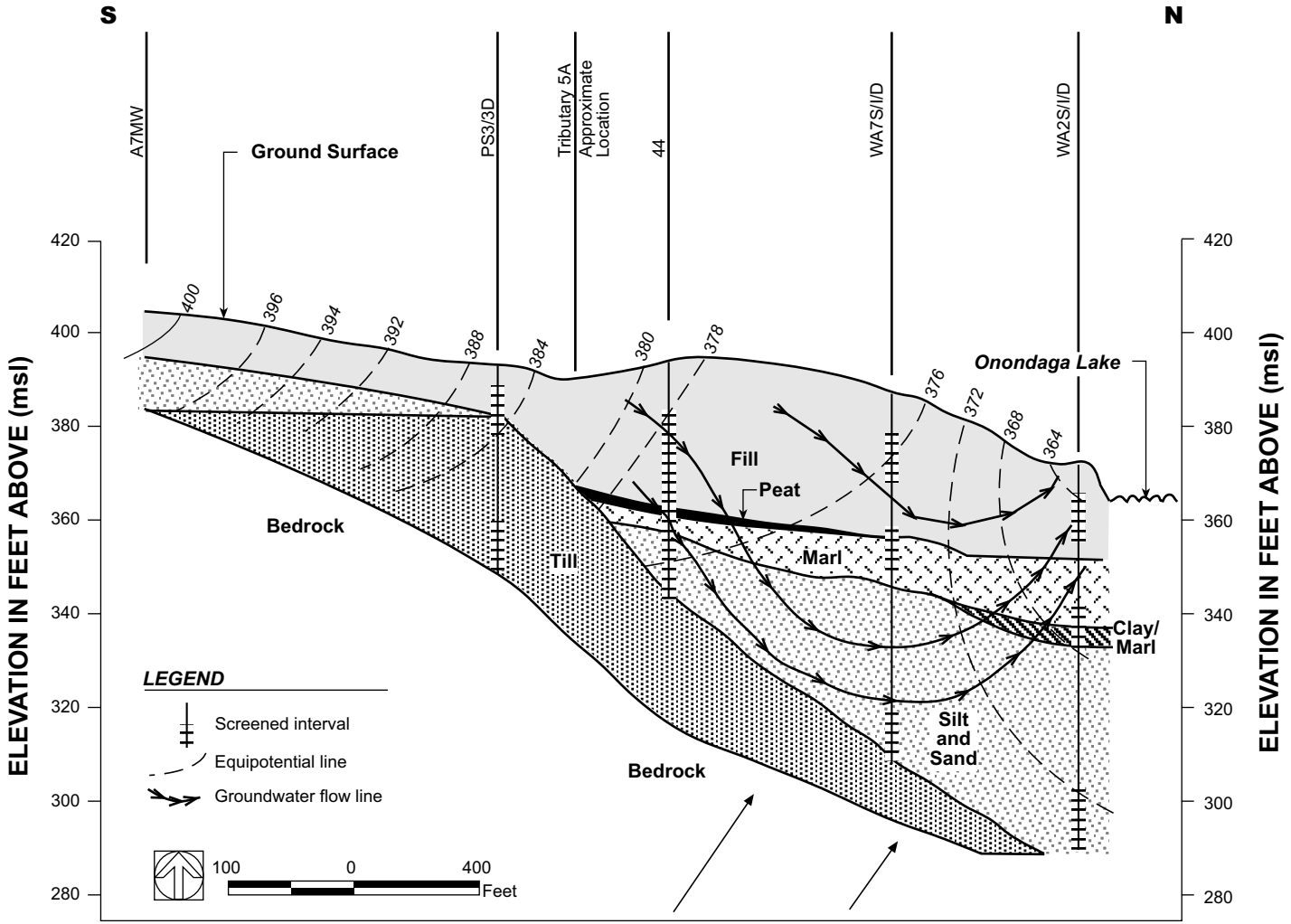
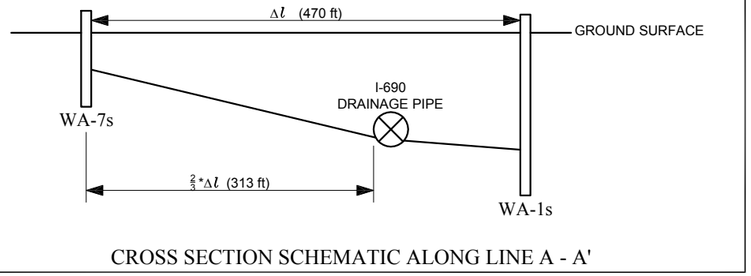


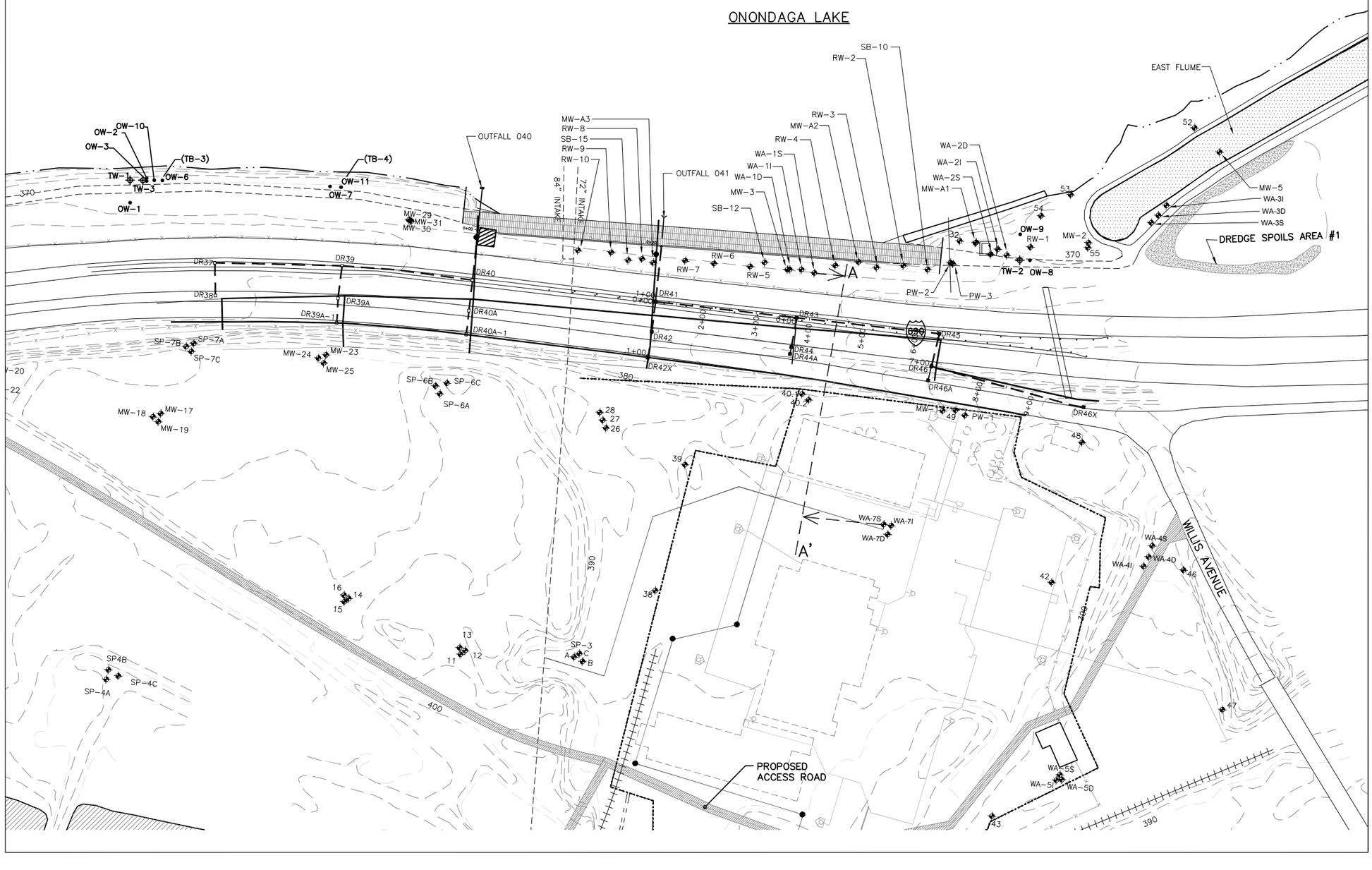
Source: O'Brien and Gere (1999). Exponent, 2001c

Figure 6-1. Hydrogeologic cross section through the Willis Avenue plant area, September 22 and 23, 1992

FIGURE 6–2



CROSS SECTION SCHEMATIC ALONG LINE A - A'



LEGEND

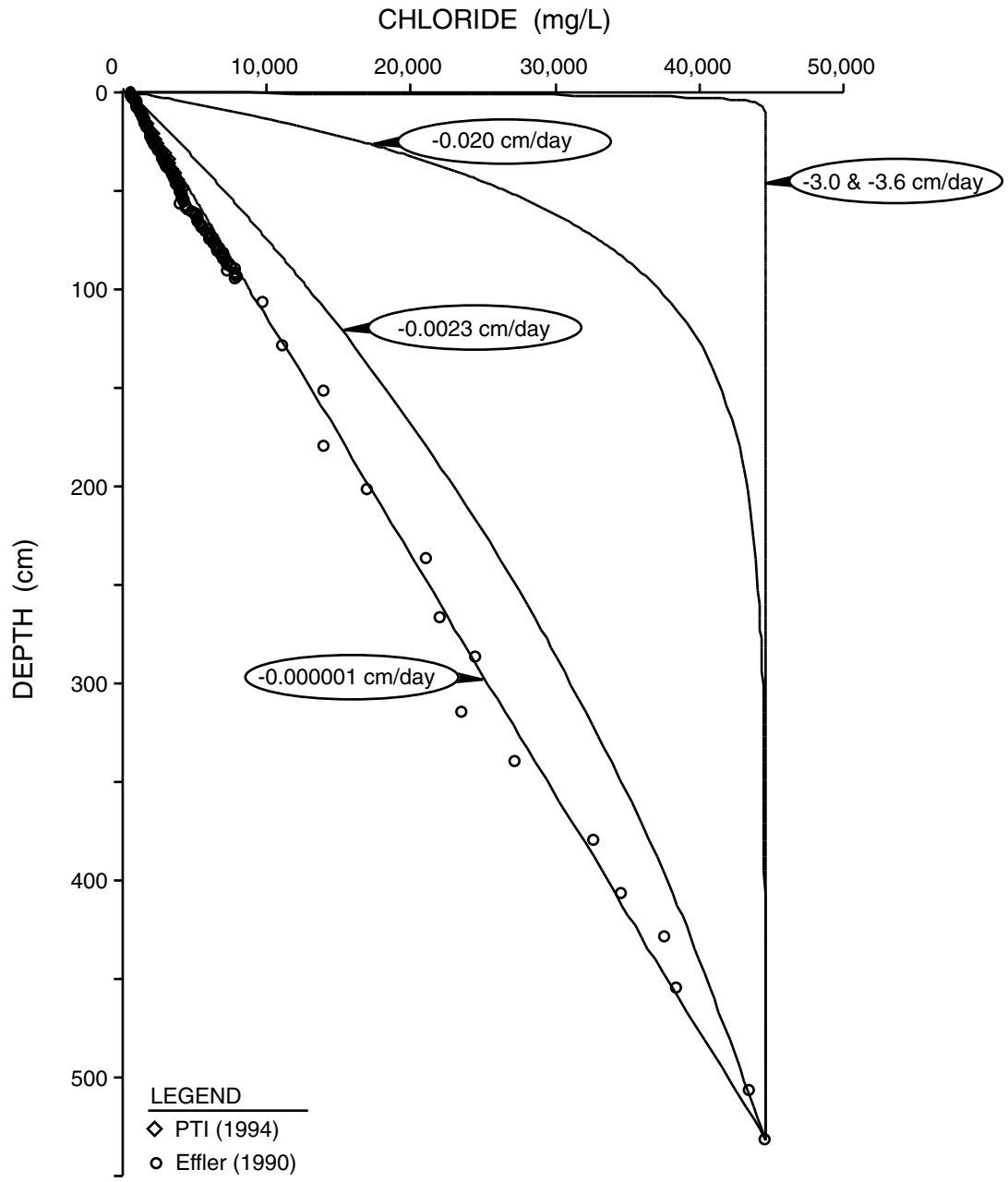
- EXISTING MONITORING OR RECOVERY WELL
- TEST WELL
- OBSERVATION WELL
- TEST BORING
- FENCE
- RAILROAD
- 390 ELEVATION CONTOUR
- POND LOCATION
- WELL PROJECTION
- I–690 STORM DRAINS

LOCATION OF WELLS AND I–690 STORM DRAINS AT THE SEMET PONDS/WILLIS AVENUE SITES

SITE PLAN

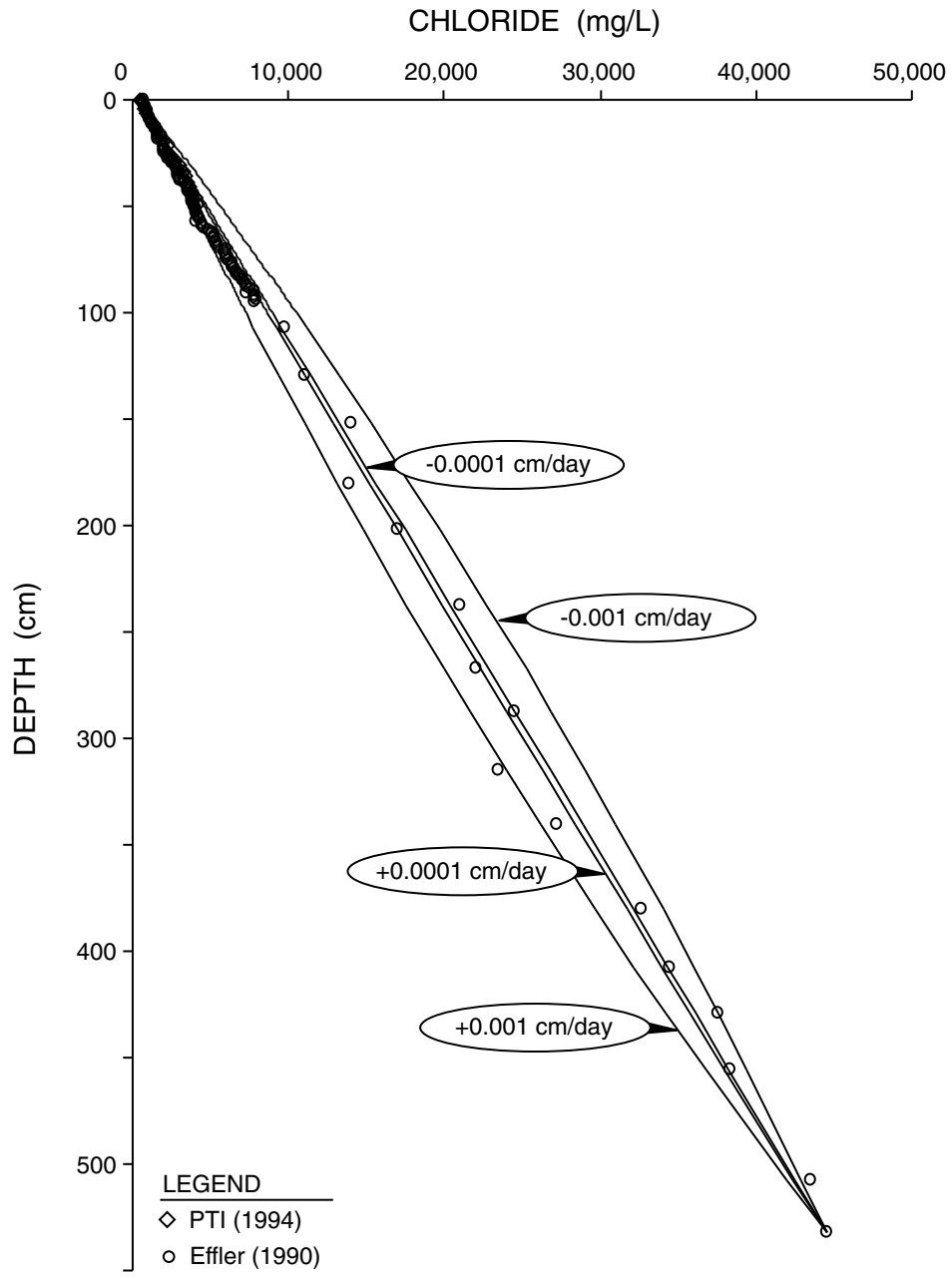
100 0 100 200

SOURCE:
O'BRIEN & GERE, 2002d



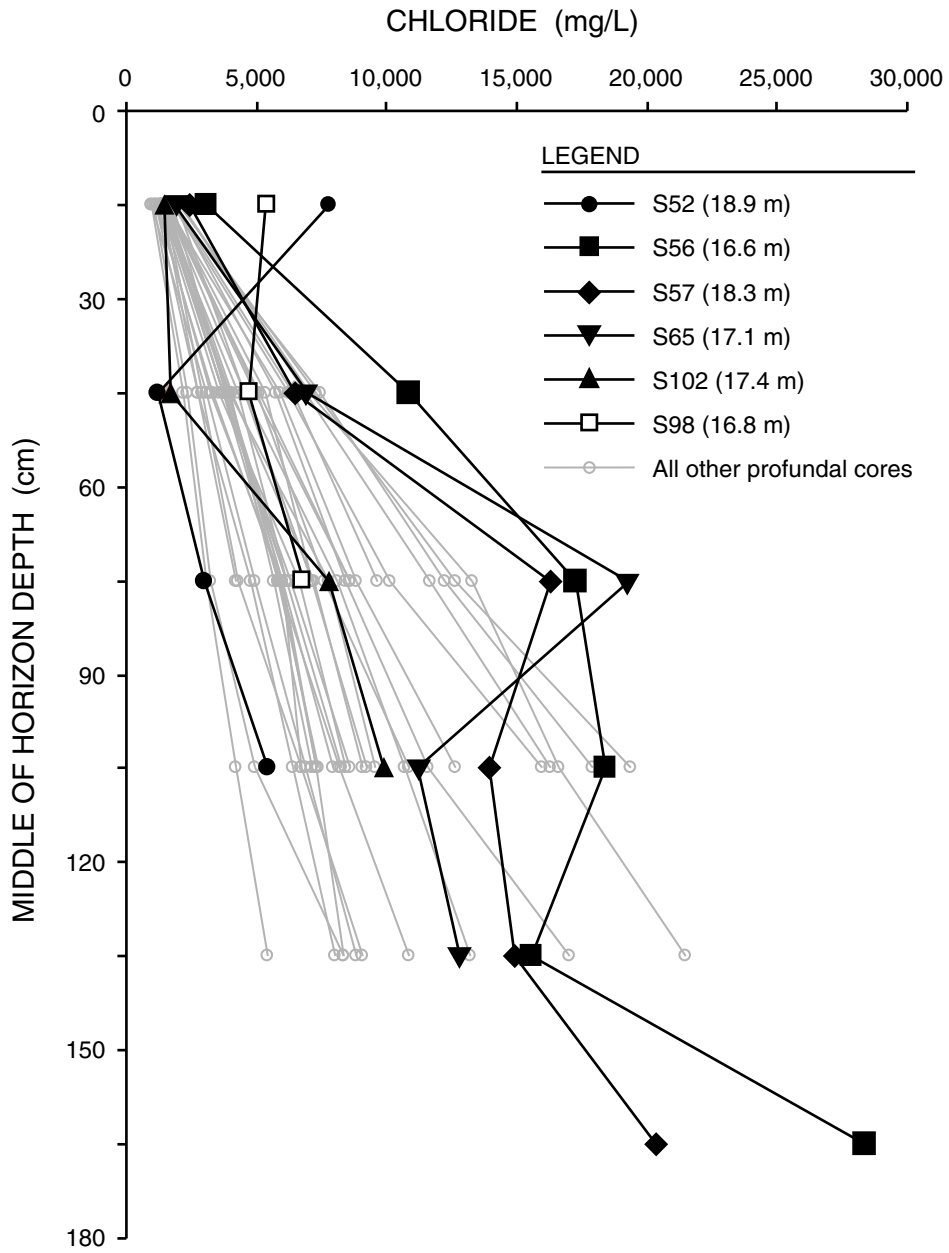
Source: Exponent, 2001c

Figure 6-3. Comparison of chloride profiles with model predictions for several velocity scenarios



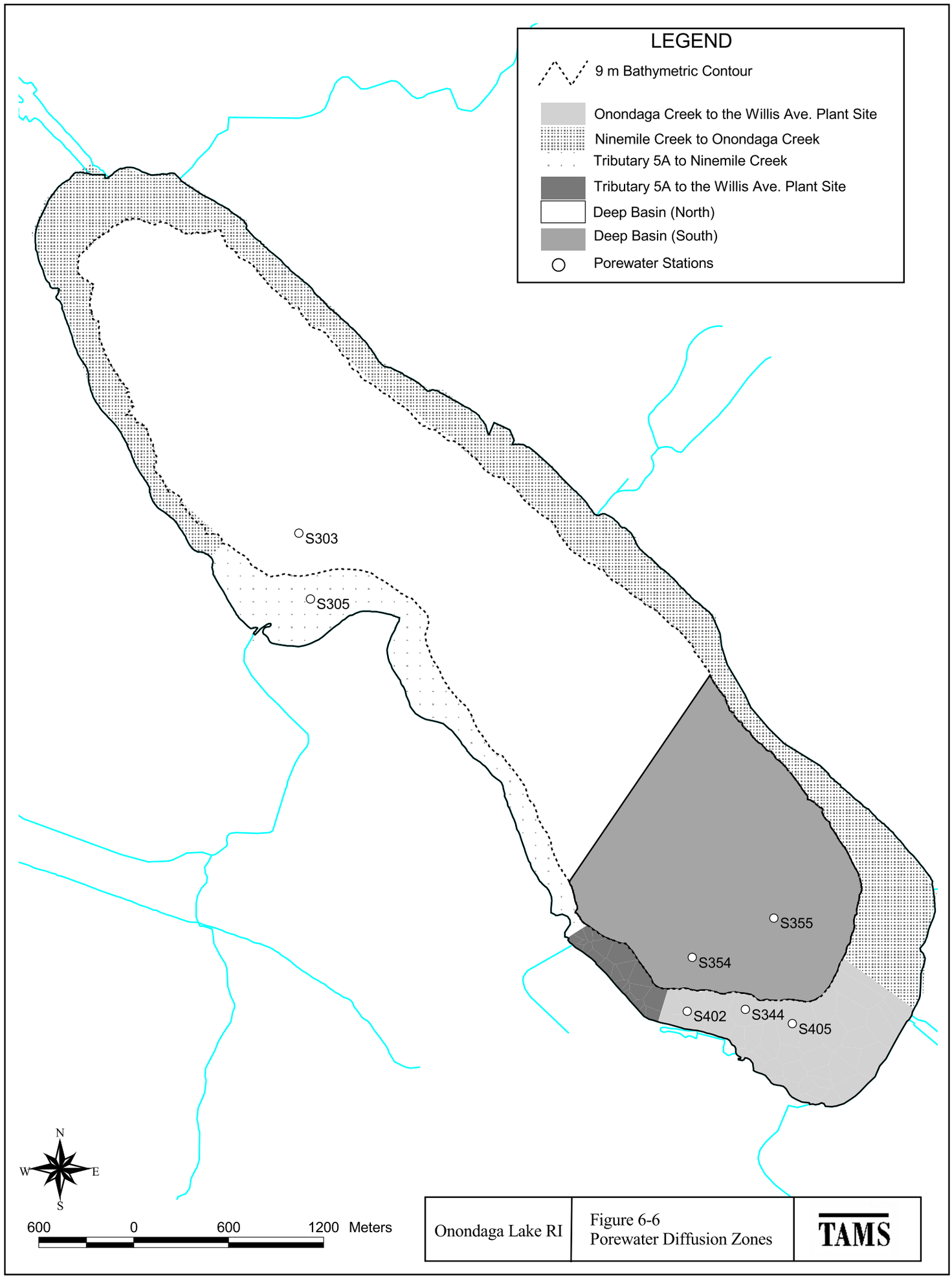
Source: Exponent, 2001c

Figure 6-4. Comparison of chloride profiles with model predictions for upward (-) and downward (+) velocities

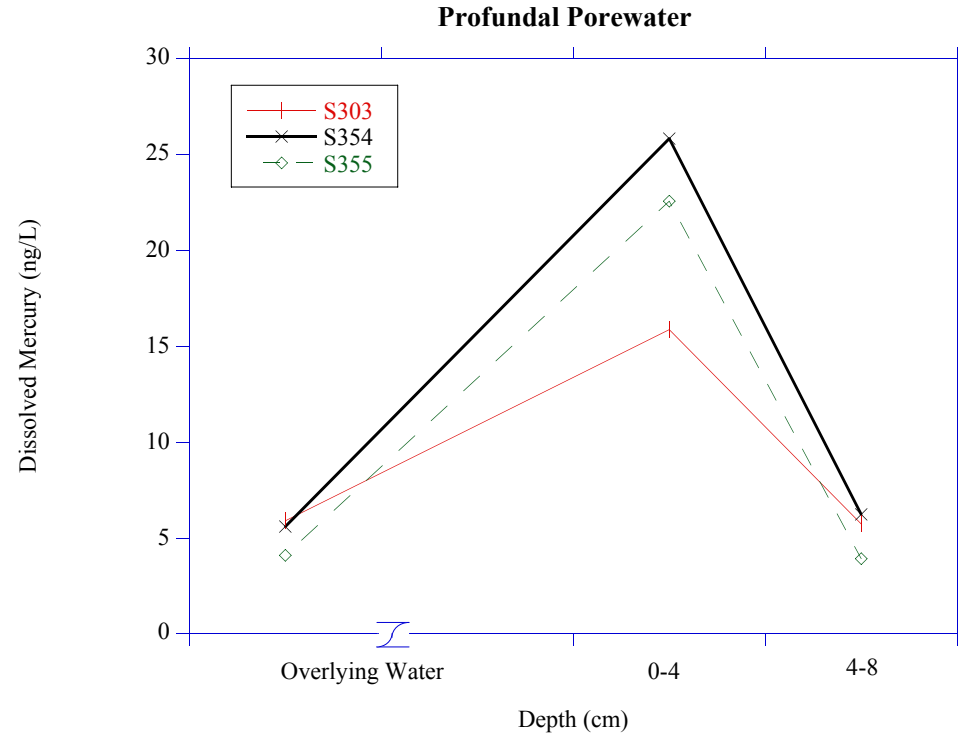


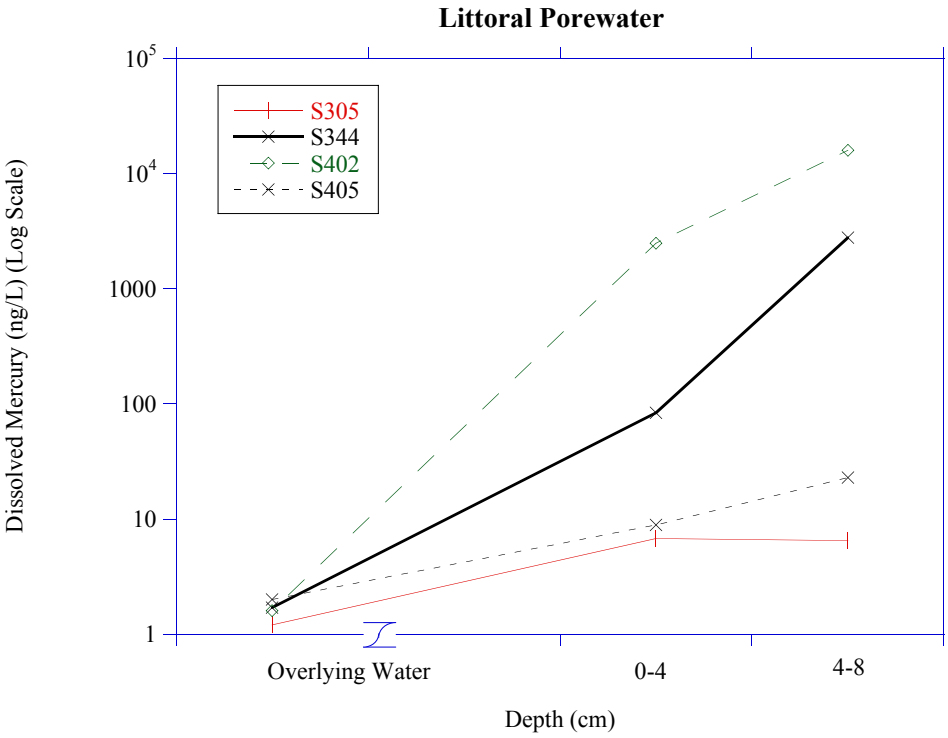
Source: Exponent, 2001c

Figure 6-5. Estimated chloride concentrations in porewater in Onondaga Lake



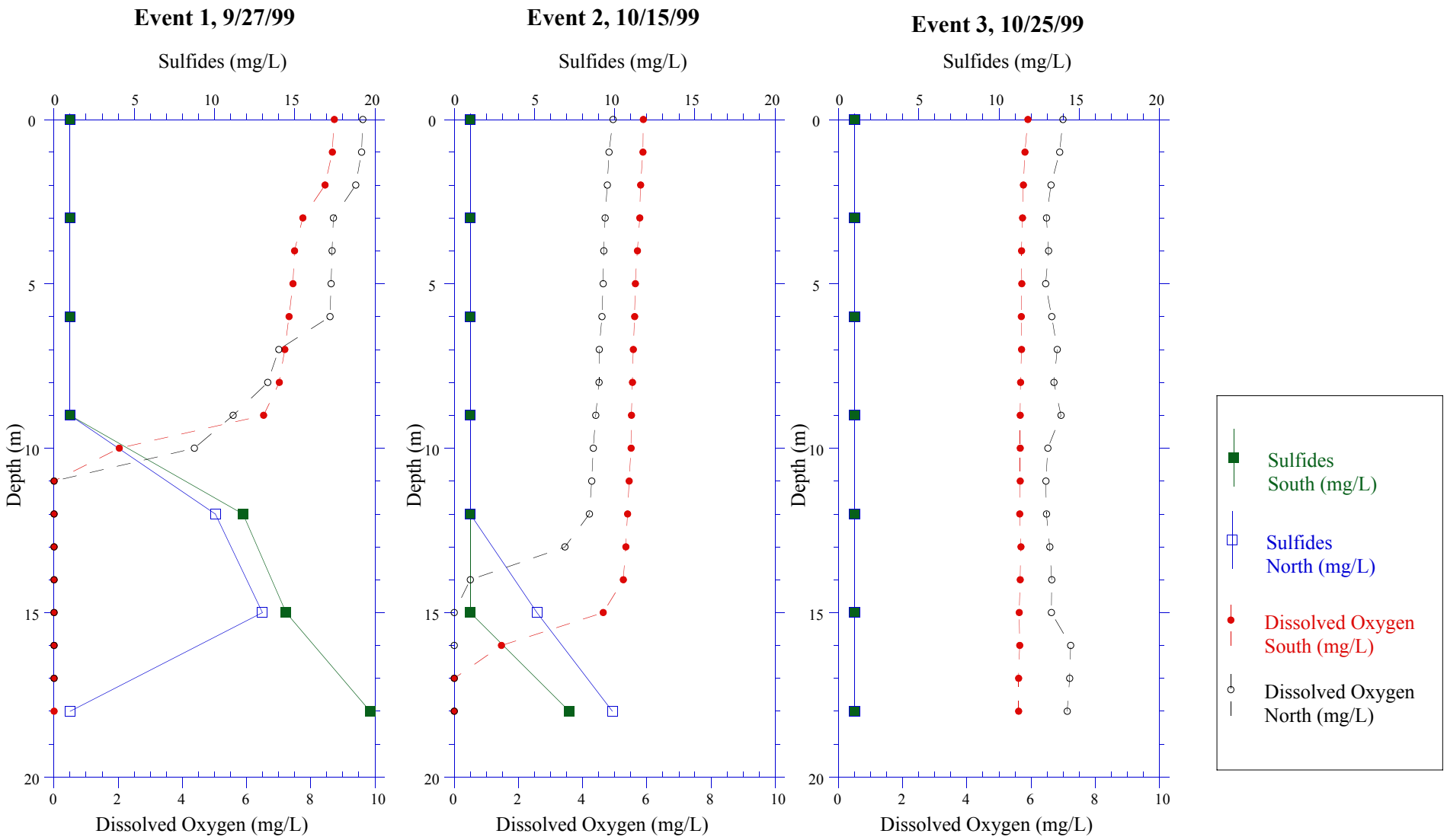
Onondaga Lake RI	Figure 6-6 Porewater Diffusion Zones	TAMS





TAMS

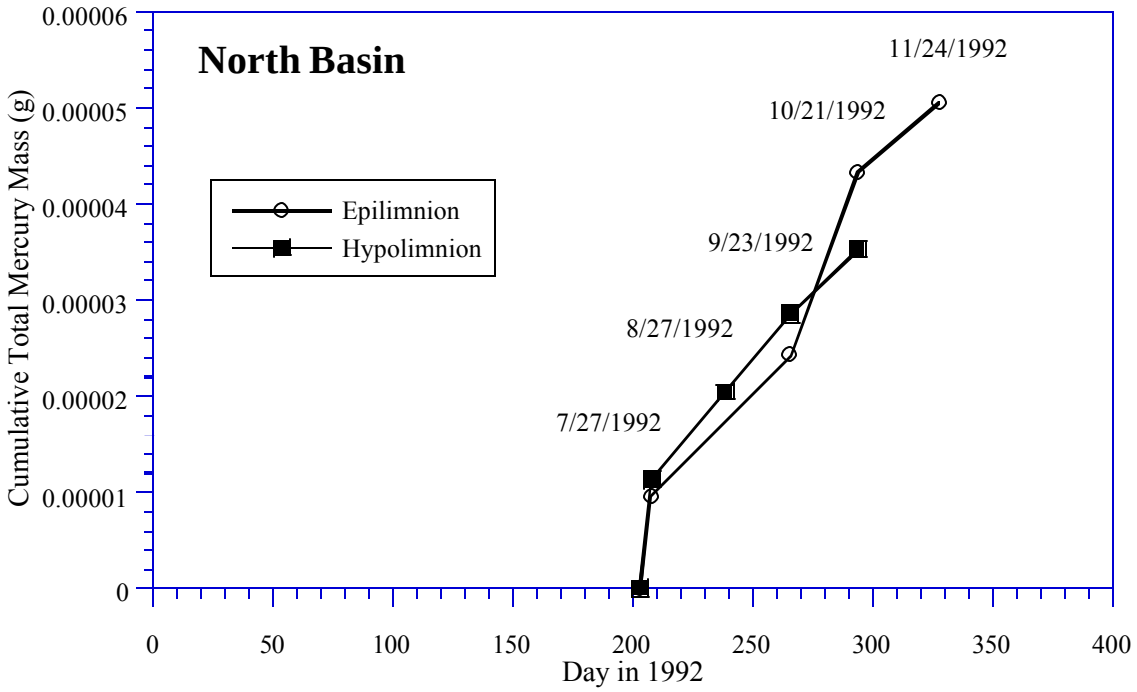
Figure 6-7
Mercury Detected in Sediment Porewater
from the Littoral and Profundal Zones in Onondaga Lake (2000)

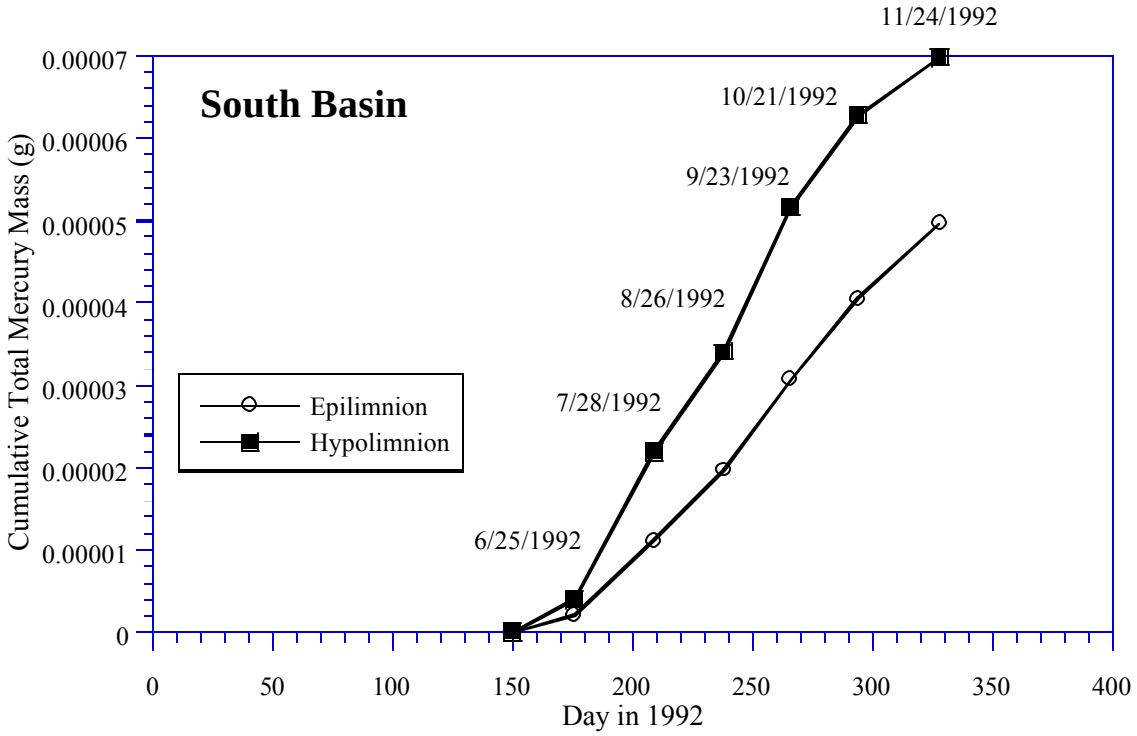


Note: During Events 4 and 5, sulfides were not detected.

TAMS

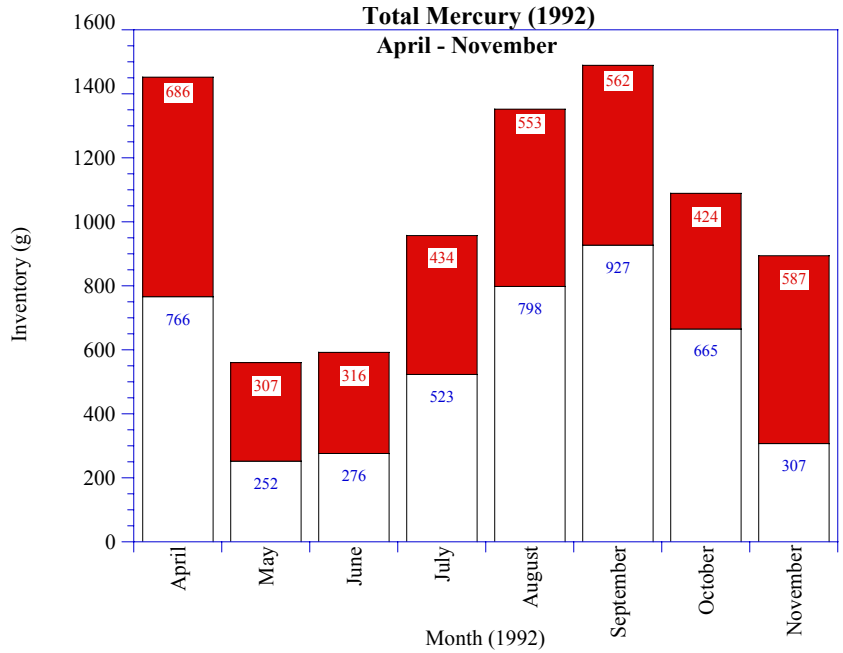
Figure 6-8
Sulfides and Dissolved Oxygen Profiles

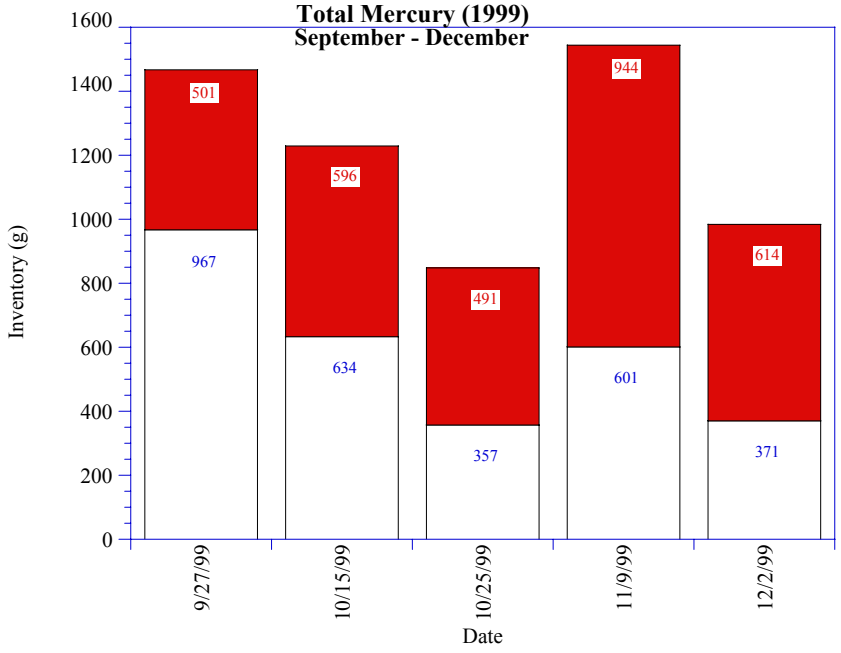


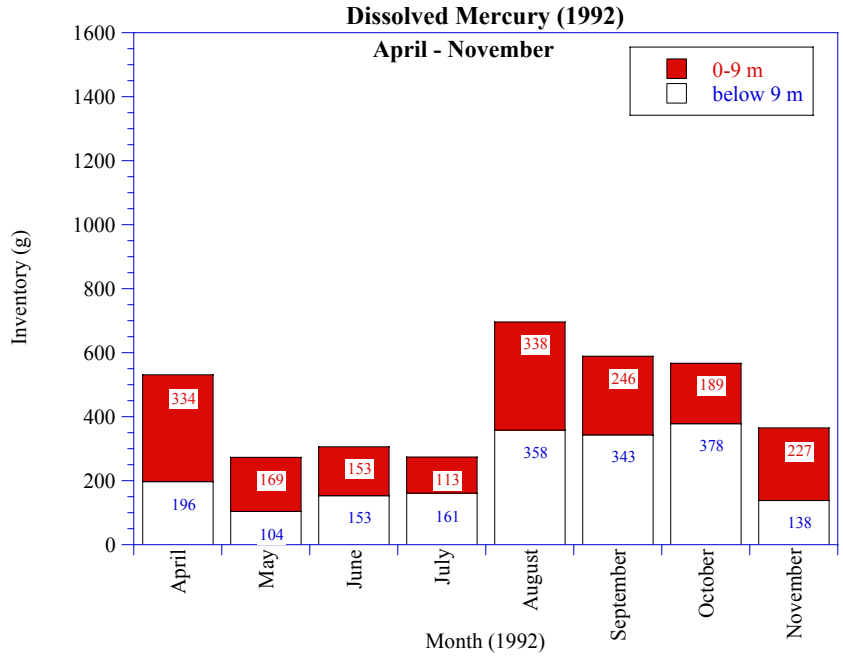


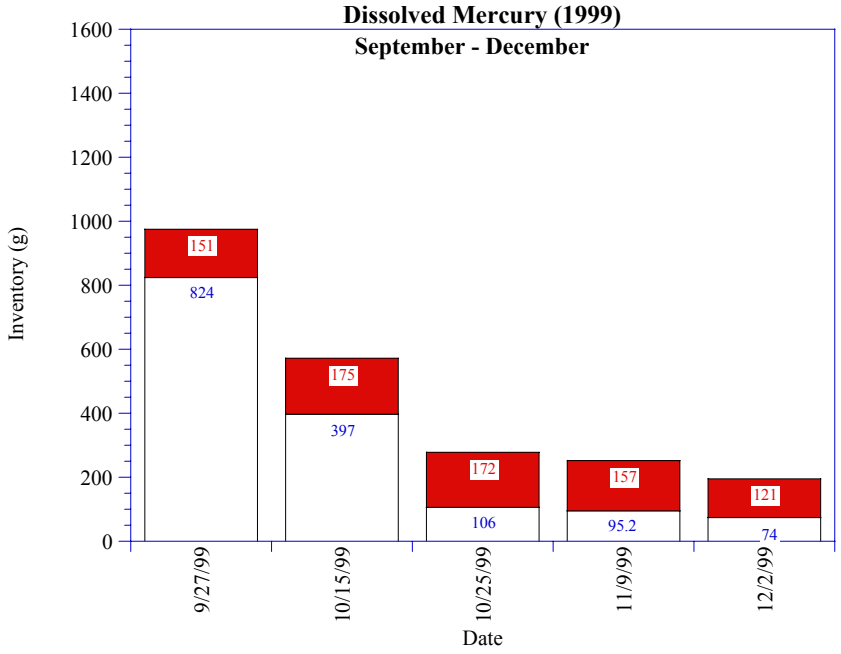
TAMS

Figure 6-9
Cumulative Mercury Load in Sediment Traps for 1992



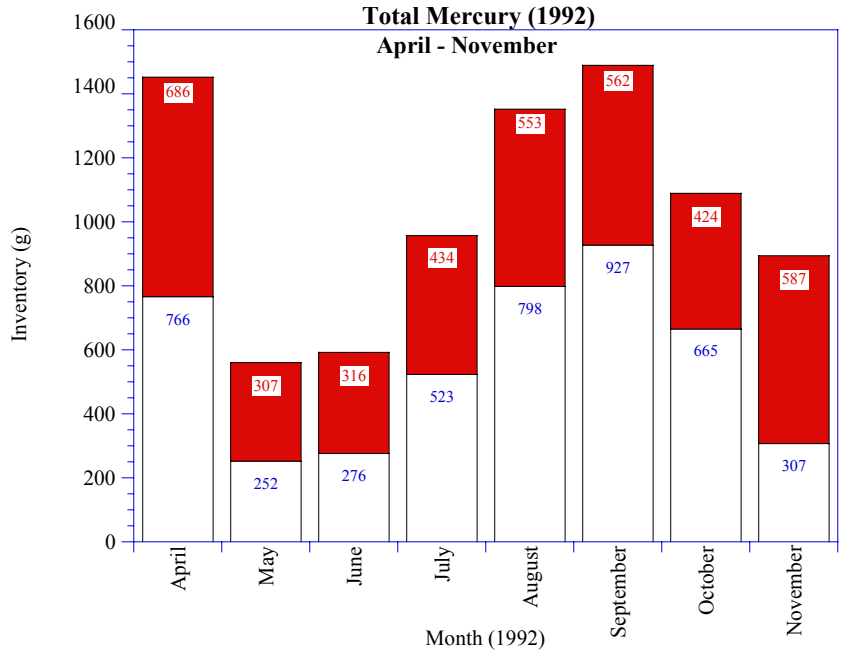


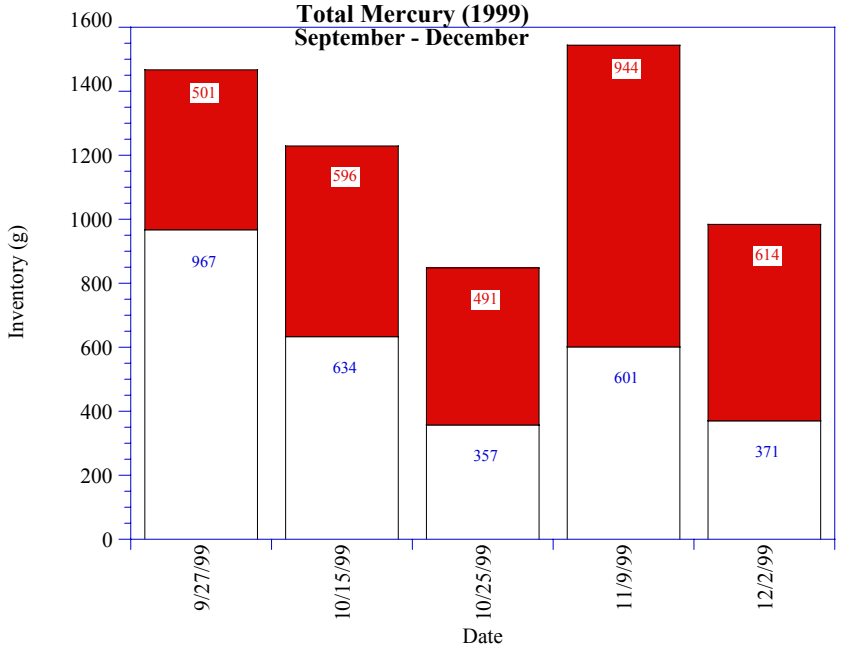


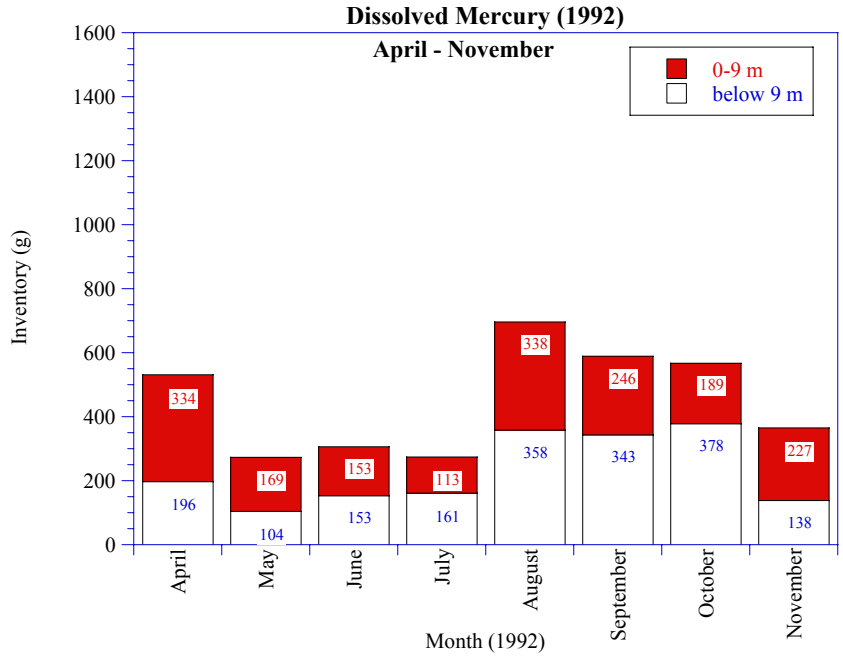


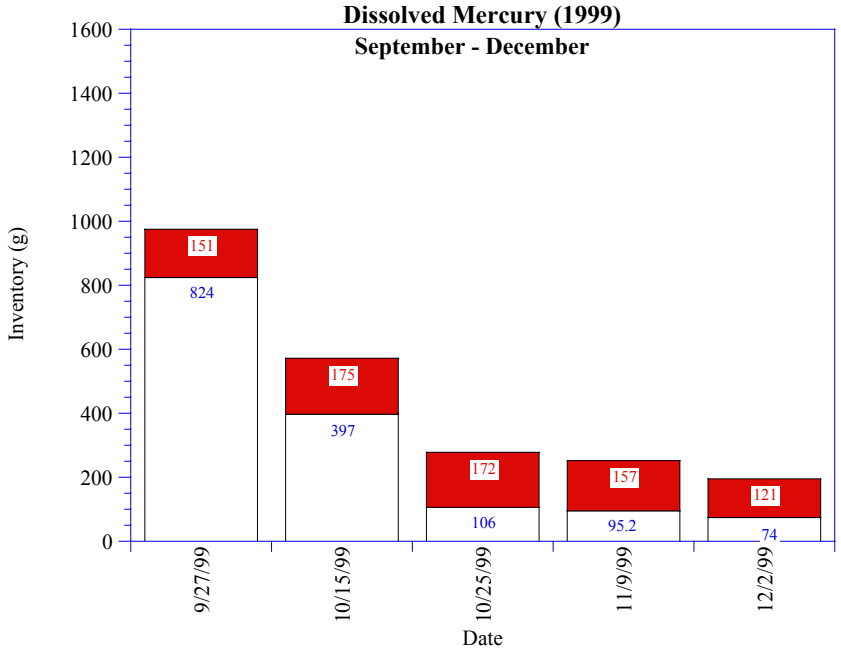
TAMS

Figure 6-10
Mercury Inventory in Surface Water of Onondaga Lake in 1992 and 1999



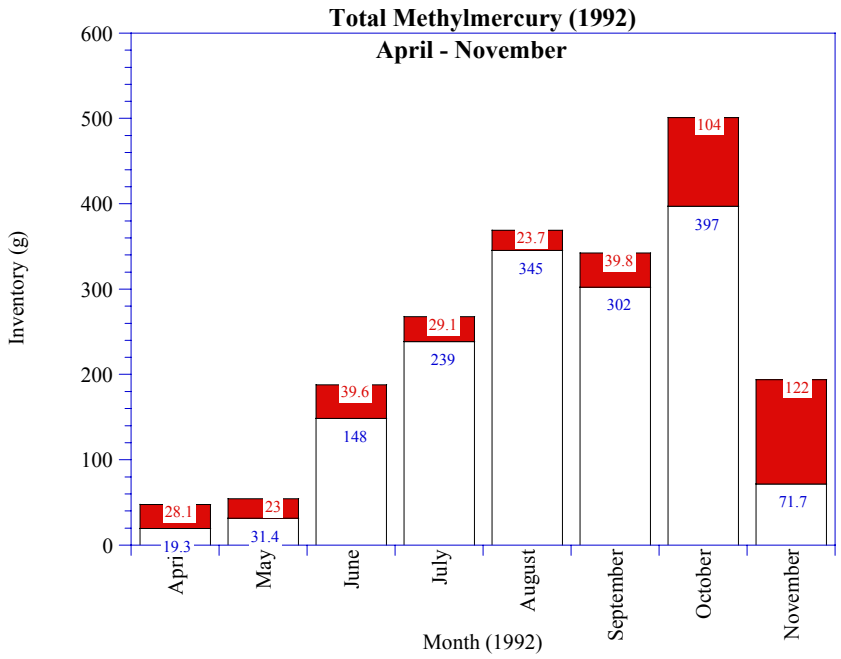


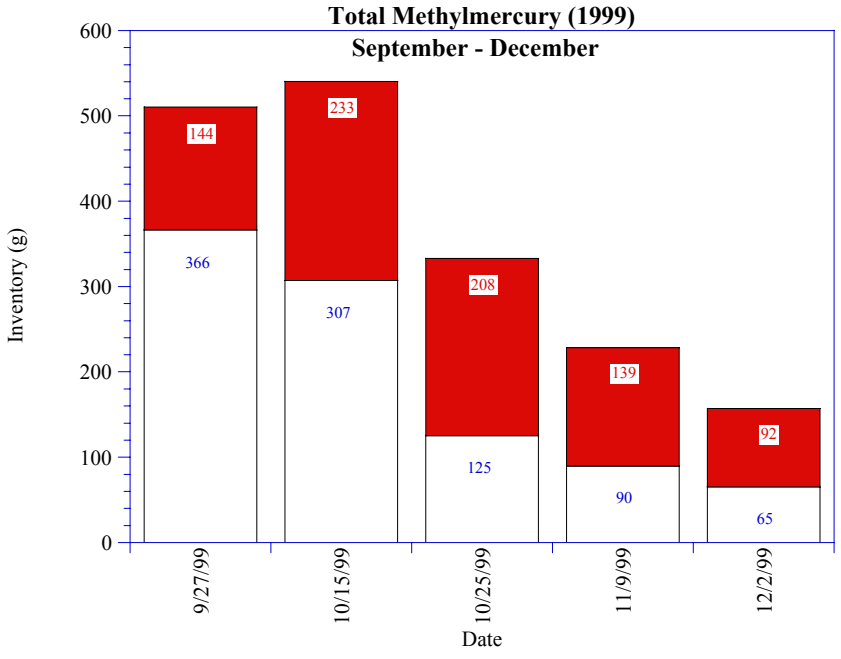


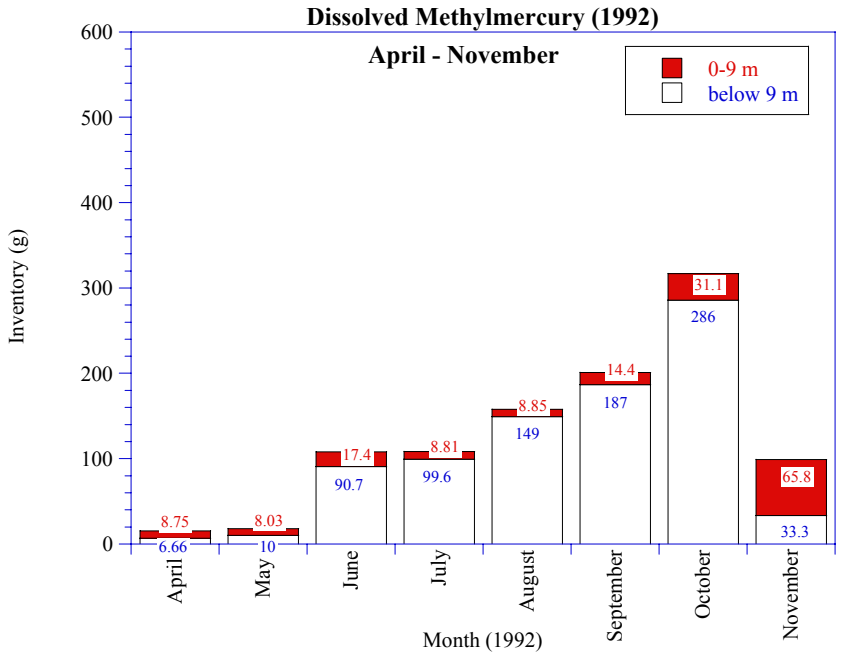


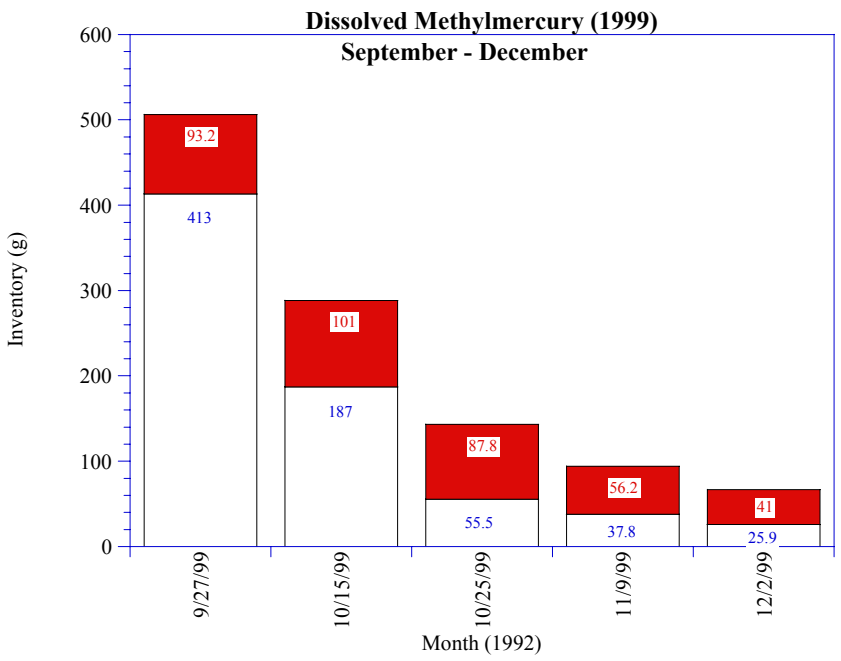
TAMS

Figure 6-10
Mercury Inventory in Surface Water of Onondaga Lake in 1992 and 1999



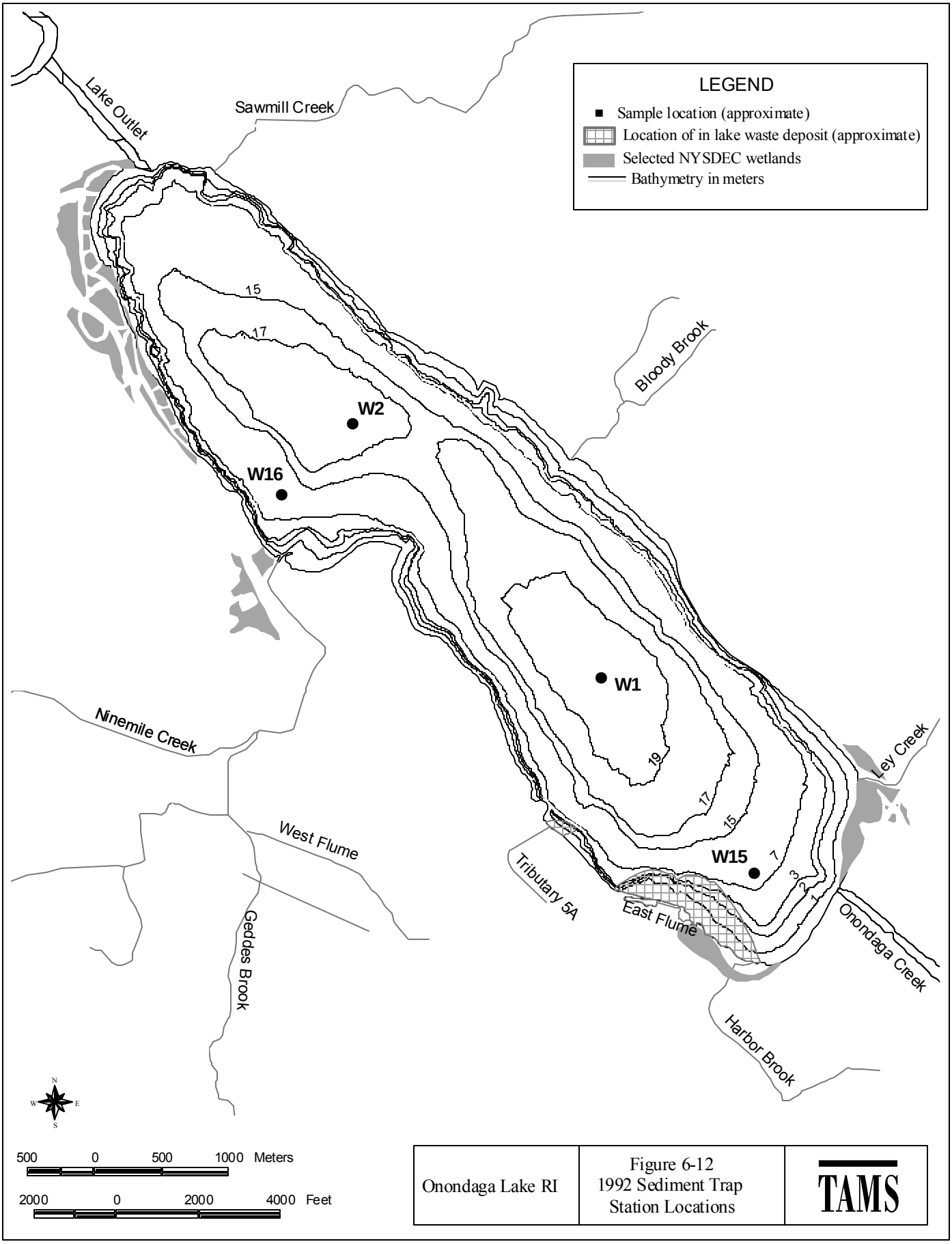


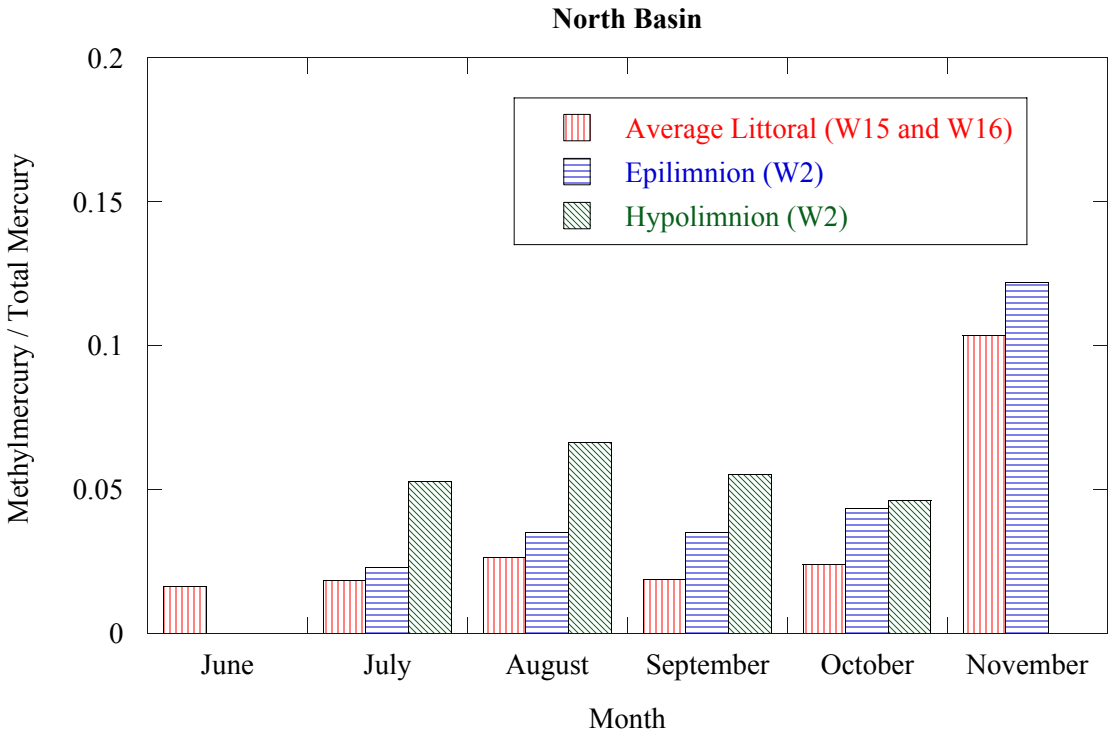


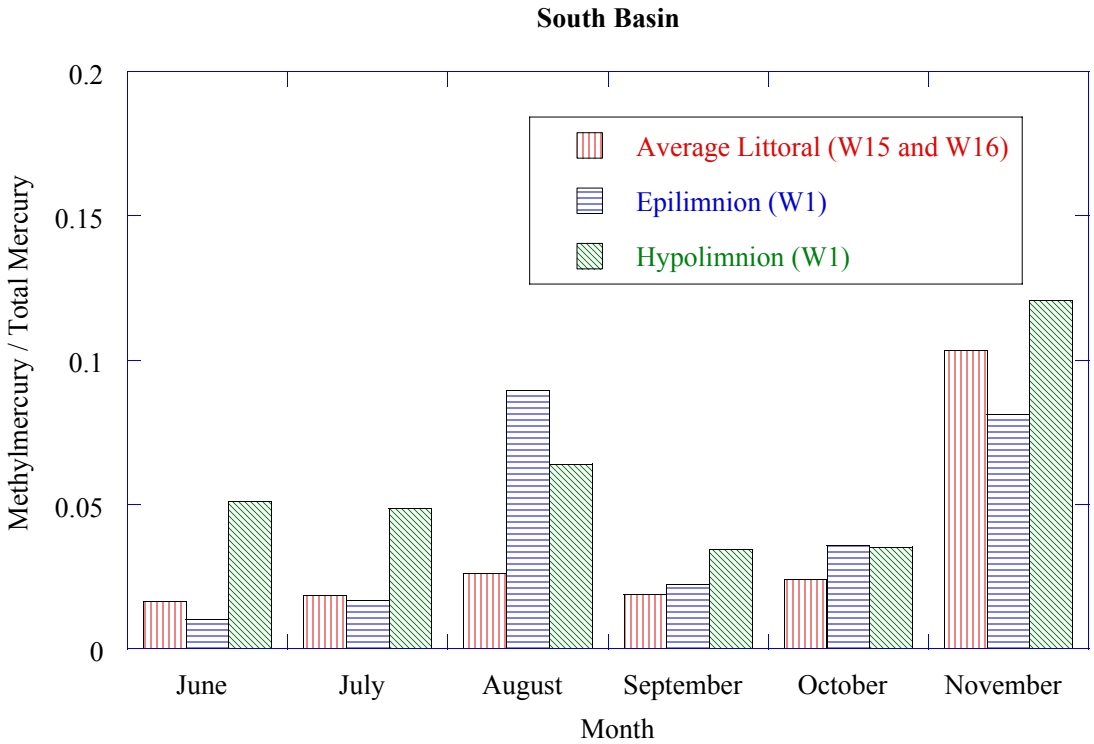


TAMS

Figure 6-11
Methylmercury Inventory in Surface Water of Onondaga Lake in 1992 and 1999


LEGEND
Sample location (approximate)
Location of in lake waste deposit (approximate)
Selected NYSDEC wetlands
Bathymetry in meters
Lake Outlet
Sawmill Creek
Bloody Brook
Ninemile Creek
West Flume
Geddes Brook
Tributary 5A
East Flume
Ley Creek
Onondaga Creek
Harbor Brook
W1
W2
W15
W16
15
17
19
17
15
7
3
1
N
W
E
S
500 0 500 1000 Meters
2000 0 2000 4000 Feet
Onondaga Lake RI
Figure 6-12
1992 Sediment Trap
Station Locations
TAMS

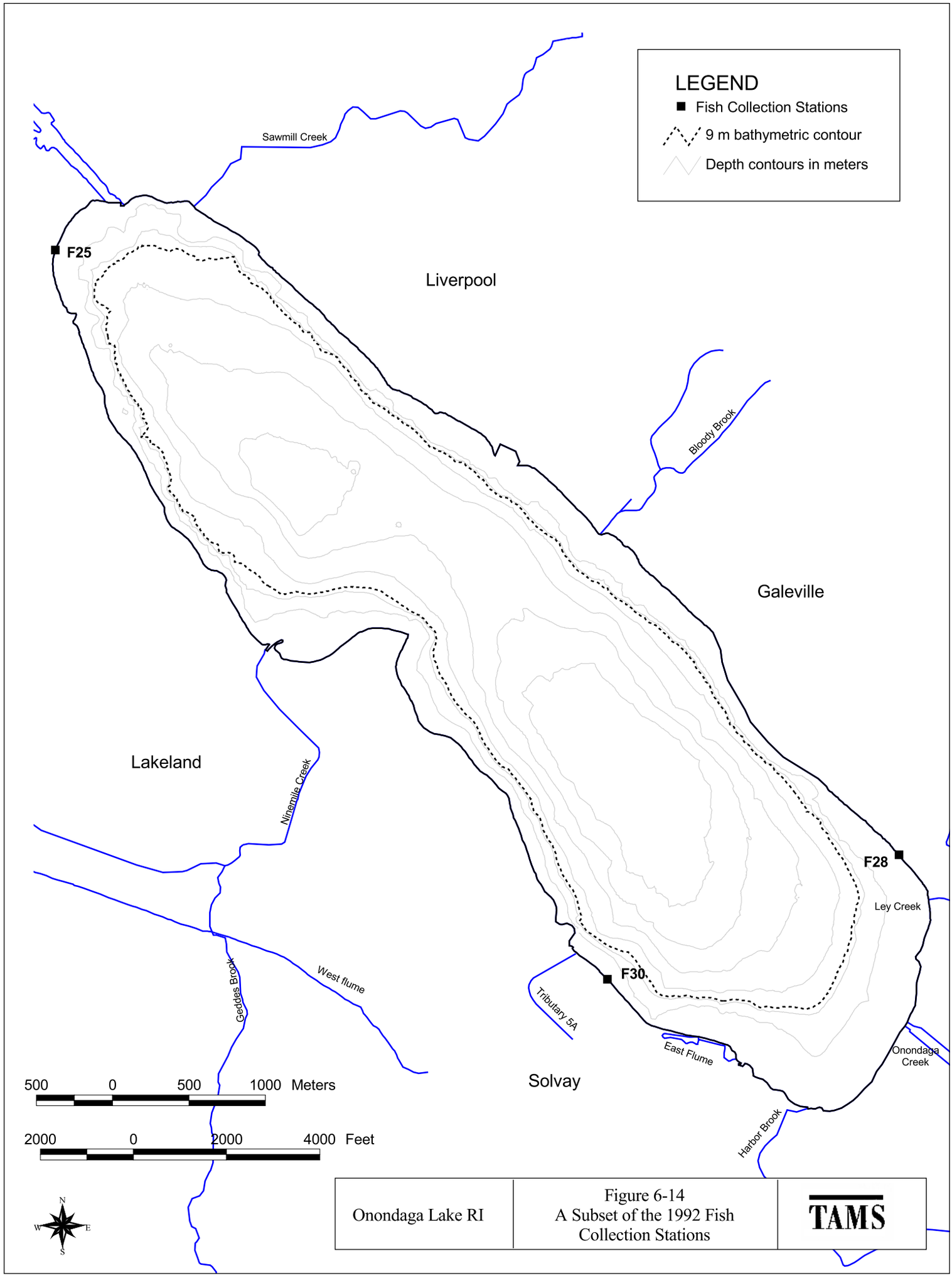




Note:
1. No data were available for the north basin from the hypolimnion in June and November and the epilimnion in June.

TAMS

Figure 6-13
Ratio of Methylmercury to Total Mercury from Sediment Trap Data from Onondaga Lake (1992)



Onondaga Lake RI	Figure 6-14 A Subset of the 1992 Fish Collection Stations	TAMS

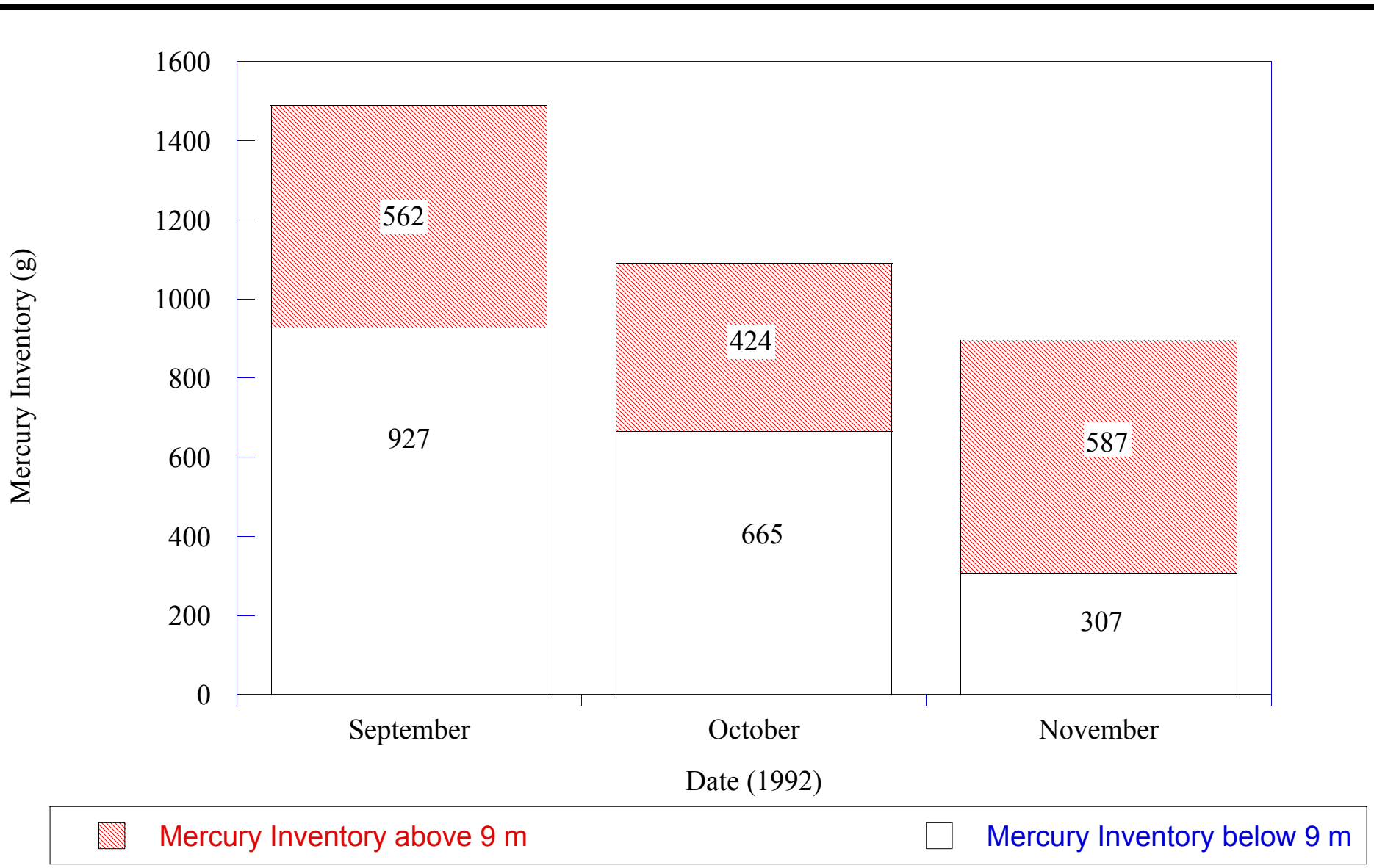


Figure 6-15
Mercury Inventory in Onondaga Lake (1992)

TAMS

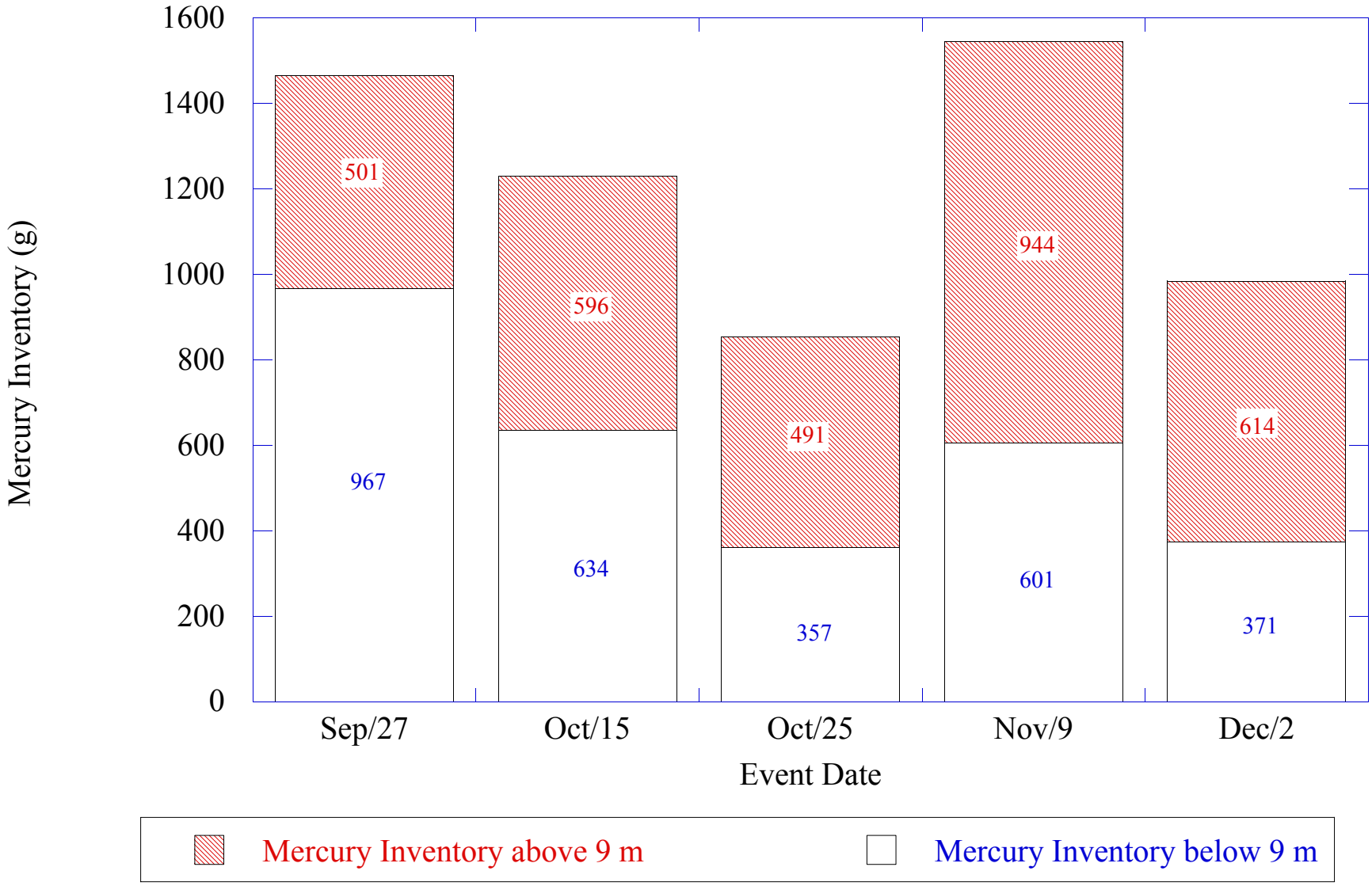
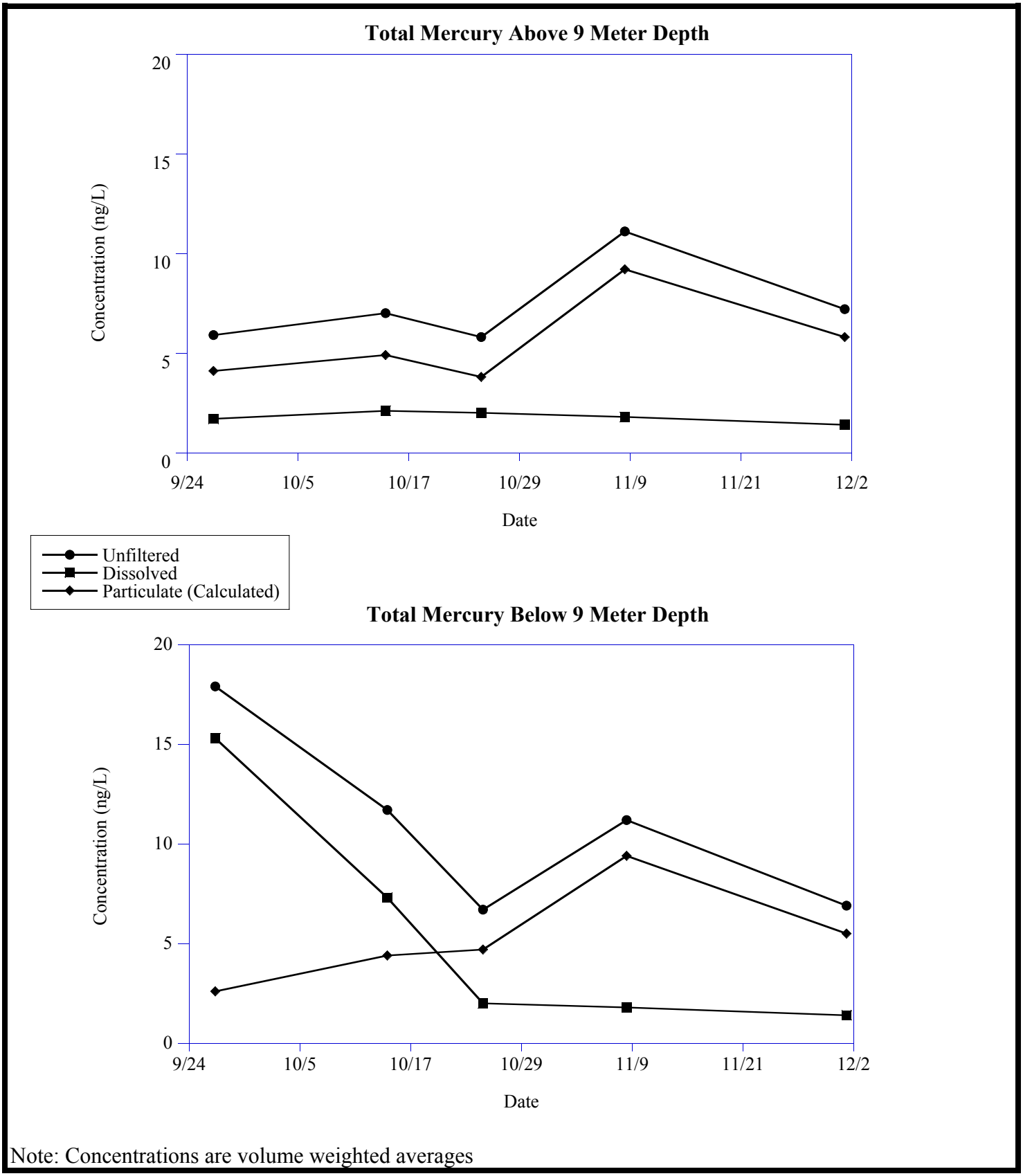


Figure 6-16
Mercury Inventory in Onondaga Lake (1999)

TAMS

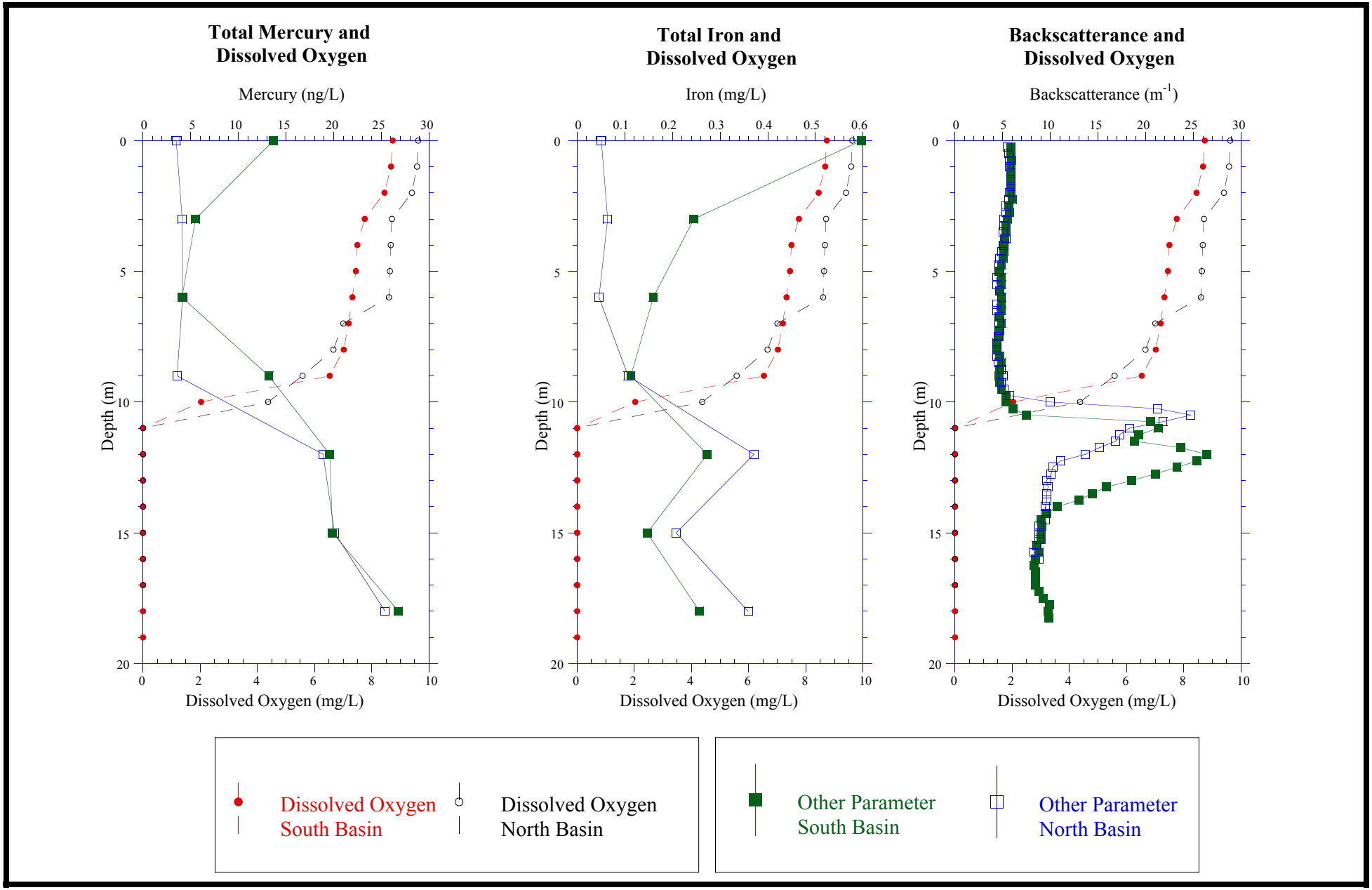


Note: Concentrations are volume weighted averages

Figure 6-17

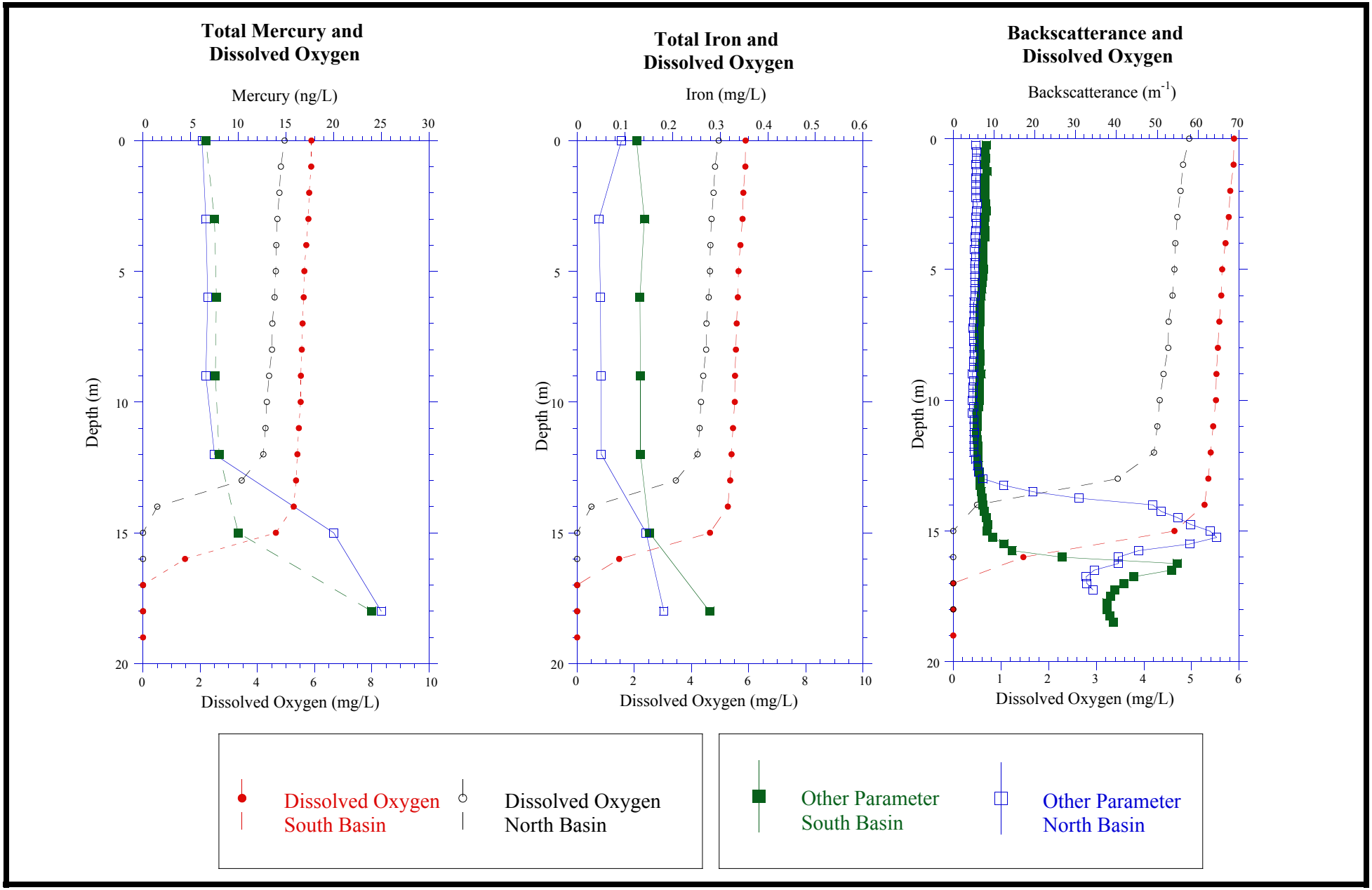
TAMS

Total Mercury Above and Below 9 Meter Depth (1999)



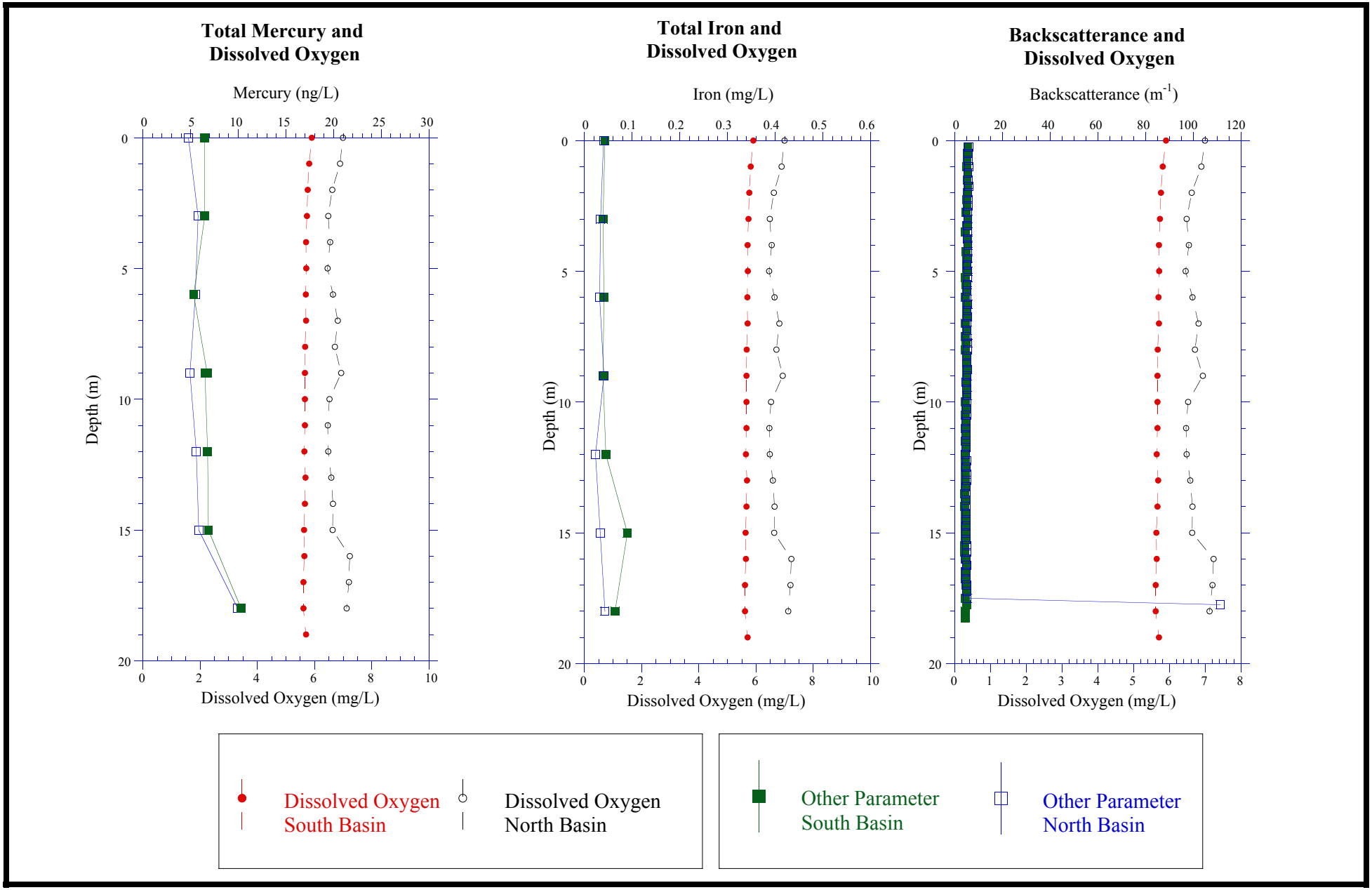
TAMS

Figure 6-18
Comparison of Total Mercury, Iron and Backscatterance for Event 1, 9/27/99



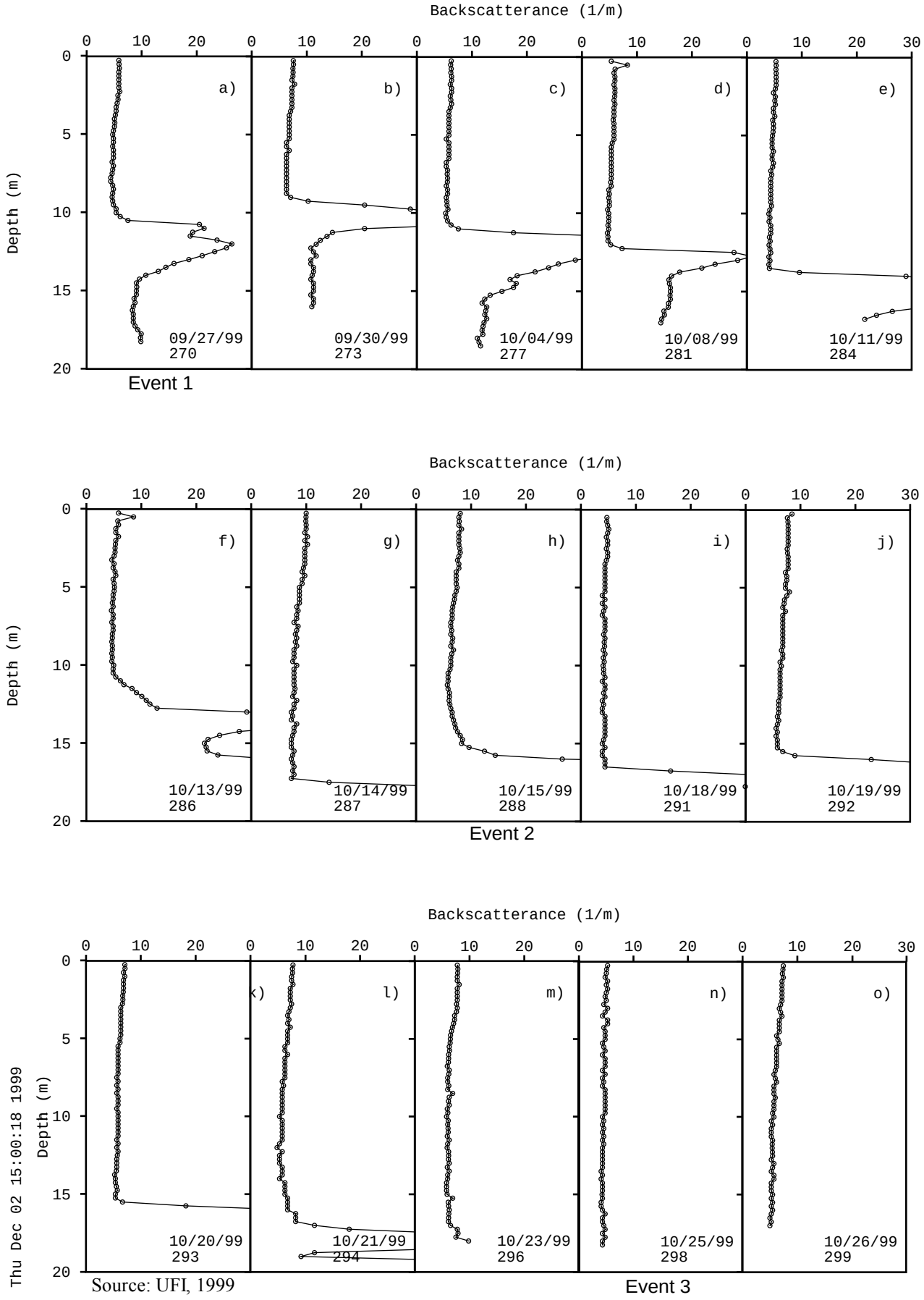
TAMS

Figure 6-19
Comparison of Total Mercury, Iron and Backscatterance for Event 2, 10/15/99



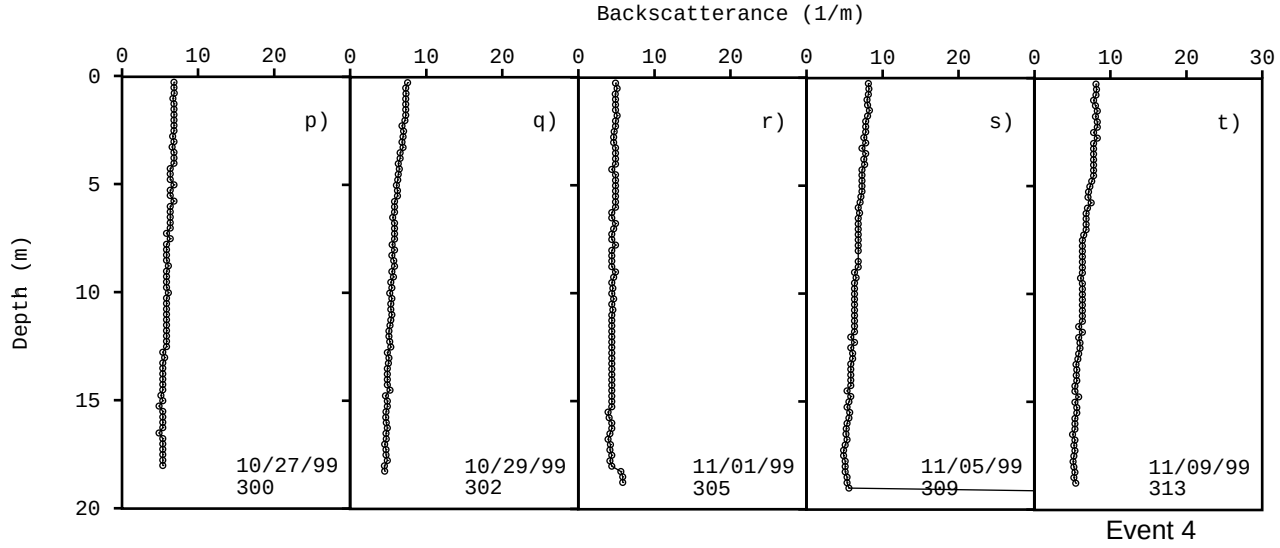
TAMS

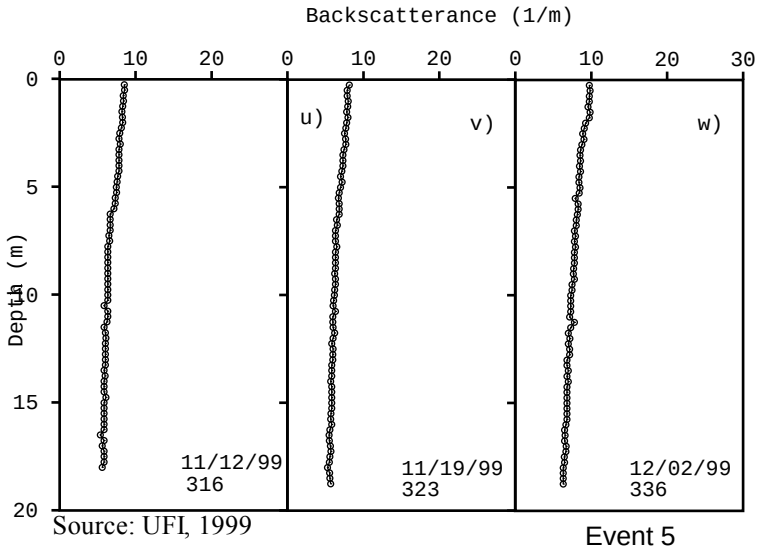
Figure 6-20
Comparison of Total Mercury, Iron and Backscatterance for Event 3, 10/25/99



Source: UFI, 1999

Figure 6-21
1999 Backscatterance Profiles for Onondaga Lake: South Deep

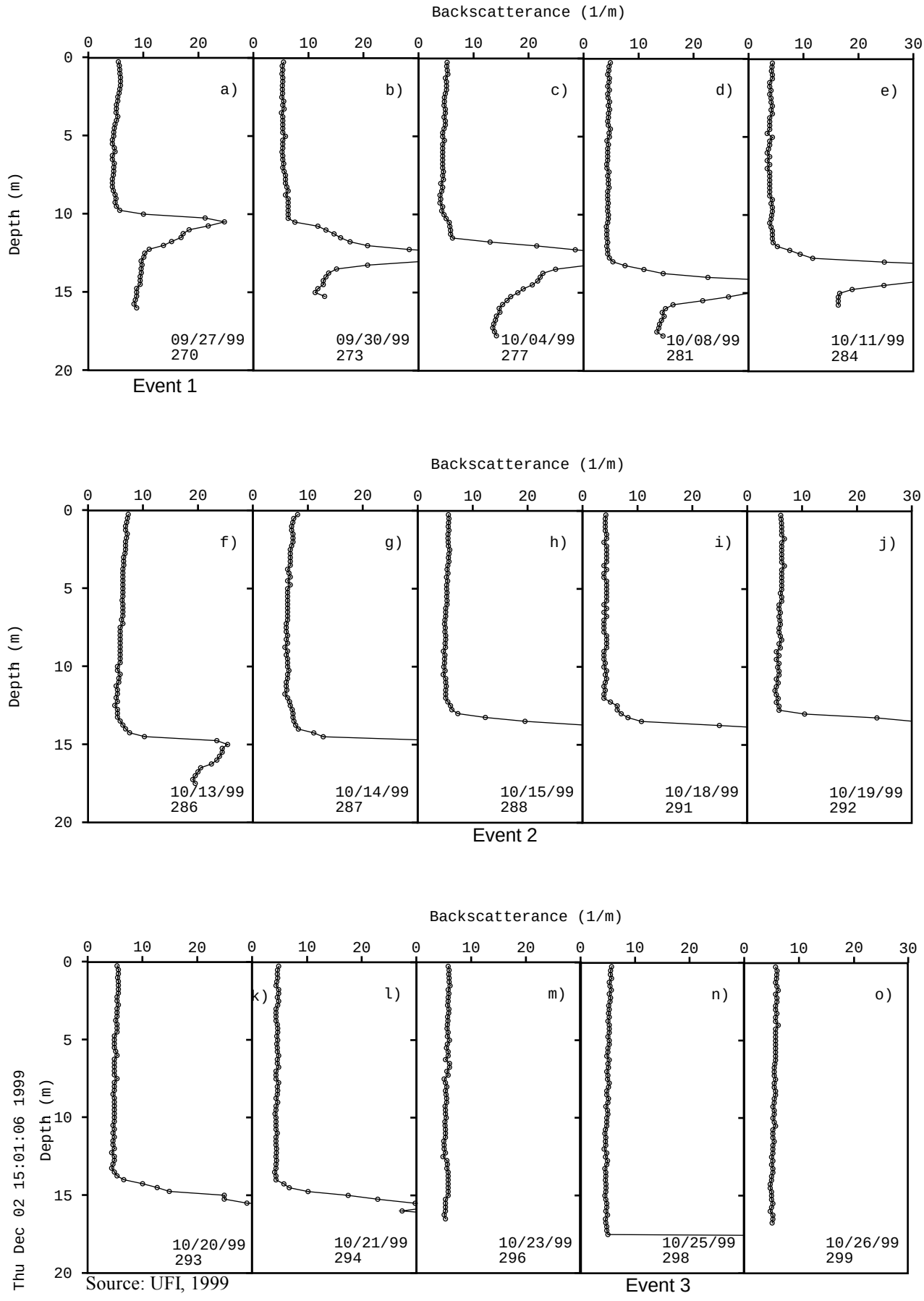




Source: UFI, 1999

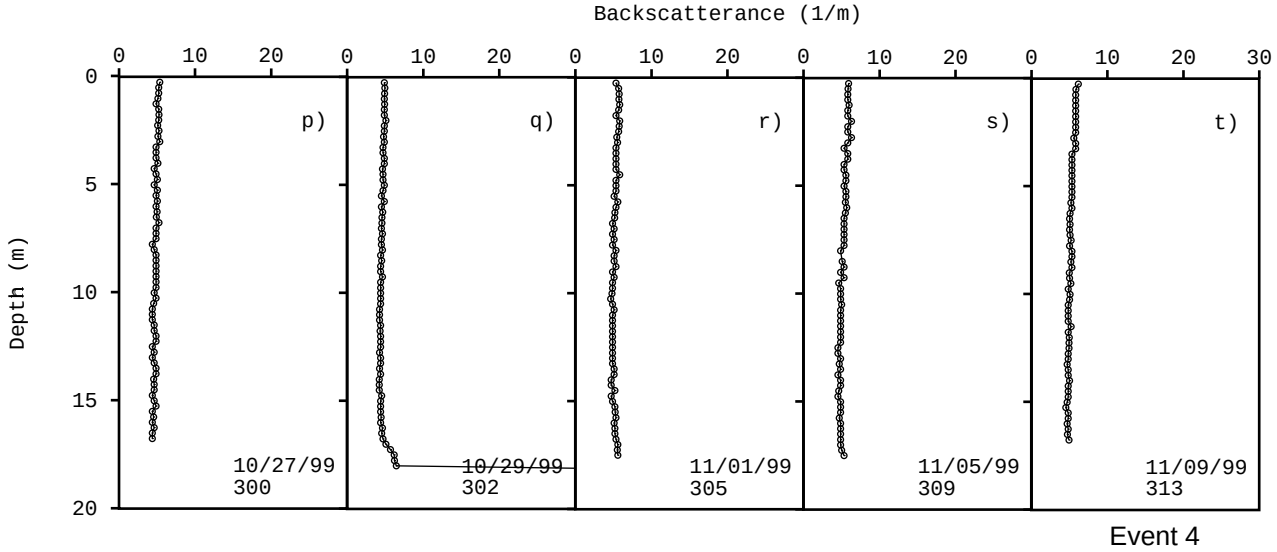
Thu Dec 02 15:00:18 1999

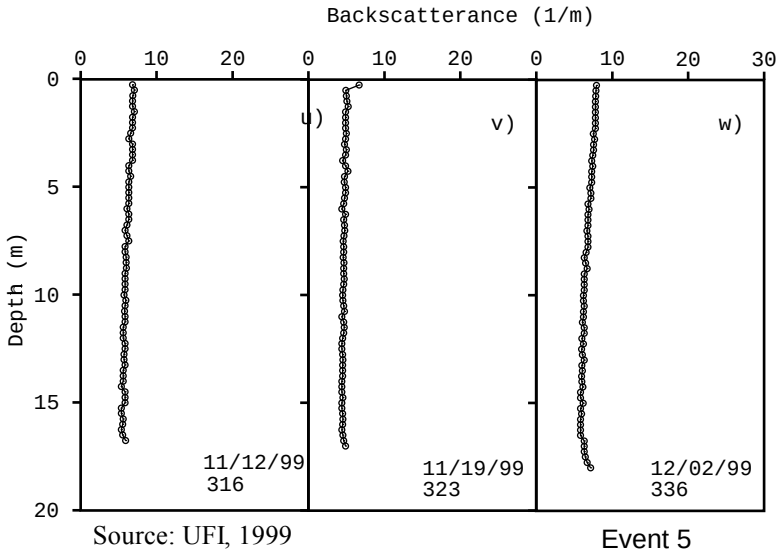
Figure 6-21
1999 Backscatterance Profiles for Onondaga Lake: South Deep



Source: UFI, 1999

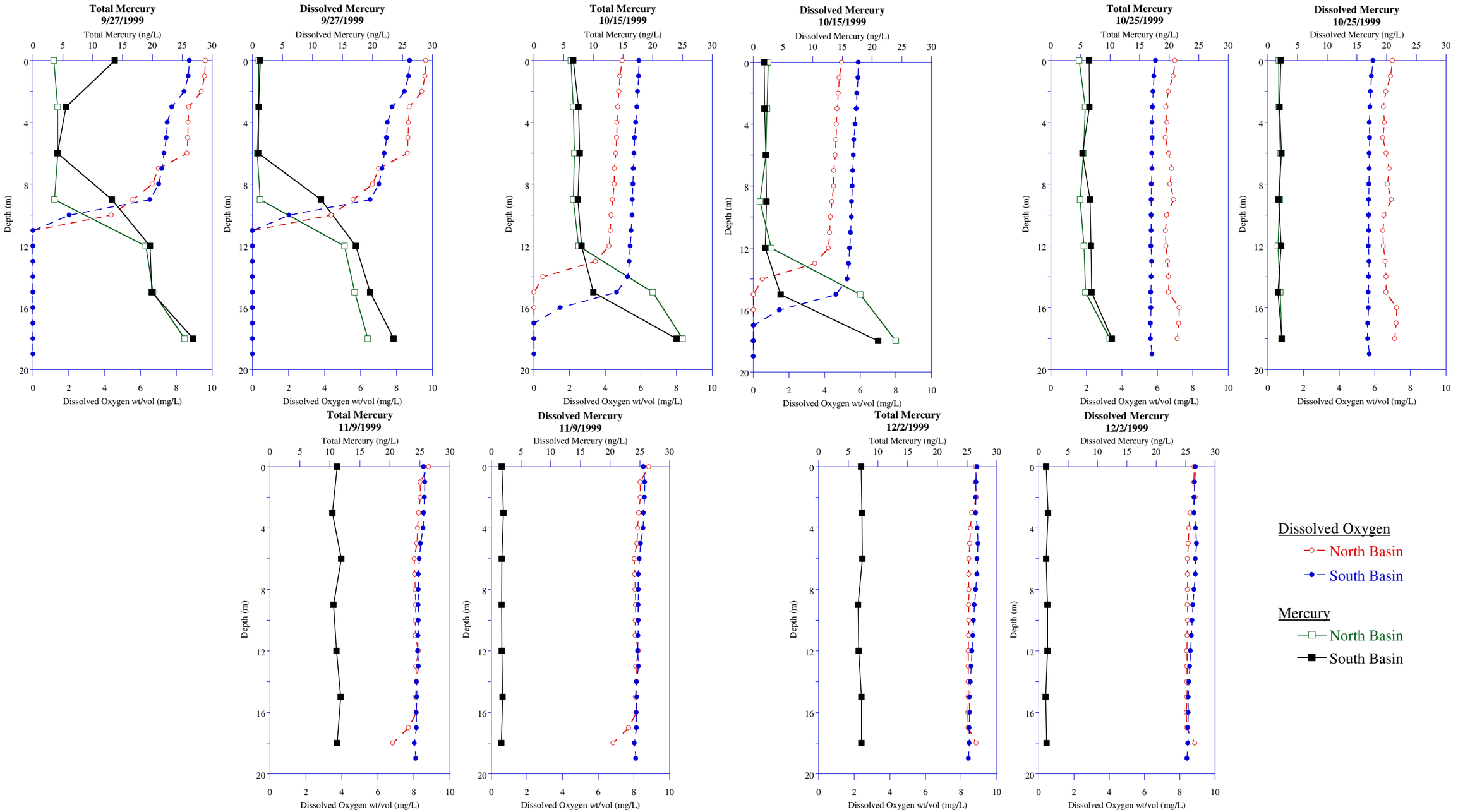
Figure 6-22
1999 Backscatterance Profiles for Onondaga Lake: North Deep





Thu Dec 02 15:01:06 1999

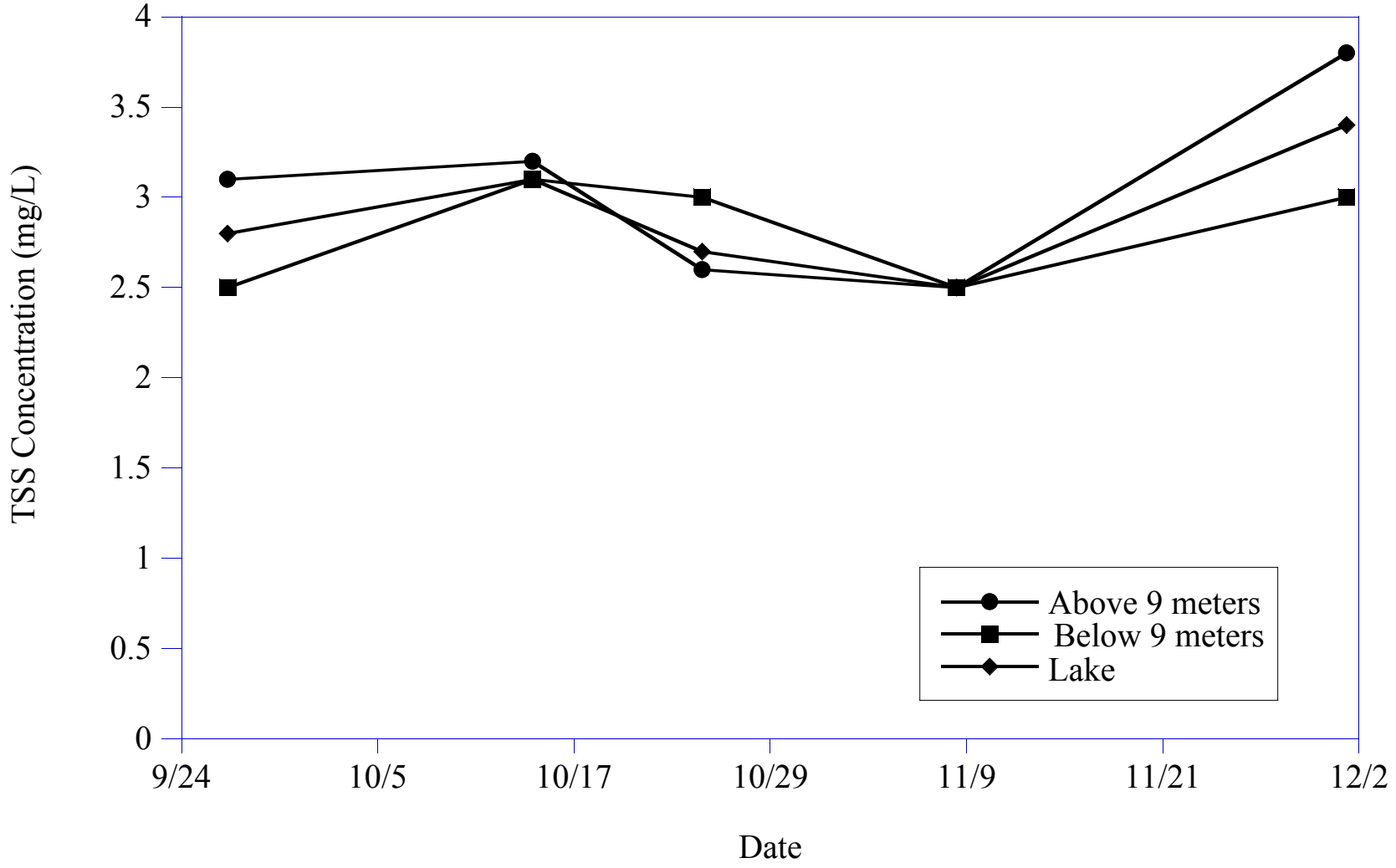
Figure 6-22
1999 Backscatterance Profiles for Onondaga Lake: North Deep



Note: The north basin was not analyzed for mercury for 11/9/99 or 12/2/99.

Figure 6-23
Mercury and Dissolved Oxygen Profiles

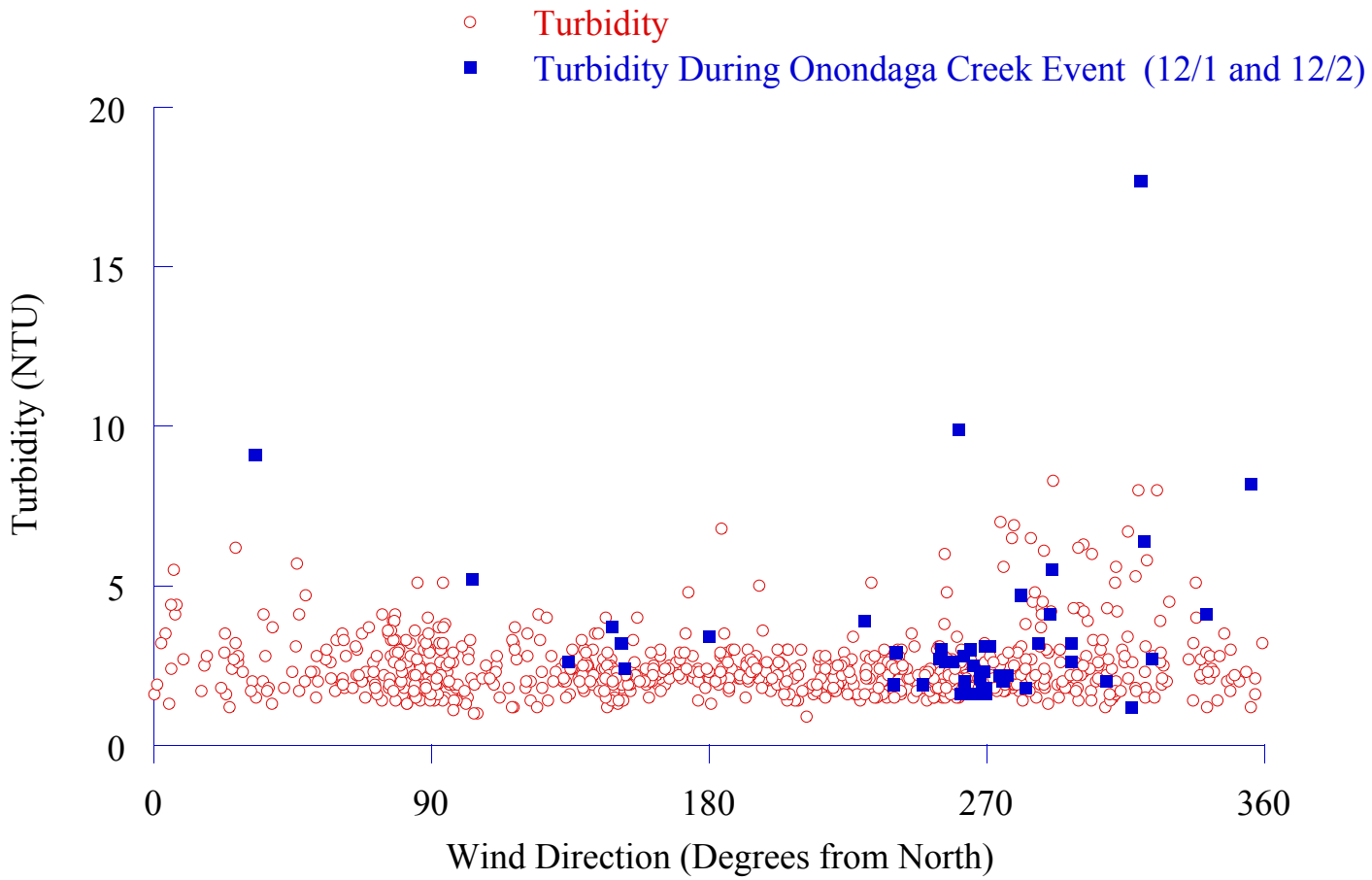
TAMS



Note: Concentrations are volume weighted averages

Figure 6-24
Total TSS in Onondaga Lake (1999)

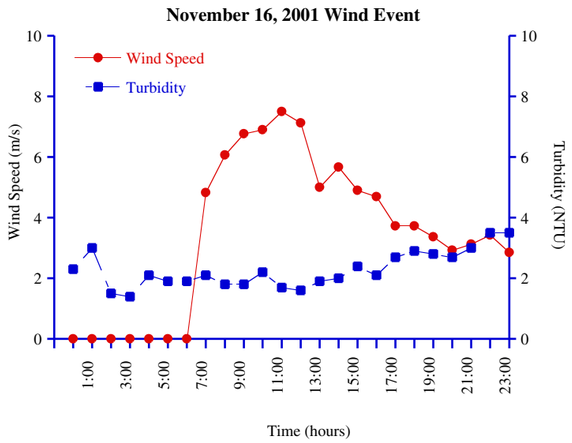
TAMS

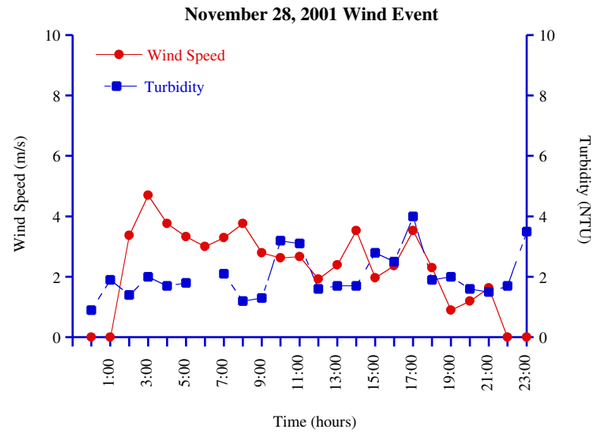


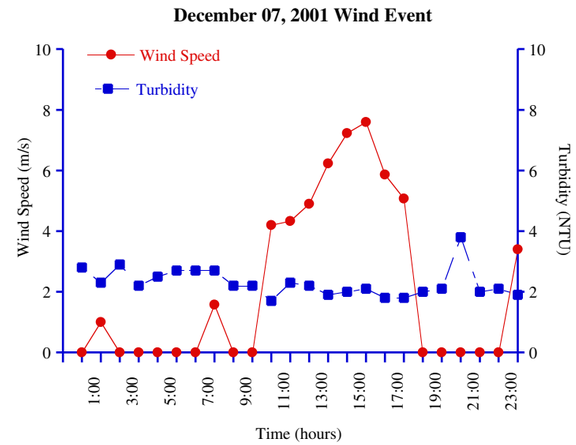
Note:
1. Data were collected hourly from November 14, 2001 through December 26, 2001, excluding December 3.

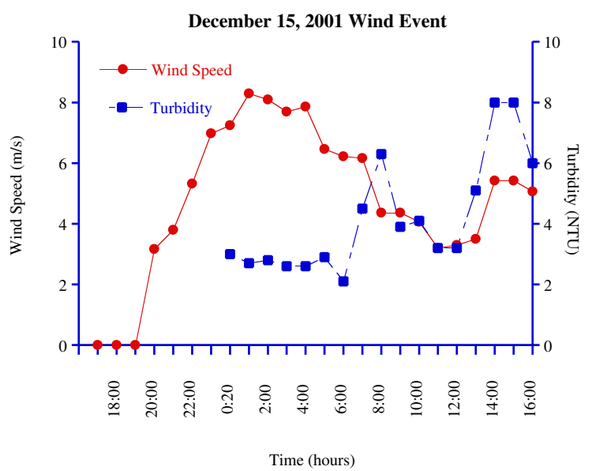
TAMS

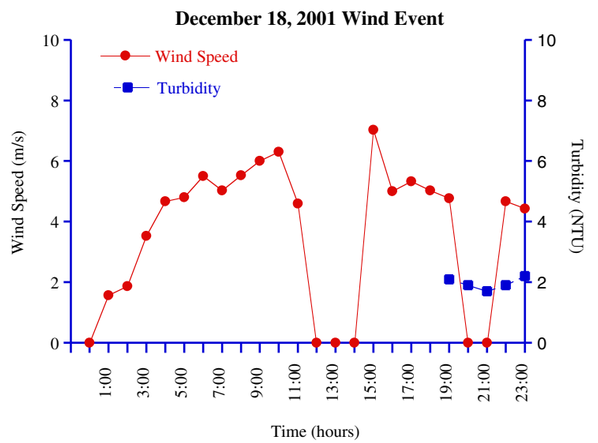
Figure 6-25
Turbidity and Wind Direction in Onondaga Lake (2001)

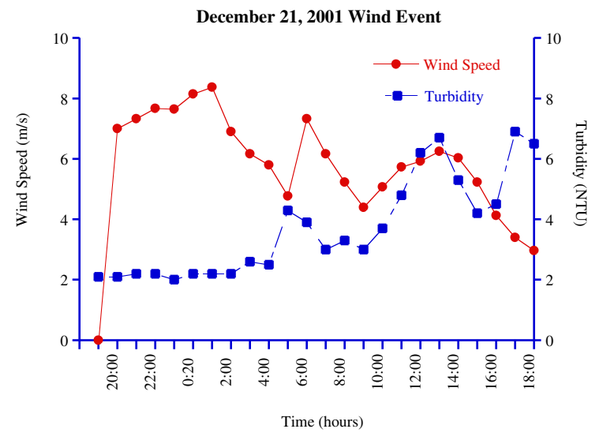








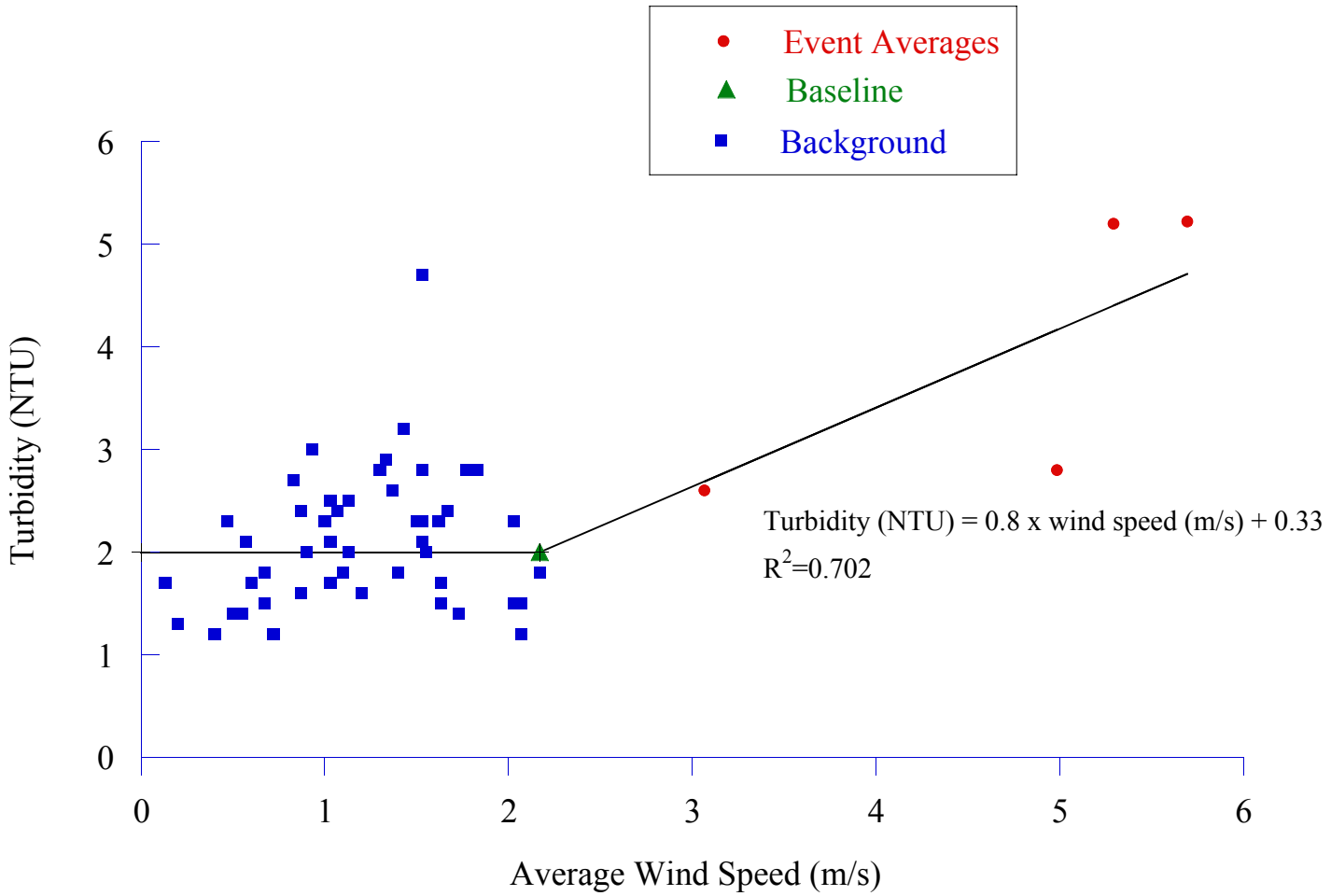




Note:
1. For wind speed, only data for northwest winds are included. For all others, the wind speed is set to zero.

TAMS

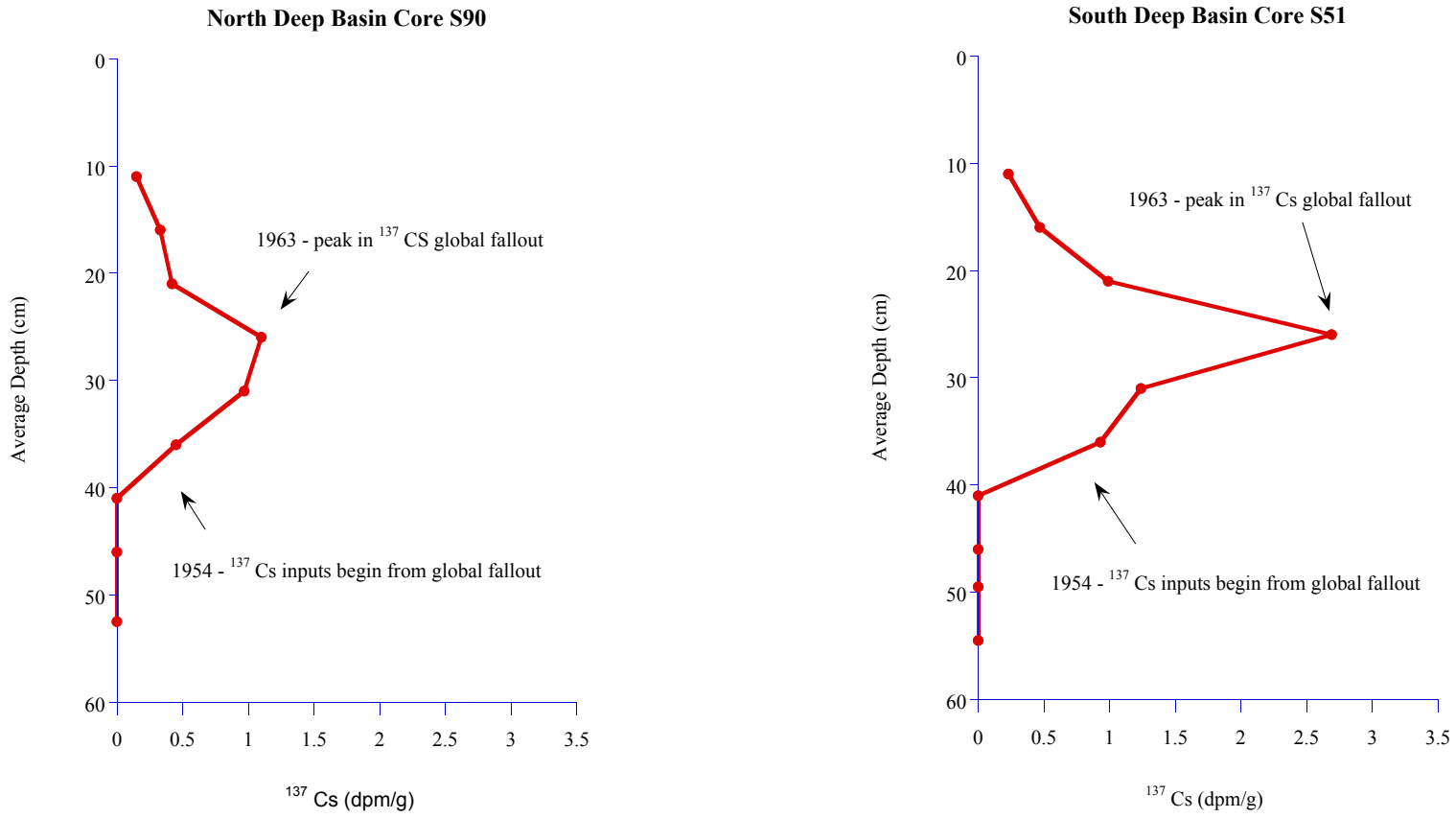
Figure 6-26
Turbidity and Wind Speed During Wind Events (2001) in Onondaga Lake



Notes:
1. These data were collected hourly from November 14, 2001 through December 26, 2001, excluding December 3.
2. Raw data used as described in Section 6.1.3.
3. Event averages include data for northwest winds collected on November 16, November 28, December 15, and December 21.
4. The baseline is the average of all data for northwest winds with speeds less than 2.17 m/s.
5. Background points include data for northwest winds with speeds less than 2.17 m/s.

TAMS

Figure 6-27
Turbidity and Average Wind Speed in Onondaga Lake (2001)



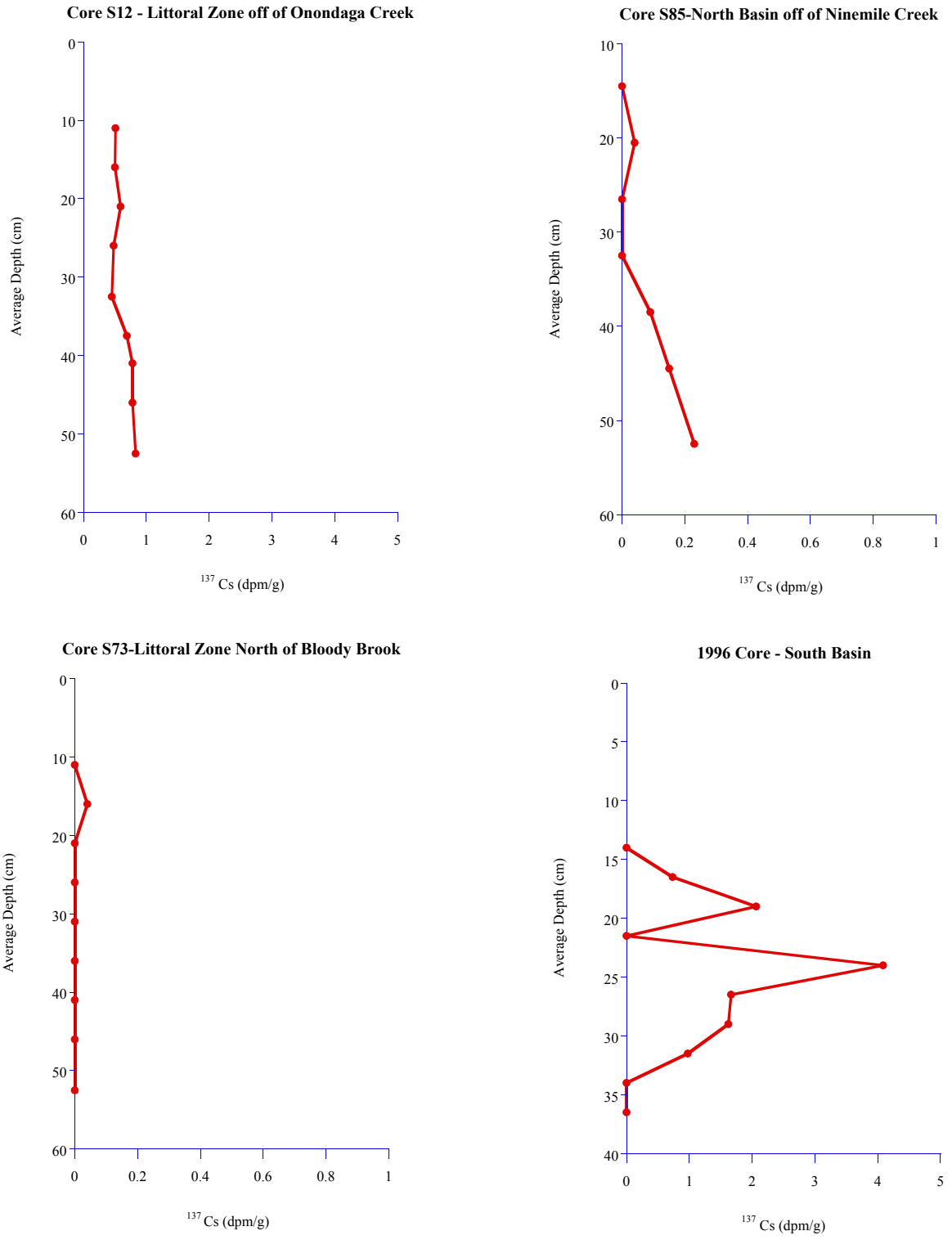
Note:

137 Cs was not analyzed at every depth interval where metals were analyzed or above 10 cm.

TAMS

Figure 6-28

137 Cs Profiles in Sediment Cores from the Deep Basins of Onondaga Lake (1992)



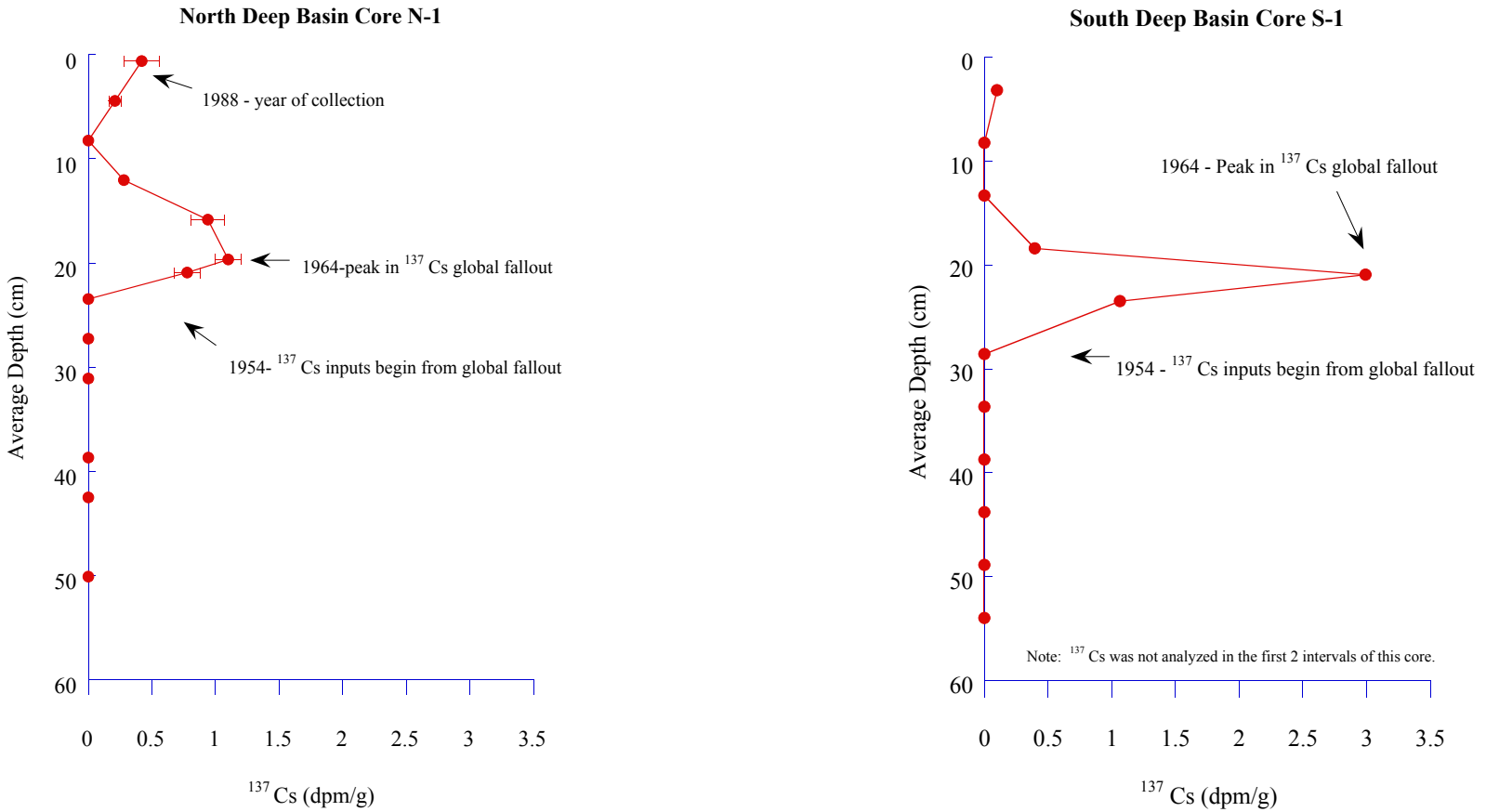
Note:

^{137} Cs was not analyzed in every depth interval where metals were analyzed or above 10 cm.

TAMS

Figure 6-29

^{137} Cs Profiles in Sediment Cores from Onondaga Lake (1992, 1996)

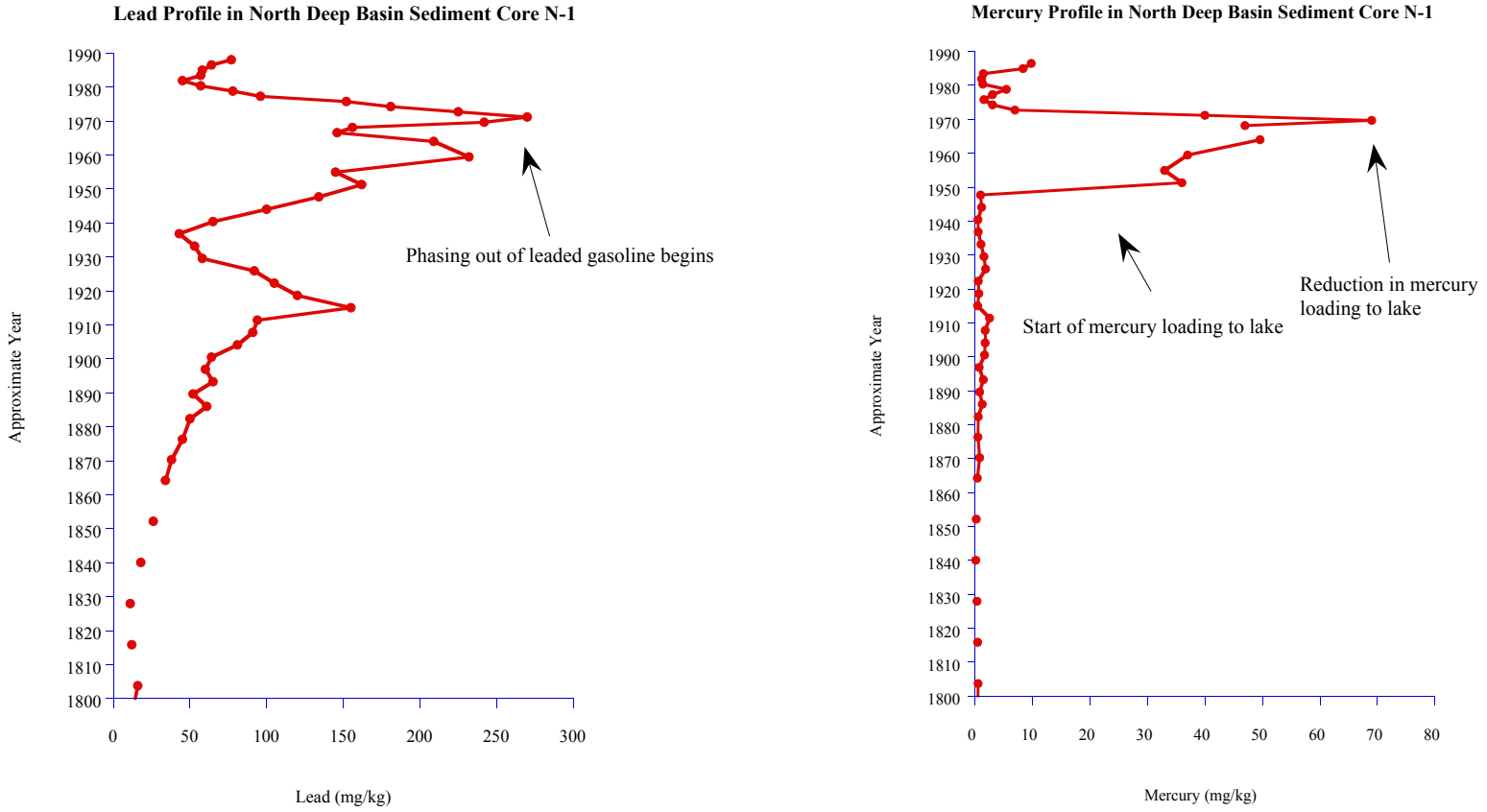


Source: Data from Rowell, 1992.

TAMS

Figure 6-30

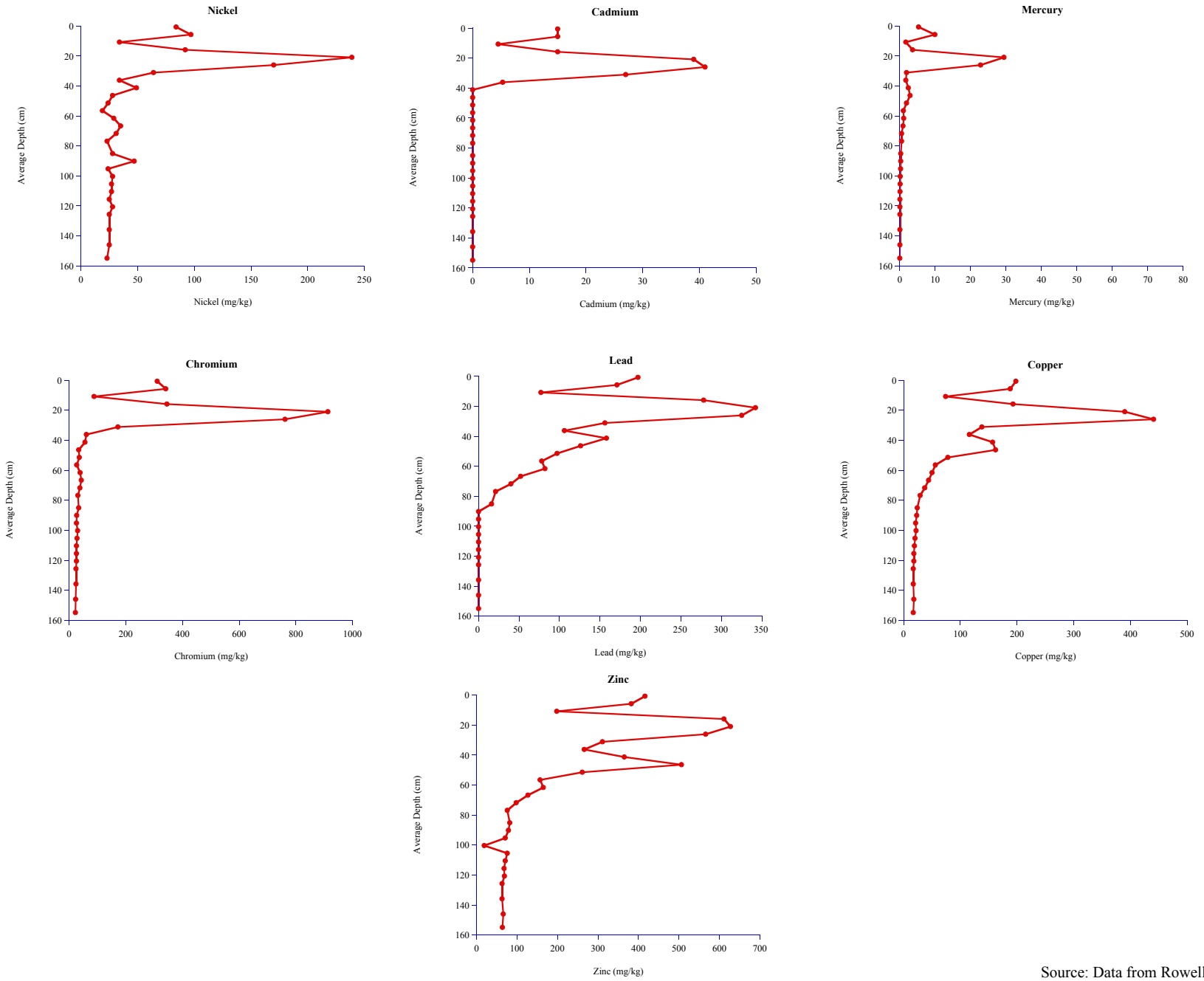
^{137}Cs Profiles in Sediment Cores from the Deep Basins of Onondaga Lake (1988)



Source: Data from Rowell, 1992.

Figure 6-31
Lead and Mercury Profiles in Sediment Cores from the North Deep Basin of Onondaga Lake (1988)

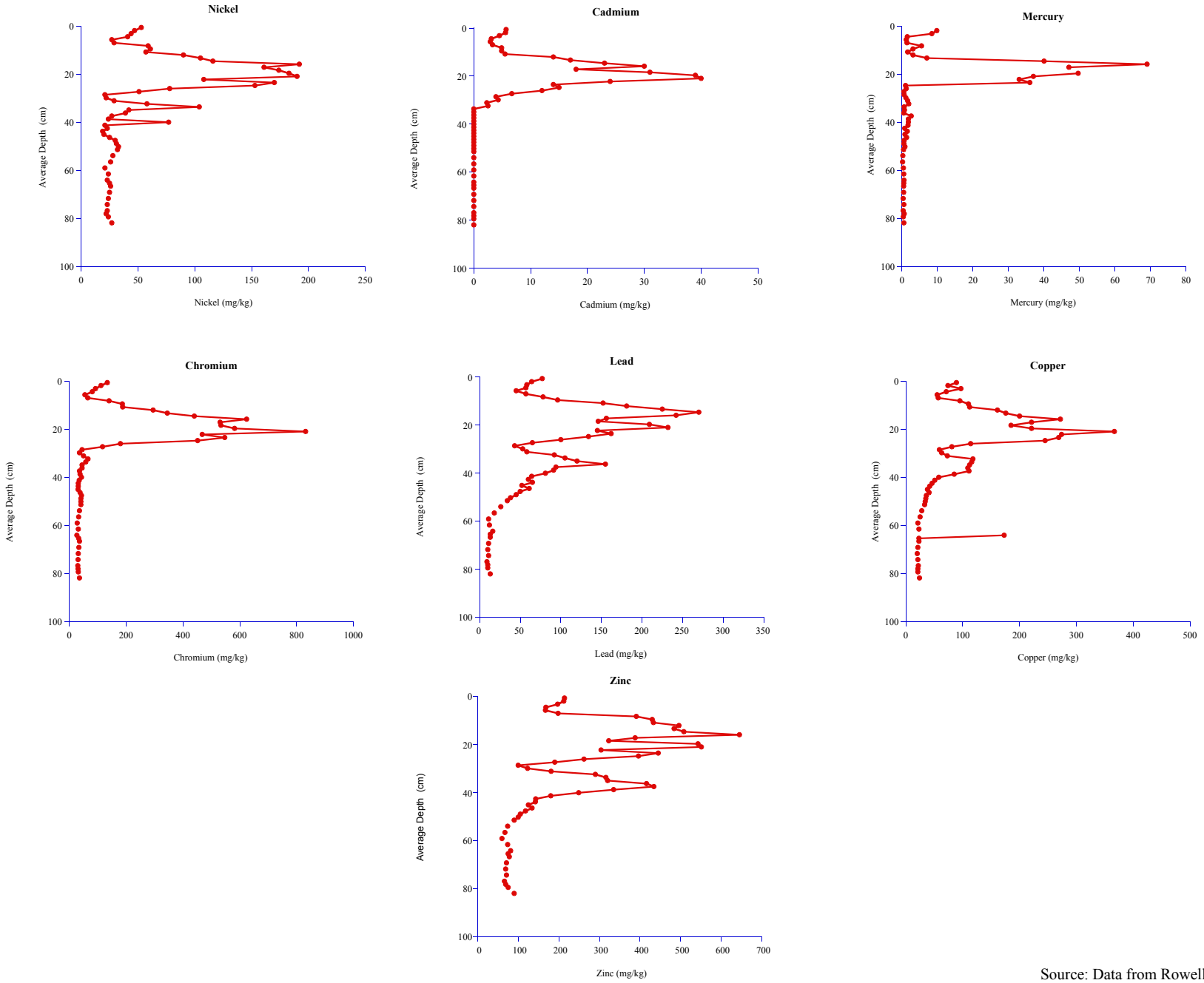
TAMS



Source: Data from Rowell, 1992.

TAMS

Figure 6-32
Metals in Sediment Core S-1 (1988, South Deep Basin)



Source: Data from Rowell, 1992.

Figure 6-33
Metals in Sediment Core N-1 (1988, North Deep Basin)

TAMS

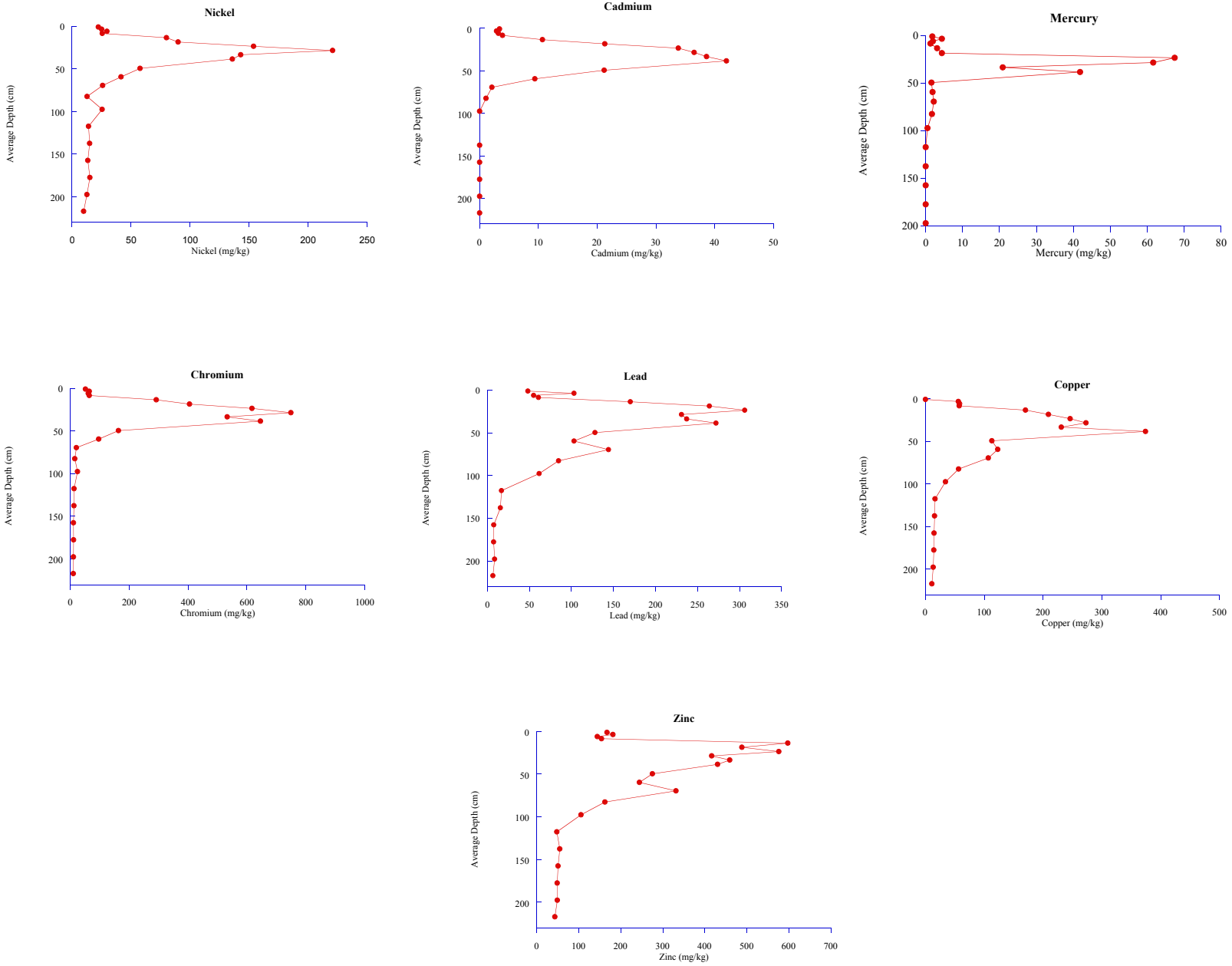


Figure 6-34
Metals in Sediment Core S51 (1992, South Deep Basin)

TAMS

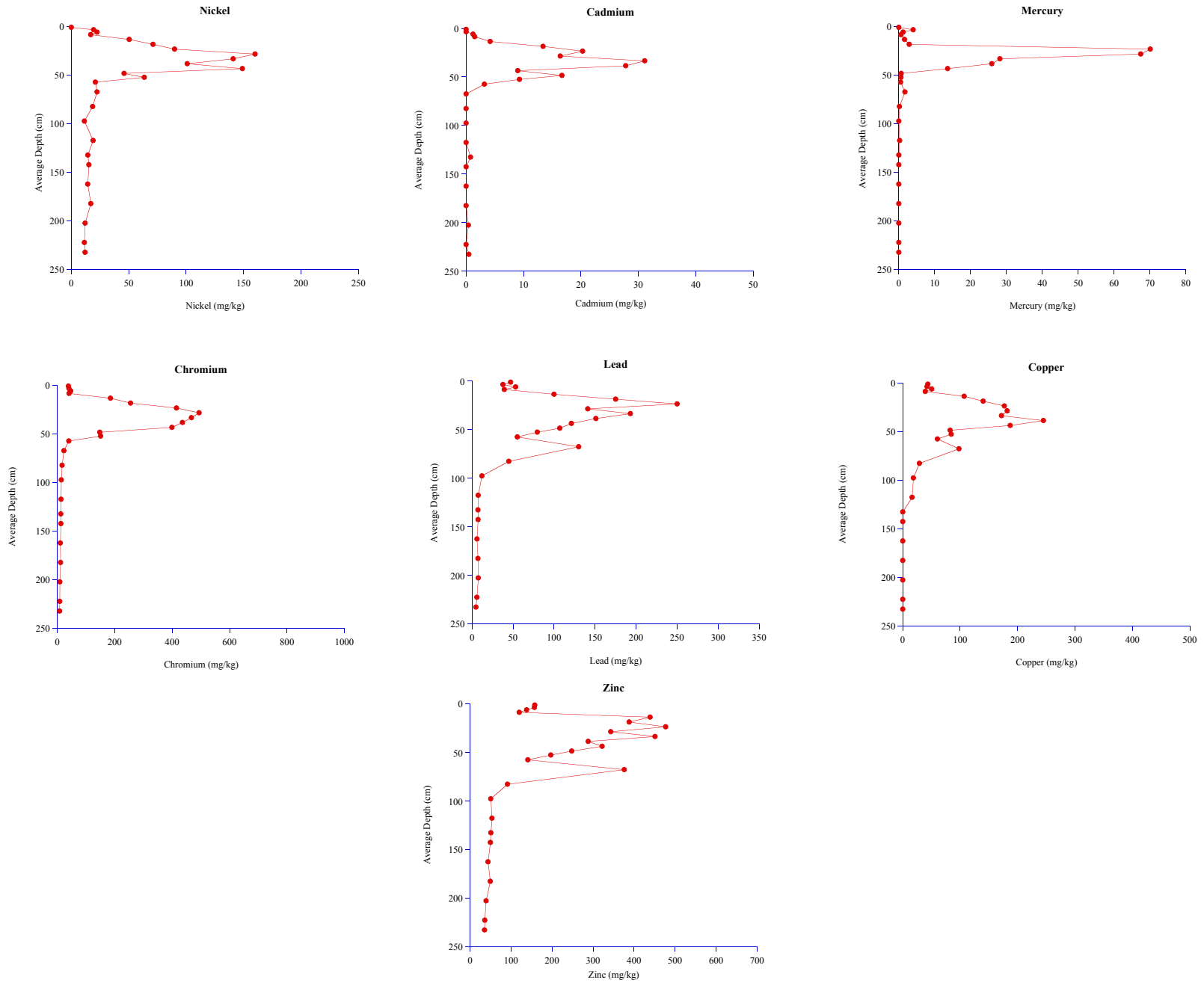
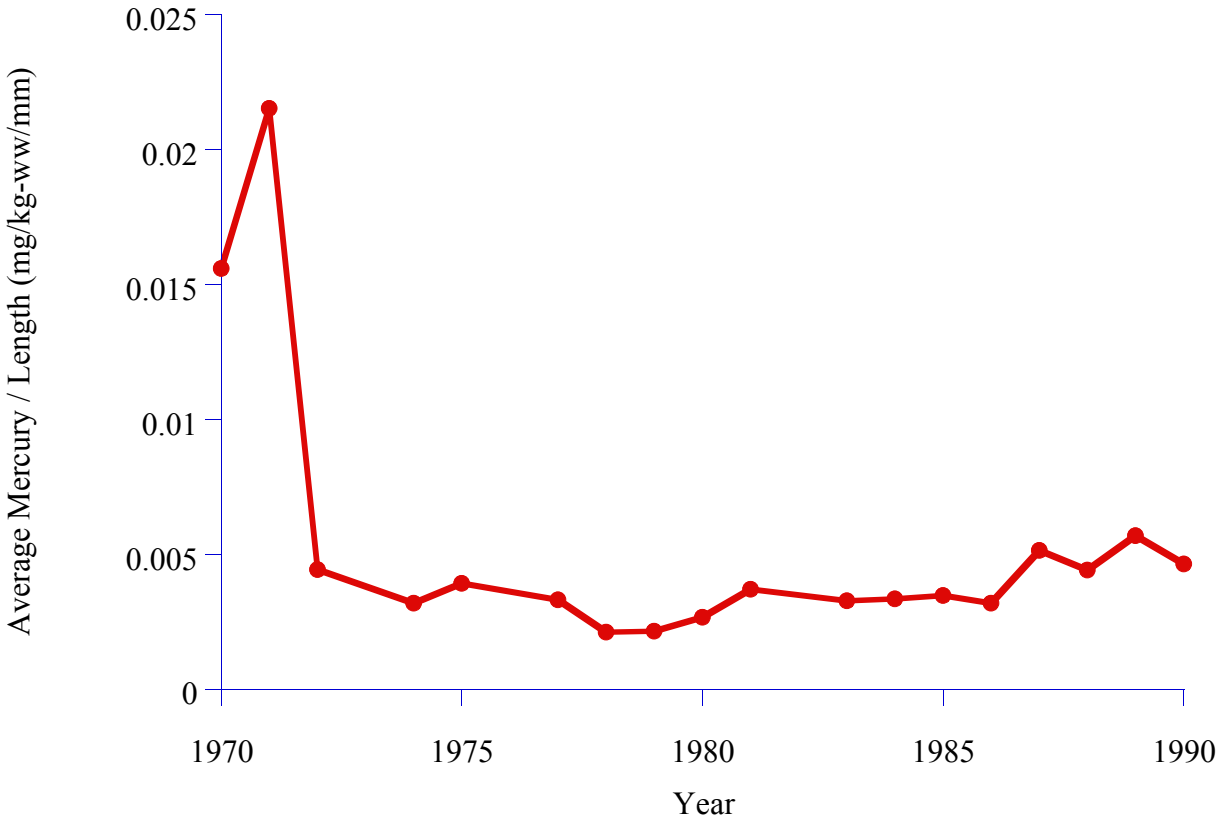


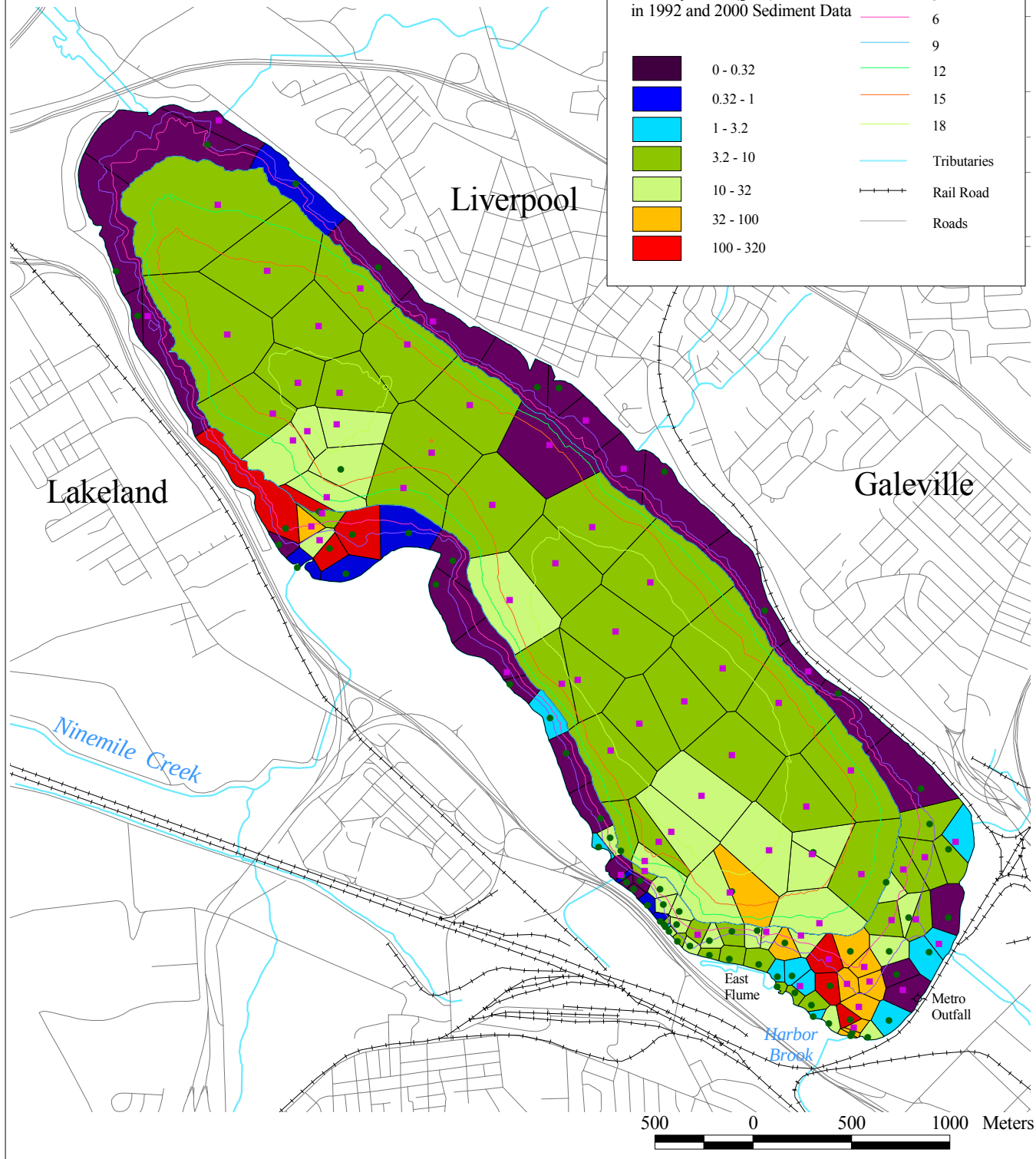
Figure 6-35
Metals in Sediment Core S90 (1992, North Deep Basin)

TAMS

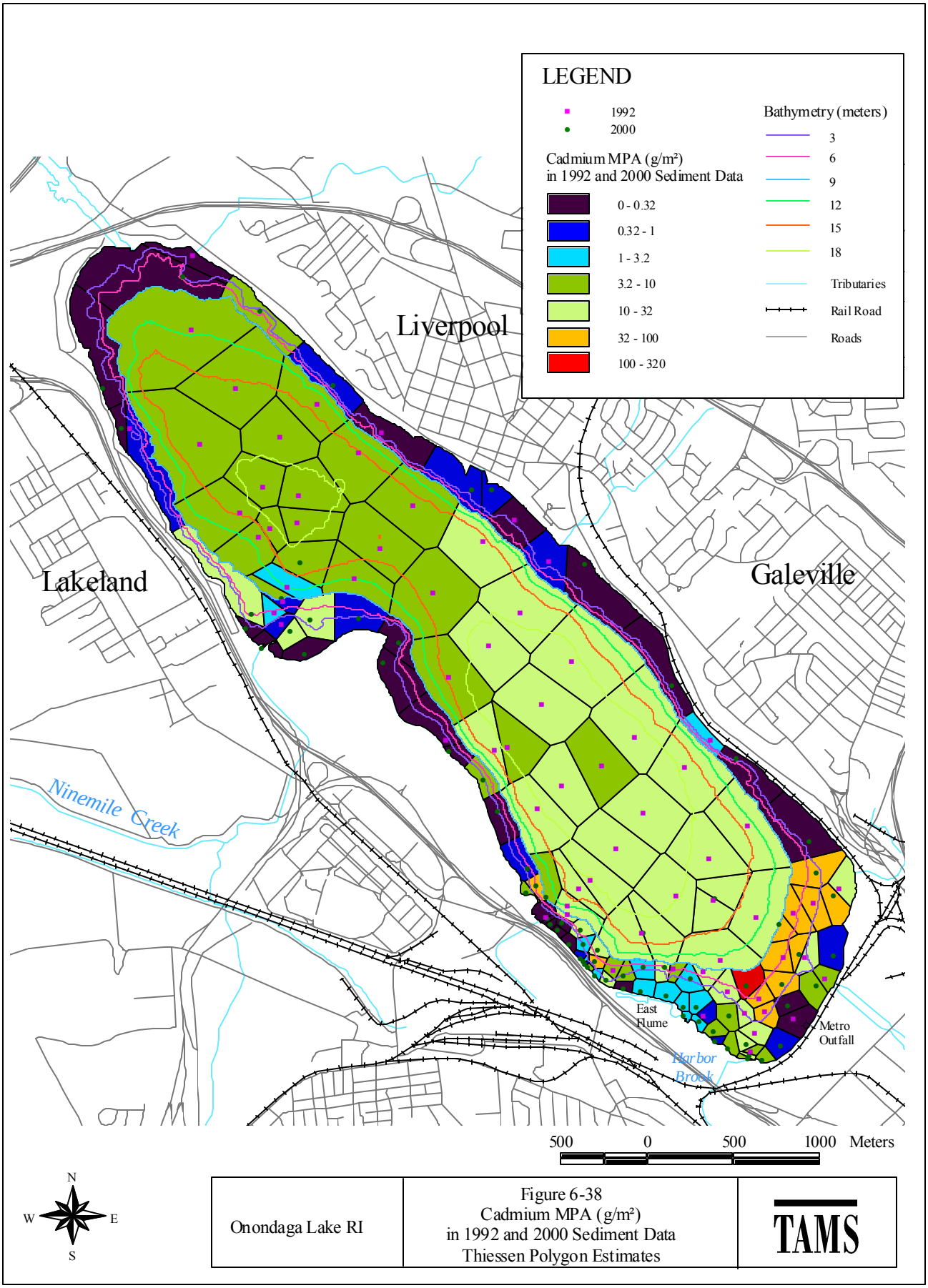


TAMS

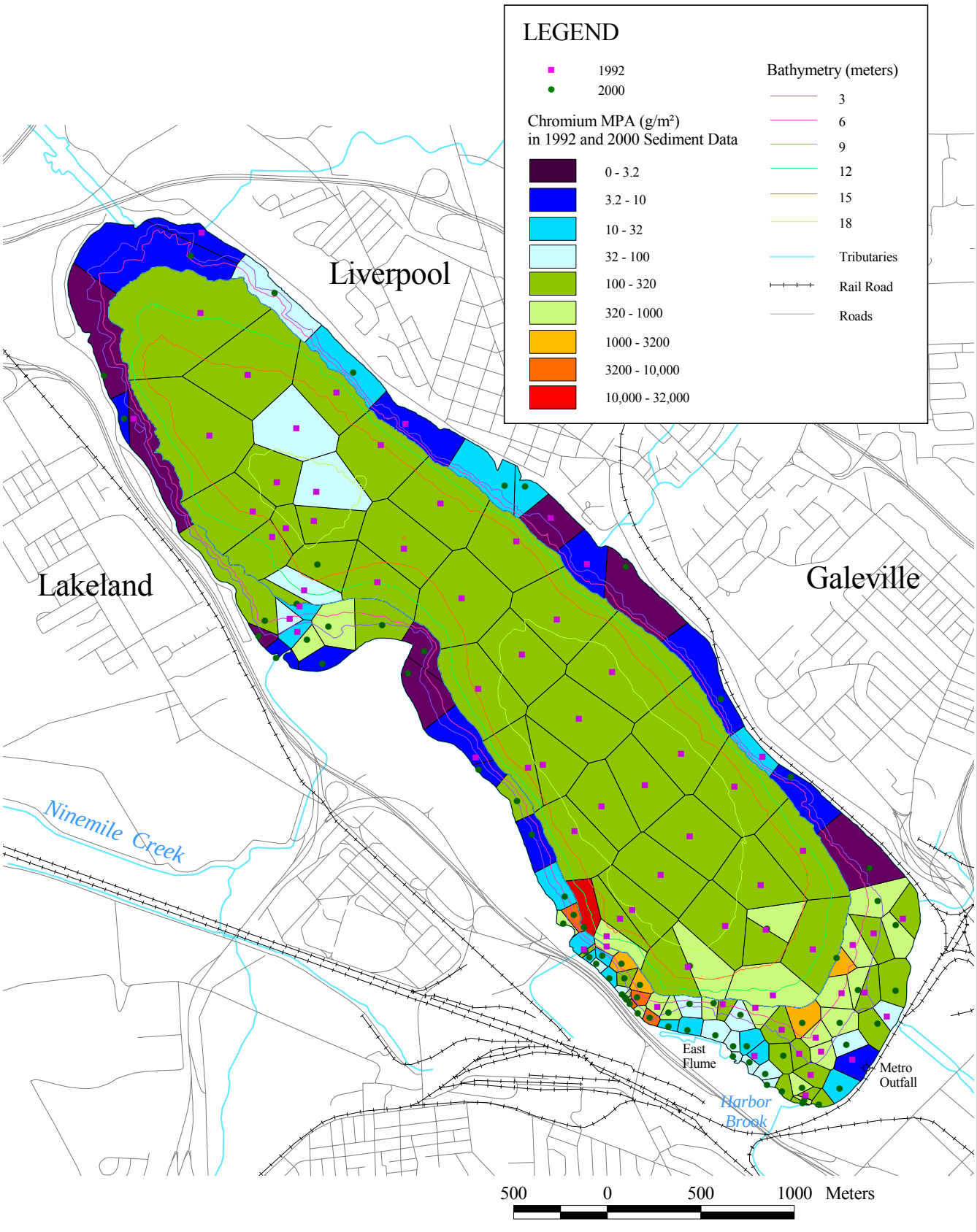
Figure 6-36
Mercury Trend in Smallmouth Bass from Onondaga Lake



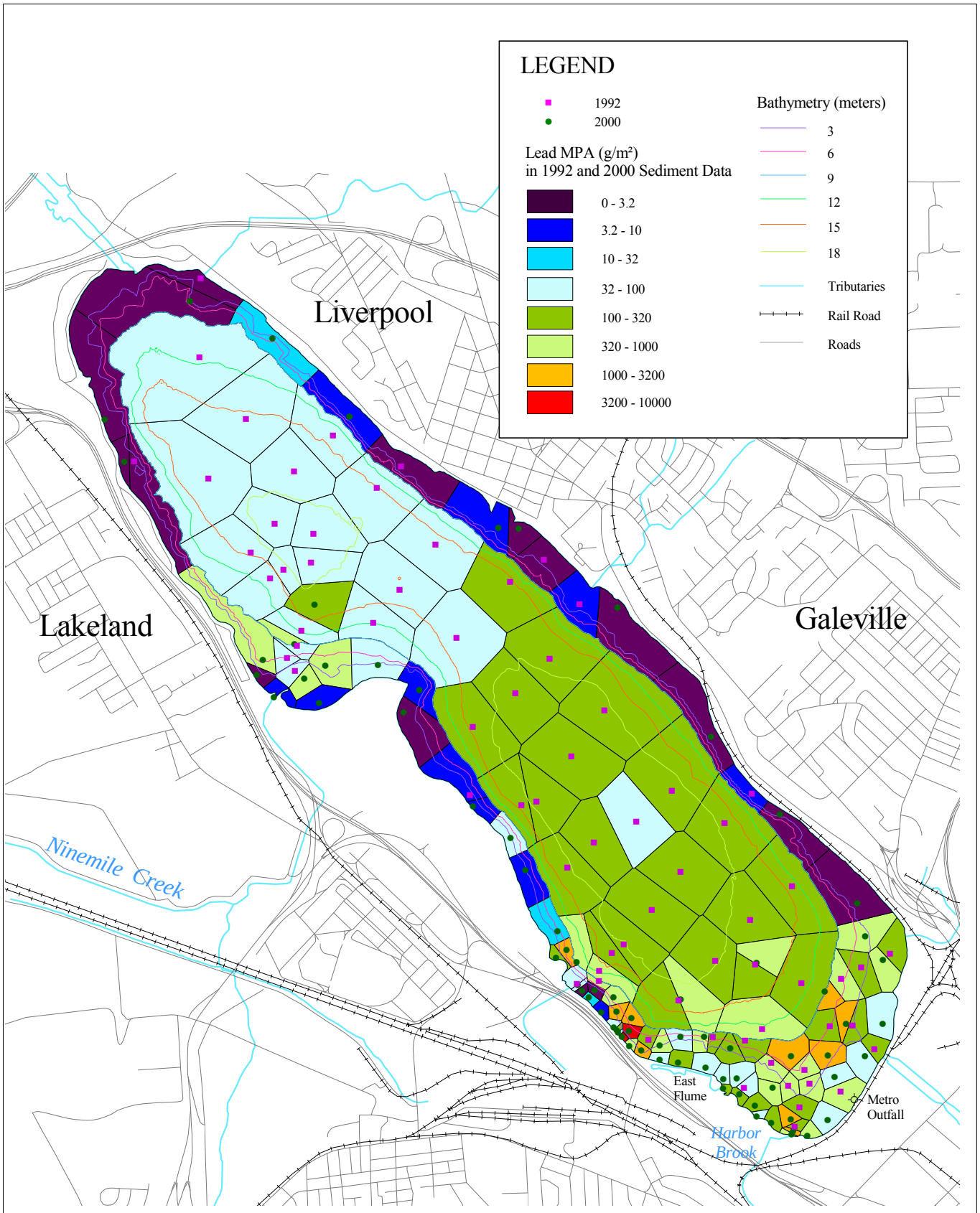
Onondaga Lake RI	Figure 6-37 Mercury MPA (g/m²) in 1992 and 2000 Sediment Data Thiessen Polygon Estimates	TAMS



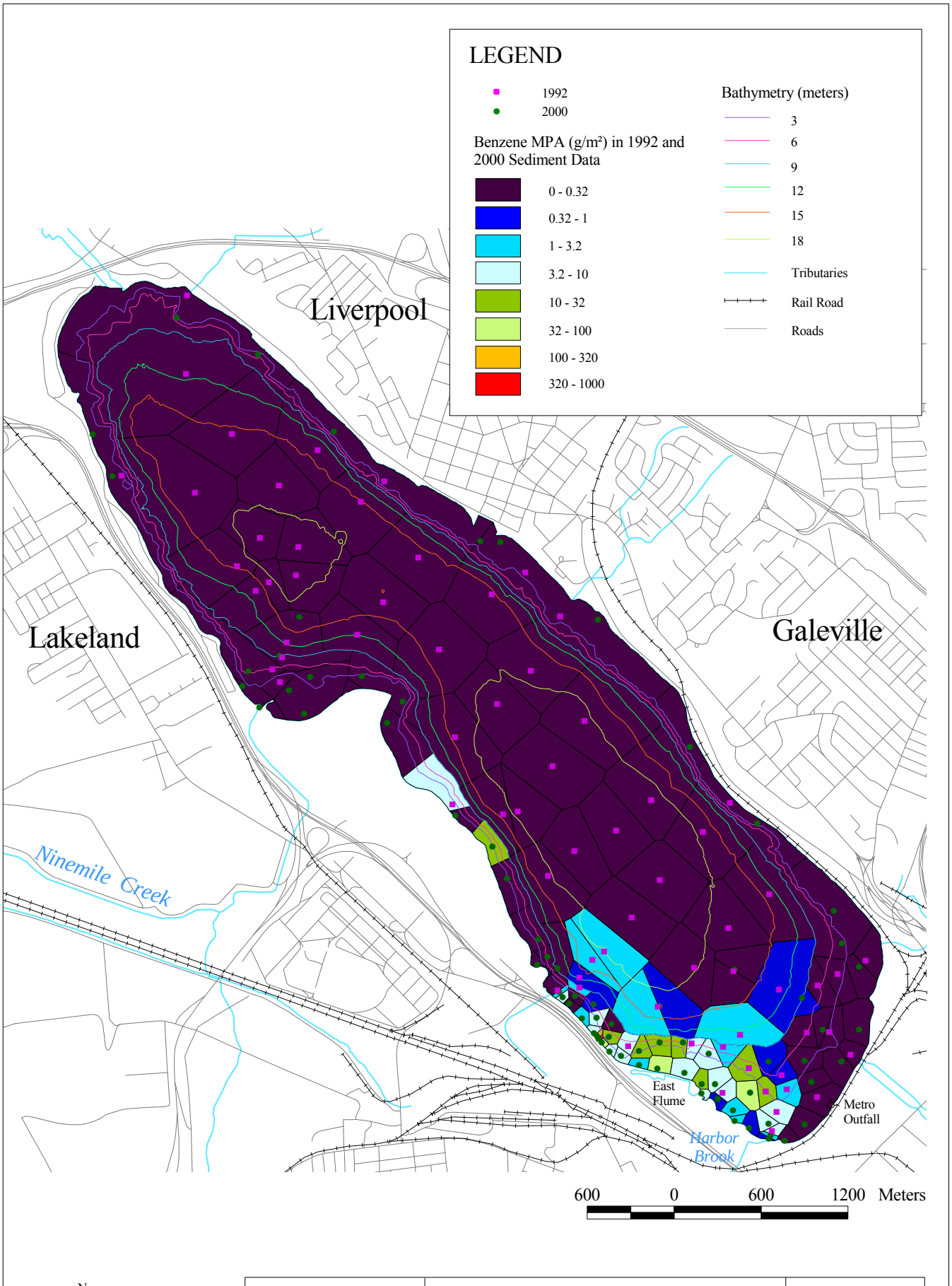
Onondaga Lake RI	Figure 6-38 Cadmium MPA (g/m²) in 1992 and 2000 Sediment Data Thiessen Polygon Estimates	TAMS



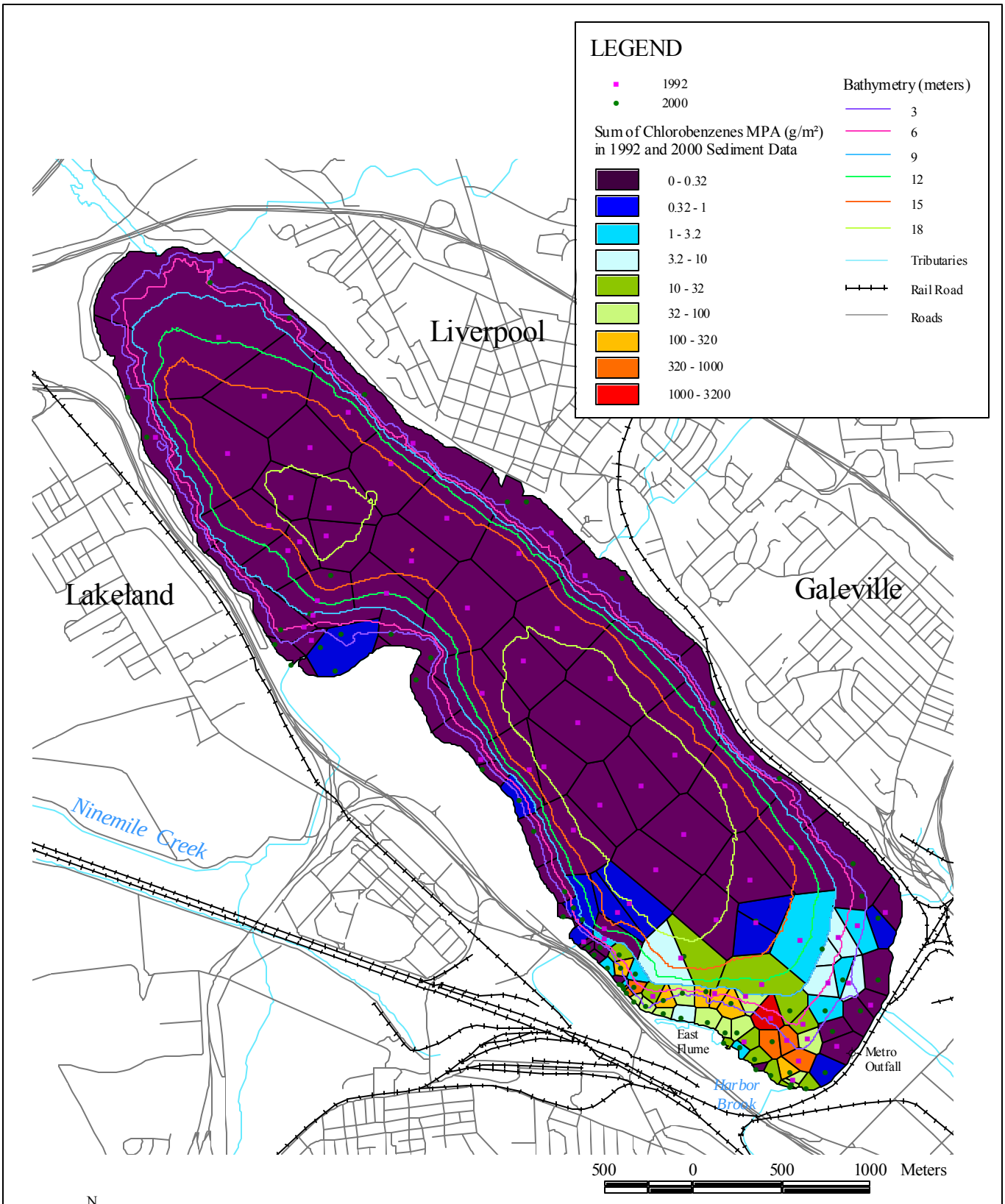
Onondaga Lake RI	Figure 6-39 Chromium MPA (g/m²) in 1992 and 2000 Sediment Data Thiessen Polygon Estimates	TAMS



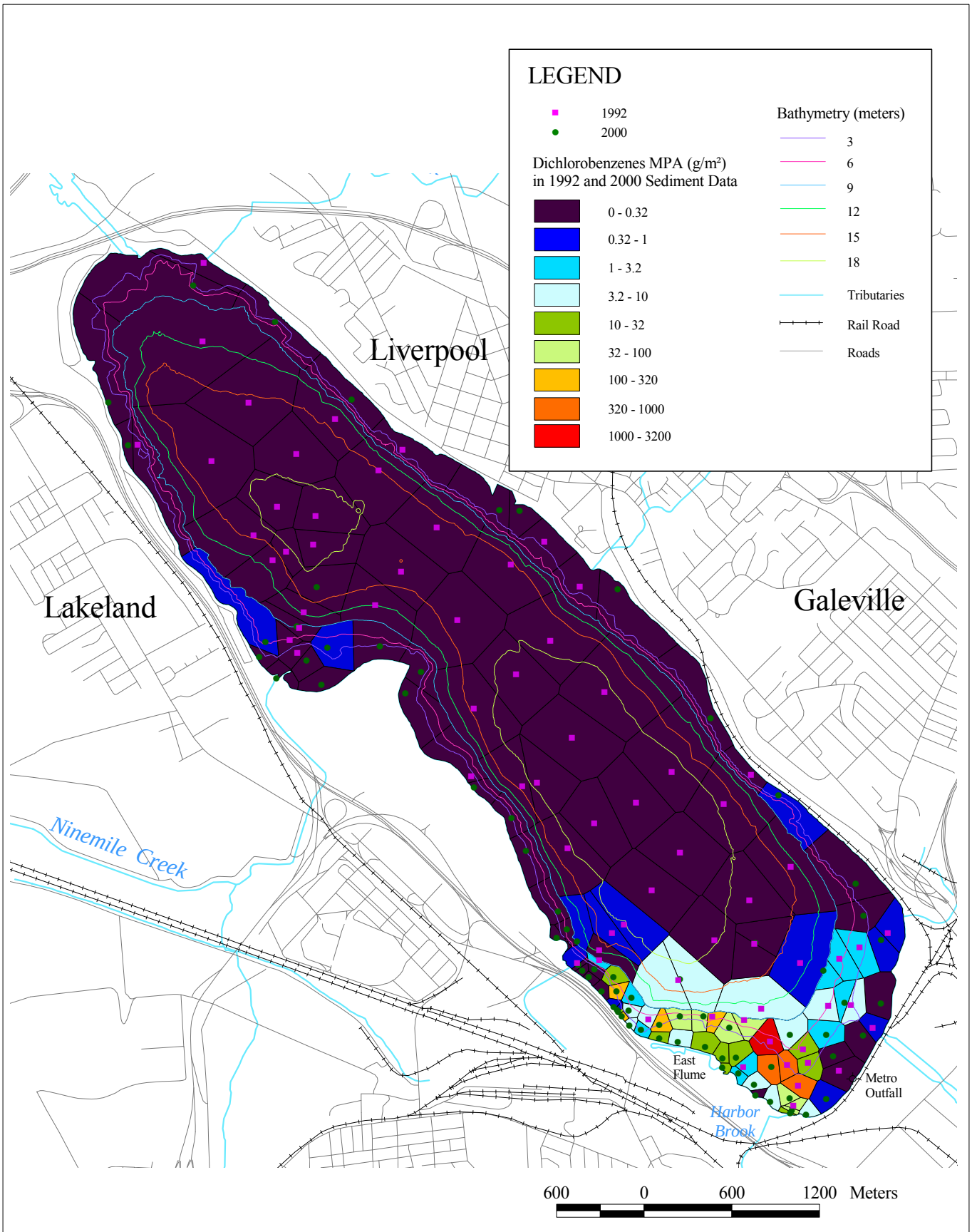
Onondaga Lake RI	Figure 6-40 Lead MPA (g/m²) in 1992 and 2000 Sediment Data Thiessen Polygon Estimates	TAMS



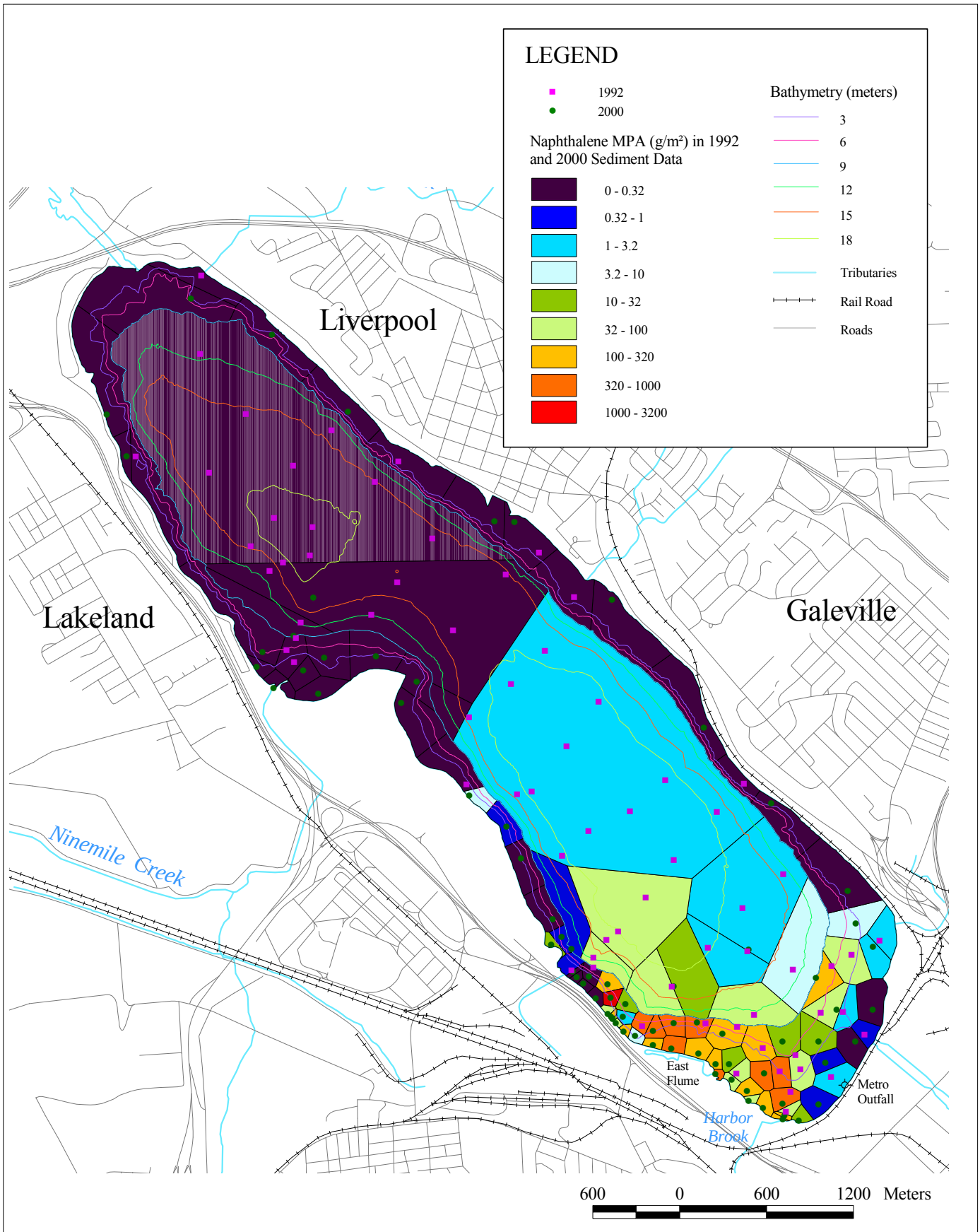
Onondaga Lake RI	Figure 6-41 Benzene MPA (g/m²) in 1992 and 2000 Sediment DataThiessen Polygon Estimates	TAMS



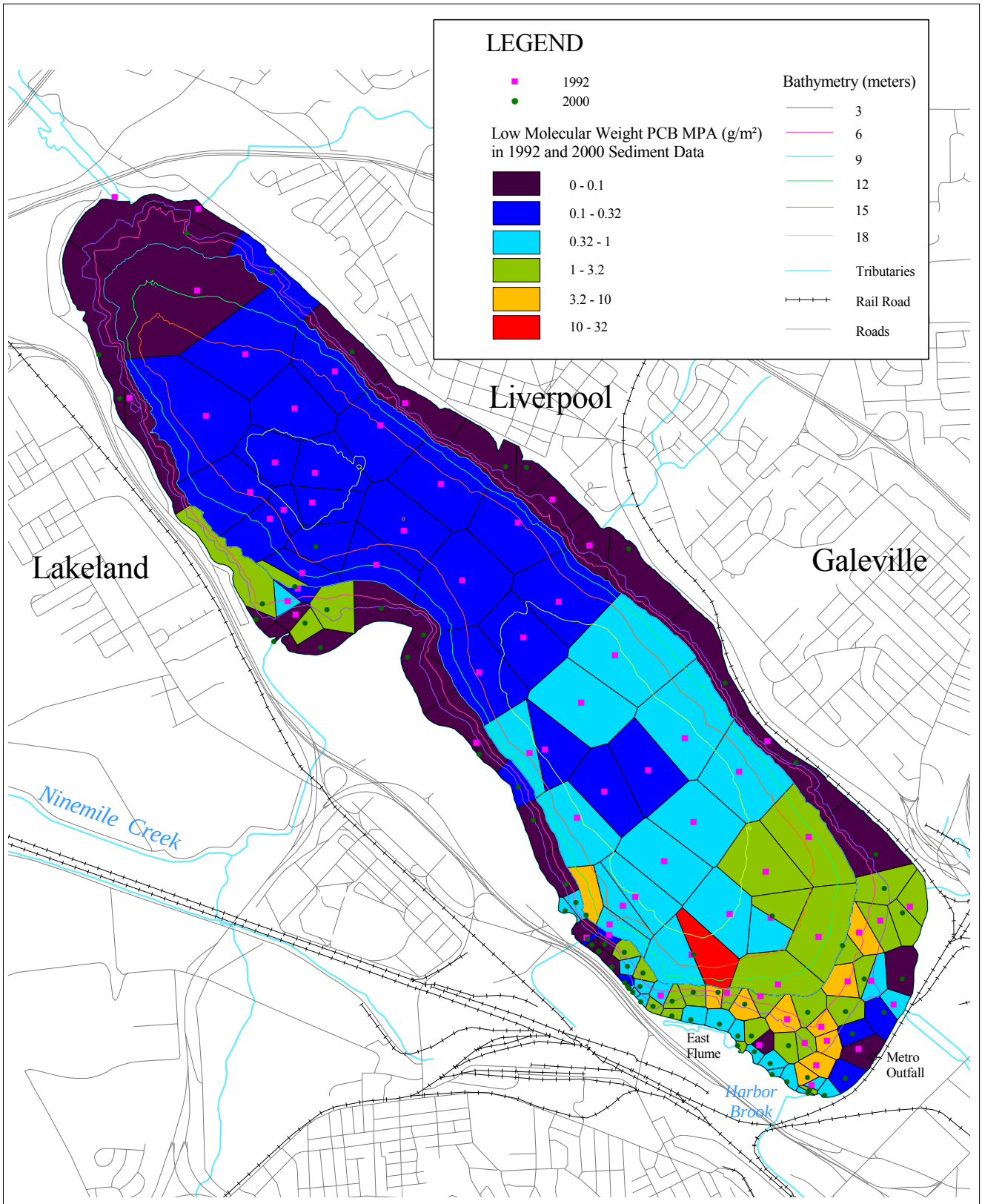
Onondaga Lake RI	Figure 6-42 Sum of Chlorobenzenes MPA (g/m²) in 1992 and 2000 Sediment Data Thiessen Polygon Estimates	TAMS



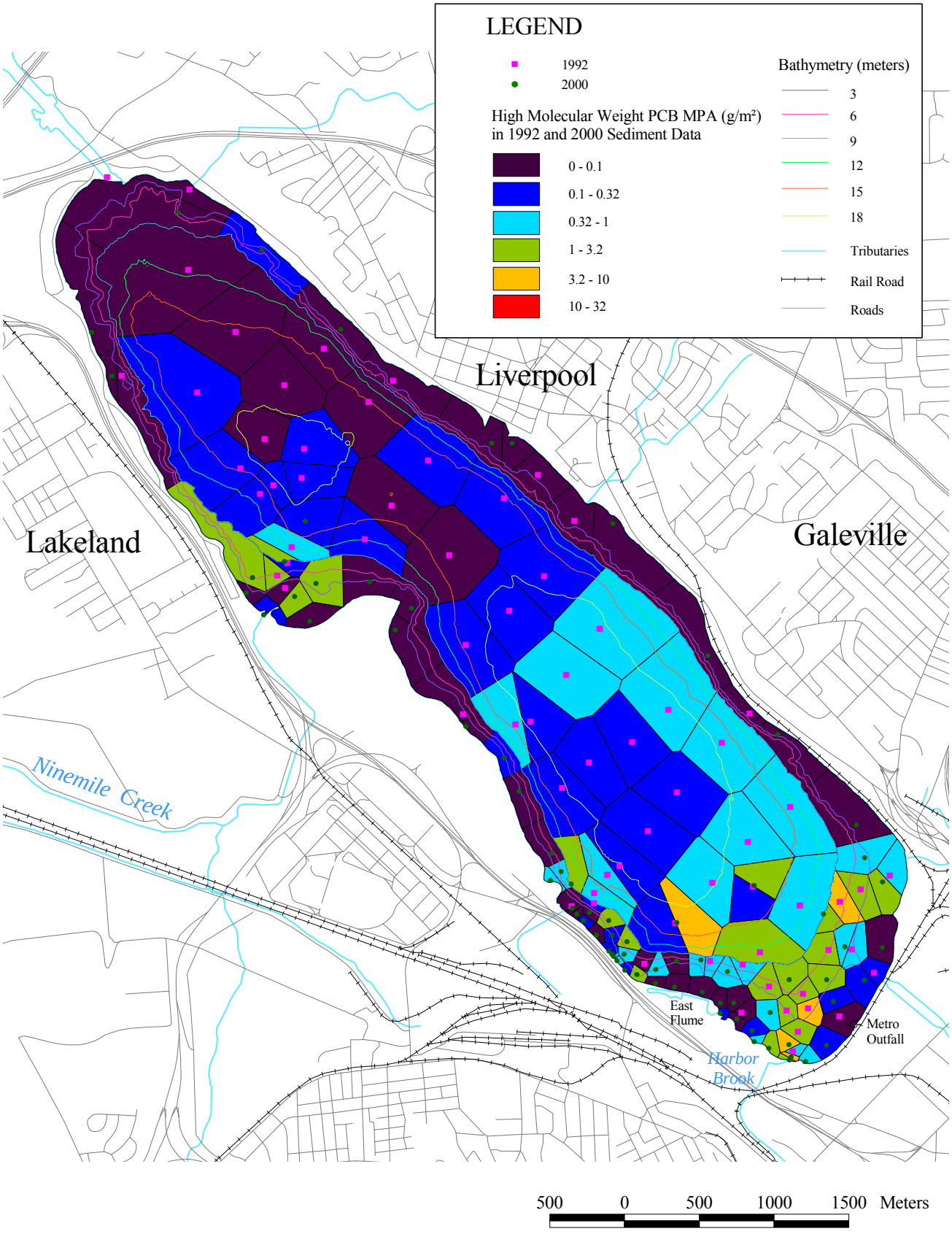
Onondaga Lake RI	Figure 6-43 Dichlorobenzenes MPA (g/m²) in 1992 and 2000 Sediment Data Thiessen Polygon Estimates	TAMS



Onondaga Lake RI	Figure 6-44 Naphthalene MPA (g/m²) in 1992 and 2000 Sediment Data Thiessen Polygon Estimates	TAMS



Onondaga Lake RI	Figure 6-45 Low Molecular Weight PCBs MPA (g/m2) in 1992 and 2000 Sediment Data Thiessen Polygon Estimates	TAMS



Onondaga Lake RI	Figure 6-46 High Molecular Weight PCBs MPA (g/m2) in 1992 and 2000 Sediment Data Thiessen Polygon Estimates	TAMS