Water Quality Monitoring Program - Turbidity Data for the Upper Harbor (except where indicated)
New Bedford Harbor Superfund Site
October 2017 through January 2020

This table shows the highest recorded measurements of turbidity, or movement of sediment in the water, at locations far from the dredge (Up-current Reference) as well as near the dredge (300-ft down current from dredge). EPA measures turbidity to ensure that PCB sediment is not being distributed beyond the dredge areas during work. Currents in the harbor are often changing, which is why EPA measures in many places around the dredge. PCBs like to attach to sediment and do not like to stay in the water. Therefore, if we know where the sediment is moving, we can monitor the movement of PCBs. Plans are in place to ensure proper action is taken in the event of high turbidity levels. If the turbidity levels are greater than 50 NTU* (above the reference level measured) at 300 feet down current of the dredging activities, EPA may stop or slow work and/or collect water samples.

Turbidity levels are also measured during sediment disposal into the Confined Aquatic Disposal (CAD) cell. While the silt curtain hinders sediment movement, measurements are still taken 25 feet from the silt curtain during disposal to ensure its effectiveness as a barrier. If the turbidity levels are greater than 50 NTU (above the reference level) 25 feet from the silt curtain, EPA will assess potential causes.

Monitoring Date	Turbidity (*NTU) Readings at Monitoring Stations:			Activity
	Up-current Reference	Compliance (50 NTU above reference level)		
		Debris Removal/ Dredging (300-ft down-current from dredge area boundary)	Disposal at EPA CAD cell (25-ft from silt curtain)	
26-Oct-17	3.2	4.3		Hybrid dredging at Upper Harbor CCA, flood tide
	2.7	3.1		Hybrid dredging at Upper Harbor CCA, ebb tide
31-Oct-17	2.2	10.9		Hybrid dredging at Upper Harbor CCA, ebb tide
	4.4	-		Hybrid dredging at Upper Harbor CCA, flood tide, broken shaker, no dredging
9-Nov-17	1.1	6.4		Hybrid dredging at Upper Harbor CCA, flood tide
	0.7	0.7		Hybrid dredging at Upper Harbor CCA, ebb tide
17-Nov-17	1.5	10.8		Hybrid dredging at Upper Harbor CCA, ebb tide
	3.2	2.4		Hybrid dredging at Upper Harbor CCA, flood tide
28-Nov-17	1.4	4.0		Hybrid dredging at Upper Harbor CCA, flood tide
	2.0	11.5		Hybrid dredging at Upper Harbor CCA, ebb tide
8-Dec-17	2.6	8.9		Hybrid dredging at Upper Harbor CCA, flood tide
	2.8	17.1		Hybrid dredging at Upper Harbor CCA, ebb tide
13-Dec-17	1.8	2.2		Hybrid dredging at Upper Harbor CCA, ebb tide
	1.6	9.2		Hybrid dredging at Upper Harbor CCA, flood tide
20-Dec-17	1.7	1.9		Hybrid dredging at Upper Harbor CCA, flood tide
	1.8	16.0		Hybrid dredging at Upper Harbor CCA, ebb tide
12-Mar-18	2.1	2.4		Hybrid dredging at Upper Harbor CCA, ebb tide
	3.5	3.9		Hybrid dredging at Upper Harbor CCA, flood tide
19-Mar-18	2.3	2.7		Hybrid dredging at Upper Harbor CCA, flood tide
	2.1	4.7		Hybrid dredging at Upper Harbor CCA, ebb tide
27-Mar-18	1.2	3.0		Hybrid dredging at Upper Harbor CCA, ebb tide
	1.8	2.2		Hybrid dredging at Upper Harbor CCA, flood tide
2-Apr-18	0.9	3.3		Hybrid dredging at Upper Harbor CCA, flood tide
	2.7	11.7, 3.8		Hybrid dredging at Upper Harbor CCA, ebb tide, 11.7 at low tide in very shallow water - may have been caused by prop wash
10-Apr-18	2.4	7.5		Hybrid dredging at Upper Harbor CCA, ebb tide
	5.7	3.8		Hybrid dredging at Upper Harbor CCA, flood tide
18-Apr-18	2.2	7.8		Hybrid dredging at Upper Harbor CCA, flood tide
	1.9	9.9		Hybrid dredging at Upper Harbor CCA, ebb tide
25-Apr-18	1.8	5.3		Hybrid dredging at Upper Harbor CCA, ebb tide
	1.9	15.7		Hybrid dredging at Upper Harbor CCA, flood tide
2-May-18	2.3	2.4		Hybrid dredging at Upper Harbor CCA, flood tide
	2.2	5.4		Hybrid dredging at Upper Harbor CCA, ebb tide
7-May-18	1.5	8.4		Hybrid dredging at Upper Harbor CCA, flood tide
	2.4	3.1		Hybrid dredging at Upper Harbor CCA, ebb tide
8-May-18	1.8	2.8		Mechanical dredging at Upper Harbor MU-31, flood tide
	1.4	1.9		Mechanical dredging at Upper Harbor MU-29, flood tide
	1.8	5.5		Mechanical dredging at Upper Harbor MU-29, ebb tide
15-May-18	4.6	16.5		Hybrid dredging at Upper Harbor CCA, flood tide
	2.2	13.6		Hybrid dredging at Upper Harbor CCA, ebb tide
16-May-18	2.4	4.8		Mechanical dredging at Upper Harbor MU-26, flood tide
	1.9	8.8		Mechanical dredging at Upper Harbor MU-26, ebb tide
21-May-18	2.3	6.2		Hybrid dredging at Upper Harbor CCA, flood tide
	3.0	5.2		Hybrid dredging at Upper Harbor CCA, ebb tide
22-May-18	2.2			No active dredging during this tide cycle
	1.8	8.9	10.9	Mechanical dredging at Upper Harbor MU-29, flood tide
29-May-18	1.1	1.6		Mechanical dredging at Upper Harbor MU-26, flood tide
	1.2	8.1		Mechanical dredging at Upper Harbor MU-26 and MU-29, ebb tide
	2.3	6.0		Mechanical dredging at Upper Harbor MU-26, flood tide

SEMS Doc ID 100013024

Water Quality Monitoring Program - Turbidity Data for the Upper Harbor (except where indicated)
New Bedford Harbor Superfund Site
October 2017 through January 2020

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Monitoring Date	Turbidity (*NTU) Readings at Monitoring Stations:			Activity
	Up-current Reference	Compliance (50 NTU above reference level)		
		Debris Removal/ Dredging (300-ft down-current from dredge area boundary)	Disposal at EPA CAD cell (25-ft from silt curtain)	
5-Jun-18	1.4	8.3		Mechanical dredging at Upper Harbor MU-29, flood tide
	3.8	15.9		Mechanical dredging at Upper Harbor MU-29, ebb tide
11-Jun-18	1.6	7.9		Mechanical dredging at Upper Harbor MU-29, ebb tide
	2.3	13.9		Mechanical dredging at Upper Harbor MU-29, flood tide
13-Jul-18	2.9	3.7		Mechanical dredging at Upper Harbor IN, flood tide
	4.3	7.6		Mechanical dredging at Upper Harbor IN, ebb tide
19-Jul-18	4.7	12.6		Mechanical dredging at Upper Harbor O, flood tide
	4.1	4.8		Mechanical dredging at Upper Harbor IN, flood tide
	4.2	4.5		Mechanical dredging at Upper Harbor IN, ebb tide
27-Jul-18	2.8	4.1		Mechanical dredging at Upper Harbor O, flood tide
	3.5	4.1		Mechanical dredging at Upper Harbor O, ebb tide
2-Aug-18	3.3	13.0		Mechanical dredging at Upper Harbor O, flood tide
	4.2	4.1		Mechanical dredging at Upper Harbor O, ebb tide
8-Aug-18	5.8	4.7		Mechanical dredging at Upper Harbor O, ebb tide
	4.0	17.0		Mechanical dredging at Upper Harbor O, flood tide
	4.0	4.3		Mechanical dredging at Upper Harbor IN, flood tide
15-Aug-18	3.9	4.6		Mechanical dredging at Upper Harbor O, flood tide
	4.5	2.7		Mechanical dredging at Upper Harbor O, ebb tide
23-Aug-18	1.4	2.1		Mechanical dredging at Upper Harbor IN, ebb tide
	1.6	3.8		Mechanical dredging at Upper Harbor O, flood tide
29-Aug-18	1.8	2.8		Mechanical dredging at Upper Harbor IN, flood tide
	2.3	6.8		Mechanical dredging at Upper Harbor IN, ebb tide
	2.3	5.2		Mechanical dredging at Upper Harbor O, ebb tide
6-Sep-18	4.3	24.8		Mechanical dredging at Upper Harbor IN, ebb tide
	2.9	6.1		Mechanical dredging at Upper Harbor O, flood tide
12-Sep-18	1.4	2.5		Mechanical dredging at Upper Harbor O, flood tide
	2.0	3.5		Mechanical dredging at Upper Harbor O, ebb tide
19-Sep-18	6.0	6.3		Mechanical dredging at Upper Harbor O, ebb tide
	6.3	7.7		Mechanical dredging at Upper Harbor O, flood tide
26-Sep-18	3.6	4.5		Mechanical dredging at Upper Harbor IN, flood tide
	3.6	5.2		Mechanical dredging at Upper Harbor IN, ebb tide
3-Oct-18	2.3	1.7		Mechanical dredging at Upper Harbor IN, ebb tide
	1.8	13.0		Mechanical dredging at Upper Harbor IN, flood tide
11-Oct-18	1.7	1.9		Mechanical dredging at Upper Harbor O, flood tide
	1.3	5.1		Mechanical dredging at Upper Harbor O, ebb tide
17-Oct-18	1.7	2.5		Mechanical dredging at Upper Harbor O, flood tide
	1.8	2.3		Mechanical dredging at Upper Harbor IN, ebb tide
24-Oct-18	1.6	1.6		Mechanical dredging at Upper Harbor IN, flood tide
	1.6	1.6		Mechanical dredging at Upper Harbor IN, ebb tide
	1.6	8.8		Mechanical dredging at Upper Harbor O, ebb tide
	2.8	2.2		Mechanical dredging at Upper Harbor O, flood tide
31-Oct-18	0.4	5.7		Mechanical dredging at Upper Harbor O, flood tide
	0.4	0.3		Mechanical dredging at Upper Harbor IN, flood tide
	0.3	0.3		Mechanical dredging at Upper Harbor IN, ebb tide
6-Nov-18	0.9	1.6		Mechanical dredging at Upper Harbor IN, ebb tide
	3.7	4.9		Mechanical dredging at Upper Harbor O, flood tide
14-Nov-18	2.8	2.4		Mechanical dredging at Upper Harbor O, flood tide
	4.4	1.6		Mechanical dredging at Upper Harbor O, ebb tide
29-Nov-18	2.7	14.8		Mechanical dredging at Upper Harbor O, ebb tide
	5.2	4.8		Mechanical dredging at Upper Harbor O, ebb tide

Water Quality Monitoring Program - Turbidity Data for the Upper Harbor (except where indicated)
New Bedford Harbor Superfund Site
October 2017 through January 2020

This table shows the highest recorded measurements of turbidity, or movement of sediment in the water, at locations far from the dredge (Up-current Reference) as well as near the dredge (300-ft down current from dredge). EPA measures turbidity to ensure that PCB sediment is not being distributed beyond the dredge areas during work. Currents in the harbor are often changing, which is why EPA measures in many places around the dredge. PCBs like to attach to sediment and do not like to stay in the water. Therefore, if we know where the sediment is moving, we can monitor the movement of PCBs. Plans are in place to ensure proper action is taken in the event of high turbidity levels. If the turbidity levels are greater than 50 NTU* (above the reference level measured) at 300 feet down current of the dredging activities, EPA may stop or slow work and/or collect water samples.

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Monitoring Date	Turbidity (*NTU) Readings at Monitoring Stations:			Activity
	Up-current Reference	Compliance (50 NTU above reference level)		
		Debris Removal/ Dredging (300-ft down-current from dredge area boundary)	Disposal at EPA CAD cell (25-ft from silt curtain)	
7-Dec-18	2.5	3.7		Mechanical dredging at Upper Harbor O, ebb tide
	2.4	1.4		Mechanical dredging at Upper Harbor O, flood tide
10-Dec-18	1.4	5.8		Mechanical dredging at Upper Harbor O, ebb tide
	3.8	2.9		Mechanical dredging at Upper Harbor O, flood tide
20-Dec-18	2.3	20.8		Mechanical dredging at Upper Harbor O, ebb tide
	6.8	8.1		Mechanical dredging at Upper Harbor O, flood tide
10-Jan-19	2.8	2.7		Mechanical dredging at Upper Harbor O, flood tide
	1.7	4.7		Mechanical dredging at Upper Harbor O, ebb tide
20-Mar-19	2.8	8.0		Mechanical dredging at Upper Harbor IN, ebb tide
	2.8	9.6		Mechanical dredging at Upper Harbor O, ebb tide
	2.7	6.6		Mechanical dredging at Upper Harbor O, flood tide
26-Mar-19	0.9	3.7		Hybrid dredging at Upper Harbor H, flood tide
	3.6	3.2		Mechanical dredging at Upper Harbor IN, ebb tide
4-Apr-19	1.5	1.7		Hybrid dredging at Upper Harbor H, flood tide
	1.9	5.0		Hybrid dredging at Upper Harbor H, ebb tide
	2.4	2.6		Hybrid dredging at Upper Harbor H, flood tide
10-Apr-19	0.4	10.6		Hybrid dredging at Upper Harbor H, flood tide
	1.6	0.8		Hybrid dredging at Upper Harbor H, ebb tide
16-Apr-19	1.3	4.5		Hybrid dredging at Upper Harbor H, ebb tide
	0.3	8.4		Hybrid dredging at Upper Harbor H, flood tide
23-Apr-19	1.2	1.3		Hybrid dredging at Upper Harbor H, flood tide
	1.1	1.2		Hybrid dredging at Upper Harbor H, ebb tide
30-Apr-19	2.2	1.7		Hybrid dredging at Upper Harbor H, ebb tide
	0.2	5.5		Hybrid dredging at Upper Harbor H, flood tide
6-May-19	1.5	4.5		Hybrid dredging at Upper Harbor L, flood tide
	1.6	4.6		Hybrid dredging at Upper Harbor L, ebb tide
14-May-19	3.2	9.0		Hybrid dredging at Upper Harbor L, ebb tide
	1.2	1.9		Hybrid dredging at Upper Harbor L, flood tide
21-May-19	1.6	1.8		Hybrid dredging at Upper Harbor L, flood tide
	1.6	4.7		Hybrid dredging at Upper Harbor L, ebb tide
	1.6	1.3		Mechanical dredging at Upper Harbor IN, flood tide
	1.6	1.3		Mechanical dredging at Upper Harbor IN, ebb tide
29-May-19	1.9	6.1		Hybrid dredging at Upper Harbor L, ebb tide
	3.1	4.4		Hybrid dredging at Upper Harbor L, flood tide
5-Jun-19	2.6	8.3		Hybrid dredging at Upper Harbor L, flood tide
	2.9	6.9		Hybrid dredging at Upper Harbor L, ebb tide
	2.9	3.5		Mechanical dredging at Upper Harbor IN, ebb tide
12-Jun-19	1.9	5.0		Mechanical dredging at Upper Harbor CCA, ebb tide
	1.9	5.3		Hybrid dredging at Upper Harbor P, ebb tide
	1.3	11.8		Mechanical dredging at Upper Harbor CCA, flood tide
	1.3	7.9		Hybrid dredging at Upper Harbor P, flood tide
19-Jun-19	4.3	2.6		Hybrid dredging at Upper Harbor P, flood tide
	1.3	14.2		Hybrid dredging at Upper Harbor P, ebb tide
24-Jun-19	1.5	4.5		Hybrid dredging at Upper Harbor P, flood tide
	2.2	5.2		Hybrid dredging at Upper Harbor P, ebb tide
2-Jul-19	1.9	11.5		Hybrid dredging at Upper Harbor P, flood tide
	5.0	6.3		Hybrid dredging at Upper Harbor P, ebb tide
11-Jul-19	1.7	4.8		Hybrid dredging at Upper Harbor R, ebb tide
	1.0	10.7		Hybrid dredging at Upper Harbor R, flood tide
	2.8	4.0		Hybrid dredging at Upper Harbor R, flood tide

Water Quality Monitoring Program - Turbidity Data for the Upper Harbor (except where indicated)
New Bedford Harbor Superfund Site
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Monitoring Date	Turbidity (*NTU) Readings at Monitoring Stations:			Activity
		Compliance (50 NTU above reference level)		
	Up-current Reference	Debris Removal/ Dredging (300-ft down-current from dredge area boundary)	Disposal at EPA CAD cell (25-ft from silt curtain)	
17-Jul-19	2.8	4.4		Mechanical dredging at Upper Harbor H, flood tide
	2.9	13.5		Hybrid dredging at Upper Harbor R, ebb tide
	2.9	4.4		Mechanical dredging at Upper Harbor H, ebb tide
23-Jul-19	2.2	4.2		Hybrid dredging at Upper Harbor R, flood tide
	2.2	2.4		Mechanical dredging at Upper Harbor L, flood tide
	4.4	4.2		Hybrid dredging at Upper Harbor R, ebb tide
	4.4	8.0		Mechanical dredging at Upper Harbor L, ebb tide
31-Jul-19	3.4	8.0		Hybrid dredging at Upper Harbor R, ebb tide
	2.9	4.2		Hybrid dredging at Upper Harbor R, flood tide
7-Aug-19	1.9	4.0		Hybrid dredging at Upper Harbor R, flood tide
	2.9	4.4		Hybrid dredging at Upper Harbor R, ebb tide
14-Aug-19	3.9	4.2		Hybrid dredging at Upper Harbor S, flood tide
	2.8	5.4		Hybrid dredging at Upper Harbor S, ebb tide
21-Aug-19	1.4	21.7		Hybrid and mechanical dredging at Upper Harbor S, flood tide
	2.3	3.0		Hybrid and mechanical dredging at Upper Harbor S, ebb tide
27-Aug-19	1.0	13.2		Hybrid dredging at Upper Harbor S, ebb tide
	0.9	5.7		Hybrid dredging at Upper Harbor S, flood tide
4-Sep-19	2.4	9.5		Hybrid dredging at Upper Harbor S, flood tide
	2.6	4.2		Hybrid dredging at Upper Harbor S, ebb tide
19-Sep-19	1.8	14.3	14.2	Mechanical dredging at Upper Harbor L, flood tide
	1.8	6.9		Mechanical dredging at Upper Harbor L, ebb tide
26-Sep-19	2.4	3.5		Mechanical dredging at Upper Harbor P, ebb tide
	4.1	7.3		Mechanical dredging at Upper Harbor P, flood tide
2-Oct-19	1.3	2.4	1.3	Mechanical dredging at Upper Harbor PMC, flood tide
	1.2	5.8		Mechanical dredging at Upper Harbor P, ebb tide
9-Oct-19	2.0	5.9		Mechanical dredging at Upper Harbor PMC, ebb tide
	3.4	3.2		Mechanical dredging at Upper Harbor PMC, flood tide
15-Oct-19	4.9	5.7		Mechanical dredging at Upper Harbor PMC, flood tide
	5.2	6.1		Mechanical dredging at Upper Harbor PMC, ebb tide
	5.0	20.4		Mechanical dredging at Upper Harbor R, ebb tide
	6.6	5.5		Mechanical dredging at Upper Harbor R, flood tide
23-Oct-19	1.3	10.2		Mechanical dredging at Upper Harbor PMC, ebb tide
	0.8	5.1	6.1	Mechanical dredging at Upper Harbor PMC, flood tide
1-Nov-19	5.7	24.1		Mechanical dredging at Upper Harbor PMC, flood tide
	4.2	10.9		Mechanical dredging at Upper Harbor PMC, ebb tide
7-Nov-19	1.9	2.6		Mechanical dredging at Upper Harbor PMC, ebb tide
	0.6	4.0	69.3	Mechanical dredging at Upper Harbor PMC, flood tide
15-Nov-19	3.0	0.4	0.4	Mechanical dredging at Upper Harbor PMC, flood tide
	0.8	8.2		Mechanical dredging at Upper Harbor PMC, ebb tide
	0.8	6.3		Mechanical dredging at Upper Harbor S, ebb tide
	2.0	0.6		Mechanical dredging at Upper Harbor S, flood tide
21-Nov-19	1.5	3.5		Mechanical dredging at Upper Harbor R, flood tide
	1.5	0.9	1.4	Mechanical dredging at Upper Harbor PMC, ebb tide
26-Nov-19	1.2	28.6		Mechanical dredging at Upper Harbor PMC, ebb tide
	1.2	10.4		Mechanical dredging at Upper Harbor R, ebb tide
	9.4	1.2	3.2	Mechanical dredging at Upper Harbor R, flood tide
7-Dec-19	5.7	3.4		Mechanical dredging at Upper Harbor R, ebb tide
	8.2	12.3	3.7	Mechanical dredging at Upper Harbor R, flood tide
10-Dec-19	9.3	18.7		Mechanical dredging at Upper Harbor PMC, ebb tide
	10.8	11.0		Mechanical dredging at Upper Harbor PMC, flood tide

Water Quality Monitoring Program - Turbidity Data for the Upper Harbor (except where indicated)
New Bedford Harbor Superfund Site
October 2017 through January 2020

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Monitoring Date	Turbidity (*NTU) Readings at Monitoring Stations:			Activity
	Up-current Reference	Compliance (50 NTU above reference level)		
		Debris Removal/ Dredging (300-ft down-current from dredge area boundary)	Disposal at EPA CAD cell (25-ft from silt curtain)	
18-Dec-19	2.4	6.2	2.3	Mechanical dredging at Upper Harbor R, flood tide
	2.1	16.3		Mechanical dredging at Upper Harbor R, ebb tide
2-Jan-20	3.0	9.9	0.9	Mechanical dredging at Upper Harbor R, flood tide
	1.1	16.6		Mechanical dredging at Veranda Inlet, ebb tide
9-Jan-20	4.9	7.5		Mechanical dredging at Upper Harbor R, flood tide
16-Jan-20	2.9	2.8		Mechanical dredging at Upper Harbor R, flood tide
	2.9	2.0		Mechanical dredging at Upper Harbor PMC, flood tide
21-Jan-20	1.3	4.5		Mechanical dredging at Upper Harbor PMC, ebb tide
	1.3	9.8		Mechanical dredging at Upper Harbor S, ebb tide
	7.2	13.0		Mechanical dredging at Upper Harbor S, flood tide
31-Jan-20	2.3	5.5	9.8	Mechanical dredging at Upper Harbor R, flood tide
	2.0	3.6		Mechanical dredging at Upper Harbor P, ebb tide

*NTU - The instrument we use to measure turbidity levels with reports data as NTU, which are Nephlometric Turbidity Units.

Water Quality Monitoring Program - Turbidity Data for the Lower Harbor (except where indicated)
New Bedford Harbor Superfund Site
September 14, 2017 through April 17, 2018

This table shows the highest recorded measurements of turbidity, or movement of sediment in the water, at locations far from the dredge (Up-current Reference) as well as near the dredge (300-ft down current from dredge). EPA measures turbidity to ensure that PCB sediment is not being distributed beyond the dredge areas during work. Currents in the harbor are often changing, which is why EPA measures in many places around the dredge. PCBs like to attach to sediment and do not like to stay in the water. Therefore, if we know where the sediment is moving, we can monitor the movement of PCBs. Plans are in place to ensure proper action is taken in the event of high turbidity levels. If the turbidity levels are greater than 50 NTU* (above the reference level measured) at 300 feet down current of the dredging activities, EPA may stop or slow work and/or collect water samples.

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Monitoring Date	Turbidity (*NTU) Readings at Monitoring Stations:			Activity
	Up-current Reference	Compliance (50 NTU above reference level)		
		Debris Removal/ Dredging (300-ft down-current from dredge area boundary)	Disposal at EPA CAD cell (25-ft from silt curtain)	
14-Sep-17	1.8	3.9	2.2	Mechanical dredging at Lower Harbor DMU 33B and scow to scow transfers at EPA CAD cell, flood tide
15-Sep-17	2.2	2.8	-	Mechanical dredging at Lower Harbor DMU 33B, flood tide
27-Sep-17	2.8	3.4	-	Mechanical dredging at Lower Harbor DMU 33B, flood tide
	2.8	2.9	-	Mechanical dredging at Lower Harbor DMU 33B, ebb tide
28-Sep-17	2.3	2.9	-	Mechanical dredging at Lower Harbor DMU 33B, flood tide
	3.2	4.3	-	Mechanical dredging at Lower Harbor DMU 33B, ebb tide
29-Sep-17	2.1	-	19.2	Disposal event at EPA CAD cell (0850), flood tide
	2.3	2.8	-	Mechanical dredging at Lower Harbor DMU 33B, flood tide
	3.1	2.1	-	Mechanical dredging at Lower Harbor DMU 33B, ebb tide
4-Oct-17	3.2	5.4		Mechanical dredging at Lower Harbor DMU 33C, ebb tide
	4.0	10.9		Mechanical dredging at Lower Harbor DMU 33C, flood tide
5-Oct-17	3.4	5.6		Mechanical dredging at Lower Harbor DMU 33C, ebb tide
	5.2	6.7	4.1	Disposal event at EPA CAD cell; Mechanical dredging at Lower Harbor DMU 33C, flood tide
11-Oct-17	3.9	4.3		Mechanical dredging at Lower Harbor DMU 33C, ebb tide
	2.3	5.0	4.7	Disposal event at EPA CAD cell; Mechanical dredging at Lower Harbor DMU 33C, flood tide
16-Nov-17	2.4	11.1	2.7	Disposal event at EPA CAD cell at 1022; Mechanical dredging at Lower Harbor DMU 34B, ebb tide
	3.2	3.8		Mechanical dredging at Lower Harbor DMU 34B, flood tide
29-Nov-17	2.5	5.0	2.2	Disposal event at EPA CAD cell at 0927; Mechanical dredging at Lower Harbor DMU 35F, ebb tide
	2.6	11.6	2.5	Disposal event at EPA CAD cell at 1556; Mechanical dredging at Lower Harbor DMU 35F, flood tide
4-Dec-17	2.3	4.9	1.2	Disposal event at EPA CAD cell at 1026; Mechanical dredging at Lower Harbor DMU 35F, ebb tide
	2.2	5.5	1.3	Disposal event at EPA CAD cell at 1456; Mechanical dredging at Lower Harbor DMU 35F, flood tide
12-Dec-17	1.7	2.3		Mechanical dredging at Lower Harbor DMU 37A, ebb tide
	1.5	3.3		Mechanical dredging at Lower Harbor DMU 37A, flood tide
19-Dec-17	2.4	5.6		Mechanical dredging at Lower Harbor DMU 37D, ebb tide
	2.1	6.5		Mechanical dredging at Lower Harbor DMU 37D, flood tide
17-Jan-18	3.4	5.0	7.4	Disposal event at EPA CAD cell at 1054; Mechanical dredging at Lower Harbor DMU 35E, ebb tide
	3.5	4.4		Mechanical dredging at Lower Harbor DMU 35E, flood tide
24-Jan-18	4.0	13.7	12.2	Disposal event at EPA CAD cell at 0952; Mechanical dredging at Lower Harbor DMU 35C, flood tide
	6.2	8.1		Mechanical dredging at Lower Harbor DMU 35C, ebb tide
26-Jan-18	3.6	4.1		Mechanical dredging at Lower Harbor DMU 35C, flood tide
31-Jan-18	3.8	5.2		Mechanical dredging at Lower Harbor DMU 35C, flood tide
	4.2	10.6		Mechanical dredging at Lower Harbor DMU 37B, ebb tide
7-Feb-18	4.1	6.4		Mechanical dredging at Lower Harbor DMU 34B, flood tide
	6.6	8.8	6.3	Disposal event at EPA CAD cell at 1510, Mechanical dredging at Lower Harbor DMU 34B, ebb tide
14-Feb-18	3.0	10.0		Mechanical dredging at Lower Harbor DMU 33C, ebb tide
	4.2	8.6		Mechanical dredging at Lower Harbor DMU 33C, flood tide
	4.2	4.6		Mechanical dredging at Lower Harbor DMU 33B, flood tide
	2.4	2.9		Mechanical dredging at Lower Harbor DMU 35C, flood tide

Water Quality Monitoring Program - Turbidity Data for the Lower Harbor (except where indicated)
New Bedford Harbor Superfund Site
September 14, 2017 through April 17, 2018

This table shows the highest recorded measurements of turbidity, or movement of sediment in the water, at locations far from the dredge (Up-current Reference) as well as near the dredge (300-ft down current from dredge). EPA measures turbidity to ensure that PCB sediment is not being distributed beyond the dredge areas during work. Currents in the harbor are often changing, which is why EPA measures in many places around the dredge. PCBs like to attach to sediment and do not like to stay in the water. Therefore, if we know where the sediment is moving, we can monitor the movement of PCBs. Plans are in place to ensure proper action is taken in the event of high turbidity levels. If the turbidity levels are greater than 50 NTU* (above the reference level measured) at 300 feet down current of the dredging activities, EPA may stop or slow work and/or collect water samples.

Turbidity levels are also measured during sediment disposal into the Confined Aquatic Disposal (CAD) cell. While the silt curtain hinders sediment movement, measurements are still taken 25 feet from the silt curtain during disposal to ensure its effectiveness as a barrier. If the turbidity levels are greater than 50 NTU (above the reference level) 25 feet from the silt curtain, EPA will assess potential causes.

Monitoring Date	Turbidity (*NTU) Readings at Monitoring Stations:			Activity
	Up-current Reference	Compliance (50 NTU above reference level)		
		Debris Removal/ Dredging (300-ft down-current from dredge area boundary)	Disposal at EPA CAD cell (25-ft from silt curtain)	
21-Feb-18	1.8	5.3	1.5	Disposal event at EPA CAD cell at 1205, Mechanical dredging at Lower Harbor DMU 35C, ebb tide
28-Feb-18	1.4	5.0		Mechanical dredging at Lower Harbor DMU 35F, ebb tide
	2.4	3.3		Mechanical dredging at Lower Harbor DMU 35F, flood tide
6-Mar-18	2.1	5.2		Mechanical dredging at Lower Harbor DMU 35F, flood tide
	2.1	3.5	1.9	Disposal event at EPA CAD cell at 1508, Mechanical dredging at Lower Harbor DMU 35F, ebb tide
	2.0	3.3		Mechanical dredging at Lower Harbor DMU 33B, ebb tide
15-Mar-18	1.5	2.2		Mechanical dredging at Lower Harbor DMU 35E, ebb tide
	1.3	2.1		Mechanical dredging at Lower Harbor DMU 35E, flood tide
23-Mar-18	1.6	8.8	1.8	Disposal event at EPA CAD cell at 0837, Mechanical dredging at Lower Harbor DMU 35C, flood tide
	2.2	1.9		Mechanical dredging at Lower Harbor DMU BTBC, ebb tide
28-Mar-18	1.0	4.8	1.7	Disposal event at EPA CAD cell at 1008, Mechanical dredging at Lower Harbor BTBC, ebb tide
	1.6	4.5		Mechanical dredging at Lower Harbor DMU BTBC, flood tide
9-Apr-18	2.3	6.0		Mechanical dredging at Lower Harbor DMU BTBC, ebb tide
	2.6	5.4		Mechanical dredging at Lower Harbor DMU BTBC, flood tide
17-Apr-18	5.1	5.1		Mechanical dredging at Lower Harbor DMU BTBA, flood tide
	4.9	4.0		Mechanical dredging at Lower Harbor DMU BTBA, ebb tide

*NTU - The instrument we use to measure turbidity levels with reports data as NTU, which are Nephlometric Turbidity Units.

Water Quality Monitoring Program - Historical Turbidity Data for the Lower Harbor (except where indicated)
New Bedford Harbor Superfund Site
November 9, 2015 to July 17, 2017

This table shows the highest recorded measurements of turbidity, or movement of sediment in the water, at locations far from the dredge (Up-current Reference) as well as near the dredge (300-ft down current from dredge). EPA measures turbidity to ensure that PCB sediment is not being distributed beyond the dredge areas during work. Currents in the harbor are often changing, which is why EPA measures in many places around the dredge. PCBs like to attach to sediment and do not like to stay in the water. Therefore, if we know where the sediment is moving, we can monitor the movement of PCBs. Plans are in place to ensure proper action is taken in the event of high turbidity levels. If the turbidity levels are greater than 50 NTU* (above the reference level measured) at 300 feet down current of the dredging activities, EPA may stop or slow work and/or collect water samples.

Turbidity levels are also measured during sediment disposal into the Confined Aquatic Disposal (CAD) cell. While the silt curtain hinders sediment movement, measurements are still taken 25 feet from the silt curtain during disposal to ensure its effectiveness as a barrier. If the turbidity levels are greater than 50 NTU (above the reference level) 25 feet from the silt curtain, EPA will assess potential causes.

Monitoring Date	Turbidity (*NTU) Readings at Monitoring Stations:			Activity
	Up-current Reference	Compliance (50 NTU above reference level)		
		Debris Removal/ Dredging (300-ft down-current from dredge area boundary)	Disposal at EPA CAD cell (25-ft from silt curtain)	
9-Nov-15	0.8	1.1	-	Debris removal, flood tide
	0.8	0.7	-	Debris removal, ebb tide
10-Nov-15	0.7	2.6	-	Debris removal, flood tide
	2.2	1.1	-	Debris removal, ebb tide
12-Nov-15	1.5	0.9	-	Debris removal, flood tide
	0.8	1.0	-	Debris removal, ebb tide
16-Nov-15	0.8	0.8	-	Debris removal, flood tide
	1.7	1.3	-	Debris removal, ebb tide
17-Nov-15	1.7	1.2	-	Debris removal, flood tide
	2.4	1.3	-	Debris removal, ebb tide
3-Dec-15	0.7	1.5	-	Debris removal, flood tide
	1.7	0.7	-	Debris removal, ebb tide
9-Dec-15	0.9	0.8	-	Debris removal, flood tide
	1.0	4.3	-	Debris removal, ebb tide
16-Dec-15	0.6	1.3	-	Debris removal, flood tide
	0.9	0.6	-	Debris removal, ebb tide
6-Jan-16	0.8	0.8	-	Debris removal, flood tide
	1.1	0.6	-	Debris removal, ebb tide
14-Jan-16	1.7	2.6	-	Debris removal, flood tide
	1.9	not sampled	-	Debris removal, ebb tide
21-Jan-16	2.1	1.4	-	Debris removal, flood tide
	1.7	4.6	-	Debris removal, ebb tide
28-Jan-16	1.2	1.2	-	Debris removal, flood tide
	1.3	2.6	-	Debris removal, ebb tide
2-Feb-16	1.0	1.5	-	Mechanical dredging, flood tide
	1.7	4.0	-	Mechanical dredging, ebb tide
3-Feb-16	1.1	1.3	-	Mechanical dredging, flood tide
	0.8	1.1	-	Mechanical dredging, ebb tide
4-Feb-16	2.4	5.8	-	Mechanical dredging, flood tide
	2.2	3.1	-	Mechanical dredging, ebb tide
5-Feb-16	6.7	-	-	Disposal at EPA CAD cell cancelled due to weather, ebb tide
9-Feb-16	2.1	-	5.2	First disposal event at EPA CAD cell, ebb tide
	2.2	10.7	-	Mechanical dredging, ebb tide
	2.8	2.4	-	Mechanical dredging, flood tide
17-Feb-16	4.3	5.7	-	Mechanical dredging, flood tide
	3.6	13.1	-	Mechanical dredging, ebb tide
22-Feb-16	4.3	-	5.0	Disposal event at EPA CAD cell, ebb tide
	3.7	7.2	-	Mechanical dredging, ebb tide
	8.9	6.4	-	Mechanical dredging, flood tide
29-Feb-16	3.9	-	17.1	Disposal event at EPA CAD cell, flood tide
	2.2	2.0	-	Mechanical dredging, flood tide
	4.0	-	4.5	Disposal event at EPA CAD cell, ebb tide
	5.3	3.4	-	Mechanical dredging, ebb tide

Water Quality Monitoring Program - Historical Turbidity Data for the Lower Harbor (except where indicated)
New Bedford Harbor Superfund Site
November 9, 2015 to July 17, 2017

This table shows the highest recorded measurements of turbidity, or movement of sediment in the water, at locations far from the dredge (Up-current Reference) as well as near the dredge (300-ft down current from dredge). EPA measures turbidity to ensure that PCB sediment is not being distributed beyond the dredge areas during work. Currents in the harbor are often changing, which is why EPA measures in many places around the dredge. PCBs like to attach to sediment and do not like to stay in the water. Therefore, if we know where the sediment is moving, we can monitor the movement of PCBs. Plans are in place to ensure proper action is taken in the event of high turbidity levels. If the turbidity levels are greater than 50 NTU* (above the reference level measured) at 300 feet down current of the dredging activities, EPA may stop or slow work and/or collect water samples.

Turbidity levels are also measured during sediment disposal into the Confined Aquatic Disposal (CAD) cell. While the silt curtain hinders sediment movement, measurements are still taken 25 feet from the silt curtain during disposal to ensure its effectiveness as a barrier. If the turbidity levels are greater than 50 NTU (above the reference level) 25 feet from the silt curtain, EPA will assess potential causes.

Monitoring Date	Turbidity (*NTU) Readings at Monitoring Stations:			Activity
	Up-current Reference	Compliance (50 NTU above reference level)		
		Debris Removal/ Dredging (300-ft down-current from dredge area boundary)	Disposal at EPA CAD cell (25-ft from silt curtain)	
11-Mar-16	1.7	4.5	-	Mechanical dredging at Cozy Cove (DMU H36), flood tide
	2.5	not sampled	-	Mechanical dredging at Cozy Cove (DMU H36), ebb tide; dredging activities moved to DMU G36 prior to conducting compliance readings.
	2.5	7.6	-	Mechanical dredging at Cozy Cove (DMU G36), ebb tide
	3.0	3.7	-	Mechanical dredging at Cozy Cove (DMU G36), flood tide
	1.4	-	1.7	First disposal event at EPA CAD cell (09:47), ebb tide
	1.4	-	1.9	Second disposal event at EPA CAD cell (13:38), ebb tide
	1.6	2.2	-	Debris removal at DMU B33 flood tide
16-Mar-16	1.9	2.8	-	Mechanical dredging at Cozy Cove (DMU J36), flood tide
	1.4	2.0	-	Mechanical dredging at Cozy Cove (DMU J36), ebb tide
	1.8	3.6	-	Mechanical dredging at Cozy Cove (DMU H36), ebb tide
	1.4	-	1.9	Disposal event at EPA CAD cell, flood tide
	1.3	1.4	-	Debris removal at DMU B33 flood tide
22-Mar-16	1.3	2.8	-	Mechanical dredging at Cozy Cove (DMU H36), ebb tide
	1.1	1.1	-	Debris removal at DMU B33 ebb tide
	2.8	1.5	-	Debris removal at DMU B33 flood tide
30-Mar-16	1.1	7.1	-	Mechanical dredging at Cozy Cove (DMU I36), flood tide
	4.7	3.3	-	Mechanical dredging at Cozy Cove (DMU G36), ebb tide
	1.1	-	1.5	Disposal event at EPA CAD cell (16:00), ebb tide
6-Apr-16	1.2	2.1	-	Mechanical dredging at Cozy Cove (DMU G36), ebb tide
	2.3	1.2	-	Mechanical dredging at Cozy Cove (DMU G36), flood tide
	1.6	-	8.2	Disposal event at EPA CAD cell (17:22), flood tide
7-Apr-16	2.1	2.2	-	Mechanical dredging at Cozy Cove (DMU G36), flood tide
	1.7	1.7	-	Mechanical dredging at Cozy Cove (DMU G36), ebb tide
8-Apr-16	1.8	1.7	-	Mechanical dredging at Cozy Cove (DMU G36), flood tide
	2.0	2.5	-	Mechanical dredging at Cozy Cove (DMU G36), ebb tide
	1.7	-	2.2	Disposal event at EPA CAD cell (07:00), flood tide
	1.7	-	2.0	Disposal event at EPA CAD cell (08:08), flood tide
	1.7	-	2.7	Disposal event at EPA CAD cell (11:00), ebb tide
13-Apr-16	3.2	6.7	-	Mechanical dredging at Cozy Cove (DMU G36), flood tide
	3.7	2.6	-	Mechanical dredging at Cozy Cove (DMU G36), ebb tide
	0.6	-	3.9	Disposal event at EPA CAD cell (12:06), flood tide
	1.7	-	1.8	Disposal event at EPA CAD cell (16:04), ebb tide
19-Apr-16	0.6	1.1	-	Mechanical dredging at Cozy Cove (DMU G36), ebb tide
	4.8	1.8	-	Mechanical dredging at Cozy Cove (DMU G36), flood tide
	0.6	-	11.9	Disposal event at EPA CAD cell (09:56), ebb tide
27-Apr-16	0.6	4.3	-	Mechanical dredging at Cozy Cove (DMU L36), flood tide
	0.8	2.8	-	Mechanical dredging at Cozy Cove (DMU L36), ebb tide
	0.6	-	0.7	Disposal event at EPA CAD cell (10:32), flood tide
	0.4	-	2.9	Disposal event at EPA CAD cell (14:59), ebb tide
29-Apr-16	0.5	2.7	-	Mechanical debris removal in Upper Harbor, flood tide
	0.7	0.9	-	Mechanical debris removal in Upper Harbor, ebb tide
3-May-16	0.8	-	-	Mechanical dredging at Cozy Cove (DMU K36), ebb tide
	0.2	0.4	-	Mechanical dredging at Cozy Cove (DMU K36), flood tide
	0.6	-	0.7	Disposal event at EPA CAD cell (15:21), flood tide
4-May-16	0.4	0.5	-	Mechanical debris removal in Upper Harbor, ebb tide
	0.7	2.1	-	Mechanical debris removal in Upper Harbor, flood tide
9-May-16	3.5	3.9	-	Mechanical dredging at Cozy Cove (DMU J36), flood tide
	0.8	3.3	-	Mechanical dredging at Cozy Cove (DMU J36), ebb tide
10-May-16	0.4	1.3	-	Debris removal in Upper Harbor, flood tide

Water Quality Monitoring Program - Historical Turbidity Data for the Lower Harbor (except where indicated)
New Bedford Harbor Superfund Site
November 9, 2015 to July 17, 2017

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Turbidity levels are also measured during sediment disposal into the Confined Aquatic Disposal (CAD) cell. While the silt curtain hinders sediment movement, measurements are still taken 25 feet from the silt curtain during disposal to ensure its effectiveness as a barrier. If the turbidity levels are greater than 50 NTU (above the reference level) 25 feet from the silt curtain, EPA will assess potential causes.

Monitoring Date	Turbidity (*NTU) Readings at Monitoring Stations:			Activity
	Up-current Reference	Compliance (50 NTU above reference level)		
		Debris Removal/ Dredging (300-ft down-current from dredge area boundary)	Disposal at EPA CAD cell (25-ft from silt curtain)	
16-May-16	0.3	0.7	-	Debris removal in Upper Harbor, ebb tide
17-May-16	0.7	-	0.6	Disposal event at EPA CAD cell (08:20), ebb tide
	2.1	1.3	-	Mechanical dredging at Cozy Cove (DMU K36), ebb tide
	0.5	1.6	-	Mechanical dredging at Cozy Cove (DMU K36), flood tide
	1.4	-	0.9	Disposal event at EPA CAD cell (15:16), flood tide
20-May-16	0.7	0.8	-	Debris removal in Upper Harbor, ebb tide
	0.8	1.8	-	Debris removal in Upper Harbor, flood tide
23-May-16	0.4	0.7	-	Debris removal in Upper Harbor, flood tide
	0.2	0.5	-	Debris removal in Upper Harbor, ebb tide
26-May-16	0.4	-	0.7	Disposal event at EPA CAD cell (09:55), flood tide
	0.8	1.1	-	Mechanical dredging at Cozy Cove (DMU G36), ebb tide
	0.4	-	0.7	Disposal event at EPA CAD cell (15:36), ebb tide
31-May-16	2.1	1.3	-	Mechanical dredging at Cozy Cove (DMU G36), ebb tide
	1.6	0.9	-	Mechanical dredging at Cozy Cove (DMU G36), flood tide
	1.2	-	1.5	Disposal event at EPA CAD cell (14:05), flood tide
3-Jun-16	1.0	1.3	-	Debris removal in Upper Harbor, ebb tide
	1.1	0.9	-	Debris removal in Upper Harbor, flood tide
8-Jun-16	0.8	1.7	-	Debris removal in Upper Harbor, flood tide
	2.6	1.0	-	Debris removal in Upper Harbor, ebb tide
9-Jun-16	1.1	13.3	-	Mechanical dredging in Lower Harbor at Cozy Cove (DMU G36), flood tide
	1.4	1.7	-	Mechanical dredging in Lower Harbor at Cozy Cove (DMU G36), ebb tide
	0.8	-	3.1	Disposal event at EPA CAD cell (09:57), flood tide
	1.3	-	1.6	Disposal event at EPA CAD cell (15:05), ebb tide
13-Jun-16	0.9	1.4	-	Debris removal in Upper Harbor, ebb tide
	1.2	1.5	-	Debris removal in Upper Harbor, flood tide
15-Jun-16	1.0	0.8	-	Debris removal in northern Lower Harbor, ebb tide
	1.1	2.6	-	Debris removal in northern Lower Harbor, flood tide
23-Jun-16	1.8	2.3	-	Mechanical dredging in Lower Harbor at DMU A33, flood tide
	1.5	not sampled	-	Mechanical dredging in Lower Harbor at DMU A33, ebb tide
24-Jun-16	1.6	1.9	-	Debris removal at Upper Harbor cable crossing area, flood tide
	2.4	1.0	-	Debris removal at Upper Harbor cable crossing area, ebb tide
27-Jun-16	2.2	1.8	-	Debris removal at Upper Harbor cable crossing area, flood tide
	2.4	1.8	-	Debris removal at Upper Harbor cable crossing area, ebb tide
30-Jun-16	1.8	2.8	-	Mechanical dredging at Lower Harbor DMU A33 and 33A, ebb tide
	1.6	1.6	-	Mechanical dredging at Lower Harbor DMU A33 and 33A, flood tide
	1.1	-	3.6	Disposal event at EPA CAD cell (12:06), flood tide
7-Jul-16	4.6	7.4	-	Debris removal at Upper Harbor cable crossing area, flood tide
	7.3	7.2	-	Debris removal at Upper Harbor cable crossing area, ebb tide
8-Jul-16	1.4	1.3	-	Mechanical dredging at Lower Harbor DMU 33A, flood tide
	1.6	-	1.9	Disposal event at EPA CAD cell (12:54), ebb tide
	1.3	2.0	-	Debris removal at Upper Harbor cable crossing area, ebb tide
12-Jul-16	1.9	2.3	-	Mechanical dredging at Lower Harbor DMU 33A, flood tide
	2.0	1.5	-	Mechanical dredging at Lower Harbor DMU 33A, ebb tide
	1.5	-	-	No disposal, but transfer of dredged material from small scows to larger, split scow at EPA CAD cell (08:15-09:10), flood tide
13-Jul-16	9.5	5.6	-	Debris removal at Upper Harbor cable crossing area, flood tide
18-Jul-16	2.0	2.2	-	Debris removal at Upper Harbor cable crossing area, ebb tide
	2.2	2.2	-	Debris removal at Upper Harbor cable crossing area, flood tide
19-Jul-16	2.8	2.2	-	Mechanical dredging at Lower Harbor DMU 33A, ebb tide
	3.2	3.4	-	Mechanical dredging at Lower Harbor DMU 33A, flood tide

Water Quality Monitoring Program - Historical Turbidity Data for the Lower Harbor (except where indicated)
New Bedford Harbor Superfund Site
November 9, 2015 to July 17, 2017

This table shows the highest recorded measurements of turbidity, or movement of sediment in the water, at locations far from the dredge (Up-current Reference) as well as near the dredge (300-ft down current from dredge). EPA measures turbidity to ensure that PCB sediment is not being distributed beyond the dredge areas during work. Currents in the harbor are often changing, which is why EPA measures in many places around the dredge. PCBs like to attach to sediment and do not like to stay in the water. Therefore, if we know where the sediment is moving, we can monitor the movement of PCBs. Plans are in place to ensure proper action is taken in the event of high turbidity levels. If the turbidity levels are greater than 50 NTU* (above the reference level measured) at 300 feet down current of the dredging activities, EPA may stop or slow work and/or collect water samples.

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Monitoring Date	Turbidity (*NTU) Readings at Monitoring Stations:			Activity
	Up-current Reference	Compliance (50 NTU above reference level)		
		Debris Removal/ Dredging (300-ft down-current from dredge area boundary)	Disposal at EPA CAD cell (25-ft from silt curtain)	
	2.7	-	2.0	Disposal event at EPA CAD cell (11:00), ebb tide
27-Jul-16	4.0	4.0	-	Mechanical dredging at Lower Harbor DMU B33, flood tide
	0.9	-	3.1	Disposal event at EPA CAD cell (11:10), flood tide
28-Jul-16	5.1	4.0	-	Debris removal at Upper Harbor cable crossing area, flood tide
3-Aug-16	5.7	3.8	-	Debris removal in Lower Harbor DMUs B33 and 33B, flood tide
	4.4	4.6	-	Debris removal in Lower Harbor DMUs B33 and 33B, ebb tide
10-Aug-16	4.9	11.9	-	Debris removal at Upper Harbor cable crossing area, flood tide
	7.3	not sampled	-	Debris removal at Upper Harbor cable crossing area, ebb tide; compliance reading not sampled (collected) because debris removal activities stopped just as the tide started ebbing
11-Aug-16	3.0	3.7	-	Mechanical dredging at Lower Harbor DMU 35B, flood tide
	5.6	4.8	-	Mechanical dredging at Lower Harbor DMU 35B, ebb tide
15-Aug-16	4.6	6.8	-	Mechanical dredging at Lower Harbor DMU 35B, ebb tide
	3.6	4.5	-	Mechanical dredging at Lower Harbor DMU 35B, flood tide
	3.6	-	6.8	Disposal event at EPA CAD cell (15:20), flood tide
25-Aug-16	2.9	5.0	-	Mechanical dredging at Lower Harbor DMU C35, flood tide
	3.5	2.0	-	Mechanical dredging at Lower Harbor DMU C35, ebb tide
	2.8	-	4.5	Disposal event at EPA CAD cell (10:36), flood tide
31-Aug-16	5.4	3.5	-	Mechanical dredging at Lower Harbor DMU C35, ebb tide
	2.8	-	5.7	Disposal event at EPA CAD cell (15:58), flood tide
8-Sep-16	1.0	4.4	-	Mechanical dredging at Lower Harbor DMU 35B, flood tide
	1.5	1.0	-	Mechanical dredging at Lower Harbor DMU 35B, ebb tide
	1.1	-	1.7	Disposal event at EPA CAD cell (15:57), ebb tide
15-Sep-16	1.8	2.9	-	Mechanical dredging at Lower Harbor DMU B34, ebb tide
	3.1	8.1	-	Mechanical dredging at Lower Harbor DMU 35B, ebb tide
	1.4	3.5	-	Mechanical dredging at Lower Harbor DMU 35B, flood tide
22-Sep-16	1.1	2.2	-	Mechanical dredging at Lower Harbor DMUs B34 and C33, flood tide
	1.1	1.1	-	Mechanical dredging at Lower Harbor DMUs B34 and C33, ebb tide
28-Sep-16	1.5	1.8	-	Mechanical dredging at Lower Harbor DMUs C34 and C33, ebb tide
	1.5	-	1.6	Disposal event at EPA CAD cell (12:35), ebb tide
	1.1	3.4	-	Mechanical dredging at Lower Harbor DMUs C34 and C33, flood tide
5-Oct-16	0.6	3.6	-	Mechanical dredging at Lower Harbor DMUs H34 and A34, flood tide
	1.3	1.3	-	Mechanical dredging at Lower Harbor DMUs H34 and A34, ebb tide
13-Oct-16	1.7	1.1	-	Mechanical dredging at Lower Harbor DMU A34, ebb tide
	1.7	-	4.3	Disposal event at EPA CAD cell (11:34), ebb tide
	1.9	2.8	-	Mechanical dredging at Lower Harbor DMU A34, flood tide
17-Oct-16	0.7	1.3	-	Mechanical dredging at Lower Harbor DMU A34, flood tide
	1.8	0.8	-	Mechanical dredging at Lower Harbor DMU A34, ebb tide
	1.2	-	3.6	Disposal event at EPA CAD cell (11:15), ebb tide
	2.0	2.3	-	Mechanical dredging at Lower Harbor DMU A34, flood tide
27-Oct-16	1.5	1.2	-	Mechanical dredging at Lower Harbor DMU C35, ebb tide
	0.9	2.1	-	Mechanical dredging at Lower Harbor DMU C35, flood tide
	0.9	-	1.8	Disposal event at EPA CAD cell (14:00), flood tide
31-Oct-16	1.2	1.7	-	Mechanical dredging at Lower Harbor DMU A34, flood tide
	1.2	1.1	-	Mechanical dredging at Lower Harbor DMU A34, ebb tide
	1.0	1.9	-	Mechanical dredging at Lower Harbor DMU A34, flood tide
8-Nov-16	2.2	3.0	-	Mechanical dredging at Lower Harbor DMU H34, flood tide
	2.8	2.1	-	Mechanical dredging at Lower Harbor DMU H34, ebb tide
29-Nov-16	0.9	3.1	-	Mechanical dredging at Lower Harbor DMU A34, ebb tide
	1.1	1.0	-	Mechanical dredging at Lower Harbor DMU A34, flood tide

Water Quality Monitoring Program - Historical Turbidity Data for the Lower Harbor (except where indicated)
New Bedford Harbor Superfund Site
November 9, 2015 to July 17, 2017

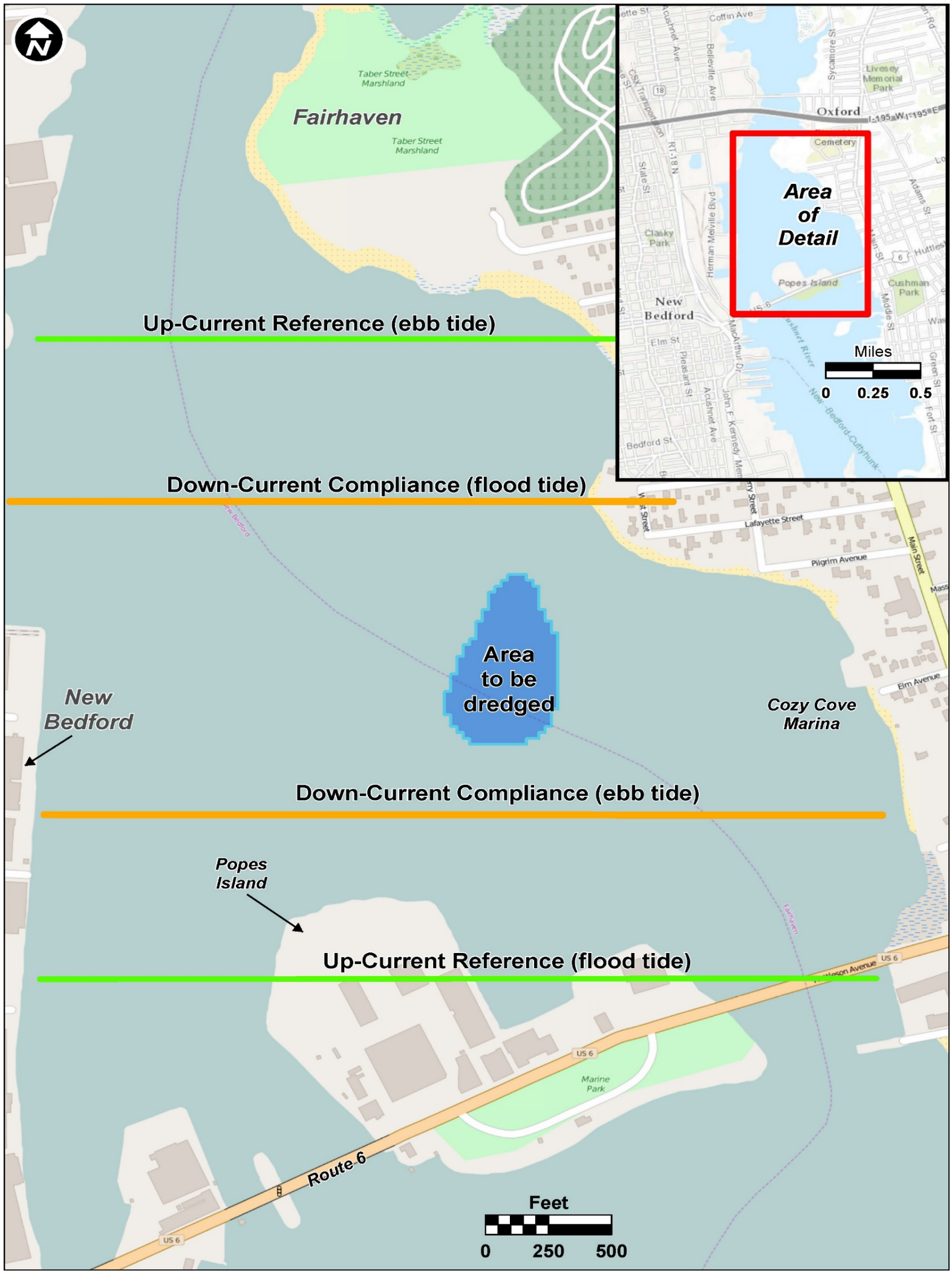
This table shows the highest recorded measurements of turbidity, or movement of sediment in the water, at locations far from the dredge (Up-current Reference) as well as near the dredge (300-ft down current from dredge). EPA measures turbidity to ensure that PCB sediment is not being distributed beyond the dredge areas during work. Currents in the harbor are often changing, which is why EPA measures in many places around the dredge. PCBs like to attach to sediment and do not like to stay in the water. Therefore, if we know where the sediment is moving, we can monitor the movement of PCBs. Plans are in place to ensure proper action is taken in the event of high turbidity levels. If the turbidity levels are greater than 50 NTU* (above the reference level measured) at 300 feet down current of the dredging activities, EPA may stop or slow work and/or collect water samples.

Turbidity levels are also measured during sediment disposal into the Confined Aquatic Disposal (CAD) cell. While the silt curtain hinders sediment movement, measurements are still taken 25 feet from the silt curtain during disposal to ensure its effectiveness as a barrier. If the turbidity levels are greater than 50 NTU (above the reference level) 25 feet from the silt curtain, EPA will assess potential causes.

Monitoring Date	Turbidity (*NTU) Readings at Monitoring Stations:			Activity
	Up-current Reference	Compliance (50 NTU above reference level)		
		Debris Removal/ Dredging (300-ft down-current from dredge area boundary)	Disposal at EPA CAD cell (25-ft from silt curtain)	
9-Dec-16	1.1	1.4	-	Mechanical dredging at Lower Harbor DMU A36 (Moby Dick), ebb tide
	1.6	2.7	-	Mechanical dredging at Lower Harbor DMU A36 (Moby Dick), flood tide
16-Dec-16	1.5	0.9	-	Mechanical dredging at Lower Harbor DMU A36 (Moby Dick), flood tide
	2.1	3.0	-	Mechanical dredging at Lower Harbor DMU A36 (Moby Dick), ebb tide
19-Dec-16	1.7	1.8	-	Mechanical dredging at Lower Harbor DMU A36 (Moby Dick), flood tide
	1.2	1.8	-	Mechanical dredging at Lower Harbor DMU A36 (Moby Dick), ebb tide
10-Jan-17	1.9	2.6	-	Mechanical dredging at Lower Harbor DMU A36 (Moby Dick), ebb tide
	3.6	3.9	-	Mechanical dredging at Lower Harbor DMU A36 (Moby Dick), flood tide
18-Jan-17	2.7	3.0	-	Mechanical dredging at Upper Harbor DMU MU28, flood tide
	3.0	3.8	-	Mechanical dredging at Upper Harbor DMU MU28, ebb tide
25-Jan-17	3.7	3.7	-	Mechanical dredging at Upper Harbor DMU MU28, ebb tide
	3.5	5.2	-	Mechanical dredging at Upper Harbor DMU MU28, flood tide
1-Feb-17	3.8	4.0	-	Mechanical dredging at Upper Harbor DMU MU28, flood tide
	3.2	3.3	-	Mechanical dredging at Upper Harbor DMU MU28, ebb tide
6-Feb-17	3.9	5.2	-	Mechanical dredging at Upper Harbor DMU MU28, ebb tide
	4.7	4.1	-	Mechanical dredging at Upper Harbor DMU MU28, flood tide
15-Feb-17	2.8	3.8	-	Mechanical dredging at Upper Harbor DMU MU28, flood tide
	3.5	4.8	-	Mechanical dredging at Upper Harbor DMU MU28, ebb tide
24-Feb-17	2.2	4.4	-	Mechanical dredging at Upper Harbor DMU MU25, ebb tide
	3.5	12.1	-	Mechanical dredging at Upper Harbor DMU MU25, flood tide
1-Mar-17	2.1	4.2	-	Mechanical dredging at Upper Harbor DMU MU25, flood tide
	3.7	3.1	-	Mechanical dredging at Upper Harbor DMU MU25, ebb tide
7-Mar-17	2.7	4.5	-	Mechanical dredging at Upper Harbor DMU MU25, ebb tide (morning)
	3.8	4.9	-	Mechanical dredging at Upper Harbor DMU MU25, flood tide
	4.6	4.8	-	Mechanical dredging at Upper Harbor DMU MU25, ebb tide (afternoon)
17-Mar-17	4.0	4.2	-	Mechanical dredging at Upper Harbor DMU MU25, flood tide
	3.9	3.8	-	Mechanical dredging at Upper Harbor DMU MU25, ebb tide
20-Mar-17	3.8	5.0	-	Mechanical dredging at Upper Harbor DMU MU25, flood tide
	4.5	4.7	-	Mechanical dredging at Upper Harbor DMU MU25, ebb tide
30-Mar-17	2.4	2.7	-	Mechanical dredging at Upper Harbor DMU MU25, flood tide
	3.2	4.3	-	Mechanical dredging at Upper Harbor DMU MU25, ebb tide
5-Apr-17	3.3	3.4	-	Mechanical dredging at Upper Harbor DMU MU25, ebb tide
	3.4	6.2	-	Mechanical dredging at Upper Harbor DMU MU25, flood tide
11-Apr-17	2.5	3.0	-	Mechanical dredging at Upper Harbor DMU MU25, flood tide (morning)
	3.2	2.1	-	Mechanical dredging at Upper Harbor DMU MU25, ebb tide
	3.4	7.6	-	Mechanical dredging at Upper Harbor DMU MU25, flood tide (afternoon)
17-Jul-17	1.8	1.8	-	Debris removal at Upper Harbor cable crossing area, flood tide
	2.3	3.0	-	Debris removal at Upper Harbor cable crossing area, ebb tide

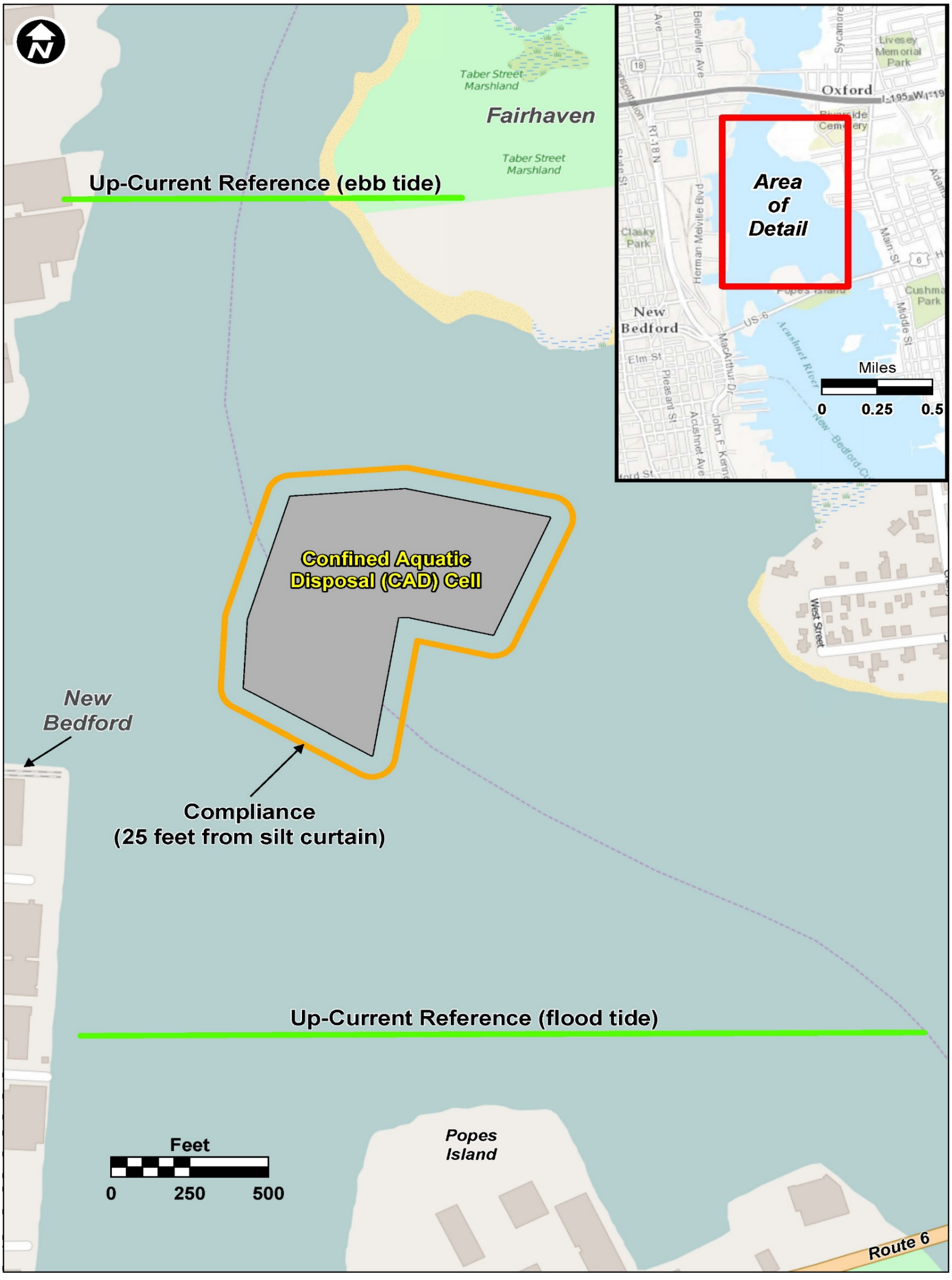
*NTU - The instrument we use to measure turbidity levels with reports data as NTU, which are Nephlometric Turbidity Units.

The map below is an example of where we collect sediment level data, or turbidity, around a dredging area. Action is taken if the turbidity levels are greater than 50 NTU* (above the reference level measured) 300 feet down current from the dredge area.



*NTU - The instrument we use to measure turbidity levels with reports data as NTU, which are Nephlometric Turbidity Units.

The map below shows where turbidity monitoring takes place in the water when mud is disposed of into the Confined Aquatic Disposal (CAD) cell. Action is taken if the turbidity levels are greater than 50 NTU* (above the reference level measured) 25 feet from the silt curtain. The silt curtain is intended to hinder sediment movement.



*NTU - The instrument we use to measure turbidity levels with reports data as NTU, which are Nephlometric Turbidity Units.

Date	Range Checked	Checker

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