

King of the tides

Once or twice a year, coasts are visited by king tides: higher high tides and lower low tides than normal. The royal visit happens when the Earth is closest to the moon or sun, or as in today's case, both celestial bodies.

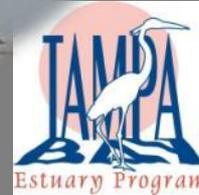
Tidal: As the Earth orbits the sun, and as the moon orbits the Earth, the distance between the objects changes. This change, however slight, translates into more or less gravitational pull and thus, more radical or conservative high and low tide cycles. Within each 29-day moon orbit of the Earth the distance changes and, once a year, the two become closer than ever. The sun and Earth are furthest apart July 2 and closest together Jan. 2.

King tide 7.1 ft.	Mean tide 2-5 ft.	Sea level
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Sources: National Oceanic and Atmospheric Administration, Orange County Coastkeeper, International Astronomical Union, NASA

Sonya Quick and Jeff Goertzen / The Register

The Tampa and Sarasota Bay Estuary Programs present: "Chasing the Waves: *King Tide*" photo exhibit. A Glimpse into Future Sea Levels



"Sea level rise will make today's king tides become the future's everyday tides.", US EPA



Photo: A. McGovern
Eldersburg, Maryland



Photo: CA King Tides

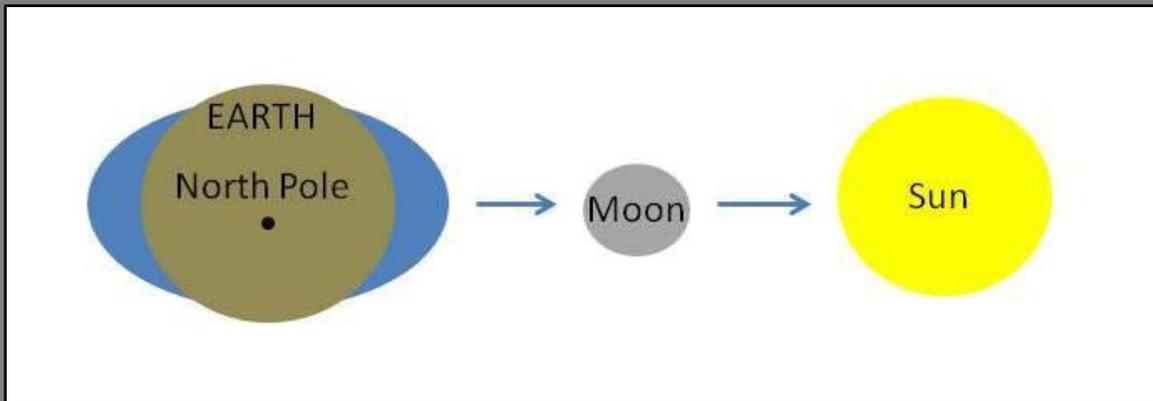
Rocketship at Embarcadero, CA,
Low and King Tides



Photo: S. Ruiz

What is King Tide?

- King tides are extremely high tides which occur typically two times per year, in the spring and fall, when the earth, sun, and moon align and the gravitational pull is at its greatest.



King Tides Photo Initiative – 2012

Raising awareness about sea level rise

King Tide Photo Contest

Sponsored by the Tampa Bay and Sarasota Bay Estuary Programs

What is a King Tide?
The King Tide is the highest predicted high tide of the year at a coastal location.

When do King Tides occur? King Tides occur when the moon and sun align on one side of the Earth and their gravitational forces combine to create extraordinarily high tides – usually twice a year.

Why photograph King Tides? King tides provide a glimpse at what our landscape will have to contend with in the coming years as the sea level rises. Highlighting King Tides in a community can raise

awareness of potential sea level rise impacts and identify flood-prone locations.

Tampa Bay and Sarasota Bay Estuary Programs are looking for "Tide Watchers" to photograph our coastlines, flooded roads, pipes, ponds or any other areas affected by rising waters.

Cash prizes are being offered for the best photos that illustrate sea level rise.

First prize - \$200
Second prize - \$125
Runner-up - \$75

PHOTO SUBMISSION GUIDELINES:

Photo submissions should include one picture of an area at low tide and another at high tide at the same location showing the increase in water level. Photos can be e-mailed to: tide@tidewatch@yahoo.com.

For examples of King Tide photos check out the Florida Tide Watch Flickr webpage at: <http://www.flickr.com/groups/1692167@N23/>



KING TIDES FOR JUNE, 2012 IN FEET ABOVE OR BELOW MLLW

ST. PETERSBURG, DOWNTOWN

Low – June 1st at 7:12 pm (-0.2)

High – June 5th at 2:26 pm (+2.9)

HILLSBOROUGH BAY

Low – June 1st @ 7:38 pm (-0.3)

High – June 5th at 2:33 pm (+3.5)

BRADENTON – MANATEE RIVER

Low – June 2nd at 7:11 pm (-0.4)

High – June 5th at 1:02 pm (+2.8)

SARASOTA BAY

Low – June 3rd @ 7:59 pm (-0.5)

High – June 5th @ 12:48 pm (+2.7)

****If you cannot photograph at these times, please check local tides for the surrounding days – these tides will be extreme as well!****



flickr from YAHOO!

The Tour

Sign Up

Explore



Florida Tide Watch's photostream

Photostream Sets Favorites Galleries Profile More



Tropical storm
Debby storm...

10 photos



King Tide June
2012 WINNERS

3 photos



King Tide June
2012

93 photos



King Tide
October 2011

22 photos



CONTEST DEADLINE:
JUNE 11, 2012

TBEP Contact:
Misty Clades
misty@tbep.org

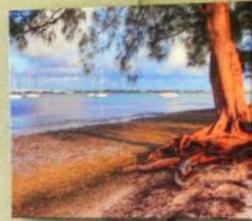
SBEP Contact:
Christine Scardino
info@sarasotabay.org



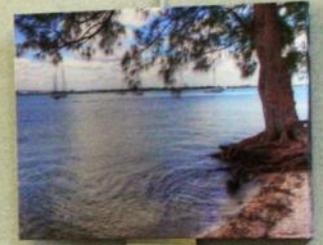
1. The historic downtown waterfront building at night.



2. The historic downtown waterfront building during the day.



3. A tree trunk on a beach, with the ocean in the background.



4. A tree trunk in the water, with the ocean in the background.



Sarasota Bay NEP office
June, 2013



11. A typical scene in Florida
townships of the Sea Coast in Cape Sable
Palm
Cape Sable Pines



12. Unfinished construction after King Tom
Palm Beach
Palm Beach





Valentine House
Jan./Feb., 2014



8. Cycling through King Tide Flooding
Nash County, California
Credit: Brent Smith, San Francisco Chronicle

10. King Tide Flooding
Nash County, California
Credit: Brent Smith, San Francisco Chronicle

11. King Tide Flooding
Nash County, California
Credit: Brent Smith, San Francisco Chronicle

12. King Tide Flooding
Nash County, California
Credit: Brent Smith, San Francisco Chronicle

13. King Tide Flooding
Nash County, California
Credit: Brent Smith, San Francisco Chronicle

Manatee County Public Library
July, 2014

“Chasing the Waves: King Tide” Exhibit Summary

Exhibit host locations:

June, 2013 -	Sarasota Bay Estuary Program offices (including special reception)
July, 2013 -	Mote Marine Laboratory
September-October, 2013 -	South Florida Museum
November, 2013 -	Weedon Island Preserve (as part of the Salty Topics speaker series)
December, 2013 -	NOAA office complex
January - February, 2014 -	Valentine House at Robinson Preserve (including special reception)
March, 2014 -	City of St. Petersburg City Hall
April, 2014 -	Oldsmar Library
May - June, 2014 -	St. Petersburg Main Library
July, 2014	Manatee County Main Library

The goal of the exhibit is to raise awareness about the effects of sea level rise on our shorelines, structures and communities. The exhibit features photos taken locally and around the world during annual “King,” or extreme high tides, showing the global impact of rising seas. King Tides typically occur twice a year when the earth, moon and sun align producing the highest predictable tides. Images include winning submissions to the King Tide Photo Contest held last year.

Visitors to the exhibit: **148,326 people**
(conservatively)

This was a partnership project between :
Tampa Bay and Sarasota Bay Estuary Programs



Photos: L. Stults



Interested in hosting

“Chasing the Waves”: King Tide?

- Dates for 2015 still available
- Contact Misty Cladas at

(727) 893-2765 or misty@tbep.org

