

## Water-Data Report 2011

**01408168 BARNEGAT BAY AT MANTOLOKING, NJ**

## BARNEGAT BAY

LOCATION.--Lat 40°02'24", long 74°03'08" referenced to North American Datum of 1983, Mantoloking Borough, Ocean County, NJ, Hydrologic Unit 02040301, on wooden bulkhead at west end of Old Bridge Avenue in Mantoloking, 2.1 mi south of Bay Head, and 4.7 mi north of Lavalette.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Annual maximum tide, water years 1980-85, 1992-93. Continuous-record tide gage, June 1993 to July 2004, November 2004 to current year.

GAGE.--Tide level recorder and tidal crest-stage gage. Datum of gage is 0.00 ft NAVD of 1988. To determine approximate elevations to NGVD of 1929, add 1.12 ft. Prior to October 2000, datum of gage at 0.0 ft NGVD of 1929. Data published to NGVD of 1929 can be adjusted to NAVD of 1988 by subtracting 1.12 ft. Online peaks have been adjusted to current datum.

REMARKS.--Missing gage-height record Dec 18 and 28, Jan 9-10, 12-14, 16-17, and 22-26 and short portions of other days. Gage cannot measure tide levels below -1.28 ft. Tide levels below -1.28 have been estimated. Prior to Apr 21, 2005, gage could not measure tide levels below -0.12 ft. Summaries for months with short periods of missing gage-height record have been estimated with little or no loss of accuracy. Some periods cannot be estimated and are noted by dashed (--) lines. Satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 3.81 ft (from crest-stage gage, adjusted to NAVD of 1988), Dec 11, 1992; minimum elevation, estimated at -1.7 ft, Apr 13, 2011, although a lower tide likely occurred during period of missing record on Feb 16, 2007 (elevation could not be accurately estimated).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known, 3.4 ft (adjusted to NAVD of 1988), Mar 6 or 7, 1962, from high-water mark at the northwest corner of the intersection of Bay Avenue and Downer Avenue in Mantoloking.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 3.56 ft, Aug 28; minimum elevation, estimated at -1.7 ft, Apr 13, although a lower tide likely occurred during period of missing record on Feb 20 (elevation could not be accurately estimated).

Statistics of Tide Elevations, in feet  
 Water Year October 2010 to September 2011  
 [e, estimated]

Month	Mean High Tide	Mean Water Level	Mean Low Tide
October	0.74	0.41	0.09
November	0.68	0.38	0.04
December	e0.5	e-0.3	e-0.1
CALENDAR YEAR 2010	0.70	0.40	0.07
January	---	---	---
February	0.21	e-0.1	e-0.4
March	0.39	0.07	-0.24
April	0.61	0.34	0.00
May	0.98	0.65	0.31
June	0.90	0.60	0.27
July	0.86	0.56	0.23
August	0.99	0.70	0.34
September	1.03	0.69	0.36
WATER YEAR 2011	0.72	0.42	0.08

## 01408168 BARNEGAT BAY AT MANTOLOKING, NJ—Continued

**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**  
[e, estimated]

Day	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low
	<b>October</b>			<b>November</b>			<b>December</b>			<b>January</b>		
<b>1</b>	2.11	1.01	0.63	0.26	-0.31	-0.81	2.44	1.33	0.32	0.26	e-0.1	e-0.9
<b>2</b>	0.88	0.42	-0.02	0.41	-0.10	-0.48	0.99	0.47	0.07	0.61	0.16	-0.21
<b>3</b>	0.08	-0.19	-0.66	0.71	0.25	-0.25	0.70	0.28	-0.24	0.30	-0.09	-0.46
<b>4</b>	1.82	0.42	-0.45	0.48	0.52	0.04	0.86	0.37	-0.02	0.52	0.03	-0.41
<b>5</b>	1.72	1.40	1.10	1.82	1.20	0.87	0.74	0.33	-0.12	0.04	-0.28	-0.63
<b>6</b>	1.49	1.11	0.70	0.86	0.51	0.11	0.80	0.33	-0.02	0.66	---	---
<b>7</b>	1.35	0.90	0.37	0.63	0.19	-0.28	0.05	-0.26	-0.54	1.35	0.76	0.20
<b>8</b>	0.98	0.52	0.10	0.39	-0.13	-0.60	0.06	-0.30	-0.58	1.33	---	---
<b>9</b>	0.81	0.40	-0.03	0.54	0.06	-0.41	-0.14	-0.45	-0.76	---	---	---
<b>10</b>	1.41	0.77	0.18	1.19	0.66	0.11	0.08	-0.33	-0.51	---	---	---
<b>11</b>	1.05	0.62	0.09	2.21	1.46	0.86	0.26	-0.15	-0.49	0.94	---	---
<b>12</b>	1.16	0.66	0.29	2.13	1.71	1.22	1.37	0.65	0.08	---	---	---
<b>13</b>	1.09	0.56	0.07	1.62	1.18	0.78	1.41	0.87	0.71	---	---	---
<b>14</b>	1.08	0.63	0.20	1.14	0.79	0.42	0.50	0.00	-0.21	---	---	---
<b>15</b>	1.12	0.72	0.48	1.21	0.85	0.41	0.10	-0.33	-0.59	0.20	---	---
<b>16</b>	-0.16	-0.50	-1.07	0.94	0.65	0.26	---	---	-0.71	---	---	---
<b>17</b>	0.76	0.19	-0.39	1.71	1.06	0.67	0.35	---	---	---	---	---
<b>18</b>	0.53	0.25	-0.09	-0.36	-0.33	-0.72	---	---	---	1.06	---	---
<b>19</b>	0.68	0.25	-0.14	0.04	-0.42	-0.88	---	---	-0.06	1.30	0.69	0.29
<b>20</b>	0.83	0.41	-0.01	0.57	0.04	-0.29	0.94	0.39	-0.05	0.73	0.25	-0.17
<b>21</b>	1.26	0.66	0.28	-0.08	-0.41	-0.93	0.76	0.39	-0.06	0.81	0.34	-0.04
<b>22</b>	0.55	0.17	-0.25	1.00	0.40	-0.24	1.34	0.80	0.32	---	---	---
<b>23</b>	0.15	-0.31	-0.67	0.89	0.39	-0.02	0.30	0.08	-0.53	---	---	---
<b>24</b>	0.27	-0.19	-0.80	0.09	-0.11	-0.40	1.04	0.41	-0.18	---	---	---
<b>25</b>	1.16	0.57	0.01	0.46	-0.04	-0.60	1.23	0.76	0.32	---	---	---
<b>26</b>	0.98	0.53	0.02	1.27	0.82	0.34	0.99	0.30	-0.28	---	---	---
<b>27</b>	1.20	0.75	0.25	0.72	0.35	-0.28	1.36	---	---	1.12	0.66	-0.16
<b>28</b>	0.79	0.34	-0.03	0.33	-0.07	-0.49	---	---	---	0.61	---	---
<b>29</b>	0.20	-0.14	-0.44	0.30	-0.01	-0.34	---	---	---	0.60	0.11	-0.34
<b>30</b>	0.52	0.04	-0.33	0.69	0.25	-0.34	---	---	-0.33	0.53	0.08	-0.31
<b>31</b>	-0.55	-0.41	-0.78	---	---	---	0.25	-0.14	-0.34	0.11	---	-0.54
<b>Max</b>	2.11	1.40	1.10	2.21	1.71	1.22	2.44	1.33	0.71	1.35	0.76	0.29
<b>Min</b>	-0.55	-0.50	-1.07	-0.36	-0.42	-0.93	-0.14	-0.45	-0.76	0.04	-0.28	e-0.9

**01408168 BARNEGAT BAY AT MANTOLOKING, NJ—Continued**

**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**  
[e, estimated]

Day	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low
	<b>February</b>			<b>March</b>			<b>April</b>			<b>May</b>		
<b>1</b>	0.44	-0.13	-0.68	0.37	0.02	-0.35	1.23	0.64	-0.07	0.67	0.11	-0.16
<b>2</b>	1.29	0.49	-0.31	0.86	0.17	-0.15	0.64	0.41	-0.15	0.58	0.46	0.14
<b>3</b>	-0.02	-0.14	-0.52	-0.10	-0.66	-0.99	0.42	-0.21	-0.62	0.83	0.61	0.05
<b>4</b>	0.47	-0.02	-0.40	0.26	-0.15	-0.58	0.76	0.42	-0.30	1.40	0.46	-0.14
<b>5</b>	0.04	-0.22	-0.69	0.67	0.29	-0.31	1.63	1.00	0.01	0.54	-0.01	-0.48
<b>6</b>	0.75	-0.17	-0.80	0.99	0.77	0.33	0.51	-0.04	-0.32	0.76	0.36	-0.22
<b>7</b>	0.05	-0.36	-0.76	1.64	0.34	-0.49	-0.01	-0.40	-0.70	0.92	0.35	-0.14
<b>8</b>	0.50	0.11	0.24	0.00	-0.41	-0.77	0.47	0.02	-0.33	0.69	0.29	-0.05
<b>9</b>	-0.87	-0.97	-1.17	0.17	-0.11	-0.46	0.19	-0.08	-0.36	0.85	0.33	-0.15
<b>10</b>	-0.57	-0.85	-1.10	1.33	0.93	0.56	0.61	0.20	-0.14	1.20	0.72	0.24
<b>11</b>	0.29	---	---	2.29	1.33	0.45	0.90	0.54	0.30	1.37	0.91	0.36
<b>12</b>	0.09	-0.35	-0.55	1.20	0.67	0.32	0.46	-0.29	-0.63	1.65	1.10	0.62
<b>13</b>	0.17	-0.36	-1.06	0.55	-0.10	-0.70	0.85	e-0.0	e-1.7	1.34	1.00	0.51
<b>14</b>	0.19	-0.23	-0.45	-0.03	-0.43	-0.69	0.91	0.50	0.06	1.39	0.95	0.58
<b>15</b>	-0.71	e-1.1	e-1.4	0.20	-0.21	-0.74	0.33	-0.08	-0.59	1.78	1.20	0.72
<b>16</b>	0.21	-0.20	-1.00	0.53	0.08	-0.33	0.56	0.58	-0.14	1.56	1.09	0.62
<b>17</b>	0.42	-0.04	-0.52	0.44	0.02	-0.32	2.66	1.71	1.07	1.16	0.86	0.36
<b>18</b>	0.85	0.40	-0.01	0.65	0.25	-0.08	0.85	0.81	0.39	1.51	1.10	0.65
<b>19</b>	0.21	-0.34	-1.12	-0.17	-0.33	-0.75	1.24	0.35	-0.26	1.67	1.01	0.60
<b>20</b>	-0.68	---	---	0.15	-0.16	-0.61	0.68	0.28	-0.06	1.40	0.79	0.26
<b>21</b>	0.44	0.13	-0.21	1.02	0.54	0.02	0.99	0.15	-0.57	1.00	0.64	0.25
<b>22</b>	0.58	0.22	-0.15	0.88	0.18	-0.37	0.03	-0.31	-0.70	1.03	0.60	0.23
<b>23</b>	0.52	0.14	-0.25	0.84	0.37	0.01	0.85	0.45	0.26	1.54	1.16	0.84
<b>24</b>	0.72	0.32	-0.05	1.11	0.71	0.28	0.80	0.29	-0.15	1.29	0.77	0.36
<b>25</b>	1.77	0.94	---	1.12	0.62	0.27	0.38	0.04	-0.38	0.78	0.43	0.02
<b>26</b>	0.17	-0.21	-0.60	0.54	0.00	-0.27	1.18	0.77	0.43	1.13	0.75	0.30
<b>27</b>	0.43	0.04	-0.48	-0.07	-0.37	-0.59	1.14	0.85	0.58	1.30	0.76	0.39
<b>28</b>	1.40	0.77	0.05	-0.41	-0.71	-0.87	1.68	1.31	0.98	0.95	0.64	0.31
<b>29</b>	---	---	---	-0.35	-0.67	-1.06	0.62	0.35	0.04	1.00	0.60	0.29
<b>30</b>	---	---	---	0.00	-0.40	-0.79	0.54	0.05	-0.30	0.56	0.22	-0.30
<b>31</b>	---	---	---	-0.02	-0.29	-0.58	---	---	---	-0.10	-0.07	-0.47
<b>Max</b>	1.77	0.94	0.24	2.29	1.33	0.56	2.66	1.71	1.07	1.78	1.20	0.84
<b>Min</b>	-0.87	e-1.1	---	-0.41	-0.71	-1.06	-0.01	-0.40	e-1.7	-0.10	-0.07	-0.48

**01408168 BARNEGAT BAY AT MANTOLOKING, NJ—Continued**

**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**  
[e, estimated]

Day	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low
	<b>June</b>				<b>July</b>				<b>August</b>			
<b>1</b>	1.07	0.57	0.05	0.97	0.44	0.13	1.07	0.74	0.23	1.10	0.65	0.13
<b>2</b>	0.23	0.06	-0.55	1.01	0.54	0.19	1.10	0.59	0.21	1.25	0.79	0.24
<b>3</b>	-0.04	-0.35	-0.70	1.16	0.76	0.47	1.13	0.72	0.21	1.59	0.98	0.38
<b>4</b>	0.28	0.02	-0.24	1.16	0.66	0.23	1.19	0.85	0.40	1.28	0.80	0.28
<b>5</b>	0.73	0.37	0.03	1.04	0.70	0.18	1.25	0.84	0.28	1.38	0.86	0.47
<b>6</b>	0.89	0.47	0.07	1.10	0.72	0.25	1.40	0.89	0.31	0.21	0.13	-0.54
<b>7</b>	0.95	0.59	0.20	0.97	0.58	0.06	1.26	0.91	0.30	1.34	0.76	-0.02
<b>8</b>	0.96	0.56	0.12	1.01	0.58	0.12	1.12	0.65	0.15	1.01	0.68	0.19
<b>9</b>	1.09	0.60	0.11	1.08	0.63	0.15	1.53	0.87	0.46	1.39	0.80	0.37
<b>10</b>	0.87	0.54	-0.03	1.01	0.48	0.00	1.29	0.89	0.42	1.18	0.78	0.32
<b>11</b>	0.79	0.45	0.06	1.40	0.72	0.23	1.16	0.69	0.27	1.28	0.90	0.39
<b>12</b>	1.22	0.60	0.17	1.07	0.66	-0.02	0.78	0.64	0.31	1.42	0.98	0.62
<b>13</b>	1.27	0.66	0.23	0.74	0.41	-0.03	1.04	0.56	0.23	1.27	0.93	0.41
<b>14</b>	1.33	0.70	0.30	0.24	0.36	0.06	1.43	0.91	0.51	1.26	0.96	0.52
<b>15</b>	1.01	0.84	0.41	1.32	0.85	0.47	1.37	0.90	0.51	1.17	0.60	-0.13
<b>16</b>	1.48	1.06	0.62	1.36	0.83	0.44	1.31	0.75	0.33	0.64	0.22	-0.11
<b>17</b>	1.68	1.22	0.75	1.15	0.72	0.31	1.09	0.68	0.23	0.50	0.15	-0.26
<b>18</b>	1.43	0.91	0.50	1.03	0.55	0.17	1.00	0.69	0.24	0.38	0.05	-0.44
<b>19</b>	1.24	0.69	0.24	0.72	0.30	-0.16	0.96	0.54	0.05	1.21	0.73	0.35
<b>20</b>	1.16	0.75	0.37	0.86	0.51	0.10	0.89	0.47	-0.01	1.11	0.72	0.34
<b>21</b>	1.02	0.73	0.28	1.20	0.73	0.18	1.36	0.72	0.28	0.76	0.39	0.00
<b>22</b>	1.01	0.67	0.21	0.64	0.24	-0.27	0.59	0.31	-0.16	1.04	0.48	0.05
<b>23</b>	0.98	0.63	0.38	0.65	0.18	-0.32	0.85	0.22	-0.24	1.12	0.54	0.22
<b>24</b>	1.34	0.82	0.34	0.69	0.25	-0.23	0.98	0.41	-0.03	0.88	0.60	0.12
<b>25</b>	1.50	0.96	0.56	0.86	0.38	0.06	1.00	0.67	0.26	0.90	0.38	0.02
<b>26</b>	1.09	0.75	0.30	1.23	0.68	0.15	0.71	0.26	-0.22	1.09	0.57	0.12
<b>27</b>	0.99	0.51	0.10	1.08	0.53	0.04	0.44	0.17	-0.23	1.16	0.76	0.29
<b>28</b>	1.11	0.54	0.19	1.09	0.53	0.12	3.56	2.20	0.63	1.53	1.03	0.49
<b>29</b>	0.98	0.55	0.07	0.96	0.77	0.42	0.74	0.67	0.09	2.01	1.42	0.95
<b>30</b>	0.48	0.48	0.14	1.30	0.58	0.06	1.03	0.55	0.15	1.74	1.15	0.61
<b>31</b>	---	---	---	0.99	0.52	0.15	1.04	0.61	0.18	---	---	---
<b>Max</b>	1.68	1.22	0.75	1.40	0.85	0.47	3.56	2.20	0.63	2.01	1.42	0.95
<b>Min</b>	-0.04	-0.35	-0.70	0.24	0.18	-0.32	0.44	0.17	-0.24	0.21	0.05	-0.54

**01408168 BARNEGAT BAY AT MANTOLOKING, NJ—Continued**