

## Water-Data Report 2009

**01409125 BARNEGAT BAY AT BARNEGAT LIGHT, NJ**

## BARNEGAT BAY

LOCATION.--Lat 39°45'40", long 74°06'29" referenced to North American Datum of 1983, Barnegat Light Borough, Ocean County, NJ, Hydrologic Unit 02040301, on bulkhead at U.S. Coast Guard Station in Barnegat Light, 0.5 mi southwest of Barnegat Inlet, and 4.4 mi east of Pebble Beach in Barnegat Township.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Annual maximum tide, water years 1965-1980. Unpublished fragmentary gage-height record, September 1997 to October 2000. Continuous-record tide gage, November 2000 to current year.

GAGE.--Tide level, water temperature, precipitation, air temperature, air pressure, and wind speed and direction recorder and tidal crest-stage gage. Datum of gage is at 0.00 ft NAVD of 1988. To determine approximate elevation in NGVD of 1929, add 1.26 ft. To determine approximate elevation in Mean Lower Low Water datum, add 1.33 ft (revised to Tidal Epoch 1983-2001).

REMARKS.--Missing gage-height record Nov 25-27 and Feb 13-16 and short portions of other days. 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 recorded, 4.90 ft, Aug 9, 1976, from tidal crest-stage gage; minimum elevation recorded, -4.25 ft, Mar 9, 2005, although a lower tide likely occurred during period of missing record on Feb 16, 2007.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation recorded, 4.93 ft (adjusted to NAVD of 1988), Dec 11, 1992, from mark on discontinued tidal crest-stage gage.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 3.21 ft, Jul 23; minimum elevation recorded, -3.56 ft, Dec 22.

Statistics of Tide Elevations, in feet  
 Water Year October 2008 to September 2009  
 [e, estimated]

Month	Mean High Tide	Mean Water Level	Mean Low Tide
October	1.46	0.29	-0.88
November	e1.3	e0.1	e-1.0
December	0.85	-0.39	-1.62
CALENDAR YEAR 2008	1.27	0.07	-1.11
January	0.96	e-0.4	e-1.6
February	e1.1	---	---
March	1.27	0.05	-1.14
April	1.36	0.11	-1.09
May	1.32	0.06	-1.15
June	1.84	0.66	-0.48
July	1.68	0.51	-0.64
August	1.51	0.34	-0.82
September	1.74	0.61	-0.52
WATER YEAR 2009	1.37	0.17	-1.03

**01409125 BARNEGAT BAY AT BARNEGAT LIGHT, NJ—Continued**
**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	High-high	Mean	Low-low									
	October			November			December			January		
1	2.22	0.78	-0.43	0.97	-0.47	-1.87	2.08	0.56	-0.50	0.65	-0.64	-1.90
2	1.87	0.40	-0.81	1.49	0.10	-0.90	0.68	-0.57	-1.65	0.50	-0.66	-1.83
3	1.36	-0.14	-1.19	1.12	-0.07	-1.08	0.78	-0.64	-1.71	0.36	-0.99	-2.16
4	1.17	-0.28	-1.36	0.89	-0.24	-1.14	0.43	-0.79	-1.88	0.11	-1.05	-2.26
5	0.83	-0.33	-1.39	1.27	0.38	-0.70	0.73	-0.57	-1.55	0.84	-0.46	-1.66
6	1.09	-0.03	-0.92	1.81	0.91	-0.21	0.83	-0.17	-1.13	1.06	-0.28	-1.43
7	0.98	-0.06	-0.92	1.42	0.51	-0.48	1.08	-0.32	-2.23	1.96	0.58	-0.90
8	1.06	-0.09	-0.93	1.52	0.52	-0.58	0.14	-1.08	-2.48	0.91	-0.95	-3.19
9	0.97	-0.14	-1.20	1.53	0.32	-1.12	0.81	-0.69	-2.13	0.78	-1.21	-2.72
10	1.10	-0.12	-1.31	1.58	0.03	-1.70	1.23	-0.49	-2.04	1.57	-0.41	-3.08
11	1.33	0.01	-1.07	1.44	-0.10	-1.43	1.90	0.22	-1.40	2.36	0.24	-1.51
12	1.46	0.04	-1.32	1.87	-0.01	-1.70	2.94	0.64	-0.82	2.11	0.22	-1.53
13	1.58	0.03	-1.49	2.17	0.36	-1.66	1.81	-0.23	-1.84	2.16	0.21	-1.52
14	2.06	0.42	-1.25	2.57	0.59	-0.96	1.97	-0.32	-2.10	1.71	-0.14	-1.85
15	2.15	0.41	-1.15	2.81	0.72	-0.96	1.65	-0.53	-2.09	1.27	-0.27	-1.59
16	2.48	0.52	-1.18	2.12	0.05	-1.51	1.02	-0.67	-2.20	0.61	---	---
17	2.53	0.56	-0.98	1.30	-0.55	-2.24	1.75	-0.05	-1.34	0.68	---	---
18	2.76	0.83	-0.62	1.87	0.19	-1.29	0.98	-0.27	-1.46	---	---	---
19	3.02	1.33	-0.09	1.97	0.57	-0.69	1.22	0.15	-1.17	1.31	---	-0.59
20	2.81	1.44	0.45	1.67	---	---	1.97	0.92	-0.08	1.37	0.23	-0.78
21	2.15	0.83	-0.50	---	---	---	2.23	1.11	-0.63	1.55	---	-1.14
22	1.51	0.27	-0.91	1.12	-0.43	-2.05	0.17	-1.74	-3.56	0.89	---	-2.06
23	2.05	0.92	-0.30	0.44	-0.95	-2.21	-0.34	-1.72	-3.24	0.66	-0.54	-1.75
24	1.70	0.50	-0.62	1.07	---	-1.70	0.76	-0.82	-2.29	1.25	-0.26	-1.40
25	2.12	0.75	-0.92	---	---	---	0.14	-1.35	-2.63	1.16	-0.42	-1.75
26	2.08	0.74	-0.31	---	---	---	0.85	-0.69	-2.63	1.08	-0.46	-1.93
27	2.07	0.63	-0.78	---	---	---	1.40	-0.29	-1.58	1.32	-0.33	-1.77
28	2.50	0.41	-0.73	---	---	-1.12	1.28	-0.47	-1.76	1.78	0.18	-1.58
29	0.66	-0.98	-2.57	1.49	0.01	-1.16	1.00	-0.58	-2.01	0.96	-0.50	-1.90
30	1.28	-0.41	-2.00	1.91	0.65	-0.98	0.78	-0.68	-2.00	1.09	-0.38	-1.71
31	1.31	-0.36	-1.52	---	---	---	1.69	0.04	-1.49	0.85	-0.45	-1.87
<b>Max</b>	3.02	1.44	0.45	2.81	0.91	-0.21	2.94	1.11	-0.08	2.36	0.58	-0.59
<b>Min</b>	0.66	-0.98	-2.57	0.44	-0.95	-2.24	-0.34	-1.74	-3.56	0.11	-1.21	-3.19

## 01409125 BARNEGAT BAY AT BARNEGAT LIGHT, NJ—Continued

**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

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>	0.51	-0.61	-1.84	2.46	0.68	-0.80	1.81	0.31	-0.76	1.43	-0.24	-1.41
<b>2</b>	1.04	-0.07	-1.10	2.20	1.01	-0.20	1.76	0.17	-0.94	1.17	-0.22	-1.51
<b>3</b>	1.73	0.83	-0.11	0.69	-0.23	-1.60	1.69	0.69	-0.41	1.25	0.07	-1.22
<b>4</b>	2.28	0.73	-0.80	0.97	-0.66	-1.84	1.75	0.20	-1.38	1.53	0.25	-1.13
<b>5</b>	1.38	-0.18	-1.67	0.81	-0.76	-1.93	1.07	-0.18	-1.60	1.72	0.37	-1.09
<b>6</b>	1.40	---	---	0.79	-0.70	-1.90	2.13	0.57	-0.88	1.82	0.29	-1.22
<b>7</b>	1.51	-0.23	-1.90	1.10	-0.45	-1.82	1.82	0.44	-1.00	1.76	0.17	-1.28
<b>8</b>	1.67	-0.25	-1.71	1.38	-0.08	-1.60	1.62	-0.02	-1.59	1.99	0.26	-1.09
<b>9</b>	1.46	-0.45	-2.22	2.04	0.46	-1.53	1.77	0.04	-1.51	2.15	0.40	-0.92
<b>10</b>	1.92	0.00	-2.00	2.13	0.44	-1.15	1.90	0.04	-1.43	1.50	0.03	-1.27
<b>11</b>	2.03	0.27	-1.39	1.91	0.25	-1.28	2.08	0.36	-1.17	1.52	-0.18	-1.48
<b>12</b>	1.83	---	---	1.13	-0.42	-2.09	1.34	0.06	-1.25	1.44	0.01	-1.03
<b>13</b>	---	---	---	1.36	-0.47	-2.03	0.94	-0.41	-1.68	0.59	-0.16	-1.16
<b>14</b>	---	---	---	1.25	-0.35	-1.77	0.58	-0.15	-1.64	1.18	-0.30	-1.32
<b>15</b>	---	---	---	1.15	-0.28	-1.52	1.73	0.75	-0.28	1.00	-0.30	-1.17
<b>16</b>	---	---	---	0.53	-0.15	-1.25	1.77	0.43	-0.36	0.84	-0.24	-1.27
<b>17</b>	---	---	-0.70	1.49	0.15	-0.81	1.12	-0.06	-0.92	1.08	0.03	-0.86
<b>18</b>	1.22	0.31	-0.53	1.03	-0.16	-0.96	0.67	-0.30	-1.27	1.02	0.02	-1.07
<b>19</b>	1.82	0.64	-1.02	0.75	-0.25	-0.97	1.16	0.21	-0.74	0.87	-0.22	-1.42
<b>20</b>	0.86	-0.70	-2.36	0.83	0.02	-0.77	1.75	0.67	-0.48	0.94	-0.44	-1.86
<b>21</b>	0.02	-1.18	-2.44	1.12	0.15	-0.81	2.02	0.87	-0.19	1.13	-0.47	-2.05
<b>22</b>	1.00	-0.30	-1.77	0.94	-0.18	-1.25	1.92	0.55	-0.60	1.38	-0.46	-2.09
<b>23</b>	0.47	-1.16	-2.66	1.00	-0.16	-1.32	1.26	-0.11	-1.62	2.03	-0.14	-1.80
<b>24</b>	0.53	-1.12	-2.94	1.37	0.12	-1.27	1.54	-0.34	-2.02	2.08	0.07	-1.60
<b>25</b>	1.15	-0.47	-2.28	2.12	0.64	-0.80	1.81	-0.16	-1.80	2.12	0.04	-1.60
<b>26</b>	1.12	-0.38	-1.91	2.19	0.83	-0.51	1.85	-0.16	-1.85	2.50	0.48	-1.30
<b>27</b>	1.34	-0.16	-1.62	2.13	0.61	-0.78	1.89	-0.18	-1.81	2.27	0.40	-0.99
<b>28</b>	1.51	-0.14	-1.61	2.26	0.63	-0.76	1.48	-0.33	-1.84	1.69	0.57	-0.86
<b>29</b>	---	---	---	2.43	0.71	-0.66	0.88	-0.39	-1.75	2.53	0.78	-0.41
<b>30</b>	---	---	---	1.54	0.20	-1.33	1.56	-0.20	-1.46	2.16	0.63	-0.59
<b>31</b>	---	---	---	0.96	-0.09	-1.39	---	---	---	1.77	0.51	-0.76
<b>Max</b>	2.28	0.83	-0.11	2.46	1.01	-0.20	2.13	0.87	-0.19	2.53	0.78	-0.41
<b>Min</b>	0.02	-1.18	-2.94	0.53	-0.76	-2.09	0.58	-0.41	-2.02	0.59	-0.47	-2.09

**01409125 BARNEGAT BAY AT BARNEGAT LIGHT, NJ—Continued**
**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low	High-high	Mean	Low-low
	June			July			August			September		
1	1.46	0.17	-1.17	2.28	0.99	-0.15	1.39	0.10	-0.96	1.68	0.46	-0.61
2	1.50	0.08	-1.43	2.26	1.01	-0.17	1.71	0.29	-0.80	1.68	0.43	-0.65
3	1.72	0.24	-1.14	2.14	0.78	-0.34	1.70	0.32	-0.75	1.93	0.53	-0.73
4	1.92	0.42	-0.90	1.96	0.58	-0.53	1.67	0.23	-0.91	1.86	0.59	-0.59
5	2.40	0.69	-0.74	1.92	0.49	-0.60	1.70	0.26	-0.94	1.68	0.44	-0.76
6	2.11	0.68	-0.64	2.04	0.51	-0.66	1.72	0.29	-0.93	1.92	0.56	-0.90
7	1.98	0.42	-0.82	2.18	0.60	-0.55	1.49	0.23	-0.94	1.93	0.56	-0.66
8	2.04	0.41	-0.76	1.99	0.67	-0.38	1.58	0.18	-1.03	1.84	0.43	-0.84
9	2.09	0.56	-0.59	1.99	0.61	-0.48	1.63	0.22	-1.08	2.03	0.73	-0.66
10	2.04	0.67	-0.42	1.68	0.46	-0.56	1.47	0.28	-0.94	2.77	1.47	0.12
11	2.02	0.74	-0.28	1.53	0.27	-0.84	1.59	0.36	-0.86	2.84	1.74	0.57
12	1.88	0.72	-0.24	1.61	0.35	-0.77	1.84	0.53	-0.77	2.04	0.84	-0.13
13	1.35	0.61	-0.33	1.46	0.42	-0.70	1.93	0.70	-0.38	2.14	0.80	-0.31
14	1.70	0.64	-0.40	1.48	0.30	-0.73	1.55	0.31	-0.78	2.24	0.82	-0.39
15	1.72	0.67	-0.30	1.33	0.12	-1.10	1.61	0.18	-1.10	2.31	0.76	-0.52
16	1.60	0.57	-0.47	1.62	0.30	-1.03	1.72	0.14	-1.25	2.87	1.07	-0.55
17	1.57	0.45	-0.72	2.01	0.59	-0.67	1.90	0.16	-1.32	2.75	1.53	-0.06
18	1.95	0.64	-0.67	2.14	0.66	-0.58	2.01	0.16	-1.44	2.41	0.74	-0.81
19	2.24	0.76	-0.54	2.08	0.37	-1.05	2.29	0.25	-1.46	2.08	0.40	-1.13
20	2.72	0.81	-0.68	2.33	0.38	-1.15	2.48	0.46	-1.21	2.01	0.33	-1.20
21	2.82	1.07	-0.32	2.52	0.60	-1.01	2.24	0.52	-1.08	1.90	0.18	-1.20
22	3.02	1.14	-0.33	2.39	0.45	-1.20	2.31	0.68	-0.96	1.86	0.16	-1.18
23	2.91	1.06	-0.45	3.21	0.72	-1.18	2.48	0.79	-0.58	1.61	0.07	-1.10
24	2.64	0.80	-0.69	2.35	0.90	-0.62	1.82	0.31	-1.00	1.33	-0.01	-1.11
25	2.49	0.66	-0.77	2.17	0.65	-0.81	1.78	0.25	-1.03	1.58	0.29	-0.79
26	2.38	0.65	-0.72	2.00	0.60	-0.73	1.46	0.11	-1.06	1.66	0.65	-0.14
27	1.98	0.76	-0.59	1.90	0.40	-0.77	1.52	0.20	-0.86	1.72	0.69	-0.09
28	2.15	0.84	-0.54	1.55	0.21	-0.99	1.55	0.38	-0.62	1.39	0.37	-0.50
29	2.22	0.98	-0.31	1.47	0.24	-0.90	1.97	0.74	-0.17	1.26	0.34	-0.45
30	2.18	0.98	-0.22	1.50	0.28	-0.74	1.77	0.59	-0.30	1.43	0.24	-0.90
31	---	---	---	1.35	0.20	-0.88	1.40	0.26	-0.77	---	---	---
<b>Max</b>	3.02	1.14	-0.22	3.21	1.01	-0.15	2.48	0.79	-0.17	2.87	1.74	0.57
<b>Min</b>	1.35	0.08	-1.43	1.33	0.12	-1.20	1.39	0.10	-1.46	1.26	-0.01	-1.20

**01409125 BARNEGAT BAY AT BARNEGAT LIGHT, NJ—Continued**