

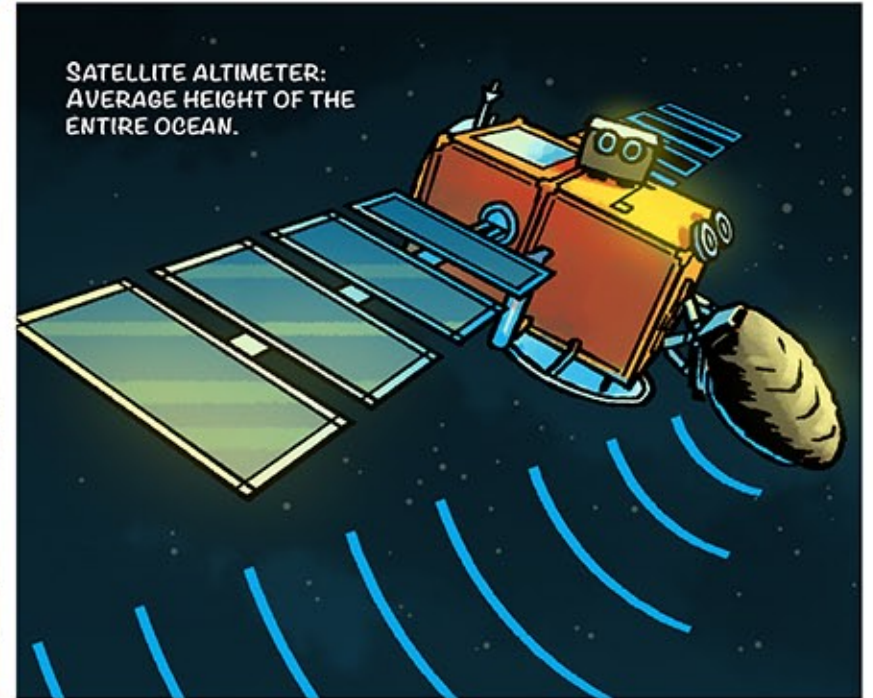
OUR NEW AGE OF WATER SEA LEVEL RISE

STORY BY SHARON MOEN ART BY DANIEL IRIZARRI OQUENDO



SCIENTISTS USE TIDE STATIONS AND SATELLITE LASER ALTIMETERS TO MEASURE HOW SEA LEVEL CHANGES OVER TIME.

TIDE STATIONS: HEIGHT OF WATER AS MEASURED ALONG THE COAST RELATIVE TO A POINT ON LAND.



SATELLITE ALTIMETER: AVERAGE HEIGHT OF THE ENTIRE OCEAN.

JUST AS EARTH IS NOT FLAT, IT TURNS OUT THAT THE SURFACE OF THE OCEAN IS ALSO NOT FLAT. AT SPECIFIC LOCATIONS, SEA LEVEL CHANGE MIGHT BE HIGHER ... OR LOWER ... THAN THE GLOBAL AVERAGE BECAUSE OF THINGS LIKE:

-SUBSIDENCE (GRADUAL SINKING OF AN AREA OF LAND)

-LAND REBOUNDING FROM THE COMPRESSIVE WEIGHT OF ICE AGE GLACIERS

- OCEAN CURRENTS



EVEN THOUGH IT IS NOT FLAT, THE OVERALL SEA LEVEL IS RISING. SCIENTISTS PREDICT SEA LEVEL WILL CONTINUE TO RISE, AND FASTER, FOR CENTURIES TO COME.

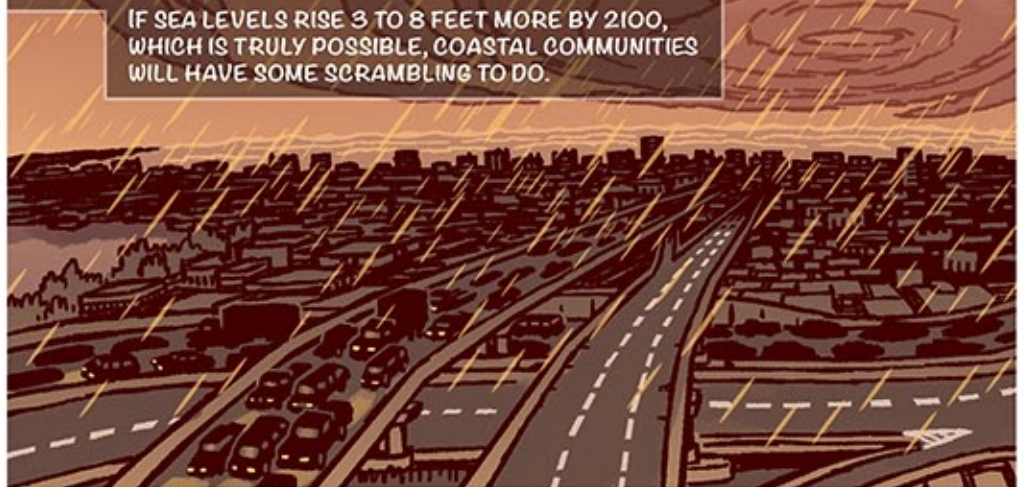
TWO MAJOR CAUSES OF GLOBAL SEA LEVEL RISE ARE THERMAL EXPANSION CAUSED BY THE WARMING OF OCEAN WATER AND THE MELTING OF LAND-BASED ICE.



ALMOST 40% OF THE PEOPLE IN THE U.S. LIVE IN COASTAL AREAS. OF THE WORLD'S 10 LARGEST CITIES, 8 ARE COASTAL.

ALREADY MORE DEADLY AND DESTRUCTIVE STORM SURGES ARE PUSHING FARTHER INLAND.

IF SEA LEVELS RISE 3 TO 8 FEET MORE BY 2100, WHICH IS TRULY POSSIBLE, COASTAL COMMUNITIES WILL HAVE SOME SCRAMBLING TO DO.



IDEAS ABOUT HOW TO DEAL WITH RISING SEA LEVELS ARE FLOATING ABOUT. SOME PEOPLE EXPECT TO LIVE IN AMPHIBIOUS ARCHITECTURE AND MODULAR, MOVABLE COASTAL CASAS. ENGINEERS MIGHT CREATE ARTIFICIAL CLOUDS TO REFLECT SUNLIGHT BACK INTO THE ATMOSPHERE. MAYBE YOU'LL BE PART OF THE SOLUTION!

