

Appendix O

2006-2025 Herbicide Residue Data

2006-2011 Beaver Dam Lake Herbicide Residue Monitoring Results: 2,4-D



Location: West of Eagle Point Boat Launch in West Beaver Dam Lake

Year	Treatment Polygon ID	Treatment Area (acres)	Herbicide Residue Concentration ($\mu\text{g/L}$)		
			1 Day After Treatment	2 Days After Treatment	7 Days After Treatment
2006	Area 7	29	38.7	17.9	61.4
			28.8	39.6	52.9
2007	26/27	10.32	19.9	13.1	15.8
			9.2	11.0	16.6
2008 (Spring)	15	14.2	42.1	27.6	<0.7
2008 (Fall)	15	14.2	3.8	1.6	<0.7
2009 (Spring)	19	11.55	99.8	43	29.4
			49.6	27.3	18.9
2009 (Fall)	19	11.55	47.4	48.3	<0.7
			31.4	11.8	3
2010 (Spring)	19	18.51	245	46.7	115
2011 (Spring)	22	8.43	176	40	58

Location: Near City Park Boat Launch in West Beaver Dam Lake

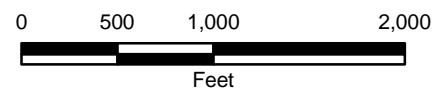
Year	Treatment Polygon ID	Treatment Area (acres)	Herbicide Residue Concentration ($\mu\text{g/L}$)		
			1 Day After Treatment	2 Days After Treatment	7 Days After Treatment
2008 (Spring)	25	9.5	49.7	35.8	82.1
2008 (Fall)	25	9.5	49.1	128	14.1
2009 (Spring)	39	2.24	17.2	25.4	12.7
			15	21.6	22.6
2009 (Fall)	39	2.24	32.8	27.6	9.9
			78.2	38.3	11.4
2010 (Spring)	39	0.72	77.6	43.6	95.4



-  2009 East Beaver Dam Lake Herbicide Treatment Site
-  2009 Herbicide Residual Monitoring Sites

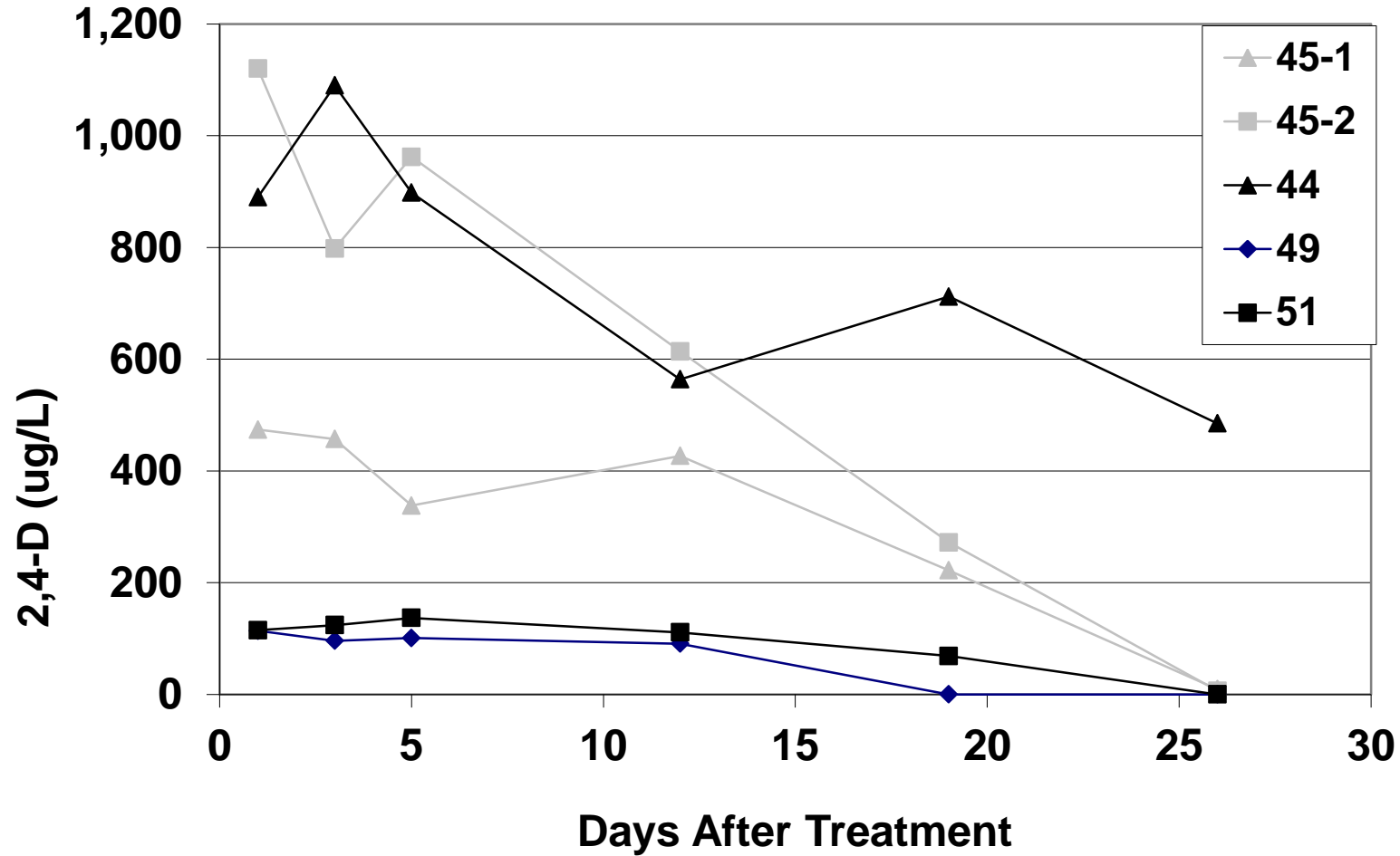
East Beaver Dam Lake Herbicide Residual Monitoring

Types of Samples: Sites 45-1 and 45-2 will be sampled for both Endothal and 2,4-D. All other sites will be sampled for 2,4-D only.
Sample Collection Day: 1, 3, 5, 12, 19, and 26 days after treatment.

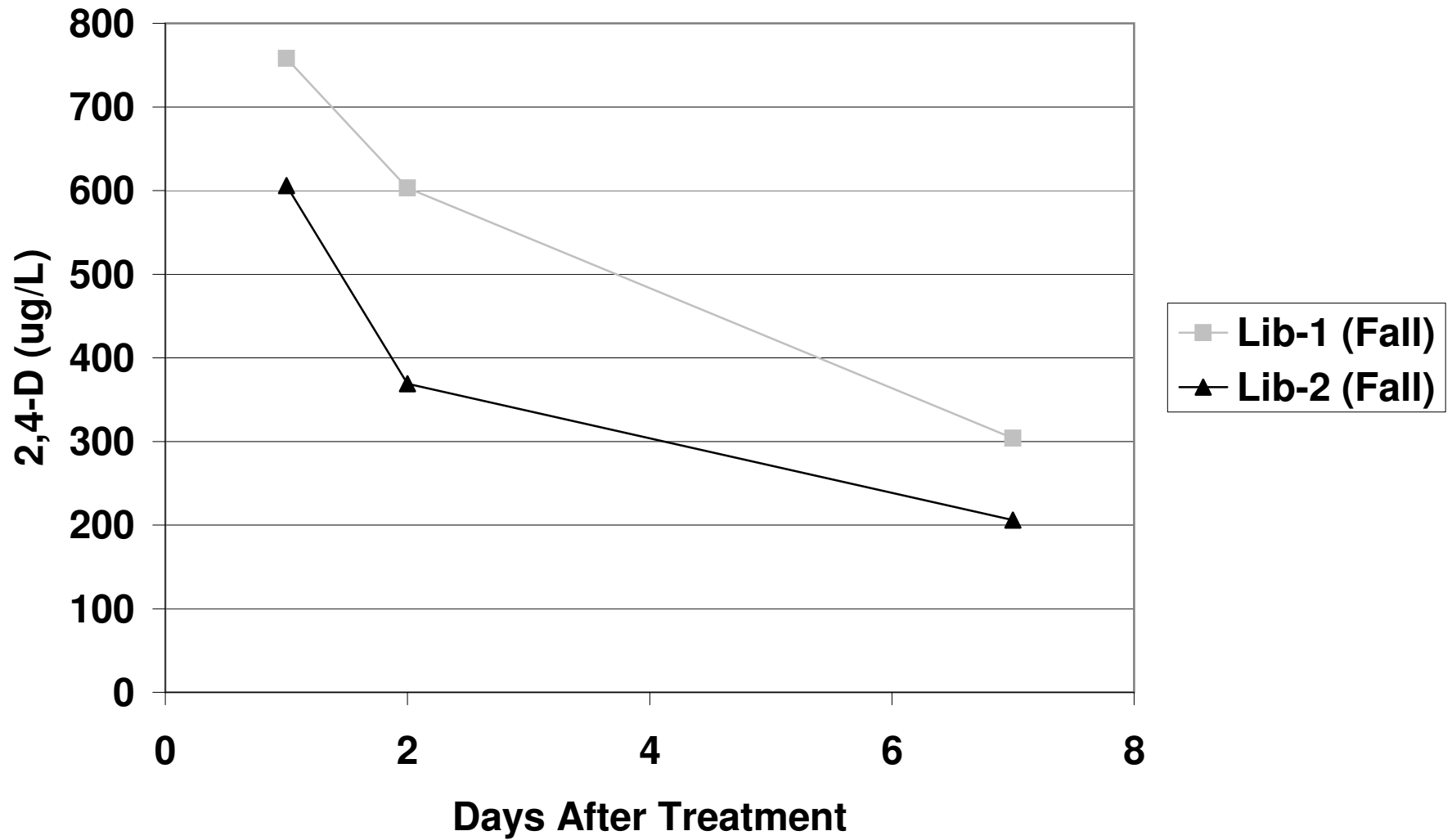


2009 East Beaver Dam Lake Herbicide Residual Monitoring Sites
Barron County, WI
Job No. 49-03-011

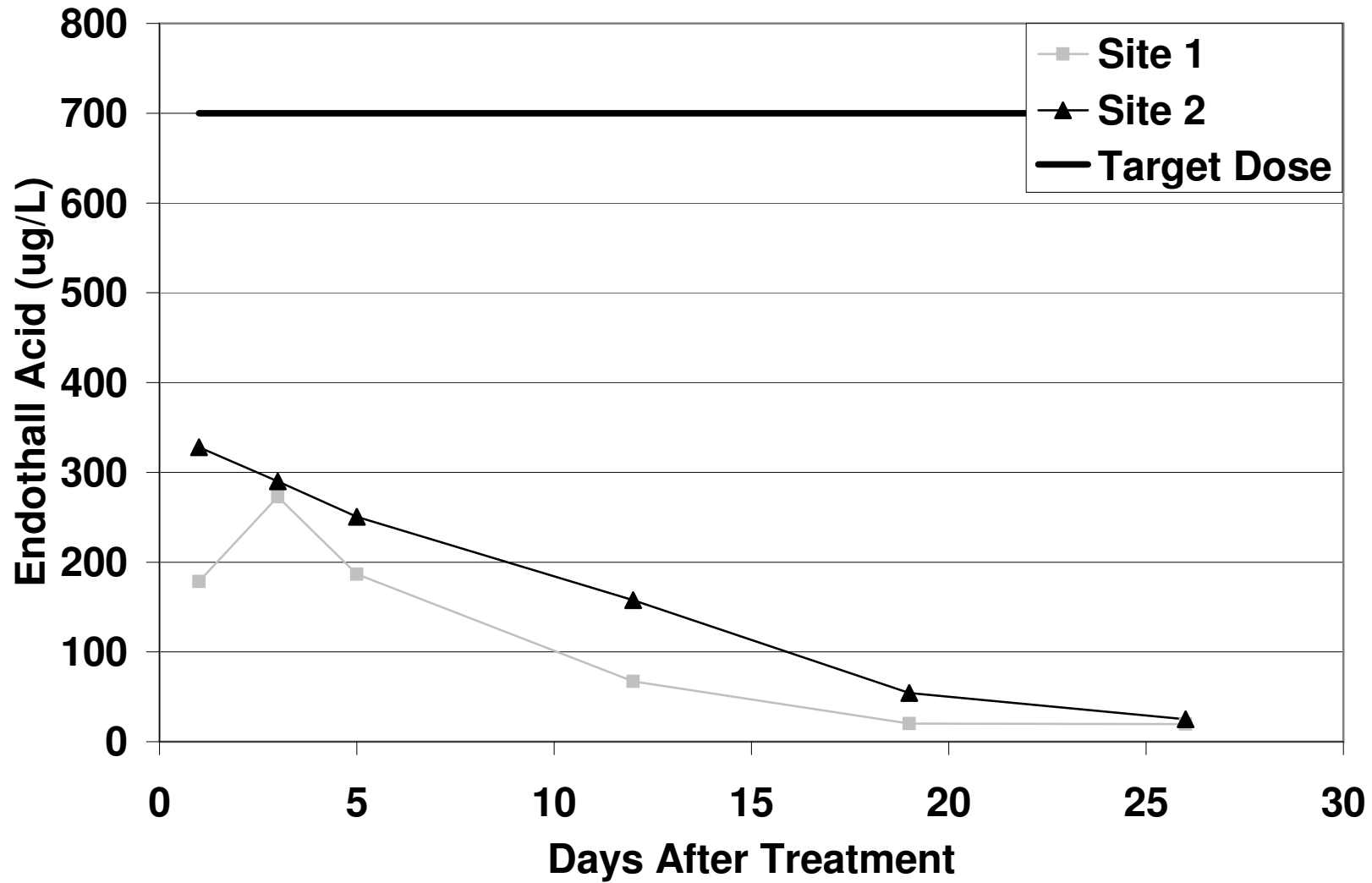
2009 Beaver Dam Lake Spring East Lake Herbicide Residual Data Summary: 2,4-D



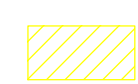

2009 Library Lake Herbicide Residual Data Summary



2009 Library Lake Herbicide Residual Data Summary

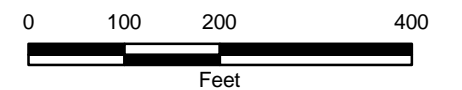




-  2009 Library Lake Herbicide Treatment Area
-  2009 Herbicide Residual Monitoring Sites

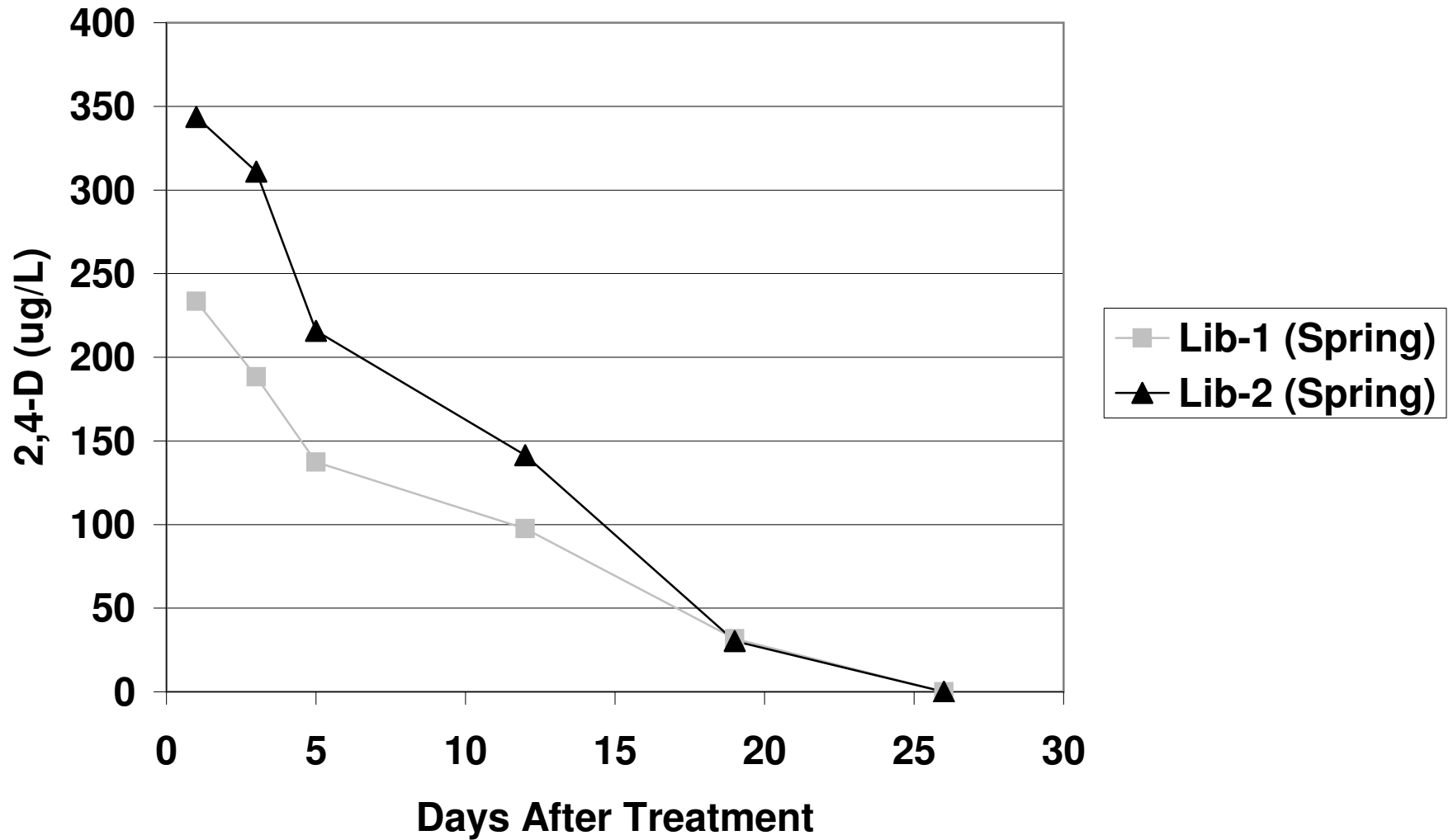
Library Herbicide Residual Monitoring

Types of Samples: Endothal and 2,4-D
Sample Collection Day: 1, 3, 5, 12, 19, and 26 days after treatment.

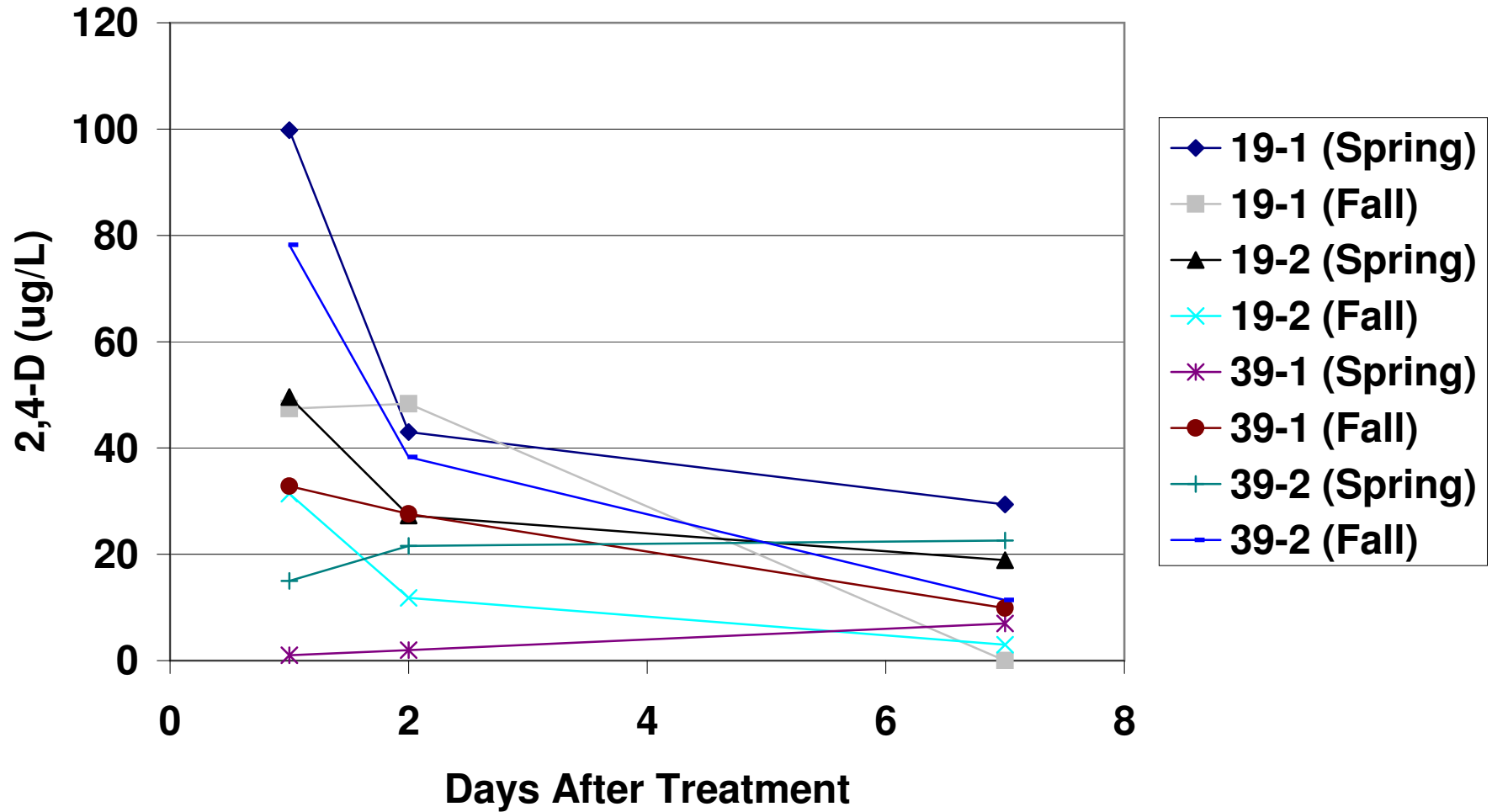


2009 Library Lake Herbicide Residual Monitoring Sites
Barron County, WI
Job No. 49-03-011

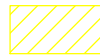

2009 Library Lake Spring Herbicide Residual Data Summary



2009 Beaver Dam Lake Herbicide Residual Data Summary: West





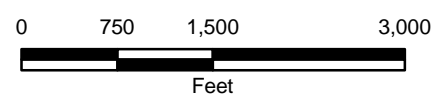
-  2009 West Beaver Dam Lake Herbicide Treatment Site
-  2009 Herbicide Residual Monitoring Sites

**West Beaver Dam Lake
Herbicide Residual Monitoring**

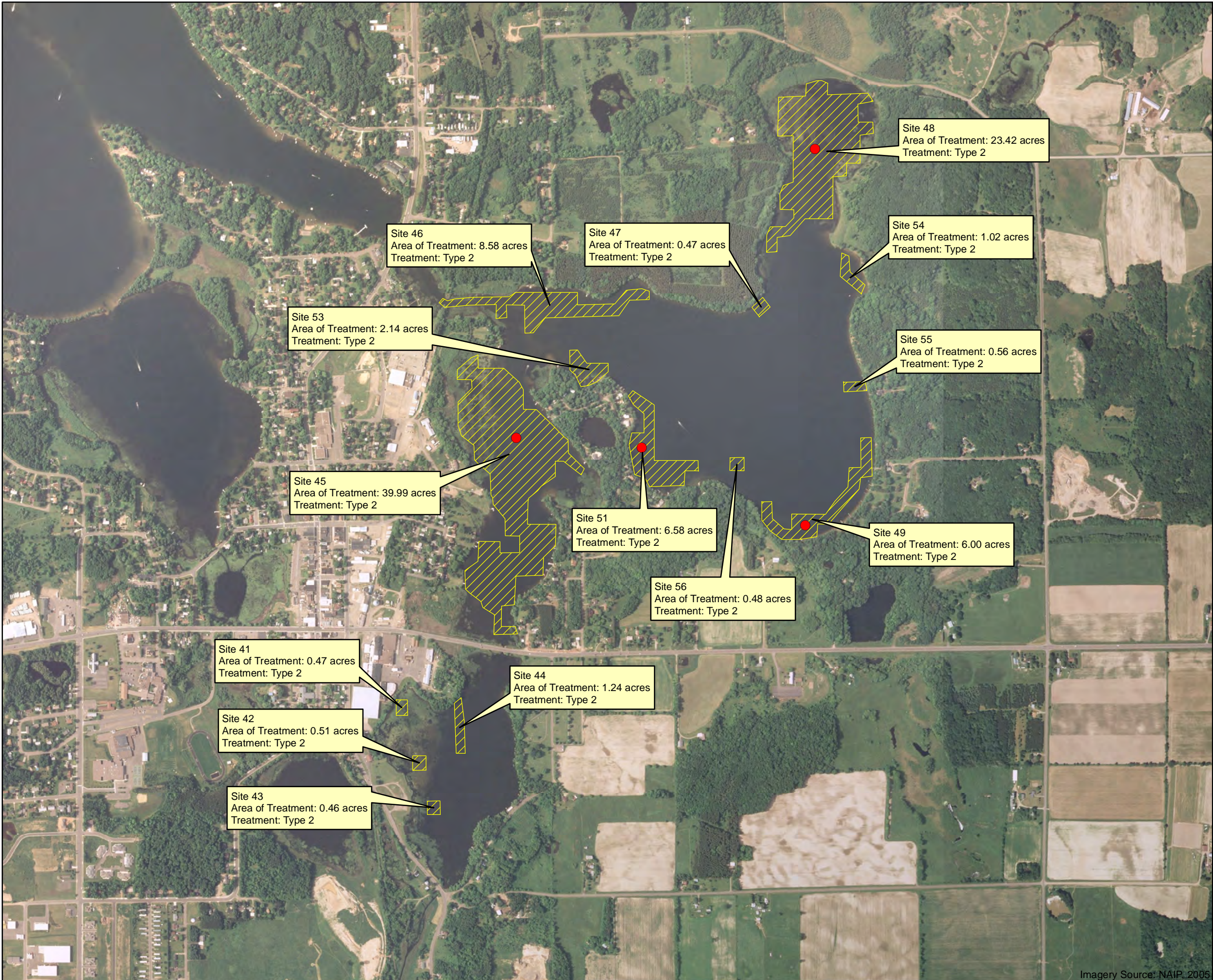
Types of Samples: 2,4-D
Sample Collection Day: 1, 2, and 7 days after treatment.



Site 19
Area of Treatment: 11.55 acres
Treatment: Type 1 and Type 4

Site 39
Area of Treatment: 2.24 acres
Treatment: Type 1 and Type 4



2009 West Beaver Dam Lake
Herbicide Residual Monitoring Sites
Barron County, WI
Job No. 49-03-011
0-9



-  Proposed 2010 Treatment Site
-  2010 Herbicide Residual Monitoring Site

Site 46
Area of Treatment: 8.58 acres
Treatment: Type 2

Site 47
Area of Treatment: 0.47 acres
Treatment: Type 2

Site 48
Area of Treatment: 23.42 acres
Treatment: Type 2

Site 54
Area of Treatment: 1.02 acres
Treatment: Type 2

Site 53
Area of Treatment: 2.14 acres
Treatment: Type 2

Site 55
Area of Treatment: 0.56 acres
Treatment: Type 2

Site 45
Area of Treatment: 39.99 acres
Treatment: Type 2

Site 51
Area of Treatment: 6.58 acres
Treatment: Type 2

Site 49
Area of Treatment: 6.00 acres
Treatment: Type 2

Site 56
Area of Treatment: 0.48 acres
Treatment: Type 2

Site 41
Area of Treatment: 0.47 acres
Treatment: Type 2

Site 44
Area of Treatment: 1.24 acres
Treatment: Type 2

Site 42
Area of Treatment: 0.51 acres
Treatment: Type 2

Site 43
Area of Treatment: 0.46 acres
Treatment: Type 2

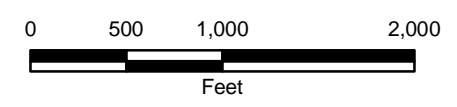


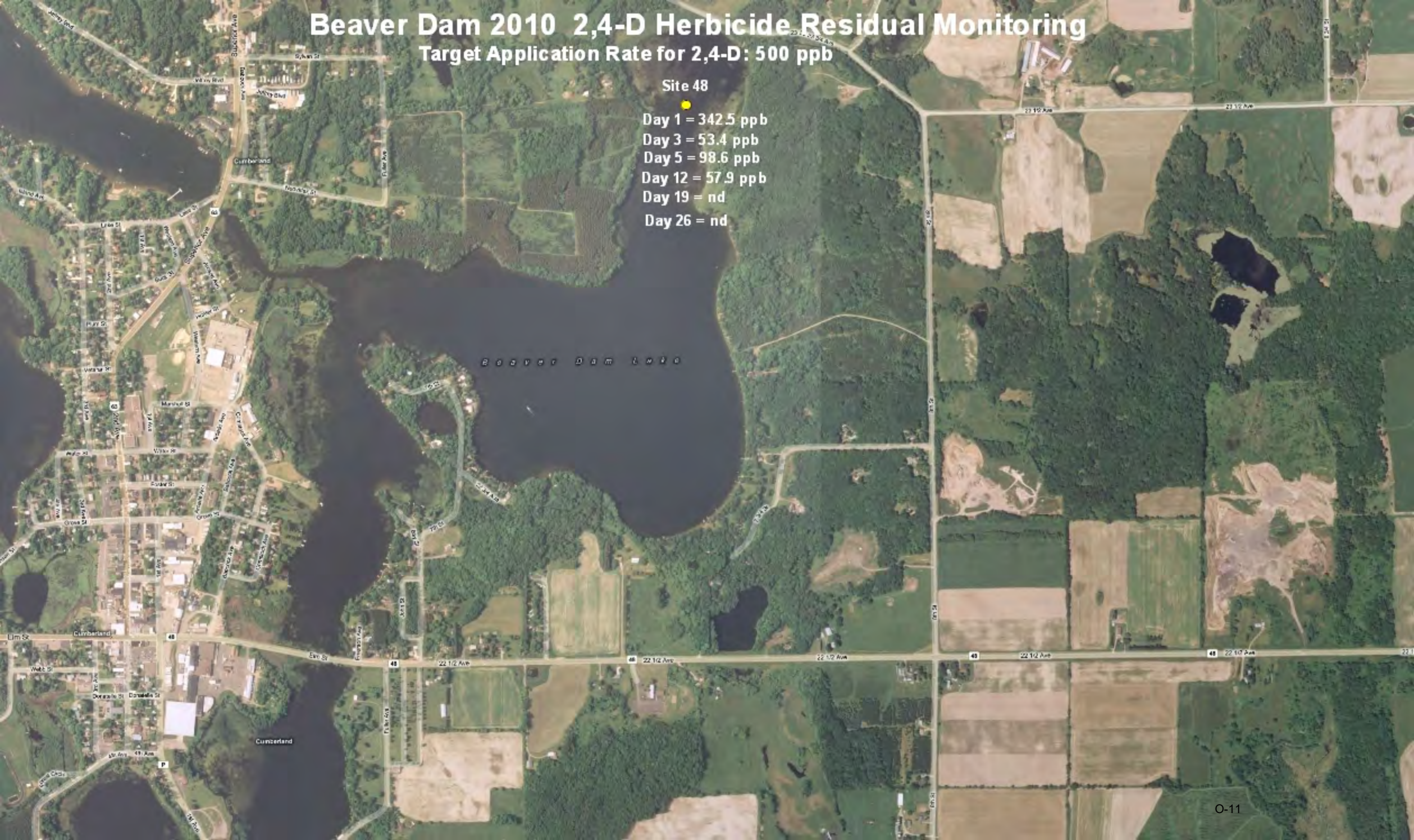
Figure 34
2010 EAST BEAVER DAM LAKE
HERBICIDE RESIDUAL
MONITORING SITES
Beaver Dam Lake
Barron County, WI
Job No. 49-03-011
O-10

Beaver Dam 2010 2,4-D Herbicide Residual Monitoring


Target Application Rate for 2,4-D: 500 ppb

Site 48

Day 1 = 342.5 ppb
Day 3 = 53.4 ppb
Day 5 = 98.6 ppb
Day 12 = 57.9 ppb
Day 19 = nd
Day 26 = nd





-  Proposed 2010 Treatment Site
-  2010 Herbicide Residual Monitoring Site

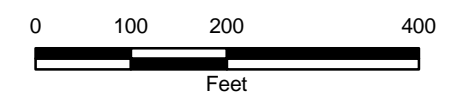


Figure 33
2010 LIBRARY LAKE
HERBICIDE RESIDUAL
MONITORING SITES
Library Lake
Barron County, WI
Job No. 49-03-011
O-12

Beaver Dam 2010 2,4-D Herbicide Residual Monitoring

Target Application Rate for 2,4-D: 500 ppb

Site 48

Day 1 = 376.8 ppb
Day 3 = 80 ppb
Day 5 = 39.6 ppb
Day 12 = 55.4 ppb
Day 19 = <14 ppb
Day 26 = <14ppb

Site 45

Day 1 = 190.6 ppb
Day 3 = 182.4 ppb
Day 5 = 127 ppb
Day 12 = 63.6 ppb
Day 19 = 53 ppb
Day 26 = 14.2 ppb

Site 51

Day 1 = 51.2 ppb
Day 3 = <14 ppb
Day 5 = <14 ppb
Day 12 = <14 ppb
Day 19 = 14.6 ppb
Day 26 = <14 ppb

Site 49

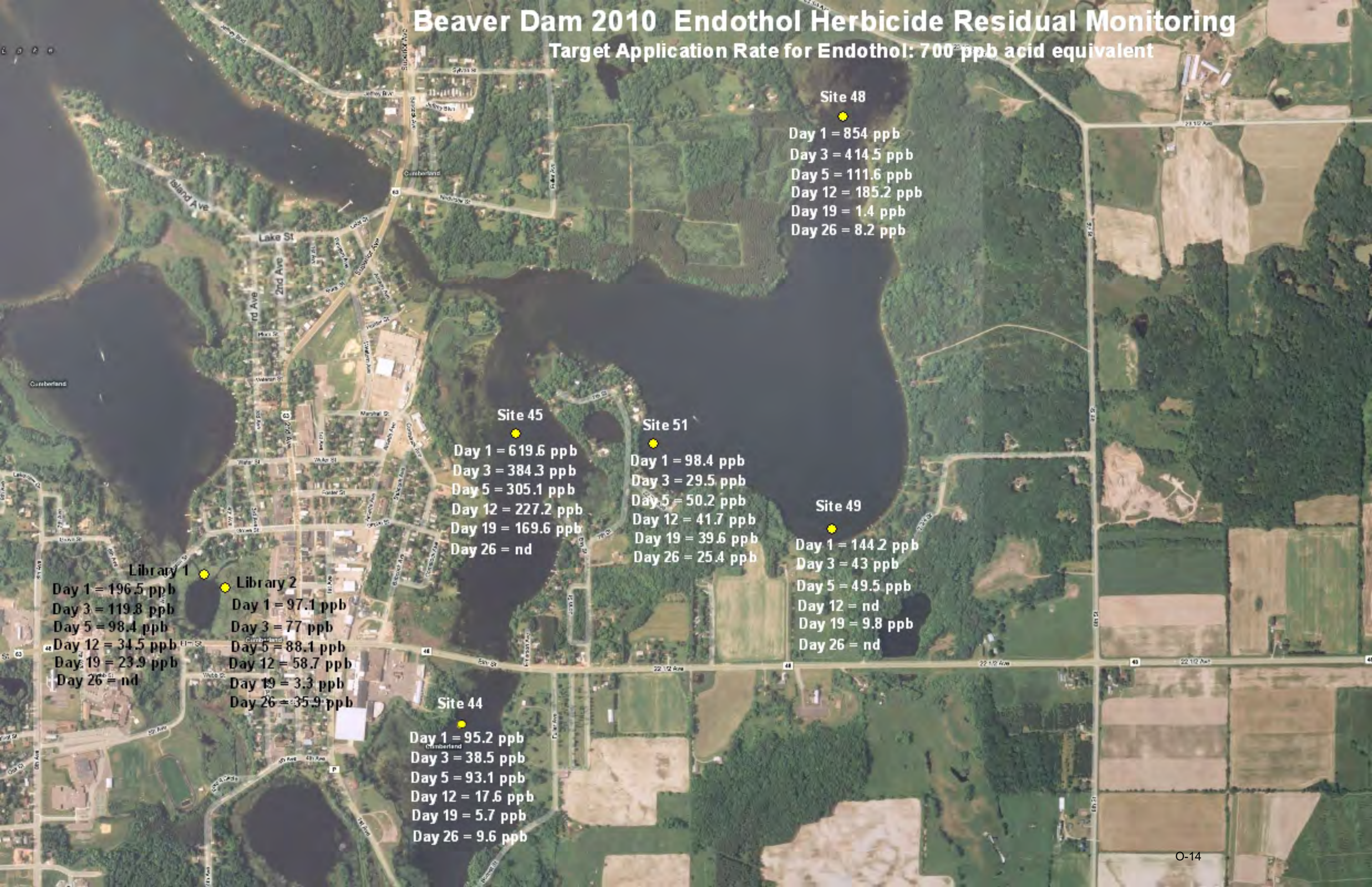
Day 1 = <14 ppb
Day 3 = <14 ppb
Day 5 = <14 ppb
Day 12 = 19.2 ppb
Day 19 = <14 ppb
Day 26 = <14ppb

Site 44

Day 1 = 23.2 ppb
Day 3 = 40.2 ppb
Day 5 = 23.2 ppb
Day 12 = 33.8 ppb
Day 19 = <14 ppb
Day 26 = <14 ppb

Beaver Dam 2010 Endothol Herbicide Residual Monitoring

Target Application Rate for Endothol: 700 ppb acid equivalent



Site 48

Day 1 = 854 ppb
Day 3 = 414.5 ppb
Day 5 = 111.6 ppb
Day 12 = 185.2 ppb
Day 19 = 1.4 ppb
Day 26 = 8.2 ppb

Site 45

Day 1 = 619.6 ppb
Day 3 = 384.3 ppb
Day 5 = 305.1 ppb
Day 12 = 227.2 ppb
Day 19 = 169.6 ppb
Day 26 = nd

Site 51

Day 1 = 98.4 ppb
Day 3 = 29.5 ppb
Day 5 = 50.2 ppb
Day 12 = 41.7 ppb
Day 19 = 39.6 ppb
Day 26 = 25.4 ppb

Site 49

Day 1 = 144.2 ppb
Day 3 = 43 ppb
Day 5 = 49.5 ppb
Day 12 = nd
Day 19 = 9.8 ppb
Day 26 = nd

Library 1

Day 1 = 196.5 ppb
Day 3 = 119.8 ppb
Day 5 = 98.4 ppb
Day 12 = 34.5 ppb
Day 19 = 23.9 ppb
Day 26 = nd

Library 2

Day 1 = 97.1 ppb
Day 3 = 77 ppb
Day 5 = 88.1 ppb
Day 12 = 58.7 ppb
Day 19 = 3.3 ppb
Day 26 = 35.9 ppb

Site 44

Day 1 = 95.2 ppb
Day 3 = 38.5 ppb
Day 5 = 93.1 ppb
Day 12 = 17.6 ppb
Day 19 = 5.7 ppb
Day 26 = 9.6 ppb

Beaver Dam 2010 2,4-D Herbicide Residual Monitoring Library Lake

Target Application Rate for 2,4-D: 500 ppb

Library 1

Day 1 = 51.2 ppb
Day 3 = 27.2 ppb
Day 5 = 22.6 ppb
Day 12 = <14 ppb
Day 19 = <14 ppb
Day 26 = <14 ppb

Library 2

Day 1 = 25 ppb
Day 3 = 26.6 ppb
Day 5 = 63 ppb
Day 12 = <14 ppb
Day 19 = <14 ppb
Day 26 = <14 ppb

Site 0 - Actual ppb 2,4-D applied: 1750 ppb

Day 1 = 144 ppb
Day 2 = 48.4 ppb
Day 7 = 36.4 ppb

Beaver Dam 2010 2,4-D Herbicide Residual Monitoring West Lake

W I S C O N S I N
B A R R O N

Site 21 - Actual ppb 2,4-D applied: 2330 ppb

Day 1 = 455 ppb
Day 2 = 290 ppb
Day 7 = 92 ppb

Site 19 - Actual ppb 2,4-D applied: 2000 ppb

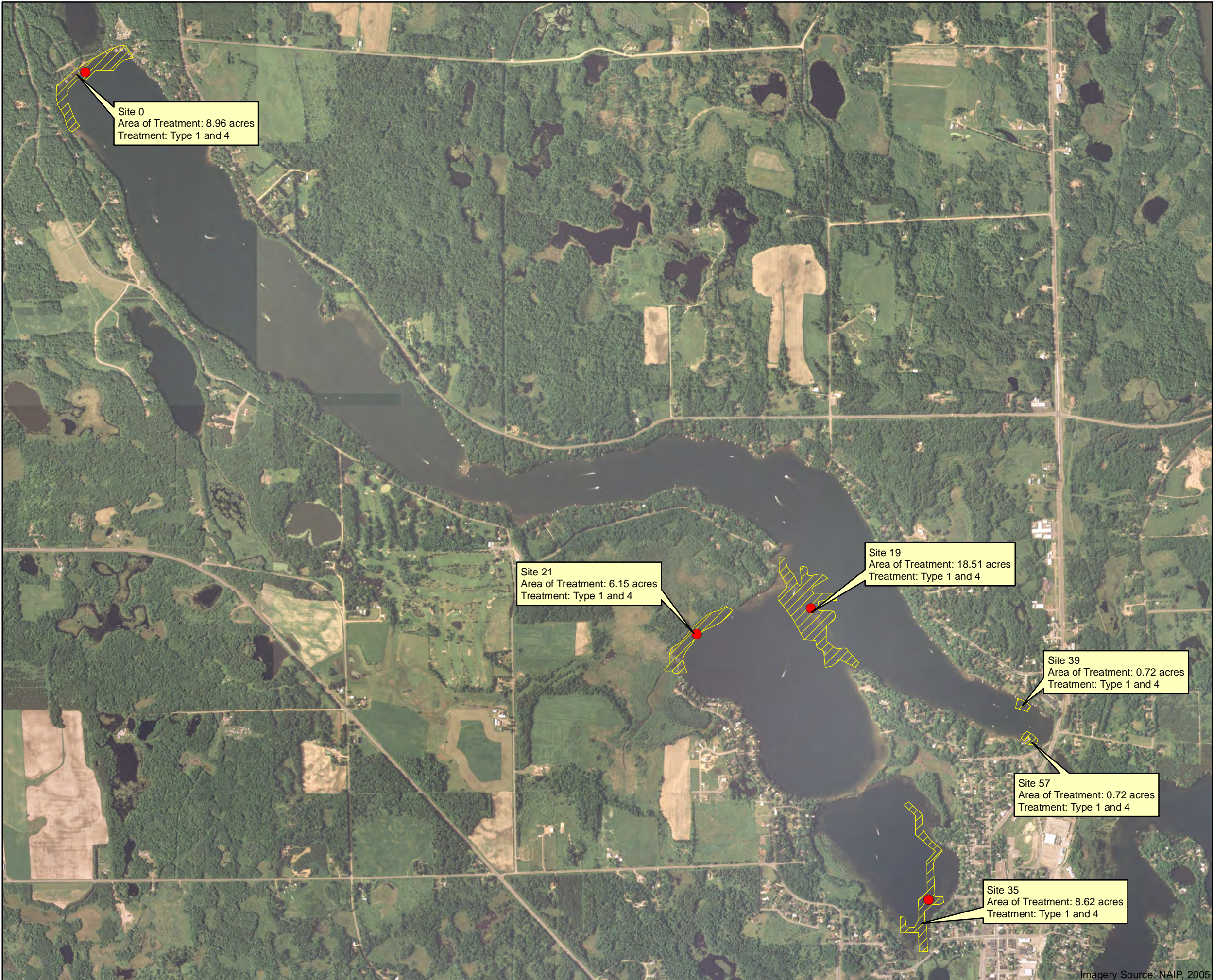
Day 1 = 245 ppb
Day 2 = 46.7 ppb
Day 7 = 115 ppb

Site 39 - Actual ppb 2,4-D applied: 2000 ppb

Day 1 = 77.6 ppb
Day 2 = 43.6 ppb
Day 7 = 95.4 ppb

Day 1 = 169 ppb
Day 2 = 49.2 ppb
Day 7 = 170 ppb

Site 35 - Actual ppb 2,4-D applied: 2330 ppb



Site 0
Area of Treatment: 8.96 acres
Treatment: Type 1 and 4



Site 21
Area of Treatment: 6.15 acres
Treatment: Type 1 and 4

Site 19
Area of Treatment: 18.51 acres
Treatment: Type 1 and 4

Site 39
Area of Treatment: 0.72 acres
Treatment: Type 1 and 4

Site 57
Area of Treatment: 0.72 acres
Treatment: Type 1 and 4

Site 35
Area of Treatment: 8.62 acres
Treatment: Type 1 and 4

 Proposed 2010 Treatment Site
 2010 Herbicide Residual Monitoring Site

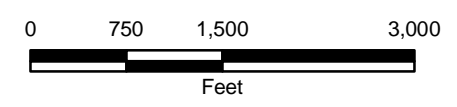
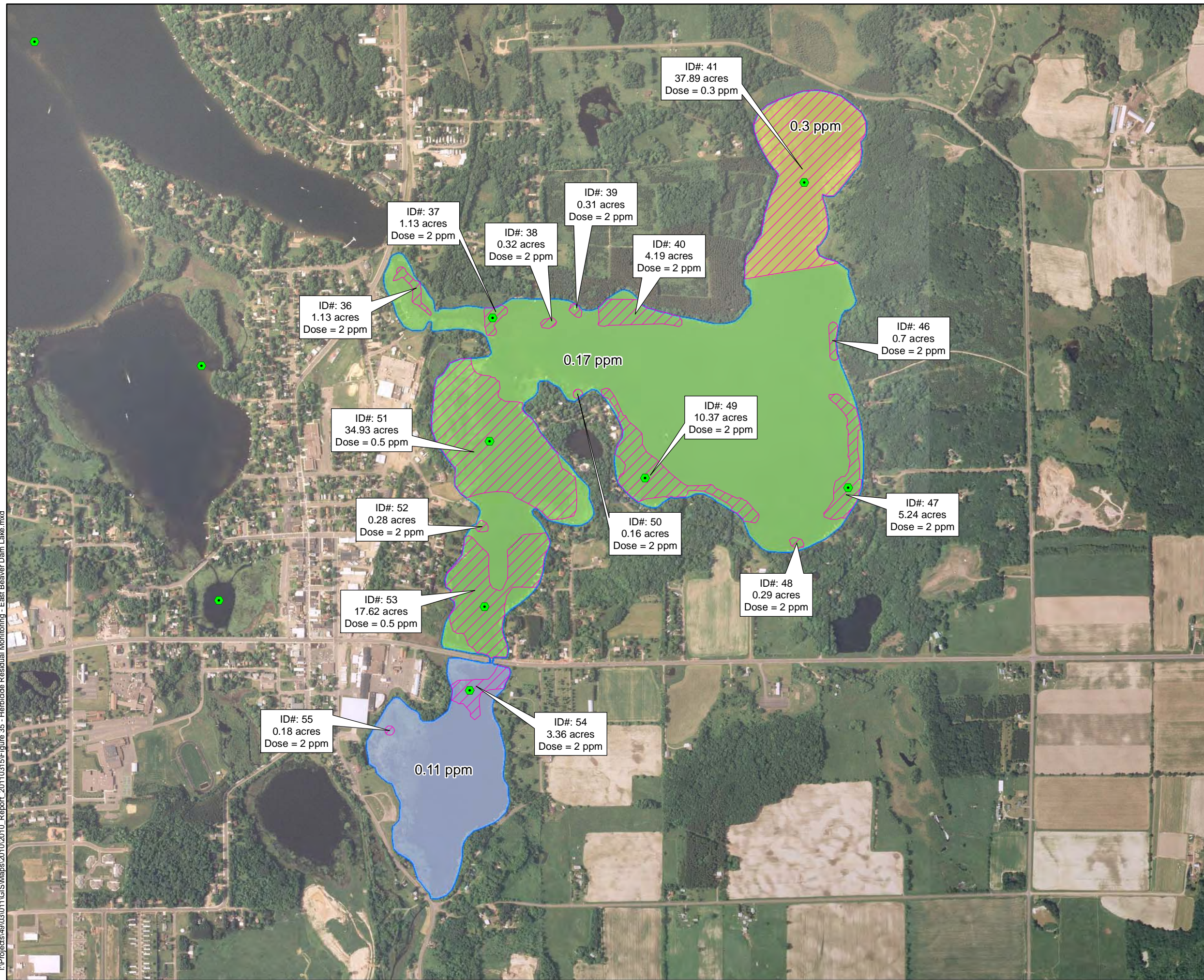


Figure 32
2010 WEST BEAVER DAM LAKE
HERBICIDE RESIDUAL
MONITORING SITES
Beaver Dam Lake
Barron County, WI
Job No. 49-03-011
0-17

I:\Projects\09\03\011\GIS\Maps\2010\2010_Report_20110315\Figure 35 - Herbicide Residual Monitoring - East Beaver Dam Lake.mxd



- Proposed 2011 EWM Treatment Areas
- Cemetery Bay (0.11 ppm)
- East Lake (0.17 ppm)
- Norwegian Bay (0.3 ppm)
- Herbicide Residual Monitoring Locations

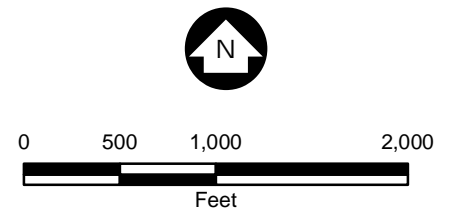
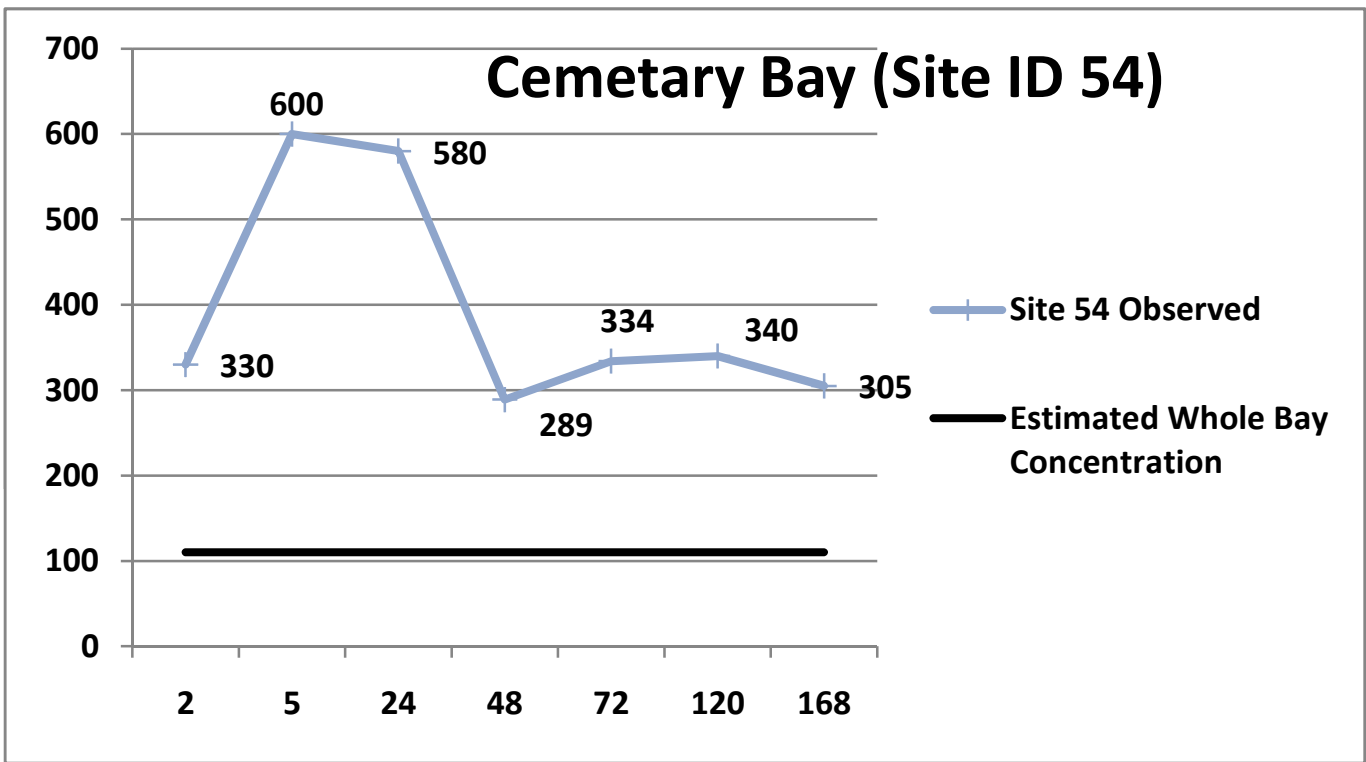
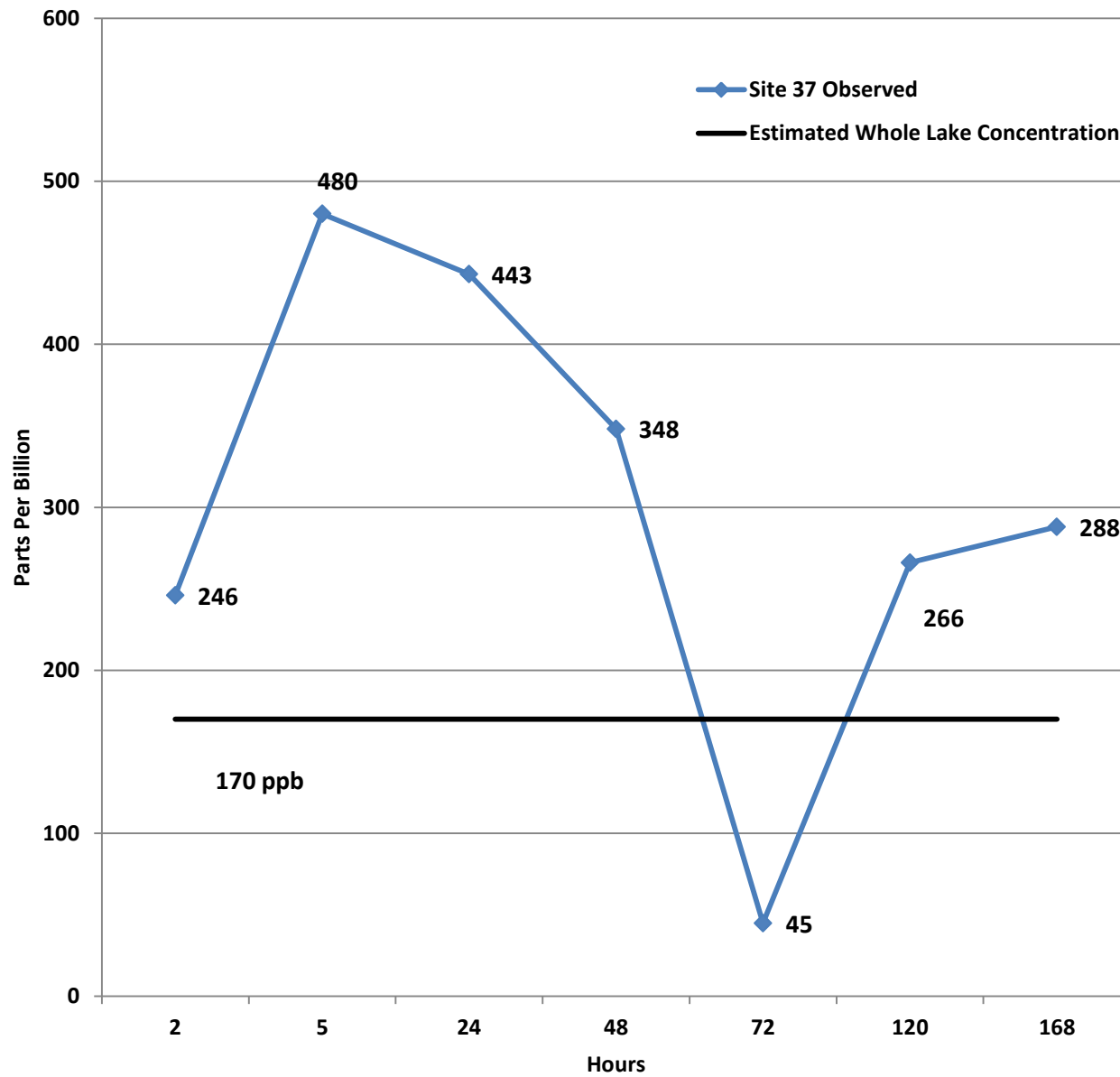


Figure 35

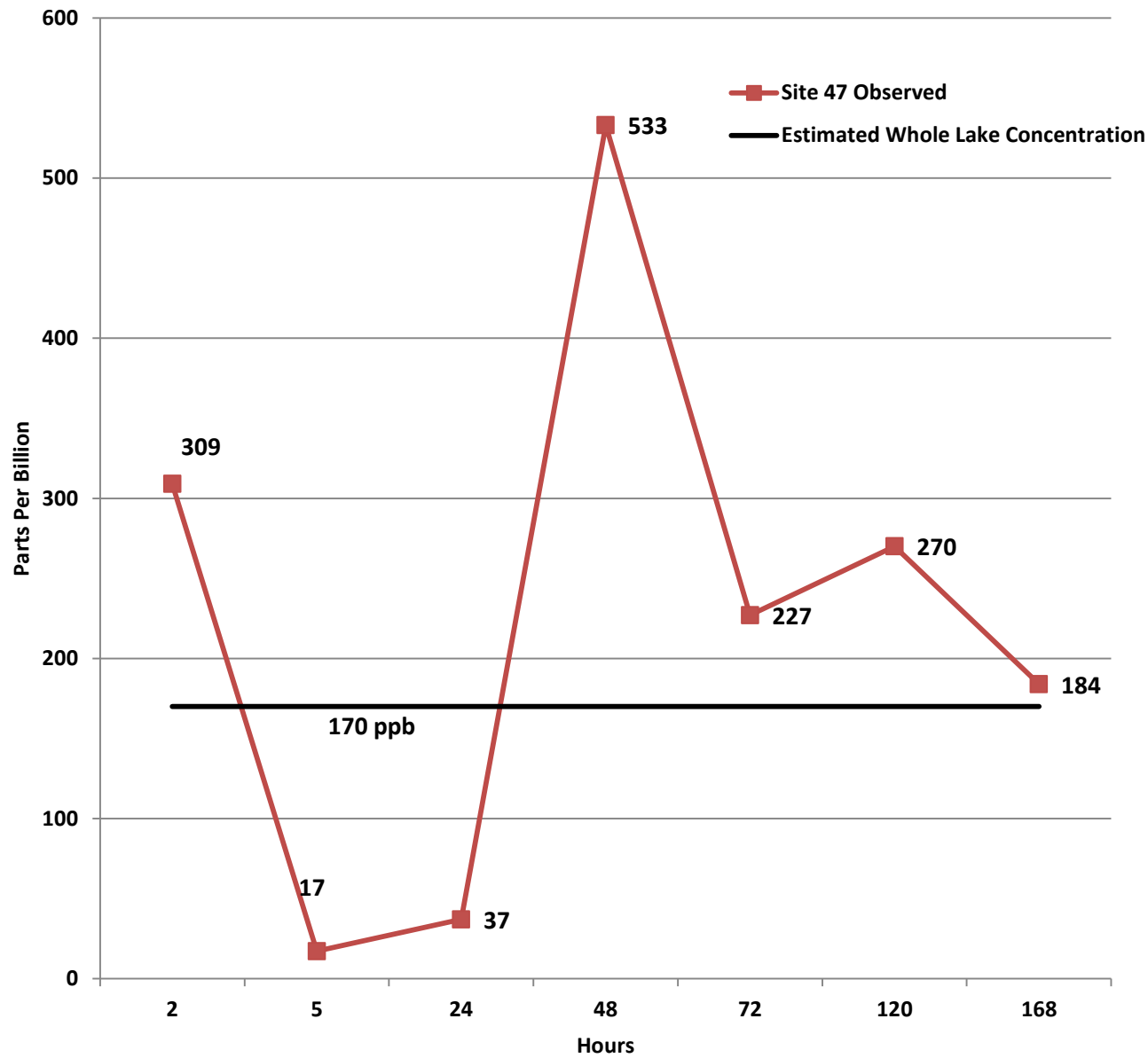
Herbicide Residual Monitoring
Beaver Dam Lake
Barron County, WI
Job No. 49-03-011
O-18



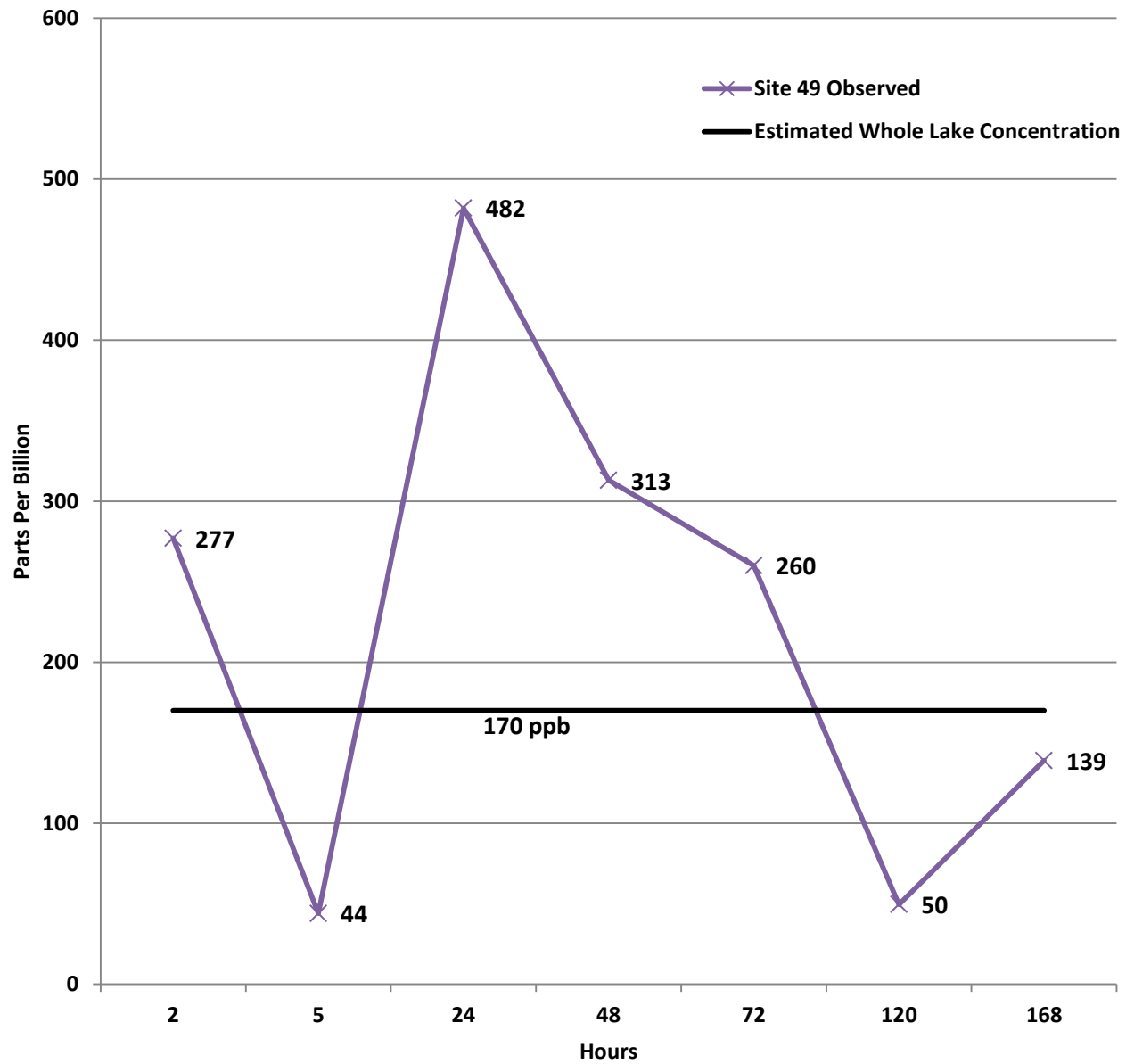
2011 Spring 2,4-D Herbicide Residue Data: East Lake (Site ID 37)



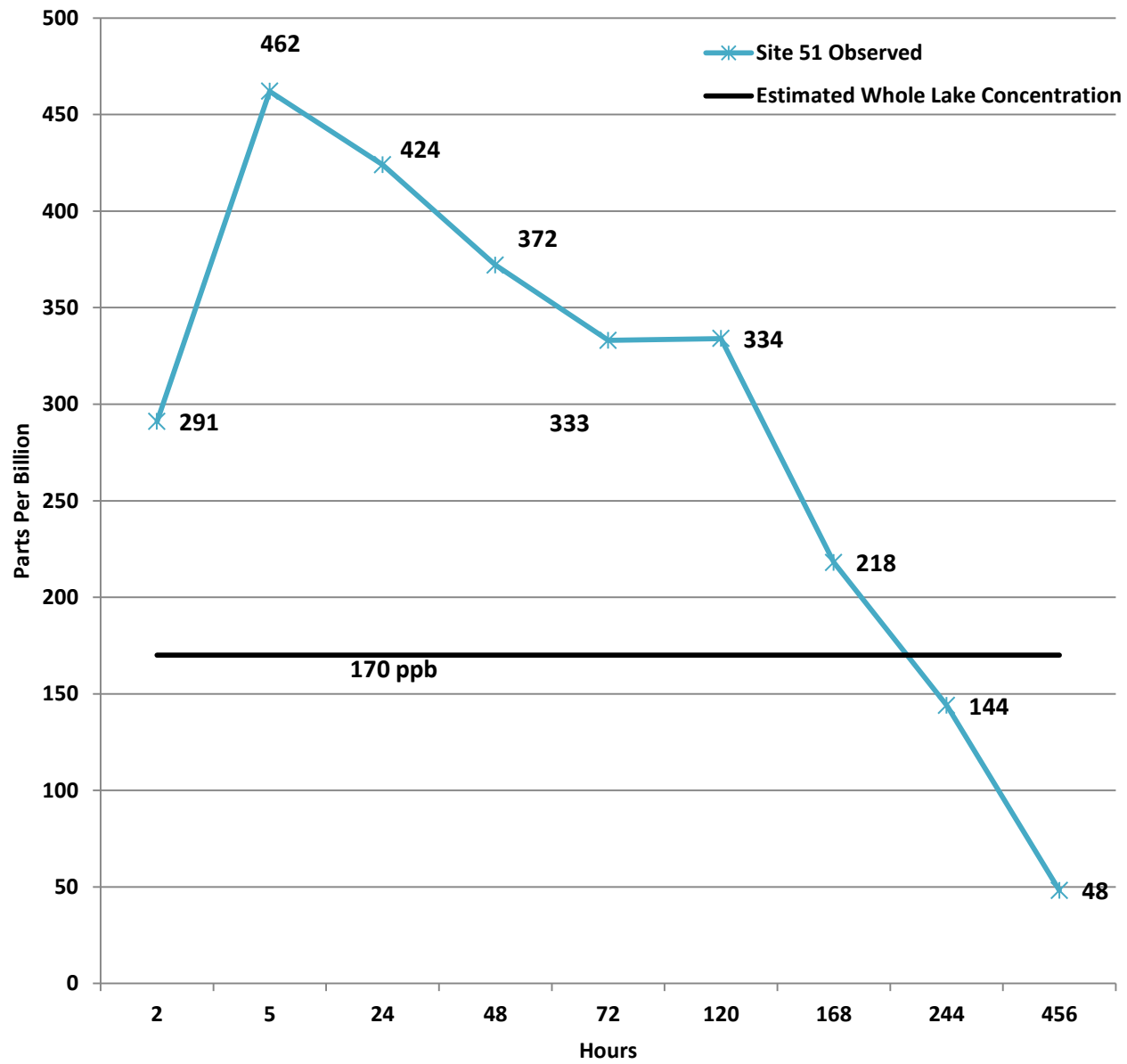
2011 Spring 2,4-D Herbicide Residue Data: East Lake (Site ID 47)



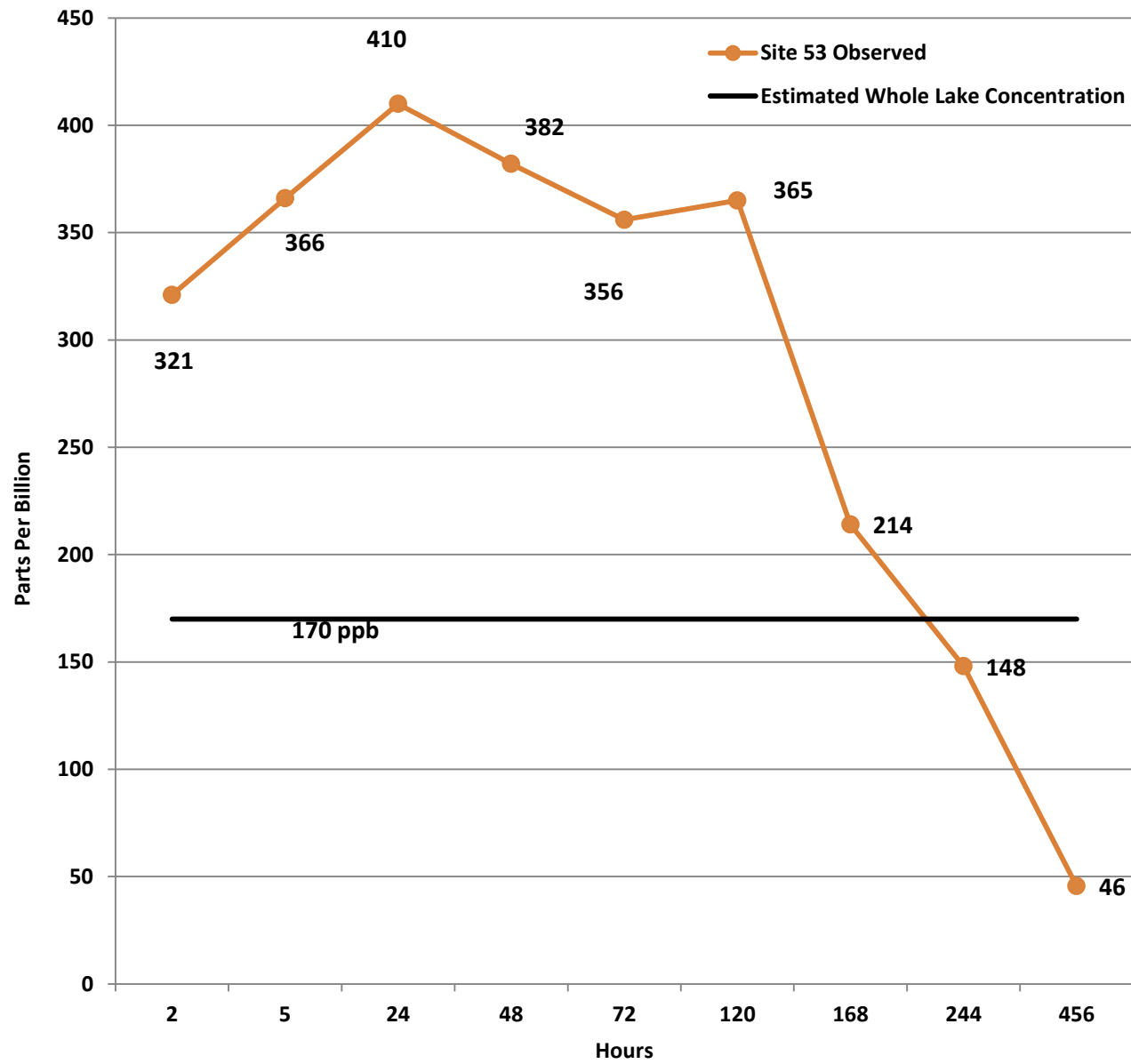
2011 Spring 2,4-D Herbicide Residue Data: East Lake (Site ID 49)



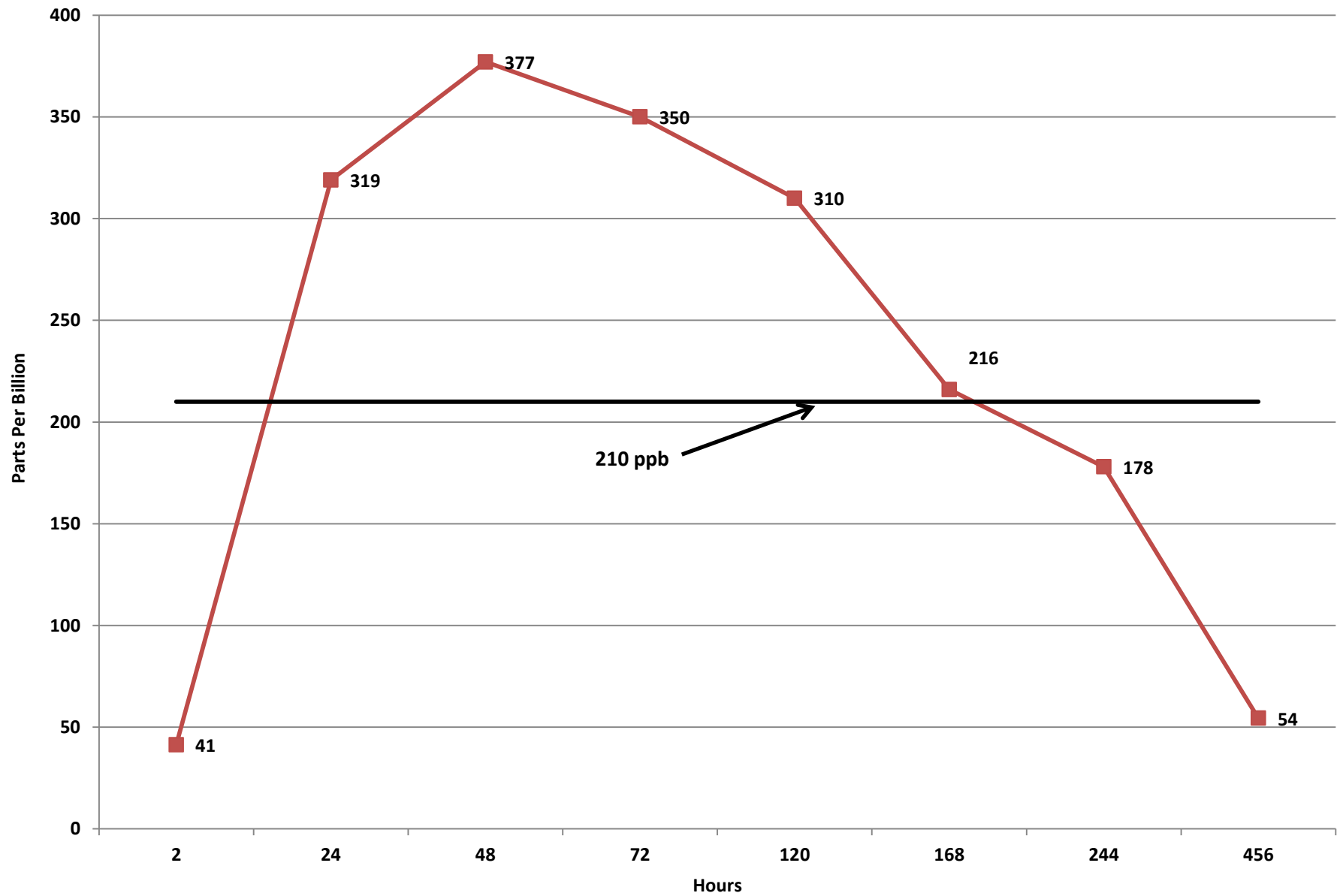
2011 Spring 2,4-D Herbicide Residue Data: East Lake (Site ID 51)

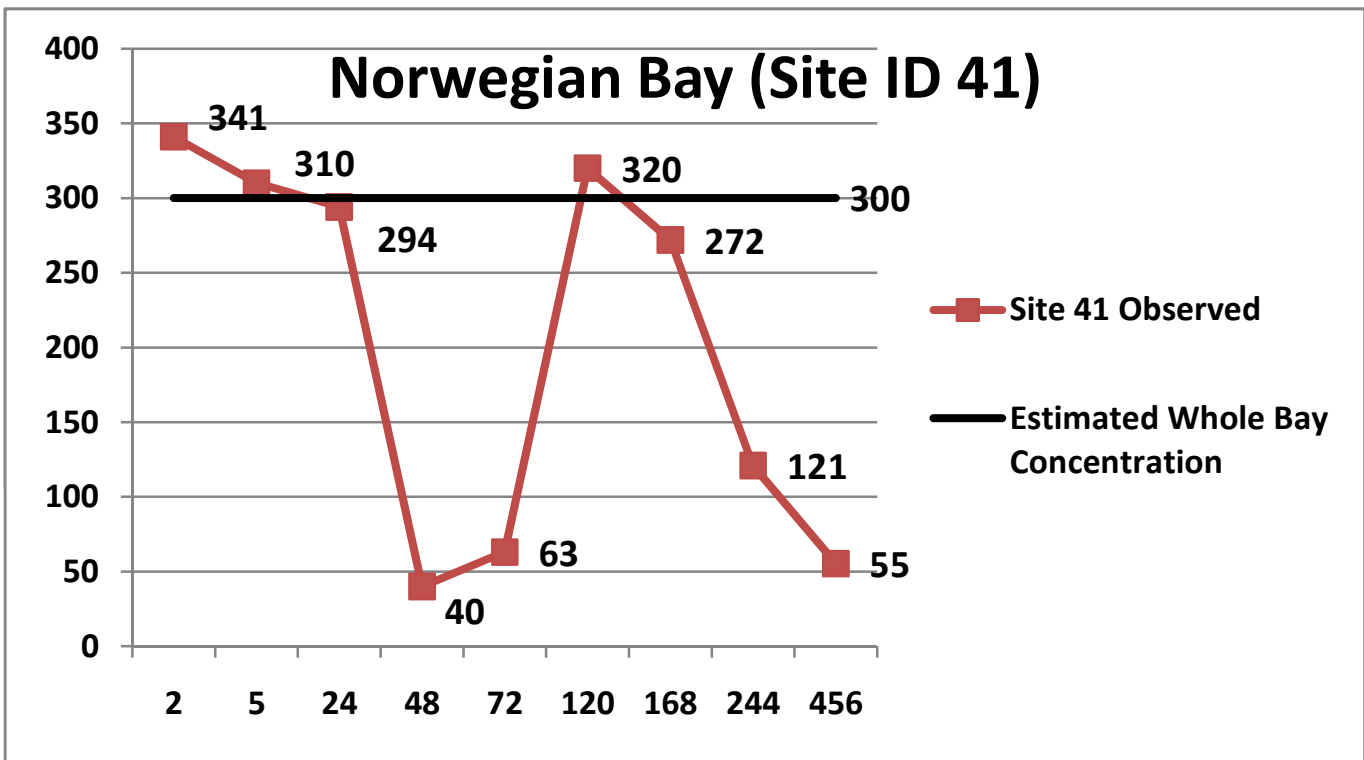


2011 Spring 2,4-D Herbicide Residue Data: East Lake (Site ID 53)

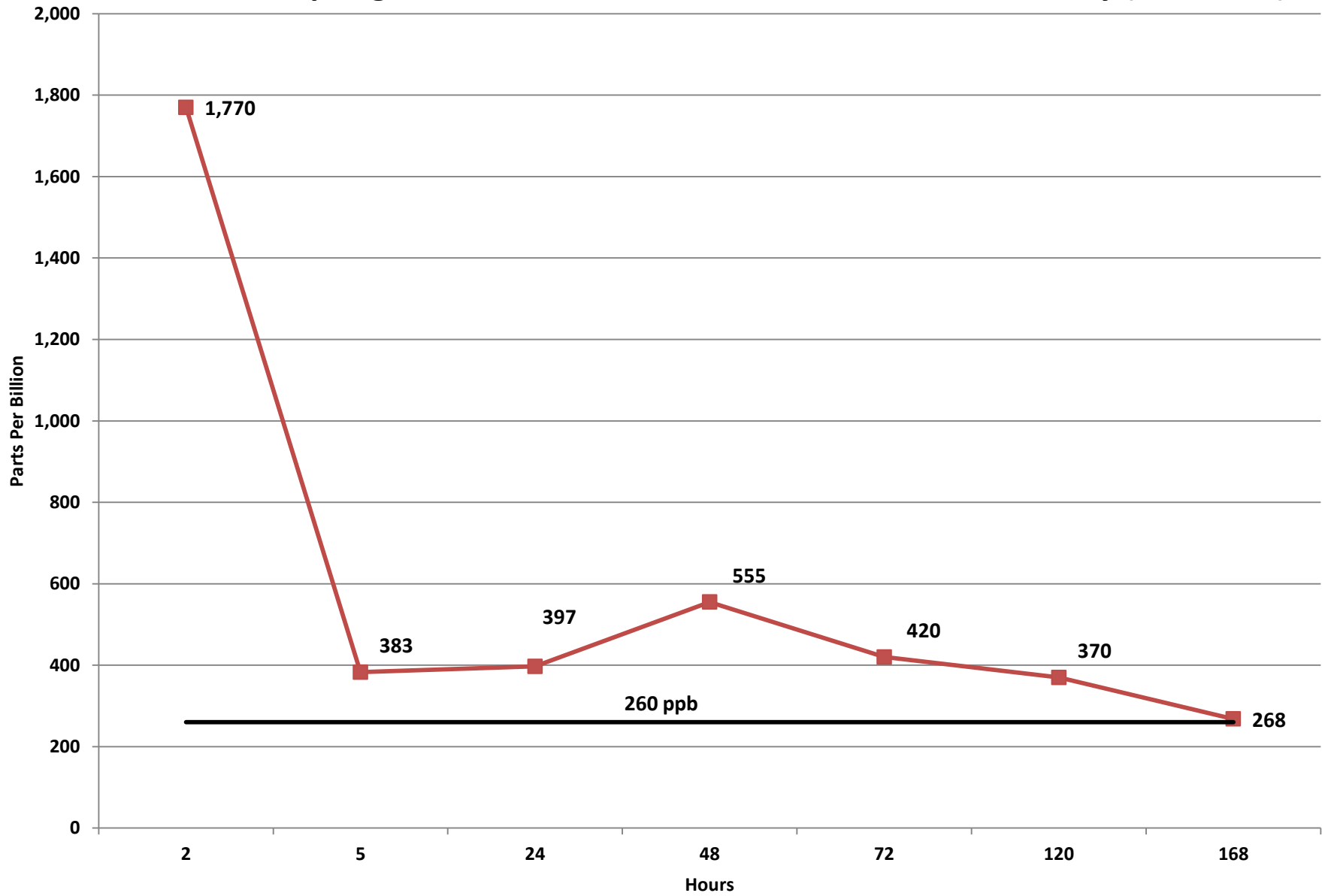


2011 Spring 2,4-D Herbicide Residue Data: Library Lake (Site ID 35)

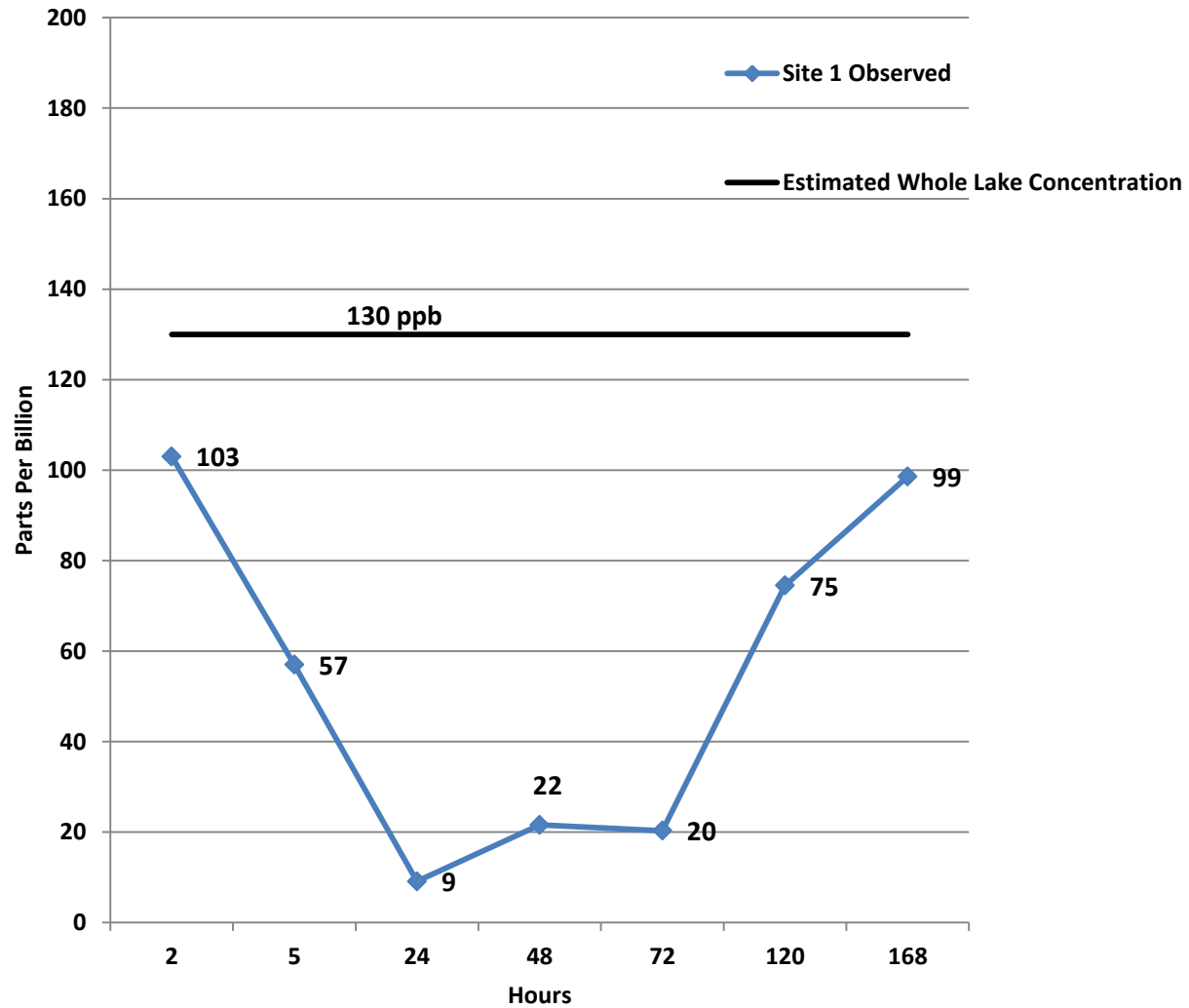




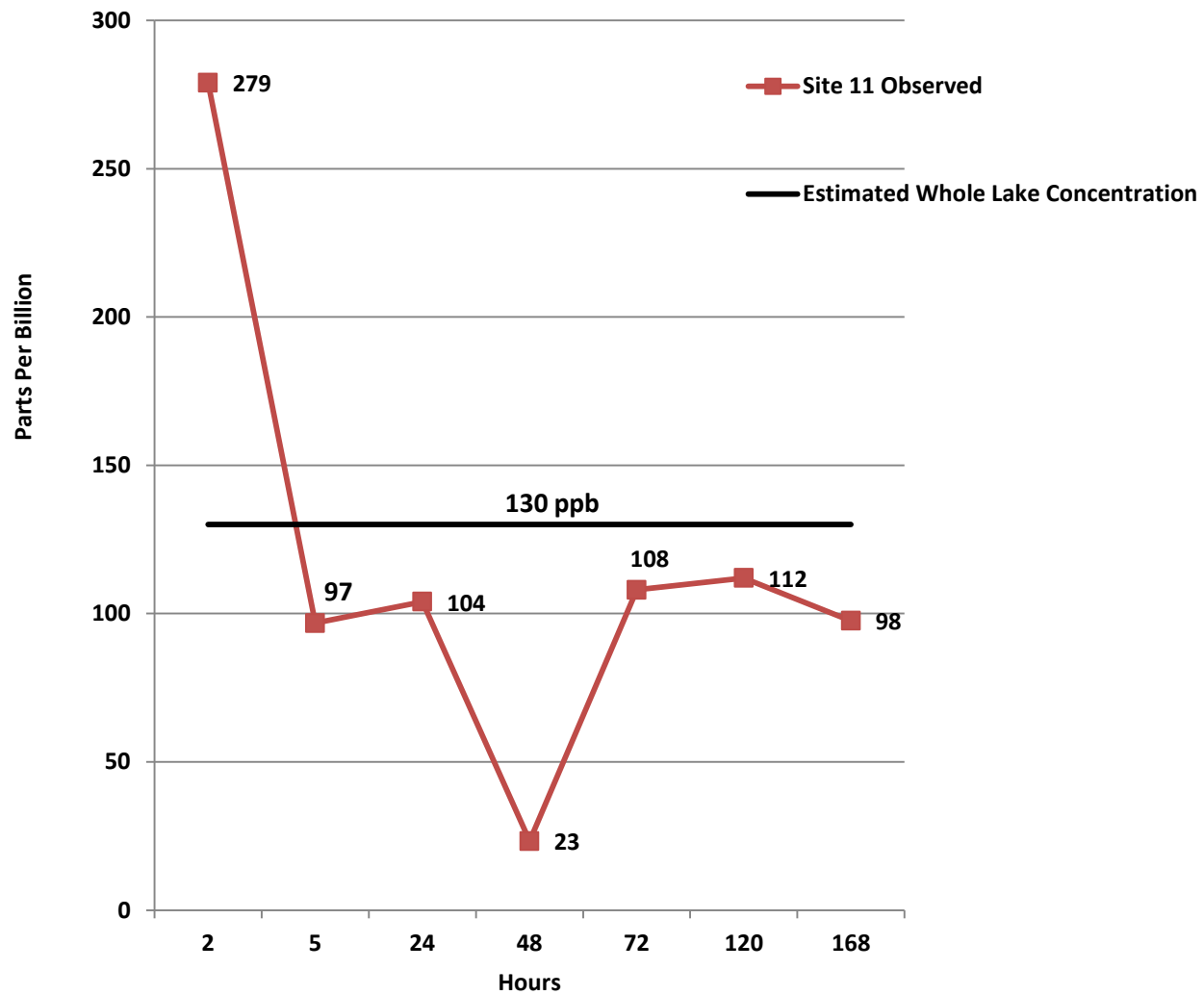
2011 Spring 2,4-D Herbicide Residue Data: Rabbit Island Bay (Site ID 31)



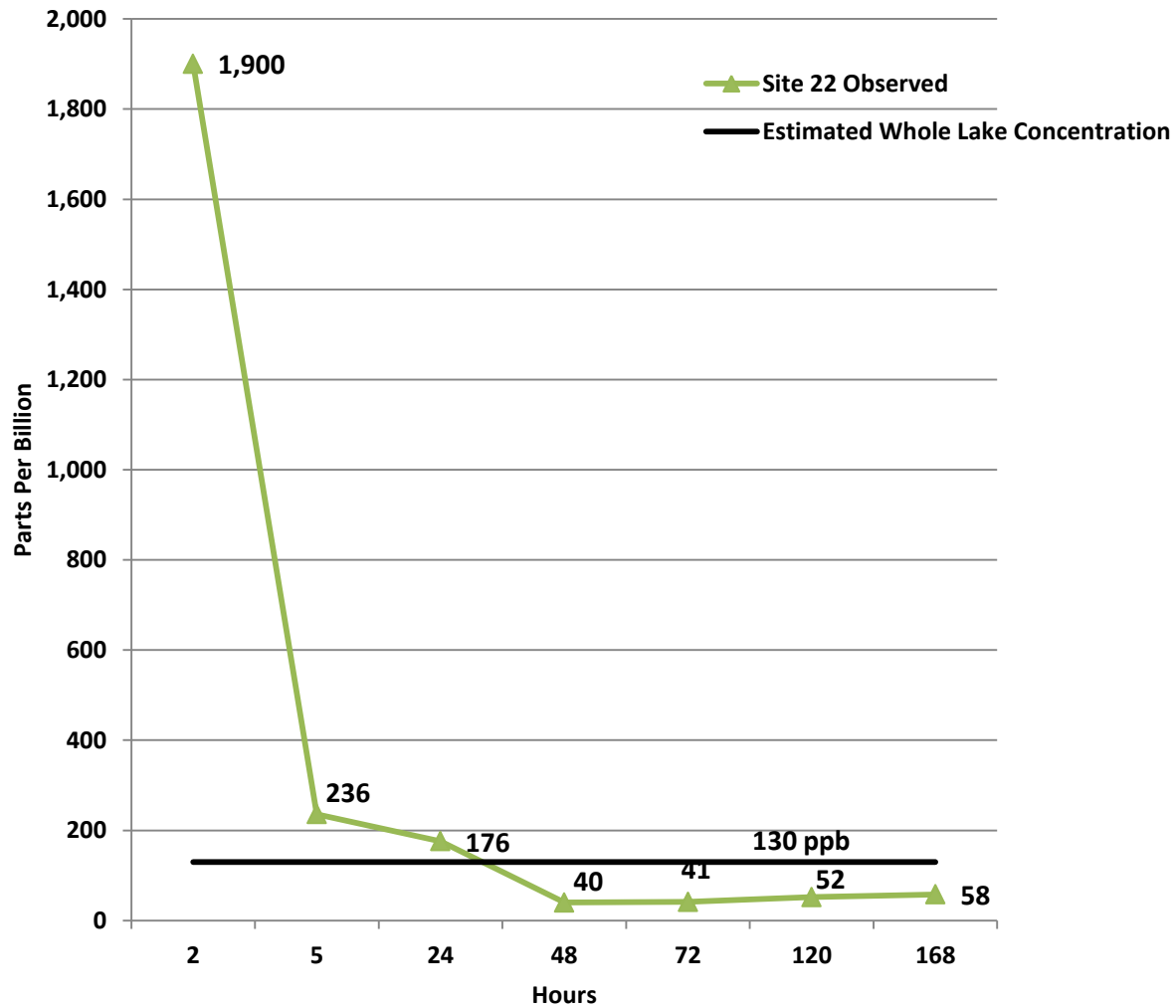
2011 Spring 2,4-D Herbicide Residue Data: West Lake (Site ID 1)



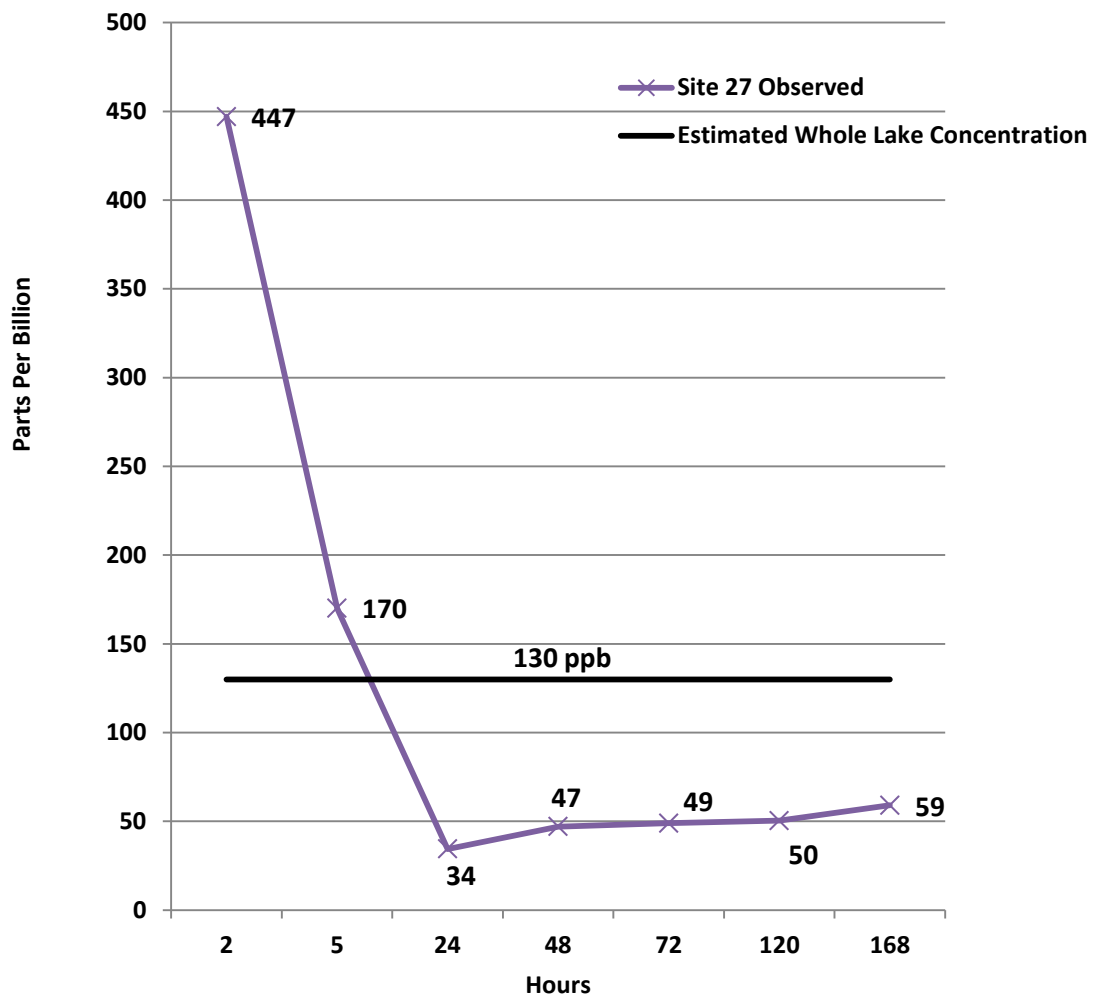
2011 Spring 2,4-D Herbicide Residue Data: West Lake (Site ID 11)



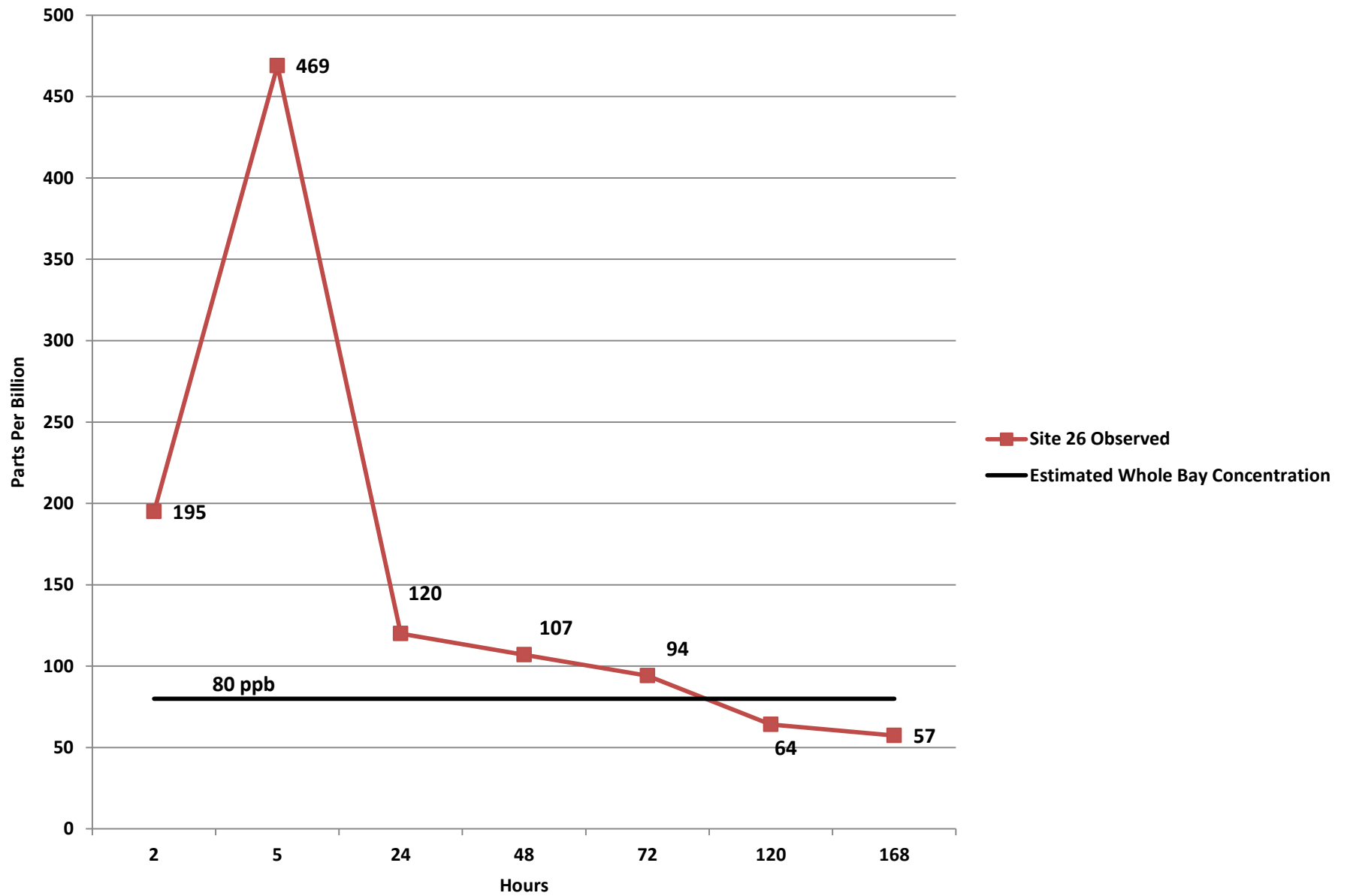
2011 Spring 2,4-D Herbicide Residue Data: West Lake (Site ID 22)



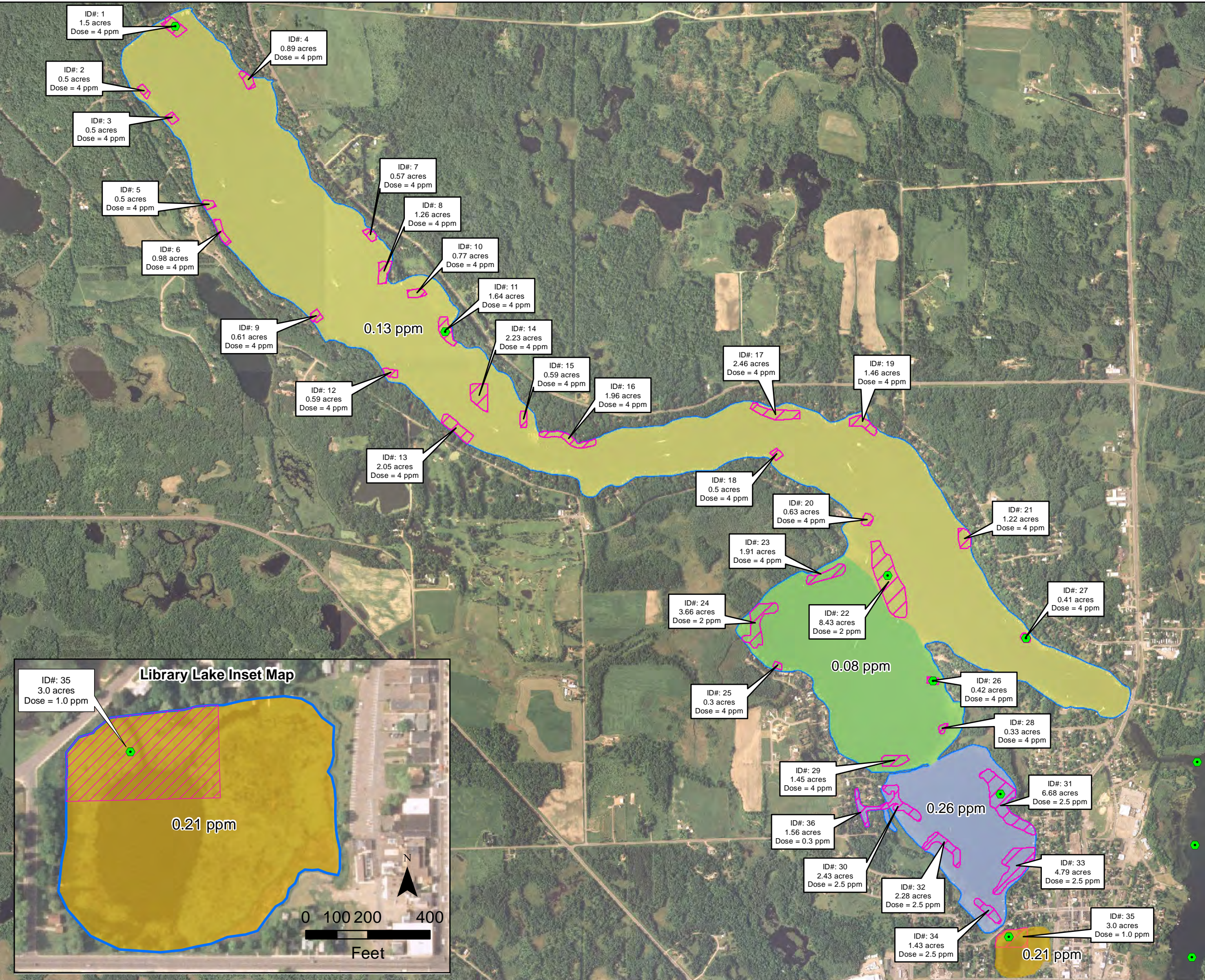
2011 Spring 2,4-D Herbicide Residue Data: West Lake (Site ID 27)








2011 Spring 2,4-D Herbicide Residue Data: William's Bay (Site ID 26)



Barr Footer: ArcGIS 10.0, 2011-04-01 16:10:09 206000 File: I:\Projects\4903011\GIS\Maps\2010\10\2010_Report_20110315\Figure 34 - Herbicide Residual Monitoring - West Beaver Dam and Library Lake.mxd User: TJA



-  Proposed 2011 EWM Treatment Areas
-  West Lake (0.13 ppm)
-  Williams Bay (0.08 ppm)
-  Rabbit Bay (0.26 ppm)
-  Library Lake (0.21 ppm)
-  Herbicide Residual Monitoring Locations

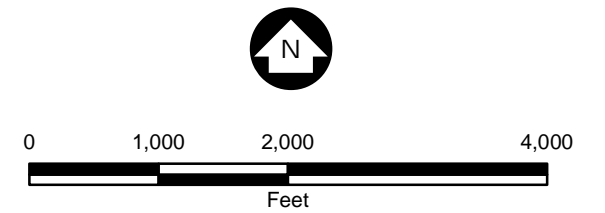
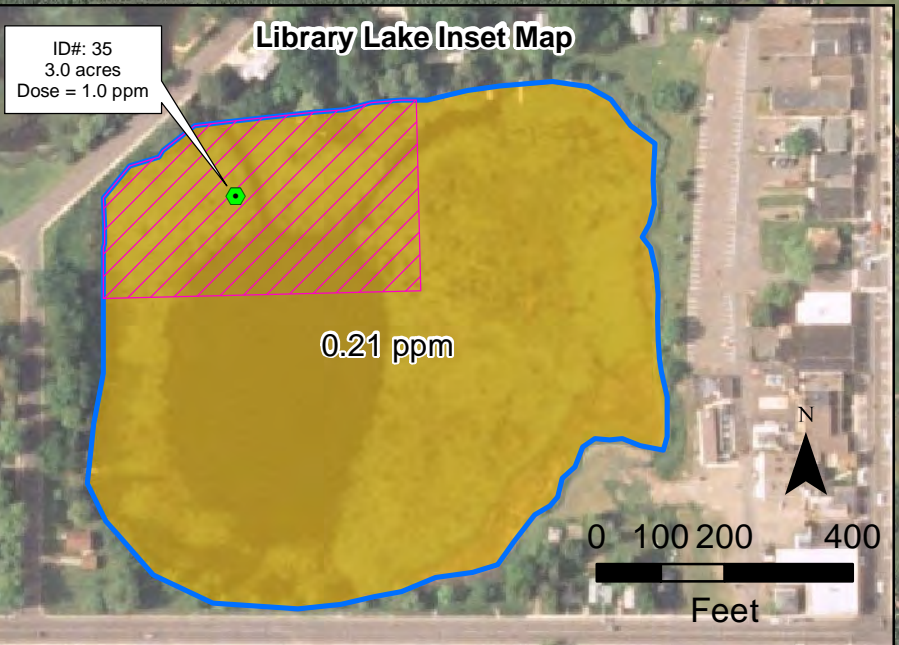
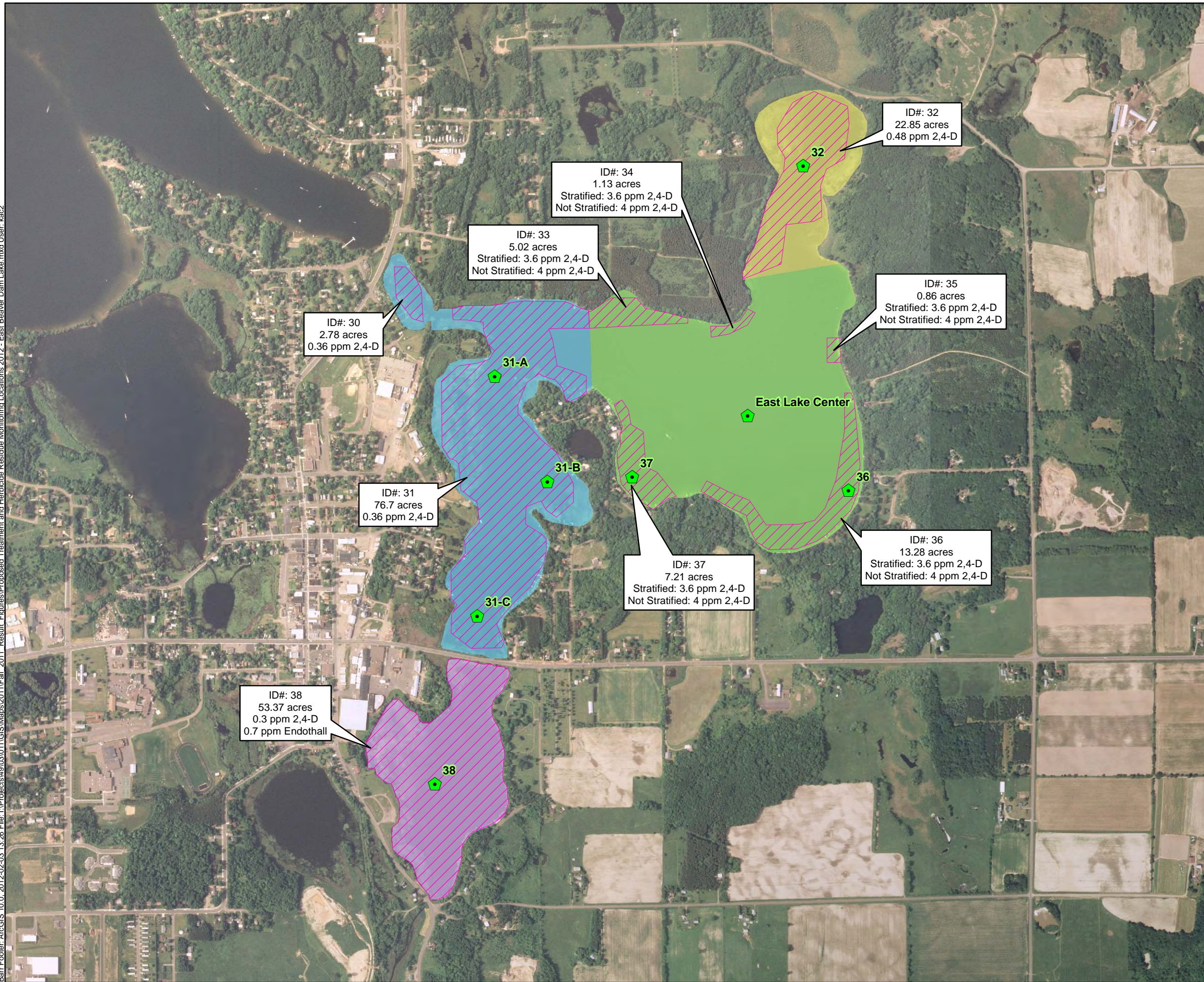








Figure 34

Herbicide Residual Monitoring
 Beaver Dam and Library Lake
 Barron County, WI
 Job No. 49-03-011
 O-33



-  Proposed 2012 EWM Treatment Areas
- Treatment Zones (183.19 Total Treated Acres)**
-  East Lake (0.30 ppm 2,4-D (Stratified) / 0.20 ppm 2,4-D (Not Stratified) - 27.5 Treated Acres)
-  City Bay (0.30 ppm 2,4-D - 79.47 Treated Acres)
-  Cemetery Bay (0.3 ppm 2,4-D / 0.7 ppm Endothall - 53.37 Treated Acres)
-  Norwegian Bay (0.30 ppm 2,4-D- 22.85 Treated Acres)
-  Herbicide Residue Monitoring Locations

ID#: 30
2.78 acres
0.36 ppm 2,4-D

ID#: 33
5.02 acres
Stratified: 3.6 ppm 2,4-D
Not Stratified: 4 ppm 2,4-D

ID#: 34
1.13 acres
Stratified: 3.6 ppm 2,4-D
Not Stratified: 4 ppm 2,4-D

ID#: 32
22.85 acres
0.48 ppm 2,4-D

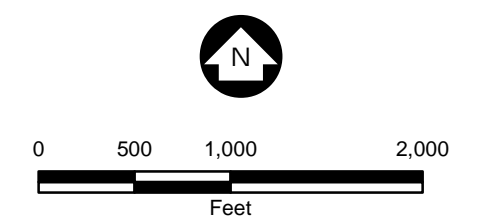
ID#: 35
0.86 acres
Stratified: 3.6 ppm 2,4-D
Not Stratified: 4 ppm 2,4-D

ID#: 31
76.7 acres
0.36 ppm 2,4-D

ID#: 37
7.21 acres
Stratified: 3.6 ppm 2,4-D
Not Stratified: 4 ppm 2,4-D

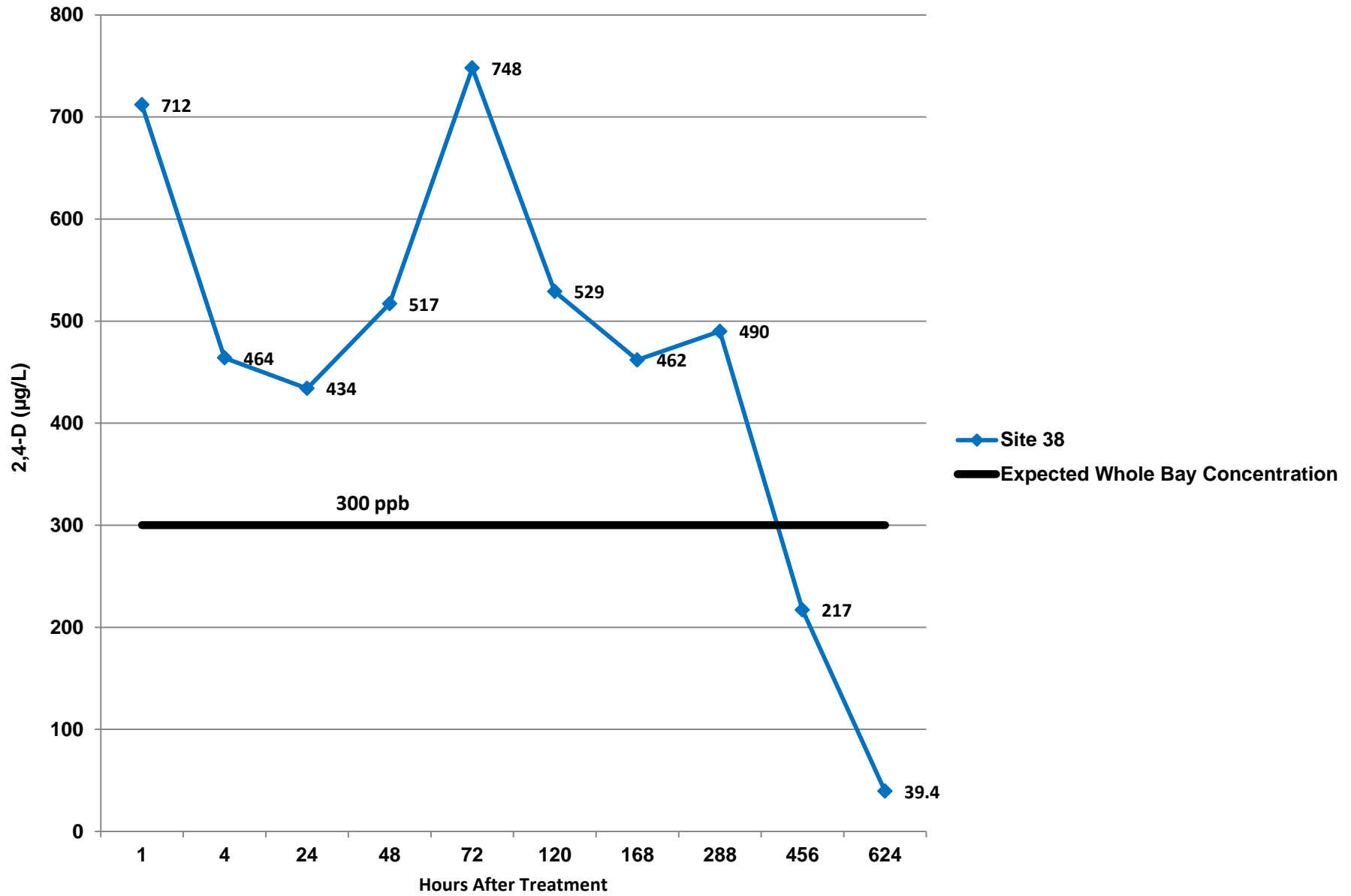
ID#: 36
13.28 acres
Stratified: 3.6 ppm 2,4-D
Not Stratified: 4 ppm 2,4-D

ID#: 38
53.37 acres
0.3 ppm 2,4-D
0.7 ppm Endothall

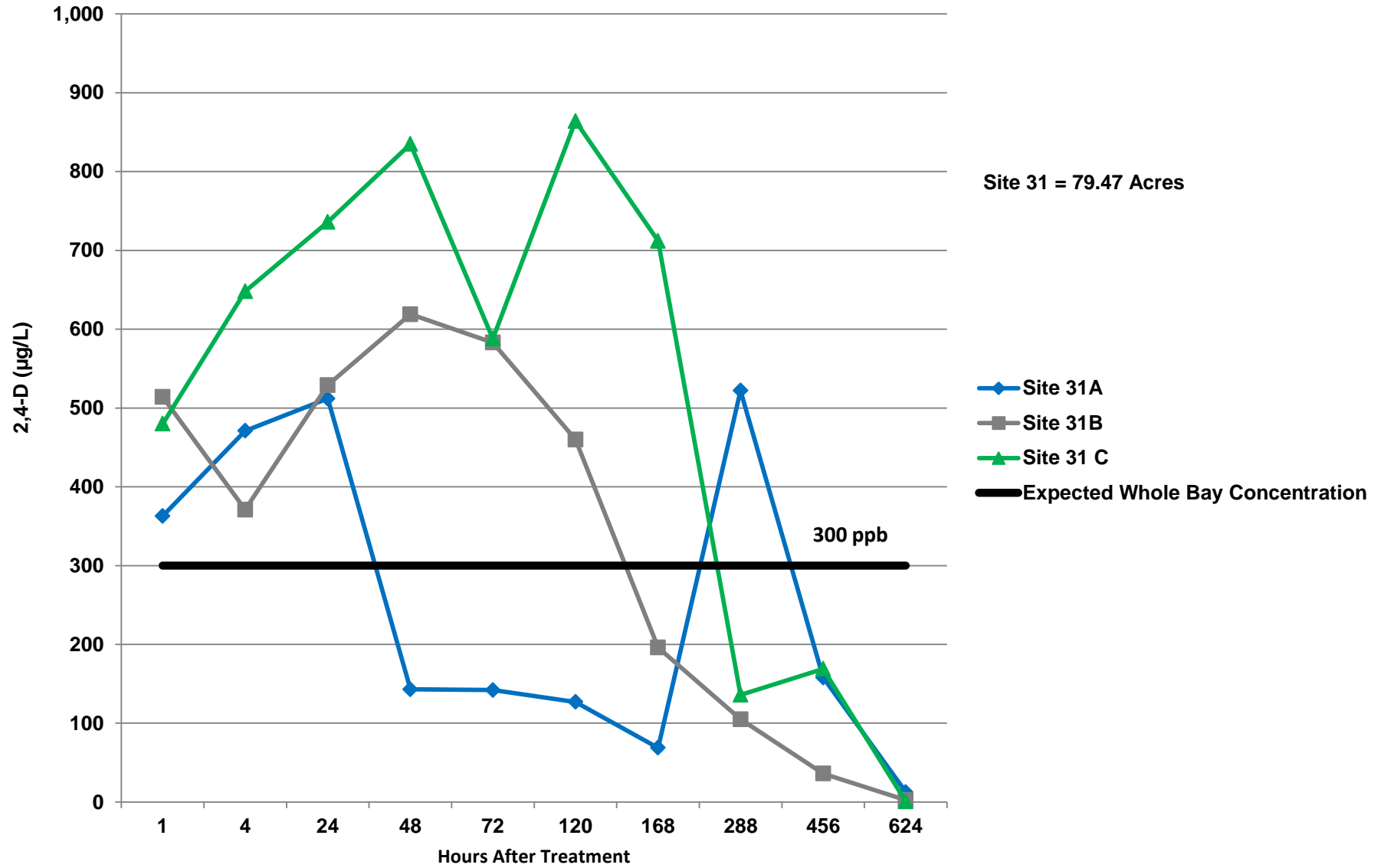


Eurasian Watermilfoil
Proposed 2012 Treatment and
Herbicide Residue Monitoring
Locations
Beaver Dam Lake
Barron County, WI
O-34

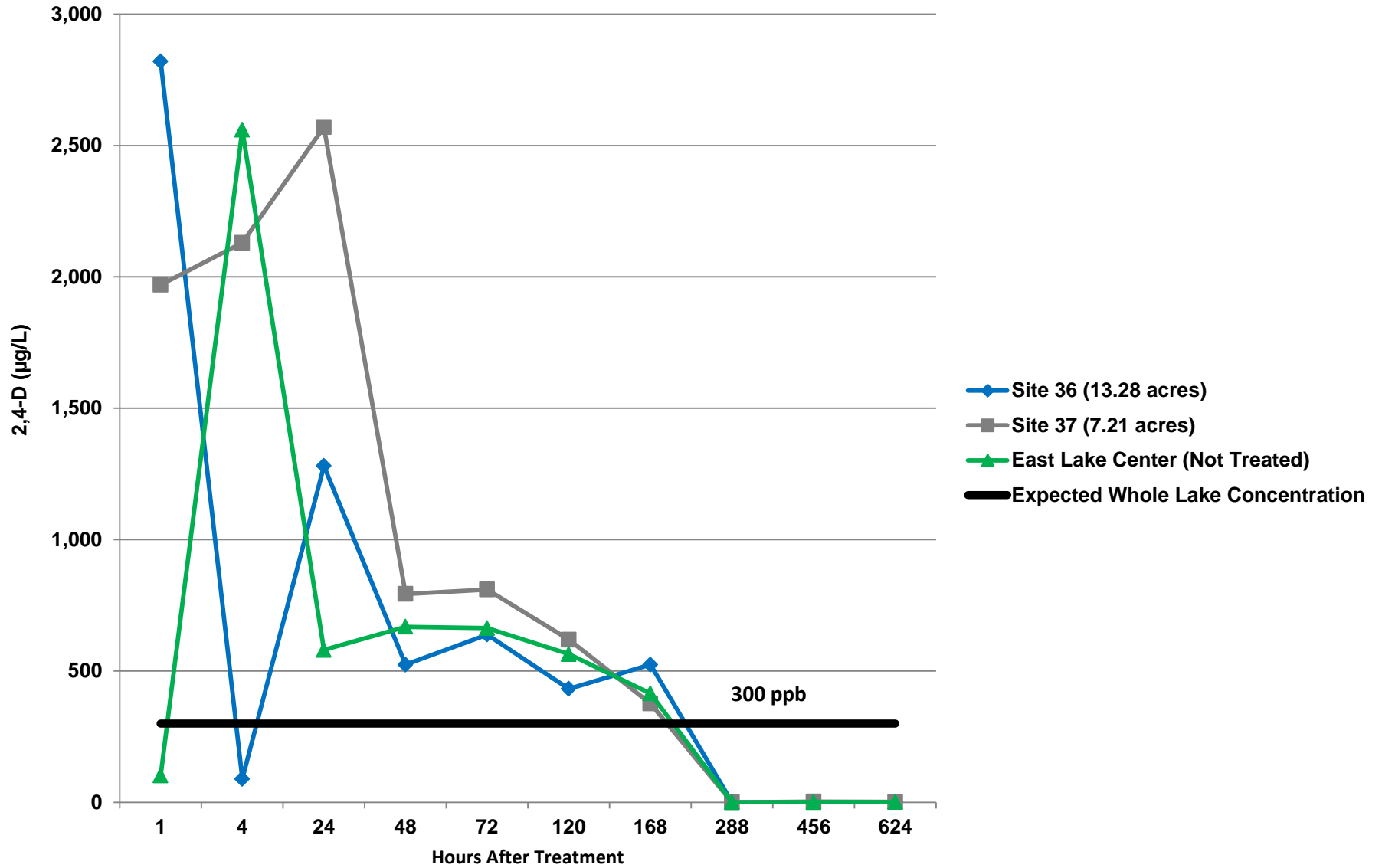
2012 Spring 2,4-D Herbicide Residue Data: Cemetary Bay (Site ID 38)



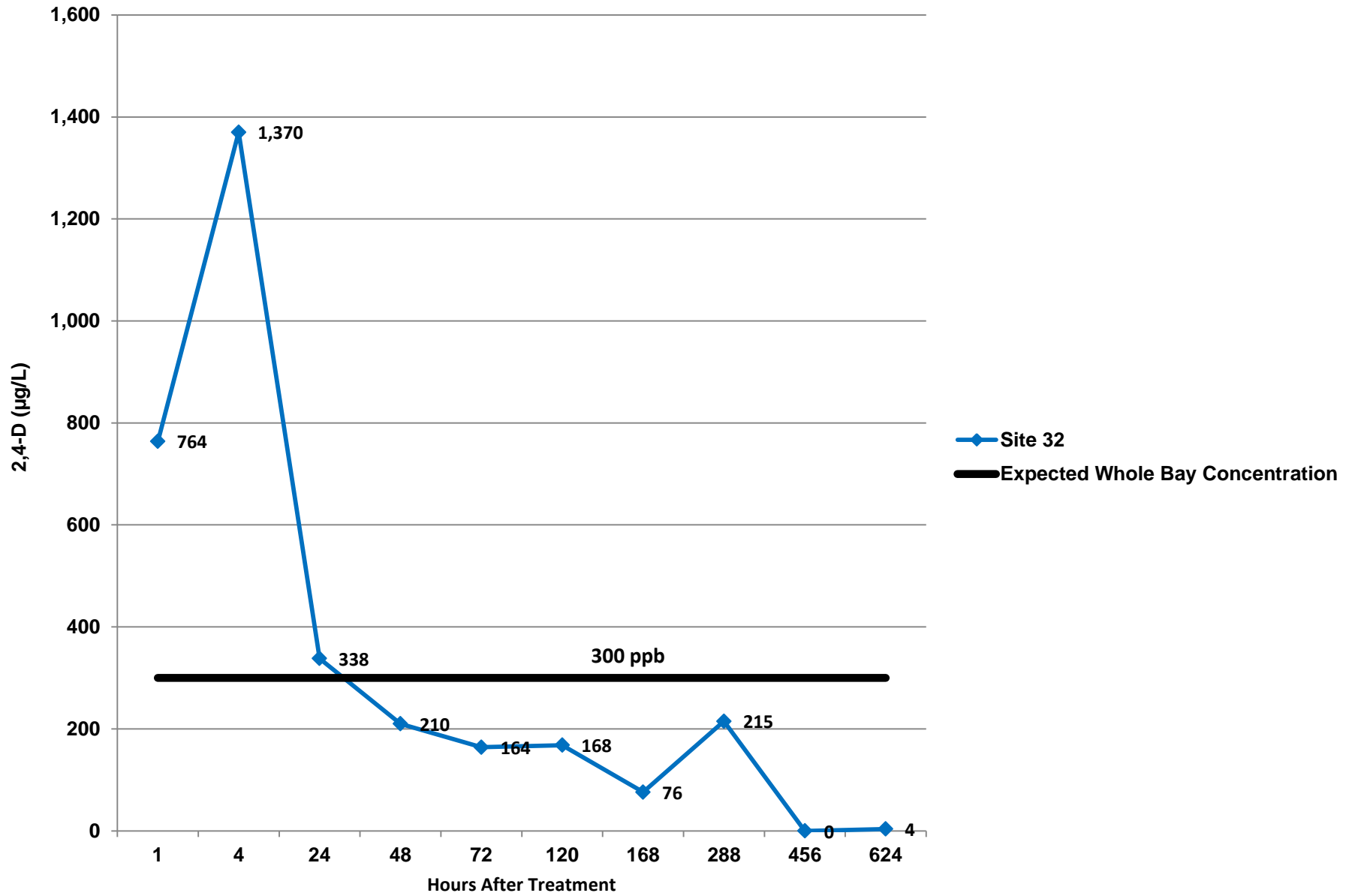
2012 Spring 2,4-D Herbicide Residue Data: City Bay (Site ID 31A, 31B, and 31C)



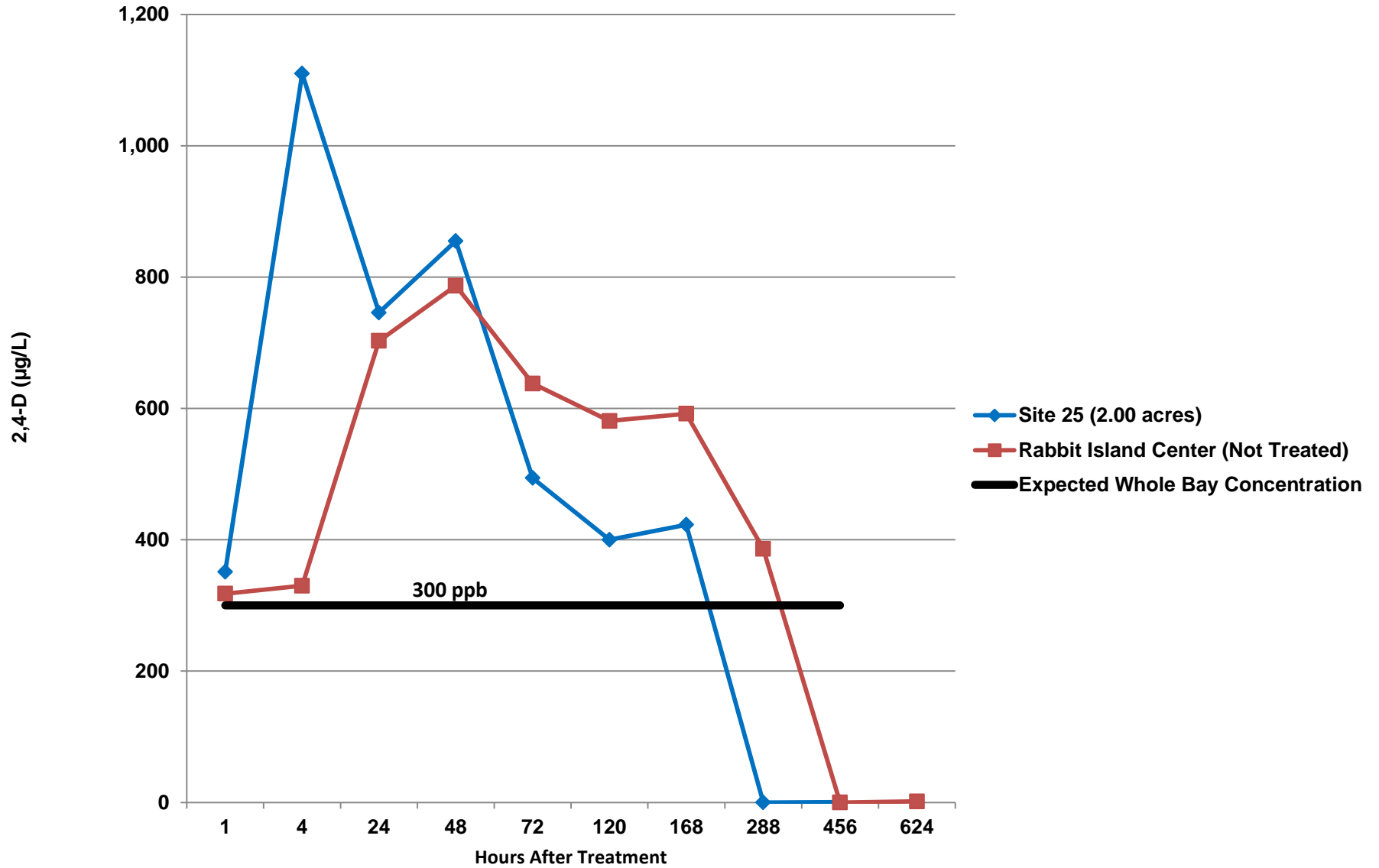
2012 Spring 2,4-D Herbicide Residue Data: East Lake (Site ID 36, 37, and East Lake Center)



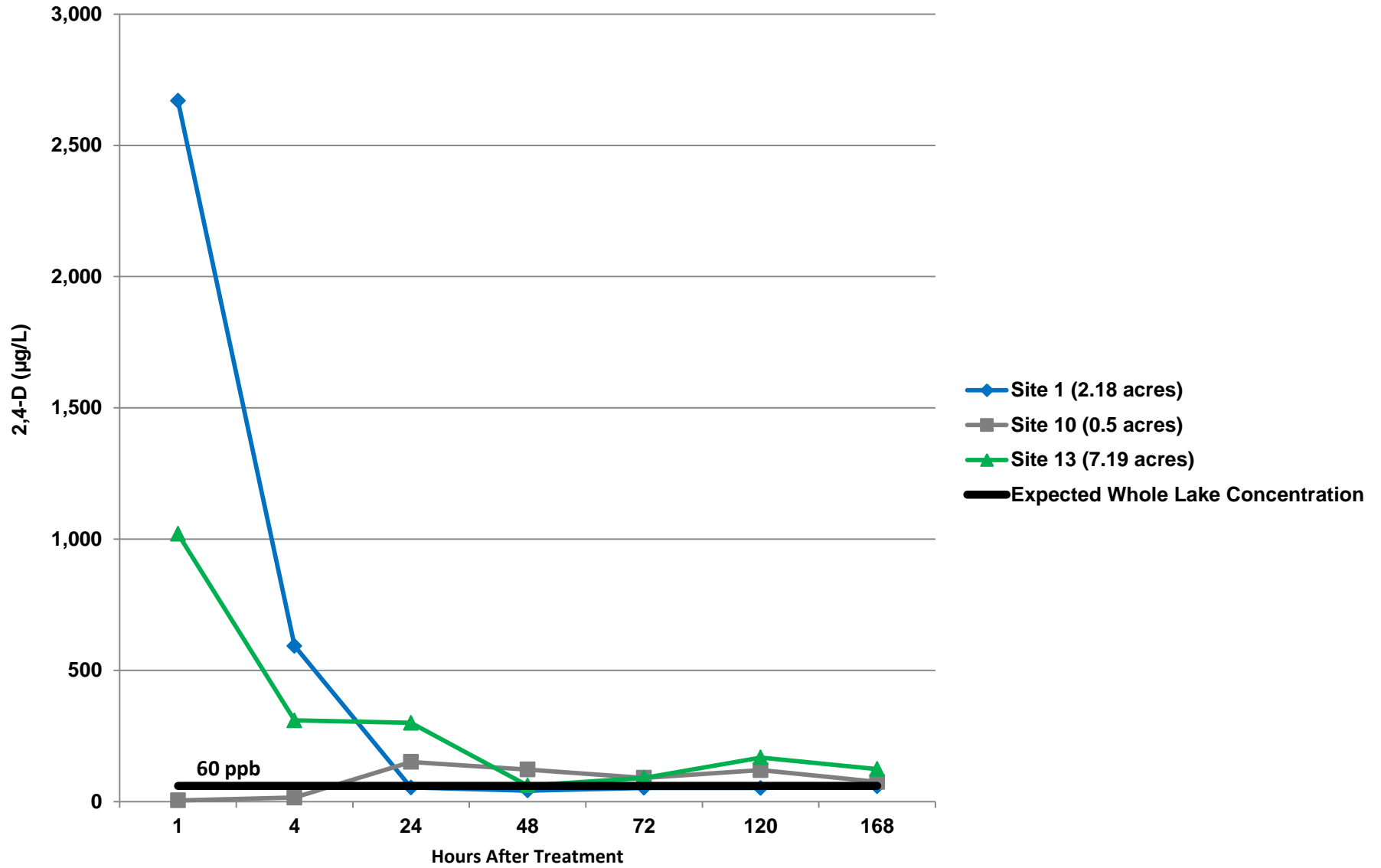
2012 Spring 2,4-D Herbicide Residue Data: Norwegian Bay (Site ID 32)



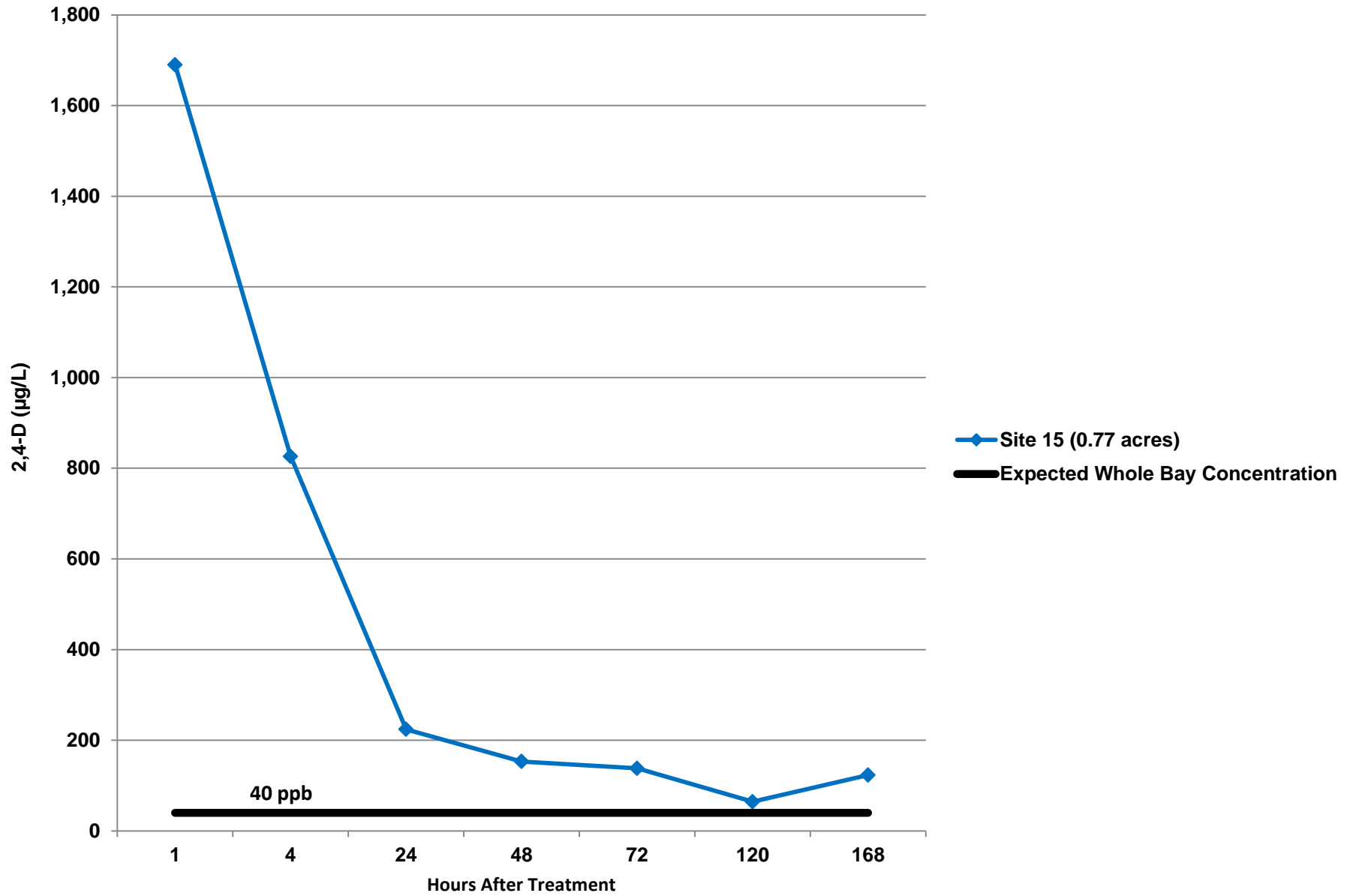
2012 Spring 2,4-D Herbicide Residue Data: Rabbit Island Bay (Site ID 25 and Rabbit Island Center)



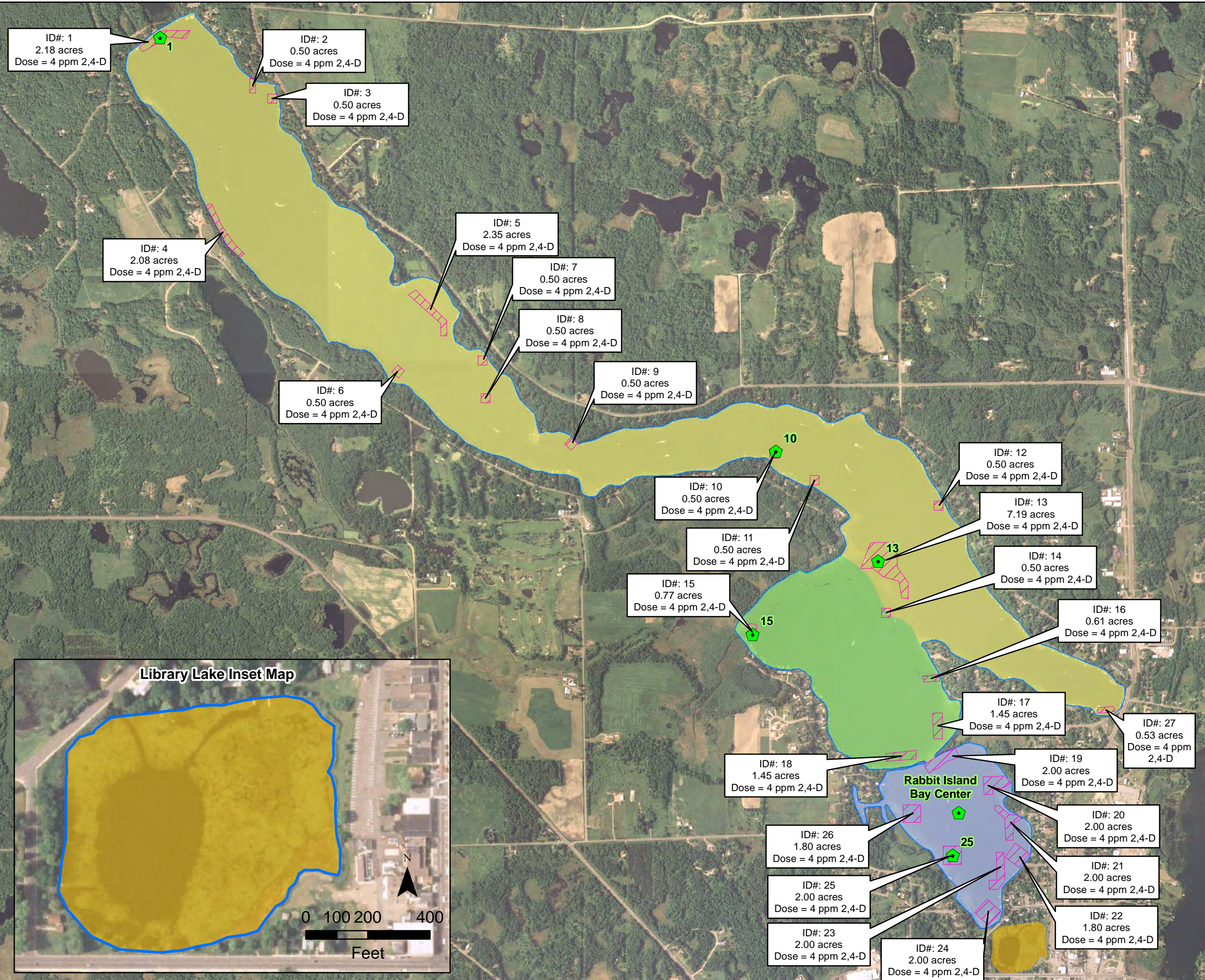
2012 Spring 2,4-D Herbicide Residue Data: West Lake (Site ID 1, 10, and 13)









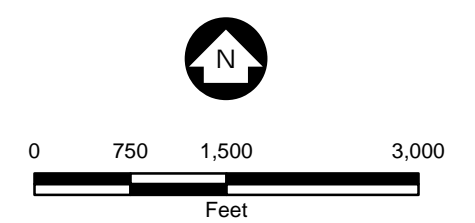
2012 Spring 2,4-D Herbicide Residue Data: Williams Bay (Site 15)



Barr Footer: ArcGIS 10.0, 2012-02-03 13:30 File: I:\Projects\49\03\01\GIS\Maps\2011\Fall_2011_Result_Figures\Proposed Treatment and Herbicide Residue Monitoring Locations 2012 - West Beaver Dam Lake.mxd User: kac2



-  Proposed 2012 EWM Treatment Areas
- Treatment Zones (39.2 Total Treated Acres)**
-  Library Lake (0 Treated Acres)
-  Rabbit Island Bay (0.30 ppm 2,4-D-15.6 Treated Acres)
-  West Lake (0.06 ppm 2,4-D - 19 Treated Acres)
-  Williams Bay (0.04 ppm 2,4-D- 4.6 Treated Acres)
-  Herbicide Residue Monitoring Locations



Eurasian Watermilfoil
 Proposed 2012 Treatment and
 Herbicide Residue Monitoring
 Locations
 Beaver Dam Lake
 Barron County, WI
 O-42

**Draft: Beaver Dam Lake, Barron County,
2,4-D Concentration Monitoring Summary, 2013
31 October 2013**

John Skogerboe

Beaver Dam Lake has an area of 1163 acres, and a maximum depth of 106 ft. The lake is listed on the WI DNR Lakes Finder web page as a seepage lake, however the lake has a water control structure and is more likely a flowage. Beaver Dam Lake is divided into two separate basins, East Lake and West Lake. Each basin can also be divided into 4 sub basins or bays (Table). Treatment scenarios can be divided into three different treatment scenarios: whole bay treatments, spot treatments with a bay wide target concentration, and spot treatments with insignificant bay wide concentrations (Figure 1 and Figure 2). Herbicide treatments on Beaver Dam Lake occurred between 5/28/13 and 6/18/13

Treatment Area	Treatment	Target	Whole Bay	Treatment	Wind	Wind	Water
Area	Scenario	Conc.	Conc.	Date	Speed	Direction	Temperature
1. East Lake							
Norwegian Bay	whole bay	500	500	05/28/13	4 to 7	E	58.7
East Lake Bay I	spot/whole bay	4000	500	05/28/13	2 to 8	N	59.1
East Lake Bay II	spot/whole bay	4000	500	05/29/13	4 to 10	SE	58.2
City Bay	whole bay	500	500	05/30/13	8 to 10	S	61.9
Cemetery Bay	spot/whole bay	2000	300	05/31/13	8 to 12	SSE	65.8
2. West Lake							
Library Bay	spot/whole bay	2400	300	05/20/13	5 to 8	SE	59.6
Rabbit Bay	spot/whole bay	4000	300	06/04/13	4 to 9	SE	64.9
Rabbit Bay	spot/whole bay	4000	300	06/06/13	4 to 7	SSE	58.1
Williams Bay	spot/whole bay	4000	300	06/05/13	4 to 10	SE	58.1
West Lake Bay I	spot	4000	70	06/03/13	3 to 5	SE	65.4
West Lake Bay II	spot	4000	70	06/13/13	4 to 8	NW	59
West Lake Bay III	spot	4000	70	06/14/13	4 to 7	SW	68.2
West Lake Bay IV	spot	4000	70	06/17/13	4 to 6	N	66.2
West Lake Bay V	spot	4000	70	06/18/13	4 to 6	SE	67.1

Water samples were collected at all sites using an integrated water sampler which collects a water sample from the entire water column. Water samples were collected at intervals of approximately 0.04, 0.16, 1, 2, 3, 5, 7, 12, 19, and 26 days after treatment (DAT). Samples were taken to shore after completion of each sample interval, and 3 drops of muriatic acid were added to each sample bottle to fix the 2,4-D and prevent degradation. Samples were then stored in a refrigerator, until shipped to the US Army Engineer Research and Development Center (ERDC) laboratory in Gainesville, FL for analysis of 2,4-D.

Norwegian Bay was a whole bay 2,4-D treatment with a bay wide target concentration of 500 ug/L ae. Concentrations of 2,4-D in water samples ranged from 539 to 1008 ug/L ae from 0.04 to 1 DAT (Figure 3). The mean bay wide concentration in samples collected from 0.04 to 7 DAT was 590 ug/L ae compared to the target bay wide concentration of 500 ug/L ae. Concentrations of 2,4-D exceeded the 2,4-D irrigation standard (100 ug/L ae) through 12 DAT.

East Lake Bay included six spot treatments with target concentrations of 4000 ug/L ae, which were calculated to result in a bay wide target concentration of 500 ug/L ae assuming dissipation throughout the bay. Concentrations of 2,4-D in water samples ranged from 58 to 2304 ug/L ae from 0.04 to 1 DAT compared to the target concentration of 4000 ug/L ae (Figure 4). The mean bay wide concentration in samples collected from 0.04 to 7 DAT was 792 ug/L ae compared to the target bay wide concentration of 500 ug/L ae. Concentrations of 2,4-D exceeded the 2,4-D irrigation standard (100 ug/L ae) through 12 DAT.

City Bay was a whole bay 2,4-D treatment with a bay wide target concentration of 500 ug/L ae. Concentrations of 2,4-D in water samples ranged from 358 to 792 ug/L ae from 0.04 to 1 DAT (Figure 5). The mean bay wide concentration in samples collected from 0.04 to 7 DAT was 636 ug/L ae compared to the target bay wide concentration of 500 ug/L ae. Concentrations of 2,4-D exceeded the 2,4-D irrigation standard (100 ug/L ae) through 7 DAT.

Cemetery Lake Bay included five spot treatments with target concentrations of 2000 ug/L ae, which were calculated to result in a bay wide target concentration of 300 ug/L ae assuming dissipation throughout the bay. Concentrations of 2,4-D in water samples ranged from 233 to 1137 ug/L ae from 0.04 to 1 DAT compared to the target concentration of 2000 ug/L ae (Figure 6). The mean bay wide concentration in samples collected from 0.04 to 7 DAT was 511 ug/L ae compared to the target bay wide concentration of 300 ug/L ae. Concentrations of 2,4-D exceeded the 2,4-D irrigation standard (100 ug/L ae) through 7 DAT.

Library Lake Bay included one spot treatment with target concentrations of 2400 ug/L ae, which was calculated to result in a bay wide target concentration of 300 ug/L ae assuming dissipation throughout the bay. Concentrations of 2,4-D in water samples ranged from 24 to 1494 ug/L ae from 0.04 to 1 DAT compared to the target concentration of 2400 ug/L ae (Figure 7). The mean bay wide concentration in samples collected from 0.04 to 7 DAT was 442 ug/L ae compared to the target bay wide concentration of 300 ug/L ae. Concentrations of 2,4-D exceeded the 2,4-D irrigation standard (100 ug/L ae) through 12 DAT.

Rabbit Island Bay included five spot treatments with target concentrations of 4000 ug/L ae, which were calculated to result in a bay wide target concentration of 300 ug/L ae assuming dissipation throughout the bay. Concentrations of 2,4-D in water samples ranged from 51 to 1848 ug/L ae from 0.04 to 1 DAT compared to the target concentration of 4000 ug/L ae (Figure 8). The mean bay wide concentration in samples collected from 0.04 to 7 DAT was 478 ug/L ae compared to the target bay wide concentration of 300 ug/L ae. Concentrations of 2,4-D exceeded the 2,4-D irrigation standard (100 ug/L ae) through 12 DAT.

Williams Bay included six spot treatments with target concentrations of 4000 ug/L ae, which were calculated to result in a bay wide target concentration of 300 ug/L ae assuming dissipation throughout the bay. Concentrations of 2,4-D in water samples ranged from 65 to 1514 ug/L ae from 0.04 to 1 DAT compared to the target concentration of 4000 ug/L ae (Figure 9). The mean bay wide concentration in samples collected from 0.04 to 7 DAT was 321 ug/L ae compared to

the target bay wide concentration of 300 ug/L ae. Concentrations of 2,4-D exceeded the 2,4-D irrigation standard (100 ug/L ae) through 7 DAT.

West Lake Bay included eighteen spot treatments with target concentrations of 4000 ug/L ae, which were calculated to result in a bay wide target concentration of 70 ug/L ae assuming dissipation throughout the bay. Herbicide applications were conducted over a period of 15 days. Max concentrations of 2,4-D in water samples from the monitored treatment areas ranged from 785 to 2066 ug/L ae compared to the target concentration of 4000 ug/L ae (Figure 10). Concentrations of 2,4-D from site 1 and site 38 were less than the 2,4-D irrigation standard (100 ug/L ae) by 0.16 DAT. Concentrations of 2,4-D from site 43 were less than the 2,4-D irrigation standard (100 ug/L ae) by 2 DAT.

Concentrations and exposure times were similar in bays treated either as whole bay treatments or spot treatments with whole bay target concentrations (Figure 11 and Figure 12). Initial concentrations of (0.04 to 1 DAT) were more variable in spot treatments with whole lake target concentrations. Concentrations of 2,4-D exceeded 100 ug/L ae for 7 to 12 DAT in these treatment scenarios. Concentrations of 2,4-D in West Lake Bay spot treatments were less than 100 ug/L by 0.16 DAT, however the most down stream site 43 exceeded 100 ug/L through 1 DAT. This site was probably significantly influenced by the numerous upstream herbicide treatments.

Figure 1. Beaver Dam East Lake 2,4-D Treatment Areas and Herbicide Sample Sites, 2013 (Barr Engineering)

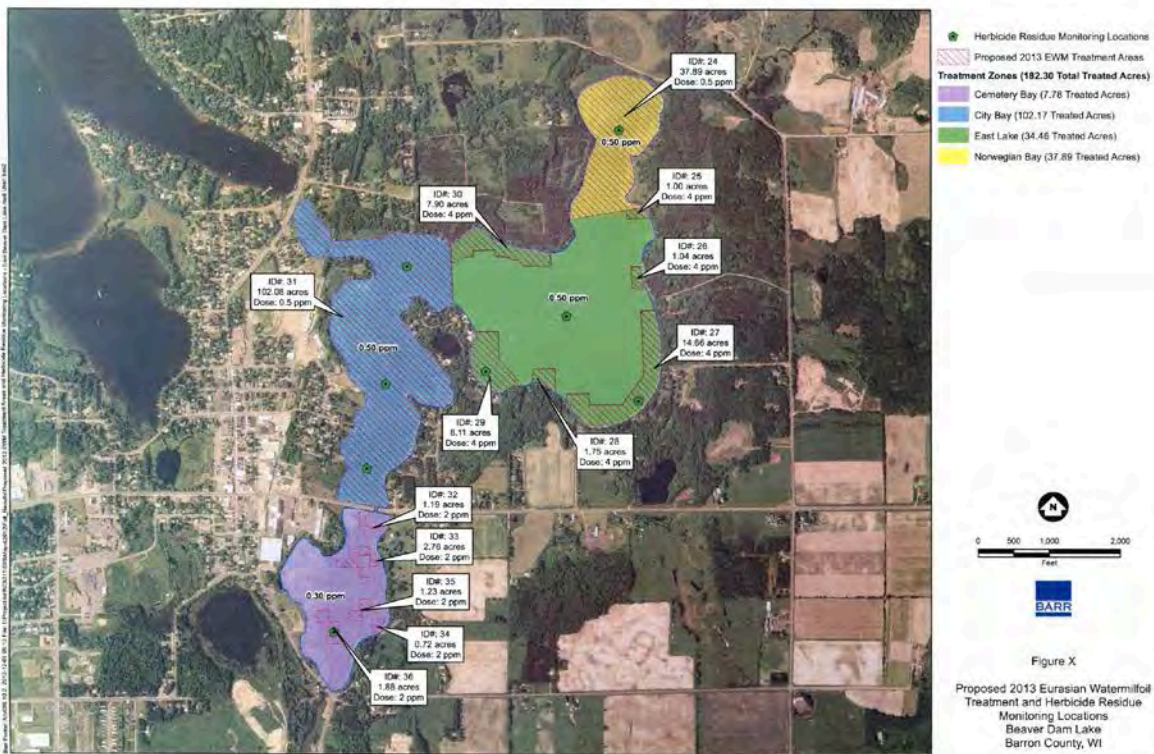


Figure X
Proposed 2013 Eurasian Watermilfoil
Treatment and Herbicide Residue
Monitoring Locations
Beaver Dam Lake
Barron County, WI

Figure 2. Beaver Dam West Lake 2,4-D Treatment Areas and Herbicide Sample Sites, 2013 (Barr Engineering)

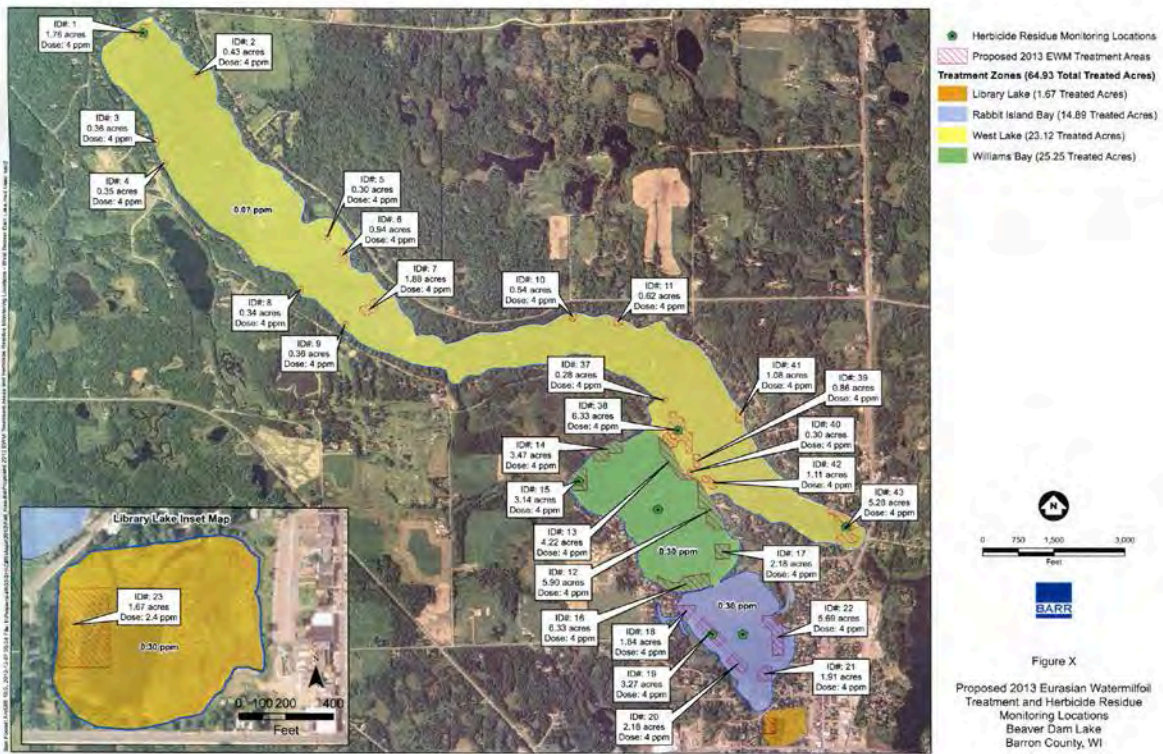


Figure 3

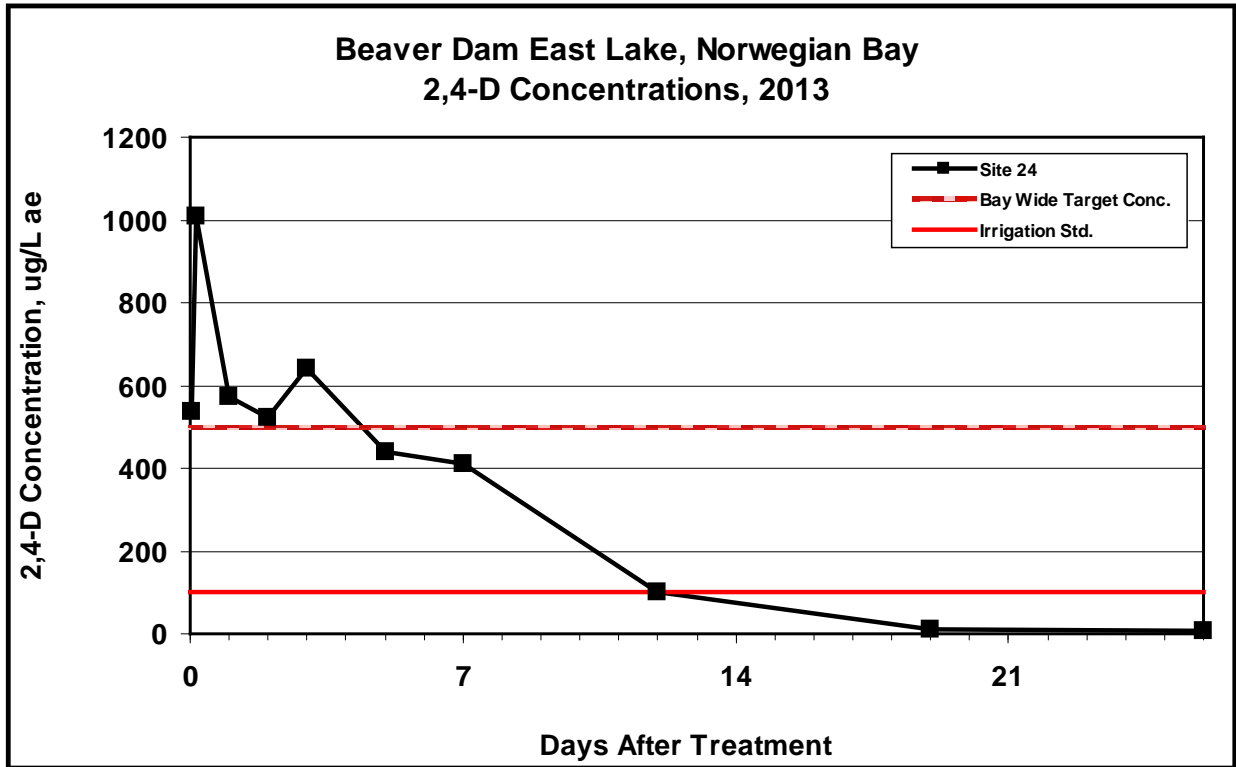


Figure 4

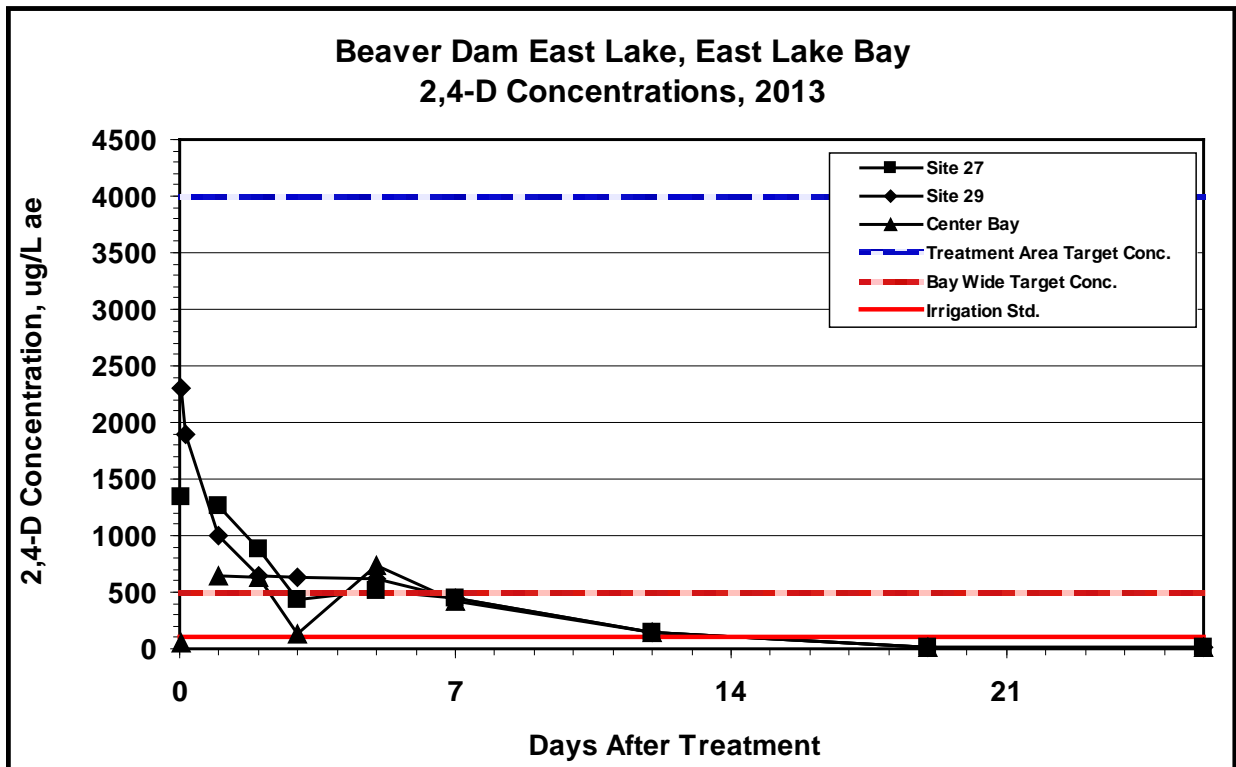


Figure 5

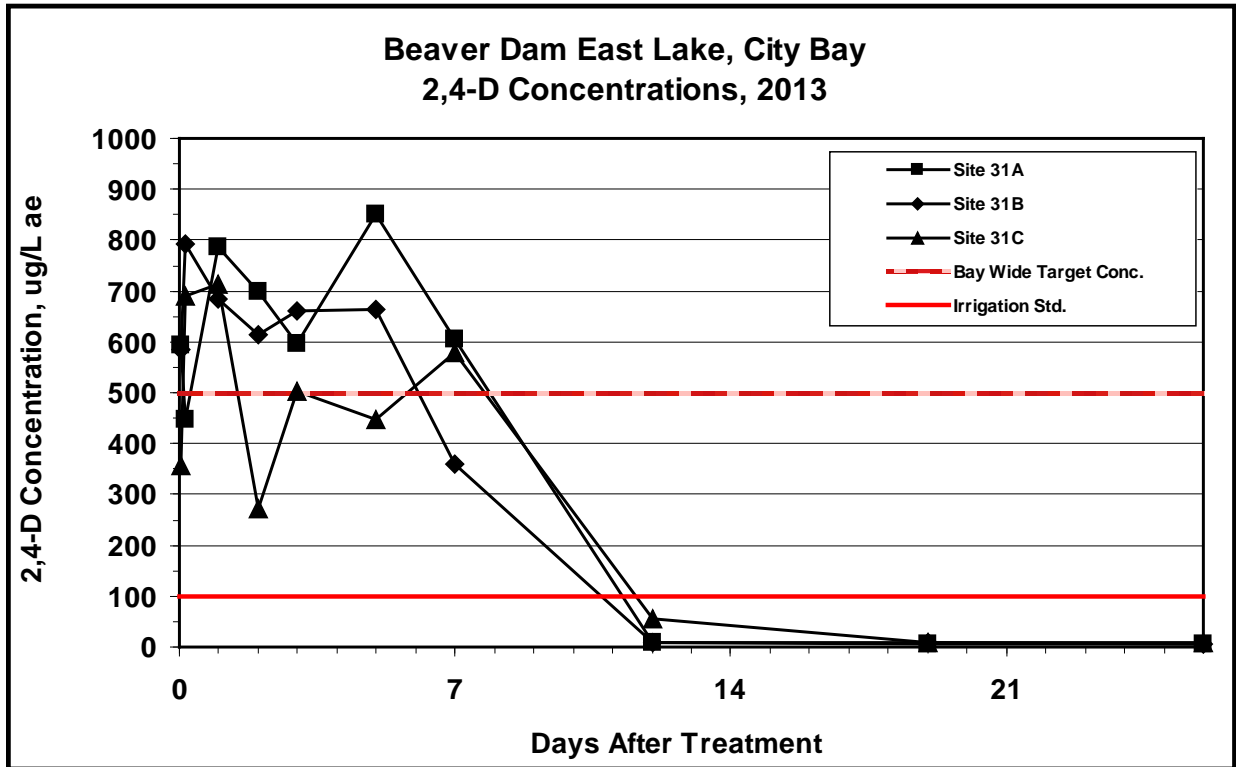


Figure 6

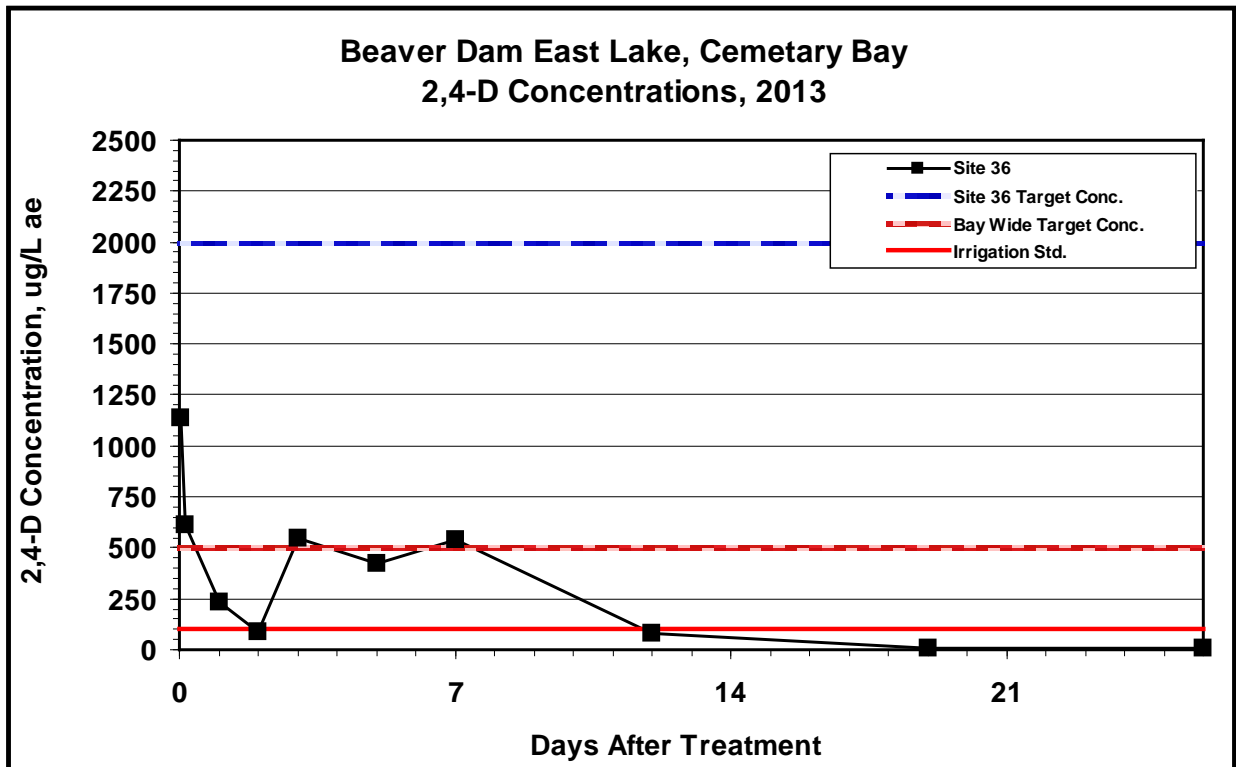


Figure 7

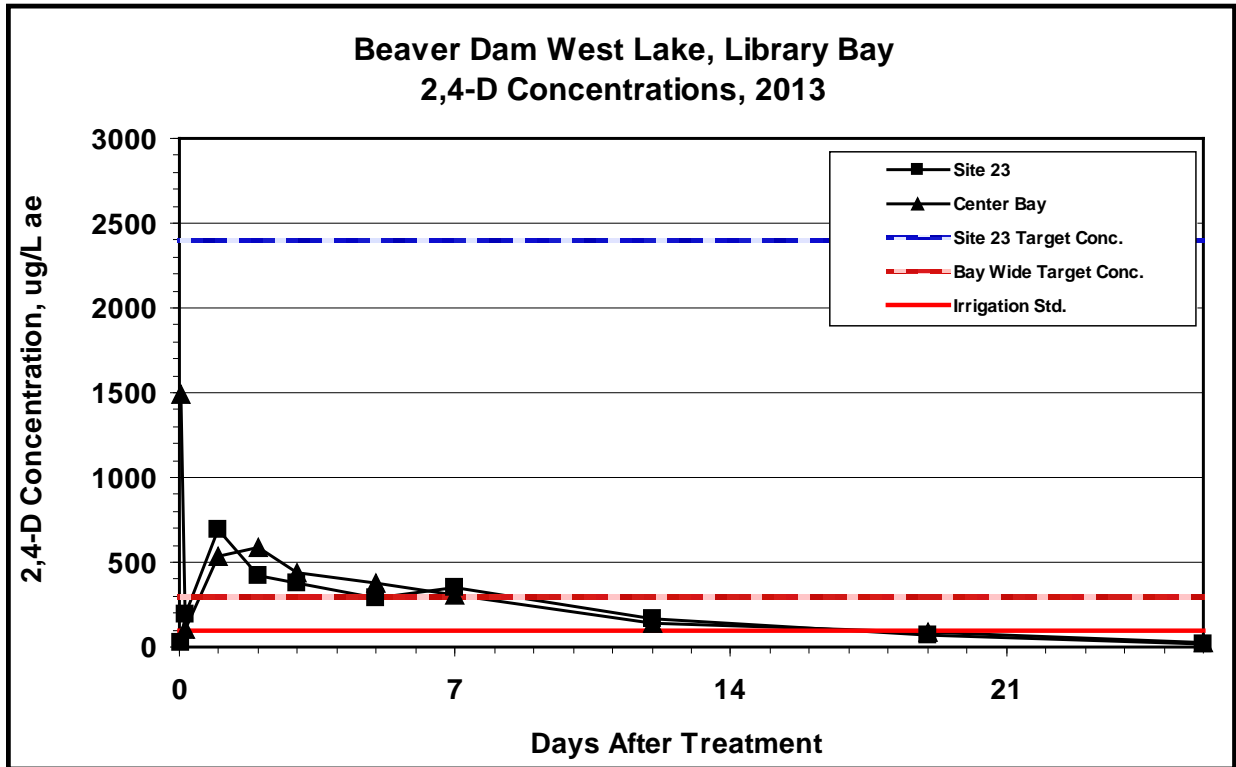


Figure 8

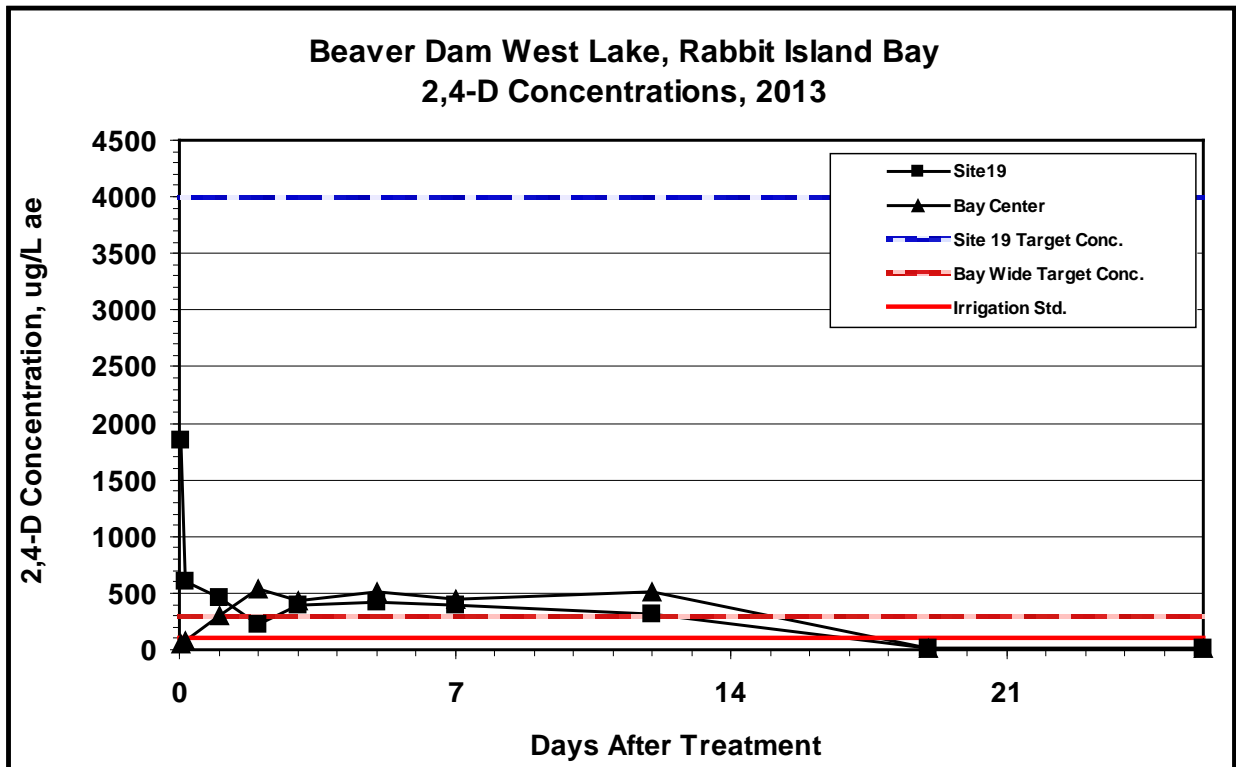


Figure 9

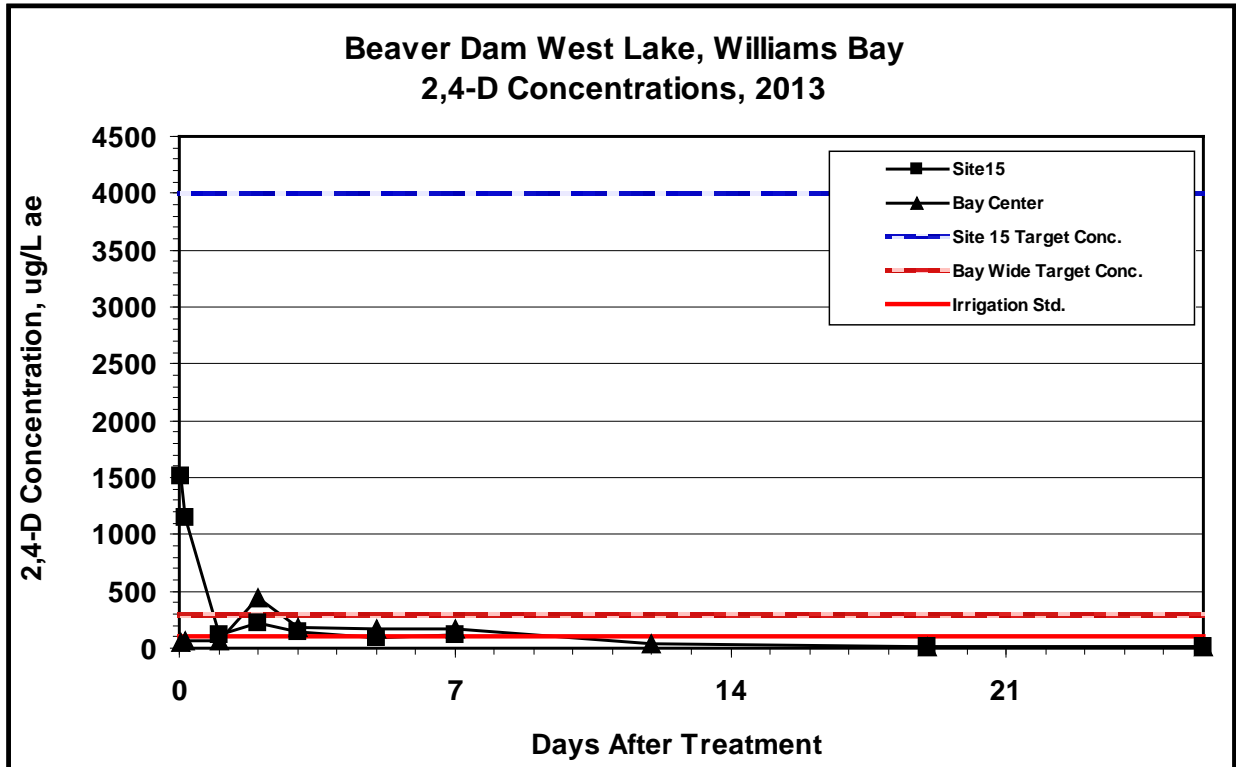


Figure 10

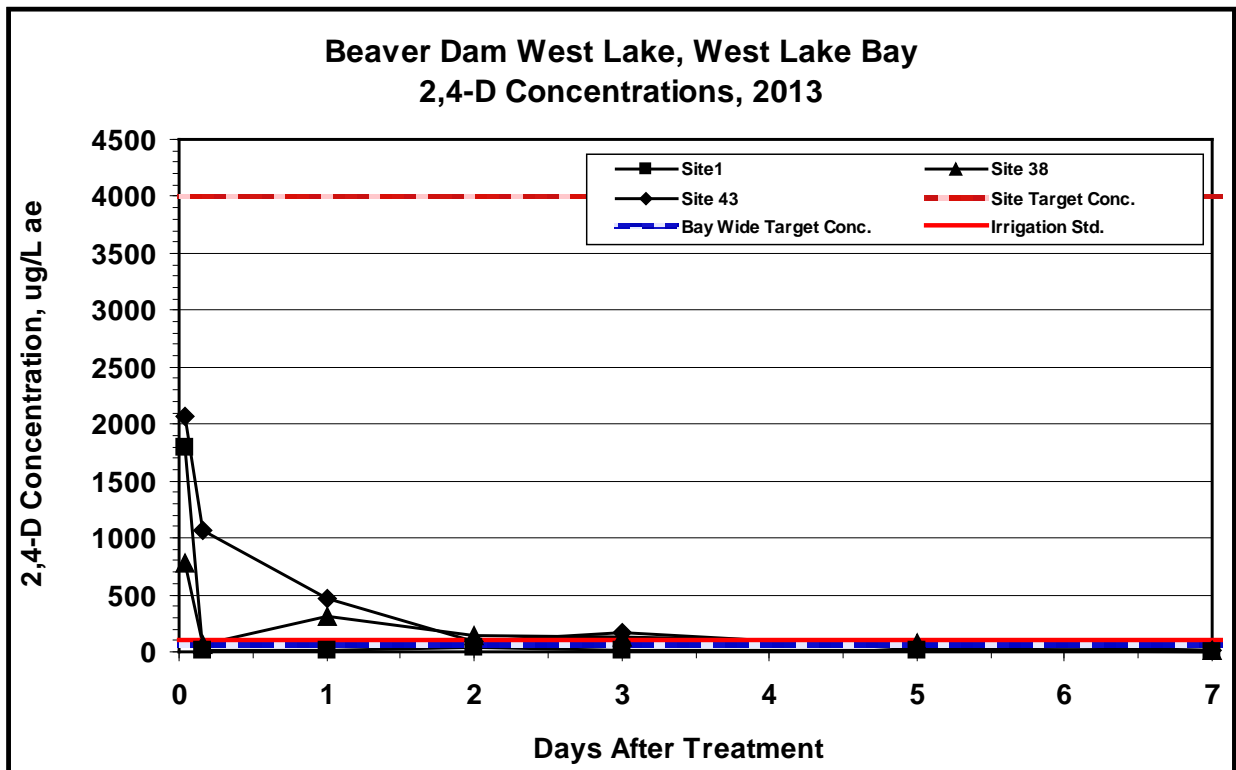


Figure 11

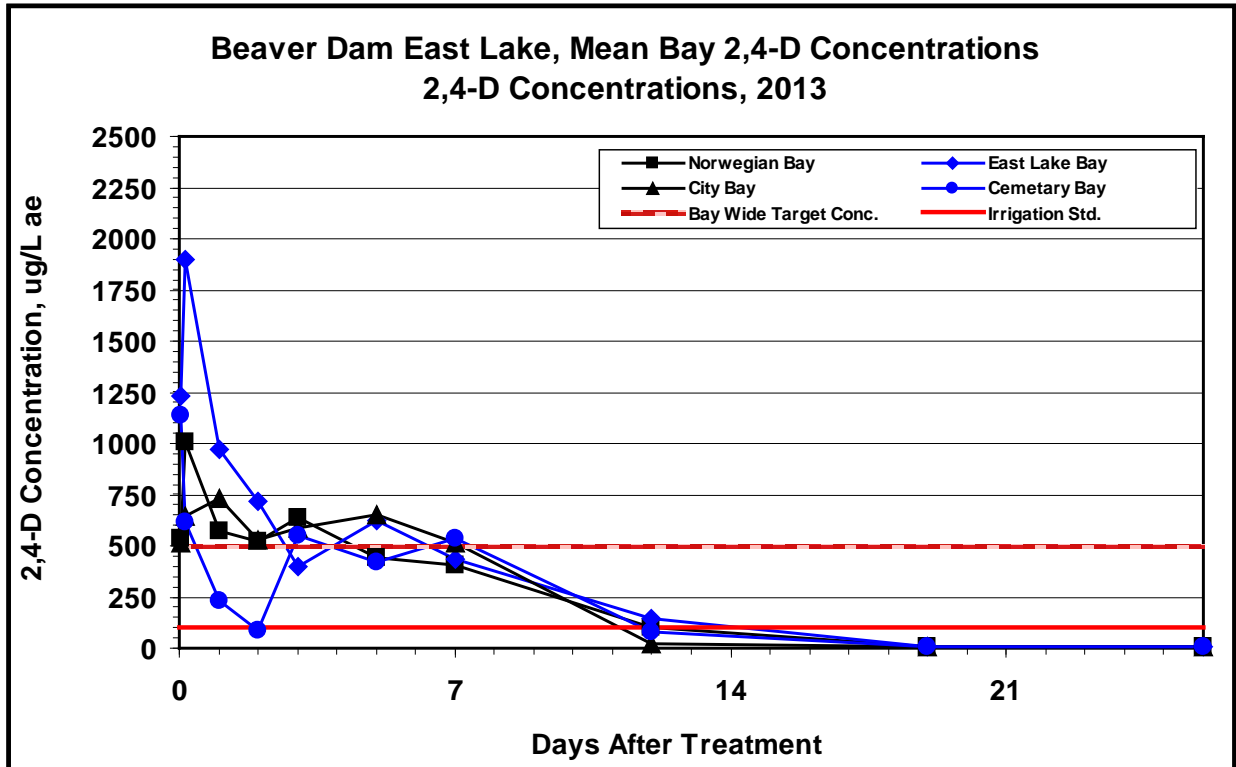
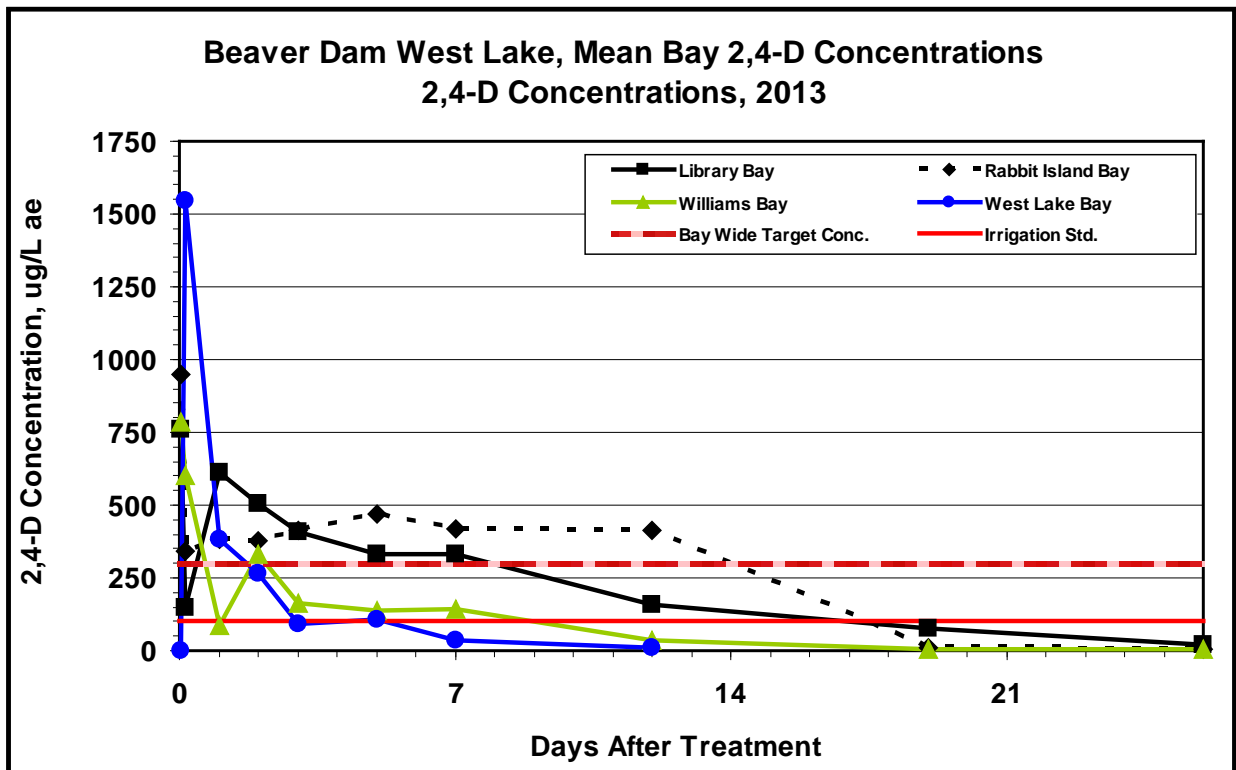
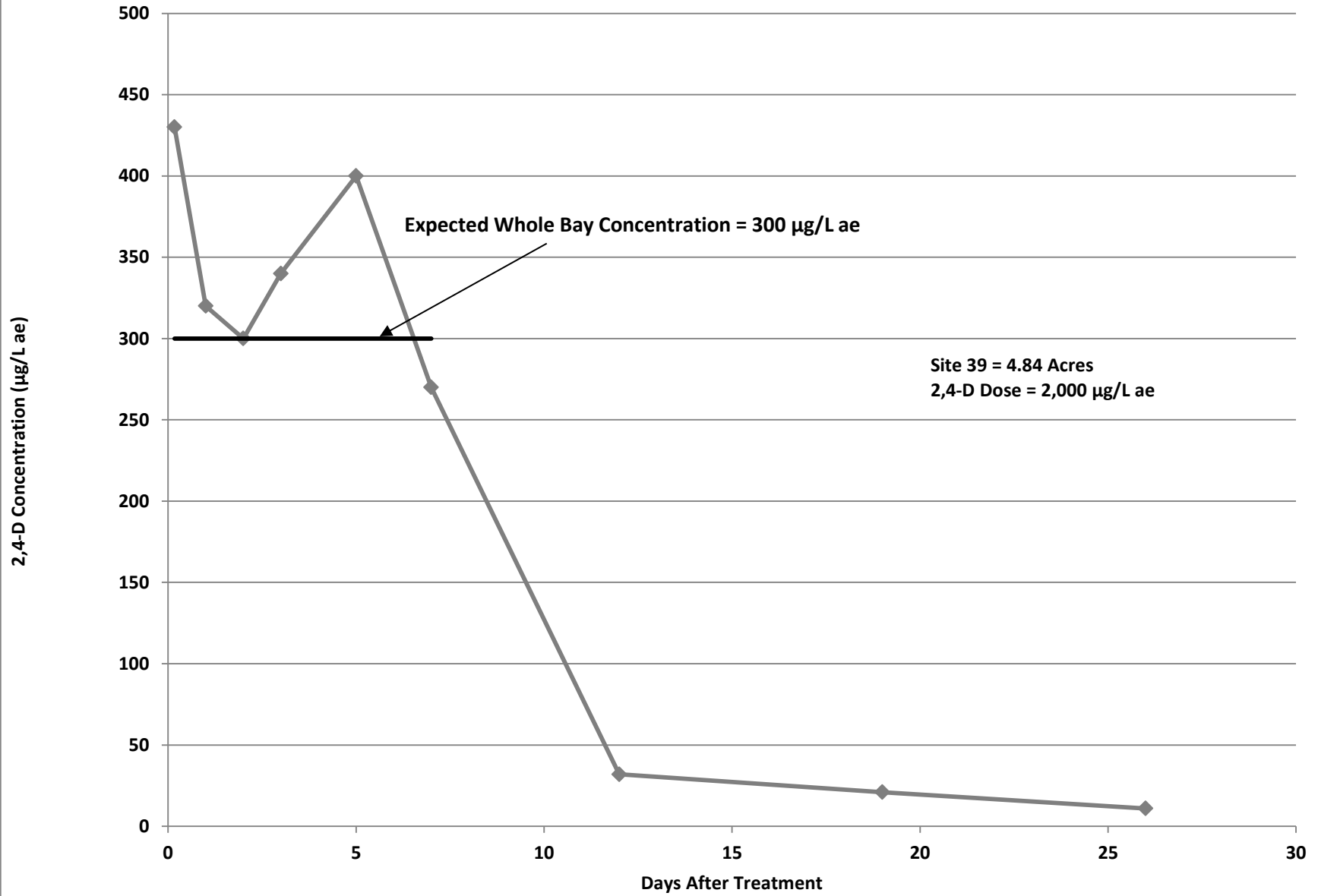


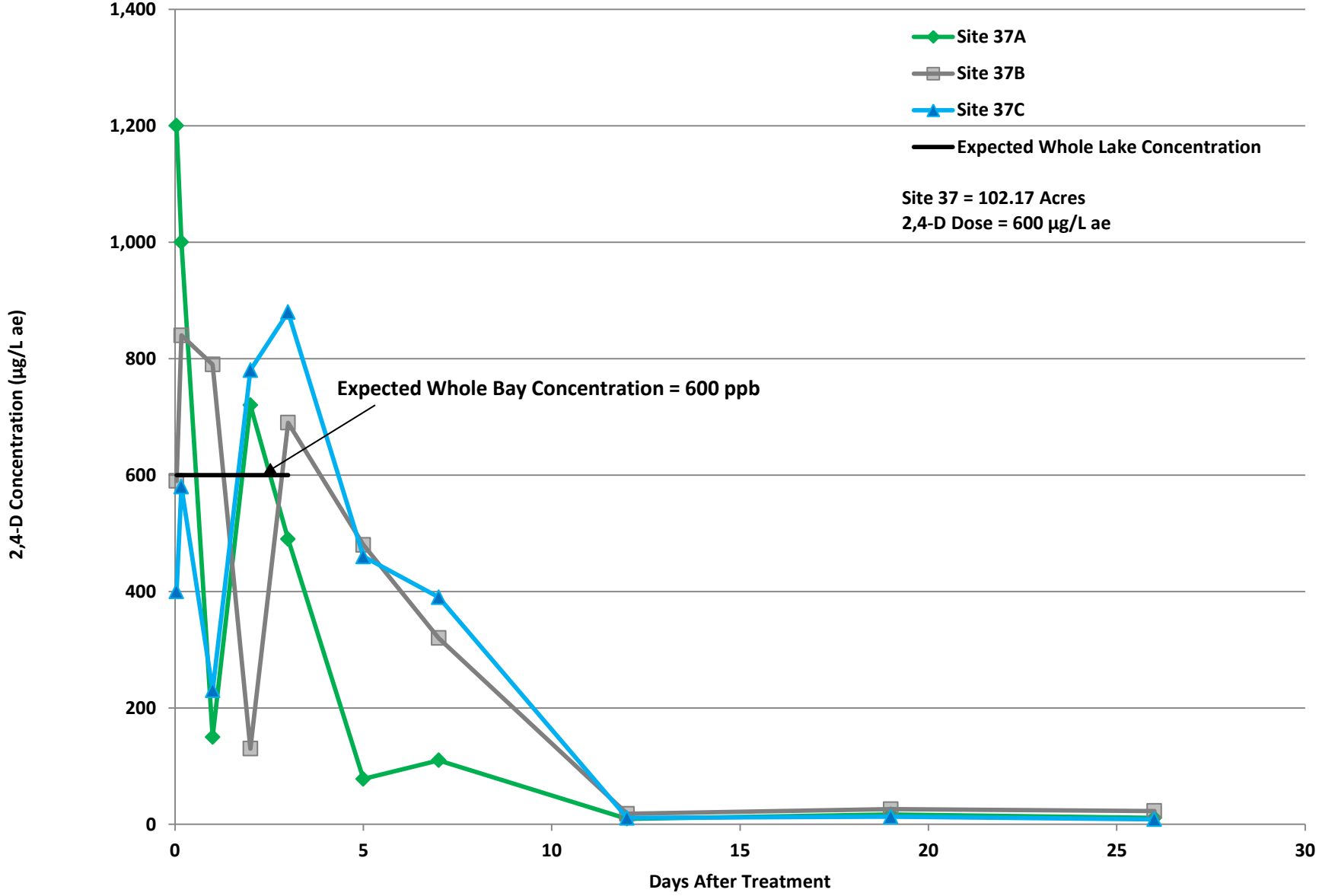
Figure 12



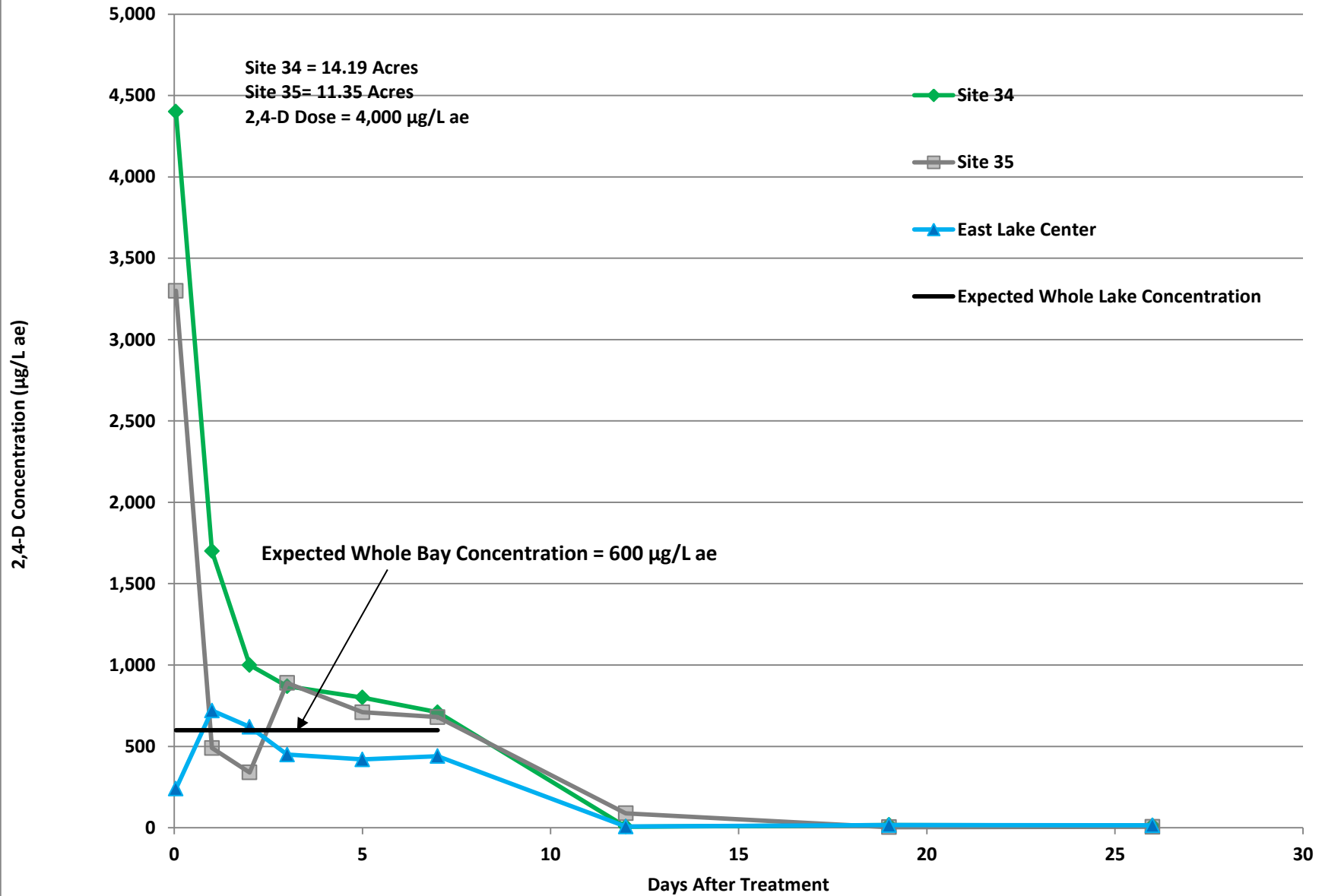
2014 Cemetery Bay 2,4-D Concentrations for Site 39

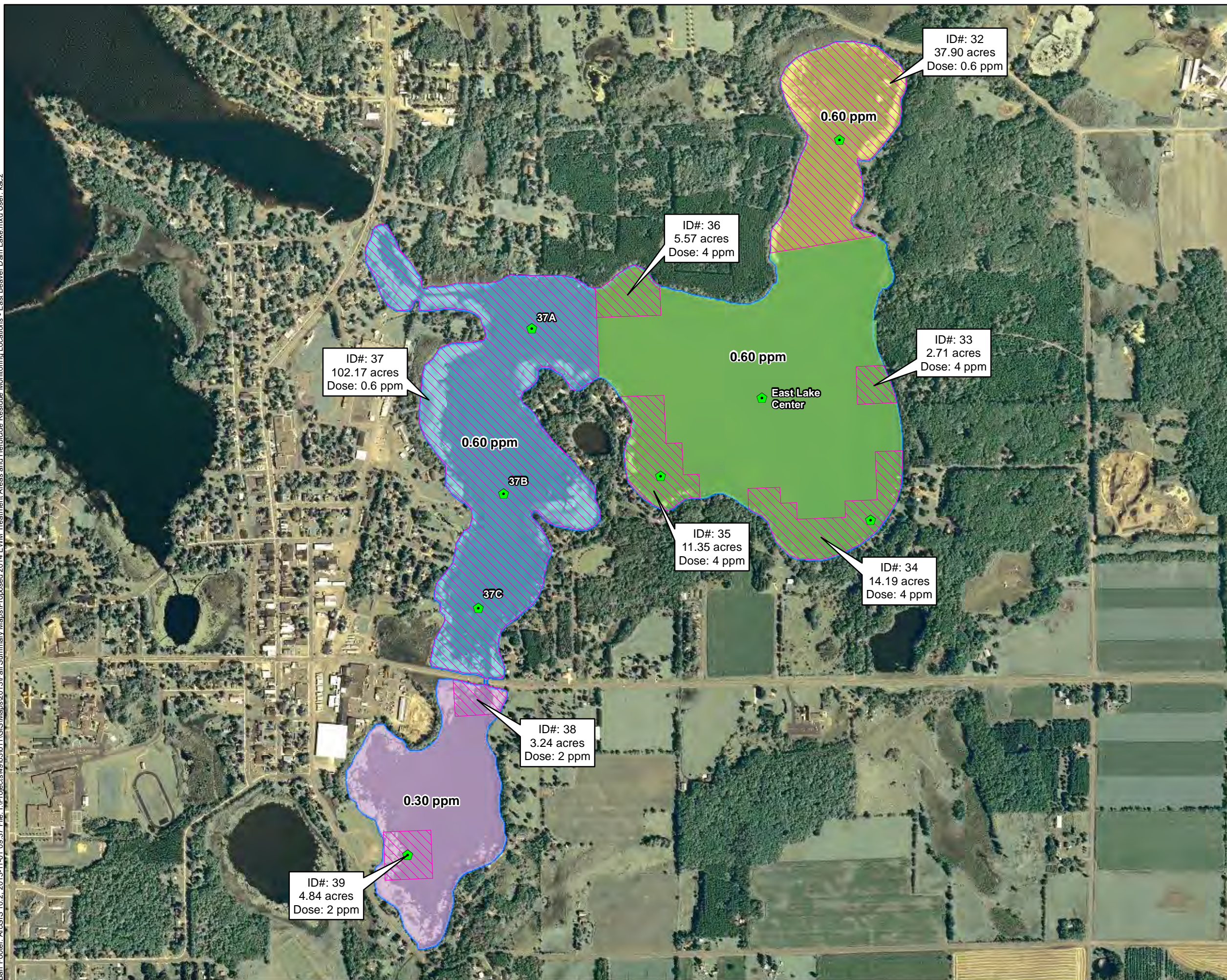


**2014 City Bay 2,4-D Concentrations
for Sites 37A, 37B, and 37C**



2014 East Lake 2,4-D Concentrations for Sites 34, 35, and East Lake Center



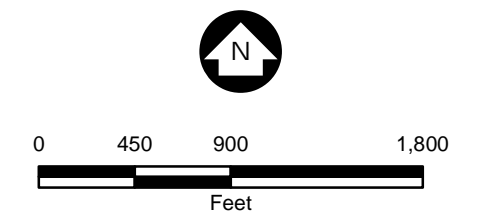


Herbicide Residue Monitoring Location

Proposed 2014 EWM Treatment Areas

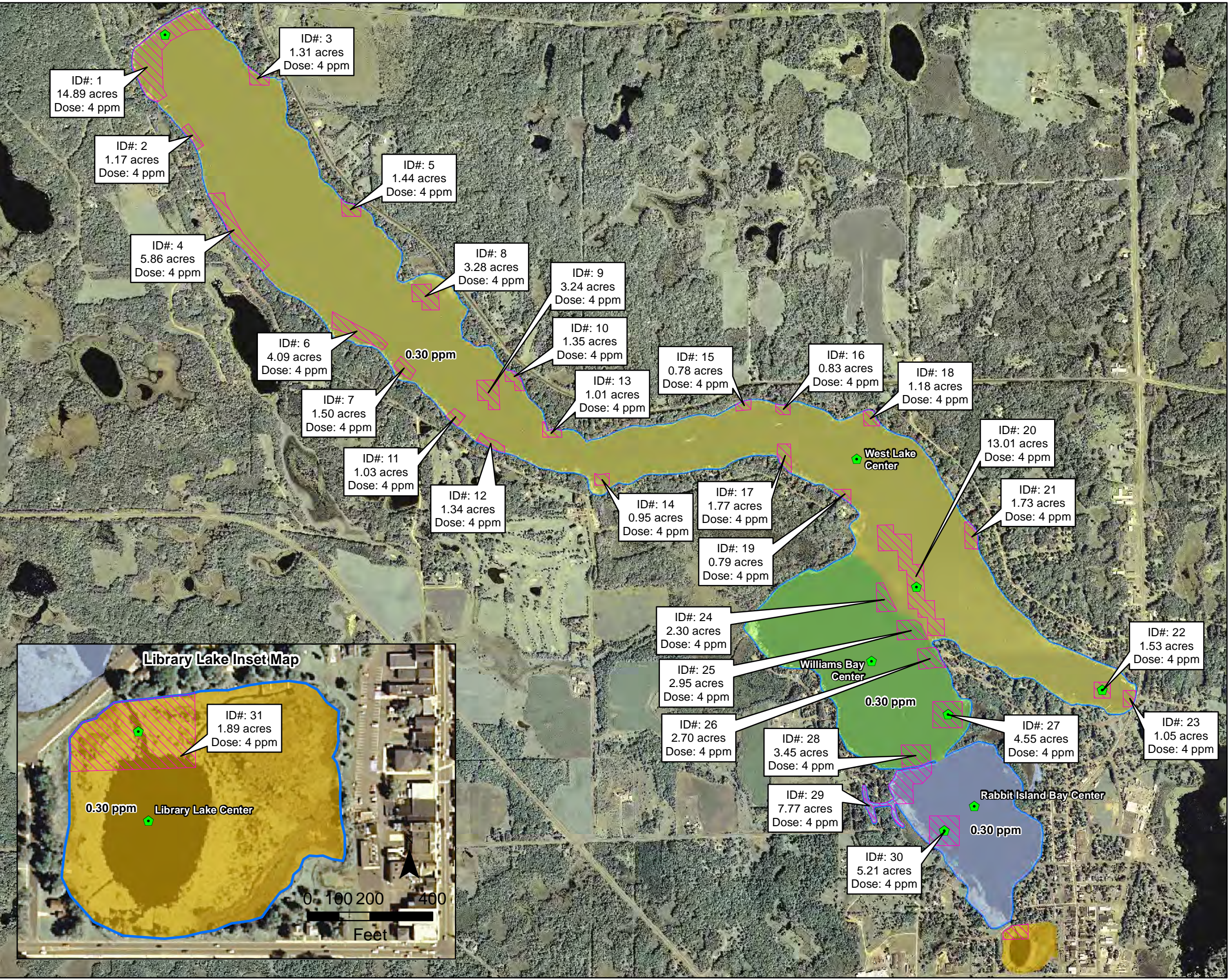
Treatment Zones

- Cemetery Bay (0.30 ppm)
- City Bay (0.60 ppm)
- East Lake (0.60 ppm)
- Norwegian Bay (0.60 ppm)

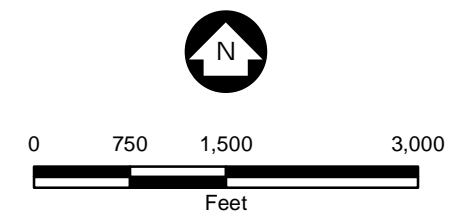
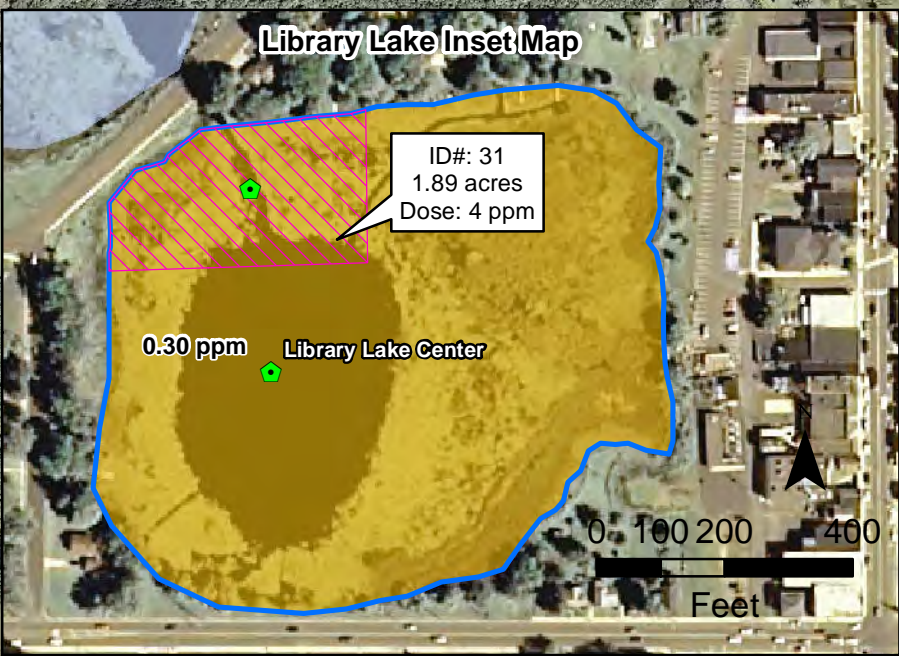


Proposed 2014 Eurasian Watermilfoil Treatment Areas and Herbicide Residue Monitoring Locations
Beaver Dam and Library Lake
Barron County, WI

Barr Footer: ArcGIS 10.2, 2013-10-30 11:33 File: I:\Projects\4903011\GIS\Maps\2013\Fall Summary Maps\Proposed 2014 EWM Treatment Areas and Herbicide Residue Monitoring Locations - West Beaver Dam and Library Lake.mxd User: kac2

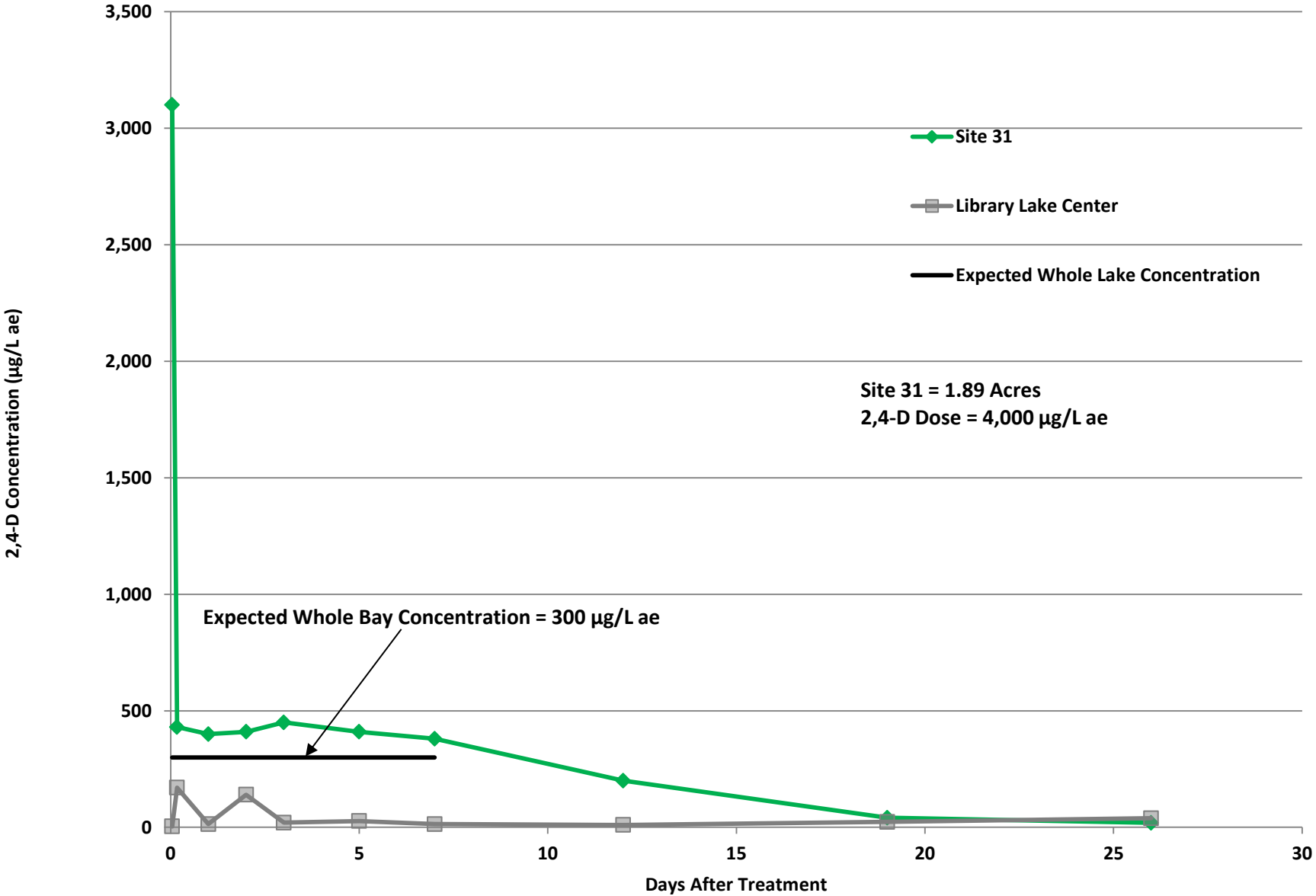


- Herbicide Residue Monitoring Location
 - Proposed 2014 EWM Treatment Areas
- Treatment Zones**
- Library Lake (0.30 ppm)
 - Rabbit Island Bay (0.30 ppm)
 - West Lake (0.30 ppm)
 - Williams Bay (0.30 ppm)

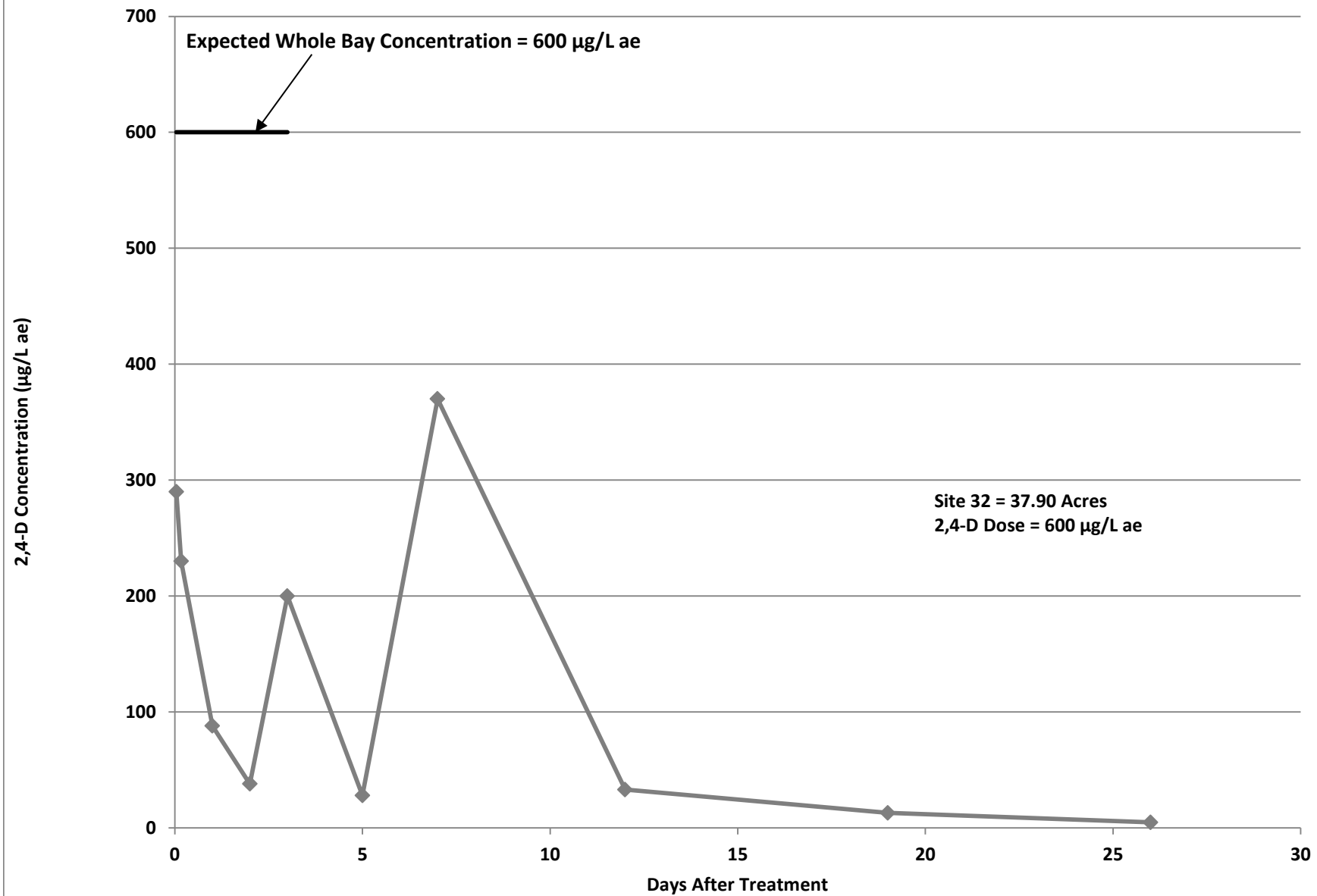


Proposed 2014 Eurasian Watermilfoil Treatment Areas and Herbicide Residue Monitoring Locations
Beaver Dam and Library Lake
Barron County, WI
O-57

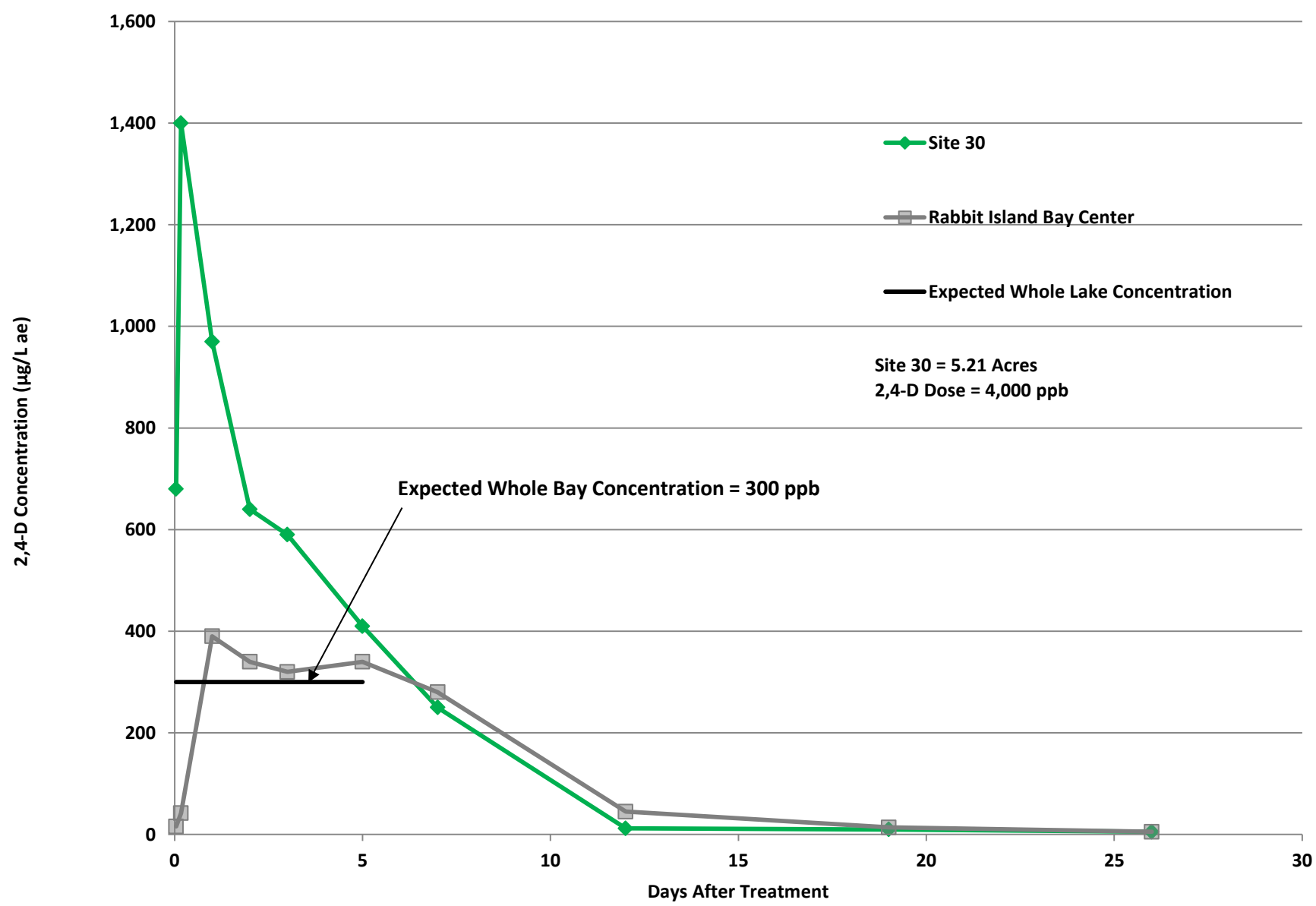
2014 Library Lake 2,4-D Concentrations
for Sites 31 and Library Lake Center



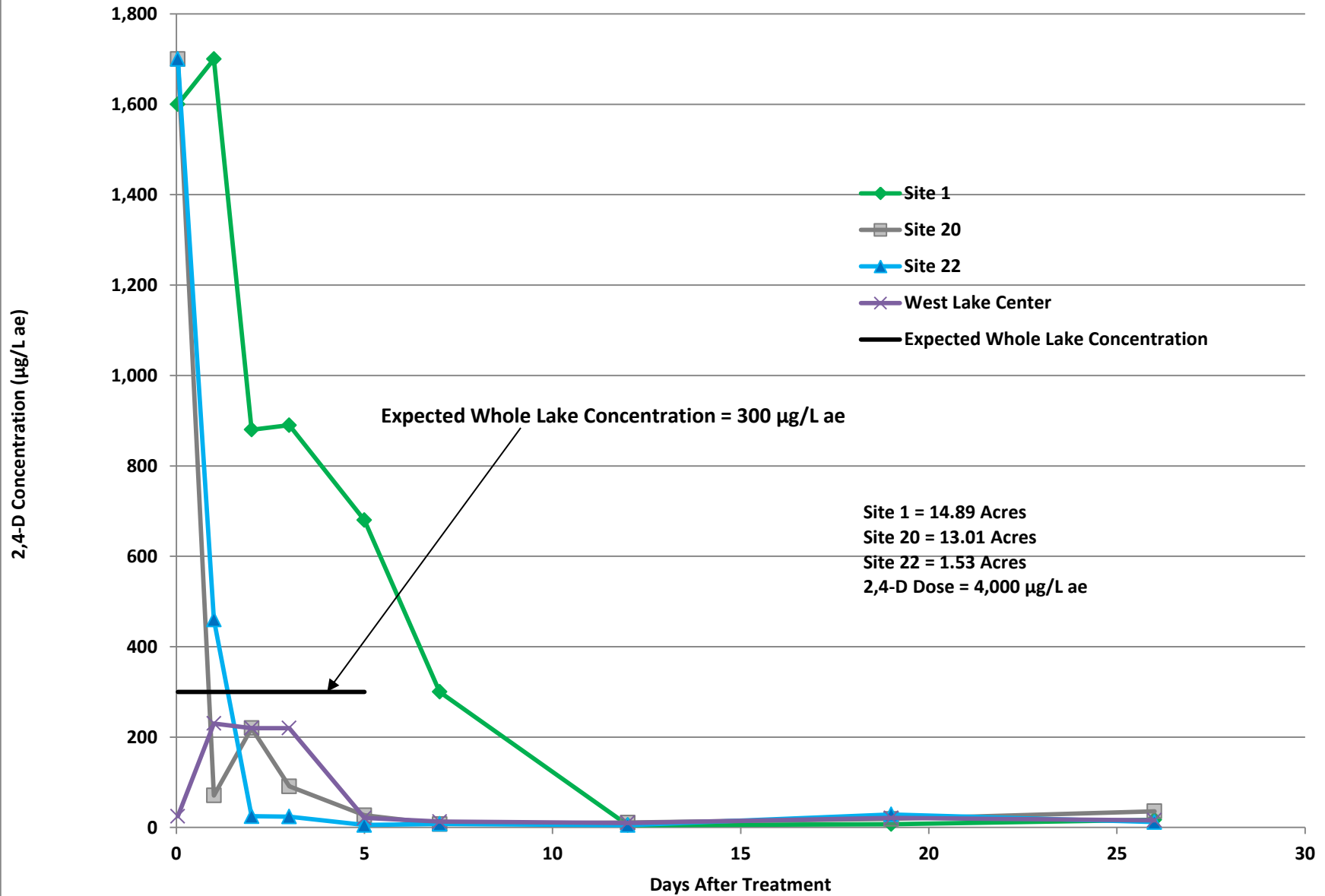
2014 Norwegian Bay 2,4-D Concentrations for Site 32



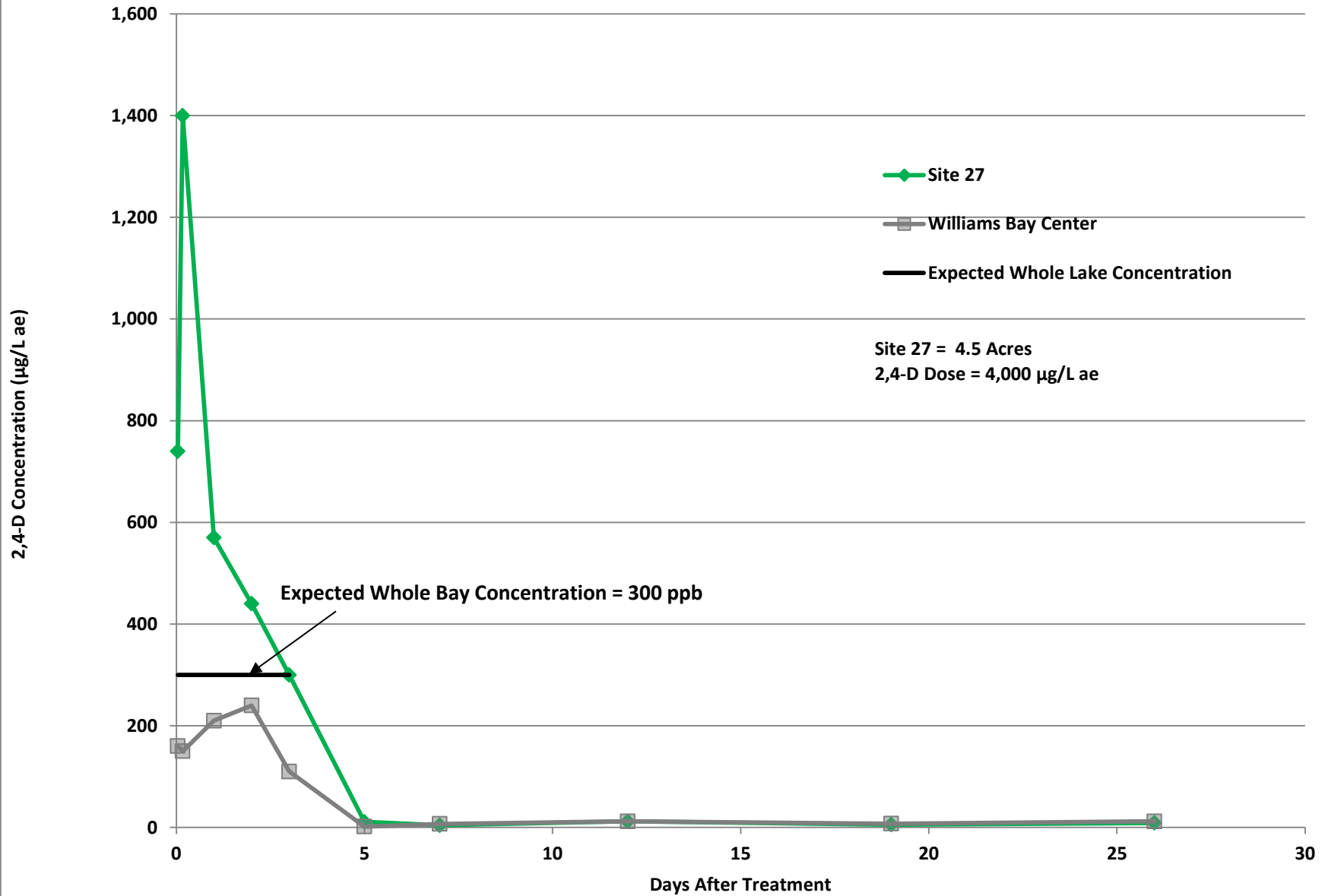
2014 Rabbit Island Bay 2,4-D Concentrations
for Sites 30 and Rabbit Island Bay Center



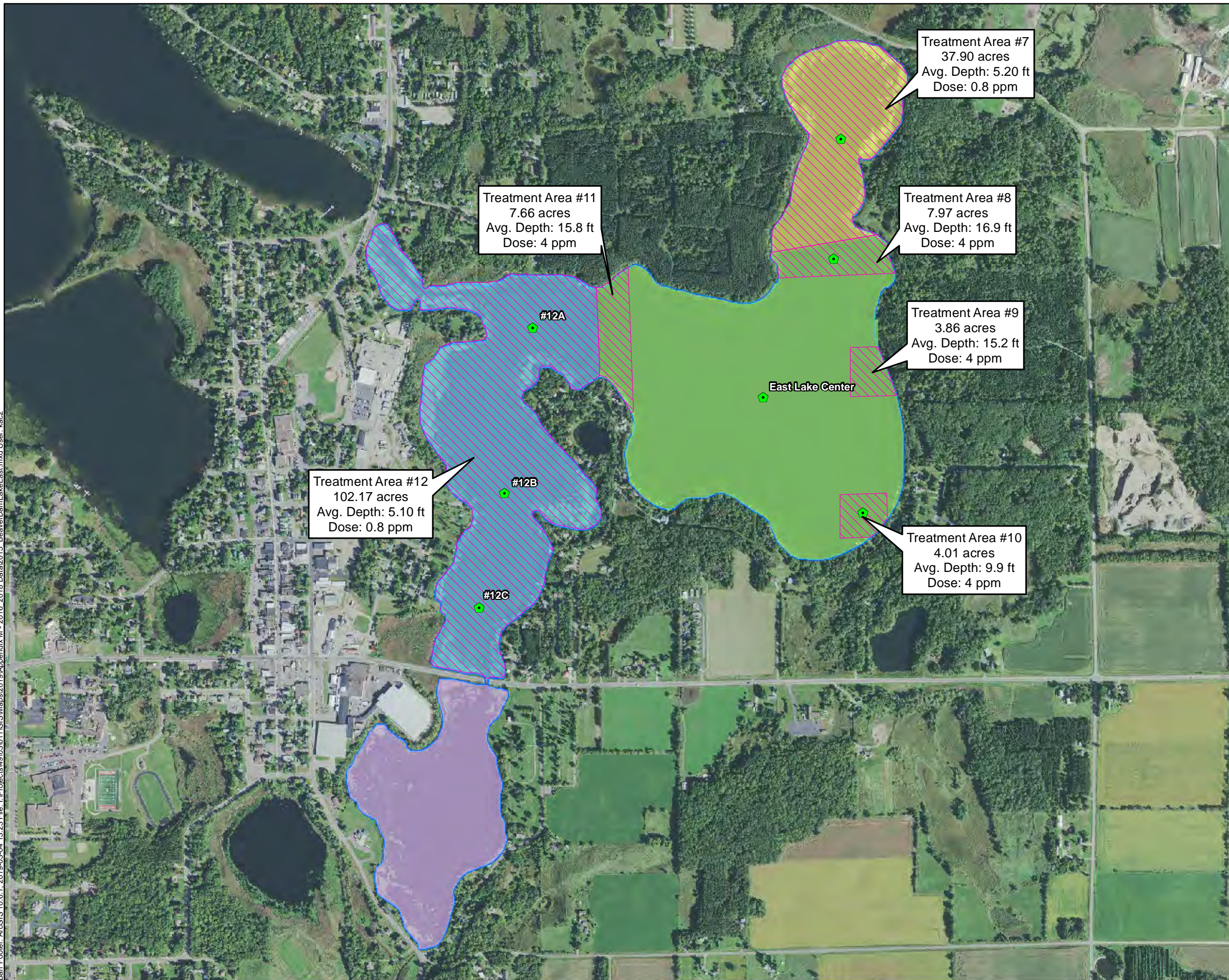
2014 West Lake 2,4-D Concentrations
for Sites 1, 20, 22, and West Lake Center









2014 Williams Bay 2,4-D Concentrations for Site 27 and Williams Bay Center



Barr Footer: ArcGIS 10.6.1, 2019-03-04 13:23 File: I:\Projects\4903011\GIS\Maps\2019\Appendix M - 2016, 2018, 2019 Data\2015 BeaverDamLakeEast.mxd User: kat2



-  Herbicide Residue Monitoring Location
-  2015 EWM Treatment Areas
- Treatment Zones**
-  Cemetery Bay
-  City Bay
-  East Lake
-  Norwegian Bay

Treatment Area #7
37.90 acres
Avg. Depth: 5.20 ft
Dose: 0.8 ppm

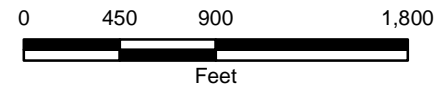
Treatment Area #8
7.97 acres
Avg. Depth: 16.9 ft
Dose: 4 ppm

Treatment Area #9
3.86 acres
Avg. Depth: 15.2 ft
Dose: 4 ppm

Treatment Area #10
4.01 acres
Avg. Depth: 9.9 ft
Dose: 4 ppm

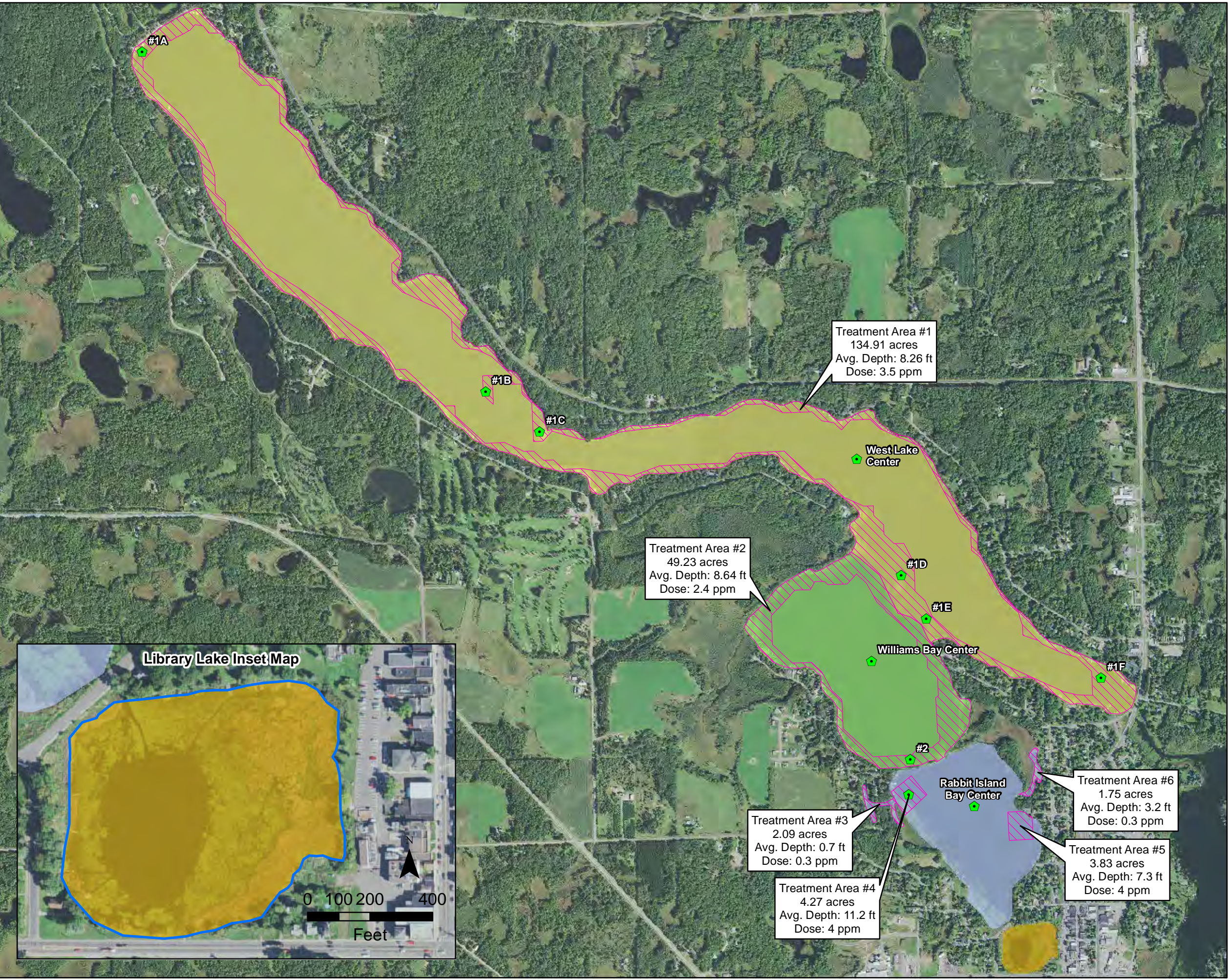
Treatment Area #11
7.66 acres
Avg. Depth: 15.8 ft
Dose: 4 ppm







Treatment Area #12
102.17 acres
Avg. Depth: 5.10 ft
Dose: 0.8 ppm



2015 EURASIAN WATERMILFOIL
TREATMENT AREAS AND HERBICIDE
RESIDUE MONITORING LOCATIONS
Beaver Dam - East
Barron County, WI

Barr Footer: ArcGIS 10.6.1, 2019-03-04 13:23 File: I:\Projects\4903011\CIS\Maps\2019\Appendix M - 2016 - 2018 Data\2015 BeaverDamLakeWest.mxd User: kac2



-  Herbicide Residue Monitoring Location
-  2015 EWM Treatment Areas
- Treatment Zones**
-  Library Lake
-  Rabbit Island Bay
-  West Lake
-  Williams Bay

Treatment Area #1
134.91 acres
Avg. Depth: 8.26 ft
Dose: 3.5 ppm

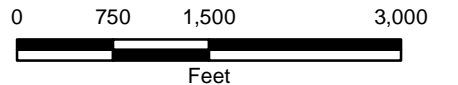
Treatment Area #2
49.23 acres
Avg. Depth: 8.64 ft
Dose: 2.4 ppm

Treatment Area #3
2.09 acres
Avg. Depth: 0.7 ft
Dose: 0.3 ppm

Treatment Area #4
4.27 acres
Avg. Depth: 11.2 ft
Dose: 4 ppm

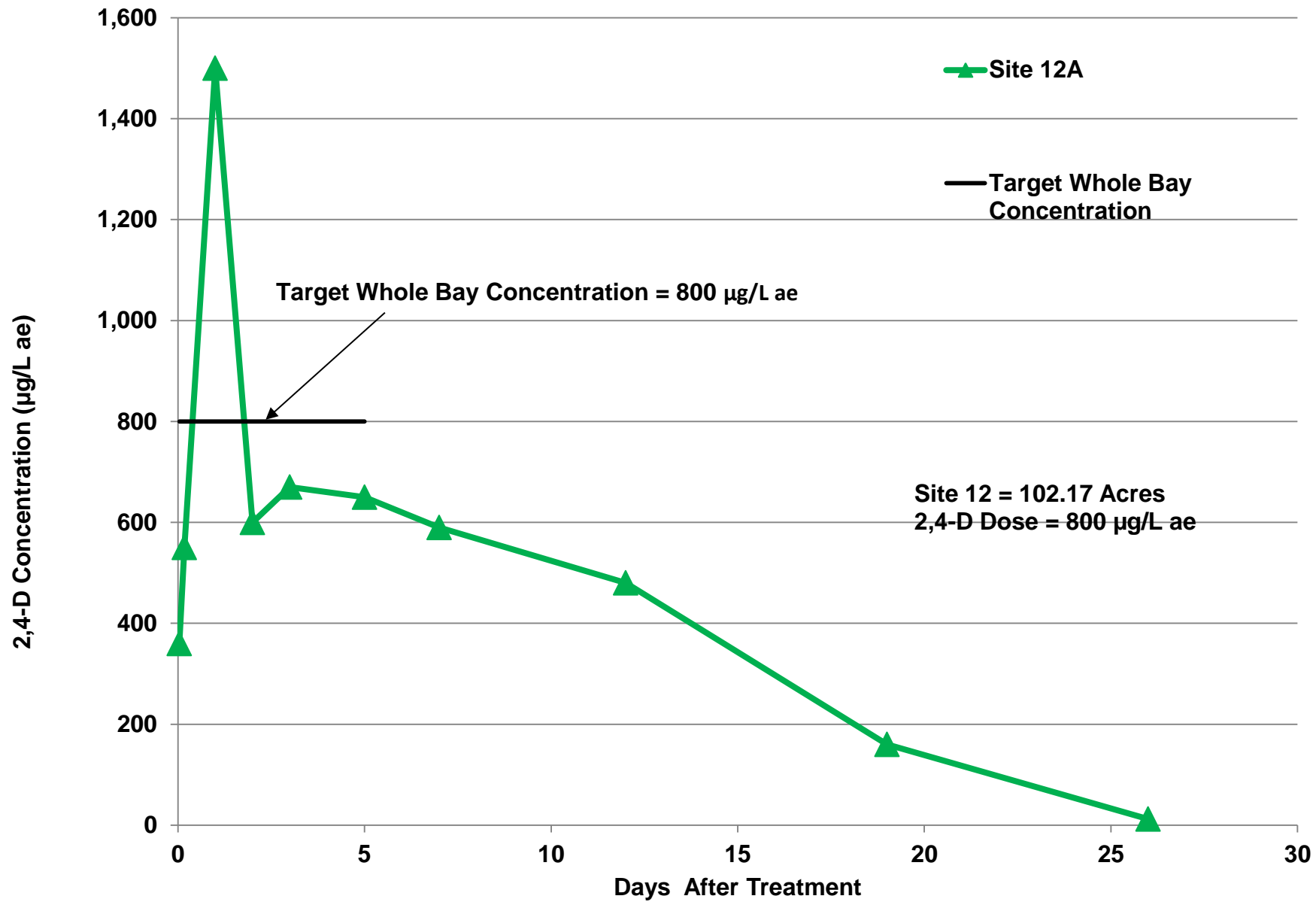
Treatment Area #6
1.75 acres
Avg. Depth: 3.2 ft
Dose: 0.3 ppm

Treatment Area #5
3.83 acres
Avg. Depth: 7.3 ft
Dose: 4 ppm

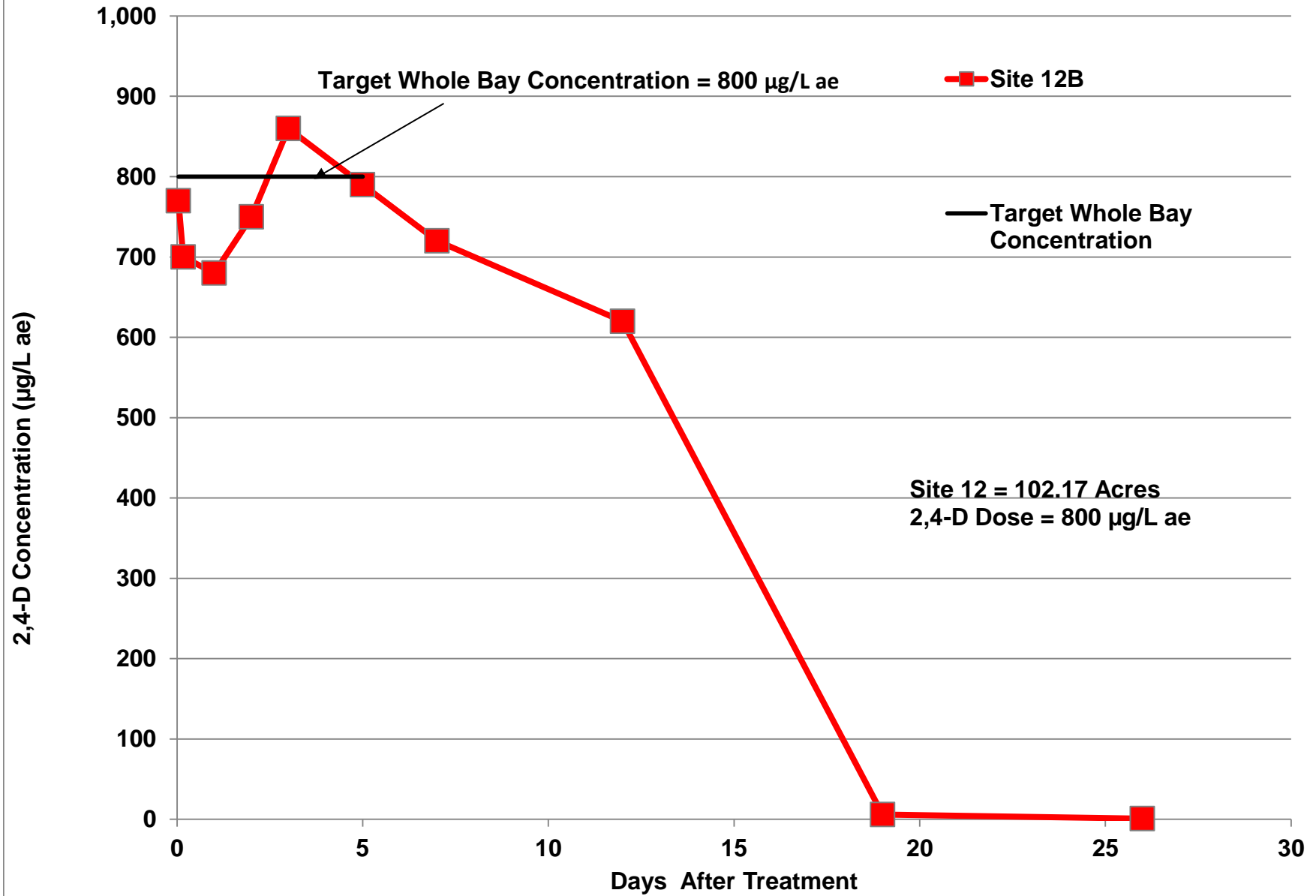


2015 EURASIAN WATERMILFOIL
TREATMENT AREAS AND HERBICIDE
RESIDUE MONITORING LOCATIONS
Beaver Dam - West
Barron County, WI
O-64

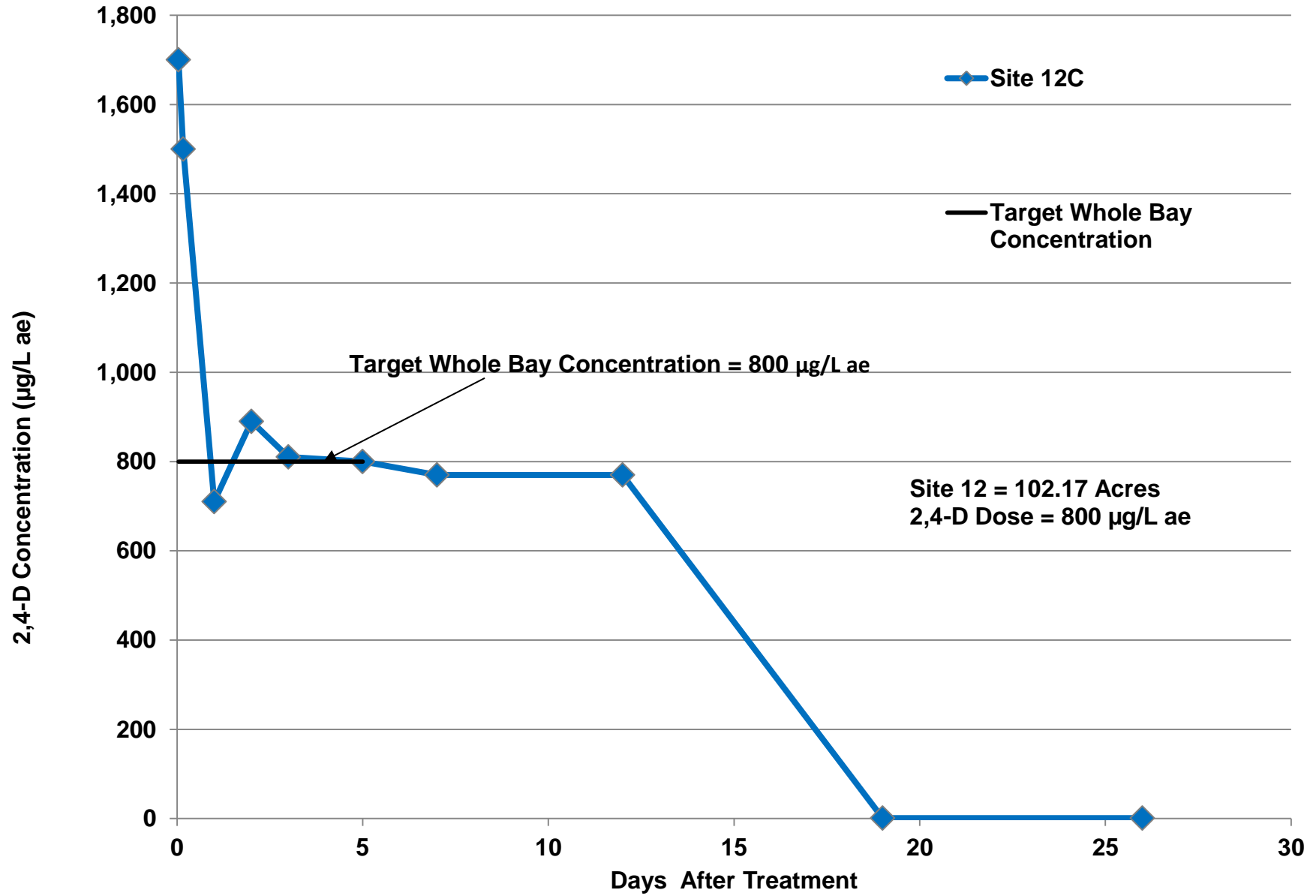
2015 City Bay 2,4-D Concentrations for Site 12A



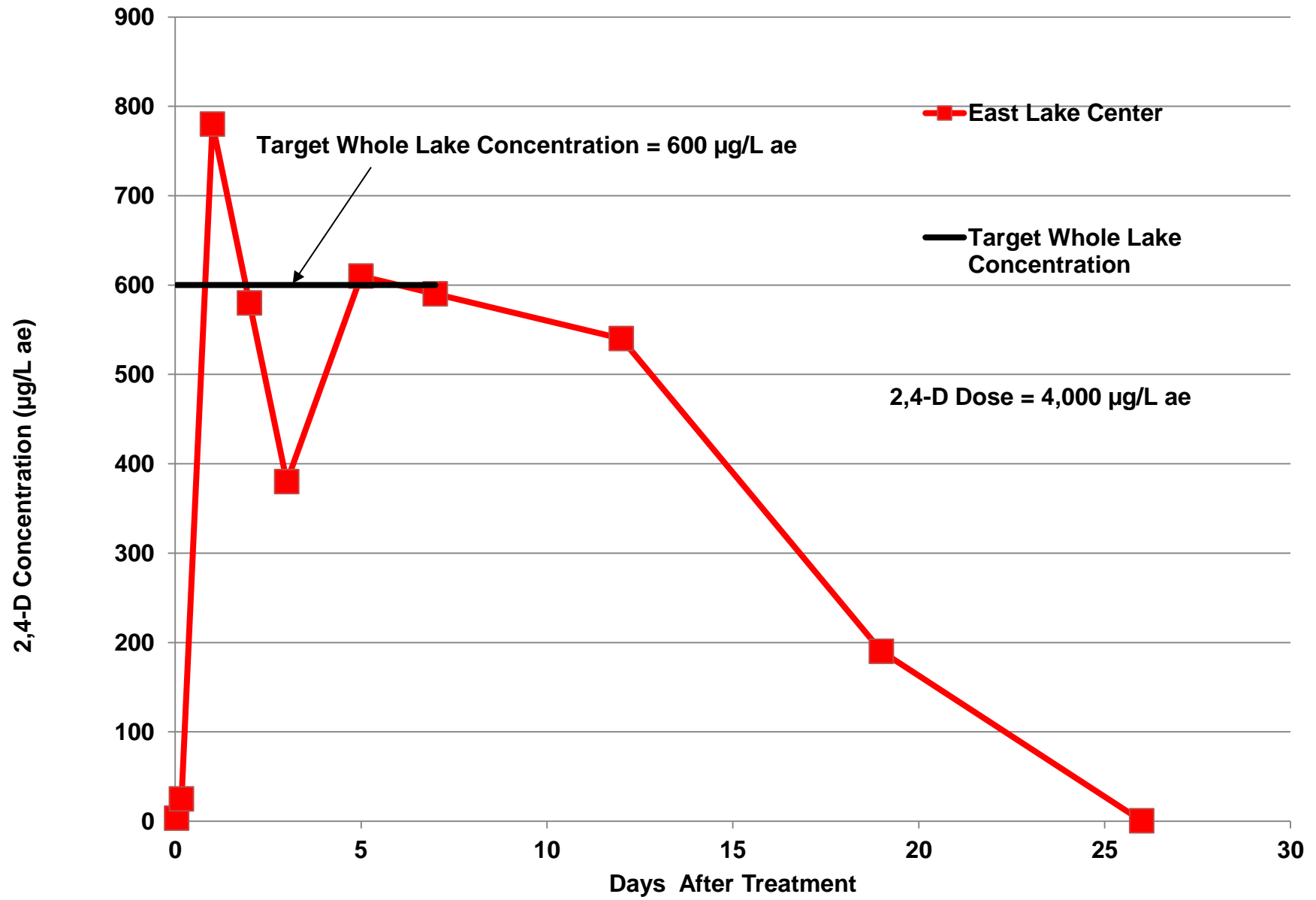
2015 City Bay 2,4-D Concentrations
for Site 12B



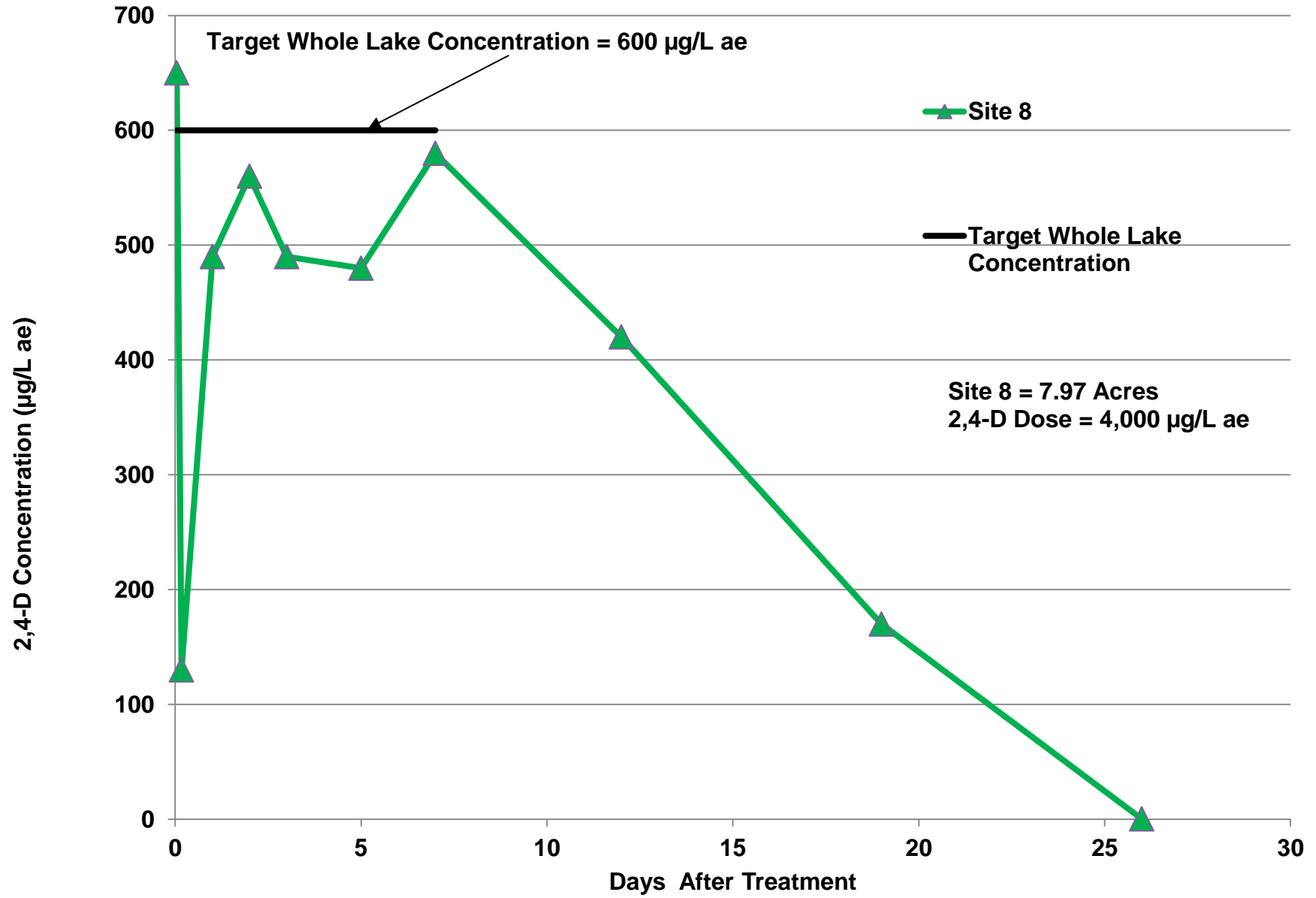
2015 City Bay 2,4-D Concentrations
for Site 12 C



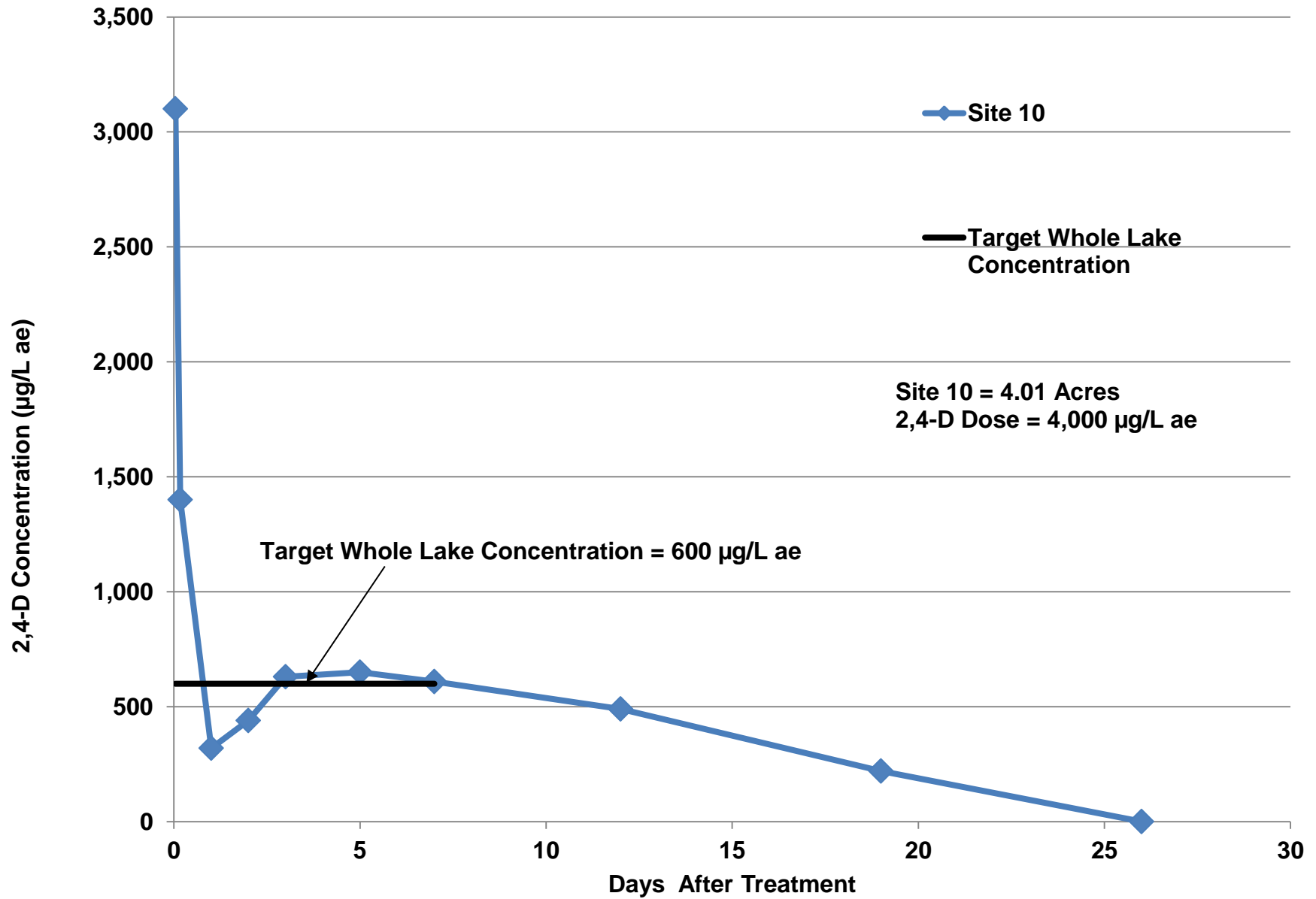
2015 East Lake 2,4-D Concentrations
for East Lake Center



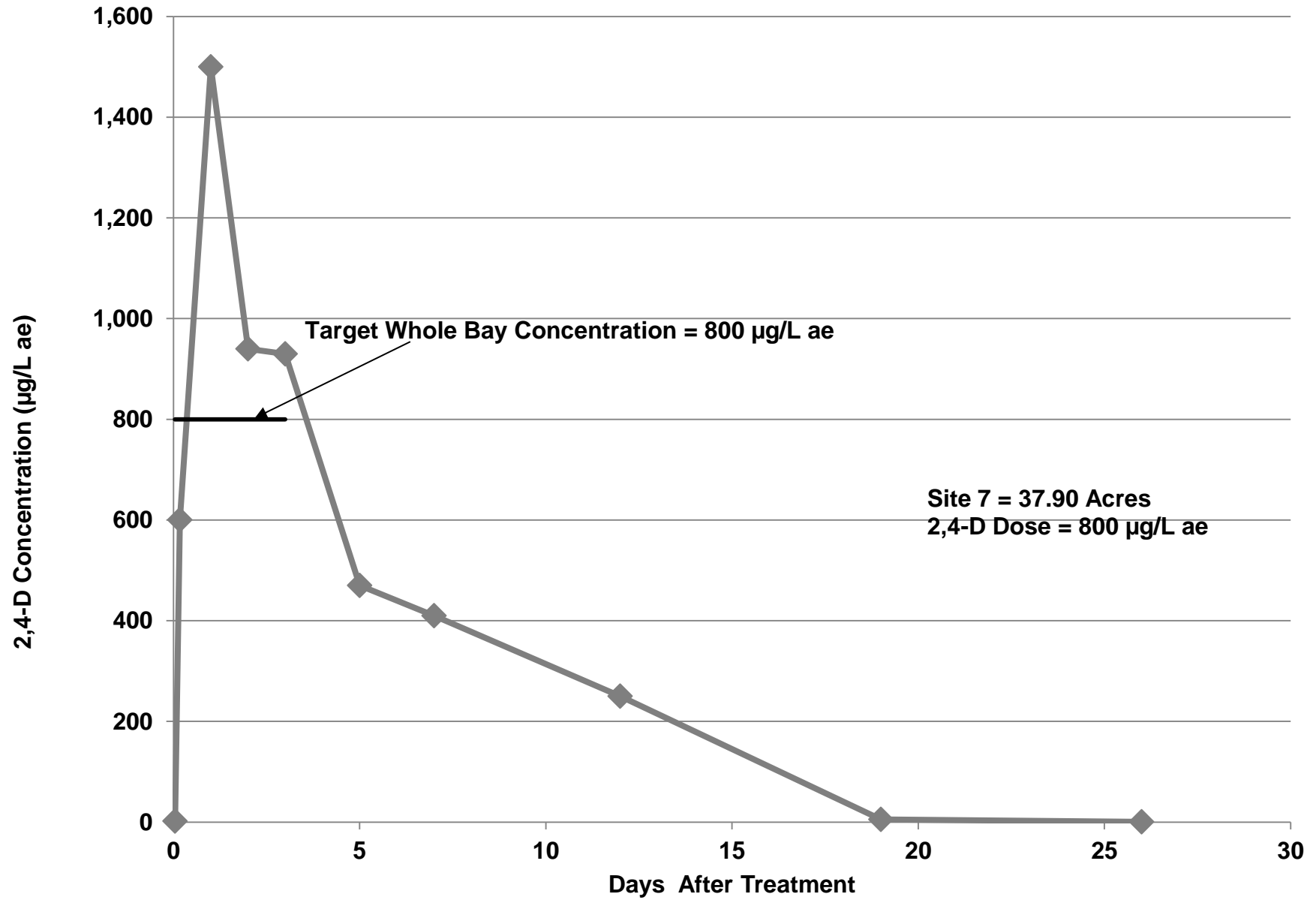
2015 East Lake 2,4-D Concentrations
for Site 8



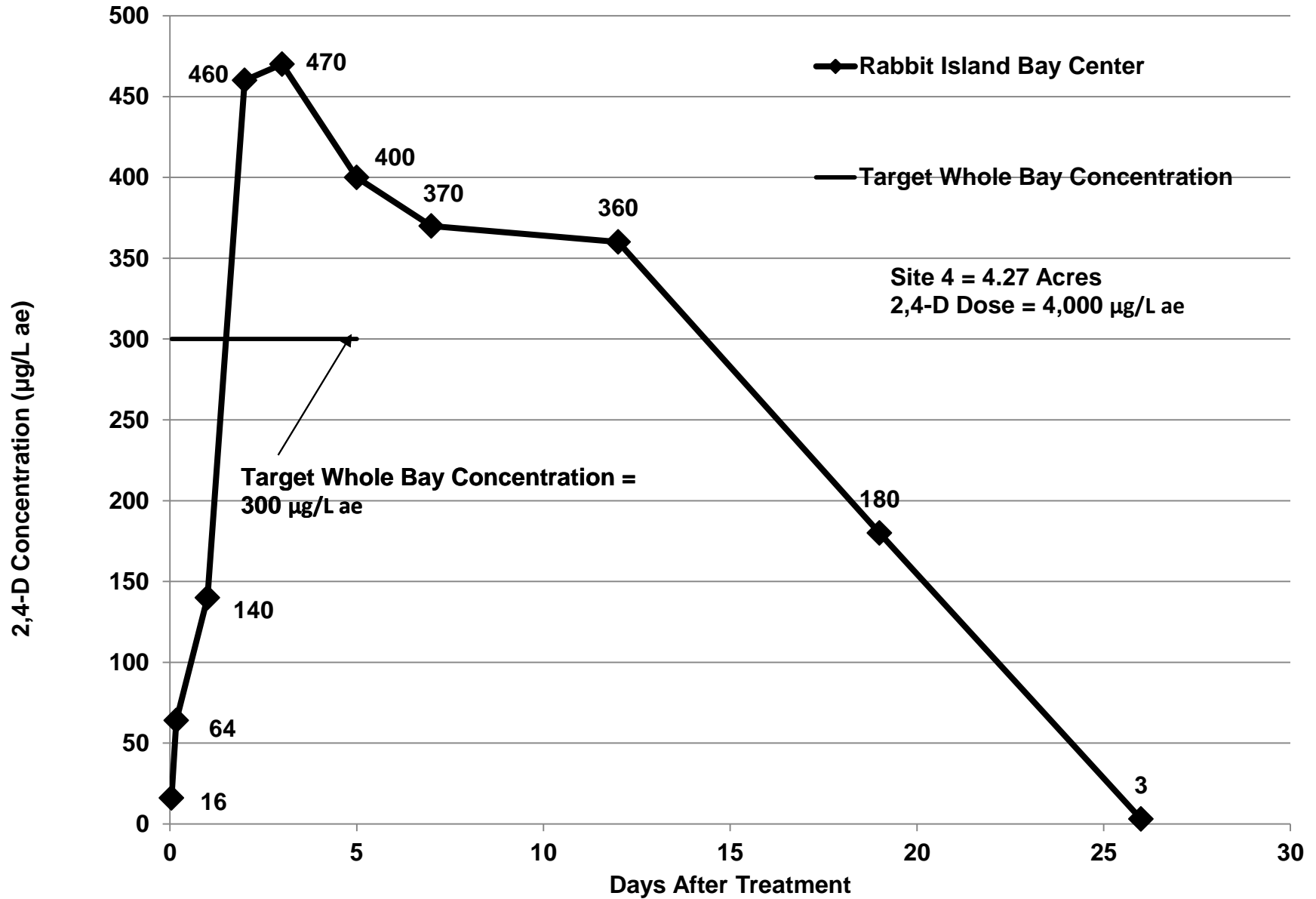
2015 East Lake 2,4-D Concentrations
for Site 10



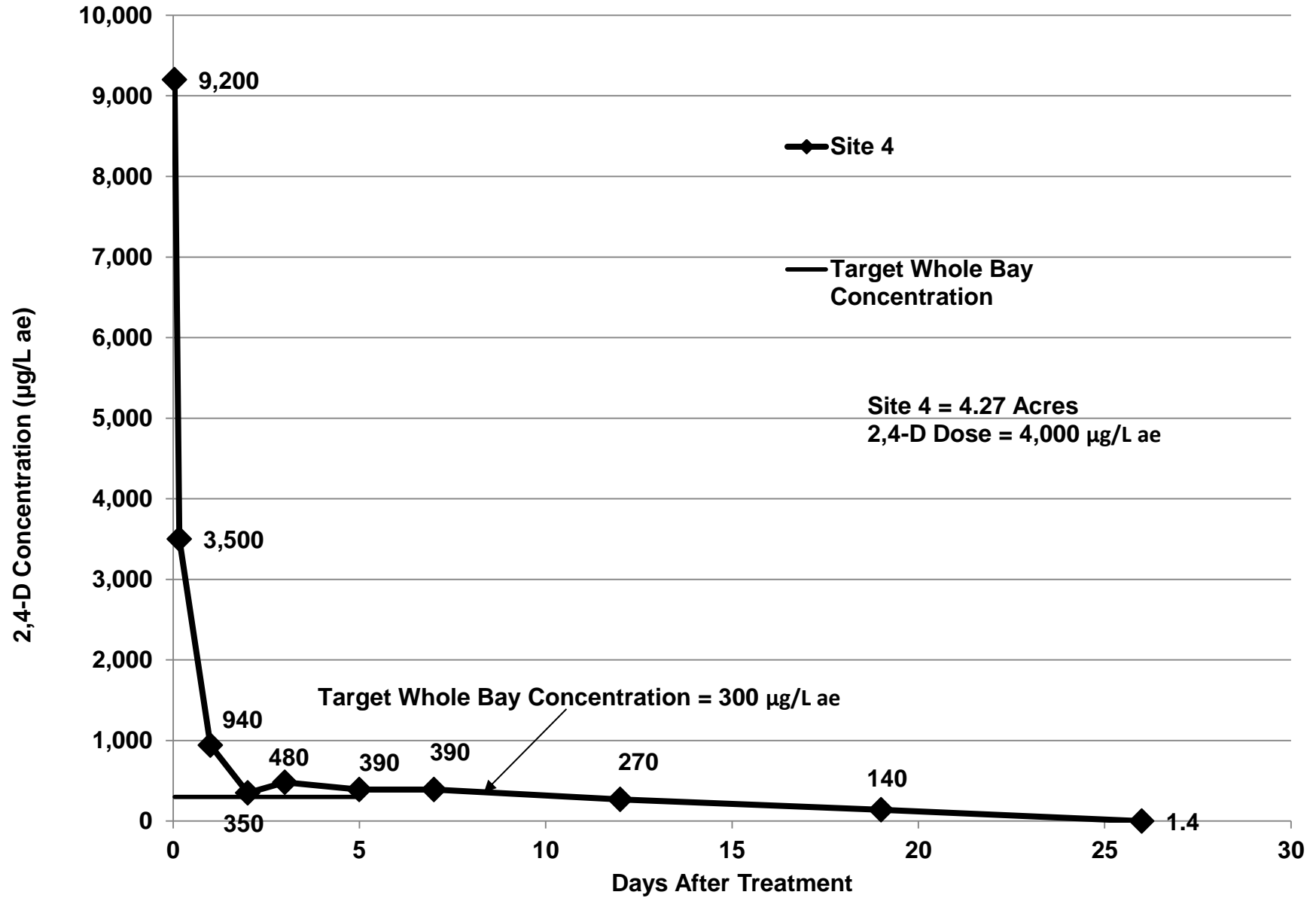
2015 Norwegian Bay 2,4-D Concentration for Norwegian Bay Site 7



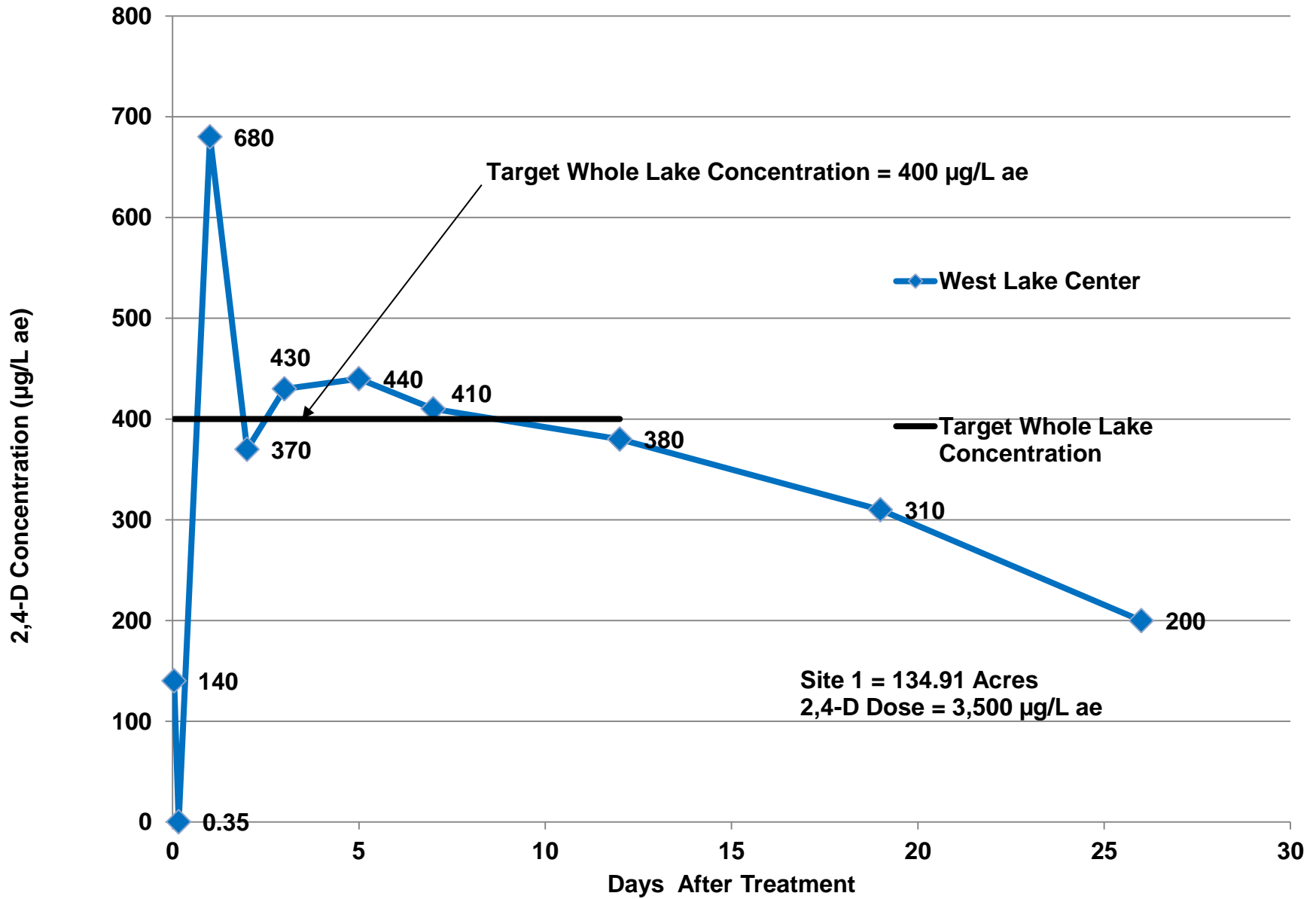
2015 Rabbit Island Bay 2,4-D Concentrations for Rabbit Island Bay Center



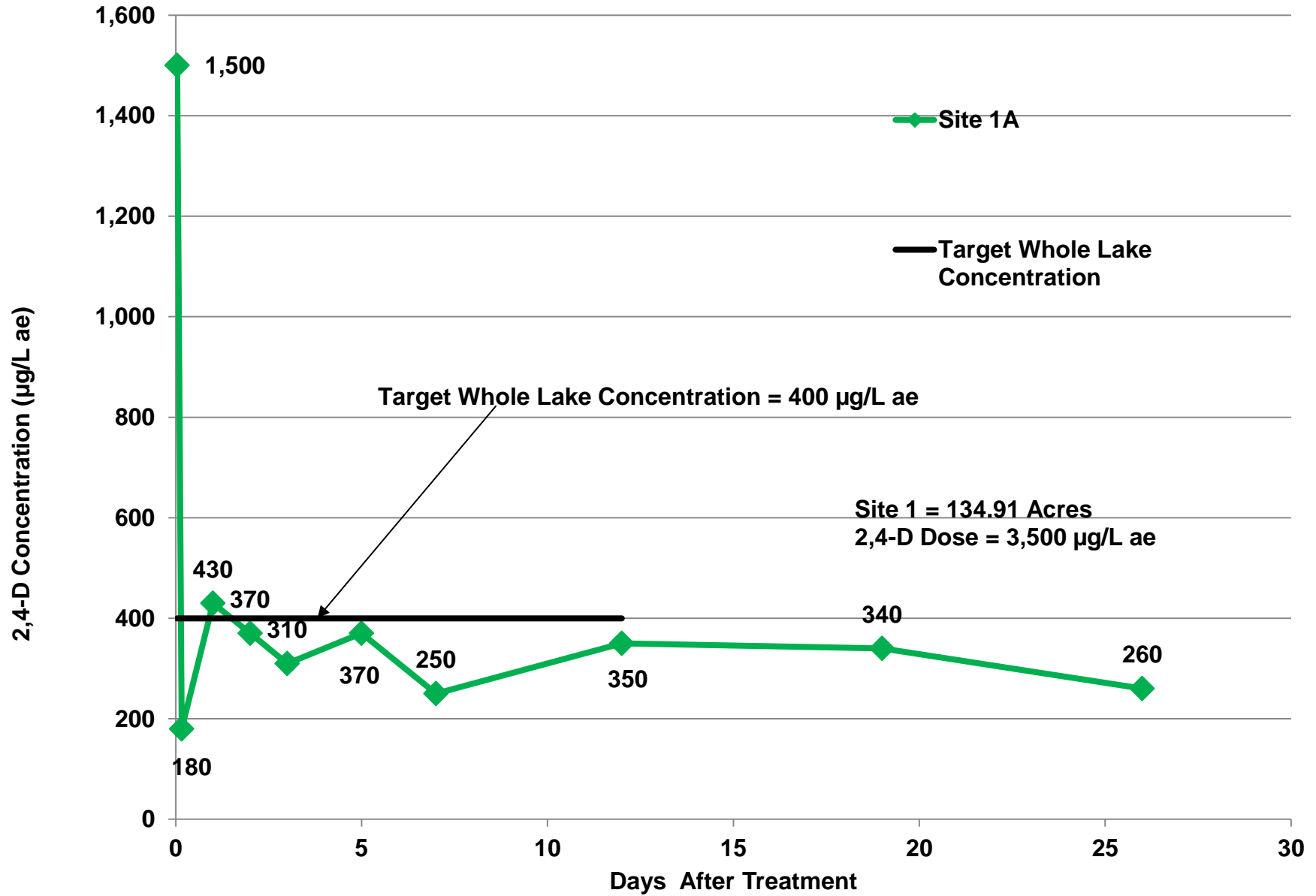
2015 Rabbit Island Bay 2,4-D Concentrations
for Site 4



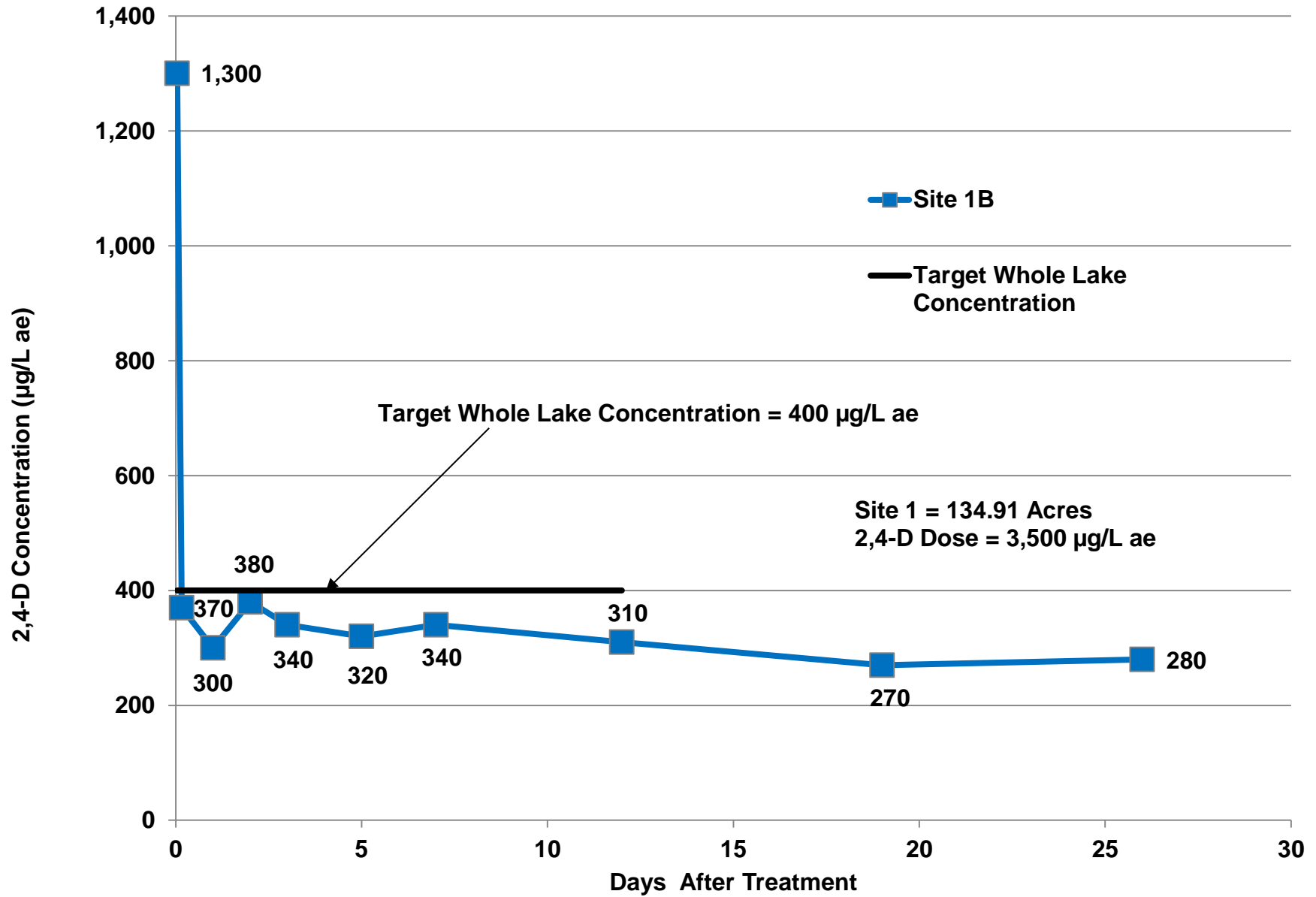
2015 West Lake 2,4-D Concentrations
for West Lake Center



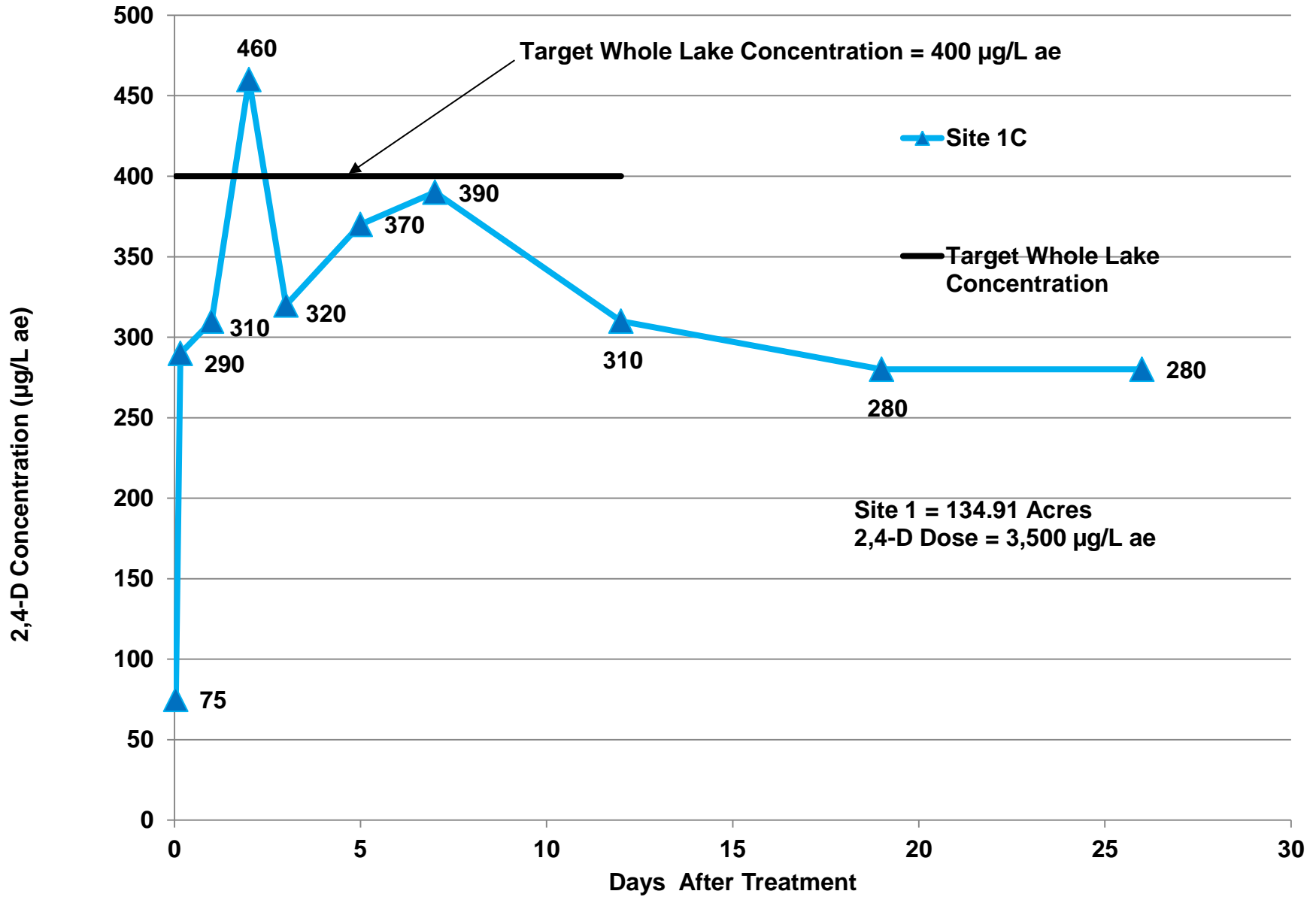
2015 West Lake 2,4-D Concentrations for Site 1A



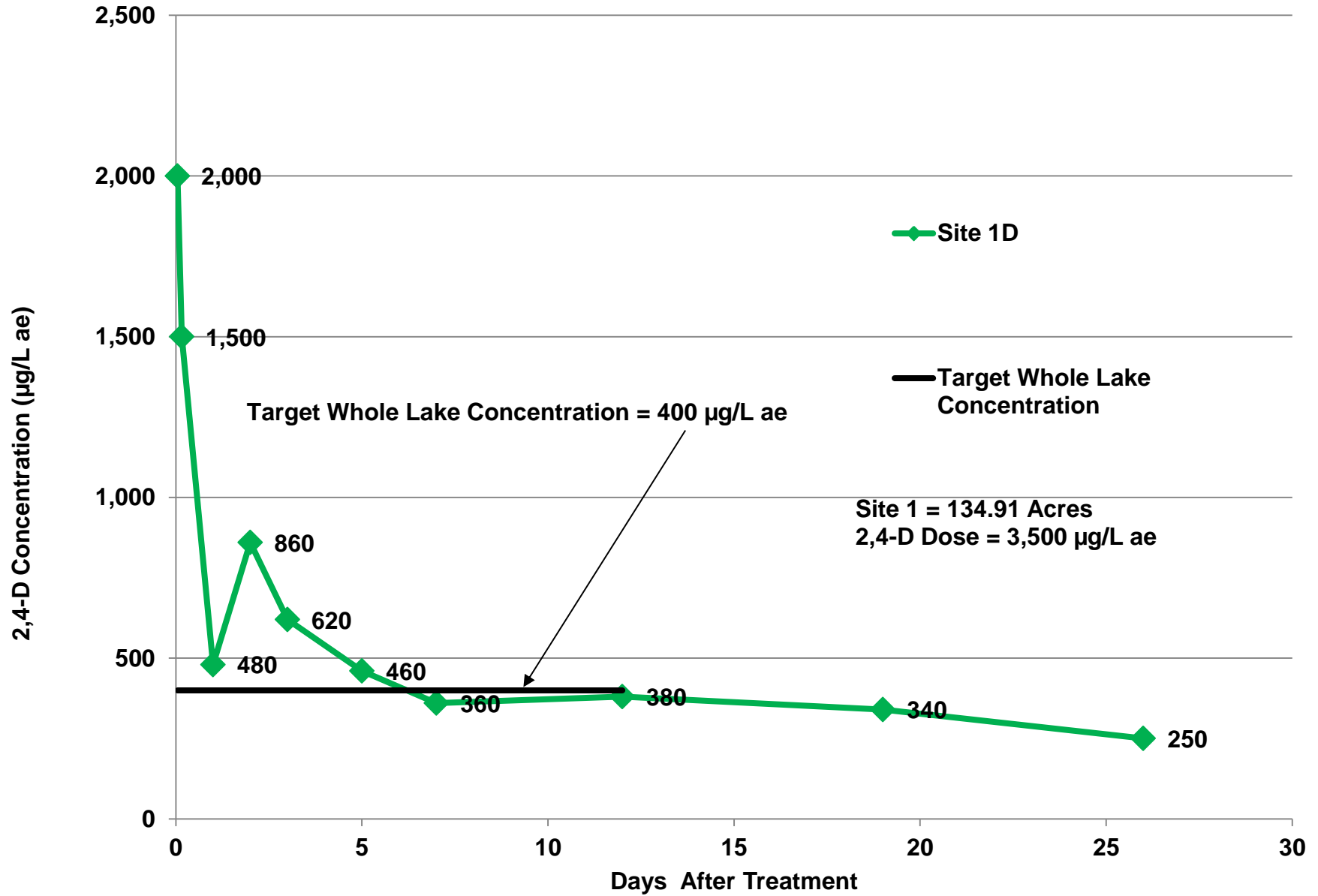
2015 West Lake 2,4-D Concentrations for Site 1B



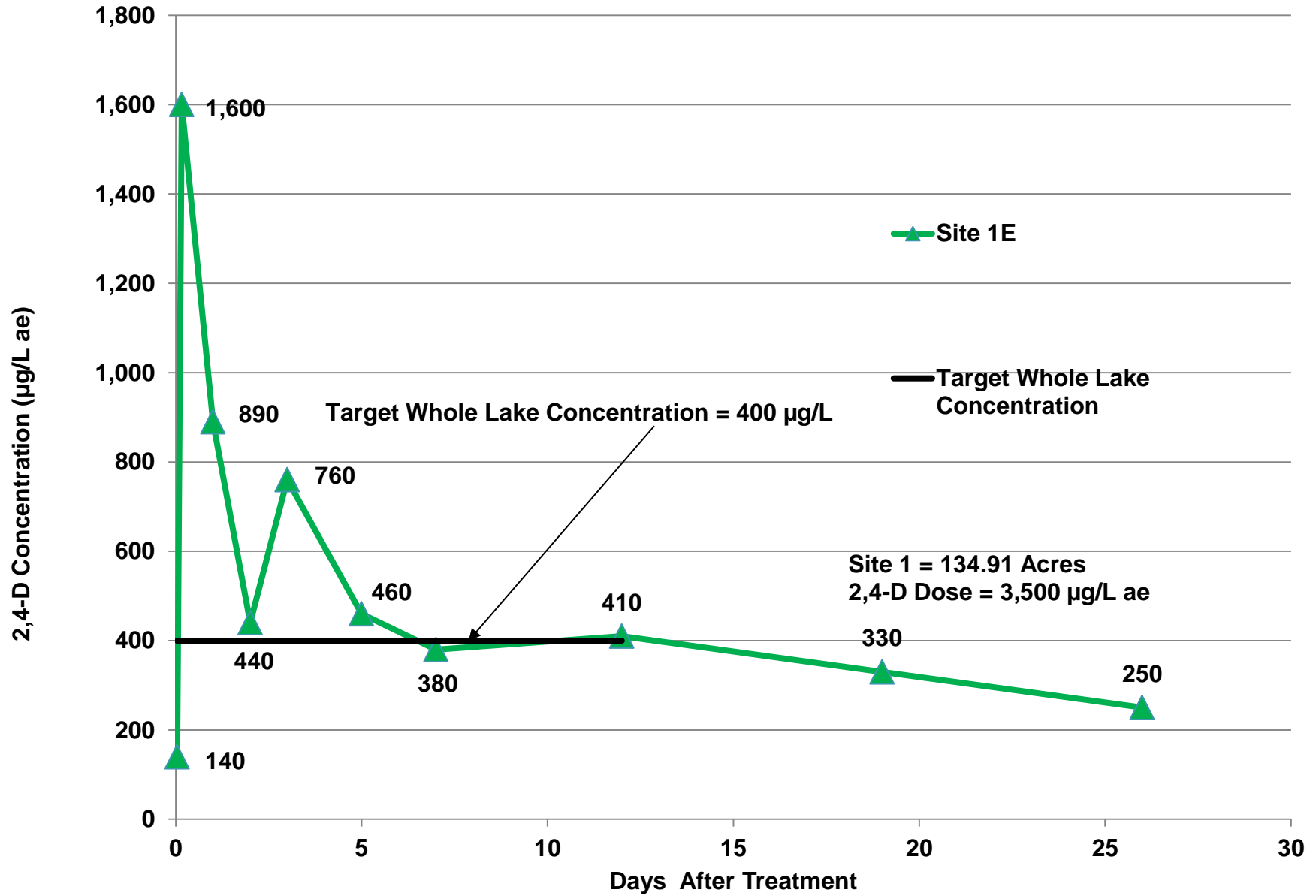
2015 West Lake 2,4-D Concentrations
for Site 1C



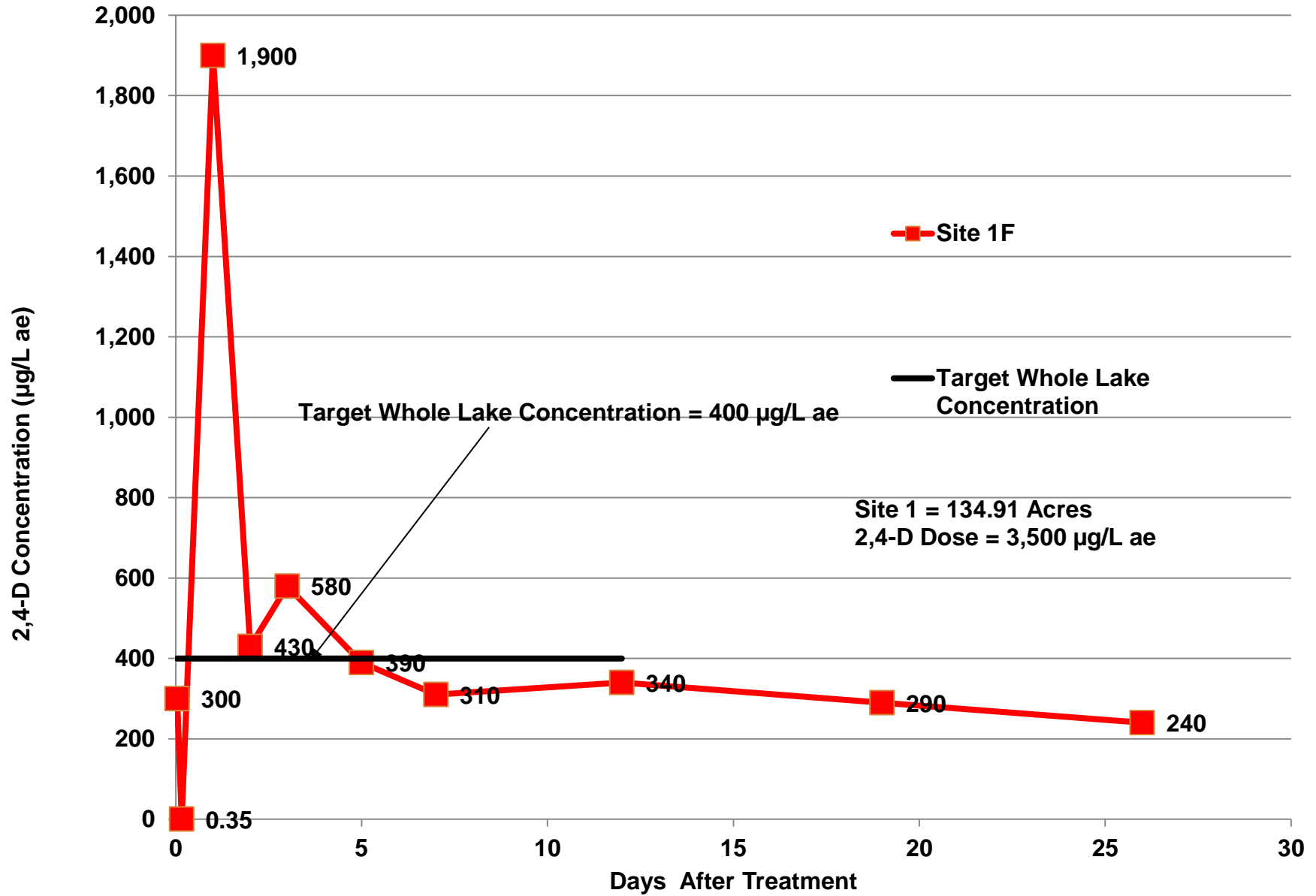
2015 West Lake 2,4-D Concentrations for Site 1D



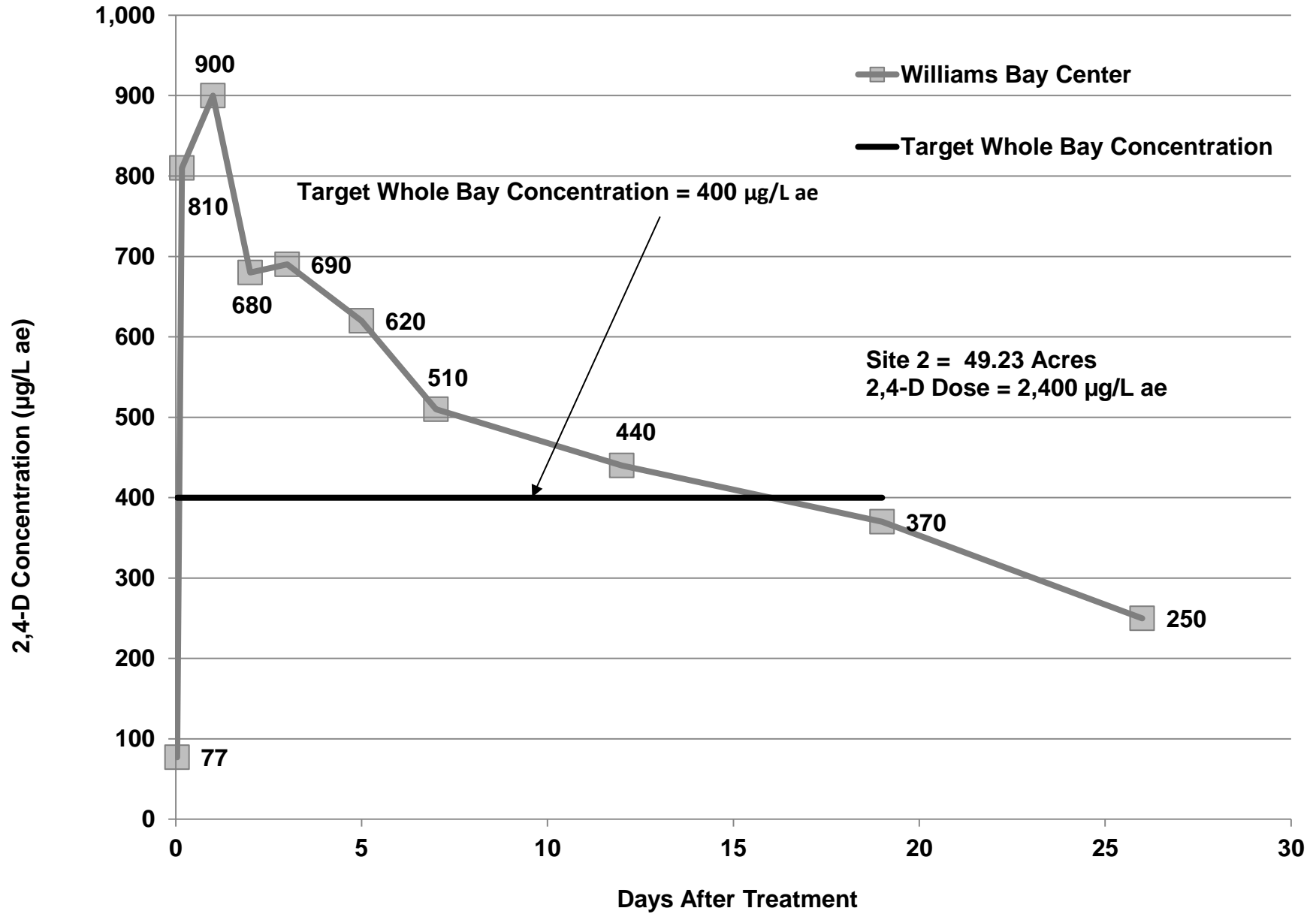
2015 West Lake 2,4-D Concentrations
for Site 1E



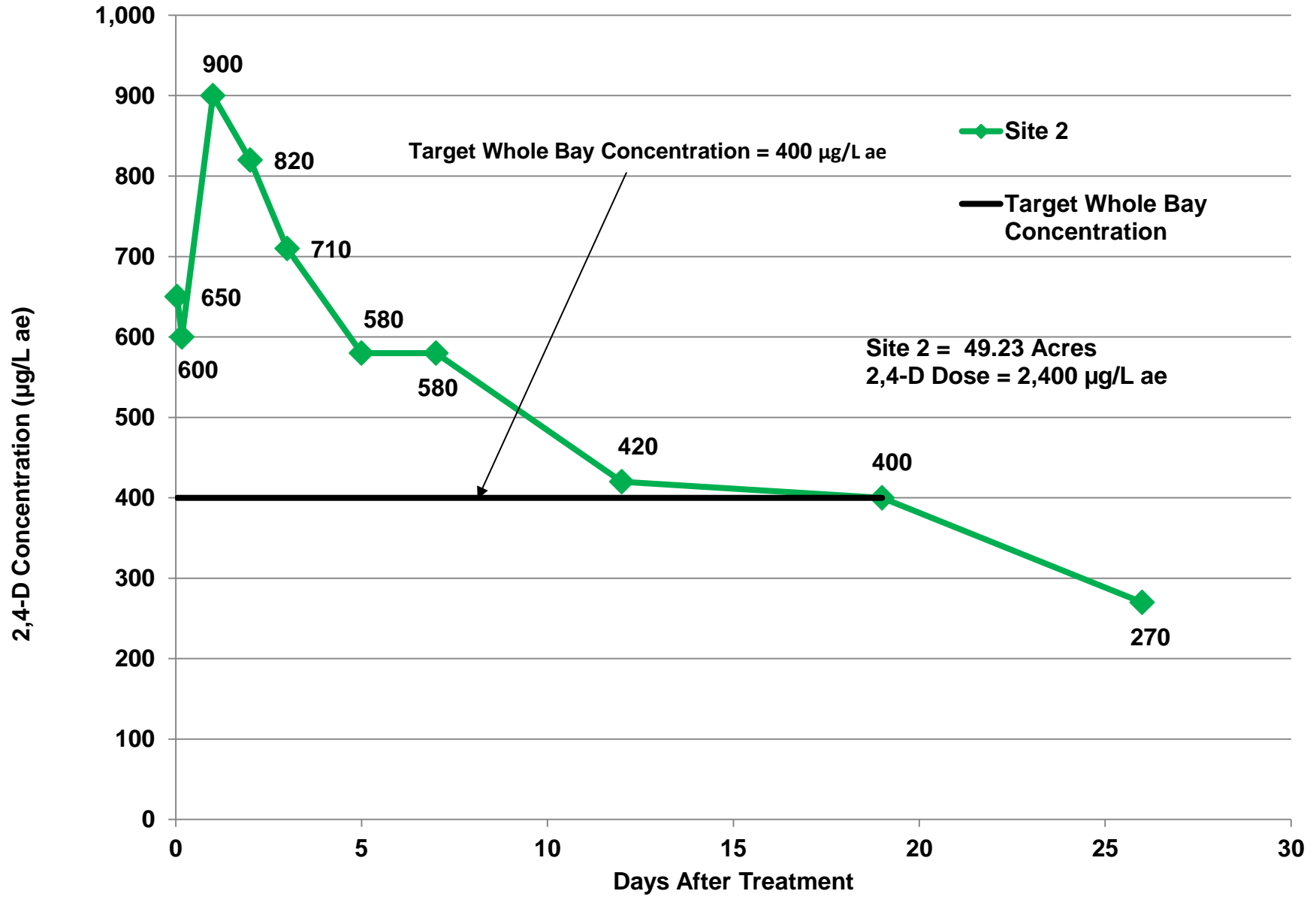
2015 West Lake 2,4-D Concentrations for Site 1F



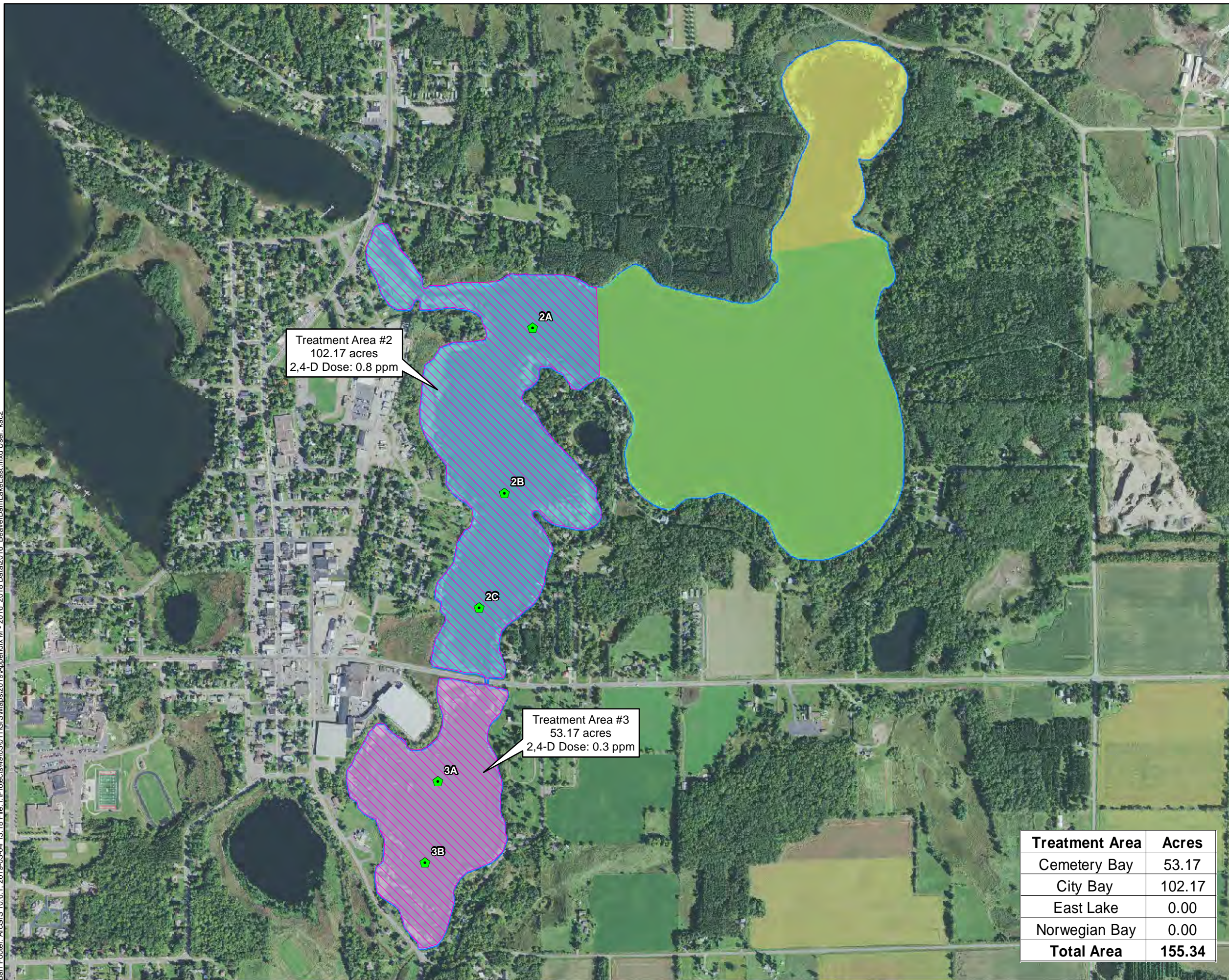
2015 Williams Bay 2,4-D Concentrations for Williams Bay Center









2015 Williams Bay 2,4-D Concentrations for Site 2



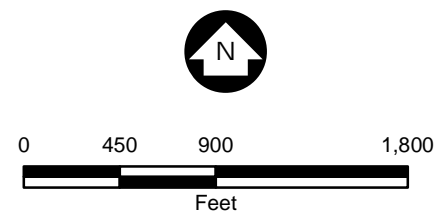
Barr Footer: ArcGIS 10.6.1, 2019-03-04 13:18 File: I:\Projects\4903011\GIS\Maps\2019\Appendix M - 2016, 2018 Data\2016 BeaverDamLakeEast.mxd User: kat2



-  2016 EWM Treatment Areas
 -  Herbicide Residue Monitoring Locations
- Treatment Zones**
-  Cemetery Bay (0.3 ppm 2,4-D)
 -  City Bay (0.80 ppm 2,4-D)
 -  East Lake (Not Treated)
 -  Norwegian Bay (Hand Removal)

Treatment Area #2
102.17 acres
2,4-D Dose: 0.8 ppm

Treatment Area #3
53.17 acres
2,4-D Dose: 0.3 ppm

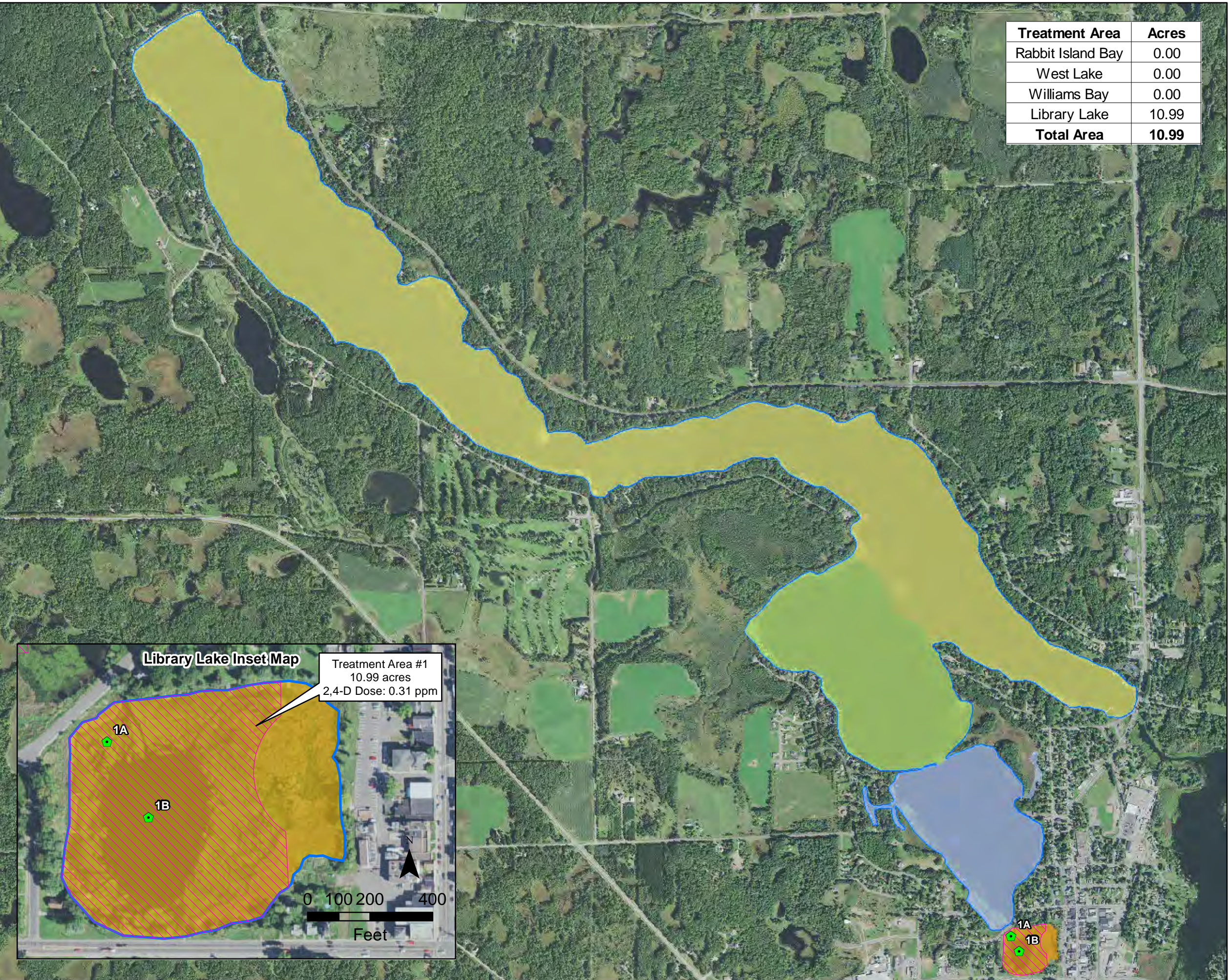


Treatment Area	Acres
Cemetery Bay	53.17
City Bay	102.17
East Lake	0.00
Norwegian Bay	0.00
Total Area	155.34







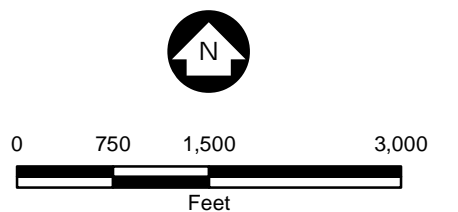
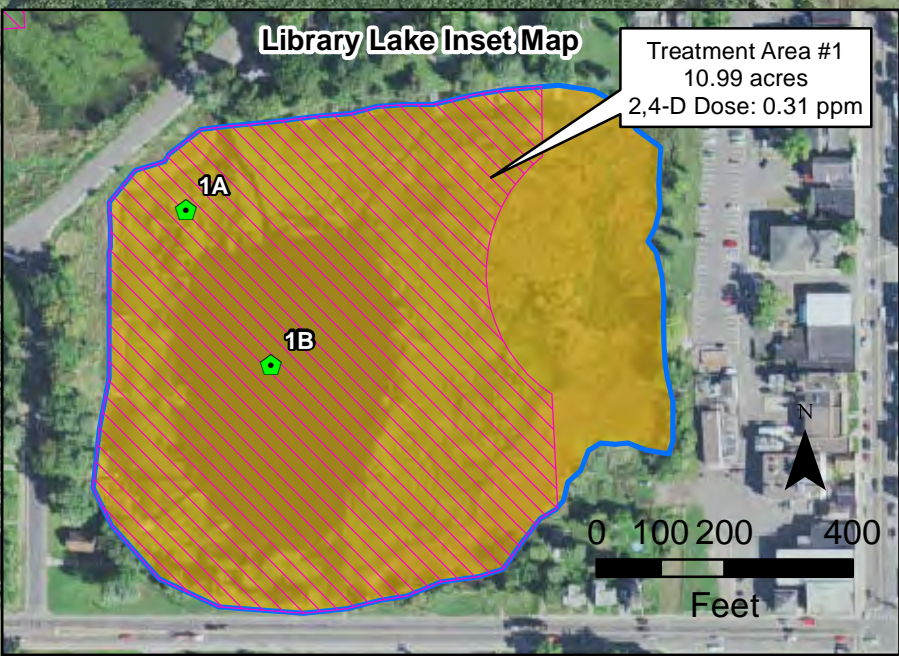
2016 EURASIAN WATERMILFOIL
TREATMENT AREAS AND HERBICIDE
RESIDUE MONITORING LOCATIONS
Beaver Dam - East
Barron County, WI
O-83

Barr Footer: ArcGIS 10.6.1, 2019-03-04 13:17 File: I:\Projects\4903011\GIS\Maps\2019\Appendix M - 2016, 2018 Data\2016_BeaverDamLakeWest.mxd User: kac2



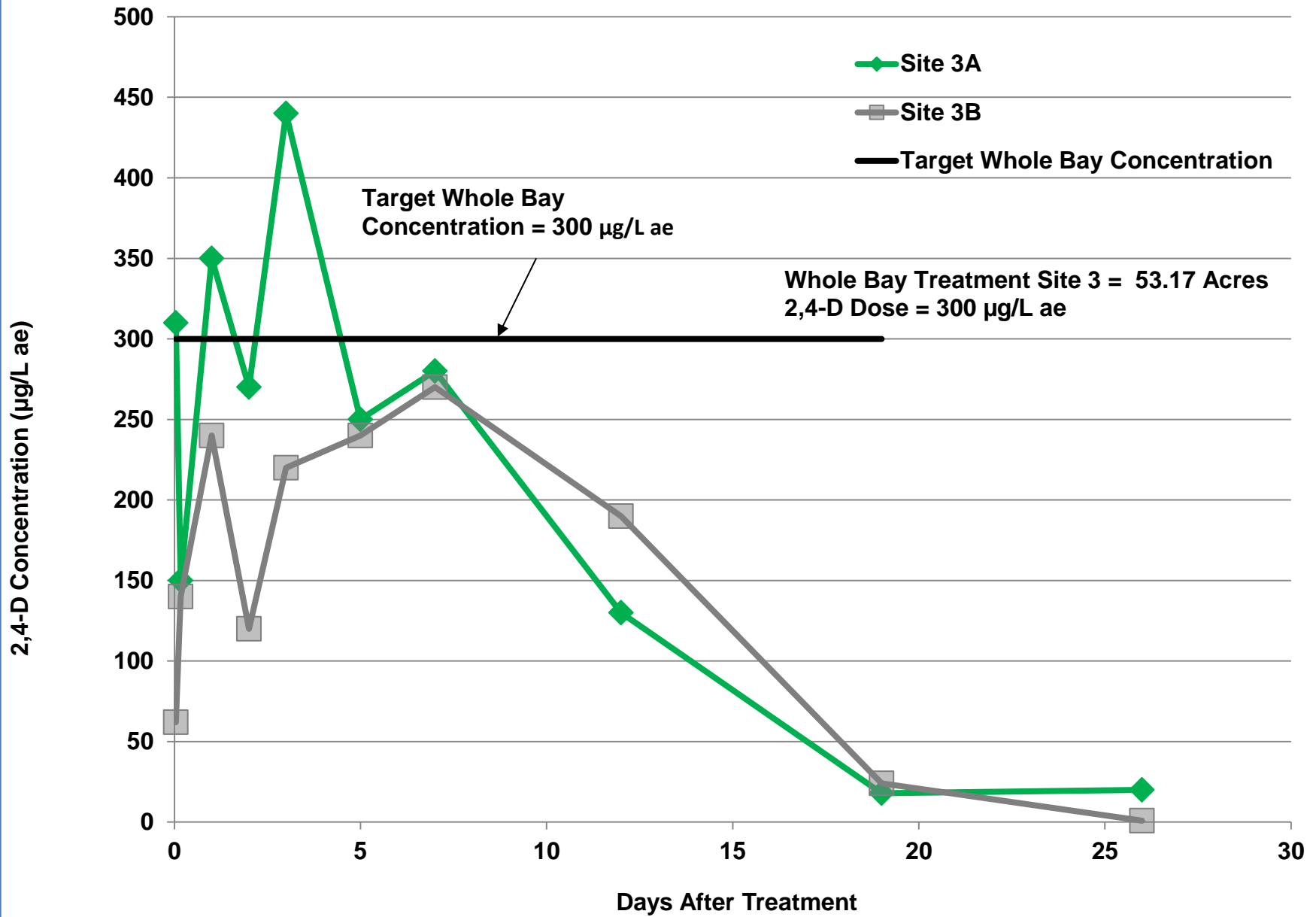
Treatment Area	Acres
Rabbit Island Bay	0.00
West Lake	0.00
Williams Bay	0.00
Library Lake	10.99
Total Area	10.99

-  2016 EWM Treatment Areas
 -  Herbicide Residue Monitoring Locations
- Treatment Zones
-  Library Lake (0.3 ppm 2,4-D)
 -  Rabbit Island Bay (Hand Removal)
 -  West Lake (Hand Removal)
 -  Williams Bay (Not Treated)

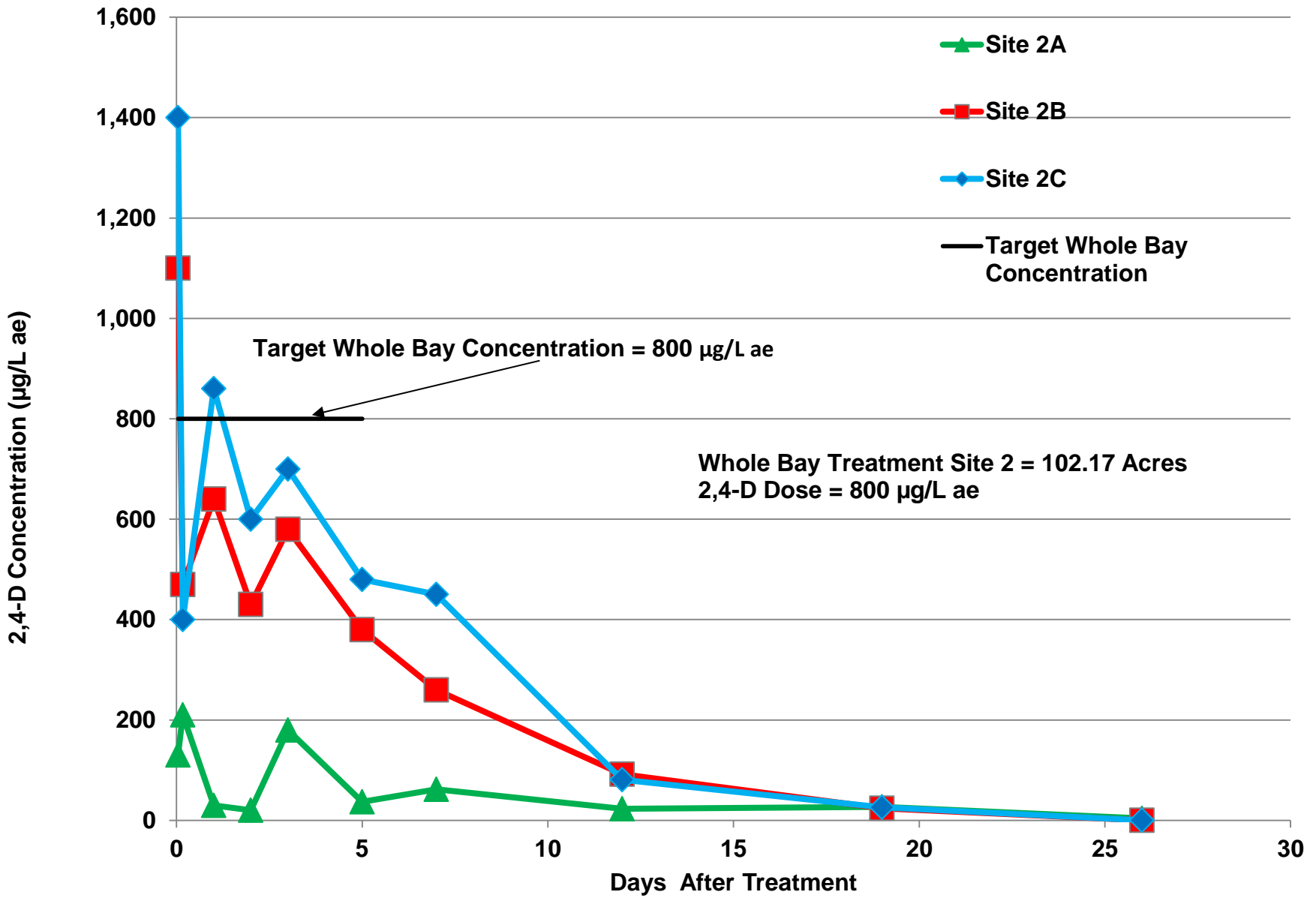


2016 EURASIAN WATERMILFOIL
TREATMENT AREAS AND HERBICIDE
RESIDUE MONITORING LOCATIONS
Beaver Dam - West
Barron County, WI
O-84

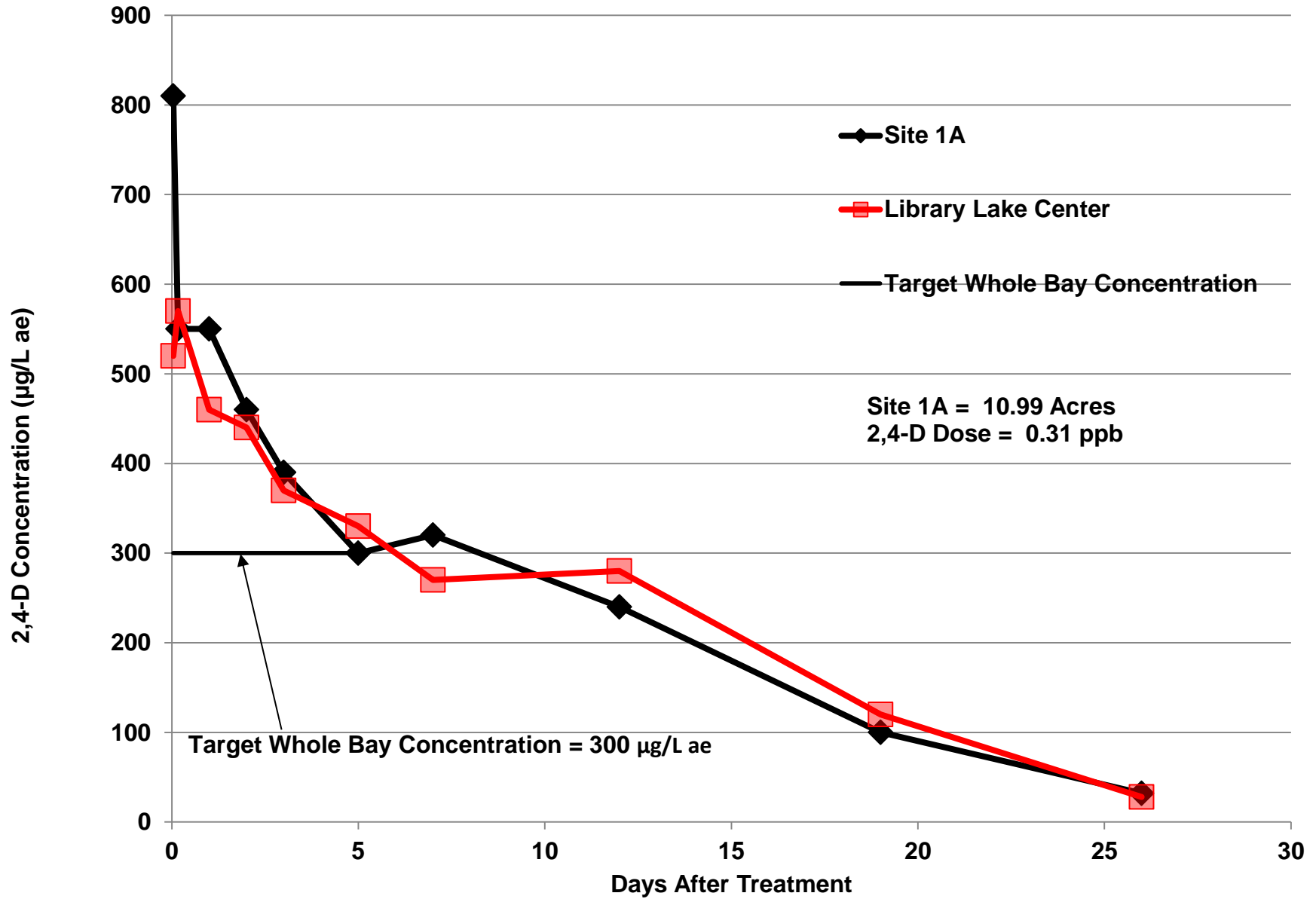
2016 Cemetery Bay 2,4-D Concentrations
for Site 3A and 3B



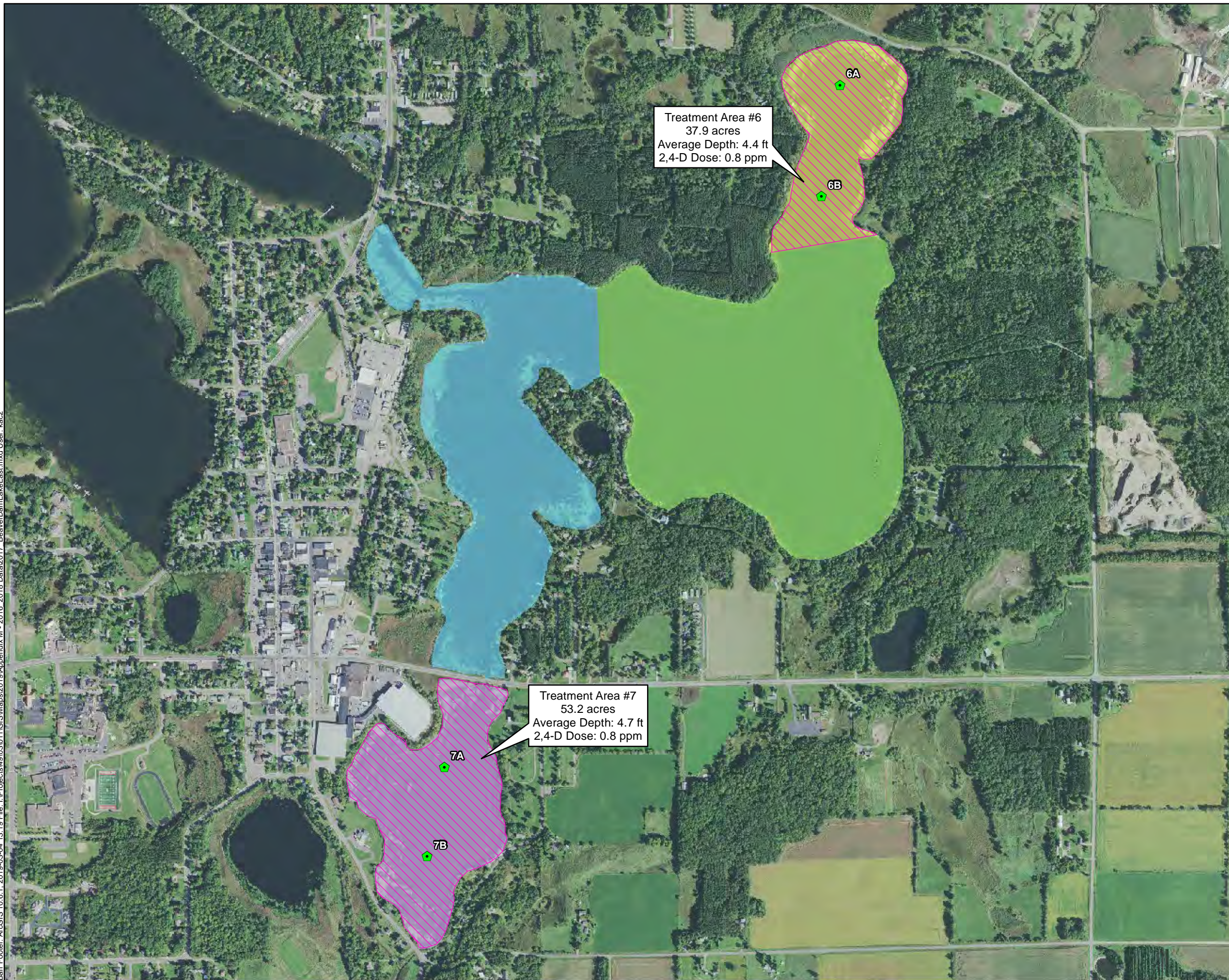
2016 City Bay 2,4-D Concentrations
for Sites 2A, 2B, and 2C



2016 Library Lake 2,4-D Concentrations
for Site 1A and Library Lake Center



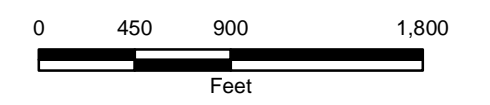
Barr Footer: ArcGIS 10.6.1, 2019-03-04 13:19 File: I:\Projects\9303011\GIS\Maps\2019\Appendix M - 2016, 2018, 2018 Data\2017 BeaverDamLakeEast.mxd User: kat2



Treatment Area #6
37.9 acres
Average Depth: 4.4 ft
2,4-D Dose: 0.8 ppm

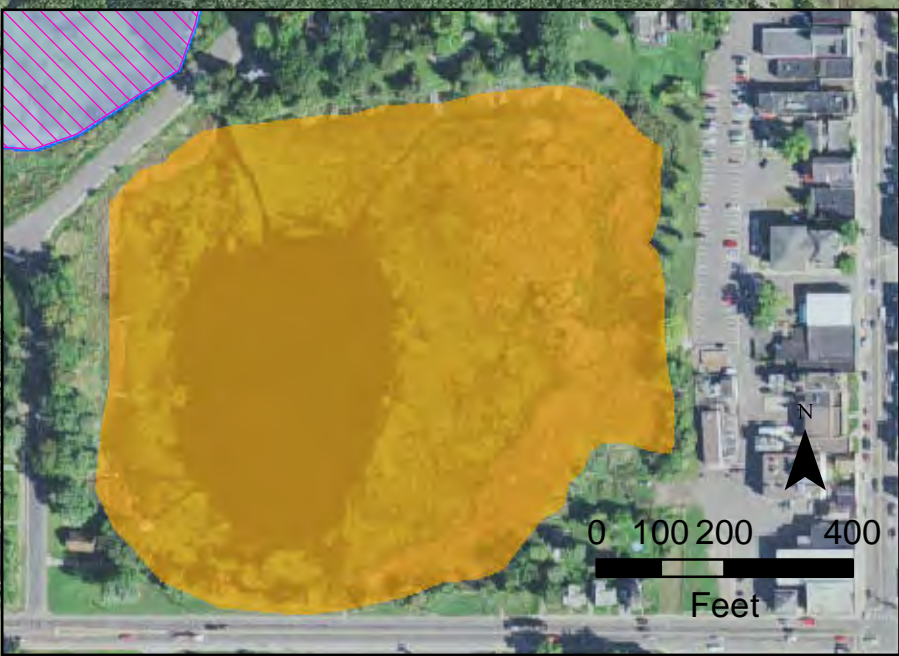
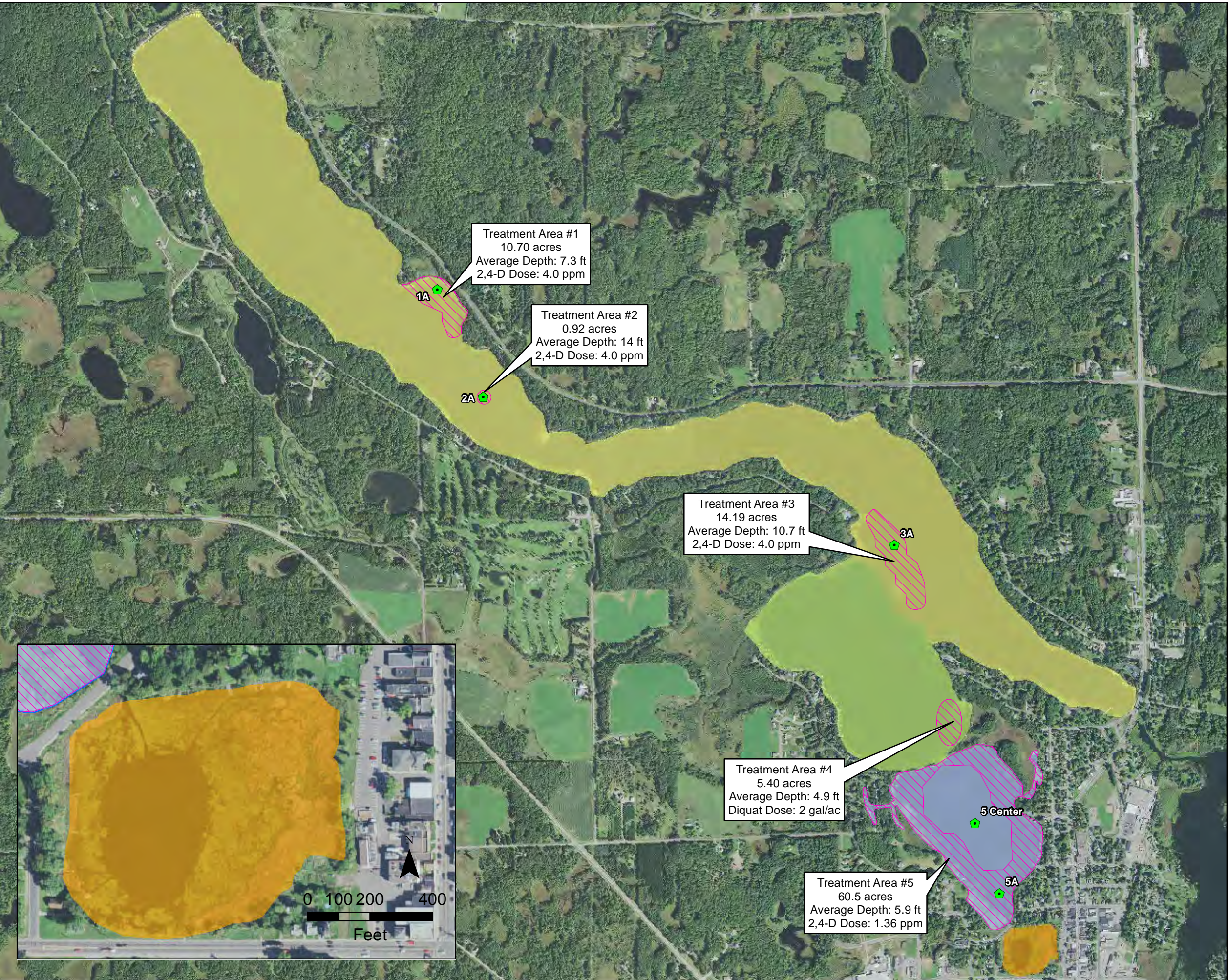
Treatment Area #7
53.2 acres
Average Depth: 4.7 ft
2,4-D Dose: 0.8 ppm







-  Proposed 2017 EWM Treatment Areas
-  Herbicide Residue Monitoring Locations
- Treatment Zones**
-  East Lake (Manual Removal)
-  City Bay (Manual Removal)
-  Cemetery Bay (Whole Bay 2,4-D Concentration - 0.8 ppm)
-  Norwegian Bay (Whole Bay 2,4-D Concentration - 0.8 ppm)

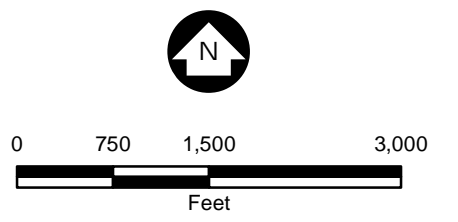


2017 EURASIAN WATERMILFOIL
TREATMENT AREAS AND HERBICIDE
RESIDUE MONITORING LOCATIONS
Beaver Dam - East
Barron County, WI
O-88

Barr Footer: ArcGIS 10.6.1, 2019-03-04 13:19 File: I:\Projects\4903011\GIS\Maps\2019\Appendix M - 2016, 2018 Data\2017 - BeaverDamLakeWest.mxd User: kac2

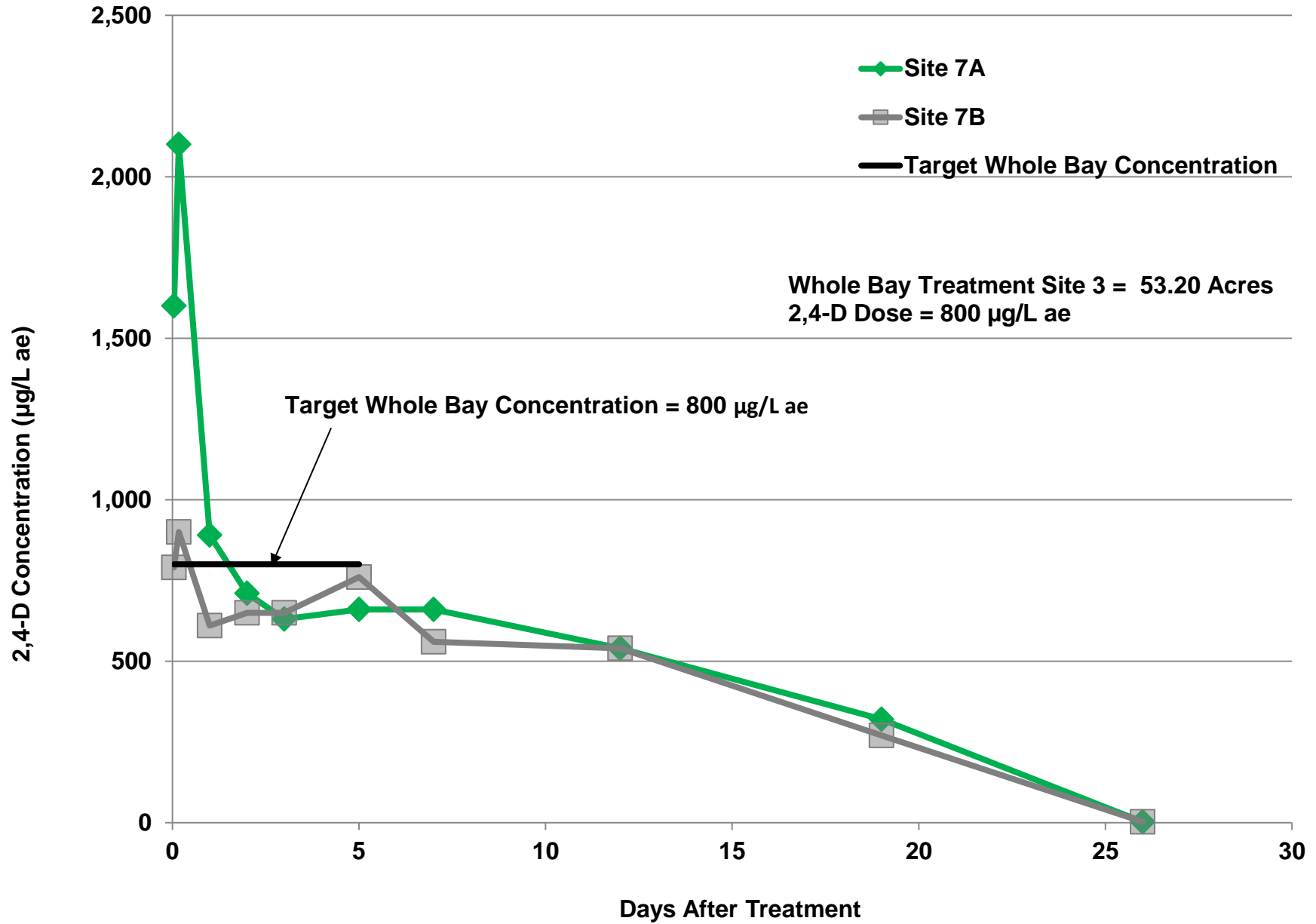


-  Proposed 2017 EWM Treatment Areas
-  Herbicide Residue Monitoring Locations
- Treatment Zones
 -  Library Lake (No Treatment)
 -  Rabbit Island Bay (Whole Lake 2,4-D Concentration 0.4 ppm)
 -  West Lake (Spot Treatment with 2,4-D)
 -  Williams Bay (Spot Treatment with Diquat)

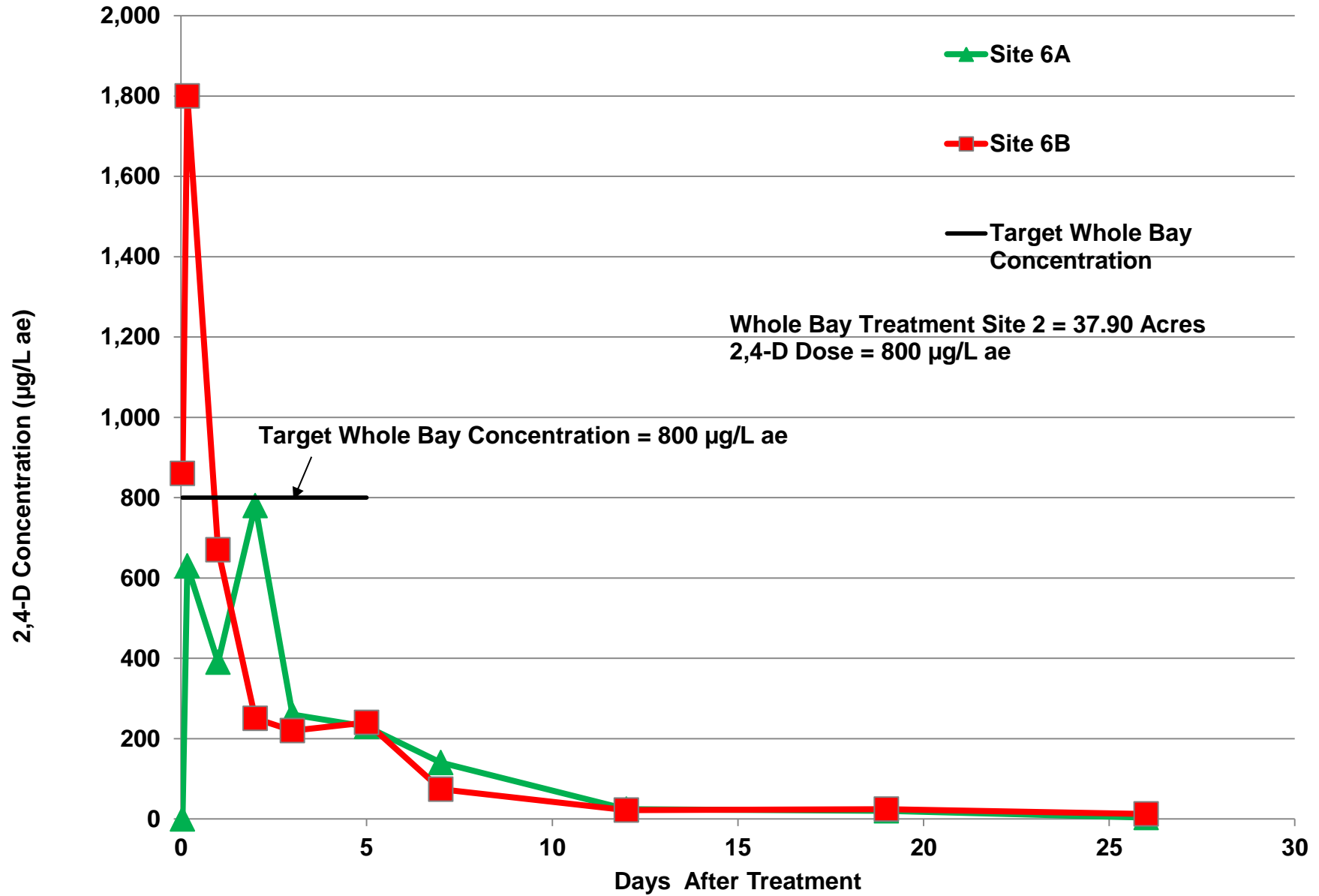


2017 EURASIAN WATERMILFOIL
TREATMENT AREAS AND HERBICIDE
RESIDUE MONITORING LOCATIONS
Beaver Dam - West
Barron County, WI
O-89

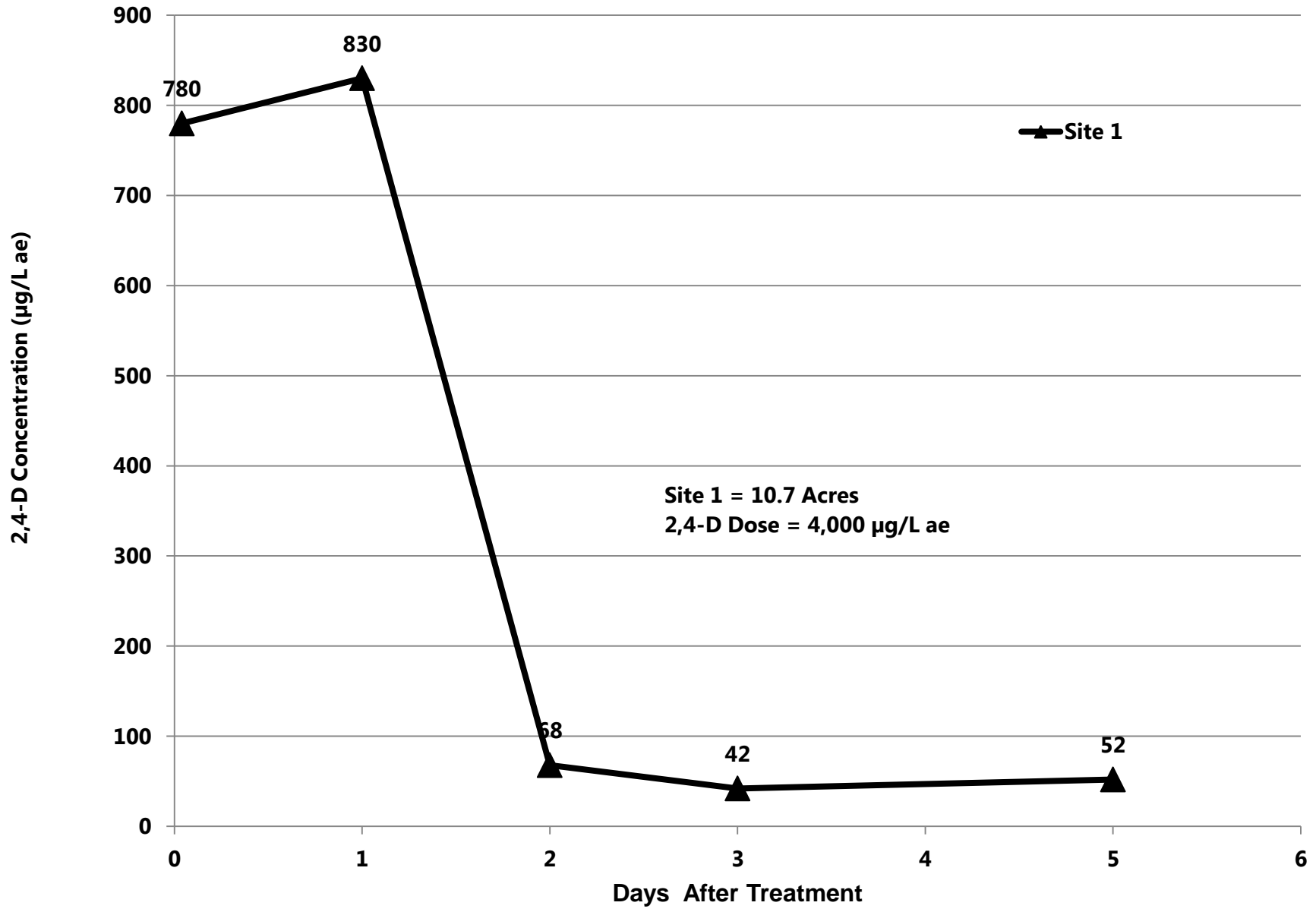
2017 Cemetery Bay 2,4-D Concentrations for Site 7A and 7B



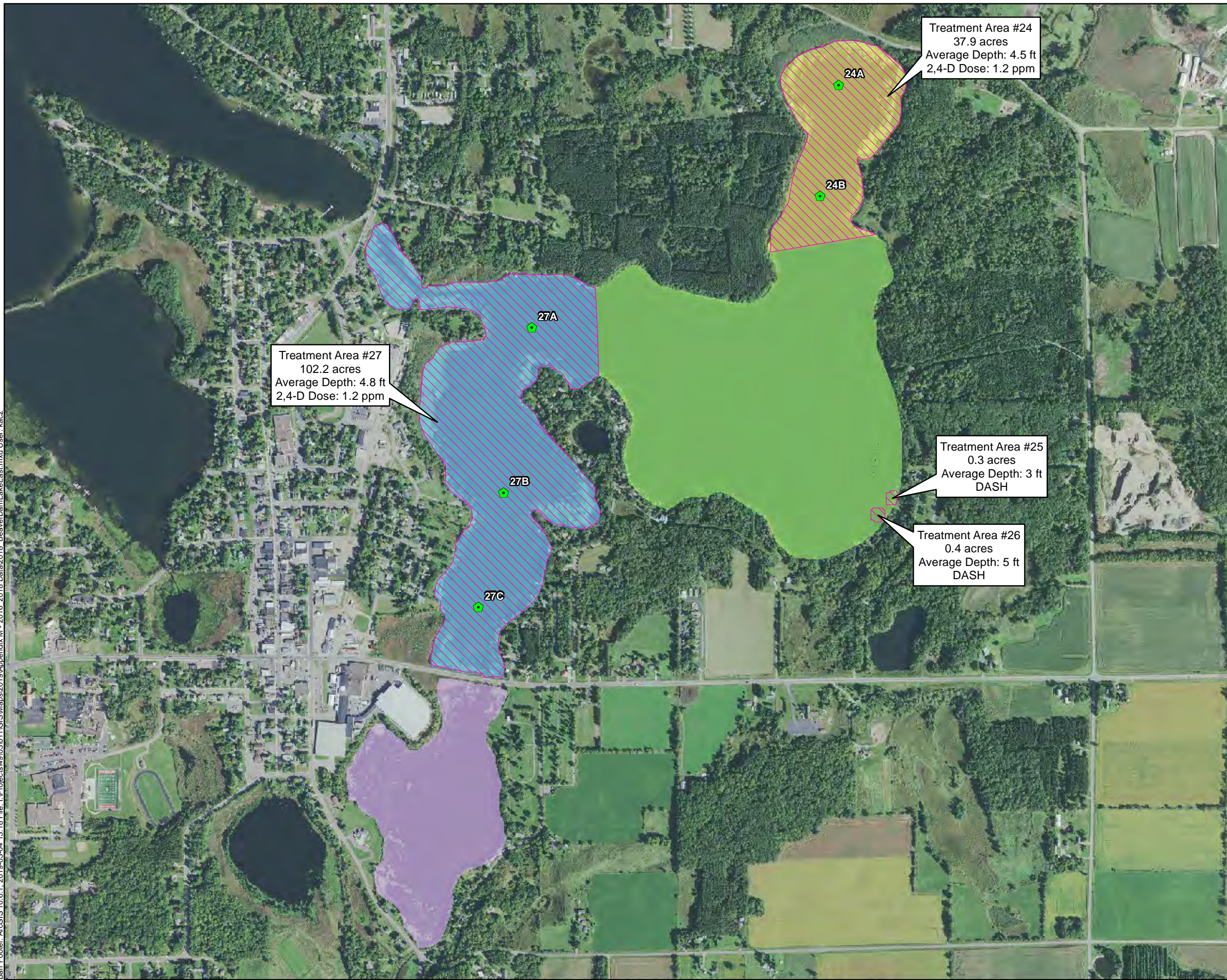
2017 Norwegian Bay 2,4-D Concentrations for Sites 6A and 6B



2017 West Lake 2,4-D Concentrations
for Site 1



Barr Footer: ArcGIS 10.6.1, 2019-03-04 13:18 File: I:\Projects\4903011\GIS\Maps\2019\Appendix M - 2016, 2018 Data\2018 BeaverDamLakeEast.mxd User: kat2









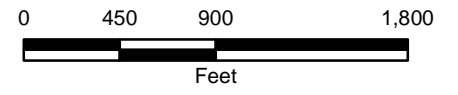
Treatment Area #24
37.9 acres
Average Depth: 4.5 ft
2,4-D Dose: 1.2 ppm

Treatment Area #27
102.2 acres
Average Depth: 4.8 ft
2,4-D Dose: 1.2 ppm

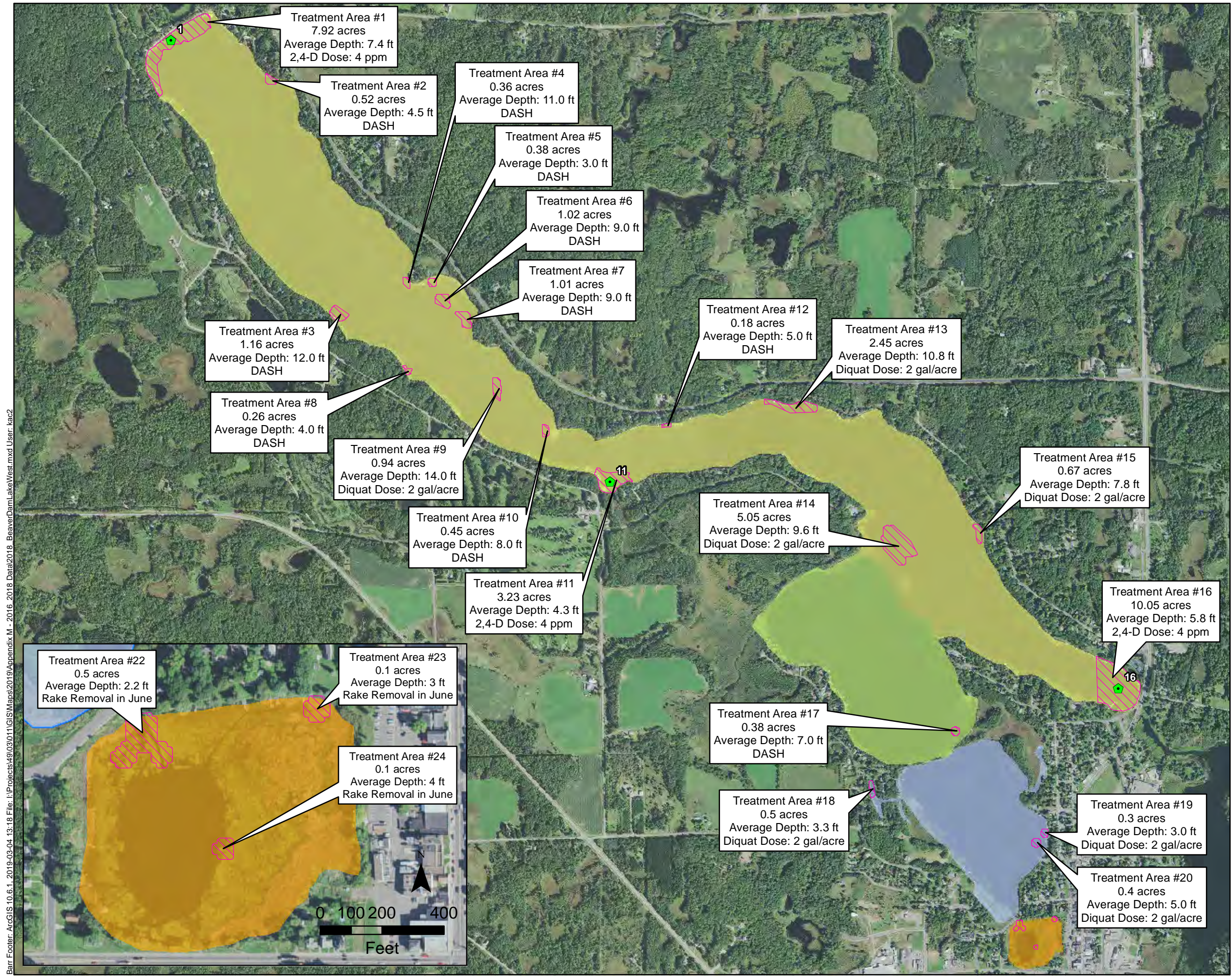
Treatment Area #25
0.3 acres
Average Depth: 3 ft
DASH







Treatment Area #26
0.4 acres
Average Depth: 5 ft
DASH

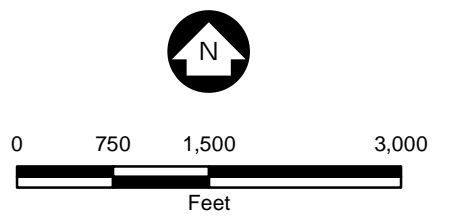
-  Herbicide Residue Monitoring Locations
-  Proposed 2018 EWM Treatment Areas
- Treatment Zones**
-  East Lake
-  City Bay
-  Cemetery Bay
-  Norwegian Bay



2018 2,4-D RESIDUE MONITORING
LOCATIONS: NORWEGIAN BAY AND
CITY BAY
Beaver Dam - East
Barron County, WI
O-93



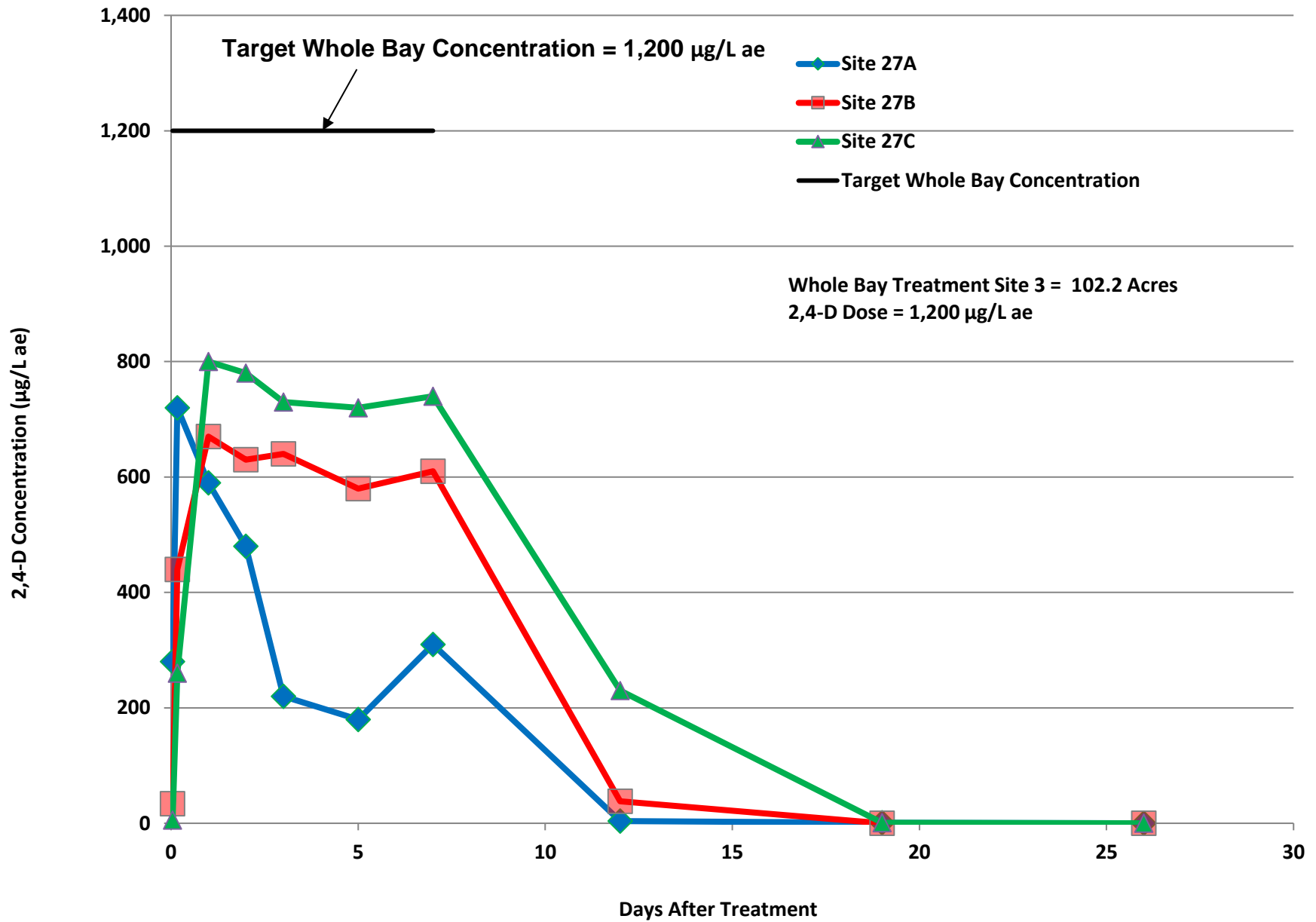
-  Herbicide Residue Monitoring Locations
-  Proposed 2018 EWM Treatment Areas
- Treatment Zones**
-  Library Lake
-  Rabbit Island Bay
-  West Lake
-  Williams Bay



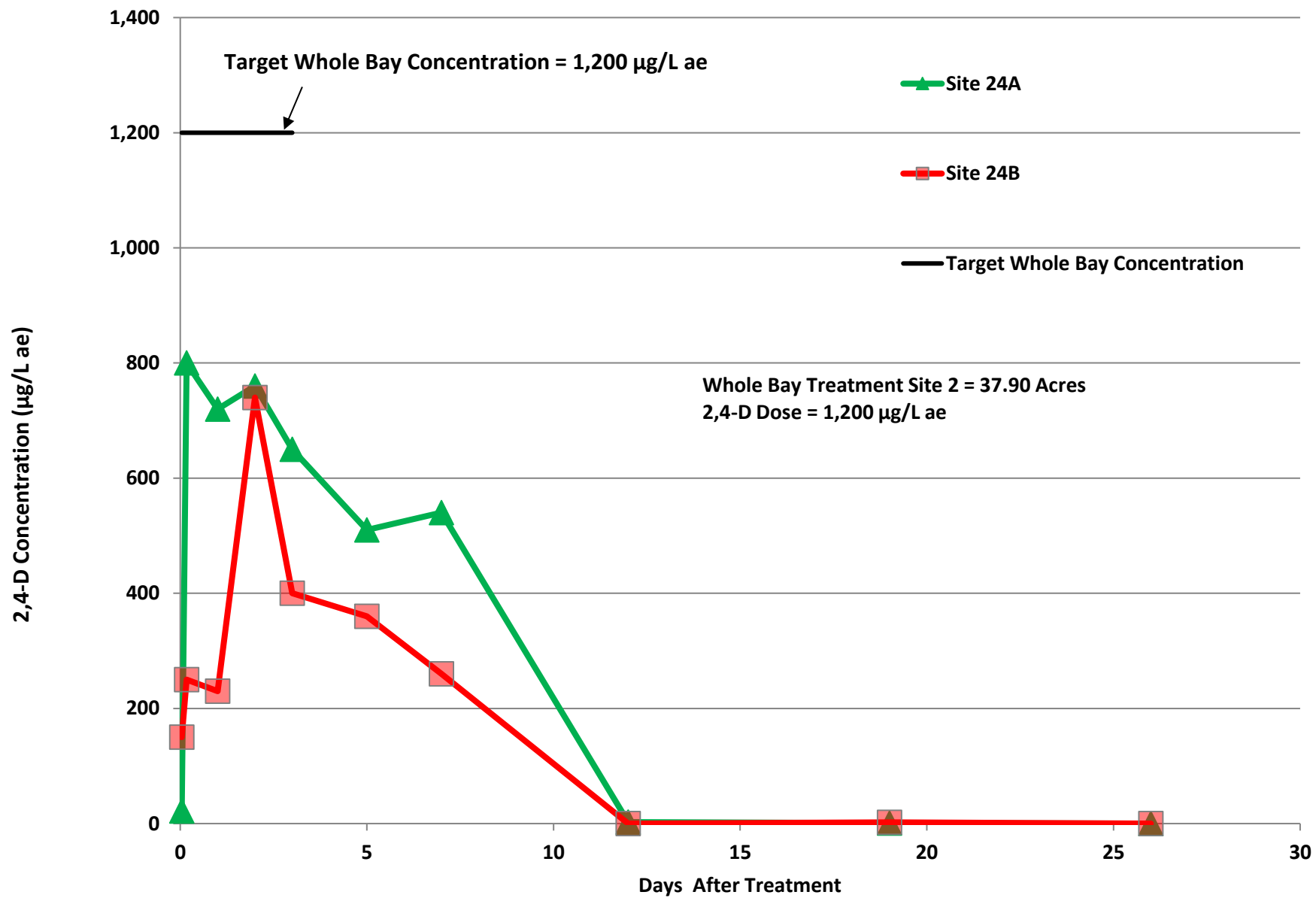
2018 2,4-D RESIDUE MONITORING LOCATIONS: WEST LAKE
 Beaver Dam - West
 Barron County, WI
 O-94

Barr Footer: ArcGIS 10.6.1 - 2019-03-04 13:18 File: I:\Projects\903011\GIS\Maps\2019\Appendix M - 2016 - 2018 Data\2018 BeaverDamLakeWest.mxd User: kac2

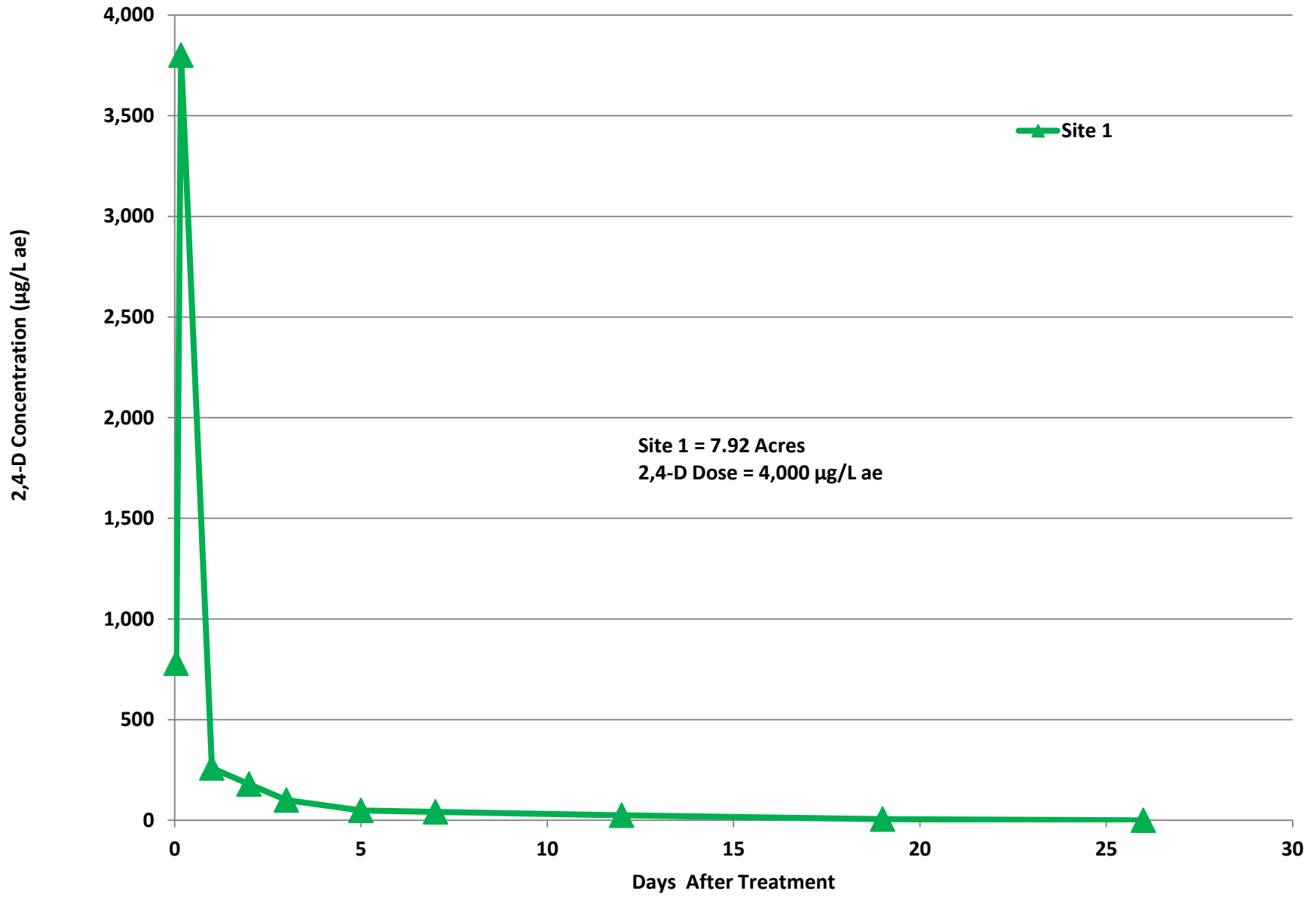
2018 City Bay 2,4-D Concentrations
for Site 27A, 27B and 27C



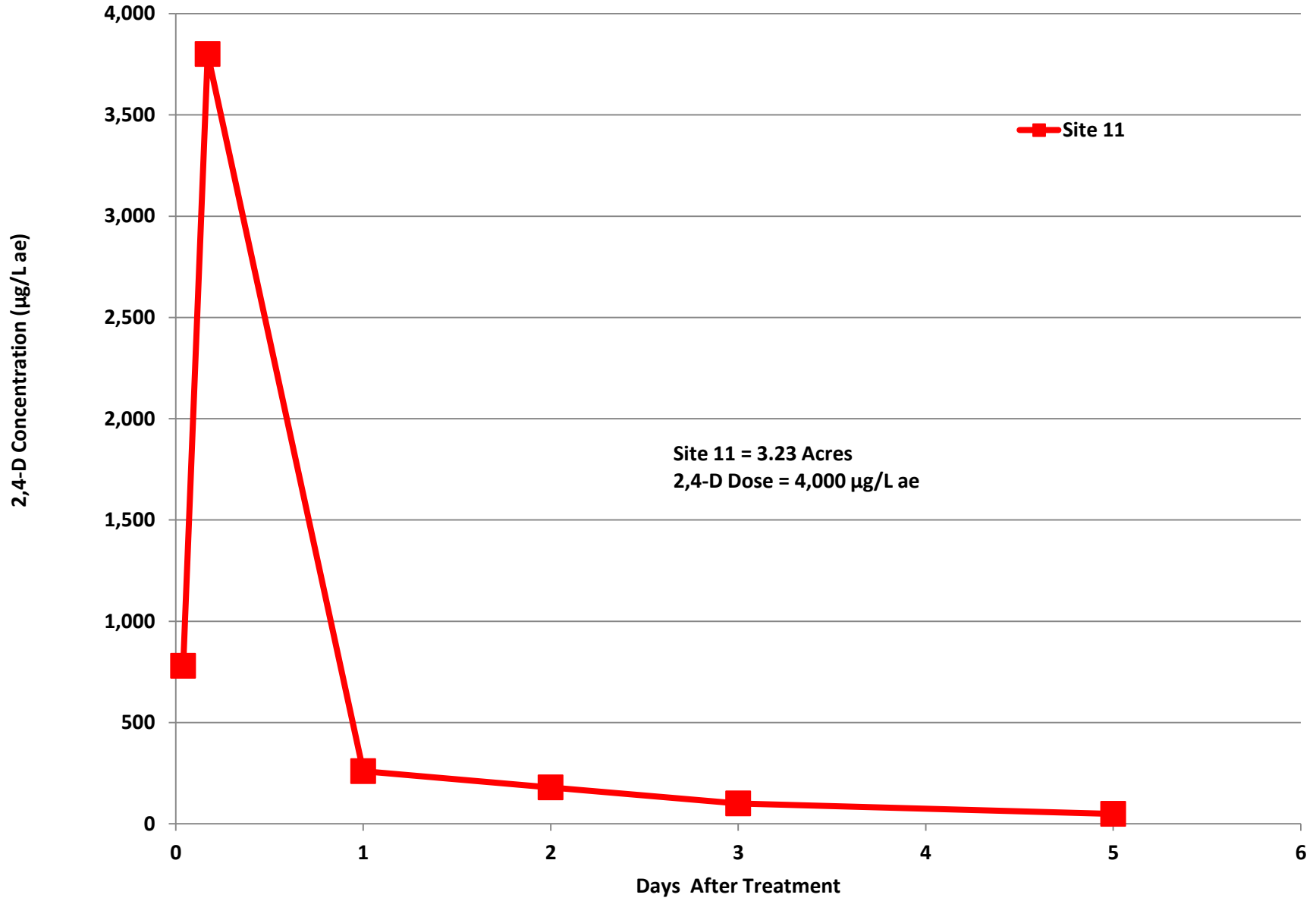
2017 Norwegian Bay 2,4-D Concentrations for Sites 24A and 24B



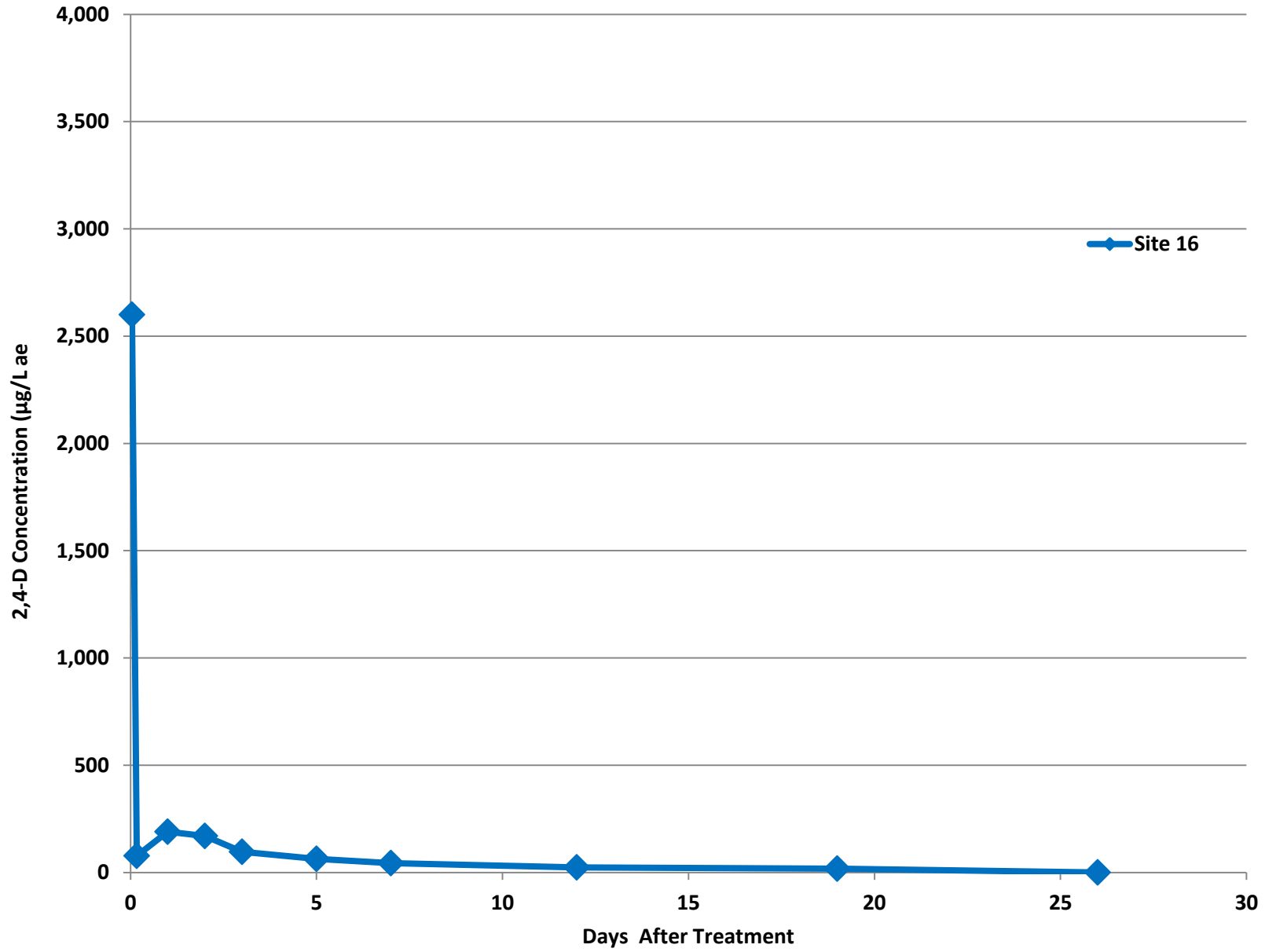
2018 West Lake 2,4-D Concentrations
for Site 1

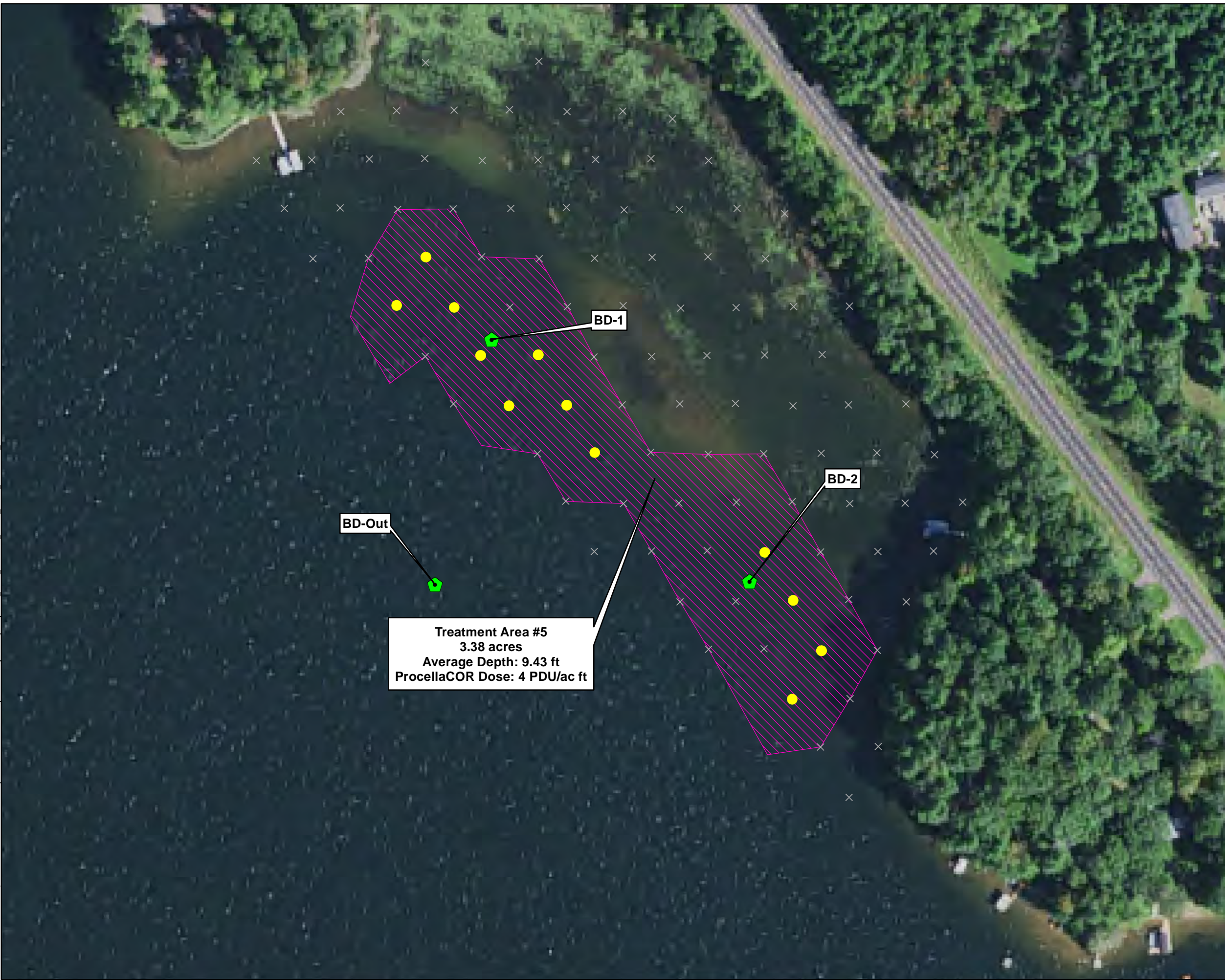






2018 West Lake 2,4-D Concentrations
for Site 11



2018 West Lake 2,4-D Concentrations for Site 16





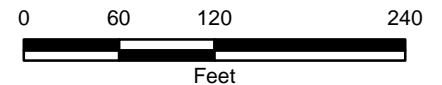
-  Herbicide Residue Monitoring Locations
-  Proposed 2019 EWM Treatment Area
- July EWM Survey Results**
-  EWM Observed
-  No EWM Present

BD-Out

BD-1

BD-2

Treatment Area #5
 3.38 acres
 Average Depth: 9.43 ft
 ProcettaCOR Dose: 4 PDU/ac ft

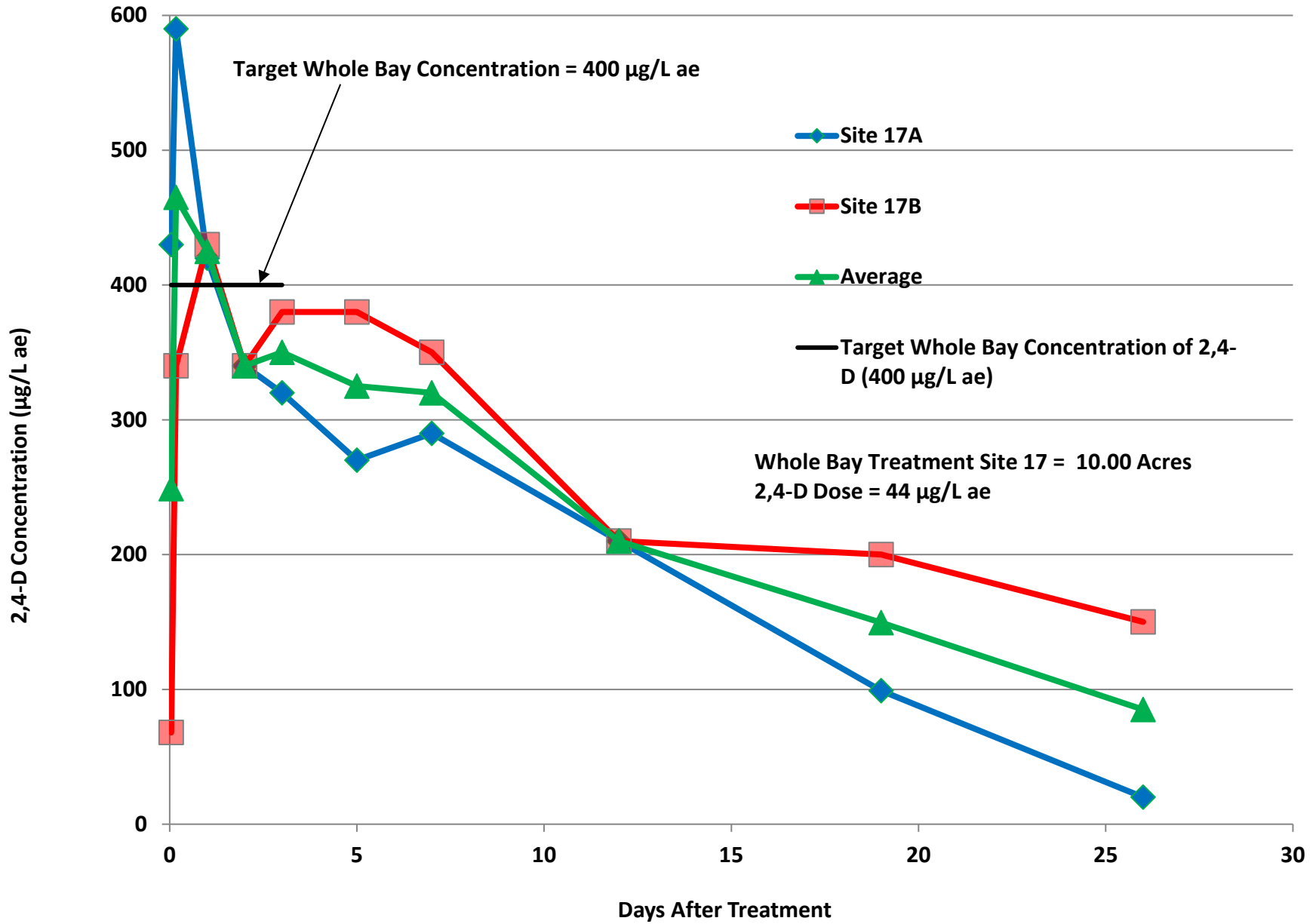


**PROPOSED 2019 EURASIAN
 WATERMILFOIL TREATMENT AREA
 AND HERBICIDE RESIDUE
 MONITORING LOCATIONS: HUNT BAY**
 Beaver Dam Lake
 Barron County, WI

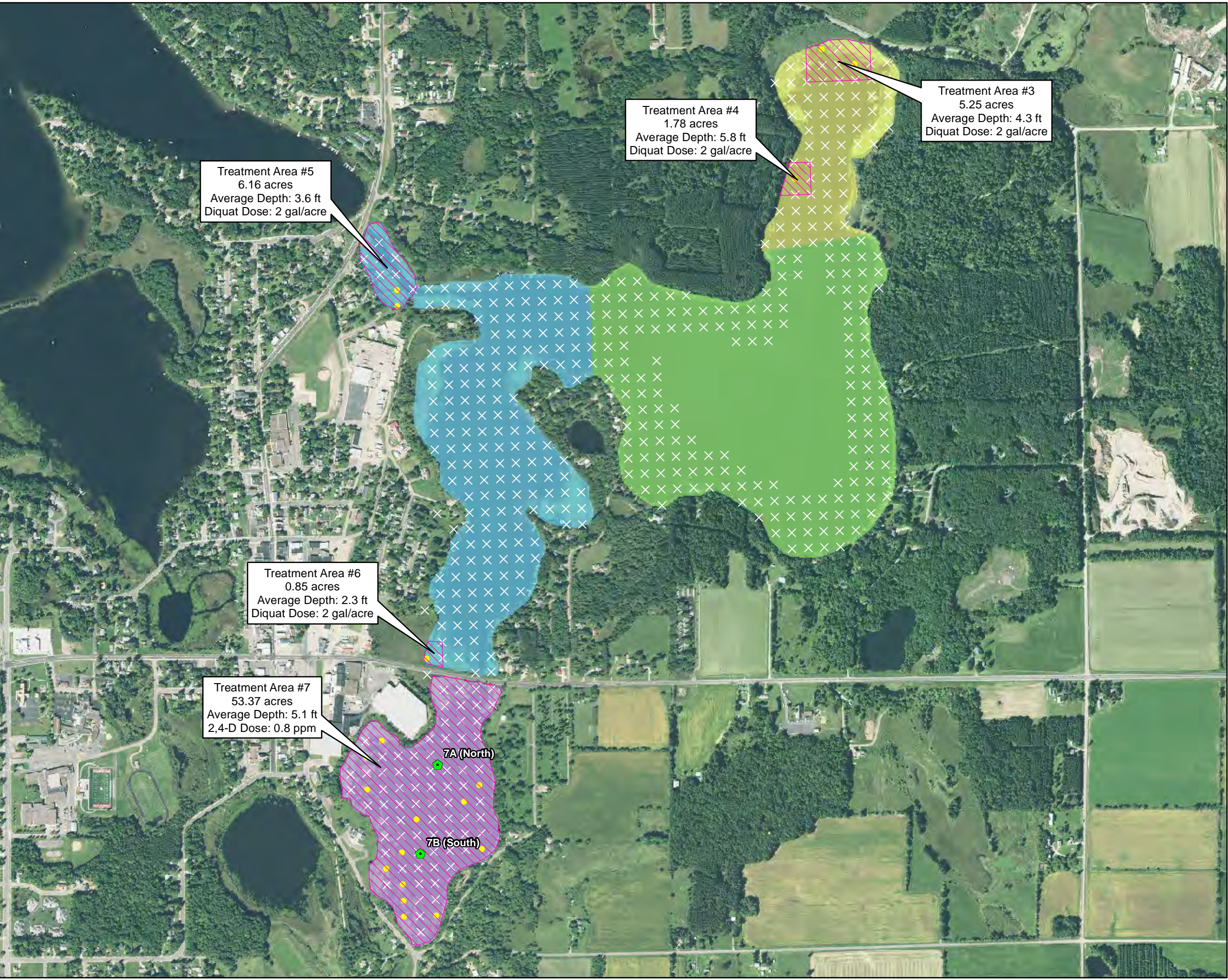
2019 Hunt Bay ProcellaCOR Residue Results






BEAVER DAM: HUNT BAY	Hours After Treatment (HAT)					
	3	6	9	12	24	48
BD-1	< 1	< 1	< 1	< 1	< 1	< 1
BD-2	< 1	< 1	< 1	< 1	< 1	< 1
BD-Out	< 1	< 1	< 1	< 1	< 1	< 1
TARGET (PDU)	4 PDU	4 PDU	4 PDU	4 PDU	4 PDU	4 PDU

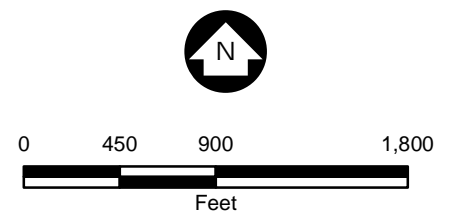
2019 Library Lake 2,4-D Concentrations
for Site 17A and 17B



Barr Footer: ArcGIS 10.7.1, 2019-12-11 11:55 File: I:\Projects\49\03\01\GIS\Maps\2019\Fall\2019_Survey\Proposed_2020_EWM_Treatment_Areas_and_Herbicide_Residue_Monitoring_Locations_-_East_Beaver_Dam.mxd User: kac2

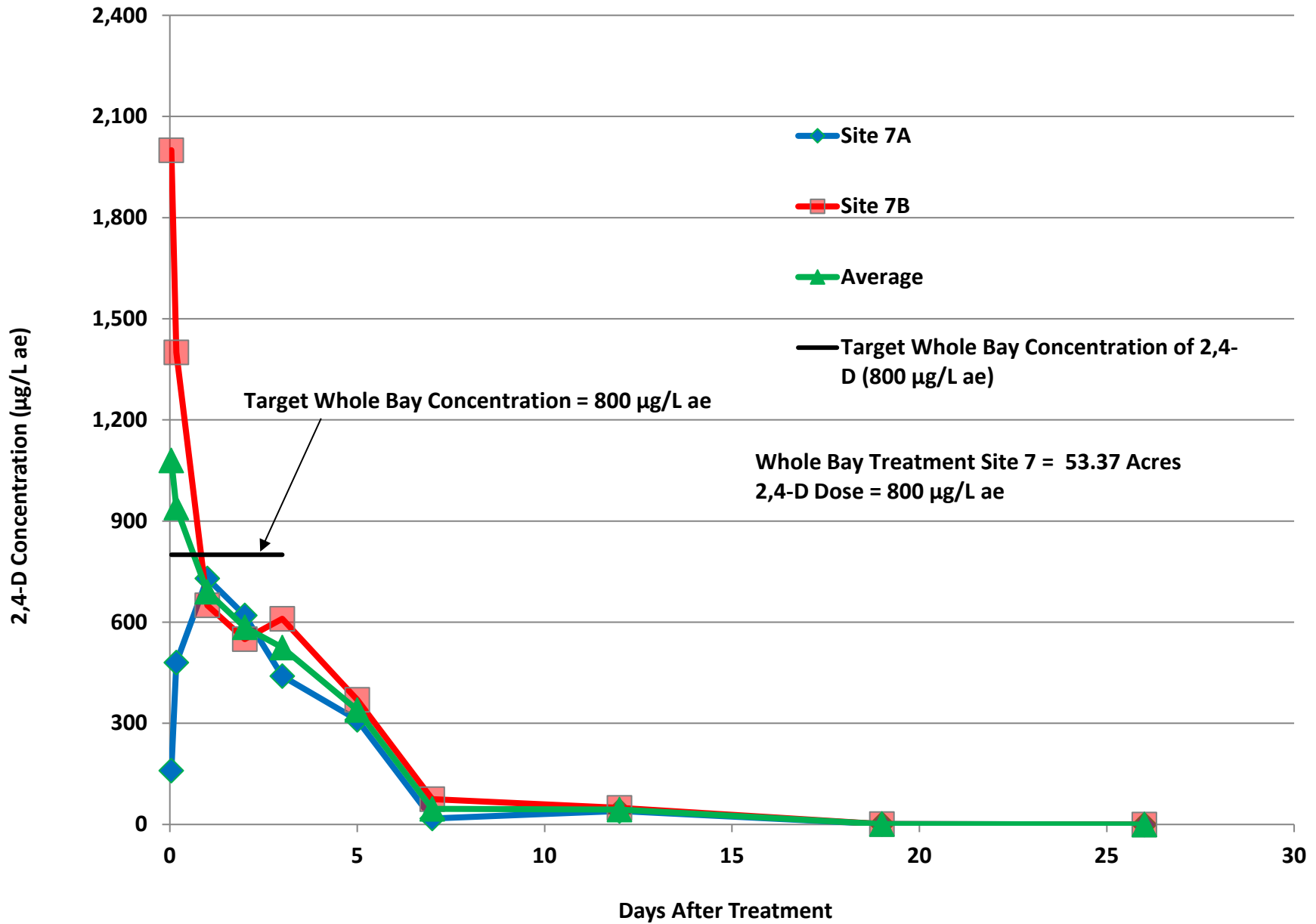


-  Proposed 2020 EWM Treatment Areas
 -  Herbicide Residue Monitoring Locations
 -  EWM Observed
 -  No EWM Present
- Treatment Zones**
-  East Lake (No Treatment)
 -  City Bay (Spot Treatment with Diquat at 2 gal/acre)
 -  Cemetery Bay (Whole Bay 2,4-D Concentration - 0.8 ppm)
 -  Norwegian Bay (Spot Treatment with Diquat at 2 gal/acre)

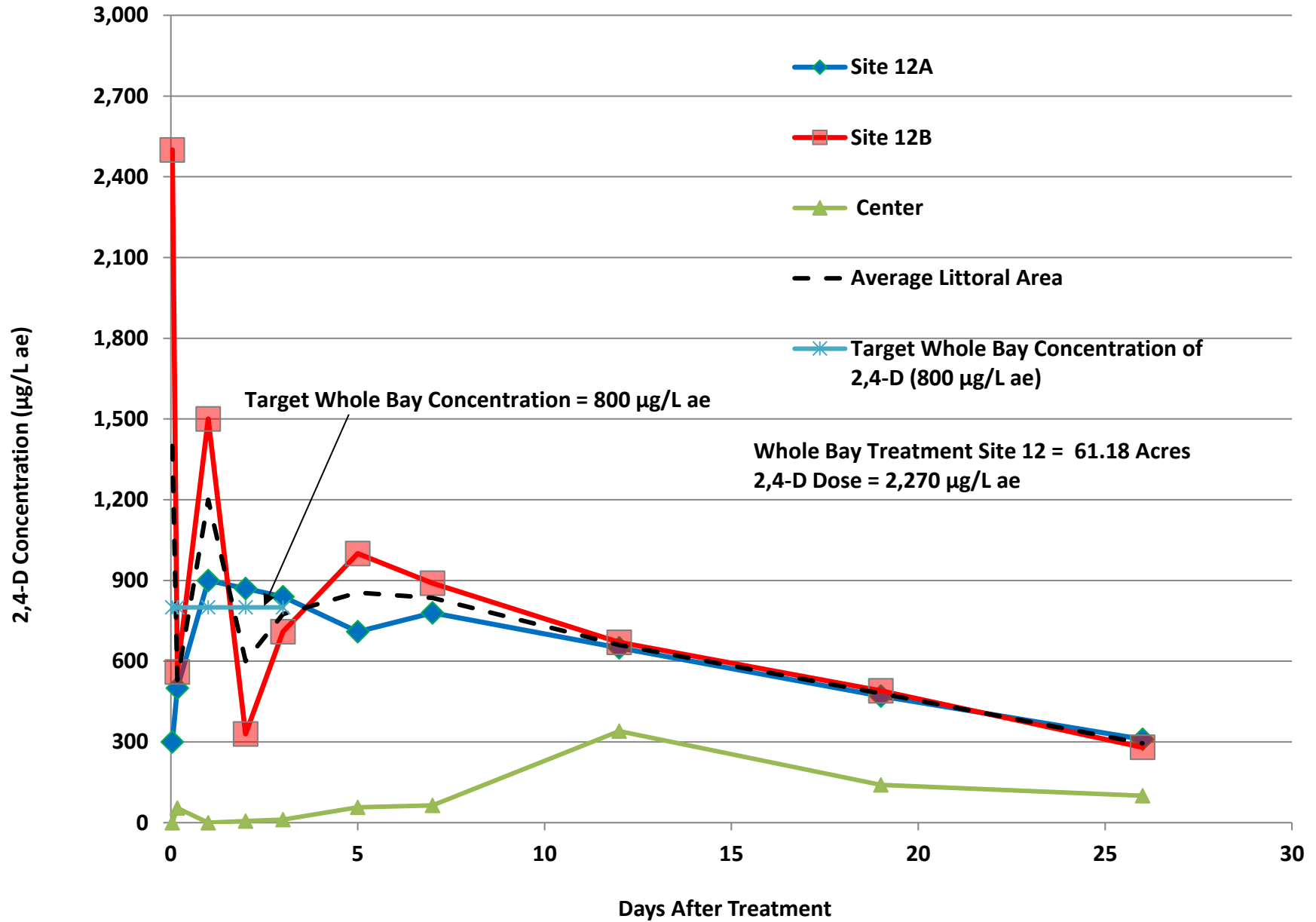


PROPOSED 2020 EURASIAN WATERMILFOIL MANAGEMENT AREAS AND HERBICIDE RESIDUE MONITORING LOCATIONS
 Beaver Dam and Library Lake
 Barron County, WI
 O-103

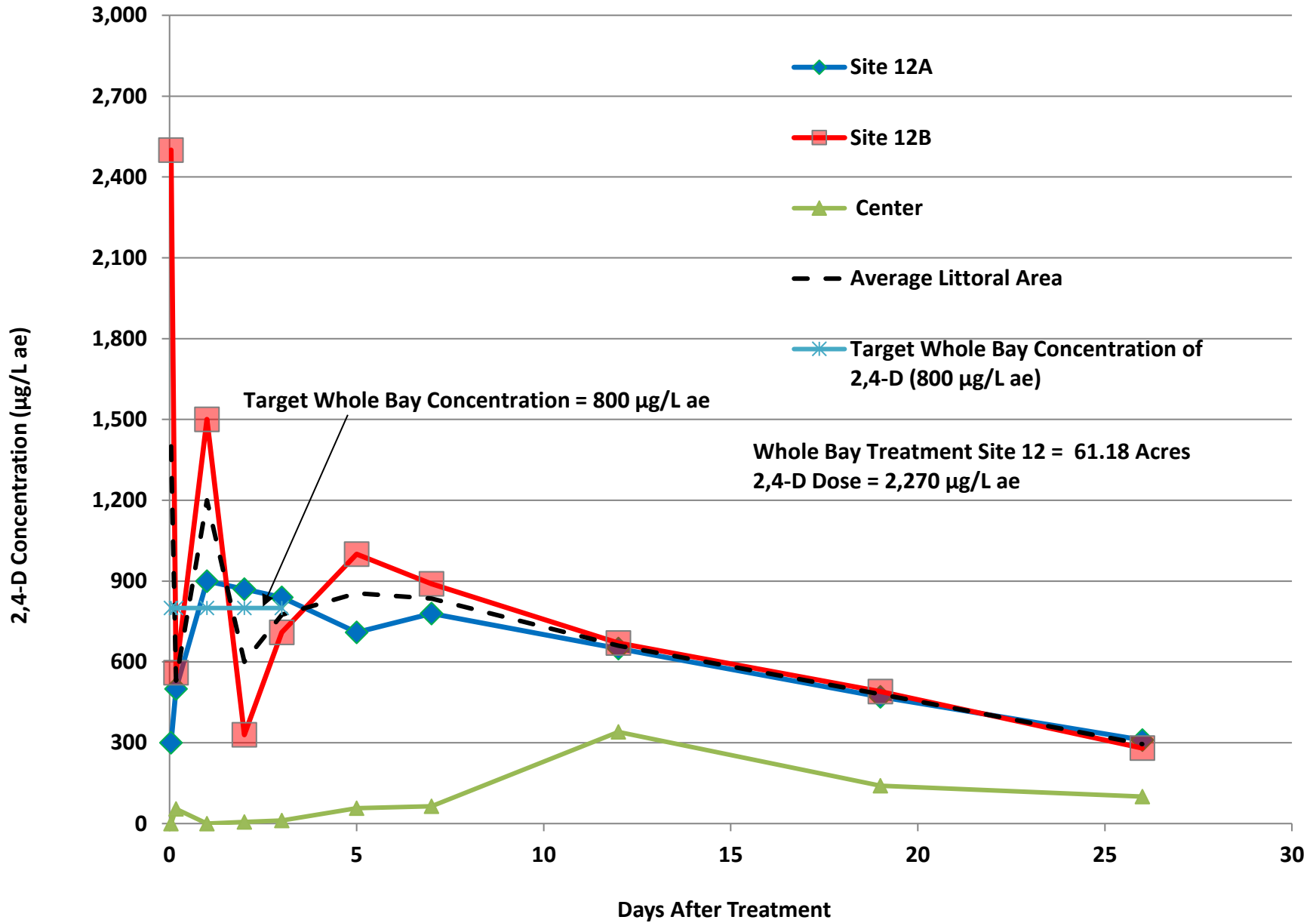
2020 Cemetery Bay 2,4-D Concentrations
for Site 7A and 7B



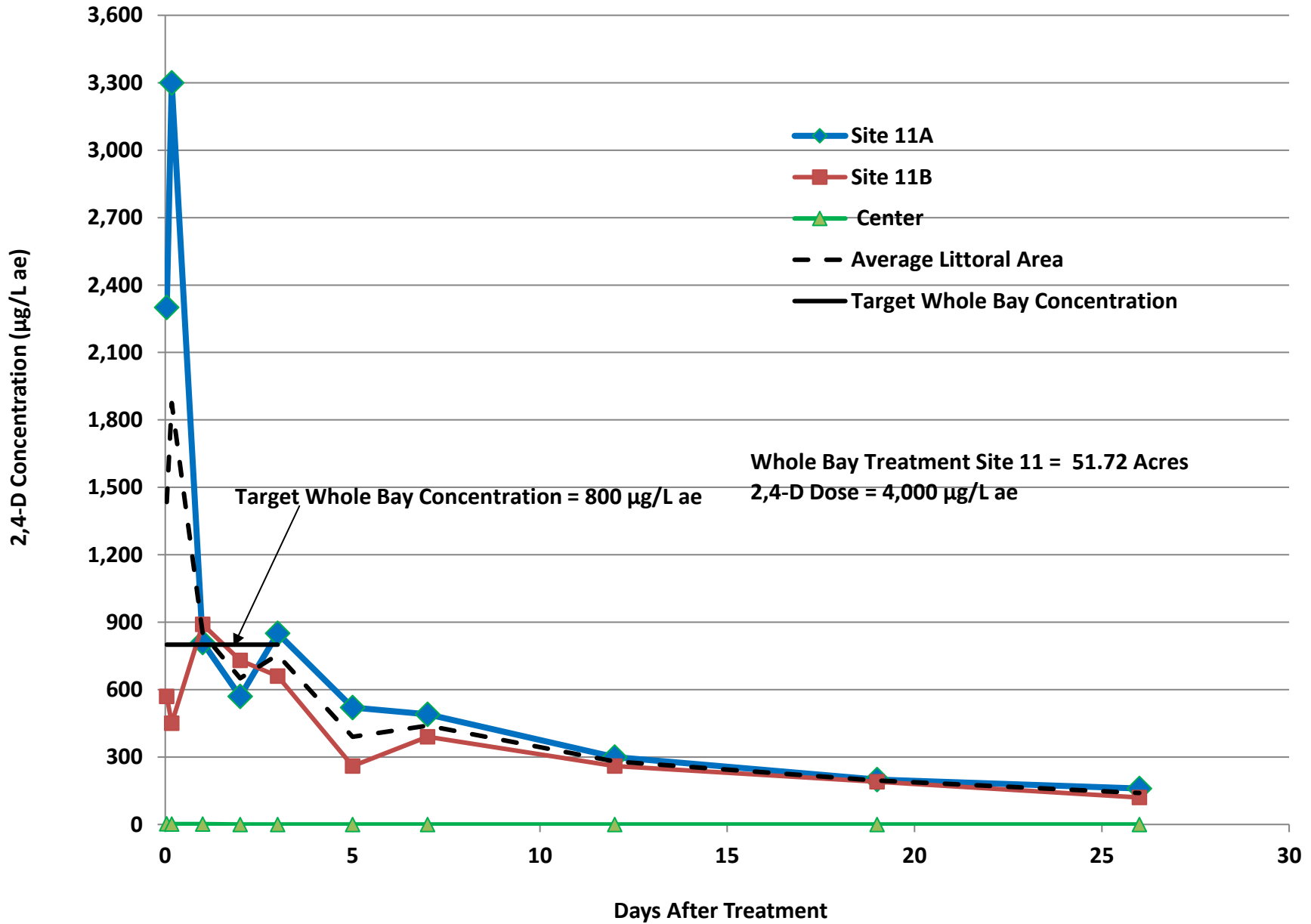
2021 Rabbit Island Bay 2,4-D Concentrations
for Sites 12A, 12B, and Center



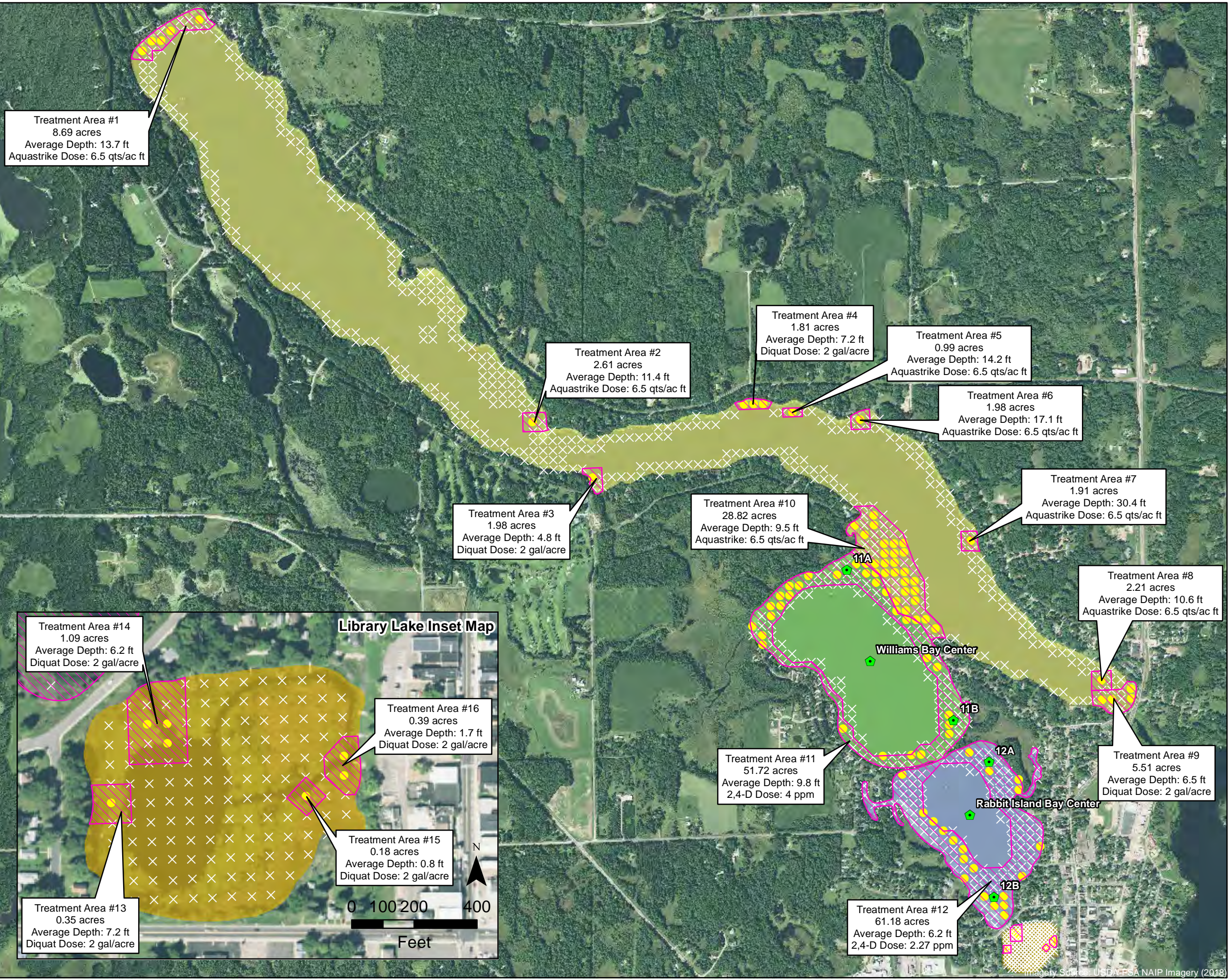
2021 Rabbit Island Bay 2,4-D Concentrations
for Sites 12A, 12B, and Center











2021 Williams Bay 2,4-D Concentrations
for Site 11A, 11B, and Center



Barr Footer: ArcGIS 10.7.1, 2021-02-10 12:07 File: I:\Projects\4903\011\GIS\Maps\2020\Fall\Survey\Proposed 2021 EWM Treatment Areas and Herbicide Residue Monitoring Locations - West Beaver Dam and Library Lake.mxd User: kac2



-  Proposed 2021 EWM Treatment Areas
-  Herbicide Residue Monitoring Locations
-  EWM Observed
-  No EWM Present

- Treatment Zones**
-  Library Lake (Spot Treatment with Diquat at 2 gal/acre)
 -  Rabbit Island Bay (Whole Bay 2,4-D Concentration - 0.8 ppm)
 -  West Lake (Spot Treatment with Diquat at 2 gal/acre or Aquasatrike at 6.5 qts/ac ft)
 -  Williams Bay (Whole Bay 2,4-D Concentration - 0.8 ppm)

Treatment Area #1
8.69 acres
Average Depth: 13.7 ft
Aquasatrike Dose: 6.5 qts/ac ft

Treatment Area #2
2.61 acres
Average Depth: 11.4 ft
Aquasatrike Dose: 6.5 qts/ac ft

Treatment Area #4
1.81 acres
Average Depth: 7.2 ft
Diquat Dose: 2 gal/acre

Treatment Area #5
0.99 acres
Average Depth: 14.2 ft
Aquasatrike Dose: 6.5 qts/ac ft

Treatment Area #6
1.98 acres
Average Depth: 17.1 ft
Aquasatrike Dose: 6.5 qts/ac ft

Treatment Area #3
1.98 acres
Average Depth: 4.8 ft
Diquat Dose: 2 gal/acre

Treatment Area #10
28.82 acres
Average Depth: 9.5 ft
Aquasatrike: 6.5 qts/ac ft

Treatment Area #7
1.91 acres
Average Depth: 30.4 ft
Aquasatrike Dose: 6.5 qts/ac ft

Treatment Area #8
2.21 acres
Average Depth: 10.6 ft
Aquasatrike Dose: 6.5 qts/ac ft

Treatment Area #14
1.09 acres
Average Depth: 6.2 ft
Diquat Dose: 2 gal/acre

Library Lake Inset Map

Treatment Area #16
0.39 acres
Average Depth: 1.7 ft
Diquat Dose: 2 gal/acre

Treatment Area #15
0.18 acres
Average Depth: 0.8 ft
Diquat Dose: 2 gal/acre

Treatment Area #13
0.35 acres
Average Depth: 7.2 ft
Diquat Dose: 2 gal/acre

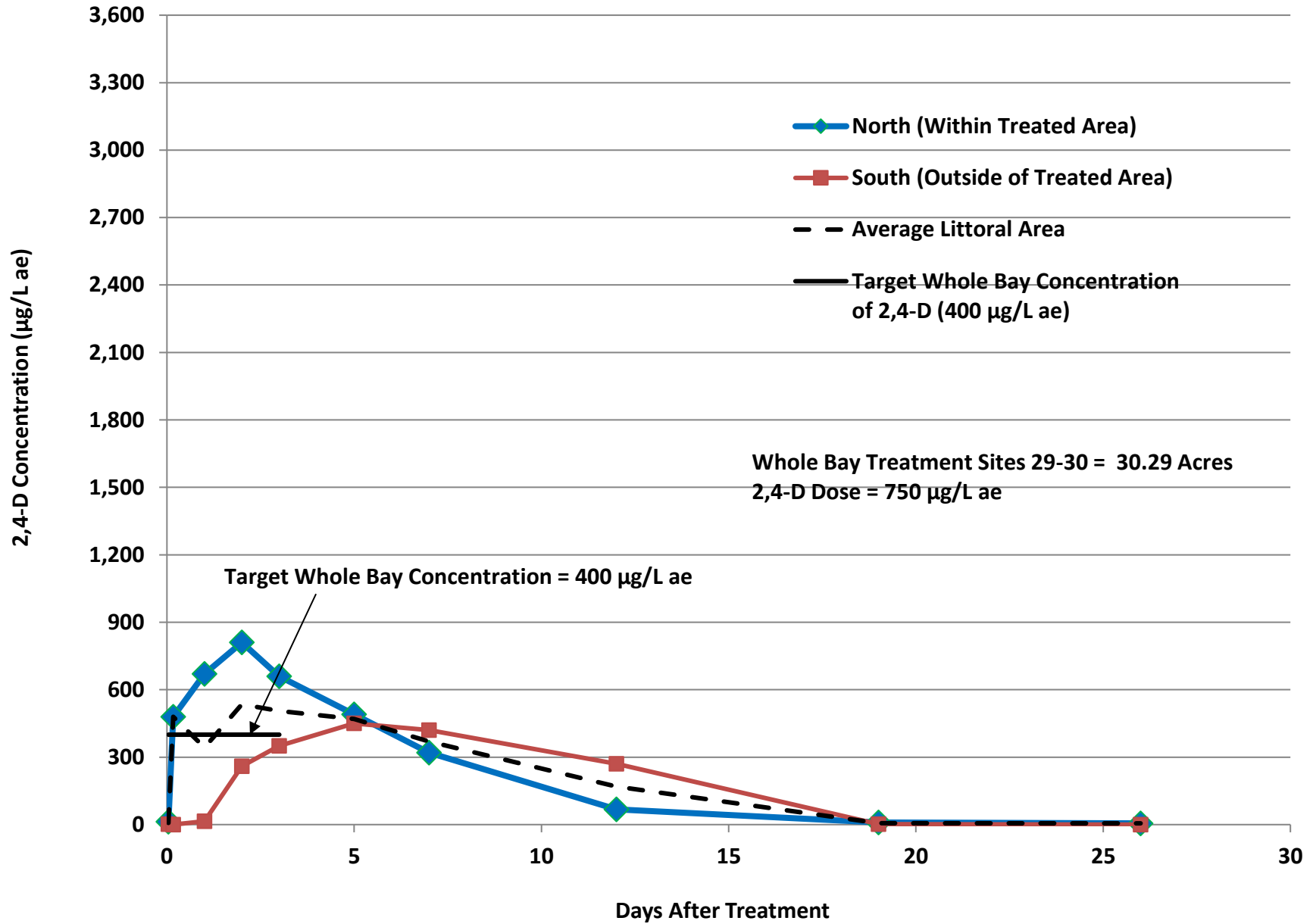
Treatment Area #11
51.72 acres
Average Depth: 9.8 ft
2,4-D Dose: 4 ppm

Treatment Area #9
5.51 acres
Average Depth: 6.5 ft
Diquat Dose: 2 gal/acre

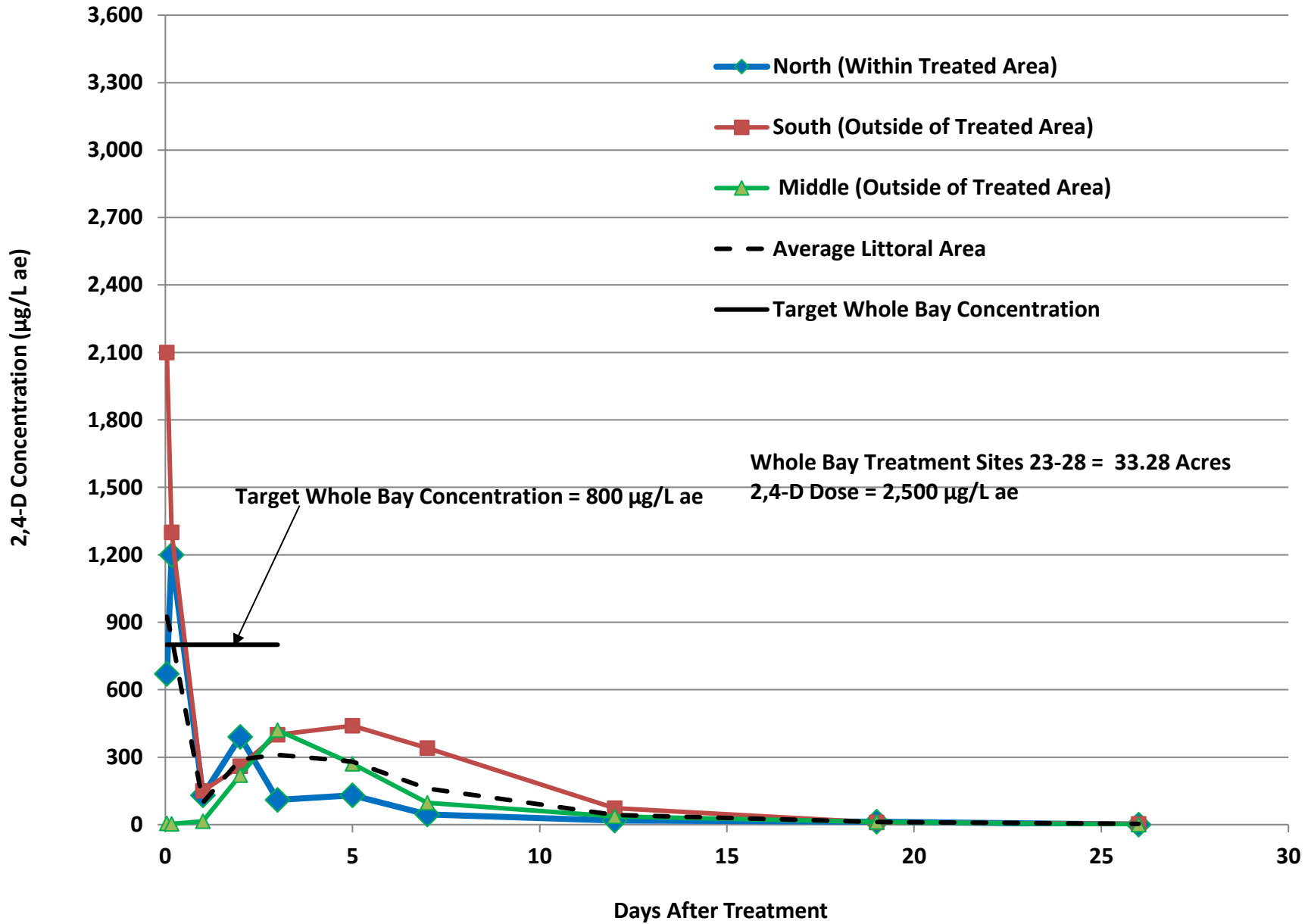
Treatment Area #12
61.18 acres
Average Depth: 6.2 ft
2,4-D Dose: 2.27 ppm

PROPOSED 2021 EWM TREATMENT AREAS AND HERBICIDE RESIDUE MONITORING LOCATIONS
Beaver Dam and Library Lake
Barron County, WI
O-108

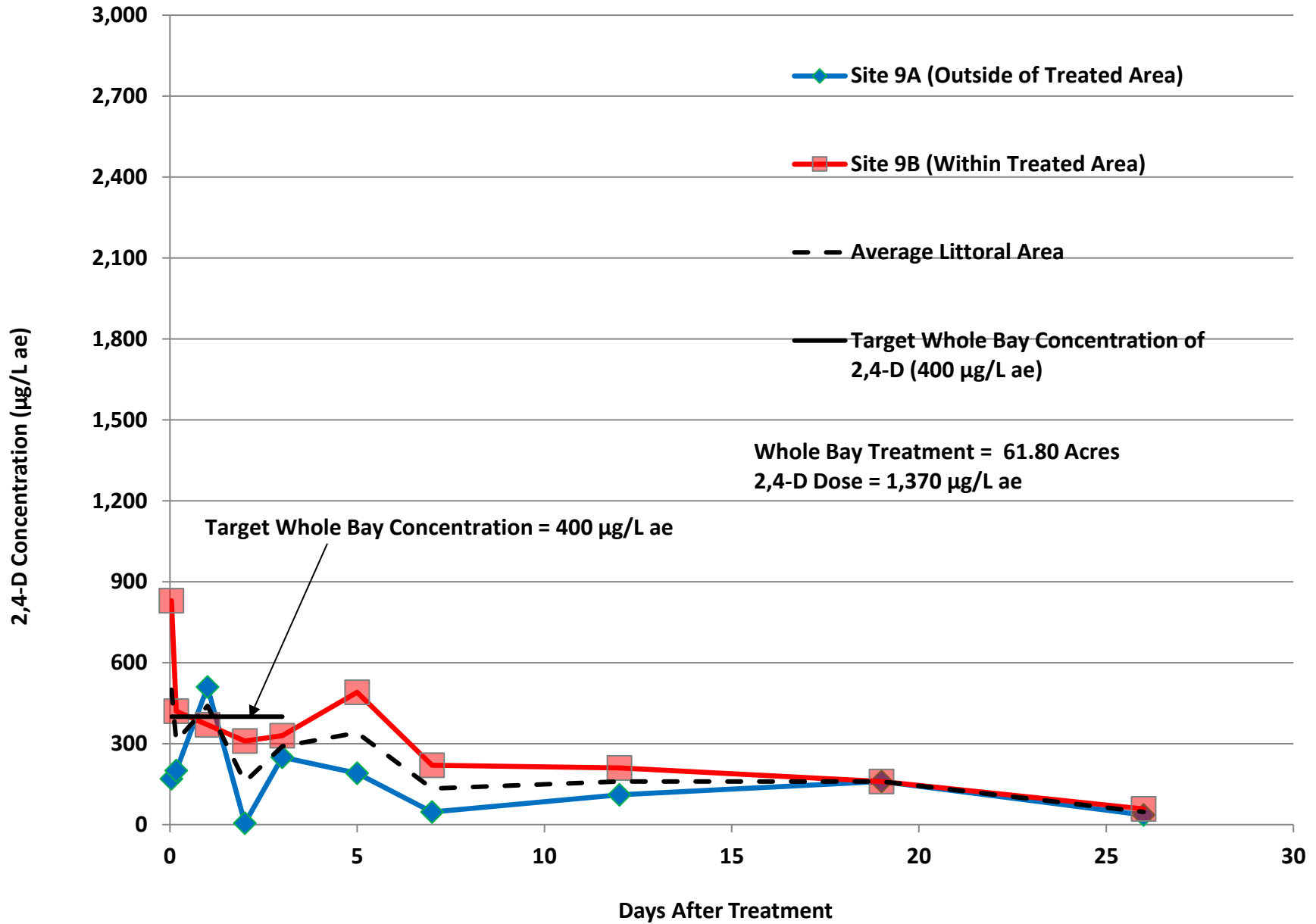
2023 Cemetery Bay 2,4-D Concentrations for North and South Sites



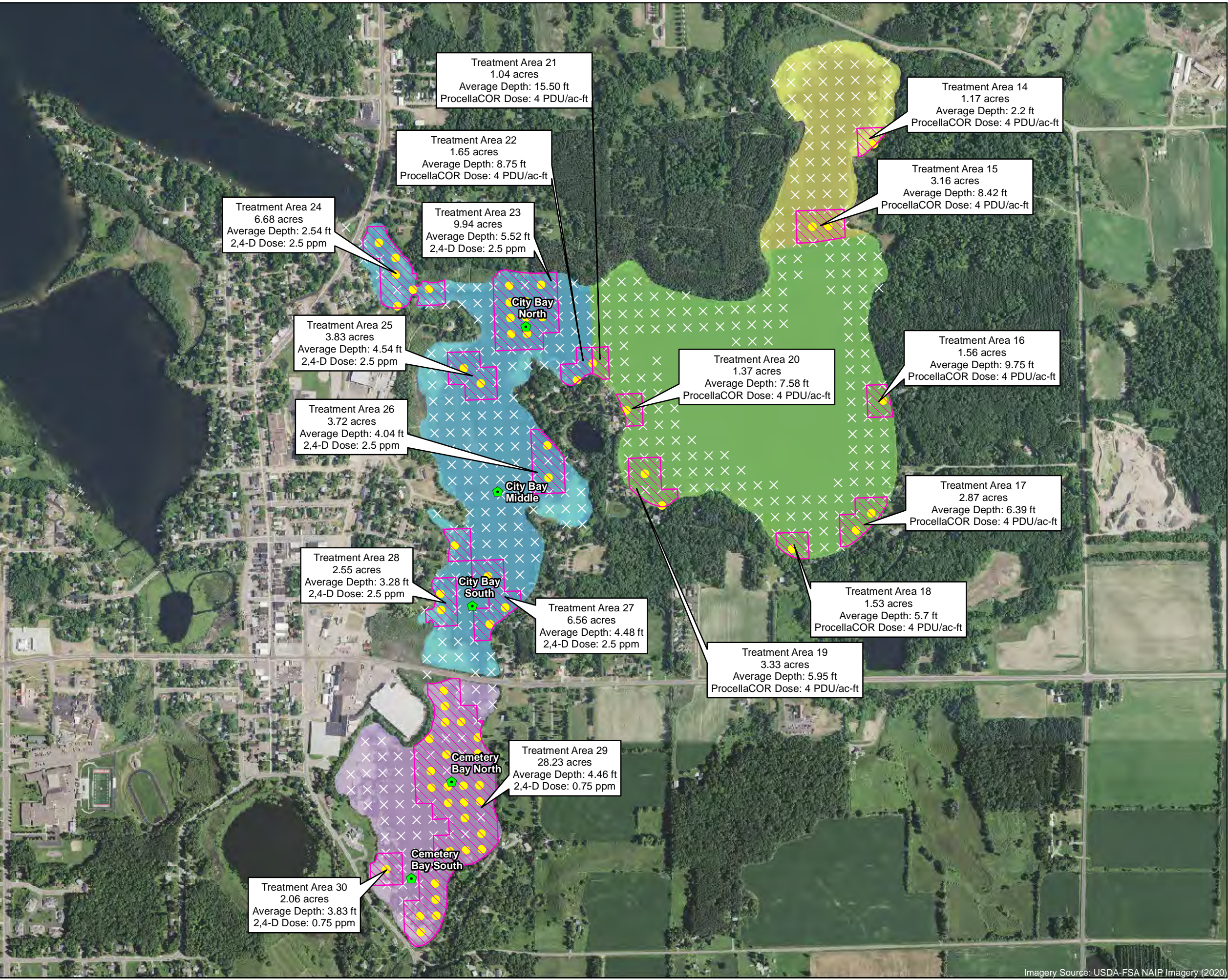
2023 City Bay 2,4-D Concentrations
for North, South, and Center Sites











2023 Rabbit Island Bay 2,4-D Concentrations
for North and South Sites

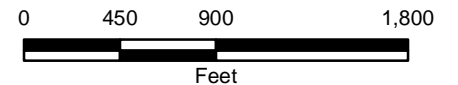


Barr Footer: ArcGIS 10.8.1, 2023-03-17 08:22 File: I:\Projects\0903011\GIS\Maps\2022\Fall 2022 Survey\Proposed 2023 Eurasian Watermilfoil Management Areas and Herbicide Residue Monitoring Locations - East Beaver Dam Lake.mxd User: kac2



-  Proposed 2023 EWM Treatment Areas
-  Herbicide Residue Monitoring Locations
-  EWM Observed
-  No EWM Present

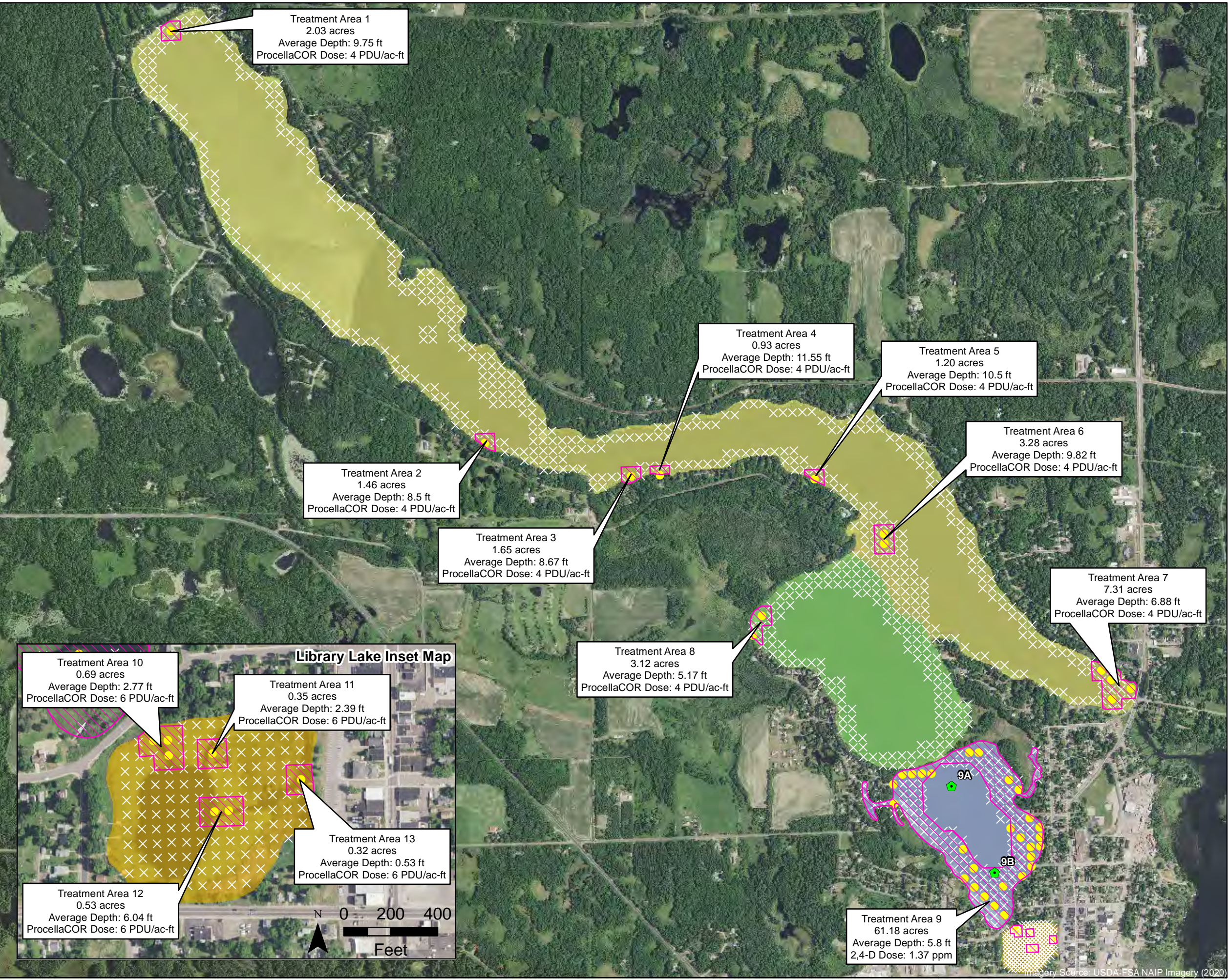
- Treatment Zones**
-  East Lake (Spot Treatment with ProcellaCOR at 4 PDU/ac ft)
 -  City Bay (Whole bay 2,4-D concentration 0.8 ppm)
 -  Cemetery Bay (Whole bay 2,4-D concentration 0.4 ppm)
 -  Norwegian Bay (Spot Treatment with ProcellaCOR at 4 PDU/ac ft)




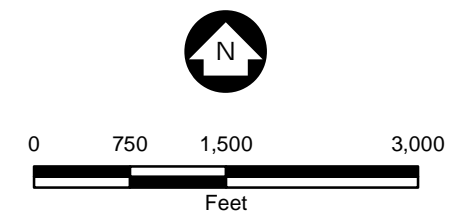
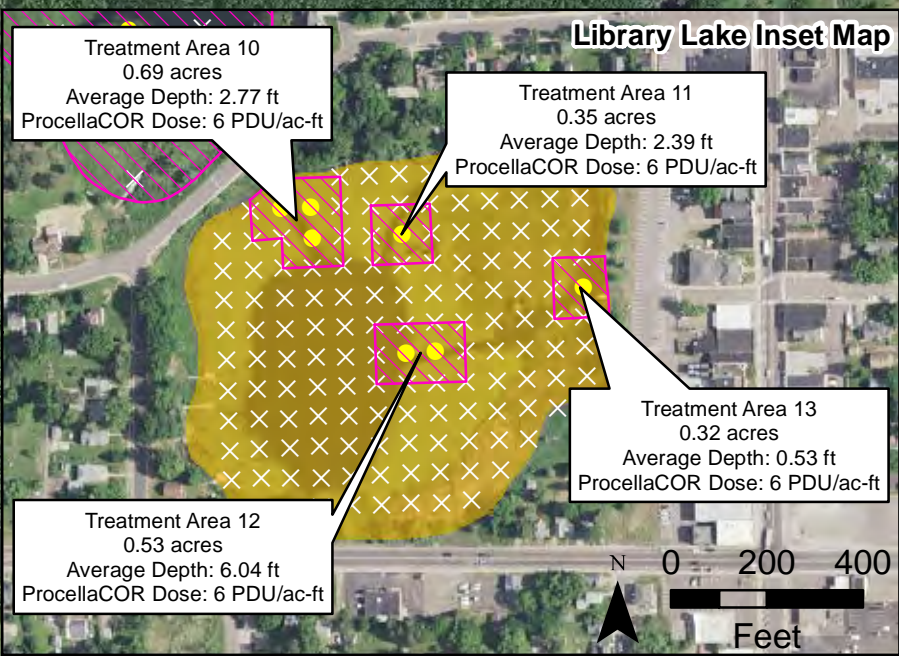
PROPOSED 2023 EURASIAN WATERMILFOIL MANAGEMENT AREAS AND HERBICIDE RESIDUE MONITORING LOCATIONS
 East Beaver Dam Lake
 Barron County, WI
 O-112

Imagery Source: USDA-FSA NAIP Imagery (2020)

Barr Footer: ArcGIS 10.8.1, 2023-02-06 10:26 File: I:\Projects\49\03011\GIS\Maps\2022\Fall 2022 Survey\Proposed 2023 Eurasian Watermilfoil Management Areas and Herbicide Residue Monitoring Locations - West Beaver Dam and Library Lake.mxd User: kac2



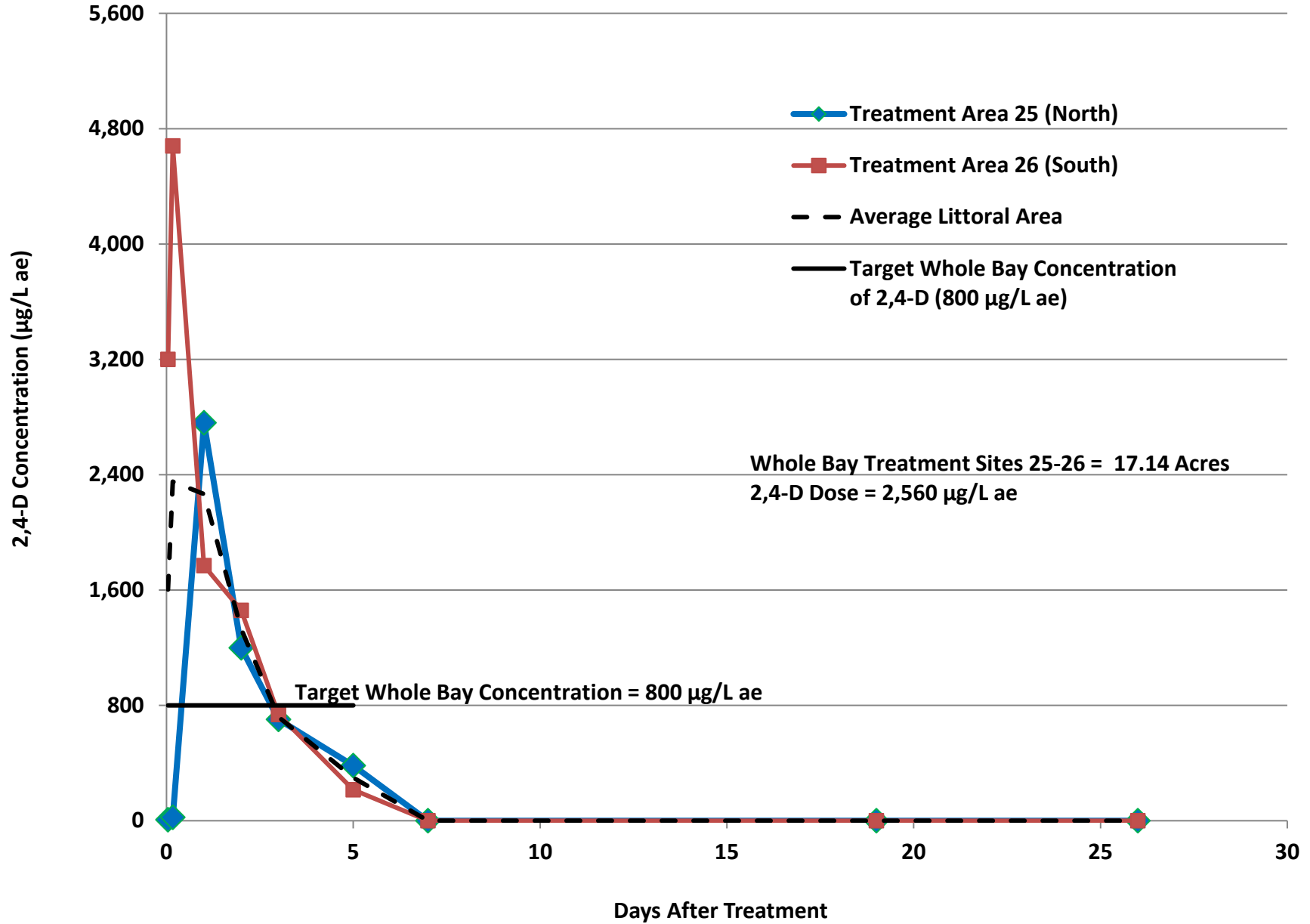
-  Proposed 2023 EWM Treatment Areas
 -  Herbicide Residue Monitoring Locations
 -  EWM Observed
 -  No EWM Present
- Treatment Zones**
-  Library Lake (Spot Treatment with ProcellaCOR at 6 PDU/ac-ft)
 -  Rabbit Island Bay (Whole bay 2,4-D concentration 0.4 ppm)
 -  West Lake (Spot Treatment with ProcellaCOR at 4 PDU/ac-ft)
 -  Williams Bay (Spot Treatment with ProcellaCOR at 4 PDU/ac-ft)



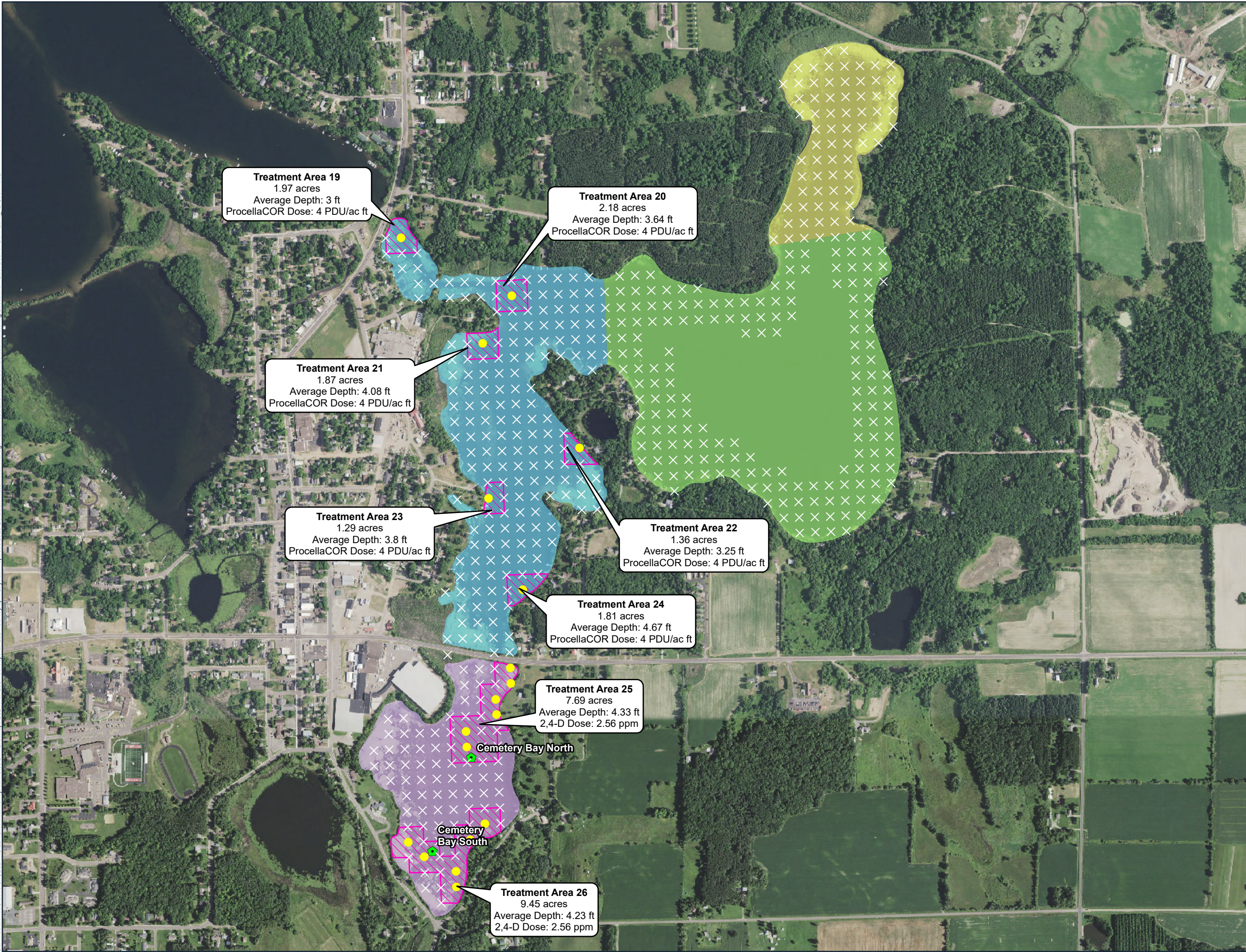
PROPOSED 2023 EURASIAN WATERMILFOIL MANAGEMENT AREAS AND HERBICIDE RESIDUE MONITORING LOCATIONS
West Beaver Dam Lake and Library Lake
Barron County, WI
O-113









Imagery Source: USDA-FSA NAIP Imagery (2020)

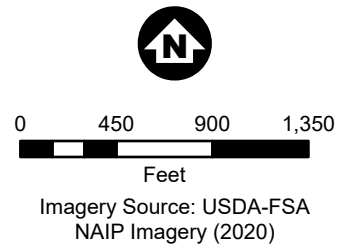
2025 Cemetery Bay 2,4-D Concentrations for North and South Sites



Barr Footer ArcGIS Pro 3.4, 2024-12-20 13:44 File: I:\Projects\49\03\01\GIS\Maps\2024\Fall\Layout: Proposed 2025 Eurasian Watermilfoil Management Areas and Herbicide Residue Monitoring Locations - East Beaver Dam Lake_v2 User: kac2



-  Proposed 2025 EWM Treatment Areas
 -  EWM Observed
 -  No EWM Present
- Treatment Zones
-  East Lake (No Treatment)
 -  Norwegian Bay (No Treatment)
 -  Cemetery Bay (Small Scale Treatment with 2,4-D at 2.56 ppm)
 -  City Bay (Small Scale Treatment with ProcellaCOR at 4 PDU/ac ft)
 -  Herbicide Residue Monitoring Locations



Proposed 2025 Eurasian Watermilfoil Management Areas and Herbicide Residue Monitoring Locations
East Beaver Dam Lake
Barron County, WI