The Effects of Sea Level Rise on Displacement and Health in the Pacific Northwest

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Over 200,000 people may be impacted in Washington and Oregon due to Sea Level Rise

Overview

Sea level rise poses a specific threat to the Pacific Northwest as the region has a long coastline and large population, indigenous and general, that lives near it. This project explores 1, 2 and 5 ft of sea level rise scenarios and estimates the amount of people that would be displaced and impacted in terms of health as result.

Methods

Using ArcMap 10.5.1, the analysis was conducted and produced maps and tables with sea level rise data from NOAA, population data from CIESIN, and healthcare data from HRSA. Through spatial analysis, the amount of people impacted was estimated.

Results

Over 200,000 people may be displaced by 1 ft of sea level rise, over 220,000 by 2 ft, and over 300,000 by 5 ft. Approximately 2,100 people who live on reservations or entities will be displaced by 1 ft of sea level rise, 3,700 people by 2 ft, and 5,900 people by 5 ft. Many people, particularly Native Americans, live in medically underserved areas.

References


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