County of Hawai'i: Climate Change and Resilience Actions

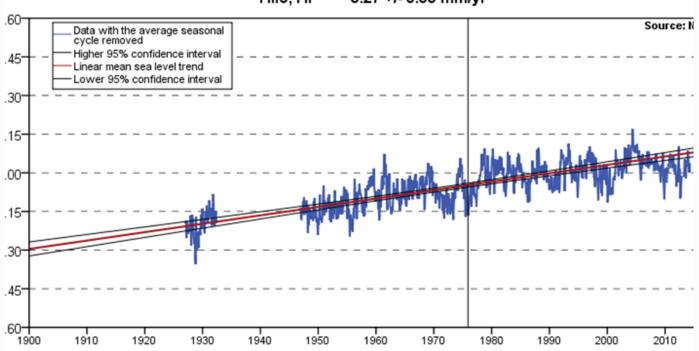


April 24, 2019

April J. Surprenant Manager of Long Range Planning County of Hawaii Planning Dept. 808-961-8131 April.Surprenant@hawaiicounty.gov

Climate Change Impacts

According to tide gauges at Hilo Harbor and Kawaihae Harbor, local, relative sealevel has risen at about 3.27 mm/yr (1.4 in/decade) over the past century due to a combination of island subsidence and regional SLR.

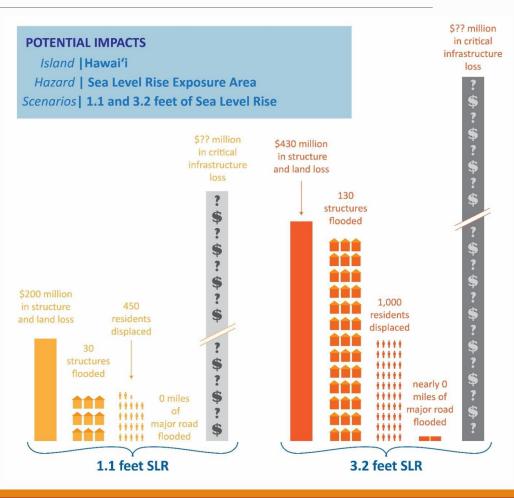


Hilo, HI 3.27 +/- 0.35 mm/yr

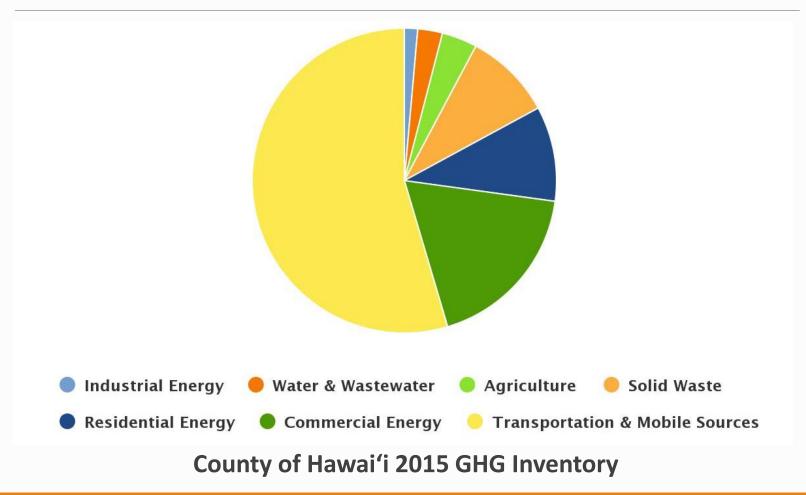
Climate Change Impacts

Hawaii County will lose \$430 million in infrastructure and land loss (not including public facilities), in part because 20% of the areas forecasted to be inundated are urban.

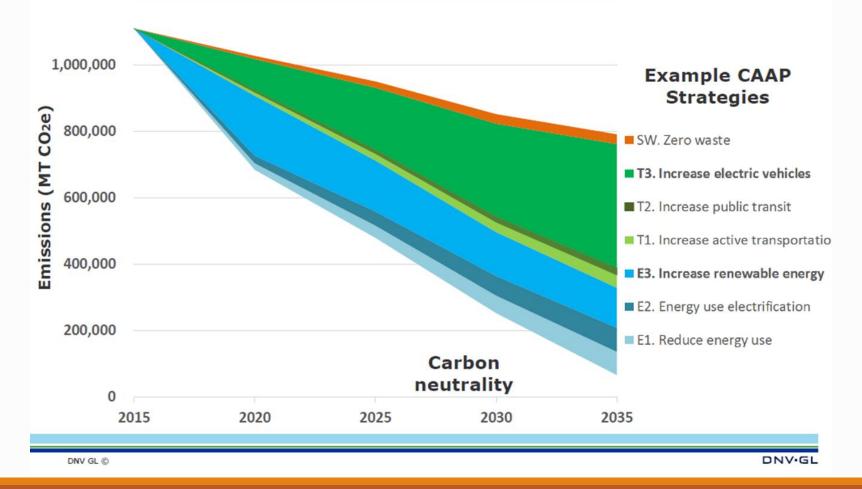
Source: Hawai'i Sea Level Rise Vulnerability & Adaptation Report, 2017



Where We stand on GHG



Work thru Existing Systems Pathways to Carbon Neutrality Electrification & Renewable Energy as Key Drivers



Work thru Existing Systems



Current Initiatives

- Public Works: Energy Code
- Water Supply: Energy Program
- Mass Transit: pilot Zero Emission Buses (ZEBs)
- Research & Development
 - Greenhouse gas (GHG) inventory, targets, & monitoring
 - Climate Action Plan (to mitigate GHG emissions)
 - Energy Efficiency & Production Projects: LED, WHCC
 - Hawai'i Energy: Continuous Efficiency Improvement (CEI)
 - Public Utilities Commission (PUC): Integrated Grid Planning, Electrification of Transportation, and Performance-Based Ratemaking
 - State Greenhouse Gas Sequestration Task Force

Current Initiatives

- General Plan Comprehensive Update
 - Identified high risk hazard areas & minimize develop
 - Address CC in all planning programs and capital projects.
- Kilauea Recovery Efforts
 - Create a model to address future response to recovery events
- Shoreline Setback Policy Amendments
 - Science-based analysis, including SLR
- Community Planning & Regional Development Plans
- Hazard Mitigation Plan Update 2020
 - Include CC impacts with pre-disaster and post-disaster planning

Resources

Energy Building Codes: <u>https://energy.hawaii.gov/hawaii-energy-building-code</u>

Water Supply 2015 Energy Evaluation: <u>https://www.hawaiidws.org/wp-content/uploads/2018/06/Hawaii-Final-Report-final-8-14-2015rev.pdf</u>.

Transit CityLab article: <u>https://www.citylab.com/transportation/2019/04/renewable-energy-public-</u> <u>transportation-hydrogen-fuel-cell-ev/586960/</u>

Climate Action Plan using ClearPath: http://icleiusa.org/clearpath/

Mahalo



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