

# Rising Tides: What projections of sea level rise tell us about the future

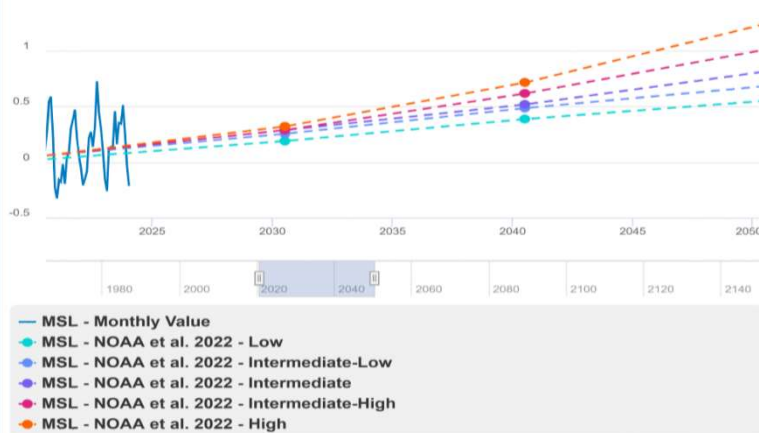
Rising sea levels have many effects on coastal regions. Specifically, the Fort Myers Beach area is at risk of seeing sea level rise upwards of a foot in the next 25 years. This can lead to many different issues for ecosystems and the entire population at large.



## Sea Level Projections

**Sea Level Data and Projections: Fort Myers, FL (8725520)**  
NOAA Tide Gauge

Feet above North American Vertical Datum of 1988  
(1983-2001 epoch)



MSL record span: 1965 to 2024 (59 years)

NOAA et al. 2022 datum-to-start-year offset (est. SLC from 1992 to 2005): 0.171 ft.

The graph above shows low, intermediate, and high projects for sea level rise from 2020 to 2050. As depicted the graph even the middle value shows a foot of rise. Currently, Fort Myers Beach is 3 feet above sea level. While a change in one foot of sea rise might not appear to have an immediate effect on our daily lives it could cause damage to indigenous ecosystems.

NOAA (National Oceanic & Atmospheric Administration)

## Effects of Sea Level Rise

### Costal Flooding



[i]

As sea levels rise coastal cities are at greater risk of being flooded.

### Habitat Loss



[ii]

Sea level rise can lead to the destruction of coastal ecosystems.

### Saltwater Intrusion



[iii]

Flooding can lead to saltwater intrusion causing contamination of freshwater aquifers.

### Displacement of Populations



[iiii]

As a result, from flooding people can be forced to migrate to a new location.

## References

[i] Rice, D. (2018, June 18). *300,000 coastal homes in US, worth \$120 billion, at risk of chronic floods from Rising seas*. USA Today.

<https://www.usatoday.com/story/news/nation/2018/06/18/rising-seas-climate-change-coastal-homes-floods/710141002/>

[ii] Coastal Care. (2012, September 6). *Destroyed coastal habitats produce significant greenhouse gas*. <https://coastalcare.org/2012/09/destroyed-coastal-habitats-produce-significant-greenhouse-gas/>

[iii] Richter, H. (2022, December 9). *Saltwater intrusion, a "slow poison" to east coast drinking water*. Circle of Blue. <https://www.circleofblue.org/2022/world/saltwater-intrusion-a-slow-poison-to-east-coast-drinking-water/>

[iiii] AP News. (2022, October 28). *UN: Flooding in West, Central Africa displaced 3.4M people*. AP News. <https://apnews.com/article/floods-chad-niger-migration-nigeria-215c7e63f7168f660b735714610877bb>