City and County of Honolulu Climate Change Adaptation Adopted Policies and Guidelines

May 30, 2014

North Shore Sustainable Communities Plan (2011)

- Shoreline Setback Policy
- Coastal Erosion Guidelines
- Water Conservation Policies & Guidelines
- Alternative Water System Development Policies and Guidelines

Wai'anae Sustainable Communities Plan (2012)

- Emergency Shelter Policies and Guidelines

‘Ewa Development Plan (2013)

- **Setback Guideline**
- **Project Risk Assessment Guideline**
- **Water Use Efficiency and Conservation Policy**
- **Alternative Water Supplies Policies**
- **Emergency Shelter Policies**

Setback Guideline

Sec. 3.1.3.3 Shoreline Area, p. 3-5

- Provide, at a minimum, a 60-foot setback along the shoreline, and, where possible, expand the setback to 150 feet where justified, based on historic or adopted projections of shoreline erosion rates.

(See also **3.12.2 Guidelines: Barbers Point Industrial Area - Coastal Environment,** p. 3-70**;** and **3.13.2 Kalaeloa Guidelines: Coastal Environment**, p. 3-75)

Setback Based on Historic and Projected Shoreline Erosion

Historic Coastal Erosion

Projected Erosion

Project Risk Assessment

Sec. 3.1.3.3 Shoreline Area, p. 3-5

- Analyze the possible impact of sea level rise for new public and private projects in shoreline areas and incorporate, where appropriate and feasible, measures to reduce risks and increase resiliency to impacts of sea level rise.

Impact on Rare Events

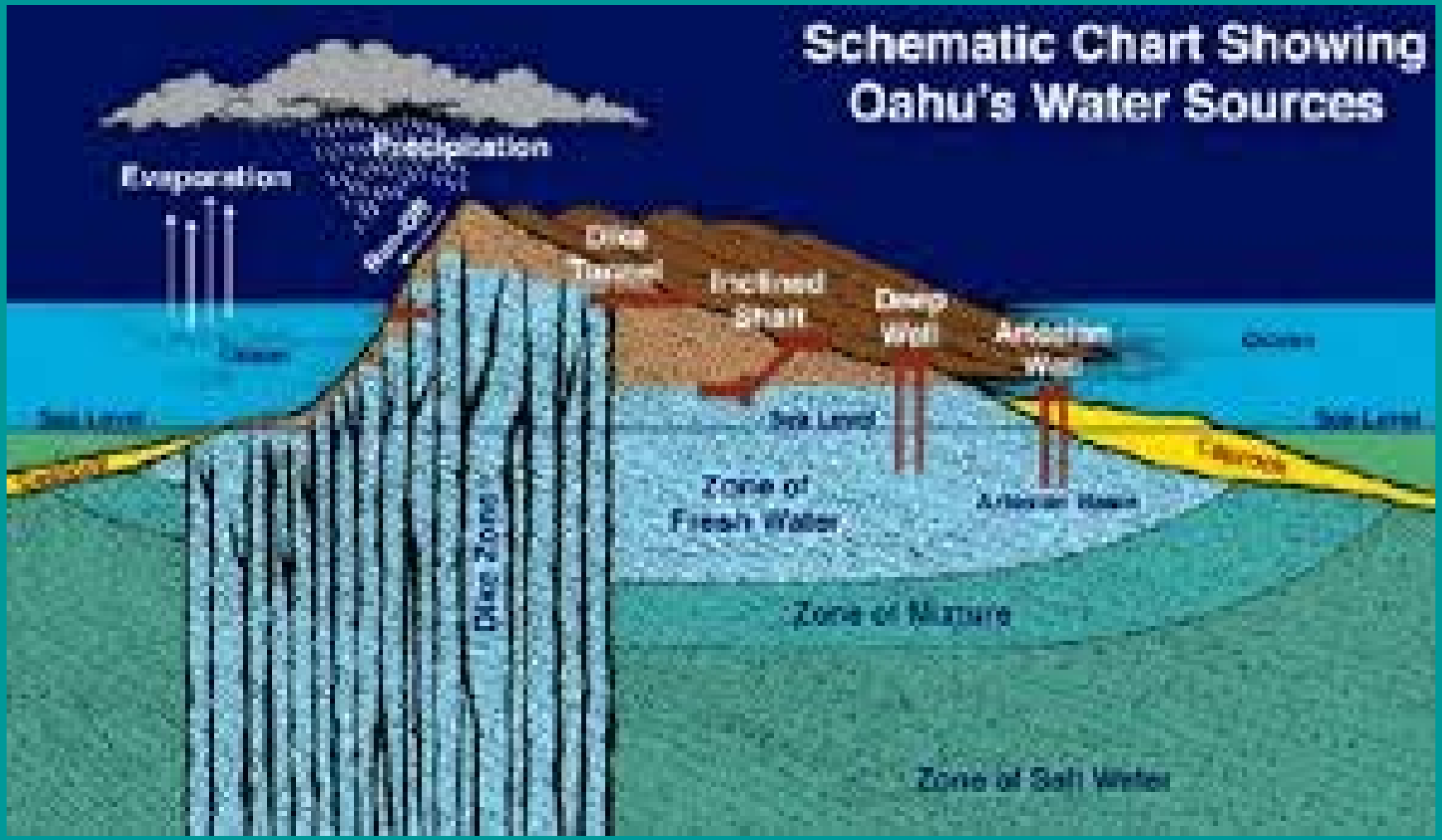
Impact on Daily, Weekly, or Monthly Events

Water Conservation

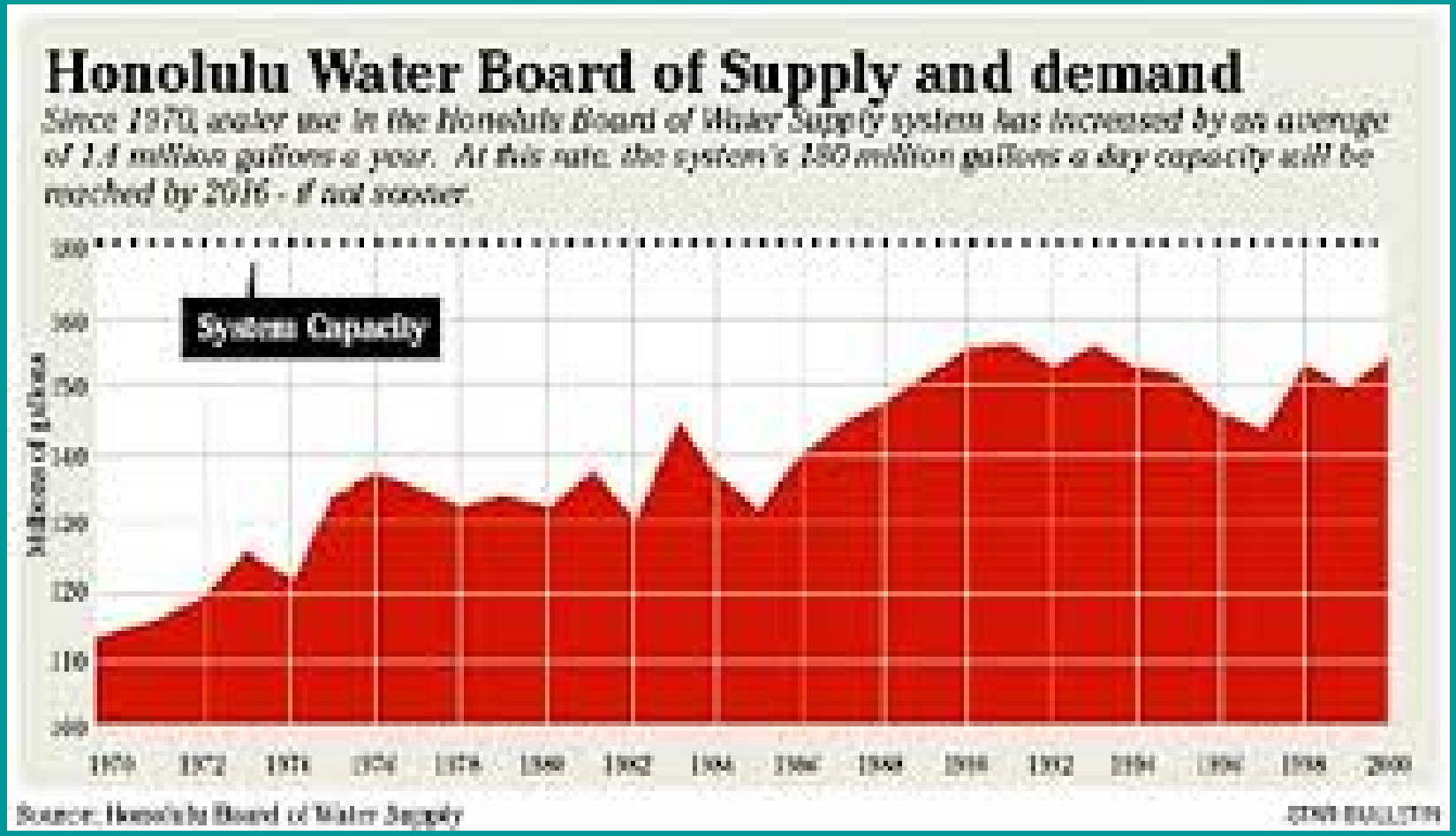
Sec. 4.2.1 Policy: Water Use Efficiency and Conservation, p. 4-22

- Require developments to conserve water resources by implementing water conservation measures, such as low flow plumbing fixtures, drought tolerant landscaping, sub-metering and efficient irrigation systems with soil moisture sensors. Such requirements shall be determined during review of building permit applications. Encourage owners of existing plumbing systems to conduct regular water audits and effect repairs to reduce water loss.

Drought Threatens Supply



Conservation Has Stabilized Demand

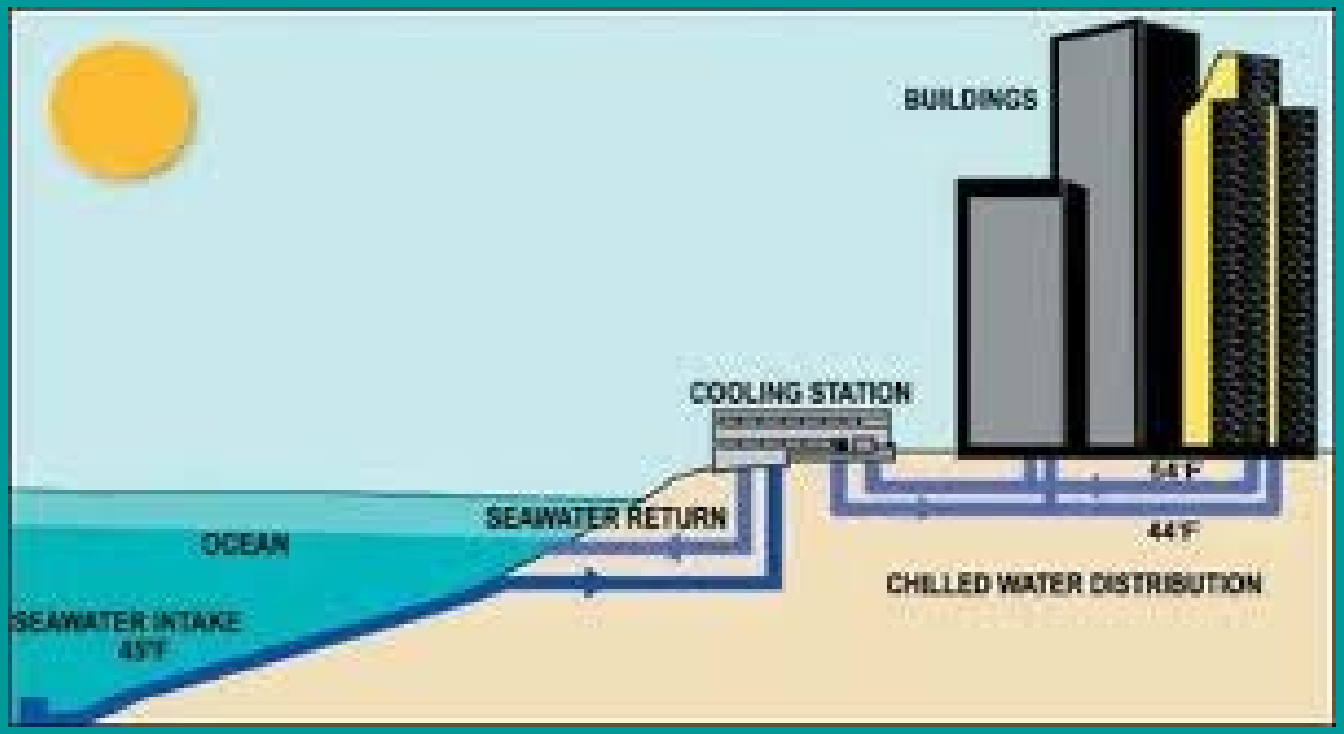


Alternative Water Supplies

Sec. 4.2.1 Policy: Alternative Water Supplies, pp. 4-23 to 4-24

- Where practical, develop alternative water supplies using new technologies in water reclamation, membrane and distillation desalination and deep ocean water applications to ensure adequate supply for planned uses.
- Encourage use of technologies conserving water and using renewable energy that could support alternative water supplies, such as seawater air conditioning, photovoltaics, efficient plumbing and lighting fixtures, wave energy, and bio-fuels.

Seawater Air Conditioning



Emergency Shelters

Sec. 4.8.1 **Public Facility Policies**, p. 4-39

- Survey and retrofit, as appropriate, Department of Education and other public buildings to make up the shortfall in hurricane resistant shelters.
- Require new City buildings which are “critical facilities used for public assembly and able to perform as shelters” to be designed and built to withstand a Category 3 hurricane.
- Provide incentives for private organizations to create hurricane resistant shelter areas in their facilities and for homes to include hurricane resistant “safe rooms.”

Hurricane Incidence to Increase

JAMM AQUINO / JAQUINO@STARBULLETIN.COM

Emma Ernestburg, an American Red Cross disaster assistance co-captain, navigated the narrow walkway between cot spaces in a demonstration of shelter layout at the American Red Cross Shelter Expo in the Kahuku High School cafeteria yesterday.

State critically short of shelters

Plan where to ride out a storm, residents are told