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# WHAT IS HAPPENING NOW?



An example of severe beach erosion on Oʻahu. Coastal residents here are at risk from tidal flooding and storm surges. Tarp was placed along the coast in attempt to control erosion, but it is not a long-term solution.

Photo by Dr. Shellie Habel, OCCL

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## WHAT IS HAPPENING NOW?



Sea level in Hilo Bay has risen ~10 inches since 1950, and is rising faster at about 1 inch every 4 years.



2017 was a record flood year for Honolulu with 37 flood days - The historical average has been ~4 days.



In Hawai'i, 66,000 people are regularly at risk of coastal flooding.

#### **COASTAL EROSION**

13 miles of beaches (10% of O'ahu's beaches) around the state already lost.

70% of beaches around the state currently threatened.



Sea level rise is putting thousands of homes at risk.

Photo by Lynn Edwards, Instagram



### **INCREASED INLAND FLOODING**

Flooding is worsening further inland- seawater flows backwards from storm drains, leading to pools of dirty, contaminated, brackish water where we live.



Water bubbles up from a storm drain in Mapunapuna, an area of Honolulu that frequently floods during the highest tides of the year.

Photo by Sea Grant King Tides Project, 2017



## MORE FREQUENT HIGH TIDE FLOODING

More flooding means increased damage to roads and buildings and overwhelmed drainage systems.



Cars and trucks drive through flooded roads during high tide events in Mapunapuna. Road damage and closures are especially detrimental to communities that rely on one road to get from place to place.

Photo by Sea Grant King Tides Project, 2019



### **CULTURAL PRACTICES AT RISK**



Sea level rise affects cultural practices like: fishpond maintenance, harvesting of salt, and gathering from the nearshore fisheries.

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# WHAT IS COMING? CHRONIC FLOODING WILL LEAD TO:



Over 25,800 acres of unusable land



About 6,500 structures projected to be at risk due to sea level rise



550 cultural sites, 38 miles of major roads, and at least \$19 billion in assets left vulnerable.