

State of Hawaii
Department of Land and Natural Resources
Geothermal Program

Carty Chang, P.E.
Chief Engineer

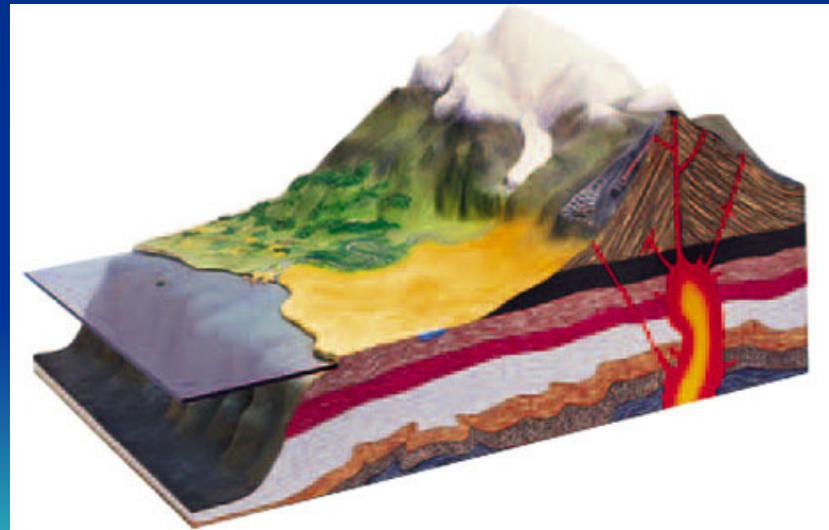
DLNR

- Division of State Parks
- Division of Forestry and Wildlife
- Division of Boating and Ocean Recreation
- Division of Aquatic Resources
- Office of Conservation and Coastal Lands
- Division of Conservation and Resources Enforcement
- Land Division
- Commission on Water Resource Management
- Kaho'olawe Island Reserve Commission
- **Engineering Division**
- Bureau of Conveyances
- Historic Preservation Division
- Offices (Personnel, Fiscal, Public Information Office)



Engineering Division Functions

- Engineering Services
- Dam and Reservoir Safety/Flood Control
- Geothermal Regulation and Resource Management



Departmental Authorities

(Related to Geothermal Resource Management)

- HRS Chapter 6E (Historic Preservation)
- HRS Chapter 171 (Management and Disposition of Public Lands)
- HRS Chapter 182 (Reservation and Disposition of Government Mineral Rights)
- HRS Chapter 183C (Conservation District)
- HRS Chapter 195D (Conservation of Aquatic Life, Wildlife and Land Plants)
- HRS Chapter 196D (Geothermal and Cable System Development)



Geothermal Program Purpose

- To regulate the exploration, development, and production of geothermal resources and its by-products on state or reserved lands
 - Prevent Waste
 - Conserve and provide for the optimum use of geothermal resources
 - Minimize or prevent degradation of the environment, surface and ground waters, and other natural resources
 - Prevent injury to life and property



Mineral Rights

- HRS § 182-2
 - Mineral rights reserved to the State
 - Minerals include “all geothermal resources, in, on, or under any land, fast or submerged”
 - Requires the issuance of a mining lease to conduct “mining operations, including geothermal resource development”

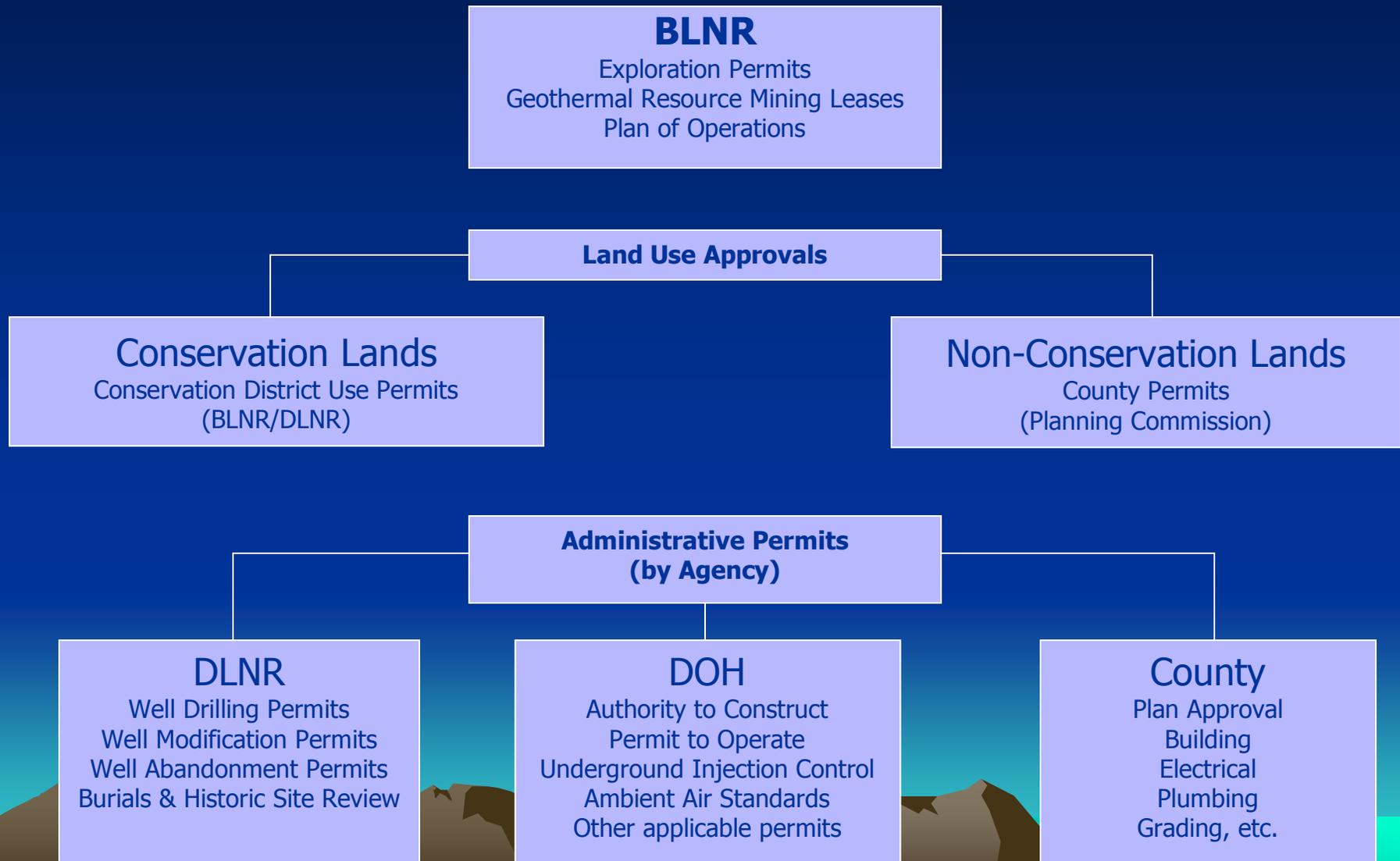


DLNR Permits/Approvals

- Exploration Permits (Chapter 182, HRS)
 - Proposed Plan of Exploration
- Leasing of State lands (Chapter 171, HRS)
- Geothermal Resource Mining Leases (Chapter 182, HRS)
 - Plan of Operations
- Well drilling, modification, abandonment permits (Chapters 174C and 182, HRS)
- Royalty Payments (Chapter 182, HRS)
- Conservation District Use Permits (Chapter 183C, HRS)
- Historic Site Review (Chapter 6E, HRS)

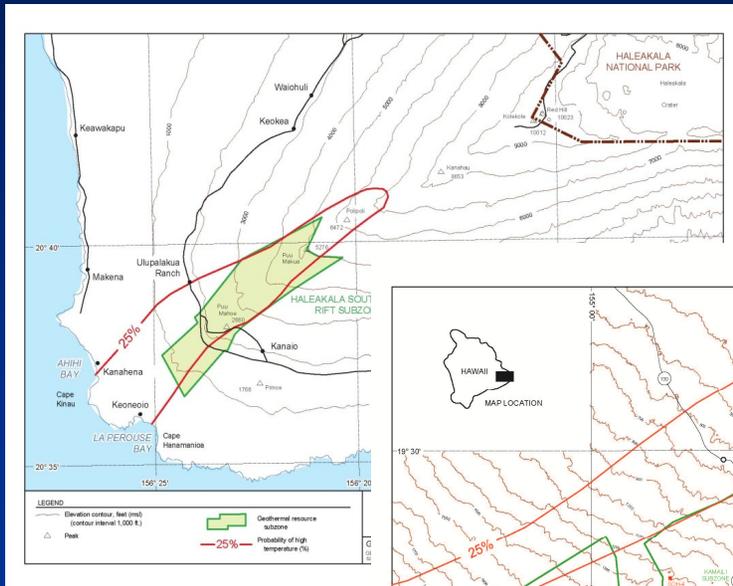


Overview of Permits/Approvals



Recent Legislation

Act 97, SLH 2012



Maui

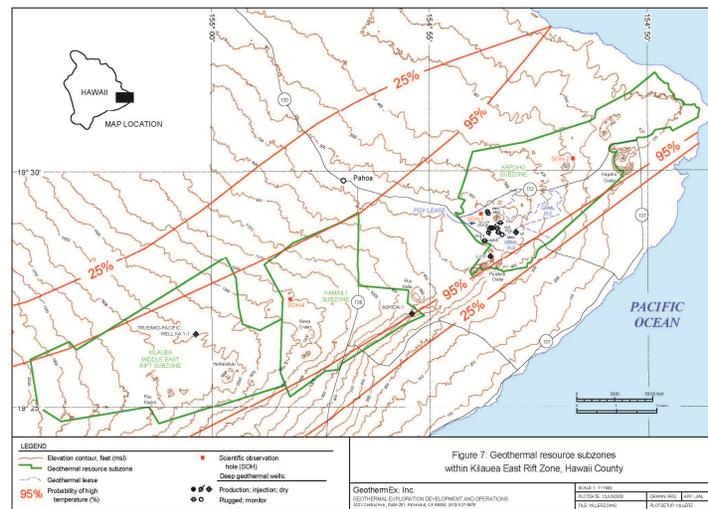


Figure 7. Geothermal resource subzones within Kilauea East Rift Zone, Hawaii County

The Governor
 0 2012
 LEGISLATURE, 2012
 All

ACT 097
S.B. NO. 3003
 S.D. 1
 H.D. 2

A BILL FOR AN ACT

GEOTHERMAL RESOURCES.

BY THE LEGISLATURE OF THE STATE OF HAWAII:

PART I

- 1
- 2 SECTION 1. The purpose of this Act is to address
- 3 geothermal resources.
- 4 More specifically:
- 5 (1) Part II amends chapter 182, Hawaii Revised Statutes,
- 6 relating to mining leases, by differentiating between
- 7 "geothermal resources exploration" and "geothermal
- 8 resources development";

Hawaii Former Geothermal Resource Subzones

Act 97, SLH 2012

- Repealed Geothermal Resource Subzone provisions (Sections 205-5.1, 205-5.2, 205-5.3 HRS)
- Differentiates between “geothermal resources exploration” and “geothermal resources development”
- Designates “geothermal resources exploration” and “geothermal resources development” as permissible uses in all state land use districts (Urban, Rural, Agricultural, Conservation)



Moving Forward

- Hiring staff
 - Geologist, Engineer, Planner, Secretary
- Resource Assessment
 - Led by Don Thomas (University of Hawaii, Center for the Study of Active Volcanoes)
 - Conduct geophysical surveys
- Updating administrative rules
- Evaluating current mining lease process for state lands



Thank you

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