CLIMATE CHANGE & SEA LEVEL RISE IMPACTS ON CHEMICAL CONTAMINATION

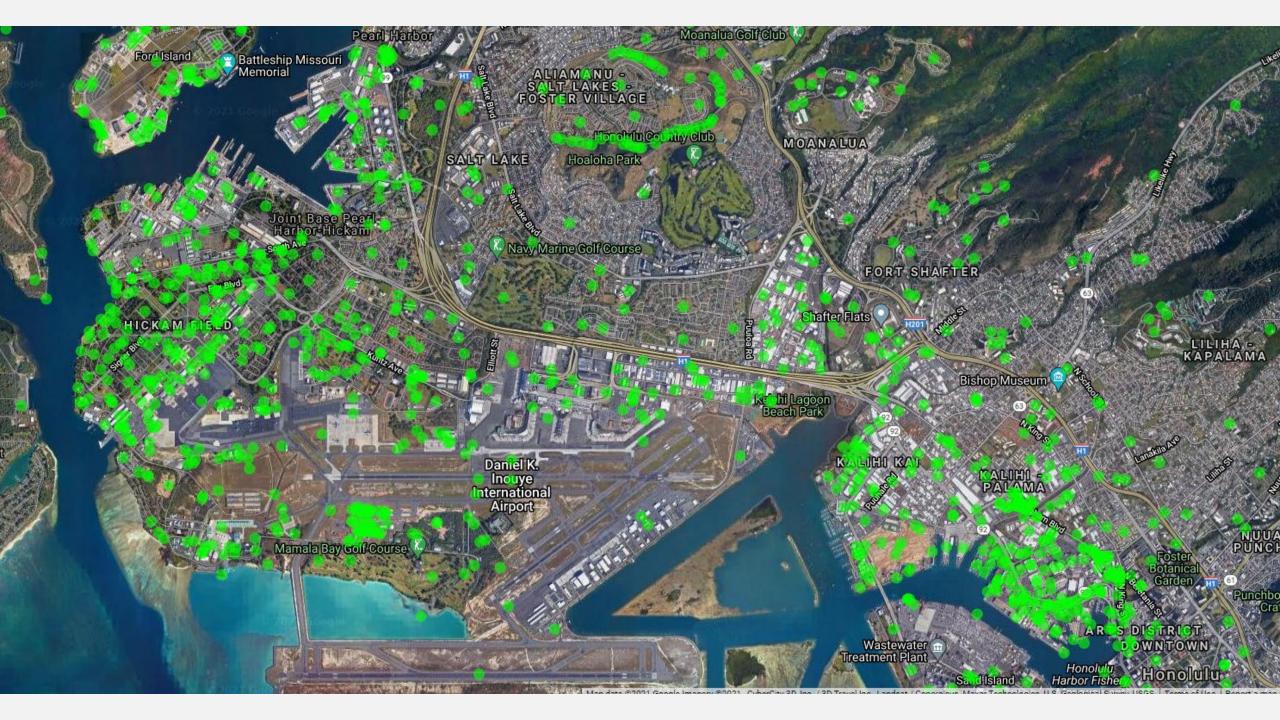
DOH HEER Office manages over 1000 sites of chemical contamination statewide

Contamination is generally the result of historical industrial and agricultural uses and releases

Contamination is often "managed in place" in a manner that protects human health and the environment (usually by limiting exposure)

Effects from climate change and rising sea levels will disrupt previously "stable" chemical contamination creating new hazards (hazard = exposure X toxicity)

Of biggest concern are the movement of contaminants (more exposure) and changing chemical conditions (higher toxicity)





HONOLULU HARBOR

- Yellow areas are properties with chemical contamination
- Blue shading shows 3.2 ft SLR
- Purple shading shows 1% flood risk with 3.2 ft SLR

- Site is around white dot in upper left
- Used for air riflery practice for many years
- High levels of lead in the soil
- Less than 3 ft above sea level and very close to the ocean
- Blue shows 3.2 ft SLR
- Purple shows 1% annual flood risk with 3.2 ft of SLR

CONTAMINANT MOVEMENT – WAIANAE HIGH



NOT JUST AN OAHU PROBLEM

Island	Chemically Contaminated Sites in 3.2 ft SLR zone (not including 1% flood zone)
Hawaii	42
Kauai	21
Lanai	Ι
Maui	54
Molokai	23
Oahu	307

For more information on this topic & climate and health in Hawaii: <u>health.hawaii.gov/heer/climate-and-health/</u> **Questions:** Contact Diana Felton, State Toxicologist: <u>diana.felton@doh.hawaii.gov</u>, 808-586-0963