

You'll Be Under Water!



Sea Level Rise

If you come back to this location in 2080, you will likely be standing in a few feet of water because climate change is causing the ocean to rise!

Marshes Can Migrate Too?

Sea level rise is caused by the melting of ice sheets that occurs when ocean temperatures increase. Historically, salt marshes have been able to withstand the gradual rise of sea levels through two ecological processes: accretion and marsh migration. Through accretion, marshes accumulate organic material on their surface and grow vertically, allowing them to stay above the rising water level. Through marsh migration, salt marshes expand outwards and move inland to more favorable locations.

What Can You Do?

With the loss of the salt marshes will go the myriad of services that these ecosystems provide including the provision of breeding grounds for animals, the storage of soil carbon, and protection from storms and coastal flooding.

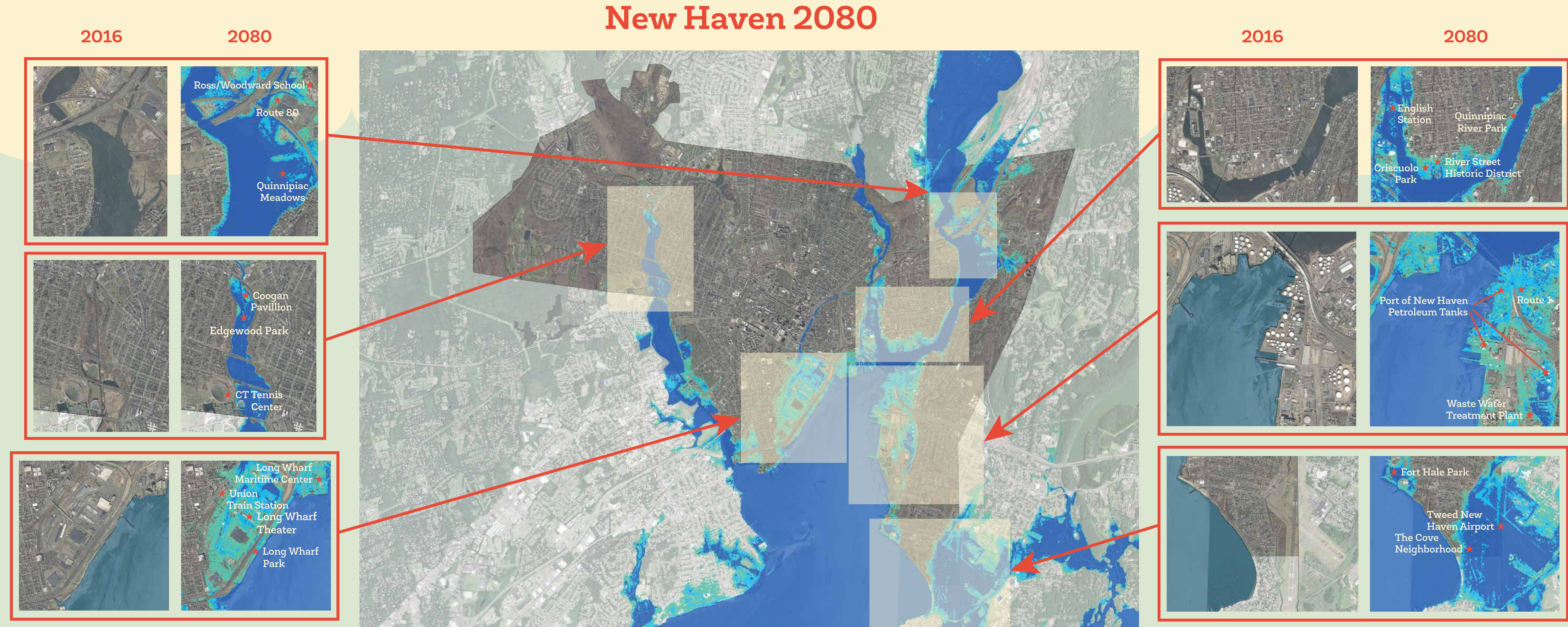
There are many ways that you can help address climate change including driving less, using less energy, and eating less meat, as well as encouraging your elected representatives to support policies that will help address climate change and sea level rise.

What Will Happen in Connecticut?

As climate change worsens, the sea level will continue to rise more rapidly and could eventually exceed the ability of salt marshes to accrete vertically. Moreover, because of the dense population of the Connecticut shoreline, the remaining wetlands will be unable to migrate inland. In Quinnipiac Meadows, for example, I-95 and the railroad tracks present a physical barrier to the migration of the marsh. Thus, as the sea level rises, the marshes will have nowhere to go! As a result, wetlands like these will become submerged to the point that they can no longer survive.

The Nature Conservancy

It is not just salt marshes that are threatened by rising sea levels. If the current rate of sea level rise is left unchecked, important parts of our city could end up underwater. Look at the diagrams to the right to see where in New Haven the rising sea level will have the most impact. This map uses data compiled by The Nature Conservancy to project areas of New Haven that will be flooded in 2080 given the current rate of sea level rise. Can you find landmarks you recognize? Now, imagine these landmarks underwater.



The three different shades of blue on the map indicate confidence levels of the projection. In other words, dark blue color indicates a very high (99%) confidence that this area will be flooded in 2080, light blue color indicates medium (66%) confidence, and light green (33%) lower confidence.

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