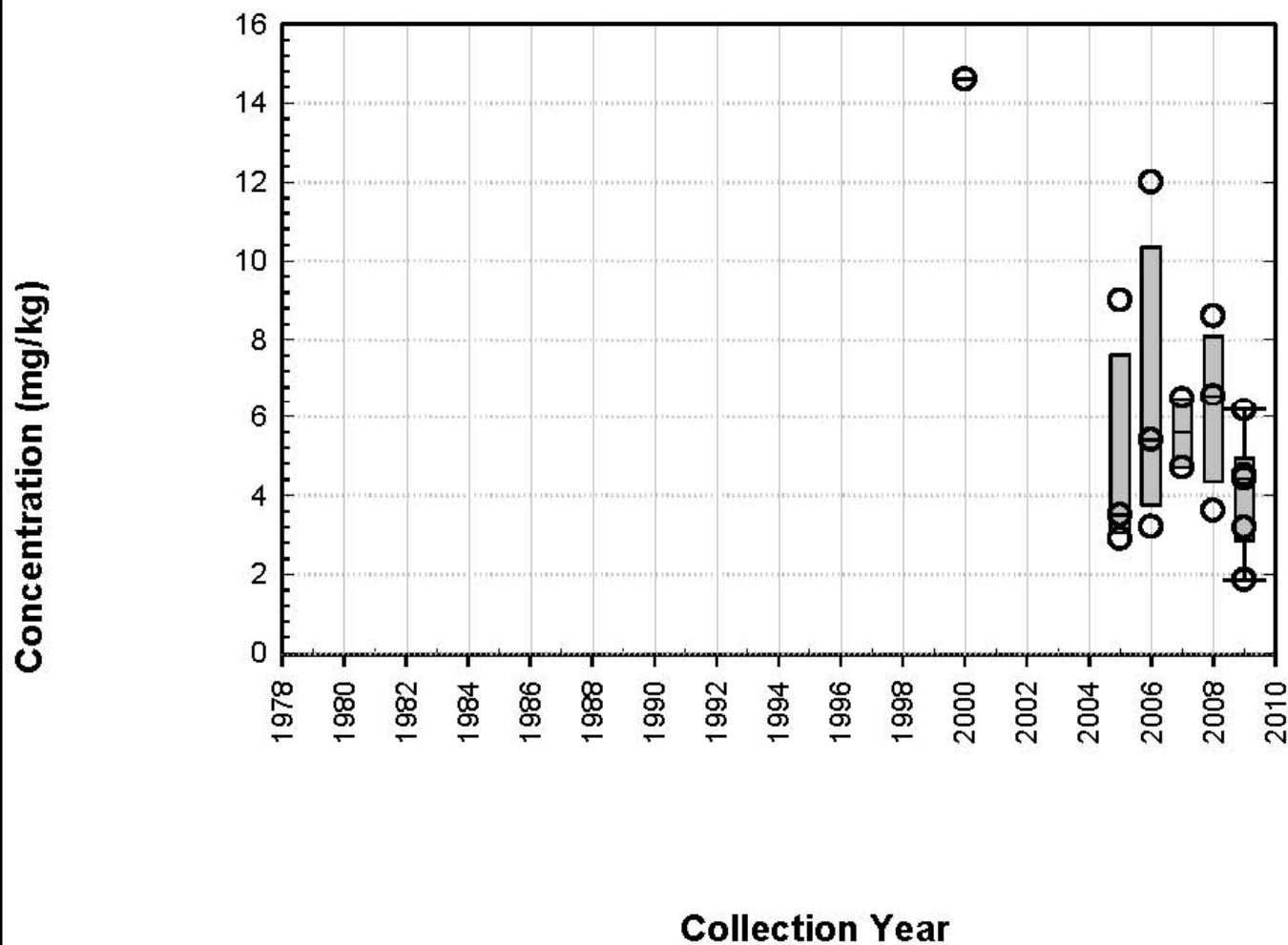
FIGURE  
**1**



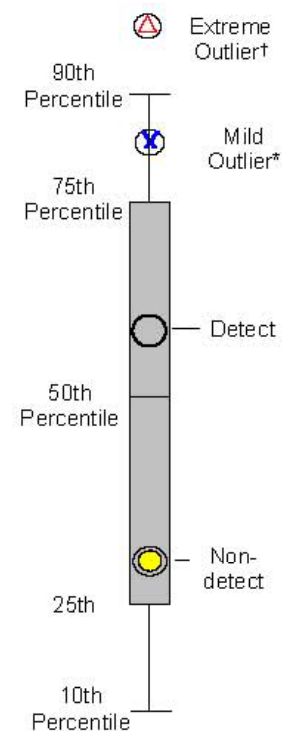
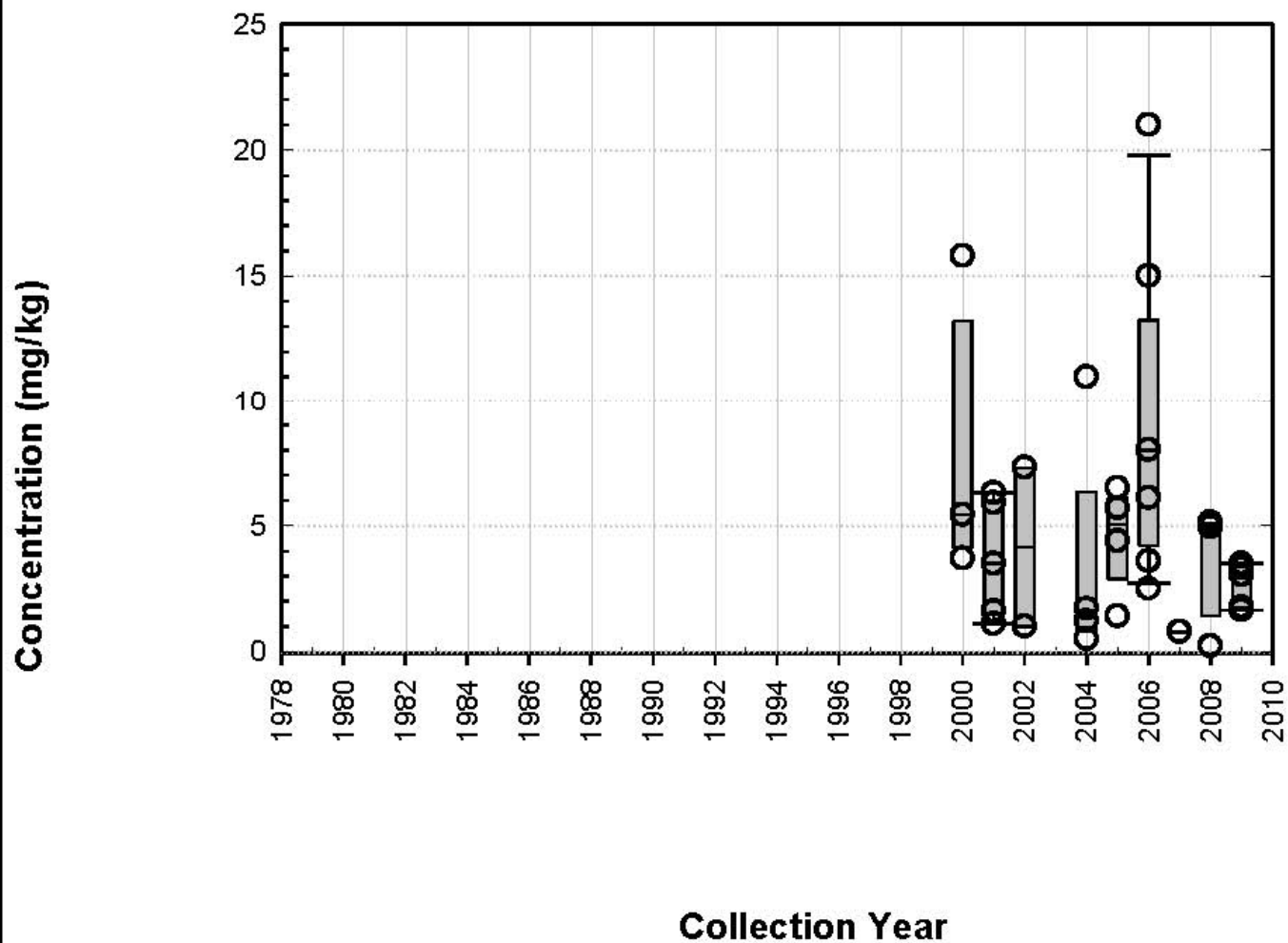
# **Total PCBs - Whole Body** **V.K. Below T-11A – Blacknose dace**



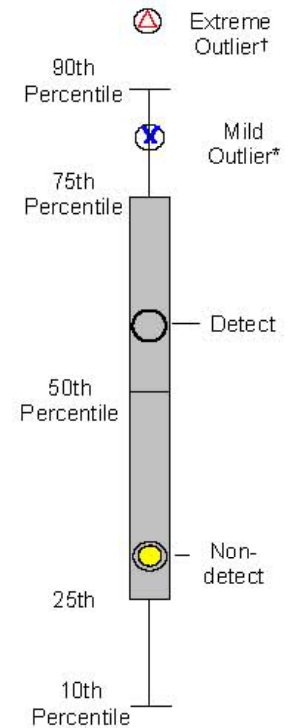
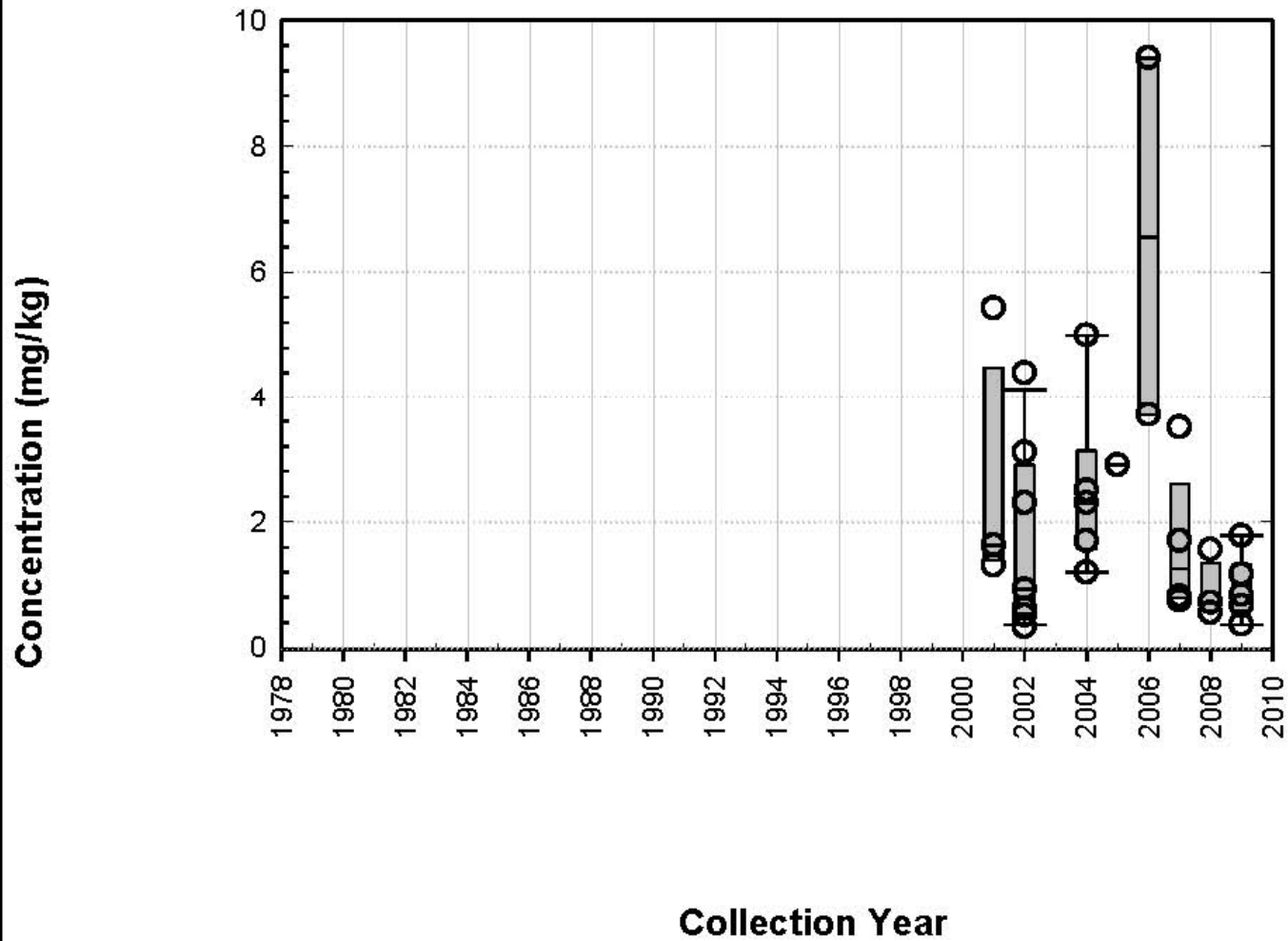
# **Total PCBs - Whole Body** **V.K. Below T-11A – Longnose dace**



# **Total PCBs - Edible Portion** **V.K. Below T-11A – Brook trout**

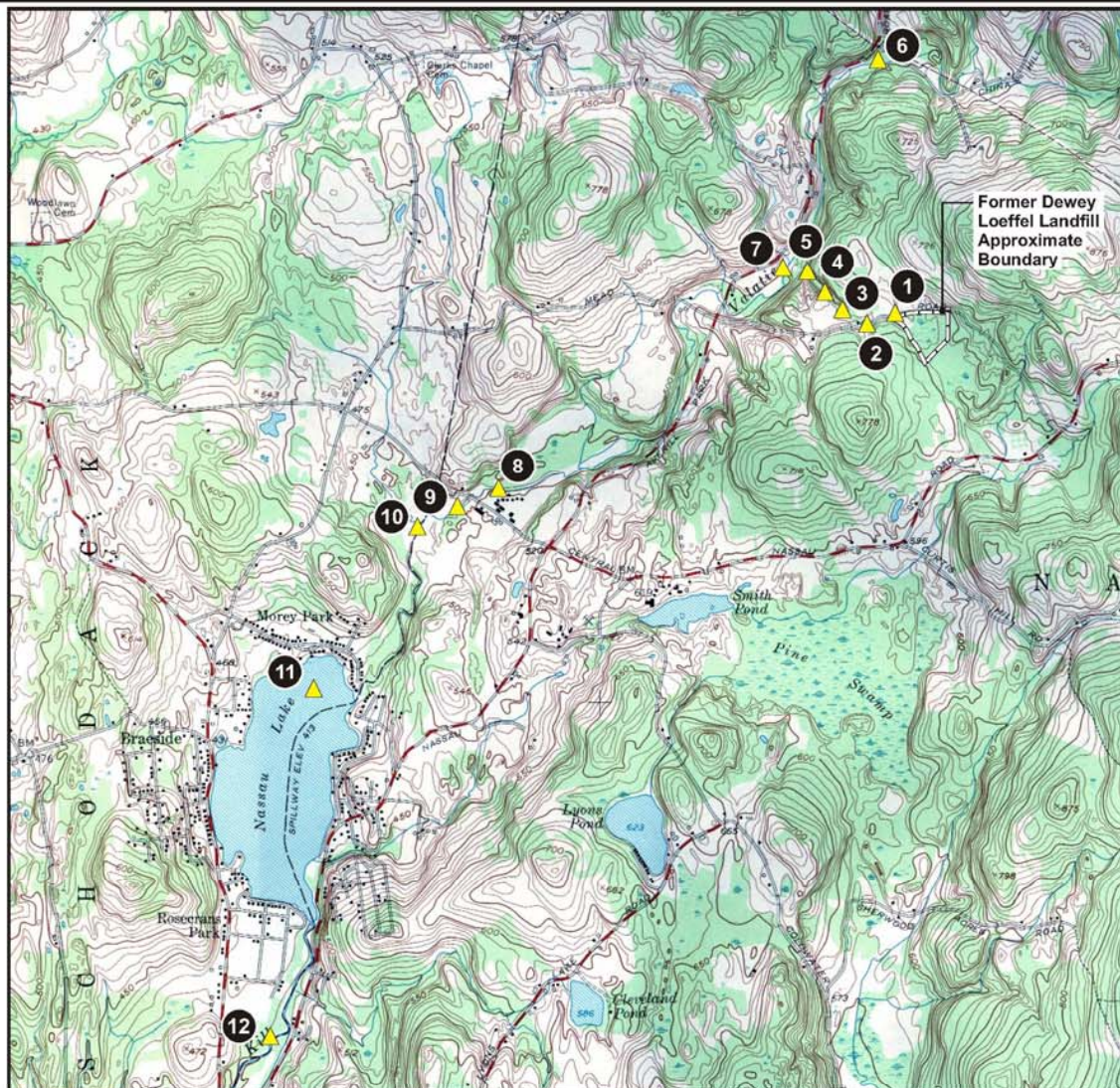


# **Total PCBs - Edible Portion** **V.K. Below T-11A – White sucker**



Valatie Kill at Area 28





REFERENCE: Base Map Source USGS 7.5 Minute Quads Nassau, New York, 1953, Photoinspected 1978.



**STATION  
NUMBER**

**LOCATION**

- 1 Wetland Above Former Mead Road Pond
- 2 Former Mead Road Pond
- 3 T11A Upper Third
- 4 T11A Middle Third
- 5 T11A Lower Third
- 6 Valatie Kill, Confluence with T14 (China Hill Road)
- 7 Valatie Kill, Below Confluence with T11A
- 8 Valatie Kill, Above Area 28
- 9 Valatie Kill, Area 28
- 10 Valatie Kill, Below Area 28
- 11 Nassau Lake
- 12 Valatie Kill, Below Nassau Lake (Above County Rte 7)

**NOTES:**

1. Sampling locations are approximate and based on coordinates provided in NYSDEC database (2004).
2. Current topography of former Dewey Loeffel landfill not depicted.

2000 0 2000  
Approximate Scale: 1" = 2000'

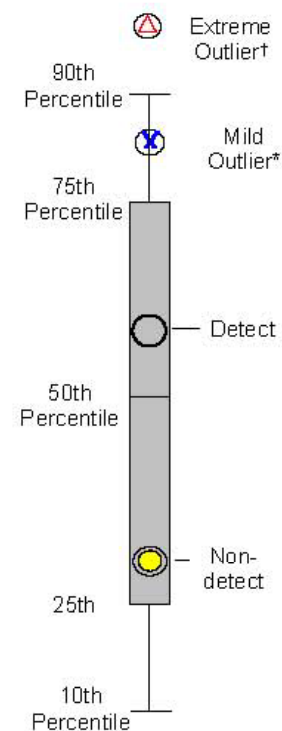
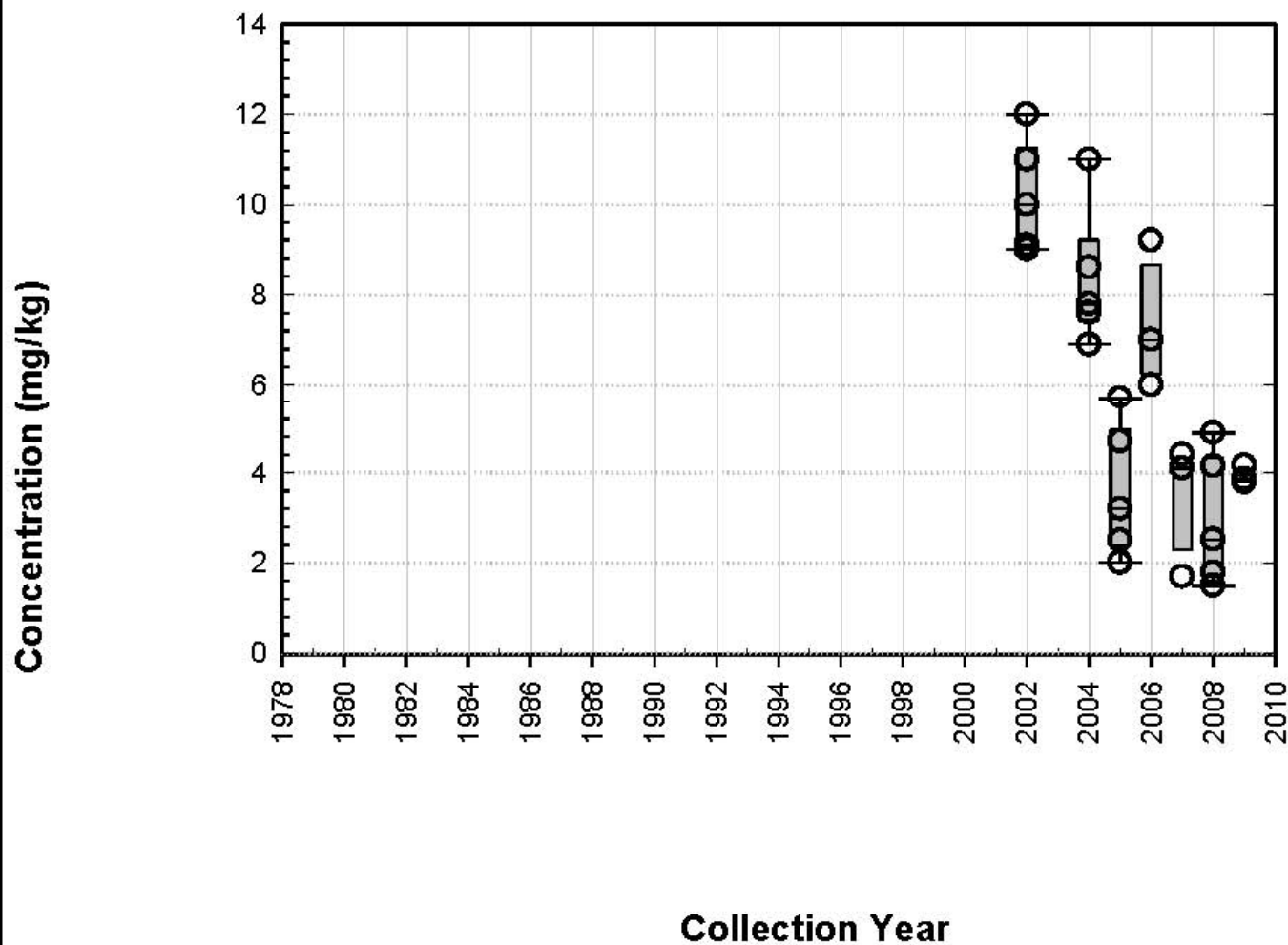
LOEFFEL SITE ENVIRONS,  
NASSAU, NEW YORK

**FISH SAMPLING LOCATIONS**



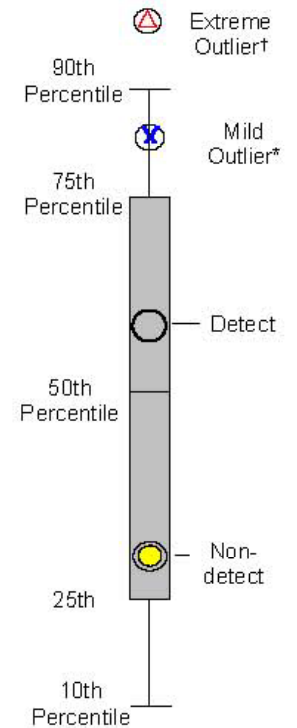
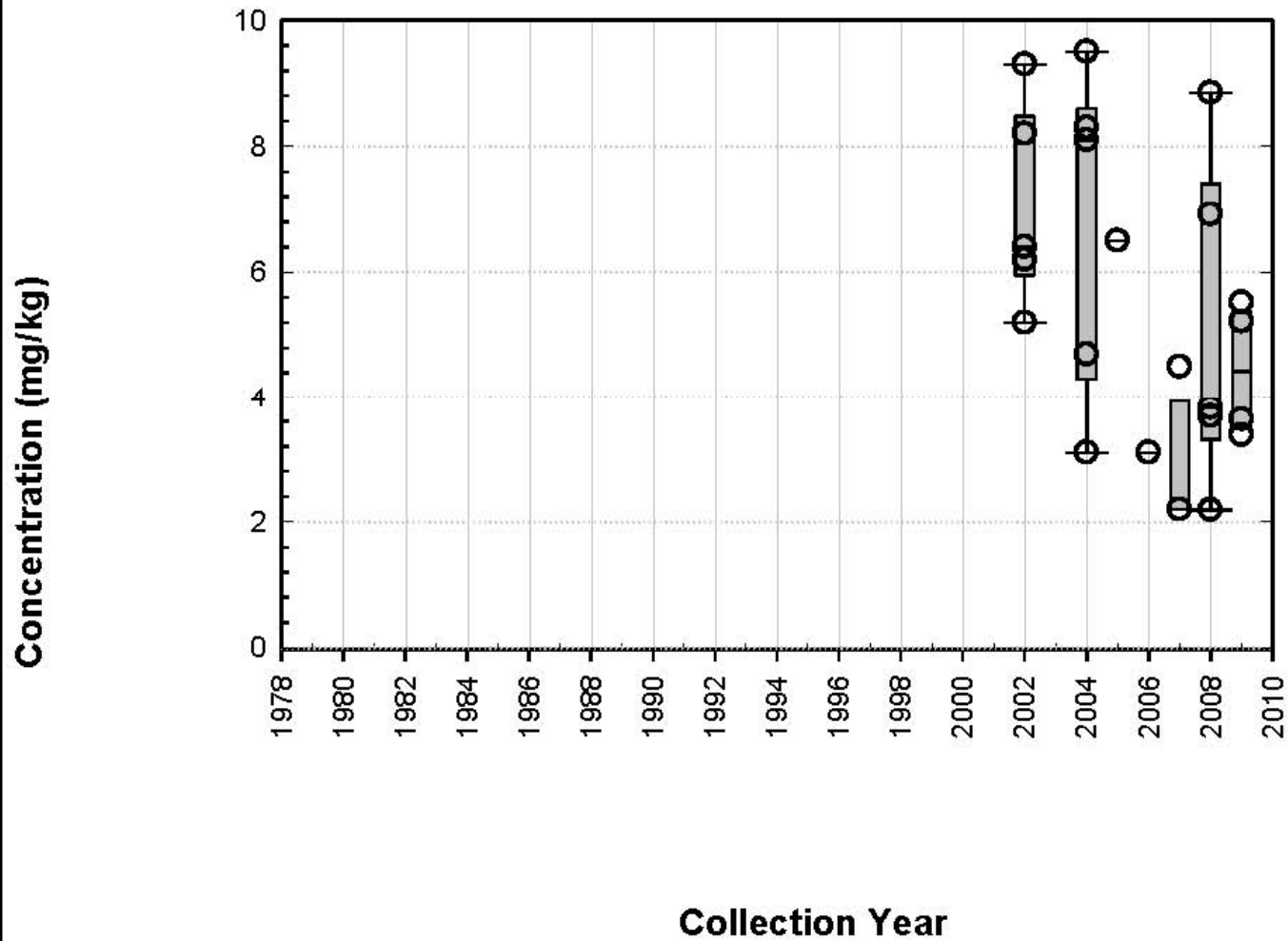
FIGURE  
1

# **Total PCBs - Whole Body** **V.K. At Area 28 – Blacknose dace**

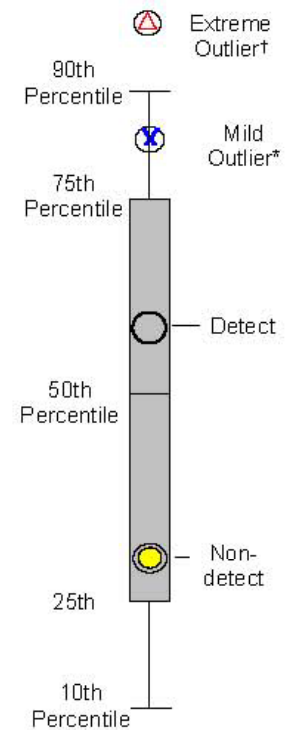
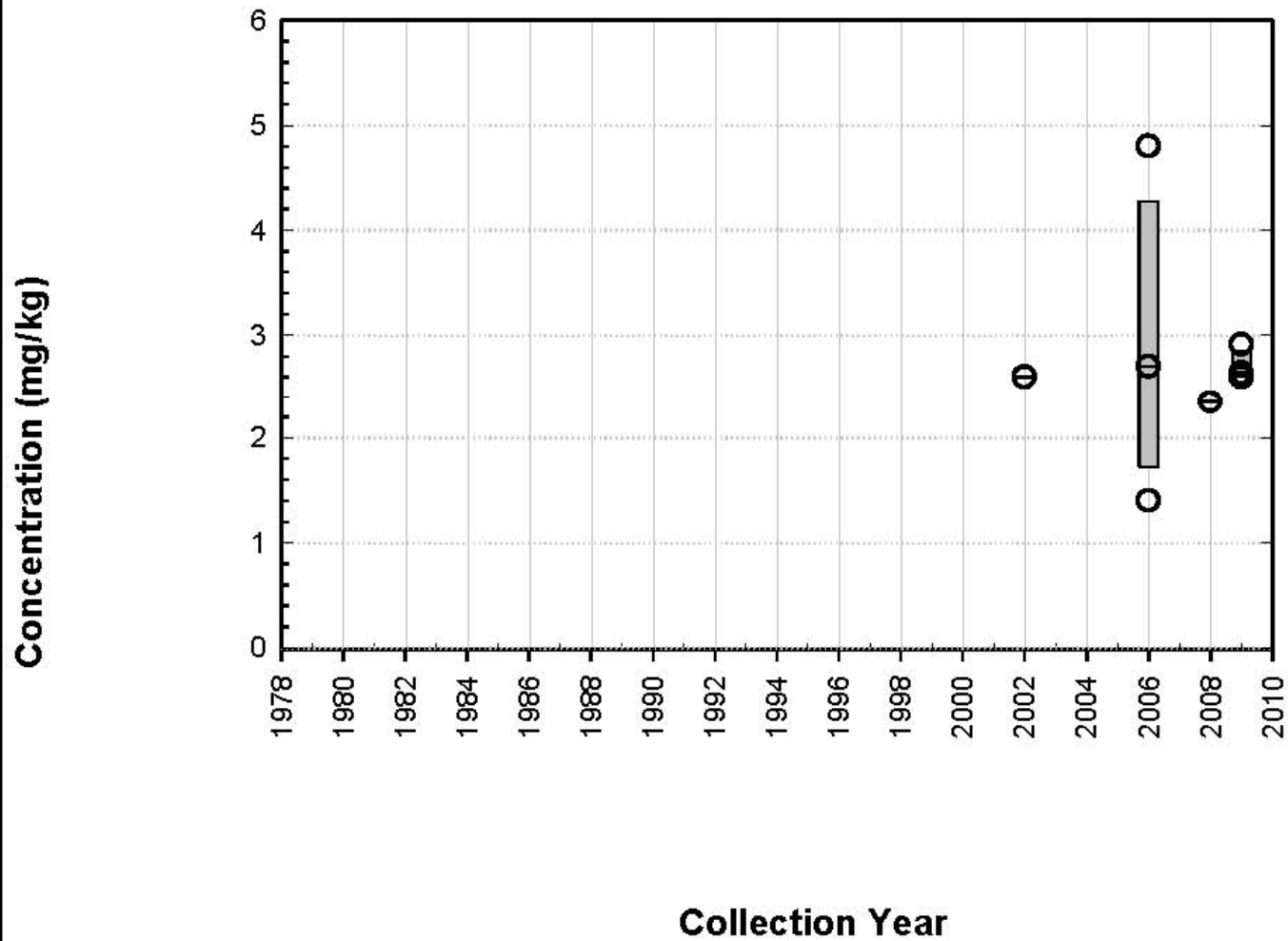




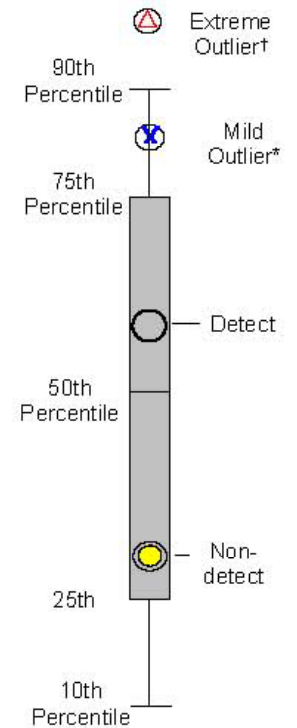
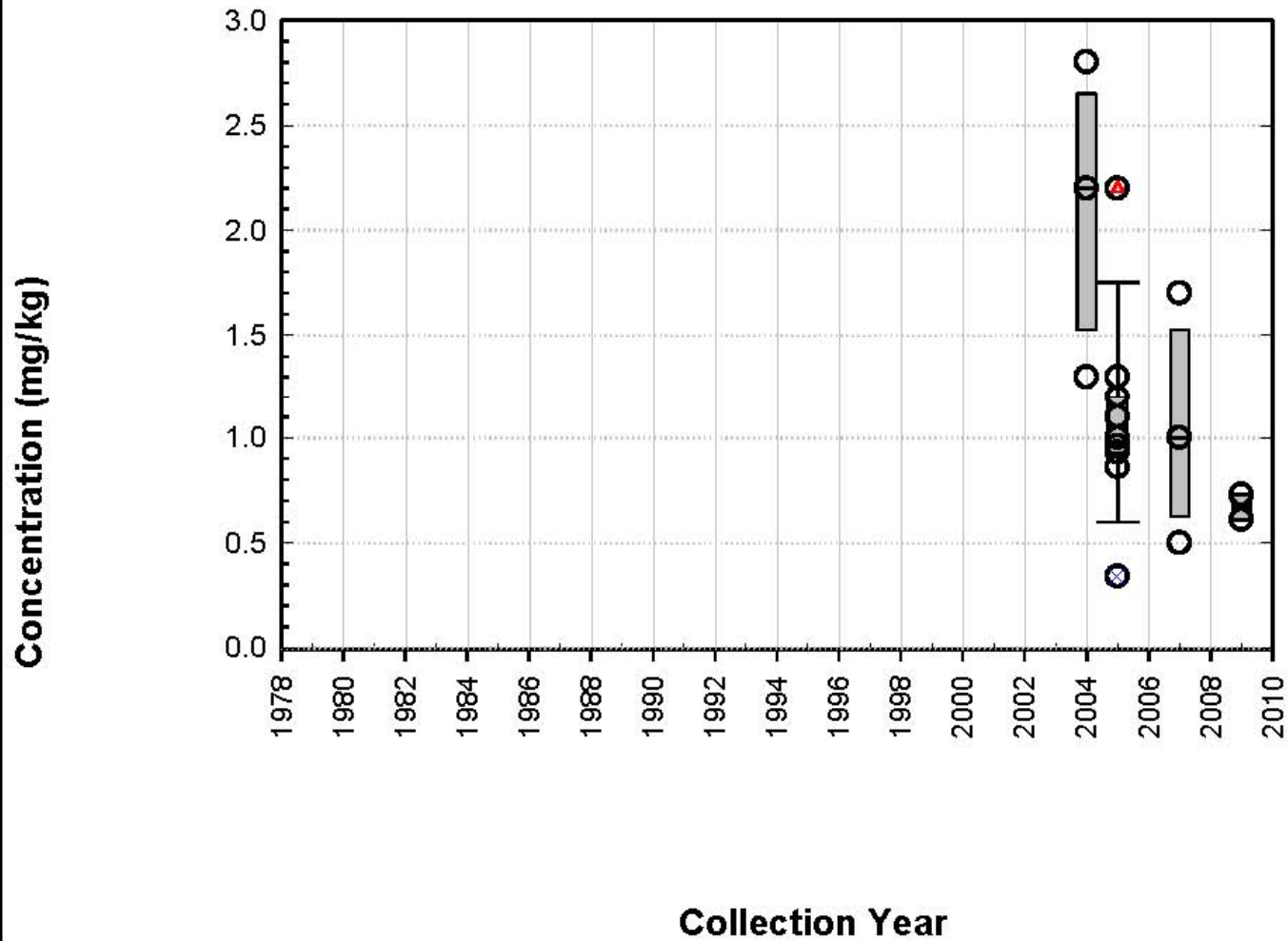
# **Total PCBs - Whole Body** **V.K. At Area 28 – Longnose dace**



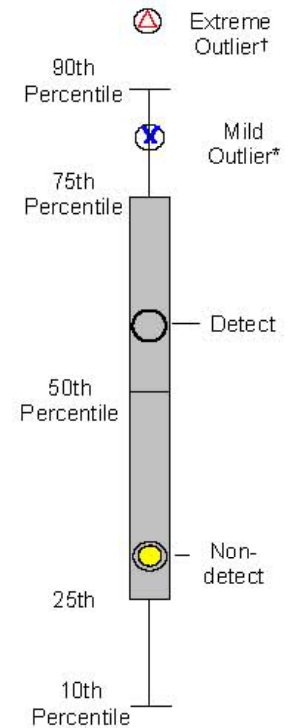
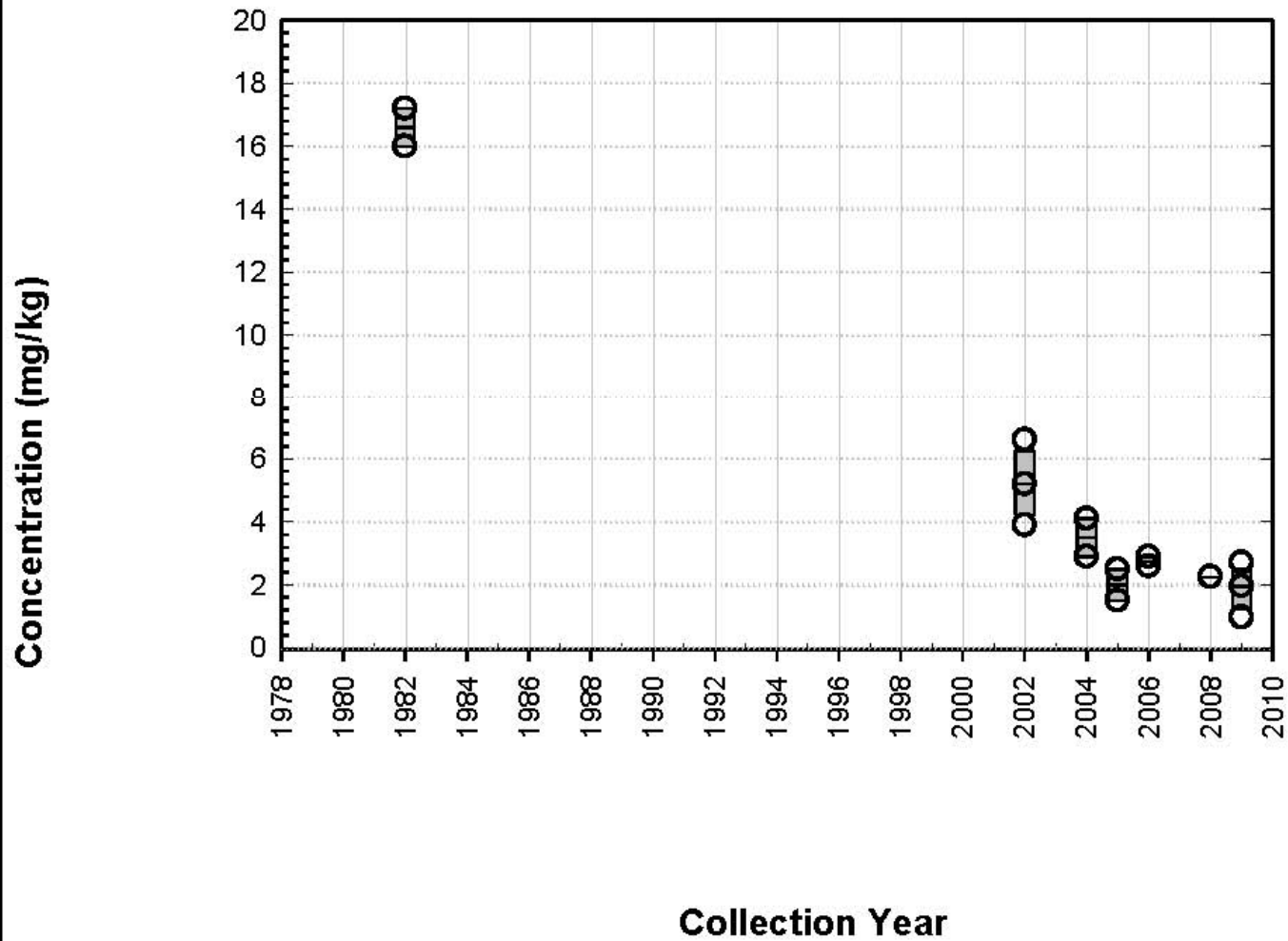
# **Total PCBs - Edible Portion** **V.K. At Area 28 – Brook trout**



# **Total PCBs - Edible Portion** **V.K. At Area 28 – White sucker**

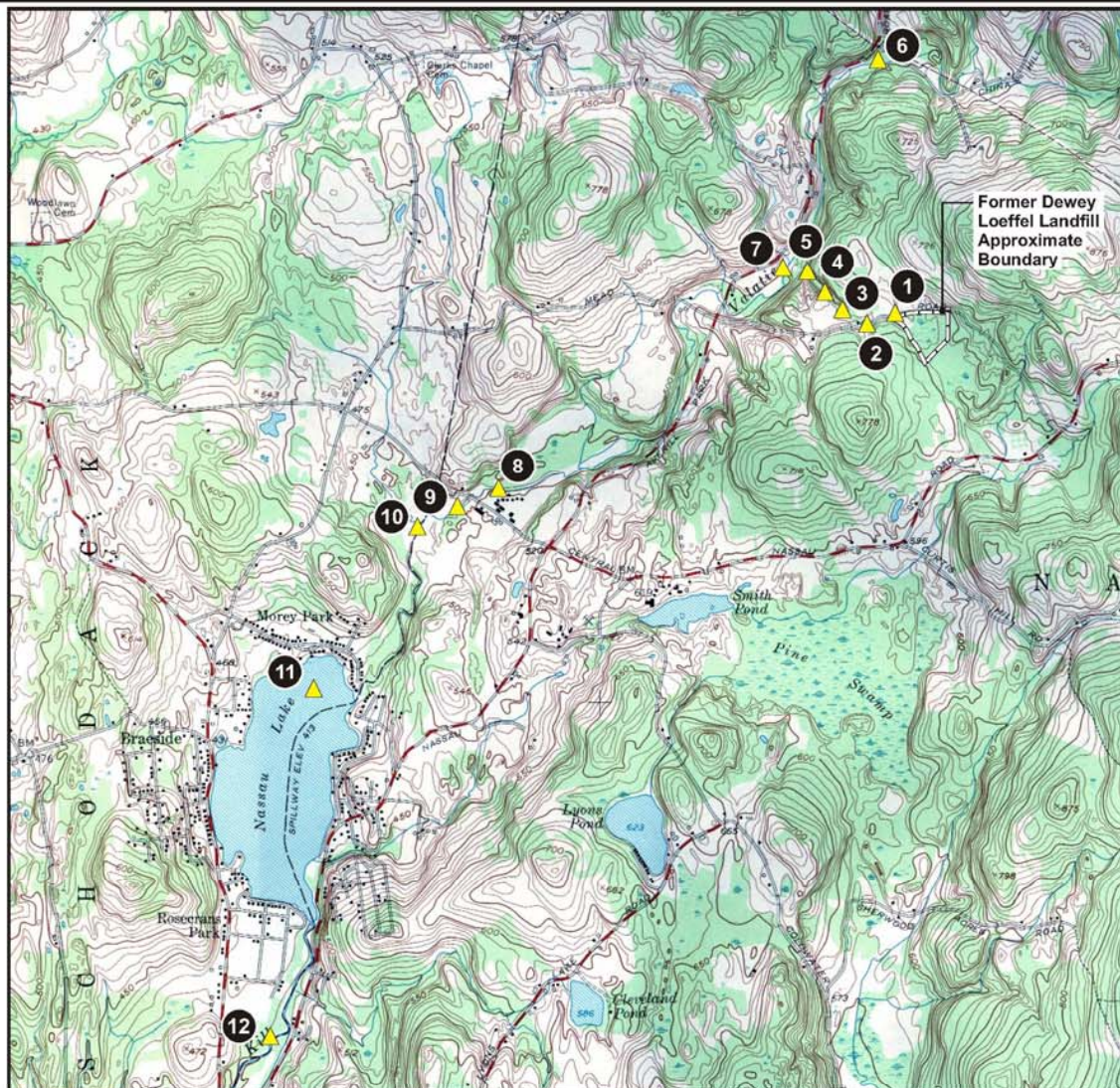


# **Total PCBs - Whole Body** **V.K. At Area 28 – White sucker**



Nassau Lake





REFERENCE: Base Map Source USGS 7.5 Minute Quads Nassau, New York, 1953, Photoinspected 1978.



**STATION  
NUMBER**

**LOCATION**

- 1 Wetland Above Former Mead Road Pond
- 2 Former Mead Road Pond
- 3 T11A Upper Third
- 4 T11A Middle Third
- 5 T11A Lower Third
- 6 Valatie Kill, Confluence with T14 (China Hill Road)
- 7 Valatie Kill, Below Confluence with T11A
- 8 Valatie Kill, Above Area 28
- 9 Valatie Kill, Area 28
- 10 Valatie Kill, Below Area 28
- 11 Nassau Lake
- 12 Valatie Kill, Below Nassau Lake (Above County Rte 7)

**NOTES:**

1. Sampling locations are approximate and based on coordinates provided in NYSDEC database (2004).
2. Current topography of former Dewey Loeffel landfill not depicted.

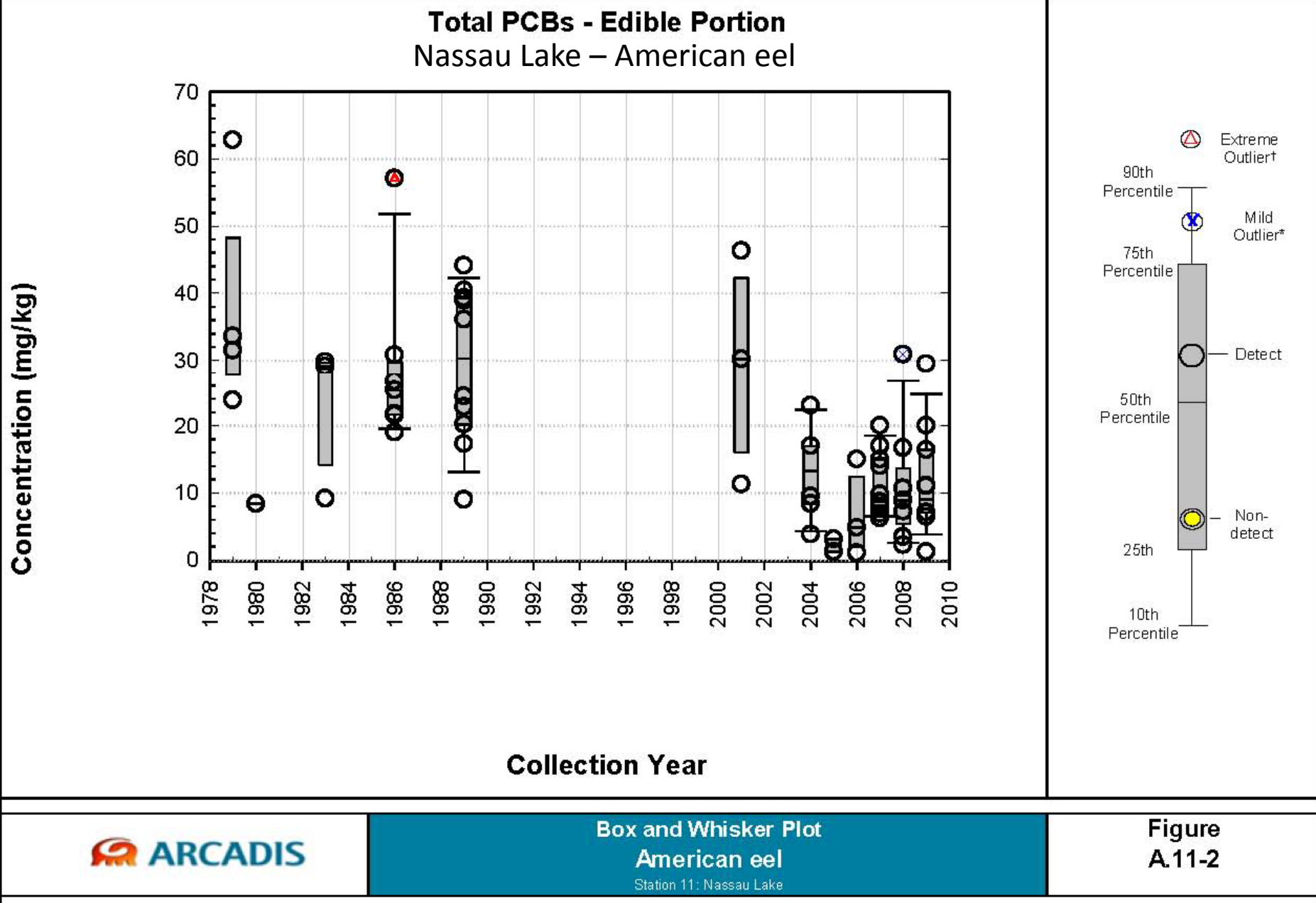
2000 0 2000  
Approximate Scale: 1" = 2000'

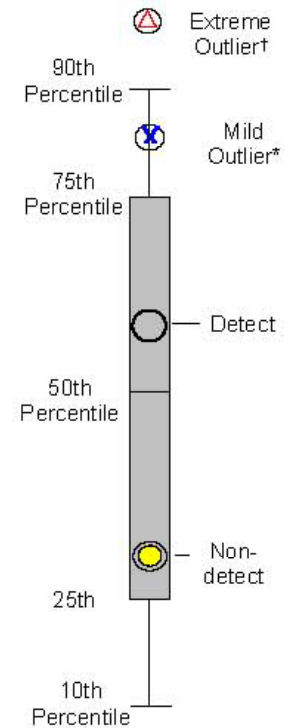
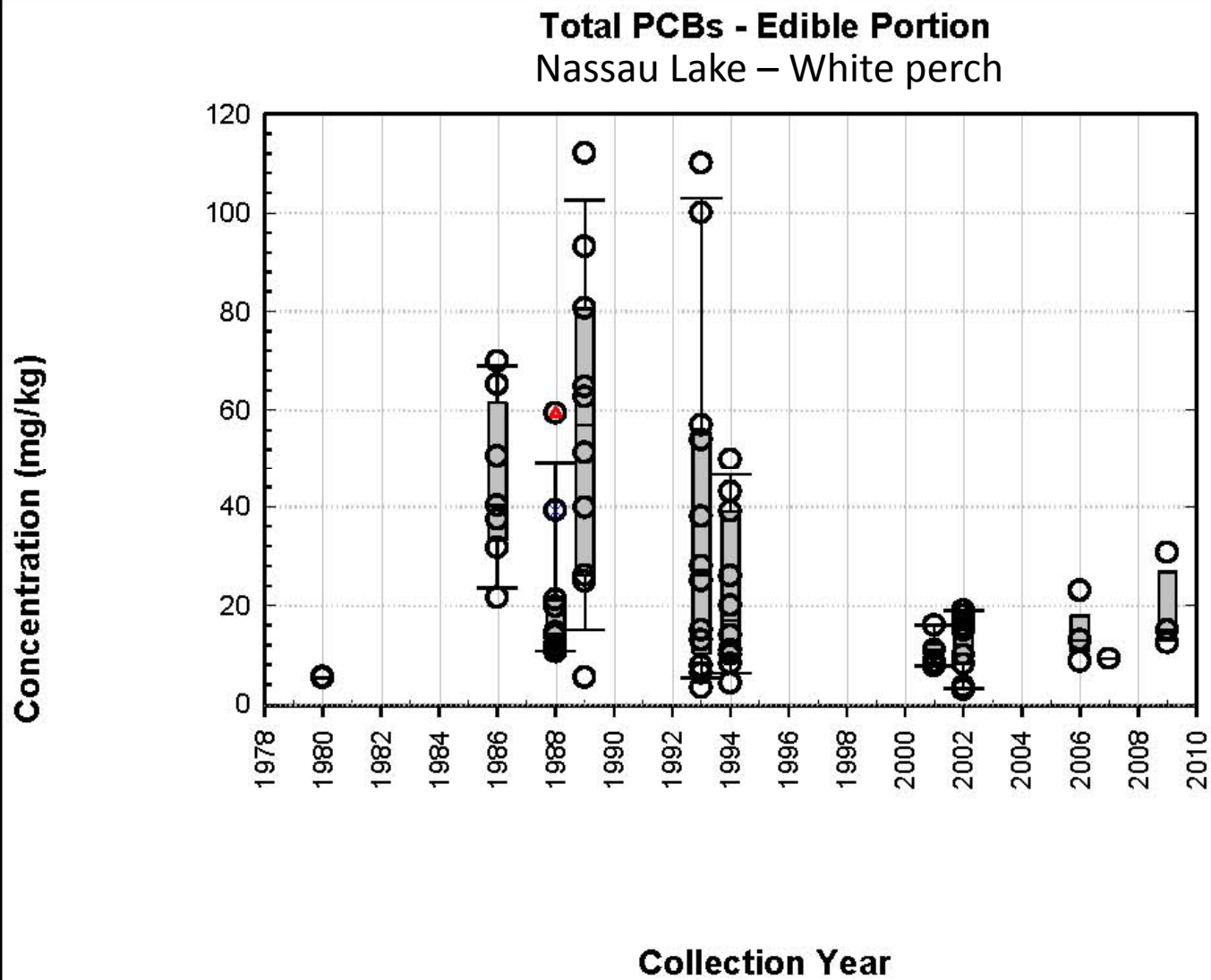
LOEFFEL SITE ENVIRONS,  
NASSAU, NEW YORK

**FISH SAMPLING LOCATIONS**



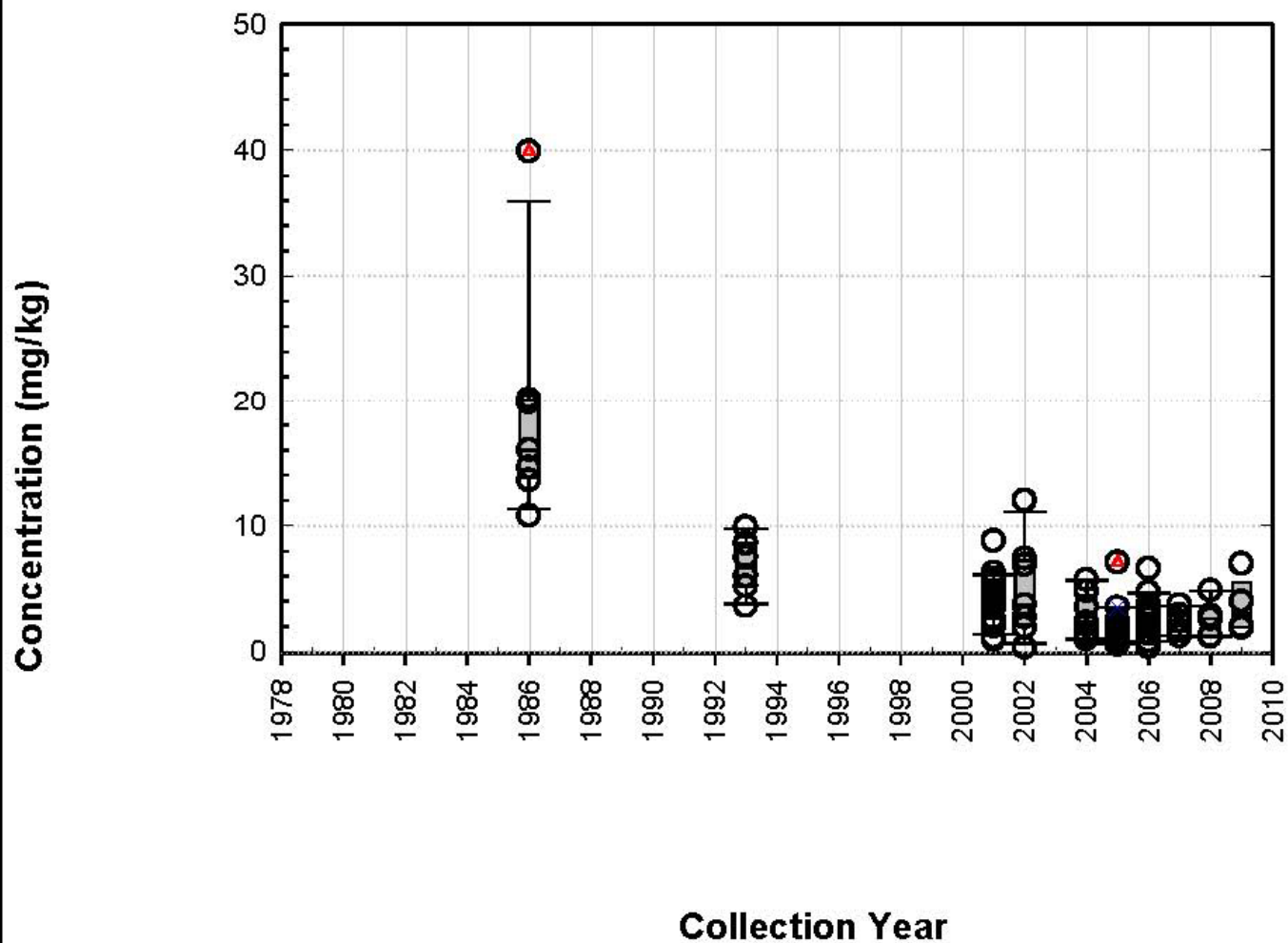
FIGURE  
1



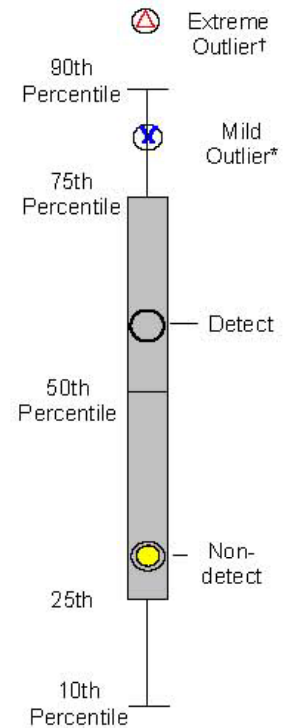
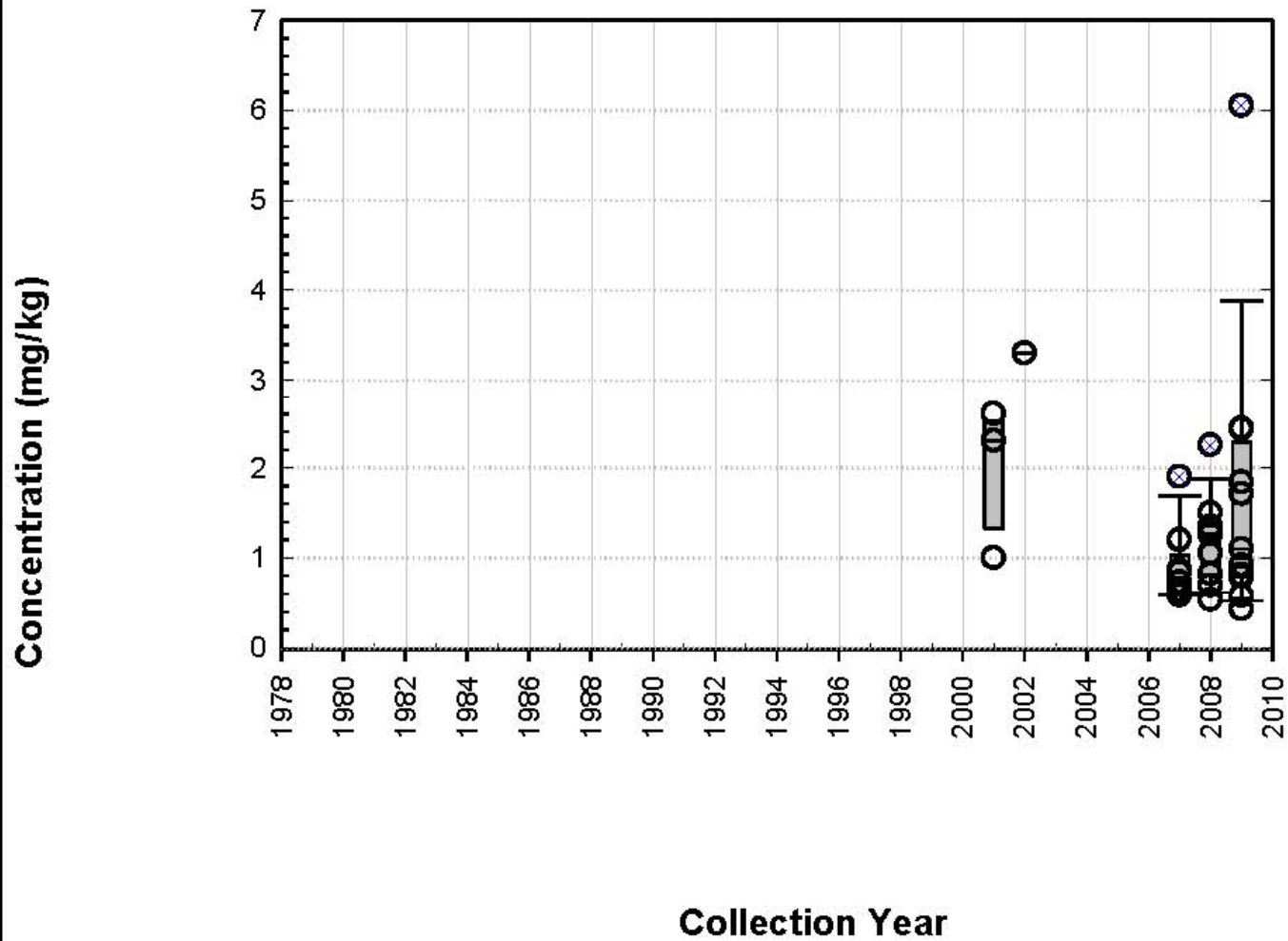




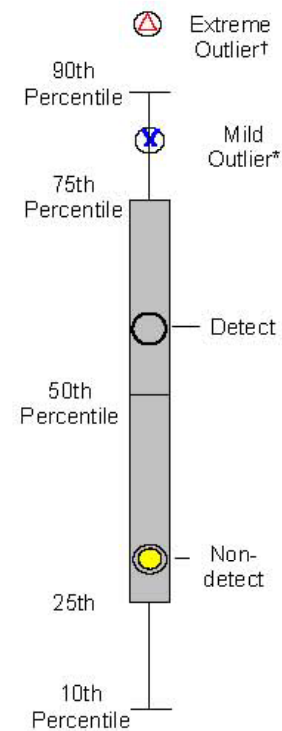
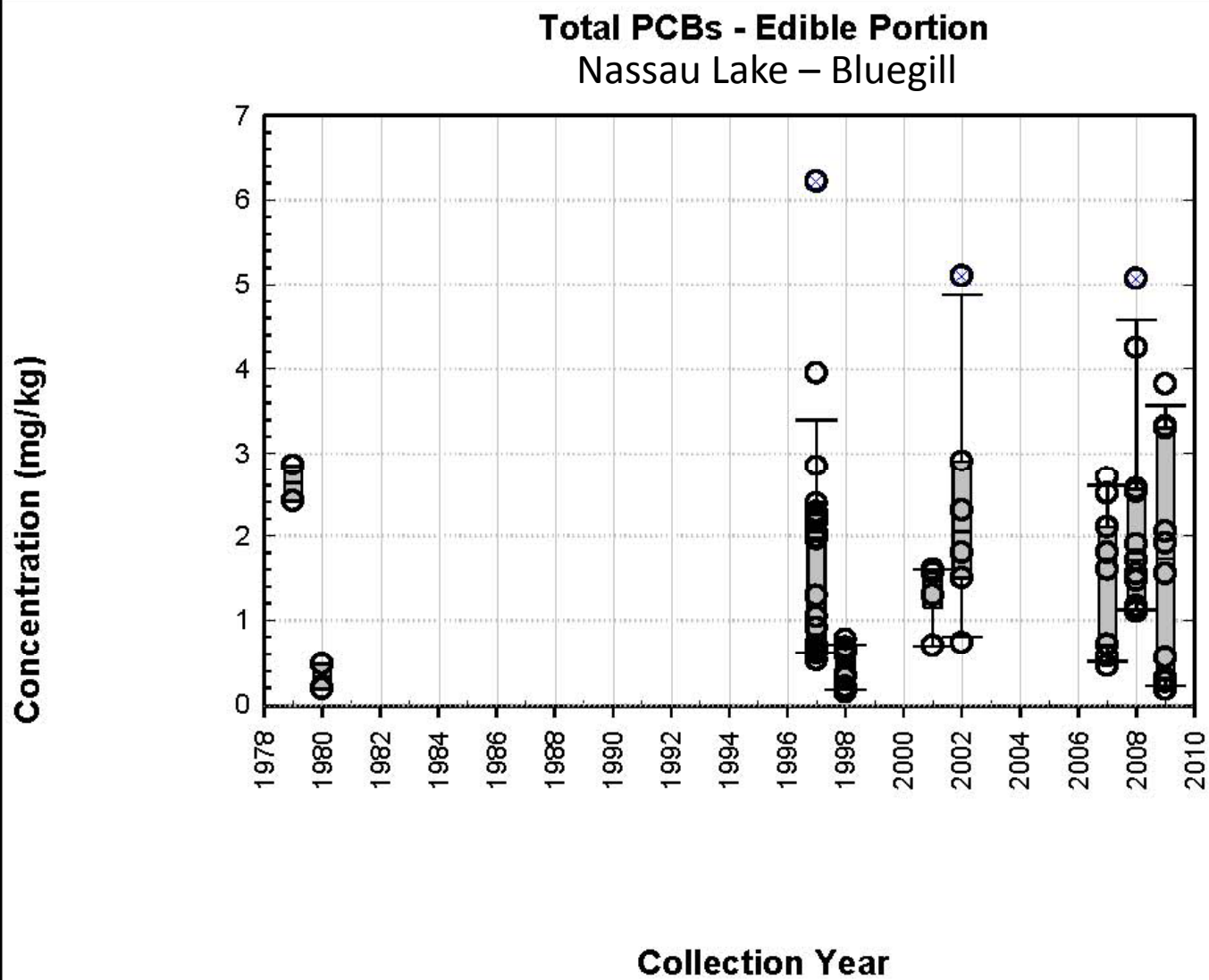
# **Total PCBs - Edible Portion** **Nassau Lake – Brown bullhead**



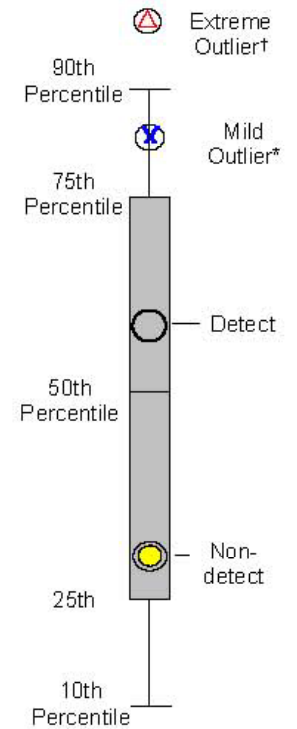
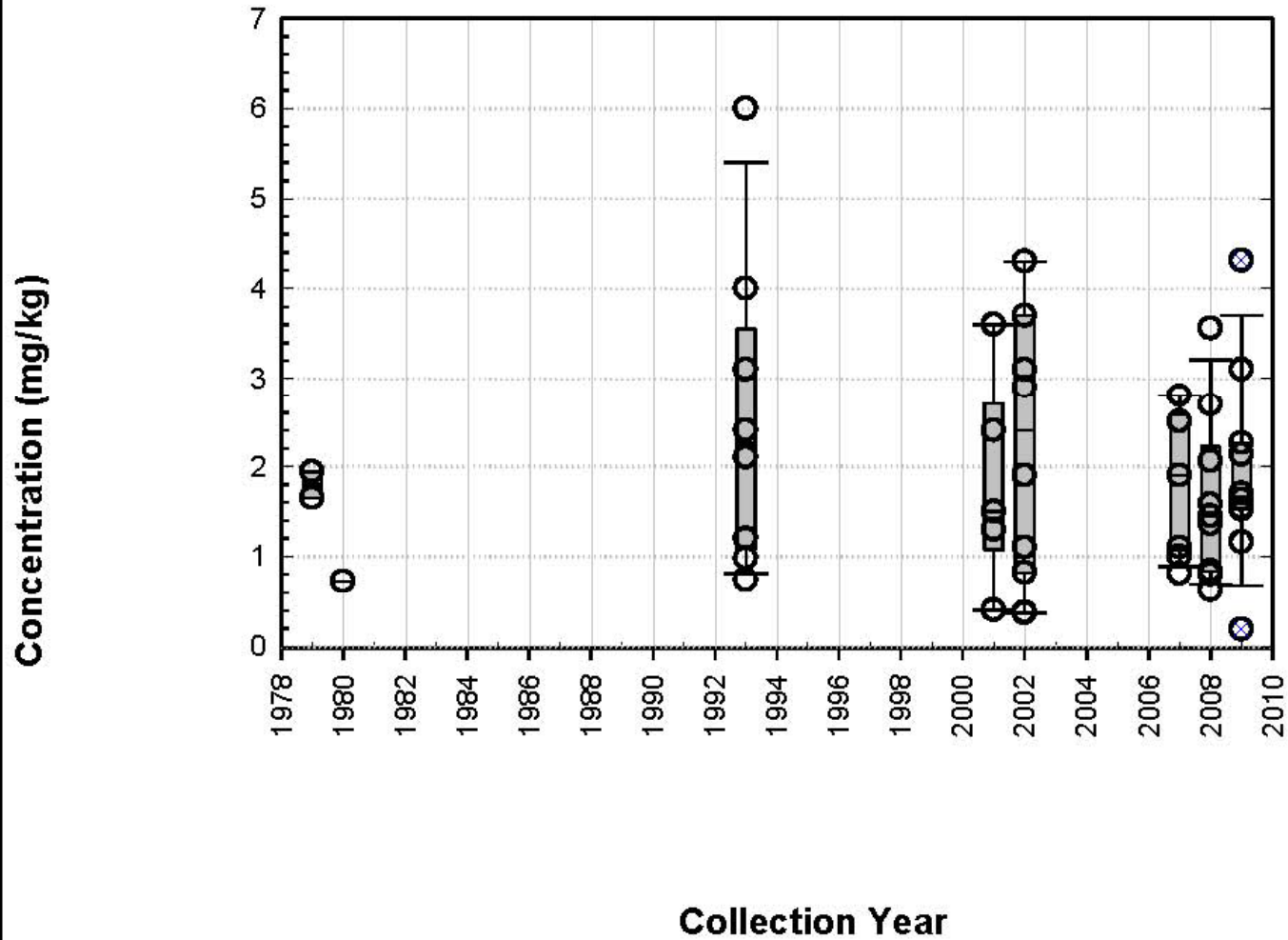
# **Total PCBs - Edible Portion** **Nassau Lake – Yellow bullhead**

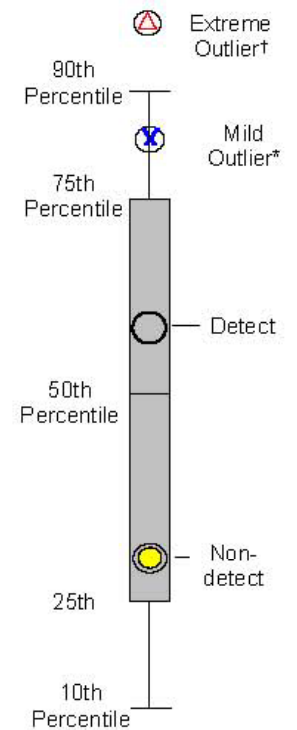
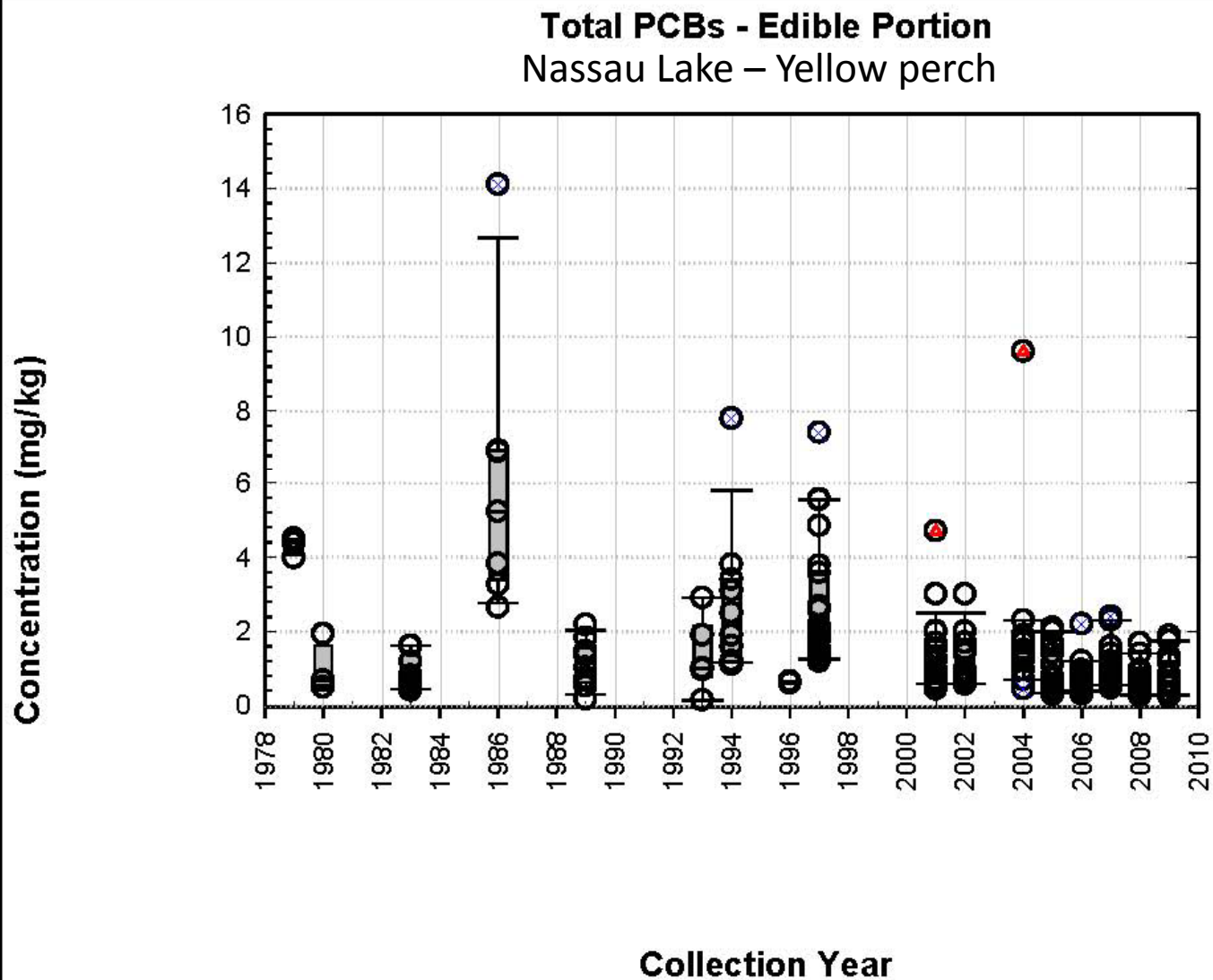


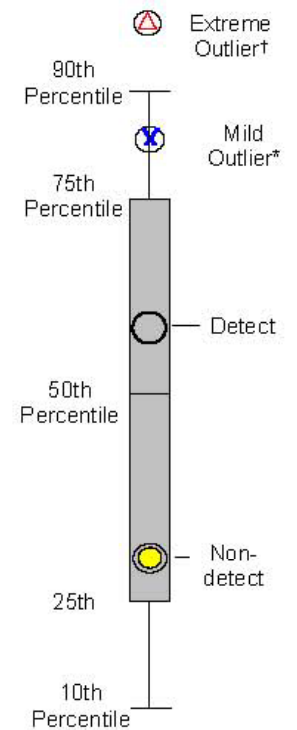
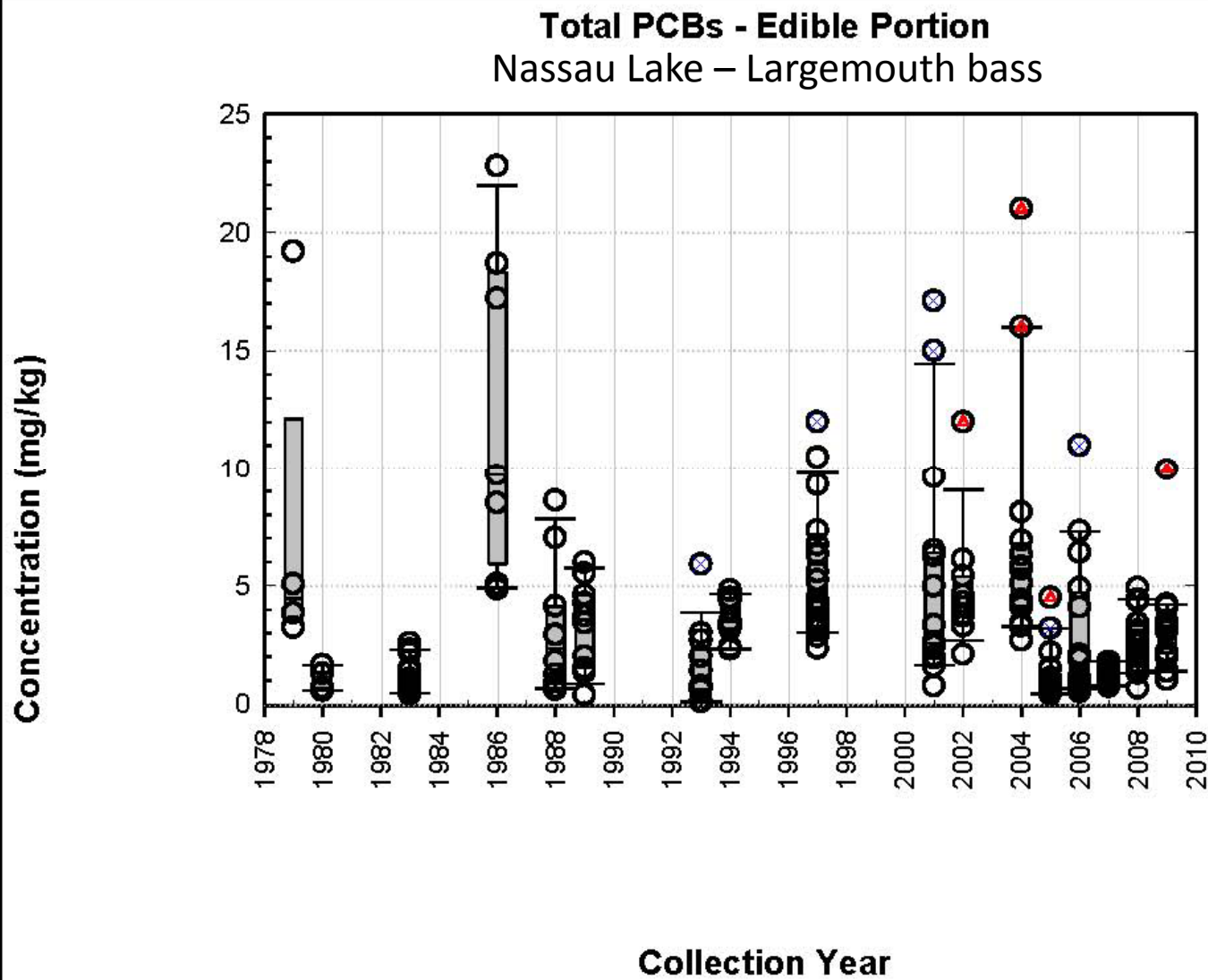




# **Total PCBs - Edible Portion** **Nassau Lake – Pumpkinseed**







# Conclusions

- In general, in the past 3 or 4 years many species haven't shown much improvement. But levels do tend to show improvement compared to what we saw before the various cleanups.
- T-11A - Levels are still elevated compared to the rest of the system. After the cleanup there was some improvement compared to the historical levels. There are no recent increases above historical highs. There do not appear to be many instances of a continuing downward trend. Levels are not protective of piscivorous wildlife.
- Area 28 - Fish in this area benefited from the cleanup. There are not many instances of a continuing downward trend. Levels are not protective of piscivorous wildlife. The eat none advisory for all species will remain in effect in the Valatie Kill upstream of Nassau Lake.
- Nassau Lake - Certain species show a decrease in PCB levels since the upstream cleanups. Not much evidence of a continuing downward trend. No justification for relaxing or removing the eat none consumption advice for all species.
- In the future, sampling and monitoring of PCB levels in fish will continue in order to detect changes and see trends.



# Health Advisories - No changes foreseen for 2010-11

- Valatie Kill - b/t Co. Rt. 18 (Hoags Corners Rd.) and Nassau Lake  
Everyone - All species - **Eat none**
- Nassau Lake - Everyone - All species - **Eat none**
- Valatie Kill - Between Nassau Lake and Kinderhook Lake  
Women of childbearing age and children under 15 - All species -  
**Eat none**  
Everyone else - American eel, bluegill and redbreast sunfish -  
**1 meal per month**
- Kinderhook Lake -  
Women of childbearing age and children under 15 - All species -  
**Eat none**  
Everyone else - American eel - **1 meal per month**
- Statewide Advisory - Everyone - All fresh water fish - Anyplace  
**1 meal per week**
- **For more information please call the NYSDOH at 1-800-458-1158**

**Michael W. Kane - Biologist 1 (Ecology)**

**NYSDEC - DFW&MR - BoH**

**625 Broadway - 5th Floor**

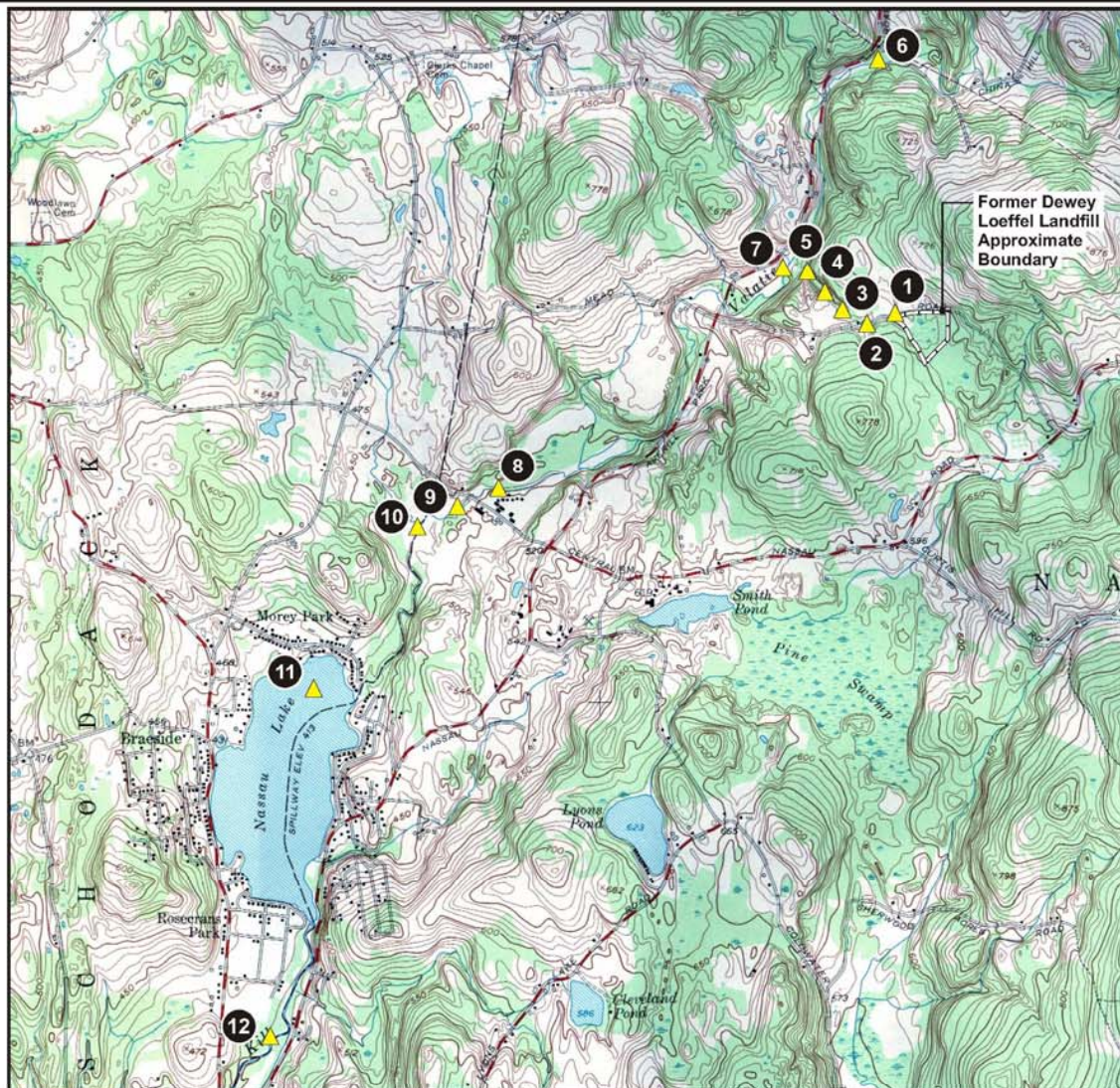
**Albany, New York 12233-4756**

**Desk Phone - (518) 402-8973**

**Fax - (518) 402-8925**

**E-mail - [mwkane@gw.dec.state.ny.us](mailto:mwkane@gw.dec.state.ny.us)**

**Health Advice - DoH -1-800-458-1158**



REFERENCE: Base Map Source USGS 7.5 Minute Quads Nassau, New York, 1953, Photoinspected 1978.



**STATION  
NUMBER**

**LOCATION**

- 1 Wetland Above Former Mead Road Pond
- 2 Former Mead Road Pond
- 3 T11A Upper Third
- 4 T11A Middle Third
- 5 T11A Lower Third
- 6 Valatie Kill, Confluence with T14 (China Hill Road)
- 7 Valatie Kill, Below Confluence with T11A
- 8 Valatie Kill, Above Area 28
- 9 Valatie Kill, Area 28
- 10 Valatie Kill, Below Area 28
- 11 Nassau Lake
- 12 Valatie Kill, Below Nassau Lake (Above County Rte 7)

**NOTES:**

1. Sampling locations are approximate and based on coordinates provided in NYSDEC database (2004).
2. Current topography of former Dewey Loeffel landfill not depicted.

2000 0 2000  
Approximate Scale: 1" = 2000'

LOEFFEL SITE ENVIRONS,  
NASSAU, NEW YORK

**FISH SAMPLING LOCATIONS**



FIGURE  
**1**