



**Water  
Quality  
Plan  
2014**

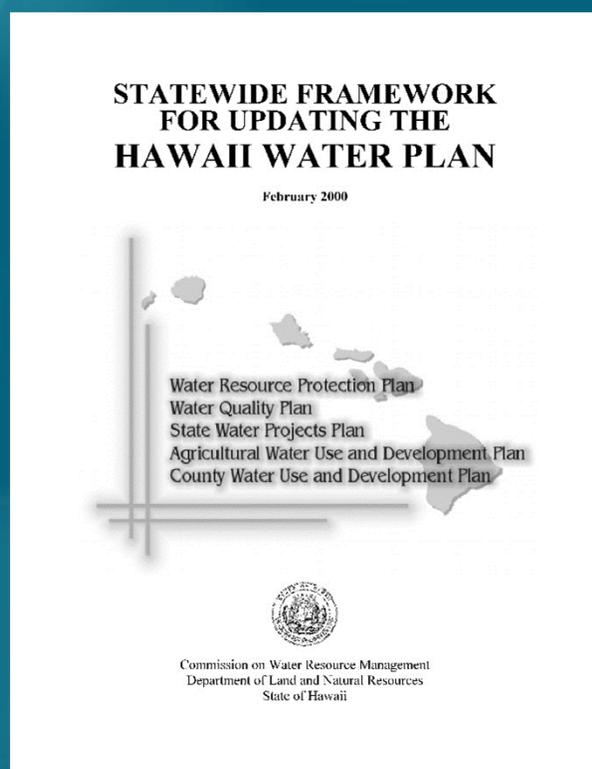
# **DOH Water Quality Plan Update**

**Joint Government Water  
Conference Meetings  
August 2014**



**Environmental Health Administration**  
Healthy People • Healthy Communities • Healthy Islands

# *Framework for Updating the Hawaii Water Plan, February 2000*



## Recommended Plan Elements:

- Source Water Assessment and Protection (SWAP) Program
- Source Water Protection Strategy
- Other DOH Programs (e.g. UIC, Wastewater, etc.)
- Developing Effective Linkages Between Inter-Agency Programs
- Recommended WQP Guidelines

**Available at:**

<http://dlnr.hawaii.gov/cwrm/planning/hiwaterplan/framework/>

# Schedule for DOH Water Quality Plan Update

## Internal DOH Planning Meetings

- **October - March 2014**

## Government Agency Planning Meetings

- **March - September 2014**, including a session at the 2nd Annual Joint Government Water Conference (August 2014)
- **July 2014** – Preliminary draft for agency review
- Agency comments due by **July 21, 2014**

## Public Meetings

- **August 2014** – Draft Water Quality Plan
- **August - October 2014**, including sessions at the 2nd Annual Joint Government Water Conference (August 2014)
- Public Comments due by **October 17, 2014**

## Final Collaboration with Government Agencies and Public

- **June 2015**: Final Water Quality Plan

# Water Quality Plan Outline

- **Section I: Background**
  - Hawaii Water Plan
  - Statewide Framework for Updating the Hawaii Water Plan
- **Section II: Water Quality Programs and Initiatives**
  - Surface Water Quality
  - Ground Water Quality
  - Drinking Water and Clean Water State Revolving Funds
  - Challenges
- **Section III: Supporting DOH Water Quality Work**
- **Appendices (including Water Quality Maps)**

# Water Quality Plan Outline

- **Section I: Background**
  - Hawaii Water Plan
  - Statewide Framework for Updating the Hawaii Water Plan
- **Section II: Water Quality Programs and Initiatives**
  - Surface Water Quality
  - Ground Water Quality
  - Drinking Water and Clean Water State Revolving Funds
  - Challenges
- **Section III: Supporting DOH Water Quality Work**
- **Appendices (including Water Quality Maps)**

# Surface Water Quality

- **Water Quality Standards**

**Goals:** The goal of the WQS Program is to develop scientifically-based WQS that:

- (a) meet federal requirements;
- (b) specify the uses to be protected in State waters; and
- (c) provide appropriate criteria and methods for evaluating the attainment of these protected uses.

**Priority Actions:**

- The Clean Water Act requires the State to complete a WQS review process and make revisions every 3 years. The Clean Water Branch is currently working on its 2014 revisions.

DOH's Clean Water Branch and Environmental Planning Office eGIS program also recently updated the State water quality maps.



# Water Quality Maps



- <http://health.hawaii.gov/cwb/site-map/clean-water-branch-home-page/water-quality-standards/>

- **Monitoring Program**



- **Goals:**

- Monitor surface waters of the State;
- Develop and implement monitoring tools and methodologies;
- Protect Hawaii's aquatic and marine resources; and
- Protect Hawaii's water recreational community.

- **Proposed Actions:**

- Partnership with USGS to conduct surveys of endocrine active compounds in smallmouth bass to determine existence of chemical contaminants (herbicides, pharmaceutical, and biogenic hormones).
- Partnership with USGS to deploy five Semipermeable Membrane Devices in West Maui to determine existence of pollutant sources and levels in different locations.
- Ocean Awareness Outreach in October 2014

- **Goals:**

- Prevent environmental degradation due to nonpoint source pollution;
- Increase the amount of resources devoted to the control of polluted runoff and focus on collaborative efforts to utilize limited resources; and
- Provide outreach and education to the community in partnership with other agencies.

- **Actions:**

- Increase the amount of funding devoted to the control of polluted runoff through best management practices;
- Obtain federal approval of Coastal Zone Nonpoint Pollution Control Program.

- **Polluted Runoff**  
**Control**



- **Total Maximum Daily Loads**



- **Goals:**
  - Quantitatively assess watershed-scale water quality problems, contributing sources, and pollutant load reductions.
  - Provide an analytical basis for implementing pollution controls.
  - Provide assistance with identifying restoration projects to improve water quality and protect public and environmental health.
- **Proposed Actions:**
  - Incorporate CWB program elements (beach and surface water monitoring, polluted runoff control, NPDES permits, etc.) into the TMDL process.
  - Collaborate with the counties and other state agencies to prioritize watersheds for restoration efforts and support stakeholder stewardship of watershed resources.

# NPDES Program

- **Goals:**
  - Regulate point source discharges through permitting and enforcement.
- **Proposed Actions:**
  - CWB is planning to implement a statewide MS4 and stormwater system initiative to encourage counties without MS4 permits to implement stormwater controls.
    - Would include providing financial and technical assistance to implement best management practices (BMPs) and monitoring.

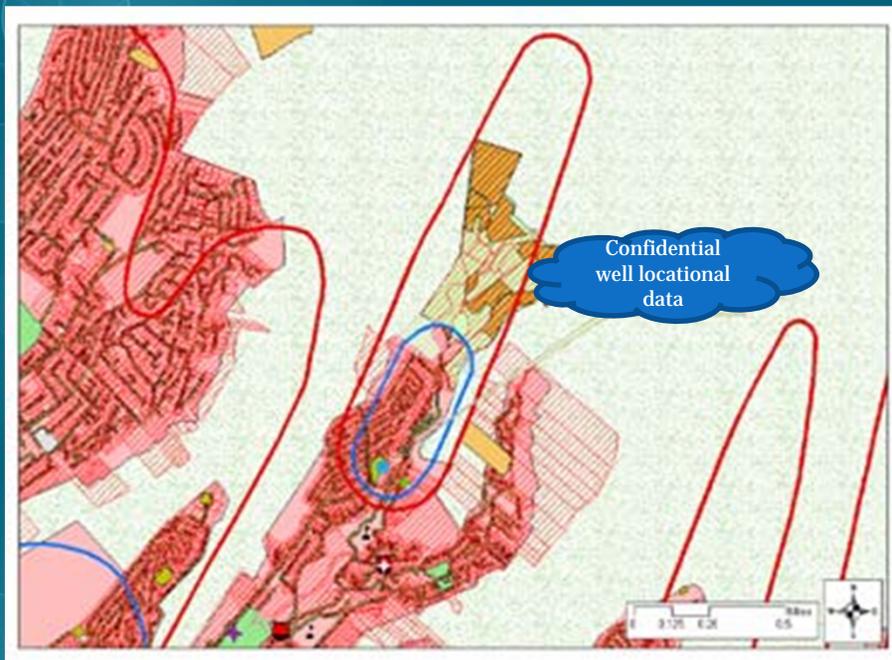


# Ground Water Quality

## • **SWAP Program**

### • **Goals:**

- Assess the susceptibility of public drinking water sources to contamination;
- Protect public drinking water sources from contamination; and
- Use source water assessment information to meet drinking water requirements.



### • **Proposed Actions:**

- **Assess all existing and proposed drinking water sources;**
- **Create state and local source water protection workgroups; and**
- **Develop and implement the Wellhead Protection Financial Assistance Program.**

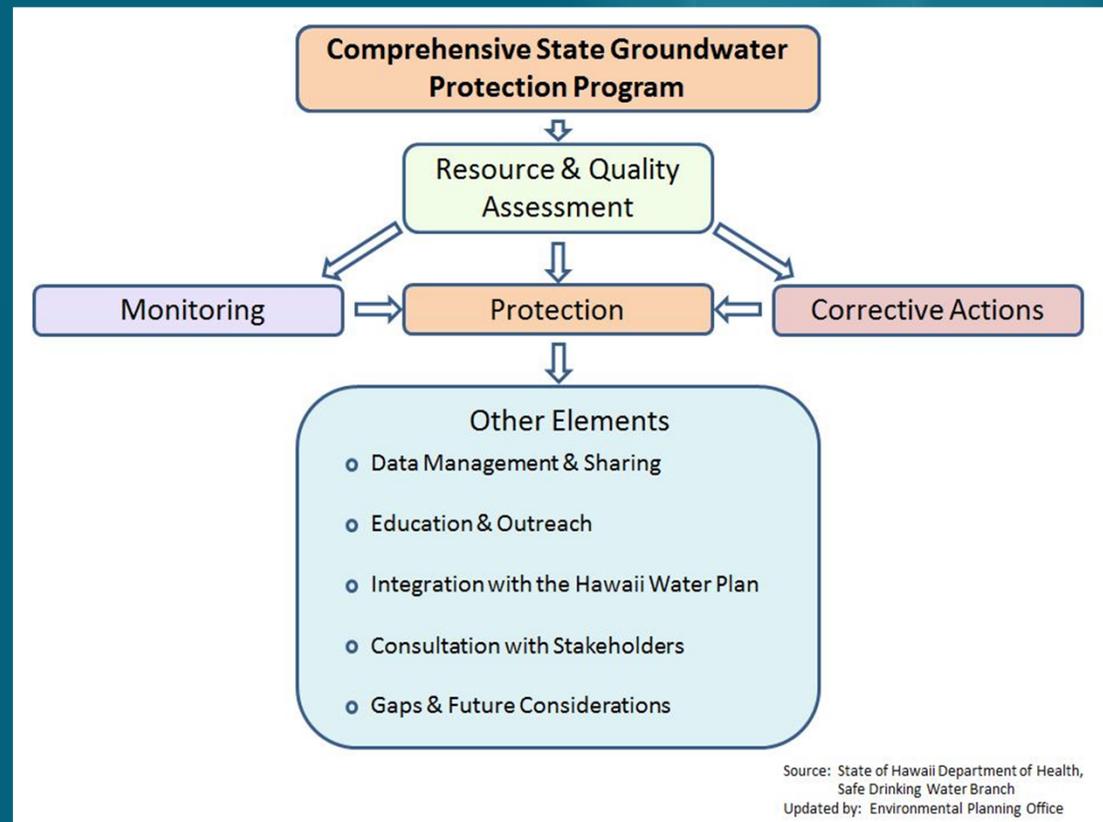
# • Comprehensive State Groundwater Protection Program

## Goals:

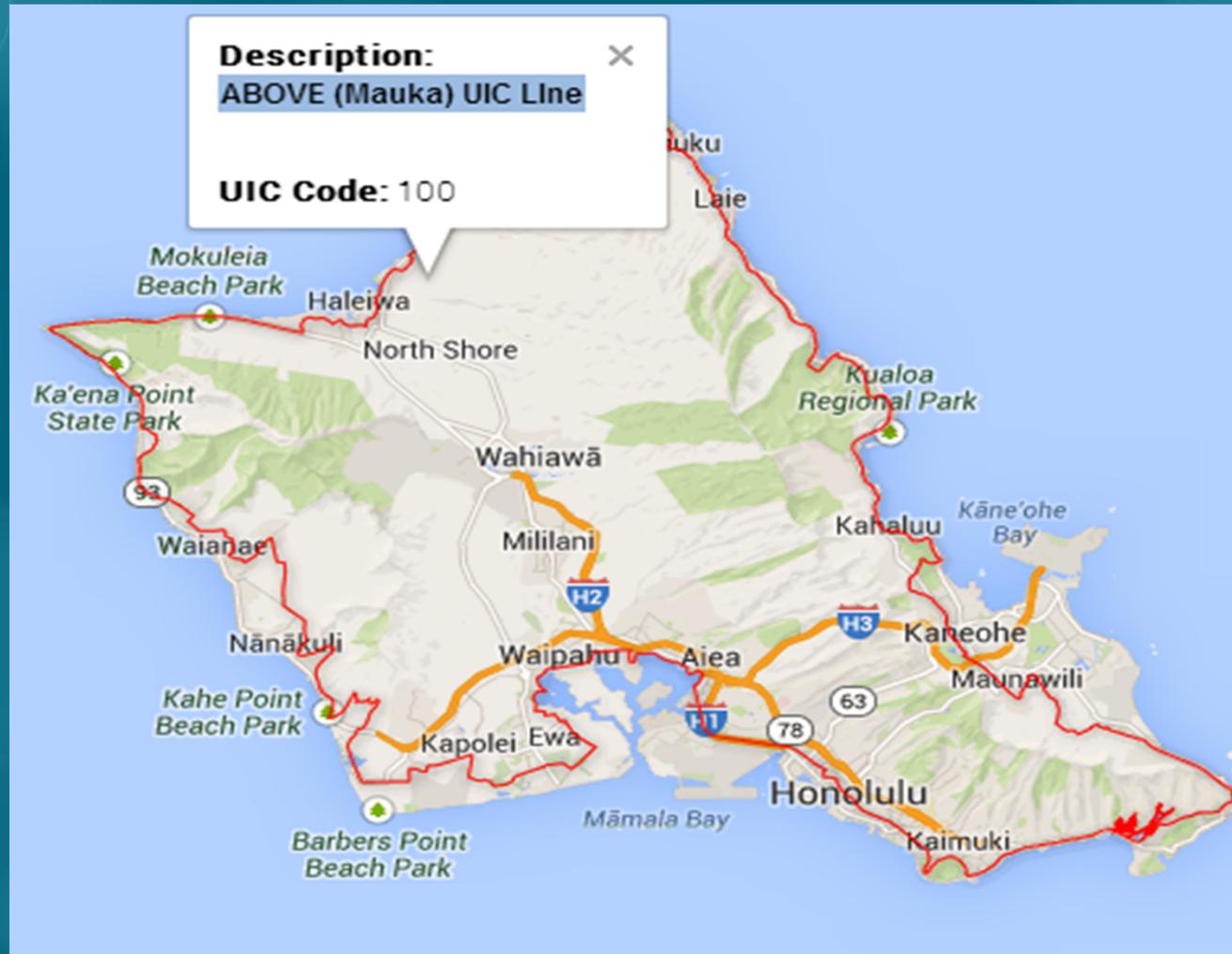
- Establish a mechanism for better understanding of relationships between ground water quantity and quality concerns;
- Demonstrate the State's proactive approach to ground water protection, justifying increased funding for program development & add'l flexibility from the EPA and other federal agencies; and
- Improve public understanding of ground water protection concerns within the State, and provide a broader context for public participation.

## Proposed Actions:

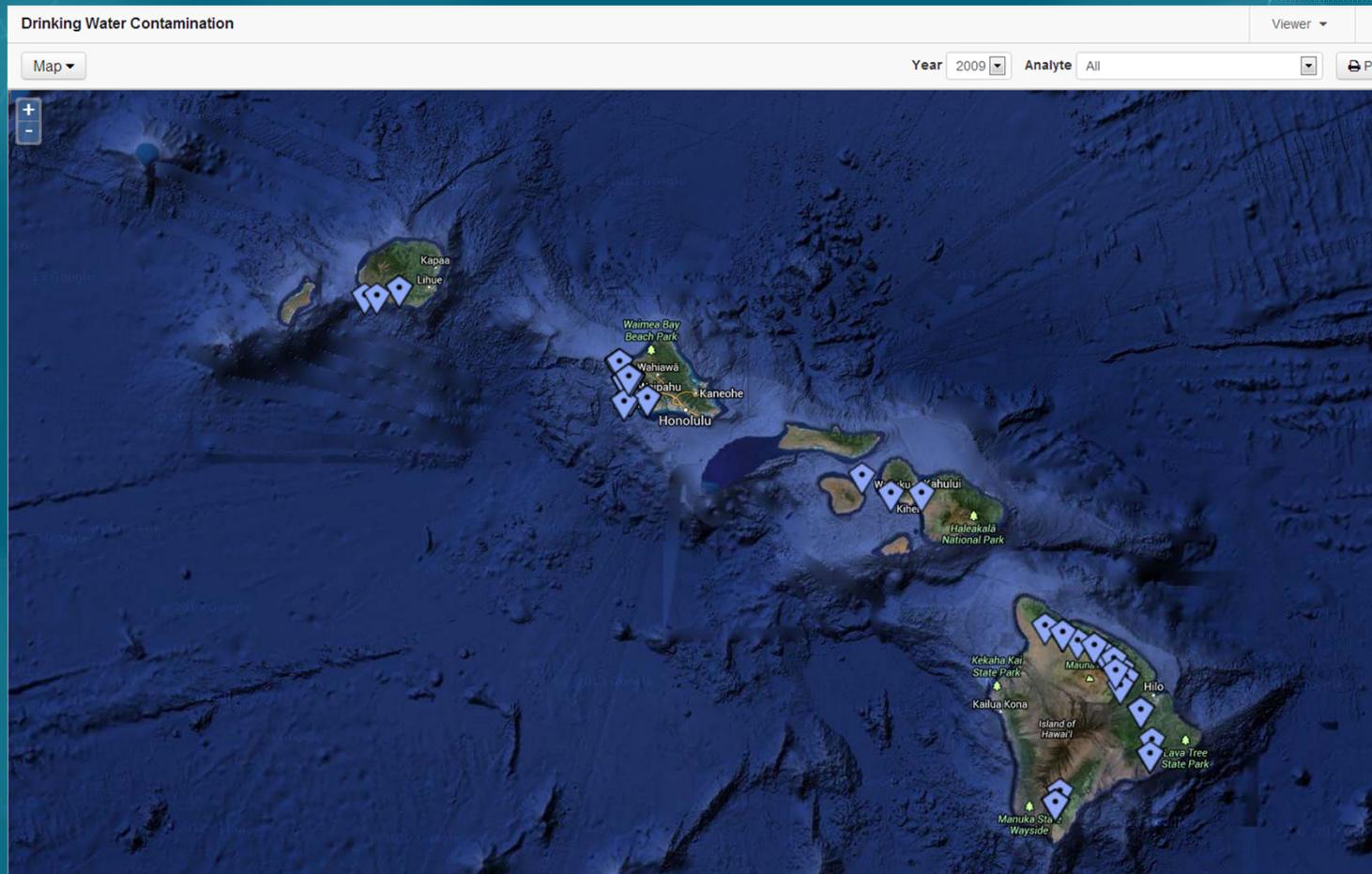
- Establish specific ground water protection goals to guide the relevant federal, state, and local programs operating within the State; and
- Establish priorities to guide relevant federal, state, and local programs and activities.



# Underground Injection Control



- Groundwater Contamination Viewer



- <http://health.hawaii.gov/sdwb/groundwater-contamination-viewer/>

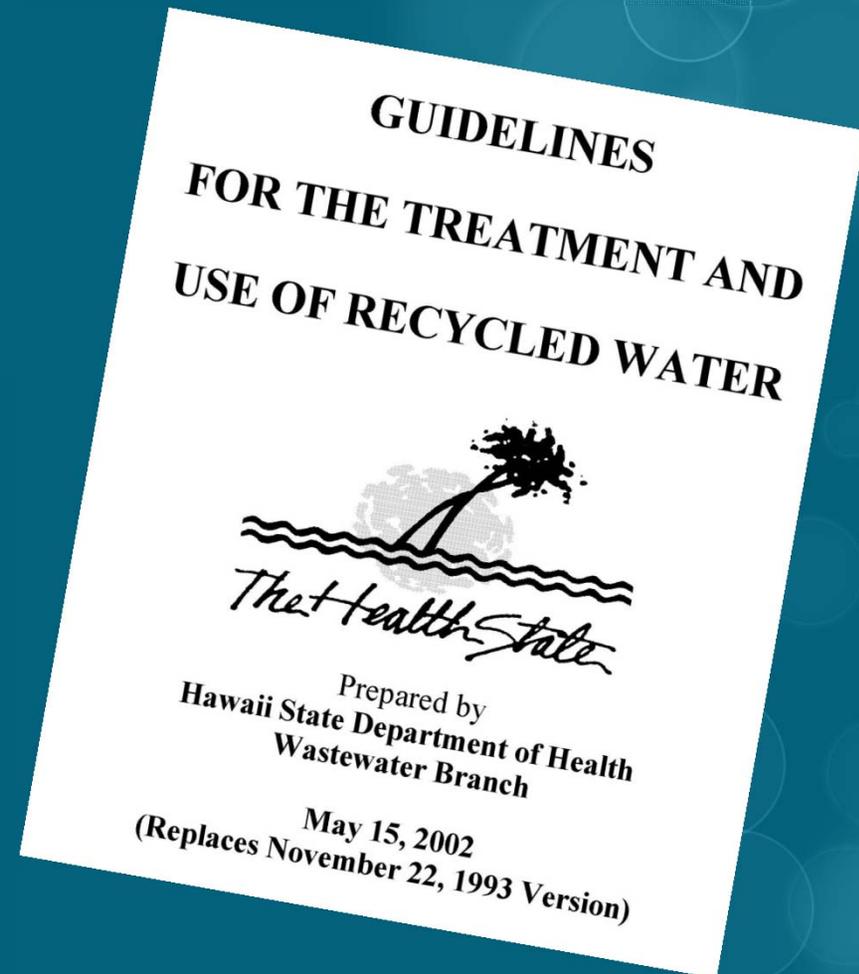
- Revising Recycled Water Guidelines

- **Goals:**

- Increase water reuse statewide.

- **Proposed Actions:**

- Complete revisions to the Guidelines by December 31, 2014.



# Upgrading and Eliminating Cesspools

- **Goal:**
  - Eliminate cesspool pollution.
- **Proposed Action:**
  - Wastewater Branch is updating its administrative rules to prohibit the construction of new cesspools and require cesspool upgrades upon transfer of property.



# Drinking Water State Revolving Fund

**Before**



Hakalau Iki Spring Box, Hamakua, Hawaii  
>\$690,000 DWSRF project

**After**



- \$149 million in low-interest loans provided since 1997
  - Loans are provided to Hawaii's 4 Counties for drinking water infrastructure projects
- Recently, Safe Drinking Water Branch reduced interest rates to 1-2% and traveled to each County to increase the number of funded projects.

# Clean Water State Revolving Fund



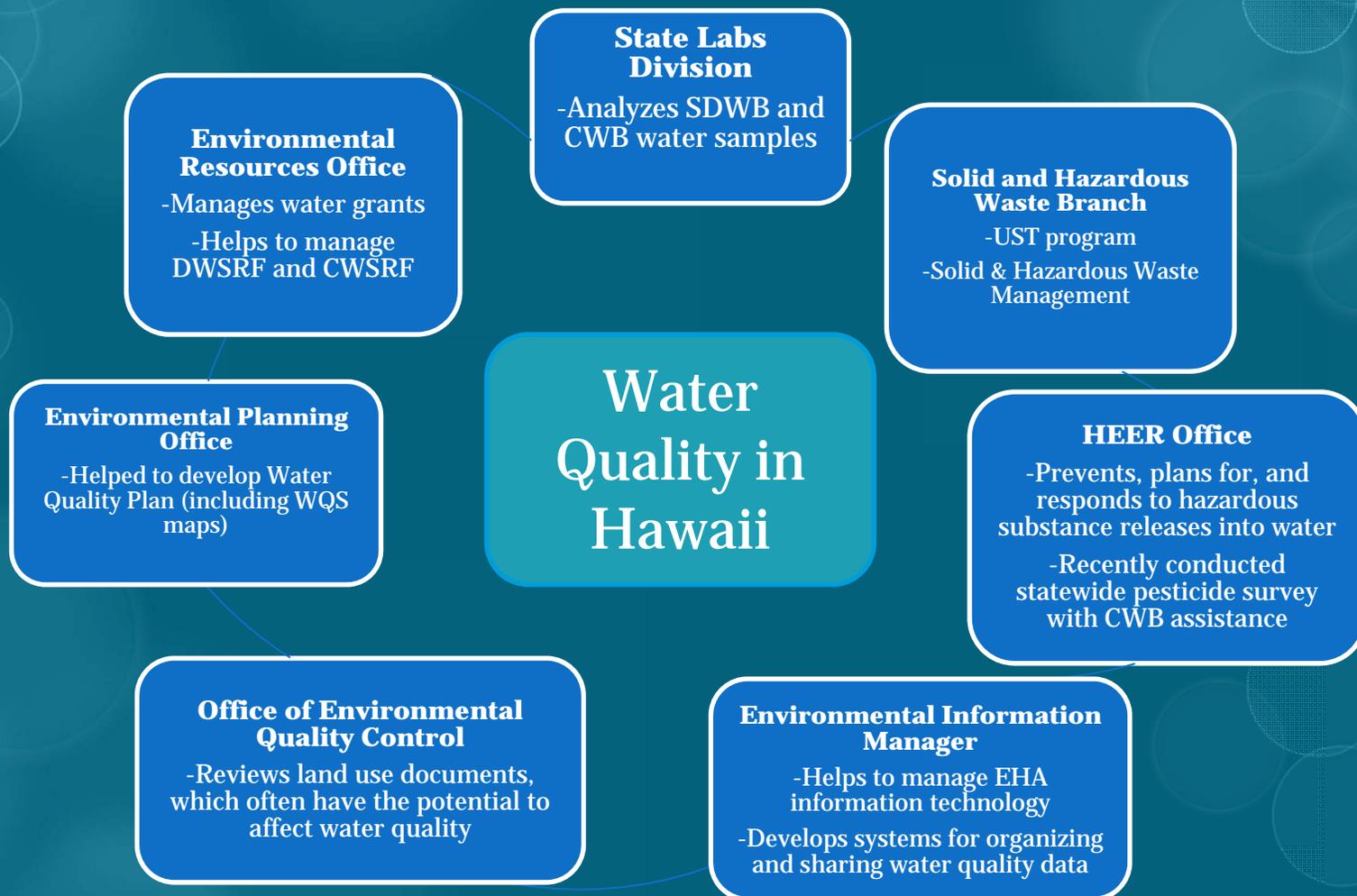
R-1 Wastewater Reuse System at Waimea  
WWTP, Kauai



Waimea WWTP Photo Voltaic Panels, Kauai

- \$675 million in low-interest loans provided since 1988
- Loans provided to the Counties for construction of publicly-owned wastewater treatment facility infrastructure.
- The current interest rate is 1%.

# Other DOH Water Quality Work



# Challenges

Intra-agency  
collaboration

Inter-agency  
collaboration

Funding  
Issues

Climate  
Change

- **Review the Draft Water Quality Plan at:**  
**<http://health.hawaii.gov/water/>**
- **Please email your comments on the Draft Plan to: [WQPComments@doh.hawaii.gov](mailto:WQPComments@doh.hawaii.gov)**



For more information on the Draft Plan or DOH's Water Quality work, please contact:

**Safe Drinking Water Branch**

(808) 586-4258

[sdwb@doh.hawaii.gov](mailto:sdwb@doh.hawaii.gov)

**Clean Water Branch**

(808) 586-4309

[cleanwaterbranch@doh.hawaii.gov](mailto:cleanwaterbranch@doh.hawaii.gov)

**Wastewater Branch**

(808) 586-4294

[wwb@doh.hawaii.gov](mailto:wwb@doh.hawaii.gov)

**Environmental Planning Office**

(808) 586-4337

[epo@doh.hawaii.gov](mailto:epo@doh.hawaii.gov)