

Water and Wells

Commission on Water Resource Management
State of Hawai'i



Overview

- About CWRM
 - Mission and Jurisdiction
 - Organization, Staffing, and Budget
- Types of Permit
 - Well construction and pump installation
 - Water use permits (ground water)
- Permit Processes



About CWORM



CWRM's Mission

- Established by Article XI, Section 7 of the Hawai'i State Constitution
- The primary guardian of Hawai'i's water resources under the public trust
- Mission: To protect and manage the waters of Hawai'i for present and future generations



Modern Legal Framework

- 1978 – Hawai‘i State Constitution adopted
- 1987 – State Water Code passed
- 2000 – Waiāhole I decision published



1978 Constitution, Article XI

Section 7. The State has an obligation to protect, control and regulate the use of Hawaii's water resources for the benefit of its people.

The legislature shall provide for a water resources agency which, as provided by law, shall set overall water conservation, quality and use policies; define beneficial and reasonable uses; protect ground and surface water resources, watersheds and natural stream environments; establish criteria for water use priorities while assuring appurtenant rights and existing correlative and riparian uses and establish procedures for regulating all uses of Hawaii's water resources.



1987 State Water Code

- Established Commission on Water Resource Management (CWERM) as the trustee of Hawai'i's water resources
- Incorporates public trust principles
- Regulation of surface & ground water
 - Created permitting system for water use
 - Designated Water Management Areas for aquifers and watersheds
- Balancing competing needs
 - Instream vs. offstream uses
 - Protection of traditional and customary rights
 - Basis for Waiāhole I and subsequent public trust rulings

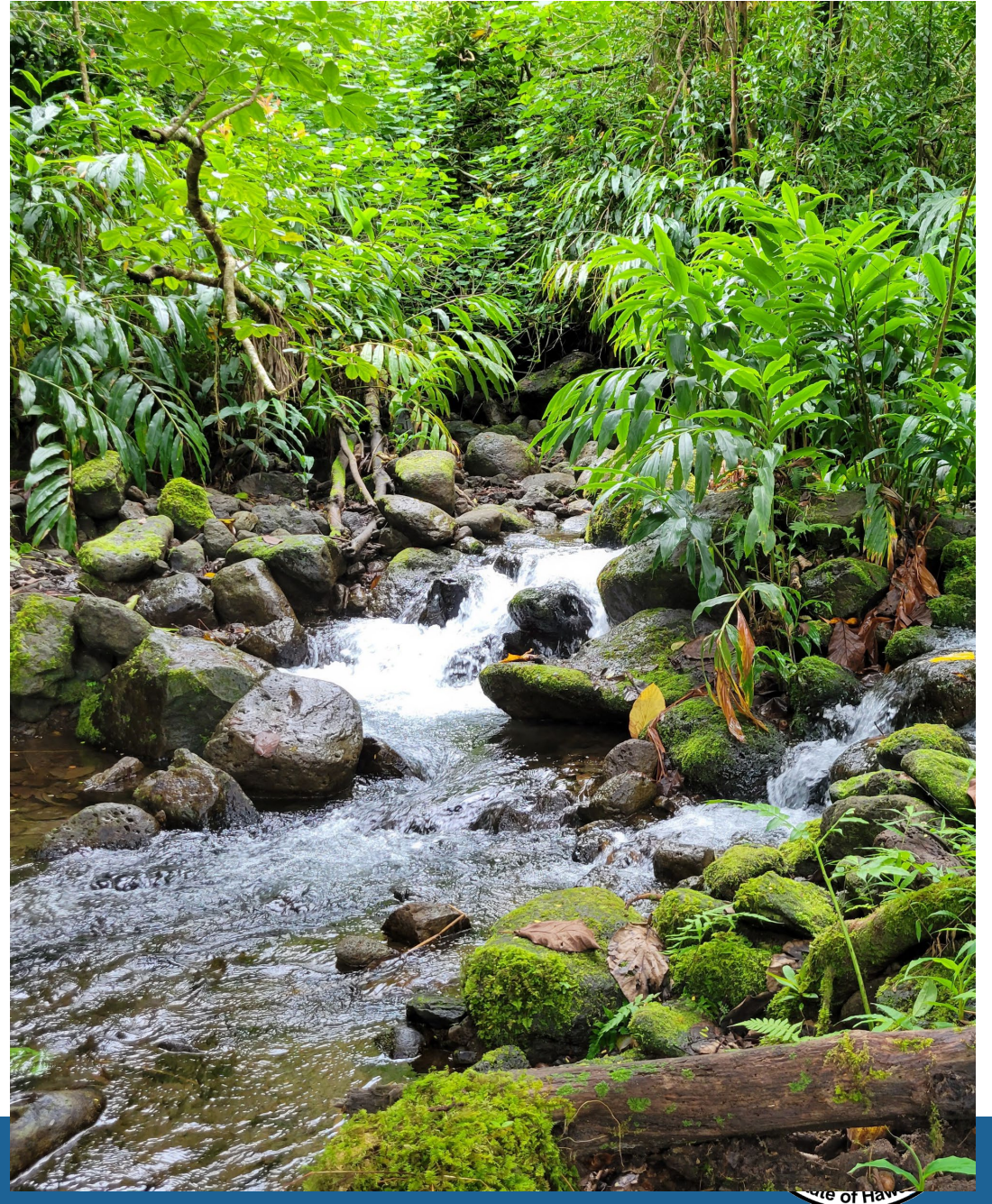


Waiāhole I

- Published in 2000 by the Hawai‘i Supreme Court
- Hawai‘i’s landmark public trust case

The Court declared:

- Water is a public trust resource
- Presumption in favor of public trust purposes
- Protection constitutes “use”
- Private commercial use is never guaranteed



CWRM's Mission

Protection

Instream

Public



Use

Offstream

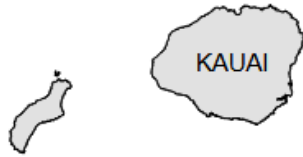
Private



Water Management Areas

- Outside of designated water management areas, water rights are generally governed by common law
- Within designated water management areas, water is allocated by the Commission consistent with public trust principles and the State Water Code (HRS ch. 174C)
- Water use within a designated WMA generally requires a water use permit

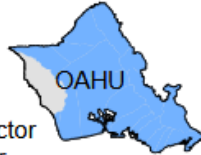




KAUAI

ISLAND OF OAHU

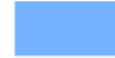
- Ground Water
- Central Sector
- Honolulu Sector
- North Sector
- Pearl Harbor Sector
- Windward Sector



OAHU



Surface Water Management Area



Ground Water Management Area

ISLAND OF MOLOKAI

- Ground Water
- Central Sector
- Northeast Sector
- Southeast Sector
- West Sector



MOLOKAI

ISLAND OF MAUI

- | | |
|---------------------|----------------------|
| <u>Ground Water</u> | <u>Surface Water</u> |
| Lahaina Sector | Honokohau |
| Iao System | Honolua |
| | Honokahua |
| | Kahana |
| | Honokowai |
| | Wahikuli |
| | Kahoma |
| | Kauaula |
| | Launiupoko |
| | Olowalu |
| | Ukumehame |
| | Waihee |
| | Waiehu |
| | Iao |
| | Waikapu |



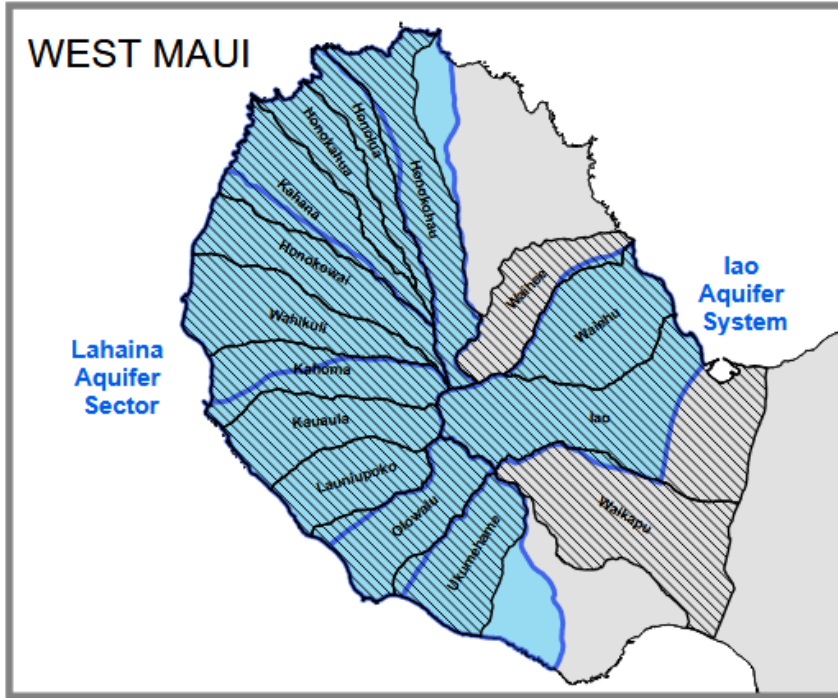
LANAI



MAUI



HAWAII



WEST MAUI

Lahaina Aquifer Sector

Iao Aquifer System



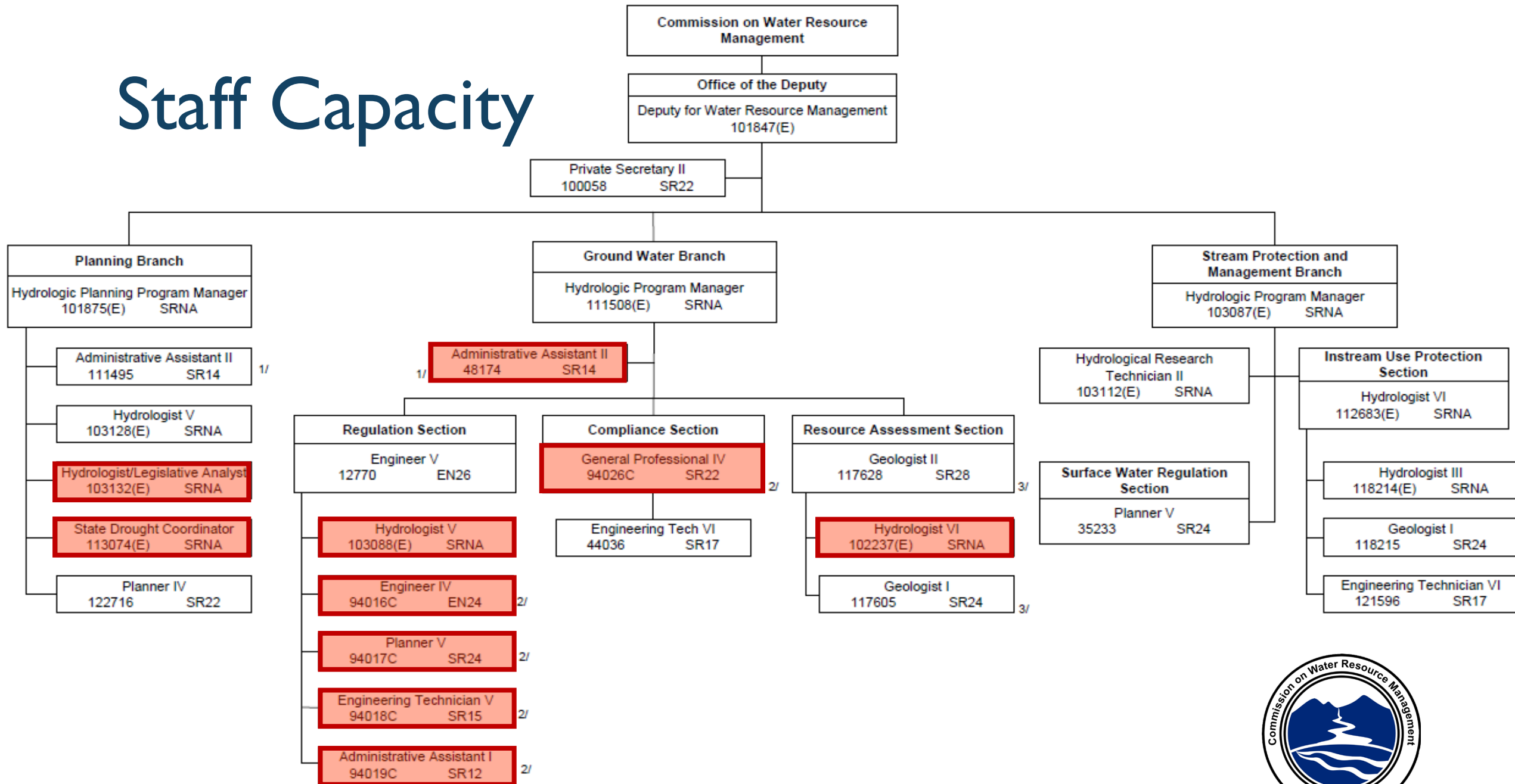
CWRM's Staff

Three branches:

- Planning
- Stream Protection and Management
- Ground Water



Staff Capacity



CWRM's Capacity

- 376 perennial streams
- 1,300 stream diversions
- 110 aquifer system areas
- 5,500 groundwater wells



CWRM's Capacity

For each SPAM staff, there are:

- 54 perennial streams
- 186 stream diversions

For each GW staff, there are:

- 916 wells
- 18 aquifer systems



Budget

- Operating budget
 - Approx. \$4.5M in general funds
 - \$3M goes to Personal Services (staff)
 - More than \$1.5M funds an agreement with USGS for statewide stream, well, and rainfall monitoring
- CIP
 - Typically \$2M each FY for construction of one deep monitor well



Permit Types and Processes



Permit Types

- Ground water
 - Well construction
 - Pump installation
- Surface water
 - Stream diversion works
 - Stream channel alteration
- Water use permit (surface or ground water management areas)

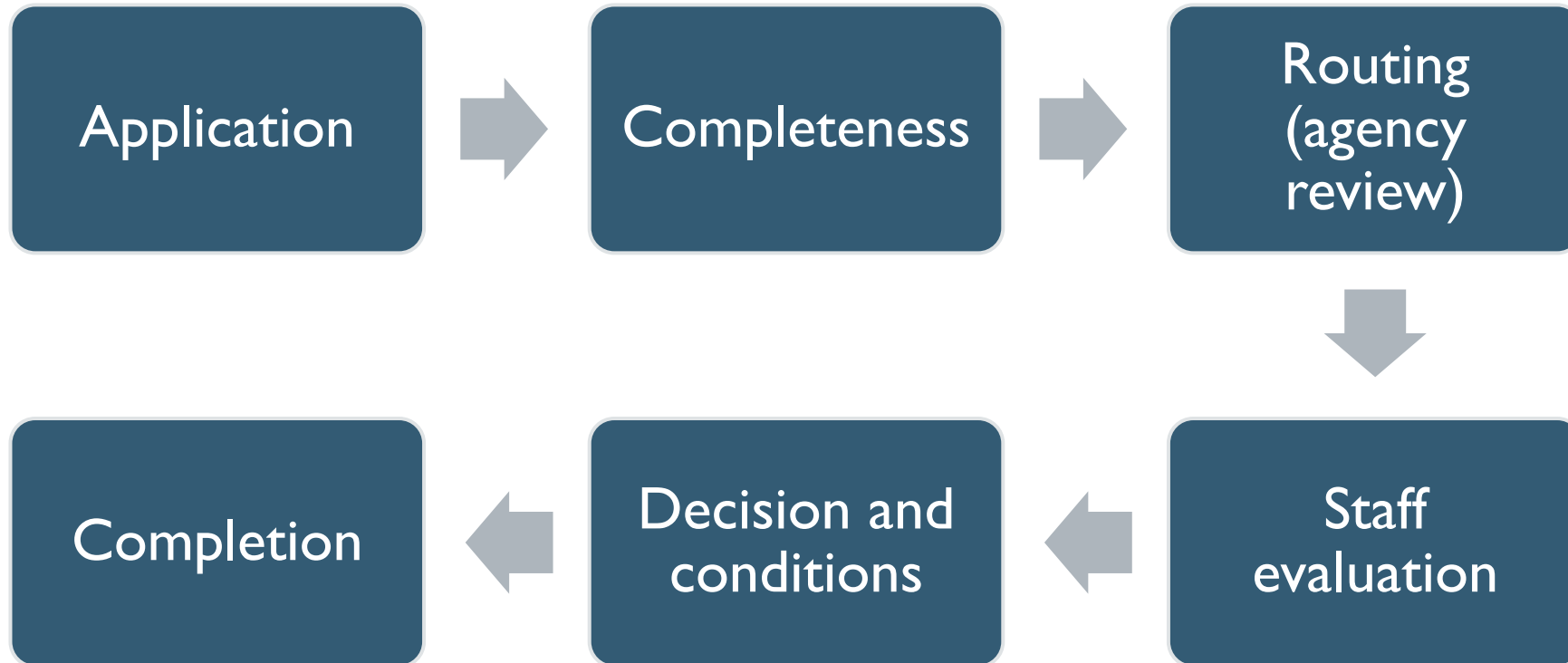


Well Construction / Pump Installation

- **Well construction permit:**
 - Can the well be drilled safely?
- **Pump installation permit:**
 - Can the pump and operating setup be installed?
 - What impacts are anticipated to the resource and other wells?
- These permits are frequently applied for and reviewed together.



Well Construction / Pump Installation

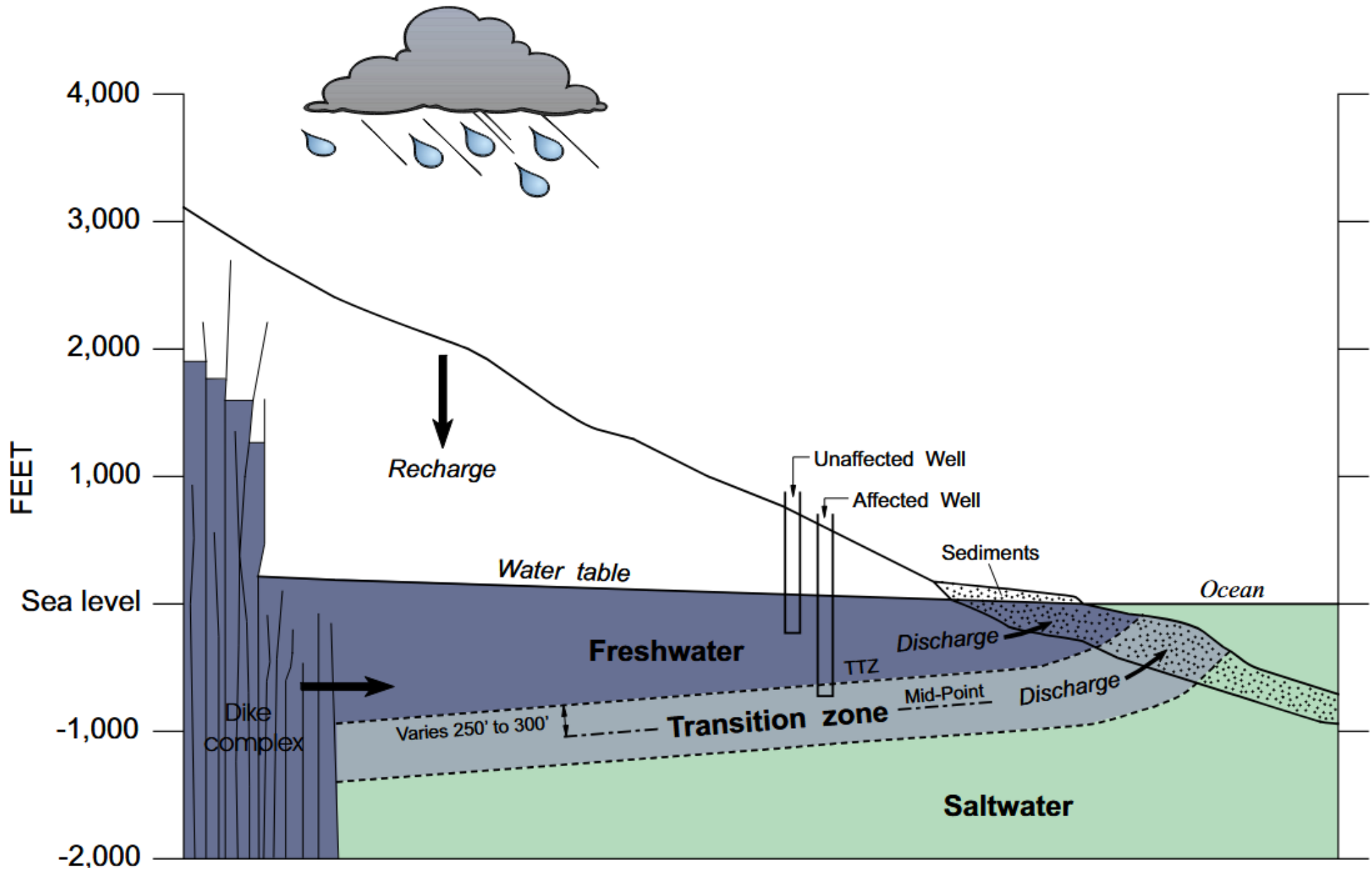


Well Construction / Pump Installation

CWRM staff reviews and evaluates:

- Well location (aquifer system, sustainable yield, current reported withdrawals)
- Construction and design (depth, casing, grouting, flow meter, etc.)
- Pump capacity and intended use
- Potential impacts (including impacts to traditional and customary practices, potential for aquifer contamination)
- Consistency with Hawai'i Water Plan
- Agency comments





Well Construction / Pump Installation

As of July 23, 2024, certain permits must be taken to the Commission for a vote:

- Well Construction Permits
 - Well penetrates two discrete water bodies
 - Artesian source: water rises to the surface without pumping
- Pump Installation Permits
 - Pump intake may affect streamflow
 - Aquifer has reached sustainable yield
 - Objections to an application have been received
 - Pump capacity is greater than 27 gallons per minute
 - Pump is under 27 gpm, but a water use permit is also required



Ground Water Use Permits

- Required only in designated water management areas
- A ground water use permit is required for:
 - New ground water uses
 - Existing uses after designation
 - Modifications to an existing water use permit that result in an increase or material change in use
- Exempt:
 - Individual domestic consumption
 - Catchment systems

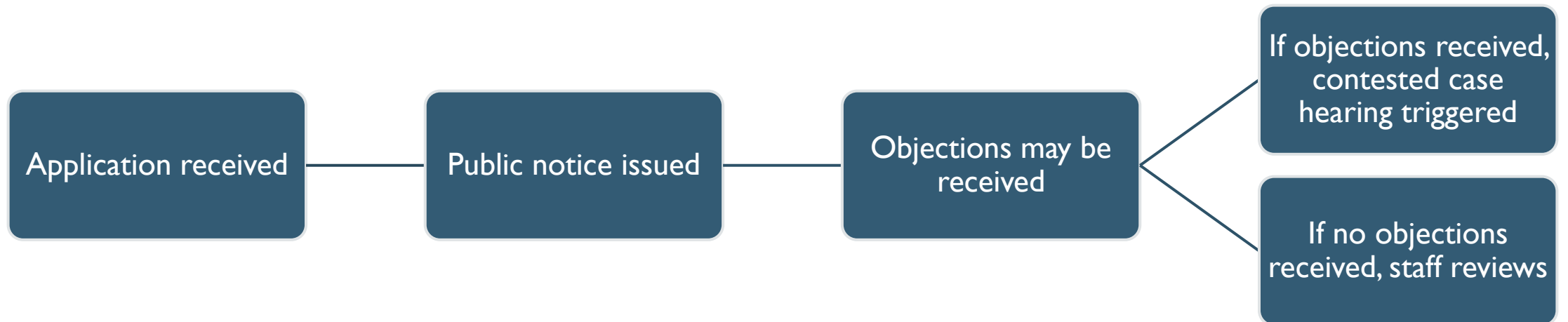


Ground Water Use Permits

- Staff evaluates the application
- Public notice is issued
- Objections may trigger further process / hearing
- Commission acts on the permit



Ground Water Use Permit Process



Ground Water Use Permit Criteria

Applicant must show the use:

- Can be accommodated by the source
- Is reasonable-beneficial
- Will not interfere with existing legal uses
- Is consistent with the public interest
- Is consistent with state and county plans
- Will not interfere with the rights of DHHL



Mahalo

