

Climate Change & Sea Level Rise in the FL Keys: Monroe County Prepares

**Presented by Roman Gastesi
County Administrator
Monroe County, FL**

**2018 SE FL Climate Compact Summit
October 24-25, 2018
Miami Beach**

Monroe County, Florida Among Most Vulnerable Counties in Nation



Rank	County	Population Displaced
1.	Tyrell, NC	45%
2.	Hyde, NC	42%
3.	Monroe, FL	36%
4.	Dare, NC	21%
5.	Currituck, NC	20%
*	Miami-Dade, FL	3%
*	Broward, FL	1%

Land that's dry now that will go **under water by **2060** in relation to the number of people living there**

**National-scale analysis of over 300 coastal counties
Matthew Hauer, Applied Demography Program,
University of Georgia*

Seeing Sea-Level Rise Today

From the Key West tide gauge. **9" increase** in sea-level in the past 100 years.

Non-storm-related flooding

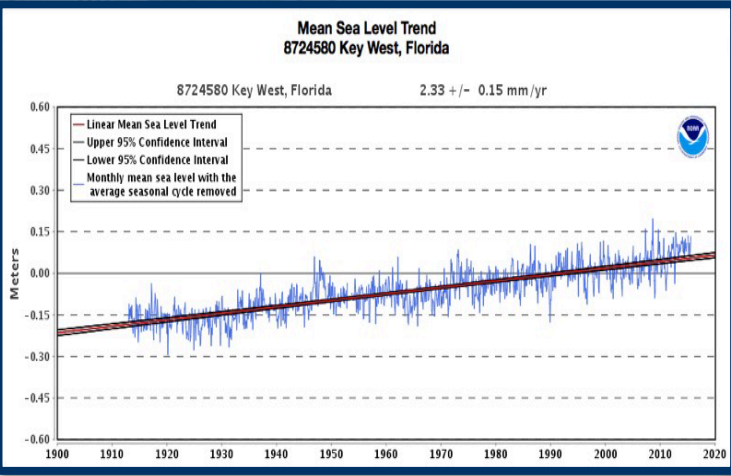


Photo by *The New York Times*

Unified Sea Level Rise Projection (Southeast Florida Regional Climate Change Compact, 2015)

Relative Sea Level Rise near Key West, FL

Year	IPCC AR5 Median (inches)	USACE High (inches)	NOAA High (inches)
2030	6	10	12
2060	14	26	34
2100	31	61	81

Observed Monthly Mean Sea Level at Key West

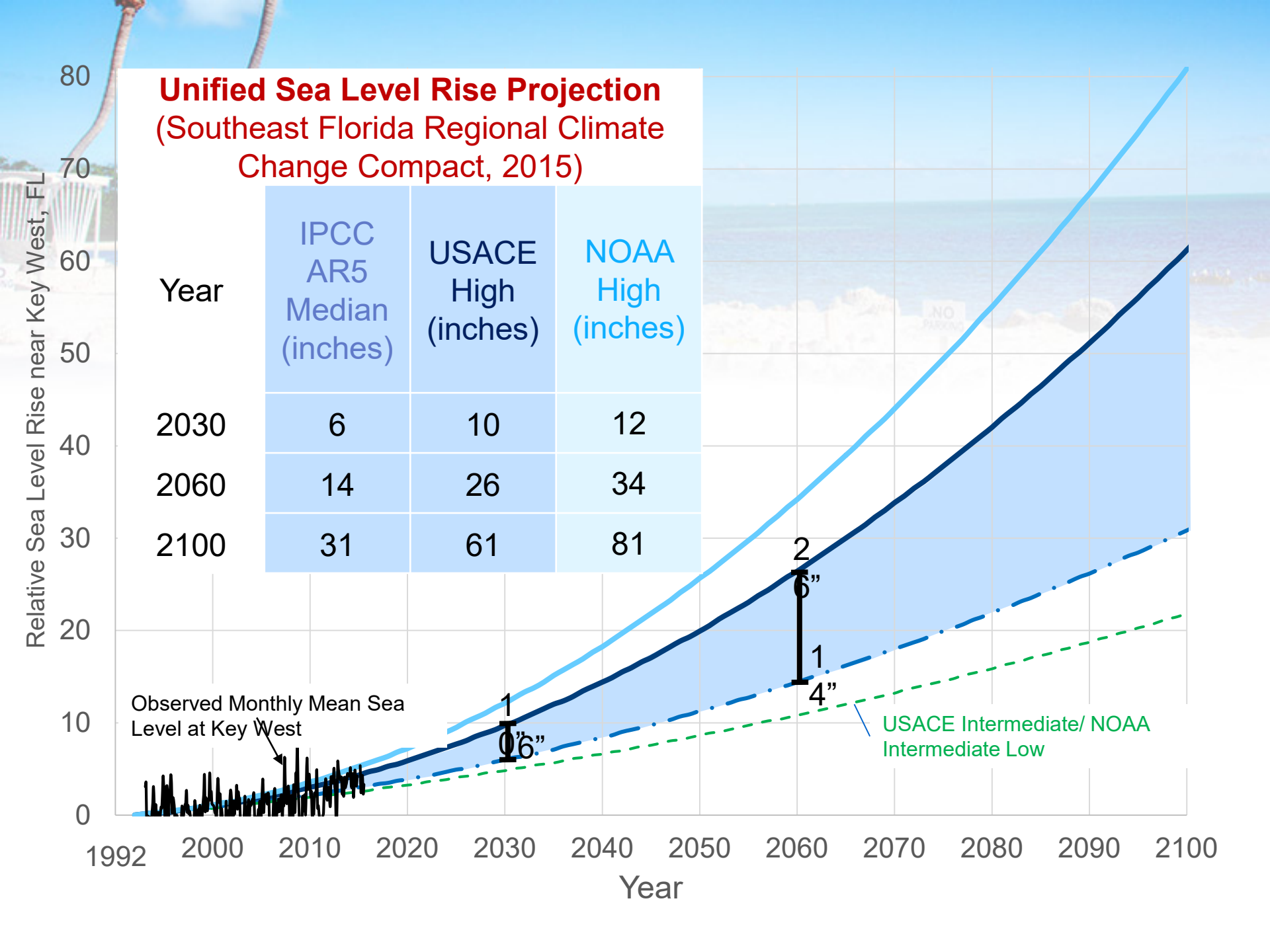
USACE Intermediate/ NOAA Intermediate Low

1992 2000 2010 2020 2030 2040 2050 2060 2070 2080 2090 2100
Year

1
6"

2
6"

1
4"



Fall King Tides



Completed Road Elevation Projects Preparing for Sea Level Rise

**Sexton Cove Estate
Road Elevation
Key Largo**



**Key Largo I
Road Elevation
Key Largo**



Stock Island Fire Station (Key West)

Station Floor
Located Here



Elevated 1.5 feet
above Code



Bernstein Park, Stock Island



Elevated
24 inches
to prepare
for sea
level rise



Tavernier Courthouse

- **\$32 Million Courthouse**
- **When built, to be elevated 1 foot higher than code to account for sea level rise**



Artist's Rendering of New Courthouse

Thank You!

