Appendix B

Data Plots

Figure B-1: Ayers Island Impoundment Profiles

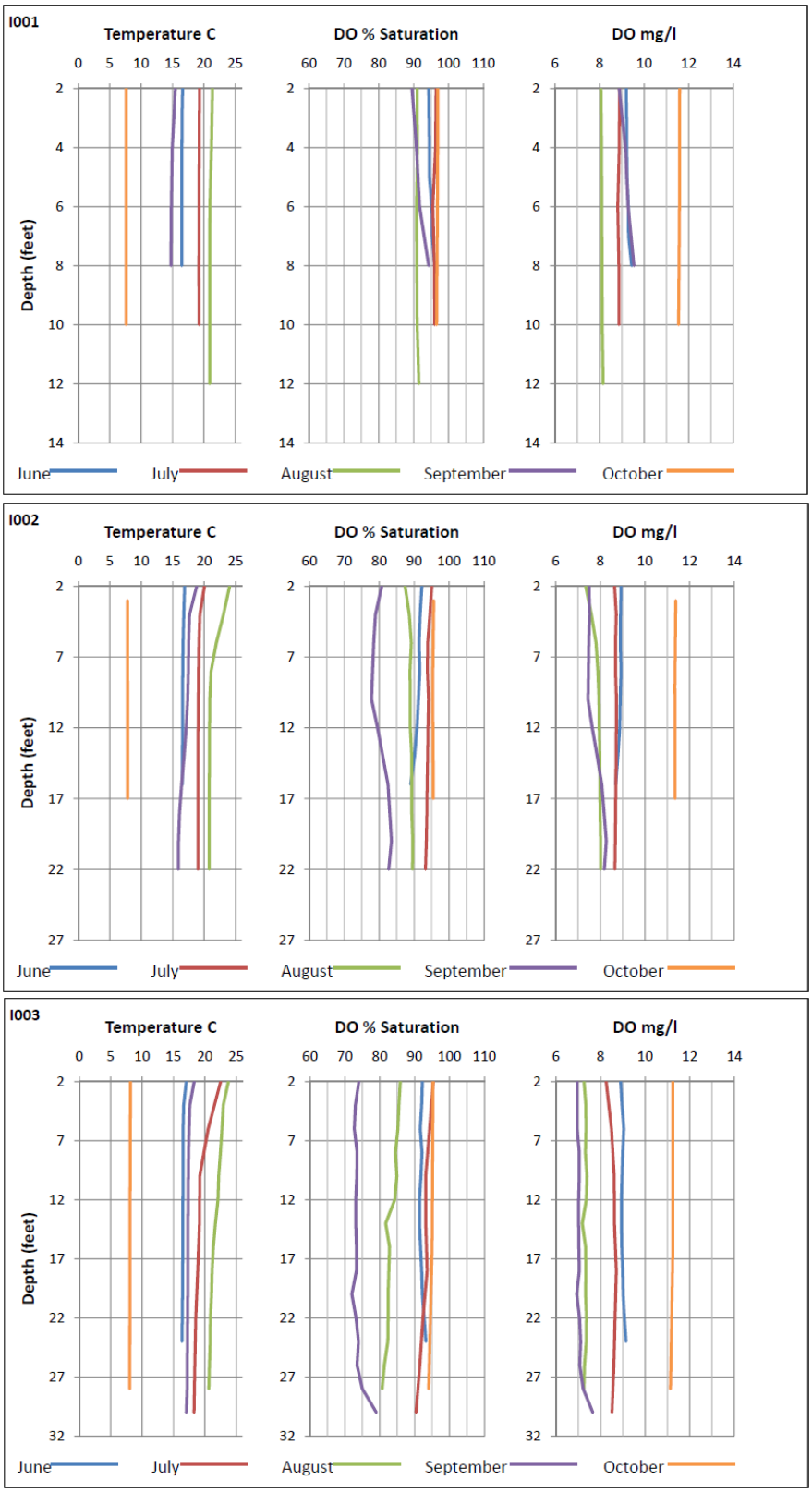
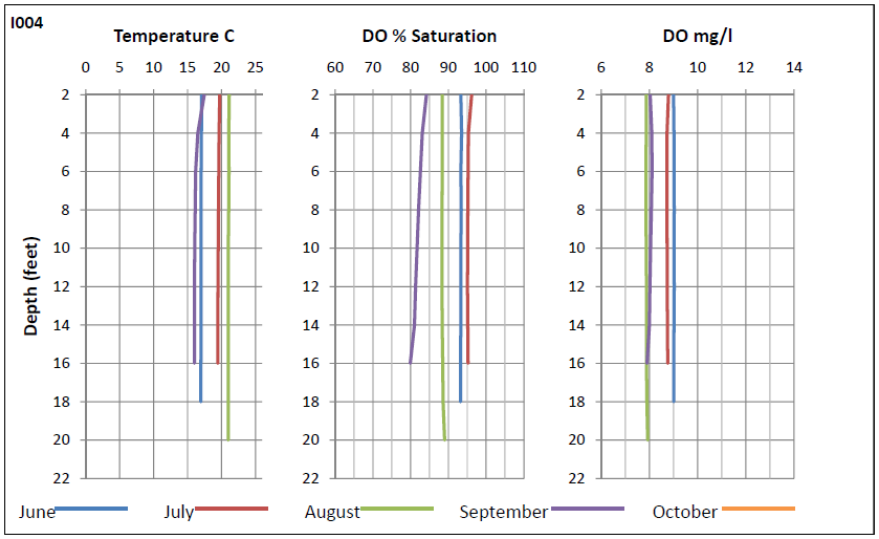
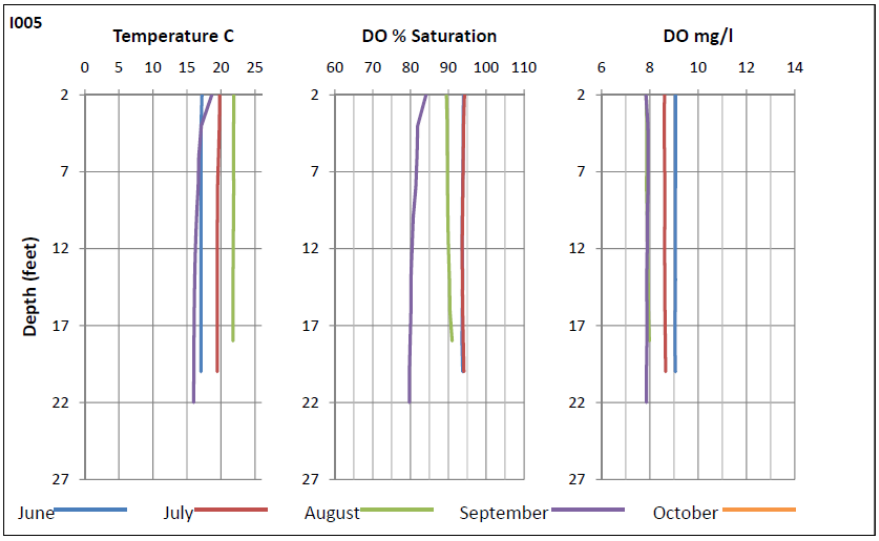


Figure B-2: Franklin Falls Impoundment Profiles





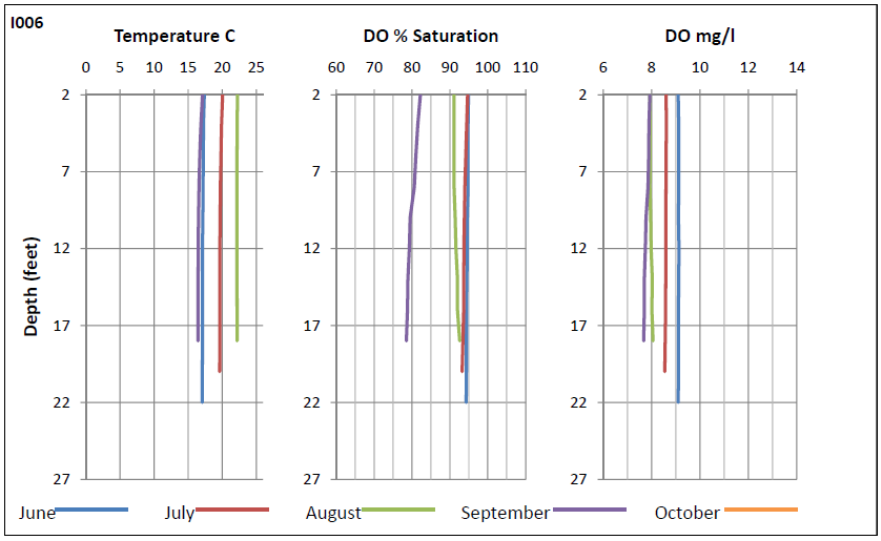


Figure B-3: Eastman Falls Impoundment Profiles

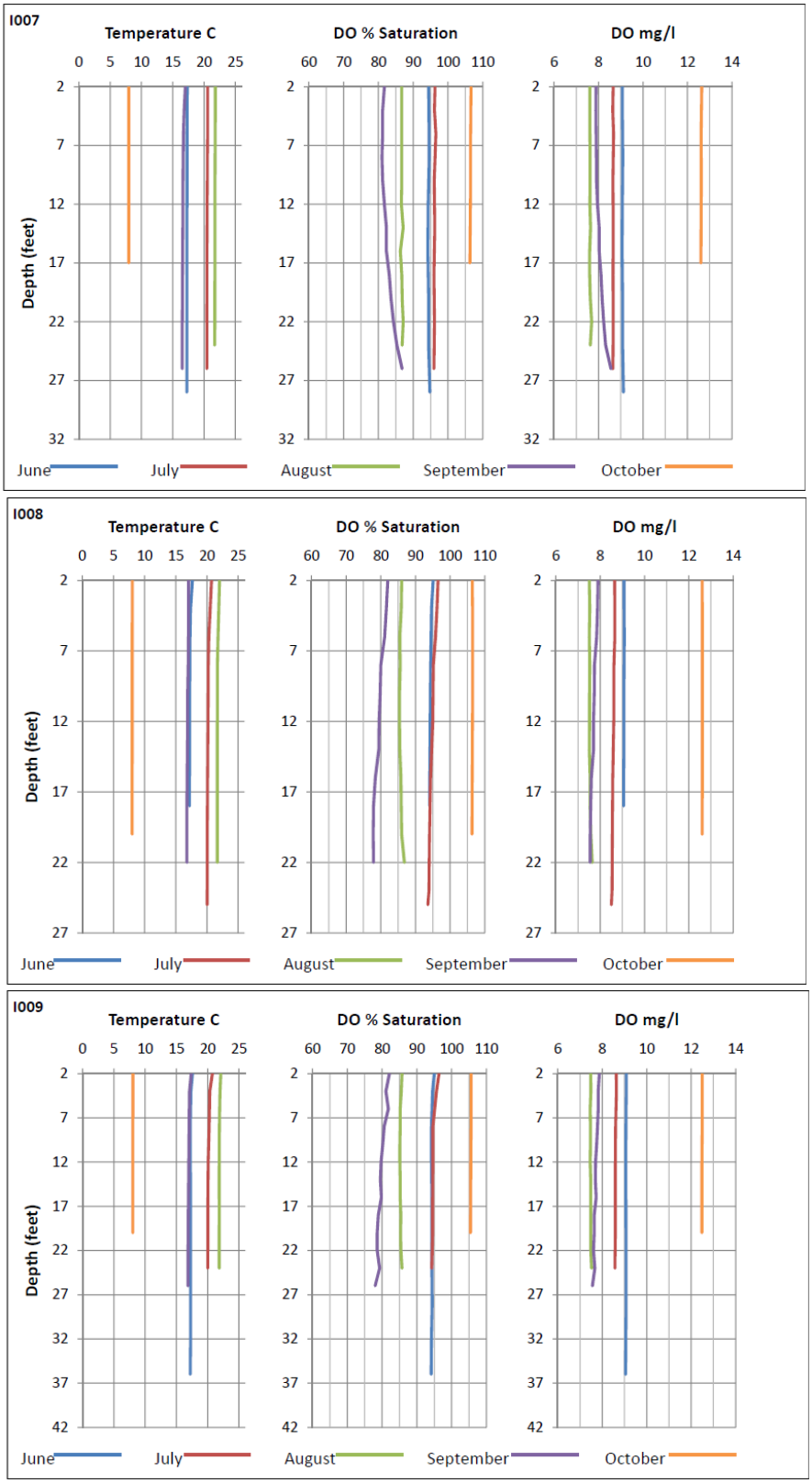


Figure B-4: Garvins Falls Impoundment Profiles

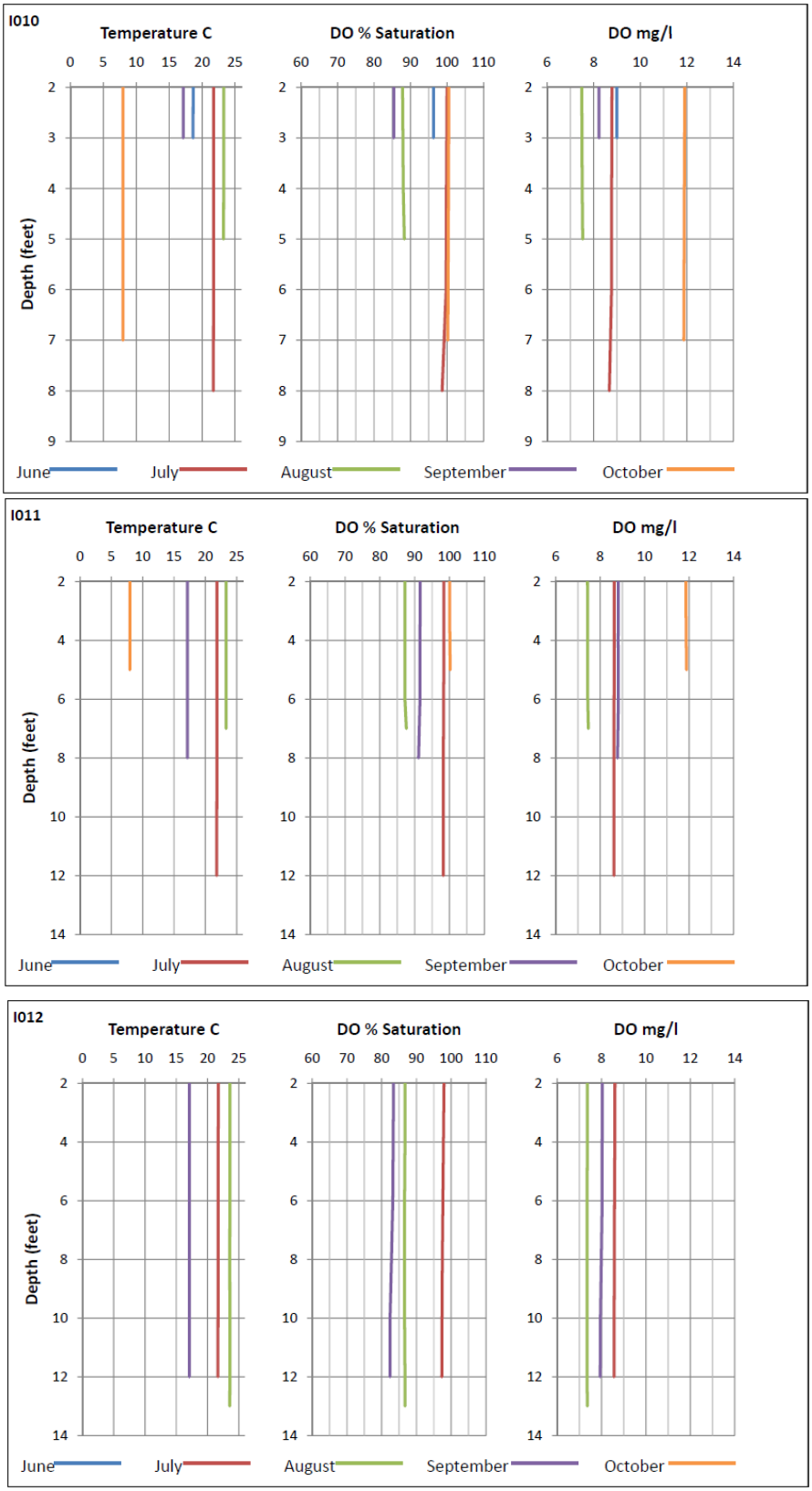
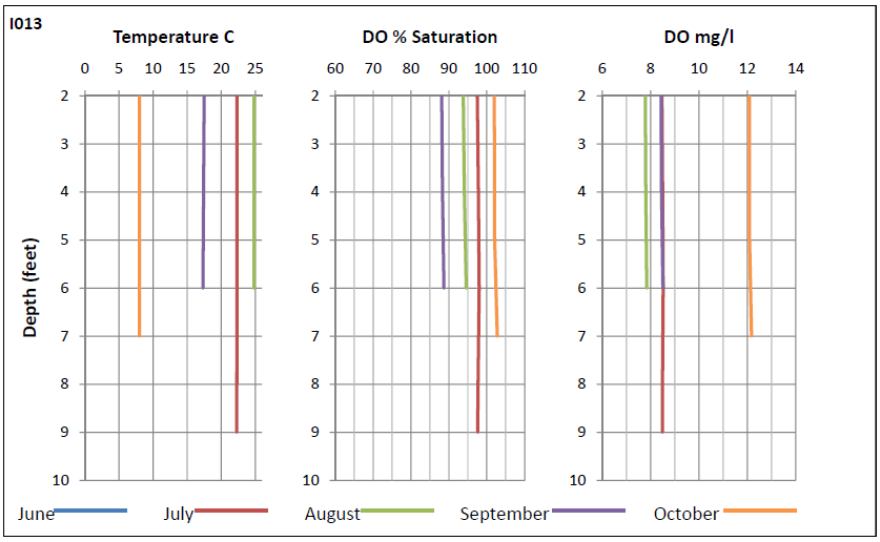
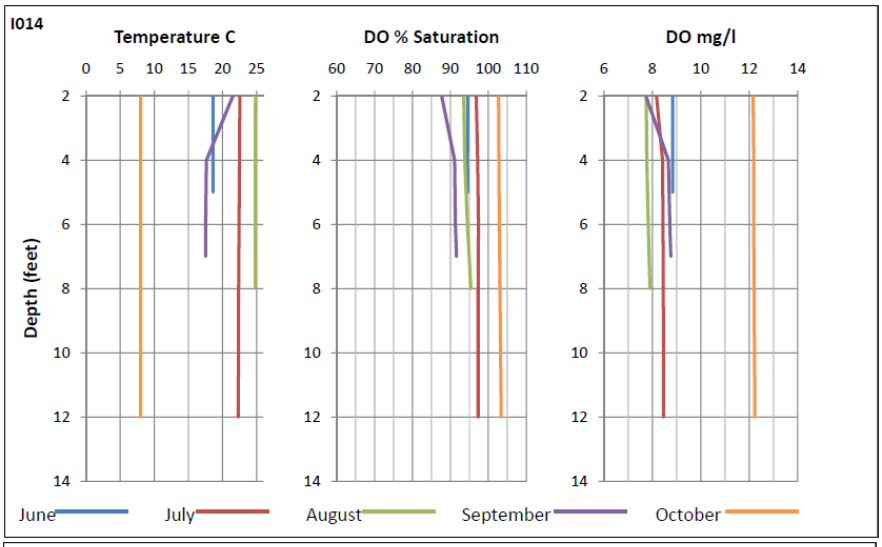


Figure B-5: Hooksett Falls Impoundment Profiles





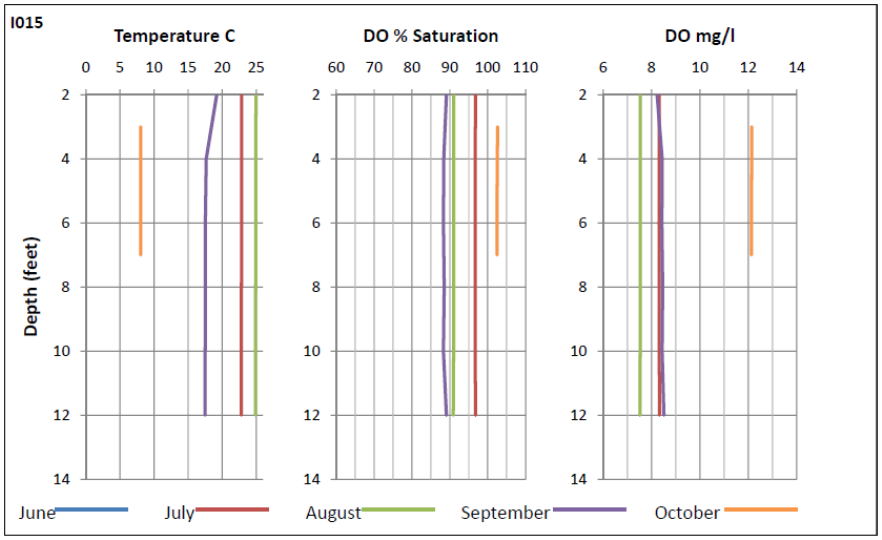
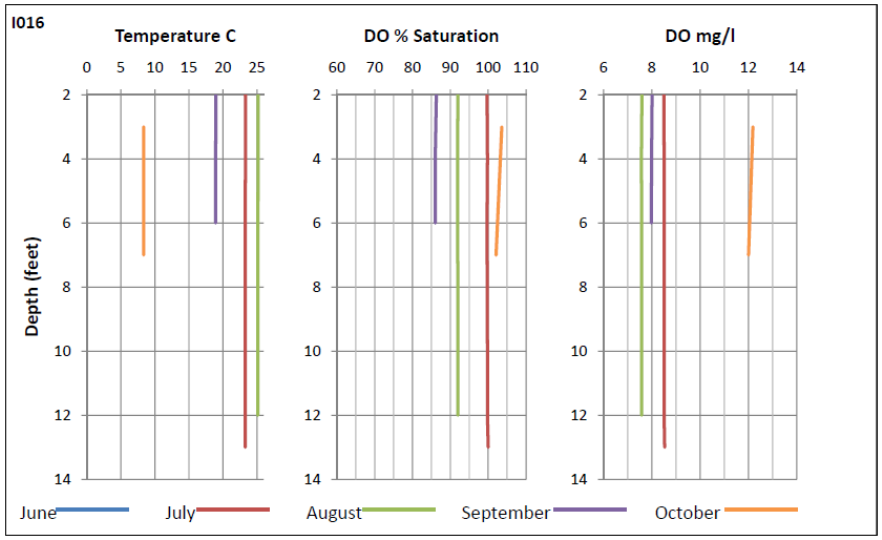
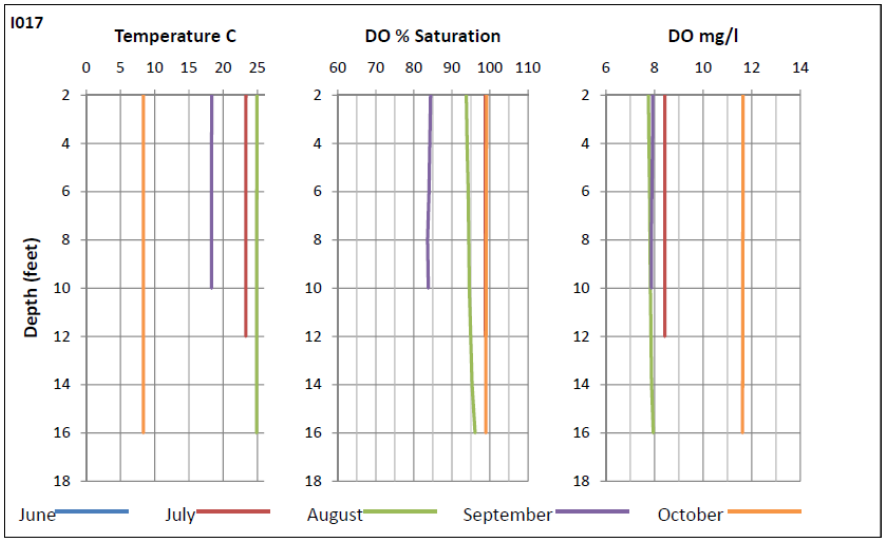


Figure B-6: Amoskeag Impoundment Profiles





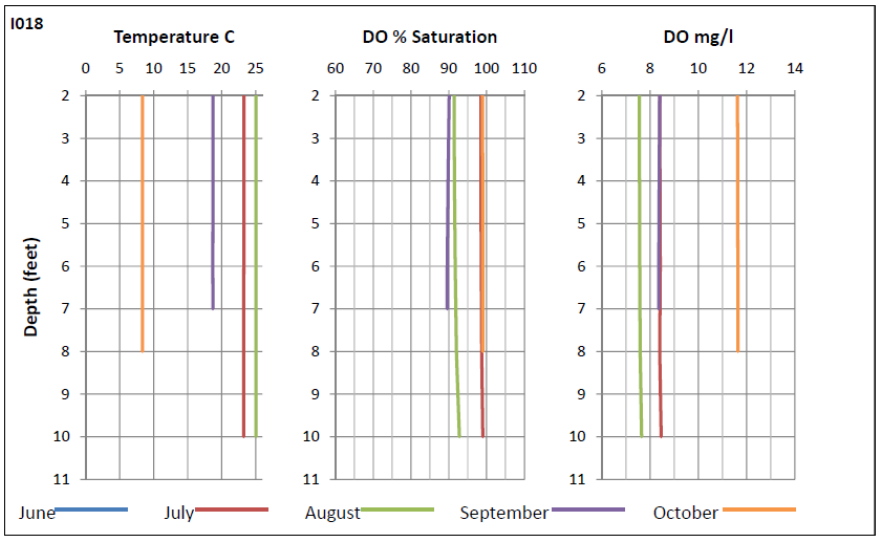
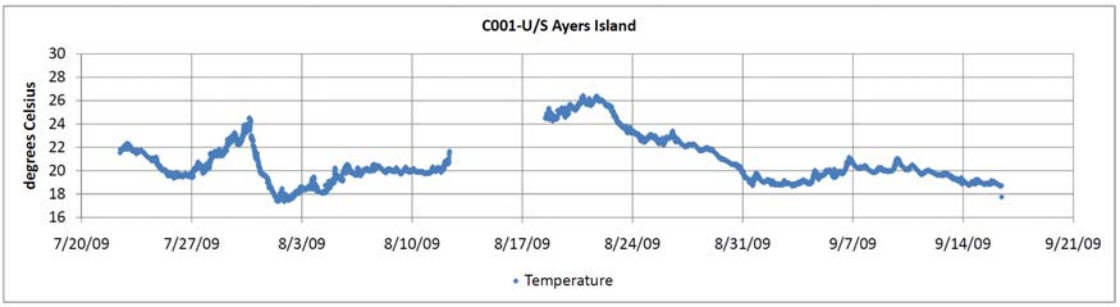
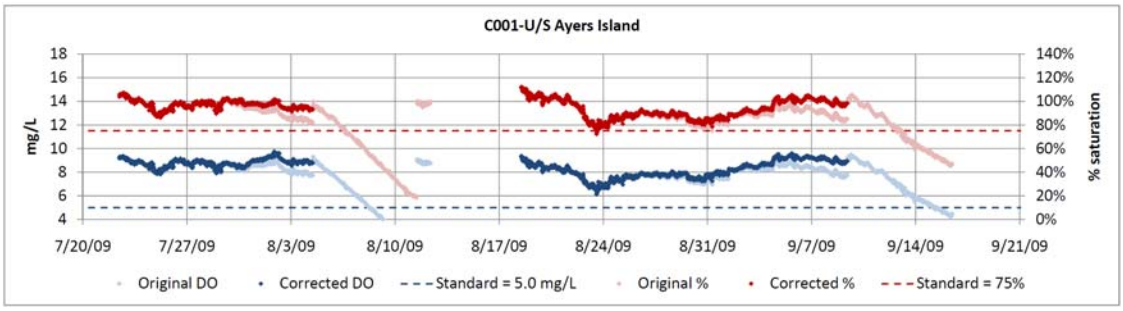
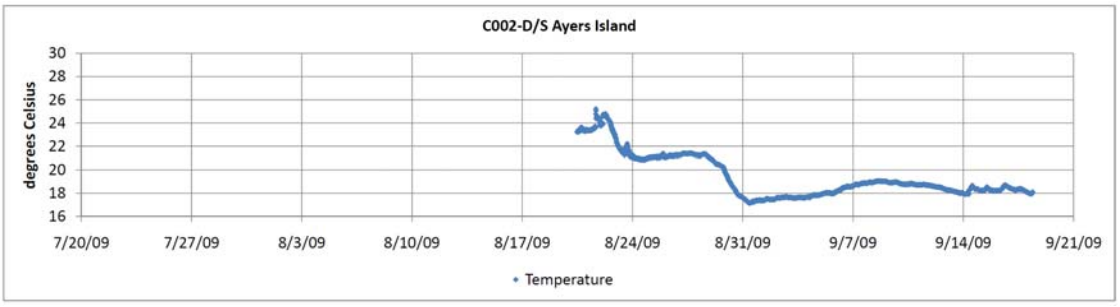
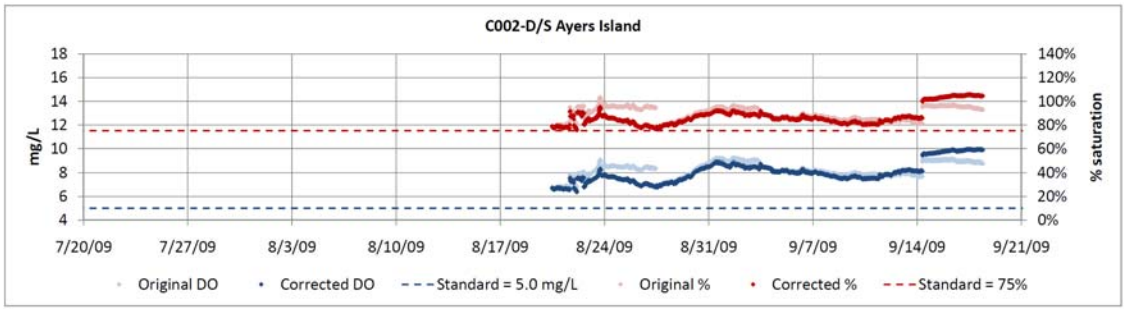


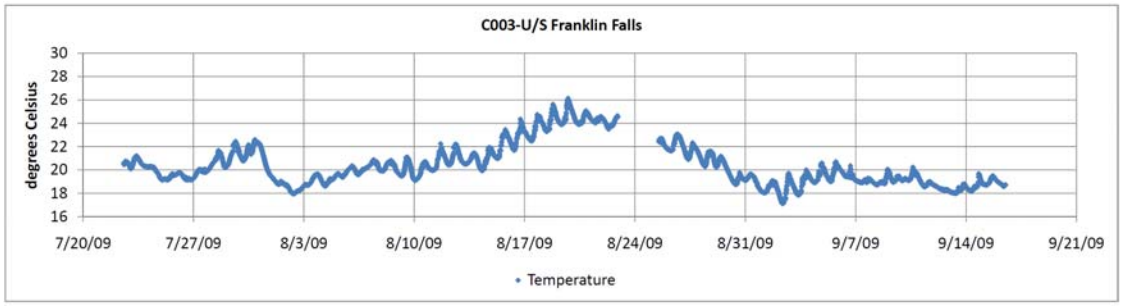
Figure B-7: Continuous Meter Results

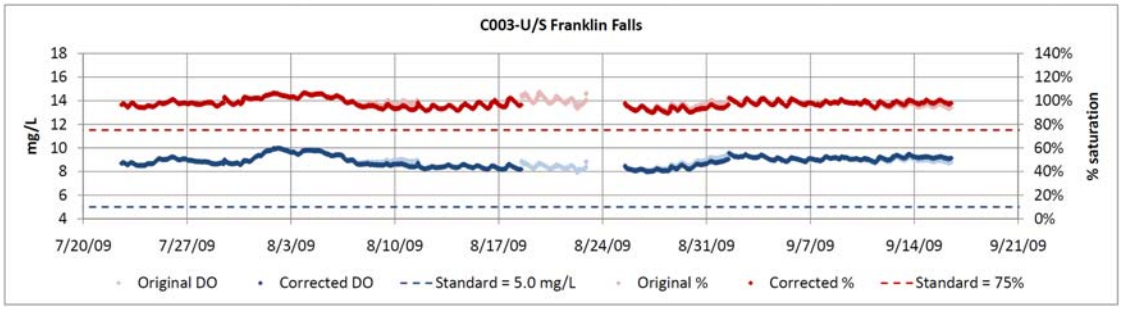


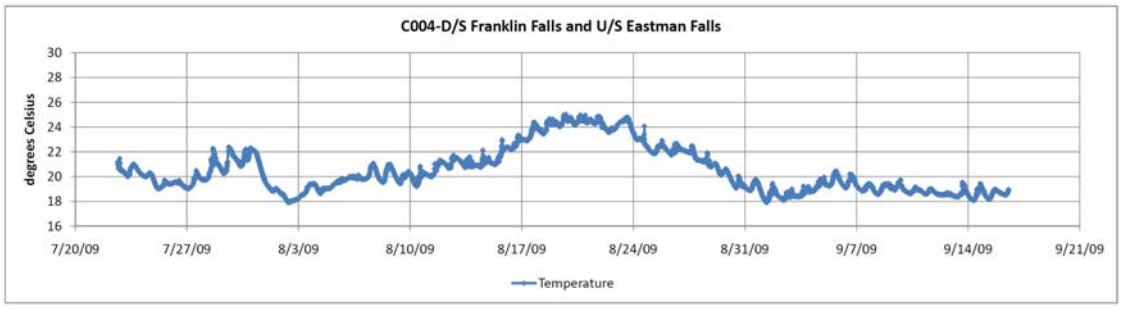


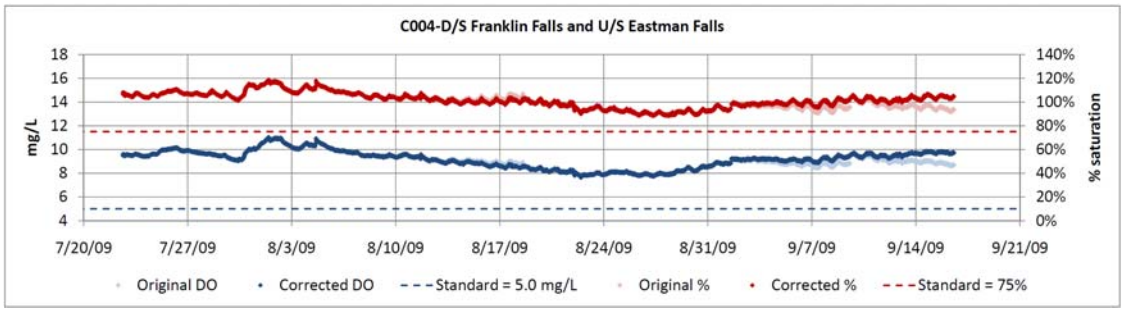


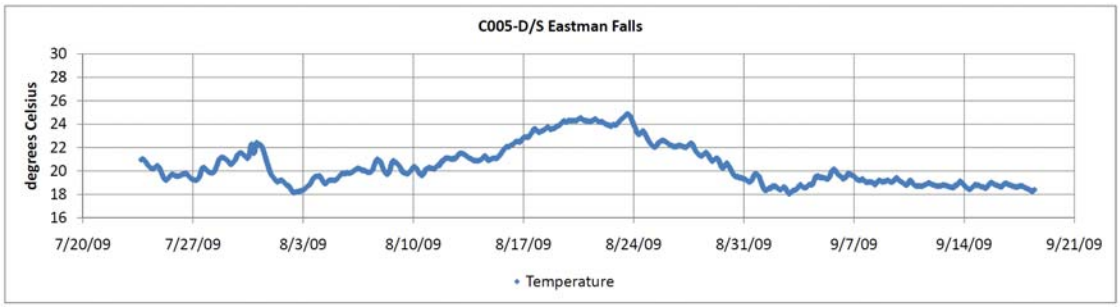


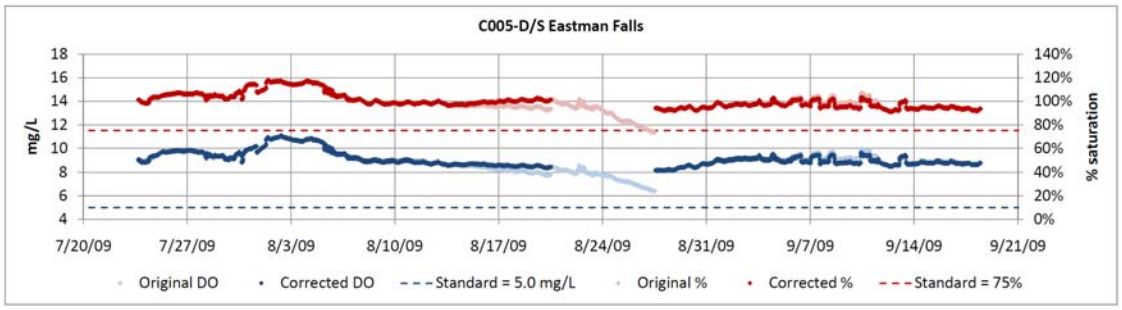

C003-U/S Franklin Falls
degrees Celsius
30
28
26
24
22
20
18
16
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Temperature

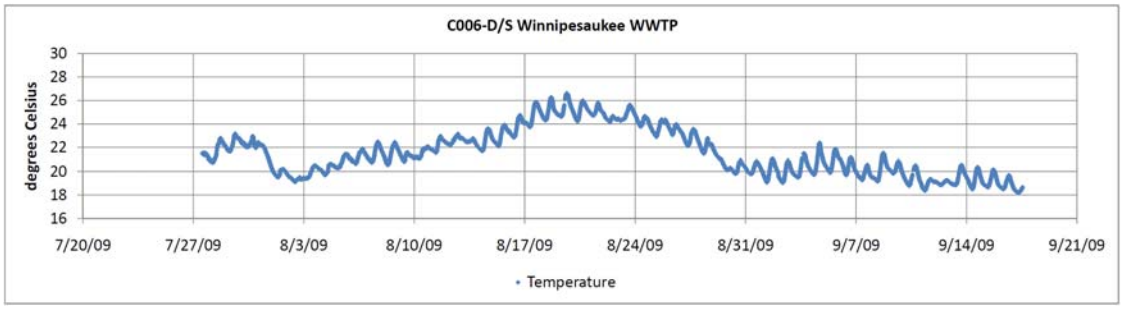

C003-U/S Franklin Falls
mg/L
18
16
14
12
10
8
6
4
% saturation
140%
120%
100%
80%
60%
40%
20%
0%
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Original DO
Corrected DO
Standard = 5.0 mg/L
Original %
Corrected %
Standard = 75%

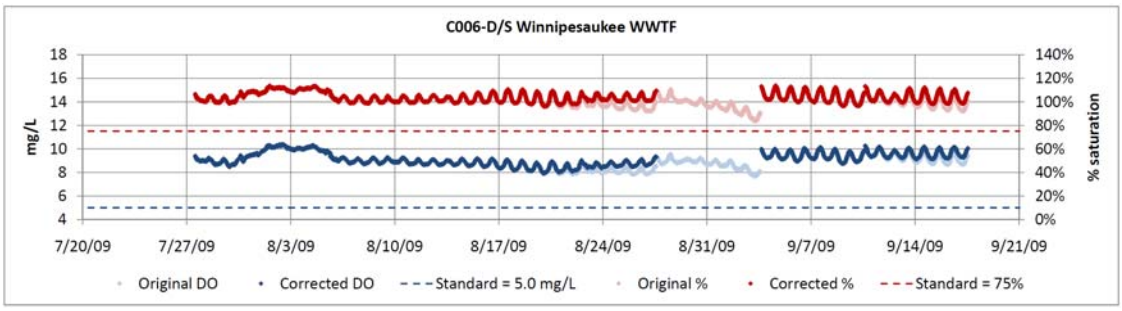

C004-D/S Franklin Falls and U/S Eastman Falls
degrees Celsius
30
28
26
24
22
20
18
16
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Temperature

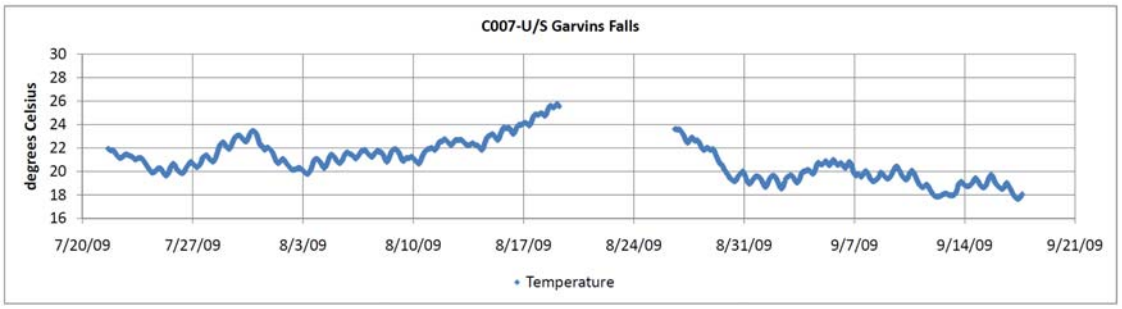

C004-D/S Franklin Falls and U/S Eastman Falls
mg/L
18
16
14
12
10
8
6
4
% saturation
140%
120%
100%
80%
60%
40%
20%
0%
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Original DO
Corrected DO
Standard = 5.0 mg/L
Original %
Corrected %
Standard = 75%

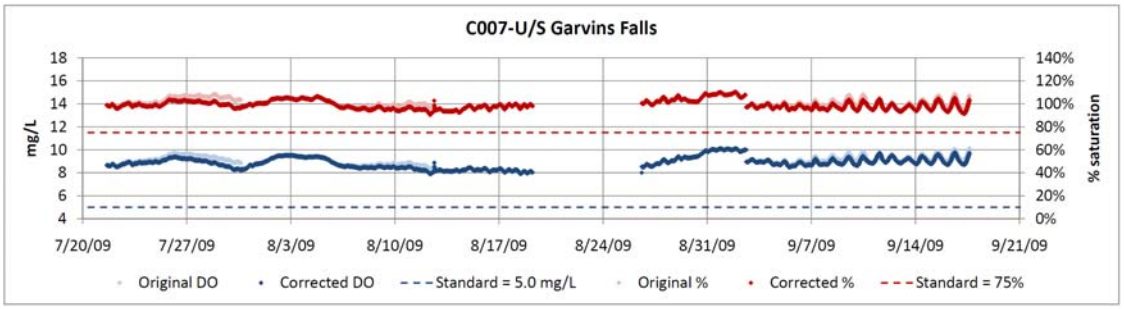

C005-D/S Eastman Falls
degrees Celsius
30
28
26
24
22
20
18
16
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Temperature

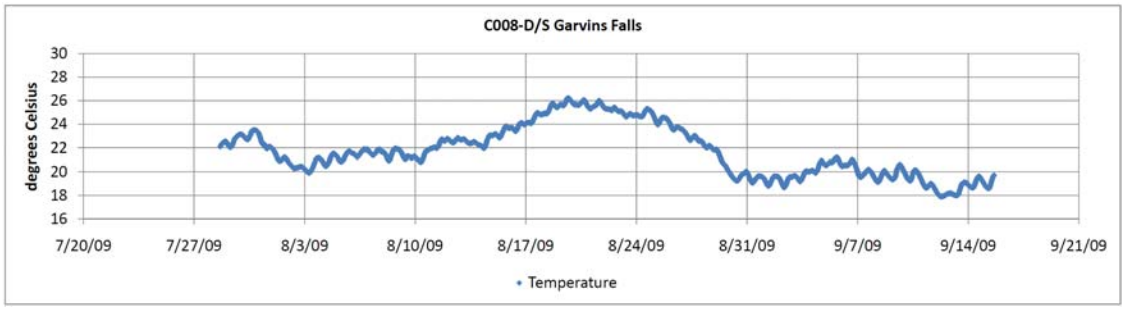

C005-D/S Eastman Falls
mg/L
18
16
14
12
10
8
6
4
% saturation
140%
120%
100%
80%
60%
40%
20%
0%
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Original DO
Corrected DO
Standard = 5.0 mg/L
Original %
Corrected %
Standard = 75%

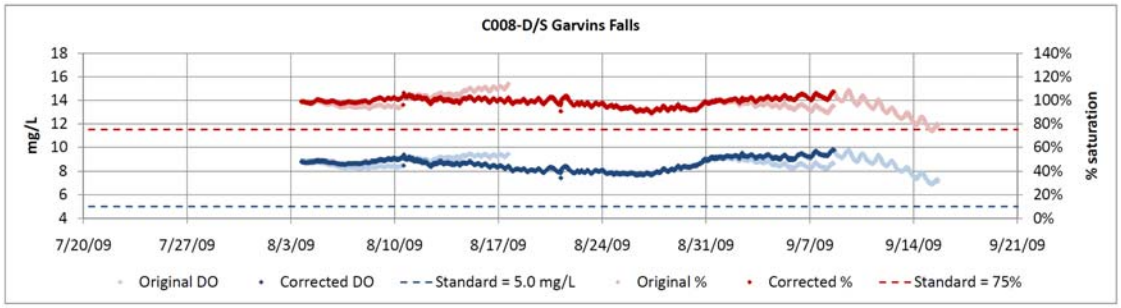

C006-D/S Winnipesaukee WWTP
degrees Celsius
30
28
26
24
22
20
18
16
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Temperature

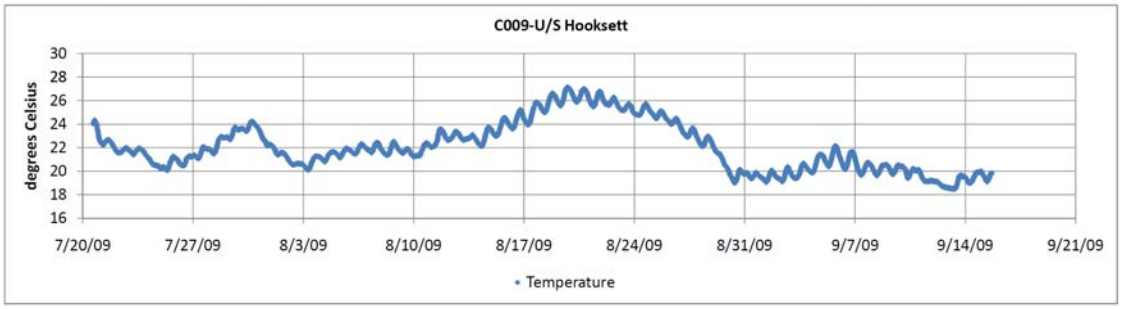

C006-D/S Winnipesaukee WWTF
mg/L
18
16
14
12
10
8
6
4
% saturation
140%
120%
100%
80%
60%
40%
20%
0%
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Original DO
Corrected DO
Standard = 5.0 mg/L
Original %
Corrected %
Standard = 75%

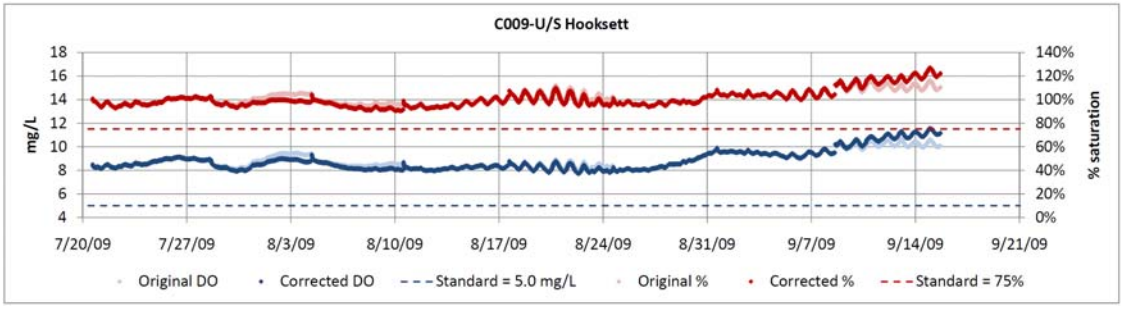

C007-U/S Garvins Falls
degrees Celsius
30
28
26
24
22
20
18
16
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Temperature

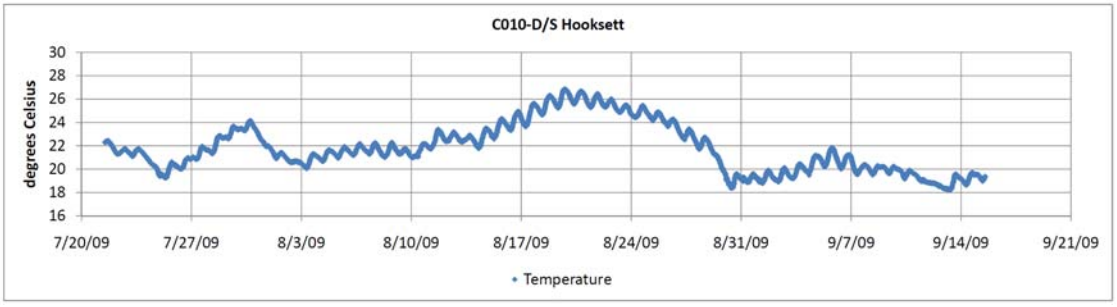

C007-U/S Garvins Falls
mg/L
18
16
14
12
10
8
6
4
% saturation
140%
120%
100%
80%
60%
40%
20%
0%
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Original DO
Corrected DO
Standard = 5.0 mg/L
Original %
Corrected %
Standard = 75%

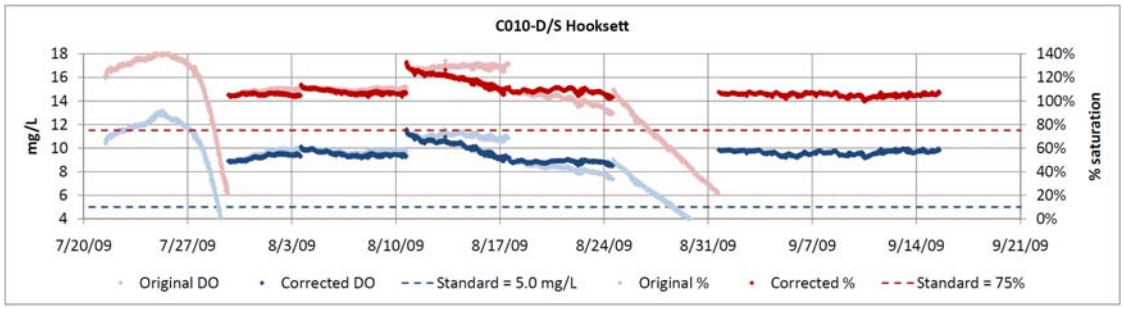

C008-D/S Garvins Falls
degrees Celsius
30
28
26
24
22
20
18
16
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Temperature

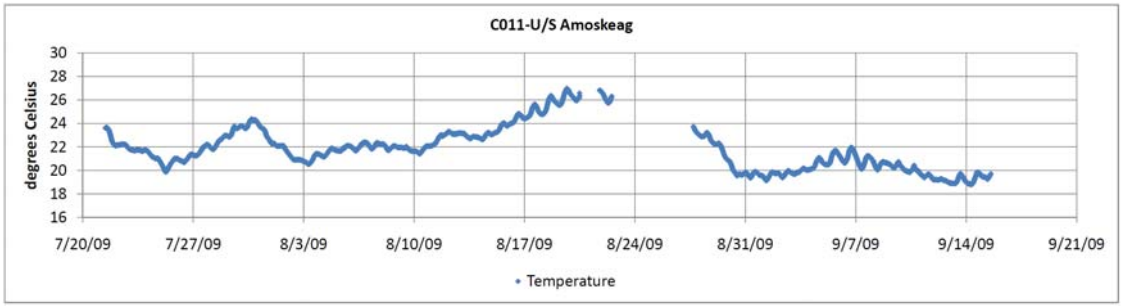

C008-D/S Garvins Falls
mg/L
18
16
14
12
10
8
6
4
% saturation
140%
120%
100%
80%
60%
40%
20%
0%
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Original DO
Corrected DO
Standard = 5.0 mg/L
Original %
Corrected %
Standard = 75%

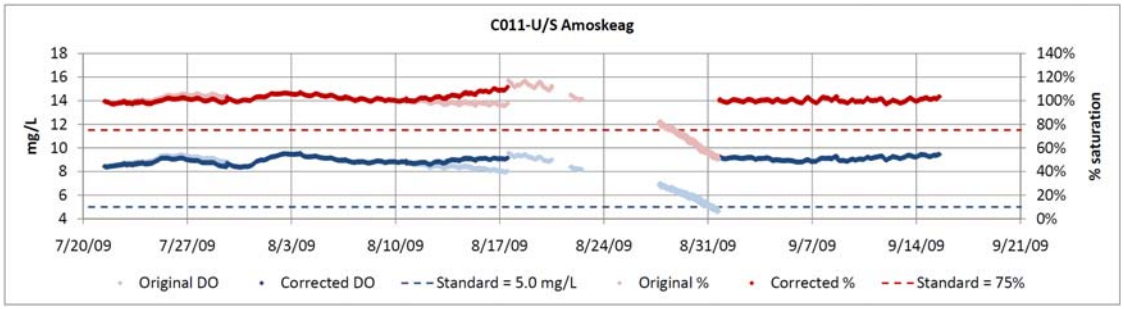

C009-U/S Hooksett
degrees Celsius
30
28
26
24
22
20
18
16
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Temperature

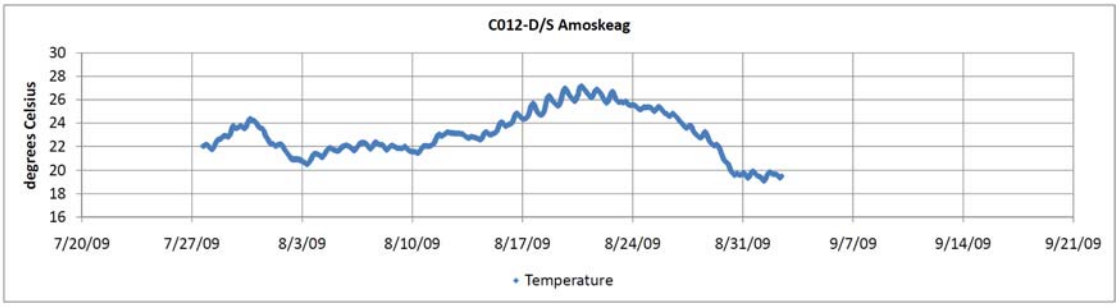

C009-U/S Hooksett
mg/L
18
16
14
12
10
8
6
4
% saturation
140%
120%
100%
80%
60%
40%
20%
0%
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Original DO
Corrected DO
Standard = 5.0 mg/L
Original %
Corrected %
Standard = 75%

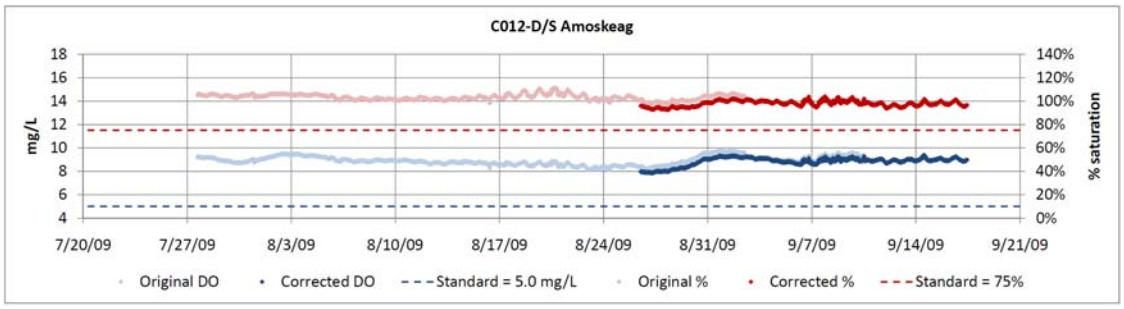

C010-D/S Hooksett
degrees Celsius
30
28
26
24
22
20
18
16
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Temperature

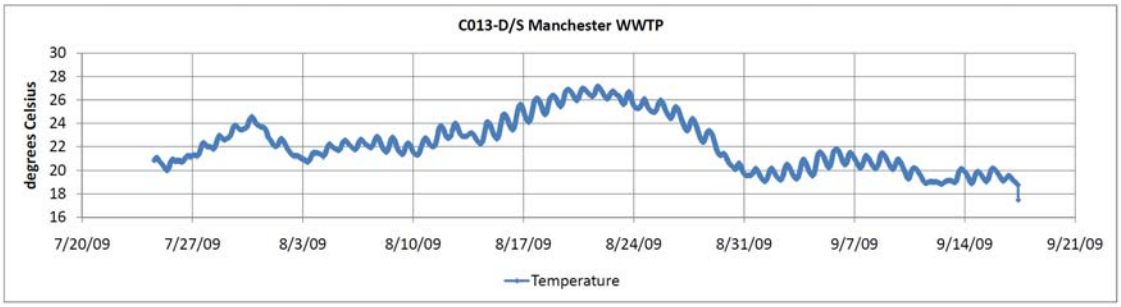

C010-D/S Hooksett
mg/L
18
16
14
12
10
8
6
4
% saturation
140%
120%
100%
80%
60%
40%
20%
0%
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Original DO
Corrected DO
Standard = 5.0 mg/L
Original %
Corrected %
Standard = 75%

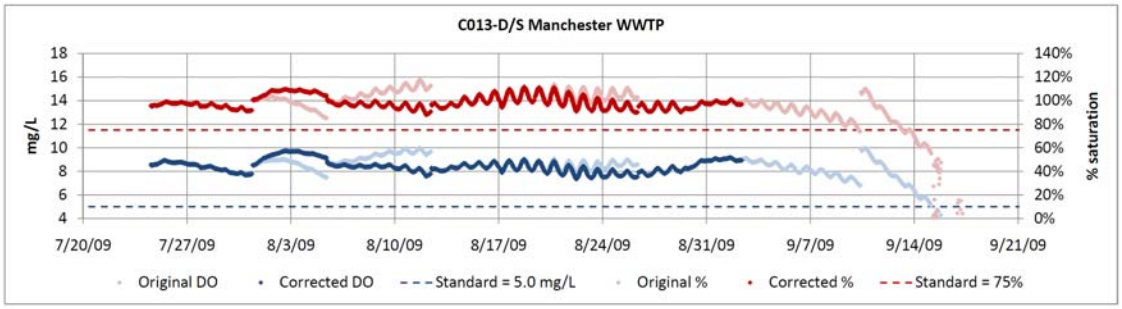

C011-U/S Amoskeag
degrees Celsius
30
28
26
24
22
20
18
16
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Temperature

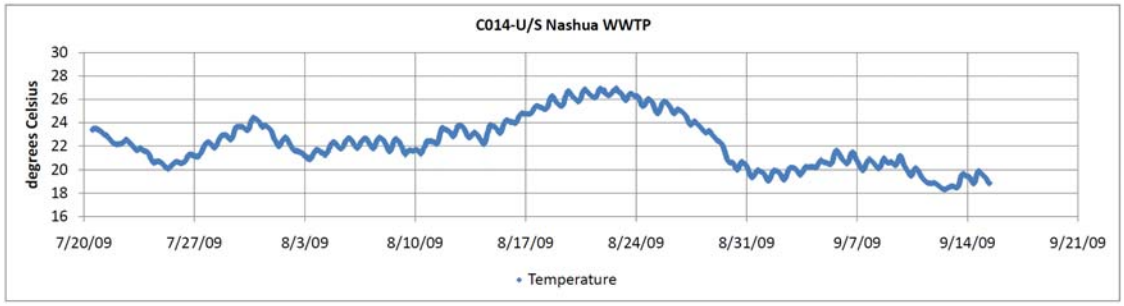

C011-U/S Amoskeag
mg/L
18
16
14
12
10
8
6
4
% saturation
140%
120%
100%
80%
60%
40%
20%
0%
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Original DO
Corrected DO
Standard = 5.0 mg/L
Original %
Corrected %
Standard = 75%

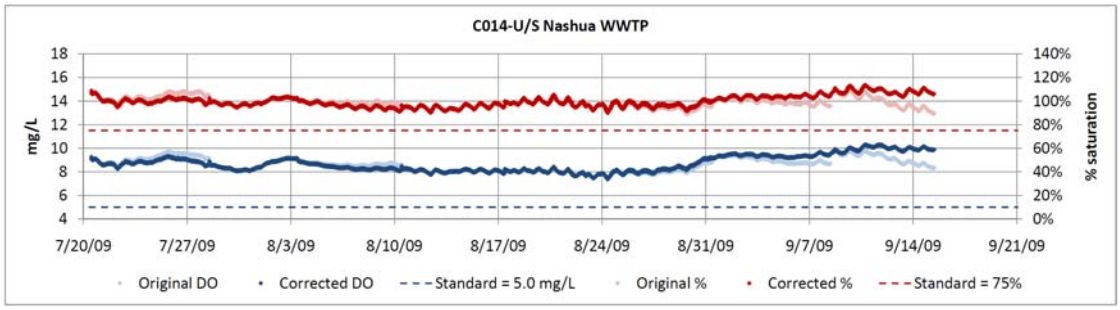

C012-D/S Amoskeag
degrees Celsius
30
28
26
24
22
20
18
16
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Temperature

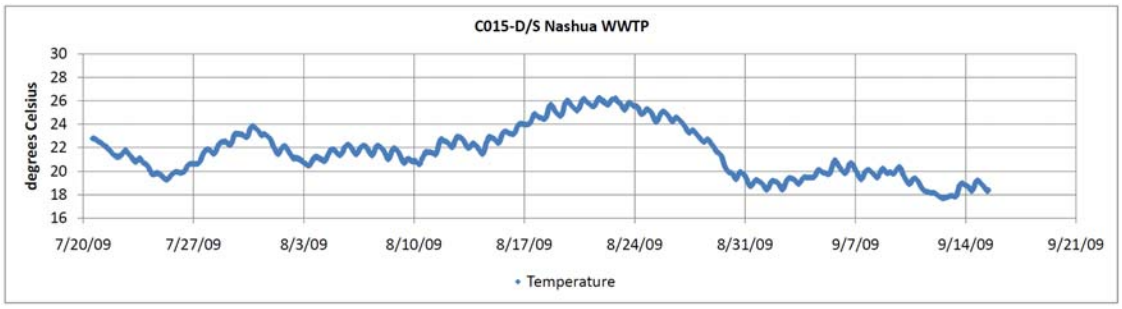

C012-D/S Amoskeag
mg/L
18
16
14
12
10
8
6
4
% saturation
140%
120%
100%
80%
60%
40%
20%
0%
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Original DO
Corrected DO
Standard = 5.0 mg/L
Original %
Corrected %
Standard = 75%


C013-D/S Manchester WWTP
degrees Celsius
30
28
26
24
22
20
18
16
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Temperature


C013-D/S Manchester WWTP
mg/L
18
16
14
12
10
8
6
4
% saturation
140%
120%
100%
80%
60%
40%
20%
0%
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Original DO
Corrected DO
Standard = 5.0 mg/L
Original %
Corrected %
Standard = 75%


C014-U/S Nashua WWTP
degrees Celsius
30
28
26
24
22
20
18
16
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Temperature


C014-U/S Nashua WWTP
mg/L
18
16
14
12
10
8
6
4
% saturation
140%
120%
100%
80%
60%
40%
20%
0%
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Original DO
Corrected DO
Standard = 5.0 mg/L
Original %
Corrected %
Standard = 75%


C015-D/S Nashua WWTP
degrees Celsius
30
28
26
24
22
20
18
16
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Temperature

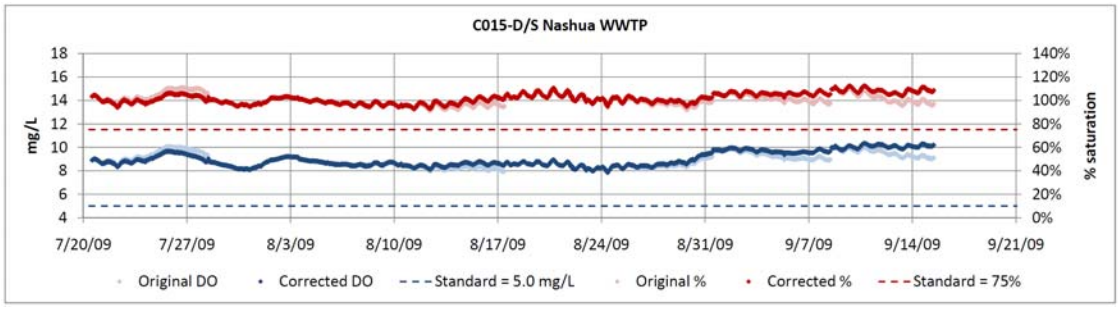
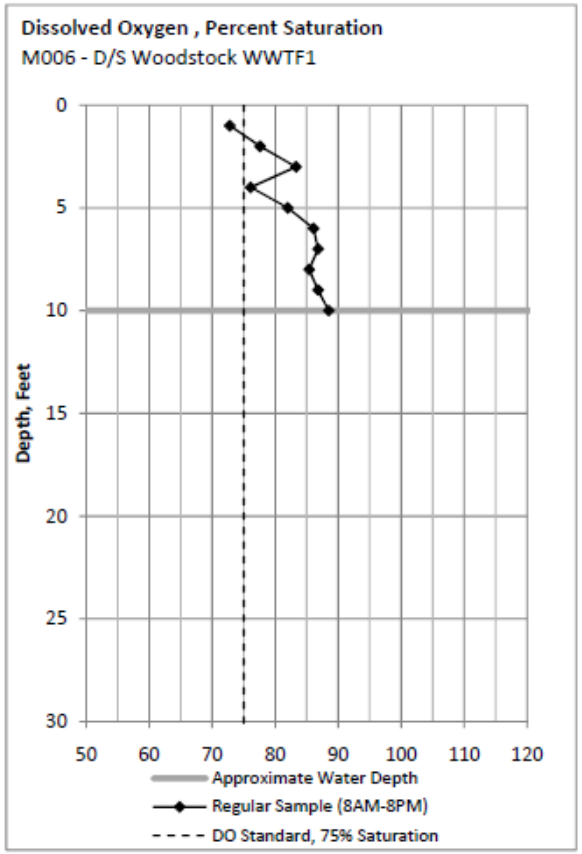
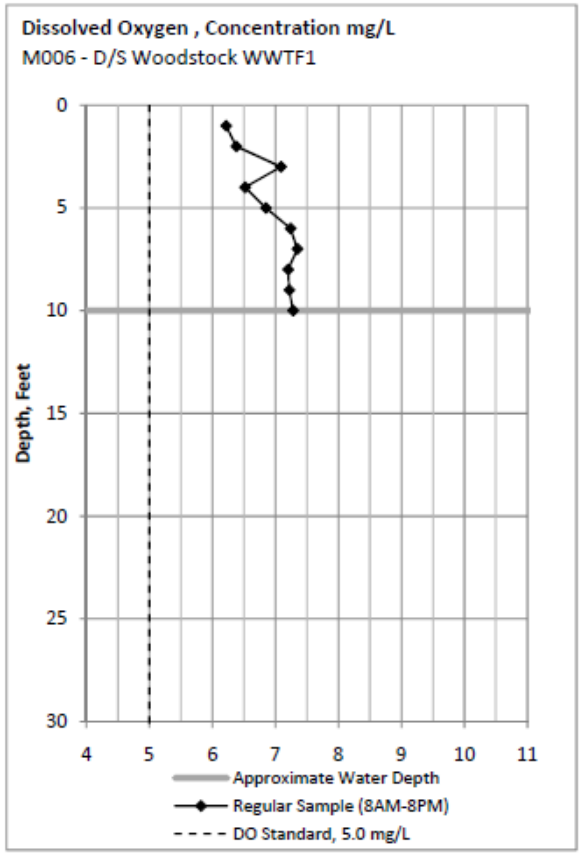
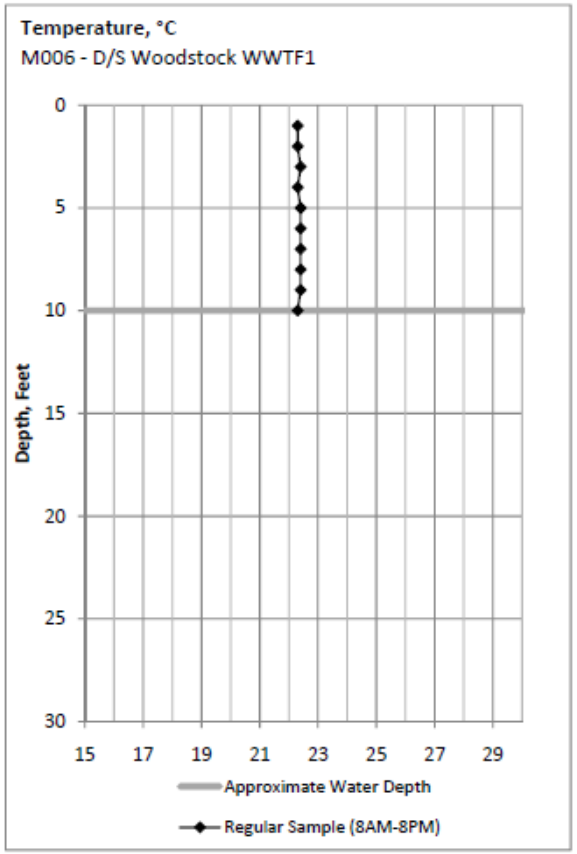

C015-D/S Nashua WWTP
mg/L
18
16
14
12
10
8
6
4
% saturation
140%
120%
100%
80%
60%
40%
20%
0%
7/20/09
7/27/09
8/3/09
8/10/09
8/17/09
8/24/09
8/31/09
9/7/09
9/14/09
9/21/09
Original DO
Corrected DO
Standard = 5.0 mg/L
Original %
Corrected %
Standard = 75%

Figure B-8: Low Flow Event #1 Profiles

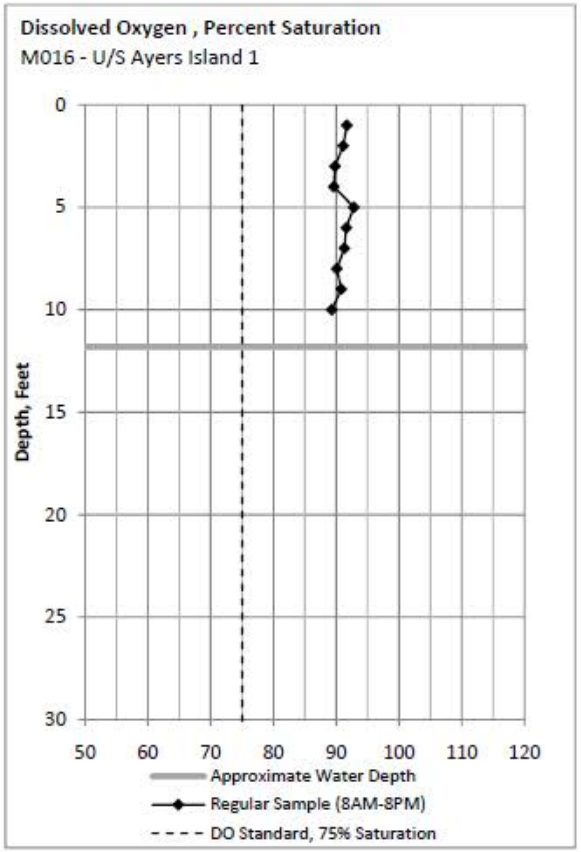
M006 - D/S Woodstock WWTF1

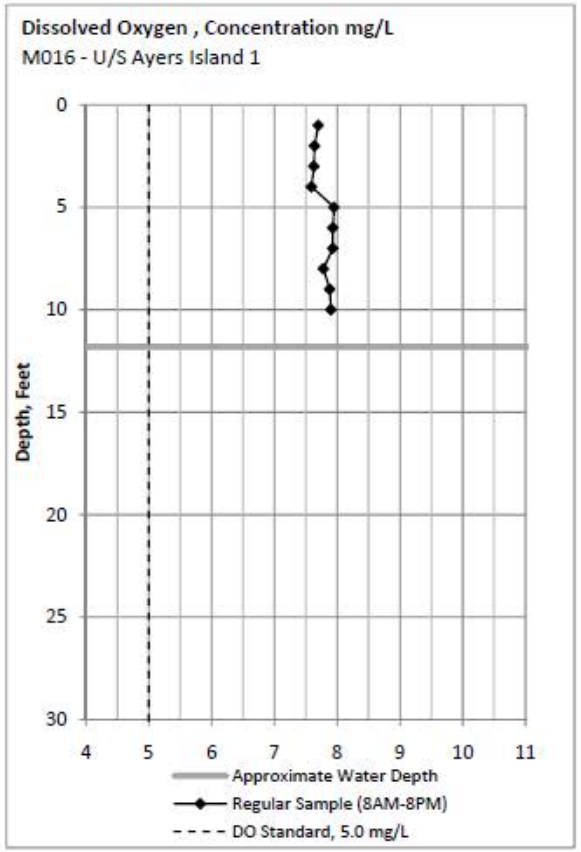


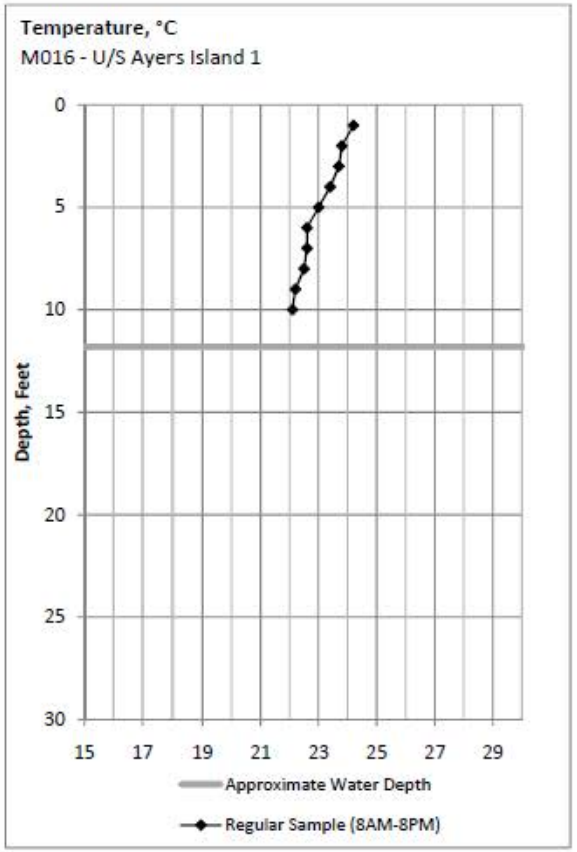




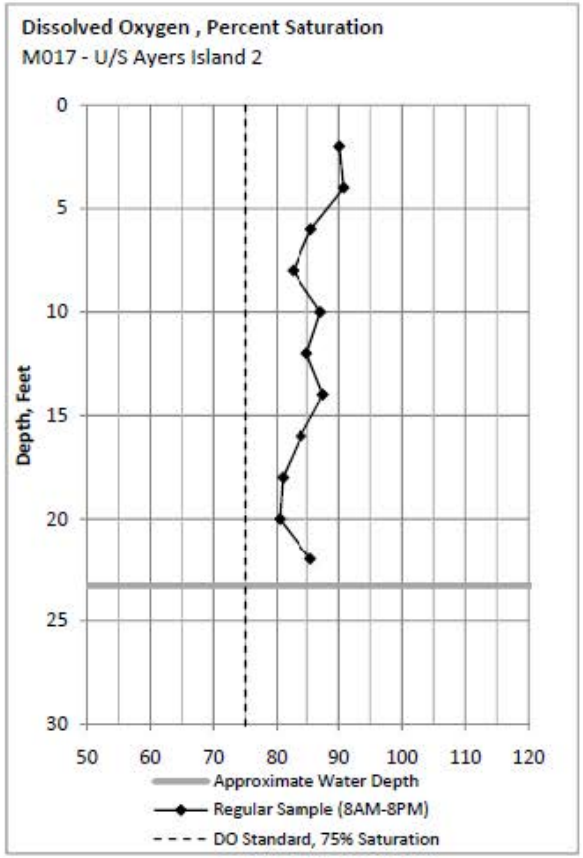
M016 - U/S Ayers Island 1

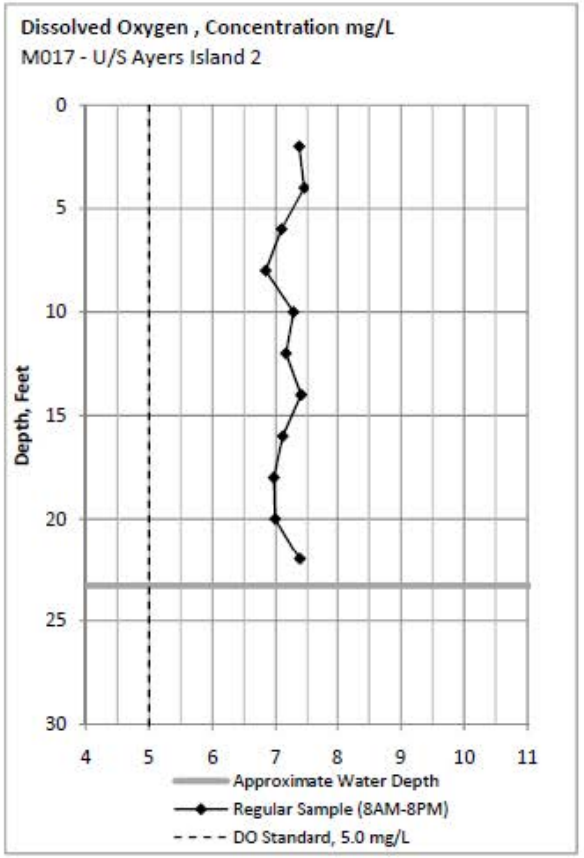


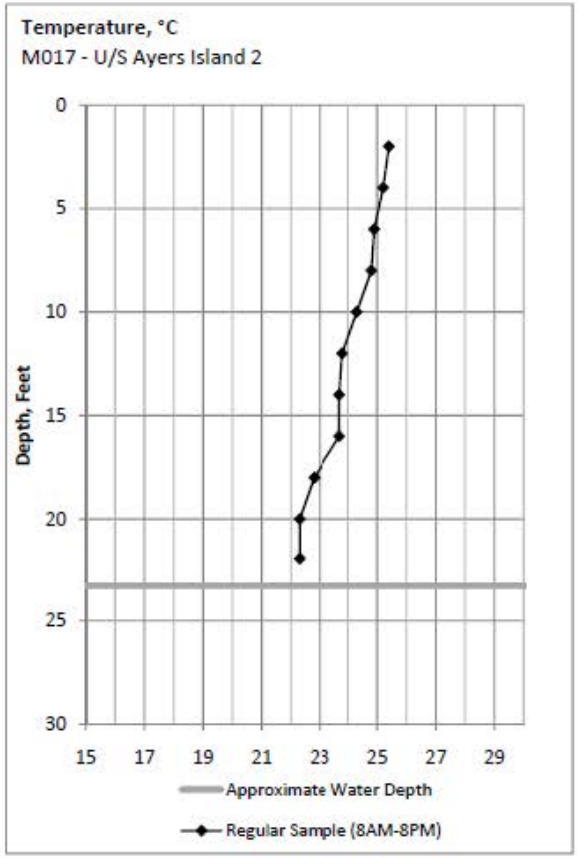




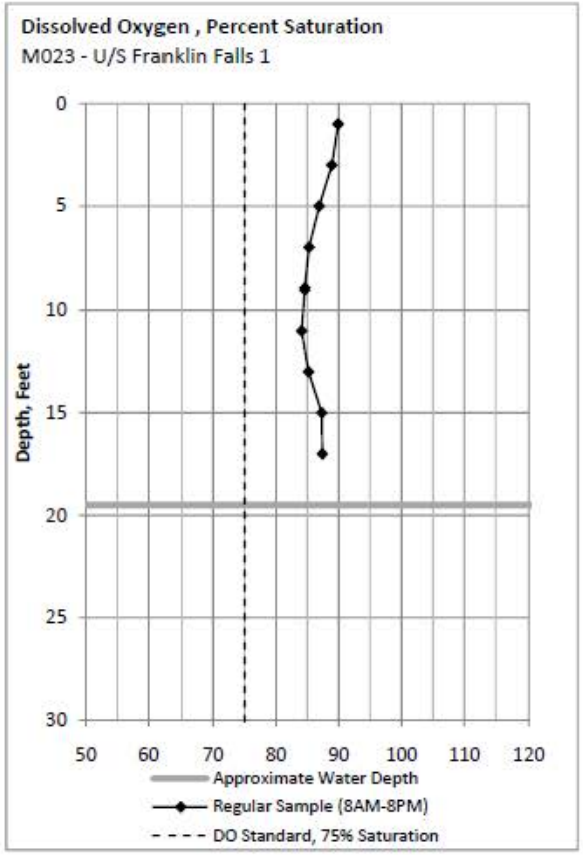
M017 - U/S Ayers Island 2

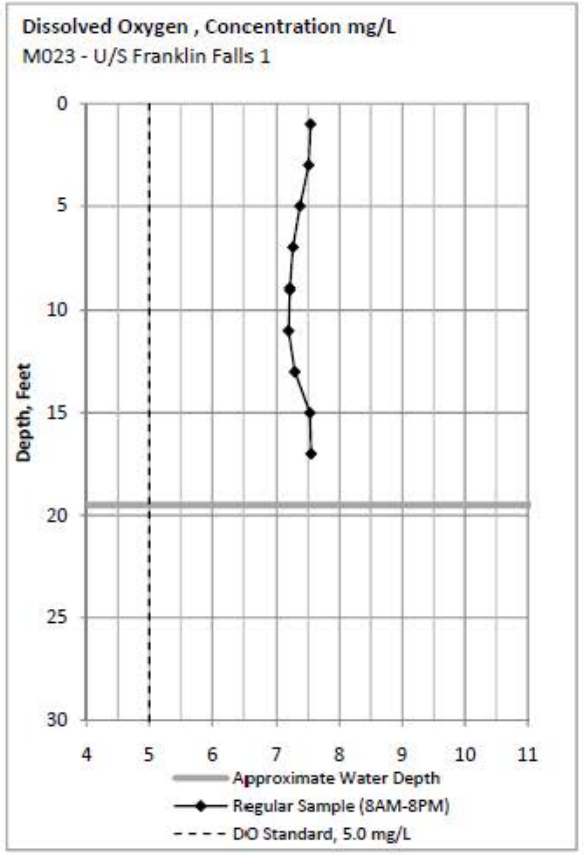


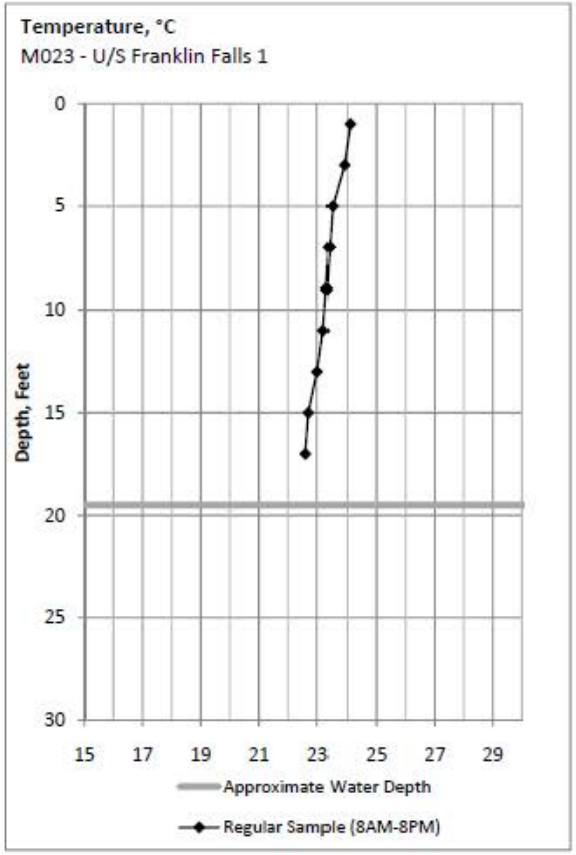




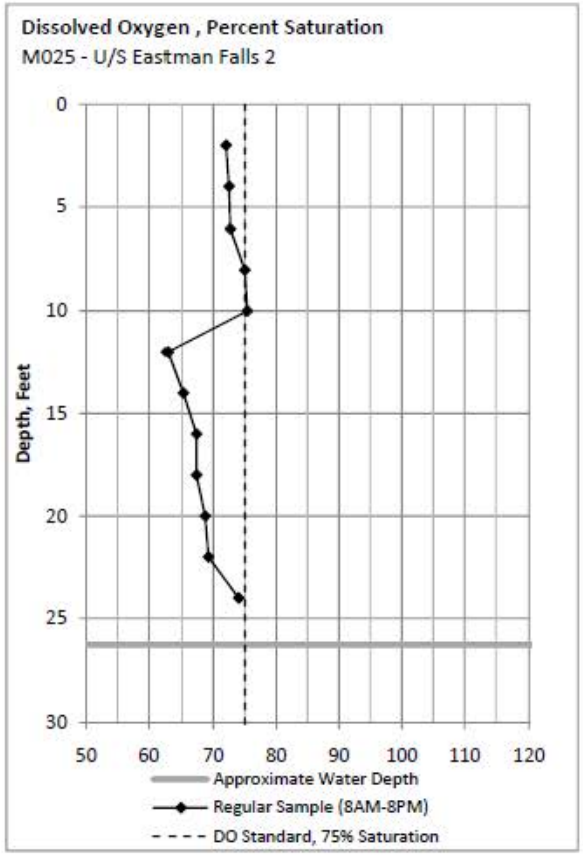
M023 - U/S Franklin Falls 1

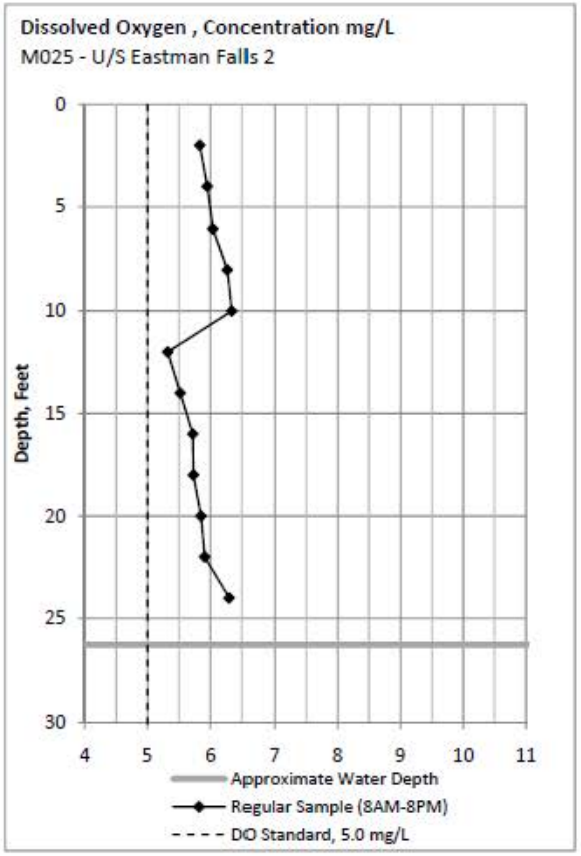


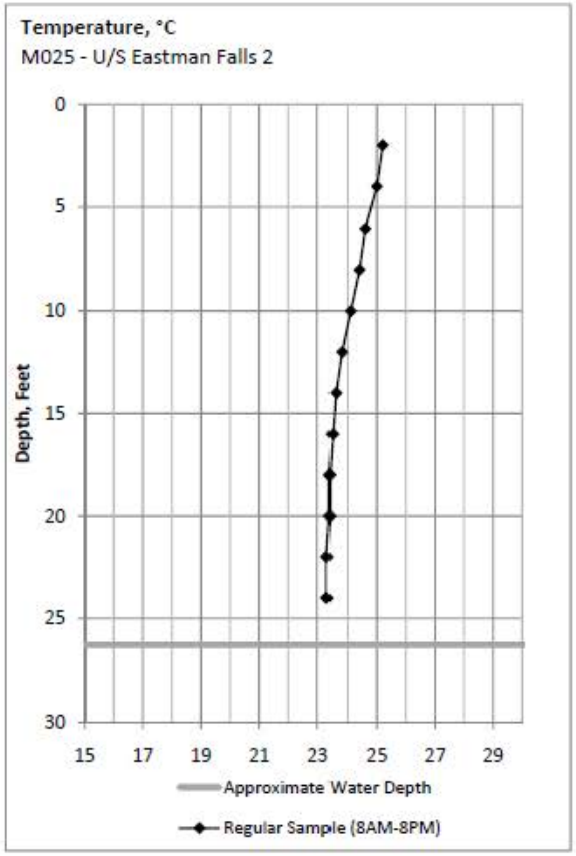




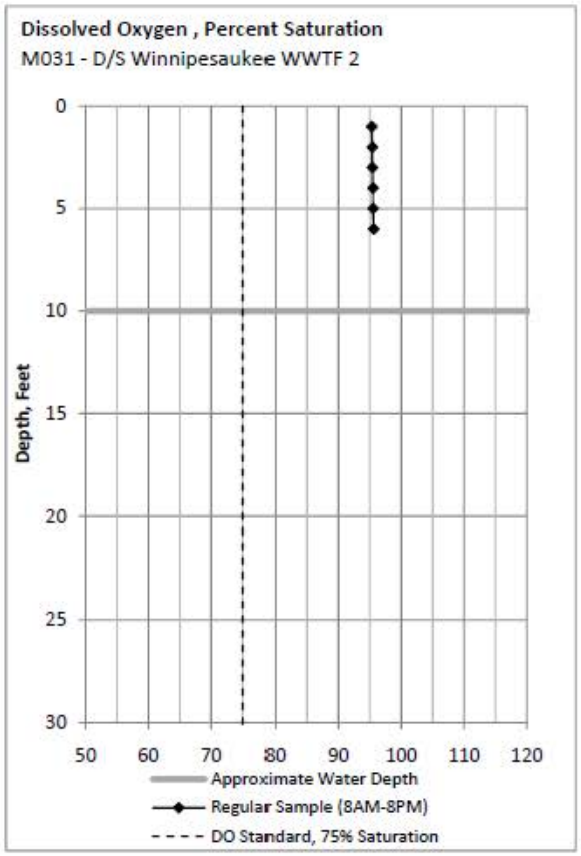
M025 - U/S Eastman Falls 2

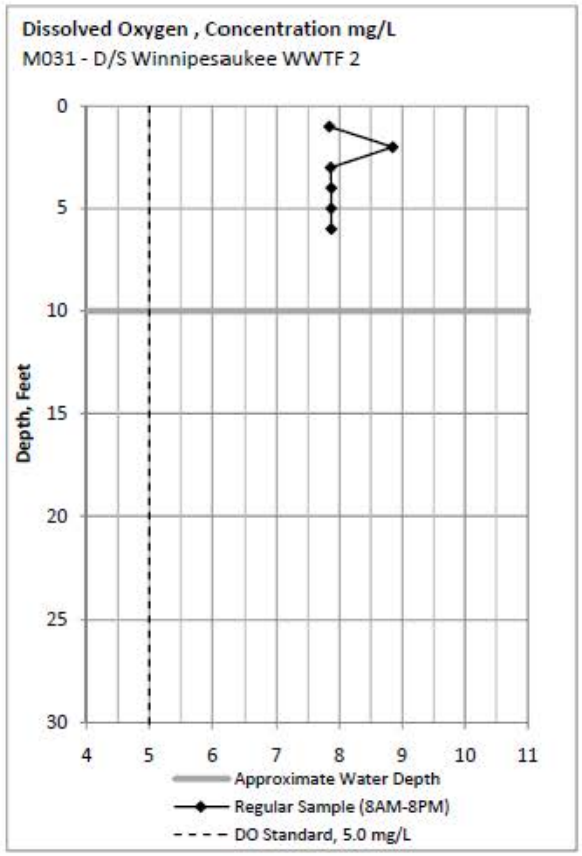


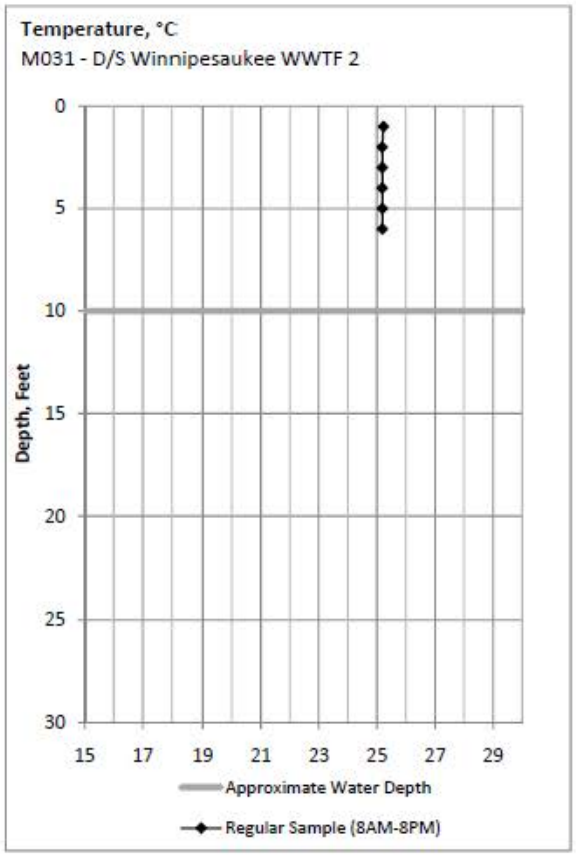




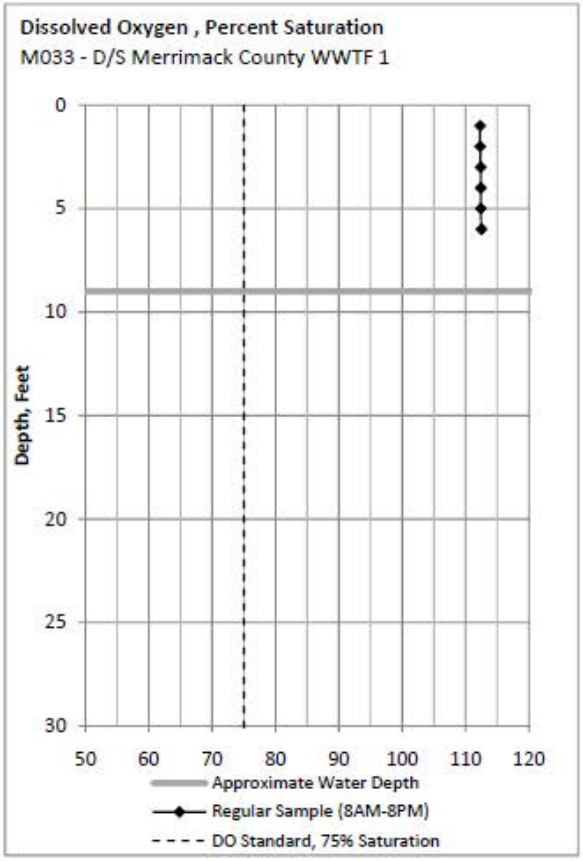
M031 - D/S Winnipesaukee WWTF 2

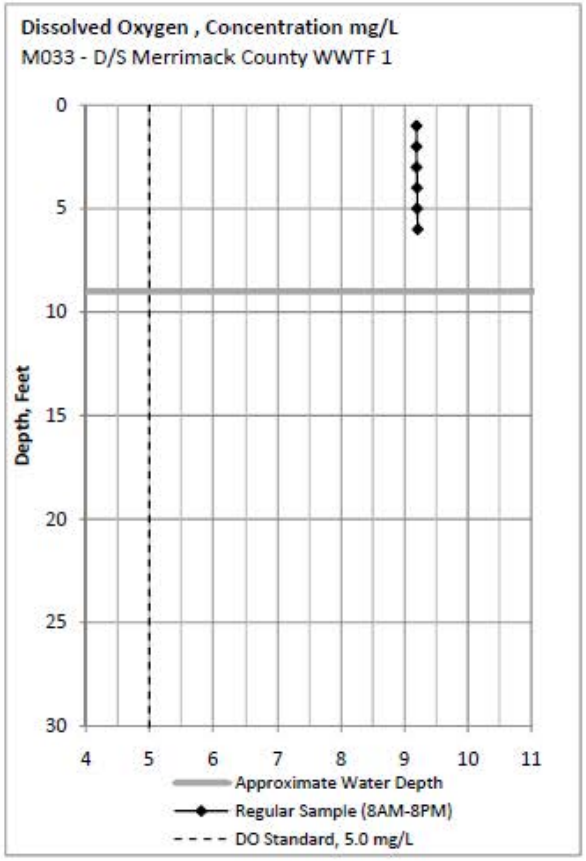


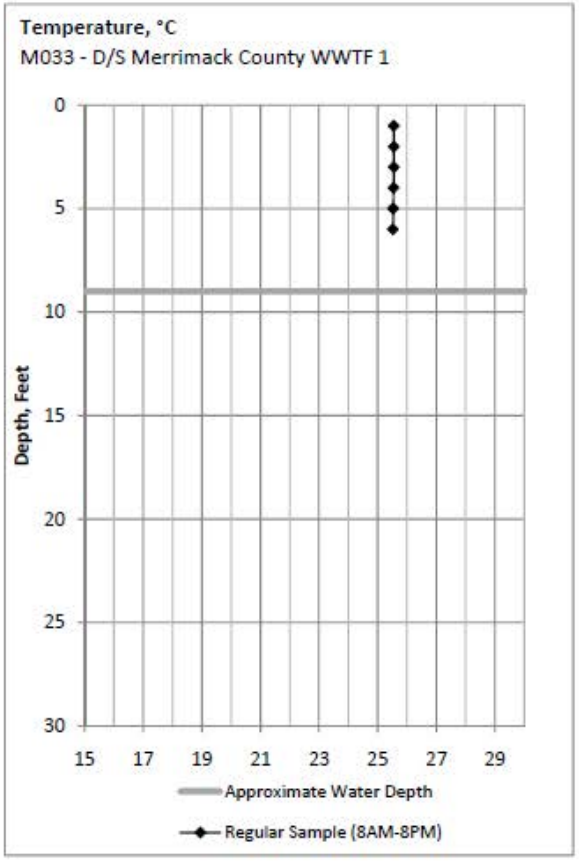




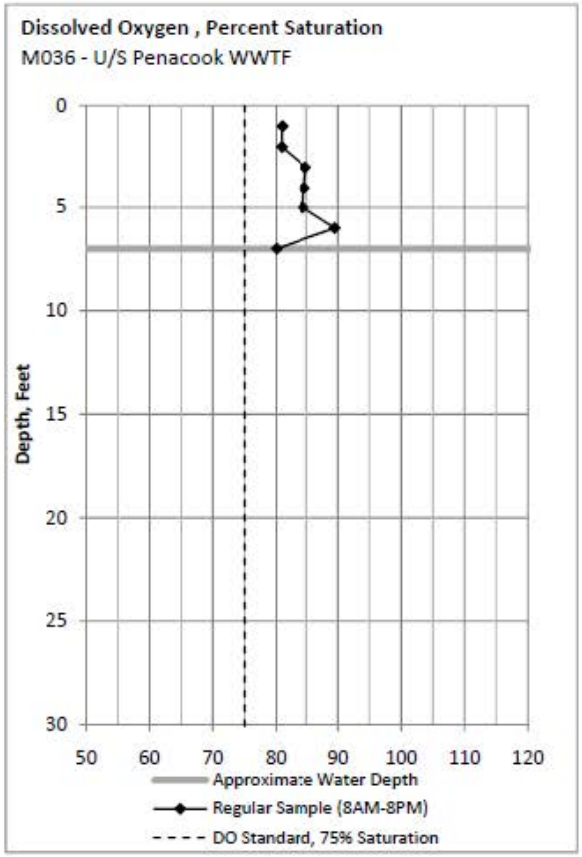
M033 - D/S Merrimack County WWTF 1

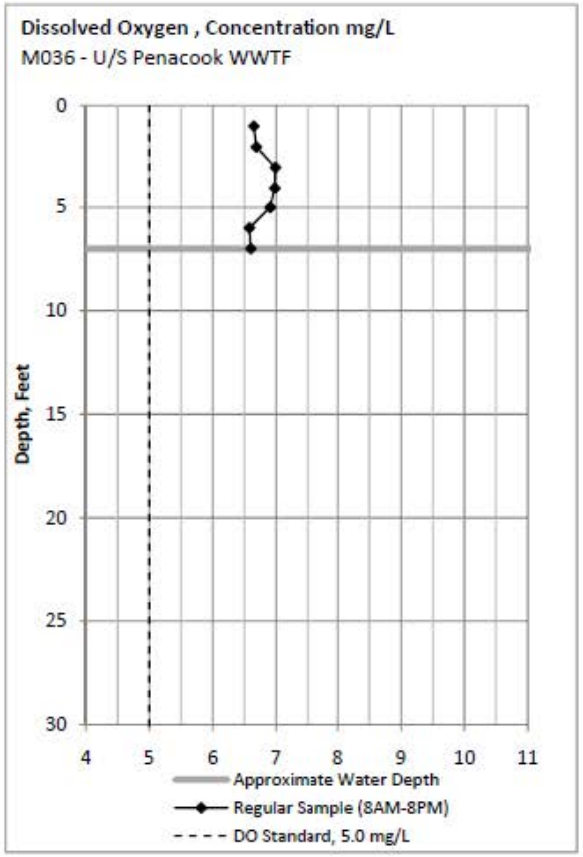


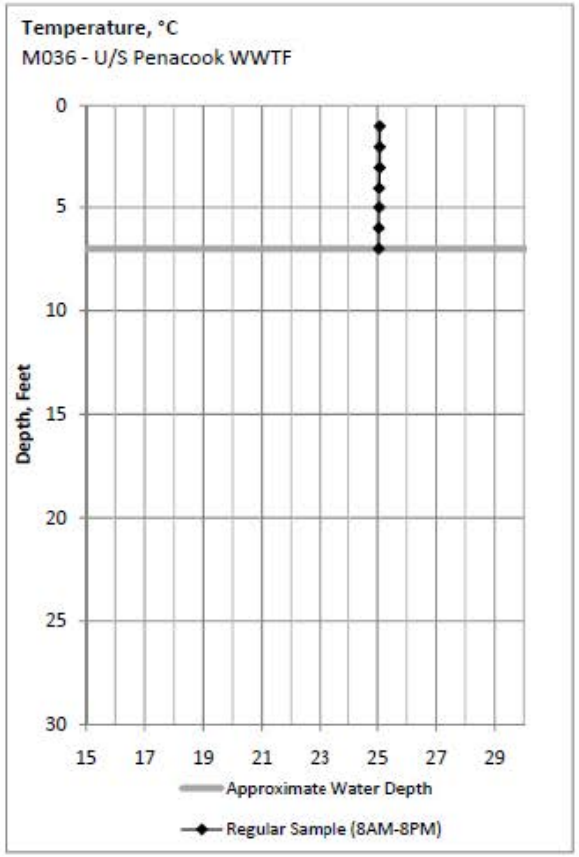




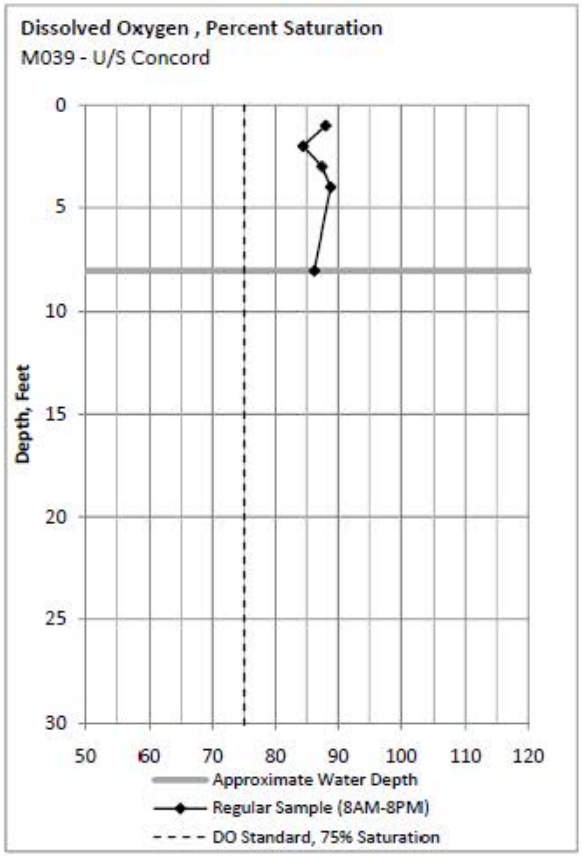
M036 - U/S Penacook WWTF

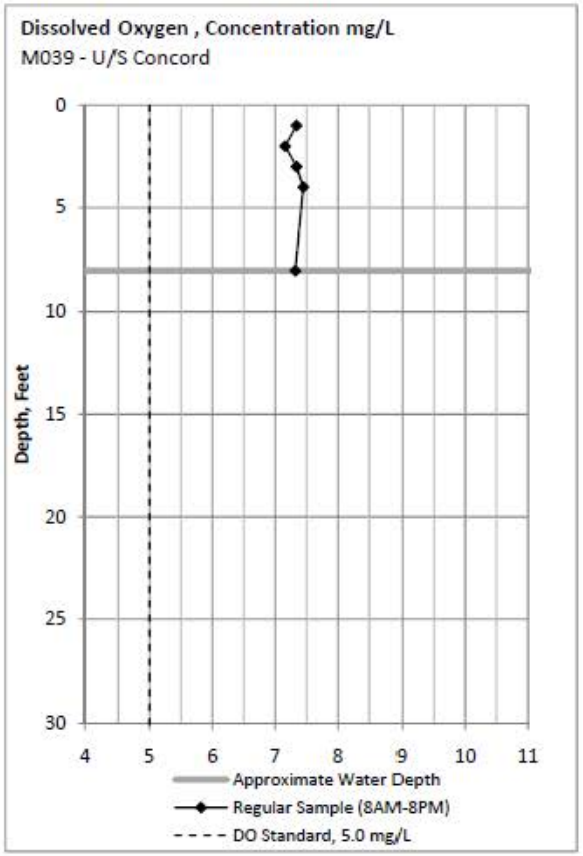


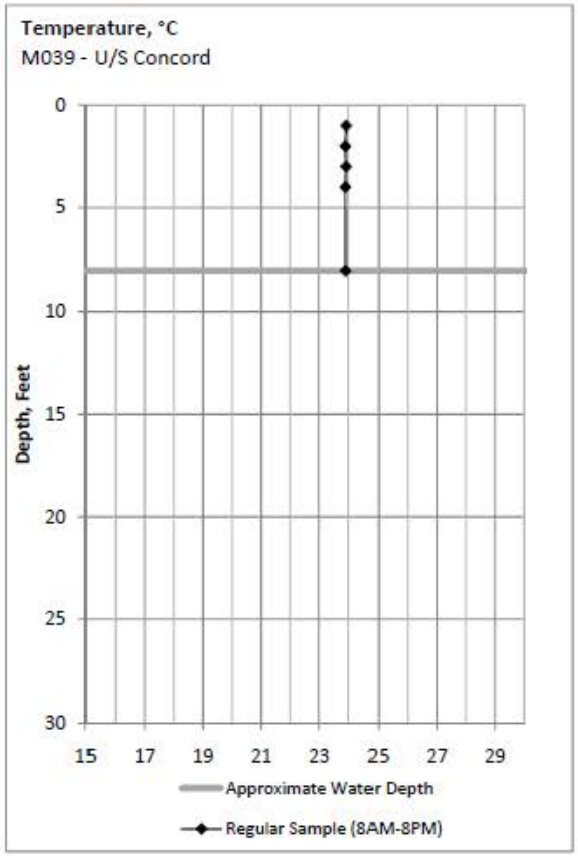




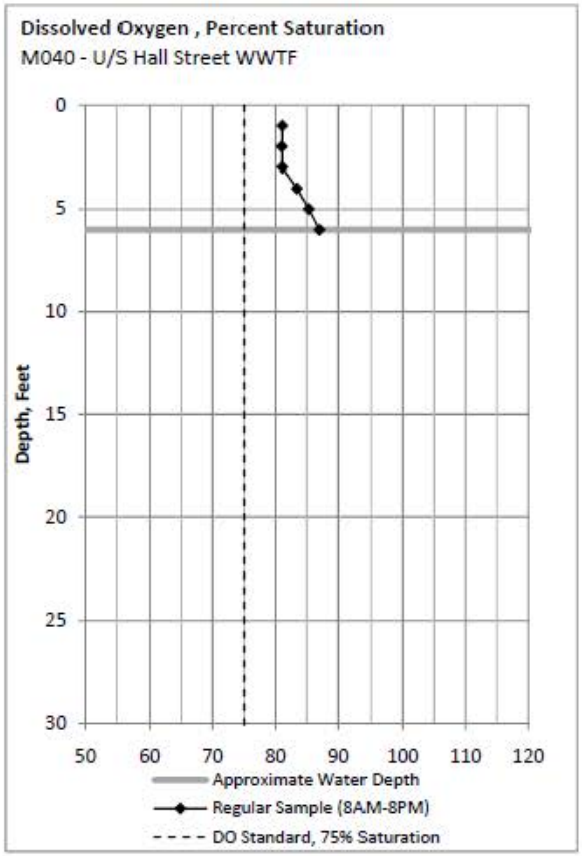
M039 - U/S Concord

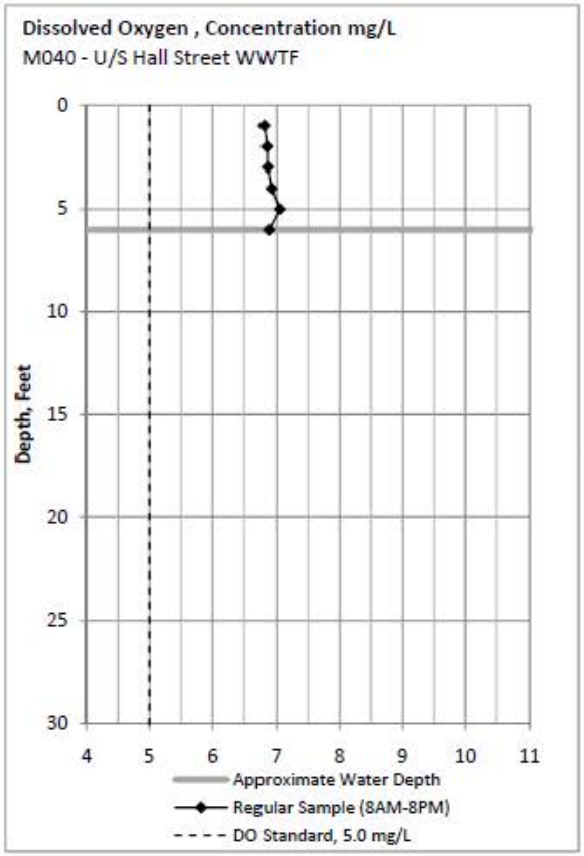


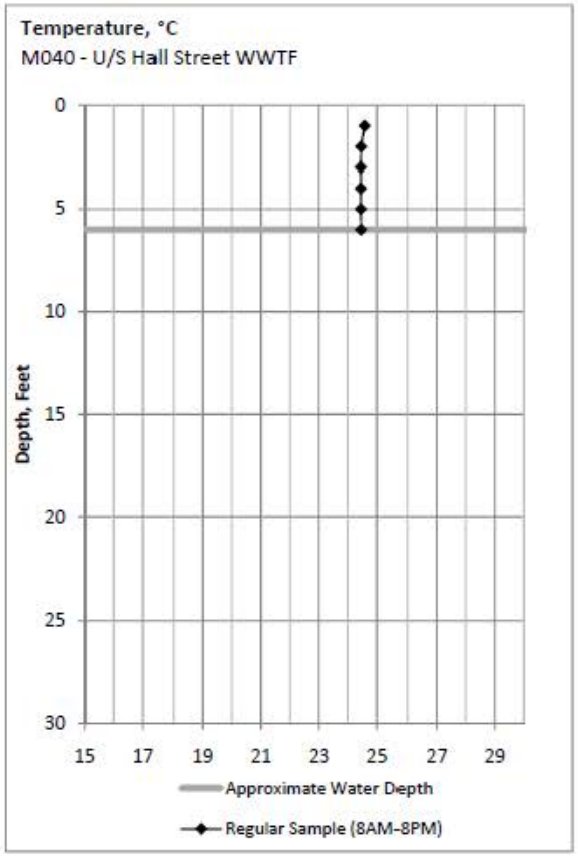




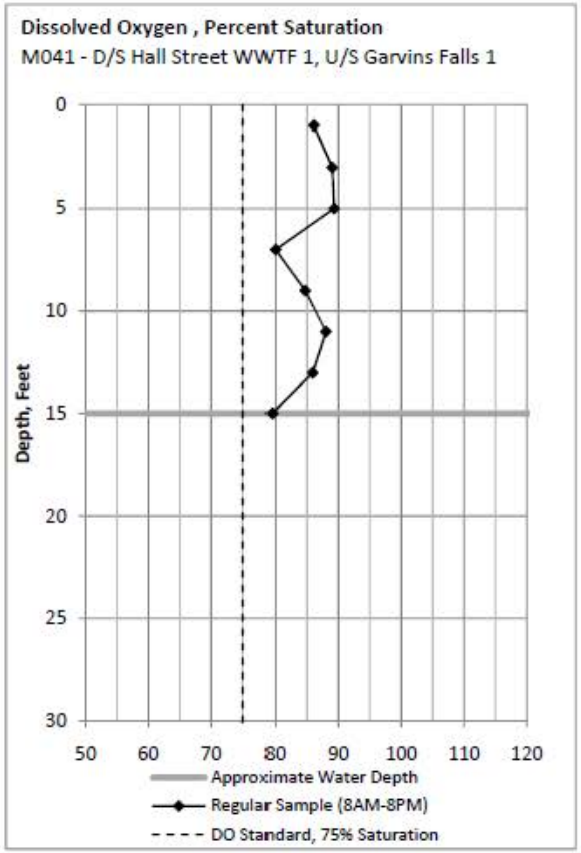
M040 - U/S Hall Street WWTF

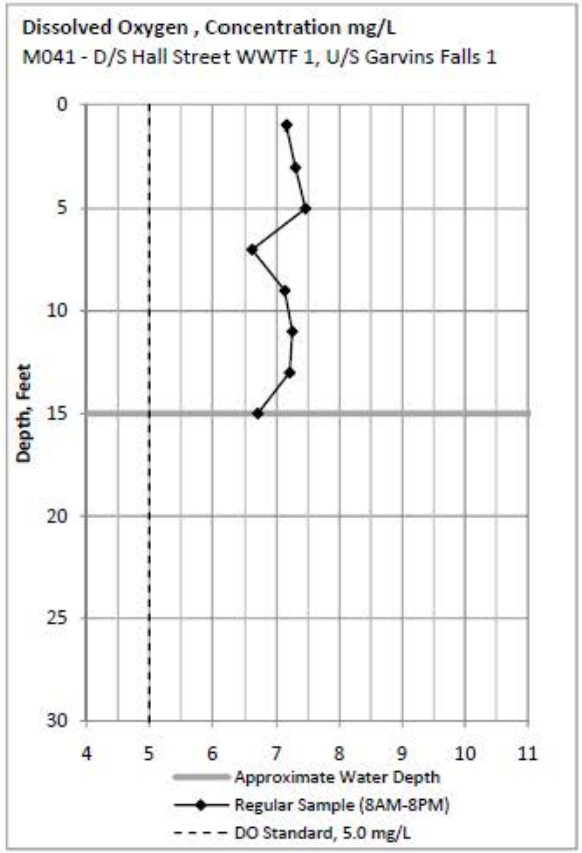


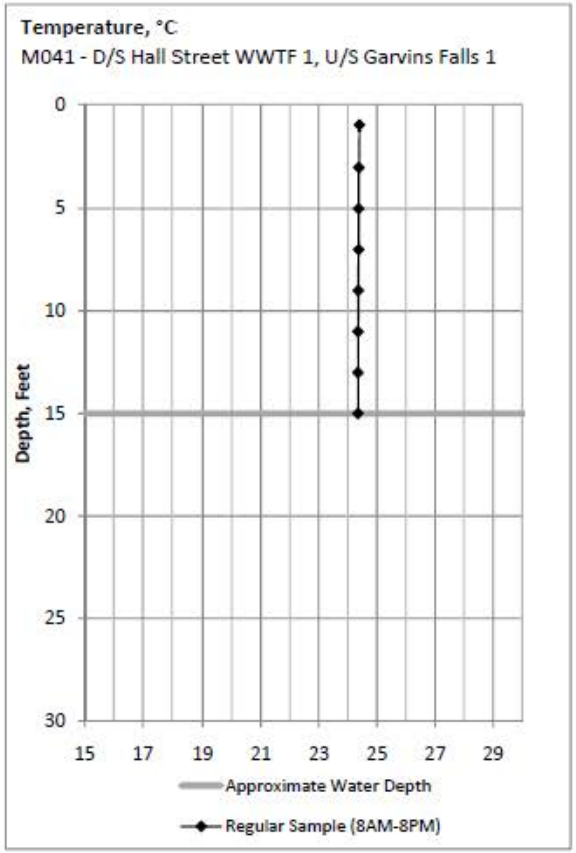




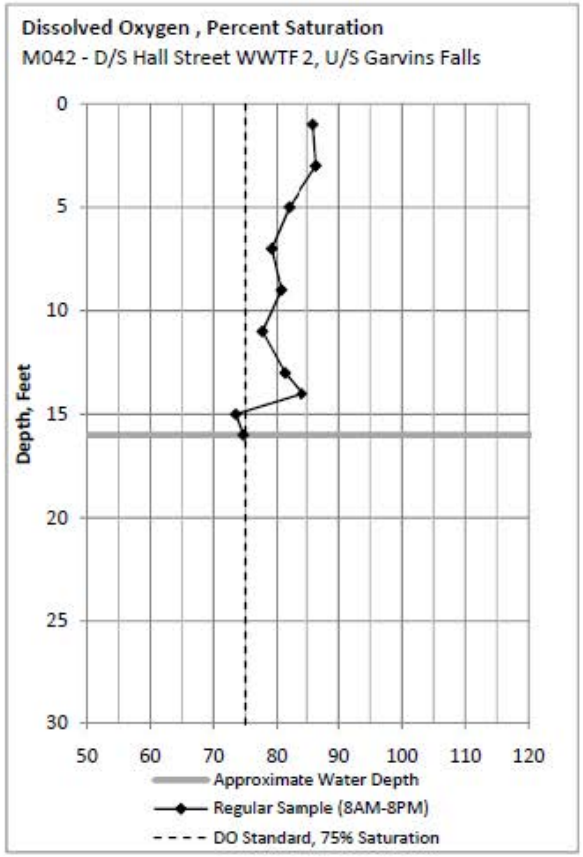
M041 - D/S Hall Street WWTF 1, U/S Garvins Falls 1

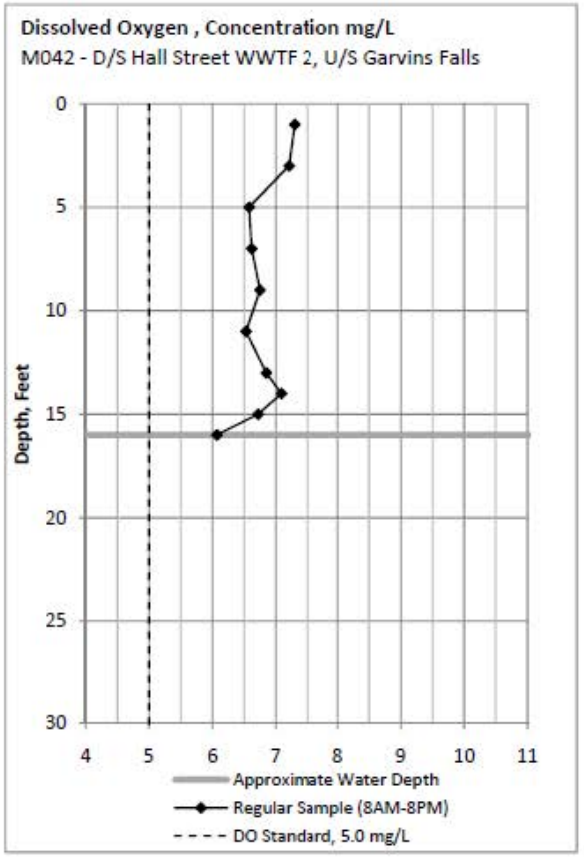


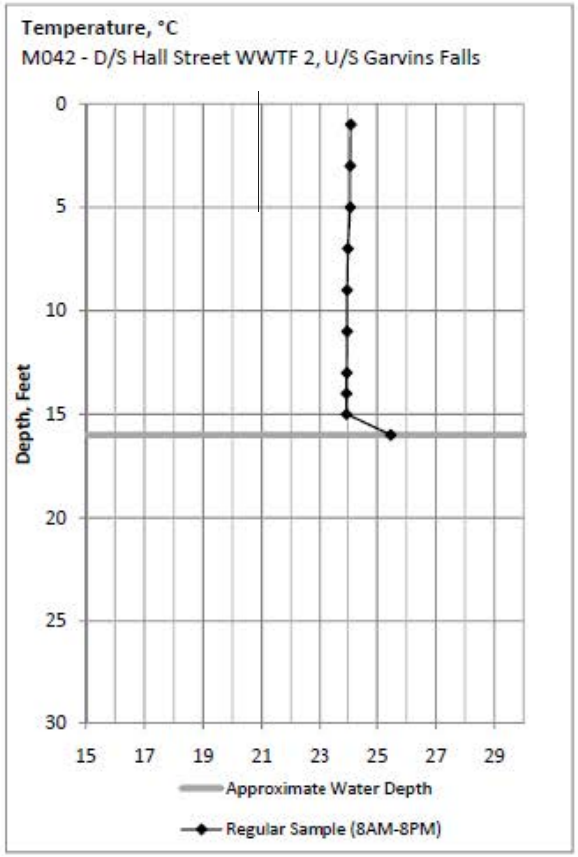




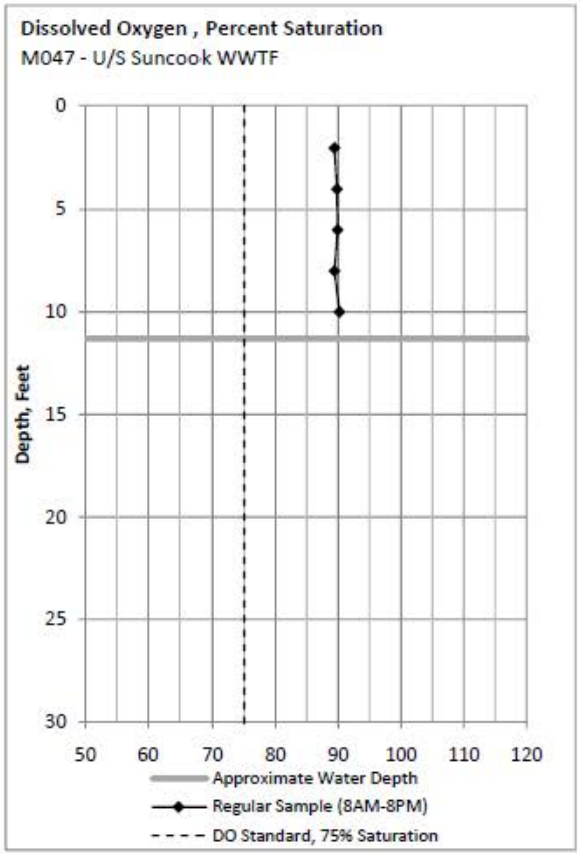
M042 - D/S Hall Street WWTF 2, U/S Garvins Falls

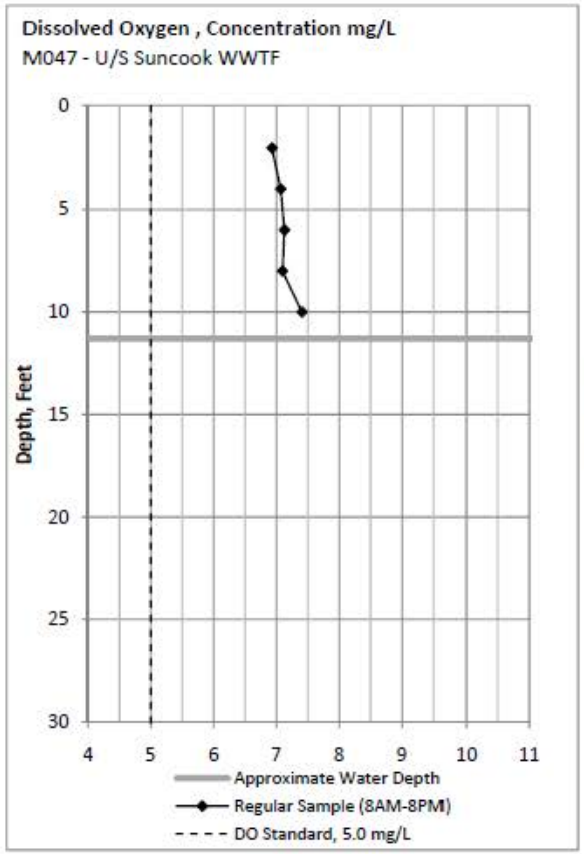


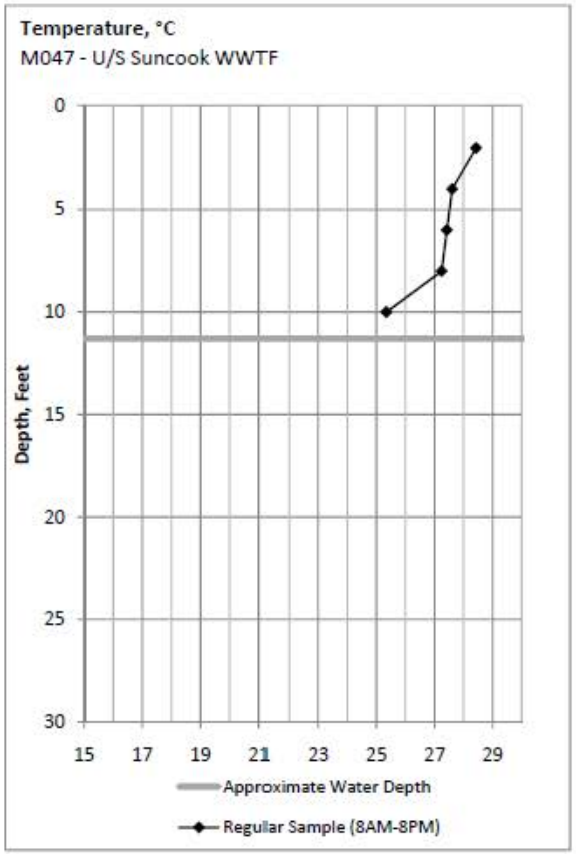




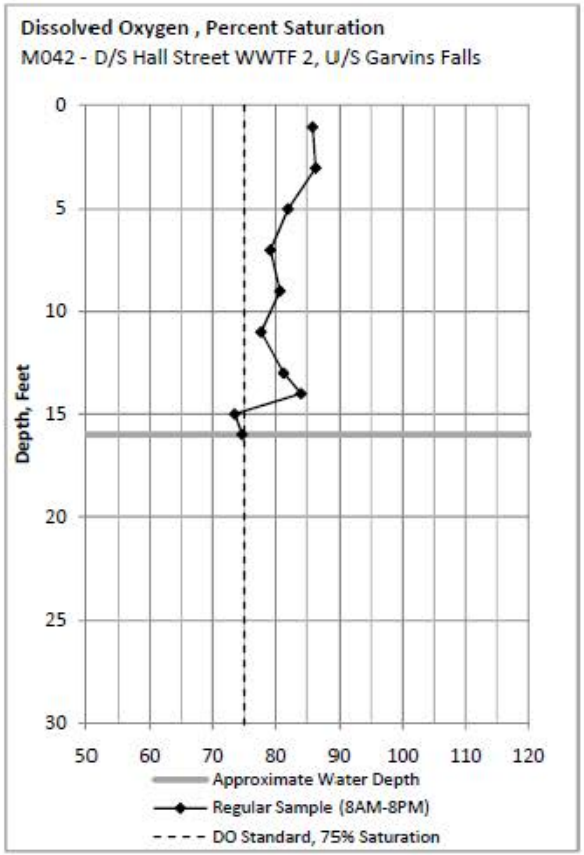
M047 - U/S Suncook WWTF

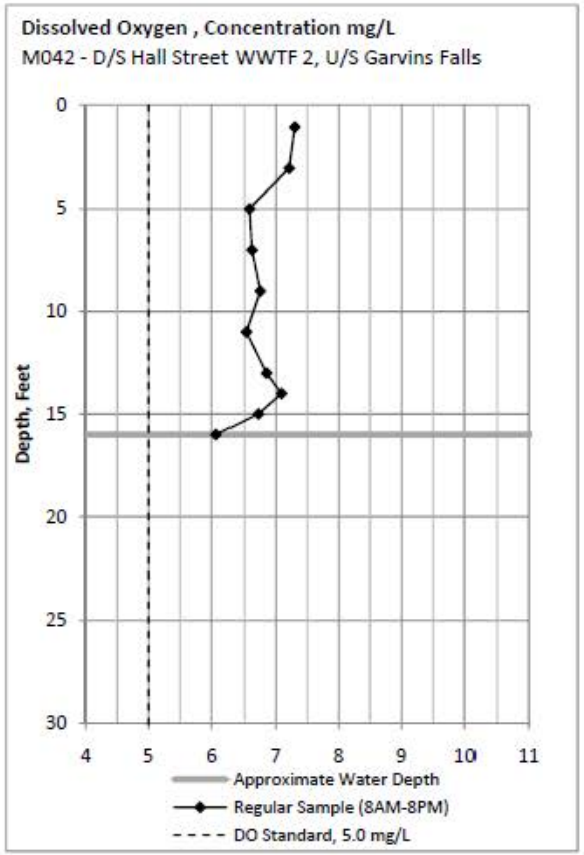


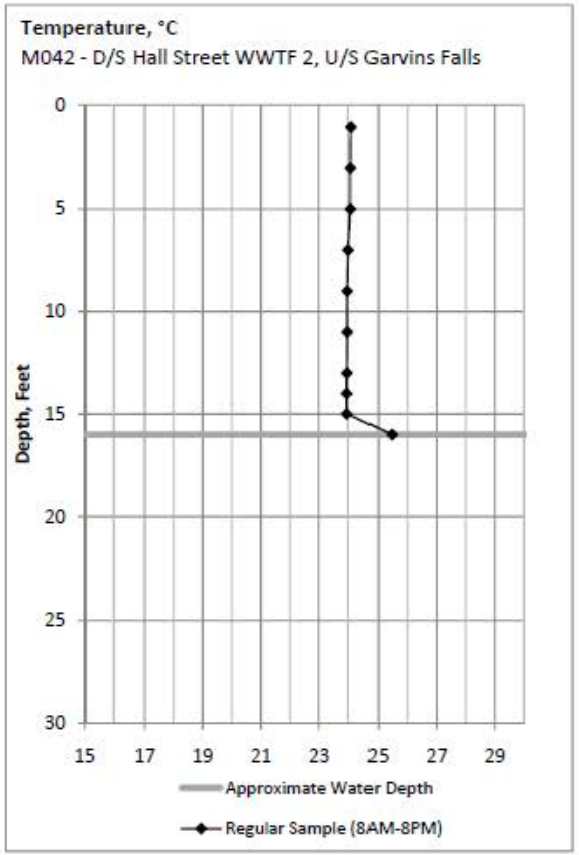




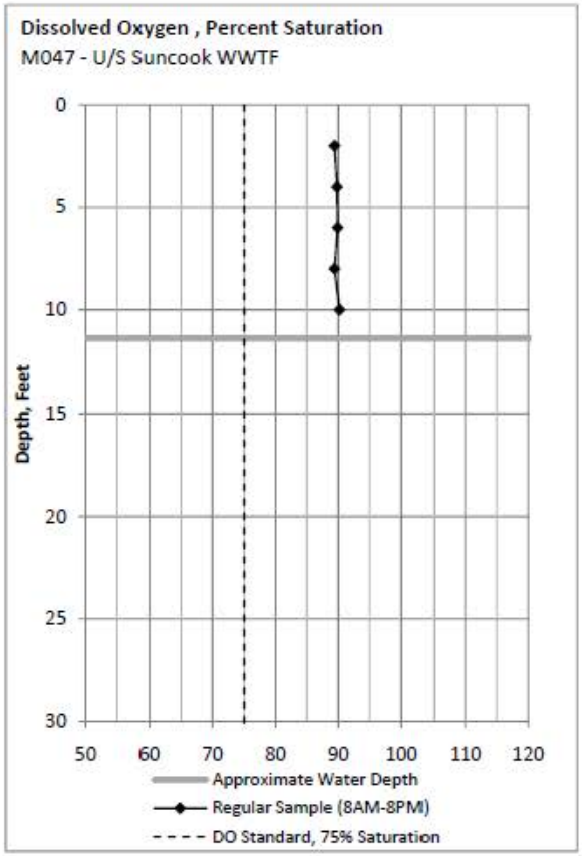
M042 - D/S Hall Street WWTF 2, U/S Garvins Falls

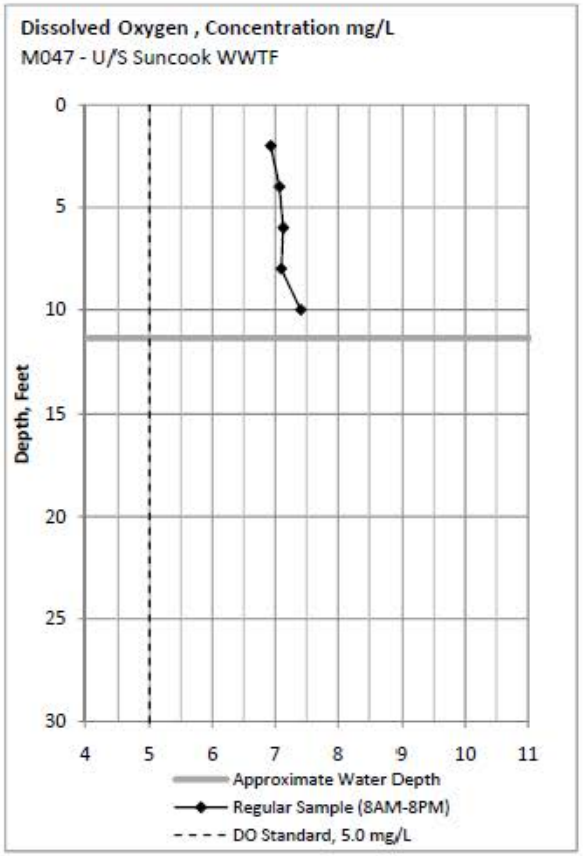


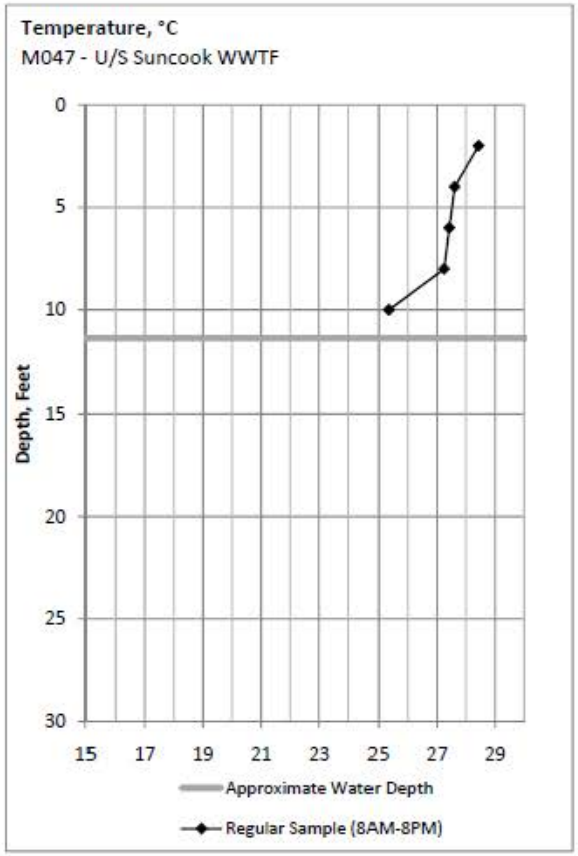




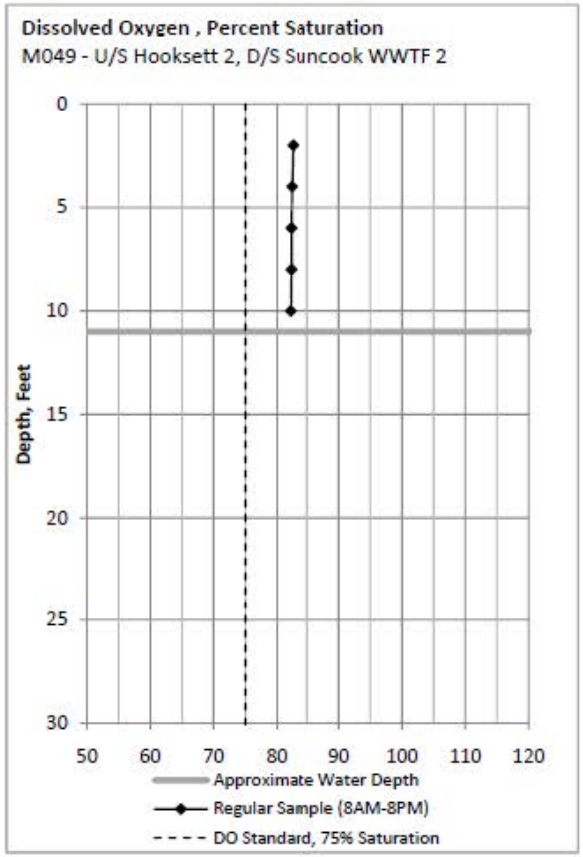
M047 - U/S Suncook WWTF

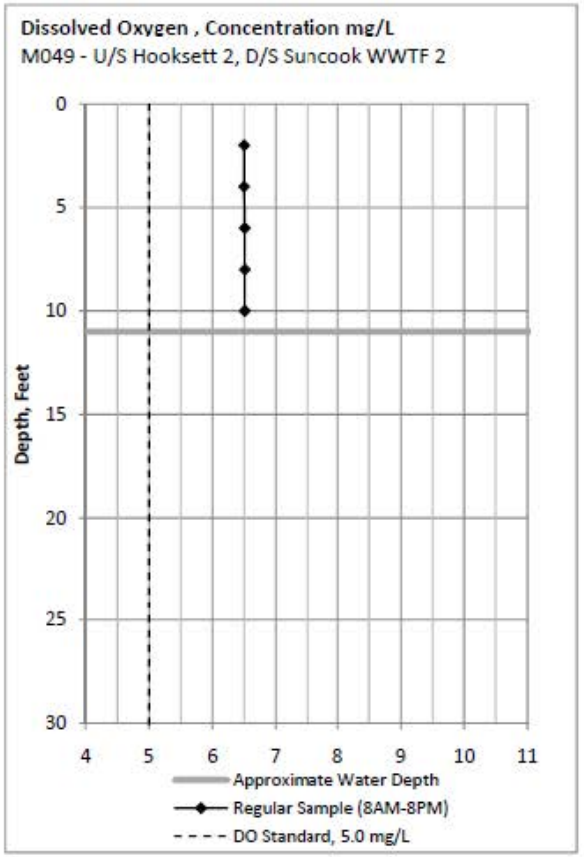


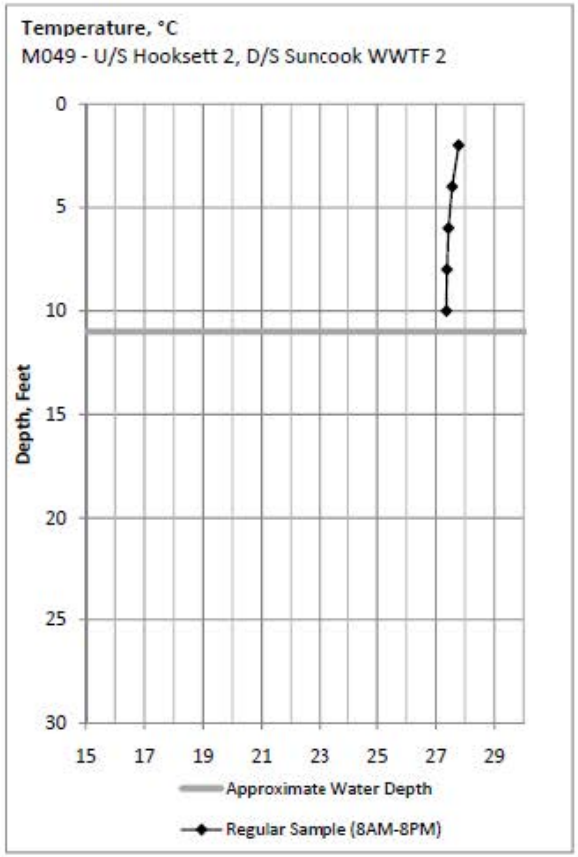




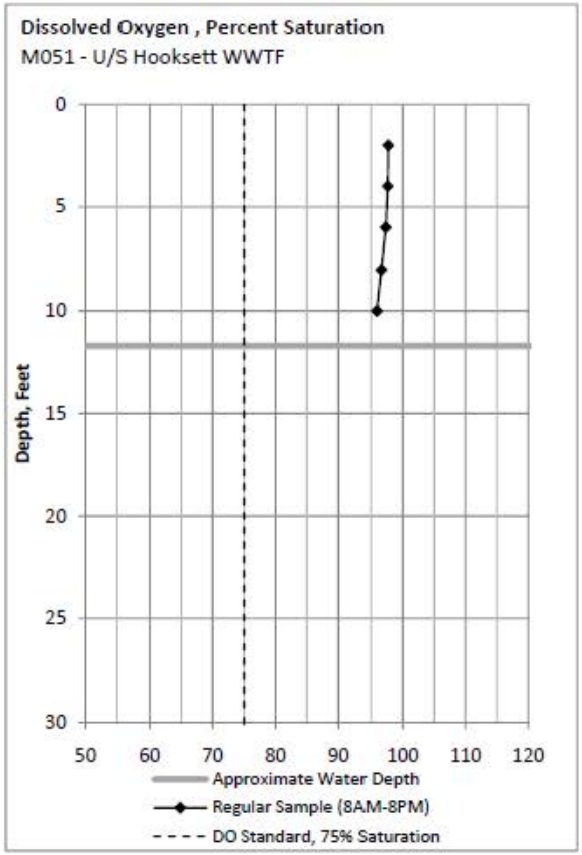
M049 - U/S Hooksett 2, D/S Suncook WWTF 2

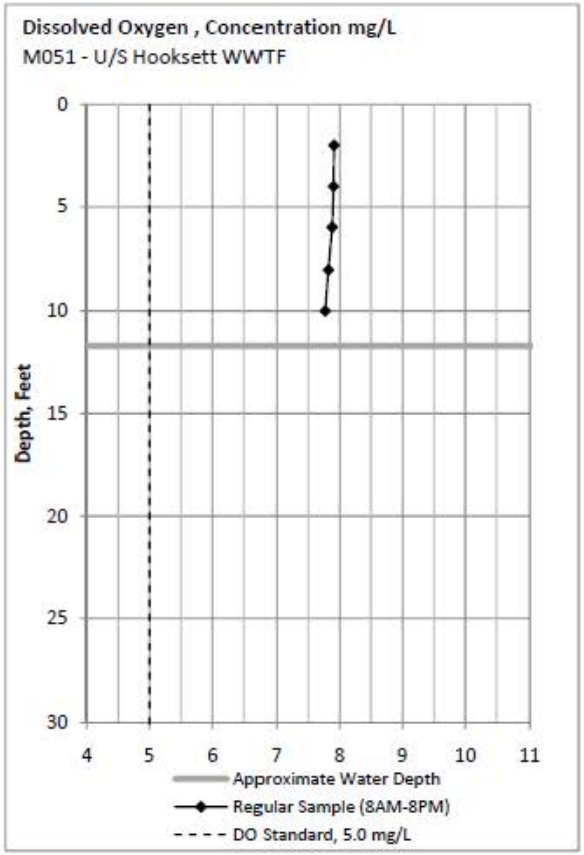


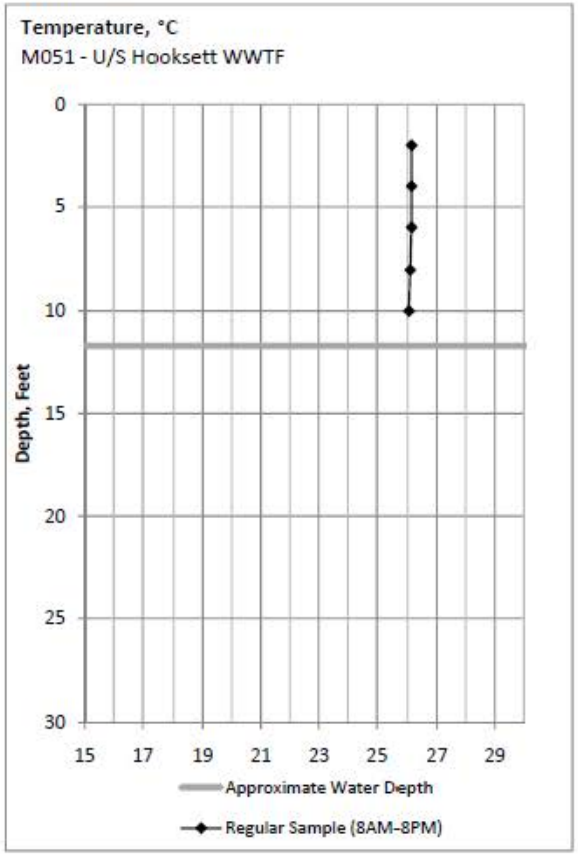




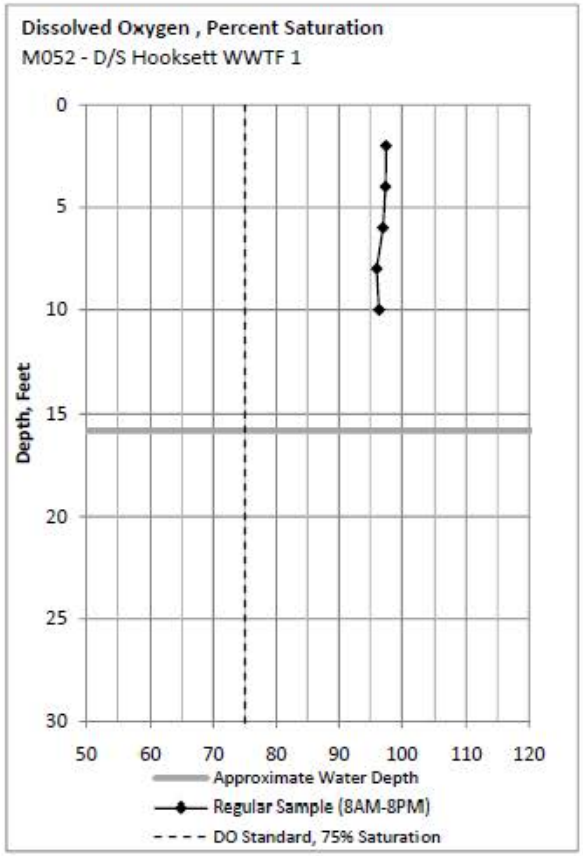
M051 - U/S Hooksett WWTF

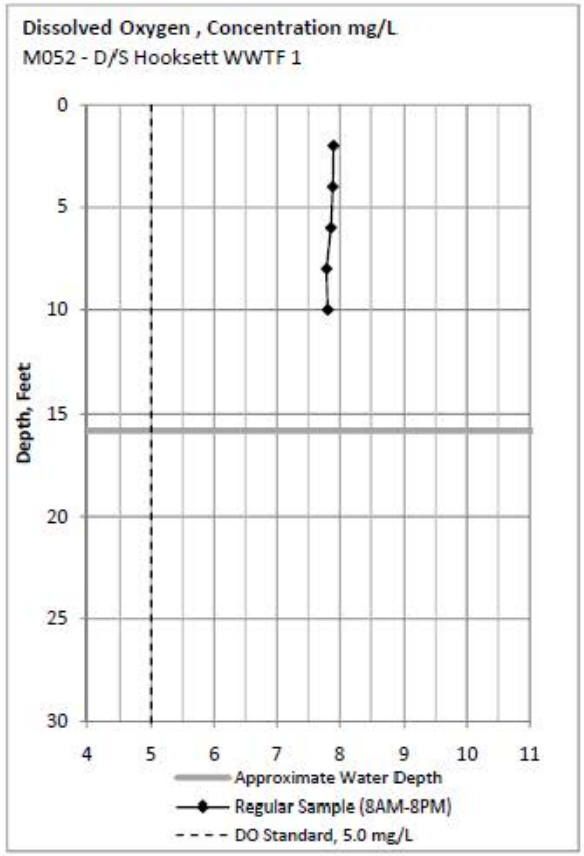


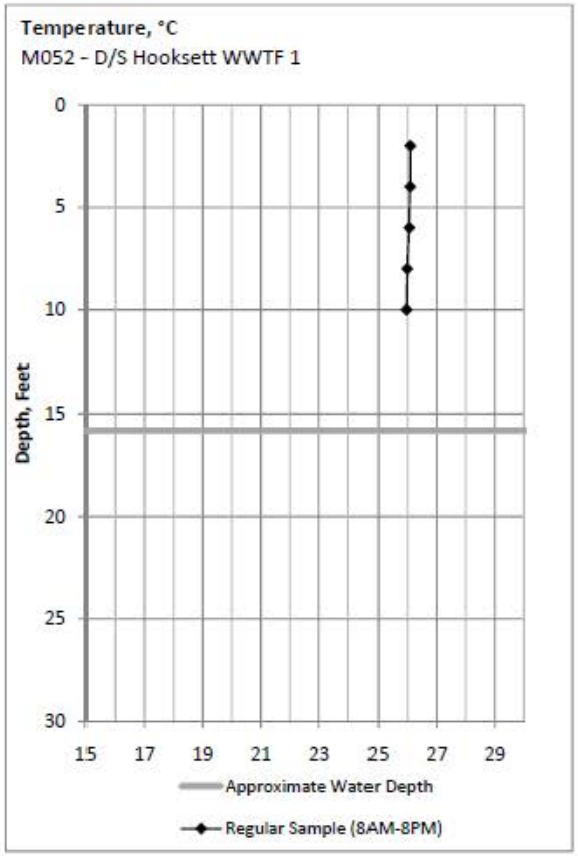




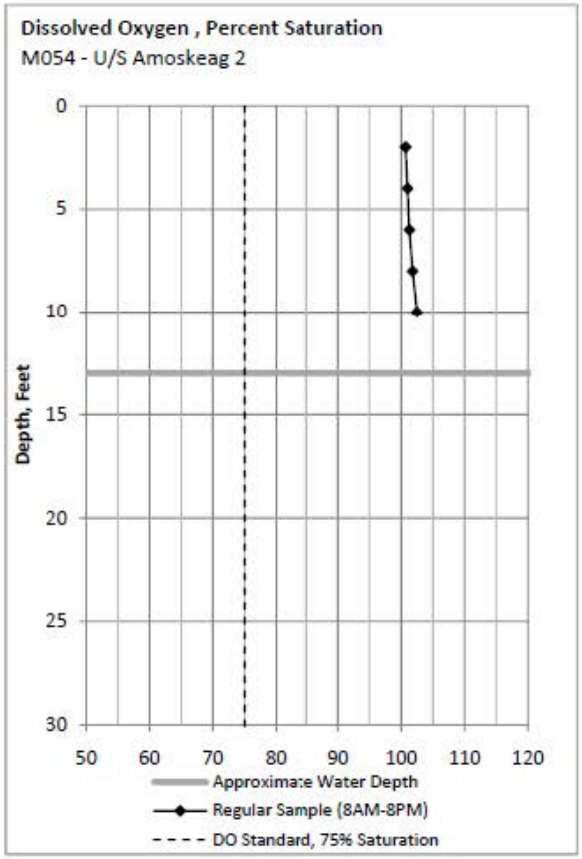
M052 - D/S Hooksett WWTF 1

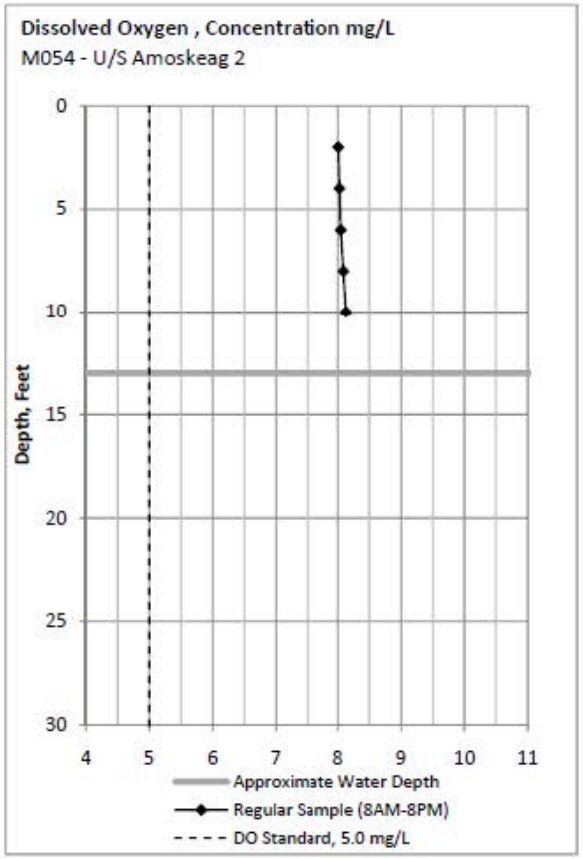


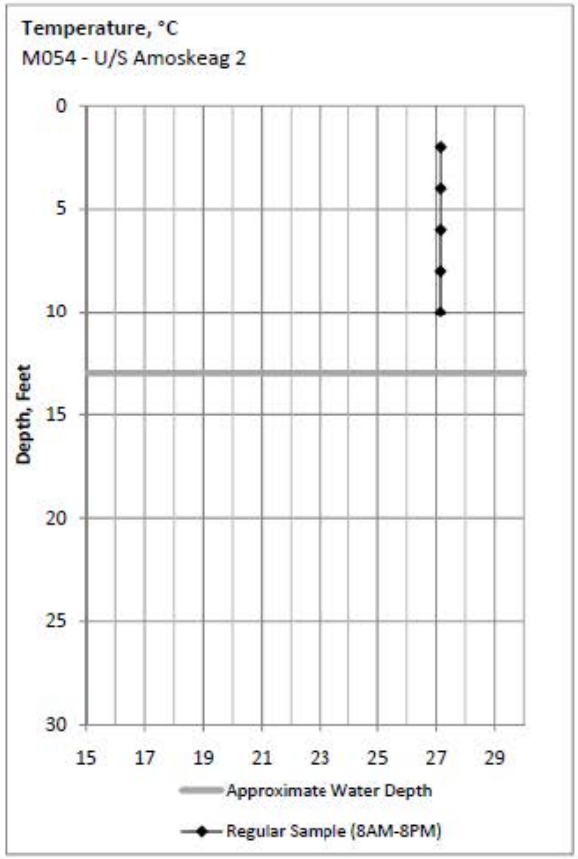




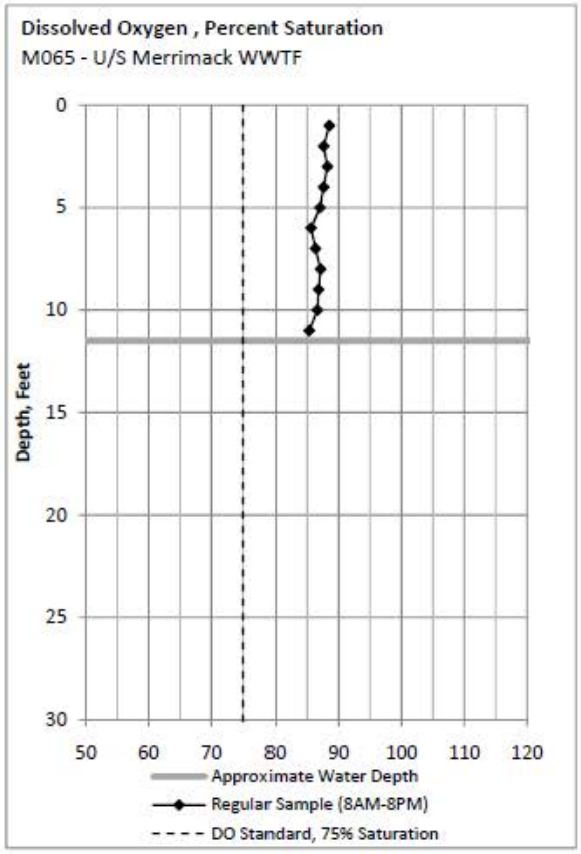
M054 - U/S Amoskeag 2

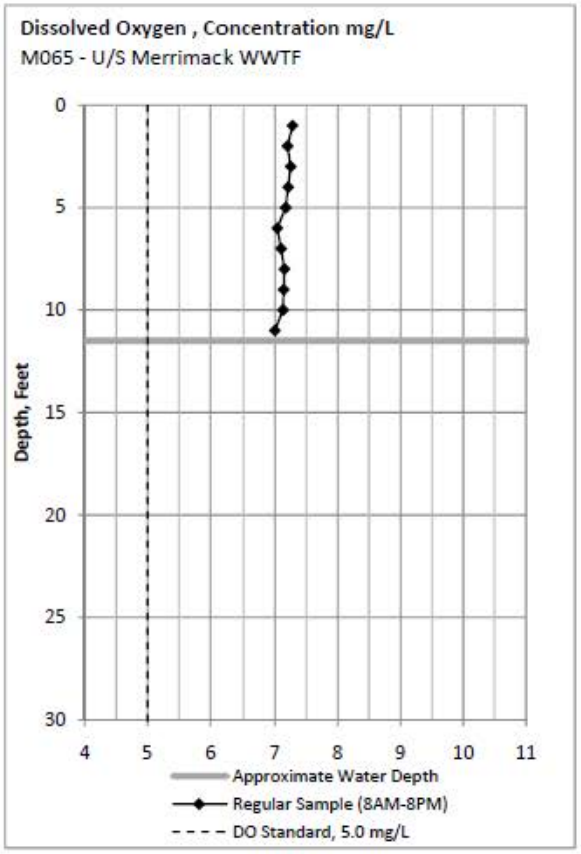


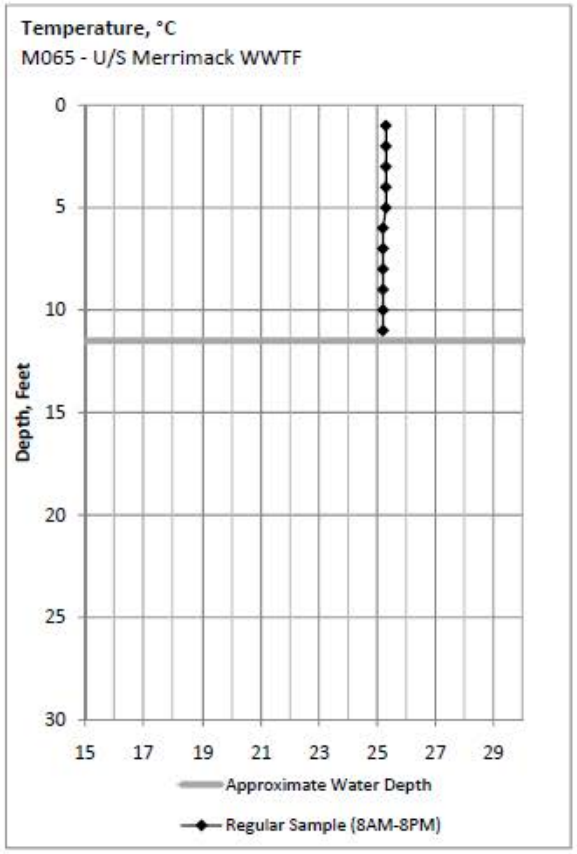




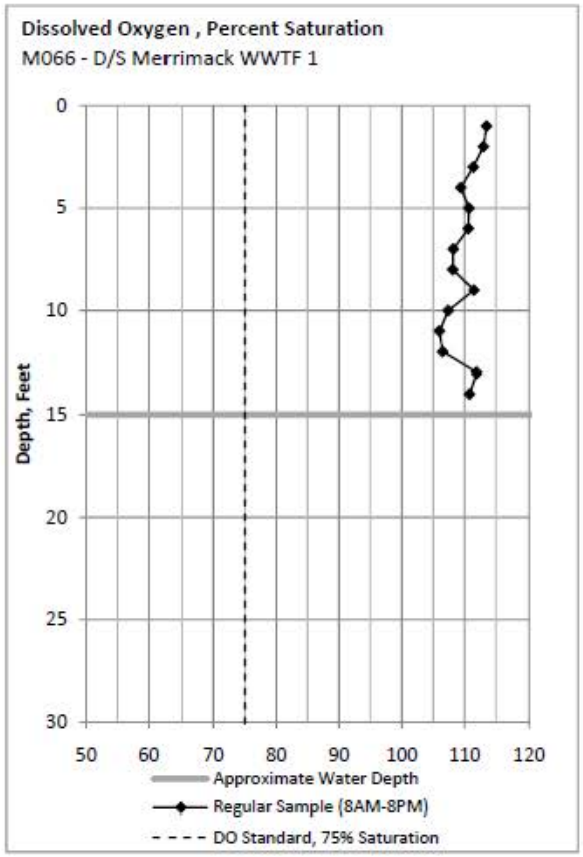
M065 - U/S Merrimack WWTF

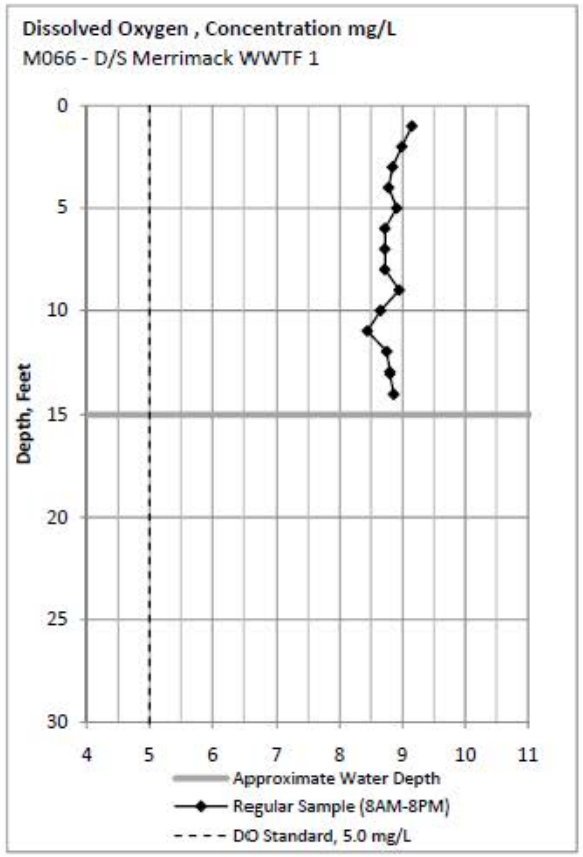


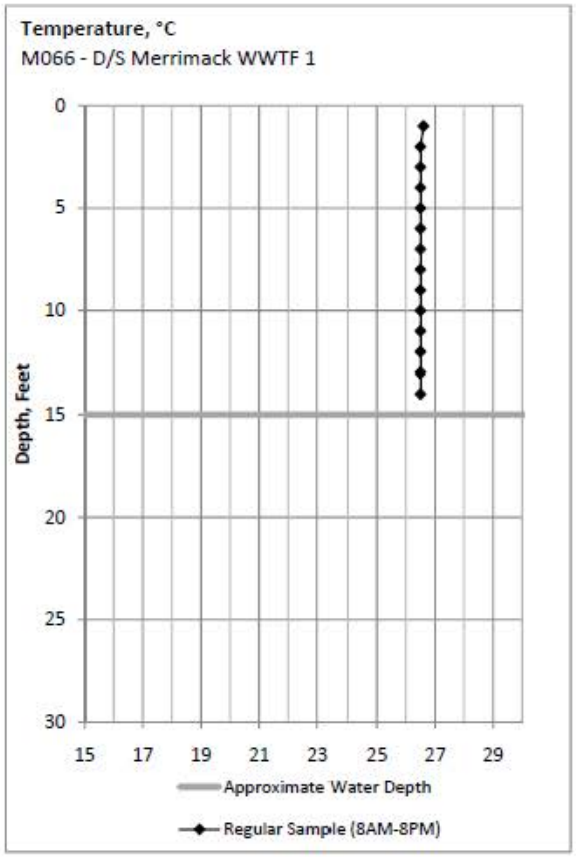




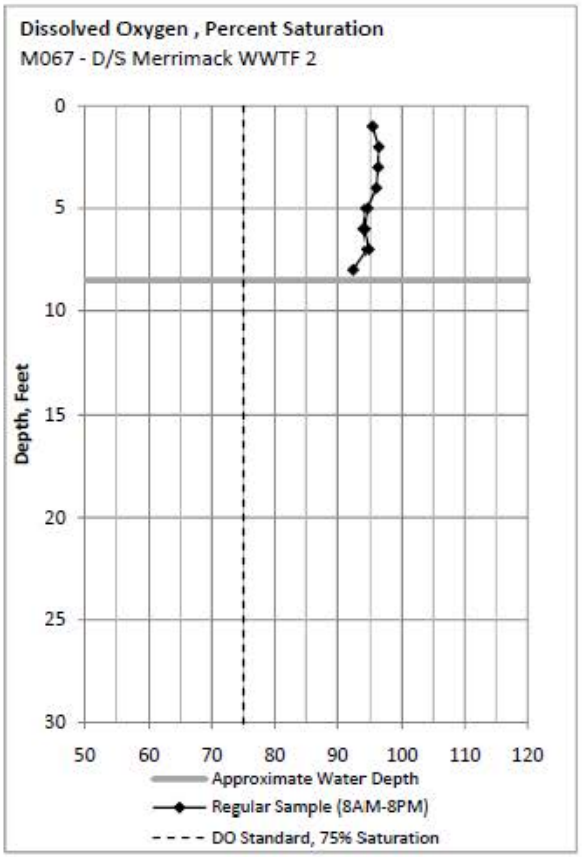
M066 - D/S Merrimack WWTF 1

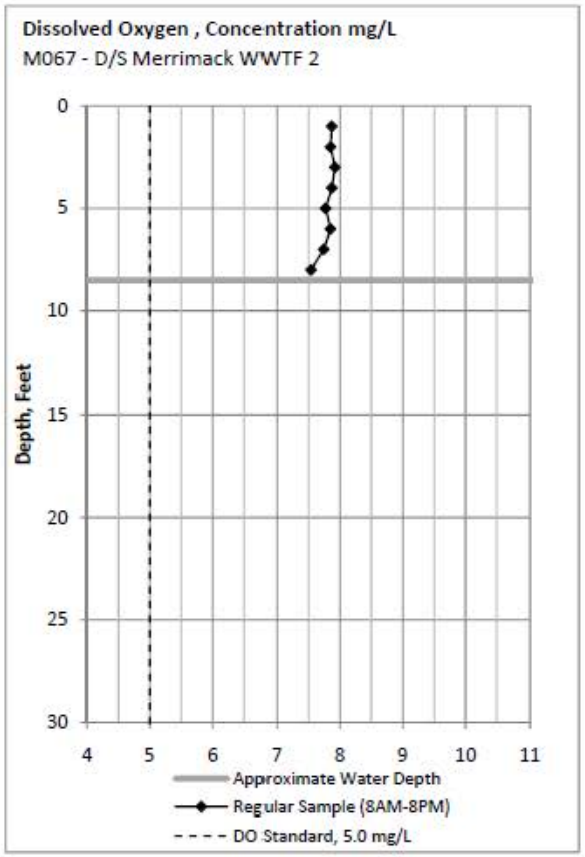


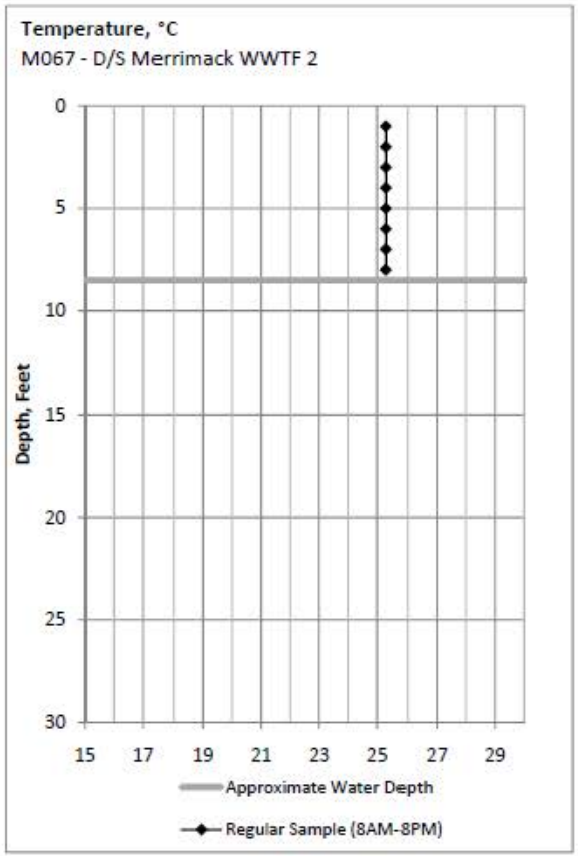




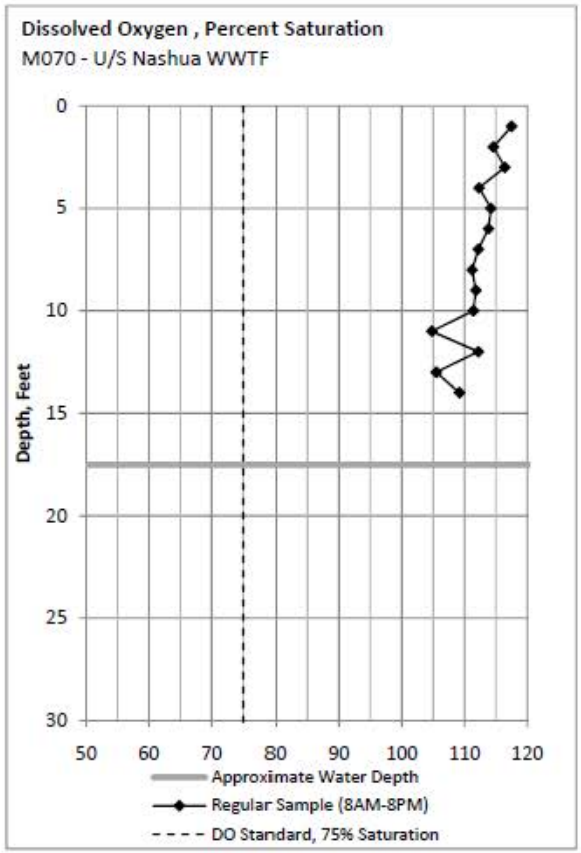
M067 - D/S Merrimack WWTF 2

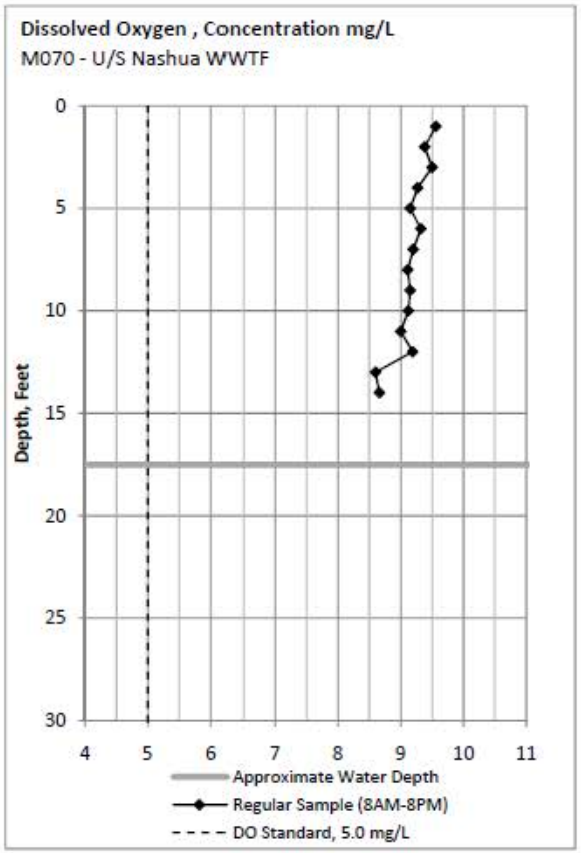


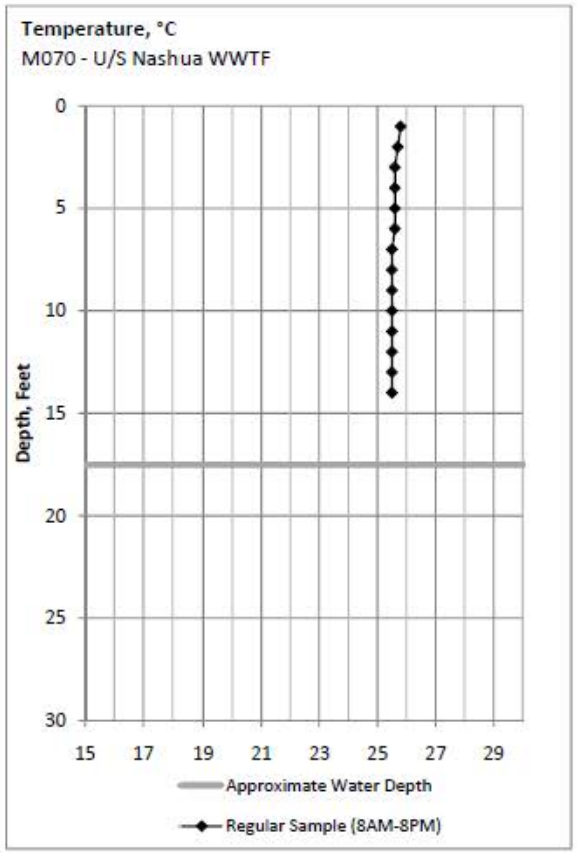




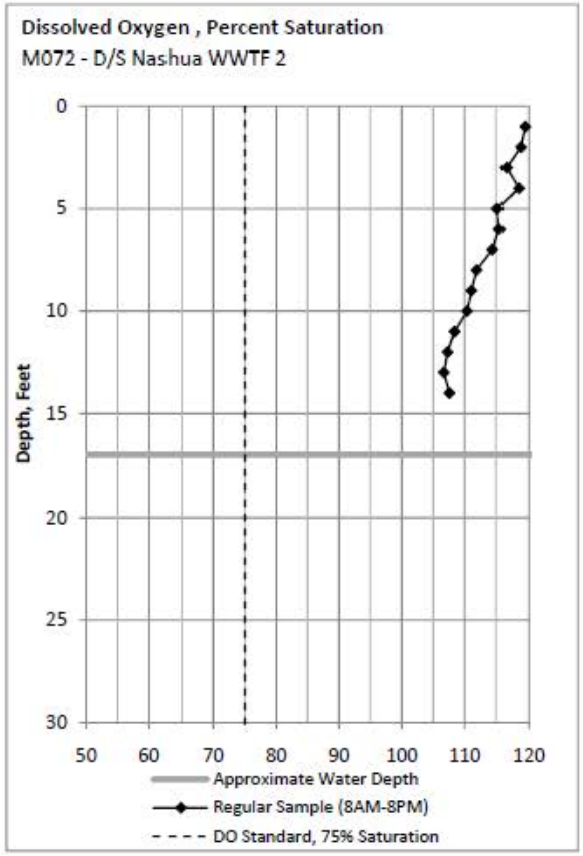
M070 - U/S Nashua WWTF

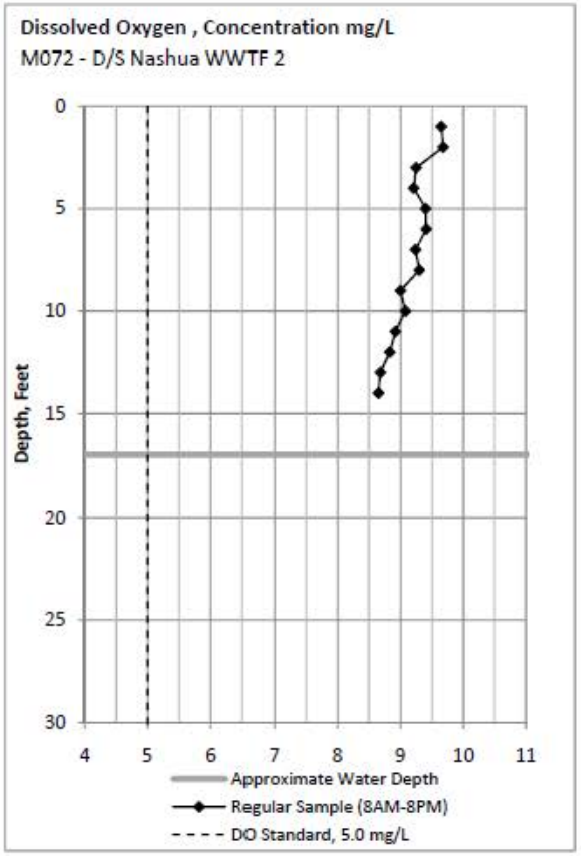


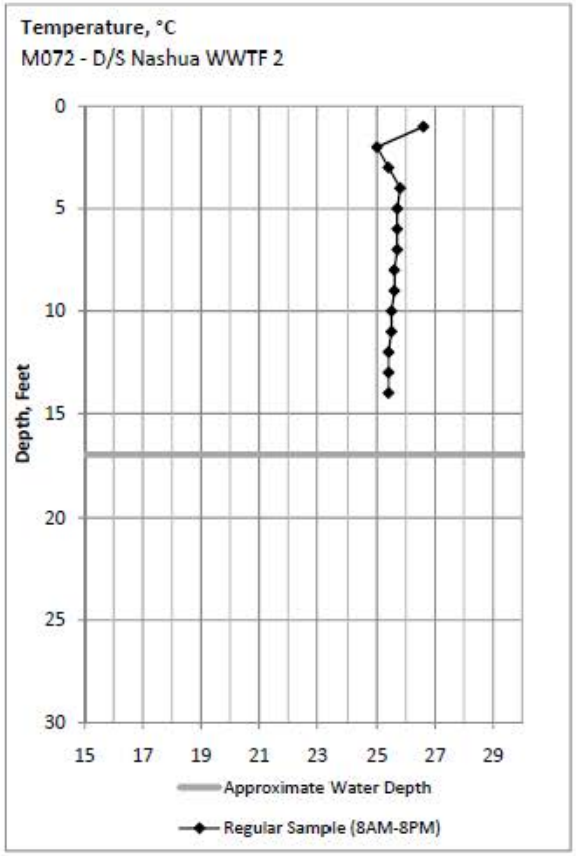




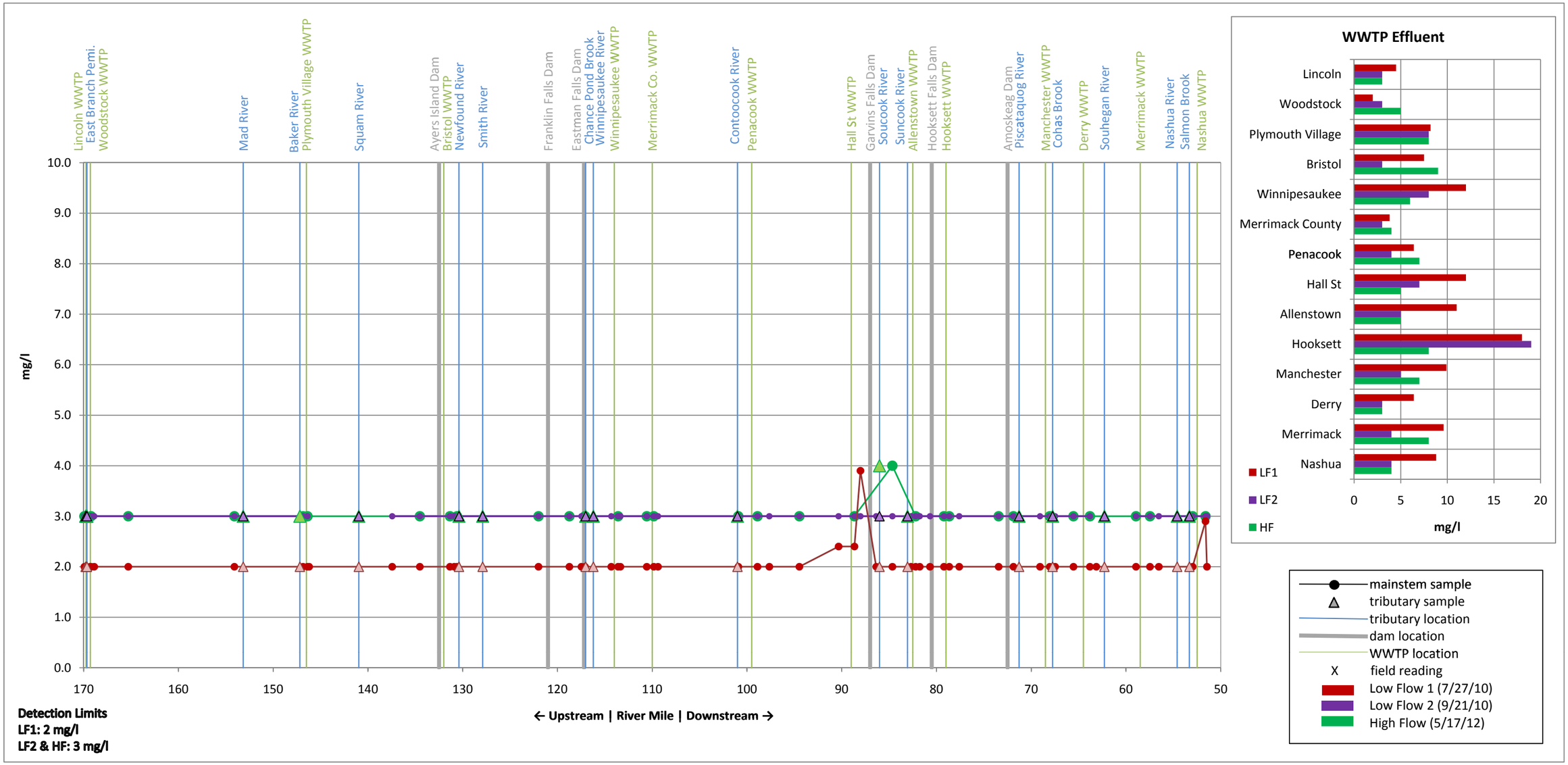
M072 - D/S Nashua WWTF 2





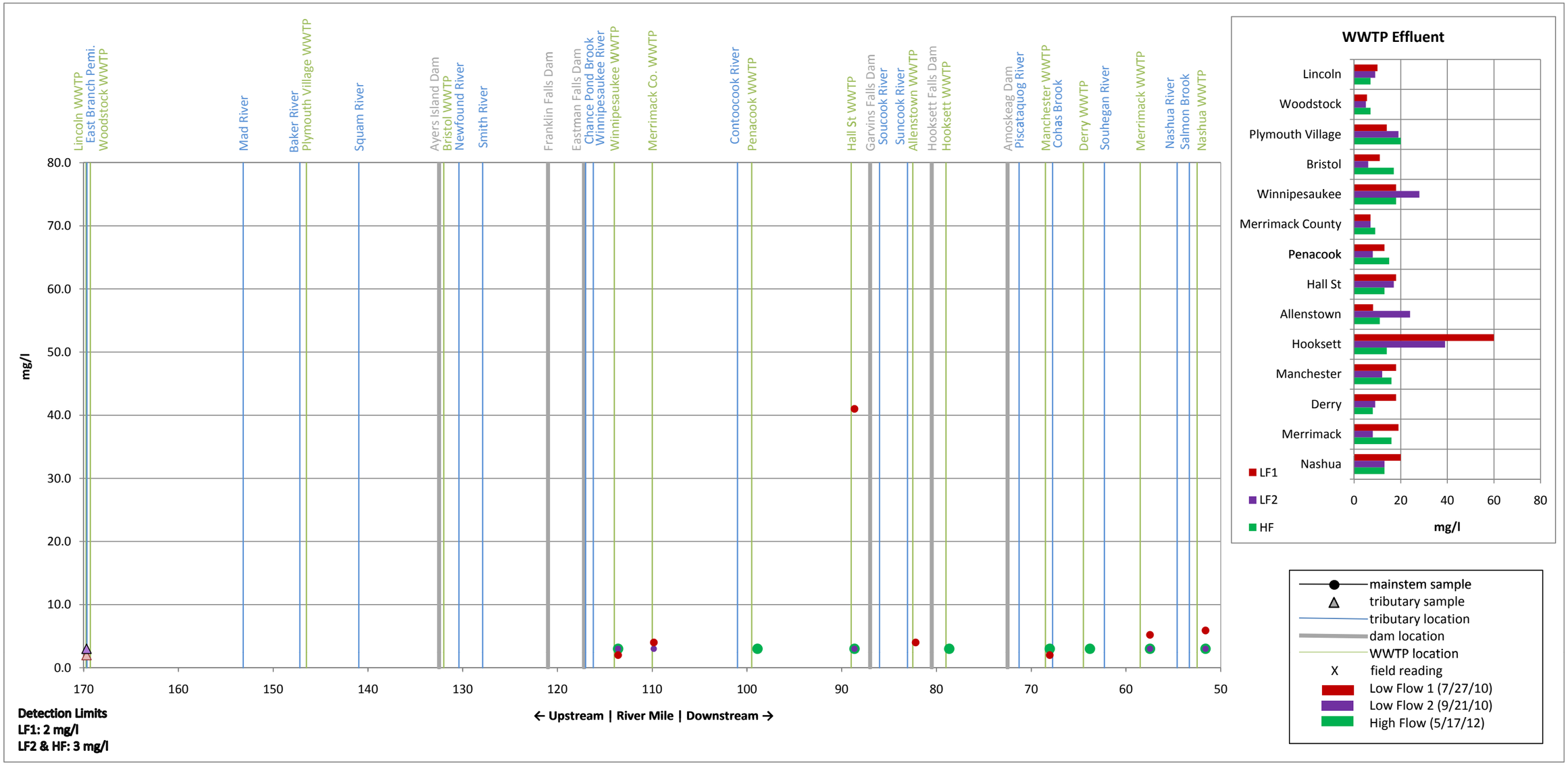


' Water Quality Results
Mainstem, Tributary, and WWTP Effluent Samples
CBOD 5

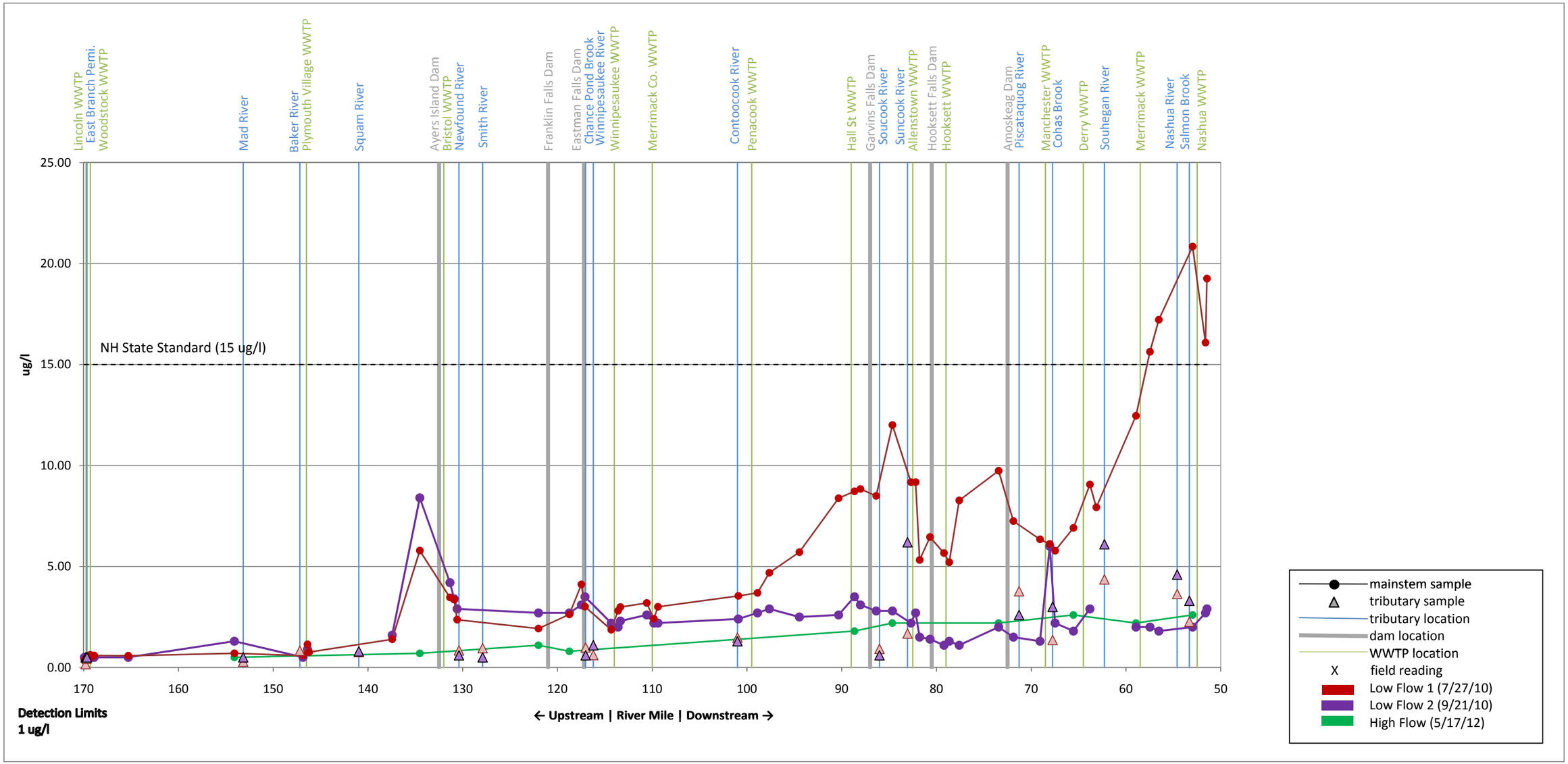


Detection Limits
LF1: 2 mg/l
LF2 & HF: 3 mg/l

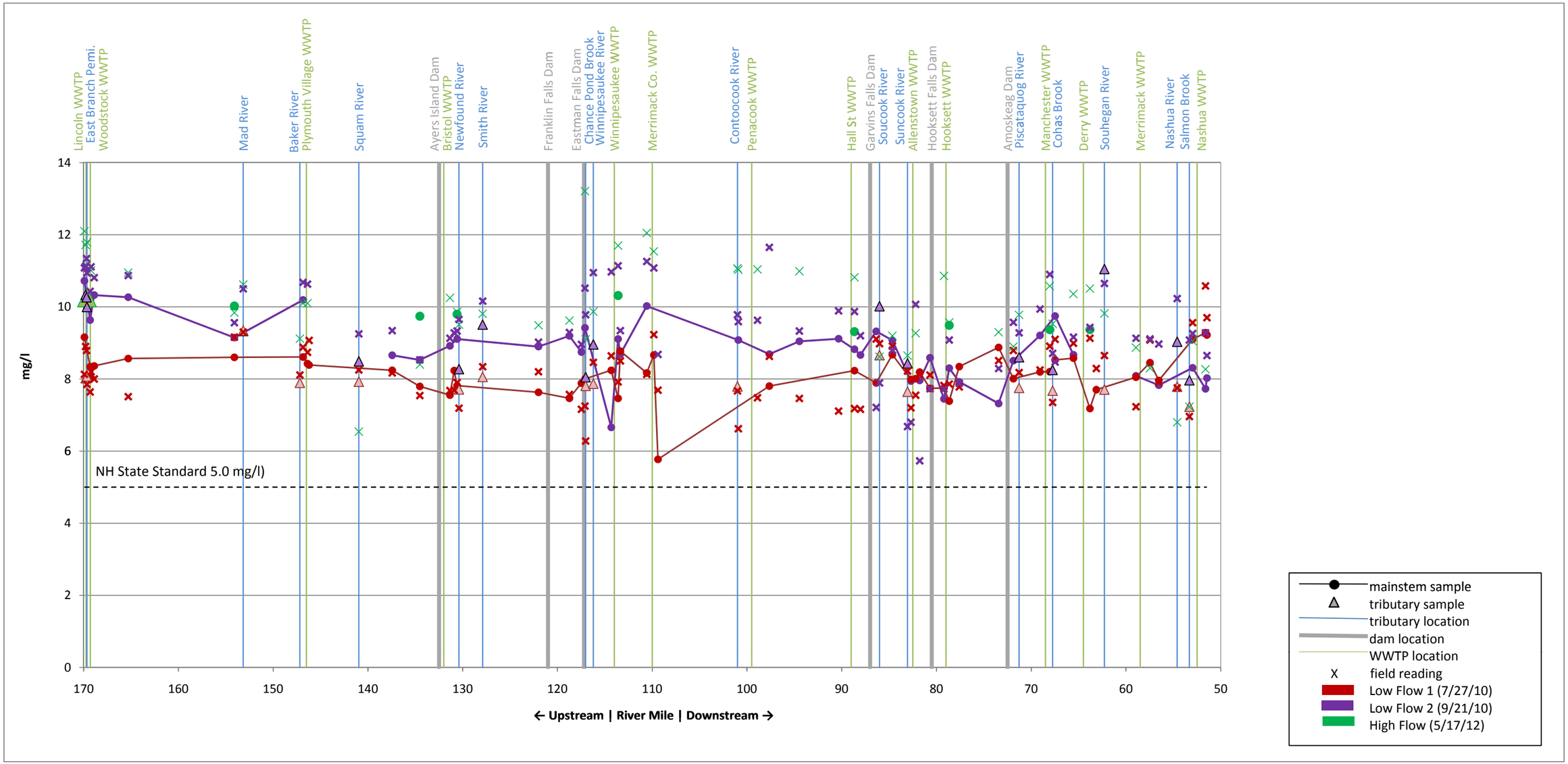
Water Quality Results
Mainstem, Tributary, and WWTP Effluent Samples
CBOD 20



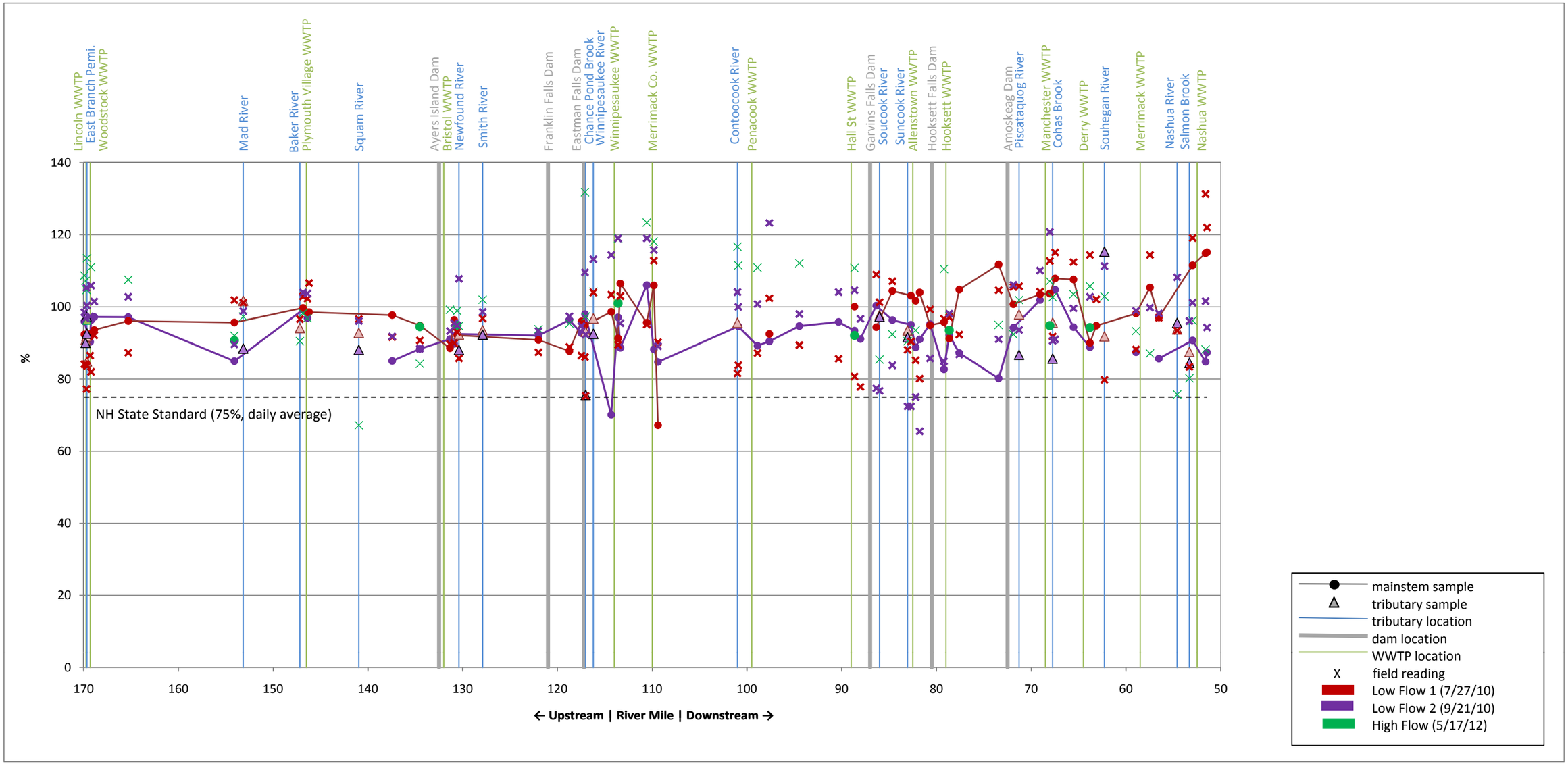
Water Quality Results
Mainstem, Tributary, and WWTP Effluent Samples
Chlorophyll-a



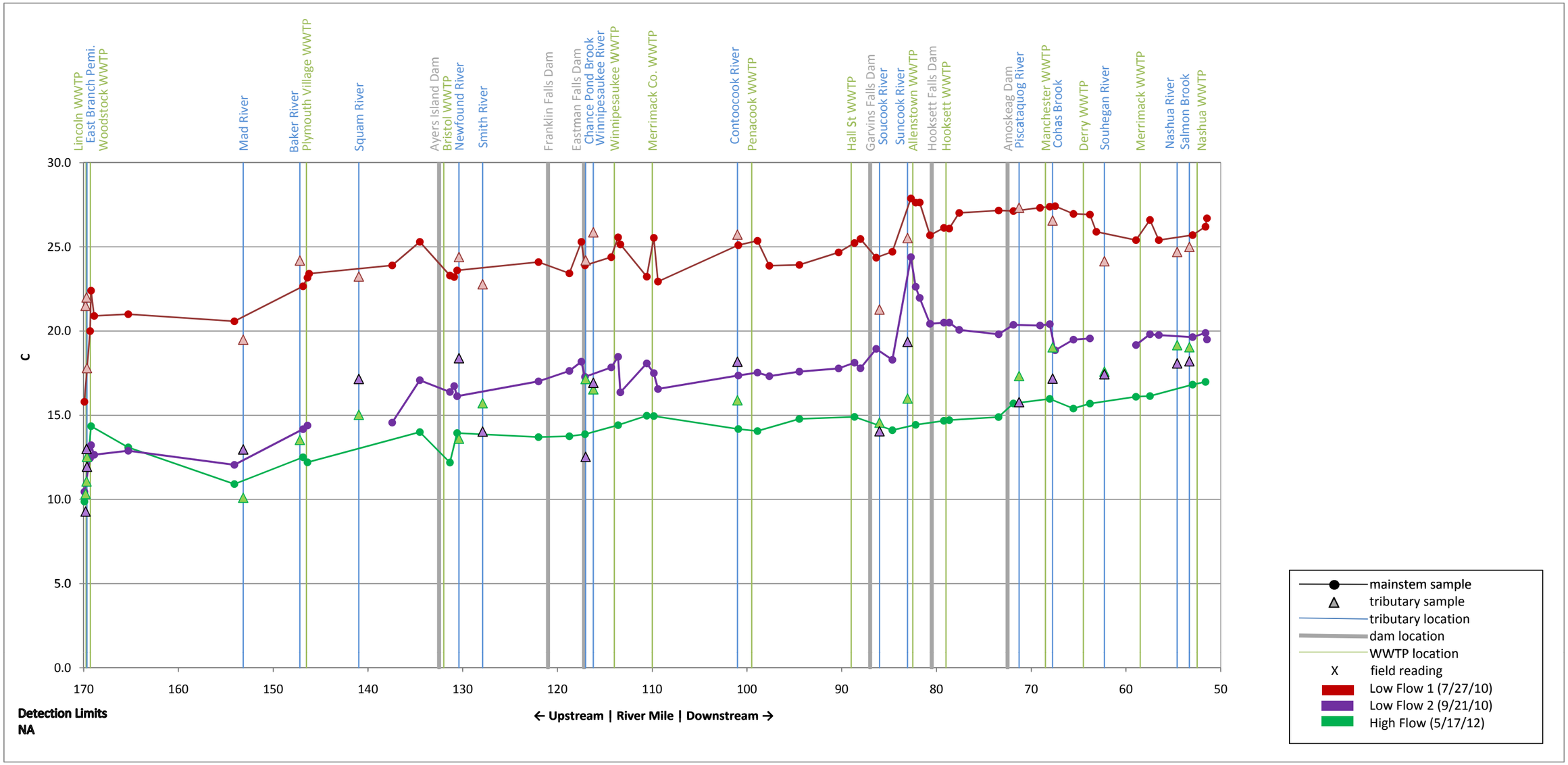
Low Flow Event Water Quality Results
Mainstem, Tributary, and WWTP Effluent Samples
Dissolved Oxygen Concentration



Water Quality Results
Mainstem, Tributary, and WWTP Effluent Samples
Dissolved Oxygen Percent Saturation

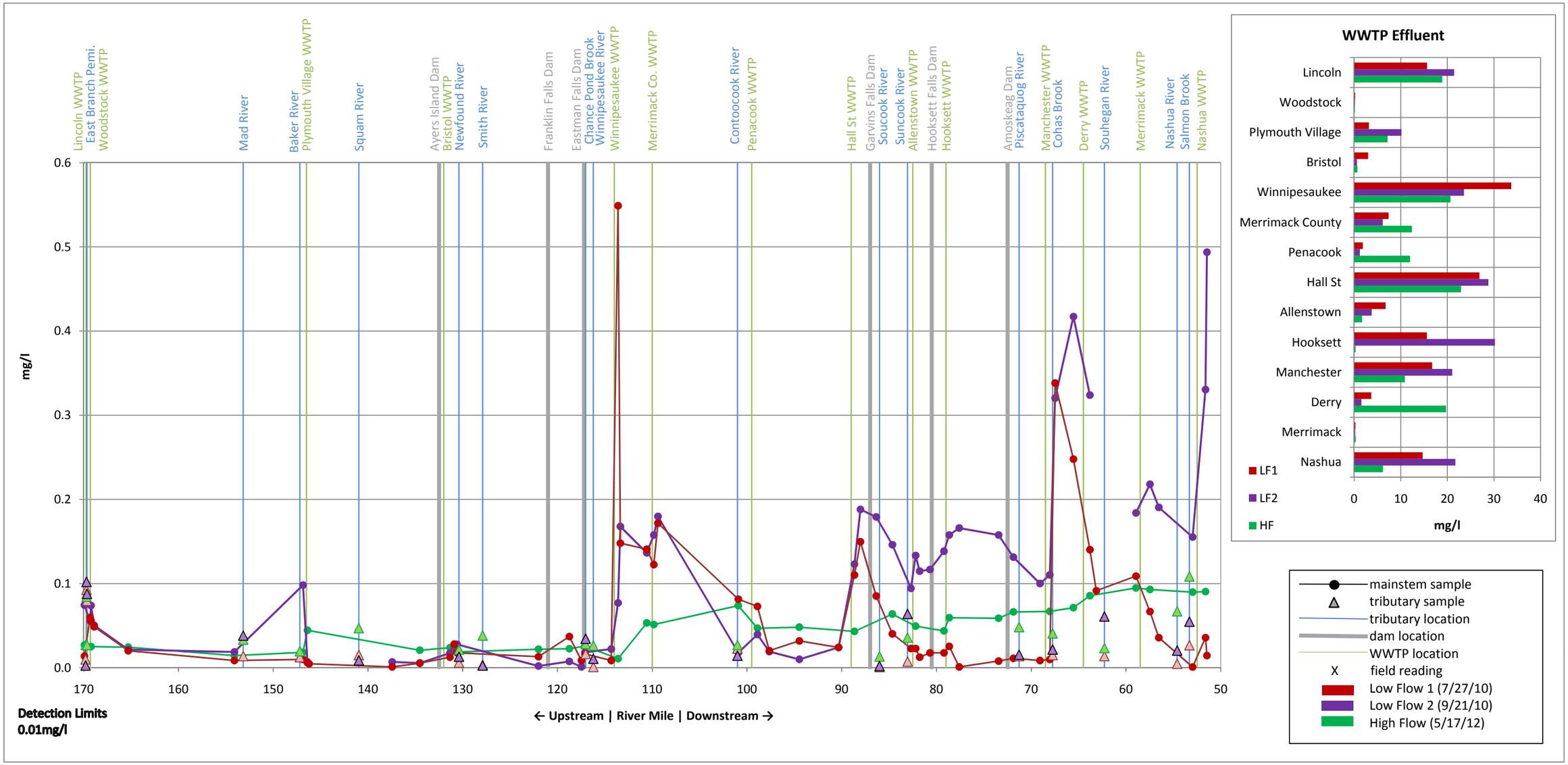


Water Quality Results
Mainstem, Tributary, and WWTP Effluent Samples
Temperature

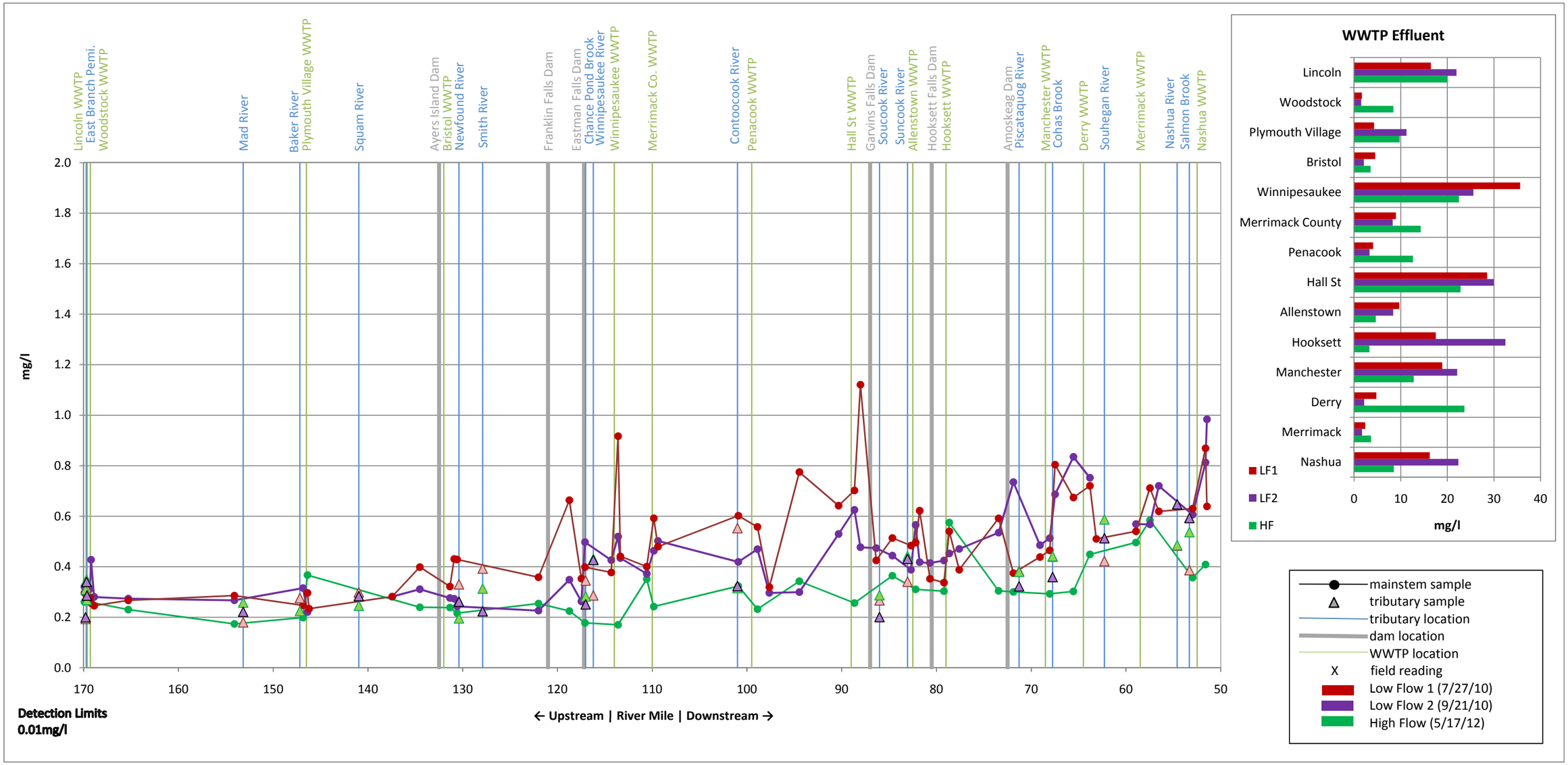


Detection Limits
NA

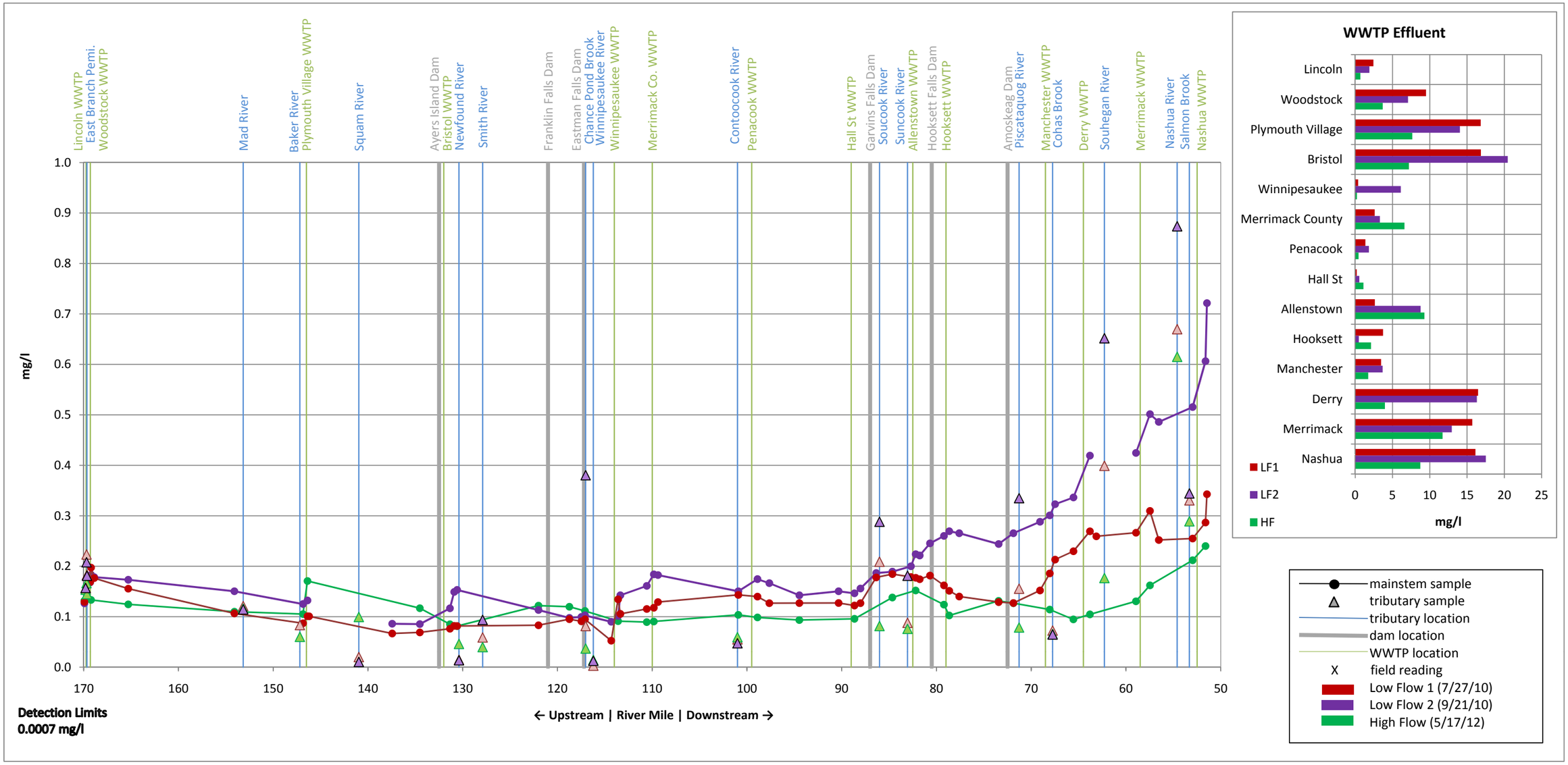
Water Quality Results
Mainstem, Tributary, and WWTP Effluent Samples
Ammonia



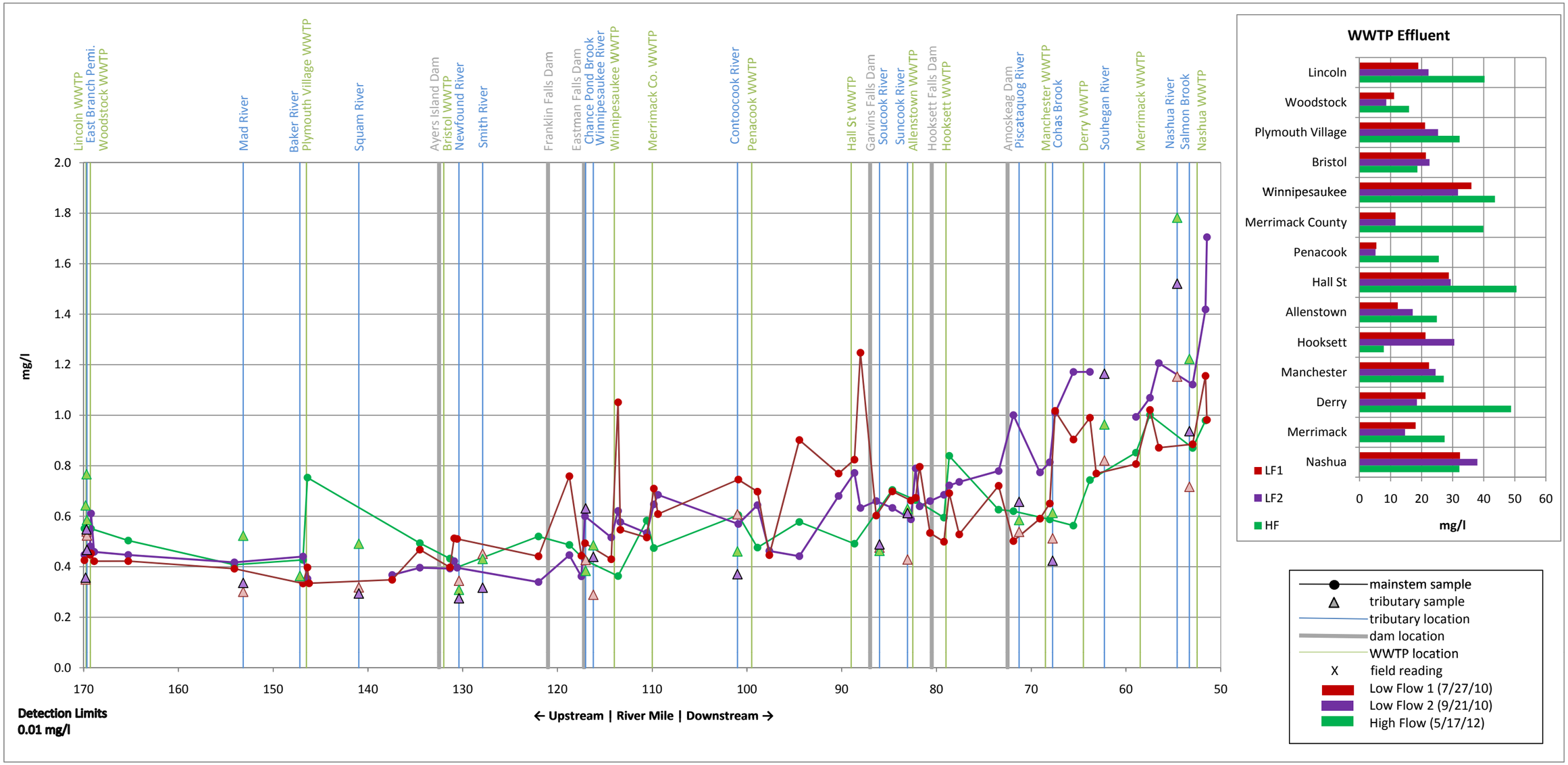
Water Quality Results
Mainstem, Tributary, and WWTP Effluent Samples
TKN



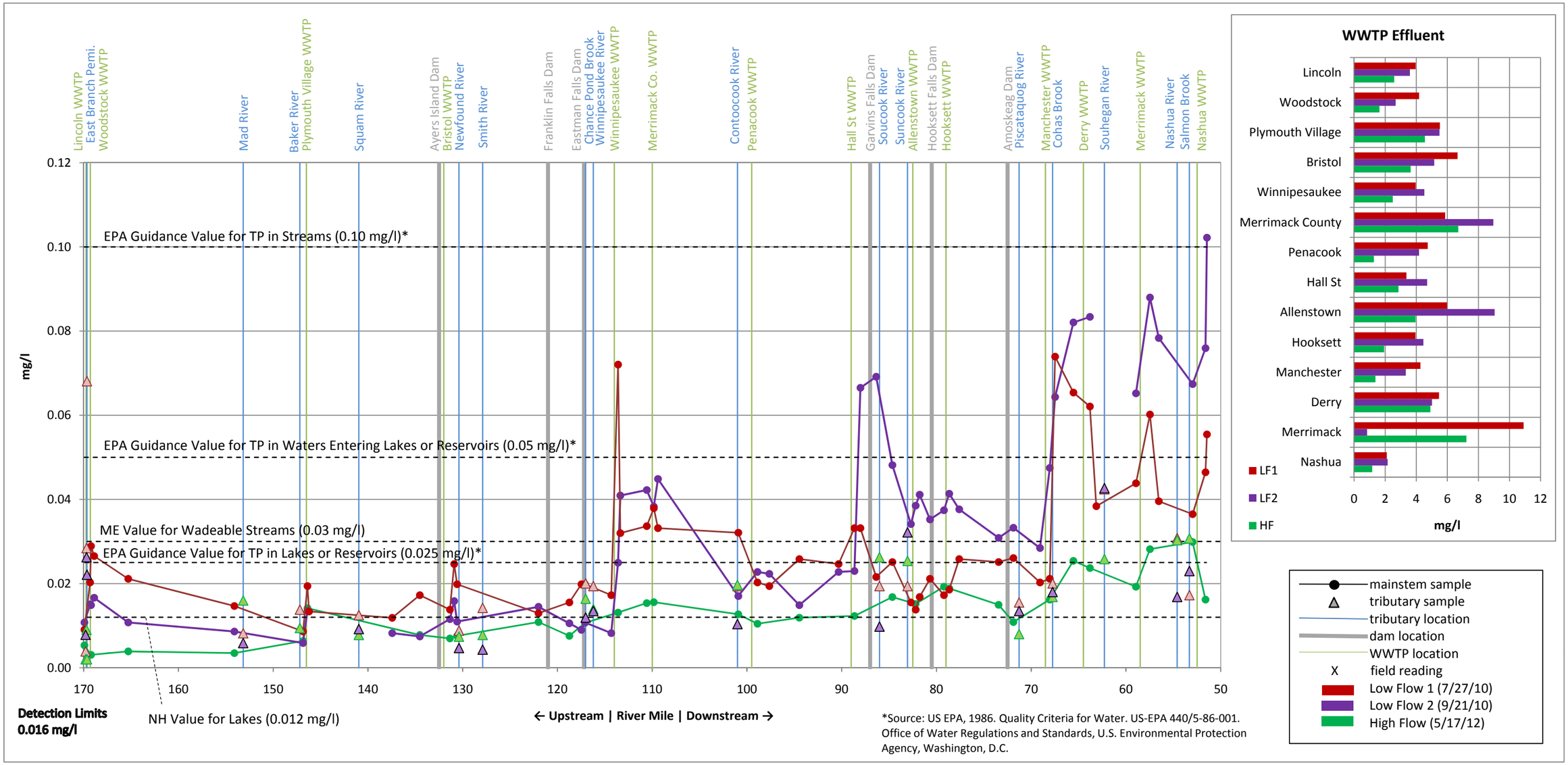
Water Quality Results
Mainstem, Tributary, and WWTP Effluent Samples
Nitrates



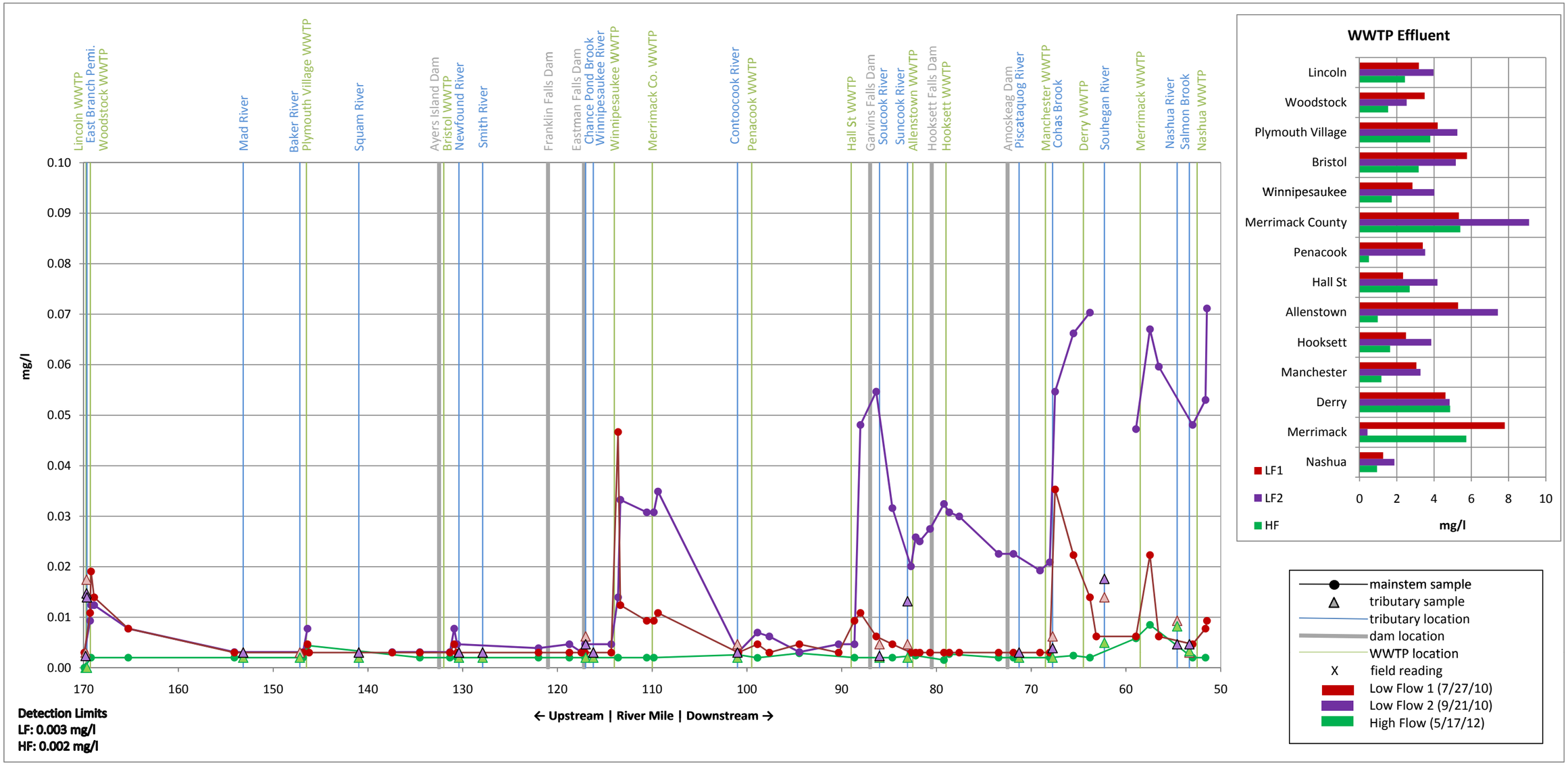
Water Quality Results
Mainstem, Tributary, and WWTP Effluent Samples
Total Nitrogen



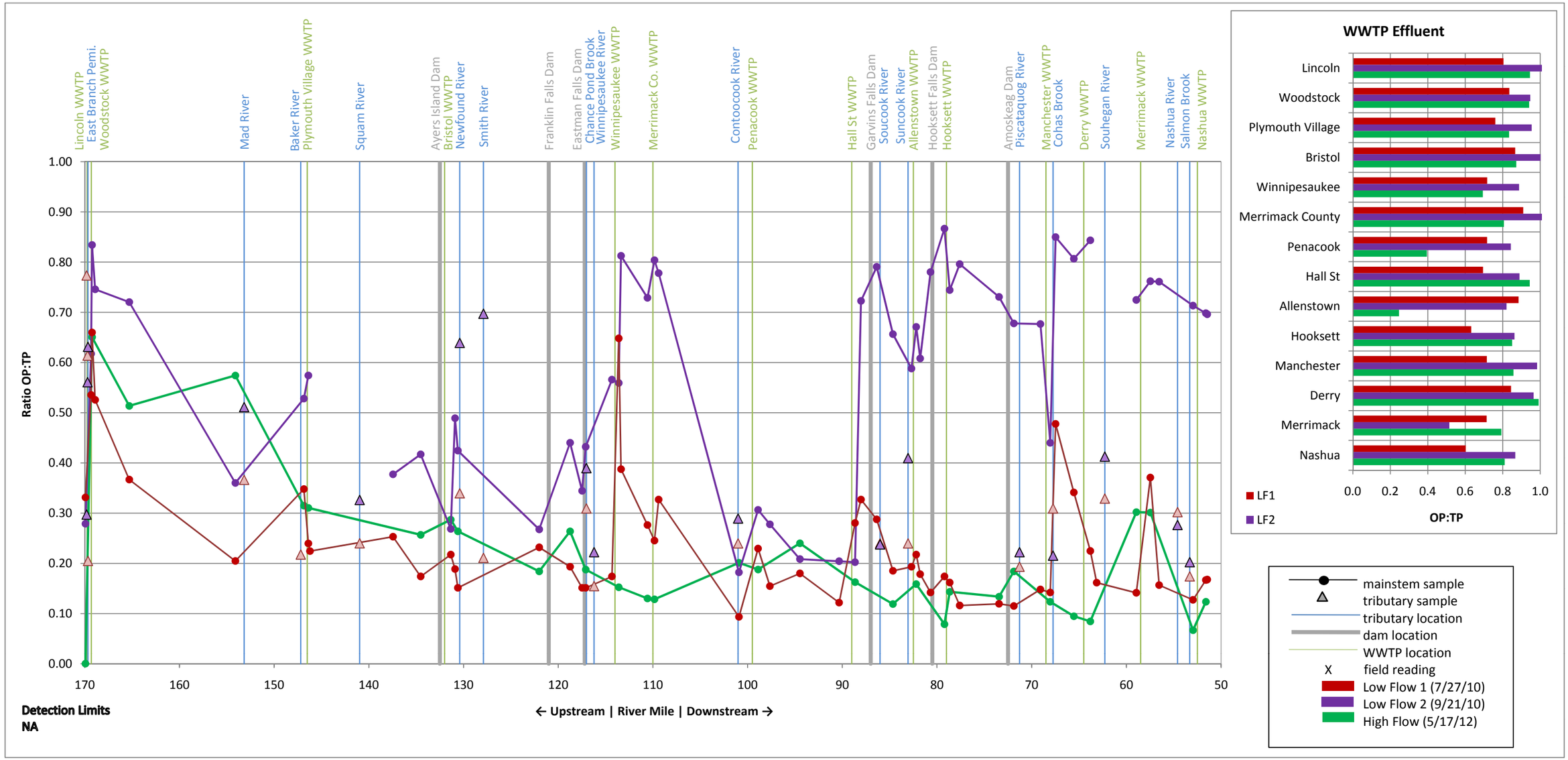
Water Quality Results
Mainstem, Tributary, and WWTP Effluent Samples
Total Phosphorus



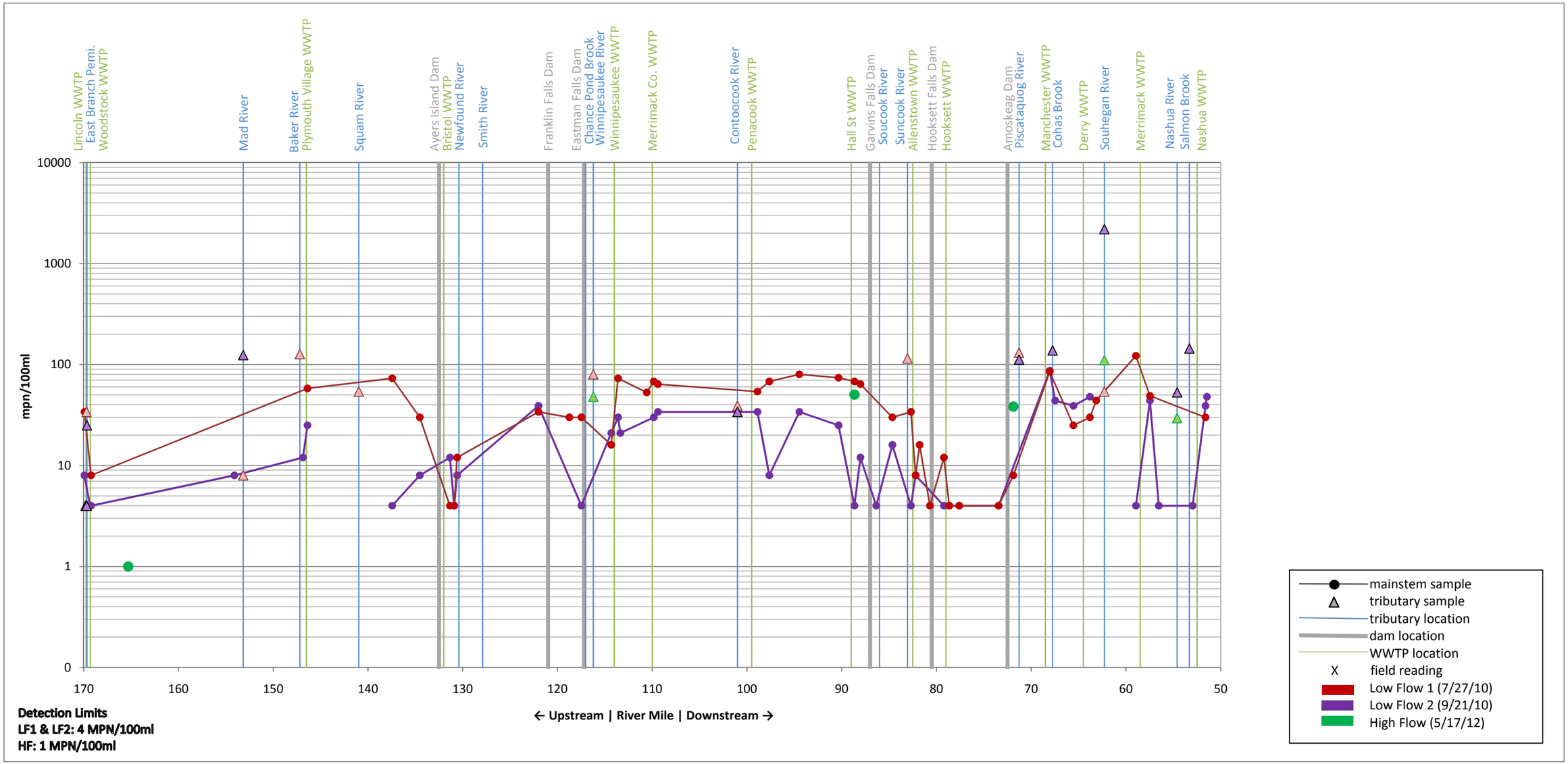
Water Quality Results
Mainstem, Tributary, and WWTP Effluent Samples
Orthophosphates



Low Flow Event Water Quality Results
Mainstem, Tributary, and WWTP Effluent Samples
Orthophosphates : Total Phosphorus Ratio

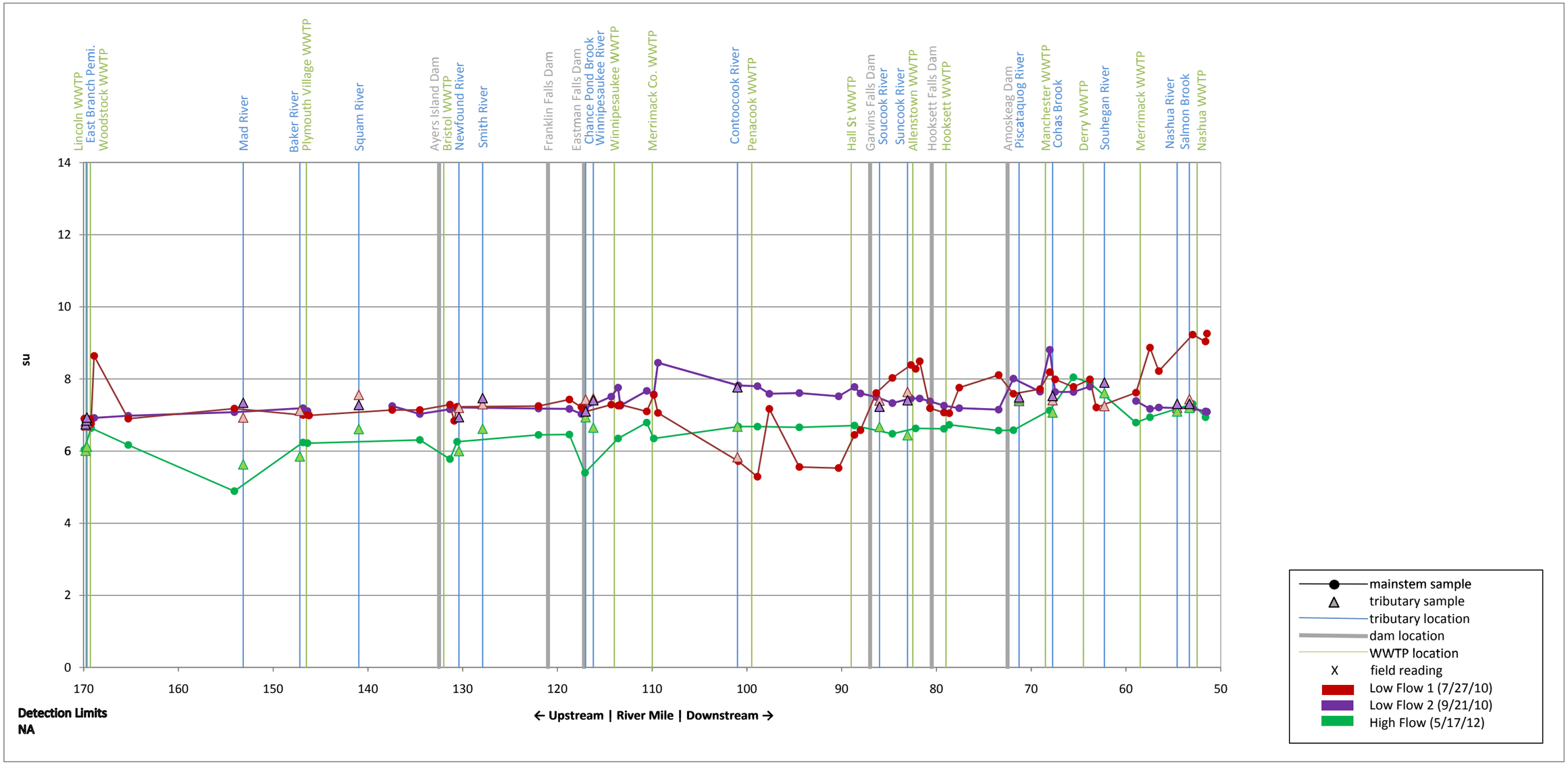


Water Quality Results
Mainstem, Tributary, and WWTP Effluent Samples
E. coli



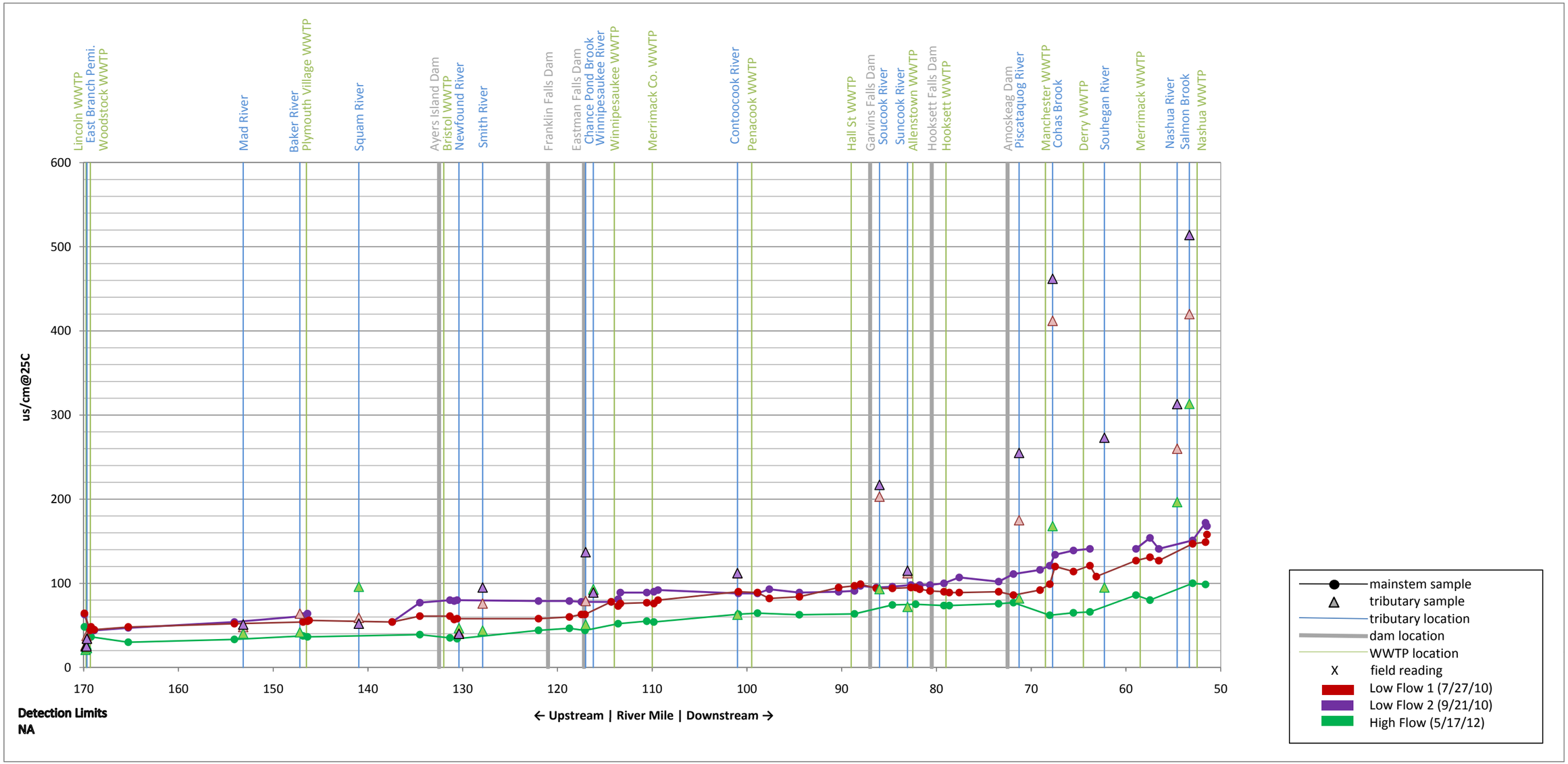
Detection Limits
LF1 & LF2: 4 MPN/100ml
HF: 1 MPN/100ml

Water Quality Results
Mainstem, Tributary, and WWTP Effluent Samples
pH



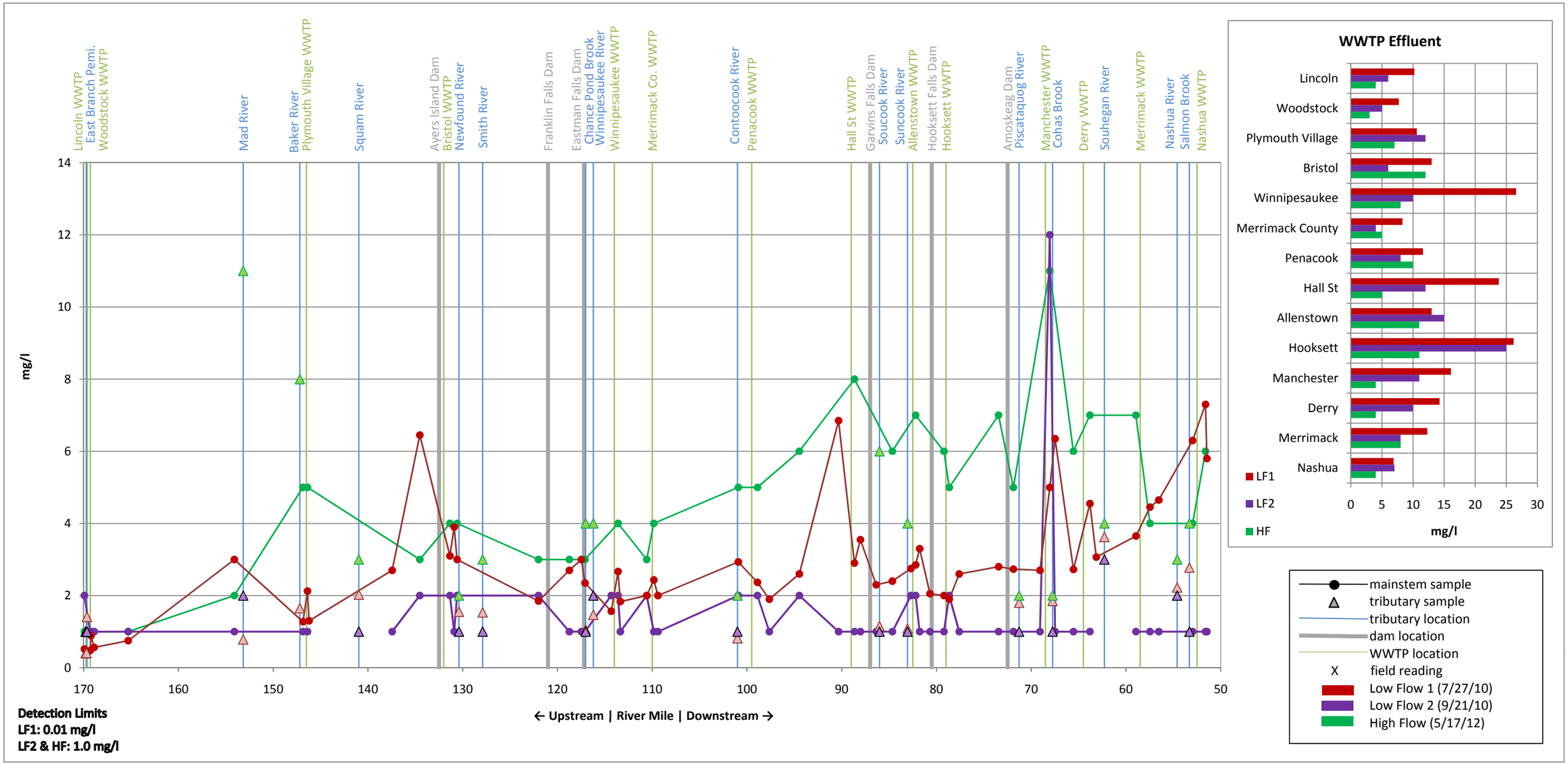
Detection Limits
NA

Water Quality Results
Mainstem, Tributary, and WWTP Effluent Samples
Specific Conductivity

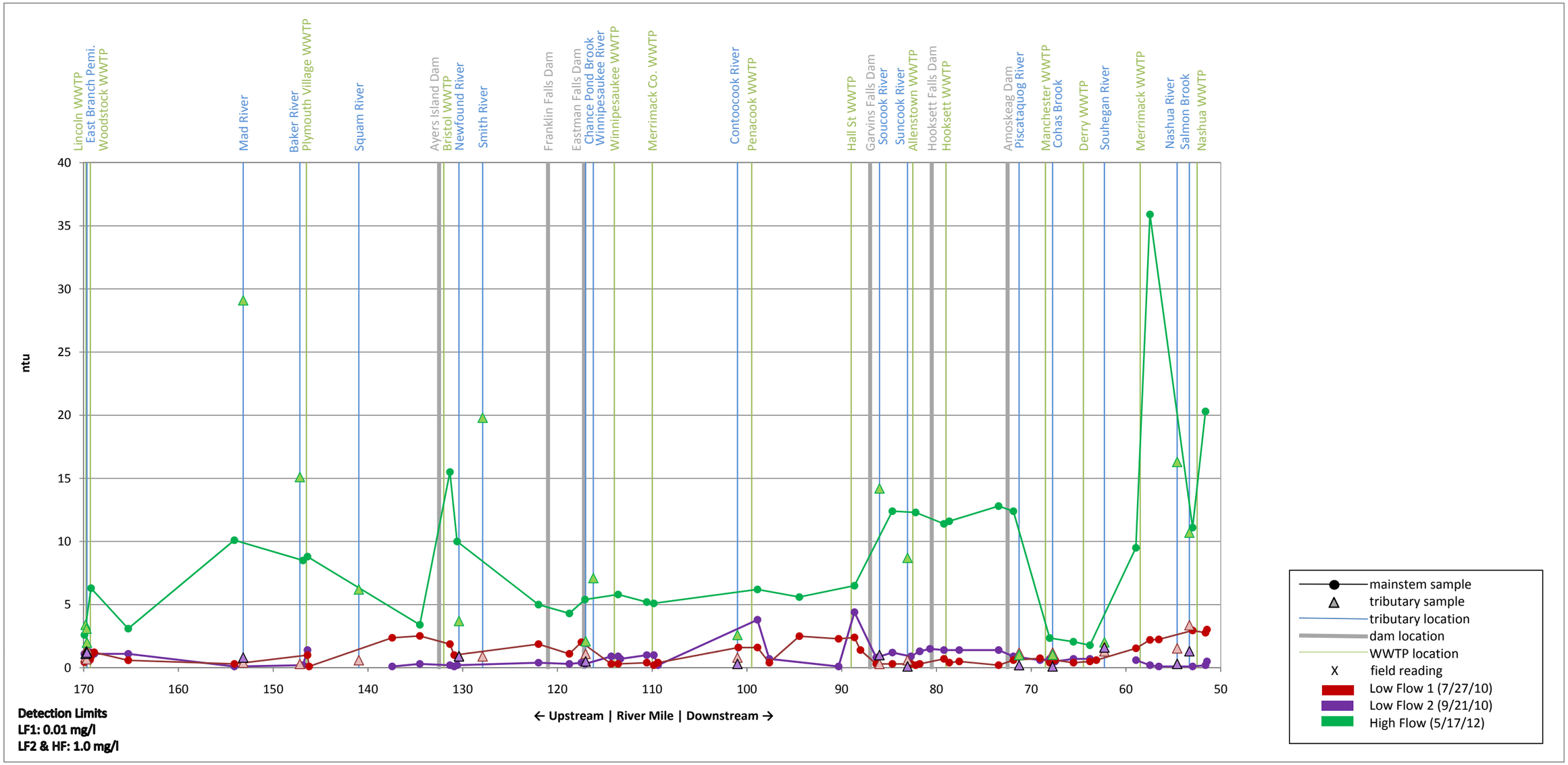


Detection Limits
NA

Water Quality Results
Mainstem, Tributary, and WWTP Effluent Samples
Total Suspended Solids



Water Quality Results
Mainstem, Tributary, and WWTP Effluent Samples
Turbidity



Detection Limits
LF1: 0.01 mg/l
LF2 & HF: 1.0 mg/l