

Battery - January 2021

Times and Heights of High and Low Waters

1 Fri	03:19 -0.1 09:08 5.0 16:11 -0.3 21:58 4.0	9 Sat	04:28 5.0 11:08 -0.3 16:55 4.1 23:17 -0.4	17 Sun	05:05 0.1 11:20 4.6 17:37 -0.2 23:56 4.1	25 Mon	05:39 4.4 12:14 0.2 18:13 3.7
2 Sat	03:59 -0.0 09:51 4.9 16:51 -0.3 22:47 4.0	10 Sun	05:29 5.2 12:05 -0.5 17:58 4.2	18 Mon	05:54 0.5 12:07 4.3 18:22 0.1	26 Tue	00:05 0.3 06:22 4.6 13:00 -0.0 18:56 3.9
3 Sun	04:43 0.1 10:41 4.8 17:35 -0.2 23:39 4.1	11 Mon	00:11 -0.5 06:24 5.4 12:59 -0.7 18:54 4.3	19 Tue	00:43 4.0 06:49 0.7 12:54 4.0 19:10 0.4	27 Wed	00:51 0.1 07:01 4.8 13:44 -0.2 19:35 4.0
4 Mon	05:33 0.2 11:36 4.7 18:25 -0.1	12 Tue	01:05 -0.6 07:16 5.5 13:51 -0.8 19:45 4.4	20 Wed	01:28 4.0 07:50 0.9 13:41 3.7 ☾ 20:02 0.6	28 Thu	01:37 -0.2 07:38 5.0 14:26 -0.4 ☉ 20:13 4.2
5 Tue	00:31 4.2 06:39 0.3 12:32 4.5 19:24 -0.1	13 Wed	01:57 -0.6 08:05 5.5 14:40 -0.9 ● 20:35 4.4	21 Thu	02:14 3.9 08:52 0.9 14:32 3.5 20:54 0.6	29 Fri	02:21 -0.3 08:16 5.1 15:07 -0.6 20:53 4.3
6 Wed	01:25 4.4 07:55 0.4 13:31 4.3 ☾ 20:26 -0.1	14 Thu	02:46 -0.5 08:53 5.4 15:26 -0.8 21:26 4.4	22 Fri	03:04 3.9 09:48 0.8 15:29 3.4 21:44 0.6	30 Sat	03:05 -0.4 08:55 5.2 15:47 -0.6 21:36 4.4
7 Thu	02:23 4.6 09:06 0.2 14:34 4.1 21:26 -0.2	15 Fri	03:34 -0.4 09:42 5.2 16:11 -0.7 22:17 4.3	23 Sat	03:57 4.0 10:39 0.6 16:29 3.4 22:32 0.6	31 Sun	03:48 -0.5 09:39 5.1 16:27 -0.6 22:23 4.5
8 Fri	03:24 4.8 10:10 0.0 15:44 4.0 22:22 -0.3	16 Sat	04:19 -0.2 10:31 4.9 16:54 -0.4 23:08 4.2	24 Sun	04:50 4.2 11:27 0.4 17:25 3.5 23:19 0.4		

East River Constant HWS Batt. + 1:30 LWS Batt. + 1:20
 North River Constant HWS Batt. + 2:20 LWS Batt. + 2:40

East River slack water lasts from 4 to 8 minutes. North River about 35 minutes.
 North River is running flood 15 feet below the surface 1 hour before turning
 from ebb to flood at surface. High water slack occurs in the Narrows 15 minutes
 before the H.W.S. East River and low water slack occurs about 20 minutes
 before the L.W.S. North River.

Battery - February 2021

Times and Heights of High and Low Waters

1 Mon	04:34 -0.4 10:28 4.9 17:09 -0.5 23:14 4.6	9 Tue	06:15 5.1 12:43 -0.5 18:45 4.3	17 Wed	06:05 0.6 12:14 4.0 18:08 0.5	25 Thu	00:26 0.1 06:35 4.9 13:14 -0.2 19:08 4.4
2 Tue	05:24 -0.2 11:22 4.7 17:56 -0.4	10 Wed	00:52 -0.3 07:06 5.2 13:33 -0.6 19:34 4.5	18 Thu	00:35 4.1 06:59 0.9 13:00 3.7 18:51 0.8	26 Fri	01:15 -0.2 07:16 5.1 13:57 -0.5 19:47 4.7
3 Wed	00:07 4.7 06:25 0.0 12:18 4.4 18:51 -0.2	11 Thu	01:42 -0.4 07:52 5.3 14:19 -0.7 ● 20:19 4.6	19 Fri	01:16 4.0 08:03 1.0 13:48 3.5 ● 19:50 1.0	27 Sat	02:02 -0.5 07:56 5.3 ○ 14:39 -0.7 ○ 20:27 4.9
4 Thu	01:01 4.7 07:36 0.2 13:17 4.2 ● 19:56 0.0	12 Fri	02:30 -0.4 08:36 5.2 15:02 -0.7 21:04 4.6	20 Sat	02:00 3.9 09:06 1.0 14:44 3.3 20:56 1.0	28 Sun	02:48 -0.7 08:38 5.4 15:21 -0.8 21:11 5.1
5 Fri	01:59 4.7 08:48 0.2 14:21 4.0 21:03 0.1	13 Sat	03:14 -0.4 09:19 5.1 15:43 -0.6 21:48 4.5	21 Sun	02:52 3.9 10:03 0.9 15:46 3.3 21:54 0.9		
6 Sat	03:03 4.7 09:54 0.1 15:33 3.8 22:05 0.0	14 Sun	03:56 -0.2 10:03 4.8 16:20 -0.4 22:31 4.4	22 Mon	03:56 4.0 10:54 0.7 16:49 3.5 22:47 0.7		
7 Sun	04:11 4.8 10:54 -0.1 16:46 3.9 23:03 -0.1	15 Mon	04:38 0.1 10:46 4.5 16:57 -0.1 23:14 4.3	23 Tue	04:59 4.3 11:42 0.4 17:42 3.7 23:37 0.4		
8 Mon	05:17 4.9 11:50 -0.3 17:50 4.1 23:59 -0.2	16 Tue	05:19 0.3 11:30 4.3 17:32 0.2 23:55 4.2	24 Wed	05:51 4.6 12:29 0.1 18:27 4.0		

East River Constant HWS Batt. + 1:30 LWS Batt. + 1:20
 North River Constant HWS Batt. + 2:20 LWS Batt. + 2:40

East River slack water lasts from 4 to 8 minutes. North River about 35 minutes.
 North River is running flood 15 feet below the surface 1 hour before turning
 from ebb to flood at surface. High water slack occurs in the Narrows 15 minutes
 before the H.W.S. East River and low water slack occurs about 20 minutes
 before the L.W.S. North River.

TIMES ADJUSTED FOR DAYLIGHT SAVINGS TIME

Battery - March 2021

Times and Heights of High and Low Waters

1 Mon 03:35 -0.7 09:24 5.3 16:02 -0.8 21:58 5.2	9 Tue 05:05 4.8 11:32 -0.0 17:40 4.2 23:46 0.1	17 Wed 05:49 0.3 11:56 4.2 17:47 0.4	25 Thu 00:09 0.6 06:11 4.6 12:54 0.2 18:53 4.4
2 Tue 04:22 -0.6 10:14 5.0 16:44 -0.6 22:49 5.2	10 Wed 06:02 4.9 12:23 -0.2 18:32 4.5	18 Thu 00:03 4.5 06:28 0.6 12:39 4.0 18:14 0.7	26 Fri 01:01 0.2 07:03 5.0 13:40 -0.1 19:37 4.8
3 Wed 05:13 -0.4 11:09 4.8 17:30 -0.4 23:43 5.2	11 Thu 00:37 -0.1 06:51 5.1 13:10 -0.3 19:17 4.7	19 Fri 00:38 4.4 07:12 0.8 13:24 3.7 18:42 1.0	27 Sat 01:52 -0.2 07:49 5.3 14:25 -0.4 20:19 5.3
4 Thu 06:11 -0.1 12:07 4.5 18:26 -0.0	12 Fri 01:25 -0.2 07:34 5.1 13:53 -0.4 19:58 4.8	20 Sat 01:14 4.2 08:11 1.1 14:11 3.6 19:26 1.2	28 Sun 02:42 -0.5 08:33 5.4 15:09 -0.7 21:01 5.6
5 Fri 00:40 5.0 07:19 0.1 13:09 4.2 19:33 0.3	13 Sat 02:11 -0.2 08:14 5.1 14:34 -0.4 20:37 4.9	21 Sun 01:57 4.1 09:21 1.1 15:03 3.5 20:55 1.3	29 Mon 03:31 -0.8 09:18 5.4 15:52 -0.8 21:45 5.8
6 Sat 01:40 4.9 08:31 0.3 14:14 4.0 20:45 0.4	14 Sun 03:53 -0.2 09:54 5.0 16:11 -0.3 22:15 4.9	22 Mon 02:50 4.1 10:24 1.0 16:02 3.5 22:15 1.2	30 Tue 04:20 -0.8 10:06 5.3 16:36 -0.7 22:33 5.8
7 Sun 02:46 4.7 09:38 0.2 15:26 3.9 21:51 0.4	15 Mon 04:33 -0.1 10:33 4.8 16:46 -0.1 22:52 4.8	23 Tue 03:55 4.1 11:18 0.8 17:06 3.7 23:15 0.9	31 Wed 05:09 -0.7 11:00 5.1 17:21 -0.5 23:26 5.7
8 Mon 03:57 4.7 10:38 0.1 16:37 4.0 22:50 0.3	16 Tue 05:11 0.1 11:14 4.5 17:18 0.1 23:28 4.7	24 Wed 05:08 4.3 12:07 0.5 18:04 4.0	

East River Constant HWS Batt. + 1:30 LWS Batt. + 1:20
North River Constant HWS Batt. + 2:20 LWS Batt. + 2:40

East River slack water lasts from 4 to 8 minutes. North River about 35 minutes. North River is running flood 15 feet below the surface 1 hour before turning from ebb to flood at surface. High water slack occurs in the Narrows 15 minutes before the H.W.S. East River and low water slack occurs about 20 minutes before the L.W.S. North River.

TIMES ADJUSTED FOR DAYLIGHT SAVINGS TIME

Battery - April 2021

Times and Heights of High and Low Waters

1 Thu 06:01 -0.5 11:58 4.8 18:10 -0.2	9 Fri 01:18 0.3 07:28 4.9 13:41 -0.0 19:53 5.0	17 Sat 06:40 0.8 12:55 3.8 18:08 1.1	25 Sun 01:29 -0.2 07:20 5.2 13:51 -0.4 19:50 5.8
2 Fri 00:23 5.5 06:58 -0.2 13:00 4.5 19:07 0.2	10 Sat 02:05 0.1 08:10 4.9 14:22 -0.1 20:32 5.1	18 Sun 00:24 4.5 07:29 1.0 13:41 3.7 18:49 1.3	26 Mon 02:21 -0.5 08:09 5.3 14:38 -0.6 20:35 6.1
3 Sat 01:23 5.3 08:03 0.1 14:03 4.3 20:16 0.6	11 Sun 02:48 0.0 08:49 4.9 15:01 -0.0 21:07 5.2	19 Mon 01:12 4.4 08:36 1.1 14:30 3.7 19:58 1.4	27 Tue 03:13 -0.7 08:58 5.3 15:26 -0.6 21:22 6.2
4 Sun 02:25 5.0 09:12 0.3 15:08 4.2 21:29 0.7	12 Mon 03:30 0.0 09:27 4.8 15:37 0.1 21:41 5.2	20 Tue 02:08 4.4 09:43 1.0 15:23 3.8 21:36 1.3	28 Wed 04:04 -0.8 09:50 5.2 16:13 -0.5 22:12 6.2
5 Mon 03:31 4.8 10:18 0.4 16:15 4.1 22:36 0.7	13 Tue 04:09 0.0 10:05 4.6 16:11 0.2 22:14 5.1	21 Wed 03:10 4.4 10:39 0.8 16:22 4.0 22:44 1.0	29 Thu 04:55 -0.8 10:47 5.0 17:02 -0.3 23:07 6.0
6 Tue 04:39 4.7 11:17 0.3 17:22 4.3 23:35 0.6	14 Wed 04:47 0.2 10:45 4.4 16:43 0.4 22:44 4.9	22 Thu 04:19 4.5 11:30 0.5 17:22 4.4 23:42 0.6	30 Fri 05:47 -0.5 11:49 4.8 17:53 0.0
7 Wed 05:45 4.7 12:09 0.2 18:21 4.5	15 Thu 05:24 0.3 11:27 4.2 17:11 0.7 23:14 4.8	23 Fri 05:27 4.7 12:17 0.2 18:16 4.8	
8 Thu 00:29 0.4 06:41 4.8 12:56 0.1 19:11 4.7	16 Fri 06:01 0.5 12:11 4.0 17:38 0.9 23:45 4.6	24 Sat 00:36 0.2 06:27 5.0 13:04 -0.1 19:04 5.3	

East River Constant HWS Batt. + 1:30 LWS Batt. + 1:20
North River Constant HWS Batt. + 2:20 LWS Batt. + 2:40

East River slack water lasts from 4 to 8 minutes. North River about 35 minutes. North River is running flood 15 feet below the surface 1 hour before turning from ebb to flood at surface. High water slack occurs in the Narrows 15 minutes before the H.W.S. East River and low water slack occurs about 20 minutes before the L.W.S. North River.

TIMES ADJUSTED FOR DAYLIGHT SAVINGS TIME

Battery - May 2021

Times and Heights of High and Low Waters

1 Sat 00:07 5.7 06:43 -0.2 12:52 4.6 18:51 0.4	9 Sun 01:40 0.4 07:41 4.6 13:46 0.3 20:02 5.2	17 Mon 07:02 0.8 13:16 3.9 18:32 1.2	25 Tue 02:03 -0.5 07:48 5.1 14:11 -0.4 20:13 6.3
2 Sun 01:09 5.4 07:44 0.1 13:54 4.5 19:58 0.7	10 Mon 02:24 0.3 08:22 4.6 14:25 0.3 20:36 5.3	18 Tue 00:45 4.6 07:58 0.9 14:02 3.9 19:34 1.3	26 Wed 02:56 -0.7 08:42 5.1 15:02 -0.4 21:02 6.3
3 Mon 02:10 5.1 08:50 0.3 14:55 4.4 21:09 0.9	11 Tue 03:06 0.2 09:01 4.5 15:03 0.4 21:09 5.3	19 Wed 01:40 4.6 09:01 0.8 14:51 4.1 21:02 1.2	27 Thu 03:49 -0.8 09:37 5.0 15:54 -0.3 21:55 6.2
4 Tue 03:11 4.8 09:53 0.4 15:56 4.4 22:15 0.9	12 Wed 03:46 0.2 09:40 4.4 15:39 0.5 21:39 5.2	20 Thu 02:39 4.6 09:59 0.7 15:45 4.4 22:15 1.0	28 Fri 04:40 -0.7 10:35 4.9 16:45 -0.2 22:52 6.0
5 Wed 04:13 4.6 10:49 0.4 16:57 4.5 23:14 0.8	13 Thu 04:25 0.2 10:20 4.3 16:13 0.6 22:08 5.1	21 Fri 03:41 4.6 10:51 0.4 16:42 4.7 23:16 0.6	29 Sat 05:32 -0.6 11:37 4.8 17:38 0.1 23:52 5.7
6 Thu 05:14 4.6 11:39 0.3 17:53 4.7	14 Fri 05:02 0.3 11:03 4.1 16:45 0.8 22:36 4.9	22 Sat 04:48 4.7 11:41 0.1 17:39 5.2	30 Sun 06:25 -0.3 12:39 4.7 18:34 0.5
7 Fri 00:06 0.7 06:09 4.6 12:24 0.3 18:42 4.9	15 Sat 05:40 0.5 11:47 4.0 17:16 0.9 23:10 4.8	23 Sun 00:13 0.2 05:53 4.8 12:30 -0.1 18:33 5.6	31 Mon 00:52 5.4 07:21 0.0 13:37 4.6 19:37 0.8
8 Sat 00:54 0.5 06:58 4.6 13:06 0.3 19:24 5.1	16 Sun 06:18 0.6 12:31 3.9 17:49 1.1 23:53 4.7	24 Mon 01:08 -0.2 06:53 5.0 13:20 -0.3 19:24 6.0	

East River Constant HWS Batt. + 1:30 LWS Batt. + 1:20
 North River Constant HWS Batt. + 2:20 LWS Batt. + 2:40

East River slack water lasts from 4 to 8 minutes. North River about 35 minutes. North River is running flood 15 feet below the surface 1 hour before turning from ebb to flood at surface. High water slack occurs in the Narrows 15 minutes before the H.W.S. East River and low water slack occurs about 20 minutes before the L.W.S. North River.

TIMES ADJUSTED FOR DAYLIGHT SAVINGS TIME

Battery - June 2021

Times and Heights of High and Low Waters

1 01:50 5.1 08:21 0.3 Tue 14:33 4.6 20:43 1.0	9 02:40 0.3 08:36 4.3 Wed 14:30 0.6 20:39 5.2	17 01:19 4.8 08:20 0.5 Thu 14:22 4.5 20:37 1.0	25 03:33 -0.7 09:24 4.9 Fri 15:38 -0.2 21:41 6.1
2 02:45 4.8 09:20 0.4 Wed 15:28 4.6 ☉ 21:48 1.0	10 03:22 0.2 09:17 4.3 Thu 15:10 0.6 ● 21:11 5.2	18 02:14 4.7 09:19 0.5 Fri 15:13 4.7 ☾ 21:50 0.9	26 04:24 -0.7 10:21 4.9 Sat 16:30 -0.1 22:37 5.9
3 03:40 4.5 10:14 0.5 Thu 16:23 4.6 22:46 1.0	11 04:02 0.2 09:57 4.2 Fri 15:49 0.7 21:42 5.1	19 03:13 4.6 10:15 0.3 Sat 16:09 5.0 22:54 0.6	27 05:13 -0.5 11:20 4.8 Sun 17:21 0.1 23:34 5.6
4 04:36 4.4 11:02 0.5 Fri 17:16 4.7 23:38 0.8	12 04:41 0.2 10:39 4.1 Sat 16:25 0.7 22:13 5.1	20 04:18 4.6 11:09 0.1 Sun 17:08 5.4 23:53 0.2	28 06:02 -0.3 12:18 4.8 Mon 18:14 0.4
5 05:31 4.3 11:46 0.5 Sat 18:06 4.9	13 05:20 0.3 11:22 4.1 Sun 17:01 0.8 22:50 5.0	21 05:27 4.6 12:01 -0.0 Mon 18:07 5.7	29 00:30 5.3 06:53 -0.0 Tue 13:13 4.7 19:10 0.7
6 00:26 0.7 06:23 4.3 Sun 12:28 0.5 18:50 5.0	14 05:58 0.4 12:06 4.1 Mon 17:38 0.9 23:35 4.9	22 00:50 -0.1 06:33 4.7 Tue 12:55 -0.1 19:03 6.0	30 01:22 5.0 07:45 0.2 Wed 14:04 4.7 20:11 1.0
7 01:12 0.6 07:11 4.3 Mon 13:09 0.5 19:30 5.2	15 06:39 0.5 12:50 4.1 Tue 18:22 1.0	23 01:46 -0.4 07:33 4.8 Wed 13:50 -0.2 19:56 6.2	
8 01:57 0.4 07:54 4.3 Tue 13:50 0.6 20:06 5.2	16 00:25 4.8 07:25 0.6 Wed 13:35 4.3 19:20 1.1	24 02:40 -0.6 08:29 4.9 Thu 14:44 -0.2 ○ 20:48 6.2	

East River Constant HWS Batt. + 1:30 LWS Batt. + 1:20
 North River Constant HWS Batt. + 2:20 LWS Batt. + 2:40

East River slack water lasts from 4 to 8 minutes. North River about 35 minutes. North River is running flood 15 feet below the surface 1 hour before turning from ebb to flood at surface. High water slack occurs in the Narrows 15 minutes before the H.W.S. East River and low water slack occurs about 20 minutes before the L.W.S. North River.

TIMES ADJUSTED FOR DAYLIGHT SAVINGS TIME

Battery - July 2021

Times and Heights of High and Low Waters

1 Thu ☾	02:13 4.7 08:39 0.5 14:54 4.6 21:14 1.1	9 Fri	02:56 0.3 08:52 4.2 14:45 0.6 20:48 5.2	17 Sat ☾	01:55 4.7 08:42 0.4 14:46 5.1 21:30 0.8	25 Sun	04:04 -0.5 10:04 5.0 16:13 -0.0 22:19 5.8
2 Fri	03:03 4.4 09:31 0.6 15:43 4.6 22:13 1.1	10 Sat ●	03:38 0.2 09:32 4.3 15:27 0.6 21:21 5.2	18 Sun	02:54 4.5 09:44 0.4 15:42 5.3 22:36 0.6	26 Mon	04:50 -0.4 10:57 4.9 17:02 0.2 23:10 5.5
3 Sat	03:55 4.2 10:20 0.7 16:33 4.7 23:07 1.0	11 Sun	04:18 0.1 10:11 4.3 16:07 0.6 21:56 5.2	19 Mon	03:59 4.4 10:44 0.3 16:44 5.4 23:37 0.3	27 Tue	05:35 -0.3 11:49 4.9 17:50 0.4
4 Sun	04:50 4.0 11:06 0.8 17:24 4.7 23:56 0.9	12 Mon	04:56 0.1 10:52 4.3 16:46 0.6 22:34 5.2	20 Tue	05:11 4.4 11:42 0.2 17:48 5.6	28 Wed	00:00 5.2 06:19 0.0 12:40 4.8 18:40 0.7
5 Mon	05:47 4.0 11:50 0.8 18:12 4.9	13 Tue	05:34 0.1 11:35 4.4 17:27 0.6 23:18 5.1	21 Wed	00:34 0.0 06:21 4.5 12:38 0.1 18:49 5.8	29 Thu	00:50 4.9 07:03 0.3 13:27 4.8 19:34 1.0
6 Tue	00:43 0.7 06:40 4.0 12:34 0.8 18:56 5.0	14 Wed	06:12 0.2 12:20 4.5 18:12 0.7	22 Thu	01:30 -0.2 07:23 4.6 13:35 -0.0 19:45 6.0	30 Fri	01:38 4.6 07:50 0.6 14:13 4.7 20:34 1.2
7 Wed	01:28 0.6 07:28 4.1 13:17 0.7 19:37 5.1	15 Thu	00:07 5.0 06:54 0.3 13:07 4.7 19:07 0.8	23 Fri	02:24 -0.4 08:19 4.8 14:30 -0.1 20:37 6.0	31 Sat ☾	02:26 4.3 08:41 0.9 14:59 4.6 21:35 1.3
8 Thu	02:13 0.4 08:11 4.2 14:01 0.7 20:13 5.2	16 Fri	01:00 4.9 07:43 0.3 13:55 4.9 20:17 0.8	24 Sat ○	03:15 -0.5 09:11 4.9 15:23 -0.1 21:28 5.9		

East River Constant HWS Batt. + 1:30 LWS Batt. + 1:20
North River Constant HWS Batt. + 2:20 LWS Batt. + 2:40

East River slack water lasts from 4 to 8 minutes. North River about 35 minutes. North River is running flood 15 feet below the surface 1 hour before turning from ebb to flood at surface. High water slack occurs in the Narrows 15 minutes before the H.W.S. East River and low water slack occurs about 20 minutes before the L.W.S. North River.

TIMES ADJUSTED FOR DAYLIGHT SAVINGS TIME

Battery - August 2021

Times and Heights of High and Low Waters

1 Sun 03:16 4.0 09:33 1.0 15:46 4.6 22:32 1.2	9 Mon 03:49 0.0 09:40 4.7 15:47 0.3 21:35 5.4	17 Tue 03:52 4.3 10:28 0.5 16:29 5.4 23:23 0.4	25 Wed 05:02 -0.1 11:13 5.1 17:23 0.4 23:27 5.1
2 Mon 04:11 3.9 10:25 1.1 16:37 4.6 23:24 1.1	10 Tue 04:28 -0.1 10:19 4.8 16:30 0.3 22:14 5.4	18 Wed 05:05 4.3 11:29 0.4 17:38 5.5	26 Thu 05:41 0.2 11:59 5.0 18:08 0.7
3 Tue 05:11 3.8 11:14 1.1 17:31 4.7	11 Wed 05:06 -0.1 11:02 4.9 17:13 0.3 22:59 5.3	19 Thu 00:20 0.2 06:15 4.5 12:27 0.3 18:40 5.6	27 Fri 00:14 4.7 06:18 0.5 12:44 4.8 18:56 1.0
4 Wed 00:12 0.9 06:08 3.9 12:01 1.0 18:22 4.8	12 Thu 05:44 -0.1 11:48 5.0 18:00 0.4 23:49 5.1	20 Fri 01:14 -0.1 07:15 4.7 13:22 0.2 19:35 5.8	28 Sat 01:02 4.4 06:57 0.8 13:27 4.7 19:50 1.2
5 Thu 00:58 0.7 07:00 4.0 12:48 0.9 19:08 5.0	13 Fri 06:25 0.1 12:38 5.1 18:54 0.5	21 Sat 02:06 -0.2 08:07 4.9 14:16 0.1 20:25 5.8	29 Sun 01:50 4.1 07:41 1.1 14:10 4.6 20:52 1.4
6 Fri 01:44 0.5 07:44 4.2 13:34 0.7 19:48 5.2	14 Sat 00:44 4.9 07:13 0.3 13:30 5.2 20:01 0.7	22 Sun 02:54 -0.3 08:55 5.1 15:06 0.0 ○ 21:11 5.8	30 Mon 02:41 3.9 08:37 1.4 14:56 4.5 ● 21:54 1.4
7 Sat 02:27 0.3 08:25 4.4 14:20 0.6 20:24 5.3	15 Sun 01:42 4.6 08:13 0.4 14:24 5.3 ● 21:13 0.7	23 Mon 03:40 -0.4 09:41 5.2 15:54 0.1 21:56 5.6	31 Tue 03:35 3.8 09:41 1.5 15:47 4.5 22:50 1.3
8 Sun 03:09 0.2 09:03 4.5 15:04 0.4 ● 20:59 5.4	16 Mon 02:43 4.4 09:22 0.6 15:23 5.3 22:21 0.6	24 Tue 04:22 -0.3 10:27 5.1 16:39 0.2 22:41 5.4	

East River Constant HWS Batt. + 1:30 LWS Batt. + 1:20
North River Constant HWS Batt. + 2:20 LWS Batt. + 2:40

East River slack water lasts from 4 to 8 minutes. North River about 35 minutes. North River is running flood 15 feet below the surface 1 hour before turning from ebb to flood at surface. High water slack occurs in the Narrows 15 minutes before the H.W.S. East River and low water slack occurs about 20 minutes before the L.W.S. North River.

TIMES ADJUSTED FOR DAYLIGHT SAVINGS TIME

Battery - September 2021

Times and Heights of High and Low Waters

1 Wed 04:35 3.8 10:39 1.4 16:45 4.5 23:40 1.1	9 Thu 04:36 -0.3 10:29 5.5 16:58 -0.0 22:39 5.3	17 Fri 00:04 0.2 06:08 4.6 12:16 0.4 18:30 5.4	25 Sat 05:35 0.7 11:54 4.9 18:20 0.9
2 Thu 05:35 3.9 11:31 1.2 17:44 4.7	10 Fri 05:16 -0.2 11:18 5.6 17:46 0.1 23:33 5.1	18 Sat 00:55 0.0 07:03 4.9 13:09 0.3 19:22 5.5	26 Sun 00:27 4.2 06:06 1.0 12:35 4.7 19:08 1.1
3 Fri 00:27 0.8 06:28 4.1 12:20 1.0 18:35 4.9	11 Sat 05:59 0.0 12:11 5.6 18:41 0.3	19 Sun 01:44 -0.1 07:51 5.1 14:00 0.2 20:07 5.6	27 Mon 01:17 4.0 06:37 1.3 13:17 4.5 20:07 1.3
4 Sat 01:11 0.6 07:14 4.4 13:07 0.7 19:18 5.2	12 Sun 00:32 4.8 06:49 0.3 13:08 5.5 19:46 0.5	20 Mon 02:29 -0.2 08:35 5.3 14:48 0.1 20:49 5.5	28 Tue 02:08 3.8 07:23 1.5 14:03 4.4 21:12 1.4
5 Sun 01:54 0.3 07:53 4.6 13:54 0.5 19:56 5.4	13 Mon 01:35 4.5 07:53 0.6 14:07 5.4 20:58 0.6	21 Tue 03:11 -0.2 09:16 5.3 15:33 0.1 21:30 5.4	29 Wed 03:02 3.7 08:48 1.6 14:55 4.4 22:13 1.3
6 Mon 02:36 0.1 08:31 4.9 14:40 0.2 20:33 5.5	14 Tue 02:41 4.3 09:07 0.8 15:11 5.3 22:07 0.6	22 Wed 03:51 -0.1 09:55 5.3 16:16 0.2 22:11 5.1	30 Thu 03:59 3.7 10:02 1.5 15:55 4.4 23:05 1.1
7 Tue 03:17 -0.1 09:08 5.2 15:26 0.0 21:11 5.6	15 Wed 03:50 4.3 10:17 0.8 16:20 5.2 23:08 0.4	23 Thu 04:28 0.1 10:34 5.2 16:57 0.4 22:54 4.8	
8 Wed 03:57 -0.3 09:47 5.4 16:11 -0.1 21:53 5.5	16 Thu 05:02 4.4 11:19 0.6 17:29 5.3	24 Fri 05:02 0.4 11:14 5.1 17:38 0.6 23:39 4.5	

East River Constant HWS Batt. + 1:30 LWS Batt. + 1:20
North River Constant HWS Batt. + 2:20 LWS Batt. + 2:40

East River slack water lasts from 4 to 8 minutes. North River about 35 minutes. North River is running flood 15 feet below the surface 1 hour before turning from ebb to flood at surface. High water slack occurs in the Narrows 15 minutes before the H.W.S. East River and low water slack occurs about 20 minutes before the L.W.S. North River.

TIMES ADJUSTED FOR DAYLIGHT SAVINGS TIME

Battery - October 2021

Times and Heights of High and Low Waters

1 Fri 04:58 3.9 11:00 1.3 16:57 4.6 23:52 0.8	9 Sat 04:51 -0.3 10:52 5.9 17:33 -0.2 23:20 4.9	17 Sun 00:32 0.0 06:46 4.9 12:53 0.3 19:01 5.1	25 Mon 05:28 0.9 11:41 4.7 18:33 0.9
2 Sat 05:51 4.2 11:51 1.0 17:54 4.8	10 Sun 05:38 -0.0 11:49 5.8 18:28 0.0	18 Mon 01:17 -0.1 07:31 5.2 13:41 0.2 19:45 5.2	26 Tue 00:46 3.8 05:57 1.2 12:23 4.5 19:24 1.1
3 Sun 00:36 0.5 06:38 4.5 12:40 0.6 18:42 5.1	11 Mon 00:24 4.6 06:32 0.3 12:51 5.5 19:31 0.3	19 Tue 01:59 -0.1 08:11 5.3 14:27 0.1 20:25 5.1	27 Wed 01:37 3.7 06:36 1.4 13:12 4.4 20:27 1.2
4 Mon 01:18 0.2 07:19 4.9 13:28 0.3 19:25 5.3	12 Tue 01:31 4.4 07:38 0.7 13:55 5.3 20:41 0.5	20 Wed 02:39 -0.1 08:48 5.4 15:11 0.1 21:04 5.0	28 Thu 02:28 3.6 07:43 1.5 14:06 4.3 21:31 1.2
5 Tue 02:01 -0.1 07:58 5.3 14:17 -0.0 20:06 5.5	13 Wed 02:37 4.3 08:53 0.8 15:01 5.1 21:49 0.5	21 Thu 03:17 0.0 09:23 5.4 15:52 0.2 21:43 4.8	29 Fri 03:20 3.7 09:19 1.5 15:04 4.3 22:25 0.9
6 Wed 02:43 -0.3 08:36 5.7 15:05 -0.3 20:48 5.5	14 Thu 03:44 4.3 10:04 0.8 16:07 5.0 22:50 0.3	22 Fri 03:53 0.2 09:57 5.3 16:32 0.3 22:24 4.5	30 Sat 04:14 3.9 10:26 1.2 16:05 4.5 23:13 0.6
7 Thu 03:25 -0.4 09:17 5.9 15:53 -0.4 21:32 5.4	15 Fri 04:51 4.4 11:07 0.7 17:13 5.0 23:43 0.2	23 Sat 04:27 0.4 10:31 5.1 17:11 0.4 23:08 4.3	31 Sun 05:07 4.2 11:21 0.8 17:06 4.6 23:57 0.3
8 Fri 04:07 -0.4 10:02 6.0 16:42 -0.4 22:22 5.2	16 Sat 05:53 4.7 12:02 0.5 18:11 5.1	24 Sun 04:59 0.7 11:05 4.9 17:51 0.7 23:56 4.0	

East River Constant HWS Batt. + 1:30 LWS Batt. + 1:20
North River Constant HWS Batt. + 2:20 LWS Batt. + 2:40

East River slack water lasts from 4 to 8 minutes. North River about 35 minutes. North River is running flood 15 feet below the surface 1 hour before turning from ebb to flood at surface. High water slack occurs in the Narrows 15 minutes before the H.W.S. East River and low water slack occurs about 20 minutes before the L.W.S. North River.

TIMES ADJUSTED FOR DAYLIGHT SAVINGS TIME

Battery - November 2021

Times and Heights of High and Low Waters

1 05:57 4.6 12:13 0.5 Mon 18:02 4.9	9 05:18 0.2 11:37 5.4 Tue 18:14 -0.0	17 00:27 -0.0 06:45 5.2 Wed 13:05 0.1 19:01 4.6	25 00:04 3.6 05:13 1.0 Thu 11:32 4.4 18:41 0.8
2 00:41 -0.0 06:43 5.1 Tue 13:04 0.1 18:52 5.1	10 00:22 4.4 06:23 0.5 Wed 12:42 5.2 19:20 0.2	18 01:07 0.0 07:21 5.2 Thu 13:48 0.1 19:41 4.5	26 00:50 3.6 06:06 1.1 Fri 12:25 4.3 19:41 0.8
3 01:25 -0.3 07:26 5.6 Wed 13:55 -0.3 19:40 5.2	11 01:26 4.3 07:36 0.7 Thu 13:44 4.9 ☾ 20:25 0.2	19 01:46 0.1 07:54 5.2 Fri 14:29 0.0 ☉ 20:20 4.4	27 01:37 3.7 07:31 1.2 Sat 13:20 4.3 ☾ 20:39 0.6
4 02:10 -0.5 08:09 5.9 Thu 14:46 -0.6 ● 20:27 5.2	12 02:28 4.3 08:46 0.7 Fri 14:46 4.8 21:25 0.2	20 02:23 0.2 08:27 5.1 Sat 15:09 0.1 21:01 4.2	28 02:27 3.9 08:49 1.0 Sun 14:18 4.3 21:31 0.4
5 02:56 -0.6 08:53 6.1 Fri 15:36 -0.7 21:15 5.1	13 03:30 4.4 09:48 0.6 Sat 15:47 4.6 22:17 0.1	21 02:59 0.4 08:58 5.0 Sun 15:48 0.2 21:43 4.0	29 03:20 4.3 09:52 0.6 Mon 15:20 4.4 22:18 0.1
6 03:43 -0.6 09:40 6.1 Sat 16:27 -0.7 22:09 4.9	14 04:29 4.6 10:43 0.5 Sun 16:44 4.6 23:03 0.0	22 03:32 0.5 09:29 4.8 Mon 16:26 0.4 22:28 3.8	30 04:15 4.7 10:47 0.3 Tue 16:23 4.5 23:05 -0.2
7 03:32 -0.4 09:33 6.0 Sun 16:19 -0.6 22:09 4.7	15 05:20 4.8 11:33 0.3 Mon 17:35 4.6 23:46 -0.0	23 04:04 0.7 10:03 4.6 Tue 17:06 0.5 23:16 3.7	
8 04:22 -0.2 10:33 5.7 Mon 17:14 -0.3 23:16 4.5	16 06:05 5.0 12:20 0.2 Tue 18:20 4.6	24 04:35 0.9 10:44 4.5 Wed 17:49 0.7	

East River Constant HWS Batt. + 1:30 LWS Batt. + 1:20
 North River Constant HWS Batt. + 2:20 LWS Batt. + 2:40

East River slack water lasts from 4 to 8 minutes. North River about 35 minutes. North River is running flood 15 feet below the surface 1 hour before turning from ebb to flood at surface. High water slack occurs in the Narrows 15 minutes before the H.W.S. East River and low water slack occurs about 20 minutes before the L.W.S. North River.

Battery - December 2021

Times and Heights of High and Low Waters

1 Wed	05:08 5.2 11:41 -0.2 17:23 4.6 23:53 -0.5	9 Thu	00:06 4.3 06:04 0.2 12:22 5.0 18:52 -0.1	17 Fri	00:36 0.1 06:55 4.9 13:24 -0.0 19:20 4.1	25 Sat	00:10 3.7 05:45 0.7 11:53 4.3 18:49 0.3
2 Thu	05:58 5.6 12:35 -0.5 18:18 4.8	10 Fri	01:05 4.3 07:11 0.5 13:20 4.7 19:53 0.0	18 Sat	01:17 0.1 07:30 4.9 14:06 -0.1 20:00 4.0	26 Sun	00:55 3.9 06:52 0.8 12:45 4.2 19:47 0.3
3 Fri	00:43 -0.6 06:46 5.9 13:28 -0.8 19:10 4.8	11 Sat ☾	02:02 4.3 08:20 0.6 14:16 4.4 20:51 0.1	19 Sun ☉	01:57 0.2 08:04 4.9 14:47 -0.1 20:40 4.0	27 Mon ☾	01:43 4.1 08:14 0.7 13:41 4.2 20:46 0.2
4 Sat ●	01:33 -0.7 07:34 6.1 14:21 -0.9 20:03 4.8	12 Sun	02:59 4.3 09:22 0.6 15:13 4.2 21:43 0.1	20 Mon	02:36 0.2 08:37 4.8 15:26 -0.1 21:21 3.9	28 Tue	02:37 4.4 09:24 0.5 14:43 4.1 21:41 -0.0
5 Sun	02:25 -0.7 08:25 6.0 15:13 -1.0 20:58 4.7	13 Mon	03:55 4.4 10:18 0.5 16:10 4.1 22:29 0.1	21 Tue	03:13 0.3 09:09 4.7 16:04 0.0 22:02 3.7	29 Wed	03:36 4.7 10:25 0.1 15:51 4.1 22:35 -0.3
6 Mon	03:17 -0.6 09:20 5.9 16:04 -0.9 21:59 4.6	14 Tue	04:48 4.5 11:08 0.4 17:04 4.0 23:13 0.1	22 Wed	03:47 0.4 09:42 4.6 16:41 0.1 22:44 3.7	30 Thu	04:36 5.1 11:22 -0.3 17:00 4.2 23:28 -0.5
7 Tue	04:09 -0.4 10:20 5.6 16:57 -0.6 23:03 4.4	15 Wed	05:35 4.7 11:55 0.2 17:53 4.0 23:55 0.1	23 Thu	04:21 0.5 10:19 4.5 17:19 0.2 23:27 3.7	31 Fri	05:35 5.4 12:18 -0.6 18:02 4.4
8 Wed	05:04 -0.1 11:22 5.3 17:53 -0.4	16 Thu	06:17 4.8 12:41 0.1 18:38 4.0	24 Fri	04:58 0.6 11:04 4.4 18:00 0.3		

East River Constant HWS Batt. + 1:30 LWS Batt. + 1:20
 North River Constant HWS Batt. + 2:20 LWS Batt. + 2:40

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 before the L.W.S. North River.