

## Water-Data Report 2010

**01411360 GREAT CHANNEL AT STONE HARBOR, NJ**
**GREAT CHANNEL**

LOCATION.--Lat 39°03'24", long 74°45'51" referenced to North American Datum of 1983, Stone Harbor Borough, Cape May County, NJ, Hydrologic Unit 02040302, on county pier just north of east abutment of bridge on Stone Harbor Boulevard (County Route 657) at the western edge of Stone Harbor, 3.7 mi southeast of Cape May Court House, and 3.9 mi southwest of Avalon.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Annual maximum tide, water years 1964 to 1977 and 1979 to 1999. Continuous-record tide gage, October 1977 to May 1978 and March 2000 to current year. Unpublished fragmentary gage-height record, May 1997 to February 2000.

GAGE.--Tide level recorder and tidal crest-stage gage. Datum of gage is at 0.00 ft NAVD of 1988. To determine approximate elevations to NGVD of 1929, add 1.31 ft. To determine approximate elevations to Mean Lower Low Water datum, add 2.61 ft (revised to Tidal Epoch 1983-2001). From October 1964 to September 1999, datum of tidal crest-stage gage at 0.00 ft NGVD of 1929. From October 1977 to May 1978, tide level recorder located at south side of bridge and datum of gage at 0.00 ft NGVD of 1929. Data published to NGVD of 1929 can be adjusted to NAVD of 1988 by subtracting 1.31 ft. Online annual tidal peaks have been adjusted to current datum.

REMARKS.--Missing gage-height record on Feb 8, 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, 6.28 ft (from tidal crest-stage gage, adjusted to NAVD of 1988), Feb 5, 1998; minimum elevation, -5.04 ft, Feb 17, 2007.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 5.44 ft, Nov 13; minimum elevation, -4.51 ft, Jan 3.

Statistics of Tide Elevations, in feet  
Water Year October 2009 to September 2010

Month	Mean High Tide	Mean Water Level	Mean Low Tide
October	2.46	0.56	-1.48
November	2.53	0.57	-1.43
December	1.94	-0.05	-2.18
CALENDAR YEAR 2009	2.15	0.19	-1.90
January	1.99	-0.07	-2.26
February	2.10	0.05	-2.12
March	2.58	0.57	-1.62
April	2.15	0.10	-2.07
May	2.04	0.03	-2.11
June	2.17	0.17	-1.97
July	2.13	0.10	-2.06
August	2.37	0.39	-1.76
September	2.35	0.38	-1.78
WATER YEAR 2010	2.24	0.23	-1.90

**01411360 GREAT CHANNEL AT STONE HARBOR, NJ—Continued**

**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**  
[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>1</b>	2.28	0.08	-2.02	2.52	0.12	-2.14	2.75	0.01	-2.42	3.60	0.43	-2.62
<b>2</b>	2.50	0.26	-1.96	3.56	1.28	-1.80	3.02	0.09	-2.76	3.45	0.07	-2.77
<b>3</b>	2.44	0.31	-1.91	3.91	1.09	-1.41	2.88	e0.0	-2.79	1.45	-1.34	-4.51
<b>4</b>	2.52	0.16	-2.12	3.28	0.33	-2.20	2.65	-0.26	-3.26	2.76	-0.26	-3.04
<b>5</b>	2.41	-0.11	-2.46	3.37	0.37	-2.21	3.64	0.55	-2.46	2.46	-0.13	-2.76
<b>6</b>	2.61	0.02	-2.53	3.00	0.20	-2.44	2.76	0.07	-2.39	1.99	-0.43	-2.81
<b>7</b>	2.52	-0.35	-3.10	3.24	0.39	-1.71	2.55	-0.07	-2.40	1.82	-0.49	-2.55
<b>8</b>	2.08	-0.69	-3.07	2.27	-0.38	-2.59	1.91	-0.44	-2.73	1.94	-0.46	-2.77
<b>9</b>	2.87	0.12	-2.04	2.34	-0.26	-2.31	3.06	1.29	-1.20	1.98	-0.30	-2.29
<b>10</b>	2.50	0.02	-2.04	1.98	-0.35	-2.39	2.75	-0.32	-3.43	2.24	-0.17	-2.34
<b>11</b>	2.55	0.15	-2.08	3.53	1.25	-0.86	0.76	-2.06	-4.44	2.03	-0.41	-2.54
<b>12</b>	2.43	0.05	-1.95	5.14	3.13	1.43	0.34	-1.85	-4.11	2.01	-0.62	-2.67
<b>13</b>	2.32	0.05	-2.28	5.44	e3.2	e1.5	1.89	-0.47	-2.26	1.99	-0.49	-2.84
<b>14</b>	2.66	0.44	-1.93	4.77	---	---	2.45	-0.07	-3.19	2.37	-0.15	-2.44
<b>15</b>	4.25	1.41	-1.61	3.49	0.74	-1.80	3.18	0.37	-2.08	2.39	-0.36	-2.62
<b>16</b>	4.75	2.59	0.15	2.89	0.23	-2.23	2.52	-0.36	-2.68	1.95	-0.65	-2.93
<b>17</b>	4.78	e2.4	e0.0	3.26	0.48	-2.19	2.10	-0.67	-2.99	2.92	0.40	-2.45
<b>18</b>	4.66	e2.2	-0.05	3.21	0.61	-1.63	2.72	0.06	-2.64	3.31	1.10	-0.92
<b>19</b>	3.73	1.17	-1.59	2.94	0.36	-1.90	4.31	1.90	-1.19	3.05	0.92	-1.15
<b>20</b>	2.85	0.19	-2.36	2.52	0.12	-1.80	3.46	1.35	-1.08	2.08	0.28	-1.74
<b>21</b>	2.78	0.13	-2.00	2.28	-0.04	-1.89	2.01	-0.17	-2.17	1.99	0.25	-1.44
<b>22</b>	2.61	0.12	-1.74	2.39	0.48	-1.30	1.40	-0.68	-2.36	2.41	0.93	-0.61
<b>23</b>	2.56	0.38	-1.81	3.11	1.45	0.02	1.50	-0.43	-2.25	2.78	0.90	-1.04
<b>24</b>	2.78	0.87	-0.72	2.73	1.25	-0.72	1.62	-0.05	-1.66	2.42	0.26	-1.61
<b>25</b>	2.02	-0.01	-1.67	2.35	0.79	-0.86	2.36	0.81	-0.63	2.63	0.65	-1.94
<b>26</b>	1.97	0.20	-1.27	2.27	0.79	-0.94	2.96	1.63	-0.48	2.82	0.10	-2.78
<b>27</b>	2.41	0.75	-0.70	2.69	0.61	-2.07	3.08	0.70	-1.77	2.13	-0.42	-2.97
<b>28</b>	2.56	1.23	-0.65	1.09	-1.30	-3.40	2.49	-0.24	-2.92	2.69	-0.16	-2.40
<b>29</b>	3.17	1.71	0.40	1.71	-0.37	-2.31	1.42	-1.50	-3.86	2.34	-0.98	-3.84
<b>30</b>	2.68	0.93	-1.08	2.44	-0.10	-2.36	1.74	-0.93	-3.96	2.09	-0.89	-4.50
<b>31</b>	2.66	0.52	-1.56	---	---	---	3.03	0.06	-3.23	3.36	0.23	-2.84
<b>Max</b>	4.78	2.59	0.40	5.44	e3.2	e1.5	4.31	1.90	-0.48	3.60	1.10	-0.61
<b>Min</b>	1.97	-0.69	-3.10	1.09	-1.30	-3.40	0.34	-2.06	-4.44	1.45	-1.34	-4.51

**01411360 GREAT CHANNEL AT STONE HARBOR, NJ—Continued**

**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**  
[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>	2.48	-0.68	-3.61	2.72	-0.17	-3.52	3.15	0.34	-2.32	2.98	0.07	-2.49
<b>2</b>	2.42	-0.58	-3.66	3.33	0.61	-2.49	2.14	0.26	-2.17	1.50	0.08	-2.03
<b>3</b>	2.44	-0.07	-2.57	4.25	1.66	-1.46	2.79	0.05	-2.13	2.57	-0.20	-2.12
<b>4</b>	2.18	-0.48	-2.82	3.35	1.09	-1.51	2.46	-0.17	-2.09	2.18	-0.08	-1.99
<b>5</b>	1.88	-0.38	-2.47	2.48	0.85	-1.43	2.12	-0.14	-2.01	2.17	-0.03	-1.78
<b>6</b>	3.94	2.25	0.25	3.10	0.55	-1.42	2.02	0.01	-1.55	1.85	-0.13	-1.70
<b>7</b>	3.33	---	---	2.30	-0.12	-1.82	1.86	-0.01	-1.56	1.68	-0.14	-1.82
<b>8</b>	---	---	---	1.94	-0.08	-1.72	1.78	0.02	-1.66	1.60	-0.16	-1.91
<b>9</b>	---	---	-2.12	1.84	-0.11	-1.74	1.97	0.18	-1.46	1.02	-0.76	-2.80
<b>10</b>	3.23	0.93	-0.41	1.92	0.03	-1.61	1.68	-0.37	-2.46	1.63	-0.51	-2.57
<b>11</b>	3.06	0.85	-1.19	2.13	0.10	-1.75	1.33	-0.68	-2.81	2.10	-0.16	-2.30
<b>12</b>	2.99	0.57	-1.52	2.47	0.80	-1.21	1.96	-0.34	-2.83	2.68	0.11	-2.23
<b>13</b>	2.75	0.29	-1.92	4.39	2.68	-0.27	2.21	-0.19	-2.50	2.50	-0.03	-2.64
<b>14</b>	1.80	-0.55	-2.74	4.02	1.94	-0.26	2.08	-0.44	-2.70	2.74	e-0.5	-2.97
<b>15</b>	1.71	-0.62	-3.13	3.40	1.44	-0.77	2.40	-0.59	-3.09	2.75	-0.25	-2.70
<b>16</b>	2.29	-0.29	-2.52	3.47	1.56	-0.70	3.25	0.32	-2.24	2.80	-0.12	-2.58
<b>17</b>	1.77	-0.46	-2.64	2.59	0.63	-1.87	2.89	0.50	-1.77	1.48	-0.23	-2.58
<b>18</b>	1.51	-0.55	-2.67	2.46	-0.07	-2.39	2.54	0.14	-2.04	2.76	0.80	-1.50
<b>19</b>	0.61	-1.05	-3.24	2.54	0.02	-2.13	1.63	-0.03	-2.13	3.43	0.56	-1.95
<b>20</b>	1.07	-0.67	-2.57	1.61	-0.03	-2.08	2.48	-0.11	-2.12	2.51	0.06	-2.22
<b>21</b>	1.56	-0.69	-2.50	2.30	-0.24	-2.14	2.46	0.05	-1.98	2.28	-0.08	-2.48
<b>22</b>	1.66	-0.04	-1.62	2.26	0.16	-1.66	2.50	0.28	-1.82	2.31	0.20	-2.20
<b>23</b>	2.82	1.15	-0.70	2.64	0.33	-1.70	2.42	0.17	-2.15	2.59	0.35	-2.14
<b>24</b>	3.22	1.00	-1.31	1.98	-0.40	-2.39	2.41	0.31	-2.12	2.60	0.19	-2.48
<b>25</b>	3.24	0.72	-1.28	2.32	0.05	-2.40	3.20	0.77	-2.16	2.81	0.07	-2.51
<b>26</b>	1.96	-0.47	-3.46	2.93	0.67	-1.83	4.04	1.37	-1.44	3.02	0.19	-2.35
<b>27</b>	3.18	0.48	-2.47	3.42	1.16	-1.37	3.67	1.20	-1.43	3.92	0.73	-2.26
<b>28</b>	3.39	0.58	-2.53	3.34	0.77	-2.12	2.93	0.29	-2.80	3.14	0.41	-2.04
<b>29</b>	---	---	---	3.46	0.72	-2.30	2.76	-0.28	-2.93	2.88	0.20	-2.12
<b>30</b>	---	---	---	3.31	0.69	-2.36	2.92	0.01	-2.69	2.76	0.06	-2.16
<b>31</b>	---	---	---	3.38	0.49	-2.48	---	---	---	1.55	0.09	-2.13
<b>Max</b>	3.94	2.25	0.25	4.39	2.68	-0.26	4.04	1.37	-1.43	3.92	0.80	-1.50
<b>Min</b>	0.61	-1.05	-3.66	1.61	-0.40	-3.52	1.33	-0.68	-3.09	1.02	-0.76	-2.97

**01411360 GREAT CHANNEL AT STONE HARBOR, NJ—Continued**

**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**  
[*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>	2.60	-0.06	-1.95	2.15	-0.19	-2.10	2.02	0.12	-1.86	2.31	0.23	-1.59
<b>2</b>	2.17	0.08	-1.94	1.74	-0.18	-2.05	2.03	0.10	-1.75	2.35	0.22	-1.57
<b>3</b>	2.46	0.36	-1.31	1.66	-0.22	-2.14	1.94	-0.04	-1.88	3.52	1.04	-1.25
<b>4</b>	2.11	0.23	-1.56	1.68	-0.24	-2.21	1.96	-0.14	-2.08	2.55	0.69	-1.46
<b>5</b>	2.05	0.28	-1.47	1.91	-0.13	-2.12	2.36	0.02	-2.04	2.61	-0.13	-2.52
<b>6</b>	1.84	0.23	-1.63	2.19	0.15	-1.75	2.68	0.09	-2.23	3.40	0.36	-2.66
<b>7</b>	2.05	0.21	-1.69	2.42	0.18	-1.90	3.00	0.36	-2.14	2.91	0.09	-2.86
<b>8</b>	2.17	0.05	-1.88	2.74	0.27	-1.97	3.12	0.25	-2.60	3.09	-0.08	-3.26
<b>9</b>	2.52	0.16	-2.05	3.06	0.34	-2.10	3.25	0.17	-2.78	2.98	0.31	-2.78
<b>10</b>	3.15	0.44	-1.91	3.37	0.37	-2.25	3.36	0.17	-2.76	3.19	0.44	-2.48
<b>11</b>	3.20	0.31	-2.10	3.43	0.40	-2.31	3.47	0.43	-2.56	3.30	0.52	-2.21
<b>12</b>	3.05	0.18	-2.37	3.40	0.27	-2.48	3.74	0.78	-2.16	3.27	0.56	-2.03
<b>13</b>	3.45	0.23	-2.39	3.23	0.26	-2.58	3.54	1.09	-1.66	3.14	0.69	-1.60
<b>14</b>	3.36	0.46	-2.08	3.07	0.25	-2.53	3.22	0.66	-1.91	2.78	0.43	-1.62
<b>15</b>	2.23	0.30	-2.27	2.88	0.53	-2.25	2.75	0.36	-2.12	2.49	0.29	-1.69
<b>16</b>	3.07	0.07	-2.40	3.13	0.36	-2.24	2.54	0.22	-1.93	2.40	0.36	-1.52
<b>17</b>	2.82	0.12	-2.50	2.54	0.17	-2.50	2.35	0.04	-2.11	2.17	-0.11	-2.17
<b>18</b>	2.63	0.28	-2.26	2.46	0.10	-2.47	2.63	0.27	-1.75	2.63	0.53	-1.15
<b>19</b>	2.37	0.09	-2.43	2.53	0.24	-2.05	2.64	0.37	-1.58	2.54	0.46	-1.48
<b>20</b>	2.40	0.09	-2.35	2.54	0.19	-2.06	2.63	0.32	-1.64	3.14	0.78	-1.51
<b>21</b>	2.53	0.12	-2.31	2.63	0.24	-2.03	2.89	0.51	-1.60	2.72	0.73	-1.36
<b>22</b>	2.84	0.27	-2.14	2.52	0.03	-2.19	2.94	0.52	-1.67	1.91	-0.20	-2.36
<b>23</b>	2.77	0.12	-2.35	2.65	0.04	-2.19	3.84	1.23	-1.30	2.58	-0.01	-2.75
<b>24</b>	2.81	0.09	-2.23	2.78	0.01	-2.22	3.72	1.78	-0.25	2.56	0.35	-1.90
<b>25</b>	2.92	e0.0	-2.23	2.67	0.15	-2.01	2.86	1.05	-1.16	2.32	-0.12	-2.34
<b>26</b>	2.88	0.07	-2.23	2.38	0.02	-2.20	2.52	0.45	-1.69	2.93	0.48	-2.10
<b>27</b>	2.90	0.19	-2.01	2.32	-0.21	-2.39	2.31	0.26	-1.88	3.22	0.94	-1.08
<b>28</b>	2.61	0.09	-2.08	2.13	-0.20	-2.31	2.25	0.22	-1.92	2.76	0.52	-1.36
<b>29</b>	2.44	0.01	-2.12	2.14	-0.32	-2.38	2.12	0.07	-1.88	2.57	0.32	-1.55
<b>30</b>	1.75	0.06	-2.07	2.24	0.19	-1.94	2.30	0.11	-1.78	2.91	0.77	-0.98
<b>31</b>	---	---	---	2.12	0.10	-1.86	2.33	0.20	-1.75	---	---	---
<b>Max</b>	3.45	0.46	-1.31	3.43	0.53	-1.75	3.84	1.78	-0.25	3.52	1.04	-0.98
<b>Min</b>	1.75	-0.06	-2.50	1.66	-0.32	-2.58	1.94	-0.14	-2.78	1.91	-0.20	-3.26

**01411360 GREAT CHANNEL AT STONE HARBOR, NJ—Continued**